

Antarctic Integrated System Science

- Inaugural Workshop
- The IPY Launch

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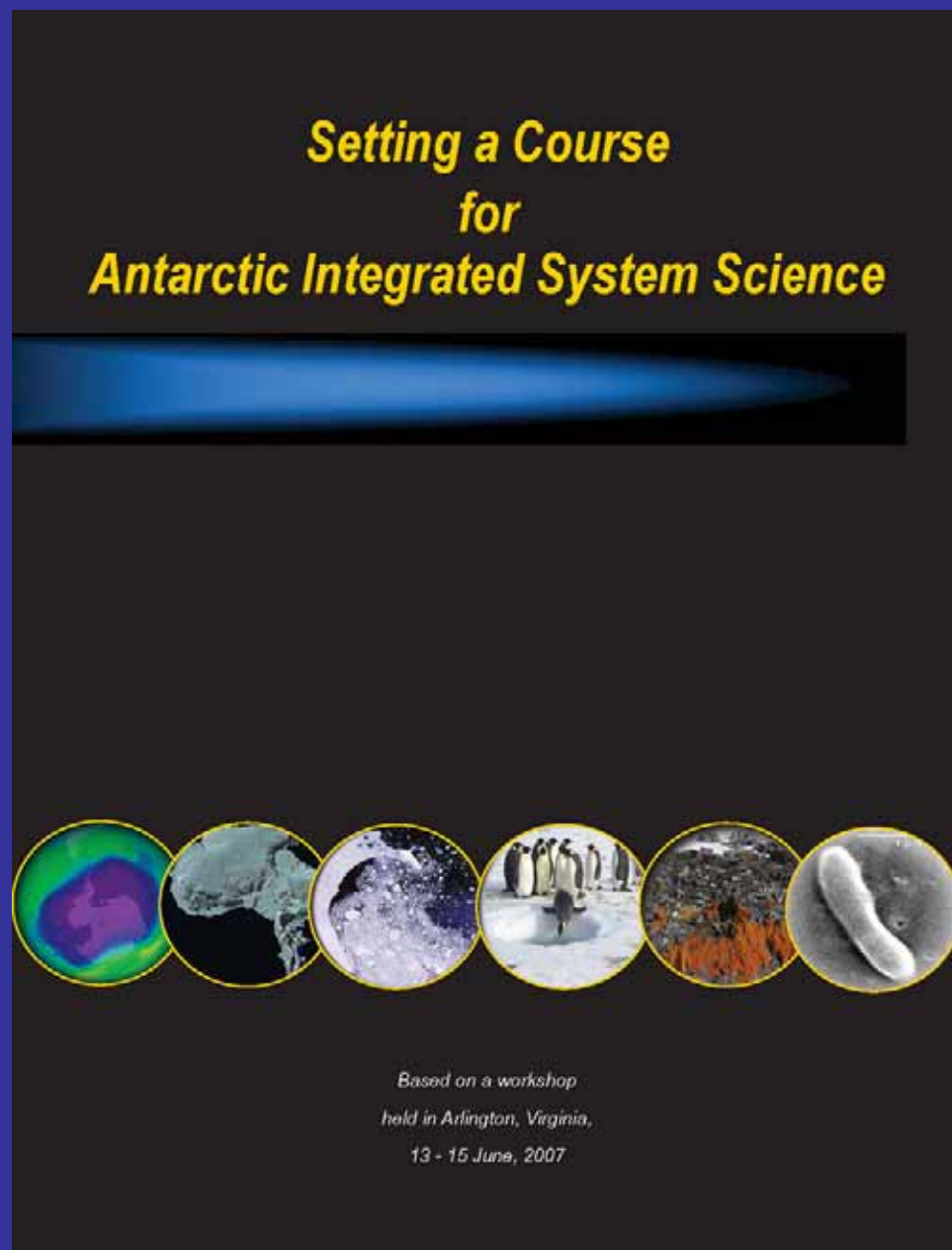


AISS

Workshop Report

<http://cresp.tamu.edu/AISSWorkshop>

attended by 40 scientists
representing broad
spectrum of earth &
environmental research
fields, institutions and
career stages



AISS Workshop Report Highlights

Recent advances and demonstrated linkages within Antarctica and to the rest of the globe provide the impetus for a program to facilitate Antarctic science focused on questions that transcend disciplinary boundaries.

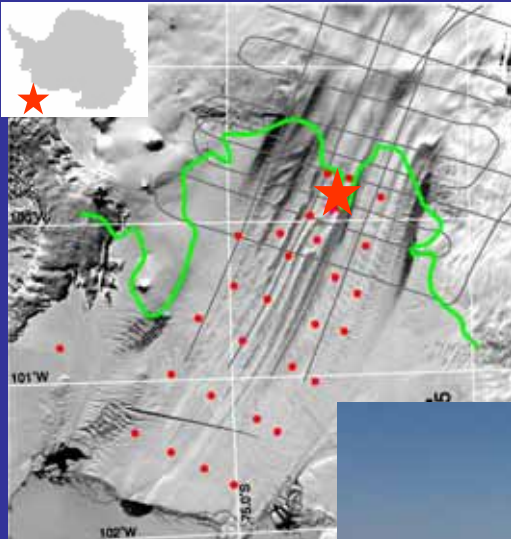
AISS projects are highly integrated, involve more than one discipline and address questions broader in scope than those typically supported by disciplinary Antarctic programs.

The enriched polar science landscape that AISS is poised to foster promises to be an important legacy of IPY 2007-2008.



COLLABORATIVE RESEARCH; IPY: Ocean-Ice Interaction in the Amundsen Sea Sector of West Antarctica

Integrated oceanographic and glaciological field studies linked with local and regional-scale modeling activities to advance prediction of future sea level change due to ice sheet behavior, particularly the active portion that drains into the Amundsen Sea



Depth of ocean cavity beneath ice shelf at 29 seismic stations requires helicopter support.



Wind-vane powered Iridium phone (inside surface pod) will transmit data and receive control commands to modify data collection from sub-shelf profilers

8 institutions, 13 investigators, 2 countries and 3 funding sources:

NASA: R. Bindshadler (PI) and A. Behar 25K (+683K, NASA)

New York University: D. Holland 596K (+79K, NASA)

Naval Postgraduate School: Tim Stanton and W. Shaw 1,484K

University of Alaska: M. Truffer 551K

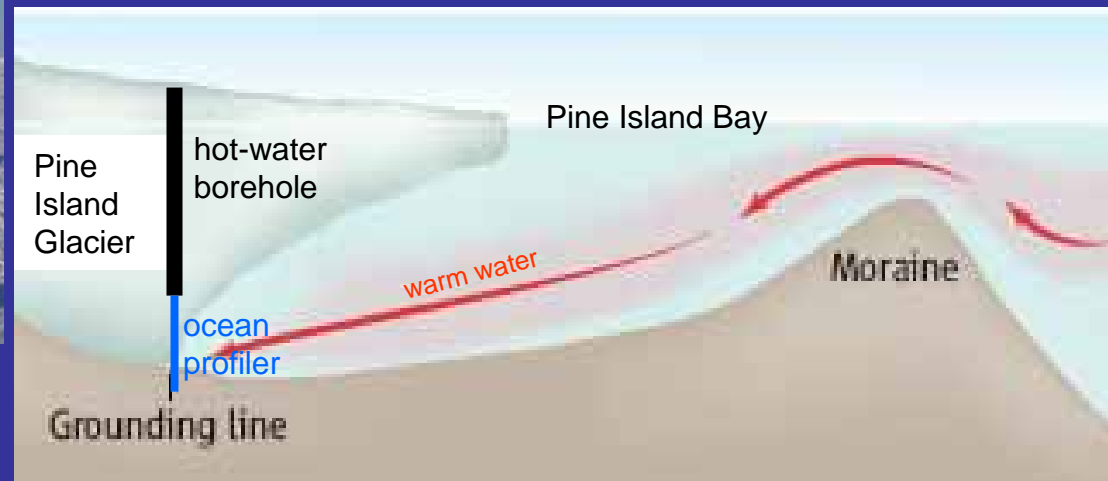
Penn State: S. Anandakrishnan 254K

McPhee Research Corporation: M. McPhee 199K

British Antarctic Survey: D. Vaughan, A. Jenkins, A. Smith and H. Corr

University of Bristol: A. Payne

Four ice boreholes through 550-m thick ice shelf will permit video-camera exploration of sub-shelf environment and deployment of new oceanographic profilers to measure evolving water properties for up to three years.





Collaborative Research in IPY: Abrupt Environmental Change in The Larsen Ice Shelf Region A Multidisciplinary Approach



-Marine & Quaternary Geosciences

(Domack, Leventer, Brachfeld, Ishman, Wellner, Balco)

-Cryosphere & Oceans

(Scambos, Pettit, Truffer, Thompson & Mosley-Thompson, Gordon, Huber)

-Marine Ecosystems

(Vernet, VanDover, Smith, McCormick)

Funded International Partners
Belgium-Ghent University
Argentina-Argentine Antarctic Institute

