

CARRICULUM VITAE



PERSONAL INFORMATION

Name: Panagiotis Kosmopoulos
Date of Birth: 07/08/1985 Athens, Greece
Marital Status: Married, one child
Current Position: - [Postdoctoral Researcher](#) at the Institute of Astronomy, Astrophysics, Space Applications and Remote Sensing, National Observatory of Athens (IAASARS/NOA)
Work Address: I. Metaxa & Vas. Pavlou, P. Penteli (Lofos Koufou), 15236 Athens, Greece
Home Address: Favnou 5, 11146, Galatsi, Athens, Greece
Work Phone: (+30) 210 8109170
Home Phone: (+30) 211 2152015
Mobile Phone: (+30) 693 7951991
Work e-mail: pkosmo@meteo.noa.gr
Personal e-mail: superchoser@gmail.com & superchoser@live.com
Solar Energy Applications e-mail: info@solea.gr
Solar Energy Applications Portal: <http://solea.gr/>

ADDITIONAL INFORMATION

Panagiotis Kosmopoulos (PK) was born in Athens, Greece, in 1985. He received his B.Sc. in Geology (2011) and M.Sc. in Environmental Physics (2013) from the University of Athens and holds a Ph.D. in Atmospheric Physics (2018) from the Aristotle University of Thessaloniki. He has a 14 year experience in solar energy and applications, radiative transfer modeling, satellite and ground-based observations, aerosol and cloud physics. PK has a professional experience as a research scientist at (i) the Laboratory of Atmospheric Physics of the Department of Geology of the National and Kapodistrian University of Athens (2006-2010), (ii) the Laboratory of Atmospheric Physics and Meteorology of the Department of Physics of the same University (2011-2013) and (iii) the Institute for Environmental Research and Sustainable Development of the National Observatory of Athens (2014-2017). He worked also as a postdoctoral researcher at the Physikalisches-Meteorologisches Observatorium Davos of the World Radiation Center in Switzerland (2018) and at the Institute for Astronomy, Astrophysics, Space Applications and Remote Sensing of the National Observatory of Athens (2018 - today). He has participated in 8 international and national competitive projects (e.g. H2020 GEO-Cradle) as research assistant (2013-today) and was granted by the European cooperation in Science and Technology (COST)'s International Network to Encourage the use of monitoring and forecasting dust products (inDust) to perform the Short-Term Scientific Mission (STSM) entitled "Finding" project (Forecasting dust impact on solar energy in Egypt) (9/2018). PK has 94 publications and more than 1100 citations (>700 excluding self citations of all authors according to Scopus, ISI and Google Scholar - 3/2019) in international journals and conferences (h-index 18). He is also reviewer of 17 highly ranked scientific journals and editor in a special issue of the Remote Sensing journal. PK is the developer of the Solar Energy Nowcasting System (SENSE) as part of his [Ph.D.](#) with end-users from the public and private sector (e.g. renewable energy authorities and handling entities). He also deals with solar atlas and solar energy business plan development, solar system performance estimations and smart grids. He is an expert on radiative transfer model simulations for solar power and energy estimations, field campaigns, aerosols, clouds and trace gases research and radiative forcing. He exploits Earth Observation data (satellite, in-situ and modelled) for a variety of solar energy applications (<http://solea.gr/>). Finally, PK has more than 55 relevant publications in scientific journals and conferences dealing with aerosol and cloud characterization, optical properties and interaction with the atmospheric environment.

EDUCATION

- Ph.D. in Environmental Physics at the Applied Physics Department, Aristotle University of Thessaloniki. PhD thesis title: Estimation of the solar energy potential in Greece using ground-based and satellite observations and numerical simulations of radiative transfer models. (1/2018)
- M.Sc. in Environmental Physics at the Physics Department, National & Kapodistrian University of Athens. MSc thesis title: Aerosol and cloud remote-sensing identification, climatic analysis and radiative transfer simulations in the atmosphere of Greece. (11/2013)
- B.Sc. in Geology and Geoenvironment, National & Kapodistrian University of Athens. BSc thesis title: Dust event remote sensing identification and climatic analysis in the atmosphere of Athens. (2/2011)

EXPERTISE

- Solar energy and applications (SOLEA): He is the developer of the Solar Energy Nowcasting System ([SENSE](#)) as part of his PhD with end-users from the public and private sector (e.g. the Independent Power Transmission Operator of Greece, the Ministry of Electricity and Renewable Energy and the New and Renewable Energy Authority of Egypt, the Magdi Yacoub's Aswan Heart Centre and the Attica Group). [Solar Atlas](#) development, [PV and CSP performance](#) estimations, smart grids, solar energy transmission and distribution systems.
- Radiative transfer modelling (RTM): Development of RTM simulations for solar power and energy estimations, field campaigns, instrument characterizations, aerosols, clouds and trace gases research and radiative forcing.
- Satellite and ground-based observations: Exploitation of Earth Observation data (satellite, in-situ and modelled) for a variety of [solar energy applications](#).
- Aerosol and cloud physics: More than 55 relevant publications in scientific journals and conferences dealing with aerosol and cloud characterization, optical properties and interaction with the atmospheric environment.
- Physical climatology: Climate feedback mechanisms, mathematical explanation and modelling of climate and various climatological studies (clouds, aerosols, solar radiation and energy, persistent pollutants, etc).

FUNDED RESEARCH PROJECTS & GRANTS - AWARDS

Project Title	Host Institute	Source	Start/End Dates
Aerosol and Cloud Influence on global surface UV irradiance retrieved from satellite sensors (ACI-UV)	National Observatory of Athens	EU-FP7-People Marie Curie IEF	1/3/2013 31/5/2013
Development of synergistic and integrated methodologies and tools for monitoring, management and forecasting of environmental parameters and pressures (KRIPIS-THESPIA)	National Observatory of Athens	National Strategic Reference Framework, Development proposals for research Institutes	1/2/2014 31/10/2015
Excellence Research Program GSRT-Siemens "Environment, Space and Geodynamics/Seismology" (ARISTOTELIS-SOLAR)	National Observatory of Athens	Hellenic Republic-Siemens settlement Agreement	1/3/2016 30/9/2016
Coordinating and integRating state-of-the-art earth observation Activities in the regions of north Africa, Middle East and Balkans and Developing Links with GEO related initiatives towards GEOSS (GEO-CRADLE)	National Observatory of Athens	H2020 Framework Program-Climate action, environment, resource efficiency and raw materials	1/10/2016 31/3/2018

Coordinating and integrating state-of-the-art earth observation Activities in the regions of north Africa, Middle East and Balkans and Developing Links with GEO related initiatives towards GEOSS (GEO-CRADLE)	Physicalisch-Meteorologisches Observatorium Davos, World Radiation Center, Switzerland	H2020 Framework Program-Climat action, environment, resource efficiency and raw materials	1/4/2018 30/9/2018
Integrated Global Observing Systems for Persistent Pollutants (IGOSP)	National Observatory of Athens	Horizon 2020 ERANET ERA-PLANET's Strand-3	1/6/2018 31/10/2018
International Network to Encourage the Use of Monitoring and Forecasting Dust Products (inDust) Short-Term Scientific Mission (STSM) grant " Finding " (Forecasting dust impact on solar energy in Egypt)	Physicalisch-Meteorologisches Observatorium Davos, World Radiation Center, Switzerland	COST European cooperation in Science & Technology	4/9/2018 27/9/2018
Sentinels Rolling Archive Products User Access, Operations, Maintenance and Evolutions	National Observatory of Athens	ESA-EOPG-CSCOP-CR-0006	1/11/2018 30/6/2019
EuroGEOSS Showcases: Applications powered by Europe (E-SHAPE)	National Observatory of Athens	EU's part of the Global Earth Observation System of Systems (GEOSS)	1/7/2019 30/6/2022 (expected)

PUBLICATIONS

(Publications in Peer-Reviewed Scientific Journals)

- A01. Kaskaoutis, D.G., Kambezidis, H.D., Hatzianastassiou, N., **Kosmopoulos, P.G.**, and Badarinath, K.V.S.: Aerosol Climatology: On the discrimination of aerosol types over four AERONET sites. *Atmospheric Chemistry and Physics Discussions*, 7, 6357-6411, 2007.
- A02. Kaskaoutis, D.G., **Kosmopoulos, P.G.**, Kambezidis, H.D., and Nastos, P.T.: Aerosol climatology and discrimination of different types over Athens, Greece based on MODIS data. *Atmospheric Environment*, 41, 7315-7329, 2007.
- A03. Kaskaoutis, D.G., Kambezidis, H.D., Hatzianastassiou, N., **Kosmopoulos, P.G.**, and Badarinath, K.V.S.: Aerosol Climatology: Dependence of the Ångström exponent on wavelength over four AERONET sites. *Atmospheric Chemistry and Physics Discussions*, 7, 7347-7397, 2007.
- A04. Kaskaoutis, D.G., Kambezidis, H.D., Nastos, P.T., and **Kosmopoulos, P.G.**: Study on an intense dust storm over Greece. *Atmospheric Environment*, 42, 6884-6896, 2008.
- A05. **Kosmopoulos, P.G.**, Kaskaoutis, D.G., Nastos, P.T., and Kambezidis, H.D.: Seasonal variation of columnar aerosol optical properties over Athens, Greece, based on MODIS data. *Remote Sensing of Environment*, 112, 2354-2366, 2008.
- A06. Kalapureddy, M.C.R., Kaskaoutis, D.G., Ernest Raj, P., Devara, P.C.S., Kambezidis, H.D., **Kosmopoulos, P.G.**, and P.T. Nastos: Identification of aerosol type over the Arabian Sea in the pre-monsoon season during the ICARB campaign. *Journal of Geophysical Research-Atmospheres*, 114, D17203, 2009.
- A07. Kaskaoutis, D.G., **Kosmopoulos, P.G.**, Kambezidis, H.D., and Nastos, P.T.: Identification of the aerosol types over Athens, Greece. The influence of air-mass transport. *Advances in Meteorology*, 2010, 168346, 2009.
- A08. Kaskaoutis, D.G., Nastos, P.T., **Kosmopoulos, P.G.**, Kambezidis, H.D., Kumar Kharol, S., and Badarinath, K.V.S.: The Aura-OMI Aerosol Index distribution over Greece in a period of 4 years. *Atmospheric Research*, 98, 28-39, 2010.
- A09. Kaskaoutis, D.G., Kalapureddy, M.C.R., Krishna Moorthy, K., Devara, P.C.S., Nastos, P.T., **Kosmopoulos, P.G.**, and Kambezidis, H.D.: Heterogeneity in pre-monsoon aerosol types over Arabian Sea deduced from ship-borne measurements of spectral AODs. *Atmospheric Chemistry and Physics*, 10, 4893-4908, 2010.

- A10. Kaskaoutis, D.G., Nastos, P.T., **Kosmopoulos, P.G.**, and Kambezidis, H.D.: The combined use of satellite data, air-mass trajectories and model applications for monitoring dust transport over Athens, Greece. *International Journal of Remote Sensing*, 31:19, 5089-5109, 2010.
- A11. Kaskaoutis, D.G., Nastos, P.T., **Kosmopoulos, P.G.**, and Kambezidis, H.D.: Characterising the long-range transport mechanisms of different aerosol types over Athens, Greece during 2000-2005. *International Journal of Climatology*, DOI:10.1002/joc.2357, 2011.
- A12. Kaskaoutis, D.G., **Kosmopoulos, P.G.**, Nastos, P.T., Kambezidis, H.D., Sharma, M., and Mehdi, W.: Transport pathways of Sahara dust over Athens, Greece as detected by MODIS and TOMS. *Geomatics, Natural Hazards and Risk*, 2011, 574296, 2011.
- A13. Kaskaoutis, D.G., Prasad, A.K., **Kosmopoulos, P.G.**, Sinha, P.R., Kharol, S.K., Gupta, P., El-Askary, H.M., and Kafatos, M.: Synergistic use of remote sensing and modelling for tracing dust storms in the Mediterranean. *Advances in Meteorology*, DOI:10.1155/2012/861026, 2012.
- A14. Kaskaoutis, D.G., Singh, R.P., Gautam, R., Sharma, M., **Kosmopoulos, P.G.**, Holben, B., and Tripathi, S.N.: Variability and trends of aerosol properties over Kanpur, northern India using AERONET data(2001-2010). *Environmental Research Letters*, DOI:10.1088/1748-9326/7/2/024003, 2012.
- A15. Kaskaoutis, D.G., Gautam, R., Singh, R.P., Houssos, E.E., Goto, D., Singh, S., Bartzokas, A., **Kosmopoulos, P.G.**, Sharma, M., Hsu, N.C., Holben, B.N., and Takemura, T.: Influence of anomalous dry conditions on aerosols over India: transport, distribution and properties. *Journal of Geophysical Research-Atmospheres*, DOI: 10.1029/2011JD017314, 2012.
- A16. Kaskaoutis, D.G., Sinha, P.R., Vinoj, V., **Kosmopoulos, P.G.**, Tripathi, S.N., Misra, A., Sharma, M., and Singh, R.P. Aerosol properties and radiative forcing over Kanpur during severe aerosol loading conditions. *Atmospheric Environment*, 79, 7-19, 2013.
- A17. Kaskaoutis, D.G., Houssos, E.E., Goto, D., Bartzokas, A., Nastos, P.T., Sinha, P.R., Kharol, S.K., **Kosmopoulos, P.G.**, Singh, R.P., and Takemura, T.: Synoptic weather conditions and aerosol episodes over Indo-Gangetic Plains, India. *Climate Dynamics*, DOI:10.1007/s00382-014-2055-2, 2014.
- A18. Rashki, A., Kaskaoutis, D.G., Francois, P., **Kosmopoulos, P.G.**, and Legrand, M.: Dust-storm dynamics over Sistan region, Iran: Seasonality, transport characteristics and affected areas. *Aeolian Research* 16 (2015), pp 35-48, 2015.
- A19. **Kosmopoulos, P.G.**, Kazadzis, S., Lagouvardos, K., Kotroni, V., and Bais A.: Solar Energy prediction and verification using operational model forecasts and ground-based solar measurements. *Energy*, 93, 1918-1930, 2015.
- A20. Taylor, M., **Kosmopoulos, P.G.**, Kazadzis, S., Keramitsoglou, I., and Kiranoudis, C.T.: Neural network radiative transfer solvers for the generation of high resolution solar irradiance spectra parameterized by cloud and aerosol parameters. *Journal of Quant. Spectr. & Rad. Transf.* 168, 176-192, 2016.
- A21. Raptis, P.I., Kazadzis, S., Eleftheratos, K., **Kosmopoulos, P.G.**, Amiridis, V., Helmis, C., and Zerefos, C.: Total ozone column measurements using an ultraviolet multi-filter radiometer. *Intern. Journ. Of Remote Sens.* 36 (17), pp 4469-4482, 2015.
- A22. **Kosmopoulos, P.G.**, Kazadzis, S., Taylor, M., Athanasopoulou, E., Speyer, O., Raptis, P.I., Marinou, E., Proestakis, E., Solomos, S., Gerasopoulos, E., Amiridis, V., Bais, A., and Kontoes, C.: Dust impact on surface solar irradiance assessed with model simulations, satellite observations and ground-based measurements. *Atmos. Meas. Tech.*, 10, DOI: 10.5194/amt-10-2435, pp 2435-2453, 2017.
- A23. Raptis, P.I., Kazadzis, S., Psiloglou, B., Kouremeti, N., **Kosmopoulos, P.G.**, and Kazantzidis, A.: Measurements and model simulations of solar radiation at tilted planes, towards the maximization of energy capture. *Energy*, 130, DOI: 10.1016/j.energy.2017.04.122, pp 570-580, 2017.
- A24. Dimitropoulou, E., Assimakopoulou, V.D., Fameli, K.M., Flocas, H., **Kosmopoulos, P.G.**, Kazadzis, S., Lagouvardos, K., and Bossioli, E.: Estimating the biogenic non-methane hydrocarbon emissions over Greece. *Atmosphere (MDPI)* 9, 14, doi:10.3390/atmos9010014, 2018.
- A25. **Kosmopoulos, P.G.**, Kazadzis, S., Taylor, M., Raptis, P.I., Keramitsoglou, I., Kiranoudis, C., and Bais, A.F.: Assessment of the surface solar irradiance derived from real-time modelling techniques and verification with ground-based measurements. *Atmos. Meas. Tech.*, 11, pp 907-924, DOI: 10.5194/amt-11-907-2018, 2018.
- A26. Kazadzis, S., Kouremeti, N., Diemoz, H., Grobner, J., Forgan, B., Campanelli, M., Estelles, V., Lantz, K., Michalsky, J., Carlund, T., Cuevas, E., Toledano, C., Becker, R., Nyeki, S., **Kosmopoulos, P.G.**, Tatsiankou, V., Vuilleumier, L., Denn, F.M., Ohkawara, N., Ijima, O., Goloup, P., Raptis, P.I., Milner, M., Behrens, K., Barreto, A., Martucci, G., Hall, E., Wendell, J., Fabbri, B.E., and Wehrli, C.: Results from the 4th WMO Filter Radiometer Comparison for aerosol optical depth measurements. *Atmos. Chem. Phys.*, 18, pp 3185-3201, DOI: 10.5194/acp-18-3185-2018, 2018.

- A27. **Kosmopoulos, P.G.**, Kazadzis, S., El-Askary, H., Taylor, M., Gkikas, A., Proestakis, E., Kontoes, C., El-Khayat, M.M.: Earth-Observation-based estimation and forecasting of particulate matter impact on solar energy in Egypt. *Remote Sens.* 10 (12), 1870, DOI: 10.3390/rs10121870, 2018.

(Publications in Conference Proceedings)

- B01. **Kosmopoulos, P.G.**, Kaskaoutis, D.G., Kambezidis, H.D., Nastos, P.T., and Badarinath, K.V.S.: Identification of Saharan dust events over Athens using remote sensing data and back-trajectory analysis. EGU Conference, Vienna, Austria, 15-20 April 2007, Sref-ID: 1607-7962/gra/EGU2007-A-09844, 2007.
- B02. Kaskaoutis, D.G., Kambezidis, H.D., Badarinath, K.V.S., **Kosmopoulos, P.G.**, and Nastos, P.T.: Aerosol climatology over two AERONET sites: an overview. EGU Conference, Vienna, Austria, 15-20 April 2007, SRef-ID: 1607-7962/gra/EGU2007-A-09771, 2007.
- B03. Kaskaoutis, D.G., **Kosmopoulos, P.G.**, Kambezidis, H.D., and Nastos, P.T.: Investigation of the Saharan dust events over Athens in the period 2000-2005. Bremen Aerosol Workshop, Bremen, Germany, 21-22 June, 2007.
- B04. **Kosmopoulos, P.G.**, Nastos, P.T., Kaskaoutis, D.G., and Kambezidis, H.D.: Study on dust events over Athens using satellite data for the period 2000-2005. 8th Pan-Hellenic Geographical Congress, Athens, 5-7 October, 2007.
- B05. **Kosmopoulos, P.G.**, Kaskaoutis, D.G., Nastos, P.T., Kambezidis, H.D., Kumar Kharol, S., and Badarinath, K.V.S.: Discrimination of different aerosol types over Athens, Greece, and investigation of the aerosol transport mechanisms. 15th National Space Science Symposium, Ooty India, 26-29 February, 2008.
- B06. **Kosmopoulos, P.G.**, Kaskaoutis, D.G., Nastos, P.T., Kambezidis, H.D., Kumar Kharol, S., and Badarinath, K.V.S.: Seasonal variation of columnar aerosol optical properties over Athens, Greece, based on MODIS data. 15th National Space Science Symposium, Ooty India, 26-29 February, 2008.
- B07. **Kosmopoulos, P.G.**, Kaskaoutis, D.G., Nastos, P.T., Kambezidis, H.D., Kumar Kharol, S., and Badarinath, K.V.S.: Investigation on the aerosol transport mechanisms over Athens, Greece combining satellite data and back-trajectory analysis. EGU Conference, Vienna, Austria, 13-18 April, 2008.
- B08. **Kosmopoulos, P.G.**, Nastos, P.T., Kaskaoutis, D.G., and Kambezidis, H.D.: Optical properties of aerosols over Athens. 9th Pan-Hellenic Conference on Meteorology-Climatology and Atmospheric Physics, COMECAP 2008, Thessaloniki, 28 to 31 May, 2008.
- B09. **Kosmopoulos, P.G.**, Kaskaoutis, D.G., Nastos, P.T., and Kambezidis, H.D.: Study on intense dust episode of 16-April 17, 2005. 2nd National Congress of Students of Geology, Athens, 3-5 June, 2008.
- B10. **Kosmopoulos, P.G.**, Kaskaoutis, D.G., Nastos, P.T., and Kambezidis, H.D.: Distinguishing different types of aerosols in 4 areas of the network AERONET with different land use. 2nd National Congress of Students of Geology, Athens, 3-5 June, 2008.
- B11. Kaskaoutis, D.G., Kambezidis, H.D., **Kosmopoulos, P.G.**, and Nastos, P.T.: The long-range transport of different aerosol types over Athens, Greece. European Aerosol Conference 2008, Thessaloniki, Greece, 24-29 August 2008, paper No: T06A153P, 2008.
- B12. Kaskaoutis, D.G., Kambezidis, H.D., Nastos, P.T., **Kosmopoulos, P.G.**, Kumar Kharol, S., and Badarinath, K.V.S.: Satellite remote sensing of long-range transported dust storm over Eastern Mediterranean and Greece. EGU Conference, Vienna, Austria, 19-24 April 2009, Geophys. Res. Abstracts 11, EGU2009-6083, 2009.
- B13. Kaskaoutis, D.G., Nastos, P.T., **Kosmopoulos, P.G.**, Kambezidis, H.D., Kumar Kharol, S., and Badarinath, K.V.S.: Spatio-temporal distribution of absorbing and non-absorbing aerosols derived from Aura-OMI Aerosol Index over Greece. EGU Conference, Vienna, Austria, 19-24 April 2009, Geophys. Res. Abstracts 11, EGU2009-6100, 2009.
- B14. Kaskaoutis, D.G., Kalapureddy, M.C.R., Devara, P.C.S., Kambezidis, H.D., **Kosmopoulos, P.G.**, and Nastos, P.T.: Aerosol optical characteristics over the Arabian Sea during the pre-monsoon season. EGU Conference, Vienna, Austria, 19-24 April 2009, Geophys. Res. Abstracts 11, EGU2009-0, 2009.
- B15. Kalapureddy, M.C.R., Kaskaoutis, D.G., Ernst Raj, P., Devara, P.C.S., Kambezidis, H.D., **Kosmopoulos, P.G.**, and Nastos, P.T.: Aerosol type Identification over the Arabian Sea in the pre-monsoon season during the ICARB campaign. EGU Conference, Vienna, Austria, 19-24 April 2009, Geophys. Res. Abstracts 11, EGU2009-0, 2009.
- B16. Kaskaoutis, D.G., Nastos, P.T., **Kosmopoulos, P.G.**, and Kalapureddy, M.C.R.: Spatio-temporal variation of Aerosol Optical Depth over Greece based on 5-year OMI observations. EGU Conference, Vienna, Austria, 2-7 May 2010, Geophys. Res. Abstracts 12, EGU2010-7254, 2010.

- B17. Kaskaoutis, D.G., Nastos, P.T., Amiridis, V., **Kosmopoulos, P.G.**, and Kambezidis, H.D.: Meteorological systems combined with strong African dust transport over Greece during wintertime. 10th Pan-Hellenic Conference on Meteorology-Climatology and Atmospheric Physics, COMECAP 2010, Patras, 25-28 May, 2010.
- B18. Garyfallou, A., Manolis, A., **Kosmopoulos, P.G.**, Kaskaoutis, D.G., Nastos, P.T., and Kambezidis, H.D.: Identification of conditions and spatial trend of fire incidents in Greece in the decade 91-01. 10th Pan-Hellenic Conference on Meteorology-Climatology and Atmospheric Physics, COMECAP 2010, Patras, 25-28 May, 2010.
- B19. **Kosmopoulos, P.G.**, Kaskaoutis, D.G., and Nastos, P.T.: Investigation of the seasonality, intensity and inter-annual trends of Saharan dust exposure towards the tropical north Atlantic and Mediterranean sea in the period 2004-2009. 7th Annual Meeting and Geosciences World Community Exhibition, AOGS 2010, Hyderabad, India, 5-9 July, 2010.
- B20. **Kosmopoulos, P.G.**, Kaskaoutis, D.G., Prasad, A.K., Sinha, P.R., and Rashki, A.R.: Spatial and vertical distribution of Sahara dust event over eastern Mediterranean in winter using remote sensing observations. 6th International Workshop on Sand/Duststorms and Associated Dustfall, Athens, Greece, 7-9 Sept., 2011.
- B21. Sinha, P.R., Kaskaoutis, D.G., Manchanda, R.K., **Kosmopoulos, P.G.**, and Sreenivasan, S.S.: Synergy of different techniques for the aerosol type discrimination: Application over Hyderabad, India. 11th Pan-Hellenic Conference on Meteorology-Climatology and Atmospheric Physics, COMECAP 2012, Athens, 30 May-1 June, 2012.
- B22. Kaskaoutis, D.G., Gautam, R., Goto, D., **Kosmopoulos, P.G.**, Singh, R.P., Singh, S.N., and Sharma, M.: On the variability of atmospheric aerosols over India during the drought pre-monsoon and monsoon 2002-2003. 11th Pan-Hellenic Conf. on Meteor.-Climat. and Atmos. Phys., COMECAP 2012, Athens, 30 May-1 June, 2012.
- B23. Kaskaoutis, D.G., Sinha, P.R., Kharol, S.K., **Kosmopoulos, P.G.**, Manchanda, R.K., Singh, R.P., Badarinath, K.V.S., and Sreenivasan, S.: Aerosol characteristics over Bay of Bengal during W-ICARB cruise campaign. 11th Pan-Hellenic Conf. on Meteor.-Climat. and Atmos. Phys., COMECAP 2012, Athens, 30 May-1 June, 2012.
- B24. Kaskaoutis, D.G., and **Kosmopoulos, P.G.**: Atmospheric Research over Indian sub-continent using GIOVANNI data. 2012 Gregory G. Leptoukh Online Giovanni Workshop, NASA GSFC, USA, 25-27 September, 2012.
- B25. Kaskaoutis, D.G., Houssos, E.E., Gautam, R., Bartzokas, A., Singh, R.P., **Kosmopoulos, P.G.**, Kumar Kharol, S., and Nastos, P.T.: Analysis of synoptic weather and atmospheric conditions associated with aerosol episodes over Indo-Gangetic Plains, India. AGU Fall Meeting, San Francisco, USA, 3-7 December, 2012.
- B26. Kazadzis, S., Amiridis, V., **Kosmopoulos, P.G.**, Marinou, E., and Tsekeri, A.: Impact of different aerosol types on the spectral solar radiation at different heights over the Mediterranean using the CALIPSO aerosol product. EGU Conference, Vienna, Austria, April 2013, Geophys. Res. Abstracts 15, EGU2013-14204, 2013.
- B27. Kaskaoutis, D.G., and **Kosmopoulos, P.G.**: The role of meteorology on atmospheric dynamics, air mass transport and aerosol characteristics. IITM-WMO seminar on Metropolitan Air Quality Forecasting & Services (SAFAR), 30th April 2013, Pune, India, 2013.
- B28. Kaskaoutis, D.G. and **Kosmopoulos, P.G.**: The exceptional hot 2007 summer in Eastern Mediterranean and the Greek wildfires: Pollution levels and Climate Implications. IITM-WMO seminar on Metropolitan Air Quality Forecasting & Services (SAFAR), 30th April 2013, Pune, India, 2013.
- B29. Kaskaoutis, D.G., Houssos, E.E., Sinha, P.R., Nastos, P.T., Bartzokas, A., Gautam, R., **Kosmopoulos, P.G.**, Kumar Kharol, S., and Singh, R.P.: The role of meteorology in the accumulation of aerosols over Ganges Basin: Climate implications during severe aerosol episodes. Workshop on Atmospheric Composition and the Asian Summer Monsoon (ACAM), Kathmandu, Nepal, 9-12 June, 2013.
- B30. Kaskaoutis, D.G., and **Kosmopoulos, P.G.**: Current state of knowledge about aerosol trends over northern India. 12th International Conference on Meteorology, Climatology and Atmospheric Physics, COMECAP 2014, Heraklion, Greece, 28-31 May, 2014.
- B31. **Kosmopoulos, P.G.**, Kazadzis, S., Lagouvardos, K., and Kotroni, V.: Solar Energy prediction and verification using MM5 forecasts & ground-based solar measurements. 12th International Conference of Meteorology, Climatology and Atmospheric Physics, COMECAP 2014, Heraklion, 28 May – 31 May, 2014.
- B32. **Kosmopoulos, P.G.**, Kazadzis, S., Flocas, H.A., Marinou, E., Amiridis, V., Taylor, M., and Jacovidis, C.P.: A 3D aerosol climatology in the atmosphere of Greece by remote sensing & radiative-transfer modeling techniques. 12th International Conference of Meteorology, Climatology and Atmospheric Physics, COMECAP 2014, Heraklion, 28 May – 31 May, 2014.
- B33. Raptis, P.I., Kazadzis, S., Eleftheratos, K., **Kosmopoulos, P.G.**, and Amiridis, V.: OMI Total Ozone Column Product validated against UVMFR retrievals. ATMOS 2015, Heraklion, Greece, 8-12 June, 2015.

- B34. **Kosmopoulos, P.G.**, Taylor, M., and Kazadzis, S.: The SOLEA Project: nowcasting solar energy spectra and UV products. 15th European Meteorological Society (EMS) Annual Meeting & 12th European Conference on Applications of Meteorology (ECAM), Sofia, Bulgaria, 7-11 September, 2015.
- B35. Taylor, M., **Kosmopoulos, P.G.**, Kazadzis, S., Keramitsoglou, I., and Kiranoudis, C.T.: A machine learning approach to derive surface solar irradiance spectra directly from satellite. 15th Europ. Meteor. Soc. (EMS) Annual Meeting & 12th European Conf. on App. of Meteor. (ECAM), Sofia, Bulgaria, 7-11 September, 2015.
- B36. **Kosmopoulos, P.G.**, Taylor, M., and Kazadzis, S.: A model of dust episode impact on surface solar irradiance. International Skynet Workshop, Rome, Italy, 2-4 March, 2016.
- B37. **Kosmopoulos, P.G.**, Kazadzis, S., Taylor, M., Bais, A., Lagouvardos, K., Kotroni, V., Keramitsoglou, I., and Kiranoudis, C.: Estimation of the solar energy potential in Greece using satellite and ground-base observations. Perspectives on Atmospheric Sciences, Springer Atmospheric Sciences. Springer, DOI: 10.1007/978-3-319-35095-0_165, 1149-1156, 2017.
- B38. **Kosmopoulos, P.G.**, Kazadzis, S., Taylor, M., El-Askary, H., Raptis, P.I., Keramitsoglou, I., and Kiranoudis, C.: Estimation of the solar energy potential in Egypt by developing high resolution solar Atlas and nowcasting service in real time. AGU Fall Meeting 2016, GC51C-1173, 12-16 December, San Francisco, USA, 2016.
- B39. **Kosmopoulos, P.G.**, Kazadzis, S., Taylor, M., Raptis, P.I., Kontoes, C., El-Askary, H., Keramitsoglou, I., and Kiranoudis, C.: The Solar Energy Nowcasting SystEm (SENSE): Pilot applications and validation of results. EMS Annual Meeting 2017, Vol. 14, EMS2017-50, 4-8 September, Dublin, Ireland, 2017.
- B40. **Kosmopoulos, P.G.**, Kazadzis, S., El-Askary, H., Kontoes, C., Keramitsoglou, I., and Kiranoudis, C.: EO-based solar energy applications into a wider GEOSS driven system through the GEO-CRADLE project in the international scale. Geophysical Research Abstracts, 20, EGU2018-9402, 2018.
- B41. **Kosmopoulos, P.G.**, Kazadzis, S., Kontoes, C., El-Askary, H., Zografos, D., and Krestos, G.: Access to solar energy applications using EO data through GEO activities: validation and demonstration of the SENSE system. 38th Annual EARSeL Symposium, ID 214, Chania, Greece, 9-12 July, 2018.
- B42. Vlachopoulos, O., **Kosmopoulos, P.G.**, Kazadzis, S., and Gerasopoulos, E.: Photosynthetically active radiation climatology in Greece for optimal vineyard planning and exploitation. 38th Annual EARSeL Symposium, ID 232, Chania, Greece, 9-12 July, 2018.
- B43. **Kosmopoulos, P.G.**, Kazadzis, S., Kontoes, C., Papoutsis, I., and Trypitsidis, A., Tsouni, A., and Vallianatos, D.: Solar energy related EO data for Greece through the GEOSS portal. 14th International Conference of Meteorology, Climatology and Atmospheric Physics, COMECAP 2018, Alexandroupolis, Greece, 15 – 17 October, 2018.
- B44. **Kosmopoulos, P.G.**, Kazadzis, S., Meleti, C., Taylor, M., Fountoulakis, I., Bugliaro, L., and Bais, A.F.: UV-Index estimations from space and validation against ground-based measurements. European Conference on Solar UV Monitoring (ECUVM 2018), Vienna, Austria, 12-14 September, 2018.
- B45. **Kosmopoulos, P.G.**, Kazadzis, S., El-Askary, H., El-Khayat, M.M.: Forecasting dust impact on solar energy in Egypt. AGU Fall Meeting 2018, 10-14 December, Washington, USA, 2018.

(Publications in Books, GEO Workshops, Technical Reports, Invited Talks, Disseminating Science Journals, Forums and Project Work Meetings)

- C01. **Kosmopoulos, P.G.**, Taylor, M., Kazadzis, S., Keramitsoglou, I., and Kiranoudis, C.: A brighter future. International Innovation 178, "A renewable future", pp 102-104, 2015.
- C02. **Kosmopoulos, P.G.**: Nowcasting and forecasting solar energy in real time. Results conference of the KRIPIS-THESPIA project, grant number PDE2013SE01380031, Athens, 30 October, 2015.
- C03. **Kosmopoulos, P.G.**, Taylor, M., and Kazadzis, S.: The SOLEA Project: estimation of the solar energy potential in real time. 1st Energy Tech Forum, Athens, Greece, 1 April, 2016.
- C04. **Kosmopoulos, P.G.**, Taylor, M., and Kazadzis, S.: Solar energy potential nowcasting and forecasting services in real time. Invited talk at the Independent Power Transmission Operator (IPTO or ADMIE), Athens, Greece, 15 April, 2016.
- C05. **Kosmopoulos, P.G.**: The SOLEA project for the exploitation of solar energy. Researchers Night 2016, EKEFE Dimokritos, 2016.
- C06. **Kosmopoulos, P.G.**: Update on the use of EO and Copernicus related products for the Solar energy nowcasting system pilot study. Regional workshop of the GEO-CRADLE project, HORIZON 2020, grant number 690133, Limassol, Cyprus, 16-17 November, 2016.

- C07. **Kosmopoulos, P.G.**, and El-Askary, H.: Pilot applications of the solar energy nowcasting system for Greece and Egypt related end-users. Regional workshop of the GEO-CRADLE project, HORIZON 2020, grant number 690133, Limassol, Cyprus, 16-17 November, 2016.
- C08. Kazadzis, S., **Kosmopoulos, P.G.**, El-Askary, H., and Taylor, M.: Roadmap for the solar energy application for GEO-CRADLE. Regional workshop of the GEO-CRADLE project, HORIZON 2020, grant number 690133, Limassol, Cyprus, 16-17 November, 2016.
- C09. **Kosmopoulos, P.G.**: Solar energy applications: The solar energy nowcasting system (SENSE) pilot. Invited talk at the Independent Power Transmission Operator (IPTO or ADMIE), Athens, Greece, 16 Dec., 2016.
- C10. Kazadzis, S., **Kosmopoulos, P.G.**, Taylor, M., Raptis, P.I., and El-Askary, H.: The Solar Energy Nowcasting System (SENSE): Updates of the pilot activity. Regional workshop of the GEO-CRADLE project, HORIZON 2020, grant number 690133, Finokalia, Crete, 10 April, 2017.
- C11. Kazadzis, S., **Kosmopoulos, P.G.**, Taylor, M., Raptis, P.I., El-Askary, H., and Kontoes, H.: The Solar Energy Nowcasting SystEm (SENSE). GEO-CRADLE Regional Workshop in Cairo, Addressing regional needs in the Middle East to Earth Observation. 24 May 2017, Cairo, Egypt, 2017.
- C12. Evenflow SPRL, El-Askary, H., **Kosmopoulos, P.G.**, and Kazadzis, S.: Business Plan for the establishment, operation and exploitation of a Solar Farm: Aswan's Solar Plant Project - Extension of Sir Magdi Yacoub Heart Hospital. July 2017, Aswan, Egypt, 2017.
- C13. El-Askary, H., Kazadzis, S., and **Kosmopoulos, P.G.**: Dynamical Solar Atlas of Egypt. AfriGEOSS: Strengthening partnerships with African Diaspora on Earth Observations. GEO-XIV Plenary, 23-27 October 2017, Washington D.C., USA, 2017.
- C14. **Kosmopoulos, P.G.**, Kazadzis, S., and El-Askary, H.: The Solar Atlas of Egypt. Submitted as a book in the framework of the GEO-CRADLE project, 2018.
- C15. **Kosmopoulos, P.G.**, and Kazadzis, S.: Pilot activity report - Access to Energy. Deliverable D4.8 of GEO-CRADLE. December 2017, Athens, Greece, 2017.
- C16. **Kosmopoulos, P.G.**, and Kazadzis, S.: Earth Observation applications for energy. Regional workshop of the GEO-CRADLE project, HORIZON 2020, grant number 690133, Istanbul, Turkey, 15-16 March, 2018.
- C17. **Kosmopoulos, P.G.**: GEO-CRADLE: Addressing regional needs through DataHub. 3rd GEO Data Providers Workshop. Frascati, Italy, 2-4 May, 2018.
- C18. **Kosmopoulos, P.G.**: Athens Environment: Smog tracers and biomass burning indicators. ERA-PLANET IGOSP Side Meeting at the 3rd GEO Data Providers Workshop. Frascati, Italy, 2-4 May, 2018.
- C19. Kazadzis, S., **Kosmopoulos, P.G.**, and Kontoes, C.: The Solar Energy Nowcasting System (SENSE) developed in the GEO-CRADLE project. EUROGEOSS Workshop 2018, 12-14 September, Geneva, 2018.
- C20. **Kosmopoulos, P.G.**: Earth Observation - based solar energy studies and applications. Invited talk at the Physikalisch-Meteorologisches Observatorium Davos, World Radiation Center, Switzerland, 24 September, 2018.
- C21. **Kosmopoulos, P.G.**, Kazadzis, S., and El-Askary, H.: Dust impacts on Solar Energy. InDust, Training School on dust products, University of Aveiro, Portugal, 4-6 February, 2019.
- C22. Kazadzis, S., Kontoes, C., **Kosmopoulos, P.G.**, Tsouni, A., and Papoutsis, I.: Earth Observation for Solar energy and applications (EO4SOL). EuroGEOSS Sprint-to-Ministerial, First meeting, Brussel, 12 February, 2019.

GUEST EDITOR

Remote Sensing journal, Special Issue "[Remote Sensing for Urban Human Health](#)".

REVIEWER IN JOURNALS

Atmospheric Chemistry and Physics, Atmospheric Measurement Techniques, Solar Energy, Renewable Energy, Annales Geophysicae, Energy, Nature Communications, Atmospheric Pollution Research, Energy and Buildings, Journal of Atmospheric and Solar-Terrestrial Physics, Environmental Pollution, Journal of Renewable and Sustainable Energy, Remote Sensing, Atmosphere, International Journal of Atmospheric Sciences, Remote Sensing of Environment, Atmospheric Environment.

PUBLICATIONS IMPACT

No	Journal	Year	Citations	Hetero-Citations	Impact Factor (5-year)
A01	Atmos. Chem. Phys. Discuss.	2007	112	84	n/a
A02	Atmos. Environment	2007	61	41	4.042
A03	Atmos. Chem. Phys. Discuss.	2007	117	97	n/a
A04	Atmos. Environment	2008	112	78	4.042
A05	Remote Sensing of Environment	2008	73	47	7.737
A06	J. Geophys. Res. Atmos.	2009	74	52	3.380
A07	Adv. Meteorology	2009	8	8	1.645
A08	Atmospheric Research	2010	25	18	3.762
A09	Atmos. Chem. Phys.	2010	55	36	5.689
A10	Inter. J. Remote Sens.	2010	11	6	1.782
A11	Inter. J. Climatology	2011	22	9	3.100
A12	Geom. Nat. Haz. Risk	2011	25	14	1.713
A13	Adv. Meteorology	2012	23	9	1.645
A14	Environm. Res. Letters	2012	73	49	4.541
A15	J. Geophys. Res. Atmos.	2012	46	23	3.380
A16	Atmos. Environment	2013	59	40	4.042
A17	Climate Dynamics	2014	31	22	3.774
A18	Aeolian Res.	2015	44	26	2.716
A19	Energy	2015	20	15	5.582
A20	Inter. J. Remote Sens.	2015	1	1	1.782
A21	J. Quant. Spectr. Rad. Transfer	2016	14	10	2.707
A22	Atmos. Meas. Tech.	2017	18	16	3.650
A23	Energy	2017	5	4	5.582
A24	Atmosphere	2018	1	0	1.775
A25	Atmos. Meas. Tech.	2018	7	4	3.650
A26	Atmos. Chem. Phys.	2018	8	7	5.689
A27	Remote Sensing	2018	0	0	3.952
Total			1044	716	91.359
H-index			18	15	
H-10 Index			20	17	
Average Impact Factor					3.7
Average citations			39	27	

[Scopus, ISI, Google Scholar - 3/2019]