

## Meeting Report

SCICEX SAC Meeting: 18 December 2014

*Held in recognition of Jeff Gossett's retirement from ASL*

2014 Fall AGU  
Thursday, 18 December  
4:30 pm to 6 pm

ARCUS Meeting Room Arctic Community Meeting Room  
San Francisco Marriot Marquis (55 4t Street)  
2<sup>nd</sup> Floor, Foothill E

\*\*\*\*\* *Light refreshments served* \*\*\*\*\*

Attendees: Jackie Richter-Menge (CRREL, Chair), Jeff Gossett (ASL), Travis King (ASL), Paul Bienhoff (JHUAPL/USARC), Larry Mayer (UNH), Martin Jeffries (ONR), Scott Harper (ONR), John Farrell (USARC), Dale Chayes (LDEO), Bill Smethie (LDEO), Ray Sambrotto (LDEO), Walt Meier (NASA), Ann Windnagel (NSIDC)

### Primary meeting objectives:

- Brief updates on state of SCICEX
- Recognizing Jeff Gossett in light of his pending retirement from Government service

### State of SCICEX

- SAC report (discussion led by Richter-Menge)
  - General Comments: Are we meeting program goals
    - o Yes!
    - o With the delivery of the SCICEX Science Plan, ASL is actively seeking and facilitating the collection of SCICEX data via SAM missions
    - o NSIDC SCICEX web site is in excellent shape
    - o New data is being delivered to the research community – need to up effort to see that community is aware of this resource
      - **Action:**
        - General announcement of new data via web site link, Arctic Info, cyrolog, etc. (Windnagel, R-Menge)
        - Prepare slides for USN (R-Menge, Jeffries)
          - o JR-M to get slides prepared by Jeff G. for NWC via John F. or Martin (completed)
          - o Tie to Navy Road Map
        - Witness the Arctic (Windnagel, R-Menge, Jeffries)
        - EOS (R-Menge, Windnagel, Jeffries)
        - AGU 2015: NSIDC presentation on historic data recovery
          - o Point to new significant contributions in bathy, water (CTD and chemistry/biology), ice thickness
    - o Turnaround time in data is fast improving: Some data (bathy, XCTD, water samples) from 2014 SAMS already (less than a year!) being posted to site – again, need to make community aware
    - o Most significant challenge the program currently faces: Being sure not to lose the hard-gained momentum as a result of the transition of personnel at ASL, namely the pending retirement of Jeff Gossett.
- Bathy

- Lines in 2014 added A LOT to the bathy map of Arctic Ocean. In general, the bathy data collection in this new phase of SCICEX is well placed and of good quality, making a significant and complimentary contribution to mapping efforts.
- Map of priority sites for collection of bathy data
  - **Action:** Larry M. will build on information previously provided to ASL by adding specific priorities in regions where there are gaps in data, specifically outside the Canada Basin.
  - Calibration of bathy data: Larry M. clarified that calibration is best obtained by traveling across existing lines. **Action:** ASL to consider running calibration lines in future SAMs
- Investigating possible addition of gravimeter
  - Dale Chayes has a handle on some units that may be available. **Action:** Jamie M. to contact Dale.
- Acknowledged that there are some problems with nav data associated with bathy records (i.e. some missing from Hampton in 2014). Jeff G. pointed out that every data set is unique, making it necessary to tweak processing procedures. This reflects inherent collection procedure; expect more of the same.

**Action:** In the case of the Hampton data, position data wasn't co-recorded in the bathy files. Larry to get nav data from Ann & correlate based on time/date.

**Action:** More generally, contact ASL when these problems are discovered to formulate a plan of action.

#### – Ice Draft

- Status of Johns Hopkins University (JHU) independent recording system
  - Clarified that this is NOT a new topsounder system
  - Further progress in developing the system is dependent on future funding
  - Good target for testing new system: ICEX 2016
  - JHU unit could allow for assessment of onboard interpretation of topsounder data for ice draft (which is meant to be of scientific quality), important to safe operations in ice covered waters.
  - Should also consider whether JHU unit could be designed to collect bottom sounder data.
  - JHU unit should be optimized to work on the array subs scheduled to travel the Arctic in near future.
  - In general, suggested that recording system can be better optimized by collaborating more closely with ASL. **Action:** JHU to coordinate with ASL
- Addressing issue of recording first versus peak return from onboard topsounder
  - Older data is first return, newer data (2014) is peak return.
  - Data from Hampton is available to investigate possibility of recovering first return data from peak return records. **Action:** IAC to determine whether this work will be supported.
  - **Action:** In future SAMS, ASL will work with NUWC to emphasize importance of filtering topsounder data to establish first (versus peak) return.
- ICEX2016
  - ASL would like to use ICEX2016 as an opportunity to ground truth topsounder data, noting that efforts in 2011 and 2013 were unsuccessful.
- M. Wenshenhan plans career change in Sept 2015
  - **Action:** IAC to develop a transition plan for processing of topsounder data
  - **Action:** NSIDC to work with Mark W. and ASL to make a final assessment of topsounder data collected since 2011.
  - **Action:** NSIDC to work with Mark W. to document data processing protocol for topsounder
- Miscellaneous
  - **Action:** JR-M to obtain NRL data from ICEX2011 along polar bear line

#### – Hydrography

- Thanks to efforts of Jeff, Jamie, Ray and Ann, responsibility for QA/QC has been successfully transitioned to Jamie.

- Thanks to efforts of Martin Jeffries and SAMS, 2011 SAM data has been recovered from Tim Boyd's computer. **Action:** Jamie to check data before posting on NSIDC site
- o 2014 data
  - Hull mounted CTDs in 2014 did not have clock set at real time (both boats). **Action:** Jeff to work with Jamie in dealing with this before Jeff leaves at end of January.
  - **Action:** Compare SCICEX and NPEO data in 2014 (Morison and Gossett)
- Water biology and chemistry
  - o 2014 SAM provided a great (!) new set of data on water properties in the Canada Basin.
  - o Poster highlighting new data presented at 2014 Fall AGU. **Action:** Ray to provide poster to Ann for inclusion on SCICEX web site
  - o 2014 lessons learn
    - Very productive meeting with Ray at ASL, allowing ASL to establish specific procedures to follow when preparing for SAM, including critical milestones (i.e. POAM). **Action:** Ray to provide POAM to NSIDC for archiving (completed)
    - Confirmed and emphasized value of training crew in sample collection prior to SAM, including identifying someone to be in charge of sample collection.
    - Another key improvement will be packaging to minimize impact on space requirements.
  - o Planning letter has been prepared and submitted to ONR for the collection of water samples in 2016 SCICEX SAM, anticipated in conjunction with ICEX2016
  - o Proposal to NSF Division of Polar Programs for the analysis of water samples anticipated for FY16 funding cycle; FY15 proposal not practical given the status of the 2014 water samples at the time of call for proposals.
  - o **Action:** Ray and Bill to provide list of water samples for non-ice camp (ICEX) SAM missions
- NSIDC report (Windnagel)
  - 2014 data out in 2014!!!!, achieving a major milestone
    - o AW and JR-M to prepare announcement of new data in Jan. 2015
  - Declass bathy data, released to IBCAO in a chunk every 5 years: Should be link to point to these data on the NSIDC SCICEX web site. **Action:** John F. to add NSIDC to the distribution list alerting the availability of new bathy
  - Need to advance the awareness and usage of data
    - o **Action:** NSIDC to look into a way to determine who is using the data
    - o **Action:** Make suggestion for referencing data more prominent
  - **Action:** Ann working with Jamie to review and post Boyd's 2011 XCTD data
  - **Action:** Ann working with all scientists to post documentation and data sampling protocols
  - **Action:** Ann working to add navigation data to data inventory page
  - **Action:** Ann will post AGU posters to SCICEX site
- IAC report (Jeffries)
  - Generally pleased with progress and state of SCICEX Phase 2
  - Need to encourage active participation by NSF
  - Consider adding other agencies to IAC (e.g. NOAA who is likely to have a specific interest in biology data and long term obs)

#### Transition at ASL: Jeff's retirement

- No defined plan in place at ASL to take over Jeff's SCICEX duties
  - o **Action:** ONR to contact ASL (i.e. Larry Estrada) to discuss transition plan
- Travis King (ASL) attending this meeting to be introduced to members of SCICEX SAC and IAC; use as point of contact until formal transition plan is put in place

**THANK YOU!!!, Jeff,**

for your many years of active commitment to SCICEX, including your strong support for the recent re-  
invigoration of the program. Your efforts have resulted in the delivery of a unique set of long term  
observations on the changing state of the Arctic Ocean, including its sea ice cover, water properties  
and bathymetry.