The World Radiation Monitoring Center at the Alfred Wegener Institute

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The Baseline Surface Radiation Network (BSRN) is a project of the World Climate Research Programme (WCRP) and the Global Energy and Water Experiment (GEWEX). It is aimed to detect important changes in the Earth’s radiation field at the Earth’s surface which may be related to climate changes. To fulfil these objectives a central BSRN data archive is essential. This archive - called World Radiation Monitoring Center (WRMC) - was established in 1991 under the leadership of Prof. Atsumu Ohmura at the Division of Climate Sciences at the Institute for Atmospheric and Climate Science, ETH Zurich, Switzerland, see http://bsrn.ethz.ch/. After 16 years of nearly continuous operation at ETH, the WRMC is currently going through a transition that will result in the re-establishment of the archive at the Alfred Wegener Institute for Polar and Marine Research in Bremerhaven (AWI), Germany.

The WRMC at AWI will base on the Publishing Network for Geoscientific & Environmental Data PANGAEA, see http://www.pangaea.de/. A Google-like interface will be used for searching and distributing BSRN-data via web. Each dataset will be identified, shared and published by a persistent Digital Object Identifier (DOI). The WRMC at AWI will offer output formats separated into radiation data, upper air sounding data and synoptic observations readable for a variety of widely-used software. Additionally, it will offer output converters and tools for the visualization, exploration and interpretation of data, see: http://www.pangaea.de/software/. The datasets always include all necessary meta data and citation information. Additional, links to the ftp-server ftp.bsrn.awi.de, containing the original station-to-archive-files, will be available. Within this presentation first impressions about the WRMC at AWI - which will officially start during summer 2008 - will be given.