

## 21<sup>st</sup> GHRSSST Science Team Meeting

1-5 June 2020, Online



### ***In situ* SST Quality Monitor (*iQuam*)**

[www.star.nesdis.noaa.gov/sod/sst/iquam/](http://www.star.nesdis.noaa.gov/sod/sst/iquam/)

### **SST Quality Monitor (SQUAM)**

[www.star.nesdis.noaa.gov/sod/sst/squam/](http://www.star.nesdis.noaa.gov/sod/sst/squam/)

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NOAA STAR; CSU CIRA; GST Inc.


*Supported by JPSS and GOES-R Programs*



# iQuam v2.1 promoted to main url in Apr 2020

[www.star.nesdis.noaa.gov/sod/sst/iquam/](http://www.star.nesdis.noaa.gov/sod/sst/iquam/)

NOAA NESDIS STAR

 **iQUAM2** *in situ* SST Quality Monitor v2.10  
NOAA / NESDIS / STAR

[www.star.nesdis.noaa.gov/sod/sst/iquam/](http://www.star.nesdis.noaa.gov/sod/sst/iquam/)

Monitor Data About

Maps  
Statistics  
Time Series  
Platforms

2019 05 28  
     
 Show hour 0

Month  Day

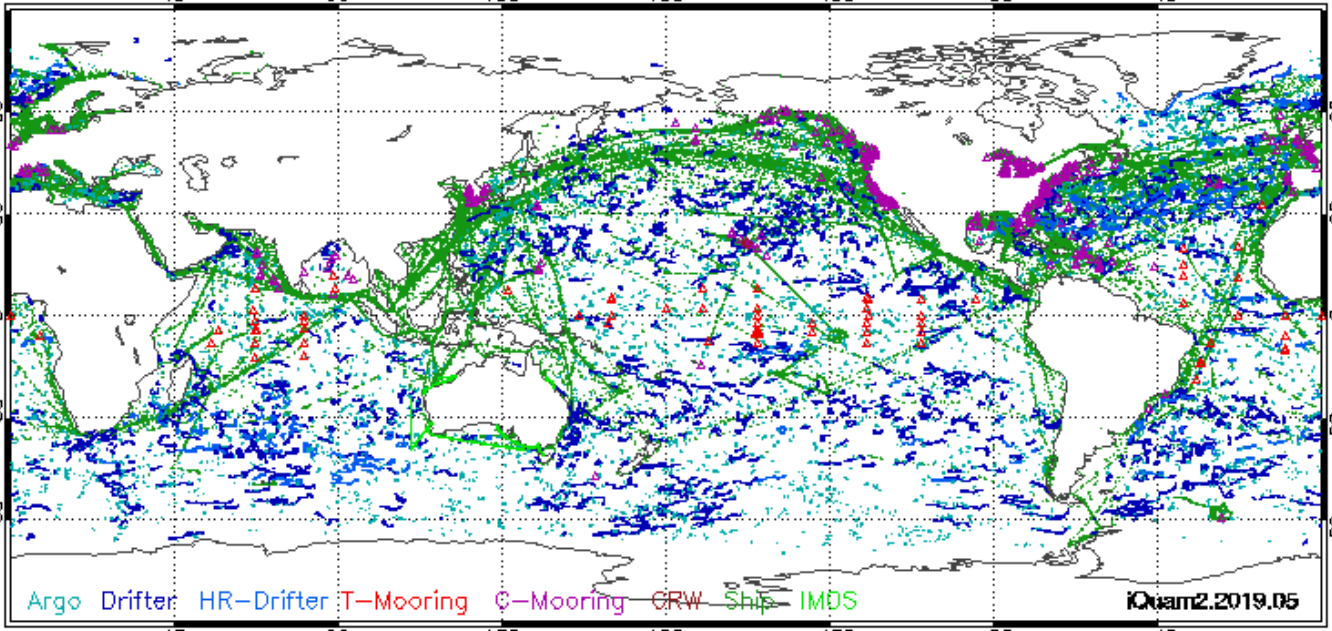
Ref SST used in QC  
 Reyn  CMC

QCed  Outlier

- **Argo** - Argo Floats
- **Drifter** - Conventional drifters
- **HR-Drifter** - High-Resolution Drifters
- **T-Mooring** - Tropical Moorings
- **C-Mooring** - Coastal Moorings
- **CRW** - Coral Reef Watch Buoys
- **Ship** - Conventional ships
- **IMOS** - IMOS Ships

Symbol = one observation.

All Platforms Argo Drifter HR-Drifter T-Mooring C-Mooring CRW Ship IMOS



Argo Drifter HR-Drifter T-Mooring C-Mooring CRW Ship IMOS iQuam2.2019.05

More iQuam Resources at GHRSSST-XXI: Evaluation of the In Situ SST Quality Control in iQuam, Haifeng Zhang, Poster

iQuam and SQUAM



# Increased number of SST Products Monitored in SQUAM Requires Redesign of the Back End



SST products monitored in SQUAM R2

	Polar L2/L3	Geo L2/L3	Analysis L4
High Res	<b>VIIRS</b> ACSP0 L2P/L3U  <b>AVHRR FRAC</b> ACSP0 L2P OSISAF L2P	<b>Himawari-8 AHI</b> ACSP0 L2P/L3U  <b>GOES-16 ABI</b> ACSP0 L2P/L3U	MUR (JPL)
Low Res	<b>AVHRR GAC</b> ACSP0 L2P/L3U		CMC (Environment Canada) OSTIA (Met Office) OSTIA RAN (Met Office) GMPE (Met Office) Geo Polar Blended (NOAA) Reynolds (NOAA) GAMSSA (BoM)

- **Back End Redesign continues**
  - Back end was initially designed for much smaller data volumes (e.g., AVHRR only)
  - Now processing multiple ACSP0 SSTs (VIIRS/FRAC/GAC/MODIS/ABI/AHI) + external products
  - Old back end (combination of IDL + bash scripts) can not keep up
  - A more scalable redesign based on python, C++ and SQL database underway
  - [Transition of Polar SQUAM complete](#)
  - [Geo and L4-SQUAM underway](#)

### SST data providers



Environment Canada



Australian Government  
Bureau of Meteorology



### Satellite missions

