

NDSC Publications - 1999

1999, Andersen, Signe B.

Spring ozone column values over Thule, Greenland in the period 1991-1998

Geophys. Res. Lett., 26, 193-196

UVVis; Ozone

1999, Baray J-L.

J. Leveau, J. Porteneuve, G. Ancellet, P. Keckhut, F. Posny, S. Baldy

Description and evaluation of a tropospheric ozone lidar implemented on an existing lidar in the southern subtropics

Appl. Opt., 38, 6808-6817

Lidar; Ozone

1999, Baron, Ph.

Ph. Ricaud, J. de La Noe, J. E. P. Eriksson, F. Merino, M. Ridal, and D. Murtagh

Studies for the Odin Sub-Millimeter Radiometer: II. Retrieval methodology

Can. Journ. of Phys., revised

Microwave; Satellite

1999, Becker, E.

J. Notholt, A. Herber

Tropospheric aerosol measurements in the Arctic by FTIR emission and Star photometer extinction spectroscopy

Geophys. Res. Lett., 26, 1711-1714

FTIR; Aerosol

1999, Bernhard G.

Seckmeyer G.

The uncertainty of measurements of spectral solar UV irradiance

J. Geophys. Res., 104, 14321-14345

Spectral UV; UV Irradiance

1999, Beyerle, G.

I. S. McDermid

Altitude Range Resolution of Differential Absorption Lidar Ozone Profiles

Applied Optics, 38, 924-927

Lidar; Ozone

1999, Bhatt, P. P.

E. E. Remsberg, L. L. Gordley, J. M. McInerney, V. G. Brackett, and J. M. Russell III

An Evaluation of the Quality of HALOE Ozone Profiles in the Lower Stratosphere

J. Geophys. Res., 104, 9261-9275

Satellite; Ozone; Validation

1999, Burrows, J.P.

M. Weber, M. Buchwitz, V. Rozanov, A. Ladstaetter-Weissenmayer, A. Richter, and M. Eisinger

The Global Ozone Monitoring Experiment (GOME): Mission Concept and First Scientific Results

J. Atmos. Sci., 56, 151-175

Satellite; Ozone

1999, Burton, S. P.

L. W. Thomason, Y. Sasano, and S. Hayashida

Comparison of aerosol extinction measurements by ILAS and SAGE II

Geophys. Res. Lett., 26, 1719-1722

Satellite; Aerosol; Validation

1999, Cairo, F.

A. Adriani, G. Didonfrancesco, L. Pulvirenti and F. Fierli

A comparison of various linear depolarization parameters measured by lidar

Appl. Opt., 38, 4425-4432

Lidar; Aerosol; Algorithm; Validation

1999, Chipperfield, M.P.

Multiannual simulations with a three-dimensional Chemical Transport Model

J. Geophys. Res., 104, 1781-1805

Model

1999, Danilin, M. Y.

J. M. Rodriguez, W. Hu, M. K. W. Ko, D. K. Weisenstein, J. B. Kumer, J. L. Mergenthaler, J. M. Russell, III,

M. Koike, et al.

Nitrogen species in the post-Pinatubo stratosphere: Model analysis utilizing UARS measurements

J. Geophys. Res., 104, 8247-8262

UVVis; Satellite; Model; Nitrogen, Aerosol; Volcano

1999, De Mazière, M.

O. Hennen, M. Van Roozendaal, P. Demoulin, and H. De Backer

Daily ozone vertical profile model built on geophysical grounds, for column retrieval from atmospheric high-resolution infrared spectra

J. Geophys. Res., 104, 23,855-23,869

FTIR; Ozone

1999, Galle B

Mellqvist J, Arlander DW, Floisand I, Chipperfield MP, Lee AM
Ground based FTIR measurements of stratospheric species from Harestua, Norway during SESAME and comparison with models
J. Atmos. Chem., 32 (1), 147-164
FTIR; Model; Validation

1999, Godin, S.
A. I. Carswell, D. P. Donovan, H. Claude, W. Steinbrecht, I. S. McDermid, T. J. McGee, M. R. Gross, H Nakane, D. P. J. Swart, H. B. Bergwerff, O. Uchino, P. von der Gathen, R. Neuber
Ozone differential absorption lidar algorithm intercomparison
Appl. Opt., 38, 6225-6236
Lidar; Algorithm; Ozone; Validation

1999, Goldman, A.
C. Paton-Walsh, W. Bell, G. C. Toon, J.-F. Blavier, B. Sen, M. T. Coffey, J. W. Hannigan, and W. G. Mankin
NDSC FTIR intercomparison at Table Mountain Facility, November, 1996
J. Geophys. Res., 104, 30481-30503
FTIR; Validation

1999, Goutail, F.
J.-P. Pommereau, C. Phillips, C. Deniel, A. Sarkissian, F. Lefèvre, E. Kyrö, M. Rummukainen, P. Eriksen, S. B. Andersen, B.-A. Kaastad-Hoiskar, G. Braathen, V. Dorokhov, and V. U. Khatatov
Depletion of Column Ozone in the Arctic during the Winters of 1993-94 and 1994-95
J. Atmos. Chem., 32, 1-34
UVVis; Ozone

1999, Guzzi, D. et al.
Four years of stratospheric aerosol measurements in the northern and southern hemispheres
Geophys. Res. Lett., 26, 2199-2202
Lidar; Aerosol

1999; Hansen, G.
M. Chipperfield
Ozone depletion at the edge of the Arctic polar vortex 1996/1997
J. Geophys. Res., 104, 1837-1845
Lidar; Ozone

1999, Hansen, G.
A. Dahlback, F. Tønnessen, and T. Svenøe
Validation of GOME total ozone by means of the Norwegian ozone monitoring network
Ann. Geophys., 17, 430-436
Satellite; Ozone; Validation

1999, Hase, F.

T. Blumenstock, and C. Paton-Walsh

Analysis of the instrumental line shape of high-resolution Fourier transform IR spectrometers with gas cell measurements and new retrieval software

Appl. Optics, 38, 3417-3422

FTIR

1999, Hase, F.

M. Hoepfner

Atmospheric ray tracing modeling for radiative transfer algorithms

Appl. Optics, 38, 3129-3133

FTIR

1999, Koike, M.

Y. Kondo, W. A. Matthews, P. V. Johnston, H. Nakajima, A. Kawaguchi, H. Nakane, I. Murata, A. Budiyo, et al.

Assessment of the uncertainties in the NO₂ and O₃ measurements by visible spectrometers

J. Atmos. Chem., 32, 121-145

UVVis; Ozone; NO₂; Validation

1999, Kreher, K.

G.E. Bodeker, H. Kanzawa, H. Nakane, and Y. Sasano

Ozone and temperature profiles measured above Kiruna inside, at the edge of, and outside the Arctic polar vortex in February and March 1997

Geophys. Res. Lett., 26, 715-718

UVVis; Ozone; Temperature

1999, Lambert, J.-C.

M. Van Roozendaal, M. De Mazière, P.C. Simon, J.-P. Pommereau, F. Goutail, A. Sarkissian, and J.F. Gleason

Investigations of pole-to-pole performances of spaceborne atmospheric chemistry sensors with the NDSC

J. Atmos. Sci., 56, 176-193

Satellite; Validation

1999, Langer, Jens

U. Klein, B. Barry, B.-M. Sinnhuber, I. Wohltmann, and K. F. Kuenzi

Chemical Ozone Depletion during Arctic Winter 1997/98 Derived from Ground Based Millimeter-Wave Observations

Geophys. Res. Lett., 26, 599-602

Microwave; Ozone

1999, Leblanc, T.

I. S. McDermid and D. A. Ortland

Lidar Observations of the Middle Atmosphere Thermal Tides and Comparison with HRDI and GSWM,
Part I. Methodology and Winter Observations at Table Mountain (34.4°N)

J. Geophysical Research, 104, 11,917-11,929

Lidar; Temperature

1999, Leblanc, T.

I. S. McDermid and D. A. Ortland

Lidar Observations of the Middle Atmosphere Thermal Tides and Comparison with HRDI and GSWM,
Part II. October Observations at Mauna Loa (19.5°N)

J. Geophysical Research, 104, 11,931-11,938

Lidar; Temperature

1999, Lee, K.-M.

J. M. McInerney, Y. Sasano, J. H. Park, W. Choi, and J. M. Russell III

Intercomparison of ILAS and HALOE ozone at high latitudes

Geophys. Res. Lett., 26, 835-838

Satellite; Ozone; Validation

1999, Lucke, R.L.

D. Korwan, R.M. Bevilacqua, J.S. Hornstein, E.P. Shettle, D.T. Chen, M. Daehler, J.D. Lumpe, M.D. Fromm,
D. Debrestian, B. Neff, M. Squire, G. König-Langlo, and J. Davies

The Polar Ozone and Aerosol Measurement (POAM III) Instrument and Early Validation Results

J. Geophys. Res., 104, 18785-18799

Satellite; Ozone; Validation

1999, McKenzie, R. L.

B. J. Connor, and G. E. Bodeker

Increased summertime UV observed in New Zealand in response to ozone loss

Science, 285, 1709-1711

Spectral UV; UV Irradiance; Ozone

1999, McPeters, R. D.

D. J. Hofmann, M. Clark, L. Flynn, L. Froidevaux, M. Gross, B. Johnson, G. Koenig, X. Liu, I. S. McDermid, T. McGee, F. Murcray, M. J. Newchurch, S. Oltmans, A. Parrish, R. Schnell, U. Singh, J. J. Tsou., T. D. Walsh,
and J. M. Zawodny

Results from the 1995 Stratospheric Ozone Profile Intercomparison at Mauna Loa

J. Geophys. Res., 104, 30,505-30,514

Lidar; Microwave; Sonde; Ozone; Validation

1999, Nagar, V. C.
M. K. McDonald, and R. L. de Zafra
Ground-based measurements of stratospheric ClO over Spitzbergen in the Arctic spring of 1997,
J. Geophys. Res., 104, 21,579 – 21,584
Microwave; ClO

1999, Miller, H.L.
R.W. Sanders, and S. Solomon
Observations and interpretation of column OClO seasonal cycles at two polar sites
J. Geophys. Res., 104, 18,769-18,783
Microwave; OClO

1999, Namboothiri, S. P.
N, Sugimoto, H. Nakane, I. Matsui and Y. Murayama
Rayleigh lidar observation of temperature over Tsukuba: winter thermal structure and comparison
studies
Earth, Planets and Space, 51, 825-832
Lidar; Satellite; Temperature; Validation

1999, Nardi, B.
W. Bellon, L. D. Oolman, and T. Deshler
Spring 1996 and 1997 ozonesonde measurements over McMurdo Station, Antarctica
Geophys. Res. Lett., 26, 723-726
Sonde; Ozone

1999, Nedoluha, G. E.
R.. M. Bevilacqua, R. M. Gomez, B. C. Hicks, and J. M. Russell III, Measurements of middle atmospheric
water vapor from low latitudes and midlatitudes in the Northern Hemisphere, 1995-1998
J. Geophys. Res., 104, 19257-19266
Microwave; H₂O

1999, Pachart, E.
J. Lenoble, C. Brogniez, D. Masserot, J.L. Bocquet
Ultraviolet spectral irradiance in the French Alps. Results of two campaigns
J. Geophys. Res., 104, 16777-16784
Spectral UV; UV Irradiance

1999, Pfeilsticker K, et al.
Intercomparison of the influence of tropospheric clouds on UV-visible absorptions detected during the
NDSC intercomparison campaign at OHP in June 1996
Geophys. Res. Lett., 26 (8), 1169-1172
UVVis; Clouds; Validation

1999, Randel, W. J.

F. Wu, J. M. Russell III, and J. Waters

Space-Time Patterns of Trends in Stratospheric Constituents Derived from UARS Measurements

J. Geophys. Res., 104, 3711-3727

Satellite; Trends

1999, Rex, M.

P. von der Gathen, G. O. Braathen, N. R. P. Harris, E. Reimer, A. Beck, R. Alfier, R. KrM-|ger-Carstensen, M. Chipperfield, H. De Backer, D. Balis, F. O'Connor, H. Dier, V. Dorokhov, H. Fast, A. Gamma, M. Gil, E. KyrM-v, Z. Litynska, I. S. Mikkelsen, M. Molyneux, G. Murphy, S. J. Reid, M. Rummukainen, and C.

Zerefos

Chemical ozone loss in the Arctic winter 1994/95 as determined by the Match technique

J. Atmos. Chem., 32, 35-59

Sonde; Theory; Ozone

1999, Roscoe, H. K.

P. V. Johnston, M. Van Roozendaal, A. Richter, A. Sarkissian, J. Roscoe, K. E. Preston, J.-C. Lambert, C. Hermans, et al.

Slant column measurements of O3 and NO2 during the NDSC intercomparison of zenith-sky UV-visible spectrometers in June 1996

J. Atmos. Chem., 32, 281-314

UVVis; Ozone; NO2

1999, Rosen, J.M

N.T. Kjome

Active laser cavity particle counters: a fundamental problem and solution for airborne application

Appl., Opts., vol. 38, No 36, 7321-7324

Sonde; Aerosol

1999, Sanders, R. W.

S. Solomon, K. Kreher, and P. V. Johnston

An intercomparison of NO2 and OClO measurements at Arrival Heights, Antarctica during austral spring 1996

J. Atmos. Chem., 33, 283-298

UVVis; NO2, OClO; Validation

1999, Sasano, Y.

M. Suzuki, T. Yokota, and H. Kanzawa

Improved Limb Atmospheric Spectrometer (ILAS) for stratospheric ozone layer measurements by solar occultation technique

Geophys. Res. Lett., 26, 197-200

Satellite; Ozone

1999, Sasano, Y.

H. Nakajima, H. Kanzawa, M. Suzuki, T. Yokota, H. Nakane, H. Gernandt, A. Schmidt, A. Herber, V. Yushkov, V. Dorokhov and T. Deshler

Validation of ILAS Version3.10 ozone with ozonesonde measurements

Geophys. Res. Lett., 26, 831-834

Sonde; Satellite; Ozone; Validation

1999, Sasano, Y.

M. Suzuki, T. Yokota, and H. Kanzawa

ILAS for stratospheric ozone layer monitoring: Outline of data processing (Version 3.00 and 3.10) and validation experiments

IEEE T. G. Rem. Sens, 37(3), 1508-1516

Satellite; Ozone; Validation

1999, Sinnhuber, B.M.

R.W. Mueller, V. Eyring, U. Klein, J. Langer, J. Trentmann, H. Bovensmann, J.P. Burrows, and K. Kuenzi
Interpretation of Mid-Arctic Stratospheric Ozone Measurements Using a Photochemical Box Model

J. Atmos. Chem., 34, 281-290

Model; Ozone

1999, Steinbrecht, W.

R. Neuber, P.von der Gathen, P. Wahl, T. McGee, M. Gross, U. Klein, and J. Langer

Results of the 1998 Ny-Ålesund Ozone Monitoring Comparison NAOMI

J. Geophys. Res., 104, 30515-30523

Lidar; Sonde; Ozone; Validation

1999, Toon, G. C.

F.-F. Blavier, B. Sen, R.J. Salawitch, G.B. Osterman, J. Notholt, M. Rex, G. T. McElroy, J. M. Russell III

Ground-based observations of Arctic O3 loss during spring and summer 1997

J. Geophys. Res., 104, 26497-26510

FTIR; Ozone