

Seminar “Ocean, Ice and Atmosphere”,
Institute of Environmental Physics (IUP), Univ. Bremen
Date: 05-Nov-2024, 12:15
Place: Building NW1, Room S1360

Volcanic and wildfire impact on the stratospheric aerosol

Johan Friberg¹

1. Lund University, Sweden

Explosive volcanic eruptions and firestorms can inject large amounts of aerosol and aerosol forming gases into the stratosphere. There, the submicron aerosol particles remain suspended for months or years blocking solar light and cooling the climate. I have spent the last 15 years studying the stratospheric aerosol with aircraft in-situ data and satellite remote sensing. Here, I will present a short overview of our studies on volcanic impact on the stratosphere, cirrus clouds, and climate, and a surprising finding regarding the fate of wildfire smoke in the stratosphere.