



A new spectroradiometer for high quality solar spectral UV irradiance measurements

S. Wuttke and O. Schrems

Alfred Wegener Institute for Polar and Marine Research, Bremerhaven, Germany (Otto.Schrems@awi.de, +49 471 48311425)

We have developed a UV spectroradiometer with technical specifications to comply with the requirements of the Network for the Detection of Atmospheric Composition Change (NDACC). Our long-term objective is to obtain high quality solar spectral UV irradiance data sets at the Arctic NDACC observatory in Ny-Ålesund (Spitsbergen). The mode of operation of the instrument as well as results of our thorough laboratory characterization prior to installation of the instrument on site will be presented. These initial results show that the UV data acquired with our new UV spectroradiometer fully meet the required NDACC specifications. The procedures of operating the new UV spectroradiometer within the NDACC network will be explained. The spectroradiometer data will be made available to the scientific community for atmospheric as well as biological applications once the new UV spectroradiometer operates on a routine basis at Ny Ålesund. At a later stage the new instrument will also be used for ground-truthing of airborne UV spectroradiometers.