



Semi-continuous measurements of the DMS oxidation products (MSA and nss-SO₄) in the aerosol phase at Amsterdam Isl., a remote site of the Austral Ocean

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It is reported here for the first time semi-continuous measurements of the main dimethyl sulfide (DMS) oxidation products in the particulate phase, Methanesulfonate (MSA) and non-sea-salt-sulfate (nss-SO₄). These measurements have been performed using a Particles-Into-Liquid-Sampler (PILS) connected to an ICS200 Reagent Free Dionex Ion chromatograph (IC). Measurements of the major inorganic anions (Cl, SO₄, NO₃) as well as selected light organics (Formate, MSA) were achieved on a 20-minute basis for a 10-day period (9-17/12/2006) at Amsterdam Isl. (37°S, 77°E), a remote site of the southern Indian Ocean. A total of 460 determinations of MSA and nss-SO₄ have been obtained within this 10-day period with concentrations ranging from 23 to 674ng/m³ and 7 to 1655 ng/m³, respectively.

Short-term variations in the concentration of these two compounds have been observed and are discussed here from similar changes observed in meteorological parameters.