

MetaData file: rs_zugspitze_ftir
Latest revision: August 10, 2018.
Revised: April 16, 1998, June 5, 2003
Provided: May 1997

Data Set Description:

Investigator: Ralf Sussmann (PI), Markus Rettinger (Engineer)
Instrument: Solar absorption FTIR
Site: Zugspitze (47.4 N, 11.0 E, 2964 m a.s.l.)
Measurement Quantities: Total vertical column densities and vertical profiles above Zugspitze

Contact Information:

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Instrument Description:

Bruker IFS 120 HR spectrometer with 125 HR upgrade; two mirror solar tracker; solar absorption measurements.

Instrument History:

1995 built up at Zugspitze and tests, operational measurements starting June 1995
1996 26 measurement days;
intercomparison with Jungfrauoch: coincident measurements and independent analyses of HF, HCl. Agreement within 2 per cent
1997 31 measurement days;
ISDN connection to the ground station for remote control
1998 64 measurement days;
remote control measurements working operationally
1999 74 measurement days
2000 77 measurement days
2001 61 measurement days
intercomparison of full Zugspitze HCl and ClONO₂ timseries with Jungfrauoch. Perfect agreement within a few per cent.
2002 101 measurement days
2003 133 measurement days;
intercomparison of 1996-2001 Zugspitze and Jungfrauoch CO series. Perfect agreement.
2004 87 measurement days
2005 134 measurement days
2006 Bruker electronics update implemented

Archiving Status NDACC Database (as to August 2018):

C2H6	Mar1995	Mar 2018
CH4	Aug 1995	Mar 2018
H2CO	Mar 1995	Feb 2018
ClONO2	Jul 1995	Mar 2017
CO	Jul 1995	Sep 2017
HCL	Mar 1995	Mar 2018
HF	Mar 1995	Mar 2018
HNO3	Jul 1995	Mar 2018
N2O	Aug 1995	Mar 2018
O3	Mar 1995	Sep 2017
HCN	Dec 2015	Sep 2017
OCS	Jul 1995	Mar 2018

Reference Articles:

Sussmann, R., et al.: Infrared spectroscopy of tropospheric trace gases: combined analysis of horizontal and vertical column abundances, Appl. Opt. 36, 735-741 (1997).

See <https://www.sussmann-publications.lima-city.de/index.htm> for all further articles.