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As of Aug 7, 2012

SMAP/ICESat-2 Joint Mission Applications Tutorial

Hosted by

Alaska Satellite Facility

Wedgewood Resort, Fairbanks, Alaska

September 18-20, 2012



The SMAP/ICESat-2 tutorial is a unique opportunity to collect and distribute information about different user needs while discussing how SMAP (launch October 2014) soil moisture and surface freeze/thaw state data products can be used in parallel with ICESat-2 (launch 2016) altimetry data.

Goals of the SMAP Applications Tutorial:

- Value-added data products and science returns from combined SMAP/ICESat-2 data.
- Identify the challenges and needs of cryosphere, northern forests, land and ocean science applications.
- Identify new users for SMAP mapping radar and ICESat-2 altimetry data, e.g. vegetation mapping, sea-ice mapping, etc.
- Motivate joint mission efforts and innovative applications with prelaunch hydrosphere and cryosphere applications using other mission products from existing missions.

Expected Workshop Outcome: Connect the mission science with the Alaskan communities in order to identify the benefits from incorporating SMAP soil moisture, surface freeze/thaw state and ICESat-2 products into existing research, operational applications and local decision-making agencies.

Day 1 Tuesday, 18 September 2012

8:00am	Registration and Coffee	
8:30am	Bob McCoy, Geophysical Institute Director (15 min)	Workshop Welcome
8:45am	Christine Bonnicksen, NASA HQ (30 min)	SMAP/ICESat-2 Welcome, Introduction to both missions and Charge to Joint Workshop
9:15am	Dara Entekabi (SMAP Science Definition Team Lead) (20 min)	SMAP Mission Overview-emphasis on Freeze Thaw
9:35am	Bea Csatho (ICESat-2 Science Definition Team Lead) (20 min)	ICESat-2 Mission Overview-compliment to SMAP Freeze Thaw research
9:55am	Molly Brown, NASA GSFC (SMAP Applications Coordinator) (20 min)	Mission Applications Strategy for tutorials, Value of pre-mission work for applications
10:20am	Nettie LaBelle-Hamer, ASF Director (20 min)	The role of the DAAC.
10:40 to 11:00am	Morning Break Questionnaire for freeze/thaw applications	

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8:30am	Vanessa Escobar (SMAP Applications Deputy Coordinator) (10 min)	Objectives for Day 2
Local Alaska Community Presentations <i>Operational Areas of Interest for Freeze Thaw Data</i>		
8:40am	Parker Martyn (National Park Services) (30 min)	<i>Remote Sensing in support of the NPS</i>
9:10am	Katey Walter (University of Alaska Fairbanks) (15 min)	<i>Methane seepage from lakes along boundaries of thawing permafrost and melting glaciers</i>
9:40am	Kyle McDonald (SMAP Mission) (15 min)	<i>CARVE and SMAP-Carbon Product</i>
9:55am	Anna Liljedahl (University of Alaska Fairbanks) (15 min)	<i>Water Management in Alaska – the Susitna Dam</i>
10:15am	<i>Speaker confirmation pending</i>	<i>Applications for ICESat-2 and SMAP Freeze Thaw products</i>
10:30-10:40am	Morning Break <i>Please use this opportunity to fill out survey</i>	
10:40-10:55am	Andy Mahoney (University of Alaska Fairbanks) (15 min each)	<i>Climate Change and Sea Ice</i>
	Alaska Command (Speaker confirmation pending) (15 min)	<i>Sea Ice Sheets and Naval navigation operational requirements</i>
10:55-11:10am	DOD (Speaker confirmation pending) (15min)	<i>Military operations and uses for satellite data</i>
11:10am-12:00pm	Plenary Session <i>SMAP mapping radar, ICESat-2 altimetry for vegetation and sea-ice mapping</i> <i>How will SMAP Freeze/Thaw and ICESat2 products for Sea Ice Applications and DOD</i>	
LUNCH 12:00-1:30pm at the ASF Lunch Facility		
1:30pm	Scott Dunbar, JPL (45min)	SMAP Data Description
2:15pm	Dara Entekhabi, MIT (20 min)	Combining data from multiple missions. Innovative approaches to future research
2:35pm-2:50pm	Afternoon Break <i>Please use this opportunity to fill out survey</i>	
2:50pm-4:00pm	Panel Discussion/Audience Discussion <i>Open discussion-identify potential collaborations and opportunity</i> <i>Action items to move research forward</i>	
4:00pm	Christine Bonniksen, NASA HQ (15 min)	Closing comments
4:15pm	Tutorial Adjourned	
Day 3 Thursday, 20 September 2012		
8:00am	Depart ASF	
<i>Visit to Permafrost Caves and the Geographical Institute, Museum of the North</i>		