MetaData File provided: May 2001.
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Data Set Description:

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Instrument: Infrared Fourier Transform Spectrometer (FTIR)

Site (1): Rikubetsu, NDSC Complement Station, Japan
43.46N, 143.77E, 370m

Site (2): Moshiri, NDSC Complement Station, Japan
44.37N, 142.27E, 280m

Measurement Quantities: Total Vertical Column Abundances above Rikubetsu and Moshiri (in number molecules per sq. cm)

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Instrument Description:

A commercial Bruker IFS 120 M has been operated in Rikubetsu since May 1995 and a Bruker IFS 120 HR in Moshiri since April 1996. Both instruments are equipped with MCT and InSb detectors. The nominal range covered is 750-1250, 1400-2100, 2000-2650, 2300-3100, 2700-3800, and 3900-4300 cm-1, based on a standard set of NDSC filters.

Algorithm Description:

Vertical column abundances are retrieved from selected microwindows containing isolated and well characterized line(s) of the target gas using SFIT2 algorithm, which was jointly developed at NIWA/Lauder and NASA/LRC.

Ancillary data:

- Line compilation : HITRAN 1996 in most cases
- Physical models : PT profiles are taken from daily rawinsonde. In some cases monthly averaged rawinsonde.

Expected Precision/Accuracy of Instrument:

Based on the tests with simulating spectra, precision and accuracy are estimated at +/- 3% and +/- 6% respectively.

Instrument History:

Both 120 M and 120 HR have been used in their original Bruker configuration.

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