

Physicist, Meteorologist or a similar (m/f) [Experimental atmospheric aerosol and cirrus cloud research](#)



HALO - High Altitude and Long Range Research Aircraft

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Your mission:

We seek a highly motivated candidate with a background in atmospheric physics, meteorology or a similar field with strong experimental and programming skills to work primarily on the measurement of small ice crystals in cirrus clouds using scattering spectrometer probes on research aircraft.

The position is funded within the framework of the European project HAIC (High Altitude Ice Crystals), a large international program focusing on enhancing the safety of commercial air traffic with respect to icing conditions sometimes occurring at high altitudes in the vicinity of deep convective systems.

DLR is participating in the HAIC program with contributions to the assessment of current capabilities of scientific measurement methods in cirrus clouds. In particular, DLR will contribute expertise and measurements with an instrument technique called “Cloud and Aerosol Spectrometer with detection of polarization” (CAS-DPOL). This instrument detects and sizes particles, cloud droplets and ice crystals based on their light scattering properties.

It will be the task of the successful candidate to work with the CAS-DPOL instrument of DLR in the lab, to actively participate in aircraft field deployments with the CAS-DPOL and to work on the scientific analysis of cirrus cloud measurements with this instrument. In order to

be able to conduct accurate, high quality measurements, in-depth laboratory characterization of the instrument is required, as well as development of adequate software to process the data. A key activity to participate in will be the Mid-Latitude Cirrus cloud experiment (ML-CIRRUS) in spring 2014 with the new German research aircraft HALO, which is coordinated by DLR. This experiment addresses questions on the formation and evolution of natural as well as aviation induced cirrus clouds. In this context it will be one important task to compare CAS-DPOL results with measurements of other cloud measurements performed on the aircraft in order to assess overall measurement quality and possible artefacts in the CAS-DPOL measurement. Participation in further field experiments is likely.

The candidate will also have the possibility to familiarize himself with other aerosol measurement methods established at DLR. To evaluate the potential of the CAS-DPOL instrument to provide information about large aerosol particles (like mineral dust or ash particles) may become a sideline of the candidate's research.

Your qualifications:

- background in atmospheric physics, meteorology or a similar field
- strong experimental and programming skills

Your benefits:

Look forward to a fulfilling job with an employer who appreciates your commitment and supports your personal and professional development. Unser einzigartiges Arbeitsumfeld bietet Ihnen Gestaltungsfreiräume und eine unvergleichbare Infrastruktur, in der Sie Ihre Mission verwirklichen können. Disabled applicants with equivalent qualifications will be given preferential treatment.

Promotion

Starting date immediately

Duration of contract 3 years

Remuneration according to EG 13 TVöD (50%)

Type of employment part-time

DLR-Standort Oberpfaffenhofen

[zum Standort](#)

DLR-Institut für Physik der Atmosphäre

[zum Institut](#)

Fachliche/r Ansprechpartnerin

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