

High Volume (HV) aerosol sampling

General: Aerosols are sampled on Whatman 541 filters and analyzed by ion chromatography. Sampling period: From “Start date” to “Stop date”. Concentration values are given in nanogram (ng) per 1 m³ air STP. Further information see http://www.awi-bremerhaven.de/GPH/AirChemistryObservatory/gallery_05.html

Values:

1. Methane sulfonate concentration = *MSA_conc*; unit [ng m⁻³]
2. Chloride concentration = *Cl_conc*; unit [ng m⁻³]
3. Bromide concentration = *Br_conc*; unit [ng m⁻³]
4. Nitrate concentration = *nitrate_conc*; unit [ng m⁻³]
5. Sulfate concentration = *sulfate_conc*; unit [ng m⁻³]
6. Sodium concentration = *Na_con*; unit [ng m⁻³]
7. Ammonium concentration = *NH4_conc*; unit [ng m⁻³]
8. Potassium concentration = *K_conc*; unit [ng m⁻³]
9. Magnesium concentration = *Mg_conc*; unit [ng m⁻³]
10. Calcium concentration = *Ca_conc*; unit [ng m⁻³]

Uncertainties of the values are approximately ±10% to ±15% for the main components MSA, chloride, nitrate, sulfate and sodium, and between ±20% and ±30% for the minor species bromide, ammonium, potassium, magnesium and calcium.