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VOCs at Hohenpeissenberg during HOPE-2012

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At the GAW global site Hohenpeissenberg a substantial suite of anthropogenic, biogenic and oxygenated volatile organic compounds (VOC) is routinely measured by on-line GC/FID and GC/MS techniques. During an extensive measurement phase from June to August 2012 supporting an EMEP intensive measurement period and the Hohenpeissenberg Photochemical Experiment (HOPE 2012), VOC data were recorded with a time resolution up to 1hr. These measurements were accompanied by a whole set of continuously measured meteorological parameters, aerosols, reactive gases, OH, H2SO4 and ROx. Since measurements were performed at high solar insolation, biogenic VOC (eg. Isoprene, alpha-terpinene) reveal pronounced diurnal cycles with large amplitudes of several hundred ppt, while anthropogenic VOC remain at a rather low level. We will present time series from this period and study turnover rates of biogenic and anthropogenic VOCs.