THE STATE OF POLAR RESEARCH AFTER THE INTERNATIONAL POLAR YEAR 2007–2008

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The International Polar Year 2007–2008—like its predecessors the first International Polar Year 1882–83 (championed by Georg von Neumayer as Chairman of the International Polar Commission), the second International Polar Year 1932–33 and the International Geophysical Year 1957–58—was an intensive, internationally coordinated campaign of scientific research in polar regions. IPY 2007–2008, which was sponsored by the International Council for Science and the World Meteorological Organization, was largely driven by the scientific community from the 'bottom up' in response to increasing recognition of the global importance of polar processes and the urgent need to understand the extremely rapid changes that are occurring at high latitudes. IPY 2007–2008 included over 160 endorsed research projects with observations in both the Arctic and Antarctic. It involved researchers from more than 60 countries in a wide range of research disciplines, from geophysics and ecology to social science and economics. Substantial new funding—more than USD 400 million—was pledged for IPY, which coordinated with and supplemented ongoing polar research and monitoring programs. Novel system-level approaches, and observational and analysis technologies, including in-situ and remote sensing, were fundamental features of IPY science.

IPY researchers observed exciting new phenomena, made fundamental scientific discoveries, developed new methods and tools, advanced interdisciplinary and international links in polar science and gained new understanding of the role of the polar regions in the total Earth system. Already, significant advances in scientific knowledge and understanding have begun to emerge, and a few of the early discoveries and achievements of IPY 2007–2008 will be summarised in this presentation. IPY 2007–2008 has also left a vital legacy of sustained observing systems, increased international research coordination and collaboration, a new generation of enthused polar researchers, and stronger links between researchers across different disciplinary fields. This legacy will be essential to address those identified polar research challenges with societal relevance and urgency beyond IPY.

Key words: Polar research, achievements of the International Polar Year 2007-2008