

**NAME, First Name:** MANN, Graham

**Affiliation:** School of Earth & Environment, University of Leeds, Leeds, U.K.

**Role in the project:** Expertise in aerosol microphysical processes, non-sulphate aerosol and polar stratospheric clouds. Evaluation & interpretation of model predictions with observations, e.g. variations in particle size from multi-wavelength aerosol extinction (SAGE-III-ISS and OMPS-LP) and CALIOP lidar backscatter & depolarization (mixed signatures of volcanic ash & sulphate, liquid/solid PSCs).

**Current position:** Lecturer in Atmospheric Science

**Education:** -- University of Leeds, U.K., 1994-1998, PhD in Atmospheric Science

-- University of Warwick, U.K. 1991-1994, BSc in Applied Mathematics

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

Scientific Steering Group of the Stratospheric Aerosol and Its Role and Climate (SSiRC, 2015 to present): co-lead of SSiRC data recovery project and ISA-MIP interactive stratospheric aerosol model initiative. Leadership team of SPARC activity “Hunga-Tonga impacts on the stratosphere” (2023-2025)

**Selected Publications:**

Antuña-Marrero J, Mann G. W., Barnes J, et al., (2021). Recovery of the first ever multi-year lidar dataset of the stratospheric aerosol layer, from Lexington, MA,..., Jan 1964 to Jul 1965.

Earth System Science Data, (9), doi: [10.5194/essd-13-4407-2021](https://doi.org/10.5194/essd-13-4407-2021)

Mann, G. W., Dhomse, S., Deshler, T. et al., (2015): Evolving particle size is the key to improved volcanic forcings, Past Global Change, vol. 23, issue 2, pp. 52-53

<https://doi.org/10.22498/pages.23.2.52>

Mann, G. W., K. S. Carslaw, C. L. Reddington, K. J. Pringle, M. Schulz, A. Asmi, et al. (2014): Inter-comparison and evaluation of global aerosol microphysical properties among AeroCom models of a range of complexity, Atmos. Chem. Phys., vol. 14, issue 9, ACP, pp. 4,679–4,713,

<https://doi.org/10.5194/acp-14-4679-2014>

Mann, G. W., Carslaw, K. S., Chipperfield, M. P. et al. (2005): Large nitric acid trihydrate particles and denitrification caused by mountain waves in the Arctic stratosphere, J. Geophys. Res., vol. 110, D08202, <https://doi.org/10.1029/2004JD005271>

Marshall L, Johnson J, Mann G.W. et al. (2019). Exploring How Eruption Source Parameters Affect Volcanic Radiative Forcing Using Statistical Emulation. Journal of Geophysical Research: Atmospheres, (2), doi: [10.1029/2018JD028675](https://doi.org/10.1029/2018JD028675)

Quaglia, I., Timmreck, C., Niemeier, U. et al. “Interactive stratospheric aerosol models' response to different amounts and altitudes of SO<sub>2</sub> injection during the 1991 Pinatubo eruption”, Atmospheric Chemistry and Physics, vol, 23, issue 2, pp. 921–948,

<https://doi.org/10.5194/acp-23-921-2023>

Timmreck C, Mann G,W., Aquila V, et al.(2018). The Interactive Stratospheric Aerosol Model Intercomparison Project (ISA-MIP): motivation and experimental design. Geoscientific Model Development, (7), doi: [10.5194/gmd-11-2581-2018](https://doi.org/10.5194/gmd-11-2581-2018)