Seasonal variations of ozone in the upper polar atmosphere from data of microwave radiometry

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Significant data set about vertical distribution of ozone for photochemical region (heights from 30 up to 50 km) in high latitudes is now accumulated. These data sets are obtained in long microwave observations of stratospheric ozone in polar latitudes of Northern and Southern Hemispheres. Microwave radiometry along with lidar are by permanent facility for a research of seasonal variations of ozone in photochemical region of atmosphere.
The results of ground-based microwave measurements of ozone content at altitudes from 30 to 50 km in polar latitude during several winters 1988/1989 (Heiss Island), 1989/1990 (Mirny, Antarctic), 1999/2000 (Apatity, SOLVE) are presented. This talk describes in detail the features of ozone behaviour in photochemical region during seasonal change.