

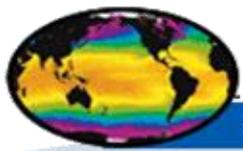
14th Meeting Report for the GHRSSST Long Term Stewardship and Reanalysis Facility (LTSRF) at the US NODC



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Technical Director
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GHRSSST-14, 17-21 June 2013



Regional/Global Task Sharing

GHRSSST Long Term Stewardship and Reanalysis Facility



Interoperable user access via OPeNDAP, TDS WCS, FTP...

User requirements, services and feedback at all levels...

GHRSSST Regional Data Assembly Centers (RDACs)

		NEODAAS	Remote Sensing Systems			

and more...

Level 2, 3 and 4 GHRSSST satellite SST data in COARDS/CF-compliant netCDF with ISO 19115-2 metadata

NODC Serves as LTSRF and RDAC

GHRSSST Global Data Assembly Center (GDAC)

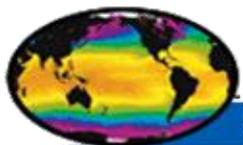
Rolling Archive	Data Ingest	MMR System	Data Tools	Data Access	User Services	

Ancillary fields filled as needed, initial FGDC metadata records appended, data provided in 30-day rolling store

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Data Ingest	CDR Production	Aggregation	Data Access	Metadata	Perpetual Archive	

Perpetual archive services, data access and aggregation, climate data records and complete ISO 19115-2 metadata



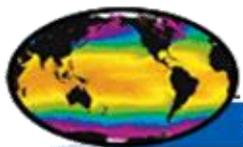
LTSRF Progress

GHRSSST Long Term Stewardship and Reanalysis Facility



	2007	2008	2009	2010	2011	2012	2013*
Products		22	26	27	40	59	60
Accessions		39,048	49,957	59,982	67,906	92,282	95,244
Files		679,000	993,580	1,352,901	1,662,004	2,459,724	2,535,291
Volumes (TB)		13	20	28	34	57	59
Services	ftp http	ftp http	ftp http DAP	ftp http DAP WMS WCS	ftp http DAP WMS WCS LAS	ftp http DAP WMS WCS LAS Geoportal	ftp http DAP WMS WCS LAS Geoportal Granules CWIC

***2013 numbers through 07 June 2013**



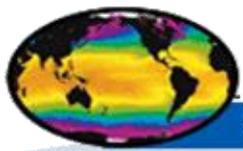
LTSRF Progress

GHRSSST Long Term Stewardship and Reanalysis Facility



	2006	2007	2008	2009	2010	2011	2012	2013*
Files served per day	85	1130	1734	3413	21,956	14,896	28,807	15,869
GB served per day	0.2	1.8	3.9	18.8	66.3	115	73	84
Users served per day	3	7	8	8	11	19	19	21

***2013 numbers projected based on Jan-May statistics.**

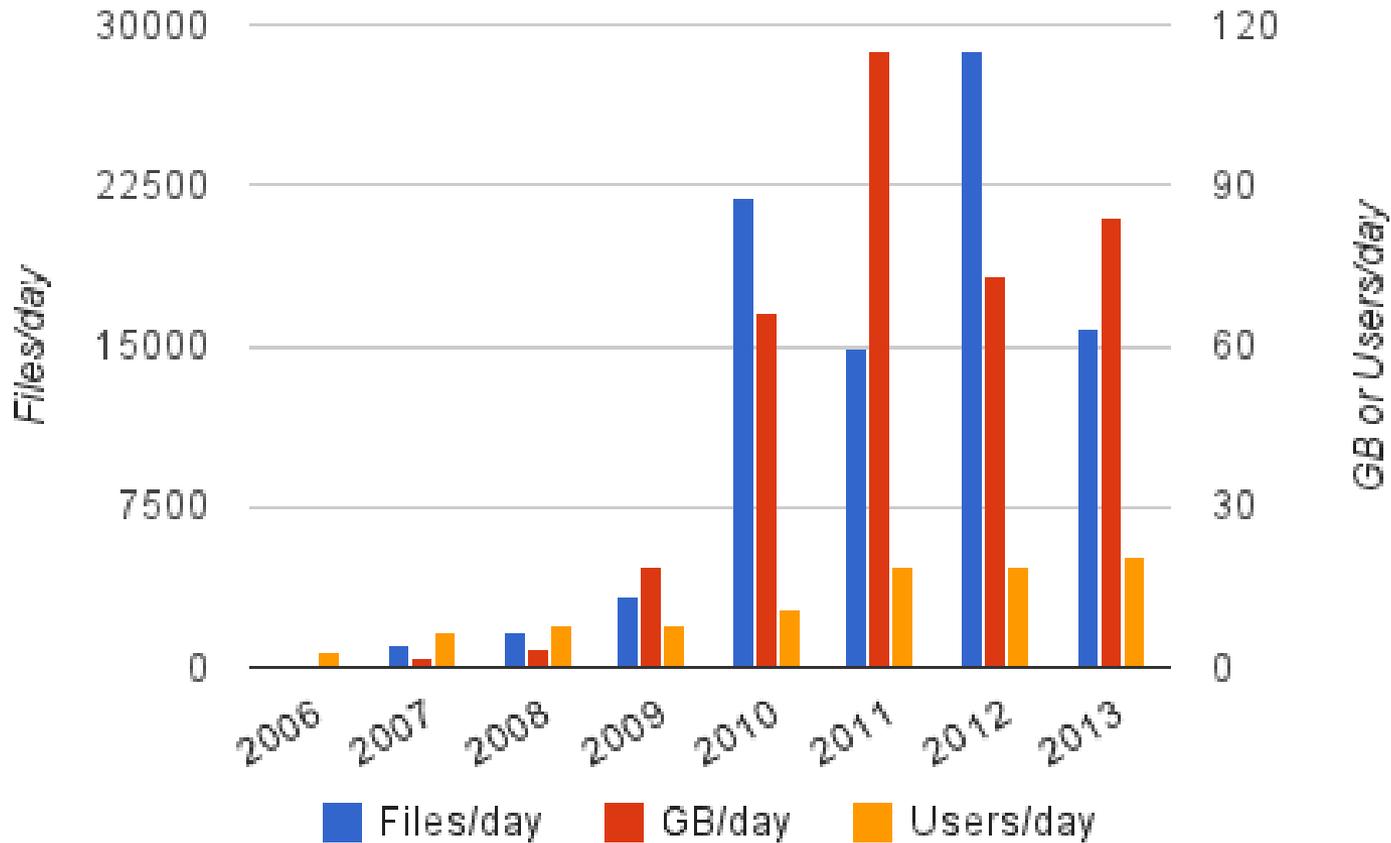


LTSRF Progress

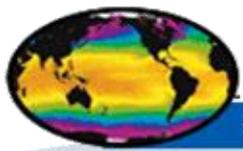
GHRSSST Long Term Stewardship and Reanalysis Facility



GHRSSST LTSRF Access Statistics



***2013 projected based on Jan-May statistics.**



GHRSSST Discovery and Access

GHRSSST Long Term Stewardship and Reanalysis Facility



Human and REST interfaces

Data access links

60 datasets, 53 with granule-level search

Supports CEOS WGISS Integrated Catalog (CWIC)

Most L4 now in LAS

The screenshot shows the NOAA National Oceanographic Data Center (NODC) search interface. At the top, it says "NOAA NATIONAL OCEANOGRAPHIC DATA CENTER (NODC) UNITED STATES DEPARTMENT OF COMMERCE". Below this are navigation tabs: "NODC HOME", "SEARCH THE NODC ARCHIVE", "BROWSE", and "SEARCH TIPS". The main heading is "Search the NODC Archive".

Search instructions: "Search metadata content, e.g. title:SST; use + to require keywords, e.g. +water +temperature; use "" to search for an exact phrase, e.g. 'water temperature' (Search tips!)"

Search form: "title:GHRSSST" with "Search" and "Clear All" buttons.

Additional Options: "Additional Options", "Clear".

WHEN: "Dates overlap range" (selected) or "Dates within range". "From:" and "To:" fields with "(yyyymmdd)" format.

WHERE: "Zoom the map to desired area and choose 'intersecting' or 'fully within'. You can zoom the map by shift-click-dragging a bounding box". "Anywhere" (selected), "Intersecting", or "Fully within".

Map: A world map with a red bounding box over the Pacific Ocean region.

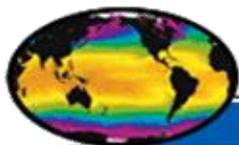
Results 1-60 of 60 record(s). "Expand results", "Zoom To Results", "Zoom To Searched Area".

Search results list:

- GHRSSST Level 4 GAMSSA Global Foundation Sea Surface Temperature Analysis**
A Group for High Resolution Sea Surface Temperature (GHRSSST) Level 4 sea surface temperature analysis produced daily on an operational basis at the Australian Bureau of Meteorology using optimal interpolation (OI) on a global 0.25 degree grid. This BLUELI...
Website Details Metadata Download Search Granules LAS TDS
OPeNDAP FTP Zoom To
- GHRSSST Level 4 ODYSSEA Global Foundation Sea Surface Temperature Analysis**
A Group for High Resolution Sea Surface Temperature (GHRSSST) Level 4 sea surface temperature analysis produced daily on an operational basis at Ifremer/CERSAT (France) using optimal interpolation (OI) on a global 0.1 degree grid. It provides a daily clo...
Website Details Metadata Download Search Granules LAS TDS
OPeNDAP FTP Zoom To
- GHRSSST Level 4 MUR Global Foundation Sea Surface Temperature Analysis**
A Group for High Resolution Sea Surface Temperature (GHRSSST) Level 4 sea surface temperature analysis produced as a retrospective dataset at the JPL Physical Oceanography DAAC using wavelets as basis functions in an optimal interpolation approach on a glo...
Website Details Metadata Download Search Granules LAS TDS
OPeNDAP FTP Zoom To
- GHRSSST Level 4 G1SST Global Foundation Sea Surface Temperature Analysis**
A Group for High Resolution Sea Surface Temperature (GHRSSST) Level 4 sea surface temperature analysis produced daily on an operational basis

Geoportal: <http://data.nodc.noaa.gov/geoportal>

Live Access Server: <http://data.nodc.noaa.gov/las>



Linking Collections and Granules

GHRSSST Long Term Stewardship and Reanalysis Facility

[UAF HOME](#)[SEARCH](#)[BROWSE](#)[SEARCH TIPS](#)

Search

Search metadata content, e.g. title:SST; use + to require keywords, e.g. +water +temperature;

use "" to search for an exact phrase, e.g. "water temperature"

Additional Options

WHEN

 Dates overlap range
 Dates within range

 From: ... (yyyymmdd)

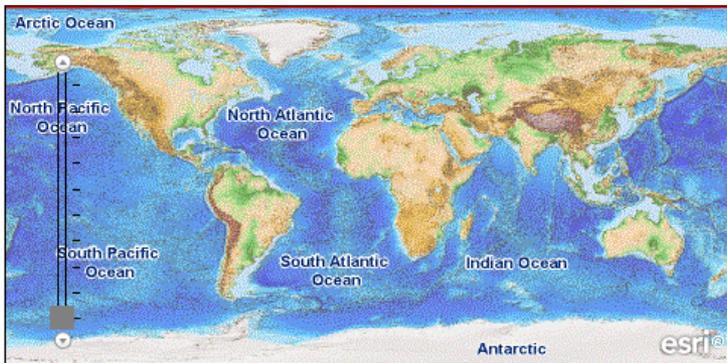
 To: ... (yyyymmdd)

WHERE

Zoom the map to desired area and choose "intersecting" or "fully within"

You can zoom the map by shift-click-dragging a bounding box

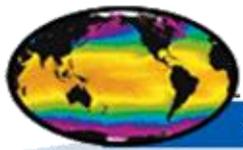
 Anywhere
 Intersecting
 Fully within



Results 1-100 of 3080 record(s)

>

 Expand results
 [Zoom To Results](#)
[Zoom To Searched Area](#)
[20030626-WSAT-REMSS-L2P_GRIDDED_25-wsat_20030626v7-v01.nc.gz](#)
[20030627-WSAT-REMSS-L2P_GRIDDED_25-wsat_20030627v7-v01.nc.gz](#)
[20060217-WSAT-REMSS-L2P_GRIDDED_25-wsat_20060217v7-v01.nc.gz](#)
[20060218-WSAT-REMSS-L2P_GRIDDED_25-wsat_20060218v7-v01.nc.gz](#)
[20060219-WSAT-REMSS-L2P_GRIDDED_25-wsat_20060219v7-v01.nc.gz](#)
[20060220-WSAT-REMSS-L2P_GRIDDED_25-wsat_20060220v7-v01.nc.gz](#)
[20060221-WSAT-REMSS-L2P_GRIDDED_25-wsat_20060221v7-v01.nc.gz](#)
[20060222-WSAT-REMSS-L2P_GRIDDED_25-wsat_20060222v7-v01.nc.gz](#)
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[20060225-WSAT-REMSS-L2P_GRIDDED_25-wsat_20060225v7-v01.nc.gz](#)
[20060226-WSAT-REMSS-L2P_GRIDDED_25-wsat_20060226v7-v01.nc.gz](#)



Active Archive Efforts at LTSRF

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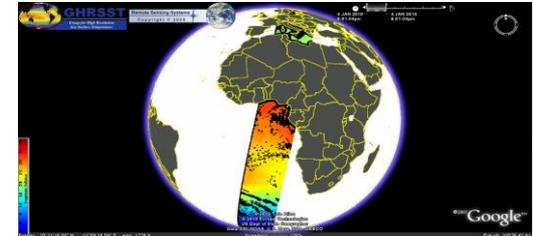


🌐 GDS2 Readiness

- Ready as we can be!

🌐 Browse/KML Graphics

- Generated automatically



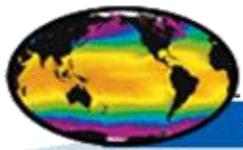
🌐 Automated Status Reporting

- Still maintained every day



🌐 Ingest from PO.DAAC Improved

- System more robust now and less reliant on presence of XML files
- PO.DAAC reconciliation underway



NODC RDAC: Pathfinder SST

GHRSSST Long Term Stewardship and Reanalysis Facility



Project Goals

1. To provide the longest, most accurate, and highest resolution consistently-reprocessed SST climate data record (CDR) from the AVHRR sensor series
2. To serve as a fundamental input to GHRSSST Reanalysis CDRs



Current Status

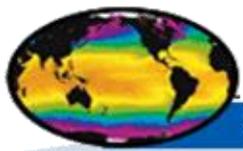
1. Version 5.2 GDS2 L3C available for 1981-**2012**. Still no errors or times.
2. TDS, FTP, HTTP, LAS, OPeNDAP, WCS, WMS, and Geoportal Server
3. 7-day climatology and gap-filled time series in Coral Reef Temperature Anomaly Database (CoRTAD v4)

Looking Forward

1. Summer 2013: Daily, 5-day, 7-day, and monthly V5.2 averages and climatologies in GDS2 L3C/L4
2. End of 2013: **V5.3** GDS2 L2P, L3U, L3C (many improvements, see notes)
3. 2014-2015: Version 6 GDS2 L2P, L3U, and L3C, with uncertainties and times, 2000-present

Bob Evans, RSMAS; Gregg Foti and Ken Casey, NOAA NODC

Project Summary: GHRSSST-14 CDR Breakout Session

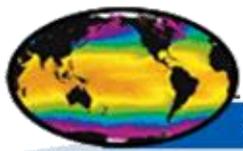


Questions/Issues for GHRSSST-14

GHRSSST Long Term Stewardship and Reanalysis Facility



NODC Issue or Concern	Comment
GDS2 Readiness	Ready to go save final testing – need real data and schedules
PO.DAAC-NODC Reconciliation	Underway, close now, plan so always in sync in GDS2 era. Can track at http://www.nodc.noaa.gov/SatelliteData/ghrsst/remaining.txt
Archive of ATSR-1, ATSR-2, AATSR L2P data from RAL	We have a possible solution but need confirmation to continue
SST Climatologies in GDS2	We have them, what should we do with them?
GCOS SST Intercomparison site and common-input comparison study	Should we turn it off, rely just on LAS? Anyone going to complete the study?



Sir Arthur G. Doughty

GHRSSST Long Term Stewardship and Reanalysis Facility



“Of all national assets, archives are the most precious; they are the gift of one generation to another and the extent of our care of them marks the extent of our civilization.”

-  1860-1936
-  Dominion Archivist, Canada