

## ELMHOLTZ GEMEINSCHAFT

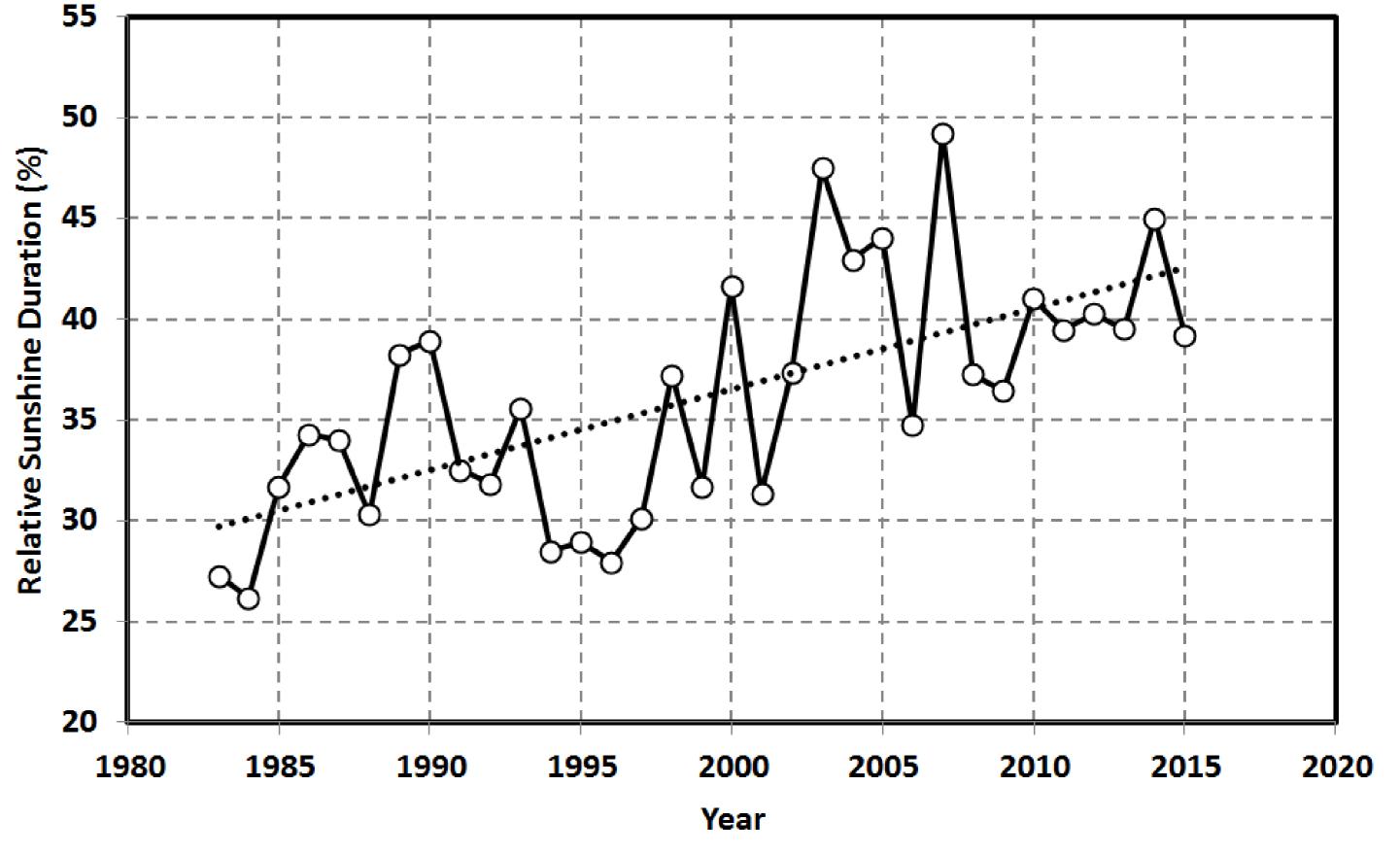


# **Status of the BSRN Station Georg-von-Neumayer**

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#### **Neumayer\_III**

- In February 2009 Neumayer\_III took over the observatory programs from the preceding stations Neumayer and Georg-von-Neumayer
- The change took place without interruptions
- Neumayer III gets hydraulically elevated to compensate snow accumulation



#### The expected lifetime from Neumayer\_III is about 30 years



Solar tracker close to Neumayer III

#### **Measurements**

- Since 1981 data are available
- They include downward and upward radiation fluxes, synoptic observations, upper air soundings, cloud ceilings
- BSRN program is ongoing

Timeseries of annual averaged relative sunshine duration

#### Trends

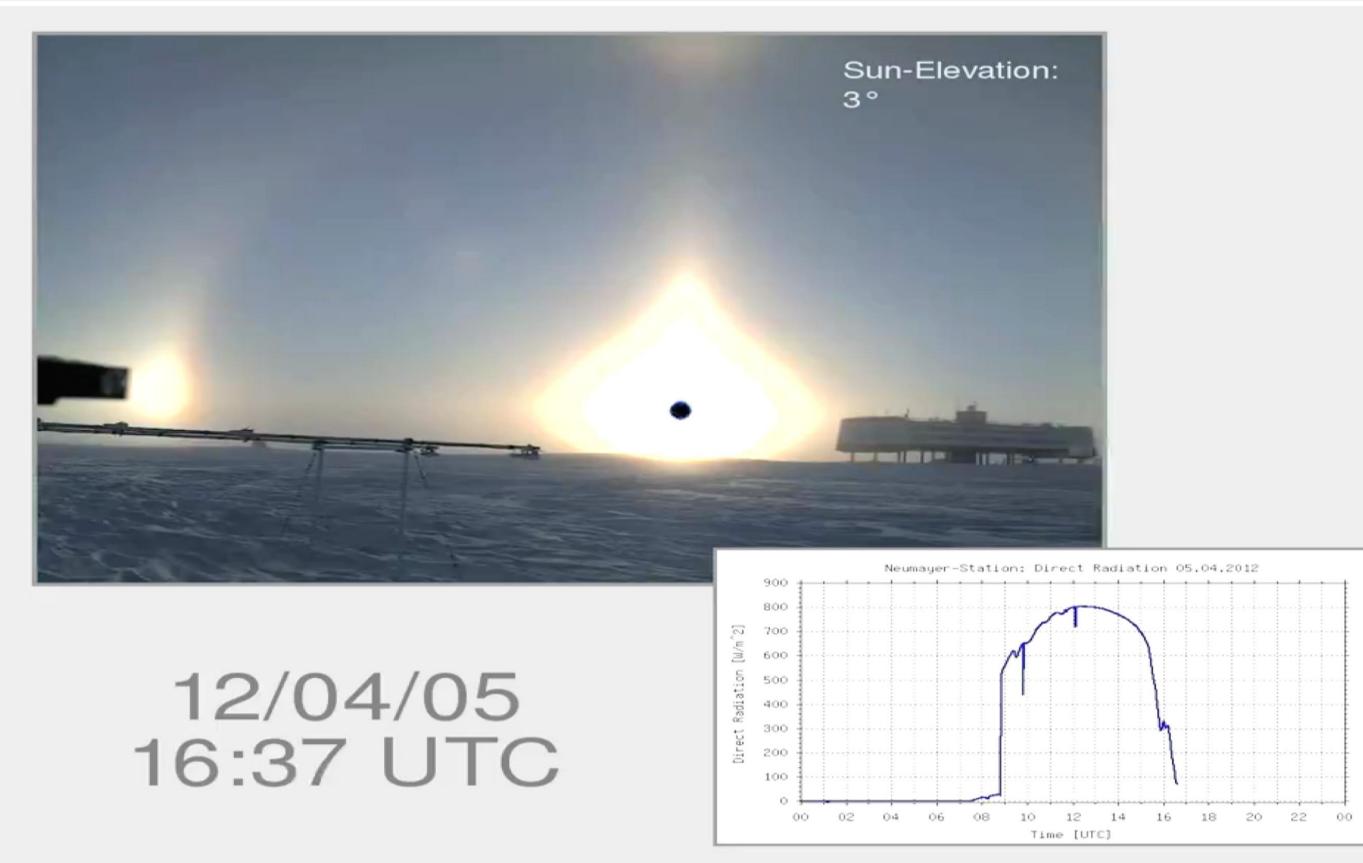
- Slightly increasing global radiation
- Slightly decreasing long-wave downward radiation
- Strongly increasing sunshine duration, see above
- Slightly increasing surface pressure
- No warming of the surface air temperature, see below

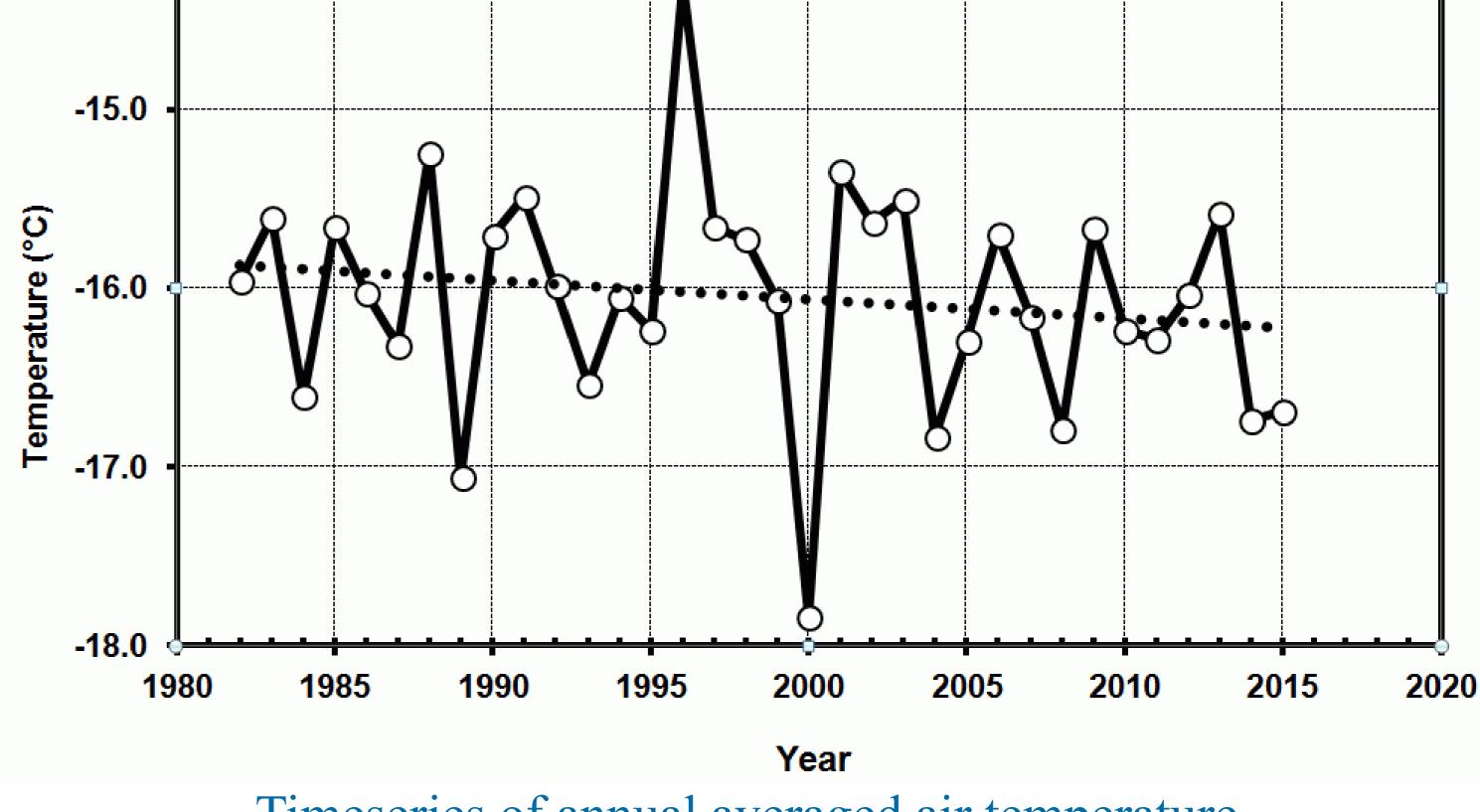
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Most probably minimum of stratospheric spring ozone depletion reached 2006, see below

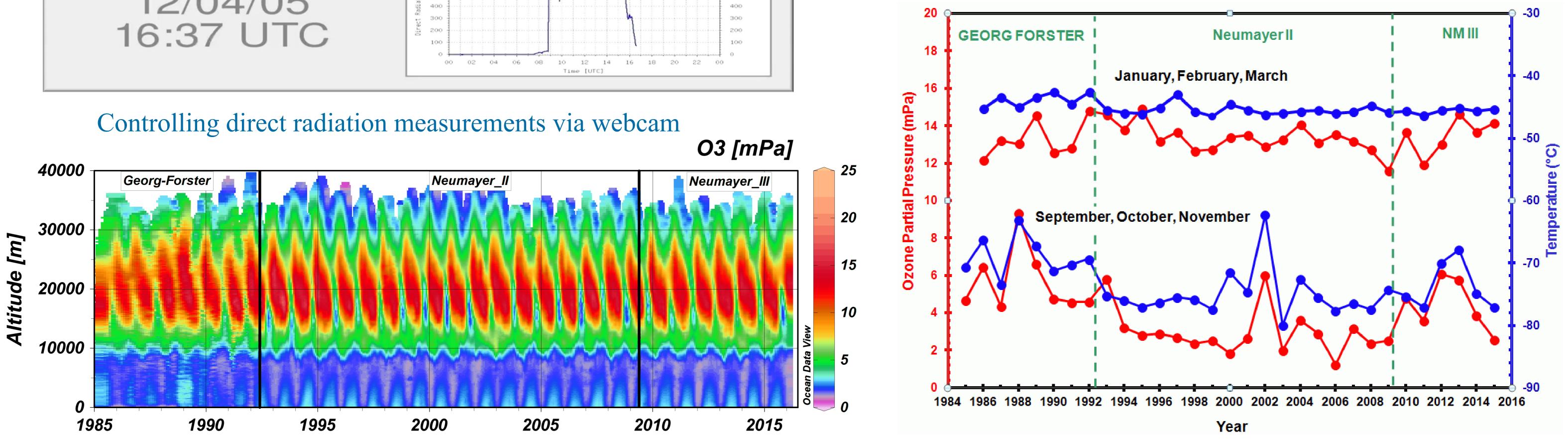


Data from other observatories like the air chemistry observatory are available





Timeseries of annual averaged air temperature



Time-altitude section of ozone partial pressure from upper air soundings

Timeseries of seasonal averaged stratospheric parameters at 70hPa

#### Climate Sciences, Polar Meteorology