

## **B02-O08**

### **AN ATMOSPHERE FLAGSHIP PROGRAMME FOR NY-AALESUND, SVALBARD AND BEYOND**

Roland Neuber (*Alfred Wegener Institute, Helmholtz Centre for Polar and Marine Research, Germany*)  
Christina A. Pedersen (*Norwegian Polar Institute, Norway*)

roland.neuber@awi.de

Research into the Arctic atmosphere is a major component of the Science Plan for the Kongsfjorden International Research Base in Ny-Ålesund, Svalbard, where eleven nations maintain research stations and scientific programmes, reaching from the earth's surface through the troposphere up to the stratospheric ozone layer and above. Building on several ongoing national and bilateral scientific cooperations and a previous atmosphere flagship initiative, a programme is under development to plan joint research activities, which will allow broadening the scientific scope of individual research goals. Additionally, contributions from other research locations on Svalbard (Hornsund, Barentsburg, Pyramiden) and Greenland (stations "Nord", Zackenberg) will be contributing to answer urgent questions, which cannot be solved from a single, local perspective.

In detail, the programme shall address topics like atmosphere – snow/sea ice/glaciers interactions, surface and boundary layer properties, aerosol - clouds - radiation interactions, meteorological observations in a pan Svalbard network on campaign and long term scales. Of particular interest will be the combination of on site observations and local, regional, and global modelling work, addressing for example the representativity of local observations. Provision of various calibration and validation data sets for modelling and satellite data is another focus. An additional specific topic connects research with education and outreach initiatives around and within all atmospheric programmes in order to involve young carrier scientists and student in field activity and publications.

The contribution shall present the scheme of the planned flagship programme and its topics, as well as some research highlights together with the long term research planning and integration initiatives, which constitute this international Atmosphere Flagship Programme.