



Arctic stratospheric ozone loss as observed over Kiruna, Sweden, during winter/spring 2004/05

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We present observations of stratospheric ozone covering the entire winter/spring period 2004/2005. The millimetre wave radiometer KIMRA at IRF Kiruna, is located at 67.8 N and 20.4 E. It was operated almost continuously and from the measurements we calculated ozone profiles and column density. For the estimated ozone loss we considered only measurements well within the polar vortex defined by the 'Equivalent Latitude' method described by Nash. In order to discriminate dynamic effects we deploy N₂O data from the Odin satellite. Although there has not been many observations of polar stratospheric clouds over Kiruna until the end of January the overall performance of the polar vortex with respect to extension and stability and the very low stratospheric temperature gives rise for a significant ozone loss during the winter 2004/05.