



Analysis of stratospheric ozone over Iberian peninsula

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Since 1991 the total ozone in column in Madrid is being measured using a Brewer spectrometer. There are other six Brewer spectrophotometers installed in Spain. In this paper a brief description of the network for measuring ozone over Iberian Peninsula is showed. Other information sources about total ozone come from satellite data; specifically the Nimbus 7 TOMS data over the peninsula from 1978 to 1993 are analyzed. Also, soundings of ozone has been made at Madrid since 1992, one per week. First results of the analysis of total ozone measurements from Brewer and TOMS at Madrid are presented. A comparison between the values of total ozone column obtained with EP-TOMS and Brewer was also made showing a good agreement between ground based and satellite based measurements. A year data analysis of four peninsular Brewer shows daily and seasonal differences. This fact justifies the maintenance of a spectrometer network and the development of collaboration with Portugal institutions in order to exchange data, to perform studies and ozone maps. Also, after a quality control procedure, an analysis of the ozone profiles from Madrid for the period 1992-2002 was made. Seasonal changes in the height and the values of the maximum at the lower stratosphere were outlined. Finally, a short study of the total ozone and by levels tendencies has been performed taking in account the limited number of years available.