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Lidar observations of ash plume across Europe

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Ground-based lidar instruments in several countries in Europe observe the ashes dispersed from the volcanic eruption at Eyjafjallajokull in Iceland. Based on atmospheric model results the aviation has been severely affected in recent days. The situation is unprecedented in Europe thus the optimal system for monitoring such an event is not in place but is very rapidly being developed. The model atmospheric results have not been verified (systematically) with lidar-based ash plume observations. However, recent results from ground-based lidars in Europe indicate that some airports may have been closed even though the air above appears clean. The presentation will describe the lidar observations in Europe collected during the ash plume event and open for a discussion of the future use of a ground-based lidar network for improved planning and forecasting.