

Data archive and exchange through the World Data Center system

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A b s t r a c t: The International Council for Science is a non-governmental body created in 1931 to promote international science and its application for the benefit of humanity. ICSU established the World Data Center system in the 1950s to handle data expected from the International Geophysical Year (IGY) 1957-1958. The WDCs operate under the auspices of ICSU for the benefit of the international scientific community and provide a mechanism for international exchange of data in all disciplines related to the Earth, its environment, and the Sun. Since the IGY, the gathering and exchange of data has been transformed by the replacement of analog with digital instruments, the networking of digital instruments, unstaffed automatic observatories, and exchange of data through the Internet and World Wide Web. This paper explores how the World Data Center system is evolving to keep pace with these changes. It also examines how the WDC interacts with other ICSU bodies, especially the International Association of Geomagnetism and Aeronomy, and the Scientific Committee on Solar-Terrestrial Physics.

Key words: geophysical data, archive, format, WDC, IAGA, ICSU

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