German Aerospace Center



**Press releases 2010**

# DLR Falcon has helped end airspace restrictions over southern Germany with an additional measurement flight

*10 May 2010*

DLR Falcon measurement flight over southern Germany on 9 May

On Sunday, 9 May 2010, the German Aerospace Center's (Deutsches Zentrum für Luft- und Raumfahrt; DLR) Falcon research aircraft took off from Oberpfaffenhofen for a measurement flight in southern German airspace. The aim of this flight was to measure the concentration of the volcanic ash cloud that caused airports across southern Germany to close on Sunday afternoon. Thanks to these measurements, it was possible to reopen the airspace earlier than expected.

Since Friday, 7 May, it had become apparent that volcanic ash from Iceland was heading towards Central Europe once again. On Saturday, 8 May, planning began for another measurement flight with the Falcon research, and the plane was immediately prepared for its mission. On behalf of the German Ministry of Transport, Building and Urban Development (BMVBS) and in consultation with the German Weather Service (DWD), the Falcon took off on Sunday, 9 May, at 16:28 Central European Summer Time (CEST) from DLR's Oberpfaffenhofen airbase for a measurement flight that took it across southern German airspace.

"The measurement flight with DLR's Falcon research aircraft, which took off just two hours after the order was issued, contributed towards reopening airspace over southern Germany earlier than expected," enthused Prof. Dr-Ing. Johann-Dietrich Wörner, chairman of the DLR board.

Flight schedule disruption, empty airports.

**Rapid deployment – important results**

The flight plan took the aircraft to an altitude of approximately eight kilometres above Munich, on to Stuttgart, continuing to Leipzig then back to Oberpfaffenhofen via Bayreuth and Munich, where the aircraft landed at 20:00 CEST. During the first leg of this mission, a volcanic aerosol layer was identified between Munich and the town of Fürstenfeldbruck, to the west of the city. This ‘cloud’ was roughly 1.5 kilometres thick, at an altitude of between two and four kilometres. The results obtained were comparable to those measured over Leipzig on 19 April. Cloud cover and high humidity impaired visual observation as well as the measurements, making it very difficult to distinguish normal clouds from the volcanic-ash laden layers. Detailed analyses of the results are underway.

At the same time, in Munich-Maisach, the volcanic ash cloud was observed with the help of a lidar (light detection and ranging) from the Meteorological Institute of the Ludwig-Maximilians University in Munich. This remote sensing instrument uses laser beams to help measure the concentration of dust particles in the ash cloud. The lidar measurements are complemented by the particulate measurements performed directly inside the cloud by DLR's Falcon aircraft complement and this extends the scope of these observations to a large part of the airspace over Germany.

The results were sent to the German Weather Service at about 20:30 CEST and were immediately used in a status meeting, after which airspace across southern Germany was reopened.

**Related Contacts**

**Andreas Schütz**
Deutsches Zentrum für Luft- und Raumfahrt (DLR) - German Aerospace Center
Corporate Communications, Spokesman
Tel: +49 2203 601-2474
Mobile: +49 171 3126466
Fax: +49 2203 601-3249
E-Mail: andreas.schuetz@dlr.de

---