

## Virtual BSC Research Seminar/ ES "Dust Impacts on aviation: Overview"

### Objectives

The lecture will overview the different dust impacts on the aviation sector and the lessons learnt within the [EUNADICS-AV project](#)

**Abstract:** European Natural Airborne Disaster Information and Coordination System for Aviation

Aviation is one of the most critical infrastructures of the 21st century. Even comparably short interruptions, for instance, due to natural hazards, can cause damage worth billions. The EUNADICS-AV project addresses airborne hazards with an extremely high impact (environmental emergency scenarios), including volcano eruptions, nuclear accidents and other scenarios where aerosols and certain trace gases are injected into the atmosphere. Before the 1990s, insufficient monitoring as well as limited data analysis capabilities made it difficult to react to and to prepare for this type of rare, high-impact events. Nowadays there are many data available during crisis situations, and the data analysis technology has improved significantly. However, there is still a major gap in the Europe-wide availability of real time hazard measurement and monitoring information for airborne hazards describing “what, where, how much” in three dimensions, combined with a near-real-time European data analysis and assimilation system.”

The main objective of EUNADICS-AV is to close this gap and allow all stakeholders in the aviation system obtain fast, coherent and consistent information. This would allow a seamless response on a European scale, including ATM, ATC, airline flight dispatching and individual flight planning



**Short bio:** Barbara Scherllin-Pirscher:

2010: Ph.D in natural sciences, Institute of Physics, University of Graz, Austria, in the field of atmospheric remote sensing with radio occultation (RO) data; use of RO data for climate monitoring (focus on upper troposphere & lower stratosphere) and for improved understanding of (tropical) atmospheric dynamics. Post doc: At the University of Graz, Austria and at NCAR, Boulder, CO, USA. She does several research visits in the U.S., Denmark, Germany. Since 2016 she has been scientist at the Zentralanstalt für Meteorologie und Geodynamik (Central Institute for Meteorology and Geodynamics) in Austria, Section: Chemical Weather Forecasts.

## Speakers

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