

Global Measurements of OClO, BrO, HCHO, and CHO-CHO from the Ozone Monitoring Instrument on EOS Aura

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Data products of trace species from the Ozone Monitoring Instrument now show great potential for atmospheric chemistry studies: BrO, an important element in stratospheric ozone depletion due to its high efficiency in destroying ozone molecules, has matured to a level that is comparable to what was previously achieved from measurements of the Global Ozone Monitoring Experiment. It is now also measured above salt lakes and volcanoes. HCHO, a volatile organic compound (VOC) produced from methane oxidation and isoprene emissions, and an indicator for urban air quality, can now be retrieved with quality that allows the continuation of VOC/air quality studies started with GOME measurements. OClO can be robustly measured in the polar vortices.

We will give an overview of the retrieval algorithm and an update on the current state of BrO, OClO, and HCHO operational data products from OMI. Results from the retrieval of CHOCHO (glyoxal) first presented in 2005 (the first-ever measurement of this alternate indicator of air quality from a satellite instrument) will be updated.