Operational Ozone Products Available from NOAA/NESDIS

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There are many agencies, groups and instruments making ozone products from satellites. This poster explains the operational ozone products produced by the US National Oceanic and Atmospheric Administration (NOAA), National Environmental Satellite, Data, and Information Service (NESDIS) that are available to support near-real time operations. These products are used by United States and international environmental modeling groups for input into weather models, into other satellite algorithms to enhance radiative transfer models, for UV forecast models, and for climate monitoring. These products are available to users in a variety of formats such as BUFR, Binary, GRIB, GRIB2, and ASCII. Poster will also provide information on how to obtain operational access to the following products.

NOAA currently produces near-real-time (NRT) total ozone and profile ozone products from the SBUV/2 instruments designed to measure scene radiance in the spectral region from 160 to 400 nm on the NOAA Polar-orbiting Operational Environmental Satellites (POES) N16 and N17, and N19.

The GOME-2 instrument was designed by the European Space Agency to measure radiation in the ultraviolet and visible part of the spectrum (240 - 790 nm) and derives measurements of atmospheric ozone and other trace gases. It is a scanning instrument (scan width 1920 km) with near global coverage daily. The field-of-view on the ground is 80 km X 40 km.

TOAST is a near real-time operational ozone map generated by combining Advanced TIROS Operational Vertical Sounder (ATOVS) tropospheric and lower stratospheric (4 to 23 km) ozone retrievals with SBUV/2 spatially smoothed mid-to-upper stratospheric (24 to 54 km) layer ozone retrievals. Daily products are created in imagery (png), binary or GRIB format.