



The E-PROFILE network of automatic LIDARS and ceilometers for operational monitoring of cloud base, aerosols and volcanic ash

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During the last years it has been shown that ceilometers are cost effective instruments for vertical profiling of aerosols with proven skills for volcanic plumes detection. As a reaction to the eruptions of the Icelandic volcanoes in 2010 and 2011 and upon recommendation of the COST ES0702 action EG-CLIMET, EUMETNET created the E-PROFILE activity as part of the observation programme which is supported by 18 national meteorological services. E-PROFILE is the continuation of the operational RADAR wind-profiler network E-WINPROF. The new objective of E-PROFILE is to integrate the approximately 700 ceilometers of the E-PROFILE country members into a European network providing vertical profiles for the monitoring of cloud base, aerosols and volcanic ash. A standardized calibration procedure is being developed in collaboration with the COST Action ES1303 TOPROF to provide profile information homogeneously across the network. The information will be distributed in real time and visualized on an interactive map. We present a detailed description of the activity and report on the current status of the development.