

GHRSSST
GROUP FOR HIGH RESOLUTION
SEA SURFACE TEMPERATURE

GHRSSST SCIENCE TEAM NEEDS FOR HIGH RESOLUTION SEA SURFACE TEMPERATURE MISSIONS

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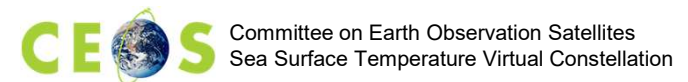


Copernicus
Europe's eyes on Earth

Group for High Resolution Sea Surface Temperature (GHRST)

The Group for High Resolution Sea Surface Temperature grew out of a GODAE Pilot Project, 1997-2008

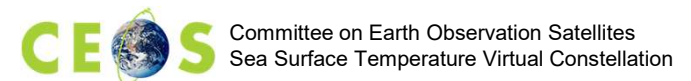
- GHRST is an **open international science group**
- **Coordinates** research and operational developments in satellite-derived sea surface temperature (SST)
- **Promotes** the application of satellites for monitoring SST by enabling SST data producers, users and scientists to collaborate within an agreed framework of best practices.



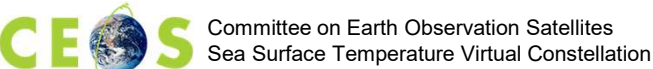
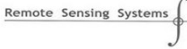
What GHR SST does

GHR SST provides:

- A framework for sea surface temperature knowledge and data sharing.
- Best practices for data processing and assessing uncertainties in the satellite SSTs.
- A forum for scientific dialogue including how to provide SSTs for operational weather and ocean forecasting, climate studies and bringing SST to the operational users and scientific researchers.



Patrons and Sponsors

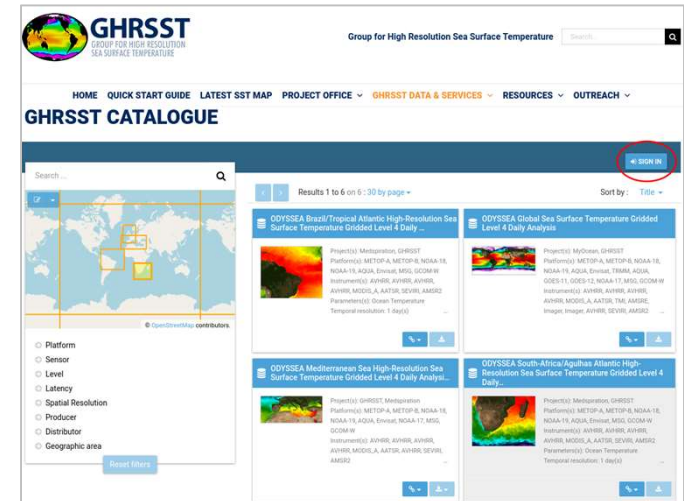


GHRSSST Central Catalogue

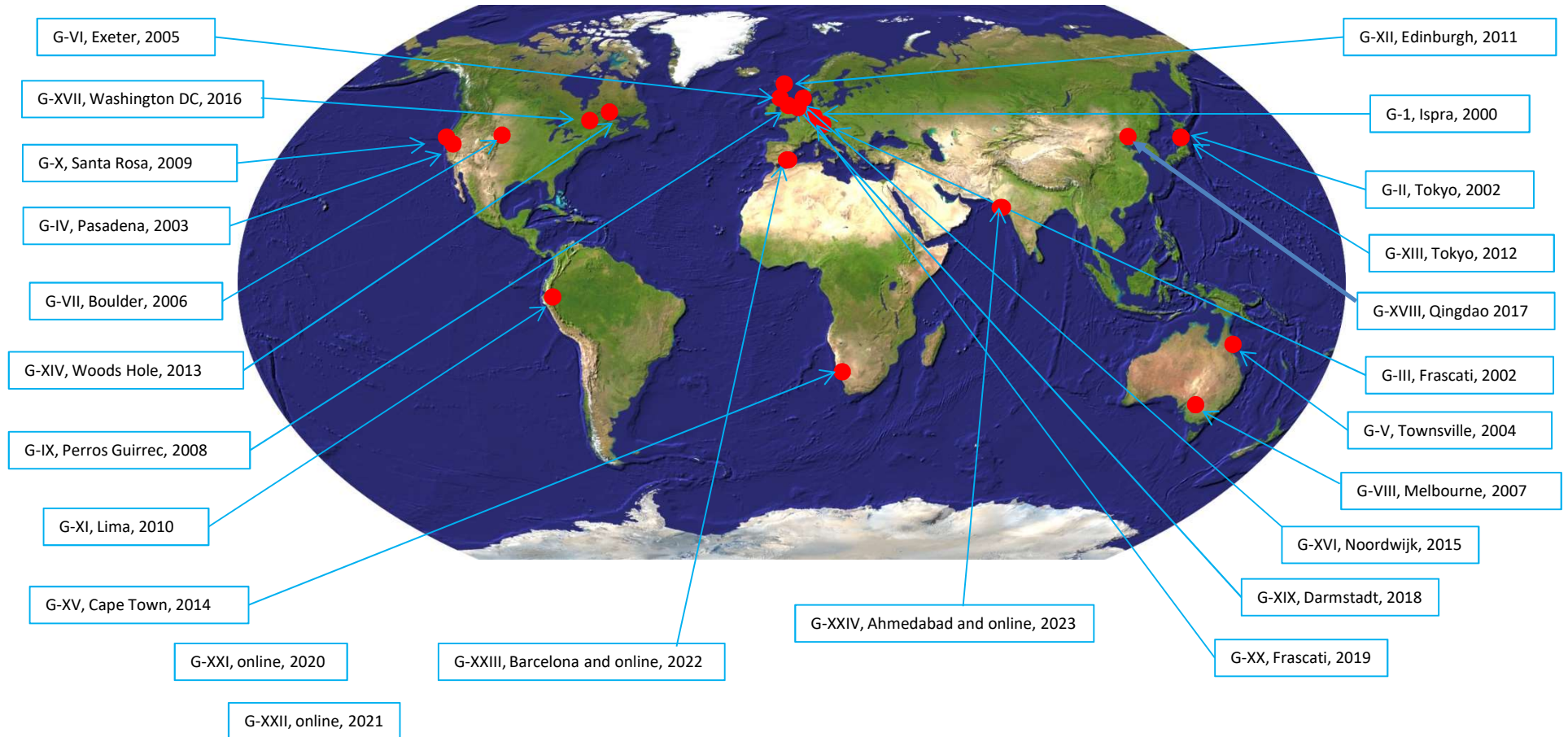
More than 100 SST products follow GHRSSST data specifications.

A new system, with decentralisation of data ingestion and distribution, was designed in 2022 to prepare GHRSSST for future growth and facilitate the integration of new data producers (Data producers, GDPs and Distributing centres, DACs).

<https://www.ghrsst.org/about-ghrsst/task-teams/task-team-on-evolution-of-the-regional-global-task-sharing-r-g-ts-tt/>



Annual Science Team Meetings



Outcome of GHRSSST XXIII, Barcelona Summer 2022

- Need for very high resolution SSTs (<100 m) in coastal zones and marginal ice zones within, e.g. Copernicus Marine data streams and applications
- Coastal SST user needs will grow in coming years. Important to coordinate internationally
- High resolution SSTs identified as a GHRSSST priority area for the coming years
- Future missions (e.g. TRISHNA and LSTM) are very promising to fill the gap in SSTs.
- How to best integrate high resolution SST products with existing SST products ?

Recommendations from GHR SST science team meeting #1

- High res SSTs products consistent with existing GHR SST products:
 - Data formats
 - SST retrievals and cloud masking
 - Quality of retrieved SST
 - Uncertainty components
- Open access to SST products
- High quality (Fiducial Reference Measurements) in situ observations should be used for validation.
- Integrate high-resolution SST with validation and SST intercomparisons

Recommendations from GHRSSST science team meeting #2

- Consistency between high resolution (<100 m) and traditional (~1 km) products
- Consistency between SST and Land/MIZ/Sea Ice Surface Temperature products
- New priority area for GHRSSST and topic of science team meeting in November 2023
- Please join GHRSSST 24 to learn more participate in discussions

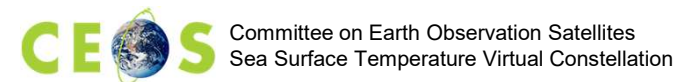
International SST Users' Symposium & GHRST international Science Team Meeting

International SST Users' Symposium & GHRST int. Science Team Meeting in Ahmedabad, India (GHRST24) , in-person and online, 16-20 October 2023, hosted by ISRO

- **Open for abstracts**, see Twitter and LinkedIn for more information
- Special session on high-resolution satellite missions



Call for abstracts
#GHRST24 now open!



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- Website <https://www.ghrsst.org>
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<http://www.ghrsst.org>

