Scientific Stewardship of GHRSST Products

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Introduction

The NOAA National Centers for Environmental Information (NCEI) play an important institutional role as the US archives for oceanographic data. As such, NCEI provides scientific stewardship of the Group for High Resolution Sea Surface Temperature (GHRSST) products. Scientific data stewardship (**Figure 1**) consists of the application of an integrated suite of functions designed to preserve and exploit the full scientific value of environmental data and information over the long-term (decades). One example of a newly stewarded GHRSST product is the real time archive of VIIRS Sea Surface Temperature **(see Figure 2**) derived using NOAA heritage Advanced Clear-Sky Processor for Oceans (ACSPO) products from STAR (Center for Satellite Applications and Research). Products are monitored in a dynamic table (**Figure 3**), built automatically from metadata and archive metrics to provide a summary of GHRSST products and data volume and file statistics. NCEI provides enhanced access, data discovery and user services **(Figure 4**) for GHRSST products. GHRSST will serve as one of the featured data groupings in NOAA's OneStop effort, which is targeted at providing next-generation discovery and access capabilities for environmental data. NCEI continues to play a role in the ongoing discussions of the evolution of the GHRSST Regional/Global Task Sharing Framework.

Figure 1. NCEI Data Stewardship Tiers (T1-T6) are continuous from bottom to top. T6 represents data stewarded through tiers 1-6.

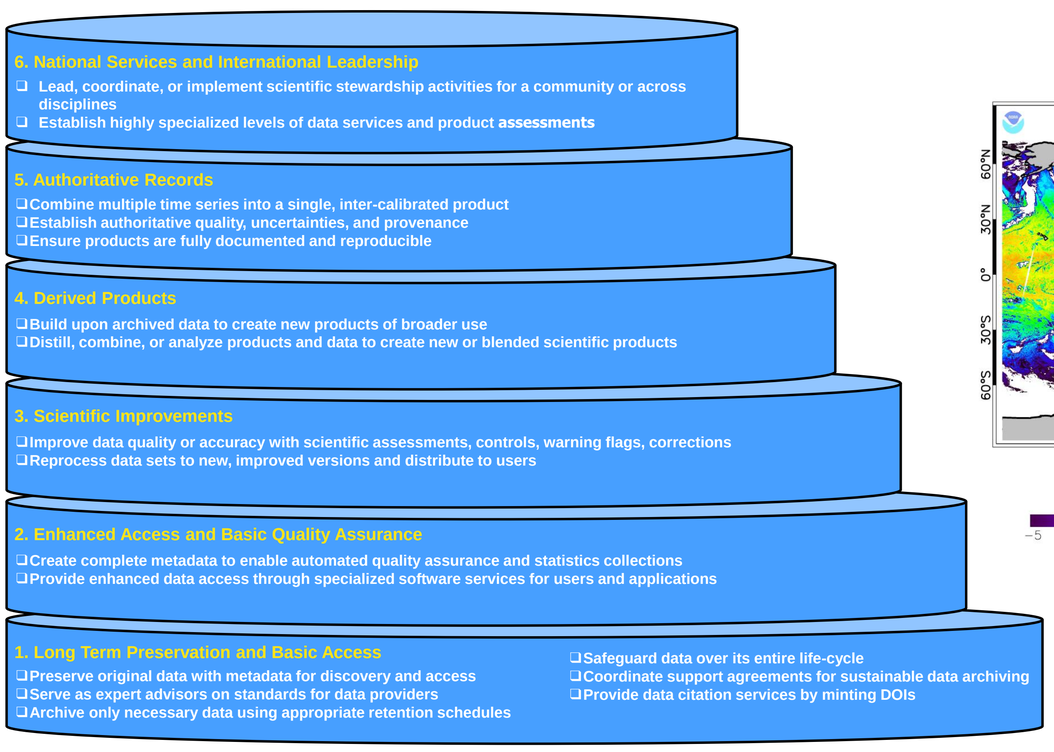


Figure 2. Example GHRSST products: (A) Pathfinder SST Version 5.3 from AHRR sensors (NOAA/NESIS/NCEI) and (b) VIIRS global ACSPO Version 2.4 Level 3 Sea Surface Temperature (NOAA/NESDIS/STAR).

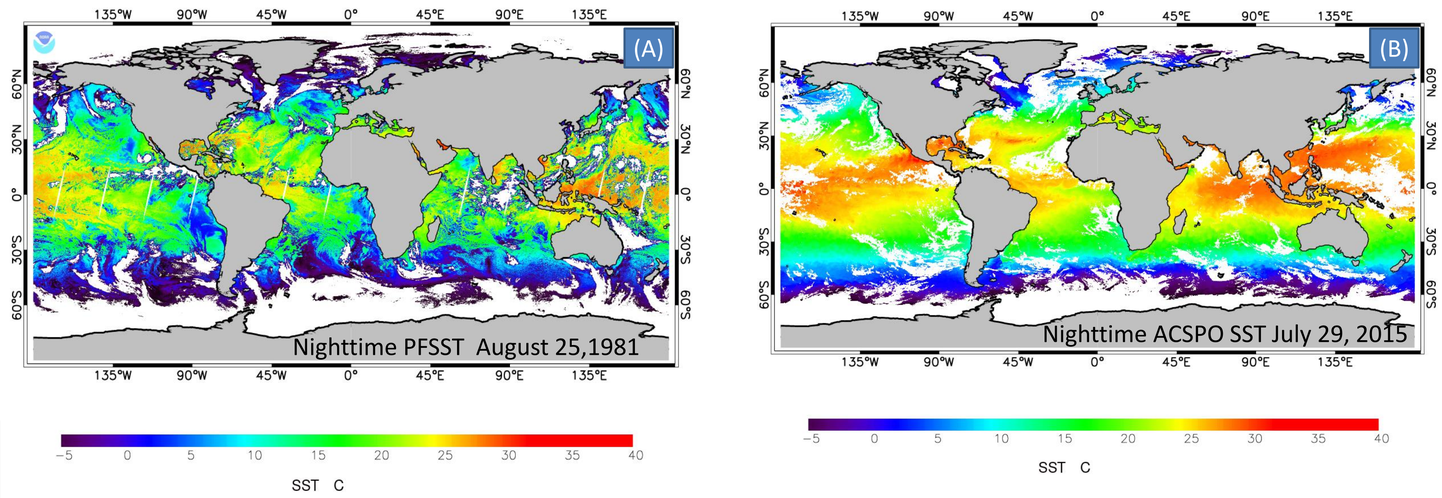


Figure 3. Dynamic Table of GHRSST products (at 81 and growing). http://ghrsst.nodc.noaa.gov/accessdata.htm

NOAA NATIONAL CENTERS FOR ENVIRONMENTAL INFORMATION
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

formerly the National Oceanographic Data Center (NODC)... more on NCEI

You are here: NODC Home > Satellite Oceanography Team > GHRSST LTSRF > Access Data

LTSRF — GHRSST Long Term Stewardship and Reanalysis Facility — NOAA NODC

Data Access is Here!

- **HTTP:** http://data.nodc.noaa.gov/ghrsst/
- **FTP:** ftp://ftp.nodc.noaa.gov/pub/data.nodc/ghrsst/
- **OPeNDAP:** http://data.nodc.noaa.gov/opendap/ghrsst/
- **THREDDS:** http://data.nodc.noaa.gov/thredds/catalog/ghrsst/
- **NODC Geoportal:** http://data.nodc.noaa.gov/geoportal/ - You may use NODC's Geoportal to search the NODC Ocean Archives for GHRSST data using criteria such as date, collecting institution (the RDAC that created the data), and geographic domain. To limit your searches to only GHRSST data, be sure to specify "fileIdentifier:*GHRSST-*" as one of your search criteria.
- **NODC Ocean Archive System:** http://www.nodc.noaa.gov/Archive/Search/ - You may search NODC's Ocean Archive System for GHRSST data using criteria such as date, collecting institution (the RDAC that created the data), and geographic domain. To limit your searches to only GHRSST data, be sure to select "Contributing projects" as one of your search criteria, and then select "GHRSST" from the menu.
- **NODC Live Access Server:** http://data.nodc.noaa.gov/las/ - Use the Live Access Server to search dynamically in time and space through NODC data products. To access GHRSST data, click the 'Choose dataset' button at the top left of the browser window, click on 'GHRSST Aggregations,' and select a GHRSST product. Currently only GHRSST L4 products are available through the Live Access Server.

For a simple tutorial on accessing GHRSST data from the LTSRF or GDAC, try the GHRSST Data Access Tutorial in PDF (~4 MB) or PPT (~6 MB) formats.

GHRSST Products in the LTSRF

RDAC	Product	Product Level	Start Date	End Date	GDS Version	Grid / Pixel Resolution	Metadata	Access	Disk Volume · Number of Days · Number of Files
ABOM	GAMSSA_28km GLOB	L4	2008-08-24	2016-04-17	1.5	28 km	Details · Granule Search · Live Access Server	FTP · HTTP · OPeNDAP · THREDDS	2.7GB · 2785 days · 2785 files
	RAMSSA_09km AUS	L4	2008-04-01	2016-04-17	1.5	9 km	Details · Granule Search · Live Access Server	FTP · HTTP · OPeNDAP · THREDDS	4.6GB · 2911 days · 2915 files
CMC	CMC0.2deg GLOB	L4	1996-06-29	2016-04-24	2.0	0.2°	Details · Granule Search · Live Access Server	FTP · HTTP · OPeNDAP · THREDDS	15.0GB · 6957 days · 7232 files
DMI	DMI_OI GLOB	L4	2013-12-11	2016-04-30	2.0	0.05°	Details · Granule Search · Live Access Server	FTP · HTTP · OPeNDAP · THREDDS	56.1GB · 371 days · 373 files
	DMI_OI NSEABALTIC	L4	2007-06-04	2016-03-04	1.5	3 km	Details · Granule Search · Live Access Server	FTP · HTTP · OPeNDAP · THREDDS	1.6GB · 3161 days · 3161 files
EUR	AMSRE	L2P	2004-12-19	2007-02-26	1.5	25 km	Details · Granule Search · Live Access Server	FTP · HTTP · OPeNDAP · THREDDS	3.0GB · 744 days · 8995 files
	ATS_NR_2P	L2P	2004-12-30	2009-09-29	1.5	1 km	Details · Granule Search	FTP · HTTP · OPeNDAP · THREDDS	315.4GB · 1643 days · 22303 files
...									
	TMI	L2P_GRIDDED	1998-01-01	2014-12-08	1.5	25 km	Details · Granule Search · Live Access Server	FTP · HTTP · OPeNDAP · THREDDS	13.1GB · 6116 days · 8738 files
	WSAT	L2P_GRIDDED	2003-02-09	2015-12-28	1.5	25 km	Details · Granule Search · Live Access Server	FTP · HTTP · OPeNDAP · THREDDS	14.7GB · 4340 days · 4738 files
	mw_OI GLOB	L4	2003-06-17	2016-04-13	2.0	0.25°	Details · Granule Search	FTP · HTTP · OPeNDAP · THREDDS	2.5GB · 4533 days · 4533 files
	mw_ir_OI GLOB	L4	2005-08-21	2016-05-21	2.0/1.5	0.081°	Details · Granule Search	FTP · HTTP · OPeNDAP · THREDDS	24.1GB · 3506 days · 6771 files
UFRJ	REMO_OI_SST_5km SAMERICA	L4	2008-02-21	2016-04-29	2.0	0.05°	Details · Granule Search	FTP · HTTP · OPeNDAP · THREDDS	0.3GB · 263 days · 264 files
UKMO	OSTIA GLOB	L4	2006-04-01	2016-04-24	2.0/1.5	0.054°	Details · Granule Search · Live Access Server	FTP · HTTP · OPeNDAP · THREDDS	28.1GB · 3672 days · 3672 files
UPA	ATS_NR_2P	L2P	2008-05-27	2012-04-08	1.5	1 km	Details · Granule Search	FTP · HTTP · OPeNDAP · THREDDS	248.5GB · 1090 days · 17122 files
		Summary:	1981-09-01	2016-05-25	**Total Volume and Number of Files:**				109068GB · 5649458 files

RDAC Codes and Acknowledgements

ABOM*	Australian Bureau of Meteorology, Australia
CMC*	Canadian Meteorological Centre, Meteorological Service of Canada, Canada
DMI*	Danish Meteorological Institute, Denmark
EUR*	Medspiration Project, Europe
JPL	NASA Jet Propulsion Laboratory, Ocean Biology Processing Group and University of Miami, USA
JPL_OUROCEAN	NASA Jet Propulsion Laboratory, OurOcean Project, USA
NAVO	Naval Oceanographic Office, USA
NCDC	NOAA National Climatic Data Center, USA
NCEI	NOAA National Centers for Environmental Information, USA
NEODAAS*	NERC Earth Observation Data Acquisition and Analysis Service, United Kingdom
OSDPD	NOAA Office of Satellite Data Processing and Distribution, USA
OSISAF*	EUMETSAT Ocean and Sea Ice Satellite Application Facility, Europe
OSPO	NOAA Office of Satellite and Product Operations, USA
REMSS*	Remote Sensing Systems, Inc., USA
UFRJ*	Laboratory of Applied Meteorology, Federal University of Rio de Janeiro, Brazil
UKMO*	UK Meteorological Office, United Kingdom
UPA*	UK Multi-Mission Product Archive Facility, United Kingdom

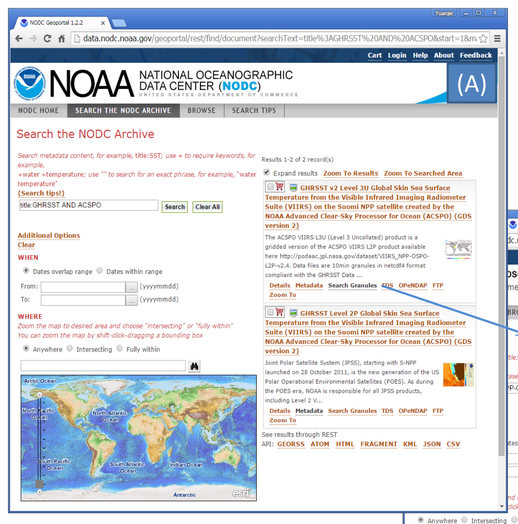
Please use this information to acknowledge GHRSST data providers for their products used in publications and media applications. Please see metadata for each product for any usage restrictions.

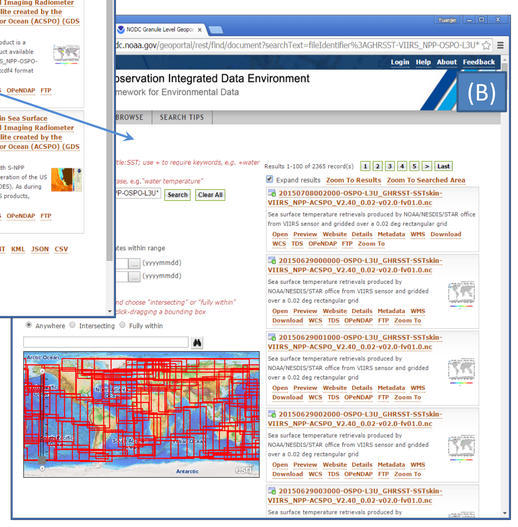
Contact Us With Questions or Concerns

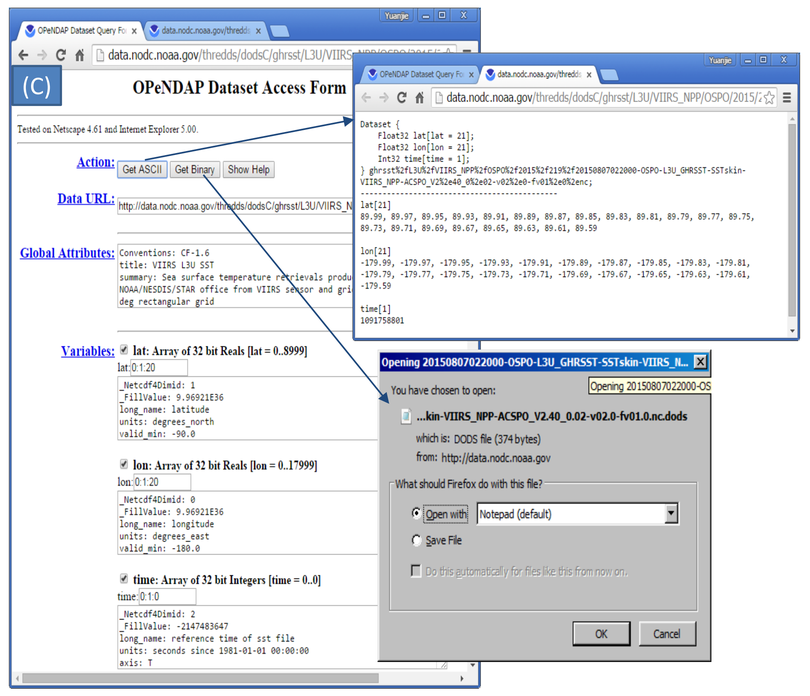
Operational Messages	**Access GHRSST Data**	LTSRF News
GHRSST Documents	LTSRF Home	SST-SI Intercomparisons

NODC NOAA CLASS AVHRR SST GODAE GAC RSMAS GHRSST GHRSST-PP MCSST NLSST SeaWiFS OAIS AIP SIP DIP GOSTA NPOESS VIIRS OPeNDAP LAS HRPT LAC GAC HDF-SDS DMAC PO.DAAC LTSRF GDAC RDAC L2P L4 OSTIA

Figure 4. Data can be discovered and accessed at the collection level and granule level using HTTP, FTP, Live Access Server, THREDDS server, OPeNDAP server, and other services (see A through C).







Summary

The NCEI provides scientific stewardship of the Group for High Resolution Sea Surface Temperature (GHRSST) products. In summary, NCEI

- provides timely, relevant and authoritative satellite-based data products to the oceanographic community with a focus on Climate Data Records and Essential Ocean and Climate Variables,
- helps plan archive requirements for future NOAA satellite missions and lead NCEI efforts relating to satellite data and metadata, and
- improves visibility of NCEI satellite products and establish strategic partnerships for better stewardship and an increased number of satellite-derived data products for users,
- and plays a role in the ongoing discussions of the evolution of the GHRSST Regional/Global Task Sharing Framework.

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