Scientific Stewardship of GHRSST Products at the NOAA National Centers for Environmental Information (NCEI)

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Introduction

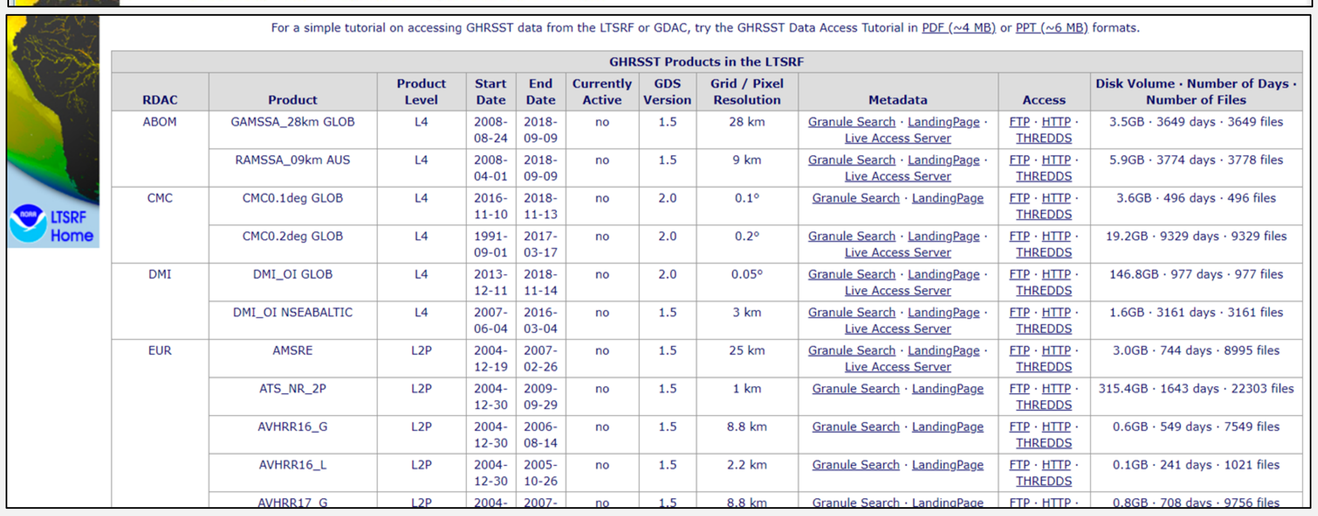
In its role as the US archive for oceanographic, geophysical and meteorological data, the NOAA National Centers for Environmental Information (NCEI) provides scientific data stewardship including near real-time and delayed-mode product distribution, rigorous archive services, custom products, and long-term data stewardship for the NOAA oceanographic satellite products. As such, NCEI provides scientific stewardship of the Group for High Resolution Sea Surface Temperature (GHRSST) data through maintaining the Long Term Stewardship and Reanalysis Facility (LTSRF) for the GHRSST Project. NCEI works with NASA's Physical Oceanography Distributed Active Archive Center (PO.DAAC) Global Data Assembly Center (GDAC) to provide stewardship of these valuable datasets.

NCEI Efforts in Scientific Data Stewardship of the GHRSST Products

- ➢Coordination of supporting agreements for sustainable archive of the GHRSST Products.
- ➢Review and creation of the controlled vocabularies in the NCEI Accession Tracking Database (ATDB) applied in the GHRSST datasets, for instance, platforms, instruments, etc.
- ➢Updating the NCEI automation archiving conventions and mapping tables for the new data sets, supporting timely automation archive of the GHRSST data into the LTSRF system.
- ➢Reviewing the collection and granule-level metadata and data format compliance, ensuring all the GHRSST products adhere to ACDD, CF, and GHRSST Data Specifications.
- ➢Completing annual review of GHRSST LTSRF and submitting the report to the annual GHRSST International Science Team Meeting.
- ➢Providing routine public data service for GHRSST data at NCEI.

GHRSST Products Access at NCEI

(https://www.nodc.noaa.gov/SatelliteData/ghrsst/accessdata.html)



NCEI provides GHRSST data access through FTP, HTTP, TDS and LAS servers.

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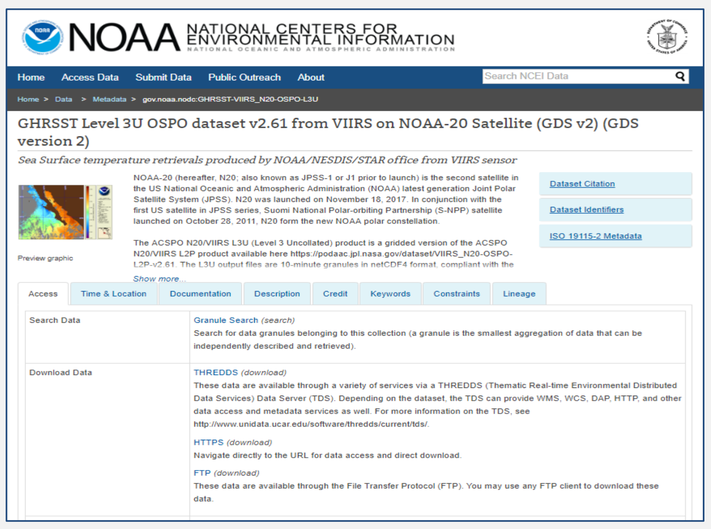
NCEI Tiers of Scientific Data Stewardship

Most of the NCEI efforts in the GHRSST project focus on the long term data preservation and basic access while the enhancement of data access, automation data quality assurance and collection of descriptive statistics are part of our future works depending on the user's requirement and availability of funding.

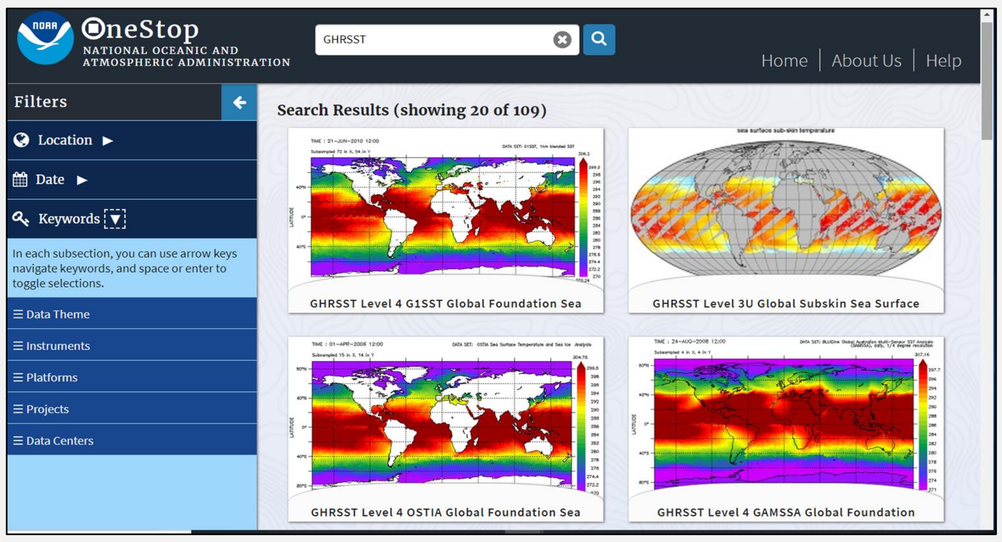
GHRSST Dataset Landing Page



Each GHRSST dataset has a corresponding NCEI dataset landing page which provides detailed information to the public, including data description, time and location, documentation, access, citation, collection ISO metadata, etc.

GHRSST Data Discovery: Collection Level

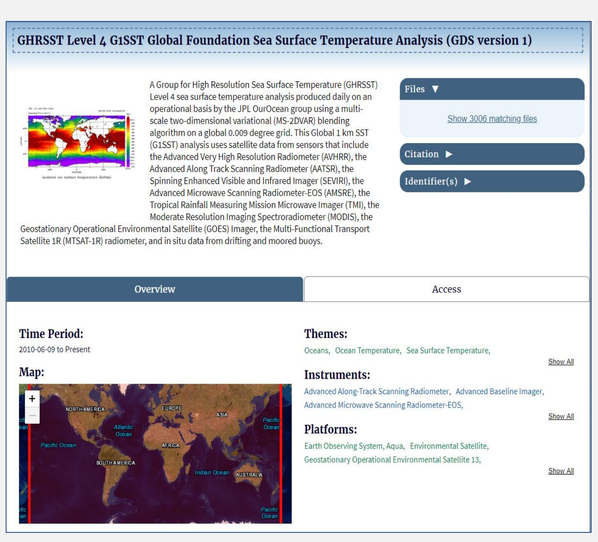
https://data.noaa.gov/onestop/#/collections?q=GHRSST

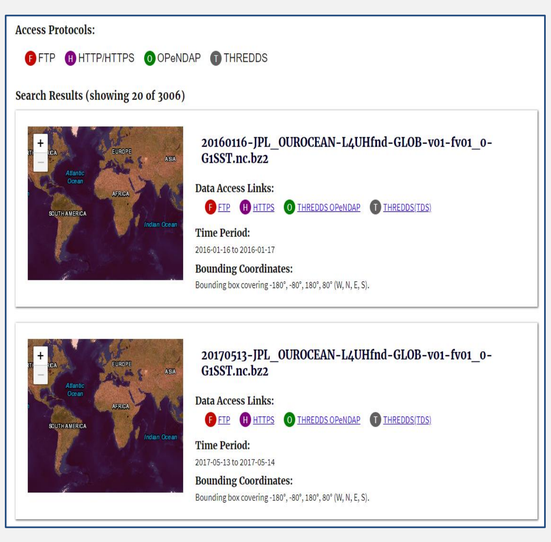


The GHRSST data sets are searchable on the NOAA OneStop portal. Advanced search options are available by spatial, temporal, or GCMD keywords.

GHRSST Data Discovery: Granule Level

https://data.noaa.gov/onestop/#/collections/granules/OneStopDatasetID





The GHRSST granules are also searchable on the OneStop portal. Granule search is available from both the OneStop user interface and the granule search API. More information can be found on the search from the granule API - https://github.com/cedardevs/onestop/blob/master/docs/usage/search-api-requests.md