NDACC Publications – 2014

Latest updates – 6/23/2021

2014, Andrey, J.
E. Cuevas, M.C. Parrondo, S. Alonso-Pérez, A. Redondas, M. Gil-Ojeda,
Quantification of ozone reductions within the Saharan air layer through a 13-year climatologic analysis of ozone profiles
Atmospheric Environment, 84, 28-34
Sonde; Ozone; Trends

2014, Bader, W.
Stavrakou, T., Muller, J.-F., Reimann, S., Boone, C. D., Harrison, J. J., Flock, O., Bovy, B., Franco, B., Lejeune, B., Servais, C. and Mahieu, E.
Long-term evolution and seasonal modulation of methanol above Jungfraujoch (46.5° N, 8.0° E): optimisation of the retrieval strategy, comparison with model simulations and independent observations
Atmospheric Measurement Techniques, 7(11), 3861–3872
doi: 10.5194/amt-7-3861-2014
FTIR; Model; CH3OH; Validation

2014, A. Bezanilla
A. Krueger, W. Stremme and M. Grutter
Solar absorption infrared spectroscopic measurements over Mexico City: Methane enhancements
Atmosfera 27(2), 173-183
FTIR; CH4

2014, Di Liberto, L.
F. Cairo, F. Fierli, G.Di Donfrancesco, M. Viterbini, T.Deshler, and M. Snels
Observation of polar stratospheric clouds over McMurdo (77.85S, 166.67E) (2006-2010)
J. Geophys. Res. Atmos., 119
doi: 10.1002/2013JD019892
Lidar; PSC

2014, Eleftheratos K.
S. Kazadzis, C. S. Zerefos, K. Tourpali, C. Meleti, D. Balis, I. Zyrichidou, K. Lakkala, U. Feister, T. Koskela, A. Heikkilâ€°, and J. M. Karhu
Ozone and spectroradiometric UV changes in the past 20 years over high latitudes, Atmosphere-Ocean,
doi: 10.1080/07055900.2014.919897
Spectral UV; Ozone; UV Irradiance

2014, Fitzka, M.

Hadzimustafic, J., and Simic, S.
Total ozone and Umkehr observations at Hoher Sonnblick 1994-2011: Climatology and extreme events
J. Geophys. Res.-Atmos., 119, 739-752
Spectral UV; Ozone; Climatology

2014, Garcia, O. E.
M. Schneider, F. Hase, T. Blumenstock, E. Sepulveda, and Y. Gonzolez
Quality assessment of ozone total column amounts as monitored by ground-based solar absorption spectrometry in the near infrared (> 3000 cm-1)
Atmos. Meas. Tech., 7, 3071-3084
doi: 10.5194/amt-7-3071-2014
FTIR; Ozone; Validation

2014, Gavrilov N.M.
M.V. Makarova, A.V. Poberovskii, and Yu.M. Timofeyev
Comparisons of CH4 ground-based FTIR measurements near Saint-Petersburg with GOSAT observations
Atmos. Meas. Techn., 7, 1003-1010
doi: 10.5194/amt-7-1003-2014
FTIR; CH4

2014, Gomez, L.
Navarro-Comas, M., Puentedura, O., Gonzalez, Y., Cuevas, E., and Gil-Ojeda, M.
Long-path averaged mixing ratios of O3 and NO2 in the free troposphere from mountain MAX-DOAS
Atmos. Meas. Tech., 7, 3373-3386
doi: 10.5194/amt-7-3373-2014
UVVis; Ozone; NO2

2014, Hommel, R.
Eichmann, K.-U., Aschmann, J., Bramstedt, K., Weber, M., von Savigny, C., Richter, A., Rozanov, A., Wittrock, F., Khosrawi, F., Bauer, R., and Burrows, J. P.
Chemical ozone loss and ozone mini-hole event during the Arctic winter 2010/2011 as observed by SCIAMACHY and GOME-2
Atmos. Chem. Phys., 14, 3247-3276
doi:10.5194/acp-14-3247-2014
UVVis; Satellite; Ozone; Arctic

2014, Mahieu, E.
Chipperfield, M. P., Notholt, J., Reddmann, T., Anderson, J., Bernath, P. F., Blumenstock, T., Coffey, M. T., Dhomse, S. S., Feng, W., Franco, B., Froidevaux, L., Griffith, D. W. T., Hannigan, J. W., Hase, F., Hossaini, R., Jones, N. B., Morino, I., Murata, I., Nakajima, H., Palm, M., Paton-Walsh, C., Russell, J. M., Schneider, M., Servais, C., Smale, D. and Walker, K. A.
Recent Northern Hemisphere stratospheric HCl increase due to atmospheric circulation changes

Nature, 515(7525), 104–107
doi: 10.1038/nature13857
FTIR; HCl

2014, Mze, N., A.
Hauchecorne, P. Keckhut, M. Thetis
Vertical distribution of gravity wave potential energy from long-term Rayleigh lidar data at a northern middle-latitude site
J. Geophys. Res.: Atmospheres, 119 (21), 12069-12083
doi: 10.1002/2014JD022035
Lidar; Temperature

2014, Parrish, A., et al
Diurnal variations of stratospheric ozone measured by ground-based microwave remote sensing at the Mauna Loa NDACC site: measurement validation and GEOSCCM model comparison
Atmos. Chem. Phys., 14, 7255-7272
Microwave; Model; Ozone; Validation

2014, Parrondo, M. C.
Gil, M., Yela, M., Johnson, B. J., and Ochoa, H. A.
Antarctic ozone variability inside the polar vortex estimated from balloon measurements
Atmos. Chem. Phys., 14, 217-229
doi:10.5194/acp-14-217-2014
Sonde; Ozone; Polar

2014, Rüfenacht, R.
Murk, A.; Kämpfer, N.; Eriksson, P.; Buehler, S.
Middle-Atmospheric Zonal and Meridional Wind Profiles from Polar, Tropical and Midlatitudes with the Ground-Based Microwave Doppler Wind Radiometer WIRA
Atmospheric Measurement Techniques, 7, 4491-4505
doi: 10.5194/amt-7-4491-2014.
Microwave; Wind

2014, Scheiben, D.
Tschanz, B., Hocke, K., Kaempfer, N., Ka, S., and Oh, J. J.
The quasi 16-day wave in mesospheric water vapor during boreal winter 2011/2012
Atmos. Chem. Phys., 14, 6511-6522
doi: 10.5194/acp-14-6511-2014
Microwave; H2O

2014, Sepulveda, E., et al

Tropospheric CH4 signals as observed by NDACC FTIR at globally distributed sites and comparison to GAW surface in situ measurements
Atmos. Meas. Tech., 7, 2337-2360
doi: 10.5194/amt-7-2337-2014
FTIR; CH4

2014, J. Staufer
J. Staehelin, R. Stübi, T. Peter, F. Tummon, and V. Thouret
Trajectory matching of ozonesondes and MOZAIC measurements in the UTLS – Part 2: Application to the global ozonesonde network
Atmos. Meas. Tech., 7, 241–266, 2014, www.atmos-meas-tech.net/7/241/2014/
Sonde; Ozonde

2014, Simone Studer
Klemens Hocke, Ansgar Schanz, Hauke Schmidt, Niklaus Kämpfer
A climatology of the diurnal variations in stratospheric and mesospheric ozone over Bern, Switzerland
Atmospheric Chemistry and Physics, 14, 5905-5919
doi: 10.5194/acp-14-5905-2014
Microwave; Ozone; Diurnal

2014, Simone Studer et al.
Intercomparison of stratospheric ozone profiles for the assessment of the upgraded GROMOS radiometer at Bern
Atmos. Meas. Tech. Discuss. , 6, 6097-6146
doi: 10.5194/acp-14-5905-2014
Microwave; Ozone; CalVal

2014, Van Malderen, R.
De Backer, H., Delcloo, A. and Allaart, M.
Identifying the Origin of Anomalous High Tropospheric Ozone in the Ozonesonde Data at Uccle by Comparison with Nearby De Bilt
Atmosphere-Ocean, Ozone Special Issue
doi: 10.1080/07055900.2014.886552
Sonde; Ozone

2014, C. Viatte
K. Strong, K.A. Walker, and J.R. Drummond
Five years of CO, HCN, C2H6, C2H2, CH3OH, HCOOH, and H2CO total columns measured in the Canadian High Arctic
Atmos. Meas. Tech., 7, 1547-1570
FTIR; CO; HCN; C2H6; C2H2; CH3OH; HCOOH; H2CO

2014, Wiegele, A.
M. Schneider, F. Hase, S. Barthlott, O. E. Garcia, E. Sepulveda, Y. Gonzalez, T. Blumenstock, U. Raffalski, M. Gisi, and R. Kohlhepp
The MUSICA MetOp/IASI H2O and dD products: characterisation and long-term comparison to NDACC/FTIR data
Atmos. Meas. Tech., 7, 2719-2732
doi: 10.5194/amt-7-2719-2014
FTIR; H2O