

2015 Aquarius Science Calibration / Validation Workshop
Santa Rosa, CA | March 31-April 1, 2015

March 31

8:00 am – Objectives for the meeting (S. Brown)

8:15 – 12 pm SST Dependency of Salinity Retrieval Error – Path for V4

Presentations (presenters should limit talks to 20 minutes):

Thomas Meissner – V3.4 GMF

Gary Lagerloef – Reflections on the Dielectric Model

Joel Scott – Comparing SST products and the Impact on SSS retrievals

Emmanuel Dinnat – Comparison of Dielectric Models (*tentative*)

David Carey – Analysis of V3.3 and V3.4

Tony Lee – Analysis of V3.4

Peter Hacker – SSS biases with Argo

Discussion topics:

- *Should the V3.4 SST correction be the baseline product for V4?*
- *Should there be a separate non-SST corrected product (old GMF)?*
- *Is there any evidence of spurious SST imprints in the V3.4 SSS?*
- *Should the correction be applied to only large spatial scales?*

12 pm - 1 pm - Lunch

1pm – 3:30 pm Errors and Uncertainties in the SSS Data

Hsun-Ying – Inter-beam Differences

Thomas Meissner – Formal Assessment of Uncertainties in the Aquarius Salinity Retrieval Algorithm

Andrea Santos – Near-Surface Salinity Stratification Observed By SMOS and Aquarius Under Rainy Conditions

Julian Schanze - The new equation of state; density and spice

Liang Hong et al. – Discussion on differences between forward modeled and retrieved SSS

Discussion

What are the remaining tall poles in the salinity retrieval errors?

What is the magnitude of the remaining inter-beam biases and what is needed to identify cause?

Putting error bars at each Aquarius salinity retrieval

3:45 pm – 5:00 pm Instrument Calibration

Presentations:

Alex Fore – Scatterometer calibration

Paolo de Mattheis – RFI algorithm parameters

Frank Wentz - Algorithm updates using the hybrid antenna patterns

Emmanuel Dinnat – Cold Sky Observations, End-to-End Calibration (*tentative*)

Discussion

- *What updates if any are needed to the end-to-end absolute calibration?*
- *Should a dedicated S/C maneuver be proposed to isolate APC cross-pol terms (e.g. point horns to nadir)?*
- *What methods should be evaluated to remove the long term drift?*

Break for Day 1, additional time for discussion is available on day 2

April 1

8:30 – 9:30 Instrument Calibration continued discussion time (if needed)

9:30 am – 11am – Clean-up of L2 files - Fred/Thomas

What variables are in the L2 files currently?

What variables can be eliminated for the L2 files?

Is there anything missing that needs to be added?

11am – 1 pm – Wrap-up Discussion, Actions and Path Forward

Carry-over discussion from Day 1

Identify near-term and long term plans and who is doing what.

2pm - 4 pm Contingency and carry over time

Attendee List

In-person:

David LeVine
Alex Fore
Simon Yueh
Hsun-Ying
Paolo de Matthaëis
Jorge Vazquez
Andrea Santos
Linwood Jones
Gary Lagerloef
David Carey
Thomas Meissner
Frank Wentz
Joel Scott
Sid Misra
Shannon Brown
Peter Hacker

Remotely:

Joel Gales
Fred Patt
Liang Hong
Gene Feldman
Emmanuel Dinnat
Senya Grodsky
Tony Lee