



## GAW-PFR Newsletter Nr. 4, March 2012

In Nr. 4 of this Newsletter series we'd like to inform PFR users and the AOD community of the latest developments within the GAW-PFR AOD network ([www.pmodwrc.ch/worcc](http://www.pmodwrc.ch/worcc)).

Since our last Newsletter in May 2011 the GAW-PFR network has grown by 3 stations (Figures 1-3): Jeju Gosan and Ulleungdo Dokdo (Korean Meteorological Administration; 71 and 226 m asl) are 2 coastal sites in South Korea while the Zugspitze (German Weather Service; 2964 m) is a high-alpine mountain station in Southern Germany not far from the GAW-PFR Hohenpeissenberg station (995 m). These 3 additions bring the total number of GAW-PFR stations to 27.

Graphs of monthly AOD are already available from these stations as well as time-series graphs from other GAW-PFR stations, which are updated each month on our website to allow the early detection of any trends.

Through our participation in the EU EUSAAR programme ([www.eusaar.org](http://www.eusaar.org)), a final AOD inter-comparison campaign was conducted from May to July, 2011. Measurements in May were conducted next to the PHOTONS Cimel on the roof of the Lab. for Meteorological Physics (LaMP; 423 m), University Blaire Pascal, Clermont-Ferrand, France. Measurements then continued at the nearby Pûy de Dome "Super-Site" (1465 m) from the end of May to July in order to compare with AOD at LaMP.

This final campaign concluded our involvement in EUSAAR, and will be documented in a forthcoming paper concerning all 7 European inter-comparison campaigns. Initial results indicate that AOD at two coincident wavelengths ( $\lambda = 500$  and  $862$  nm) agreed at most sites to within the accuracy of measurements ( $\pm 0.015$ ).

On the technical front, a new generation of solar spectrophotometers, the Precision Solar Spectroradiometer (PSR), is being developed at PMOD/WRC to eventually replace current filter-based sunphotometers. The PSR prototype will be operated in 2012 next to the WORCC PFR-triad to test its performance and long-term stability. It is our aim to provide a commercial version of the PSR by 2013.

In other GAW-PFR developments, annual quality assured data from 10 stations were updated to 2010 and submitted to the World Data Centre for Aerosols (WDCA) at NILU, Norway. Daily AOD results from up to 24 stations are submitted in (quasi) "near-real-time", and are available through <http://ebas.nilu.no>.



Figures 1-3. GAW-PFR stations: Jeju Gosan, Ulleungdo Dokdo and the Zugspitze.

If you are interested in submitting your PFR data to GAW-PFR then please get in touch with us or visit the GAW-PFR website at [www.pmodwrc.ch/worcc](http://www.pmodwrc.ch/worcc).