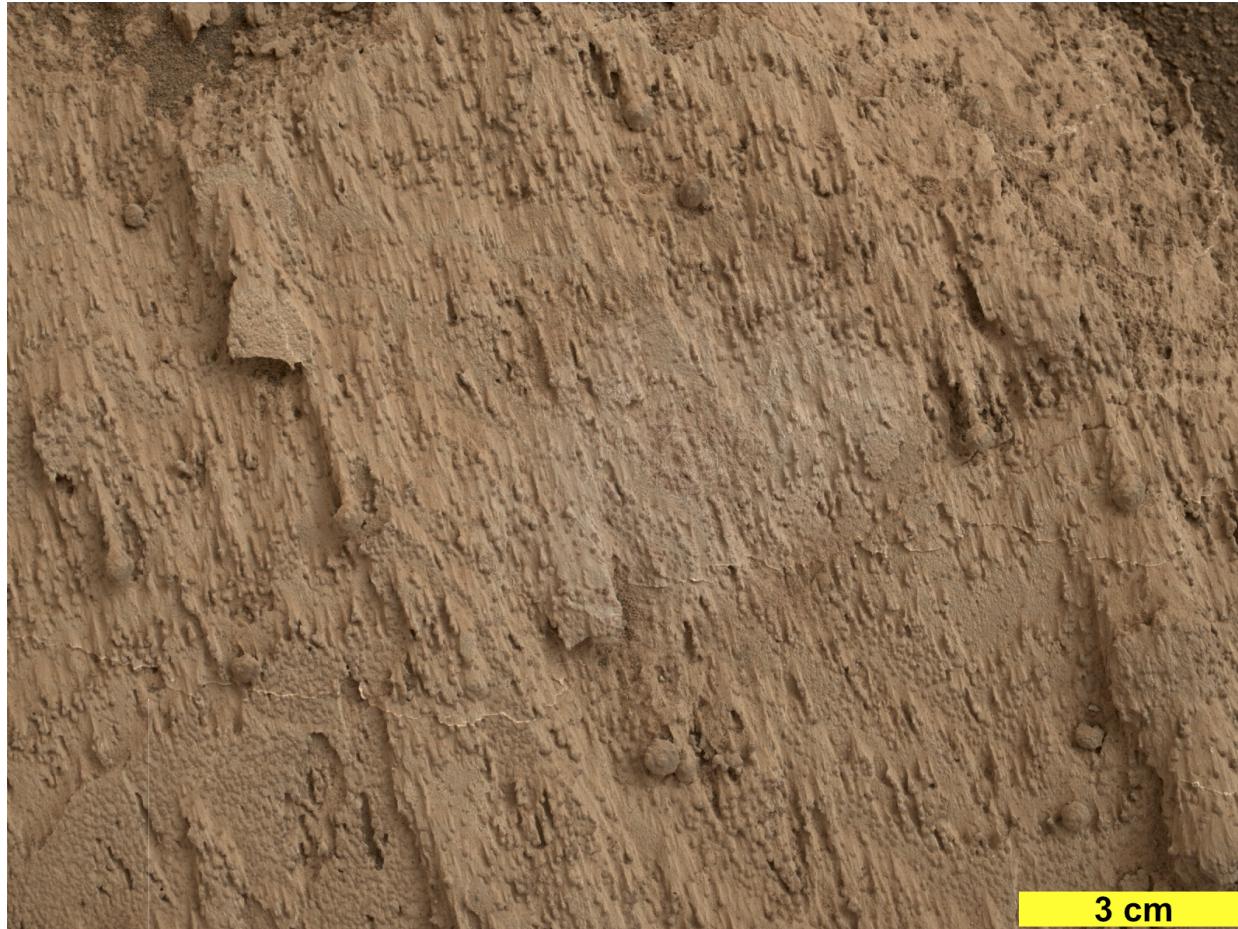


# **Curiosity's Mars Hand Lens Imager (MAHLI) Mars Science Laboratory (MSL) Principal Investigator's Notebook: Sols 3290–3423**

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## Mars Science Laboratory (MSL) Mars Hand Lens Imager (MAHLI) Technical Report 0031

### Cover photo

MAHLI view of a brushed target called Clad Hallan, located at the entrance of the Maria Gordon Notch in lower Aeolis Mons, acquired on Sol 3321. Illuminated by sunlight from the upper right, this is MAHLI image 3321MH0007060021104408C00.

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- 7.1 Definitions and conventions
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### Acknowledgements

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Note that pages are not numbered in this document because all of the *Range and Scale Information Sheets*, *Focus Merge Product Information Sheets*, and *MAHLI Image Comment Sheets* were inserted separately after creation using a word processing tool that differs from the one used for the text.

## Abstract

Covering the time between Curiosity's 3290th and 3423rd Martian days (sols) of operations in northern Gale crater, Mars, this document is a compilation of the Mars Science Laboratory (MSL) Mars Hand Lens Imager (MAHLI) Team's notes and information about MAHLI images and activities conducted during that period. The report includes brief sol-by-sol notes—written as the mission unfolded—regarding how the MAHLI instrument was used and significant events that occurred which impacted the MAHLI instrument or investigation. The document, further, contains information regarding range and scale (camera working distance and scale of in-focus elements of an image); the parent images, range, and scale information associated with each MAHLI focus merge product created onboard the instrument; and a description of the purpose and intent behind acquisition of each MAHLI image and creation of each onboard focus merge product. The MSL science team and rover engineers routinely used the information contained in this report during the course of the mission for tactical planning, strategic planning, and scientific analysis.

# 1 Introduction

## 1.1 Introduction and purpose

This document is a compilation of the Mars Hand Lens Imager (MAHLI) Team’s notes and information about MAHLI images and activities that occurred during the Mars Science Laboratory (MSL) mission between Sols 3290 and 3423.

MAHLI is a 2-megapixel color camera with a focusable macro lens mounted on the turret at the end of a robotic arm aboard NASA’s MSL rover, Curiosity (Edgett et al. 2012). The rover landed and began operation in northern Gale crater, Mars, on 6 August 2012 (Vasavada et al. 2014).

Each *Curiosity’s Mars Hand Lens Imager (MAHLI) Mars Science Laboratory (MSL) Principal Investigator’s Notebook* covers a specific period corresponding to a release of MAHLI data to the NASA Planetary Data System (PDS) Imaging Node (<http://pds-imaging.jpl.nasa.gov/>). As some MAHLI data can arrive from Mars months or years after a given release period, the publication of these reports typically lags behind the PDS release schedule by a period that varies from one occasion to the next, depending largely on when data acquired during that period arrive on Earth and when we have time to complete the *Principal Investigator’s Notebook* report.

This report, *Curiosity’s Mars Hand Lens Imager (MAHLI) Mars Science Laboratory (MSL) Principal Investigator’s Notebook: Sols 3290–3423*, corresponds to MAHLI data Release 30 in the NASA PDS archives. These are data acquired 07 November 2021 through 24 March 2022.

## 1.2 Versions and change log

The enclosed materials were compiled as the MSL mission unfolded. That being the case, we might sometimes have made errors. The reader should be aware that this report might be corrected via release of a new version in the future.

A new version would also be created if new data from this report’s period (Martian sols) are received from the instrument after an earlier version has been made available. This can occur because MAHLI can store data onboard the instrument for weeks, months, and even years after acquisition. As a result, images are archived with the NASA PDS on the basis of when they are received on Earth, not when they are acquired on Mars.

Covering the Sol 3290 through 3423 period, this document is Version 1.

If this were a later version, this section would document the changes made relative to the previous.

## 2 Instrument activities for this period

This section captures day-by-day or sol-by-sol notes written by the MAHLI Team, as the mission unfolded, regarding how the MAHLI instrument was used or significant events that occurred which impacted the MAHLI instrument or investigation.

MAHLI Activities During Sols 3290 – 3423						
milestone or field site	date (UTC)	Sol	camera positions	Parent images	Onboard focus merges	Notes
Zechstein drill site	The Zechstein sample was extracted using Curiosity's drill on Sol 3289. The MAHLI was not operated during the period that the drill bit assembly held the sample until sample analyses were complete. The sample held by the drill bit assembly was discarded on Sol 3301.					
	19 Nov 21	3301	6	13	0	MAHLI imaged the Zechstein sample discard pile, the surfaces surrounding SAM inlet #2, with the inlet cover open (a follow-up to Zechstein sample drop-offs), and the Zechstein drill hole.
	20 Nov 21	3303	83	85	0	MAHLI imaged the Zechstein Sample Discard Pile and a rover self-portrait was acquired to document the Zechstein drill site.
	30 Nov 21	3312	1	2	0	MAHLI imaged the Zechstein Drill Cuttings.
Enroute to boulders below escarpment on southeast side of Greenheugh pediment	01 Dec 21	3313	4	32	3	MAHLI imaged the target Camusnagaul and the focus stack images were merged.
Boulders below escarpment on southeast side of Greenheugh pediment	03 Dec 21	3315	10	62	3	MAHLI imaged the targets Arainn, Whaligoe_Steps and Yarrow_Stone. MAHLI also imaged the sky, with the dust cover open and closed for flat fielding. The focus stack images were also merged.
	04 Dec 21	3316	17	171	0	MAHLI imaged the target Whaligoe_Steps, which includes a 9x1 mosaic, and the target Laurentia.
	06 Dec 21	3318	0	0	15	Focus stack images from Sol 3316 were merged.
Drive toward and through Maria Gordon notch	07 Dec 21	3319	4	32	3	MAHLI imaged the target Duirinish and the focus stack images were merged.
	08 Dec 21	3320	4	4	0	MAHLI acquired wheel inspection images of the 6 rover wheels.
	09 Dec 21	3321	4	36	0	MAHLI imaged the DRT brushed target Cladh_Hallan.
	10 Dec 21	3322	0	0	3	Focus stack images from Sol 3321 were merged.
	11 Dec 21	3323	7	54	0	MAHLI imaged the targets Helens_Bay and Lakehead.
	12 Dec 21	3324	0	0	5	Focus stack images from Sol 3323 were merged.
	14 Dec 21	3326	3	22	2	MAHLI imaged the target Portgower and the focus stack images were merged.
Drive toward “mini walk-about” location that included “the Prow	16 Dec 21	3328	4	32	0	MAHLI imaged the target Korskellie.
	17 Dec 21	3329	0	0	3	Focus stack images from Sol 3328 were merged.
	18 Dec 21	3330	4	8	0	MAHLI imaged the targets Aros_Park and Clochoderick with the dust cover closed.

MAHLI Activities During Sols 3290 – 3423						
milestone or field site	date (UTC)	Sol	camera positions	Parent images	Onboard focus merges	Notes
Drive toward “mini walk-about” location that included “the Prow”	02 Jan 22	3344	5	42	0	MAHLI imaged the DRT-brushed target Maes_Howe.
	03 Jan 22	3345	0	0	4	Focus stack images from Sol 3344 were merged.
“Mini walk-about” that included “the Prow”	05 Jan 22	3347	3	22	2	MAHLI imaged the target Verde and the focus stack images were merged.
	07 Jan 22	3349	3	22	2	MAHLI imaged the target El_Fosso and the focus stack images were merged.
Investigation of the sol 3353 anomaly showed that knowledge of the contents of the MAHLI DEA nonvolatile memory (NVM, a.k.a. flash) had become unknown, likely the result of a single event upset (e.g., cosmic ray hit). It was determined that the solution would be to, essentially, re-set the DEA flash and clear its contents. In doing so, some low priority (downlink bin 99) data from Sols 3347 and 3349, plus the full-frame rover wheel images obtained on Sol 3353, were deleted rather than downlinked to Earth, but, otherwise, the impact was negligible.						
“Mini walk-about” area, including “the Prow”	19 Jan 22	3361	0	0	0	All data stored in the MAHLI DEA flash (CDPIDs 1-4693 from Sols 2993-3353) were erased from the MAHLI DEA as part of the recovery from the Sol 3353 DEA flash issue. The recovery was successful.
	20 Jan 22	3362	9	86	0	MAHLI imaged the targets Coati and Morok and acquired a 5x1 mosaic of the target Caroni.
	21 Jan 22	3363	0	0	8	The focus merges from Sol 3362 were merged.
	22 Jan 22	3364	6	44	0	MAHLI imaged the targets Mazaruni and Formoso.
	23 Jan 22	3365	0	0	4	Focus stack images from Sol 3364 were merged.
	27 Jan 22	3369	20	20	0	MAHLI imaged $\geq 360^\circ$ of the 3 left rover wheels and right front rover wheel.
	29 Jan 22	3371	13	104	0	MAHLI acquired a 6x1 mosaic on the target The Test and imaged the DRT-brushed target Suapi.
	30 Jan 22	3372	0	0	9	Focus stack images from Sol 3371 were merged.
	02 Feb 22	3374	16	152	0	MAHLI acquired an 11 frame “T-shaped” mosaic of the Toron block and imaged the target Surumu which is on the Toron block.
Drive toward southeast end of Greenheugh pediment	02 Feb 22	3375	0	0	15	Focus stack images from Sol 3374 were merged.
	03 Feb 22	3376	4	32	3	MAHLI imaged the target Kokadai and the focus stack images were merged.
	06 Feb 22	3378	7	46	4	MAHLI imaged the REMS UV Sensor and the targets Erico and Aji. The focus stack images were also merged.
	09 Feb 22	3381	4	32	3	MAHLI imaged the target El_Dorado and the focus stack images were merged.
Climbing on to the Greenheugh pediment	11 Feb 22	3383	3	22	2	MAHLI imaged the target Tantallon_Castle and the focus stack images were merged.
	13 Feb 22	3385	5	47	0	MAHLI imaged the DRT-brushed target Kintradwell.
	14 Feb 22	3386	0	0	4	Focus stack images from Sol 3385 were merged.
	15 Feb 22	3387	6	40	3	MAHLI imaged the DRT-brushed target Loch_Garten and the focus stack images were merged.
	16 Feb 22	3388	12	78	6	MAHLI imaged the MAHLI and APXS calibration targets as well as the target Tappington and the DRT-brushed target Loch_Coruisk. The focus stack images were also merged.
	17 Feb 22	3389	4	5	0	At night, MAHLI imaged inside the CheMin inlet for cleanliness.
	20 Feb 22	3392	10	60	0	MAHLI imaged the targets Nithsdale and Foss_Mine.
	21 Feb 22	3393	0	0	5	Focus stack images from Sol 3392 were merged.

MAHLI Activities During Sol 3290 – 3423						
milestone or field site	date (UTC)	Sol	camera positions	Parent images	Onboard focus merges	Notes
Climbing on to the Greenheugh pediment	23 Feb 22	3395	5	47	4	MAHLI imaged the DRT-brushed target Galdenoch and the focus stack images were merged.
	24 Feb 22	3396	10	72	0	MAHLI imaged the DRT-brushed target Scousburgh and the target Blackthorn Salt.
	25 Feb 22	3397	0	0	6	Focus stack images from Sol 3396 were merged.
	26 Feb 22	3398	7	58	0	MAHLI imaged the targets Exnaboe and Stinchar Valley.
	27 Feb 22	3399	0	0	5	Focus stack images from Sol 3398 were merged.
Traversing West on the Greenheugh pediment	10 Mar 22	3409	4	32	0	MAHLI imaged the DRT-brushed target Skaw_Granite.
	10 Mar 22	3410	0	0	3	Focus stack images from Sol 3409 were merged.
	13 Mar 22	3413	8	55	5	MAHLI imaged the targets Appleby and Achvarasdal as well as the wheel-surface interface of the rover left front wheel. The focus stack images were also merged.
	15 Mar 22 /16 Mar 22	3415	4	32	3	MAHLI imaged the target Oosta and the focus stack images were merged.
	18 Mar 22	3417	4	32	3	MAHLI imaged the target Knott and the focus stack images were merged.
	20 Mar 22	3419	12	112	0	MAHLI imaged the target Blackadder, which includes a 9x1 mosaic from approximately 5 cm standoff.
	21 Mar 22	3420	0	0	11	Focus stack images from Sol 3419 were merged.
	22 Mar 22	3421	5	42	4	MAHLI imaged the target Calder and the focus stack images were merged.
	23 Mar 22	3422	12	81	7	MAHLI imaged the DRT-brushed target Calder and the targets Scandal_Beck, Ashkirk and Breakyneck. The focus stack images were also merged.
	24 Mar 22	3423	6	52	0	MAHLI imaged the targets Redscarhead and Breakyneck.
	23 Mar 22	3422	12	81	7	MAHLI imaged the DRT-brushed target Calder and the targets Scandal Beck, Ashkirk and Breakyneck. The focus stack images were also merged.
	24 Mar 22	3423	6	52	0	MAHLI imaged the targets Redscarhead and Breakyneck.

## 3 Helpful tips

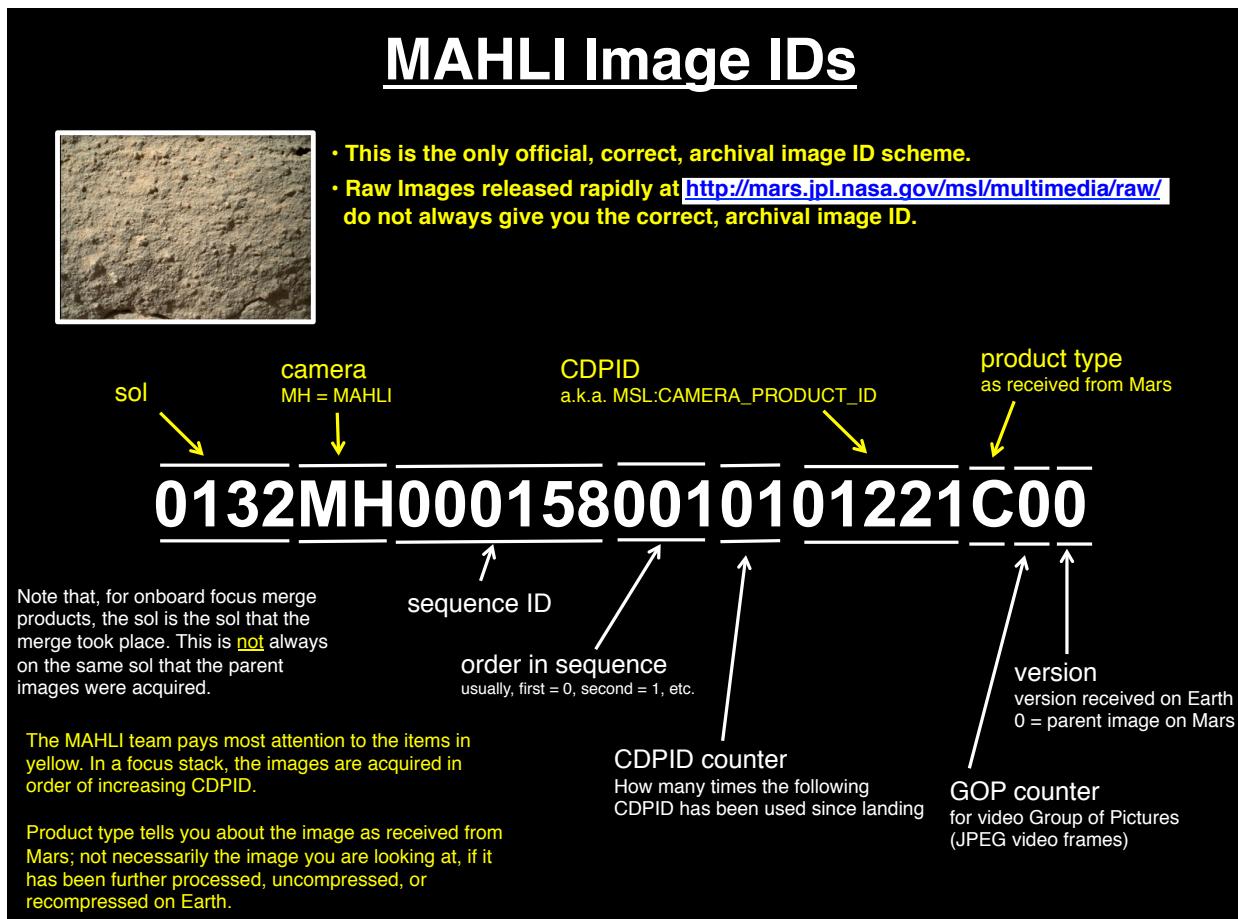
### 3.1 MAHLI instrument and investigation

Please refer to Edgett *et al.* (2012) for a description of the MAHLI instrument and investigation, Edgett *et al.* (2015) for information about the characterization and calibration of the instrument, and Yingst *et al.* (2016) for some of the lessons learned after ~1.5 Mars years of surface operations. Additional information on how the instrument and data have been used is in the paper by Minitti *et al.* (2013) and the extended abstract by Garvin *et al.* (2017).

### 3.2 MAHLI image IDs

MAHLI images and onboard focus merge products are identified by their image IDs. The following figure describes the information content of these IDs.

Note that raw images released within minutes of receipt on Earth to the public via the JPL-Caltech web site (<http://mars.jpl.nasa.gov/msl/multimedia/raw/>) do not necessarily have the correct, final, archival image IDs.



The NASA PDS archives include documentation that describes the MAHLI image ID and file naming scheme and the nature of the archived Experiment Data Record (EDR) and Reduced Data Record (RDR) products (Malin *et al.*, 2013).

The EDR products, the raw data product, have the following file name scheme:

- 1 **[Image ID]\_XXXX** – these are always 8-bit images except for the 16-bit products (type A) returned from MAHLI for calibration purposes.

The RDR products are of the following nature:

- 2 **[Image ID]\_DRXX** – 16-bit depth (per band) relative radiometric calibrated color images,
- 3 **[Image ID]\_DRLX** – 16-bit depth (per band) relative radiometric calibrated and geometric calibrated color images,
- 4 **[Image ID]\_DRCX** – 8-bit relative radiometric calibrated images for which a color correction has been applied, and
- 5 **[Image ID]\_DRCL** – 8-bit relative radiometric and geometric calibrated images for which a color correction has been applied.

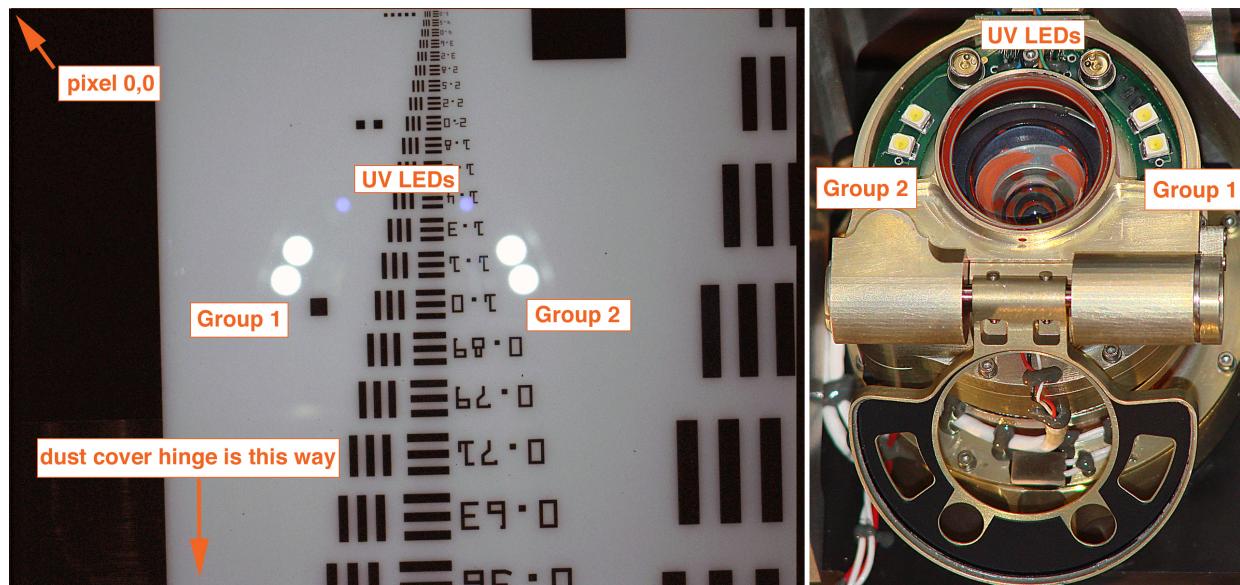
The following table describes the variety of image types (raw, lossless, JPEG, focus merge, thumbnail, *etc.*). Malin *et al.* (2013) described these in greater detail.

product type	product format
A	raster 16-bit image
B	raster 8-bit image
C	lossless compressed image
D	JPEG grayscale image
E	JPEG 4:2:2 color image
F	JPEG 4:4:4 color image
G	raster thumbnail of parent image
H	JPEG gray thumbnail of parent image
I	JPEG 4:4:4 thumbnail of parent image
J	raster 8-bit video frame
K	lossless compressed video frame
L	JPEG grayscale video frame
M	JPEG 4:2:2 color video frame
N	JPEG 4:4:4 color video frame
O	raster 8-bit thumbnail of video frame
P	JPEG gray thumbnail of video frame
Q	JPEG 4:4:4 thumbnail of video frame
R	focus merge best focus image product
S	focus merge range map product
T	focus merge best focus thumbnail
U	focus merge range map thumbnail

Types R and T are JPEG 4:4:4; S and U are JPEG grayscale products.

### 3.3 MAHLI LED positions

The MAHLI camera head has two groups of two white light LEDs (Edgett *et al.* 2012), called Group 1 and Group 2. For reference, the figure below shows their location on the camera head and how these locations translate to positions relative to pixel 0,0 (column 0, row 0) on the MAHLI CCD. In addition, MAHLI has two 365 nm ultraviolet (UV) LEDs, also shown in the figure. Each group of two LEDs (Group 1, Group 2, and UV) can be operated together or independently with each of the other two groups. When the LEDs are used, which group was operated is reported in the RATIONALE\_DESC description of the image intent and purpose (**Section 6**).



MAHLI image TVC\_MH0809080020000032B00, left, shows the violet and white reflections of the UV and Group 1 and Group 2 white light LEDs, indicating their location in relation to the CCD's pixel at column 0, row 0. The photograph on the right shows the camera head with its dust cover open and LEDs labeled.

## 4 Camera range and scale information

### 4.1 Purpose and description

MAHLI *Range and Scale Information Sheets* (or “Distance and Scale Information Sheets”) describe (a) the distance between the MAHLI camera and an imaged target, and (b) the scale of in-focus features in the image, based on knowledge of that distance. Usually, these are determined using the camera’s stepper motor count focus position (Edgett *et al.* 2015).

These information sheets were created only for cases in which there was a need. Cases for which they are not usually created include those when the only MAHLI image(s) acquired on a given sol are (a) views of the landscape, focused at infinity; (b) intended to make a rover self-portrait mosaic; (c) sky flat field calibration data; or (d) routinely-acquired images of the rover wheels for inspection purposes.

For the Sol 3290–3423 period, *Range and Scale Information Sheets* were created for the following Sols: 3301, 3303, 3312, 3313, 3315, 3316, 3319, 3320, 3321, 3323, 3326, 3328, 3330, 3344, 3347, 3349, 3353, 3362, 3364, 3369, 3371, 3374, 3376, 3378, 3381, 3383, 3385, 3387, 3388, 3389, 3392, 3395, 3396, 3398, 3409, 3413, 3415, 3417, 3419, 3421, 3422, 3423.

The origin of the MAHLI *Range and Scale Information Sheets* was in the need for a rapid, tactical response from the MAHLI team to the Curiosity Rover Planners—the engineers tasked with operating the rover’s mobility and robotic arm systems—for range-finding and image scale information derived from MAHLI’s autofocus and focus merge capabilities. As described by Minitti *et al.* (2013), during the rover’s first sample extraction campaign, conducted at the Rocknest eolian sand deposit in October–November 2012, the engineers elected to use MAHLI autofocus sub-frames to confirm their estimates of the range to the sand surface for subsequent scoop placement (Anderson *et al.* 2015). These *Range and Scale Information Sheets* were borne of that effort to provide the information almost as soon as the data arrived on Earth.

Presented in this section are the latest versions of the *Range and Scale Information Sheets*, for the above stated sols, as of the date of this *MAHLI Technical Report* publication. Most of these sheets were actively used during the MSL mission for tactical and strategic planning, as well as for the scientific analyses. Note that some of the sheets exhibit slightly different formatting from each other, as the formatting and content evolved over time.

The image IDs presented in these Information Sheets are the identifiers of the best, least-compressed version of the image received from Mars for a given camera position for the stated purpose (autofocus, imaging, range-finding, etc.). In cases for which only a thumbnail version of the image was received, the image ID is colored orange.

### 4.2 Formulae

#### 4.2.1 Working distance

The working distance ( $d_w$ , in centimeters) presented in the *Range and Scale Information Sheets* was computed from the empirical relationship between working distance and motor count for the flight unit MAHLI when the dust cover is open ( $m_{open}$ ) described by Edgett *et al.* (2015):

$$d_w = (am_{open}^{-1} + b + cm_{open} + dm_{open}^2 + em_{open}^3)^{-1}, \quad (1)$$

in which  $a = 0.576786$ ,  $b = -11.8479$ ,  $c = 2.80153 \times 10^{-3}$ ,  $d = -2.266488 \times 10^{-7}$ , and  $e = 6.26666 \times 10^{-12}$ .

For the dust cover closed case ( $m_{closed}$ ), Edgett *et al.* (2015) found that  $m_{closed}$  is related to  $m_{open}$  as follows:

$$m_{closed} = 17075 - m_{open}. \quad (2)$$

#### 4.2.2 Standoff distance (RP distance; MAHLI toolframe +X distance)

The standoff distance ( $d_s$ , in centimeters) presented in the *Range and Scale Information Sheets* is 1.9 cm less than the MAHLI working distance (Edgett *et al.* 2015). Note that “standoff distance” is equivalent to “RP distance” and “MAHLI toolframe +X distance”; see **Section 7.1**. It is determined by subtracting 1.9 cm from the working distance ( $d_w$ ) computed from motor count:

$$d_s = d_w - 1.9 \text{ cm} \quad (3)$$

#### 4.2.3 Distance or range uncertainty estimate

##### Estimation approach applied to the Sol 0–945 *Range and Scale Information Sheets*

For the Sol 0–945 period (except Sol 687), the uncertainty in distance (whether expressed as  $d_w$  or  $d_s$ ) was estimated using an early version of our team’s understanding (Edgett *et al.* 2013) of the flight unit MAHLI depth of field (DOF;  $d_{old\_DOF}$ , in centimeters) as a function of working distance ( $d_w$ ).

The method for estimating the far range of the DOF,  $d_{old\_far}$ , was:

$$d_{old\_far} = ad_w^5 - bd_w^4 + cd_w^3 + dd_w^2 + ed_w - f \quad (4)$$

in which  $a = 2.067963396 \times 10^{-10}$ ,  $b = 5.81503025785 \times 10^{-8}$ ,  $c = 1.55563715379086 \times 10^{-5}$ ,  $d = 1.78558768966003 \times 10^{-3}$ ,  $e = 7.87243271888297 \times 10^{-3}$ , and  $f = 3.57047935299353 \times 10^{-2}$ .

The method for estimating the near range of the DOF,  $d_{old\_near}$ , was:

$$d_{old\_near} = -(ad_w^5 + bd_w^4 - cd_w^3 + dd_w^2 - ed_w + f) \quad (5)$$

in which  $a = -9.6497783 \times 10^{-12}$ ,  $b = 1.06050131902 \times 10^{-8}$ ,  $c = 5.8615047292452 \times 10^{-6}$ ,  $d = 2.42284468424977 \times 10^{-3}$ ,  $e = 4.28714139095939 \times 10^{-3}$ , and  $f = 7.534391000189 \times 10^{-4}$ .

The MAHLI *Range and Scale Information Sheets* added the absolute values of the near and far DOF, then divided by two, to provide an overall uncertainty,  $\pm d_{old\_DOF}$ , in centimeters:

$$\pm d_{old\_DOF} = ((-d_{old\_near}) + d_{old\_far})/2 \quad (6)$$

The  $\pm d_{old\_DOF}$  estimate was sufficient for using MAHLI as a range finder for subsequent scoop placement during the Rocknest sample extraction campaign (Minitti *et al.* 2013; Anderson *et al.* 2015).

### Improved estimation method, used for Sol 687 and after Sol 945 Range and Scale Information Sheets

Later analysis refined our DOF estimate (Edgett et al. 2015), but these results arrived too late to be incorporated into most of the Sol 0–945 *Range and Scale Information Sheets*. That said, for small working distances (e.g., < 20 cm), the results are about the same. As a function of dust cover open focus motor count ( $m_{open}$ ), the near ( $d_{near}$ ) and far ( $d_{far}$ ) depth of field can be expressed, in centimeters, as:

$$d_{near} \text{ or } d_{far} = (am_{open}^{-1} + b + cm_{open} + dm_{open}^2 + em_{open}^3)^{-1}, \quad (7)$$

in which, for  $d_{near}$ ,  $a = 1.03565$ ,  $b = -11.9083$ ,  $c = 2.82403 \times 10^{-3}$ ,  $d = -2.29003 \times 10^{-7}$ , and  $e = 6.34332 \times 10^{-12}$ ; and, for  $d_{far}$ ,  $a = 1.03438$ ,  $b = -11.4118$ ,  $c = 2.69297 \times 10^{-3}$ ,  $d = -2.17752 \times 10^{-7}$ , and  $e = 6.02494 \times 10^{-12}$ .

#### 4.2.4 Pixel scale

The estimated pixel scale ( $p$ , in  $\mu\text{m}$  per pixel) is based on working distance ( $d_w$ ) and applies only to the in-focus portions of a given image. We estimate the scale from the working distance ( $d_w$ ) as described by Edgett et al. (2012):

$$p = 6.9001 + 3.5201d_w. \quad (8)$$

#### 4.2.5 Pixel scale uncertainty estimate

##### No estimation applied to the Sol 0–998 range and scale information sheets

No estimate of pixel scale uncertainty was applied to the MAHLI *Range and Scale Information Sheets* until Sol 999.

##### Estimation approach

Pixel scale uncertainty ( $p_{far}$ ,  $p_{near}$ ,  $\pm p_{uncertainty}$ , in  $\mu\text{m}$  per pixel) can be estimated based on the depth of field ( $d_{far}$ ,  $d_{near}$ , in centimeters; **Equation 7**) and pixel scale ( $p$ , in  $\mu\text{m}$  per pixel, **Equation 8**) as determined from working distance ( $d_w$ , in centimeters; **Equation 1**). The uncertainty applies only to the in-focus portions of a given image. The uncertainty can be estimated as follows (please round  $\pm p_{uncertainty}$  to the nearest 0.1  $\mu\text{m}$  per pixel):

$$p_{far} = (6.9001 + 3.5201(d_w + d_{far})) - p, \quad (9)$$

$$p_{near} = p - (6.9001 + 3.5201(d_w + d_{near})), \text{ and} \quad (10)$$

$$\pm p_{uncertainty} = (p_{far} + p_{near})/2. \quad (11)$$

#### 4.2.6 Image dimensions estimate

The image dimension estimates described in the MAHLI *Range and Scale Information Sheets* are computed by multiplying the estimated pixel scale ( $p$ ) by the number of horizontal (columns) and vertical (rows) covered by the image. This simplistic approach, of course, assumes that the target is a plane parallel to the CCD.

last update: 19\_November\_2021

### Sol 3301 - MAHLI Image Range & Scale Information\*

*Note that other images might have been acquired; this table does not describe all images; it describes each camera positioning.													
Working distance is a photography term; it is the range from the MAHLI front lens element (sapphire window) to the target.													
Standoff distance is measured from the plane defined by the tips of the MAHLI contact sensor probes to the target.													
Range, Scale, and DOF are computed from Motor Count using the equations from version 2 of Edgett et al. (2015, <a href="https://doi.org/10.13140/RG.2.1.3798.5447">https://doi.org/10.13140/RG.2.1.3798.5447</a> ).													
Sequence	Image ID*	MSL:CAMERA_PRODUCT_ID (CDPID)	Motor Count	Range or Working Distance from motor mount (cm)	Standoff (MAHLI Toolframe +X) from motor count (cm)	Depth of Field estimate			Pixel Scale (µm/pixel)	Illuminated Pixels on CCD (approximate)		Image Dimensions (cm) (approximate)	
						near (cm)	far (cm)			horiz-ontal	vertical	horizontal (CCD columns)	vertical (CCD rows)

#### Zechstein sample discard pile

mhli00197	context view	intended standoff - 25 cm											
	3301MH0001970011103958C00	3958	13019	26.4	24.5	-1.8	2.0	99.8	6.6	1608	1198	16.1	12.0
mhli00122	medium-resolution	intended standoff - 5 cm											
	APXS raster spot 1	3301MH0001220011103960C00	3960	14044	6.6	4.7	-0.2	0.1	30.0	0.5	1608	1198	4.8
mhli00122	medium-resolution	intended standoff - 5 cm											
	APXS raster spot 2	3301MH0001220011103962C00	3962	14053	6.5	4.6	-0.2	0.1	29.8	0.5	1608	1198	4.8

#### SAM sample inlet 2 - cover open - after sample drop-off - inspect surface surrounding inlet perimeter

mhli00779	full-frame using manual focus	intended standoff - 20 cm											
	3301MH0007790011103963C00	3963	13080	23.1	21.2	-1.4	1.5	88.3	5.0	1608	1198	14.2	10.6
	full-frame based on 128 x 128 autofocus sub-frame (starting pixel 1008, 768)	3301MH0007790031103965C00	3965	13108	21.9	20.0	-1.2	1.3	83.9	4.5	1608	1198	13.5

#### Zechstein drill hole

mhli00197	context view	intended standoff - 25 cm											
	3301MH0001970011103967C00	3967	13024	26.1	24.2	-1.7	1.9	98.8	6.4	1608	1198	15.9	11.8
mhli00774	intermediate-resolution view	intended standoff - 10 cm											
	3301MH0007740011103969C00	3969	13542	11.2	9.3	-0.4	0.4	46.5	1.3	1608	1198	7.5	5.6

last update: [22\\_November\\_2021](#)

## Sol 3303 - MAHLI Image Range & Scale Information\*

*Note that other images might have been acquired; this table does not describe all images; it describes each camera positioning.									
Working distance is a photography term; it is the range from the MAHLI front lens element (sapphire window) to the target.									
Standoff distance is measured from the plane defined by the tips of the MAHLI contact sensor probes to the target.									
Range, Scale, and DOF are computed from Motor Count using the equations from version 2 of Edgett et al. (2015, <a href="https://doi.org/10.13140/RG.2.1.3798.5447">https://doi.org/10.13140/RG.2.1.3798.5447</a> ).									
Range or Working Distance from motor mount (cm)	Standoff (MAHLI Toolframe +X) from motor count (cm)	Depth of Field estimate		Pixel Scale ( $\mu\text{m/pixel}$ )	Pixel Scale uncertainty ( $\pm \mu\text{m/pixel}$ )	Illuminated Pixels on CCD (approximate)		Image Dimensions (cm) (approximate)	
		near (cm)	far (cm)			horizontal (CCD columns)	vertical (CCD rows)		

Zechstein sample discard pile													
mhl00122	medium-resolution	intended standoff - 5 cm											
	APXS raster spot 2												
	3303MH0001220011103971C00	3971	13919	7.4	5.5	0.2	0.2	33.0	0.6	1608	1198	5.3	4.0
mhl00122	medium-resolution	intended standoff - 5 cm											
	APXS raster spot 1												
	3303MH0001220011103973C00	3973	13922	7.4	5.5	-0.2	0.2	32.9	0.6	1608	1198	5.3	3.9

**MAHLI rover self-portrait - manual focus - no range and scale information**

last update: 30\_November\_2021

### Sol 3312 - MAHLI Image Range & Scale Information\*

Sequence	Image ID*	MSL:CAMERA_PRODUCT_ID (CDPID)	Motor Count	Range or Working Distance from motor mount (cm)	Standoff (MAHLI Toolframe +X) from motor count (cm)	Depth of Field estimate		Pixel Scale (µm/pixel)	Illuminated Pixels on CCD (approximate)		Image Dimensions (cm) (approximate)	
						near (cm)	far (cm)		horiz-ontal	vertical	horizontal (CCD columns)	vertical (CCD rows)

Zechstein drill hole cuttings															
mhli00122	medium-resolution	intended standoff - 5 cm	3312MH0001220011104056C00	4056	13929	7.3	5.4	-0.2	0.2	32.7	0.6	1608	1198	5.3	3.9

last update: 01\_December\_2021

Sol 3313 - MAHLI Image Range & Scale Information\*

*Note that other images might have been acquired; this table does not describe all images; it describes each camera positioning.									
Working distance is a photography term; it is the range from the MAHLI front lens element (sapphire window) to the target.									
Standoff distance is measured from the plane defined by the tips of the MAHLI contact sensor probes to the target.									
Range, Scale, and DOF are computed from Motor Count using the equations from version 2 of Edgett et al. (2015, <a href="https://doi.org/10.13140/RG.2.1.3798.5447">https://doi.org/10.13140/RG.2.1.3798.5447</a> ).									
Range or Working Distance from motor mount (cm)	Standoff (MAHLI Toolframe +X) from motor count (cm)	Depth of Field estimate		Pixel Scale ( $\mu\text{m/pixel}$ )	Pixel Scale uncertainty ( $\pm \mu\text{m/pixel}$ )	Illuminated Pixels on CCD (approximate)		Image Dimensions (cm) (approximate)	
		near (cm)	far (cm)			horizontal (CCD columns)	vertical (CCD rows)		

target named Camusnagaul													
mhli00190	context view	intended standoff - 25 cm											
	3313MH0001900011104058C00	4058	13013	26.8	24.9	-1.8	2.0	101.1	6.8	1608	1198	16.3	12.1
mhli00224	medium-resolution stereo-1	intended standoff - 5 cm											
	3313MH0002240011104060C00	4060	13944	7.2	5.3	-0.2	0.2	32.3	0.6	1608	1198	5.2	3.9
corresponding focus merge products:		best focus product:	3313MH0001930001104093R00				range map product:	3313MH0001930001104094S00					
mhli00224	medium-resolution stereo-2	intended standoff - 5 cm											
	3313MH0002240011104070C00	4070	13968	7.1	5.2	-0.2	0.2	31.7	0.6	1608	1198	5.1	3.8
corresponding focus merge products:		best focus product:	3313MH0001930001104091R00				range map product:	3313MH0001930001104092S00					
mhli00386	high resolution view	intended standoff - 1 cm											
	3313MH0003860011104080C00	4080	14888	3.3	1.4	-0.1	0.1	18.5	0.2	1608	1198	3.0	2.2
corresponding focus merge products:		best focus product:	3313MH0001930001104089R00				range map product:	3313MH0001930001104090S00					

last update: [06\\_December\\_2021](#)

*Note that other images might have been acquired; this table does not describe all images; it describes each camera positioning.					
Working distance is a photography term; it is the range from the MAHU front lens element (sapphire window) to the target.					
Standoff distance is measured from the plane defined by the tips of the MAHU contact sensor probes to the target.					
Range, Scale, and DOF are computed from Motor Count using the equations from version 2 of Edgett et al. (2015, <a href="https://doi.org/10.13140/RG.2.1.3798.5447">https://doi.org/10.13140/RG.2.1.3798.5447</a> ).					

## Sol 3315 - MAHLI Image Range & Scale Information\*

Sequence	Image ID*	MSL:CAMERA_PRODUCT_ID (CDPID)	Motor Count	Range or Working Distance from motor mount (cm)	Standoff (MAHLI Toolframe +X) from motor count (cm)	Depth of Field estimate		Pixel Scale ( $\mu\text{m}/\text{pixel}$ )	Pixel Scale uncertainty ( $\pm \mu\text{m}/\text{pixel}$ )	Illuminated Pixels on CCD (approximate)		Image Dimensions (cm) (approximate)	
						near (cm)	far (cm)			horizontal (CCD columns)	vertical	horizontal (CCD columns)	vertical (CCD rows)

target named `Arainn`

mhl00197	context view	intended stand-off - 25 cm											
	3315MH0001970011104096C00	4096	13024	26.1	24.2	-1.7	1.9	98.8	6.4	1608	1198	15.9	11.8

target named Whaligoe\_Steps

mhli00197	context view	intended standoff - 25 cm											
	3315MH0001970011104098C00	4098	13021	26.3	24.4	-1.7	2.0	99.4	6.5	1608	1198	16.0	11.9

target named Yarrow Stone

mhli00706	<b>context view</b>	<b>intended standoff - 25 cm</b>											
	3315MH0007060011104100C00	4100	13015	26.6	24.7	-1.8	2.0	100.7	6.7	1608	1198	16.2	12.1
mhli00699	<b>medium-resolution stereo-1</b>	<b>intended standoff - 5 cm</b>											
	3315MH0006990011104103C00	4103	13967	7.1	5.2	-0.2	0.2	31.8	0.6	1608	1198	5.1	3.8
	<i>corresponding focus merge products:</i>	<i>best focus product:</i> 3315MH0001930001104161R00				<i>range map product:</i> 3315MH0001930001104162S00							
mhli00699	<b>medium-resolution stereo-2</b>	<b>intended standoff - 5 cm</b>											
	3315MH0006990011104114C00	4114	13967	7.1	5.2	-0.2	0.2	31.8	0.6	1608	1198	5.1	3.8
	<i>corresponding focus merge products:</i>	<i>best focus product:</i> 3315MH0001930001104159R00				<i>range map product:</i> 3315MH0001930001104160S00							
mhli00800	<b>high resolution view</b>	<b>intended standoff - 2 cm</b>											
	3315MH0008000011104125C00	4125	14601	4.1	2.2	-0.1	0.1	21.3	0.3	1608	1198	3.4	2.5
	<i>corresponding focus merge products:</i>	<i>best focus product:</i> 3315MH0001930001104157R00				<i>range map product:</i> 3315MH0001930001104158S00							

**MAHLI sky flat field images - dust cover closed - first set**

**Note:** Where the Motor Count is given in blue font, the dust cover was closed during imaging; please use caution in interpreting the range and scale information, as the results are less certain.

mhl00712	close focus - ~2.04 cm working distance focus position - manual focus											
	3315MH0007120001104135C00	4135	0	n/a	n/a	n/a	n/a	n/a	n/a	1608	1198	n/a
	2 cm standoff equivalent - ~3.9 cm working distance focus position - manual focus											
	3315MH0007120011104136C00	4136	2412	n/a	n/a	n/a	n/a	n/a	n/a	1608	1198	n/a
	5 cm standoff equivalent - ~6.9 cm working distance focus position - manual focus											
	3315MH0007120021104137C00	4137	3078	n/a	n/a	n/a	n/a	n/a	n/a	1608	1198	n/a
25 cm standoff equivalent - ~26.9 cm working distance focus position - manual focus												
	3315MH0007120031104138C00	4138	4062	n/a	n/a	n/a	n/a	n/a	n/a	1608	1198	n/a
infinity focus - manual focus												
	3315MH0007120041104139C00	4139	4488	n/a	n/a	n/a	n/a	n/a	n/a	1608	1198	n/a

## MAHLI sky flat field images - dust cover open - first set

mhl00453	close focus - ~2.04 cm working distance focus position - manual focus											
	3315MH0004530001104140C00	4140	15996	n/a	n/a	n/a	n/a	n/a	n/a	1608	1198	n/a
	2 cm standoff equivalent - ~3.9 cm working distance focus position - manual focus											
	3315MH0004530011104141C00	4141	14664	n/a	n/a	n/a	n/a	n/a	n/a	1608	1198	n/a
	5 cm standoff equivalent - ~6.9 cm working distance focus position - manual focus											
	3315MH0004530021104142C00	4142	13998	n/a	n/a	n/a	n/a	n/a	n/a	1608	1198	n/a
	25 cm standoff equivalent - ~26.9 cm working distance focus position - manual focus											
	3315MH0004530031104143C00	4143	13014	n/a	n/a	n/a	n/a	n/a	n/a	1608	1198	n/a
	pre-launch flat field equivalent - ~63.3 cm working distance focus position - manual focus											
	3315MH0004530041104144C00	4144	12750	n/a	n/a	n/a	n/a	n/a	n/a	1608	1198	n/a
	infinity focus - manual focus											
	3315MH0004530051104145C00	4145	12552	n/a	n/a	n/a	n/a	n/a	n/a	1608	1198	n/a

**Continued on Next Page...**

MAHLI sky flat field images - dust cover open - second set (camera rotated approximately 180° relative to first set)														
mhlii00453	close focus - ~2.04 cm working distance focus position - manual focus													
	3315MH0004530001104146C00	4146	15996	n/a	1608	1198	n/a	n/a						
	2 cm standoff equivalent - ~3.9 cm working distance focus position - manual focus													
	3315MH0004530011104147C00	4147	14664	n/a	1608	1198	n/a	n/a						
	5 cm standoff equivalent - ~6.9 cm working distance focus position - manual focus													
	3315MH0004530021104148C00	4148	13998	n/a	1608	1198	n/a	n/a						
	25 cm standoff equivalent - ~26.9 cm working distance focus position - manual focus													
	3315MH0004530031104149C00	4149	13014	n/a	1608	1198	n/a	n/a						
	pre-launch flat field equivalent - ~63.3 cm working distance focus position - manual focus													
	3315MH0004530041104150C00	4150	12750	n/a	1608	1198	n/a	n/a						
infinity focus - manual focus														
3315MH0004530051104151C00	4151	12552	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	1608	1198	n/a	n/a

MAHLI sky flat field images - dust cover closed - second set (camera rotated approximately 180° relative to first set)													
Note: Where the Motor Count is given in blue font, the dust cover was closed during imaging; please use caution in interpreting the range and scale information, as the results are less certain.													
mhl00712	close focus - ~2.04 cm working distance focus position - manual focus	3315MH0007120001104152C00	4152	0	n/a	n/a	n/a	n/a	n/a	1608	1198	n/a	n/a
	2 cm standoff equivalent - ~3.9 cm working distance focus position - manual focus	3315MH0007120011104153C00	4153	2412	n/a	n/a	n/a	n/a	n/a	1608	1198	n/a	n/a
	5 cm standoff equivalent - ~6.9 cm working distance focus position - manual focus	3315MH0007120021104154C00	4154	3078	n/a	n/a	n/a	n/a	n/a	1608	1198	n/a	n/a
	25 cm standoff equivalent - ~26.9 cm working distance focus position - manual focus	3315MH0007120031104155C00	4155	4062	n/a	n/a	n/a	n/a	n/a	1608	1198	n/a	n/a
	infinity focus - manual focus	3315MH0007120041104156C00	4156	4488	n/a	n/a	n/a	n/a	n/a	1608	1198	n/a	n/a

last update: 06\_December\_2021

### Sol 3316 - MAHLI Image Range & Scale Information \*

Sequence	Image ID*	MSL:CAMERA_PRODUCT_ID (CDPID)	Motor Count	Range or Working Distance from motor mount (cm)	Standoff (MAHLI Toolframe +X) from motor count (cm)	Depth of Field estimate		Pixel Scale (µm/pixel)	Illuminated Pixels on CCD (approximate)		Image Dimensions (cm) (approximate)	
						near (cm)	far (cm)		horiz-ontal	vertical	horizontal (CCD columns)	vertical (CCD rows)
<small>*Note that other images might have been acquired; this table does not describe all images; it describes each camera positioning.</small>												

target named Whaligoe_Steps - a 9 x 1 mosaic												
mhli00836	position 1 of 9	intended standoff - 10 cm to 20 cm										
	3316MH0008360011104164C00	4164	13254	16.9	15.0	-0.8	0.8	66.3	2.7	1608	1198	10.7
	corresponding focus merge products:	best focus product:	3318MH0004400001104362R00						range map product:	3318MH0004400001104363S00		
mhli00836	position 2 of 9	intended standoff - 10 cm to 20 cm										
	3316MH0008360011104175C00	4175	13357	14.4	12.5	-0.6	0.6	57.6	2.0	1608	1198	9.3
	corresponding focus merge products:	best focus product:	3318MH0004400001104360R00						range map product:	3318MH0004400001104361S00		
mhli00836	position 3 of 9	intended standoff - 10 cm to 20 cm										
	3316MH0008360011104186C00	4186	13360	14.3	12.4	-0.6	0.6	57.4	2.0	1608	1198	9.2
	corresponding focus merge products:	best focus product:	3318MH0004400001104358R00						range map product:	3318MH0004400001104359S00		
mhli00836	position 4 of 9	intended standoff - 10 cm to 20 cm										
	3316MH0008360011104197C00	4197	13422	13.1	11.2	-0.5	0.5	53.2	1.7	1608	1198	8.5
	corresponding focus merge products:	best focus product:	3318MH0004400001104356R00						range map product:	3318MH0004400001104357S00		
mhli00836	position 5 of 9	intended standoff - 10 cm to 20 cm										
	3316MH0008360011104208C00	4208	13469	12.3	10.4	-0.4	0.4	50.3	1.5	1608	1198	8.1
	corresponding focus merge products:	best focus product:	3318MH0004400001104354R00						range map product:	3318MH0004400001104355S00		
mhli00836	position 6 of 9	intended standoff - 10 cm to 20 cm										
	3316MH0008360011104219C00	4219	13369	14.2	12.3	-0.5	0.6	56.7	1.9	1608	1198	9.1
	corresponding focus merge products:	best focus product:	3318MH0004400001104352R00						range map product:	3318MH0004400001104353S00		
mhli00836	position 7 of 9	intended standoff - 10 cm to 20 cm										
	3316MH0008360011104230C00	4230	13310	15.4	13.5	-0.6	0.7	61.3	2.3	1608	1198	9.9
	corresponding focus merge products:	best focus product:	3318MH0004400001104350R00						range map product:	3318MH0004400001104351S00		
mhli00836	position 8 of 9	intended standoff - 10 cm to 20 cm										
	3316MH0008360011104241C00	4241	13277	16.3	14.4	-0.7	0.7	64.1	2.5	1608	1198	10.3
	corresponding focus merge products:	best focus product:	3318MH0004400001104348R00						range map product:	3318MH0004400001104349S00		
mhli00836	position 9 of 9	intended standoff - 10 cm to 20 cm										
	3316MH0008360011104252C00	4252	13225	17.7	15.8	-0.8	0.9	69.2	3.0	1608	1198	11.1
	corresponding focus merge products:	best focus product:	3318MH0004400001104346R00						range map product:	3318MH0004400001104347S00		

target named Whaligoe_Steps												
mhli00706	context view	intended standoff - 25 cm										
	3316MH0007060011104263C00	4263	13014	26.7	24.8	-1.8	2.0	100.9	6.7	1608	1198	16.2
mhli00708	medium-resolution stereo-1	intended standoff - 5 cm										
	3316MH0007080011104266C00	4266	13988	6.9	5.0	-0.2	0.2	31.3	0.6	1608	1198	5.0
	corresponding focus merge products:	best focus product:	3318MH0004400001104344R00						range map product:	3318MH0004400001104345S00		
mhli00708	medium-resolution stereo-2	intended standoff - 5 cm										
	3316MH0007080011104277C00	4277	13981	7.0	5.1	-0.2	0.2	31.4	0.6	1608	1198	5.1
	corresponding focus merge products:	best focus product:	3318MH0004400001104342R00						range map product:	3318MH0004400001104343S00		
mhli00837	high resolution view	intended standoff - 1 cm										
	3316MH0008370021104289C00	4288	15095	2.8	0.9	-0.1	0.1	16.9	0.2	1608	1198	2.7
	corresponding focus merge products:	best focus product:	3318MH0004400001104340R00						range map product:	3318MH0004400001104341S00		

target named Laurentia												
mhli00706	context view	intended standoff - 25 cm										
	3316MH0007060011104299C00	4299	13020	26.3	24.4	-1.7	2.0	99.6	6.5	1608	1198	16.0
mhli00763	medium-resolution stereo-1	intended standoff - 5 cm										
	3316MH0007630011104302C00	4302	14028	6.7	4.8	-0.2	0.1	30.4	0.5	1608	1198	4.9
	corresponding focus merge products:	best focus product:	3318MH0004400001104338R00						range map product:	3318MH0004400001104339S00		
mhli00763	medium-resolution stereo-2	intended standoff - 5 cm										
	3316MH0007630011104313C00	4313	14023	6.7	4.8	-0.2	0.1	30.5	0.5	1608	1198	4.9
	corresponding focus merge products:	best focus product:	3318MH0004400001104336R00						range map product:	3318MH0004400001104337S00		
mhli00794	high resolution view	intended standoff - 1 cm										
	3316MH0007940011104324C00	4324	15184	2.7	0.8	0.0	0.1	16.3	0.2	1608	1198	2.6
	corresponding focus merge products:	best focus product:	3318MH0004400001104334R00						range map product:	3318MH0004400001104335S00		

last update: 07\_December\_2021

## Sol 3319 - MAHLI Image Range & Scale Information\*

\*Note that other images might have been acquired; this table does not describe all images; it describes each camera positioning.

**Working distance** is a photography term; it is the range from the MAH1 front lens element (sapphire window) to the target.

Standoff distance is measured from the plane defined by the tips of the MAHLI contact sensor probes to the target.

Range, Scale, and DOF are computed from Motor Count using the equations from version 2 of Edgett et al. (2015, <https://doi.org/10.13140/RG.2.1.3798.5447>).

Sequence	Image ID*	MSL:CAMERA_PRODUCT_ID (CDPID)	Motor Count	Range or Working Distance from motor mount (cm)	Standoff (MAHLI Toolframe +X) from motor count (cm)	Depth of Field estimate		Pixel Scale (µm/pixel)	Pixel Scale uncertainty (± µm/pixel)	Illuminated Pixels on CCD (approximate)		Image Dimensions (cm) (approximate)	
						near (cm)	far (cm)			horizontal (CCD columns)	vertical	horizontal (CCD columns)	vertical (CCD rows)

target named Duirinish														
mhli00190	context view		intended standoff - 25 cm											
	3319MH000190001104365C00		4365	13019	26.4	24.5	-1.8	2.0	99.8	6.6	1608	1198	16.1	12.0
mhli00168	medium-resolution stereo-1		intended standoff - 5 cm											
	3319MH000168001104367C00		4367	14027	6.7	4.8	-0.2	0.1	30.4	0.5	1608	1198	4.9	3.6
corresponding focus merge products:		best focus product:	3319MH0001930001104400R00				range map product:		3319MH0001930001104401S00					
mhli00168	medium-resolution stereo-2		intended standoff - 5 cm											
	3319MH000168001104377C00		4377	14036	6.6	4.7	-0.2	0.1	30.2	0.5	1608	1198	4.9	3.6
corresponding focus merge products:		best focus product:	3319MH0001930001104398R00				range map product:		3319MH0001930001104399S00					
mhli00743	high resolution view		intended standoff - 1 cm											
	3319MH0007430001104387C00		4387	15189	2.7	0.8	0.0	0.1	16.3	0.2	1608	1198	2.6	2.0
corresponding focus merge products:		best focus product:	3319MH0001930001104396R00				range map product:		3319MH0001930001104397S00					

last update: 15\_September\_2022

### Sol 3320 - MAHLI Image Range & Scale Information\*

Sequence	Image ID*	MSL:CAMERA_PRODUCT_ID (CDPID)	Motor Count	*Note that other images might have been acquired; this table does not describe all images; it describes each camera positioning.								
				Working distance is a photography term; it is the range from the MAHLI front lens element (sapphire window) to the target.		Standoff distance is measured from the plane defined by the tips of the MAHLI contact sensor probes to the target.		Range, Scale, and DOF are computed from Motor Count using the equations from version 2 of Edgett et al. (2015, <a href="https://doi.org/10.13140/RG.2.1.3798.5447">https://doi.org/10.13140/RG.2.1.3798.5447</a> ).				
				Range or Working Distance from motor mount (cm)	Standoff (MAHLI Toolframe +X) from motor count (cm)	Depth of Field estimate		Pixel Scale (μm/pixel)	Illuminated Pixels on CCD (approximate)		Image Dimensions (cm) (approximate)	
						near (cm)	far (cm)		horiz-ontal	vertical	horizontal (CCD columns)	vertical (CCD rows)

rover wheel inspection - view below rover undercarriage													
mhli00261	right (starboard) rear and middle wheels												
	manual focus on rear wheel												
	3320MH0002610011104402E01	4402	12582	~334	~332	~-1.6 m	~4.9 m	~1200	n/a	1608	1198	~193	~144
mhli00259	right (starboard) front wheel												
	manual focus on front wheel												
	3320MH0002590001104403E01	4403	12660	~113	~111	~27	~50	~400	~135	1608	1198	~64	~48
mhli00264	left (port) rear and middle wheels												
	manual focus on rear wheel												
	3320MH0002640001104404E03	4404	12582	~334	~332	~-1.6 m	~4.9 m	~1200	n/a	1608	1198	~193	~144
mhli00262	left (port) front wheel												
	manual focus on front wheel												
	3320MH0002620001104405E01	4405	12660	~113	~111	~27	~50	~400	~135	1608	1198	~64	~48

last update: [10\\_December\\_2021](#)

## Sol 3321 - MAHLI Image Range & Scale Information\*

*Note that other images might have been acquired; this table does not describe all images; it describes each camera positioning.								
Working distance is a photography term; it is the range from the MAHLI front lens element (sapphire window) to the target.								
Standoff distance is measured from the plane defined by the tips of the MAHLI contact sensor probes to the target.								
Range, Scale, and DOF are computed from Motor Count using the equations from version 2 of Edgett et al. (2015, <a href="https://doi.org/10.13140/RG.2.1.3798.5447">https://doi.org/10.13140/RG.2.1.3798.5447</a> ).								
Range or Working Distance from motor mount (cm)	Standoff (MAHLI Toolframe +X) from motor count (cm)	Depth of Field estimate		Pixel Scale ( $\mu\text{m/pixel}$ )	Pixel Scale uncertainty ( $\pm \mu\text{m/pixel}$ )		Illuminated Pixels on CCD (approximate)	
		near (cm)	far (cm)		horizontal	vertical	horizontal (CCD columns)	vertical (CCD rows)

last update: [14\\_December\\_2021](#)

## Sol 3323 - MAHLI Image Range & Scale Information\*

target named Helens_Bay														
mhli00190	context view		intended standoff - 25 cm											
	3323MH0001900011104449C00	4449	13022	26.2	24.3	-1.7	2.0	99.2	6.5	1608	1198	16.0	11.9	
mhli00299	medium-resolution stereo-1		intended standoff - 5 cm											
	3323MH0002990011104451C00	4451	14024	6.7	4.8	-0.2	0.1	30.4	0.5	1608	1198	4.9	3.6	
corresponding focus merge products:			best focus product:				range map product:				3324MH00027000110451L00			
mhli00299	medium-resolution stereo-2		intended standoff - 5 cm											
	3323MH0002990011104461C00	4461	14032	6.6	4.7	-0.2	0.1	30.3	0.5	1608	1198	4.9	3.6	
corresponding focus merge products:			best focus product:				range map product:				3324MH000270001104509500			
mhli00838	high resolution view		intended standoff - 1 cm											
	3323MH0008380011104471C00	4471	15146	2.7	0.8	0.0	0.1	16.6	0.2	1608	1198	2.7	2.0	
corresponding focus merge products:			best focus product:				range map product:				3324MH000270001104507500			

target named Lakehead														
mhl00190	context view		intended standoff - 25 cm											
	3323MH0001900011104481C00		4481	13016	26.6	24.7	-1.8	2.0	100.5	6.7	1608	1198	16.2	12.0
mhl00673	medium-resolution stereo-1		intended standoff - 5 cm											
	3323MH0006730011104483C00		4483	14121	6.1	4.2	-0.1	0.1	28.4	0.5	1608	1198	4.6	3.4
mhl00673	corresponding focus merge products:		best focus product:		3324MH0002270001104504R00				range map product:		3324MH0002270001104505S00			
	medium-resolution stereo-2		intended standoff - 5 cm											
	3323MH0006730011104493C00		4493	14138	6.0	4.1	-0.1	0.1	28.1	0.5	1608	1198	4.5	3.4
	corresponding focus merge products:		best focus product:		3324MH0002270001104502R00				range map product:		3324MH0002270001104503S00			

last update: 15\_December\_2021

Sol 3326 - MAHLI Image Range & Scale Information\*

Sequence	Image ID*	MSL:CAMERA_PRODUCT_ID (CDPID)	Motor Count	Range or Working Distance from motor mount (cm)	Standoff (MAHLI Toolframe +X) from motor count (cm)	Depth of Field estimate		Pixel Scale ( $\mu\text{m}/\text{pixel}$ )	Pixel Scale uncertainty ( $\pm \mu\text{m}/\text{pixel}$ )	Illuminated Pixels on CCD (approximate)		Image Dimensions (cm) (approximate)	
						near (cm)	far (cm)			horizontal (CCD columns)	vertical	horizontal (CCD columns)	vertical (CCD rows)

target named Portgower														
mhli00190	context view		intended standoff - 25 cm											
	3326MH0001900011104513C00		4513	13019	26.4	24.5	-1.8	2.0	99.8	6.6	1608	1198	16.1	12.0
mhli00306	medium-resolution stereo-1		intended standoff - 5 cm											
	3326MH0003060011104515C00		4515	14000	6.8	4.9	-0.2	0.2	31.0	0.6	1608	1198	5.0	3.7
corresponding focus merge products:		best focus product:				3326MH0002650001104536R00	range map product:				3326MH0002650001104537S00			
mhli00306	medium-resolution stereo-2		intended standoff - 5 cm											
	3326MH0003060011104525C00		4525	14002	6.8	4.9	-0.2	0.2	30.9	0.6	1608	1198	5.0	3.7
corresponding focus merge products:		best focus product:				3326MH0002650001104534R00	range map product:				3326MH0002650001104535S00			

last update: 20\_December\_2021

### Sol 3328 - MAHLI Image Range & Scale Information\*

*Note that other images might have been acquired; this table does not describe all images; it describes each camera positioning.													
Working distance is a photography term; it is the range from the MAHLI front lens element (sapphire window) to the target.													
Standoff distance is measured from the plane defined by the tips of the MAHLI contact sensor probes to the target.													
Range, Scale, and DOF are computed from Motor Count using the equations from version 2 of Edgett et al. (2015, <a href="https://doi.org/10.13140/RG.2.1.3798.5447">https://doi.org/10.13140/RG.2.1.3798.5447</a> ).													
Sequence	Image ID*	MSL:CAMERA_PRODUCT_ID (CDPID)	Motor Count	Range or Working Distance from motor mount (cm)	Standoff (MAHLI Toolframe +X) from motor count (cm)	Depth of Field estimate		Pixel Scale (µm/pixel)	Illuminated Pixels on CCD (approximate)		Image Dimensions (cm) (approximate)		
						near (cm)	far (cm)		horiz-ontal	vertical	horizontal (CCD columns)	vertical (CCD rows)	
<b>target named Korskellie</b>													
mhli00190	<b>context view</b>	<b>intended standoff - 25 cm</b>											
	3328MH0001900011104539C00	4539	13020	26.3	24.4	-1.7	2.0	99.6	6.5	1608	1198	16.0	
mhli00299	<b>medium-resolution stereo-1</b>	<b>intended standoff - 5 cm</b>											
	3328MH0002990011104541C00	4541	14009	6.8	4.9	-0.2	0.2	30.8	0.6	1608	1198	5.0	
	<i>corresponding focus merge products:</i>	<i>best focus product:</i> 3329MH0001930001104574R00		<i>range map product:</i> 3329MH0001930001104575S00								3.7	
mhli00299	<b>medium-resolution stereo-2</b>	<b>intended standoff - 5 cm</b>											
	3328MH0002990011104551C00	4551	14010	6.8	4.9	-0.2	0.2	30.8	0.5	1608	1198	4.9	
	<i>corresponding focus merge products:</i>	<i>best focus product:</i> 3329MH0001930001104572R00		<i>range map product:</i> 3329MH0001930001104573S00								3.7	
mhli00174	<b>high resolution view</b>	<b>intended standoff - 2 cm</b>											
	3328MH0001740011104561C00	4561	14699	3.8	1.9	-0.1	0.1	20.2	0.3	1608	1198	3.3	
	<i>corresponding focus merge products:</i>	<i>best focus product:</i> 3329MH0001930001104570R00		<i>range map product:</i> 3329MH0001930001104571S00								2.4	

<b>target named Korskellie</b>													
mhli00190	<b>context view</b>	<b>intended standoff - 25 cm</b>		4539	13020	26.3	24.4	-1.7	2.0	99.6	6.5	1608	1198
	3328MH0001900011104539C00											16.0	11.9
mhli00299	<b>medium-resolution stereo-1</b>	<b>intended standoff - 5 cm</b>		4541	14009	6.8	4.9	-0.2	0.2	30.8	0.6	1608	1198
	3328MH0002990011104541C00											5.0	3.7
	<i>corresponding focus merge products:</i>	<i>best focus product:</i> 3329MH0001930001104574R00		<i>range map product:</i> 3329MH0001930001104575S00									
mhli00299	<b>medium-resolution stereo-2</b>	<b>intended standoff - 5 cm</b>		4551	14010	6.8	4.9	-0.2	0.2	30.8	0.5	1608	1198
	3328MH0002990011104551C00											4.9	3.7
	<i>corresponding focus merge products:</i>	<i>best focus product:</i> 3329MH0001930001104572R00		<i>range map product:</i> 3329MH0001930001104573S00									
mhli00174	<b>high resolution view</b>	<b>intended standoff - 2 cm</b>		4561	14699	3.8	1.9	-0.1	0.1	20.2	0.3	1608	1198
	3328MH0001740011104561C00											3.3	2.4
	<i>corresponding focus merge products:</i>	<i>best focus product:</i> 3329MH0001930001104570R00		<i>range map product:</i> 3329MH0001930001104571S00									

last update: 20\_December\_2021

### Sol 3330 - MAHLI Image Range & Scale Information\*

Sequence	Image ID*	MSL:CAMERA_PRODUCT_ID (CDPID)	Motor Count	Range or Working Distance from motor mount (cm)	Standoff (MAHLI Toolframe +X) from motor count (cm)	Depth of Field estimate		Pixel Scale (µm/pixel)	Illuminated Pixels on CCD (approximate)		Image Dimensions (cm) (approximate)	
						near (cm)	far (cm)		horiz-ontal	vertical	horizontal (CCD columns)	vertical (CCD rows)
<small>*Note that other images might have been acquired; this table does not describe all images; it describes each camera positioning.</small>												

#### target named Aros\_Park

**Note:** Where the Motor Count is given in blue font, the dust cover was closed during imaging; please use caution in interpreting the range and scale information, as the results are less certain.

mhli00625	context view	intended standoff - 25 cm										
	3330MH0006250011104577C00	4577	4049	26.0	24.1	-1.7	1.9	98.4	6.4	1608	1198	15.8
mhli00553	medium-resolution view	intended standoff - 5 cm										
	3330MH0005530011104579C00	4579	2723	5.0	3.1	-0.1	0.1	24.5	0.4	1608	1198	3.9

#### target named Clochoderick- after DRT

**Note:** Where the Motor Count is given in blue font, the dust cover was closed during imaging; please use caution in interpreting the range and scale information, as the results are less certain.

mhli00625	context view	intended standoff - 25 cm										
	3330MH0006250011104581C00	4581	4084	28.2	26.3	-2.0	2.3	106.1	7.5	1608	1198	17.1
mhli00553	medium-resolution view	intended standoff - 5 cm										
	3330MH0005530011104583C00	4583	3076	6.9	5.0	-0.2	0.2	31.0	0.6	1608	1198	5.0

last update: 03\_January\_2022

### Sol 3344 - MAHLI Image Range & Scale Information\*

*Note that other images might have been acquired; this table does not describe all images; it describes each camera positioning.																			
Working distance is a photography term; it is the range from the MAHLI front lens element (sapphire window) to the target.																			
Standoff distance is measured from the plane defined by the tips of the MAHLI contact sensor probes to the target.																			
Range, Scale, and DOF are computed from Motor Count using the equations from version 2 of Edgett et al. (2015, <a href="https://doi.org/10.13140/RG.2.1.3798.5447">https://doi.org/10.13140/RG.2.1.3798.5447</a> ).																			
Sequence	Image ID*	MSL:CAMERA_PRODUCT_ID (CDPID)	Motor Count	Range or Working Distance from motor mount (cm)	Standoff (MAHLI Toolframe +X) from motor count (cm)	Depth of Field estimate		Pixel Scale (µm/pixel)	Illuminated Pixels on CCD (approximate)		Image Dimensions (cm) (approximate)								
						near (cm)	far (cm)		horiz-	vertical	horizontal (CCD columns)	vertical (CCD rows)							
target named Maes_Howe - after DRT																			
mhli00190	context view	intended standoff - 25 cm																	
	3344MH0001900011104585C00	4585	13020	26.3	24.4	-1.7	2.0	99.6	6.5	1608	1198	16.0							
mhli00173	medium-resolution stereo-1	intended standoff - 5 cm																	
	APXS raster spot 1																		
	3344MH0001730011104587C00	4587	14005	6.8	4.9	-0.2	0.2	30.9	0.6	1608	1198	5.0							
	corresponding focus merge products:	best focus product:				range map product:				3345MH0001530001104633S00									
mhli00173	medium-resolution stereo-2	intended standoff - 5 cm																	
	APXS raster spot 1																		
	3344MH0001730011104597C00	4597	14006	6.8	4.9	-0.2	0.2	30.9	0.6	1608	1198	5.0							
	corresponding focus merge products:	best focus product:				range map product:				3345MH0001530001104631S00									
mhli00335	high resolution view	intended standoff - 2 cm																	
	APXS raster spot 1																		
	3344MH0003350011104607C00	4607	14698	3.8	1.9	-0.1	0.1	20.2	0.3	1608	1198	3.3							
	corresponding focus merge products:	best focus product:				range map product:				3345MH0001530001104629S00									
mhli00173	medium-resolution view	intended standoff - 5 cm																	
	APXS raster spot 2																		
	3344MH0001730011104617C00	4617	14008	6.8	4.9	-0.2	0.2	30.8	0.6	1608	1198	5.0							
	corresponding focus merge products:	best focus product:				range map product:				3345MH0001530001104627S00									

last update: 05\_January\_2022

### Sol 3347 - MAHLI Image Range & Scale Information\*

*Note that other images might have been acquired; this table does not describe all images; it describes each camera positioning.														
Working distance is a photography term; it is the range from the MAHLI front lens element (sapphire window) to the target.														
Standoff distance is measured from the plane defined by the tips of the MAHLI contact sensor probes to the target.														
Range, Scale, and DOF are computed from Motor Count using the equations from version 2 of Edgett et al. (2015, <a href="https://doi.org/10.13140/RG.2.1.3798.5447">https://doi.org/10.13140/RG.2.1.3798.5447</a> ).														
Sequence	Image ID*	MSL:CAMERA_PRODUCT_ID (CDPID)	Motor Count	Range or Working Distance from motor mount (cm)	Standoff (MAHLI Toolframe +X) from motor count (cm)	Depth of Field estimate		Pixel Scale (µm/pixel)	Illuminated Pixels on CCD (approximate)		Image Dimensions (cm) (approximate)			
						near (cm)	far (cm)		horiz-ontal	vertical	horizontal (CCD columns)	vertical (CCD rows)		
<b>target named Verde</b>														
mhli00190	context view	<b>intended standoff - 25 cm</b>												
	3347MH0001900011104635C00	4635	13016	26.6	24.7	-1.8	2.0	100.5	6.7	1608	1198	16.2		
mhli00173	medium-resolution stereo-1	<b>intended standoff - 5 cm</b>												
	3347MH0001730011104637C00	4637	13989	6.9	5.0	-0.2	0.2	31.2	0.6	1608	1198	5.0		
mhli00173	corresponding focus merge products:	best focus product:		3347MH0002650001104658R00		range map product:		3347MH0002650001104659S00						
	3347MH0001730011104647C00	4647	13989	6.9	5.0	-0.2	0.2	31.2	0.6	1608	1198	5.0		
	corresponding focus merge products:	best focus product:		3347MH0002650001104656R00		range map product:		3347MH0002650001104657S00						

target named Verde												
mhli00190	context view	<b>intended standoff - 25 cm</b>										
	3347MH0001900011104635C00	4635	13016	26.6	24.7	-1.8	2.0	100.5	6.7	1608	1198	16.2
mhli00173	medium-resolution stereo-1	<b>intended standoff - 5 cm</b>										
	3347MH0001730011104637C00	4637	13989	6.9	5.0	-0.2	0.2	31.2	0.6	1608	1198	5.0
mhli00173	corresponding focus merge products:	best focus product:		3347MH0002650001104658R00		range map product:		3347MH0002650001104659S00				
	3347MH0001730011104647C00	4647	13989	6.9	5.0	-0.2	0.2	31.2	0.6	1608	1198	5.0
	corresponding focus merge products:	best focus product:		3347MH0002650001104656R00		range map product:		3347MH0002650001104657S00				

last update: 08\_January\_2022

## Sol 3349 - MAHLI Image Range & Scale Information\*

*Note that other images might have been acquired; this table does not describe all images; it describes each camera positioning.									
Working distance is a photography term; it is the range from the MAHLI front lens element (sapphire window) to the target.									
Standoff distance is measured from the plane defined by the tips of the MAHLI contact sensor probes to the target.									
Range, Scale, and DOF are computed from Motor Count using the equations from version 2 of Edgett et al. (2015, <a href="https://doi.org/10.13140/RG.2.1.3798.5447">https://doi.org/10.13140/RG.2.1.3798.5447</a> ).									
Range or Working Distance from motor mount (cm)	Standoff (MAHLI Toolframe +X) from motor count (cm)	Depth of Field estimate		Pixel Scale ( $\mu\text{m/pixel}$ )	Pixel Scale uncertainty ( $\pm \mu\text{m/pixel}$ )	Illuminated Pixels on CCD (approximate)		Image Dimensions (cm) (approximate)	
		near (cm)	far (cm)			horizontal (CCD columns)	vertical (CCD rows)		

target named El_Fosso														
mhli00190	context view		intended standoff - 25 cm											
	3349MH0001900011104661C00	4661	13019	26.4	24.5	-1.8	2.0	99.8	6.6	1608	1198	16.1	12.0	
mhli00299	medium-resolution stereo-1		intended standoff - 5 cm											
	3349MH0002990011104663C00	4663	14039	6.6	4.7	-0.2	0.1	30.1	0.5	1608	1198	4.8	3.6	
corresponding focus merge products:			best focus product:				range map product:				3349MH0002650001004684R00			
mhli00299	medium-resolution stereo-2		intended standoff - 5 cm											
	3349MH0002990011004673C00	4673	14037	6.6	4.7	-0.2	0.1	30.2	0.5	1608	1198	4.8	3.6	
corresponding focus merge products:			best focus product:				range map product:				3349MH0002650001004683R00			

last update: 11\_January\_2022

### Sol 3353 - MAHLI Image Range & Scale Information\*

*Note that other images might have been acquired; this table does not describe all images; it describes each camera positioning.													
Working distance is a photography term; it is the range from the MAHLI front lens element (sapphire window) to the target.													
Standoff distance is measured from the plane defined by the tips of the MAHLI contact sensor probes to the target.													
Range, Scale, and DOF are computed from Motor Count using the equations from version 2 of Edgett et al. (2015, <a href="https://doi.org/10.13140/RG.2.1.3798.5447">https://doi.org/10.13140/RG.2.1.3798.5447</a> ).													
Sequence	Image ID*	MSL:CAMERA_PRODUCT_ID (CDPID)	Motor Count	Range or Working Distance from motor mount (cm)	Standoff (MAHLI Toolframe +X) from motor count (cm)	Depth of Field estimate		Pixel Scale (µm/pixel)	Illuminated Pixels on CCD (approximate)		Image Dimensions (cm) (approximate)		
						near (cm)	far (cm)		horiz-	vertical	horizontal (CCD columns)	vertical (CCD rows)	

rover wheel inspection - top view, looking down on wheels - full wheel inspection, position 1 of planned 5 but 2 actual (performed on sol 3353)													
<b>left (port) rear wheel</b>													
mhli00769	manual focus	intended distance to top of wheel: ~170 cm											
	3353MH0007690011004686I01	4686	12618	~172	~170	~-0.6 m	~1.6 m	~612	n/a	1608	1198	~98	~73
<b>left (port) middle wheel</b>													
mhli00770	manual focus	intended distance to top of wheel: ~112 cm											
	3353MH0007700011004687I01	4687	12660	~114	~112	~28	~50	~408	~137	1608	1198	~65	~49
<b>left (port) front wheel</b>													
mhli00771	manual focus	intended distance to top of wheel: ~135 cm											
	3353MH0007710011004688I01	4688	12642	~137	~135	~38	~82	~489	~210	1608	1198	~78	~59
<b>right (starboard) front wheel</b>													
mhli00772	manual focus	intended distance to top of wheel: ~124 cm											
	3353MH0007720011004689I01	4689	12648	~126	~124	~32	~67	~450	~175	1608	1198	~72	~54

rover wheel inspection - top view, looking down on wheels - full wheel inspection, position 2 of planned 5 but 2 actual (performed on sol 3353)													
<b>left (port) rear wheel</b>													
mhli00769	manual focus	intended distance to top of wheel: ~170 cm											
	3353MH0007690011004690I01	4690	12618	~172	~170	~-0.6 m	~1.6 m	~612	n/a	1608	1198	~98	~73
<b>left (port) middle wheel</b>													
mhli00770	manual focus	intended distance to top of wheel: ~112 cm											
	3353MH0007700011004691I01	4691	12660	~114	~112	~28	~50	~408	~137	1608	1198	~65	~49
<b>left (port) front wheel</b>													
mhli00771	manual focus	intended distance to top of wheel: ~135 cm											
	3353MH0007710011004692I01	4692	12642	~137	~135	~38	~82	~489	~210	1608	1198	~78	~59
<b>right (starboard) front wheel</b>													
mhli00772	manual focus	intended distance to top of wheel: ~124 cm											
	3353MH0007720011004693I01	4693	12648	~126	~124	~32	~67	~450	~175	1608	1198	~72	~54

last update: 21\_January\_2022

*Note that other images might have been acquired; this table does not describe all images; it describes each camera positioning.						
Working distance is a photography term; it is the range from the MAH1 front lens element (sapphire window) to the target.						
Standoff distance is measured from the plane defined by the tips of the MAH1 contact sensor probes to the target.						
Range, Scale, and DOF are computed from Motor Count using the equations from version 2 of Edgett et al. (2015, <a href="https://doi.org/10.13140/RG.2.1.3798.5447">https://doi.org/10.13140/RG.2.1.3798.5447</a> ).						
Range or Working Distance from	Standoff (MAH1 Toolframe +X)	Depth of Field estimate	Pixel Scale (μm/pixel)	Pixel Scale uncertainty	Illuminated Pixels on CCD (approximate)	Image Dimensions (cm) (approximate)

target named Coati													
mhl00706	context view	intended standoff - 25 cm											
		3362MH0007060011200002C00	2	13011	26.9	25.0	-1.8	2.1	101.6	6.8	1608	1198	16.3
mhl00714	medium-resolution stereo-1	intended standoff - 5 cm											
	3362MH0007140011200005C00	5	13913	7.5	5.6	-0.2	0.2	33.1	0.6	1608	1198	5.3	4.0
corresponding focus merge products:		best focus product:			3363MH0001700001200101R00	range map product:			3363MH0001700001200102500				
mhl00714	medium-resolution stereo-2	intended standoff - 5 cm											
	3362MH0007140011200016C00	16	13911	7.5	5.6	-0.2	0.2	33.2	0.6	1608	1198	5.3	4.0
corresponding focus merge products:		best focus product:			3363MH0001700001200099R00	range map product:			3363MH0001700001200100500				

target named Caroni - a 5 x 1 mosaic															
mhli00152	position 1 of 5		intended standoff - 7 cm												
	3362MH0001520011200038C00	38	13760	8.7	6.8	-0.2	0.2	37.6	0.8	1608	1198	6.1	4.5		
corresponding focus merge products:		best focus product:		3363MH0001700001200095R00	range map product:							3363MH0001700001200096S00			
mhli00152	position 2 of 5		intended standoff - 7 cm												
	3362MH0001520011200048C00	48	13825	8.2	6.3	-0.2	0.2	35.6	0.7	1608	1198	5.7	4.3		
corresponding focus merge products:		best focus product:		3363MH0001700001200093R00	range map product:							3363MH0001700001200094G00			
mhli00152	position 3 of 5		intended standoff - 7 cm												
	3362MH0001520011200058C00	58	13929	7.3	5.4	-0.2	0.2	32.7	0.6	1608	1198	5.3	3.9		
corresponding focus merge products:		best focus product:		3363MH0001700001200091R00	range map product:							3363MH0001700001200092S00			
mhli00152	position 4 of 5		intended standoff - 7 cm												
	3362MH0001520011200068C00	68	13950	7.2	5.3	-0.2	0.2	32.2	0.6	1608	1198	5.2	3.9		
corresponding focus merge products:		best focus product:		3363MH0001700001200089R00	range map product:							3363MH0001700001200090S00			
mhli00152	position 5 of 5		intended standoff - 7 cm												
	3362MH0001520011200078C00	78	14005	6.8	4.9	-0.2	0.2	30.9	0.6	1608	1198	5.0	3.7		
corresponding focus merge products:		best focus product:		3363MH0001700001200087R00	range map product:							3363MH0001700001200088S00			

last update: 24\_January\_2022

### Sol 3364 - MAHLI Image Range & Scale Information\*

Sequence	Image ID*	MSL:CAMERA_PRODUCT_ID (CDPID)	Motor Count	*Note that other images might have been acquired; this table does not describe all images; it describes each camera positioning.								
				Working distance is a photography term; it is the range from the MAHLI front lens element (sapphire window) to the target.		Standoff distance is measured from the plane defined by the tips of the MAHLI contact sensor probes to the target.		Range, Scale, and DOF are computed from Motor Count using the equations from version 2 of Edgett et al. (2015, <a href="https://doi.org/10.13140/RG.2.1.3798.5447">https://doi.org/10.13140/RG.2.1.3798.5447</a> ).				
				Range or Working Distance from motor mount (cm)	Standoff (MAHLI Toolframe +X) from motor count (cm)	Depth of Field estimate		Pixel Scale (µm/pixel)	Illuminated Pixels on CCD (approximate)		Image Dimensions (cm) (approximate)	
						near (cm)	far (cm)		horiz-ontal	vertical	horizontal (CCD columns)	vertical (CCD rows)

target named Mazaruni													
mhli00190	context view	intended standoff - 25 cm											
	3364MH0001900011200104C00	104	13015	26.6	24.7	-1.8	2.0	100.7	6.7	1608	1198	16.2	12.1
mhli00299	medium-resolution stereo-1	intended standoff - 5 cm											
	3364MH0002990011200106C00	106	13960	7.1	5.2	-0.2	0.2	31.9	0.6	1608	1198	5.1	3.8
	corresponding focus merge products:	best focus product:	3365MH0001530001200153R00					range map product:	3365MH0001530001200154S00				
mhli00299	medium-resolution stereo-2	intended standoff - 5 cm											
	3364MH0002990011200116C00	116	13989	6.9	5.0	-0.2	0.2	31.2	0.6	1608	1198	5.0	3.7
	corresponding focus merge products:	best focus product:	3365MH0001530001200151R00					range map product:	3365MH0001530001200152S00				

target named Formoso													
mhli00190	context view	intended standoff - 25 cm											
	3364MH0001900011200126C00	126	13020	26.3	24.4	-1.7	2.0	99.6	6.5	1608	1198	16.0	11.9
mhli00168	medium-resolution stereo-1	intended standoff - 5 cm											
	3364MH0001680011200128C00	128	14024	6.7	4.8	-0.2	0.1	30.4	0.5	1608	1198	4.9	3.6
	corresponding focus merge products:	best focus product:	3365MH0001530001200149R00					range map product:	3365MH0001530001200150S00				
mhli00168	medium-resolution stereo-2	intended standoff - 5 cm											
	3364MH0001680011200138C00	138	14010	6.8	4.9	-0.2	0.2	30.8	0.5	1608	1198	4.9	3.7
	corresponding focus merge products:	best focus product:	3365MH0001530001200147R00					range map product:	3365MH0001530001200148S00				

**Sol 3369 - MAHLI Image Range & Scale Information\***

\*Note that other images might have been acquired; this table does not describe all images; it describes each camera positioning.

Working distance is a photography term; it is the range from the MAHLI front lens element (sapphire window) to the target.

Standoff distance is measured from the plane defined by the tips of the MAHLI contact sensor probes to the target.

Range, Scale, and DOF are computed from Motor Count using the equations from version 2 of Edgett et al. (2015, <https://doi.org/10.13140/RG.2.1.3798.5447>).

Sequence	Image ID*	MSL:CAMERA_PRODUCT_ID (CDPID)	Motor Count	Range or Working Distance from motor mount (cm)	Standoff (MAHLI Toolframe +X) from motor count (cm)	Depth of Field estimate		Pixel Scale (μm/pixel)	Illuminated Pixels on CCD (approximate)	Image Dimensions (cm) (approximate)	
						near (cm)	far (cm)			horizontal (CCD columns)	vertical (CCD rows)

**rover wheel inspection - top view, looking down on wheels - full wheel inspection, position 1 of 5 (performed on sol 3369)**

mhli00769	left (port) rear wheel													
	manual focus	intended distance to top of wheel: ~170 cm												
		3369MH0007690011200155E01	155	12618	~172	~170	~-0.6 m	~1.6 m	~612	n/a	1608	1198	~98	~73
mhli00770	left (port) middle wheel													
	manual focus	intended distance to top of wheel: ~112 cm												
		3369MH0007700011200156E01	156	12660	~114	~112	~-28	~50	~408	~137	1608	1198	~65	~49
mhli00771	left (port) front wheel													
	manual focus	intended distance to top of wheel: ~135 cm												
		3369MH0007710011200157E01	157	12642	~137	~135	~-38	~82	~489	~210	1608	1198	~78	~59
mhli00772	right (starboard) front wheel													
	manual focus	intended distance to top of wheel: ~124 cm												
		3369MH0007720011200158E01	158	12648	~126	~124	~-32	~67	~450	~175	1608	1198	~72	~54

**rover wheel inspection - top view, looking down on wheels - full wheel inspection, position 2 of 5 (performed on sol 3369)**

mhli00769	left (port) rear wheel													
	manual focus	intended distance to top of wheel: ~170 cm												
		3369MH0007690011200159E01	159	12618	~172	~170	~-0.6 m	~1.6 m	~612	n/a	1608	1198	~98	~73
mhli00770	left (port) middle wheel													
	manual focus	intended distance to top of wheel: ~112 cm												
		3369MH0007700011200160E01	160	12660	~114	~112	~-28	~50	~408	~137	1608	1198	~65	~49
mhli00771	left (port) front wheel													
	manual focus	intended distance to top of wheel: ~135 cm												
		3369MH0007710011200161E01	161	12642	~137	~135	~-38	~82	~489	~210	1608	1198	~78	~59
mhli00772	right (starboard) front wheel													
	manual focus	intended distance to top of wheel: ~124 cm												
		3369MH0007720011200162E01	162	12648	~126	~124	~-32	~67	~450	~175	1608	1198	~72	~54

**rover wheel inspection - top view, looking down on wheels - full wheel inspection, position 3 of 5 (performed on sol 3369)**

mhli00769	left (port) rear wheel													
	manual focus	intended distance to top of wheel: ~170 cm												
		3369MH0007690011200163E01	163	12618	~172	~170	~-0.6 m	~1.6 m	~612	n/a	1608	1198	~98	~73
mhli00770	left (port) middle wheel													
	manual focus	intended distance to top of wheel: ~112 cm												
		3369MH0007700011200164E01	164	12660	~114	~112	~-28	~50	~408	~137	1608	1198	~65	~49
mhli00771	left (port) front wheel													
	manual focus	intended distance to top of wheel: ~135 cm												
		3369MH0007710011200165E01	165	12642	~137	~135	~-38	~82	~489	~210	1608	1198	~78	~59
mhli00772	right (starboard) front wheel													
	manual focus	intended distance to top of wheel: ~124 cm												
		3369MH0007720011200166E01	166	12648	~126	~124	~-32	~67	~450	~175	1608	1198	~72	~54

**rover wheel inspection - top view, looking down on wheels - full wheel inspection, position 4 of 5 (performed on sol 3369)**

mhli00769	left (port) rear wheel													
	manual focus	intended distance to top of wheel: ~170 cm												
		3369MH0007690011200167E01	167	12618	~172	~170	~-0.6 m	~1.6 m	~612	n/a	1608	1198	~98	~73
mhli00770	left (port) middle wheel													
	manual focus	intended distance to top of wheel: ~112 cm												
		3369MH0007700011200168E01	168	12660	~114	~112	~-28	~50	~408	~137	1608	1198	~65	~49
mhli00771	left (port) front wheel													
	manual focus	intended distance to top of wheel: ~135 cm												
		3369MH0007710011200169E01	169	12642	~137	~135	~-38	~82	~489	~210	1608	1198	~78	~59
mhli00772	right (starboard) front wheel													
	manual focus	intended distance to top of wheel: ~124 cm												
		3369MH0007720011200170E01	170	12648	~126	~124	~-32	~67	~450	~175	1608	1198	~72	~54

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rover wheel inspection - top view, looking down on wheels - full wheel inspection, position 5 of 5 (performed on sol 3369)															
mhli00769	<b>left (port) rear wheel</b>														
	<b>manual focus</b>	intended distance to top of wheel: ~170 cm													
	3369MH0007690011200171E01	171	12618	~172	~170	~-0.6 m	~1.6 m	~612	n/a	1608	1198	~98	~73		
mhli00770	<b>left (port) middle wheel</b>														
	<b>manual focus</b>	intended distance to top of wheel: ~112 cm													
	3369MH0007700011200172E01	172	12660	~114	~112	~-28	~50	~408	~137	1608	1198	~65	~49		
mhli00771	<b>left (port) front wheel</b>														
	<b>manual focus</b>	intended distance to top of wheel: ~135 cm													
	3369MH0007710011200173E01	173	12642	~137	~135	~-38	~82	~489	~210	1608	1198	~78	~59		
mhli00772	<b>right (starboard) front wheel</b>														
	<b>manual focus</b>	intended distance to top of wheel: ~124 cm													
	3369MH0007720011200174E01	174	12648	~126	~124	~-32	~67	~450	~175	1608	1198	~72	~54		

last update: [31\\_January\\_2022](#)

## Sol 3371 - MAHLI Image Range & Scale Information\*

target named <b>The_Test</b> - a 6 x 1 mosaic														
mhli00708	<b>position 1 of 6</b>		<b>intended standoff - 5 cm</b>											
	3371MH0007080011200176C00	176	13999	6.9	5.0	-0.2	0.2	31.0	0.6	1608	1198	5.0	3.7	
<i>corresponding focus merge products:</i>		<i>best focus product:</i> 3372MH0005360001200295R00						<i>range map product:</i> 3372MH0005360001200296S00						
mhli00708	<b>position 2 of 6</b>		<b>intended standoff - 5 cm</b>											
	3371MH0007080011200187C00	187	14051	6.5	4.6	-0.2	0.1	29.9	0.5	1608	1198	4.8	3.6	
<i>corresponding focus merge products:</i>		<i>best focus product:</i> 3372MH0005360001200293R00						<i>range map product:</i> 3372MH0005360001200294S00						
mhli00708	<b>position 3 of 6</b>		<b>intended standoff - 5 cm</b>											
	3371MH0007080011200198C00	198	14157	5.9	4.0	-0.1	0.1	27.7	0.5	1608	1198	4.5	3.3	
<i>corresponding focus merge products:</i>		<i>best focus product:</i> 3372MH0005360001200291R00						<i>range map product:</i> 3372MH0005360001200292S00						
mhli00708	<b>position 4 of 6</b>		<b>intended standoff - 5 cm</b>											
	3371MH0007080011200209C00	209	14039	6.6	4.7	-0.2	0.1	30.1	0.5	1608	1198	4.8	3.6	
<i>corresponding focus merge products:</i>		<i>best focus product:</i> 3372MH0005360001200289R00						<i>range map product:</i> 3372MH0005360001200290S00						
mhli00708	<b>position 5 of 6</b>		<b>intended standoff - 5 cm</b>											
	3371MH0007080011200220C00	220	14063	6.4	4.5	-0.1	0.1	29.6	0.5	1608	1198	4.8	3.5	
<i>corresponding focus merge products:</i>		<i>best focus product:</i> 3372MH0005360001200287R00						<i>range map product:</i> 3372MH0005360001200288S00						
mhli00708	<b>position 6 of 6</b>		<b>intended standoff - 5 cm</b>											
	3371MH0007080011200231C00	231	14185	5.8	3.9	-0.1	0.1	27.2	0.4	1608	1198	4.4	3.3	
<i>corresponding focus merge products:</i>		<i>best focus product:</i> 3372MH0005360001200285R00						<i>range map product:</i> 3372MH0005360001200286S00						

target named <b>Suapi</b> - after DRT - quantitative relief model (QRM) data													
mhl00190	context view	intended standoff - 25 cm											
	3371MH0001900011200242C00	242	13015	26.6	24.7	-1.8	2.0	100.7	6.7	1608	1198	16.2	12.1
mhl00173	med res - stereo-1 & relief model position 1	intended standoff - 5 cm											
	3371MH0001730011200244C00	244	13954	7.2	5.3	-0.2	0.2	32.1	0.6	1608	1198	5.2	3.8
	corresponding focus merge products:	best focus product: 3372MH0005360001200283R00						range map product: 3372MH0005360001200284S00					
mhl00173	med res - stereo-2 & relief model position 2	intended standoff - 5 cm											
	3371MH0001730011200254C00	254	13983	7.0	5.1	-0.2	0.2	31.4	0.6	1608	1198	5.0	3.8
	corresponding focus merge products:	best focus product: 3372MH0005360001200281R00						range map product: 3372MH0005360001200282S00					
mhl00705	med res - relief model position 3	intended standoff - 5 cm											
	3371MH0007050011200264C00	264	13980	7.0	5.1	-0.2	0.2	31.5	0.6	1608	1198	5.1	3.8
mhl00705	med res - relief model position 4	intended standoff - 5 cm											
	3371MH0007050011200266C00	266	13978	7.0	5.1	-0.2	0.2	31.5	0.6	1608	1198	5.1	3.8
mhl00705	med res - relief model position 5	intended standoff - 5 cm											
	3371MH0007050011200268C00	268	13973	7.0	5.1	-0.2	0.2	31.6	0.6	1608	1198	5.1	3.8
mhl00426	high resolution view	intended standoff - 1 cm											
	3371MH0004260011200270C00	270	15021	3.0	1.1	-0.1	0.1	17.4	0.2	1608	1198	2.8	2.1
	corresponding focus merge products:	best focus product: 3372MH0005360001200279R00						range map product: 3372MH0005360001200280S00					

last update: 04\_February\_2022

### Sol 3374 - MAHLI Image Range & Scale Information \*

Sequence	Image ID*	MSL:CAMERA_PRODUCT_ID (CDPID)	Motor Count	Working distance is a photography term; it is the range from the MAHLI front lens element (sapphire window) to the target.										
				Range or Working Distance from motor mount (cm)		Standoff (MAHLI Toolframe +X) from motor count (cm)		Depth of Field estimate		Pixel Scale (µm/pixel)	Illuminated Pixels on CCD (approximate)		Image Dimensions (cm) (approximate)	
				near (cm)	far (cm)	-0.7	0.7	64.2	2.5		1608	1198	10.3	7.7

target named Toron- an 11 frame "T-shaped" mosaic													
mhli00841	position 1 of 11	intended standoff - 15 cm											
	3374MH0008410011200298C00	298	13276	16.3	14.4	-0.7	0.7	64.2	2.5	1608	1198	10.3	7.7
	corresponding focus merge products:	best focus product:	3375MH0004400001200477R00							range map product:	3375MH0004400001200478S00		
mhli00841	position 2 of 11	intended standoff - 15 cm											
	3374MH0008410011200308C00	308	13278	16.2	14.3	-0.7	0.7	64.0	2.5	1608	1198	10.3	7.7
	corresponding focus merge products:	best focus product:	3375MH0004400001200475R00							range map product:	3375MH0004400001200476S00		
mhli00841	position 3 of 11	intended standoff - 15 cm											
	3374MH0008410011200318C00	318	13262	16.6	14.7	-0.7	0.8	65.5	2.6	1608	1198	10.5	7.8
	corresponding focus merge products:	best focus product:	3375MH0004400001200473R00							range map product:	3375MH0004400001200474S00		
mhli00841	position 4 of 11	intended standoff - 15 cm											
	3374MH0008410011200328C00	328	13297	15.8	13.9	-0.7	0.7	62.4	2.4	1608	1198	10.0	7.5
	corresponding focus merge products:	best focus product:	3375MH0004400001200471R00							range map product:	3375MH0004400001200472S00		
mhli00841	position 5 of 11	intended standoff - 15 cm											
	3374MH0008410011200338C00	338	13320	15.2	13.3	-0.6	0.6	60.4	2.2	1608	1198	9.7	7.2
	corresponding focus merge products:	best focus product:	3375MH0004400001200469R00							range map product:	3375MH0004400001200470S00		
mhli00841	position 6 of 11	intended standoff - 15 cm											
	3374MH0008410011200348C00	348	13350	14.5	12.6	-0.6	0.6	58.1	2.0	1608	1198	9.3	7.0
	corresponding focus merge products:	best focus product:	3375MH0004400001200467R00							range map product:	3375MH0004400001200468S00		
mhli00841	position 7 of 11	intended standoff - 15 cm											
	3374MH0008410011200358C00	358	13333	14.9	13.0	-0.6	0.6	59.4	2.1	1608	1198	9.6	7.1
	corresponding focus merge products:	best focus product:	3375MH0004400001200465R00							range map product:	3375MH0004400001200466S00		
mhli00841	position 8 of 11	intended standoff - 15 cm											
	3374MH0008410011200368C00	368	13327	15.1	13.2	-0.6	0.6	59.9	2.2	1608	1198	9.6	7.2
	corresponding focus merge products:	best focus product:	3375MH0004400001200463R00							range map product:	3375MH0004400001200464S00		
mhli00841	position 9 of 11	intended standoff - 15 cm											
	3374MH0008410011200378C00	378	13342	14.7	12.8	-0.6	0.6	58.7	2.1	1608	1198	9.4	7.0
	corresponding focus merge products:	best focus product:	3375MH0004400001200461R00							range map product:	3375MH0004400001200462S00		
mhli00841	position 10 of 11	intended standoff - 15 cm											
	3374MH0008410011200388C00	388	13315	15.3	13.4	-0.6	0.6	60.9	2.3	1608	1198	9.8	7.3
	corresponding focus merge products:	best focus product:	3375MH0004400001200459R00							range map product:	3375MH0004400001200460S00		
mhli00841	position 11 of 11	intended standoff - 15 cm											
	3374MH0008410011200398C00	398	13232	17.5	15.6	-0.8	0.8	68.4	2.9	1608	1198	11.0	8.2
	corresponding focus merge products:	best focus product:	3375MH0004400001200457R00							range map product:	3375MH0004400001200458S00		

target named Surumu													
mhli00190	context view	intended standoff - 25 cm											
	3374MH0001900011200408C00	408	13016	26.6	24.7	-1.8	2.0	100.5	6.7	1608	1198	16.2	12.0
mhli00152	medium-resolution stereo-1	intended standoff - 5 cm											
	APXS raster spot 2												
	3374MH0001520011200410C00	410	13984	7.0	5.1	-0.2	0.2	31.4	0.6	1608	1198	5.0	3.8
	corresponding focus merge products:	best focus product:	3375MH0004400001200455R00							range map product:	3375MH0004400001200456S00		
mhli00152	medium-resolution stereo-2	intended standoff - 5 cm											
	APXS raster spot 2												
	3374MH0001520011200420C00	420	13979	7.0	5.1	-0.2	0.2	31.5	0.6	1608	1198	5.1	3.8
	corresponding focus merge products:	best focus product:	3375MH0004400001200453R00							range map product:	3375MH0004400001200454S00		
mhli00419	high resolution view	intended standoff - 1 cm											
	APXS raster spot 2												
	3374MH0004190011200430C00	430	15053	2.9	1.0	-0.1	0.1	17.2	0.2	1608	1198	2.8	2.1
	corresponding focus merge products:	best focus product:	3375MH0004400001200451R00							range map product:	3375MH0004400001200452S00		
mhli00152	medium-resolution view	intended standoff - 5 cm											
	APXS raster spot 1												
	3374MH0001520011200440C00	440	13955	7.1	5.2	-0.2	0.2	32.1	0.6	1608	1198	5.2	3.8
	corresponding focus merge products:	best focus product:	3375MH0004400001200449R00							range map product:	3375MH0004400001200450S00		

last update: 04\_February\_2022

## Sol 3376 - MAHLI Image Range & Scale Information\*

*Note that other images might have been acquired; this table does not describe all images; it describes each camera positioning.								
Working distance is a photography term; it is the range from the MAH1 front lens element (sapphire window) to the target.								
Standoff distance is measured from the plane defined by the tips of the MAH1 contact sensor probes to the target.								
Range, Scale, and DOF are computed from Motor Count using the equations from version 2 of Edgett et al. (2015, <a href="https://doi.org/10.13140/RG.2.1.3798.5447">https://doi.org/10.13140/RG.2.1.3798.5447</a> ).								
Range or Working Distance from motor mount (cm)	Standoff (MAH1 Toolframe +X) from motor count (cm)	Depth of Field estimate		Pixel Scale ( $\mu\text{m}/\text{pixel}$ )	Pixel Scale uncertainty ( $\pm \mu\text{m}/\text{pixel}$ )	Illuminated Pixels on CCD (approximate)		Image Dimensions (cm) (approximate)
		near (cm)	far (cm)			horizontal (CCD columns)	vertical (CCD rows)	

target named Kokadai														
mhli00190	context view		intended standoff - 25 cm											
	3376MH0001900011200480C00		480	13016	26.6	24.7	-1.8	2.0	100.5	6.7	1608	1198	16.2	12.0
mhli00173	medium-resolution stereo-1		intended standoff - 5 cm											
	3376MH0001730011200482C00		482	14005	6.8	4.9	-0.2	0.2	30.9	0.6	1608	1198	5.0	3.7
corresponding focus merge products:		best focus product:		3376MH0001930001200515R00				range map product:		3376MH0001930001200516S00				
mhli00173	medium-resolution stereo-2		intended standoff - 5 cm											
	3376MH0001730011200492C00		492	14005	6.8	4.9	-0.2	0.2	30.9	0.6	1608	1198	5.0	3.7
corresponding focus merge products:		best focus product:		3376MH0001930001200513R00				range map product:		3376MH0001930001200514G00				
mhli00716	high resolution view		intended standoff - 1 cm											
	3376MH00071600011200502C00		502	15142	2.8	0.9	0.0	0.1	16.6	0.2	1608	1198	2.7	2.0
corresponding focus merge products:		best focus product:		3376MH0001930001200511R00				range map product:		3376MH0001930001200512S00				

last update: 07\_February\_2022

#### Sol 3378 - MAHLI Image Range & Scale Information\*

**REMS LIV sensor**

mhl00095	standard viewing position	intended standoff: ~15 cm											
	3378MH000950011200518C00	518	13259	16.7	14.8	-0.7	0.8	65.8	2.7	1608	1198	10.6	7.9

target named **Erico**

mhli00190	context view	intended standoff - 25 cm											
	3378MH0001900011200520C00	520	13021	26.3	24.4	-1.7	2.0	99.4	6.5	1608	1198	16.0	11.9

target named **Aji**

mhl00190	<b>context view</b>	<b>intended standoff - 25 cm</b>											
	3378MH0001900011200522C00	522	13021	26.3	24.4	-1.7	2.0	99.4	6.5	1608	1198	16.0	11.9
mhl00224	<b>medium-resolution stereo-1</b>	<b>intended standoff - 5 cm</b>											
	3378MH0002240011200524C00	524	14022	6.7	4.8	-0.2	0.1	30.5	0.5	1608	1198	4.9	3.7
	<i>corresponding focus merge products:</i>	<i>best focus product:</i>	3378MH0001530001200569R00				<i>range map product:</i>	3378MH0001530001200570500					
mhl00224	<b>medium-resolution stereo-2</b>	<b>intended standoff - 5 cm</b>											
	3378MH0002240011200534C00	534	14028	6.7	4.8	-0.2	0.1	30.4	0.5	1608	1198	4.9	3.6
	<i>corresponding focus merge products:</i>	<i>best focus product:</i>	3378MH0001530001200567R00				<i>range map product:</i>	3378MH0001530001200568S00					

target named **Erico**

mhli00299	<b>medium-resolution stereo-1</b>	<b>intended standoff - 5 cm</b>										
	3378MH0002990011200544C00	544	14030	6.7	4.8	-0.2	0.1	30.3	0.5	1608	1198	4.9
mhli00299	<i>corresponding focus merge products:</i>	<i>best focus product:</i> 3378MH0001530001200565R00				<i>range map product:</i> 3378MH0001530001200566S00						
	3378MH0002990011200544C00	554	14029	6.7	4.8	-0.2	0.1	30.3	0.5	1608	1198	4.9
	<i>corresponding focus merge products:</i>	<i>best focus product:</i> 3378MH0001530001200563R00				<i>range map product:</i> 3378MH0001530001200564G00						

last update: 15\_September\_2022

## Sol 3381 - MAHLI Image Range & Scale Information\*

*Note that other images might have been acquired; this table does not describe all images; it describes each camera positioning.									
Working distance is a photography term; it is the range from the MAHLI front lens element (sapphire window) to the target.									
Standoff distance is measured from the plane defined by the tips of the MAHLI contact sensor probes to the target.									
Range, Scale, and DOF are computed from Motor Count using the equations from version 2 of Edgett et al. (2015, <a href="https://doi.org/10.13140/RG.2.1.3798.5447">https://doi.org/10.13140/RG.2.1.3798.5447</a> ).									
Range or Working Distance from motor mount (cm)	Standoff (MAHLI Toolframe +X) from motor count (cm)	Depth of Field estimate		Pixel Scale (µm/pixel)	Pixel Scale uncertainty (± µm/pixel)	Illuminated Pixels on CCD (approximate)		Image Dimensions (cm) (approximate)	
		near (cm)	far (cm)			horizontal (CCD columns)	vertical (CCD rows)		

target named El_Dorado														
mhli00190	context view		intended standoff - 25 cm											
	3381MH0001900011200572C00		572	13022	26.2	24.3	-1.7	2.0	99.2	6.5	1608	1198	16.0	11.9
mhli00182	medium-resolution stereo-1		intended standoff - 5 cm											
	3381MH0001820011200574C00		574	14053	6.5	4.6	-0.2	0.1	29.8	0.5	1608	1198	4.8	3.6
corresponding focus merge products:		best focus product:		3381MH0001930001200607R00				range map product:		3381MH0001930001200608S00				
mhli00182	medium-resolution stereo-2		intended standoff - 5 cm											
	3381MH0001820011200584C00		584	14055	6.5	4.6	-0.2	0.1	29.8	0.5	1608	1198	4.8	3.6
corresponding focus merge products:		best focus product:		3381MH0001930001200605R00				range map product:		3381MH0001930001200605S00				
mhli00426	high resolution view		intended standoff - 1 cm											
	3381MH0004260011200594C00		594	15281	2.5	0.6	0.0	0.1	15.7	0.2	1608	1198	2.5	1.9
corresponding focus merge products:		best focus product:		3381MH0001930001200603R00				range map product:		3381MH0001930001200604S00				

last update: 11\_February\_2022

### Sol 3383 - MAHLI Image Range & Scale Information\*

*Note that other images might have been acquired; this table does not describe all images; it describes each camera positioning.												
Working distance is a photography term; it is the range from the MAHLI front lens element (sapphire window) to the target.												
Standoff distance is measured from the plane defined by the tips of the MAHLI contact sensor probes to the target.												
Range, Scale, and DOF are computed from Motor Count using the equations from version 2 of Edgett et al. (2015, <a href="https://doi.org/10.13140/RG.2.1.3798.5447">https://doi.org/10.13140/RG.2.1.3798.5447</a> ).												
Sequence	Image ID*	MSL:CAMERA_PRODUCT_ID (CDPID)	Motor Count	Range or Working Distance from motor mount (cm)	Standoff (MAHLI Toolframe +X) from motor count (cm)	Depth of Field estimate		Pixel Scale (μm/pixel)	Illuminated Pixels on CCD (approximate)		Image Dimensions (cm) (approximate)	
						near (cm)	far (cm)		horiz-ontal	vertical	horizontal (CCD columns)	vertical (CCD rows)

target named Tantallon_Castle													
mhli00190	context view	intended standoff - 25 cm											
	3383MH0001900011200610C00	610	13017	26.5	24.6	-1.8	2.0	100.3	6.6	1608	1198	16.1	12.0
mhli00173	medium-resolution stereo-1	intended standoff - 5 cm											
	3383MH0001730011200612C00	612	14004	6.8	4.9	-0.2	0.2	30.9	0.6	1608	1198	5.0	3.7
	corresponding focus merge products:	best focus product:	3383MH0002650001200633R00					range map product:	3383MH0002650001200634S00				
mhli00173	medium-resolution stereo-2	intended standoff - 5 cm											
	3383MH0001730011200622C00	622	14007	6.8	4.9	-0.2	0.2	30.8	0.6	1608	1198	5.0	3.7
	corresponding focus merge products:	best focus product:	3383MH0002650001200631R00					range map product:	3383MH0002650001200632S00				

last update: 14\_February\_2022

### Sol 3385 - MAHLI Image Range & Scale Information\*

*Note that other images might have been acquired; this table does not describe all images; it describes each camera positioning.																			
Working distance is a photography term; it is the range from the MAHLI front lens element (sapphire window) to the target.																			
Standoff distance is measured from the plane defined by the tips of the MAHLI contact sensor probes to the target.																			
Range, Scale, and DOF are computed from Motor Count using the equations from version 2 of Edgett et al. (2015, <a href="https://doi.org/10.13140/RG.2.1.3798.5447">https://doi.org/10.13140/RG.2.1.3798.5447</a> ).																			
Sequence	Image ID*	MSL:CAMERA_PRODUCT_ID (CDPID)	Motor Count	Range or Working Distance from motor mount (cm)	Standoff (MAHLI Toolframe +X) from motor count (cm)	Depth of Field estimate		Pixel Scale (µm/pixel)	Illuminated Pixels on CCD (approximate)		Image Dimensions (cm) (approximate)								
				near (cm)	far (cm)				horiz-ontal	vertical	horizontal (CCD columns)	vertical (CCD rows)							
<b>target named Kintradwell - after DRT</b>																			
mhli00706	context view	intended standoff - 25 cm																	
	3385MH0007060011200636C00	636	13020	26.3	24.4	-1.7	2.0	99.6	6.5	1608	1198	16.0							
mhli00763	medium-resolution stereo-1	intended standoff - 5 cm																	
	APXS raster spot 2	3385MH0007630011200639C00																	
	3385MH0007630011200639C00	639	14031	6.6	4.7	-0.2	0.1	30.3	0.5	1608	1198	4.9							
	corresponding focus merge products:	best focus product: 3386MH0001530001200688R00				range map product: 3386MH0001530001200689S00													
mhli00763	medium-resolution stereo-2	intended standoff - 5 cm																	
	APXS raster spot 2	3385MH0007630011200650C00																	
	3385MH0007630011200650C00	650	14031	6.6	4.7	-0.2	0.1	30.3	0.5	1608	1198	4.9							
	corresponding focus merge products:	best focus product: 3386MH0001530001200686R00				range map product: 3386MH0001530001200687S00													
mhli00785	high resolution view	intended standoff - 1 cm																	
	APXS raster spot 2	3385MH0007850011200661C00																	
	3385MH0007850011200661C00	661	15192	2.7	0.8	0.0	0.1	16.3	0.2	1608	1198	2.6							
	corresponding focus merge products:	best focus product: 3386MH0001530001200684R00				range map product: 3386MH0001530001200685S00													
mhli00763	medium-resolution view	intended standoff - 5 cm																	
	APXS raster spot 1	3385MH0007630011200672C00																	
	3385MH0007630011200672C00	672	14021	6.7	4.8	-0.2	0.1	30.5	0.5	1608	1198	4.9							
	corresponding focus merge products:	best focus product: 3386MH0001530001200682R00				range map product: 3386MH0001530001200683S00													

last update: 17\_February\_2022

### Sol 3387 - MAHLI Image Range & Scale Information\*

*Note that other images might have been acquired; this table does not describe all images; it describes each camera positioning.												
Working distance is a photography term; it is the range from the MAHLI front lens element (sapphire window) to the target.												
Standoff distance is measured from the plane defined by the tips of the MAHLI contact sensor probes to the target.												
Range, Scale, and DOF are computed from Motor Count using the equations from version 2 of Edgett et al. (2015, <a href="https://doi.org/10.13140/RG.2.1.3798.5447">https://doi.org/10.13140/RG.2.1.3798.5447</a> ).												
Sequence	Image ID*	MSL:CAMERA_PRODUCT_ID (CDPID)	Motor Count	Range or Working Distance from motor mount (cm)	Standoff (MAHLI Toolframe +X) from motor count (cm)	Depth of Field estimate		Pixel Scale (µm/pixel)	Illuminated Pixels on CCD (approximate)		Image Dimensions (cm) (approximate)	
				near (cm)	far (cm)				horiz-ontal	vertical	horizontal (CCD columns)	vertical (CCD rows)

#### target named [Loch\\_Garten](#) - before DRT

mhli00190	<a href="#">context view</a>	<b>intended standoff - 25 cm</b>										
	3387MH0001900011200691C00	691	13019	26.4	24.5	-1.8	2.0	99.8	6.6	1608	1198	16.1
mhli00122	<a href="#">medium-resolution view</a>	<b>intended standoff - 5 cm</b>										
	3387MH0001220011200693C00	693	14026	6.7	4.8	-0.2	0.1	30.4	0.5	1608	1198	4.9

#### target named [Loch\\_Garten](#) - after DRT

mhli00706	<a href="#">context view</a>	<b>intended standoff - 25 cm</b>										
	3387MH0007060011200695C00	695	13021	26.3	24.4	-1.7	2.0	99.4	6.5	1608	1198	16.0
mhli00763	<a href="#">medium-resolution stereo-1</a>	<b>intended standoff - 5 cm</b>										
	3387MH0007630011200698C00	698	14020	6.7	4.8	-0.2	0.1	30.5	0.5	1608	1198	4.9
	<a href="#">corresponding focus merge products:</a>	<i>best focus product:</i> 3387MH0001930001200734R00				<i>range map product:</i> 3387MH0001930001200735S00						
mhli00763	<a href="#">medium-resolution stereo-2</a>	<b>intended standoff - 5 cm</b>										
	3387MH0007630011200709C00	709	14030	6.7	4.8	-0.2	0.1	30.3	0.5	1608	1198	4.9
	<a href="#">corresponding focus merge products:</a>	<i>best focus product:</i> 3387MH0001930001200732R00				<i>range map product:</i> 3387MH0001930001200733S00						
mhli00603	<a href="#">high resolution view</a>	<b>intended standoff - 1 cm</b>										
	3387MH0006030011200720C00	720	15168	2.7	0.8	0.0	0.1	16.4	0.2	1608	1198	2.6
	<a href="#">corresponding focus merge products:</a>	<i>best focus product:</i> 3387MH0001930001200730R00				<i>range map product:</i> 3387MH0001930001200731S00						

last update: 17\_February\_2022

### Sol 3388 - MAHLI Image Range & Scale Information \*

Sequence	Image ID*	MSL:CAMERA_PRODUCT_ID (CDPID)	Motor Count	Range or Working Distance from motor mount (cm)	Standoff (MAHLI Toolframe +X) from motor count (cm)	Depth of Field estimate		Pixel Scale (µm/pixel)	Illuminated Pixels on CCD (approximate)		Image Dimensions (cm) (approximate)	
						near (cm)	far (cm)		horiz-ontal	vertical	horizontal (CCD columns)	vertical (CCD rows)
<b>*Note that other images might have been acquired; this table does not describe all images; it describes each camera positioning.</b>												

MAHLI calibration target														
<b>Note:</b> one can also use features in these images to determine scale; the scale information presented here is based on motor count, not analysis of the images.														
mhli00371	bar target - 5 cm working distance	3388MH0003710011200737C00	737	14379	4.9	3.0	-0.1	0.1	24.1	0.3	1608	1198	3.9	2.9
mhli00372	cent target - 5 cm working distance	3388MH0003720011200739C00	739	14375	4.9	3.0	-0.1	0.1	24.1	0.4	1608	1198	3.9	2.9
mhli00374	calibration target + front left wheel + surface - 30 cm working distance													
	autofocus on calibration target	3388MH0003740011200741C00	741	12963	30.2	28.3	-2.3	2.6	113.3	8.6	1608	1198	18.2	13.6
	manual infinity focus	3388MH0003740021200742C00	742	12552	(infinity)	(infinity)	(infinity)	(infinity)	(infinity)	(infinity)	1608	1198	(infinity)	(infinity)

APXS calibration target														
<b>Note:</b> one can also use features in the image(s) to determine scale; the scale information presented here is based on motor count, not analysis of the image(s).														
mhli00373	6.9 cm working distance	3388MH0003730011200744C00	744	13952	7.2	5.3	-0.2	0.2	32.1	0.6	1608	1198	5.2	3.9

target named Tappington													
mhli00190	context view	intended standoff - 25 cm											
	3388MH0001900011200746C00	746	13036	25.4	23.5	-1.6	1.8	96.3	6.1	1608	1198	15.5	11.5
mhli00182	medium-resolution stereo-1	intended standoff - 5 cm											
	3388MH0001820011200748C00	748	14227	5.6	3.7	-0.1	0.1	26.5	0.4	1608	1198	4.3	3.2
	corresponding focus merge products:	best focus product:	3388MH0001630001200824R00					range map product:	3388MH0001630001200825S00				
mhli00182	medium-resolution stereo-2	intended standoff - 5 cm											
	3388MH0001820011200758C00	758	14230	5.5	3.6	-0.1	0.1	26.4	0.4	1608	1198	4.2	3.2
	corresponding focus merge products:	best focus product:	3388MH0001630001200822R00					range map product:	3388MH0001630001200823S00				

target named Loch_Coruisk- after DRT														
mhli00706	context view	intended standoff - 25 cm												
	3388MH0007060011200768C00	768	13019	26.4	24.5	-1.8	2.0	99.8	6.6	1608	1198	16.1	12.0	
mhli00723	medium-resolution stereo-1	intended standoff - 5 cm												
	APXS raster spot 2	3388MH0007230011200771C00	771	13990	6.9	5.0	-0.2	0.2	31.2	0.6	1608	1198	5.0	3.7
	corresponding focus merge products:	best focus product:	3388MH0001630001200820R00					range map product:	3388MH0001630001200821S00					
mhli00723	medium-resolution stereo-2	intended standoff - 5 cm												
	APXS raster spot 2	3388MH0007230011200782C00	782	13992	6.9	5.0	-0.2	0.2	31.2	0.6	1608	1198	5.0	3.7
	corresponding focus merge products:	best focus product:	3388MH0001630001200818R00					range map product:	3388MH0001630001200819S00					
mhli00658	high resolution view	intended standoff - 1 cm												
	APXS raster spot 2	3388MH0006580011200793C00	793	15063	2.9	1.0	-0.1	0.1	17.1	0.2	1608	1198	2.8	2.1
	corresponding focus merge products:	best focus product:	3388MH0001630001200816R00					range map product:	3388MH0001630001200817S00					
mhli00723	medium-resolution view	intended standoff - 5 cm												
	APXS raster spot 1	3388MH0007230011200804C00	804	13991	6.9	5.0	-0.2	0.2	31.2	0.6	1608	1198	5.0	3.7
	corresponding focus merge products:	best focus product:	3388MH0001630001200814R00					range map product:	3388MH0001630001200815S00					

last update: 18\_February\_2022

### Sol 3389 - MAHLI Image Range & Scale Information\*

Sequence	Image ID*	MSL:CAMERA_PRODUCT_ID (CDPID)	Motor Count	*Note that other images might have been acquired; this table does not describe all images; it describes each camera positioning.											
				Working distance is a photography term; it is the range from the MAHLI front lens element (sapphire window) to the target.		Standoff distance is measured from the plane defined by the tips of the MAHLI contact sensor probes to the target.		Range, Scale, and DOF are computed from Motor Count using the equations from version 2 of Edgett et al. (2015, <a href="https://doi.org/10.13140/RG.2.1.3798.5447">https://doi.org/10.13140/RG.2.1.3798.5447</a> ).		Pixel Scale (µm/pixel)		Illuminated Pixels on CCD (approximate)		Image Dimensions (cm) (approximate)	
				Range or Working Distance from motor mount (cm)	Standoff (MAHLI Toolframe +X) from motor count (cm)	Depth of Field estimate		near (cm)	far (cm)	Pixel Scale (µm/pixel)		horiz-ontal	vertical	horizontal (CCD columns)	vertical (CCD rows)

### CheMin sample inlet - at night with its cover open - deep imaging to check cleanliness state of mesh, funnel, funnel throat

intended working distance to mesh is 12.4 cm; to funnel throat is 16.3 cm - for scale, note that mesh diameter is 3.5 cm

mhli00312	image focused at funnel throat (~4 cm below mesh) - position 1 of 3 to inspect funnel throat												
	manual focus	intended distance to funnel throat: 16.3 cm											
mhli00326	3389MH0003120001200826C00	826	13272	16.4	14.5	-0.7	0.7	64.6	2.6	1024	1024	6.6	6.6
	image focused at mesh												
mhli00326	manual focus	intended distance to mesh: 12.4 cm											
	3389MH0003120011200827C00	827	13458	12.5	10.6	-0.4	0.4	51.0	1.5	1024	1024	5.2	5.2
mhli00326	image focused at funnel throat (~4 cm below mesh) - position 2 of 3 to inspect funnel throat												
	manual focus	intended distance to funnel throat: 16.3 cm											
mhli00326	3389MH0003260001200828C00	828	13272	16.4	14.5	-0.7	0.7	64.6	2.6	1024	1024	6.6	6.6
	image focused at funnel throat (~4 cm below mesh) - position 3 of 3 to inspect funnel throat												
mhli00228	manual focus	intended distance to funnel throat: 16.3 cm											
	3389MH0002280001200830C00	830	13182	19.1	17.2	-0.9	1.0	74.0	3.4	1608	1198	11.9	8.9

### CheMin sample inlet - at night with its cover open - overview of entire inlet

intended working distance to inlet is ~19 cm - for scale, note that mesh diameter is 3.5 cm

mhli00228	manual focus	intended distance: ~19 cm											
	3389MH0002280001200830C00	830	13182	19.1	17.2	-0.9	1.0	74.0	3.4	1608	1198	11.9	8.9

last update: 22\_February\_2022

### Sol 3392 - MAHLI Image Range & Scale Information \*

Sequence	Image ID*	MSL:CAMERA_PRODUCT_ID (CDPID)	Motor Count	*Note that other images might have been acquired; this table does not describe all images; it describes each camera positioning.								
				Working distance is a photography term; it is the range from the MAHLI front lens element (sapphire window) to the target.		Standoff distance is measured from the plane defined by the tips of the MAHLI contact sensor probes to the target.		Range, Scale, and DOF are computed from Motor Count using the equations from version 2 of Edgett et al. (2015, <a href="https://doi.org/10.13140/RG.2.1.3798.5447">https://doi.org/10.13140/RG.2.1.3798.5447</a> ).				
				Range or Working Distance from motor mount (cm)	Standoff (MAHLI Toolframe +X) from motor count (cm)	Depth of Field estimate		Pixel Scale (µm/pixel)	Illuminated Pixels on CCD (approximate)	Image Dimensions (cm) (approximate)		
						near (cm)	far (cm)			horizontal (CCD columns)	vertical (CCD rows)	

target named Nithsdale													
mhli00190	context view	intended standoff - 25 cm											
	3392MH0001900011200832C00	832	13028	25.9	24.0	-1.7	1.9	98.0	6.3	1608	1198	15.8	11.7
mhli00173	medium-resolution stereo-1	intended standoff - 5 cm											
	3392MH0001730011200834C00	834	14160	5.9	4.0	-0.1	0.1	27.7	0.4	1608	1198	4.4	3.3
	corresponding focus merge products:	best focus product:	3393MH0002270001200899R00					range map product:	3393MH0002270001200900S00				
mhli00173	medium-resolution stereo-2	intended standoff - 5 cm											
	3392MH0001730011200844C00	844	14148	6.0	4.1	-0.1	0.1	27.9	0.5	1608	1198	4.5	3.3
	corresponding focus merge products:	best focus product:	3393MH0002270001200897R00					range map product:	3393MH0002270001200898S00				

target named Foss_Mine - quantitative relief model (QRM) data													
mhli00190	context view	intended standoff - 25 cm											
	3392MH0001900011200854C00	854	13017	26.5	24.6	-1.8	2.0	100.3	6.6	1608	1198	16.1	12.0
mhli00182	med res - stereo-1 & relief model position 1	intended standoff - 5 cm											
	3392MH0001820011200856C00	856	14001	6.8	4.9	-0.2	0.2	31.0	0.6	1608	1198	5.0	3.7
	corresponding focus merge products:	best focus product:	3393MH0002270001200895R00					range map product:	3393MH0002270001200896S00				
mhli00182	med res - stereo-2 & relief model position 2	intended standoff - 5 cm											
	3392MH0001820011200866C00	866	13999	6.9	5.0	-0.2	0.2	31.0	0.6	1608	1198	5.0	3.7
	corresponding focus merge products:	best focus product:	3393MH0002270001200893R00					range map product:	3393MH0002270001200894S00				
mhli00705	med res - relief model position 3	intended standoff - 5 cm											
	3392MH0007050011200876C00	876	13998	6.9	5.0	-0.2	0.2	31.0	0.6	1608	1198	5.0	3.7
mhli00705	med res - relief model position 4	intended standoff - 5 cm											
	3392MH0007050011200878C00	878	14001	6.8	4.9	-0.2	0.2	31.0	0.6	1608	1198	5.0	3.7
mhli00705	med res - relief model position 5	intended standoff - 5 cm											
	3392MH0007050011200880C00	880	14001	6.8	4.9	-0.2	0.2	31.0	0.6	1608	1198	5.0	3.7
mhli00743	high resolution view	intended standoff - 1 cm											
	3392MH0007430011200882C00	882	15111	2.8	0.9	-0.1	0.1	16.8	0.2	1608	1198	2.7	2.0
	corresponding focus merge products:	best focus product:	3393MH0002270001200891R00					range map product:	3393MH0002270001200892S00				

last update: 28\_February\_2022

### Sol 3395 - MAHLI Image Range & Scale Information\*

*Note that other images might have been acquired; this table does not describe all images; it describes each camera positioning.																		
Working distance is a photography term; it is the range from the MAHLI front lens element (sapphire window) to the target.																		
Standoff distance is measured from the plane defined by the tips of the MAHLI contact sensor probes to the target.																		
Range, Scale, and DOF are computed from Motor Count using the equations from version 2 of Edgett et al. (2015, <a href="https://doi.org/10.13140/RG.2.1.3798.5447">https://doi.org/10.13140/RG.2.1.3798.5447</a> ).																		
Sequence	Image ID*	MSL:CAMERA_PRODUCT_ID (CDPID)	Motor Count	Range or Working Distance from motor mount (cm)	Standoff (MAHLI Toolframe +X) from motor count (cm)	Depth of Field estimate		Pixel Scale (μm/pixel)	Illuminated Pixels on CCD (approximate)		Image Dimensions (cm) (approximate)							
				near (cm)	far (cm)				horiz-ontal	vertical	horizontal (CCD columns)	vertical (CCD rows)						
<b>target named Galdenoch - after DRT</b>																		
mhli00706	context view	intended standoff - 25 cm																
	3395MH0007060011200902C00	902	13016	26.6	24.7	-1.8	2.0	100.5	6.7	1608	1198	16.2						
mhli00699	medium-resolution stereo-1	intended standoff - 5 cm																
	APXS raster spot 2																	
	3395MH0006990011200905C00	905	13968	7.1	5.2	-0.2	0.2	31.7	0.6	1608	1198	5.1						
	corresponding focus merge products:	best focus product:			3395MH0001530001200954R00	range map product:			3395MH0001530001200955S00									
mhli00699	medium-resolution stereo-2	intended standoff - 5 cm																
	APXS raster spot 2																	
	3395MH0006990011200916C00	916	13976	7.0	5.1	-0.2	0.2	31.6	0.6	1608	1198	5.1						
	corresponding focus merge products:	best focus product:			3395MH0001530001200952R00	range map product:			3395MH0001530001200953S00									
mhli00699	medium-resolution view	intended standoff - 5 cm																
	APXS raster spot 1																	
	3395MH0006990011200927C00	927	13979	7.0	5.1	-0.2	0.2	31.5	0.6	1608	1198	5.1						
	corresponding focus merge products:	best focus product:			3395MH0001530001200950R00	range map product:			3395MH0001530001200951S00									
mhli00823	high resolution view	intended standoff - 1 cm																
	APXS raster spot 2																	
	3395MH0008230011200938C00	938	14975	3.1	1.2	-0.1	0.1	17.8	0.2	1608	1198	2.9						
	corresponding focus merge products:	best focus product:			3395MH0001530001200948R00	range map product:			3395MH0001530001200949S00									

last update: 28\_February\_2022

### Sol 3396 - MAHLI Image Range & Scale Information \*

*Note that other images might have been acquired; this table does not describe all images; it describes each camera positioning.												
Working distance is a photography term; it is the range from the MAHLI front lens element (sapphire window) to the target.												
Standoff distance is measured from the plane defined by the tips of the MAHLI contact sensor probes to the target.												
Range, Scale, and DOF are computed from Motor Count using the equations from version 2 of Edgett et al. (2015, <a href="https://doi.org/10.13140/RG.2.1.3798.5447">https://doi.org/10.13140/RG.2.1.3798.5447</a> ).												
Sequence	Image ID*	MSL:CAMERA_PRODUCT_ID (CDPID)	Motor Count	Range or Working Distance from motor mount (cm)	Standoff (MAHLI Toolframe +X) from motor count (cm)	Depth of Field estimate		Pixel Scale (µm/pixel)	Illuminated Pixels on CCD (approximate)		Image Dimensions (cm) (approximate)	
						near (cm)	far (cm)		horiz-	vertical	horizontal (CCD columns)	vertical (CCD rows)

#### target named Scousburgh- before DRT

mhli00190	context view	intended standoff - 25 cm	957	13020	26.3	24.4	-1.7	2.0	99.6	6.5	1608	1198	16.0	11.9
mhli00122	medium-resolution view	intended standoff - 5 cm	959	13999	6.9	5.0	-0.2	0.2	31.0	0.6	1608	1198	5.0	3.7

#### target named Scousburgh- after DRT

mhli00706	context view	intended standoff - 25 cm	961	13019	26.4	24.5	-1.8	2.0	99.8	6.6	1608	1198	16.1	12.0
mhli00763	medium-resolution stereo-1	intended standoff - 5 cm	964	13998	6.9	5.0	-0.2	0.2	31.0	0.6	1608	1198	5.0	3.7
	corresponding focus merge products:	best focus product: 3397MH0001630001201038R00							range map product:	3397MH0001630001201039S00				
mhli00763	medium-resolution stereo-2	intended standoff - 5 cm	975	13997	6.9	5.0	-0.2	0.2	31.1	0.6	1608	1198	5.0	3.7
	corresponding focus merge products:	best focus product: 3397MH0001630001201036R00							range map product:	3397MH0001630001201037S00				
mhli00835	high resolution view	intended standoff - 1 cm	986	15073	2.9	1.0	-0.1	0.1	17.1	0.2	1608	1198	2.7	2.0
	corresponding focus merge products:	best focus product: 3397MH0001630001201034R00							range map product:	3397MH0001630001201035S00				

#### target named Blackthorn\_Salt

mhli00190	context view	intended standoff - 25 cm	997	13017	26.5	24.6	-1.8	2.0	100.3	6.6	1608	1198	16.1	12.0
mhli00224	medium-resolution stereo-1	intended standoff - 5 cm	999	13977	7.0	5.1	-0.2	0.2	31.5	0.6	1608	1198	5.1	3.8
	corresponding focus merge products:	best focus product: 3397MH0001630001201032R00							range map product:	3397MH0001630001201033S00				
mhli00224	medium-resolution stereo-2	intended standoff - 5 cm	1009	13978	7.0	5.1	-0.2	0.2	31.5	0.6	1608	1198	5.1	3.8
	corresponding focus merge products:	best focus product: 3397MH0001630001201030R00							range map product:	3397MH0001630001201031S00				
mhli00176	high resolution view	intended standoff - 2 cm	1019	14625	4.0	2.1	-0.1	0.1	21.0	0.3	1608	1198	3.4	2.5
	corresponding focus merge products:	best focus product: 3397MH0001630001201028R00							range map product:	3397MH0001630001201029S00				

last update: 02\_March\_2022

### Sol 3398 - MAHLI Image Range & Scale Information\*

Sequence	Image ID*	MSL:CAMERA_PRODUCT_ID (CDPID)	Motor Count	Range or Working Distance from motor mount (cm)	Standoff (MAHLI Toolframe +X) from motor count (cm)	Depth of Field estimate		Pixel Scale (µm/pixel)	Illuminated Pixels on CCD (approximate)		Image Dimensions (cm) (approximate)	
						near (cm)	far (cm)		horiz-ontal	vertical	horizontal (CCD columns)	vertical (CCD rows)
<small>*Note that other images might have been acquired; this table does not describe all images; it describes each camera positioning.</small>												

target named Exnaboe												
<small>Working distance is a photography term; it is the range from the MAHLI front lens element (sapphire window) to the target.</small>												
mhli00706	context view	intended standoff - 25 cm										
	3398MH0007060011201041C00	1041	13014	26.7	24.8	-1.8	2.0	100.9	6.7	1608	1198	16.2
mhli00740	medium-resolution stereo-1	intended standoff - 5 cm										
	3398MH0007400011201044C00	1044	14001	6.8	4.9	-0.2	0.2	31.0	0.6	1608	1198	5.0
	corresponding focus merge products:	best focus product:	3399MH0002270001201106R00					range map product:	3399MH0002270001201107S00			
mhli00740	medium-resolution stereo-2	intended standoff - 5 cm										
	3398MH0007400011201055C00	1055	14011	6.8	4.9	-0.2	0.2	30.7	0.5	1608	1198	4.9
	corresponding focus merge products:	best focus product:	3399MH0002270001201104R00					range map product:	3399MH0002270001201105S00			
mhli00800	high resolution view	intended standoff - 2 cm										
	3398MH0008000011201066C00	1066	14685	3.8	1.9	-0.1	0.1	20.4	0.3	1608	1198	3.3
	corresponding focus merge products:	best focus product:	3399MH0002270001201102R00					range map product:	3399MH0002270001201103S00			

target named Stinchar_Valley												
<small>Working distance is a photography term; it is the range from the MAHLI front lens element (sapphire window) to the target.</small>												
mhli00190	context view	intended standoff - 25 cm										
	3398MH0001900011201077C00	1077	13023	26.2	24.3	-1.7	1.9	99.0	6.5	1608	1198	15.9
mhli00308	medium-resolution stereo-1	intended standoff - 5 cm										
	3398MH0003080011201079C00	1079	14114	6.2	4.3	-0.1	0.1	28.6	0.5	1608	1198	4.6
	corresponding focus merge products:	best focus product:	3399MH0002270001201100R00					range map product:	3399MH0002270001201101S00			
mhli00308	medium-resolution stereo-2	intended standoff - 5 cm										
	3398MH0003080011201089C00	1089	14107	6.2	4.3	-0.1	0.1	28.7	0.5	1608	1198	4.6
	corresponding focus merge products:	best focus product:	3399MH0002270001201098R00					range map product:	3399MH0002270001201099S00			

last update: [11\\_March\\_2022](#)

## Sol 3409 - MAHLI Image Range & Scale Information\*

*Note that other images might have been acquired; this table does not describe all images; it describes each camera positioning.									
Working distance is a photography term; it is the range from the MAHLI front lens element (sapphire window) to the target.									
Standoff distance is measured from the plane defined by the tips of the MAHLI contact sensor probes to the target.									
Range, Scale, and DOF are computed from Motor Count using the equations from version 2 of Edgett et al. (2015, <a href="https://doi.org/10.13140/RG.2.1.3798.5447">https://doi.org/10.13140/RG.2.1.3798.5447</a> ).									
Range or Working Distance from motor mount (cm)	Standoff (MAHLI Toolframe +X) from motor count (cm)	Depth of Field estimate		Pixel Scale ( $\mu\text{m}/\text{pixel}$ )	Pixel Scale uncertainty ( $\pm \mu\text{m}/\text{pixel}$ )	Illuminated Pixels on CCD (approximate)		Image Dimensions (cm) (approximate)	
		near (cm)	far (cm)			horizontal (CCD columns)	vertical (CCD rows)		

target named Skaw_Granite - after DRT													
mhli00190	context view	intended standoff - 25 cm											
	3409MH0001900011201109C00	1109	13017	26.5	24.6	-1.8	2.0	100.3	6.6	1608	1198	16.1	12.0
mhli00299	medium-resolution stereo-1	intended standoff - 5 cm											
	3409MH0002990011201111C00	1111	13989	6.9	5.0	-0.2	0.2	31.2	0.6	1608	1198	5.0	3.7
corresponding focus merge products:		best focus product:				range map product:				3410MH0001930001201144R00	3410MH0001930001201145S00		
mhli00299	medium-resolution stereo-2	intended standoff - 5 cm											
	3409MH0002990011201121C00	1121	13988	6.9	5.0	-0.2	0.2	31.3	0.6	1608	1198	5.0	3.7
corresponding focus merge products:		best focus product:				range map product:				3410MH0001930001201142R00	3410MH0001930001201143S00		
mhli00426	high resolution view	intended standoff - 1 cm											
	3409MH0004260011201131C00	1131	15057	2.9	1.0	-0.1	0.1	17.2	0.2	1608	1198	2.8	2.1
corresponding focus merge products:		best focus product:				range map product:				3410MH0001930001201140R00	3410MH0001930001201141S00		

last update: 16\_March\_2022

### Sol 3413 - MAHLI Image Range & Scale Information\*

*Note that other images might have been acquired; this table does not describe all images; it describes each camera positioning.												
Working distance is a photography term; it is the range from the MAHLI front lens element (sapphire window) to the target.												
Standoff distance is measured from the plane defined by the tips of the MAHLI contact sensor probes to the target.												
Range, Scale, and DOF are computed from Motor Count using the equations from version 2 of Edgett et al. (2015, <a href="https://doi.org/10.13140/RG.2.1.3798.5447">https://doi.org/10.13140/RG.2.1.3798.5447</a> ).												
Sequence	Image ID*	MSL:CAMERA_PRODUCT_ID (CDPID)	Motor Count	Range or Working Distance from motor mount (cm)	Standoff (MAHLI Toolframe +X) from motor count (cm)	Depth of Field estimate		Pixel Scale (µm/pixel)	Illuminated Pixels on CCD (approximate)		Image Dimensions (cm) (approximate)	
				near (cm)	far (cm)				horizontal	vertical	horizontal (CCD columns)	vertical (CCD rows)

target named Appleby												
<b>mhli00190 context view</b>												
	3413MH0001900011201147C00	1147	13017	26.5	24.6	-1.8	2.0	100.3	6.6	1608	1198	16.1
<b>mhli00173 medium-resolution stereo-1</b>												
	3413MH0001730011201149C00	1149	13994	6.9	5.0	-0.2	0.2	31.1	0.6	1608	1198	5.0
<i>corresponding focus merge products:</i>												
	best focus product:	3413MH0002270001201209R00	range map product: 3413MH0002270001201210S00									
<b>mhli00173 medium-resolution stereo-2</b>												
	3413MH0001730011201159C00	1159	14005	6.8	4.9	-0.2	0.2	30.9	0.6	1608	1198	5.0
<i>corresponding focus merge products:</i>												
	best focus product:	3413MH0002270001201207R00	range map product: 3413MH0002270001201208S00									
<b>mhli00337 high resolution view</b>												
	3413MH0003370011201169C00	1169	14674	3.9	2.0	-0.1	0.1	20.5	0.3	1608	1198	3.3
<i>corresponding focus merge products:</i>												
	best focus product:	3413MH0002270001201205R00	range map product: 3413MH0002270001201206S00									

target named Achvarasdal												
<b>mhli00190 context view</b>												
	3413MH0001900011201179C00	1179	13052	24.5	22.6	-1.5	1.7	93.3	5.7	1608	1198	15.0
<b>mhli00224 medium-resolution stereo-1</b>												
	3413MH0002240011201181C00	1181	14350	5.0	3.1	-0.1	0.1	24.5	0.4	1608	1198	3.9
<i>corresponding focus merge products:</i>												
	best focus product:	3413MH0002270001201203R00	range map product: 3413MH0002270001201204S00									
<b>mhli00224 medium-resolution stereo-2</b>												
	3413MH0002240011201191C00	1191	14354	5.0	3.1	-0.1	0.1	24.4	0.4	1608	1198	3.9
<i>corresponding focus merge products:</i>												
	best focus product:	3413MH0002270001201201R00	range map product: 3413MH0002270001201202S00									

inspect left front rover wheel/surface interface												
<b>mhli00262 left (port) front wheel</b>												
	manual focus	intended distance to wheel-surface interface: ~112 cm										
	3413MH0002620001201200E01	1200	12660	~113	~111	~27	~50	~400	~135	1608	1198	~64

last update: 16\_March\_2022

### Sol 3415 - MAHLI Image Range & Scale Information\*

*Note that other images might have been acquired; this table does not describe all images; it describes each camera positioning.														
Working distance is a photography term; it is the range from the MAHLI front lens element (sapphire window) to the target.														
Standoff distance is measured from the plane defined by the tips of the MAHLI contact sensor probes to the target.														
Range, Scale, and DOF are computed from Motor Count using the equations from version 2 of Edgett et al. (2015, <a href="https://doi.org/10.13140/RG.2.1.3798.5447">https://doi.org/10.13140/RG.2.1.3798.5447</a> ).														
Sequence	Image ID*	MSL:CAMERA_PRODUCT_ID (CDPID)	Motor Count	Range or Working Distance from motor mount (cm)	Standoff (MAHLI Toolframe +X) from motor count (cm)	Depth of Field estimate		Pixel Scale (µm/pixel)	Illuminated Pixels on CCD (approximate)		Image Dimensions (cm) (approximate)			
						near (cm)	far (cm)		horiz-ontal	vertical	horizontal (CCD columns)	vertical (CCD rows)		
<b>target named Oosta</b>														
mhli00190	context view	<b>intended standoff - 25 cm</b>												
	3415MH0001900011201212C00	1212	13019	26.4	24.5	-1.8	2.0	99.8	6.6	1608	1198	16.1		
mhli00173	medium-resolution stereo-1	<b>intended standoff - 5 cm</b>												
	3415MH0001730011201214C00	1214	14052	6.5	4.6	-0.2	0.1	29.8	0.5	1608	1198	4.8		
	corresponding focus merge products:	best focus product:			3415MH0001930001201247R00	range map product:			3415MH0001930001201248S00					
mhli00173	medium-resolution stereo-2	<b>intended standoff - 5 cm</b>												
	3415MH0001730011201224C00	1224	14052	6.5	4.6	-0.2	0.1	29.8	0.5	1608	1198	4.8		
	corresponding focus merge products:	best focus product:			3415MH0001930001201245R00	range map product:			3415MH0001930001201246S00					
mhli00311	high resolution view	<b>intended standoff - 2 cm</b>												
	3415MH0003110011201234C00	1234	14807	3.5	1.6	-0.1	0.1	19.2	0.2	1608	1198	3.1		
	corresponding focus merge products:	best focus product:			3415MH0001930001201243R00	range map product:			3415MH0001930001201244S00					

last update: 18\_March\_2022

### Sol 3417 - MAHLI Image Range & Scale Information\*

*Note that other images might have been acquired; this table does not describe all images; it describes each camera positioning.														
Working distance is a photography term; it is the range from the MAHLI front lens element (sapphire window) to the target.														
Standoff distance is measured from the plane defined by the tips of the MAHLI contact sensor probes to the target.														
Range, Scale, and DOF are computed from Motor Count using the equations from version 2 of Edgett et al. (2015, <a href="https://doi.org/10.13140/RG.2.1.3798.5447">https://doi.org/10.13140/RG.2.1.3798.5447</a> ).														
Sequence	Image ID*	MSL:CAMERA_PRODUCT_ID (CDPID)	Motor Count	Range or Working Distance from motor mount (cm)	Standoff (MAHLI Toolframe +X) from motor count (cm)	Depth of Field estimate		Pixel Scale (µm/pixel)	Illuminated Pixels on CCD (approximate)		Image Dimensions (cm) (approximate)			
						near (cm)	far (cm)		horiz-ontal	vertical	horizontal (CCD columns)	vertical (CCD rows)		
<b>target named Knott</b>														
mhli00190	context view	<b>intended standoff - 25 cm</b>												
	3417MH0001900011201250C00	1250	13019	26.4	24.5	-1.8	2.0	99.8	6.6	1608	1198	16.1		
mhli00297	medium-resolution stereo-1	<b>intended standoff - 5 cm</b>												
	3417MH0002970011201252C00	1252	14046	6.6	4.7	-0.2	0.1	30.0	0.5	1608	1198	4.8		
	corresponding focus merge products:	best focus product: 3417MH0001930001201285R00				range map product: 3417MH0001930001201286S00								
mhli00297	medium-resolution stereo-2	<b>intended standoff - 5 cm</b>												
	3417MH0002970011201262C00	1262	14049	6.5	4.6	-0.2	0.1	29.9	0.5	1608	1198	4.8		
	corresponding focus merge products:	best focus product: 3417MH0001930001201283R00				range map product: 3417MH0001930001201284S00								
mhli00419	high resolution view	<b>intended standoff - 1 cm</b>												
	3417MH0004190011201272C00	1272	15272	2.5	0.6	0.0	0.1	15.8	0.2	1608	1198	2.5		
	corresponding focus merge products:	best focus product: 3417MH0001930001201281R00				range map product: 3417MH0001930001201282S00								

<b>target named Knott</b>													
mhli00190	context view	<b>intended standoff - 25 cm</b>	1250	13019	26.4	24.5	-1.8	2.0	99.8	6.6	1608	1198	16.1
mhli00297	medium-resolution stereo-1	<b>intended standoff - 5 cm</b>	1252	14046	6.6	4.7	-0.2	0.1	30.0	0.5	1608	1198	4.8
	corresponding focus merge products:	best focus product: 3417MH0001930001201285R00	range map product: 3417MH0001930001201286S00										
mhli00297	medium-resolution stereo-2	<b>intended standoff - 5 cm</b>	1262	14049	6.5	4.6	-0.2	0.1	29.9	0.5	1608	1198	4.8
	corresponding focus merge products:	best focus product: 3417MH0001930001201283R00	range map product: 3417MH0001930001201284S00										
mhli00419	high resolution view	<b>intended standoff - 1 cm</b>	1272	15272	2.5	0.6	0.0	0.1	15.8	0.2	1608	1198	2.5
	corresponding focus merge products:	best focus product: 3417MH0001930001201281R00	range map product: 3417MH0001930001201282S00										

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\*Note that other images might have been acquired; this table does not describe all images; it describes each camera positioning.  
Working distance is a photography term; it is the range from the MAHUI front lens element (sapphire window) to the target.  
Standoff distance is measured from the plane defined by the tips of the MAHUI contact sensor probes to the target.  
Range, Scale, and DOF are computed from Motor Count using the equations from version 2 of Edgett et al. (2015, <https://doi.org/10.13140/RG.2.1.3798.5447>).

## Sol 3419 - MAHLI Image Range & Scale Information\*

Sequence	Image ID*	MSL:CAMERA_PRODUCT_ID (CDPID)	Motor Count	Range or Working Distance from motor mount (cm)	Standoff (MAHLI Toolframe +X) from motor count (cm)	Depth of Field estimate		Pixel Scale ( $\mu\text{m}/\text{pixel}$ )	Pixel Scale uncertainty ( $\pm \mu\text{m}/\text{pixel}$ )	Illuminated Pixels on CCD (approximate)		Image Dimensions (cm) (approximate)	
						near (cm)	far (cm)			horizontal (CCD columns)	vertical	horizontal (CCD columns)	vertical (CCD rows)

target named Blackadder - 9x1 mosaic from 5 cm standoff														
mhli00148	context view	intended standoff - 10 cm												
	3419MH0001480011201288C00	1288	13501	11.8	9.9	-0.4	0.4	48.6	1.4	1608	1198	7.8	5.8	
mhli00173	medium-resolution stereo-1	intended standoff - 5 cm												
	APXS raster spot 2; position 1 of 9	3419MH0001730011201290C00	1290	14000	6.8	4.9	-0.2	0.2	31.0	0.6	1608	1198	5.0	3.7
mhli00173	corresponding focus merge products:	best focus product:				3420MH0004490001201419R00	range map product:				3420MH0004490001201420S00			
	medium-resolution stereo-2	intended standoff - 5 cm												
mhli00173	APXS raster spot 2; position 1 of 9	3419MH0001730011201300C00	1300	13999	6.9	5.0	-0.2	0.2	31.0	0.6	1608	1198	5.0	3.7
	corresponding focus merge products:	best focus product:				3420MH0004490001201417R00	range map product:				3420MH0004490001201418S00			
mhli00743	high resolution view	intended standoff - 1 cm												
	APXS raster spot 2	3419MH0007430011201310C00	1310	15114	2.8	0.9	-0.1	0.1	16.8	0.2	1608	1198	2.7	2.0
mhli00173	corresponding focus merge products:	best focus product:				3420MH0004490001201415R00	range map product:				3420MH0004490001201416S00			
	medium-resolution view	intended standoff - 5 cm												
mhli00173	APXS raster spot 1; position 2 of 9	3419MH0001730011201320C00	1320	14003	6.8	4.9	-0.2	0.2	30.9	0.6	1608	1198	5.0	3.7
	corresponding focus merge products:	best focus product:				3420MH0004490001201413R00	range map product:				3420MH0004490001201414S00			
mhli00173	medium-resolution view	intended standoff - 5 cm												
	position 9 of 9	3419MH0001730011201330C00	1330	14194	5.7	3.8	-0.1	0.1	27.0	0.4	1608	1198	4.3	3.2
mhli00173	corresponding focus merge products:	best focus product:				3420MH0004490001201411R00	range map product:				3420MH0004490001201412S00			
	medium-resolution view	intended standoff - 5 cm												
mhli00173	position 8 of 9	3419MH0001730011201340C00	1340	14153	5.9	4.0	-0.1	0.1	27.8	0.5	1608	1198	4.5	3.3
	corresponding focus merge products:	best focus product:				3420MH0004490001201409R00	range map product:				3420MH0004490001201410S00			
mhli00173	medium-resolution view	intended standoff - 5 cm												
	position 7 of 9	3419MH0001730011201350C00	1350	13992	6.9	5.0	-0.2	0.2	31.2	0.6	1608	1198	5.0	3.7
mhli00173	corresponding focus merge products:	best focus product:				3420MH0004490001201407R00	range map product:				3420MH0004490001201408S00			
	medium-resolution view	intended standoff - 5 cm												
mhli00173	position 6 of 9	3419MH0001730011201360C00	1360	14107	6.2	4.3	-0.1	0.1	28.7	0.5	1608	1198	4.6	3.4
	corresponding focus merge products:	best focus product:				3420MH0004490001201405R00	range map product:				3420MH0004490001201406S00			
mhli00173	medium-resolution view	intended standoff - 5 cm												
	position 5 of 9	3419MH0001730011201370C00	1370	14084	6.3	4.4	-0.1	0.1	29.2	0.5	1608	1198	4.7	3.5
mhli00173	corresponding focus merge products:	best focus product:				3420MH0004490001201403R00	range map product:				3420MH0004490001201404S00			
	medium-resolution view	intended standoff - 5 cm												
mhli00173	position 4 of 9	3419MH0001730011201380C00	1380	14001	6.8	4.9	-0.2	0.2	31.0	0.6	1608	1198	5.0	3.7
	corresponding focus merge products:	best focus product:				3420MH0004490001201401R00	range map product:				3420MH0004490001201402S00			
mhli00173	medium-resolution view	intended standoff - 5 cm												
	position 3 of 9	3419MH0001730011201390C00	1390	14002	6.8	4.9	-0.2	0.2	30.9	0.6	1608	1198	5.0	3.7
mhli00173	corresponding focus merge products:	best focus product:				3420MH0004490001201399R00	range map product:				3420MH0004490001201400S00			

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### Sol 3421 - MAHLI Image Range & Scale Information\*

*Note that other images might have been acquired; this table does not describe all images; it describes each camera positioning.																			
Working distance is a photography term; it is the range from the MAHLI front lens element (sapphire window) to the target.																			
Standoff distance is measured from the plane defined by the tips of the MAHLI contact sensor probes to the target.																			
Range, Scale, and DOF are computed from Motor Count using the equations from version 2 of Edgett et al. (2015, <a href="https://doi.org/10.13140/RG.2.1.3798.5447">https://doi.org/10.13140/RG.2.1.3798.5447</a> ).																			
Sequence	Image ID*	MSL:CAMERA_PRODUCT_ID (CDPID)	Motor Count	Range or Working Distance from motor mount (cm)	Standoff (MAHLI Toolframe +X) from motor count (cm)	Depth of Field estimate		Pixel Scale (µm/pixel)	Illuminated Pixels on CCD (approximate)		Image Dimensions (cm) (approximate)								
				near (cm)	far (cm)				horiz-ontal	vertical	horizontal (CCD columns)	vertical (CCD rows)							
<b>target named Calder - before DRT</b>																			
mhli00197	context view	intended standoff - 25 cm																	
	3421MH0001970011201422C00	1422	13031	25.7	23.8	-1.7	1.9	97.3	6.2	1608	1198	15.7							
mhli00152	medium-resolution stereo-1	intended standoff - 5 cm																	
	APXS raster spot 1	3421MH0001520011201424C00																	
	corresponding focus merge products:	best focus product: 3421MH0001530001201469R00				range map product: 3421MH0001530001201470S00				5.0									
mhli00152	medium-resolution stereo-2	intended standoff - 5 cm																	
	APXS raster spot 1	3421MH0001520011201434C00																	
	corresponding focus merge products:	best focus product: 3421MH0001530001201467R00				range map product: 3421MH0001530001201468S00				5.0									
mhli00796	high resolution view	intended standoff - 1 cm																	
	APXS raster spot 1	3421MH0007960011201444C00																	
	corresponding focus merge products:	best focus product: 3421MH0001530001201465R00				range map product: 3421MH0001530001201466S00				2.7									
mhli00152	medium-resolution view	intended standoff - 5 cm																	
	APXS raster spot 2	3421MH0001520011201454C00																	
	corresponding focus merge products:	best focus product: 3421MH0001530001201463R00				range map product: 3421MH0001530001201464S00				5.0									

last update: [23\\_March\\_2022](#)

## Sol 3422 - MAHLI Image Range & Scale Information\*

*Note that other images might have been acquired; this table does not describe all images; it describes each camera positioning.								
Working distance is a photography term; it is the range from the MAH1 front lens element (sapphire window) to the target.								
Standoff distance is measured from the plane defined by the tips of the MAH1 contact sensor probes to the target.								
Range, Scale, and DOF are computed from Motor Count using the equations from version 2 of Edgett et al. (2015, <a href="https://doi.org/10.13140/RG.2.1.3798.5447">https://doi.org/10.13140/RG.2.1.3798.5447</a> ).								
Range or Working Distance from motor mount (cm)	Standoff (MAH1 Toolframe +X) from motor count (cm)	Depth of Field estimate		Pixel Scale ( $\mu\text{m}/\text{pixel}$ )	Pixel Scale uncertainty ( $\pm \mu\text{m}/\text{pixel}$ )	Illuminated Pixels on CCD (approximate)		Image Dimensions (cm) (approximate)
		near (cm)	far (cm)			horizontal (CCD columns)	vertical (CCD rows)	

target named Calder - after DRT														
mhli00190	context view		intended standoff - 25 cm											
	3422MH0001900011201472C00		1472	13019	26.4	24.5	-1.8	2.0	99.8	6.6	1608	1198	16.1	12.0
mhli00152	medium-resolution stereo-1		intended standoff - 5 cm											
	3422MH00015200011201474C00		1474	14012	6.8	4.9	-0.2	0.2	30.7	0.5	1608	1198	4.9	3.7
corresponding focus merge products:		best focus product:				3422MH0001710001201564R00	range map product:				3422MH0001710001201565S00			
mhli00152	medium-resolution stereo-2		intended standoff - 5 cm											
	3422MH00015200011201484C00		1484	14008	6.8	4.9	-0.2	0.2	30.8	0.6	1608	1198	5.0	3.7
corresponding focus merge products:		best focus product:				3422MH0001710001201562R00	range map product:				3422MH0001710001201563S00			
mhli00796	high resolution view		intended standoff - 1 cm											
	3422MH00079600011201494C00		1494	15138	2.8	0.9	-0.1	0.1	16.6	0.2	1608	1198	2.7	2.0
corresponding focus merge products:		best focus product:				3422MH0001710001201560R00	range map product:				3422MH0001710001201561S00			

target named Scandal_Beck														
mhil00190	context view		intended standoff - 25 cm											
	3422MH0001900011201504C00		1504	13028	25.9	24.0	-1.7	1.9	98.0	6.3	1608	1198	15.8	11.7
mhil00782	intermediate-resolution view		intended standoff - 15 cm											
	3422MH00078200011201506C00		1506	13293	15.9	14.0	-0.7	0.7	62.7	2.4	1608	1198	10.1	7.5
	corresponding focus merge products:		best focus product:		3422MH0001710001201558R00				range map product:		3422MH0001710001201559S00			

target named Ashkirk														
mhli00190	context view		intended standoff - 25 cm											
	3422MH0001900011201517C00		1517	13012	26.8	24.9	-1.8	2.0	101.3	6.8	1608	1198	16.3	12.1
mhli00224	medium-resolution stereo-1		intended standoff - 5 cm											
	3422MH0002240011201519C00		1519	13988	6.9	5.0	-0.2	0.2	31.3	0.6	1608	1198	5.0	3.7
corresponding focus merge products:		best focus product:				3422MH0001710001201556R00	range map product:				3422MH0001710001201557500			
mhli00224	medium-resolution stereo-2		intended standoff - 5 cm											
	3422MH0002240011201529C00		1529	13970	7.0	5.1	-0.2	0.2	31.7	0.6	1608	1198	5.1	3.8
corresponding focus merge products:		best focus product:				3422MH0001710001201554R00	range map product:				3422MH0001710001201555500			
mhli00307	high resolution view		intended standoff - 2.5 cm											
	3422MH00030700011201539C00		1539	14461	4.6	2.7	-0.1	0.1	23.0	0.3	1608	1198	3.7	2.8
corresponding focus merge products:		best focus product:				3422MH0001710001201552R00	range map product:				3422MH0001710001201553500			

target named Breakyneck														
mhl00619	context view stereo-1		intended standoff - 25 cm											
	3422MH0006190011201549C00		1549	13022	26.2	24.3	-1.7	2.0	99.2	6.5	1608	1198	16.0	11.9
mhl00619	context view stereo-2		intended standoff - 25 cm											
	3422MH0006190011201551C00		1551	13020	26.3	24.4	-1.7	2.0	99.6	6.5	1608	1198	16.0	11.9

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## Sol 3423 - MAHLI Image Range & Scale Information\*

target named Redscarhead													
mhl00190	context view	intended standoff - 25 cm											
	3423MH0001900011201567C00	1567	13014	26.7	24.8	-1.8	2.0	100.9	6.7	1608	1198	16.2	12.1
mhl00224	medium-resolution stereo-1	intended standoff - 5 cm											
	3423MH0002240011201569C00	1569	13979	7.0	5.1	-0.2	0.2	31.5	0.6	1608	1198	5.1	3.8
	corresponding focus merge products:	best focus product:				3424MH0002270001201626R00	range map product:				3424MH0002270001201627500		
mhl00224	medium-resolution stereo-2	intended standoff - 5 cm											
	3423MH0002240011201579C00	1579	13984	7.0	5.1	-0.2	0.2	31.4	0.6	1608	1198	5.0	3.8
	corresponding focus merge products:	best focus product:				3424MH0002270001201624R00	range map product:				3424MH0002270001201625500		

target named Breakyneck													
mhl00297	medium-resolution stereo-1	intended standoff - 5 cm											
	3423MH0002970011201589C00	1589	14002	6.8	4.9	-0.2	0.2	30.9	0.6	1608	1198	5.0	3.7
corresponding focus merge products:				best focus product:				range map product:				3424MH000270001201623R00	3424MH000270001201623S00
mhl00297	medium-resolution stereo-2	intended standoff - 5 cm											
	3423MH0002970011201599C00	1599	14016	6.7	4.8	-0.2	0.2	30.6	0.5	1608	1198	4.9	3.7
corresponding focus merge products:				best focus product:				range map product:				3424MH000270001201621R00	3424MH000270001201621S00
mhl00523	high resolution view	intended standoff - 1 cm											
	3423MH0005230011201609C00	1609	15164	2.7	0.8	0.0	0.1	16.4	0.2	1608	1198	2.6	2.0
corresponding focus merge products:				best focus product:				range map product:				3424MH000270001201619R00	3424MH000270001201619S00

## 5 Focus merge product information

### 5.1 Purpose and description

The MAHLI *Focus Merge Product Information Sheets* provide information about the best focus and range map products created by focus merges performed onboard the MAHLI instrument.

The information includes:

1. thumbnail images representing the appearance of each best focus and range map product;
2. a brief title or description of the image target and purpose;
3. the Sol and date (UTC) that the merged parent images were acquired;
4. the Sol on which the focus merge took place,
5. image IDs for the focus merge products and a corresponding full-frame image;
6. the MAHLI command sequence that acquired the parent images and the command sequence that created the focus merge products;
7. the commanded stack depth; that is, the number of parent images acquired in a given focus stack;
8. the type of focus stack (relative or absolute; see definitions in **Section 7**);
9. a list of the thumbnail image IDs for the parent images acquired in the focus stack (because, in some cases, these are the only versions of the focus stack images that are received on Earth);
10. the focus position (stepper motor count) for each parent image in the focus stack;
11. the range and range uncertainty determined from the focus position (motor count) of each parent image; and
12. the grayscale DN value corresponding to each parent image motor count and range in the focus merge range map product.

Further, for each parent image, the *Focus Merge Product Information Sheets* state whether any of the full-size images (Individual Focus Stack Images) were received on Earth, listing:

13. the image ID of the full-size parent or child image, if received on Earth;
14. the date on which the full-size image was received (applicable only to *Focus Merge Product Information Sheets* for the period between Sol 0 and 946 after that, with the exception of Sol 930, this practice was abandoned as unnecessary);
15. the compression quality of the best version of the image, if received on Earth (this practice was later abandoned as unnecessary); and

16. a statement regarding the fate of parent images not received on Earth; that is, the Sol on which the parent was deleted from the data storage inside the instrument's digital electronics assembly (DEA).

Each MAHLI *Focus Merge Product Information Sheet* is identified by the Sol on which the parent images were acquired. The onboard merge, in some cases, might have been performed on a later sol.

The parent images identified in rows that are colored orange, if they have a corresponding DN value in a yellow-colored column, are those that participated in the creation of the focus merge product. In other words, those that are in white rows (for which there is a corresponding DN in the yellow column) had no in-focus elements and thus were not incorporated into the merged product, even if they had been commanded to be merged. Which images were commanded to be merged can be determined by the yellow-colored column that indicates the corresponding DN values in the range map image product; for cases in which the commanded focus stack depth is  $> 8$ , the corresponding DN values (yellow-colored column) will indicate the 8 commanded to be merged (the instrument cannot merge  $> 8$  but it can acquire  $> 8$  images in a focus stack).

In cases in which the focus stack parent images were returned to Earth, the data user has the option to perform a new focus merge using software approaches available on Earth, now or in the future, which might outperform the MAHLI onboard algorithm. The user also has the opportunity, in these cases, to improve each parent image before performing the merge (e.g., remove blemishes, perform flat field correction, etc.).

When a  $> 8$  image focus stack has been acquired, the orange-colored rows can also indicate recommendations for images that would contain in-focus elements and could be added to a future focus merge product, whether performed onboard MAHLI or Earth after receipt of the full-size images. Those images that are recommended, but were not merged onboard, have no “Corresponding DN in Range Map” in the yellow, rightmost columns of the *Focus Merge Product Information Sheets*.

For the Sol 3290–3423 period, focus stacks that were merged onboard the instrument were acquired on Sols 3313, 3315, 3316, 3319, 3321, 3323, 3326, 3328, 3344, 3347, 3349, 3362, 3364, 3371, 3374, 3376, 3378, 3381, 3383, 3385, 3387, 3388, 3392, 3395, 3396, 3398, 3409, 3413, 3415, 3417, 3419, 3421, 3422, 3423. Unless otherwise stated, the onboard focus merges performed during this period were all of the “basic” type (see Edgett *et al.* 2012; Edgett *et al.* 2015).

## 5.2 Formulae

### 5.2.1 Range

When acquiring a focus stack, the MAHLI camera head is held in a fixed position. This means that the working distance ( $d_w$ ) — and corresponding standoff distance ( $d_s$ ) — is constant (see **Section 5.2.5**). However, each image acquired in a focus stack is done so at a different focus position; that is, a different stepper motor count position ( $m_{open}$  or  $m_{closed}$ ; usually  $m_{open}$ ). That motor count is related to the range ( $r_{fm}$ ) between the front lens element of the camera and the in-focus elements of the image by the same empirical formula (**Equation 1**) as applied to determine working distance from motor count. In centimeters,

$$r_{fm} = (am_{open}^{-1} + b + cm_{open} + dm_{open}^2 + em_{open}^3)^{-1}, \quad (12)$$

in which  $a = 0.576786$ ,  $b = -11.8479$ ,  $c = 2.80153 \times 10^{-3}$ ,  $d = -2.266488 \times 10^{-7}$ , and  $e = 6.26666 \times 10^{-12}$ .

For each parent image in a given focus stack, this range is given in the green-colored column on the right side of each MAHLI *Focus Merge Product Information Sheet*.

### 5.2.2 Range uncertainty estimate

The uncertainty ( $\pm r_{uncertainty}$ , in centimeters) in the computed range ( $r_{fm}$ ) is estimated using depth of field as related to the corresponding range (via motor count; **Equation 12**) for each merged parent image. The range uncertainty estimate is noted in the light green column on the lower right side of each MAHLI *Focus Merge Product Information Sheet*.

*Focus Merge Product Information Sheets* in which the relevant column is labeled “Estimated Range Uncertainty”

For MAHLI *Focus Merge Product Information Sheets* created before Sol 942, our estimate of range uncertainty was based on the older (Edgett *et al.* 2013) depth of field equations described in **Section 4.2.3, Equations 4, 5, and 6**, in which we substituted  $r_{fm}$  for  $d_w$ .

*Focus Merge Product Information Sheets* in which the relevant column is labeled “Depth of Field”

For MAHLI *Focus Merge Product Information Sheets* created starting with Sol 942, we used the refined knowledge of MAHLI depth of field, described by Edgett *et al.* (2015) and in **Equation 7** of **Section 4.2.3** to determine  $d_{far}$  and  $d_{near}$  for each focus stack parent image motor count. The resulting range uncertainty estimate ( $\pm r_{uncertainty}$ , in centimeters) reported in the light green column on the lower right side of the corresponding *Focus Merge Product Information Sheet* is estimated by the average of the absolute values of  $d_{far}$  and  $d_{near}$ :

$$\pm r_{uncertainty} = ((-d_{near}) + d_{far})/2. \quad (13)$$

Alternatively, particularly after Sol 1000, the depth of field is reported in the form of both the near and far ( $d_{far}$  and  $d_{near}$ ) depths of field, per **Equation 7**.

### 5.2.3 Corresponding DN in range map product

Focus merge range map products created onboard MAHLI are returned as grayscale JPEG compressed images. The pixel values (DN) range from 0 to 255. These are assigned by the onboard software on the basis of commanded focus stack depth. The table below, from Edgett *et al.* (2015), shows the relationship between each image commanded to be focus merged and its corresponding grayscale DN value in a MAHLI range map product. In other words, if the instrument is commanded to merge eight images, DN values are assigned according to the second column in the table; if commanded to merge only four images, the corresponding DN values are those in the sixth column. Thus, each DN in a range map product can be related to a motor count position and a corresponding range via linear interpolation between these values.

Relation between commanded image participant in an onboard MAHLI focus merge and range map grayscale data value (DN)							
image commanded to be merged	DN for 8-image merge	DN for 7-image merge	DN for 6-image merge	DN for 5-image merge	DN for 4-image merge	DN for 3-image merge	DN for 2-image merge
1st	255	255	255	255	255	255	255
2nd	223	218	212	204	191	170	127
3rd	191	182	170	153	127	84	—
4th	159	145	127	102	63	—	—
5th	127	109	84	51	—	—	—
6th	95	72	42	—	—	—	—
7th	63	36	—	—	—	—	—
8th	31	—	—	—	—	—	—

#### 5.2.4 Determination of which parent images participated in a given focus merge product (orange rows)

Focus merge parent images in the orange-colored rows on each of the *Focus Merge Product Information Sheets* are an indicator of the images that were actually merged. A merge of up to 8 images might be commanded, but perhaps only 3, 4, or 5 of them actually exhibit in-focus elements the get incorporated into the best focus image product.

As discussed by Edgett *et al.* (2015), the parent images that were actually merged, relative to the number commanded to be merged (indicated by the number of yellow-colored rows regarding the corresponding DN in the range map products on the right side of each *Focus Merge Product Information Sheet*), are determined by the range of grayscale DN, between 0 and 255, in the focus merge range map product. For example, if the DN range of this product is 91 to 138, then only three of 8 images commanded to be merged participated in that merge, per the DN values corresponding to an 8-image focus merge, per the table above.

#### 5.2.5 Camera working distance and standoff distance

For a given focus stack, the distance between the MAHLI camera head and an imaged target can be determined from a corresponding image acquired via autofocusing (assuming the autofocus effort found focus). In other words, while the range between the camera and the in-focus elements of a parent image are captured by the individual parent images in the focus stack (**Section 5.2.1**), the camera acquired the stack from a fixed working distance. On the MAHLI *Focus Merge Product Information Sheets*, the corresponding autofocus image, and its stepper motor count focus position, are stated on the left side of the sheet, beneath the thumbnail images, in rows and columns colored light blue.

For some *Focus Merge Product Information Sheets*, the working distance ( $d_w$ ) and standoff distance ( $d_s$ ) are provided in these blue rows and columns. These were computed from the motor count position using the same formulae for  $d_w$  and  $d_s$  described in **Section 4.2 (Equations 1 and 3, respectively)**. Where these values are not given, the data user can apply **Equations 1 and 3** to the motor count, or use the corresponding full-frame image ID to identify the working distance and standoff distance using the *Range and Scale Information Sheets* for that Sol. We began to regularly provide a result for  $d_w$  and  $d_s$  starting with Sol 694; before that, the cases in which these

values are not given are a reflection of the evolution of the production and content of the MAHLI *Focus Merge Product Information Sheets* over time.

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#### Sol 3313 - MAHLI Onboard Focus Merge Product Information

		target Camusnagaul - stereo-1 - ~5 cm standoff							
			CDPID	corresponding frame:	3313MH0002240011104060C00				
best focus image:	3313MH0001930001104093R00	4093		motor count:	13944	range (cm):	7.2		
range map product:	3313MH0001930001104094S00	4094		acquired sequence:	mhli00224	stack type:	Relative		
acquired on date:	1-Dec-21			merge sequence:	mhli00193	merge type:	Basic		
motor count interval:	42	acquired on sol:	3313	focus merged on sol:	3313				
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)	pixel scale (μm/pixel)	pixel scale uncertainty (μm/pixel)	DN in range map	image n of 8	
			near	far					
3313MH0002240021104061C00	4061	13776	8.59	-0.2	0.2	37.1	0.8	255	1
3313MH0002240021104062C00	4062	13818	8.21	-0.2	0.2	35.8	0.8	223	2
3313MH0002240021104063C00	4063	13860	7.86	-0.2	0.2	34.6	0.7	191	3
3313MH0002240021104064C00	4064	13902	7.53	-0.2	0.2	33.4	0.7	159	4
3313MH0002240021104065C00	4065	13944	7.23	-0.2	0.2	32.3	0.6	127	5
3313MH0002240021104066C00	4066	13986	6.94	-0.2	0.2	31.3	0.6	85	6
3313MH0002240021104067C00	4067	14028	6.66	-0.2	0.2	30.4	0.6	63	7
3313MH0002240021104068C00	4068	14070	6.41	-0.2	0.1	29.4	0.5	31	8

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#### Sol 3313 - MAHLI Onboard Focus Merge Product Information

		target Camusnagaul - stereo-2 - ~5 cm standoff							
			CDPID	corresponding frame:	3313MH0002240011104070C00				
best focus image:	3313MH0001930001104091R00	4091		motor count:	13968	range (cm):	7.1		
range map product:	3313MH0001930001104092S00	4092		acquired sequence:	mhli00224	stack type:	Relative		
acquired on date:	1-Dec-21			merge sequence:	mhli00193	merge type:	Basic		
motor count interval:	42	acquired on sol:	3313	focus merged on sol:	3313				
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)	pixel scale (μm/pixel)	pixel scale uncertainty (μm/pixel)	DN in range map	image n of 8	
			near	far					
3313MH0002240021104071C00	4071	13800	8.37	-0.2	0.2	36.4	0.8	255	1
3313MH0002240021104072C00	4072	13842	8.01	-0.2	0.2	35.1	0.7	223	2
3313MH0002240021104073C00	4073	13884	7.67	-0.2	0.2	33.9	0.7	191	3
3313MH0002240021104074C00	4074	13926	7.36	-0.2	0.2	32.8	0.6	159	4
3313MH0002240021104075C00	4075	13968	7.06	-0.2	0.2	31.7	0.6	127	5
3313MH0002240021104076C00	4076	14010	6.78	-0.2	0.2	30.8	0.6	85	6
3313MH0002240021104077C00	4077	14052	6.51	-0.2	0.1	29.8	0.5	63	7
3313MH0002240021104078C00	4078	14094	6.27	-0.1	0.1	29.0	0.5	31	8

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### Sol 3313 - MAHLI Onboard Focus Merge Product Information

		target Camusnagaul - ~1 cm standoff						
			CDPID	corresponding frame:	3313MH0003860011104080C00			
best focus image:	3313MH0001930001104089R00	4089		motor count:	14888	range (cm):	3.3	
range map product:	3313MH0001930001104090S00	4090		acquired sequence:	mhli00386	stack type:	Relative	
acquired on date:	1-Dec-21			merge sequence:	mhli00193	merge type:	Basic	
motor count interval:	54	acquired on sol:	3313	focus merged on sol:	3313			
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)	pixel scale (μm/pixel)	pixel scale uncertainty (μm/pixel)	DN in range map	image n of 8
3313MH0003860021104081C00	4081	14672	3.87	-0.1 0.1	20.5	0.3	255	1
3313MH0003860021104082C00	4082	14726	3.71	-0.1 0.1	20.0	0.3	223	2
3313MH0003860021104083C00	4083	14780	3.56	-0.1 0.1	19.4	0.3	191	3
3313MH0003860021104084C00	4084	14834	3.42	-0.1 0.1	19.0	0.2	159	4
3313MH0003860021104085C00	4085	14888	3.29	-0.1 0.1	18.5	0.2	127	5
3313MH0003860021104086C00	4086	14942	3.17	-0.1 0.1	18.0	0.2	85	6
3313MH0003860021104087C00	4087	14996	3.05	-0.1 0.1	17.6	0.2	63	7
3313MH0003860021104088C00	4088	15050	2.93	-0.1 0.1	17.2	0.2	31	8

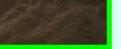
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Sol 3315 - MAHLI Onboard Focus Merge Product Information

		target Yarrow_Stone - stereo-1 - ~5 cm standoff							
			CDPID	corresponding frame:		3315MH000699001104103C00			
best focus image:	3315MH0001930001104161R00		4161	motor count:		13967	range (cm): 7.1		
range map product:	3315MH0001930001104162S00		4162	acquired sequence:		mhli00699	stack type: Relative		
acquired on date:	3-Dec-21			merge sequence:		mhli00193	merge type: Basic		
motor count interval:		30	acquired on sol:		3315	focus merged on sol:			
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (μm/pixel)	pixel scale uncertainty (μm/pixel)	DN in range map	image n of 8
				near	far				
3315MH0006990031104105C00	4105	13847	7.97	-0.2	0.2	34.9	0.7	255	1
3315MH0006990031104106C00	4106	13877	7.73	-0.2	0.2	34.1	0.7	223	2
3315MH0006990031104107C00	4107	13907	7.50	-0.2	0.2	33.3	0.7	191	3
3315MH0006990031104108C00	4108	13937	7.28	-0.2	0.2	32.5	0.6	159	4
3315MH0006990031104109C00	4109	13967	7.07	-0.2	0.2	31.8	0.6	127	5
3315MH0006990031104110C00	4110	13997	6.86	-0.2	0.2	31.1	0.6	85	6
3315MH0006990031104111C00	4111	14027	6.67	-0.2	0.2	30.4	0.6	63	7
3315MH0006990031104112C00	4112	14057	6.48	-0.2	0.1	29.7	0.5	31	8

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Sol 3315 - MAHLI Onboard Focus Merge Product Information

		target Yarrow_Stone - stereo-2 - ~5 cm standoff							
			CDPID	corresponding frame:		3315MH0006990011104114C00			
best focus image:	3315MH0001930001104159R00		4159	motor count:		13967	range (cm): 7.1		
range map product:	3315MH0001930001104160S00		4160	acquired sequence:		mhli00699	stack type: Relative		
acquired on date:	3-Dec-21			merge sequence:		mhli00193	merge type: Basic		
motor count interval:		30	acquired on sol:		3315	focus merged on sol:			
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (μm/pixel)	pixel scale uncertainty (μm/pixel)	DN in range map	image n of 8
				near	far				
3315MH0006990031104116C00	4116	13847	7.97	-0.2	0.2	34.9	0.7	255	1
3315MH0006990031104117C00	4117	13877	7.73	-0.2	0.2	34.1	0.7	223	2
3315MH0006990031104118C00	4118	13907	7.50	-0.2	0.2	33.3	0.7	191	3
3315MH0006990031104119C00	4119	13937	7.28	-0.2	0.2	32.5	0.6	159	4
3315MH0006990031104120C00	4120	13967	7.07	-0.2	0.2	31.8	0.6	127	5
3315MH0006990031104121C00	4121	13997	6.86	-0.2	0.2	31.1	0.6	85	6
3315MH0006990031104122C00	4122	14027	6.67	-0.2	0.2	30.4	0.6	63	7
3315MH0006990031104123C00	4123	14057	6.48	-0.2	0.1	29.7	0.5	31	8

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### Sol 3315 - MAHLI Onboard Focus Merge Product Information

		target Yarrow_Stone- ~2 cm standoff						
best focus image:	3315MH0001930001104157R00	4157	motor count:	14601	range (cm):	4.1		
range map product:	3315MH0001930001104158S00	4158	acquired sequence:	mhli00800	stack type:	Relative		
acquired on date:	3-Dec-21		merge sequence:	mhli00193	merge type:	Basic		
motor count interval:	54	acquired on sol:	3315	focus merged on sol:	3315			
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)	pixel scale (µm/pixel)	pixel scale uncertainty (µm/pixel)	DN in range map	image n of 8
3315MH0008000031104127C00	4127	14385	4.86	-0.1 0.1	24.0	0.4	255	1
3315MH0008000031104128C00	4128	14439	4.65	-0.1 0.1	23.3	0.3	223	2
3315MH0008000031104129C00	4129	14493	4.45	-0.1 0.1	22.6	0.3	191	3
3315MH0008000031104130C00	4130	14547	4.26	-0.1 0.1	21.9	0.3	159	4
3315MH0008000031104131C00	4131	14601	4.08	-0.1 0.1	21.3	0.3	127	5
3315MH0008000031104132C00	4132	14655	3.92	-0.1 0.1	20.7	0.3	85	6
3315MH0008000031104133C00	4133	14709	3.76	-0.1 0.1	20.1	0.3	63	7
3315MH0008000031104134C00	4134	14763	3.61	-0.1 0.1	19.6	0.3	31	8

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Sol 3316 - MAHLI Onboard Focus Merge Product Information

		target Whaligoe_Steps - mosaic position 1 of 9 - ~15 cm standoff							
best focus image:	3318MH0004400001104362R00	4362	motor count:	13254	range (cm):	16.9			
range map product:	3318MH0004400001104363S00	4363	acquired sequence:	mhli00836	stack type:	Relative			
acquired on date:	4-Dec-21			merge sequence:	mhli00440	merge type:	Basic		
motor count interval:		36	acquired on sol:	3316	focus merged on sol:	3318			
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (μm/pixel)	pixel scale uncertainty (μm/pixel)	DN in range map	image n of 8
				near	far				
3316MH0008360031104166C00	4166	13110	21.78	-1.2	1.3	83.6	4.5	255	1
3316MH0008360031104167C00	4167	13146	20.34	-1.1	1.2	78.5	3.9	223	2
3316MH0008360031104168C00	4168	13182	19.05	-1.0	1.0	74.0	3.4	191	3
3316MH0008360031104169C00	4169	13218	17.90	-0.8	0.9	69.9	3.0	159	4
3316MH0008360031104170C00	4170	13254	16.87	-0.8	0.8	66.3	2.7	127	5
3316MH0008360031104171C00	4171	13290	15.93	-0.7	0.7	63.0	2.4	85	6
3316MH0008360031104172C00	4172	13326	15.08	-0.6	0.6	60.0	2.2	63	7
3316MH0008360031104173C00	4173	13362	14.30	-0.6	0.6	57.2	2.0	31	8

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Sol 3316 - MAHLI Onboard Focus Merge Product Information

		target Whaligoe_Steps - mosaic position 2 of 9 - ~13 cm standoff							
			CDPID	corresponding frame:		3316MH000836001104175C00			
best focus image:	3318MH0004400001104360R00		4360	motor count:		13357	range (cm): 14.4		
range map product:	3318MH0004400001104361S00		4361	acquired sequence:		mhli00836	stack type: Relative		
acquired on date:	4-Dec-21			merge sequence:		mhli00440	merge type: Basic		
motor count interval:		36	acquired on sol:		3316	focus merged on sol:			
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (μm/pixel)	pixel scale uncertainty (μm/pixel)	DN in range map	image n of 8
				near	far				
3316MH0008360031104177C00	4177	13213	18.05	-0.9	0.9	70.4	3.1	255	1
3316MH0008360031104178C00	4178	13249	17.00	-0.8	0.8	66.8	2.8	223	2
3316MH0008360031104179C00	4179	13285	16.05	-0.7	0.7	63.4	2.5	191	3
3316MH0008360031104180C00	4180	13321	15.19	-0.6	0.6	60.4	2.2	159	4
3316MH0008360031104181C00	4181	13357	14.40	-0.6	0.6	57.6	2.0	127	5
3316MH0008360031104182C00	4182	13393	13.68	-0.5	0.5	55.1	1.8	85	6
3316MH0008360031104183C00	4183	13429	13.02	-0.5	0.5	52.7	1.7	63	7
3316MH0008360031104184C00	4184	13465	12.40	-0.4	0.4	50.6	1.5	31	8

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Sol 3316 - MAHLI Onboard Focus Merge Product Information

		target Whaligoe_Steps - mosaic position 3 of 9 - ~12 cm standoff						
		CDPID	corresponding frame:		3316MH0008360011104186C00			
best focus image:	3318MH0004400001104358R00		4358	motor count:		13360	range (cm):	14.3
range map product:	3318MH0004400001104359S00		4359	acquired sequence:		mhli00836	stack type:	Relative
acquired on date:	4-Dec-21			merge sequence:		mhli00440	merge type:	Basic
motor count interval:		36	acquired on sol:		3316	focus merged on sol:		3318
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (µm/pixel)	pixel scale uncertainty (µm/pixel)	DN in range map
				near	far			
3316MH0008360031104188C00	4188	13216	17.96	-0.9	0.9	70.1	3.1	255
3316MH0008360031104189C00	4189	13252	16.92	-0.8	0.8	66.5	2.7	223
3316MH0008360031104190C00	4190	13288	15.98	-0.7	0.7	63.1	2.4	191
3316MH0008360031104191C00	4191	13324	15.12	-0.6	0.6	60.1	2.2	159
3316MH0008360031104192C00	4192	13360	14.34	-0.6	0.6	57.4	2.0	127
3316MH0008360031104193C00	4193	13396	13.62	-0.5	0.5	54.9	1.8	85
3316MH0008360031104194C00	4194	13432	12.96	-0.5	0.5	52.5	1.7	63
3316MH0008360031104195C00	4195	13468	12.35	-0.4	0.4	50.4	1.5	31

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Sol 3316 - MAHLI Onboard Focus Merge Product Information

		target Whaligoe_Steps - mosaic position 4 of 9 - ~11 cm standoff						
best focus image:	<a href="#">3318MH0004400001104356R00</a>		4356	motor count:		13422	range (cm):	13.1
range map product:	<a href="#">3318MH0004400001104357S00</a>		4357	acquired sequence:		mhli00836	stack type:	Relative
acquired on date:	4-Dec-21					merge sequence:	mhli00440	merge type:
motor count interval:		36	acquired on sol:		3316	focus merged on sol:		3318
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (μm/pixel)	pixel scale uncertainty (μm/pixel)	DN in range map
				near	far			
<a href="#">3316MH0008360031104199C00</a>	4199	13278	16.23	-0.7	0.7	64.0	2.5	255
<a href="#">3316MH0008360031104200C00</a>	4200	13314	15.35	-0.6	0.7	60.9	2.3	223
<a href="#">3316MH0008360031104201C00</a>	4201	13350	14.55	-0.6	0.6	58.1	2.0	191
<a href="#">3316MH0008360031104202C00</a>	4202	13386	13.82	-0.5	0.5	55.5	1.9	159
<a href="#">3316MH0008360031104203C00</a>	4203	13422	13.14	-0.5	0.5	53.2	1.7	127
<a href="#">3316MH0008360031104204C00</a>	4204	13458	12.52	-0.4	0.4	51.0	1.6	85
<a href="#">3316MH0008360031104205C00</a>	4205	13494	11.94	-0.4	0.4	48.9	1.4	63
<a href="#">3316MH0008360031104206C00</a>	4206	13530	11.41	-0.4	0.4	47.1	1.3	31

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#### Sol 3316 - MAHLI Onboard Focus Merge Product Information

		target Whaligoe_Steps - mosaic position 5 of 9 - ~10 cm standoff						
			CDPID	corresponding frame:		3316MH0008360011104208C00		
best focus image:		3318MH0004400001104354R00	4354	motor count:		13469	range (cm):	12.3
range map product:		3318MH0004400001104355S00	4355	acquired sequence:		mhli00836	stack type:	Relative
acquired on date:		4-Dec-21			merge sequence:	mhli00440	merge type:	Basic
motor count interval:		36	acquired on sol:		3316	focus merged on sol:		3318
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (μm/pixel)	pixel scale uncertainty (μm/pixel)	DN in range map
				near	far			
3316MH0008360031104210C00	4210	13325	15.10	-0.6	0.6	60.0	2.2	255
3316MH0008360031104211C00	4211	13361	14.32	-0.6	0.6	57.3	2.0	223
3316MH0008360031104212C00	4212	13397	13.60	-0.5	0.5	54.8	1.8	191
3316MH0008360031104213C00	4213	13433	12.94	-0.5	0.5	52.5	1.6	159
3316MH0008360031104214C00	4214	13469	12.34	-0.4	0.4	50.3	1.5	127
3316MH0008360031104215C00	4215	13505	11.77	-0.4	0.4	48.3	1.4	85
3316MH0008360031104216C00	4216	13541	11.25	-0.4	0.4	46.5	1.3	63
3316MH0008360031104217C00	4217	13577	10.77	-0.3	0.3	44.8	1.2	31
								8

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#### Sol 3316 - MAHLI Onboard Focus Merge Product Information

		target Whaligoe_Steps - mosaic position 6 of 9 - ~12 cm standoff						
			CDPID	corresponding frame:		3316MH0008360011104219C00		
best focus image:		3318MH0004400001104352R00	4352	motor count:		13369	range (cm):	14.2
range map product:		3318MH0004400001104353S00	4353	acquired sequence:		mhli00836	stack type:	Relative
acquired on date:		4-Dec-21			merge sequence:	mhli00440	merge type:	Basic
motor count interval:		36	acquired on sol:		3316	focus merged on sol:		3318
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (μm/pixel)	pixel scale uncertainty (μm/pixel)	DN in range map
				near	far			
3316MH0008360031104221C00	4221	13225	17.69	-0.8	0.9	69.2	3.0	255
3316MH0008360031104222C00	4222	13261	16.68	-0.7	0.8	65.6	2.7	223
3316MH0008360031104223C00	4223	13297	15.76	-0.7	0.7	62.4	2.4	191
3316MH0008360031104224C00	4224	13333	14.92	-0.6	0.6	59.4	2.1	159
3316MH0008360031104225C00	4225	13369	14.15	-0.6	0.6	56.7	1.9	127
3316MH0008360031104226C00	4226	13405	13.45	-0.5	0.5	54.3	1.8	85
3316MH0008360031104227C00	4227	13441	12.81	-0.5	0.5	52.0	1.6	63
3316MH0008360031104228C00	4228	13477	12.21	-0.4	0.4	49.9	1.5	31
								8

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#### Sol 3316 - MAHLI Onboard Focus Merge Product Information

		target Whaligoe_Steps - mosaic position 7 of 9 - ~14 cm standoff						
			CDPID	corresponding frame:		3316MH0008360011104230C00		
best focus image:		3318MH0004400001104350R00	4350	motor count:		13310	range (cm):	15.4
range map product:		3318MH0004400001104351S00	4351	acquired sequence:		mhli00836	stack type:	Relative
acquired on date:		4-Dec-21			merge sequence:		mhli00440	merge type:
motor count interval:		36	acquired on sol:		3316	focus merged on sol:		3318
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (μm/pixel)	pixel scale uncertainty (μm/pixel)	
			near	far		DN in range map	image n of 8	
3316MH0008360031104232C00	4232	13166	19.60	-1.0	1.1	75.9	3.6	255
3316MH0008360031104233C00	4233	13202	18.40	-0.9	0.9	71.7	3.2	223
3316MH0008360031104234C00	4234	13238	17.31	-0.8	0.8	67.8	2.9	191
3316MH0008360031104235C00	4235	13274	16.33	-0.7	0.7	64.4	2.5	159
3316MH0008360031104236C00	4236	13310	15.44	-0.6	0.7	61.3	2.3	127
3316MH0008360031104237C00	4237	13346	14.63	-0.6	0.6	58.4	2.1	85
3316MH0008360031104238C00	4238	13382	13.89	-0.5	0.5	55.8	1.9	63
3316MH0008360031104239C00	4239	13418	13.21	-0.5	0.5	53.4	1.7	31
								8

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#### Sol 3316 - MAHLI Onboard Focus Merge Product Information

		target Whaligoe_Steps - mosaic position 8 of 9 - ~14 cm standoff						
			CDPID	corresponding frame:		3316MH0008360011104241C00		
best focus image:		3318MH0004400001104348R00	4348	motor count:		13277	range (cm):	16.3
range map product:		3318MH0004400001104349S00	4349	acquired sequence:		mhli00836	stack type:	Relative
acquired on date:		4-Dec-21			merge sequence:		mhli00440	merge type:
motor count interval:		36	acquired on sol:		3316	focus merged on sol:		3318
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (μm/pixel)	pixel scale uncertainty (μm/pixel)	
			near	far		DN in range map	image n of 8	
3316MH0008360031104243C00	4243	13133	20.84	-1.1	1.2	80.3	4.1	255
3316MH0008360031104244C00	4244	13169	19.50	-1.0	1.1	75.5	3.6	223
3316MH0008360031104245C00	4245	13205	18.30	-0.9	0.9	71.3	3.2	191
3316MH0008360031104246C00	4246	13241	17.23	-0.8	0.8	67.5	2.8	159
3316MH0008360031104247C00	4247	13277	16.26	-0.7	0.7	64.1	2.5	127
3316MH0008360031104248C00	4248	13313	15.37	-0.6	0.7	61.0	2.3	85
3316MH0008360031104249C00	4249	13349	14.57	-0.6	0.6	58.2	2.0	63
3316MH0008360031104250C00	4250	13385	13.83	-0.5	0.5	55.6	1.9	31
								8

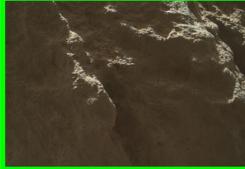
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#### Sol 3316 - MAHLI Onboard Focus Merge Product Information

		target Whaligoe_Steps - mosaic position 9 of 9 - ~16 cm standoff							
best focus image:	3318MH0004400001104346R00	4346	motor count:			13225	range (cm):	17.7	
range map product:	3318MH0004400001104347S00	4347	acquired sequence:			mhli00836	stack type:	Relative	
acquired on date:	4-Dec-21				merge sequence:	mhli00440	merge type:	Basic	
motor count interval:		36	acquired on sol:		3316	focus merged on sol:		3318	
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (μm/pixel)	pixel scale uncertainty (μm/pixel)	DN in range map	image n of 8
				near	far				
3316MH0008360031104254C00	4254	13081	23.09	-1.4	1.5	88.2	5.0	255	1
3316MH0008360031104255C00	4255	13117	21.49	-1.2	1.3	82.5	4.4	223	2
3316MH0008360031104256C00	4256	13153	20.08	-1.1	1.1	77.6	3.8	191	3
3316MH0008360031104257C00	4257	13189	18.82	-0.9	1.0	73.1	3.4	159	4
3316MH0008360031104258C00	4258	13225	17.69	-0.8	0.9	69.2	3.0	127	5
3316MH0008360031104259C00	4259	13261	16.68	-0.7	0.8	65.6	2.7	85	6
3316MH0008360031104260C00	4260	13297	15.76	-0.7	0.7	62.4	2.4	63	7
3316MH0008360031104261C00	4261	13333	14.92	-0.6	0.6	59.4	2.1	31	8

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#### Sol 3316 - MAHLI Onboard Focus Merge Product Information

		target Whaligoe_Steps - stereo-1 - ~5 cm standoff							
best focus image:	3318MH0004400001104344R00	4344	motor count:			13988	range (cm):	6.9	
range map product:	3318MH0004400001104345S00	4345	acquired sequence:			mhli00708	stack type:	Relative	
acquired on date:	4-Dec-21				merge sequence:	mhli00440	merge type:	Basic	
motor count interval:		60	acquired on sol:		3316	focus merged on sol:		3318	
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (μm/pixel)	pixel scale uncertainty (μm/pixel)	DN in range map	image n of 8
				near	far				
3316MH0007080031104268C00	4268	13748	8.85	-0.2	0.2	38.0	0.8	255	1
3316MH0007080031104269C00	4269	13808	8.30	-0.2	0.2	36.1	0.8	223	2
3316MH0007080031104270C00	4270	13868	7.80	-0.2	0.2	34.4	0.7	191	3
3316MH0007080031104271C00	4271	13928	7.34	-0.2	0.2	32.7	0.6	159	4
3316MH0007080031104272C00	4272	13988	6.92	-0.2	0.2	31.3	0.6	127	5
3316MH0007080031104273C00	4273	14048	6.54	-0.2	0.1	29.9	0.5	85	6
3316MH0007080031104274C00	4274	14108	6.18	-0.1	0.1	28.7	0.5	63	7
3316MH0007080031104275C00	4275	14168	5.86	-0.1	0.1	27.5	0.4	31	8

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#### Sol 3316 - MAHLI Onboard Focus Merge Product Information

		target Whaligoe_Steps - stereo-2 - ~5 cm standoff						
best focus image:	3318MH0004400001104342R00	4342	motor count:	13981	range (cm):	7.0		
range map product:	3318MH0004400001104343S00	4343	acquired sequence:	mhli00708	stack type:	Relative		
acquired on date:	4-Dec-21		merge sequence:	mhli00440	merge type:	Basic		
motor count interval:	60	acquired on sol:	3316	focus merged on sol:	3318			
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)	pixel scale ( $\mu\text{m}/\text{pixel}$ )	pixel scale uncertainty ( $\mu\text{m}/\text{pixel}$ )	DN in range map	image n of 8
			near	far				
3316MH0007080031104279C00	4279	13741	8.92	-0.3	0.2	38.3	0.9	255
3316MH0007080031104280C00	4280	13801	8.36	-0.2	0.2	36.3	0.8	223
3316MH0007080031104281C00	4281	13861	7.85	-0.2	0.2	34.5	0.7	191
3316MH0007080031104282C00	4282	13921	7.39	-0.2	0.2	32.9	0.6	159
3316MH0007080031104283C00	4283	13981	6.97	-0.2	0.2	31.4	0.6	127
3316MH0007080031104284C00	4284	14041	6.58	-0.2	0.2	30.1	0.5	85
3316MH0007080031104285C00	4285	14101	6.22	-0.1	0.1	28.8	0.5	63
3316MH0007080031104286C00	4286	14161	5.89	-0.1	0.1	27.6	0.4	31
								8

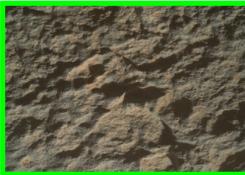
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#### Sol 3316 - MAHLI Onboard Focus Merge Product Information

		target Whaligoe_Steps - ~1 cm standoff						
best focus image:	3318MH0004400001104340R00	4340	motor count:	15095	range (cm):	2.8		
range map product:	3318MH0004400001104341S00	4341	acquired sequence:	mhli00837	stack type:	Relative		
acquired on date:	4-Dec-21		merge sequence:	mhli00440	merge type:	Basic		
motor count interval:	96	acquired on sol:	3316	focus merged on sol:	3318			
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)	pixel scale ( $\mu\text{m}/\text{pixel}$ )	pixel scale uncertainty ( $\mu\text{m}/\text{pixel}$ )	DN in range map	image n of 8
			near	far				
3316MH0008370031104290C00	4290	14711	3.75	-0.1	0.1	20.1	0.3	255
3316MH0008370031104291C00	4291	14807	3.49	-0.1	0.1	19.2	0.3	223
3316MH0008370031104292C00	4292	14903	3.26	-0.1	0.1	18.4	0.2	191
3316MH0008370031104293C00	4293	14999	3.04	-0.1	0.1	17.6	0.2	159
3316MH0008370031104294C00	4294	15095	2.84	-0.1	0.1	16.9	0.2	127
3316MH0008370031104295C00	4295	15191	2.66	-0.1	0.1	16.3	0.2	85
3316MH0008370031104296C00	4296	15287	2.50	0.0	0.1	15.7	0.2	63
3316MH0008370031104297C00	4297	15383	2.35	0.0	0.1	15.2	0.2	31
								8

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#### Sol 3316 - MAHLI Onboard Focus Merge Product Information

		target Laurentia - stereo-1 - ~5 cm standoff							
			CDPID	corresponding frame:	3316MH0007630011104302C00				
best focus image:	3318MH0004400001104338R00	4338		motor count:	14028	range (cm):	6.7		
range map product:	3318MH0004400001104339S00	4339		acquired sequence:	mhli00763	stack type:	Relative		
acquired on date:	4-Dec-21			merge sequence:	mhli00440	merge type:	Basic		
motor count interval:	24	acquired on sol:	3316	focus merged on sol:	3318				
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)	pixel scale (μm/pixel)	pixel scale uncertainty (μm/pixel)	DN in range map	image n of 8	
			near	far					
3316MH0007630031104304C00	4304	13932	7.31	-0.2	0.2	32.6	0.6	255	1
3316MH0007630031104305C00	4305	13956	7.14	-0.2	0.2	32.0	0.6	223	2
3316MH0007630031104306C00	4306	13980	6.98	-0.2	0.2	31.5	0.6	191	3
3316MH0007630031104307C00	4307	14004	6.82	-0.2	0.2	30.9	0.6	159	4
3316MH0007630031104308C00	4308	14028	6.66	-0.2	0.2	30.4	0.6	127	5
3316MH0007630031104309C00	4309	14052	6.51	-0.2	0.1	29.8	0.5	85	6
3316MH0007630031104310C00	4310	14076	6.37	-0.2	0.1	29.3	0.5	63	7
3316MH0007630031104311C00	4311	14100	6.23	-0.1	0.1	28.8	0.5	31	8

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#### Sol 3316 - MAHLI Onboard Focus Merge Product Information

		target Laurentia - stereo-2 - ~5 cm standoff							
			CDPID	corresponding frame:	3316MH0007630011104313C00				
best focus image:	3318MH0004400001104336R00	4336		motor count:	14023	range (cm):	6.7		
range map product:	3318MH0004400001104337S00	4337		acquired sequence:	mhli00763	stack type:	Relative		
acquired on date:	4-Dec-21			merge sequence:	mhli00440	merge type:	Basic		
motor count interval:	24	acquired on sol:	3316	focus merged on sol:	3318				
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)	pixel scale (μm/pixel)	pixel scale uncertainty (μm/pixel)	DN in range map	image n of 8	
			near	far					
3316MH0007630031104315C00	4315	13927	7.35	-0.2	0.2	32.8	0.6	255	1
3316MH0007630031104316C00	4316	13951	7.18	-0.2	0.2	32.2	0.6	223	2
3316MH0007630031104317C00	4317	13975	7.01	-0.2	0.2	31.6	0.6	191	3
3316MH0007630031104318C00	4318	13999	6.85	-0.2	0.2	31.0	0.6	159	4
3316MH0007630031104319C00	4319	14023	6.70	-0.2	0.2	30.5	0.6	127	5
3316MH0007630031104320C00	4320	14047	6.55	-0.2	0.1	29.9	0.5	85	6
3316MH0007630031104321C00	4321	14071	6.40	-0.2	0.1	29.4	0.5	63	7
3316MH0007630031104322C00	4322	14095	6.26	-0.1	0.1	28.9	0.5	31	8

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### Sol 3316 - MAHLI Onboard Focus Merge Product Information

		target Laurentia - ~1 cm standoff						
			CDPID	corresponding frame:	3316MH0007940011104324C00			
best focus image:	3318MH0004400001104334R00	4334		motor count:	15184	range (cm):	2.7	
range map product:	3318MH0004400001104335S00	4335		acquired sequence:	mhli00794	stack type:	Relative	
acquired on date:	4-Dec-21			merge sequence:	mhli00440	merge type:	Basic	
motor count interval:	48	acquired on sol:	3316	focus merged on sol:	3318			
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)	pixel scale (μm/pixel)	pixel scale uncertainty (μm/pixel)	DN in range map	image n of 8
3316MH0007940031104326C00	4326	14992	3.06	-0.1 0.1	17.7	0.2	255	1
3316MH0007940031104327C00	4327	15040	2.95	-0.1 0.1	17.3	0.2	223	2
3316MH0007940031104328C00	4328	15088	2.86	-0.1 0.1	17.0	0.2	191	3
3316MH0007940031104329C00	4329	15136	2.76	-0.1 0.1	16.6	0.2	159	4
3316MH0007940031104330C00	4330	15184	2.68	-0.1 0.1	16.3	0.2	127	5
3316MH0007940031104331C00	4331	15232	2.59	-0.1 0.1	16.0	0.2	85	6
3316MH0007940031104332C00	4332	15280	2.51	0.0 0.1	15.7	0.2	63	7
3316MH0007940031104333C00	4333	15328	2.43	0.0 0.1	15.5	0.2	31	8

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### Sol 3319 - MAHLI Onboard Focus Merge Product Information

		target Duirinish - stereo-1 - ~5 cm standoff						
best focus image:	<a href="#">3319MH0001930001104400R00</a>	4400	motor count:			14027	range (cm):	6.7
range map product:	<a href="#">3319MH0001930001104401S00</a>	4401	acquired sequence:		mhli00168	stack type:	Relative	
acquired on date:	7-Dec-21			merge sequence:		mhli00193	merge type:	Basic
motor count interval:		18	acquired on sol:		3319	focus merged on sol:		3319
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (μm/pixel)	pixel scale uncertainty (μm/pixel)	DN in range map
			near	far				
3319MH0001680021104368C00	4368	13955	7.15	-0.2	0.2	32.1	0.6	255
3319MH0001680021104369C00	4369	13973	7.02	-0.2	0.2	31.6	0.6	223
3319MH0001680021104370C00	4370	13991	6.90	-0.2	0.2	31.2	0.6	191
3319MH0001680021104371C00	4371	14009	6.79	-0.2	0.2	30.8	0.6	159
3319MH0001680021104372C00	4372	14027	6.67	-0.2	0.2	30.4	0.6	127
3319MH0001680021104373C00	4373	14045	6.56	-0.2	0.1	30.0	0.5	85
3319MH0001680021104374C00	4374	14063	6.45	-0.2	0.1	29.6	0.5	63
3319MH0001680021104375C00	4375	14081	6.34	-0.2	0.1	29.2	0.5	31
								8

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### Sol 3319 - MAHLI Onboard Focus Merge Product Information

		target Duirinish - stereo-2 - ~5 cm standoff						
best focus image:	<a href="#">3319MH0001930001104398R00</a>	4398	motor count:		14036	range (cm):	6.6	
range map product:	<a href="#">3319MH0001930001104399S00</a>	4399	acquired sequence:		mhli00168	stack type:	Relative	
acquired on date:	7-Dec-21			merge sequence:		mhli00193	merge type:	Basic
motor count interval:		18	acquired on sol:		3319	focus merged on sol:		3319
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (μm/pixel)	pixel scale uncertainty (μm/pixel)	DN in range map
			near	far				
3319MH0001680021104378C00	4378	13964	7.09	-0.2	0.2	31.8	0.6	255
3319MH0001680021104379C00	4379	13982	6.96	-0.2	0.2	31.4	0.6	223
3319MH0001680021104380C00	4380	14000	6.84	-0.2	0.2	31.0	0.6	191
3319MH0001680021104381C00	4381	14018	6.73	-0.2	0.2	30.6	0.6	159
3319MH0001680021104382C00	4382	14036	6.61	-0.2	0.2	30.2	0.5	127
3319MH0001680021104383C00	4383	14054	6.50	-0.2	0.1	29.8	0.5	85
3319MH0001680021104384C00	4384	14072	6.39	-0.2	0.1	29.4	0.5	63
3319MH0001680021104385C00	4385	14090	6.29	-0.1	0.1	29.0	0.5	31
								8

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### Sol 3319 - MAHLI Onboard Focus Merge Product Information

		target Duirinish - ~1 cm standoff						
best focus image:	<a href="#">3319MH0001930001104396R00</a>	4396	motor count:	15189	range (cm):	2.7		
range map product:	<a href="#">3319MH0001930001104397S00</a>	4397	acquired sequence:	mhli00743	stack type:	Relative		
acquired on date:	7-Dec-21				merge sequence:	mhli00193	merge type: Basic	
motor count interval:		36	acquired on sol:	3319	focus merged on sol:		3319	
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)	pixel scale (µm/pixel)	pixel scale uncertainty (µm/pixel)	DN in range map	image n of 8
				near				
<a href="#">3319MH0007430021104388C00</a>	4388	15045	2.94	-0.1	0.1	17.3	0.2	255
<a href="#">3319MH0007430021104389C00</a>	4389	15081	2.87	-0.1	0.1	17.0	0.2	223
<a href="#">3319MH0007430021104390C00</a>	4390	15117	2.80	-0.1	0.1	16.8	0.2	191
<a href="#">3319MH0007430021104391C00</a>	4391	15153	2.73	-0.1	0.1	16.5	0.2	159
<a href="#">3319MH0007430021104392C00</a>	4392	15189	2.67	-0.1	0.1	16.3	0.2	127
<a href="#">3319MH0007430021104393C00</a>	4393	15225	2.60	-0.1	0.1	16.1	0.2	85
<a href="#">3319MH0007430021104394C00</a>	4394	15261	2.54	-0.1	0.1	15.8	0.2	63
<a href="#">3319MH0007430021104395C00</a>	4395	15297	2.48	0.0	0.1	15.6	0.2	31
								8

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### Sol 3321 - MAHLI Onboard Focus Merge Product Information

		target Cladh_Hallan - after DRT - stereo-1 - ~5 cm standoff						
best focus image:	3322MH0001930001104446R00	4446	motor count:		13980	range (cm):	7.0	
range map product:	3322MH0001930001104447S00	4447	acquired sequence:		mhli00723	stack type:	Relative	
acquired on date:	9-Dec-21			merge sequence:		mhli00193	merge type:	Basic
motor count interval:		36	acquired on sol:		3321	focus merged on sol:		3322
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)	pixel scale (µm/pixel)	pixel scale uncertainty (µm/pixel)	DN in range map	image n of 8
				near				
3321MH0007230031104412C00	4412	13836	8.06	-0.2	0.2	35.3	0.7	255
3321MH0007230031104413C00	4413	13872	7.77	-0.2	0.2	34.2	0.7	223
3321MH0007230031104414C00	4414	13908	7.49	-0.2	0.2	33.3	0.7	191
3321MH0007230031104415C00	4415	13944	7.23	-0.2	0.2	32.3	0.6	159
3321MH0007230031104416C00	4416	13980	6.98	-0.2	0.2	31.5	0.6	127
3321MH0007230031104417C00	4417	14016	6.74	-0.2	0.2	30.6	0.6	85
3321MH0007230031104418C00	4418	14052	6.51	-0.2	0.1	29.8	0.5	63
3321MH0007230031104419C00	4419	14088	6.30	-0.1	0.1	29.1	0.5	31
								8

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### Sol 3321 - MAHLI Onboard Focus Merge Product Information

		target Cladh_Hallan - after DRT - stereo-2 - ~5 cm standoff						
best focus image:	3322MH0001930001104444R00	4444	motor count:		13986	range (cm):	6.9	
range map product:	3322MH0001930001104445S00	4445	acquired sequence:		mhli00723	stack type:	Relative	
acquired on date:	9-Dec-21			merge sequence:		mhli00193	merge type:	Basic
motor count interval:		36	acquired on sol:		3321	focus merged on sol:		3322
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)	pixel scale (µm/pixel)	pixel scale uncertainty (µm/pixel)	DN in range map	image n of 8
				near				
3321MH0007230031104423C00	4423	13842	8.01	-0.2	0.2	35.1	0.7	255
3321MH0007230031104424C00	4424	13878	7.72	-0.2	0.2	34.1	0.7	223
3321MH0007230031104425C00	4425	13914	7.44	-0.2	0.2	33.1	0.7	191
3321MH0007230031104426C00	4426	13950	7.18	-0.2	0.2	32.2	0.6	159
3321MH0007230031104427C00	4427	13986	6.94	-0.2	0.2	31.3	0.6	127
3321MH0007230031104428C00	4428	14022	6.70	-0.2	0.2	30.5	0.6	85
3321MH0007230031104429C00	4429	14058	6.48	-0.2	0.1	29.7	0.5	63
3321MH0007230031104430C00	4430	14094	6.27	-0.1	0.1	29.0	0.5	31
								8

updated: 21\_December\_2021

### Sol 3321 - MAHLI Onboard Focus Merge Product Information

		target Cladh_Hallan - after DRT - ~2 cm standoff							
best focus image:	3322MH0001930001104442R00	4442	motor count:	14635	range (cm):	4.0			
range map product:	3322MH0001930001104443S00	4443	acquired sequence:	mhli00746	stack type:	Relative			
acquired on date:	9-Dec-21		merge sequence:	mhli00193	merge type:	Basic			
motor count interval:	48	acquired on sol:	3321	focus merged on sol:	3322				
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)	pixel scale (µm/pixel)	pixel scale uncertainty (µm/pixel)	DN in range map	image n of 8	
3321MH0007460031104434C00	4434	14443	4.63	-0.1 near	0.1 far	23.2	0.3	255	1
3321MH0007460031104435C00	4435	14491	4.45	-0.1 near	0.1 far	22.6	0.3	223	2
3321MH0007460031104436C00	4436	14539	4.29	-0.1 near	0.1 far	22.0	0.3	191	3
3321MH0007460031104437C00	4437	14587	4.13	-0.1 near	0.1 far	21.4	0.3	159	4
3321MH0007460031104438C00	4438	14635	3.98	-0.1 near	0.1 far	20.9	0.3	127	5
3321MH0007460031104439C00	4439	14683	3.83	-0.1 near	0.1 far	20.4	0.3	85	6
3321MH0007460031104440C00	4440	14731	3.70	-0.1 near	0.1 far	19.9	0.3	63	7
3321MH0007460031104441C00	4441	14779	3.57	-0.1 near	0.1 far	19.5	0.3	31	8

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### Sol 3323 - MAHLI Onboard Focus Merge Product Information

		target Helens_Bay - stereo-1 - ~5 cm standoff						
best focus image:	3324MH0002270001104510R00	4510	motor count:			14024	range (cm):	6.7
range map product:	3324MH0002270001104511S00	4511	acquired sequence:			mhli00299	stack type:	Relative
acquired on date:	11-Dec-21	merge sequence:			mhli00227	merge type:	Basic	
motor count interval:		36	acquired on sol:		3323	focus merged on sol:		3324
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (μm/pixel)	pixel scale uncertainty (μm/pixel)	DN in range map
			near	far				
3323MH0002990021104452C00	4452	13880	7.70	-0.2	0.2	34.0	0.7	255
3323MH0002990021104453C00	4453	13916	7.43	-0.2	0.2	33.1	0.6	223
3323MH0002990021104454C00	4454	13952	7.17	-0.2	0.2	32.1	0.6	191
3323MH0002990021104455C00	4455	13988	6.92	-0.2	0.2	31.3	0.6	159
3323MH0002990021104456C00	4456	14024	6.69	-0.2	0.2	30.4	0.6	127
3323MH0002990021104457C00	4457	14060	6.47	-0.2	0.1	29.7	0.5	85
3323MH0002990021104458C00	4458	14096	6.25	-0.1	0.1	28.9	0.5	63
3323MH0002990021104459C00	4459	14132	6.05	-0.1	0.1	28.2	0.5	31
								8

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### Sol 3323 - MAHLI Onboard Focus Merge Product Information

		target Helens_Bay - stereo-2 - ~5 cm standoff						
best focus image:	3324MH0002270001104508R00	4508	motor count:			14032	range (cm):	6.6
range map product:	3324MH0002270001104509S00	4509	acquired sequence:			mhli00299	stack type:	Relative
acquired on date:	11-Dec-21	merge sequence:			mhli00227	merge type:	Basic	
motor count interval:		36	acquired on sol:		3323	focus merged on sol:		3324
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (μm/pixel)	pixel scale uncertainty (μm/pixel)	DN in range map
			near	far				
3323MH0002990021104462C00	4462	13888	7.64	-0.2	0.2	33.8	0.7	255
3323MH0002990021104463C00	4463	13924	7.37	-0.2	0.2	32.8	0.6	223
3323MH0002990021104464C00	4464	13960	7.11	-0.2	0.2	31.9	0.6	191
3323MH0002990021104465C00	4465	13996	6.87	-0.2	0.2	31.1	0.6	159
3323MH0002990021104466C00	4466	14032	6.64	-0.2	0.2	30.3	0.6	127
3323MH0002990021104467C00	4467	14068	6.42	-0.2	0.1	29.5	0.5	85
3323MH0002990021104468C00	4468	14104	6.21	-0.1	0.1	28.8	0.5	63
3323MH0002990021104469C00	4469	14140	6.01	-0.1	0.1	28.0	0.5	31
								8

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Sol 3323 - MAHLI Onboard Focus Merge Product Information

		target Helens_Bay - ~1 cm standoff							
			CDPID	corresponding frame:		3323MH0008380011104471C00			
best focus image:		3324MH0002270001104506R00	4506	motor count:		15146	range (cm):	2.7	
range map product:		3324MH0002270001104507S00	4507	acquired sequence:		mhli00838	stack type:	Relative	
acquired on date:		11-Dec-21				mhli00227	merge type:	Basic	
motor count interval:		66	acquired on sol:		3323	focus merged on sol:		3324	
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (μm/pixel)	pixel scale uncertainty (μm/pixel)	DN in range map	image n of 8
				near	far				
3323MH0008380021104472C00	4472	14882	3.31	-0.1	0.1	18.5	0.2	255	1
3323MH0008380021104473C00	4473	14948	3.15	-0.1	0.1	18.0	0.2	223	2
3323MH0008380021104474C00	4474	15014	3.01	-0.1	0.1	17.5	0.2	191	3
3323MH0008380021104475C00	4475	15080	2.87	-0.1	0.1	17.0	0.2	159	4
3323MH0008380021104476C00	4476	15146	2.75	-0.1	0.1	16.6	0.2	127	5
3323MH0008380021104477C00	4477	15212	2.63	-0.1	0.1	16.1	0.2	85	6
3323MH0008380021104478C00	4478	15278	2.51	0.0	0.1	15.7	0.2	63	7
3323MH0008380021104479C00	4479	15344	2.41	0.0	0.1	15.4	0.2	31	8

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Sol 3323 - MAHLI Onboard Focus Merge Product Information

		target Lakehead - stereo-1 - ~4 cm standoff							
			CDPID	corresponding frame:		3323MH0006730011104483C00			
best focus image:		3324MH0002270001104504R00	4504	motor count:		14121	range (cm):	6.1	
range map product:		3324MH0002270001104505S00	4505	acquired sequence:		mhli00673	stack type:	Relative	
acquired on date:		11-Dec-21			merge sequence:		mhli00227	merge type:	
motor count interval:		84	acquired on sol:		3323	focus merged on sol:		3324	
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (μm/pixel)	pixel scale uncertainty (μm/pixel)	DN in range map	image n of 8
				near	far				
3323MH0006730021104484C00	4484	13785	8.50	-0.2	0.2	36.8	0.8	255	1
3323MH0006730021104485C00	4485	13869	7.79	-0.2	0.2	34.3	0.7	223	2
3323MH0006730021104486C00	4486	13953	7.16	-0.2	0.2	32.1	0.6	191	3
3323MH0006730021104487C00	4487	14037	6.61	-0.2	0.2	30.2	0.5	159	4
3323MH0006730021104488C00	4488	14121	6.11	-0.1	0.1	28.4	0.5	127	5
3323MH0006730021104489C00	4489	14205	5.67	-0.1	0.1	26.9	0.4	85	6
3323MH0006730021104490C00	4490	14289	5.27	-0.1	0.1	25.4	0.4	63	7
3323MH0006730021104491C00	4491	14373	4.91	-0.1	0.1	24.2	0.4	31	8

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### Sol 3323 - MAHLI Onboard Focus Merge Product Information

		target Lakehead - stereo-2 - ~4 cm standoff						
best focus image:	3324MH0002270001104502R00	4502	motor count:	14138	range (cm):	6.0		
range map product:	3324MH0002270001104503S00	4503	acquired sequence:	mhli00673	stack type:	Relative		
acquired on date:	11-Dec-21		merge sequence:	mhli00227	merge type:	Basic		
motor count interval:	84	acquired on sol:	3323	focus merged on sol:	3324			
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)	pixel scale (µm/pixel)	pixel scale uncertainty (µm/pixel)	DN in range map	image n of 8
3323MH0006730021104494C00	4494	13802	8.35	-0.2	0.2	36.3	0.8	255
3323MH0006730021104495C00	4495	13886	7.66	-0.2	0.2	33.9	0.7	223
3323MH0006730021104496C00	4496	13970	7.05	-0.2	0.2	31.7	0.6	191
3323MH0006730021104497C00	4497	14054	6.50	-0.2	0.1	29.8	0.5	159
3323MH0006730021104498C00	4498	14138	6.02	-0.1	0.1	28.1	0.5	127
3323MH0006730021104499C00	4499	14222	5.58	-0.1	0.1	26.6	0.4	85
3323MH0006730021104500C00	4500	14306	5.19	-0.1	0.1	25.2	0.4	63
3323MH0006730021104501C00	4501	14390	4.84	-0.1	0.1	23.9	0.4	31
								8

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### Sol 3326 - MAHLI Onboard Focus Merge Product Information

		target Portgower - stereo-1 - ~5 cm standoff						
			CDPID	corresponding frame:		3326MH0003060011104515C00		
best focus image:		3326MH0002650001104536R00	4536	motor count:		14000	range (cm):	6.8
range map product:		3326MH0002650001104537S00	4537	acquired sequence:		mhli00306	stack type:	Relative
acquired on date:		14-Dec-21			merge sequence:		mhli00265	merge type: Basic
motor count interval:		54	acquired on sol:		3326	focus merged on sol:		3326
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (µm/pixel)	pixel scale uncertainty (µm/pixel)	DN in range map
				near	far			
3326MH0003060021104516C00	4516	13784	8.51	-0.2	0.2	36.9	0.8	255
3326MH0003060021104517C00	4517	13838	8.04	-0.2	0.2	35.2	0.7	223
3326MH0003060021104518C00	4518	13892	7.61	-0.2	0.2	33.7	0.7	191
3326MH0003060021104519C00	4519	13946	7.21	-0.2	0.2	32.3	0.6	159
3326MH0003060021104520C00	4520	14000	6.84	-0.2	0.2	31.0	0.6	127
3326MH0003060021104521C00	4521	14054	6.50	-0.2	0.1	29.8	0.5	85
3326MH0003060021104522C00	4522	14108	6.18	-0.1	0.1	28.7	0.5	63
3326MH0003060021104523C00	4523	14162	5.89	-0.1	0.1	27.6	0.4	31
								8

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### Sol 3326 - MAHLI Onboard Focus Merge Product Information

		target Portgower - stereo-2 - ~5 cm standoff						
			CDPID	corresponding frame:		3326MH0003060011104525C00		
best focus image:		3326MH0002650001104534R00	4534	motor count:		14002	range (cm):	6.8
range map product:		3326MH0002650001104535S00	4535	acquired sequence:		mhli00306	stack type:	Relative
acquired on date:		14-Dec-21			merge sequence:		mhli00265	merge type: Basic
motor count interval:		54	acquired on sol:		3326	focus merged on sol:		3326
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (µm/pixel)	pixel scale uncertainty (µm/pixel)	DN in range map
				near	far			
3326MH0003060021104526C00	4526	13786	8.49	-0.2	0.2	36.8	0.8	255
3326MH0003060021104527C00	4527	13840	8.03	-0.2	0.2	35.2	0.7	223
3326MH0003060021104528C00	4528	13894	7.60	-0.2	0.2	33.6	0.7	191
3326MH0003060021104529C00	4529	13948	7.20	-0.2	0.2	32.2	0.6	159
3326MH0003060021104530C00	4530	14002	6.83	-0.2	0.2	30.9	0.6	127
3326MH0003060021104531C00	4531	14056	6.49	-0.2	0.1	29.7	0.5	85
3326MH0003060021104532C00	4532	14110	6.17	-0.1	0.1	28.6	0.5	63
3326MH0003060021104533C00	4533	14164	5.88	-0.1	0.1	27.6	0.4	31
								8

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### Sol 3328 - MAHLI Onboard Focus Merge Product Information

		target Korskellie - stereo-1 - ~5 cm standoff						
			CDPID	corresponding frame:		3328MH0002990011104541C00		
best focus image:		3329MH0001930001104574R00	4574	motor count:		14009	range (cm):	6.8
range map product:		3329MH0001930001104575S00	4575	acquired sequence:		mhli00299	stack type:	Relative
acquired on date:		16-Dec-21			merge sequence:	mhli00193	merge type:	Basic
motor count interval:		36	acquired on sol:		3328	focus merged on sol:		3329
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (μm/pixel)	pixel scale uncertainty (μm/pixel)	DN in range map
				near	far			
3328MH0002990021104542C00	4542	13865	7.82	-0.2	0.2	34.4	0.7	255
3328MH0002990021104543C00	4543	13901	7.54	-0.2	0.2	33.4	0.7	223
3328MH0002990021104544C00	4544	13937	7.28	-0.2	0.2	32.5	0.6	191
3328MH0002990021104545C00	4545	13973	7.02	-0.2	0.2	31.6	0.6	159
3328MH0002990021104546C00	4546	14009	6.79	-0.2	0.2	30.8	0.6	127
3328MH0002990021104547C00	4547	14045	6.56	-0.2	0.1	30.0	0.5	85
3328MH0002990021104548C00	4548	14081	6.34	-0.2	0.1	29.2	0.5	63
3328MH0002990021104549C00	4549	14117	6.13	-0.1	0.1	28.5	0.5	31
								8

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### Sol 3328 - MAHLI Onboard Focus Merge Product Information

		target Korskellie - stereo-2 - ~5 cm standoff						
			CDPID	corresponding frame:		3328MH0002990011104551C00		
best focus image:		3329MH0001930001104572R00	4572	motor count:		14010	range (cm):	6.8
range map product:		3329MH0001930001104573S00	4573	acquired sequence:		mhli00299	stack type:	Relative
acquired on date:		16-Dec-21			merge sequence:	mhli00193	merge type:	Basic
motor count interval:		36	acquired on sol:		3328	focus merged on sol:		3329
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (μm/pixel)	pixel scale uncertainty (μm/pixel)	DN in range map
				near	far			
3328MH0002990021104552C00	4552	13866	7.81	-0.2	0.2	34.4	0.7	255
3328MH0002990021104553C00	4553	13902	7.53	-0.2	0.2	33.4	0.7	223
3328MH0002990021104554C00	4554	13938	7.27	-0.2	0.2	32.5	0.6	191
3328MH0002990021104555C00	4555	13974	7.02	-0.2	0.2	31.6	0.6	159
3328MH0002990021104556C00	4556	14010	6.78	-0.2	0.2	30.8	0.6	127
3328MH0002990021104557C00	4557	14046	6.55	-0.2	0.1	30.0	0.5	85
3328MH0002990021104558C00	4558	14082	6.33	-0.2	0.1	29.2	0.5	63
3328MH0002990021104559C00	4559	14118	6.13	-0.1	0.1	28.5	0.5	31
								8

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### Sol 3328 - MAHLI Onboard Focus Merge Product Information

		target Korskellie - ~2 cm standoff						
best focus image:	3329MH0001930001104570R00	4570	motor count:	14699	range (cm):	3.8		
range map product:	3329MH0001930001104571S00	4571	acquired sequence:	mhli00174	stack type:	Relative		
acquired on date:	16-Dec-21		merge sequence:	mhli00193	merge type:	Basic		
motor count interval:	60	acquired on sol:	3328	focus merged on sol:	3329			
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)	pixel scale (µm/pixel)	pixel scale uncertainty (µm/pixel)	DN in range map	image n of 8
3328MH0001740021104562C00	4562	14459	4.57	-0.1 0.1	23.0	0.3	255	1
3328MH0001740021104563C00	4563	14519	4.36	-0.1 0.1	22.2	0.3	223	2
3328MH0001740021104564C00	4564	14579	4.15	-0.1 0.1	21.5	0.3	191	3
3328MH0001740021104565C00	4565	14639	3.96	-0.1 0.1	20.9	0.3	159	4
3328MH0001740021104566C00	4566	14699	3.79	-0.1 0.1	20.2	0.3	127	5
3328MH0001740021104567C00	4567	14759	3.62	-0.1 0.1	19.6	0.3	85	6
3328MH0001740021104568C00	4568	14819	3.46	-0.1 0.1	19.1	0.3	63	7
3328MH0001740021104569C00	4569	14879	3.31	-0.1 0.1	18.6	0.2	31	8

updated: 05\_January\_2022

### Sol 3344 - MAHLI Onboard Focus Merge Product Information

		target Maes_Howe - after DRT - APXS spot 1 - stereo-1 - ~5 cm standoff						
best focus image:	3345MH0001530001104632R00	4632	motor count:			14005	range (cm):	6.8
range map product:	3345MH0001530001104633S00	4633	acquired sequence:		mhli00173	stack type:	Relative	
acquired on date:	2-Jan-22				merge sequence:	mhli00153	merge type:	Basic
motor count interval:		30	acquired on sol:		3344	focus merged on sol:		3345
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (μm/pixel)	pixel scale uncertainty (μm/pixel)	DN in range map
				near	far			
3344MH0001730021104588C00	4588	13885	7.66	-0.2	0.2	33.9	0.7	255
3344MH0001730021104589C00	4589	13915	7.44	-0.2	0.2	33.1	0.6	223
3344MH0001730021104590C00	4590	13945	7.22	-0.2	0.2	32.3	0.6	191
3344MH0001730021104591C00	4591	13975	7.01	-0.2	0.2	31.6	0.6	159
3344MH0001730021104592C00	4592	14005	6.81	-0.2	0.2	30.9	0.6	127
3344MH0001730021104593C00	4593	14035	6.62	-0.2	0.2	30.2	0.6	85
3344MH0001730021104594C00	4594	14065	6.44	-0.2	0.1	29.6	0.5	63
3344MH0001730021104595C00	4595	14095	6.26	-0.1	0.1	28.9	0.5	31
								8

updated: 05\_January\_2022

### Sol 3344 - MAHLI Onboard Focus Merge Product Information

		target Maes_Howe - after DRT - APXS spot 1 - stereo-2 - ~5 cm standoff						
best focus image:	3345MH0001530001104630R00	4630	motor count:			14006	range (cm):	6.8
range map product:	3345MH0001530001104631S00	4631	acquired sequence:		mhli00173	stack type:	Relative	
acquired on date:	2-Jan-22				merge sequence:	mhli00153	merge type:	Basic
motor count interval:		30	acquired on sol:		3344	focus merged on sol:		3345
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (μm/pixel)	pixel scale uncertainty (μm/pixel)	DN in range map
				near	far			
3344MH0001730021104598C00	4598	13886	7.66	-0.2	0.2	33.9	0.7	255
3344MH0001730021104599C00	4599	13916	7.43	-0.2	0.2	33.1	0.6	223
3344MH0001730021104600C00	4600	13946	7.21	-0.2	0.2	32.3	0.6	191
3344MH0001730021104601C00	4601	13976	7.00	-0.2	0.2	31.6	0.6	159
3344MH0001730021104602C00	4602	14006	6.80	-0.2	0.2	30.9	0.6	127
3344MH0001730021104603C00	4603	14036	6.61	-0.2	0.2	30.2	0.5	85
3344MH0001730021104604C00	4604	14066	6.43	-0.2	0.1	29.5	0.5	63
3344MH0001730021104605C00	4605	14096	6.25	-0.1	0.1	28.9	0.5	31
								8

updated: 05\_January\_2022

### Sol 3344 - MAHLI Onboard Focus Merge Product Information

		target Maes_Howe - after DRT - APXS spot 1 - ~2 cm standoff						
best focus image:	3345MH0001530001104628R00	4628	motor count:			14698	range (cm):	3.8
range map product:	3345MH0001530001104629S00	4629	acquired sequence:			mhli00335	stack type:	Relative
acquired on date:	2-Jan-22	merge sequence:			mhli00153	merge type:	Basic	
motor count interval:		54	acquired on sol:		3344	focus merged on sol:		3345
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (μm/pixel)	pixel scale uncertainty (μm/pixel)	DN in range map
			near	far				
3344MH0003350021104608C00	4608	14482	4.49	-0.1	0.1	22.7	0.3	255
3344MH0003350021104609C00	4609	14536	4.30	-0.1	0.1	22.0	0.3	223
3344MH0003350021104610C00	4610	14590	4.12	-0.1	0.1	21.4	0.3	191
3344MH0003350021104611C00	4611	14644	3.95	-0.1	0.1	20.8	0.3	159
3344MH0003350021104612C00	4612	14698	3.79	-0.1	0.1	20.2	0.3	127
3344MH0003350021104613C00	4613	14752	3.64	-0.1	0.1	19.7	0.3	85
3344MH0003350021104614C00	4614	14806	3.50	-0.1	0.1	19.2	0.3	63
3344MH0003350021104615C00	4615	14860	3.36	-0.1	0.1	18.7	0.2	31
								8

updated: 05\_January\_2022

### Sol 3344 - MAHLI Onboard Focus Merge Product Information

		target Maes_Howe - after DRT - APXS spot 2 - ~5 cm standoff						
best focus image:	3345MH0001530001104626R00	4626	motor count:			14008	range (cm):	6.8
range map product:	3345MH0001530001104627S00	4627	acquired sequence:			mhli00173	stack type:	Relative
acquired on date:	2-Jan-22	merge sequence:			mhli00153	merge type:	Basic	
motor count interval:		30	acquired on sol:		3344	focus merged on sol:		3345
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (μm/pixel)	pixel scale uncertainty (μm/pixel)	DN in range map
			near	far				
3344MH0001730021104618C00	4618	13888	7.64	-0.2	0.2	33.8	0.7	255
3344MH0001730021104619C00	4619	13918	7.42	-0.2	0.2	33.0	0.6	223
3344MH0001730021104620C00	4620	13948	7.20	-0.2	0.2	32.2	0.6	191
3344MH0001730021104621C00	4621	13978	6.99	-0.2	0.2	31.5	0.6	159
3344MH0001730021104622C00	4622	14008	6.79	-0.2	0.2	30.8	0.6	127
3344MH0001730021104623C00	4623	14038	6.60	-0.2	0.2	30.1	0.5	85
3344MH0001730021104624C00	4624	14068	6.42	-0.2	0.1	29.5	0.5	63
3344MH0001730021104625C00	4625	14098	6.24	-0.1	0.1	28.9	0.5	31
								8

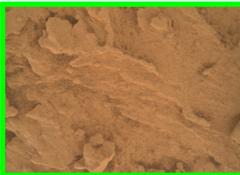
updated: [10\\_January\\_2022](#)

### Sol 3347 - MAHLI Onboard Focus Merge Product Information

		target Verde - stereo-1 - ~5 cm standoff						
best focus image:	<a href="#">3347MH0002650001104658R00</a>	4658	motor count:	13989	range (cm):	6.9		
range map product:	<a href="#">3347MH0002650001104659S00</a>	4659	acquired sequence:	mhli00173	stack type:	Relative		
acquired on date:	5-Jan-22			merge sequence:	mhli00265	merge type:	Basic	
motor count interval:		30	acquired on sol:	3347	focus merged on sol:		3347	
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)	pixel scale (μm/pixel)	pixel scale uncertainty (μm/pixel)	DN in range map	image n of 8
			near	far				
<a href="#">3347MH0001730021104638C00</a>	4638	13869	7.79	-0.2	0.2	34.3	0.7	255
<a href="#">3347MH0001730021104639C00</a>	4639	13899	7.56	-0.2	0.2	33.5	0.7	223
<a href="#">3347MH0001730021104640C00</a>	4640	13929	7.33	-0.2	0.2	32.7	0.6	191
<a href="#">3347MH0001730021104641C00</a>	4641	13959	7.12	-0.2	0.2	32.0	0.6	159
<a href="#">3347MH0001730021104642C00</a>	4642	13989	6.92	-0.2	0.2	31.2	0.6	127
<a href="#">3347MH0001730021104643C00</a>	4643	14019	6.72	-0.2	0.2	30.6	0.6	85
<a href="#">3347MH0001730021104644C00</a>	4644	14049	6.53	-0.2	0.1	29.9	0.5	63
<a href="#">3347MH0001730021104645C00</a>	4645	14079	6.35	-0.2	0.1	29.3	0.5	31
								8

updated: [10\\_January\\_2022](#)

### Sol 3347 - MAHLI Onboard Focus Merge Product Information

		target Verde - stereo-2 - ~5 cm standoff						
best focus image:	<a href="#">3347MH0002650001104656R00</a>	4656	motor count:	13989	range (cm):	6.9		
range map product:	<a href="#">3347MH0002650001104657S00</a>	4657	acquired sequence:	mhli00173	stack type:	Relative		
acquired on date:	5-Jan-22			merge sequence:	mhli00265	merge type:	Basic	
motor count interval:		30	acquired on sol:	3347	focus merged on sol:		3347	
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)	pixel scale (μm/pixel)	pixel scale uncertainty (μm/pixel)	DN in range map	image n of 8
			near	far				
<a href="#">3347MH0001730021104648C00</a>	4648	13869	7.79	-0.2	0.2	34.3	0.7	255
<a href="#">3347MH0001730021104649C01-Partial</a>	4649	13899	7.56	-0.2	0.2	33.5	0.7	223
<a href="#">3347MH0001730021104650I01</a>	4650	13929	7.33	-0.2	0.2	32.7	0.6	191
<a href="#">3347MH0001730021104651I01</a>	4651	13959	7.12	-0.2	0.2	32.0	0.6	159
<a href="#">3347MH0001730021104652I01</a>	4652	13989	6.92	-0.2	0.2	31.2	0.6	127
<a href="#">3347MH0001730021104653I01</a>	4653	14019	6.72	-0.2	0.2	30.6	0.6	85
<a href="#">3347MH0001730021104654I01</a>	4654	14049	6.53	-0.2	0.1	29.9	0.5	63
<a href="#">3347MH0001730021104655I01</a>	4655	14079	6.35	-0.2	0.1	29.3	0.5	31
								8

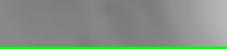
updated: 08\_January\_2022

Sol 3349 - MAHLI Onboard Focus Merge Product Information

		target El_Fosso - stereo-1 - ~5 cm standoff						
			CDPID	corresponding frame:		3349MH0002990011104663C00		
best focus image:	3349MH0002650001004684R00		4684	motor count:		14039	range (cm):	6.6
range map product:	3349MH0002650001004685S00		4685	acquired sequence:		mhli00299	stack type:	Relative
acquired on date:	7-Jan-22			merge sequence:		mhli00265	merge type:	Basic
motor count interval:		36	acquired on sol:		3349	focus merged on sol:		3349
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (µm/pixel)	pixel scale uncertainty (µm/pixel)	DN in range map
				near	far			
3349MH0002990021104664I01	4664	13895	7.59	-0.2	0.2	33.6	0.7	255
3349MH0002990021104665I01	4665	13931	7.32	-0.2	0.2	32.7	0.6	223
3349MH0002990021004666I01	4666	13967	7.07	-0.2	0.2	31.8	0.6	191
3349MH0002990021004667I01	4667	14003	6.82	-0.2	0.2	30.9	0.6	159
3349MH0002990021004668I01	4668	14039	6.59	-0.2	0.2	30.1	0.5	127
3349MH0002990021004669I01	4669	14075	6.38	-0.2	0.1	29.3	0.5	85
3349MH0002990021004670I01	4670	14111	6.17	-0.1	0.1	28.6	0.5	63
3349MH0002990021004671I01	4671	14147	5.97	-0.1	0.1	27.9	0.5	31

updated: 08\_January\_2022

Sol 3349 - MAHLI Onboard Focus Merge Product Information

		target El_Fosso - stereo-2 - ~5 cm standoff						
			CDPID	corresponding frame:		3349MH0002990011004673C00		
best focus image:	3349MH0002650001004682R00		4682	motor count:		14037	range (cm):	6.6
range map product:	3349MH0002650001004683S00		4683	acquired sequence:		mhli00299	stack type:	Relative
acquired on date:	7-Jan-22			merge sequence:		mhli00265	merge type:	Basic
motor count interval:		36	acquired on sol:		3349	focus merged on sol:		3349
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (µm/pixel)	pixel scale uncertainty (µm/pixel)	DN in range map
				near	far			
3349MH0002990021004674I01	4674	13893	7.60	-0.2	0.2	33.7	0.7	255
3349MH0002990021004675I01	4675	13929	7.33	-0.2	0.2	32.7	0.6	223
3349MH0002990021004676I01	4676	13965	7.08	-0.2	0.2	31.8	0.6	191
3349MH0002990021004677I01	4677	14001	6.84	-0.2	0.2	31.0	0.6	159
3349MH0002990021004678I01	4678	14037	6.61	-0.2	0.2	30.2	0.5	127
3349MH0002990021004679I01	4679	14073	6.39	-0.2	0.1	29.4	0.5	85
3349MH0002990021004680I01	4680	14109	6.18	-0.1	0.1	28.7	0.5	63
3349MH0002990021004681I01	4681	14145	5.98	-0.1	0.1	28.0	0.5	31

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### Sol 3362 - MAHLI Onboard Focus Merge Product Information

		target Coati - stereo-1 - ~55 mm standoff							
			CDPID	corresponding frame:	3362MH0007140011200005C00				
best focus image:	3363MH0001700001200101R00	101		motor count:	13913	range (cm):	7.5		
range map product:	3363MH0001700001200102S00	102		acquired sequence:	mhli00714	stack type:	Relative		
acquired on date:	20-Jan-22			merge sequence:	mhli00170	merge type:	Basic		
motor count interval:	66	acquired on sol:	3362	focus merged on sol:	3363				
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)	pixel scale (µm/pixel)	pixel scale uncertainty (µm/pixel)	DN in range map	image n of 8	
			near	far					
3362MH0007140031200007C00	7	13649	9.89	-0.3	0.3	41.7	1.0	255	1
3362MH0007140031200008C00	8	13715	9.18	-0.3	0.3	39.2	0.9	223	2
3362MH0007140031200009C00	9	13781	8.54	-0.2	0.2	37.0	0.8	191	3
3362MH0007140031200010C00	10	13847	7.97	-0.2	0.2	34.9	0.7	159	4
3362MH0007140031200011C00	11	13913	7.45	-0.2	0.2	33.1	0.7	127	5
3362MH0007140031200012C00	12	13979	6.98	-0.2	0.2	31.5	0.6	85	6
3362MH0007140031200013C00	13	14045	6.56	-0.2	0.1	30.0	0.5	63	7
3362MH0007140031200014C00	14	14111	6.17	-0.1	0.1	28.6	0.5	31	8

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### Sol 3362 - MAHLI Onboard Focus Merge Product Information

		target Coati - stereo-2 - ~55 mm standoff							
			CDPID	corresponding frame:	3362MH0007140011200016C00				
best focus image:	3363MH0001700001200099R00	99		motor count:	13911	range (cm):	7.5		
range map product:	3363MH0001700001200100S00	100		acquired sequence:	mhli00714	stack type:	Relative		
acquired on date:	20-Jan-22			merge sequence:	mhli00170	merge type:	Basic		
motor count interval:	66	acquired on sol:	3362	focus merged on sol:	3363				
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)	pixel scale (µm/pixel)	pixel scale uncertainty (µm/pixel)	DN in range map	image n of 8	
			near	far					
3362MH0007140031200018C00	18	13647	9.91	-0.3	0.3	41.8	1.0	255	1
3362MH0007140031200019C00	19	13713	9.20	-0.3	0.3	39.3	0.9	223	2
3362MH0007140031200020C00	20	13779	8.56	-0.2	0.2	37.0	0.8	191	3
3362MH0007140031200021C00	21	13845	7.98	-0.2	0.2	35.0	0.7	159	4
3362MH0007140031200022C00	22	13911	7.47	-0.2	0.2	33.2	0.7	127	5
3362MH0007140031200023C00	23	13977	7.00	-0.2	0.2	31.5	0.6	85	6
3362MH0007140031200024C00	24	14043	6.57	-0.2	0.1	30.0	0.5	63	7
3362MH0007140031200025C00	25	14109	6.18	-0.1	0.1	28.7	0.5	31	8

updated: 29\_January\_2022

Sol 3362 - MAHLI Onboard Focus Merge Product Information

		target Morok - ~65 mm standoff							
best focus image:	3363MH0001700001200097R00		97	motor count:		13791	range (cm):	8.4	
range map product:	3363MH0001700001200098S00		98	acquired sequence:		mhli00714	stack type:	Relative	
acquired on date:	20-Jan-22					merge sequence:	mhli00170	merge type:	
motor count interval:		66	acquired on sol:		3362	focus merged on sol:		3363	
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (µm/pixel)	pixel scale uncertainty (µm/pixel)	DN in range map	image n of 8
				near	far				
3362MH0007140031200029C00	29	13527	11.45	-0.4	0.4	47.2	1.3	255	1
3362MH0007140031200030C00	30	13593	10.56	-0.3	0.3	44.1	1.1	223	2
3362MH0007140031200031C00	31	13659	9.77	-0.3	0.3	41.3	1.0	191	3
3362MH0007140031200032C00	32	13725	9.07	-0.3	0.2	38.8	0.9	159	4
3362MH0007140031200033C00	33	13791	8.45	-0.2	0.2	36.6	0.8	127	5
3362MH0007140031200034C00	34	13857	7.89	-0.2	0.2	34.7	0.7	85	6
3362MH0007140031200035C00	35	13923	7.38	-0.2	0.2	32.9	0.6	63	7
3362MH0007140031200036C00	36	13989	6.92	-0.2	0.2	31.2	0.6	31	8

updated: 29\_January\_2022

Sol 3362 - MAHLI Onboard Focus Merge Product Information

		target <b>Caroni</b> - mosaic position 1 of 5 - ~7 cm standoff							
best focus image:	3363MH0001700001200095R00	95	motor count:		13760	range (cm):	8.7		
range map product:	3363MH0001700001200096S00	96	acquired sequence:		mhli00152	stack type:	Relative		
acquired on date:	20-Jan-22			merge sequence:		mhli00170	merge type:	Basic	
motor count interval:		48	acquired on sol:		3362	focus merged on sol:		3363	
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (µm/pixel)	pixel scale uncertainty (µm/pixel)	DN in range map	image n of 8
				near	far				
3362MH0001520021200039C00	39	13568	10.88	-0.3	0.3	45.2	1.2	255	1
3362MH0001520021200040C00	40	13616	10.27	-0.3	0.3	43.1	1.1	223	2
3362MH0001520021200041C00	41	13664	9.72	-0.3	0.3	41.1	1.0	191	3
3362MH0001520021200042C00	42	13712	9.21	-0.3	0.3	39.3	0.9	159	4
3362MH0001520021200043C00	43	13760	8.73	-0.2	0.2	37.6	0.8	127	5
3362MH0001520021200044C00	44	13808	8.30	-0.2	0.2	36.1	0.8	85	6
3362MH0001520021200045C00	45	13856	7.89	-0.2	0.2	34.7	0.7	63	7
3362MH0001520021200046C00	46	13904	7.52	-0.2	0.2	33.4	0.7	31	8

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Sol 3362 - MAHLI Onboard Focus Merge Product Information

		target Caroni - mosaic position 2 of 5 - ~65 mm standoff							
			CDPID	corresponding frame:		3362MH0001520011200048C00			
best focus image:	3363MH0001700001200093R00		93	motor count:		13825	range (cm):	8.2	
range map product:	3363MH0001700001200094S00		94	acquired sequence:		mhli00152	stack type:	Relative	
acquired on date:	20-Jan-22			merge sequence:		mhli00170	merge type:	Basic	
motor count interval:		48	acquired on sol:		3362	focus merged on sol:		3363	
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (µm/pixel)	pixel scale uncertainty (µm/pixel)	DN in range map	image n of 8
				near	far				
3362MH0001520021200049C00	49	13633	10.07	-0.3	0.3	42.4	1.0	255	1
3362MH0001520021200050C00	50	13681	9.53	-0.3	0.3	40.5	1.0	223	2
3362MH0001520021200051C00	51	13729	9.03	-0.3	0.2	38.7	0.9	191	3
3362MH0001520021200052C00	52	13777	8.58	-0.2	0.2	37.1	0.8	159	4
3362MH0001520021200053C00	53	13825	8.15	-0.2	0.2	35.6	0.7	127	5
3362MH0001520021200054C00	54	13873	7.76	-0.2	0.2	34.2	0.7	85	6
3362MH0001520021200055C00	55	13921	7.39	-0.2	0.2	32.9	0.6	63	7
3362MH0001520021200056C00	56	13969	7.05	-0.2	0.2	31.7	0.6	31	8

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Sol 3362 - MAHLI Onboard Focus Merge Product Information

		target Caroni - mosaic position 3 of 5 - ~55 mm standoff							
best focus image:	<b>3363MH0001700001200091R00</b>		<b>91</b>	motor count:		<b>13929</b>	range (cm):	<b>7.3</b>	
range map product:	<b>3363MH0001700001200092S00</b>		<b>92</b>	acquired sequence:		mhli00152	stack type:	<b>Relative</b>	
acquired on date:	20-Jan-22				merge sequence:		mhli00170	merge type:	
motor count interval:		48	acquired on sol:		3362	focus merged on sol:		3363	
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (µm/pixel)	pixel scale uncertainty (µm/pixel)	DN in range map	image n of 8
				near	far				
3362MH0001520021200059C00	59	13737	<b>8.96</b>	-0.3	0.2	<b>38.4</b>	0.9	255	1
3362MH0001520021200060C00	60	13785	<b>8.50</b>	-0.2	0.2	<b>36.8</b>	0.8	223	2
3362MH0001520021200061C00	61	13833	<b>8.08</b>	-0.2	0.2	<b>35.4</b>	0.7	191	3
3362MH0001520021200062C00	62	13881	<b>7.70</b>	-0.2	0.2	<b>34.0</b>	0.7	159	4
3362MH0001520021200063C00	63	13929	<b>7.33</b>	-0.2	0.2	<b>32.7</b>	0.6	127	5
3362MH0001520021200064C00	64	13977	<b>7.00</b>	-0.2	0.2	<b>31.5</b>	0.6	85	6
3362MH0001520021200065C00	65	14025	<b>6.68</b>	-0.2	0.2	<b>30.4</b>	0.6	63	7
3362MH0001520021200066C00	66	14073	<b>6.39</b>	-0.2	0.1	<b>29.4</b>	0.5	31	8

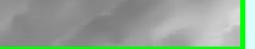
updated: 29\_January\_2022

Sol 3362 - MAHLI Onboard Focus Merge Product Information

		target Caroni - mosaic position 4 of 5 - ~55 mm standoff							
			CDPID	corresponding frame:		3362MH0001520011200068C00			
best focus image:	3363MH0001700001200089R00		89	motor count:		13950	range (cm):	7.2	
range map product:	3363MH0001700001200090S00		90	acquired sequence:		mhli00152	stack type:	Relative	
acquired on date:	20-Jan-22			merge sequence:		mhli00170	merge type:	Basic	
motor count interval:		48	acquired on sol:		3362	focus merged on sol:		3363	
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (µm/pixel)	pixel scale uncertainty (µm/pixel)	DN in range map	image n of 8
				near	far				
3362MH0001520021200069C00	69	13758	8.75	-0.2	0.2	37.7	0.8	255	1
3362MH0001520021200070C00	70	13806	8.32	-0.2	0.2	36.2	0.8	223	2
3362MH0001520021200071C00	71	13854	7.91	-0.2	0.2	34.7	0.7	191	3
3362MH0001520021200072C00	72	13902	7.53	-0.2	0.2	33.4	0.7	159	4
3362MH0001520021200073C00	73	13950	7.18	-0.2	0.2	32.2	0.6	127	5
3362MH0001520021200074C00	74	13998	6.86	-0.2	0.2	31.0	0.6	85	6
3362MH0001520021200075C00	75	14046	6.55	-0.2	0.1	30.0	0.5	63	7
3362MH0001520021200076C00	76	14094	6.27	-0.1	0.1	29.0	0.5	31	8

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Sol 3362 - MAHLI Onboard Focus Merge Product Information

		target Caroni - mosaic position 5 of 5 - ~5 cm standoff							
best focus image:	<b>3363MH0001700001200087R00</b>		<b>87</b>	motor count:		<b>14005</b>	range (cm):	<b>6.8</b>	
range map product:	<b>3363MH0001700001200088S00</b>		<b>88</b>	acquired sequence:		mhli00152	stack type:	<b>Relative</b>	
acquired on date:	20-Jan-22				merge sequence:		mhli00170	merge type:	
motor count interval:		48	acquired on sol:		3362	focus merged on sol:		3363	
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (µm/pixel)	pixel scale uncertainty (µm/pixel)	DN in range map	image n of 8
				near	far				
3362MH0001520021200079C00	79	13813	<b>8.25</b>	-0.2	0.2	<b>36.0</b>	0.8	255	1
3362MH0001520021200080C00	80	13861	<b>7.85</b>	-0.2	0.2	<b>34.5</b>	0.7	223	2
3362MH0001520021200081C00	81	13909	<b>7.48</b>	-0.2	0.2	<b>33.2</b>	0.7	191	3
3362MH0001520021200082C00	82	13957	<b>7.14</b>	-0.2	0.2	<b>32.0</b>	0.6	159	4
3362MH0001520021200083C00	83	14005	<b>6.81</b>	-0.2	0.2	<b>30.9</b>	0.6	127	5
3362MH0001520021200084C00	84	14053	<b>6.51</b>	-0.2	0.1	<b>29.8</b>	0.5	85	6
3362MH0001520021200085C00	85	14101	<b>6.22</b>	-0.1	0.1	<b>28.8</b>	0.5	63	7
3362MH0001520021200086C00	86	14149	<b>5.96</b>	-0.1	0.1	<b>27.9</b>	0.5	31	8

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### Sol 3364 - MAHLI Onboard Focus Merge Product Information

		target Mazaruni - stereo-1 - ~5 cm standoff							
			CDPID	corresponding frame:	3364MH0002990011200106C00				
best focus image:	3365MH0001530001200153R00	153		motor count:	13960	range (cm):	7.1		
range map product:	3365MH0001530001200154S00	154		acquired sequence:	mhli00299	stack type:	Relative		
acquired on date:	22-Jan-22			merge sequence:	mhli00153	merge type:	Basic		
motor count interval:	36	acquired on sol:	3364	focus merged on sol:	3365				
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)	pixel scale (μm/pixel)	pixel scale uncertainty (μm/pixel)	DN in range map	image n of 8	
			near	far					
3364MH0002990021200107C00	107	13816	8.23	-0.2	0.2	35.9	0.8	255	1
3364MH0002990021200108C00	108	13852	7.93	-0.2	0.2	34.8	0.7	223	2
3364MH0002990021200109C00	109	13888	7.64	-0.2	0.2	33.8	0.7	191	3
3364MH0002990021200110C00	110	13924	7.37	-0.2	0.2	32.8	0.6	159	4
3364MH0002990021200111C00	111	13960	7.11	-0.2	0.2	31.9	0.6	127	5
3364MH0002990021200112C00	112	13996	6.87	-0.2	0.2	31.1	0.6	85	6
3364MH0002990021200113C00	113	14032	6.64	-0.2	0.2	30.3	0.6	63	7
3364MH0002990021200114C00	114	14068	6.42	-0.2	0.1	29.5	0.5	31	8

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### Sol 3364 - MAHLI Onboard Focus Merge Product Information

		target Mazaruni - stereo-2 - ~5 cm standoff							
			CDPID	corresponding frame:	3364MH0002990011200116C00				
best focus image:	3365MH0001530001200151R00	151		motor count:	13989	range (cm):	6.9		
range map product:	3365MH0001530001200152S00	152		acquired sequence:	mhli00299	stack type:	Relative		
acquired on date:	22-Jan-22			merge sequence:	mhli00153	merge type:	Basic		
motor count interval:	36	acquired on sol:	3364	focus merged on sol:	3365				
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)	pixel scale (μm/pixel)	pixel scale uncertainty (μm/pixel)	DN in range map	image n of 8	
			near	far					
3364MH0002990021200117C00	117	13845	7.98	-0.2	0.2	35.0	0.7	255	1
3364MH0002990021200118C00	118	13881	7.70	-0.2	0.2	34.0	0.7	223	2
3364MH0002990021200119C00	119	13917	7.42	-0.2	0.2	33.0	0.6	191	3
3364MH0002990021200120C00	120	13953	7.16	-0.2	0.2	32.1	0.6	159	4
3364MH0002990021200121C00	121	13989	6.92	-0.2	0.2	31.2	0.6	127	5
3364MH0002990021200122C00	122	14025	6.68	-0.2	0.2	30.4	0.6	85	6
3364MH0002990021200123C00	123	14061	6.46	-0.2	0.1	29.6	0.5	63	7
3364MH0002990021200124C00	124	14097	6.25	-0.1	0.1	28.9	0.5	31	8

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### Sol 3364 - MAHLI Onboard Focus Merge Product Information

		target Formoso - stereo-1 - ~5 cm standoff						
best focus image:	3365MH0001530001200149R00	149	motor count:	14024	range (cm):	6.7		
range map product:	3365MH0001530001200150S00	150	acquired sequence:	mhli00168	stack type:	Relative		
acquired on date:	22-Jan-22		merge sequence:	mhli00153	merge type:	Basic		
motor count interval:	18	acquired on sol:	3364	focus merged on sol:	3365			
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)	pixel scale (µm/pixel)	pixel scale uncertainty (µm/pixel)	DN in range map	image n of 8
3364MH0001680021200129C00	129	13952	7.17	-0.2 0.2	32.1	0.6	255	1
3364MH0001680021200130C00	130	13970	7.05	-0.2 0.2	31.7	0.6	223	2
3364MH0001680021200131C00	131	13988	6.92	-0.2 0.2	31.3	0.6	191	3
3364MH0001680021200132C00	132	14006	6.80	-0.2 0.2	30.9	0.6	159	4
3364MH0001680021200133C00	133	14024	6.69	-0.2 0.2	30.4	0.6	127	5
3364MH0001680021200134C00	134	14042	6.58	-0.2 0.2	30.0	0.5	85	6
3364MH0001680021200135C00	135	14060	6.47	-0.2 0.1	29.7	0.5	63	7
3364MH0001680021200136C00	136	14078	6.36	-0.2 0.1	29.3	0.5	31	8

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### Sol 3364 - MAHLI Onboard Focus Merge Product Information

		target Formoso - stereo-2 - ~5 cm standoff						
best focus image:	3365MH0001530001200147R00	147	motor count:	14010	range (cm):	6.8		
range map product:	3365MH0001530001200148S00	148	acquired sequence:	mhli00168	stack type:	Relative		
acquired on date:	22-Jan-22		merge sequence:	mhli00153	merge type:	Basic		
motor count interval:	18	acquired on sol:	3364	focus merged on sol:	3365			
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)	pixel scale (µm/pixel)	pixel scale uncertainty (µm/pixel)	DN in range map	image n of 8
3364MH0001680021200139C00	139	13938	7.27	-0.2 0.2	32.5	0.6	255	1
3364MH0001680021200140C00	140	13956	7.14	-0.2 0.2	32.0	0.6	223	2
3364MH0001680021200141C00	141	13974	7.02	-0.2 0.2	31.6	0.6	191	3
3364MH0001680021200142C00	142	13992	6.90	-0.2 0.2	31.2	0.6	159	4
3364MH0001680021200143C00	143	14010	6.78	-0.2 0.2	30.8	0.6	127	5
3364MH0001680021200144C00	144	14028	6.66	-0.2 0.2	30.4	0.6	85	6
3364MH0001680021200145C00	145	14046	6.55	-0.2 0.1	30.0	0.5	63	7
3364MH0001680021200146C00	146	14064	6.44	-0.2 0.1	29.6	0.5	31	8

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### Sol 3371 - MAHLI Onboard Focus Merge Product Information

		target <a href="#">The_Test</a> - mosaic position 1 of 6 - ~5 cm standoff						
			CDPID	corresponding frame:	<a href="#">3371MH0007080011200176C00</a>			
best focus image:	<a href="#">3372MH0005360001200295R00</a>	295		motor count:	<a href="#">13999</a>	range (cm):	<a href="#">6.9</a>	
range map product:	<a href="#">3372MH0005360001200296S00</a>	296		acquired sequence:	<a href="#">mhli00708</a>	stack type:	<a href="#">Relative</a>	
acquired on date:	29-Jan-22			merge sequence:	<a href="#">mhli00536</a>	merge type:	<a href="#">Basic</a>	
motor count interval:	60	acquired on sol:	3371	focus merged on sol:			3372	
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)	pixel scale (μm/pixel)	pixel scale uncertainty (μm/pixel)	DN in range map	image n of 8
			near	far				
<a href="#">3371MH0007080031200178C00</a>	178	13759	<a href="#">8.74</a>	<a href="#">-0.2</a>	<a href="#">0.2</a>	<a href="#">37.7</a>	<a href="#">0.8</a>	<a href="#">255</a>
<a href="#">3371MH0007080031200179C00</a>	179	13819	<a href="#">8.20</a>	<a href="#">-0.2</a>	<a href="#">0.2</a>	<a href="#">35.8</a>	<a href="#">0.7</a>	<a href="#">223</a>
<a href="#">3371MH0007080031200180C00</a>	180	13879	<a href="#">7.71</a>	<a href="#">-0.2</a>	<a href="#">0.2</a>	<a href="#">34.0</a>	<a href="#">0.7</a>	<a href="#">191</a>
<a href="#">3371MH0007080031200181C00</a>	181	13939	<a href="#">7.26</a>	<a href="#">-0.2</a>	<a href="#">0.2</a>	<a href="#">32.5</a>	<a href="#">0.6</a>	<a href="#">159</a>
<a href="#">3371MH0007080031200182C00</a>	182	13999	<a href="#">6.85</a>	<a href="#">-0.2</a>	<a href="#">0.2</a>	<a href="#">31.0</a>	<a href="#">0.6</a>	<a href="#">127</a>
<a href="#">3371MH0007080031200183C00</a>	183	14059	<a href="#">6.47</a>	<a href="#">-0.2</a>	<a href="#">0.1</a>	<a href="#">29.7</a>	<a href="#">0.5</a>	<a href="#">85</a>
<a href="#">3371MH0007080031200184C00</a>	184	14119	<a href="#">6.12</a>	<a href="#">-0.1</a>	<a href="#">0.1</a>	<a href="#">28.5</a>	<a href="#">0.5</a>	<a href="#">63</a>
<a href="#">3371MH0007080031200185C00</a>	185	14179	<a href="#">5.80</a>	<a href="#">-0.1</a>	<a href="#">0.1</a>	<a href="#">27.3</a>	<a href="#">0.4</a>	<a href="#">31</a>

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### Sol 3371 - MAHLI Onboard Focus Merge Product Information

		target <a href="#">The_Test</a> - mosaic position 2 of 6 - ~45 mm standoff						
			CDPID	corresponding frame:	<a href="#">3371MH0007080011200187C00</a>			
best focus image:	<a href="#">3372MH0005360001200293R00</a>	293		motor count:	<a href="#">14051</a>	range (cm):	<a href="#">6.5</a>	
range map product:	<a href="#">3372MH0005360001200294S00</a>	294		acquired sequence:	<a href="#">mhli00708</a>	stack type:	<a href="#">Relative</a>	
acquired on date:	29-Jan-22			merge sequence:	<a href="#">mhli00536</a>	merge type:	<a href="#">Basic</a>	
motor count interval:	60	acquired on sol:	3371	focus merged on sol:			3372	
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)	pixel scale (μm/pixel)	pixel scale uncertainty (μm/pixel)	DN in range map	image n of 8
			near	far				
<a href="#">3371MH0007080031200189C00</a>	189	13811	<a href="#">8.27</a>	<a href="#">-0.2</a>	<a href="#">0.2</a>	<a href="#">36.0</a>	<a href="#">0.8</a>	<a href="#">255</a>
<a href="#">3371MH0007080031200190C00</a>	190	13871	<a href="#">7.77</a>	<a href="#">-0.2</a>	<a href="#">0.2</a>	<a href="#">34.3</a>	<a href="#">0.7</a>	<a href="#">223</a>
<a href="#">3371MH0007080031200191C00</a>	191	13931	<a href="#">7.32</a>	<a href="#">-0.2</a>	<a href="#">0.2</a>	<a href="#">32.7</a>	<a href="#">0.6</a>	<a href="#">191</a>
<a href="#">3371MH0007080031200192C00</a>	192	13991	<a href="#">6.90</a>	<a href="#">-0.2</a>	<a href="#">0.2</a>	<a href="#">31.2</a>	<a href="#">0.6</a>	<a href="#">159</a>
<a href="#">3371MH0007080031200193C00</a>	193	14051	<a href="#">6.52</a>	<a href="#">-0.2</a>	<a href="#">0.1</a>	<a href="#">29.9</a>	<a href="#">0.5</a>	<a href="#">127</a>
<a href="#">3371MH0007080031200194C00</a>	194	14111	<a href="#">6.17</a>	<a href="#">-0.1</a>	<a href="#">0.1</a>	<a href="#">28.6</a>	<a href="#">0.5</a>	<a href="#">85</a>
<a href="#">3371MH0007080031200195C00</a>	195	14171	<a href="#">5.84</a>	<a href="#">-0.1</a>	<a href="#">0.1</a>	<a href="#">27.5</a>	<a href="#">0.4</a>	<a href="#">63</a>
<a href="#">3371MH0007080031200196C00</a>	196	14231	<a href="#">5.54</a>	<a href="#">-0.1</a>	<a href="#">0.1</a>	<a href="#">26.4</a>	<a href="#">0.4</a>	<a href="#">31</a>

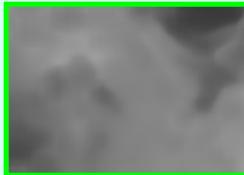
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### Sol 3371 - MAHLI Onboard Focus Merge Product Information

		target <a href="#">The_Test</a> - mosaic position 3 of 6 - ~4 cm standoff							
			CDPID	corresponding frame:	3371MH0007080011200198C00				
best focus image:	3372MH0005360001200291R00	291		motor count:	14157	range (cm):	5.9		
range map product:	3372MH0005360001200292S00	292		acquired sequence:	mhli00708	stack type:	Relative		
acquired on date:	29-Jan-22			merge sequence:	mhli00536	merge type:	Basic		
motor count interval:	60	acquired on sol:	3371	focus merged on sol:	3372				
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)	pixel scale (μm/pixel)	pixel scale uncertainty (μm/pixel)	DN in range map	image n of 8	
			near	far					
3371MH0007080031200200C00	200	13917	7.42	-0.2	0.2	33.0	0.6	255	1
3371MH0007080031200201C00	201	13977	7.00	-0.2	0.2	31.5	0.6	223	2
3371MH0007080031200202C00	202	14037	6.61	-0.2	0.2	30.2	0.5	191	3
3371MH0007080031200203C00	203	14097	6.25	-0.1	0.1	28.9	0.5	159	4
3371MH0007080031200204C00	204	14157	5.92	-0.1	0.1	27.7	0.4	127	5
3371MH0007080031200205C00	205	14217	5.61	-0.1	0.1	26.6	0.4	85	6
3371MH0007080031200206C00	206	14277	5.32	-0.1	0.1	25.6	0.4	63	7
3371MH0007080031200207C00	207	14337	5.06	-0.1	0.1	24.7	0.4	31	8

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### Sol 3371 - MAHLI Onboard Focus Merge Product Information

		target <a href="#">The_Test</a> - mosaic position 4 of 6 - ~45 mm standoff							
			CDPID	corresponding frame:	3371MH0007080011200209C00				
best focus image:	3372MH0005360001200289R00	289		motor count:	14039	range (cm):	6.6		
range map product:	3372MH0005360001200290S00	290		acquired sequence:	mhli00708	stack type:	Relative		
acquired on date:	29-Jan-22			merge sequence:	mhli00536	merge type:	Basic		
motor count interval:	60	acquired on sol:	3371	focus merged on sol:	3372				
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)	pixel scale (μm/pixel)	pixel scale uncertainty (μm/pixel)	DN in range map	image n of 8	
			near	far					
3371MH0007080031200211C00	211	13799	8.38	-0.2	0.2	36.4	0.8	255	1
3371MH0007080031200212C00	212	13859	7.87	-0.2	0.2	34.6	0.7	223	2
3371MH0007080031200213C00	213	13919	7.41	-0.2	0.2	33.0	0.6	191	3
3371MH0007080031200214C00	214	13979	6.98	-0.2	0.2	31.5	0.6	159	4
3371MH0007080031200215C00	215	14039	6.59	-0.2	0.2	30.1	0.5	127	5
3371MH0007080031200216C00	216	14099	6.24	-0.1	0.1	28.9	0.5	85	6
3371MH0007080031200217C00	217	14159	5.91	-0.1	0.1	27.7	0.4	63	7
3371MH0007080031200218C00	218	14219	5.60	-0.1	0.1	26.6	0.4	31	8

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### Sol 3371 - MAHLI Onboard Focus Merge Product Information

		target The_Test - mosaic position 5 of 6 - ~45 mm standoff						
best focus image:	3372MH0005360001200287R00	287	motor count:		14063	range (cm):	6.4	
range map product:	3372MH0005360001200288S00	288	acquired sequence:		mhli00708	stack type:	Relative	
acquired on date:	29-Jan-22			merge sequence:		mhli00536	merge type:	Basic
motor count interval:		60	acquired on sol:		3371	focus merged on sol:		3372
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)	pixel scale (µm/pixel)	pixel scale uncertainty (µm/pixel)	DN in range map	image n of 8
3371MH0007080031200222C00	222	13823	8.17	-0.2    0.2	35.7	0.7	255	1
3371MH0007080031200223C00	223	13883	7.68	-0.2    0.2	33.9	0.7	223	2
3371MH0007080031200224C00	224	13943	7.23	-0.2    0.2	32.4	0.6	191	3
3371MH0007080031200225C00	225	14003	6.82	-0.2    0.2	30.9	0.6	159	4
3371MH0007080031200226C00	226	14063	6.45	-0.2    0.1	29.6	0.5	127	5
3371MH0007080031200227C00	227	14123	6.10	-0.1    0.1	28.4	0.5	85	6
3371MH0007080031200228C00	228	14183	5.78	-0.1    0.1	27.2	0.4	63	7
3371MH0007080031200229C00	229	14243	5.48	-0.1    0.1	26.2	0.4	31	8

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### Sol 3371 - MAHLI Onboard Focus Merge Product Information

		target The_Test - mosaic position 6 of 6 - ~4 cm standoff						
best focus image:	3372MH0005360001200285R00	285	motor count:		14185	range (cm):	5.8	
range map product:	3372MH0005360001200286S00	286	acquired sequence:		mhli00708	stack type:	Relative	
acquired on date:	29-Jan-22			merge sequence:		mhli00536	merge type:	Basic
motor count interval:		60	acquired on sol:		3371	focus merged on sol:		3372
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)	pixel scale (µm/pixel)	pixel scale uncertainty (µm/pixel)	DN in range map	image n of 8
3371MH0007080031200233C00	233	13945	7.22	-0.2    0.2	32.3	0.6	255	1
3371MH0007080031200234C00	234	14005	6.81	-0.2    0.2	30.9	0.6	223	2
3371MH0007080031200235C00	235	14065	6.44	-0.2    0.1	29.6	0.5	191	3
3371MH0007080031200236C00	236	14125	6.09	-0.1    0.1	28.3	0.5	159	4
3371MH0007080031200237C00	237	14185	5.77	-0.1    0.1	27.2	0.4	127	5
3371MH0007080031200238C00	238	14245	5.47	-0.1    0.1	26.2	0.4	85	6
3371MH0007080031200239C00	239	14305	5.20	-0.1    0.1	25.2	0.4	63	7
3371MH0007080031200240C00	240	14365	4.94	-0.1    0.1	24.3	0.4	31	8

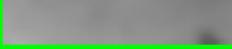
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Sol 3371 - MAHLI Onboard Focus Merge Product Information

		target <b>Suapi</b> - after DRT - stereo-1 - ~5 cm standoff							
			CDPID	corresponding frame:		3371MH0001730011200244C00			
best focus image:	3372MH0005360001200283R00		283	motor count:		13954	range (cm):	7.2	
range map product:	3372MH0005360001200284S00		284	acquired sequence:		mhli00173	stack type:	Relative	
acquired on date:	29-Jan-22			merge sequence:		mhli00536	merge type:	Basic	
motor count interval:		30	acquired on sol:		3371	focus merged on sol:		3372	
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (µm/pixel)	pixel scale uncertainty (µm/pixel)	DN in range map	image n of 8
				near	far				
3371MH0001730021200245C00	245	13834	8.08	-0.2	0.2	35.3	0.7	255	1
3371MH0001730021200246C00	246	13864	7.83	-0.2	0.2	34.5	0.7	223	2
3371MH0001730021200247C00	247	13894	7.60	-0.2	0.2	33.6	0.7	191	3
3371MH0001730021200248C00	248	13924	7.37	-0.2	0.2	32.8	0.6	159	4
3371MH0001730021200249C00	249	13954	7.16	-0.2	0.2	32.1	0.6	127	5
3371MH0001730021200250C00	250	13984	6.95	-0.2	0.2	31.4	0.6	85	6
3371MH0001730021200251C00	251	14014	6.75	-0.2	0.2	30.7	0.6	63	7
3371MH0001730021200252C00	252	14044	6.56	-0.2	0.1	30.0	0.5	31	8

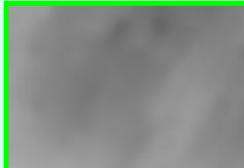
updated: 05\_February\_2022

Sol 3371 - MAHLI Onboard Focus Merge Product Information

		target <b>Suapi</b> - after DRT - stereo-2 - ~5 cm standoff							
best focus image:	3372MH0005360001200281R00	281	motor count:		13983	range (cm):	7.0		
range map product:	3372MH0005360001200282S00	282	acquired sequence:		mhli00173	stack type:	Relative		
acquired on date:	29-Jan-22			merge sequence:		mhli00536	merge type:	Basic	
motor count interval:		30	acquired on sol:		3371	focus merged on sol:		3372	
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (µm/pixel)	pixel scale uncertainty (µm/pixel)	DN in range map	image n of 8
				near	far				
3371MH0001730021200255C00	255	13863	7.84	-0.2	0.2	34.5	0.7	255	1
3371MH0001730021200256C00	256	13893	7.60	-0.2	0.2	33.7	0.7	223	2
3371MH0001730021200257C00	257	13923	7.38	-0.2	0.2	32.9	0.6	191	3
3371MH0001730021200258C00	258	13953	7.16	-0.2	0.2	32.1	0.6	159	4
3371MH0001730021200259C00	259	13983	6.96	-0.2	0.2	31.4	0.6	127	5
3371MH0001730021200260C00	260	14013	6.76	-0.2	0.2	30.7	0.6	85	6
3371MH0001730021200261C00	261	14043	6.57	-0.2	0.1	30.0	0.5	63	7
3371MH0001730021200262C00	262	14073	6.39	-0.2	0.1	29.4	0.5	31	8

updated: 05\_February\_2022

### Sol 3371 - MAHLI Onboard Focus Merge Product Information

		target <b>Suapi</b> - after DRT - ~1 cm standoff						
best focus image:	<a href="#">3372MH0005360001200279R00</a>	279	motor count:	15021	range (cm):	3.0		
range map product:	<a href="#">3372MH0005360001200280S00</a>	280	acquired sequence:	mhli00426	stack type:	Relative		
acquired on date:	29-Jan-22		merge sequence:	mhli00536	merge type:	Basic		
motor count interval:	48	acquired on sol:	3371	focus merged on sol:	3372			
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)	pixel scale (μm/pixel)	pixel scale uncertainty (μm/pixel)	DN in range map	image n of 8
<a href="#">3371MH0004260021200271C00</a>	271	14829	3.44	-0.1 0.1	19.0	0.2	255	1
<a href="#">3371MH0004260021200272C00</a>	272	14877	3.32	-0.1 0.1	18.6	0.2	223	2
<a href="#">3371MH0004260021200273C00</a>	273	14925	3.21	-0.1 0.1	18.2	0.2	191	3
<a href="#">3371MH0004260021200274C00</a>	274	14973	3.10	-0.1 0.1	17.8	0.2	159	4
<a href="#">3371MH0004260021200275C00</a>	275	15021	2.99	-0.1 0.1	17.4	0.2	127	5
<a href="#">3371MH0004260021200276C00</a>	276	15069	2.90	-0.1 0.1	17.1	0.2	85	6
<a href="#">3371MH0004260021200277C00</a>	277	15117	2.80	-0.1 0.1	16.8	0.2	63	7
<a href="#">3371MH0004260021200278C00</a>	278	15165	2.71	-0.1 0.1	16.4	0.2	31	8

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#### Sol 3374 - MAHLI Onboard Focus Merge Product Information

		target Toron - mosaic position 1 of 11 - ~14 cm standoff							
			CDPID	corresponding frame:		3374MH0008410011200298C00			
best focus image:		3375MH0004400001200477R00	477	motor count:		13276	range (cm):	16.3	
range map product:		3375MH0004400001200478S00	478	acquired sequence:		mhli00841	stack type:	Relative	
acquired on date:		2-Feb-22		merge sequence:		mhli00440	merge type:	Basic	
motor count interval:		18	acquired on sol:	3374	focus merged on sol:		3375		
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (μm/pixel)	pixel scale uncertainty (μm/pixel)	DN in range map	image n of 8
			near	far					
3374MH0008410021200299C00	299	13204	18.33	-0.9	0.9	71.4	3.2	255	1
3374MH0008410021200300C00	300	13222	17.78	-0.8	0.9	69.5	3.0	223	2
3374MH0008410021200301C00	301	13240	17.26	-0.8	0.8	67.6	2.8	191	3
3374MH0008410021200302C00	302	13258	16.76	-0.8	0.8	65.9	2.7	159	4
3374MH0008410021200303C00	303	13276	16.28	-0.7	0.7	64.2	2.5	127	5
3374MH0008410021200304C00	304	13294	15.83	-0.7	0.7	62.6	2.4	85	6
3374MH0008410021200305C00	305	13312	15.40	-0.6	0.7	61.1	2.3	63	7
3374MH0008410021200306C00	306	13330	14.99	-0.6	0.6	59.7	2.2	31	8

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#### Sol 3374 - MAHLI Onboard Focus Merge Product Information

		target Toron - mosaic position 2 of 11 - ~14 cm standoff							
			CDPID	corresponding frame:		3374MH0008410011200308C00			
best focus image:		3375MH0004400001200475R00	475	motor count:		13278	range (cm):	16.2	
range map product:		3375MH0004400001200476S00	476	acquired sequence:		mhli00841	stack type:	Relative	
acquired on date:		2-Feb-22		merge sequence:		mhli00440	merge type:	Basic	
motor count interval:		18	acquired on sol:	3374	focus merged on sol:		3375		
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (μm/pixel)	pixel scale uncertainty (μm/pixel)	DN in range map	image n of 8
			near	far					
3374MH0008410021200309C00	309	13206	18.27	-0.9	0.9	71.2	3.2	255	1
3374MH0008410021200310C00	310	13224	17.72	-0.8	0.9	69.3	3.0	223	2
3374MH0008410021200311C00	311	13242	17.20	-0.8	0.8	67.4	2.8	191	3
3374MH0008410021200312C00	312	13260	16.70	-0.7	0.8	65.7	2.7	159	4
3374MH0008410021200313C00	313	13278	16.23	-0.7	0.7	64.0	2.5	127	5
3374MH0008410021200314C00	314	13296	15.78	-0.7	0.7	62.4	2.4	85	6
3374MH0008410021200315C00	315	13314	15.35	-0.6	0.7	60.9	2.3	63	7
3374MH0008410021200316C00	316	13332	14.94	-0.6	0.6	59.5	2.1	31	8

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Sol 3374 - MAHLI Onboard Focus Merge Product Information

		target Toron - mosaic position 3 of 11 - ~15 cm standoff							
			CDPID	corresponding frame:		3374MH0008410011200318C00			
best focus image:	3375MH0004400001200473R00		473	motor count:		13262	range (cm):	16.6	
range map product:	3375MH0004400001200474S00		474	acquired sequence:		mhli00841	stack type:	Relative	
acquired on date:	2-Feb-22			merge sequence:		mhli00440	merge type:	Basic	
motor count interval:		18	acquired on sol:		3374	focus merged on sol:		3375	
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (µm/pixel)	pixel scale uncertainty (µm/pixel)	DN in range map	image n of 8
				near	far				
3374MH0008410021200319C00	319	13190	18.78	-0.9	1.0	73.0	3.3	255	1
3374MH0008410021200320C00	320	13208	18.21	-0.9	0.9	71.0	3.1	223	2
3374MH0008410021200321C00	321	13226	17.66	-0.8	0.9	69.1	3.0	191	3
3374MH0008410021200322C00	322	13244	17.14	-0.8	0.8	67.2	2.8	159	4
3374MH0008410021200323C00	323	13262	16.65	-0.7	0.8	65.5	2.6	127	5
3374MH0008410021200324C00	324	13280	16.18	-0.7	0.7	63.9	2.5	85	6
3374MH0008410021200325C00	325	13298	15.73	-0.7	0.7	62.3	2.4	63	7
3374MH0008410021200326C00	326	13316	15.30	-0.6	0.6	60.8	2.2	31	8

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Sol 3374 - MAHLI Onboard Focus Merge Product Information

		target Toron - mosaic position 4 of 11 - ~14 cm standoff						
			CDPID	corresponding frame:		3374MH0008410011200328C00		
best focus image:	3375MH0004400001200471R00		471	motor count:		13297	range (cm):	15.8
range map product:	3375MH0004400001200472S00		472	acquired sequence:		mhli00841	stack type:	Relative
acquired on date:	2-Feb-22			merge sequence:		mhli00440	merge type:	Basic
motor count interval:		18	acquired on sol:		3374	focus merged on sol:		3375
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (µm/pixel)	pixel scale uncertainty (µm/pixel)	DN in range map
				near	far			
3374MH0008410021200329C00	329	13225	17.69	-0.8	0.9	69.2	3.0	255
3374MH0008410021200330C00	330	13243	17.17	-0.8	0.8	67.3	2.8	223
3374MH0008410021200331C00	331	13261	16.68	-0.7	0.8	65.6	2.7	191
3374MH0008410021200332C00	332	13279	16.20	-0.7	0.7	63.9	2.5	159
3374MH0008410021200333C00	333	13297	15.76	-0.7	0.7	62.4	2.4	127
3374MH0008410021200334C00	334	13315	15.33	-0.6	0.7	60.9	2.3	85
3374MH0008410021200335C00	335	13333	14.92	-0.6	0.6	59.4	2.1	63
3374MH0008410021200336C00	336	13351	14.53	-0.6	0.6	58.0	2.0	31

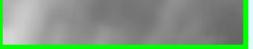
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Sol 3374 - MAHLI Onboard Focus Merge Product Information

		target Toron - mosaic position 5 of 11 - ~13 cm standoff							
			CDPID	corresponding frame:		3374MH0008410011200338C00			
best focus image:	3375MH0004400001200469R00		469	motor count:		13320	range (cm):	15.2	
range map product:	3375MH0004400001200470S00		470	acquired sequence:		mhli00841	stack type:	Relative	
acquired on date:	2-Feb-22			merge sequence:		mhli00440	merge type:	Basic	
motor count interval:		18	acquired on sol:		3374	focus merged on sol:		3375	
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (µm/pixel)	pixel scale uncertainty (µm/pixel)	DN in range map	image n of 8
				near	far				
3374MH0008410021200339C00	339	13248	17.03	-0.8	0.8	66.8	2.8	255	1
3374MH0008410021200340C00	340	13266	16.54	-0.7	0.8	65.1	2.6	223	2
3374MH0008410021200341C00	341	13284	16.08	-0.7	0.7	63.5	2.5	191	3
3374MH0008410021200342C00	342	13302	15.64	-0.7	0.7	61.9	2.3	159	4
3374MH0008410021200343C00	343	13320	15.21	-0.6	0.6	60.4	2.2	127	5
3374MH0008410021200344C00	344	13338	14.81	-0.6	0.6	59.0	2.1	85	6
3374MH0008410021200345C00	345	13356	14.42	-0.6	0.6	57.7	2.0	63	7
3374MH0008410021200346C00	346	13374	14.05	-0.5	0.5	56.4	1.9	31	8

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Sol 3374 - MAHLI Onboard Focus Merge Product Information

		target Toron - mosaic position 6 of 11 - ~13 cm standoff							
			CDPID	corresponding frame:		3374MH0008410011200348C00			
best focus image:	3375MH0004400001200467R00		467	motor count:		13350	range (cm):	14.5	
range map product:	3375MH0004400001200468S00		468	acquired sequence:		mhli00841	stack type:	Relative	
acquired on date:	2-Feb-22			merge sequence:		mhli00440	merge type:	Basic	
motor count interval:		18	acquired on sol:		3374	focus merged on sol:		3375	
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (µm/pixel)	pixel scale uncertainty (µm/pixel)	DN in range map	image n of 8
				near	far				
3374MH0008410021200349C00	349	13278	16.23	-0.7	0.7	64.0	2.5	255	1
3374MH0008410021200350C00	350	13296	15.78	-0.7	0.7	62.4	2.4	223	2
3374MH0008410021200351C00	351	13314	15.35	-0.6	0.7	60.9	2.3	191	3
3374MH0008410021200352C00	352	13332	14.94	-0.6	0.6	59.5	2.1	159	4
3374MH0008410021200353C00	353	13350	14.55	-0.6	0.6	58.1	2.0	127	5
3374MH0008410021200354C00	354	13368	14.17	-0.6	0.6	56.8	1.9	85	6
3374MH0008410021200355C00	355	13386	13.82	-0.5	0.5	55.5	1.9	63	7
3374MH0008410021200356C00	356	13404	13.47	-0.5	0.5	54.3	1.8	31	8

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#### Sol 3374 - MAHLI Onboard Focus Merge Product Information

		target Toron - mosaic position 7 of 11 - ~13 cm standoff						
best focus image:	<a href="#">3375MH0004400001200465R00</a>	465	motor count:			13333	range (cm):	14.9
range map product:	<a href="#">3375MH0004400001200466S00</a>	466	acquired sequence:			mhli00841	stack type:	Relative
acquired on date:	2-Feb-22				merge sequence:	mhli00440	merge type:	Basic
motor count interval:		18	acquired on sol:		3374	focus merged on sol:		3375
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (µm/pixel)	pixel scale uncertainty (µm/pixel)	DN in range map
				near	far			
3374MH0008410021200359C00	359	13261	16.68	-0.7	0.8	65.6	2.7	255
3374MH0008410021200360C00	360	13279	16.20	-0.7	0.7	63.9	2.5	223
3374MH0008410021200361C00	361	13297	15.76	-0.7	0.7	62.4	2.4	191
3374MH0008410021200362C00	362	13315	15.33	-0.6	0.7	60.9	2.3	159
3374MH0008410021200363C00	363	13333	14.92	-0.6	0.6	59.4	2.1	127
3374MH0008410021200364C00	364	13351	14.53	-0.6	0.6	58.0	2.0	85
3374MH0008410021200365C00	365	13369	14.15	-0.6	0.6	56.7	1.9	63
3374MH0008410021200366C00	366	13387	13.80	-0.5	0.5	55.5	1.9	31
								8

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#### Sol 3374 - MAHLI Onboard Focus Merge Product Information

		target Toron - mosaic position 8 of 11 - ~13 cm standoff						
best focus image:	<a href="#">3375MH0004400001200463R00</a>	463	motor count:			13327	range (cm):	15.1
range map product:	<a href="#">3375MH0004400001200464S00</a>	464	acquired sequence:			mhli00841	stack type:	Relative
acquired on date:	2-Feb-22				merge sequence:	mhli00440	merge type:	Basic
motor count interval:		18	acquired on sol:		3374	focus merged on sol:		3375
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (µm/pixel)	pixel scale uncertainty (µm/pixel)	DN in range map
				near	far			
3374MH0008410021200369C00	369	13255	16.84	-0.8	0.8	66.2	2.7	255
3374MH0008410021200370C00	370	13273	16.36	-0.7	0.7	64.5	2.6	223
3374MH0008410021200371C00	371	13291	15.90	-0.7	0.7	62.9	2.4	191
3374MH0008410021200372C00	372	13309	15.47	-0.6	0.7	61.4	2.3	159
3374MH0008410021200373C00	373	13327	15.05	-0.6	0.6	59.9	2.2	127
3374MH0008410021200374C00	374	13345	14.66	-0.6	0.6	58.5	2.1	85
3374MH0008410021200375C00	375	13363	14.28	-0.6	0.6	57.2	2.0	63
3374MH0008410021200376C00	376	13381	13.91	-0.5	0.5	55.9	1.9	31
								8

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#### Sol 3374 - MAHLI Onboard Focus Merge Product Information

		target Toron - mosaic position 9 of 11 - ~13 cm standoff						
			CDPID	corresponding frame:		3374MH0008410011200378C00		
best focus image:		3375MH0004400001200461R00	461	motor count:		13342	range (cm):	14.7
range map product:		3375MH0004400001200462S00	462	acquired sequence:		mhli00841	stack type:	Relative
acquired on date:		2-Feb-22		merge sequence:		mhli00440	merge type:	Basic
motor count interval:		18	acquired on sol:	3374	focus merged on sol:		3375	
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (µm/pixel)	pixel scale uncertainty (µm/pixel)	DN in range map
			near	far				
3374MH0008410021200379C00	379	13270	16.44	-0.7	0.7	64.8	2.6	255
3374MH0008410021200380C00	380	13288	15.98	-0.7	0.7	63.1	2.4	223
3374MH0008410021200381C00	381	13306	15.54	-0.7	0.7	61.6	2.3	191
3374MH0008410021200382C00	382	13324	15.12	-0.6	0.6	60.1	2.2	159
3374MH0008410021200383C00	383	13342	14.72	-0.6	0.6	58.7	2.1	127
3374MH0008410021200384C00	384	13360	14.34	-0.6	0.6	57.4	2.0	85
3374MH0008410021200385C00	385	13378	13.97	-0.5	0.5	56.1	1.9	63
3374MH0008410021200386C00	386	13396	13.62	-0.5	0.5	54.9	1.8	31
								8

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#### Sol 3374 - MAHLI Onboard Focus Merge Product Information

		target Toron - mosaic position 10 of 11 - ~13 cm standoff						
			CDPID	corresponding frame:		3374MH0008410011200388C00		
best focus image:		3375MH0004400001200459R00	459	motor count:		13315	range (cm):	15.3
range map product:		3375MH0004400001200460S00	460	acquired sequence:		mhli00841	stack type:	Relative
acquired on date:		2-Feb-22		merge sequence:		mhli00440	merge type:	Basic
motor count interval:		18	acquired on sol:	3374	focus merged on sol:		3375	
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (µm/pixel)	pixel scale uncertainty (µm/pixel)	DN in range map
			near	far				
3374MH0008410021200389C00	389	13243	17.17	-0.8	0.8	67.3	2.8	255
3374MH0008410021200390C00	390	13261	16.68	-0.7	0.8	65.6	2.7	223
3374MH0008410021200391C00	391	13279	16.20	-0.7	0.7	63.9	2.5	191
3374MH0008410021200392C00	392	13297	15.76	-0.7	0.7	62.4	2.4	159
3374MH0008410021200393C00	393	13315	15.33	-0.6	0.7	60.9	2.3	127
3374MH0008410021200394C00	394	13333	14.92	-0.6	0.6	59.4	2.1	85
3374MH0008410021200395C00	395	13351	14.53	-0.6	0.6	58.0	2.0	63
3374MH0008410021200396C00	396	13369	14.15	-0.6	0.6	56.7	1.9	31
								8

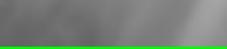
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Sol 3374 - MAHLI Onboard Focus Merge Product Information

		target Toron - mosaic position 11 of 11 - ~16 cm standoff							
			CDPID	corresponding frame:		3374MH0008410011200398C00			
best focus image:	3375MH0004400001200457R00		457	motor count:		13232	range (cm):	17.5	
range map product:	3375MH0004400001200458S00		458	acquired sequence:		mhli00841	stack type:	Relative	
acquired on date:	2-Feb-22			merge sequence:		mhli00440	merge type:	Basic	
motor count interval:		18	acquired on sol:		3374	focus merged on sol:		3375	
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (µm/pixel)	pixel scale uncertainty (µm/pixel)	DN in range map	image n of 8
				near	far				
3374MH0008410021200399C00	399	13160	19.82	-1.0	1.1	76.7	3.7	255	1
3374MH0008410021200400C00	400	13178	19.19	-1.0	1.0	74.4	3.5	223	2
3374MH0008410021200401C00	401	13196	18.59	-0.9	1.0	72.3	3.3	191	3
3374MH0008410021200402C00	402	13214	18.02	-0.9	0.9	70.3	3.1	159	4
3374MH0008410021200403C00	403	13232	17.49	-0.8	0.8	68.4	2.9	127	5
3374MH0008410021200404C00	404	13250	16.98	-0.8	0.8	66.7	2.7	85	6
3374MH0008410021200405C00	405	13268	16.49	-0.7	0.8	64.9	2.6	63	7
3374MH0008410021200406C00	406	13286	16.03	-0.7	0.7	63.3	2.5	31	8

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Sol 3374 - MAHLI Onboard Focus Merge Product Information

		target <b>Surumu</b> - APXS spot 2 - stereo-1 - ~5 cm standoff						
			CDPID	corresponding frame:		3374MH0001520011200410C00		
best focus image:	3375MH0004400001200455R00		455	motor count:		13984	range (cm):	7.0
range map product:	3375MH0004400001200456S00		456	acquired sequence:		mhli00152	stack type:	Relative
acquired on date:	2-Feb-22			merge sequence:		mhli00440	merge type:	Basic
motor count interval:		48	acquired on sol:		3374	focus merged on sol:		3375
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (µm/pixel)	pixel scale uncertainty (µm/pixel)	DN in range map
				near	far			
3374MH0001520021200411C00	411	13792	8.44	-0.2	0.2	36.6	0.8	255
3374MH0001520021200412C00	412	13840	8.03	-0.2	0.2	35.2	0.7	223
3374MH0001520021200413C00	413	13888	7.64	-0.2	0.2	33.8	0.7	191
3374MH0001520021200414C00	414	13936	7.28	-0.2	0.2	32.5	0.6	159
3374MH0001520021200415C00	415	13984	6.95	-0.2	0.2	31.4	0.6	127
3374MH0001520021200416C00	416	14032	6.64	-0.2	0.2	30.3	0.6	85
3374MH0001520021200417C00	417	14080	6.35	-0.2	0.1	29.2	0.5	63
3374MH0001520021200418C00	418	14128	6.07	-0.1	0.1	28.3	0.5	31

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#### Sol 3374 - MAHLI Onboard Focus Merge Product Information

		target <b>Surumu - APXS spot 2 - stereo-2 - ~5 cm standoff</b>						
			CDPID	corresponding frame:		<a href="#">3374MH0001520011200420C00</a>		
best focus image:		<a href="#">3375MH0004400001200453R00</a>	453	motor count:		<a href="#">13979</a>	range (cm):	7.0
range map product:		<a href="#">3375MH0004400001200454S00</a>	454	acquired sequence:		<a href="#">mhli00152</a>	stack type:	<a href="#">Relative</a>
acquired on date:		2-Feb-22		merge sequence:		<a href="#">mhli00440</a>	merge type:	<a href="#">Basic</a>
motor count interval:		48	acquired on sol:	3374	focus merged on sol:		3375	
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (µm/pixel)	pixel scale uncertainty (µm/pixel)	DN in range map
			near	far				
<a href="#">3374MH0001520021200421C00</a>	421	13787	<b>8.48</b>	-0.2	0.2	36.8	0.8	<b>255</b>
<a href="#">3374MH0001520021200422C00</a>	422	13835	<b>8.07</b>	-0.2	0.2	35.3	0.7	<b>223</b>
<a href="#">3374MH0001520021200423C00</a>	423	13883	<b>7.68</b>	-0.2	0.2	33.9	0.7	<b>191</b>
<a href="#">3374MH0001520021200424C00</a>	424	13931	<b>7.32</b>	-0.2	0.2	32.7	0.6	<b>159</b>
<a href="#">3374MH0001520021200425C00</a>	425	13979	<b>6.98</b>	-0.2	0.2	31.5	0.6	<b>127</b>
<a href="#">3374MH0001520021200426C00</a>	426	14027	<b>6.67</b>	-0.2	0.2	30.4	0.6	<b>85</b>
<a href="#">3374MH0001520021200427C00</a>	427	14075	<b>6.38</b>	-0.2	0.1	29.3	0.5	<b>63</b>
<a href="#">3374MH0001520021200428C00</a>	428	14123	<b>6.10</b>	-0.1	0.1	28.4	0.5	<b>31</b>

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#### Sol 3374 - MAHLI Onboard Focus Merge Product Information

		target <b>Surumu - APXS spot 2 - ~1 cm standoff</b>						
			CDPID	corresponding frame:		<a href="#">3374MH0004190011200430C00</a>		
best focus image:		<a href="#">3375MH0004400001200451R00</a>	451	motor count:		<a href="#">15053</a>	range (cm):	2.9
range map product:		<a href="#">3375MH0004400001200452S00</a>	452	acquired sequence:		<a href="#">mhli00419</a>	stack type:	<a href="#">Relative</a>
acquired on date:		2-Feb-22		merge sequence:		<a href="#">mhli00440</a>	merge type:	<a href="#">Basic</a>
motor count interval:		72	acquired on sol:	3374	focus merged on sol:		3375	
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (µm/pixel)	pixel scale uncertainty (µm/pixel)	DN in range map
			near	far				
<a href="#">3374MH0004190021200431C00</a>	431	14765	<b>3.60</b>	-0.1	0.1	19.6	0.3	<b>255</b>
<a href="#">3374MH0004190021200432C00</a>	432	14837	<b>3.42</b>	-0.1	0.1	18.9	0.2	<b>223</b>
<a href="#">3374MH0004190021200433C00</a>	433	14909	<b>3.24</b>	-0.1	0.1	18.3	0.2	<b>191</b>
<a href="#">3374MH0004190021200434C00</a>	434	14981	<b>3.08</b>	-0.1	0.1	17.7	0.2	<b>159</b>
<a href="#">3374MH0004190021200435C00</a>	435	15053	<b>2.93</b>	-0.1	0.1	17.2	0.2	<b>127</b>
<a href="#">3374MH0004190021200436C00</a>	436	15125	<b>2.79</b>	-0.1	0.1	16.7	0.2	<b>85</b>
<a href="#">3374MH0004190021200437C00</a>	437	15197	<b>2.65</b>	-0.1	0.1	16.2	0.2	<b>63</b>
<a href="#">3374MH0004190021200438C00</a>	438	15269	<b>2.53</b>	-0.1	0.1	15.8	0.2	<b>31</b>

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### Sol 3374 - MAHLI Onboard Focus Merge Product Information

		target <b>Surumu - APXS spot 1 - ~5 cm standoff</b>						
			CDPID	corresponding frame:	3374MH0001520011200440C00			
best focus image:	3375MH0004400001200449R00	449		motor count:	13955	range (cm):	7.1	
range map product:	3375MH0004400001200450S00	450		acquired sequence:	mhli00152	stack type:	Relative	
acquired on date:	2-Feb-22			merge sequence:	mhli00440	merge type:	Basic	
motor count interval:	48	acquired on sol:	3374	focus merged on sol:	3375			
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)	pixel scale (µm/pixel)	pixel scale uncertainty (µm/pixel)	DN in range map	image n of 8
3374MH0001520021200441C00	441	13763	8.71	-0.2    0.2	37.5	0.8	255	1
3374MH0001520021200442C00	442	13811	8.27	-0.2    0.2	36.0	0.8	223	2
3374MH0001520021200443C00	443	13859	7.87	-0.2    0.2	34.6	0.7	191	3
3374MH0001520021200444C00	444	13907	7.50	-0.2    0.2	33.3	0.7	159	4
3374MH0001520021200445C00	445	13955	7.15	-0.2    0.2	32.1	0.6	127	5
3374MH0001520021200446C00	446	14003	6.82	-0.2    0.2	30.9	0.6	85	6
3374MH0001520021200447C00	447	14051	6.52	-0.2    0.1	29.9	0.5	63	7
3374MH0001520021200448C00	448	14099	6.24	-0.1    0.1	28.9	0.5	31	8

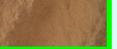
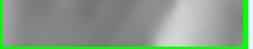
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Sol 3376 - MAHLI Onboard Focus Merge Product Information

		target Kokadai - stereo-1 - ~5 cm standoff							
			CDPID	corresponding frame:		3376MH0001730011200482C00			
best focus image:	3376MH0001930001200515R00		515	motor count:		14005	range (cm):	6.8	
range map product:	3376MH0001930001200516S00		516	acquired sequence:		mhli00173	stack type:	Relative	
acquired on date:	3-Feb-22			merge sequence:		mhli00193	merge type:	Basic	
motor count interval:		30	acquired on sol:		3376	focus merged on sol:		3376	
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (µm/pixel)	pixel scale uncertainty (µm/pixel)	DN in range map	image n of 8
				near	far				
3376MH0001730021200483C00	483	13885	7.66	-0.2	0.2	33.9	0.7	255	1
3376MH0001730021200484C00	484	13915	7.44	-0.2	0.2	33.1	0.6	223	2
3376MH0001730021200485C00	485	13945	7.22	-0.2	0.2	32.3	0.6	191	3
3376MH0001730021200486C00	486	13975	7.01	-0.2	0.2	31.6	0.6	159	4
3376MH0001730021200487C00	487	14005	6.81	-0.2	0.2	30.9	0.6	127	5
3376MH0001730021200488C00	488	14035	6.62	-0.2	0.2	30.2	0.6	85	6
3376MH0001730021200489C00	489	14065	6.44	-0.2	0.1	29.6	0.5	63	7
3376MH0001730021200490C00	490	14095	6.26	-0.1	0.1	28.9	0.5	31	8

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Sol 3376 - MAHLI Onboard Focus Merge Product Information

		target Kokadai - stereo-2 - ~5 cm standoff						
			CDPID	corresponding frame:		3376MH0001730011200492C00		
best focus image:	3376MH0001930001200513R00		513	motor count:		14005	range (cm):	6.8
range map product:	3376MH0001930001200514S00		514	acquired sequence:		mhli00173	stack type:	Relative
acquired on date:	3-Feb-22			merge sequence:		mhli00193	merge type:	Basic
motor count interval:		30	acquired on sol:		3376	focus merged on sol:		3376
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (µm/pixel)	pixel scale uncertainty (µm/pixel)	DN in range map
				near	far			
3376MH0001730021200493C00	493	13885	7.66	-0.2	0.2	33.9	0.7	255
3376MH0001730021200494C00	494	13915	7.44	-0.2	0.2	33.1	0.6	223
3376MH0001730021200495C00	495	13945	7.22	-0.2	0.2	32.3	0.6	191
3376MH0001730021200496C00	496	13975	7.01	-0.2	0.2	31.6	0.6	159
3376MH0001730021200497C00	497	14005	6.81	-0.2	0.2	30.9	0.6	127
3376MH0001730021200498C00	498	14035	6.62	-0.2	0.2	30.2	0.6	85
3376MH0001730021200499C00	499	14065	6.44	-0.2	0.1	29.6	0.5	63
3376MH0001730021200500C00	500	14095	6.26	-0.1	0.1	28.9	0.5	31

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### Sol 3376 - MAHLI Onboard Focus Merge Product Information

		target Kokadai - ~1 cm standoff						
			CDPID	corresponding frame:	3376MH0007160011200502C00			
best focus image:	3376MH0001930001200511R00	511		motor count:	15142	range (cm):	2.8	
range map product:	3376MH0001930001200512S00	512		acquired sequence:	mhli00716	stack type:	Relative	
acquired on date:	3-Feb-22			merge sequence:	mhli00193	merge type:	Basic	
motor count interval:	60	acquired on sol:	3376	focus merged on sol:	3376			
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)	pixel scale (μm/pixel)	pixel scale uncertainty (μm/pixel)	DN in range map	image n of 8
3376MH0007160021200503C00	503	14902	3.26	-0.1 near far	18.4	0.2	255	1
3376MH0007160021200504C00	504	14962	3.12	-0.1 near far	17.9	0.2	223	2
3376MH0007160021200505C00	505	15022	2.99	-0.1 near far	17.4	0.2	191	3
3376MH0007160021200506C00	506	15082	2.87	-0.1 near far	17.0	0.2	159	4
3376MH0007160021200507C00	507	15142	2.75	-0.1 near far	16.6	0.2	127	5
3376MH0007160021200508C00	508	15202	2.64	-0.1 near far	16.2	0.2	85	6
3376MH0007160021200509C00	509	15262	2.54	-0.1 near far	15.8	0.2	63	7
3376MH0007160021200510C00	510	15322	2.44	0.0 near far	15.5	0.2	31	8

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### Sol 3378 - MAHLI Onboard Focus Merge Product Information

		target <b>Aji</b> - stereo-1 - ~5 cm standoff						
best focus image:	<a href="#">3378MH0001530001200569R00</a>	569	corresponding frame:			<a href="#">3378MH0002240011200524C00</a>		
range map product:	<a href="#">3378MH0001530001200570S00</a>	570	motor count:			14022	range (cm):	6.7
acquired on date:	6-Feb-22				acquired sequence:	mhli00224	stack type:	Relative
motor count interval:		42	acquired on sol:		3378	merge sequence:	mhli00153	merge type:
			focus merged on sol:		3378			
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (µm/pixel)	pixel scale uncertainty (µm/pixel)	DN in range map
				near	far			
<a href="#">3378MH0002240021200525C00</a>	525	13854	7.91	-0.2	0.2	34.7	0.7	255
<a href="#">3378MH0002240021200526C00</a>	526	13896	7.58	-0.2	0.2	33.6	0.7	223
<a href="#">3378MH0002240021200527C00</a>	527	13938	7.27	-0.2	0.2	32.5	0.6	191
<a href="#">3378MH0002240021200528C00</a>	528	13980	6.98	-0.2	0.2	31.5	0.6	159
<a href="#">3378MH0002240021200529C00</a>	529	14022	6.70	-0.2	0.2	30.5	0.6	127
<a href="#">3378MH0002240021200530C00</a>	530	14064	6.44	-0.2	0.1	29.6	0.5	85
<a href="#">3378MH0002240021200531C00</a>	531	14106	6.20	-0.1	0.1	28.7	0.5	63
<a href="#">3378MH0002240021200532C00</a>	532	14148	5.96	-0.1	0.1	27.9	0.5	31
								8

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### Sol 3378 - MAHLI Onboard Focus Merge Product Information

		target <b>Aji</b> - stereo-2 - ~5 cm standoff						
best focus image:	<a href="#">3378MH0001530001200569R00</a>	567	corresponding frame:			<a href="#">3378MH0002240011200534C00</a>		
range map product:	<a href="#">3378MH0001530001200568S00</a>	568	motor count:			14028	range (cm):	6.7
acquired on date:	6-Feb-22				acquired sequence:	mhli00224	stack type:	Relative
motor count interval:		42	acquired on sol:		3378	merge sequence:	mhli00153	merge type:
			focus merged on sol:		3378			
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (µm/pixel)	pixel scale uncertainty (µm/pixel)	DN in range map
				near	far			
<a href="#">3378MH0002240021200535C00</a>	535	13860	7.86	-0.2	0.2	34.6	0.7	255
<a href="#">3378MH0002240021200536C00</a>	536	13902	7.53	-0.2	0.2	33.4	0.7	223
<a href="#">3378MH0002240021200537C00</a>	537	13944	7.23	-0.2	0.2	32.3	0.6	191
<a href="#">3378MH0002240021200538C00</a>	538	13986	6.94	-0.2	0.2	31.3	0.6	159
<a href="#">3378MH0002240021200539C00</a>	539	14028	6.66	-0.2	0.2	30.4	0.6	127
<a href="#">3378MH0002240021200540C00</a>	540	14070	6.41	-0.2	0.1	29.4	0.5	85
<a href="#">3378MH0002240021200541C00</a>	541	14112	6.16	-0.1	0.1	28.6	0.5	63
<a href="#">3378MH0002240021200542C00</a>	542	14154	5.93	-0.1	0.1	27.8	0.5	31
								8

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### Sol 3378 - MAHLI Onboard Focus Merge Product Information

		target <b>Erico - stereo-1 - ~5 cm standoff</b>						
best focus image:	<a href="#">3378MH0001530001200565R00</a>	565	motor count:			14030	range (cm):	6.7
range map product:	<a href="#">3378MH0001530001200566S00</a>	566	acquired sequence:			mhli00299	stack type:	Relative
acquired on date:	6-Feb-22				merge sequence:	mhli00153	merge type:	Basic
motor count interval:		36	acquired on sol:		3378	focus merged on sol:		3378
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (μm/pixel)	pixel scale uncertainty (μm/pixel)	DN in range map
			near	far				
3378MH0002990021200545C00	545	13886	7.66	-0.2	0.2	33.9	0.7	255
3378MH0002990021200546C00	546	13922	7.39	-0.2	0.2	32.9	0.6	223
3378MH0002990021200547C00	547	13958	7.13	-0.2	0.2	32.0	0.6	191
3378MH0002990021200548C00	548	13994	6.88	-0.2	0.2	31.1	0.6	159
3378MH0002990021200549C00	549	14030	6.65	-0.2	0.2	30.3	0.6	127
3378MH0002990021200550C00	550	14066	6.43	-0.2	0.1	29.5	0.5	85
3378MH0002990021200551C00	551	14102	6.22	-0.1	0.1	28.8	0.5	63
3378MH0002990021200552C00	552	14138	6.02	-0.1	0.1	28.1	0.5	31
								8

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### Sol 3378 - MAHLI Onboard Focus Merge Product Information

		target <b>Erico - stereo-2 - ~5 cm standoff</b>						
best focus image:	<a href="#">3378MH0001530001200563R00</a>	563	motor count:			14029	range (cm):	6.7
range map product:	<a href="#">3378MH0001530001200564S00</a>	564	acquired sequence:			mhli00299	stack type:	Relative
acquired on date:	6-Feb-22				merge sequence:	mhli00153	merge type:	Basic
motor count interval:		36	acquired on sol:		3378	focus merged on sol:		3378
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (μm/pixel)	pixel scale uncertainty (μm/pixel)	DN in range map
			near	far				
3378MH0002990021200555C00	555	13885	7.66	-0.2	0.2	33.9	0.7	255
3378MH0002990021200556C00	556	13921	7.39	-0.2	0.2	32.9	0.6	223
3378MH0002990021200557C00	557	13957	7.14	-0.2	0.2	32.0	0.6	191
3378MH0002990021200558C00	558	13993	6.89	-0.2	0.2	31.2	0.6	159
3378MH0002990021200559C00	559	14029	6.66	-0.2	0.2	30.3	0.6	127
3378MH0002990021200560C00	560	14065	6.44	-0.2	0.1	29.6	0.5	85
3378MH0002990021200561C00	561	14101	6.22	-0.1	0.1	28.8	0.5	63
3378MH0002990021200562C00	562	14137	6.02	-0.1	0.1	28.1	0.5	31
								8

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#### Sol 3381 - MAHLI Onboard Focus Merge Product Information

		target <b>El_Dorado</b> - stereo-1 - ~45 mm standoff						
			CDPID	corresponding frame:		3381MH0001820011200574C00		
best focus image:		3381MH0001930001200607R00	607	motor count:		14053	range (cm):	6.5
range map product:		3381MH0001930001200608S00	608	acquired sequence:		mhli00182	stack type:	Relative
acquired on date:		9-Feb-22		merge sequence:		mhli00193	merge type:	Basic
motor count interval:		24	acquired on sol:		3381	focus merged on sol:		3381
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (μm/pixel)	pixel scale uncertainty (μm/pixel)	DN in range map
				near	far			
3381MH0001820021200575C00	575	13957	7.14	-0.2	0.2	32.0	0.6	255
3381MH0001820021200576C00	576	13981	6.97	-0.2	0.2	31.4	0.6	223
3381MH0001820021200577C00	577	14005	6.81	-0.2	0.2	30.9	0.6	191
3381MH0001820021200578C00	578	14029	6.66	-0.2	0.2	30.3	0.6	159
3381MH0001820021200579C00	579	14053	6.51	-0.2	0.1	29.8	0.5	127
3381MH0001820021200580C00	580	14077	6.36	-0.2	0.1	29.3	0.5	85
3381MH0001820021200581C00	581	14101	6.22	-0.1	0.1	28.8	0.5	63
3381MH0001820021200582C00	582	14125	6.09	-0.1	0.1	28.3	0.5	31
								8

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#### Sol 3381 - MAHLI Onboard Focus Merge Product Information

		target <b>El_Dorado</b> - stereo-2 - ~45 mm standoff						
			CDPID	corresponding frame:		3381MH0001820011200584C00		
best focus image:		3381MH0001930001200605R00	605	motor count:		14055	range (cm):	6.5
range map product:		3381MH0001930001200606S00	606	acquired sequence:		mhli00182	stack type:	Relative
acquired on date:		9-Feb-22		merge sequence:		mhli00193	merge type:	Basic
motor count interval:		24	acquired on sol:		3381	focus merged on sol:		3381
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (μm/pixel)	pixel scale uncertainty (μm/pixel)	DN in range map
				near	far			
3381MH0001820021200585C00	585	13959	7.12	-0.2	0.2	32.0	0.6	255
3381MH0001820021200586C00	586	13983	6.96	-0.2	0.2	31.4	0.6	223
3381MH0001820021200587C00	587	14007	6.80	-0.2	0.2	30.8	0.6	191
3381MH0001820021200588C00	588	14031	6.64	-0.2	0.2	30.3	0.6	159
3381MH0001820021200589C00	589	14055	6.50	-0.2	0.1	29.8	0.5	127
3381MH0001820021200590C00	590	14079	6.35	-0.2	0.1	29.3	0.5	85
3381MH0001820021200591C00	591	14103	6.21	-0.1	0.1	28.8	0.5	63
3381MH0001820021200592C00	592	14127	6.08	-0.1	0.1	28.3	0.5	31
								8

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### Sol 3381 - MAHLI Onboard Focus Merge Product Information

		target El_Dorado - ~6 mm standoff						
			CDPID	corresponding frame:		3381MH0004260011200594C00		
best focus image:		3381MH0001930001200603R00	603	motor count:		15281	range (cm): 2.5	
range map product:		3381MH0001930001200604S00	604	acquired sequence:		mhli00426	stack type: Relative	
acquired on date:		9-Feb-22		merge sequence:		mhli00193	merge type: Basic	
motor count interval:		48	acquired on sol:		3381	focus merged on sol:		
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)	pixel scale (µm/pixel)	pixel scale uncertainty (µm/pixel)	DN in range map	image n of 8
				near				
3381MH0004260021200595C00	595	15089	2.86	-0.1	0.1	17.0	0.2	255
3381MH0004260021200596C00	596	15137	2.76	-0.1	0.1	16.6	0.2	223
3381MH0004260021200597C00	597	15185	2.67	-0.1	0.1	16.3	0.2	191
3381MH0004260021200598C00	598	15233	2.59	-0.1	0.1	16.0	0.2	159
3381MH0004260021200599C00	599	15281	2.51	0.0	0.1	15.7	0.2	127
3381MH0004260021200600C00	600	15329	2.43	0.0	0.1	15.5	0.2	85
3381MH0004260021200601C00	601	15377	2.35	0.0	0.1	15.2	0.2	63
3381MH0004260021200602C00	602	15425	2.28	0.0	0.1	14.9	0.2	31
								8

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#### Sol 3383 - MAHLI Onboard Focus Merge Product Information

		target Tantallon_Castle - stereo-1 - ~5 cm standoff						
best focus image:	<a href="#">3383MH0002650001200633R00</a>	633	motor count:	<a href="#">14004</a>	range (cm):	<a href="#">6.8</a>		
range map product:	<a href="#">3383MH0002650001200634S00</a>	634	acquired sequence:	mhli00173	stack type:	<a href="#">Relative</a>		
acquired on date:	11-Feb-22		merge sequence:	mhli00265	merge type:	<a href="#">Basic</a>		
motor count interval:	30	acquired on sol:	3383	focus merged on sol:	3383			
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)	pixel scale (μm/pixel)	pixel scale uncertainty (μm/pixel)	DN in range map	image n of 8
			near	far				
<a href="#">3383MH0001730021200613C00</a>	613	13884	<a href="#">7.67</a>	<a href="#">-0.2</a>	<a href="#">0.2</a>	<a href="#">33.9</a>	<a href="#">0.7</a>	<a href="#">255</a>
<a href="#">3383MH0001730021200614C00</a>	614	13914	<a href="#">7.44</a>	<a href="#">-0.2</a>	<a href="#">0.2</a>	<a href="#">33.1</a>	<a href="#">0.7</a>	<a href="#">223</a>
<a href="#">3383MH0001730021200615C00</a>	615	13944	<a href="#">7.23</a>	<a href="#">-0.2</a>	<a href="#">0.2</a>	<a href="#">32.3</a>	<a href="#">0.6</a>	<a href="#">191</a>
<a href="#">3383MH0001730021200616C00</a>	616	13974	<a href="#">7.02</a>	<a href="#">-0.2</a>	<a href="#">0.2</a>	<a href="#">31.6</a>	<a href="#">0.6</a>	<a href="#">159</a>
<a href="#">3383MH0001730021200617C00</a>	617	14004	<a href="#">6.82</a>	<a href="#">-0.2</a>	<a href="#">0.2</a>	<a href="#">30.9</a>	<a href="#">0.6</a>	<a href="#">127</a>
<a href="#">3383MH0001730021200618C00</a>	618	14034	<a href="#">6.63</a>	<a href="#">-0.2</a>	<a href="#">0.2</a>	<a href="#">30.2</a>	<a href="#">0.6</a>	<a href="#">85</a>
<a href="#">3383MH0001730021200619C00</a>	619	14064	<a href="#">6.44</a>	<a href="#">-0.2</a>	<a href="#">0.1</a>	<a href="#">29.6</a>	<a href="#">0.5</a>	<a href="#">63</a>
<a href="#">3383MH0001730021200620C00</a>	620	14094	<a href="#">6.27</a>	<a href="#">-0.1</a>	<a href="#">0.1</a>	<a href="#">29.0</a>	<a href="#">0.5</a>	<a href="#">31</a>

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#### Sol 3383 - MAHLI Onboard Focus Merge Product Information

		target Tantallon_Castle - stereo-2 - ~5 cm standoff						
best focus image:	<a href="#">3383MH0002650001200631R00</a>	631	motor count:	<a href="#">14007</a>	range (cm):	<a href="#">6.8</a>		
range map product:	<a href="#">3383MH0002650001200632S00</a>	632	acquired sequence:	mhli00173	stack type:	<a href="#">Relative</a>		
acquired on date:	11-Feb-22		merge sequence:	mhli00265	merge type:	<a href="#">Basic</a>		
motor count interval:	30	acquired on sol:	3383	focus merged on sol:	3383			
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)	pixel scale (μm/pixel)	pixel scale uncertainty (μm/pixel)	DN in range map	image n of 8
			near	far				
<a href="#">3383MH0001730021200623C00</a>	623	13887	<a href="#">7.65</a>	<a href="#">-0.2</a>	<a href="#">0.2</a>	<a href="#">33.8</a>	<a href="#">0.7</a>	<a href="#">255</a>
<a href="#">3383MH0001730021200624C00</a>	624	13917	<a href="#">7.42</a>	<a href="#">-0.2</a>	<a href="#">0.2</a>	<a href="#">33.0</a>	<a href="#">0.6</a>	<a href="#">223</a>
<a href="#">3383MH0001730021200625C00</a>	625	13947	<a href="#">7.21</a>	<a href="#">-0.2</a>	<a href="#">0.2</a>	<a href="#">32.3</a>	<a href="#">0.6</a>	<a href="#">191</a>
<a href="#">3383MH0001730021200626C00</a>	626	13977	<a href="#">7.00</a>	<a href="#">-0.2</a>	<a href="#">0.2</a>	<a href="#">31.5</a>	<a href="#">0.6</a>	<a href="#">159</a>
<a href="#">3383MH0001730021200627C00</a>	627	14007	<a href="#">6.80</a>	<a href="#">-0.2</a>	<a href="#">0.2</a>	<a href="#">30.8</a>	<a href="#">0.6</a>	<a href="#">127</a>
<a href="#">3383MH0001730021200628C00</a>	628	14037	<a href="#">6.61</a>	<a href="#">-0.2</a>	<a href="#">0.2</a>	<a href="#">30.2</a>	<a href="#">0.5</a>	<a href="#">85</a>
<a href="#">3383MH0001730021200629C00</a>	629	14067	<a href="#">6.42</a>	<a href="#">-0.2</a>	<a href="#">0.1</a>	<a href="#">29.5</a>	<a href="#">0.5</a>	<a href="#">63</a>
<a href="#">3383MH0001730021200630C00</a>	630	14097	<a href="#">6.25</a>	<a href="#">-0.1</a>	<a href="#">0.1</a>	<a href="#">28.9</a>	<a href="#">0.5</a>	<a href="#">31</a>

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#### Sol 3385 - MAHLI Onboard Focus Merge Product Information

		target <b>Kintradwell - after DRT - APXS spot 2 - stereo-1 - ~5 cm standoff</b>						
			CDPID	corresponding frame:		3385MH0007630011200639C00		
best focus image:		<a href="#">3386MH0001530001200688R00</a>	688	motor count:		14031	range (cm):	6.6
range map product:		<a href="#">3386MH0001530001200689S00</a>	689	acquired sequence:		mhli00763	stack type:	Relative
acquired on date:		13-Feb-22		merge sequence:		mhli00153	merge type:	Basic
motor count interval:		24	acquired on sol:		3385	focus merged on sol:		3386
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (μm/pixel)	pixel scale uncertainty (μm/pixel)	DN in range map
				near	far			
3385MH0007630031200641C00	641	13935	7.29	-0.2	0.2	32.6	0.6	255
3385MH0007630031200642C00	642	13959	7.12	-0.2	0.2	32.0	0.6	223
3385MH0007630031200643C00	643	13983	6.96	-0.2	0.2	31.4	0.6	191
3385MH0007630031200644C00	644	14007	6.80	-0.2	0.2	30.8	0.6	159
3385MH0007630031200645C00	645	14031	6.64	-0.2	0.2	30.3	0.6	127
3385MH0007630031200646C00	646	14055	6.50	-0.2	0.1	29.8	0.5	85
3385MH0007630031200647C00	647	14079	6.35	-0.2	0.1	29.3	0.5	63
3385MH0007630031200648C00	648	14103	6.21	-0.1	0.1	28.8	0.5	31
								8

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#### Sol 3385 - MAHLI Onboard Focus Merge Product Information

		target <b>Kintradwell - after DRT - APXS spot 2 - stereo-2 - ~5 cm standoff</b>						
			CDPID	corresponding frame:		3385MH0007630011200650C00		
best focus image:		<a href="#">3386MH0001530001200686R00</a>	686	motor count:		14031	range (cm):	6.6
range map product:		<a href="#">3386MH0001530001200687S00</a>	687	acquired sequence:		mhli00763	stack type:	Relative
acquired on date:		13-Feb-22		merge sequence:		mhli00153	merge type:	Basic
motor count interval:		24	acquired on sol:		3385	focus merged on sol:		3386
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (μm/pixel)	pixel scale uncertainty (μm/pixel)	DN in range map
				near	far			
3385MH0007630031200652C00	652	13935	7.29	-0.2	0.2	32.6	0.6	255
3385MH0007630031200653C00	653	13959	7.12	-0.2	0.2	32.0	0.6	223
3385MH0007630031200654C00	654	13983	6.96	-0.2	0.2	31.4	0.6	191
3385MH0007630031200655C00	655	14007	6.80	-0.2	0.2	30.8	0.6	159
3385MH0007630031200656C00	656	14031	6.64	-0.2	0.2	30.3	0.6	127
3385MH0007630031200657C00	657	14055	6.50	-0.2	0.1	29.8	0.5	85
3385MH0007630031200658C00	658	14079	6.35	-0.2	0.1	29.3	0.5	63
3385MH0007630031200659C00	659	14103	6.21	-0.1	0.1	28.8	0.5	31
								8

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### Sol 3385 - MAHLI Onboard Focus Merge Product Information

		target <b>Kintradwell - after DRT - APXS spot 2 - ~1 cm standoff</b>						
best focus image:	<a href="#">3386MH0001530001200684R00</a>	684	motor count:		15192	range (cm):	2.7	
range map product:	<a href="#">3386MH0001530001200685S00</a>	685	acquired sequence:		mhli00785	stack type:	Relative	
acquired on date:	13-Feb-22			merge sequence:		mhli00153	merge type:	Basic
motor count interval:		42	acquired on sol:		3385	focus merged on sol:		3386
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (µm/pixel)	pixel scale uncertainty (µm/pixel)	DN in range map
				near	far			
<a href="#">3385MH0007850031200663C00</a>	663	15024	2.99	-0.1	0.1	17.4	0.2	255
<a href="#">3385MH0007850031200664C00</a>	664	15066	2.90	-0.1	0.1	17.1	0.2	223
<a href="#">3385MH0007850031200665C00</a>	665	15108	2.82	-0.1	0.1	16.8	0.2	191
<a href="#">3385MH0007850031200666C00</a>	666	15150	2.74	-0.1	0.1	16.5	0.2	159
<a href="#">3385MH0007850031200667C00</a>	667	15192	2.66	-0.1	0.1	16.3	0.2	127
<a href="#">3385MH0007850031200668C00</a>	668	15234	2.59	-0.1	0.1	16.0	0.2	85
<a href="#">3385MH0007850031200669C00</a>	669	15276	2.52	-0.1	0.1	15.8	0.2	63
<a href="#">3385MH0007850031200670C00</a>	670	15318	2.45	0.0	0.1	15.5	0.2	31
								8

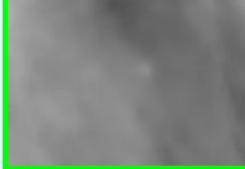
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### Sol 3385 - MAHLI Onboard Focus Merge Product Information

		target <b>Kintradwell - after DRT - APXS spot 1 - ~5 cm standoff</b>						
best focus image:	<a href="#">3386MH0001530001200682R00</a>	682	motor count:		14021	range (cm):	6.7	
range map product:	<a href="#">3386MH0001530001200683S00</a>	683	acquired sequence:		mhli00763	stack type:	Relative	
acquired on date:	13-Feb-22			merge sequence:		mhli00153	merge type:	Basic
motor count interval:		24	acquired on sol:		3385	focus merged on sol:		3386
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (µm/pixel)	pixel scale uncertainty (µm/pixel)	DN in range map
				near	far			
<a href="#">3385MH0007630031200674C00</a>	674	13925	7.36	-0.2	0.2	32.8	0.6	255
<a href="#">3385MH0007630031200675C00</a>	675	13949	7.19	-0.2	0.2	32.2	0.6	223
<a href="#">3385MH0007630031200676C00</a>	676	13973	7.02	-0.2	0.2	31.6	0.6	191
<a href="#">3385MH0007630031200677C00</a>	677	13997	6.86	-0.2	0.2	31.1	0.6	159
<a href="#">3385MH0007630031200678C00</a>	678	14021	6.71	-0.2	0.2	30.5	0.6	127
<a href="#">3385MH0007630031200679C00</a>	679	14045	6.56	-0.2	0.1	30.0	0.5	85
<a href="#">3385MH0007630031200680C00</a>	680	14069	6.41	-0.2	0.1	29.5	0.5	63
<a href="#">3385MH0007630031200681C00</a>	681	14093	6.27	-0.1	0.1	29.0	0.5	31
								8

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### Sol 3387 - MAHLI Onboard Focus Merge Product Information

		target <b>Loch_Garten</b> - after DRT - stereo-1 - ~5 cm standoff						
best focus image:	<a href="#">3387MH0001930001200734R00</a>	734	motor count:		<a href="#">14020</a>	range (cm):	<a href="#">6.7</a>	
range map product:	<a href="#">3387MH0001930001200735S00</a>	735	acquired sequence:		mhli00763	stack type:	<a href="#">Relative</a>	
acquired on date:	15-Feb-22			merge sequence:		mhli00193	merge type:	<a href="#">Basic</a>
motor count interval:		24	acquired on sol:		3387	focus merged on sol:		3387
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (μm/pixel)	pixel scale uncertainty (μm/pixel)	DN in range map
			near	far				
<a href="#">3387MH0007630031200700C00</a>	700	13924	<a href="#">7.37</a>	<a href="#">-0.2</a>	<a href="#">0.2</a>	<a href="#">32.8</a>	<a href="#">0.6</a>	<a href="#">255</a>
<a href="#">3387MH0007630031200701C00</a>	701	13948	<a href="#">7.20</a>	<a href="#">-0.2</a>	<a href="#">0.2</a>	<a href="#">32.2</a>	<a href="#">0.6</a>	<a href="#">223</a>
<a href="#">3387MH0007630031200702C00</a>	702	13972	<a href="#">7.03</a>	<a href="#">-0.2</a>	<a href="#">0.2</a>	<a href="#">31.7</a>	<a href="#">0.6</a>	<a href="#">191</a>
<a href="#">3387MH0007630031200703C00</a>	703	13996	<a href="#">6.87</a>	<a href="#">-0.2</a>	<a href="#">0.2</a>	<a href="#">31.1</a>	<a href="#">0.6</a>	<a href="#">159</a>
<a href="#">3387MH0007630031200704C00</a>	704	14020	<a href="#">6.71</a>	<a href="#">-0.2</a>	<a href="#">0.2</a>	<a href="#">30.5</a>	<a href="#">0.6</a>	<a href="#">127</a>
<a href="#">3387MH0007630031200705C00</a>	705	14044	<a href="#">6.56</a>	<a href="#">-0.2</a>	<a href="#">0.1</a>	<a href="#">30.0</a>	<a href="#">0.5</a>	<a href="#">85</a>
<a href="#">3387MH0007630031200706C00</a>	706	14068	<a href="#">6.42</a>	<a href="#">-0.2</a>	<a href="#">0.1</a>	<a href="#">29.5</a>	<a href="#">0.5</a>	<a href="#">63</a>
<a href="#">3387MH0007630031200707C00</a>	707	14092	<a href="#">6.28</a>	<a href="#">-0.1</a>	<a href="#">0.1</a>	<a href="#">29.0</a>	<a href="#">0.5</a>	<a href="#">31</a>

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### Sol 3387 - MAHLI Onboard Focus Merge Product Information

		target <b>Loch_Garten</b> - after DRT - stereo-2 - ~5 cm standoff						
best focus image:	<a href="#">3387MH0001930001200732R00</a>	732	motor count:		<a href="#">14030</a>	range (cm):	<a href="#">6.7</a>	
range map product:	<a href="#">3387MH0001930001200733S00</a>	733	acquired sequence:		mhli00763	stack type:	<a href="#">Relative</a>	
acquired on date:	15-Feb-22			merge sequence:		mhli00193	merge type:	<a href="#">Basic</a>
motor count interval:		24	acquired on sol:		3387	focus merged on sol:		3387
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (μm/pixel)	pixel scale uncertainty (μm/pixel)	DN in range map
			near	far				
<a href="#">3387MH0007630031200711C00</a>	711	13934	<a href="#">7.30</a>	<a href="#">-0.2</a>	<a href="#">0.2</a>	<a href="#">32.6</a>	<a href="#">0.6</a>	<a href="#">255</a>
<a href="#">3387MH0007630031200712C00</a>	712	13958	<a href="#">7.13</a>	<a href="#">-0.2</a>	<a href="#">0.2</a>	<a href="#">32.0</a>	<a href="#">0.6</a>	<a href="#">223</a>
<a href="#">3387MH0007630031200713C00</a>	713	13982	<a href="#">6.96</a>	<a href="#">-0.2</a>	<a href="#">0.2</a>	<a href="#">31.4</a>	<a href="#">0.6</a>	<a href="#">191</a>
<a href="#">3387MH0007630031200714C00</a>	714	14006	<a href="#">6.80</a>	<a href="#">-0.2</a>	<a href="#">0.2</a>	<a href="#">30.9</a>	<a href="#">0.6</a>	<a href="#">159</a>
<a href="#">3387MH0007630031200715C00</a>	715	14030	<a href="#">6.65</a>	<a href="#">-0.2</a>	<a href="#">0.2</a>	<a href="#">30.3</a>	<a href="#">0.6</a>	<a href="#">127</a>
<a href="#">3387MH0007630031200716C00</a>	716	14054	<a href="#">6.50</a>	<a href="#">-0.2</a>	<a href="#">0.1</a>	<a href="#">29.8</a>	<a href="#">0.5</a>	<a href="#">85</a>
<a href="#">3387MH0007630031200717C00</a>	717	14078	<a href="#">6.36</a>	<a href="#">-0.2</a>	<a href="#">0.1</a>	<a href="#">29.3</a>	<a href="#">0.5</a>	<a href="#">63</a>
<a href="#">3387MH0007630031200718C00</a>	718	14102	<a href="#">6.22</a>	<a href="#">-0.1</a>	<a href="#">0.1</a>	<a href="#">28.8</a>	<a href="#">0.5</a>	<a href="#">31</a>

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### Sol 3387 - MAHLI Onboard Focus Merge Product Information

		target <a href="#">Loch_Garten</a> - after DRT - ~1 cm standoff						
			CDPID	corresponding frame:	3387MH0006030011200720C00			
best focus image:	3387MH0001930001200730R00	730		motor count:	15168	range (cm):	2.7	
range map product:	3387MH0001930001200731S00	731		acquired sequence:	mhli00603	stack type:	Relative	
acquired on date:	15-Feb-22			merge sequence:	mhli00193	merge type:	Basic	
motor count interval:	54	acquired on sol:	3387	focus merged on sol:	3387			
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)	pixel scale (μm/pixel)	pixel scale uncertainty (μm/pixel)	DN in range map	image n of 8
3387MH0006030031200722C00	722	14952	3.14	-0.1 near	0.1 far	18.0	0.2	255 1
3387MH0006030031200723C00	723	15006	3.03	-0.1 near	0.1 far	17.6	0.2	223 2
3387MH0006030031200724C00	724	15060	2.91	-0.1 near	0.1 far	17.2	0.2	191 3
3387MH0006030031200725C00	725	15114	2.81	-0.1 near	0.1 far	16.8	0.2	159 4
3387MH0006030031200726C00	726	15168	2.71	-0.1 near	0.1 far	16.4	0.2	127 5
3387MH0006030031200727C00	727	15222	2.61	-0.1 near	0.1 far	16.1	0.2	85 6
3387MH0006030031200728C00	728	15276	2.52	-0.1 near	0.1 far	15.8	0.2	63 7
3387MH0006030031200729C00	729	15330	2.43	0.0 near	0.1 far	15.4	0.2	31 8

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Sol 3388 - MAHLI Onboard Focus Merge Product Information

		target Tappington - stereo-1 - ~35 mm standoff							
best focus image:	3388MH0001630001200824R00		CDPID	corresponding frame:		3388MH0001820011200748C00			
range map product:	3388MH0001630001200825S00		824	motor count:		14227	range (cm):	5.6	
acquired on date:	16-Feb-22		825	acquired sequence:		mhli00182	stack type:	Relative	
merge sequence:			mhli00163			merge type:			
motor count interval:		24	acquired on sol:		3388	focus merged on sol:		3388	
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (µm/pixel)	pixel scale uncertainty (µm/pixel)	DN in range map	image n of 8
				near	far				
3388MH0001820021200749C00	749	14131	6.06	-0.1	0.1	28.2	0.5	255	1
3388MH0001820021200750C00	750	14155	5.93	-0.1	0.1	27.8	0.5	223	2
3388MH0001820021200751C00	751	14179	5.80	-0.1	0.1	27.3	0.4	191	3
3388MH0001820021200752C00	752	14203	5.68	-0.1	0.1	26.9	0.4	159	4
3388MH0001820021200753C00	753	14227	5.56	-0.1	0.1	26.5	0.4	127	5
3388MH0001820021200754C00	754	14251	5.44	-0.1	0.1	26.1	0.4	85	6
3388MH0001820021200755C00	755	14275	5.33	-0.1	0.1	25.7	0.4	63	7
3388MH0001820021200756C00	756	14299	5.22	-0.1	0.1	25.3	0.4	31	8

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Sol 3388 - MAHLI Onboard Focus Merge Product Information

		target Tappington - stereo-2 - ~35 mm standoff							
best focus image:	3388MH0001630001200822R00		CDPID	corresponding frame:		3388MH0001820011200758C00			
range map product:	3388MH0001630001200823S00		822	motor count:		14230	range (cm):	5.5	
acquired on date:	2022-02-16		823	acquired sequence:		mhli00182	stack type:	Relative	
motor count interval:	24		acquired on sol:		3388	merge sequence:	mhli00163	merge type:	
Individual Focus Stack Images		CDPID	motor count	range (cm)	range uncertainty (cm)	pixel scale (µm/pixel)	pixel scale uncertainty (µm/pixel)	DN in range map	image n of 8
3388MH0001820021200759C00	759	14134	6.04	-0.1	0.1	28.2	0.5	255	1
3388MH0001820021200760C00	760	14158	5.91	-0.1	0.1	27.7	0.4	223	2
3388MH0001820021200761C00	761	14182	5.78	-0.1	0.1	27.3	0.4	191	3
3388MH0001820021200762C00	762	14206	5.66	-0.1	0.1	26.8	0.4	159	4
3388MH0001820021200763C00	763	14230	5.54	-0.1	0.1	26.4	0.4	127	5
3388MH0001820021200764C00	764	14254	5.43	-0.1	0.1	26.0	0.4	85	6
3388MH0001820021200765C00	765	14278	5.32	-0.1	0.1	25.6	0.4	63	7
3388MH0001820021200766C00	766	14302	5.21	-0.1	0.1	25.2	0.4	31	8

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### Sol 3388 - MAHLI Onboard Focus Merge Product Information

		target <b>Loch_Coruisk-</b> after DRT - APXS spot 2 - stereo-1 - ~5 cm standoff						
			CDPID	corresponding frame:	3388MH0007230011200771C00			
best focus image:	3388MH0001630001200820R00	820		motor count:	13990	range (cm):	6.9	
range map product:	3388MH0001630001200821S00	821		acquired sequence:	mhli00723	stack type:	Relative	
acquired on date:	16-Feb-22			merge sequence:	mhli00163	merge type:	Basic	
motor count interval:	36	acquired on sol:	3388	focus merged on sol:	3388			
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)	pixel scale (μm/pixel)	pixel scale uncertainty (μm/pixel)	DN in range map	image n of 8
3388MH0007230031200773C00	773	13846	7.98	-0.2    0.2	35.0	0.7	255	1
3388MH0007230031200774C00	774	13882	7.69	-0.2    0.2	34.0	0.7	223	2
3388MH0007230031200775C00	775	13918	7.42	-0.2    0.2	33.0	0.6	191	3
3388MH0007230031200776C00	776	13954	7.16	-0.2    0.2	32.1	0.6	159	4
3388MH0007230031200777C00	777	13990	6.91	-0.2    0.2	31.2	0.6	127	5
3388MH0007230031200778C00	778	14026	6.68	-0.2    0.2	30.4	0.6	85	6
3388MH0007230031200779C00	779	14062	6.45	-0.2    0.1	29.6	0.5	63	7
3388MH0007230031200780C00	780	14098	6.24	-0.1    0.1	28.9	0.5	31	8

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### Sol 3388 - MAHLI Onboard Focus Merge Product Information

		target <b>Loch_Coruisk-</b> after DRT - APXS spot 2 - stereo-2 - ~5 cm standoff						
			CDPID	corresponding frame:	3388MH0007230011200782C00			
best focus image:	3388MH0001630001200818R00	818		motor count:	13992	range (cm):	6.9	
range map product:	3388MH0001630001200819S00	819		acquired sequence:	mhli00723	stack type:	Relative	
acquired on date:	16-Feb-22			merge sequence:	mhli00163	merge type:	Basic	
motor count interval:	36	acquired on sol:	3388	focus merged on sol:	3388			
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)	pixel scale (μm/pixel)	pixel scale uncertainty (μm/pixel)	DN in range map	image n of 8
3388MH0007230031200784C00	784	13848	7.96	-0.2    0.2	34.9	0.7	255	1
3388MH0007230031200785C00	785	13884	7.67	-0.2    0.2	33.9	0.7	223	2
3388MH0007230031200786C00	786	13920	7.40	-0.2    0.2	32.9	0.6	191	3
3388MH0007230031200787C00	787	13956	7.14	-0.2    0.2	32.0	0.6	159	4
3388MH0007230031200788C00	788	13992	6.90	-0.2    0.2	31.2	0.6	127	5
3388MH0007230031200789C00	789	14028	6.66	-0.2    0.2	30.4	0.6	85	6
3388MH0007230031200790C00	790	14064	6.44	-0.2    0.1	29.6	0.5	63	7
3388MH0007230031200791C00	791	14100	6.23	-0.1    0.1	28.8	0.5	31	8

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### Sol 3388 - MAHLI Onboard Focus Merge Product Information

		target <b>Loch_Coruisk</b> - after DRT - APXS spot 2 - ~1 cm standoff						
			CDPID	corresponding frame:		3388MH0006580011200793C00		
best focus image:		3388MH0001630001200816R00	816	motor count:		15063	range (cm):	2.9
range map product:		3388MH0001630001200817S00	817	acquired sequence:		mhli00658	stack type:	Relative
acquired on date:		16-Feb-22		merge sequence:		mhli00163	merge type:	Basic
motor count interval:		72	acquired on sol:		3388	focus merged on sol:		3388
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (µm/pixel)	pixel scale uncertainty (µm/pixel)	DN in range map
				near	far			
3388MH0006580031200795C00	795	14775	3.58	-0.1	0.1	19.5	0.3	255
3388MH0006580031200796C00	796	14847	3.39	-0.1	0.1	18.8	0.2	223
3388MH0006580031200797C00	797	14919	3.22	-0.1	0.1	18.2	0.2	191
3388MH0006580031200798C00	798	14991	3.06	-0.1	0.1	17.7	0.2	159
3388MH0006580031200799C00	799	15063	2.91	-0.1	0.1	17.1	0.2	127
3388MH0006580031200800C00	800	15135	2.77	-0.1	0.1	16.6	0.2	85
3388MH0006580031200801C00	801	15207	2.63	-0.1	0.1	16.2	0.2	63
3388MH0006580031200802C00	802	15279	2.51	0.0	0.1	15.7	0.2	31
								8

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### Sol 3388 - MAHLI Onboard Focus Merge Product Information

		target <b>Loch_Coruisk</b> - after DRT - APXS spot 1 - ~5 cm standoff						
			CDPID	corresponding frame:		3388MH0007230011200804C00		
best focus image:		3388MH0001630001200814R00	814	motor count:		13991	range (cm):	6.9
range map product:		3388MH0001630001200815S00	815	acquired sequence:		mhli00723	stack type:	Relative
acquired on date:		16-Feb-22		merge sequence:		mhli00163	merge type:	Basic
motor count interval:		36	acquired on sol:		3388	focus merged on sol:		3388
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (µm/pixel)	pixel scale uncertainty (µm/pixel)	DN in range map
				near	far			
3388MH0007230031200806C00	806	13847	7.97	-0.2	0.2	34.9	0.7	255
3388MH0007230031200807C00	807	13883	7.68	-0.2	0.2	33.9	0.7	223
3388MH0007230031200808C00	808	13919	7.41	-0.2	0.2	33.0	0.6	191
3388MH0007230031200809C00	809	13955	7.15	-0.2	0.2	32.1	0.6	159
3388MH0007230031200810C00	810	13991	6.90	-0.2	0.2	31.2	0.6	127
3388MH0007230031200811C00	811	14027	6.67	-0.2	0.2	30.4	0.6	85
3388MH0007230031200812C00	812	14063	6.45	-0.2	0.1	29.6	0.5	63
3388MH0007230031200813C00	813	14099	6.24	-0.1	0.1	28.9	0.5	31
								8

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#### Sol 3392 - MAHLI Onboard Focus Merge Product Information

		target Nithsdale - stereo-1 - ~4 cm standoff						
best focus image:	3393MH0002270001200899R00	899	motor count:		14160	range (cm):	5.9	
range map product:	3393MH0002270001200900S00	900	acquired sequence:		mhli00173	stack type:	Relative	
acquired on date:	20-Feb-22			merge sequence:		mhli00227	merge type:	Basic
motor count interval:		30	acquired on sol:		3392	focus merged on sol:		3393
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (μm/pixel)	pixel scale uncertainty (μm/pixel)	DN in range map
				near	far			
3392MH0001730021200835C00	835	14040	6.59	-0.2	0.2	30.1	0.5	255
3392MH0001730021200836C00	836	14070	6.41	-0.2	0.1	29.4	0.5	223
3392MH0001730021200837C00	837	14100	6.23	-0.1	0.1	28.8	0.5	191
3392MH0001730021200838C00	838	14130	6.06	-0.1	0.1	28.2	0.5	159
3392MH0001730021200839C00	839	14160	5.90	-0.1	0.1	27.7	0.4	127
3392MH0001730021200840C00	840	14190	5.74	-0.1	0.1	27.1	0.4	85
3392MH0001730021200841C00	841	14220	5.59	-0.1	0.1	26.6	0.4	63
3392MH0001730021200842C00	842	14250	5.45	-0.1	0.1	26.1	0.4	31
								8

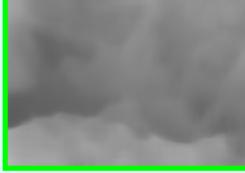
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#### Sol 3392 - MAHLI Onboard Focus Merge Product Information

		target Nithsdale - stereo-2 - ~4 cm standoff						
best focus image:	3393MH0002270001200897R00	897	motor count:		14148	range (cm):	6.0	
range map product:	3393MH0002270001200898S00	898	acquired sequence:		mhli00173	stack type:	Relative	
acquired on date:	20-Feb-22			merge sequence:		mhli00227	merge type:	Basic
motor count interval:		30	acquired on sol:		3392	focus merged on sol:		3393
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (μm/pixel)	pixel scale uncertainty (μm/pixel)	DN in range map
				near	far			
3392MH0001730021200845C00	845	14028	6.66	-0.2	0.2	30.4	0.6	255
3392MH0001730021200846C00	846	14058	6.48	-0.2	0.1	29.7	0.5	223
3392MH0001730021200847C00	847	14088	6.30	-0.1	0.1	29.1	0.5	191
3392MH0001730021200848C00	848	14118	6.13	-0.1	0.1	28.5	0.5	159
3392MH0001730021200849C00	849	14148	5.96	-0.1	0.1	27.9	0.5	127
3392MH0001730021200850C00	850	14178	5.81	-0.1	0.1	27.3	0.4	85
3392MH0001730021200851C00	851	14208	5.65	-0.1	0.1	26.8	0.4	63
3392MH0001730021200852C00	852	14238	5.51	-0.1	0.1	26.3	0.4	31
								8

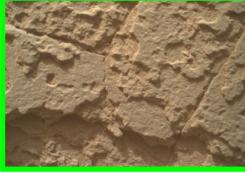
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#### Sol 3392 - MAHLI Onboard Focus Merge Product Information

		target Foss_Mine - stereo-1 - relief model position 1 - ~5 cm standoff							
			CDPID	corresponding frame:	3392MH0001820011200856C00				
best focus image:	3393MH0002270001200895R00	895		motor count:	14001	range (cm):	6.8		
range map product:	3393MH0002270001200896S00	896		acquired sequence:	mhli00182	stack type:	Relative		
acquired on date:	20-Feb-22			merge sequence:	mhli00227	merge type:	Basic		
motor count interval:	24	acquired on sol:	3392	focus merged on sol:	3393				
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (μm/pixel)	pixel scale uncertainty (μm/pixel)	DN in range map	image n of 8
			near	far					
3392MH0001820021200857C00	857	13905	7.51	-0.2	0.2	33.3	0.7	255	1
3392MH0001820021200858C00	858	13929	7.33	-0.2	0.2	32.7	0.6	223	2
3392MH0001820021200859C00	859	13953	7.16	-0.2	0.2	32.1	0.6	191	3
3392MH0001820021200860C00	860	13977	7.00	-0.2	0.2	31.5	0.6	159	4
3392MH0001820021200861C00	861	14001	6.84	-0.2	0.2	31.0	0.6	127	5
3392MH0001820021200862C00	862	14025	6.68	-0.2	0.2	30.4	0.6	85	6
3392MH0001820021200863C00	863	14049	6.53	-0.2	0.1	29.9	0.5	63	7
3392MH0001820021200864C00	864	14073	6.39	-0.2	0.1	29.4	0.5	31	8

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#### Sol 3392 - MAHLI Onboard Focus Merge Product Information

		target Foss_Mine - stereo-2 - relief model position 2 - ~5 cm standoff							
			CDPID	corresponding frame:	3392MH0001820011200866C00				
best focus image:	3393MH0002270001200893R00	893		motor count:	13999	range (cm):	6.9		
range map product:	3393MH0002270001200894S00	894		acquired sequence:	mhli00182	stack type:	Relative		
acquired on date:	20-Feb-22			merge sequence:	mhli00227	merge type:	Basic		
motor count interval:	24	acquired on sol:	3392	focus merged on sol:	3393				
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (μm/pixel)	pixel scale uncertainty (μm/pixel)	DN in range map	image n of 8
			near	far					
3392MH0001820021200867C00	867	13903	7.53	-0.2	0.2	33.4	0.7	255	1
3392MH0001820021200868C00	868	13927	7.35	-0.2	0.2	32.8	0.6	223	2
3392MH0001820021200869C00	869	13951	7.18	-0.2	0.2	32.2	0.6	191	3
3392MH0001820021200870C00	870	13975	7.01	-0.2	0.2	31.6	0.6	159	4
3392MH0001820021200871C00	871	13999	6.85	-0.2	0.2	31.0	0.6	127	5
3392MH0001820021200872C00	872	14023	6.70	-0.2	0.2	30.5	0.6	85	6
3392MH0001820021200873C00	873	14047	6.55	-0.2	0.1	29.9	0.5	63	7
3392MH0001820021200874C00	874	14071	6.40	-0.2	0.1	29.4	0.5	31	8

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### Sol 3392 - MAHLI Onboard Focus Merge Product Information

		target Foss_Mine - ~1 cm standoff						
			CDPID	corresponding frame:	3392MH0007430011200882C00			
best focus image:	3393MH0002270001200891R00	891		motor count:	15111	range (cm):	2.8	
range map product:	3393MH0002270001200892S00	892		acquired sequence:	mhli00743	stack type:	Relative	
acquired on date:	20-Feb-22			merge sequence:	mhli00227	merge type:	Basic	
motor count interval:	36	acquired on sol:	3392	focus merged on sol:	3393			
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)	pixel scale (μm/pixel)	pixel scale uncertainty (μm/pixel)	DN in range map	image n of 8
3392MH0007430021200883C00	883	14967	3.11	-0.1 0.1	17.8	0.2	255	1
3392MH0007430021200884C00	884	15003	3.03	-0.1 0.1	17.6	0.2	223	2
3392MH0007430021200885C00	885	15039	2.96	-0.1 0.1	17.3	0.2	191	3
3392MH0007430021200886C00	886	15075	2.88	-0.1 0.1	17.1	0.2	159	4
3392MH0007430021200887C00	887	15111	2.81	-0.1 0.1	16.8	0.2	127	5
3392MH0007430021200888C00	888	15147	2.74	-0.1 0.1	16.6	0.2	85	6
3392MH0007430021200889C00	889	15183	2.68	-0.1 0.1	16.3	0.2	63	7
3392MH0007430021200890C00	890	15219	2.61	-0.1 0.1	16.1	0.2	31	8

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#### Sol 3395 - MAHLI Onboard Focus Merge Product Information

		target <b>Galdenoch</b> - after DRT - APXS spot 2 - stereo-1 - ~5 cm standoff						
			CDPID	corresponding frame:		3395MH0006990011200905C00		
best focus image:	3395MH0001530001200954R00		954	motor count:		13968	range (cm):	7.1
range map product:	3395MH0001530001200955S00		955	acquired sequence:		mhli00699	stack type:	Relative
acquired on date:	23-Feb-22			merge sequence:		mhli00153	merge type:	Basic
motor count interval:		30	acquired on sol:		3395	focus merged on sol:		3395
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (μm/pixel)	pixel scale uncertainty (μm/pixel)	DN in range map
				near	far			
3395MH0006990031200907C00	907	13848	7.96	-0.2	0.2	34.9	0.7	255
3395MH0006990031200908C00	908	13878	7.72	-0.2	0.2	34.1	0.7	223
3395MH0006990031200909C00	909	13908	7.49	-0.2	0.2	33.3	0.7	191
3395MH0006990031200910C00	910	13938	7.27	-0.2	0.2	32.5	0.6	159
3395MH0006990031200911C00	911	13968	7.06	-0.2	0.2	31.7	0.6	127
3395MH0006990031200912C00	912	13998	6.86	-0.2	0.2	31.0	0.6	85
3395MH0006990031200913C00	913	14028	6.66	-0.2	0.2	30.4	0.6	63
3395MH0006990031200914C00	914	14058	6.48	-0.2	0.1	29.7	0.5	31
								8

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#### Sol 3395 - MAHLI Onboard Focus Merge Product Information

		target <b>Galdenoch</b> - after DRT - APXS spot 2 - stereo-2 - ~5 cm standoff						
			CDPID	corresponding frame:		3395MH0006990011200916C00		
best focus image:	3395MH0001530001200952R00		952	motor count:		13976	range (cm):	7.0
range map product:	3395MH0001530001200953S00		953	acquired sequence:		mhli00699	stack type:	Relative
acquired on date:	23-Feb-22			merge sequence:		mhli00153	merge type:	Basic
motor count interval:		30	acquired on sol:		3395	focus merged on sol:		3395
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (μm/pixel)	pixel scale uncertainty (μm/pixel)	DN in range map
				near	far			
3395MH0006990031200918C00	918	13856	7.89	-0.2	0.2	34.7	0.7	255
3395MH0006990031200919C00	919	13886	7.66	-0.2	0.2	33.9	0.7	223
3395MH0006990031200920C00	920	13916	7.43	-0.2	0.2	33.1	0.6	191
3395MH0006990031200921C00	921	13946	7.21	-0.2	0.2	32.3	0.6	159
3395MH0006990031200922C00	922	13976	7.00	-0.2	0.2	31.6	0.6	127
3395MH0006990031200923C00	923	14006	6.80	-0.2	0.2	30.9	0.6	85
3395MH0006990031200924C00	924	14036	6.61	-0.2	0.2	30.2	0.5	63
3395MH0006990031200925C00	925	14066	6.43	-0.2	0.1	29.5	0.5	31
								8

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### Sol 3395 - MAHLI Onboard Focus Merge Product Information

		target Galdenoch - after DRT - APXS spot 1 - ~5 cm standoff						
			CDPID	corresponding frame:		3395MH0006990011200927C00		
best focus image:		3395MH0001530001200950R00	950	motor count:		13979	range (cm):	7.0
range map product:		3395MH0001530001200951S00	951	acquired sequence:		mhli00699	stack type:	Relative
acquired on date:		23-Feb-22			merge sequence:		mhli00153	merge type: Basic
motor count interval:		30	acquired on sol:		3395	focus merged on sol:		3395
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (µm/pixel)	pixel scale uncertainty (µm/pixel)	DN in range map
				near	far			
3395MH0006990031200929C00	929	13859	7.87	-0.2	0.2	34.6	0.7	255
3395MH0006990031200930C00	930	13889	7.63	-0.2	0.2	33.8	0.7	223
3395MH0006990031200931C00	931	13919	7.41	-0.2	0.2	33.0	0.6	191
3395MH0006990031200932C00	932	13949	7.19	-0.2	0.2	32.2	0.6	159
3395MH0006990031200933C00	933	13979	6.98	-0.2	0.2	31.5	0.6	127
3395MH0006990031200934C00	934	14009	6.79	-0.2	0.2	30.8	0.6	85
3395MH0006990031200935C00	935	14039	6.59	-0.2	0.2	30.1	0.5	63
3395MH0006990031200936C00	936	14069	6.41	-0.2	0.1	29.5	0.5	31
								8

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### Sol 3395 - MAHLI Onboard Focus Merge Product Information

		target Galdenoch - after DRT - APXS spot 2 - ~1 cm standoff						
			CDPID	corresponding frame:		3395MH0008230011200938C00		
best focus image:		3395MH0001530001200948R00	948	motor count:		14975	range (cm):	3.1
range map product:		3395MH0001530001200949S00	949	acquired sequence:		mhli00823	stack type:	Relative
acquired on date:		23-Feb-22			merge sequence:		mhli00153	merge type: Basic
motor count interval:		60	acquired on sol:		3395	focus merged on sol:		3395
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (µm/pixel)	pixel scale uncertainty (µm/pixel)	DN in range map
				near	far			
3395MH0008230031200940C00	940	14735	3.69	-0.1	0.1	19.9	0.3	255
3395MH0008230031200941C00	941	14795	3.52	-0.1	0.1	19.3	0.3	223
3395MH0008230031200942C00	942	14855	3.37	-0.1	0.1	18.8	0.2	191
3395MH0008230031200943C00	943	14915	3.23	-0.1	0.1	18.3	0.2	159
3395MH0008230031200944C00	944	14975	3.09	-0.1	0.1	17.8	0.2	127
3395MH0008230031200945C00	945	15035	2.96	-0.1	0.1	17.3	0.2	85
3395MH0008230031200946C00	946	15095	2.84	-0.1	0.1	16.9	0.2	63
3395MH0008230031200947C00	947	15155	2.73	-0.1	0.1	16.5	0.2	31
								8

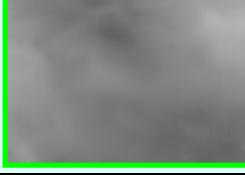
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### Sol 3396 - MAHLI Onboard Focus Merge Product Information

		target <b>Scousburgh</b> - after DRT - stereo-1 - ~5 cm standoff							
best focus image:	<a href="#">3397MH0001630001201038R00</a>	1038	motor count:		13998	range (cm):	6.9		
range map product:	<a href="#">3397MH0001630001201039S00</a>	1039	acquired sequence:		mhli00763	stack type:	Relative		
acquired on date:	24-Feb-22			merge sequence:		mhli00163	merge type: Basic		
motor count interval:		24	acquired on sol:		3396	focus merged on sol:			
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)	pixel scale (μm/pixel)	pixel scale uncertainty (μm/pixel)	DN in range map	image n of 8	
			near	far					
3396MH0007630031200966C00	966	13902	7.53	-0.2	0.2	33.4	0.7	255	1
3396MH0007630031200967C00	967	13926	7.36	-0.2	0.2	32.8	0.6	223	2
3396MH0007630031200968C00	968	13950	7.18	-0.2	0.2	32.2	0.6	191	3
3396MH0007630031200969C00	969	13974	7.02	-0.2	0.2	31.6	0.6	159	4
3396MH0007630031200970C00	970	13998	6.86	-0.2	0.2	31.0	0.6	127	5
3396MH0007630031200971C00	971	14022	6.70	-0.2	0.2	30.5	0.6	85	6
3396MH0007630031200972C00	972	14046	6.55	-0.2	0.1	30.0	0.5	63	7
3396MH0007630031200973C00	973	14070	6.41	-0.2	0.1	29.4	0.5	31	8

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### Sol 3396 - MAHLI Onboard Focus Merge Product Information

		target <b>Scousburgh</b> - after DRT - stereo-2 - ~5 cm standoff							
best focus image:	<a href="#">3397MH0001630001201036R00</a>	1036	motor count:		13997	range (cm):	6.9		
range map product:	<a href="#">3397MH0001630001201037S00</a>	1037	acquired sequence:		mhli00763	stack type:	Relative		
acquired on date:	24-Feb-22			merge sequence:		mhli00163	merge type: Basic		
motor count interval:		24	acquired on sol:		3396	focus merged on sol:			
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)	pixel scale (μm/pixel)	pixel scale uncertainty (μm/pixel)	DN in range map	image n of 8	
			near	far					
3396MH0007630031200977C00	977	13901	7.54	-0.2	0.2	33.4	0.7	255	1
3396MH0007630031200978C00	978	13925	7.36	-0.2	0.2	32.8	0.6	223	2
3396MH0007630031200979C00	979	13949	7.19	-0.2	0.2	32.2	0.6	191	3
3396MH0007630031200980C00	980	13973	7.02	-0.2	0.2	31.6	0.6	159	4
3396MH0007630031200981C00	981	13997	6.86	-0.2	0.2	31.1	0.6	127	5
3396MH0007630031200982C00	982	14021	6.71	-0.2	0.2	30.5	0.6	85	6
3396MH0007630031200983C00	983	14045	6.56	-0.2	0.1	30.0	0.5	63	7
3396MH0007630031200984C00	984	14069	6.41	-0.2	0.1	29.5	0.5	31	8

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#### Sol 3396 - MAHLI Onboard Focus Merge Product Information

		target <b>Scousburgh</b> - after DRT - ~1 cm standoff							
			CDPID	corresponding frame:	3396MH0008350011200986C00				
best focus image:	<a href="#">3397MH0001630001201034R00</a>	1034		motor count:	15073	range (cm):	2.9		
range map product:	<a href="#">3397MH0001630001201035S00</a>	1035		acquired sequence:	mhli00835	stack type:	Relative		
acquired on date:	24-Feb-22			merge sequence:	mhli00163	merge type:	Basic		
motor count interval:	30	acquired on sol:	3396	focus merged on sol:	3397				
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)	pixel scale (μm/pixel)	pixel scale uncertainty (μm/pixel)	DN in range map	image n of 8	
			near	far					
3396MH0008350031200988C00	988	14953	3.14	-0.1	0.1	18.0	0.2	255	1
3396MH0008350031200989C00	989	14983	3.08	-0.1	0.1	17.7	0.2	223	2
3396MH0008350031200990C00	990	15013	3.01	-0.1	0.1	17.5	0.2	191	3
3396MH0008350031200991C00	991	15043	2.95	-0.1	0.1	17.3	0.2	159	4
3396MH0008350031200992C00	992	15073	2.89	-0.1	0.1	17.1	0.2	127	5
3396MH0008350031200993C00	993	15103	2.83	-0.1	0.1	16.9	0.2	85	6
3396MH0008350031200994C00	994	15133	2.77	-0.1	0.1	16.7	0.2	63	7
3396MH0008350031200995C00	995	15163	2.71	-0.1	0.1	16.5	0.2	31	8

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#### Sol 3396 - MAHLI Onboard Focus Merge Product Information

		target <b>Blackthorn_Salt</b> - stereo-1 - ~5 cm standoff							
			CDPID	corresponding frame:	3396MH0002240011200999C00				
best focus image:	<a href="#">3397MH0001630001201032R00</a>	1032		motor count:	13977	range (cm):	7.0		
range map product:	<a href="#">3397MH0001630001201033S00</a>	1033		acquired sequence:	mhli00224	stack type:	Relative		
acquired on date:	24-Feb-22			merge sequence:	mhli00163	merge type:	Basic		
motor count interval:	42	acquired on sol:	3396	focus merged on sol:	3397				
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)	pixel scale (μm/pixel)	pixel scale uncertainty (μm/pixel)	DN in range map	image n of 8	
			near	far					
3396MH0002240021201000C00	1000	13809	8.29	-0.2	0.2	36.1	0.8	255	1
3396MH0002240021201001C00	1001	13851	7.94	-0.2	0.2	34.8	0.7	223	2
3396MH0002240021201002C00	1002	13893	7.60	-0.2	0.2	33.7	0.7	191	3
3396MH0002240021201003C00	1003	13935	7.29	-0.2	0.2	32.6	0.6	159	4
3396MH0002240021201004C00	1004	13977	7.00	-0.2	0.2	31.5	0.6	127	5
3396MH0002240021201005C00	1005	14019	6.72	-0.2	0.2	30.6	0.6	85	6
3396MH0002240021201006C00	1006	14061	6.46	-0.2	0.1	29.6	0.5	63	7
3396MH0002240021201007C00	1007	14103	6.21	-0.1	0.1	28.8	0.5	31	8

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#### Sol 3396 - MAHLI Onboard Focus Merge Product Information

		target Blackthorn_Salt - stereo-2 - ~5 cm standoff							
			CDPID	corresponding frame:	3396MH0002240011201009C00				
best focus image:	<a href="#">3397MH0001630001201030R00</a>	1030		motor count:	13978	range (cm):	7.0		
range map product:	<a href="#">3397MH0001630001201031S00</a>	1031		acquired sequence:	mhli00224	stack type:	Relative		
acquired on date:	24-Feb-22			merge sequence:	mhli00163	merge type:	Basic		
motor count interval:	42	acquired on sol:	3396	focus merged on sol:	3397				
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)	pixel scale (μm/pixel)	pixel scale uncertainty (μm/pixel)	DN in range map	image n of 8	
			near	far					
3396MH0002240021201010C00	1010	13810	8.28	-0.2	0.2	36.1	0.8	255	1
3396MH0002240021201011C00	1011	13852	7.93	-0.2	0.2	34.8	0.7	223	2
3396MH0002240021201012C00	1012	13894	7.60	-0.2	0.2	33.6	0.7	191	3
3396MH0002240021201013C00	1013	13936	7.28	-0.2	0.2	32.5	0.6	159	4
3396MH0002240021201014C00	1014	13978	6.99	-0.2	0.2	31.5	0.6	127	5
3396MH0002240021201015C00	1015	14020	6.71	-0.2	0.2	30.5	0.6	85	6
3396MH0002240021201016C00	1016	14062	6.45	-0.2	0.1	29.6	0.5	63	7
3396MH0002240021201017C00	1017	14104	6.21	-0.1	0.1	28.8	0.5	31	8

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#### Sol 3396 - MAHLI Onboard Focus Merge Product Information

		target Blackthorn_Salt - ~2 cm standoff							
			CDPID	corresponding frame:	3396MH0001760011201019C00				
best focus image:	<a href="#">3397MH0001630001201028R00</a>	1028		motor count:	14625	range (cm):	4.0		
range map product:	<a href="#">3397MH0001630001201029S00</a>	1029		acquired sequence:	mhli00176	stack type:	Relative		
acquired on date:	24-Feb-22			merge sequence:	mhli00163	merge type:	Basic		
motor count interval:	48	acquired on sol:	3396	focus merged on sol:	3397				
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)	pixel scale (μm/pixel)	pixel scale uncertainty (μm/pixel)	DN in range map	image n of 8	
			near	far					
3396MH0001760021201020C00	1020	14433	4.67	-0.1	0.1	23.3	0.3	255	1
3396MH0001760021201021C00	1021	14481	4.49	-0.1	0.1	22.7	0.3	223	2
3396MH0001760021201022C00	1022	14529	4.32	-0.1	0.1	22.1	0.3	191	3
3396MH0001760021201023C00	1023	14577	4.16	-0.1	0.1	21.5	0.3	159	4
3396MH0001760021201024C00	1024	14625	4.01	-0.1	0.1	21.0	0.3	127	5
3396MH0001760021201025C00	1025	14673	3.86	-0.1	0.1	20.5	0.3	85	6
3396MH0001760021201026C00	1026	14721	3.72	-0.1	0.1	20.0	0.3	63	7
3396MH0001760021201027C00	1027	14769	3.59	-0.1	0.1	19.5	0.3	31	8

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### Sol 3398 - MAHLI Onboard Focus Merge Product Information

		target Exnaboe - stereo-1 - ~5 cm standoff						
			CDPID	corresponding frame:	3398MH0007400011201044C00			
best focus image:	3399MH0002270001201106R00	1106		motor count:	14001	range (cm):	6.8	
range map product:	3399MH0002270001201107S00	1107		acquired sequence:	mhli00740	stack type:	Relative	
acquired on date:	26-Feb-22			merge sequence:	mhli00227	merge type:	Basic	
motor count interval:	54	acquired on sol:	3398	focus merged on sol:	3399			
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)	pixel scale (μm/pixel)	pixel scale uncertainty (μm/pixel)	DN in range map	image n of 8
			near	far				
3398MH0007400031201046C00	1046	13785	8.50	-0.2	0.2	36.8	0.8	255
3398MH0007400031201047C00	1047	13839	8.03	-0.2	0.2	35.2	0.7	223
3398MH0007400031201048C00	1048	13893	7.60	-0.2	0.2	33.7	0.7	191
3398MH0007400031201049C00	1049	13947	7.21	-0.2	0.2	32.3	0.6	159
3398MH0007400031201050C00	1050	14001	6.84	-0.2	0.2	31.0	0.6	127
3398MH0007400031201051C00	1051	14055	6.50	-0.2	0.1	29.8	0.5	85
3398MH0007400031201052C00	1052	14109	6.18	-0.1	0.1	28.7	0.5	63
3398MH0007400031201053C00	1053	14163	5.88	-0.1	0.1	27.6	0.4	31
								8

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### Sol 3398 - MAHLI Onboard Focus Merge Product Information

		target Exnaboe - stereo-2 - ~5 cm standoff						
			CDPID	corresponding frame:	3398MH0007400011201055C00			
best focus image:	3399MH0002270001201104R00	1104		motor count:	14011	range (cm):	6.8	
range map product:	3399MH0002270001201105S00	1105		acquired sequence:	mhli00740	stack type:	Relative	
acquired on date:	26-Feb-22			merge sequence:	mhli00227	merge type:	Basic	
motor count interval:	54	acquired on sol:	3398	focus merged on sol:	3399			
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)	pixel scale (μm/pixel)	pixel scale uncertainty (μm/pixel)	DN in range map	image n of 8
			near	far				
3398MH0007400031201057C00	1057	13795	8.41	-0.2	0.2	36.5	0.8	255
3398MH0007400031201058C00	1058	13849	7.95	-0.2	0.2	34.9	0.7	223
3398MH0007400031201059C00	1059	13903	7.53	-0.2	0.2	33.4	0.7	191
3398MH0007400031201060C00	1060	13957	7.14	-0.2	0.2	32.0	0.6	159
3398MH0007400031201061C00	1061	14011	6.77	-0.2	0.2	30.7	0.6	127
3398MH0007400031201062C00	1062	14065	6.44	-0.2	0.1	29.6	0.5	85
3398MH0007400031201063C00	1063	14119	6.12	-0.1	0.1	28.5	0.5	63
3398MH0007400031201064C00	1064	14173	5.83	-0.1	0.1	27.4	0.4	31
								8

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### Sol 3398 - MAHLI Onboard Focus Merge Product Information

		target <b>Exnaboe</b> - ~2 cm standoff						
			CDPID	corresponding frame:		3398MH0008000011201066C00		
best focus image:		3399MH0002270001201102R00	1102	motor count:		14685	range (cm):	3.8
range map product:		3399MH0002270001201103S00	1103	acquired sequence:		mhli00800	stack type:	Relative
acquired on date:		26-Feb-22			merge sequence:		mhli00227	merge type: Basic
motor count interval:		54	acquired on sol:		3398	focus merged on sol:		3399
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (µm/pixel)	pixel scale uncertainty (µm/pixel)	DN in range map
				near	far			
3398MH0008000031201068C00	1068	14469	4.53	-0.1	0.1	22.9	0.3	255
3398MH0008000031201069C00	1069	14523	4.34	-0.1	0.1	22.2	0.3	223
3398MH0008000031201070C00	1070	14577	4.16	-0.1	0.1	21.5	0.3	191
3398MH0008000031201071C00	1071	14631	3.99	-0.1	0.1	20.9	0.3	159
3398MH0008000031201072C00	1072	14685	3.83	-0.1	0.1	20.4	0.3	127
3398MH0008000031201073C00	1073	14739	3.67	-0.1	0.1	19.8	0.3	85
3398MH0008000031201074C00	1074	14793	3.53	-0.1	0.1	19.3	0.3	63
3398MH0008000031201075C00	1075	14847	3.39	-0.1	0.1	18.8	0.2	31
								8

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### Sol 3398 - MAHLI Onboard Focus Merge Product Information

		target <b>Stinchar_Valley</b> - stereo-1 - ~45 mm standoff						
			CDPID	corresponding frame:		3398MH0003080011201079C00		
best focus image:		3399MH0002270001201100R00	1100	motor count:		14114	range (cm):	6.2
range map product:		3399MH0002270001201101S00	1101	acquired sequence:		mhli00308	stack type:	Relative
acquired on date:		26-Feb-22			merge sequence:		mhli00227	merge type: Basic
motor count interval:		66	acquired on sol:		3398	focus merged on sol:		3399
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (µm/pixel)	pixel scale uncertainty (µm/pixel)	DN in range map
				near	far			
3398MH0003080021201080C00	1080	13850	7.94	-0.2	0.2	34.9	0.7	255
3398MH0003080021201081C00	1081	13916	7.43	-0.2	0.2	33.1	0.6	223
3398MH0003080021201082C00	1082	13982	6.96	-0.2	0.2	31.4	0.6	191
3398MH0003080021201083C00	1083	14048	6.54	-0.2	0.1	29.9	0.5	159
3398MH0003080021201084C00	1084	14114	6.15	-0.1	0.1	28.6	0.5	127
3398MH0003080021201085C00	1085	14180	5.80	-0.1	0.1	27.3	0.4	85
3398MH0003080021201086C00	1086	14246	5.47	-0.1	0.1	26.1	0.4	63
3398MH0003080021201087C00	1087	14312	5.17	-0.1	0.1	25.1	0.4	31
								8

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### Sol 3398 - MAHLI Onboard Focus Merge Product Information

		target <a href="#">Stinchar_Valley - stereo-2 - ~45 mm standoff</a>						
			CDPID	corresponding frame:	<a href="#">3398MH0003080011201089C00</a>			
best focus image:	<a href="#">3399MH0002270001201098R00</a>	1098		motor count:	14107	range (cm):	6.2	
range map product:	<a href="#">3399MH0002270001201099S00</a>	1099		acquired sequence:	mhli00308	stack type:	Relative	
acquired on date:	26-Feb-22			merge sequence:	mhli00227	merge type:	Basic	
motor count interval:	66	acquired on sol:	3398	focus merged on sol:	3399			
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm) near      far	pixel scale (μm/pixel)	pixel scale uncertainty (μm/pixel)	DN in range map	image n of 8
<a href="#">3398MH0003080021201090C00</a>	1090	13843	8.00	-0.2      0.2	35.1	0.7	255	1
<a href="#">3398MH0003080021201091C00</a>	1091	13909	7.48	-0.2      0.2	33.2	0.7	223	2
<a href="#">3398MH0003080021201092C00</a>	1092	13975	7.01	-0.2      0.2	31.6	0.6	191	3
<a href="#">3398MH0003080021201093C00</a>	1093	14041	6.58	-0.2      0.2	30.1	0.5	159	4
<a href="#">3398MH0003080021201094C00</a>	1094	14107	6.19	-0.1      0.1	28.7	0.5	127	5
<a href="#">3398MH0003080021201095C00</a>	1095	14173	5.83	-0.1      0.1	27.4	0.4	85	6
<a href="#">3398MH0003080021201096C00</a>	1096	14239	5.50	-0.1      0.1	26.3	0.4	63	7
<a href="#">3398MH0003080021201097C00</a>	1097	14305	5.20	-0.1      0.1	25.2	0.4	31	8

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### Sol 3409 - MAHLI Onboard Focus Merge Product Information

		target <b>Skaw_Granite - after DRT - stereo-1 - ~5 cm standoff</b>							
			CDPID	corresponding frame:		<a href="#">3409MH0002990011201111C00</a>			
best focus image:		<a href="#">3410MH0001930001201144R00</a>	1144	motor count:		<a href="#">13989</a>	range (cm): <a href="#">6.9</a>		
range map product:		<a href="#">3410MH0001930001201145S00</a>	1145	acquired sequence:		mhli00299	stack type: <a href="#">Relative</a>		
acquired on date:		10-Mar-22			merge sequence:	mhli00193	merge type: <a href="#">Basic</a>		
motor count interval:		36	acquired on sol:		3409	focus merged on sol:	3410		
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (µm/pixel)	pixel scale uncertainty (µm/pixel)		
			near	far		DN in range map	image n of 8		
<a href="#">3409MH0002990021201112C00</a>	1112	13845	<a href="#">7.98</a>	<a href="#">-0.2</a>	<a href="#">0.2</a>	<a href="#">35.0</a>	<a href="#">0.7</a>	<a href="#">255</a>	<a href="#">1</a>
<a href="#">3409MH0002990021201113C00</a>	1113	13881	<a href="#">7.70</a>	<a href="#">-0.2</a>	<a href="#">0.2</a>	<a href="#">34.0</a>	<a href="#">0.7</a>	<a href="#">223</a>	<a href="#">2</a>
<a href="#">3409MH0002990021201114C00</a>	1114	13917	<a href="#">7.42</a>	<a href="#">-0.2</a>	<a href="#">0.2</a>	<a href="#">33.0</a>	<a href="#">0.6</a>	<a href="#">191</a>	<a href="#">3</a>
<a href="#">3409MH0002990021201115C00</a>	1115	13953	<a href="#">7.16</a>	<a href="#">-0.2</a>	<a href="#">0.2</a>	<a href="#">32.1</a>	<a href="#">0.6</a>	<a href="#">159</a>	<a href="#">4</a>
<a href="#">3409MH0002990021201116C00</a>	1116	13989	<a href="#">6.92</a>	<a href="#">-0.2</a>	<a href="#">0.2</a>	<a href="#">31.2</a>	<a href="#">0.6</a>	<a href="#">127</a>	<a href="#">5</a>
<a href="#">3409MH0002990021201117C00</a>	1117	14025	<a href="#">6.68</a>	<a href="#">-0.2</a>	<a href="#">0.2</a>	<a href="#">30.4</a>	<a href="#">0.6</a>	<a href="#">85</a>	<a href="#">6</a>
<a href="#">3409MH0002990021201118C00</a>	1118	14061	<a href="#">6.46</a>	<a href="#">-0.2</a>	<a href="#">0.1</a>	<a href="#">29.6</a>	<a href="#">0.5</a>	<a href="#">63</a>	<a href="#">7</a>
<a href="#">3409MH0002990021201119C00</a>	1119	14097	<a href="#">6.25</a>	<a href="#">-0.1</a>	<a href="#">0.1</a>	<a href="#">28.9</a>	<a href="#">0.5</a>	<a href="#">31</a>	<a href="#">8</a>

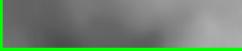
updated: [20\\_April\\_2022](#)

### Sol 3409 - MAHLI Onboard Focus Merge Product Information

		target <b>Skaw_Granite - after DRT - stereo-2 - ~5 cm standoff</b>							
			CDPID	corresponding frame:		<a href="#">3409MH0002990011201121C00</a>			
best focus image:		<a href="#">3410MH0001930001201142R00</a>	1142	motor count:		<a href="#">13988</a>	range (cm): <a href="#">6.9</a>		
range map product:		<a href="#">3410MH0001930001201143S00</a>	1143	acquired sequence:		mhli00299	stack type: <a href="#">Relative</a>		
acquired on date:		10-Mar-22			merge sequence:	mhli00193	merge type: <a href="#">Basic</a>		
motor count interval:		36	acquired on sol:		3409	focus merged on sol:	3410		
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (µm/pixel)	pixel scale uncertainty (µm/pixel)		
			near	far		DN in range map	image n of 8		
<a href="#">3409MH0002990021201122C00</a>	1122	13844	<a href="#">7.99</a>	<a href="#">-0.2</a>	<a href="#">0.2</a>	<a href="#">35.0</a>	<a href="#">0.7</a>	<a href="#">255</a>	<a href="#">1</a>
<a href="#">3409MH0002990021201123C00</a>	1123	13880	<a href="#">7.70</a>	<a href="#">-0.2</a>	<a href="#">0.2</a>	<a href="#">34.0</a>	<a href="#">0.7</a>	<a href="#">223</a>	<a href="#">2</a>
<a href="#">3409MH0002990021201124C00</a>	1124	13916	<a href="#">7.43</a>	<a href="#">-0.2</a>	<a href="#">0.2</a>	<a href="#">33.1</a>	<a href="#">0.6</a>	<a href="#">191</a>	<a href="#">3</a>
<a href="#">3409MH0002990021201125C00</a>	1125	13952	<a href="#">7.17</a>	<a href="#">-0.2</a>	<a href="#">0.2</a>	<a href="#">32.1</a>	<a href="#">0.6</a>	<a href="#">159</a>	<a href="#">4</a>
<a href="#">3409MH0002990021201126C00</a>	1126	13988	<a href="#">6.92</a>	<a href="#">-0.2</a>	<a href="#">0.2</a>	<a href="#">31.3</a>	<a href="#">0.6</a>	<a href="#">127</a>	<a href="#">5</a>
<a href="#">3409MH0002990021201127C00</a>	1127	14024	<a href="#">6.69</a>	<a href="#">-0.2</a>	<a href="#">0.2</a>	<a href="#">30.4</a>	<a href="#">0.6</a>	<a href="#">85</a>	<a href="#">6</a>
<a href="#">3409MH0002990021201128C00</a>	1128	14060	<a href="#">6.47</a>	<a href="#">-0.2</a>	<a href="#">0.1</a>	<a href="#">29.7</a>	<a href="#">0.5</a>	<a href="#">63</a>	<a href="#">7</a>
<a href="#">3409MH0002990021201129C00</a>	1129	14096	<a href="#">6.25</a>	<a href="#">-0.1</a>	<a href="#">0.1</a>	<a href="#">28.9</a>	<a href="#">0.5</a>	<a href="#">31</a>	<a href="#">8</a>

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Sol 3409 - MAHLI Onboard Focus Merge Product Information

		target Skaw_Granite - after DRT - ~1 cm standoff							
			CDPID	corresponding frame:	3409MH0004260011201131C00				
best focus image:	3410MH0001930001201140R00	1140		motor count:	15057	range (cm):	2.9		
range map product:	3410MH0001930001201141S00	1141		acquired sequence:	mhli00426	stack type:	Relative		
acquired on date:	10-Mar-22			merge sequence:	mhli00193	merge type:	Basic		
motor count interval:		48	acquired on sol:	3409	focus merged on sol:		3410		
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (µm/pixel)	pixel scale uncertainty (µm/pixel)	DN in range map	image n of 8
				near	far				
3409MH0004260021201132C00	1132	14865	3.35	-0.1	0.1	18.7	0.2	255	1
3409MH0004260021201133C00	1133	14913	3.23	-0.1	0.1	18.3	0.2	223	2
3409MH0004260021201134C00	1134	14961	3.12	-0.1	0.1	17.9	0.2	191	3
3409MH0004260021201135C00	1135	15009	3.02	-0.1	0.1	17.5	0.2	159	4
3409MH0004260021201136C00	1136	15057	2.92	-0.1	0.1	17.2	0.2	127	5
3409MH0004260021201137C00	1137	15105	2.82	-0.1	0.1	16.8	0.2	85	6
3409MH0004260021201138C00	1138	15153	2.73	-0.1	0.1	16.5	0.2	63	7
3409MH0004260021201139C00	1139	15201	2.65	-0.1	0.1	16.2	0.2	31	8

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#### Sol 3413 - MAHLI Onboard Focus Merge Product Information

		target Appleby - stereo-1 - ~5 cm standoff						
			CDPID	corresponding frame:		3413MH0001730011201149C00		
best focus image:		<a href="#">3413MH0002270001201209R00</a>	1209	motor count:		13994	range (cm):	6.9
range map product:		<a href="#">3413MH0002270001201210S00</a>	1210	acquired sequence:		mhli00173	stack type:	Relative
acquired on date:		13-Mar-22			merge sequence:	mhli00227	merge type:	Basic
motor count interval:		30	acquired on sol:		3413	focus merged on sol:		3413
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (μm/pixel)	pixel scale uncertainty (μm/pixel)	DN in range map
				near	far			
3413MH0001730021201150C00	1150	13874	7.75	-0.2	0.2	34.2	0.7	255
3413MH0001730021201151C00	1151	13904	7.52	-0.2	0.2	33.4	0.7	223
3413MH0001730021201152C00	1152	13934	7.30	-0.2	0.2	32.6	0.6	191
3413MH0001730021201153C00	1153	13964	7.09	-0.2	0.2	31.8	0.6	159
3413MH0001730021201154C00	1154	13994	6.88	-0.2	0.2	31.1	0.6	127
3413MH0001730021201155C00	1155	14024	6.69	-0.2	0.2	30.4	0.6	85
3413MH0001730021201156C00	1156	14054	6.50	-0.2	0.1	29.8	0.5	63
3413MH0001730021201157C00	1157	14084	6.32	-0.1	0.1	29.2	0.5	31
								8

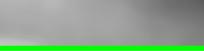
updated: [21\\_April\\_2022](#)

#### Sol 3413 - MAHLI Onboard Focus Merge Product Information

		target Appleby - stereo-2 - ~5 cm standoff						
			CDPID	corresponding frame:		3413MH0001730011201159C00		
best focus image:		<a href="#">3413MH0002270001201207R00</a>	1207	motor count:		14005	range (cm):	6.8
range map product:		<a href="#">3413MH0002270001201208S00</a>	1208	acquired sequence:		mhli00173	stack type:	Relative
acquired on date:		13-Mar-22			merge sequence:	mhli00227	merge type:	Basic
motor count interval:		30	acquired on sol:		3413	focus merged on sol:		3413
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (μm/pixel)	pixel scale uncertainty (μm/pixel)	DN in range map
				near	far			
3413MH0001730021201160C00	1160	13885	7.66	-0.2	0.2	33.9	0.7	255
3413MH0001730021201161C00	1161	13915	7.44	-0.2	0.2	33.1	0.6	223
3413MH0001730021201162C00	1162	13945	7.22	-0.2	0.2	32.3	0.6	191
3413MH0001730021201163C00	1163	13975	7.01	-0.2	0.2	31.6	0.6	159
3413MH0001730021201164C00	1164	14005	6.81	-0.2	0.2	30.9	0.6	127
3413MH0001730021201165C00	1165	14035	6.62	-0.2	0.2	30.2	0.6	85
3413MH0001730021201166C00	1166	14065	6.44	-0.2	0.1	29.6	0.5	63
3413MH0001730021201167C00	1167	14095	6.26	-0.1	0.1	28.9	0.5	31
								8

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Sol 3413 - MAHLI Onboard Focus Merge Product Information

		target Appleby - ~2 cm standoff						
			CDPID	corresponding frame:		3413MH0003370011201169C00		
best focus image:	3413MH0002270001201205R00		1205	motor count:		14674	range (cm):	3.9
range map product:	3413MH0002270001201206S00		1206	acquired sequence:		mhli00337	stack type:	Relative
acquired on date:	13-Mar-22			merge sequence:		mhli00227	merge type:	Basic
motor count interval:		42	acquired on sol:		3413	focus merged on sol:		3413
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (µm/pixel)	pixel scale uncertainty (µm/pixel)	DN in range map
				near	far			
3413MH0003370021201170C00	1170	14506	4.40	-0.1	0.1	22.4	0.3	255
3413MH0003370021201171C00	1171	14548	4.26	-0.1	0.1	21.9	0.3	223
3413MH0003370021201172C00	1172	14590	4.12	-0.1	0.1	21.4	0.3	191
3413MH0003370021201173C00	1173	14632	3.99	-0.1	0.1	20.9	0.3	159
3413MH0003370021201174C00	1174	14674	3.86	-0.1	0.1	20.5	0.3	127
3413MH0003370021201175C00	1175	14716	3.74	-0.1	0.1	20.1	0.3	85
3413MH0003370021201176C00	1176	14758	3.62	-0.1	0.1	19.7	0.3	63
3413MH0003370021201177C00	1177	14800	3.51	-0.1	0.1	19.3	0.3	31

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Sol 3413 - MAHLI Onboard Focus Merge Product Information

		target Achvarasdal - stereo-1 - ~3 cm standoff							
			CDPID	corresponding frame:		3413MH0002240011201181C00			
best focus image:	3413MH0002270001201203R00		1203	motor count:		14350	range (cm):	5.0	
range map product:	3413MH0002270001201204S00		1204	acquired sequence:		mhli00224	stack type:	Relative	
acquired on date:	13-Mar-22			merge sequence:		mhli00227	merge type:	Basic	
motor count interval:		42	acquired on sol:		3413	focus merged on sol:		3413	
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (µm/pixel)	pixel scale uncertainty (µm/pixel)	DN in range map	image n of 8
				near	far				
3413MH0002240021201182C00	1182	14182	5.78	-0.1	0.1	27.3	0.4	255	1
3413MH0002240021201183C00	1183	14224	5.57	-0.1	0.1	26.5	0.4	223	2
3413MH0002240021201184C00	1184	14266	5.37	-0.1	0.1	25.8	0.4	191	3
3413MH0002240021201185C00	1185	14308	5.18	-0.1	0.1	25.1	0.4	159	4
3413MH0002240021201186C00	1186	14350	5.00	-0.1	0.1	24.5	0.4	127	5
3413MH0002240021201187C00	1187	14392	4.83	-0.1	0.1	23.9	0.4	85	6
3413MH0002240021201188C00	1188	14434	4.67	-0.1	0.1	23.3	0.3	63	7
3413MH0002240021201189C00	1189	14476	4.51	-0.1	0.1	22.8	0.3	31	8

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### Sol 3413 - MAHLI Onboard Focus Merge Product Information

		target Achvarasdal - stereo-2 - ~3 cm standoff						
			CDPID	corresponding frame:	3413MH0002240011201191C00			
best focus image:	3413MH0002270001201201R00	1201		motor count:	14354	range (cm):	5.0	
range map product:	3413MH0002270001201202S00	1202		acquired sequence:	mhli00224	stack type:	Relative	
acquired on date:	13-Mar-22			merge sequence:	mhli00227	merge type:	Basic	
motor count interval:	42	acquired on sol:	3413	focus merged on sol:	3413			
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)	pixel scale (μm/pixel)	pixel scale uncertainty (μm/pixel)	DN in range map	image n of 8
3413MH0002240021201192C00	1192	14186	5.76	-0.1 0.1	27.2	0.4	255	1
3413MH0002240021201193C00	1193	14228	5.55	-0.1 0.1	26.5	0.4	223	2
3413MH0002240021201194C00	1194	14270	5.35	-0.1 0.1	25.8	0.4	191	3
3413MH0002240021201195C00	1195	14312	5.17	-0.1 0.1	25.1	0.4	159	4
3413MH0002240021201196C00	1196	14354	4.99	-0.1 0.1	24.4	0.4	127	5
3413MH0002240021201197C00	1197	14396	4.81	-0.1 0.1	23.8	0.4	85	6
3413MH0002240021201198C00	1198	14438	4.65	-0.1 0.1	23.3	0.3	63	7
3413MH0002240021201199C00	1199	14480	4.49	-0.1 0.1	22.7	0.3	31	8

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#### Sol 3415 - MAHLI Onboard Focus Merge Product Information

		target Oosta - stereo-1 - ~45 mm standoff						
			CDPID	corresponding frame:		3415MH0001730011201214C00		
best focus image:		3415MH0001930001201247R00	1247	motor count:		14052	range (cm):	6.5
range map product:		3415MH0001930001201248S00	1248	acquired sequence:		mhli00173	stack type:	Relative
acquired on date:		15-Mar-22			merge sequence:	mhli00193	merge type:	Basic
motor count interval:		30	acquired on sol:		3415	focus merged on sol:		3415
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (μm/pixel)	pixel scale uncertainty (μm/pixel)	DN in range map
				near	far			
3415MH0001730021201215C00	1215	13932	7.31	-0.2	0.2	32.6	0.6	255
3415MH0001730021201216C00	1216	13962	7.10	-0.2	0.2	31.9	0.6	223
3415MH0001730021201217C00	1217	13992	6.90	-0.2	0.2	31.2	0.6	191
3415MH0001730021201218C00	1218	14022	6.70	-0.2	0.2	30.5	0.6	159
3415MH0001730021201219C00	1219	14052	6.51	-0.2	0.1	29.8	0.5	127
3415MH0001730021201220C00	1220	14082	6.33	-0.2	0.1	29.2	0.5	85
3415MH0001730021201221C00	1221	14112	6.16	-0.1	0.1	28.6	0.5	63
3415MH0001730021201222C00	1222	14142	6.00	-0.1	0.1	28.0	0.5	31
								8

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#### Sol 3415 - MAHLI Onboard Focus Merge Product Information

		target Oosta - stereo-2 - ~45 mm standoff						
			CDPID	corresponding frame:		3415MH0001730011201224C00		
best focus image:		3415MH0001930001201245R00	1245	motor count:		14052	range (cm):	6.5
range map product:		3415MH0001930001201246S00	1246	acquired sequence:		mhli00173	stack type:	Relative
acquired on date:		15-Mar-22			merge sequence:	mhli00193	merge type:	Basic
motor count interval:		30	acquired on sol:		3415	focus merged on sol:		3415
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (μm/pixel)	pixel scale uncertainty (μm/pixel)	DN in range map
				near	far			
3415MH0001730021201225C00	1225	13932	7.31	-0.2	0.2	32.6	0.6	255
3415MH0001730021201226C00	1226	13962	7.10	-0.2	0.2	31.9	0.6	223
3415MH0001730021201227C00	1227	13992	6.90	-0.2	0.2	31.2	0.6	191
3415MH0001730021201228C00	1228	14022	6.70	-0.2	0.2	30.5	0.6	159
3415MH0001730021201229C00	1229	14052	6.51	-0.2	0.1	29.8	0.5	127
3415MH0001730021201230C00	1230	14082	6.33	-0.2	0.1	29.2	0.5	85
3415MH0001730021201231C00	1231	14112	6.16	-0.1	0.1	28.6	0.5	63
3415MH0001730021201232C00	1232	14142	6.00	-0.1	0.1	28.0	0.5	31
								8

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### Sol 3415 - MAHLI Onboard Focus Merge Product Information

		target Oosta - ~15 mm standoff						
best focus image:	<a href="#">3415MH0001930001201243R00</a>	1243	motor count:	14807	range (cm):	3.5		
range map product:	<a href="#">3415MH0001930001201244S00</a>	1244	acquired sequence:	mhli00311	stack type:	Relative		
acquired on date:	15-Mar-22		merge sequence:	mhli00193	merge type:	Basic		
motor count interval:	66	acquired on sol:	3415	focus merged on sol:	3415			
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)	pixel scale (μm/pixel)	pixel scale uncertainty (μm/pixel)	DN in range map	image n of 8
				near				
<a href="#">3415MH0003110021201235C00</a>	1235	14543	4.27	-0.1	0.1	21.9	0.3	255
<a href="#">3415MH0003110021201236C00</a>	1236	14609	4.06	-0.1	0.1	21.2	0.3	223
<a href="#">3415MH0003110021201237C00</a>	1237	14675	3.86	-0.1	0.1	20.5	0.3	191
<a href="#">3415MH0003110021201238C00</a>	1238	14741	3.67	-0.1	0.1	19.8	0.3	159
<a href="#">3415MH0003110021201239C00</a>	1239	14807	3.49	-0.1	0.1	19.2	0.3	127
<a href="#">3415MH0003110021201240C00</a>	1240	14873	3.33	-0.1	0.1	18.6	0.2	85
<a href="#">3415MH0003110021201241C00</a>	1241	14939	3.17	-0.1	0.1	18.1	0.2	63
<a href="#">3415MH0003110021201242C00</a>	1242	15005	3.03	-0.1	0.1	17.6	0.2	31
								8

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### Sol 3417 - MAHLI Onboard Focus Merge Product Information

		target Knott - stereo-1 - ~45 mm standoff						
			CDPID	corresponding frame:		<a href="#">3417MH0002970011201252C00</a>		
best focus image:		<a href="#">3417MH0001930001201285R00</a>	1285	motor count:		<a href="#">14046</a>	range (cm):	6.6
range map product:		<a href="#">3417MH0001930001201286S00</a>	1286	acquired sequence:		mhli00297	stack type:	Relative
acquired on date:		18-Mar-22			merge sequence:	mhli00193	merge type:	Basic
motor count interval:		60	acquired on sol:		3417	focus merged on sol:		3417
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (μm/pixel)	pixel scale uncertainty (μm/pixel)	DN in range map
			near	far				
<a href="#">3417MH0002970021201253C00</a>	1253	13806	8.32	-0.2	0.2	36.2	0.8	255
<a href="#">3417MH0002970021201254C00</a>	1254	13866	7.81	-0.2	0.2	34.4	0.7	223
<a href="#">3417MH0002970021201255C00</a>	1255	13926	7.36	-0.2	0.2	32.8	0.6	191
<a href="#">3417MH0002970021201256C00</a>	1256	13986	6.94	-0.2	0.2	31.3	0.6	159
<a href="#">3417MH0002970021201257C00</a>	1257	14046	6.55	-0.2	0.1	30.0	0.5	127
<a href="#">3417MH0002970021201258C00</a>	1258	14106	6.20	-0.1	0.1	28.7	0.5	85
<a href="#">3417MH0002970021201259C00</a>	1259	14166	5.87	-0.1	0.1	27.6	0.4	63
<a href="#">3417MH0002970021201260C00</a>	1260	14226	5.56	-0.1	0.1	26.5	0.4	31
								8

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### Sol 3417 - MAHLI Onboard Focus Merge Product Information

		target Knott - stereo-2 - ~45 mm standoff						
			CDPID	corresponding frame:		<a href="#">3417MH0002970011201262C00</a>		
best focus image:		<a href="#">3417MH0001930001201283R00</a>	1283	motor count:		<a href="#">14049</a>	range (cm):	6.5
range map product:		<a href="#">3417MH0001930001201284S00</a>	1284	acquired sequence:		mhli00297	stack type:	Relative
acquired on date:		18-Mar-22			merge sequence:	mhli00193	merge type:	Basic
motor count interval:		60	acquired on sol:		3417	focus merged on sol:		3417
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (μm/pixel)	pixel scale uncertainty (μm/pixel)	DN in range map
			near	far				
<a href="#">3417MH0002970021201263C00</a>	1263	13809	8.29	-0.2	0.2	36.1	0.8	255
<a href="#">3417MH0002970021201264C00</a>	1264	13869	7.79	-0.2	0.2	34.3	0.7	223
<a href="#">3417MH0002970021201265C00</a>	1265	13929	7.33	-0.2	0.2	32.7	0.6	191
<a href="#">3417MH0002970021201266C00</a>	1266	13989	6.92	-0.2	0.2	31.2	0.6	159
<a href="#">3417MH0002970021201267C00</a>	1267	14049	6.53	-0.2	0.1	29.9	0.5	127
<a href="#">3417MH0002970021201268C00</a>	1268	14109	6.18	-0.1	0.1	28.7	0.5	85
<a href="#">3417MH0002970021201269C00</a>	1269	14169	5.85	-0.1	0.1	27.5	0.4	63
<a href="#">3417MH0002970021201270C00</a>	1270	14229	5.55	-0.1	0.1	26.4	0.4	31
								8

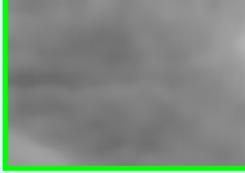
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### Sol 3417 - MAHLI Onboard Focus Merge Product Information

		target Knott - ~6 mm standoff						
			CDPID	corresponding frame:	3417MH0004190011201272C00			
best focus image:	3417MH0001930001201281R00	1281		motor count:	15272	range (cm):	2.5	
range map product:	3417MH0001930001201282S00	1282		acquired sequence:	mhli00419	stack type:	Relative	
acquired on date:	18-Mar-22			merge sequence:	mhli00193	merge type:	Basic	
motor count interval:	72	acquired on sol:	3417	focus merged on sol:	3417			
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm) near      far	pixel scale (µm/pixel)	pixel scale uncertainty (µm/pixel)	DN in range map	image n of 8
3417MH0004190021201273C00	1273	14984	3.07	-0.1      0.1	17.7	0.2	255	1
3417MH0004190021201274C00	1274	15056	2.92	-0.1      0.1	17.2	0.2	223	2
3417MH0004190021201275C00	1275	15128	2.78	-0.1      0.1	16.7	0.2	191	3
3417MH0004190021201276C00	1276	15200	2.65	-0.1      0.1	16.2	0.2	159	4
3417MH0004190021201277C00	1277	15272	2.52	-0.1      0.1	15.8	0.2	127	5
3417MH0004190021201278C00	1278	15344	2.41	0.0      0.1	15.4	0.2	85	6
3417MH0004190021201279C00	1279	15416	2.30	0.0      0.1	15.0	0.2	63	7
3417MH0004190021201280C00	1280	15488	2.19	0.0      0.0	14.6	0.1	31	8

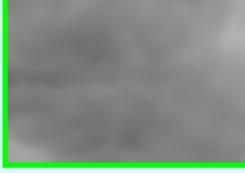
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#### Sol 3419 - MAHLI Onboard Focus Merge Product Information

		target <b>Blackadder - APXS spot 2 - mosaic position 1 of 9 - stereo-1</b> - ~5 cm standoff							
best focus image:	<a href="#">3420MH0004490001201419R00</a>	1419	motor count:	14000	range (cm):	6.8			
range map product:	<a href="#">3420MH0004490001201420S00</a>	1420	acquired sequence:	mhli00173	stack type:	Relative			
acquired on date:	20-Mar-22		merge sequence:	mhli00449	merge type:	Basic			
motor count interval:	30	acquired on sol:	3419	focus merged on sol:	3420				
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)	pixel scale (μm/pixel)	pixel scale uncertainty (μm/pixel)	DN in range map	image n of 8	
			near	far					
3419MH0001730021201291C00	1291	13880	7.70	-0.2	0.2	34.0	0.7	255	1
3419MH0001730021201292C00	1292	13910	7.47	-0.2	0.2	33.2	0.7	223	2
3419MH0001730021201293C00	1293	13940	7.26	-0.2	0.2	32.4	0.6	191	3
3419MH0001730021201294C00	1294	13970	7.05	-0.2	0.2	31.7	0.6	159	4
3419MH0001730021201295C00	1295	14000	6.84	-0.2	0.2	31.0	0.6	127	5
3419MH0001730021201296C00	1296	14030	6.65	-0.2	0.2	30.3	0.6	85	6
3419MH0001730021201297C00	1297	14060	6.47	-0.2	0.1	29.7	0.5	63	7
3419MH0001730021201298C00	1298	14090	6.29	-0.1	0.1	29.0	0.5	31	8

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#### Sol 3419 - MAHLI Onboard Focus Merge Product Information

		target <b>Blackadder - APXS spot 2 - mosaic position 1 of 9 - stereo-2</b> - ~5 cm standoff							
best focus image:	<a href="#">3420MH0004490001201417R00</a>	1417	motor count:	13999	range (cm):	6.9			
range map product:	<a href="#">3420MH0004490001201418S00</a>	1418	acquired sequence:	mhli00173	stack type:	Relative			
acquired on date:	20-Mar-22		merge sequence:	mhli00449	merge type:	Basic			
motor count interval:	30	acquired on sol:	3419	focus merged on sol:	3420				
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)	pixel scale (μm/pixel)	pixel scale uncertainty (μm/pixel)	DN in range map	image n of 8	
			near	far					
3419MH0001730021201301C00	1301	13879	7.71	-0.2	0.2	34.0	0.7	255	1
3419MH0001730021201302C00	1302	13909	7.48	-0.2	0.2	33.2	0.7	223	2
3419MH0001730021201303C00	1303	13939	7.26	-0.2	0.2	32.5	0.6	191	3
3419MH0001730021201304C00	1304	13969	7.05	-0.2	0.2	31.7	0.6	159	4
3419MH0001730021201305C00	1305	13999	6.85	-0.2	0.2	31.0	0.6	127	5
3419MH0001730021201306C00	1306	14029	6.66	-0.2	0.2	30.3	0.6	85	6
3419MH0001730021201307C00	1307	14059	6.47	-0.2	0.1	29.7	0.5	63	7
3419MH0001730021201308C00	1308	14089	6.29	-0.1	0.1	29.1	0.5	31	8

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#### Sol 3419 - MAHLI Onboard Focus Merge Product Information

		target Blackadder - APXS spot 2 - ~1 cm standoff							
			CDPID	corresponding frame:	3419MH0007430011201310C00				
best focus image:	3420MH0004490001201415R00	1415		motor count:	15114	range (cm):	2.8		
range map product:	3420MH0004490001201416S00	1416		acquired sequence:	mhli00743	stack type:	Relative		
acquired on date:	20-Mar-22				merge sequence:	mhli00449	merge type:		
motor count interval:		36	acquired on sol:	3419	focus merged on sol:	3420			
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)	pixel scale (μm/pixel)	pixel scale uncertainty (μm/pixel)	DN in range map		
			near	far					
3419MH0007430021201311C00	1311	14970	3.10	-0.1	0.1	17.8	0.2	255	1
3419MH0007430021201312C00	1312	15006	3.03	-0.1	0.1	17.6	0.2	223	2
3419MH0007430021201313C00	1313	15042	2.95	-0.1	0.1	17.3	0.2	191	3
3419MH0007430021201314C00	1314	15078	2.88	-0.1	0.1	17.0	0.2	159	4
3419MH0007430021201315C00	1315	15114	2.81	-0.1	0.1	16.8	0.2	127	5
3419MH0007430021201316C00	1316	15150	2.74	-0.1	0.1	16.5	0.2	85	6
3419MH0007430021201317C00	1317	15186	2.67	-0.1	0.1	16.3	0.2	63	7
3419MH0007430021201318C00	1318	15222	2.61	-0.1	0.1	16.1	0.2	31	8

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#### Sol 3419 - MAHLI Onboard Focus Merge Product Information

		target Blackadder - APXS spot 1 - mosaic position 2 of 9 - ~5 cm standoff							
			CDPID	corresponding frame:	3419MH0001730011201320C00				
best focus image:	3420MH0004490001201413R00	1413		motor count:	14003	range (cm):	6.8		
range map product:	3420MH0004490001201414S00	1414		acquired sequence:	mhli00173	stack type:	Relative		
acquired on date:	20-Mar-22				merge sequence:	mhli00449	merge type:		
motor count interval:		30	acquired on sol:	3419	focus merged on sol:	3420			
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)	pixel scale (μm/pixel)	pixel scale uncertainty (μm/pixel)	DN in range map		
			near	far					
3419MH0001730021201321C00	1321	13883	7.68	-0.2	0.2	33.9	0.7	255	1
3419MH0001730021201322C00	1322	13913	7.45	-0.2	0.2	33.1	0.7	223	2
3419MH0001730021201323C00	1323	13943	7.23	-0.2	0.2	32.4	0.6	191	3
3419MH0001730021201324C00	1324	13973	7.02	-0.2	0.2	31.6	0.6	159	4
3419MH0001730021201325C00	1325	14003	6.82	-0.2	0.2	30.9	0.6	127	5
3419MH0001730021201326C00	1326	14033	6.63	-0.2	0.2	30.2	0.6	85	6
3419MH0001730021201327C00	1327	14063	6.45	-0.2	0.1	29.6	0.5	63	7
3419MH0001730021201328C00	1328	14093	6.27	-0.1	0.1	29.0	0.5	31	8

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#### Sol 3419 - MAHLI Onboard Focus Merge Product Information

		target Blackadder - mosaic position 9 of 9 - ~4 cm standoff						
			CDPID	corresponding frame:		3419MH0001730011201330C00		
best focus image:		3420MH0004490001201411R00	1411	motor count:		14194	range (cm):	5.7
range map product:		3420MH0004490001201412S00	1412	acquired sequence:		mhli00173	stack type:	Relative
acquired on date:		20-Mar-22			merge sequence:		mhli00449	merge type: Basic
motor count interval:		30	acquired on sol:		3419	focus merged on sol:		3420
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (μm/pixel)	pixel scale uncertainty (μm/pixel)	DN in range map
				near	far			
3419MH0001730021201331C00	1331	14074	6.38	-0.2	0.1	29.4	0.5	255
3419MH0001730021201332C00	1332	14104	6.21	-0.1	0.1	28.8	0.5	223
3419MH0001730021201333C00	1333	14134	6.04	-0.1	0.1	28.2	0.5	191
3419MH0001730021201334C00	1334	14164	5.88	-0.1	0.1	27.6	0.4	159
3419MH0001730021201335C00	1335	14194	5.72	-0.1	0.1	27.0	0.4	127
3419MH0001730021201336C00	1336	14224	5.57	-0.1	0.1	26.5	0.4	85
3419MH0001730021201337C00	1337	14254	5.43	-0.1	0.1	26.0	0.4	63
3419MH0001730021201338C00	1338	14284	5.29	-0.1	0.1	25.5	0.4	31
								8

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#### Sol 3419 - MAHLI Onboard Focus Merge Product Information

		target Blackadder - mosaic position 8 of 9 - ~4 cm standoff						
			CDPID	corresponding frame:		3419MH0001730011201340C00		
best focus image:		3420MH0004490001201409R00	1409	motor count:		14153	range (cm):	5.9
range map product:		3420MH0004490001201410S00	1410	acquired sequence:		mhli00173	stack type:	Relative
acquired on date:		20-Mar-22			merge sequence:		mhli00449	merge type: Basic
motor count interval:		30	acquired on sol:		3419	focus merged on sol:		3420
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (μm/pixel)	pixel scale uncertainty (μm/pixel)	DN in range map
				near	far			
3419MH0001730021201341C00	1341	14033	6.63	-0.2	0.2	30.2	0.6	255
3419MH0001730021201342C00	1342	14063	6.45	-0.2	0.1	29.6	0.5	223
3419MH0001730021201343C00	1343	14093	6.27	-0.1	0.1	29.0	0.5	191
3419MH0001730021201344C00	1344	14123	6.10	-0.1	0.1	28.4	0.5	159
3419MH0001730021201345C00	1345	14153	5.94	-0.1	0.1	27.8	0.5	127
3419MH0001730021201346C00	1346	14183	5.78	-0.1	0.1	27.2	0.4	85
3419MH0001730021201347C00	1347	14213	5.63	-0.1	0.1	26.7	0.4	63
3419MH0001730021201348C00	1348	14243	5.48	-0.1	0.1	26.2	0.4	31
								8

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Sol 3419 - MAHLI Onboard Focus Merge Product Information

		target Blackadder - mosaic position 7 of 9 - ~5 cm standoff						
		CDPID	corresponding frame:		3419MH0001730011201350C00			
best focus image:	3420MH0004490001201407R00		1407	motor count:		14112	range (cm):	6.2
range map product:	3420MH0004490001201408S00		1408	acquired sequence:		mhli00173	stack type:	Relative
acquired on date:	20-Mar-22		merge sequence:		mhli00449	merge type:	Basic	
motor count interval:		30	acquired on sol:		3419	focus merged on sol:		3420
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (µm/pixel)	pixel scale uncertainty (µm/pixel)	DN in range map
				near	far			
3419MH0001730021201351C00	1351	13992	6.90	-0.2	0.2	31.2	0.6	255
3419MH0001730021201352C00	1352	14022	6.70	-0.2	0.2	30.5	0.6	223
3419MH0001730021201353C00	1353	14052	6.51	-0.2	0.1	29.8	0.5	191
3419MH0001730021201354C00	1354	14082	6.33	-0.2	0.1	29.2	0.5	159
3419MH0001730021201355C00	1355	14112	6.16	-0.1	0.1	28.6	0.5	127
3419MH0001730021201356C00	1356	14142	6.00	-0.1	0.1	28.0	0.5	85
3419MH0001730021201357C00	1357	14172	5.84	-0.1	0.1	27.4	0.4	63
3419MH0001730021201358C00	1358	14202	5.68	-0.1	0.1	26.9	0.4	31

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Sol 3419 - MAHLI Onboard Focus Merge Product Information

		target Blackadder - mosaic position 6 of 9 - ~45 mm standoff							
		CDPID	corresponding frame:		3419MH0001730011201360C00				
best focus image:	3420MH0004490001201405R00		1405	motor count:		14107	range (cm):	6.2	
range map product:	3420MH0004490001201406S00		1406	acquired sequence:		mhli00173	stack type:	Relative	
acquired on date:	20-Mar-22					merge sequence:	mhli00449	merge type:	
motor count interval:		30	acquired on sol:		3419	focus merged on sol:		3420	
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (µm/pixel)	pixel scale uncertainty (µm/pixel)	DN in range map	image n of 8
				near	far				
3419MH0001730021201361C00	1361	13987	6.93	-0.2	0.2	31.3	0.6	255	1
3419MH0001730021201362C00	1362	14017	6.73	-0.2	0.2	30.6	0.6	223	2
3419MH0001730021201363C00	1363	14047	6.55	-0.2	0.1	29.9	0.5	191	3
3419MH0001730021201364C00	1364	14077	6.36	-0.2	0.1	29.3	0.5	159	4
3419MH0001730021201365C00	1365	14107	6.19	-0.1	0.1	28.7	0.5	127	5
3419MH0001730021201366C00	1366	14137	6.02	-0.1	0.1	28.1	0.5	85	6
3419MH0001730021201367C00	1367	14167	5.86	-0.1	0.1	27.5	0.4	63	7
3419MH0001730021201368C00	1368	14197	5.71	-0.1	0.1	27.0	0.4	31	8

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Sol 3419 - MAHLI Onboard Focus Merge Product Information

		target Blackadder - mosaic position 5 of 9 - ~45 mm standoff						
			CDPID	corresponding frame:		3419MH0001730011201370C00		
best focus image:	3420MH0004490001201403R00		1403	motor count:		14084	range (cm):	6.3
range map product:	3420MH0004490001201404S00		1404	acquired sequence:		mhli00173	stack type:	Relative
acquired on date:	20-Mar-22			merge sequence:		mhli00449	merge type:	Basic
motor count interval:		30	acquired on sol:		3419	focus merged on sol:		3420
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (µm/pixel)	pixel scale uncertainty (µm/pixel)	DN in range map
				near	far			
3419MH0001730021201371C00	1371	13964	7.09	-0.2	0.2	31.8	0.6	255
3419MH0001730021201372C00	1372	13994	6.88	-0.2	0.2	31.1	0.6	223
3419MH0001730021201373C00	1373	14024	6.69	-0.2	0.2	30.4	0.6	191
3419MH0001730021201374C00	1374	14054	6.50	-0.2	0.1	29.8	0.5	159
3419MH0001730021201375C00	1375	14084	6.32	-0.1	0.1	29.2	0.5	127
3419MH0001730021201376C00	1376	14114	6.15	-0.1	0.1	28.6	0.5	85
3419MH0001730021201377C00	1377	14144	5.99	-0.1	0.1	28.0	0.5	63
3419MH0001730021201378C00	1378	14174	5.83	-0.1	0.1	27.4	0.4	31

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Sol 3419 - MAHLI Onboard Focus Merge Product Information

		target Blackadder - mosaic position 4 of 9 - ~5 cm standoff							
			CDPID	corresponding frame:		3419MH0001730011201380C00			
best focus image:	3420MH0004490001201401R00		1401	motor count:		14001	range (cm):	6.8	
range map product:	3420MH0004490001201402S00		1402	acquired sequence:		mhli00173	stack type:	Relative	
acquired on date:	20-Mar-22			merge sequence:		mhli00449	merge type:	Basic	
motor count interval:		30	acquired on sol:		3419	focus merged on sol:		3420	
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (µm/pixel)	pixel scale uncertainty (µm/pixel)	DN in range map	image n of 8
				near	far				
3419MH0001730021201381C00	1381	13881	7.70	-0.2	0.2	34.0	0.7	255	1
3419MH0001730021201382C00	1382	13911	7.47	-0.2	0.2	33.2	0.7	223	2
3419MH0001730021201383C00	1383	13941	7.25	-0.2	0.2	32.4	0.6	191	3
3419MH0001730021201384C00	1384	13971	7.04	-0.2	0.2	31.7	0.6	159	4
3419MH0001730021201385C00	1385	14001	6.84	-0.2	0.2	31.0	0.6	127	5
3419MH0001730021201386C00	1386	14031	6.64	-0.2	0.2	30.3	0.6	85	6
3419MH0001730021201387C00	1387	14061	6.46	-0.2	0.1	29.6	0.5	63	7
3419MH0001730021201388C00	1388	14091	6.28	-0.1	0.1	29.0	0.5	31	8

updated: [27\\_April\\_2022](#)

### Sol 3419 - MAHLI Onboard Focus Merge Product Information

		target Blackadder - mosaic position 3 of 9 - ~5 cm standoff						
			CDPID	corresponding frame:	3419MH0001730011201390C00			
best focus image:	3420MH0004490001201399R00	1399		motor count:	14002	range (cm):	6.8	
range map product:	3420MH0004490001201400S00	1400		acquired sequence:	mhli00173	stack type:	Relative	
acquired on date:	20-Mar-22			merge sequence:	mhli00449	merge type:	Basic	
motor count interval:	30	acquired on sol:	3419	focus merged on sol:	3420			
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)	pixel scale (μm/pixel)	pixel scale uncertainty (μm/pixel)	DN in range map	image n of 8
3419MH0001730021201391C00	1391	13882	7.69	-0.2 0.2	34.0	0.7	255	1
3419MH0001730021201392C00	1392	13912	7.46	-0.2 0.2	33.2	0.7	223	2
3419MH0001730021201393C00	1393	13942	7.24	-0.2 0.2	32.4	0.6	191	3
3419MH0001730021201394C00	1394	13972	7.03	-0.2 0.2	31.7	0.6	159	4
3419MH0001730021201395C00	1395	14002	6.83	-0.2 0.2	30.9	0.6	127	5
3419MH0001730021201396C00	1396	14032	6.64	-0.2 0.2	30.3	0.6	85	6
3419MH0001730021201397C00	1397	14062	6.45	-0.2 0.1	29.6	0.5	63	7
3419MH0001730021201398C00	1398	14092	6.28	-0.1 0.1	29.0	0.5	31	8

updated: [25\\_April\\_2022](#)

### Sol 3421 - MAHLI Onboard Focus Merge Product Information

		target Calder - before DRT - APXS spot 1 - stereo-1 - ~5 cm standoff					
			CDPID	corresponding frame:		3421MH0001520011201424C00	
best focus image:		<a href="#">3421MH0001530001201469R00</a>	1469	motor count:		14005	range (cm): 6.8
range map product:		<a href="#">3421MH0001530001201470S00</a>	1470	acquired sequence:		mhli00152	stack type: Relative
acquired on date:		22-Mar-22		merge sequence:		mhli00153	merge type: Basic
motor count interval:		48	acquired on sol:		3421	focus merged on sol:	
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (µm/pixel)	pixel scale uncertainty (µm/pixel)
				near	far		
<a href="#">3421MH0001520021201425C00</a>	1425	13813	8.25	-0.2	0.2	36.0	0.8
<a href="#">3421MH0001520021201426C00</a>	1426	13861	7.85	-0.2	0.2	34.5	0.7
<a href="#">3421MH0001520021201427C00</a>	1427	13909	7.48	-0.2	0.2	33.2	0.7
<a href="#">3421MH0001520021201428C00</a>	1428	13957	7.14	-0.2	0.2	32.0	0.6
<a href="#">3421MH0001520021201429C00</a>	1429	14005	6.81	-0.2	0.2	30.9	0.6
<a href="#">3421MH0001520021201430C00</a>	1430	14053	6.51	-0.2	0.1	29.8	0.5
<a href="#">3421MH0001520021201431C00</a>	1431	14101	6.22	-0.1	0.1	28.8	0.5
<a href="#">3421MH0001520021201432C00</a>	1432	14149	5.96	-0.1	0.1	27.9	0.5

updated: [25\\_April\\_2022](#)

### Sol 3421 - MAHLI Onboard Focus Merge Product Information

		target Calder - before DRT - APXS spot 1 - stereo-2 - ~5 cm standoff					
			CDPID	corresponding frame:		3421MH0001520011201434C00	
best focus image:		<a href="#">3421MH0001530001201467R00</a>	1467	motor count:		14004	range (cm): 6.8
range map product:		<a href="#">3421MH0001530001201468S00</a>	1468	acquired sequence:		mhli00152	stack type: Relative
acquired on date:		22-Mar-22		merge sequence:		mhli00153	merge type: Basic
motor count interval:		48	acquired on sol:		3421	focus merged on sol:	
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (µm/pixel)	pixel scale uncertainty (µm/pixel)
				near	far		
<a href="#">3421MH0001520021201435C00</a>	1435	13812	8.26	-0.2	0.2	36.0	0.8
<a href="#">3421MH0001520021201436C00</a>	1436	13860	7.86	-0.2	0.2	34.6	0.7
<a href="#">3421MH0001520021201437C00</a>	1437	13908	7.49	-0.2	0.2	33.3	0.7
<a href="#">3421MH0001520021201438C00</a>	1438	13956	7.14	-0.2	0.2	32.0	0.6
<a href="#">3421MH0001520021201439C00</a>	1439	14004	6.82	-0.2	0.2	30.9	0.6
<a href="#">3421MH0001520021201440C00</a>	1440	14052	6.51	-0.2	0.1	29.8	0.5
<a href="#">3421MH0001520021201441C00</a>	1441	14100	6.23	-0.1	0.1	28.8	0.5
<a href="#">3421MH0001520021201442C00</a>	1442	14148	5.96	-0.1	0.1	27.9	0.5

updated: [25\\_April\\_2022](#)

### Sol 3421 - MAHLI Onboard Focus Merge Product Information

		target Calder - before DRT - APXS spot 1 - ~1 cm standoff						
best focus image:	<a href="#">3421MH0001530001201465R00</a>	1465	corresponding frame:		<a href="#">3421MH0007960011201444C00</a>			
range map product:	<a href="#">3421MH0001530001201466S00</a>	1466	motor count:		15123	range (cm):	2.8	
acquired on date:	22-Mar-22			acquired sequence:		mhli00796	stack type:	Relative
motor count interval:	42	merge sequence:		mhli00153	merge type:	Basic		
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)	pixel scale (μm/pixel)	pixel scale uncertainty (μm/pixel)	DN in range map	image n of 8
3421MH0007960021201445C00	1445	14955	3.14	-0.1 near      far	17.9	0.2	255	1
3421MH0007960021201446C00	1446	14997	3.05	-0.1 near      far	17.6	0.2	223	2
3421MH0007960021201447C00	1447	15039	2.96	-0.1 near      far	17.3	0.2	191	3
3421MH0007960021201448C00	1448	15081	2.87	-0.1 near      far	17.0	0.2	159	4
3421MH0007960021201449C00	1449	15123	2.79	-0.1 near      far	16.7	0.2	127	5
3421MH0007960021201450C00	1450	15165	2.71	-0.1 near      far	16.4	0.2	85	6
3421MH0007960021201451C00	1451	15207	2.63	-0.1 near      far	16.2	0.2	63	7
3421MH0007960021201452C00	1452	15249	2.56	-0.1 near      far	15.9	0.2	31	8

updated: [25\\_April\\_2022](#)

### Sol 3421 - MAHLI Onboard Focus Merge Product Information

		target Calder - before DRT - APXS spot 2 - ~5 cm standoff						
best focus image:	<a href="#">3421MH0001530001201463R00</a>	1463	motor count:		14007	range (cm):	6.8	
range map product:	<a href="#">3421MH0001530001201464S00</a>	1464	acquired sequence:		mhli00152	stack type:	Relative	
acquired on date:	22-Mar-22			merge sequence:		mhli00153	merge type:	Basic
motor count interval:	48	acquired on sol:		3421	focus merged on sol:		3421	
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)	pixel scale (μm/pixel)	pixel scale uncertainty (μm/pixel)	DN in range map	image n of 8
3421MH0001520021201455C00	1455	13815	8.24	-0.2 near      far	35.9	0.8	255	1
3421MH0001520021201456C00	1456	13863	7.84	-0.2 near      far	34.5	0.7	223	2
3421MH0001520021201457C00	1457	13911	7.47	-0.2 near      far	33.2	0.7	191	3
3421MH0001520021201458C00	1458	13959	7.12	-0.2 near      far	32.0	0.6	159	4
3421MH0001520021201459C00	1459	14007	6.80	-0.2 near      far	30.8	0.6	127	5
3421MH0001520021201460C00	1460	14055	6.50	-0.2 near      far	29.8	0.5	85	6
3421MH0001520021201461C00	1461	14103	6.21	-0.1 near      far	28.8	0.5	63	7
3421MH0001520021201462C00	1462	14151	5.95	-0.1 near      far	27.8	0.5	31	8

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### Sol 3422 - MAHLI Onboard Focus Merge Product Information

		target Calder - after DRT - stereo-1 - ~5 cm standoff							
			CDPID	corresponding frame:	3422MH0001520011201474C00				
best focus image:	3422MH0001710001201564R00	1564		motor count:	14012	range (cm):	6.8		
range map product:	3422MH0001710001201565S00	1565		acquired sequence:	mhli00152	stack type:	Relative		
acquired on date:	23-Mar-22			merge sequence:	mhli00171	merge type:	Basic		
motor count interval:	48	acquired on sol:	3422	focus merged on sol:	3422				
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)	pixel scale (μm/pixel)	pixel scale uncertainty (μm/pixel)	DN in range map	image n of 8	
			near	far					
3422MH0001520021201475C00	1475	13820	8.19	-0.2	0.2	35.7	0.7	255	1
3422MH0001520021201476C00	1476	13868	7.80	-0.2	0.2	34.4	0.7	223	2
3422MH0001520021201477C00	1477	13916	7.43	-0.2	0.2	33.1	0.6	191	3
3422MH0001520021201478C00	1478	13964	7.09	-0.2	0.2	31.8	0.6	159	4
3422MH0001520021201479C00	1479	14012	6.77	-0.2	0.2	30.7	0.6	127	5
3422MH0001520021201480C00	1480	14060	6.47	-0.2	0.1	29.7	0.5	85	6
3422MH0001520021201481C00	1481	14108	6.18	-0.1	0.1	28.7	0.5	63	7
3422MH0001520021201482C00	1482	14156	5.92	-0.1	0.1	27.7	0.5	31	8

updated: [25\\_April\\_2022](#)

### Sol 3422 - MAHLI Onboard Focus Merge Product Information

		target Calder - after DRT - stereo-2 - ~5 cm standoff							
			CDPID	corresponding frame:	3422MH0001520011201484C00				
best focus image:	3422MH0001710001201562R00	1562		motor count:	14008	range (cm):	6.8		
range map product:	3422MH0001710001201563S00	1563		acquired sequence:	mhli00152	stack type:	Relative		
acquired on date:	23-Mar-22			merge sequence:	mhli00171	merge type:	Basic		
motor count interval:	48	acquired on sol:	3422	focus merged on sol:	3422				
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)	pixel scale (μm/pixel)	pixel scale uncertainty (μm/pixel)	DN in range map	image n of 8	
			near	far					
3422MH0001520021201485C00	1485	13816	8.23	-0.2	0.2	35.9	0.8	255	1
3422MH0001520021201486C00	1486	13864	7.83	-0.2	0.2	34.5	0.7	223	2
3422MH0001520021201487C00	1487	13912	7.46	-0.2	0.2	33.2	0.7	191	3
3422MH0001520021201488C00	1488	13960	7.11	-0.2	0.2	31.9	0.6	159	4
3422MH0001520021201489C00	1489	14008	6.79	-0.2	0.2	30.8	0.6	127	5
3422MH0001520021201490C00	1490	14056	6.49	-0.2	0.1	29.7	0.5	85	6
3422MH0001520021201491C00	1491	14104	6.21	-0.1	0.1	28.8	0.5	63	7
3422MH0001520021201492C00	1492	14152	5.94	-0.1	0.1	27.8	0.5	31	8

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Sol 3422 - MAHLI Onboard Focus Merge Product Information

		target Calder - after DRT - ~1 cm standoff						
			CDPID	corresponding frame:		3422MH0007960011201494C00		
best focus image:	3422MH0001710001201560R00		1560	motor count:		15138	range (cm):	2.8
range map product:	3422MH0001710001201561S00		1561	acquired sequence:		mhli00796	stack type:	Relative
acquired on date:	23-Mar-22			merge sequence:		mhli00171	merge type:	Basic
motor count interval:		42	acquired on sol:		3422	focus merged on sol:		3422
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (µm/pixel)	pixel scale uncertainty (µm/pixel)	DN in range map
				near	far			
3422MH0007960021201495C00	1495	14970	3.10	-0.1	0.1	17.8	0.2	255
3422MH0007960021201496C00	1496	15012	3.01	-0.1	0.1	17.5	0.2	223
3422MH0007960021201497C00	1497	15054	2.93	-0.1	0.1	17.2	0.2	191
3422MH0007960021201498C00	1498	15096	2.84	-0.1	0.1	16.9	0.2	159
3422MH0007960021201499C00	1499	15138	2.76	-0.1	0.1	16.6	0.2	127
3422MH0007960021201500C00	1500	15180	2.68	-0.1	0.1	16.3	0.2	85
3422MH0007960021201501C00	1501	15222	2.61	-0.1	0.1	16.1	0.2	63
3422MH0007960021201502C00	1502	15264	2.54	-0.1	0.1	15.8	0.2	31

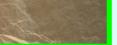
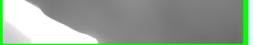
updated: 25\_April\_2022

Sol 3422 - MAHLI Onboard Focus Merge Product Information

		target Scandal_Beck - ~14 cm standoff							
			CDPID	corresponding frame:		3422MH0007820011201506C00			
best focus image:	3422MH0001710001201558R00		1558	motor count:		13293	range (cm):	15.9	
range map product:	3422MH0001710001201559S00		1559	acquired sequence:		mhli00782	stack type:	Relative	
acquired on date:	23-Mar-22			merge sequence:		mhli00171	merge type:	Basic	
motor count interval:		36	acquired on sol:		3422	focus merged on sol:		3422	
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (µm/pixel)	pixel scale uncertainty (µm/pixel)	DN in range map	image n of 8
				near	far				
3422MH0007820031201508C00	1508	13149	20.22	-1.1	1.1	78.1	3.9	255	1
3422MH0007820031201509C00	1509	13185	18.95	-0.9	1.0	73.6	3.4	223	2
3422MH0007820031201510C00	1510	13221	17.81	-0.8	0.9	69.6	3.0	191	3
3422MH0007820031201511C00	1511	13257	16.78	-0.8	0.8	66.0	2.7	159	4
3422MH0007820031201512C00	1512	13293	15.85	-0.7	0.7	62.7	2.4	127	5
3422MH0007820031201513C00	1513	13329	15.01	-0.6	0.6	59.7	2.2	85	6
3422MH0007820031201514C00	1514	13365	14.24	-0.6	0.6	57.0	2.0	63	7
3422MH0007820031201515C00	1515	13401	13.53	-0.5	0.5	54.5	1.8	31	8

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Sol 3422 - MAHLI Onboard Focus Merge Product Information

		target Ashkirk - stereo-1 - ~5 cm standoff						
			CDPID	corresponding frame:		3422MH0002240011201519C00		
best focus image:	3422MH0001710001201556R00		1556	motor count:		13988	range (cm):	6.9
range map product:	3422MH0001710001201557S00		1557	acquired sequence:		mhli00224	stack type:	Relative
acquired on date:	23-Mar-22			merge sequence:		mhli00171	merge type:	Basic
motor count interval:		42	acquired on sol:		3422	focus merged on sol:		3422
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (µm/pixel)	pixel scale uncertainty (µm/pixel)	DN in range map
				near	far			
3422MH0002240021201520C00	1520	13820	8.19	-0.2	0.2	35.7	0.7	255
3422MH0002240021201521C00	1521	13862	7.85	-0.2	0.2	34.5	0.7	223
3422MH0002240021201522C00	1522	13904	7.52	-0.2	0.2	33.4	0.7	191
3422MH0002240021201523C00	1523	13946	7.21	-0.2	0.2	32.3	0.6	159
3422MH0002240021201524C00	1524	13988	6.92	-0.2	0.2	31.3	0.6	127
3422MH0002240021201525C00	1525	14030	6.65	-0.2	0.2	30.3	0.6	85
3422MH0002240021201526C00	1526	14072	6.39	-0.2	0.1	29.4	0.5	63
3422MH0002240021201527C00	1527	14114	6.15	-0.1	0.1	28.6	0.5	31

updated: 25\_April\_2022

Sol 3422 - MAHLI Onboard Focus Merge Product Information

		target Ashkirk - stereo-2 - ~5 cm standoff						
			CDPID	corresponding frame:		3422MH0002240011201529C00		
best focus image:	3422MH0001710001201554R00		1554	motor count:		13970	range (cm):	7.0
range map product:	3422MH0001710001201555S00		1555	acquired sequence:		mhli00224	stack type:	Relative
acquired on date:	23-Mar-22			merge sequence:		mhli00171	merge type:	Basic
motor count interval:		42	acquired on sol:		3422	focus merged on sol:		3422
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (µm/pixel)	pixel scale uncertainty (µm/pixel)	DN in range map
				near	far			
3422MH0002240021201530C00	1530	13802	8.35	-0.2	0.2	36.3	0.8	255
3422MH0002240021201531C00	1531	13844	7.99	-0.2	0.2	35.0	0.7	223
3422MH0002240021201532C00	1532	13886	7.66	-0.2	0.2	33.9	0.7	191
3422MH0002240021201533C00	1533	13928	7.34	-0.2	0.2	32.7	0.6	159
3422MH0002240021201534C00	1534	13970	7.05	-0.2	0.2	31.7	0.6	127
3422MH0002240021201535C00	1535	14012	6.77	-0.2	0.2	30.7	0.6	85
3422MH0002240021201536C00	1536	14054	6.50	-0.2	0.1	29.8	0.5	63
3422MH0002240021201537C00	1537	14096	6.25	-0.1	0.1	28.9	0.5	31

updated: [25\\_April\\_2022](#)

### Sol 3422 - MAHLI Onboard Focus Merge Product Information

		target Ashkirk - ~25 mm standoff						
			CDPID	corresponding frame:	3422MH0003070011201539C00			
best focus image:	3422MH0001710001201552R00	1552		motor count:	14461	range (cm):	4.6	
range map product:	3422MH0001710001201553S00	1553		acquired sequence:	mhli00307	stack type:	Relative	
acquired on date:	23-Mar-22			merge sequence:	mhli00171	merge type:	Basic	
motor count interval:		72	acquired on sol:	3422	focus merged on sol:	3422		
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)	pixel scale (µm/pixel)	pixel scale uncertainty (µm/pixel)	DN in range map	image n of 8
				near				
3422MH0003070021201540C00	1540	14173	5.83	-0.1	0.1	27.4	0.4	255
3422MH0003070021201541C00	1541	14245	5.47	-0.1	0.1	26.2	0.4	223
3422MH0003070021201542C00	1542	14317	5.14	-0.1	0.1	25.0	0.4	191
3422MH0003070021201543C00	1543	14389	4.84	-0.1	0.1	23.9	0.4	159
3422MH0003070021201544C00	1544	14461	4.56	-0.1	0.1	23.0	0.3	127
3422MH0003070021201545C00	1545	14533	4.31	-0.1	0.1	22.1	0.3	85
3422MH0003070021201546C00	1546	14605	4.07	-0.1	0.1	21.2	0.3	63
3422MH0003070021201547C00	1547	14677	3.85	-0.1	0.1	20.5	0.3	31
								8

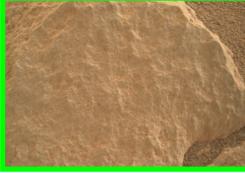
updated: [06\\_June\\_2022](#)

### Sol 3423 - MAHLI Onboard Focus Merge Product Information

		target Redscarhead - stereo-1 - ~5 cm standoff						
best focus image:	<a href="#">3424MH0002270001201626R00</a>	1626	motor count:		13979	range (cm):	7.0	
range map product:	<a href="#">3424MH0002270001201627S00</a>	1627	acquired sequence:		mhli00224	stack type:	Relative	
acquired on date:	24-Mar-22			merge sequence:		mhli00227	merge type:	Basic
motor count interval:		42	acquired on sol:		3423	focus merged on sol:		3424
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (μm/pixel)	pixel scale uncertainty (μm/pixel)	DN in range map
			near	far				
3423MH0002240021201570C00	1570	13811	8.27	-0.2	0.2	36.0	0.8	255
3423MH0002240021201571C00	1571	13853	7.92	-0.2	0.2	34.8	0.7	223
3423MH0002240021201572C00	1572	13895	7.59	-0.2	0.2	33.6	0.7	191
3423MH0002240021201573C00	1573	13937	7.28	-0.2	0.2	32.5	0.6	159
3423MH0002240021201574C00	1574	13979	6.98	-0.2	0.2	31.5	0.6	127
3423MH0002240021201575C00	1575	14021	6.71	-0.2	0.2	30.5	0.6	85
3423MH0002240021201576C00	1576	14063	6.45	-0.2	0.1	29.6	0.5	63
3423MH0002240021201577C00	1577	14105	6.20	-0.1	0.1	28.7	0.5	31
								8

updated: [06\\_June\\_2022](#)

### Sol 3423 - MAHLI Onboard Focus Merge Product Information

		target Redscarhead - stereo-2 - ~5 cm standoff						
best focus image:	<a href="#">3424MH0002270001201624R00</a>	1624	motor count:		13984	range (cm):	7.0	
range map product:	<a href="#">3424MH0002270001201625S00</a>	1625	acquired sequence:		mhli00224	stack type:	Relative	
acquired on date:	24-Mar-22			merge sequence:		mhli00227	merge type:	Basic
motor count interval:		42	acquired on sol:		3423	focus merged on sol:		3424
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (μm/pixel)	pixel scale uncertainty (μm/pixel)	DN in range map
			near	far				
3423MH0002240021201580C00	1580	13816	8.23	-0.2	0.2	35.9	0.8	255
3423MH0002240021201581C00	1581	13858	7.88	-0.2	0.2	34.6	0.7	223
3423MH0002240021201582C00	1582	13900	7.55	-0.2	0.2	33.5	0.7	191
3423MH0002240021201583C00	1583	13942	7.24	-0.2	0.2	32.4	0.6	159
3423MH0002240021201584C00	1584	13984	6.95	-0.2	0.2	31.4	0.6	127
3423MH0002240021201585C00	1585	14026	6.68	-0.2	0.2	30.4	0.6	85
3423MH0002240021201586C00	1586	14068	6.42	-0.2	0.1	29.5	0.5	63
3423MH0002240021201587C00	1587	14110	6.17	-0.1	0.1	28.6	0.5	31
								8

updated: [06\\_June\\_2022](#)

### Sol 3423 - MAHLI Onboard Focus Merge Product Information

		target Breakyneck - stereo-1 - ~5 cm standoff					
			CDPID	corresponding frame:	3423MH0002970011201589C00		
best focus image:	3424MH0002270001201622R00	1622		motor count:	14002	range (cm):	6.8
range map product:	3424MH0002270001201623S00	1623		acquired sequence:	mhli00297	stack type:	Relative
acquired on date:	24-Mar-22					merge sequence:	mhli00227
motor count interval:		60	acquired on sol:		3423	focus merged on sol:	
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (μm/pixel)	pixel scale uncertainty (μm/pixel)
			near	far			
3423MH0002970021201590C00	1590	13762	8.72	-0.2	0.2	37.6	0.8
3423MH0002970021201591C00	1591	13822	8.18	-0.2	0.2	35.7	0.7
3423MH0002970021201592C00	1592	13882	7.69	-0.2	0.2	34.0	0.7
3423MH0002970021201593C00	1593	13942	7.24	-0.2	0.2	32.4	0.6
3423MH0002970021201594C00	1594	14002	6.83	-0.2	0.2	30.9	0.6
3423MH0002970021201595C00	1595	14062	6.45	-0.2	0.1	29.6	0.5
3423MH0002970021201596C00	1596	14122	6.11	-0.1	0.1	28.4	0.5
3423MH0002970021201597C00	1597	14182	5.78	-0.1	0.1	27.3	0.4

updated: [06\\_June\\_2022](#)

### Sol 3423 - MAHLI Onboard Focus Merge Product Information

		target Breakyneck - stereo-2 - ~5 cm standoff					
			CDPID	corresponding frame:	3423MH0002970011201599C00		
best focus image:	3424MH0002270001201620R00	1620		motor count:	14016	range (cm):	6.7
range map product:	3424MH0002270001201621S00	1621		acquired sequence:	mhli00297	stack type:	Relative
acquired on date:	24-Mar-22					merge sequence:	mhli00227
motor count interval:		60	acquired on sol:		3423	focus merged on sol:	
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)		pixel scale (μm/pixel)	pixel scale uncertainty (μm/pixel)
			near	far			
3423MH0002970021201600C00	1600	13776	8.59	-0.2	0.2	37.1	0.8
3423MH0002970021201601C00	1601	13836	8.06	-0.2	0.2	35.3	0.7
3423MH0002970021201602C00	1602	13896	7.58	-0.2	0.2	33.6	0.7
3423MH0002970021201603C00	1603	13956	7.14	-0.2	0.2	32.0	0.6
3423MH0002970021201604C00	1604	14016	6.74	-0.2	0.2	30.6	0.6
3423MH0002970021201605C00	1605	14076	6.37	-0.2	0.1	29.3	0.5
3423MH0002970021201606C00	1606	14136	6.03	-0.1	0.1	28.1	0.5
3423MH0002970021201607C00	1607	14196	5.71	-0.1	0.1	27.0	0.4

updated: [06\\_June\\_2022](#)

### Sol 3423 - MAHLI Onboard Focus Merge Product Information

		target Breakyneck - ~1 cm standoff						
			CDPID	corresponding frame:		3423MH0005230011201609C00		
best focus image:		3424MH0002270001201618R00	1618	motor count:		15164	range (cm): 2.7	
range map product:		3424MH0002270001201619S00	1619	acquired sequence:		mhli00523	stack type: Relative	
acquired on date:		24-Mar-22			merge sequence:	mhli00227	merge type: Basic	
motor count interval:		84	acquired on sol:		3423	focus merged on sol:	3424	
Individual Focus Stack Images	CDPID	motor count	range (cm)	range uncertainty (cm)	pixel scale (µm/pixel)	pixel scale uncertainty (µm/pixel)	DN in range map	image n of 8
				near				
3423MH0005230021201610C00	1610	14828	3.44	-0.1	0.1	19.0	0.2	255
3423MH0005230021201611C00	1611	14912	3.24	-0.1	0.1	18.3	0.2	223
3423MH0005230021201612C00	1612	14996	3.05	-0.1	0.1	17.6	0.2	191
3423MH0005230021201613C00	1613	15080	2.87	-0.1	0.1	17.0	0.2	159
3423MH0005230021201614C00	1614	15164	2.71	-0.1	0.1	16.4	0.2	127
3423MH0005230021201615C00	1615	15248	2.56	-0.1	0.1	15.9	0.2	85
3423MH0005230021201616C00	1616	15332	2.42	0.0	0.1	15.4	0.2	63
3423MH0005230021201617C00	1617	15416	2.30	0.0	0.1	15.0	0.2	31
								8

## 6 Image comment, purpose, RATIONALE\_DESC

A RATIONALE\_DESC accompanies each MAHLI image and each focus merge product archived with the NASA PDS. It is found in each archived image label file (.LBL).

The RATIONALE\_DESC is a text description of the purpose (rationale) behind the acquisition of each MAHLI parent image.

For onboard focus merge products, the RATIONALE\_DESC includes information regarding when the merge was performed and which parent images were merged. This information is not automatically tracked by the instrument or ground data system and thus requires human intervention; this is the only pathway by which this information is conveyed to the data user through the NASA PDS archival products.

The MAHLI Team drafts each RATIONALE\_DESC as the data are acquired and returned to Earth. Final editing of each RATIONALE\_DESC is performed a few months before the data are archived with the NASA PDS. In some cases, an error might be detected in a RATIONALE\_DESC some time after the data are first archived; in such a case, the corrections are made in a later release of MAHLI data to the PDS (as long as the mission continues and funding is available to do so).

The pages that follow capture the RATIONALE\_DESC for each MAHLI image acquired and lists the ID for the best available image or focus merge product returned to Earth. Note that the RATIONALE\_DESC also applies to any other child images spawned by a given parent image and thus there might be additional images, not listed here, that correspond to a given RATIONALE\_DESC. In some cases, it was only necessary to return a thumbnail image; the IDs for these are given in orange text. As noted earlier, purple text indicates Image IDs for which the last two characters might differ from those in the NASA PDS archives.

Note that the text on the pages that follow is tiny. We highly recommend that the reader view this document electronically (*i.e.*, PDF file on a computer screen) and magnify the view  $\geq 400\%$ .

The *MAHLI Image Comment Sheets* that follow include data acquired Sol 3290–3423. During this period, the instrument obtained images and/or performed focus merges on **Sols 3301, 3303, 3312, 3313, 3315, 3316, 3318, 3319, 3320, 3321, 3322, 3323, 3324, 3326, 3328, 3329, 3330, 3344, 3345, 3347, 3349, 3353, 3362, 3363, 3364, 3365, 3369, 3371, 3372, 3374, 3375, 3376, 3378, 3381, 3383, 3385, 3386, 3387, 3388, 3389, 3392, 3393, 3395, 3396, 3397, 3398, 3399, 3409, 3410, 3413, 3415, 3417, 3419, 3420, 3421, 3422, 3423**.

updated: 22\_November\_2021

<b>Sol 3301 - MAHLI Images</b>	acquired/perform date(s)	19-Nov-21		
	camera position	6	Image ID: black = best, least-compressed version receive as of date at upper left; orange = only a thumbnail has been received	
	total parent images	13		
	focus merges performed	0	COPID:	
	total focus merge products	0	Camera Data Product Identifier = MSLCAMERA_PRODUCT_ID in POS archive product labels	
	total parent images + focus merge products	13		
summary of MAHLI activities:				
	MAHLI imaged the Zechestein sample discard pile, the surfaces surrounding SAM inlet #2, with the inlet cover open, a follow-up to Zechestein sample drop-offs and the Zechestein drill hole.			
Sequence	Camera Position	Image ID	COPID	
			Image Comment/Purpose (RATIONALE_DESC for POS archive products, 400 character limit)	
mhlID0197	Zechestein sample discard pile ~25 cm standoff	3301MH0001970001103957C00	3957	autofocus sub-frame for Zechestein sample discard pile - APXS spot 1 - standoff near 25 cm
		3301MH0001970011103958C00	3958	Zechestein sample discard pile - APXS spot 1 - standoff near 25 cm
mhlID0122	Zechestein sample discard pile APXS spot 1 ~45 mm standoff	3301MH0001220001103959C00	3959	autofocus sub-frame for Zechestein sample discard pile - APXS spot 1 - standoff near 45 mm
		3301MH000122001103960C00	3960	Zechestein sample discard pile - APXS spot 1 - standoff near 45 mm
mhlID0122	Zechestein sample discard pile APXS spot 2 ~45 mm standoff	3301MH0001220001103961C00	3961	autofocus sub-frame for Zechestein sample discard pile - APXS spot 2 - standoff near 45 mm
		3301MH000122001103962C00	3962	Zechestein sample discard pile - APXS spot 2 - standoff near 45 mm
mhlID0779	SAM Inlet 2 ~20 cm standoff	3301MH000779001103963C00	3963	SAM inlet 2 cover open after sample drop-off - inspect surface surrounding inlet perimeter - manual focus assuming 231 mm working distance
		3301MH0007790021103964C00	3964	autofocus sub-frame for SAM inlet 2 cover open after sample drop-off - inspect surface surrounding inlet perimeter - standoff near 20 cm
		3301MH0007790031103965C00	3965	SAM inlet 2 cover open after sample drop-off - inspect surface surrounding inlet perimeter - standoff near 20 cm
mhlID0197	Zechestein drill hole drilled on Sol 3289 ~25 cm standoff	3301MH0001970001103966C00	3966	autofocus sub-frame for drill hole in rock named Zechestein - drilled sol 3289 - standoff near 25 cm
		3301MH000197001103967C00	3967	drill hole in rock named Zechestein - drilled sol 3289 - standoff near 25 cm
mhlID0774	Zechestein drill hole drilled on Sol 3289 ~10 cm standoff	3301MH0007740001103968C00	3968	autofocus sub-frame for drill hole in rock named Zechestein - drilled sol 3289 - sub-frame positioned to focus on surface outside hole - standoff near 10 cm
		3301MH000774001103969C00	3969	drill hole in rock named Zechestein - drilled sol 3289 - focus based on preceding autofocus sub-frame - standoff near 10 cm

updated: 24\_November\_2021

**Sol 3303 - MAHLI Images**

acquired/perform date(s)	20-Nov-21			
camera position:	83	Image ID:		
total parent images	85	black = best, least-compressed version receive as of date at upper left; orange = only a thumbnail has been received		
focus merges performed	0	COPID:		
total focus merge products	0	Camera Data Product Identifier = MSLCAMERA_PRODUCT_ID in POS archive product labels		
total parent images + focus merge products	85			
summary of MAHLI activities:				
MAHLI imaged the Zechelein Sample Discard pile and a rover self-portrait was acquired to document the Zechelein drill site.				
Sequence	Camera Position	Image ID	COPID	
mhlID0122	Zechelein sample discard pile APXS spot 2 ~55 mm standoff	3303MH00012200110397000	3970	autofocus sub-frame for Zechelein sample discard pile - APXS spot 2 - standoff near 55 mm
mhlID0122	Zechelein sample discard pile APXS spot 1 ~55 mm standoff	3303MH00012200110397100	3971	Zechelein sample discard pile - APXS spot 2 - standoff near 55 mm
mhlID0390		3303MH00012200110397200	3972	autofocus sub-frame for Zechelein sample discard pile - APXS spot 1 - standoff near 55 mm
mhlID0390		3303MH00012200110397300	3973	Zechelein sample discard pile - APXS spot 1 - standoff near 55 mm
mhlID0390		3303MH00012200110397400	3974	Curiosity self-portrait mosaic at the Zechelein drill site
mhlID0390		3303MH00012200110397500	3975	Curiosity self-portrait mosaic at the Zechelein drill site
mhlID0390		3303MH00012200110397600	3976	Curiosity self-portrait mosaic at the Zechelein drill site
mhlID0390		3303MH00012200110397700	3977	Curiosity self-portrait mosaic at the Zechelein drill site
mhlID0390		3303MH00012200110397800	3978	Curiosity self-portrait mosaic at the Zechelein drill site
mhlID0390		3303MH00012200110397900	3979	Curiosity self-portrait mosaic at the Zechelein drill site
mhlID0390		3303MH00012200110398000	3980	Curiosity self-portrait mosaic at the Zechelein drill site
mhlID0390		3303MH00012200110398100	3981	Curiosity self-portrait mosaic at the Zechelein drill site
mhlID0390		3303MH00012200110398200	3982	Curiosity self-portrait mosaic at the Zechelein drill site
mhlID0390		3303MH00012200110398300	3983	Curiosity self-portrait mosaic at the Zechelein drill site
mhlID0390		3303MH00012200110398400	3984	Curiosity self-portrait mosaic at the Zechelein drill site
mhlID0390		3303MH00012200110398500	3985	Curiosity self-portrait mosaic at the Zechelein drill site
mhlID0390		3303MH00012200110398600	3986	Curiosity self-portrait mosaic at the Zechelein drill site
mhlID0390		3303MH00012200110398700	3987	Curiosity self-portrait mosaic at the Zechelein drill site
mhlID0390		3303MH00012200110398800	3988	Curiosity self-portrait mosaic at the Zechelein drill site
mhlID0390		3303MH00012200110398900	3989	Curiosity self-portrait mosaic at the Zechelein drill site
mhlID0390		3303MH00012200110399000	3990	Curiosity self-portrait mosaic at the Zechelein drill site
mhlID0390		3303MH00012200110399100	3991	Curiosity self-portrait mosaic at the Zechelein drill site
mhlID0390		3303MH00012200110399200	3992	Curiosity self-portrait mosaic at the Zechelein drill site
mhlID0390		3303MH00012200110399300	3993	Curiosity self-portrait mosaic at the Zechelein drill site
mhlID0390		3303MH00012200110399400	3994	Curiosity self-portrait mosaic at the Zechelein drill site
mhlID0390		3303MH00012200110399500	3995	Curiosity self-portrait mosaic at the Zechelein drill site
mhlID0390		3303MH00012200110399600	3996	Curiosity self-portrait mosaic at the Zechelein drill site
mhlID0390		3303MH00012200110399700	3997	Curiosity self-portrait mosaic at the Zechelein drill site
mhlID0390		3303MH00012200110399800	3998	Curiosity self-portrait mosaic at the Zechelein drill site
mhlID0390		3303MH00012200110399900	3999	Curiosity self-portrait mosaic at the Zechelein drill site
mhlID0390		3303MH00012200110400000	4000	Curiosity self-portrait mosaic at the Zechelein drill site
mhlID0390		3303MH00012200110400100	4001	Curiosity self-portrait mosaic at the Zechelein drill site
mhlID0390		3303MH00012200110400200	4002	Curiosity self-portrait mosaic at the Zechelein drill site
mhlID0390		3303MH00012200110400300	4003	Curiosity self-portrait mosaic at the Zechelein drill site
mhlID0390		3303MH00012200110400400	4004	Curiosity self-portrait mosaic at the Zechelein drill site
mhlID0390		3303MH00012200110400500	4005	Curiosity self-portrait mosaic at the Zechelein drill site
mhlID0390		3303MH00012200110400600	4006	Curiosity self-portrait mosaic at the Zechelein drill site
mhlID0390		3303MH00012200110400700	4007	Curiosity self-portrait mosaic at the Zechelein drill site
mhlID0390		3303MH00012200110400800	4008	Curiosity self-portrait mosaic at the Zechelein drill site
mhlID0390		3303MH00012200110400900	4009	Curiosity self-portrait mosaic at the Zechelein drill site
mhlID0390		3303MH00012200110401000	4010	Curiosity self-portrait mosaic at the Zechelein drill site
mhlID0390		3303MH00012200110401100	4011	Curiosity self-portrait mosaic at the Zechelein drill site
mhlID0390		3303MH00012200110401200	4012	Curiosity self-portrait mosaic at the Zechelein drill site
mhlID0390		3303MH00012200110401300	4013	Curiosity self-portrait mosaic at the Zechelein drill site
mhlID0390		3303MH00012200110401400	4014	Curiosity self-portrait mosaic at the Zechelein drill site
mhlID0390		3303MH00012200110401500	4015	Curiosity self-portrait mosaic at the Zechelein drill site
mhlID0390		3303MH00012200110401600	4016	Curiosity self-portrait mosaic at the Zechelein drill site
mhlID0390		3303MH00012200110401700	4017	Curiosity self-portrait mosaic at the Zechelein drill site
mhlID0390		3303MH00012200110401800	4018	Curiosity self-portrait mosaic at the Zechelein drill site
mhlID0390		3303MH00012200110401900	4019	Curiosity self-portrait mosaic at the Zechelein drill site
mhlID0390		3303MH00012200110402000	4020	Curiosity self-portrait mosaic at the Zechelein drill site
mhlID0390		3303MH00012200110402100	4021	Curiosity self-portrait mosaic at the Zechelein drill site
mhlID0390		3303MH00012200110402200	4022	Curiosity self-portrait mosaic at the Zechelein drill site
mhlID0390		3303MH00012200110402300	4023	Curiosity self-portrait mosaic at the Zechelein drill site
mhlID0390		3303MH00012200110402400	4024	Curiosity self-portrait mosaic at the Zechelein drill site
mhlID0390		3303MH00012200110402500	4025	Curiosity self-portrait mosaic at the Zechelein drill site
mhlID0390		3303MH00012200110402600	4026	Curiosity self-portrait mosaic at the Zechelein drill site
mhlID0390		3303MH00012200110402700	4027	Curiosity self-portrait mosaic at the Zechelein drill site
mhlID0390		3303MH00012200110402800	4028	Curiosity self-portrait mosaic at the Zechelein drill site
mhlID0390		3303MH00012200110402900	4029	Curiosity self-portrait mosaic at the Zechelein drill site
mhlID0390		3303MH00012200110403000	4030	Curiosity self-portrait mosaic at the Zechelein drill site
mhlID0390		3303MH00012200110403100	4031	Curiosity self-portrait mosaic at the Zechelein drill site
mhlID0390		3303MH00012200110403200	4032	Curiosity self-portrait mosaic at the Zechelein drill site
mhlID0390		3303MH00012200110403300	4033	Curiosity self-portrait mosaic at the Zechelein drill site
mhlID0390		3303MH00012200110403400	4034	Curiosity self-portrait mosaic at the Zechelein drill site
mhlID0390		3303MH00012200110403500	4035	Curiosity self-portrait mosaic at the Zechelein drill site
mhlID0390		3303MH00012200110403600	4036	Curiosity self-portrait mosaic at the Zechelein drill site
mhlID0390		3303MH00012200110403700	4037	Curiosity self-portrait mosaic at the Zechelein drill site
mhlID0390		3303MH00012200110403800	4038	Curiosity self-portrait mosaic at the Zechelein drill site

Continued on Next Page...

mhd0390		3303MH000390001104039C00	4039	Curiosity self-portrait mosaic at the Zechestein drill site
mhd0390		3303MH000390001104040C00	4040	Curiosity self-portrait mosaic at the Zechestein drill site
mhd0390		3303MH000390001104041C00	4041	Curiosity self-portrait mosaic at the Zechestein drill site
mhd0390		3303MH000390001104042C00	4042	Curiosity self-portrait mosaic at the Zechestein drill site
mhd0390		3303MH000390001104043C00	4043	Curiosity self-portrait mosaic at the Zechestein drill site
mhd0390		3303MH000390001104044C00	4044	Curiosity self-portrait mosaic at the Zechestein drill site
mhd0390		3303MH000390001104045C00	4045	Curiosity self-portrait mosaic at the Zechestein drill site
mhd0390		3303MH000390001104046C00	4046	Curiosity self-portrait mosaic at the Zechestein drill site
Rover Self-Portrait		3303MH000390001104047C00	4047	Curiosity self-portrait mosaic at the Zechestein drill site
		3303MH000390001104048C00	4048	Curiosity self-portrait mosaic at the Zechestein drill site
		3303MH000390001104049C00	4049	Curiosity self-portrait mosaic at the Zechestein drill site
		3303MH000390001104050C00	4050	Curiosity self-portrait mosaic at the Zechestein drill site
		3303MH000390001104051C00	4051	Curiosity self-portrait mosaic at the Zechestein drill site
		3303MH000390001104052C00	4052	Curiosity self-portrait mosaic at the Zechestein drill site
		3303MH000390001104053C00	4053	Curiosity self-portrait mosaic at the Zechestein drill site
		3303MH000390001104054C00	4054	Curiosity self-portrait mosaic at the Zechestein drill site

updated: 30\_November\_2021

Sol 3312 - MAHLI Images	acquired/perform date(s)	20-Nov-21	Image ID: black = best, least-compressed version receive as of date at upper left; orange = only a thumbnail has been received.
	camera position:	1	
	total parent images:	2	
	focus merges performed:	0	
	total focus merge products:	0	
	total parent images + focus merge products:	2	

summary of MAHLI activities:	MAHLI imaged the Zechstein Drill Cuttings.			
Sequence	Camera Position	Image ID	COPID	
mhl00122	Zechstein drill cuttings ~55 mm standoff	3312MH0001122000110405600	4055	autofocus sub-frame for Zechstein drill cuttings - standoff near 55 mm
		3312MH000112200110405600	4056	Zechstein drill cuttings - standoff near 55 mm

updated: 01\_December\_2021

Sol 3313 - MAHLI Images			
	camera position	CPID	Image Comment/Purpose (RATIONALE_DESC for PDS archive products; 400 character limit)
	camera position	4	Image ID: black = best, least-compressed version receive as of date at upper left; orange = only a thumbnail has been received
	focus merges performed	32	
	total focus merge products	3	CPID:
	total parent images + focus merge products	39	Camera Data Product Identifier = MSL_CAMERA_PRODUCT_ID in PDS archive product labels
summary of MAHLI activities:			
	MAHLI imaged the target Camusnagaul and the focus stack images were merged.		
Sequence	Camera Position	Image ID	CPID
mhl00190	Camusnagaul ~25 cm standoff	3313MH0001900001104057C00	4057
		3313MH0001900001104058C00	4058
mhl00224	Camusnagaul stereo-1 ~5 cm standoff	3313MH0002240001104059C00	4059
		3313MH0002240001104060C00	4060
		3313MH0002240021104061C00	4061
		3313MH0002240021104062C00	4062
		3313MH0002240021104063C00	4063
		3313MH0002240021104064C00	4064
		3313MH0002240021104065C00	4065
		3313MH0002240021104066C00	4066
		3313MH0002240021104067C00	4067
		3313MH0002240021104068C00	4068
mhl00224	Camusnagaul stereo-2 ~5 cm standoff	3313MH0002240001104069C00	4069
		3313MH0002240001104070C00	4070
		3313MH0002240021104071C00	4071
		3313MH0002240021104072C00	4072
		3313MH0002240021104073C00	4073
		3313MH0002240021104074C00	4074
		3313MH0002240021104075C00	4075
		3313MH0002240021104076C00	4076
		3313MH0002240021104077C00	4077
		3313MH0002240021104078C00	4078
mhl00386	Camusnagaul ~1 cm standoff	3313MH0003860001104079C00	4079
		3313MH0003860001104080C00	4080
		3313MH0003860001104081C00	4081
		3313MH0003860001104082C00	4082
		3313MH00038600021104083C00	4083
		3313MH00038600021104084C00	4084
		3313MH00038600021104085C00	4085
		3313MH00038600021104086C00	4086
		3313MH00038600021104087C00	4087
		3313MH00038600021104088C00	4088
mhl00393	Focus Merges	3313MH0001930001104089C00	4089
		3313MH0001930001104090C00	4090
		3313MH0001930001104091C00	4091
		3313MH0001930001104092C00	4092
		3313MH0001930001104093C00	4093
		3313MH0001930001104094C00	4094

updated: 15\_September\_2022

Sol 3315 - MAHLI Images						
	Sequence	Camera Position	Image ID	COPID	Image Content/Purpose	RATIONALE_DESC for POS archive products; 400 character limit
			acquired/perform date(s)	9-Dec-21		
			camera position	10	Image ID:	
			parent image	62	black = best, least-compressed version receive as of date at upper left; orange = only a thumbnail has been received	
			focus merges performed	5	COPID:	
			total focus merge products	5	Camera Data Product Identifier = MSLCAMERA_PRODUCT_ID in POS archive product labels	
			total parent images + focus merge products	66		
		summary of MAHLI activities:	MAHLI imaged the targets Aralinn, Whalgae_Steps and Yarrow_Stone. MAHLI also imaged the sky, with the dust cover open and closed for flat field. The focus stack images were also merged.			
mhlID0197		Aralinn ~25 cm standoff	3315MH000197001104095000	4095	autofocus sub-frame for target Aralinn - standoff near 25 cm	
mhlID0197		Whalgae_Steps ~25 cm standoff	3315MH000197001104096000	4096	target Aralinn - standoff near 25 cm	
mhlID0706		Yarrow_Stone ~25 cm standoff	3315MH000197001104097000	4097	autofocus sub-frame for target Whalgae_Steps - standoff near 25 cm	
mhlID0706		Yarrow_Stone ~25 cm standoff	3315MH000197001104098000	4098	target Whalgae_Steps - standoff near 25 cm	
mhlID0699		Yarrow_Stone stereo-1 ~5 cm standoff	3315MH000699001104101000	4099	autofocus sub-frame for target Yarrow_Stone - standoff near 25 cm	
mhlID0699		Yarrow_Stone stereo-1 ~5 cm standoff	3315MH00069900110410100000	4100	target Yarrow_Stone - standoff near 25 cm	
mhlID0699		Yarrow_Stone stereo-1 ~5 cm standoff	3315MH00069900110410101000	4101	target Yarrow_Stone - standoff near 25 cm - alternative auto-exposure	
mhlID0699		Yarrow_Stone stereo-1 ~5 cm standoff	3315MH000699001104102000	4102	autofocus sub-frame for target Yarrow_Stone - stereo-1 - standoff near 5 cm	
mhlID0699		Yarrow_Stone stereo-1 ~5 cm standoff	3315MH000699001104103000	4103	target Yarrow_Stone - stereo-1 - standoff near 5 cm	
mhlID0699		Yarrow_Stone stereo-1 ~5 cm standoff	3315MH000699001104104000	4104	target Yarrow_Stone - stereo-1 - standoff near 5 cm - alternative auto-exposure	
mhlID0699		Yarrow_Stone stereo-1 ~5 cm standoff	3315MH00069900110410405000	4105	target Yarrow_Stone - stereo-1 - standoff near 5 cm - image 1 in 8-image relative focus stack	
mhlID0699		Yarrow_Stone stereo-1 ~5 cm standoff	3315MH00069900110410406000	4106	target Yarrow_Stone - stereo-1 - standoff near 5 cm - image 2 in 8-image relative focus stack	
mhlID0699		Yarrow_Stone stereo-1 ~5 cm standoff	3315MH000699001104104107000	4107	target Yarrow_Stone - stereo-1 - standoff near 5 cm - image 3 in 8-image relative focus stack	
mhlID0699		Yarrow_Stone stereo-1 ~5 cm standoff	3315MH0006990011041041080000	4108	target Yarrow_Stone - stereo-1 - standoff near 5 cm - image 4 in 8-image relative focus stack	
mhlID0699		Yarrow_Stone stereo-1 ~5 cm standoff	3315MH0006990011041041090000	4109	target Yarrow_Stone - stereo-1 - standoff near 5 cm - image 5 in 8-image relative focus stack	
mhlID0699		Yarrow_Stone stereo-1 ~5 cm standoff	3315MH0006990011041041100000	4110	target Yarrow_Stone - stereo-1 - standoff near 5 cm - image 6 in 8-image relative focus stack	
mhlID0699		Yarrow_Stone stereo-1 ~5 cm standoff	3315MH0006990011041041110000	4111	target Yarrow_Stone - stereo-1 - standoff near 5 cm - image 7 in 8-image relative focus stack	
mhlID0699		Yarrow_Stone stereo-1 ~5 cm standoff	3315MH0006990011041041120000	4112	target Yarrow_Stone - stereo-1 - standoff near 5 cm - image 8 in 8-image relative focus stack	
mhlID0699		Yarrow_Stone stereo-2 ~5 cm standoff	3315MH00069900110411130000	4113	autofocus sub-frame for target Yarrow_Stone - stereo-2 - standoff near 5 cm	
mhlID0699		Yarrow_Stone stereo-2 ~5 cm standoff	3315MH00069900110411140000	4114	target Yarrow_Stone - stereo-2 - standoff near 5 cm	
mhlID0699		Yarrow_Stone stereo-2 ~5 cm standoff	3315MH00069900110411150000	4115	target Yarrow_Stone - stereo-2 - standoff near 5 cm - alternative auto-exposure	
mhlID0699		Yarrow_Stone stereo-2 ~5 cm standoff	3315MH00069900110411160000	4116	target Yarrow_Stone - stereo-2 - standoff near 5 cm - image 1 in 8-image relative focus stack	
mhlID0699		Yarrow_Stone stereo-2 ~5 cm standoff	3315MH00069900110411170000	4117	target Yarrow_Stone - stereo-2 - standoff near 5 cm - image 2 in 8-image relative focus stack	
mhlID0699		Yarrow_Stone stereo-2 ~5 cm standoff	3315MH00069900110411180000	4118	target Yarrow_Stone - stereo-2 - standoff near 5 cm - image 3 in 8-image relative focus stack	
mhlID0699		Yarrow_Stone stereo-2 ~5 cm standoff	3315MH00069900110411190000	4119	target Yarrow_Stone - stereo-2 - standoff near 5 cm - image 4 in 8-image relative focus stack	
mhlID0699		Yarrow_Stone stereo-2 ~5 cm standoff	3315MH00069900110411200000	4120	target Yarrow_Stone - stereo-2 - standoff near 5 cm - image 5 in 8-image relative focus stack	
mhlID0699		Yarrow_Stone stereo-2 ~5 cm standoff	3315MH00069900110411210000	4121	target Yarrow_Stone - stereo-2 - standoff near 5 cm - image 6 in 8-image relative focus stack	
mhlID0699		Yarrow_Stone stereo-2 ~5 cm standoff	3315MH00069900110411220000	4122	target Yarrow_Stone - stereo-2 - standoff near 5 cm - image 7 in 8-image relative focus stack	
mhlID0699		Yarrow_Stone stereo-2 ~5 cm standoff	3315MH00069900110411230000	4123	target Yarrow_Stone - stereo-2 - standoff near 5 cm - image 8 in 8-image relative focus stack	
mhlID0800		Yarrow_Stone ~2 cm standoff	3315MH00080000110411240000	4124	autofocus sub-frame for target Yarrow_Stone - standoff near 2 cm	
mhlID0800		Yarrow_Stone ~2 cm standoff	3315MH00080000110411250000	4125	target Yarrow_Stone - standoff near 2 cm	
mhlID0800		Yarrow_Stone ~2 cm standoff	3315MH00080000110411260000	4126	target Yarrow_Stone - standoff near 2 cm - alternative auto-exposure	
mhlID0800		Yarrow_Stone ~2 cm standoff	3315MH00080000110411270000	4127	target Yarrow_Stone - standoff near 2 cm - image 1 in 8-image relative focus stack	
mhlID0800		Yarrow_Stone ~2 cm standoff	3315MH00080000110411280000	4128	target Yarrow_Stone - standoff near 2 cm - image 2 in 8-image relative focus stack	
mhlID0800		Yarrow_Stone ~2 cm standoff	3315MH00080000110411290000	4129	target Yarrow_Stone - standoff near 2 cm - image 3 in 8-image relative focus stack	
mhlID0800		Yarrow_Stone ~2 cm standoff	3315MH00080000110411300000	4130	target Yarrow_Stone - standoff near 2 cm - image 4 in 8-image relative focus stack	
mhlID0800		Yarrow_Stone ~2 cm standoff	3315MH00080000110411310000	4131	target Yarrow_Stone - standoff near 2 cm - image 5 in 8-image relative focus stack	
mhlID0800		Yarrow_Stone ~2 cm standoff	3315MH00080000110411320000	4132	target Yarrow_Stone - standoff near 2 cm - image 6 in 8-image relative focus stack	
mhlID0800		Yarrow_Stone ~2 cm standoff	3315MH00080000110411330000	4133	target Yarrow_Stone - standoff near 2 cm - image 7 in 8-image relative focus stack	
mhlID0800		Yarrow_Stone ~2 cm standoff	3315MH00080000110411430000	4134	target Yarrow_Stone - standoff near 2 cm - image 8 in 8-image relative focus stack	
mhlID0712		sky flats - dust cover closed - MAHLI looking at the sky opposite the sun at +108.4° azimuth, +30° elevation, away from the rover deck	3315MH00071200110411350000	4135	MARLI sky flat field image - dust cover closed - manual focus at motor count 0 - close focus position - focus as if for working distance 21 mm	
mhlID0712		sky flats - dust cover closed - MAHLI looking at the sky opposite the sun at +108.4° azimuth, +30° elevation, away from the rover deck	3315MH000712001104136000	4136	MARLI sky flat field image - dust cover closed - manual focus at motor count 2412 - focus as if for working distance of 39 mm	
mhlID0712		sky flats - dust cover closed - MAHLI looking at the sky opposite the sun at +108.4° azimuth, +30° elevation, away from the rover deck	3315MH000712001104137000	4137	MARLI sky flat field image - dust cover closed - manual focus at motor count 3078 - focus as if for working distance of 69 mm	
mhlID0712		sky flats - dust cover closed - MAHLI looking at the sky opposite the sun at +108.4° azimuth, +30° elevation, away from the rover deck	3315MH000712001104138000	4138	MARLI sky flat field image - dust cover closed - manual focus at motor count 4062 - focus as if for working distance of 268 mm	
mhlID0453		sky flats - MARLI looking at the sky opposite the sun at +108.4° azimuth, +30° elevation, away from the rover deck	3315MH00045300110411400000	4140	MARLI sky flat field image - dust cover open - manual focus at motor count 15996 - close focus position - focus as if for working distance 21 mm	
mhlID0453		sky flats - MARLI looking at the sky opposite the sun at +108.4° azimuth, +30° elevation, away from the rover deck	3315MH00045300110411410000	4141	MARLI sky flat field image - dust cover open - manual focus at motor count 14664 - focus as if for working distance of 39 mm	
mhlID0453		sky flats - MARLI looking at the sky opposite the sun at +108.4° azimuth, +30° elevation, away from the rover deck	3315MH00045300110411420000	4142	MARLI sky flat field image - dust cover open - manual focus at motor count 13998 - focus as if for working distance of 69 mm	
mhlID0453		sky flats - MARLI looking at the sky opposite the sun at +108.4° azimuth, +30° elevation, away from the rover deck	3315MH00045300110411430000	4143	MARLI sky flat field image - dust cover open - manual focus at motor count 13014 - focus as if for working distance of 267 mm	
mhlID0453		sky flats - MARLI looking at the sky opposite the sun at +108.4° azimuth, +30° elevation, away from the rover deck	3315MH00045300411041440000	4144	MARLI sky flat field image - dust cover open - manual focus at motor count 12750 - focus as if for working distance of 633 mm	
mhlID0453		sky flats - MARLI looking at the sky opposite the sun at +108.4° azimuth, +30° elevation, away from the rover deck	3315MH000453005110411450000	4145	MARLI sky flat field image - dust cover open - manual focus at motor count 12552 - near infinity focus	
mhlID0453		sky flats - MARLI looking at the sky opposite the sun at +108.4° azimuth, +30° elevation, away from the rover deck	3315MH00045300110414600000	4146	MARLI sky flat field image - dust cover open - manual focus at motor count 15996 - close focus position - focus as if for working distance 21 mm - camera head rotated 180-degrees relative to previous acquired this same sol	
mhlID0453		sky flats - MARLI looking at the sky opposite the sun at +108.4° azimuth, +30° elevation, away from the rover deck	3315MH00045300110414700000	4147	MARLI sky flat field image - dust cover open - manual focus at motor count 14664 - focus as if for working distance of 39 mm - camera head rotated 180-degrees relative to previous acquired this same sol	
mhlID0453		sky flats - MARLI looking at the sky opposite the sun at +108.4° azimuth, +30° elevation, away from the rover deck	3315MH00045300110414800000	4148	MARLI sky flat field image - dust cover open - manual focus at motor count 13998 - focus as if for working distance of 69 mm - camera head rotated 180-degrees relative to previous acquired this same sol	
mhlID0453		sky flats - MARLI looking at the sky opposite the sun at +108.4° azimuth, +30° elevation, away from the rover deck	3315MH00045300311041490000	4149	MARLI sky flat field image - dust cover open - manual focus at motor count 13014 - focus as if for working distance of 267 mm - camera head rotated 180-degrees relative to previous acquired this same sol	
mhlID0453		sky flats - MARLI looking at the sky opposite the sun at +108.4° azimuth, +30° elevation, away from the rover deck	3315MH00045300411041500000	4150	MARLI sky flat field image - dust cover open - manual focus at motor count 12750 - focus as if for working distance of 633 mm - camera head rotated 180-degrees relative to previous acquired this same sol	
mhlID0453		sky flats - MARLI looking at the sky opposite the sun at +108.4° azimuth, +30° elevation, away from the rover deck	3315MH000453005110415100000	4151	MARLI sky flat field image - dust cover open - manual focus at motor count 12552 - near infinity focus - camera head rotated 180-degrees relative to previous acquired this same sol	
mhlID0712		sky flats - dust cover closed - MAHLI looking at the sky opposite the sun at +108.4° azimuth, +30° elevation, away from the rover deck camera rotated 180° relative to the preceding set of sky flats	3315MH00071200110415200000	4152	MARLI sky flat field image - dust cover closed - manual focus at motor count 0 - close focus position - focus as if for working distance 21 mm - camera head rotated 180-degrees relative to previous acquired this same sol	
mhlID0712		sky flats - dust cover closed - MAHLI looking at the sky opposite the sun at +108.4° azimuth, +30° elevation, away from the rover deck camera rotated 180° relative to the preceding set of sky flats	3315MH00071200110415300000	4153	MARLI sky flat field image - dust cover closed - manual focus at motor count 2412 - focus as if for working distance of 39 mm - camera head rotated 180-degrees relative to previous acquired this same sol	
mhlID0712		sky flats - dust cover closed - MAHLI looking at the sky opposite the sun at +108.4° azimuth, +30° elevation, away from the rover deck camera rotated 180° relative to the preceding set of sky flats	3315MH00071200110415400000	4154	MARLI sky flat field image - dust cover closed - manual focus at motor count 3078 - focus as if for working distance of 69 mm - camera head rotated 180-degrees relative to previous acquired this same sol	
mhlID0712		sky flats - dust cover closed - MAHLI looking at the sky opposite the sun at +108.4° azimuth, +30° elevation, away from the rover deck camera rotated 180° relative to the preceding set of sky flats	3315MH00071200110415500000	4155	MARLI sky flat field image - dust cover closed - manual focus at motor count 4062 - focus as if for working distance of 268 mm - camera head rotated 180-degrees relative to previous acquired this same sol	
mhlID0712		sky flats - dust cover closed - MAHLI looking at the sky opposite the sun at +108.4° azimuth, +30° elevation, away from the rover deck camera rotated 180° relative to the preceding set of sky flats	3315MH00071200110415600000	4156	MARLI sky flat field image - dust cover closed - manual focus at motor count 4488 - near infinity focus - camera head rotated 180-degrees relative to previous acquired this same sol	
mhlID0199		Focus Merges	3315MH000199001104157000	4157	target Yarrow_Stone - standoff near 2 cm - focus stack acquired sol 3315 with MSL_CAMERA_PRODUCT_IDs 4127-4134 - best focus image product	
mhlID0199		Focus Merges	3315MH000199001104158000	4158	target Yarrow_Stone - standoff near 2 cm - focus stack acquired sol 3315 with MSL_CAMERA_PRODUCT_IDs 4127-4134 - range map product	
mhlID0199		Focus Merges	3315MH000199001104159000	4159	target Yarrow_Stone - stereo-1 - standoff near 5 cm - focus stack acquired sol 3315 with MSL_CAMERA_PRODUCT_IDs 4116-4121 - best focus image product	
mhlID0199		Focus Merges	3315MH000199001104160000	4160	target Yarrow_Stone - stereo-2 - standoff near 5 cm - focus stack acquired sol 3315 with MSL_CAMERA_PRODUCT_IDs 4116-4123 - range map product	
mhlID0199		Focus Merges	3315MH000199001104161000	4161	target Yarrow_Stone - stereo-1 - standoff near 5 cm - focus stack acquired sol 3315 with MSL_CAMERA_PRODUCT_IDs 4105-4112 - best focus image product	
mhlID0199		Focus Merges	3315MH000199001104162000	4162	target Yarrow_Stone - stereo-1 - standoff near 5 cm - focus stack acquired sol 3315 with MSL_CAMERA_PRODUCT_IDs 4105-4112 - range map product	

updated: 21\_December\_2021

Sol 3316 - MAHLI Images			
summary of MAHLI activities:			
Sequence	Camera Position	Image ID	CPID
			acquired/perform date(s): <b>4-Dec-21</b>
mhl00836	Whaligoe_Steps mosaic position 1 of 9 -10 cm standoff	3316MH008360001104163C00	17
		3316MH008360001104164C00	1463
		3316MH008360001104164C00	1464
		3316MH0083600021104165C00	1465
		3316MH0083600031104166C00	1466
		3316MH0083600031104167C00	1467
		3316MH0083600031104168C00	1468
		3316MH0083600031104169C00	1469
		3316MH0083600031104170C00	1470
mhl00836	Whaligoe_Steps mosaic position 2 of 9 -10 cm standoff	3316MH0083600031104171C00	1471
		3316MH0083600031104172C00	1472
		3316MH0083600031104173C00	1473
		3316MH008360001104174C00	1474
		3316MH008360001104175C00	1475
		3316MH0083600021104176C00	1476
		3316MH0083600031104177C00	1477
		3316MH0083600031104178C00	1478
		3316MH0083600031104179C00	1479
mhl00836	Whaligoe_Steps mosaic position 3 of 9 -10 cm standoff	3316MH0083600031104180C00	1480
		3316MH0083600031104181C00	1481
		3316MH0083600031104182C00	1482
		3316MH0083600031104183C00	1483
		3316MH0083600031104184C00	1484
		3316MH008360001104185C00	1485
		3316MH008360001104186C00	1486
		3316MH0083600021104187C00	1487
		3316MH0083600031104188C00	1488
mhl00836	Whaligoe_Steps mosaic position 4 of 9 -10 cm standoff	3316MH0083600031104189C00	1489
		3316MH0083600031104190C00	1490
		3316MH0083600031104191C00	1491
		3316MH0083600031104192C00	1492
		3316MH0083600031104193C00	1493
		3316MH0083600031104194C00	1494
		3316MH0083600031104195C00	1495
		3316MH008360001104196C00	1496
		3316MH008360001104197C00	1497
mhl00836	Whaligoe_Steps mosaic position 5 of 9 -10 cm standoff	3316MH008360001104198C00	1498
		3316MH0083600031104199C00	1499
		3316MH0083600031104200C00	1500
		3316MH0083600031104201C00	1501
		3316MH0083600031104202C00	1502
		3316MH0083600031104203C00	1503
		3316MH0083600031104204C00	1504
		3316MH0083600031104205C00	1505
		3316MH0083600031104206C00	1506
mhl00836	Whaligoe_Steps mosaic position 6 of 9 -10 cm standoff	3316MH008360001104207C00	1507
		3316MH0083600021104208C00	1508
		3316MH0083600021104209C00	1509
		3316MH0083600031104210C00	1510
		3316MH0083600031104211C00	1511
		3316MH0083600031104212C00	1512
		3316MH0083600031104213C00	1513
		3316MH0083600031104214C00	1514
		3316MH0083600031104215C00	1515
mhl00836	Whaligoe_Steps mosaic position 7 of 9 -10 cm standoff	3316MH0083600031104216C00	1516
		3316MH0083600031104217C00	1517
		3316MH0083600031104218C00	1518
		3316MH0083600031104219C00	1519
		3316MH0083600021104220C00	1520
		3316MH0083600031104221C00	1521
		3316MH0083600031104222C00	1522
		3316MH0083600031104223C00	1523
		3316MH0083600031104224C00	1524
mhl00836	Whaligoe_Steps mosaic position 8 of 9 -10 cm standoff	3316MH0083600031104225C00	1525
		3316MH0083600031104226C00	1526
		3316MH0083600031104227C00	1527
		3316MH0083600031104228C00	1528
		3316MH0083600031104229C00	1529
		3316MH0083600031104230C00	1530
		3316MH0083600031104231C00	1531
		3316MH0083600031104232C00	1532
		3316MH0083600031104233C00	1533

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mhl00763	Laurentia stereo-1 ~5 cm standoff	3316MH0007690001104301C00	4301	autofocus sub-frame for target Laurentia - stereo-1 - standoff near 5 cm
		3316MH0007690001104302C00	4302	target Laurentia - stereo-1 - standoff near 5 cm
		3316MH00076900021104303C00	4303	target Laurentia - stereo-1 - standoff near 5 cm - alternative auto-exposure
		3316MH0007690031104304C00	4304	target Laurentia - stereo-1 - standoff near 5 cm - image 1 in 8-image relative focus stack
		3316MH0007690031104305C00	4305	target Laurentia - stereo-1 - standoff near 5 cm - image 2 in 8-image relative focus stack
		3316MH0007690031104306C00	4306	target Laurentia - stereo-1 - standoff near 5 cm - image 3 in 8-image relative focus stack
		3316MH0007690031104307C00	4307	target Laurentia - stereo-1 - standoff near 5 cm - image 4 in 8-image relative focus stack
		3316MH0007690031104308C00	4308	target Laurentia - stereo-1 - standoff near 5 cm - image 5 in 8-image relative focus stack
		3316MH0007690031104309C00	4309	target Laurentia - stereo-1 - standoff near 5 cm - image 6 in 8-image relative focus stack
		3316MH0007690031104310C00	4310	target Laurentia - stereo-1 - standoff near 5 cm - image 7 in 8-image relative focus stack
		3316MH0007690031104311C00	4311	target Laurentia - stereo-1 - standoff near 5 cm - image 8 in 8-image relative focus stack
mhl00768	Laurentia stereo-2 ~5 cm standoff	3316MH0007690001104312C00	4312	autofocus sub-frame for target Laurentia - stereo-2 - standoff near 5 cm
		3316MH0007690001104313C00	4313	target Laurentia - stereo-2 - standoff near 5 cm
		3316MH0007690021104314C00	4314	target Laurentia - stereo-2 - standoff near 5 cm - alternative auto-exposure
		3316MH0007690031104315C00	4315	target Laurentia - stereo-2 - standoff near 5 cm - image 1 in 8-image relative focus stack
		3316MH0007690031104316C00	4316	target Laurentia - stereo-2 - standoff near 5 cm - image 2 in 8-image relative focus stack
		3316MH0007690031104317C00	4317	target Laurentia - stereo-2 - standoff near 5 cm - image 3 in 8-image relative focus stack
		3316MH0007690031104318C00	4318	target Laurentia - stereo-2 - standoff near 5 cm - image 4 in 8-image relative focus stack
		3316MH0007690031104319C00	4319	target Laurentia - stereo-2 - standoff near 5 cm - image 5 in 8-image relative focus stack
		3316MH0007690031104320C00	4320	target Laurentia - stereo-2 - standoff near 5 cm - image 6 in 8-image relative focus stack
		3316MH0007690031104321C00	4321	target Laurentia - stereo-2 - standoff near 5 cm - image 7 in 8-image relative focus stack
		3316MH0007690031104322C00	4322	target Laurentia - stereo-2 - standoff near 5 cm - image 8 in 8-image relative focus stack
mhl00794	Laurentia ~1 cm standoff	3316MH0007940001104323C00	4323	autofocus sub-frame for target Laurentia - standoff near 1 cm
		3316MH000794001104324C00	4324	target Laurentia - standoff near 1 cm
		3316MH0007940021104325C00	4325	target Laurentia - standoff near 1 cm - alternative auto-exposure
		3316MH0007940031104326C00	4326	target Laurentia - standoff near 1 cm - image 1 in 8-image relative focus stack
		3316MH0007940031104327C00	4327	target Laurentia - standoff near 1 cm - image 2 in 8-image relative focus stack
		3316MH0007940031104328C00	4328	target Laurentia - standoff near 1 cm - image 3 in 8-image relative focus stack
		3316MH0007940031104329C00	4329	target Laurentia - standoff near 1 cm - image 4 in 8-image relative focus stack
		3316MH0007940031104330C00	4330	target Laurentia - standoff near 1 cm - image 5 in 8-image relative focus stack
		3316MH0007940031104331C00	4331	target Laurentia - standoff near 1 cm - image 6 in 8-image relative focus stack
		3316MH0007940031104332C00	4332	target Laurentia - standoff near 1 cm - image 7 in 8-image relative focus stack
		3316MH0007940031104333C00	4333	target Laurentia - standoff near 1 cm - image 8 in 8-image relative focus stack

updated: 06\_December\_2021

Sol 3318 - MAHLI Images			
		acquired/perform date(s)	6-Dec-21
		camera position:	0
		Image ID:	
		0	black = best, least-compressed version receive as of date at upper left; orange = only a thumbnail has been received.
		total parent images	15
		COPID:	
		total focus merge products	30
		Camera Data Product Identifier = MSL_CAMERA_PRODUCT_ID in POS archive product labels	
		total parent images + focus merge products	40
		summary of MAHLI activities:	Focus stack images from Sol 3316 were merged.
Sequence	Camera Position	Image ID	COPID
mhl0040	Focus Merges	3318MH000400001104334800	4334
		target Launertia - standoff near 1 cm - focus stack acquired sol 3316 with MSL_CAMERA_PRODUCT_IDS 4326-4333 - best focus image product	
		3318MH000400001104335500	4335
		target Launertia - standoff near 1 cm - focus stack acquire sol 3316 with MSL_CAMERA_PRODUCT_IDS 4326-4333 - range map product	
		3318MH00040040001104336800	4336
		target Launertia - stereo-2 - standoff near 5 cm - focus stack acquired sol 3316 with MSL_CAMERA_PRODUCT_IDS 4315-4322 - best focus image product	
		3318MH00040040001104337500	4337
		target Launertia - stereo-2 - standoff near 5 cm - focus stack acquired sol 3316 with MSL_CAMERA_PRODUCT_IDS 4315-4322 - range map product	
		3318MH00040040001104338800	4338
		target Launertia - stereo-1 - standoff near 5 cm - focus stack acquired sol 3316 with MSL_CAMERA_PRODUCT_IDS 4304-4311 - best focus image product	
		3318MH00040040001104339500	4339
		target Launertia - stereo-1 - standoff near 5 cm - focus stack acquired sol 3316 with MSL_CAMERA_PRODUCT_IDS 4304-4311 - range map product	
		3318MH00040040001104340900	4340
		target Whalgae_Steps - standoff near 1 cm - focus stack acquired sol 3316 with MSL_CAMERA_PRODUCT_IDS 4290-4297 - best focus image product	
		3318MH00040040001104341500	4341
		target Whalgae_Steps - standoff near 1 cm - focus stack acquired sol 3316 with MSL_CAMERA_PRODUCT_IDS 4290-4297 - range map product	
		3318MH00040040001104342600	4342
		target Whalgae_Steps - stereo-2 - standoff near 5 cm - focus stack acquired sol 3316 with MSL_CAMERA_PRODUCT_IDS 4279-4286 - best focus image product	
		3318MH00040040001104343500	4343
		target Whalgae_Steps - stereo-2 - standoff near 5 cm - focus stack acquired sol 3316 with MSL_CAMERA_PRODUCT_IDS 4279-4286 - range map product	
		3318MH00040040001104344800	4344
		target Whalgae_Steps - stereo-1 - standoff near 5 cm - focus stack acquired sol 3316 with MSL_CAMERA_PRODUCT_IDS 4268-4275 - best focus image product	
		3318MH00040040001104345500	4345
		target Whalgae_Steps - stereo-1 - standoff near 5 cm - focus stack acquired sol 3316 with MSL_CAMERA_PRODUCT_IDS 4268-4275 - range map product	
		3318MH00040040001104346900	4346
		target Whalgae_Steps - mosaic position 9 of 9 - standoff between 10 cm and 16 cm - focus stack acquired sol 3316 with MSL_CAMERA_PRODUCT_IDS 4254-4261 - best focus image product	
		3318MH00040040001104347500	4347
		target Whalgae_Steps - mosaic position 9 of 9 - standoff between 10 cm and 16 cm - focus stack acquired sol 3316 with MSL_CAMERA_PRODUCT_IDS 4254-4261 - range map product	
		3318MH00040040001104348900	4348
		target Whalgae_Steps - mosaic position 8 of 9 - standoff between 10 cm and 16 cm - focus stack acquired sol 3316 with MSL_CAMERA_PRODUCT_IDS 4243-4250 - best focus image product	
		3318MH00040040001104349500	4349
		target Whalgae_Steps - mosaic position 8 of 9 - standoff between 10 cm and 16 cm - focus stack acquired sol 3316 with MSL_CAMERA_PRODUCT_IDS 4243-4250 - range map product	
		3318MH00040040001104350800	4350
		target Whalgae_Steps - mosaic position 7 of 9 - standoff between 10 cm and 16 cm - focus stack acquired sol 3316 with MSL_CAMERA_PRODUCT_IDS 4232-4239 - best focus image product	
		3318MH00040040001104351500	4351
		target Whalgae_Steps - mosaic position 7 of 9 - standoff between 10 cm and 16 cm - focus stack acquired sol 3316 with MSL_CAMERA_PRODUCT_IDS 4232-4239 - range map product	
		3318MH00040040001104352600	4352
		target Whalgae_Steps - mosaic position 6 of 9 - standoff between 10 cm and 16 cm - focus stack acquired sol 3316 with MSL_CAMERA_PRODUCT_IDS 4221-4228 - best focus image product	
		3318MH00040040001104353500	4353
		target Whalgae_Steps - mosaic position 6 of 9 - standoff between 10 cm and 16 cm - focus stack acquired sol 3316 with MSL_CAMERA_PRODUCT_IDS 4221-4228 - range map product	
		3318MH00040040001104354800	4354
		target Whalgae_Steps - mosaic position 5 of 9 - standoff between 10 cm and 16 cm - focus stack acquired sol 3316 with MSL_CAMERA_PRODUCT_IDS 4210-4217 - best focus image product	
		3318MH00040040001104355500	4355
		target Whalgae_Steps - mosaic position 5 of 9 - standoff between 10 cm and 16 cm - focus stack acquired sol 3316 with MSL_CAMERA_PRODUCT_IDS 4210-4217 - range map product	
		3318MH00040040001104356900	4356
		target Whalgae_Steps - mosaic position 4 of 9 - standoff between 10 cm and 16 cm - focus stack acquired sol 3316 with MSL_CAMERA_PRODUCT_IDS 4199-4206 - best focus image product	
		3318MH00040040001104357500	4357
		target Whalgae_Steps - mosaic position 4 of 9 - standoff between 10 cm and 16 cm - focus stack acquired sol 3316 with MSL_CAMERA_PRODUCT_IDS 4199-4206 - range map product	
		3318MH00040040001104358900	4358
		target Whalgae_Steps - mosaic position 3 of 9 - standoff between 10 cm and 16 cm - focus stack acquired sol 3316 with MSL_CAMERA_PRODUCT_IDS 4188-4195 - best focus image product	
		3318MH00040040001104359500	4359
		target Whalgae_Steps - mosaic position 3 of 9 - standoff between 10 cm and 16 cm - focus stack acquired sol 3316 with MSL_CAMERA_PRODUCT_IDS 4188-4195 - range map product	
		3318MH00040040001104360800	4360
		target Whalgae_Steps - mosaic position 2 of 9 - standoff between 10 cm and 16 cm - focus stack acquired sol 3316 with MSL_CAMERA_PRODUCT_IDS 4177-4184 - best focus image product	
		3318MH00040040001104361500	4361
		target Whalgae_Steps - mosaic position 2 of 9 - standoff between 10 cm and 16 cm - focus stack acquired sol 3316 with MSL_CAMERA_PRODUCT_IDS 4177-4184 - range map product	
		3318MH00040040001104362600	4362
		target Whalgae_Steps - mosaic position 1 of 9 - standoff between 10 cm and 16 cm - focus stack acquired sol 3316 with MSL_CAMERA_PRODUCT_IDS 4166-4173 - best focus image product	
		3318MH00040040001104363500	4363
		target Whalgae_Steps - mosaic position 1 of 9 - standoff between 10 cm and 16 cm - focus stack acquired sol 3316 with MSL_CAMERA_PRODUCT_IDS 4166-4173 - range map product	

updated: 21\_December\_2021

Sol 3319 - MAHLI Images			
Sequence	Camera Position	Image ID	COPID
mnhD0190	Duirinish ~25 cm standoff	3319MH000190001104364C00	4364
		3319MH000190001104365C00	4365
mnhD0168	Duirinish stereo-1 ~5 cm standoff	3319MH0001680001104366C00	4366
		3319MH000168001104367C00	4367
		3319MH0001680021104368C00	4368
		3319MH0001680021104369C00	4369
		3319MH0001680021104370C00	4370
		3319MH0001680021104371C00	4371
		3319MH0001680021104372C00	4372
		3319MH0001680021104373C00	4373
		3319MH0001680021104374C00	4374
		3319MH0001680021104375C00	4375
mnhD0168	Duirinish stereo-2 ~5 cm standoff	3319MH0001680001104376C00	4376
		3319MH000168001104377C00	4377
		3319MH0001680021104378C00	4378
		3319MH0001680021104379C00	4379
		3319MH0001680021104380C00	4380
		3319MH0001680021104381C00	4381
		3319MH0001680021104382C00	4382
		3319MH0001680021104383C00	4383
		3319MH0001680021104384C00	4384
		3319MH0001680021104385C00	4385
mnhD0743	Duirinish ~1 cm standoff	3319MH0007430001104386C00	4386
		3319MH000743001104387C00	4387
		3319MH0007430021104388C00	4388
		3319MH0007430021104389C00	4389
		3319MH0007430021104390C00	4390
		3319MH0007430021104391C00	4391
		3319MH0007430021104392C00	4392
		3319MH0007430021104393C00	4393
		3319MH0007430021104394C00	4394
		3319MH0007430021104395C00	4395
mnhD0393	Focus Merges	3319MH0001930001104396C00	4396
		3319MH000193001104397C00	4397
		3319MH000193001104398C00	4398
		3319MH000193001104399C00	4399
		3319MH000193001104400C00	4400
		3319MH000193001104401C00	4401

summary of MAHLI activities: MAHLI imaged the target Duirinish and the focus stack images were merged.

acquired/perform date(s)	7-Dec-21
camera position:	4
focus parent images	32
focus merges performed	5
total focus merge products	5
total parent images + focus merge products	38

Image Comment/Purpose (RATIONALE\_DESC for PDS archive products; 400 character limit)

black = best, least-compressed version receive as of date at upper left; orange = only a thumbnail has been received

COPID: Camera Data Product Identifier = MSL\_CAMERA\_PRODUCT\_ID in PDS archive product labels

updated: 15\_September\_2022

updated: 21\_December\_2021

Sol 3321 - MAHLI Images			
		acquired/perform date(s)	9-Dec-21
		camera position:	4
		Image ID:	
		focus parent images:	36
		black = best, least-compressed version receive as of date at upper left; orange = only a thumbnail has been received.	
		focus merge performed:	0
		CPID:	
		Camera Data Product Identifier = MSLCAMERA_PRODUCT_ID in PDS archive product labels	
		total focus merge products:	0
		total parent images + focus merge products:	36
		summary of MAHLI activities:	MAHLI imaged the DRT brushed target Cladh_Hallan.
Sequence	Camera Position	Image ID	CPID
mhl00706	Cladh_Hallan after DRT -25 cm standoff	3321MH0007060001104406C00	4406
		3321MH0007060001104407C00	4407
		3321MH0007060021104408C00	4408
mhl00723	Cladh_Hallan after DRT stereo-1 -5 cm standoff	3321MH0007230001104409C00	4409
		3321MH000723001104410C00	4410
		3321MH0007230021104411C00	4411
		3321MH0007230031104412C00	4412
		3321MH0007230031104413C00	4413
		3321MH0007230031104414C00	4414
		3321MH0007230031104415C00	4415
		3321MH0007230031104416C00	4416
		3321MH0007230031104417C00	4417
		3321MH0007230031104418C00	4418
		3321MH0007230031104419C00	4419
		3321MH0007230001104420C00	4420
mhl00723	Cladh_Hallan after DRT stereo-2 -5 cm standoff	3321MH000723001104421C00	4421
		3321MH000723001104422C00	4422
		3321MH0007230031104423C00	4423
		3321MH0007230031104424C00	4424
		3321MH0007230031104425C00	4425
		3321MH0007230031104426C00	4426
		3321MH0007230031104427C00	4427
		3321MH0007230031104428C00	4428
		3321MH0007230031104429C00	4429
		3321MH0007230031104430C00	4430
		3321MH0007460001104431C00	4431
		3321MH0007460001104432C00	4432
mhl00746	Cladh_Hallan after DRT -2 cm standoff	3321MH0007460001104433C00	4433
		3321MH0007460001104434C00	4434
		3321MH0007460001104435C00	4435
		3321MH0007460031104436C00	4436
		3321MH0007460031104437C00	4437
		3321MH0007460031104438C00	4438
		3321MH0007460031104439C00	4439
		3321MH0007460031104440C00	4440
		3321MH0007460031104441C00	4441

updated: 10\_December\_2021

Sol 3322 - MAHLI Images		acquired/perform metadata	10-Dec-21	0	Image ID:
		camera positions:		0	black = best, least compressed version receive as of date at upper left; orange = only a thumbnail has been received.
		total parent images:		0	
		focus merges per parent:		3	COPID:
		total focus merge products:		6	Camera Data Product identifier = MSL-CAMERA_PRODUCT_ID in PDS archive product labels
		total parent images + focus merge pr products:		6	
summary of MAHLI activities:		Focus stack images from Sol 3322 were merged.			
Sequence	Camera Position	Image ID	COPID	Image Comment/Purpose (RATIONALE_DESC for PDS archive products; 400 character limit)	
mhl00193	Focus Merges	3322M#H001930001104442800	4442	target_ClAdh_Hallan - after dust removal tool (DRT) - standoff near 2 cm - focus stack acquired sol 3321 with MSL_CAMERA_PRODUCT_IDs 4443-4441 - best focus image product	
		3322M#H001930001104443500	4443	target_ClAdh_Hallan - after dust removal tool (DRT) - standoff near 2 cm - focus stack acquired sol 3321 with MSL_CAMERA_PRODUCT_IDs 4443-4441 - range map product	
		3322M#H00193000110444800	4444	target_ClAdh_Hallan - after dust removal tool (DRT) - stereo-2 - standoff near 5 cm - focus stack acquired sol 3321 with MSL_CAMERA_PRODUCT_IDs 4443-4438 - best focus image product	
		3322M#H00193000110444500	4445	target_ClAdh_Hallan - after dust removal tool (DRT) - stereo-2 - standoff near 5 cm - focus stack acquired sol 3321 with MSL_CAMERA_PRODUCT_IDs 4423-4430 - range map product	
		3322M#H00193000110444600	4446	target_ClAdh_Hallan - after dust removal tool (DRT) - stereo-1 - standoff near 5 cm - focus stack acquired sol 3321 with MSL_CAMERA_PRODUCT_IDs 4412-4419 - best focus image product	
		3322M#H001930001104447500	4447	target_ClAdh_Hallan - after dust removal tool (DRT) - stereo-1 - standoff near 5 cm - focus stack acquired sol 3321 with MSL_CAMERA_PRODUCT_IDs 4412-4419 - range map product	

updated: 21\_December\_2021

Sol 3323 - MAHLI Images			
Sequence	Camera Position	Image ID	COPID
		acquired/perform date(s)	11-Dec-21
		camera position	7
		black parent images	54
		focus merges performed	0
		total focus merge products	0
		total parent images + focus merge products	54
summary of MAHLI activities:			
MAHLI imaged the targets Helens_Bay and Lakehead.			
mhl00190	Helens_Bay ~25 cm standoff	3323MH000190001104448C00	4448
		autofocus sub-frame for target Helens_Bay - standoff near 25 cm	
		3323MH000190001104449C00	4449
		target Helens_Bay - standoff near 25 cm	
mhl00299	Helens_Bay stereo-1 ~5 cm standoff	3323MH000299001104450C00	4450
		autofocus sub-frame for target Helens_Bay - stereo-1 - standoff near 5 cm	
		3323MH000299001104451C00	4451
		target Helens_Bay - stereo-1 - standoff near 5 cm	
		3323MH0002990021104452C00	4452
		target Helens_Bay - stereo-1 - standoff near 5 cm - image 1 in 8-image relative focus stack	
		3323MH0002990021104453C00	4453
		target Helens_Bay - stereo-1 - standoff near 5 cm - image 2 in 8-image relative focus stack	
		3323MH0002990021104454C00	4454
		target Helens_Bay - stereo-1 - standoff near 5 cm - image 3 in 8-image relative focus stack	
		3323MH0002990021104455C00	4455
		target Helens_Bay - stereo-1 - standoff near 5 cm - image 4 in 8-image relative focus stack	
		3323MH0002990021104456C00	4456
		target Helens_Bay - stereo-1 - standoff near 5 cm - image 5 in 8-image relative focus stack	
		3323MH0002990021104457C00	4457
		target Helens_Bay - stereo-1 - standoff near 5 cm - image 6 in 8-image relative focus stack	
		3323MH0002990021104458C00	4458
		target Helens_Bay - stereo-1 - standoff near 5 cm - image 7 in 8-image relative focus stack	
		3323MH0002990021104459C00	4459
		target Helens_Bay - stereo-1 - standoff near 5 cm - image 8 in 8-image relative focus stack	
mhl00299	Helens_Bay stereo-2 ~5 cm standoff	3323MH0002990021104460C00	4460
		autofocus sub-frame for target Helens_Bay - stereo-2 - standoff near 5 cm	
		3323MH000299001104461C00	4461
		target Helens_Bay - stereo-2 - standoff near 5 cm	
		3323MH0002990021104462C00	4462
		target Helens_Bay - stereo-2 - standoff near 5 cm - image 1 in 8-image relative focus stack	
		3323MH0002990021104463C00	4463
		target Helens_Bay - stereo-2 - standoff near 5 cm - image 2 in 8-image relative focus stack	
		3323MH0002990021104464C00	4464
		target Helens_Bay - stereo-2 - standoff near 5 cm - image 3 in 8-image relative focus stack	
		3323MH0002990021104465C00	4465
		target Helens_Bay - stereo-2 - standoff near 5 cm - image 4 in 8-image relative focus stack	
		3323MH0002990021104466C00	4466
		target Helens_Bay - stereo-2 - standoff near 5 cm - image 5 in 8-image relative focus stack	
		3323MH0002990021104467C00	4467
		target Helens_Bay - stereo-2 - standoff near 5 cm - image 6 in 8-image relative focus stack	
		3323MH0002990021104468C00	4468
		target Helens_Bay - stereo-2 - standoff near 5 cm - image 7 in 8-image relative focus stack	
		3323MH0002990021104469C00	4469
		target Helens_Bay - stereo-2 - standoff near 5 cm - image 8 in 8-image relative focus stack	
mhl00388	Helens_Bay ~1 cm standoff	3323MH0008380001104470C00	4470
		autofocus sub-frame for target Helens_Bay - standoff near 1 cm	
		3323MH000838001104471C00	4471
		target Helens_Bay - standoff near 1 cm	
		3323MH0008380021104472C00	4472
		target Helens_Bay - standoff near 1 cm - image 1 in 8-image relative focus stack	
		3323MH0008380021104473C00	4473
		target Helens_Bay - standoff near 1 cm - image 2 in 8-image relative focus stack	
		3323MH0008380021104474C00	4474
		target Helens_Bay - standoff near 1 cm - image 3 in 8-image relative focus stack	
		3323MH0008380021104475C00	4475
		target Helens_Bay - standoff near 1 cm - image 4 in 8-image relative focus stack	
		3323MH0008380021104476C00	4476
		target Helens_Bay - standoff near 1 cm - image 5 in 8-image relative focus stack	
		3323MH0008380021104477C00	4477
		target Helens_Bay - standoff near 1 cm - image 6 in 8-image relative focus stack	
		3323MH0008380021104478C00	4478
		target Helens_Bay - standoff near 1 cm - image 7 in 8-image relative focus stack	
		3323MH0008380021104479C00	4479
		target Helens_Bay - standoff near 1 cm - image 8 in 8-image relative focus stack	
mhl00190	Lakehead ~25 cm standoff	3323MH000190001104480C00	4480
		autofocus sub-frame for target Lakehead - standoff near 25 cm	
		3323MH000190001104481C00	4481
		target Lakehead - standoff near 25 cm	
mhl00673	Lakehead stereo-1 ~4 cm standoff	3323MH0006730001104482C00	4482
		autofocus sub-frame for target Lakehead - stereo-1 - standoff near 4 cm	
		3323MH000673001104483C00	4483
		target Lakehead - stereo-1 - standoff near 4 cm	
		3323MH0006730021104484C00	4484
		target Lakehead - stereo-1 - standoff near 4 cm - image 1 in 8-image relative focus stack	
		3323MH0006730021104485C00	4485
		target Lakehead - stereo-1 - standoff near 4 cm - image 2 in 8-image relative focus stack	
		3323MH0006730021104486C00	4486
		target Lakehead - stereo-1 - standoff near 4 cm - image 3 in 8-image relative focus stack	
		3323MH0006730021104487C00	4487
		target Lakehead - stereo-1 - standoff near 4 cm - image 4 in 8-image relative focus stack	
		3323MH0006730021104488C00	4488
		target Lakehead - stereo-1 - standoff near 4 cm - image 5 in 8-image relative focus stack	
		3323MH0006730021104489C00	4489
		target Lakehead - stereo-1 - standoff near 4 cm - image 6 in 8-image relative focus stack	
		3323MH0006730021104490C00	4490
		target Lakehead - stereo-1 - standoff near 4 cm - image 7 in 8-image relative focus stack	
		3323MH0006730021104491C00	4491
		target Lakehead - stereo-1 - standoff near 4 cm - image 8 in 8-image relative focus stack	
mhl00673	Lakehead stereo-2 ~4 cm standoff	3323MH0006730001104492C00	4492
		autofocus sub-frame for target Lakehead - stereo-2 - standoff near 4 cm	
		3323MH000673001104493C00	4493
		target Lakehead - stereo-2 - standoff near 4 cm	
		3323MH0006730021104494C00	4494
		target Lakehead - stereo-2 - standoff near 4 cm - image 1 in 8-image relative focus stack	
		3323MH0006730021104495C00	4495
		target Lakehead - stereo-2 - standoff near 4 cm - image 2 in 8-image relative focus stack	
		3323MH0006730021104496C00	4496
		target Lakehead - stereo-2 - standoff near 4 cm - image 3 in 8-image relative focus stack	
		3323MH0006730021104497C00	4497
		target Lakehead - stereo-2 - standoff near 4 cm - image 4 in 8-image relative focus stack	
		3323MH0006730021104498C00	4498
		target Lakehead - stereo-2 - standoff near 4 cm - image 5 in 8-image relative focus stack	
		3323MH0006730021104499C00	4499
		target Lakehead - stereo-2 - standoff near 4 cm - image 6 in 8-image relative focus stack	
		3323MH0006730021104500C00	4500
		target Lakehead - stereo-2 - standoff near 4 cm - image 7 in 8-image relative focus stack	
		3323MH000673002110451C00	4501
		target Lakehead - stereo-2 - standoff near 4 cm - image 8 in 8-image relative focus stack	

updated: 14\_December\_2021

<b>Sol 3324 - MAHLI Images</b>	acquired/perform date(s)	13-Dec-21	
	camera position:	B	Image ID: black = best, least-compressed version receive as of date at upper left; orange = only a thumbnail has been received
	total parent images:	0	
	focus merges performed:	0	COPID:
	total focus merge products:	0	Camera Data Product Identifier = MSL_CAMERA_PRODUCT_ID in PDS archive product labels
	total parent images + focus merge products:	0	
summary of MAHLI activities:			
Focus stack images from Sol 3323 were merged.			
Sequence	Camera Position	Image ID	COPID
mhl00227	Focus Merges	3324MH0002270001104502800	4502 target_Lakehead - stereo-2 - standoff near 4 cm - focus stack acquired sol 3323 with MSL_CAMERA_PRODUCT_IDS 4494-4501 - best focus image product
		3324MH0002270001104503500	4503 target_Lakehead - stereo-2 - standoff near 4 cm - focus stack acquired sol 3323 with MSL_CAMERA_PRODUCT_IDS 4494-4501 - range map product
		3324MH0002270001104504800	4504 target_Lakehead - stereo-1 - standoff near 4 cm - focus stack acquired sol 3323 with MSL_CAMERA_PRODUCT_IDS 4484-4491 - best focus image product
		3324MH0002270001104505500	4505 target_Lakehead - stereo-1 - standoff near 4 cm - focus stack acquired sol 3323 with MSL_CAMERA_PRODUCT_IDS 4484-4491 - range map product
		3324MH0002270001104506800	4506 target_Helens_Bay - standoff near 1 cm - focus stack acquired sol 3323 with MSL_CAMERA_PRODUCT_IDS 4472-4479 - best focus image product
		3324MH0002270001104507500	4507 target_Helens_Bay - standoff near 1 cm - focus stack acquired sol 3323 with MSL_CAMERA_PRODUCT_IDS 4472-4479 - range map product
		3324MH0002270001104508800	4508 target_Helens_Bay - stereo-2 - standoff near 5 cm - focus stack acquired sol 3323 with MSL_CAMERA_PRODUCT_IDS 4462-4469 - best focus image product
		3324MH0002270001104509500	4509 target_Helens_Bay - stereo-2 - standoff near 5 cm - focus stack acquired sol 3323 with MSL_CAMERA_PRODUCT_IDS 4462-4469 - range map product
		3324MH0002270001104510800	4510 target_Helens_Bay - stereo-1 - standoff near 5 cm - focus stack acquired sol 3323 with MSL_CAMERA_PRODUCT_IDS 4452-4459 - best focus image product
		3324MH0002270001104511500	4511 target_Helens_Bay - stereo-1 - standoff near 5 cm - focus stack acquired sol 3323 with MSL_CAMERA_PRODUCT_IDS 4452-4459 - range map product

updated: 22\_December\_2021

<b>Sol 3326 - MAHLI Images</b>	<table border="1"> <tr><td>acquired/perform date(s)</td><td>14-Dec-21</td><td></td></tr> <tr><td>camera position</td><td>3</td><td>Image ID:</td></tr> <tr><td>total parent images</td><td>22</td><td>black = best, least-compressed version receive as of date at upper left; orange = only a thumbnail has been received.</td></tr> <tr><td>focus merges performed</td><td>2</td><td>COPID:</td></tr> <tr><td>total focus merge products</td><td>4</td><td>Camera Data Product Identifier = MSL_CAMERA_PRODUCT_ID in PDS archive product labels</td></tr> <tr><td>total parent images + focus merge products</td><td>26</td><td></td></tr> </table>		acquired/perform date(s)	14-Dec-21		camera position	3	Image ID:	total parent images	22	black = best, least-compressed version receive as of date at upper left; orange = only a thumbnail has been received.	focus merges performed	2	COPID:	total focus merge products	4	Camera Data Product Identifier = MSL_CAMERA_PRODUCT_ID in PDS archive product labels	total parent images + focus merge products	26	
acquired/perform date(s)	14-Dec-21																			
camera position	3	Image ID:																		
total parent images	22	black = best, least-compressed version receive as of date at upper left; orange = only a thumbnail has been received.																		
focus merges performed	2	COPID:																		
total focus merge products	4	Camera Data Product Identifier = MSL_CAMERA_PRODUCT_ID in PDS archive product labels																		
total parent images + focus merge products	26																			
summary of MAHLI activities: MAHLI imaged the target Portgower and the focus stack images were merged.																				
Sequence	Camera Position	Image ID																		
		COPID																		
mhl00190	Portgower ~25 cm standoff	3326MH000190000110451200																		
		4512 autofocus sub-frame for target Portgower - standoff near 25 cm																		
mhl00306	Portgower stereo-1 ~5 cm standoff		3326MH000190000110451300																	
			4513 target Portgower - standoff near 25 cm																	
			3326MH000190000110451400																	
			4514 autofocus sub-frame for target Portgower - stereo-1 - standoff near 5 cm																	
			4515 target Portgower - stereo-1 - standoff near 5 cm																	
			3326MH000190000110451500																	
			4516 target Portgower - stereo-1 - standoff near 5 cm - image 1 in 8-image relative focus stack																	
			3326MH000190000110451600																	
			4517 target Portgower - stereo-1 - standoff near 5 cm - image 2 in 8-image relative focus stack																	
			3326MH000190000110451700																	
			4518 target Portgower - stereo-1 - standoff near 5 cm - image 3 in 8-image relative focus stack																	
			3326MH000190000110451900																	
			4519 target Portgower - stereo-1 - standoff near 5 cm - image 4 in 8-image relative focus stack																	
			3326MH000190000110452000																	
			4520 target Portgower - stereo-1 - standoff near 5 cm - image 5 in 8-image relative focus stack																	
mhl00306	Portgower stereo-2 ~5 cm standoff		3326MH000190000110452100																	
			4521 target Portgower - stereo-1 - standoff near 5 cm - image 6 in 8-image relative focus stack																	
			3326MH000190000110452200																	
			4522 target Portgower - stereo-1 - standoff near 5 cm - image 7 in 8-image relative focus stack																	
			3326MH000190000110452300																	
			4523 target Portgower - stereo-1 - standoff near 5 cm - image 8 in 8-image relative focus stack																	
			3326MH000190000110452400																	
			4524 autofocus sub-frame for target Portgower - stereo-2 - standoff near 5 cm																	
			3326MH000190000110452500																	
			4525 target Portgower - stereo-2 - standoff near 5 cm																	
			3326MH000190000110452600																	
			4526 target Portgower - stereo-2 - standoff near 5 cm - image 1 in 8-image relative focus stack																	
			3326MH000190000110452700																	
			4527 target Portgower - stereo-2 - standoff near 5 cm - image 2 in 8-image relative focus stack																	
mhl00266	Focus Merges		3326MH000190000110452800																	
			4528 target Portgower - stereo-2 - standoff near 5 cm - image 3 in 8-image relative focus stack																	
			3326MH000190000110452900																	
			4529 target Portgower - stereo-2 - standoff near 5 cm - image 4 in 8-image relative focus stack																	
			3326MH000190000110453000																	
			4530 target Portgower - stereo-2 - standoff near 5 cm - image 5 in 8-image relative focus stack																	
			3326MH000190000110453100																	
			4531 target Portgower - stereo-2 - standoff near 5 cm - image 6 in 8-image relative focus stack																	
			3326MH000190000110453200																	
			4532 target Portgower - stereo-2 - standoff near 5 cm - image 7 in 8-image relative focus stack																	
			3326MH000190000110453300																	
			4533 target Portgower - stereo-2 - standoff near 5 cm - image 8 in 8-image relative focus stack																	
mhl00266			3326MH000265000110453400																	
			4534 target Portgower - stereo-2 - standoff near 5 cm - focus stack acquired sol 3326 with MSL_CAMERA_PRODUCT_IDs 4526-4533 - best focus image product																	
			3326MH000265000110453500																	
			4535 target Portgower - stereo-2 - standoff near 5 cm - focus stack acquired sol 3326 with MSL_CAMERA_PRODUCT_IDs 4526-4533 - range map product																	
			3326MH000265000110453600																	
			4536 target Portgower - stereo-1 - standoff near 5 cm - focus stack acquired sol 3326 with MSL_CAMERA_PRODUCT_IDs 4516-4523 - best focus image product																	
			3326MH000265000110453700																	
			4537 target Portgower - stereo-1 - standoff near 5 cm - focus stack acquired sol 3326 with MSL_CAMERA_PRODUCT_IDs 4516-4523 - range map product																	

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Sol 3328 - MAHLI Images			
	Sequence	Image ID	COPID
		acquired/perform date(s)	16-Dec-21
		camera position:	4
		Image ID:	
		camera position:	32
		black = best, least-compressed version receive as of date at upper left; orange = only a thumbnail has been received.	
		focus merges performed:	0
		COPID:	
		Camera Data Product Identifier = MSLCAMERA_PRODUCT_ID in PDS archive product labels	
		total focus merge products:	0
		total parent images + focus merge products:	32
		summary of MAHLI activities:	MAHLI imaged the target Korskellie.
mhl00190	Korskellie ~25 cm standoff	3328MH000190001104538C00	4538
		autofocus sub-frame for target Korskellie - standoff near 25 cm	
		3328MH000190001104539C00	4539
		target Korskellie - standoff near 25 cm	
mhl00299	Korskellie stereo-1 ~5 cm standoff	3328MH000299001104540C00	4540
		autofocus sub-frame for target Korskellie - stereo-1 - standoff near 5 cm	
		3328MH000299001104541C00	4541
		target Korskellie - stereo-1 - standoff near 5 cm	
		3328MH0002990021104542C00	4542
		target Korskellie - stereo-1 - standoff near 5 cm - image 1 in 8-image relative focus stack	
		3328MH0002990021104543C00	4543
		target Korskellie - stereo-1 - standoff near 5 cm - image 2 in 8-image relative focus stack	
		3328MH0002990021104544C00	4544
		target Korskellie - stereo-1 - standoff near 5 cm - image 3 in 8-image relative focus stack	
		3328MH0002990021104545C00	4545
		target Korskellie - stereo-1 - standoff near 5 cm - image 4 in 8-image relative focus stack	
		3328MH0002990021104546C00	4546
		target Korskellie - stereo-1 - standoff near 5 cm - image 5 in 8-image relative focus stack	
		3328MH0002990021104547C00	4547
		target Korskellie - stereo-1 - standoff near 5 cm - image 6 in 8-image relative focus stack	
		3328MH0002990021104548C00	4548
		target Korskellie - stereo-1 - standoff near 5 cm - image 7 in 8-image relative focus stack	
		3328MH0002990021104549C00	4549
		target Korskellie - stereo-1 - standoff near 5 cm - image 8 in 8-image relative focus stack	
mhl00299	Korskellie stereo-2 ~5 cm standoff	3328MH000299001104550C00	4550
		autofocus sub-frame for target Korskellie - stereo-2 - standoff near 5 cm	
		3328MH000299001104551C00	4551
		target Korskellie - stereo-2 - standoff near 5 cm	
		3328MH0002990021104552C00	4552
		target Korskellie - stereo-2 - standoff near 5 cm - image 1 in 8-image relative focus stack	
		3328MH0002990021104553C00	4553
		target Korskellie - stereo-2 - standoff near 5 cm - image 2 in 8-image relative focus stack	
		3328MH0002990021104554C00	4554
		target Korskellie - stereo-2 - standoff near 5 cm - image 3 in 8-image relative focus stack	
		3328MH0002990021104555C00	4555
		target Korskellie - stereo-2 - standoff near 5 cm - image 4 in 8-image relative focus stack	
		3328MH0002990021104556C00	4556
		target Korskellie - stereo-2 - standoff near 5 cm - image 5 in 8-image relative focus stack	
		3328MH0002990021104557C00	4557
		target Korskellie - stereo-2 - standoff near 5 cm - image 6 in 8-image relative focus stack	
		3328MH0002990021104558C00	4558
		target Korskellie - stereo-2 - standoff near 5 cm - image 7 in 8-image relative focus stack	
		3328MH0002990021104559C00	4559
		target Korskellie - stereo-2 - standoff near 5 cm - image 8 in 8-image relative focus stack	
mhl00174	Korskellie ~2 cm standoff	3328MH0001740001104560C00	4560
		autofocus sub-frame for target Korskellie - standoff near 2 cm	
		3328MH000174001104561C00	4561
		target Korskellie - standoff near 2 cm	
		3328MH0001740021104562C00	4562
		target Korskellie - standoff near 2 cm - image 1 in 8-image relative focus stack	
		3328MH0001740021104563C00	4563
		target Korskellie - standoff near 2 cm - image 2 in 8-image relative focus stack	
		3328MH0001740021104564C00	4564
		target Korskellie - standoff near 2 cm - image 3 in 8-image relative focus stack	
		3328MH0001740021104565C00	4565
		target Korskellie - standoff near 2 cm - image 4 in 8-image relative focus stack	
		3328MH0001740021104566C00	4566
		target Korskellie - standoff near 2 cm - image 5 in 8-image relative focus stack	
		3328MH0001740021104567C00	4567
		target Korskellie - standoff near 2 cm - image 6 in 8-image relative focus stack	
		3328MH0001740021104568C00	4568
		target Korskellie - standoff near 2 cm - image 7 in 8-image relative focus stack	
		3328MH0001740021104569C00	4569
		target Korskellie - standoff near 2 cm - image 8 in 8-image relative focus stack	

updated: 20\_December\_2021

<b>Sol 3329 - MAHLI Images</b>	acquired/perform date(s)	17-Dec-21	
	camera position:	0	Image ID: black = best, least-compressed version receive as of date at upper left; orange = only a thumbnail has been received
	total parent images:	0	
	focus merges performed:	5	COPID:
	total focus merge products:	0	Camera Data Product Identifier = MSL_CAMERA_PRODUCT_ID in POS archive product labels
	total parent images + focus merge products:	0	
summary of MAHLI activities:			
Focus stack images from Sol 3328 were merged.			
Sequence	Camera Position	Image ID	COPID
mhl00193	Focus Merges	3329MH0001930001104570800	4570 target KorsKellie - standoff near 2 cm - focus stack acquired sol 3328 with MSL_CAMERA_PRODUCT_IDs 4562-4569 - best focus image product
		3329MH0001930001104571500	4571 target KorsKellie - standoff near 2 cm - focus stack acquired sol 3328 with MSL_CAMERA_PRODUCT_IDs 4562-4569 - range map product
		3329MH0001930001104572800	4572 target KorsKellie - stereo-2 - standoff near 5 cm - focus stack acquired sol 3328 with MSL_CAMERA_PRODUCT_IDs 4452-4559 - best focus image product
		3329MH0001930001104573500	4573 target KorsKellie - stereo-2 - standoff near 5 cm - focus stack acquired sol 3328 with MSL_CAMERA_PRODUCT_IDs 4452-4559 - range map product
		3329MH0001930001104574800	4574 target KorsKellie - stereo-1 - standoff near 5 cm - focus stack acquired sol 3328 with MSL_CAMERA_PRODUCT_IDs 4542-4549 - best focus image product
		3329MH0001930001104575500	4575 target KorsKellie - stereo-1 - standoff near 5 cm - focus stack acquired sol 3328 with MSL_CAMERA_PRODUCT_IDs 4542-4549 - range map product

updated: 22\_December\_2021

<b>Sol 3330 - MAHLI Images</b>	acquired/perform date(s)	18-Dec-21		
	camera position:	4	Image ID:	
	total parent images:	8	black = best, least-compressed version receive as of date at upper left; orange = only a thumbnail has been received	
	focus merges performed:	0	COPID:	
	total focus merge products:	0	Camera Data Product Identifier = MSLCAMERA_PRODUCT_ID in POS archive product labels	
	total parent images + focus merge products:	8		
summary of MAHLI activities:				
	MAHLI imaged the targets Arcs_Park and Clochoderick with the dust cover closed.			
Sequence	Camera Position	Image ID	COPID	
			Image Comment/Purpose (RATIONALE_DESC for POS archive products; 400 character limit)	
mhlID0625	Arcs_Park dust cover closed ~25 cm standoff	3330MH000625000104576C00	4576	autofocus sub-frame for target Arcs_Park - dust cover closed - standoff near 25 cm
		3330MH000625001104577C00	4577	target Arcs_Park - dust cover closed - standoff near 25 cm
mhlID0553	Arcs_Park dust cover closed ~3 cm standoff	3330MH000530001104578C00	4578	autofocus sub-frame for target Arcs_Park - dust cover closed - standoff near 3 cm
		3330MH000530011104579C00	4579	target Arcs_Park - dust cover closed - standoff near 3 cm
mhlID0625	Clochoderick after DRT dust cover closed ~25 cm standoff	3330MH000625001104580C00	4580	autofocus sub-frame for target Clochoderick - after dust removal tool (DRT) - dust cover closed - standoff near 25 cm
		3330MH0006250011104581C00	4581	target Clochoderick - after dust removal tool (DRT) - dust cover closed - standoff near 25 cm
mhlID0553	Clochoderick after DRT dust cover closed ~5 cm standoff	3330MH000530001104582C00	4582	autofocus sub-frame for target Clochoderick - after dust removal tool (DRT) - dust cover closed - standoff near 5 cm
		3330MH000530011104583C00	4583	target Clochoderick - after dust removal tool (DRT) - dust cover closed - standoff near 5 cm



updated: 03\_January\_2022

Sol 3345 - MAHLI Images																											
<table border="1"> <tr> <td>acquired/perform date(s)</td><td>3-Jan-22</td><td></td><td></td></tr> <tr> <td>camera position:</td><td>0</td><td colspan="2">Image ID: black = best, least-compressed version receive as of date at upper left; orange = only a thumbnail has been received</td></tr> <tr> <td>total parent images</td><td>0</td><td colspan="2"></td></tr> <tr> <td>focus merges performed</td><td>4</td><td colspan="2">CPID:</td></tr> <tr> <td>total focus merge products</td><td>4</td><td colspan="2">Camera Data Product Identifier = MSL_CAMERA_PRODUCT_ID in PDS archive product labels</td></tr> <tr> <td>total parent images + focus merge products</td><td>9</td><td colspan="2" rowspan="2"></td></tr> </table>				acquired/perform date(s)	3-Jan-22			camera position:	0	Image ID: black = best, least-compressed version receive as of date at upper left; orange = only a thumbnail has been received		total parent images	0			focus merges performed	4	CPID:		total focus merge products	4	Camera Data Product Identifier = MSL_CAMERA_PRODUCT_ID in PDS archive product labels		total parent images + focus merge products	9		
acquired/perform date(s)	3-Jan-22																										
camera position:	0	Image ID: black = best, least-compressed version receive as of date at upper left; orange = only a thumbnail has been received																									
total parent images	0																										
focus merges performed	4	CPID:																									
total focus merge products	4	Camera Data Product Identifier = MSL_CAMERA_PRODUCT_ID in PDS archive product labels																									
total parent images + focus merge products	9																										
summary of MAHLI activities:																											
Sequence	Camera Position	Image ID	Image Comment/Purpose (RATIONALE_DESC for PDS archive products; 400 character limit)																								
mhlD0153	Focus Merges	3345MH0001530001104626800	4626 target Maes_Howe - after dust removal tool (DRT) - APXS spot 2 - standoff near 5 cm - focus stack acquired sol 3344 with MSL_CAMERA_PRODUCT_IDS 4618-4625 - best focus image product																								
		3345MH0001530001104627500	4627 target Maes_Howe - after dust removal tool (DRT) - APXS spot 2 - standoff near 5 cm - focus stack acquired sol 3344 with MSL_CAMERA_PRODUCT_IDS 4618-4625 - range map product																								
		3345MH0001530001104628800	4628 target Maes_Howe - after dust removal tool (DRT) - APXS spot 1 - standoff near 2 cm - focus stack acquired sol 3344 with MSL_CAMERA_PRODUCT_IDS 4608-4615 - best focus image product																								
		3345MH0001530001104629500	4629 target Maes_Howe - after dust removal tool (DRT) - APXS spot 1 - standoff near 2 cm - focus stack acquired sol 3344 with MSL_CAMERA_PRODUCT_IDS 4608-4615 - range map product																								
		3345MH0001530001104630800	4630 target Maes_Howe - after dust removal tool (DRT) - APXS spot 1 - stereo-2 - standoff near 5 cm - focus stack acquired sol 3344 with MSL_CAMERA_PRODUCT_IDS 4598-4605 - best focus image product																								
		3345MH0001530001104631500	4631 target Maes_Howe - after dust removal tool (DRT) - APXS spot 1 - stereo-2 - standoff near 5 cm - focus stack acquired sol 3344 with MSL_CAMERA_PRODUCT_IDS 4598-4605 - range map product																								
		3345MH0001530001104632800	4632 target Maes_Howe - after dust removal tool (DRT) - APXS spot 1 - stereo-1 - standoff near 5 cm - focus stack acquired sol 3344 with MSL_CAMERA_PRODUCT_IDS 4598-4595 - best focus image product																								
		3345MH0001530001104633500	4633 target Maes_Howe - after dust removal tool (DRT) - APXS spot 1 - stereo-1 - standoff near 5 cm - focus stack acquired sol 3344 with MSL_CAMERA_PRODUCT_IDS 4598-4595 - range map product																								

updated: 10\_January\_2022

Sol 3347 - MAHLI Images			
	Sequence	Image ID	COPID
		acquired/perform date(s)	5-Jan-22
		camera position:	3
		Image ID:	
		camera position:	22
		black = best, least-compressed version receive as of date at upper left; orange = only a thumbnail has been received	
		focus merges performed	2
		COPID:	
		Camera Data Product Identifier = MSL_CAMERA_PRODUCT_ID in POS archive product labels	
		total focus merge products	1
		total parent images + focus merge products	36
		summary of MAHLI activities:	MAHLI imaged the target Verde and the focus stack images were merged.
mhl00190	Verde ~25 cm standoff	3347MH0001900001104634C00	4634
		autofocus sub-frame for target Verde - standoff near 25 cm	
		3347MH0001900001104635C00	4635
		target Verde - standoff near 25 cm	
mhl00173	Verde stereo-1 ~5 cm standoff	3347MH0001730001104636C00	4636
		autofocus sub-frame for target Verde - stereo-1 - standoff near 5 cm	
		3347MH000173001104637C00	4637
		target Verde - stereo-1 - standoff near 5 cm	
		3347MH0001730021104638C00	4638
		target Verde - stereo-1 - standoff near 5 cm - image 1 in 8-image relative focus stack	
		3347MH0001730021104639C00	4639
		target Verde - stereo-1 - standoff near 5 cm - image 2 in 8-image relative focus stack	
		3347MH0001730021104640C00	4640
		target Verde - stereo-1 - standoff near 5 cm - image 3 in 8-image relative focus stack	
		3347MH0001730021104641C00	4641
		target Verde - stereo-1 - standoff near 5 cm - image 4 in 8-image relative focus stack	
		3347MH0001730021104642C00	4642
		target Verde - stereo-1 - standoff near 5 cm - image 5 in 8-image relative focus stack	
		3347MH0001730021104643C00	4643
		target Verde - stereo-1 - standoff near 5 cm - image 6 in 8-image relative focus stack	
		3347MH0001730021104644C00	4644
		target Verde - stereo-1 - standoff near 5 cm - image 7 in 8-image relative focus stack	
		3347MH0001730021104645C00	4645
		target Verde - stereo-1 - standoff near 5 cm - image 8 in 8-image relative focus stack	
mhl00173	Verde stereo-2 ~5 cm standoff	3347MH0001730001104646C00	4646
		autofocus sub-frame for target Verde - stereo-2 - standoff near 5 cm	
		3347MH0001730011104647C00	4647
		target Verde - stereo-2 - standoff near 5 cm	
		3347MH0001730021104648C00	4648
		target Verde - stereo-2 - standoff near 5 cm - image 1 in 8-image relative focus stack	
		3347MH0001730021104649C01_Partial	4649
		target Verde - stereo-2 - standoff near 5 cm - image 2 in 8-image relative focus stack	
		3347MH0001730021104650C01	4650
		target Verde - stereo-2 - standoff near 5 cm - image 3 in 8-image relative focus stack	
		3347MH0001730021104651C01	4651
		target Verde - stereo-2 - standoff near 5 cm - image 4 in 8-image relative focus stack	
		3347MH0001730021104652C01	4652
		target Verde - stereo-2 - standoff near 5 cm - image 5 in 8-image relative focus stack	
		3347MH0001730021104653C01	4653
		target Verde - stereo-2 - standoff near 5 cm - image 6 in 8-image relative focus stack	
		3347MH0001730021104654C01	4654
		target Verde - stereo-2 - standoff near 5 cm - image 7 in 8-image relative focus stack	
		3347MH0001730021104655C01	4655
		target Verde - stereo-2 - standoff near 5 cm - image 8 in 8-image relative focus stack	
mhl00266	Focus Merges	3347MH0002650001104656R00	4656
		target Verde - stereo-2 - standoff near 5 cm - focus stack acquired sol 3347 with MSL_CAMERA_PRODUCT_IDS 4648-4655 - beat focus image product	
		3347MH0002650001104657S00	4657
		target Verde - stereo-2 - standoff near 5 cm - focus stack acquired sol 3347 with MSL_CAMERA_PRODUCT_IDS 4648-4655 - range map product	
		3347MH0002650001104658R00	4658
		target Verde - stereo-1 - standoff near 5 cm - focus stack acquired sol 3347 with MSL_CAMERA_PRODUCT_IDS 4638-4645 - beat focus image product	
		3347MH0002650001104659S00	4659
		target Verde - stereo-1 - standoff near 5 cm - focus stack acquired sol 3347 with MSL_CAMERA_PRODUCT_IDS 4638-4645 - range map product	

updated: 08\_January\_2022

Sol 3349 - MAHLI Images			
	Sequence	Image ID	COPID
		acquired/perform date(s)	7-Jan-22
		camera position:	3
		Image ID:	
		camera position:	3
		black = best, least-compressed version receive as of date at upper left; orange = only a thumbnail has been received	
		total parent images	22
		COPID:	1
		focus merges performed	1
		Camera Data Product Identifier = MSL_CAMERA_PRODUCT_ID in PDS archive product labels	
		total focus merge products	1
		total parent images + focus merge products	23
		summary of MAHLI activities:	MAHLI imaged the target El_Fosso and the focus stack images were merged.
mhl00190	El_Fosso ~25 cm standoff	3349MH0000190001104661001	4660
mhl00190	El_Fosso ~25 cm standoff	3349MH0000190001104661000	4661
mhl00299	El_Fosso stereo-1 ~5 cm standoff	3349MH0000299001104663001	4662
mhl00299	El_Fosso stereo-1 ~5 cm standoff	3349MH000029900110466303	4663
mhl00299	El_Fosso stereo-1 ~5 cm standoff	3349MH00002990021104664001	4664
mhl00299	El_Fosso stereo-1 ~5 cm standoff	3349MH00002990021104664001	4665
mhl00299	El_Fosso stereo-1 ~5 cm standoff	3349MH00002990021104664001	4666
mhl00299	El_Fosso stereo-1 ~5 cm standoff	3349MH00002990021104667001	4667
mhl00299	El_Fosso stereo-1 ~5 cm standoff	3349MH00002990021104668001	4668
mhl00299	El_Fosso stereo-1 ~5 cm standoff	3349MH00002990021104668001	4669
mhl00299	El_Fosso stereo-1 ~5 cm standoff	3349MH0000299002110467001	4670
mhl00299	El_Fosso stereo-1 ~5 cm standoff	3349MH0000299002110467101	4671
mhl00299	El_Fosso stereo-2 ~5 cm standoff	3349MH0000299001104673001	4672
mhl00299	El_Fosso stereo-2 ~5 cm standoff	3349MH000029900110467300	4673
mhl00299	El_Fosso stereo-2 ~5 cm standoff	3349MH00002990021104674001	4674
mhl00299	El_Fosso stereo-2 ~5 cm standoff	3349MH0000299002110467501	4675
mhl00299	El_Fosso stereo-2 ~5 cm standoff	3349MH0000299002110467601	4676
mhl00299	El_Fosso stereo-2 ~5 cm standoff	3349MH00002990021104677001	4677
mhl00299	El_Fosso stereo-2 ~5 cm standoff	3349MH0000299002110467801	4678
mhl00299	El_Fosso stereo-2 ~5 cm standoff	3349MH0000299002110467801	4679
mhl00299	El_Fosso stereo-2 ~5 cm standoff	3349MH0000299002110468001	4680
mhl00299	El_Fosso stereo-2 ~5 cm standoff	3349MH0000299002110468101	4681
mhl00265	Focus Merges	3349MH000265000110468200	4682
mhl00265	Focus Merges	3349MH000265000110468300	4683
mhl00265	Focus Merges	3349MH000265000110468400	4684
mhl00265	Focus Merges	3349MH000265000110468500	4685

updated: 14\_April\_2022

updated: 29\_January\_2022

			acquired/perform date(s)	20-Jan-21
			camera position:	9
			camera parent images	86
			focus merges performed	5
			total focus merge products	5
			total parent images + focus merge products	86
			summary of MAHLI activities:	On Sol 3361, all data on the MAHLI DEA (CPID=1-469) from Sol 2993-353) were erased from the MAHLI DEA as part of the recovery from the Sol 3353 DEA Flash issue. On Sol 3362, MAHLI imaged the targets Coati and Morok and MAHLI acquired a 5x1 mosaic of the target Caroni.
Sequence	Camera Position	Image ID	CPID	Image comment/Purpose (RATIONALE_DESC for POS archive products; 400 character limit)
mhl00706	Coati ~25 cm standoff	3362MH000706001190001100	1	autofocus sub-frame for target Coati - standoff near 25 cm
		3362MH000706001120000200	2	target Coati - standoff near 25 cm
		3362MH000706001120000300	3	target Coati - standoff near 25 cm - alternative auto-exposure
mhl00714	Coati stereo-1 ~55 mm standoff	3362MH000714000120000400	4	autofocus sub-frame for target Coati - stereo-1 - standoff near 55 mm
		3362MH000714001120000500	5	target Coati - stereo-1 - standoff near 55 mm
		3362MH000714002120000600	6	target Coati - stereo-1 - standoff near 55 mm - alternative auto-exposure
		3362MH000714003120000700	7	target Coati - stereo-1 - standoff near 55 mm - image 1 in 8-image relative focus stack
		3362MH000714003120000800	8	target Coati - stereo-1 - standoff near 55 mm - image 2 in 8-image relative focus stack
		3362MH000714003120000900	9	target Coati - stereo-1 - standoff near 55 mm - image 3 in 8-image relative focus stack
		3362MH000714003120001000	10	target Coati - stereo-1 - standoff near 55 mm - image 4 in 8-image relative focus stack
		3362MH000714003120001100	11	target Coati - stereo-1 - standoff near 55 mm - image 5 in 8-image relative focus stack
		3362MH000714003120001200	12	target Coati - stereo-1 - standoff near 55 mm - image 6 in 8-image relative focus stack
		3362MH000714003120001300	13	target Coati - stereo-1 - standoff near 55 mm - image 7 in 8-image relative focus stack
		3362MH000714003120001400	14	target Coati - stereo-1 - standoff near 55 mm - image 8 in 8-image relative focus stack
mhl00714	Coati stereo-2 ~55 mm standoff	3362MH000714000120001500	15	autofocus sub-frame for target Coati - stereo-2 - standoff near 55 mm
		3362MH000714001120001600	16	target Coati - stereo-2 - standoff near 55 mm
		3362MH000714002120001700	17	target Coati - stereo-2 - standoff near 55 mm - alternative auto-exposure
		3362MH000714003120001800	18	target Coati - stereo-2 - standoff near 55 mm - image 1 in 8-image relative focus stack
		3362MH000714003120001900	19	target Coati - stereo-2 - standoff near 55 mm - image 2 in 8-image relative focus stack
		3362MH000714003120002000	20	target Coati - stereo-2 - standoff near 55 mm - image 3 in 8-image relative focus stack
		3362MH000714003120002100	21	target Coati - stereo-2 - standoff near 55 mm - image 4 in 8-image relative focus stack
		3362MH000714003120002200	22	target Coati - stereo-2 - standoff near 55 mm - image 5 in 8-image relative focus stack
		3362MH000714003120002300	23	target Coati - stereo-2 - standoff near 55 mm - image 6 in 8-image relative focus stack
		3362MH000714003120002400	24	target Coati - stereo-2 - standoff near 55 mm - image 7 in 8-image relative focus stack
		3362MH000714003120002500	25	target Coati - stereo-2 - standoff near 55 mm - image 8 in 8-image relative focus stack
mhl00714	Morok ~65 mm standoff	3362MH000714000120002600	26	autofocus sub-frame for target Morok - standoff near 65 mm
		3362MH000714001120002700	27	target Morok - standoff near 65 mm
		3362MH000714002120002800	28	target Morok - standoff near 65 mm - alternative auto-exposure
		3362MH000714003120002900	29	target Morok - standoff near 65 mm - image 1 in 8-image relative focus stack
		3362MH000714003120003000	30	target Morok - standoff near 65 mm - image 2 in 8-image relative focus stack
		3362MH000714003120003100	31	target Morok - standoff near 65 mm - image 3 in 8-image relative focus stack
		3362MH000714003120003200	32	target Morok - standoff near 65 mm - image 4 in 8-image relative focus stack
		3362MH000714003120003300	33	target Morok - standoff near 65 mm - image 5 in 8-image relative focus stack
		3362MH000714003120003400	34	target Morok - standoff near 65 mm - image 6 in 8-image relative focus stack
		3362MH000714003120003500	35	target Morok - standoff near 65 mm - image 7 in 8-image relative focus stack
		3362MH000714003120003600	36	target Morok - standoff near 65 mm - image 8 in 8-image relative focus stack
mhl00715	Caroni mosaic position 1 of 5 ~7 cm standoff	3362MH000152000120003700	37	autofocus sub-frame for target Caroni - mosaic position 1 of 5 - standoff between 5 cm and 7 cm
		3362MH000152001120003800	38	target Caroni - mosaic position 1 of 5 - standoff between 5 cm and 7 cm
		3362MH000152002120003900	39	target Caroni - mosaic position 1 of 5 - standoff between 5 cm and 7 cm - image 1 in 8-image relative focus stack
		3362MH000152003120004000	40	target Caroni - mosaic position 1 of 5 - standoff between 5 cm and 7 cm - image 2 in 8-image relative focus stack
		3362MH000152004120004100	41	target Caroni - mosaic position 1 of 5 - standoff between 5 cm and 7 cm - image 3 in 8-image relative focus stack
		3362MH000152002120004200	42	target Caroni - mosaic position 1 of 5 - standoff between 5 cm and 7 cm - image 4 in 8-image relative focus stack
		3362MH000152003120004300	43	target Caroni - mosaic position 1 of 5 - standoff between 5 cm and 7 cm - image 5 in 8-image relative focus stack
		3362MH000152004120004400	44	target Caroni - mosaic position 1 of 5 - standoff between 5 cm and 7 cm - image 6 in 8-image relative focus stack
		3362MH000152002120004500	45	target Caroni - mosaic position 1 of 5 - standoff between 5 cm and 7 cm - image 7 in 8-image relative focus stack
		3362MH000152003120004600	46	target Caroni - mosaic position 1 of 5 - standoff between 5 cm and 7 cm - image 8 in 8-image relative focus stack
mhl00715	Caroni mosaic position 2 of 5 ~7 cm standoff	3362MH000152000120004700	47	autofocus sub-frame for target Caroni - mosaic position 2 of 5 - standoff between 5 cm and 7 cm
		3362MH000152001120004800	48	target Caroni - mosaic position 2 of 5 - standoff between 5 cm and 7 cm
		3362MH000152002120004900	49	target Caroni - mosaic position 2 of 5 - standoff between 5 cm and 7 cm - image 1 in 8-image relative focus stack
		3362MH000152003120005000	50	target Caroni - mosaic position 2 of 5 - standoff between 5 cm and 7 cm - image 2 in 8-image relative focus stack
		3362MH000152004120005100	51	target Caroni - mosaic position 2 of 5 - standoff between 5 cm and 7 cm - image 3 in 8-image relative focus stack
		3362MH000152002120005200	52	target Caroni - mosaic position 2 of 5 - standoff between 5 cm and 7 cm - image 4 in 8-image relative focus stack
		3362MH000152003120005300	53	target Caroni - mosaic position 2 of 5 - standoff between 5 cm and 7 cm - image 5 in 8-image relative focus stack
		3362MH000152004120005400	54	target Caroni - mosaic position 2 of 5 - standoff between 5 cm and 7 cm - image 6 in 8-image relative focus stack
		3362MH000152002120005500	55	target Caroni - mosaic position 2 of 5 - standoff between 5 cm and 7 cm - image 7 in 8-image relative focus stack
		3362MH000152003120005600	56	target Caroni - mosaic position 2 of 5 - standoff between 5 cm and 7 cm - image 8 in 8-image relative focus stack
mhl00715	Caroni mosaic position 3 of 5 ~7 cm standoff	3362MH000152000120005700	57	autofocus sub-frame for target Caroni - mosaic position 3 of 5 - standoff between 5 cm and 7 cm
		3362MH000152001120005800	58	target Caroni - mosaic position 3 of 5 - standoff between 5 cm and 7 cm
		3362MH000152002120005900	59	target Caroni - mosaic position 3 of 5 - standoff between 5 cm and 7 cm - image 1 in 8-image relative focus stack
		3362MH000152003120006000	60	target Caroni - mosaic position 3 of 5 - standoff between 5 cm and 7 cm - image 2 in 8-image relative focus stack
		3362MH000152004120006100	61	target Caroni - mosaic position 3 of 5 - standoff between 5 cm and 7 cm - image 3 in 8-image relative focus stack
		3362MH000152002120006200	62	target Caroni - mosaic position 3 of 5 - standoff between 5 cm and 7 cm - image 4 in 8-image relative focus stack
		3362MH000152003120006300	63	target Caroni - mosaic position 3 of 5 - standoff between 5 cm and 7 cm - image 5 in 8-image relative focus stack
		3362MH000152004120006400	64	target Caroni - mosaic position 3 of 5 - standoff between 5 cm and 7 cm - image 6 in 8-image relative focus stack
		3362MH000152002120006500	65	target Caroni - mosaic position 3 of 5 - standoff between 5 cm and 7 cm - image 7 in 8-image relative focus stack
		3362MH000152003120006600	66	target Caroni - mosaic position 3 of 5 - standoff between 5 cm and 7 cm - image 8 in 8-image relative focus stack

Continued on Next Page...

		3362MH0001520001200067C00	67	autofocus sub-frame for target Caroni - mosaic position 4 of 5 - standoff between 5 cm and 7 cm
		3362MH0001520011200068C00	68	target Caroni - mosaic position 4 of 5 - standoff between 5 cm and 7 cm
		3362MH0001520011200069C00	69	target Caroni - mosaic position 4 of 5 - standoff between 5 cm and 7 cm - image 1 in 8-image relative focus stack
		3362MH0001520011200070C00	70	target Caroni - mosaic position 4 of 5 - standoff between 5 cm and 7 cm - image 2 in 8-image relative focus stack
		3362MH0001520011200071C00	71	target Caroni - mosaic position 4 of 5 - standoff between 5 cm and 7 cm - image 3 in 8-image relative focus stack
		3362MH0001520011200072C00	72	target Caroni - mosaic position 4 of 5 - standoff between 5 cm and 7 cm - image 4 in 8-image relative focus stack
		3362MH0001520011200073C00	73	target Caroni - mosaic position 4 of 5 - standoff between 5 cm and 7 cm - image 5 in 8-image relative focus stack
		3362MH0001520011200074C00	74	target Caroni - mosaic position 4 of 5 - standoff between 5 cm and 7 cm - image 6 in 8-image relative focus stack
		3362MH0001520011200075C00	75	target Caroni - mosaic position 4 of 5 - standoff between 5 cm and 7 cm - image 7 in 8-image relative focus stack
		3362MH0001520011200076C00	76	target Caroni - mosaic position 4 of 5 - standoff between 5 cm and 7 cm - image 8 in 8-image relative focus stack
mhi00152	Caroni mosaic position 4 of 5 ~7 cm standoff	3362MH0001520001200077C00	77	autofocus sub-frame for target Caroni - mosaic position 5 of 5 - standoff between 5 cm and 7 cm
		3362MH0001520011200078C00	78	target Caroni - mosaic position 5 of 5 - standoff between 5 cm and 7 cm
		3362MH0001520011200079C00	79	target Caroni - mosaic position 5 of 5 - standoff between 5 cm and 7 cm - image 1 in 8-image relative focus stack
		3362MH0001520011200080C00	80	target Caroni - mosaic position 5 of 5 - standoff between 5 cm and 7 cm - image 2 in 8-image relative focus stack
		3362MH0001520011200081C00	81	target Caroni - mosaic position 5 of 5 - standoff between 5 cm and 7 cm - image 3 in 8-image relative focus stack
		3362MH0001520011200082C00	82	target Caroni - mosaic position 5 of 5 - standoff between 5 cm and 7 cm - image 4 in 8-image relative focus stack
		3362MH0001520011200083C00	83	target Caroni - mosaic position 5 of 5 - standoff between 5 cm and 7 cm - image 5 in 8-image relative focus stack
		3362MH0001520011200084C00	84	target Caroni - mosaic position 5 of 5 - standoff between 5 cm and 7 cm - image 6 in 8-image relative focus stack
		3362MH0001520011200085C00	85	target Caroni - mosaic position 5 of 5 - standoff between 5 cm and 7 cm - image 7 in 8-image relative focus stack
		3362MH0001520011200086C00	86	target Caroni - mosaic position 5 of 5 - standoff between 5 cm and 7 cm - image 8 in 8-image relative focus stack

updated: 21\_January\_2022

Sol 3363 - MAHLI Images			
Sequence	Camera Position	Image ID	COPID
		3363MH0001700001200087800	87
		3363MH0001700001200088500	88
		3363MH0001700001200088900	89
		3363MH0001700001200090500	90
		3363MH0001700001200091800	91
		3363MH0001700001200092500	92
		3363MH0001700001200093000	93
		3363MH0001700001200094500	94
		3363MH0001700001200095600	95
		3363MH0001700001200096500	96
		3363MH0001700001200097800	97
mhlD0170	Focus Merges	3363MH0001700001200098500	98
		3363MH0001700001200099600	99
		3363MH0001700001200100500	100
		3363MH0001700001200101800	101
		3363MH0001700001200102500	102
summary of MAHLI activities:			
The focus merges from Sol 3362 were merged.			
acquired/perform date(s) 21-Jan-22			
camera position 0 Image ID:			
0 black = best, least-compressed version receive as of date at upper left; orange = only a thumbnail has been received			
total parent images 0 COPID:			
focus merges performed Camera Data Product Identifier = MSL_CAMERA_PRODUCT_ID in POS archive product labels			
total focus merge products 46 Camera Data Product Identifier = MSL_CAMERA_PRODUCT_ID in POS archive product labels			
total parent images + focus merge products 46			

updated: 31\_January\_2022

Sol 3364 - MAHLI Images	<table border="1"> <tr><td>acquired/perform date(s)</td><td>22-Jan-21</td></tr> <tr><td>camera position:</td><td>6</td></tr> <tr><td>total parent images</td><td>44</td></tr> <tr><td>focus merges performed</td><td>0</td></tr> <tr><td>total focus merge products</td><td>0</td></tr> <tr><td>total parent images + focus merge products</td><td>44</td></tr> </table>			acquired/perform date(s)	22-Jan-21	camera position:	6	total parent images	44	focus merges performed	0	total focus merge products	0	total parent images + focus merge products	44																																																																																									
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total parent images	44																																																																																																							
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summary of MAHLI activities: MAHLI imaged the targets Mazaruni and Formoso.																																																																																																								
<table border="1"> <thead> <tr><th>Sequence</th><th>Camera Position</th><th>Image ID</th><th>COPID</th></tr> </thead> <tbody> <tr><td rowspan="22">mhl00190</td><td rowspan="2">Mazaruni ~25 cm standoff</td><td>3364MH0001900011200103C00</td><td>103</td></tr> <tr><td>3364MH0001900011200104C00</td><td>104</td></tr> <tr><td rowspan="10">Mazaruni stereo-1 ~5 cm standoff</td><td>3364MH0002990011200105C00</td><td>105</td></tr> <tr><td>3364MH0002990011200106C00</td><td>106</td></tr> <tr><td>3364MH0002990011200107C00</td><td>107</td></tr> <tr><td>3364MH0002990011200108C00</td><td>108</td></tr> <tr><td>3364MH0002990011200109C00</td><td>109</td></tr> <tr><td>3364MH0002990011200110C00</td><td>110</td></tr> <tr><td>3364MH0002990011200111C00</td><td>111</td></tr> <tr><td>3364MH0002990011200112C00</td><td>112</td></tr> <tr><td>3364MH0002990011200113C00</td><td>113</td></tr> <tr><td>3364MH0002990011200114C00</td><td>114</td></tr> <tr><td rowspan="10">Mazaruni stereo-2 ~5 cm standoff</td><td>3364MH0002990011200115C00</td><td>115</td></tr> <tr><td>3364MH0002990011200116C00</td><td>116</td></tr> <tr><td>3364MH0002990011200117C00</td><td>117</td></tr> <tr><td>3364MH0002990011200118C00</td><td>118</td></tr> <tr><td>3364MH0002990011200119C00</td><td>119</td></tr> <tr><td>3364MH0002990011200120C00</td><td>120</td></tr> <tr><td>3364MH0002990011200121C00</td><td>121</td></tr> <tr><td>3364MH0002990011200122C00</td><td>122</td></tr> <tr><td>3364MH0002990011200123C00</td><td>123</td></tr> <tr><td>3364MH0002990011200124C00</td><td>124</td></tr> <tr><td>mhl00199</td><td>Formoso ~25 cm standoff</td><td>3364MH0001900011200125C00</td><td>125</td></tr> <tr><td rowspan="16">mhl00299</td><td rowspan="16">Formoso stereo-1 ~5 cm standoff</td><td>3364MH0001900011200126C00</td><td>126</td></tr> <tr><td>3364MH0001680011200127C00</td><td>127</td></tr> <tr><td>3364MH0001680011200128C00</td><td>128</td></tr> <tr><td>3364MH0001680011200129C00</td><td>129</td></tr> <tr><td>3364MH0001680011200130C00</td><td>130</td></tr> <tr><td>3364MH0001680011200131C00</td><td>131</td></tr> <tr><td>3364MH0001680011200132C00</td><td>132</td></tr> <tr><td>3364MH0001680011200133C00</td><td>133</td></tr> <tr><td>3364MH0001680011200134C00</td><td>134</td></tr> <tr><td>3364MH0001680011200135C00</td><td>135</td></tr> <tr><td>3364MH0001680011200136C00</td><td>136</td></tr> <tr><td>3364MH0001680011200137C00</td><td>137</td></tr> <tr><td>3364MH0001680011200138C00</td><td>138</td></tr> <tr><td>3364MH0001680011200139C00</td><td>139</td></tr> <tr><td>3364MH0001680011200140C00</td><td>140</td></tr> <tr><td>3364MH0001680011200141C00</td><td>141</td></tr> <tr><td rowspan="5">mhl00190</td><td rowspan="5">Formoso stereo-2 ~5 cm standoff</td><td>3364MH0001680011200142C00</td><td>142</td></tr> <tr><td>3364MH0001680011200143C00</td><td>143</td></tr> <tr><td>3364MH0001680011200144C00</td><td>144</td></tr> <tr><td>3364MH0001680011200145C00</td><td>145</td></tr> <tr><td>3364MH0001680011200146C00</td><td>146</td></tr> </tbody></table>			Sequence	Camera Position	Image ID	COPID	mhl00190	Mazaruni ~25 cm standoff	3364MH0001900011200103C00	103	3364MH0001900011200104C00	104	Mazaruni stereo-1 ~5 cm standoff	3364MH0002990011200105C00	105	3364MH0002990011200106C00	106	3364MH0002990011200107C00	107	3364MH0002990011200108C00	108	3364MH0002990011200109C00	109	3364MH0002990011200110C00	110	3364MH0002990011200111C00	111	3364MH0002990011200112C00	112	3364MH0002990011200113C00	113	3364MH0002990011200114C00	114	Mazaruni stereo-2 ~5 cm standoff	3364MH0002990011200115C00	115	3364MH0002990011200116C00	116	3364MH0002990011200117C00	117	3364MH0002990011200118C00	118	3364MH0002990011200119C00	119	3364MH0002990011200120C00	120	3364MH0002990011200121C00	121	3364MH0002990011200122C00	122	3364MH0002990011200123C00	123	3364MH0002990011200124C00	124	mhl00199	Formoso ~25 cm standoff	3364MH0001900011200125C00	125	mhl00299	Formoso stereo-1 ~5 cm standoff	3364MH0001900011200126C00	126	3364MH0001680011200127C00	127	3364MH0001680011200128C00	128	3364MH0001680011200129C00	129	3364MH0001680011200130C00	130	3364MH0001680011200131C00	131	3364MH0001680011200132C00	132	3364MH0001680011200133C00	133	3364MH0001680011200134C00	134	3364MH0001680011200135C00	135	3364MH0001680011200136C00	136	3364MH0001680011200137C00	137	3364MH0001680011200138C00	138	3364MH0001680011200139C00	139	3364MH0001680011200140C00	140	3364MH0001680011200141C00	141	mhl00190	Formoso stereo-2 ~5 cm standoff	3364MH0001680011200142C00	142	3364MH0001680011200143C00	143	3364MH0001680011200144C00	144	3364MH0001680011200145C00	145	3364MH0001680011200146C00	146
Sequence	Camera Position	Image ID	COPID																																																																																																					
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	Mazaruni stereo-1 ~5 cm standoff	3364MH0002990011200105C00	105																																																																																																					
		3364MH0002990011200106C00	106																																																																																																					
		3364MH0002990011200107C00	107																																																																																																					
		3364MH0002990011200108C00	108																																																																																																					
		3364MH0002990011200109C00	109																																																																																																					
		3364MH0002990011200110C00	110																																																																																																					
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		3364MH0002990011200112C00	112																																																																																																					
		3364MH0002990011200113C00	113																																																																																																					
		3364MH0002990011200114C00	114																																																																																																					
	Mazaruni stereo-2 ~5 cm standoff	3364MH0002990011200115C00	115																																																																																																					
		3364MH0002990011200116C00	116																																																																																																					
		3364MH0002990011200117C00	117																																																																																																					
		3364MH0002990011200118C00	118																																																																																																					
		3364MH0002990011200119C00	119																																																																																																					
		3364MH0002990011200120C00	120																																																																																																					
		3364MH0002990011200121C00	121																																																																																																					
		3364MH0002990011200122C00	122																																																																																																					
		3364MH0002990011200123C00	123																																																																																																					
		3364MH0002990011200124C00	124																																																																																																					
mhl00199	Formoso ~25 cm standoff	3364MH0001900011200125C00	125																																																																																																					
mhl00299	Formoso stereo-1 ~5 cm standoff	3364MH0001900011200126C00	126																																																																																																					
		3364MH0001680011200127C00	127																																																																																																					
		3364MH0001680011200128C00	128																																																																																																					
		3364MH0001680011200129C00	129																																																																																																					
		3364MH0001680011200130C00	130																																																																																																					
		3364MH0001680011200131C00	131																																																																																																					
		3364MH0001680011200132C00	132																																																																																																					
		3364MH0001680011200133C00	133																																																																																																					
		3364MH0001680011200134C00	134																																																																																																					
		3364MH0001680011200135C00	135																																																																																																					
		3364MH0001680011200136C00	136																																																																																																					
		3364MH0001680011200137C00	137																																																																																																					
		3364MH0001680011200138C00	138																																																																																																					
		3364MH0001680011200139C00	139																																																																																																					
		3364MH0001680011200140C00	140																																																																																																					
		3364MH0001680011200141C00	141																																																																																																					
mhl00190	Formoso stereo-2 ~5 cm standoff	3364MH0001680011200142C00	142																																																																																																					
		3364MH0001680011200143C00	143																																																																																																					
		3364MH0001680011200144C00	144																																																																																																					
		3364MH0001680011200145C00	145																																																																																																					
		3364MH0001680011200146C00	146																																																																																																					

updated: 24\_January\_2022

<b>Sol 3365 - MAHLI Images</b>	acquired/perform date(s)	<b>23-Jan-21</b>	
	camera position:	<b>0</b>	Image ID: 0 black = best, least-compressed version receive as of date at upper left; orange = only a thumbnail has been received
	total parent images:	<b>0</b>	
	focus merges performed:	<b>4</b>	COPID:
	total focus merge products:	<b>4</b>	Camera Data Product Identifier = MSL_CAMERA_PRODUCT_ID in POS archive product labels
	total parent images + focus merge products:	<b>0</b>	
summary of MAHLI activities:			
Focus stack images from Sol 3364 were merged.			
Sequence	Camera Position	Image ID	COPID
mhl00153	Focus Merges	3365MH0001530001200147800	147 target Formoso - stereo-2 - standoff near 5 cm - focus stack acquired sol 3364 with MSL_CAMERA_PRODUCT_IDS 139-146 - best focus image product
		3365MH0001530001200148500	148 target Formoso - stereo-2 - standoff near 5 cm - focus stack acquired sol 3364 with MSL_CAMERA_PRODUCT_IDS 139-146 - range map product
		3365MH0001530001200149800	149 target Formoso - stereo-1 - standoff near 5 cm - focus stack acquired sol 3364 with MSL_CAMERA_PRODUCT_IDS 129-136 - best focus image product
		3365MH0001530001200150500	150 target Formoso - stereo-1 - standoff near 5 cm - focus stack acquired sol 3364 with MSL_CAMERA_PRODUCT_IDS 129-136 - range map product
		3365MH0001530001200151800	151 target Mazaruni - stereo-2 - standoff near 5 cm - focus stack acquired sol 3364 with MSL_CAMERA_PRODUCT_IDS 117-124 - best focus image product
		3365MH0001530001200152500	152 target Mazaruni - stereo-2 - standoff near 5 cm - focus stack acquired sol 3364 with MSL_CAMERA_PRODUCT_IDS 117-124 - range map product
		3365MH0001530001200153800	153 target Mazaruni - stereo-1 - standoff near 5 cm - focus stack acquired sol 3364 with MSL_CAMERA_PRODUCT_IDS 107-114 - best focus image product
		3365MH0001530001200154500	154 target Mazaruni - stereo-1 - standoff near 5 cm - focus stack acquired sol 3364 with MSL_CAMERA_PRODUCT_IDS 107-114 - range map product

updated: 15\_September\_2022

Sol 3369 - MAHLI Images				
	acq/det/perform detobj	27 Jan 22	Image ID:	
	camera positions:	20	black = best, least compressed version received as of date at upper left; orange = only a thumbnail has been received	
	total parent images	20		
	focus merges performed	0	COPID:	
	total focus merge products	0	Camera Data Product Identifier = MSL-CAMERA_PRODUCT_ID in PDS archive product labels	
	total parent images + focus merge products	20		
summary of MAHLI activities: MAHLI imaged > 360° of the 3 b's for rover wheels and right front rover wheel.				
Sequence	Camera Position	Image ID	COPID	
		Image Comment/Purpose (RATIONALE_DESC for PDS archive products; 400 character limit)		
mhd0769	Left Rear Wheel - top view Wheel Inspection Position 1 of 5	3369M#0007690011200155E01	155	rover rear left wheel inspection - top view looking downward on wheel - position 1 of 5 of campaign performed on sol 3369 - manual focus assumes standoff of about 170 cm
mhd0770	Left Middle Wheel - top view Wheel Inspection Position 1 of 5	3369M#0007700011200156E01	156	rover left middle wheel inspection - top view looking downward on wheel - position 1 of 5 of campaign performed on sol 3369 - manual focus assumes standoff about 112 cm
mhd0771	Left Front Wheel - top view Wheel Inspection Position 1 of 5	3369M#0007710011200157E01	157	rover left front wheel inspection - top view looking downward on wheel - position 1 of 5 of campaign performed on sol 3369 - manual focus assumes standoff of about 135 cm
mhd0772	Right Front Wheel - top view Wheel Inspection Position 1 of 5	3369M#0007720011200158E01	158	rover right front wheel inspection - top view looking downward on wheel - position 1 of 5 of campaign performed on sol 3369 - manual focus assumes standoff about 124 cm
mhd0769	Left Rear Wheel - top view Wheel Inspection Position 2 of 5	3369M#0007690011200159E01	159	rover left rear wheel inspection - top view looking downward on wheel - position 2 of 5 of campaign performed on sol 3369 - manual focus assumes standoff of about 170 cm
mhd0770	Left Middle Wheel - top view Wheel Inspection Position 2 of 5	3369M#0007700011200160E01	160	rover left middle wheel inspection - top view looking downward on wheel - position 2 of 5 of campaign performed on sol 3369 - manual focus assumes standoff about 112 cm
mhd0771	Left Front Wheel - top view Wheel Inspection Position 2 of 5	3369M#0007710011200161E01	161	rover left front wheel inspection - top view looking downward on wheel - position 2 of 5 of campaign performed on sol 3369 - manual focus assumes standoff of about 135 cm
mhd0772	Right Front Wheel - top view Wheel Inspection Position 2 of 5	3369M#0007720011200162E01	162	rover right front wheel inspection - top view looking downward on wheel - position 2 of 5 of campaign performed on sol 3369 - manual focus assumes standoff about 124 cm
mhd0769	Left Rear Wheel - top view Wheel Inspection Position 3 of 5	3369M#0007690011200163E01	163	rover left rear wheel inspection - top view looking downward on wheel - position 3 of 5 of campaign performed on sol 3369 - manual focus assumes standoff of about 170 cm
mhd0770	Left Middle Wheel - top view Wheel Inspection Position 3 of 5	3369M#0007700011200164E01	164	rover left middle wheel inspection - top view looking downward on wheel - position 3 of 5 of campaign performed on sol 3369 - manual focus assumes standoff about 112 cm
mhd0771	Left Front Wheel - top view Wheel Inspection Position 3 of 5	3369M#0007710011200165E01	165	rover left front wheel inspection - top view looking downward on wheel - position 3 of 5 of campaign performed on sol 3369 - manual focus assumes standoff of about 135 cm
mhd0772	Right Front Wheel - top view Wheel Inspection Position 3 of 5	3369M#0007720011200166E01	166	rover right front wheel inspection - top view looking downward on wheel - position 3 of 5 of campaign performed on sol 3369 - manual focus assumes standoff about 124 cm
mhd0769	Left Rear Wheel - top view Wheel Inspection Position 4 of 5	3369M#0007690011200167E01	167	rover left rear wheel inspection - top view looking downward on wheel - position 4 of 5 of campaign performed on sol 3369 - manual focus assumes standoff of about 170 cm
mhd0770	Left Middle Wheel - top view Wheel Inspection Position 4 of 5	3369M#0007700011200168E01	168	rover left middle wheel inspection - top view looking downward on wheel - position 4 of 5 of campaign performed on sol 3369 - manual focus assumes standoff about 112 cm
mhd0771	Left Front Wheel - top view Wheel Inspection Position 4 of 5	3369M#0007710011200169E01	169	rover left front wheel inspection - top view looking downward on wheel - position 4 of 5 of campaign performed on sol 3369 - manual focus assumes standoff of about 135 cm
mhd0772	Right Front Wheel - top view Wheel Inspection Position 4 of 5	3369M#0007720011200170E01	170	rover right front wheel inspection - top view looking downward on wheel - position 4 of 5 of campaign performed on sol 3369 - manual focus assumes standoff about 124 cm
mhd0769	Left Rear Wheel - top view Wheel Inspection Position 5 of 5	3369M#0007690011200171E01	171	rover left rear wheel inspection - top view looking downward on wheel - position 5 of 5 of campaign performed on sol 3369 - manual focus assumes standoff of about 170 cm
mhd0770	Left Middle Wheel - top view Wheel Inspection Position 5 of 5	3369M#0007700011200172E01	172	rover left middle wheel inspection - top view looking downward on wheel - position 5 of 5 of campaign performed on sol 3369 - manual focus assumes standoff about 112 cm
mhd0771	Left Front Wheel - top view Wheel Inspection Position 5 of 5	3369M#0007710011200173E01	173	rover left front wheel inspection - top view looking downward on wheel - position 5 of 5 of campaign performed on sol 3369 - manual focus assumes standoff of about 135 cm
mhd0772	Right Front Wheel - top view Wheel Inspection Position 5 of 5	3369M#0007720011200174E01	174	rover right front wheel inspection - top view looking downward on wheel - position 5 of 5 of campaign performed on sol 3369 - manual focus assumes standoff about 124 cm

updated: 05\_February\_2022

Sol 3371 - MAHLI Images

Continued on Next Page..



updated: 31\_January\_2022

updated: 15\_September\_2022

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Continued on Next Page...

		3374MH0004190001200429C00	429	autofocus sub-frame for target Surumu - APXS spot 2 - standoff near 1 cm
		3374MH0004190011200430C00	430	target Surumu - APXS spot 2 - standoff near 1 cm
		3374MH0004190021200431C00	431	target Surumu - APXS spot 2 - standoff near 1 cm - image 1 in 8-image relative focus stack
		3374MH0004190021200432C00	432	target Surumu - APXS spot 2 - standoff near 1 cm - image 2 in 8-image relative focus stack
		3374MH0004190021200433C00	433	target Surumu - APXS spot 2 - standoff near 1 cm - image 3 in 8-image relative focus stack
		3374MH0004190021200434C00	434	target Surumu - APXS spot 2 - standoff near 1 cm - image 4 in 8-image relative focus stack
		3374MH0004190021200435C00	435	target Surumu - APXS spot 2 - standoff near 1 cm - image 5 in 8-image relative focus stack
		3374MH0004190021200436C00	436	target Surumu - APXS spot 2 - standoff near 1 cm - image 6 in 8-image relative focus stack
		3374MH0004190021200437C00	437	target Surumu - APXS spot 2 - standoff near 1 cm - image 7 in 8-image relative focus stack
		3374MH0004190021200438C00	438	target Surumu - APXS spot 2 - standoff near 1 cm - image 8 in 8-image relative focus stack
mhl00419	Surumu APXS spot 2 ~1 cm standoff	3374MH0001520001200439C00	439	autofocus sub-frame for target Surumu - APXS spot 1 - standoff near 5 cm
		3374MH0001520011200440C00	440	target Surumu - APXS spot 1 - standoff near 5 cm
		3374MH0001520021200441C00	441	target Surumu - APXS spot 1 - standoff near 5 cm - image 1 in 8-image relative focus stack
		3374MH0001520021200442C00	442	target Surumu - APXS spot 1 - standoff near 5 cm - image 2 in 8-image relative focus stack
		3374MH0001520021200443C00	443	target Surumu - APXS spot 1 - standoff near 5 cm - image 3 in 8-image relative focus stack
		3374MH0001520021200444C00	444	target Surumu - APXS spot 1 - standoff near 5 cm - image 4 in 8-image relative focus stack
		3374MH0001520021200445C00	445	target Surumu - APXS spot 1 - standoff near 5 cm - image 5 in 8-image relative focus stack
		3374MH0001520021200446C00	446	target Surumu - APXS spot 1 - standoff near 5 cm - image 6 in 8-image relative focus stack
		3374MH0001520021200447C00	447	target Surumu - APXS spot 1 - standoff near 5 cm - image 7 in 8-image relative focus stack
		3374MH0001520021200448C00	448	target Surumu - APXS spot 1 - standoff near 5 cm - image 8 in 8-image relative focus stack
mhl00512	Surumu APXS spot 1 ~5 cm standoff	3374MH0001520001200449C00	449	autofocus sub-frame for target Surumu - APXS spot 1 - standoff near 5 cm
		3374MH0001520011200450C00	450	target Surumu - APXS spot 1 - standoff near 5 cm
		3374MH0001520021200451C00	451	target Surumu - APXS spot 1 - standoff near 5 cm - image 1 in 8-image relative focus stack
		3374MH0001520021200452C00	452	target Surumu - APXS spot 1 - standoff near 5 cm - image 2 in 8-image relative focus stack
		3374MH0001520021200453C00	453	target Surumu - APXS spot 1 - standoff near 5 cm - image 3 in 8-image relative focus stack
		3374MH0001520021200454C00	454	target Surumu - APXS spot 1 - standoff near 5 cm - image 4 in 8-image relative focus stack
		3374MH0001520021200455C00	455	target Surumu - APXS spot 1 - standoff near 5 cm - image 5 in 8-image relative focus stack
		3374MH0001520021200456C00	456	target Surumu - APXS spot 1 - standoff near 5 cm - image 6 in 8-image relative focus stack
		3374MH0001520021200457C00	457	target Surumu - APXS spot 1 - standoff near 5 cm - image 7 in 8-image relative focus stack
		3374MH0001520021200458C00	458	target Surumu - APXS spot 1 - standoff near 5 cm - image 8 in 8-image relative focus stack

updated: 03\_February\_2022

Sol 3375 - MAHLI Images				
Sequence	Camera Position	Image ID	COPID	
		3375MH000440000120049800	0	
		3375MH0004400001200450500	0	
		3375MH0004400001200451800	451	
		3375MH0004400001200452500	452	
		3375MH0004400001200453800	453	
		3375MH0004400001200454500	454	
		3375MH0004400001200455800	455	
		3375MH0004400001200456500	456	
		3375MH0004400001200457600	457	
		3375MH0004400001200458300	458	
		3375MH0004400001200459800	459	
mhl0040	Focus Merges	3375MH0004400001200460500	460	
		3375MH0004400001200461800	461	
		3375MH0004400001200462500	462	
		3375MH0004400001200463800	463	
		3375MH0004400001200464500	464	
		3375MH0004400001200465800	465	
		3375MH0004400001200466500	466	
		3375MH0004400001200467800	467	
		3375MH0004400001200468500	468	
		3375MH0004400001200469800	469	
		3375MH0004400001200470500	470	
		3375MH0004400001200471800	471	
		3375MH0004400001200472500	472	
		3375MH0004400001200473800	473	
		3375MH0004400001200474500	474	
		3375MH0004400001200475800	475	
		3375MH0004400001200476500	476	
		3375MH0004400001200477800	477	
		3375MH0004400001200478500	478	
summary of MAHLI activities:				
Focus stack images from Sol 3374 were merged.				
0 images acquired/merged per date(s): 0-Feb-22				
camera position: 0				
image ID: 0				
black = best, least-compressed version received as of date at upper left; orange = only a thumbnail has been received.				
focus merges performed: 15				
COPID: 0				
Camera Data Product Identifier = MSL_CAMERA_PRODUCT_ID in POS archive product labels				
total focus merge products: 30				
total parent images + focus merge products: 30				

updated: 14\_April\_2022

Sol 3376 - MAHLI Images			
		acquired/perform date(s)	3-Feb-22
		camera position:	4
		Image ID:	
		camera positions	32
		black = best, least-compressed version receive as of date at upper left; orange = only a thumbnail has been received	
		focus merges performed	5
		CPID:	
		Camera Data Product Identifier = MSL_CAMERA_PRODUCT_ID in PDS archive product labels	
		total focus merge products	1
		total parent images + focus merge products	30
		summary of MAHLI activities:	MAHLI imaged the target Kokadai and the focus stack images were merged.
Sequence	Camera Position	Image ID	CPID
mnhD0130	Kokadai ~25 cm standoff	3376MH0001900011200479C00	479
		3376MH0001900011200480C00	480
mnhD0173	Kokadai stereo-1 ~5 cm standoff	3376MH0001730011200481C00	481
		3376MH0001730011200482C00	482
		3376MH0001730011200483C00	483
		3376MH00017300211200484C00	484
		3376MH00017300211200485C00	485
		3376MH00017300211200486C00	486
		3376MH00017300211200487C00	487
		3376MH00017300211200488C00	488
		3376MH00017300211200489C00	489
		3376MH00017300211200490C00	490
mnhD0173	Kokadai stereo-2 ~5 cm standoff	3376MH0001730011200491C00	491
		3376MH0001730011200492C00	492
		3376MH00017300211200493C00	493
		3376MH00017300211200494C00	494
		3376MH00017300211200495C00	495
		3376MH00017300211200496C00	496
		3376MH00017300211200497C00	497
		3376MH00017300211200498C00	498
		3376MH00017300211200499C00	499
		3376MH00017300211200500C00	500
mnhD0716	Kokadai ~1 cm standoff	3376MH00071600011200501C00	501
		3376MH00071600011200502C00	502
		3376MH00071600011200503C00	503
		3376MH00071600011200504C00	504
		3376MH00071600211200505C00	505
		3376MH00071600211200506C00	506
		3376MH00071600211200507C00	507
		3376MH00071600211200508C00	508
		3376MH00071600211200509C00	509
		3376MH00071600211200510C00	510
mnhD0393	Focus Merges	3376MH0001930011200511C00	511
		3376MH0001930011200512C00	512
		3376MH0001930011200513C00	513
		3376MH0001930011200514C00	514
		3376MH0001930011200515C00	515
		3376MH0001930011200516C00	516

updated: 18\_April\_2022

Sol 3378 - MAHLI Images			
		acquired/perform date(s)	6-Feb-22
		camera position:	7
		46	black = best, least-compressed version receive as of date at upper left; orange = only a thumbnail has been received
		focus merges performed	4
		total focus merge products	4
		total parent images + focus merge products	54
	summary of MAHLI activities:	MAHLI imaged the REMS UV Sensor and the targets Erico and Ajii. The focus stack images were also merged.	
Sequence	Camera Position	Image ID	COPID
mhl0095	REMS UV sensor ~15 cm standoff	3378MH00009500011200517C00	517
		3378MH00009500011200518C00	518
mhl0190	Erico ~25 cm standoff	3378MH0001900011200519C00	519
		3378MH0001900011200520C00	520
mhl0190	Ajii ~25 cm standoff	3378MH0001900011200521C00	521
		3378MH0001900011200522C00	522
mhl0224	Ajii stereo-1 ~5 cm standoff	3378MH00022400011200523C00	523
		3378MH00022400011200524C00	524
		3378MH00022400011200525C00	525
		3378MH00022400011200526C00	526
		3378MH00022400011200527C00	527
		3378MH00022400011200528C00	528
		3378MH00022400011200529C00	529
		3378MH00022400011200530C00	530
		3378MH00022400011200531C00	531
		3378MH00022400011200532C00	532
mhl0224	Ajii stereo-2 ~5 cm standoff	3378MH00022400011200533C00	533
		3378MH00022400011200534C00	534
		3378MH00022400011200535C00	535
		3378MH00022400011200536C00	536
		3378MH00022400011200537C00	537
		3378MH00022400011200538C00	538
		3378MH00022400011200539C00	539
		3378MH00022400011200540C00	540
		3378MH00022400011200541C00	541
		3378MH00022400011200542C00	542
mhl0299	Erico stereo-1 ~5 cm standoff	3378MH00029900011200543C00	543
		3378MH00029900011200544C00	544
		3378MH00029900011200545C00	545
		3378MH00029900011200546C00	546
		3378MH00029900011200547C00	547
		3378MH00029900011200548C00	548
		3378MH00029900011200549C00	549
		3378MH00029900011200550C00	550
		3378MH00029900011200551C00	551
		3378MH00029900011200552C00	552
mhl0299	Erico stereo-2 ~5 cm standoff	3378MH00029900011200553C00	553
		3378MH00029900011200554C00	554
		3378MH00029900011200555C00	555
		3378MH00029900011200556C00	556
		3378MH00029900011200557C00	557
		3378MH00029900011200558C00	558
		3378MH00029900011200559C00	559
		3378MH00029900011200560C00	560
		3378MH00029900011200561C00	561
		3378MH00029900011200562C00	562
mhl0153	Focus Merges	3378MH00015300011200563C00	563
		3378MH00015300011200564S00	564
		3378MH00015300011200565R00	565
		3378MH00015300011200566S00	566
		3378MH00015300011200567R00	567
		3378MH00015300011200568S00	568
		3378MH00015300011200569R00	569
		3378MH00015300011200570S00	570

updated: 12\_April\_2022

Sol 3381 - MAHLI Images			
		acquired/perform date(s)	9-Feb-22
		camera position:	4
		Image ID:	
		black = best, least-compressed version receive as of date at upper left; orange = only a thumbnail has been received	
		focus merges performed:	32
		CPID:	
		Camera Data Product Identifier = MSL_CAMERA_PRODUCT_ID in PDS archive product labels	
		total focus merge products:	1
		total parent images + focus merge products:	38
		summary of MAHLI activities:	MAHLI imaged the target El_Dorado and the focus stack images were merged.
Sequence	Camera Position	Image ID	CPID
mnh00190	El_Dorado ~25 cm standoff	3381MH0001900011200571C00	571
		3381MH0001900011200572C00	572
mnh00182	El Dorado stereo-1 ~45 mm standoff	3381MH00018200011200573C00	573
		3381MH00018200011200574C00	574
		3381MH00018200011200575C00	575
		3381MH00018200011200576C00	576
		3381MH00018200011200577C00	577
		3381MH00018200011200578C00	578
		3381MH00018200011200579C00	579
		3381MH00018200011200580C00	580
		3381MH00018200011200581C00	581
		3381MH00018200011200582C00	582
mnh00182	El_Dorado stereo-2 ~45 mm standoff	3381MH00018200011200583C00	583
		3381MH00018200011200584C00	584
		3381MH00018200011200585C00	585
		3381MH00018200011200586C00	586
		3381MH00018200011200587C00	587
		3381MH00018200011200588C00	588
		3381MH00018200011200589C00	589
		3381MH00018200011200590C00	590
		3381MH00018200011200591C00	591
		3381MH00018200011200592C00	592
mnh00426	El_Dorado ~6 mm standoff	3381MH00042600011200593C00	593
		3381MH00042600011200594C00	594
		3381MH00042600011200595C00	595
		3381MH00042600011200596C00	596
		3381MH00042600011200597C00	597
		3381MH00042600011200598C00	598
		3381MH00042600011200599C00	599
		3381MH00042600011200600C00	600
		3381MH00042600011200601C00	601
		3381MH00042600011200602C00	602
mnh00193	Focus Merges	3381MH00019300011200603H00	603
		3381MH00019300011200604H00	604
		3381MH00019300011200605H00	605
		3381MH00019300011200606H00	606
		3381MH00019300011200607H00	607
		3381MH00019300011200608H00	608

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Sol 3383 - MAHLI Images				
	acquired/perform date(s)	11-Feb-22		
	camera position:	3	Image ID:	
	total parent images:	22	black = best, least-compressed version receive as of date at upper left; orange = only a thumbnail has been received	
	focus merges performed:	2	COPID:	
	total focus merge products:	4	Camera Data Product Identifier = MSL_CAMERA_PRODUCT_ID in PDS archive product labels	
	total parent images + focus merge products:	26		
summary of MAHLI activities:				
	MAHLI imaged the target Tantallon_Castle and the focus stack images were merged.			
Sequence	Camera Position	Image ID	COPID	
mhl00190	Tantallon_Castle ~25 cm standoff	3383MH0001900011200609C00	609 autofocus sub-frame for target Tantallon_Castle - standoff near 25 cm	
		3383MH0001900011200610C00	610 target Tantallon_Castle - standoff near 25 cm	
mhl00173	Tantallon_Castle stereo-1 ~5 cm standoff	3383MH0001730001200611C00	611 autofocus sub-frame for target Tantallon_Castle - stereo-1 - standoff near 5 cm	
		3383MH0001730011200612C00	612 target Tantallon_Castle - stereo-1 - standoff near 5 cm	
		3383MH0001730021200613C00	613 target Tantallon_Castle - stereo-1 - standoff near 5 cm - image 1 in 8-image relative focus stack	
		3383MH0001730021200614C00	614 target Tantallon_Castle - stereo-1 - standoff near 5 cm - image 2 in 8-image relative focus stack	
		3383MH0001730021200615C00	615 target Tantallon_Castle - stereo-1 - standoff near 5 cm - image 3 in 8-image relative focus stack	
		3383MH0001730021200616C00	616 target Tantallon_Castle - stereo-1 - standoff near 5 cm - image 4 in 8-image relative focus stack	
		3383MH0001730021200617C00	617 target Tantallon_Castle - stereo-1 - standoff near 5 cm - image 5 in 8-image relative focus stack	
		3383MH0001730021200618C00	618 target Tantallon_Castle - stereo-1 - standoff near 5 cm - image 6 in 8-image relative focus stack	
		3383MH0001730021200619C00	619 target Tantallon_Castle - stereo-1 - standoff near 5 cm - image 7 in 8-image relative focus stack	
		3383MH0001730021200620C00	620 target Tantallon_Castle - stereo-1 - standoff near 5 cm - image 8 in 8-image relative focus stack	
mhl00173	Tantallon_Castle stereo-2 ~5 cm standoff	3383MH0001730001200621C00	621 autofocus sub-frame for target Tantallon_Castle - stereo-2 - standoff near 5 cm	
		3383MH0001730011200622C00	622 target Tantallon_Castle - stereo-2 - standoff near 5 cm	
		3383MH0001730021200623C00	623 target Tantallon_Castle - stereo-2 - standoff near 5 cm - image 1 in 8-image relative focus stack	
		3383MH0001730021200624C00	624 target Tantallon_Castle - stereo-2 - standoff near 5 cm - image 2 in 8-image relative focus stack	
		3383MH0001730021200625C00	625 target Tantallon_Castle - stereo-2 - standoff near 5 cm - image 3 in 8-image relative focus stack	
		3383MH0001730021200626C00	626 target Tantallon_Castle - stereo-2 - standoff near 5 cm - image 4 in 8-image relative focus stack	
		3383MH0001730021200627C00	627 target Tantallon_Castle - stereo-2 - standoff near 5 cm - image 5 in 8-image relative focus stack	
		3383MH0001730021200628C00	628 target Tantallon_Castle - stereo-2 - standoff near 5 cm - image 6 in 8-image relative focus stack	
mhl00266	Focus Merges	3383MH0002650001200631R00	629 target Tantallon_Castle - stereo-2 - standoff near 5 cm - image 7 in 8-image relative focus stack	
		3383MH0002650001200632S00	630 target Tantallon_Castle - stereo-2 - standoff near 5 cm - image 8 in 8-image relative focus stack	
		3383MH0002650001200633R00	631 target Tantallon_Castle - stereo-2 - standoff near 5 cm - focus stack acquired sol 3383 with MSL_CAMERA_PRODUCT_IDs 623-630 - best focus image product	
		3383MH0002650001200634R00	632 target Tantallon_Castle - stereo-2 - standoff near 5 cm - focus stack acquired sol 3383 with MSL_CAMERA_PRODUCT_IDs 623-630 - range map product	
		3383MH0002650001200635R00	633 target Tantallon_Castle - stereo-1 - standoff near 5 cm - focus stack acquired sol 3383 with MSL_CAMERA_PRODUCT_IDs 613-620 - best focus image product	
		3383MH0002650001200634500	634 target Tantallon_Castle - stereo-1 - standoff near 5 cm - focus stack acquired sol 3383 with MSL_CAMERA_PRODUCT_IDs 613-620 - range map product	

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Sol 3385 - MAHLI Images

Sol 3385 - MAHLI Images		acquired/perform date(s)	13-Feb-22
Sequence	Camera Position	Image ID	COPID
mhlID0706	Kintradwell after DRT -25 cm standoff	3385MH0007060011200635C00	5
		3385MH0007060011200636C00	635
		3385MH0007060011200637C00	636
		3385MH0007060011200637C00	637
mhlID0763	Kintradwell after DRT APXS spot 2 stereo-1 -5 cm standoff	3385MH0007630011200638C00	638
		3385MH0007630011200639C00	639
		3385MH0007630011200640C00	640
		3385MH0007630011200641C00	641
		3385MH0007630011200642C00	642
		3385MH0007630011200643C00	643
		3385MH0007630011200644C00	644
		3385MH0007630011200645C00	645
		3385MH0007630011200646C00	646
		3385MH0007630011200647C00	647
		3385MH0007630011200648C00	648
mhlID0763	Kintradwell after DRT APXS spot 2 stereo-2 -5 cm standoff	3385MH0007630011200649C00	649
		3385MH0007630011200650C00	650
		3385MH0007630011200651C00	651
		3385MH0007630011200652C00	652
		3385MH0007630011200653C00	653
		3385MH0007630011200654C00	654
		3385MH0007630011200655C00	655
		3385MH0007630011200656C00	656
		3385MH0007630011200657C00	657
		3385MH0007630011200658C00	658
		3385MH0007630011200659C00	659
mhlID0785	Kintradwell after DRT APXS spot 2 -1 cm standoff	3385MH0007850011200660C00	660
		3385MH0007850011200661C00	661
		3385MH0007850011200662C00	662
		3385MH0007850011200663C00	663
		3385MH0007850011200664C00	664
		3385MH0007850011200665C00	665
		3385MH0007850011200666C00	666
		3385MH0007850011200667C00	667
		3385MH0007850011200668C00	668
		3385MH0007850011200669C00	669
		3385MH0007850011200670C00	670
mhlID0763	Kintradwell after DRT APXS spot 1 -5 cm standoff	3385MH0007630011200671C00	671
		3385MH0007630011200672C00	672
		3385MH0007630011200673C00	673
		3385MH0007630011200674C00	674
		3385MH0007630011200675C00	675
		3385MH0007630011200676C00	676
		3385MH0007630011200677C00	677
		3385MH0007630011200678C00	678
		3385MH0007630011200679C00	679
		3385MH0007630011200680C00	680
		3385MH0007630011200681C00	681

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Sol 3386 - MAHLI Images			
acquired/perform date(s)	14-Feb-22		
camera position:	0	Image ID:	
total parent images	0	black = best, least-compressed version receive as of date at upper left; orange = only a thumbnail has been received.	
focus merges performed	4	COPID:	
total focus merge products	4	Camera Data Product Identifier = MSL_CAMERA_PRODUCT_ID in POS archive product labels	
total parent images + focus merge products	9		
summary of MAHLI activities:	Focus stack images from Sol 3385 were merged.		
Sequence	Camera Position	Image ID	COPID
mhl00153	Focus Merges	3386MH00015300012006882800	682
		target Kinttradwell - after dust removal tool (DRT) - APXS spot 1 - standoff near 5 cm - focus stack acquired sol 3385 with MSL_CAMERA_PRODUCT_IDS 674-681 - best focus image product	
		3386MH00015300012006883500	683
		target Kinttradwell - after dust removal tool (DRT) - APXS spot 1 - standoff near 5 cm - focus stack acquired sol 3385 with MSL_CAMERA_PRODUCT_IDS 674-681 - range map product	
		3386MH00015300012006884800	684
		target Kinttradwell - after dust removal tool (DRT) - APXS spot 2 - standoff near 1 cm - focus stack acquired sol 3385 with MSL_CAMERA_PRODUCT_IDS 682-670 - best focus image product	
		3386MH00015300012006885500	685
		target Kinttradwell - after dust removal tool (DRT) - APXS spot 2 - standoff near 1 cm - focus stack acquired sol 3385 with MSL_CAMERA_PRODUCT_IDS 683-670 - range map product	
		3386MH00015300012006886800	686
		target Kinttradwell - after dust removal tool (DRT) - APXS spot 2 - stereo-2 - standoff near 5 cm - focus stack acquired sol 3385 with MSL_CAMERA_PRODUCT_IDS 652-659 - best focus image product	
		3386MH0001530001200687500	687
		target Kinttradwell - after dust removal tool (DRT) - APXS spot 2 - stereo-2 - standoff near 5 cm - focus stack acquired sol 3385 with MSL_CAMERA_PRODUCT_IDS 652-659 - range map product	
		3386MH0001530001200688900	688
		target Kinttradwell - after dust removal tool (DRT) - APXS spot 2 - stereo-1 - standoff near 5 cm - focus stack acquired sol 3385 with MSL_CAMERA_PRODUCT_IDS 641-648 - best focus image product	
		3386MH0001530001200689500	689
		target Kinttradwell - after dust removal tool (DRT) - APXS spot 2 - stereo-1 - standoff near 5 cm - focus stack acquired sol 3385 with MSL_CAMERA_PRODUCT_IDS 641-648 - range map product	

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Sol 3387 - MAHLI Images			
Sequence	Camera Position	Image ID	COPID
		acquired/perform date(s)	15-Feb-22
		camera position:	6
		focus merges performed	40
		total focus merge products	5
		total parent images	40
		total parent images + focus merge products	40
		summary of MAHLI activities:	MAHLI imaged the DRT-brushed target Loch_Garten and the focus stack images were merged.
mhlID0190	Loch_Garten before DRT ~25 cm standoff	3387MH000190001120069000	690
mhlID0190	Loch_Garten before DRT ~25 cm standoff	3387MH000190001120069100	691
mhlID0122	Loch_Garten before DRT ~5 cm standoff	3387MH00012200011200693000	692
mhlID0122	Loch_Garten before DRT ~5 cm standoff	3387MH00012200011200693100	693
mhlID0706	Loch_Garten after DRT ~25 cm standoff	3387MH00070600011200694000	694
mhlID0706	Loch_Garten after DRT ~25 cm standoff	3387MH00070600011200695000	695
mhlID0761	Loch_Garten after DRT stereo-1 ~5 cm standoff	3387MH00076300012006970000	697
mhlID0761	Loch_Garten after DRT stereo-1 ~5 cm standoff	3387MH00076300112006980000	698
mhlID0761	Loch_Garten after DRT stereo-1 ~5 cm standoff	3387MH00076300212006990000	699
mhlID0761	Loch_Garten after DRT stereo-1 ~5 cm standoff	3387MH00076300312007000000	700
mhlID0761	Loch_Garten after DRT stereo-1 ~5 cm standoff	3387MH00076300312007010000	701
mhlID0761	Loch_Garten after DRT stereo-1 ~5 cm standoff	3387MH00076300312007020000	702
mhlID0761	Loch_Garten after DRT stereo-1 ~5 cm standoff	3387MH00076300312007030000	703
mhlID0761	Loch_Garten after DRT stereo-1 ~5 cm standoff	3387MH00076300312007040000	704
mhlID0761	Loch_Garten after DRT stereo-1 ~5 cm standoff	3387MH00076300312007050000	705
mhlID0761	Loch_Garten after DRT stereo-1 ~5 cm standoff	3387MH00076300312007060000	706
mhlID0761	Loch_Garten after DRT stereo-1 ~5 cm standoff	3387MH00076300312007070000	707
mhlID0763	Loch_Garten after DRT stereo-2 ~5 cm standoff	3387MH0007630012007080000	708
mhlID0763	Loch_Garten after DRT stereo-2 ~5 cm standoff	3387MH00076300112007090000	709
mhlID0763	Loch_Garten after DRT stereo-2 ~5 cm standoff	3387MH00076300212007100000	710
mhlID0763	Loch_Garten after DRT stereo-2 ~5 cm standoff	3387MH00076300312007110000	711
mhlID0763	Loch_Garten after DRT stereo-2 ~5 cm standoff	3387MH00076300312007120000	712
mhlID0763	Loch_Garten after DRT stereo-2 ~5 cm standoff	3387MH00076300312007130000	713
mhlID0763	Loch_Garten after DRT stereo-2 ~5 cm standoff	3387MH00076300312007140000	714
mhlID0763	Loch_Garten after DRT stereo-2 ~5 cm standoff	3387MH00076300312007150000	715
mhlID0763	Loch_Garten after DRT stereo-2 ~5 cm standoff	3387MH00076300312007160000	716
mhlID0763	Loch_Garten after DRT stereo-2 ~5 cm standoff	3387MH00076300312007170000	717
mhlID0763	Loch_Garten after DRT stereo-2 ~5 cm standoff	3387MH00076300312007180000	718
mhlID0603	Loch_Garten after DRT ~1 cm standoff	3387MH00060300012007190000	719
mhlID0603	Loch_Garten after DRT ~1 cm standoff	3387MH00060300112007200000	720
mhlID0603	Loch_Garten after DRT ~1 cm standoff	3387MH00060300212007210000	721
mhlID0603	Loch_Garten after DRT ~1 cm standoff	3387MH00060300312007220000	722
mhlID0603	Loch_Garten after DRT ~1 cm standoff	3387MH00060300312007230000	723
mhlID0603	Loch_Garten after DRT ~1 cm standoff	3387MH00060300312007240000	724
mhlID0603	Loch_Garten after DRT ~1 cm standoff	3387MH00060300312007250000	725
mhlID0603	Loch_Garten after DRT ~1 cm standoff	3387MH00060300312007260000	726
mhlID0603	Loch_Garten after DRT ~1 cm standoff	3387MH00060300312007270000	727
mhlID0603	Loch_Garten after DRT ~1 cm standoff	3387MH00060300312007280000	728
mhlID0603	Loch_Garten after DRT ~1 cm standoff	3387MH00060300312007290000	729
mhlID0191	Focus Merges	3387MH00019300012007300000	730
mhlID0191	Focus Merges	3387MH00019300012007310000	731
mhlID0191	Focus Merges	3387MH00019300012007320000	732
mhlID0191	Focus Merges	3387MH00019300012007330000	733
mhlID0191	Focus Merges	3387MH00019300012007340000	734
mhlID0191	Focus Merges	3387MH00019300012007350000	735

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Sol 3388 - MAHLI Images			
Sequence	Camera Position	Image ID	COPID
		acquired/perform date(s)	16-Feb-22
		camera position:	12
		image ID:	78
		camera parent images	78
		focus merges performed	
		total focus merge products	62
		total parent images + focus merge products	90
		summary of MAHLI activities:	MAHLI imaged the MAHLI and APXS calibration targets as well as the target Tappington and the DRT-brushed target Loch_Coruisk. The focus stack images were also merged.
mhlID0371	MAHLI cal target - centered on bar target - ~5 cm working distance	338BMH000371001120073600	736
		autofocus sub-frame for MAHLI calibration target - bar target - near 5 cm working distance	
		338BMH000371001120073700	737
		MAHLI calibration target - bar target - near 5 cm working distance	
mhlID0372	MAHLI cal target - centered on cent target - ~5 cm working distance	338BMH000372001120073800	738
		autofocus sub-frame for MAHLI calibration target - cent target - near 5 cm working distance	
		338BMH000372001120073900	739
		MAHLI calibration target - cent target - near 5 cm working distance	
mhlID0374	MAHLI cal target + wheel + surface -~30 cm working distance from target	338BMH000374001120074000	740
		autofocus sub-frame for MAHLI calibration target + wheel and Mars surface - calibration target near 30 cm working distance - focus on calibration target	
		338BMH000374001120074100	741
		MAHLI calibration target and wheel and Mars surface - calibration target near 30 cm working distance - focus on calibration target	
		338BMH000374001120074200	742
		MAHLI calibration target and wheel and Mars surface - calibration target near 30 cm working distance - manual focus at infinity	
mhlID0373	APXS cal target - 5 cm standoff	338BMH000373001120074300	743
		autofocus sub-frame for APXS calibration target - standoff near 5 cm	
		338BMH000373001120074400	744
		APXS calibration target - standoff near 5 cm	
mhlID0190	Tappington - 25 cm standoff	338BMH000190001120074500	745
		autofocus sub-frame for target Tappington - standoff near 25 cm	
		338BMH000190001120074600	746
		target Tappington - standoff near 25 cm	
		338BMH000182001120074700	747
		autofocus sub-frame for target Tappington - stereo-1 - standoff near 35 mm	
		338BMH000182001120074800	748
		target Tappington - stereo-1 - standoff near 35 mm	
		338BMH000182001120074900	749
		target Tappington - stereo-1 - standoff near 35 mm - image 1 in 8-image relative focus stack	
		338BMH000182001120075000	750
		target Tappington - stereo-1 - standoff near 35 mm - image 2 in 8-image relative focus stack	
		338BMH000182001120075100	751
		target Tappington - stereo-1 - standoff near 35 mm - image 3 in 8-image relative focus stack	
		338BMH000182001120075200	752
		target Tappington - stereo-1 - standoff near 35 mm - image 4 in 8-image relative focus stack	
		338BMH000182001120075300	753
		target Tappington - stereo-1 - standoff near 35 mm - image 5 in 8-image relative focus stack	
		338BMH000182001120075400	754
		target Tappington - stereo-1 - standoff near 35 mm - image 6 in 8-image relative focus stack	
		338BMH000182001120075500	755
		target Tappington - stereo-1 - standoff near 35 mm - image 7 in 8-image relative focus stack	
		338BMH000182001120075600	756
		target Tappington - stereo-1 - standoff near 35 mm - image 8 in 8-image relative focus stack	
mhlID0182	Tappington stereo-1 -~35 mm standoff	338BMH000182001120075700	757
		autofocus sub-frame for target Tappington - stereo-2 - standoff near 35 mm	
		338BMH000182001120075800	758
		target Tappington - stereo-2 - standoff near 35 mm	
		338BMH000182001120075900	759
		target Tappington - stereo-2 - standoff near 35 mm - image 1 in 8-image relative focus stack	
		338BMH000182001120076000	760
		target Tappington - stereo-2 - standoff near 35 mm - image 2 in 8-image relative focus stack	
		338BMH000182001120076100	761
		target Tappington - stereo-2 - standoff near 35 mm - image 3 in 8-image relative focus stack	
		338BMH000182001120076200	762
		target Tappington - stereo-2 - standoff near 35 mm - image 4 in 8-image relative focus stack	
		338BMH000182001120076300	763
		target Tappington - stereo-2 - standoff near 35 mm - image 5 in 8-image relative focus stack	
		338BMH000182001120076400	764
		target Tappington - stereo-2 - standoff near 35 mm - image 6 in 8-image relative focus stack	
		338BMH000182001120076500	765
		target Tappington - stereo-2 - standoff near 35 mm - image 7 in 8-image relative focus stack	
		338BMH000182001120076600	766
		target Tappington - stereo-2 - standoff near 35 mm - image 8 in 8-image relative focus stack	
mhlID0706	Loch_Coruisk after DRT -~25 cm standoff	338BMH000706001120076700	767
		autofocus sub-frame for target Loch_Coruisk - after dust removal tool (DRT) - APXS spot 2 - standoff near 25 cm	
		338BMH000706001120076800	768
		target Loch_Coruisk - after dust removal tool (DRT) - APXS spot 2 - standoff near 25 cm	
		338BMH000706001120076900	769
		target Loch_Coruisk - after dust removal tool (DRT) - APXS spot 2 - standoff near 25 cm - alternative auto-exposure	
mhlID0712	Loch_Coruisk after DRT APXS spot 2 stereo-1 -~5 cm standoff	338BMH000723001120077000	770
		autofocus sub-frame for target Loch_Coruisk - after dust removal tool (DRT) - APXS spot 2 - stereo-1 - standoff near 5 cm	
		338BMH000723001120077100	771
		target Loch_Coruisk - after dust removal tool (DRT) - APXS spot 2 - stereo-1 - standoff near 5 cm	
		338BMH000723001120077200	772
		target Loch_Coruisk - after dust removal tool (DRT) - APXS spot 2 - stereo-1 - standoff near 5 cm - alternative auto-exposure	
		338BMH000723001120077300	773
		target Loch_Coruisk - after dust removal tool (DRT) - APXS spot 2 - stereo-1 - standoff near 5 cm - image 1 in 8-image relative focus stack	
		338BMH000723001120077400	774
		target Loch_Coruisk - after dust removal tool (DRT) - APXS spot 2 - stereo-1 - standoff near 5 cm - image 2 in 8-image relative focus stack	
		338BMH000723001120077500	775
		target Loch_Coruisk - after dust removal tool (DRT) - APXS spot 2 - stereo-1 - standoff near 5 cm - image 3 in 8-image relative focus stack	
		338BMH000723001120077600	776
		target Loch_Coruisk - after dust removal tool (DRT) - APXS spot 2 - stereo-1 - standoff near 5 cm - image 4 in 8-image relative focus stack	
		338BMH000723001120077700	777
		target Loch_Coruisk - after dust removal tool (DRT) - APXS spot 2 - stereo-1 - standoff near 5 cm - image 5 in 8-image relative focus stack	
		338BMH000723001120077800	778
		target Loch_Coruisk - after dust removal tool (DRT) - APXS spot 2 - stereo-1 - standoff near 5 cm - image 6 in 8-image relative focus stack	
		338BMH000723001120077900	779
		target Loch_Coruisk - after dust removal tool (DRT) - APXS spot 2 - stereo-1 - standoff near 5 cm - image 7 in 8-image relative focus stack	
		338BMH000723001120078000	780
		target Loch_Coruisk - after dust removal tool (DRT) - APXS spot 2 - stereo-1 - standoff near 5 cm - image 8 in 8-image relative focus stack	
mhlID0723	Loch_Coruisk after DRT APXS spot 2 stereo-2 -~5 cm standoff	338BMH000723001120078100	781
		autofocus sub-frame for target Loch_Coruisk - after dust removal tool (DRT) - APXS spot 2 - stereo-2 - standoff near 5 cm	
		338BMH000723001120078200	782
		target Loch_Coruisk - after dust removal tool (DRT) - APXS spot 2 - stereo-2 - standoff near 5 cm	
		338BMH000723001120078300	783
		target Loch_Coruisk - after dust removal tool (DRT) - APXS spot 2 - stereo-2 - standoff near 5 cm - alternative auto-exposure	
		338BMH000723001120078400	784
		target Loch_Coruisk - after dust removal tool (DRT) - APXS spot 2 - stereo-2 - standoff near 5 cm - image 1 in 8-image relative focus stack	
		338BMH000723001120078500	785
		target Loch_Coruisk - after dust removal tool (DRT) - APXS spot 2 - stereo-2 - standoff near 5 cm - image 2 in 8-image relative focus stack	
		338BMH000723001120078600	786
		target Loch_Coruisk - after dust removal tool (DRT) - APXS spot 2 - stereo-2 - standoff near 5 cm - image 3 in 8-image relative focus stack	
		338BMH000723001120078700	787
		target Loch_Coruisk - after dust removal tool (DRT) - APXS spot 2 - stereo-2 - standoff near 5 cm - image 4 in 8-image relative focus stack	
		338BMH000723001120078800	788
		target Loch_Coruisk - after dust removal tool (DRT) - APXS spot 2 - stereo-2 - standoff near 5 cm - image 5 in 8-image relative focus stack	
		338BMH000723001120078900	789
		target Loch_Coruisk - after dust removal tool (DRT) - APXS spot 2 - stereo-2 - standoff near 5 cm - image 6 in 8-image relative focus stack	
		338BMH000723001120079000	790
		target Loch_Coruisk - after dust removal tool (DRT) - APXS spot 2 - stereo-2 - standoff near 5 cm - image 7 in 8-image relative focus stack	
		338BMH000723001120079100	791
		target Loch_Coruisk - after dust removal tool (DRT) - APXS spot 2 - stereo-2 - standoff near 5 cm - image 8 in 8-image relative focus stack	
mhlID0658	Loch_Coruisk after DRT APXS spot 2 stereo-2 -~1 cm standoff	338BMH000658001120079200	792
		autofocus sub-frame for target Loch_Coruisk - after dust removal tool (DRT) - APXS spot 2 - standoff near 1 cm	
		338BMH000658001120079300	793
		target Loch_Coruisk - after dust removal tool (DRT) - APXS spot 2 - standoff near 1 cm	
		338BMH00065800120079400	794
		target Loch_Coruisk - after dust removal tool (DRT) - APXS spot 2 - standoff near 1 cm - alternative auto-exposure	
		338BMH00065800120079500	795
		target Loch_Coruisk - after dust removal tool (DRT) - APXS spot 2 - standoff near 1 cm - image 1 in 8-image relative focus stack	
		338BMH00065800120079600	796
		target Loch_Coruisk - after dust removal tool (DRT) - APXS spot 2 - standoff near 1 cm - image 2 in 8-image relative focus stack	
		338BMH00065800120079700	797
		target Loch_Coruisk - after dust removal tool (DRT) - APXS spot 2 - standoff near 1 cm - image 3 in 8-image relative focus stack	
		338BMH00065800120079800	798
		target Loch_Coruisk - after dust removal tool (DRT) - APXS spot 2 - standoff near 1 cm - image 4 in 8-image relative focus stack	
		338BMH00065800120079900	799
		target Loch_Coruisk - after dust removal tool (DRT) - APXS spot 2 - standoff near 1 cm - image 5 in 8-image relative focus stack	
		338BMH0006580012008000	800
		target Loch_Coruisk - after dust removal tool (DRT) - APXS spot 2 - standoff near 1 cm - image 6 in 8-image relative focus stack	
		338BMH0006580012008010	801
		target Loch_Coruisk - after dust removal tool (DRT) - APXS spot 2 - standoff near 1 cm - image 7 in 8-image relative focus stack	
		338BMH00065800120080200	802
		target Loch_Coruisk - after dust removal tool (DRT) - APXS spot 2 - standoff near 1 cm - image 8 in 8-image relative focus stack	

Continued on Next Page...

mhi00723	Loch_Corusk after DRT APKS spot 1 -5 cm standoff	3388M+H007230011200803C00	803	autofocus sub-frame for target Loch_Corusk - after dust removal tool (DRT) - APKS spot 1 - standoff near 5 cm
		3388M+H007230011200804C00	804	target Loch_Corusk - after dust removal tool (DRT) - APKS spot 1 - standoff near 5 cm
		3388M+H007230021200805C00	805	target Loch_Corusk - after dust removal tool (DRT) - APKS spot 1 - standoff near 5 cm - alternative auto-exposure
		3388M+H007230031200806C00	806	target Loch_Corusk - after dust removal tool (DRT) - APKS spot 1 - standoff near 5 cm - image 1 in 8-image relative focus stack
		3388M+H007230031200807C00	807	target Loch_Corusk - after dust removal tool (DRT) - APKS spot 1 - standoff near 5 cm - image 2 in 8-image relative focus stack
		3388M+H007230031200808C00	808	target Loch_Corusk - after dust removal tool (DRT) - APKS spot 1 - standoff near 5 cm - image 3 in 8-image relative focus stack
		3388M+H007230031200809C00	809	target Loch_Corusk - after dust removal tool (DRT) - APKS spot 1 - standoff near 5 cm - image 4 in 8-image relative focus stack
		3388M+H007230031200810C00	810	target Loch_Corusk - after dust removal tool (DRT) - APKS spot 1 - standoff near 5 cm - image 5 in 8-image relative focus stack
		3388M+H007230031200811C00	811	target Loch_Corusk - after dust removal tool (DRT) - APKS spot 1 - standoff near 5 cm - image 6 in 8-image relative focus stack
		3388M+H007230031200812C00	812	target Loch_Corusk - after dust removal tool (DRT) - APKS spot 1 - standoff near 5 cm - image 7 in 8-image relative focus stack
		3388M+H007230031200813C00	813	target Loch_Corusk - after dust removal tool (DRT) - APKS spot 1 - standoff near 5 cm - image 8 in 8-image relative focus stack
mhi00613	Focus Merges	3388M+H001630001200814R00	814	target Loch_Corusk - after dust removal tool (DRT) - APKS spot 1 - standoff near 5 cm - focus stack acquired sol 3388 with MSL_CAMERA_PRODUCT_IDS 806-813 - best focus image product
		3388M+H001630001200815R00	815	target Loch_Corusk - after dust removal tool (DRT) - APKS spot 1 - standoff near 5 cm - focus stack acquired sol 3388 with MSL_CAMERA_PRODUCT_IDS 806-813 - range map product
		3388M+H001630001200816R00	816	target Loch_Corusk - after dust removal tool (DRT) - APKS spot 2 - standoff near 1 cm - focus stack acquired sol 3388 with MSL_CAMERA_PRODUCT_IDS 795-802 - best focus image product
		3388M+H001630001200817500	817	target Loch_Corusk - after dust removal tool (DRT) - APKS spot 2 - standoff near 1 cm - focus stack acquired sol 3388 with MSL_CAMERA_PRODUCT_IDS 795-802 - range map product
		3388M+H001630001200818R00	818	target Loch_Corusk - after dust removal tool (DRT) - APKS spot 2 - stereo-2 - standoff near 5 cm - focus stack acquired sol 3388 with MSL_CAMERA_PRODUCT_IDS 784-791 - best focus image product
		3388M+H001630001200819R00	819	target Loch_Corusk - after dust removal tool (DRT) - APKS spot 2 - stereo-2 - standoff near 5 cm - focus stack acquired sol 3388 with MSL_CAMERA_PRODUCT_IDS 784-791 - range map product
		3388M+H001630001200820R00	820	target Loch_Corusk - after dust removal tool (DRT) - APKS spot 2 - stereo-1 - standoff near 5 cm - focus stack acquired sol 3388 with MSL_CAMERA_PRODUCT_IDS 773-780 - best focus image product
		3388M+H001630001200821S00	821	target Loch_Corusk - after dust removal tool (DRT) - APKS spot 2 - stereo-1 - standoff near 5 cm - focus stack acquired sol 3388 with MSL_CAMERA_PRODUCT_IDS 773-780 - range map product
		3388M+H001630001200822R00	822	target Tappington - stereo-2 - standoff near 35 mm - focus stack acquired sol 3388 with MSL_CAMERA_PRODUCT_IDS 759-766 - best focus image product
		3388M+H001630001200823S00	823	target Tappington - stereo-2 - standoff near 35 mm - focus stack acquired sol 3388 with MSL_CAMERA_PRODUCT_IDS 759-766 - range map product
		3388M+H001630001200824R00	824	target Tappington - stereo-1 - standoff near 35 mm - focus stack acquired sol 3388 with MSL_CAMERA_PRODUCT_IDS 749-756 - best focus image product
		3388M+H001630001200825S00	825	target Tappington - stereo-1 - standoff near 35 mm - focus stack acquired sol 3388 with MSL_CAMERA_PRODUCT_IDS 749-756 - range map product

updated: 18\_February\_2022

Sol 3389 - MAHLI Images		acquired/perform date(s)	17-Feb-22
camera position		4	Image ID:
total parent images		5	b = best; least-compressed version receive as of date at upper left; orange = only a thumbnail has been received
focus images performed		0	
total focus image products		0	CPDP:
total parent images / focus image products		5	Camera Data Product Identifier = MSL-CAMERA_PRODUCT_ID in PDS archive product labels.
summary of MAHLI activities:		At night, MAHLI imaged inside the CheMin inlet for cleanliness.	
Sequence	Camera Position	Image ID	CPDP
Image Comment/Purpose (RATIONALE_DESC for PDS archive products; 400 character limit)			
mhl00312	MAHLI 12.4 cm working distance above CheMin inlet mesh; inlet cover open; position 1 of 3; imaging at right	3389MH0003120001200B2600	826
		3389MH0003120001200B2700	827
mhl00326	position 2 of 3, otherwise same as above	3389MH000320001200B2800	828
		3389MH000320001200B2900	829
mhl00329	position 3 of 3, otherwise same as two above	3389MH000320001200B2900	830
mhl00225	~17 cm above open CheMin inlet	3389MH0002280001200B3000	

updated: 18\_April\_2022

Sol 3392 - MAHLI Images			
Sequence	Camera Position	Image ID	COPID
		acquired/perform date(s)	20-Feb-22
		camera position	10
		image ID:	
		black = best, least-compressed version receive as of date at upper left; orange = only a thumbnail has been received	
		focus merges performed	0
		COPID:	
		Camera Data Product Identifier = MSLCAMERA_PRODUCT_ID in PDS archive product labels	
		total focus merge products	0
		total parent images + focus merge products	60
		summary of MAHLI activities:	MAHLI imaged the targets Nithsdale and Foss_Mine.
mhl00190	Nithsdale ~25 cm standoff	3392MH0001900011200831C00	831
		autofocus sub-frame for target Nithsdale - standoff near 25 cm	
		3392MH0001900011200832C00	832
		target Nithsdale - standoff near 25 cm	
mhl00173	Nithsdale stereo-1 ~4 cm standoff	3392MH00017300011200833C00	833
		autofocus sub-frame for target Nithsdale - stereo-1 - standoff near 4 cm	
		3392MH0001730011200834C00	834
		target Nithsdale - stereo-1 - standoff near 4 cm	
		3392MH00017300211200835C00	835
		target Nithsdale - stereo-1 - standoff near 4 cm - image 1 in 8-image relative focus stack	
		3392MH00017300211200836C00	836
		target Nithsdale - stereo-1 - standoff near 4 cm - image 2 in 8-image relative focus stack	
		3392MH00017300211200837C00	837
		target Nithsdale - stereo-1 - standoff near 4 cm - image 3 in 8-image relative focus stack	
		3392MH00017300211200838C00	838
		target Nithsdale - stereo-1 - standoff near 4 cm - image 4 in 8-image relative focus stack	
		3392MH00017300211200839C00	839
		target Nithsdale - stereo-1 - standoff near 4 cm - image 5 in 8-image relative focus stack	
		3392MH00017300211200840C00	840
		target Nithsdale - stereo-1 - standoff near 4 cm - image 6 in 8-image relative focus stack	
		3392MH00017300211200841C00	841
		target Nithsdale - stereo-1 - standoff near 4 cm - image 7 in 8-image relative focus stack	
		3392MH00017300211200842C00	842
		target Nithsdale - stereo-1 - standoff near 4 cm - image 8 in 8-image relative focus stack	
mhl00173	Nithsdale stereo-2 ~4 cm standoff	3392MH00017300011200843C00	843
		autofocus sub-frame for target Nithsdale - stereo-2 - standoff near 4 cm	
		3392MH0001730011200844C00	844
		target Nithsdale - stereo-2 - standoff near 4 cm	
		3392MH00017300211200845C00	845
		target Nithsdale - stereo-2 - standoff near 4 cm - image 1 in 8-image relative focus stack	
		3392MH00017300211200846C00	846
		target Nithsdale - stereo-2 - standoff near 4 cm - image 2 in 8-image relative focus stack	
		3392MH00017300211200847C00	847
		target Nithsdale - stereo-2 - standoff near 4 cm - image 3 in 8-image relative focus stack	
		3392MH00017300211200848C00	848
		target Nithsdale - stereo-2 - standoff near 4 cm - image 4 in 8-image relative focus stack	
		3392MH00017300211200849C00	849
		target Nithsdale - stereo-2 - standoff near 4 cm - image 5 in 8-image relative focus stack	
		3392MH00017300211200850C00	850
		target Nithsdale - stereo-2 - standoff near 4 cm - image 6 in 8-image relative focus stack	
		3392MH00017300211200851C00	851
		target Nithsdale - stereo-2 - standoff near 4 cm - image 7 in 8-image relative focus stack	
		3392MH00017300211200852C00	852
		target Nithsdale - stereo-2 - standoff near 4 cm - image 8 in 8-image relative focus stack	
mhl00190	Foss_Mine ~25 cm standoff	3392MH0001900011200853C00	853
		autofocus sub-frame for target Foss_Mine - standoff near 25 cm	
		3392MH0001900011200854C00	854
		target Foss_Mine - standoff near 25 cm	
mhl00182	Foss_Mine stereo-1 relief model position 1 ~5 cm standoff	3392MH00018200011200855C00	855
		autofocus sub-frame for target Foss_Mine - stereo-1 - relief model position 1 - standoff near 5 cm	
		3392MH0001820011200856C00	856
		target Foss_Mine - stereo-1 - relief model position 1 - standoff near 5 cm	
		3392MH00018200211200857C00	857
		target Foss_Mine - stereo-1 - relief model position 1 - standoff near 5 cm - image 1 in 8-image relative focus stack	
		3392MH00018200211200858C00	858
		target Foss_Mine - stereo-1 - relief model position 1 - standoff near 5 cm - image 2 in 8-image relative focus stack	
		3392MH00018200211200859C00	859
		target Foss_Mine - stereo-1 - relief model position 1 - standoff near 5 cm - image 3 in 8-image relative focus stack	
		3392MH00018200211200860C00	860
		target Foss_Mine - stereo-1 - relief model position 1 - standoff near 5 cm - image 4 in 8-image relative focus stack	
		3392MH00018200211200861C00	861
		target Foss_Mine - stereo-1 - relief model position 1 - standoff near 5 cm - image 5 in 8-image relative focus stack	
		3392MH00018200211200862C00	862
		target Foss_Mine - stereo-1 - relief model position 1 - standoff near 5 cm - image 6 in 8-image relative focus stack	
		3392MH00018200211200863C00	863
		target Foss_Mine - stereo-1 - relief model position 1 - standoff near 5 cm - image 7 in 8-image relative focus stack	
		3392MH00018200211200864C00	864
		target Foss_Mine - stereo-1 - relief model position 1 - standoff near 5 cm - image 8 in 8-image relative focus stack	
mhl00182	Foss_Mine stereo-2 relief model position 2 ~5 cm standoff	3392MH00018200011200865C00	865
		autofocus sub-frame for target Foss_Mine - stereo-2 - relief model position 2 - standoff near 5 cm	
		3392MH0001820011200866C00	866
		target Foss_Mine - stereo-2 - relief model position 2 - standoff near 5 cm	
		3392MH00018200211200867C00	867
		target Foss_Mine - stereo-2 - relief model position 2 - standoff near 5 cm - image 1 in 8-image relative focus stack	
		3392MH00018200211200868C00	868
		target Foss_Mine - stereo-2 - relief model position 2 - standoff near 5 cm - image 2 in 8-image relative focus stack	
		3392MH00018200211200869C00	869
		target Foss_Mine - stereo-2 - relief model position 2 - standoff near 5 cm - image 3 in 8-image relative focus stack	
		3392MH00018200211200870C00	870
		target Foss_Mine - stereo-2 - relief model position 2 - standoff near 5 cm - image 4 in 8-image relative focus stack	
		3392MH00018200211200871C00	871
		target Foss_Mine - stereo-2 - relief model position 2 - standoff near 5 cm - image 5 in 8-image relative focus stack	
		3392MH00018200211200872C00	872
		target Foss_Mine - stereo-2 - relief model position 2 - standoff near 5 cm - image 6 in 8-image relative focus stack	
		3392MH00018200211200873C00	873
		target Foss_Mine - stereo-2 - relief model position 2 - standoff near 5 cm - image 7 in 8-image relative focus stack	
		3392MH00018200211200874C00	874
		target Foss_Mine - stereo-2 - relief model position 2 - standoff near 5 cm - image 8 in 8-image relative focus stack	
mhl00705	Foss_Mine relief model position 3 ~5 cm standoff	3392MH00070500011200875C00	875
		autofocus sub-frame for target Foss_Mine - relief model position 3 - standoff near 5 cm	
		3392MH0007050011200876C00	876
		target Foss_Mine - relief model position 3 - standoff near 5 cm	
mhl00705	Foss_Mine relief model position 4 ~5 cm standoff	3392MH0007050011200877C00	877
		autofocus sub-frame for target Foss_Mine - relief model position 4 - standoff near 5 cm	
		3392MH0007050011200878C00	878
		target Foss_Mine - relief model position 4 - standoff near 5 cm	
mhl00705	Foss_Mine relief model position 5 ~5 cm standoff	3392MH0007050011200879C00	879
		autofocus sub-frame for target Foss_Mine - relief model position 5 - standoff near 5 cm	
		3392MH0007050011200880C00	880
		target Foss_Mine - relief model position 5 - standoff near 5 cm	
mhl00743	Foss_Mine ~1 cm standoff	3392MH00074300011200881C00	881
		autofocus sub-frame for target Foss_Mine - standoff near 1 cm	
		3392MH0007430011200882C00	882
		target Foss_Mine - standoff near 1 cm	
		3392MH00074300211200883C00	883
		target Foss_Mine - standoff near 1 cm - image 1 in 8-image relative focus stack	
		3392MH00074300211200884C00	884
		target Foss_Mine - standoff near 1 cm - image 2 in 8-image relative focus stack	
		3392MH00074300211200885C00	885
		target Foss_Mine - standoff near 1 cm - image 3 in 8-image relative focus stack	
		3392MH00074300211200886C00	886
		target Foss_Mine - standoff near 1 cm - image 4 in 8-image relative focus stack	
		3392MH00074300211200887C00	887
		target Foss_Mine - standoff near 1 cm - image 5 in 8-image relative focus stack	
		3392MH00074300211200888C00	888
		target Foss_Mine - standoff near 1 cm - image 6 in 8-image relative focus stack	
		3392MH00074300211200889C00	889
		target Foss_Mine - standoff near 1 cm - image 7 in 8-image relative focus stack	
		3392MH00074300211200890C00	890
		target Foss_Mine - standoff near 1 cm - image 8 in 8-image relative focus stack	

updated: 22\_February\_2022

<b>Sol 3393 - MAHLI Images</b>	acquired/perform date(s)	21-Feb-22	
	camera position:	0	Image ID: black = best, least-compressed version receive as of date at upper left; orange = only a thumbnail has been received
	total parent images:	0	
	focus merges performed:		COPID:
	total focus merge products:	40	Camera Data Product Identifier = MSL_CAMERA_PRODUCT_ID in POS archive product labels
	total parent images + focus merge products:	40	
summary of MAHLI activities:			
Focus stack images from Sol 3392 were merged.			
Sequence	Camera Position	Image ID	COPID
mhl00227	Focus Merges	3393MH0002270001200891800	891
		3393MH0002270001200892500	892
		3393MH0002270001200893800	893
		3393MH0002270001200894500	894
		3393MH0002270001200895800	895
		3393MH0002270001200896500	896
		3393MH0002270001200897800	897
		3393MH0002270001200898500	898
		3393MH0002270001200899600	899
		3393MH0002270001200900500	900

updated: 18\_April\_2022

Sol 3395 - MAHLI Images	<table border="1"> <tr><td>acquired/perform date(s)</td><td>23-Feb-22</td></tr> <tr><td>camera position</td><td>5</td></tr> <tr><td>total parent images</td><td>47</td></tr> <tr><td>focus merges performed</td><td>4</td></tr> <tr><td>total focus merge products</td><td>4</td></tr> <tr><td>total parent images + focus merge products</td><td>55</td></tr> </table>			acquired/perform date(s)	23-Feb-22	camera position	5	total parent images	47	focus merges performed	4	total focus merge products	4	total parent images + focus merge products	55																																																																																																																																																																					
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summary of MAHLI activities: MAHLI imaged the DRT-brushed target Galdenoch and the focus stack images were merged.																																																																																																																																																																																				
<table border="1"> <tr><td>Sequence</td><td>Camera Position</td><td>Image ID</td><td>COPID</td></tr> <tr><td>mhlD0706</td><td>Galdenoch after DRT ~25 cm standoff</td><td>3395MH00070600011200901C00</td><td>091</td></tr> <tr><td></td><td></td><td>3395MH00070600011200902C00</td><td>902</td></tr> <tr><td></td><td></td><td>3395MH00070600011200903C00</td><td>903</td></tr> <tr><td>mhlD0699</td><td>Galdenoch after DRT APXS spot 2 stereo-1 ~5 cm standoff</td><td>3395MH00069900011200904C00</td><td>904</td></tr> <tr><td></td><td></td><td>3395MH00069900011200905C00</td><td>905</td></tr> <tr><td></td><td></td><td>3395MH00069900011200906C00</td><td>906</td></tr> <tr><td></td><td></td><td>3395MH00069900011200907C00</td><td>907</td></tr> <tr><td></td><td></td><td>3395MH00069900011200908C00</td><td>908</td></tr> <tr><td></td><td></td><td>3395MH00069900011200909C00</td><td>909</td></tr> <tr><td></td><td></td><td>3395MH00069900011200910C00</td><td>910</td></tr> 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<tr><td></td><td></td><td>3395MH00069900011200923C00</td><td>923</td></tr> <tr><td></td><td></td><td>3395MH00069900011200924C00</td><td>924</td></tr> <tr><td></td><td></td><td>3395MH00069900011200925C00</td><td>925</td></tr> <tr><td>mhlD0823</td><td>Galdenoch after DRT APXS spot 1 ~5 cm standoff</td><td>3395MH00082300011200926C00</td><td>926</td></tr> <tr><td></td><td></td><td>3395MH00082300011200927C00</td><td>927</td></tr> <tr><td></td><td></td><td>3395MH00082300011200928C00</td><td>928</td></tr> <tr><td></td><td></td><td>3395MH00082300011200929C00</td><td>929</td></tr> <tr><td></td><td></td><td>3395MH00082300011200930C00</td><td>930</td></tr> <tr><td></td><td></td><td>3395MH00082300011200931C00</td><td>931</td></tr> <tr><td></td><td></td><td>3395MH00082300011200932C00</td><td>932</td></tr> <tr><td></td><td></td><td>3395MH00082300011200933C00</td><td>933</td></tr> <tr><td></td><td></td><td>3395MH00082300011200934C00</td><td>934</td></tr> 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2 stereo-1 ~5 cm standoff	3395MH00069900011200904C00	904			3395MH00069900011200905C00	905			3395MH00069900011200906C00	906			3395MH00069900011200907C00	907			3395MH00069900011200908C00	908			3395MH00069900011200909C00	909			3395MH00069900011200910C00	910			3395MH00069900011200911C00	911			3395MH00069900011200912C00	912			3395MH00069900011200913C00	913			3395MH00069900011200914C00	914	mhlD0699	Galdenoch after DRT APXS spot 2 stereo-2 ~5 cm standoff	3395MH00069900011200915C00	915			3395MH00069900011200916C00	916			3395MH00069900011200917C00	917			3395MH00069900011200918C00	918			3395MH00069900011200919C00	919			3395MH00069900011200920C00	920			3395MH00069900011200921C00	921			3395MH00069900011200922C00	922			3395MH00069900011200923C00	923			3395MH00069900011200924C00	924			3395MH00069900011200925C00	925	mhlD0823	Galdenoch after DRT APXS spot 1 ~5 cm standoff	3395MH00082300011200926C00	926			3395MH00082300011200927C00	927			3395MH00082300011200928C00	928			3395MH00082300011200929C00	929			3395MH00082300011200930C00	930			3395MH00082300011200931C00	931			3395MH00082300011200932C00	932			3395MH00082300011200933C00	933			3395MH00082300011200934C00	934			3395MH00082300011200935C00	935			3395MH00082300011200936C00	936	mhlD0153	Focus Merges	3395MH00015300011200948C00	948			3395MH00015300011200949C00	949			3395MH00015300011200950C00	950			3395MH00015300011200951C00	951			3395MH00015300011200952C00	952			3395MH00015300011200953C00	953			3395MH00015300011200954C00	954			3395MH00015300011200955C00	955
Sequence	Camera Position	Image ID	COPID																																																																																																																																																																																	
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mhlD0699	Galdenoch after DRT APXS spot 2 stereo-1 ~5 cm standoff	3395MH00069900011200904C00	904																																																																																																																																																																																	
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		3395MH00069900011200914C00	914																																																																																																																																																																																	
mhlD0699	Galdenoch after DRT APXS spot 2 stereo-2 ~5 cm standoff	3395MH00069900011200915C00	915																																																																																																																																																																																	
		3395MH00069900011200916C00	916																																																																																																																																																																																	
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		3395MH00069900011200919C00	919																																																																																																																																																																																	
		3395MH00069900011200920C00	920																																																																																																																																																																																	
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		3395MH00069900011200924C00	924																																																																																																																																																																																	
		3395MH00069900011200925C00	925																																																																																																																																																																																	
mhlD0823	Galdenoch after DRT APXS spot 1 ~5 cm standoff	3395MH00082300011200926C00	926																																																																																																																																																																																	
		3395MH00082300011200927C00	927																																																																																																																																																																																	
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		3395MH00082300011200930C00	930																																																																																																																																																																																	
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		3395MH00082300011200936C00	936																																																																																																																																																																																	
mhlD0153	Focus Merges	3395MH00015300011200948C00	948																																																																																																																																																																																	
		3395MH00015300011200949C00	949																																																																																																																																																																																	
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		3395MH00015300011200955C00	955																																																																																																																																																																																	

updated: 25\_April\_2022

Sol 3396 - MAHLI Images			
Sequence	Camera Position	Image ID	COPID
mhlID0130	Scousburgh before DRT ~25 cm standoff	3396MH#000190001120095600	956
		3396MH#000190001120095700	957
mhlID0122	Scousburgh before DRT ~5 cm standoff	3396MH#0001120001120095800	958
		3396MH#0001120001120095900	959
mhlID0706	Scousburgh after DRT ~25 cm standoff	3396MH#0001706001120096000	960
		3396MH#0001706001120096100	961
		3396MH#0001706001120096200	962
mhlID0761	Scousburgh after DRT stereo-1 ~5 cm standoff	3396MH#0007630001120096300	963
		3396MH#000763001120096400	964
		3396MH#0007630021120096500	965
		3396MH#0007630031120096600	966
		3396MH#0007630031120096700	967
		3396MH#0007630031120096800	968
		3396MH#0007630031120096900	969
		3396MH#0007630031120097000	970
		3396MH#0007630031120097100	971
		3396MH#0007630031120097200	972
		3396MH#0007630031120097300	973
mhlID0763	Scousburgh after DRT stereo-2 ~5 cm standoff	3396MH#000763001120097400	974
		3396MH#000763001120097500	975
		3396MH#0007630021120097600	976
		3396MH#0007630031120097700	977
		3396MH#0007630031120097800	978
		3396MH#0007630031120097900	979
		3396MH#0007630031120098000	980
		3396MH#0007630031120098100	981
		3396MH#0007630031120098200	982
		3396MH#0007630031120098300	983
		3396MH#0007630031120098400	984
mhlID0835	Scousburgh after DRT ~1 cm standoff	3396MH#0008350001120098500	985
		3396MH#0008350011120098600	986
		3396MH#0008350021120098700	987
		3396MH#0008350031120098800	988
		3396MH#0008350031120098900	989
		3396MH#0008350031120099000	990
		3396MH#0008350031120099100	991
		3396MH#0008350031120099200	992
		3396MH#0008350031120099300	993
		3396MH#0008350031120099400	994
mhlID0190	Blackthorn_Salt ~25 cm standoff	3396MH#000190001120099500	995
		3396MH#000190001120099600	996
		3396MH#000190001120099700	997
		3396MH#000224001120099800	998
		3396MH#000224001120099900	999
		3396MH#0002240021120100000	1000
		3396MH#0002240021120100100	1001
		3396MH#0002240021120100200	1002
		3396MH#0002240021120100300	1003
		3396MH#0002240021120100400	1004
mhlID0224	Blackthorn_Salt stereo-1 ~5 cm standoff	3396MH#0002240021120100500	1005
		3396MH#0002240021120100600	1006
		3396MH#0002240021120100700	1007
		3396MH#0002240021120100800	1008
		3396MH#0002240021120100900	1009
		3396MH#0002240021120101000	1010
		3396MH#0002240021120101100	1011
		3396MH#0002240021120101200	1012
		3396MH#0002240021120101300	1013
		3396MH#0002240021120101400	1014
mhlID0224	Blackthorn_Salt stereo-2 ~5 cm standoff	3396MH#0002240021120101500	1015
		3396MH#0002240021120101600	1016
		3396MH#0002240021120101700	1017

Continued on Next Page...

		3996MH0001760001201019C00	1018	autofocus sub-frame for target Blackthorn_Salt - standoff near 2 cm
		3996MH0001760011201019C00	1019	target Blackthorn_Salt - standoff near 2 cm
		3996MH0001760021201019C00	1020	target Blackthorn_Salt - standoff near 2 cm - image 1 in 8-image relative focus stack
		3996MH0001760021201021C00	1021	target Blackthorn_Salt - standoff near 2 cm - image 2 in 8-image relative focus stack
		3996MH0001760021201021C00	1022	target Blackthorn_Salt - standoff near 2 cm - image 3 in 8-image relative focus stack
		3996MH0001760021201023C00	1023	target Blackthorn_Salt - standoff near 2 cm - image 4 in 8-image relative focus stack
		3996MH0001760021201024C00	1024	target Blackthorn_Salt - standoff near 2 cm - image 5 in 8-image relative focus stack
		3996MH0001760021201025C00	1025	target Blackthorn_Salt - standoff near 2 cm - image 6 in 8-image relative focus stack
		3996MH0001760021201026C00	1026	target Blackthorn_Salt - standoff near 2 cm - image 7 in 8-image relative focus stack
		3996MH0001760021201027C00	1027	target Blackthorn_Salt - standoff near 2 cm - image 8 in 8-image relative focus stack

updated: 28\_February\_2022

<b>Sol 3397 - MAHLI Images</b>	acquired/perform date(s)	<b>25-Feb-23</b>	
	camera position:	<b>B</b>	Image ID: black = best, least-compressed version receive as of date at upper left; orange = only a thumbnail has been received
	total parent images:	<b>0</b>	
	focus merges performed:	<b>0</b>	COPID:
	total focus merge products:	<b>0</b>	Camera Data Product Identifier = MSL_CAMERA_PRODUCT_ID in PDS archive product labels
	total parent images + focus merge products:	<b>0</b>	
summary of MAHLI activities:			
	Focus stack images from Sol 3396 were merged.		
Sequence	Camera Position	Image ID	COPID
mhl00163	Focus Merges	3397MH0001630001201028900	1028
		3397MH0001630001201029500	1029
		3397MH0001630001201030900	1030
		3397MH0001630001201031500	1031
		3397MH0001630001201032800	1032
		3397MH0001630001201033500	1033
		3397MH0001630001201034900	1034
		3397MH0001630001201035500	1035
		3397MH0001630001201036800	1036
		3397MH0001630001201037500	1037
		3397MH0001630001201038800	1038
		3397MH0001630001201039500	1039

updated: 20\_April\_2022

Sol 3398 - MAHLI Images	<table border="1"> <tr><td>acquired/perform date(s)</td><td>26-Feb-23</td></tr> <tr><td>camera position</td><td>7</td></tr> <tr><td>total parent images</td><td>58</td></tr> <tr><td>focus merges performed</td><td>0</td></tr> <tr><td>total focus merge products</td><td>0</td></tr> <tr><td>total parent images + focus merge products</td><td>58</td></tr> </table>				acquired/perform date(s)	26-Feb-23	camera position	7	total parent images	58	focus merges performed	0	total focus merge products	0	total parent images + focus merge products	58
acquired/perform date(s)	26-Feb-23															
camera position	7															
total parent images	58															
focus merges performed	0															
total focus merge products	0															
total parent images + focus merge products	58															
summary of MAHLI activities:																
MAHLI imaged the targets Exnaboe and Stinchar.																
Sequence	Camera Position	Image ID	COPID	Image Comment/Purpose [RATIONALE_DESC for PDS archive products; 400 character limit]												
mhl00706	Exnaboe ~25 cm standoff	3398MH000706000120104000	1040	autofocus sub-frame for target Exnaboe - standoff near 25 cm												
		3398MH000706000120104100	1041	target Exnaboe - standoff near 25 cm												
		3398MH000706000120104200	1042	target Exnaboe - standoff near 25 cm - alternative auto-exposure												
mhl00740	Exnaboe stereo-1 ~5 cm standoff	3398MH000740000120104300	1043	autofocus sub-frame for target Exnaboe - stereo-1 - standoff near 5 cm												
		3398MH000740000120104400	1044	target Exnaboe - stereo-1 - standoff near 5 cm												
		3398MH000740000120104500	1045	target Exnaboe - stereo-1 - standoff near 5 cm - alternative auto-exposure												
		3398MH000740000120104600	1046	target Exnaboe - stereo-1 - standoff near 5 cm - image 1 in 8-image relative focus stack												
		3398MH000740000120104700	1047	target Exnaboe - stereo-1 - standoff near 5 cm - image 2 in 8-image relative focus stack												
		3398MH000740000120104800	1048	target Exnaboe - stereo-1 - standoff near 5 cm - image 3 in 8-image relative focus stack												
		3398MH000740000120104900	1049	target Exnaboe - stereo-1 - standoff near 5 cm - image 4 in 8-image relative focus stack												
		3398MH000740000120105000	1050	target Exnaboe - stereo-1 - standoff near 5 cm - image 5 in 8-image relative focus stack												
		3398MH000740000120105100	1051	target Exnaboe - stereo-1 - standoff near 5 cm - image 6 in 8-image relative focus stack												
		3398MH000740000120105200	1052	target Exnaboe - stereo-1 - standoff near 5 cm - image 7 in 8-image relative focus stack												
		3398MH000740000120105300	1053	target Exnaboe - stereo-1 - standoff near 5 cm - image 8 in 8-image relative focus stack												
mhl00740		3398MH000740000120105400	1054	autofocus sub-frame for target Exnaboe - stereo-2 - standoff near 5 cm												
		3398MH000740000120105500	1055	target Exnaboe - stereo-2 - standoff near 5 cm												
		3398MH000740000120105600	1056	target Exnaboe - stereo-2 - standoff near 5 cm - alternative auto-exposure												
		3398MH000740000120105700	1057	target Exnaboe - stereo-2 - standoff near 5 cm - image 1 in 8-image relative focus stack												
		3398MH000740000120105800	1058	target Exnaboe - stereo-2 - standoff near 5 cm - image 2 in 8-image relative focus stack												
		3398MH000740000120105900	1059	target Exnaboe - stereo-2 - standoff near 5 cm - image 3 in 8-image relative focus stack												
		3398MH000740000120106000	1060	target Exnaboe - stereo-2 - standoff near 5 cm - image 4 in 8-image relative focus stack												
		3398MH000740000120106100	1061	target Exnaboe - stereo-2 - standoff near 5 cm - image 5 in 8-image relative focus stack												
		3398MH000740000120106200	1062	target Exnaboe - stereo-2 - standoff near 5 cm - image 6 in 8-image relative focus stack												
		3398MH000740000120106300	1063	target Exnaboe - stereo-2 - standoff near 5 cm - image 7 in 8-image relative focus stack												
		3398MH000740000120106400	1064	target Exnaboe - stereo-2 - standoff near 5 cm - image 8 in 8-image relative focus stack												
mhl00800	Exnaboe ~2 cm standoff	3398MH000800000120106500	1065	autofocus sub-frame for target Exnaboe - standoff near 2 cm												
		3398MH000800000120106600	1066	target Exnaboe - standoff near 2 cm												
		3398MH000800000120106700	1067	target Exnaboe - standoff near 2 cm - alternative auto-exposure												
		3398MH000800000120106800	1068	target Exnaboe - standoff near 2 cm - image 1 in 8-image relative focus stack												
		3398MH000800000120106900	1069	target Exnaboe - standoff near 2 cm - image 2 in 8-image relative focus stack												
		3398MH000800000120107000	1070	target Exnaboe - standoff near 2 cm - image 3 in 8-image relative focus stack												
		3398MH000800000120107100	1071	target Exnaboe - standoff near 2 cm - image 4 in 8-image relative focus stack												
		3398MH000800000120107200	1072	target Exnaboe - standoff near 2 cm - image 5 in 8-image relative focus stack												
		3398MH000800000120107300	1073	target Exnaboe - standoff near 2 cm - image 6 in 8-image relative focus stack												
		3398MH000800000120107400	1074	target Exnaboe - standoff near 2 cm - image 7 in 8-image relative focus stack												
		3398MH000800000120107500	1075	target Exnaboe - standoff near 2 cm - image 8 in 8-image relative focus stack												
mhl0190	Stinchar_Valley ~25 cm standoff	3398MH000190000120107600	1076	autofocus sub-frame for target Stinchar_Valley - standoff near 25 cm												
		3398MH000190000120107700	1077	target Stinchar_Valley - standoff near 25 cm												
mhl0308	Stinchar_Valley stereo-1 ~45 mm standoff	3398MH000308000120107800	1078	autofocus sub-frame for target Stinchar_Valley - stereo-1 - standoff near 45 mm												
		3398MH000308000120107900	1079	target Stinchar_Valley - stereo-1 - standoff near 45 mm												
		3398MH000308000120108000	1080	target Stinchar_Valley - stereo-1 - standoff near 45 mm - image 1 in 8-image relative focus stack												
		3398MH000308000120108100	1081	target Stinchar_Valley - stereo-1 - standoff near 45 mm - image 2 in 8-image relative focus stack												
		3398MH000308000120108200	1082	target Stinchar_Valley - stereo-1 - standoff near 45 mm - image 3 in 8-image relative focus stack												
		3398MH000308000120108300	1083	target Stinchar_Valley - stereo-1 - standoff near 45 mm - image 4 in 8-image relative focus stack												
		3398MH000308000120108400	1084	target Stinchar_Valley - stereo-1 - standoff near 45 mm - image 5 in 8-image relative focus stack												
		3398MH000308000120108500	1085	target Stinchar_Valley - stereo-1 - standoff near 45 mm - image 6 in 8-image relative focus stack												
		3398MH000308000120108600	1086	target Stinchar_Valley - stereo-1 - standoff near 45 mm - image 7 in 8-image relative focus stack												
		3398MH000308000120108700	1087	target Stinchar_Valley - stereo-1 - standoff near 45 mm - image 8 in 8-image relative focus stack												
mhl0308	Stinchar_Valley stereo-2 ~45 mm standoff	3398MH000308000120108800	1088	autofocus sub-frame for target Stinchar_Valley - stereo-2 - standoff near 45 mm												
		3398MH000308000120108900	1089	target Stinchar_Valley - stereo-2 - standoff near 45 mm												
		3398MH000308000120109000	1090	target Stinchar_Valley - stereo-2 - standoff near 45 mm - image 1 in 8-image relative focus stack												
		3398MH000308000120109100	1091	target Stinchar_Valley - stereo-2 - standoff near 45 mm - image 2 in 8-image relative focus stack												
		3398MH000308000120109200	1092	target Stinchar_Valley - stereo-2 - standoff near 45 mm - image 3 in 8-image relative focus stack												
		3398MH000308000120109300	1093	target Stinchar_Valley - stereo-2 - standoff near 45 mm - image 4 in 8-image relative focus stack												
		3398MH000308000120109400	1094	target Stinchar_Valley - stereo-2 - standoff near 45 mm - image 5 in 8-image relative focus stack												
		3398MH000308000120109500	1095	target Stinchar_Valley - stereo-2 - standoff near 45 mm - image 6 in 8-image relative focus stack												
		3398MH000308000120109600	1096	target Stinchar_Valley - stereo-2 - standoff near 45 mm - image 7 in 8-image relative focus stack												
		3398MH000308000120109700	1097	target Stinchar_Valley - stereo-2 - standoff near 45 mm - image 8 in 8-image relative focus stack												

updated: 02\_March\_2022

Sol 3399 - MAHLI Images			
summary of MAHLI activities			
Sequence	Camera Position	Image ID	CDP0
		Focus stack Images from Sol 3398 were merged.	
mhl00227	Focus Merges	3399MH002270001201098900	1098 target #Stinchar_Valley - stereo-2 - standoff near 45 mm - focus stack acquired sol 3398 with MSL_CAMERA_PRODUCT_ID=1090-1097 - best focus image product
		3399MH002270001201099500	1099 target #Stinchar_Valley - stereo-2 - standoff near 45 mm - focus stack acquired sol 3398 with MSL_CAMERA_PRODUCT_ID=1090-1097 - range map product
		3399MH002270001201100100	1100 target #Stinchar_Valley - stereo-1 - standoff near 45 mm - focus stack acquired sol 3398 with MSL_CAMERA_PRODUCT_ID=1080-1087 - best focus image product
		3399MH002270001201101500	1101 target #Stinchar_Valley - stereo-1 - standoff near 45 mm - focus stack acquired sol 3398 with MSL_CAMERA_PRODUCT_ID=1080-1087 - range map product
		3399MH002270001201102900	1102 target #Exnaboe - standoff near 2 cm - focus stack acquired sol 3398 with MSL_CAMERA_PRODUCT_ID=1068-1075 - best focus image product
		3399MH002270001201103500	1103 target #Exnaboe - standoff near 2 cm - focus stack acquired sol 3398 with MSL_CAMERA_PRODUCT_ID=1068-1075 - range map product
		3399MH002270001201104000	1104 target #Exnaboe - stereo-2 - standoff near 5 cm - focus stack acquired sol 3398 with MSL_CAMERA_PRODUCT_ID=1057-1064 - best focus image product
		3399MH002270001201105000	1105 target #Exnaboe - stereo-2 - standoff near 5 cm - focus stack acquired sol 3398 with MSL_CAMERA_PRODUCT_ID=1057-1064 - range map product
		3399MH002270001201106900	1106 target #Exnaboe - stereo-1 - standoff near 5 cm - focus stack acquired sol 3398 with MSL_CAMERA_PRODUCT_ID=1046-1053 - best focus image product
		3399MH002270001201107500	1107 target #Exnaboe - stereo-1 - standoff near 5 cm - focus stack acquired sol 3398 with MSL_CAMERA_PRODUCT_ID=1046-1053 - range map product

updated: 20\_April\_2022

Sol 3409 - MAHLI Images	acq/ed/perform date[s]	10-Mar-23		
	camera positions	4		
	total parent images	32		
	focus merges performed	0		
	total focus merge products	0		
	total parent images + focus merge products	32		
summary of MAHLI activities:				
MAHLI imaged the DRT-brushed target Skaw_Granite.				
Sequence	Camera Position	Image ID	COPID	Image Comment/Purpose [RATIONALE_DESC for PDS archive products; 400 character limit]
mhlD0190	Skaw_Granite after DRT ~25 cm standoff	3409MH000190001201108C00	1108	autofocus sub-frame for target Skaw_Granite - after dust removal tool (DRT) - standoff near 25 cm
		3409MH000190001201109C00	1109	target Skaw_Granite - after dust removal tool (DRT) - standoff near 25 cm
mhlD0299	Skaw_Granite after DRT stereo-1 ~5 cm standoff	3409MH000299001201110C00	1110	autofocus sub-frame for target Skaw_Granite - after dust removal tool (DRT) - stereo-1 - standoff near 5 cm
		3409MH000299001201111C00	1111	target Skaw_Granite - after dust removal tool (DRT) - stereo-1 - standoff near 5 cm
		3409MH000299001201112C00	1112	target Skaw_Granite - after dust removal tool (DRT) - stereo-1 - standoff near 5 cm - image 1 in 8-image relative focus stack
		3409MH000299001201113C00	1113	target Skaw_Granite - after dust removal tool (DRT) - stereo-1 - standoff near 5 cm - image 2 in 8-image relative focus stack
		3409MH000299001201114C00	1114	target Skaw_Granite - after dust removal tool (DRT) - stereo-1 - standoff near 5 cm - image 3 in 8-image relative focus stack
		3409MH000299001201115C00	1115	target Skaw_Granite - after dust removal tool (DRT) - stereo-1 - standoff near 5 cm - image 4 in 8-image relative focus stack
		3409MH000299001201116C00	1116	target Skaw_Granite - after dust removal tool (DRT) - stereo-1 - standoff near 5 cm - image 5 in 8-image relative focus stack
		3409MH000299001201117C00	1117	target Skaw_Granite - after dust removal tool (DRT) - stereo-1 - standoff near 5 cm - image 6 in 8-image relative focus stack
		3409MH000299001201118C00	1118	target Skaw_Granite - after dust removal tool (DRT) - stereo-1 - standoff near 5 cm - image 7 in 8-image relative focus stack
		3409MH000299001201119C00	1119	target Skaw_Granite - after dust removal tool (DRT) - stereo-1 - standoff near 5 cm - image 8 in 8-image relative focus stack
mhlD0299	Skaw_Granite after DRT stereo-2 ~5 cm standoff	3409MH000299001201120C00	1120	autofocus sub-frame for target Skaw_Granite - after dust removal tool (DRT) - stereo-2 - standoff near 5 cm
		3409MH000299001201121C00	1121	target Skaw_Granite - after dust removal tool (DRT) - stereo-2 - standoff near 5 cm
		3409MH000299001201122C00	1122	target Skaw_Granite - after dust removal tool (DRT) - stereo-2 - standoff near 5 cm - image 1 in 8-image relative focus stack
		3409MH000299001201123C00	1123	target Skaw_Granite - after dust removal tool (DRT) - stereo-2 - standoff near 5 cm - image 2 in 8-image relative focus stack
		3409MH000299001201124C00	1124	target Skaw_Granite - after dust removal tool (DRT) - stereo-2 - standoff near 5 cm - image 3 in 8-image relative focus stack
		3409MH000299001201125C00	1125	target Skaw_Granite - after dust removal tool (DRT) - stereo-2 - standoff near 5 cm - image 4 in 8-image relative focus stack
		3409MH000299001201126C00	1126	target Skaw_Granite - after dust removal tool (DRT) - stereo-2 - standoff near 5 cm - image 5 in 8-image relative focus stack
		3409MH000299001201127C00	1127	target Skaw_Granite - after dust removal tool (DRT) - stereo-2 - standoff near 5 cm - image 6 in 8-image relative focus stack
		3409MH000299001201128C00	1128	target Skaw_Granite - after dust removal tool (DRT) - stereo-2 - standoff near 5 cm - image 7 in 8-image relative focus stack
		3409MH000299001201129C00	1129	target Skaw_Granite - after dust removal tool (DRT) - stereo-2 - standoff near 5 cm - image 8 in 8-image relative focus stack
mhlD0426	Skaw_Granite after DRT ~1 cm standoff	3409MH000426001201130C00	1130	autofocus sub-frame for target Skaw_Granite - after dust removal tool (DRT) - standoff near 1 cm
		3409MH000426001201131C00	1131	target Skaw_Granite - after dust removal tool (DRT) - standoff near 1 cm
		3409MH000426001201132C00	1132	target Skaw_Granite - after dust removal tool (DRT) - standoff near 1 cm - image 1 in 8-image relative focus stack
		3409MH000426001201133C00	1133	target Skaw_Granite - after dust removal tool (DRT) - standoff near 1 cm - image 2 in 8-image relative focus stack
		3409MH000426001201134C00	1134	target Skaw_Granite - after dust removal tool (DRT) - standoff near 1 cm - image 3 in 8-image relative focus stack
		3409MH000426001201135C00	1135	target Skaw_Granite - after dust removal tool (DRT) - standoff near 1 cm - image 4 in 8-image relative focus stack
		3409MH000426001201136C00	1136	target Skaw_Granite - after dust removal tool (DRT) - standoff near 1 cm - image 5 in 8-image relative focus stack
		3409MH000426001201137C00	1137	target Skaw_Granite - after dust removal tool (DRT) - standoff near 1 cm - image 6 in 8-image relative focus stack
		3409MH000426001201138C00	1138	target Skaw_Granite - after dust removal tool (DRT) - standoff near 1 cm - image 7 in 8-image relative focus stack
		3409MH000426001201139C00	1139	target Skaw_Granite - after dust removal tool (DRT) - standoff near 1 cm - image 8 in 8-image relative focus stack

updated: 11\_March\_2022

Sol 3410 - MAHLI Images		acquired/perform date(s)	10-Mar-22	
		camera position	0	
		total parent images	0	
		focus merges performed	3	
		total focus merge products	3	
		Camera Data Product Identifier = MSL-CAMERA_PRODUCT_ID in PDS archive product labels		
		total parent images + focus merge products	6	
summary of MAHLI activities:		Focus stack images from Sol 3409 were merged.		
Sequence	Camera Position	Image ID	COPID	
Image Comment/Purpose (RATIONALE_DESC for PDS archive products; 400 character limit)				
mhl00193	Focus Merges	3410MH0001930001201140R00	1140	target Skw_Granite - after dust removal tool (DRT) - standoff near 1 cm - focus stack acquired sol 3409 with MSL-CAMERA_PRODUCT_ID 106 1132-1139 - best focus image product
		3410MH0001930001201141S00	1141	target Skw_Granite - after dust removal tool (DRT) - standoff near 1 cm - focus stack acquired sol 3409 with MSL-CAMERA_PRODUCT_ID 106 1132-1139 - range map product
		3410MH0001930001201142R00	1142	target Skw_Granite - after dust removal tool (DRT) - stereo-2 - standoff near 5 cm - focus stack acquired sol 3409 with MSL-CAMERA_PRODUCT_ID 106 1132-1139 - best focus image product
		3410MH0001930001201143S00	1143	target Skw_Granite - after dust removal tool (DRT) - stereo-2 - standoff near 5 cm - focus stack acquired sol 3409 with MSL-CAMERA_PRODUCT_ID 1122 1122-1129 - range map product
		3410MH0001930001201144R00	1144	target Skw_Granite - after dust removal tool (DRT) - stereo-1 - standoff near 5 cm - focus stack acquired sol 3409 with MSL-CAMERA_PRODUCT_ID 1112 1112-1119 - best focus image product
		3410MH0001930001201145S00	1145	target Skw_Granite - after dust removal tool (DRT) - stereo-1 - standoff near 5 cm - focus stack acquired sol 3409 with MSL-CAMERA_PRODUCT_ID 1112 1112-1119 - range map product

updated: 21\_April\_2022

<b>Sol 3413 - MAHLI Images</b>	<table border="1"> <tr><td>acquired/perform date(s)</td><td colspan="2">13-Mar-22</td></tr> <tr><td>camera position</td><td colspan="2">8</td></tr> <tr><td>total parent images</td><td colspan="2">55</td></tr> <tr><td>focus merges performed</td><td colspan="2">55</td></tr> <tr><td>total focus merge products</td><td colspan="2">49</td></tr> <tr><td>total parent images + focus merge products</td><td colspan="2">55</td></tr> </table>		acquired/perform date(s)	13-Mar-22		camera position	8		total parent images	55		focus merges performed	55		total focus merge products	49		total parent images + focus merge products	55	
acquired/perform date(s)	13-Mar-22																			
camera position	8																			
total parent images	55																			
focus merges performed	55																			
total focus merge products	49																			
total parent images + focus merge products	55																			
summary of MAHLI activities: MAHLI imaged the targets Appleby and Achvarasdal as well as the wheel-surface interface of the rover left front wheel. The focus stack images were also merged.																				
Sequence	Camera Position	Image ID																		
		COPID																		
mhl00190	Appleby ~25 cm standoff	3413MH000019000120114600																		
		1146 autofocus sub-frame for target Appleby - standoff near 25 cm																		
mhl00173	Appleby stereo-1 ~5 cm standoff		3413MH0000173000120114700																	
			1147 target Appleby - standoff near 25 cm																	
			3413MH0000173000120114800																	
			1148 autofocus sub-frame for target Appleby - stereo-1 - standoff near 5 cm																	
			3413MH0000173001120114900																	
			1149 target Appleby - stereo-1 - standoff near 5 cm																	
			3413MH0000173002120115000																	
			1150 target Appleby - stereo-1 - standoff near 5 cm - image 1 in 8-image relative focus stack																	
			3413MH0000173002120115100																	
			1151 target Appleby - stereo-1 - standoff near 5 cm - image 2 in 8-image relative focus stack																	
			3413MH0000173002120115200																	
			1152 target Appleby - stereo-1 - standoff near 5 cm - image 3 in 8-image relative focus stack																	
			3413MH0000173002120115300																	
			1153 target Appleby - stereo-1 - standoff near 5 cm - image 4 in 8-image relative focus stack																	
			3413MH0000173002120115400																	
			1154 target Appleby - stereo-1 - standoff near 5 cm - image 5 in 8-image relative focus stack																	
	mhl00173	Appleby stereo-2 ~5 cm standoff	3413MH0000173002120115500																	
			1155 target Appleby - stereo-1 - standoff near 5 cm - image 6 in 8-image relative focus stack																	
			3413MH0000173002120115600																	
			1156 target Appleby - stereo-1 - standoff near 5 cm - image 7 in 8-image relative focus stack																	
			3413MH0000173002120115700																	
			1157 target Appleby - stereo-1 - standoff near 5 cm - image 8 in 8-image relative focus stack																	
			3413MH0000173000120115800																	
			1158 autofocus sub-frame for target Appleby - stereo-2 - standoff near 5 cm																	
			3413MH0000173001120115900																	
			1159 target Appleby - stereo-2 - standoff near 5 cm																	
			3413MH0000173002120116000																	
			1160 target Appleby - stereo-2 - standoff near 5 cm - image 1 in 8-image relative focus stack																	
			3413MH0000173002120116100																	
			1161 target Appleby - stereo-2 - standoff near 5 cm - image 2 in 8-image relative focus stack																	
mhl00337	Appleby ~2 cm standoff		3413MH0000173002120116200																	
			1162 target Appleby - stereo-2 - standoff near 5 cm - image 3 in 8-image relative focus stack																	
			3413MH0000173002120116300																	
			1163 target Appleby - stereo-2 - standoff near 5 cm - image 4 in 8-image relative focus stack																	
			3413MH0000173002120116400																	
			1164 target Appleby - stereo-2 - standoff near 5 cm - image 5 in 8-image relative focus stack																	
			3413MH0000173002120116500																	
			1165 target Appleby - stereo-2 - standoff near 5 cm - image 6 in 8-image relative focus stack																	
			3413MH0000173002120116600																	
			1166 target Appleby - stereo-2 - standoff near 5 cm - image 7 in 8-image relative focus stack																	
			3413MH0000173002120116700																	
			1167 target Appleby - stereo-2 - standoff near 5 cm - image 8 in 8-image relative focus stack																	
			3413MH000037000120116800																	
			1168 autofocus sub-frame for target Appleby - standoff near 2 cm																	
			3413MH000037000120116900																	
mhl00190	Achvarasdal ~23 cm standoff		1169 target Appleby - standoff near 2 cm																	
			3413MH000037000120117000																	
			1170 target Appleby - standoff near 2 cm - image 1 in 8-image relative focus stack																	
			3413MH000037000120117100																	
			1171 target Appleby - standoff near 2 cm - image 2 in 8-image relative focus stack																	
			3413MH000037000120117200																	
			1172 target Appleby - standoff near 2 cm - image 3 in 8-image relative focus stack																	
			3413MH000037000120117300																	
			1173 target Appleby - standoff near 2 cm - image 4 in 8-image relative focus stack																	
			3413MH000037000120117400																	
			1174 target Appleby - standoff near 2 cm - image 5 in 8-image relative focus stack																	
			3413MH000037000120117500																	
			1175 target Appleby - standoff near 2 cm - image 6 in 8-image relative focus stack																	
			3413MH000037000120117600																	
			1176 target Appleby - standoff near 2 cm - image 7 in 8-image relative focus stack																	
mhl00224	Achvarasdal stereo-1 ~3 cm standoff		3413MH000037000120117700																	
			1177 target Appleby - standoff near 2 cm - image 8 in 8-image relative focus stack																	
			3413MH000019000120117800																	
			1178 autofocus sub-frame for target Achvarasdal - standoff near 23 cm																	
			3413MH000019000120117900																	
			1179 target Achvarasdal - standoff near 23 cm																	
			3413MH0000224000120118000																	
			1180 autofocus sub-frame for target Achvarasdal - stereo-1 - standoff near 3 cm																	
			3413MH0000224001120118100																	
			1181 target Achvarasdal - stereo-1 - standoff near 3 cm																	
			3413MH0000224002120118200																	
			1182 target Achvarasdal - stereo-1 - standoff near 3 cm - image 1 in 8-image relative focus stack																	
			3413MH0000224002120118300																	
			1183 target Achvarasdal - stereo-1 - standoff near 3 cm - image 2 in 8-image relative focus stack																	
			3413MH0000224002120118400																	
mhl00224	Achvarasdal stereo-2 ~3 cm standoff		1184 target Achvarasdal - stereo-1 - standoff near 3 cm - image 3 in 8-image relative focus stack																	
			3413MH0000224002120118500																	
			1185 target Achvarasdal - stereo-1 - standoff near 3 cm - image 4 in 8-image relative focus stack																	
			3413MH0000224002120118600																	
			1186 target Achvarasdal - stereo-1 - standoff near 3 cm - image 5 in 8-image relative focus stack																	
			3413MH0000224002120118700																	
			1187 target Achvarasdal - stereo-1 - standoff near 3 cm - image 6 in 8-image relative focus stack																	
			3413MH0000224002120118800																	
			1188 target Achvarasdal - stereo-1 - standoff near 3 cm - image 7 in 8-image relative focus stack																	
			3413MH0000224002120118900																	
			1189 target Achvarasdal - stereo-1 - standoff near 3 cm - image 8 in 8-image relative focus stack																	
			3413MH0000224002120119000																	
			1190 autofocus sub-frame for target Achvarasdal - stereo-2 - standoff near 3 cm																	
			3413MH0000224001120119100																	
			1191 target Achvarasdal - stereo-2 - standoff near 3 cm																	
mhl00224	Achvarasdal stereo-2 ~3 cm standoff		3413MH0000224002120119200																	
			1192 target Achvarasdal - stereo-2 - standoff near 3 cm - image 1 in 8-image relative focus stack																	
			3413MH0000224002120119300																	
			1193 target Achvarasdal - stereo-2 - standoff near 3 cm - image 2 in 8-image relative focus stack																	
			3413MH0000224002120119400																	
			1194 target Achvarasdal - stereo-2 - standoff near 3 cm - image 3 in 8-image relative focus stack																	
			3413MH0000224002120119500																	
			1195 target Achvarasdal - stereo-2 - standoff near 3 cm - image 4 in 8-image relative focus stack																	
			3413MH0000224002120119600																	
			1196 target Achvarasdal - stereo-2 - standoff near 3 cm - image 5 in 8-image relative focus stack																	
			3413MH0000224002120119700																	
			1197 target Achvarasdal - stereo-2 - standoff near 3 cm - image 6 in 8-image relative focus stack																	
			3413MH0000224002120119800																	
			1198 target Achvarasdal - stereo-2 - standoff near 3 cm - image 7 in 8-image relative focus stack																	
			3413MH0000224002120119900																	
			1199 target Achvarasdal - stereo-2 - standoff near 3 cm - image 8 in 8-image relative focus stack																	
mhl00227	Rover Left Front Wheel		3413MH0000227000120120000																	
			1200 rover left from wheel contact with surface - rover stability assessment - target at about 112 cm - manual focus at motor count 12660																	
			3413MH0000227000120120100																	
			1201 target Achvarasdal - stereo-2 - standoff near 3 cm - focus stack acquired sol 3413 with MSL_CAMERA_PRODUCT_IDs 1192-1199 - best focus image product																	
			3413MH00002270001201202000																	
			1202 target Achvarasdal - stereo-2 - standoff near 3 cm - focus stack acquired sol 3413 with MSL_CAMERA_PRODUCT_IDs 1192-1199 - range map product																	
			3413MH00002270001201203000																	
			1203 target Achvarasdal - stereo-1 - standoff near 3 cm - focus stack acquired sol 3413 with MSL_CAMERA_PRODUCT_IDs 1192-1199 - best focus image product																	
			3413MH00002270001201204000																	
			1204 target Achvarasdal - stereo-1 - standoff near 3 cm - focus stack acquired sol 3413 with MSL_CAMERA_PRODUCT_IDs 1192-1199 - range map product																	
mhl00227	Focus Merges		3413MH00002270001201205000																	
			1205 target Appleby - standoff near 2 cm - focus stack acquired sol 3413 with MSL_CAMERA_PRODUCT_IDs 1170-1177 - best focus image product																	
			3413MH00002270001201206000																	
			1206 target Appleby - standoff near 2 cm - focus stack acquired sol 3413 with MSL_CAMERA_PRODUCT_IDs 1170-1177 - range map product																	
			3413MH00002270001201207000																	
			1207 target Appleby - stereo-2 - standoff near 5 cm - focus stack acquired sol 3413 with MSL_CAMERA_PRODUCT_IDs 1160-1167 - best focus image product																	
			3413MH00002270001201208000																	
			1208 target Appleby - stereo-2 - standoff near 5 cm - focus stack acquired sol 3413 with MSL_CAMERA_PRODUCT_IDs 1160-1167 - range map product																	
			3413MH00002270001201209000																	
			1209 target Appleby - stereo-1 - standoff near 5 cm - focus stack acquired sol 3413 with MSL_CAMERA_PRODUCT_IDs 1150-1157 - best focus image product																	
			3413MH00002270001201201000																	
			1210 target Appleby - stereo-1 - standoff near 5 cm - focus stack acquired sol 3413 with MSL_CAMERA_PRODUCT_IDs 1150-1157 - range map product																	

updated: 21\_April\_2022

Sol 3415 - MAHLI Images			
		acquired/perform date(s)	2022-04-21T14:44:22
		camera position:	4
		camera parent images	32
		focus merges performed	3
		total focus merge products	3
		total parent images + focus merge products	35
		summary of MAHLI activities:	MAHLI imaged the target Oosta and the focus stack images were merged.
mnhD0190	Oosta ~25 cm standoff	3415MH0001900001201211C00	1211 autofocus sub-frame for target Oosta - standoff near 25 cm
mnhD0190	Oosta ~25 cm standoff	3415MH0001900001201212C00	1212 target Oosta - standoff near 25 cm
mnhD0173	Oosta stereo-1 ~45 mm standoff	3415MH0001730001201213C00	1213 autofocus sub-frame for target Oosta - stereo-1 - standoff near 45 mm
mnhD0173	Oosta stereo-1 ~45 mm standoff	3415MH0001730011201214C00	1214 target Oosta - stereo-1 - standoff near 45 mm
mnhD0173	Oosta stereo-1 ~45 mm standoff	3415MH0001730021201215C00	1215 target Oosta - stereo-1 - standoff near 45 mm - image 1 in 8-image relative focus stack
mnhD0173	Oosta stereo-1 ~45 mm standoff	3415MH0001730021201216C00	1216 target Oosta - stereo-1 - standoff near 45 mm - image 2 in 8-image relative focus stack
mnhD0173	Oosta stereo-1 ~45 mm standoff	3415MH0001730021201217C00	1217 target Oosta - stereo-1 - standoff near 45 mm - image 3 in 8-image relative focus stack
mnhD0173	Oosta stereo-1 ~45 mm standoff	3415MH0001730021201218C00	1218 target Oosta - stereo-1 - standoff near 45 mm - image 4 in 8-image relative focus stack
mnhD0173	Oosta stereo-1 ~45 mm standoff	3415MH0001730021201219C00	1219 target Oosta - stereo-1 - standoff near 45 mm - image 5 in 8-image relative focus stack
mnhD0173	Oosta stereo-1 ~45 mm standoff	3415MH0001730021201220C00	1220 target Oosta - stereo-1 - standoff near 45 mm - image 6 in 8-image relative focus stack
mnhD0173	Oosta stereo-1 ~45 mm standoff	3415MH0001730021201221C00	1221 target Oosta - stereo-1 - standoff near 45 mm - image 7 in 8-image relative focus stack
mnhD0173	Oosta stereo-1 ~45 mm standoff	3415MH0001730021201222C00	1222 target Oosta - stereo-1 - standoff near 45 mm - image 8 in 8-image relative focus stack
mnhD0173	Oosta stereo-2 ~45 mm standoff	3415MH0001730001201223C00	1223 autofocus sub-frame for target Oosta - stereo-2 - standoff near 45 mm
mnhD0173	Oosta stereo-2 ~45 mm standoff	3415MH0001730011201224C00	1224 target Oosta - stereo-2 - standoff near 45 mm
mnhD0173	Oosta stereo-2 ~45 mm standoff	3415MH0001730021201225C00	1225 target Oosta - stereo-2 - standoff near 45 mm - image 1 in 8-image relative focus stack
mnhD0173	Oosta stereo-2 ~45 mm standoff	3415MH0001730021201226C00	1226 target Oosta - stereo-2 - standoff near 45 mm - image 2 in 8-image relative focus stack
mnhD0173	Oosta stereo-2 ~45 mm standoff	3415MH0001730021201227C00	1227 target Oosta - stereo-2 - standoff near 45 mm - image 3 in 8-image relative focus stack
mnhD0173	Oosta stereo-2 ~45 mm standoff	3415MH0001730021201228C00	1228 target Oosta - stereo-2 - standoff near 45 mm - image 4 in 8-image relative focus stack
mnhD0173	Oosta stereo-2 ~45 mm standoff	3415MH0001730021201229C00	1229 target Oosta - stereo-2 - standoff near 45 mm - image 5 in 8-image relative focus stack
mnhD0173	Oosta stereo-2 ~45 mm standoff	3415MH0001730021201230C00	1230 target Oosta - stereo-2 - standoff near 45 mm - image 6 in 8-image relative focus stack
mnhD0173	Oosta stereo-2 ~45 mm standoff	3415MH0001730021201231C00	1231 target Oosta - stereo-2 - standoff near 45 mm - image 7 in 8-image relative focus stack
mnhD0173	Oosta stereo-2 ~45 mm standoff	3415MH0001730021201232C00	1232 target Oosta - stereo-2 - standoff near 45 mm - image 8 in 8-image relative focus stack
mnhD0311	Oosta ~15 mm standoff	3415MH0003110001201233C00	1233 autofocus sub-frame for target Oosta - standoff near 15 mm
mnhD0311	Oosta ~15 mm standoff	3415MH0003110011201234C00	1234 target Oosta - standoff near 15 mm
mnhD0311	Oosta ~15 mm standoff	3415MH0003110021201235C00	1235 target Oosta - standoff near 15 mm - image 1 in 8-image relative focus stack
mnhD0311	Oosta ~15 mm standoff	3415MH0003110021201236C00	1236 target Oosta - standoff near 15 mm - image 2 in 8-image relative focus stack
mnhD0311	Oosta ~15 mm standoff	3415MH0003110021201237C00	1237 target Oosta - standoff near 15 mm - image 3 in 8-image relative focus stack
mnhD0311	Oosta ~15 mm standoff	3415MH0003110021201238C00	1238 target Oosta - standoff near 15 mm - image 4 in 8-image relative focus stack
mnhD0311	Oosta ~15 mm standoff	3415MH0003110021201239C00	1239 target Oosta - standoff near 15 mm - image 5 in 8-image relative focus stack
mnhD0311	Oosta ~15 mm standoff	3415MH0003110021201240C00	1240 target Oosta - standoff near 15 mm - image 6 in 8-image relative focus stack
mnhD0311	Oosta ~15 mm standoff	3415MH0003110021201241C00	1241 target Oosta - standoff near 15 mm - image 7 in 8-image relative focus stack
mnhD0311	Oosta ~15 mm standoff	3415MH0003110021201242C00	1242 target Oosta - standoff near 15 mm - image 8 in 8-image relative focus stack
mnhD0393	Focus Merges	3415MH0001930001201243H00	1243 target Oosta - standoff near 15 mm - focus stack acquired sol 3415 with MSL_CAMERA_PRODUCT_IDs 1239-1242 - best focus image product
mnhD0393	Focus Merges	3415MH0001930001201244S00	1244 target Oosta - standoff near 15 mm - focus stack acquired sol 3415 with MSL_CAMERA_PRODUCT_IDs 1235-1242 - range map product
mnhD0393	Focus Merges	3415MH0001930001201245R00	1245 target Oosta - stereo-2 - standoff near 45 mm - focus stack acquired sol 3415 with MSL_CAMERA_PRODUCT_IDs 1225-1232 - best focus image product
mnhD0393	Focus Merges	3415MH0001930001201246S00	1246 target Oosta - stereo-2 - standoff near 45 mm - focus stack acquired sol 3415 with MSL_CAMERA_PRODUCT_IDs 1225-1232 - range map product
mnhD0393	Focus Merges	3415MH0001930001201247R00	1247 target Oosta - stereo-1 - standoff near 45 mm - focus stack acquired sol 3415 with MSL_CAMERA_PRODUCT_IDs 1215-1222 - best focus image product
mnhD0393	Focus Merges	3415MH0001930001201248S00	1248 target Oosta - stereo-1 - standoff near 45 mm - focus stack acquired sol 3415 with MSL_CAMERA_PRODUCT_IDs 1215-1222 - range map product

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<b>Sol 3417 - MAHLI Images</b>	acquired/perform date(s)	18-Mar-22	
	camera position	4	Image ID: black = best, least-compressed version receive as of date at upper left; orange = only a thumbnail has been received
	total parent images	32	
	focus merges performed	5	CPID:
	total focus merge products	1	Camera Data Product Identifier = MSL_CAMERA_PRODUCT_ID in POS archive product labels
	total parent images + focus merge products	38	
summary of MAHLI activities:			
	MAHLI imaged the target Knott and the focus stack images were merged.		
Sequence	Camera Position	Image ID	CPID
mhl00190	Knott ~25 cm standoff	3417MH000190001201249C00	1249 autofocus sub-frame for target Knott - standoff near 25 cm
		3417MH000190001201250C00	1250 target Knott - standoff near 25 cm
mhl00297	Knott stereo-1 ~45 mm standoff	3417MH0002970001201251C00	1251 autofocus sub-frame for target Knott - stereo-1 - standoff near 45 mm
		3417MH0002970011201252C00	1252 target Knott - stereo-1 - standoff near 45 mm
		3417MH0002970021201253C00	1253 target Knott - stereo-1 - standoff near 45 mm - image 1 in 8-image relative focus stack
		3417MH0002970021201254C00	1254 target Knott - stereo-1 - standoff near 45 mm - image 2 in 8-image relative focus stack
		3417MH0002970021201255C00	1255 target Knott - stereo-1 - standoff near 45 mm - image 3 in 8-image relative focus stack
		3417MH0002970021201256C00	1256 target Knott - stereo-1 - standoff near 45 mm - image 4 in 8-image relative focus stack
		3417MH0002970021201257C00	1257 target Knott - stereo-1 - standoff near 45 mm - image 5 in 8-image relative focus stack
		3417MH0002970021201258C00	1258 target Knott - stereo-1 - standoff near 45 mm - image 6 in 8-image relative focus stack
		3417MH0002970021201259C00	1259 target Knott - stereo-1 - standoff near 45 mm - image 7 in 8-image relative focus stack
		3417MH0002970021201260C00	1260 target Knott - stereo-1 - standoff near 45 mm - image 8 in 8-image relative focus stack
mhl00297	Knott stereo-2 ~45 mm standoff	3417MH0002970001201261C00	1261 autofocus sub-frame for target Knott - stereo-2 - standoff near 45 mm
		3417MH0002970011201262C00	1262 target Knott - stereo-2 - standoff near 45 mm
		3417MH0002970021201263C00	1263 target Knott - stereo-2 - standoff near 45 mm - image 1 in 8-image relative focus stack
		3417MH0002970021201264C00	1264 target Knott - stereo-2 - standoff near 45 mm - image 2 in 8-image relative focus stack
		3417MH0002970021201265C00	1265 target Knott - stereo-2 - standoff near 45 mm - image 3 in 8-image relative focus stack
		3417MH0002970021201266C00	1266 target Knott - stereo-2 - standoff near 45 mm - image 4 in 8-image relative focus stack
		3417MH0002970021201267C00	1267 target Knott - stereo-2 - standoff near 45 mm - image 5 in 8-image relative focus stack
		3417MH0002970021201268C00	1268 target Knott - stereo-2 - standoff near 45 mm - image 6 in 8-image relative focus stack
		3417MH0002970021201269C00	1269 target Knott - stereo-2 - standoff near 45 mm - image 7 in 8-image relative focus stack
		3417MH0002970021201270C00	1270 target Knott - stereo-2 - standoff near 45 mm - image 8 in 8-image relative focus stack
mhl00419	Knott ~6 mm standoff	3417MH0004190001201271C00	1271 autofocus sub-frame for target Knott - standoff near 6 mm
		3417MH0004190011201272C00	1272 target Knott - standoff near 6 mm
		3417MH0004190021201273C00	1273 target Knott - standoff near 6 mm - image 1 in 8-image relative focus stack
		3417MH0004190021201274C00	1274 target Knott - standoff near 6 mm - image 2 in 8-image relative focus stack
		3417MH0004190021201275C00	1275 target Knott - standoff near 6 mm - image 3 in 8-image relative focus stack
		3417MH0004190021201276C00	1276 target Knott - standoff near 6 mm - image 4 in 8-image relative focus stack
		3417MH0004190021201277C00	1277 target Knott - standoff near 6 mm - image 5 in 8-image relative focus stack
		3417MH0004190021201278C00	1278 target Knott - standoff near 6 mm - image 6 in 8-image relative focus stack
		3417MH0004190021201279C00	1279 target Knott - standoff near 6 mm - image 7 in 8-image relative focus stack
		3417MH0004190021201280C00	1280 target Knott - standoff near 6 mm - image 8 in 8-image relative focus stack
mhl00393	Focus Merges	3417MH0001930001201281C00	1281 target Knott - standoff near 6 mm - focus stack acquired sol 3417 with MSL_CAMERA_PRODUCT_IDS 1273-1280 - best focus image product
		3417MH0001930001201282C00	1282 target Knott - standoff near 6 mm - focus stack acquired sol 3417 with MSL_CAMERA_PRODUCT_IDS 1273-1280 - range map product
		3417MH0001930001201283C00	1283 target Knott - stereo-2 - standoff near 45 mm - focus stack acquired sol 3417 with MSL_CAMERA_PRODUCT_IDS 1263-1270 - best focus image product
		3417MH0001930001201284C00	1284 target Knott - stereo-2 - standoff near 45 mm - focus stack acquired sol 3417 with MSL_CAMERA_PRODUCT_IDS 1263-1270 - range map product
		3417MH0001930001201285C00	1285 target Knott - stereo-1 - standoff near 45 mm - focus stack acquired sol 3417 with MSL_CAMERA_PRODUCT_IDS 1253-1260 - best focus image product
		3417MH0001930001201286C00	1286 target Knott - stereo-1 - standoff near 45 mm - focus stack acquired sol 3417 with MSL_CAMERA_PRODUCT_IDS 1253-1260 - range map product

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Sol 3419 - MAHLI Images			
	Sequence	camera position:	Image ID
Sol 3419 - MAHLI Images		acquired/perform date(s)	20-Mar-22
Sol 3419 - MAHLI Images		camera position:	112
Sol 3419 - MAHLI Images		Image ID:	black = best, least-compressed version receive as of date at upper left; orange = only a thumbnail has been received
Sol 3419 - MAHLI Images		focus merges performed	112
Sol 3419 - MAHLI Images		CPDID:	0
Sol 3419 - MAHLI Images		total focus merge products	0
Sol 3419 - MAHLI Images		total parent images + focus merge products	112
Sol 3419 - MAHLI Images		summary of MAHLI activities:	MAHLI imaged the target Blackadder, which includes a 9x1 mosaic from approximately 5 cm standoff.
Sequence	Camera Position	Image ID	CPDID
mhl00148	Blackadder ~10 cm standoff	3419MH00011480001201287C000	1287
mhl00148	Blackadder ~10 cm standoff	3419MH00011480001201288C000	1288
mhl00173	Blackadder APXS spot 2 mosaic position 1 of 9 stereo-1 ~5 cm standoff	3419MH00011730001201289C000	1289
		3419MH00011730011201290C000	1290
		3419MH00011730021201291C000	1291
		3419MH00011730021201292C000	1292
		3419MH00011730021201293C000	1293
		3419MH00011730021201294C000	1294
		3419MH00011730021201295C000	1295
		3419MH00011730021201296C000	1296
		3419MH00011730021201297C000	1297
		3419MH00011730021201298C000	1298
mhl00173	Blackadder APXS spot 2 mosaic position 1 of 9 stereo-2 ~5 cm standoff	3419MH00011730001201299C000	1299
		3419MH00011730011201300C000	1300
		3419MH00011730021201301C000	1301
		3419MH00011730021201302C000	1302
		3419MH00011730021201303C000	1303
		3419MH00011730021201304C000	1304
		3419MH00011730021201305C000	1305
		3419MH00011730021201306C000	1306
		3419MH00011730021201307C000	1307
		3419MH00011730021201308C000	1308
mhl00743	Blackadder APXS spot 2 ~1 cm standoff	3419MH0007430001201309C000	1309
		3419MH0007430011201310C000	1310
		3419MH0007430021201311C000	1311
		3419MH0007430021201312C000	1312
		3419MH0007430021201313C000	1313
		3419MH0007430021201314C000	1314
		3419MH0007430021201315C000	1315
		3419MH0007430021201316C000	1316
		3419MH0007430021201317C000	1317
		3419MH0007430021201318C000	1318
mhl00173	Blackadder APXS spot 1 mosaic position 2 of 9 ~5 cm standoff	3419MH00011730001201319C000	1319
		3419MH00011730011201320C000	1320
		3419MH00011730021201321C000	1321
		3419MH00011730021201322C000	1322
		3419MH00011730021201323C000	1323
		3419MH00011730021201324C000	1324
		3419MH00011730021201325C000	1325
		3419MH00011730021201326C000	1326
		3419MH00011730021201327C000	1327
		3419MH00011730021201328C000	1328
mhl00173	Blackadder mosaic position 9 of 9 ~4 cm standoff	3419MH00011730001201329C000	1329
		3419MH00011730011201330C000	1330
		3419MH00011730021201331C000	1331
		3419MH00011730021201332C000	1332
		3419MH00011730021201333C000	1333
		3419MH00011730021201334C000	1334
		3419MH00011730021201335C000	1335
		3419MH00011730021201336C000	1336
		3419MH00011730021201337C000	1337
		3419MH00011730021201338C000	1338
mhl00173	Blackadder mosaic position 8 of 9 ~4 cm standoff	3419MH00011730001201339C000	1339
		3419MH00011730011201340C000	1340
		3419MH00011730021201341C000	1341
		3419MH00011730021201342C000	1342
		3419MH00011730021201343C000	1343
		3419MH00011730021201344C000	1344
		3419MH00011730021201345C000	1345
		3419MH00011730021201346C000	1346
		3419MH00011730021201347C000	1347
		3419MH00011730021201348C000	1348

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Sol 3420 - MAHLI Images			
Sequence	Camera Position	Image ID	COPID
acquired/perform date(s)			21 Mar 22
camera position:			0
Image ID:			black = best, least-compressed version receive as of date at upper left; orange = only a thumbnail has been received
total parent images			11
COPID:			
total focus merge products			21
Camera Data Product Identifier = MSL_CAMERA_PRODUCT_ID in POS archive product labels			
total parent images + focus merge products			22
summary of MAHLI activities:			
Focus stack images from Sol 3419 were merged.			
mhlID0449	Focus Merges	3420MH0004490001201399800	1399
		target Blackadder - mosaic position 3 of 9 - standoff near 5 cm - focus stack acquired sol 3419 with MSL_CAMERA_PRODUCT_IDS 1391-1398 - best focus image product	
		3420MH0004490001201405000	1400
		target Blackadder - mosaic position 3 of 9 - standoff near 5 cm - focus stack acquired sol 3419 with MSL_CAMERA_PRODUCT_IDS 1391-1398 - range map product	
		3420MH0004490001201401800	1401
		target Blackadder - mosaic position 4 of 9 - standoff near 5 cm - focus stack acquired sol 3419 with MSL_CAMERA_PRODUCT_IDS 1381-1388 - best focus image product	
		3420MH0004490001201402500	1402
		target Blackadder - mosaic position 4 of 9 - standoff near 5 cm - focus stack acquired sol 3419 with MSL_CAMERA_PRODUCT_IDS 1381-1388 - range map product	
		3420MH0004490001201403800	1403
		target Blackadder - mosaic position 5 of 9 - standoff near 45 mm - focus stack acquired sol 3419 with MSL_CAMERA_PRODUCT_IDS 1371-1378 - best focus image product	
		3420MH00044900012014045000	1404
		target Blackadder - mosaic position 5 of 9 - standoff near 45 mm - focus stack acquired sol 3419 with MSL_CAMERA_PRODUCT_IDS 1371-1378 - range map product	
		3420MH0004490001201405000	1405
		target Blackadder - mosaic position 6 of 9 - standoff near 45 mm - focus stack acquired sol 3419 with MSL_CAMERA_PRODUCT_IDS 1361-1368 - best focus image product	
		3420MH0004490001201406500	1406
		target Blackadder - mosaic position 6 of 9 - standoff near 45 mm - focus stack acquired sol 3419 with MSL_CAMERA_PRODUCT_IDS 1361-1368 - range map product	
		3420MH0004490001201407800	1407
		target Blackadder - mosaic position 7 of 9 - standoff near 5 cm - focus stack acquired sol 3419 with MSL_CAMERA_PRODUCT_IDS 1351-1358 - best focus image product	
		3420MH0004490001201408000	1408
		target Blackadder - mosaic position 7 of 9 - standoff near 5 cm - focus stack acquired sol 3419 with MSL_CAMERA_PRODUCT_IDS 1351-1358 - range map product	
		3420MH0004490001201409800	1409
		target Blackadder - mosaic position 8 of 9 - standoff near 4 cm - focus stack acquired sol 3419 with MSL_CAMERA_PRODUCT_IDS 1341-1348 - best focus image product	
		3420MH0004490001201410500	1410
		target Blackadder - mosaic position 8 of 9 - standoff near 4 cm - focus stack acquired sol 3419 with MSL_CAMERA_PRODUCT_IDS 1341-1348 - range map product	
		3420MH0004490001201411800	1411
		target Blackadder - mosaic position 9 of 9 - standoff near 4 cm - focus stack acquired sol 3419 with MSL_CAMERA_PRODUCT_IDS 1331-1338 - best focus image product	
		3420MH0004490001201425000	1412
		target Blackadder - mosaic position 9 of 9 - standoff near 4 cm - focus stack acquired sol 3419 with MSL_CAMERA_PRODUCT_IDS 1331-1338 - range map product	
		3420MH0004490001201413800	1413
		target Blackadder - APXS spot 1 - mosaic position 2 of 9 - standoff near 5 cm - focus stack acquired sol 3419 with MSL_CAMERA_PRODUCT_IDS 1321-1328 - best focus image product	
		3420MH00044900012014145000	1414
		target Blackadder - APXS spot 1 - mosaic position 2 of 9 - standoff near 5 cm - focus stack acquired sol 3419 with MSL_CAMERA_PRODUCT_IDS 1321-1328 - range map product	
		3420MH0004490001201415800	1415
		target Blackadder - APXS spot 2 - standoff near 1 cm - focus stack acquired sol 3419 with MSL_CAMERA_PRODUCT_IDS 1331-1318 - best focus image product	
		3420MH0004490001201416500	1416
		target Blackadder - APXS spot 2 - standoff near 1 cm - focus stack acquired sol 3419 with MSL_CAMERA_PRODUCT_IDS 1331-1318 - range map product	
		3420MH0004490001201417800	1417
		target Blackadder - APXS spot 2 - mosaic position 1 of 9 - stereo-2 - standoff near 5 cm - focus stack acquired sol 3419 with MSL_CAMERA_PRODUCT_IDS 1301-1308 - best focus image product	
		3420MH0004490001201418500	1418
		target Blackadder - APXS spot 2 - mosaic position 1 of 9 - stereo-2 - standoff near 5 cm - focus stack acquired sol 3419 with MSL_CAMERA_PRODUCT_IDS 1301-1308 - range map product	
		3420MH0004490001201419800	1419
		target Blackadder - APXS spot 2 - mosaic position 1 of 9 - stereo-1 - standoff near 5 cm - focus stack acquired sol 3419 with MSL_CAMERA_PRODUCT_IDS 1291-1298 - best focus image product	
		3420MH0004490001201420500	1420
		target Blackadder - APXS spot 2 - mosaic position 1 of 9 - stereo-1 - standoff near 5 cm - focus stack acquired sol 3419 with MSL_CAMERA_PRODUCT_IDS 1291-1298 - range map product	

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Sol 3421 - MAHLI Images			
Sequence	Camera Position	Image ID	COPID
mnhD0137	Calder before DRT ~25 cm standoff	3421MH000159001201201421C00	1421
		3421MH000159001201201422C00	1422
mnhD0152	Calder before DRT APXS spot 1 stereo-1 ~5 cm standoff	3421MH0001520001201423C00	1423
		3421MH0001520001201424C00	1424
		3421MH0001520001201425C00	1425
		3421MH00015200021201426C00	1426
		3421MH00015200021201427C00	1427
		3421MH00015200021201428C00	1428
		3421MH0001520001201429C00	1429
		3421MH00015200021201430C00	1430
		3421MH00015200021201431C00	1431
		3421MH00015200021201432C00	1432
mnhD0152	Calder before DRT APXS spot 1 stereo-2 ~5 cm standoff	3421MH0001520001201433C00	1433
		3421MH0001520001201434C00	1434
		3421MH00015200021201435C00	1435
		3421MH00015200021201436C00	1436
		3421MH00015200021201437C00	1437
		3421MH00015200021201438C00	1438
		3421MH00015200021201439C00	1439
		3421MH00015200021201440C00	1440
		3421MH00015200021201441C00	1441
		3421MH00015200021201442C00	1442
mnhD0796	Calder before DRT APXS spot 1 ~1 cm standoff	3421MH0007960001201443C00	1443
		3421MH0007960001201444C00	1444
		3421MH00079600021201450C00	1445
		3421MH00079600021201446C00	1446
		3421MH00079600021201447C00	1447
		3421MH0007960002120148C00	1448
		3421MH0007960002120149C00	1449
		3421MH00079600021201495C00	1450
		3421MH0007960002120151C00	1451
		3421MH00079600021201452C00	1452
mnhD0152	Calder before DRT APXS spot 2 ~5 cm standoff	3421MH0001520001201493C00	1453
		3421MH0001520001201454C00	1454
		3421MH00015200021201455C00	1455
		3421MH00015200021201456C00	1456
		3421MH00015200021201457C00	1457
		3421MH00015200021201458C00	1458
		3421MH00015200021201459C00	1459
		3421MH00015200021201460C00	1460
		3421MH00015200021201461C00	1461
		3421MH00015200021201462C00	1462
mnhD0151	Focus Merges	3421MH0001530001201463H00	1463
		3421MH0001530001201464H00	1464
		3421MH0001530001201465H00	1465
		3421MH0001530001201466H00	1466
		3421MH00015300021201467H00	1467
		3421MH00015300021201468H00	1468
		3421MH00015300021201469H00	1469
		3421MH00015300021201470H00	1470

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		3422MH0000870001201538C00	1538	autofocus sub-frame for target Ashkirk - standoff near 25 mm
		3422MH0000870001201539C00	1539	target Ashkirk - standoff near 25 mm
		3422MH0000870001201540C00	1540	target Ashkirk - standoff near 25 mm - image 1 in 8-image relative focus stack
		3422MH0000870001201541C00	1541	target Ashkirk - standoff near 25 mm - image 2 in 8-image relative focus stack
		3422MH0000870001201542C00	1542	target Ashkirk - standoff near 25 mm - image 3 in 8-image relative focus stack
		3422MH0000870001201543C00	1543	target Ashkirk - standoff near 25 mm - image 4 in 8-image relative focus stack
		3422MH0000870001201544C00	1544	target Ashkirk - standoff near 25 mm - image 5 in 8-image relative focus stack
		3422MH0000870001201545C00	1545	target Ashkirk - standoff near 25 mm - image 6 in 8-image relative focus stack
		3422MH0000870001201546C00	1546	target Ashkirk - standoff near 25 mm - image 7 in 8-image relative focus stack
		3422MH0000870001201547C00	1547	target Ashkirk - standoff near 25 mm - image 8 in 8-image relative focus stack
mhl00307	Ashkirk ~25 mm standoff	3422MH0006190001201548C00	1548	autofocus sub-frame for target Breakyneck - stereo-1 - standoff near 25 cm
mhl00619	Breakyneck stereo-1 ~25 cm standoff	3422MH0006190001201549C00	1549	target Breakyneck - stereo-1 - standoff near 25 cm
mhl00619	Breakyneck stereo-2 ~25 cm standoff	3422MH0006190001201550C00	1550	autofocus sub-frame for target Breakyneck - stereo-2 - standoff near 25 cm
		3422MH0006190001201551C00	1551	target Breakyneck - stereo-2 - standoff near 25 cm
		3422MH0001710001201552N00	1552	target Ashkirk - standoff near 25 mm - focus stack acquired sol 3422 with MSL_CAMERA_PRODUCT_IDs 1540-1547 - best focus image product
		3422MH0001710001201553N00	1553	target Ashkirk - standoff near 25 mm - focus stack acquired sol 3422 with MSL_CAMERA_PRODUCT_IDs 1540-1547 - range map product
		3422MH0001710001201554N00	1554	target Ashkirk - stereo-2 - standoff near 5 cm - focus stack acquired sol 3422 with MSL_CAMERA_PRODUCT_IDs 1530-1537 - best focus image product
		3422MH0001710001201555N00	1555	target Ashkirk - stereo-2 - standoff near 5 cm - focus stack acquired sol 3422 with MSL_CAMERA_PRODUCT_IDs 1530-1537 - range map product
		3422MH0001710001201556N00	1556	target Ashkirk - stereo-1 - standoff near 5 cm - focus stack acquired sol 3422 with MSL_CAMERA_PRODUCT_IDs 1520-1527 - best focus image product
		3422MH0001710001201557N00	1557	target Ashkirk - stereo-1 - standoff near 5 cm - focus stack acquired sol 3422 with MSL_CAMERA_PRODUCT_IDs 1520-1527 - range map product
		3422MH0001710001201558N00	1558	target Scandal_Beck - standoff near 14 cm - focus stack acquired sol 3422 with MSL_CAMERA_PRODUCT_IDs 1508-1515 - best focus image product
		3422MH0001710001201559N00	1559	target Scandal_Beck - standoff near 14 cm - focus stack acquired sol 3422 with MSL_CAMERA_PRODUCT_IDs 1508-1515 - range map product
		3422MH0001710001201560N00	1560	target Calder - after dust removal tool (DRT) - standoff near 1 cm - focus stack acquired sol 3422 with MSL_CAMERA_PRODUCT_IDs 1495-1502 - best focus image product
		3422MH0001710001201561N00	1561	target Calder - after dust removal tool (DRT) - standoff near 1 cm - focus stack acquired sol 3422 with MSL_CAMERA_PRODUCT_IDs 1495-1502 - range map product
		3422MH0001710001201562N00	1562	target Calder - after dust removal tool (DRT) - stereo-2 - standoff near 5 cm - focus stack acquired sol 3422 with MSL_CAMERA_PRODUCT_IDs 1485-1492 - best focus image product
		3422MH0001710001201563N00	1563	target Calder - after dust removal tool (DRT) - stereo-2 - standoff near 5 cm - focus stack acquired sol 3422 with MSL_CAMERA_PRODUCT_IDs 1485-1492 - range map product
		3422MH0001710001201564N00	1564	target Calder - after dust removal tool (DRT) - stereo-1 - standoff near 5 cm - focus stack acquired sol 3422 with MSL_CAMERA_PRODUCT_IDs 1475-1482 - best focus image product
		3422MH0001710001201565N00	1565	target Calder - after dust removal tool (DRT) - stereo-1 - standoff near 5 cm - focus stack acquired sol 3422 with MSL_CAMERA_PRODUCT_IDs 1475-1482 - range map product

updated: 06\_June\_2022

Sol 3423 - MAHLI Images			
Sequence	Camera Position	Image ID	COPID
		acquired/perform date(s)	24-Mar-23
		camera position:	6
		camera position	52
		focus merges performed	0
		total focus merge products	0
		total parent images + focus merge products	52
		summary of MAHLI activities:	MAHLI imaged the targets Redscarhead and Breakyneck.
mhl00190	Redscarhead ~25 cm standoff	3423MH00019000120156600	1566
		autofocus sub-frame for target Redscarhead - standoff near 25 cm	
		3423MH00019000120156700	1567
		target Redscarhead - standoff near 25 cm	
mhl00224	Redscarhead stereo-1 ~5 cm standoff	3423MH000224000120156800	1568
		autofocus sub-frame for target Redscarhead - stereo-1 - standoff near 5 cm	
		3423MH000224000120156900	1569
		target Redscarhead - stereo-1 - standoff near 5 cm	
		3423MH00022400020120157000	1570
		target Redscarhead - stereo-1 - standoff near 5 cm - image 1 in 8-image relative focus stack	
		3423MH00022400020120157100	1571
		target Redscarhead - stereo-1 - standoff near 5 cm - image 2 in 8-image relative focus stack	
		3423MH00022400020120157200	1572
		target Redscarhead - stereo-1 - standoff near 5 cm - image 3 in 8-image relative focus stack	
		3423MH00022400020120157300	1573
		target Redscarhead - stereo-1 - standoff near 5 cm - image 4 in 8-image relative focus stack	
		3423MH00022400020120157400	1574
		target Redscarhead - stereo-1 - standoff near 5 cm - image 5 in 8-image relative focus stack	
		3423MH00022400020120157500	1575
		target Redscarhead - stereo-1 - standoff near 5 cm - image 6 in 8-image relative focus stack	
		3423MH00022400020120157600	1576
		target Redscarhead - stereo-1 - standoff near 5 cm - image 7 in 8-image relative focus stack	
		3423MH00022400020120157700	1577
		target Redscarhead - stereo-1 - standoff near 5 cm - image 8 in 8-image relative focus stack	
mhl00224	Redscarhead stereo-2 ~5 cm standoff	3423MH000224000120157800	1578
		autofocus sub-frame for target Redscarhead - stereo-2 - standoff near 5 cm	
		3423MH000224000120157900	1579
		target Redscarhead - stereo-2 - standoff near 5 cm	
		3423MH00022400020120158000	1580
		target Redscarhead - stereo-2 - standoff near 5 cm - image 1 in 8-image relative focus stack	
		3423MH00022400020120158100	1581
		target Redscarhead - stereo-2 - standoff near 5 cm - image 2 in 8-image relative focus stack	
		3423MH00022400020120158200	1582
		target Redscarhead - stereo-2 - standoff near 5 cm - image 3 in 8-image relative focus stack	
		3423MH00022400020120158300	1583
		target Redscarhead - stereo-2 - standoff near 5 cm - image 4 in 8-image relative focus stack	
		3423MH00022400020120158400	1584
		target Redscarhead - stereo-2 - standoff near 5 cm - image 5 in 8-image relative focus stack	
		3423MH00022400020120158500	1585
		target Redscarhead - stereo-2 - standoff near 5 cm - image 6 in 8-image relative focus stack	
		3423MH00022400020120158600	1586
		target Redscarhead - stereo-2 - standoff near 5 cm - image 7 in 8-image relative focus stack	
		3423MH00022400020120158700	1587
		target Redscarhead - stereo-2 - standoff near 5 cm - image 8 in 8-image relative focus stack	
mhl00297	Breakyneck stereo-1 ~5 cm standoff	3423MH000297000120158800	1588
		autofocus sub-frame for target Breakyneck - stereo-1 - standoff near 5 cm	
		3423MH000297000120158900	1589
		target Breakyneck - stereo-1 - standoff near 5 cm	
		3423MH00029700020120159000	1590
		target Breakyneck - stereo-1 - standoff near 5 cm - image 1 in 8-image relative focus stack	
		3423MH00029700020120159100	1591
		target Breakyneck - stereo-1 - standoff near 5 cm - image 2 in 8-image relative focus stack	
		3423MH00029700020120159200	1592
		target Breakyneck - stereo-1 - standoff near 5 cm - image 3 in 8-image relative focus stack	
		3423MH00029700020120159300	1593
		target Breakyneck - stereo-1 - standoff near 5 cm - image 4 in 8-image relative focus stack	
		3423MH00029700020120159400	1594
		target Breakyneck - stereo-1 - standoff near 5 cm - image 5 in 8-image relative focus stack	
		3423MH00029700020120159500	1595
		target Breakyneck - stereo-1 - standoff near 5 cm - image 6 in 8-image relative focus stack	
		3423MH00029700020120159600	1596
		target Breakyneck - stereo-1 - standoff near 5 cm - image 7 in 8-image relative focus stack	
		3423MH00029700020120159700	1597
		target Breakyneck - stereo-1 - standoff near 5 cm - image 8 in 8-image relative focus stack	
mhl00297	Breakyneck stereo-2 ~5 cm standoff	3423MH000297000120159800	1598
		autofocus sub-frame for target Breakyneck - stereo-2 - standoff near 5 cm	
		3423MH000297000120159900	1599
		target Breakyneck - stereo-2 - standoff near 5 cm	
		3423MH00029700020120160000	1600
		target Breakyneck - stereo-2 - standoff near 5 cm - image 1 in 8-image relative focus stack	
		3423MH00029700020120160100	1601
		target Breakyneck - stereo-2 - standoff near 5 cm - image 2 in 8-image relative focus stack	
		3423MH00029700020120160200	1602
		target Breakyneck - stereo-2 - standoff near 5 cm - image 3 in 8-image relative focus stack	
		3423MH00029700020120160300	1603
		target Breakyneck - stereo-2 - standoff near 5 cm - image 4 in 8-image relative focus stack	
		3423MH00029700020120160400	1604
		target Breakyneck - stereo-2 - standoff near 5 cm - image 5 in 8-image relative focus stack	
		3423MH00029700020120160500	1605
		target Breakyneck - stereo-2 - standoff near 5 cm - image 6 in 8-image relative focus stack	
		3423MH00029700020120160600	1606
		target Breakyneck - stereo-2 - standoff near 5 cm - image 7 in 8-image relative focus stack	
		3423MH00029700020120160700	1607
		target Breakyneck - stereo-2 - standoff near 5 cm - image 8 in 8-image relative focus stack	
mhl00523	Breakyneck ~1 cm standoff	3423MH000523000120160800	1608
		autofocus sub-frame for target Breakyneck - stereo-2 - standoff near 1 cm	
		3423MH000523000120160900	1609
		target Breakyneck - standoff near 1 cm	
		3423MH00052300020120161000	1610
		target Breakyneck - standoff near 1 cm - image 1 in 8-image relative focus stack	
		3423MH00052300020120161100	1611
		target Breakyneck - standoff near 1 cm - image 2 in 8-image relative focus stack	
		3423MH00052300020120161200	1612
		target Breakyneck - standoff near 1 cm - image 3 in 8-image relative focus stack	
		3423MH00052300020120161300	1613
		target Breakyneck - standoff near 1 cm - image 4 in 8-image relative focus stack	
		3423MH00052300020120161400	1614
		target Breakyneck - standoff near 1 cm - image 5 in 8-image relative focus stack	
		3423MH00052300020120161500	1615
		target Breakyneck - standoff near 1 cm - image 6 in 8-image relative focus stack	
		3423MH00052300020120161600	1616
		target Breakyneck - standoff near 1 cm - image 7 in 8-image relative focus stack	
		3423MH00052300020120161700	1617
		target Breakyneck - standoff near 1 cm - image 8 in 8-image relative focus stack	

## 7 Definitions, conventions, and acronyms

### 7.1 Definitions and conventions

#### **absolute focus stack**

A MAHLI focus stack acquired using a commanded (manual) focus setting. The starting focus position (a stepper motor count), and the incremental change in focus position (a stepper motor count interval) between frames in the focus stack, are specified by instrument commanding.

#### **best focus image product**

A *focus merge product* created onboard the MAHLI instrument from up to 8 *parent images* acquired as a focus stack. The *best focus image product* is a color JPEG that combines the in-focus (or closest to in-focus) elements of the up to 8 *parent images* into a single image. The onboard focus merge software also creates a *range map product*.

#### **focus merge product**

Using the methods described by Edgett et al. (2012), *focus merge products* are created onboard the MAHLI instrument from up to 8 *parent images* acquired as a focus stack. Two products are created, a *best focus image product* and a *range map product*.

#### **MAHLI toolframe +X distance**

Same as *standoff distance*. See *standoff distance*.

#### **parent and child images**

Every MAHLI image has a *parent image*, the picture originally commanded to be acquired. Upon command, the parent image can spawn children (each a *child image*) onboard the instrument. Examples of children include *thumbnail images*, focus merge products, and any version of the image that is compressed differently than the parent (Edgett et al. 2012). While a parent can be an image that was compressed during image acquisition, our best practice since landing on Mars has been to acquire and store (onboard the instrument) most MAHLI images in uncompressed 8-bit form. An uncompressed 8-bit parent image can be commanded for compression some time after acquisition and storage, whereas a parent that was compressed at the time of acquisition cannot be further compressed onboard the instrument. When a parent is stored onboard in uncompressed form, it can be used to create multiple versions of the image, each time with a different compression scheme, for downlink to Earth. Thus, if the image received is over-compressed, we have the option to retrieve it again (as many times as necessary) in a less compressed form. Indeed, the majority of MAHLI images received from Mars have been losslessly compressed children of an uncompressed, 8-bit parent.

#### **range**

Used here in the context of describing a focus merge range map product, this term refers to the distance between the front lens element and in-focus elements of the imaged subject in a given MAHLI focus merge product. As each MAHLI focus stack is acquired at a fixed *working distance*, the range denotes the distance between the camera and the relief elements of the target (*i.e.*, subject), as indicated by grayscale pixel values (data number, DN) in the range map product.

#### **range map product**

A grayscale JPEG image *focus merge product* created onboard the MAHLI instrument from up to 8 *parent images* acquired as a focus stack. The *range map product* accompanies a *best focus*

*image product*. The grayscale pixel values (data number, DN) can be correlated with knowledge of instrument focus, *working distance*, *range*, and pixel scale.

### RATIONALE\_DESC

The term, RATIONALE\_DESC, comes from the NASA PDS archivists. The RATIONALE\_DESC for a given MAHLI image is a text description of the rationale or purpose behind the acquisition of a given MAHLI parent image or onboard focus merge product. Each parent image RATIONALE\_DESC provides information that the MAHLI team desired to communicate to data users, such as the intended image target, intended working or standoff distance, intended purpose of the image (e.g., stereo, mosaic, autofocus sub-frame, range-finding), image position in a focus stack, as well as information regarding how the image supports observations made by other MSL science instruments, especially APXS and ChemCam. The RATIONALE\_DESC for a focus merge product tells the user which images were merged (on what sol they were acquired and images of which CDPIIDs were merged), as well as the focus merge product type (best focus or range map product).

### relative focus stack

A MAHLI focus stack acquired using a starting focus position determined by a preceding instrument command. Usually, this is a focus setting based upon a focus position determined by a preceding autofocus command. The incremental change in focus position (a stepper motor count interval) between frames in the focus stack is specified by instrument commanding.

### RP distance

RP refers to Rover Planners, the personnel who drive the Curiosity rover and operate its robotic arm. RP distance is equivalent to *standoff distance*. See definition of *standoff distance*.

### sol

A Martian day; duration of ~1.027 Earth days.

### Sol

A specific Martian sol during the MSL Curiosity mission. Because it landed during local afternoon, the sol that Curiosity arrived on Mars was designated Sol 0 and the first full sol after landing was Sol 1.

### standoff distance

Also known as the MAHLI *toolframe distance* and *RP distance*, this is range between the subject photographed and the Y, Z plane defined by the two MAHLI contact sensor probe tips when they are not in contact with a surface. In the MAHLI toolframe, the X axis is equivalent to the instrument's optic (z) axis; the distance between the Y, Z plane and the subject is +X; the -X-axis goes from the Y, Z plane into the camera. Standoff *distance* and *RP distance* are equivalent to the +X MAHLI toolframe distance. MAHLI *standoff distance* is 1.9 cm less than *working distance*.

### thumbnail images

Reduced-size versions of MAHLI *parent images* and *focus merge products*, approximately 1/8th size in terms of pixel dimensions. Under most circumstances, a *thumbnail image* is returned to Earth for every *parent image* acquired or *focus merge product* created, whether a full-size version of the *parent image* (or a *child image*) or *focus merge product* is returned or not.

### working distance

A photography term that refers to the range between the front lens element of a camera and the subject imaged. MAHLI working distance is 1.9 cm greater than the toolframe (also known as standoff or RP) distance.

## 7.2 Acronyms

### APXS

Alpha Particle X-ray Spectrometer (science instrument aboard MSL Curiosity rover)

### CDPID or MSL:CAMERA\_PRODUCT\_ID

Each MAHLI parent image acquired or onboard focus merge product created and stored in the instrument's DEA flash memory is assigned a Camera Data Product ID (CDPID). This identifier, plus the time at which (or sol on which) the data were acquired, uniquely identify each image. The CDPID and sol are incorporated into the image ID. Data acquired by the camera but not stored in the DEA have less unique CDPIDs; these acquisitions have generally been rare and easy for the operations team to track (*i.e.*, 12 such images were obtained during Interplanetary Cruise, only one such image was obtained during the first 1000 sols of operations on Mars).

### ChemCam

Chemistry Camera; Laser Induced Breakdown Spectrometer (LIBS) and Remote Microscopic Imager (RMI) (science instrument suite aboard MSL Curiosity rover)

### CheMin

Chemistry and Mineralogy x-ray diffraction (XRD) and x-ray fluorescence (XRF) sample analysis investigation (science instrument aboard MSL Curiosity rover)

### CHIMRA

Collection and Handling for Interior Martian Rock Analysis (sample handling and processing subsystem on Curiosity's robotic arm)

### DEA

Digital Electronics Assembly, the MAHLI electronics housed inside Curiosity's rover body.

### DN

data number (image pixel value)

### DOF

image depth of field

### DRT

Dust Removal Tool (wire brush tool on Curiosity's robotic arm)

### EDR

Experiment Data Record

### Hazcam(s)

Hazard cameras (engineering cameras aboard MSL Curiosity rover)

### ID or image ID

Image identifier (NASA PDS image identifier for MAHLI images and focus merge products).

### JPL-Caltech

Jet Propulsion Laboratory, California Institute of Technology, Pasadena, California, USA

**MAHLI**

Mars Hand Lens Imager (science instrument aboard MSL Curiosity rover)

**MARDI**

Mars Descent Imager (science instrument aboard MSL Curiosity rover)

**Mastcam-34 (also M-34 and M34)**

34 mm focal length Mast Camera (science instrument aboard MSL Curiosity rover)

**Mastcam-100 (also M-100 and M100)**

100 mm focal length Mast Camera (science instrument aboard MSL Curiosity rover)

**MSL**

Mars Science Laboratory

**MSSS**

Malin Space Science Systems, San Diego, California, USA

**NASA**

National Aeronautics and Space Administration (USA space agency)

**Navcam(s)**

Navigation cameras (engineering cameras aboard MSL Curiosity rover)

**PDS**

Planetary Data System (NASA planetary science data archives)

**QMS**

Quadrupole Mass Spectrometer (part of the SAM instrument suite aboard MSL Curiosity rover)

**RDR**

Reduced Data Record

**REMS**

Rover Environment and Monitoring Station (science instrument suite aboard MSL Curiosity rover)

**SAM**

Sample Analysis at Mars (science instrument suite aboard MSL Curiosity rover)

**TLS**

Tunable Laser Spectrometer (part of the SAM instrument suite aboard MSL Curiosity rover)

**USA**

United States of America

**UTC**

Coordinated Universal Time

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