



## **MEDIA ADVISORY: MARCH 12TH: IPY DAY FOCUSING ON CHANGING EARTH**

March 3rd, 2008

On March 12th, 2008, the International Polar Year (IPY) will launch its third 'International Polar Day', focusing on our Changing Earth; with a specific focus on Earth history as discovered through paleoclimate records that study the long term history of the Earth by analysing ice sheets and sediments below polar lakes and oceans.

In preparation, a special webpage <<http://www.ipy.org/index.php?/ipy/detail/earth>> has been prepared with information for Press and Educators, details of current projects, contact details for scientists around the world, including in the polar regions, images, background information and useful links and resources.

To better understand the impacts of human-induced climate change requires close awareness of natural forces of planetary change. In the 4.6 billion year history of our planet, the present arrangement of cold ice-covered regions at the northern and southern poles represents a recent development. An unprecedented combination of continental positions and orbital conditions has allowed the current 'icehouse' climate to develop. It has also stimulated, within the past 1 million years, an oscillation of 'rapid' glacial and interglacial events. Within this global icehouse condition, cycles of ocean atmosphere interaction have given rise to regional climate variations on scales of decades to centuries.

While almost every IPY project studies some aspect of the changing climate, or its impacts, thirteen of them specifically look at change over a geological timescale, which would help put current observations into long-term context. The next International Polar Day focusing on our Changing Earth represents an opportunity to learn more about these projects and to talk to the experts directly about their research. There will also be a wide range of educational and community activities, including classroom experiments, a virtual balloon launch, and live web-conferencing with the scientists in both the Arctic and the Antarctic.

### **About IPY and International Polar Days**

The International Polar Year 2007-8 is a large international and interdisciplinary coordinated research effort focused on the polar regions. An estimated 50,000 participants from more than 60 countries are involved in research as diverse as anthropology and astronomy, health and history, and genomics and glaciology. This

fourth IPY was launched in March 2007, and will continue through early 2009. During this time, a regular sequence of International Polar Days will raise awareness and provide information about particular and timely aspects of the polar regions. These Polar Days will include press releases, contacts to experts in several languages, activities for teachers, community participation, web-conferencing events, and links to researchers in the Arctic and Antarctic. The complete schedule for International Polar Days is listed below.

September 21st 2007: Sea Ice  
sea ice, marine life, changing climate

December 13th 2007: Ice Sheets  
ice sheets, traverses, expeditions, adventure

March 13th 2008: Changing Earth, Past & Present  
ice ages, paleoclimate, Earth history

June 18th 2008: Land and Life  
permafrost, terrestrial biodiversity, hydrology, snow

September 24th 2008: People  
social sciences, human health

December 2008: Above the Poles  
astronomy, meteorology, atmospheric sciences

March 2009: Oceans and Marine Life  
marine biodiversity, polar and global ocean circulations

### **About Changing Earth**

The combination of continents and ocean gateways in their present configuration, large ice masses in Antarctica, and perennial ice coverage of the Arctic Ocean, led to oscillations in the climate system. These oscillations, known popularly as ice ages, involve cool glacial periods interspersed with warm interglacial periods - they have occurred for nearly 2 million years. We also recognize subtle natural, regional, patterns of variability in the ocean and atmosphere that affect weather patterns over most of the globe, on annual, decadal, and perhaps centennial time scales. In addition to ice ages and regional variations, human activities will impose a doubling of atmospheric greenhouse gases that will result in temperature increases on time scales of decades to centuries. As caretakers and beneficiaries of ecosystems and civilizations adapted to specific climate conditions, we need to give serious effort to understanding and predicting natural and human-induced change.

### **Contact**

For more information regarding this event, please contact  
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For more information and contact details, please visit the IPY Changing Earth webpage:  
<<http://www.ipy.org/index.php?/ipy/detail/earth>>.

For more information about the International Polar Year, please visit [www.ipy.org](http://www.ipy.org)