

Prof. MURAT GÜNDÜZ

Personal Information

Email: muratgunduz@deu.edu.tr

Web: <https://avesis.deu.edu.tr/murat.gunduz>

International Researcher IDs

ORCID: 0000-0003-1316-3039

Publons / Web Of Science ResearcherID: P-2066-2019

ScopusID: 57191348787

Yoksis Researcher ID: 219188

Education Information

Doctorate, Middle East Technical University, Institute Of Marine Sciences, Deniz Bilim (Oşinografi) (Dr), Turkey 2002 - 2008

Postgraduate, Middle East Technical University, Institute Of Marine Sciences, Deniz Bilim (Oşinografi) (YI) (Tezli), Turkey 2000 - 2002

Undergraduate, Mersin University, Faculty Of Arts And Sciences, Department Of Physics, Turkey 1995 - 1999

Dissertations

Doctorate, Seasonal circulation and thermohaline structure of the Caspian sea, Middle East Technical University, Deniz Bilimleri Enstitüsü, Deniz Bilim (Oşinografi) (Dr), 2008

Research Areas

Marine Sciences and Technology

Academic Titles / Tasks

Professor, Dokuz Eylul University, Deniz Bilimleri ve Teknolojisi Enstitüsü, Deniz Bilimleri Anabilim Dalı, 2023 - Continues

Associate Professor, Dokuz Eylul University, Deniz Bilimleri ve Teknolojisi Enstitüsü, Deniz Bilimleri Anabilim Dalı, 2015 - 2023

Assistant Professor, Dokuz Eylul University, Deniz Bilimleri ve Teknolojisi Enstitüsü, Deniz Bilimleri Anabilim Dalı, 2014 - 2015

Research Assistant, Middle East Technical University, Institute Of Marine Sciences, Fiziksel Oşinografi (YI) (Tezli), 2000 - 2008

Academic and Administrative Experience

Dokuz Eylul University, 2017 - Continues

Dokuz Eylul University, 2016 - Continues

Courses

Modelling of Wind-Driven Ocean Circulations , Postgraduate, 2014 - 2015

Regional Oceanography, Postgraduate, 2014 - 2015

Data Assimilation in Ocean Modelling , Postgraduate, 2014 - 2015

Advising Theses

GÜNDÜZ M., Investigation of summer season physical oceanographic properties of Izmir Bay by using long term oceanographic measurements, Postgraduate, A.GÖKBARLAS(Student), 2017

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Coastal upwelling along the Turkish coast of the Black Sea: Its role in the distribution of the hydrographic properties**
Gündüz M., Causio S., Bonino G., Vandenbulcke L., Gregorie M., Lima L., Ciliberti S., Ilıcak M., Aydogdu A., Masina S., et al.
JOURNAL OF OPERATIONAL OCEANOGRAPHY, vol.15, pp.205-210, 2022 (SCI-Expanded)
- II. **The Black Sea overturning circulation and its indicator of change**
Ilıcak M., Causio S., Ciliberti S., Coppini G., Lima L., Aydogdu A., Azevedo D., Lecci R., U. Cetin D., Masina S., et al.
JOURNAL OF OPERATIONAL OCEANOGRAPHY, vol.15, pp.64-72, 2022 (SCI-Expanded)
- III. **Monitoring and Forecasting the Ocean State and Biogeochemical Processes in the Black Sea: Recent Developments in the Copernicus Marine Service**
Ciliberti S. A., Gregoire M., Staneva J., Palazov A., Coppini G., Lecci R., Peneva E., Matreata M., Marinova V., Masina S., et al.
JOURNAL OF MARINE SCIENCE AND ENGINEERING, vol.9, no.10, 2021 (SCI-Expanded)
- IV. **A model of Black Sea circulation with strait exchange (2008-2018)**
GÜNDÜZ M., Ozsoy E., Hordoir R.
GEOSCIENTIFIC MODEL DEVELOPMENT, vol.13, no.1, pp.121-138, 2020 (SCI-Expanded)
- V. **Possible recovery site of four non-recovered bodies lost in the Marmara Sea by using an ocean circulation model**
GÜNDÜZ M.
AUSTRALIAN JOURNAL OF FORENSIC SCIENCES, vol.49, no.2, pp.154-160, 2017 (SCI-Expanded)
- VI. **SEA LEVEL AND FIXED ADCP MEASUREMENTS FROM TURKISH STRAITS SYSTEM DURING 2008-2011**
Tutsak E., GÜNDÜZ M., Ozsoy E.
SEA OF MARMARA: MARINE BIODIVERSITY, FISHERIES, CONSERVATION AND GOVERNANCE, vol.42, pp.62-78, 2016 (SCI-Expanded)
- VII. **ON WATER TRANSPORT VARIABILITY OF THE BOSPHORUS STRAIT**
GÜNDÜZ M., Özsoy E.
SEA OF MARMARA: MARINE BIODIVERSITY, FISHERIES, CONSERVATION AND GOVERNANCE, vol.42, pp.118-134, 2016 (SCI-Expanded)
- VIII. **Caspian Sea surface circulation variability inferred from satellite altimeter and sea surface temperature**
GÜNDÜZ M.
JOURNAL OF GEOPHYSICAL RESEARCH-OCEANS, vol.119, no.2, pp.1420-1430, 2014 (SCI-Expanded)
- IX. **Modelling seasonal circulation and thermohaline structure of the Caspian Sea**
GÜNDÜZ M., Özsoy E.
OCEAN SCIENCE, vol.10, no.3, pp.459-471, 2014 (SCI-Expanded)
- X. **Impact of Levantine Intermediate Water on the interannual variability of the Adriatic Sea based on**

simulations with a fine resolution ocean model

GÜNDÜZ M., Dobricic S., Oddo P., Pinardi N., Guarneri A.

OCEAN MODELLING, vol.72, pp.253-263, 2013 (SCI-Expanded)

XI. Impacts of freshwater on the seasonal variations of surface salinity and circulation in the Caspian Sea

Kara A. B., Wallcraft A. J., Metzger E. J., GÜNDÜZ M.

CONTINENTAL SHELF RESEARCH, vol.30, no.10-11, pp.1211-1225, 2010 (SCI-Expanded)

XII. Effects of the North Sea Caspian pattern on surface fluxes of Euro-Asian-Mediterranean seas

GÜNDÜZ M., Özsoy E.

GEOPHYSICAL RESEARCH LETTERS, vol.32, no.21, 2005 (SCI-Expanded)

Articles Published in Other Journals

- I. **Climate projections of the Adriatic Sea: role of river release**
Verri G., Furnari L., GÜNDÜZ M., Senatore A., Santos da Costa V., De Lorenzis A., Fedele G., Manco I., Mentaschi L., Clementi E., et al.
Frontiers in Climate, vol.6, 2024 (ESCI)
- II. **Detection of possible route of mines broken off during the Russia-Ukraine war with an ocean circulation and a particle model**
Gündüz M., Kutluk D.
Journal of the Black Sea/Mediterranean Environment, vol.28, no.3, pp.353-360, 2022 (Peer-Reviewed Journal)
- III. **Modelling The Impact of The Oil Spill Pollution in Ildır Bay, Turkey**
Gündüz M., Sözer A.
TURKISH JOURNAL OF MARITIME AND MARINE SCIENCES, vol.8, no.1, pp.60-68, 2022 (Peer-Reviewed Journal)
- IV. **Summer climate variability of the İzmir Bay based on longterm temperature and salinity records (1996-2013)**
Gökbarlas A., GÜNDÜZ M.
International Journal of Environment and Geoinformatics, vol.4, no.3, pp.157-163, 2017 (Peer-Reviewed Journal)
- V. **Connections between climate indices and Caspian Sea surface temperature**
GÜNDÜZ M., Ersin T., SÖZER A., ÖZSOY E.
Ordu University, Journal of Science and Technology, vol.1, no.5, pp.29-36, 2015 (Peer-Reviewed Journal)
- VI. **Blocking of the upper layer flow in the Canakkale Dardanelles Strait and its influence on fish catches**
GÜNDÜZ M., ÖZSOY E.
Journal of the Black Sea / Mediterranean Environment, vol.21, no.3, pp.250-263, 2015 (Peer-Reviewed Journal)
- VII. **Water transport variability in the Aegean Sea and its connection with North Sea Caspian Pattern NCP**
GÜNDÜZ M., SÖZER A., Ersin T., ÖZSOY E.
Ordu University, Journal of Scienceand Technology, vol.1, no.5, pp.1-8, 2015 (Peer-Reviewed Journal)

Books & Book Chapters

- I. **Sea Level and Fixed ADCP Measurements from Turkish Straits System during 2008-2011**
TUTSAK E., GÜNDÜZ M., ÖZSOY E.
in: The Sea of Marmara Marine Biodiversity Fisheries Conservation and Governance, Emin Özsoy, M. Namık Çağatay, Neslihan Balks, Nuray Balks, Bayram Öztürk, Editor, Turkish Marine Research Foundation (TUDAV), İstanbul, pp.62-78, 2016
- II. **On Water Transport Variability of the Bosphorous Strait**
GÜNDÜZ M., ÖZSOY E.
in: The Sea of Marmara Marine Biodiversity Fisheries Conservation and Governance, Emin Özsoy, M. Namık Çağatay, Neslihan Balks, Nuray Balks, Bayram Öztürk, Editor, Turkish Marine Research Foundation (TUDAV),

Refereed Congress / Symposium Publications in Proceedings

- I. **Rusya – Ukrayna Savaşı Sırasında Kopan Mayınların Olası Başlangıç Noktası Rotasının Sayısal Sirkülasyon ve Parçacık Modelleriyle Tespiti**
GÜNDÜZ M.
RUSYA-UKRAYNA SAVAŞI KAPSAMINDA KARADENİZ’DE DENİZ GÜVENLİĞİ ÇALIŞTAYI, Ankara, Turkey, 09 December 2022
- II. **Black Sea Physics Analysis and Forecasting System**
Ciliberti S., Jansen E., Azevedo D., Causio S., ILICAK M., GÜNDÜZ M., Matreata M., Stefanizzi L., Creti’ S., Lecci R., et al.
EGU General Assembly Conference Abstracts, Viyana, Austria, 01 May 2022
- III. **Improving the accuracy of the Black Sea Physics Analysis and Forecasting System in the framework of Copernicus Marine Service**
Ciliberti S., Jansen E., Azevedo D., ILICAK M., GÜNDÜZ M., Matreata M., Lima L., Aydoğdu A., Causio S., Stefanizzi L., et al.
9th EuroGOOS International conference, Brest, Belarus, 14 May 2021
- IV. **CMEMS Black Sea Monitoring and Forecasting Centre: an overview on service and scientific developments in 2016-2021 and future perspectives**
Palazov A., Ciliberti S., Lecci R., Grégoire M., Staneva J., Peneva E., Matreata M., Jansen E., Lima L., Azevedo D., et al.
9th EuroGOOS International conference, 03 May 2021
- V. **Evolution of the Black Sea Physical Analysis and Forecasting System within CMEMS**
Ciliberti S. A., Jansen E., Azevedo D., GÜNDÜZ M., ILICAK M., Pinaridi N., Coppini G., Masina S., Lecci R., Causio S., et al.
23rd EGU General Assembly, 19 April 2021
- VI. **The Mediterranean, Black and Marmara Seas analysis and forecasting physical systems: validation methodology and quality assessment**
GÜNDÜZ M.
International Verification Methods Workshop Online (2020-IVMW-O), Australia, 12 - 13 November 2020
- VII. **Operating a Network of Integrated Observatory Systems in the Mediterranean Sea (ODYSSEA): The role of Gökova Observatory**
KESKİN Ç., AKTAN TURAN Y., GÜNDÜZ M.
Fish Forum 2018, 10 - 14 December 2018
- VIII. **OPERATING A NETWORK OF INTEGRATED OBSERVATORY SYSTEMS IN THE MEDITERRANEAN SEA: ODYSSEA PROJECT AS A TOOL IN FISHERIES AND AQUATIC SCIENCES**
AKTAN TURAN Y., KESKİN Ç., KARATAŞ STEINUM S., YARDIMCI C. H., GÜNDÜZ M.
International Symposium on Fisheries and Aquatic Sciences, 21 - 23 November 2018
- IX. **PHYSICAL PROPERTIES OF THE SIGACIK BAY**
GÜNDÜZ M., ERONAT C., SAYIN E.
SEA-CONF 2017 3TH INTERNATIONAL CONFERENCE, Constanta, Romania, 18 - 20 May 2017, pp.15-16
- X. **Changing of the density levels of Izmir Bay Eastern Aegean Sea**
ERONAT C., SAYIN E., GÜNDÜZ M., BEŞİKTEPE Ş. T.
41. CIESM Kongresi, Kiel, Germany, 12 - 16 September 2016, vol.1, pp.66
- XI. **The last stand of EMT influence along the eastern coast of the Aegean Sea**
SAYIN E., ERONAT C., BEŞİKTEPE Ş. T., GÜNDÜZ M.
41. CIESM Kongresi, Kiel, Germany, 12 - 16 September 2016, vol.1, pp.132
- XII. **Possible connection between the Eastern Mediterranean droughts and North Sea Caspian Pattern NCP**
GÜNDÜZ M.
CLIMATE CHANGE AND THE CASPIAN SEA, Tahrán, 8 - 10 May 2016
- XIII. **The Leading Role of the Turkish Straits System in Ocean Science and the Environmental Degradation**

Imposed on Unique Natural Cultural Heritage by Canal Istanbul

ÖZSOY E., SÖZER A., Tutsak E., GÜNDÜZ M., Gianmaria S.

Jeolojik Acidan Mega Projeler, Turkey, 26 - 28 December 2014

- XIV. **Nonlinear Hydrodynamics of the Atmosphere and Ocean with Examples from Sea Straits**
ÖZSOY E., SÖZER A., Özgür G., GÜNDÜZ M., Gianmaria S.
International Symposium on Disorder Systems: Theory and Its Applications, 21 - 25 August 2014
- XV. **Inter annual variability of upper layer blocking of the Dardanelles strait and its connection with the fish catch in the Aegean sea 1979 2013**
GÜNDÜZ M., ÖZSOY E.
Medclivar2014 Conference, 23 - 25 July 2014
- XVI. **Impacts of Atmospheric Teleconnections on climate of Turkey and Aegean Sea**
GÜNDÜZ M.
International Water Symposium: Impacts of Climate Change on Coastal Cities, 30 January 2014
- XVII. **The Levantine Sea Coupled Modeling and Forecasting Experience**
ÖZSOY E., Aydoğdu A., Hazem N., SÖZER A., GÜNDÜZ M.
17. Ulusal Sivi Hal Sempozyumu, Turkey, 13 - 14 December 2013
- XVIII. **Türkiye nin Geçiş Suları İlk Tespitler**
TUTAK B., KABOĞLU G., BEŞİKTEPE Ş. T., Beken Ç. P., GÜNDÜZ M., AKÇALI B., AKYOL O.
Türkiye'xxde Kıyı Yönetimi: Son Gelişmeler Ulusal Çalıştayı, Turkey, 25 - 26 April 2013
- XIX. **Observing System Experiment with coastal in situ observations in the Adriatic Sea**
Srdjan D., GÜNDÜZ M., Dong W., Wenjing J., Simona M., Andrea S.
2nd GODAE OceanView Coastal Oceans and Shelf Seas Task Team (COSS-TT) International Coordination Workshop (COSS-ICW2), 4 - 07 February 2013
- XX. **Optical Physical and Ecosystem Regional Modelling Assessment OPERA A Revolutionary Approach**
Charles T., Violeta S. C., BEŞİKTEPE Ş. T., David M., BENGİL F., GÜNDÜZ M., Michael T.
Ocean Optics Conference, 8 - 12 October 2012
- XXI. **High resolution NEMO model set up in the Adriatic Sea**
GÜNDÜZ M., Srdjan D., Paulo O., Nadia P.
2012 NEMO Users meeting, 22 - 23 May 2012
- XXII. **Multi year variations in the Northern Levantine Basin based on coupled hydrodynamic and ecosystem modeling**
ÖZSOY E., Ali A., SÖZER A., GÜNDÜZ M.
2011 EGU General Assembly 20, 20 - 25 August 2011
- XXIII. **Operational Forecasting for the Northern Levantine Black Sea and the Turkish Straits System Problems and Prospects**
ÖZSOY E., SÖZER A., Hazem N., GÜNDÜZ M.
Rapp. Comm. Int. MerMedit, 10 - 14 May 2010
- XXIV. **Acoustic Impact of Short Term Ocean Variability in the Okinawa Trough**
Charlie B., Robert H., Jacobs G., GÜNDÜZ M.
OCEANS2009, MTS/IEEE Biloxi - Marine Technology for Our Future: Global and Local Challenges, 26 - 29 October 2009
- XXV. **Integrated Meteorology and Oceanography Network of Excellence MOMA Observation and Model Forecast Systems**
ÖZSOY E., SÖZER A., GÜNDÜZ M., Ismail Y., Bulent Y.
3rd National Defense Applications Modelling and Simulation Conference, Turkey, 17 - 18 July 2009
- XXVI. **HYCOM Caspian Sea Modeling Part I An Overview of the Model and Coastal Upwelling**
Alan W., Kara B., Joe M., GÜNDÜZ M.
11th HYCOM Consortium Meeting, 24 - 26 April 2007
- XXVII. **HYCOM Caspian Sea Modeling Part II Investigation of Subsurface Properties**
GÜNDÜZ M., Alan W., Kara B., Joe M.
11th HYCOM Consortium Meeting, 24 - 26 April 2007

- XXVIII. **Towards Climatic Modelling of the Caspian Sea Thermo Hydrodynamics**
Rashit I., Ramiz S., GÜNDÜZ M., Aa R., Aa S., ÖZSOY E.
38th CIESM Congress, 9 - 13 April 2007
- XXIX. **Application of the Creeping Sea Fill Methodology to the wind speed over the Caspian Sea**
GÜNDÜZ M., Kara B., Alan W., Joe M.
Rapp. Comm. Int. Mer Medit. Vol. 38, 9 - 13 April 2007
- XXX. **Effects of the North Sea Caspian Pattern on Surface Fluxes of Euro Asian Mediterranean Seas**
GÜNDÜZ M., ÖZSOY E.
European Geosciences Union General Assembly 2006, 2 - 07 April 2006
- XXXI. **Influence of North Sea Caspian Pattern NCP an Atmospheric Tele connection on the Surface Fluxes over the Mediterranean Sea**
GÜNDÜZ M., ÖZSOY E.
1st International CLIVAR ScienceConference, Understanding and Predicting Our Climate System., 21 - 25 June 2004
- XXXII. **Climate variability of the Eastern Mediterranean and Black Sea based on empirical orthogonal functions EOFs analysis**
GÜNDÜZ M., ÖZSOY E.
Oceanography of the Eastern Mediter-ranean and Black Sea: Similarities and Differences of two interconnected Basins., 14 - 18 October 2002

Other Publications

- I. **Near Shore Marine Biology Survey**
Güçlüsoy H., Beşiktepe Ş. T., Bizsel N., Cihangir B., Açık Çınar Ş., Koçak F., Sayın E., Çınar M. E., Bizsel K. C., Gündüz M., et al.
Technical Report, pp.1-155, 2017
- II. **Real Time Current and Sediment Transport Modelling and Monitoring Programme in Izmir Bay**
Beşiktepe Ş. T., Sayın E., Beşiktepe Ş., Gündüz M., Akdağ C. T., Kısacık D., Kaboğlu G., Eronat C., Oğuz Kaboğlu S.
Technical Report, pp.1-307, 2016
- III. **Numerical and Sediment Transport Modeling Project with Real Time Observation System in Izmir Bay**
Beşiktepe Ş. T., Sayın E., Duman M., Kaboğlu G., Gündüz M.
Technical Report, pp.1-126, 2014

Supported Projects

SAYIN E., GÜNDÜZ M., ERONAT C., Project Supported by Higher Education Institutions, İklimsel değişimler sonucu Ege Denizi'nde oluşan yoğun sulara İzmir Körfezi'nin etkisi, 2019 - 2022

GÜNDÜZ M., Project Supported by Higher Education Institutions, Karadeniz için Operasyonel Deniz Tahmin Sistemi Geliştirilmesi, 2016 - 2019

Metrics

Publication: 58
Citation (WoS): 129
Citation (Scopus): 122
H-Index (WoS): 7
H-Index (Scopus): 6

Congress and Symposium Activities

Türkiye'nin Birleşmiş Milletler Okyanus Bilimleri On Yılına Katkıları Uluslararası Konferansı, Invited Speaker, Ankara, Turkey, 2023