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Trend of ozone content in the layers in the stratosphere and troposphere at the stations of the middle Europe

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In this presentation we give the trend of the ozone content in the selected layers in the stratosphere and troposphere at stations in the central Europe where the vertical ozone profile is measured (Hoheinpeissenberg, Payerne, Uccle, Prague, Legionowo, Lindenberg). We use these layers in the stratosphere: 63-40 hPa, 100-63 hPa, 158-100 hPa; layers in the troposphere-stratosphere region: 250 hPa, and/or the pressure of the tropopause up to 158 hPa, 400 hPa up to 250 hPa and/or the pressure of the tropopause; layers in the troposphere: 630-400 hPa and the ground-630 hPa. We introduce modification of the tropopause determination due to of the small number of measurements in the vertical ozone profile in the case of Brewer-Mast ozonesonde. There is a sharp difference in trends of the ozone content between layers in the stratosphere and that in the troposphere. In general while in the stratospheric layers we observe negative trend of ozone content before mid-1990s, after point the positive trend occurrs. On the other hand in the tropospheric layers in 1990s we observe the oposite change in trends of ozone kontent. Before the 1990s the positive trends of ozone content are present, after the negative ones are observed.