

Konstantinos LAGOUVARDOS

PERSONAL INFORMATION

DATE - PLACE OF BIRTH: 22 May 1964 in Athens, Greece
PROFESSION: Research Director
PROFESSIONAL ADDRESS: National Observatory of Athens
Institute of Environmental Research Lofos Koufou,
Palaia Pendeli, 15236, Athens, Greece
Tel : 30 210 8109127 Fax : 30 210 8103236
E-mail:lagouvar@noa.gr

ACADEMIC QUALIFICATIONS

- 1992: Ph. D. thesis in Meteorology, entitled: 'Dynamics of active precipitating systems observed during the European field experiment FRONTS 87'. University Pierre et Marie Curie, Paris 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.

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: Research Associate, IERSD/National Observatory of Athens, Greece
- 1998-1999: Coordinator of the Organization of the MSc “Science and Technology of Water Resources” of the National Technical University of Athens.
- 1993-1999: Research Scientist, Laboratory of Meteorology, School of Physics, University of Athens, Greece.
- 1992-1993: Post-doctoral research (funded by ESA) in CRPE/CNRS, France.

AREAS OF EXPERTISE

Dynamic meteorology, numerical weather prediction, lightning meteorology, climatology and dynamics of severe weather phenomena.

HONORS / FELLOWSHIPS / OTHER RELEVANT EXPERIENCE

- French Ministry of Research and Development Fellowship, 1989-1992.
- National Representative in the following EU COST Actions: COST 76 “Development of VHF/UHF wind profilers and vertical sounders for use in European observing systems”, COST 78 “Development of nowcasting techniques”, COST 710 “Harmonisation in the pre-processing of meteorological data for dispersion model”.
- Member of the WG of the General Secretariat for Research and Technology of the collaboration of Greece with ESA.
- Member of the French, American and Royal Meteorological Societies.
- Member of the scientific Committee of the «MEDITERRANEAN SCHOOL ON MESOSCALE METEOROLOGY», Sardinia, Italy, 2004.

- Coordinator of Working Group 4 on “Intense sea-atmosphere interactions” of “HYdrological cycle in the Mediterranean Experiment – HyMeX” international project. 2010-today.
- Coordinator of the Science Team–Lightning” of HyMeX international project ([.hymex.org](http://hymex.org)), 2010-today.
- Guest Editor of the EGU journal *Advances in Geosciences*, 2006.
- Guest Editor of the “Natural Hazards *and Earth System Sciences*”, 2010.
- Scientific Coordinator of the network of surface automated meteorological stations of IERSD/NOA.
- Scientific Coordinator of the operational weather prediction based on BOLAM model at IERSD/NOA.

OTHER ACTIVITIES

- Student and Post-Doc supervision : Supervision of 4 Post-docs, 2 PhD. I have also acted as examiner in 3 PhDs (in France and Spain).
- Reviewer of Scientific proposals : at GSRT, EU (5th, 6th, Framework Program), Cyprus (Institute for Promotion of Research)
- Organisation of International Conferences: Member of the organizing committee and convener in several National and International conferences, Co-President of the Organising Committee of the “12th Plinius Conference on Mediterranean Storms”, 2010.

PUBLICATIONS IN INTERNATIONAL JOURNALS

1. Lagouvardos K. Lemaitre Y. and Scialom G, 1992: "Mesoscale ageostrophic circulations of two fronts observed during the FRONTS 87 experiment. Diagnosis and interpretation". *Meteorology and Atmospheric Physics*, **48**, 293-307.
2. Lagouvardos K. Lemaitre Y. and Scialom G, 1993: "Dynamical structure of a wide cold frontal cloudband observed during the FRONTS 87 experiment". *Quarterly Journal of Royal Meteorological Society*, **119**, 1291-1319.
3. Lagouvardos K. Lemaitre Y. and Scialom G, 1993: "Importance of diabatic processes on ageostrophic circulations observed during the FRONTS 87 experiment". *Quarterly Journal of Royal Meteorological Society*, **119**, 1321-1345.
4. Kotroni V. and Lagouvardos K., 1993: "Low-level jet streams associated with atmospheric cold fronts - seven case studies from the FRONTS87 experiment". *Geophysical Research Letters*, **20**, 1371-1374.
5. Lagouvardos K., Lemaitre Y., 1994: "Influence of strong wind and humidity gradients on frontal ageostrophic circulations". *Quarterly Journal of Royal Meteorological Society*, **120**, 1513-1533.
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 FRONTS87". *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 Petitdidier M., 1995: "A comparison of wind profiler and sounding observations during a frontal event". *International Journal of Remote Sensing*, **16**, 1685-1695.

10. 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.
11. 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.
12. 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.
13. 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.
14. 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.
15. 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.
16. 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.
17. 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.
18. 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.
19. 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.
20. 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.
21. Lagouvardos K. And V. Kotroni, 1999: "Aspects of the 25-26 March 1998 storm over Greece " *Weather*, **54**, 154-160.
22. 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.
23. 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.
24. 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.
25. 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.
26. 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. **108**, No 10, 1977-1980.

27. 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.
28. Feidas C., C. Cartalis, K. Lagouvardos, 2002: Temporal simulation of diurnal temperature and relative humidity evolution at a forested mountainous site in Attica, Greece. *Int. J. of Wildland Fire*, **11**, 1-12.
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, No. **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. *J. Appl. Meteor.*, **42**, 1667-1678.
32. Anadranistakis M., K. Lagouvardos, V. Kotroni, H. Eleftheriadis, 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**, L06116.
34. Kotroni V. and K. Lagouvardos, 2004: Evaluation of MM5 high-resolution real-time forecasts over the urban area of Athens, Greece. *J. Appl. Meteor.*, **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 forecasts of a NWP model. *Int. J. 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. *J. Appl. Meteor.*, **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. Feidas H., T. Kontos, N. Soulakellis, K. Lagouvardos, 2007: A GIS tool for the evaluation of the precipitation forecasts of a numerical weather prediction model using satellite data. *Computers and Geosciences*, 33 (8), pp. 989-1007.
47. 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.
48. 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. *J. Appl. Meteor.*, 46, 1901-1912.
49. 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.
50. 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.
51. 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.
52. Kotroni V., and K. Lagouvardos, 2008: Lightning occurrence in relation with elevation, terrain slope and vegetation cover over the Mediterranean. *JGR-Atmospheres*, 113, D21118, doi:10.1029/2008JD010605.
53. 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
54. 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.
55. 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
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 lightning 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* (NHES), 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*, 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, doi: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, 2010
63. Delitala A. , Gallino S. , Villa L., Lagouvardos K. and Drago. A. 2010: Weather-routing in long-distance Mediterranean routes. *Theoretical and Applied Climatology*, DOI 10.1007/s00704-009-0238-2
64. Lagouvardos K., E. Floros and V. Kotroni, 2010: A Grid-enabled Regional-scale Ensemble Forecasting System in the Mediterranean. *J 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. 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, 2010.
67. 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.
68. 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.
69. 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*, DOI: 10.1007/s12145-010-0071-2.
70. 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.
71. 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.

72. Kohn M., E. Galanti, C. Price, K. Lagouvardos and V. Kotroni, 2011: Now-Casting Thunderstorms in the Mediterranean Region using Lightning Data. *Atmospheric Research*, 100, 489-502.
73. Mazarakis, N., V. Kotroni, K. Lagouvardos, A.A. Argiriou, and C.J. Anderson, 2011: The sensitivity of warm period precipitation forecasts to various modifications of the Kain – Fritch Convective Parameterization Scheme. *Natural Hazards and Earth System Science*, 11, 1327-1339.
74. Price C., Yoav Yair, Alberto Mugnai, Kostas Lagouvardos, Maria Carmen Llasat, Silas Michaelides, Stefano Dietrich, Eli Galanti, Luis Garrote, Dimitris Katsanos, Vasso Kotroni, Montserrat Llasat-Botija, Luis Mediero, Efrat Morin, Kleanthis Nicolaides, Keti Savvidou, Baruch Ziv, 2011: The FLASH Project: Using lightning data to better understand and predict flash floods. *Environmental Science & Policy*, 14, 898-911.
75. Price C., Y. Yair, A. Mugnai, K. Lagouvardos, M. C. Llasat, S. Michaelides, U. Dayan, S. Dietrich, F. Di Paola, E. Galanti, L. Garrote, N. Harats, D. Katsanos, M. Kohn, V. Kotroni, M. Llasat-Botija, B. Lynn, L. Mediero, E. Morin, K. Nicolaides, S. Rozalis, K. Savvidou, and B. Ziv, 2011: Using lightning data to better understand and predict flash floods in the Mediterranean. *Surveys in Geophysics* 32 (6), pp. 733-751.
76. Amiridis V., C. Zerefos, S. Kazadzis, E. Gerasopoulos, K. Eleftheratos, M. Vrekoussis, A. Stohl, R.E. Mamouri, P. Kokkalis, A. Papayannis, K. Eleftheriadis, E. Diapouli, I. Keramitsoglou, C. Kontoes, V. Kotroni, K. Lagouvardos, E. Marinou, E. Giannakaki, E. Kostopoulou, C. Giannakopoulos, A. Richter, J.P. Burrows, N. Mihalopoulos, 2012: Impact of the 2009 Attica wild fires on the air quality in urban Athens, *Atmospheric Environment* 46, pp. 536-544.
77. Sindosi O. A., A. Bartzokas, V. Kotroni and K. Lagouvardos, 2012: Verification of precipitation forecasts of MM5 model over Epirus, NW Greece, for various convective parameterization schemes, *Natural Hazards and Earth System Sciences*, 12, 1393-1405.
78. Lolis C. J., A. Bartzokas, K. Lagouvardos and D. A. Metaxas, 2012: Intra-annual variation of atmospheric static stability in the Mediterranean region: a 60-year climatology. *Theoretical and Applied Climatology*.
79. Koutroulis A. G., M. G. Grillakis, I. K. Tsanis, V. Kotroni and K. Lagouvardos, 2012: Lightning activity, rainfall and flash flooding. Occasional or interrelated events? A case study in the island of Crete, *Natural Hazards and Earth System Sciences*, 12, 881-89, DOI: 10.5194/nhess-12-881-2012.
80. Mazarakis, N., V. Kotroni, K. Lagouvardos, L. Bertotti, 2012 : High resolution wave model validation over the Greek maritime areas, *Natural Hazards and Earth System Sciences*, 12, 3433–3440.
81. Papagiannaki K., K. Lagouvardos, and V. Kotroni, 2013: A database of high-impact weather events in Greece: a descriptive impact analysis for the period 2001–2011, *Natural Hazards and Earth System Sciences*, 13, 727–736.
82. Mazarakis, N., V. Kotroni, K. Lagouvardos, L. Bertotti, 2012 : High resolution wave model validation over the Greek maritime areas, *Natural Hazards and Earth System Sciences*, 12, 3433–3440.
83. Papagiannaki K., K. Lagouvardos, and V. Kotroni, 2013: A database of high-impact weather events in Greece: a descriptive impact analysis for the period 2001–2011, *Natural Hazards and Earth System Sciences*, 13, 727–736.
84. Lagouvardos, K., V. Kotroni, E. Defer and O. Bousquet, 2013: Study of a heavy precipitation event over southern France, in the frame of HYMEX project: Observational analysis and model results using assimilation of lightning. *Atmospheric Research*, Volume 134, 1 December 2013, Pages 45-55.
85. Kotroni V., K. Lagouvardos, and S. Lykoudis, 2013: High-resolution model-based

COORDINATION OF PROJECTS

Title	Duration	Budget (Euros)
INTERNATIONAL PROJECTS		
1. « WERMED- Weatherrouting dans la Méditerranée». Interreg IIIb	2005-2007	350000
2. «FLASH-Observations, Analysis and Modeling of Lightning Activity in Thunderstorms, for use in Short Term Forecasting of Flash Floods» FP6	2006-2010	464050
3. «Network for supporting Marine Affairs in the Mediterranean - NETMARIMED». INTERREG-ARCHIMED	2008	45000
NATIONAL PROJECTS		
1. « Study of the solar energy availability in Greece». Independent Power Transmission Operator	2012-2013	6000
2. « Study of the solar energy availability in Greece». Independent Power Transmission Operator	2013-2014	12000
SPONSORSHIPS		
1. «Extension of the operational network of surface meteorological stations». Financement: STAVROS NIARCHOS FOUNDATION	2008	30000
2. «Extension of the operational network of surface meteorological stations». Financement: OPAP	2008	30000
EXPLOITATION OF R&D RESULTS		
«Weather forecasting products and services». Financement: private sector	2002-2013	~1.100.000