NDACC Publications – 2011

Updated – 4/15/2020

2011, Angelbratt, J.
Mellqvist, J. et al
A new method to detect long term trends of methane (CH4) and nitrous oxide (N2O) total columns measured within the NDACC ground-based high resolution solar FTIR network
Atmos. Chem. Phys. Discuss., 11, 8207–8247
FTIR; CH4; N2O; Trends

2011, Angelbratt J.
Mellqvist J.; Simpson D.; et al.
Carbon monoxide (CO) and ethane (C(2)H(6)) trends from groundbased solar FTIR measurements at six European stations, comparison and sensitivity analysis with the EMEP model
ATMOSPHERIC CHEMISTRY AND PHYSICS Volume: 11 Issue: 17 Pages: 9253-9269
DOI: 10.5194/acp-11-9253- 2011
FTIR; Model; CO; C2H6; Trends

2011, Bernhard, G.
Trends of solar ultraviolet irradiance at Barrow, Alaska, and the effect of measurement uncertainties on trend detection
Atmos. Chem. Phys., 11, 13,029-13,045
doi:10.5194/acp-11-13029-2011
Spectral UV; UV Irradiance; Trends

2011, René Bleisch
Niklaus Kämpfer, Alexander Haefele, "Retrieval of tropospheric water vapour by using spectra of a 22 GHz radiometer
Atmos. Measurement Techniques 4
doi: 10.5194/amt-4-1891-2011
Microwave; H2O

2011, De Wachter, E.
Haefele, A., Kaempfer N., Ka S., Lee, J. E., Oh, J. J.
The Seoul Water Vapor Radiometer for the Middle Atmosphere: Calibration, Retrieval, and Validation
IEEE Transactions on geoscience and remote sensing, 49(3), 1052-1062
Microwave; H2O; CalVal

2011, Dils, B.
Cui, J., Henne, S., Mahieu, E., Steinbacher, M. and De Maziere, M.

1997–2007 CO trend at the high Alpine site Jungfraujoch: a comparison between NDIR surface in situ and FTIR remote sensing observations
Atmospheric Chemistry and Physics, 11(13), 6735–6748
doi:10.5194/acp-11-6735-2011
FTIR; CO Trends

2011, Eriksson, P.
S. A. Buehler, C. P. Davis, C. Emde, and O. Lemke
ARTS, the atmospheric radiative transfer simulator, Version 2
J. Quant. Spectrosc. Radiat. Transfer
doi:10.1016/j.jqsrt.2011.03.001
Microwave

2011, Fiorucci, I.
G. Muscari, and R. L. de Zafra
Revising the retrieval technique of a long-term stratospheric HNO3 data set: from a constrained matrix inversion to the optimal estimation algorithm
Annales Geophysicae, 29, 1317-1330
doi:10.5194/angeo-29-1317-2011
Microwave; HNO3

2011, Frederick J. E.
A. L. Hodge
Solar irradiance at the earth's surface: long-term behavior observed at the South Pole
Atmos. Chem. Phys., 11, 1177-1189
Spectral UV, UV Irradiance

2011, Gruzdev A.N.
Elokhov A.S.
Variability of stratospheric and tropospheric nitrogen dioxide observed by visible spectrophotometer at Zvenigorod, Russia
International Journal of Remote Sensing, 2011, Vol. 32, No 11, pp. 3115-3127.
UVVis; NO2

2011, Hendrick, F.
J.-P. Pommereau, F. Goutail, R. D. Evans, D. Ionov, A. Pazmino, E. Kyrˆ, G. Held, P. Eriksen, V. Dorokhov, M. Gil, M. Van Roozendael
NDACC/SAOZ UV-visible total ozone measurements: improved retrieval and comparison with correlative ground-based and satellite observations
Atmos. Chem. Phys. (2011), 11, 5975 – 5995
doi: 10.5194/acp-11-5975-2011
UVVis; Satellite; Ozone; Validation

2011, Hurst, D. F.
Oltmans, S. J., Vömel, H., Rosenlof,K. H., Davis, S. M., Ray, E. A., Hall, E. G., and Jordan, A. F.
Stratospheric water vapor trends over Boulder, Colorado: Analysis of the 30 year Boulder record
J. Geophys. Res., 116, D02306, doi:10.1029/2010JD015065
Sonde; H2O; Trends

2011, Jegou F.
Godin-Beekmann S., Correa M.P., Brogniez C., Auriol F., Peuch V.H., Haeffelin M., Pazmino A., Saiag P., Goutail F. et al
Validity of satellite measurements used for the monitoring of UV radiation risk on health
Atmos. Chem. Phys., 11, 24, 13377-13394
Spectral UV; Satellite; UV Irradiance; Validation

2011, Keckhut, P.
W.J. Randel, C. Claud, T. Leblanc, W. Steinbrecht, B.M. Funatsu, H. Bencherif, I.S. McDermid, A. Hauchecorne, C. Long, R. Lin, G. Baumgarten
An evaluation of uncertainties in monitoring middle atmosphere temperatures with the ground-based lidar network in support of space observations
J. Atmos. Sol.-Terr. Phys.
doi: 10.1016/j.jastp.2011.01.003
Lidar; Temperature; Ca;Val

2011, Kuang, S.
J. F. Burris, M. J. Newchurch, S. Johnson, and S. Long
Differential Absorption Lidar to measure subhourly variation of tropospheric ozone profiles
IEEE Trans. Geosci. Remote Sens., 49, 557-571
Lidar; Trop Ozone

2011, Li, T.
T. Leblanc, I. S. McDermid, P. Keckhut, A. Hauchecorne, and X. Dou
Middle atmosphere temperature trend and solar cycle revealed by long-term Rayleigh lidar observations
J. Geophys. Res., 116, D00P05
doi:10.1029/2010JD015275
Lidar; Temperature; Trends

2011, R. Lindenmaier
K. Strong, R.L. Batchelor, P. Bernath, S.H. Chabrillat, M. Chipperfield, W.H. Daffer, J.R. Drummond, W. Feng, A.I. Jonsson, F. Kolonjari, G.L. Manney, C.A. McLinden, R. Menard, and K.A. Walker
A study of the Arctic NOy budget above Eureka, Canada
J. Geophys. Res., 116, D23302
FTIR; NOy

2011, Nedoluha, G. E., et al
Ground-based measurements of ClO from Mauna Kea and intercomparisons with Aura and UARS MLS
J. Geophys. Res., 116, D02307
doi: 10.1029/2010JD014732
Microwave, Satellite; ClO; Validation

2011, Oetjen, H.,
Wittrock, F., Richter, A., Chipperfield, M. P., Medeke, T., Sheode, N., Sinnhuber, B.-M., Sinnhuber, M., and Burrows, J. P.
Evaluation of stratospheric chlorine chemistry for the Arctic spring 2005 using modelled and measured OClO column densities
Atmos. Chem. Phys., 11, 689-703
doi:10.5194/acp-11-689-2011
UVVis; Model; OClO; Arctic

2011, Simic, S.
Fitzka, M., Schmalwieser, A., Weihs, P., and Hadzimustafic, J.
Factors affecting UV irradiance at selected wavelengths at Hoher Sonnblick
Atmos. Res., 101, 869-878
Spectral UV; UV Irradiance

2011, W. Stremme
I. Ortega, C. Siebe, M. Grutter
Gas composition of Popocatepetl Volcano between 2007 and 2008: FTIR Spectroscopic measurements of an explosive event and during quiescent degassing
Earth and Planetary Sciences Letters. Vol. 301, Issue 3-4, p. 502-510
doi: 10.1016/j.epsl.2010.11.032
FTIR

2011, Wagner, J. E.
Angelini, F., Blumthaler, M., Fitzka, M., Gobbi, G. P., Kift, R., Kreuter, A., Rieder, H. E., Simic, S., Webb, A., and Weihs, P.
Investigation of the 3-D actinic flux field in mountainous terrain
Atmos. Res., 102, 300-310
Spectral UV