CDR-TAG

J.Mittaz (Chair)
V.Banzon (vice-Chair)
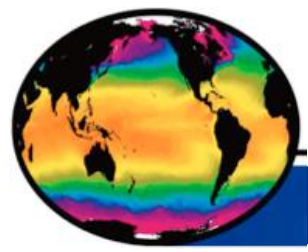
AGENDA

- **International project review (Jon Mittaz)**
- **Intro to CDAF tool (Jon Mittaz)**
- **AVHRR HRPT SST validation around Australia (Helen Beggs)**
- **ESA CCI SST validation (Gary Corlett)**
- **5 minutes from Sasha**
- **CDAF tool demonstration (Jean-Francois Piolle+Prasanjit Dash)**
- **Discussion (All)**
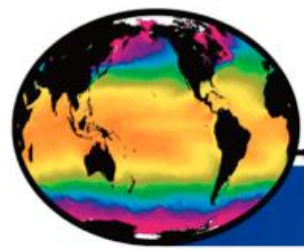
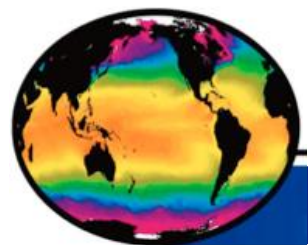# Summary of CDR-TAG Related Projects

Table Part 1

Name	Type	Goals	Status	Funding
ERSST	Historical/Insitu	Monthly SST analyses from 1880 to Now (2° x2° grid) + merge SST and land surface air temp	Maintaining ERSST v3b/v4 + data to NOAA GlobalTemp	
HadSST3	Historical/Insitu	Improved bias adjustment	Ongoing	Yes
HadIOD	Historical/Insitu	Release database with monthly updates	Ongoing	Yes
HOSTACE	Historical/Insitu			
AVHRR FCDR (FIDUCEO)	Level 1	Create AVHRR FCDR	Ongoing	Yes
AVHRR HRPT/LAC	Level 1			
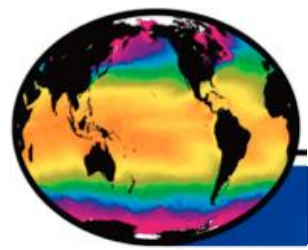
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Table Part 2

GHRSST Climate Data Record Technical Advisory Group

Name	Type	Goals	Status	Funding
MODIS SST	Level 2	Create satellite-derived SST CDR	Ongoing	Yes
VIIRS SST	Level 2	Create satellite-derived SST CDR	Ongoing	Yes
IMOS HRPT	Level 2/Level 3	HRPT AVHRR SST CDR for Australian region 1992 - present	Ongoing	Likely
ACSPO-RAN	Level 2/Level 3			
NOAA GOES	Level 2/Level 3			
NOAA MTSAT	Level 2/Level 3			
NOAA MSG	Level 2/Level 3			
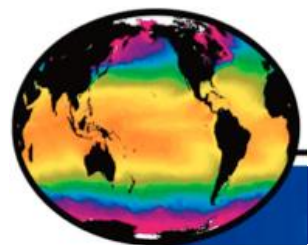
Table Part 3

GHRSST Climate Data Record Technical Advisory Group

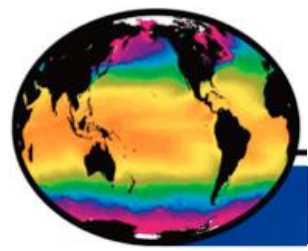| Name	Type	Goals	Status	Funding
Pathfinder	Level 2/Level 3	Version 5.3 generated, climatology/gap filled data fro PFV5.2 available	Ongoing	
AASTI	Level 2/Level 3			
ARC	Level 2/Level 3	AATSR SST for Climate	Continued by CCI SST	No
OSI-SAF MSG	Level 3	Reprocessed SEVIRI SST 2004-2012	On going	Yes
ESA SST CCI	Level 2/Level 3	SST CDR fro (A)ATSR/AVHRR	Ongoing	Yes

Table Part 4

Name	Type	Goals	Status	Funding
OSI-SAF SeaIce	Level 4			
HadISST	Level 4	Public release/regular updates	Ongoing	Yes
MUR	Level 4			
NOAA Blended	Level 4			
DMI L4	Level 4			
North/Baltic Sea RAN	Level 4			
ESA CCI SST	Level 4			
¼° daily OISST	Level 4	maintenance	Code refresh ongoing	1 FTE
LDEO	Level 4			
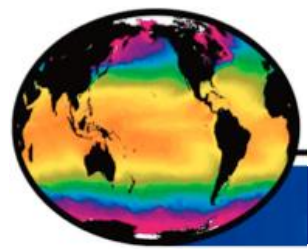
Table Part 5

| Name	Type	Goals	Status	Funding
Med/Black Sea RAN	Level 4	provide consistent long time series of SST L4 for regional climate modelling and operations	Extended dataset (1981-2015) available end of June 2016 (CMEMS) (Andrea Pisano et al. Poster).	
MGDSST	Level 4	Provide consistent time series of global daily SST analysis	The latest version has been available through NEAR-GOOS Database since Dec. 2015 (not GDS2.0)	Yes
iQUAM	Tools			
Felyx	Tools			
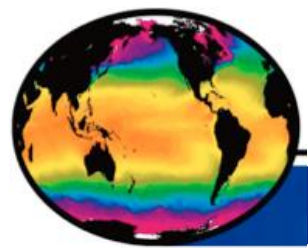
- **The CDAF (Climate Data Assessment Framework) attempts to define a framework to enable the assessment of any SST dataset wrt metrics aimed at climate applications**
  - Provide overall general information (time length, resolution, available uncertainties etc.)
  - Then quantative measurements
    - Estimates of systematic effects
      - Global average difference to drifting buoys
      - Regional differences on space scales ~1000km
        » Provide standard deviation of variation of bias
    - Systematic difference against Argo
      - Regional analysis done on larger spatial scales
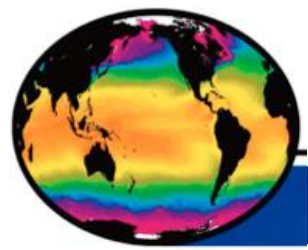
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CDAF description (2)

- Non-systematic effects
  - Subtract the regional means defined above and use the robust standard deviation as an estiaate
- Stability
  - How to do this accurately still needs to be properly defined
  - Drifting buoy network not known to be be stable at the level required for climate
    - » Possible use of shipborne radiometers
    - » Use of GTMBA for tropical locations
  - Require some estimate with confidence limits
- SST sensitivity
  - Depends on algorithm used including RTM accuracy if used
    - » May have to be provided by SST providor
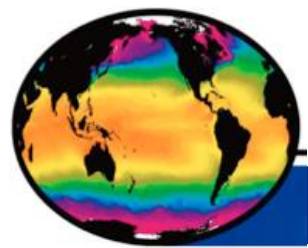
CDAF Tool ideas

- **At last GHRSST meeting the possibility of a tool to help the CDAF process was raised**
  - Help providers provide some of the metrics required by CDAF
  - Provide consistent framework across all datasets
- **Have started the process of starting thinking about how to do this**
  - Nothing is set in stone as yet
  - Some questions need some answer/direction
    - How to do stability?
    - What reference datasets?
    - Regional scales?
    - Uncertainty validation?
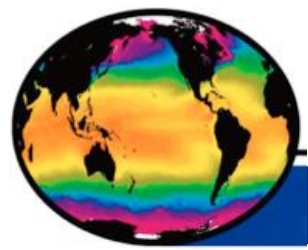
CDAF agenda

- **A couple of talks to set where we are at the moment from individual products**
  - Helen Beggs: AVHRR HRPT SST validation around Australia
  - Gary Corlett: ESA CCI SST validation
- **Use of SQUAM/Felyx to build a toold for the CDAF**
  - Interactive talks from Jean-Francois Piolle + Prasanjit Dash
- **Open discussion**