PARCA/OIB Science Team Meeting: Sea Ice 29-31 January 2012, Goddard Space Flight Center, Greenbelt, MD

Honoring the memory of our colleague and friend, Seymour Laxon, by advancing remotely-based observations of the Arctic sea ice cover

Attending all or part of meeting (not inclusive): Farrell, Kwok, Lindsay, R-Menge, Kurtz, Donghui, Harbeck, Connor, Tschudi, Instrument Team [ATM (Yungel, Manizade or others), DMS (Dominguez), Snow radar (Leuschen, Panden, other)], NSIDC Reps [Kaminski et al.], Brozena, Gardner, Li, Cavalieri, Newman, Davidson (ESA), Parrinello (ESA), Arvesen, Dotson, Jeffries, Xie, Webster, Rigor, Stroeve, Armitage, Tilling

By skype or telecon: Kauker, Haas, Hendricks, E. Key, Ackley, Mahoney, Rigor, Maksym, Prado,

Tues., 29 Jan: PARCA Meeting (full agenda and location provide by Charles Webb)

Featured sea ice presentations:

- 1535 Climate and Sea Ice Interactions in the Record Arctic Sea Ice Decline of 2012, T. Scambos and NSIDC Science Team, NSIDC
- 1600 Arctic sea ice drift speed and ice thickness, R. Kwok, JPL
- 1615 Using combined records of IceBridge and satellite-derived thickness and extent data to constrain figure projections of Arctic sea ice, J. Stroeve, University of Colorado, Boulder
- 1630 Towards an improved system for seasonal Arctic sea ice forecasting, N. Kurtz, GSFC
- 1645 In Memoriam: Seymour Laxon, H. J. Zwally, GSFC

Weds., 30 Jan: IceBridge Sea Ice Workshop; Rm. E108

Objective: Review and advance the status of OIB Sea Ice Community Products

0830 Convene: Introduction and Welcome (Richter-Menge)

- Workshop objectives
- Draft flight lines for IceBridge 2013 Arctic campaign
- 0915 Current Efforts Successes and Challenges in Generating and Using IceBridge Sea Ice Products

(~ 10 min. per presentation)

- Kurtz (NASA): Status of OIB Sea Ice Community Products
- Leuschen (U Kansas): Status of the KU snow depth products
- Kauker (AWI): Potential value of IceBridge data for improved sea ice predictions
- Xie (UTSA): Automated method in deriving local sea level height from ATM L1B data (UTSA)
- Yi (NASA): ATM waveform analysis over sea ice
- Farrell/Newman (NOAA): Comparison of IceBridge airborne data with in situ measurement in the Beaufort Sea
- Webster/Rigor (UW): Comparison IceBridge and BROMEX snow depth and sea ice thickness observations
- Tschudi (U Colorado): VIIRS cal/val using IceBridge KT-19 observations
- Li Li (NRL): NRL use of IceBridge sea ice products

- Mahoney (UAF): Use of OIB data to identify MY features in the Beaufort Sea; SIZONet plans for ice thickness obs (joining from Hawaii, 5 hours time difference)
- Others?

Discussion: Identify and address gaps in the collection, delivery and use of IceBridge sea ice community products

1300 Exploring Opportunities for Collaboration

- Davidson (ESA): Summary of CVRT meeting in Nov. 2012, with an eye towards CryoVEx/IceBridge sea ice activities in 2014
- Hendricks/Helm (AWI): AWI activities for 2013
- Haas (York U): Coordination with the Canadian Space Agency
- Tschudi (U Colorado): Update on UAV and CULPIS-X plans
- Brozena/Gardner (NRL): Update on NRL activities
- Jeffries (ONR)/Lee (U Washington): ONR Marginal Ice Zone Project
- Webster/Rigor (U Washington): AOX/NAICEX/BROMEX 2013
- Others?

Discussion: Identifying and coordinating opportunities for collaboration

1500 Future Arctic Sea Ice Observations: Increased Utilization of Sub-Orbital Assets

• Richter-Menge: Kick off with ideas from IceBridge Sea Ice Science Team

Discussion: Without consideration of logistic or resource constraints, develop a prioritized list of sea ice observations that would benefit from the increased use of autonomous airborne platforms

1700 End of workshop

Thurs, 31 Jan: OIB Sea Ice Science Team Meeting (closed session): Rm. H114

Joint session of land ice and sea ice teams

0830

- 1. LVIS Status & Global Hawk plans (15 min) (Blair/Luthcke)
- 2. GLISTIN Status (15 min) (D. Moller)
- 3. ATM: new science data products (15 min) (B. Krabill)

Break out: Sea ice team: Rm. E108

- 0915 Guidance from HQ to OIB Science Team (Wagner, Studinger)
- 1030 Revise and prioritize flight lines for 2013 Arctic campaign
- 1300 Role of LVIS in IceBridge going forward: Sea Ice Observations
 - Follow up discussion with Blair on the utility of LVIS data: Is it being used and how? (OIB Sea Ice Science Team)
- 1400 Unfinished business

• Science team input on instrument and platform configurations

1500 End of meeting