



Sarantis Sofianos

Curriculum Vitae

Associate Professor
Department of Physics
National and Kapodistrian University of Athens

Contact:

Division of Environmental Physics - Meteorology
University Campus, Building PHYS-5
Athens, 15784
Phone: +30 210 7276932
e-mail: ssofiano@phys.uoa.gr

January 2024

Professional History:

2020 – Present: Associate Professor, Faculty of Physics, University of Athens, Greece

2019 – Present: Visiting Professor, Foundation for Research and Technology - Hellas (Institute of Applied and Computational Mathematics)

2015 – 2020: Assistant Professor, Faculty of Physics, University of Athens, Greece (Tenureship: 14/2/2019)

2009 – 2015: Lecturer of Physical Oceanography, Faculty of Physics, University of Athens, Greece

2000 – 2009: Researcher, Faculty of Physics, University of Athens, Greece

1995 – 2000: Research Assistant, University of Miami, USA

1994 – 1995: Research Assistant, University of Athens, Greece

Education:

BSc in Physics, **University of Athens**

PhD in Meteorology and Physical Oceanography, **University of Miami**, USA. Title: *"Circulation and Water Mass Formation in the Red Sea, and the Exchange with the Indian Ocean"*. Supervisor: Professor W. E. Johns.

Research Activities

Publications:

Publications in peer reviewed journals and book chapters:

1. **Sofianos S. S.** and W. E. Johns, 2001: Wind induced sea level variability in the Red Sea, *Geophysical Research Letters*, 28, 3175-3178.
2. **Sofianos S. S.**, W. E. Johns, and S. P. Murray, 2002: Heat and freshwater budgets in the Red Sea from direct observations at Bab el Mandeb, *Deep Sea Research II*, 49, 1323-1340.
3. **Sofianos S. S.** and W. E. Johns, 2002: An Oceanic General Circulation Model (OGCM) investigation of the Red Sea circulation, 1. The exchange between the Red sea and the Indian Ocean. *Journal of Geophysical Research*, 107, 3196, doi: 10.1029/2001JC001184.
4. **Sofianos S. S.** and W. E. Johns, 2003: An Oceanic General Circulation Model (OGCM) investigation of the Red Sea circulation. Part II.: The three-dimensional circulation in the Red Sea. *Journal of Geophysical Research*, 108, 3066, doi: 10.1029/2001JC001185.
5. Lascaratos A., **S. Sofianos**, and G. Korres, 2003: Interannual variability of atmospheric parameters over the Mediterranean basin fro 1945 to 1994, *CIESM Workshop Series*, vol. 16, pp. 21-24.
6. Theocharis A., A. Lascaratos, and **S. Sofianos**, 2003: Variability of sea water properties in the Ionian, Cretan and Levantine seas during the last century, *CIESM Workshop Series*, vol. 16, pp. 73– 76.
7. Lascaratos A., **S. Sofianos**, A. Theocharis and M. Tsimplis, 2005: Long term water masses: time scales, in “State of the Hellenic Marine Environment”, Eds. V. Papathanasiou and A. Zenetos, *HCMR Publ.*, 360 pp, ISBN: 960-86651-8-3.
8. **Sofianos S. S.**, N. Skliris, A. Mantziafou, A. Lascaratos, G. Zodiatis, R. Lardner, D. Hayes, and G. Georgiou, 2006: Nesting operational forecasting models in the Eastern Mediterranean: active and slave mode, *Ocean Science Discussions*, 3, 1225–1254.
9. Skliris N., **S. Sofianos** and A. Lascaratos, 2007: Hydrological changes in the Mediterranean Sea in relation to changes in the freshwater budget: A numerical modelling study, *Journal of Marine Systems*, 65, 400-416.
10. **Sofianos S. S.** and W. E. Johns, 2007: Observations of the summer Red Sea circulation, *Journal of Geophysical Research*, VOL. 112, C06025, doi:10.1029 - 2006JC003886.
11. Zodiatis, G., R. Lardner, D. Hayes, G. Georgiou, **S. Sofianos**, N. Skliris, A. Lascaratos, 2008: Operational ocean forecasting in the Eastern Mediterranean: implementation and evaluation, *Ocean Science*, 4, 31-47.
12. Skliris, N., A. Mantziafou, **S. Sofianos**, and A. Gkanasos, 2010: Satellite-derived variability of the Aegean Sea ecohydrodynamics, *Continental Shelf Research*, 30 (5), pp. 403-418.
13. Tzali, M., **S. Sofianos**, A. Mantziafou and N. Skliris, 2010: Modelling the impact of Black Sea water inflow on the North Aegean Sea hydrodynamics, *Ocean Dynamics*, DOI: 10.1007/s10236-010-0277-3.
14. Skliris, N., **S. Sofianos**, A. Gkanasos, A. Mantziafou, V. Vervatis, P. Axaopoulos, A. Lascaratos, 2011: Decadal scale variability of sea surface temperature in the Mediterranean Sea in relation to atmospheric variability, *Ocean Dynamics*, DOI 10.1007/s10236-011-0493-5.

15. Vervatis, V. D., **S. Sofianos**, and A. Theocharis, 2011: Distribution of the thermohaline characteristics in the Aegean Sea related to water mass formation processes (2005-2006 winter surveys), *J. Geophys. Res.*, doi:10.1029/2010JC006868.
16. Skliris, N., **S. S. Sofianos**, A. Gkanasos, P. Axaopoulos, A. Mantziafou, V. Vervatis, 2011: Long-term sea surface temperature variability in the Aegean Sea, *Advances in Oceanography and Limnology*, 2:2, 125-139.
17. Zafirakou-Koulouris A., C. Koutitas, **S. Sofianos**, A. Mantziafou, M. Tzali and S. C. Dermissi, 2012, Oil Spill Dispersion Forecasting with the aid of a 3D Simulation Model, *Journal of Physical Science and Application*, 2012, 10, 448-453.
18. Tonani, M., J. A. U. Nilsson, V. Lyubartsev, A. Grandi, A. Aydogdu, J. Azzopardi, G. Bolzon, A. Bruschi, A. Drago, T. Garau, J. Gatti, I. Gertman, R. Goldman, D. Hayes, G. Korres, P. Lorente, V. Malacic, A. Mantziafou, G. Nardone, A. Olita, E. Ozsoy, I. Pairaud, S. Pensieri, L. Perivoliotis, B. Petelin, M. Ravaioli, L. Renault, **S. Sofianos**, M. G. Sotillo, A. Teruzzi, and G. Zodiatis, 2012: Operational evaluation of the Mediterranean Monitoring and Forecasting Centre products: implementation and results, *Ocean Sci. Discuss.*, 9, 1813–1851, doi:10.5194/osd-9-1813-2012.
19. Johns, W. E. and **S. Sofianos**, 2012, Atmospherically Forced Exchange through the Bab el Mandeb Strait, *J. Phys. Oceanogr.*, 42, 1143–1157.
20. Vervatis V. D., **S. S. Sofianos**, N. Skliris, S. Somot, A. Lascaratos and M. Rixen, 2013: Mechanisms controlling the thermohaline circulation pattern variability in the Aegean–Levantine region. A hindcast simulation (1960–2000) with an eddy resolving model, *Deep-Sea Research I*, 74, 82–97.
21. Qahtani, J.A., Alaa, E., Kallos, G., Galanis, G., **Sofianos, S.**, Mitsakou, C., Spyrou, C., Kalogeri, C., Bartsotas, N., Athanaselis, J., Vervatis, V., Solomos, S., Axaopoulos, P., Beard, D.W., Alexiou, I., 2014: An integrated weather and sea state forecasting system for the Arabian Peninsula (WASSF), *Springer Proceedings in Complexity*, pp. 173-177.
22. Özsoy E., **S. Sofianos**, I. Gertman, A. Mantziafou, A. Aydoğdu, S. Georgiou, E. Tutsak, A. Lascaratos, A. Hecht and M. A. Latif, 2014: Deep-water variability and inter-basin interactions in the Eastern Mediterranean Sea, in: *The Mediterranean sea: temporal variability and spatial patterns*, Geophysical Monograph Series, 202, 85-112.
23. Malanotte-Rizzoli P., V. Artale, G. L. Borzelli-Eusebi, S. Brenner⁴, G. Civitarese, A. Crise, J. Font, M. Gacic, N. Kress, S. Marullo, E. Ozsoy, M. Ribera d’Alcalà, W. Roether, K. Schroeder, **S. Sofianos**, T. Tanhua, A. Theocharis, M. Alvarez, Y. Ashkenazy, A. Bergamasco, V. Cardin, S. Carniel, F. D’Ortenzio, E. Garcia-Ladona, J. M. Garcia-Lafuente, A. Gogou, M. Gregoire, D. Hainbucher, H. Kontoyannis, V. Kovacevic, E. Krasakapoulou, G. Krokos, A. Incarbona, M. G. Mazzocchi, M. Orlic, A. Pascual, P.-M. Poulain, A. Rubino, J. Siokou-Frangou, E. Souvermezoglou, M. Sprovieri, I. Taupier-Letage, J. Tintoré, and G. Triantafyllou, 2014: Physical forcing and physical/biochemical variability of the Mediterranean Sea: a review of unresolved issues and directions for future research, *Ocean Science*, 10, 281-322, doi: 10.5194/os-10-281-2014.
24. Georgiou, S., A. Mantziafou, **S. Sofianos**, I. Gertman, E. Özsoy, S. Somot and V. Vervatis, 2014: Climate Variability and Deep Water Mass Characteristics in the Aegean Sea, *Atmos. Res.*, 152, 146-158, DOI: 10.1016/j.atmosres. 2014.07. 023.
25. Vervatis, V., N. Skliris and **S. Sofianos**, 2014: Inter-annual/decadal variability of the north Aegean Sea hydrodynamics over 1960-2000, *Medit. Mar. Sci.*, 15/4, 2014, SPECIAL ISSUE, 696-705.
26. Sofianos, S., V. Vervatis, A. Mantziafou, M. Ravdas and S. Georgiou, 2015: Investigating deep-water formation variability in the Aegean Sea and its influence in the adjacent basins deep circulation, *J. Black Sea/Medit. Envir.*, Special Issue, 74-77.

27. **Sofianos, S.** and W. E. Johns, 2015: Water Mass Formation, Overturning Circulation, and the Exchange of the Red Sea with the Adjacent Basins, in: N.M.A Rasul and I.C.F Stewart (eds.), *The Red Sea*, Springer Earth System Sciences, DOI 10.1007/978-3-662-45201-1_20.
28. Hernandez, F., E. Blockley, G. B. Brassington, F. Davidson, P. Divakaran, M. Drévillon, S. Ishizaki, M. Garcia-Sotillo, P. J. Hogan, P. Lagema, B. Levier, M. Martin, A. Mehra, C. Mooers, N. Ferry, A. Ryan, C. Regnier, A. Sellar, G. C. Smith, **S. Sofianos**, T. Spindler, G. Volpe, J. Wilkin, E. D. Zaron, A. Zhang, 2015: Performance evaluations, near real-time assessment of operational oceanography forecast products, *J. Oper. Ocean.*, <http://dx.doi.org/10.1080/1755876X.2015.1050282>.
29. Papadopoulos, V. P., Zhan, P., **Sofianos, S. S.**, Raitsos, D. E., Qurban, M., Abualnaja, Y., Bower, A., Kontoyiannis, H., Pavlidou, A., Asharaf T.T., M., Zarokanellos, N. and Hoteit, I., 2015: Factors governing the deep ventilation of the Red Sea. *J. Geophys. Res. Oceans*, 120, 7493–7505 DOI:10.1002/2015JC010996.
30. Licer, M., P. Smerkol, A. Fettich, M. Ravdas, A. Papapostolou, A. Mantziafou, B. Strajnar, J. Cedilnik, M. Jeromel, J. Jerman, S. Petan, V. Malacic, and **S. Sofianos**, 2016: Modeling ocean and atmosphere during an extreme Bora event in Northern Adriatic using one-way and two-way atmosphere-ocean coupling, *Ocean Sci.*, 12, 71-86, doi:10.5194/os-12-71-2016.
31. Mavropoulou, A.-M., A. Mantziafou, E. Jarosz and **S. Sofianos**, 2016: The influence of Black Sea Water inflow and its synoptic time-scale variability in the North Aegean Sea hydrodynamics, *Ocean Dynamics*, 66(2), 195-206, doi: 10.1007/s10236-016-0923-5.]
32. Kostopoulos, V., E. Chrisagi, **S. Sofianos**, K. Helmis, 2016: Study of the impact of a new Drag Coefficient parameterization on the forecasting skill of an Ocean Model in the Aegean and Levantine Seas, *Med. J. Physics*, 1 (1), 22-31.
33. Zodiatis, G., M. De Dominicis, L. Perivoliotis, H. Radhakrishnan, E. Georgoudis, M. Sotillo, R. W. Lardner, G. Krokos, D. Bruciaferri, A. Ribotti, A. Drago, E. Bourma, E. Padorno, P. Daniel, G. Gonzalez, C. Chazot, V. Gouriou, **S. Sofianos**, J. Tintore, P. Garreau, N. Pinardi, G. Coppini, A. Pisano, E. D'Acunzo, R. Sorgente, L. Fazioli, D. Soloviev, S. Stylianou, A. Nicolaidis, X. Panayidou, A. Karaolia, 2016: The Mediterranean Decision Support System for Marine Safety dedicated to oil slicks predictions, *Deep Sea Res. Part II*, <http://dx.doi.org/10.1016/j.dsr2.2016.07.014>.
34. **Sofianos S.** and W. E. Johns, 2017: The Summer Circulation in the Gulf of Suez and Its Influence in the Red Sea Thermohaline Circulation, *J. Phys. Oceanogr.*, DOI: 10.1175/JPO-D-16-0282.1
35. Zarokanellos, N. D., V. P. Papadopoulos, **S. S. Sofianos**, and B. H. Jones, 2017: Physical and biological characteristics of the winter-summer transition in the Central Red Sea, *J. Geophys. Res. Oceans*, 122, doi:10.1002/2017JC012882.
36. Hatzonikolakis, Y., K. Tsiaras, J. A. Theodorou, G. Petihakis, **S. Sofianos** and G. Triantafyllou, 2017: Simulation of mussel *Mytilus galloprovincialis* growth with a dynamic energy budget (DEB) model in Maliakos and Thermaikos Gulfs (E. Mediterranean), *Aquaculture Environment Interactions*, DOI: <https://doi.org/10.3354/aei00236>
37. Zodiatis, G., R. Lardner, T. M. Alves, Y. Krestenitis, L. Perivoliotis, **S. Sofianos** and K. Spanoudaki, 2017: Oil spill forecasting (prediction), *J. Mar. Res.*, 75, 923–953. [Cited: 1/1/2]
38. Mitchell, N. C. and **S. S. Sofianos**, 2018: Origin of submarine channel north of Hanish Sill, Red Sea, in: N. M. A. Rasul and I. C. F. Stewart (eds.), *Geological Setting, Palaeoenvironment and Archaeology of the Red Sea*, Springer Earth System Sciences, ISBN 978-3-319-99408-6, DOI: 10.1007/978-3-319-99408-6.

39. Iona, A., Theodorou, A., **Sofianos, S.**, Watelet, S., Troupin, C., and Beckers, J.-M., 2018: Mediterranean Sea climatic indices: monitoring long-term variability and climate changes, *Earth Syst. Sci. Data*, 10, 1829-1842, <https://doi.org/10.5194/essd-10-1829-2018>.
40. Krokos, G., V. Papadopoulos, **S. Sofianos** and I. Hoteit, 2019: Natural Climate Oscillations May Counteract Red Sea Warming over the Coming Decades, *Geophys. Res. Lett.*, DOI:10.1029/2018GL081397
41. Xie, J., G. Krokos, **S. Sofianos** and I. Hoteit, 2019, Interannual Variability of the Exchange Flow Through the Strait of Bab-al-Mandeb, *J. Geophys. Res.: Oceans*, 124. <https://doi.org/10.1029/2018JC014478>
42. Gkanasos, A., S. Somarakis, K. Tsiaras, D. Kleftogiannis, M. Giannoulaki, E. Schismenou, **S. Sofianos**, G. Triantafyllou, 2019: Development, application and evaluation of a 1-D full life cycle anchovy and sardine model for the North Aegean Sea (Eastern Mediterranean), *PLoS ONE* 14(8): e0219671. <https://doi.org/10.1371/journal.pone.0219671>
43. Tintore, J., Pinardi N., Álvarez-Fanjul E., Aguiar E., Álvarez-Berastegui D., Bajo M., Balbin R., Bozzano R., Nardelli B.B., Cardin V., Casas B., Charcos-Llorens M., Chiggiato J., Clementi E., Coppini G., Coppola L., Cossarini G., Deidun A., Deudero S., D'Ortenzio F., Drago A., Drudi M., El Serafy G., Escudier R., Farcy P., Federico I., Fernández J.G., Ferrarin C., Fossi C., Frangoulis C., Galgani F., Gana S., García Lafuente J., Sotillo M.G., Garreau P., Gertman I., Gómez-Pujol L., Grandi A., Hayes D., Hernández-Lasheras J., Herut B., Heslop E., Hilmi K., Juza M., Kallos G., Korres G., Lecci R., Lazzari P., Lorente P., Liubartseva S., Louanchi F., Malacic V., Mannarini G., March D., Marullo S., Mauri E., Meszaros L., Mourre B., Mortier L., Muñoz-Mas C., Novellino A., Obaton D., Orfila A., Pascual A., Pensieri S., Pérez Gómez B., Pérez Rubio S., Perivoliotis L., Petihakis G., de la Villéon L.P., Pistoia J., Poulain P.-M., Pouliquen S., Prieto L., Raimbault P., Reglero P., Reyes E., Rotllan P., Ruiz S., Ruiz J., Ruiz I., Ruiz-Orejón L.F., Salihoglu B., Salon S., Sammartino S., Arcilla A.S., Sánchez-Román A., Sannino G., Santoleri R., Sardá R., Schroeder K., Simoncelli S., **Sofianos S.**, Sylaios G., Tanhua T., Teruzzi A., Testor P., Tezcan D., Torner M., Trotta F., Umgiesser G., von Schuckmann K., Verri G., Vilibic I., Yucel M., Zavatarelli M. and Zodiatis G., 2019: Challenges for Sustained Observing and Forecasting Systems in the Mediterranean Sea, *Front. Mar. Sci.*, 6:568. doi: 10.3389/fmars.2019.00568
44. Mavropoulou, A.-M., V. Vervatis and **S. Sofianos**, 2020: Dissolved Oxygen interannual variability and shifts in the Mediterranean Sea, *Journal of Marine Systems*, doi: <https://doi.org/10.1016/j.jmarsys.2020.103348>.
45. Asfahani, K., G. Krokos, V. Papadopoulos, B. H. Jones, **S. Sofianos**, M. Kheireddine and I. Hoteit, 2020: Capturing a Mode of Intermediate Water Formation in the Red Sea, *Journal of Geophysical Research: Oceans*, 125, e2019JC015803, doi: <https://doi.org/10.1029/2019JC015803>.
46. Vasou, P., V. Vervatis, G. Krokos, I. Hoteit and **S. Sofianos**, 2020: Variability of Water Exchanges Through the Strait of Hormuz, *Ocean Dynamics*, 70:1053-1065, doi: <https://doi.org/10.1007/s10236-020-01384-2>
47. Stamataki N., Y. Hatzonikolakis, K. Tsiaras, C. Tsangaris, G. Petihakis, **S. Sofianos**, and G. Triantafyllou, 2020: Modelling mussel (*Mytilus* spp.) microplastic accumulation, *Ocean Science*, 16, 927-949, doi: <https://doi.org/10.5194/os-16-927-2020>
48. Karagiorgos J., V. Vervatis and **S. Sofianos**, 2020: The impact of Tides on the Bay of Biscay Dynamics, *J. Mar. Sci. Eng.*, 8, 617, doi: <https://doi.org/10.3390/jmse8080617>
49. Hoteit I., Y. Abualnaja, S. Afzal, B. Ait-El-Fquih, T. Akylas, C. Antony, C. Dawson, K. Asfahani, R. J. Brewin, L. Cavaleri, I. Cerovecki, B. Cornuelle, S. Desamsetti, R. Attada, H. Dasari, J. Sanchez-Garrido, L. Genevier, M. El Gharamti, J. A. Gittings, E. Gokul, G. Gopalakrishnan, D. Guo, B. Hadri, M. Hadwiger, M. Abed Hammoud, M. Hendershott, M. Hittawe, A. Karumuri, O. Knio, A. Köhl, S. Kortas, G. Krokos, R. Kunchala, L. Issa, I.

- Lakkis, S. Langodan, P. Lermusiaux, T. Luong, J. Ma, O. Le Maitre, M. Mazloff, S. El Mohtar, V. P. Papadopoulos, T. Platt, L. Pratt, N. Raboudi, M.-F. Racault, D. E. Raitzos, S. Razak, S. Sanikommu, S. Sathyendranath, **S. Sofianos**, A. Subramanian, R. Sun, E. Titi, H. Toye, G. Triantafyllou, K. Tsiaras, P. Vasou, Y. Viswanadhapalli, Y. Wang, F. Yao, P. Zhan and G. Zodiatis, 2020: Towards an End-to-End Analysis and Prediction System for Weather, Climate, and Marine Applications in the Red Sea, *Bull. Amer. Meteor. Soc.* 1–61, doi: <https://doi.org/10.1175/BAMS-D-19-0005.1>
50. Banks, A.C., P. G. Drakopoulos, S. Chaikalas, N. Spyridakis, A. P. Karageorgis, S. Psarra, V. Taillandier, F. D'Ortenzio, **S. Sofianos**, Xavier Durrieu de Madron, 2020: An in situ optical dataset for working towards fiducial reference measurements based satellite ocean colour validation in the Eastern Mediterranean, *Proc. SPIE 11524*, Eighth International Conference on Remote Sensing and Geoinformation of the Environment (RSCy2020), 1152424, <https://doi.org/10.1117/12.2571193>
51. Vervatis, V., P. De Mey-Frémaux, N. Ayoub, J. Karagiorgos, M. Ghantous, M. Kailas, C.-E. Testut, and **S. Sofianos**, 2020: Assessment of a physical-biogeochemical stochastic model in a high-resolution Bay of Biscay configuration. Part 1: generation and first analysis, *Ocean Modelling*, Volume 160, 101781, doi: <https://doi.org/10.1016/j.ocemod.2021.101781>
52. Vervatis, V., P. De Mey-Frémaux, N. Ayoub, J. Karagiorgos, S. Ciavatta, R. J. W. Brewin, and **S. Sofianos**, 2020: Assessment of a physical-biogeochemical stochastic model in a high-resolution Bay of Biscay configuration. Part 2: empirical consistency, *Ocean Modelling*, Volume 160, 101770, doi: <https://doi.org/10.1016/j.ocemod.2021.101770>
53. Kampouris, K., V. Vervatis, J. Karagiorgos and **S. Sofianos**, 2021: Oil spill model uncertainty quantification using an atmospheric ensemble, *Ocean Science*, 17, 919–934, <https://doi.org/10.5194/os-17-919-2021>
54. Zodiatis, G., L. Robin Lardner, K. Spanoudaki, **S. Sofianos**, H. Radhakrishnan, G. Coppini, S. Liubartseva, N. Kampanis, G. Krokos, I. Hoteit, J. Tintore, T. Eremina and A. Drago, 2021: Operational oil spill modelling assessments, in: *Marine Hydrocarbon Spill Assessments*, Ed. Oleg Makarynsky, ISBN: 978-0-12-819354-9
55. Chaikalas S., Parinos C, Möbius J., Gogou A., Velaoras D., Hainbacher D., **Sofianos S.**, Tanhua T., Cardin V., Proestakis E., Amiridis V., Androni A. and Karageorgis A., 2021: Optical Properties and Biochemical Indices of Marine Particles in the Open Mediterranean Sea: The R/V Maria S. Merian Cruise, March 2018, *Front. Earth Sci.*, doi: <https://doi.org/10.3389/feart.2021.614703>
56. Gkanasos, A., Schismenou, E., Tsiaras, K., Somarakis, S., Giannoulaki, M., **Sofianos, S.**, and Triantafyllou, G., 2021: A three dimensional, full life cycle, anchovy and sardine model for the North Aegean Sea (Eastern Mediterranean): Validation, sensitivity and climatic scenario simulations, *Medit. Mar. Sci.*, doi:<https://doi.org/10.12681/mms.27407>
57. Zgouridou, A., Tripidaki, E., Giantsis, I.A., Theodorou, J.A., Kalaitzidou, M., Raitzos, D.E., Lattos, A., Mavropoulou, A.-M., **Sofianos, S.**, Karagiannis, D., Chaligiannis, I., Anestis, A., Papadakis, N., Feidantsis, K., Mintza, D., Staikou, A. and Michaelidis, B., 2021: The current situation and potential effects of climate change on the microbial load of marine bivalves of the Greek coastlines: an integrative review, *Environ. Microbiol.*, <https://doi.org/10.1111/1462-2920.15765>
58. Bourma, E.; Perivoliotis, L.; Petihakis, G.; Korres, G.; Frangoulis, C.; Ballas, D.; Zervakis, V.; Tragou, E.; Katsafados, P.; Spyrou, C.; Dassenakis M., Poulos S., Megalofonou P., **Sofianos S.**, Paramana T., Katsaounis G., Karditsa A., Petrakis S., Mavropoulou A.-M., Paraskevopoulou V., Milatou N., Pagonis P., Velanas S., Ntoumas M., Mamoutos I., Pettas M., Christodoulaki S., Kassis D., Sotiropoulou M., Mavroudi A., Moira A., Denaxa D., Anastasopoulou G., Potiris M., Kolovogiannis V., Dimitrakopoulos A.-A., Petalas S. and Zissis N., 2022: The Hellenic Marine Observing, Forecasting and Technology System—An

Integrated Infrastructure for Marine Research, *J. Mar. Sci. Eng.*, 10(3), 329.
<https://doi.org/10.3390/jmse10030329>

59. Mavropoulou, A.-M., V. Vervatis and **S. Sofianos**, 2022: The Mediterranean Sea overturning circulation: A hindcast simulation (1958–2015) with an eddy-resolving ($1/36^\circ$) model, *Deep Sea Res. Part I: Oceanographic Research Papers*, Volume 187, <https://doi.org/10.1016/j.dsr.2022.103846>.
60. Karageorgis, A. P., V. C. Metheniti, S. P. Chaikalis, W. D. Gardner, Th. Kanellopoulos, O. Mikkelsen, N. Kampanis, **S. Sofianos**, and Ch. Anagnostou, 2022: Particulate Matter Spatial, Temporal Distribution and Size Properties in the Aegean Sea, in: *The Aegean Sea Environment: The Natural System*, C. L. Anagnostou, A. G. Kostianoy, I. D. Mariolakos, P. Panayotidis, M. Soilemezidou, and G. Tsaltas (eds.), *Hdb Env Chem*, DOI: 10.1007/698_2022_899
61. Antivachis, D., V. Vervatis, **S. Sofianos**, 2023: Lagrangian Coherent Structures in the Mediterranean Sea: Seasonality and basin regimes, *Progress in Oceanography*, Volume 215, 103051, ISSN 0079-6611, <https://doi.org/10.1016/j.pocean.2023.103051>.
62. Metheniti, V., A. P. Karageorgis, P. Drakopoulos, N. Kampanis, **S. Sofianos**, 2023: Deriving the diffuse attenuation coefficient in the Eastern Mediterranean Sea, using observational optical measurements and a multi-layer perceptron regression model, *Deep Sea Research Part I: Oceanographic Research Papers*, Volume 199, 104105, ISSN 0967-0637, <https://doi.org/10.1016/j.dsr.2023.104105>.
63. Patlakas, P., C. Stathopoulos, C. Kalogeri, V. Vervatis, J. Karagiorgos, I. Chaniotis, A. Kallos, A. S. Ghulam, M. A. Al-omary, I. Papageorgiou, D. Diamantis, Z. Christidis, J. Snook, **S. Sofianos**, and G. Kallos, 2023: The Development and Operational Use of an Integrated Numerical Weather Prediction System in the National Center for Meteorology of the Kingdom of Saudi Arabia, *Weather and Forecasting* 38, 11 (2023): 2289-2319, doi: <https://doi.org/10.1175/WAF-D-23-0034.1>
64. Vasou, P., G. Krokos, S. Langodan, **S. Sofianos**, and I. Hoteit, 2023: Contribution of surface and lateral forcing to the Arabian Gulf warming trends, *Frontiers in Marine Science*, Volume 10 – 2023, doi: [10.3389/fmars.2023.1260058](https://doi.org/10.3389/fmars.2023.1260058)
65. Kargiorgos, J., V. Vervatis, I. Samos, **S. Sofianos** and H. Flocas, 2023: Ocean-wave-atmosphere coupling and model initialization in Medicane forecasting, *Journal: Atmospheric Research*, (submitted for publication, ATMOSRES-D-23-02122)
66. Metheniti, V., V. Vervatis, N. Kampanis, and **S. Sofianos**, 2023: Turbidity effects on the Aegean Sea Surface Properties Using Numerical Simulations, *Deep-Sea Research Part I* (submitted for publication, DSR1-D-23-00271)

Publications in peer reviewed international conference proceedings:

1. Johns W. E., S. P. Murray, and S. S. Sofianos, 1998: Atmospherically forced exchange through the strait of Bab el Mandeb, 1998 Ocean Sciences Meeting, AGU, February 1998, San Diego, California, USA.
2. Sofianos S. S. and W. E. Johns, 2000: Investigation of the seasonal exchange between the Red Sea and the Indian Ocean, a numerical model approach, 2000 Ocean Sciences Meeting, AGU, January 2000, San Antonio, Texas, USA.
3. Johns W. E. , S. S. Sofianos, and S. P. Murray, 2000: The exchange flow at Bab el Mandeb and the inferred heat and freshwater budgets of the Red Sea, April 2000, EGS XXV General Assembly, Nice, France.
4. Sofianos S. S. and W. E. Johns, 2000: Modeling the seasonal exchange between a semi-enclosed sea and the open ocean, April 2000, EGS XXV General Assembly, Nice, France.

5. Johns W. E. and S. S. Sofianos, 2002: Atmospherically forced exchange through the strait of Bab el Mandeb. April 2002, Villefrance, Second ONR Straits Workshop.
6. Korres G., A. Lascaratos and S. Sofianos, 2002: Use of atmospheric forecast fields in ocean circulation and wave prediction models in Greek areas, 5th RAMS Workshop and Related Applications. 29 Sept. – 3 Oct. 2002, Santorini, Greece.
7. Korres G., A. Lascaratos, S. Sofianos and G. Kallos, 2002: The ALERMO ocean circulation forecast system, 3rd EuroGOOS Conference, December 2002, Athens, Greece
8. Korres G., A. Lascaratos, S. Sofianos and G. Kallos. 2002: The TRITON wave forecast system, 3rd EuroGOOS Conference, December 2002, Athens, Greece
9. Johns W. E., S. P. Murray, S. Sofianos, D. B. Olson and F. Yao, 2003: Exchanges of the Arabian Marginal Seas with the Indian Ocean, IUGG 2003 Meeting, Sapporo, Japan, June 30 – July 11, 2003.
10. Sofianos S., N. Skliris, and A. Lascaratos, 2004: Forcing mechanisms of the Aegean Sea Circulation, CIESM 2004 Meeting, Barcelona, May 2004.
11. Lascaratos A. and S. Sofianos, 2004: Deep water mass variability in the Eastern Mediterranean, CIESM 2004 Meeting, Barcelona, May 2004.
12. Druon J-N., W. Schrimpf, S. Dobricic, E. Peneva , A. Lascaratos, S. Sofianos , P. Garreau, S. Djavidnia, 2004: Relative Contribution of the Eutrophication and Hydromorphology to Bottom Oxygen Deficiency: The case of the Mediterranean and Black Seas, CIESM 2004 Meeting, Barcelona, May 2004.
13. Sofianos S., A. Lascaratos, and V. Vervatis, 2004: Monitoring the Saharan dust dispersion in the Mediterranean Sea with a numerical model (2001-2002), CIESM 2004 Meeting, Barcelona, May 2004.
14. Skliris N., A. Lascaratos, and S. Sofianos, 2004: Modelling the impact of the Nile damming on the Mediterranean thermohaline circulation, CIESM 2004 Meeting, Barcelona, May 2004.
15. Skliris N., S. Sofianos, A. Lascaratos, 2004: Past and future changes in the Mediterranean "climate" in relation to changes in the freshwater budget: a numerical modeling study, 36th International Liege Colloquium on Ocean Dynamics: "Marine Environmental Monitoring and Prediction", May 2004, Liege, Belgium.
16. Kallos G., S. Sofianos, I. Pytharoulis, P. Katsafados and N. Skliris, 2005: Limited area atmosphere/ocean forecasting system for the Eastern Mediterranean MFSTEP activities, 2005 International Ocean Research Conference, UNESCO-TOS, Paris, France, June 2005.
17. Sofianos S., N. Skliris, V. Vervatis, D. Olson, V. Kourafalou, A. Lascaratos and W. Johns, 2005: On the Forcing Mechanisms of the Aegean Sea Surface Circulation, Geophysical Research Abstracts, Vol.7, 04223.
18. Skliris N., S. Sofianos and A. Lascaratos, 2006: Changes in the Mediterranean Sea climate in relation to changes in the freshwater budget: a numerical modeling study, Geophysical Research Abstracts, Vol.8, 02251.
19. Zodiatis G., R. Lardner, D. Hayes, G. Georgiou ,S. Sofianos, N. Skliris and A. Lascaratos, 2006: Implementation and evaluation of regional and coastal ocean forecasting systems in the Eastern Mediterranean, Geophysical Research Abstracts, Vol.8, 04627.
20. Theocharis A., V. Vervatis and S. Sofianos, 2006: Monitoring the evolution of the Aegean Sea thermohaline characteristics in the post-Eastern Mediterranean Transient period, Geophysical Research Abstracts, Vol.8, 06515.
21. Sofianos S., A. Theocharis and V. Vervatis, 2006: Profiling Float Observations in the Aegean Sea, Second Argo Science Workshop, Venice, Italy, March 13-18, 2006.

22. Skliris N., S. Sofianos, A. Mantziafou and A. Lascaratos, 2007: Ocean Forecasting in the Eastern Mediterranean, the ALERMO system, CIESM 2007 Meeting, Istanbul, Turkey.
23. Sofianos S., A. Theocharis and V. Vervatis, 2007: Changes in the Aegean Sea Thermohaline Characteristics in the Post-Eastern Mediterranean Transient Period, CIESM 2007 Meeting, Istanbul, Turkey.
24. Skliris N., A. Mantziafou, S. Sofianos, A. Lascaratos, I. Keramitsoglou, G. Vlahopoulos, N. Adaktilou and C. Cartalis, 2007: Modelling the Ecohydrodynamics of the Aegean Sea, EGU General Assembly, Vienna 15-20 April 2007.
25. Zodiatis G., R. Lardner, D. Hayes, G. Georgiou, S. Sofianos, N. Skliris, G. Kallos and A. Lascaratos, 2007: Validation of Ocean Forecasts in the Levantine Basin, Eastern Mediterranean, International Conference, Fluxes and Structures in Fluids, St. Petersburg, Russia, July 2007.
26. Sofianos S., 2007: The Mediterranean Operational Oceanography Network Forecasting System, GODAE Coastal Workshop, Liverpool, UK, October 2007.
27. Skliris N., A. Mantziafou, S. Sofianos, A. Lascaratos, I. Keramitsoglou, G. Vlahopoulos, C. Cartalis, V. Paraskevopoulou, M. Scoullou, 2008: A study of the plankton ecosystem of the Aegean Sea using Seawifs data and a 3D coupled hydrodynamic/biological model, EGU General Assembly, Vienna, April 2008.
28. Zodiatis G., D. Hayes, R. Lardner, G. Georgiou, S. Sofianos, N. Skliris, A. Lascaratos, 2008: Evaluation of operational ocean forecasting in the Cyprus subregion, EGU General Assembly, Vienna, April 2008.
29. Sofianos, S., 2008: Evolution of the Aegean Sea thermohaline structure in the post-Eastern Mediterranean Transient period, 3rd ESF MedCLIVAR Workshop Rhodes, September 2008 (INVITED).
30. Zodiatis G., S. Sofianos, N. Skliris, A. Mantziafou, A. Lascaratos, R. Lardner, D. Hayes, G. Georgiou G., 2009: Evaluating nesting procedures in ocean operational forecasting in the Eastern Mediterranean, Fluxes and Fluid structure conference, Moscow, Lomonosov University, June 2009.
31. Skliris N., A. Mantziafou, S. Sofianos, A. Gkanasos, V. Vervatis, 2009: Variability of sea surface temperature and chlorophyll in the Aegean Sea from satellite measurements, EGU General Assembly, Vol. 11, EGU2009-487.
32. Vervatis V., S. Sofianos, and A. Theocharis, 2009: Water mass distribution and formation processes in the Aegean Sea, EGU General Assembly, Vol. 11, EGU2009-4794.
33. Tzali, M., Sofianos, S., Kallos, G., Mantziafou, A., Zafeirakou, A., Dermisis, V., Koutitas, Ch., Zervakis, V., 2009: Oil spill dispersion forecasting system for the region of installation of the burgas alexandroulopis pipeline outlet (N.E. Aegean) in the framework of "DIAVLOS" project, AIP Con. Proc., DOI:10.1063/1.3322304.
34. Axaopoulos, P. and S. Sofianos, 2009: Long term variability of sea surface temperature in Mediterranean Sea, AIP Con. Proc., DOI: 10.1063/1.3322579.
35. Sofianos S., 2009: Extreme event impact on 3-D thermohaline structure variability in the Aegean-Levantine region, 3rd HyMeX Workshop, 1-4 June 2009, Heraklion, 2009 (INVITED).
36. Zafeirakou-Koulouris, A., C. Koutitas, S. Sofianos, A. Mantziafou, M. Tzali, V. Dermisis and S. Dermisi, 2009, Modeling the evolution and fate of an oil slick with a 3-D simulation model, 3rd International Conference on Experiment, Process, System Modeling, Simulation and Optimization, Athens 8-11 July 2009.
37. Sofianos S., 2010: Monitoring and modelling the dynamics of the Aegean-Levantine basins, 4th HyMeX Workshop, 8-10 June 2010, Bologna, Italy, 2010.

38. Skliris N., A. Mantziafou, S. Sofianos, A Gkanasos, P. Aksaopoulos, and V. Vervatis, 2010: Satellite-derived long-term variability of sea surface temperature in the Mediterranean Sea, *Geophysical Research Abstracts* Vol. 12, EGU2010-6448.
39. Sofianos S., N. Skliris, A. Mantziafou and M. Tzali, 2010: Ocean forecasting in the Aegean-Levantine region, *Eos Trans. AGU*, 91(26), Ocean Sci. Meet. Suppl., 2010.
40. Skliris N., A. Mantziafou, S. Sofianos, A. Gkanasos and A. Lascaratos, 2010: Sea surface temperature and chlorophyll non-seasonal variability in the Aegean sea by means of EOF analysis of satellite data, 39th CIESM Congress, Venice, Italy, 2010.
41. Zodiatis, G., Hayes, D., Lardner, R., Georgiou, G., Kallos, G., Sofianos, S. Pinardi N. and Panayidou, X., 2010: Marine core and downstream oceanographic services in the Eastern Mediterranean Levantine Basin and their success in assisting the EU response agencies. In *Proceedings of the 5th EuroGOOS Conference, Coastal to Global Operational Oceanography: Achievements and Challenges*, publication (No. 28, pp. 465-472).
42. Kallos G., G. Galanis, C. Mitsakou, P. Athanasiadis, C. Spyrou, S. Sofianos, and C. Kalogeri, 2011: Energy resource mapping at the framework of MARINA PLATFORM project, *Geophysical Research Abstracts* Vol. 13, EGU2011-11950.
43. Sofianos S., N. Skliris, A. Mantziafou, A. Lascaratos and M. Tzali, 2011: Advances in forecasting the Aegean-Levantine circulation, 2nd Scientific Conference and Annual General Assembly of the European Federation of Marine Science and Technology Societies, Athens, Greece, July 2011.
44. Vassilios Vervatis, Sarantis Sofianos, and Nikolaos Skliris, 2011: Dynamical features of the Aegean-Levantine Seas: Interannual simulations for the years 1960-2000, 2nd Scientific Conference and Annual General Assembly of the European Federation of Marine Science and Technology Societies, Athens, Greece, July 2011.
45. Skliris N., S. S. Sofianos, A. Ganasos, A. Mantziafou, P. Axaopoulos, V. Vervatis, 2011: Sea surface temperature variability in the Aegean Sea during 1985-2008, 2nd Scientific Conference and Annual General Assembly of the European Federation of Marine Science and Technology Societies, Athens, Greece, July 2011.
46. Kallos G. and S. Sofianos, 2011: Environmental predictions for search and rescue operations – incident investigations, 3rd International Symposium on Maritime Disaster Management, Al-Khobar, SA, October 2011.
47. Sofianos, S., and Vervatis, V., 2012: The response of the Aegean and Levantine seas to changes of the air-sea fluxes, AGU, Ocean Sci. Meeting, Salt Lake City, 2012.
48. Cradden, L. C. Kalogeri, C. Spyrou, A. Adam, C. Stathopoulos, G. Galanis, S. Sofianos, D. Ingram, G. Kallos, A. Papapostolou, P. Axaopoulos, 2012: A combined resource atlas for marine energy, 4th International Conference on Ocean Energy, 17 October, Dublin, 2012.
49. Sofianos S., Vervatis V., Skliris N., Somot S., Lascaratos A., Mantziafou A., 2012: Climate variability and water mass formation in the Eastern Mediterranean Sea, 11th International Conference on Meteorology, Climatology and Atmospheric Physics, Athens May-June 2012.
50. Özsoy, E., Sofianos, S., Gertman, I., Mantziafou, A., Aydoğdu, A., Vervatis, V., Tutsak, E., Lascaratos, A. and Latif, M. A. Deep-water variability and inter-basin interactions in the Eastern Mediterranean Sea, MedCLIVAR 2012 Conference, Madrid, September 2012.
51. Sofianos S. and W. Johns, 2013: Water-mass formation, overturning circulation and the exchange of the Red Sea with the adjacent basins, Saudi Geological Survey Conference, Red Sea: Its origin Structure and Environment, Jeddah, 2013 (**INVITED**)
52. Özsoy E., S. Sofianos, I. Gertman, A. Mantziafou, A. Aydogdu, S. Georgiou, E. Tutsak, A. Lascaratos, Artur Hecht, and M. A. Latif, 2013: Deep-water variability and inter-basin

- interactions in the Eastern Mediterranean Sea, Geophysical Research Abstracts Vol. 15, EGU2013-3990, 2013, EGU General Assembly, Vienna 2013.
53. Ravdas M., S. Sofianos, A. Mantziafou, and V. Vervatis, 2013: The Dynamics of the Ionian Sea and its climatic implication: Interannual simulation for the period 1960-2000, Geophysical Research Abstracts, Vol. 15, EGU2013-4909, 2013, EGU General Assembly, Vienna 2013.
54. Kallos G., G. Galanis, C. Spyrou, C. Mitsakou, S. Solomos, N. Bartsotas, C. Kalogrei, I. Athanaselis, S. Sofianos, V. Vervatis, P. Axaopoulos, A. Papapostolou, J. Al Qahtani, E. Alaa, I. Alexiou, and D. Beard, 2013: An integrated weather and sea-state forecasting system for the Arabian Peninsula (WASSF), Geophysical Research Abstracts, Vol. 15, EGU2013-10629, 2013, EGU General Assembly, Vienna 2013.
55. Hayes D., S. Dobricic, G. Zodiatis and S. Sofianos, 2013: Assimilating glider data operationally in the CYCOFOS Levantine model, Geophysical Research Abstracts, Vol. 15, EGU2013-9771, 2013, EGU General Assembly, Vienna 2013.
56. Zambianchi E., P.-M. Poulain, P. Wang, A. Kalampokis, M. Berta, M. Borghini, B. Buonocore, D. Cianelli, P. Falco, R. Gerin, I. Iermano, C. Mantovani, G. Nicolaides, T. Ozgokmen, S. Sofianos, M. Uttieri, V. Zervakis, 2013: Surface circulation in the Gulf of Naples during the Gelato 2012 experiment, 40th CIESM Congress, Marseilles, France.
57. Zervakis V., E. Tragou, S. Leontiou, P.-M. Poulain, R. Gerin, S. Kioroglou, S. Sofianos, 2013: Estimation of residence times and mixing rates in the Hellenic Seas, 40th CIESM Congress, Marseilles, France.
58. Sofianos S., V. Zervakis, M. Bekiari and E. Chrysagi, 2013: Evaluating oil-spill dispersion forecasting in the Northern Aegean Sea, GODAE – Oceanview Symposium 2013, 4-6 November 2013, Baltimore, USA.
59. Sofianos S., 2014: Climate change impact on the Mediterranean Sea, Symposium on Impact of Climate Change on Coastal Cities, 30 January 2014, Izmir (**INVITED**).
60. Sofianos, S., E. Özsoy, I. Gertman, V. Vervatis and M. Ravdas, 2014: The response of the Aegean and Levantine seas to changes of the air-sea fluxes, AGU, Ocean Sci. Meeting, Honolulu, Hawaii, USA 2014.
61. Sofianos, S., G. Kallos, G. Galanis, M. Bekiari, E. Chrysagi, 2014: Modeling/forecasting the ocean circulation in the Red Sea and Arabian Gulf, towards an oil spill prediction operational system, 7th PetroEnvironment Symposium and Exhibition, February 2014, Al Khobar, Saudi Arabia
62. Mavropoulou, A. M., S. Sofianos, A. Mantziafou, and E. Jarosz, 2014: The influence of Black Sea Water inflow and its synoptic time-scale variability in the North Aegean Sea hydrodynamics, Geophysical Research Abstracts, Vol. 16, EGU2014-6612-1, 2014, EGU General Assembly, Vienna 2014.
63. Sofianos S., V. Vervatis, A. Mantziafou and M. Ravdas, 2014: Investigating deep-water formation variability in the Aegean Sea and its influence in the adjacent basins deep circulation, MEDCLIVAR 2014 Conference, June 2014, Ankara, Turkey.
64. Sofianos S., 2014: Monitoring and modeling the Eastern Mediterranean circulation and its climatic variability, EastMed Symposium 2014, November 17-20, Limassol, Cyprus. (**INVITED**)
65. Sofianos S., V. P. Papadopoulos, D. Denaxa and Y. Abualnaja, 2014: Investigating the interannual variability of the circulation and water mass formation in the Red Sea, AGU Fall Meeting 2014, December 15-19, 2014, San Francisco, USA.
66. Kostopoulos V., E. Chrysagi, S. Sofianos and C. Helmis, 2015: On the influence of a regional drag coefficient parameterization scheme in the forecasting skill of an ocean model

in the Aegean and Levantine Seas, *Geophysical Research Abstracts*, Vol. 17, EGU2015-8445, 2015, EGU General Assembly, Vienna 2015.

67. Licer M., P. Smerkol, A. Fetich, M. Ravdas, A. Papapostolou, A. Mantziafou, J. Cedinlik, B. Stajnar, M. Jeromel, N. Pristov, J. Jerman, S. Petan, V. Malacic and S. Sofianos, 2015: Ocean Dynamics Simulation during an Extreme Bora Event using a Two-Way Coupled Atmosphere-Ocean Modelin System, *Geophysical Research Abstracts*, Vol. 17, EGU2015-1924, 2015, EGU General Assembly, Vienna 2015.

68. Sofianos, S., 2015: Forcing mechanisms of the Eastern Mediterranean thermohaline variability, *EastMed Symposium 2015*, October 19-21, Haifa, Israel. **(INVITED)**

69. Papdopoulos, V., Y. Abualnaja, S. Sofianos and I. Hoteit, 2015: Sea Surface Temperature Variability and Driving Factors in the Red Sea, *International Symposium on the Indian Ocean*, November 30 - December 4, 2015, Goa, India.

70. Sofianos, S., V. Papadopoulos, Y. Abualnaja, A. Nenes and I. Hoteit, 2016: Monsoon-driven variability in the southern Red Sea and the exchange with the Indian Ocean, *AGU, Ocean Sci. Meeting*, New Orleans, Louisiana, USA 2016.

71. Zodiatis, G., G. Galanis, H. Radhakrishnan, A. Nikolaidis, G. Emmanouil, G. Nikolaidis, R. Lardner, S. Sofianos, S. Stylianou, and M. Nikolaidis, 2016: Downscaling the Copernicus marine service- the CYCOFOS new forecasting systems at regional and sub-regional scales in the Mediterranean Sea, *HRCF workshop*, Met Office, Exeter, UK 13-15 April 2016

72. Zodiatis, G., H. Radhakrishnan, G. Galanis, A. Nikolaidis, G. Emmanouil, G. Nikolaidis, R. Lardner, S. Sofianos, S. Stylianou, and M. Nikolaidis, 2016: The CYCOFOS new forecasting systems at regional and sub-regional scales for supporting the marine safety, *Geophysical Research Abstracts*, Vol. 18, EGU2016-13807, 2016, EGU General Assembly 2016.

73. Kailas, M., E. Chrysagi, and S. Sofianos, 2016: Forecasting skill assessment of an oil spill simulation system in the NE Aegean and atmospheric forcing perturbation experiments, *Geophysical Research Abstracts*, Vol. 18, EGU2016-11712, 2016, EGU General Assembly 2016

74. Licer, M., P. Smerkol, A. Fettich, M. Ravdas, A. Papapostolou, A. Mantziafou, B. Strajnar, J. Cedilnik, M. Jeromel, J. Jerman, S. Petan, A. Benetazzo, Sandro Carniel, V. Malacic, and S. Sofianos, 2016: Computed and observed turbulent heat fluxes during an extreme Bora event in the Adriatic using atmosphere-ocean coupling, *Geophysical Research Abstracts*, Vol. 18, EGU2016-2084-1, 2016, EGU General Assembly 2016

75. Licer, M., P. Smerkol, A. Fettich, M. Ravdas, A. Papapostolou, A. Mantziafou, B. Strajnar, J. Cedilnik, M. Jeromel, J. Jerman, S. Petan, A. Benetazzo, S. Carniel, V. Malacic, and S. Sofianos, 2016: Modeling turbulent heat fluxes during an extreme Bora event in the Adriatic using atmosphere-ocean coupling, *EMS Annual Meeting Abstracts*, Vol. 13, EMS2016-448, 2016.

76. Pefanis, V., A. Nenes, A. M. Mavropoulou, V. Vervatis, S. Sofianos, 2016: Impact of surface water turbidity on the dynamics of the Mediterranean Sea and its interaction with the atmosphere, *MEDCLIVAR 2016 Conference*, September 2016, Athens, Greece.

77. Sofianos, S., V. Papadopoulos, Y. Abulnaja, D. Giouroukou, E. Bolonaki and I. Hoteit, 2016: Summer-time monsoon-driven variability in the Red Sea and the effects of the exchanges with the Indian Ocean, *International Conference on the Marine Environment in the Red Sea (ICMERS)*, Thuwal, KSA, 14-16 November 2016.

78. Mavropoulou, A. M., A. Nenes, S. Sofianos, 2016: Interannual variability of the oxygen minimum zone in the Mediterranean Sea, *MEDCLIVAR 2016 Conference*, September 2016, Athens, Greece.

79. Zodiatis, G., I. Gertman, P-M. Poulain, M. Menna and S. Sofianos, 2016: Two decades of monitoring and forecasting of the circulation in the Levantine (1995-2016), 41st CIESM Congress, Kiel Germany, 2016.
80. Chaikalis, S., A.P. Karageorgis, S. Sofianos, P. Drakopoulos, 2016: Estimating zscat in ultra-oligotrophic seas: implications for LISST-Deep scattering measurements PiE – 2016, Conference, October 2016, Budapest, Hungary.
81. Vervatis V., P. De Mey, N. Ayoub, M. Kailas, and S. Sofianos, 2017: Stochastic Coastal/Regional Uncertainty Modelling: a Copernicus marine research project in the framework of Service Evolution, Geophysical Research Abstracts, Vol. 19, EGU2017-10054, 2017, EGU General Assembly 2017.
82. Zodiatis, G., G. Galanis, A. Nikolaidis, H. Radhakrishnan, G. Emmanouil, G. Nikolaidis, R. Lardner, S. Sofianos, S. Stylianou, M. Nikolaidis and V. Vervatis, 2017: Downscaling the Copernicus CMEMS Med MFC in the Eastern Mediterranean: The new CYCOFOS forecasting systems at regional and sub-regional scales, EUROGOOS Conference on Operational Oceanography, October 2017, Bergen, Norway.
83. Vervatis, V., P. De Mey, M. Kailas, N. Ayoub and S. Sofianos, 2017: Stochastic Coastal/Regional Uncertainty Modelling: insights from ensemble sensitivity/consistency experiments, 5th GODAE OceanView COSS-TT-ICM5, Cape Town, South Africa, 3-7 April 2017
84. De Mey, P., V. Vervatis, N. Ayoub, M. Kailas, G. Charria, J. Lamouroux, Ch. Skandrani, M. Iskandarani, M. Le Hénaff, and S. Sofianos, 2017: Array design and ensemble consistency analysis, GODAE OceanView Joint DA-TT & OSeval-TT Meeting, CMRE, La Spezia, 11-13 October 2017
85. Krokos, G., V. Papadopoulos, S. Sofianos and I. Hoteit, 2018: Assessing the Long-Term SST Response of the Red Sea to Natural Climate Variability, AGU, Ocean Sci. Meeting, Portland, Oregon, USA 2018.
86. Vervatis V., P. De Mey, M. Kailas, N. Ayoub, and S. Sofianos, 2018: Model uncertainties stemming from ocean-biogeochemical autoregressive processes: a high-resolution application for the Bay of Biscay, AGU, Ocean Sci. Meeting, Portland, Oregon, USA 2018.
87. Sofianos, S., V. Papadopoulos, Y. Abualnaja, D. Giouroukou, G. Krokos and I. Hoteit, 2018: Summer-time monsoon-driven variability in the Red Sea and the exchanges with the Indian Ocean, AGU, Ocean Sci. Meeting, Portland, Oregon, USA 2018.
88. Zodiatis, G., H. Radhakrishnan, G Galanis, A. Nikolaidis, G. Emmanouil, G. Nikolaidis, R. Lardner, S. Stylianou, M. Nikolaidis, S. Sofianos and V. Vervatis, 2018: Downscaling the Copernicus marine service in the Eastern Mediterranean, AGU, Ocean Sci. Meeting, Portland, Oregon, USA 2018.
89. Mavropoulou, A.-M., V. Vervatis, A. Nenes and S. Sofianos, 2018: Interannual to decadal variability of the Oxygen minimum zone in the Mediterranean Sea, The 50th International Liege colloquium on ocean dynamics: Long-term studies in oceanography, Liege, Belgium, 28 May - 1 June, 2018
90. Coppini, G., E. Alvarez Fanjul, S. Sofianos, M. Garcia Sotillo, S. Liubartseva, N. Pinardi, P. Agostini, J. Tintore, B. Moure, C. Silvestri, G. Zodiatis, L. Perivolitis, G. Mannarini, A. Drago, R. Balbín, C. Solidoro, 2018: Applications in support of blue growth developed by MONGOOS partners, GEO Blue Planet 2018 Symposium, Toulouse, France, 4-6 July, 2018
91. De Mey-Frémaux, P., V. Vervatis, B. Lemieux-Dudon, J. Karagiorgos, Nadia Ayoub, and Sarantis Sofianos, 2019: Generation, Consistency and Reliability of Ensemble-based Regional Physical/Biogeochemical Uncertainty Estimates, 27th Annual IUGG Assembly, Montreal, Canada, 8-18 July, 2019.

92. Mavropoulou, A.-M., V. Vervatis, and S. Sofianos, 2020: Dissolved oxygen response on the climate variability of the Mediterranean Sea, Ocean Sciences Meeting, San Diego, California, USA, 16-21 February 2020.
93. Karagiorgos, J., V. Vervatis, B. Lemieux-Dudon, P. De Mey-Frémaux, N. Ayoub, S. Sofianos, 2020: On the use of atmospheric ensembles to generate physical-biogeochemical ocean model uncertainties, Ocean Sciences Meeting, San Diego, California, USA, 16-21 February 2020.
94. Metheniti V, Karageorgis AP, Kampanis N, Sofianos S., 2020: Beam attenuation coefficient Measurements in the Eastern Mediterranean Sea, 9th MONGOOS Meeting & Workshop 24-25 November 2020.
95. Mavropoulou, A.-M., V. Vervatis, and S. Sofianos, 2020: Basin scale dissolved oxygen interannual variability of the Mediterranean Sea: Analysis of long-term observations, EGU General Assembly 2020, Online, 4-8 May 2020, <https://doi.org/10.5194/egusphere-egu2020-15189>.
96. Metheniti V, Karageorgis AP, Kampanis N, Sofianos S., 2021: Optical properties of the Eastern Mediterranean Sea. In: EGU General Assembly 2021, online. pp EGU21-2644, <https://doi.org/10.5194/egusphereegu21-2644>
97. Vervatis, V., De Mey-Frémaux, P., Lemieux-Dudon, B., Karagiorgos, J., Ayoub, N., and Sofianos, S., 2021: Ensemble generation of regional ocean physics and biogeochemical model uncertainties, empirical consistency and suitability for probabilistic forecasting, EGU General Assembly 2021, online, 19–30 Apr 2021, EGU21-14154, <https://doi.org/10.5194/egusphere-egu21-14154>, 2021.
98. Metheniti V., Vervatis V., Karageorgis A. P., Kampanis N., & Sofianos S., 2022: Response of the Aegean Sea surface characteristics to turbidity variations, using numerical simulations. EGU General Assembly, hybrid, 23-27 May 2022. <https://doi.org/10.5194/EGUSPHERE-EGU22-3773>
99. Chaikalis, S, A.C. Banks, K Kikaki, S Sofianos, PG Drakopoulos, N Spyridakis, S. Psarra, V. Taillandier, F. D’Ortenzio, AP Karageorgis, 2022: Optical Properties and Hydrolight simulations of the NW Levantine Sea during PERLE-2 cruise, International Radiation Symposium (IRS2022), -8 July 2022, Thessaloniki Greece
100. Metheniti V., Karageorgis A. P., Kampanis N., & Sofianos S., 2022: A Neural Network Approach for Retrieving Ocean’s Inherent Optical Properties, Using in-Situ and Remotely Sensed Measurements. International Radiation Symposium, 4-8 July 2022, Thessaloniki, Greece.
101. Karagiorgos, J., I. Samos, V. Vervatis, S. Sofianos, H. Flocas, 2023: The Impact of Ocean – Atmosphere Coupling on the Prediction of Mediterranean Cyclones: A Case Study of Medicane Ianos, *Environ. Sci. Proc.* 26, 60. <https://doi.org/10.3390/environsciproc2023026060>
102. Karagiorgos, J., Vervatis, V., and Sofianos, S., 2023: The effect of water turbidity on the upper-ocean properties and dynamics in the Mediterranean and Black Seas, EGU General Assembly 2023, Vienna, Austria, 24–28 Apr 2023, EGU23-3520, <https://doi.org/10.5194/egusphere-egu23-3520>, 2023.

Publications in peer reviewed international (organized in Greece) conference proceedings:

1. Sofianos, S., A. Theocharis, and A. Lascaratos, 2003: Long term variability of hydrology and dynamics in the Mediterranean Sea (1910-1999), 7th Hellenic Symposium of Oceanography and Fisheries, Creta, May 2003.

2. Skliris N., S. Sofianos, A. Mantziafou, A., I. Keramitsoglou, N. Adaktilou, C. Cartalis and A. Lascaratos, 2006: Modeling of the plankton ecosystem of the Aegean Sea in relation to mixed layer dynamics, 8th Hellenic Symposium of Oceanography and Fisheries, Thessaloniki, June 2006.
3. Sofianos S., A. Theocharis and V. Vervatis, 2006: Profiling Flot Observations in the Aegean Sea, 8th Hellenic Symposium of Oceanography and Fisheries, Thessaloniki, June 2006.
4. N. Skliris, S. Sofianos, A. Mantziafou, V. Vervatis and A. Lascaratos, 2006: Ocean Forecasting in the Eastern Mediterranean with the MFS-ALERMO System, 8th Hellenic Symposium of Oceanography and Fisheries, Thessaloniki, June 2006.
5. N. Aspiotis, S. Sofianos, N. Skliris and A. Lascaratos, 2006: Wind and Wave Correlations in the Greek Seas, 8th Hellenic Symposium of Oceanography and Fisheries, Thessaloniki, June 2006.
6. Vervatis V., Sofianos S., Theocharis A., 2010: Water mass structure and its evolution in the Aegean and Levantine basins from direct observations, 9th Hellenic Symposium of Oceanography and Fisheries, Patras, May 2010.
7. Gkanasos A., Skliris N., Mantziafou A., Sofianos S., 2010: Satellite derived seasonal variability of sea surface temperature and chlorophyll in the Aegean sea, 9th Hellenic Symposium of Oceanography and Fisheries, Patras, May 2010.
8. Kontoyiannis H., Zervakis V., Sofianos S., Theocharis A., Georgopoulos D., 2010: An example of flow behavior over topography in the southern Cyclades Plateau, 9th Hellenic Symposium of Oceanography and Fisheries, Patras, May 2010.
9. Tzali M., Sofianos S., Mantziafou A., Vervatis V., 2010: Impact of the Black Sea Water on the circulation of the North Aegean Sea, 9th Hellenic Symposium of Oceanography and Fisheries, Patras, May 2010.
10. Sofianos S., G. Kallos, A. Mantziafou, M. Tzali, A. Zafeirakou, A. dermisis, V. Koutitas, V. Zervakis, 2010: Operational system for forecasting the dispersion of oil spills in the area of the Burgas - Aleksandroupolis (NE Aegean) oil pipe terminal in the framework of DIAVLOS Project, 9th Hellenic Symposium of Oceanography and Fisheries, Patras, May 2010.
11. Βαρώτσου Ε., Σ. Σοφιανός, Α. Μαντζιαφού, 2012: ΜΕΛΕΤΗ ΤΩΝ ΔΙΑΚΥΜΑΝΣΕΩΝ ΔΥΝΑΜΙΚΩΝ ΧΑΡΑΚΤΗΡΙΣΤΙΚΩΝ ΤΗΣ ΠΕΡΙΟΧΗΣ ΑΙΓΑΙΟΥ – ΛΕΒΑΝΤΙΝΗΣ, 10th Panhellenic Symposium of Oceanography & Fisheries, Athens, May 2012.
12. Spyropoulou A., S. Sofianos, G. Tsirtsis, 2015: Application of a 3D hydrodynamic model in a coastal lagoon in the Aegean Sea, Eastern Mediterranean: seasonal variability of the along axis characteristics, 11th Panhellenic Symposium of Oceanography & Fisheries, Mytilene, Lesvos, May 2015.
13. Poliou D., A. Mantziafou, S. Sofianos, 2018: Seasonal and interannual variability of the barotropic relative vorticity and the eddy kinetic energy of the Mediterranean Sea from 20 years altimetry data (1993-2012), 12th Panhellenic Symposium of Oceanography & Fisheries, Corfu, May/June 2018.
14. Karageorgis AP, Kanellopoulos TD, Chaikalis S, Sofianos S, 2018: Seasonal variation in the distribution of particulate matter in the Saronikos Gulf during 2017, 12th Panhellenic Symposium of Oceanography & Fisheries, Corfu, May/June 2018.
15. Hatzonikolakis Y, Stamataki N, Tsiaras K, Petihakis G, Sofianos S, Triantafyllou G, 2018: Simulation of mussel *Mytilus galloprovincialis* growth with a dynamic energy budget model, and an estimate of marine microplastics accumulation, 12th Panhellenic Symposium of Oceanography & Fisheries, Corfu, May/June 2018.

16. Mavropoulou A-M, Vervatis V, Nenes A, Sofianos S, 2018: Climatic trends of dissolved oxygen in the Mediterranean Sea, 12th Panhellenic Symposium of Oceanography & Fisheries, Corfu, May/June 2018.
17. Karageorgis A., Drakopoulos P., Iona S., Kapsimalis V., Psarra S., Sofianos S., Spyridakis N., Topouzelis K. and Zervakis V., 2018, ΕΛΛΗΝΙΚΗ ΓΕΩΛΟΓΙΚΗ ΕΤΑΙΡΕΙΑ, 1η ΗΜΕΡΙΔΑ ΤΗΛΕΠΙΣΚΟΠΗΣΗΣ ΚΑΙ ΔΙΑΣΤΗΜΙΚΩΝ ΕΦΑΡΜΟΓΩΝ, Athens, January 2018
18. Chaikalis S., Banks A.C., Drakopoulos P.G, Kikaki K., Psarra S., Sofianos S., Giannakaki E., Spyridakis N. and Karageorgis A.P., 2022: Measuring and modeling the optical properties in the Cretan Sea. Marine and Inland Water Research Symposium, Porto Heli, 2022

Research Projects

Participation in research project as researcher:

1. Hydrodynamics and geochemical fluxes in the Strait of Otranto (OTRANTO) (MAS2-CT93-0068), Funding: E.U., Project coordinator: Istituto Nazionale di Oceanografia e di Geofisica Sperimentale, Trieste (Italy), Partner: University of Athens, Duration: 1993 – 1996, Position: Researcher
2. Hydrodynamics and biochemical processes in the straits of the Cretan Arc (PELAGOS) (MAS2-CT93-0059), Funding: E.U., Project coordinator: Hellenic Center for Marine Research, Partner: University of Athens, Duration: 1993 – 1996, Position: Researcher
3. Mediterranean Eddy Resolving Modeling and Interdisciplinary Studies (MERMAIDS) (MAS2-CT93-0055), Funding: E.U., Project coordinator: Istituto Nazionale di Geofisica e Vulcanologia (Italy), Project coordinator: Istituto Nazionale di Oceanografia e di Geofisica Sperimentale, Trieste (Italy), Duration: 1993 – 1996, Position: Researcher
4. Dynamics of Boundary Currents and Marginal Seas (N00014-95-1-0025), Funding: Office of Naval Research, USA, Project coordinator: University of Miami, Partner: University of Miami, Duration: 1995 – 2000, Position: Research Assistant
5. Σύστημα πρόγνωσης καιρού υψηλής ευκρίνειας για ναυτιλιακές και άλλες εφαρμογές (NHPEAS), Funding: Γενική Γραμματεία Έρευνας και Τεχνολογίας (ΕΠΕΤ II), Project Coordinator: University of Athens, Partner: University of Athens, Duration: 1999 – 2001, Position: Researcher
6. Σύστημα παρακολούθησης, πρόγνωσης και πληροφόρησης για την κατάσταση των Ελληνικών θαλασσών (ΠΟΣΕΙΔΩΝ), Funding: Χρηματοδοτικός Μηχανισμός του Ευρωπαϊκού Οικονομικού Χώρου (ΕΦΤΑ) – Υπουργείο Εθνικής Οικονομίας, Project Coordinator: University of Athens, Partner: University of Athens, Duration: 1997 – 2001, Position: Researcher
7. Mediterranean Forecasting System Pilot Project (MFSPP) (MAS3-PL97-1608), Funding: E.U. – FP5, Project coordinator: Istituto Nazionale di Geofisica e Vulcanologia (Italy), Partner: University of Athens, Duration: 1998 – 2001, Position: Researcher
8. Atmospheric Deposition and Impact of pollutants, key elements and nutrients on the Open Mediterranean Sea (ADIOS) (EVK3-CT-2000-0035), Funding: E.U. – FP5, Project coordinator: Centre de Formation et de Recherche sur l'Environnement Marin, Perpignan (France), Partner: University of Athens, Duration: 2001 – 2003, Position: Researcher
9. Development and Application of Validated Geophysical Ocean Wave Products from ENVISAT ASAR and RA-2 Instruments (EnviWave) (EVG2-2001-00017), Funding: E.U. – FP5, Project coordinator: NORUT Northern Research Institute (Norway), Partner: University of Athens, Duration: 2002 – 2005, Position: Researcher

10. Mediterranean Forecasting System Toward Environmental Prediction (MFSTEP) (EVK3-CT-2003-00075), Funding: E.U. – FP5, Project coordinator: Istituto Nazionale di Geofisica e Vulcanologia (Italy), Partner: University of Athens, Duration: 2003 – 2006, Position: Researcher and Work-package leader (WP9: Regional/Shelf models)

11. Εφαρμογή αριθμητικών μοντέλων για διερεύνηση πιθανότητας εμφάνισης ευτροφικών φαινομένων σε παράκτιες περιοχές επηρεαζόμενες από ποτάμια - ΠΥΘΑΓΟΡΑΣ ΙΙ (70/3/8016), Funding: Υπουργείο Παιδείας, Project coordinator: University of Athens, Συνεργασία με Ερευνητική Ομάδα Χημικής Ωκεανογραφίας του Τμήματος Χημείας, Duration: 2005 – 2007, Position: Researcher

12. Καταγραφή παραγωγικότητας Ελληνικών θαλασσών και ανάπτυξη διαχειριστικού εργαλείου για την πρόληψη και αντιμετώπιση περιστατικών ευτροφισμού - ΠΥΘΑΓΟΡΑΣ ΙΙ (70/3/8045), Funding: Υπουργείο Παιδείας, Project coordinator: University of Athens, Συνεργασία με Ερευνητική Ομάδα Τηλεπισκόπησης του Τομέα Φυσικής Περιβάλλοντος και Μετεωρολογίας, Duration: 2005 – 2007, Position: Researcher

13. Climate Change and Impact Research: the Mediterranean Environment – CIRCE (Integrated Project 036961), Funding: E.U. – FP6, Project coordinator: Istituto Nazionale di Geofisica e Vulcanologia (Italy), Partner: University of Athens, Duration: 2007 – 2010, Position: Researcher and coordinator of physical oceanography group

14. MARINA Platform: Evaluation of multi-purpose platforms for Marine Renewable Energy (241402), Funding: E.U. – FP7, Project coordinator: ACCIONA ENERGIA S.A. (Spain), Partner: University of Athens, Duration: 2010 – 2013, Position: Researcher and coordinator of physical oceanography group

15. A weather, dust, wave, sea currents and tidal forecasting system for the Arabian Peninsula, Red Sea and Gulf Region (WASSF), Funding: ARAMCO, SA, Project coordinator: University of Athens, Partner: University of Athens, Duration: 2010 – Today, Position: Coordinator of physical oceanography group

16. EMODNET MedSea Checkpoint, Funding: E.U., Project Coordinator: Istituto Nazionale di Geofisica e Vulcanologia (Italy), Partner: University of Athens, Duration: 2015 – 2017, Position: Coordinator of physical oceanography group

Participation in research project as coordinator or NKUA coordinator:

1. Aegean Sea Workshop (N00014-02-1-1089), Funding: Office of Naval Research, USA, Project coordinator: Institute of Accelerating Systems and Applications (University of Athens), Duration: 2002 – 2003, Position: Principal Investigator.

2. Profiling Float Observation in the Aegean Sea (N00014-04-1-0524), Funding: Office of Naval Research, USA, Project coordinator: Institute of Accelerating Systems and Applications (University of Athens), Partner: IASA, Duration: 2004 – 2007, Position: Principal Investigator

3. International Action for the Sustainability of the Mediterranean and the Black Sea Environment – IASON (SSA No. 515234), Funding: E.U. – FP6, Project coordinator: Hellenic Center for Marine Research, Partner: IASA – University of Athens, Duration: 2005 – 2006, Position: NKUA Principal Investigator

4. Ανάπτυξη και εφαρμογή εργαλείων διαχείρισης κρίσεων ρύπανσης από πετρελαιοκηλίδες στη περιοχή εγκατάστασης του αγωγού Burgas – Αλεξανδρούπολη (Βορειοανατολικό Αιγαίο) – ΔΙΑΥΛΟΣ (AMΘ 16), Funding: Γενική Γραμματεία Έρευνας και Τεχνολογίας, Επιχειρησιακό Πρόγραμμα Ανατολικής Μακεδονίας – Θράκης, Project coordinator: MARAC Electronics, Partner: IASA – University of Athens, Duration: 2006 – 2008, Position: NKUA Principal Investigator

5. European COastal-shelf sea OPerational observing and forecasting system – ECOOP (Integrated Project 036355), Funding: E.U. – FP6, Project coordinator: Danmarks Meteorologiske Institut (Denmark), Partner: IASA – University of Athens, Duration: 2007 – 2010, Position: NKUA Principal Investigator
6. MyOcean (CA 18122008), Funding: E.U. – FP7, Project coordinator: Mercator (France), Partner: IASA – University of Athens, Duration: 2009 – 2012, Position: NKUA Principal Investigator
7. Development of the Integrated Parallel Cyprus Coastal Ocean Forecasting System
Funding: Ίδρυμα Προώθησης Έρευνας (Κύπρος – FP7), Project coordinator: University of Cyprus, Partner: IASA – University of Athens, Duration: 2009 – 2012, Position: NKUA Principal Investigator
8. Tracking Oil Spills and Coastal Awareness Network (TOSCA) (MED 2340), Funding: E.U. – MED, Project coordinator: PACA Sea Innovation & Business Cluster - Toulon Var Technologies (France), Partner: IASA – University of Athens, Duration: 2010 – 2013, Position: NKUA Principal Investigator
9. MyOcean II - Integration of pan-European capacity for Ocean Monitoring and Forecasting (GMES Programme) (283367). Funding: E.U. – FP7, Project coordinator: Mercator (France), Partner: University of Athens, Duration: 2012 – 2014, Position: NKUA Principal Investigator
10. ARSOCEANS - Operational system for the sea modeling (2334-12-700001) (K.E. ΕΛΚΕ: 11424)
Funding: Republic of Slovenia – EU Cohesion Funds, Project coordinator: BRON Slovenia, Partner: University of Athens, Duration: 2012 – 2014, Position: NKUA Principal Investigator (K.E. ΕΛΚΕ: 11221)
11. Mediterranean Decision Support System for Marine Safety (MED 3653), Funding: E.U. – MED, Project coordinator: Department of Merchant Shipping (Cyprus), Partner: IASA – University of Athens, Duration: 2012 – 2015, Position: NKUA Principal Investigator
12. MyOcean Follow On (633085), Funding: E.U. – H2020, Project coordinator: Mercator (France), Partner: IASA – University of Athens, Duration: 2014 – 2015, Position: NKUA Principal Investigator
13. SCRUM: Stochastic coastal/regional uncertainty modelling, sensitivity, consistency and potential contribution to CMEMS ensemble data assimilation, Funding: Copernicus – CMEMS, Project Coordinator: S. Sofianos, University of Athens (Greece), Partner: University of Athens, Duration: 2016-2018, Position: Coordinator (K.E. ΕΛΚΕ: 13337)
14. Stochastic Coastal/Regional Uncertainty Modelling II: (SCRUM 2) Funding: Copernicus – CMEMS, Project Coordinator: S. Sofianos, University of Athens (Greece), Partner: University of Athens, Duration: 2016-2018, Position: Coordinator (K.E. ΕΛΚΕ: 15017)
15. Ανάπτυξη/εφαρμογή αριθμητικού μοντέλου για κλειστές θάλασσες Funding: WEMET P.C., Project Coordinator: S. Sofianos, University of Athens (Greece), Partner: University of Athens, Duration: 2020-2022, Position: Coordinator (K.E. ΕΛΚΕ: 16893)
16. Αγωγός Φυσικού Αερίου EAST-MED POSEIDON, Προσομοίωση Διασποράς Πετρελαϊκής Ρύπανσης, Διάχυσης Ιζημάτων και Υποθαλάσσιου Θορύβου, Funding: ΑΣΠΡΟΦΟΣ ΤΕΧΝΙΚΗ ΕΤΑΙΡΕΙΑ Α.Ε., Project Coordinator: Εθνικό Μετσόβειο Πολυτεχνείο, Partner: University of Athens, Duration: 2021-2022, Position: NKUA Principal Investigator (K.E. ΕΛΚΕ: 17805)
17. Η σύζευξη ωκεανογραφικών και ατμοσφαιρικών μοντέλων για ημίκλειστες θάλασσες, Funding: WEMET P.C., Project Coordinator: S. Sofianos, University of Athens (Greece), Partner: University of Athens, Duration: 2023-2024, Position: Coordinator (K.E. ΕΛΚΕ: 19442)

18. Οι αλληλεπιδράσεις του συζευγμένου συστήματος θάλασσας-ατμόσφαιρας στην περιοχή της Μεσογείου, υπό την επίδραση των οπτικών χαρακτηριστικών του ανώτερου στρώματος του ωκεανού, Funding: ΕΛΙΔΕΚ (Υποτροφία Υ.Δ.), Project Coordinator: S. Sofianos, University of Athens (Greece), Partner: University of Athens, Duration: 2023-2025, Position: Coordinator (Κ.Ε. ΕΛΚΕ: 19673)

19. Unraveling the Deep Overturning Circulation of the Red Sea, Funding: KAUST, Project Coordinator: KAUST, Partner: University of Athens, Duration: 2024-2025, Position: NKUA Principal Investigator (Κ.Ε. ΕΛΚΕ: αναμένεται)

Field experience (cruises):

1. November 1994: Participation in an oceanographic cruise at the Otranto Strait in the framework of the OTRANTO project (R/V AEGAEO).
2. January 1995: Participation in an oceanographic cruise in the Cretan Sea in the framework of the PELAGOS project (R/V AEGAEO).
3. February 1995: Participation in an oceanographic cruise at the Otranto Strait in the framework of the OTRANTO project (R/V AEGAEO).
4. February 2000 – March 2000: Participation in a cruise in the equatorial Atlantic in the framework of the North Brazil Current Rings Experiment (NBC) project (R/V SEWARD JOHNSON).
5. August 2001: Coordination and participation, as chief scientist, in an oceanographic cruise in the Red Sea in the framework of the Boundary Currents and Marginal Seas and Red Sea Outflow Experiment (REDSOX) projects (R/V MURICE EWING).
6. November 2004: Participation in an oceanographic cruise, as national observer, in the southern Aegean in the framework of the Internal Wave Mixing Experiment in the Aegean Sea project (R/V Oceanus).
7. March 2005: Coordination and participation, as chief scientist, in an oceanographic cruise in the Aegean Sea in the framework of the Profiling Floats Observations in the Aegean Sea project (R/V AEGAEO).
8. February 2006: Coordination and participation, as chief scientist, in an oceanographic cruise in the Aegean Sea in the framework of the Profiling Floats Observations in the Aegean Sea project (R/V AEGAEO).

Teaching/supervising activities

Teaching:

Undergraduate Courses:

1. Physical Oceanography, Undergraduate course, Department of Physics, University of Athens
2. Fluid Dynamics, Undergraduate Course, Department of Physics, University of Athens

Graduate Courses:

1. Introduction to Physical Oceanography, Graduate Program in Oceanography and Marine Management, University of Athens
2. Dynamical Physical Oceanography, Graduate Program in Oceanography and Marine Management, University of Athens

3. Numerical Modeling in Physical Oceanography, Graduate Program in Oceanography and Marine Management, University of Athens
4. Operational Oceanography, Graduate Program in Oceanography and Marine Management, University of Athens
5. Physical Oceanography, Graduate Program in Environmental Physics, University of Athens
6. Geophysical Fluid Dynamics, Graduate Program in Environmental Physics, University of Athens
7. Dynamics of Atmospheres and Oceans, Graduate Program in Marine Technology and Science, National Technical University of Athens

Older courses:

8. Waves and Tides, Graduate Program in Oceanography and Marine Management, University of Athens
9. Air-Sea Interactions, Graduate Program in Oceanography and Marine Management, University of Athens
10. Data Analysis Methods, Graduate Program in Environmental Physics, University of Athens
11. Air-Sea-Land Interactions, Graduate Program in Environmental Physics, University of Athens

Supervision and committees in PhD and Graduate programs

Supervision of PhD students (completed):

1. A. Gkanasos, Study of the climatic changes in the North Aegean Sea and their effects on the ecosystem dynamics, 2021.
2. A.P. Mavropoulou, The impact of climate variability and natural / anthropogenic depositions on the oxygen distribution of the Mediterranean Sea, 2023.
3. S. Chaikalis, Water masses optical properties in an oligotrophic environment, 2023.
- 4.V. Metheniti, The impact of the optical characteristics of the sea surface layer on the ocean dynamics (combining observations and models in the Aegean Sea), 2023.

He currently supervises three (3) PhD students.

Participation in PhD supervising committees (completed):

1. New methods of analysis and forecast of oceanic waves, G. Emmanoyil, 2011, Department of Physics, National and Kapodistrian University of Athens
2. 3-D Circulation, Impact of the Terrestrial Loading and Atmospheric Conditions on Seasonal and Climatic Time Scales in Eastern Mediterranean gulfs: A case study in Kalloni Gulf, Lesvos island, Greece, A. E. Spyropoulou, 2015, University of Aegean
3. Study of the long-term variability of the hydrological characteristics of the Mediterranean Sea and its basins, A. Iona, 2019, University of Thessaly
4. Modeling the lower atmosphere and the sea surface condition for energy production applications, C. Kalogeri, 2017, Department of Physics, National and Kapodistrian University of Athens
5. Improving precipitation estimates over complex terrain through the use of high-resolution numerical weather predictions, N. Bartsotas, 2018, Department of Physics, National and Kapodistrian University of Athens

6. Estimation of energy production from large scale wind farms, C. M. Stathopoulos, 2021, Department of Physics, National and Kapodistrian University of Athens
7. The dynamics of water mass formation in the northern Red Sea, George Krokos, 2021, King Abdulah University of Science and Technology, Saudi Arabia
8. Estimation of extreme values of environmental variables and quantification of the uncertainty, P. Patlakas, 2021, Department of Physics, National and Kapodistrian University of Athens

He has also participated in the PhD examining committees (16) in the Departments of Physics, geology and Geoenvironment and Biology of NKUA and the following universities: University of Bologna, Italy, University of Aegean, Universitat de les Illes Balears, Spain, University of Venice, Italy, Hebrew University of Jerusalem, Israel. He, also, supervised 39 MSc students and many undergraduate students.

Other activities

Administrative bodies:

Member of the University of Athens Senate, 2011-2012

Member of the Department of Physics Assembly, 2010-2011, 2013-2014, 2016-2017, 2017-2019, 2020-21, 2023-24

Member of the Interdepartmental Committee of the Graduate Program in Nautical and Marine Technology and Science, National Technical University of Athens: 2015-2017

Member of the Interdepartmental/Interinstitutional Committee of the Graduate Program in Oceanography and Marine Management: 2009-today

Chair of the Interinstitutional Committee of the Graduate Program in Oceanography and Marine Management: 2020-today

International and national bodies

Member of the Science Steering Committee and Operational Advisory Group of the Mediterranean Operational Oceanography Network (MOON), the EuroGOOS Task Team for the Mediterranean Sea: 2005 - 2012

Member of the General assembly of the Mediterranean Operational Network for the Global Ocean Observing System (MONGOOS): 2012-today

Member of the Board of the Greek Oceanographic Union: 2010 - 2012

Associate representative of Greece at the European Federation of Marine Science and Technology Societies (EFMS): 2010 - 2012

Member of Unions

American Geophysical Union (AGU), European Geophysical Union (EGU), CIESM (Commission Internationale pour l'Exploration Scientifique de la mer Méditerranée)