



## **Re-evaluation of the long-term total ozone series from Oxford since 1924**

C. Vogler, **S. Brönnimann**, J. Staehelin, R. Bleisch

Institute for Atmospheric and Climate Science, ETH Zurich, Switzerland

In 1924, G. M. B. Dobson started observations of total ozone in his laboratory in Oxford. He continued these observations, though with some gaps, until shortly before his death in 1976. Despite the sometimes unfavourable observing conditions, the Oxford record could become a very important, long ozone series. Until recently, only the data since the International Geophysical Year in 1957 have been available. Here we present the full record, reaching back to 1924. We have digitised the original observations sheets and have re-evaluated the measurements from the original information. In this paper we present the procedure and discuss the corrections that are necessary to account for the effect of aerosols. Other sources of errors are also addressed. Moreover, we explore the possibilities of completing and extending the Oxford record using BUV and TOMS data. The presentation will also include results of comparisons with other long-term European total ozone series as well as an analysis based on climate indices.