



Satellite measurements of chemical tracers in the UTLS and comparison with in-situ data.

H. Clark

CNRM Meteo France

We use a combination of measurements from the satellites MOPITT and AIRS to trace the origin of air in the upper troposphere and lower stratosphere. Tracer fields from the two satellites compare well with the in-situ fields taken from aircraft as part of the MOZAIC project, and capture known geographical and meteorological features. We examine tracer-tracer relationships in different regions during January and July 2003. Consistent with other studies, stratospheric air is signified with high ozone and low water vapour, with a potential temperature greater than 360K and with low values of carbon monoxide. The tracer-tracer relationships are indicative of a transition layer in the extratropical tropopause.