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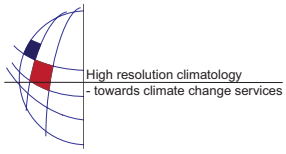

Did the volcanic ash from Eyjafjallajökull volcano affect the weather forecast in the Czech Republic?

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Meteorological aspects of the volcanic ash cloud occurrence was largely discussed in media that demanded also the estimation of impact on daily temperatures. This contribution presents an evaluation of possible impact of the volcanic ash from Eyjafjallajökull eruption on the weather forecast in the Czech Republic as was made for that purpose in time of ash cloud occurrence.
A cloud of volcanic ash moved over the Czech territory on April 16th 2010 and it prevailed until April 22nd. In the beginning it occurred in the elevation between 6 to 11 km but it decreased with time. It is assumed that volcanic ash influence the surface temperature because increased reflection of solar radiation before it reach the Earth's surface which is than less warming. Because operational NWP models doesn't account for volcanic ash effect in realtime it could be also assumed that the temperature forecast was less successful during those days. The evaluation of forecast error with respect to the previous and following periods could also act as an indirect estimate of impact of volcanic ash on the temperature in evaluated period.
GFS forecast and regional WRF model (multimodel postprocessing) forecasts were evaluated. Forecast overestimated the surface temperature by 1 to 2 °C during April 16th to 20th while overestimation of 0 to 1 °C was found for sunny days outside that period.

Key words: volcanic ash, Eyjafjallajökull, weather forecast, temperature