

International Space Science Institute Hallerstrasse 6 CH-3012 Bern Switzerland

International Teams in Space Science

Generation of Climate Data Records of Sea-Surface Temperature from current and future satellite radiometers

Team Leader:

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Co-Team Leader:

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Second Workshop 1-5 October 2012

Draft Agenda

27 September 2012, 09:15

Monday, 1 October, 2012

1 Welcome (09:00)

- 1.1 Local Arrangements
- 1.2 Review Objectives of the Workshop
- 1.3 Discuss & modify agenda

2 Satellite radiometers

- 2.1 New developments:
 - 2.1.1 Suomi-NPP VIIRS Instrument characteristics and SST Accuracies (Peter Minnett)
 - 2.1.2 AMSR-2 on GCOM-W1 (Peter Minnett)
 - 2.1.3 Chinese FY satellites and sensors (Lei Guan)
- 2.2 Consequences of loss of Envisat and AATSR; progress towards SLSTR (Gary Corlett)
- 2.3 New results of note (All)

3 Shipboard radiometers

- 3.1 Update on past and future deployment plans.
- 3.2 Radiometer calibration workshop developments?

4 In situ measurements

- 4.1 Updates on results using drifting or moored buoys.
- 4.2 New developments?

5 Discussion of SST CDRs

- 5.1 Uncertainty budgets and SI traceability (Theo Theocharous)
- 5.2 Improvements on the flow diagram developed at the First Workshop?
- 5.3 How can the satellite-derived SST CDR be extended back before the deployments of ship-board radiometers? (Gary Wick)
- 5.4 How can satellite SST CDRs be merged with in situ SST time series?
- 5.5 Ocean reference sites is this concept one to follow for radiometric skin SST measurements?
- 5.6 Alignment with QA4EO; involvement of CEOS

6 Data Archiving and distribution

- 6.1 Refine the user requirements for a data archive
- 6.2 Discuss and agree upon the initial radiometer data format, including metadata for archival data (Tim Nightingale)

Tuesday, 2 October, 2012

7 Definition of Breakout Groups – Ship-board radiometry, in situ measurements and (other suggestions?)

Each group to consider, amongst other things:

- 7.1 Minimum and optimal accuracy requirements and how these can be achieved and demonstrated
- 7.2 Revision of contents of "Best Practices Handbooks" for measurements to be used to validate satellite-derived SSTs
- 7.3 Discuss research areas that need urgent attention.

Wednesday, 3 October, 2012

- 8 Updates in Sentinel-3 and SST_cci (Craig Donlon)
- **9 Reports of Breakout Groups**
- **10 Breakout sessions**

Thursday, 4 October, 2012

- 11 Reports of Breakout Groups
- 12 Breakout sessions
- **13 Reports of Breakout Groups**

Friday, 5 October, 2012

14 Future plans

- 14.1 Identify problems to be addressed, gaps to be filled
- 14.2 Requirements of future calibration workshops
- 14.3 Opportunities for coordinated ship radiometer deployments
- 14.4 Outline of peer-reviewed publications arising from this ISSI Study Project
- 14.5 Dates for next ISSI Workshop

Adjourn 12:30

Workshop Participants

Dr Peter Minnett (Team Leader)
Dr Gary Corlett (Co-leader)
Dr Sandra Castro
Dr Craig Donlon (Wed & Thurs)
Dr Lei Guan
Dr Andrew Jessup
Dr Tim Nightingale
Mrs Anne O'Carroll (Mon & Tues)
Dr Theo Theocharous
Dr Gary Wick
Mr Werenfrid Wimmer (from Mon pm)

University of Miami, USA University of Leicester, UK University of Colorado, USA ESA-ESTEC, NL Ocean University of China, CN University of Washington, USA Rutherford Appleton Laboratory, UK EUMETSAT, DE National Physical Laboratory, UK NOAA Earth System Research Laboratory, USA University of Southampton, UK

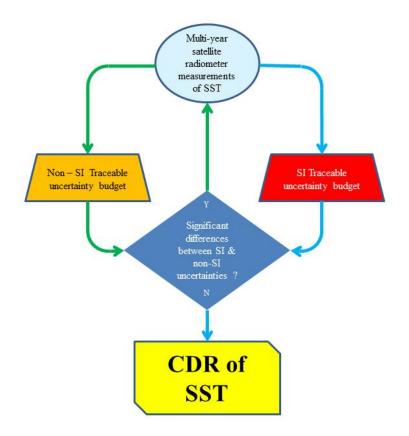


Figure 1 Simplified depiction of the path to generating CDRs of SST using shipboard radiometers.

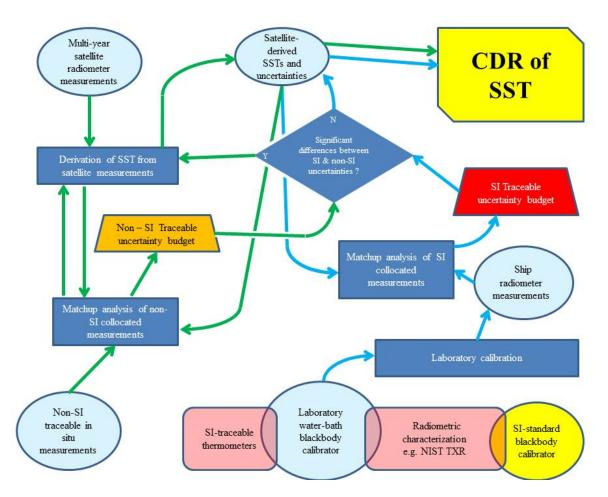


Figure 2. Detailed diagram of the pathway to generating CDRs of SSTs using shipboard radiometers.