CURRICULUM VITAE - [STERGIOS KARTSIOS]

PERSONAL INFORMATION

Family name:	**Kartsios**
First name**:**	**Stergios**
Day of Birth:	17/10/1987
Place of Birth:	Thessaloniki, Greece
Office phone number:	+302310 998572
Work Address:	Department of Meteorology and Climatology, School of Geology, Faculty of Sciences, Aristotle University of Thessaloniki, GR-54124
e-mail:	kartsios@geo.auth.gr
Scopus ID:	56736820800
OrcID:	0000-0002-2790-3782

EDUCATION

2020: **Ph.D.** Department of Meteorology and Climatology, School of Geology**,** Faculty of Sciences, Aristotle University of Thessaloniki
Thesis: **"Atmosphere – Wildland Fires Interactions using Numerical Models in Greece".** *Supervisor***: Prof. Theodore Karacostas**

2013: **M.Sc.** Degree in Meteorology, Climatology and Atmospheric Environment, School of Geology**,** Faculty of Sciences, Aristotle University of Thessaloniki. ***(Honors)***
*Dissertation***: "Online coupling between Atmosphere – Fire Models for investigation of Wildland Fires".** *Supervisor***: Prof. Theodore Karacostas**

2010: **B.Sc.** Degree in Physics, School of Physics, Faculty of Sciences, Aristotle University of Thessaloniki
Dissertation: **"Trend study on the tropospheric NO_2 column over economically developed areas, based on satellite measurements".** *Supervisor:* **Dr. Dimitrios Balis**

AWARDS/FELLOWSHIPS

11/2012: Award for excellence for postgraduate studies, Aristotle University of Thessaloniki

SPECIAL SKILLS AND COMPETENCES

Atmospheric numerical models:	WRF
Radiative tranfer models:	libRadtran
Fire behavior models:	SFIRE, BehavePlus
Operating systems:	LINUX, WINDOWS
Programming languages:	FORTRAN, Python, Bash scripting, HTML, PHP
UNIX, LINUX applications:	NCL, CDO, NCO, GRADS, RIP, VAPOR
WINDOWS & Linux applications:	MS Office, Wolfram Mathematica, Surfer, Statistica, R, Matlab
GIS applications:	QGIS, ArcGIS

LANGUAGES

Greek (mother tongue)
English: Fluent (Michigan Certificate of Proficiency in English)

WORKING EXPERIENCE

04/2016 – 01/2018	**Junior Meteorologist**: 3D S.A. "General Aviation Applications", 2 Skiathou Str. 546 46, Thessaloniki, Greece
03/2018 – now	**Junior Meteorologist** (External Collaborator): 3D S.A. "General Aviation Applications", 2 Skiathou Str. 546 46, Thessaloniki, Greece

RESEARCH INTERESTS

- **Fire Meteorology** and applications with coupled atmosphere – fire models (WRF-SFIRE)
- **Synoptic weather forecasting** and investigation of the optimum set up of numerical weather prediction models
- **Evaluation of numerical weather prediction models** with different techniques and tools
- Analysis of **extreme weather events**
- **Climate change** through climate simulations in the framework of WCRP-CORDEX and WCRP-CORDEX – Flagship Pilot Studies
- Applications with the use of atmospheric numerical models
- Analysis of meteorological parameters

PARTICIPATION IN RESEARCH PROJECTS

05/2020 – now	**Research Assistant:** Department of Meteorology and Climatology, School of Geology, Faculty of Sciences, Aristotle University of Thessaloniki. "*Resilient farming by adaptive microclimate managements (STARGATE)*". H2020, LC-SFS-19-2018-2. Scientific Coordinator: Dr. Katragou Eleni, Department of Meteorology and Climatology, A.U.Th.
02/2018 – now	**Research Assistant:** Department of Meteorology and Climatology, School of Geology, Faculty of Sciences, Aristotle University of Thessaloniki. "*Enhancing Food Security in AFRIcan AgriCULTUral Systems with the Support of Remote Sensing (AfriCultuReS)*". H2020-SFS-2017-1. Scientific Coordinator: Dr. Katragou Eleni, Department of Meteorology and Climatology, A.U.Th.
10/2019 – 12/2021	**Research Assistant:** EC, ECMWF, "*Copernicus Atmosphere Monitoring Service-84: Global and regional a posteriori validation and quality assurance (CAMS84)*." Scientific Coordinator: Dr. Katragou Eleni, Department of Meteorology and Climatology, A.U.Th.

04/2019 – 11/2020 **Research Assistant:** General Secretariat for Research and Technology (GSRT): 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)*", 2018-2020.

07 - 10/2017 **Research Assistant:** Laboratory of Atmospheric Physics, Department of Physics, Faculty of Sciences, Aristotle University of Thessaloniki. "*Regional climate-air quality interactions (REQUA)*". Scientific Coordinator: Dr. Mellas Dimitrios, Department of Physics, A.U.Th.

11/2016 – 10/2018 **Research Assistant:** EC, ECMWF, "*Copernicus Atmosphere Monitoring Service-84: Global and regional a posteriori validation, including focus on the Arctic and Mediterranean areas (CAMS84)*." Scientific Coordinator: Dr. Katragou Eleni, Department of Meteorology and Climatology, A.U.Th.

01/2014 – 06/2015 **Research Assistant**: Department of Meteorology and Climatology, School of Geology, Faculty of Sciences, Aristotle University of Thessaloniki. 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*". Scientific Coordinator: Prof. Karacostas Theodore, Department of Meteorology and Climatology, A.U.Th.

WORKSHOPS/SCHOOLS ATTENDED

1. Joint WRF/MPAS Users' Workshop 2021, Online, NCAR, Boulder, CO, USA (7-10/06/2021)
2. "*Efficient Use of HPC Systems*", PRACE Training Centre course, online, GRNET headquarters, Athens, Greece (14-15/12/2020)
3. "*Introduction to Parallel Programming*", PRACE Training Centre course, online, GRNET headquarters, Athens, Greece (11-13/11/2020)
4. International Workshop "*Convection-Permitting Modeling for Climate Research: Current and Future Challenges*", Online (2-4/09/2020).
5. "*Machine Learning in HPC*", PRACE Training Centre course, GRNET headquarters, online, Athens, Greece (11-12/06/2020)
6. Virtual WRF/MPAS Users' Workshop 2020, Online, NCAR, Boulder, CO, USA (8-9/06/2020)
7. **Visitor at C3WE group**, NCAR, Boulder, CO, USA (20/09-20/10/2017)
8. "*Workshop on Modelling of Wildfires and their Enviromental Impacts*", Centre national de la recherche scientifique (CNRS, France), International Union of Geodesy and Geophysics (IUGG), ICTP, Trieste, Italy (22-26/06/2015)
9. "*Developer School for HPC Applications in Earth Sciences & Symposium on HPC and Data-Intensive Applications in Earth Sciences: Challenges and Opportunities*", Istituto Nazionale di Oceanografia e di Geofisica Sperimentale (OGS) – Partnership for Advanced Computer in Europe (PRACE), CINECA, ICTP, Trieste, Italy (10-14/11/2014)
10. Training Workshop, "*Use of satellite data and products in studying and forecasting extreme weather events*", Aristotle University of Thessaloniki, EUMETSAT, Greece, Thessaloniki, Perea (30/9-4/10/2013)

CONFERENCES ATTENDED

1. 14th International Conference on Meteorology, Climatology and Atmospheric Physics (COMECAP 2018), Democritus University of Thrace, Hellenic Meteorological Society, Alexandroupolis, Greece (15 - 17/10/2018)
2. International Conference on "e-Infrastructures for excellent science in Southeast Europe and the Eastern Mediterranean", ViSEEM, Sofia, Bulgaria (15 – 16/05/2018)
3. European Geosciences Union (EGU) General Assembly 2015, Vienna, Austria (12-17/04/2015)
4. 95th American Meteorological Society Annual Meeting (AMS 2015), Phoenix, Arizona, USA (4-8/01/2015)
5. 10th International Congress of the Hellenic Geographical Society, Hellenic Geographical Society, School of Geology A.U.TH., Research Committee A.U.TH., Thessaloniki, Greece (22-24/10/2014)
6. 12th International Conference on Meteorology, Climatology and Atmospheric Physics (COMECAP 2014), University of Crete (Department of Chemistry, Environmental Chemical Processes Laboratory- ECPL), Hellenic Meteorological Society, Mariolopoulos-Kanaginis Foundation for the Environmental Sciences, Heraklion, Greece (28-31/05/2014)
7. 11th International Conference on Meteorology, Climatology and Atmospheric Physics (COMECAP 2012), National and Kapodistrian University of Athens (Department of Environmental Physics - Meteorology and Laboratory of Climatology and Atmospheric Environment), Hellenic Meteorological Society, Mariolopoulos-Kanaginis Foundation for the Environmental Sciences, Athens, Greece (29/05-1/06/2012)

ARTICLES IN PEER-REVIEWED JOURNALS

1. Ban, N., C. Caillaud, E. Coppola, …, **S. Kartsios**, E. Katragkou, …, **2021**: The first multi-model ensemble of regional climate simulations at kilometer-scale resolution, part I: evaluation of precipitation. *Clim Dyn.*, Article In Press, https://doi.org/10.1007/s00382-021-05708-w
2. **Kartsios, S.,** Th. Karacostas, I. Pytharoulis, and A. P. Dimitrakopoulos, **2021**: Numerical investigation of atmosphere-fire interactions during high-impact wildland fire events in Greece. *Atmospheric Research,* 247, 105253, https://doi.org/10.1016/j.atmosres.2020.105253
3. Alexandridis, T., …, **S. Kartsios**, M. Karypidou, E. Katragkou, …, **2021**: Designing AfriCultuReS services to support food security in Africa. *Trans in GIS*, 25(2), pp. 692–720, https://doi.org/10.1111/tgis.12684
4. Lavin-Gullon, A., J. Fernadez, ..., **S. Kartsios**, E. Katragkou, ..., **2021**: Internal variability versus multi-physics uncertainty in a regional climate model. *Int J Climatol.*, 41(S1), pp. E656–E671, https://doi.org/10.1002/joc.6717
5. Akritidis, D., E. Katragkou, A. K., Georgoulias, P. Zanis, **S. Kartsios**, J. Flemming, A. Inness, J. Douros, and H. Eskes, 2020: A complex aerosol transport event over Europe during the 2017 Storm Ophelia in CAMS forecast systems: analysis and evaluation, *Atmos. Chem. Phys.*, 20(21), pp. 13557–13578, 698, https://doi.org/10.5194/acp-2020-467

6. Pavlidis, V., E. Katragkou, A. Prein, A. K. Georgoulias, **S. Kartsios**, P. Zanis, and Th. Karacostas, **2020**: 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. https://doi.org/10.5194/gmd-13-2511-2020
7. Coppola, E., S. Sobolowski, E. Pichelli, …, **S. Kartsios**, E. Katragkou, …, **2020**:. A first-of-its-kind multi-model convection permitting ensemble for investigating convective phenomena over Europe and the Mediterranean. *Clim Dyn*, 55(1-2), pp 3-34. ISSN 0930-7575, https://doi.org/10.1007/s00382-018-4521-8
8. Pytharoulis, I., **S. Kartsios**, I. Tegoulias, H. Feidas, M.M. Miglietta, I. Matsangouras, and Th. Karacostas, **2018**: Sensitivity of a Mediterranean tropical-like cyclone to physical parameterizations. *Atmosphere*, 9(11), 436, https://doi.org/10.3390/atmos9110436
9. Karacostas, Th., **S. Kartsios**, I. Pytharoulis, I. Tegoulias, and D. Bampzelis, **2018**: Observations and modelling of the characteristics of convective activity related to a potential rain enhancement program in central Greece. *Atmospheric Research*, 208, pp 218-228, ISSN 0169-8095, https://doi.org/10.1016/j.atmosres.2017.08.014
10. Knist, S., …, **S. Kartsios**, E. Katragkou, …., **2017**: Land-atmosphere coupling in EURO-CORDEX evaluation experiments. *J. Geophys. Res. Atmos.*, 122(1), 79–103, https://doi:10.1002/2016JD025476
11. Pytharoulis, I., S. Kotsopoulos, I. Tegoulias, **S. Kartsios**, D. Bampzelis, and Th. Karacostas, **2016**: Numerical modelling of an intense precipitation event and its associated lightning activity over northern Greece. *Atmospheric Research*, 169, pp 523-538, ISSN 0169-8095, https://doi:10.1016/j.atmosres.2015.06.019

PEER REVIEWED ARTICLES IN BOOK CHAPTERS

1. Katragkou, E., I. Gkotovou, **S. Kartsios**, V. Pavlidis, K. Tsigaridis, M. Trail, L. Nazarenko and Th. S. Karacostas, **2017**: AUTH Regional Climate Model Contributions to EURO-CORDEX. In: Karacostas T.S., A.F. Bais, P.T. Nastos (Eds.), Perspectives on Atmospheric Sciences. Springer Atmospheric Sciences, pp 741-746, ISBN 978-3-319-35095-0, https://doi.org/10.1007/978-3-319-35095-0_10
2. Vavritsa, M., E. Katragkou, **S. Kartsios**, I. Pytharoulis and Th. S. Karacostas, **2017**: Sensitivity Study of Cloud-Radiation Feedbacks in a Regional Climate Model Simulation Over Europe. In: Karacostas T.S., A.F. Bais, P.T. Nastos (Eds.), Perspectives on Atmospheric Sciences. Springer Atmospheric Sciences, pp 677-682, ISBN 978-3-319-35095-0, https://doi.org/10.1007/978-3-319-35095-0_96
3. Karacostas, Th., I. Pytharoulis, I. Tegoulias, D. Bampzelis, **S. Kartsios**, S. Kotsopoulos, P. Zanis, E. Katragkou and K. Tympanidis, **2017**: The DAPHNE Conceptual Model for Designing a Precipitation Enhancement Project in Thessaly, Greece. In: Karacostas T.S., A.F. Bais, P.T. Nastos (Eds.), Perspectives on Atmospheric Sciences. Springer Atmospheric Sciences, pp 287-293, ISBN 978-3-319-35095-0, https://doi.org/10.1007/978-3-319-35095-0_40
4. Krestenitis, Y., I. Pytharoulis, Theodore S. Karacostas, Y. Androulidakis, C. Makris, K. Kombiadou, I. Tegoulias, V. Baltikas, S. Kotsopoulos and **S. Kartsios**, **2017**: Severe Weather Events and Sea Level Variability Over the Mediterranean Sea: The WaveForUs Operational Platform. In: Karacostas T.S., A.F. Bais, P.T. Nastos (Eds.), Perspectives on Atmospheric Sciences. Springer

Atmospheric Sciences, pp 63-68, ISBN 978-3-319-35095-0, https://doi.org/10.1007/978-3-319-35095-0_9

5. Tegoulias, I., **S. Kartsios**, I. Pytharoulis, S. Kotsopoulos and Th. S. Karacostas, **2017**: The Influence of WRF Parameterisation Schemes on High Resolution Simulations Over Greece. In: Karacostas T.S., A.F. Bais, P.T. Nastos (Eds.), Perspectives on Atmospheric Sciences. Springer Atmospheric Sciences, pp 3-8, ISBN 978-3-319-35095-0, https://doi.org/10.1007/978-3-319-35095-0_1
6. **Kartsios, S.,** Th. Karacostas, I. Pytharoulis, and A.P. Dimitrakopoulos, **2017**: The Role of Heat Extinction Depth Concept to Fire Behavior: An Application to WRF-SFIRE Model. In: Karacostas T.S., A.F. Bais, P.T. Nastos (Eds.), Perspectives on Atmospheric Sciences. Springer Atmospheric Sciences, pp 137—142, ISBN 978-3-319-35095-0, https://doi.org/10.1007/978-3-319-35095-0_20

PEER REVIEWED ARTICLES IN CONFERENCE PROCEEDINGS

1. Alexandridis Th., G. Laneve, E. Katragkou, I. Cherif, G. Ovakoglou, D. Kasampalis, M. C. Karypidou, **S. Kartsios**, I. Pytharoulis, D. Moshou, S. Herrera García, G. Nikulin, and J. Suárez Beltrán, 2019: Enhancing food security through the AfriCultuReS project: Design of crop, water and drought services. **2019** IEEE International Geoscience and Remote Sensing Symposium, IGARSS 2019, Yokohama, Japan, 28 July – 2 August, https://doi.org/10.1109/IGARSS.2019.8900586
2. Presvelou I, **S. Kartsios**, and E. Katragkou, **2019**: Evaluation of a WRF-AUTH euro-cordex 0.11 hindcast regional climate simulation. In Proc.: XXXIIth International Climatology Conference (Association International de Climatologie), Thessaloniki, Greece, 29 May – 1 June
3. **Kartsios S.**, I. Pytharoulis, Th. Karacostas, S. Kotsopoulos, and I. Tegoulias, **2018**: Predictability of convective activity in Central Greece due to topography and land use spatial changes. In: Proc. 14th International Conference on Meteorology, Climatology and Atmospheric Physics (COMECAP 2018), Alexandroupolis, Greece, 15 – 17 October
4. Pytharoulis I., **S. Kartsios**, I. Tegoulias, H. Feidas, I. Matsangouras, Th. Karacostas, and P. Nastos, **2018**: The impact of the model configuration on the simulation of a Mediterranean tropical-like cyclone. In: Proc. 14th International Conference on Meteorology, Climatology and Atmospheric Physics (COMECAP 2018), Alexandroupolis, Greece, 15 – 17 October
5. Kampouri A., **S. Kartsios**, Th. Karacostas, I. Pytharoulis, and F. Athanasiou, **2018**: WRF sensitivity analysis in simulating a heavy rainfall event using different microphysics schemes. In: Proc. 14th International Conference on Meteorology, Climatology and Atmospheric Physics (COMECAP 2018), Alexandroupolis, Greece, 15 – 17 October
6. Karacostas Th., I. Pytharoulis, I. Tegoulias, **S. Kartsios**, D. Bampzelis and K. Tympanidis, **2018**: Near-present and future precipitation characteristics in Thessaly area, being related to the upper-air synoptic circulation types. In: Proc. 14th International Conference on Meteorology, Climatology and Atmospheric Physics (COMECAP 2018), Alexandroupolis, Greece, 15 – 17 October
7. Sofiadis I., E. Katragkou, V. Pavlidis, **S. Kartsios**, K. Tsigaridis, M. Karypidou, D. Melas, **2018**: Assessing the temperature changes in the 21st century over Europe, using regional climate models. In: Proc. 14th Protection & Restoration of the Environment Conference (PRE XIV2018), Thessaloniki, Greece, 3 -6 July

8. **Kartsios S.**, Th. Karacostas, I. Pytharoulis, I. Tegoulias, S. Kotsopoulos, and D. Bampzelis, **2015**: Impact of high resolution elevation and land use data on simulated convective activity over Central Greece. In Proc.: 95th American Meteorological Society Annual Meeting, Phoenix, Arizona, 4-8 January
9. Bampzelis D., V. Spiridonov, **S. Kartsios**, I. Pytharoulis, I. Tegoulias, and Th. Karacostas, **2015**: Numerical simulation of airborne cloud seeding for the DAPHNE precipitation enhancement project in central Greece. In Proc.: 95th American Meteorological Society Annual Meeting, Phoenix, Arizona, 4-8 January
10. **Kartsios S.**, Th. Karacostas, I. Pytharoulis, and A. Dimitrakopoulos, **2014**: Simulating Atmosphere-Fire Interactions using a Coupled Weather – Wildland Fire Model. In: Proc. 10th Congress of the Hellenic Geographical Society, Thessaloniki, Greece, 22-24 October
11. Pytharoulis I., I. Tegoulias, S. Kotsopoulos, D. Bampzelis, **S. Kartsios**, P. Zanis, E. Katragkou, and Th. Karacostas, **2014**: High-resolution WRF hindcasts over central Greece: Characteristics of simulated convective activity and model evaluation. In Proc.: 15th Annual WRF Users' Workshop, Boulder, CO, 23-27 June
12. Tegoulias I., I. Pytharoulis, S. Kotsopoulos, D. Bampzelis, **S. Kartsios**, and Th. Karacostas, **2014**: The influence of WRF parameterisation schemes on high resolution simulations over Central Greece. In Proc.: 15th Annual WRF Users' Workshop, Boulder, CO, 23-27 June
13. **Kartsios S.**, Th. Karacostas, I. Pytharoulis, and A. Dimitrakopoulos, **2014**: Coupled Weather – Wildland Fire Model for fire behaviour interpretation. In: Proc. 12th International Conference on Meteorology, Climatology and Atmospheric Physics (COMECAP 2014), Heraklion, Greece, 28 – 31 May, pp 477-481

CONFERENCE ABSTRACTS

1. Ha-Truong, M., Bastin, S., Drobinski, P., Fita, L., Chiriaco, M., Polcher, J., and Bock, O. and the model providers from FPSCONV community, **2021**: 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
2. Katragkou E., M. C. Karypidou, **S. Kartsios**, S. Gewehr, and S. Mourelatos, **2020**: Building a climate service to support an Early Warning System for the West Nile Virus disease in Greece, EGU General Assembly 2020, Online, 4–8 May 2020, EGU2020-18979, https://doi.org/10.5194/egusphere-egu2020-18979.
3. Akritidis D., E. Katragkou, A. K. Georgoulias, P. Zanis, **S. Kartsios**, J. Flemming, A. Inness, and H. Eskes, **2020**: Ex-hurricane Ophelia and air quality impacts over Europe in CAMS forecast systems, EGU General Assembly 2020, Online, 4–8 May 2020, EGU2020-4061, https://doi.org/10.5194/egusphere-egu2020-4061.
4. Karypidou M.C., E. Katragkou, **S. Kartsios**, A. Papa, A. Tsioka, S. Kalaitzopoulou, G. Sandra, and S. Mourelatos, **2019**: An early-warning system of West Nile Virus risk in northern Greece. European Scientific Conference on Applied Infectious Disease Epidemiology (ESCAIDE), Stockholm, Sweden, 27 – 29 November
5. Lavin-Gullon A., J. Fernadez, S. Bastin, R. M. Cardoso, Th. M. Giannaros, K. Goergen, **S. Kartsios**, E. Katragkou, T. Lorenz, J. Milovac, S. Sobolowski, P. M. M. Soares, and K. Warrach-Sagi, 2019: Case study reproducibility in a convection-permitting WRF multi-physics ensemble: the role of

internal variability. In Proc: International Conference On Regional Climate, ICRC-CORDEX 2019, Beijing, China, 14-19 October.

6. Bastin S., M. Ha, P. Drobinski, M. Chiriaco, L. Fita, O. Bock, J. Polcher, N. Ban, D. Belusic, C. Caillaud, R. Cardoso, E. Coppola, Th. M. Giannaros, K. Goergen, P. Hans-Juergen, O. Hodnebrog, **S. Karsios**, E. Katragkou, A. Lavin-Gullon, T. Lorenz, J. Milovac, E. Pichelli, C. Schär, P. M. M. Soares, P. Stocchi, J. Vergara Temprado, S. Sobolowski, K. Warrach-Sagi, and V. Wulfmeyer, **2019**: Multi-model analysis of triggering of precipitation: impact of model resolution and convection representation, and evolution in a warmer climate. In Proc: International Conference On Regional Climate, ICRC-CORDEX 2019, Beijing, China, 14-19 October.
7. Goergen K., S. Bastin, B. Bourgart, R. M. Cardoso, D. Coquelin, A. Martynov, J. Fernadez, Th. M. Giannaros, O. Hodnebrog, T. Lorenz, J. Milovac, K. Warrach-Sagi, P. M. M. Soares, S. Sobolowski, H. Truhetz, **S. Kartsios**, E. Katragkou, A. Lavin-Gullon, and S. Kollet, **2019**: Soil moisture-temperature coupling in a CORDEX FPS convection-permitting WRF RCM ensemble. In Proc: International Conference On Regional Climate, ICRC-CORDEX 2019, Beijing, China, 14-19 October.
8. **Kartsios S.**, A. Prein, I. Presvelou, and E. Katragkou, **2019**: 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. In Proc: Latsis Symposium 2019, High-Resolution Climate Modeling: Perspectives and Challenges, ETH Zürich, Zürich, Switzerland, 21 – 23 August
9. Goergen K., S. Bastin, B. Bourgart, R. M. Cardoso, D. Coquelin, A. Martynov, J. Fernandez, T. M. Giannaros, Ø. Hodnebrog, **S. Kartsios**, E. Katragkou, T. Lorenz, J. Milovac, K. WarrachSagi, P. Soares, S. Sobolowski, H. Truhetz, and S. Kollet, **2019**: Soil moisture-temperature coupling in a CORDEX FPS convection permitting WRF RCM ensemble. In Proc: Latsis Symposium 2019, High-Resolution Climate Modeling: Perspectives and Challenges, ETH Zürich, Zürich, Switzerland, 21 – 23 August
10. Georgoulias, A., G. Alexandri, E. Katragkou, V. Pavlidis, **S. Kartsios**, and A. Sanchez-Lorenz, **2017**: Evaluation of surface solar radiation trends from WRF simulations over Europe with satellite and ground-based observations. In Proc.: European Geosciences Union (EGU) General Assembly 2017, Vienna, Austria, 23-28 April
11. Katragkou E., M. Vavritsa, **S. Kartsios**, G. Alexandri, I. Pytharoulis, and T. Karacostas, **2016**: Sensitivity study of convective cloud feedbacks on radiation and impacts on precipitation. In Proc: International Conference on Regional Climate, ICRC-CORDEX 2016, Stockholm, Sweden, 17-20 May.
12. Knist S., K. Goergen, A. Colette, R. M. Cardoso, R. Fealy, J. Fernandez, M. Garcia-Diez, **S. Kartsios**, E. Katragkou, S. Mayer, E. van Meijgaard, P. M.M. Soares, S. Sobolowski, G. Szepszo, R. Vautard, K. Warrach-Sagi, V. Wulfmeyer, and C. Simmer, **2016**: Land atmosphere coupling in EURO-CORDEX evaluation experiments. In Proc: International Conference on Regional Climate, ICRC-CORDEX 2016, Stockholm, Sweden, 17-20 May
13. Bampzelis D., I. Pytharoulis, I. Tegoulias, S. Kotsopoulos, **S. Kartsios** and T. Karacostas, **2015**: Numerical modeling of convective activity over central Greece in the framework of the DAPHNE project. In Proc.: 16th Annual WRF Users' Workshop, Boulder, Colorado, USA, 15-19 June
14. Tegoulias I., I. Pytharoulis, T. Karacostas, S. Kotsopoulos, **S. Kartsios** and D. Bampzelis, **2015**: Evaluation of the operational numerical weather predictions of the Daphne project. In Proc.: 16th Annual WRF Users' Workshop, Boulder, Colorado, USA, 15-19 June

15. **Kartsios S.**, S. Kotsopoulos, Th. Karacostas, I. Tegoulias, I. Pytharoulis, and D. Bampzelis, **2015**: Statistical evaluation of the simulated convective activity over Central Greece. In Proc.: European Geosciences Union (EGU) General Assembly 2015, Vienna, Austria, 12-17 April
16. Katragkou E., **S. Kartsios**, M. Vavritsa, G. Alexandri, and Th. Karacostas, **2015**: Impact of subgrid-scale cloud feedbacks to radiation in a climatic simulation over Europe. In Proc.: European Geosciences Union (EGU) General Assembly 2015, Vienna, Austria, 12-17 April
17. Karacostas Th., D. Bampzelis, S. Karipidou, I. Pytharoulis, I. Tegoulias, **S. Kartsios**, S. Kotsopoulos, and N. Pakalidou, **2015**: Comparative analysis of near-present and future synoptic conditions and their contribution to precipitation in central Greece. In Proc.: European Geosciences Union (EGU) General Assembly 2015, Vienna, Austria, 12-17 April
18. Kotsopoulos S., I. Tegoulias, I. Pytharoulis, **S. Kartsios**, D. Bampzelis, and Th. Karacostas, **2015**: The impact of the uncertainty in the initial soil moisture condition of irrigated areas on the spatiotemporal characteristics of convective activity in Central Greece. In Proc.: European Geosciences Union (EGU) General Assembly 2015, Vienna, Austria, 12-17 April.
19. Pytharoulis I., I. Tegoulias, Th. Karacostas, S. Kotsopoulos, **S. Kartsios**, and D. Bampzelis, **2015**: Evaluation of operational numerical weather predictions in relation to the prevailing synoptic conditions. In Proc.: European Geosciences Union (EGU) General Assembly 2015, Vienna, Austria, 12-17 April
20. Tegoulias I., I. Pytharoulis, Th. Karacostas, **S. Kartsios**, S. Kotsopoulos, and D. Bampzelis, **2015**: Performance of the operational high-resolution numerical weather predictions of the Daphne project. In Proc.: European Geosciences Union (EGU) General Assembly 2015, Vienna, Austria, 12-17 April
21. Karacostas Th., I. Pytharoulis, I. Tegoulias, D. Bampzelis, and **S. Kartsios**, **2015**: The "DAPHNE" conceptual model for the design of a precipitation enhancement project in Thessaly, Greece. In Proc.: 5th International Conference on Meteorology and Climatology of the Mediterranean, Konstantinople, Turkey, 2-4 March
22. Tegoulias I., Th. Karacostas, I. Pytharoulis, S. Kotsopoulos, **S. Kartsios**, and D. Bampzelis, **2015**: Using object based methods to verify weather predictions. In Proc.: 5th International Conference on Meteorology and Climatology of the Mediterranean, Konstantinople, Turkey, 2-4 March
23. Kotsopoulos S., I. Tegoulias, I. Pytharoulis, **S. Kartsios**, D. Bampzelis, and Th. Karacostas, **2014**: Impact of irrigations on simulated convective activity over Central Greece: A high resolution study. In Proc.: AGU Fall Meeting, San Francisco, 15-19 December
24. Tegoulias I., I. Pytharoulis, S. Kotsopoulos, **S.Kartsios**, D. Bampzelis, and Th.Karacostas, **2014**: Numerical Weather Predictions Evaluation Using Spatial Verification Methods. In Proc.: AGU Fall Meeting, San Francisco, USA, 15-19 December
25. Tegoulias I., I. Pytharoulis, S. Kotsopoulos, D. Bampzelis, **S. Kartsios**, and Th. Karacostas, **2014**: Sensitivity of high resolution simulations over central Greece to WRF parameterizations. In Proc.: 14th EMS Annual Meeting & 10th European Conference on Applied Climatology (ECAC), Prague, Czech Republic, 06-10 October

PARTICIPATION IN HPC PROJECTS

HPC System: **ARIS (Advanced Research Information System)**, GRNET, Athens, Greece

Production Calls:

1. **ELUCE** (*Effects of past and future Land Use Changes on European climate*), PR010014_thin, 2600000 core hrs (11/03/2021 – 11/03/2022)
2. **FineCoCPS** (*Fine and coarse climate convective permitting simulations over Europe*), PR009020_thin, 1390000 core hrs (03/08/2020 – 03/08/2021)
3. **ReCliSA** (*Regional Climate Simulations over Africa*), PR008045_thin, 700000 core hrs (13/12/2019 – 13/12/2020)
4. **SatLUC** *(European regional climate simulations driven by satellite land use change data)*, PR007033_thin, 1000000 core hrs (10/05/2019 – 10/05/2020)
5. **LUCE** *(Impact of Land Use Changes on regional and local climate in Europe)*, PR005025_thin, 700000 core hrs (08/02/2018 – 08/02/2019)
6. **COPERATE** (*COnvective PERmitting Regional ClimATE Simulations*), PR003005, 19000000 core hrs (28/02/3017 – 28/02/2018)
7. **COrFIRE** (*ClOud Resolving climate and FIRE Simulations*), PR002009, 500000 core hrs (14/6/2016 – 14/6/2017)
8. **VERGINA** (*Very high resolution regional climate simulations over Europe*), PR002046, 1400000 core hrs (14/6/2016 – 14/6/2017)
9. **COrRECT** (*Cloud Resolving Climate Simulations*), PR001009, 1400000 core hrs (23/10/2015 – 23/04/2016)
10. **REGINA** (*Regional climate simulations over Europe*), PR001036,core hrs (20/10/2015 – 20/04/2016)

Preparatory Calls:

1. **LESinFIRE** (*Large Eddy Simulations in wildland FIREs*), PA001010, 100000 core hrs (03/11/2015 – 03/01/2016)

ADDITIONAL INFO

- Presenter and instructor on "PRACE Training Centre course on Meteorological and climate modelling", GRNET, PRACE-5ip, Athens, Greece, 16/04/2019 (https://events.prace-ri.eu/event/797/, last access 20/03/2020)
- Presenter and instructor on "PRACE Training Centre course on Meteorological and climate modelling", GRNET, PRACE-5ip, Athens, Greece, 4/07/2018 (https://events.prace-ri.eu/event/745/overview, last access 20/03/2020)
- Presenter and instructor on "VI-SEEM NAT-GR CL: National training event in Greece", GRNET, VI-SEEM, KE.DE.A, Thessaloniki, Greece, 11-12/12/2017 (https://events.hpc.grnet.gr/event/60/timetable/#20171211, last access 20/03/2020)
- HCAA (Greek National Civil Aviation Authority) Certified Instructor on UAS (Unmanned Aircraft System) theoretical training (3D Drone Academy)