



International Ice Charting Working Group VIII Yearbook  
(Summary of attendees and participating agencies/services)

Section I  
Agencies/Services

Section II  
Attendees

## Section I Agencies/Services



[Alaska Satellite Facility](#)

The Alaska Satellite Facility (ASF) of the Geophysical Institute, University of Alaska Fairbanks, has more than a decade of experience in satellite remote sensing. ASF is involved in a wide range of activities -- from downlinking satellite data to developing data analysis tools, value-added products, and training for Synthetic Aperture Radar (SAR) users. SAR is the only satellite imagery that can be acquired at any time of the day or night and during adverse weather conditions.

Satellite remote-sensing data are acquired, processed, analyzed, and archived by the various centers of ASF. The data are distributed to national and international scientists, as well as to government agencies. The primary goal of the ASF staff is to provide expertise and service to the research community.



[Canadian Ice Service](#)

The Canadian Ice Service (CIS) has conducted ice aerial reconnaissance, ice analysis and forecasting, and shipping route forecasting for over fifty years. The CIS works in partnership with the Canadian Coast Guard, and other Canadian and international organizations. With its centre of operations in Ottawa, Ontario, it consists of over 80 professionals working ashore, in ships, and flying in aircraft, to provide around the clock support to the marine community. Along with the International Ice Patrol and the National Ice Center, CIS is a proud member of the North American Ice Service.



[Danish Meteorological Institute](#)



[Federal Maritime and Hydrographic Agency of Germany](#)



[Finnish Institute of Marine Research](#)

The first ice service activities in Finland started already in 1890s by the Finnish Scientific Society. In 1915 the World War forced to provision of immediately available ice service activities, and operational ice service started. In November 1918, with the founding of the Finnish Institute of Marine Research, the Finnish Ice Service became a part of the new organisation. The first ice charts and reports were published in January 1919. Today Finnish Ice Service provides daily ice service over the Baltic Sea to support icebreaking and the maritime transportation.



[Icelandic Meteorological Office](#)



[Hydrographical Department, Maritime Safety Agency, Japan](#)



[National Snow & Ice Data Center](#)

We support research into our world's frozen realms: the snow, ice, glacier, frozen ground, and climate interactions that make up Earth's cryosphere. Scientific data, whether taken in the field or relayed from satellites orbiting Earth, form the foundation for the scientific research that informs the world about our planet and our climate systems.



**Norwegian  
Meteorological Institute**  
met.no

[Norwegian Meteorological Institute](http://www.met.no)

The Norwegian Meteorological Institute (met.no) is the official meteorological service for official and military purpose. met.no shall work to help authorities, industry, trade and the public to save life and property, to plan activities and to save the environment. The National Ice Service is a part of met.no, included in the Forecasting Division for Northern Norway in Tromsø.



[Russian Federation Arctic and Antarctic Research Institute](http://www.aari.ru)



[Swedish Meteorological and Hydrological Institute](http://www.smhi.se)

The national Swedish meteorological and hydrological institute, SMHI, was founded in 1873 and meteorological data as well as ice observations in Swedish fairways are available since then. The Swedish Ice Service at SMHI has used remote sensing since the late 1960's, SAR data operationally since 1990, starting with ERS-1. Since the launch of RADARSAT-1, SAR data has been increasingly important. Based on daily ice charts (produced during the winter period November- May), a comprehensive data base with ice conditions in the Baltic together with a detailed 3-dimensional ocean model calculating ice formation and ice drift up to 5 days ahead, the ice service can provide a wide variety of information optimizing icebreaking, shipping and marine construction.



[United States National Ice Center](http://www.nic.noaa.gov)

The National Ice Center (NIC) is a multi-agency operational center operated by the [United States Navy](http://www.navy.mil), the [National Oceanic and Atmospheric Administration \(NOAA\)](http://www.noaa.gov), and the [United States Coast Guard](http://www.uscg.mil). Our mission is to provide the highest quality strategic and tactical ice services tailored to meet the operational requirements of U.S. national interests and to provide specialized meteorological and oceanographic services to United States government agencies. Along with the Canadian Ice Service and the International Ice Patrol, NIC is a proud member of the North American Ice Service.



## [U.S. Coast Guard International Ice Patrol](#)

Formed in the aftermath of the tragic sinking of the RMS TITANIC in 1912, the International Ice Patrol (IIP) monitors the iceberg danger near the Grand Banks of Newfoundland and provides the limits of all known ice to the maritime community. Located in Groton, CT; IIP has a crew of 17 employees, with 4 officers, 3 civilians, and 10 enlisted personnel (one Yeoman and nine Marine Science Technicians). Along with the Canadian Ice Service and the National Ice Center, IIP is a proud member of the North American Ice Service.

**Section II**  
**Attendees**  
(Name, Agency, Biography)

**Adamsen, Nora**

**Bancroft, Douglas**  
*Canadian Ice Service*



Douglas Bancroft joined the Meteorological Service of Canada (MSC) in 1981, and served as a forecaster, shift supervisor, operations supervisor and manager in a variety of weather centres. He later served as national Director of Oceanography and Climate Science, and since 2006, has been Director of the Canadian Ice Service, and Co-Director of the NAIS. In addition to his civil service duties, as a member of the Canadian Naval Reserve, he has served a variety of tours at sea and ashore, including command of six ships for various periods. Doug holds a BSc in Physics, a specialised undergraduate diploma in meteorology, and an MSc in Physical Oceanography. He is married with a son and daughter (both undergraduates).

**Bowyer, Paul**  
*British Antarctic Survey*

Graduated from the University of Leicester UK, with a B.Sc. in Geography, before going on to complete a M.Sc. in Geographical Information Systems at the University of Nottingham, UK. Also holds a Ph.D. in remote sensing of vegetation from the University of Salford, UK. A newcomer to the world of ice, having a background in remote sensing of soil and vegetation, and has worked as a research assistant and post-doctoral fellow on various projects ranging from estimation of vegetation water content for wildfire modelling, through to landcover mapping for modelling the transmission of a parasitic zoonosis. Currently working on the Polar View project, Antarctic Node.

**Breivik, Lars-Anders**  
*Norwegian Meteorological Institute (met.no)*

Lars-Anders Breivik is Head of Section for Remote Sensing, Research and Development at the Norwegian Meteorological Institute in Oslo. His background is dynamic meteorology and assimilation in NWP. The emphasis last years has been on transferring scientific work and results into operational use. This involves the chain from scientific algorithm development to implementation in real time applications and user contact. A main task has been the work as Project manager for the development and operation of the High Latitude Ocean & Sea Ice Satellite Application Facility (OSI SAF), <http://saf.met.no/>.

**Buch, Erik**  
*Danish Meteorological Institute*  
*(Centre for Ocean and Ice)*



Dr. Erik Buch (Director of Centre for Ocean and Ice). Graduated as Master of Science, Physical Oceanography, 1978; Lic. Scient. (Ph.D), Physical Oceanography, 1983; Bachelor of Commerce, Management, 1990 and Project Management, 1994. Senior scientist at Greenland Fisheries Research Institute, 1982; Head of Fisheries Department, same institute, 1985. Vice-Director, same institute, 1986. Head of Oceanographic Department, Royal Danish Administration of Navigation and Hydrography, 1990. Head of Division for Operational Oceanography, DMI 1998 (renamed to Centre for Ocean and Ice in 2006). Responsible for the Danish oceanographic contribution to the Greenland Sea Project. Project co-ordinator for the Nordic contribution to World Ocean Circulation Experiment - NORDIC WOCE. Representing DMI in EuroGOOS, chairman of EuroGOOS Baltic Task Team since 1998. Coordinator of the EU-funded projects PAPA and ECOOP, WP leader in the MERSEA IP project. Great experience in oceanographic data collection, analysis and presentation. Responsible for oceanographic monitoring program in Greenland Waters since 1980.

**Celentano, Andrea**

**Chartier, Ray**  
*National Ice Center*



Commander Raymond E. Chartier Jr. was born in Pawtucket, Rhode Island, and grew up in East Hartford, Connecticut. He began his naval service in 1982 by enlisting in the Navy. After two years he received a Naval Reserve Officer Training Corps (NROTC) scholarship to the University of Washington where he earned a Bachelor of Science Degree in Oceanography with an emphasis in Physics. In 1988 he was commissioned in the Unrestricted Line community. His military career includes many challenging sea and shore tours of duty: Nuclear Power and Submarine Officer training pipeline 1988-1989; USS NEVADA (SSBN 733 Gold) 1989-1993; Naval Postgraduate School 1993-1995 (MS in Oceanography and Meteorology); Naval European Meteorology and Oceanography Center (NEMOC), Rota Spain 1995-1998; USS ABRAHAM LINCOLN (CVN 72) 1998-2000; Naval Meteorology and Oceanography Detachment, Fallon, NV from 2000-2003; Chief of Naval Operations (OPNAV) Staff in Washington, D.C. 2003-2007. He has served as the Director of the National Ice Center since May 2007. He and his wife have been married since 1988 and have three children.

**Clemente-Colón, Pablo**  
*U.S. National Ice Center*



Born and raised on the warm shores of a tropical island, Puerto Rico, USA. I have served as Chief Scientist of the National Ice Center (NIC) since March 2005 and within the NOAA National Environmental Satellite, Data, and Information Service (NESDIS) as an Oceanographer for nearly 30 years. I received a B.S. degree in physics from the University of Puerto Rico at Mayagüez in 1977, M.S.

degree in oceanography from Texas A&M University, College Station in 1980, and Ph.D. degree in Marine Studies from the University of Delaware, Newark in 2002. I serve in numerous scientific organizations and technical committees in the U.S. and internationally including the North American Ice Service (NAIS) Science Committee, International Ice Charting Working Group (IICWG) Science and Technology Standing Committee, Global Climate Observing System (GCOS) Sea Ice Subgroup (SIS) Executive Committee, Alaska Ocean Observing System (AOOS) Sea Ice (SI) Working Group, NOAA International Affairs Council (IAC) Polar Committee, International Arctic Buoy Programme (IABP) Executive Committee, and the International Programme for Antarctic Buoys (IPAB) Executive Committee. Although my present interests take me to high and very cold latitudes, I try to always keep a hot Latin heart.

### **Crevier, Yves**

#### **De Abreu, Roger** *Canadian Ice Service*



Born and raised in Toronto, Canada. Completed a Bachelor of Environmental Studies (1996) and Ph.D. in Geography, both at the University of Waterloo (1996). My doctorate thesis was entitled *In situ and Satellite Observations of Sea Ice Albedo During Spring Melt*. Participated in numerous sea ice field campaigns, most focused on the validation of satellite imagery. Spent two years at the Canada Centre for Remote Sensing as a Visiting Fellow investigating the use of SAR for coastal applications. Since 1998, have worked in the Applied Science Division of the Canadian Ice Service of Environment Canada (and the North American Ice Service) where I focus primarily on the operational remote sensing of sea ice and oil spills. I currently participate on the IICWG Standing Organizing Committee. Contact email is [roger.deabreu@ec.gc.ca](mailto:roger.deabreu@ec.gc.ca)

#### **Dinessen, Frode** *Norwegian Ice Service*

Born and raised in northern Norway. Lived most of my life in Tromsø and was graduated from the University in Tromsø in 1996 (Applied Physics). Started to work at the Norwegian Meteorological Institute, forecasting division for Northern Norway, in 1997. Was involved when the Ice Service was moved from the head quarter in Oslo to the forecasting division for Northern Norway. Became leader of the Ice Service. From 2001 – 2007 I was working with development of ground segments for receiving and processing of satellite data at Kongsberg Spacetec. In 2007 I returned to the Norwegian Ice Service as Project Manager. Have a girlfriend and two kids. Enjoying football, ski, fishing and mountain tours.

#### **Ezerskis, Giedrius**

#### **Falkingham, John**

***Canadian Ice Service***



Trained as a meteorologist, John Falkingham has been intimately involved with monitoring Canada's ice environment and predicting its changes for over three decades. He has worked in various capacities at the Canadian Ice Service, a division of Environment Canada, and is currently a special advisor to the Director. He is an expert, not only in sea ice forecasting and climatology, but also in how ice affects marine navigation and how mariners make use of ice information. He strives to combine sound science with real world situations, reconciling a need for answers with the uncertainties of prediction. Internationally, John represents Canada on the JCOMM Expert Team on Sea Ice and is a founding member of the International Ice Charting Working Group.

**Ferri, Maria Teresa**

**Fetterer, Florence**

***National Snow & Ice Data Center***



I manage NSIDC's NOAA-sponsored program and serve as the NSIDC liaison to NOAA. The NOAA@NSIDC program includes popular data sets such as the Glacier Photograph Database and the Sea Ice Index. The NOAA team specializes in documenting and publishing data sets that might otherwise remain unavailable to researchers. Examples include Russian and U.S. sea ice chart data, submarine upward looking sonar ice draft data, and historical Soviet snow data. Prior to joining NSIDC in 1996, I worked with the Naval Research Laboratory in Bay St. Louis, Mississippi. Note: Visit <http://nsidc.org/about/expertise/bios/fetterer.html> for more information.

**Frolov, Ivan**

**Gauthier, Marie-France**

***Canadian Ice Service***



I was born and raised in Gatineau, Quebec, Canada. I completed a Bachelor of Science in Physics at the Université du Québec à Trois-Rivières (1982) and received a diploma in Meteorology from the Université du Québec à Montréal (1983). I worked as an Operational Meteorologist at the Pacific Weather Centre, Vancouver, British Columbia and at Greenwood Military Base, Nova Scotia until summer 1988. Then I joined the Canadian Ice Service (CIS) as an Ice Forecaster, began studies in the field of management and

obtained a diploma in Industrial Relations. Between 1999 and 2007, I occupied numerous key positions at the CIS including Chief of Forecast Operations, Chief of Information Technology and Chief of Applied Sciences on an acting basis. In July 2007 I became the Chief of Forecast Operations Division of the CIS. I am an active member of the Canadian Meteorology and Oceanography Society. I enjoy cross-country skiing, yoga, and fine restaurants.

**Gråbak, Ola**  
*European Space Agency (ESRIN)*



Ola Gråbak joined the European Space Agency (ESRIN) in 1993 after doing his masters degree in Electrical Engineering at the Technical University of Trondheim, Norway. After completing the ESA young graduate program, he worked with facilities management within the ESA Earth Observation ground segment until 1996. From 1996-1997 he earned a masters degree in Space Studies with the International Space University in Strasbourg, France. After returning to ESRIN, Ola has been involved with Earth Observations applications development, sharing his time between developing the industrial aspects and supporting the GMES Service Element (GSE). Married with 2 children and enjoys hiking, fishing and cross country skiing.

**Grafström, Torbjörn**  
*Swedish Ice Service*  
*SMHI*



Torbjörn Grafström graduated from Uppsala University in 1984 and joined SMHI as weather forecaster. Between 1988 and 2006 he has been employed at the marine forecasting service, SMHI Weatherrouting, during a rapidly expanding period. From 1990 and onwards, the main interest however has been in sea ice mapping and ice forecasting. Has been a member of Expert Team on Sea Ice and represented Sweden in IICWG as well as the Baltic Sea Ice Meeting for some years. Is married to Gunilla since 1989 and has two children.

**Gullne, Ulf**

**Hall, Richard**

**Hansen, Keld Q**

**Holfort, Jürgen**  
*German Ice Service*



Born (1961) in Germany and raised in Mexico. The Diplom and PhD studies done at the Institut für Meereskunde at Kiel, the Diploma thesis about sediment transport in the Elbe estuary, the PhD thesis about large scale circulation and transports in the South Atlantic. Post-Doc at Brookhaven Natl Laboratory about the CO<sub>2</sub> transport in the Ocean, then working in the equatorial west Pacific back at the Institut für Meereskunde at Kiel. Then the focus shifted northwards, working in Nordic Seas and northern North Atlantic at the Institut für Meereskunde Hamburg, where some time was also devoted to teaching. From December 2003 to January 2006 at the Norwegian Polar Institute in Tromsø mainly working about the circulation in Fram Strait and the Freshwater transport in the East Greenland current. Since the university studies taken part in numerous research cruises, in later time mostly as cruise leader. Now at the BSH as head of the German ice service and Baltic sea water level service.  
Married without children and in the free time enjoying golf and photography.

**Jolles, Wim**

**Jonsdottir, Ingibjorg**

**Jönsson, Anette**  
*Swedish Meteorological and Hydrological Institute*



Born and raised in Halmstad, a town by the sea on the Swedish west coast. Studied oceanography in Gothenburg and graduated 1997. Continued with a PhD in Water and Environmental Studies 2005 from Linköping University. The topic was surface waves and its impact on bottom sediments. Started in parallel as an operational oceanographer at SMHI 1999 working mainly with the ocean circulation model Hiromb. Appointed as head of the oceanographic warning and ocean forecasting section 2006 of which the Swedish Ice Service is a part.

**Jørgensen, Peter Viskum**

**Kelly, Kathleen**

**La Belle-Hamer, Nettie**  
*Alaska Satellite Facility*



Nettie La Belle-Hamer received her Bachelor's degree in physics from the University of California at Berkeley in 1985. She achieved her Master's and her Ph.D. in space physics at the University of Alaska Fairbanks in 1988 and 1994, respectively. Following graduation, Dr. La Belle-Hamer became involved with the Alaska Satellite Facility (formerly known as the Alaska SAR Facility) first as the EOSDIS Core System Scientist working on the NASA development of a distributed earth science data system. After managing the first two Antarctic Mapping Missions and the RADARSAT Geophysical Processor System at ASF, she became the Science Center Manager in 2000. In 2002, Dr. La Belle-Hamer became the Director of the Alaska Satellite Facility.

**Lindberg, Amund E. B.**

**Lindvall, Johny**

**Madsen, Eric**

**Parmiggiani, Flavio**

**Pedersen, Leif Toudal**  
*Danish Meteorological Institute*  
*(Center for Ocean & Science)*



Leif Toudal Pedersen (ltp@dmi.dk). PhD in microwave remote sensing from the Technical University of Denmark (DTU), 1992. Employed at DTU from 1982 to 2007 (2001-2007 as an Associate Professor), and at DMI from November 2007 in the Center for ocean and Ice. Has been a co-investigator in a number of sea-ice related projects including the Greenland Sea Project, European Subpolar Ocean projects (ESOP and ESOP-2), the IMSI and IWICOS projects, the CONVECTION project, the PELICON and SEALION projects and the GreenICE, IOMASA, DAMOCLES and PolarView projects.

Most of these projects have been funded by the European Commission. Has been the chief designer of the popular ice/weather/ocean data distribution system <http://www.seaice.dk> at DTU. Has supervised numerous PhD and master students at DTU and served on evaluation committees both in Denmark and abroad. Is currently the head of the Satellite remote sensing group of DMI's Center for Ocean and Ice (COI). Is a member of the Danish National Committee for Climate Research and the Danish National Committee for the International Polar Year.

**Petti, Gary**

**Puestow, Thomas**

**Rogerson, Scott**

### ***USCG International Ice Patrol***



Born and raised in central California. Lived in northern Italy for 4 years (age 8-12). Graduated from U.S. Coast Guard Academy in New London, CT in 1989 (Applied Science). Has served aboard three different ships (270' WMEC in VA, 82' WPB in CA, and 110' WPB in ME). Graduated from the Naval Postgraduate School in Monterey, CA in 1995 (Meteorology & Physical Oceanography). Taught marine science at Coast Guard Academy from 1997-2001. Was Deputy Commander of IIP from 2001-2004. Completed a staff tour in Philadelphia from 2004-2007. Has been Commander of IIP since May 2007. Married with a teenage son. Enjoys golf, running and Ultimate Frisbee. Is active in his church (men's ministry & youth programs).

#### **Saper, Ronald**

#### **Scherbakov, Yuri**

#### **Seina, Ari**

***Finnish Ice Service***

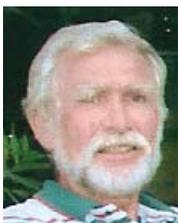
***Finnish Institute of Marine Research***



Born in 1950 in Helsinki, Finland. M.Sc. in 1985, Helsinki University, Finland. Worked as a research scientist in the Finnish Ice Service since 1974, Head 2001-07, and Head of Ice Research and Ice Service since 2008. Participated in many international sea ice and remote sensing projects. Founding member of IICWG (1999-) and Co-chair of Standing Committee on Data, Information and Customer Support (2004-). Chairman of Baltic Sea Ice Meeting (BSIM) (2004-). Founding member and member of board of European Ice Services (EIS) (2007-). Since 2004 member of WMO/JCOMM-IOC – Expert Team for Sea Ice representing Finland and BSIM. Member of National Remote Sensing Advisory Group. Member of Standing Committee for National EU affairs in Science and Technology. Participated many national and international ice and remote sensing research projects. Married with lovely Eeva-Liisa. Enjoys good wine, good company, and rambling in mountains.

#### **Smolyanitsky, Vasily**

#### **Strübing, Klaus**



Born (1939) and raised in the old German Hanse City Lübeck near the coast of the Baltic Sea. Diploma in Geography (+ Geology and Meteorology) from the University of Hamburg (July 1967). Employment 1967 - 2004: At Bundesamt für Seeschifffahrt und Hydrograph (BSH) - Federal Maritime and Hydrographic Agency (until 1990 named Deutsches Hydrographisches Institut (DHI)) – German Hydrographic Institute. Positions held

1967 - 1993: Scientific official in the Ice Service of the Dept. of Oceanography,  
1993 - 2004: Head of the Section "Ice Service" (incl. Remote Sensing)  
2001 - 2004: Head (Director and Professor) of the Division "Marine Services"  
30.04.2004: Retirement. Later on active as consultant.

Activities/Memberships in several national and international research and working groups, boards etc related to sea ice and remote sensing.

Practical experience in different ice conditions, ice reconnaissance and in ice navigation could be gained on board of icebreakers, merchant and research vessels (e.g. "Polarstern") as well as on board of helicopters and special aircrafts. Navigated sea areas were: Baltic Sea and North Sea, northern North Atlantic (Labrador Sea to Greenland Sea/Fram Strait), Arctic Ocean (Baffin Bay to Beaufort Sea with Canadian Ice Patrol aircraft), research campaign at O'Higgins Station (Antarctic Peninsula).

Married with Anke. Enjoying volleyball and running (until severe car accident in 1988) and cycling.

### **Tangen, Helge**

#### *Norwegian Meteorological Institute (met.no)*

Born (1955) in Southern Norway (Oslo area). Master degree in Meteorology in 1985 at the University of Oslo. Served as meteorologist for met.no in Stavanger (1985-1987) and Tromsø (1997-1998). From January 1999 Regional Director for Northern Norway activities at met.no, with headquarter in Tromsø (70 degrees north). Responsibilities: All weather forecasting in the Norwegian and Barents Seas, as well as land areas of Northern Norway and Svalbard. Aviation forecasting is also included in the tasks. The Norwegian Ice Service is located at the met.no Tromsø office, too. The manned arctic stations Jan Mayen, Bear Island and Hopen are administrated from the Tromsø office. Was Project Manager for the GMES ICEMON project (2003-2006) and active in the process of forming Polar View as a follow-up, joined with the Canadian led Northern View project. Serving as node manager for the Euro-Russian Arctic node in Polar View. A funding member of IICWG. Also a funding member of the EIS (European Ice Services) and currently serving as Chairman of the EIS board (2007-2009). Enjoying classical music, wine, skiing, garden work and fishing.

### **Young, Sharolyn**