Constantinos CARTALIS
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Director of the Department of Environment Physics (since 1.12.2017)
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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. Followed (distant learning) post graduate courses on Strategic Information Systems at the Heriot Watt University (1994) and in "Urban Design" at the University of Pennsylvania (2014).

2. Academic experience

Professor at the Department of Environmental Physics of the University of Athens [previously Associate Professor, Assistant Professor and Lecturer] – 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). Collaborating Professor at the Masters Program on "Strategies for the management of the environment and natural disasters", Dept. of Geology, University of Athens, (2016…). Collaborating Professor at the Open University of Greece, Masters Programme on Environmental design of cities (2013-2016) and in Environmental Planning (2017-…).

3. Teaching experience

Teaching of the undergraduate courses: Introduction to Atmospheric Physics, Quality of the atmospheric environment, Climate and Climate Change.
Teaching of the graduate courses: Atmopsheric Physics, Principles and Applications of Remote Sensing, Climate and climate variability, Environmental Management, Mesoscale Convention Systems (including satellite meteorology).
Supervision of undergraduate (60) and graduate students (7 at PhD level and 48 at Masters level) for the completion of their thesis.
Provides three distant learning cources within the continuing education program of the University of Athens: GIS for chartography and the environment, Climate change and urban areas, GIS for archaeology (the latter in cooperation with the Dept of Archaeology of the University of Athens).

4. Research area

Research refers to: a) climate and climate change, with emphasis to energy budget analysis and to the drafting of adaption/mitigation plans b) cities with emphasis to microclimate, the thermal environment and air quality c) applications of Earth Observation for the above as well as other environmental applications (e.g. forest fires, extreme weather events, natural environment and ecosystem services).

5. Research experience

Has participated in ***44 EU and/or state funded research projects*** related to environmental physics, Earth Observation (ISOLE, PRIMAVERA, DIFFUSION, TOASTE, BRIDGE, etc.).

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

Representative projects are (*(on going denoted with italics)*

Project	Funding Agency	Role
Use of satellite measurements for the definition of the atmospheric chemical composition and of the energy budget in the Mediterranean region	GSRT	Leader
Assessing research and user needs for earth observation in the field Atmosphere-Climate	JRC-ISPRA	Partner
Management of the atmospheric environment in urban areas	European Space Agency	Leader
Definition of environmental indicators	EUROSTAT	Partner
Study of the urban heat island with the use of satellite remote sensing	GSRT	Leader
Development of algorithms for atmospheric correction of satellite data	GSRT	Leader
DIFFUSION (Application of satellite remote sensing for the needs of the public sector)	JRC-ISPRA	Leader
ISOLE - Use of Earth Observation for the study of islands' environment	DG Research – EC	Partner
Study of the urban microclimate with the combined use of satellite/ground data	Ministry of Environment	Leader
Use of Earth Observation for aerosol distribution in urban areas and their impact on human health	GSRT	Leader
Use of Earth Observation for evaluating thermal heat island in urban areas	GSRT	Leader
SustainaBle uRban plannIng Decision support accountinG for urban mEtabolism (BRIDGE)	DG Research - EC	Partner
MONITOR - Definition of indicators at the urban scale as supported by EO	European Space Agency	Partner
Simulation of energy fluxes in the urban environment	Bilateral program GR-FRA	Partner
Preparation of an Adaptation plan for the thermal environment of Athens	Municipality of Athens	Leader
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	GMES	Partner
SUB2HRS, Environmental and space applications in support of sporting events	*University of Brighton*	*Partner*
Assessment of the sustainability performance of projects	ETVA-VIPE	Leader
Climate change and Development Model of Greece 2017-2018	*Dianeosis*	*Leader*
Assessment of the impact of urbanization to urban climate in support of the development of smart tools for sustainable urbanism 2016-2020	*European Space Agency*	*Leader*
Drought and fIre ObServatory and eArly waRning system (DISARM) 2017-2020	*European Regional Development Fund*	*Partner*
Development of a multicriteria application for the prediction, detection and management of climate change induced dangers to sites of major cultural and touristic interest – application for selected archaeological sites and monuments of the World Heritage Catalog of UNESCO 2018-2021	*General Secretariat for Research and Technology – Greek Ministry of Education*	*Partner*

6. International experience (ongoing with italics)

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

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

Member of the Management Board of the Space Cluster of the innovation hub Corallia. Member of the Environment Council of the Greek Development Agency for Industrial Areas.

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 "Urban Heat Island". Invited Guest editor for the journal Sustainability, Special Issue "Urban Climate Modeling and Assessment in Support of Sustainable Development". Member of the Editorial Board of the international referred journal "Advances in Building Energy Research".

Evaluator for 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, Sustainability, Climate, International Journal of Environmental Research and Public Health*

Member of the Scientific Committee of the Fifth International Conference "Counteracting Urban Heat Island (UHI) and Climate Change through Mitigation and Adaptation», India 2018.

Elected Vice-President of the Council of the Intenrational Bureau of Education, UNESCO.
Member of the Council of the International Bureau of Education (UNESCO)
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. Member and Vice President of the European Network of Environmental Legislators (2011-2012).
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).
Member and Vice President of the European Network of Environmental Legislators (2011-2012).
Evaluator for chapters/reports (2013) of IPCC on behalf of the Ministry of Environment of Greece. 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.
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".

7. Invited presentations to peer-reviewed, internationally established conferences and international advanced schools.

Cartalis, C., "Nature Based Solutions to counteract overheating and energy poverty", COST International Workshop on Energy Poverty, Athens, 2018.

Cartalis, C., "Changing Cities", Advanced Training Session, University of Cologne, Cologne, December 2017.

Cartalis, C., "Introduction to Optical Remote Sensing" and "Introduction to Thermal Remote Sensing", Advanced ESA Land Cover Program, Kunming-China, November 2017.

Cartalis, C., "Prerequisites for Nature Based Solutions in Cities", European Forum on Nature Based Solutions, Tallin, October 2017.

Cartalis, C., "Urban Heat Island", Advanced ESA Land Cover Training Program, Budapest, September 2017.

Cartalis, C., "Earth Observation for the study of the Urban heat island", Advanced ESA Land Cover Training Program, Tianjin, November 2015.

Cartalis, C. "Mitigating climate change effects in cities", Lecture Series, University of Cologne, 21 January 2016.

Cartalis, C., "Science of cool cities: Examples of multidisciplinary approaches", Workshop, University of Cologne, 21 January 2016.

Cartalis, C. and Mavrakou, Th., "Earth observation and GIS systems for urbanization", MASS Conference, UNEP-Grid, Warsaw, November 2015.

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.

Cartalis, C., The physics of Urban Heat island, Programme MED (Mediterranean and Environment), Athens, February 2015.

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.

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.

Cartalis, C., 2014, Earth Observation applications for the urban environment, Workshop on Global Urban Observation and Monitoring from Space, National Observatory of Athens, Athens.

Cartalis, C., Use of Earth Observation for environmental applications – the case of Greece, ESA Summer School on Land applications, Athens 2013.

Cartalis, C., 3rd OECD Urban Roundtable, Cities and Green Growth, Paris, 2010.

Cartalis, C., 2003, Environmental issues in the preparation of Olympic Games, presentation, International Olympic Committee Workshop, Lausanne.

Cartalis, C., 2002. Use of Geographic Information Systems in major events, Annual Conference of AGILE, Crete.

Cartalis, C., Strategy for the assessment of air pollution at the European level, Workshop of the European Environment Agency, Copenhagen 1996.

8. Organisation of international conferences in the field of the applicant (membership in the steering and/or organising committee)

Member of the Scientific and Organizing Committees of the GLOBE (Global Observations to Benefit the Environment) Workshop, Santorini 1995.
Member of the Scientific and Organizing Committees of the ESA Dragon Workshop, Santorini, 2005.
Member of the Scientific Committee of the Third International Conference "Counteracting Urban Heat Island (UHI) and Climate Change through Mitigation and Adaptation**»,** Venice, 2014.
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 Committee of the Fifth International Conference "Counteracting Urban Heat Island (UHI) and Climate Change through Mitigation and Adaptation**»,** Hyderabad-India, 2018.

9. Prizes/ Awards/ Academy memberships
Research assistantship – Dept of Atmospheric, Oceanic and Space Sciences, University of Michigan (1985-1989)
Medal of the city of Athens (2004)
Honorary Doctorate at the Demokritus University of Thrace – Greece (2014)
European Space Agency (ESA) award for project implementation (DRAGON 3) (201
Copernicus - GMES Award for an app on quality of life in urban areas
Energy Mastering Award (2017).

10. Publications
10.1 Books

Co-author of the Chapter "Energy Consumption of the Building Sector: Incorporating Urbanization, Local Climate Change, and Energy Poverty, in book "Smart City Networks", Springer 2017.
Author of the Chapter "Climatic change in the built environment in temperate climates", in book "Energy efficiency and environmental quality of buildings", Springer, 2016.
Co-author of the chapter "Building Resilient Cities to Climate Change", in book "Future City Architecture for Optimal Living", Springer, 2015.
Co-author of the chapter Use of Earth Observation to support urban modelling parameterization in BRIDGE". In: Understanding Urban Metabolism: A Tool for Urban Planning. Routledge, Taylor & Francis, London, 2014, pp. 58 - 68.

10.2 In international refereed journals

1. Polydoros, A., Mavrakou, T., Cartalis, C., 2018. Quantifying the Trends in Land Surface Temperature and Surface Urban Heat Island Intensity in Mediterranean Cities in View of Smart Urbanization, Urban Science, 2(1), 16; doi:10.3390/urbansci2010016
2. Mavrakou, T., Polydoros, A., Cartalis, C., and Santamouris, M., 2018. Recognition of Thermal Hot and Cold Spots in Urban Areas in Support of Mitigation Plans to Counteract Overheating: Application for Athens, Climate, 6(1), 16; doi:10.3390/cli6010016
3. Paravantis, J., Santamouris, Mat, Cartalis, C., Efthymiou, Ch. and Kontoulis, N., 2017, Mortality impact associated to high ambient temperatures, heatwaves and the urban heat island in Athens, Greece, Sustainability, *9*(4), 606; doi:10.3390/su9040606
4.Vlami, V., Kokkoris, I., Zogaris, S., Cartalis, C., Kehayias, G. and Dimopoulos, P., Cultural landscapes and attributes of "culturalness" in protected areas: An exploratory assessment in

Greece, Science of The Total Environment, Volume 595, 1 October 2017, Pages 229–243.
5.Benas, N., Chrysoulakis, N. and Cartalis, C., 2016, Urban surface temperature and heat island characteristics and trends in the Mediterranean, Theoretical and Applied Climatology, pp. 1-10.
6. 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, 1: 107. doi: https://doi.org/10.15344/2456-351X/2016/107.
7. 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, 4:2
8. 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.
9. 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.
10. 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.
11. 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
12. 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.
13. 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.
14. 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.
15. 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
16. 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
17. 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
18. 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, 61-70.
19. 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
20. Cartalis, C., 2014. Towards Resilient Cities – A Review of definitions, challenges and prospects, Advances in Building Energy Research, vol. 8, 259-266.
21. 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.
22. 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.
23. 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.
24. Dassenakis, M., Paraskevopoulou, V., Cartalis, C., Adaktylou, N., and Katsiabani, K., 2011. Remote sensing in coastal water monitoring: applications in the eastern Mediterannean sea, Pure and Applied Chemistry, vol.84, no. 2, pp.335-375.
25. 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 ancillery information, Advances in Space Research, 43 (6), pp 930-940.
26. Adaktylou, N., Cartalis, C., Kalkanis, G., 2009. A learning platform for the introduction of remote sensing princilples in higher education: a pilot phase application, International Journal of Web based teachning and learning texhnologies, vol. 4, pp 43-60.
27. Stathopoulou, M. and Cartalis, C., 2009. Downscaling AVHRR land surface temperatures for improved surface urban heat island intensity estmation, Remote Sensing of Environment, vol. 113, pp. 2592-2605.
28. 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.
29. 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, Solal Energy, vol.81, pp. 358-368.
30. 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.
31. 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.
32. 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.
33. Keramitsoglou, I, Cartalis, C. and Kiranoudis, C.T., 2006. Automatic Identification of Oil Spills on Satellite Images, Environmental Modelling & Software, 21 , 640–652.
34. 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.

35. 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.
36. 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.
37. 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.
38. 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.
39. 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 Aoos-Vikos, northern Greece using remote sensing and GIS techniques, International Journal of Risk Assessment and Management, 5 (1), pp. 50-65.
40. 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.
41. 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.
42. 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.
43. 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.
44. Varotsos, C., Cartalis, C., Vlamakis, A., Tzanis, 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.
45. 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), pp 65-72.
46. Keramitsoglou, I., Cartalis, C., and Kassomenos, P., 2003. Decision Support System for managing oil spill events, Environmenal Management, 32 (2), 290-298.
47. 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.
48. 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.
49. 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.
50. 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.

51. 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.
52. 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.
53. 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.
54. 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.
55. 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.
56. 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.
57. 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.
58. 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.
59. 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.
60. 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 (renamed to International Journal of Sustainable Energy).
61. 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.
62. 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.
63. 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).
64. 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 Envionmental Chemistry, 69, 31-42.
65. Cartalis, C., 1997. Critical aspects and essential means for a green economic development in Greece, Sustainable Development, vol. 5, 1-6.
66. 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.
67. 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.
68. Retalis, A. και Cartalis, C., 1997. Definition of the tropopause height in the South-Eastern Mediterranean Region, Toxicological and Environmental Chemistry, 58,259-267.

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