KOTRONI Vassiliki

Personal Information

DATE - PLACE OF BIRTH:	20 November 1965 in Athens, Greece
PROFESSION:	Research Director
PROFESSIONAL ADDRESS:	National Observatory of Athens, Institute of Environmental Research and Sustainable Development Lofos Koufou, P. Penteli, 15236, Athens, Greece Tel : 30 210 3490826, E-mail:kotroni@noa.gr

Academic Qualifications

1993: Ph. D. thesis in Meteorology, University of Clermont Ferrand, France.

1989: DEA in Meteorology and Oceanography, University Pierre et Marie Curie, Paris France.

1988: B. Sc in Physical Sciences. National University of Athens, Greece.

Scholarships

1990-1993: Scholarship from the French Ministry of Research and Technology for PhD research.

Professional Experience

- 2011 – today: Director of Research IERSD/National Observatory of Athens, Greece.
- 2006 – 2011: Associate Researcher IERSD/National Observatory of Athens, Greece.
- 2002 – 2006: Assistant Researcher IERSD/National Observatory of Athens, Greece.
- 1999 – 2002: Researcher Grade D, IERSD/National Observatory of Athens, Greece.
- 1993-1999: Research Scientist, Laboratory of Meteorology, School of Physic, University of Athens, Greece.

Areas of expertise

- Dynamic meteorology, numerical weather prediction, weather monitoring, atmospheric electricity, climatology, dynamics and societal impacts of weather related natural hazards, weather and climate services development.
- Scientific coordinator of operational weather prediction at NOA based on MM5, WRF and WRF-CHEM models and of the related activities.
- Scientific coordinator of the ZEUS lightning detection network.

Participation in National and International Committees

- National Delegate at the following COST (Cooperation Scientifique et Technique) European Committees:
  1994-1998: COST 617: “Stationary sources of urban air pollutants”
  1995-1998: COST 75: “Advanced weather radar systems”
  1999-2002: COST 717: “Use of radar observations in hydrological and NWP models”

2016-2021: COST: “Atmospheric electricity: coupling with climate and other earth system components” (deputy delegate)

- 2003-2004: Member of the National delegation to IPCC (Intergovernamental Panel for Climate Change).
- 2004-2006: Member of the European Grid Applications Advisory Board (EGAAP) of the EU.
- 2003-2014: Member of the national committee Hellasgrid (On Grid Computer Applications).
- Member of the Scientific Steering Committee of MEDEX project endorsed by the WMO World Weather Research Program (WWRP) for the study of high impact weather over the entire Mediterranean basin.
- Member of the Scientific Steering Committee of the Plinius Conferences on Mediterranean Storms.
- 2013-2018: Member of the International Scientific Steering Committee of the HYMEX (HYdrological cycle in Mediterranean EXperiment) project.
- 2018-2019: Member of the General Assembly of the Hellenic Foundation for Research and Innovation (http://www.elidek.gr/en/homepage/).
- 2020-today: Member of the international committee Global Climate Observing Systems (GCOS) Task Team on Lightning Observations for Climate Applications (TTLOCA) of the World Meteorological Organization (WMO).

Other Activities

- **Editor**

2006: Guest Editor of the EGU journal Advances in Geosciences.
2010: Guest Editor of the journal “Earth Science Informatics”, Special Issue entitled «Virtual organizations and application services for earth science on grids».
2014-2019: Editor in Annales Geophysicae.
2015-now: Editor in Natural Hazard and Earth System Sciences.
2019-now: Member of the Editorial Board in Atmosphere.

- **Reviewer (International Journals)**
  - Advances in Geosciences
  - Applied Energy
  - Atmospheric Environment
  - Atmospheric Research
  - Atmospheric Measurement Techniques – Discussions
  - Bulletin of the American Meteorological Society
  - Climate Research
  - Global Nest
  - International Journal of Climatology
  - Journal of Applied Meteorology and Climatology
  - Journal of Atmospheric and Oceanic Technology
  - Journal of Climate
  - Journal of Geophysical Research

- Journal of Lightning
- Meteorologische Zeitschrift
- Monthly Weather Review
- Natural Hazards and Earth System Sciences
- Physics and Chemistry of the Earth
- Quarterly Journal of the Royal Meteorological Society
- Theoretical and Applied Climatology

• Reviewer of Scientific proposals

- 2000: EU, 5th Framework Program
- 2004: EU, 6th Framework Program
- 2004-2006: Greek Secretariat for Research and Technology.
- 2006-2008: Cyprus Institute for Promotion of Research.
- 2009: EU, 7th Framework Program
- 2012-2013-2014-2015-2016: ANR, France
- 2017: State Scholarships Foundation (Greece), Israel Science Foundation (Israel), Fundação para a Ciência e a Tecnologia (Portugal)
- 2017: National Science Centre, Poland
- 2018: EAA Grants
- 2019: H2020-MSCA (EU), JPI Climate & Oceans (EU), Israel Science Foundation (Israel), GSRT (Greece)
- 2020: EAA Grants ; Program FCT - Aga Khan, Portugal; ELIDEK, PostDoc, Greece; PCE2020, Executive Agency for Higher Education, Research, Development and Innovation Funding, Romania
- 2022: UEFISCDI (The Executive Agency for Higher Education, Research, Development and Innovation Funding, Romania), EAA Grants

• Reviewer of Institutes

- 2017: Member of the Panel for the evaluation of the Laboratoire Meteorologie Dynamique (LMD), Paris, France

• Organisation of International Conferences

1997: Member of the Organising Committee of the international Symposium "Symposium on Regional Weather Prediction on Parallel Computer Environments", 15-17 October 1997, Athens.

2000: Convenor at the European Geophysical Union General Assembly.

2001-today: Member of the Steering Committee of the EGU (Topical Conference) Plinius Conference on Mediterranean Storms.

2005: Chair of the Organising Committee of the “7th Plinius Conference on Mediterranean Storms”, 5-7 October, Rethymno, Crete, Greece.

2010: Member of the Organising Committee of the “12th Plinius Conference on Mediterranean Storms”, 1-4 September, Corfu, Greece.

2012, 2014, 2016, 2021: Member of the Scientific Committee of the International Conference on Meteorology, Climatology and Atmospheric Physics, COMECAP 2012 (Athens, 29 May – 1 June 2012), COMECAP 2014 (Heraklion, 28-31 May

2014), COMECAP 2016 (Thessaloniki, 19-21 September 2016), COMECAP 2021 (Ioannina, 26-29 September 2021).

2015: Chair of the Organising Committee of the "9th Hymex Workshop, 21-25 September, Mykonos, Greece.

2017, 2018: Member of the Steering Committee of the 10th Hymex Workshop (4-7 July 2017, Barcelona, Spain), 11th Hymex Workshop (29 May – 2 June 2018, Lecce, Italy).

2018: Member of the Plinius Steering Committee and of the Scientific and program committee, EGU Topical Conference, Montpellier, 9-12 October 2018.

2019: Co-chair of CFMIP 2019 Meeting on Clouds, Precipitation, Circulation, and Climate Sensitivity, 30 Sep – 4 Oct, Mykonos, Greece.

2024: Co-chair of 18th the Plinius Conference on Mediterranean Risks, EGU Topical Conference, Chania, Greece, 30 September - 3 October 2024.

- **Major contributions to the early careers of excellent researchers**

Supervisor of post-doc researchers

- Dr. Eric Defer (2003-2005): now CNRS Researcher at Laboratoire d'Aérologie, Toulouse, France.
- Dr. Emmanouil Flaounas (2012-2018): now Assistant Researcher at HNMR
- Dr. Theodore Giannaros (2016-2019): now Assistant Researcher at IERSD/ NOA
- Dr. Athanasios Karagiannidis (2017-2019): Research Associate at NOA
- Dr. Kyriakoula Makri (2020-2021): IKY Postdoc Fellow at NOA
- Dr. Georgios Papavasileiou (2021-2022): Research Associate at NOA
- Dr. Georgios Emmanouil (2021-2022): Research Associate at NOA
- Dr. Eleni Dragozi (2019-2023): Research Associate at NOA
- Dr. Stavros Dafis (2021-now): Postdoc Fellow at NOA
- Dr. Elisavet Galanaki (2016-2023): Research Associate at NOA

Supervision of PhD thesis

- 2006-2010: Dr. N. Mazarakis, University of Patras
- Co-supervision of PhD thesis (Member of advisory committee)
- 2008-2014: Dr. O. Sintosi, University of Ioannina
- 2009-2015:Dr. K.M. Fameli, University of Athens
- 2009-2015: Dr. I. Markonis, National Technical University of Athens
- 2014-2018: E. Galanaki, University of Patras
- 2018-today: D. Haskos, University of Ioannina

- **Examples of leadership in industrial innovation or design**

- Co-coordinator (with Dr. K. Lagouvardos) of the concept, development and operation of **www.meteo.gr**. This activity integrates specialized forecasts and observations over Greece, it was founded in 2002 and during the last years is constantly among the top-5 (in terms of average daily visitors) sites in the Greek internet (ref: www.ened.gr). This activity has been self-financed since 2006 and has attracted funding from the private sector that exceeds in total 4.000.000 Euros.
- Coordinator of the **ZEUS** lightning detection network comprising 6 sensors deployed in Europe and northern Africa (operating since 2005). This is among the few

instrumentation/equipment that a Greek Institution has deployed in permanent positions outside the Greek territory.

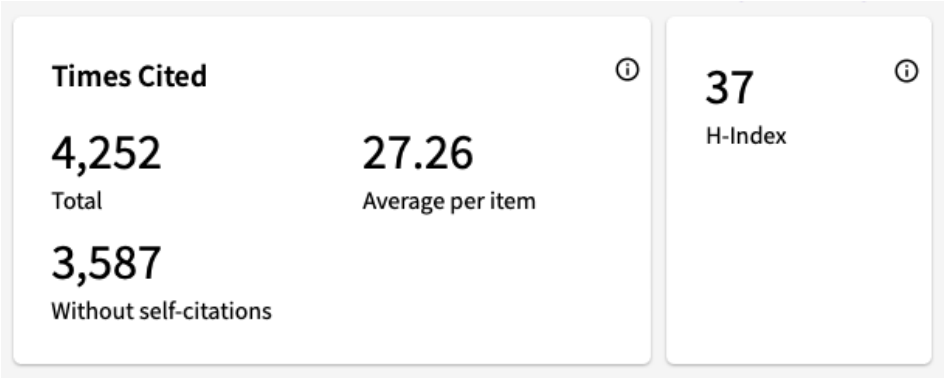
- **Service in Administrative positions**

2013-2015: Deputy Director of the Institute of Environmental Research and Sustainable Development of the National Observatory of Athens (NOA).

2023-2024: Member of the Scientific Board of the Institute of Environmental Research and Sustainable Development (IERSD/NOA).

2022-2026: Member of the Board of Directors of the National Observatory of Athens (NOA), elected representative of EAA research staff

Citation Report (Web of Science, 1o/2024)



Publications in International Journals

1. Kotroni V., and C. Amory-Mazaudier, 1993: "Influence of orographic and canopy conditions on friction velocities observed during frontal events using Doppler sodar observations". *Journal of Applied Meteorology*, **32**, 506-521.
2. Beyrich F., and V. Kotroni, 1993: "Estimation of surface stress over a forest from sodar measurements and its use to parameterize the stable boundary layer height". *Boundary Layer Meteorology,* **66**, 93-103.
3. Bougeault P., A. Jansa Clar, J.L. Attie, I. Beau, B. Benech, R. Benoit, P. Bessemoulin, J.L. Caccia, B. Carissimo, J.L. Champeaux, M. Crochet, A. Druilhet, P. Durand, E. Elkhalfi, A. Genoves, M. Georgelin, K.P. Hoinka, V. Klaus, E. Koffi, V. Kotroni, C. Mazaudier, J. Pelon, M. Petitdidier, Y. Pointin, D. Puech, E. Richard, T. Satomura, J. Stein, and D. Tannhauser, 1993: "The atmospheric momentum budget over a major mountain range: First results of the PYREX field program". *Annales Geophysicae*, **11**, 395-418.
4. Kotroni V. and Lagouvardos K., 1993: "Low-level jet streams associated with atmospheric cold fronts - seven case studies from the FRONTS 87 experiment". *Geophysical Research Letters*, **20**, 1371-1374.
5. Kotroni V., Y. Lemaitre, and M. Petitdidier, 1994: "Dynamics of a low-level jet observed during the FRONTS 87 experiment". *Quarterly Journal of Royal Meteorological Society,* **120**, 277-303.
6. Kotroni V., C. Amory-Mazaudier, and K. Lagouvardos, 1994: "Doppler sodar observations of a cold front during the PYREX experiment: orographic effects". *International Journal of Remote Sensing*, **15**, 489-497.

7. Kotroni V. and Lagouvardos K., 1994: "Dynamic structure and evolution of a prefrontal boundary layer: Three case studies of FRONTS 87". *Atmospheric Research,* **35**, 55-70.
8. Lagouvardos K. and Kotroni V., 1995: "Upper-level frontogenesis: two case-studies from the FRONTS 87 experiment". *Monthly Weather Review*, **123**, 1197-1206.
9. Kotroni V., Lagouvardos K. and Petitididier M., 1995: "A comparison of wind profiler and sounding observations during a frontal event". *International Journal of Remote Sensing*, **16**, 1685-1695.
10. Kassomenos P., Kotroni V. and Kallos G., 1995: "Analysis of the climatological and air quality observations from the Greater Athens Area". *Atmospheric Environment*, **29**, 3671-3688.
11. Lagouvardos K., Kotroni V., Dobricic S., Nickovic S. and Kallos G., 1996: "On the storm of 21-22 October 1994 over Greece: Observations and model results". *Journal of Geophysical Research*, **101** (D21), 26217-26226.
12. Lagouvardos K., Kotroni V., and Kallos G., 1996: "Exploring the effects of different types of model initialisation: simulation of a severe air-pollution episode in Athens, Greece". *Meteorological Applications*, **3**, 147-155.
13. Kotroni V., Kallos G., and Lagouvardos K., 1997: "Convergence zones over the Greek Peninsula and associated thunderstorm activity". *Quarterly Journal of Royal Meteorological Society,* **123**, 1961-1984.
14. Peleg, M., M. Luria, G. Sharf, A. Vanger, G. Kallos, V. Kotroni, K. Lagouvardos, and M. Varinou, 1997: "Observational Evidence of an Ozone Episode over the Greater Athens Area". *Atmospheric Environment*, **31**, 3969-3983.
15. Kallos G., V. Kotroni, K. Lagouvardos, and A. Papadopoulos, 1998: "On the long-range transport of air pollutants from Europe to Africa". *Geophysical Research Letters*, **25**, No 5, 619-622.
16. Kotroni V., Lagouvardos K., G. Kallos and Y. Lemaitre, 1998: "Modelling study of the IOP2 cold front of FRONTS 87 Experiment". *Meteorological Applications,* **5***,* 297-306.
17. Lagouvardos K., V. Kotroni, and G. Kallos, 1998: "An extreme cold surge over the Greek Peninsula". *Quarterly Journal of Royal Meteorological Society,* **124**, 2299-2328.
18. Kotroni V., G. Kallos, K. Lagouvardos, M. Varinou, and R. Walko, 1999: "Numerical simulations of the meteorological and dispersion conditions during an air pollution episode over Athens, Greece". *Journal of Applied Meteorology*, **38**, 432-447.
19. Kotroni V., K. Lagouvardos, G. Kallos, and D. Ziakopoulos, 1999: "Severe flooding over central and southern Greece associated with pre-cold frontal orographic lifting". *Quarterly Journal of Royal Meteorological Society*, **125**, 967-991.
20. Kotroni V., K. Lagouvardos and G. Kallos, 1999: "Model investigation of a cloud band associated with a cold front over Eastern Mediterranean". *Physics and Chemistry of the Earth, Vol. 24,* **6**, 633-636*.*
21. Lagouvardos K., V. Kotroni, S. Nickovic, D. Jovic, and G. Kallos, 1999: "Observations and model simulations of a winter sub-synoptic vortex over the Central Mediterranean". *Meteorological Applications,* **6**, 371-383.
22. Lagouvardos K. And V. Kotroni, 1999: "Aspects of the 25-26 March 1998 storm over Greece " *Weather,* **54**, 154-160.
23. Lagouvardos, K., V. Kotroni., G. Kallos, and S.T. Rao, 2000: "An analysis of the meteorological and air quality conditions during an extreme ozone episode over the Northeastern USA". *Intenational Journal of Environment and Pollution*, **14**, 364-373*.*

24. Varinou M., G. Kallos, V. Kotroni, and K. Lagouvardos, 2000: "The influence of the lateral boundaries and background concentrations on limited area photochemical model simulations". *Intenational Journal of Environment and Pollution*, **14**, 354-363.
25. Lagouvardos K., and Kotroni V., 2000: "Use of METEOSAT Water-Vapour images for the diagnosis of a vigorous stratospheric intrusion over Central Mediterranean". *Meteorological Applications*, 7, 205-210.
26. Wanger A., Peleg M., Sharf G., Mahrer Y., Dayan U., Kallos G., Kotroni V., Lagouvardos K., Varinou M., Papadopoulos A., and Luria M., 2000: "Some observational and modelling evidence of long range transport of air pollutants from Europe towards the Israeli coast". *Journal of Geophysical Research*, Vol **105**, No D6, 7177-7186.
27. Kotroni V. and K. Lagouvardos, 2001: Precipitation forecast skill of different convective parameterization and microphysical schemes: application for the cold season over Greece. *Geophysical Research Letters,* Vol. **28**, No 10, 1977-1980.
28. Kotroni V., K. Lagouvardos and D. Lalas, 2001: The effect of Crete island on the Etesian winds over the Aegean Sea. *Quarterly Journal of Royal Meteorological Society*, **127**, 1917-1938.
29. Anadranistakis M., K. Lagouvardos, V. Kotroni and K. Skouras, 2002: Combination of Kalman filter and an empirical method for the correction of near-surface temperature forecasts: application over Greece. *Geophysical Research Letters, Vol. 29,* **16***,* 1776-1779.
30. Koussis A., K. Lagouvardos, K. Mazi, V. Kotroni, D. Sitzmann, J. Lang, H. Zaiss, A. Buzzi, and P. Malguzzi, 2003: Flood forecasts for an urban basin with an integrated hydro-meteorological model. *Journal of Hydrological Engineering*, **8**, 1-11.
31. Lagouvardos K., V. Kotroni, A. Koussis, C. Feidas, A. Buzzi, P. Malguzzi, 2003: The meteorological model BOLAM at the National Observatory of Athens: assessment of two-year operational use. *Journal of Applied Meteorology*, **42**, 1667-1678.
32. Anadranistakis M., K. Lagouvardos, V. Kotroni, H. Elefteriadis, 2004: Correcting temperature and humidity forecasts using kalman filtering: potential for agricultural protection in Northern Greece. *Atmospheric Research,* **71(3)**, 115-125.
33. Katsanos D., K. Lagouvardos, V. Kotroni and G.J. Huffmann, 2004: Statistical evaluation of MPA-RT high-resolution precipitation estimates from satellite platforms over the Central and Eastern Mediterranean. *Geophysical Research Letters,* **31**, art. no. L06116.
34. Kotroni V. and K. Lagouvardos, 2004: Evaluation of MM5 high-resolution real-time forecasts over the urban area of Athens, Greece. *Journal of Applied Meteorology*, **43**, 1666-1678.
35. Medaglia C. M., C. Adamo, F. Baordo, S. Dietrich, S. Di Michele, V. Kotroni, K. Lagouvardos, A. Mugnai, S. Pinori, E. A. Smith, G. J. Tripoli, 2005: Comparing microphysical/dynamical outputs by different cloud resolving models: impact on passive microwave precipitation retrieval from satellite. *Advances in Geosciences*, **2**, 195-199.
36. Lagouvardos K. and V. Kotroni, 2005: Improvement of high resolution weather forecasts through humidity adjustment, based on satellite data. *Quarterly Journal of Royal Meteorological Society,* **131***, 2695-2712.*

37. Feidas, H., K. Lagouvardos, V. Kotroni, and C. Cartalis, 2005: Application of two satellite infrared techniques in support of precipitation forecats of a NWP model. *International Journal of Remote Sensing*, **26**,5393-5417.
38. Defer E., K Lagouvardos, and V. Kotroni, 2005: Lightning Activity in Eastern Mediterranean Region", *JGR-Atmospheres*, **110**, D24210.
39. Kotroni V., K. Lagouvardos, E. Defer, S. Dietrich, F. Porcù, C.M. Medaglia, and M. Demirtas, 2005: The Antalya 5 December 2002 storm: Observations and model analysis. *Journal of Applied Meteorology*, **45**, 576-590.
40. Lagouvardos K., V. Kotroni, E. Defer, 2006: Synoptic environment related to rapid cyclogenesis in the Eastern Mediterranean, *Advances in Geosciences*, **7**, 115-119.
41. Mazarakis, N., V. Kotroni, K. Lagouvardos, S. Music, S. Nickovic, 2006: Impact of the assimilation of conventional data on the quantitative precipitation forecasts in the Eastern Mediterranean, *Advances in Geosciences*, **7**, 237-242.
42. Katsanos, D., N. Viltard, K. Lagouvardos, V. Kotroni, 2006: Performance of a rain retrieval algorithm using TRMM data in the Eastern Mediterranean, *Advances in Geosciences*, **7**, 321-325.
43. Katsanos D., K. Lagouvardos, V. Kotroni and A. Argiriou, 2007: Combined analysis of rainfall and lightning data produced by mesoscale systems in the Central and Eastern Mediterranean, *Atmospheric Research, 83, 55-63.*
44. Akylas E., V. Kotroni and K. Lagouvardos, 2007: Sensitivity of high resolution operational weather forecasts to the choice of the planetary boundary layer scheme, *Atmospheric Research, 84, 49-57.*
45. Mirasgedis S., Y. Sarafidis, E. Georgopoulou, V. Kotroni, K. Lagouvardos, and D. P. Lalas, 2007 : Modeling framework for estimating impacts of climate change on electricity demand at regional level: Case of Greece. *Energy Conversion and Management, 48, 1737-1750.*
46. Lagouvardos K., and V. Kotroni, 2007: TRMM and lightning observations of a low-pressure system over the Eastern Mediterranean. *Bulletin of the American Meteorological Society,* 88, 1363–1367.
47. Katsanos D., Lagouvardos K., Kotroni V. and Argiriou A., 2007: Relationship of lightning activity with microwave brightness temperatures and spaceborne radar reflectivity profiles in the Central and Eastern Mediterranean. *Journal of Applied Meteorology, 46, 1901-1912*.
48. Lagouvardos K., V. Kotroni and E. Defer, 2007: The 21-22 January 2004 explosive cyclogenesis over the Aegean Sea: observations and model analysis. *Quarterly Journal of Royal Meteorological Society, 133, 1519-1531.*
49. Mugnai A., Eric A. Smith, Gregory J. Tripoli, Stefano Dietrich,Vassiliki Kotroni, Kostas Lagouvardos, and Carlo M. Medaglia, 2008: Explaining discrepancies in passive microwave cloud-radiation databases in microphysical context from two different cloud-resolving models *Meteorology and Atmospheric Physics, 101, 127-145.*
50. Kotroni V., Lykoudis S, Lagouvardos K., and Lalas D, 2008: A fine resolution regional climate change experiment for the Eastern Mediterranean: analysis of the present climate simulations. *Global and Planetary Change*, 64, 93-104.
51. Kotroni V., and K. Lagouvardos, 2008: Lightning occurrence in relation with elevation, terrain slope and vegetation cover over the Mediterranean. *JGR-Atmospheres*, 113, D21118; https://doi.org/10.1029/2008JD010605.

52. Bloom A, V. Kotroni and K. Lagouvardos, 2008: Climate change impact of wind energy availability in the Eastern Mediterranean using the regional climate model PRECIS *Natural Hazards and Earth System Sciences (NHESS),* 8, 1249-1257.
53. Mazarakis N., V. Kotroni, K. Lagouvardos and A.A. Argiriou, 2008: Storms and Lightning Activity in Greece during the Warm Periods of 2003-2006. *Journal of Applied Meteorology and Climatology*, 47, 3089–3098.
54. Vincendon B., V. Ducrocq , S. Dierer, V Kotroni , M.Lelay , M. Milelli, A. Quesney, G-M. Saulnier, D. Rabuffetti, L. Bouilloud, K. Chancibault, S. Anquetin, K. Lagouvardos, P. Steiner, 2009: Flash Flood Forecasting Within The Preview Project : Value Of High-Resolution Hydrometeorological Coupled Forecast, *Meteorology and Atmospheric Physics,* 103 (1-4), pp. 115-125.
55. Petrova S., R. Mitzeva, V. Kotroni, J. Latham and E. Peneva, 2009: Analyses of summer lightning activity and precipitation in the Central and Eastern Mediterranean. *Atmospheric Research*, *91, 453-458.*
56. Mazarakis, N., V. Kotroni, K. Lagouvardos and A.A. Argiriou, 2009: The sensitivity of numerical forecasts to convective parameterization during the warm period and the use of lighting data as an indicator for convective occurrence. *Atmospheric Research* 94 (4), pp. 704-714.
57. Koletsis I., K. Lagouvardos, V. Kotroni, and A. Bartzokas, 2009: Numerical study of a downslope windstorm in Northwestern Greece. *Atmospheric Research* 94 (2), pp. 178-193.
58. Katsanos D.K., K. Lagouvardos and V. Kotroni, 2009: Relationship between lightning and model simulated microphysical parameters over the central and eastern Mediterranean, *Natural Hazards and Earth System Sciences (NHESS),* 9, 1719-1726.
59. Lagouvardos K., V. Kotroni, H-D Betz and K. Schmidt, 2009: A comparison of lightning data provided by ZEUS and LINET networks over Western Europe. *Natural Hazards and Earth System Sciences*, 9, 1713-1717.
60. Koletsis I., K. Lagouvardos, V. Kotroni and A. Bartzokas, 2009: The interaction of northern wind flow with the complex topography of Crete Island – Part I: Observational study, *Natural Hazards and Earth System Sciences (NHESS)*, 9, 1845-1855.
61. Yoav Yair, Barry Lynn, Colin Price, Vassiliki Kotroni, Konstantinos Lagouvardos, Efrat Morin, Alberto Mugnai and Maria-Carmen Llasat, 2010: Predicting the potential for lightning activity in Mediterranean storms based on the Weather Research and Forecasting (WRF) model dynamic and microphysical fields. *JGR-Atmospheres*, 115, D04205; https://doi.org/10.1029/2008JD010868.
62. Bartzokas A., V. Kotroni, K. Lagouvardos, C.J. Lolis, A. Gkikas, and M.I. Tsirogianni, 2010: Weather forecast in north-western Greece: RISKMED warnings and verification of MM5 model. *Natural Hazards and Earth System Sciences*, 10, 1–12.
63. Williams E., W. Lyons, Y. Hobara, V. Mushtak, N. Asencio, R. Boldi, J. Bór, S. Cummer, E. Greenberg, M. Hayakawa, R. Holzworth, V. Kotroni, J. Li, C. Morales1, T. Nelson, C. Price, B. Russell, G. Sátori, K. Shirahata, Y. Takahashi, K. Yamashita, 2010: Ground-based detection of sprites and their parent lightning flashes over Africa during the 2006 AMMA campaign. *Quarterly Journal of Royal Meteorological Society,* **136,** 257–271.

64. Lagouvardos K., E. Floros and V. Kotroni, 2010: A Grid-enabled Regional-scale Ensemble Forecasting System in the Mediterranean. *Journal of Grid Computing*, 8:181–197.
65. Llasat, M.C., M. Llasat-Botija, M.A. Prat, F. Porcú, C Price, A. Mugnai, K. Lagouvardos, V.Kotroni, D. Katsanos, S. Michaelides, Y. Yair, K. Savvidou, K. Nicolaides, 2010: High-impact floods and flash floods in Mediterranean countries: the FLASH preliminary database. *Advances in Geosciences*, 23, 47-55.
66. Harats, N.; Ziv, B.; Kotroni, V.; Yair, Y.; Lynn, B.; Dayan, U., 2010: Lightning and rain dynamic indices as predictors for flash floods events in the Mediterranean, *Advances in Geosciences,* 23, 57-64.
67. Savvidou K., K. Lagouvardos, S. Michaelides, V. Kotroni, and P. Constantinides, 2010: Verification of the BOLAM weather prediction model over the area of Cyprus, *Advances in Geosciences*, 23, 93–100.
68. Bartzokas A., J. Azzopardi, L. Bertotti, A. Buzzi, L. Cavaleri, D. Conte, S. Davolio, S. Dietrich, A. Drago, O. Drofa, A. Gkikas, V. Kotroni, K. Lagouvardos, C.J. Lolis, S. Michaelides, M. Miglietta, A. Mugnai, S. Music, K. Nikolaides, F. Porcù, K. Savvidou, and M.I. Tsirogianni, 2010: The RISKMED project: Philosophy, methods and products. *Natural Hazards and Earth System Sciences*, 10, 1393-1401.
69. Koletsis I., K. Lagouvardos, V. Kotroni and A. Bartzokas, 2010: The interaction of northern wind flow with the complex topography of Crete Island – Part II: Numerical study, *Natural Hazards and Earth System Sciences*, 10, 1115-1127.
70. Kotroni V., E.Floros, K. Lagouvardos, G. Pejanovic, L. Ilic, and M. Zivkovic, 2010: Multi-model multi-analysis ensemble weather forecasting on the Grid for the South Eastern Mediterranean Region, *Earth Science Informatics*, 3, 209-218.
71. Retalis A., D. Paronis, K. Lagouvardos and V. Kotroni, 2010: The heat wave of June 2007 in Athens, Greece - Part 1: Study of satellite derived land surface temperature. *Atmospheric Research*, 98, 458-46.
72. Kotroni V., K. Lagouvardos, and A. Retalis, 2011: The heat wave of June 2007 in Athens, Greece - Part 2: Modelling study and sensitivity experiments. *Atmospheric Research,* 100, 1-11.
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Projects – Acting as Coordinator or PI/Partner

Title	Duration	Budget (Euros)
COORDINATOR OF INTERNATIONAL PROJECTS		
1. "Drought and fIre obServatory and eArly waRning systeM (DISARM)". Funding: Transnational Cooperation Programme Interreg Balkan-Mediterranean 2014-2020.	2017-2019	1,028,000 (NOA: 355,900)
2. "Cyclone processes leading to extreme rainfall in the Mediterranean region — ExMeCy". Funding: H2020-MSCA-IF-2014.	2016-2018	155,783
3. "Assessment of weather and climatic risks in Greece based on observational networks". Funding: World Bank.	2021	32,000
4. "EXCLIMATE-GR : detecting and attributing the extreme weather events of the current climate with a regional focus". Funding: European Climate Foundation.	2021-2023	55,000
5. "BIOMETEO-GR: Analysis of the biometeorological conditions in Greece in the current and future	2022-2023	58,000

climate » Funding: European Climate Foundation.		
6. “SNOWCLIM: Snow cover variability and trends in the current and future climate for the Balkan region and relation of these trends with impacts » Funding: European Climate Foundation.	2023-2024	71,000
PARTNER IN INTERNATIONAL PROJECTS		
1. “EURORISK.PREVIEW”. Funding : Programme Aeronautic & Space second call, area GMES.	2005-2008	162,858
2. “Weather Risk Reduction in the Central and Eastern Mediterranean – RISKMED”. Funding: INTERREG III, STRAND B – ARCHIMED.	2006-2008	101,100
3. “SEE-GRID eInfrastructure for Regional eScience”. Funding: INFRA-2007-1.2.2, Integrating Activities – ICT-based e-Infrastructures.	2008-2010	50,838
4. “Floods and Fire risk assessment and management – FLIRE”. Funding: LIFE11 ENV/GR/975.	2012-2015	131,117
5. “VRE for regional Interdisciplinary communities in Southeast Europe and the Eastern Mediterranean - VI-SEEM”. Funding: H2020-EINFRA-2014-2015.	2015-2018	64,858
6. “Climate change management through adaptation and mitigation— AdaptTM”. Funding: Erasmus+ Programme.	2017-2021	6,147
7. “Cyprus Flood Forecasting System — CyFFORS”. Funding: THE RESEARCH PROMOTION FOUNDATION PROGRAMMES FOR RESEARCH, TECHNOLOGICAL DEVELOPMENT AND INNOVATION (Cyprus).	2019-2021	23,800
8. “TRIPGIFT: Training pupils on geosciences through Virtual Field Trips”. Funding: EU, Erasmus+.	2022-2025	23,659
COORDINATOR OF NATIONAL PROJECTS		
1. “Improvement of prediction of meteorological and climate parameters in the Eastern Mediterranean”, Excellency in Greek Research Centres, Funding: Greek Secretariat for Research and Technology.	2002-2005	500,000
2. “Rainfall estimation by satellites and combined use with numerical weather prediction models”. Funding: Greek Secretariat for Research and Technology, Joint research and technology programs.	2002-2005	17,500
3. “Improvement of forecasting of severe weather events in the Central and Easter Meditteranean“. Funding: Committee on the Challenges of Modern Society/CCMS – NATO.	2002-2005	16,000
4. “Precipitation observation, and estimation of the hydrological budget over the Mornos basin”. Funding: Athens Water Supply and Sewerage Company (EYDAP SA).	2012-2013	97,641

COORDINATOR OF OUTREACH – EDUCATIONAL PROJECTS		
1. “Educational Programme for the Secondary Education: Peri Anemon & Ydaton”.	2016-now	150,758
PARTNER IN NATIONAL PROJECTS		
1. “Hellas HPC”. Funding: Greek Secretariat for Research and Technology.	2010	2,439
2. “Prototype system for assessing and mapping vulnerability and disaster risk due to severe weather conditions in Greece — YANTAS”. Funding: GSRT, “Research- Create -Innovate”, EDK-B-Cycle.	2020-2022	74,790
3. “TITAN-RISK: Assessment of the natural and climatic risks for the natural environment and local communities in the areas where the facilities of the TITAN group are located (in Achaia, Viotia and Thessaloniki)”. Funding: TITAN Company.	2022-2023	9,920
4. “PLEIONE: Development of a microsensor network for environmental monitoring in an urban environment”. Funding: Guardian Telematics.	2023-2024	49,600
5. “PAFSANIAS: Earthquake, Fire and Flood Risks Assessment In Attica Prefecture”. Funding: Attica Prefecture.	2023-2024	63,856
6. “Design of a national strategy for the adaption of the protection of cultural heritage monuments to the impact of climate change“. Funding: Ministry of Culture.	2023-2026	200,000
COORDINATOR OF PRIVATE SECTOR FUNDING PROJECTS		
1. “Weather Forecasting over the Greek Road Network”. Funding: INTERAMERICAN.	2012-2013	25,459
2. “Severe Weather events over the Greek Road Network”. Funding: INTERAMERICAN.	2017-2023	186,600
3. “Development of VR educational material”. Funding: SAMSUNG.	2018-2019	6,200
4. “Estimating lightning risk over Greece”. Funding: Private Sector (DESFA & COSMOTE).	2019-2021	24,496
5. “Weather forecasts for the private sector, weather related applications and info, www.meteo.gr”.	2006-now	2.750.000

TOTAL ATTRACTED FUNDING AT NOA: ~5.450.000