

RDAC Update: NOAA/NESDIS/NCEI

Sheekela Baker-Yeboah^{1,2},

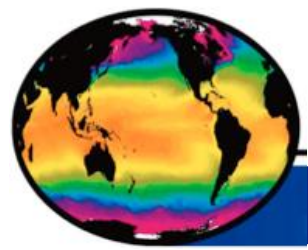
Kenneth S. Casey²,

Viva Banzon²

¹University of Maryland,

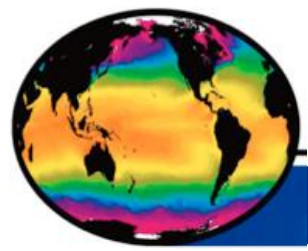
²NOAA National Centers for Environmental Information

June 6, 2016



Updates on

- **PFSST**
- **OISST**
- **In Situ Data Bases**



AVHRR Pathfinder SST



GHRSSST Climate Data Record Technical Advisory Group

Project Goals

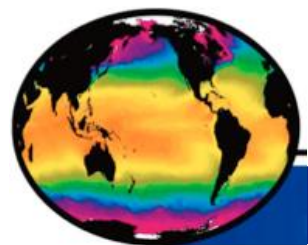
1. To provide the longest (>32 years), most accurate, and highest resolution consistently-reprocessed SST climate data record (CDR) from the AVHRR sensor series
2. To serve as a fundamental input to GHRSSST Reanalysis CDRs



Current Status

1. Version 5.3 GDS2 for L2P, L3U, and L3C generated using AWS, 1981-2014
2. WS TDS, FTP, HTTP, LAS, OPeNDAP, WCS, WMS, and Geoportal Server
3. Collection and granule discovery
4. 7-day climatology and gap-filled time series in CoRTAD v5 on PFV5.2
5. PFV5.2 DOI minted:
[10.7289/V5WD3XHB](https://doi.org/10.7289/V5WD3XHB)

Sheekela Baker-Yeboah, Ken Casey, Korak Saha, Dexin Zhang, NOAA NCEI



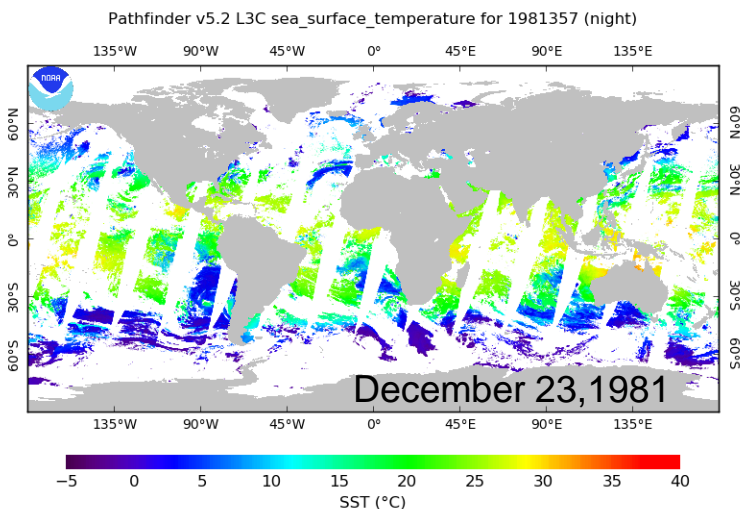
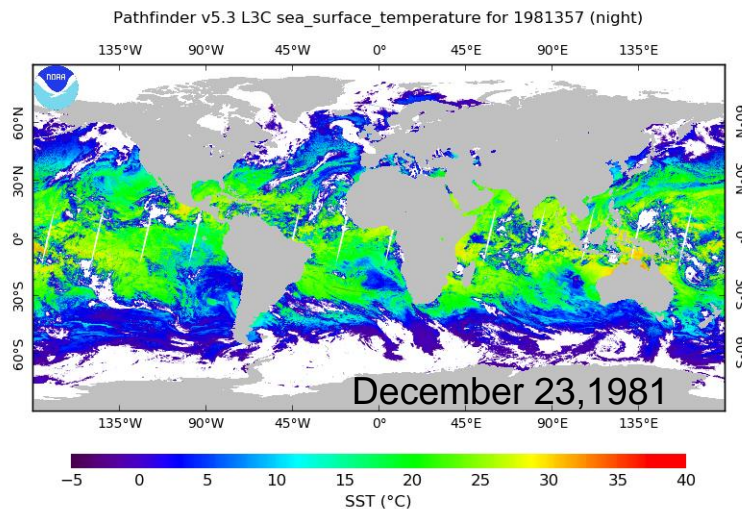
AVHRR Pathfinder SST



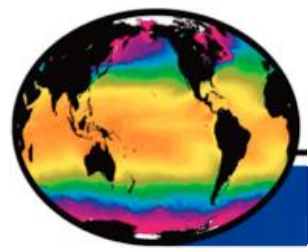
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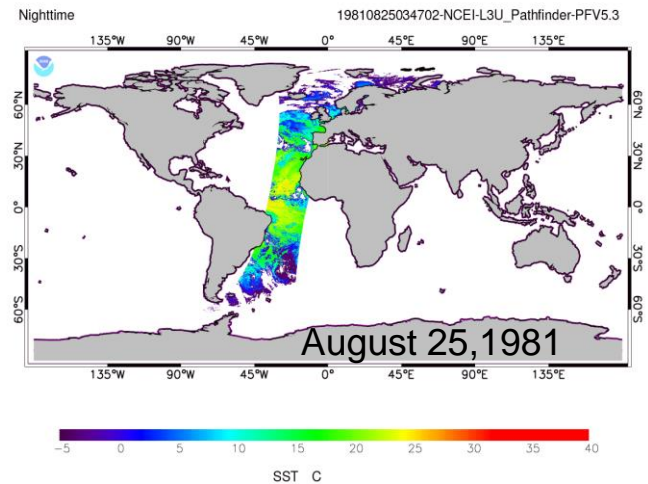
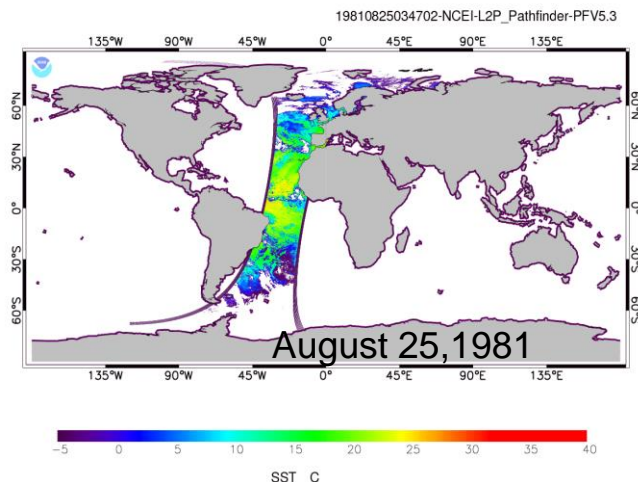
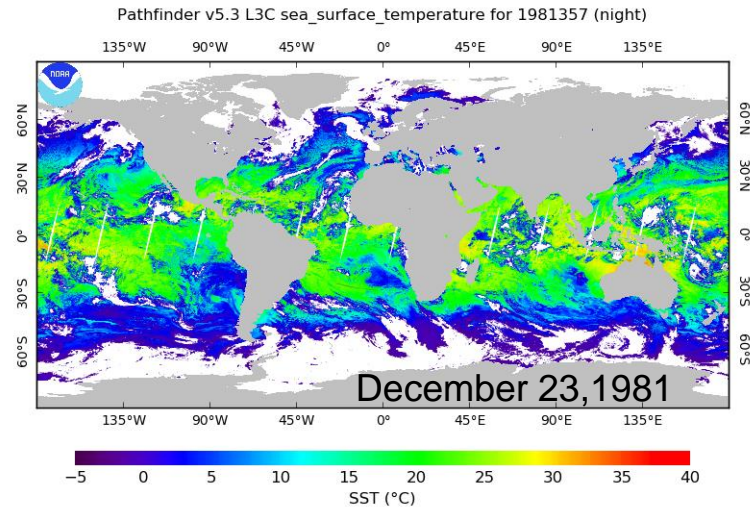
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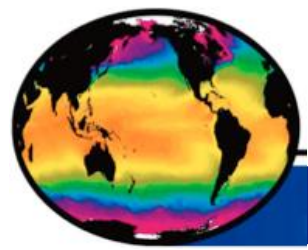
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AVHRR Pathfinder SST



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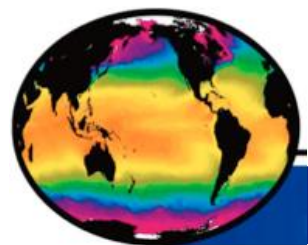
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Looking Forward

1. July 30, 2016: V5.3 GDS2 **L3C, L3U, L2P** (see posters); DOI to be minted
2. Jan 2017: Quarterly updates of V5.3 to be released
3. Dec 2017: Version 6 GDS2 L2P, L3U, and L3C, with uncertainties and times, 1981-2016
4. CoRTAD v6 with PFV5.3 in May 2017
5. Binner SeaDAS update to be resolved.

Sheekela Baker-Yeboah, Ken Casey, Korak Saha, Dexin Zhang, NOAA NCEI



Daily 1/4° OISST v2

GHRSSST Climate Data Record Technical Advisory Group

Project Goals

1. To continue daily updates to ~34 yr record in a sustainable manner, that meets the requirements of the NOAA Climate Data Records Program
2. To increase interactions with climate relevant users

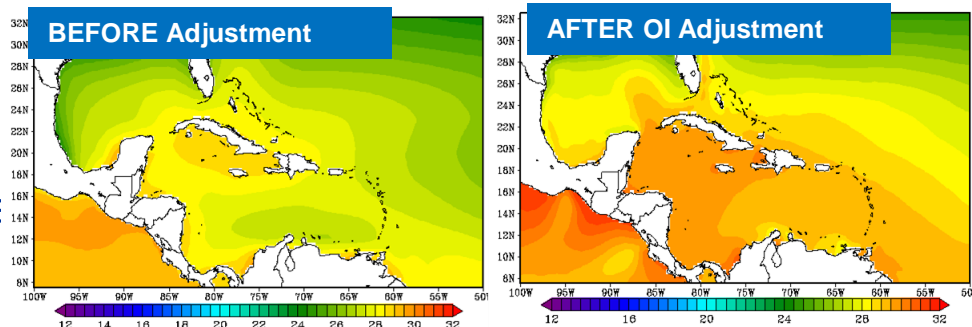
Current Status

1. Refactoring of legacy code and migration to 64-bit machine ongoing
2. 30-year (1982-2011) climatology available
3. Paper describing version 2 published (previously an online pdf)
4. Period of record now available in GDS2.0 at PO.DAAC
5. AVHRR+AMSR remains on hold

Relevant Graphic

CMIP SST projections (2071-2100) are at very coarse resolution

Projections can be normalized with 30-yr OISST climatology...

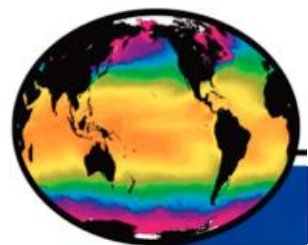


...provides an anchor to present and allow finer resolution assessment

Looking Forward

1. Evaluate new Pathfinder and ACSPO for eventual reprocessing
2. More consolidation among NCEI products

Viva Banzon, NOAA
NCEI



ERSST Version 4

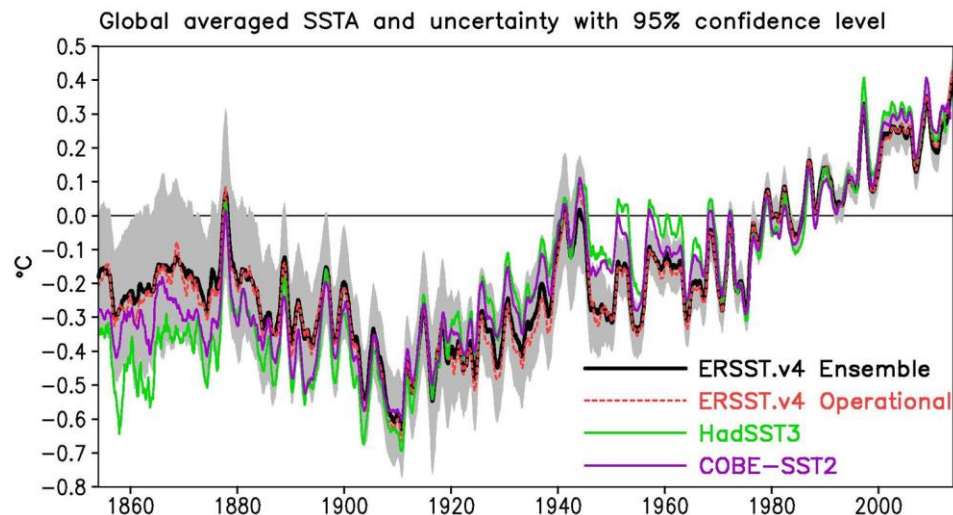
GHRSSST Climate Data Record Technical Advisory Group

Project Goals

1. Provide monthly SST analyses from 1880 to present on a $2^{\circ} \times 2^{\circ}$ spatial grids.
2. Merge SST and land surface air temperatures to produce global surface temperature.

Current Status

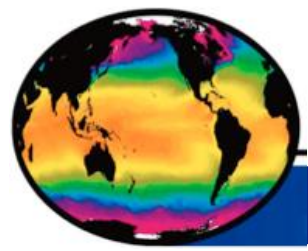
1. Maintaining operational ERSST v3b and v4.
2. Maintaining operational SST uncertainty for ERSSTv4.
3. Providing SST to NOAA GlobalTemp v4 merged with GHCN v3.3.0.
4. ERSST development including updated sea-ice concentration, ICOADS Release 3, and Argo temperature observations above 5m.



Looking Forward

1. ERSSTv5 release targeting later 2017.

Boyin Huang, NOAA/NCEI



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