

Characteristics of Columnar and Surface Ozone Measured over Dibrugarh

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Characteristics of Total column ozone and surface Ozone measured by Microtops II Ozonometer and a 2B TECH Ozone Monitor during 2007-2010 at Dibrugarh are investigated and results are presented. The Total column ozone increases with sunrise, reaching maximum in noon hours and then gradually decreases till evening. Seasonally Total column ozone is higher in premonsoon (March-May) and lower in retreating monsoon (October-November). An annual variation in Total column ozone has also been observed. The surface Ozone was found to have two diurnal minima in the morning and afternoon hours and broad maxima during the day and night. The minimum and maximum varies between 45-5 ppbv. The possible mechanisms for production and loss of both columnar and surface Ozone are investigated with a view to explain the diurnal as well as seasonal variations.