

Personal Information

Name: Stelios A. Kazadzis
Date of Birth: 23.04.1971
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Status: Married, two children
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Summary

Stelios Kazadzis (SK) has 26 years of experience in basic and applied research in Atmospheric Physics. From 1989 to 2000, he studied Physics at the Department of Physics, Aristotle University of Thessaloniki (Physics Degree, MSc in Environmental Physics and PhD in Atmospheric Physics). His doctoral dissertation is related to the advances and applications of spectral measurements of ultraviolet solar radiation. Since 1997, SK has participated in 47 (21 as PI) funded, 33 (15) European and 14 (6) national (Greek and Swiss) projects. Since 2015 (PMODWRC) as PI he has received 4.6M funding. He is a member of the Atmospheric Chemistry and Physics editorial board and is an active reviewer in more than 15 scientific journals. He has 163 publications in peer reviewed journals with 5.950 non self citations and H-index of 46 (scopus).

His scientific interests are:

- Aerosol and trace gases remote sensing
- Aerosol and solar measurements and calibration
- Study of the optical properties of aerosols, Aerosol-cloud-radiation interactions
- Measurements and applications of solar radiation from surface-based and satellite receivers
- Calibration/validation studies of satellite atmospheric products related to aerosols and spectral solar irradiance
- Forecasting and applications of solar radiation / energy

Working Experience

2021- Lecturer Swiss Federal Institute of Technology ETH Zurich, Department of Environmental Systems Science, Institute of Atmospheric and Climate Science, Switzerland
2015- Senior Researcher, leader of the World Aerosol Optical Depth and Calibration Center, Physicalisch Meteorologisches Observatorium Davos, World Radiation Center, Switzerland
2015- Associate Researcher, Institute for Environmental and Sustainable Development, National Observatory of Athens, Greece
2009-2015 Assoc./Senior Researcher, Institute for Environmental and Sustainable Development, National Observatory of Athens, Greece
2008-2009 Post Doctoral Research Associate, Finnish Meteorological Institute, Climate Change Group. Marie Curie – Intra European Fellowship, Finland
2008 Post Doctoral Research Associate, Department of Geology, A. Univ. of Thessaloniki, Greece
2007-2008 Post Doctoral Research Associate, National and Kapodestrian University of Athens, Greece
2000-2007 Post Doctoral Research Associate, Laboratory of Atmospheric Physics, Aristotle University of Thessaloniki, Greece
03-09/2001 Visiting Scientists, Joint Research Center, Ispra, Italy

1996–1998 Research Scientist, Laboratory of Atmospheric Physics, A.U.Th.

Studies

Date	Title	University	Thesis	Supervisor
1989-1994	BA in Physics (7.11 /10)	Aristotle University of Thessaloniki, Greece	Experimental measurements of solar UV albedo	Prof. A. Bais
1994-1996	MSc on “Environmental Physics” (9.26 /10)	Aristotle University of Thessaloniki, Greece	Aerosol Optical depth measurements using solar direct spectral measurements	Prof. A. Bais
1996-2000	PhD in “Atmospheric Physics” (10/10 Excellent)	Aristotle University of Thessaloniki, Greece	Advances and applications of solar spectral UV measurements	Prof. A. Bais, C. Zerefos, I. Ziomas

Scholarships / Awards

- 05/2008-11/2009 Senior Researcher, **EU-FP7-PEOPLE-Marie Curie – Intra European Fellowship** “Validation of Aerosol optical Properties and surface Irradiance measured from Ozone Monitoring Instrument on board of AURA satellite”. Finnish Meteorological Institute, Finland. Project ID: [219908](#)
- 06/2010-05/2013 Principle Investigator: **EU-FP7-PEOPLE-Marie Curie – European Reintegration grant** “Aerosol and Cloud Influence on global surface UV irradiance retrieve from satellite sensors”. National Observatory of Athens, FP7-2009-RG-Proj. Number: [247492](#)
- 03/2012-2/2014 Principle Investigator: **EU-FP7-PEOPLE-Marie Curie – Intra European Fellowship:** “Global mapping of aerosol properties using neural network inversions of ground and satellite based data”. National Observatory of Athens. EU-IEF-2011 Proj. Number: [300515](#). Fellow: Dr. Michael Taylor.
- 01/2008-12/2008 Aristotle University Research Committee scholarship of Excellence “Aerosol Climatology over Eastern Mediterranean with the use of satellite and ground-based sensors”
- 01/2006-06/2007 Greek State Scholarship Foundation, Greece. Scholarship award for the Post-Doc Research: “Climatology of aerosol optical properties over Thessaloniki, Greece”
- 05/2025 ACP Copernicus **Outstanding Editor Award** in recognition of excellent services as Editor of Atmospheric Chemistry and Physics in 2024.

POSITIONS OF RESPONSIBILITY

Head of the **World Optical depth Research and Calibration Center** of WMO, 2015-
Member of the **Scientific advisory group for Aerosols** of WMO ([WMO-SAG](#)), 2015-
Action Chair, COST Action [Harmonia](#), sun photometer measurement homogenization (2022-2026).
Leader of **ACTRIS PMODWRC Central Facility Unit**
Deputy Chair, **ACTRIS Expert Group on Satellite validation** (2024-2028)
Member of the **International Radiation Commission (IRC)**, 2021-
Member of the **Expert Team of Atmospheric Composition Measurement Quality** of the World meteorological Organization ([ET ACMQ](#)).

Member of the **Expert Team on the Atmospheric Composition Network Design and Evolution** of the World meteorological Organization ([ACNDE](#))

Co-leading the **action group on renewable energy of EuroGEO**.

Principle Investigator: WMO [Global Atmospheric Watch – Precision Filter Radiometer aerosol network](#)

Swiss national representative in EU-COST actions: [inDUST](#), Workgroup leader (2017-2021), [Probe](#) (2020-2023), [NEXUSNET](#) (2021-2024).

Member of the Global Atmospheric Watch – Swiss panel

PI of the international WMO *4th and 5th filter Radiometer comparison, Davos, Switzerland, (2015, 2021)*

Editor in Atmospheric Chemistry and Physics journal

Member of the Global Climate Observing System (GCOS) group of Switzerland.

PI of the Pandonia atmospheric composition network station of Athens.

Teaching Experience

1. Teaching

University	Program	Lesson	Years
ETH Zurich – Institute of Atmospheric and Climate Sciences	MSc: “Atmospheric and Climate Sciences”	Atmospheric Remote Sensing UV Radiation	2022- 2021-2022
Univ. Peloponnese, Greece	MSc: «Space Science, technology and Applications»,	“Space Applications”	2016-2017, 2017-2018
Aristotle Univ. Thessaloniki, Greece	MSc: “Environmental Physics”	Field measurements 1	2003-2007
Aristotle Univ. Thessaloniki, Greece	MSc: “Environmental Physics”	Field Measurements 2	2003-2007
Aristotle Univ. Thessaloniki, Greece	MSc: “Environmental Physics”	Subjects in Environmental Physics	2005-2007
Aristotle Univ. Thessaloniki, Greece	MSc: “Environmental Physics”	Aerosol Measurements	2011-2013

2. Supervision of PhD Thesis

Completed: Supervisor / three member committee:

- Emmanouil Proestakis, Univ. of Patras, Greece “Investigation of the cloud indirect effect with ground based and satellite measurements”, 2014-2018
- Panagiotis Kosmopoulos, Aristotle Univ. Thessaloniki, Greece “Methods of forecasting solar energy using ground based and satellite based data”, 2013-2018
- Panagiotis Raptis National and Kapodestrian University of Athens, Greece “Development of methodologies for the retrieval of aerosols and trace gases using solar spectral measurements”, 2014-2018
- Myrto Gratsea, University of Crete, “Measurements of Trace gases over Athens area with remote sensing techniques”, 2014-2022
- Kyriakoula Papachristopoulou, NKUA, Greece. “Solar radiation/energy forecasting and the role of aerosols and clouds”, 2019-2023
- XinYuan Hu, Solar energy forecasting, the effects of aerosol and clouds, Physics Department, ETH Zurich, May 2021-Dec. 2025
- Moustaka Anna, “Multisensor Characterization of Aerosol Optical Properties, Trends, and Radiative Effects from Regional to Global Scales” Aristotle University Thessaloniki, May, 2021-March 2026

On going/ three member committee:

- Miguel Huertas, Effects of aerosols mineralogy to solar radiation, Mariea Curie Doctoral Network, September 2025

- Angelos Karanikolas, Aerosol optical properties' measurements and applications at WORCC, PMODWRC, ETH Zurich, Switzerland, December 2020-
- Dimitra Kouklaki, NKUA, Greece, 2022-
- Georgia Charalambous, Cyprus University of Technology, 2023-
- Athina Savva, Cyprus University of Technology, 2024-

Participation in the 7 member examining committee

- Stolaki Stavroula, "Study of the fog characteristics at Macedonia airport of Thessaloniki, Greece", Aristotle University of Thessaloniki, Geology Department, 2011
- Nikitidou Efterpi, «Variability of aerosol and cloud optical properties and their effect on the transfer of solar irradiance in the atmosphere», University of Patras, Laboratory of Atmospheric Physics, 2013
- Gkikas Antonios, "Study of aerosol episode in the Mediterranean region with the use of satellite-based sensors", University of Ioannina, 2012.
- Zempila Maria-Melina, "Solar Ultraviolet radiation climatology in the Eastern Mediterranean region", Aristotle University of Thessaloniki, Physics Department, 2013.
- Kokkalis Panagiotis, "Study of the tropospheric aerosols with ground and satellite –based techniques: measurement statistical analysis", National and technical University of Athens, 2014.
- Vassilios Pavlidis, "Estimating Error and uncertainty of cloud-aerosol-radiation interactions in regional climate model simulations", Aristotle University of Thessaloniki, Geology Department, 2019.
- Drosoglou Theano, 'Ground-based measurements of atmospheric trace gases using differential optical absorption spectroscopy and comparisons with satellite observations', Aristotle University Thessaloniki, Physics Department, April, 2021
- Marios Korras-Carraca, "Aerosol effects in the Climate radiative balance using satellite and reanalysis data", University of Aegean, Greece, 2021
- Stavros Logothetis, "Study of the effect of aerosols and clouds on the estimation and short-term forecast of solar radiation", Un. Of Patras, Greece, 2022
- Vasiliki Daskalopoulou, "The impact of triboelectrification on desert dust flow dynamics", Physics department, University of Crete, Greece, 2023
- Thanasis Natsis, Aerosol and cloud effects on solar radiation, Aristotle University Thessaloniki, Physics Department, December, 2023
- Ioanna Tsikoudi, "Dynamics of the Atmospheric Boundary Layer in a Marine Environment Using Active Remote Sensing Methods", National and Kapodistrian University of Athens, Greece, May 2025

3. Other

Member of the PhD supporting committee of PMODWRC.

PhD defence committee (ETH Zurich, Switzerland, AUTH, Greece, Paris T., France)

External Evaluator, MSc: "Environmental Science and Engineering", Dimokritio Univ. of Thrace (2012-2014, 2015-2016)

Supervisor/co-supervisor of 5 undergraduate and 8 Master Thesis (Aristotle Univ. Thessaloniki, Univ. of Ioannina, Univ. Of Patras, Finnish Meteorological Institute, National and Kapodestrian Univ. of Athens, Univ. of West Attica/MSc of Science in Energy and Environmental Investments, Univ. of Aegean, Greece).

Current group members (project based)

K. Papachristopoulou (Post-Doc), K. Kilchoffer (Post-Doc), A. Karanikolas (PhD), X. Hou (PhD), A. Moustaka (Post-Doc), M. Huertas (PhD), Y. Gschwind (MSc)

Reviewer/Editor in Journals

Editor: Atmospheric Chemistry and Physics (IF: 5.5)

Editor in Special Issues: "SKYNET – the international network for aerosol, clouds, and solar radiation studies and their applications", Atmospheric Measurements and Techniques (IF: 3.2), Atmospheric Chemistry and Physics (inter-journal)

Coordinator: Special issue: Dust aerosol measurements, modeling and multidisciplinary effects (AMT/ACP inter-journal SI), 2020

Coordinator: Special issue: Sun-photometric measurements of aerosols: harmonization, comparisons, synergies, effects, and applications (AMT/ACP inter-journal SI)

Coordinator: Special issue: Satellite and ground-based remote sensing of aerosol optical, physical, and chemical properties over China (ACP/AMT inter-journal SI) (AMT/ACP inter-journal SI), 2020

Guest editor inter-journal special issue entitled "Profiling the atmospheric boundary layer at a European scale" (Atmospheric Measurements and Techniques, 2022)

Reviewer:

"UNEP EEAP Report on "Environmental Effects of Ozone Depletion and Interactions with Climate Change - 2014"

Reviewer in Journals:

Atmospheric Chemistry and Physics, Atmospheric Environment, Journal of Geophysical Research, Geophysical Research Letters, Atmospheric Research, Annales Geophysicae, Aerosol and Air Quality Research, Particuology, Atmospheric Science Letters, Journal of Atmospheric Chemistry, Computers and Geosciences, Journal of Atmospheric and Oceanic Technology, Journal of Pure and Applied Optics, Applied Optics, Journal of Solar terrestrial Physics, Remote Sensing

Reviewer in National proposal funds:

- Netherlands Organisation for Scientific Research,
- National Committee of Science and Technology of Chile,
- General Secretary of Research and Technology, Greece
- EU HORIZON-EIC Pathfinder, EU HORIZON Space, 2024-

Invited Speaker

Conferences/Seminars/webinars

- S. Kazadzis, Aerosol sun photometry state of the art and progress and the COST action Harmonia, European meteorological Society, Bratislava, Slovakia & Online | 3–8 September 2023, Convenor.
- S. Kazadzis, "The Harmonia COST action", Innovation in Atmospheric Measurement Techniques Workshop, CYI online, organized by ACTRIS, ICOS and IAGOS, together with the Eastern Mediterranean and Middle East Climate and Atmosphere Research Center (EMME-CARE), June 2023
- S. Kazadzis, AGORA Aerosol Training Course: Characterization of atmospheric aerosol using in-situ and remote sensing techniques, "Aerosol sun photometry", June 12-17, 2023
- Earth Observation for Global Earth Observations (EO4GEO) - 08.04.2023, online: "Aerosol measurements and effects" , <https://www.youtube.com/watch?v=MlmZ8nS3mik&t=3s>
- Earth Observation for Global Earth Observations (EO4GEO) - Erasmus+, 9.11.2021, online: "Solar energy nowcasting and short term forecasting" <https://www.youtube.com/watch?v=EAfR3HGAsA&t=12s>
- German Weather Service, Lindenberg, Germany, "Aerosol optical depth: measurements, calibration and global networks", 28.10.2021
- SKYNET users conference: The GAW-PFR Network, Rome, Italy, December, 2016
- World Radiation Center, Davos, Switzerland, "Solar radiation measurements and applications", November, 2014
- Delft Univ. of Technology, Aerosol Impact on solar radiation, April, 2014
- Geo Symposium 2021, on line, "The Energy in the WEF Nexus". June, 2021
- International Summer School, Solar Radiation Based Established Techniques for aTmospheric Observations: SORBETTO 2, September 2021, online.

Schools

- Harmonia, "Above the clouds" School, Izana, Tenerife, Spain. The Scientific objectives of the Harmonia Action.
- AGORA [Aerosol Training Course](#): Characterization of atmospheric aerosol using in-situ and remote sensing techniques, ATMO-ACCESS project, Andalusian Global Observatory of the Atmosphere, Granada, Spain, June, 2024
- Harmonia "Sky over Berlin" School on sun photometry, 8-10 April, 2024 Berlin, Germany
- [Global Atmospheric Watch Training and Education Center](#) Aerosol Optical properties and sun photometric measurements, October, 2023

- AGORA [Aerosol Training Course](#): Characterization of atmospheric aerosol using in-situ and remote sensing techniques, ATMO-ACCESS project, Andalusian Global Observatory of the Atmosphere, Granada, Spain, June, 2023
- International Summer School, Solar Radiation Based Established Techniques for aTmospheric Observations: SORBETTO 3, February 2023, ESA-ESRIN, Rome.
- International Summer School, Solar Radiation Based Established Techniques for aTmospheric Observations: SORBETTO 2, September 2021, online.
- International Summer School, Solar Radiation Based Established Techniques for aTmospheric Observations: SORBETTO, 2-6 July 2018, CNR Headquarter and Sapienza University. (<http://sorbetto2018.artov.isac.cnr.it/>), Rome, Italy
- [Global Atmospheric Watch Training and Education Center](#) Aerosol Optical properties and solar radiation, May 2016 & September 2017
- [Global Atmospheric Watch Training and Education Center](#) Solar UV irradiance and aerosol effects, May 2017 and June 2023
- [2nd ECARS Summer school](#), Satellite Cal/Val Activities employing ground-based remote sensors, Agios Nikolaos and Finokalia, Crete, Greece, April 2017

Talks in World Meteorological Organization related meetings

- Toronto, Canada, Environment Canada, “Solar spectral UV and aerosol columnar properties”, 22 April, 2015
- Seoul, Korea, Korean Meteorological Agency, “Report from World Optical Depth Research and Calibration Centre & PFR Network activities”, June 6, 2016
- Geneva, Switzerland, WMO headquarters, “International Network to Encourage the Use of Monitoring and Forecasting Dust Products”, 9th July, 2018
- Zurich, Meteoswiss, Global Atmospheric Watch-Switzerland, “Report from World Optical Depth Research and Calibration Centre & PFR Network activities”, November 2015-2018

Funding ID

Participation in 45 research projects, 23 as PI. Since 2015 (PMODWRC) as PI he has received 4.6M funding.

Project funding overview

	PMOD 2015-2025		NOA-AUTH	1998-2015
	PI	Collaborator	PI	Collaborator
EU project / ESA	19	3	4	11
National	5	1	2	7
Budget as PMOD PI	4.6 Mil.			

Project Title	Host Institute	Budget (host) (KEuro)	Source	Role	Start / End dates
ACTRIS NEXT	PMOD/WRC	50	EU Horizon Europe	PI PMODWRC	07/2026-06/2032
QA4EO-Earth Care	PMOD/WRC	30	ESA	PI PMODWRC	04/2026-04/2028
GENESIS	PMOD/WRC	260/4000	EU Horizon Europe	PI PMODWRC	11/2026-10/2029
ACTRIS – CH2	PMOD/WRC	400/3000	SNF/Switzerland	PMODWRC	01/2025-12/2028
Observe	PMOD/WRC	50/250	ESA	PI PMODWRC	06/2025-05/2027
Statistics	PMOD/WRC	50/700	ESA	Ass. Researcher	02/2025-01/2026

PANORAMA	PMOD/WRC	400	EU Horizon Europe	PI PMODWRC	1/2025-1/2028
RACE ECV- Earth Care	PMOD/WRC	250K	Prodex SBFI	PI PMODWRC	10/2024-9/2026
Dust DN Marie Curie Training Network	PMOD/WRC	250K	MSCA EU Horizon Europe	PI PMODWRC	11/2024-10/2028
ATARI	PMOD/WRC	275/1500	EU Horizon Europe	PI PMODWRC	10/2024-09/2027
Certainty	PMOD/WRC	245/8000	EU Horizon Europe	PI PMODWRC	1/2024-12/2027
Excelsior	PMOD/WRC	140/10000	EU Horizon Europe	PI PMODWRC	1/2023-11/2027
SIMCA	PMOD/WRC	355/355	SNF	Co-PI PMODWRC	1/2024-12/2027
AOD improvement using enhanced cloud information	PMOD/WRC	30/100	ESA	PI PMODWRC	11/2023-10/2024
Harmonia COST action	PMOD/WRC	~800/800	EU COST Actions	Action Chair PI	10/2022-09/2026
QA4EO – AOD correction for NO2	PMOD/WRC	30/200	ESA	Assoc. Researcher	10/2021-
Megacities around the globe: Aerosol optical depth Spatial distribution and Trends over the last two decades using spaceborne data (MAST)	PMODWRC/ETHZ	24/24	Swiss Excellence scholarship	PhD Supervision	09/2021-09/2022
Aerosol Optical Depth data Web Interface for data communication to scientists and the public	PMOD/WRC	50/50	MeteoSwiss (GCOS) – Switzerland	Action proposer	01/2021-04/2023
ACTRIS - CH	PMOD/WRC	360/2000	Switzerland	Co-PI PMODWRC	06/2021-05/2025
EIFFEL: revealing the role of geoss as the default digital portal for building climate change adaptation & mitigation applications	PMOD/WRC	90/5000	EU-H2020	PI: PMODWRC	03/2021 – 02/2024
"Metrology for aerosol optical properties"	PMOD/WRC	600/3000	EURAMET/EMPIR	Assoc. Researcher	06/2020 – 05/2023
E-Shape, Showcases powered by Europe	PMOD-WRC / NOA	71 / 1700	EU Horizon 2020	PI: PMODWRC	03/2019 03/2023
The Global Atmosphere Watch Precision Filter Radiometer (GAW-PFR) Network for Aerosol Optical Depth long term measurements	PMOD/WRC	96	MeteoSwiss (GCOS) – Switzerland	PI	10/2018 03/2020
PANACEA: Panhellenic infrastructure for atmospheric composition and climate change	NOA	580	GSRT Research & Innovation Infrastructure	Assoc. Researcher (AR)	11/2018 10/2021
inDust COST Action	PMOD/WRC	600	EU COST Action	National representative (Swiss) WG leader	11/2017 10/2021
ATLAS-III	PMOD/WRC	120	European Space Agency	AR	01/2018 6/2019
SIOS – Infrastructure development of the Norwegian node (SIOS-InfraNor)	PMOD/WRC	50 (subcontractor)	Research Council of Norway	Co-PI	08/2018 07/2023
ATLAS-II	PMOD/WRC	150	European Space Agency	AR	07/2016 12/2017
GEO-CRADLE	PMOD/WRC	120	EU- Horizon 2020	PI PMOD/WRC	02/2016 11/2018
ATLAS, characterization of spertoradiometers with a tunable laser	PMOD/WRC	400	European Space Agency	Co-PI	05/2015 07/2016
Aristoteles: Solar radiation and solar energy nowcasting and forecasting	IERSD/NOA	130	Excellence Program of GSRT in Environment, Space and Geoenvironment 2015-2017	AR	11/2015 10/2017
TALOS: Thunder And Lightning Observing System	IERSD/NOA	253	GSRT: Excellence grants	AR	03/2014 11/2015

Researchers Night Athens	IERSD/NOA	45	MSC-RN-H2020, EU	PI	05/2014 12/2015
MarcoPolo – Monitoring and Assessment of Regional air quality in China using space Observations	IAASARS/NOA	200	European Commission, FP7 Space	AR	01/2014 12/2016
Urban clusters impact on regional Air pollution and climate and generic visualization software for satellite data applications (AeroVis)	Univ. Thrace	60	GSRT: Greek Chinese corporation	AR	11/2013 04/2014
THESPIA: Development of Synergistic methodologies and tools for monitoring and forecasting environmental parameters	IERSD/NOA	1014	GSRT	AR and scientific man/ent	01/2013 08/2015
Building Capacity for a Centre of Excellence for EO-based monitoring of Natural Disasters	IERSD/NOA	2800	EU-FP7-Regpot-2013	AR	03/2013 02/2016
Global mapping of aerosol properties using neural network inversions of ground and satellite based data	IERSD/NOA	222	EU-FP7-People Marie Curie IEF	PI	03/2012 02/2014
Lidar Climatology of Vertical Aerosol Structure for Space-Based Lidar Simulation Studies	IAASARS/NOA	200	European Space Agency	AR	03/2012 07/2013
Aerosol and Cloud Influence on global surface UV irradiance retrieved from satellite sensors	IERSD/NOA	45	EU-FP7-People Marie Curie IEF	PI	11/2011 05/2013
Climate Change Initiative Ozone	NKUA	60	European Space Agency	AR	09/2010 08/2013
Hellenic Network of Solar Energy	NKUA	48	GSRT	SR	12/2010 11/2012
Validation of Aerosol optical Properties and surface Irradiance measured from Ozone Monitoring Instrument on board of AURA satellite	Finnish Meteorological Institute, Finland	125	EU-FP7-People Marie Curie IEF	Fellow – PI	05/2008 11/2009
Fog forecasting and dissipation at Thessaloniki airport	AUTH	12	Latsis foundation	AR	1/2008 6/2008
Geomon: Global Earth Observation And Monitoring	NKUA	48	EU FP6 FP6-SUSTDEV	AR	12/2007 05/2008
Stratospheric-Climate Links with Emphasis on the Upper Troposphere and Lower Stratosphere	AUTH	387	European Commission FP6	AR	01/2005 08/2005 & 01/2006 12/2006
Aerosol Climatology over Eastern Mediterranean with the use of satellite and ground-based sensors	AUTH	6	AUTH Committee scholarship of Excellence	Fellow – PI	01/2008 12/2008
Climatology of aerosol optical properties over Thessaloniki, Greece	AUTH	9	IKY	Fellow	01/2005 06/2006
Influence of clouds on the spectral actinic flux in the lower troposphere	AUTH	151	EU-EC Energy	AR	09/2005 12/2005
Greek UV Radiation Network	AUTH	340	GSRT	AR	09/2004 12/2004
Quality assurance of Spectral Ultraviolet Measurements in Europe through the Development of a Transportable Unit	AUTH	380	European Commission FP5	AR	01/2002 11/2004 & 06/2005
Actinic Flux Determination from Measurements of Irradiance	AUTH	96	European Commission FP5	AR	11/2000 12/2001
Measurements of ultraviolet solar radiation for scientific purposes	AUTH		GSRT	AR	05/1996 09/1997
Measurements of the horizontal column of atmospheric pollutants	AUTH		GSRT	AR	02/1995 11/1996 & 01/1996 04/1996

Communication activities

- Responsible of forecasting the UV Index for the National Observatory of Athens and providing it to the public by meteo.gr (<http://www.meteo.gr/uv.cfm>) 2010-2018.
- Co-director of the National Observatory of Athens for the Researchers' Night 2014.
- Beyond Center of Excellence for EO based monitoring of natural disasters, the National Observatory of Athens head of the field of Solar Energy and the Solarhub web portal: <http://beyond-eocenter.eu/solarapp/>.

Applications:

Short term forecasting Sense2/nextSense2: https://solar.beyond-eocenter.eu/#solar_short

long term forecasting – Greece: https://solar.beyond-eocenter.eu/#solar_long

UV forecasting – Greece (UVIOS2): <https://solar.beyond-eocenter.eu/#uv>

Participation in Experimental Campaigns

- PAUR Campaign, **Ag. Efstratios, Greece**, 6-20 June 1996. (Project: EU/PAUR)
- Fourth European Intercomparison of Ultraviolet Spectroradiometers, 1-13 July 1997, **Nea Michaniona, Greece**. (Project: EU/SUSPEN)
- Biodos Campaign of biological dosimeters 15-22 July 1997, **Nea Michaniona, Greece**. (Project: EU/Biodos)
- Bavarian solar radiation Campaign, **Hohenpeissenberg, Germany** 15-22, May 1997. (Project: EU/PAUR 2)
- Campaign of the PAUR II project, **Crete, Greece**, 3-21 May 1999. (Project: EU/PAUR 2)
- Intercomparison of spectroradiometers. **Ispra Campaign, Italy** May 2001 (Project: EU/QASUME)
- Intercomparison with the traveling spectroradiometer bentham DM150 at the Qasume project core institutes. **Innsbruck, Austria**, June 2002, **Bilthoven, The Netherlands** June 2002, **Manchester UK** July 2002, **Jokionen Finland**, July 2002, **Thessaloniki Greece** October 2002. (Project: EU/QASUME)
- Inspectro UK Campaign, **East Anglia UK** August 28- September 28 2002. (Project: EU/INSPECTRO)
- Intercomparison with the traveling spectroradiometer bentham DM150 at the Qasume project institutes. **Jokioinen, Finland**, May 2003, **Sodankyla, Finland**, June 2003, **Trondheim, Norway**, June 2003, **Oslo, Norway**, June 2003, **Reading, UK**, July, 2003, **Bilthoven, The Netherlands**, July 2003. (Project: EU/QASUME)
- Inspectro Bavarian Campaign, **Munich, Germany**, 1-31 May, 2004. (Project: EU/INSPECTRO)
- Intercomparison with the traveling spectroradiometer bentham DM150 at the Qasume project institutes: IM **Lisbon, Portugal**, July 2004, **INTA El Arenosillo, Spain** July 2004, **Izana, Tenerife**, June 2005 (Project: EU/QASUME)
- Aerosol Campaign, **Thessaloniki** 12-25 July, 2006. (Project: EU/SCOUT O3)
- OMI UV and aerosol campaign **Thessaloniki** 1-30 October 2007 (Project: National/OMIUUV)
- SNORTEX snow albedo campaign, **Sodankyla Finland** April 21-27, 2009 ((Project: EU/Snortex)
- IS4Fires burning experiment **Hyttiala, Finland** June, 2009 (Project: EU/IS4Fires)
- QASUME field campaign June 2010, **Jokioinen, Finland**
- ACEMED (Evaluation of CALIPSO's aerosol classification scheme over Eastern Mediterranean), **Crete, Greece** September 2011 (Project: ESA/ACEMED)
- CHARADMExp campaign: «Characterization of Aerosol mixtures of Dust And Marine origin», June-July 2014, **Finokalia, Crete** (Project: ESA/CHARADMExp)
- Organizer for the organization of the WMO «4th Filter Radiometer Comparison at PMODWRC», **Davos, Switzerland**, October - November, 2015 (WMO)
- Pre-Tect Campaign, **Finokalia, Crete, April**, 2017 (Project: ESA/PreTECT)
- QUATRAM Campaign of sun-photometric instruments, **Rome, Italy**, October, 2017 (national/QUATRAM).
- Organizer for the 5th Filter Radiometer Comparison, **Davos, Switzerland** September-October, 2021
- Organizer of the Earth Care Validation campaign, **Thessaloniki, Greece**, April-May, 2025
- FRC 6, Davos, Switzerland, September-October 2025

PUBLICATIONS IN PEER-REVIEWED JOURNALS

Summary (Scopus, 02/2026 and google scholar)

Number of pub. In peer reviewed journals	163	
Conferences (proceeding papers)	190	
Conferences (abstracts)	74	
Citations	5980	9980
Non-self Citations	5300	
h Index:	46	61

Summary of publications - journals

α/α	Journals	Publisher	Impact Factor (2021)	Number of pub.
1	Atmospheric Chemistry and Physics	Copernicus Publications	7.2	41*
2	Atmospheric Measurement Techniques	Copernicus Publications	4.2	34*
3	Atmospheric Environment	Elsevier Science	3.7	11
4	Journal of Geophysical Research	American Geophysical Union	3.4	7
5	Applied Optics	Optical Society of America	1.8	6
6	Annales Geophysicae	Copernicus Publications	1.6	6
7	Atmospheric Research	Elsevier	5.4	4
8	Geophysical Res. Letters	American Geophysical Union	4.3	3
9	Atmosphere	MDPI	3.1	7
10	Energy	Elsevier Science	4.9	2
11	Journal of Quantitative Spectroscopy and Radiative Transfer	Elsevier Science	2.6	2
12	International Journal of Remote Sensing	Taylor & Francis	1.7	2
13	Photochemistry and Photobiology Science	Royal Society of Chemistry	2.9	2
14	Photochemistry and Photobiology	American Society for Photobiology	2.2	2
15	Metrologia	IOP Science	2.3	2
16	Nature Communications Earth Environ.	Springer Nature	7.3	1
17	Earth System Dynamics	Copernicus Publications	4.6	1
18	Tellus	Taylor & Francis	2.0	1
19	Atmosphere-Ocean	Taylor & Francis	2.1	1
20	Natural Hazards Earth Syst. Science	Copernicus Publications	2.3	1
21	Atmospheric Science letters	Royal meteorological Society	1.2	1
22	Science of the total Environment	Elsevier Science	4.6	2
23	Geosciences Instruments and Methods Data Systems	Copernicus Publications	1.3	1
24	Geophysica**	Geophysical Society of Finland,	1	1
25	Lupus	Sage publishing	2.9	1
26	Journal of Atmospheric Sciences	Americam meteorological Society	3.1	1
27	Remote Sensing	MDPI	5.3	7
28	Solar Energy	Elsevier Science	4.3	2
29	European Review	Oxford Publ.	1.4	1
30	Energies	MDPI	3.3	5
31	Allergy	Willey	14.7	4
32	Applied Energy	Elsevier	11	1
33	Bulletin of the American Meteorological Society	AMS	8	1
34	Geosci. Model Dev	Copernicus publications	4	1
	Total		Weigh. average = 4.7	163

*3 highlight papers, **Journal ISSN 0367-4231

Publication list in peer reviewed journals

- A1. Bais, A. F., **S. Kazadzis**, D. Balis, C. S. Zerefos, and M. Blumthaler, "Correcting global solar UV spectra recorded by a Brewer spectroradiometer for its angular response error", *Applied Optics*, 37, 27, 6339 - 6344, 1998.
- A2. **Kazadzis**, S., A. F. Bais, D. Balis, C. S. Zerefos, and M. Blumthaler, "Retrieval of downwelling UV actinic flux density spectra from spectral measurements of global and direct solar UV irradiance", *J. Geophys. Res.* 105, D4, 4857-4864, 2000.
- A3. Munakata, N., **S. Kazadzis**, A. F. Bais, K. Hieda, G. Ronto, P. Rettberg, G. Horneck, "Comparisons of spore dosimetry and spectral photometry of solar-UV radiation at four sites in Japan and Europe", *Photochem. Photobiol.* 72, 739-745, 2000.
- A4. Bais, A. F., B. G. Gardiner, H. Slaper, M. Blumthaler, G. Bernhard, R. McKenzie, A. R. Webb, G. Seckmeyer, B. Kjeldstad, T. Koskela, P. Kirsch, J. Gröbner, J. B. Kerr, **S. Kazadzis**, K. Leszczynski, D. Wardle, C. Brogniez, W. Josefsson, D. Gillotay, H. Reinen, P. Weihs, T. Svenoe, P. Eriksen, F. Kuik, A. Redondas, "SUSPEN intercomparison of ultraviolet spectroradiometers", *J. Geophys. Res.* 106, 12,509-12,526, 2001.
- A5. Kazantzidis, A., D. S. Balis, A. F. Bais, **S. Kazadzis**, E. Galani, E. Kosmidis and M. Blumthaler, "Comparison of model calculations with spectral UV measurements during the SUSPEN campaign: the effect of aerosols", *J. Atmos. Science.*, Vol. 58, Issue12, 1529-1539, 2001.
- A6. D.S. Balis, V. Amiridis, C. Zerefos, E. Gerasopoulos, M. Andreae, P. Zanis, A. Kazantzidis, **S. Kazadzis** and A. Papayannis, "Raman lidar and sunphotometric measurements of aerosol optical properties during a biomass burning episode over Thessaloniki, Greece". *Atmospheric Environment.* 37, 4529-4538, 2003
- A7. Kylling, A. Webb, A. R. Bais, A. F. Blumthaler, M. Schmitt, R. Thiel, S. Kazantzidis, A. Kift, R. Misslbeck, M. Schallhart, B. Schreder, J. Topaloglou, **C. Kazadzis**, S. Rimmer, J. "Actinic flux determination from measurements of irradiance" *J. Geophys. Res.* Vol. 108, No. D16, 2003.
- A8. D. S. Balis, V. Amiridis, C. Zerefos, A. Kazantzidis, **S. Kazadzis**, A. F. Bais, C. Meleti, A. Papayannis, V. Matthias, and H. Dier. "Study of the effect of different type of aerosols on UV-B radiation from measurements during EARLINET" *Atmospheric Chemistry and Physics* 4, 307-321, 2004
- A9. **S. Kazadzis**, C. Topaloglou, A. F. Bais, M. Blumthaler, D. Balis, A. Kazantzidis, B. Schallhart "Actinic flux and O1D photolysis frequencies retrieved from spectral measurements of irradiance at Thessaloniki, Greece". *Atmospheric Chemistry and Physics*, 4 4191-4225, 2004
- A10. A F. Bais, A. Kazantzidis, **S. Kazadzis**, D. Balis, C. S. Zerefos, C. Meleti, "Effects of aerosol optical depth and single scattering albedo on surface UV irradiance". *Atmospheric Environment*, 39, 1093-1102, 2005
- A11. **S. Kazadzis**, A. Bais, N. Kouremeti, E. Gerasopoulos, K. Garane, M. Blumthaler, B. Schallhart, A. Cede "Direct spectral measurements with a Brewer spectroradiometer: absolute calibration and aerosol optical depth retrieval", *Applied Optics*, 44 (9), 1681-1690 2005
- A12. C. Topaloglou, **S. Kazadzis**, A. F. Bais, M. Blumthaler, B. Schallhart, D. Balis."NO₂ and HCHO photolysis frequencies from irradiance measurements in Thessaloniki, Greece." *Atmospheric Chemistry and Physics* Vol. 5, pp 1645-1653, 2005
- A13. A. Kylling, A. R. Webb, R. Kift, G. P. Gobbi, L. Ammannato, F. Barnaba, A. Bais, **S. Kazadzis**, M. Wendisch, E. Jakel, S. Schmidt, A. Kniffka, S. Thiel, W. Junkermann, M. Blumthaler, R. Silbernagl, B. Schallart, B. Kjeldstad, T. M. Thorseth, R. Scheirer, and B. Mayer, "Spectral Actinic flux in the Lower Troposphere: Measurement and 1-D Simulations for Cloudless, Broken Cloud and Overcast Situations", *Atmospheric Chemistry and Physics*, Vol. 5, pp 1975-1997, 2005
- A14. A. Papayannis, D. Balis, V. Amiridis, G. Chourdakis, G. Tsaknakis, C. Zerefos, A.D.A. Castanho, S. Nickovic, **S. Kazadzis** and J. Grabowski, "Measurements of Saharan dust aerosols over the Eastern Mediterranean using elastic backscatter-Raman lidar, spectrophotometric and satellite observations in the frame of the EARLINET project", *Atmospheric Chemistry and Physics*, Vol. 5, pp 2065-2079, 2005
- A15. J. Grobner, J. Schreder, **S. Kazadzis**, A. F. Bais, M. Blumthaler, P. Gorts, R. Tax, T. Koskela, G. Seckmeyer, A. R. Webb, "A travelling reference spectroradiometer for routine quality assurance of spectral solar ultraviolet irradiance measurements", *Applied Optics*, 44 (25) 2005
- A16. V. Amiridis, D.S. Balis, **S. Kazadzis**, A. Bais, E. Giannakaki, A. Papayannis and C. Zerefos "Four-year aerosol observations with a Raman lidar at Thessaloniki, Greece, in the framework of EARLINET", *J. of Geophys. Res.*, 110, D21203, doi:10.1029/2005JD006190, 2005
- A17. A. Bais, **S. Kazadzis**, K. Garane, N. Kouremeti, J. Gröbner, M. Blumthaler, G. Seckmeyer, A.R. Webb, T. Koskela, P. Gorts, J. Schreder "A portable device for characterizing the angular response of UV spectroradiometers" *Applied Optics*, 44., (32), 2005
- A18. A. Arola, **S. Kazadzis**, N. Krotkoc, A. Bais, J. Herman, K. Lakkala, "Assessment of TOMS UV bias due to the absorbing aerosols" *J. Geophys. Res.*, VOL. 110, D23211, doi:10.1029/2005JD005913, 2005

- A19. Alexander Cede, S. **Kazadzis**, Matt Kowalewski, Alkis Bais, Natalia Kouremeti, Mario Blumthaler, Jay Herman, "Solar zenith angle effect on direct irradiance measurements of Brewer spectrophotometers due to polarization" VOL. 33, L02806, doi:10.1029/2005GL024860, Geophys. Res. Letters, 2006
- A20. Julian Gröbner, Mario Blumthaler, Stelios **Kazadzis**, Alkis Bais, Ann Webb, Josef Schreder, Gunther Seckmeyer, Diana Rembges „Quality Assurance of spectral solar UV measurements: Results from 26 UV monitoring sites in Europe, 2002 to 2004" Metrologia 43, S66–S71, 2006
- A21. Balis D., V. Amiridis, S. **Kazadzis**, S. Nickovic, A. Papayannis, G. Tsaknakis, N. Kalivitis, M. Kanakidou, N. Mihalopoulos, M. Vrekoussis, G Chourdakis and M. Drakakis, "Charachetristics of desert dust over the East Mediterranean regions" Annales Geophysicae, Pages 807-821. SRef-ID: 1432-0576-ag, Volume 24, N. 3, 2006
- A22. Nobuo Munakata, Santoso Cornain, Mpu Kanoko, Ketut Mulyadi, Sri Lestari, Widodo Wirohadidjojo, David Bolseé, Stelios **Kazadzis**, Victor Meyer-Rochow, Nelson Schuch, Claudio Casiccia, Motohisa Kaneko, Chung-Ming Liu, Kowichi Jimbow, Toshiaki Saida, Chikako Nishigori, Katsumi Ogata, Shigeo Nonaka, Kotaro Hieda and Masamitsu Ichihashi "Biological Monitoring of Solar-UV Radiation at 17 Sites in Asia, Europe and South America from 1999 to 2004". Pages 689-695, Vol. 82 N. 3 Photochemistry and Photobiology, 2006
- A23. Meinander O, **Kazadzis** S., Blumthaler M., Ylianttila L., Johnsen B., Lakkala K., Koskela T. and Josefsson W. "Diurnal discrepancies in spectral solar UV radiation measurements" Vol. 45, No. 21 Applied Optics, 2006
- A24. Kazantzidis A, A. F. Bais, J. Gröbner, J. Herman, S. **Kazadzis**, N. Krotkov, E. Kyrö, H. Reinen, P.N. den Outer, K. Garane, P. Görts, K. Lakkala, C. Meleti, H. Slaper and T. Turunen "Comparison of ground-based and TOMS surface UV irradiances over four stations in Europe" VOL. 111, D13207, doi:10.1029/2005JD006672 J. Geophys. Res.. 2006
- A25. M. E. Koukouli, D. S. Balis, V. Amiridis, S. **Kazadzis**, A. Bais, S. Nickovic, O. Torres. "Aerosol variability over Thessaloniki using ground based remote sensing observations and the TOMS aerosol index 40 (2006) 5367–5378 Atmospheric Environment, 2006
- A26. K. Garane, A. Bais, S. **Kazadzis**, A. Kazantzidis, C. Meleti, "Monitoring of UV spectral irradiance at Thessaloniki (1990-2005): Data re-evaluation and quality control" Annales Geophysicae, Vol. 24, pp. 3215-3228, 2006
- A27. Alexandros Papayannis, Chen Yong Fu, Zhang Huaiqing, Vassilios Amiridis, Stylianos **Kazadzis**, Georgios Chourdakis, Georgios Georgoussis, Carlos Pérez, Hong-Bin Chen, Philippe Goloub, Rodelize-Elisabeth Mamouri and Dimitrios Paronis, Extraordinary dust event over Beijing, China during April 2006: lidar, sun photometric, satellite observations and model validation Geophysical Research Letters, Vol. 34, I07806, doi:10.1029/2006gl029125, 2007
- A28. S. **Kazadzis**., A. Bais, V. Amiridis, D. Balis, C. Meleti, N. Kouremeti, C. S. Zerefos, S. Rapsomanikis, M. Petrakakis, A. Kelesis, P. Tzoumaka, K. Kelektoglou, Nine years of UV aerosol optical depth measurements at Thessaloniki, Greece, Atmospheric Chemistry and Physics, Vol. 7, pp 2091-2101, 2007
- A29. C. S. Zerefos, E. Gerasopoulos, I. Tzagouri, B. Psiloglou, A. Belehaki, T. Herekakis, A. Bais, S. **Kazadzis**, C. Eleftheratos, N. Kalivitis, and N. Mihalopoulos. Evidence of gravity waves into the atmosphere during the March 2006 total solar eclipse Atmospheric Chemistry and Physics 2007, Vol.7, pp. 4943-4951 SRef-ID: 1680-7324/acp/2007-7-4943
- A30. E. Giannakaki, D.S. Balis, V. Amiridis and S. **Kazadzis**, Optical and geometrical characteristics of cirrus clouds over a mid-latitude lidar station, Atmospheric Chemistry and Physics, Vol. 7, 5519-5530, 2007
- A31. **Kazadzis**, S., Bais, A., Blumthaler, M., Webb, A., Kouremeti, N., Kift, R., Schallhart, B., and Kazantzidis, A.: Effects of total solar eclipse of 29 March 2006 on surface radiation, Atmos. Chem. Phys., 7, 5775-5783, 2007
- A32. A. Kazantzidis, A. Bais, C. Emde, S. **Kazadzis**, and C. Zerefos Attenuation of global ultraviolet and visible irradiance over Greece during the total solar eclipse of 29 March 2006 Atm. Chemistry and Physics 7, 5959-5969, 2007
- A33. S. Thiel, S., M. Blumthaler, E. Jäkel, R. Scheirer, L. Ammannato, A. Bais, B. Bandy, B. Bohn, O. Engelsen, G. P. Gobbi, J. Groebner, W. Junkermann, S. **Kazadzis**, R. Kift, B. Kjeldstad, N. Kouremeti, A. Kylling, B. Mayer, P. Monks, C. Reeves, B. Schallhart, S. Schmidt, R. Schmitt, J. Schreder, R. Silbernagl, C. Topaloglou, T. M. Thorseth, A.R. Webb, M. Wendisch, P. Werle: Influence of clouds on the spectral actinic flux in the lower troposphere (INSPECTRO): overview of the field campaign" Atm. Chemistry and Physics., 8, 1789-1812, 2008
- A34. N. Kouremeti, A. Bais, S. **Kazadzis**, M. Blumthaler and R. Schmitt, A CCD spectrometer for direct solar irradiance and sky radiance measurements, Applied Optics, Vol. 47, No. 10, 2008
- A35. C. Topaloglou, B. Mayer, S. **Kazadzis**, A. Bais, M. Blumthaler Estimation of photolysis frequencies from TOMS satellite measurements and routine meteorological observations, Annales Geophysicae, 26 1965-1975, 2008.
- A36. Andreas Kazantzidis, Alkiviadis F. Bais, Maria Melina Zempila, Stelios **Kazadzis**, Peter N. den Outer, Tapani Koskela and Harry Slaper Calculations of the human Vitamin D exposure from UV spectral measurements at three European stations, Photochem. Photobiol. Sci., 8, 45 - 51, DOI: 10.1039/b811216a, 2009
- A37. E. Katragkou, S. **Kazadzis**, V. Amiridis, V. Papaioannou, S. Karathanasis, D. Melas, PM10 regional transport pathways in Thessaloniki, Greece, Atmospheric Environment 43 1079–1085, 2009

- A38. S. **Kazadzis**, A. Bais, A. Arola, N. Krotkov, N. Kouremeti, and C. Meleti, Ozone Monitoring Instrument spectral UV irradiance products: comparison with ground based measurements at an urban environment. *Atm. Chemistry and Physics.*, 9, 585-594, 2009
- A39. V. Amiridis, D.S. Balis, E. Giannakaki, A. Stohl, S. **Kazadzis**, M.E. Koukouli, P. Zanis Optical characteristics of aged smoke aerosols over Southeastern Europe determined from UV-Raman lidar measurements, *Atmos. Chem. Phys.*, 9, 2431–2440, 2009
- A40. N. Munakata, S. **Kazadzis**, D. Bolseé, N. Schuch, T. Koskela, A. Karpetchko, C. Meleti, C. Casiccia, M. Barcellos da Rosa, T. Saida, C. Nishigori, K. Ogata, K. Imafuku, C. Liu, S. Lestari, M. Kanoko, S. Cornain, K. Mulyadi, K. Hieda, Variations and trends of biologically effective doses of solar ultraviolet radiation in Asia, Europe and South America from 1999 to 2007, *Photochem. Photobiol. Sci.*, DOI: 10.1039/b906975e, 2009
- A41. Meleti C., Bais A.F., **Kazadzis** S., Kouremeti N., Garane K., Zerefos C. Factors affecting solar UV irradiance, measured since 1990 at Thessaloniki, Greece, *Int. Journal of Remote Sensing*, 30:15, 4167, 4179, 2009
- A42. C. S. Zerefos, C. Meleti, K. Eleftheratos, S. **Kazadzis**, A. Romanou, A. Bais, and C. Ichoku Solar brightening over Thessaloniki, Greece, dimming over Beijing, China, *Tellus*, DOI: 10.1111/j.1600-0889.2009.00425.x, 2009
- A43. S. **Kazadzis**, N. Kouremeti, A. Bais, A. Kazantzidis and C. Meleti, Aerosol forcing efficiency in the UVA region from spectral solar irradiance measurements, *Ann. Geophys.*, 27, 2515–2522, 2009
- A44. S. **Kazadzis**, A. Bais, D. Balis, N. Kouremeti, M. Zempila, A. Arola, E. Giannakaki, A. Kazantzidis, V. Amiridis, Spatial and temporal UV irradiance and aerosol variability within the area of an OMI satellite pixel, *Atm. Chem. and Phys.*, 9, 7273-7298, 2009
- A45. Amiridis, V., Kafatos, M., Perez, C., **Kazadzis**, S., Gerasopoulos, E., Mamouri, R. E., Papayannis, A., Kokkalis, P., Giannakaki, E., Basart, S., Daglis, I., and Zerefos, C.: The potential of the synergistic use of passive and active remote sensing measurements for the validation of a regional dust model, *Ann. Geophys.*, 27, 3155-3164, 2009
- A46. S. N. Stolaki, S. A. **Kazadzis**, D. V. Foris and Th. S. Karacostas, Study of fog occurrences' characteristics at Thessaloniki airport, as a forecasting tool, *Nat. Hazards Earth Syst. Sci.*, 9, 1541–1549, 2009
- A47. A. Papayannis, R.E. Mamouri, V. Amiridis, S. **Kazadzis**, C. Pérez, G. Tsaknakis, P. Kokkalis Systematic lidar observations of Saharan dust layers over Athens, Greece in the frame of EARLINET project (2004-2006) *Annales geophysicae*, 27, 3611-3620, 2009
- A48. A. Arola, S. **Kazadzis**, A. Lindfors, N. Krotkov, J. Kujanpaa, J. Tamminen, A. Bais, A. di Sarra, J. M. Villaplana, C. Brogniez, A. M. Siani, M. Janouch, P. Weihs, T. Koskela, N. Kouremeti, D. Meloni, V. Buchard, F. Auriol, I. Ialongo, M. Staneck, S. Simic, A. Webb, A. Smedley, and S. Kinne, A new approach to correct for absorbing aerosols in OMI UV: a preliminary evaluation, *Geophysical Research Letters*, 36, L22805, doi:10.1029/2009GL041137, 2009
- A49. Meinander O., Wuttke S., Seckmeyer G., **Kazadzis** S., Lindfors A., Kyrö E. Solar Zenith Angle Asymmetry Cases in Polar Snow UV Albedo, *Geophysica*, 45(1–2), 183–198, 2009
- A50. M. E. Koukouli, S. **Kazadzis**, V. Amiridis, C. Ichoku, D. S. Balis, A. F. Bais, Investigation of the negative trend in the MODIS Aerosol Optical Depth over the Southern Balkans, *Atmospheric Environment*, doi:10.1016/j.atmosenv.2009.11.024, 2010
- A51. **Kazadzis**, S., Gröbner, J., Arola, A., and Amiridis, V.: The effect of the global UV irradiance measurement accuracy on the single scattering albedo retrieval, *Atmos. Meas. Tech.*, 3, 1029-1037, doi:10.5194/amt-3-1029-2010, 2010.
- A52. Amiridis, V., Giannakaki, E., Balis, D. S., Gerasopoulos, E., Pytharoulis, I., Zanis, P., **Kazadzis**, S., Melas, D., and Zerefos, C.: Smoke injection heights from agricultural burning in Eastern Europe as seen by CALIPSO, *Atmos. Chem. Phys.*, 10, 11567–11576, 2010
- A53. Arola, A., Schuster, G., Myhre, G., **Kazadzis**, S., Dey, S., and Tripathi, S. N.: Inferring absorbing organic carbon content from AERONET data, *Atmos. Chem. Phys.*, 11, 215–225, 2011
- A54. Gerasopoulos, E., Amiridis, V., **Kazadzis**, S., Kokkalis, P., Eleftheratos, K., Andreae, M. O., Andreae, T. W., El-Askary, H., and Zerefos, C. S.: Three-year ground based measurements of aerosol optical depth over the Eastern Mediterranean: the urban environment of Athens, *Atmos. Chem. Phys.*, 11, 2145-2159, 2011
- A55. V. Amiridis, D. Balis, E. Giannakaki, S. **Kazadzis**, A. Arola, E. Gerasopoulos Characterization of the aerosol type using simultaneous measurements of the lidar ratio and estimations of the single scattering albedo, *Atmospheric Research* 101, 46–53 2011
- A56. Aaltonen, V., Rodriguez, E., **Kazadzis**, S., Arola, A., Amiridis, V., Lihavainen, H., de Leeuw, G., On the variation of aerosol properties over Finland based on the optical columnar measurements, *Atmospheric Research*, doi: 10.1016/j.atmosres.2011.07.014, 2012
- A57. Amiridis, V., Zerefos, C., **Kazadzis**, S., Gerasopoulos, E., Eleftheratos, K., Vrekoussis, M., Stohl, A., Mamouri, R.E., Kokkalis, P., Papayannis, A., Eleftheriadis, K., Diapouli, E., Keramitsoglou, I., Kontoes, C., Kotroni, V., Lagouvardos, K., Marinou, E., Giannakaki, E., Kostopoulou, E., Giannakopoulos, C., Richter, A., Burrows, J.P., Mihalopoulos, N. Impact of the 2009 Attica wild fires on the air quality in urban Athens, *Atmospheric Environment*, doi: 10.1016/j.atmosenv.2011.07.056, 2012

- A58. Zerefos, C. S., Tourpali, K., Eleftheratos, K., **Kazadzis, S.**, Meleti, C., Feister, U., Koskela, T., and Heikkilä, A.: Evidence of a possible turning point in solar UV-B over Canada, Europe and Japan, *Atmos. Chem. Phys.*, 12, 2469-2477, doi:10.5194/acp-12-2469-2012, 2012
- A59. Mamouri, R. E., Papayannis, A., Amiridis, V., Müller, D., Kokkalis, P., Rapsomanikis, S., Karageorgos, E. T., Tsaknakis, G., Nenes, A., **Kazadzis, S.**, and Remoundaki, E.: Multi-wavelength Raman lidar, sun photometric and aircraft measurements in combination with inversion models for the estimation of the aerosol optical and physico-chemical properties over Athens, Greece, *Atmos. Meas. Tech.*, 5, 1793-1808, doi:10.5194/amt-5-1793-2012, 2012.
- A60. Gerasopoulos, E., **Kazadzis, S.**, Vrekoussis, M., Kouvarakis, G., Liakakou, E., Kouremeti, N., Giannadaki, D., Kanakidou, M., Bohn, B., and Mihalopoulos, N.: Factors affecting O3 and NO2 photolysis frequencies measured in the eastern Mediterranean during the five year period 2002-2006, *Journal of Geophysical Research*, 117, D22305, doi:10.1029/2012JD017622, 2012.
- A61. Meinander, O., **Kazadzis, S.**, Arola, A., Riihelä, A., Räisänen, P., Kivi, R., Kontu, A., Kouznetsov, R., Sofiev, M., Svensson, J., Suokanerva, H., Aaltonen, V., Manninen, T., Roujean, J.-L., and Hautecoeur, O.: Spectral albedo of seasonal snow during intensive melt period at Sodankylä, beyond the Arctic Circle, *Atmos. Chem. Phys.*, 13, 3793-3810, doi:10.5194/acp-13-3793-2013, 2013
- A62. Lindfors, A. V., Kouremeti, N., Arola, A., **Kazadzis, S.**, Bais, A. F., and Laaksonen, A.: Effective aerosol optical depth from pyranometer measurements of surface solar radiation (global radiation) at Thessaloniki, Greece, *Atmos. Chem. Phys.*, 13, 3733-3741, doi:10.5194/acp-13-3733-2013, 2013
- A63. Gkikas, A., Hatzianastassiou, N., Mihalopoulos, N., Katsoulis, V., **Kazadzis, S.**, Pey, J., Querol, X., and Torres, O.: The regime of intense desert dust episodes in the Mediterranean based on contemporary satellite observations and ground measurements, *Atmos. Chem. Phys.*, 13, 12135-12154, doi:10.5194/acp-13-12135-2013, 2013
- A64. Amiridis, V., Wandinger, U., Marinou, E., Giannakaki, E., Tsekeri, A., Basart, S., **Kazadzis, S.**, Gkikas, A., Taylor, M., Baldasano, J., and Ansmann, A.: Optimizing Saharan dust CALIPSO retrievals, *Atmos. Chem. Phys.*, 13, 12089-12106, 2013
- A65. Zerefos, C. S., Tetsis, P., Kazantzidis, A., Amiridis, V., Zerefos, S. C., Luterbacher, J., Eleftheratos, K., Gerasopoulos, E., **Kazadzis, S.**, and Papayannis, A.: Further evidence of important environmental information content in red-to-green ratios as depicted in paintings by great masters, *Atmos. Chem. Phys.*, 14, 2987-3015, doi:10.5194/acp-14-2987-2014, 2014.
- A66. Taylor, M., **Kazadzis, S.**, and Gerasopoulos, E.: Multi-modal analysis of aerosol robotic network size distributions for remote sensing applications: dominant aerosol type cases, *Atmos. Meas. Tech.*, 7, 839-858, doi:10.5194/amt-7-839-2014, 2014
- A67. K. Eleftheratos, S. **Kazadzis**, C. S. Zerefos, K. Tourpali, C. Meleti, D. Balis, I. Zyrichidou, K. Lakkala, U. Feister, T. Koskela, A. Heikkilä & J. M. Karhu: Ozone and Spectroradiometric UV Changes in the Past 20 Years over High Latitudes, *Atmosphere-Ocean*, DOI: 10.1080/07055900.2014.919897, 2014
- A68. **Kazadzis, S.**, Veselovskii, I., Amiridis, V., Gröbner, J., Suvorina, A., Nyeki, S., Gerasopoulos, E., Kouremeti, N., Taylor, M., Tsekeri, A., and Wehrli, C.: Aerosol microphysical retrievals from precision filter radiometer direct solar radiation measurements and comparison with AERONET, *Atmos. Meas. Tech.*, 7, 2013-2025, doi:10.5194/amt-7-2013-2014, 2014.
- A69. Taylor, M., **Kazadzis, S.**, Tsekeri, A., Gkikas, A., and Amiridis, V.: Satellite retrieval of aerosol microphysical and optical parameters using neural networks: a new methodology applied to the Sahara desert dust peak, *Atmos. Meas. Tech.*, 7, 3151-3175, doi:10.5194/amt-7-3151-2014, 2014.
- A70. Flaounas, E., Kotroni, V., Lagouvardos, K., **Kazadzis, S.**, Gkikas, A. and Hatzianastassiou, N., Cyclone contribution to dust transport over the Mediterranean region. *Atmosph. Sci. Lett.*, 16: 473-478. doi: 10.1002/asl.584, 2015
- A71. Taylor, M., **Kazadzis, S.**, Amiridis, V., Kahn, R.A., Global aerosol mixtures and their multiyear and seasonal characteristics, *Atmospheric Environment*, doi: 10.1016/j.atmosenv.2015.06.029, 2015
- A72. Amiridis, V., Marinou, E., Tsekeri, A., Wandinger, U., Schwarz, A., Giannakaki, E., Mamouri, R., Kokkalis, P., Binietoglou, I., Solomos, S., Herekakis, T., **Kazadzis, S.**, Gerasopoulos, E., Proestakis, E., Kottas, M., Balis, D., Papayannis, A., Kontoes, C., Kourtidis, K., Papagiannopoulos, N., Mona, L., Pappalardo, G., Le Rille, O., and Ansmann, A.: LIVAS: a 3-D multi-wavelength aerosol/cloud database based on CALIPSO and EARLINET, *Atmos. Chem. Phys.*, 15, 7127-7153, doi:10.5194/acp-15-7127-2015, 2015.
- A73. P.I. Raptis, S. **Kazadzis**, K. Eleftheratos, P. Kosmopoulos, V. Amiridis, C. Helmis and C. Zerefos (2015) Total ozone column measurements using an ultraviolet multi-filter radiometer, *International Journal of Remote Sensing*, 36:17, 4469-4482, DOI: 10.1080/01431161.2015.1083631
- A74. Kosmopoulos P.G., **Kazadzis S.**, Lagouvardos K., Kotroni V., Bais A., Solar energy prediction and verification using operational model forecasts and ground-based solar measurements, *Energy* 93 (2015) 1918e1930, <http://dx.doi.org/10.1016/j.energy.2015.10.054>, 2015
- A75. Proestakis M., **Kazadzis S.**, Lagouvardos K., Kotroni V., Kazantzidis A., Lightning activity and aerosols in the Mediterranean region, *Atmospheric Research* 170 66-75, <http://dx.doi.org/10.1016/j.atmosres.2015.11.010>, 2016

- A76. M. Taylor, P.G. Kosmopoulos, **S. Kazadzis**, I. Keramitsoglou, C.T. Kiranoudis, Neural network radiative transfer solvers for the generation of high resolution solar irradiance spectra parameterized by cloud and aerosol parameters, *Journal of Quantitative Spectroscopy and Radiative Transfer* Volume 168, Pages 176–192, January 2016
- A77. M. Gratsea, Mihalis Vrekoussis, Andreas Richter, Folkard Wittrock, Anja Schönhardt, John Burrows, **Stelios Kazadzis**, Nikos Mihalopoulos, Evangelos Gerasopoulos, Slant column MAX-DOAS measurements of nitrogen dioxide, formaldehyde, glyoxal and oxygen dimer in the urban environment of Athens, *Atmospheric Environment*, Volume 135, Pages 118-131, ISSN 1352-2310, <http://dx.doi.org/10.1016/j.atmosenv.2016.03.048>, 2016
- A78. H. Diémoz, K. Eleftheratos, **S. Kazadzis**, V. Amiridis and Christos S. Zerefos, Retrieval of aerosol optical depth in the visible range with a Brewer spectrophotometer in Athens, *Atmos. Meas. Tech.*, 9, 1871–1888, 2016
- A79. M.M. Zampila, M. Taylor, A. Bais and **S. Kazadzis**, Modeling the relationship between photosynthetically active radiation and global horizontal irradiance using singular spectrum analysis, *Journal of Quantitative Spectroscopy & Radiative Transfer*, 182, 240–263, 2016
- A80. Gkikas, A., Basart, S., Hatzianastassiou, N., Marinou, E., Amiridis, V., **Kazadzis, S.**, Pey, J., Querol, X., Jorba, O., Gassó, S., and Baldasano, J. M.: Mediterranean intense desert dust outbreaks and their vertical structure based on remote sensing data, *Atmos. Chem. Phys.*, 16, 8609-8642, doi:10.5194/acp-16-8609-2016, 2016
- A81. Proestakis, E., **Kazadzis, S.**, Lagouvardos, K., Kotroni, V., Amiridis, V., Marinou, E., Price, C., Kazantzidis, A., Aerosols and lightning activity: The effect of vertical profile and aerosol type, *Atmospheric Research*, doi: 10.1016/j.atmosres.2016.07.031, 2016
- A82. Founda, D., **Kazadzis, S.**, Mihalopoulos, N., Gerasopoulos, E., Lianou, M., and Raptis, P. I.: Long-term visibility variation in Athens (1931–2013): a proxy for local and regional atmospheric aerosol loads, *Atmos. Chem. Phys.*, 16, 11219-11236, doi:10.5194/acp-16-11219-2016, 2016.
- A83. **Kazadzis, S.**, Raptis, P., Kouremeti, N., Amiridis, V., Arola, A., Gerasopoulos, E., and Schuster, G. L.: Aerosol absorption retrieval at ultraviolet wavelengths in a complex environment, *Atmos. Meas. Tech.*, 9, 5997-6011, doi:10.5194/amt-9-5997-2016, 2016.
- A84. A. Papayannis, A. Argyrouli, A. Bougiatioti, E. Remoundaki, S. Vratolis, A. Nenes, S. Solomos, M. Komppula, E. Giannakaki, J. Kalogiros, R. Banks, K. Eleftheriadis, E. Mantas, E. Diapouli, C.G. Tzani, **S. Kazadzis**, I. Biniotoglou, L. Labzovskii, J. Vande Hey and C.S. Zerefos, From hygroscopic aerosols to cloud droplets: the HygrA-CD Campaign in the Athens basin - An overview, *Science of the Total Environment* 574, 216–233, 2017
- A85. Carlund, T., Kouremeti, N., **Kazadzis, S.**, and Gröbner, J.: Aerosol optical depth determination in the UV using a four-channel precision filter radiometer, *Atmos. Meas. Tech.*, 10, 905-923, doi:10.5194/amt-10-905-2017, 2017.
- A86. P.I. Raptis, **S. Kazadzis**, B. Psiloglou, N. Kouremeti, P. Kosmopoulos, A. Kazantzidis, Measurements and model simulations of solar radiation at tilted planes, towards the maximization of energy capture. *Energy* 130 570-580, 2017
- A87. 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, 2435-2453, <https://doi.org/10.5194/amt-10-2435-2017>, 2017.
- A88. E. Dimitropoulou, V. D. Assimakopoulos, K. M. Fameli, H. A. Flocas, P. Kosmopoulos, **S. Kazadzis**, K. Lagouvardos, E. Bossioli, Estimating the biogenic non-methane hydrocarbon emissions over Greece, *Atmosphere*, 9, 14; doi:10.3390/atmos9010014, 2018
- A89. Proestakis, E., Amiridis, V., Marinou, E., Georgoulas, A. K., Solomos, S., **Kazadzis, S.**, Chimot, J., Che, H., Alexandri, G., Biniotoglou, I., Daskalopoulou, V., Kourtidis, K. A., de Leeuw, G., and van der A, R. J.: Nine-year spatial and temporal evolution of desert dust aerosols over South and East Asia as revealed by CALIOP, *Atmos. Chem. Phys.*, 18, 1337-1362, <https://doi.org/10.5194/acp-18-1337-2018>, 2018.
- A90. **Kazadzis, S.**, Kouremeti, N., Nyeki, S., Gröbner, J., and Wehrl, C.: The World Optical Depth Research and Calibration Center (WORCC) quality assurance and quality control of GAW-PFR AOD measurements, *Geosci. Instrum. Method. Data Syst.*, 7, 39-53, <https://doi.org/10.5194/gi-7-39-2018>, 2018.
- A91. **Kazadzis, S.**, Founda, D., Psiloglou, B. E., Kambezidis, H., Mihalopoulos, N., Sanchez-Lorenzo, A., Meleti, C., Raptis, P. I., Pierros, F., and Nabat, P.: Long-term series and trends in surface solar radiation in Athens, Greece, *Atmos. Chem. Phys.*, 18, 2395-2411, <https://doi.org/10.5194/acp-18-2395-2018>, 2018. (highlight paper ACP)
- A92. Kosmopoulos, P. G., **Kazadzis, S.**, Taylor, M., Raptis, P. I., Keramitsoglou, I., Kiranoudis, C., and Bais, A. F.: Assessment of surface solar irradiance derived from real-time modelling techniques and verification with ground-based measurements, *Atmos. Meas. Tech.*, 11, 907-924, <https://doi.org/10.5194/amt-11-907-2018>, 2018.
- A93. Raptis, P.-I., **Kazadzis, S.**, Gröbner, J., Kouremeti, N., Doppler, L., Becker, R., and Helmis, C.: Water vapour retrieval using the Precision Solar Spectroradiometer, *Atmos. Meas. Tech.*, 11, 1143-1157, <https://doi.org/10.5194/amt-11-1143-2018>, 2018.

- A94. **Kazadzis, S.**, Kouremeti, N., Diémoz, H., Gröbner, J., Forgan, B. W., Campanelli, M., Estellés, 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., Goloub, 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 Fourth WMO Filter Radiometer Comparison for aerosol optical depth measurements, *Atmos. Chem. Phys.*, 18, 3185–3201, <https://doi.org/10.5194/acp-18-3185-2018>, 2018. (highlight paper ACP)
- A95. López-Solano, J., Redondas, A., Carlund, T., Rodriguez-Franco, J. J., Diémoz, H., León-Luis, S. F., Hernández-Cruz, B., Guirado-Fuentes, C., Kouremeti, N., Gröbner, J., **Kazadzis, S.**, Carreño, V., Berjón, A., Santana-Díaz, D., Rodríguez-Valido, M., De Bock, V., Moreta, J. R., Rimmer, J., Smedley, A. R. D., Boulkelia, L., Jepsen, N., Eriksen, P., Bais, A. F., Shiroto, V., Vilaplana, J. M., Wilson, K. M., and Karppinen, T.: Aerosol optical depth in the European Brewer Network, *Atmos. Chem. Phys.*, 18, 3885–3902, <https://doi.org/10.5194/acp-18-3885-2018>, 2018.
- A96. V. Tatsiankou, K. Hinzer, H. Schriemer, **S. Kazadzis**, N. Kouremeti, J. Gröbner, R. Beal, Extensive validation of solar spectral irradiance meters at the World Radiation Center, *Solar Energy*, Volume 166, Pages 80–89, 2018
- A97. Zempila, M.M., Fountoulakis, I., Taylor, M., **Kazadzis, S.**, Arola, A., Koukoulis, M.E., Bais, A., Meleti, C., Balis, D., Validation of OMI erythral doses with multi-sensor ground-based measurements in Thessaloniki, Greece, *Atmospheric Environment*, doi: 10.1016/j.atmosenv.2018.04.012, 2018
- A98. Solomos, S., Kalivitis, N., Mihalopoulos, N., Amiridis, V., Kouvarakis, G., Gkikas, A., Biniotoglou, I., Tsekeri, A., **Kazadzis, S.**, Kottas, M., Pradhan, Y., Proestakis, E., Nastos, P.T., Marenco, F.: From Tropospheric Folding to Khamsin and Foehn Winds: How Atmospheric Dynamics Advanced a Record-Breaking Dust Episode in Crete. *Atmosphere*, 9, 240, 2018.
- A99. Benedetti, A., Reid, J. S., Knippertz, P., Marsham, J. H., Di Giuseppe, F., Rémy, S., Basart, S., Boucher, O., Brooks, I. M., Menut, L., Mona, L., Laj, P., Pappalardo, G., Wiedensohler, A., Baklanov, A., Brooks, M., Colarco, P. R., Cuevas, E., da Silva, A., Escribano, J., Flemming, J., Huneeus, N., Jorba, O., **Kazadzis, S.**, Kinne, S., Popp, T., Quinn, P. K., Sekiyama, T. T., Tanaka, T., and Terradellas, E.: Status and future of numerical atmospheric aerosol prediction with a focus on data requirements, *Atmos. Chem. Phys.*, 18, 10615–10643, <https://doi.org/10.5194/acp-18-10615-2018>, 2018
- A100. Lakkala, K., Arola, A., Gröbner, J., León-Luis, S. F., Redondas, A., **Kazadzis, S.**, Karppinen, T., Karhu, J. M., Egli, L., Heikkilä, A., Koskela, T., Serrano, A., and Vilaplana, J. M.: Performance of the FMI cosine error correction method for the Brewer spectral UV measurements, *Atmos. Meas. Tech.*, 11, 5167–5180, <https://doi.org/10.5194/amt-11-5167-2018>, 2018.
- A101. Raptis, I.-P.; **Kazadzis, S.**; Eleftheratos, K.; Amiridis, V.; Fountoulakis, I. Single Scattering Albedo's Spectral Dependence Effect on UV Irradiance. *Atmosphere*, 9, 364, <https://www.mdpi.com/2073-4433/9/9/364>, 2018.
- A102. Zanatta, M., Laj, P., Gysel, M., Baltensperger, U., Vratolis, S., Eleftheriadis, K., Kondo, Y., Dubuisson, P., Winiarek, V., **Kazadzis, S.**, Tunved, P., and Jacobi, H.-W.: Effects of mixing state on optical and radiative properties of black carbon in the European Arctic, *Atmos. Chem. Phys.*, 18, 14037–14057, <https://doi.org/10.5194/acp-18-14037-2018>, 2018
- A103. Toledano, C., González, R., Fuertes, D., Cuevas, E., Eck, T. F., **Kazadzis, S.**, Kouremeti, N., Gröbner, J., Goloub, P., Blarel, L., Román, R., Barreto, Á., Berjón, A., Holben, B. N., and Cachorro, V. E.: Assessment of Sun photometer Langley calibration at the high-elevation sites Mauna Loa and Izaña, *Atmos. Chem. Phys.*, 18, 14555–14567, <https://doi.org/10.5194/acp-18-14555-2018>, 2018
- A104. 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, 1870, 2018.
- A105. Gergianaki, I., Fanourakis, A., Adamichou, C., Spyrou, G., Mihalopoulos, N., **Kazadzis, S.**, Bertias, G., Is systemic lupus erythematosus different in urban versus rural living environment? Data from the Cretan Lupus Epidemiology and Surveillance Registry. *Lupus*, <https://doi.org/10.1177/0961203318816820>, 2018
- A106. Cuevas, E., Romero-Campos, P. M., Kouremeti, N., Kazadzis, S., Räisänen, P., García, R. D., Barreto, A., Guirado-Fuentes, C., Ramos, R., Toledano, C., Almansa, F., and Gröbner, J.: Aerosol optical depth comparison between GAW-PFR and AERONET-Cimel radiometers from long-term (2005–2015) 1 min synchronous measurements, *Atmos. Meas. Tech.*, 12, 4309–4337, <https://doi.org/10.5194/amt-12-4309-2019>, 2019
- A107. Á. Barreto, R. Román; D. Pérez-Ramírez; A. J. Berjón; N. Kouremeti; **S. Kazadzis**; J. Gröbner; M. Mazzola; C. Toledano; J. A. Benavent-Oltra; L. Doppler; J. Juryšek; A. F. Almansa; S. Victori; F. Maupin; C. Guirado-Fuentes; R. González; V. Vitale; P. Goloub; L. Blarel; L. A.-Arboledas; E. Woolliams; C. Greenwell; S. Taylor; J. Carlos Antuña; M. Yela, Evaluation of night-time aerosols measurements and lunar irradiance models in the frame of the first multi-instrument nocturnal intercomparison campaign, V. 202, *Atmospheric Environment*, 2019
- A108. Masoom, A.; Kosmopoulos, P.; Bansal, A.; **Kazadzis, S.** Solar Energy Estimations in India Using Remote Sensing Technologies and Validation with Sun Photometers in Urban Areas. *Remote Sens.* 2020, 12, 254.
- A109. Aebi, C., Gröbner, J., **Kazadzis, S.**, Vuilleumier, L., Gkikas, A., and Kämpfer, N.: Estimation of cloud optical thickness, single scattering albedo and effective droplet radius using a shortwave radiative closure study in Payerne, *Atmos. Meas. Tech.*, 13, 907–923, <https://doi.org/10.5194/amt-13-907-2020>, 2020

- A110. Raptis, I.-P.; **Kazadzis, S.**; Amiridis, V.; Gkikas, A.; Gerasopoulos, E.; Mihalopoulos, N. A Decade of Aerosol Optical Properties Measurements over Athens, Greece. *Atmosphere* 2020, 11, 154
- A111. Nakajima, T., Campanelli, M., Che, H., Estellés, V., Irie, H., Kim, S.-W., Kim, J., Liu, D., Nishizawa, T., Pandithurai, G., Soni, V. K., Thana, B., Tugisurn, N.-U., Aoki, K., Go, S., Hashimoto, M., Higurashi, A., **Kazadzis, S.**, Khatri, P., Kouremeti, N., Kudo, R., Marengo, F., Momoi, M., Ningombam, S. S., Ryder, C. L., Uchiyama, A., and Yamazaki, A.: An overview of and issues with sky radiometer technology and SKYNET, *Atmos. Meas. Tech.*, 13, 4195–4218, <https://doi.org/10.5194/amt-13-4195-2020>, 2020.
- A112. Nemuc, A., Basart, S., Tobias, A., Nickovic, S., Barnaba, F., **Kazadzis, S.**, Monteiro, A., International Network to Encourage the Use of Monitoring and Forecasting Dust Products (InDust). *European Review*, 1-15. doi:10.1017/S1062798720000733, 2020
- A113. Kosmopoulos, P.; Kouroutsidis, D.; Papachristopoulou, K.; Raptis, P.I.; Masoom, A.; Saint-Drenan, Y.-M.; Blanc, P.; Kontoes, C.; Kazadzis, S. Short-Term Forecasting of Large-Scale Clouds Impact on Downwelling Surface Solar Irradiation. <https://doi.org/10.3390/en13246555> *Energies* 2020, 13, 6555.
- A114. Gkikas, A., Proestakis, E., Amiridis, V., **Kazadzis, S.**, Di Tomaso, E., Tsekeri, A., Marinou, E., Hatzianastassiou, N., and Pérez García-Pando, C.: ModIs Dust AeroSol (MIDAS): a global fine-resolution dust optical depth data set, *Atmos. Meas. Tech.*, 14, 309–334, <https://doi.org/10.5194/amt-14-309-2021>, 2021.
- A115. Gratsea, M., Bösch, T., Kokkalis, P., Richter, A., Vrekoussis, M., **Kazadzis, S.**, Tsekeri, A., Papayannis, A., Mylonaki, M., Amiridis, V., Mihalopoulos, N., and Gerasopoulos, E.: Retrieval and evaluation of tropospheric-aerosol extinction profiles using multi-axis differential optical absorption spectroscopy (MAX-DOAS) measurements over Athens, Greece, *Atmos. Meas. Tech.*, 14, 749–767, <https://doi.org/10.5194/amt-14-749-2021>, 2021.
- A116. Raptis I-P, Eleftheratos K, **Kazadzis S**, Kosmopoulos P, Papachristopoulou K, Solomos S. The Combined Effect of Ozone and Aerosols on Erythemal Irradiance in an Extremely Low Ozone Event during May 2020. *Atmosphere*. 12(2):145. <https://doi.org/10.3390/atmos12020145>, 2021
- A117. van Heerwaarden, C.C., Mol, W.B., Veerman, M.A., **Kazadzis S.**, Kouremeti N., Record high solar irradiance in Western Europe during first COVID-19 lockdown largely due to unusual weather. *Commun Earth Environ* 2, 37. <https://doi.org/10.1038/s43247-021-00110-0>, 2021
- A118. Fountoulakis, I.; Kosmopoulos, P.; Papachristopoulou, K.; Raptis, I.-P.; Mamouri, R.-E.; Nisantzi, A.; Gkikas, A.; Witthuhn, J.; Bley, S.; Moustaka, A.; Buehl, J.; Seifert, P.; Hadjimitsis, D.G.; Kontoes, C.; **Kazadzis, S.** Effects of Aerosols and Clouds on the Levels of Surface Solar Radiation and Solar Energy in Cyprus. *Remote Sens.* 13, 2319. <https://doi.org/10.3390/rs13122319>, 2021
- A119. Kosmopoulos, P. G., **Kazadzis, S.**, Schmalwieser, A. W., Raptis, P. I., Papachristopoulou, K., Fountoulakis, I., Masoom, A., Bais, A. F., Bilbao, J., Blumthaler, M., Kreuter, A., Siani, A. M., Eleftheratos, K., Topaloglou, C., Gröbner, J., Johnsen, B., Svendby, T. M., Vilaplana, J. M., Doppler, L., Webb, A. R., Khazova, M., De Backer, H., Heikkilä, A., Lakkala, K., Jaroslowski, J., Meleti, C., Diémoz, H., Hülsen, G., Klotz, B., Rimmer, J., and Kontoes, C.: Real-time UV index retrieval in Europe using Earth observation-based techniques: system description and quality assessment, *Atmos. Meas. Tech.*, 14, 5657–5699, <https://doi.org/10.5194/amt-14-5657-2021>, 2021
- A120. Arola, A., Wandji Nyamsi, W., Lipponen, A., **Kazadzis, S.**, Krotkov, N. A., and Tamminen, J.: Rethinking the correction for absorbing aerosols in the OMI- and TROPOMI-like surface UV algorithms, *Atmos. Meas. Tech.*, 14, 4947–4957, <https://doi.org/10.5194/amt-14-4947-2021>, 2021
- A121. A. Masoom, P. Kosmopoulos, A. Bansal, A. Gkikas. E. Proestakis, **S. Kazadzis**, V. Amiridis, Forecasting dust impact on solar energy using remote sensing and modeling techniques, *Solar Energy*, Volume 228, Pages 317-332, <https://doi.org/10.1016/j.solener.2021.09.033>, 2021
- A122. Hou, X., Wild, M., Folini, D., **Kazadzis, S.**, and Wohland, J.: Climate change impacts on solar power generation and its spatial variability in Europe based on CMIP6, *Earth Syst. Dynam.*, 12, 1099–1113, <https://doi.org/10.5194/esd-12-1099-2021>, 2021.
- A123. Logothetis, S.-A., Salamalikis, V., Gkikas, A., **Kazadzis, S.**, Amiridis, V., and Kazantzidis, A.: 15-year variability of desert dust optical depth on global and regional scales, *Atmos. Chem. Phys.*, 21, 16499–16529, <https://doi.org/10.5194/acp-21-16499-2021>, 2021.
- A124. Fountoulakis, I.; Papachristopoulou, K.; Proestakis, E.; Amiridis, V.; Kontoes, C.; **Kazadzis, S.** Effect of Aerosol Vertical Distribution on the Modeling of Solar Radiation. *Remote Sens.* 14, 1143, 2022
- A125. Gkikas, A., Proestakis, E., Amiridis, V., **Kazadzis, S.**, Di Tomaso, E., Marinou, E., Hatzianastassiou, N., Kok, J. F., and García-Pando, C. P.: Quantification of the dust optical depth across spatiotemporal scales with the MIDAS global dataset (2003–2017), *Atmos. Chem. Phys.*, 22, 3553–3578, <https://doi.org/10.5194/acp-22-3553-2022>, 2022.
- A126. Papachristopoulou, K.; Fountoulakis, I.; Gkikas, A.; Kosmopoulos, P.G.; Nastos, P.T.; Hatzaki, M.; **Kazadzis, S.** 15-Year Analysis of Direct Effects of Total and Dust Aerosols in Solar Radiation/Energy over the Mediterranean Basin. *Remote Sens.* 2022, 14, 1535. <https://doi.org/10.3390/rs14071535>, 2022
- A127. Hou, X.; Papachristopoulou, K.; Saint-Drenan, Y.-M.; **Kazadzis, S.** Solar Radiation Nowcasting Using a Markov Chain Multi-Model Approach. *Energies*, 15, 2996. <https://doi.org/10.3390/en15092996>, 2022

- A128. Raptis, I.-P.; Moustaka, A.; Kosmopoulos, P.; **Kazadzis, S.** Selecting Surface Inclination for Maximum Solar Power. *Energies* 2022, 15, 4784. <https://doi.org/10.3390/en15134784>
- A129. Natalia Kouremeti, Saulius Nevas, **Stelios Kazadzis**, Julian Gröbner, Philipp Schneider and Kerstin Maria Schwind, SI-traceable solar irradiance measurements for aerosol optical depth retrieval, *Metrologia*, Volume 59, Number 4, <https://doi.org/10.1088/1681-7575/ac6cbb>, 2022
- A130. A. Monteiro, S. Basart, **S. Kazadzis**, A. Gkikas, A. Tobias, C. Gama, C. Pérez García Pando, E. Tarradellas, G. Notas, N. Middleton, J. Kushta, V. Amiridis, K. Lagouvardos, P. Kosmopoulos, V. Kotroni, M. Kanakidou, N. Mihalopoulos, N. Kalivitis, P. Dagsson-Waldhauserová, H. El-Askary, K. Sievers, T. Giannaros, L. Mona, M. Hirtl, P. Skomorowski, S. Nickovic, A. Votsis, T. H. Virtanen, T. Christoudias, B. Di Mauro, S. Trippetta, S. Kutuzovza, O. Meinander, “Multi-sectoral impact assessment of an extreme African dust episode in the Eastern Mediterranean in March 2018”, *Science of The Total Environment* Volume 843, 15 October, 156861, <https://doi.org/10.1016/j.scitotenv.2022.156861>, 2022
- A131. Karanikolas, A., Kouremeti, N., Gröbner, J., Egli, L., and **Kazadzis, S.**: Sensitivity of aerosol optical depth trends using long-term measurements of different sun photometers, *Atmos. Meas. Tech.*, 15, 5667–5680, <https://doi.org/10.5194/amt-15-5667-2022>, 2022.
- A132. Papachristopoulou, K., Raptis, I.-P., Gkikas, A., Fountoulakis, I., Masoom, A., and **Kazadzis, S.**: Aerosol optical depth regime over megacities of the world, *Atmos. Chem. Phys.*, 22, 15703–15727, <https://doi.org/10.5194/acp-22-15703-2022>, 2022
- A133. Isabella Annesi-Maesano, L., B. Benedetta, K. F. Chung, B. Clot, M. Collaud Coen, G. D’Amato, A. Damialis, J. Dominguez-Ortega, C. Galán, S. Gilles, S. Holgate, M. Jeebhay, **S. Kazadzis**, N. G. Papadopoulos, S. Quirce, J. Sastre, F. Tummon, C. Traidl-Hoffmann, J. Walusiak-Skorupa, P. Alonso-Coello, C. Canelo-Aybar, Y. Cantero-Fortiz, D. Rigau, J. Salazar, F. Verdugo-Paiva, M. Jutel, C. A. Akdis, I. Agache, “Is exposure to pollen a risk factor for moderate and severe asthma exacerbations?”, *Allergy*, <https://doi.org/10.1111/all.15724>, 2023
- A134. Drosoglou, T., Raptis, I.-P., Valeri, M., Casadio, S., Barnaba, F., Herreras-Giralda, M., Lopatin, A., Dubovik, O., Brizzi, G., Niro, F., Campanelli, M., and **Kazadzis, S.**: Evaluating the effects of columnar NO₂ on the accuracy of aerosol optical properties retrievals, *Atmos. Meas. Tech.*, 16, 2989–3014, <https://doi.org/10.5194/amt-16-2989-2023>, 2023.
- A135. Raptis, I.-P.; **Kazadzis, S.**; Fountoulakis, I.; Papachristopoulou, K.; Kouklaki, D.; Psiloglou, B.E.; Kazantzidis, A.; Benetatos, C.; Papadimitriou, N.; Eleftheratos, K. Evaluation of the Solar Energy Nowcasting System (SENSE) during a 12-Months Intensive Measurement Campaign in Athens, Greece. *Energies*, 16, 5361. <https://doi.org/10.3390/en16145361>, 2023
- A136. Masoom, A., Fountoulakis, I., **Kazadzis, S.**, Raptis, I.-P., Kampouri, A., Psiloglou, B. E., Kouklaki, D., Papachristopoulou, K., Marinou, E., Solomos, S., Gialitaki, A., Founda, D., Salamalikis, V., Kaskaoutis, D., Kouremeti, N., Mihalopoulos, N., Amiridis, V., Kazantzidis, A., Papayannis, A., Zerefos, C. S., and Eleftheratos, K.: Investigation of the effects of the Greek extreme wildfires of August 2021 on air quality and spectral solar irradiance, *Atmos. Chem. Phys.*, 23, 8487–8514, <https://doi.org/10.5194/acp-23-8487-2023>, 2023
- A137. Kouklaki D, **Kazadzis S**, Raptis I-P, Papachristopoulou K, Fountoulakis I, Eleftheratos K. Photovoltaic Spectral Responsivity and Efficiency under Different Aerosol Conditions. *Energies*. 2023; 16(18):6644. <https://doi.org/10.3390/en16186644>, 2023
- A138. Theano Drosoglou, Maria-Elissavet Koukouli, Ioannis-Panagiotis Raptis, **Stelios Kazadzis**, Andreas Pseftogkas, Kostas Eleftheratos, Christos Zerefos, Nitrogen dioxide spatiotemporal variations in the complex urban environment of Athens, Greece, *Atmospheric Environment*, Volume 314, 2023, 120115, ISSN 1352-2310, <https://doi.org/10.1016/j.atmosenv.2023.120115>, 2023
- A139. Lucia Mona, Vassilis Amiridis, Emilio Cuevas, Antonis Gkikas, Serena Trippetta, Sophie Vandenbussche, Angela Benedetti, Pavla Dagsson-Waldhauserova, Paola Formenti, Alexander Haefele, **Stelios Kazadzis**, Peter Knippertz, Benoit Laurent, Fabio Madonna, Slobodan Nickovic, Nikolaos Papagiannopoulos, Gelsomina Pappalardo, Carlos Pérez García-Pando, Thomas Popp, Sergio Rodríguez, Andrea Sealy, Nobuo Sugimoto, Enric Terradellas, Ana Vukovic Vimic, Bernadette Weinzierl, Sara Basart, Observing mineral dust in northern africa, the middle east and Europe: current capabilities and challenges ahead for the development of dust services, *Bulletin of the American Meteorological Society*, DOI: <https://doi.org/10.1175/BAMS-D-23-0005.1>, 2023
- A140. Daskalopoulou, V., Raptis, P. I., Tsekeri, A., Amiridis, V., **Kazadzis, S.**, Ulanowski, Z., Charmandaris, V., Tassis, K., and Martin, W.: Linear polarization signatures of atmospheric dust with the SolPol direct-sun polarimeter, *Atmos. Meas. Tech.*, 16, 4529–4550, <https://doi.org/10.5194/amt-16-4529-2023>, 2023
- A141. Gröbner, J., Kouremeti, N., Hülsen, G., Zuber, R., Ribnitzky, M., Nevas, S., Sperfeld, P., Schwind, K., Schneider, P., **Kazadzis, S.**, Barreto, Á., Gardiner, T., Mottungan, K., Medland, D., and Coleman, M.: Spectral aerosol optical depth from SI-traceable spectral solar irradiance measurements, *Atmos. Meas. Tech.*, 16, 4667–4680, <https://doi.org/10.5194/amt-16-4667-2023>, 2023
- A142. Álvarez, Ó., Barreto, Á., García, O. E., Hase, F., García, R. D., Gröbner, J., León-Luis, S. F., Sepúlveda, E., Carreño, V., Alcántara, A., Ramos, R., Almansa, A. F., **Kazadzis, S.**, Taquet, N., Toledano, C., and Cuevas, E.: Aerosol properties derived from ground-based Fourier transform spectra within the COllaborative Carbon Column Observing Network, *Atmos. Meas. Tech.*, 16, 4861–4884, <https://doi.org/10.5194/amt-16-4861-2023>, 2023

- A143. Almansa, A. F., Barreto, Á., Kouremeti, N., González, R., Masoom, A., Toledano, C., Gröbner, J., García, R. D., González, Y., **Kazadzis, S.**, Victori, S., Álvarez, Ó., Maupin, F., Carreño, V., Cachorro, V. E., and Cuevas, E.: The Langley ratio method, a new approach for transferring photometer calibration from direct sun measurements, *Atmos. Meas. Tech.*, 17, 659–675, <https://doi.org/10.5194/amt-17-659-2024>, 2024.
- A144. Ioana Agache, Isabella Annesi-Maesano, Lorenzo Cecchi, Benedetta Biagioni, Kian Fan Chung, Bernard Clot, Gennaro D'Amato, Athanasios Damialis, Stefano del Giacco, Javier Dominguez-Ortega, Carmen Galàn, Stefanie Gilles, Stephen Holgate, Mohamed Jeebhay, **Stelios Kazadzis**, Kari Nadeau, Nikolaos Papadopoulos, Santiago Quirce, Joaquin Sastre, Fiona Tummon, Claudia Traidl-Hoffmann, Jolanta Walusiak-Skorupa, Marek Jutel, Cezmi A. Akdis. EAACI guidelines on environmental science for allergy and asthma: The impact of short-term exposure to outdoor air pollutants on asthma-related outcomes and recommendations for mitigation measures. *Allergy*. 2024;00:1–31.DOI: 10.1111/all.16103. 2024
- A145. Papachristopoulou, K., Fountoulakis, I., Bais, A. F., Psiloglou, B. E., Papadimitriou, N., Raptis, I.-P., Kazantzidis, A., Kontoes, C., Hatzaki, M., and **Kazadzis, S.**: Effects of clouds and aerosols on downwelling surface solar irradiance nowcasting and short-term forecasting, *Atmos. Meas. Tech.*, 17, 1851–1877, <https://doi.org/10.5194/amt-17-1851-2024>, 2024.
- A146. Moustaka, A.Korras-Carraca, M.-B. Papachristopoulou, K.; Stamatis, M. Fountoulakis, I.; **Kazadzis, S.** Proestakis, E.; Amiridis, V.Tourpali, K.; Georgiou, T. Assessing Lidar Ratio Impact on CALIPSO Retrievals Utilized for the Estimation of Aerosol SW Radiative Effects across North Africa, Middle East and Europe. *Remote Sens.* 2024, 16, 1689. <https://doi.org/10.3390/rs16101689>
- A147. Fountoulakis, I., Tsekeri, A., **Kazadzis, S.**, Amiridis, V., Nersesian, A., Tschla, M., Proestakis, E., Gkikas, A., Papachristopoulou, K., Barlakas, V., Emde, C., and Mayer, B.: A sensitivity study on radiative effects due to the parameterization of dust optical properties in models, *Atmos. Chem. Phys.*, 24, 4915–4948, <https://doi.org/10.5194/acp-24-4915-2024>, 2024.
- A148. Fragkos, K.; Fountoulakis, I.; Charalampous, G.; Papachristopoulou, K.; Nisantzi, A.; Hadjimitsis, D.; **Kazadzis, S.** Twenty-Year Climatology of Solar UV and PAR in Cyprus: Integrating Satellite Earth Observations with Radiative Transfer Modeling. *Remote Sens.* 2024, 16, 1878. <https://doi.org/10.3390/rs16111878>
- A149. Amiridis, V.; **Kazadzis, S.**; Gkikas, A.; Voudouri, K.A.; Kouklaki, D.; Koukoulis, M.-E.; Garane, K.; Georgoulas, A.K.; Solomos, S.; Varlas, G.; et al. Natural Aerosols, Gaseous Precursors and Their Impacts in Greece: A Review from the Remote Sensing Perspective. *Atmosphere* 2024, 15, 753. <https://doi.org/10.3390/atmos15070753>, 2024
- A150. Campanelli, M., Estellés, V., Kumar, G., Nakajima, T., Momoi, M., Gröbner, J., **Kazadzis, S.**, Kouremeti, N., Karanikolas, A., Barreto, A., Nevas, S., Schwind, K., Schneider, P., Harju, I., Kärhä, P., Diémoz, H., Kudo, R., Uchiyama, A., Yamazaki, A., Iannarelli, A. M., Mevi, G., Di Bernardino, A., and Casadio, S.: Evaluation of on-site calibration procedures for SKYNET Prede POM sun–sky photometers, *Atmos. Meas. Tech.*, 17, 5029–5050, <https://doi.org/10.5194/amt-17-5029-2024>, 2024.
- A151. Masoom, A., **Kazadzis, S.**, Valeri, M., Raptis, I.-P., Brizzi, G., Papachristopoulou, K., Barnaba, F., Casadio, S., Kreuter, A., and Niro, F.: Assessment of the impact of NO₂ contribution on aerosol-optical-depth measurements at several sites worldwide, *Atmos. Meas. Tech.*, 17, 5525–5549, <https://doi.org/10.5194/amt-17-5525-2024>, 2024
- A152. Karanikolas, A., Kouremeti, N., Campanelli, M., Estellés, V., Momoi, M., Kumar, G., Nyeki, S., and **Kazadzis, S.**: Intercomparison of aerosol optical depth retrievals from GAW-PFR and SKYNET sun photometer networks and the effect of calibration, *Atmos. Meas. Tech.*, 17, 6085–6105, <https://doi.org/10.5194/amt-17-6085-2024>, 2024.
- A153. Ioana Agache, Isabella Annesi-Maesano, Lorenzo Cecchi, Benedetta Biagioni, Fan Chung, Gennaro D'Amato, Athanasios Damialis, Stefano del Giacco, Javier Dominguez Ortega, Carmen Galàn, Stefanie Gilles, Stephen Holgate, Mohamed Jeebhay, **Stelios Kazadzis**, Kari Nadeau, Nikos G. Papadopoulos, Santiago Quirce, Joaquin Sastre, Claudia Traidl-Hoffmann, Jolanta Walusiak-Skorupa, Magdalena Zemelka-Wiacek, Marek Jutel, Cezmi A. Akdis, EAACI Guidelines on Environmental Science for Allergy and Asthma—Recommendations on the Impact of Indoor Air Pollutants on the Risk of New-Onset Asthma and on Asthma-Related Outcomes, *Allergy*, DOI: <https://doi.org/10.1111/all.16502>, February, 2025
- A154. Hou, Xinyuan ; Fountoulakis, Ilias; Blanc, Philippe; Aebi, Christine; **Kazadzis, Stelios**. Intrahour solar radiation forecasting based on sun visibility for different cloud types, *Solar Energy* 294, <https://doi.org/10.1016/j.solener.2025.113477>, 2025
- A155. **Kazadzis, S.**, Fountoulakis, I., Damialis, A., Masoom, A., Papachristopoulou, K., Gilles, S., Coen, M.C., Tummon, F., Crouzy, B., Clot, B., Pat, Y., Brügggen, M.-C., Nyeki, S., Raptis, I.-P., Solomos, S., Gkikas, A., Moustaka, A., Kouremeti, N. and Akdis, C.A. (2025), Aerosol Measurements and Decadal Changes: The Role of Climatic Changes and How It Reflects in Respiratory Allergies and Asthma. *Allergy*. <https://doi.org/10.1111/all.16602>, 2025
- A156. Xinyuan Hou, Kyriakoula Papachristopoulou, Yves-Marie Saint-Drenan, Panagiotis G. Kosmopoulos, Basil E. Psiloglou, **Stelios Kazadzis**, Effects of clouds, aerosols and shadows on solar energy potential on urban rooftops using earth observation data and digital surface models *Applied Energy* 397 (2025) <https://doi.org/10.1016/j.apenergy.2025.126243> 126243, 2025
- A157. Hou, X., Papachristopoulou, K., and **Kazadzis, S.**: Assessment of aerosol optical depth forecast for day-ahead clear-sky direct irradiance, *Atmos. Meas. Tech.*, 18, 4543–4557, <https://doi.org/10.5194/amt-18-4543-2025>, 2025.

- A158. Fountoulakis, I., Papachristopoulou, K., **Kazadzis, S.**, Hülsen, G., Gröbner, J., Raptis, I.-P., Kouklaki, D., Masoom, A., Kouremeti, N., Kontoes, C., and Zerefos, C. S.: Assessment of the accuracy in UV index modelling using the UVIOS2 system during the UVC-III campaign, *Geosci. Model Dev.*, 18, 7451–7473, <https://doi.org/10.5194/gmd-18-7451-2025>, 2025.
- A159. Karanikolas, A., Torres, B., Momoi, M., Herreras Giralda, M., Kouremeti, N., Gröbner, J., Doppler, L., and **Kazadzis, S.**: Retrieval of aerosol properties from aerosol optical depth measurements with high temporal resolution and spectral range, *Atmos. Meas. Tech.*, 18, 7651–7677, <https://doi.org/10.5194/amt-18-7651-2025>, 2025.
- A160. Herrero-Anta, S., Eckhardt, S., Evangelidou, N., Gilardoni, S., Graßl, S., Heslin-Rees, D., **Kazadzis, S.**, Kouremeti, N., Krejci, R., Mateos, D., Mazzola, M., Ritter, C., Román, R., Stebel, K., and Zielinski, T.: Exceptional high AOD over Svalbard in summer 2019: a multi-instrumental approach, *Atmos. Chem. Phys.*, 26, 1435–1457, <https://doi.org/10.5194/acp-26-1435-2026>, 2026.
- A161. Pulimeno, S., Lupi, A., Vitale, V., Frangipani, C., Toledano, C., **Kazadzis, S.**, Kouremeti, N., Ritter, C., Graßl, S., Stebel, K., Fioletov, V., Abboud, I., Blindheim, S., Ma, L., O'Neill, N., Sobolewski, P., Gupta, P., Lind, E., Eck, T. F., Hyvärinen, A., Aaltonen, V., Kivi, R., Csavina, J., Kabanov, D., Sakerin, S. M., Sidorova, O. R., Stone, R. S., Telg, H., Riihimäki, L., Cordero, R. R., Radenz, M., Engelmann, R., Van Roozendal, M., Chaikovskiy, A., Goloub, P., Hisamitsu, J., and Mazzola, M.: Recent advances in aerosol optical depth measurements in polar regions: insights from the Polar-AOD Program, *Atmos. Chem. Phys.*, 26, 1809–1846, <https://doi.org/10.5194/acp-26-1809-2026>, 2026.
- A162. Moustaka, A., Siomos, N., **Kazadzis, S.**, Proestakis, E., Voudouri, K. A., Lopatin, A., Dubovik, O., Tourpali, K., Zerefos, C., Amiridis, V., and Gkikas, A.: Enhancing dust aerosols monitoring capabilities across North Africa and the Middle East using the A-Train satellite constellation, *Atmos. Meas. Tech.*, 19, 1201–1225, <https://doi.org/10.5194/amt-19-1201-2026>, 2026.
- A163. Papadimitriou, N., Fountoulakis, I., Gkikas, A., Papachristopoulou, K., Kazantzidis, A., **Kazadzis, S.**, Pfenninger, S., Kapsomenakis, J., Eleftheratos, K., Argiriou, A. A., Doppler, L., and Zerefos, C. S.: PV power modelling using solar radiation from ground-based measurements and CAMS: Assessing the diffuse component related uncertainties leveraging the Global Solar Energy Estimator (GSEE), *Atmos. Meas. Tech.*, 19, 1227–1244, <https://doi.org/10.5194/amt-19-1227-2026>, 2026.

Books/Book chapters (1)

- B1. Carlos Toledano, Victoria E. Cachorro, David Mateos, Roberto Roman, Ramiro Gonzalez, Alexander Smirnov, Julian Grobner, Stelios Kazadzis, and Natalia Kouremeti, Sun Photometers, book chapter in “Field Measurements for Passive Environmental Remote Sensing” Edited by Nicholas R. Nalli Elsevier, ISBN: 978-0-12-823953-7, 2022

Conference proceedings (reviewed papers)

- C1. Bais A. F., Kazadzis S. “The role of spectral UV measurements in biological dosimetry, their advantages and limitations” A tool for assessing the impacts of UV Radiation on health and ecosystems, Conference proceedings, Air pollution Research Report 71, 1998.
- C2. Munakata N., D. Bolsee, D. Gillotay, S. Kazadzis, A.F. Bais, K. Makita, L. Boeira, N. Schuch. “Comparisons of spore dosimetry and spectral photometry for measurement of biologically effective doses of solar UV radiation”. SPIE 4482, 34-345, Reprinted from Ultraviolet ground- and space- based measurements, models and effects, 2002
- C3. Bais A.F., A. Kazantzidis, S. Kazadzis, D. Balis, C.S. Zerefos and C. Meleti, Effects of aerosol optical depth and single scattering albedo on surface UV irradiance, in Ultraviolet Ground- and Space-based Measurements, Models, and Effects, proceedings of SPIE, San Diego 30 July – 1 August 2001, Vol. 4482, 15-22, 2002.
- C4. Balis, D., V. Amiridis, C. Zerefos, , C. Meleti, A. Kazantzidis, S. Kazadzis, A.F. Bais, and A. Papayannis, Experimental estimates of the lidar ratio and the single scattering albedo during EARLINET and their association with the levels of UV irradiance at the Earth’s surface, in Proceedings of the 6th International Symposium on Tropospheric Profiling, September 14-20, Leipzig, Germany, p351-353, 2003.
- C5. A. Bais, M. Blumthaler, D. Rembges, G. Seckmeyer, A. Webb, P. Gorts, T. Koskela, J. Gröbner, S. Kazadzis, J. Schreder, P. Cotton, P. Kelly, N. Kouremeti, K. Rikkonen, H. Studemund, R. Tax, S. Wuttke , “Quality Assurance of Spectral Ultraviolet Measurements in Europe Through the Development of a Transportable Unit (QASUME)”, SPIE’s Third International Asia-Pacific Symposium on Remote Sensing of the Atmosphere, Ocean, Environment, and Space, 23-27 October, 2002, Hangzhou, China 4896, pp. 232-240, 2003
- C6. Kazadzis, S., A. Bais, N. Kouremeti, E. Gerasopoulos, V. Amiridis, K. Garane, Aerosol optical depth measurements (1997-2003) at Thessaloniki, Greece, in Quadrennial Ozone Symposium (QOS 2004), June 1-8, Kos, Greece, p980-981, 2004.
- C7. Bais A.F., C.S. Zerefos, E. Kosmidis, A. Kazantzidis, S. Kazadzis and C. Topaloglou Establishment of a network for uv monitoring in Greece – Quadrennial Ozone Symposium, Kos Greece, 1-8 June, 2004
- C8. Grobner J., S. Kazadzis, J. Schreder, A. F. Bais, M. Blumthaler, P. Gorts, T. Koskela, G. Seckmeyer, and A. R. Webb , Quality Assurance results from the 2002 and 2003 site visits within the QASUME project, Quadrennial Ozone Symposium, Kos Greece, 1-8 June, 2004

- C9. Meleti C., A. Bais, C. Zerefos, K. Garane, S. Kazadzis, Temporal and spatial variability of solar ultraviolet measurements in Greece, Quadrennial Ozone Symposium, Kos Greece, 1-8 June, 2004
- C10. Topaloglou C., Kazadzis S. Bais A. Blumthaler M. Schallhart B, Ozone photolysis rate calculations from measurements of spectral irradiance at Thessaloniki, Greece, Quadrennial Ozone Symposium, Kos Greece, 1-8 June, 2004
- C11. A. Arola, N. Krotkov, S. Kazadzis, K. Lakkala, A. Bais, J. Herman, N. Chunarova, E. Nezval, Assessment of TOMS bias due to absorbing aerosols., SPIE Annual Meeting, 2-6 August, San Diego, USA, 5545, pp. 28-36, 2004
- C12. Amiridis, V., D. Balis, and S. Kazadzis, Below-cloud scavenging (rainout) of aerosol particles measured with a backscatter lidar, in 22nd International Laser Radar Conference, July 12-16, Matera, Italy, p669-671, 2004.
- C13. A. F. Bais, M. Blumthaler, A. R. Webb, G. J. Seckmeyer, B. Kjeldstad, A. M. Cede, S. Thiel, J. Herman, S. Kazadzis, R. Kift, B. Schallhart, N. Kouremeti, A. Redondas, G. J. Labow, R. Schmitt, D. Pissulla, S. Wuttke, Intercomparison of solar UV direct irradiance spectral measurements at Izana in June 2005, SPIE 2005
- C14. K. E. Garane, A. F. Bais, K. Tourpali, C. Meleti, C. Zerefos, S. Kazadzis Variability of spectral UV irradiance at Thessaloniki, Greece, from 15 years of measurements, SPIE, 2005
- C15. Mario Blumthaler; Stelios Kazadzis, Julian Gröbner, Alkis Bais, Ann Webb, Josef Schreder, Gunther Seckmeyer, Diana Rembges QA/QC of Spectral Solar UV irradiance measurements, Newrad conference, Davos Switzerland, 17-19 October, 2005
- C16. Koukouli, M., D. Balis, A. Bais, V. Amiridis, S. Kazadzis, E. Giannakaki, N. Kouremeti, and O. Torres, Aerosol characterization over Northern Greece; aerosol loading derived from satellite observations and ground-based measurements, in Proceedings of the Atmospheric Science Conference (ESA Special Publication), May 8-12, ESA-ESRIN, Frascati, 2006.
- C17. Poupkou A. D. Melas, I. Kioutsioukis, I. Lisaridis, P. Symeonidis, D. Balis, S. Karathanasis and S. Kazadzis, "Regional air quality forecasting over Greece within promote" Atmospheric Science Conference, ESA-ESRIN, Frascati, 8-12 May, 2006, ESA Special Publication (628), 2006
- C18. M. Blumthaler, A. Bais, A. Webb, S. Kazadzis, R. Kift, N. Kouremeti, B. Schallhart, and A. Kazantzidis Variations of solar radiation at the Earth's surface during the total solar eclipse of 29 March 2006 Proc. SPIE 6362-6370, 2006
- C19. A. Kazantzidis, A. Bais, K. Garane, S. Kazadzis, and C. Meleti Estimation of UV irradiance from ancillary data and comparison with measurements at Thessaloniki, Greece (40.5°N, 23°E), Proc. SPIE 6362-6369, 2006
- C20. Balis D., V. Amiridis, E. Giannakaki, S. Kazadzis, C. Zerefos, A. Papayannis, The effect of fires in Russia's Southern Agricultural District on the aerosol loading over Northern Greece. Raman lidar and sunphotometric measurements of biomass burning aerosol optical properties, in Proceedings of the 7th International Symposium on Tropospheric Profiling: Needs and Technologies, June 11-17, Boulder, Colorado, 2.13-P 2006.
- C21. Balis D., V. Amiridis, E. Giannakaki, S. Kazadzis, A. Arola, A. Papayannis, Characteristics of biomass burning aerosols over SE Europe determined from lidar and sunphotometric measurements, in Proceedings of the 23rd International Laser and Radar conference, July 24-28, Nara, Japan, 2006.
- C22. Amiridis V., E. Giannakaki, M. Koukouli, S. Kazadzis, D. Balis, A. Bais, Evaluation of the OMI aerosol index using coincident lidar observations, in Proceedings of the 23rd International Laser and Radar conference, July 24-28, Nara, Japan, 2006.
- C23. Giannakaki E., D. Balis, V. Amiridis, S. Kazadzis, Optical and geometrical properties of cirrus clouds over a mid-latitude lidar station, in 4th Workshop on Lidar Measurements in Latin America, June 17-23, Ilhabela, São Paulo, Brazil, 2007.
- C24. A. F. Bais, S. Kazadzis, C. Meleti, N. Kouremeti, J. Kaurola, K. Lakkala, H. Slaper, P.N. den Outer, W. Josefsson, U. Feister, M. Janouch: Variability in spectral UV irradiance at seven European stations, pages: 27-28, UV conference celebrating 100 years of UV research, Davos, Switzerland 18-20 September, 2007
- C25. S. Kazadzis, A. Kazantzidis, A. Bais, N. Kouremeti: Aerosol forcing efficiency in the UV region from cloudless irradiance measurements at an urban-marine environment, pages: 99-100, UV conference celebrating 100 years of UV research, Davos, Switzerland 18-20 September, 2007
- C26. S. Kazadzis, A. Bais, D. Balis, A. Kazantzidis, S. Misios, N. Kouremeti, E. Gianakaki, M. Zebila, V. Amiridis, P. Tzoumaka: SCOUT aerosol campaign: Temporal and spatial variations of aerosols at Thessaloniki, Greece, pages: 83-84, UV conference celebrating 100 years of UV research, Davos, Switzerland 18-20 September, 2007
- C27. A. Kazantzidis, A. Bais, S. Kazadzis, N. Kouremeti, D. Balis, E. Gianakaki, S. Rapsomanikis, K. Kelektoglou, R. Schmidhauser, R.-M. Hu: The aerosol single scattering albedo during the SCOUT-O3 Aerosol-UV radiation campaign, pages: 87-88, UV conference celebrating 100 years of UV research, Davos, Switzerland 18-20 September, 2007
- C28. M. Blumthaler, B. Schallhart, A. Bais, D. Balis, S. Kazadzis, A. Kazantzidis, N. Kouremeti, A. Webb, R. Kift, G. Seckmeyer, D. Pissulla, S. Rapsomanikis, M. Wiegner, T. Ruhtz, R. Schmidhauser, J. Herman, A. Cede: The SCOUT UV aerosol campaign, pages: 73-74, UV conference celebrating 100 years of UV research, Davos, Switzerland 18-20 September, 2007
- C29. Koukouli, M.E., S. Kazadzis, V. Amiridis, C. Ichoku, D.S. Balis, Comparisons of satellite derived aerosol optical depth over a variety of sites in the southern Balkan region as an indicator of local air quality, in Proceedings of SPIE, Vol. 6745, Remote Sensing of Clouds and the Atmosphere XII, doi:10.1117/12.737681, September 17-20, Florence, Italy, 2007.

- C30. Giannakaki, E., D.S. Balis, V. Amiridis, S. Kazadzis, Optical properties of cirrus clouds at a mid-latitude EARLINET station, in Proceedings of SPIE, Vol. 6745, Remote Sensing of Clouds and the Atmosphere XII, doi:10.1117/12.740698, September 17-20, Florence, Italy, 2007.
- C31. Kazadzis, S., A. Bais, D. Balis, M. Zebila, N. Kouremeti, A. Kazantzidis, E. Giannakaki, M. Koukouli, C. Meleti, V. Amiridis, J. Herman, A. Tanskanen, Evaluation of OMI-derived UV radiation, total ozone and aerosol properties against ground-based measurements, in Proceedings of the IX Conference of Meteorology-Climatology and Atmospheric Physics, May 28-31, Thessaloniki, Greece, 2008.
- C32. A. Kazantzidis, N. Krotkov, M. Blumthaler; A. Bais, S. Kazadzis, D. Balis, R. Schmidhauser, N. Kouremeti, E. Giannakaki, A. Arola Aerosol single-scattering albedo retrieval with various techniques in the UV and visible wavelength range, Proc. of SPIE Vol. 7462 September 2009, Vol. 7462 74620C-1/ 74620C-8, SPIE Optics and Photonics, San Diego, USA August 30, September 3, 2009
- C33. A. Arola, S. Kazadzis, A. Lindfors, J. Kujanpaa, N. Kalakoski, A. Bais Ozone Monitoring Instrument satellite irradiance product correction using a global aerosol climatology, Proc. of SPIE Vol. 7462, September 2009, Vol. 7462, 74620D-1/ 74620D-6, SPIE Optics and Photonics, San Diego, USA August 30, September 3, 2009
- C34. A. Heikkila, S. Kazadzis, et. al Effects of terrestrial UV radiation on selected outdoor materials: an interdisciplinary approach, Proc. of SPIE Vol. 7462 Vol. 7462 74620G-1/ 74620G-9, SPIE Optics and Photonics, San Diego, USA August 30, September 3, 2009.
- C35. Kazadzis S., Amiridis V., Kouremeti N. The effect of aerosol absorption in solar UV radiation, 11th International Conference on Meteorology, Climatology and Atmospheric Physics, Athens 29 May – 1 June 2012
- C36. Bais A.F., Kazantzidis A., Zerefos C.S., Melas D., Kosmidis E., Kazadzis S., Nikitidou E., Giannaros T.M., Zempila M.M., Fragkos K., Salamalikis V. Hellenic Network for Solar Energy, 11th International Conference on Meteorology, Climatology and Atmospheric Physics, Athens 29 May – 1 June 2012
- C37. Gerasopoulos E., Mihalopoulos N, Kazadzis S., Vrekoussis M., Liakakou E., Kouvarakis G., Kouremeti N. Factors controlling the variability of photolysis rates of NO₂ and O₁D in the complex environment of the Eastern Mediterranean, 11th International Conference on Meteorology, Climatology and Atmospheric Physics, Athens 29 May – 1 June 2012
- C38. Amiridis V., Marinou E., Kazadzis S., Gerasopoulos E., Mamouri R.E., Kokkalis P., Papayannis A., Kouremeti N., Giannakaki E., Liakakou E., Paraskevopoulou D., Gratsea M., Kouvarakis G., Allakhverdiev K., Huseyinoglu F., Secgin A., Balis D., Bais A.F., Mihalopoulos N., Daglis I.A., Zerefos C.S. Evaluation of CALIPSO's aerosol classification scheme during the ACEMED experimental campaign over Greece: the case study of 9th of September 2011, 11th International Conference on Meteorology, Climatology and Atmospheric Physics, Athens 29 May – 1 June 2012
- C39. Kazadzis, S., N. Kouremeti, E. Giannakaki, V. Amiridis, R.E. Mamouri, D. Balis, A. Papayannis, The effect of the aerosol vertical distribution on the solar radiation profiles, 26th International Laser Radar Conference, Porto Heli, Greece, June 2012.
- C40. Marinou, E., V. Amiridis, A. Tsekeri, S. Basart, J.M. Baldasano, S. Kazadzis, A. Papayannis, Comparison of averaged extinction profiles from CALIPSO and BSC-DREAM8b dust model over Greece, 26th International Laser Radar Conference, Porto Heli, Greece, June 2012
- C41. Vassilis Amiridis, U. Wandinger, E. Marinou, S. Kazadzis A. Tsekeri, E. Giannakaki, R.E. Mamouri, P. Kokkalis, T. Herekakis, A. Papayannis, D. Balis, G. Pappalardo, Lidar Climatology of Vertical Aerosol Structure for Space-Based Lidar Simulation Studies, 26th international laser radar conference at Porto Heli, Greece, 25th - 29th June 2012
- C42. Papayannis, A., P. Kokkalis, R.E. Mamouri, V. Amiridis, E. Remoundaki, G. Tsaknakis, S. Kazadzis, A. Tsekeri, E. Marinou, Synergetic infrastructure for trace gas and aerosol measurements and characterization at the National Technical University of Athens and the National Observatory of Athens, Greece, 26th International Laser Radar Conference, Porto Heli, Greece, June 2012.
- C43. Papayannis, A., P. Kokkalis, R. Mamouri, G. Tsaknakis, E. Giannakaki, V. Amiridis and S. Kazadzis, Profiling of aerosols and water vapor over Athens using synergy of Raman lidar, radiosounding, sun photometry and CALIPSO LIDAR, 9th International Symposium for Tropospheric Profiling, L'Aquila, Italy, 3-7 September 2012
- C44. O. Meinander, S. Kazadzis, A. Arola, R. Kivi, A. Kontu, H. Suokanerva, E. Kyrö, V. Aaltonen, T. Manninen, A. Riihelä, J.-L. Roujean, and O. Hautecoeur, About UV Albedo of Seasonal Snow at Sodankylä, IRS2012-542-12, International Radiation Symposium 2012, Dahlem Cube, Berlin, Germany, 06 – 10 August 2012
- C45. Taylor, M., Kazadzis, S., Gerosopoulos, E.: Multi-modal fitting of AERONET size distributions during atypical aerosol conditions, 12th International Conference on Meteorology, Climatology and Atmospheric Physics COMECAP 2014, Crete 28-31 May 2014
- C46. Taylor, M., Kazadzis, S., Tsekeri, A., Gkikas, A., Amiridis, V.: AEROMAP: Satellite retrieval of dust aerosol microphysical and optical parameters using neural networks, Conference on Meteorology, Climatology and Atmospheric Physics COMECAP 2014, Crete 28-31 May 2014
- C47. Kosmopoulos P.G., Kazadzis S., Flocas H.A., Marinou E., Amiridis V., Jacovidis C.P.: A 3D Aerosol Climatology & simulation of radiative transfer by remote sensing & modeling techniques in the atmosphere of Greece, Conference on Meteorology, Climatology and Atmospheric Physics COMECAP 2014, Crete 28-31 May 2014
- C48. Kazadzis S., Kosmopoulos P.G., Lagouvardos K., Kotroni V.: Solar Energy prediction and verification using model forecasts and ground based solar measurements, Conference on Meteorology, Climatology and Atmospheric Physics COMECAP 2014, Crete 28-31 May 2014
- C49. Kazadzis S., Raptis I.P., V. Psiloglou, Kazantzidis A., Bais A.: Solar Radiation Measurements and Model Calculations at Inclined Surfaces, Conference on Meteorology, Climatology and Atmospheric Physics COMECAP 2014, Crete 28-31 May 2014

- C50. Raptis I.P., Kazadzis S., B. Bohn, N. Mihalopoulos¹, M. Gratsea, H. Berresheim, F. Rohrer, M. Adam: A Method for Calculating O₁D and NO₂ Photolysis Frequencies using satellite based UV solar radiation retrievals, Conference on Meteorology, Climatology and Atmospheric Physics COMECAP 2014, Crete 28-31 May 2014
- C51. Kazadzis S., Founda D., Psiloglou V., Kambezidis H.D., Pierros F., Meleti C., Mihalopoulos N., Surface total solar radiation variability at Athens, Greece since 1954, Climatology and Atmospheric Physics COMECAP 2014, Crete 28-31 May 2014
- C52. Founda D., Kazadzis S., Long term variability of visibility in Athens - The urban influence, Climatology and Atmospheric Physics COMECAP 2014, Crete 28-31 May 2014
- C53. Bais A.F., Kazantzidis A., Giannaros T.H., Zempila M.M., Kazadzis S., Nikitidou E., Tzoumanikas P., Salamalikis V., Kosmidis E., Mela S.D., Zerefos C.S., Fragkos K., Fountoulakis I., Drosoglou T.H., Kotti M.C., The Hellenic Solar Energy Network: validation of products, Climatology and Atmospheric Physics COMECAP 2014, Crete 28-31 May 2014
- C54. Kopania T., Kazadzis S., Lagouvardos K., Meleti C., Bais A.F., Vougioukas S., Solar UV Index forecast and observational network of the National Observatory of Athens, Climatology and Atmospheric Physics COMECAP 2014, Crete 28-31 May 2014
- C55. Vassilis Amiridis, Stavros Solomos, Alexandra Tsekeri, Eleni Marinou, Stylianos Kazadzis, Evangelos Gerasopoulos, Themistocles Herekakis, Charalampos Kontoes, Atmospheric hazards monitoring and forecasting, 1st International GEOMAPPLICA Conference 2014
- C56. M. Taylor, S. Kazadzis, V. Amiridis, R. Kahn, A climatology of global aerosol mixtures to support Sentinel-5P and EarthCARE mission applications, Conference: Advances in Atmospheric Science and Applications (ATMOS 2015) ESA Workshop, Crete, 2015
- C57. P.G. Kosmopoulos, S. Kazadzis, M. Taylor, A. Bais, K. Lagouvardos, V. Kotroni, I. Keramitsoglou and C. Kiranoudis, 2016. Estimation of the solar energy potential in Greece using satellite and ground-based observations. 13th International Conference on Meteorology, Climatology and Atmospheric Physics, COMECAP 2016, Thessaloniki, Greece, 19-21 September 2016.
- C58. M.M. Zempila, M. Taylor, I. Fountoulakis, Alkiviadis F. Bais, S. Kazadzis and K. Fragkos, Introducing a Cloud Screening Detector Using Global Horizontal Irradiances in UV and PAR in Thessaloniki, Greece, 13th International Conference on Meteorology, Climatology and Atmospheric Physics, COMECAP 2016, Thessaloniki, Greece, 19-21 September 2016.
- C59. Alexandros Papayannis, Athina Argyrouli, Panayotis Kokkalis, Georgios Tsaknakis, Ioannis Binietoglou, Stavros Solomos, Stylianos Kazadzis, Stefanos Samaras, Christine Böckmann, Panagiotis Raptis and Vassilis Amiridis, Vertical Profiles of Aerosol Optical and Microphysical Properties During a Rare Case of Long-range Transport of Mixed Biomass Burning-polluted Dust Aerosols from the Russian Federation-Kazakhstan to Athens, Greece, The 27th International Laser Radar Conference (ILRC 27), <http://dx.doi.org/10.1051/epjconf/201611918003>, Volume 119, 2016
- C60. Eleni Marinou, Vassilis Amiridis, Alexandra Tsekeri, Stavros Solomos, Panos Kokkalis, Emmanouil Proestakis, Michael Kottas, Ioannis Binietoglou, Prodromos Zanis, Stelios Kazadzis, Ulla Wandinger and Albert Ansmann, 3D Structure of Saharan Dust Transport Towards Europe as Seen by CALIPSO 18007, <http://dx.doi.org/10.1051/epjconf/201611918007>, The 27th International Laser Radar Conference (ILRC 27), Volume 119, 2016
- C61. Alexandros Papayannis, Athina Argyrouli, Detlef Müller, Georgios Tsaknakis, Panayotis Kokkalis, Ioannis Binietoglou, Stelios Kazadzis, Stavros Solomos and Vassilis Amiridis, Tropospheric Vertical Profiles of Aerosol Optical, Microphysical and Concentration Properties in the Frame of the Hygra-CD Campaign (Athens, Greece 2014): A Case Study of Long-Range Transport of Mixed Aerosols, The 27th International Laser Radar Conference (ILRC 27), Volume 119, 2016
- C62. M. Zempila, Maria Elissavet Koukoulis, Alkiviadis Bais, Antii Arola, Ilias Fountoulakis, Natalia Kouremeti, Stelios Kazadzis, Dimitrios Balis long-term comparisons of omi surface uv irradiances to a nilu_uv multi-filter radiometer in Thessaloniki, Greece, European Space Agency (ESA) Living Planet Symposium 2016, 9-13 May, Prague, Czech Republic.
- C63. Zempila MM, Taylor M, Fountoulakis I, Koukoulis ME, Bais AF, Arola A, van Geffen J, van Weele M, van der A R, Kouremeti N, Kazadzis S, Meleti C, Balis DS (2016), CIE, Vitamin D and DNA damage: a synergistic study in Thessaloniki, Greece. European Space Agency (ESA) Living Planet Symposium 2016, 9-13 May, Prague, Czech Republic.
- C64. Julian Gröbner, Stelios Kazadzis, Natalia Kouremeti, Lionel Doppler, Rinat Tagirov, Alexander I. Shapiro, Spectral Solar Variations During The Eclipse Of March 20th, 2015 At Two European Sites, International Radiation Symposium, Auckland, N. Zealand, April, 2016
- C65. Heikkilä A., Kazadzis S., Meinander O., Vaskuri A., Kärhä P., Mylläri V., Syrjälä S. and Koskela T., UV Exposure in Artificial and Natural Weathering: A Comparative Study, International Radiation Symposium, Auckland, N. Zealand, April, 2016
- C66. M. Campanelli, V. Estellés, H. Diemoz, N. Kouremeti, S. Kazadzis, R. Becker, S. Vergari, S. Dietrich, The SKYNET radiometer Network: Aerosol Optical Depth retrieval performance at the FRC-IV campaign and long-term comparison against GAW-PFR and AERONET standard instruments, TECO – 2016 (Technical Conference on Meteorological and Environmental Instruments and Methods of Observation), Madrid, 27-30 September 2016
- C67. Stelios Kazadzis, Natalia Kouremeti, Julian Gröbner, Emilio Cuevas, Comparisons of Aerosol Optical Depth measurements from different global Networks: the 4th filter radiometer comparison, , TECO – 2016 (Technical Conference on Meteorological and Environmental Instruments and Methods of Observation), Madrid, 27-30 September 2016
- C68. A. Heikkilä, S. Kazadzis, O. Meinander, A. Vaskuri, P. Kärhä, V. Mylläri, S. Syrjälä, and T. Koskela, UV exposure in artificial and natural weathering: A comparative study, AIP Conference Proceedings 1810, 110004; doi: 10.1063/1.4975566, 2017

- C69. M. Campanelli, A.M. Iannarelli, S. Kazadzis, S. Vergari, V. Estelles, H. Diemoz, A. di Sarra, A. Cede, The QUATRAM Campaign: QUALITY and TRACEABILITY of Atmospheric aerosol Measurements, The 2018 WMO/CIMO Technical Conference on Meteorological and Environmental Instruments and Methods of Observation, Amsterdam, the Netherlands, October, 2018
- C70. Kosmopoulos, P.G., Kazadzis, S., Kontoes, C., Papoutsis, I., and Trypitsidis, A.: 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.
- C71. Fountoulakis I., Natsis A., Siomos N., Drosoglou T., Bais A., Balis D., Kazadzis S., Measurements of the aerosol single scattering albedo in the UV over Thessaloniki, Greece, 14th International Conference of Meteorology, Climatology and Atmospheric Physics, COMECAP 2018, Alexandroupolis, Greece, 15 – 17 October, 2018.
- C72. S. Kazadzis, N. Kouremeti, Aerosol Optical Depth Measurements at the WMO Global Atmospheric Watch - PFR Network Stations, American geoph. Union Conference, San Francisco, USA, 9-13 December, 2019.
- C73. I. P. Raptis, S. Kazadzis, G. Pinardi, Validation of TROPOMI NO₂ Retrievals Using PANDORA Measurements in Athens, Greece, American geoph. Union Conference, San Francisco, USA, 9-13 December, 2019.
- C74. P. G. Kosmopoulos, S. Kazadzis, C. Kontoes, P. Blanc, H. El-Askary, M. El-Khayat, D. Zografos, Addressing SDG7 Through the NextSENSE Showcase, American geoph. Union Conference, San Francisco, USA, 9-13 December, 2019.
- C75. H. El-Askary, Wenzhao Li, Stelios Kazadzis, Panagiotis G Kosmopoulos, Daniele Struppa, Thomas Piechota, Vassilis Amiridis, Mohamed Qurban, Michael J Garay, Olga V. Kalashnikova and Charalambos Kontoes, Case studies on using earth observations addressing key environmental challenges along the sustainable development goals, American geoph. Union Conference, San Francisco, USA, 9-13 December, 2019.
- C76. Kazadzis, S., Kouremeti, N., and Groebner, J.: Aerosol Optical Depth Measurements at high altitude and polar WMO Global Atmospheric Watch - PFR Network Stations, EGU General Assembly 2020, Online, 4–8 May 2020, EGU2020-6161, <https://doi.org/10.5194/egusphere-egu2020-6161>, 2020
- C77. Fountoulakis, I., Papachristopoulou, K., Proestakis, E., Gkikas, A., Raptis, P. I., Siomos, N., Kontoes, C., and Kazadzis, S.: Effect of aerosol vertical distribution on the transfer of solar radiation through the atmosphere, EGU General Assembly 2021, online, 19–30 Apr 2021, EGU21-6111, <https://doi.org/10.5194/egusphere-egu21-6111>, 2021.
- C78. Papachristopoulou K., Fountoulakis I., Kosmopoulos P., Kouroutsidis D., Raptis P.I., Kontoes C., Hatzaki M. and Kazadzis S.: Assessment of a newly developed short-term forecasting system (nextSENSE) of Downwelling Surface Solar Irradiance (DSSI) and validation with ground-based measurements, EGU General Assembly 2021, Online, 19–30 April 2021, EGU21-7218, 2021
- C79. Marinou, E., Amiridis, V., Mavropoulou, I., Baars, H., Kazadzis, S., Rosoldi, M., Ene, D., Barreto, A., Casadio, S., Zenk, C., Sciare, J., Mocnik, G., Kandler, K., Stuut, J.-B., Rodriguez, S., Knipertz, P., Rutz, T., Komppula, M., Daskalopoulou, V., and Hloupis, G. and the ASKOS team: The ASKOS experiment for the validation of Aeolus L2A aerosol product, EGU General Assembly 2021, online, 19–30 Apr 2021, EGU21-13781, <https://doi.org/10.5194/egusphere-egu21-13781>, 2021.
- C80. Natalia Kouremeti, Saulius Nevas, Stelios Kazadzis and Julian Gröbner, Traceability of Solar and Lunar Direct Irradiances Measured with Precision Filter Radiometers, Newrad conference, June 2021
- C81. Ioannis-Panagiotis Raptis, Eleftheratos Kostas, Kopania Theodora, Kazadzis Stelios, Assessment of PANDORA Total O₃ and Total NO₂ retrievals, 15th International Conference on Meteorology, Climatology and Atmospheric Physics, Ioannina, Greece, September 2021
- C82. Vasiliki Daskalopoulou, Ioannis-Panagiotis Raptis, Alexandra Tsekeri, Vassilis Amiridis, Stelios Kazadzis and Martin William, Effect of Dust Particles Orientation on Linear Polarization of Solar Irradiance, 15th International Conference on Meteorology, Climatology and Atmospheric Physics, Ioannina, Greece, September 2021
- C83. Papachristopoulou K., Raptis P.I., Gkikas A., Amiridis V. and Kazadzis S., 2021: Megacities around the globe: AOD spatial distribution and trends over the last two decades using spaceborne data, 15th COMECAP, 26-29 September 2021, Ioannina, Greece
- C84. Papachristopoulou K., Kosmopoulos P., Gkikas A., Amiridis V., Hatzaki M. and Kazadzis S., "Dust aerosols in the Greek area and their effect on surface solar irradiance", 15th International Conference on Meteorology, Climatology and Atmospheric Physics, Hybrid Congress, Ioannina, Greece, 26-29 September 2021
- C85. Stavros-Andreas Logothetis, Vasileios Salamalikis, Antonis Gkikas, Stelios Kazadzis, Vassilis Amiridis and Andreas Kazantzidis, "Global trends of Dust Optical Depth, over the period 2003-2017, based on the MIDAS fine resolution dataset", 15th International Conference on Meteorology, Climatology and Atmospheric Physics, Hybrid Congress, Ioannina, Greece, 26-29 September 2021
- C86. Moustaka A., Raptis I.P., Giannakaki E., Kazadzis S., Evaluation of Incoming Solar Radiation at tilted surfaces at various European Cities, 15th COMECAP, 26-29 September 2021, Ioannina, Greece
- C87. Kosmopoulos P.G., Kazadzis S., Kouroutsidis D., Papachristopoulou K., Saint-Drenan Y.M., Kontoes C. and Blanc P., The nextSENSE system: Short-term forecasting of solar energy in Europe and North Africa, 15th COMECAP, 26-29 September 2021, Ioannina, Greece
- C88. Ioannis-Panagiotis Raptis, Dimitra Kouklaki, Kostas Eleftheratos, Ilias Fountoulakis, Stelios Kazadzis, Comparison of Total Ozone Column and UVI retrieved from Brewer, PANDORA and OMI at Athens, Greece during 2018-2021, Quadrennial Ozone Symposium 2021, Seoul, South Korea, 3-9 October 2021
- C89. Ilias Fountoulakis, Panagiotis Kosmopoulos, Kyriakoula Papachristopoulou, Panagiotis-Ioannis Raptis, Kostas Eleftheratos, Katerina Garane, Alkiviadis Bais, Charalampos Kontoes, Stelios Kazadzis, A satellite-based UV and VIS climatology for biological

and agricultural applications for Greece and Cyprus: preliminary results and validation ,Quadrennial Ozone Symposium 2021, Seoul, South Korea, 3-9 October 2021

- C90. Panagiotis Ioannis Raptis, Stelios Kazadzis, Monica Campanelli, Stefano Casadio, Anna-Maria Iannarelli, Kouklaki Dimitra Uncertainties in ground based AOD retrievals due to NO₂, AGU 2021 Fall Meeting, New Orleans, USA, December 2021
- C91. Panagiotis Ioannis Raptis, Moustaka Anna, Kosmopoulos Panagiotis, Stelios Kazadzis, Aerosol and Clouds impact on selecting Inclination for surfaces to maximize incoming Solar Radiation, AGU 2021 Fall Meeting, New Orleans, USA, December 2021
- C92. Fountoulakis, I., Raptis, I.-P., Kouklaki, D., Kosmopoulos, P., Psiloglou, B., Eleftheratos, K., and Kazadzis, S.: Spectral optical properties of aerosols in Athens, Greece during the August 2021 wildfires and their effects on surface solar radiation, EGU General Assembly 2022, Vienna, Austria, 23–27 May 2022, EGU22-2721, <https://doi.org/10.5194/egusphere-egu22-2721>, 2022.

International Radiation Symposium, Thessaloniki, 4-8, July, 2022:

- C93. Julian Gröbner, Natalia Kouremeti, Ralf Zuber, Gregor Hülsen and Stelios Kazadzis, Spectral aerosol optical depth retrieved from calibrated solar spectral irradiance measurements
- C94. William Wandji, Ville Leinonen, Antti Lipponen, Else van den Besselaar, Santtu Mikkonen, Arturo Sanchez–lorenzo, Martin Wild, Doris Folini, Rei Kudo, Ben Liley, Raghav Srinivasan, Bruce Forgan, Alexandru Dumitrescu, Grzegorz Urban, Michal Kowalewski, Marcia Yamasoe, Nilton Évora Do Rosário, Dimitra Founda, Stelios Kazadzis, Veronica Manara, Atsumu Ohmura and Antti Arola, worldwide historical evolution of aerosol optical depth derived from sunshine duration measurements since the late 19th century
- C95. Angelos Karanikolas, Natalia Kouremeti, Monica Campanelli, Victor Estellés and Stelios Kazadzis, Evaluation of the SKYNET Network Improved Langley Plot method through calibration transfer from the GAW-PFR network
- C96. Panagiotis Kosmopoulos, Apostolos Katranitsas, Anastasios Tsavalos, Xinyuan Hou, Orestis Speyer, Stelios Kazadzis and Evangelos Gerasopoulos, Rooftop Solar Photovoltaic Energy Potential at Urban Environments: Application Example for the City of Athens in Greece
- C97. Panagiotis Kosmopoulos, Marios Mechilis, Ilias Fountoulakis, Akriti Masoom and Stelios Kazadzis, Energy Autonomy Scenarios for the Island of Antikythera in Greece by Exploiting Solar Power Plant Technologies
- C98. Panagiotis Kosmopoulos, Stelios Kazadzis, Alois Schmalwieser, Panagiotis Raptis, Kyriakoula Papachristopoulou, Ilias Fountoulakis, Akriti Masoom, Alkiviadis Bais, Julia Bilbao, Mario Blumthaler, Axel Kreuter, Anna Maria Siani, Kostas Eleftheratos, Chrysanthi Topaloglou, Julian Gröbner, Bjørn Johnsen, Tove Svendby, Jose Manuel Vilaplana, Lionel Doppler, Ann Webb, Marina Khazova, Hugo De Backer, Anu Heikkilä, Kaisa Lakkala, Janusz Jaroslowski, Charikleia Meleti, Henri Diémoz, Gregor Hülsen, Barbara Klotz, John Rimmer and Charalampos Kontoes, The Ultraviolet Index Operating System (UVIOS): Application Example and Validation in the European Region
- C99. Stelios Kazadzis, Natalia Kouremeti, Martine Collaud Coen and Julian Gröbner, Sun-Photometric Measurements of Aerosol Optical Depth from the WMO Global Atmospheric Watch PFR Network
- C100. Stelios Kazadzis, Natalia Kouremeti, Julian Gröbner, Monica Campanelli, Victor Estelles, Huizheng Che, Carlos Toledano, Philippe Goloub, Africa Barreto, Thomas Carlund, Ralf Becker, Lionel Doppler, Francisco Navas-Guzmán, Michael Milner, Won Seok Jung and Axel Kreuter, Results of 5th filter radiometer comparison of aerosol optical depth measurements
- C101. Kostas Eleftheratos, Dimitra Kouklaki, Ilias Fountoulakis, Ioannis-Panagiotis Raptis, Dimitra Founda, Stelios Kazadzis, Basil Psiloglou, Vassilis Amiridis, Eleni Marinou and Christos Zerefos, Impact of Extreme Wildfires of August 2021 on Air Quality and Solar Irradiance in Greece
- C102. Natalia Kouremeti, Saulius Nevas, Stelios Kazadzis, Julian Gröbner, Philipp Schneider and Kerstin Schwind, SI-traceable aerosol optical depth retrieval using a Precision Filter-Radiometer
- C103. Natalia Kouremeti, Stelios Kazadzis, Julian Gröbner, Georg H Hansen, Mauro Mazzola and Kerstin Stebel, Day and Night-Time Aerosol Optical Depth Measurements at Ny-Ålesund Using Sun and Lunar Precision FilterRadiometers
- C104. Natalia Kouremeti, Saulius Nevas, Stelios Kazadzis, Julian Gröbner, Philipp Schneider and Kerstin Schwind, SI-traceable characterization of a Lunar Precision Filter-Radiometer
- C105. Natalia Kouremeti, Julian Gröbner, Stelios Kazadzis and Gregor Hülsen, Performance Evaluation of the Precision Spectroradiometers Triad
- C106. Ilias Fountoulakis, Kyriakoula Papachristopoulou, Emmanouil Proestakis, Vassilis Amiridis, Charalampos Kontoes and Stelios Kazadzis, Effect of the vertical profile of aerosol extinction coefficient on the modelling of solar radiation in different spectral regions
- C107. Akriti Masoom, Panagiotis Kosmopoulos, Ankit Bansal and Stelios Kazadzis, Solar Resource Assessment and Forecasting Using CAMS-MACC and Physical Modeling in Tropical Climate
- C108. Kyriakoula Papachristopoulou, Ilias Fountoulakis, Antonis Gkikas, Panagiotis Kosmopoulos, Panagiotis Nastos, Maria Hatzaki and Stelios Kazadzis, Total Aerosols and Pure Dust Induced Perturbations on Downwelling Surface Solar Radiation over the Mediterranean Basin

- C109. Alexandra Tsekeri, Vassilis Amiridis, Maria Tschla, Ilias Fountoulakis, Angelos Nersesian, Emmanouil Proestakis, Antonis Gkikas, Kyriakoula Papachristopoulou, Vasileios Barlakas and Stelios Kazadzis, The Effect of Large Dust Size on Solar Radiation Fluxes
- C110. Dimitra Kouklaki, Ioannis-Panagiotis Raptis, Stelios Kazadzis and Kostas Eleftheratos, Impact of Atmospheric Composition on the Spectral Solar Irradiance and PV efficiency
- C111. Anna Moustaka, Emmanouil Proestakis, Vassilis Amiridis, Stelios Kazadzis, Kleareti Tourpali and Antonis Gkikas, aerosol radiative effects based on an improved calipso classification scheme
- C112. Fountoulakis, Ilias ; Kontoes, Charalampos ; Papachristopoulou, Kyriakoula ; Kosmopoulos, Panagiotis ; Raptis, Ioannis-Panagiotis ; Gkikas, Antonios ; Mamouri, Rodanthi-Elisavet ; Nisantzi, Argyro ; Witthuhn, Jonas ; Kazadzis, Stelios ; Hadzimitsis, Diofantos, Exploitation of Earth Observation information for solar energy modelling: applications in energy, health and agriculture 44th COSPAR Scientific Assembly. Held 16-24 July, 2022. Online at <https://www.cosparathens2022.org/>. Abstract A0.3-0001-22, 2022
- C113. Dimitra Kouklaki, Kyriakoula Papachristopoulou, Ilias Fountoulakis, Ioannis-Panagiotis Raptis, Stelios Kazadzis, and Kostas Eleftheratos, Direct effect of Aerosols on Surface Solar Radiation (GHI and DNI) for Solar Energy: sensitivity study using CAMS, satellite-based and ground-based measurements, European Meteorological Society Annual Meeting 2022, 4-9 September, Bonn, Germany, 2022
- C114. Ioannis-Panagiotis Raptis, Kostas Eleftheratos, Stelios Kazadzis, Panagiotis Kosmopoulos, Klaus Gierens, Ilias Fountoulakis, Kyriakoula Papachristopoulou, Dimitra Kouklaki, Andreas Kazantzidis, Charilaos Benetatos, and Vassilis Psiloglou, Evaluation of the Solar Energy Nowcasting System (SENSE) using Multiple Ground Based Measurements, European Meteorological Society Annual Meeting 2022, 4-9 September, Bonn, Germany, 2022
- C115. S. Kazadzis, N., Kouremeti, J. Groebner and MAPP partners, Metrology for aerosol optical properties (MAPP): Project results and links with international aerosol field comparisons, Metrology for Climate Action Conference, online, 26-30 September, 2022.
- C116. Fragkos K., Nisantzi A., Fountoulakis I., Michaelides S., Charalampous G., Papachristopoulou K., Kontoes C., Hadjimitsis D., Kazadzis S., "the solar radiation and energy laboratory of eratosthenes centre of excellence: establishment and research directions", Ninth International Conference on Remote Sensing and Geoinformation of the Environment, 3-5 April 2023, Ayia Napa, Cyprus
- C117. Charalampous G., Fragkos K., Nisantzi A., Fountoulakis I., Papachristopoulou K., Hadjimitsis D., Kazadzis S., "satellite ozone and uv measurements over specific areas of cyprus", Ninth International Conference on Remote Sensing and Geoinformation of the Environment, 3-5 April 2023, Ayia Napa, Cyprus.
- C118. Kazadzis, S., Kouremeti, N., and Groebner, J.: Aerosol Optical Depth Measurements and trends from the Global Atmospheric Watch - PFR Network and aerosol homogenization initiatives, EGU General Assembly 2023, Vienna, Austria, 24–28 Apr 2023, EGU23-2340, <https://doi.org/10.5194/egusphere-egu23-2340>, 2023.
- C119. Hou, X. and Kazadzis, S.: Solar energy potential assessment on urban rooftops using digital surface models, EGU General Assembly 2023, Vienna, Austria, 24–28 Apr 2023, EGU23-3486, <https://doi.org/10.5194/egusphere-egu23-3486>, 2023.
- C120. Moustaka, A., Proestakis, E., Amiridis, V., Kazadzis, S., Tourpali, K., and Gkikas, A.: Depicting the regime of different aerosol types in NAMEE (North Africa - Middle East - Europe) based on CALIOP-CALIPSO retrievals, EGU General Assembly 2023, Vienna, Austria, 24–28 Apr 2023, EGU23-11608, <https://doi.org/10.5194/egusphere-egu23-11608>, 2023.
- C121. Fragkos, K., Fountoulakis, I., Nisantzi, A., Papachristopoulou, K., Hadjimitsis, D., and Kazadzis, S.: Modelled-based Photosynthetically Active Radiation climatology for Cyprus: Validation with measurements and trends, EGU General Assembly 2023, Vienna, Austria, 24–28 Apr 2023, EGU23-7269, <https://doi.org/10.5194/egusphere-egu23-7269>, 2023.
- C122. Kouklaki, D., Raptis, I.-P., Kazadzis, S., Fountoulakis, I., Papachristopoulou, K., and Eleftheratos, K.: The Aspire campaign: Assessing the effects of aerosols on solar radiation and energy in SE Europe., EGU General Assembly 2023, Vienna, Austria, 24–28 Apr 2023, EGU23-5952, <https://doi.org/10.5194/egusphere-egu23-5952>, 2023.
- C123. Papachristopoulou, K., Fountoulakis, I., Bais, A. F., Psiloglou, B. E., Kontoes, C., Hatzaki, M., and Kazadzis, S.: Improvements and validation of nextSENSE solar energy nowcasting and short-term forecasting system, EGU General Assembly 2023, Vienna, Austria, 24–28 Apr 2023, EGU23-11429, <https://doi.org/10.5194/egusphere-egu23-11429>, 2023.
- C124. Fountoulakis, I., Fragkos, K., Papachristopoulou, K., Nisantzi, A., Gkikas, A., Hadjimitsis, D., and Kazadzis, S.: Evolution of biologically active ultraviolet doses in Cyprus, EGU General Assembly 2023, Vienna, Austria, 24–28 Apr 2023, EGU23-6396, <https://doi.org/10.5194/egusphere-egu23-6396>, 2023.
- C125. Raptis, I. P., Drosoglou, T., Valeri, M., Casadio, S., Barnaba, F., Brizzi, G., Niro, F., Campanelli, M., and Kazadzis, S.: NO2 absorption correction for enhanced AOD retrieval, EGU General Assembly 2023, Vienna, Austria, 24–28 Apr 2023, EGU23-8642, <https://doi.org/10.5194/egusphere-egu23-8642>, 2023.
- C126. Kyriakoula Papachristopoulou, Ilias Fountoulakis, Dimitra Kouklaki, Charalampos Kontoes, and Stelios Kazadzis, Assessing aerosol related uncertainties in the NextSENSE2 system, <https://meetingorganizer.copernicus.org/EMS2023/EMS2023-562.html> European Meteorological Society, Bratislava, Slovakia & Online | 3–8 September 2023
- C127. Akriti Masoom, Natalia Kouremeti, Africa Barreto, Carlos Toledano, Thierry Podvin, Luc Blarel, Gael Dubois, Julian Gröbner, and Stelios Kazadzis, Traceability of Aerosol Optical Depth measurements and links with the Aerosols, Clouds and Trace Gases

Research Infrastructure (ACTRIS) / Calibration of Aerosol Remote Sensing (CARS), <https://meetingorganizer.copernicus.org/EMS2023/EMS2023-373.html>, European Meteorological Society, Bratislava, Slovakia & Online | 3–8 September 2023

- C128. Lionel Doppler, Stelios Kazadzis, Natalia Kouremeti, Akriti Masoom, Africa Barreto, Emilio Cuevas, Carlos Toledano, Roberto Roman, Monica Campanelli, and Christoph Ritter, Learnings of measurement campaigns in photometry instrumentation and inversion methods, a COST/HARMONIA study, <https://meetingorganizer.copernicus.org/EMS2023/EMS2023-656.html>, European Meteorological Society, Bratislava, Slovakia & Online | 3–8 September 2023
- C129. Konstantinos Fragkos, Rodanthi-Elisavet Mamouri, Ilias Fountoulakis, Argyro Nisantzi, Dragos Ene, Georgia Charalampous, Kyriakoula Papachristopoulou, Albert Ansmann, Johannes Buhl, Patric Seifert, Diofantos Hadjimitsis, and Stelios Kazadzis, The capacity of Eratosthenes Centre of Excellence to estimate cloud radiative effects: the CyCARE campaign, <https://meetingorganizer.copernicus.org/EMS2023/EMS2023-409.html> European Meteorological Society, Bratislava, Slovakia & Online | 3–8 September 2023
- C130. Georgia Charalampous, Konstantinos Fragkos, Franco Marengo, Yevgeny Derimian, Argyro Nisantzi, Rodanthi-Elisavet Mamouri, Michalis Pikridas, Danielle El Hajj, Diofantos Hadjimitsis, Jean Sciare, and Stelios Kazadzis, Dust impact on surface solar radiation levels in Cyprus, <https://meetingorganizer.copernicus.org/EMS2023/EMS2023-493.html>, European Meteorological Society, Bratislava, Slovakia & Online | 3–8 September 2023
- C131. Stelios Kazadzis, Natalia Kouremeti, Akriti Masoom, and Julian Groebner and the Harmonia Core group Team, Aerosol sun photometry state of the art and progress and the COST action Harmonia, <https://meetingorganizer.copernicus.org/EMS2023/EMS2023-41.html>, European Meteorological Society, Bratislava, Slovakia & Online | 3–8 September 2023

16th International Conference on Meteorology, Climatology and Atmospheric Physics—COMECAP 2023, Athens, Greece, 25–29 September 2023.

- C132. Eleftheratos, K.; Raptis, I.-P.; Kouklaki, D.; Kazadzis, S.; Fountoulakis, I.; Psiloglou, B.E.; Papachristopoulou, K.; Founda, D.; Benetatos, C.; Kazantzidis, A.; et al. The ASPIRE Project: Atmospheric Parameters Affecting Solar Irradiance and Solar Energy in Athens, Greece—Overview and Results. *Environ. Sci. Proc.* 2023, 26, 46. <https://doi.org/10.3390/environsciproc2023026046>
- C133. Fountoulakis, I.; Siomos, N.; Raptis, I.-P.; Eleftheratos, K.; Kouklaki, D.; Psiloglou, B.E.; Amiridis, V.; Kazadzis, S. Using Radiometric Measurements to Separate Dust and Smoke Radiative Effects during a Combined Smoke–Dust Event. *Environ. Sci. Proc.* 2023, 26, 26. <https://doi.org/10.3390/environsciproc2023026026>
- C134. Kouklaki, D.; Papachristopoulou, K.; Fountoulakis, I.; Tsekeri, A.; Raptis, P.-I.; Kazadzis, S.; Eleftheratos, K. Impact of Aerosols on Surface Solar Radiation and Solar Energy in the Mediterranean Basin. *Environ. Sci. Proc.* 2023, 26, 56. <https://doi.org/10.3390/environsciproc2023026056>
- C135. Papachristopoulou, K.; Tsekeri, A.; Kouklaki, D.; Raptis, P.I.; Marinou, E.; Amiridis, V.; Fountoulakis, I.; Kazadzis, S. Surface Shortwave Radiation Measurements and Modeling under Intense Desert Dust Conditions. *Environ. Sci. Proc.* 2023, 26, 15. <https://doi.org/10.3390/environsciproc2023026015>
- C136. Moustaka, A.; Korras-Carraca, M.-B.; Papachristopoulou, K.; Fountoulakis, I.; Kazadzis, S.; Proestakis, E.; Amiridis, V.; Tourpali, K.; Gkikas, A. Assessment of Cloud-Aerosol Lidar with Orthogonal Polarization–Cloud-Aerosol Lidar and Infrared Pathfinder Satellite Observations Retrievals towards Estimating the Aerosol Direct Impact on the Shortwave Radiation Budgets in North Africa, Europe, and the Middle East. *Environ. Sci. Proc.* 2023, 26, 139. <https://doi.org/10.3390/environsciproc2023026139>
- C137. Fragkos, K.; Nisantzi, A.; Fountoulakis, I.; Michaelides, S.; Charalampous, G.; Papachristopoulou, K.; Kontoes, C.; Hadjimitsis, D.; Kazadzis, S. Introducing the Solar Radiation and Energy Laboratory of the Eratosthenes’ Centre of Excellence: Overview of Activities. *Environ. Sci. Proc.* 2023, 26, 45. <https://doi.org/10.3390/environsciproc2023026045>
- C138. Eleni Marinou, Peristera Paschou, Ioanna Tsikoudi, Alexandra Tsekeri, Vasiliki Daskalopoulou, Dimitra Kouklaki, Nikos Siomos, Vasileios Spanakis-Misirlis, Kalliopi Artemis Voudouri, Thanasis Georgiou, Eleni Drakaki, Anna Kampouri, Kyriaki Papachristopoulou, Ioanna Mavropoulou, Sotiris Mallios, Emmanouil Proestakis, Antonis Gkikas, Iliana Koutsoupi, Ioannis Panagiotis Raptis, Stelios Kazadzis, Holger Baars, Athina Floutsi, Razvan Pirloaga, Anca Nemuc, Franco Marengo, Maria Kezoudi, Alkistis Papetta, G. Močnik, C. Ryder, N. Ratcliffe, An overview of the ASKOS campaign in Cabo Verde. *Environ. Sci. Proc.* 2023, 26, 200. <https://doi.org/10.3390/environsciproc2023026200>
- C139. Moustaka, A., Korras-Carraca, M.-B., Papachristopoulou, K., Stamatis, M., Proestakis, E., Fountoulakis, I., Kazadzis, S., Amiridis, V., Tourpali, K., Solomos, S., Spyrou, C., Zerefos, C., and Gkikas, A.: Assessing lidar ratio impact on CALIPSO retrievals utilized for estimating aerosol shortwave direct radiative effects over the NAMEE domain, EGU General Assembly 2024, Vienna, Austria, 14–19 Apr 2024, EGU24-16988, 2024.
- C140. Papadimitriou, N., Fountoulakis, I., Kapsomenakis, J., Gkikas, A., Kazadzis, S., Spyrou, C., Papachristopoulou, K., and Zerefos, C. S.: Variability in solar based power generation at the Eastern Mediterranean, EGU General Assembly 2024, Vienna, Austria, 14–19 Apr 2024, EGU24-18880, 2024.
- C141. Kontoes, C., Papadopoulou, D., Bartsotas, N. S., Kazadzis, S., Koutalieris, G., Stathopoulos, C., Salta, F. N., Patlakas, P., Papachristopoulou, K., Fountoulakis, L., Delkos, A., Symeonidis, S., and Sinnis, V.: The development of a Hybrid Renewable Energy

Forecasting System under the Destination Earth initiative., EGU General Assembly 2024, Vienna, Austria, 14–19 Apr 2024, EGU24-18891, 2024.

International radiation symposium. 17-21 June 2024 Hangzhou, China

- C142. Dimitra Kouklaki, Alexandra Tsekeri, Kyriakoula Papachristopoulou, Anna Gialitaki, Panagiotis-Ioannis Paptis, Bernhard Mayer, Claudia Emde, Eleni Marinou, Vasilis Amiridis, Stelios Kazadzis, Solar Radiation and Heating Rates under Desert Dust Conditions Based on Ground- Based Measurements and Simulations
- C143. Kyriakoula Papachristopoulou, Ilias Fountoulakis, Gregor Hülsen, Julian Gröner, Dimitra Kouklaki, Akriti Masoom, Ioannis-Panagiotis Raptis, Christos S. Zerefos, Stelios Kazadzis Solar UV Radiation Nowcasting and Short-term Forecasting System Based on Earth Observation Data: Evaluation during the UVCIII Campaign
- C144. Georgia Charalampous, Konstantinos Fragkos, Argyro Nisantzi, Ilias Fountoulakis, Kyriakoula Papachristopoulou, Diofantos Hadjimitsis, Stelios Kazadzis, Preliminary Evaluation of the Cyprus Erythmal Irradiance Forecasting System
- C145. Dimitra Kouklaki, Apostolos Kapoulas, Ilias Fountoulakis, Stelios Kazadzis, I-P Raptis, Nikolaos Papadimitriou, Kyriakoula Papachristopoulou, Andreas Kazantzidis, Vasilis Amiridis, Christos S. Zerefos, Konstantinos Eleftheratos, The Effect of Atmospheric Variability in Measured Spectral Ultraviolet Radiation in Athens, Greece, during the ASPIRE Campaign
- C146. Xinyuan Hou, Stelios Kazadzis, Sun Visibility Forecasting Based on Sky Images Using Deep Learning and Statistical Post-Processing
- C147. Angelos Karanikolas, Benjamin Torres, Marcos Herreras Giralda, Masahiro Momoi, Natalia Kouremeti, Julian Gröbner, Lionel Doppler, Stelios Kazadzis, Retrieval of Aerosol Properties from Direct Solar Irradiance Data with High Temporal and Spectral Resolution Using GRASP
- C148. Anna Moustaka, Marios-Bruno Korras-Carraca, Kyriakoula Papachristopoulou, Michael Stamatis, Ilias Fountoulakis, Stelios Kazadzis, Emmanouil Proestakis, Vassilis Amiridis, Kleareti Tourpali, Christos Zerefos and, Antonis Gkikas, Assessment of Lidar Ratio Impact on CALIPSO Retrievals and on the Estimated Aerosol SW Radiative Effects Across North Africa, Middle East and Europe
- C149. Ilias Fountoulakis, Katerina Garane, Apostolos Kapoulas, Dimitra Kouklaki, Nikolaos Papadimitriou, Alkiviadis Bais, Konstantinos Eleftheratos, Stelios Kazadzis, Kyriakoula Papachristopoulou, Konstantinos Fragkos, Vasilis Amiridis, Alexandros Papayannis, Christos S. Zerefos, Trends and Variability of the UV Index over Athens and Thessaloniki, Greece from Measured and Reconstructed Time Serie
- C150. Kyriakoula Papachristopoulou, Alexandra Tsekeri, Dimitra Kouklaki, Anna Gialitaki, Claudia Emde, Bernard Mayer, Howard W. Barker, Jason N.S. Cole, Zhipeng Qu, Meriem Kacimi, Vassilis Amiridis, Stelios Kazadzis, Eleni Marinou, ensitivity Study of Aerosol Direct Radiative Effects on Cloudy EarthCARE Scenes Using 1D and 3D Radiative Transfer Simulations
- C151. Stelios Kazadzis, Natalia Kouremeti, Julian Groebner, M. Collaud Coen, 20 Years of Aerosol Optical Depth Trends from the Gaw-Pfr Network

European meteorological Society Annual Meeting, Barcelona 2 to 6 of September 2024, Session: Harmonia COST Action: Aerosol observations and links with atmospheric and solar energy studies

- C152. Xinyuan Hou, Kyriakoula Papachristopoulou, Akriti Masoom, and Stelios Kazadzis, Aerosol forecast and its effect on surface solar radiation, EMS2024-370
- C153. Dimitra Kouklaki, Alexandra Tsekeri, Kyriakoula Papachristopoulou, Anna Gialitaki, Panagiotis-Ioannis Paptis, Bernhard Mayer, Claudia Emde, Eleni Marinou, Vassilis Amiridis, and Stelios Kazadzis , Desert dust and water vapor radiative effects using airborne and ground-based measurements and simulations, during the ESA ASKOS campaign in Cabo Verde. | Onsite presentation, EMS2024-705
- C154. Kyriakoula Papachristopoulou, Konstantinos Michailidis, Gabriela Ciocan, Georgios Kosmopoulos, Maria Poutli, Deniz D. G. Tokgöz, Stefan Dosev, Priji Balakrishnan, Antonis Gkikas, and Stelios Kazadzis, Aerosol optical depth regime over megacities and possible links with their population changes, EMS2024-313
- C155. Stavros-Andreas Logothetis, Antonis Gkikas, Stelios Kazadzis, Andreas Kazantzidis, Vassilis Amiridis, and Christos Zerefos, Dust trends in the Eastern Mediterranean and the surrounding deserts during 2001-2022, EMS2024-633
- C156. Anna Moustaka, Antonis Gkikas, Emmanouil Proestakis, Anton Lopatin, Stelios Kazadzis, Oleg Dubovik, Kleareti Tourpali, Christos Zerefos, and Vassilis Amiridis, A synergy between CALIOP-CALIPSO and GRASP-POLDER retrievals towards advancing monitoring capabilities of dust aerosols across North Africa and Middle East, EMS2024-591
- C157. Akriti Masoom, Natalia Kouremeti, Stelios Kazadzis, Markus Killian, Axel Kreuter, and Ioannis-Panagiotis Raptis, Performance analysis and synergistic use of cloud flagging algorithms of ground-based remote sensing instrumentations, EMS2024-365
- C158. Angelos Karanikolas, Benjamin Torres, Marcos Herreras Giralda, Masahiro Momoi, Natalia Kouremeti, Julian Gröbner, Lionel Doppler, and Stelios Kazadzis, Retrieval of Aerosol Properties from Direct Solar Irradiance Data with High Temporal and Spectral Resolution Using GRASP, EMS2024-778

- C159. África Barreto, Roberto Román, Andrea Balotti, Claudia Frangipani, Miguel Ángel Gamonal, Daniel González-Fernández, Pablo González-Sicilia, Angelos Karanikolas, Simone Pulimeno, Cedric Busschots, and Stelios Kazadzis, Nocturnal Aerosol Monitoring at Roque de los Muchachos high-altitude station: Lunar Product Comparison | Onsite presentation EMS2024-1045
- C160. Georgia Charalampous, Konstantinos Fragkos, Ilias Fountoulakis, Franco Marengo, Yevgeny Derimian, Andreas Karpasitis, Argyro Nisantzi, Rodanthi-Elisavet Mamouri, Diofantos Hadjimitsis, and Stelios Kazadzis, Assessment of Dust Impact on Shortwave Surface Irradiance: A Seven-Year Study at Agia Marina Xyliatou, Cyprus, EMS2024-610
- C161. Nikolaos Papadimitriou, Ilias Fountoulakis, Kyriakoula Papachristopoulou, Antonis Gkikas, Stelios Kazadzis, John Kapsomenakis, and Christos Zerefos, Parameterization of the direct and diffuse surface solar radiation components in the Global Solar Energy Estimator (GSEE) and related uncertainties in the energy production simulations, EMS2024-518
- C162. Stelios Kazadzis and the COST action Harmonia Core group, Harmonia COST Action: Overview of aerosol optical depth calibration and homogenization activities | Onsite presentation, EMS2024-69

ACTRIS Science Conference 13-16 May 2024, Rennes, France

- C163. S. Kazadzis, J. Groebner, M. Gysel-Ber, M. Collaud Coen, F. Navas-Guzman, N. Kouremeti, A. Masoom, B. T. Brem, N. K. Nowak, R. L. Modini, G. Martucci, M. Hervo, S. Erb, Long range transport of smoke over Switzerland: aerosol properties and spectral features
- C164. A. Masoom, I. Fountoulakis, K. Papachristopoulou, E. Marinou, V. Amiridis, S. Kazadzis, Effect of wildfires on aerosol optical and microphysical properties, transport and ageing
- C165. S. Kazadzis, N. Kouremeti, E. Lind, A. Barreto, C. Toledano, P. Goloub, A. Karanikolas, J. Gröbner, Long term comparisons of aerosol optical depth measurements; differences and trends

AERONET Science and Application Exchange 2024, September 17-19, 2024, UMD Alumni Center, 7801 Alumni Dr., College Park, MD 20742, USA

- C166. A. Masoom, T. Drosoglou, S. Kazadzis, I.-P. Raptis, Synergy of ground-based remote sensing instrumentations to explore the impact of NO₂ absorption on aerosol optical depth retrieval
- C167. A. F. Almansa-Rodríguez, A. Barreto, N. Kouremeti, R. González, A. Masoom, C. Toledano, J. Gröbner, R. D. García, Y. González, S. Kazadzis, S. Victori, O. Álvarez-Losada, F. Maupin, P. González-Sicilia. V.Carreño₂ and V. E. Cachorro, The Langley ratio method, a new approach for transferring photometer calibration from direct sun measurement
- C168. N. Kouremeti, S. Nevas, T. Stone, J. Gröbner, G. Hülsen, S. Kazadzis, P. Schneider and K. Schwind, Traceability of Lunar direct irradiance measured with a Precision FilterRadiometer
- C169. N. Kouremeti, S. Kazadzis, J. Gröbner, S. Nevas and K. Schwind, Traceability chain of the WMO AOD reference and GAW-PFR network
- C170. A. Nemuc, S. Kazadzis, C. Toledano, L. Doppler, M. Campanelli, N. Kouremeti, A. Masoom, V. Estelles, R. Roman, K. Papachristopoulou, I. Fountoulakis, S. Solomos, S. Vandenbussche, P. Raptis, P. Dagsson-Waldhauserova, M. J. Costa, The European COST Networking Action Harmonia: International network for harmonization of atmospheric aerosol retrievals from ground-based photometers
- C171. N. Kouremeti, S. Kazadzis, J. Gröbner, The filter radiometer comparison international campaigns for AOD Traceability
- C172. S. Kazadzis, N. Kouremeti, J. Gröbner, A. Masoom; A. Karanikolas, 20 years of Aerosol optical depth trends from the GAW-PFR network and collocated measurements with AERONET

EGU conference, Vienna, April, 2025

- C173. Nikolaos Papadimitriou, Ilias Fountoulakis, Antonis Gkikas, Kyriakoula Papachristopoulou, John Kapsomenakis, Stelios Kazadzis, Andreas Kazantzidis, and Christos S. Zerefos, Using the CAMS solar radiation time-series product to model solar PV power potential. Uncertainty evaluation under diverse atmospheric conditions using ground-based measurements.
- C174. E. Marinou, V. Amiridis, P. Paschou, A. Tsekeri, I. Tsikoudi K.A. Voudouri, M. Tsihla, K. Papachristopoulou, I. Koutsoupi, D. Kouklaki, E. Giannakaki, S. Kazadzis, D. Balis, K. Michailidis, G. Peletidou, A. Nemuc, D. Nicolae, G. Močnik, F. Marengo, M. Kezoudi, S. Gross, M. Wirth, F. Ewald, E. O Connor, V. Vakkari, D. Moisseev, L. Mona, M. Rosoldi, N. Papagiannopoulos, R. Mamouri, A. Nisantzi, H. Baars, A. Floutsi, and P. Kollias., ACROSS Mediterranean activities for EarthCARE validation and exploitation
- C175. Dimitra Kouklaki, Alexandra Tsekeri, Anna Gialitaki, Kyriakoula Papachristopoulou, Panagiotis-Ioannis Paptis, Bernhard Mayer, Claudia Emde, Silke Groß, Eleni Marinou, Vasilis Amiridis, Stelios Kazadzis, Dust Aerosol and Water Vapor Radiative Effects: A Multi-Campaign Analysis of ASKOS and ORCESTRAPERCUSSION Over the Atlantic

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- C176. Dimitris Balis, Stelios Kazadzis, Vassilis Amiridis, Arnoud Apituley, Holger Baars, Alexandru Dandocsi, Jean-Philippe Putaud, Kristina Höhler, Gianluigi Liberti, Franco Marenco, Eleni Marinou, Doina Nicolae, Nikolaos Papagiannopoulos, Lucas Pfitzenmaier, Alejandro Rodriguez-Gomez, Kerstin Stebel, Michael Sicard, Tijnl Verhoelst, Ulla Wandinger, Robert Wegener, Activities of the Aerosol Clouds and Trace gases European Research Infrastructure (ACTRIS) Expert Group on Satellite Cal/Val
- C177. Dimitra Kouklaki, Alexandra Tsekeri, Anna Gialitaki, Bernhard Mayer, Claudia Emde, Silke Gross, Eleni Marinou, Vassilis Amiridis, Stelios Kazadzis, Radiative Effects of Dust Aerosols and Water Vapor During the ORCESTRAS Campaign Over the Atlantic
- C178. K. Papachristopoulou, S. Kazadzis, A. Hueni, V. Amiridis, A. Moustaka, A. Karanikolas, E. Marinou, D. Kouklaki, Use of state of the art spectral solar radiation and aerosol measurements for EarthCare validation

EarthCARE Science and Validation Workshop 2025, Tokyo, Japan, Dec 1-5, 2025

- C179. Alexandra Tsekeri, Stella Girtsou, George Giannopoulos, Dimitra Kouklaki, Ioanna Tsikoudi, Dimitra Karkani, Eleni Marinou, Angelos Georgakakis, Bernhard Mayer, Stelios Kazadzis, Kyriakoula Papachristopoulou, Anna Gialitaki, Florian Ewald, Silke Groß, Charalampos Kontoes, Vassilis Amiridis. Optimising 3D RT EarthCARE products using geostationary observations and AI, for climate research and solar energy applications
- C180. Kyriaki Papachristopoulou, Stelios Kazadzis, Dimitris Balis, Bernhard Mayer, Alkiviadis Bais, Andreas Hüni, Marvin Wagner, Dimitra Kouklaki, Georgia Charalampous, Andreas Kazantzidis, Vassilis Amiridis, Aikaterini Garane, Kelly Voudouri, Georgia Peletidou, Dimitris Karagkiozidis, Natalia Kouremeti, Angelos Karanikolas, Anna Moustaka, Yannis Gschwind, Eleni Marinou, Alexandra Tsekeri, Anna Gialitaki, Rodanthe-Elisavet Mamouri, Validation of EarthCARE products based on radiative closure experiments using State-of-the-Art spectral solar and aerosol measurements
- C181. E. Marinou, K.A. Voudouri, I. Tsikoudi, P. Paschou, D. Kouklaki, M. Tschla, A. Karipis, G. Peletidou, K. Michailidis, L. Pfitzenmaier, K. Papachristopoulou, S. Gross, M. Wirth, Dave Donovan, A. Bataglia, P. Kollias, S. Mashon, E. O Connor, D. Balis, S. Kazadzis, and V. Amiridis. Validation of EarthCARE Aerosol, Cloud, and Synergistic Products within ACROSS Activities

EGU conference, Vienna, May, 2026

- C182. Nikolaos Papadimitriou, Ilias Fountoulakis, Kostas Douvis, Stergios Misios, Antonis Gkikas, Stelios Kazadzis, Andreas Kazantzidis, and Christos S. Zerefos, Projections of PV energy production in the Eastern Mediterranean and Middle East during the 21st century: Assessing the role of atmospheric aerosols
- C183. Stelios Kazadzis and the RACE ECV Thessaloniki Campaign Team, Assessing aerosol impacts on EarthCARE radiative closure using spectral radiation observations
- C184. Kevin Kilchhofer, Kyriaki Papachristopoulou, Manouk Geurts, Timofei Sukhodolov, and Stelios Kazadzis, Effect of stratospheric aerosol injection scenarios on surface irradiation and solar energy production
- C185. Yannis Gschwind, Kyriakoula Papachristopoulou, and Stelios Kazadzis, Validation of the EarthCARE ACM_RT product using surface solar irradiance measurements from BSRN stations and modeled values from CAMS.
- C186. Miguel Huerta Gómez, Alkiviadis Bais, Alberto Redondas, Daniela Meloni, Ilias Fountoulakis, Alcide di Sarra, Katerina Garane, Stelios Kazadzis, and Martin Wild, Dust optical properties in the UV
- C187. Kyriakoula Papachristopoulou, Alexandra Tsekeri, Dimitra Kouklaki, Anna Gialitaki, Claudia Emde, Bernhard Mayer, Howard W. Barker, Jason N.S. Cole, Zhipeng Qu, Meriem Kacimi, Vassilis Amiridis, Eleni Marinou, and Stelios Kazadzis, Do 1D and 3D radiative transfer estimates of aerosol direct radiative effects differ? A sensitivity study using realistic cloudy EarthCARE scenes
- C188. Anna Moustaka, Antonis Gkikas, Stavros-Andreas Logothetis, Johannes Flemming, Samuel Rémy, Melanie Ades, Kleareti Tourpali, Vassilis Amiridis, and Stelios Kazadzis, Impact of Satellite Aerosol Assimilation on AOD Representation and Long-Term Trends in CAMS Reanalysis
- C189. Benjamin Torres, Oleg Dubovik, Carlos Toledano, David Fuertes, Masahiro Momoi, Stelios Kazadzis, Thierry Marbach, Elena Lind, Roberto Roman, Manuel Veloso Varela, and Africa Barreto, Inferring aerosol optical depth at unmeasured wavelengths from ground-based spectral photometer data: uncertainty-consistent regression, sensitivity tests, and application to real data
- C190. Georgia Charalampous, Konstantinos Fragkos, Ilias Fountoulakis, Kyriaki Papachristopoulou, Argyro Nisantzi, Diofantos Hadjimitsis, and Stelios Kazadzis, Evaluation of the Cyprus UV Index (UVI) Forecasting System Over One Year of Observations: Assessing the Impact of Ozone and Aerosols
- C191. Athina Savva, Stelios Kazadzis, Christodoulos Biskas, Georgia Charalampous, Kyriaki Papachristopoulou, Maria Poutli, Dimitra Kouklaki, Dimitrios Balis, Argyro Nisantzi, Diofantos Hadjimitsis, and Rodanthe-Elisavet Mamouri, Evaluation and Intercalibration

of Various Low-Cost Sun-Photometers During the RACE-EarthCARE Validation Experimental Field Campaign in Thessaloniki, Greece

- C192. Dimitra Kouklaki, Alexandra Tsekeri, Anna Gialitaki, Bernhard Mayer, Silke Groß, Martin Wirth, Claudia Emde, Eleni Marinou, Stelios Kazadzis, and Vassilis Amiridis, Quantifying three-dimensional radiative transfer effects of clouds using EarthCARE observations and collocated airborne data
- C193. Nadia Kairaktidi, Stavros-Andreas Logothetis, Georgios Kosmopoulos, Panagiotis Ioannidis, Stelios Kazadzis, Natalia Kouremeti, Alexandros Papayannis, and Andreas Kazantzidis, Retrieval of Aerosol Optical Properties from Spectral Solar Irradiance Using Radiative Transfer Modelling in Mountain and Coastal Environments
- C194. Angelos Karanikolas, Natalia Kouremeti, Africa Barreto, Carlos Toledano, Philip Goloub, Julian Gröbner, and Stelios Kazadzis, AOD long term comparisons of CIMEL and PFR measurements at the ACTRIS sun-photometer calibration sites
- C195. Angelos Georgakis, Rizos Chadoulis, Stelios Kazadzis, Kyriaki Papachristopoulou, David Casali, and Charalampos Kontoes, Assessing Aerosol Impact on Digital Twin Solar Irradiance Forecasts and on PV Power Prediction
- C196. Natalia Kouremeti, Stelios Kazadzis, Julian Gröbner, Gregor Hülsen, Angelos Karanikolas, Miguel Huerta, and Saulius Nevas, Homogenization activities of ground-based aerosol optical depth measurements within WMO Filterradiometers Campaign (FRC-VI)
- C197. Rizos-Theodoros Chadoulis, John Chaniotis, Aggelos Georgakis, Stelios Kazadzis, Charalambos Kontoes, Anastasios-Christos Kontogiannopoulos, Kyriaki Papachristopoulou, Konstantinos Passadis, Theodora Papadopoulou, Platon Patlakas, David Purnell, Christos Stathopoulos, Aspasia Trevlaki, Assessing energy drought risks for renewable energy systems in the mediterranean using cams and c3s, 2026 IEEE International Geoscience and Remote Sensing Symposium, 9 - 14 August 2026, Washington, D.C., USA

IOP published

G Charalampous, K Fragkos, A Nisantzi, I Fountoulakis, K Papachristopoulou, D Hadjimitsis and S Kazadzis, Preliminary Evaluation of The Cyprus Erythemal Irradiance Forecasting System, IOP Conf. Ser.: Earth Environ. Sci. 1522 012038DOI 10.1088/1755-1315/1522/1/012038, 2025

Angelos Karanikolas, Benjamin Torres, Marcos Herreras Giralda, Masahiro Momoi, Natalia Kouremeti, Julian Gröbner, Lionel Doppler and Stelios Kazadzis, Retrieval of aerosol properties from direct solar irradiance data with high temporal resolution, IOP Conf. Ser.: Earth Environ. Sci. 1522 012012DOI 10.1088/1755-1315/1522/1/012012, 2025

Dimitra Kouklaki, Ilias Fountoulakis, Stelios Kazadzis, Ioannis-Panagiotis Raptis, Andreas Kazantzidis, Apostolos Kapoulas, Kyriakoula Papachristopoulou, Nikolaos Papadimitriou, Vassilis Amiridis, Christos S. Zerefos, The Effect of Atmospheric Variability in Measured Spectral Ultraviolet Radiation in Athens, Greece, During the ASPIRE Campaign, IOP Conf. Ser.: Earth Environ. Sci. 1522 012037DOI 10.1088/1755-1315/1522/1/012037, 2025

Ilias Fountoulakis, Katerina Garane, Kostas Eleftheratos, Dimitra Kouklaki, Apostolos Kapoulas, Alkiviadis Bais, Nikolaos Papadimitriou, Konstantinos Fragkos, Kyriakoula Papachristopoulou, Stelios Kazadzis, 20-year trends and variability of the UV index over Athens and Thessaloniki, Greece from measured and reconstructed time series, IOP Conf. Ser.: Earth Environ. Sci. 1522 012036DOI 10.1088/1755-1315/1522/1/012036, 2025

Conference publications/presentations (abstracts/posters, 75)

1. Bais, A. F., B. G. Gardiner, H. Slaper, P. J. Kirsch, S. Kazadzis, M. Blumthaler, C. Brogniez, P. Eriksen, D. Gillotay, W. Josefsson, B. Kjeldstad, T. Koskela, F. Kuik, K. Leszczynski, R.L. McKenzie, A. Redondas, H. A. J. M. Reinen, G. Seckmeyer, T. Svenoe, D. I. Wardle, A. R. Webb, P. Weihs, W. Allabar, G. Bernhard, M. Gay, J. Groebner, M. Huber, P. V. Johnston, J.-E. Karlsson, J. B. Kerr, M. Kotkamp, J. Manzano, D. Masserot, C. Meleti, E. Pachart, T. Persen, G. Rengarajan, E. Saarinen, R. Schmitt, J. Schreder, R. Tax, T. M. Thorseth, R. Visuri, B. Walravens, and W. Wauben, "Results from comparisons of global solar UV spectra measured during the SUSPEN intercomparison campaign", European Conference on Atmospheric UV Radiation, Helsinki, Finland, 29 June - 2 July, 1998.
2. Bais, A.F., M. Blumthaler, S. Kazadzis, H. Slaper, C. Brognier, P. Eriksen, B.G. Gardiner, D. Gillotay, W. Josefsson, B. Kjeldstad, T. Koskela, F. Kuik, K. Leszczynski, R.L. Mckenzie, A. Redondas, H.A.J.M. Reinen, G. Seckmeyer, T. Svenoe, D.I. Wardle, A.R. Weeb, P. Weihs, W. Allabar, G. Bernhard, M. Gay, J. Groebner, M. Huber, P.V. Johnston, J.E. Karlsson, J.B. Keer, P.J. Kirsch, M. Kotkamp, J. Manzano, D. Masserot, C. Meleti, E. Pachart, T. Persen, G. Rengarajan, E. Saarinen, R. Schmitt, J. Schreder, T.M. Thorseth, R. Visuri, B. Walravens and W. Wauben, The effect of cosine response on global solar UV spectra measured during the SUSPEN intercomparison campaign. European Conference on atmospheric UV radiation , Helzinki (Finland), June 29-July 2, 1998.
3. Kazadzis S., A. F. Bais, D. Balis, C. S. Zerefos, M. Blumthaler, "Simulation of spectral downwelling actinic flux using a Brewer spectrophotometer", European Conference on Atmospheric UV Radiation, Helsinki, Finland, 29 June - 2 July, 1998.

4. Bais A.F., A. Kazantzidis, S. Kazadzis, D. Balis, C.S. Zerefos and C. Meleti, Effects of aerosol optical depth and single scattering albedo on surface UV irradiance, in Ultraviolet Ground- and Space-based Measurements, Models, and Effects, proceedings of SPIE, San Diego 30 July – 1 August 2001, Vol. 4482, 15-22, 2002.
5. Balis, D., V. Amiridis, C. Zerefos, C. Meleti, S. Kazantzidis, S. Kazadzis, A. Bais, A. Papayannis, and G. Chourdakis, The effect of aerosols on the UV Irradiance at the earth's surface. Lidar and irradiance measurements during EARLINET, in 21st International Laser Radar Conference, July 8-12, Quebec, Canada, p365-368, 2002.
6. A. Bais, M. Blumthaler, A. Webb, C. Topaloglou, B. Schallard, J. Schreder, A. Kazantzidis, S. Kazadzis, R. Schmitt, S. Tiel, "Actinic flux determination from measurements of irradiance (ADMIRA): results from the experimental and monitoring campaign". Proceedings Symposium 2002, EUROTRAC-2, Transport and chemical transformation in the troposphere, 2002, P. Midgley, M. Reuther, Editors.
7. Topaloglou C. Kazadzis S., Kazantzidis A., Bais A. "UV spectral measurements of actinic flux and global irradiance at Thessaloniki". Proceedings Symposium 2002, EUROTRAC-2, Transport and chemical transformation in the troposphere, 2002, P. Midgley, M. Reuther, Editors.
8. Kazadzis S., Kazantzidis A., Topaloglou C., Bais A. "UV actinic flux retrieval from global and direct spectral irradiance measurements". Proceedings Symposium 2002, EUROTRAC-2, Transport and chemical transformation in the troposphere, 2002, P. Midgley, M. Reuther, Editors.
9. Balis, D., V. Amiridis, C. Zerefos, E. Gerasopoulos, M. Andreae, P. Zanis, A. Kazantzidis, S. Kazadzis, and A. Papayannis, Raman lidar and sunphotometric measurements of aerosol optical properties during a biomass burning episode over Thessaloniki, Greece, in Journal of Aerosol Science, European Aerosol Conference, August 31 - September 5, Madrid, Spain, 34, p1107-1108, 2003.
10. Balis, D., V. Amiridis, A. Arola, S. Kazadzis, and A. Bais, Characterization of the aerosol type using simultaneous measurements of the lidar ratio and the single scattering albedo during EARLINET (2001-2004), in Geophysical Research Abstracts Volume 7, European Geosciences Union, General Assembly, April 24-29, Vienna, Austria, EGU05-A-03039, 2005.
11. C. Meleti, A. F. Bais, S. Kazadzis, N. Kouremeti, "Twenty years of aerosol optical depth in the UV-B range at Thessaloniki, Greece", EGU, General Assembly, Vienna 22-27 April, 2005
12. A. Bais, A. Kazantzidis, S. Kazadzis and N. Kouremeti, "Application of a model derived cosine correction method on Brewer spectral measurements" EGU, General Assembly, Vienna 22-27 April, 2005
13. A. Arola, S. Kazadzis, N. Krotkov, A. Bais, J. Gröbner and J. Herman, "Assessment of TOMS UV bias due to the absorbing aerosols", EGU, General Assembly, Vienna 22-27 April, 2005
14. C. Topaloglou, S. Kazadzis, A. F. Bais, M. Blumthaler, D. Balis, B. Schallhart. "Retrieval of Photolysis Frequencies of Ozone, Nitrogen Dioxide and Formaldehyde from UV Irradiance Measurements", EGU, General Assembly, Vienna 22-27 April, 2005
15. Garane A., Bais A., Meleti C., Kazantzidis A., Kazadzis S., UV measurements in Greece, Hellenic Meteorological conference Athens 11-12 November, 2005, Athens, Greece
16. Koukouli, M., D. Balis, A. Bais, V. Amiridis, E. Giannakaki, S. Kazadzis, N. Kouremeti, O. Torres, OMI/Aura Aerosol Index and ground-based Brewer observations of Aerosol Optical Depth as scientific tools for the analysis of aerosol concentrations over Eastern Europe, in Geophysical Research Abstracts Volume 8, European Geosciences Union, General Assembly, April 02-07, Vienna, Austria, EGU06-A-03312, 2006.
17. M. Koukouli, Balis D., Bais A., Amiridis V., Kazadzis S., Georgoulas A. "Analysis of Physical characteristics of Aerosols over Thessaloniki using ground based observations and satellite measurements". 8th Panhellenic conference of Meteorology and Atmospheric Physics, Athens May 24-26, 2006.
18. Matsoukas C., Kazadzis S., Kazantzidis A., Hatzianastasiou N., Vardavas I., Bais A., "Comparison of calculated UV irradiance values from FORTH model with spectral measurements and results from LibRadTran model". 8th Panhellenic conference of Meteorology and Atmospheric Physics, Athens May 24-26, 2006.
19. Papayannis, A, C. Y. Fu, Z. Huaqing, V. Amiridis, G. Chourdakis, G., Georgoussis, C. Pérez, H. B. Chen, P. Goloub, R. E. Mamouri, S. Kazadzis, D. Paronis, G. Tsaknakis, J.M. Baldasano, Extra-ordinary dust event over beijing, china during april 2006: lidar, sun photometric, satellite observations and model validation, in Proceedings of the International Union of Geology and Geodesy (IUGG), XXIV General Assembly, July 2-13, Perugia, Italy, 2007.
20. Amiridis, V., D. Balis, E. Giannakaki, S. Kazadzis, A. Arola, A. Papayannis, Characteristics of biomass burning aerorols over SE Europe determined from Lidar and Sunphotometer measurements, in 4th Workshop on Lidar Measurements in Latin America, June 17-23, Ilhabela, São Paulo, Brazil, 2007.
21. N. Kouremeti, A. Bais, S. Kazadzis, M. Blumthaler, R. Schmitt: A CCD spectrometer for direct solar irradiance and sky radiance measurements. UV. Pages: 55-56, UV conference celebrating 100 years of UV research, Davos, Switzerland 18-20 September, 2007
22. A. Bais, A. Kazantzidis, S. Kazadzis, N. Kouremeti, M. Blumthaler, B. Schallhart, A. Webb, R. Kift Changes in surface radiation over Greece caused by the total solar eclipse of 29 March 2006, pages: 89-90, , UV conference celebrating 100 years of UV research, Davos, Switzerland 18-20 September, 2007
23. Amiridis, V., S Kazadzis, D Balis, A Bais, and C Zerefos, LIDAR and sunphotometric measurements of aerosol optical properties over Thessaloniki, Greece, in 1st International Conference: From Deserts to Monsoons, June 1-6, Crete, Greece, 2008.

24. Amiridis, V., S. Kazadzis, A.F. Bais and I.A. Daglis, Establishment of a radiometric aerosol station for satellite validation at Athens, Greece, in 1st International Conference: From Deserts to Monsoons, June 1-6, Crete, Greece, 2008.
25. Kokkalis, P., E. Gerasopoulos, V. Amiridis, R.E. Mamouri, M. Koukouli, S. Kazadzis, and A. Papayannis, Climatology of aerosol optical depth over Athens, Greece using ground-based (LIDAR, Multi-filter Radiometer) and satellite data (MODIS), in 1st International Conference: From Deserts to Monsoons, June 1-6, Crete, Greece, 2008.
26. Kokkalis, P., E. Gerasopoulos, V. Amiridis, R.E. Mamouri, G. Tsaknakis, M. Koukouli, S. Kazadzis and A. Papayannis Study of the aerosol optical depth variability over Athens, Greece using ground-based (lidar, multi-filter radiometer) and satellite data (MODIS), in Journal of Aerosol Science, European Aerosol Conference, August 24-29, Thessaloniki, Greece, 2008.
27. Kazadzis, S., A. Bais, A. Tanskanen, D. Balis, M. Zebila, N. Kouremeti, A. Kazantzidis, E. Giannakaki, C. Meleti, V. Amiridis and J. Herman, OMI campaign: The effect of spatial and temporal aerosol variability on OMI solar irradiance products, in Journal of Aerosol Science, European Aerosol Conference, August 24-29, Thessaloniki, Greece, 2008.
28. Koukouli, M.E., S. Kazadzis, V. Amiridis, C. Ichoku and D. Balis, Discussions on the satellite-derived aerosol optical depth over a variety of sites in the Southern Balkan region as an indicator of local air quality, in Proceedings of the IX Conference of Meteorology-Climatology and Atmospheric Physics, May 28-31, Thessaloniki, Greece, 2008.
29. C. Meleti, S. Kazadzis, A. Bais, M. E. Koukouli, C. Ichoku and N. Kouremeti, A study on the long term aerosol changes and their effects on solar radiation measured at Thessaloniki, Greece European Aerosol Conference August 15-30, 2008, Thessaloniki, Greece
30. A. Bais, M. Blumthaler, A. Webb, G. Seckmeyer, S. Rapsomanikis, T. Ruhtz, R. Schmidhauser, J. Herman, D. Balis, S. Kazadzis, B. Schallard, R. Kift, A. Cede, D. Pissula, M. Wiegner, A. Kazantzidis, N. Kouremeti, E. Giannakaki and A. Kelektoglou Effects of aerosols on UV radiation: overview of the SCOUT-O3 campaign", European Aerosol Conference August 15-30, 2008, Thessaloniki, Greece
31. Meinander O, Kazantzis S, Kontu A, Aarva A, Manninen T, Paatero J, Kyrö E Diurnal albedo of seasonally melting Arctic snow at wavelengths of UV and visible. A31A-0076 presented at the AGU Fall Meeting 2009, 14-18 December, San Francisco, USA. 2009
32. M. M. Zempila, A. Kazantzidis, A. F. Bais, S. Kazadzis, P. N. den Outer, T. Koskela, and Harry Slaper, Calculations of the Human Vitamin D Exposure from UV Spectral Measurements at Three European Stations 7th International Conference of the Balkan Physical Union; Alexandroupolis; 9 September 2009 through 13 September 2009; Code 79345, Volume 1203, 2010, Pages 795-800
33. Mamouri, R.E., A. Papayannis, P. Kokkalis, G. Tsaknakis, V. Amiridis, and S. Kazadzis, Follow up of the Eyjafjallajökull volcano over Athens, Greece in the frame of the EARLINET project, European Geosciences Union, EGU2010, Vienna, Austria, 02-07 May 2010.
34. Amiridis, V., E. Giannakaki, D. Balis, I. Pytharoulis, P. Zanis, D. Melas, S. Kazadzis, E. Gerasopoulos, C. Zerefos, Smoke injection heights from agricultural burning in Eastern Europe as seen by CALIPSO, 25th International Laser radar Conference, Saint-Petersburg, Russia, 05-09 July 2010.
35. V. Aaltonen, E. Rodriguez, S. Kazadzis, L. Sogacheva, A. Arola, G. de Leeuw, Characteristics of the aerosol climatology over Finland based on the optical columnar properties, Geophysical Research Abstracts Vol. 12, EGU2010-15750, 2010
36. S. Kazadzis, J. Grobner, A. Arola, V. Amiridis, Aerosol single scattering albedo retrieval from global UV irradiance measurements, International Aerosol Conference, Helsinki 29 August – 3 September 2010
37. E. Gerasopoulos P. Kokkalis, S. Kazadzis, V. Amiridis, K. Eleftheriadis, C. Zerefos, Christos, Aerosol Optical Depth (AOD) variability over Athens, Greece, International Aerosol Conference, Helsinki 29 August – 3 September 2010
38. V. Amiridis, J. Grobner, S. Nyeki, E. Giannakaki, D. Muller, S. Kazadzis, P. Kokkalis, N. Kouremeti, D. Balis, A. Papayannis, I. Keramitsoglou, I. Daglis, Precision Filter Radiometer measurements and aerosol microphysical retrievals, during THERMOPOLIS 2009, International Aerosol Conference, Helsinki 29 August – 3 September 2010
39. A. Poupkou, E. Katragkou, M. Koukouli, S. Kazadzis, K. Markakis, T. Giannaros, D. Balis, N. Daskalakis, M. Kanakidou, D. Melas, Evaluation of simulated PM10 concentrations over Greece using gridded satellite measurements, International Aerosol Conference, Helsinki 29 August – 3 September 2010
40. E. Marinou, V. Amiridis, S. Kazadzis, D. Kopania, A. Papayannis, Aerosol Optical Depth in East Mediterranean using MODIS and CALIPSO satellite retrievals, European Aerosol Conference, Manchester UK, 5-9 September, 2011
41. V. Kotroni, S. Kazadzis, K. Lagouvardos, V. Amiridis, E. Gerasopoulos Influence of wind field patterns on aerosol optical depth over Athens and the Aegean sea, European Aerosol Conference, Manchester UK, 5-9 September, 2011
42. Gerasopoulos, E., M. Gratsea, S. Kazadzis, V. Amiridis, M. Vrekoussis, E. Liakakou, Dust impact on urban air quality, 6th International Workshop on Sand/Duststorms and associated dustfall, Athens, Greece, 7-9 September 2011.
43. Amiridis, V., E. Marinou, E. Gerasopoulos, S. Kazadzis, M. Gratsea, E. Liakakou, R. Mamouri, P. Kokkalis, A. Papayannis, N. Kouremeti, E. Giannakaki, D. Balis, A. Bais, ACEMED experimental campaign for the evaluation of CALIPSO's aerosol classification scheme over Greece, 6th International Workshop on Sand/Duststorms and associated dustfall, Athens, Greece, 7-9 September 2011.
44. E. Gerasopoulos, N. Mihalopoulos, S. Kazadzis, M. Vrekoussis, G. Kouvarakis and N. Kouremeti Influence of aerosol optical properties on NO2 and O1D photolysis rates measured at Eastern Mediterranean European Aerosol Conference, Manchester UK, 5-9 September, 2011

45. S. Kazadzis, V. Amiridis, E. Gerasopoulos and A. Arola, Aerosol absorption retrieval at ultraviolet wavelengths in a complex environment, European Aerosol Conference, Manchester UK, 5-9 September, 2011
46. A. Heikkilä, T. Koskela, K. Lakkala, P. Kärhä, S. Syrjälä, H. Lemmetyinen, U. Feister, N. Kouremeti, A. Bais, S. Kazadzis, J.M. Vilaplana, J.J. Rodriguez, C. Guirado, and E.Cuevas, New approaches in assessment of solar UV exposure ageing materials, EGU General Assembly Vienna, 2012
47. Vassilis Amiridis, U. Wandinger, E. Marinou, S. Kazadzis A. Tsekeri, E. Giannakaki, R.E. Mamouri, P. Kokkalis, T. Herekakis, A. Papayannis, D. Balis, G. Pappalardo, Lidar Climatology of Vertical Aerosol Structure for Space-Based Lidar Simulation Studies, 26th international laser radar conference at Porto Heli, Greece, 25th - 29th June 2012
48. O. Meinander, S. Kazadzis, A. Arola, R. Kivi, A. Kontu, H. Suokanerva, E. Kyrö, V. Aaltonen, T. Manninen, A. Riihelä, J.-L. Roujean, and O. Hautecoeur, About UV Albedo of Seasonal Snow at Sodankylä, IRS2012-542-12, International Radiation Symposium 2012, Dahlem Cube, Berlin, Germany, 06 – 10 August 2012
49. Gkikas, A., N. Hatzianastassiou, S. Kazadzis, V. Amiridis, S. Basart, E. Marinou, M. Taylor, J.M. Baldasano, Optical properties and radiative impact of intense dust outflows in the Mediterranean basin, based on a synergistic use of satellite, ground-based measurements and modeling, European Aerosol Conference (EAC), Granada, Spain, 2-7 September 2012.
50. Taylor, M., S. Kazadzis, A. Tsekeri, A. Gkikas and V. Amiridis, Calculation of aerosol microphysical properties by neural network inversion of ground-based AERONET data, European Aerosol Conference (EAC), Granada, Spain, 2-7 September 2012.
51. K. Eleftheratos, S. Kazadzis, T. Koskela, K. Lakkala, C. Zerefos, Ozone and spectroradiometric UV changes in the past 20 years at high Latitudes IRS2012-442 International Radiation Symposium 2012, Dahlem Cube, Berlin, Germany, 06 – 10 August 2012
52. Amiridis V., Kazadzis S., Marinou E., Giannakaki E., Mamouri R., Kokkalis P., Tsekeri A., Herekakis T., Wandinger U., Pappalardo G., Papayannis A., Balis D., Lidar Climatology of Vertical Aerosol Structure for Space-Based Lidar Simulation Studies (LIVAS), ESA Advances in Atmospheric Science and Applications Conference, Bruges, 18-22 June 2012.
53. Amiridis V., Kazadzis S., Gerasopoulos E., Marinou E., Tsekeri A., LeRille O., 5-year CALIPSO climatology of Saharan dust over North Africa and Europe, European Geosciences Union, Vienna, 7-12 April 2013.
54. Kazadzis S., Amiridis V., Kosmopoulos P., Marinou E., Tsekeri A., Impact of different aerosol types on the spectral solar radiation at different heights over the Mediterranean using the CALIPSO aerosol product, European Geosciences Union, Vienna, 7-12 April 2013.
55. Amiridis V., U. Wandinger, E. Marinou, A. Tsekeri, E. Giannakaki, S. Kazadzis, A. Gkikas and A. Ansmann, Optimization of CALIPSO dust retrievals over Europe and North Africa, International Conference on Remote Sensing and Geoinformation, Paphos, 8-10 April 2013.
56. Amiridis V., Marinou E., Tsekeri A., Giannakaki E., Mamouri R.E., Kokkalis P., Kazadzis S., Gerasopoulos E., Herekakis T., Papayannis A., Balis D. S., Lidar climatology of Vertical Aerosol Structure (LIVAS): a 3-dimensional global aerosol database, Climatology and Atmospheric Physics COMECAP 2014, Crete 28-31 May 2014
57. K. Lagouvardos, V. Kotroni, S. Kazadzis, T. Giannaros, A. Karagiannidis, E. Galanaki, E. Proestakis, The TALOS project: climatology, nowcasting and forecasting of lightning activity 2015, 9th HyMeX workshop 21-25 September, Mykonos, Greece.
58. E. Proestakis, S. Kazadzis, K. Lagouvardos, V. Kotroni, E. Marinou, V. Amiridis Aerosol types and lightning activity over the Mediterranean Sea, 9th HyMeX Workshop, 21-25 September 2015, Mykonos, Greece.
59. P.I. Raptis, S. Kazadzis, K. Eleftheratos, P.G. Kosmopoulos, V. Amiridis, 2015. OMI Total Ozone Column Product validated against UVMFR retrievals. ATMOS 2015, Herakleion, Greece, 8-12 June 2015.
60. P.G. Kosmopoulos, M. Taylor, S. Kazadzis, 2015. 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.
61. M. Taylor, P.G. Kosmopoulos, S. Kazadzis, I. Keramitsoglou, C.T. Kiranoudis, 2015. A machine learning approach to derive surface solar irradiance spectra directly from satellite. 15th European Meteorological Society (EMS) Annual Meeting & 12th European Conference on Applications of Meteorology (ECAM), Sofia, Bulgaria, 7-11 September 2015.
62. M. Zempila, M. Taylor, M. Koukouli, A. Bais, A. Arola, I. Fountoulakis, N. Kouremeti, S. Kazadzis, D. Balis. Evaluation of OMI Surface UV Irradiances against NILU-UV Measurements: in preparation for TROPOMI/S5P. ACVE 2016: Atmospheric Composition Validation and Evolution, ESRIN Frascati, Italy, 18-20 October 2016
63. M. Gratsea, T. Bösch, P. Kokkalis, A. Richter, M. Vrekoussis, S. Kazadzis, A. Papayannis, V. Amiridis, N. Mihalopoulos, E. Gerasopoulos, Retrieval of aerosol vertical profiles over Athens using MAX-DOAS measurements, 11th International Conference on Air Quality – Science and Application Air Quality, Barcelona, 12-16 March, 2018
64. S. Basart, S. Nckovic, V. Amiridis, P. Dagsonn, H. El Askary, A. Durant, S. Kazadzis, L. Mona, A. Monteiro, A. nemuc, I. tegen, A. Vucovic, B. Weinzeirl, G. Varga, E. Terradelas, InDust: International Network to encourage the use of monitoring and forecasting dust products, The 2nd IceDust Workshop, Reykjavik, February 14th, 2018
65. Natalia Kouremeti, Stelios Kazadzis, Mauro Mazzola, Georg Hansen, Kerstin Stebel, Julian Gröbner Development and aerosol optical depth measurements with a Lunar photometer at Ny-Ålesund, Polar conference 2018, Davos June 2018

66. S. Kazadzis, Natalia Kouremeti, Georg Hansen, Kerstin Stebel, Veijo Aaltonen, Edith Rodriguez, Stephan Nyeki Long term aerosol optical depth measurements in polar regions from the GAW-PFR network Long term aerosol optical depth measurements in polar regions from the GAW-PFR network, Polar conference 2018, Davos, June 2018
67. Kosmopoulos, P.G., Kazadzis, S., and Kontoes, C.: Access to solar energy data through the GEOSS portal. 3rd GEO Data Providers Workshop. Frascati, Italy, 2-4 May, 2018.
68. 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.
69. 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.
70. 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.
71. Antonis Gkikas, Emmanouil Proestakis, Eleni Marinou, Vassilis Amiridis, Stelios Kazadzis and Nikos Hatzianastassiou., A synergistic use of passive and active satellite retrievals for dust identification at global scale, 14th International Conference of Meteorology, Climatology and Atmospheric Physics, COMECAP 2018, Alexandroupolis, Greece, 15 – 17 October, 2018
72. Ilias Fountoulakis, Athanasios Natsis, Nikolaos Siomos, Theano Drosoglou, Alkiviadis Bais, Dimitrios Balis and Stelios Kazadzis. Measurements of the aerosol single scattering albedo in the UV over Thessaloniki, Greece, 14th International Conference of Meteorology, Climatology and Atmospheric Physics, COMECAP 2018, Alexandroupolis, Greece, 15 – 17 October, 2018
73. G. Pinardi, C. Vigouroux, B. Langerock, M. De Mazière, J. Granville, S. Compernelle, J.C. Lambert, F. Hendrick, M. Van Roozendael, I. De Smedt, H. Eskes, A.Cede, M. Tiefengraben, A. Bais, H. Irie, T. Wagner, A. PETERS, C. Rivera, F. Hendrick, M. Van Roozendael, Y. Kanaya, C. Liu, S. Kazad-zis, J. Hovila, A. Richter, F. Wittrock, K. Strong, A. Pazmino, JP. Pommereau, M. Yela, O. Puentedura, Validation of TROPOMI NO₂ and HCHO vertical columns with UV-Vis DOAS and FTIR instruments, ATMOS, ESA, Salzburg, Austria 2018
74. Papachristopoulou, K., Fountoulakis, I., Kosmopoulos, P., Raptis, P. I., Mamouri, R.-E., Nisantzi, A., Witthuhn, J., Bühl, J., Gkikas, A., Hadjimitsis, D. G., Kontoes, C., and Kazadzis, S.: Clouds and aerosol effects on solar energy in Cyprus, EMS Annual Meeting 2021, online, 6–10 Sep 2021, EMS2021-314, <https://doi.org/10.5194/ems2021-314>, 2021.
75. Harju, Ikonen, Karha, Kouremeti, Huelsen, S. Kazadzis, J. Groebner, Angular responsivity measurements of optical radiometers for estimating uncertainties of atmospheric aerosol measurements related to FOV effects, 20th International Metrology Congress, May, 2021
76. Herman G.J. Smit, Gao Chen, Julian Groebner, Bradley Hall, Stelios Kazadzis, Alberto Redondas, Martin Steinbacher, Joele Viallon, Roeland Van Malderen, Christoph Zellweger, Shinya Takatsuji, Robert Wegener, Alfred Wiedensohler, Chris Lehman: Uncertainty, Stability and Traceability in Global Monitoring of Atmospheric Composition and the Role of WMO/GAW Central Calibration Facilities – Reality and Plans , Metrology for Climate Action Conference, online, 26-30 September, 2022.

2024 IEEE International Geoscience and Remote Sensing Symposium, Athens, July 2024

77. Eleni Marinou, Vassilis Amiridis, Peristera Paschou, Alexandra Tsekeri, Ioanna Tsikoudi, Kaliopi-Artemis Voudouri, Anna Gialitaki, Maria Tsihla, Kyriaki Papachristopoulou, Dimitra Kouklaki, Iliana Koutsoupi, Elina Giannakaki, Stelios Kazadzis, Dimitris Balis, Kostantinos Michailidis, Georgia Peletidou, Anca Nemuc, Doina Nicolae, Grisa Močnik, Franco Marengo, Maria Kezoudi, Silke Gross, Martin Wirth, Florian Ewald, Ewan O'Connor, Ville Vakkari, Dmitri Moisseev, Pavlos Kollias, Lucia Mona, Nikos Papagiannopoulos, Marco Rosoldi, Rodanthi-Elisavet Mamouri, Dragos Ene, Athina Floutsis, Holger Baars, across mediterranean experiment for the cal/val of the earthcare mission
78. Georgia Charalampous, Konstantinos Fragkos, Andreas Karpasitis, Ilias Fountoulakis, Argyro Nisantzi, Kyriakoula Papachristopoulou, Diofantos Hadjimitsis, Stelios Kazadzis, cyprus erythemat radiation forecasting system (ceryfos)
79. Diofantos hadjimitsis, kyriacos themistocelous, silas michaelides, kyriacos neocleous, chris danezis, nicholas kyriakides, christiana papoutsas, christodoulos mettas, rodanthi mammouri, argyro nisantzi, marios tzouvaras, michalis mavrovouniotes, marinos eliades, kostas fragkos, dante abate, ioannis varvaris, constantinos panayiotou, zampela pittaki, evagoras evagorou, josefina kountouri, georgios leventis, christos theocharides, andreas anayiotos, kyriaki fotiou, thomaida polydorou, christiana filippou, despoina makri, eleftheria kalogirou, georgia charalampous, dragos ene, maria anastasiadou, maria prodrompou, eleni loulli, george melillos, andreas christofe, haris kontoes, mariza kaskara, gunter schreier, thomas krauss, albert ansmann, stelios tzortzis, stelios neophytides, stelios kazadzis, panayiotis philimis, george komodromos, nicos christoforou, Emerging prospects in earth observation for cyprus & the eastern mediterranean, middle east and north africa (emmena) region through the eratosthenes centre of excellence & excelsior h2020 teaming project

80. Charalampos Kontoes, Theodora Papadopoulou, Stelios Kazadzis, George Koutalieris, Christos Stathopoulos, Fotini Salta, Platon Patlakas, Kyriakoula Papachristopoulou, Ilias Fountoulakis, Nikolaos Bartsotas, Anagnostis Delkos, Symeon Symeonidis, Vasileios Sinnis, Copernicus and Destine Platform Ecosystem Opportunities

Monographs/Thesis

- O1. S. **Kazadzis**: "Aerosol climatology at Thessaloniki, Greece" IKY Post doctoral Fellowship, 2007
- O2. S. **Kazadzis**: "Aerosol load in Thessaloniki area from ground based and satellite measurements", Excellence fellowship Research Committee AUTH, 2009
- O3. S. **Kazadzis**: "Validation of Aerosol optical Properties and surface Irradiance measured from Ozone Monitoring Instrument on board of AURA satellite. Final Report EU-FP7-PEOPLE-Marie Curie – Intra European Fellowship, 2009
- O4. S. **Kazadzis**: Aerosol and Cloud Influence on global surface UV irradiance retrieved from satellite sensors, FP7-PEOPLE-2009-RG: Marie Curie Action: "Reintegration Grants", 2013
- S. **Kazadzis**: «Experimental measurements of UV albedo», *Bachelor thesis*, Physics Department, AUTH, 1994.
- S. **Kazadzis**: «Aerosol optical depth retrieval with the aid of direct ultraviolet spectral measurements" *MSc thesis*, Physics Department, AUTH, 1996.
- S. **Kazadzis**: «Advances and applications in ultraviolet spectral measurements", *PhD thesis*, Physics Department, AUTH,, 2000.

Other Publications

- WMO/GAW The Fifth WMO Filter Radiometer Comparison (FRC-V), [GAW Report No. 280](#), 2023
- Hansen, Georg, Kouremeti, Natalia, Gilardoni, Stefania, Stebel, Kerstin, Evangeliou, Nikolaos, Ritter, Christoph, Zielinski, Tymon, Herrero, Sara, Kazadzis, Stelios, Mateos, David, Mazzola, Mauro, Pakszys, Paulina, & Eleftheriadis, Konstantinos. Long-term observations of aerosol optical depth and their relation to in-situ aerosol properties in the Svalbard region (LOAD-RIS). In SESS report 2022 - The State of Environmental Science in Svalbard - an annual report (pp. 44–61). Svalbard Integrated Arctic Earth Observing System. <https://doi.org/10.5281/zenodo.7376140>, 2023
- [WMO/GAW The Fourth WMO Filter Radiometer Comparison \(FRC-IV\), GAW Report No. 231, 2017](#)
- [WMO/GAW Aerosol Measurement Procedures Guidelines and Recommendations 2nd Edition 2016, GAW report no. 227, 2016](#)
- P.G. Kosmopoulos, M. Taylor, S. **Kazadzis**, I. Keramitsoglou, C.T. Kiranoudis, 2015. A brighter future. International Innovation Journal, A Renewable Future 178, pp 102-104
- [Bais, A. F., C. Topaloglou, B., S. Kazadzis, M. Blumthaler, J. Schreder, A. Schmalwieser, D. Henriques and M. Janouch, Report of the LAP/COST/WMO intercomparison of erythemal radiometers, WMO/GAW report No. 141, World Meteorological Organization, Geneva, 1999.](#)
- Grobner, J., S. **Kazadzis**, J. Schreder, A.F. Bais, M. Blumthaler, P. Gorts, T. Koskela, G. Seckmeyer, A. Webb, S. Wuttke, Quality assurance of spectral ultraviolet measurements in Europe through the development of a transportable unit: Report on the site visits 2002, EUR 20991 EN, European Commission, 2002
- Grobner, J., S. **Kazadzis**, J. Schreder, A.F. Bais, M. Blumthaler, P. Gorts, T. Koskela, G. Seckmeyer, A. Webb, S. Wuttke, Quality assurance of spectral ultraviolet measurements in Europe through the development of a transportable unit: Report on the site visits 2003, EUR 20991 EN, European Commission, 2003
- Gröbner, et al., Quality Assurance of Spectral Ultraviolet Measurements in Europe through the development of a transportable unit (QASUME); Report of visits Round 2004, EUR 21398 EN, European Commission, 2004.
- [The Solar Atlas of Egypt, 2018](#)
- Contribution to the [National Climate Observing System report](#), Switzerland. 2025