

# CURRICULUM VITAE

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**Dr. Atmospheric Sciences and Environment**

**ASSISTANT RESEARCHER**

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ΑΚΑΔΗΜΙΑ



ΑΘΗΝΩΝ

Athens | February 2023

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## BIOGRAPHICAL INFORMATION

### A1. Personal information

<b>Name</b>	Antonis Gkikas
<b>Birth:</b>	11 <sup>th</sup> December 1979, Athens, Greece
<b>Nationality:</b>	Greek
<b>Current Position:</b>	Assistant Researcher (Research Centre for Atmospheric Physics and Climatology, Academy of Athens)
<b>Address:</b>	Academy of Athens, Solonos St. 84, 10680, Athens, Greece
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<b>Skype</b>	antonis_gkikas
<b>Web:</b>	<a href="https://react.space.noa.gr/component/content/article.html?id=39&amp;Itemid=101">https://react.space.noa.gr/component/content/article.html?id=39&amp;Itemid=101</a>
<b>Researcher-ID</b>	F-4184-2017
<b>Scopus ID</b>	35757496400
<b>ResearchGate</b>	<a href="https://www.researchgate.net/profile/Antonis-Gkikas">https://www.researchgate.net/profile/Antonis-Gkikas</a>
<b>LinkedIn</b>	<a href="https://www.linkedin.com/in/antonis-gkikas-49b10a72/">https://www.linkedin.com/in/antonis-gkikas-49b10a72/</a>
<b>ORCID</b>	<a href="https://orcid.org/0000-0002-4137-0724">https://orcid.org/0000-0002-4137-0724</a>

### A2. Education

<b>2008-2012</b>	<i>PhD in Atmospheric Sciences and Environment</i>
<b>Institute:</b>	<i>Department of Physics, University of Ioannina</i>
<b>PhD thesis:</b>	<i>Study of aerosol episodes over the broader area of the Mediterranean basin based on contemporary satellite data</i>
<b>Supervisor:</b>	<i>Nikos Hatzianastassiou</i>
<b>Link:</b>	<a href="https://www.didaktorika.gr/eadd/handle/10442/30067">https://www.didaktorika.gr/eadd/handle/10442/30067</a>
<b>2004-2007</b>	<i>MSc in Meteorology, Climatology and Atmospheric Environment</i>
<b>Institute:</b>	<i>Department of Physics, University of Ioannina</i>
<b>MSC thesis:</b>	<i>Study of aerosol optical properties in the broader area of the Mediterranean basin</i>
<b>Supervisor:</b>	<i>Nikos Hatzianastassiou</i>
<b>1999-2004</b>	<i>BSc in Natural Resources and Environmental Engineering</i>
<b>Institute:</b>	<i>Department of Natural Resources and Environmental Engineering, Technological Institute of Crete (Branch of Chania)</i>
<b>BSc thesis:</b>	<i>Atmospheric weather prediction models</i>
<b>Supervisor:</b>	<i>Emmanouil Lekkas</i>

### A3. Positions

2023 – present	Assistant Researcher – Research Centre for Atmospheric Physics and Climatology [Academy of Athens]
2021 – present	Principal Investigator of the ATLANTAS project (H.F.R.I.), [IAASARS/NOA]
2020 – 2022	Postdoctoral Researcher (member of the <a href="#">ReACT team</a> ), [IAASARS/NOA]
2019-2020	Postdoctoral Researcher (member of the ERC D-TECT), [IAASARS/NOA]
2017-2019	Marie Curie Postdoctoral Fellow, [IAASARS/NOA]
2017	Postdoctoral Researcher [IERSD/NOA]
2014-2016	Marie Curie Postdoctoral Fellow, [Earth Sciences Department/BSC]
2012-2014	Postdoctoral Researcher, [Physics Department/University of Ioannina]
2012-2014	External collaborator, [Department of Environment/ University of Aegean]
2012-2013	External collaborator, [IAASARS/NOA]
2012	External collaborator, [IERSD/NOA]
2011-2012	External collaborator, [Department of Chemistry/University of Crete]
2008-2012	PhD candidate, [Laboratory of Meteorology/Physics Department/University of Ioannina]
2003	Meteorologist [Air force military base, Souda, Greece; Practical Training]

## B. RESEARCH

### B1. Expertise fields

- Aerosol optical and microphysical properties based on spaceborne and ground-based retrievals relying on passive and active remote sensing techniques
- Spatiotemporal variability of aerosol loads at regional and global scales
- Aerosol-radiation interactions
- Atmospheric-dust regional models
- Dust impacts on atmospheric processes at short- and long-temporal scales
- Data assimilation of dust observations
- Atmospheric Physics
- Meteorology - Climatology

### B2. Participation in research projects

A/A	Acronym	Funding	Duration	Role
1.	ADD-CROSS	EUMETSAT	2021-2023	<ul style="list-style-type: none"> <li>• WP manager</li> <li>• Evaluation of aerosol and meteorological outputs derived by CAMS and IFS</li> </ul>
2.	NEWTON	ESA	2021-2022	co-PI of the project
3.	ATLANTAS	H.F.R.I.	2021-2024	Principal Investigator
4.	ASKOS	ESA	2021-2022	<ul style="list-style-type: none"> <li>• WP manager (Synthesis and Recommendations)</li> </ul>
5.	CORAL	ESA	2020-2021	<ul style="list-style-type: none"> <li>• WP manager (Assimilation of Aeolus wind profiles in regional numerical weather model)</li> </ul>

6.	EΔBM34	NSRF 2014-2020	2020-2021	Aerosols' impact of the radiation budget of the Earth-Atmosphere system
7.	D-TECT	ERC	2017-2022	Development of a global dust optical depth dataset
8.	VADAM	ESA	2018-2021	Cal/Val of Aeolus L2A products
9.	ACROSS	ESA	2022-2025	<ul style="list-style-type: none"> <li>• Cal/Val of EarthCARE satellite products</li> <li>• Exploitation of EarthCARE satellite products</li> <li>• Upgrade of the ESA-LIVAS dataset</li> </ul>
10.	PANACEA	EU/National	2018-2022	<ul style="list-style-type: none"> <li>• Cal/Val of Aeolus L2A products</li> <li>• Member of the management committee</li> </ul>
11.	inDust	EU (COST)	2017-2021	<ul style="list-style-type: none"> <li>• Development of the <a href="#">dust catalogue</a> including spaceborne and ground-based observations</li> </ul>
12.	DUST-GLASS	H2020-MSCA-IF-2016	2017-2019	Marie Curie Fellow
13.	Meteorological forecasts	NOA	2017	Analysis of desert dust outbreaks
14.	MDRAF	Marie-Curie FP7-PEOPLE-IEF	2014-2016	Marie Curie Fellow
15.	THALIS	NSRF	2012-2014	Study of optical and microphysical aerosol properties in the broader Greek area
16.	LIVAS	ESA	2012	Processing of satellite data
17.	DEUCALION	NSRF	2012-2014	Development of educational tools, related to earthquakes and natural disasters, for students in elementary schools
18.	LIFE + PM3	EU	2011-2012	Analysis of aerosol satellite data in the Eastern Mediterranean
19.	ACI-UV	EU	2011-2012	Analysis of satellite data for atmospheric constituents
20.	EPIRUS-AEROSOL	University of Ioannina	2008-2009	Analysis of aerosol optical properties in the NW Greece
21.	RISKMED	Intereg IIIB	2006-2008	Development of an early weather warning system in NW Greece

## TEACHING EXPERIENCE

Period	Course	Course program	Institution
2018-2019	<b>Fundamentals of remote sensing</b>	<a href="#">MSc SSTA</a>	UoP/NOA
<b>Description</b>	<ul style="list-style-type: none"> <li>Principles of remote sensing for monitoring aerosol particles based on ground-based and spaceborne observations</li> <li>Aerosol optical and microphysical properties</li> <li>Retrieval algorithms</li> <li>Scientific applications</li> </ul>		

Period	Course	Course program	Institution
2017-2018	<b>Fundamentals of remote sensing</b>	<a href="#">MSc SSTA</a>	UoP/NOA
<b>Description</b>	<ul style="list-style-type: none"> <li>Principles of remote sensing for monitoring aerosol particles based on ground-based and spaceborne observations</li> <li>Aerosol optical and microphysical properties</li> <li>Retrieval algorithms</li> <li>Scientific applications</li> </ul>		

Period	Course	Course program	Institution
2017-2018	<b>Advanced space applications</b>	<a href="#">MSc SSTA</a>	UoP/NOA
<b>Description</b>	<ul style="list-style-type: none"> <li>Supervision of MSc students performing a small scale research project</li> <li><b>DUst transport over the tRopical ATlantic OceaN (DURATION)</b></li> </ul>		

Period	Course	Course program	Institution
2018	<b>Vertical and columnar aerosol measurements</b>	<a href="#">2<sup>nd</sup> Summer School</a>	HAAR
<b>Description</b>	<ul style="list-style-type: none"> <li>Aerosol classification techniques</li> <li>Principles of remote sensing</li> <li>Spaceborne and ground-based instruments</li> <li>Desert dust outbreaks (observations, modelling, impact on the radiation budget and atmospheric processes).</li> </ul>		

Period	Course	Course program	Institution
2005-2014	<b>Laboratory of Atmospheric Physics</b>	Physics Department	UoI
<b>Description</b>	<ul style="list-style-type: none"> <li>Operation of meteorological instruments</li> <li>Meteorological observations</li> <li>Altitude dependent variations of pressure and density</li> <li>Pressure and altitude calculations within the atmosphere</li> <li>Atmospheric Thermodynamics</li> <li>Water phases and heat transfer</li> </ul>		

## D. SCHOLARSHIPS – GRANTS

<b>Title:</b>	<i>Effects of Mediterranean desert dust outbreaks on radiation, atmospheric dynamics and forecasting accuracy of a numerical mesoscale model</i>
<b>Acronym:</b>	<b>MDRAF</b>
<b>Number:</b>	622662
<b>URL:</b>	<a href="#">CORDIS</a>
<b>Period:</b>	May 2014 – April 2016
<b>Funding scheme:</b>	<b>FP7-PEOPLE-2013-IEF - Marie-Curie Action: "Intra-European fellowships for career development"</b>
<b>Host Institute:</b>	Barcelona Supercomputing Center (BSC), Spain
<b>Budget:</b>	166 336,20 €

<b>Title:</b>	<i>Improving global dust prediction and monitoring through data assimilation of satellite-based dust aerosol optical depth</i>
<b>Acronym:</b>	<b>DUST-GLASS</b>
<b>Number:</b>	749461
<b>URL:</b>	<a href="#">CORDIS</a>
<b>Period:</b>	May 2017 – April 2019
<b>Funding scheme:</b>	<b>H2020-MSCA-IF-2016 Marie Skłodowska-Curie Individual Fellowships</b>
<b>Host Institute:</b>	National Observatory of Athens (NOA), Greece
<b>Budget:</b>	164653,20 €

<b>Title:</b>	<i>Assessment of naTural and ANThropogenic Aerosols impact on climate</i>
<b>Acronym:</b>	<b>ATLANTAS</b>
<b>Number:</b>	00544
<b>URL:</b>	<a href="#">H.F.R.I.</a>
<b>Period:</b>	April 2021 – March 2024
<b>Funding scheme:</b>	<b>2<sup>nd</sup> Call for H.F.R.I. Research Projects to support Post-doctoral Researchers</b>
<b>Host Institute:</b>	National Observatory of Athens (NOA), Greece
<b>Budget:</b>	189547,00 €

<b>Title:</b>	<i>Assessment of tropospheric aerosols impact on the radiation budget at planetary scale</i>
<b>Period:</b>	March 2020 – November 2021
<b>Funding scheme:</b>	<b>NSRF 2014-2020</b>
<b>Host institute:</b>	University of Ioannina
<b>Budget:</b>	50000 €

## E

## BOOKS

Translation (in Greek): **Understanding Weather and Climate**, Edward Aguado and James E. Burt, pp. 576, Sixth Edition, Prentice Hall<sup>1</sup>. [Supervisors: Prof. Aristeides Bartzokas, Assistant Professor: Χρήστος Λώλης, Publisher: IWN].

## F

## RESEARCH Thesis

Institute	University of Ioannina
Department	Physics
Title	<i>Study of aerosol episodes over the broader area of the Mediterranean basin based on contemporary satellite data</i>
Supervisor	Nikos Hatzianastassiou
Link	<a href="https://www.didaktorika.gr/eadd/handle/10442/30067">https://www.didaktorika.gr/eadd/handle/10442/30067</a>

## F2. Publications

1. A. Monteiro, S. Basart, S. Kazadzis, **A. Gkikas**, S. Vandenbussche, 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, Biagio Di Mauro, S. Trippetta, S. Kutuzov, O. Meinander: «**Multi-sectoral impact assessment of an extreme African dust episode in the Eastern Mediterranean in March 2018**», *Science of The Total Environment*, Vol. 843, <https://doi.org/10.1016/j.scitotenv.2022.156861>, 2022.
2. K. Papachristopoulou, I.-P. Raptis, **A. Gkikas**, I. Fountoulakis, A. Masoom, and S. Kazadzis: «**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.
3. H. Huang, Y. Qian, Y. Liu, C. He, J. Zheng, Z. Zhang, and **A. Gkikas**: «**Where does the dust deposited over the Sierra Nevada snow come from?**», *Atmos. Chem. Phys.*, 22, 15469–15488, <https://doi.org/10.5194/acp-22-15469-2022>, 2022.
4. E. Drakaki, V. Amiridis, A. Tsekeri, **A. Gkikas**, E. Proestakis, S. Mallios, S. Solomos, C. Spyrou, E. Marinou, C. Ryder, D. Bouris, P. Katsafados. «**Modelling coarse and giant desert dust particles**», *Atmos. Chem. Phys.*, 22, 12727–12748, <https://doi.org/10.5194/acp-22-12727-2022>, 2022.
5. B. Cvetkovic, P. Dagsson-Waldhauserova, S. Petkovic, Ó. Arnalds, F. Madonna, E. Proestakis, **A. Gkikas**, A. Vukovic Vimic, G. Pejanovic, M. Rosoldi, D. Ceburnis, V. Amiridis, L. Lisá, S. Nickovic, and J. Nikolic: «**Fully Dynamic High-Resolution Model for Dispersion of Icelandic Airborne Mineral Dust**», *Atmosphere*, 13(9), 1345; <https://doi.org/10.3390/atmos13091345>, 2022.



6. S. Y. Aslanoğlu, E. Proestakis, **A. Gkikas**, G. Güllü, V. Amiridis. «**Dust Climatology of Turkey as a Part of the Eastern Mediterranean Basin via 9-Year CALIPSO-Derived Product**», *Atmosphere*, 13(5), 733, <https://doi.org/10.3390/atmos13050733>, 2022.
7. **A. Gkikas**, E. Proestakis, V. Amiridis, S. Kazadzis, E. Di Tomaso, E. Marinou, N. Hatzianastassiou, J.F. Kok, and C.P. García-Pando. «**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.
8. K. Papachristopoulou, I. Fountoulakis, **A. Gkikas**, P. G. Kosmopoulos, P. T. Nastos, M. Hatzaki, S. Kazadzis. «**15-Year Analysis of Direct Effects of Total and Dust Aerosols in Solar Radiation/Energy over the Mediterranean Basin**», *Remote Sensing*, 14 (7), 1535, <https://doi.org/10.3390/rs14071535>, 2022.
9. S.-A., Logothetis, V. Salamalikis, **A. Gkikas**, S. Kazadzis, V. Amiridis, and A. Kazantzidis. «**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.
10. 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*, 228, 317-332, <https://doi.org/10.1016/j.solener.2021.09.033>, 2021.
11. M.-B. Korras-Carraca, **A. Gkikas**, C. Matsoukas, N. Hatzianastassiou. «**Global Clear-Sky Aerosol Speciated Direct Radiative Effects over 40 Years (1980–2019)**», *Atmosphere*, 12 (10), 1254, <https://doi.org/10.3390/atmos12101254>, 2021.
12. **A. Gkikas**, E. Proestakis, V. Amiridis, S. Kazadzis, E. Di Tomaso, A. Tsekeri, E. Marinou, N. Hatzianastassiou, and C. 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. **[Highlight paper]**
13. M. Gavrouzou, N. Hatzianastassiou, **A. Gkikas**, C. J. Lolis, N. Mihalopoulos. «**A Climatological Assessment of Intense Desert Dust Episodes over the Broader Mediterranean Basin Based on Satellite Data**», *Remote Sensing*, 13 (15), 2895, <https://doi.org/10.3390/rs13152895>, 2021.
14. I. Fountoulakis, P. Kosmopoulos, K. Papachristopoulou, I.-P. Raptis, R.-E. Mamouri, A. Nisantzi, **A. Gkikas**, J. Witthuhn, S. Bley, A. Moustaka, J. Buehl, P. Seifert, D. G. Hadjimitsis, C. Kontoes, S. Kazadzis. «**Effects of aerosols and clouds on the levels of surface solar radiation and solar energy in Cyprus**», *Remote Sensing*, 13 (12), 2319, <https://doi.org/10.3390/rs13122319>, 2021.
15. M. Gavrouzou, N. Hatzianastassiou, **A. Gkikas**, M.-B. Korras-Carraca, N. Mihalopoulos. «**A global climatology of dust aerosols based on satellite data: Spatial, seasonal and inter-annual patterns over the period 2005–2019**», *Remote Sensing*, 13 (3), 359, <https://doi.org/10.3390/rs13030359>, 2021.
16. A. Gialitaki, A. Tsekeri, V. Amiridis, R. Ceolato, L. Paulien, A. Kampouri, **A. Gkikas**, S. Solomos, E. Marinou, M. Haarig, H. Baars, A. Ansmann, T. Lapyonok, A. Lopatin, O. Dubovik, S. Groß, M. Wirth, D. Balis. «**Is the near-spherical shape the new black for smoke?**», *Atmos. Chem. Phys.*, <https://doi.org/10.5194/acp-20-14005-2020>, 2020.
17. D. Kaskaoutis, G. Grivas, C. Theodosi, M. Tsagkaraki, D. Paraskevopoulou, I. Stavroulas, E. Liakakou, **A. Gkikas**, N. Hatzianastassiou, C. Wu, E. Gerasopoulos, N. Mihalopoulos. «**Carbonaceous Aerosols in Contrasting Atmospheric Environments in Greek Cities: Evaluation of the EC-tracer Methods for Secondary Organic Carbon Estimation**», *Atmosphere*, 11(2), 161, <https://doi.org/10.3390/atmos11020161>, 2020.

18. P. Raptis, S. Kazadzis, V. Amiridis, **A. Gkikas**, E. Gerasopoulos, N. Mihalopoulos. «**A Decade of Aerosol Optical Properties Measurements over Athens, Greece**», *Atmosphere*, 11(2), 154, <https://doi.org/10.3390/atmos11020154>, 2020.
19. C. Aebi, J. Gröbner, S. Kazadzis, L. Vuilleumier, **A. Gkikas**, N. Kämpfer, «**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.
20. N. Hatzianastassiou, N. Kalaitzi, M. Gavrouzou, **A. Gkikas**, M. B. Korras-Carraca; N. Mihalopoulos. «**A Climatological Satellite Assessment of Absorbing Carbonaceous Aerosols on a Global Scale**», *Atmosphere*, 10(11) 671, <https://doi.org/10.3390/atmos10110671>, 2019.
21. **A. Gkikas**, T. Giannaros, V. Kotroni and K. Lagouvardos: «**Assessing the radiative impacts of an extreme desert dust outbreak and the potential improvements on short-term weather forecasts: the case of February 2015**», *Atmospheric Research*, 226, 152-170, <https://doi.org/10.1016/j.atmosres.2019.04.020>, 2019.
22. D. Konsta, I. Biniotoglou, **A. Gkikas**, S. Solomos, E. Marinou, E. Proestakis, S. Basart, C. Pérez García-Pando, V. Amiridis, H. El-Askary: «**Evaluation of the BSC-DREAM8b regional dust model using the 3D LIVAS-CALIPSO product**», *Atmospheric Environment*, 195, 46-62, <https://doi.org/10.1016/j.atmosenv.2018.09.047>, 2018.
23. Kosmopoulos P.G., S. Kazadzis, H. El-Askary, M. Taylor, **A. Gkikas**, E. Proestakis, C. Kontoes, M.M. El-Khayat. «**Earth-Observation-Based Estimation and Forecasting of Particulate Matter Impact on Solar Energy in Egypt**» *Remote Sens.*, 10(12), 1870, <https://doi.org/10.3390/rs10121870>, 2018.
24. S. Solomos, N. Kalivitis, N. Mihalopoulos, V. Amiridis, G. Kouvarakis, **A. Gkikas**, I. Biniotoglou, A. Tsekeri, S. Kazadzis, M. Kottas, Y. Pradhan, E. Proestakis, P. T. Nastos and F. Marengo: «**From Tropospheric Folding to Khamsin and Foehn Winds: How Atmospheric Dynamics Advanced a Record-Breaking Dust Episode in Crete**», *Atmosphere*, 9(7), 240; <https://doi.org/10.3390/atmos9070240>, 2018.
25. **A. Gkikas**, V. Obiso, C. Pérez García-Pando, O. Jorba, N. Hatzianastassiou, L. Vendrell, S. Basart, S. Solomos, S. Gassó, and J.M. Baldasano: «**Direct radiative effects during intense Mediterranean desert dust outbreaks**», *Atmos. Chem. Phys.*, 18, 8757-8787, <https://doi.org/10.5194/acp-18-8757-2018>, 2018.
26. W. Li, H. El-Askary, M.A. Qurban, E. Proestakis, M.J. Garay, O.V. Kalashnikova, V. Amiridis, **A. Gkikas**, E. Marinou, T. Piechota, and K.P. Makikandan: «**An Assessment of Atmospheric and Meteorological Factors Regulating Red Sea Phytoplankton Growth**», *Remote Sensing*, 10 (5), 673, <https://doi.org/10.3390/rs10050673>, 2018.
27. **A.Gkikas**, S. Basart, N. Hatzianastassiou, E. Marinou, V. Amiridis, S. Kazadzis, J. Pey, X. Querol, O. Jorba, S. Gassó, and J.M. Baldasano: «**Mediterranean intense desert dust outbreaks and their vertical structure based on remote sensing data**», *Atmos. Chem. Phys.*, 16, 8609-8642, <https://doi.org/10.5194/acp-16-8609-2016>, 2016.
28. **A. Gkikas**, N. Hatzianastassiou, N. Mihalopoulos, O. Torres: «**Characterization of aerosol episodes in the greater Mediterranean Sea area from satellite observations (2000–2007)**», *Atmospheric Environment*, 128, 286–304, <https://doi.org/10.1016/j.atmosenv.2015.11.056>, 2016.
29. E. Flaounas, V. Kotroni, K. Lagouvardos, S. Kazadzis, **A. Gkikas**, N. Hatzianastassiou: «**Cyclone contribution to dust transport over the Mediterranean region**», *Atmos. Sci. Let.*, <https://doi.org/10.1002/asl.584>, 2015.
30. M. B. Korras-Carraca, N. Hatzianastassiou, C. Matsoukas, **A. Gkikas**, and C.D. Papadimas: «**The regime of aerosol asymmetry parameter over Europe, the Mediterranean and the Middle East based on**

- MODIS satellite data: evaluation against surface AERONET measurements»,** *Atmos. Chem. Phys.*, 15, 13113-13132, <https://doi.org/10.5194/acp-15-13113-2015>, 2015.
31. **A. Gkikas**, E.E. Houssos, C.J. Lolis, A. Bartzokas, N. Mihalopoulos, N. Hatzianastassiou: «**Atmospheric circulation evolution related to desert dust episodes over the Mediterranean**», *Q.J.R. Meteorol. Soc.*, <https://doi.org/10.1002/qj.2466>, 2014.
  32. M. Taylor, S. Kazadzis, A. Tsekeri, **A. Gkikas**, and V. Amiridis: «**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, <https://doi.org/10.5194/amt-7-3151-2014>, 2014.
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  36. **A. Gkikas**, E.E. Houssos, N. Hatzianastassiou, C.D. Papadimas, A. Bartzokas: «**Synoptic conditions favouring the occurrence of aerosol episodes over the broader Mediterranean basin**», *Q.J.R. Meteorol. Soc.*, 138: 932–949, <https://doi.org/10.1002/qj.978>, 2012.
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  38. A. Bartzokas, J. Azzopardi, L. Bertotti, A. Buzzi, L. Cavaleri, D. Conte, S. Davolio, S. Dietrich, A. Drago, O. Drofa, **A. Gkikas**, V. Kotroni, K. Lagouvardos, C.J. Lolis, S. Michaelides, M. Miglietta, A. Mugnai, S. Music, K. Nikolaidis, F. Porcù, K. Savvidou, and M.I. Tsirogianni: «**The RISKMED project: Philosophy, methods and products**», *Nat. Hazards Earth Syst. Sci.*, 10, 1393–1401, <https://doi.org/10.5194/nhess-10-1393-2010>, 2010.
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  40. N. Hatzianastassiou, **A. Gkikas**, N. Mihalopoulos, O. Torres, and B. D. Katsoulis: «**Natural versus anthropogenic aerosols in the eastern Mediterranean basin derived from multiyear TOMS and MODIS satellite data**», *J. Geophys. Res.*, 114, D24202, <https://doi.org/10.1029/2009JD011982>, 2009.
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### Submitted papers

1. **A. Gkikas**, A. Gialitaki, I. Binietoglou, E. Marinou, M. Tschla, N. Siomos, P. Paschou, A. Kampouri, K. A. Voudouri, E. Proestakis, M. Mylonaki, C.-A. Papanikolaou, H. Baars, A. G. Straume, D. Balis, A.

Papayannis, N. Mihalopoulos and V. Amiridis: «**First assessment of Aeolus L2A particle backscatter coefficient retrievals in the Eastern Mediterranean**», submitted to *Atmospheric Measurement and Techniques (AMT)*.

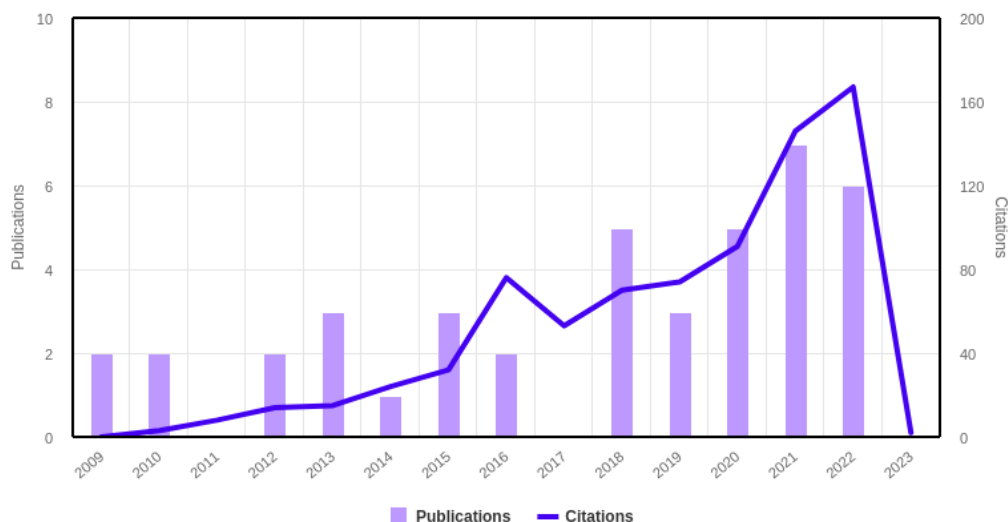
2. P. Kiriakidis, **A. Gkikas**, G. Papangelis, T. Christoudias, J. Kushta, E. Proestakis, A. Kampouri, E. Marinou, E. Drakaki, A. Benedetti, M. Rennie, C. Retscher, A.G. Straume, A. Dandocsi, J. Sciare, and V. Amiridis: «**The impact of assimilating Aeolus wind data on regional Aeolian dust model simulations using WRF-Chem**», *EGUsphere* [preprint], <https://doi.org/10.5194/egusphere-2022-819>, 2022.
3. M. Mytilinaios, S. Basart, S. Ciamprone, J. Cuesta, C. Dema, E. Di Tomaso, P. Formenti, **A. Gkikas**, O. Jorba, R. Kahn, C. Pérez García-Pando, S. Trippetta, and L. Mona: «**Comparison of dust optical depth from multi-sensor products and the MONARCH dust reanalysis over Northern Africa, the Middle East and Europe**», *Atmos. Chem. Phys. Discuss.* [preprint], <https://doi.org/10.5194/acp-2022-655>, in review, 2022.
4. V. Amiridis, A. Kampouri, **A. Gkikas**, S. Misios, A. Gialitaki, E. Marinou, M. Rennie, A. Benedetti, S. Solomos, P. Zanis, O. Vasardani, K. Eleftheratos, P. Paschou, T. Georgiou, S. Scollo, L. Mona, N. Papagiannopoulos, C. Retscher, T. Parrinello, A. Grete Straume: «**Aeolus impact on Volcanic Ash early warning systems for Aviation**», *Nature Communications Earth & Environment*, in review, 2023.

### F3. Metrics

#### Web of Science

<b>41</b>	<b>775</b>	<b>16</b>
Publications in Web of Science	Sum of Times Cited	H-Index

Times Cited and Publications Over Time



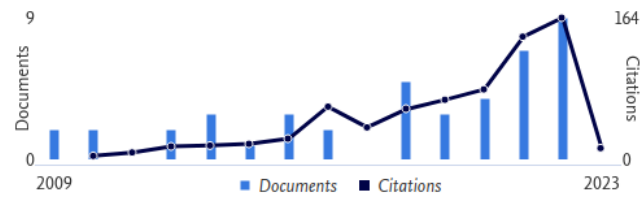
**Figure 1:** Time evolution of the number of publications (purple bars) and citations (blue curve) (Source: *Web of Science*).

**Scopus**

802 Citations by 534 documents | 169 Co-authors | 17 h-index [View h-graph](#)

[Set alert](#) [Edit profile](#) [Save to list](#) [Potential author matches](#) [Export to SciVal](#)

Document & citation trends



[Analyze author output](#) [Citation overview](#)

Most contributed Topics 2017–2021 ⓘ

- AERONET; Aerosol; Aerosol Property  
[17 documents](#)
- Ice; Ice Crystal; CALIPSO  
[1 document](#)
- Aerosol; Haze; Elemental Carbon  
[1 document](#)

[View all Topics](#)

**Figure 2:** Time evolution of the number of publications (blue bars) and citations (black curve) (Source: *Scopus*).

**Google Scholar**

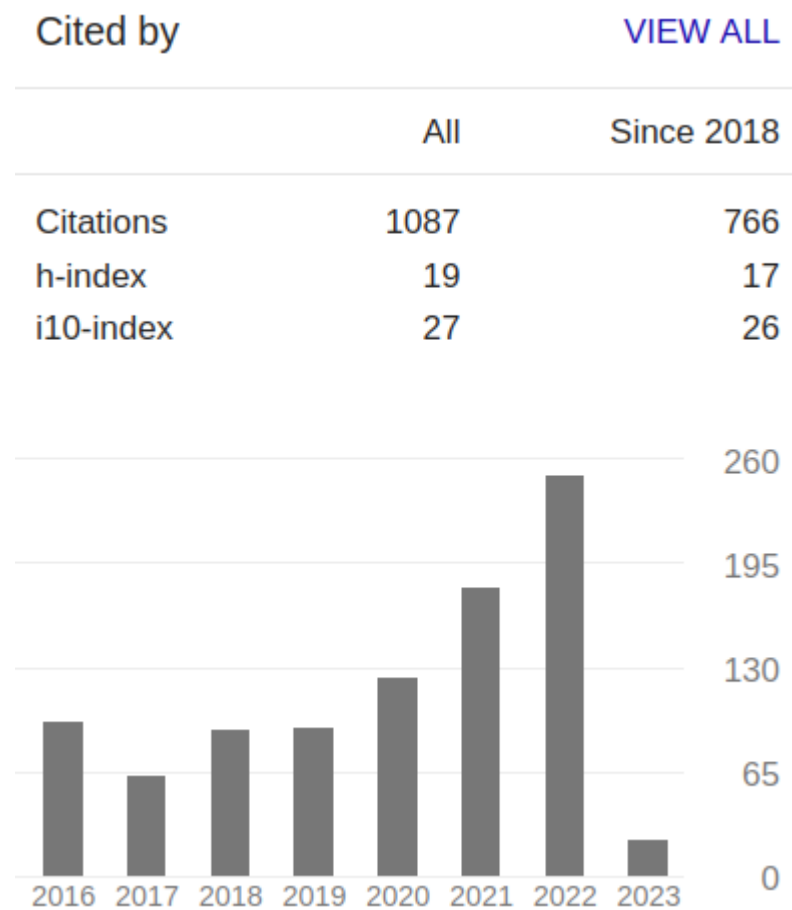


Figure 3: Time evolution of citations (Source: Google Scholar).

#### F4. Conference announcements

1. K. Papachristopoulou, I.-P. Raptis, [A. Gkikas](#), I. Fountoulakis, A. Masoom, and S. Kazadzis: «**Are Aerosol Optical Depth trends related with population changes? A worldwide assessment over megacities**», 28<sup>th</sup> General Assembly of the International Union of Geodesy and Geophysics, IUGG2023, Berlin, Germany, 2023.
2. T. Georgiou, E. Proestakis, [A. Gkikas](#), K. Rizos, E. Drakaki, A. Kampouri, A. Tsikerdekis, H. Baars, A. A. Floutsi, A. Benedetti, and V. Amiridis: «**Enhancing Aeolus L2A for depolarizing targets and impact on aerosol research and NWP**», EGU General Assembly 2023, Vienna, Austria, 2023.
3. P. Paschou, N. Siomos, E. Marinou, [A. Gkikas](#), S. M. Idrissa, D. T. Quaye, D. D. Fiogbe Attannon, C. Meleti, J. von Bismarck, T. Fehr, and V. Amiridis: «**Validation of the Aeolus L2A products with the eVe lidar during ASKOS/JATAC campaign**», EGU General Assembly 2023, Vienna, Austria, 2023.
4. A. Kampouri, V. Amiridis, O. Tichý, N. Evangeliou, S. Solomos, A. Gialitaki, E. Marinou, [A. Gkikas](#), E. Proestakis, S. Scollo, L. Merucci, L. Mona, N. Papagiannopoulos, and P. Zanis: «**Inversion techniques on volcanic emissions and the use for quantitative dispersion modeling: The case of Etna eruption on 12 March 2021**», EGU General Assembly 2023, Vienna, Austria, 2023.

5. A. Moustaka, E. Proestakis, V. Amiridis, S. Kazadzis, K. Tourpali, and A. Gkikas: «**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, 2023.
6. I. Fountoulakis, K. Fragkos, K. Papachristopoulou, A. Nisantzi, A. Gkikas, D. Hadjimitsis, and S. Kazadzis: «**Evolution of biologically active ultraviolet doses in Cyprus**», EGU General Assembly 2023, Vienna, Austria, 2023.
7. S. Yeşer Aslanoğlu, E. Proestakis, A. Gkikas, G Güllü, and V. Amiridis: «**A 9-Year Three-Dimensional Dust Climatology of the Eastern Mediterranean Basin via CALIPSO-Derived Product**», EGU General Assembly 2023, Vienna, Austria, 2023.
8. H. Huang, Y. Qian, Y. Liu, C. He, J. Zheng, Z. Zhang and A. Gkikas: «**Where Does the Dust Deposited over the Sierra Nevada Snow Come From?**», AGU2022, Chicago, USA, 2022.
9. A. Benedetti, V. Amiridis, E. Proestakis, A. Dabas, and A. Gkikas: «**Upgrading Aeolus aerosol observational capabilities towards improving air quality and NWP models (ADD-CROSS)**», EUMETSAT Meteorological Satellite Conference, Brussels, Belgium, 2022.
10. A. Kampouri, N. Evangelidou, O. Tichý, V. Amiridis, S. Solomos, A. Gialitaki, E. Marinou, A. Gkikas, E. Proestakis, S. Scollo, L. Merucci, L. Mona, N. Papagiannopoulos and P. Zanis: «**Advanced inversion techniques on volcanic emissions and their use for quantitative dispersion modeling: the 12th March 2021- Etna's eruption**», IAC2022, Athens, Greece, 2022.
11. Jonilda Kushta, Pantelis Kiriakidis, Theodoros Christoudias, Antonis Gkikas, George Papagelis, Emmanouil Proestakis, Eleni Marinou, Anna Gialitaki, Angela Benedetti, Michael Rennie, Anna Grete Straume, Vassilis Amiridis and Jean Sciare: «**Impact of Aeolus wind assimilation on mineral dust mobilization and transport over the Mediterranean**», IAC2022, Athens, Greece, 2022.
12. Ilias Fountoulakis, Kyriakoula Papachristopoulou, Panagiotis Kosmopoulos, Ioannis-Panagiotis Raptis, Antonis Gkikas, Rodanthi-Elisavet Mamouri, Argyro Nisantzi, Jonas Witthuhn, Charalampos Kontoes, Diofantos G. Hadjimitsis, Stelios Kazadzis: «**Exploitation of Earth Observation information for solar irradiation modelling: applications in energy, health and agriculture**», COSPAR 2022 44<sup>th</sup> Scientific Assembly, Athens, Greece, 2022.
13. Anna Moustaka, Emmanouil Proestakis, Vassilis Amiridis, Stelios Kazadzis, Kleareti Tourpali, Antonis Gkikas: «**Aerosol radiative effects based on an improved CALIPSO classification scheme**», International Radiation Symposium 2022, Thessaloniki, Greece, 2022.
14. Marios-Bruno Korras Carraca, Antonis Gkikas, Arlindo M. Da Silva, Christos Matsoukas, Nikolaos Hatzianastassiou, Ilias Vardavas: «**Global vertically resolved Aerosol Optical Properties and Direct Radiative Effect of Main Aerosol Types Based on MERRA-2 Reanalysis Data**», International Radiation Symposium 2022, Thessaloniki, Greece, 2022.
15. Alexandra Tsekeri, Vassilis Amiridis, Maria Tschla, Ilias Fountoulakis, Angelos Nersesian, Emmanouil Proestakis, Antonis Gkikas, Kyriakoula Papachristopoulou, Vasileios Barlakas, Stelios Kazadzis: «**The Effect of Large Dust Size aerosols on solar radiation Fluxes**», International Radiation Symposium 2022, Thessaloniki, Greece, 2022.
16. Kyriakoula Papachristopoulou, Ilias Fountoulakis, Antonis Gkikas, Panagiotis Kosmopoulos, Panagiotis T. Nastos, Maria Hatzaki, Stelios Kazadzis: «**Total Aerosols and Pure Dust Induced Perturbations on Downwelling Surface Solar Radiation over the Mediterranean Basin**», International Radiation Symposium 2022, Thessaloniki, Greece, 2022.

17. I. Krisch, M. Rennie, A. Benedetti, W. McLean, A. Stoffelen, N. Zagar, C. Wright, T. Banyard, M. Ern, V. Amiridis, A. Kampouri, **A. Gkikas**, T. Fehr, J. von Bismarck, T. Parinello, and O. Reitebuch: «**Climate Relevant Topics Based on Global Atmospheric Wind and Aerosol Profiles as Provided by ESA's Aeolus Satellite**», 2<sup>nd</sup> Climate Observation Conference, Darmstadt, Germany, 17-19 October 2022.
18. Peristera Paschou, Nikolaos Siomos, Eleni Marinou, Holger Baars, George Georgousis, **Antonis Gkikas**, Jonas Von Bismarck, Thorsten Fehr: «**First results from ASKOS as part of the JATAC campaign: Validation of Aeolus products and aerosol characterization using ground-based and airborne measurements**», International Laser Radar Conference, Montana, USA, 2022.
19. Emmanouil Proestakis, Angela Benedetti, Alain Dabas, Vassilis Amiridis, Eleni Marinou, Peristera Paschou, Athanassios Georgiou, **Antonis Gkikas**, Anna Kampouri, Anna Gialitaki, Alexandra Tsekeri, William McLean, Liam Steel: «**Assessing Aeolus aerosol observational capabilities for data assimilation in air quality and NWP models**», International Laser Radar Conference, Montana, USA, 2022.
20. Angela Benedetti, Stephanie Fiedler, Vassilis Amiridis, **Antonis Gkikas**, Emmanouil Proestakis, Eleni Marinou, Stelios Myriokefalitakis, Sara Basart, Raffaele Bernardello, Enza Di Tomaso, Jerónimo Escribano, Maria Goncalves, Joan Llorc, Carlos Pérez García-Pando, Melanie Ades, Zak Kipling, Daniel Thiemert, Jan-Berend Stuut, Svetlana Tsyro, Jan Griesfeller: «**The 4D-Atlantic Dust and Ocean Modelling and Observing Study (DOMOS)**», ESA Living Planet Symposium, Bonn, Germany, 2022.
21. Eleni Marinou, Holger Baars, Peristera Paschou, Griša Močnik, Nikos Siomos, Ronny Engelmann, Annet Skupin, Razvan Pirloaga, Matevž Lenarčič, Cordula Zenk, Eder Silva, Elizandro Rodrigues, Pericles Silva, Sofia Gómez Maqueo Anaya, Henriette Gebauer, Samira Moussa Idrissa, Daniel Tetteh Quaye, Desire Degbe Fiogbe Attannon, Johannes Bühl, Martin Radenz, Bogdan Antonescu, Dragos Ene, Lukas Pfitzenmaier, Ewan O' Connor, Patric Seifert, Ioanna Mavropoulou, Thanasis Georgiou, Christos Spyrou, Eleni Drakaki, Anna Kampouri, Ioanna Tsikoudi, **Antonis Gkikas**, Emmanouil Proestakis, Luke Jones, Anca Nemuc, Moritz Haarig, Athina Floutsi, Albert Ansmann, Marija Bervida, Luka Drinovec, Uroš Jagodič, Blaž Žibert, Konrad Kandler, Arya Sree, Franco Marengo, Maria Kezoudi, Christos Keleshis, Jean Sciare, Birgit Heese, Dietrich Althausen, Nilton Manuel Evora Do Rosario, Corrine Almeida, Angela Benedetti, Ulla Wandinger, Doina Nicolae, Pavlos Kollias, Vassilis Amiridis, Rob Koopman, Jonas Von Bismarck, Thorsten Fehr: «**First results from ASKOS as part of the JATAC campaign: Validation of Aeolus products and aerosol characterization using ground-based and airborne measurements**», ESA Living Planet Symposium, Bonn, Germany, 2022.
22. **Antonis Gkikas**, Georgios Papangelis, Pantelis Kyriakidis, Eleni Drakaki, Emmanouil Proestakis, Anna Gialitaki, Eleni Marinou, Maria Tsihla, Jonilda Kushta, Theodoros Christoudias, Christos Spyrou, Angela Benedetti, Michael Rennie, Anna Kampouri, Anne Grete Straume, Christian Retscher, Alexandru Dandocsi, Jean Sciare, Vassilis Amiridis: «**Towards improving dust forecasts via Aeolus wind data assimilation**», ESA Living Planet Symposium, Bonn, Germany, 2022.
23. **Antonis Gkikas** and the NEWTON team: «**Assessing the impact of Aeolus wind data assimilation on the Saharan dust simulations in the framework of the JATAC campaign**», EGU General Assembly 2022, Vienna, Austria, 2022.
24. Pantelis Kiriakidis, **Antonis Gkikas**, George Papangelis, Eleni Drakaki, Emmanouil Proestakis, Anna Gialitaki, Eleni Marinou, Jonilda Kushta, Theodoros Christoudias, Christos Spyrou, Angela Benedetti, Michael Rennie, Anna Kampouri, Anna Grete Straume, Christian Retscher, Alexandru Dandocsi, Jean Sciare, Vassilis Amiridis: «**The impact**



- of assimilating AEOLUS wind data on regional Aeolian dust model simulations using WRF-Chem»,** EGU General Assembly 2022, Vienna, Austria, 2022.
25. E. Marinou, H. Baars, P. Paschou, R. Pirloaga, E. O' Connor, G. Močnik, N. Siomos, R. Engelmann, A. Skupin, M. Lenarčič, C. Zenk, E. Silva, E. Rodrigues, P. Silva, S. G. Maqueo Anaya, H. Gebauer, J. Bühl, M. Radenz, B. Antonescu, A. Nemuc, D. Ene, L. Pfitzenmaier, P. Seifert, I. Mavropoulou, T. Georgiou, C. Spirou, E. Drakaki, A. Kampouri, I. Tsikoudi, **A. Gkikas**, E. Proestakis, M. Haarig, A. Floutsi, A. Ansmann, M. Bervida, L. Drinovec, U. Ja1godič, B. Žibert, K. Kandler, A. Sudharaj, F. Marengo, M. Kezoudi, C. Keleshis, J. Sciare, B. Heese, D. Althausen, U. Wandinger, D. Nicolae, P. Kollias, V. Amiridis, R. Koopman, J. Von Bismarck, and T. Fehr: **«The contribution of ACTRIS to the Joint Aeolus Tropical Atlantic Campaign in Cabo Verde»**, 1<sup>st</sup> ACTRIS Science Conference, 2022.
  26. Peristera Paschou, Nikolaos Siomos, Eleni Marinou, **Antonis Gkikas**, George Georgoussis, Jonas von Bismarck, Thorsten Fehr, Vassilis Amiridis: **«Aeolus L2A Cal/Val using eVe lidar dataset from JATAC 2021»**, Aeolus 3<sup>rd</sup> Anniversary Conference, Taormina, Italy, 2022.
  27. Jonilda Kushta, Theodoros Christoudias, Pantelis Kiriakidis, **Antonis Gkikas**, Emmanouil Proestakis, Eleni Marinou, Eleni Drakaki, Maria Tsihla, Anna Gialitaki, Anna Kampouri, Angela Benedetti, Michael Rennie, Anne Grete Straume, Christian Retscher, Alexandru Dandocsi, Jean Sciare, Vassilis Amiridis: **«Aeolus wind data assimilation impact on aeolian dust modelling with WRF-CHEM»**, Aeolus 3<sup>rd</sup> Anniversary Conference, Taormina, Italy, 2022.
  28. **Antonis Gkikas**, Georgios Papangelis, Eleni Drakaki, Emmanouil Proestakis, Anna Kampouri, Maria Tsihla, Eleni Marinou, Christos Spyrou, Angela Benedetti, Michael Rennie, Peristera Paschou, Nikolaos Siomos, Holger Baars, Anne Grete Straume, Christian Retscher, Alexandru Dandocsi, Ronny Engelmann, Annett Skupin, Dietrich Althausen, Ulla Wandinger, Zhenping Yin, Cordula Zenk, Vassilis Amiridis: **«Assessing the impact of Aeolus wind data assimilation on the numerical simulations of Saharan dust outflows towards the Tropical Atlantic Ocean»**, Aeolus 3<sup>rd</sup> Anniversary Conference, Taormina, Italy, 2022.
  29. Anna Kampouri, Vassilis Amiridis, **Antonis Gkikas**, Emmanouil Proestakis, Anna Gialitaki, Eleni Marinou, George Papangelis, Lucia Mona, Angela Benedetti, Michael Rennie, Anne Grete Straume, Prodromos Zanis: **«First numerical experiments assessing the impact of Aeolus wind data assimilation on volcanic ash dispersion»**, Aeolus 3<sup>rd</sup> Anniversary Conference, Taormina, Italy, 2022.
  30. Eleni Marinou, Holger Baars, Peristera Paschou, Griša Močnik, Nikos Siomos, Ronny Engelmann, Annet Skupin, Razvan Pirloaga, Matevž Lenarčič, Cordula Zenk, Eder Silva, Elizandro Rodrigues, Pericles Silva, Sofia Gómez Maqueo Anaya, Henriette Gebauer, Samira Moussa Idrissa, Daniel Tetteh Quaye, Desire Degbe Fiogbe Attannon, Johannes Bühl, Martin Radenz, Bogdan Antonescu, Dragos Ene, Lukas Pfitzenmaier, Ewan O' Connor, Patric Seifert, Ioanna Mavropoulou, Thanasis Georgiou, Christos Spyrou, Eleni Drakaki, Anna Kampouri, Ioanna Tsikoudi, **Antonis Gkikas**, Emmanouil Proestakis, Luke Jones, Anca Nemuc, Moritz Haarig, Athina Floutsi, Albert Ansmann, Marija Bervida, Luka Drinovec, Uroš Jagodič, Blaž Žibert, Konrad Kandler, Arya Sree, Franco Marengo, Maria Kezoudi, Christos Keleshis, Jean Sciare, Birgit Heese, Dietrich Althausen, Nilton Manuel Evora Do Rosario, Corrine Almeida, Angela Benedetti, Ulla Wandinger, Doina Nicolae, Pavlos Kollias, Vassilis Amiridis, Rob Koopman, Jonas Von Bismarck, Thorsten Fehr: **«First results from ASKOS as part of the JATAC campaign: Validation of Aeolus products and aerosol characterization using ground-based and airborne measurements»**, Aeolus 3<sup>rd</sup> Anniversary Conference, Taormina, Italy, 2022.
  31. George Papangelis, Emmanouil Proestakis, **Antonis Gkikas**, Eleni Drakaki, Christos Spyrou, Eleni Marinou, Anna Gialitaki, Maria Tsihla, Ioanna Tsikoudi, Anna Kampouri, Nikolaos Siomos, Thanasis Georgiou, Michael Rennie,

- Angela Benedetti, Vassilis Amiridis: «**Potential impact of Aeolus assimilated wind fields on regional simulations of sea salt emission and transport**», Aeolus 3<sup>rd</sup> Anniversary Conference, Taormina, Italy, 2022.
32. Aikaterini Pappa, Christos Spyrou, Antonis Gkikas, George Papangelis, Vassilis Amiridis: «**Conceptualizing the assimilation of Aeolus wind products in LAPS**», 4<sup>th</sup> European Nowcasting Conference, 2022.
33. Peristera Paschou, Nikolaos Siomos, Eleni Marinou, Antonis Gkikas, George Georgoussis, Thorsten Fehr, Jonas von Bismarck: «**EVE Polarization Lidar on the Joint Aeolus Tropical Atlantic Campaign 2021 - First Results of Aeolus L2A Products Validation**», ATMOS 2021, 2021.
34. Emmanouil Proestakis, Antonis Gkikas, Georgios Papangelis, Eleni Drakaki, Eleni Marinou, Anna Gialitaki, Maria Tsihla, Ioanna Tsikoudi, Anna Kampouri, Alexandros Alexiou, Athanasios Georgiou, Michael Rennie, Angela Benedetti, Vassilis Amiridis: «**First Assessment on Potential Improvements of Sea Salt Emissions Due to Assimilation of Aeolus Wind Fields**», ATMOS 2021, 2021.
35. Anna Kampouri, Vassilis Amiridis, Antonis Gkikas, Emmanouil Proestakis, Anna Gialitaki, Eleni Marinou, George Papangelis, Lucia Mona, Angela Benedetti, Mike Rennie, Anne Grete Straume, Prodromos Zanis: «**First Numerical Experiments Towards Assessing The Impact Of Aeolus Wind Assimilation On Volcanic Ash Dispersion**», ATMOS 2021, 2021.
36. Antonis Gkikas, Georgios Papangelis, Eleni Drakaki, Emmanouil Proestakis, Anna Gialitaki, Eleni Marinou, Jonilda Kushta, Theodoros Christoudias, Pantelis Kiriakidis, Christos Spyrou, Angela Benedetti, Michael Rennie, Anna Kampouri, Anne Grete Straume, Christian Retscher, Alexandru Dandocsi, Jean Sciare, Vassilis Amiridis: «**The NEWTON Project: Advancing Regional Dust Forecasts Via Aeolus Wind Data Assimilation**», ATMOS 2021, 2021.
37. Persitera Paschou, Nikolaos Siomos, George Georgoussis, Eleni Marinou, Antonis Gkikas, Volker Freudenthaler, Jonas Von Bismarck, Thorsten Fehr, Vassilis Amiridis: «**First Results on the Aeolus L2A Validation During ASKOS Campaign**», European Lidar Conference 2021, Granada, Spain, 2021.
38. Maria Gavrouzou, Nikos Hatzianastassiou, Antonis Gkikas, Marios-Bruno Korras-Carraca: «**Aerosol-cloud interactions and temperature inversions during dust aerosol episodes in the Mediterranean Basin. The case study of 16-18 June 2016**», International Conference on Atmospheric Dust, Monopoli, Italy, 2021.
39. Michail Mytilinaios, Lucia Mona, Serena Trippetta, Francesca Barnaba, Sara Basart, Enza Di Tomaso, Oriol Jorba, Carlos Pérez García-Pando, Emmanouil Proestakis, Eleni Marinou, Antonis Gkikas, Vassilis Amiridis, Paola Formenti, Juan Cuesta, Claudia Di Biagio, Benoit Laurent, Beatrice Marticorena: «**Evaluation of a high-resolution dust regional reanalysis using in-situ and remote sensing observations**», WCRP-WWRP Symposium on Data Assimilation and Reanalysis, Bonn, Germany, 2021.
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121. Marios Koras-Caracca, **Antonis Gkikas**, Christos Papadimas, Nikos Hatzianastassiou: «**Aerosol size over the broader Greek area based on satellite and ground measurements**», 11<sup>th</sup> Conference Meteorology, Climatology and Atmospheric Physics, 2012.
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123. **Antonis Gkikas**, Elias Houssos, Aristides Bartzokas, Nikos Mihalopoulos, Nikos Hatzianastassiou: «**Atmospheric circulation patterns associated with intense dust outbreaks over the Mediterranean basin**», Atmospheric Composition Change the European Network (ACCENT), Air quality and climate change: Interactions and Feedbacks, 3<sup>rd</sup> Urbino Symposium, 2011.

124. **Antonis Gkikas**, Elias Houssos, Christos Lolis, Aristides Bartzokas, Nikos Mihalopoulos, Nikos Hatzianastassiou: «**Atmospheric circulation characteristics favouring the development of desert dust storms in the Mediterranean**», 13<sup>th</sup> Plinius Conference on Mediterranean Storms, 2011.
125. Nikos Mihalopoulos, Savvas Kleanthous, Giorgos Kouvarakis, **Antonis Gkikas**, Euterpi Vasiliadou, Christina Theodosi, Christina Zoubali, Nikos Hatzianastassiou: «**Interannual variability of dust over the Eastern Mediterranean**», 6<sup>th</sup> International workshop on sand/duststorms and associated dustfall, 2011.
126. Marios Korras-Carraca, **Antonis Gkikas**, Christos Papadimas, Nikos Hatzianastassiou: «**Saharan and Arabian Peninsula dust optical properties from MODIS Aqua Deep Blue over 2002-2010**», 6<sup>th</sup> International workshop on sand/duststorms and associated dustfall, 2011.
127. **Antonis Gkikas**, Elias Houssos, Christos Lolils, Aristeides Bartzokas, Nikos Mihalopoulos, Nikos Hatzianastassiou: «**The regime of dust episodes over the Mediterranean basin from contemporary satellites**», 6<sup>th</sup> International workshop on sand/duststorms and associated dustfall, 2011.
128. Marios Korras Carraca, **Antonis Gkikas**, Nikos Hatzianastassiou: «**Comparison of MODIS Deep Blue aerosol single scattering albedo and asymmetry parameter with AERONET for northern Africa, Middle East and Europe**», European Aerosol Conference, 2011.
129. **Antonis Gkikas**, Nikos Hatzianastassiou, Nikos Mihalopoulos: «**Direct effect of extreme aerosol episodes on atmospheric solar radiation in the broader Mediterranean basin and potential links with atmospheric dynamics**», EGU General Assembly 2011, 2011.
130. **Antonis Gkikas**, Elias Houssos, Aristides Bartzokas, Nikos Hatzianastassiou: «**Synoptic conditions favouring the occurrence of strong aerosol episodes over the broader Mediterranean basin**», 12<sup>th</sup> Plinius Conference on Mediterranean Storms, 2010.
131. Christos Papadimas, **Antonis Gkikas**, Nikos Hatzianastassiou: «**Desert dust optical properties over the Saharan desert and Arabian Peninsula based on Deep Blue MODIS data during the period 2003-2007**», International Aerosol Conference, 2010.
132. **Antonis Gkikas**, Nikos Hatzianastassiou, Nikos Mihalopoulos: «**Direct radiative effect of extreme desert dust episodes in the Mediterranean basin**», International Aerosol Conference, 2010.
133. **Antonis Gkikas**, Nikos Hatzianastassiou, Nikos Mihalopoulos: «**Variability in aerosol properties, sources and events in the Eastern Mediterranean basin based on satellite observations**», Protection of the Environment, 2010.
134. Vassilis Minias, **Antonis Gkikas**, Christos Papadimas, Nikos Hatzianastassiou: «**Aerosol optical properties in north-west Greece during the 8-year period 2000-2008 based on high resolution MODIS-Terra data**», 10<sup>th</sup> Conference Meteorology, Climatology and Atmospheric Physics, 2010.
135. **Antonis Gkikas**, Nikos Mihalopoulos, Nikos Hatzianastassiou: «**Characteristics of dust aerosol events in the Mediterranean basin based on a synergistic use of 7-year (2000-2007) satellite data**», 10<sup>th</sup> Conference Meteorology, Climatology and Atmospheric Physics, 2010.
136. **Antonis Gkikas**, Nikos Hatzianastassiou, Nikos Mihalopoulos, Omar Torres, Basilis Katsoulis: «**The role of natural and anthropogenic particles in the eastern Mediterranean basin aerosol levels based on multi-year TOMS and MODIS satellite data**», Our warming planet, IAMAS-IAPSO-IACS MOCA-09, Joint General Assembly, 2009.

137. Nikos Hatzianastassiou, Nikos Mihalopoulos, **Antonis Gkikas**, Omar Torres, Basilis Katsoulis: «**The role of megacities on aerosol optical thickness in the Eastern Mediterranean basin based on TOMS and MODIS satellite data**», 7<sup>th</sup> International Conference on Air Quality - Science and Application (Air Quality 2009), 2009.
138. **Antonis Gkikas**, Nikos Hatzianastassiou, Nikos Mihalopoulos: «**Study and characterization of aerosol episodes in the Mediterranean basin for the 7-year period 2000 – 2007 based on MODIS data**», European Aerosol Conference, 2008.
139. **Antonis Gkikas**, Nikos Hatzianastassiou, Nikos Mihalopoulos: «**Aerosol events in the Mediterranean basin during the 7-year period 2000 – 2007 based on MODIS – Terra data**», 5<sup>th</sup> General Assembly of the European Geosciences Union, 2008.
140. **Antonis Gkikas**, Nikos Hatzianastassiou, Nikos Mihalopoulos: «**Study of aerosol episodes in the greater Mediterranean basin using MODIS-Terra satellite data**», 9<sup>th</sup> Conference Meteorology, Climatology and Atmospheric Physics, 2008.
141. Aristides Bartzokas, Vassiliki Kotroni, Kostas Lagouvardos, Christos Lolils, **Antonis Gkikas**, Maria Tsirogianni: «**The RISKMED project**», 9<sup>th</sup> Conference Meteorology, Climatology and Atmospheric Physics, 2008.
142. Nikos Hatzianastassiou, **Antonis Gkikas**: «**A multi-year study of aerosol optical thickness in Greece**», 8<sup>th</sup> Conference Meteorology, Climatology and Atmospheric Physics, 2006.

## G. INVITED TALKS

1. **Antonis Gkikas**, Anna Gialitaki, George Papangelis, Pantelis Kiriakidis, Eleni Drakaki, Emmanouil Proestakis, Anna Kampouri, Eleni Marinou, Nikolaos Siomos, Peristera Paschou, Panagiotis Kosmopoulos, Kalliopi-Artemis Voudouri, Christiana Papanikolaou, Maria Mylonaki, Dimitris Balis, Alexandros Papayannis, Jonilda Kushta, Theodoros Christoudias, Christos Spyrou, Angela Benedetti, Michael Rennie, Anne Grete Straume, Christian Retscher, Alexandru Dandocsi, Jean Sciare, Vassilis Amiridis: «**Aeolus L2A Cal/Val studies in the framework of the Greek ACTRIS RI and exploitation of wind profiles assimilation towards advancing regional dust forecasts**», 3<sup>rd</sup> Aeolus L2A virtual working meeting, 16<sup>th</sup> December 2021. [[link](#)]
2. **Antonis Gkikas**: «**MIDAS global dust optical depth dataset: Development and applications**», *inDust webinars*, April 2021. [[link](#)]

## H

► **ACTRIS** for identification of physico-chemical properties of fine and ultrafine aerosols affecting the climate of Greece» (Winter period, 2013-2014).

### PARTICIPATION IN EXPERIMENTAL CAMPAIGNS

- Instruments installation for monitoring urban particulate matter in the city of Ioannina
- Filters sampling

- Scientific analysis
- **ASKOS:** «Support to the Aeolus Validation and Calibration Through Ground Based Observations in the Tropics» (June-July 2020, Cabo Verde).
  - Cal/Val of Aeolus products
  - Manager of the working package “Synthesis of Reports and Recommendations”

## I. CONFERENCE SCIENTIFIC COMITEES

- Nomination as a judge for the Outstanding Student and PhD candidate Presentation (OSPP) Award contest at the [EGU General Assembly 2022](#).
- Member of the [scientific committee](#) of the [Aeolus 3<sup>rd</sup> Anniversary Conference](#) [28<sup>th</sup> – 1<sup>st</sup> April 2022, Taormina, Italy]
- Co-chair of the [Science#2 session](#) in the [Aeolus 3<sup>rd</sup> Anniversary Conference](#) [28<sup>th</sup> – 1<sup>st</sup> April 2022, Taormina, Italy]
- Co-chair of the [Aerosols and data assimilation](#) Session in the EUMETSAT Meteorological Satellite Conference [19-23 September 2022, Brussels, Belgium]

## J

- **PARTICIPATION IN UNIONS**
- Member of the Hellenic Meteorological Society (EMTE)
- Member of the European Geosciences Union (EGU)
- Member of the American Geoscience Union (AGU)
- Member of the Hellenic Association for Aerosol Research (HAAR)

## K

### COLLABORATIONS

- European Space Agency (ESA)
- European Center of Mesoscale Weather Forecasts (ECMWF)
- European Organisation for the Exploitation of Meteorological Satellites (EUMETSAT)
- Royal Netherlands Meteorological Institute (KNMI)
- Barcelona Supercomputing Center (BSC)
- Leibniz Institute for Tropospheric Research (TROPOS)
- Cyprus Institute (Cyl)
- University of California, Los Angeles (UCLA)
- Institute of Environmental Assessment and Water Research (IDAEA-CSIC)
- National Observatory of Athens
- University of Ioannina

- Aristotle University of Thessaloniki (Τμήμα Φυσικής)
- University of Patras
- National Technical University of Athens
- University of Aegean
- University of Crete