



Long time series of VOC at the Hohenpeissenberg Meteorological Observatory (DWD)

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Volatile organic compounds (VOC) are crucial for tropospheric chemistry and our climate. They are key substances for the formation of ozone in the presence of sunlight and nitrogen oxides (NO_x). Being oxidised by OH, they affect the oxidation capacity of the atmosphere and play an essential role in the formation of organic aerosol.

Since 1998 C_2 - C_{10} VOC compounds including anthropogenic, biogenic and oxygenated VOC are monitored at the GAW global station Hohenpeissenberg Meteorological Observatory. Routine measurements are performed with on-line GC/FID and GC/MS technique twice a day. Complemented with sporadic intensive measurement phases with a time resolution up to 1 hr, a comprehensive data set has developed over the last 16 years. Here, we will present our time series and trend analyses.