



## **State-of-the-art research aircraft flying currently over Europe**

An international campaign led by the University of Bremen investigates the effects of pollutants from European and Asian megacities on the Earth's atmosphere

A state-of-the-art research aircraft will be flying over major cities in Europe until the end of July. The flight routes stretch from London to Rome and from Madrid to Berlin, all within the framework of an international research project where atmospheric physicists and chemists investigate the effects of air pollutants emitted by major population centers, the so called MPCs, on the Earth's atmosphere, and thereby gain a better understanding of their transport and transformation. The leader of the research campaign Prof. John P. Burrows of the Institute of Environmental Physics at the University of Bremen says, "Several flights totaling to around 52 flight hours will be undertaken until the end of July over major cities". For this campaign, scientists will be using the ultra modern aircraft HALO (High Altitude and Long Range Research Aircraft) which is based at the German Aerospace Center DLR (Deutsches Zentrum für Luft- und Raumfahrt) in Oberpfaffenhofen.

### **Complementary measurements to be taken over the whole of Europe**

The HALO payload comprises state of art instruments to characterize the emission plumes flowing out of major European population centers (MPC) during events of intense photochemical activity. During the first phase of the campaign, complementary measurements from the airborne platforms FAAM (<http://www.faam.ac.uk>) and ERA CNR Sky Arrow, as well as from the European lidar and EMEP ground base network will be additionally carried out over Europe and used for planning and interpretation. The integrated analysis of enhancing observational data products will help to improve knowledge and prediction of the transport and transformation patterns of pollutant outflows in Europe.

### **Campaign is supported with up to 6 Million Euro funding**

Apart from the University of Bremen partner institutions are the German Aerospace Center-DLR, the Max-Planck-Institute for Chemistry, the Karlsruhe Institute of Technology, the Forschungszentrum Jülich, and the Universities of Heidelberg, Wuppertal, and Mainz. The project named EMeRGe (Effect of Megacities on the transport and transformation of pollutants on the Regional and Global scales) runs until 2018 and is funded with around 6 million Euros by the German Research Foundation - DFG (Deutsche Forschungsgemeinschaft).

## **HALO aircraft – a collaboration of German science community**

The HALO aircraft is the new research aircraft for atmospheric research and earth observation of the German science community. HALO was initially funded by the Federal Ministry of Education and Research, the Helmholtz-Gemeinschaft and the Max-Planck-Gesellschaft. The operational standby costs are shared by six German research centers and the DFG (Deutsche Forschungsgemeinschaft), which represents the German universities, together forming the [HALO consortium](#). Owner and operator of the aircraft is the German Aerospace Center – DLR.

For further information about Project EMeRGe, please visit [www.iup.uni-bremen.de/emerge](http://www.iup.uni-bremen.de/emerge). For further information about the research aircraft, please visit [www.halo.dlr.de](http://www.halo.dlr.de).

### **Further information:**

Universität Bremen  
Fachbereich Physik / Elektrotechnik  
Institut für Umweltphysik (IUP)  
Prof. John P. Burrows  
Tel.: 0421 218-62100  
E-Mail: [burrows@iup.physik.uni-bremen.de](mailto:burrows@iup.physik.uni-bremen.de)

Dr. M.-D. Andrés-Hernández  
Tel.: 0421 218-62110  
E-Mail: [lola@iup.physik.uni-bremen.de](mailto:lola@iup.physik.uni-bremen.de)

Also found in: <http://www.uni-bremen.de/universitaet/presseservice/pressemitteilungen.html>