

**ELENI KATRAGKOU**

Associate Professor

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# Curriculum Vitae

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05/2021

## [A] EDUCATION AND ACADEMIC EXPERIENCE

### EDUCATION

**2003**, Dr. rer. nat., School of Physics and Astronomy, Heidelberg University, Germany, “Magna cum laude”

“Aircraft based measurements of atmospheric sulfur dioxide and ground based measurements of gaseous S(VI) in the simulated internal flow of an aircraft engine: Implications for atmospheric aerosol formation”

**2000**, MSc in Environmental Physics, Aristotle University of Thessaloniki, School of Physics

**1998**, BSc in Physics, Aristotle University of Thessaloniki, School of Physics

### FOREIGN LANGUAGES

**English** (Cambridge Certificate of Proficiency in English)

**German** (Grosses Sprachdiplom, Goethe Institut)

**Spanish** (Diploma de Español - Nivel Intermedio, Instituto Cervantes)

### SCHOLARSHIPS-PRIZES

**11/2012**: National *L'oreal-UNESCO* prize for Women in Science

**12/2010**: Scholarship for Post doctoral research, Research Committee, AUTH

**05/2009**: 1<sup>st</sup> Prize for Young Scientists, EURASAP (European Association for the Science of Air), 30th NATO/SPS International Technical Meeting on Air Pollution Modelling and its Application, 18-22/05/2009, San Francisco, USA

**5/2008**: Prize for Young Scientists, Hellenic Meteorological Society (HMS), 9<sup>th</sup> HMS Conference on Meteorology, Climatology and Physics of the Atmosphere, 28-31/5/2008, Thessaloniki, Greece

**1999-2000**: Scholarship of Excellence, State Scholarship Foundation (IKY) for Post-graduate studies

**1995-1996**: Scholarship of Excellence, State Scholarship Foundation (IKY) for Under-graduate studies

## **ACADEMIC EXPERIENCE**

**04/2020** Appointed Associate Professor, in the field of “Physical Climatology-Climate Models”, Department of Meteorology and Climatology, School of Geology, Faculty of Science, Aristotle University of Thessaloniki, Greece

**11/2019** Elected Associate Professor, in the field of “Physical Climatology-Climate Models”, Department of Meteorology and Climatology, School of Geology, Faculty of Science, Aristotle University of Thessaloniki, Greece

**10/2015** Appointed Assistant Professor, in the field of “Physical Climatology-Climate Models”, Department of Meteorology and Climatology, School of Geology, Faculty of Science, Aristotle University of Thessaloniki, Greece

**05/2015** Elected Assistant Professor, in the field of “Physical Climatology-Climate Models”, Department of Meteorology and Climatology, School of Geology, Faculty of Science, Aristotle University of Thessaloniki, Greece

**01/2014** Appointed Lecturer, in the field of “Physical Climatology-Climate Models”, Department of Meteorology and Climatology, School of Geology, Faculty of Science, Aristotle University of Thessaloniki, Greece

**06/2010** Elected Lecturer, in the field of “Physical Climatology-Climate Models”, Department of Meteorology and Climatology, School of Geology, Faculty of Science, Aristotle University of Thessaloniki, Greece

**2008-2010** Research Associate in Laboratory of Climatology and Atmospheric Science, School of Geology and Geoenvironment, Faculty of Science, National and Kapodistrian University of Athens, Greece

**2005-2010** Research Associate in Laboratory of Atmospheric Physics, School of Physics, Faculty of Science, Aristotle University of Thessaloniki, Greece

**01-05/2005** Visiting Scientist, Max Planck Institute for Meteorology, Hamburg, Germany

**08-12/2004** Visiting Scientist, Dalhousie University, School of Physics and Atmospheric Science, Halifax, Canada

**12/2003–05/2004** Post-Doctoral researcher, Max Planck Institute for Nuclear Physics, Atmospheric Physics Division, Heidelberg, Germany.

**03/2001–11/2003** Doctoral research, Max Planck Institute for Nuclear Physics, Atmospheric Physics Division, Heidelberg, Germany.

**09/2000-12/2000** Researcher Associate in the Laboratory of Heat Transfer and Environmental Engineering, Faculty of Engineering, School of Mechanical Engineering, Aristotle University of Thessaloniki, Greece

## [B] PUBLICATIONS

### [SCOPUS ID](#)

#### PEER REVIEW JOURNALS

1. **Katragkou E.**, S. Wilhelm, F. Arnold, C. Wilson, First gaseous sulfur (VI) measurements in the simulated internal flow of an aircraft gas turbine engine during project PartEmis, *Geophysical Research Letters*, 31, L022117, doi: 10.1029/2003GL018231, 2004.
2. Sorokin A., **E. Katragkou**, F. Arnold, R. Busen, U. Schumann, Gaseous SO<sub>3</sub> and H<sub>2</sub>SO<sub>4</sub> in the exhaust of an aircraft gas turbine engine: Measurements by CIMS and implications for fuel sulfur conversion to sulfur (VI) and conversion of SO<sub>3</sub> to H<sub>2</sub>SO<sub>4</sub>, *Atmospheric Environment*, 38, 449–456, 2004.
3. Petzold A, M Fiebig, L Fritzsche, C Stein, U Schumann, CW Wilson, CD Hurley, F Arnold, **E Katragkou**, U Baltensperger, M Gysel, S Nyeki, R Hitzenberger, H Giebl, KJ. Hughes, R Kurtenbach, P Wiesen, P Madden, H Puxbaum, S Vrchaticky, C Wahl, Particle emissions from aircraft engines – a survey of the European project PartEmis, *Meteorologische Zeitschrift*, 14, (4) 465-476, 2005.
4. Zanis P, **E. Katragkou**, K. Markakis, I. Lysaridis, A. Poupkou, D. Melas, M. Kanakidou, B. Psiloglou, E. Gerasopoulos, C. Zerefos, S. Karathanasis, Effects on surface atmospheric photo-oxidants over Greece during the total solar eclipse event of 29 March 2006, *Atmospheric Chemistry and Physics*, 7, pp. 6061-6073, 2007
5. Amiridis V., D. Melas, D.S. Balis, A. Papayannis, D. Founda, **E. Katragkou**, R. Mamouri, E. Giannakaki, S. Kazadzis, E. Gerasopoulos and C. Zerefos, Aerosol Lidar observations and model calculations of the Planetary Boundary Layer evolution over Greece, during the solar eclipse of 2006, *Atmospheric Chemistry and Physics*, 7, pp. 6181-6189, 2007
6. Krueger, B.C., **E. Katragkou**, I. Tegoulas, P. Zanis, D. Melas, E. Coppola, S. A. Rauscher, P. Huszar, T. Halenka. Regional decadal photochemical model calculations for Europe concerning ozone levels in a changing climate. *Időjárás - Quarterly Journal of the Hungarian Meteorological Service*, 112, 3-4, pp. 285-300, 2008
7. **Katragkou E.**, S. Kazadzis, V. Amiridis, V. Papaioannou, S. Karathanasis, D. Melas, PM10 regional transport pathways in Thessaloniki, Greece, *Atmospheric Environment*, 43, 1079-1085, doi:10.1016/j.atmosenv.2008.11.021, 2009
8. Zyrichidou I., M. E. Koukouli, D. S. Balis, **E. Katragkou**, D. Melas, A. Poupkou, I. Kioutsoukis, R. van der A, F. K. Boersma, M. van Roozendael, A. Richter, Satellite observations and model simulations of tropospheric NO<sub>2</sub> columns over South-eastern Europe, *Atmospheric Chemistry and Physics*, 9, 6119-6134, 2009

9. Ordonez C., N. Elguindi, O. Stein, V. Huijnen, J. Flemming, A. Inness, H. Flentje, **E. Katragkou**, P. Moinat, V-H. Peuch, A. Segers, V. Thouret, M. van Weele, C. S. Zerefos, J-P. Cammas, and M. G. Schultz, Global model simulations of air pollution during the 2003 European heat wave, *Atmospheric Chemistry and Physics*, 10, 789–815, 2010

#### AS LECTURER

10. **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, (23) 11805-11821, 2010.
11. Papanastasiou D.K., A. Poupkou, **E. Katragkou**, V. Amiridis, D. Melas, N. Mihalopoulos, S. Basart, C. Perez, J.M. Baldasano, An assessment of the efficiency of dust regional modelling to predict Saharan dust transport episodes, *Advances in Meteorology*, vol. 2010, Article ID 154368, 9 pages, doi:10.1155/2010/154368, 2010.
12. Syrakov D., V. Spiridonov, M. Prodanova, A. Bogatchev, N. Miloshev, K. Ganev, G. Jordano, **E. Katragkou**, D. Melas, A. Poupkou, K. Markakis, R. San Jose, J.L. Perez, A system for assessment of climatic air pollution levels in Bulgaria. Description and validation, *International Journal of Environment and Pollution*, 46 (1/2), pp. 18-42, 2011
13. Huszar P., K. Juda-Rezler, T. Halenka, H. Chervenkov, D. Syrakov, B. C. Krueger, P. Zanis, D. Melas, **E. Katragkou**, M. Reizer, W. Trapp, M. Belda, Effects of climate change on ozone and particulate matter over Central and Eastern Europe, *Climate Research*, 50 (1), pp. 51–68, doi: 10.3354/cr01036, 2011
14. **Katragkou E.**, P. Zanis, I. Kioutsioukis, I. Tegoulis, D. Melas, B.C. Krüger, E. Coppola, Future climate change impacts on summer surface ozone from regional climate-air quality simulations over Europe, *Journal of Geophysical Research*, 116 (22), doi:10.1029/2011JD015899, 2011
15. Zanis P., **E. Katragkou**, I. Tegoulis, A. Poupkou, D. Melas, 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 (36), pp. 6489-6500, 2011
16. 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, Modelling the effects of climate change on air quality over Central and Eastern Europe: Concept, evaluation and projections, *Climate Research*, 53 (3), pp. 179-203, 2012.
17. Zyrichidou I., M.E. Koukouli, D. Balis, I. Kioutsioukis, A. Poupkou, **E. Katragkou**, D. Melas, F. Boersma, M. van Roozendaal, Evaluation of high resolution simulated and OMI retrieved tropospheric NO<sub>2</sub> column densities over South-Eastern Europe, *Atmospheric Research*, 122, pp. 55-56, 2013.
18. Markakis, K., **E. Katragkou**, A. Poupkou, D. Melas, MOSESS: A New Emission Model for the Compilation of Model-Ready Emission Inventories-Application in a

Coal Mining Area in Northern Greece, *Environmental Modeling and Assessment*, 18 (5), pp. 509-521, 2013

19. Vautard R., A. Gobiet, D. Jacob, M. Belda, A. Colette, M. Déqué, J. Fernández, M. García-Díez, K. Goergen, I. Güttler, T. Halenka, T. Karacostas, **E. Katragkou**, K. Keuler, S. Kotlarski, S. Mayer, G. Nikulin, M. Patarčić, S. Sobolowski, M. Suklitsch, C. Teichmann, K. Warrach-Sagi, V. Wulfmeyer, P. Yiou, The simulation of European heat waves from an ensemble of regional climate models within the EURO-CORDEX project, *Climate Dynamics*, 41 (9-10), pp. 2555-2575, 2013.
20. Akritidis D., P. Zanis, **E. Katragkou**, M. Schultz, I. Tegoulis, A. Poupkou, K. Markakis, I. Pytharoulis, T. Karacostas, Evaluating the impact of chemical boundary conditions on near surface ozone in regional climate -air quality simulations over Europe, *Atmospheric Research*, 134, pp. 116-130, 2013.
21. Anagnostopoulou C., Zanis P., **Katragkou E.**, Tegoulis I., Tolika K., Recent past and future patterns of the Etesian winds based on regional scale climate model simulations, *Climate Dynamics*, 42 (7-8), pp. 1819-1836, 2014.
22. Zyrichidou I., M.E. Koukouli, D. Balis, K. Markakis, A. Poupkou, **E. Katragkou**, I. Kioutsioukis, D. Melas, F. Boersma, M. Van Roozendaal, Identification of surface NOX emission sources on a regional scale using OMI NO2, *Atmospheric Environment*, 101, 82-93, 2015.
23. **Katragkou E.**, M. García-Díez, R. Vautard, S. Sobolowski, P. Zanis, G. Alexandri, R. M. Cardoso, A. Colette, J. Fernandez, A. Gobiet, K. Goergen, T. Karacostas, S. Knist, S. Mayer, P. M. M. Soares, I. Pytharoulis, I. Tegoulis, A. Tsikerdekis, D. Jacob, Hindcast regional climate simulations within EURO-CORDEX: Evaluation of a WRF multi-physics ensemble, *Geoscientific Model Development*, 8, 603-618, 2015.

#### AS ASSISTANT PROFESSOR

24. Flemming J., V. Huijnen, J. Arteta, P. Bechtold, A. Beljaars, A.-M. Blechschmidt, B. Josse, M. Diamantakis, R. J. Engelen, A. Gaudel, A. Inness, L. Jones, **E. Katragkou**, V. Marecal, V.-H. Peuch, A. Richter, M. G. Schultz, O. Stein, and A. Tsikerdekis, Tropospheric chemistry in the integrated forecasting system of ECMWF, *Geoscientific Model Development*, 8, 975-1003, 2015
25. Eskes H., V. Huijnen, A. Arola, A. Benedictow, A. Blechschmidt, E. Botek, O. Boucher, I. Bouarar, S. Chabrillat, E. Cuevas, R. Engelen, H. Flentje, A. Gaudel, J. Griesfeller, L. Jones, J. Kapsomenakis, **E. Katragkou**, S. Kinne, B. Langerock, M. Razinger, A. Richter, M. Schultz, M. Schulz, N. Sudarchikova, V. Thouret, M. Vrekoussis, A. Wagner, and C. Zerefos, Validation of reactive gases and aerosols in the MACC global analysis and forecast system. *Geoscientific Model Development Discussions*, 8, 1117-1169, 2015.
26. Inness A., A.-M. Blechschmidt, I. Bouarar, S. Chabrillat, M. Crepulja, R. J. Engelen, H. Eskes, J. Flemming, A. Gaudel, F. Hendrick, V. Huijnen, L. Jones, J. Kapsomenakis, **E. Katragkou**, A. Keppens, B. Langerock, M. de Mazière, D. Melas, V.H. Peuch, M. Razinger, A. Richter, M. G. Schultz, M. Suttie, V. Thouret, M. Vrekoussis, A. Wagner and C. Zerefos, Data assimilation of satellite retrievals of ozone, carbon monoxide and nitrogen dioxide with ECMWF's Composition IFS, *Atmospheric Chemistry and Physics. Discussions*, 15, 4265-4331, 2015.

27. **Katragkou, E.**, Zanis, P., Tsikerdekis, A., Kapsomenakis, J., Melas, D., Eskes, H., Flemming, J., Huijnen, V., Inness, A., Schultz, M.G., Stein, O., Zerefos, C.S., Evaluation of near-surface ozone over Europe from the MACC reanalysis, *Geoscientific Model Development*, 8 (7), pp. 2299-2314, 2015
28. Colette A., C. Andersson, A. Baklanov, B. Bessagnet, J. Brandt, J. H. Christensen, R. Doherty, M. Engardt, C. Geels, C. Giannakopoulos, G. B. Hedegaard, **E. Katragkou**, J. Langner, H. Lei, A. Manders, D. Melas, F. Meleux, L. Roull, M. Sofiev, Joana Soares, D. S. Stevenson, M. Tombrou-Tzella, K. V. Varotsos, P. Young, Is the ozone climate penalty robust in Europe? *Environmental Research Letters*, 10 084015, doi:10.1088/1748-9326/10/8/084015, 2015
29. Eskes H., V. Huijnen, A. Arola, A. Benedictow, A. Blechschmidt, E. Botek, O. Boucher, I. Bouarar, S. Chabrillat, E. Cuevas, R. Engelen, H. Flentje, A. Gaudel, J. Griesfeller, L. Jones, J. Kapsomenakis, **E. Katragkou**, S. Kinne, B. Langerock, M. Razinger, A. Richter, M. Schultz, M. Schulz, N. Sudarchikova, V. Thouret, M. Vrekoussis, A. Wagner, and C. Zerefos, Validation of reactive gases and aerosols in the MACC global analysis and forecast system. *Geoscientific Model Development*, 8, 3523-3543, 2015.
30. Alexandri G., A. K. Georgoulas, P. Zanis, **E. Katragkou**, A. Tsikerdekis, K. Kourtidis, and C. Meleti, On the ability of RegCM4 regional climate model to simulate surface solar radiation patterns over Europe: an assessment using satellite-based observations, *Atmospheric Chemistry and Physics*, 15, 13195-13216, 2015.
31. Kioutsioukis I., A. de Meij, H. Jakobsc, **E. Katragkou**, J.F. Vinuesa, Andreas Kazantzidis, High resolution WRF ensemble forecasting for irrigation: Multi-variable evaluation, *Atmospheric Research*, 167, 156–174, 2016
32. Flemming, J., Benedetti, A., Inness, A., Engelen, J. R., Jones, L., Huijnen, V., Remy, S., Parrington, M., Suttie, M., Bozzo, A., Peuch, V.-H., Akritidis, D., **Katragkou, E.**, The CAMS interim Reanalysis of Carbon Monoxide, Ozone and Aerosol for 2003-2015 (2017) *Atmospheric Chemistry and Physics*, 17 (3), pp. 1945-1983, 2017
33. Tsikerdekis, A., Zanis, P., Steiner, A.L., Solmon, F., Amiridis, V., Marinou, E., **Katragkou, E.**, Karacostas, T., Foret, G., Impact of dust size parameterizations on aerosol burden and radiative forcing in RegCM4, *Atmospheric Chemistry and Physics*, 17 (2), pp. 769-791, 2017
34. Knist, S., Goergen, K., Buonomo, E., Christensen, O.B., Colette, A., Cardoso, R.M., Fealy, R., Fernández, J., García-Díez, M., Jacob, D., Kartsios, S., **Katragkou, E.**, Keuler, K., Mayer, S., van Meijgaard, E., Nikulin, G., Soares, P.M.M., Sobolowski, S., Szepszo, G., Teichmann, C., Vautard, R., Warrach-Sagi, K., Wulfmeyer, V., Simmer, C. Land-atmosphere coupling in EURO-CORDEX evaluation experiments, *Journal of Geophysical Research: Atmospheres*, 122 (1), pp. 79-103, 2017
35. Michaelides, S., Karacostas, T., Sánchez, J.L., Retalis, A., Pytharoulis, I., Homar, V., Romero, R., Zanis, P., Giannakopoulos, C., Bühl, J., Ansmann, A., Merino, A., Melcón, P., Lagouvardos, K., Kotroni, V., Bruggeman, A., López-Moreno, J.I., Berthet, C., **Katragkou, E.**, Tymvios, F., Hadjimitsis, D.G., Mamouri, R.-E., Nisantzi, A., Reviews and perspectives of high impact atmospheric processes in the Mediterranean, [Atmospheric Research](#), 208, pp. 4-44, 2018

36. Alpanidou, V., **Katragkou, E.**, Mazaris, A.D., The efficiency of phenological shifts as an adaptive response against climate change: a case study of loggerhead sea turtles (*Caretta caretta*) in the Mediterranean, [\*Mitigation and Adaptation Strategies for Global Change\*](#), 23 (7), pp. 1143-1158, 2018.
37. Akritidis, D., **Katragkou, E.**, Zanis, P., Pytharoulis, I., Melas, D., Flemming, J., Inness, A., Clark, H., Plu, M., and Eskes, H.: A deep stratosphere-to-troposphere ozone transport event over Europe simulated in CAMS global and regional forecast systems: analysis and evaluation, [\*Atmospheric Chemistry and Physics\*](#), 18, 15515-15534, 2018.
38. Coppola E., S. Sobolowski, ... **E. Katragkou**, ..., A first-of-its-kind multi-model convection permitting ensemble for investigating convective phenomena over Europe and the Mediterranean, [\*Climate Dynamics\*](#), <https://doi.org/10.1007/s00382-018-4521-8>.
39. Fita, L., Polcher, J., Giannaros, T. M., Lorenz, T., Milovac, J., Sofiadis, G., **Katragkou, E.**, Bastin, S.: CORDEX-WRF v1.3: development of a module for the Weather Research and Forecasting (WRF) model to support the CORDEX community, [\*Geoscientific Model Development\*](#), 12, 1029-1066, <https://doi.org/10.5194/gmd-12-1029-2019>, 2019.

#### AS ASSOCIATE PROFESSOR

40. Tsikerdekis, A., Zanis, P., Georgoulis, A.K., Alexandri G., **Katragkou E.**, Karacostas T, Solmon F., Direct and semi-direct radiative effect of North African dust in present and future regional climate simulations, [\*Climate Dynamics\*](#), 2019.
41. Jack C. and **Katragkou E.**, Evaluation of downscaling methods over Europe: results of the EU-COST Action VALUE, [\*International Journal of Climatology\*](#), doi: 10.1002/joc.6184, 2019.
42. Jacob, D., Teichmann, C., Sobolowski, S., **Katragkou, E.** et al, Regional climate downscaling over Europe: perspectives from the EURO-CORDEX community, [\*Regional Environmental Change\*](#), 20 (2), art. no. 51, 2020.
43. Davin, E. L., Rechid, D., Breil, M., Cardoso, R. M., Coppola, E., Hoffmann, P., Jach, L. L., **Katragkou, E.**, de Noblet-Ducoudré, N., Radtke, K., Raffa, M., Soares, P. M. M., Sofiadis, G., Strada, S., Strandberg, G., Tölle, M. H., Warrach-Sagi, K., and Wulfmeyer, V.: Biogeophysical impacts of forestation in Europe: first results from the LUCAS (Land Use and Climate Across Scales) regional climate model intercomparison, [\*Earth System Dynamics\*](#), 11, 183–200, <https://doi.org/10.5194/esd-11-183-2020>, 2020.
44. Pavlidis, V., **Katragkou, E.**, Prein, A., Georgoulis, A.K., Kartsios, S., Zanis, P., Karacostas, T., Investigating the sensitivity to resolving aerosol interactions in downscaling regional model experiments with WRFv3.8.1 over Europe, [\*Geoscientific Model Development\*](#), 13 (6), pp. 2511-2532, 2020.
45. Lavin-Gullon A., J. Fernandez, S. Bastin, R. M. Cardoso, L. Fita, T. M. Giannaros, K. Goergen, J. M. Gutierrez, S. Kartsios, **E. Katragkou**, T. Lorenz, J. Milovac, S. Sobolowski, P. M. M. Soares, K. Warrach-Sagi, Internal variability vs multi-physics uncertainty in a regional climate model, [\*International Journal of Climatology\*](#), <http://dx.doi.org/10.1002/joc.6717>



46. Breil M., D. Rechid, E.L. Davin, N. de Noblet-Ducoudré, **E. Katragkou**, R.M. Cardoso, P. Hoffmann, L.L. Jach, P.M.M. Soares, G. Sofiadis, S. Strada, G. Strandberg, M.H. Tölle, K. Warrach-Sagi, The opposing effects of reforestation and afforestation on the diurnal temperature cycle at the surface and in the lowest atmospheric model level in the European summer, *Journal of Climate*, 33 (21), pp. 9159-9179, 2020.
47. Alexandridis, ..., Kartsios, S., Karypidou, M.C., **Katragkou, E.**, ..., Designing AfriCultuReS services to support food security in Africa, *Transactions in GIS*, <http://dx.doi.org/10.1111/tgis.12684>, 2020.
48. Karypidou, M.C., Alpanidou, V., Tompkins, A.M., Mazaris A.D., Gewehr S., Mourelatos S., **Katragkou E.**, Projected shifts in the distribution of malaria vectors due to climate change, *Climatic Change*, 2020.
49. Akritidis, D., **Katragkou, E.**, Georgoulas, A.K., Zanis, P., Kartsios, S., Flemming, J., Inness, A., Douros, J., Eskes, H., A complex aerosol transport event over Europe during the 2017 Storm Ophelia in CAMS forecast systems: Analysis and evaluation, *Atmospheric Chemistry and Physics*, 20 (21), art. no. 698, pp. 13557-13578, 2020
50. Ban N., E. Brisson, C. Caillaud, E. Coppola, E. Pichelli, S. Sobolowski, M. Adinolfi, B. Ahrens, S. Berthou, S. Bastin, D. Belusic, S. Chan, L. Fita, T. Frisius, K. Goergen, Oivind Hodnebrog, Stergios Kartsios, **E. Katragkou**, E. J. Kendon, K. Keuler, Alvaro Lavin-Gullon, Torge Lorenz, Josipa Milovac, Hans-Juergen Panitz, Mario Raa, Armelle Remedio, Christoph Schär, Birthe Marie Steensen, Paolo Stocchi, Merja H., Toelle, Heimo Truhetz, Jesus Vergara Temprado, Hylke de Vries, The first multi-model ensemble of regional climate simulations at the kilometer-scale resolution, Part I: Evaluation of precipitation, *Climate Dynamics*, <https://doi.org/10.1007/s00382-021-05708-w>

## PUBLICATIONS IN CONFERENCE PROCEEDINGS

- Σ.1** **Katragkou E.**, I. Kioutsioukis, A. Poupkou, I. Lisaridis, K. Markakis, S. Karathanasis, D. Melas, D. Balis, An air quality study for Greece with the MM5/CAMx modeling system, *ENVISAT Symposium 2007*, 23-27/04/2007, Montreux, Switzerland.
- Σ.2** **Katragkou E.**, P. Zanis, I. Lisaridis, K. Markakis, D. Melas, Air quality modeling of aerosols and photo-oxidants over Greece: the case study of solar eclipse, Atmospheric composition Change - Causes and Consequences - Local to Global, eds: Michela Maione, Sandro Fuzzi, Publisher: Aracne editrice S.r.l., ISBN: 978-88-548-2268-9, January 2009, Proceedings of the *2<sup>nd</sup> Accent Symposium, Atmospheric Composition Change. Causes and Consequences - Local to Global*, 23-27 July, 2007, Urbino, Italy.
- Σ.3** **Katragkou E.**, Zanis P., Tegoulis I., Melas D., Krueger D.C., P. Huszar, T. Halenka, Tropospheric Ozone over Europe: An air quality model evaluation for the period 1990-2001, *IX EMTE National-International Conference of Meteorology-Climatology and Atmospheric Physics*, 28-31 May, 2008, Thessaloniki, Greece, p.649
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- ΣX.24 Zittis G., P. Hadjinicolaou, J. Lelieveld, E.Tyrlis, E. Katragkou**, I. Pytharoulis, CLWRF hindcast simulation over the CORDEX West Asia domain, *European Geosciences Union, General Assembly 2012*, 7-12 April 2013, Vienna, Austria.
- ΣX.25 Eskes H., V. Huijnen and MACC-II validation partners**, Validation of the GMES Atmosphere Service global composition reanalysis, *European Geosciences Union, General Assembly 2012*, 7-12 April 2013, Vienna, Austria.
- ΣX.26 Katragkou et al.**, Evaluation of a WRF-hindcast ensemble within the EURO-CORDEX project, *International Conference on Regional Climate, CORDEX 2013*, 4-7 November 2013, Brussels, Belgium.
- ΣX.27 Vautard and the EuroCordex Heat Wave Team**, The simulation of European heat waves from an ensemble of regional climate models within the EURO-CORDEX project, *International Conference on Regional Climate, CORDEX 2013*, 4-7 November 2013, Brussels, Belgium.
- ΣX.28 Ozdemir H., G. Demir, U. Im, M. Kanakidou, E. Katragkou**, T. Kindap, K. Markakis, G. Marougianni, D. Melas, N. Mihalopoulos, A. Poupkou, L. Pozzoli, C. Theodosi, A. Unal, A study of high Particulate Matter concentrations episodes in the Megacity of Istanbul using a fine resolution CMAQ air quality modelling simulation, *17<sup>th</sup> International MESAEP Symposium on Environmental Pollution and its Impact on Life in the Mediterranean Region*, 28 September – 1 October 2013, Istanbul, Turkey.
- ΣX.29 Katragkou E.**, R. Vautard, P. Zanis, R. M. Cardoso, J. Fernandez, M. García-Díez, K. Goergen, S. Mayer, I. Pytharoulis, S. Sobolowski, P. Soares, I. Tegoulis, T. Karacostas, A. Gobiet, D. Jacob, Evaluation of a WRF-hindcast ensemble within the EURO-CORDEX project, *International Conference on Regional Climate – CORDEX 2013*, A partnership between WCRP, the European Commissions and IPCC, 4-7 November 2013, Brussels, Belgium
- ΣX.30 Knist S. Sebastian Knist, K. Goergen, J. Keune, L. Poorthuis, A. Colette, M. Cardoso, R. Fealy, J. Fernandez, M. Garcia-Diez, E. Katragkou**, S. Mayer, P. Soares, S. Sobolowski, R. Vautard, K. Sarrach-Wagi, V. Wulfmeyer, C. Simmer, Validation of soil moisture and surface fluxes in EURO-CORDEX simulations as

part of a land-atmosphere coupling analysis, *European Geosciences Union (EGU) General Assembly 2014*, 28/4 – 2/5 2014, Vienna, Austria.

- ΣX.31 Katragkou E.**, P. Zanis, M. Cardoso, J. Fernandez, M. Garcia-Diez, A. Gobiet, K. Goergen, D. Jacob, T. Karacostas, S. Mayer, I. Pytharoulis, P. Soares, S. Sobolowski, I. Tegoulis, A. Tsikerdekis, R. Vautard, Evaluation of a WRF-hindcast ensemble within the EURO-CORDEX project, *European Geosciences Union (EGU) General Assembly 2014*, 28/4 – 2/5 2014, Vienna, Austria.
- ΣX.32 Alexandri G.**, A. Tsikerdekis, P. Zanis, **E. Katragkou**, A. K. Georgoulis, On the ability of two regional climate models to simulate surface solar radiation patterns over Europe: An assessment using CM SAF satellite data, *European Geosciences Union (EGU) General Assembly 2014*, 28/4 – 2/5 2014, Vienna, Austria.
- ΣX.33 Tsikerdekis A.**, **E. Katragkou**, P. Zanis, D. Melas, H. J. Eskes, J. Flemming, V. Huijnen, A. Inness, I. Kapsomenakis, M. Schultz, O. Stein, C. Zerefos, Comparison between assimilated and non-assimilated experiments of the MACCii global reanalysis near surface ozone, *European Geosciences Union (EGU) General Assembly 2014*, 28/4 – 2/5 2014, Vienna, Austria.
- ΣX.34 Zanis P.**, **Katragkou E.**, Ntogras C., Marougianni G., Feidas H., Anadranistakis E., Melas D., Preliminary results from a high resolution regional climate model simulation over Greece for the period 1960-2100, *10<sup>th</sup> International Geographical Congress*, 22-24/10/2014, Thessaloniki, Greece
- ΣX.35 Zanis P.**, **Katragkou E.**, Ntogras C., Marougianni G., Feidas H., Anadranistakis E., Melas D., Preliminary results from a high resolution regional climate model simulation over Greece for the period 1960-2100, *10th International Congress of the Hellenic Geographical Society*, 22-24/10/2014, Thessaloniki, Greece.
- ΣX.36 Katragkou E.**, S. Kartsios, M. Vavritsa, G. Alexandri, T. Karacostas, Impact of subgrid-scale cloud feedbacks to radiation in a climatic simulation over Europe, *European Geosciences Union (EGU) General Assembly 2015*, 12– 17/4/2015, Vienna, Austria.
- ΣX.37 Alexandri G.**, A.K. Georgoulis, P. Zanis, A. Tsikerdekis, **E. Katragkou**, K. Kourtidis, C. Meleti, On the ability of RegCM4 to simulate surface solar radiation patterns over Europe: An assessment using satellite-based observations, *European Geosciences Union (EGU) General Assembly 2015*, 12– 17/4/2015, Vienna, Austria.
- ΣX.38 Eskes H.**, A. Arola, A. Blechschmidt, E. Botek, E. Cuevas, A. Gaudel, J. Kapsomenakis, **E. Katragkou**, M. Razinger, M. Schulz, N. Sudarchikova, A. Wagner, Validation of reactive gases and aerosols in the MACC global analysis and forecast system, *European Geosciences Union (EGU) General Assembly 2015*, 12– 17/4/2015, Vienna, Austria.

#### AS ASSISTANT PROFESSOR

- ΣX.39 Tsikerdekis A.**, P. Zanis, A.L. Steiner, F. Solmon, V. Amiridis, E. Marinou, **E. Katragkou**, T. Karacostas, Dust size parameterization in RegCM4: Impact on aerosol burden and radiative forcing, *2015 AGU Fall Meeting*, 14– 18/12/2015, San Francisco, U.S.A.

- ΣX.40** Eskes H., S. Basart, A. Blechschmidt, S. Chabrillat, H. Clark, E. Cuevas, R. Engelen, J. Kapsomenakis, **E. Katragkou**, K. Mantzius Hansen, S. Niemeijer, M. Ramonet, M. Schulz, N. Sudarchikova, A. Wagner, T. Warneke, Validation of aerosols, reactive gases and greenhouse gases in the CAMS forecasts, analyses and reanalyses, *European Geosciences Union (EGU) General Assembly 2015*, 18–22/4/2016, Vienna, Austria.
- ΣX.41** Rechid D., N. de Noblet, O. Branch, R. M. Cardoso, E. Coppola, E. Davin, R. Fealy, B.Gálos, F.Giorgi, M.Angel Gaertner, K. Goergen, A. Haensler, N. Hempelmann, D. Jacob, **E. Katragkou**, K. Keuler, J. Otto, A. Pitman, S. Preuschmann, P. M.M. Soares, G. Strandberg, C.Teichmann, R.Vautard, EURO-CORDEX-LUC: A new initiative on coordinated regional land use change experiments, *International Conference on Regional Climate-CORDEX 2016 (ICRC-CORDEX 2016)*, 17–20/5/2016, Stockholm, Sweden.
- ΣX.42** **Katragkou E.**, M. Vavritsa, S. Kartsios, G. Alexandri, I. Pytharoulis, T. Karacostas, Sensitivity study of convective cloud feedbacks on radiation and impacts on precipitation, *International Conference on Regional Climate-CORDEX 2016 (ICRC-CORDEX 2016)*, 17-20/5/2016, Stockholm, Sweden.
- ΣX.43** Knist S., Goergen K., Colette A., Cardoso R.M, Fealy R., Fernandez J., Garcia-Diez M., Kartsios S., **Katragkou E.**, Mayer S., van Meijgaard E., Soares M.M.P, Sobolowski S., Szepszo G., Vautard R., Warrach-Sagi K., Wulfmeyer V., Simmer C., Land atmosphere coupling in EURO--CORDEX evaluation experiments, *International Conference on Regional Climate-CORDEX 2016 (ICRC-CORDEX 2016)*, 17-20/5/2016, Stockholm, Sweden.
- ΣX.44** Karypidou M., **E. Katragkou**, A. Mazaris, S. Mourelatos, S. Gewehr, S. Kalaitzopoulou, A. Tompkins, Impact of climate variability on mosquito activity over Greece and linkages to malaria incidence, Impact of environmental changes on infectious diseases (IECID 2017), 17-19/5/2017, Trieste, Italy.
- ΣX.45** **Katragkou E.**, D. Akritidis, S. Kontos, P. Zanis, D. Melas, R. Engelen, M. Plu, H. Eskes, Consistency between the global and regional modeling components of CAMS over Europe, *European Geosciences Union (EGU) General Assembly 2017*, 23– 28/4/2017, Vienna, Austria.
- ΣX.46** Rechid D., E. Davin, N. de Noblet-Ducoudré, **E. Katragkou** and the LUCAS team, CORDEX Flagship Pilot Study "LUCAS - Land Use & Climate Across Scales" - a new initiative on coordinated regional land use change and climate experiments for Europe, *European Geosciences Union (EGU) General Assembly 2017*, 23–28/4/2017, Vienna, Austria.
- ΣX.47** Georgoulas A.K., G. Alexandri, **E. Katragkou**, V. Pavlidis, S. Kartsios, A. Sanchez-Lorenzo, Evaluation of surface solar radiation trends from WRF simulations over Europe with satellite and ground-based observations, *European Geosciences Union (EGU) General Assembly 2017*, 23– 28/4/2017, Vienna, Austria.
- ΣX.48** Karypidou M.C, **E. Katragkou**, Building data value chains: from climate data production to impacts: The example of climate-sensitive vector borne diseases, *MedClivar Conference 2018*, 19-21/9/2018, Belgrade, Serbia.
- ΣX.49** Sofiadis I., **E. Katragkou**, Quantifying the summer temperature response to extreme deforestation in Europe, (*best poster award for I. Sofiadis*), *MedClivar Conference 2018*, 19-21/9/2018, Belgrade, Serbia.

- ΣX.50** Fita L., Bastin S., E. Polcher, **E. Katragkou**, T.M. Giannaros, R. Pennel, T. Arsouze, Sensitivity tests on CORDEX FPS convection permitting WRF configuration, *GEWEX convection permitting climate modeling workshop II*, 4-6/9/2018, Boulder-Colorado USA.
- ΣX.51** Akritidis D., **E. Katragkou**, P. Zanis, I. Pytharoulis, D. Melas, J. Flemming, A. Inness, H. Clark, M. Plu, H. Eskes, Stratospheric intrusions over Europe during the cold wave of January 2017 in CAMS forecast systems, *14th International Conference on Meteorology, Climatology and Atmospheric Physics*, 15-17/10/2018, Alexandroupolis Greece
- ΣX.52** Tsikerdekis A., P. Zanis, A. Georgoulas, G. Alexandri, **E. Katragkou**, F. Solmon, Direct and semi-direct radiative effects of dust aerosols in regional climate simulations for present and future climate over North Africa and Mediterranean, *14th International Conference on Meteorology, Climatology and Atmospheric Physics*, 15-17 October 2018, Alexandroupolis Greece.
- ΣX.53** Breil M., D. Rechid, E. Davin, N. de Noblet-Ducoudré, **E. Katragkou**, R. Cardoso, P. Hoffmann, L. Jach, P. Soares, I. Sofiadis, G. Strandberg, M. Tölle, K. Warrach-Sagi., The impact of afforestation on the diurnal cycles of temperature and turbulent heat fluxes, *European Geosciences Union (EGU) General Assembly 2019*, 7– 12/4/2019, Vienna, Austria.
- ΣX.54** Sofiadis I., **Katragkou E.**, Davin E. L., de Noblet-Ducoudre N., Rechid D., Employing the ESA CCI Land Cover product for regional climate simulations over Europe, *Living Planet Symposium 2019*, 13-17/5/2019, Milan, Italy.
- ΣX.55** Kartsios S., A. Prein, I. Presvelou, **E. Katragkou**, Investigating biases in the regional climate simulation of WRF-AUTH in the framework of the CORDEX FPS on Convective phenomena at high resolution over Europe and the Mediterranean, *Latsis 2019 Symposium, High-Resolution Climate Modeling: Perspectives and Challenges*, 21-23 August 2019, ETH Zurich, Switzerland.
- ΣX.56** Goergen K., S. Bastin, ... **E. Katragkou**, ..., Soil moisture-temperature coupling in a CORDEX FPS convection permitting WRF RCM ensemble, *Latsis 2019 Symposium, High-Resolution Climate Modeling: Perspectives and Challenges*, 21-23 August 2019, ETH Zurich, Switzerland.

#### AS ASSOCIATE PROFESSOR

- ΣX.57** Bastin S., P. Drobinski, M. Chiriaco, ... , **E. Katragkou**, ..., Multi-model analysis of triggering of precipitation : impact of model resolution and convection representation, and evolution in a warmer climate, *International Conference on Regional Climate, ICRC-CORDEX 2019*, 14-18/10/2019, Beijing, China.
- ΣX.58** Hoffmann P., D. Rechid, V. Reinhart, E. Davin, , **E. Katragkou**, N. de Noblet-Ducoudré, Providing high-resolution land-use change information for ensemble simulations within EURO-CORDEX and the LUCAS framework, *International Conference on Regional Climate, ICRC-CORDEX 2019*, 14-18/10/2019, Beijing, China.
- ΣX.59** Hoffmann P., D. Rechid, E. Davin, N. de Noblet-Ducoudré, **E. Katragkou**, ..., Response of LUCAS-models to forestation and afforestation in Europe under dry,

wet and extreme climate conditions, *International Conference on Regional Climate, ICRC-CORDEX 2019, 14-18/10/2019, Beijing, China.*

- ΣX.60** Goergen K., S. Bastin, B. Bourgart, ..., **E. Katragkou**, ..., Soil moisture-temperature coupling in a CORDEX FPS convection-permitting WRF RCM ensemble, *International Conference on Regional Climate, ICRC-CORDEX 2019, 14-18/10/2019, Beijing, China.*
- ΣX.61** Lavin-Gullon A., Fernandez J., Bastin, S., Cardoso R. M., Giannaros, T. M., Goergen, K., Kartsios, S., **Katragkou, E.**, Lorenz, T., Milovac J., Sobolowski, S., Soares, P. M. M., Warrach-Sagi, K., Case study reproducibility in a convection-permitting WRF multi-physics ensemble: the role of internal variability, *International Conference on Regional Climate, ICRC-CORDEX 2019, 14-18/10/2019, Beijing, China.*
- ΣX.62** Alexandridis, T.K., Cherif, I., Kasampalis, D., Ovakoglou, G., Moshou, D., Laneve, G., **Katragkou, E.**, Kganyago, M., Mashiyyi, N., Pattnayak, K., Challinor, A., Kotsopoulos, S., Kagoyire, C., and Suarez Beltran, J., Land, livestock, crops, water and weather products of the AfriCultuReS project for food security in Africa, 18-22/11/2019, Kigali, Rwanda.
- ΣX.63** Karypidou M. C., **Katragkou E.**, An early warning system of West Nile Virus risk in northern Greece, *European Scientific Conference on Applied Infectious Disease Epidemiology ESCAIDE 2019, 27-29/11/2019, Stockholm, Sweden.*
- ΣX.64** Karypidou M.C. and **E. Katragkou**, Precipitation biases over southern Africa: examining the role of the Angola Low, *European Geosciences Union (EGU) General Assembly 2020, 3– 8/5/2020, Vienna, Austria. (on line participation due to COVID-19)*
- ΣX.65** D. Akritidis, **E. Katragkou**, A. K. Georgoulas, P. Zanis, S. Kartsios, J. Flemming, A. Inness, and H. Eskes, Ex-hurricane Ophelia and air quality impacts over Europe in CAMS forecast systems, *European Geosciences Union (EGU) General Assembly 2020, 3– 8/5/2020, Vienna, Austria (on line participation due to COVID-19)*
- ΣX.66** **Katragkou E.**, M.C. Karypidou, S. Kartsios, S. Gewehr, S. Mourelatos, Building a climate service to support an Early Warning System for the West Nile Virus disease in Greece, *European Geosciences Union (EGU) General Assembly 2020, 3– 8/5/2020, Vienna, Austria. (on line participation due to COVID-19)*
- ΣX.67** **Katragkou E.**, M.C. Karypidou, S. Kartsios, S. Gewehr, S. Mourelatos, Building a climate service to support an Early Warning System for the West Nile Virus disease in Greece, *European Geosciences Union (EGU) General Assembly 2020, 3– 8/5/2020, Vienna, Austria (on line participation due to COVID-19)*
- ΣX.68** Hoffmann P., D. Rechid, V. Reinhart, C. Asmus, E. Davin, **E. Katragkou**, N. De Noblet-Ducoudré, B. Bechtel, J. Böhner, Long-term high-resolution land-use/land-cover change dataset for regional climate modeling, *AGU fall meeting, 7-11/12/2020, San Francisco, CA, USA.*
- ΣX.69** Nabat, P., Somot, S., Corre, L., **Katragkou, E.**, Li, S., Mallet, M., van Meijgaard, E., Pavlidis, V., Pietikäinen, J.-P., Soerland, S., and Solmon, F.: Impact of aerosols on the future Euro-Mediterranean climate: results from the CORDEX FPS-Aerosol, *EGU General Assembly 2021, online, 19–30 Apr 2021, EGU21-2211, <https://doi.org/10.5194/egusphere-egu21-2211>, 2021.*

- ΣX.70** Ha-Truong, M., Bastin, S., Drobinski, P., Fita, L., Chiriaco, M., Polcher, J., and Bock, O. and the model providers from **FPSCONV community**: Precipitation frequency in MED and EURO-CORDEX ensembles from 0.44° to convective permitting resolution: what explains the differences?, EGU General Assembly 2021, online, 19–30 Apr 2021, EGU21-8843, <https://doi.org/10.5194/egusphere-egu21-8843>, 2021.
- ΣX.71** Daloz, A. S., Schwingshackl, C., Mooney, P., Strada, S., T. Lund, M., Breil, M., M. Cardoso, R., Davin, E., Hoffmann, P., **Katragkou, E.**, C.A. Lima, D., Meier, R., de Noblet-Ducoudre, N., Rechid, D., M. M. Soares, P., Sofiadis, G., Strandberg, G., and H. Toelle, M.: Climate forcing due to the snow albedo effect in the regional climate models from the CORDEX Flagship Pilot study LUCAS., EGU General Assembly 2021, online, 19–30 Apr 2021, EGU21-2120, <https://doi.org/10.5194/egusphere-egu21-2120>, 2021.
- ΣX.72** Hoffmann, P., Rechid, D., Reinhart, V., Asmus, C., Davin, E. L., **Katragkou, E.**, de Noblet-Ducoudré, N., Böhner, J., and Bechtel, B.: Generating long-term high-resolution land-use change datasets for regional climate modeling in CORDEX domains, EGU General Assembly 2021, online, 19–30 Apr 2021, EGU21-14967, <https://doi.org/10.5194/egusphere-egu21-14967>, 2021.
- ΣX.73** Cardoso, R. M., Lima, D. D. C. A., Soares, P. M. M., Rechid, D., Breil, M., Coppola, E., Davin, E., Hoffmann, P., Jach, L., **Katragkou, E. K.**, Meier, R., Mooney, P. A., de Noblet-Ducoudré, N., Panitz, H.-J., Sofiadis, I., Strada, S., Strandberg, G., Tölle, M., and Warrach-Sagi, K.: Land-atmosphere coupling during compound extreme heat and drought events in the LUCAS experiment: a new coupling metric for climate extremes, EGU General Assembly 2021, online, 19–30 Apr 2021, EGU21-15797, <https://doi.org/10.5194/egusphere-egu21-15797>, 2021.

## [C] TEACHING

### UNDERGRADUATE

School of Geology, Aristotle University of Thessaloniki (2<sup>nd</sup> Semester). Course: **Introduction to Computer Science** (since 2013-14)

School of Physics, Aristotle University of Thessaloniki (7<sup>th</sup> Semester). Course: **Physical Climatology and Global Change** (2012-13 to 2014-2015)

School of Geology, Aristotle University of Thessaloniki (5<sup>th</sup> semester). Μάθημα: **Foreign Language Terminology I: English** (2017-18 today, co-teaching)

### POSTGRADUATE

MSc Meteorology Climatology and Atmospheric Environment, School of Geology, Aristotle University of Thessaloniki (1<sup>st</sup> semester). Course: **Solar and Earth radiation** (from 2012-13 to today)

MSc Meteorology Climatology and Atmospheric Environment, School of Geology, Aristotle University of Thessaloniki (3rd semester). Course: **Climate Models** (from 2015-2016 to today)

MSc Meteorology Climatology and Atmospheric Environment, School of Geology, Aristotle University of Thessaloniki (3rd semester). Course: **Practical Meteorology** (from 2016-17 to today)

MSc in Environmental Physics, School of Physics, Aristotle University of Thessaloniki (3<sup>rd</sup> semester). Course: **Environmental Models** (from 2006-07 to 2014-2015, assisting)

MSc in Environmental Physics, School of Physics, Aristotle University of Thessaloniki (2<sup>nd</sup> semester). Course: **Techniques of Measuring Atmospheric Parameters** (from 2008-09 to today, assisting)

### A.1 Advisor of doctoral thesis

1. **Pavlidis Vassilios**, «Estimating errors and uncertainty in radiation and cloudiness in regional climate modeling», PhD thesis, School of Geology, Aristotle University of Thessaloniki, 3/2016 – 2/2020.

[With support of the State Scholarship Foundation. Funding 12/2016 – 12/2019](#)

2. **Maria Chara Karypidou**, “Estimating errors and uncertainties of precipitation in regional climate simulations over Africa: investigation of physical processes”, PhD thesis, School of Geology, Aristotle University of Thessaloniki, started 4/2018.

[With support of the Hellenic Foundation of Research and Innovation. Funding 10/2019– 7/2022](#)

3. **Ioannis Sofiadis**, “Investigating the impact of land cover changes on European climate with regional climate model simulations”, PhD thesis, School of Geology, Aristotle University of Thessaloniki, started 7/2018.

[With the support of the Swiss Government Excellence Scholarships for Foreign Students for the Academic Year 2019 and the Hellenic Foundation of Research and Innovation 20/2019 – 10/2022.](#)

### A.2 Member of doctoral advisory committee

1. **Tsikerdekis Athanasios**, “Investigation of dust-climate interactions with a use of a regional climate model”, PhD thesis, School of Geology, Aristotle University of Thessaloniki, Advisor: P. Zanis
2. **Kontos Serafim**, “Development and evaluation of a desert dust emission model” PhD thesis, School of Physics, Aristotle University of Thessaloniki, Advisor: D. Melas



### **A.3 Member of doctoral examination committee**

1. **Akritidis Dimitrios**, "Investigation of background air quality in Europe, with the use of numerical models", PhD thesis, School of Geology, Aristotle University of Thessaloniki, Advisor: P. Zanis, 10/2014
2. **Giannors Christos**, Sensitivity analysis and optimization of a mesoscale atmospheric model, PhD thesis, School of Physics, Aristotle University of Thessaloniki, Advisor: D. Melas, 2/2018
3. **Markel Garcia Diez**, «Realismo físico, valor añadido y sensibilidad a la elección de las parameterizaciones de un modelo regional del clima sobre Europa», PhD thesis, Τμήμα Universito of Cantabria, Spain, Advisor: Jesus Fernandez Fernandez, 09/2014

### **B.1 Advisor of postgraduate (MSc) thesis**

1. **Pavlidis Vassilios** «Evaluation of hindcast regional climate simulations over Europe for the period 1990-2008 », MSc in Meteorology Climatology and Atmospheric Environment, School of Geology, Aristotle University of Thessaloniki, 12/2015.
2. **Vavritsa Margarita** "Sensitivity study of cloud-radiation feedbacks in a regional climate model simulation", MSc in Meteorology Climatology and Atmospheric Environment, School of Geology, Aristotle University of Thessaloniki, 09/2016
3. **Gkotovou Ioanna** "Impact of boundary forcing on regional climate simulations and evaluation with satellite data" MSc in Meteorology Climatology and Atmospheric Environment, School of Geology, Aristotle University of Thessaloniki, 03/2017
4. **Sofiadis Ioannis** «Climate change over Europe for the 21st century using a regional climate simulation under scenario RCP8.5» MSc in Meteorology Climatology and Atmospheric Environment, School of Geology, Aristotle University of Thessaloniki, 10/2017.
5. **Karypidou Maria-Chara** «Impact of climate variability on mosquito density and malaria transmission in Greece», MSc in Meteorology Climatology and Atmospheric Environment, School of Geology, Aristotle University of Thessaloniki, 12/2017
6. **Iris Papakonstantinou Presvelou**, "Investigating the added value of high resolution regional climate simulations over Europe", MSc in Meteorology Climatology and Atmospheric Environment, School of Geology, Aristotle University of Thessaloniki, 9/2019

### **C1. Advisor of graduate (BSc) thesis**

**Katsada Dimitra**, «Sensitivity of regional climate simulations in radiation», BSc thesis, School of Physics, Aristotle University of Thessaloniki, 10/2015.

Mentor of international PhD students

**Program: PRACE SoHPC, Summer of High Performance Computing 2017**

- 1) Mahmoud Elbattah, PhD student - College of Engineering and Informatics, National University of Ireland Galway.  
Visiting Department of Meteorology and Climatology: July-August 2017  
Topic: European climate model simulations  
*Awarded with the “HPC Ambassador Award”*
- 2) Edwige Pezzuli, PhD student – Sapienza University of Rome  
Visiting Department of Meteorology and Climatology: July-August 2017  
Topic: Visualizing European climate change

## e-COURSES

SurfSara-Netherlands, Massive Open Online Course (MOOC) on Grid Computing, Παρουσίαση e-course με τίτλο: “**The importance of GRID computing on investigation of climate and its change**” (<https://www.surfsara.nl/project/mooc>)

## [D] ACADEMIC ACTIVITIES

- **IPCC Assessment Report 6 (AR6) WGI**, Chapter: Regional Atlas, *Contributing Author*
  - **Coordination of international networks**
- 1) **WCRP EURO-CORDEX** Region 4: Europe (coordination: D. Jacob, S. Sobolowski, E. Katragkou)
  - 2) **WCRP CORDEX FPS LUCAS** Land use and climate across scales (coordination: D. Rechid, N. de Noble, E. Davin, E. Katragkou)
- **Participation in scientific projects**
1. \***EURO-CORDEX**, World Climate Research Program (WCRP), European Coordinated Regional Downscaling Experiment, *Coordinator in Dynamical Downscaling activities of EURO-CORDEX* (2010-today)
  2. \*CORDEX-Flagship Pilot Study: *Land use change across scales*, **LUCAS** (2016-today)
  3. CORDEX- Flagship Pilot Study: *Convective phenomena at high resolution over Europe and the Mediterranean* (2016-today)
  4. \*Ίδρυμα Κρατικών Υποτροφιών, Προώθηση των ανταλλαγών και της επιστημονικής συνεργασίας Ελλάδας-Γερμανίας, *Μελέτη των επιπτώσεων στο κλίμα της Ευρώπης από τις αλλαγές χρήσης Γης με τη χρήση περιοχικών κλιματικών προσομοιώσεων*, 2018-2020 (**IKYDA 2018**)

5. \*EC, H2020, LC-SFS-19-2018-2, Resilient farming by adaptive microclimate managements, Stargate (2019-2023), Ανθεκτική γεωργία μέσω προσαρμοσμένης μικροκλιματικής διαχείρισης (**STARGATE**) 10/2019 – 9/2023 (κωδ. Έργου 99440)
6. \*EU, ECMWF, Copernicus Atmosphere Monitoring Service ([CAMS-84](#)): Global and regional a posteriori evaluation and quality assurance, Αξιολόγηση και εκτίμηση ποιότητας μοντέλων παγκόσμιας και περιοχικής κλίμακας, 10/2018-12/2021
7. \*State Scholarship Foundation (IKY) & German Academic Exchange Service (DAAD), Greece-Germany bilateral cooperation, Impact of Land Use Changes on regional and local climate in Europe: present and future climate projections (LUCE), 2018-2019 (**IKYDA 2018**)
8. General Secretariat Research and Technology (ΓΓΕΤ), Greek-German on Bilateral Research and Innovation Cooperation 2016, “Establishment of an Early Warning System for Mosquito-borne diseases and implementation of new vector control tools in the urban environment” (**EWSMD**), 05/2018 – 2020
9. \* EC, H2020, Enhancing Food Security in AFRIcan AgriCULTUral Systems with the Support of REmote Sensing ([AfriCultures](#)), 2017-2021
10. \* EU, Copernicus Atmosphere Monitoring Service ([CAMS-84](#)): Global and regional a posteriori validation, including focus on the Arctic and Mediterranean areas, 10/2015–9/2018.
11. EC, H2020, Monitoring Atmospheric Composition and Climate ([MACC-III](#)), 2014-2015
12. EC, FP7, The People Programme, International Research Staff Exchange Scheme, Regional climate-air quality interactions **REQUA**, 2014-2017.
13. \*Research Committee AUTH, Action A: Research Grant for LecturersRegional climate simulation in the framework of EURO-CORDEX, 2014-2016.
14. State Scholarship Foundation (IKY) & German Academic Exchange Service (DAAD), Greece-Germany bilateral cooperation, Operational air quality forecast in Greece and Germany, 2014-2015 (**IKYDA 2014**)
15. National Strategic Reference Framework (NSRF) 2007-2013, An Innovative and Integrated Conceptual Model to Mitigate the Impact of Climate Change on Drought: Potentiality and Applicability of a Precipitation Enhancement Project in Thessaly (**DAPHNE**), 2013-2015
16. National Strategic Reference Framework (NSRF) 2007-2013, A pilot system for the development and delivery of daily wave and circulation forecasts for public and emergency uses in the Thermaikos gulf (**WaveForUs**), 2013-2015
17. EC, FP7, Environmental Optimization of IRrigAtion Management with the Combine uSe and Integration of High Precision Satellite Data, Advanced Modeling, Process Control and Business Innovation (**ENORASIS**), 2012-2015
18. State Scholarship Foundation (IKY) & German Academic Exchange Service (DAAD), Greece-Germany bilateral cooperation, Etesian winds over the Aegean Sea: Aeolian potential for the present and future climate, 2012-2013 (**IKYDA 2012**)
19. EC, FP7, Monitoring Atmospheric Composition and Climate ([MACC-II](#)), 2012-2014
20. National Strategic Reference Framework (NSRF) 2007-2013, Geographical Information System for the visualization of climate (**Geoclima**), 2011 – 2013

21. EC, FP7, Promote Air Quality Services integrating Observations – Development Of Basic Localised Information for Europe” (**PASODOBLE**), 2010 – 2013
22. EC, FP7, Monitoring Atmospheric Composition and Climate (**MACC**), 2009-2011
23. State Scholarship Foundation (IKY) & German Academic Exchange Service (DAAD), Greece-Germany bilateral cooperation, Coupling of the chemistry global model ECHAM5.HAMOX with the regional chemistry model CAMx, 2008 (**IKYDA 2008**)
24. EC, FP6, Global and Regional Earth-System Monitoring using Satellite and in-situ data, (**GEMS**) 2005-2009
25. EC, FP6, Central and Eastern Europe Climate Change Impact and Vulnerability Assessment, (**CECILIA**), 2006-2009
26. ESA, Protocol monitoring for the GMES (Global Monitoring for Environment and Security) Service Element: Atmosphere (**PROMOTE**), 2006 -2009
27. General Sekretariat of Research and Technology (GSRT), **PYTHAGORAS II**, Assessment in the radiation energy balance over the Mediterranean and southeastern Europe with emphasis over Greece, 2005-2006
28. Bayerisches Staatsministerium für Landesentwicklung und Umweltfragen, Reactive Nitrogen Experiment (**SCAVEX**), 2001-2003
29. EC, FP5, Measurement and predictions of the emission of aerosols and gaseous precursors from gas turbine engines (**PARTEMIS**), 2000-2003
30. EC, FP5, Sustainable Urban Transportation (**SUTRA**) 2000-2003.

## IMPACT FACTOR PUBLICATION LIST

Journal	Impact Factor	#publications
Environmental Research Letters	6.192	1
Journal of Climate	5.707	1
Atmospheric Chemistry and Physics	5.414	11
Geoscientific Model Development	5.240	6
Atmospheric Research	4.676	4
Earth System Dynamics	4.589	1
Geophysical Research Letters	4.580	1
Climate Dynamics	4.486	5
Climatic Change	4.314	1
Atmospheric Environment	4.012	4
International Journal of Climatology	3.609	2
Regional Environmental Change	3.481	1
Journal of Geophysical Research	2.799	2
Mitigation and Adaptation Strategies for Global Change	2.216	1
Transaction in GIS	2.119	1
Meteorologische Zeitschrift	2.072	1
Climate Research	1.690	3
Environmental Modeling and Assessment	1.634	1
Advances in Meteorology	1.491	1
Quarterly Journal of the Hungarian Meteorological Service	0.670	1
International Journal of Environment and Pollution (IJEP)	0.540	1
<b>TOTAL</b>		<b>50</b>
<b>AVERAGE</b>	<b>4.11</b>	

## Journal Reviewer

Journal
1. Nature Climate Change
2. Atmospheric Chemistry and Physics (ACP)
3. Climate Dynamics (Clim Dyn)
4. Climate Services (CLISER)
5. Geophysical Research Letters (GRL)
6. Hydrology and Earth System Sciences (HESS)
7. Science of the Total Environment
8. International Journal of Climatology (IJOC)
9. Geoscientific Model Development (GMD)
10. Atmospheric Environment (Atmos Env)
11. Climatic Change
12. Regional Environmental Change (REEC)
13. Journal of Environmental Management
14. Theoretical and Applied Climatology (TAAC)
15. Annales Geophysicae (ANGEO)
16. Climate Research (CR)
17. Atmosphere
18. Advances in Meteorology
19. Atmospheric and Oceanic Science Letters (AOSL)

### **Invited/Keynote speaker**

In European Grid Infrastructure (EGI) Community Forum 2013 (invited keynote plenary speaker), *“The importance of grid computing in the investigation of climate and its change”* University of Manchester, 11/4/2013

### **Member of Organizing/Scientific Committee in Conferences**

[Copernicus Climate Change Services](#) (C3S), Regional Training Event for Greece, Cyprus and Malta. *“Using Climate data for adaptation studies”*, National trainer for the C3S program. Included 2 webinars and one-day seminar, Athens, 18/11/2019).

WCRP-[CORDEX FPS-LUCAS](#) annual workshop, *Impacts of Land use changes on climate in Europe*, Macedonia Palace, Thessaloniki, 1-2/10/2018.

[National Educational Workshop VI-SEEM](#), *The national infrastructure HPC ARIS and Scientific Applications*, Aristotle University Research Dissemination Center, AUTH, 11-12/12/2017.

13th International Conference on Meteorology, Climatology and Atmospheric Physics, Member of the organizing committee (executive secretariat), Thessaloniki, 19-21/9/2016.

European Grid Infrastructure (EGI) Community Forum 2014, Member of the research committee, Topic «Success stories in using e-Infrastructures for research», Helsinki Finland, 19-23/5/2014.

### **Conference Convener**

European Grid Infrastructure (EGI) Community Forum 2014, Convener in ‘Environmental science on grids and clouds’, Finland, 19-23/5/ 2014

### **Project Evaluation**

*NILS Science and Sustainability program*<sup>1</sup>, University Complutense Madrid

*LinkSCEEM & Cy-Tera Joint Call for Proposals for HPC access*<sup>2</sup>, High-Performance Computers (HPC) Cy-Tera & LinkSCEEM-2

*HFRI*, 1<sup>ST</sup> call for HFRI research projects to support post-doctoral researchers, 2017

*HFRI*, 2<sup>st</sup> call for HFRI research projects to support faculty members and researchers, 2019

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<sup>1</sup> <http://www.nilsmobilityproject.es>

<sup>2</sup> <http://www.linksceem.eu/ls2/user-resources/how-to-apply/howto-apply-production.html>

*High Performance Computing (HPC)-Europa*<sup>3</sup>, Member of the Scientific Users Selection Panel (SUSP) for proposal evaluation, 2017-2021

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<sup>3</sup> <http://www.hpc-europa.eu/>