Geophysical Research Abstracts, Vol. 8, 05554, 2006 SRef-ID: 1607-7962/gra/EGU06-A-05554 © European Geosciences Union 2006



Comparison of new firn sample results from Kohnen station with those from the 300 km apart firn sampling in Dronning Maud Land in 1998.

M. Leuenberger (1), K. Weiler (1), S. Kipfstuhl (2), J. Schwander (1), P. Nyfeler (1), A. Landais (3,4), J. Jouzel (3), R. Mulvaney

(1) Climate and Environmental Physics, Physics Institute, University of Bern, Sidlerstrasse 5, CH-3012 Bern, leuenberger@climate.unibe.ch

(2) Alfred Wegener Institut, Am Alten Hafen 26, D-27568 Bremerhaven

(3) IPSL/Laboratoire des Sciences du Climat et de l,Environnement, UMR CEA-CNRS, CEA Saclay, 91191 Gif-sur-Yvette, France

(4) The Institute of Earth Sciences, Hebrew University, Givat Ram, 91904 Jerusalem

(5) British Antarctic Survey High Cross, Madingley Road CAMBRIDGE CB3 0ET United Kingdom

New firn air samples for EPICA-DML were taken during the field season 2005/06 within a collaborative project between the Division of Climate and Environmental Physics of the University of Bern (CEP) and the Alfred Wegener Institute, Bremerhaven. These samples will be analyzed at CEP for multiple parameters using isotope mass spectrometry as well as combined CO_2 and O_2 analyzers. Results regarding a comparison between the different CO_2 and O_2 methods used in the laboratory will be presented and discussed. In addition a comparison with the field CO_2 determination will be shown. Influences of different site conditions will be discussed based a comparison between the new and the former, 300 km apart, firn sampling in Dronning Maud Land.