



## **Impact on Estimated Ozone Trends Utilizing Measurements from Ground-, Balloon-, and Satellite-Instruments**

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Total ozone overburden as well as vertical ozone distribution is measured from many global locations. Emphasis is mainly on the instrumental impact when estimating long-term ozone trends. This presentation discusses ozone measurements utilizing six techniques: Dobson Spectrophotometer, Ground-based Ultra-violet Radiometer (GUV), NILU-Ultra-violet Irradiance Meter (simply called NILU), Electrochemical Concentration Cell (ECC) sondes, satellites (especially those particular to the A-Train), and the handheld Microtops II Sunphotometer. Additional measurements from a few of the cooperative sites of the Southern Hemisphere Additional Ozonesonde (SHADOZ) network are compared, but mostly between ECC's and satellites. Although different instruments track changes in generally the same way the amount of measured ozone was found to differ. A brief review of the instruments and discussion of the instrumental impact on the estimated trend will be presented.