

Name of research institute or organization:

**Physikalisch-Meteorologisches Observatorium Davos,
World Radiation Center**

Title of project:

Remote sensing of aerosol optical depth

Project leader and team:

Dr. Christoph Wehrli, project leader
Dr. Stephan Nyeki

Project description:

Aerosol optical depth (AOD) is derived from solar spectral irradiance measurements at Jungfraujoch since 1998. These measurements are made in the context of the Global Atmosphere Watch (GAW) program of the WMO by PMOD/WORCC in collaboration with MeteoSwiss. Quality controlled results are fed into the World Data Center Aerosols (WDCA) for public access. This project is a continuous monitoring activity.

At the end of November 2009, the main Precision Filter Radiometer was brought back to Davos for servicing and a replacement PFR was installed in January 2010.

Measurements in 2009 are partly missing as the automated dome remained closed for intermittent periods.

Key words:

Solar radiation, Aerosol optical depth monitoring, calibration

Internet data bases:

<http://www.pmodwrc.ch/worcc>
<http://ebas.nilu.no/>

Collaborating partners/networks:

MeteoSwiss (MCH)
Global Atmosphere Watch (GAW), AOD network

Scientific publications and public outreach 2010:

Conference papers

Nyeki, S., C. Wehrli, and J. Gröbner, Long-term Aerosol Optical Depth (AOD) Measurements from the GAW-PFR Network, International Polar Year Conference, Oslo, Norway, 8-12 June, 2010.

Nyeki, S., C. Wehrli, J. Gröbner, and L. Vuilleumier, Long-term Aerosol Optical Depth (AOD) measurements at the Jungfraujoch Global GAW station, Symposium on Atmospheric Chemistry and Physics at Mountain Sites, Interlaken, Switzerland, June 8-10, 2010.

Address:

PMOD/WRC
Dorfstrasse 33
CH-7260 Davos Dorf
Fax: +41 81 417 5100
URL: <http://www.pmodwrc.ch>

Contacts:

Christoph Wehrli
Tel.: +41 81 417 5137
e-mail: christoph.wehrli@pmodwrc.ch

Stephan Nyeki
Tel.: +41 81 417 5139
e-mail: stephan.nyeki@pmodwrc.ch