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ROMANIAN LIDAR INVESTIGATION OF THE EYJAFJALLAJOKULL VOLCANIC ASH

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Abstract

The eruption of the Eyjafjallajokull volcano and its impact on the environment in Romania has been studied by means of different complementary tools. In order to characterize both various types of clouds, theirs dynamics, and the ash sulphates aerosols, different diagnosis type instruments have been deeply analyzed, too. Thus, the occurrence of the ash cloud over Romania, Bucharest city (lat: 44.4 N, long: 26.0 E), starting on the 17th of April 2010 when it covered this area, and also the weather conditions have been investigated. The HYSPLIT (Hybrid Single Particle Lagrangian Integrated Trajectory) model, ECMWF (European Centre for Medium-Range Weather Forecasts) and satellite data were used as a complementary tool for the LIDAR measurement data.

Key words: LIDAR, satellite data, synoptic, volcanic-ash

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