

History of polar data management in Japan - before and after the International Polar Year 2007-2008 -

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Diverse data accumulated by many science disciplines make up the most significant legacy of the International Polar Year (IPY2007-2008). The Polar Data Center (PDC) of the National Institute of Polar Research (NIPR), followed by the Polar Environment Data Science Center (PEDSC) of the Joint Support-Center for Data Science Research (DS) have responsibility to manage these polar data in Japan as a National Antarctic Data Center (NADC). During the IPY, a significant number of multidisciplinary metadata records have been compiled from IPY- endorsed projects with Japanese activity. A tight collaboration has been established between the Global Change Master Directory (GCMD), the Polar Information Commons (PIC), and the newly established World Data System (WDS). In this presentation, a long-term history of data management for polar science will be summarized, focusing on the era before and after the IPY. At the 22nd Antarctic Treaty Consultative Meeting (ATCM) in 1998, affiliate countries were obliged to ensure that scientific data collected from Antarctic programs could be freely exchanged and used. Following Article No. 1.c of the 1998 Antarctic Treaty, each country is required to establish NADC and to properly disclose the data collected from involved scientists. The PDC has performed the function of a NADC for Japan and established a data policy in February 2007, based on the requirements of the Standing Committee on Antarctic Data Management (SCADM) of SCAR. This contributed to the subsequent SCAR Data and Information Management Strategy. Many dedicated data service tasks have been conducted by the staffs of PDC & PEDSC as a member of NADC under SCAR. Several different aspects of scientific data collected in the polar region have great significance for global environmental research in this century. To construct an effective framework for long-term strategy of the polar data, data must be made available promptly and new Internet technologies such a repository network service like the PIC must be employed. In addition to the activities in polar science communities of SCAR and the International Arctic Science Committee (IASC), tighter linkages must be established with other cross-cutting science bodies under ICSU, such as CODATA, and WDS. Linkages among these data-management bodies need to be strengthened in the post IPY era.