

Curriculum Vitae

Surname: Zanis
 First name: Prodromos
 Sex: Male
 Date of birth: 09/12/69
 Place of birth: Xanthi, Greece
 Mailing address: Solonos 65-67, Thessaloniki, Greece
 Tel.: +30 2310811994
 Marital status: Married with 2 children
 Nationality: Greek

1. Education

1987-1992 Degree in Physics, Physics Department, School of Sciences, Aristotle University of Thessaloniki, Greece
 1993-1994 Masters of Science (M.Sc.) in Atmospheric Sciences, School of Environmental Sciences, University of East Anglia, Norwich, U.K.
 1/11/1995-10/6/1999 Ph.D. degree in Natural Sciences, School of Sciences, University of Bern, Bern, Switzerland

2. Funds and research experience

11/1995-10/1996 Swiss Department of Environment (BUWAL), research assistant at Physical Geography, University of Bern
 11/1996-12/1996 University of East Anglia, Norwich, U.K., visiting researcher at School of Environmental Sciences
 1/1997-6/1997 EU project VOTALP (Vertical Ozone Transport in the Alps), research assistant at Laboratory of Radiochemistry and Environmental Chemistry, University of Bern and at Paul Scherrer Institute (PSI), Villigen, Switzerland
 7/1997-6/1999 Commission of Technology and Innovation (KTI, Switzerland), research assistant at Physical Geography, University of Bern
 9/1999 –8/2002 EU project of the V framework, STACCATO (Influence of Stratosphere-Troposphere Exchange in a Changing Climate on Atmospheric Transport and Oxidation Capacity) (EVK2-CT-1999-00050), researcher at Laboratory of Atmospheric Physics, Physics Department, Aristotle University of Thessaloniki, Greece
 2/2000 – 1/2003 Scientific collaborator - consultant of the group CABO (Climate and Background Ozone), Physical Geography, University of Bern, in EU project TROTREP (Tropospheric Ozone and Precursors, Trends, Budget, and Policy) of the V framework (EVK2-1999-00286)
 9/2002-3/2006 Scientific collaborator of the Laboratory of Climatology and Atmospheric Environment, Faculty of Geology, National and Kapodistrian University of Athens, Greece in the EU-project CANDIDOZ (Chemical and Dynamical Influences on Decadal Ozone Change - EVK2-2001-00024)
 6/2003-4/2007 Research assistant at the Research Centre for Atmospheric Physics and Climatology, Academy of Athens, Greece
 4/2007- Assistant Prof., Department of Meteorology and Climatology, School of Geology, Aristotle University of Thessaloniki, Greece

3. Publications and citations

	Articles in peer reviewed journals	Articles in conferences proceedings	Articles in Books	Abstracts in conferences	Invited Talks	Total Citations (Scopus Citation Index)	H-Factor (Scopus Citation Index)
Number	52	35	2	61	8	>650	15

4. Articles in peer-review journals

- 4.1) Zanis P., E. Schuepbach, H.E. Scheel, M. Baudenbacher, and B. Buchmann. Inhomogeneities and trends in the surface ozone record (1986-1996) at Jungfrauoch in the Swiss Alps. **Atmospheric Environment**, 33, 3777-3786, 1999a.
- 4.2) Zanis P., E. Schuepbach, H.W. Gaeggeler, S. Huebener, and L. Tobler. Factors controlling Beryllium-7 at Jungfrauoch in Switzerland. **Tellus**, 51(4), 789-805, 1999b.
- 4.3) Zanis P., P.S. Monks, E. Schuepbach, and S.A. Penkett. On the relationship of HO₂+RO₂ with J(O¹D) during FREETEX '96 at the Jungfrauoch Observatory (3,580 m asl) in the Swiss Alps. **Journal of Geophysical Research**, 104(D21), 26,913-26,926, 1999c.
- 4.4) Zanis P., P.S. Monks, E. Schuepbach, and S.A. Penkett. The role of in-situ photochemistry in the control of ozone during spring at the Jungfrauoch Observatory (3,580 m asl) – Comparison of model results with measurements. **Journal of Atmospheric Chemistry**, 37(1), 1-27, 2000a.
- 4.5) Carpenter L.J., T. Green, G. Mills, S. Bauguitte, S.A. Penkett, P. Zanis, E. Schuepbach, N. Schmidbauer, P.S. Monks, C. Zellweger. Oxidised nitrogen and ozone production efficiencies in the springtime free troposphere over the Alps. **Journal of Geophysical Research**, 105(D11), 14547-14559, 2000.
- 4.6) Zanis P., P.S. Monks, E. Schuepbach, L.J. Carpenter, T.J. Green, G.P. Mills, S. Bauguitte, and S.A. Penkett. *In-situ* Ozone Production under Free Tropospheric conditions during FREETEX '98 in the Swiss Alps. **Journal of Geophysical Research**, 105(D19), 24,223-24,234, 2000b.
- 4.7) Broennimann S., E. Schuepbach, P. Zanis, B. Buchmann, and H. Wanner. A climatology of regional background ozone at different elevations in Switzerland (1992-1998). **Atmospheric Environment**, 34, 5191-5198, 2000.
- 4.8) Schuepbach E., T.K. Friedli, P. Zanis, P.S. Monks, and S.A. Penkett. State space analysis of trends and seasonalities of lower free tropospheric ozone (1988-1997) at the high elevation site at Jungfrauoch. **Journal of Geophysical Research**, 106(D17), 20,413-20,427, 2001a.
- 4.9) Zanis P., C.S. Zerefos, D. Melas, D. Balis, I. Ziomas, E. Gerasopoulos, P. Tzoumaka, W. Fricke, S. Gilge, U. Kaminski. Comparison of measured and modelled ozone and nitrogen oxide concentrations at two different sites in Europe during the solar eclipse on August 11, 1999. **Atmospheric Environment**, 35, 4663-4673, 2001a.
- 4.10) Zerefos C.S., D.S. Balis, P. Zanis, C. Meleti, A.F. Bais, K. Tourpali, D. Melas, I. Ziomas, and A. Papayannis. Changes in surface UV solar irradiance and ozone over Greece, during the eclipse of August 11, 1999. **Advances in Space Research**, 27(12), 1955-1963, 2001.
- 4.11) Gerasopoulos E., P. Zanis, A. Stohl, C.S. Zerefos, C. Papastefanou, W. Ringer, L. Tobler, S. Huebener, H.J. Kanter, L. Tositti, S. Sandrini. A climatology of ⁷Be at four high-altitude stations at the Alps and the Northern Apennines. **Atmospheric Environment**, 35/36, 6347-6360, 2001.
- 4.12) Zanis P., K. Kourtidis, B. Rappenglueck, D. Balis, D. Melas, C. Zerefos, R. Schmitt, S. Rapsomanikis, and P. Fabian. A case study on the link between surface ozone

- photochemistry and total ozone during the PAURII experiment at Crete – Comparison of observations with box model calculations. **Journal of Geophysical Research**, 10.1029/2000JD000137, 2002.
- 4.13) Zerefos, C.S., K.A. Kourtidis, D. Melas, D. Balis, P. Zanis, H.T. Mantis, C. Repapis, I. Isaksen, J. Sundet, J. Herman, P.K. Bhartia, and B. Calpini. Photochemical Activity and Solar Ultraviolet Radiation Modulation Factors (PAUR): An overview of the project, **Journal of Geophysical Research**, 10.1029/2000JD000134, 2002.
- 4.14) K. R. Solomon, X. Tang, S. R. Wilson, P. Zanis, and A. F. Bais, Changes in tropospheric composition and air quality due to stratospheric ozone depletion, **Photochem. Photobiol. Sci.**, 2, 62–67, 2003.
- 4.15) Zanis P., E. Gerasopoulos, A. Priller, C. Schnabel, A. Stohl, C. Zerefos, H. W. Gäggeler, L. Tobler, P.W. Kubik, H. J. Kanter, H. E. Scheel, J. Luterbacher, and M. Berger, An estimate of the impact of Stratosphere-to-Troposphere Transport (STT) on the lower free tropospheric ozone over the Alps using ^{10}Be and ^7Be measurements, **Journal of Geophysical Research**, 108(D12) 10.1029/2002JD002604, 2003a.
- 4.16) E. Galani, D. Balis, P. Zanis, C.S. Zerefos, A. Papayannis, H. Wernli, E. Gerasopoulos, Observations of Stratosphere-Troposphere Transport events over eastern Mediterranean using a ground-based lidar system, **Journal of Geophysical Research**, 108(D12), doi:10.1029/2002JD002596, 2003.
- 4.17) Cristofanelli, P., P. Bonasoni, W. Collins, J. Feichter, C. Forster, A. Kentarchos, P. James, C. Land, G. J. Roelofs, P. Siegmund, M. Sprenger, A. Stohl, H. Wernli, T. Trickl, P. Zanis, and J. Meloen, Stratosphere-troposphere exchange: model and method evaluation with measurement data, **Journal of Geophysical Research**, 108(D12), 10.1029/2002JD002600, 2003.
- 4.18) Stohl, A., P. Bonasoni, P. Cristofanelli, W. Collins, J. Feichter, A. Frank, C. Forster, E. Gerasopoulos, H. Gäggeler, P. James, T. Kentarchos, S. Kreipl, H. Kromp-Kolb, B. Krüger, C. Land, J. Meloen, A. Papayannis, A. Priller, P. Seibert, M. Sprenger, G. J. Roelofs, E. Scheel, C. Schnabel, P. Siegmund, L. Tobler, T. Trickl, H. Wernli, V. Wirth, P. Zanis, C. Zerefos, Stratosphere-troposphere exchange – a review, and what we have learned from STACCATO, **Journal of Geophysical Research**, 108(D12), doi:10.1029/2002JD002490, 2003.
- 4.19) Gerasopoulos E., C. S. Zerefos, C. Papastefanou, P. Zanis, K. O'Brien, Low-frequency variability of Beryllium-7 surface concentrations over Eastern Mediterranean, **Atmospheric Environment**, 37(13), 1745-1756, 2003.
- 4.20) P. Zanis, P.S. Monks, T.J. Green, E. Schuepbach, L.J. Carpenter, G.P. Mills, A. Richard, and S.A. Penkett, Seasonal variation of peroxy radicals in the lower free troposphere based on observations from the FREE Tropospheric EXperiments at Jungfraujoch in the Swiss Alps, **Geophysical Research Letters**, 30(10), doi:10.1029/2003GL017122, 2003b.
- 4.21) P. Zanis, T. Trickl, A. Stohl, H. Wernli, O. Cooper, C.S. Zerefos, H. Gaeggeler, A. Priller, C. Schnabel, H. E. Scheel, H.J. Kanter, L. Tobler, P. Kubik, P. Cristofanelli, C. Forster, P. James, E. Gerasopoulos, A. Delclos, and A. Papayannis, Forecast, observation and modelling of a deep stratospheric intrusion event over Europe, **Atmospheric Chemistry and Physics**, 3, 763-777, 2003c.
- 4.22) Balis, D.S., V. Amiridis, C. Zerefos, E. Gerasopoulos, M. Andreae, P. Zanis, A. Kazantzidis, S. Kazadzis and A. Papayannis, Raman lidar and sunphotometric measurements of aerosol optical properties during a biomass burning episode over Thessaloniki, Greece, **Atmospheric Environment**, 37, 4529-4538, 2003.
- 4.23) Zerefos, C. S., K. Eleftheratos, D. S. Balis, P. Zanis, G. Tselioudis and C. Meleti, Impact of aviation on cirrus clouds, **Atmospheric Chemistry and Physics**, 3, 1633–1644, 2003.
- 4.24) Priller A., M. Berger, H. W. Gaeggeler, E. Gerasopoulos, P. W. Kubik, C. Schnabel, L. Tobler, E. Wild, P. Zanis, C. Zerefos, Accelerator Mass Spectrometry of Particle

- Bound ^{10}Be , **Nuclear Instrumental Methods in Physics Research B**, 223–224 (2004) 601–607, 2004.
- 4.25) Isaksen I. S. A., C. Zerefos, K. Kourtidis, C. Meleti, S. B. Dalsøren, J. K. Sundet, A. Grini, P. Zanis and D. Balis, Tropospheric ozone changes at unpolluted and semipolluted regions induced by stratospheric ozone changes, **Journal of Geophysical Research**, 110, D02302, doi:10.1029/2004JD004618, 2005.
- 4.26) Papayannis A., D. Balis, P. Zanis, E. Galani, H. Wernli, C. Zerefos, A. Stohl, S. Eckhardt, and V. Amiridis, Sampling of an STT event over the Eastern Mediterranean region by lidar and electrochemical sonde, **Annales Geophysicae**, 23, 2039–2050, 2005.
- 4.27) Gerasopoulos E., P. Zanis, C. Papastefanou, C. S. Zerefos, A. Ioannidou, H. Wernli, A complex case study of down to the surface intrusions of persistent stratospheric air over the Eastern Mediterranean, **Atmospheric Environment**, 40, 4113–4125, 2006.
- 4.28) Zanis P., E. Maillard, J. Stahelin, C. Zerefos, E. Kosmidis and K. Tourpali, On the turnaround of stratospheric ozone trends deduced from the re-evaluated Umkehr record of Arosa, Switzerland, **Journal of Geophysical Research**, 111, D22307, doi:10.1029/2005JD006886, 2006.
- 4.29) Zanis P., A. Ganser, C. Zellweger, S. Henne, M. Steinbacher and J. Stahelin, Seasonal variability of measured ozone production efficiencies in the lower free troposphere of Central Europe, **Atmospheric Chemistry and Physics**, 7, 223–236, 2007.
- 4.30) Eleftheratos K., C. S. Zerefos, P. Zanis, D. S. Balis, G. Tselioudis, K. Gierens, and R. Sausen, A study on natural and manmade global interannual fluctuations of cirrus cloud cover for the period 1984–2004, **Atmospheric Chemistry and Physics**, 7 (10), 2631–2642, 2007.
- 4.31) Zerefos C., K. Eleftheratos, P. Zanis, D. S. Balis and G. Tselioudis, Search for man-made cirrus contrails over Southeast Asia, **Terrestrial Atmospheric and Oceanic Sciences**, Vol. 18, No. 3, 459–474, 2007.
- 4.32) Repapis C.C., C.M. Philandras, P.D. Kalabokas, P. Zanis and C.S. Zerefos, Is the last years abrupt warming in the National Observatory of Athens records a climate change manifestation? **Global NEST Journal**, Vol 9, No 2, pp 107–116, 2007.
- 4.33) Zanis P., E. Katragkou, M. Kanakidou, B. Psiloglou, S. Karathanasis, M. Vrekoussis, E. Gerasopoulos, I. Lysaridis, K. Markakis, A. Poupkou, V. Amiridis, D. Melas, N. Mihalopoulos, and C. Zerefos, Effects on surface atmospheric photo-oxidants over Greece during the total solar eclipse event of 29 March 2006, **Atmospheric Chemistry and Physics**, 7, 6061–6073, 2007.
- 4.34) Gerasopoulos E., C. S. Zerefos, I. Tsagouri, D. Founda, V. Amiridis, A. F. Bais, A. Belehaki, N. Christou, G. Economou, M. Kanakidou, A. Karamanos, M. Petrakis, P. Zanis, The Total Solar Eclipse of March 2006: Overview, **Atmospheric Chemistry and Physics**, 8, 5205–5220, 2008.
- 4.35) I. Kioutsioukis, D. Melas and P. Zanis, Statistical Downscaling of Daily Precipitation over Greece, **International Journal of Climatology**, 28, 679–691, DOI: 10.1002/joc.1557, 2008.
- 4.36) Harris N.R.P., E. Kyrö, J. Staehelin, D. Brunner, S-B. Andersen, S. Godin-Beekmann, S. Dhomse, P. Hadjinicolaou, G. Hansen, I. Isaksen, A. Jrrar, A. Karpetchko, R. Kivi, B. Knudsen, P. Krizan, J. Lastovicka, J. Maeder, Y. Orsolini, J.A. Pyle, M. Rex, K. Vanicek, M. Weber, I. Wohltmann, P. Zanis, and C. Zerefos, Ozone trends at northern mid- and high latitudes – a European perspective, **Annales Geophysicae**, 26, 1207–1220, 2008.
- 4.37) Krüger B. C., E. Katragkou, I. Tegoulas, P. Zanis, D. Melas, E. Coppola, S. Rauscher, P. Huszar and T. Halenka, Regional decadal photochemical model calculations for Europe concerning ozone levels in a changing climate, **Quarterly Journal of the Hungarian Meteorological Service, IDOJARAS**, Vol. 112, No. 3–4, pp. 285–300, 2008.

- 4.38) Zanis P., C. Douvis, I. Kapsomenakis, I. Kioutsioukis and D. Melas, A sensitivity study of the Regional Climate Model (RegCM3) to the convective scheme with emphasis in central eastern and southeastern Europe, **Theoretical and Applied Climatology**, 97, 327–337, DOI 10.1007/s00704-008-0075-8, 2009.
- 4.39) Founda D., H. D. Kambezidis, M. Petrakis, P. Zanis and C. Zerefos, A Correction of the recent air temperature record at the historical meteorological station of the National Observatory of Athens (NOA) due to instrument change, **Theoretical and Applied Climatology**, 97, 385–389, DOI 10.1007/s00704-008-0084-7, 2009.
- 4.40) Zanis P., I. Kapsomenakis, C. Philandras, K. Douvis, D. Nikolakis, E. Kanelopoulou, C. Zerefos, and C. Repapis, Analysis of an ensemble of present-day and future Regional Climate Simulations for Greece, **International Journal of Climatology**, 29, 1614-1633, DOI: 10.1002/joc.1809, 2009.
- 4.41) Amiridis V., D.S. Balis, E. Giannakaki, A. Stohl, S. Kazadzis, M. Koukouli, P. Zanis, Optical characteristics of biomass burning aerosols over Southeastern Europe determined from UV-Raman lidar measurements, **Atmospheric Chemistry and Physics**, 9, 2431-2440, 2009.
- 4.42) Zanis P., A study on the direct effect of anthropogenic aerosols on near surface temperature over Southeastern Europe during summer 2000 based on regional climate modeling, **Annales Geophysicae**, 27, 3977–3988, 2009.
- 4.43) Akritidis D., P. Zanis, I. Pytharoulis, A. Mavrakis and Th. Karacostas, A deep stratospheric intrusion event down to the earth’s surface of the megacity of Athens, **Meteorology and Atmospheric Physics**, 109 (1-2), 9-18, DOI: 10.1007/s00703-010-0096-6, 2010.
- 4.44) Katragkou E., P. Zanis, I. Tegoulis, D. Melas, I. Kioutsioukis, B.C. Krüger, P. Huszar, T. Halenka, S. Rauscher, Decadal regional air quality simulations over Europe in present climate: near surface ozone sensitivity to external meteorological forcing, **Atmospheric Chemistry and Physics**, 10, 11805–11821, doi:10.5194/acp-10-11805-2010, 2010.
- 4.45) Amiridis V., E. Giannakaki, D.S. Balis, I. Pytharoulis, P. Zanis, E. Gerasopoulos, S. Kazadzis, D. Melas, C. Zerefos, Smoke injection heights from agricultural burning in Eastern Europe as seen by CALIPSO, **Atmospheric Chemistry and Physics**, 10, 11567-11576, doi:10.5194/acp-10-11567-2010, 2010.
- 4.46) Poupkou A., P. Zanis, P. Nastos, D. Papanastasiou, D. Melas, K. Tourpali, C. Zerefos, Present climate trend analysis of the Etesian winds in the Aegean Sea, **Theoretical and Applied Climatology**, 106, 459–472, DOI: 10.1007/s00704-011-0443-7, 2011.
- 4.47) Zanis P., E. Katragkou, I. Tegoulis, A. Poupkou, D. Melas, P. Huszar, F. Giorgi, Evaluation of near surface ozone in air quality simulations forced by a regional climate model over Europe for the period 1991-2000, **Atmospheric Environment**, 45, 6489-6500, doi:10.1016/j.atmosenv.2011.09, 2011.
- 4.48) Katragkou E., P. Zanis, I. Kioutsioukis, I. Tegoulis, D. Melas, B.C. Krüger, E. Coppola, Future climate change impacts on surface ozone from regional climate-air quality simulations over Europe, **Journal of Geophysical Research**, 116, D22307, doi:10.1029/2011JD015899, 2011.
- 4.49) Huszar P., K. Juda-Rezler, T. Halenka, H. Chervenkov, D. Syrakov, B. C. Krueger, P. Zanis, D. Melas, E. Katragkou, M. Reizer, W. Trapp and M. Belda, Potential climate change impacts on ozone and PM levels over Central and Eastern Europe from high resolution simulations, **Climate Research**, 50, 51–68, doi: 10.3354/cr01036, 2011.
- 4.50) Zanis P., C. Ntogras, A. Zakey, I. Pytharoulis, Th. Karacostas, Regional climate feedback of anthropogenic aerosols over Europe with RegCM3, **Climate Research**, 52, 267-278, 2012.
- 4.51) Juda-Rezler K., M. Reizer, P. Huszar, B.C. Krüger, P. Zanis, D. Syrakov, E. Katragkou, W. Trapp, D. Melas, H. Chervenkov, I. Tegoulis, T. Halenka, On the effect of climate change on regional air quality over central-eastern Europe: concept,

- evaluation and future projections, *Climate Research*, 53, 179–203, doi: 10.3354/cr01072, 2012.
- 4.52) Tolika K., P. Zanis, C. Anagnostopoulou, Regional climate change scenarios for Greece: Future temperature and precipitation projections from ensembles of RCMs, **Global Nest**, in press, 2012.

5. Participation in research projects

- 5.1) Project “In-situ photochemical control and long-range transport of free tropospheric ozone at Jungfrauoch in the Swiss Alps”, Swiss Department of Environment (Project No. 204.3/FP3052), 1995-1996.
- 5.2) Project “In-situ photochemical control and transport of ozone at Jungfrauoch”, Committee for research and technology, KTI, Project No.3418.1, 1997-1999.
- 5.3) EU-project VOTALP (Vertical Ozone Transport in the Alps), ENV4-CT95-0025, 1996- 1998.
- 5.4) "Tropospheric Ozone Research – TOR-2", Sub-project of EUROTRAC2 (EUROpean experiment on TRANsport and transformation of environmentally relevant trace Constituents in the troposphere over Europe), 1996-1999.
- 5.5) EU-project PAUR II (Photochemical Activity and solar Ultraviolet Radiation Modulation Factors), ENV4-CT97-0623, 1998-2000.
- 5.6) EU-project STACCATO (Influence of Stratosphere-Troposphere Exchange in a Changing Climate on Atmospheric Transport and Oxidation Capacity), EVK2-CT-1999-00050, 2000-2002.
- 5.7) EU-project TROTREP (Tropospheric Ozone and Precursors, Trends, Budget, and Policy), EVK2-1999-00286, 2000-2003.
- 5.8) EU-project CANDIDOZ (Chemical and Dynamical Influences on Decadal Ozone Change), EVK2-2001-00024, 2002-2005.
- 5.9) COST 723 (Data Exploitation and Modelling for the Upper Troposphere and Lower Stratosphere), 2002-2006.
- 5.10) Internal Project of the Academy of Athens “Projections of future climate change with dynamical and statistical downscaling for Eastern Mediterranean” 200/587 and 200/626, 2004-2005.
- 5.11) National project with title “Natural variability of aerosol and ozone levels and their impact on the regional climate of Eastern Mediterranean”, PYTHAGORAS II - Funding of research at the universities, 2005-2007.
- 5.12) National project with title “Use of dynamical downscaling to study extreme weather events in Greece”, PYTHAGORAS II - Funding of research at the universities, 2005-2007.
- 5.13) National project with title “Study of the origin and the transport mechanisms of aerosols and ozone at Athens with the use of modern optical methods and laser techniques”, PYTHAGORAS II - Funding of research at the universities, 2005-2007.
- 5.14) National project with title “Study of extreme weather events in Greece and projections of regional climate change with downscaling methods”, PENED 2003, funding program for supporting young researchers, General Secretariat for Research and Technology (GSRT), 2005-2007.
- 5.15) EU-project CECILIA (Central and Eastern Europe Climate Change Impact and Vulnerability), Contract no.: 037005, 2006-2009.
- 5.16) GeoClima, Action Cooperation project, Operational Programmes “Competitiveness And Entrepreneurship” And Regions In Transition, (<http://www.geoclima.eu/>), 2011-2012.