# Workshop on Oceanographic Studies of the Amundsen Sea

University of Göteborg, Ågrenska Villan 28-29 April 2011

## Thursday 28 April

10.00: Convene workshop - *R. Muench*, Earth & Space Research (ESR), Chair 10.00 – 10.15: Introductions, short announcements

# 10.15 – 11.30: Background

10.15 – 10.30 Workshop background and goals, and the SASSI program - *Robin Muench* 10.30 – 11.00 Coastal and bottom topographic details. *Richard Gyllencreutz*, Stockholm University

11.00 – 11.15 Influence of glacier melt water and Circumpolar Deep Water on Calcium Carbonate saturation in Antarctic waters. *Melissa Chierici*, University of Gothenburg 11.15 – 11.30 Glaciology of the sector feeding into the Amundsen Sea. *Per Holmlund*, Stockholm University

# 11.30 – 12.30: Lunch

# **12.30 – 14.00 - Recent results**

12.30 – 13.00. ANTarctic Shelf Ecology and Exchange, *Ole Anders Nöst*, Norwegian Polar Institute

13.00 – 13.15 Dynamics and evolution of epidemic diseases in Antarctic seals. *Karin Hårding*, University of Gothenburg

13.15 – 13.45 Recent results from the Western Amundsen Shelf (hydrographic data from 2008/2009; 2010/2011; mooring 2010), TIDES *Anna Wåhlin*, University of Gothenburg 13.45 – 14.15 Recent results from Pine Island Bay. *Keith Nicholls*, British Antarctic Survey

# 14.15 – 14.45 Coffee

## 14.45 – 17.00: Recent results (cont'd)

14.45 – 15.30 Model results of CDW intrusions onto the Ross and West Antarctic peninsula Shelves, recent developments of the Amundsen model, *John Klinck*, Old Dominion University 15.30 – 16.00 Observations near and beneath Pine Island Glacier: tales from a yellow submarine and its friends. *Pierre Dutrieux*, LDEO

16.00 – 16.15 Variability of the ACC measured by satellite altimetry (presentation of master thesis project). *Hanna Alsen*, University of Gothenburg

16.15 – 17.00: The ACC as seen using OSCAR and other satellite-derived information. *Kathleen Dohan*, Earth and Space Research (ESR)

**19.00: Group Dinner at the restaurant 'Hemma Haga' in Haga.** The restaurant has a selection of small dishes, traditional Swedish food. You usually need two or three dishes if you are hungry. Menu and map enclosed!

# Friday 29 April:

## 9.00 – 10.00. Discussion and Hypothesis Development. Chair: R. Muench.

Possible topics include: candidate forcing mechanisms for CDW intrusions; impacts of sea ice cover and icebergs; processes involving the Getz Ice Shelf; circulation on the Amundsen shelf; role of slope currents and the ACC; decadal changes; historical changes in the WAIS; role of bottom topography at different scales; New scientific questions!; Joint proposals?; and, an Ocean Science Meeting 2012 Antarctic shelf session.

#### **Ongoing and future collaborative field work, satellite-derived information. Chair:** *G. Björk* **10.00 – 10.30: Update and discussion of the Swedish OSO-cruise program status**: *Martin Biuw*, Swedish Polar Research Secretariat

#### 10.30 – 11.00: Coffee

#### 11.00 – 12.00 Collaborations (cont'd)

11.00 – 11.15 Korea Polar Research Institute (via videolink): Presentation of new Polar icebreaker Araon, future plans [CANCELLED]

11.15 – 11.30 OSO 2011/2012 cruise G. Björk

11.30 - 11.45 UGOT field work plans from Oden during 2012 - 2015. A. Wåhlin

11.45 - 12.00 Summary BAS moorings and field activities in 2012/2013. K. Nicholls

#### 12.00 – 13.00: Lunch

#### 13.00 - 15:00: Collaborations (cont's). Chair: Karen Heywood

13.00 - 13.15 Summary of LDEO/BAS field work plans 2012/2013 (Autosub). Pierre Dutrieux

13.15 – 13.30 Processes and variability of ocean heat transport toward ice shelves in the Amundsen Sea Embayment. *Karen Heywood* 

## 13.30 – 15.00 Discussion. Chair: Karen Heywood

Summary of existing field work plans leading to minutes that can be circulated. Moorings, sections, timing, equipment launched/recovered (gliders, etc). Collaboration: Mooring positions, timing, opportunities for deploying equipment (met balloons, moorings, gliders etc). Borrow instruments? Model input...? Multibeam data. Climatology and meteorological data sources. Ftp site for workshop products.

## 15.00 – 15.05: Closing remarks and adjourn. Anna Wåhlin