

NDACC Publications – 2015

Latest updates – 4/15/2020

2015, Bais, A. F.

R. L. McKenzie, G. Bernhard, P. J. Aucamp, M. Ilyas, S. Madronich, and K. Tourpali, K.

Ozone depletion and climate change: Impacts on UV radiation

Photochem. Photobiol. Sci., 14, 19-52

doi: 10.1039/c4pp90032d

Spectral UV; UV Irradiance; Ozone

2015, Barthlott, S.

M. Schneider, F. Hase, A. Wiegeler, E. Christner, Y. Gonzalez, T. Blumenstock, S. Dohe, O. E. Garcia, E.

Sepulveda, K. Strong, J. Mendonca, D. Weaver, M. Palm, N. M. Deutscher, T. Warneke, J. Notholt, B.

Lejeune, E. Mahieu, N. Jones, D. W. T. Griffith, V. A. Velasco, D. Smale, J. Robinson, R. Kivi, P. Heikkinen,
and U. Raffalski

Using XCO₂ retrievals for assessing the long-term consistency of NDACC/FTIR data sets

Atmos. Meas. Tech., 8, 1555-1573

doi: 10.5194/amt-8-1555-2015

FTIR; XCO₂

2015, Bernhard, G.

A. Arola, A. Dahlback, V. Fioletov, A. Heikkilä, B. Johnsen, T. Koskela, K. Lakkala, T. Svendby, and J.
Tamminen

Comparison of OMI UV observations with ground-based measurements at high northern latitudes

Atmos. Chem. Phys., 15, 7391-7412

DOI:10.5194/acp-15-7391-2015

Spectral UV; Satellite; UV Irradiance; Validation

2015, Dammers, E., et al

Retrieval of ammonia from ground-based FTIR solar spectra

Atmos. Chem. Phys., 15, 12789-12803

doi: 10.5194/acp-15-12789-2015

FTIR; NH₃

2015, L Di Liberto

R Lehmann, I Tritscher, F Fierli, JL Mercer, M Snels

Lagrangian analysis of microphysical and chemical processes in the Antarctic stratosphere: a case study

Atmospheric Chemistry and Physics 15 (12), 6651-6665

doi: 10.5194/acp-15-6651-2015

Lidar; Aerosol

2015, Dionisi D. et al.

Water vapor observations up to the lower stratosphere through the Raman lidar during the Maïdo Lidar Calibration Campaign

Atmos. Meas. Tech., 8, pp.1425-1445

Lidar; H₂O; Calibration

2015, Duflot, V., et al.

Acetylene (C₂H₂) and hydrogen cyanide (HCN) from IASI satellite observations: global distributions, validation, and comparison with model

Atmos. Chem. Phys., 15(18), 10509-10527

doi: 10.5194/acp-15-10509-2015

FTIR; Satellite; C₂H₂, HCN; Validation

2015, Franco, B.

Hendrick, F., Van Roozendaal, M., Müller, J.-F., Stavrou, T., Marais, E. A., Bovy, B., Bader, W., Fayt, C., Hermans, C., Lejeune, B., Pinardi, G., Servais, C., and Mahieu, E.

Retrievals of formaldehyde from ground-based FTIR and MAX-DOAS observations at the Jungfraujoch station and comparisons with GEOS-Chem and IMAGES model simulations

Atmos. Meas. Tech., 8, 1733-1756

doi:10.5194/amt-8-1733-2015

UVVis; Model; H₂CO

2015, A. Gaudel

G. Ancellet, S. Godin-Beekmann, Analysis of 20 years of tropospheric ozone vertical profiles by lidar and ECC at Observatoire de Haute Provence (OHP) at 44°N, 6.7°E

Atmospheric Environment, Volume 113, 2015, Pages 78-89

doi: 10.1016/j.atmosenv.2015.04.028

Lidar; Sonde; Ozone

2015, Gil-Ojeda, M.

Navarro-Comas, M., Gómez-Martín, L., Adame, J. A., Saiz-Lopez, A., Cuevas, C. A., González, Y., Puentedura, O., Cuevas, E., Lamarque, J.-F., Kinnison, D., and Tilmes, S.

NO₂ seasonal evolution in the north subtropical free troposphere

Atmos. Chem. Phys., 15, 10567-10579

doi:10.5194/acp-15-10567-2015

UVVis; NO₂; Seasonal

2015, Haluza, D.

Schwab, M.; Simic, S.; Cervinka, R.; Moshhammer, H.

Perceived Relevance of Educative Information on Public (Skin) Health: Results of a Representative, Population-Based Telephone Survey

Int J Environ Res Public Health. 12(11):14260-14274

Spectral UV; Health

2015, Khaykin S.

Hauchecorne A., Mze N., Keckhut P

Seasonal variation of gravity wave activity at midlatitudes from 7 years of COSMIC GPS and Rayleigh lidar temperature observations

Geophys. Res. Lett., 42 (4), 1251-1258

doi: 10.1002/2014GL062891

Lidar; Temperature

2015, Kremser, S., et al

Positive trends in Southern Hemisphere carbonyl sulfide

Geophys. Res. Lett., 42, 9473-9480

doi: 10.1002/2015GL065879

FTIR; COS

2015, Lainer, M.

Kaempfer, N., Tschanz, B., Neloluha G. E., Ka S., and Oh, J. J.

Trajectory mapping of middle atmospheric water vapor by a mini network of NDACC instruments

Atmos. Chem. Phys., 15, 9711~730

Microwave; H₂O

2015, Le Pichon A.

Assink J. D., Heinrich P., Blanc E., Charlton-Perez A. J., Lee C.-F., Keckhut P., Hauchecorne A., Refenacht R., Kampf N., Drob D., P.S.M. Smets, L. G. Evers, L. Ceranna, C. Pilger, O. Ross, C. Claud, J.

Comparison of co-located independent ground-based middle-atmospheric wind and temperature measurements with Numerical Weather Prediction models

Geophys. Res., 120 (16), 8318-8331

doi: 10.1002/2015JD023273

Lidar; Model; Wind; Temperature

2015, Mahieu, E., et al

Recent Northern Hemisphere stratospheric HCl increase due to atmospheric circulation changes

Nature, 515,104-107

doi: 10.1038/nature13857

FTIR; HCl

2015, Maillard Barras, E.

Haefele, A., Stübi, R., and Ruffieux, D.

A method to derive the Site Atmospheric State Best Estimate (SASBE) of ozone profiles from radiosonde and passive microwave data

Atmos. Meas. Tech. Discuss., 8, 3399–3422

doi:10.5194/amtd-8-3399-2015

Microwave; Ozone

2015, Lorena Moreira et al.

Trend analysis of the 20-year time series of stratospheric ozone profiles observed by the GROMOS microwave radiometer at Bern

Atmospheric Chemistry and Physics, 15/19, 10999-11009, 2015

doi: 10.5194/acp-15-10999-2015

Microwave; Ozone; Trends

2015, Nedoluha, G. E., et al

Unusual stratospheric ozone anomalies observed in 22 years of measurements from Lauder, New Zealand

Atmos. Chem. Phys., 15, 6817-6826

Microwave; Ozone

2015, Scheepmaker, R. A., et al

Validation of SCIAMACHY HDO/H₂O measurements using the TCCON and NDACC-MUSICA networks

Atmos. Meas. Tech., 8(4), 1799-1818

doi: 10.5194/amt-8-1799-2015

FTIR; Satellite; H₂O

2015, Schoeberl, M.

H. Selkirk, A. Douglass, and H Vömel

Sources of Seasonal Variability in Tropical UTLS Water Vapor and Ozone: Inferences from the Ticosonde Dataset at Costa Rica

J. Geophys. Res., 120, 9684–9701

doi:10.1002/2015JD023299

Sonde; H₂O; Ozone

2015, Sica, R.

Haefele, A.

Retrieval of temperature from a multiple-channel Rayleigh-scatter lidar using an optimal estimation method

Applied optics, 54, 1872–1889

Lidar; Temperature

2015, Verhoelst, T.

Granville, J., Hendrick, F., Köhler, U., Lerot, C., Pommereau, J.-P., Redondas, A., Van Roozendaal, M., and Lambert, J.-C.

Metrology of ground-based satellite validation: co-location mismatch and smoothing issues of total ozone comparisons

Atmos. Meas. Tech., 8, 5039-5062

doi:10.5194/amt-8-5039-2015

UVVis; Satellite; Ozone

2015, C. Viatte

K. Strong, J. Hannigan, E. Nussbaumer, L. Emmons, S. Conway, C. Paton-Walsh, J. Hartley, J. Benmergui, and J. Lin

Identifying fire plumes in the Arctic with tropospheric FTIR measurements and transport models

Atmos. Chem. Phys., 15, 2227-2246

doi:10.5194/acp-15-2227-2015

FTIR; Model

2015, Vigouroux, C.

T. Blumenstock, M. Coffey, Q. Errera, O. Garcia, N. B. Jones, J. W. Hannigan, F. Hase, B. Liley, E. Mahieu, J. Mellqvist, J. Notholt, M. Palm, G. Persson, M. Schneider, C. Servais, D. Smale, L. Thalix, and M. De Maziere

Trends of ozone total columns and vertical distribution from FTIR observations at eight NDACC stations around the globe

Atmos. Chem. Phys., 15, 2915-2933

doi: 10.5194/acp-15-2915-2015

FTIR; Ozone; Trends

2015, Zeng, G., et al

Multi-model simulation of CO and HCHO in the Southern Hemisphere: comparison with observations and impact of biogenic emissions

Atmos. Chem. Phys., 15, 7217-7245

doi: 10.5194/acp-15-7217-2015

FTIR; Model; CO; HCHO