



Measurement and Interpretation of Gas and Snow Phase Formaldehyde Concentrations obtained during the CHABLIS Campaign in Coastal Antarctica

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Measurements of year-round gas and snow phase formaldehyde obtained during the 2004-5 CHABLIS campaign in coastal Antarctica will be presented.

Factors controlling HCHO concentration include (i) long range transport, (ii) local chemical sources and sinks, and (iii) exchange with the snow surface. Our data show seasonality in agreement with observations from Neumayer Station but with lower concentrations, in line with model predictions.

A comprehensive suite of chemical measurements during the campaign allows for an in-depth study of HCHO controls. Furthermore, monthly snow-pit studies allow us to investigate the development of HCHO within the snow pack. Comparison of gas and snow-phase data with other polar sites will also be presented.