

**NAME, First Name:** ANTUÑA-MARRERO, Juan Carlos

**Affiliation:** University of Valladolid, Spain

**Role in the project:** Expertise on lidar and sun photometry. Will contribute in the validation of satellite observations with the observations from lidar, sun photometer and other ground based stratospheric aerosol observations (Task 2). Also will contribute with my experience on data rescue and recalibration of surface based observations (Task 3).

**Current position:** Postdoc Researcher (2019- )

**Former Position(s):**

- Meteorologist, Radar Meteorology, INSMET, Camagüey, Cuba (1982-1985)
- Specialist, Minerals Spectral Analysis, Geological Enterprise, Camagüey, Cuba (1986-1988)
- Researcher, Camagüey Lidar Station, INSMET, Camagüey, Cuba (1989-1995)
- Senior Researcher GOAC, INSMET, Camagüey, Cuba (2002-2018)

**Education:**

- Ph.D. in Atmospheric Sciences, Rutgers University, NJ, USA (1999-2002)
- M.S. in Meteorology, University of Maryland, MD, USA (1996-1998)
- B.S. Physics, Havana University, Cuba (1976-1981)

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

- Member of the international panel for NASA satellite mission TEMPO (2016 – )
- Steering Committee of the Stratospheric Aerosol and Its Role and Climate (SSiRC initiative)  
Co-lead of the Data Rescue Activity (2012- )

**Selected Publications:**

Antuña-Marrero, J.-C., Mann, G. W., Keckhut, P., Avdyushin, S., Nardi, B., and Thomason, L. W.: Shipborne lidar measurements showing the progression of the tropical reservoir of volcanic aerosol after the June 1991 Pinatubo eruption, *Earth Syst. Sci. Data*, 12, 2843–2851, <https://doi.org/10.5194/essd-12-2843-2020>, 2020.

Antuña-Marrero, J.-C., Mann, G. W., Barnes, J., Rodríguez-Vega, A., Shallcross, S., Dhomse, S. S., Fiocco, G., and Grams, G. W.: Recovery of the first ever multi-year lidar dataset of the stratospheric aerosol layer, from Lexington, MA, and Fairbanks, AK, January 1964 to July 1965, *Earth Syst. Sci. Data*, 13, 4407–4423, <https://doi.org/10.5194/essd-13-4407-2021>, 2021.

Antuña-Marrero, J.-C., Mann, G. W., Barnes, J., Calle, A., Dhomse, S. S., Cachorro, V. E., Deshler, T., Zhengyao, L., and Sharma, N.: The recovery and re-calibration of a 13-month aerosol extinction profiles dataset from searchlight observations from New Mexico, after the 1963 Agung eruption. (Submitted), <https://essd.copernicus.org/preprints/essd-2022-272/>, 2022.

Dhomse, S. S., Mann, G. W., Antuña Marrero, J. C., Shallcross, S. E., Chipperfield, M. P., Carslaw, K. S., Marshall, L., Abraham, N. L., and Johnson, C. E.: Evaluating the simulated radiative forcings, aerosol properties, & stratospheric warmings from the 1963 Mt Agung, 1982 El Chichón, & 1991 Mt Pinatubo volcanic aerosol clouds, *Atmos. Chem. Phys.*, 20, 13627–13654, <https://10.5194/acp-20-13627-2020>, 2020.

Antuña, J. C., A. Robock, G. L. Stenchikov, L. W. Thomason, and J. E. Barnes, Lidar validation of SAGE II aerosol measurements after the 1991 Mount Pinatubo eruption. *J. Geophys. Res.*, 107(D14), 4194, <https://doi.org/10.1029/2001JD001441>, 2002.