Seasonal, Interannual and decadal variability of North Atlantic Ozone: Comparison of UM-UKCA and remote sensing observations.

Dr Maria Russo

NCAS, University of Cambridge

M. R. Russo, N. L. Abraham, B. J. Kerridge, M. Koehler, B. G. Latter, R. Siddans, A. T. Archibald, J. A. Pyle.

This work investigates recent variability of tropospheric ozone across the North Atlantic (NA) at a variety of different time scales. Integrations of the UKCA model and observations from satellite retrievals (OMI-MLS and OMI) are used to investigate the seasonal, interannual and decadal variability of tropospheric ozone in the North Atlantic for the period 2005-2017. We will further analyse different atmospheric sub layers (from OMI retrievals) and use these in combination with the tropospheric ozone column diagnostic to gain further insight on how ozone variability in the North Atlantic varies across the troposphere and lower stratosphere.