

Information about the contents of this supplement:

This folder contains two small data files, both in netCDF format, which contain the reflectivity and Doppler velocity data from the GRaCE radar. These are the data shown in Figures 8 and 11 of the main text, allowing the reader to reproduce the results shown in the paper, or apply alternative methodologies to analyse the data.

Case study 1 is provided in the file `data_20230307.nc`

Case study 2 is `data_20240228.nc`

The netCDF data contain the following variables:

- `dBZ_G` - the equivalent radar reflectivity factor [dBZ]
- `V` - the mean Doppler velocity [m/s]. Positive values are downward.
- `t` - the time of day [decimal hours, UTC]
- `r` - the range of the cloud sample from the radar [km].

The radar is vertically pointing so range can be interpreted as a height above ground. Note that Chilbolton is at an altitude of approximately 85m above mean sea level.

netCDF data can be easily viewed using software such as [NASA/GISS Panoply](#) and imported into standard programming and data visualisation tools such as python or MATLAB.