



5th INTERNATIONAL ICE ANALYST WORKSHOP

May 16-20, 2016 – US National Ice Center, Suitland, MD
"Ice Analysis and Forecasting in the Southern Hemisphere"



MONDAY May 16, 2016

0830	Arrival – Coffee	
0900-0910	Workshop Motivation and Goals Adoption of the Agenda	CDR K. Taylor, Director, U.S. National Ice Center (NIC)
0910-0920	Meeting Logistics	C. Panowicz, NIC
0920-1000	Current State and Recent Trends of Antarctic Sea Ice	Dr. T. Markus, Chief, Cryospheric Science Laboratory, NASA Goddard Flight Center, USA

Use of Geographical Information Services in Sea Ice/Iceberg Analysis

1000-1100	Use of SIGRID-3 for Sea Ice Analysis	P. Wagner, Norwegian Ice Service
	- Background on SIGRID-3 Development	- Structure of SIGRID-3
	- Code Tables for SIGRID-3 Variables	- Egg Code to SIGRID-3
	- SIGRID 3 Shapefile Format- Mandatory and Optional Fields	- Database File Contents
	- Metadata File Structure and Content	- Archiving Data

1100-1115

BREAK

Center Discussions on Use of GIS: Type GIS used, software, database structure, process to translate from analysis to SIGRID-3 to database, tools, plug-ins, GUI development, workflow from analysis to product, data sharing, sharable GIS tools and areas that need development assistance.

1115-1140	SIPAS at U.S. National Ice Center	G. Wachira, NIC
1140-1205	GIS in Ice Analysis at Arctic and Antarctic Research Institute (AARI)	V. Smolyanitsky, AARI
1205-1230	QGIS at the Norwegian Ice Service (NIS)	N. Hughes, NIS

1230-1330

LUNCH

1330-1355	Denmark Meteorological Institute (DMI) -Antarctic Analysis Production	J. Jakobsen, DMI
1355-1420	Argentina Naval Hydrographic Service (SHN) - Antarctic Sea Ice Products	LT. A. Scardilli, SHN
1420-1445	Australia's Sea Ice Products and Plans	Dr. J. Leiser, ACECRC, University of Tasmania, Hobart, AU
1445-1510	Antarctic Sea Ice Analysis Collaboration NIC, NIS, AARI.....	N. Hughes, NIS

1515-1530

BREAK

1530-1630	Group Discussion – Harmonized Ice Products	N. Hughes, P. Wagner, NIS
	Review/Input Standardized Parameters on Ice Analysis/Databases	

*What's the point of harmonization and collaboration on **routine sea ice analysis products**?*

- | | |
|--|---|
| - What's in it for my agency? | - Are there already products in place that can be used? |
| - What shared data sources are available? | - Is there a requirement for your agency to produce products? |
| - What parameters does my service need to provide? | - What are advantages – i.e. why should do this? |
| - Is the work be duplicated-are we doing the same thing? | - What level of collaboration? |
| -Are we 'agreed' on use of standards? | -How make this 'official'? |



5th INTERNATIONAL ICE ANALYST WORKSHOP

May 16-20, 2016 – US National Ice Center, Suitland, MD
"Ice Analysis and Forecasting in the Southern Hemisphere"



TUESDAY May 17, 2016

0830 Arrival – Coffee

0900-0910 Workshop Announcements C. Panowicz, NIC

Antarctic Iceberg Monitoring/Data

Discussions on each agencies mission as it pertains to icebergs, data used, GIS use, efforts to track icebergs, data sources for analysis, what challenges are, size criteria, data formats/output, and how/where product is disseminated for users.

0910-0930 NIC Antarctic Database/Antarctic Shelf Update MST1 Tyson, NIC
 C. Readinger, NIC

0930-1015 Brigham Young Univ (BYU) Antarctic Iceberg Tracking Database Dr. D. Long, Assoc Dean, Fulton
 College of Engineering and Tech,
 BYU

1015-1030 IICWG Iceberg Committee Update CDR G. McGrath, CO USCG Int'l
 Ice Patrol (IIP)

1030-1045

BREAK

1045-1200 Group Discussion – Way Ahead for Monitoring Antarctic Icebergs Dr. D. Long, BYU
 CDR G. McGrath, IIP

Rationale for a collaborative or 'international' Southern Hemisphere (SH) iceberg tracking database.

- | | |
|---|--|
| - Where would it be located? | - What format would be needed – GIS? |
| - Who would the product be intended to serve? | - How would archive data? |
| - What agencies should be involved? | - What are advantages – i.e. why should do this? |
| - What should 'reportable' size limit? | - How often updated? |
| - What sources will be used for data? | - How make this 'official'? |

1200-1300

LUNCH

Operations and Needs of Vessels Operating in Antarctic Waters

Discussions on experience navigating in sea ice, recent missions, handling ships in ice, sea ice data needs of ship operators, timeliness of sea ice data, sea ice observations, useful outlook from centers on sea ice conditions, scale of analysis, data delivery.

1300-1400 Navigating Sea Ice and Icebergs of Antarctica CDR K. Boda, USCG

1400-1430 National Science Foundation (NSF)'s Polar Programs G. Blaisdell, NSF

1430-1500 Sea Ice Observations in Antarctica P. Wagner, NIS on behalf of
 P. Heil, ACECRC

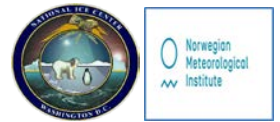
1500-1515

BREAK

1515-1630 Exercise 1- Preparing Routine Sea Ice Analysis in SH P. Wagner, NIS
 C. Readinger, NIC



5th INTERNATIONAL ICE ANALYST WORKSHOP
 May 16-20, 2016 – US National Ice Center, Suitland, MD
"Ice Analysis and Forecasting in the Southern Hemisphere"



WEDNESDAY May 18, 2016

0830 Arrival – Coffee

0900-0915 Workshop Announcements C. Panowicz, NIC

Sea Ice Modeling in the Southern Hemisphere

Presentations on operational sea ice models and parameters available to analysts.

0915-0945 GOFS Model in Antarctic R. Allard, *Naval Research Lab, Stennis Space Center, MS*

0945-1015 Argentina's Antarctic Ice Model LT A. Scardilli, *SNH*

1015-1100 Group Discussion- Models in Southern Hemisphere Dr. P. Clemente-Colòn, *NIC*
 R. Allard, *NRL SSC*

Southern Hemisphere Sea Ice Forecasting

- What requirements do ice services have for OPERATIONAL ice forecasts?
- What format would be needed – GIS?
- How can convert model data into usable forecast product?
- Can sea ice and iceberg analysis data be included in models?
- Is there a plan for validation – how would that be planned? Working Group?

1100-1115

BREAK

Sea Ice Analysis in the Southern Hemisphere (SH)

1115-1215 Global Maritime Distress System – Applicability to Ice Services V. Smolyanitsky, *AARI*
 - Connection between GMDSS, SafetyNet, MIS, NAVTEXT, METAREAS
 - Responsibilities of Countries 'owning' METAREAS
 - Regulations on preparation and dissemination of messages
 - Documentation on program-latest versions, location of information

1215-1315

LUNCH

1315-1430 Global Maritime Distress System – Applicability to Ice Services V. Smolyanitsky, *AARI*
 Continued discussion on responsibilities and process of preparing.

1430-1445

BREAK

1445-1515 S411 for Sea Ice/Iceberg Depiction in ENC's J. Holfort, *BSH*

1515-1630 Group Discussion – Implementation of GMDSS/ENC in SH V. Smolyanitsky, *AARI*
 J. Holfort, *BSH*

- How do we get started providing sea ice information in GMDSS and ENC's?
- What are the minimum requirements for areas?
- Where do these products 'go'?
- Are there shared products than can be used now for preparation?
- What can we do now?
- How do we plan the way forward?
- Converting shape files to ENC – what works?
- Is there a template for format?
- Where is latest information on regulations?
- What features can we depict now?
- Document our plan?
- Rules for ENC's?

1900-2100 Group Event – La Tasca, 607 King Street, Alexandria, Va



5th INTERNATIONAL ICE ANALYST WORKSHOP
 May 16-20, 2016 – US National Ice Center, Suitland, MD
"Ice Analysis and Forecasting in the Southern Hemisphere"



FRIDAY May 20, 2016

0830	Arrival – Coffee	
0900-0910	Workshop Announcements.....	C. Panowicz, <i>NIC</i>
0910-1000	Geophysical Constraints on the Antarctic Sea Ice Cover.....	Dr. P. Clemente-Colón, <i>NIC</i> Dr. S. V. Nghiem, <i>JPL</i>
1010-1130	Review of Noted Differences from Exercise #1 Verification of Ice Edge Forecast Collection of Best Practices.....	N. Hughes, <i>NIS</i>
1130-1200	Complete Comparison Chart Sea Ice Analysis Parameters.....	P. Wagner, <i>NIS</i>

1200-1300

LUNCH

1300-1400	Review/Respond to Action Items for 2016 IICWG (Southern Hemisphere) Update S.H. Contact Information List.....	C. Panowicz, <i>NIC</i> LT A. Scardilli, <i>SNH</i>
1400-1430	Future Plans, Questions and Discussion.....	C. Panowicz, <i>NIC</i> V. Smolyanitsky, <i>AARI</i> N. Hughes, <i>NIS</i>
1430-1500	Documenting the Meeting.....	All