

NAME, First Name: RIEGER, Landon

Affiliation: Institute for Space and Atmospheric Science, University of Saskatchewan, Canada

Role in the project:

Expertise in remote sensing measurements and retrieval of stratospheric aerosol, in particular from limb observations such as OSIRIS, SCIAMACHY and OMPS-LP. Validation of aerosol measurements using lidars and ground-based measurements. Experience using and evaluating aerosol climatologies in climate models. Tasks 1 and 2.

Current position:

Research Engineer at the University of Saskatchewan - Lead scientist on the Aerosol Limb Imaging project

Education:

PhD Physics - 2019 - University of Saskatchewan

MSc Engineering Physics - 2013 - University of Saskatchewan

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

Stratospheric Sulfur and its Role in Climate (SSIRC) steering group co-lead

Selected Publications:

Rieger, L. A., et al. "Stratospheric temperature and ozone anomalies associated with the 2020 Australian New Year fires." *Geophysical Research Letters* 48.24 (2021): e2021GL095898.

Bourassa, Adam E., et al. "Tomographic Retrievals of Hunga Tonga-Hunga Ha'apai Volcanic Aerosol." *Geophysical Research Letters* 50.3 (2023): e2022GL101978.

Rieger, L. A., et al. "Quantifying CanESM5 and EAMv1 sensitivities to Mt. Pinatubo volcanic forcing for the CMIP6 historical experiment." *Geoscientific Model Development* 13.10 (2020): 4831-4843.

Rieger, L. A., et al. "A multiwavelength retrieval approach for improved OSIRIS aerosol extinction retrievals." *Journal of Geophysical Research: Atmospheres* 124.13 (2019): 7286-7307.

Rieger, Landon A., et al. "A study of the approaches used to retrieve aerosol extinction, as applied to limb observations made by OSIRIS and SCIAMACHY." *Atmospheric Measurement Techniques* 11.6 (2018): 3433-3445.

Rieger, L. A., A. E. Bourassa, and D. A. Degenstein. "Stratospheric aerosol particle size information in Odin-OSIRIS limb scatter spectra." *Atmospheric Measurement Techniques* 7.2 (2014): 507-522.