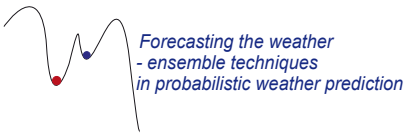
EMS Annual Meeting Abstracts
Vol. 8, EMS2011-59, 2011
11th EMS / 10th ECAM



Retrieval of atmospheric CO_2 from satellite near-infrared nadir spectra in the frame of ESA's climate change initiative

M. Reuter, M. Buchwitz, O. Schneising, J. Heymann, H. Bovensmann, and J.P. Burrows
University of Bremen, Germany (reuterm@loz.de)

ESA's climate change initiative (CCI) aims at global satellite measurements of essential climate variables (ECV). One of these variables is XCO_2 (the column-average dry-air mole fraction of atmospheric CO_2) which is retrieved from the satellite instruments SCIAMACHY aboard ENVISAT and TANSO aboard GOSAT. Results of the SCIAMACHY retrieval algorithms WFM-DOAS and BESD will be the focus of the presentation. This includes a comparison against ground based FTS measurements, GOSAT retrievals, and model results.