Aquarius Cal/Cal Meeting
Jan 10-12, 2017
Santa Rosa, CA

AGENDA

Tuesday, January 10th

Overview and Introduction
• Cal/Val Meeting Overview and Objectives [S. Brown]
• Cal/Val Workshop Objectives [G. Lagerloef]
• From Version 1 (V1) to Version 4 (V4) [S. Brown]

Seasonal, Regional and Long-term Temporal Analyses
• Global Antenna Temperature (TA) / Sea Surface Salinity (SSS) Analysis in Version 4.5.1 [L. Hong, J. Gales, D. Carey]
• Aquarius: Changes in Geophysical Model V4 to V5 [T. Meissner, F. Went, A. Manaster]
• Cold Sky Calibration (CSC) Biases and Time Series with Hardware-only Wiggle Correction [E. Dinnat, D. Le Vine]
• Aquarius Long-term Trend Analysis [S. Misra]
• Assessing Seasonal to Interannual Calibration Drifts with Level-2 Co-located Surface Observations [G. Lagerloef, D. Carey]
• Analysis of Regional Biases in Version 4.5 [S. Brown]

Salinity Validation Analyses
• Comparison of Reference Salinity Products [A. Manaster, T. Meissner, F. Wentz]
• Seasonal/Regional Biases in Aquarius/SMAP SSS [O. Melnichenko, P. Hacker]
• Evaluation of Aquarius V4.0, V4.5, V4.51 SSS using Argo data [T. Lee]
• Aquarius Validation Data Segment (AVDS) Analyses for V4.0, V4.5.0 and V4.5.1 [G. Lagerloef, H. Kao]
• Snakes on a Ship [J. Schanze]

Wednesday, January 11th

Radiometer Calibration
• Status and plans for whole range TA calibration [E. Dinnat, D. Le Vine]

Dielectric Measurements
• Comparisons of Argo Data and Salinity Results Retrieved from Different Model Functions [R. Lang, Y. Zhou, E. Dinnat, D. Le Vine]

Other Corrections
• Summary of Changes in the Land Model and Plan for the Land Correction [Y. Soldo, D. Le Vine, E. Dinnat, J. Gales, L. Hong]
• RFI Flagging [Y. Soldo, P. de Matthaes, D. Le Vine]
• Status of Radiometer RFI Work and Missed Detection Analysis [P. de Matthaeis, Y. Soldo, D. Le Vine]
• Improved sea ice fraction model: Objective and Status [E. Dinnat, L. Brucker]
• New Correction for Improved SSS Retrievals Near Land [E. Dinnat, HY. Soldo, D. Le Vine]
• Air-Sea Dependence v4.5 [S. Brown]

SMAP Salinity Compared to Aquarius
• RSS SMAP Salinity: Version 2.0 Validated Release [T. Meissner, F. Wentz, T. Lee]

V5 and Looking Toward the End of Phase F
• Rain Impact Model (RIM) for Aquarius [M. Jacob, A. Santos-Garcia, L. Jones]
• Overview & Status of the Aquarius Phase-F: Preservation Task for Mission Closeout [V. Tsontos, G. Feldman]

OBJECTIVES
• Evaluate performance improvements from algorithm changes in version 4.5.x processing
• Re-assess seasonal and regional biases in latest product with the objective of identifying cause
• Use of SMAP to better understand Aquarius residual biases with respect to Argo/HYCOM
• Assess state of instrument calibration analysis both for absolute end-to-end calibration and drift
• Evaluate SPURS-2 results and how they can support Aquarius validation
• Evaluation of additional products included in version 5 (including RIM, spice etc.)
• Finalize list of v5 product contents
• Update schedule for finalizing algorithms and processing for v5 (including approach for empirical corrections)
• Identify and set schedule for final documentation

TOPICS
• Exploitation of cold sky measurements to stabilize the long-term radiometer calibration
• Use of vicarious methods (e.g. Antarctica) to either correct, or at least support an ocean model correction for the exponential long term drift
• Use of other ocean regions to help identify and separate the instrument contribution from the biases
• Alternative methods to isolate instrument component of drift (e.g. N/S hemisphere; A/D passes)
• Potential regional/season systematics in the retrieval model
• SMAP inter-comparisons during overlap period and SMAP regional biases relative to Aquarius
• Evaluation of 3rd Stokes Calibration
• End-to-end absolute calibration
• Updated processing for sea ice fraction
• Algorithms improvements for RFI
• Observed rain-freshening from underway observations