Tal Ezer
Old Dominion University
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4111 Monarch Way, Norfolk, VA 23508
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Education:

1989	Ph.D**.**	*Physical Oceanography* ("Summa Cum Laude")
		Florida State University, Tallahassee, FL
1984	M.Sc**.**	*Atmospheric Sciences* ("Cum Laude")
		Hebrew University, Jerusalem, Israel
1981	B.Sc**.**	*Physics* (major) and *Mathematics* (minor)
		Hebrew University, Jerusalem, Israel

Professional Experience:

2009-present *Professor*, Old Dominion Univ., Department of Ocean & Earth Sciences, Norfolk, VA

2007-2009 *Associate Professor*, Old Dominion University, Ocean, Earth & Atmospheric Sciences

2007-present *Affiliated Faculty*, Virginia Modeling, Analysis & Simulation Center (VMASC)

2007-present *Affiliated Faculty*, Center for Coastal Physical Oceanography (CCPO)

2019-present Affiliated Faculty, Institute for Coastal Adaptation & Resilience (ICAR)

9/2014-12/2014 *Visiting Professor*, National Oceanography Center & Univ. of Southampton, UK

2007-2010 *Visiting Research Collaborator*, Princeton University, Princeton, NJ

1996-2007 *Research Scholar*, Princeton University, Program in Atmospheric & Oceanic Sciences

1989-1996 *Research Staff*, Princeton University, Program in Atmospheric & Oceanic Sciences

1985-1989 *Research Assistant*, Florida State University, Oceanography Dept., Tallahassee, FL

1981-1985 *Research Scientist*, Israel Oceanographic & Limnological Research Inst., Haifa, Israel

1974-1978 *Officer*, Air Force

Honors and Awards:

2022-2025 Chair, Organizing Committee, International Workshop on Modeling the Ocean (IWMO)

2023 Research.com ranking of best scientists in the field of Earth Science

2020-2025 Stanford University world ranking of scientists (top 2% most-cited scientists in the field)

2022-2023 Selection Board, Georg Wust Prize, German Society for Marine Research and Nature-Springer

2019 National Council of Nominators for the 25th Annual Heinz Award in Environment

2018   MIT SOLVE ODU/GreenStream winning team for coastal community resilience solutions

2017   College of Sciences *Distinguished Research Award*

2016   Paper on sea level rise was most cited paper of *JGR-Oceans* 2013-2016.

2014-2019 Two "Highly Cited Papers" (top 1% in field), 1 in Geosciences 1 in Plants & Animal Sci.

2013   Editors' Citation for Excellence in Refereeing for *Geophysical Research Letters*

2009   SCHEV Virginia Outstanding Faculty Award, Internal Nominee (not selected)

2007   AGU Outstanding Student Paper Award (co-author with advisee student)

2002   National Ocean Partnership Program (NOPP), Excellence in Partnering Award

2001   Distinguished Visiting Professor, Academia Mexicana de Ciencias

1999- Listing: Who's Who in Science and Engineering

1987   The Honor Society of Phi Kappa Phi

1985-1988   Israel Oceanographic and Limnological Research Scholarship

1984   The Hebrew University's Gershon Meirbaum Scholarship

1983   The Hebrew University's Shindel Prize

1982   Israel Maritime League Award

Professional Societies:

   American Geophysical Union (AGU)

   The Oceanography Society (TOS),

   Marine Technology Society (MTS)

   Coastal Education and Research Foundation (CERF).

Other Professional Activities:

Editor-in-Chief (2021-present), *Ocean Dynamics* by Springer-Nature

Co-Editor (2001-2021), *Ocean Dynamics* (responsible editor for over 80 papers)

Editor, International Workshop on Modeling the Ocean, 15 Special Issues, Springer-Nature Publ.
      (IWMO-2009 to IWMO-2025).

Co-Editor, Special Issue of Ocean Modelling on Coupled Models, Elsevier Publ. (2019-2021)

Convener/session chair various international meetings (WPGM2006, Beijing; PICES2008, Dalian,
      China; IWMO2009, Taipei, Taiwan; IWMO2010, Norfolk, VA; IWMO2011, Qingdao, China;
      IWMO2012, Yokohama, Japan; IWMO2013, Bergen, Norway; IWMO2014, Halifax, Canada;
      IWMO2015, Canberra, Australia; IWMO2016, Bologna, Italy; IWMO2018, Brazil;

      IWMO2019, Wuxi, China; Iwmo2022, Ann Arbor, MI; IWMO2023, Hamburg, Germany;
      IWMO2024, Sapporo, Japan; IWMO2025, Stanford, USA); IWMO2025, Stanford, USA

      Organizer, workshops of terrain-following ocean model users (1996-2003)

      Organizer and lecturer, summer coastal modeling training courses

Manager, Princeton Ocean Model (POM) users group (~7000 users; 70 countries)

      Journals Reviewer, CSR, DAO, GRL, JGR, JMS, JPO, JTECH, OD, OM, others

Proposals Reviewer, NOAA, NASA, NSF, international (UNESCO, Hong Kong

Research Council, Bi-national Science Foundation, Poland Research Foundation)

Review Panel, national funding agencies.

    2017 Chesapeake Bay Program- review panel of the CB Climate Change Assessment

    2013, 2018 Maryland Sea Level Rise Projection, Climate Change Commission

    Consultant to the *World Bank's* international project: The Red Sea- Dead Sea Conveyer Study
    2014/15 Validation Test Panel for NRL model development, The Naval Oceanographic Office
    Gulf of Mexico Research Initiative (BP Oil Spill Response)

Old Dominion University Service and Activities:

Committees-

Coastal Management and Review Board, City of Norfolk (OES/ODU representative), 2/2023-10/2026

College of Science Strategic Planning Committee, 2023

College of Science Connection Committee for incoming new undergraduate students, 2021

OEAS Search Committee for faculty position in sea level science, 2018-2019

OEAS Tenure Track Faculty Evaluation Committee, 2017-2020

OEAS Undergraduate Education Committee, 2015-

OEAS Coordinator, Modeling and Simulation Graduate Certificate in Oceanography

OEAS Promotion and Tenure Committee (Chair), 2010-2013

OEAS Dept. Chair Search Committee, AY-2009/10

Chemistry and Biochemistry Dept. Chair Search Committee, AY-2010/11

OEAS Faculty Search Committee, AY-2007/08

Member of Research Centers/Initiatives-

Geospatial & Environmental Opportunities for Interdisciplinary Studies
(GEOIDS).

Consortium for Maritime Research (CMR)

    Virginia Coastal Energy Research Consortium (VCERC)

Virginia Modeling, Analysis & Simulation Center (VMASC), affiliated faculty

Advisory Board, Institute for Jewish Studies & Interfaith Understanding (IJIU)

Additional Department Activities-

    Coordinator of OEAS Dept. seminar series and Ludwig Lecture, AY-2008/09

Education and Outreach Activities-

Norfolk Public School Science Fair, volunteer judge at the 2011 competition held
 at NAUTICUS, Feb. 19, 2011.

National Ocean Science Bowl:

Volunteer judge and reviewer of questions for the regional Blue Crab competition, March, 2008.
Writer of over 100 questions for the 2009 competition. Review team challenge questions for Blue
Crab 2010.

Postdoc/Visiting Scientist Support: Supported junior faculty from Geogr. Dept. (2007-2009)

Student Advisor (ODU): Primary advisor: 2 MS students, 2 PhD students; ~30 Graduate Committees.
  Advisor for 4-7 undergraduate students/year
Co-Advisor of Ph.D. students Outside ODU: SC (graduated), USF (graduated),
  Plymouth Univ. UK (2017-2019), GTECH, VIMS (2024).
Teaching Courses: <u>Regularly taught</u> (every year or every other year)
  OEAS-405/505 Physical Oceanography (Fall 2007-2025)
  OEAS-604 Introduction to Physical Oceanography (Fall 2008, 2017-2025)
  OEAS-415/515 Waves & Tides (Spring 2009-2023, every other year)
  OEAS-435/605 Ocean Modeling & Prediction (Spring 2008-2025, every other year)
<u>Irregularly taught</u>:
  OEAS-130G Research Skills and Information Literacy for the Natural Sciences (2024-2025)
  OEAS-691 Seminar (Spring 2022)
  OEAS-895 Reading class: The Gulf Stream (Spring 2021)
  OEAS-468W Research Methods in Math & Science (co-instructor, Spring 2020)
  OEAS-695 Reading class on Numerical Modeling (Spring, 2014)

Publications

- ~175 refereed publications (over 50% as first author; ~30 different journals; ~10 book chapters)

- Google Scholar Citations: ~8500 (H-Index~51, I10 Index ~87)

- 1%-2% top cited author in the field (several lists); several highly cited papers.

--------------------------------- 2025 --------------------------------------

Ezer, T. (2025), The Gulf Stream: its history and links to coastal impacts and climate change, Annual Review of Marine Science, Vol. 18, doi:10.1146/annurev-marine-040224-120037 (invited review).

Ezer, T. (2025), Surface currents in the Mid-Atlantic Bight: The role of the Gulf Stream versus wind, Frontiers in Marine Science, Vol. 12, doi:10.3389/fmars.2025.1645286 (invited for a special issue).

Ezer, T. and T. Updyke (2025), Comparing surface currents near the mouth of three bays along the U.S. East Coast: Chesapeake Bay, Delaware Bay, and New York Bay, Ocean Dynamics, 75(1), No. 6, doi:10.1007/s10236-024-01656-1.

Ezer, T., J. Whitehead, L. Costadone and M. Mitchell (2025), Section II-D Sea Level, in: Virginia Climate Assessment 2025, Kinter, J. L. et al. (Eds), George Mason University, Fairfax, VA, in preparation/review.

Ezer, T., A. Bonaduce, S. Carniel, S., A. Chabchoub, R. de Camargo, S. N. Estrada-Allis, O. B. Fringer, A. Gangopadhyay, G. Gao, P. F. J. Lermusiaux, Z. Liu, Y. Miyazawa, A. O. Forster, A. Pinones, E. Stanev, C. Sun, C. Volker, J. Wang, F. Xu and E. Young (2025), Editorial – Ocean

dynamics in 2024: overview and thank you to reviewers, Ocean Dynamics, 75(1), No. 8, doi:10.1007/s10236-024-01658-z.

-------------------------------- 2024 --------------------------------------

Ezer, T. and T. Updyke (2024), On the links between sea level and temperature variations in the Chesapeake Bay and the Atlantic Meridional Overturning Circulation (AMOC), Ocean Dynamics, 74(4), 307-320, doi:10.1007/s10236-024-01605-y.

Park, K., E. Di Lorenzo, Y. J. Zhang, H. Wang, **T. Ezer**, and F. Ye (2024), Delayed coastal inundation caused by ocean dynamics post-hurricane Matthew, Nature NPJ Climate and Atmospheric Science, 7,5, doi:10.1038/s41612-023-00549-2.

Wang, J., **T. Ezer**, R. de Camargo, Y. Miyazawa, J. Staneva, and F. Xu (2024), The 12th International Workshop on Modeling the Ocean (IWMO 2022) in Ann Arbor, Michigan, USA on June 28–July 1, 2022, Ocean Dynamics, 74(2), 77-80, doi:10.1007/s10236-023-01593-5.

Ezer, T. et al. (2024) Editorial – Ocean Dynamics in 2023: overview and thank you to reviewers, Ocean Dynamics, 74, doi:10.1007/s10236-024-01603-0.

-------------------------------- 2023 --------------------------------------

Ezer, T. (2023), Evaluation of the applicability of the Ekman theory for wind-driven ocean currents: a comparison with the Mellor-Yamada turbulent model, *Ocean Dynamics*, 73(9), 575-591, doi:10.1007/s10236-023-01570-y.

Ezer, T. (2023), Sea level acceleration and variability in the Chesapeake Bay: past trends, future projections, and spatial variations within the Bay, *Ocean Dynamics*, 73(1), 23-34, doi:10.1007/s10236-022-01536-6.

Ezer, T. (2023), In memoriam: Prof. Dr. Jörg-Olaf Wolff (1959–2023), *Ocean Dynamics*, 73(10), doi:10.1007/s10236-023-01573-9.

Ezer, T. (2023), Comments On "Reconsidering the relationship between Gulf Stream transport and dynamic sea level at U.S. East Coast" by Chi et al.", *ESS Open Archive* preprint, doi:10.22541/essoar.168626392.22220862/v1

Ezer, T., S. Carniel, R. de Camargo, S. N. Estrada-Allis, G. Gao, R. J. Greatbatch, P. F. J. Lermuslaux, Z. Liu, Y. Miyazawa, A. Orfila Forster, S. Panickal, H. Phillips, A. Pinones, E. Stanev, C. Volker, F. Xu, E. Young (2023), Editorial: Thank you to 2022 Ocean Dynamics reviewers, *Ocean Dynamics*, 73(1), 35-38, doi:10.1007/s10236-022-01535-7

Dangendorf, S., N. Hendricks, Q. Sun, J. Klinck, **T. Ezer**, T. Frederikse, F. Calafat, T. Wahl, T. Tornquist, (2023), Acceleration of U.S. southeast and Gulf Coast sea-level rise amplified by internal climate variability, *Nature Communications*, 14, 1935, doi:10.1038/s41467-023-37649-9

Park, K., E. Di Lorenzo, Y. J. Zhang, H. Wang, **T. Ezer**, and F. Ye (2023), Delayed coastal inundation caused by ocean dynamics post-hurricane Matthew, *NPJ Climate and Atmospheric Science*, in press.

Wang, J., **T. Ezer**, R. de Camargo, Y. Miyazawa, J. Staneva, and F. Xu (2023), The 12th International Workshop on Modeling the Ocean (IWMO 2022) in Ann Arbor, Michigan, USA on June 28–July 1, 2022, *Ocean Dynamics*, doi:10.1007/s10236-023-01593-5.

-------------------------------- 2022 --------------------------------------

Ezer, T. (2022), A demonstration of a simple methodology of flood prediction for a coastal city under threat of sea level rise: the case of Norfolk, VA, USA, *Earth's Future*, 10(9), doi:10.1029/2022EF002786.

Ezer, T. (2022), Sea level variability in the Gulf of Mexico since 1900 and its link to the Yucatan Channel and the Florida Strait flows, *Ocean Dynamics*, 72(11-12), 741-759, doi:10.1007/s10236-022-01530-y.

Ezer, T. and S. Dangendorf (2022) Spatiotemporal variability of the ocean since 1900: Testing a new approach using global sea level reconstruction, *Ocean Dynamics*, 72(1), 79-97, doi:10.1007/s10236-021-01494-5.

Ezer, T. and S. Dangendorf (2022), The impact of remote temperature anomalies on the strength and position of the Gulf Stream and on coastal sea level variability: A model sensitivity study, *Ocean Dynamics*, 72(3-4), 223-239, doi:10.1007/s10236-022-01500-4.

Park, K., I. Federico, E. Di Lorenzo, **T. Ezer**, K. M. Cobb, N. Pinardi, and G. Coppini (2022) The contribution of hurricane remote ocean forcing to storm surge along the Southeastern U.S. coast *Coastal Engineering*, doi:10.1016/j.coastaleng.2022.104098.

Ezer, T., S. Henderson-Griswold and T. Updyke (2022), Dynamic observations in the Hampton Roads region: how surface currents at the mouth of Chesapeake Bay may be linked with winds, water level, river discharge and remote forcing from the Gulf Stream, Oceans 2022, *IEEE Xplore*, doi:10.1109/OCEANS47191.2022.9977092.

-------------------------------- 2021 --------------------------------------

Ezer, T. and S. Dangendorf (2021), Variability and upward trend in the kinetic energy of Western Boundary Currents over the last century: impacts from barystatic and dynamic sea level change, *Climate Dynamics*, 57(9-10), 2351-2373, doi:10.1007/s00382-021-05808-7.

Ezer, T., X. Fanghua, Z. Liu, E. Stanev, S. Wang and J. Wei (2021), The 11th International Workshop on Modeling the Ocean (IWMO 2019) in Wuxi, China, June 17-20, 2019, *Ocean Dynamics*, 71(4), 471-474, doi:10.1007/s10236-021-01448-x.

Dangendorf, S., T. Frederikse, L. Chafik, J. Klinck, **T. Ezer**, and B. Hamlington, (2021) Data-driven reconstruction reveals large-scale ocean circulation control on coastal sea level, *Nature Climate Change*, 11, 514-520, doi:10.1038/s41558-021-01046-1.

Ezer, T., Editorial: On the 20th Anniversary of Ocean Dynamics and farewell to Jörg-Olaf Wolff, Ocean Dynamics, Vol. 71, July 2021, https://www.springer.com/journal/10236/updates/19278284.

Qiao, F., **T. Ezer**, K. Fennel, I. Ginis, J. McWilliams (Eds.) (2021) Coupled Models, Special Issue of Ocean Modelling, 2019-2021, Elsevier Pbl., https://www.sciencedirect.com/journal/ocean-modelling/special-issue/109681JX5X0/.

-------------------------------- 2020 --------------------------------------

Ezer, T. and S. Dangendorf (2020), Global sea level reconstruction for 1900-2015 reveals regional variability in ocean dynamics and an unprecedented long weakening in the Gulf Stream flow since the 1990s, *Ocean Science*, 16(4), 997-1016, doi:10.5194/os-16-997-2020.

Ezer, T. (2020), The long-term and far-reaching impact of hurricane Dorian (2019) on the Gulf Stream and the coast, *Journal of Marine Systems*, 208, doi:10.1016/j.jmarsys.2020.103370.

Ezer, T., (2020), Analysis of the changing patterns of seasonal flooding along the U.S. East Coast, *Ocean Dynamics*, 70(2), 241-255, doi:10.1007/s10236-019-01326-7.

Ezer, T., R. de Camargo, C. A. S. Tanajura, F. Xu, and H. Xue (2020), The 10th International Workshop on Modeling the Ocean (IWMO 2018) in Santos, Brazil, June 25-28, 2018, *Ocean Dynamics*, 70(6), 839-841, doi:10.1007/s10236-020-01374-4.

Bruciaferri, D., G. Shapiro, S. Stanichny, A. Zatsepin, **T. Ezer**, F. Wobus, X. Francis and D. Hilton (2020), The development of a 3D computational mesh to improve the representation of dynamic processes in ocean models: application and testing in the Black Sea, *Ocean Modelling*, 146(2020), doi:10.1016/j.ocemod.2019.101534.

Han, W., D. Stammer, P. Thompson, **T. Ezer**, H. Palanisamy, X. Zhang, C. Domingues, L. Zhang and D. Yuan, (2020), Impact of basin-scale climate modes on coastal sea level: a review, Chap. 9, pp. 247-295, In: Ponte et al. (Eds.), Relationships Between Coastal Sea Level and Large Scale Ocean Circulation, Space Sci. Ser. ISSI Vol. 75, 978-3-030-45633-7 , Springer Nature, Switzerland.

Lawson, G., M. Sosonkina, **T. Ezer** and Y. Shen, (2020), Applying EMD/HHT analysis to power traces of applications executed on systems with Intel Xeon Phi, *International Journal of High Performance Computing Applications*, 34(2), 187-198, doi:10.1177/1094342017731612.

Oey, L.Y., Y. Noh, J. Berntsen, S.Y. Kim, H. Mitsudera and **T. Ezer** (2020), Editorial-
The 9th International Workshop on Modeling the Ocean (IWMO 2017) in Seoul, Korea, July 3-6, 2017, *Ocean Dynamics*, 70(1), 163-164, doi:10.1007/s10236-019-01322-x.

Ezer, T. (2020) Comments on "The transient sensitivity of sea level rise" by Grinsted and Christensen,

Ocean Science Discussion, doi:10.5194/os-2020-68

Ezer, T. (2020) Comments on "Oceanic response to the consecutive Hurricanes Dorian and Humberto"
by D, Avila-Alonso et al., Natural Hazards and Earth System Science, Open Discussion, doi:10.5194/nhess-2020-296

-------------------------------- 2019 --------------------------------------

Ezer, T., (2019), Regional differences in sea level rise between the Mid-Atlantic Bight and the South Atlantic Bight: Is the Gulf Stream to blame?, Earth's Future, 7(7), 771-783, doi:10.1029/2019EF001174.

Ezer, T., (2019), Hurricanes and the Gulf Stream: A double whammy impact on coastal flooding, CCPO Circulation, Vol. 24, No. 2, 1-2. (not refereed publication)

Ezer, T., (2019), Numerical modeling of the impact of hurricanes on ocean dynamics: sensitivity of the Gulf Stream response to storm's track, Ocean Dynamics, 69(9), 1053-1066, doi: 10.1007/s10236-019-01289-9.

Ponte, R. M. et al (**T. ezer** and 53 co-authors) (2019), Towards comprehensive observing and forecasting systems for monitoring and predicting regional to coastal sea level, OceanObs19, Frontiers in Marine Science, section Coastal Ocean Processes, doi:10.3389/fmars.2019.00437.

Han, W., D. Stammer, C. Domingues, **T. Ezer**, H. Palanisamy, P. Thompson, X. Zhang, L. Zhang and D. Yuan, (2019), Impact of natural internal climate modes on coastal sea level: a review, Surveys in Geophysics, doi:10.1007/s10712-019-09562-8.

-------------------------------- 2018 --------------------------------------

Ezer, T., (2018), On the interaction between a hurricane, the Gulf Stream and coastal sea level, Ocean Dynamics, 68, 1259-1272, doi:10.1007/s10236-018-1193-1.

Ezer, T., (2018), The increased risk of flooding in Hampton Roads: On the roles of sea level rise, storm surges, hurricanes and the Gulf Stream. In: The Hampton Roads Sea Level Rise Preparedness and Resilience Intergovernmental Pilot Project, Toll, R. and G. F. Kuska (Eds.), Marine Technology Society Journal, 52(2), 34-44, doi:10.4031/MTSJ.52.2.6.

Ezer, T., L.-Y. Oey, H. Xue, M. Zavatarelli, G. Sannino, R. de Camargo (2018), Editorial - The 8th International Workshop on Modeling the Ocean (IWMO 2016) in Bologna, Italy, June 7-10, 2016, Ocean Dynamics, 68(1), 153-156, doi:10.1007/s10236-017-1123-7.

Boesch, D.F., W.C. Boicourt, R.I. Cullather, **T. Ezer**, G.E. Galloway, Jr., Z.P. Johnson, K.H. Kilbourne, M.L. Kirwan, M.L. Kirwan, R.E. Kopp, S. Land, M. Li, W. Nardin, C.K. Sommerfield, W.V. Sweet.

(2018), Sea-level Rise Projections for Maryland 2018, University of Maryland Center for Environmental Science, Cambridge, MD, 28pp.

Atkinson, L. and **T. Ezer**. (2018), Norfolk, Virginia: A city dealing with increased flooding, Chapter 9.1, pp. 322-326, In: Climate Change and Cities, Second Assessment Report of the Urban Climate Change Research Network, Editors: Rosenzweig, C., W. D. Solecki, P. Romero-Lankao, S. Mehrotra, S. Dhakal and S. A. Ibrahim, Cambridge University Press.

Hermann, M., S. Doney, T. **Ezer**, K. Gedan, P. Morefield, B. Muhling, D. Pirhalla, S. Shaw, (2018) Scientific and Technical Advisory Committee Review of the Chesapeake Bay Program Partnership's Climate Change Assessment Framework and Programmatic Integration and Response Efforts. STAC Publication Number 18-001, Edgewater, MD., 32pp.

Rueda-Roa, D., T. **Ezer** and F. Muller-Karger (2018), Description and mechanisms of the mid-year upwelling in the southern Caribbean Sea from remote sensing and local data, Journal of Marine Science and Engineering, 6(2), 36, doi:10.3390/jmse6020036.

Lawson, G., M. Sosonkina,T. **Ezer** and Y. Shen, (2018), Applicability of the Empirical Mode Decomposition for power traces of large-scale applications, In: Wyrzykowski R., Dongarra J., Deelman E., Karczewski K. (eds) Parallel Processing and Applied Mathematics. PPAM 2017, 10778, 71-80, Springer, doi:10.1007/978-3-319-78054-2-7.

-------------------------------- 2017 --

Ezer, T., L. P. Atkinson and R. Tuleya (2017), Observations and operational model simulations reveal the impact of Hurricane Matthew (2016) on the Gulf Stream and coastal sea level, Dynamics of Atmospheres & Oceans, 80, 124-138. doi:10.1016/j.dynatmoce.2017.10.006.

Ezer, T. and L. P. Atkinson (2017), On the predictability of high water level along the U.S. East Coast: can the Florida Current measurement be an indicator for flooding caused by remote forcing?, Ocean Dynamics, 67(6), 751-766, doi:10.1007/s10236-017-1057-0.

Ezer, T. (2017), A modeling study of the role that bottom topography plays in Gulf Stream dynamics and in influencing the tilt of mean sea level along the U.S. East Coast, Ocean Dynamics, 67(5), 651-664, doi:10.1007/s10236-017-1052-5.

Cheng, Y., T. **Ezer** and L. P. Atkinson (2017), Analysis of tidal amplitude changes using the EMD method, Continental Shelf Research, 148, 44-52, doi:10.1016/j.csr.2017.09.009.

Oey, L.-Y., T. **Ezer**, J. Sheng, F. Chai, J. Gan, K. Lamb and Y. Miyazawa (2017), Editorial - The 6th International Workshop on Modeling the Ocean (IWMO 2014), Ocean Dynamics, 67(2), 317-319, doi:10.1007/s10236-016-1028-x.

Oey, L.-Y., X.-H. Wang, T. **Ezer**, Y. Noh, A. Hogg (2017), Editorial - The 7th International Workshop on Modeling the Ocean (IWMO 2015), Ocean Dynamics, 67(12), 1645-1647, doi:10.1007/s10236-017-1103-y.

Lawson, G., M. Sosonkina,T. **Ezer** and Y. Shen, (2017), Applying EMD/HHT analysis to power traces of applications executed on systems with Intel Xeon Phi, International Journal of High Performance Computing Applications, doi:10.1177/1094342017731612.

Lawson, G., M. Sosonkina,T. **Ezer** and Y. Shen, (2017), Empirical Mode Decomposition for Modeling of Parallel Applications on Intel Xeon Phi Processors, CCGrid '17 Proceedings of the 17th IEEE/ACM International Symposium on Cluster, Cloud and Grid Computing pp. 1000-1008, IEEE/ACM CCGRID Publ., doi:10.1109/CCGRID.2017.99.

Ezer, T. (2017), Comments on "Non-hydrostatic effects in the Dead Sea" by Padon and Ashkenazy, Ocean Sci. Discuss., doi:10.5194/os-2017-29-RC1.

Cheng, Y., T. **Ezer**, B. Hamlington and H.-P. Plag (2016), Teleconnections between the U.S. east coastal and North Atlantic long-term sea level variability, submitted.

--------------------------------- 2016 ---------------------------------------

Ezer, T., (2016), Can the Gulf Stream induce coherent short-term fluctuations in sea level along the U.S. East Coast?: A modeling study, Ocean Dynamics, 66(2), 207-220, doi:10.1007/s10236-016-0928-0.

Ezer, T., (2016), Revisiting the problem of the Gulf Stream separation: on the representation of topography in ocean models with different types of vertical grids, Ocean Modelling, 104, 15-27. doi:10.1016/j.ocemod.2016.05.008.

Cheng, Y., T. **Ezer** and B. Hamlington, (2016), Sea level acceleration in the China Seas, in: Sea Level Changes, A. Hu (Ed.), Water, 8(7), 293. doi:10.3390/w8070293.

Ezer, T., I. D. Haigh and P. L. Woodworth (2016), Nonlinear sea-level trends and long-term variability on western European coasts, J. Coastal Res., 32(4),744-755, doi:10.2112/JCOASTRES-D-15-00165.1.

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Ezer, T. (2015), Detecting changes in the transport of the Gulf Stream and the Atlantic overturning circulation from coastal sea level data: The extreme decline in 2009-2010 and estimated variations for 1935-2012, Global and Planetary Change, 129, 23-36, doi:10.1016/j.gloplacha.2015.03.002.

Ezer, T. and L. Atkinson (2015), Sea level rise in Virginia- causes, effects and response. Virginia Journal of Science, 66(3), 355-359, Publication of the Virginia Academy of Science.

Erisman, B., W. Heyman, S. Kobara, T. **Ezer**, S Pittman, O. Aburto-Oropeza, R. Nemeth, (2015), Fish spawning aggregations: where well-placed management actions can yield big benefits for fisheries and conservation, Fish and Fisheries, doi:10.1111/faf.12132.

Ezer, T. (2015), ODU-European collaborations on climate change and sea level rise researach, CCPO Circulation, Vol. 20, No. 3, 1-3.

Ashford, J. R., T. **Ezer**, C. M. Jones and H. Liu (2015), Predicting the distribution of beluga whales in Cook Inlet, Alaska, using river discharge: A comparison between Chickaloon Bay and the Susitna Delta, Polar Biology, unpublished.

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Ezer, T. and L. P. Atkinson (2014), Accelerated flooding along the U. S. East Coast: On the impact of sea level rise, tides, storms, the Gulf Stream and the North Atlantic Oscillations.Earth's Future, 2(8), 362-382, doi:10.1002/2014EF000252.

Saramul, S. and T. **Ezer** (2014), Spatial variations of sea level along the coast of Thailand: Impacts of extreme land subsidence, earthquakes and the seasonal monsoon, Global and Planetary Change, 122, 70-81, doi:10.1016/j.gloplacha.2014.08.012.

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Hecht, A. and T. **Ezer**, (1982), Temperature and electrical conductivity of the Dead Sea water, August 1982 - April 1983, Israel Oceanographic and Limlonogical Res., H2/83, 12 pp.

Hecht, A. and T. **Ezer** (1982), Measurements of currents and waves in the Dead Sea, September 1981 - August 1982, Israel Oceanographic and Limlonogical Res., H7/82, 37 pp.

Abstracts and Papers Presentations (over 200 total, of which over 70 *invited)

 2025

*Ezer, T., The "Hot Take" on sea level rise projections, Hampton Roads Sea Level Rise/Flooding Adaptation

Forum, VMASC, Suffolk VA, March 21.

*Ezer, T., Impact of open ocean variability on the U.S. Mid-Atlantic coasts and bays, EGU-2025, Vienna, Austria, April 28 (solicited highlighted paper).

*Ezer, T., The links between offshore ocean dynamics and coastal variability: The Gulf Stream case, Hebrew University, Jerusalem, Israel, May 29 (virtual seminar).

Ezer, T., On the interaction between Atlantic Ocean variability and the dynamics of bays along the U.S. East coast, 15th International Workshop on Modeling the Ocean (IWMO-2025), Stanford, CA, June 30 - July 3.

*Ezer, T., Remote influence on coastal dynamics in the Mid-Atlantic Bight, GMU, October 9 (virtual).

2024

Ezer, T. and T. Updyke, Estuarine-Coastal Dynamics and Forcing of Three Mid-Atlantic Bays: Chesapeake Bay, Delaware Bay, and New York Bay, AGU-24, Washington, DC, December 12.

*Ezer, T., The Gulf Stream impact on coastal sea level and flooding, NSF OOI Pioneer MAB Workshop, Norfolk VA, September 10.

*Ezer, T., H. Huang, and A. Bochdansky, A turbulent model tests the Ekman Theory and simulates the distribution of biological particles in the ocean, 14th International Workshop on Modeling the Ocean (IWMO-2024), (Invited Keynote speaker) Sapporo, Japan, July 18.

*Ezer, T., Prediction of local sea level rise and extreme flooding, Department of Earth and Environment, Florida International University, March 22.

Ezer, T., Combining statistics of local data with global model projections for predictions of local sea level rise and probability of extreme flooding, Ocean Sciences Meeting (OSM-2024), New Orleans, February 23.

Huang, H., T. Ezer, A. Bochdansky, Biological-physical interaction of particle distribution: the turbulent mixed-layer pump and particle sinking through modeling and observations, Ocean Sciences Meeting (OSM-2024), New Orleans, February 21.

*Ezer, T., The science of sea level rise and flood prediction for the Hampton Roads region, Virginia Association of Surveyors meeting, Virginia Beach, January 12.

2023

Ezer, T., Statistical models versus climate models and the prediction of extreme coastal sea level events and flooding, International Workshop on Modeling the Ocean (IWMO-2023), Hamburg, Germany, June 27-30.

Ezer, T., Predicting future coastal sea level rise: statistical models based on local observations versus climate model predictions, Coastal Ocean and Shelf seas Task Team (COSS-TT) Meeting, Montreal, Canada, May 2.

2022

Ezer, T., Global to regional sea level variability and changing ocean dynamics since 1900, Department of Environment and Geography, University of York, UK, November 11 (virtual).

Ezer, T, Links between ocean circulation and coastal sea level inundation, US CLIVAR Process Study and Model Improvement (PSMI) Panel, Norfolk, VA, September 8.

Ezer, T., Interconnections between sea level, hurricanes, and the Gulf Stream: analysis of century-long global sea level and regional models, 12th International Workshop on Modeling the Ocean (IWMO-2022), Ann Arbor, MI, June 28. (Invited Keynote Speaker)

Ezer, T., S. Henderson-Griswold and T. Updyke, Dynamic observations in the Hampton Roads region: how surface currents at the mouth of Chesapeake Bay may be linked with winds, water level, river discharge and remote forcing from the Gulf Stream, Oceans 2022, Virginia Beach, VA, October 17.

Ezer, T., The science of sea level rise and flooding. Living With Rising Water: Symposium on Sea Level Rise Science, Impacts and Solutions, Chrysler Museum of Art, Norfolk, VA, April 9.

Ezer, T. and S. Dangendorf, Analysis of century-long sea level reconstruction reveals changes in spatiotemporal variability and ocean dynamics that can impact coastal sea level. Ocean Sciences Meeting 2022, February, 28. (virtual)

Park, K., I. Federico, E. Di Lorenzo, T. Ezer, K. M. Cobb, G. Coppini, and N. Pinardi, Timing and regional dynamics of extreme water level drivers in the U.S. southeast coast. Ocean Sciences Meeting 2022, March, 4. (virtual)

Washington, K., S. Dangendorf, T. Ezer and S. Clayton, Analysis of tidal range variability across the United States. Ocean Sciences Meeting 2022, February, 28. (virtual)

*Ezer,T., From global sea level rise of the past century to Norfolk flood prediction for the next century. CCPO/ICAR Seminar Series, February, 14. (virtual)

2021

*Ezer, T., Sea level rise, hurricanes, and the Gulf Stream, NASA/GISS Sea Level Rise seminar, December, 21. (virtual)

*Ezer, T., Past and projections of sea level rise in the Hampton Roads region, Coastal Resilience and Adaptation Economy Consortium: Local Best Practices Workshop, ODU, Norfolk, December, 2.

*Ezer, T., Air-sea interaction and modeling of hurricanes, typhoons and cyclones, The 10th training course on Regional Application of Coupled Climate Models, UNESCO/IOC Ocean Dynamics and Climate (ODC) Center, Qingdao, China, July 7. (virtual)

*Ezer, T., Climate change, sea level rise and links to changes in ocean dynamics, The 10th training course on Regional Application of Coupled Climate Models, UNESCO/IOC Ocean Dynamics and Climate (ODC) Center, Qingdao, China, July 8. (virtual)

*Ezer, T., Sea level rise, hurricanes and the Gulf Stream: impacts on the Elizabeth River and the Hampton Roads region, Sea Level Rise and Climate Resilience Committee, The Elizabeth River Project, Norfolk, VA, April 20. (virtual)

2020

Ezer, T., The short- and long-term impacts of hurricanes on coastal flooding along the U.S. East coast, HurriCon: Science at the Intersection of Hurricanes and the Populated Coast, East Carolina University, Greenville, NC, February 27.

Ezer, T., On the changing pattern of seasonal flooding along the US East Coast, CP52A-04, AGU Ocean Sciences Meeting, San Diego, CA, February 21.

Park, K., E. Ci Lorenzo, K. M. Cobb, R. J. Clarck, I. Federico, N. Pinardi, G. Coppini, N. Deffley, R. Mathews, C. G. Piecuch and T. Ezer, Drivers of coastal flooding along South-Atlantic Bight during Hurricanes Dorian and Matthew, CP53D-06, AGU Ocean Sciences Meeting, San Diego, CA, February 21.

2019

Ezer, T., On the Impact of Hurricanes on Ocean Dynamics and the Seasonal Pattern of Flooding, CCPO and ODU Resilience Collaborative Seminar Series, ODU, Norfolk, VA, October 28.

Ezer, T., The science of sea level rise and impact on flooding in Norfolk, Seminar for REU students, ODU, Norfolk, VA, July 11.

Ezer, T., Simulations of hurricanes, typhoons, cyclones and tropical storms, UNESCO/IOC Regional Training on Ocean Dynamics and Climate, First Institute of Oceanography, Qingdao, China, June 28.

Ezer, T., Air-sea interactions in ocean models, UNESCO/IOC Regional Training on Ocean Dynamics and Climate, First Institute of Oceanography, Qingdao, China, June 27.

Ezer, T., On unusual shifts in "hotspots" of accelerated sea level rise along the U.S. East Coast, International Workshop on Modeling the Ocean, IWMO-2019, Wuxi, China, June 17.

Ezer, T., On the impact on coastal sea level from the combined effect of hurricanes and the Gulf Stream, US CLIVAR Workshop, Sea Level Hotspots from Florida to Maine, Norfolk, VA, April 23.

Bruciaferri, D., G. Shapiro, S. Stanichny, A. Zatsepin, T. Ezer, F. Wobus, X. Francis, and D. Hilton, New numerical model for the Black Sea circulation, Geophysical Research Abstracts, Vol. 21, EGU2019-5933, EGU General Assembly 2019, Vienna, Austria, April 8.

2018

Ezer, T., On two types of impacts of hurricanes on coastal sea level and flooding: Direct storm surges versus remote influence through disruption of the Gulf Stream flow, AGU Fall Meeting, Washington, DC, December 13.

*Ezer, T., The science of sea level rise and why flooding increases in Virginia, 2018 Annual Summit of Virginia Academy of Science, Engineering and Medicine: Securing Prosperity in the Coastal Zone, Richmond, VA, November 7.

*Ezer, T., Computer modeling of the ocean: how to be an oceanographer without getting wet, Science on Friday Series, College of Science, ODU, Norfolk, VA, November 2.

*Ezer, T., Climate change, sea level rise, hurricanes and the Gulf Stream: Are they all related?, Seminar series of Ocean, Earth & Atmospheric Sciences, ODU, Norfolk, VA, October 11.

*Allen, T. and T. Ezer, Climate and oceanic processes impacting communities in the Southern Rivers Watershed, Sea Level Rise Summer Symposium Series, City of Virginia Beach, September 19.

Ezer, T., Numerical modeling of the interactions between hurricanes, the Gulf Stream and sea level, The 10th International Workshop on Modeling the Ocean (IWMO-2018), Santos, Brazil, June 25.

Ezer, T., Sea level rise and flooding in the Hampton Roads, Seminar to REU students, Old Dominion University, June 21.

Ezer, T., Sea level rise and variability in the Chesapeake Bay: numerical modeling of the impact of climate change, hurricanes and the Gulf Stream, Chesapeake Research & Modeling Symposium, Annapolis, MD, June 12.

*Ezer, T., Sea level rise, flooding and the role of the Gulf Stream, College of Sciences Advisory Board Meeting, Old Dominion University, Norfolk, VA, April 18.

*Ezer, T., Ocean dynamics and coastal sea level along the US coast, Centre for Coastal and Ocean Science and Engineering, Plymouth University, Plymouth, UK, March 14.

*Ezer, T., Interactions between large-scale ocean dynamics and sub-mesoscale processes: impact on coastal sea level, Workshop of the International Space Science Institute, Bern, Switzerland, March 5.

Ezer, T., The contribution of the Gulf Stream to sea level variability, Ocean Sciences Meeting, Portland, OR, February 12.

2017

*Ezer, T., The Dead Sea: science, history and the Dead Sea-Red Sea Conduit project, Temple Sinai, Newport News, VA, October 27.

*Ezer, T., Regional ocean modeling setup and tools, UNESCO/IOC Training Course on Development of Coupled Regional Ocean Models, Ocean Dynamics and Climate Center, Qingdao, China, June 12-23.

*Ezer, T., The Gulf Stream's influence on sea level along the U.S. East Coast, South Florida Water Management District, West Palm Beach, Fl, May 9.
*Ezer, T., Sea level rise in the Hampton Roads area, Public Journalism class, ODU, Norfolk, VA, March 21.
*Ezer, T., The Gulf Stream and sea level rise, Unitarian Church of Norfolk, Norfolk, VA, March 3.
*Ezer, T., Climate change, sea level rise and impacts on the Hampton Roads region, Hampton University Atmospheric and Planetary Sciences Seminar, Hampton, VA, January 18.

2016
*Ezer, T., Progress, challenges and failures in ocean circulation modeling: the Gulf Stream case. Dr. Chet Grosch Symposium "The Art of Fluid Dynamics", Norfolk, VA, October 13.
Qiu, Q., S. Barbot, E. Hill, J. D. P. Moore, L. Feng and T. Ezer, Transient flow in the mantle wedge in the last decade following great earthquakes in the Sumatran subduction zone. AGU Fall Meeting, San Francisco, December 12-16.
*Ezer, T., The science of sea level rise and the role of the Gulf Stream. Flood Adaptation Forum, Hampton Roads Planning District, Hampton, VA, July 29.
*Ezer, T., Review of sea level change in the Chesapeake Bay area. Workshop #1 of NCPC Climate Science Task Group, National Capital Planning Commission, Washington, DC, June 28.
Ezer, T., Revisiting the problem of the Gulf Stream separation in ocean models. 8th International Workshop on Modeling the Ocean (IWMO-2016), Bologna, Italy, June 8.
Ezer, T., From POM-1996 to IWMO-2016: an overview of 20 years of ocean modeling and users participation (in honor of Prof. Emeritus G. Mellor, the recipient of the 2016 Historical Oceanography Society Award). 8th International Workshop on Modeling the Ocean (IWMO-2016), Bologna, Italy, June 9.
*Ezer, T., Sea level rise for the Chesapeake Bay area: causes, trends and future projections. Workshop on the development of climate projections for use in Chesapeake Bay program assessments. The Scientific and Technical Advisory Committee (STAC), Annapolis, MD, March 7.
Ezer, T., Gulf Stream's induced variations in coastal sea level: Can the same mechanism work from daily to decadal time-scales?, Ocean Sciences Meeting, New Orleans, LA, February 26.
Ezer, T., Sea level rise and variability along the U.S. east coast and the impact from the Gulf Stream and AMOC, George Mason University, Fairfax, VA, January 21.

2015
*Ezer, T., Sea level rise and increased flooding in Hampton Roads, Department of Architecture, Hampton University, VA, September 1.
*Ezer, T., Assessing the hazards and impacts of sea level rise in Virginia, Workshop on Mitigation and Adaptation Research in Virginia, Suffolk, VA, August 11.
Erisman, B., W. Heyman, S. Kobara, T. Ezer, S Pittman, O. Aburto-Oropeza, R. Nemeth, Location, location, aggregation: where small, well-placed management actions can yield big wins for fisheries and conservation, AFS-2015, American Fisheries Society Annual Meeting, Portland, OR, August 16.
Ezer, T., Sea level rise and its impact on the Hampton Roads region. Presentation to REU summer students, CCPO/ODU, Norfolk, VA, June 11.
Ezer, T., Climate change, ocean dynamics and sea level rise: A comparison between the two sides of the North Atlantic Ocean, IWMO-2015 International Workshop on Modeling the Ocean, Canberra, Australia, June 2.
*Ezer, T. and L. Atkinson, Sea level rise in Virginia- causes, effects and response, State of Virginia's Environment Symposium of the Virginia Academy of Science, James Madison University, Harrisonburg, VA, May 21.
Ezer, T., On ocean dynamics and sea level rise: Recent research and controversies, MARI Meeting, ODU, Norfolk, VA, April 28.

Ezer, T., Oceanography and sea level, presentation for Roadstead Montessori High School students, CCPO, Norfolk, VA, January 08.

2014

*Ezer, T., Climatic changes in Atlantic Ocean circulation and uneven sea level rise, Euro-Mediterranean Center for Climate Change (CMCC), Bologna, Italy, November 13.

*Ezer, T., Accelerated coastal sea level and flooding along the U.S. East Coast and their relation to climate driven changes in the Atlantic Ocean circulation, National Oceanography Center, Southampton, UK, November 7.

*Ezer, T., New statistical methods to detect acceleration in sea level: examples from the US and UK coasts, Coastal Seminar Series, University of Southampton, UK, November 5.

*Ezer, T., Recent findings of the relation between coastal sea level rise, climate change and ocean dynamics, GEOMAR, Kiel, Germany, October 29.

*Ezer, T., Climate change, sea level rise and accelerated flooding along the U.S. East Coast, Dept of Geography, Birkbeck College, University of London, October, 9.

Ezer, T., Numerical aspect of simulations of overflows in climate models, National Oceanography Center, Southampton, UK, Octover, 7.

*Ezer, T., Sea level rise and increased flooding in the Hampton Roads region. Research Experience for Undergraduates (REU) Summer Program, ODU, Norfolk, VA, June 12.

*Ezer, T.: Why are sea level rise and flooding accelerating along the U.S. East Coast. TechSurge- Technical Support for Coast Resiliency, MTS/ODU, Norfolk, VA, June 3.

*Ezer, T.: Climate change, ocean dynamics and uneven sea level rise along the U.S. East Coast, School of Marine Sciences, University of Maine, April 18.

Ezer, T.: Uneven sea level rise along the U.S. East Coast: The impact of ocean dynamics on past changes and future sea level rise projections, 2014 Ocean Sciences Meeting, Honolulu, Hawaii, February 23-28.

McCarthy, G., A. Blaker, T. Ezer, S. Cunningham and D. Smeed, Dynamics and impacts of the extreme drops in the Atlantic Meridional Overturning Circulation observed by the 26N monitoring array, 2014 Ocean Sciences Meeting, Honolulu, Hawaii, February 23-28.

Atkinson, L. P. and T. Ezer: Sea level rise acceleration along the U. S. east coast and increased flooding in the urban coast, AMS Annual Meeting, Atlanta, GA, February 2-6.

*Ezer, T.: Study of physical-biological factors that impact the beluga whales in Cook Inlet, Donald Gilman River Center, Kenai Peninsula Borough, Soldotna, Alaska, January 16.

2013

*Ezer, T.: Why climate change may cause an uneven sea level rise along the US East coast, Civil and Environmental Engineering Seminar, Old Dominion University, November 8.

*Ezer, T. (moderator and chair of panel-1): State of the science of rising sea levels and extreme storms, EU-American Conference: Transatlantic Solutions to Sea Level Rise Adaptation, Old Dominion University, October 30.

*Ezer, T.: On the connections between the Gulf Stream and sea level rise along the US east coast, Graduate School of Oceanography, University of Delaware, September 27.

*Ezer, T.: On the connections between the Gulf Stream and sea level rise along the US east coast, Graduate School of Oceanography, Physical Oceanography Seminar, The University of Rhode Island, September 20.

Ezer, T.: How climatic changes in Atlantic Ocean currents affect local sea level rise and increase flooding, OEAS Departmental Seminar Series, Old Dominion University, September 12.

*Ezer, T.: Sea level rise and the challenge of modeling water level in the mid-Atlantic coast, MARACOOS Modeling Workshop, Washington, DC, July 22.

Ezer, T.: On the impact of the AMOC on sea level rise: new evidence that a slowdown of the Gulf Stream is responsible for accelerating sea level rise along the US Mid-Atlantic coast, US AMOC/UK RAPID International Science Meeting, Baltimore, MD, July 18.

Atkinson, L. P., T. Ezer and C. Considine: Sea level rise and increased flood risk along the US East Coast: New science and impact on policy and local decisions, 2013 AGU Science Policy Conference: Preparing for our Future, Washington, DC, June 24-26.

Ezer, T.: Using EMD/HHT analysis to connect coastal sea level rise with ocean dynamics and climate change, 5th International Workshop on Modeling the Ocean, Bergen, Norway, June 18.

* Ezer, T.: ODU's Climate Change and Sea Level Rise Initiative: Sea level rise and flooding studies, ECOnference'13, Old Dominion University and Inside Business, Ted Constant Convocation Center, Norfolk, VA, April 16.

Ezer, T.: New statistical methods for extracting sea level rise trends from noisy tide gauge data, Math Awareness SIAM Conference, ODU, Norfolk, VA, April 13.

Saramul, S. and T. Ezer: The influence of river discharges on salinity, temperature and currents in the upper Gulf of Thailand, Graduate Research Achievement Day, ODU, Norfolk, VA, April 11.

Asford, J. and T. Ezer: Physical-biological interactions governing spatial distributions and abundance of Beluga Whales in Cook Inlet, Alaska. Response of Arctic Marine Ecosystems to Climate Change, Anchorage, AK, March 26.

* Ezer, T.: Sea level rise and floods in the Chesapeake Bay and the Mid-Atlantic region: how much?, why us? and what next?, VIMS Physical Sciences Seminar, Gloucester Pt., VA, March 14.

*Atkinson, L. P., T. Ezer, R. Diaz, M. McShane, B. St. John, and E. Smith: Studies of Decision Making, Education and Social Aspects of Community Response to Accelerating Sea Level Rise. National Conference on Science and the Environment, Washington DC, January 15.

2012

Ezer, T.: Analysis of Sea Level Rise and Variability: On the Connections Between Observed CoastalSea Level and Climatic Changes in Ocean Circulation, Paper# G33C-05, AGU Fall Meeting, San Francisco, December 5.

*Atkinson, L., T. Ezer, M. McShane, R. De Young and B. McFarlane: Increased flooding risk – accelerating threat and stakeholder response, Paper# OS31A-1705, AGU Fall Meeting, San Francisco, December 5.

*Ezer, T and L. Atkinson: Sea level rise acceleration in the Hampton Roads: a scientific perspective, Hampton Roads Sea Level Rise Adaptation Forum, VMASC, Suffolk, VA, November 16.

*Ezer, T: How to be an oceanographer without getting wet: the art and science of computer ocean modeling, ECE Graduate Seminar, Old Dominion University, Norfolk, VA, November 9.

Atkinson, L., T. Ezer, M. McShane, R. De Young and B. McFarlane: Accelerating Sea Level Rise and Stakeholder Response, Annual Meeting of the Geological Society of America, Charlotte, NC, November 6.

Ezer, T. and W. B. Corlett: Analysis of relative sea level variations and trends in the Chesapeake Bay: Is there evidence for acceleration in sea level rise?, Oceans'12 MTS/IEEE Meeting, Virginia Beach, VA, October 16.

Atkinson, L. and T. Ezer: Sea Level Rise: Science and Preparedness, Symposium on Climate Change in Former Colonies: Challenges of Property and History, Washington and Lee University School of Law, Lexington, VA, October 12.

Ezer, T. and L.-Y. Oey: On the dynamics of strait flows and their importance for large-scale circulation and climate: An example from a Bering Sea model, International Workshop on Modeling the Ocean (IWMO-2012), JAMSTEC, Yokahama, Japan, May 21-24.

Saramul, S. and T. Ezer: Numerical simulations of the upper Gulf of Thailand: Coastal dynamics and forcing mechanisms, International Workshop on Modeling the Ocean (IWMO-2012), JAMSTEC, Yokahama, Japan, May 21-24.

Ezer, T., Heyman, W. D. and Houser, C.: Observations and high-resolution modeling of small-scale flow-topography interactions near Caribbean coral reefs, #B2067, 2012 Ocean Sciences Meeting, Salt Lake City, UT, February 20-24.

Saramul, S. and T. Ezer: Forcing mechanisms for the coastal dynamics of the upper Gulf of Thailand, #B1734, 2012 Ocean Sciences Meeting, Salt Lake City, UT, February 20-24.

Ezer, T.: A study of the environmental and physical factors that influence the movement and survival of beluga whales in Cook Inlet, Alaska Marine Science Symposium, Alaska, Anchorage, Alaska, January 16-20.

2011

*Ezer, Numerical modeling with sigma- and generalized-coordinate ocean models: equations, applications and new developments. UNESCO/IOC Regional Training and Research Center on Ocean Dynamics and Climate, Qingdao, Chaina, June 10-16.

Ezer, T., W. Heyman and C. Houser, High-resolution simulations of flow-topography interactions near coral reefs and potential implications for Caribbean fish spawning aggregations, The 3rd International Workshop on Modeling the Ocean (IWMO-2011), Qingdao, China, June 8.

*Ezer, T., Turbulent flow near Caribbean coral reefs and fish spawning aggregations: observations and simulations shed light on physical-biological connections, CCPO, January 31.

Corlett, W. B. and T. Ezer, Preliminary analysis on the interannual shifting of the Caribbean Current, Undergraduate Research Symposium, Old Dominion University, February 12.

2010

*Ezer, T., Hydrodynamic models and remote sensing data help study the beluga whale habitat in Cook Inlet, Cook Inlet Beluga Whale Science Conference, Anchorage, AK, October 11-12.

*Ezer, T., Inundation modeling, remote sensing data and the endangered beluga whales, TAMU/Galveston, TX, October 5.

Ezer, T. and L.-Y. Oey, Numerical simulations reveal the role of the Alaskan Stream in modulating the Bering Sea climate, 2nd International Workshop on Modeling the Ocean (IWMO-2010), Norfolk, VA, May 24-26.

Saramul, S. and T. Ezer, Tidal-driven dynamics and mixing processes in a coastal ocean model with wetting and drying, 2nd International Workshop on Modeling the Ocean (IWMO-2010), Norfolk, VA, May 24-26.

Liu, H. and T. Ezer, Integrating inundation models, Landsat satellite imagery, and GIS to assess tidal movements in Cook Inlet, Alaska, 2nd International Workshop on Modeling the Ocean (IWMO-2010), Norfolk, VA, May 24-26.

*Ezer, T., Inundation modeling and remote sensing in Cook Inlet with applications for morphology change and Beluga whales movements, Cook Inlet Modelers Workshop, Anchorage, AK, March 29-30.

Ezer, T. and L.-Y. Oey, The Bering Sea climate and the Alaskan Stream: A numerical modeling study, paper #IT35C-16, 2010 Ocean Sciences Meeting, Portland, OR, February 22-26,

Liu, H. and T. Ezer, Monitoring tidal movements in Cook Inlet, Alaska, using the integration of remote sensing data, GIS and inundation models, paper #GO35D-02, 2010 Ocean Sciences Meeting, Portland, OR, February 22-26,

2009

*Ezer, T., The Dead Sea – Red Sea "Peace Conduit", JCC, Sandler Campus, Virginia Beach, VA, October 12.

*Ezer, T., Applications of circulation and inundation models to support biological and environmental studies, Workshop on modeling the ocean: dynamics, synthesis and prediction, Taipei, Taiwan, February 23-26.

Liu, H. and T. Ezer, Integration of Landsat imagery and an inundation model in flood assessment and predictions.. The 17th International Conference on Geoinformatics 2009, Aug. 12-14.

2008

*Ezer, T., D. T. Rueda-Roa and F. Muller-Karger, Unusual mechanisms for driving coastal upwelling and near-shore currents: Examples from the Caribbean Sea and biological consequences, Annual PICES Meeting, Dalian, China, October 23 – November 3.

Saramul, S. and T. Ezer, Tidal-Driven Mixing Processes in a Coastal Ocean Model With Wetting and Drying, AGU Fall Meeting, EOS Trans., 89(53), Fall Meet. Suppl., Paper # S21B-1167, San Francisco, CA, December, 15-19.

Rueda-Roa, D., T. Ezer and F. Muller-Karger, What drives unusual upwelling patterns in the southeastern Caribbean Sea? Analysis of local and remote sensing data, Abstract 1511, 2008 Ocean Sciences Meeting, Orlando, FL, March 2-7.

Ezer, T., L.-Y. Oey and R. Hobbs, Modeling inundation processes in an extremely large tide environment: Applications to flow dynamics and Belugas whale movements studies in Cook Inlet, Alaska, Abstract 547, 2008 Ocean Sciences Meeting, Orlando, FL, March 2-7.

Ezer, T., Modeling inundation processes in Cook Inlet, Alaska, Poster, Research Expo 2008, Norfolk, VA, April 9.

2007

Rueda-Roa, D; T. Ezer, and F. Muller-Karger, Description of an Unrecognized Secondary Upwelling Peak in the Southeastern Caribbean, Eos Trans. AGU, 88(52), Fall Meet. Suppl., Abstract OS33B-1268, Dec. 10-14.

Ezer, T., Contribution to modeling of overflow mixing, Climate Process Team, Gravity Current Entrainment Workshop, Miami, FL, November, 12-14.

Ezer, T., Applications of ocean modeling and prediction, Virginia Modeling Analysis and Simulation Center Colloquium, Suffolk, VA, October 18.

Ezer, T., Inundation modeling for flood prediction and support for Beluga whales monitoring in Cook Inlet, Alaska, Center for Coastal Physical Oceanography, Seminar Series, Norfolk, VA, October 15.

*Ezer, T. Caribbean Sea modeling at Princeton and sensitivity studies of the MBRS to eddies currents, MesoAmerican Barrier Reef System Workshop, University of South Florida, Feb. 28-Mar. 1.

*Ezer, T., Modeling component contribution for the Antigua and Barbuda Research Program, Planning meeting, St. Croix, USVI, June 17-21.

Ezer, T. Review of status and developments of new numerical schemes, Ocean Model Development Workshop, Princeton, NJ, January 15-16.

Ezer, T. and L.-Y. Oey, Modeling and satellite observations of tidally-driven currents and mud flats flooding in Cook Inlet, Alaska. Alaska Marine Science Symposium, Anchorage, AK, January 21-24.

2006

Oey, L.-Y. and T. Ezer   Ocean response to hurricane Wilma, GFDL, Princeton, January, 25,

Ezer, T.   Modeling mixing and entrainment in overflows and the role of sill topography in the Denmark Strait and the Faroe Bank Channel regions, 2006 Ocean Sciences Meeting, Honolulu, HI, February 23.

L.-Y. Oey, T. Ezer, M. Johnson and S.-J. Fan   A baroclinic ocean model with wetting and drying capabilities: Application to the Cook Inlet, Alaska, 2006 Ocean Sciences Meeting, Honolulu, HI, February 22.

Ezer, T. and L.-Y. Oey   Evaluation of a three-dimensional ocean model with wetting and drying capabilities for simulations of extremely large tides in Cook Inlet, Alaska, 2006 Western Pacific Geophysical Meeting, Beijing, China, July 24.

Ezer, T.   Modeling Caribbean Sea eddies and their influence on coral reefs, University of South Florida, July 10.

Ezer, T. Small-scale topography and large-scale climate modeling: The problem of overflow dynamics and mixing. Old Dominion University, Norfolk, VA, October 3.

*Heyman, W., B. Kjerfve and T. Ezer   Spawning aggregations as sources: The status of the science and its applications for management. 59th GCFI Conference on Caribbean Connectivity, Gulf and Caribbean Fisheries Institute, Belize, 9-11, November.

*Ezer   Invited Participant, Community Standards for Unstructured Grids Workshop, NOAA/UNIDATA Sponsored, UCAR, Boulder, CO, October 16-17.

*Ezer   Challenges in modeling eddy-driven currents in the Caribbean Sea, Connectivity and Coral Bleaching Workshop, TAMU, College Station, TX, December 4-5.

2005

Ezer, T.   Numerical model studies of meso-scale eddies in the Gulf of Mexico and the west Caribbean Sea, Texas A&M University, College Station, TX, February 22.

Oey, L.-Y. and T. Ezer   Development and testing of an ocean model with wetting and drying capability for tidal areas (Cook Inlet), MMS-ITM Meeting, Anchorage, AK, March 14-16.

Ezer, T., D. Thattai and B. Kjerfve,   Numerical studies of the interaction between offshore currents and eddies in the west Caribbean Sea and transports across the Meso-American Barrier Reef and Lagoon, EGU 2005, Vienna, Austria, April 24-29.

Ezer, T.,   Using high-resolution numerical models with idealized configurations to compare mixing properties in the Denmark Strait and the Faroe Bank Channel overflow regions, EGU 2005, Vienna, Austria, April 24-29.

2004

Ezer, T.   On the sensitivity of simulated dense overflows to model grid and mixing parameterizations, AGU Ocean Sciences Meeting, Portland, OR, January, 29.

Ezer, T., D. Thattai and B. Kjerfve,   Simulations of the influence of the West Caribbean Sea Circulation and eddies on the Meso-American Barrier Reef System, Extended Abstract, PECS 2004, Merida, Mexico, October 18-22.

Legg, S. et al. (CPT members)   The Gravity Current Entrainment Climate Process Team, SCOR Ocean Mixing symposium, Victoria, BC, Canada, October.

Ezer, T.   On entrainment and mixing in simulations of gravity currents with terrain-following models and the Mellor-Yamada turbulence scheme, CPT-GCE Workshop, Providence, RI, November 9-10.

2003

Ezer, T. and G. L. Mellor   On mixing and advection in the BBL and how they are affected by the model grid: Sensitivity studies with a generalized coordinate ocean model, 2003 Terrain-Following Ocean Models Users Workshop, PMEL, Seattle, WA, August 4-6.

Blumberg, A. F., G. L. Mellor and T. Ezer   To share or not to share- the challenges of open source code: The Princeton Ocean Model experience, Estuarine Research Federation conference, Seattle, WA, September.

Dong, C., R. Houghton, H.-W. Ou, D. Chen and T. Ezer,   Numerical study of the diapycnal flow through a tidal front with passive tracers, MABPOM Workshop, UMASS, Dartmouth, MA, October 16-17.

*Ezer, T.,   An overview of developments in terrain-following ocean models, First Institute of Oceanography, Qingdau, China, December 17.

*Ezer, T.,   Nowcasting/forecasting systems and process studies in the Gulf of Mexico, First Institute   of Oceanography, Qingdau, China, December 18.

2002

*Ezer, T.   Developments in terrain-following ocean models, Marine Sciences Research Center, SUNY, Stony Brook, NY, March 6.

*Ezer, T.   Gulf of Mexico and Yucatan Channel modeling, Western Caribbean Sea Workshop, Columbia, SC, June 13.

Ezer, T.   EOF analysis and Gulf of Mexico variability, NOAA/GFDL, Princeton, NJ, August 7.

*Ezer, T.   Developments in terrain-following ocean models: past, present and future, Dept. of Civil, Environmental and Ocean Engineering, Stevens Institute of Technology, Hoboken, NJ, September 18.

Ezer, T.   Review of developments in terrain-following ocean models, NOAA/GFDL, Princeton, NJ, October 9.

*Ezer, T.   Development of Nowcast/Forecast systems for the U.S. east coast and the Gulf of Mexico, US-Korea Workshop on coastal forecast system in the East/Japan Sea, Seoul, Korea, October 16.

Ezer, T., L.-Y. Oey. and H.-C. Lee   Simulation of velocities in the Yucatan Channel, In: Proc., Oceans 2002, MTS/IEEE, Biloxi, MS, October 31.

Ezer, T. and L.-Y. Oey   Modes of variability in the Yucatan Channel Flow, AGU Fall Meeting, San Francisco, CA, December 10.

Kjerfve, B., D. Thattai, T. Ezer and W. Heyman. Connectivity revisited - physical oceanography of the MesoAmerican Barrier Reef. Invited paper presented at the 55th Annual Meeting of the Gulf and Caribbean Fisheries Institute, Xel Ha, Mexico, November 11.

2001

Ezer, T.   Simulations of past and future climatic variability of the Atlantic Ocean and the coastal   zone, Symposium on Climate Variations, the Oceans, and Social Impacts, 81st AMS Annual Meeting, Albuquerque, NM, Jan. 15.

Ezer, T.   The east coast ocean forecasting system: Challenges and lessons learned. Interactive Symposium on the Exchange of Operational and Research Coastal Oceanic, Atmospheric, and Hydrologic Observations and Model Products. 81st AMS Annual Meeting, Albuquerque, NM, Jan. 16.

Arango, H. and T. Ezer,   A community Terrain-following Ocean Modeling System (TOMS), Ocean Models and Prediction, ONR/SPAWAR Review, Stennis Space Center, MS, Feb. 15.

Ezer, T.   Overflow and bottom boundary layer simulations with a generalized sigma coordinate ocean model, Dynamics of Overflow Mixing and Entrainment (DOME) Workshop, RSMAS, Miami, FL, Feb. 23.

Ezer, T.   Downslope mixing and the use of sigma ocean models for climate studies,

2001 Terrain-Following Ocean Models Workshop, Boulder, CO, Aug. 20.

Ezer, T. Comparisons of numerical aspects in POM and ROMS, 2001 Terrain-Following Ocean Models Workshop, Boulder, CO, August 20.

Ezer, T. Ocean model comparison studies, 2001 TOMS Inaugural Meeting, Boulder, CO, August 23.

*Ezer, T. Data assimilation and Gulf of Mexico simulations, El Grupo de Estudios Oceanograficos (GEO) del CICATA-IPN, Invited by Academia Mexicana de Ciencias (AMC), Mexico City, October 11.

2000

Ezer, T. Simulations of the response of the Atlantic Ocean to climatic changes in high latitudes, Ocean Sciences Meet., AGU, San Antonio, TX, Jan. 24-28.

Ezer, T. G. L. Mellor and S. Hakkinen, A generalization of a sigma coordinate ocean model and an intercomparison of model vertical grids, Ocean Sciences Meet. AGU, San Antonio, TX, Jan.   24-28.

Ezer, T. Simulations of the seasonal mixed layer in the North Atlantic Ocean, University of South Carolina, Columbia, SC, Feb. 14.

Ezer, T. An operational coastal ocean forecasting system, University of South Carolina, Columbia, SC, Feb. 15.

*Ezer, T. Problems in simulating the surface mixed layer and the bottom boundary layer with hree-dimensional basin-scale ocean models, Invited, Comperative Analysis and Rationalization of Second-Moment Turbulence Models (CARTUM) Workshop II, Marseille, France, Mar. 1-2.

*Ezer, T. Simulations of the Atlantic Ocean variabilities with a sigma coordinate ocean model, University of South Florida, St. Petersburg, FL, Apr. 13.

*Ezer, T. Atlantic Ocean climate variabilities: Past, present and future, Florida, State University, Tallahassee, FL, Apr. 19.

1999

Ezer, T. Data Assimilation and Model Evaluation Experiments: Experience with the Princeton Ocean Model, DAMEE-NAB Information Exchange Meeting No. 6, RSMAS, University of Miami, Miami, FL, February 24-26.

Ezer, T. Mixed-layer modeling with a three-dimensional ocean model. Coastal Ocean Modeling, Gordon Research Conference, Colby-Sawyer College, New London, NH, June 20-25.

Ezer, T. Simulations of the seasonal mixed-layer with the Mellor-Yamada Turbulence Scheme, Sigma Coordinate Ocean Model Users Meeting'99, Bar Harbor. ME, Sep. 20-22.

Mellor, G. L., S. Hakkinen, T. Ezer and R. Patchen A generalization of a sigma coordinate ocean model andan intercomparison of model vertical grids, Sigma Coordinate Ocean Model Users Meeting'99, Bar Harbor. ME, Sep. 20-22.

Ezer, T. Sigma coordinate ocean models: Generalized coordinate systems, non-Boussinesq formulation and pressure gradient errors. New Ocean Model Meeting, Southampton Oceanography Centre, UK, Sep. 27-29.

1998

Ezer, T. Sensitivity studies with a North Atlantic configuration of the Princeton Ocean Model, Proc., The 2nd POM users meeting, RSMAS, University of Miami, Miami, FL, February 17-19.

Ezer, T. Sensitivity studies and data assimilation experiments with a sigma coordinate North Atlantic basin model, Proc., DAMEE Information Exchange Meeting No. 5, RSMAS, University of Miami, Miami, FL, March 5-6.

Ezer, T. and G. L. Mellor   Can ocean models simulate climatic ocean changes using surface atmospheric observations?, The 1998 Conference of the World Ocean Circulation Experiment on Ocean Circulation and Climate, Halifax, Canada, May, 24-29.

*Ezer, T.   Modeling, prediction and data assimilation studies with POM, National Centers for Environmental Prediction, Camp Spring, MD, November, 24.

*Ezer, T.   North Atlantic decadal variabilities in a sigma coordinate ocean model, Invited Seminar, Physical Oceanography Seminar Series, Graduate School of Oceanography, University of Rhode Islad, Narragansett Bay, RI, December, 4.

Ezer, T.   Simulations of decadal variabilities and the response of the ocean to extreme climate, Geophysical Fluid Dynamics, December, 29.

1997

*Ezer   Overview of research at Princeton's Center for Ocean Data Assimilation and Modeling, Community Need for an Ocean Data Assimilation Center, NSF/WOCE, Dallas, TX, February 20-21.

Ezer, T. and G. L. Mellor   Configuration of the Princeton Ocean Model for the North Atlantic basin, Data Assimilation and Model Evaluation Experiments - North Atlantic Basin, Meeting #4, Stennis Space Center, MS, March 24-26.

Ezer, T. and G. L. Mellor   Assimilation of Topex/Poseidon altimeter data into a high resolution sigma coordinate North Atlantic ocean model, Data Assimilation and Model Evaluation Experiments - North Atlantic Basin, Meeting #4, Stennis Space Center, MS, March 24-26.

Ezer   Simulations of interannual and interdecadal Atlantic Ocean variabilities associated with observed SST and wind anomalies, Ocean Interfaces: The Oceanographic Society's 1997 Scientific Meeting, Seattle, WA, April 1-3.

*Ezer   Air-sea interaction in an operational coastal forecast system, Coupled Modeling and Air-Sea-Land Interaction Workshop, Naval Research Laboratory, Monterey, CA, July 9-10.

*Mellor, G. L. and T. Ezer   A methodology of assimilating sea surface height data into ocean models, Summer workshop on ocean modeling and prediction, IMGA-CNR, Modena, Italy.

1996

Ezer, T. and G. L. Mellor   Towards nowcasting and forecasting the North Atlantic and the coastal zone with the Princeton Ocean Model. Data Assimilation and Model Evaluation Experiments- North Atlantic Basin (DAMEE-NAB) Meeting, RSMAS, University of Miami, FL, March 18.

Mellor, G. L. and T. Ezer   On Sigma coordinate errors and bottom topography. Data Assimilation and Model Evaluation Experiments- North Atlantic Basin (DAMEE-NAB) Meeting, RSMAS, University of Miami, FL, March 19.

Ezer, T. and G. L. Mellor   Simulations of seasonal, interannual and interdecadal Atlantic Ocean variabilities associated with variations in observed surface temperatures and winds. ACCP PI Meeting, WHOI, MA, May 14-16.

Ezer, T.   Applications of POM to basin-scale climate problems. The Princeton Ocean Model Users Meeting, Princeton University, June 10-12.

Mellor, G. L. and T. Ezer   Prediction and modeling of the U.S. east coast and the Atlantic Ocean   with the Princeton Ocean Model. Ocean Modeling Workshop, FNMOC, Monterey, CA, October 8-10.

1995

Ezer, T., G. L. Mellor and J. H. Jungclaus   Atlantic ocean climate studies with the Princeton Ocean Model, ACCP Principal Investigators Meeting, Miami, FL, May 2-4.

Ezer, T. and G. L. Mellor   Seasonal variations of sea level along the U.S. east coast: A comparison between observations and an operational ocean model. AGU Spring Meeting, May 30-June 2.

*Ezer, T.   East coast prediction system. Oil Spill Workshop, University of Massachusetts, Dartmouth, MA, May 30-June 1.

*Ezer, T.   Coastal prediction and data assimilation in oceanography. 1995 NOAA Colloquium on environmental prediction, NOAA Science Center, Camp Spring, MD, June 15.

Ezer, T.   Studies using a sigma coordinate ocean model: from coastal prediction to climate modeling. NASA/Goddard, Washington, DC, July 11.

Ezer, T. G. L. Mellor and P. Chen   Toward operational ocean forecasting of coastal regions and semi-enclosed seas. IAPSO XXI General Assembly, Honolulu, HI, August 10.

*Ezer, T.   The East Coast Forecast System. The Gulf of Maine Ecosystem Modeling Workshop, University of Maine, Orono, ME, October 24.

1994

Ezer, T., and G.L. Mellor   Nowcasting the evolution of the Gulf Stream system by assimilation of surface data into a realistic ocean model. AGU Ocean Sci. Meeting, San Diego, Ca, Feb. 21-25.

*Ezer, T.   Data assimilation in ocean models and operational coastal ocean forecasting. New England Physical Oceanography Seminar, Yale University, New Haven, CT, April 29.

Ezer, T., S. Hakkinen and G. L. Mellor   Simulations of the Arctic and the North Atlantic oceans. Atlantic Climate Change Program Meeting, GFDL, Princeton, NJ, May 9-11.

Mellor, G.L., T. Ezer, and P. Chen   An operational coastal forecast system for the U.S. east coast: Progress report and future directions. AGU Spring Meeting, Baltimore, Md, May 23-27.

Chen, P., G.L. Mellor, and T. Ezer   A U.S. east coast tidal model using observational tidal station data. AGU Spring Meeting, Baltimore, Md, May 23-27.

*Ezer, T.   Coastal forecasting and data assimilation in oceanography. 3nd NOAA Colloquium on Environmental Prediction, NOAA Science Center, Camp Springs, Md, June 16.

Ezer, T., G. L. Mellor and P. Chen   Towards an east coast operational nowcast/forecast system, Middle Atlantic Bight Physical Oceanography and Meteorology (MABPOM) workshop, Rutgers University, New Brunswick, NJ, November 3-4.

1993

*Ezer, T., and G.L. Mellor   Meso-scale variability inferred from altimetric data assimilation using a primitive equation ocean model. In: Utilization of Geosat follow-on data for coastal oceanography and for assimilation into eddy resolving global ocean models, Applied Physics Laboratory, The Johns Hopkins University, Laurel, Md, May 18-19.

*Ezer, T., and G.L. Mellor   Simulations and data assimilation studies of the east coast and the North Atlantic ocean with the Princeton's coastal ocean numerical model, AGU 1993 Spring Meeting, Baltimore, Md, May 24-27.

*Ezer, T.   Coastal ocean circulation modeling. 2nd NOAA Colloquium on Environmental Prediction, National Ocean Service, Silver Spring, Md, June 29.

Ezer, T.,   Modeling the separation of the Gulf Stream. WOCE Numerical Experimentation Group Meeting, Institute of Ocean Sciences, Sidney, Vancouver Island, Canada, September 13-15.

Ezer, T.   Nowcasting the Gulf Stream using assimilation of surface data. DAMEE meeting, Princeton University, Princeton, NJ, September 20-21.

1992

Ezer, T., and G.L. Weatherly   Numerical studies of Antarctic Bottom Water and DWBC in the Atlantic
Ocean. AGU 1992 Ocean Sciences Meeting, New Orleans, La, January 27 - 31.

Ezer, T., and G.L. Mellor   Studying the variabilities and the energetics of the Gulf Stream with the Princeton
ocean model. AGU 1992 Ocean Sciences Meeting, New Orleans, La, January 27 - 31.

Ko, D.S., G.L. Mellor, and T. Ezer   Data assimilation of satellite altimetry into a Gulf Stream ocean model.
AGU 1992 Ocean Sciences Meeting, New Orleans, La, January 27-31.

Ezer, T., G.L. Mellor and D-S Ko   Using thermal analysis fields and Geosat altimetry data for initialization
and data assimilation studies of the Gulf Stream and the U.S. eastern coast. AGU 1992 Spring Meeting,
Montreal, Canada, May 11-15.

Ezer, T., and G.L. Mellor   Assimilation of Geosat altimeter data into a primitive equation Gulf Stream model,
AGU 1992 Fall Meeting, San Francisco, Ca, December 10-15.

1991

Ezer, T., and G.L. Mellor   Numerical simulation of the seasonal variations of the Gulf Stream induced by
local atmospheric forcing. The Oceanography Society, Second Scientific Meeting, St. Petersburg,
Florida, March 24-28.

Mellor, G.L., and T. Ezer   A coastal ocean model. International Liege Colloquium on Ocean Hydrodynamics,
Modelling the Interaction of the Deep Ocean and the Shelf and Coastal Seas. Liege, Belgium, May 6 -
10.

Ezer, T., and G.L. Mellor   A progress report on Princeton's coastal ocean numerical model. AGU Spring
Meeting, Baltimore, Md, May 28-31.

Ezer, T., and G.L. Mellor   Objective assimilation of combined altimetry and SST data. SYNOP workshop.
WHOI, September 2-6.

Mellor, G.L., and T. Ezer   Gulf Stream climatology and separation: model sensitivity to surface forcing.
SYNOP workshop. WHOI, September 2-6.

Ezer, T., G.L. Mellor, and D.S. Ko   Nowcasting the Gulf Stream structure with a primitive equation model
and assimilation of altimetry and SST data. Mar. Tech. Soc. Meeting, New Orleans, La, November 11-
14.

Ko, D.S., W. O'Connor, G.L. Mellor, and T. Ezer   Cold start forecast experiments in the Gulf Stream region.
Mar. Tech. Soc. Meeting, New Orleans, La, November 11-14.

1990

Mellor, G.L., and T. Ezer   Data assimilation with a realistic North Atlantic regional model.AGU Ocean
Sciences Meeting, New Orleans, La, February 12 - 16.

Ezer, T.   A Gulf Stream model and an altimetry assimilation scheme. SYNOP Rocky Mountain Workshop,
NCAR, Boulder, Colorado, June 18-21.

Ezer, T.   Altimetric data assimilation using the Princeton/Dynalysis Model.
Coastal Ocean Circulation Models Workshop, Sponsored by NOAA/ COAP and Fleet Numerical
Oceanography Center, Monterey, Ca, October 16-18.

1989

Ezer, T. The interaction between a deep cold jet and the Bottom Boundary Layer of the ocean.Department of
Oceanography, Florida State University, March 29.

*Ezer, T. On the Benthic Boundary Layer of the western North Atlantic. NOAA/ Geophysical Fluid
Dynamics Laboratory, Princeton NJ, January 31.

1982-1984

*Ezer, T. Modeling and measuring the drift currents in the Dead-Sea. The annual symposium of the
Geological Society of Israel, Institute of Earth Sciences, The Hebrew University, Jerusalem, Israel,
November 5, 1984.
Ezer, T. A progress report on numerical modeling of the Dead-Sea. Conference on Dead-Sea research,
sponsored by the Earth Sciences Research Authority, Ministry of Energy and Infrastructure,
Weizmann Institute of Science, Rehovot, Israel, November 23.
*Ezer, T. The current and waves in the Dead-Sea. Seminar for Naval Officers, Ein Gedi, Israel, May 15.
Ezer, T. Studying the Dead-Sea circulation. Symposium of Marine Topics, sponsored by the Society for the
Protection of Nature, The National Institute of Oceanography, Haifa, Israel, April 12.
Ezer, T. Numerical simulations of air-sea interaction in a lake. Seminar in Atmospheric Sciences, Department
of Atmospheric Sciences, Jerusalem, Israel, February 15, 1983.
Ezer, T. Measurements of currents and waves in the Dead-Sea. The Field School of the Society for the
Protection of Nature, Ein Gedi, Israel, December 3, 1982.

Grants and Support

Title: Regional Resilience Innovation Incubation (R2I2) program that focuses on developing AI-assisted
geodesign tools and technologies to support effective stakeholder and community engagement in hazard
mitigation planning and transportation planning (with other universities), **Agency**: NSF, Period: 10/2025-
9/2027, Amount: $500,000, (pending).

Title: Ocean Dynamics Editor-in-Chief service and travel, **Agency**: Springer-Nature Publishing, **Period**:
1/1/2026-12/30/2030, **Amount**: 68,000 Euro (awarded, no IDC allowed)

Title: Ocean Dynamics Editor-in-Chief service and travel, **Agency**: Springer-Nature Publishing, **Period**:
7/1/2021-12/30/2025, **Amount**: 60,000 Euro (awarded, no IDC allowed)

Title: Acquisition of Bi-Static Differential-Absorption Barometric Radar Ground Instrumentation for Severe
Weather Forecasts, Space Barometry, Atmosphere Modeling, **Agency**: Dept. of Army, **Period:** 6/1/2024-
5/31/2025**, Amount:** $ 299,937.00 (co-PI with Asundi, Mech. & Aerospace Eng.) (declined)

Title: Increasing Resilience in Tidewater Virginia: Methods for Making Insightful Decisions Under
Uncertainty, **Agency**: ONR, **Period:** 11/1/2023-10/30/2028**, Amount:** $ 2,147,258.00 to ODU (total:
$6,966,648)**, Role** co-PI (subcontract to GMU), **Efforts:** 1mon/yr (declined).

Title: MRI: Acquisition of Bi-Static Differential-Absorption Barometric Radar Ground Instrumentation for
Severe Weather Forecasts, Space Barometry, Atmosphere Modeling, **Agency**: NSF, **Period**: 9/1/2023-
8/31/2026, Role: co-PI (with Asundi), Amount: $291,705, **Efforts:** 1mon/yr (declined).

Title: Synthesizing Salt Marsh Responses to Regional Drivers of Relative Sea Level Change**, Agency:** NASA**, Period:** 11/17/2022-11/16/2025**, Amount:** $864,596**, Role** co-PI (T. Allen & others), **Efforts:** 1mon/yr. (declined)

Title: Project TIDES: Toward Inclusive, Diverse, and Equitable Sea Level Science, **Agency**: NASA, **Period**: 8/1/2022-7/31/2024, **Amount**: $250,000, Role co-PI (T. Allen & others), Efforts: 1mon/yr. (declined)

Title: Improving Severe Weather Forecasts Through a Novel Remote Sensing Radar Technology, Bi-Static Differential-absorption BArometric Radar (DiBAR). ODU Batten College of Engineering and Technology Multidisciplinary Research Seed Grant (MRSG) 2022. (declined)

Title: Large-Scale CoPe: SHORES (Science of Hazards in Oceanic-Rural Environments and Societies). **Agency**: NSF/CoPe (subcontract to UDel), **Period**: 9/1/2022-8/31/2027, **Amount**: project total $19,998,376, ODU: $446,343, Role: ODU's PI, Efforts: 1 mon/yr (declined)

Title: Training Course on Regional Application of Coupled Climate Models, **Agency**: UNESCO/IOC, First Institute of Oceanography, Qingdao, China, **Period**: 7/5/2021-7/16/2021, **Amount**: $1,500 (no IDC)

Title: Acquisition of Bi-Static Differential-Absorption Barometric Radar (DiBAR), ODU MRI limited submissions internal competition (with Sharan Asundi; selected by ODURF to represent the Institution in this competition).

Title: Acquisition of Bi-Static Differential-Absorption Barometric Radar (DiBAR) Ground Instrumentation for Improving Severe Weather Forecasts, Space Barometry & Atmosphere Modeling, NSF-MRI 2022 Internal Competition, **Amount**: 60,000, Role: co-PI (with S. Asundi, MEA, D. Popescu, ECE, P. Taylor, NASA)

Title: Large-scale CoPe: Science HUB for Ocean Research and Engagement (SHORE)- Mid-Atlantic. **Agency**: NSF/CoPe (subcontract to UDel), **Period**: 6/1/2021-5/31/2026, **Amount**: project total $20,000,000, ODU: $450,000, Role: ODU's PI, Efforts: 1 mon/yr (declined)

Title: Improving the representation of ocean dynamics in climate prediction and understanding the role of ocean variability in impacts on vulnerable coasts. **Agency**: NOAA, **Period**: 2022-2025, **Amount**: $300,000 (declined)

Title: MRI: Acquisition of Bi-Static Differential-Absorption Barometric Radar (DiBAR) Ground Instrumentation for Improving Severe Weather Forecasts, Space Barometry & Atmosphere Modeling, **Agency**: NSF, **Period**: 8/16/2021-8/15/2024, **Amount**: 436,999 (including 131,100 match), Role: co-PI (with S. Asundi, MEA, and D. Popescu, ECE) (declined)

Title: Improving Severe Weather Forecasts Through a Novel Remote Sensing Radar Technology, Bi-Static Differential-absorption BArometric Radar (DiBAR), **Supporter**: ODU's Multidisciplinary Seed Grant (MRSG), **Amount**: 24,964, Role: co-PI (with S. Asundi, MEA, and D. Popescu, ECE) (declined)

Title: ERC: National Center for Urban-Coastal Flood Management using a Cyber-Physical-Human-Systems Framework, **Agency**: NSF/ERC, Role: ODU's co-PI (prelim proposal declined)

Title: Regional RISA Teams Competition for the Mid-Atlantic, **Agency**: NOAA/RISE (subcontract UDel), **Amount**: project total $4,335,000, Role: ODU's PI (prelim proposal declined)

Title: Dinitrogen fixation and the biogeography of diazotrophs in the Gulf of Mexico: the role of biogeochemical gradients from the basin- to the meso-scale in contrasting seasons. **Agency:** NSF; **Period:** 8/1/20-7/31/23, **Amount:** $1,687,327, Role: co-PI, Efforts: 1 mon/yr (declined)

Title: Synthesis of sea level rise and water quality in the Chesapeake Bay: assessing nutrient loads and water quality impacts from tidal flooding. **Agency:** STAC Chesapeake Bay Program; **Period:** 9/1/19-11/30/20, **Amount:** $125,000, Role: co-PI (with Mulholland), Efforts: 1 mon/yr (declined)

Title: Dinitrogen fixation and the biogeography of diazotrophs in the Gulf of Mexico: the role of the Loop Current and eddy circulation. **Agency:** NSF; **Period:** 2/1/19-1/31/22, **Amount:** $1,246,657, Role: co-PI, Efforts: 1 mon/yr (declined)

Title: Training Course on Climate Dynamics and Air-sea Interaction, **Agency**: UNESCO/IOC, First Institute of Oceanography, Qingdao, China, **Amount:** $3,000, Period: 6/14/19-6/29/19.

Title: Green Stream Flood Monitoring and Warning System
Source: MIT-SOLVE competition; 9/23/18- GreenStream-ODU team wins $10,000 prize.

Title: Flood Monitoring and Warning System
Source: RISE (U.S. Department of Housing and Urban Development, HUD); **Period**: 5/1/2019-4/30/2021; **Amount**: $288,500 (ODU subcontract to Green Stream Technologies: $23,838), (declined)

Title: Predictability of storm surge and high water along the East Coast of the United States: from days to weeks. **Source:** NOAA-OAR-OWAQ-2019-2005820; **Period**: 2019-2022; **Amount**: ~$900,000 (GMU-ODU collaboration), (considering for resubmitting)

Title: Sea Level Rise Analysis
Source: ODU's Climate Change and Sea Level Rise Initiative; **Period:** 5/1/2012-continuous;
(support for travel and publication expenses; no specific efforts time)

Title: Travel Grants for sea level rise research, 2017-2018.
Source: ODU's Resilience Collaborative (several grants total ~$3000)

Title: International Workshop on Modeling the Ocean, 2018, **Agency:** University of Sao Paulo, Brazil, **Amount**: $45,000 (PI: de Camargo, Brazil; travel and accommodation support)

Title: A Tool to Measure Community Stress and Social Capital to Support Disaster Resilience Planning
Agency: Dept. Homeland Security/UNC Coastal Resilience Center; **Period**: 1/1/2016-12/31/2017; **Amount**: $270,000, **PI**: Plag (Ezer's role: co-PI); Efforts: 0.5 mon/yr

Title: CDS&E: Analyzing high-performance and big-data resources with Empirical Mode Decomposition method. **Agency**: NSF; **Period**: 5/16/18-5/15/21, **Amount**: $360,000, Role: co-PI, Efforts: 2 mon/yr. (pending)

Title: Past, Present and Future Sea Level from Observations and Models
Agency: NASA; **Period**: 10/1/2013-9/90/2016;
PI: Richard Ray (Awarded; Ezer's role: Collaborator, no $ to ODU)

Title: Cook Inlet Beluga Whale Research: Study of physical and biological factors that impact the beluga's population
From: Kenai Peninsula Borough, **Period**: 4/19/2011-7/10/2013
Role: PI (co-PI, C. Jones, J. Ashford, H. Liu), Amount: $176,316 (no IDC)

Title: Collaborative Research: Modeling sea ice-ocean ecosystem responses to climate changes in the Bering-Chukchi-Beaufort Seas with data assimilation Of RUSALCA measurements
From: NOAA , **Period**: 7/1/2008-6/30/2012
Role: PI (with L. Oey, PU and J. Wang, NOAA), **Amount**: $108,000

Title: Using inundation modeling and remote sensing data to study hydrodynamic and environmental impacts on the survival of Cook Inlet's Beluga whales
From: NOAA, **Period**: 10/1/2010-9/31/2011
Role: PI, **Amount**: $27,000

Title: Collaborative Research: Planning Grant: Industry/University Cooperative Research Center for Wind Energy
From: NSF, **Period**: 8/1/2009-7/31/2010
Role: co-PI (Lead PI: L. Atkinson), **Amount**: $10,000

Title: Mid-Atlantic ocean model calculations
From: MMS/ Sub-contract: Princeton University, **Period**: 3/1/2009-2/28/2011
Role: PI (with L. Atkinson, ODU and L. Oey, PU), **Amount**: $184,000

Title: Red Sea - Dead Sea conveyance feasibility study
From: World Bank/Coyne et Bellier/Tractebel Engineering, **Period**: 6/1/2008-6/30/2011
Role: PI, **Amount**: initial award $98,540; extension: $41,000

Title: Collaborative Research: Influence of physico-chemical gradients on rates of dinitrogen fixation and diazotroph diversity in the Gulf of Mexico (co_PI with Mulholland), **Agency**: NSF, **Period**: 3/1/2018-2/28/2021, **Amount**: $789,854, Efforts: 2 mon/yr. (declined)

Title: A process to Optimize Medical Surge Capacity and Improve Health Services Accessibility during Extreme Climate Events. **Agency**: NSF; **Period**: 5/1/2017-4/30/2019; Amount: total $439,223; Role: co-PI, Efforts: 2 mon/yr

Title: Multi-tier seasonal prediction system for Mid-Atlantic coastal high water. **Agency**: NOAA, Period: 2017-2020, Amount: total $1,800,000 (ODU $540,000), Role: co-PI (lead: GMU).

Title: Impact of accelerated melting of Greenland ice sheet on ocean circulation and coastal sea level along the U.S. east coast. **Agency**: NSF; **Period**: 11/1/2016-10/31/2019; Amount: total $381,811; PI.

Title: Collaborative Proposal: A focused approach to incorporate BD capabilities into coastal hazards and risks. **Agency**: NSF; **Period**: 9/1/2016-8/31/2019; Amount: total $210,000; Role: co-PI.

Title: Data driven modeling, simulation, analysis and design of complex systems
Agency: NSF; **Period**: 1/1/2015-12/31/2020; **Amount**: ~$3,000,000, co-PI.

Title: Multi-generational Responses of Coastal Socioecological Systems to Global Change: Modeling Dynamic Feedbacks in a Ridge-to-Reef Landscape Microcosm; **Agency**: NSF/subcontract to MSU; lead PI: Hyndman (MSU) (Ezer role: co-PI, ODU's PI); **Amount**: ODU $224,600.

Title: Hazards SEES: An Integrated Analysis of Meteorological Hazards, Power System Vulnerability and Resilience Management Policy; **Agency**: NSF/subcontract to VT (collaboration between ODU, VT, VIMS and UM); lead PI: Rahman (VT) (Ezer role: co-PI, ODU's PI); **Amount**: ODU $289,195 (total $950,000).

Title: Diagnostic of Climate Data Sets and Indicators that Influence the Vulnerability of the U.S. Atlantic Coast to Climate Change. **Agency**: NOAA; **Period**: 6/1/2014-5/31/2017; **Amount**: $429,286
PIs: Ezer and Plag.

Title: EasSM-3 Collaborative Research: Predictability of Processes Contributing to Seasonal to Interdecadal Local Sea Level Changes. **Agency**: NSF; Period: 7/1/2014-6/30/2017; **Amount**: $364,160
PIs: Plag and Ezer.

Title: Coastal SEES: An ecosystem-human model of climate change impacts on ocean-dependent communities in the developing world: A western Caribbean estuarine system as a prototype testbed; **Agency**: NSF; Period: 8/1/2014-7/31/2019; **Amount**: $1,898,946 (total), $269,935 (ODU).
PI: Ezer (ODU sub contract to MSU; Co-PI on NSF prop.)

Title: Improving Regional Sea Level Rise Projections for Flood-Prone Regions
Agency: NASA; **Period**: 10/1/2013-9/90/2016; **Amount**: $461,570, **PI**: Ezer

Title: Collaborative sea level research; **Agency**: Diamond Jubilee International Visiting Fellowship, University of Southampton, UK; **Period**: 8/1/2014-7/31/2017; **Amount**: 15,000 GBP

Title: Science Alliance Live! **Agency**: ONR; **Period**: 8/1/2014-7/31/2017; **Amount**: $561,984
PI: Alonzo (Ezer's role: co-PI/Collaborator)

Title: Increased Flooding Risk, Mitigation Strategies, and Sustainable Land Use: Simulating Land-Use Changes in a Vulnerable Coastal City**, Agency:** NSF**, Period:** 08/01/2013 – 07/31/2015**; PI:** Earnest, Ezer, Alonzo, McShane, Yusuf**; Amount:** $557,419

Title: Development of Google Earth-based Tools for Modeling, Simulation, and Visualization of Climate Change and Adaptation

Agency: VA Sea Grant
Role: PI (co-PI, Y. Shen PI), Amount: $70,000

Title: Development of Google Earth-based Tools for Modeling, Simulation, and Visualization of Sea Level Rise and Offshore Wind Energy Generation
Agency: ODU Office of Research
Role: PI (co-PI, Y. Shen, S. Dhali, H. Zhu, G. Zhou, H. Garcia), Amount: $50,000

Title: Interdisciplinary approach for the integration of remote sensing data and inundation ocean models
Agency: NASA
Role: PI (co-PI, H. Liu, Geog. Dept. ODU)

Title: Development of innovative visualization tools for marine science education in ocean modeling
Agency: NSF
Role: PI (co-PIs, Y. Shen, Eng. and G. Watson, Edu., ODU)

Title: Collaborative Research: Synchronized spawning – the role of ocean physics and geomorphology in reef fish reproduction
Agency: NSF
Role: co-PI (Lead PI: W. Heyman, TAMU)

Other Past Projects

2007-2009 (NSF) Collaborative Research, Gravity Current Entrainment Climate Process Team

2007-2009 (NOAA) Numerical modeling of tides and inundation Processes in Cook Inlet (Alaska) in support of Beluga Population & Migration Studies

2009 (ODU-Office of Research, SEECR award) Integrating remote sensing data and inundation ocean models to map coastal areas and improve flood predictions.

2007-2007 (TAMU/Stanford foundation): Antigua and Barbuda coastal and marine ecosystem management program.

2007-2012 (NOAA): Modeling sea-ice-ocean-ecosystem responses to climate changes in the Bering-Chukch-Beaufort seas with data assimilation of RUSALCA measurements (co-PI with L. Oey, PU & J. Wang, UAF).

2007-2008 (ODU Office of Research)

2007-2008 (ODU College of Sciences)

2006-2008 (NSF): Collaborative Research, Gravity Current Entrainment Climate Process Team (co-PI with S. Legg, GFDL).

2003-2006 (NSF): Collaborative Research, Gravity Current Entrainment Climate Process Team (PI, collaborative research with PIs from GFDL, WHOI, NCAR, RSMAS).

2000-2006 (ONR): A Community Terrain-Following Ocean Modeling System (PI, with H. Arango, Rutgers).

2003-2005 (MMS): Development and Testing of an Ocean Model with Wetting And Drying (co-PI with L. Oey & G. Mellor, PU).

2001-2003 (MMS/FSU): Validation of deep cyclonic gyres in the Gulf of Mexico (PI, with T. Sturges, FSU).

1998-2000 (ONR/NOAA/NOPP): Coastal Marine Demonstration of Forecast Information to Mariners for the U.S. East Coast (co-PI with G. Mellor, PU).

1996-2000 (ONR): Data Assimilation and Model Evaluation Experiments- North Atlantic Basin (DAMEE-NAB) (co-PI with G. Mellor, PU).

1992-1996 (ONR): Data Assimilation and Model Evaluation Experiments- Gulf Stream Region (DAMEE-GSR) (co-PI with G. Mellor, PU).

1995-1998 (NASA): Modeling the North Atlantic and Nordic Seas (co-PI with G. Mellor, PU & S. Hakkinen, NASA).

1993-1995 (NOAA/Atlantic Climate Change Program): North Atlantic and Arctic Ocean variability (co-PI with G. Mellor, PU).

1993-1998 (NOAA/Coastal Ocean Program): Development of the U.S. East Coast Operational Ocean Forecast System (co-PI with G. Mellor, PU).

Consulting/Subcontracts

2007-2008 (O'Brien & Gere Engineers Inc.): Data analysis and modeling of Jourdan River and Bayou project.

2006-2007 (NASA/USF): Analysis of altimeter data and model fields to support studies of climate variations and upwelling in the CARIACO region (also advise a graduate student of USF).

2005-2007 (PREPA/URS Corp.): Simulations of thermal plumes in a bay to support environmental concerns and EPA requirements for power station operation.

2006 (IMSG System): NOAA/Climate Prediction Center proposal.

2002-2004 (Stevens Institute of Technology): Organize and lecture at summer courses/workshop on ocean and sediment transport modeling.

2000-2002 (MMS/DEEPSTAR): High resolution hindcast experiments in the Gulf of Mexico (with L. Oey).

2001-2003 (Univ. S. Carolina/Nature Conservancy): Support the development of a numerical model for the MesoAmerican Barrier Reef System (also advice a USC graduate student).

2001-2003 (MMS/FSU): Validation of deep cyclonic gyres in the Gulf of Mexico.

1999-2001 (Natl. Politech. Inst., Mexico): Development of a numerical model for the western Gulf of Mexico.

1991-Present: Consulting and providing computer and web support to the POM user's group and answering questions from users (mostly with no pay, occasionally get consulting fee or travel expenses).