

PERSONAL INFORMATION

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EDUCATION

- 2007 **PhD**, National Technical University of Athens, Greece, School of Rural and Surveying Engineering, Laboratory of Remote Sensing
- 2000 **MSc** in Remote Sensing, Image Processing and Applications, University of Dundee, UK, Department of Applied Physics and Electronic & Mechanical Engineering
- 1999 **Bachelor's Degree**, Department of Environmental Studies, University of the Aegean, Greece

CURRENT POSITION

- 2015 - Assistant Professor, Satellite Oceanography
Department of Marine Studies, University of the Aegean, Greece
- 2014 - Head of Marine Remote Sensing Group (<https://mrsg.aegean.gr>)
Department of Marine Studies, University of the Aegean, Greece

PREVIOUS POSITIONS

- 2010 – 2015 Lecturer (Member of the Faculty), Department of Marine Studies, University of the Aegean, Greece
- 2005 – 2008 Contractual agent, European Commission (EC), Joint Research Center (JRC), Institute for the Protection and Security of the Citizen (IPSC), Maritime Affairs Unit, Ispra (VA) - Italy
- 2002 – 2005 Researcher, National Technical University of Athens, Greece, School of Rural and Surveying Engineering, Laboratory of Remote Sensing

FELLOWSHIPS AND AWARDS

- 2012 – 2014 Post-Doc grant, Greek General Secretariat for Research and Technology, Action «Supporting Postdoctoral Researchers» of the Operational Program “Education and Lifelong Learning”, Greece
- 2005 – 2008 Category 20 grant (PhD studies), European Commission (EC), Joint Research Center (JRC).
- 2003 – 2005 Fellowship (PhD studies), National Technical University of Athens
- 1999 Fellowship (Tuition fees for MSc) for 1999, Student Awards Agency for Scotland

SUPERVISION OF GRADUATE STUDENTS

- 2014 – 2017 Three Ph.D. candidates and eight Master students, Department of Marine Studies, University of the Aegean

TEACHING ACTIVITIES

- 2014 – Postgraduate course: “Geoinformatics and applications in coastal and marine

- environment", MSc in Coastal Management. Department of Marine Studies, University of the Aegean, Greece.
- 2009 – Undergraduate courses: "Sea remote sensing" and "Applied Satellite Oceanography", Department of Marine Studies, University of the Aegean, Greece.
- 2011 – 2012 Postgraduate courses: "Geographic Information Systems and Environmental Management" and "Introduction in Applied Geoinformatics". Department of Environment, School of the Environment, University of the Aegean, Greece.

INSTITUTIONAL RESPONSIBILITIES

- 2014 – Faculty member, Erasmus+ responsible, Department of Marine Studies, University of the Aegean, Greece
- 2014 Co-organiser of the Summer School, "Introduction to Seaweed Biodiversity", 22-26/9/14, Mytilini, Greece, Greece University of the Aegean (Greece) | University of Aberdeen (Scotland, UK) | Hellenic Centre for Marine Research

COMMISSIONS OF TRUST (SELECTED)

- 2017 - National Pivot, Knowledge Platform, BlueMed-CSA, Research and innovation initiative for blue jobs and growth in the Mediterranean area, Horizon 2020 - BG-13-2016, Grant Agreement 727453
- 2014 - 2017 Scientific Committee, IEEE International Geoscience & Remote Sensing Symposiums (IGARSS 2014-2017)
- 2013 – 2014 External Reviewer, General Secretariat for Research and Technology, Ministry of Education and Religious Affairs, Greece,
- 2012 – 2013 External Reviewer, Research Grants Council (RGC) of Hong Kong.
- 2011 – Scientific Paper Reviewer (selected): Remote Sensing of Environment | Marine Pollution Bulletin | Oceanography Special issue on SAR in Oceanography | Remote Sensing of the African Seas SPRINGER (V. Barale & M. Gade, co-editors).
- 2010 Evaluation Committee, General Secretariat for Research and Technology, Ministry of Education and Religious Affairs, Greece

MEMBERSHIPS OF SCIENTIFIC SOCIETIES

- 2017- Member of editorial board of Mediterranean Marine Science Journal
- 2013 – IEEE Geoscience and Remote Sensing Society Member
- 1999 – Greek Union of Environmental Scientists (September 2002 – February 2005 General Secretary of the Board)

INTERNATIONAL RESEARCH PROJECTS (SELECTED)

- H2020-EO-2016, MARINE-EO, Bridging Innovative Downstream Earth Observation and Copernicus enabled Services for Integrated maritime environment, surveillance and security, Project ID: 5754547, (2017-2020)
- H2020-MSCA-RISE-2015, MARIE SKŁODOWSKA-CURIE RESEARCH AND INNOVATION STAFF EXCHANGE (RISE), SEO-DWARF, Semantic EO Data Web Alert and Retrieval Framework, Project ID: 691071, (2015 – 2019)
- MARISCA, Marine Spatial Planning in the Aegean Sea for the protection and conservation of biodiversity, European Economic Area Financial Mechanism (EEA-Grants), (2015 – 2016)
- ERA-BEACH, Preservation of Aegean Archipelago Beaches, European Economic Area Financial Mechanism (EEA-Grants), (2015 – 2016)
- Deputy Scientific Coordinator, Three-Dimensional High Resolution Mapping of the affected area of Vrissa from the earthquake of Lesvos on 12/06/2017, North Aegean Region (7/2017-8/2017).
- Scientific coordinator, Project: "Identification, mapping and mapping of the seagrass meadows in Greece", (1/9/2015 - 31/12/2015).

PEER REVIEW PUBLICATIONS (SELECTED)

- [4.A.1]. **Topouzelis K.**, Makri D., Stoupas N., Papakonstantinou A., Katsanevakis S., Seagrass mapping in Greek territorial waters using Landsat-8 satellite images, *International Journal of Applied Earth Observation & Geoinformation*, 2018, v 67, pp 98-113. DOI: 10.1016/j.jag.2017.12.013
- [4.A.2]. Sini M, Katsanevakis S, Koukourouvli N, Gerovasileiou V, Dailianis T, Buhl-Mortensen L, Damalas D, Dendrinou P, Dimas X, Frantzis A, Gerakaris V, Giakoumi S, Gonzalez-Mirelis G, Hasiotis T, Issaris Y, Kavadas SG, Koutsogiannopoulos DD, Koutsoubas D, Manoutsoglou E, Markantonatou V, Mazaris AD, Poursanidis D, Papatheodorou G, Salomidi M, **Topouzelis K**, Trygonis V, Vassilopoulou V and Zotou M, (2017) Assembling Ecological Pieces to Reconstruct the Conservation Puzzle of the Aegean Sea. ([open access](#)) *Frontiers in Marine Science*, 4:347. doi: 10.3389/fmars.2017.00347
- [4.A.3]. S. Katsanevakis, M. Sini, T. Dailianis, V. Gerovasileiou, N. Koukourouvli, **K. Topouzelis**, M. Ragkousis, 2017, Identifying where vulnerable species occur in a data-poor context: combining satellite imaging and underwater occupancy surveys, *Marine Ecology Progress Series*, 2017, Vol. 577: 17–32, DOI: <https://doi.org/10.3354/meps12232>
- [4.A.4]. **Topouzelis, K.**, Papakonstantinou A, Doukari M., 2017, Coastline change detection using Unmanned aerial vehicles and image processing techniques, *Sep2017, Vol. 26 Issue 9, p5564-5571. 8p., ISSN 1018-4619*
- [4.A.5]. Papakonstantinou, A., **Topouzelis, K.**, Pavlogeorgatos, G. 2016. Coastline Zones Identification and 3D Coastal Mapping Using UAV Spatial Data, *ISPRS International Journal of Geo-Information* vol. 5 (6) p. 75 ([open access](#)), Special Issue Unmanned Aerial Vehicles in Geomatics. DOI: 10.3390/ijgi5060075
- [4.A.6]. **Topouzelis K.** & Singha, S., 2016, Incidence angle Normalization of Wide Swath SAR Data for Oceanographic Applications. *Open Geosciences*, 8(1), pp. 450-464. ([open access](#)) doi:10.1515/geo-2016-0029
- [4.A.7]. Papakonstantinou, A., **Topouzelis, K.**, Pavlogeorgatos, G., 2016, Coastline Zones Identification and 3D Coastal Mapping Using UAV Spatial Data, *ISPRS International Journal of Geo-Information* vol. 5 (6) p. 75 ([open access](#)), Special Issue Unmanned Aerial Vehicles in Geomatics, doi:10.3390/ijgi5060075
- [4.A.8]. **Topouzelis, K.** and Kitsiou, D. 2015, Detection and classification of mesoscale atmospheric phenomena above sea in SAR imagery. *Remote Sensing of Environment*, vol 160, 263-272. <http://dx.doi.org/10.1016/j.rse.2015.02.006>.
- [4.A.9]. **Topouzelis, K.**, Varnava S. and Georgiou A., 2015, Seasonal and Spatial Variability of SST Using MODIS Data: the Case Study of Aegean Sea, *International Journal of Remote Sensing Applications* ([open access](#)), Vol.5 Iss.1, DOI: 10.14355/ijrsa.2015.05.003
- [4.A.10]. **Topouzelis, K.** and Kitsiou, 2014, D. Sea State Primitive Object Creation from SAR Data, *International Journal of Geosciences* ([open access](#)), 5, 1561-1570. <http://dx.doi.org/10.4236/ijg.2014.513127>
- [4.A.11]. V. Karathanassi, D. Sykas, **K. Topouzelis**, 2012, Development of a Network-Based Method for Unmixing of Hyperspectral Data, *IEEE Transactions on Geoscience and Remote Sensing*, 50 (3), pp. 839 - 84.
- [4.A.12]. **K. Topouzelis**, D. Stathakis, V. Karathanassi, 2009, Investigation of genetic algorithms contribution to feature selection for oil spill detection, *International Journal of Remote Sensing*, vol.30, no.3, pp.611-625.
- [4.A.13]. **K. Topouzelis**, 2008, "Oil spill detection by SAR images: Approaches and Algorithms", Invited paper for the special issue: Synthetic Aperture Radar (SAR), *SENSORS Journal* ([open access](#)), no. 8, pp. 6642-6659.
- [4.A.14]. **K. Topouzelis**, V. Karathanassi, P. Pavlakis, D. Rokos, 2007, Detection and discrimination between oil spills and look-alike phenomena through neural networks, *ISPRS Journal of Photogrammetry and Remote Sensing*, (62), pp. 264–270.
- [4.A.15]. G. Ferraro, A. Bernardini, M. David, S. Meyer-Roux, O. Muellenhoff, M. Perkovic, D. Tarchi, **K. Topouzelis**, 2007, Towards an operational use of space imagery for oil pollution monitoring in the Mediterranean basin: A demonstration in the Adriatic Sea, *Marine Pollution Bulletin*, vol. 54, issue 4, pp. 403-422.

BOOK CHAPTERS

- [4.B.1]. **K. Topouzelis** and S. Singha, 2016, CHAPTER 6, Oil Spill Detection Using Space-Borne Sentinel-1 SAR Imagery, Oil Spill Science and Technology, 2nd Edition by Mervin Fingas, Publisher: Gulf Professional Publishing, Release Date: November 2016, ISBN: 9780128110966
- [4.B.2]. **K. Topouzelis**, D. Tarchi, M. Vespe, M. Posada, O. Muellenhoff and G. Ferraro, 2015, Chapter: 13, Detection, Tracking, and Remote Sensing: Satellites and Image Processing (Spaceborne Oil Spill Detection), Handbook of Oil Spill Science and Technology, Publisher: John Wiley & Sons, Editors: Merv Fingas
- [4.B.3]. G. Ferraro, B. Bulgarelli, S. Meyer-Roux, O. Muellenhoff, D. Tarchi, **K. Topouzelis**, 2008, The Use of Satellite Imagery from Archives to Monitor Oil Spills in the Mediterranean Sea, Chapter on "Remote Sensing of the European Seas", Vittorio Barale & Martin Gade, editors, Springer.

CONFERENCES (SELECTED)

- [4.Δ.1]. **K. Topouzelis**, A. Papakonstantinou, M. Doukari and P. Stamatis, The Role of UAVs and Satellite Images in Coastal Management for Touristic Areas, Smartbluercity Conference, 28-29 September 2017, Heraklion-Crete, Greece
- [4.Δ.2]. **K. Topouzelis** (2017) Mapping an emerging marine litter problem using UAS: the case of refugee litter in the eastern coast of Lesbos island, Workshop on remote sensing of marine litter, 30 Nov. – 1 Dec. 2017, ESA/ESTEC, Noordwijk, The Netherlands.
- [4.Δ.3]. Hasiotis T., Velegrakis A., Trygonis V., **Topouzelis K.**, Andreadis O., Chatzipavlis A., Psarros F., Manoutsoglou E., Monioudi I., Koronios E. Monitoring erosion risk in Kamari beach (Santorini), CEST 2017, 15th International Conference on Environmental Science and Technology, 31st August - 2nd September 2017, Rhodes, Greece
- [4.Δ.4]. Velegrakis A., Hasiotis T., Tzoraki O., Karambas Th., Monioudi I., Trygonis V., **Topouzelis K.**, Chatzipavlis A.E., Aaheim A. and Orlov A., Recording of and technical responses to coastal erosion of touristic Aegean island beaches – The ERABEACH project, CEST 2017, 15th International Conference on Environmental Science and Technology, 31st August - 2nd September 2017, Rhodes, Greece
- [4.Δ.5]. M. Daboor, S. Singha, B. Montpetit, **K. Topouzelis**, D. Flett, 2017, Oil Spill Detection Using Simulated RADARSAT Constellation Mission Compact Polarimetric SAR Data, 2017 IEEE International Geoscience and Remote Sensing Symposium, July 23–28, 2017, Fort Worth, Texas, USA
- [4.Δ.6]. **K. Topouzelis**, 2017, UAS applications in coastal areas, Unmanned Vehicles (aerial - surface - underwater) Technology, 1st International Conference, Athens, Greece, 17-19 May 2017
- [4.Δ.7]. **K. Topouzelis**, A. Papakonstantinou, M. Doukari, P. Stamatis, D. Makri & S. Katsanevakis, 2017, Coastal habitat mapping in the Aegean Sea using high resolution orthophotomaps, Fifth International Conference on Remote Sensing and Geoinformation of Environment' 20-23 March, 2017 - Cyprus
- [4.Δ.8]. Doykari M., Papakonstantinou A. , **Topouzelis K.**, " The use of UAVs for mapping immigrant sea litter: the case of Lesbos island", 14th Conference of the Greek Cartographic Society, ,2-4 November, Thessaloniki ,2016. (in Greek)
- [4.Δ.9]. Velegrakis A., Andreadis O., Papakonstantinou A., Manoutsoglou E., Doukari M., Hasiotis T., **Topouzelis K.** and Katsanevakis S., 2016, "Preliminary study on the emerging marine litter problem along the eastern coast of Lesbos isl., Greece", 41th CIESM Congress, Kiel, Germany, 12-16 September.
- [4.Δ.10]. A.F. Velegrakis, O. Andreadis, A. Papakonstantinou, **K. Topouzelis**, S. Katsanevakis, E. Manoutsoglou, M. Doukari, F. Psarros , P. Doukari Michaela and Th. Hasiotis, "Preliminary study on the emerging marine litter problem along the eastern coast of Lesbos", April 2016, White paper for Municipality of Lesbos.