

CURRICULUM VITAE

Constantinos CARTALIS

Associate Professor

Department of Environmental Physics – Meteorology

University of Athens – Greece

tel: + 30 210 7276774

ckartali@phys.uoa.gr

1. Education

Completed undergraduate studies at the University of Athens (B.S. in Physics;1985) and pursued graduate studies (University of Michigan, Ann Arbor) completing Masters of Science in Atmospheric Science, Masters of Science in Engineering in Aerospace Engineering (emphasis in Aerodynamics) and PhD in Atmospheric Science (Thesis title: «The retrieval of the concentrations of nitric oxide and nitrogen dioxide from satellite solar occultation measurements at sunset and sunrise»)

2. Academic experience

Associate Professor (since 7/2006) at the Department of Environmental Physics of the University of Athens [previously Assistant Professor 1998-2006 and Lecturer 1994-1998] – Head of the Remote Sensing and Image Processing Unit in the above Department.

Visiting professor at the Department of Climatology at the University of Thessaloniki, Greece (1999-2002).

Adjunct Professor at the Open University of Greece, Masters Programme on Environmental design of cities (2013-...)

3. Teaching experience

3.1 Teaching of the undergraduate courses: Introduction to Atmospheric Physics, Air pollution, Physical Climatology, Atmospheric Physics II.

Teaching of the graduate courses: Principles and Applications of Remote Sensing, Climate and climate variability, Environmental Management, Mesoscale Convective Systems (including satellite meteorology), Solar and Terrestrial Radiation.

Supervision of undergraduate (55) and graduate students (7 at PhD level and 43 at Masters level) for the completion of their thesis.

Visiting professor at the Department of Climatology at the University of Thessaloniki, Greece (1999-2002). Assignment of the graduate course “Satellite Meteorology and Climatology”.

Adjunct Professor at the Hellenic Open University, Masters Programme on Environmental design of cities (2013-...)

Collaborating educational staff for the Masters Program on “Strategies for the management of the environment and natural disasters”, Dept. of Geology, University of Athens, (>2015)..

Collaboration with the Open University of Cyprus in the framework of the Masters Program on «Advanced Studies on Adaptation and Mitigation Techniques, Technologies and Plans for the Built Environment».

Co-assignment of the course “Remote Sensing”, 2nd year of the Masters Program on Marine Technology, Department of Naval Engineering, National Technical University of Athens.

Laboratory work in the courses “General Physics”, “Electromagnetic Radiation” and “Atmospheric Physics”.

Lectures in the Masters Program of the Department of Spatial Planning of the University of Thessaly on: «Urban environment», «Environmental and climate changes and regional development».

Assignment of editorial work for the Masters Program «Environmental Design of Cities», Thematic Course «Introduction to the natural and anthropogenic environment», Hellenic Open University, 1999.

Instructor at the Masters Program “Environmental Management” of the European Association for Environmental Management Education (1994-1996).

4. Other professional experience

Member of the Parliament of Greece and President of the Environment Committee of the Parliament

Secretary General at the Ministry of Culture Collaborator at the Municipality of Athens (1991-1992)

5. Awards

Honorary Doctorate at the Demokritus University of Thrace – Greece. Medal of the city of Athens

ESA award for project implementation (DRAGON) Copernicus - GMES Award for the application

6. Research area

As depicted in the following chapters, the research area is concentrated to the study of problems/issues linked to atmospheric physics. It should be noted that emphasis has been given to research – also with the use of satellite remote sensing

– in the scientific fields: Urban environment (urban climate, thermal heat island, land use/land cover, air quality), adaptation/mitigation plans, climate and the environment (greenhouse effect and climate change), radiative transfer and energy budget of the system Earth – atmosphere, Mesoscale Convective Systems.

An example of the research orientation in the holistic analysis of physical parameters with the potential to influence the anthropogenic environment is the project BRIDGE which aimed to define, with the use of numeric models and satellite remote sensing, the scientific analysis and the simulation of the various components of urban metabolism (energy, material and water flows) as well as their link to social and economic parameters and sustainable urban development.

In terms of satellite remote sensing, the specific research fields refer to the following categories: (a) Satellite depiction in the thermal infrared of the urban and periurban thermal environment as well as of the thermal heat island (b) Processing – with the development of advanced classification techniques – of satellite data of varying resolutions in order to (1) define the vertical distribution of chemical species in the atmosphere (2) depict and monitor land use/land cover changes (3) define parameters such as albedo and emissivity, in support of climate studies (4) assess and monitor changes and pressures in nature sensitive areas (5) develop multicriteria algorithms with application in the event of natural disasters (heat waves, extreme weather events, forest fires and marine pollution) and (6)

support of adaptation/mitigation plans for climate change (with emphasis in urban environments).

7. Research experience

Overall

Has participated in ***41 EU and/or state funded research projects*** related to environmental physics, Earth Observation (ISOLE, PRIMAVERA, DIFFUSION, TOASTE, BRIDGE, etc.).

Participation in the project DRAGON on the use of Earth Observation for environmental applications, run by ESA (European Space Agency) – National Research Committee of China (since 2006 and ongoing).

During the period 1994-1997, he participated in the works of the European Topical Centre for Air Quality of the EEA.

Participation to research programs – Research activity

(on going denoted with italics)

In total ***41 EU, ESA and/or state funded research projects***, out of which acting as Principal Investigator/Project Leader in twenty (20).

1. Project STEP

Project title: Study of the ozone exchange between the troposphere and the stratosphere (TOASTE)

Period: 1990-1992

Funding Agency: DG Research - EC

Member of the research team of the University of Athens

2. Project EPOCH

Project title: Study and simulation of meteorological parameters in forested areas

Period: 1991-1993

Funding Agency: DG Research - EC

Member of the research team of the University of Athens

3. Program for the collaboration between Greece and Soviet Union

Project title: Study of atmospheric total ozone in southern Europe

Period: 1992-1993

Funding Agency: General Secretariat for Research and Technology (GSRT)
– Greece

Project Leader

4. Program for the collaboration between Greece and Italy

Title: Use of satellite measurements for the definition of the atmospheric chemical composition and of the energy budget in the Mediterranean region Period: 1992-1993

Funding Agency: General Secretariat for Research and Technology (GSRT)
– Greece

Project Leader

5. Program for the collaboration of Academic Institutions and Private entities

Project title: Spatial and temporal variations of wind parameters in selected forested areas

Funding agency: European Social Fund

Member of the research team of the University of Athens

6. Program for the collaboration of Academic Institutions and Private entities

Project title: Classification of meteorological parameters and pollution loads in urban and industrial regions

Funding agency: European Social Fund

Member of the research team of the University of Athens

7. Program for the collaboration between Greece and Italy

Project title: Validation of operational cloud cover and precipitation analysis by NOAA/AVHRR and METEOSAT satellite imagery and surface observations: an application for the Mediterranean Region

Funding Agency: General Secretariat for Research and Technology (GSRT)
– Greece

Project Leader

8. Program “Centre for Earth Observation”

Project title: Assessing research and user needs for earth observation in the field
Atmosphere-Climate

Funding agency: JRC-ISPRA

Member of the international research consortium – Scientist responsible for the University of Athens

9. Program “Air Quality”

Project title: “Management of the atmospheric environment in urban areas”

Funding agency: European Environment Agency

Project Leader

10. Program on Environmental Statistics

Project title: Definition of environmental indicators

Funding agency: EUROSTAT

Member of the research team of the University of Athens

11. Program for the enhancement of the research potential (PENED)

Project title: Study of the urban heat island with the use of satellite remote sensing

Funding Agency: General Secretariat for Research and Technology (GSRT)

– Greece

Project Leader

12. Program “Centre for Earth Observation”

Title: Application of satellite remote sensing in agriculture Funding

agency: JRC-Ispra

Member of the research team

13. Program on Environmental Education – Phase A (Design)

Project title: GLOBE-ALEXANDROS

Funding agency: Ministry of Environment

Project Leader

14. Program on Environmental Education – Phase B (Implementation)

Project title: GLOBE-ALEXANDROS

Funding agency: Ministry of Environment

Member of the research team

15. Program YPER

Project title: Development of algorithms for atmospheric correction of satellite data

Funding Agency: General Secretariat for Research and Technology (GSRT)

– Greece

Project Leader

16. Program Telematics for Education

Project title: TECNET - Environmental Case Studies in the Internet Funding

Agency: DG Telematics – EC

Member of the research team

17. Program LIFE

Title: Mediterranean Action (MEDACT)

Funding agency: DG Environment – EC

Project Leader

18. Environment Program

Project title: Support of the National Focal Point of Greece to the European Environment Agency

Funding agency: Ministry of Environment

Project Leader

19. Program on Earth Observation

Project title: DIFFUSION (Application of satellite remote sensing for the needs of the public sector)

Funding agency: JRC-ISPRA

Project Leader

20. Program for research collaborations Title:

PYRSOS (Assessment of forest fires)

Funding Agency: General Secretariat for Research and Technology (GSRT) – Greece

Member of the research team

21. Program on Mobility in Environmental Education

Project title: Promoting environmental applications of earth observation to the educational community

Funding agency: Ministry of Education

Project Leader

22. Program on Earth Observation

Title: ISOLE - Use of Earth Observation for the study of islands' environment Funding agency: DG Research – EC

Member of the international research consortium – Scientist responsible for the University of Athens

23. Program on Earth Observation

Project title: PRIMAVERA – Use of Earth Observation for the study, monitoring and assessment of nature protected areas

Funding agency: DG Research – EC

Member of the international research consortium – Scientist responsible for the University of Athens

24. Program on Environmental Education

Project title: Ecological Schools – A proposal for the sustainable school Funding

Agency: Ministry of Education

Project Leader

25. Program on Environmental Education

Project title: An information campaign in the field of air quality Funding

agency: DG Environment - EC

Project Leader

26. Research Program

Project title: PROMED - Use of Earth Observation for the monitoring of oil spills in the marine environment

Funding agency: DG Environment – EC

Member of the international research consortium – Scientist responsible for the University of Athens

27. Informatics Program

Project title: FORMIDABLE - Friendly Operational Risk Management through Interoperable Decision Aid Based on Local Events)

Funding agency: DG Telematics – EC

Member of the international research consortium – Scientist responsible for the University of Athens

28. Program for Environmental Research PYTHAGORAS

Project title: Study of the urban microclimate with the combined use of satellite and ground data

Funding agency: Ministry of Environment

Project Leader

29. Program for Environmental Research PYTHAGORAS

Project title: Study of the urban environment

Funding agency: Ministry of Environment

Project Leader

30. Program for the Bilateral Cooperation Greece-Canada

Project title: Use of Earth Observation for aerosol distribution in urban areas and their impact on human health

Funding agency: GSRT

Project Leader

31. Program for the Bilateral Cooperation Greece-USA

Project title: Use of Earth Observation for evaluating thermal heat island in urban areas

Funding agency: GSRT

Project Leader

32. Framework Program 7 - Environment including Climate Change

Project title: Sustainable Urban Planning Decision support accounting for urban metabolism (BRIDGE),

Funding agency: DG Research - EC

Member of the international research consortium – Scientist responsible for the University of Athens

33. Cooperation Program between ESA and China (DRAGON -1, 2006-2012) Project

title: Use of Earth Observation in Support of the Needs of Major Athletic Events: Case Study for the Olympic Games (Athens-Beijing-London)

Funding agency: ESA

Principal Investigator (project leader)

34. Cooperation program with the Greek Bank for Industrial Development (ETVA- VIPE)

Project title: Integration of environmental dimension in production sectors – techniques and technologies»

Funding agency: ETVA

Project Leader

35. Cooperation Program between ESA and China (DRAGON -2, 2012-2016) Project

title: MONITOR - Definition of indicators at the urban scale as supported by EO data

Funding agency: ESA

Co-Principal Investigator

Project award for excellence

36. Program COMENIUS

Project title: MASS (Motivate and Attract Students to Science)

Funding agency: COMENIUS

Member of the international research consortium – Scientist responsible for the University of Athens

37. Program for the bilateral cooperation Greece - France

Project title: Simulation of energy fluxes in the urban environment Funding

agency: GSRT

Member of the Research team

38. *Cooperation program Univ. of Athens and Municipality of Athens*
Project title: Preparation of an Adaptation plan for the thermal environment of Athens
Funding agency: Municipality of Athens
Project Leader

39. *Research project GMES - Large-scale demonstrators in support of GMES and GNSS based services (LDA)*
Project title: Use of Earth observation data in support of the development of an application for mobile phones (app) in the area Quality of environment and real Estate
Funding agency: GMES
Member of the research consortium – Scientist responsible for the University of Athens
Copernicus - GMES Award for the application

40. *International Cooperation program*
Project title: SUB2HRS, Environmental and space applications in support of sporting events
Funding agency: various through the University of Brighton
Member of the international research consortium – Scientist responsible for the University of Athens

41. *Research Cooperation Program with ETVA-VIPE*
Project title: Assessment of the sustainability performance of projects
Funding agency: ETVA-VIPE
Project Leader

7. Other related experience

7.1. At the international level *(on going in italics)*

Elected Vice-President (since 1/2016) of the Council of the International Bureau of Education, UNESCO.

External evaluator (opponent) for PhD defence, 2/2016, Department of Geoinformatics, KTH – Stockholm.

Member of the Editorial Board of the international scientific journal «International Journal of Earth and Environmental Sciences».

Invited Guest editor for the journal Sustainability, Special Issue - Topic in "Urban Heat Island".

Expert for DG Regio of the European Commission in support of Cohesion Policy, regional and urban development.

Expert at Directorate General for Regional Policy of the European Commission on environmental issues related to the Cohesion Fund and the regional/urban development. .

Member of the Council of the International Bureau of Education (UNESCO) (2014-...).

National Coordinator for the international programme of environmental education GLOBE (run by NASA and NSF) (1996-2002 and 2012-...).

Member of the Editorial Board of the international referred journal “Advances in Building Energy Research”.

Chairman of the working team of the International Bureau of Education (UNESCO) regarding the design and implementation of the International Conference on Education of UNESCO (2015-...).

*Member of the Scientific Committee of the Fourth International Conference “Counteracting **Urban Heat Island (UHI) and Climate Change through Mitigation and Adaptation**», Singapore 2016.*

Member of the Scientific Steering Committee of the Project LIFE – Stymfalia. Evaluator at international scientific journals:

Atmospheric Environment, International Journal of Remote Sensing, Remote sensing of the Environment, Solar Energy, Energy and Buildings, ISRN Meteorology, Sustainable Cities and Societies, Landscape and Urban Planning, Renewable Energy, Remote Sensing Letters, Theoretical and Applied Climatology, Environmental Science & Technology, International Journal for Low Carbon Technologies, Environmental Management, International Journal of Geophysics, International Journal of Sustainability.

Invited editor at the international scientific journal Advances of Building Energy Research for the special issue on «Resilient Cities to Climate Change and Energy Scarcity».

Member and Vice President of the European Network of Environmental Legislators (2011-2012).

Member of the Committee of DG Environment of the European Commission for the White Paper on Environmental Networks (1996-1998).

Evaluator for chapters/reports (2013) of IPCC.

Evaluator of research proposals: a) European Commission (DG Environment, DG Research, DG Telematics) b) General Secretariat for Research and Technology – Greece and Ministry of Environment and c) National Science Foundation – US.

Evaluator of scholarship applications at the Masters level at the National Foundation for Scholarships, Greece (2013).

Member of the Steering Committee of the Centre of Earth Observation (CEO) (pathfinder and implementation phases, jointly run by JRC, DG Research and ESA) (1995-1999).

Member of the Management Board of the European Environment Agency (1996- 2001).

Member of the Scientific Committee of the European Environment Agency (2002- 2005).

Member of Thematic Co-operation Groups of DG Research in the area of Earth Observation (on issues (a) EO and operational applications (b) EO and natural disasters (c) EO in developing countries

National delegate of Greece in “Telematics and the environment” of DG Informatics (1995-1998) and national expert of Greece at the OECD (thematic group on environment).

Evaluator for DG Research, DG Environment and DG Telematics of the European Commission, National Science Foundation/US and state entities.

Expert on urban environment (microclimate, heat island, air pollution, remote sensing): India (New Delhi), Japan (Tokyo) and China (Beijing).

During his professional career he has collaborated with EEA, UNEP/MAP, OECD, ESA, BSEC, NSF and other international bodies.

7.2. At the national level

At the national level, he has served as member of the Greek National Space Committee, has participated in the drafting of the national research policy (as with respect to the environment and Earth Observation) and has been member of several National committees (e.g. for the assessment of the implementation of the environment programme, for the development assistance cooperation in the field of environment – OECD, for the environmental cooperation with the Black Sea countries, for the environmental cooperation with the Mediterranean Action Plan – UNEP, etc.).

8. Continuous education

Completion of distance learning courses:

α) «Designing Cities», University of Pennsylvania, (School of Design), 2013. β) «Strategic Information Systems», Heriot Watt University, 1994.

Completion of training seminar of the Hellenic Open University on «Open and distance learning» and «Information and communication technologies for distance learning», 2013.

9. Collaboration with Universities and Research Centers

1. University of Michigan, Department of Atmospheric, Oceanic and Space Sciences.
2. Rutherford Appleton Laboratory
3. European Environment Agency
4. European Space Agency
5. Remote Sensing Institute, Joint Research Center, Ispra.
6. Center for Earth Observation – JRC/EC
7. EURISY Association
8. University of Sunderland
9. University of Dundee
10. DLR
11. Technological University Copenhagen
12. IROE - CNR, Florence
13. SAR (Sardegna)

14. RIVM, Bilthoven, Netherlands
15. NILU Norway.
16. Telespazio, s.p.a., Roma, Italy.
17. Central Aerological Observatory, Moscow, U.S.S.R.
18. NASA Langley Research Center, Langley, Virginia, U.S.A.
19. National Science Foundation, USA.
20. Aristotle University of Thessaloniki, Department of Geology
21. National Center of Marine Science, Greece
22. National Center for Space Applications, Greece
23. General Secretariat for Civil Protection, Greece
24. University of Helsinki
25. Fondazione per la Meteorologia Applicata
26. Universidad Complutense de Madrid
27. Oxford Brookes University
28. University of California – Berkeley
30. University of Tartu – Estonia.
31. King’s College London
32. University of Pavia, Italy
33. KTH, Sweden
34. Cyprus Institute
35. Foundation for Research and Technology (FORTH)
36. University of Aveiro, Portugal
37. Technical University Madrid
38. Capital Normal University
39. Beijing University
40. University of Twente
41. ERSRIN
42. University of Ohio
43. University of Brighton
44. University of Stuttgart
45. UNEP – GRID, Warsaw
46. CNES, Toulouse.
47. Polytechnic School of Crete
48. National Remote Sensing Centre, China
49. Concordia University, Canada
50. University of Cologne
51. Εθνικό Αστεροσκοπείο Αθηνών
52. East China University, Shanghai.

10. Invited speaker

1. Cartalis, C., “Earth Observation for the study of the Urban heat island”, ESA Land Cover Training School, Tianjin, November 2015.
2. Cartalis, C. “Mitigating climate change effects in cities: The role and contribution of STEM education”, Lecture Series, University of Cologne, 21 January 2016.
3. Cartalis, C., “Science of cool cities: Examples of multidisciplinary approaches”, Workshop, University of Cologne, 21 January 2016.
4. Cartalis, C. and Mavrakou, Th., “Earth observation and GIS systems for urbanization”, MASS Conference, UNEP-Grid, Warsaw, November 2015.
5. Cartalis, C. Revealing the secrets of the environment and climate with the use of Earth Observation, Physics Conference, Athens, 12/2015.
6. Cartalis, C., Earth Observation in Support of Science and Applications development in the field Land and Environment: Synthesis Results from the ESA- MOST DRAGON Cooperation Programme, 36th International Symposium on Remote Sensing of Environment, Berlin, 11-15 May 2015.
7. Cartalis, C., The physics of Urban Heat island, Programme MED (Mediterranean and Environment), Athens, 16 February 2015.
8. Cartalis, C., Mavrakou, T. and Polydoros, A. 2014. “Earth Observation as a Tool for Improving Climate Resilience in Mediterranean Cities”. Paper presented at the International Conference for the Adaptation Strategies to Global Environmental Change in the Mediterranean City and the Role of Global Earth Observations (the Mediterranean City 2014) Athens, Greece June 10-11.
9. Cartalis, C., Polydoros, A., Mavrakou, Th. and Asimakopoulos, D. N. 2014. “Earth Observation in Support of the development of Adaptation Plans for climate change in cities: an application for the thermal environment in Athens, Greece”. Paper presented at the 2014 DRAGON 3 mid-term results symposium. Ghengdu, China.
10. Cartalis, C., 2014. Workshop on Global Urban Observation and Monitoring from Space, National Observatory of Athens, Athens.

11. Cartalis, C., Use of Earth Observation for environmental applications – the case of Greece, 2013, προσκεκλημένη παρουσίαση, ESA Summer School on Land applications.
12. Cartalis, C., 3rd OECD Urban Roundtable, Cities and Green Growth, Paris, 2010.
13. Cartalis, C., 2003, Environmental issues in the preparation of Olympic Games, presentation, International Olympic Committee Workshop, Lausanne.
14. Cartalis, C., 2002. Use of Geographic Information Systems in major events, Annual Conference of AGILE, Crete.
15. Cartalis, C., Strategy for the assessment of air quality at the European level, Workshop της Ευρωπαϊκής Υπηρεσίας Περιβάλλοντος για την Ποιότητα του Αέρα, Κοπεγχάγη, Απρίλιος 1996.

11. Publications

11.1 Books

1. Author of the Chapter “Climatic change in the built environment in temperate climates”, in book “Energy efficiency and environmental quality of buildings”, Springer, 2016.
2. Co-author of the chapter “Building Resilient Cities to Climate Change”, in book “Future City Architecture for Optimal Living”, Springer, 2015.
3. Cartalis, C., Stathopoulou, M., Mitraka, Z. and Chrysoulakis, N., 2014. Use of Earth Observation to support urban modelling parameterization in BRIDGE. In: Chrysoulakis, N., Castro, E. A. and Moors, E. J. (Eds.), 2014. Understanding Urban Metabolism: A Tool for Urban Planning. Routledge, Taylor & Francis, London. ISBN 9780415835114, pp. 58 - 68.
4. Cartalis, C. and Feidas, H., Principles and applications of Remote Sensing, Tziolas publishing, pp. 610, 2012 (in Greek).
5. Adaktilou N., Cartalis C., Kalkanis G., 2011. A Learning Platform for the Introduction of Remote Sensing Principles in Higher Education in a Blended Learning Collaborative Environment. Invited Chapter in the Book "Dynamic Advancements in Teaching and Learning Based Technologies: New Concepts" Editors: E. Ng, N. Karacapilidis, M. Raisinghani), Information Science Reference, New York, 2011, ISBN 978-1-60960-153-9.
6. Chrysoulakis, N., Prastacos, P., and Cartalis, C., 2004. Development of a Decision Support Tool for Technological Risk Management with Remote Sensing and GIS. In: Hilty, L., Seifert, E. and Treibert, R. (eds.): Information Systems for Sustainable Development. Idea Group, Hershey PA 17033, USA, pp. 342 -353.

7. Petrakis M., Lianou M., Psiloglou B., Chalkias C., and Cartalis, C., 2003, Light pollution as a policy tool, Chapter in book “LIGHT POLLUTION - THE GLOBAL VIEW”, pp. 293-300, Astrophysics and Space Science Library, Kluwer Academic Publisher.

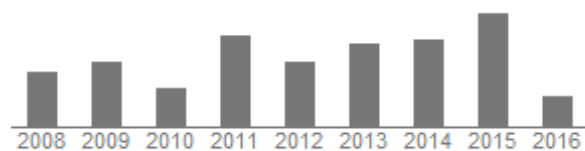
8. Cartalis, C., 1999, Chapter on Meteorology and Urban Microclimate in the book “Introduction to Natural Environment”, Open University of Greece.

11.2 Synopsis of publications

Citations in scientific journals and books. 1533(source: Scholar, Scopus, Web of Science)

New listing – March 8, 2016

Δείκτες παραθέσεων	Όλα	Από το 2011
Παραθέσεις	1533	893
h-index	20	15
i10-index	31	19



11.3 International refereed journals

11.3.1 Submitted manuscripts

1. Benas, N., Chrysoulakis, N. and Cartalis, C., 2016, Urban surface temperature and heat island characteristics and trends in the Mediterranean, manuscript submitted for publication, Theoretical and Applied Climatology, submitted for publication.

2. Cartalis, C., Santamouris, M., Polydoros, A., Nyktarakis, G., and Mavrakou, Th., 2016, Assessing the interlinks between urbanization, the built environment and the thermal environment in view of smart and sustainable urban development: a demonstration application for Athens, International Journal of Earth and Environmental Sciences, submitted for publication.

11.3.2 Publications to international refereed journals

1. Agathangelidis I, Cartalis C, and Santamouris M, 2016. Estimation of air temperatures for the urban agglomeration of Athens with the use of satellite data, Geoinformatics and Geostatistics: An overview, accepted for publication, in press.

2. Cartalis, C. and Stathopoulou, M., 2016. The Potential of Earth Observation Based Indicators to Assess the State of Urban Environment: An Application for the Urban

Agglomeration of Athens. *Journal of Geoscience and Environment Protection*, **4**, 29-37.
<http://dx.doi.org/10.4236/gep.2016.43003>.

3. H. Akbari, C. Cartalis, D. Kolokotsa, A. Muscio, A. L. Pisello, F. Rossi, M. Santamouris, A. Synnefa, N.H. Wongf, M. Zinzig, 2016, Local Climate Change and Urban Heat Island Mitigation Techniques – The State of the Art, *Journal of Civil Engineering and Management*, **22** (1), pp. 1-16.

4. Cartalis C, Santamouris, M, Polydoros A, Mavrakou Th., 2016. Thermal Hot Spots in Cities as Hazards for Health Security: An Application for the Urban Agglomeration of Athens, Greece. *Int J Natural Disaster Health Secur.* **3**(1), 13-16.

5. Mavrakou, T. and Cartalis, C. 2015, Analysis of an extreme weather event over Athens-Greece, with the use of Meteosat satellite data, *Nat. Hazards Earth Syst. Sci. Discuss.*, **3**, 2191–2219, 2015 www.nat-hazards-earth-syst-sci-discuss.net/3/2191/2015/
doi:10.5194/nhessd-3-2191-2015

6. Cartalis, C., Polydoros, A., Mavrakou, Th, Assimakopoulos, D.N., 2015, Use of earth observation for the development of resilience and adaptability plans for the thermal environment in urban areas, *Open Journal of Remote Sensing*, **6**, 17-22.

7. Polydoros, A., Cartalis, C., Santamouris, M. and Mavrakou, Th., 2015. Assessing the urban heat island in major urban centres with the use of indicators, *Urban Climate*, **14**, 166-175.

8. Santamouris, M., Cartalis, C. and Synnefa, A., 2015. Local Urban Warming, Possible Impacts and a Resilience Plan to climate change for the historical centre of Athens, Greece, *Sustainable Cities and Societies*, 281-291.

9. Santamouris, M., Cartalis, C., Synnefa, A., Kolokotsa, D., 2014. On The Impact of Urban Heat Island and Global Warming on the Power Demand and Electricity Consumption of Buildings—A Review, *Energy and Buildings*, DOI: 10.1016/j.enbuild.2014.09.052

10. Polydoros, A. and Cartalis, C. 2014. Use of Earth Observation based indices for the monitoring of built-up area features and dynamics in support of urban energy studies, *Energy and Buildings*. DOI: 10.1016/j.enbuild.2014.09.060

11. Polydoros, A. and Cartalis, C. 2014. Assessing thermal risk in urban areas – an application for the urban agglomeration of Athens, *Advances in Building Energy Research*, **8**:1, 74-83, DOI: 10.1080/17512549.2014.890536

12. Santamouris, M., Alevizos, S.M., Aslanoglou, L., Mantzios, D., Milonas, P., Sarelli, I., Karatasou, S., Cartalis, C., Paravantis, J., 2014, Freezing the poor – indoor environmental quality in low and very low income households during the winter period in Athens, *Energy and Buildings*, **70** (2014), 61-70.

13. Gaitani, N., Santamouris, M., Cartalis, C., Pappas, I., Xyrafi, F., Mastrapostoli, E., Karahaliou, P., Efthymiou, S., 2014. Microclimatic analysis as a prerequisite for sustainable urbanization: an application for an urban regeneration project for a medium size city in the greater urban agglomeration of Athens- Greece, *Sustainable Cities and Society*, vol. 13, pp. 230–236, 2014
14. Cartalis, C., 2014. Towards Resilient Cities – A Review of definitions, challenges and prospects, *Advances in Building Energy Research*, vol. 8, 259-266.
15. Chrysoulakis, N., Lopes, M., San José, R., Grimmond, C.S.B., Jones, M.B., Magliulo, V., Klostermann, J.E.M., Synnefa, A., Mitraka, Z., Castro, E., González, A., Vogt, R., Vesala, T., Spano, D., Pigeon, G., Freer-Smith, P., Staszewski, T., Hodges, N., Mills, G. and Cartalis, C., 2013. Sustainable urban metabolism as a link between bio-physical sciences and urban planning: the BRIDGE project. *Landscape and Urban Planning*, 112, 100 - 117.
16. Chrysoulakis, N., Mitraka, Z., Stathopoulou, M. and Cartalis, C., 2013. A comparative analysis of the urban web of the greater Athens agglomeration for the last 20 years period on the basis of Landsat imagery. *Fresenius Environmental Bulletin*, 22, 2139 - 2144.
17. Stathopoulou, M., Iacovides, S., Cartalis, C., 2012. Quality of life in metropolitan Athens using satellite and census data- comparison between 1991 and 2001, *Journal of Heat Island international*, vol. 7-2, pp.25-32.
18. Dassenakis, M., Paraskevopoulou, V., Cartalis, C., Adaktylou, N., and Katsiabani, K., 2011. Remote sensing in coastal water monitoring: applications in the eastern Mediterranean sea, *Pure and Applied Chemistry*, vol.84, no. 2, pp.335- 375.
19. Katsiabani, K., Adaktylou, N., Cartalis, C., 2009. A generalised methodology for estimating land surface temperature for non-urban areas of Greece through the combined use of NOAA-AVHRR and ancillary information, *Advances in Space Research*, 43 (6), pp 930-940.
20. Adaktylou, N., Cartalis, C., Kalkanis, G., 2009. A learning platform for the introduction of remote sensing principles in higher education: a pilot phase application, *International Journal of Web based teaching and learning technologies*, vol. 4, pp 43-60.
21. Stathopoulou, M. and Cartalis, C., 2009. Downscaling AVHRR land surface temperatures for improved surface urban heat island intensity estimation, *Remote Sensing of Environment*, vol. 113, pp. 2592-2605.
22. Stathopoulou, M., Synnefa, A., Cartalis, C., Santamouris, M., Karlessi, I. and Akbari, H., 2009. A surface heat island study of Athens using high resolution satellite imagery and measurements of the optical and thermal properties of commonly used building and paving materials, *International Journal of Sustainable Energy*, vol. 28, pp. 59-76.

23. Stathopoulou, M. and Cartalis, C., 2007. Daytime urban heat islands from Landsat ETM+ and Corine land cover data: an application to major cities in Greece, *Solar Energy*, vol.81, pp. 358-368.
24. Stathopoulou, M. and Cartalis, C., 2007. Use of satellite remote sensing in support of urban heat island studies, *Advances in Building Energy Research*, vol. 1, pp. 203-212.
25. Stathopoulou, M., Cartalis, C., Petrakis, M., 2007. Integrating Corine land cover data and Landsat TM for surface emissivity definition: application to the urban area of Athens, *International Journal of Remote Sensing*, 28(15), pp.3291- 3304.
26. Chrysoulakis, N., Herlin, I., Prastacos, P., Yahia, H., Grazzini, J. and C, Cartalis, 2007. An improved algorithm for the detection of plumes caused by natural or technological hazards using AVHRR imagery. *Remote Sensing of Environment*, 108, 393 – 406.
27. Keramitsoglou, I, Cartalis, C. and Kiranoudis, C.T., 2006. Automatic Identification of Oil Spills on Satellite Images, *Environmental Modelling & Software*, 21 , 640–652.
28. Stathopoulou, M, Cartalis, C. and N. Chrysoulakis, 2006. Using midday surface temperature to estimate Cooling Degree-Days from NOAA-AVHRR thermal infrared data: An application for Athens, Greece. *Solar Energy*, 80, 414 - 422.
29. Feidas, H., Lagouvardos, C., Kotroni V. and Cartalis, C., 2005. Application of three Satellite Techniques in Support of Precipitation Forecasts of a NWP Model. *International Journal of Remote Sensing*, 26:24, 5393-5417.
30. Katsiabani, K., Adaktylou, N., and Cartalis, C., 2005. Estimating land surface temperature for non-urban areas of Greece through the combined use of CORINE land cover and ASTER spectral library: Methodology and sensitivity analysis. *International Journal of Remote Sensing*, 26:24.
31. Feidas, H., and Cartalis, C., 2005. Application of an automated cloud – tracking algorithm on satellite imagery for tracking and monitoring small mesoscale convective cloud systems, *International Journal of Remote Sensing*, Vol. 26 (8), pp 1677 – 1698.
32. Cartalis, C. and Keramitsoglou, I., 2005. Analysis of TOMS-derived Lambert-equivalent reflectivities for the period 1996-2000, *International Journal of Remote Sensing*, 26:16, 3597-3603.

33. Petrakis, M., Psiloglou, B., Keramitsoglou, I., Cartalis, C. and Lianou, M., 2005. Evaluation of forest fire risk and fire extinction difficulty at the mountainous park of Aaos-Vikos, northern Greece using remote sensing and GIS techniques, *International Journal of Risk Assessment and Management*, 5 (1), pp. 50-65.
34. Chrysoulakis, N., Adaktylou, N., and Cartalis, C. 2004. Detecting and monitoring plumes caused by major industrial accidents with JPLUME, a new software tool for low resolution image analysis, *Environmental Modelling and Software*, 20, 1486-1494.
35. Cartalis, C., Chrysoulakis, N., Feidas, H., and Pitsitakis, N., 2004. Categorization of cold period weather types in Greece on the basis of the photointerpretation of NOAA/AVHRR imagery. *International Journal of Remote Sensing*, 25, 2951 - 2977.
36. Mihalakakou, G., Santamouris, M., Papanikolaou, N., Cartalis, C., and Tsagrassoulis, A., 2004. Simulation of the urban heat island phenomenon in Mediterranean climates, *Pure and Applied Geophysics*, 161, 429-451.
37. Stathopoulou, C. Cartalis, and I. Keramitsoglou, 2004. Mapping micro-urban heat islands using NOAA/AVHRR images and CORINE Land Cover: an application to coastal cities of Greece, *International Journal of Remote Sensing*, 25 (12), 2301-2316.
38. Varotsos, C., Cartalis, C., Vlamakis, A., Tzani, C., and Keramitsoglou, I., 2004. The Long-Term Coupling between Column Ozone and Tropopause Properties. *Journal of Climate*, Vol. 17, No. 19, pp. 3843-3854.
39. Keramitsoglou, I., Asimakopoulos, D., Cartalis, C., Petrakis, M., Argiriou, A., Sifakis, N., Kassomenos, P., Theophilopoulos, N., Ntziou, I., and Herrero, A., 2003. An operational system for monitoring oil spills in the Mediterranean Sea: The Promed System, *Mediterranean Marine Science*, Vol. 4 (2), pp65-72.
40. Keramitsoglou, I., Cartalis, C., and Kassomenos, P., 2003. Decision Support System for managing oil spill events, *Environmental Management*, 32 (2), 290-298.
41. Petrakis, M., Psiloglou, B., Kassomenos, P., and Cartalis, C., 2003. Summertime measurements of benzene and toluene in Athens, using a DOAS system, *Journal of the Air & Waste Management Association*, 53 (9), 1052-1064.
42. Chrysoulakis, N. and C. Cartalis, 2003. A new algorithm for the detection of plumes caused by industrial accidents, on the basis of NOAA/AVHRR imagery. *International Journal of Remote Sensing*, 24, 3353 –3367.
43. Chrysoulakis, N. and C. Cartalis, 2003. TAD - a new Satellite Images Analysis Software Tool for the Detection of Major Fires caused by Technological Accidents. *International Journal of Remote Sensing*, 24, 1259 - 1271.
44. Chrysoulakis, N. and C. Cartalis, 2002. Thermal detection of plumes produced by

industrial accidents in urban areas based on the presence of the heat island. *International Journal of Remote Sensing*, 23, 2909 - 2916.

45. Feidas , H., Cartalis C., and Lagouvardos, K., 2002. Temporal simulation of diurnal temperature and relative humidity evolution at a forested mountainous site in Attica, Greece. *International Journal of Wildland Fire*, 11(2): 95-106.

46. Chrysoulakis, N. and C. Cartalis, 2002. Improving the estimation of land surface temperature for the region of Greece: adjustment of a split window algorithm to account for the distribution of precipitable water. *International Journal of Remote Sensing*, 23, 871 - 880.

47. Cartalis, C., Nikitopoulou, Th., and Proedrou, M., 2002. Climate Changes and their impact on agriculture in Greece: a critical aspect for medium - and long - term environmental policy planning, *International Journal of Environment and Pollution*, 17 (3), 211-219.

48. Cartalis, C., and Petrakis, M., 2002. Assessment of air quality at the European scale: Existing status, recommendations and priorities, *Journal of Environmental Assessment Policy and Management*, vol. 4, 101.

49. Chrysoulakis, N., Proedrou, M. and C. Cartalis, 2001. Variations and trends in annual and seasonal means of precipitable water in Greece as deduced from radiosonde measurements. *Toxicological and Environmental Chemistry*, 84, 1 - 6.

50. Cartalis, C., Asimakopoulos, D.N., and Feidas, H., 2001. Categorization of meteorological parameters and systems in support of the assessment of the dispersion of forest fire related air emissions. *Toxicological and Environmental Chemistry*, 80, 1-9.

51. Feidas H. and C. Cartalis, 2001. Monitoring mesoscale convective cloud systems associated with heavy storms with the use of Meteosat imagery. *Journal of Applied Meteorology and Climatology*, 40 (3), 491-512.

52. Cartalis, C., Synodinou, A., Proedrou, M., Tsangrasoulis, A., and Santamouris, M., 2001. Modifications in energy demand in urban areas as a result of climate changes: An assessment for the south east Mediterranean region, *Energy Conversion and Management*, 42 (14), 1647-1656.

53. Cartalis, C., Feidas, H., Glezakou, M., Proedrou, M., and Chrysoulakis, N., 2000. Use of Earth Observation in support of Environmental Impact Assessments: Prospects and Trends. *Environmental Science & Policy*, 3, 287 - 294.

54. Chrysoulakis, N. and C. Cartalis, 2000. Distribution of Precipitable Water in Southern Greece in support of Solar Radiation Models. *International Journal of Solar Energy*, 20, 197 – 206 (μετονομάστηκε σε *International Journal of Sustainable Energy*).

55. Chrysoulakis, N. and Cartalis, C., 2000. A new approach for the detection of major

fires caused by industrial accidents, using NOAA/AVHRR imagery. *International Journal of Remote Sensing*, 21, 1743 - 1748.

56. Feidas, H., Cartalis, C., and Cracknell, A.P., 2000. Use of METEOSAT imagery to define clouds linked with floods in Greece, *International Journal of Remote Sensing*, 21 (5), 1047-1072.

57. Retalis, A., Cartalis, C. and Athanassiou, E., 1999. Assessment of the distribution of aerosols in the area of Athens with the use of Landsat Thematic Mapper data, *International Journal of Remote Sensing*, 20 (5), 939-945.

58. Deligiorgi, D., Cartalis, C., Kouroupetroglou, G., Moutselos, K., and Kambitsi, E., 1999. A Decision Support Tool for the assessment of air quality in urban areas: an application for Athens, Greece, *Toxicological and Environmental Chemistry*, 69, 31-42.

59. Cartalis, C., 1997. Critical aspects and essential means for a green economic development in Greece, *Sustainable Development*, vol. 5, 1-6.

60. Cartalis, C. and Chrysoulakis, N., 1997. Estimation of Precipitable water in Greece on the basis of radiosondes and satellite data. *Toxicological and Environmental Chemistry*, 58, 163-171.

61. Dalianis, D., Petassis, D., Santamouris, M., Argiriou, A., Cartalis, C. and Asimakopoulos, D.N., 1997. Social cost of electricity generation in Greece, *Renewable Energy*, vol. 12 (3), 281-289.

62. Retalis, A. και Cartalis, C., 1997. Definition of the tropopause height in the South-Eastern Mediterranean Region, *Toxicological and Environmental Chemistry*, 58, 259-267.

63. Athanassiou, E. και Cartalis, C., 1997. Image processing in BASIC: an examination of its potential, *International Journal for Remote Sensing*, 18 (5), 1179-1182.

64. Chrysoulakis, N. and C. Cartalis, 1997. A model algorithm for defining the vertical profile of absolute humidity by ground measurements of humidity. *Toxicological and Environmental Chemistry*, 58, 269-279.

65. Proedrou, M., Theoharatos, G. και Cartalis, C., 1997. Variations and trends in annual and seasonal air temperatures in Greece Determined from ground and satellite measurements, *Theoretical and Applied Climatology*, 57, 65-78.

66. Cartalis, C. and Deligiorgi, D., 1997. An assessment of air pollution episodes in the urban area of Athens for the period 1984-1994, *Toxicological and Environmental Chemistry*, 58, 281-295.

67. Chrysoulakis, N. and Cartalis, C., 1997. An Assessment of climatological cloud characteristics in south eastern mediterranean in support of the study of the interaction between climate and life processes. *Toxicological and Environmental Chemistry*, 59, 125-

144.

68. Cartalis, C., 1997. Use of NOAA AVHRR and LANDSAT Thematic Mapper images in support of studies of atmospheric composition, *International Journal of Remote Sensing*, 18 (14), 3097-3102.

69. Cartalis, C. and Retalis, A., 1996. Exploring the need to revise atmospheric correction algorithms of satellite sensor images for the area of Greece, *International Journal of Remote Sensing*, 16 (10), 1897-1903.

70. Retalis, A., Cartalis, C. and Varotsos, C., 1995. An analysis of the distribution of nitrogen dioxide in the South-eastern Mediterranean for the period 1985-1989, *International Journal of Remote Sensing*, 16 (10), 1897-1903.

71. Cartalis, C., 1994. A Photochemical model for the simulation of the variability of nitric oxide and nitrogen dioxide at sunset and sunrise, *Toxicological and Environmental Chemistry*, Vol. 42, 71-86.

72. Cartalis, C. and Varotsos, C., 1994. Surface ozone in Athens, Greece at the beginning and at the end of the 20th century, *Atmospheric Environment*, 38 (1), 3- 8.

73. Cartalis, C., 1993. The role of cloud albedo in the retrieval of concentrations from satellite sensor occultation measurements, *International Journal of Remote Sensing*, 14 (2), 395-400.

74. Cartalis, C., Varotsos, C. And Feidas, H. 1992. The impact of air pollution in an urban area on the amount of solar ultraviolet radiation at the surface, *Toxicological and Environmental Chemistry*, 36, 195-203.

75. Varotsos, C., Dris, N.A, Asimakopoulos, D.N., and Cartalis, C., 1992. On the relation between the 10.7 cm solar flux, surface pressure and air temperature over Greece, *Theoretical and Applied Climatology*, 46, 27-32.

76. Varotsos, C., Helmis, C., and Cartalis, C., 1992. Annual and semiannual waves in ozone as derived from SBUV vertical global ozone profiles, *Geophysical Research Letters*, 19 (9), 925-928.

77. Varotsos, C., Cartalis, C., Feidas, H., Gerasi, E., and Asimakopoulos, D.N., 1992. Relationship of ozone and its precursors in the west coast air basin of Athens: a statistical model for the assessment of air quality in an urban area, *Atmospheric Research*, 28, 41-47.

78. Cartalis, C., 1992. A new method to improve the radiometric monitoring of atmospheric composition for photochemical active species: an application for nitric oxide, *International Journal of Remote Sensing*, 13 (8), 1571-1575.

79. Cartalis, C. and Eftihidis, G., 1992. The impact of forest fires on the air pollution of

an urban area: a case-study for Athens, Greece, *Toxicological and Environmental Chemistry*, 31.

80. Cartalis, C., 1992. The effect of photochemically active species and clouds on the relationship between radiance and concentration profiles, *International Journal of Remote Sensing*, 13 (4), 789-793.

81. Katsambas, Ch. Antoniou, J. Stratigos, I. Arvanitis, F. Zolota, C. Varotsos, C. Cartalis and D.N. Asimakopoulos, 1991. A simple algorithm for simulating the solar radiation at the Earth's surface: an application in determining the minimum Erythema dose, *Earth, Moon and Planets*, 53, 191-204.

82. Varotsos, C., and Cartalis, C., 1991. Re-evaluation of surface ozone over Athens, Greece, for the period 1901-1940, *Atmospheric Research*, 26, 303-310.

83. Varotsos, C. and Cartalis, C., 1991. The Role of Quasi-Stationary Planetary Waves in the Retrieval of Concentrations from Satellite Measurements, *Geophysical Research Letters*, 18 (4), 681-684.

84. Cartalis, C., 1991. Interaction of Photochemical and radiative processes in the stratosphere: An application on the retrieval of concentration profiles from satellite measurements, *Earth, Moon and Planets*, 52, 131-144.

11.3.3 Presentations to Conferences (with proceedings)

1. Cartalis C., Nyktarakis, G., Polydoros A. and Santamouris, M.' Analysis of thermal hot spots in the urban area of Athens as a tool for focused public policies to reduce energy consumption of buildings, accepted for publication at the 4th International Conference on Countermeasures to Urban Heat Island, 30-31 May and 1 June 2016, National University of Singapore, Singapore.

2. Cartalis C., Tzelidi D., Polydoros A.' Mavrakou T. and Chrysoulakis N., A comparative examination of the relationship between land surface temperature and urban planning and development: an application for cities in the Mediterranean region, accepted for publication at the 4th International Conference on Countermeasures to Urban Heat Island, 30-31 May and 1 June 2016, National University of Singapore, Singapore.

3. M. Santamouris, J. A. Paravantis, C. Efthymiou and C. Cartalis, Heat Effects and Mortality in Athens, Greece, accepted for publication at the 4th International Conference on Countermeasures to Urban Heat Island, 30-31 May and 1 June 2016, National University of Singapore, Singapore.

4. Karl Schneider, Constantinos Cartalis, Bara Semerakova, Bregje van den Brand, Costas Costa, Inese Liepina, Magdalena Machinko-Nagrabecka, Motivating and Attracting Students to Science: Identifying Good Practice Approaches, 11th Conference of the European Science Education Research Association (ESERA), 31 August to 4

September 2015, Helsinki.

5. Cartalis, C., Santamouris, M., Asimakopoulos, D., Polydoros, A. and Mavrakou, Th., Identifying Hot Spots in Urban Areas in support of Microclimatic Studies in the City of Athens, including its Historic Centre, DRAGON 15 Conference, Interlaken, 22-26 June 2015.

6. Polydoros, A. and Cartalis, C., Object Oriented Mapping of Urban Areas to Support Surface Heat Island Assessment, DRAGON 15 Conference, Interlaken, 22-26 June 2015.

7. Mavrakou, Th. And Cartalis, C., “Detection of storm cells with the use of Meteosat satellite images and the application of rgb composites Airmass and Convection COMECAP 2014, 28-31 May, Heraklion.

8. C. Cartalis, D. N. Asimakopoulos, Y. Ban, Y. Bao, Y. Bi, P. Defourny, G. Del Barrio, J. Fan, Z. Gao, H. Gong, J. Gong, P. Gong, C. Li, S. Pignatti, A. Sarris, and G. Yang, Earth observation in support of science and applications development in the field “Land and Environment”: Synthesis results from the ESA-MOST DRAGON Cooperation programme, Int. Arch. Photogramm. Remote Sens. Spatial Inf. Sci., XL-7/W3, 1075-1081, 2015
www.int-arch-photogramm-remote-sens-spatial-inf-sci.net/XL-7-W3/1075/2015/
doi:10.5194/isprsarchives-XL-7-W3-1075-2015 .

9. Cartalis, C. and Santamouris, M., 2014. Climate change resilience plan for the historic centre of Athens, ICOMOS Scientific Conference, Florence, 10-14 November.

10. Mitraka, Z., Gastellu-Etchegorry, J.P., Chrysoulakis, N. and Cartalis, C., 2014. Remote sensing techniques to assist the analysis of urban microclimate. In Muscio, A. (ed.): Proceedings of the Third International Conference on Countermeasures to Urban Heat Island, held in Venice, October 13 - 15, pp. 754 - 765.

11. Polydoros, A. and Cartalis, C. 2014. “Assessing the urban heat island in major urban centres with the use of indicators”. In Muscio, A., (ed.): Proceedings of the Third International Conference on Countermeasures to Urban Heat Island Venice, Italy October 13-15, 2014, 961-971. ISBN:978-88-906958-2-7.

12. Cartalis, C., Polydoros, A., Mavrakou Th., and Asimakopoulos, D.N., 2014, Earth Observation in Support of the development of Adaptation Plans for climate change in cities: an application for the thermal environment in Athens, Greece, ESA Dragon Conference, Chengdu-China.

13. Synnefa, A., Stathopoulou, M., Adaktylou, N., Kolokotsa, D., Gobakis, K., Santamouris, M., Chrysoulakis, N. and Cartalis, C., 2013. A case study of sustainable urban planning with the use of a decision support system. Joint Conference 34th AIVC – 3rd TightVent- 2nd Cool Roofs’ - 1st Venticool: Energy conservation technologies for mitigation and adaptation in the built environment:

the role of ventilation strategies and smart materials, held in Athens, Greece, September 25 - 26.

14. Cartalis, C., 2013, Assessment of Drivers of Climate Change in Cities: An application for urban sprawl, ESA DRAGON Conference, Palermo.

15. Asimakopoulos, D., Cartalis, C., Petrakis, M., Adaktylou, N., Stathopoulou, M., Chrysoulakis, N., Use of earth observation in support of major sport events: The post games assessment of the sporting event of the Olympic Games 2004, European Space Agency, (Special Publication) ESA SP, Volume 704 SP, 2013, 7p, Dragon 2 Final Results and Dragon 3 Kick-Off Symposium; Beijing; China; 25 June 2012 through 29 June 2012; Code 102048.

16. San José, R., Pérez, J.L., González, R.M., Synnefa, A., Chrysoulakis, N., and Cartalis, C., 2011. High Resolution simulation by using WRF/UCM and CMAQ models over Athens with different urban planning scenarios. Proc. of the Third International Conference on Environmental Management, Engineering, Planning and Economics (CEMEPE 2011) & SECOTOX Conference, Skiathos, Greece, June 19-24.

17. Chrysoulakis, N., Mitraka, Z., Stathopoulou, M. and Cartalis, C., 2011. A comparative analysis of the urban web of the greater Athens agglomeration for the last 20 years period on the basis of Landsat imagery. In: Proceedings of the Third International Conference on Environmental Management, Engineering, Planning and Economics (CEMEPE 2011) & SECOTOX Conference, Skiathos, Greece, June 19-24.

18. Synnefa, A., Stathopoulou, M., Sakka, A., Katsiabani, K., Santamouris, M., Adaktylou, N., Cartalis, C. and Chrysoulakis, N., 2010. Integrating sustainability aspects in urban planning: the case of Athens. In: Proceedings of 3rd International Conference PALENC2010: Passive & Low Energy Cooling for the Built Environment, held in Rhodes, Greece (29 September - 1 October).

19. Synnefa, A., Stathopoulou, M., Sakka, A., Katsiabani, K., Santamouris, M., Adaktylou, N., Cartalis, C. and Chrysoulakis, N., 2010. Integrating sustainability aspects in urban planning: the case of Athens. In: Proceedings of 3rd International Conference PALENC2010: Passive & Low Energy Cooling for the Built Environment, held in Rhodes, Greece (29 September - 1 October).

20. Stathopoulou, M., Iacovides S. and Cartalis, C., 2009. Quality of Life in Metropolitan Athens Using Satellite and Census Data: Comparison between 1991

and 2001. 2nd International Conference on Countermeasures to Urban Heat Islands, September 21-23, Berkeley, California.

21. Adaktilou, N., Kalkanis G and Cartalis, C., 2009. A learning platform for the introduction of Remote Sensing principles and applications in Higher Education. 2nd Workshop Education and Training: From Research to Teaching in Schools and Universities, 16-17 June, Chania, Greece.

22. Adaktilou, N., Cartalis, C., Kalkanis, G., 2009, An electronic platform for the instruction of remote sensing and its applications. BPU7 Conference, 9-13 September 2009, Alexandroupolis, Greece.

23. Stathopoulou M. and Cartalis C. 2007. Study of the urban heat island of Athens, Greece during daytime and night-time. Urban Remote Sensing Joint Event, 11-13 April 2007, Paris, pages 1 – 7.

24. Adaktilou, N. and Cartalis, C., 2007. A Learning Platform for the Introduction of Remote Sensing Principles and Applications: A Pilot Phase. 6th European Conference on e-Learning, Copenhagen Business School, Copenhagen, Denmark, 4-5 October.

25. Stathopoulou M., Cartalis, C. and I. Keramitsoglou, 2005, Thermal remote sensing of Thom's Discomfort Index (DI): comparison with in situ measurements, SPIE Symposium, Brugges, 18-22 September.

26. Chrysoulakis, N., Keramitsoglou, I. and C. Cartalis, 2003. Hydrologic land cover classification mapping at the local level with the combined use of ASTER multispectral imagery and GPS measurements. In: Ehlers, M. (Editor), Proceedings of 10th SPIE International Symposium on Remote Sensing: Remote Sensing for Environmental Monitoring, GIS Applications, and Geology III, Vol. 5239, 2003.

27. Kassomenos P., Keramitsoglou, I. and Cartalis, C., Studying environmental hazards: a risk analysis for oil spill incidents in Cretan and Libyan Seas, Proceedings of the 1st Conference on Oceanographical Aspects for a sustainable Mediterranean, Athens, 27-29 September 2002.

28. Keramitsoglou, I., Cartalis, C. and Kiranoudis, C.T., An integrated fuzzy classification system for automatic oil spill detection using SAR images, Proceedings of the 9th International Symposium of Remote Sensing, 22-27 September 2002, Aghia Pelagia, Crete, Vol. 4883, pp. 131-140, 2003.

29. Petrakis, M., Lianou, M., Psiloglou, B., Chalkias, C., and Cartalis, C., "Light pollution as a policy tool", in "Light Pollution: The Global View", Proceedings of the International Conference on Light Pollution, 5-7 March, La Serena, Chile, pp. 293-295, Hugo E. Schwarz (Ed.), Astrophysics and Space Science Library, Kluwer Academic Publishers, The Netherlands, 2002.
30. Petrakis, M., Chalkias, C., Psiloglou, B., Lianou, M., and Cartalis, C., Geographical Information Systems and Remote Sensing in Environmental Management of small islands, 3rd International Symposium on "Remote sensing of urban areas", 11-13 June, Istanbul, Turkey, 2002.
31. Petrakis, M., Lianou, M., Psiloglou, B., Chalkias, C., Akylas, E. and Cartalis, C., Mapping satellite derived night light emissions as a policy tool, 3rd International Symposium on "Remote sensing of urban areas", 11-13 June, Istanbul, Turkey, 2002.
32. Petrakis, M., Cartalis, C., Psiloglou, B., Keramitsoglou, I., Lianou, M., Chalkias, C., GIS techniques in a Park Management system, 21st Annual ESRI International User Conference, 9-13 July, San Diego, California, 2001.
33. Petrakis, M., Psiloglou, B., Keramitsoglou, I., Cartalis, C. and Lianou, M., Remote Sensing and GIS technique in environmental impact assessment and management of the Vikos-Aoos Greek mountainous park, Natural Hazards Workshop, 5-7 June, Igls, Austria, 2000.
34. Cartalis, C., Athanassiou, E., Proedrou, M., Andritsos, A., and Chrysoulakis, N., 1999. Microclimatic Mapping of the Athens area with the Use of Landsat Thermal Infrared Imagery. In CD ROM of Proceeding of HISTOCITY '99 (Historical Cities Sustainable Development: "The GIS as Design and Management Support"), Series of TMR Euro-conferences.
35. Chrysoulakis, N. and C. Cartalis, 1998. A new approach for the detection of industrial accidents with the use of NOAA/AVHRR imagery. Abstracts of 7th International Symposium on Natural & Man-Made Hazards, Technical University of Crete, Chania, (p. 44).
36. Cartalis, C., and Retalis, A., 1998, Satellite earth observation in support of the assessment of stratospheric aerosols in south eastern Mediterranean, International Conference of the Remote Sensing Society, Greenwich.

37. Retalis, A., Cartalis, C. and Asimakopoulos, D.N., 1998, An atmospheric correction algorithm applied to polluted urban cities: a case study for Athens, International Conference of the Remote Sensing Society, Greenwich.
38. Feidas, H., and Cartalis, C., An automated algorithm for tracking convective cloud systems using Meteosat imagery, 9th Conference on satellite meteorology and oceanography, 25-29/5/1998, Παρίσι.
39. Arianoutsou, M., C. Cartalis, D. Deligiorgi, G. Kouroupetroglou, G. Farangitakis, E. Flegga, A. Photopoulos, S. Skampardonis, V. Vanikioti, N. Adaktylou, A. Andritsos, N. Chrysoulakis, D. Kazanis, K. Niahou, S. Papavassiliou, C. Radea and C. Michalopoulos, 1997. Global Learning Observations to Benefit the Environment (GLOBE): an international programme for environmental awareness and education. International Conference on Environment and Society: Education and Public Awareness for Sustainability, UNESCO, Thessaloniki.
40. Cartalis, C. and Petrakis, M., Definition of metadata for earth observation applications, 4th European Earth Observation System Workshop, 2-3/10/1997.
41. Cartalis, C., An open classroom for the environment, International Conference on OPEN CLASSROOM II, 19-21/9/1997, 169-175, Crete.
42. Feidas, H., and Cartalis, C., Systematic Classification of clouds in METEOSAT imagery for the definition of clouds characteristics in weather events associated with floods in Greece, INM/WMO International Symposium on Cyclones and Hazardous Weather in the Mediterranean, 14-17/4/1997, Palma de Mayorca, pp.95-100.
43. M. Petrakis, P. Kassomenos, S. Lykoudis, C. Cartalis, D. Deligiorgi, H. Feidas, N. Chrysoulakis, N. Dalezios, N. Papamanolis, M. Mathioudi, L. Toulis, K. Tibas, N. Pantalos, S. Batistatos, Use of Earth Observation in Agriculture, Proceedings of International Symposium on Applied Agrometeorology and Agroclimatology, University of Thessaly, Volos, (European Commission, COST 77,79,711, EUR 18328 EN, (pp. 335 - 339).
44. Cartalis, C., Strategy for the assessment of air quality at the European level, Workshop της Ευρωπαϊκής Υπηρεσίας Περιβάλλοντος για την Ποιότητα του Αέρα, Κοπεγχάγη, Απρίλιος 1996.
45. Cartalis, C., Nikitopoulou, Th., Proedrou, M., Assessment of the impact of climate changes to agriculture, International Conference on Agrometeorology, Volos, April 1996.
46. Petrakis, M., Cartalis, C., Use of Earth Observation in Agriculture, Use of satellite remote sensing in agriculture, International Conference on Agrometeorology, Volos, April 1996.

47. Cartalis, C., Petrakis, M., Earth Observation in Greece: Status, prospects and needs with respect to local and regional environmental characteristics, International Workshop on Earth Observation, Ispra, 1995, February 1995.
48. Retalis, A., Cartalis, C., Tombrou, M., and Varotsos, C., Atmospheric soundings in support of the definition of the tropopause region in the south eastern Mediterranean region, International NATO Workshop on Atmospheric Ozone and its changes in the Mediterranean, Athens, 31/10-4/11/1995, Proceedings NATO ASI Series, vol. 53, pp. 281-284, 1997.
49. Cartalis, C. and Retalis, A., Analysis of stratospheric aerosols in the south eastern Mediterranean region as deduced from SAGE I and SAGE II measurements, International NATO Workshop on Atmospheric Ozone and its changes in the Mediterranean, Athens, 31/10-4/11/1995, Proceedings NATO ASI Series, vol. 53, pp. 270-279, 1997.
50. Cartalis, C., Use of optical sensors in support of the study of the atmosphere, NATO Advanced Research Workshop, Apatity, Sept. 1993.
51. Cartalis, C., Santamouris, M., and Asimakopoulos, D.N., Energy efficiency in Greece: from environmental aspects to economic values, United Nations Conference on Energy, Paris, May 1993.
52. Cartalis, C., Active remote sensing from space: status, potential, and prospects, προφορική International Symposium on Acoustic Remote Sensing and Associated Techniques of the Atmosphere and Oceans, Athens, Greece, 26-29 May 1992, 237-242.
53. Cartalis, C., Varotsos, C., and Tombrou, M., Variations of historic and recent surface ozone measurements for Athens, Greece, 1st General Conference of the Balkan Physical Union, Thessaloniki, Greece, September 26-28, 1991.
54. Cartalis, C., Satellite monitoring of atmospheric composition and atmospheric structure: Current and future capabilities, 1st General Conference of the Balkan Physical Union, Thessaloniki, Greece, September 26-28, 1991.
55. Cartalis, C. and Kallos, G., The role of computers in environmental sciences, 1st General Conference of the Balkan Physical Union, Thessaloniki, Greece, September 26-28, 1991.
56. Varotsos, C., Cartalis, C., and Vlassi, A., Intraseasonal variation of surface ozone in Athens, Greece, 5th American Meteorological Society Conference on Climate Variations, Denver, U.S.A., October 1991.
57. Varotsos, C., Cartalis, C. and Tombrou, M., A thermodynamic diagnostic tool for climatic variations, 5th American Meteorological Society Conference on Climate Variations, Denver, U.S.A., October 1991.
58. Cartalis, C. and Sakellariou, N., Improving the efficiency of retrieval models by

using a NOAA/AVHRR cloud detection algorithm, 5th AVHRR users meeting, Tromso, Norway, June 1991, Πρακτικά Συνεδρίου, EUM P09, 265-271.

59. Cartalis, C. and Eftihifis, G., The impact of a forest fire in the pollution of an urban area, International Conference on Forest Meteorology, Coimbra, Πορτογαλίας, Νοέμβριος 1990, Πρακτικά του συνεδρίου, vol. B, 23.1-23.7.

60. Cartalis, C. And Drayson, S.R., The retrieval of NO and NO₂ concentrations from satellite solar occultation measurements, International Radiation Symposium, Lille, Γαλλίας, 18-24 Αυγούστου 1988, Πρακτικά Συνεδρίου, σελ. 511-515, Reidel 1989.

54. Cartalis, C., The impact of the diurnal variation of NO and NO₂ on the interpretation of solar occultation measurements, πρακτικά του Workshop on Non Linear Science, Πανεπιστήμιο του Los Angeles, 1 - 12 Αυγούστου, 1988.

11.3.4 Presentations to Conferences and Workshops (Book of Abstracts)

Submitted 1. Cartalis, C., Polydoros, A., Asimakopoulos, D. and Mavrakou, Th., Earth observation in support of sustainable urban planning: results of the DRAGON-3 Monitor project - Part I on the thermal environment, to be presented at the ESA Dragon 3 Symposium, Wuhan, 4-6 July 2016.

Submitted 2. Cartalis, C., Polydoros, A., Nyktarakis, G., 2016. Downscaling Earth Observation data in the Thermal Infrared in Support of the study of the thermal environment in cities, to be presented at the ESA Dragon 3 Symposium, Wuhan, 4- 6 July 2016.

1. Cartalis, C., 2015, EO information as a service to citizens regarding the quality of life in cities, Earth Observation Open Science 2.0, ESA-Frascati, 12-14 October 2015.

2. Cartalis, C. and V. Tsetsos, 2015, estate4real: EO application for the real estate market in cities, Earth Observation Open Science 2.0, ESA-Frascati, 12-14 October 2015.

3. Mavrakou, T. and Cartalis, C. 2014. "Detection of storm cells with the use of Meteosat satellite images and the application of RGB composites "Airmass" and "Convection"". Paper presented at the 12th International Conference on Meteorology, Climatology and Atmospheric Physics (COMECAP) Heraklion, Greece May 28-31, 2014.

4. Cartalis, C., 2013, Mega (sport) events as catalysts for sustainable urbanization?, International Conference: Impact of megaevents to cities, Univ. of East London.

5. Cartalis, C., Stathopoulou, M., Chrysoulakis, N. and Charalambopoulos, I., 2013. Improving urban planning with the use of environmental indicators. Proc. of the Fourth International Conference on Environmental Management, Engineering, Planning and Economics (CEMEPE & SECOTOX), Mykonos, Greece, June 24- 28.

6. Cartalis, C., Asimakopoulos, D., Petrakis, M., Adaktylou, N., Stathopoulou, M. and Chrysoulakis, N., 2013. Use of Earth Observation in assessing the impact of Major Sport Events. Proc. of the Fourth International Conference on Environmental Management, Engineering, Planning and Economics (CEMEPE & SECOTOX), Mykonos, Greece, June 24-28.
7. Asimakopoulos, D., Cartalis, C., Petrakis, M., Stathopoulou, M., Adaktylou, N. and Chrysoulakis, N., 2011. Sport Events Case Studies. Dragon 2 Symposium, Prague, Czech Republic, June 20 - 24.
8. Asimakopoulos, D., Chrysoulakis, N., Stathopoulou, M., Petrakis, M. and C. Cartalis, 2010. Assessing the link between urban changes and major sport events with the use of Earth Observation. Dragon 2 Mid Term Results Symposium held in Yahnghshuo Country, Guilin, China, May 17 - 21.
9. Asimakopoulos, D., Petrakis, M., Chrysoulakis, N., Stathopoulou, M., Karvounis, G. and C. Cartalis, 2009. Olympic Games in Athens: using earth observation for the assessment of changes and impacts for the natural and built environment. Annual Dragon 2 Symposium held in Barcelona, Spain, June 22 - 26.
10. Skliris, N., Mantziafou, A., Sofianos, S., Lascaratos, A., Keramitsoglou, I., Vlahopoulos, G., Cartalis, C., Paraskevopoulou, V., Scoullou, M., A study of the plankton ecosystem of the Aegean Sea using Seawifs data and a 3D coupled hydrodynamic/biological model, Geophysical Research Abstracts, Vol. 10, EGU2008-A-03857, 2008, SRef-ID: 1607-7962/gra/EGU2008-A-03857, EGU General Assembly 2008.
11. Skliris, N., Mantziafou, A., Sofianos, N., Vevatis, V., Lascaratos, A., Keramitsoglou, I., Vlahopoulos, G., Adaktylou, N. and Cartalis, C., 2007. Modelling the ecohydrodynamics of the Aegean sea, Geophysics Research Abstracts, vol. 9.
12. Stathopoulou, M. Cartalis, C. and Andritsos, A., 2005. Assessing the thermal environment of major cities in Greece, 1st International Conference on Passive and Low Energy Cooling for the built Environment (PALENC 2005), Santorini Island.
13. Cartalis, C., 2005. Use of Earth Observation in support of the needs of Olympic Games, DRAGON Symposium, Santorini, 28-30 June.
14. Katsiabani, K., Adaktylou, N., and Cartalis, C., 2003. Climatic Mapping of Greece with the use of NOAA-AVHRR satellite images, International Symposium on Geographical Information Systems and Remote Sensing, University of Thessaly, Volos.
15. Keramitsoglou I. and Cartalis, C., An operational system for monitoring oil spills: the promed system, PROMED Workshop, Crete, November 2001, 37.
16. Petrakis M., B. Psiloglou, I. Keramitsoglou, C. Cartalis, M. Lianou, Remote Sensing and GIS Technique in Environmental Impact Assessment and Management of the Vikos-

Aoos Greek Mountainous Park, Poster presentation in the Advanced Techniques for the Assessment of Natural Hazards in Mountainous Areas, Igls/Innsbruck, Austria, 5-7 June, 2000.

17. C. Cartalis, E. Athanassiou, M. Proedrou, A. Andritsos and N. Chrysoulakis, 1999. Microclimatic Mapping of the Athens area with the Use of Landsat Thermal Infrared Imagery. In CD ROM of Proceeding of HISTOCITY '99 (Historical Cities Sustainable Development: "The GIS as Design and Management Support"), Series of TMR Euro-conferences.

18. Chrysoulakis, N. and C. Cartalis, 1998. A new approach for the detection of industrial accidents with the use of NOAA/AVHRR imagery. Abstracts of 7th International Symposium on Natural & Man-Made Hazards, Technical University of Crete, Chania, (p. 44).

19. Arianoutsou, M., C. Cartalis, D. Deligiorgi, G. Kouroupetroglou, G. Farangitakis, E. Flegga, A. Photopoulos, S. Skampardonis, V. Vanikioti, N. Adaktylou, A. Andritsos, N. Chrysoulakis, D. Kazanis, K. Niahou, S. Papavassiliou, C. Radea and C. Michalopoulos, 1997. Global Learning Observations to Benefit the Environment (GLOBE): an international programme for environmental awareness and education. International Conference on Environment and Society: Education and Public Awareness for Sustainability, UNESCO, Thessaloniki.

20. Petrakis, M., Kassomenos, P., Lykoudis, S., Cartalis, C., Deligiorgi, D., Feidas, H., Chrysoulakis, N., Dalezios, N., Papamanolis, N., Mathioudi, M., Toullos, L., Tibas, K., Pantalos, N., and Batistatos, S., 1996. Use of Earth Observation in Agriculture. In: Dalezios, R. N. (Editor), Proceedings of the COST International Symposium on Applied Agrometeorology and Agroclimatology. European Commission, COST 77,79,711, EUR 18328 EN, (pp. 335 -339).

21. Cartalis, C. and Mihalopoulos, Ch, GLOBE: An global environmental education network, UNESCO Conference on Environmental Education, Thessaloniki, 1997.

22. Cartalis, C., Networking and data transfer for earth observation data and applications, Βρυξέλλες, Ημερίδα Center for Earth Observation, 4-5/12/1997.

23. Cartalis, C., Οι δραστηριότητες του Ευρωπαϊκού Οργανισμού Περιβάλλοντος, Συνάντηση Εργασίας για την περιβαλλοντική πολιτική της Ευρωπαϊκής Ένωσης, Λευκωσία, Δεκέμβριος 1997.

24. Retalis, A., Cartalis, C. and Varotsos, C. Total ozone characteristics in the south east Mediterranean region as deduced from satellite observations, 20ο Διεθνές Συνέδριο Ευρωπαϊκής Γεωφυσικής Εταιρείας, Αμβούργο, 3-7 Απριλίου 1995.

25. Retalis, A., and Cartalis, C., Distribution of Stratospheric aerosols in the Mediterranean as deduced from satellite observations, 20ο Διεθνές Συνέδριο Ευρωπαϊκής Γεωφυσικής Εταιρείας, Αμβούργο, 3-7 Απριλίου 1994.
26. Cartalis, C., Asimakopoulos, D., Feidas, H., Categorisation of the parameters and systems that influence weather patterns and atmospheric stability conditions in forested areas, 2ο Διεθνές Συνέδριο για Δασικές πυρκαγιές, Coimbra Πορτογαλίας, Νοέμβριος 1994.
27. Cartalis, C., Tombrou, M., Varotsos, C. and Asimakopoulos, D.N., Changes in the tropopause region in the Mediterranean in the period 1978 to 1991, 6th International Climatology Colloquim, Thessaloniki, 22-25/9/1993.
28. C. Cartalis, NATO Advanced Research Workshop, Active Remote Sensing, Apatity, Russia, 1992.
29. Cartalis, C., Varotsos, C. and Vlasi, A., Using historic surface ozone records to determine changes in the ozone producing potential, Quadrennial Ozone Symposium, University of Virginia, 4-13 June, 1992.
30. Asimakopoulos, D., Varotsos, C. and Cartalis, C., Vertical ozone profiles over Athens, Greece, Workshop on Transport and Stratosphere-Troposphere Exchange, Oxford, 25-26 May, 1992.
31. Cartalis, C., Environmental guidelines to reduce air pollution from transport, Workshop on achieving good environmental practice in Eastern and Central Europe, Πολωνία, 18-20 Οκτωβρίου 1992 (Πρόεδρος της ομάδος εργασίας "Αστικές μεταφορές και ατμοσφαιρική ρύπανση").
32. Cartalis, C., Assessing the contribution of land based sources to marine pollution, CEMR (Council of European Municipalities and Regions), Workshop on Marine Pollution from land-based sources, Venice, 4-5 December, 1991.
33. Cartalis, C., Sustainable development and environmental protection, NATO Advanced Research Workshop, Sustainable Development and Global Environmental Change, Lake Arrowhead, California, 11-16 November, 1991.
34. Cartalis, C., Varotsos, C., and Catsambas, A., The impact of air pollution on the amount of solar UV radiation at the Earth's surface: an application in the development of a minimum erythema dose, 2nd European Academy Conference of Dermatology, Athens, 9-14 October, 1991.

35. Cartalis, C., Environmental implications resulting from heavy traffic, 3rd Annual Conference of Balkan Capitals, Ankara, 12-13 September, 1991.
36. Varotsos, C., Cartalis, C., and Feidas, H., Relationship of ozone to NO_x and hydrocarbons, Conference of the International Union of Geodesy and Geophysics (IUGG), Vienna, Austria, 11-24 August 1991.
37. Varotsos, C., Helmis, C., and Cartalis, C., Statistical analysis of SBUV ozone measurements, Conference of the International Union of Geodesy and Geophysics (IUGG), Vienna, Austria, 11-24 August 1991.
38. Cartalis, C., Space systems for Earth Monitoring: Current status and future prospects, NATO Advanced Study Institute, The Behaviour of systems in the space environment, Scotland, Pitlochry, 7-19 July 1991.
39. Varotsos, C. and Cartalis, C., Solar variability effects in the air surface temperature and surface ultraviolet radiation, General Assembly of the European Geophysical Society, Wiesbaden, Germany, 22-26 April 1991.
40. Varotsos, C., Cartalis, C., Tombrou, M., and Asimakopoulos, D.N., Using radiosonde data for the period 1978-1987 to explore the stratosphere-troposphere exchange over Athens, Greece, General Assembly of the European Geophysical Society, Wiesbaden, Germany, 22-26 April 1991.
41. Cartalis, C. and Drayson, S.R., Parameterization of the photochemistry of nitric oxide and nitrogen dioxide at sunset and sunrise and its applicability in inversion codes, Fifth Scientific Assembly of the International Association of Meteorology and Atmospheric Physics, University of Reading, United Kingdom, 31 July-12 August 1989.

12. DISTINCTIONS

Research assistantship from the University of Michigan (Department of Atmospheric, Oceanic and Space Sciences), 1985 - 1989.

Support distinction from AGU regarding the participation to the annual Conference, Baltimore 1988.

Scholarship from UCLA for the participation to summer school on Non Linear Sciences, 1988.

Support distinction from EGS for the participation in the annual Conference, Wiesbaden, 1991.

Distinction from Empirikion Foundation for research work, 1993.