**BREWER OZONE VARIABILITY OVER ANKARA AND COMPARISON BETWEEN OMI AND BREWER OZONE MEASUREMENTS**

**FOR ANKARA (2006-2013)**

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ABSTRACT

Ozone is a key trace gas in the atmosphere surrounding our planet: Ozone in the stratosphere absorbs the detrimental part of the solar radiation, thus protecting life (in its present form) at the Earth’s surface.

TOMS ozone Nimbus-7 satellite program began on October 24, 1978. In 2004, TOMS satellites were stopped their activities. OMI (Ozone Monitoring Instrument on Aura) has begun working to send ozone data from July 2004 to present.

**Brewer Spectrophotometer Installation and Measurement in Ankara, Turkey;** Turkish State Meteorological Service has been performing on an official project from TUBITAK titled “Observation of the tropospheric and stratospheric ozone/UV-B changings over Turkey and analyses of the results”. A few academic personals from ITU (Istanbul Technical University) also includes in this Ozone Project under contract no: 105G032. Brewer Spectrophotometer has been bought at the extension of this TUBITAK Project and installed in Ankara. The Brewer #188 has been performing on the roof of main building of TSMS since November 2006 (39° 97‘N, -32° 863‘E). A correlation study among the Brewer, OMI and ozonesonde has been completed for the last six years. A correlation coefficient of almost 0.95 was found in between Brewer MK III data and OMI for the limited period (November 2006- December 2013).

**Keywords:** Ozone Satellite Data, Total Ozone, Dobson Units, Seasonal Ozone, Brewer Spectrophotometer