



Dependence of ozone lamina characteristics to the distance from the polar vortex edge.

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Ozone laminae are the narrow layers of enhanced or depleted ozone concentration. They occur predominantly in the outer side of the vortex edge. These findings are supported by the ozonosonde observations and by the model studies, which was done on limited size of examples. This study is done on large size examples. We use measurements from the European ozonosonde stations from the period 1970-2008. We are interested in these ozone lamina characteristics: the number of laminae per profile, the ozone amount in laminae per profile and the depth of laminae in the case of large laminae. We look for dependence of these characteristics to the distance from the polar vortex edge at several levels in the stratosphere. As the measure of distance from the polar vortex edge we use difference in equivalent latitude between the polar vortex edge and at the ozonosonde stations. We expect from the decreasing of distance from the polar vortex edge the number of laminae per profile will be increased and the depth of laminae will be decreased.