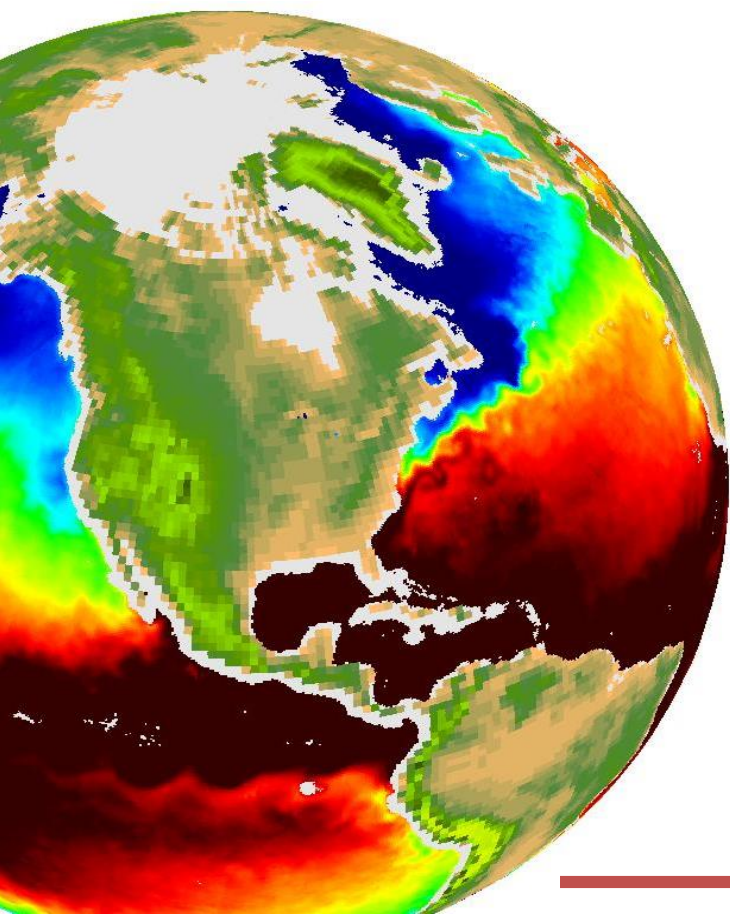


MISST2

Chelle L. Gentemann+ lots
www.misst.org

- Progress in 2013
- Future work

GHRST13
Woods Hole, MA 2013



URI - Cornillon

- Using HRPT data, extend the sea surface temperature SST time series covering waters off the east and west coasts of the continental US from January 1982 through May 2016.
 - Release in L2P
- Produce front/gradient maps

NRL - Cummings

- An adjoint-based procedure to determine the impact of assimilation of observations on reducing ocean model forecast error has been integrated into the Navy's global HYCOM ocean analysis/forecast system.
- A capability for direct assimilation of satellite sea surface temperature (SST) radiances has been implemented in the three-dimensional variational Navy Coupled Ocean Data Assimilation system (NCODA 3DVAR).

U.Miami - Minnett/Evans

- Based on the first year of on-orbit measurements of skin sea-surface temperatures by the VIIRS on the Suomi-NPP satellite, we conclude the retrieved fields are of high quality and hold the promise of continuing the time series of global SST measurements of the AVHRRs and the MODISs.
- Estimates of uncertainties in the SST retrievals are based on comparisons with drifting buoys and ship-board radiometers. The comparisons, in the form of a Match-Up Data Base, have also be used to refine the atmospheric correction algorithm to provide more uniform errors across the entire VIIRS swath, and less sensitivity to regional and seasonal changes in atmospheric properties.

U.Maryland – Harris & Mittaz

- Developed a methodology for using the SI-traceable (A)ATSR instrument series as a reference to determine critical AVHRR calibration parameters in-orbit.
- Development of a semi-deterministic methodology for assessing retrieval uncertainty on a pixel-basis. We have trained the algorithm for all of the geostationary sensors that we generate SSTs from on an operational basis.

JPL – Chin, Vazquez, Armstrong

- Accomplishments over the last year included the implementation of version 4.0 of the Multi-scale Ultra-high Resolution (MUR) Sea Surface Temperature Data Set.
- Validation at the high latitudes included comparisons with buoys which indicate that bias and rms values are lower for MUR than other L4 products.
- Future work will include processing of all MUR data with version 4.0 algorithm and processing of SSTs in large Lakes with AVHRR, MODIS, and ATSR data.

U.Utah - Crosman

- The first year's MISST2 task (**Task 1.3**) of reviewing current lake temperature algorithms and other sources of error associated with satellite-derived lake water surface temperature (WST) has been mostly completed.

NAVOCEANO - May

- Status: Module has been written and output L2P GDS 2.0 file format verified. Will request input at GHRSSST meeting on an Aug 1, 2013 date to transition all NAVO L2P files to GDS 2.0
- Lake temperatures

RSS - Gentemann

- Continued production of L2P for TMI, WindSAT
- Expect to switch to GDS 2.0 Fall 2013 and begin producing AMSR2 at same time
- All data will be reprocessed to GDS2.0, one month overlap in format.