



Seasonal variation of total peroxy radicals (RO_x) at Hohenpeissenberg

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Continuous measurements of RO_x radicals (HO₂+RO₂) were carried out using NO titration and measurement as OH by the Hohenpeissenberg chemical ionisation mass spectrometer (CIMS) since May 2012 at the rural background mountain site Hohenpeissenberg in southern Germany. These data complement the OH and total OH-reactivity measurements routinely run by this CIMS instrument. Results of RO_x calibration measurements are presented. The hourly mean data from originally 30 second time resolution of the peroxy radical measurements show a clear diurnal and seasonal pattern with a mean daily minimum to maximum range of 2 to 10 ppt in summer and 0.1 to 0.7 ppt in winter, respectively. The daily maximum is at 12h UTC in summer and 9h UTC in winter. Seasonal and diurnal patterns of RO_x are compared to corresponding data of OH and other parameters.