

QOS2016-160-1, 2016

Quadrennial Ozone Symposium of the International Ozone Commission

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Ozone Monitoring at the NASA Wallops Flight Facility: Celebrating the First Half Century

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The NASA Wallops Flight Facility (WFF) operates one of the oldest continuous ozone measurement stations in the world. Ozone measurements were initiated there with a Beck model Dobson spectrophotometer on 23 June 1967. Since 1998 Dobson records are archived by NOAA. Wallops Dobson data are also archived at the WOUDC and NDACC (1990-). ECC (Electro-chemical Concentration Cell) ozonesonde launches commenced at Wallops on 6 May 1970, making WFF the longest continuously operating ECC site in the US, with more than 2000 vertical profiles measured. WFF sponsored Ascension in SHADOZ (1998-2010) and has partnered with INPE in Natal, Brazil, also a SHADOZ site, to collect ozonesonde data since 1978; Natal is the longest operating tropical ozonesonde station. During the analog ECC Ozonesonde era (1970-1995), an instrument was released biweekly. During the digital ozonesonde era (1995-present day), ozone profiles are recorded at least weekly (~66/yr), which provides data for climatology, special projects (eg IONS-04; Thompson et al, 2007) and satellite overpasses. We present a summary of these activities and the WFF data archive, as well as calibration procedures and re-processing of ozonesonde data according to WMO/GAW and SI2N guidelines (Smit et al., 2014; Witte et al, QOS, 2016).