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The World Radiation Monitoring Center of the Baseline Surface Radiation Network: Status 2017

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The World Radiation Monitoring Center (WRMC) is the central archive of the Baseline Surface Radiation Network (BSRN). The BSRN was initiated by the World Climate Research Programme (WCRP) Working Group on Radiative Fluxes and began operations in 1992. One of its aims is to provide short and long-wave surface radiation fluxes of the best possible quality to support the research projects of the WCRP and other scientific projects. The high quality, uniform and consistent measurements of the BSRN network can be used to monitor the short- and long-wave radiative components and their changes with the best methods currently available, to validate and evaluate satellite-based estimates of the surface radiative fluxes, and to verify the results of global climate models. In 1992 the BSRN/WRMC started at ETH Zurich, Switzerland with 9 stations. Since 2007 the archive is hosted by the Alfred-Wegener-Institut (AWI) in Bremerhaven, Germany (http://www.bsrn.awi.de/) and comprises a network of currently 59 stations in contrasting climatic zones, covering a latitude range from 80°N to 90°S. Of the 59 stations, 23 offer the complete radiation budget (down- and upwelling short- and long-wave data).

In addition to the ftp-service access instituted at ETH Zurich, the archive at AWI offers data access via PAN-GAEA - Data Publisher for Earth & Environmental Science (https://www.pangaea.de). PANGAEA guarantees the long-term availability of its content through a commitment of the operating institutions. Within PANGAEA, the metadata of the stations are freely available. To access the data itself an account is required. If the scientist accepts to follow the data release guidelines of the archive (http://bsrn.awi.de/data/conditions-of-data-release/) he or she can get an account from amelie.driemel@awi.de. Currently, more than 9,400 station months (>780 years) are available for interested scientists (see also https://dataportals.pangaea.de/bsrn/?q=LR0100 for an overview on available data).

After long years of excellent service as the director of the WRMC, Gert-König Langlo retires in 2017. He is handing over the duties to the current WRMC data curator Amelie Driemel who will continue this important task in the years to come.