

File Revision Date:

May 9, 2001

File: wgm_Sondres.txt

Data Set Description:

PI: William G. Mankin
Instrument: EOCOM Fourier Transform Interferometer
Site(s): Black Mountain, Sondre Stromfjord, Greenland 67N, 52.6W, 0.4km
Measurement Quantities: Column Density [molec/cm²] N₂O, O₃, HCl, HF, HNO₃

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Reference Articles:

Column Observations of HNO₃, N₂O, HF, HCl, O₃ at Sondre Stromfjord, Greenland During Winter 1994-'95, J.W.Hannigan, M.T.Coffey, W.G.Mankin, A.Goldman, Journal of Atmospheric Chemistry, 30: 103-118, May 1998

Airborne Fourier transform spectroscopy of the upper atmosphere., Mankin, W. G., Opt. Engr., 17, 39-43 (1978).

Instrument Description:

This meta-data file describes data taken during the SESAME Campaign at Sondre Stromfjord, Greenland. The instrument is not an NDSC standard instrument nor intercompared. The instrument is a 16cm OPD

EOCOM interferometer. It uses a two color detector and hence a single optical path for both the InSb and MCT regions. The mid IR region from 750 - 4500cm⁻¹ is broken into several optical regions with bandpass filters and recorded separately. Typically an observation is composed of 10 scans each taking 6sec to record. The data in the archive are daily average column amounts. A full description of the instrument, observation scheme, column and error analysis can be found in the JAC reference given above.

Algorithm Description:

SFIT 1.09 was used for all spectra fitting.

Expected Precision/Accuracy of Instrument:

A complete discussion of the errors in the columns can be found in the error analysis section of the JAC paper.

Instrument History:

See References above.