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Tropospheric Ozone from GOME-2 Vertical O3 Profiles

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Vertical ozone profiles on a 80x40 km² footprint from GOME-2 are retrieved by KNMI within the framework of the EUMETSAT O3MSAF. The retrieval algorithm uses GOME-2 radiance measurements in the range from 260 to 330 nm and tries to find the ozone profile best matching the original radiance measurements. This is done by iteratively adjusting the knowledge of the state of the model atmosphere via a forward model and the optimal estimation inversion technique. The ozone profiles are given as partial ozone columns in DU in 40 layers from the surface up to 0.1 hPa. From these vertical ozone profiles, the tropospheric part can be determined, both as a total tropospheric column or as a partial profile. In this poster we will present the vertical ozone profiles calculated from GOME-2 data on the recently added high resolution ground pixels (80x40 km²2)