

NDACC Publications – 2010

Updated – 4/15/2020

2010, C. Adams

C. McLinden, K. Strong, and V. Umlenski

Ozone and NO₂ variations measured during the August 1, 2008 solar eclipse above Eureka, Canada with a UV-visible spectrometer

J. Geophys. Res., 115, D19310

doi: 10.1029/2010JD014424

UVVis; Ozone; NO₂

2010, R.L. Batchelor

F. Kolonjari, R. Lindenmaier, R.L. Mittermeier, W. Daffer, H. Fast, G. Manney, K. Strong, and K.A. Walker
Four Fourier transform spectrometers and the Arctic polar vortex: Instrument intercomparison and ACE-FTS validation at Eureka during the IPY springs of 2007 and 2008

Atmos. Meas. Techniques, 3, 51-66

FTIR; Satellite; Validation

2010, Bernhard, G.

C. R. Booth, and J. C. Ebrahimian

Climatology of ultraviolet radiation at high latitudes derived from measurements of the National Science Foundation's Ultraviolet Spectral Irradiance Monitoring Network, in: UV Radiation in Global Climate Change

in Measurements, Modeling and Effects on Ecosystems, edited by W. Gao, D. L. Schmoldt, and J. R. Slusser, 544 pp., Tsinghua, University Press, Beijing and Springer, New York, ISBN 978-3-642-03312-4
Spectral UV; UV Irradiance

2010, Clain, G., et al.

A Lagrangian approach to analyse the tropospheric ozone climatology in the tropics: Climatology of stratosphere-troposphere exchange at Reunion Island

Atmos. Environ., 44, 968–975

Lidar; Ozone

2010, David, C.

Keckhut, P., Armetta, A., Jumelet, J., Snels, M., Marchand, M. and Bekki, S.

Radiosonde stratospheric temperatures at Dumont d'Urville (Antarctica): trends and link with polar stratospheric clouds

Atmospheric Chemistry & Physics, 2010, Vol. 10, pp. 3813-3825

Lidar; PSC, Trends

2010, de Laat A. T. J.

GlouDEMANS A. M. S.; Schrijver H....Mellqvist, J., et al., ; et al.
Validation of five years (2003-2007) of SCIAMACHY CO total column measurements using ground-based spectrometer observations
ATMOSPHERIC MEASUREMENT TECHNIQUES 3(5), 1457-1471
FTIR; Satellite; CO; CalVal

2010, Di Biagio, C.
Muscari, G., di Sarra, A., de Zafra, R. L., Eriksen, P., Fiorucci, I., and Fua', D.
Evolution of temperature, O₃, CO, and N₂O profiles during the exceptional 2009 Arctic major stratospheric warming as observed by lidar and mm-wave spectroscopy at Thule (76.5°N, 68.8°W), Greenland
J. Geophys. Res, 115, D24315
doi:10.1029/2010JD014070
Microwave; Lidar; Ozone; CO; N₂O

2010, Dionisi D.
Congeduti F., Liberti G.L., Cardillo F.
Calibration of a Multichannel Water Vapor Raman Lidar through Noncollocated Operational Soundings: Optimization and Characterization of Accuracy and Variability
J. Atmos. Ocean. Tech., 27, 108-121
Lidar; H₂O; CalVal

2010, Duflot, V.
Dils, B., Baray, J. L., De Mazière, M., Attié, J. L., Vanhaelewyn, G., Senten, C., Vigouroux, C., Clain, G., and Delmas, R.
Analysis of the origin of the distribution of CO in the subtropical southern Indian Ocean in 2007
J. Geophys. Res., Vol. 115, No. D22, D22106
doi: 10.1029/2010JD013994
FTIR; CO

2010, Fujiwara, M.
H. Vömel, F. Hasebe, M. Shiotani, S.-Y. Ogino, S. Iwasaki, N. Nishi, T. Shibata, K. Shimizu, E. Nishimoto, J. Valverde-Canossa, H. B. Selkirk and S. J. Oltmans
Seasonal to decadal variations of water vapor in the tropical lower stratosphere observed with balloon-borne cryogenic frost point hygrometers
J. Geophys. Res., 115, D18304
doi: 10.1029/2010JD014179
Sonde; H₂O

2010, Gruzdev A.N.
Elokhov A.S.

Validation of Ozone Monitoring Instrument NO₂ measurements using ground based NO₂ measurements at Zvenigorod, Russia

International Journal of Remote Sensing, Vol. 31, No 2, pp. 497-511

UVVis; ozone; NO₂; CalVal

2010, Hauchecorne, A.

P. Keckhut, C. Claud, F. Dalaudier, A. Garnier

Observation of the thermal structure and dynamics of the stratosphere and the mesosphere from space

Comptes Rendus Geosciences, 342 (4-5), 323-330

doi:10.1016/j.crte.2010.01.002

Lidar; Satellite; Temperature

2010, Kerr, J. B.

The Brewer Spectrophotometer

in UV Radiation in Global Climate Change (eds. Gao, W., Slusser, J. R. & Schmoldt, D. L.) 160–191

(Springer Berlin Heidelberg)

Brewer

2010, R. Lindenmaier

R.L. Batchelor, K. Strong, H. Fast, F. Goutail, F. Kolonjari, C.T. McElroy, R.L. Mittermeier, and K.A. Walker

An evaluation of ozone microwindows using the Eureka Bruker 125HR Fourier transform infrared spectrometer

J. Quant. Spectrosc. Radiat. Transfer, 111 (4), 569-585

doi:10.1016/j.jqsrt.2009.10.013

FTIR; Ozone; Validation

2010 Palm, M.

Melsheimer, C.; Noël, S.; Heise, S.; Notholt, J.; Burrows, J. & Schrems, O.

Integrated water vapor above Ny Ålesund, Spitsbergen: a multi-sensor intercomparison

Atmos. Chem. Phys, 10, 1-12

FTIR; Microwave, H₂O; Validation

2010, M. Palm

C. G. Hoffmann, S. H. W. Golchert, and J. Notholt

The ground based MW radiometer OZORAM on Spitsbergen - description and validation of stratospheric and mesospheric O₃-measurements

Atmos. Meas. Tech. Discuss., 3, 1933-1970

Microwave; Ozone; Validation

2010, Petersen, A. K.

Warneke, T.; Frankenberg, C.; Bergamaschi, P.; Gerbig, C.; Notholt, J.; Buchwitz, M.; Schneising, O. &

Schrems, O.

First ground-based FTIR observations of methane in the inner tropics over several years

Atmos. Chem. Phys. 10(15), 7231-7239

FTIR; CH₄

2010, Raju, U.J.P.

P. Keckhut, Y. Courcoux, M. Marchand, S. Bekki, B. Morel, H. Bencherif, and A. Hauchecorne,
Nocturnal temperature changes over Tropics during CAWSES -III campaign: Comparison with numerical
models and satellite data

J. Atmos. Sol. Terr. Phys., 72, 1171-1179

Lidar; Model; Satellite; Temperature

2010, Roscoe, H.K.

M. Van Roozendaal, C. Fayt, A. du Piesanie, N. Abuhassan, C. Adams, M. Akrami, A. Cede, J. Chong, K.
Cl  mer, U. Friess, M. Gil Ojeda, F. Goutail, R. Graves, A. Griesfeller, K. Grossmann, G. Hemerijckx, F.
Hendrick, J. Herman, C. Hermans, H. Irie, P. V. Johnston, Y. Kanaya, K. Kreher, R. Leigh, A. Merlaud, G. H.
Mount, M. Navarro, H. Oetjen, A. Pazmino, M. Perez-Camacho, E. Peters, G. Pinardi, O. Puentedura, A.
Richter, A. Schnhardt, R. Shaiganfar, E. Spinei, K. Strong, H. Takashima, T. Vlemmix, M. Vrekoussis, T.
Wagner, F. Wittrock, M. Yela, S. Yilmaz, F. Boersma, J. Hains, M. Kroon, A. Piters, and Y. J. Kim
Intercomparison of slant column measurements of NO₂ and O₄ by MAX-DOAS and zenith-sky UV and
visible spectrometers

Atmos. Meas. Tech., 3, 1629-1646

UVVis; NO₂; O₄; Validation

2010, Selkirk, H. B.

H. V  mel, J. M. Valverde Canossa, L. Pfister, J. A. Diaz, W. Fern  ndez, J. Amador, W. Stolz, and G. S. Peng
Detailed structure of the tropical upper troposphere and lower stratosphere as revealed by balloon
sonde observations of water vapor, ozone, temperature, and winds during the NASA TCSP and TC4
campaigns

J. Geophys. Res., 115, D00J19

doi: 10.1029/2009JD013209

Sonde; H₂O; Ozone; Temperature; Winds

2010, S. Simic

M. Fitzka, P. Weihs and H. Kromp-Kolb

Monitoring of spectral UV in Austria and investigation of short- and long-term changes . In: Dragutin T.
Mihailovic and Branislava Lalic

Advances in Environmental Modeling and Measurements; NOVA, New York; ISBN 978-1-60876-599-7
Spectral UV; UV Irradiance

2010, Warneke, T.

Petersen, A. K.; Gerbig, C.; Jordan, A.; Radenbeck, C.; Rothe, M.; Macatangay, R.; Notholt, J., Schrems, O.
Co-located column and in situ measurements of CO₂ in the tropics compared with model simulations

Atmos. Chem. Phys. 10(12), 5593-5599

FTIR; Model; CO₂; Validation

2010, Zander, R.

Duchatelet, P., Mahieu, E., Demoulin, P., Roland, G., Servais, C., Auwera, J. V., Perrin, A., Rinsland, C. P. and Crutzen, P. J.

Formic acid above the Jungfrauoch during 1985-2007: observed variability, seasonality, but no long-term background evolution

Atmospheric Chemistry and Physics, 10(20), 10047–10065

doi: 10.5194/acp-10-10047-2010

FTIR; CH₂O₂