NAME, First Name: KLOSS, Corinna
Affiliation: (1) CNRS, Laboratoire de Physique et Chimie de l'Environnement et de l'Espace (LPC2E), Orléans, France (2) Forschungszentrum Jülich GmbH, Institute for Energy and Climate-Stratosphere (IEK-7), Jülich, Germany

Role in the project:

- **Team leader**
- Contribution and analysis of in situ (balloon borne) aerosol information (typology, size distribution) in Task 3 and development of new observational strategies in Task 4.
- Bringing an overview on space-borne stratospheric aerosol observation instruments.

Current position: Post-doc (DFG scholarship at IEK-7)

Former Position(s):

03/2018- 11/2022 multiple post-doc project positions at CNRS in Orléans, France

- Analysis of satellite and in situ observations of aerosols in the Asian monsoon region.
- Global stratospheric and climate impact analysis of recent volcanic eruptions and wildfires.

11/2013 – 11/2017 research assistant and Ph.D. Fellow HITEC at FZJ, IEK-7 in Germany
Ph.D. thesis: 'Carbonyl Sulfide in the stratosphere: airborne instrument development and satellite based data analysis'

- Development of the airborne two channel ICOS spectrometer AMICA and operation at the StratoClim campaigns
- ACE-FTS satellite data analysis of the substance OCS

Education:

10/2017	Ph.D. in Atmospheric Chemistry from University of Wuppertal
10/2013	Master of Science
09/2012 to 08/2013	University of East Anglia, School of Environmental Sciences, Norwich, UK; Study program: Atmospheric Sciences
02/2012	Bachelor of Science
03/2009 to 02/2012	University of Applied Sciences Koblenz; Study program: Measurement Engineering and Sensor Technology

Services in National and/or International Committees (most recent nominations):

2023	Co-Convener for the coming EGU General Assembly 2023 for the session 'GMPV8.5/AS4 .14/CL1.14/NH2.11 Volcanic plumes: insights into volcanic emissions and their impacts on the environment, atmosphere and climate'
Since 11/2021	SSiRC Steering Committee Member (Stratospheric Sulfur and its Role in Climate), a SPARC initiative
Since 11/2021	Starting Participant of the ANR project ASTuS (project lead: Bernard Legras) Role: Responsible for Aerosol observation and trajectory analysis of smoke vortices in the stratosphere from extreme fire events
03/2018 to 2022	Member of the ANR project TTL-XING (project lead: Bernard Legras)

Role: Satellite aerosol and trace gas observation and dynamical process analysis in the Asian monsoon anticyclone

Honors:

2023	Invited key-note speaker at IUGG in Berlin (for July 2023)
2021	LABEX VOLTAIRE 2 Postdoc Fellowship, Université d'Orléans (3 selected projects out of 17)
2021	Invited key-note speaker at NASA SAGE III/ISS Science Team meeting
2021	ACP highlight paper: C. Kloss et al., 2021: 'Stratospheric aerosol layer perturbation caused by the 2019 Raikoke and Ulawun eruptions and climate impact'
2019 – 2021	Personal funding to conduct my research project as Principal Investigator abroad, Research Fellowship, German Research Foundation (DFG)
2014	HITEC Ph.D. Fellowship, Forschungszentrum Jülich GmbH (7 selected out of 198), including a 2-month research stay at Bodeker Scientific in Alexandra, New Zealand

Selected Publications:

Kloss C. et al., 'Aerosol characterization of the stratospheric plume from the volcanic eruption at Hunga Tonga January 15th 2022', Geophysical Research Letters (2022)

Sellitto P. et al. 'The unexpected radiative impact of the Hunga Tonga eruption of January 15th, 2022', nature communications (2022)

Kloss C. et al., 'Stratospheric aerosol layer perturbation caused by the 2019 Raikoke and Ulawun eruptions and climate impact', Atmospheric Chemistry and Physics (2021)

Kloss, C., et al. 'Airborne Mid-Infrared Cavity enhanced Absorption spectrometer (AMICA) ', Atmos. Meas. Tech., 14, 5271–5297 (2021)

Bossolasco A. et al. 'Global modelling studies of composition and decadal trends of the Asian Tropopause Aerosol Layer ', Atmospheric Chemistry and Physics, 21, 2745 – 2764 (2021)

Kloss C., et al., 'Australian fires 2019-2020: tropospheric and stratospheric pollution throughout the whole fire season', Frontiers in Environmental Science (2021)

Kloss C. et al., 'Impact of the 2018 Ambae eruption on the global stratospheric aerosol layer and climate', Journal of Geophysical Research (2020)

Kloss C. et al., 'Transport of the 2017 Canadian wildfire plume to the tropics and global stratosphere via the Asian monsoon circulation ', Atmospheric Chemistry and Physics (2019)