

## **Global Ozone Monitoring Experiment (GOME) on Board of ERS 2**

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### **Abstract**

The second European Remote Sensing satellite (ERS 2) was successfully launched on 21st , April 1995. GOME is the only completely new instrument on board of ERS-2. For 3 months GOME has been commissioned in orbit. Until July 1996 GOME was in the geophysical validation phase. The ground processing of GOME data is done by the German Remote Sensing Processing Facility (DFD, DLR). Total column ozone data as ESA level 2 product are released since beginning of August 1996. ERS 2 is flying on a sun synchronous polar orbit in about 780 km with a descending equator crossing time at 10:30 local time. GOME is a nadir viewing spectrometer which observes solar radiation transmitted through or scattered from the earth atmosphere or the surface. The spectrometer covers a wavelength range from 240 to 793 nm with a spectral resolution of 0.2 to 0.3 nm. The spectrum is recorded simultaneously by 4 detector arrays. In addition 3 broad band polarisation detectors are included. Using the differential optical absorption spectroscopy technique (DOAS) the detection of column densities of ozone and nitrogen dioxide is now operational. First total column ozone measurements are shown.

Keywords: GOME, Ozone Monitoring, Instrument

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