OIB Science Team Meeting: Sea Ice  
25-27 January 2012, Building 33, Goddard Space Flight Center, Greenbelt, MD

Attending all or part of meeting (not inclusive): Farrell, McAdoo, Kwok, Lindsay, R-Menge, Kurtz, Donghui, Connor, Tschudi, Instrument Team [ATM (Yungel, Manizade, Harpold), DMS (Dominguez), Snow radar (Panzer or other)], NSIDC Reps [Kaminski et al.], Holt, Gardner, Cavalieri, Tom Newman, Davidson (ESA), John Arvesen, Ryan Dotson, Clemente-Colon

By skype or telecon: Eicken, Haas, Hendricks

Weds, 25 Jan: Workshop - Airborne Sea Ice Products

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

0830 Convene. Introduction and Welcome (Richter-Menge)
  • Workshop objectives

0845 Setting a collaborative stage: Update on the CryoSat2 mission (Davidson)

0915 Through early afternoon (2/3 of day): Current Efforts – Decadal-scale Predictions

  Presentations from researchers using sea ice data from OIB (~ 10 min. per presentation):
  • Kwok: Experience with ATM data quality
  • Farrell: Sea Ice Lead Analysis from High Resolution Airborne Imagery
  • McAdoo
  • Connor: Arctic sea ice freeboard from CryoSat-2: Validation using data from the first IceBridge underflight
  • Lindsay
  • Tschudi: Update on UAV plans
  • R-Menge: In situ measurements during ICEX2011
  • Gardner/Brozena: Lidar data over ICEX2011
  • Arvesen: DMS Photogrammetry – Results from ICEX2011
  • Kurtz: Status of OIB Sea Ice Community Products
  • Others?

Discussion: Identify and address gaps in plan to routinely produce sea ice community products

1400 Future Efforts – Seasonal-scale Predictions

Setting the stage: Seasonal forecasting needs (Hajo Eicken, via skype or telecon)

Brian storm: Airborne-based observations that, if provided in a timely fashion, could contribute to seasonal sea ice projections (e.g. snow depth, freeboard, thickness, albedo (black carbon content), etc.)

Discussion: Identify technology and resource limitations standing in the way of making these observations

1700 End of workshop
Thurs, Jan 26: Day 1, OIB Science Team Meeting

0830 Guidance from HQ to OIB Science Team (Wagner)
   – Joint session with OIB Land Ice Science Team

0900 Draft and prioritize flight lines for 2012 Arctic campaign

   Things to consider (in addition to historic lines):
   • Thule-based
     o Add North Pole flight
   • Fairbanks-based
     o New flight lines over seasonal ice
     o Coordination with BROMEX (Nghiem) and SIZoNet (Mahoney/Eicken)
   • Coordination with PAMARCMiP/CryoVEx 2012 (Davidason/(via skype) Hendrick and Haas)
   • Coordination with LVIS and MABEL (Hofton/Brunt - tentative)

1300 OIB Outyears

   Background: Future Directions for IceBridge (Wagner/Tagg)

   Discussion: Consider potential increase use of Unmanned Autonomous Systems (e.g. Global Hawk, Ikhana) for collection of sea ice measurements in Arctic
   • Increase spatial and temporal coverage
   • Contribute to seasonal projections (e.g. NOAA Sea Ice Outlook)
   • Surface conditions (melt pond development, albedo, etc.)
     o Could include BRDF instrument?

1700 End of day

Friday, Jan 27: Day 2, OIB Science Team Meeting

0830 Sea Ice Team Breakout

   • Attend to unfinished business

   • Report out to OIB team

1200 End of meeting