



# Applied Science and Research Standing Committee (ASRSC)

## Committee Report

Wolfgang Dierking

Alfred Wegener Institute & University in Tromsø

Phillip Reid

University of Tasmania

Dean Flett

Canadian Ice Service



## **Applied Science and Research Standing Committee (ASRSC)**

Many thanks to Dean for preparing the presentation  
about status of still pending action items!!

(To be shown this afternoon)

# Action Group: Retrieval of sea ice parameters (1)

SC14-6 white paper on (new) ice chart parameters

*(Sean Helfrich and Nick Hughes, 2013)* completed??

- Ice thickness + volume
- Ice motion / pressure
- Ice age
- Snow Depth
- Fraction of Ridged Ice
- Stage of melting (“melting form”)
- Rotten ice
- Ice Compression and Tensile Strength
- Measurement Uncertainties, range (min – max)
- “Analyst confidence”

## Action Group: Retrieval of sea ice parameters (2)

SC14-11 evaluation of ice + snow thickness data set

(a) for operational users and

(b) for initializing sea ice model runs

Linked to CliC activity (*Lead: Nick Hughes*)

To be continued

SC15-10 Shipboard instrumentation

suggestions from FMI are available

(*Nick Hughes, Sean Helfrich, Tumas Niskanen,...*)

To be continued?

## Action Group: Retrieval of sea ice parameters (3)

SC17-3 Validation Exchange methodologies and evaluation techniques for ice information verification (observations, charts, model outputs). Long term objective: move towards standards for verification.

*(Responsible: CIS - Paul Pestieau, NIC - Sean Helfrich, DMI - Till Rasmussen, NIS - Nick Hughes, IIP – Mike Hicks)*

- NAIS partners at June 2017 meeting initiated activities to pursue verification studies for sea ice and icebergs
- Within context of YOPP, CIS has expanded its research to include NAIS partners with intent to address verification

# Action Group: Retrieval of sea ice parameters (3)

This action group to be discussed in ASRSC-meetings:

- priorities,
- overlaps,
- lacking feedback,
- lack of time,
- how to proceed
- ...

## Action Group: Satellite missions (1)

SC16-5 Provide link to third party missions

Completed

SC17-1 Potential of INSAR

*(Responsible W. Dierking)*

- Presentation Science Workshop
- Publication in „The Cryosphere“: Feasibility
- Submitted manuscript „TGRS“: Validation (landfast ice)

Completed

## Action Group: Satellite missions (2)

SC17-2 TerraSAR InSAR acquisitions over landfast ice regimes off Labrador and Barrow coasts in coordination with deployment of in-situ buoys planned for December 2017 (Labrador) and Spring 2018 (Barrow; TBC)

*(Responsible: Wolfgang Dierking (SAR acquisitions), Adrienne Tivy, Bruno Tremblay, Pablo Clemente-Colon, and Andy Mahoney (Buoy deployment))*

**TO BE STARTED (?-> DISCUSSION)**

## Action Group: Collaborations

SC15-8 collaboration between ASPeCt and Ice Watch  
shipboard sea ice observations programmes

(Responsible: Pablo Clemente-Colón, Nick Hughes,  
Petra Heil, Jenny Hutchings, John Falkingham)

Completed?

## Action Group: “Southern Hemisphere”

SC15-9 “Southern collaboration” **to be continued**

- Southern hemisphere services to share near real-time and historical in-situ ice and meteorological observations from Antarctic stations via NSIDC.
- Provide manual (in Spanish) on ice observations training.

(Responsible: Alvaro Scardilli, ASRSC co-chairs, Florence Fetterer)

SC16-2 Make the Argentinian ice observation manual available via Global Cryosphere Watch web page

*(Responsible: Vasily Smolyanitsky, Alvaro Scardilli)*

**to be continued**

## Action Group: Reporting

SC17-4 Summary report on the outcomes of the Data Assimilation Workshop

Leif Toudal Pedersen provided a copy of the meeting report (August, 2017) which Secretariat distributed to members

Completed