The GODAE High Resolution SST Project as an NDE Customer

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http://www.ghrsst-pp.org
What is the GHRSSST-PP?

- GODAE is an international project dedicated to the development of *operational global ocean analysis and prediction systems*
- GODAE depends on high-quality SST data products to *constrain upper ocean circulation and thermal structure of ocean models*
- Global coverage SST data products need to:
  - be **accurate** (to better than 0.5K),
  - be **operationally available** in near real time (daily),
  - have **high spatial resolution** (<10km), and
  - have **high temporal resolution** (6-12 hours).
- In 2000, there were no SST products that could satisfy these requirements: so the IGST initiated the GHRSSST-PP
**GHRSSST-PP Goals**

- Provide the next generation of global SST products for operational and climate users
  - Create integrated common format products (SST, Sea Ice, uncertainties, auxiliary QC)
  - Create operationally efficient and scientifically valid methodologies for real time fusion of SST data
  - Deliver products to applications in national, regional and international communities
  - Minimize duplication of activities within the global SST Community
  - Develop comprehensive real-time *and* retrospective systems

What is GHRSSST?

How is NOAA Involved now?

GHRSSST as an NDE Customer?
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Regional/Global Task Sharing

GHRSST-PP

A working demonstration of GEOSS!

What is GHRSST?

How is NOAA Involved now?

GHRSST as an NDE Customer?

Regional Data Assembly Centres (RDAC)

SST data products (L2P, L4)

Ingestion, Dissemination and Processing Service (IDPS)

Global Data Analysis Centre (GDAC)

Product Rolling Archive

Metadata repository (MMR)

HR-DDS archive

Matchup database (MDB)

Global L4 analysis systems...

Global coverage L4 SST products

GHRSSST-PP Long Term Stewardship and Reanalysis Facility (LTSRF) at NODC

Historical time series SST CDR products

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Current NOAA Involvement

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How is NOAA Involved now?

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ORA: real time GOES L2P and POES/GOES analysis

ESRL: Optimal analysis algorithms, diurnal variability, error characterization

NCDC: Optimal analysis and blending algorithms

NODC: Archive, long term stewardship, and reanalysis CDRs

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How might NDE play a role?

NDE could play a key role for the global SST community, acting as the Data Assembly Center for NPP/NPOESS data, reformatting SST EDRs from VIIRS and CMIS to GHRSST specifications.
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