

Brief CV of Prof. Konstantinos Kourtidis

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Studies: B. Sc. in Physics, Aristotle University of Thessaloniki (1987), Ph.D. in Physics, Aristotle University of Thessaloniki (1991).

Professional experience (selection)

1. Doctoral Fellowship at the Max Planck Institute for Aeronomy, Katllenburg-Lindau, Germany (10.1987-11.1991); research Fellowship at the Max Planck Institute for Aeronomy, Katllenburg-Lindau, Germany (12.1991-12.1993); research Fellowship of the Max-Planck-Gessellschaft at the Max Planck Institute for Aeronomy, Katllenburg-Lindau, Germany (1.5.1995-31.7.1995); NASA/JPL scholarship, Summer School of Earth Sciences: Processes of Global Change, Pasadena, CA, USA, 15-19.8.1993; visiting Research Fellowship at Goddard Space Flight Center, NASA , Greenbelt, USA (June 2000); visiting Research Fellowship at Institute of Geophysics, University of Oslo, Norway (January 2001).
2. Head of National Delegation in PBEO (Programme Board for Earth Observation) 2004-2010 and DOSTAG (Data Operations Scientific and Technical Advisory Group) 2004-2012 of the European Space Agency (ESA); member of the GSRT Working Group for the realization and monitoring of the accession of Greece in ESA 2004-2012. National Representative of Greece in EU's COST ESSEM (Co-operation in Science and Technology Earth System Science and Environmental Management) Domain Committee 2010-2013.
3. Managing Editor of the on-line Newsletter of the European Geosciences Union (EGU) (<http://www.egu.eu/newsletter/> , 2002-2011); managing administrator of the geoscientific images database of EGU (<http://imadgeo.egu.eu> , 2007-2013). Member of the Education, Outreach, News and Sponsorship Committee of EGU (2006-2013); Member of the Education Committee of EGU (2017-today); member in several professional organizations, referee at several scientific journals; Reviewer, UNEP EEAP Report on Environmental Effects of Ozone Depletion and Interactions with Climate Change, 2006 and 2010.
4. Participation in 45+ national and international research programmes; PI in several of these; 60+ publications in journals included in ISI, 9 contributions in monographs, 100+ publications in international conference proceedings; around 1000 citations in Science Citation Index, h-index 20.

Awards

European Geosciences Union Service Award 2007 (citation: "in recognition of his generous and innovative services as Managing Editor of the EGU Newsletter", see

<https://www.egu.eu/awards-medals/union-service-award/2007/kostas-kourtidis/>).

Books

1 published book (K. Kourtidis, Global Biogeochemical cycles: Recycling in the global natural geosystem, Tziolas Publications, Thessaloniki, 2012, 236 pages (in Greek)).

Published work

Ph.D. Thesis

Kourtidis K. A. (1991) Photochemical air pollution in urban and rural areas, 125 p., Aristotle University of Thessaloniki.

ISI-Indexed journals

1. Enders, G., R. Dlugi, R. Steinbrecher, B. Clement, R. Daiber, J. V. Eijk, S. Gab, M. Haziza, G. Helas, U. Herrmann, M. Kessel, J. Kesselmeier, D. Kotzias, **K. Kourtidis**, H.--H. Kurth, R. T. McMillen, G. Roeder, W. Schuermann, U. Teichmann and L. Torres, Biosphere/Atmosphere interactions: Integrated research in a european coniferous forest ecosystem. *Atmospheric Environment* 26A, 171-189, 1992.

2. Rappenglueck B., **K. Kourtidis** and P. Fabian, Measurements of ozone and peroxyacetyl nitrate (PAN) in Munich. *Atmospheric Environment* 27B, 293-305, 1993.

3. **Kourtidis K. A.**, P. Fabian, C. Zerefos and B. Rappenglueck, Peroxyacetyl nitrate (PAN), peroxypropionyl nitrate (PPN) and PAN/ozone ratio measurements at three sites in Germany. *Tellus* 45B, 442-457, 1993.

4. Fabian P., R. Borchers and **K. Kourtidis**, Bromine-containing source gases during EASOE. *Geophys. Res. Lett.* 21, 13, 1219-1222, 1994.

5. **Kourtidis K. A.**, R. Borchers, P. Fabian and J. Harnisch, Carbonyl sulfide (COS) measurements in the Arctic Polar Vortex. *Geophys. Res. Lett.* 22, 393-396, 1995.

6. Harnisch, J., R. Borchers, P. Fabian and **K. Kourtidis**, Aluminium production as a source of Carbonyl Sulfide (COS). *Environ. Sci. and Pollut. Res.* 2 (3), 161-162, 1995.

7. **Kourtidis K.**, R. Borchers and P. Fabian, Dibromomethane (CH_2Br_2) measurements in the upper troposphere and the lower stratosphere. *Geophys. Res. Lett.* 23, 2581-2583, 1996.
8. **Kourtidis K.A.**, R. Borchers and P. Fabian, Some Methyl Nitrate observations at an urban and a rural site in Germany, *Fresenius Environmental Bulletin* 6, 611-616, 1997.
9. Vassiliadis D. V., **K. A. Kourtidis** and O. Poulida, The Potential of Statistical State Space Models in Urban Ozone Forecasting, *Environ. Sci. and Pollut. Res.* 5, 7-11, 1997.
10. **Kourtidis K.A.**, R. Borchers and P. Fabian, Vertical distribution of methyl bromide (CH_3Br) in the stratosphere, *Geophys. Res. Lett.* 25, 505-508, 1998.
11. **Kourtidis K.A.**, I. C. Ziomas, B. Rappenglueck, A. Proyou and D. Balis, Evaporative traffic hydrocarbon emissions, traffic CO and speciated HC emissions from the city of Athens, *Atmospheric Environment* 33, 3831-3842, 1999.
12. **Kourtidis K.** and I. Ziomas, Estimation of secondary organic aerosol (SOA) production from traffic from the city of Athens, *Global NEST* 1, 33-38, 1999.
13. Simeonidis P., G. Sanida, I. Ziomas and **K. Kourtidis**, An estimation of the spatial and temporal distribution of biogenic hydrocarbon emissions in Greece, *Atmospheric Environment* 33, 3791-3801, 1999.
14. Rappenglueck B., **K. Kourtidis**, D. Melas and P. Fabian, Observations of biogenic and anthropogenic NMHC in Athens Area during the PAUR campaign, *Phys. Chem. Earth (B)*, 24, 717-724, 1999.
15. **Kourtidis K.**, I. Ziomas, C. Zerefos, A. Gousopoulos, D. Balis and P. Tzoumaka, Benzene and toluene levels measured with a commercial DOAS system in Thessaloniki, Greece. *Atmospheric Environment*, 34, 1471-1480, 2000.
16. Zerefos C., K. Ganey, **K. Kourtidis**, M. Tzortziou, A. Vasaras and E. Syrakov, On the origin of SO_2 above Northern Greece, *Geophys. Res. Lett.*, 27, 365-368, 2000.
17. Jonson J.E., A. Kylling, T. Berntsen, I.S.A. Isaksen, C.S. Zerefos and **K. Kourtidis**, Chemical effects of UV fluctuations inferred from

total ozone and tropospheric aerosol variations, *J. Geophys. Res.* **105**, 14,561-14,574, 2000.

18. Zerefos, C., D.S. Balis, C. Meleti, A.F. Bais, K. Tourpali, **K. Kourtidis**, K. Vanicek, F. Capelani, U. Kaminski, T. Colombo, R. Stubi, L. Manea, P. Formenti, M.O. Andreae, Changes in Surface Solar UV irradiances and Total Ozone during the Solar Eclipse of August 11, 1999, *J. Geophys. Res.*, **105**, 26,463-26,473, 2000.

19. Zerefos C.S., D. S. Balis, P. Zanis, C. Meleti, A.F. Bais, K. Tourpali, D. Melas, I. Ziomas, E. Galani, **K. Kourtidis**, A. Papayannis and Z. Gogosheva, Changes in surface UV solar irradiance and ozone over the Balkans during the eclipse of August 11, 1999, *Adv. Space Res.*, **27**, 1955-1963, 2001.

20. Zerefos C. S., **K. A. Kourtidis**, D. Balis, A. Bais and B. Calpini, Photochemical activity over the Eastern Mediterranean under variable environmental conditions, *Phys. Chem. Earth (C)*, **26**, 549-554, 2001.

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22. Kouvarakis G., M. Vrekousis, N. Mihalopoulos, **K. Kourtidis**, B. Rappengluck, E. Gerasopoulos and C. Zerefos, Spatial and temporal variability of tropospheric ozone (O₃) in the boundary layer above the Aegean Sea (Eastern Mediterranean), *J. Geophys. Res.*, **107**, D18, 10.1029/2000JD000081, 14 pages, 2002.

23. Balis D., C. S. Zerefos, **K. Kourtidis**, A.F. Bais, A. Hofzumahaus, A. Kraus, R. Schmitt, M. Blumthaler, and G.P. Gobbi, Measurements and modeling of photolysis rates during PAUR campaign, *J. Geophys. Res.*, **107**, D18, 8138, DOI: 10.1029/2000JD000136, 12 pages, 2002.

24. **Kourtidis K.**, C. Zerefos, S. Rapsomanikis, V. Simeonov, D. Balis, E. Kosmidis, P. E. Perros, A. Thompson, J. Witte, B. Calpini, W. M. Sharobiem, A. Papayannis, N. Mihalopoulos, and R. Drakou,, Regional Levels of Ozone in the Troposphere over Eastern Mediterranean, *J. Geophys. Res.*, **107**, D18, 8140, DOI: 10.1029/2000JD000140, 13 pages, 2002.

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39. Giannaros T. M., Melas D., Daglis I. A., Keramitsoglou I., **Kourtidis K.**: Numerical study of the urban heat island over Athens (Greece) with the WRF Model, *Atmos. Environ.*, 73, 103-111, 2013.
40. **Kourtidis K.**, Rapsomanikis S., Zerefos C., Georgoulas A. K., Pavlidou E.: Severe particulate pollution from the deposition practices of the primary materials of a cement plant, *Environ. Sci. Pollut. Res.*, 16, 9796-9808, DOI: 10.1007/s11356-014-2969-6, 2014.
41. Georgoulas A., **Kourtidis K.**, Rapsomanikis S., Santchez-Lopez A., Common summertime total cloud cover and aerosol optical depth weekly variabilities over Europe: sign of the aerosol indirect effects?, *Atmospheric Research*, 153, 59-73, 2015.
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43. Amiridis V., E. Marinou, A. Tsekeri, U. Wandinger, A. Schwartz, E. Giannakaki, R-E Mamouri, P. Kokkalis, I. Biniatoglou, S. Solomos, T. Herekakis, S. Kazadzis, E. Gerasopoulos, D. Balis, A. Papayannis, C. Kontoes, **K. Kourtidis**, N. Papagiannopoulos, L. Mona, G. Pappalardo, O. LeRille, and A. Ansmann, LIVAS: a 3D multi-wavelength aerosol/cloud climatology based on CALIPSO and EARLINET, *Atmos. Chem. Phys.*, 15, 7127–7153, 2015.
44. **Kourtidis K.**, S. Stathopoulos, A. Georgoulas, G. Alexandri, S. Rapsomanikis: A study of the impact of synoptic weather conditions and water vapor on aerosol-cloud relationships over major urban clusters of China, *Atmos. Chem. Phys.*, 15, 10955-10964, doi:10.5194/acp-15-10955-2015, 2015.
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47. Alexandri G., A. K. Georgoulas, P. Zanis, E. Katragkou, A. Tsikerdekis, **K. A. Kourtidis**, C. Meleti: On the ability of RegCM4 regional climate model to simulate surface solar radiation patterns over Europe: An assessment using satellite-based observations, *Atmos. Chem. Phys.*, 15, 13195-13216, 2015.
48. Kastelis N. and **K. Kourtidis**: Characterisation of the atmospheric electric field and correlation with CO₂ at a rural site in southern Balkans, *Earth, Planets and Space*, 68:3, DOI 10.1186/s40623-016-0379-3, 2016.
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51. Stathopoulos S., A. K. Georgoulas, **K. Kourtidis**, Space-borne observations of aerosol - cloud relations for cloud systems of different heights, *Atmos. Res.* 183, 191-201, 2017.
52. De Ridder K., B. Maiheu, D. Lauwaet, I. A. Daglis, I. Keramitsoglou, **K. Kourtidis**, P. Manunta, M. Paganini, Urban heat island intensification during hot spells – the case of Paris during the summer of 2003, *Urban Science* 1, 3, doi:10.3390/urbansci1010003, 2016.
53. Alexandri G., A. Georgoulas, C. Meleti, D. Balis, **K. Kourtidis**, A. Sanchez-Lorenzo, J. Trentmann, P. Zanis: A high resolution satellite view of surface solar radiation over the climatically sensitive region of Eastern Mediterranean, *Atmospheric Research*, 188, 107-121, doi:10.1016/j.atmosres.2016.12.015, 2017.
- 54.Kourtidis K.**, A. K. Georgoulas, B. Mijling, R. van der A, Q. Zhang, J. Ding: A new method for deriving trace gas emission inventories from satellite observations: The case of SO₂ over China, *Science of the Total Environment*, 612, 923–930, 2018.
55. Proestakis E., V. Amiridis, E. Marinou, A. Georgoulas, S. Solomos, S. Kazadzis, J. Chimot, C. Huizheng, G. Alexandri, I. Binietoglou, V. Daskalopoulou, **K. Kourtidis**, G. de Leeuw, and R. van der A: Nine-year spatial and temporal evolution of desert dust aerosols over South and East Asia as revealed by CALIOP, *Atmos. Chem. Phys.*, 18, 1337-1362, <https://doi.org/10.5194/acp-18-1337-2018>, 2018.
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a Collective Online Platform, *ISPRS Int. J. Geo-Inf.*, 7(5), 187, doi:10.3390/ijgi7050187, 2018.

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