HITEC Lab

Title: **Aeroplane measurements in the upper troposphere and lower stratosphere**

Date: **12 November, 2014**

Time: **9:30 – 16:30**

Location: Forschungszentrum Jülich ▶ IEK-7, Build. 5.2, Room 3012

The one day training course will introduce you to the art of making airborne measurements to learn about processes in our atmosphere that are relevant for climate. Besides the scientific aspects of such aircraft observations, the course will provide insights into the technological challenges of making an instrument “aircraft proof” and into the tools that atmospheric scientists use to develop camping strategies and flight plans to address the scientific questions of interest.

At the end of the day, a number of films from airborne field campaigns in different regions will illustrate how everything you have learned is put into practice.

You will learn:

- Why and how aircraft equipped with analytical instruments are needed to better understand processes in UTLS (upper troposphere/lower stratosphere) that influence climate
- How airborne measurements are made on research and passenger aircraft
- The planning and technological steps to develop airborne analytical instrumentation
- How flight plans for specific scientific questions are developed using atmospheric models

Number of Participants:

8 - 12

Responsible Scientists:

Dr. Marc von Hobe, IEK-7
Dr. Andreas Petzold, IEK-8

The HITEC Labs are hands-on periods of practical training lasting 2 to 3 days, in which small groups of students from various institutes concentrate on one method that is applied in various fields. The aim of the HITEC Labs is to enable the PhD students to appreciate that a method originating from an unrelated field may also be applied in their own work. If students should discover that they require more intensive instruction in applying the method than can be imparted during the HITEC Lab, then they can make arrangements with PhD students at the institute in question to work at the institute for a limited period.