

QOS2016-318, 2016

Quadrennial Ozone Symposium of the International Ozone Commission

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Trends in UTLS Ozone from Aura Microwave Limb Sounder Measurements

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Ozone near the tropopause has a strong effect on net radiative forcing and temperature. In this study ozone measurements from Microwave Limb sounder on board Aura satellite were used to perform trend analysis of near tropopause ozone. Additionally, correlation coefficients were computed for ozone in the UTLS and erythemal UV radiation at the surface. The analysis shows that lower stratospheric ozone decreased significantly over northern and southern mid latitudes whereas there is significant increase in the polar region especially in the northern hemisphere. Correlation study shows slight positive correlation over most of the region except for some areas in the tropics that display relatively high negative association.