SMAP SDT Meeting #6
Jet Propulsion Laboratory, Pasadena, CA
Room 321-B20
March 8-9, 2011

The Objectives of the SDT Meeting are:

1. Assess Integrity of Mission Science Objectives, Progress, and Requirements
2. Understand the Changes to Baseline Performances of the Instruments and Data Systems and Assess Impacts on Mission Science
3. Firm Up 2011-2013 Time-Line Cal/Val Activities; Coordinate with AirMOSS and CARVE,
4. Finalize Plans for Nature-Run and Downselect Forward Models for Algorithm Testbed
5. Quantify/Confirm Algorithm Error Allocations; Define Milestones Towards Algorithm Downselect and Review
6. Assess Progress and Identify Next-Steps in Research, Data utilization, Applications and Outreach

Tuesday March 8, 2011

Project Status

08:30-09:00   SDT Meeting Objectives and Science Timeline (Dara Entekhabi)
   1. Structure of agenda and outcomes objectives
   2. Science schedule, progress on algorithms and next phase plans
   3. NASA HQ comments on DAAC selection and L4 products
   4. Process and timeline for ATBD reviews
   5. Promoting water cycle science and SMAP

09:00-09:30   Project Status (Kent Kellogg)
   1. Schedule and budget status
   2. Changes to baseline
   3. Areas where descopes may impact science requirements
   4. Schedule for Project PDR and KDP-C
   5. Status of L1 Mission Requirements

09:30-09:45   Discussion of Descopes Affecting Science and Project Schedule (All)

Instruments

09:45-10:15   Radar Performance Update (Mike Spencer)
   1. Current baseline radar instrument (emphasis on performance changes)
   2. Status of descope impacts
   3. FAA Compliance status
   4. Other topics

10:15-10:30   Radar Discussion (All)

10:30-10:45   **Break**

10:45-11:15 Radiometer Performance Updates (Douglas Dawson)
1. Current baseline radiometer instrument (emphasis on performance changes)
2. Status of descope impacts
3. RFI approach status
4. Other topics

11:15-11:30 Radiometer Discussion (All)

Applications

11:30-12:00 Planning the October 2011 Applications Workshop
(Molly Brown, Susan Moran, Son Nghiem)
1. Status of Early-Adopters solicitation
2. New Mission Applications Representatives at JPL and GSFC
3. Feedback from Brad Doorn on metrics
4. Plans and expected outcomes for future short courses and meetings

12:00-13:30 Lunch

Cal/Val

13:30-14:00 May 2011 Cal/Val Workshop (Tom Jackson)
1. Status of Core Sites DCL
2. Cal/Val Workshop Goals
3. Agenda
4. Participants
5. Expected outcome of workshop

14:15-14:45 Update on Field Campaigns (Tom Jackson/Andreas Colliander)
1. CARVE Overview
     a. Update on PALS conical scanning
2. FY11 Activities
     a. SJV-UAVSAR
   b. CARVE options
               i. Transits
               ii. Alaska
               iii. Oklahoma
3. FY12 and Beyond
     a. Impacts of CARVE and alternatives
4. FY13
     a. CanEx-FT

14:45-15:00 Discussion of SMOS Downloads and Analysis Plans; SMOS Brightness
Temperature Calibration (Andreas Colliander, Rajat Bindlish, Steven Chan)

15:00-15:30 Break

15:30-15:45 Discussion of SMOS Downloads and Analysis Plans (All)

15:45-16:15	AirMOSS and L4_SM Cal/Val (Mahta Moghaddam)

16:15-16:45 Australia Airborne and Ground Cal/Val Campaigns (Jeff Walker)
1. Results of recent airborne campaigns and instrument data
2. Calibration of instrument data
3. Validation of retrievals
4. Upcoming schedule of campaigns

16:45-17:15 Canada Science Plan (Stephane Belair)

17:15 **Adjourn**

19:00 **Social Dinner**
Mi Piace **Restaurant http://www.mipiace.com/**
25 E. Colorado Boulevard (North side near corner of Fair Oaks)

Wednesday March 9, 2011

SDS and Algorithm Testbed

08:30-09:00 Science Data Systems Topics (Oh-Ig Kwoun, Barry Weiss)
1. Science code to operational code schedule; Deliveries schedules; Test Plans
2. Status of data product specifications; data formats; definitions for flags and meta-data
3. Ingestion status of dynamic data sets (ECMWF, SMOS)
4. Availability of info and data sets to SDT and Early Adopters via SDS Wiki and ftp server

09:00-09:20 SDS Testbed - Nature Run/GloSim2 Status (Crow, Reichle, Chan)
1. Nature Run completion and data to SDS (Rolf Reichle and Wade Crow)
2. GloSim2 readiness, schedule, and upgrades over GloSim (Steven Chan)
3. Radar forward modeling in GloSim2 (Sab Kim)

09:20-09:40 Algorithm Testbed Radar Forward Models (Sab Kim)

09:40-10:00 Discussion of SDS Topics and update on DAAC selection (All)

10:00-10:10 Pre-PDR Science Peer Review Follow-Up Status (Dara Entekhabi)

10:10-10:40 **Break**

Error Allocations Common to Algorithms

10:40-11:35 Retrieval Algorithm Error Allocations and Algorithms Uncertainties
(ATBD teams)
1. Each L2/3/4 algorithm submits 1-page allocation table
2. Each L2/3/4 algorithm submits 1-page list of key uncertainties and plans to retire them
3. SDT/ADT lead prepare to discuss primary retrieval algorithm and main error sources

11:35-11:55 Level 3 Compositing and Error Modeling (Steven Chan)

11:55-12:00 Ancillary Data Status - Overview (Erika Podest)

12:00-12:15 Permanent Water Bodies, DEM/Mountainous Area, Urban Area
(Steven Chan, Erika Podest)

12:15-13:30 **Lunch**

Ancillary Data Common to Algorithms

Surface Temperature

13:30-13:45 Land Surface Temperature Ancillary Data Verifications (Thomas Holmes)

13:45-14:00 Model LST Regional Intercomparisons (Joshua Fisher and Irene Garonna)

14:00-14:15 Discussion and Next Steps (Peggy O'Neill)

Vegetation

14:15-14:45 MODIS NDVI climatology & VWC (Tom Jackson, Rajat Bindlish, Josh Fisher)

14:45-15:00 Land Classification / Vegetation Type (Sab Kim)

15:00-15:15 h, τ-ω Model Parameters (Andreas Colliander)

15:15-15:30 Discussion and Next Steps (Tom Jackson)

15:30-16:00 **Break**

Other Ancillary Data

16:00-16:15 Urban Area (Narendra Das)

16:15-16:30 Precipitation (Scott Dunbar)

16:30-16:45 Permanent Ice/Snow (Ed Kim, Noah Molotch)

16:45-17:30 General Discussion of Ancillary Data Issues (All)
1. What analyses will be done to update all algorithm error allocations in a consistent way?
2. Will we have one overarching OSSE applied to all algorithms similar to the Hydros OSSE?
3. What is the timeline?

17:30 **Adjourn**