

# Ozone measurements at Chilbolton Observatory

Judith Agnew
Chilbolton Group
RAL Space



#### **Chilbolton Observatory**

- Chilbolton Observatory is a large rural field site in Hampshire. Funding for atmospheric science measurements is received from NERC.
- Plenty of space for permanent or visiting instruments





## Chilbolton Observatory instruments

- We have a wide variety of instruments making in-situ and remote-sensing measurements:
- Radars
  - o Precipitation, clouds, winds
- Lidars
  - o Clouds, aerosols, water vapour
- Microwave radiometers
  - o Integrated water vapour and liquid water, low resolution water vapour profile
- Meteorological instruments and rain gauges
  - o Temperature, RH, pressure, wind, rain accumulation, rain rate, drop size distribution
- Sun photometer
  - Aerosol optical depth of atmosphere at UV to IR wavelengths, particle size distribution if skies are clear
- Aerosols
  - Aerosol optical particle counter giving size spectra 0.26 34.0 μm



## Chilbolton Observatory instruments

#### Ozone

- No permanent instrument, but some visiting instruments for campaigns:
  - TEI49i ozone analyser for ClearfLo 2011-2012
  - FGAM ozone lidar for ClearfLo at RAL 2012 and for CSIP at Chilbolton 2005
- Clean rural site upwind of London with excellent, flexible facilities for future measurements