Development of a low visibility forecast tool for Munich Airport

P. Röhner (1), B.-R. Beckmann (1), M. Rohn (1), C. Mohr (2), and A. Bott (2)
(1) Deutscher Wetterdienst, Abteilung Flugmeteorologie, Offenbach, Germany (peer.roehner@dwd.de), (2) Universität Bonn, Meteorologisches Institut, Bonn, Germany

Within the frame of the German research project LuFo iPort (innovative Airport), supported by the federal ministry of economics, a low visibility forecast tool is developed in cooperation between the German Weather Service (DWD) and the Meteorological Institute of Bonn University. A model prototype is adapted to Munich Airport and initialised with both COSMO-DE runs and local meteorological observations obtained through an instrumentation installed close to the heads of the two runways. Besides the measurement of air temperature, humidity and wind speed at standard level and at different heights above ground using a 20m high tower, profiles of soil temperature and humidity as well as upward and downward radiation are recorded. In a second step, the additional value of MWRP, ceilometer and SODAR data is planned to be validated during a measurement campaign envisaged for autumn 2011.