



Does climate change affect the mixing height?

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Within the StartClim 2006 project - part A convective mixing heights for the period 1975 to 2006 were calculated using daily 12 UTC rawinsonde data of Vienna. Obtained results of the convective mixing height show the typical yearly cycle of the mixing height with low values in winter and high values in summer. Additionally data of 9 near Alpine stations have been investigated in the same way. All stations show increasing mixing height values in the comparison of the 2 periods. The beginning of rising heights in spring starts earlier and the decreasing of heights in autumn starts later in the period 1991 - 2006 than in 1975 - 1990. A clear climate change signal, but with different magnitude is visible in all datasets. Reasons as the decrease of relative humidity or the increase in global radiation are considered as possible explanations.