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Intercomparisons of upper tropospheric/lower stratospheric jet  
and tropopause diagnostics in operational data assimilation products

The upper tropospheric/lower stratospheric (UTLS) jets are important in defining atmospheric circulation and transport, particularly in the vicinity of the extra-tropical tropopause. We have developed methods for characterizing the UTLS jets and tropopauses from operational assimilated meteorological analyses. Here we describe our methods of identifying and cataloging the jets and tropopauses and present results from several meteorological datasets. We include comparisons of different GEOS-5 versions, the different algorithms used for calculating the locations of the tropopauses and comparisons of jet and tropopause products derived from GEOS-5 with the ERA-Interim and other data assimilation products.