

**Subrahmanyam Bulusu**  
Professor, Physical Oceanography & Satellite Oceanography  
Satellite Oceanography Laboratory  
School of the Earth, Ocean, and Environment  
University of South Carolina  
701 Sumter St., EWS 617; Columbia, SC 29208  
Phone: (803) 777-2572; Fax: (803) 777-6610; E-mail: sbulusu@geol.sc.edu  
Lab Webpage: <http://satocean.geol.sc.edu/>

## EDUCATION

---

- PhD (1998)      National Oceanography Centre  
(Formerly Southampton Oceanography Center),  
University of Southampton, Southampton, UK.  
Major: Oceanography (Satellite Oceanography/Physical Oceanography).  
  
Dissertation: A Study of the Indian Ocean Circulation using Satellite  
Observations and Model Simulations  
Dissertation Supervisor: Prof. Ian S. Robinson
- MSc (1991)      Andhra University, Visakhapatnam, India.  
Major: Marine Science (Physical Oceanography)
- BSc (1988)      Andhra University, Visakhapatnam, India.  
Major: Physics (Minors: Mathematics and Chemistry)

## PROFESSIONAL EXPERIENCE

---

- 01/2015 – Present      Professor (Tenured), School of the Earth, Ocean, and Environment,  
University of South Carolina, Columbia, SC.
- 08/2010 – 12/2014      Associate Professor (Tenured), School of the Earth, Ocean and  
Environment, University of South Carolina, Columbia, SC.
- 08/2005 – 07/2010      Assistant Professor, School of the Earth, Ocean and Environment,  
University of South Carolina, Columbia, SC.
- 03/2005 – 08/2005      Assistant Scholar/Scientist, Center for Ocean Atmospheric Prediction  
Studies (COAPS), Florida State University, Tallahassee, FL.
- 03/2001 – 03/2005      Research Associate, Center for Ocean Atmospheric Prediction Studies  
(COAPS), Florida State University, Tallahassee, FL.
- 10/1998 – 03/2001      Postdoctoral Associate, Center for Ocean Atmospheric Prediction Studies  
(COAPS), Florida State University, Tallahassee, FL.  
(Post-doc advisor: Dr. James J. O'Brien).
- 10/1995 – 10/1998      British Commonwealth Fellow, National Oceanographic Center,  
University of Southampton, UK.
- 10/1992 – 09/1995      Research Fellow, National Institute of Oceanography, Goa, India.
- 05/1991 – 10/1992      Faculty Member, Computer Education and Training Division, Methodex  
Systems Limited, New Delhi, India.

## HONORS AND FELLOWSHIPS

---

- 2018      Breakthrough Leadership in Research Award, University of South Carolina  
(University of South Carolina's highest Award in Research)
- 2014      Excellence in Teaching Award, Mortar Board INC, National College Senior

Honors Society, 2014.  
 2013 Breakthrough Rising Star, University of South Carolina  
 2013 Outstanding Guest Editorship for a special issue series- OSTM/Jason-2 applications, Marine Geodesy, Taylor & Francis Group, 2013  
 1995-1998 Commonwealth Scholarship in the field of Remote Sensing & Technology, British Government, 1995 (The Indian Government selects only one fellowship each year in each STEM discipline).

---

#### MEMBERSHIP IN PROFESSIONAL SOCIETIES

American Geophysical Union (AGU)  
 American Meteorological Society (AMS)  
 European Geophysical Union (EGU)  
 Institute of Electrical and Electronics Engineers (IEEE)

---

#### RESEARCH INTERESTS

- Use of satellite remote sensing for studying ocean circulation utilizing both active microwave sensors and passive optical sensors, as well as in the combination of passive/ active (radiometer/radar) instruments.
- Ocean-atmosphere dynamics; monsoon dynamics; air-sea interactions; climate change
- Numerical modeling based on the Hybrid Coordinate Ocean Model (HYCOM), coupled ocean-atmosphere-land-ice simulations from NOAA/NCEP Climate Forecast System (CFSv2.0), and Nucleus for European Modelling of the Ocean (NEMO), NASA's Estimating Ocean Circulation and Climate of the Ocean (ECCO).

---

#### FIELD WORK EXPERIENCE/OCEANOGRAPHIC CRUISES

Nov. 10-Nov. 30, 1992	Northeastern Arabian Sea, ORV SAGAR KANYA, Cruise #79
Jan. 15-Feb. 7, 1993	Central Arabian Sea, FORV SAGAR SAMPADA, Cruise #106
Apr. 27-May 15, 1993	Arabian Sea, ORV SAGAR KANYA, Cruise # 83
Aug. 26-Sep. 7, 1993	Equatorial Indian Ocean, ORV SAGAR KANYA, Cruise #86
Oct. 11-Nov. 9, 1993	Bay of Bengal, Onboard ORV SAGAR KANYA, Cruise #88
May 23-Jun. 9, 1994	Eastern Arabian Sea, ORV SAGAR KANYA, Cruise #92
Sep. 1-Sep. 25, 1994	Central Arabian Sea, ORV SAGAR KANYA, Cruise #95
Jan. 3- Jan. 21, 1995	Arabian Sea & Bay of Bengal, ORV SAGAR KANYA, Cruise #98

---

#### FUNDED CONTRACTS & GRANTS (3.7 MILLION)

- 1) National Academy of Sciences (Gulf Research Program), GOFFISH: Advancing Gulf of Mexico Operational Forecasting with Application to Fisheries, Industry Safety, and Natural Hazards, \$400,000, 3/1/2022-2/28/2027 (Total amount \$9 Million, subaward from FSU to UofSC \$400,000) **(Sole PI at UofSC)**.
- 2) NASA EPSCoR, Monitoring Marine Heatwaves along the US East coast using Satellite observations and model simulations, \$25,000; 5/14/2021-5/13/2022. **(Sole PI)**
- 3) NASA/SC Space grant mini REAP proposal, Analyzing the connection between Surface Freshwater Lenses and Hurricanes in the Gulf of Mexico using NASA's SMAP Salinity, \$9,989; 10/20/2020-08/20/2021 **(Sole PI)**.
- 4) ONR, Circulation Changes in the Arctic Ocean and Subarctic Seas and their Connections to the Global Ocean and Climate", \$351,000, 07/01/2020-06/30/2023 **((Sole PI)**
- 5) ONR, Influence of Mesoscale and Submesoscale Eddy Structures on the Arabian Sea Mixed, \$230,000, 07/13/2020-07/12/2022 **(Sole PI)**.

- 6) ONR (MISO-BoB), Response of the Bay of Bengal to the Atmospheric Intraseasonal Oscillations, \$575,000, 05/01/2017-01/31/2023 **(Sole PI)**.
- 7) NASA/SC Space Grant, Utilization of NASA's SMAP Salinity and GPM Precipitation for Indian Ocean Monsoon Studies, \$12,000; 06/15/2019-04/14/2020. (Mentor, Graduate Fellowship awarded to Heather Roman-Stork)
- 8) ONR (NASCar), Upper Ocean Mixing Processes and Circulation in the Arabian Sea during Monsoons, \$455,000, 01/01/2015-12/31/2019 **(Sole PI)**.
- 9) NASA/SC Space Grant, Estimation of Volume and Freshwater Flux in the Arctic Ocean, \$10,000; 07/10/2017-03/15/2018 **(Sole PI)**.
- 10) NASA/SC Space Grant, (Renewal): Investigating Role of Southern Ocean on Global Climate using Satellite observations and model simulations; \$12,000; 08/01/2017-06/24/2018. (Mentor, Graduate Fellowship Awarded to Brady Ferster).
- 11) NASA/SC Space Grant, Investigating Role of Southern Ocean on Global Climate using Satellite observations and model simulations; \$12,000; 08/01/2016-06/30/2017. (Mentor, Graduate Fellowship Awarded to Brady Ferster).
- 12) NASA/SC Space Grant, Role of salinity on Agulhas Current System, \$6,000, 07/01/2016-04/30/2017 **(Sole PI)**.
- 13) NASA, New Approaches to understanding the MJO using Satellite Altimetry and Aquarius Salinity in the Tropical Oceans, \$296,249, 07/09/2013-07/08/2017 **(Sole PI)**.
- 14) ONR, Northern Indian Ocean Salt Transport (NIOST): Estimation of Fresh and Salt Water Transports in the Indian Ocean Using Remote Sensing, Hydrographic Observations and HYCOM simulations, \$345,000; 05/01/2012-04/30/2015 **(Sole PI)**.
- 15) NASA/South Carolina Space Grant Graduate Fellowship, Estimation of Fresh and salt water transports in the Indian Ocean using NASA's Aquarius Sea Surface Salinity data, (PI: Matthew Nienhaus, MS student (Marine Science) Advisor: Dr. Subrahmanyam Bulusu), \$10,000; 05/01/2012-04/30/2013.
- 16) ONR, Estimation of Salt and Fresh water transports in the Bay of Bengal using HYCOM, \$59,995, 05/14/11-9/30/2012 **(Sole PI)**.
- 17) NASA/South Carolina Space grant Graduate Fellowship, Calibration and validation of SMOS and Aquarius Salinity data, (PI: Gary Grunseich, MS student (EOS) Advisor: Dr. Subrahmanyam Bulusu), \$10,000; 08/01/2011-07/31/2012.
- 18) NASA, Indian Ocean Response to ENSO and IOD using satellite observations, \$76,391, 08/16/2008 - 08/15/2010 **(Sole PI)**.
- 19) NASA/SC South Carolina Space Grant, Hurricane Contribution to Air-Sea Fluxes of CO<sub>2</sub>, \$10,000, 05/01/2008-04/30/2009 (Mentor, Graduate Fellowship Awarded to Michelle Gierach)
- 20) NASA/SC South Carolina Space Grant: Studying Large Scale Circulation with Altimetry, \$10,000, 05/01/2008 - 04/30/2009 (Mentor, Graduate Fellowship Awarded to Dara Cadden)
- 21) NASA/SC South Carolina Space Grant, Studying Large Scale Circulation with Altimetry, \$10,000, 08/01/2007-07/31/2008 (Mentor, Graduate Fellowship Awarded to Dara Cadden)
- 22) NASA, Satellite data analysis of Low Frequency Indian Ocean Climate Variability, \$239,524, 03/01/2006 - 02/28/2010 **(Sole PI)**.
- 23) NASA/South Carolina Space Grant, Influence of Phytoplankton on Ocean Circulation, \$30,000, 05/01/2006 - 04/30/2008 **(Sole PI)**.
- 24) UofSC Office of Research and Health Sciences, Acquisition of a long-range HF Radar surface current mapping system, \$75,000, 2006-2007. (PI: Dr. Richard Styles & CO-PI's: Dr. George Voulgaris, Subrahmanyam Bulusu and Sasha Yankovsky).
- 25) NASA/SC South Carolina Space Grant, Studying Large Scale Circulation with Altimetry, \$10,000, 05/01/2006-04/30/2007 (Mentor, Graduate Fellowship Awarded to Dara Cadden)

- 26) NASA/JPL, Comparison of upper ocean wave dynamics with JASON-1 and TOPEX/Poseidon, \$444,000, 10/01/2000-09/30/2005. (PI: Dr. Jim O'Brien and CO-PI: Dr. Subrahmanyam Bulusu).

#### DATA/SOFTWARE (NO FUNDS TO USC)

---

1. ESA, Study on the Basin Scale Exchange of Salt in the Tropical Indian Ocean using SMOS Salinity data, 04/01/2009 - 03/31/2012 (Sole PI).
2. INCOIS/Ministry of Earth Sciences (MoES), Government of India, Equatorial Mooring Array for Current Observations and Research on Indian Ocean Dynamics (EMAC-IOD), CO-PI, \$2.2 Million (No funds to USC), 04/01/2012-03/31/2017.

#### PUBLICATIONS

---

##### REFEREED BOOK AND MONOGRAPH CHAPTERS PUBLISHED (TOTAL 3)

---

- 1) George H. Born and **Subrahmanyam Bulusu** (Guest Editors): Marine Geodesy Special Issue on OSTM/Jason-2 altimetry Applications- Part 3, pp. 399. ISBN: 01490419 (2012) 35 (S1), 2012.
- 2) George H. Born and **Subrahmanyam Bulusu** (Guest Editors): Marine Geodesy Special Issue on OSTM/Jason-2 Calibration/Validation- Part 2, pp. 490. ISBN: 01490419 (2011) 34 (3-4), 2011.
- 3) George H. Born and **Subrahmanyam Bulusu** (Guest Editors): Marine Geodesy Special Issue on OSTM/Jason-2 Calibration/Validation- Part 1, pp. 517. ISBN: 01490419 (2010) 33 (S1), 2010.

##### REFERRED JOURNAL ARTICLES PUBLISHED (TOTAL 88)

---

(Underline denotes graduate students; \* denotes undergraduate students)

1. Ernst, P. A\*, Subrahmanyam, B., & Trott, C. B\*. (2022). Lakshadweep High propagation and impacts on the Somali Current and eddies during the southwest monsoon. *Journal of Geophysical Research: Oceans*, 127, e2021JC018089. <https://doi.org/10.1029/2021JC018089>
2. Hall, S.B., **Subrahmanyam B.**, J.H. Morrison (2022). Intercomparison of Salinity Products within the Beaufort Gyre Region, *Remote Sensing*, 14, 71, <https://doi.org/10.3390/rs14010071>.
3. Shroyer, E. et al. (2021). Bay of Bengal Intraseasonal Oscillations and the 2018 Monsoon Onset, *Bulletin of the American Meteorological Society*, <https://doi.org/10.1175/BAMS-D-20-0113.1>.
4. Roman-Stork, H.L., **B. Subrahmanyam**, C.B. Trott (2021). Mesoscale Eddy Variability and its Linkage to Deep Convection over the Bay of Bengal using Satellite Altimetric Observations, *Advances in Space Research*, 68, 387-400. <https://doi.org/10.1016/j.asr.2019.09.054>.
5. Eley, N.E., **B. Subrahmanyam**, and C.B. Trott (2021). The concurrence and air-sea interactions of Hurricanes Marco and Laura (2020), *Remote Sensing*, 13, 1932. <https://doi.org/10.3390/rs13101932>.

6. Trott, C.B., **B. Subrahmanyam**, and C.E. Washburn\* (2021). Investigating the Response of Temperature and Salinity in the Agulhas Current Region to ENSO Events, **Remote Sensing**, 13, 1829. <https://doi.org/10.3390/rs13091829>.
7. Hall, S.B., **Subrahmanyam B.**, Nyadjro E.S., Samuelsen A (2021). Surface Freshwater Fluxes in the Arctic and Subarctic Seas during Contrasting Years of High and Low Summer Sea Ice Extent. **Remote Sensing**. 13(8):1570. <https://doi.org/10.3390/rs13081570>.
8. Trott, C.B., and **B. Subrahmanyam** (2021). Satellite Data Analysis of the Upper Ocean Response to Hurricane Dorian (2019) in the North Atlantic Ocean, **IEEE Geoscience Remote Sensing Letters**, Doi: 10.1109/LGRS.2020.3032062.
9. Greaser, S.R., **B. Subrahmanyam**, Trott, C.B., and Roman-Stork, H.L. (2020). Interactions between Mesoscale eddies and Synoptic Oscillations in the Bay of Bengal during the Strong Monsoon of 2019, **Journal of Geophysical Research: Oceans**, 125,e2020JC016772. <https://doi.org/10.1029/2020JC016772>.
10. Roman-Stork, H.L., and **B. Subrahmanyam** (2020). The Impact of Cyclone Amphan (2020) on Southwest Monsoon onset and Preconditioning, **Remote Sensing**, 12, 3011, doi:10.103390/rs12183011.
11. **Subrahmanyam, B.**, H. L. Roman-Stork, V.S.N. Murty (2020). Response of the Bay of Bengal to 3-7-day Synoptic Oscillations during the Southwest monsoon of 2019, **Journal of Geophysical Research-Oceans**, 125, e2020JC016200. <https://doi.org/10.1029/2020JC016200>.
12. Shoup, C.G., H. L. Roman-Stork, and **B. Subrahmanyam** (2020). Analysis of Coupled Ocean and Atmospheric Preconditioning of Primary Madden-Julian Oscillation Events, **Journal of Geophysical Research: Oceans**, 25, e2020JC016358. <https://doi.org/10.1029/2020JC016358>.
13. Nichols, R.E., **B. Subrahmanyam**, and A. Arguez (2020). Recent Variability in the Arctic Ocean and Subarctic seas, **Remote Sensing in Earth Systems Science**, <https://doi.org/10.1007/s41976-020-00035-w>.
14. Brokaw, R.J., **B. Subrahmanyam**, Trott, C.B., A. Chaigneau (2019). Eddy Surface Characteristics and Vertical Structure in the Gulf of Mexico from Satellite Observations and Model Simulations, **Journal of Geophysical Research: Oceans**, 125, e2019JC015538. <https://doi.org/10.1029/2019JC015538>
15. Roman-Stork, H.L., **B. Subrahmanyam**, C.B. Trott (2019). Monitoring of Monsoon Intraseasonal Oscillations in the Indian Ocean using Satellite derived Sea Surface Height and Sea Surface Salinity, **Journal of Geophysical Research-Oceans**, 125, e2019JC015891. <https://doi.org/10.1029/2019JC015891>
16. Roman-Stork, H.L., **B. Subrahmanyam**, V.S.N. Murty (2019). The Role of salinity in the Southeastern Arabian Sea in Determining Monsoon Onset and Strength, **Journal of Geophysical Research: Oceans**, 125, <https://doi.org/10.1029/2019JC015592>.
17. Nichols, R.E., **B. Subrahmanyam** (2019). Estimation of Surface Freshwater Fluxes from the Arctic Ocean using Satellite derived Salinity, **Remote Sensing in Earth Systems Science**, volume 2, issue 4, pp 247-259.
18. Trott, C.B.\*., **B. Subrahmanyam**, H. L. Roman-Stork, V.S.N. Murty, and C. Gnanaseelan and (2019). Variability of Intraseasonal Oscillations and Synoptic Signals in Sea Surface Salinity in the Bay of Bengal, **Journal of Climate**, <https://doi.org/10.1175/JCLI-D-19-0178.1>.
19. Roman-Stork, H.L., **B. Subrahmanyam**, V.S.N. Murty (2019). Quasi-biweekly Oscillations in the Bay of Bengal in Observations and Model Simulations, **Deep-Sea Research**, <https://doi.org/10.1016/j.dsr2.2019.06.017>.
20. Shoup, C.G., **B. Subrahmanyam**, H. L. Roman-Stork (2019). Madden-Julian Oscillation-Induced Sea Surface Salinity Variability as Detected in Satellite Derived Salinity, **Geophysical Research Letters**, 46. <https://doi.org/10.1029/2019GL083694>.

21. Trott, C.B., **B. Subrahmanyam**, V.S.N. Murty, and J.F. Shriver (2019). Large Scale Fresh and Salt Water Exchanges in the Indian Ocean, **Journal of Geophysical Research: Oceans**, <https://doi.org/10.1029/2019JC015361>.67.
22. Trott, C.B., **B. Subrahmanyam** (2019). Detection of Intraseasonal Oscillations in the Bay of Bengal using Altimetry, **Atmospheric Science Letters**, e920. <https://doi.org/10.1002/asl.920>.
23. Brokaw, R.J.\*., **B. Subrahmanyam**, S.L. Morey (2019). Loop Current and Eddy-Driven Salinity Variability in the Gulf of Mexico, **Geophysical Research Letters**, 46. <https://doi.org/10.1029/2019GL082931>.
24. Trott, C.B., **B. Subrahmanyam**, E.S. Nyadjro (2019). Influence of mesoscale features on Mixed Layer Dynamics in the Arabian Sea, **Journal of Geophysical Research: Oceans**, 124, <https://doi.org/10.1029/2019JC014965>.
25. Trott, C.B., **B. Subrahmanyam**, A. Chaigneau, and H. L. Roman-Stork (2019). Eddy-induced Temperature and salinity Variability in the Arabian Sea, **Geophysical Research Letters**, 46. doi:10.1029/2018GL081605.
26. Paris, M.L., **B. Subrahmanyam**, C.B. Trott, and VSN Murty (2019). Influence of ENSO events on the Agulhas Leakage Region, **Remote Sensing in Earth Science Systems**, 10.1007/s41976-018-0007-z.
27. Ferster, B.S., **B. Subrahmanyam**, and A. Arguez (2019). Recent Changes in Southern Ocean Circulation and Climate , **IEEE Geoscience Remote Sensing Letters**, 10.1109/LGRS.2018.2880589.
28. Ferster, B.S., **B. Subrahmanyam**, I. Fukumori, E.S. Nyadjro (2018). Variability of Southern Ocean Transports, **Journal of Physical Oceanography**, 48, DOI: 10.1175/JPO-D-18-0055.1, 2,667-2,688.
29. **Subrahmanyam, B.** C.B. Trott, V.S.N. Murty (2018). Detection of Intraseasonal Oscillations in SMAP salinity in the Bay of Bengal, **Geophysical Research Letters**, 10.1029/2018GL078662, 7,057-7,065.
30. Trott, C.B., **B. Subrahmanyam**, A. Chaigneau, and T. Delcroix (2018). Eddy Tracking in the Northwestern Indian Ocean during Southwest Monsoon Regimes, **Geophysical Research Letters**, 10.1029/2018GL078381, 6,594-6,602.
31. Ferster, B.S., **B. Subrahmanyam** (2018). A Comparison of Satellite-derived Sea Surface Salinity and Salt Fluxes in the Southern Ocean, **Remote Sensing in Earth System Science**, doi: 10.1007/s41976-018-001-5.
32. Ferster, B.S., **B. Subrahmanyam**, and A. Macdonald (2018). Confirmation of ENSO-Southern Ocean Teleconnections using Satellite-Derived SST, **Remote Sensing**, 10, 331, doi:10.3390/rs10020331.
33. Paris, M.L., and **B. Subrahmanyam** (2018). Role of El Nino Southern Oscillation (ENSO) events on Temperature and Salinity Variability in the Agulhas Leakage Region, **Remote Sensing**, 10, 127, doi:10.3390/rs10010127.
34. D'Addezio, J.M., and **B. Subrahmanyam** (2018). Evidence of organized Intraseasonal Convection linked to Ocean Dynamics in the Seychelles-Chagos Thermocline Ridge, **Climate Dynamics**, <https://doi.org/10.1007/s00382-018-4087-5>.
35. Centurioni, L.R. et al. (2017). Northern Arabian Sea Circulation-Autonomous Research (NASCar), A Research initiative based on Autonomous Sensors, **Oceanography**, 78-91.
36. Burns, J.M., **B. Subrahmanyam**, and V.S.N. Murty (2017). On the Dynamics of the Sri Lanka Dome, **Journal of Geophysical Research**, 122, doi:10.1002/2017JC012986.
37. Trott, C.B., **B. Subrahmanyam**, V.S.N. Murty (2017). Variability in the Somali Current and eddies during the Southwest Monsoon regimes, **Dynamics of Atmosphere and Oceans**, 79, 43-55.
38. Corbett, C.M., **B. Subrahmanyam**, B. S. Giese (2017). A comparison of sea surface salinity in the equatorial Pacific Ocean during the 1997-98, 2012-13, and 2014-15 ENSO events, **Climate Dynamics**, doi 10.1007/s00382-017-3527-y.

39. Melzer, B.A., and **B. Subrahmanyam** (2017). Decadal Changes in Salinity in the Oceanic Subtropical Gyres, *Journal of Geophysical Research*, 122,pp 1-19, doi:10.1002/2016JC012243.
40. Melzer, B.A., and **B. Subrahmanyam** (2016). Evaluation of GRACE Mascon Gravity Solution in relation to interannual Oceanic Water Mass Variations, *IEEE Transactions on Geoscience and Remote Sensing*, Vo. 55, 2, 907-914.
41. Corbett, C.M., and **B. Subrahmanyam** (2016). Validation of Satellite Derived Salinity in the Equatorial Pacific with Specific Emphasis on the 2014-15 ENSO Event, *IEEE Geoscience Remote Sensing Letters*, Vol. 13, 12, 1979-1983.
42. Burns, J.M., and **B. Subrahmanyam** (2016). Variability of the Seychelles-Chagos Thermocline Ridge dynamics in connection with ENSO and Indian Ocean Dipole, *IEEE Geoscience Remote Sensing Letters*, Vol 13, 12, 2019-2023.
43. Burns, J.M., **B. Subrahmanyam**, E.S. Nyadjro, and V.S.N. Murty (2016). Tropical Cyclone Activity over the Southwest Tropical Indian Ocean, *Journal of Geophysical Research*, 121, doi:10.1002/2016JC011992.
44. Nyadjro, E.S., and **B. Subrahmanyam** (2016). Spatial and temporal variability of central Indian Ocean salinity fronts observed by SMOS, *Remote Sensing of Environment*, doi:10.1016/j.rse.2016.02.049.
45. D'Addezio, J.M., and **B. Subrahmanyam** (2016). Role of Salinity on the interannual variability of the Seychelles-Chagos thermocline ridge, *Remote Sensing of Environment*, doi:10.1016/j.rse.2016.02.051.
46. D'Addezio, J.M., and **B. Subrahmanyam** (2016). Sea surface salinity variability in the Agulhas Current Region inferred from SMOS and Aquarius, *Remote Sensing of Environment*, doi: 10.1016/j.rse.2016.02.006.
47. Melzer, B.A., **B. Subrahmanyam** (2015). Investigating Decadal Changes in Sea Surface Salinity in Oceanic Subtropical Gyres, *Geophysical Research Letters*, 42, 7631–7638, doi:10.1002/2015GL065636.
48. D'Addezio, J.M., **B. Subrahmanyam**, E.S. Nyadjro, and V.S.N. Murty (2015). Seasonal Variability of Salinity and Salt Transports in the North Indian Ocean, *Journal of Physical Oceanography*, Vol. 45, No. 7. 1947-1966.
49. Felton, C.S., **B. Subrahmanyam**, V.S.N. Murty, and J.F. Shriver (2014). Estimation of the Barrier Layer thickness in the Indian Ocean using Aquarius salinity *Journal of Geophysical Research*, 119, doi:10.1022013JC009759.
50. Nyadjro, E.S., and **B. Subrahmanyam** (2014). SMOS salinity mission reveals salinity structure of the Indian Ocean Dipole, *IEEE Geoscience and Remote Sensing Letters*,, vol 11,9, 1564-1568.
51. Grunseich, G., **B. Subrahmanyam**, and Bin Wang (2013). Aquarius Salinity observations detect the Madden-Julian Oscillation, *Geophysical Research Letters*, 40, 1-6, doi: 10.1002/2013GL058173
52. Felton, C.S., **B. Subrahmanyam**, V.S.N. Murty (2013). ENSO Modulated cyclogenesis over the Bay of Bengal, *Journal of Climate*, 26, 9806-9818.
53. Nyadjro, E.S., and **B. Subrahmanyam**, and B.S. Giese (2013). Variability of Salt flux in the Indian Ocean during 1960-2008, *Remote Sensing of Environment*, 134, 175-193.
54. Grunseich, G., **B. Subrahmanyam** (2013). Detection of the Madden-Julian Oscillation from satellite altimetry, *IEEE Geoscience and Remote Sensing Letters*, 10, 441-445 .
55. Nyadjro, E.S., **B. Subrahmanyam**, V.S.N. Murty, J.F. Shriver (2012). Role of Salinity on the dynamics of the Arabian Sea Mini Warm Pool, *Journal of Geophysical Research*, 117, doi: 10.1029/2012JC007978.

56. Nienhaus, M.S., and **B. Subrahmanyam**, and V.S.N. Murty (2012). Altimetric Observations of Coastal Kelvin Waaves in the Bay of Bengal, *OSTM/Jason-2 special issue, Marine Geodesy*,35, 190-216.
57. **Subrahmanyam, B.** ,G. Grunseich, E.S. Nyadjro (2012). Preliminary SMOS salinity measurements and validation in the Indian Ocean, *IEEE Transcations Geoscience and Remote Sensing*, volume 50, doi: 10.1109/TGRS.2012.2199122.
58. Grunseich, G., **B. Subrahmanyam**, V.S.N. Murty, and B. S. Giese (2011). Sea Surface Salinity Variability during the Indian Ocean Dipole and ENSO Events in the Tropical Indian Ocean, *Journal of Geophysical Research*, doi:10.1029/2011JC007456.
59. Grunseich, G., **B. Subrahmanyam**, A. Arguez (2011). Influence of the Madden-Julian Oscillation on Sea Surface Salinity in the Indian Ocean, *Geophysical Research Letters* , Vol. 38, L17605, doi:10.1029/2011GL049047.
60. Nyadjro, E.S., **B. Subrahmanyam**, and J.F. Shriver (2011). Seasonal Variability of Salt Transport during the Indian Ocean Monsoons, *Journal of Geophysical Research*, 116, doi:10.1029/2011JC006993.
61. **Subrahmanyam, B.**, V.S.N. Murty, D. Heffner (2011). Interannual variability of sea surface salinity in the equatorial Indian Ocean, *Remote Sensing of the Environment*, 115, 944-956.
62. Nyadjro, E.S., **B. Subrahmanyam**, V.S.N. Murty, J.F. Shriver (2010). Salt Transports in the near-surface layer in the Monsoon-influenced Indian ocean using HYCOM", *Geophysical Research Letters*, 37, doi:10.1029/2010GL044127.
63. Gierach, M.M., **B. Subrahmanyam**, A. Samelsen, and K. Ueyoshi\*\*(2009). Hurricane driven alterations in plankton community size structure in the Gulf of Mexico: A modelling study *Geophysical Research Letters*, Vol 36, doi:10.1029/2009GL037414.
64. Gierach, M.M., **B. Subrahmanyam**, P.G. Thoppil (2009). Physical and Biological Responses to Hurricane Katrina (2005) in a 1/25° nested Gulf of Mexico HYCOM, *Journal of Marine Systems*, Vol 78, 168-179.
65. **Subrahmanyam, B.** , D.M. Heffner, D. Cromwell, J.F. Shriver, (2009). Detection of Rossby Waves in Mult-parameters in Multi-mission Satellite Observations and HYCOM simulations in the Indian Ocean, *Remote Sensing of Environment*, 113, 6, 1293-1303.
66. Cadden, D.D.H., R. Styles, and **B. Subrahmanyam**(2009). Estimates of Geostrophic Surafce Currents in the South Atlantic Bight, *Marine Geodesy*, volume 32, 3, doi:10.1080/01490410903094908.
67. Cadden, D.D.H., **B.Subrahmanyam**, D.P. Chambers, and V.S.N. Murty (2009). Surface and Subsurface Geostrophic Current Variability in the Indian Ocean From Altimetry, *Marine Geodesy*, 32:19-29.
68. Heffner, D.M., **B. Subrahmanyam**, J.F. Shriver, and J.F. Blundell (2008). Indian Ocean Rossby waves detected in HYCOM sea surface salinity, *Geophysical. Research Letters*, 35, L03605, doi:10.1029/2007GL032760.
69. Gierach, M.M., **B. Subrahmanyam**(2008). Biophysical Responses of the Upper Ocean to Major Gulf of Mexico Hurricanes in 2005, *Journal of Geophysical Research*, 113, doi:10.1029/2007JC004419.
70. **Subrahmanyam, B.**, K. Ueyoshi, J.M. Morrison (2008). Sensitivity of the Indian Ocean Circulation to Phytoplankton forcing using an ocean model, *Remote Sensing of Environment*, doi:10.1016/j.rse.2007.05.021.



71. Gierach, M.M., **B. Subrahmanyam** (2007). Global oceancolor and phytoplankton, *Bulletin of American Meteorological Society (BAMS), State of Climate in 2006*, S43-S45.
72. Gierach, M.M., **B. Subrahmanyam** (2007). Satellite Data Analysis of the upper response to the Hurricanes Katrina and Rita (2005) in the Gulf of Mexico, *IEEE Geoscience and Remote Sensing Letters*, 4, 132-136.
73. Maza, M., G. Voulgaris, **B. Subrahmanyam** (2006). Subtidal Inner shelf currents off Cartagena de Indias, Caribbean coast of Colombia, *Geophysical Research Letters*, 33, 21606, doi:10.1029/2006GL027324, 2006.
74. Nakamoto, S., S. Prasanna Kumar, J.M. Oberhuber, K. Muneyama, K. Ueyoshi, **B. Subrahmanyam**, K. Nakata, C.A. Lai, R. Frouin (2006). Potential feedback mechanism between phytoplankton and upper ocean environment through radiative transfer process influenced by heat release by phytoplankton Numerical Ocean General Circulation Models and an Analytical Solution, **Global Climate Change and Response of Carbon Cycle in the Equatorial Pacific and Indian Ocean and Adjacent Landmasses**, Elsevier Oceanography Series 73, Edited by H. Kawahata and Y. Awaya., Chapter 11, 255-272. ISBN: 0-444-52948-9.
75. Ueyoshi, K., R. Frouin, S. Nakamoto, **B. Subrahmanyam** (2005). Sensitivity of equatorial Pacific Ocean circulation to solar radiation absorbed by Phytoplankton, **Remote Sensing of the Coastal Environment**, Edited by Frouin, Robert J.; Babin, Marcel; Sathyendranath, Shubha. Proceedings of the International society for optics and Photonics (SPIE), Volume 5885, pp. 206-216, doi: 10.1117/12.621424.
76. **Subrahmanyam, B.**, V.S.N. Murty, R.J. Sharp, and J.J. O'Brien (2005). Air-Sea Coupling during the tropical cyclones in the Indian Ocean - a case study using satellite observations, *Pure and Applied Geophysics*, 162, 1643-1672, 2005.
77. Murty, V.S.N., **B. Subrahmanyam**, V. Tilvi, and J. J. O'Brien (2004). A new technique for the estimation of Sea Surface Salinity in the tropical Indian Ocean from OLR, *Journal of Geophysical Research.*, 109, doi:10.1029/2003JC001928, 2004.
78. Maghanani, V., **B. Subrahmanyam**, L. Xie, and J. Morrison (2003). Numerical simulation of seasonal and interannual Indian Ocean Upper layer circulation using MICOM. *Journal of Geophysical Research*, 108, doi:10.1029/2002JC001567, 33-1 to 33-21.
79. Shi, W., **B. Subrahmanyam** , J.Morrison (2002): Estimation of heat and Salt variability in the Indian Ocean from TOPEX/Poseidon altimetry, *Journal of Geophysical Research*, 108, 3214, doi:10.1029/2001JC001244, 7-1 to 7-15.
80. **Subrahmanyam, B.**, K.H. Rao, N. Srinivasa Rao, V.S.N. Murty, R.J. Sharp (2002). Influence of a tropical cyclone on Chlorophyll-a concentration in the Arabian Sea, *Geophys. Res. Letts*, 29, 22, 1-4.
81. Murty, V.S.N., **B. Subrahmanyam**, M.S.S. Sarma, V. Tilvi, and V. Ramesh Babu (2002). Estimation of Sea Surface Salinity in the Bay of Bengal using Outgoing Longwave Radiation, *Geophysical Research Letters.*, Vol. 29, 16, 11-1 to 11-4.
82. Tilberg, C.E., **B. Subrahmanyam**, and J. J. O'Brien (2002): Ocean color variability in the Tasman Sea. *Geophysical Research Letters*, 29, 10, 125-1 to 125-4.
83. Maghanani, V., J. Morrison, L. Xie, and **B. Subrahmanyam** (2002): Heat Budget of the Indian Ocean estimated from TOPEX/Poseidon altimetry and Model simulations. *Deep-Sea Research Part-II*, 49, 1459-1480.

84. **Subrahmanyam, B.** I.S. Robinson, J.R. Blundell, P.G. Challenor (2001). Indian Ocean Rossby waves observed in TOPEX/POSEIDON altimeter data and Model simulations. *International Journal of Remote Sensing*, 22, 141-167.
85. **Subrahmanyam, B.**, and I.S. Robinson (2000). Sea Surface Height variability in the Indian Ocean from TOPEX/POSEIDON altimetry and Model simulations. *Marine Geodesy*, 23, 167-195.
86. Murty, V.S.N., **B. Subrahmanyam**, L.V. Gangadhra Rao, and G.V Reddyi (1998). Seasonal variation of sea surface temperature in the Bay of Bengal during 1992 as derived from NOAA-AVHRR SST data. *International Journal of Remote Sensing*, 98, 2361-2372.
87. **Subrahmanyam, B.**, V. Ramesh Babu, V.S.N. Murty, and L.V.G. Rao (1996). Surface circulation off Somalia and western equatorial Indian Ocean during summer monsoon of 1998 from GEOSAT altimeter data. *International Journal of Remote Sensing*, 17, 761-770.
88. **Subrahmanyam, B.**, V.S.N. Murty, and L.V.G. Rao (1994). Short-Term Variability of Sea surface Heat Budget of the East Central Arabian Sea during November, 1992. *Mahasagar*, 27, 2, 79-87.

---

**NON-REFERRED PUBLICATIONS COMPLETED (TOTAL 20)**

---

1. V.S.N. Murty, H.L. Roman-Stork, **B. Subrahmanyam (2020)**. Insights on the Variability of Sea Surface Salinity in the North Indian Ocean during the Southwest monsoon of 2020, Ocean Digest, Volume 7, Issue 4, October 2020, PP 2-6.
2. **Subrahmanyam, B.**, B.S. Ferster (2017). Investigating the Role of the Southern Ocean on Global Climate Change, Proceedings of MTS/IEEE Oceans'17, Anchorage, Alaska, September 18-21, 2017.
3. Grunseich, G., and **B. Subrahmanyam (2011)**. Validation of SMOS salinity data and its applications to Indian Ocean climate events, Proceedings of the *Oceans 2011 MTS/IEEE Kona*, Kona, HI. Sept. 17, 2011-Sept. 22, 2011. ISBN No. 978-0-933957-39-8.
4. **Subrahmanyam, B.**, D.M. Heffner, D. Cromwell, J.F. Shriver (2009). Detection of Rossby waves in SST and Salinity, Group for High Resolution Sea Surface Temperature (GHRSSST) 2009 International Users Symposium, Santa Rosa, California, USA, May 28-29, 2009, Conference Proceedings, Pages 136-137.
5. **Subrahmanyam, B.**, V.S.N. Murty, and J.J. O'Brien (2005). New Sea Surface Salinity Product in the Tropical Indian Ocean, in WMO WORLD Climate Research Programme, CAS/JSC Working Group on Numerical Experimentation, Research Activities in Atmospheric and Oceanic Modelling, 2005.
6. **Subrahmanyam, B.**, V.S.N. Murty, and J.J. O'Brien (2004). A New Technique for Estimation of Sea Surface Salinity in the Tropical Indian Ocean from OLR in WMO WORLD Climate Research Programme, CAS/JSC Working Group on Numerical Experimentation, Research Activities in Atmospheric and Oceanic Modelling, 2004.
7. **Subrahmanyam, B.**, V.S.N. Murty, and J.J. O'Brien (2003). New Sea Surface Salinity Product in the Tropical Indian Ocean Estimated from Outgoing Longwave Radiation. OCEANS 2003, San Diego, California, USA, September 22-26, 2003.
8. **Subrahmanyam, B.**, J.J. O'Brien, V. Manghanani, L. Xie, and J.M. Morrison (2003). Estimation of Heat Transports in the Indian Ocean using Altimetry and MICOM in WMO WORLD Climate Research Programme, CAS/JSC Working Group on Numerical Experimentation, Research Activities in Atmospheric and Oceanic Modelling, 2003.
9. **Subrahmanyam, B.**, V. Manghanai, J.J. O'Brien, J.M. Morrison, L. Xie (2001). A study of the Indian Ocean Dipole Mode dynamics using satellite observations and MICOM simulations. Proceedings of *American Meteorological Society (AMS)* meeting at San Diego, USA, May 14-18, 2001.

10. **Subrahmanyam, B.**, D. M. Legler, B. Barnier, J.J. O'Brien, A.P. de Miranda, and M.A. Bourassa (2001). Sensitivity of an ocean general circulation model to changes in the surface momentum forcing. WMO WORLD Climate Research Programme, CAS/JSC Working Group on Numerical Experimentation, Research Activities in Atmospheric and Oceanic Modelling, 2001.
11. **Subrahmanyam, B.**, D.M. Legler, B. Barnier, A.P. de Miranda, and J.J. O'Brien (2000). Sensitivity of the North Atlantic circulation to momentum forcing using SPEM. Proceedings of *IEEE International Geoscience and Remote Sensing Symposium* (IGARSS 2000), Honolulu, Hawaii, 24-28 July 2000, vol. I, Piscataway, NJ: IEEE.
12. Leonardi, A.P., H.E. Hurlburt, J.J. O'Brien, and **B. Subrahmanyam** (2000). Comparison of modeled and remotely sensed Rossby waves in the subtropical North Pacific, WMO/ICSU/IOC/ World Climate Research Programme, CAS/JSC working group on Numerical Experimentation, Research Activities in Atmospheric and Oceanic Modeling, Report No. 30, WMO/TD-No. 987, pp 9.3-9.4, Edited by H. Ritchie, February, 2000.
13. Zamudio, L., J.J. O'Brien, and **B. Subrahmanyam** (2000). Tracking Coastally Generated Eddies in the East Tropical Pacific. WMO WORLD Climate Research Programme, CAS/JSC Working Group on Numerical Experimentation, Research Activities in Atmospheric and Oceanic Modelling, Edited by H. Ritchie, Report No. 30 (WMO/TD-No. 987), February, 2000.
14. **Subrahmanyam, B.**, D. M. Legler, and J. J. O'Brien (2000). Response of the North Atlantic circulation with surface momentum forcing using SPEM Model. WMO WORLD Climate Research Programme, CAS/JSC Working Group on Numerical Experimentation, Research Activities in Atmospheric and Oceanic Modeling, Edited by H. Ritchie, No. 30 (WMO/TD-No. 987), pp 9.13-9.14, February, 2000.
15. **Subrahmanyam, B.**, D. M. Legler, and J. J. O'Brien (1999). Indian Ocean Circulation using TOPEX/POSEIDON Altimetry and Model Simulations. WMO WORLD Climate Research Programme, CAS/JSC Working Group on Numerical Experimentation, Research Activities in Atmospheric and Oceanic Modelling, Edited by H. Ritchie, Report No. 28 (WMO/TD-No. 942), pp. 2.45-2.46, February, 1999.
16. **Subrahmanyam, B.**, I.S. Robinson & P.G. Challenor (1997). Seasonal variability of the Arabian Sea circulation from the TOPEX/POSEIDON altimeter. In: Symposium of monitoring the oceans in the 2000s: An integrated approach, Coastal and regional environment section, Biarritz, France, October 15-17, 1997.
17. Murty, V.S.N., **B. Subrahmanyam**, L.V. Gangadhra Rao (1994). Seasonal variability of thermal field of the Bay of Bengal derived from NOAA AVHRR during 1992. Presented in the *15th Asian Conference on Remote Sensing*, November 17-23, 1994 at Bangalore, India. Vol. II, G-6-1 G-6-6.
18. **Subrahmanyam, B.**, T. Ram Prasad, and P. Vethamony (1994). A software for retrieving GEOSAT Altimeter data, National Institute of Oceanography (NIO), Goa, India, Technical Report No. NIO/TR-3/94, pp 33.
19. Kishnama Charyulu, R.J., **B. Subrahmanyam**, and G.E. Nampoothiri (1994). On processing of wind data collected from ships, National Institute of Oceanography (NIO), Goa, India, Technical Report No. NIO/TR-6/94, pp. 16.
20. **Subrahmanyam, B.**, and M.M. Ali (1993). Removal of residual orbit error from GEOSAT Altimeter data, Project report submitted to Space Applications Center ISRO, Ahmedabad, India, as part of the training course RS-OMSF held during June 7-July 16, 1993.

## PRESENTATIONS AT PROFESSIONAL MEETINGS (TOTAL 142)

---

1. **Subrahmanaym, B.** (2021). The Role of Synoptic Oscillations in Recent Monsoon Variability, Second International Indian Ocean Expedition (IIOE-2) Steering Committee Meeting No. 4, 12-15 April 2021 (*Virtual Oral Presentation*).
2. **Subrahmanaym, B.**, (2021). Vertical Structure of Mesoscale Eddies and their Influence on their influence on Air-Sea Interaction Processes in the Bay of Bengal, The annual ONR MISO-BOB Meeting October 1, 6,7, 2001 (*Virtual Oral Presentation*).
3. **Subrahmanaym, B.**, V.S.N. Murty, Sarah B. Hall, Corinne B. Trott (2021). Detection of Internal Waves from the High Resolution Sea Surface Salinity in the Andam Sea and Bay of Bengal, 2021 Fall AGU meeting December 13-17, 2021, New Orleans (*Poster Presentation*)
4. Hall, S.H., **Subrahmanyam B.** (2021). Dynamics of the Beaufort Gyre in Anomalously Fresher Years between 2007 and 2018, 2021 Fall AGU meeting December 13-17, 2021, New Orleans (*Poster Presentation*)
5. Bernish, M. K., **B. Subrahmanyam** (2021). Surface and Subsurface Salinity Variability during Marine Heatwaves along the East Coast of the United States, 2021 Fall AGU meeting December 13-17, 2021, New Orleans (*Oral Presentation*)
6. Emily, E.N., **B. Subrahmanyam** (2021). Eddy Variability and Characteristics during Extended and Retracted Loop Current States, 2021 Fall AGU meeting December 13-17, 2021, New Orleans (*Oral Presentation*)
7. **Subrahmanyam, B.**, H.L. Roman-Stork, V.S.N. Murty (2020). The role of synoptic oscillations in recent monsoon Variability, ONR MISOBBoB meeting (virtual), December 1, 2020. (*Oral Presentation*).
8. **Subrahmanyam, B.**, H.L. Roman-Stork, C.B. Trott (2020). Detecting Monsoon Intraseasonal Oscillations in the Indian Ocean in Salinity, Ocean Sciences Meeting, February 16-21, 2020, San Diego (*Poster Presentation*).
9. Roman-Stork, H. L. and **B. Subrahmanyam** (2020). The Role of Salinity in Determining Southwest Monsoon Variability, Ocean Sciences Meeting, February 16-21, 2020, San Diego (*Oral Presentation*).
10. Nichols, R.E., **B. Subrahmanyam**, B.S. Ferster (2020). Estimation of freshwater fluxes from the Arctic Ocean using SMAP and CFS salinity. AGU Fall Meeting 2018, Washington D.C., December 10-14 (*Poster Presentation*).
11. Shoup, C.G., and **B. Subrahmanyam** (2020). Analysis of Primary Madden-Julian Oscillation Events in the Indian Ocean using Satellite Observations, 100<sup>th</sup> AMS Annual meeting, 12-16 January, 2020, Boston, MA (*Oral Presentation*).
12. **Subrahmanyam, B.**, H.L. Roman-Stork, C.B. Trott (2019). Utilization of Satellite Altimetry data in Monitoring Intraseasonal Oscillations in the Indian Ocean, Ocean Surface Topography Mission (OSTST) Science Team Meeting, Chicago, October 21-25, 2019 (*Oral Presentation*).
13. **Subrahmanyam, B.**, H.L. Roman-Stork, C.B. Trott (2019). Meso-scale Eddy Variability and its linkage to the Deep Convection over the Bay of Bengal using Satellite Altimetric Observations, Sources and Sinks of Ocean Mesoscale Eddy Energy, March 12-14, 2019, Tallahassee, FL. (*Oral Presentation*).
14. Trott, C.B., **B. Subrahmanyam** (2019). Mesoscale and sub-mesoscale structure in the Arabian Sea, Sources and Sinks of Ocean Mesoscale Eddy Energy, March 12-14, 2019, Tallahassee, FL. (*Oral Presentation*).
15. Roman-Stork, H. L. and **B. Subrahmanyam** (2019). Analysis of the Quasi-Biweekly Oscillation in the Indian Ocean using Satellite Observations and Ocean Model Simulations, EGU General Meeting 2019, April 7-12, 2019, Vienna, Austria (*Poster Presentation*).

16. **Subrahmanyam, B.** (2019). Intrinsic Role of Sea Surface Salinity on the development of Indian Summer Monsoon Onset, EGU General Meeting 2019, April 7-12, 2019, Vienna, Austria (*Poster Presentation*).
17. Nichols, R.E. and **B. Subrahmanyam** (2019). Recent variability in Arctic Ocean circulation and climate. Discover USC April 26, 2019, Columbia, SC (*Poster Presentation*).
18. Shoup, C. G. and **B. Subrahmanyam** (2019). New Approaches to Understanding MJO Dynamics. Discover USC, Columbia, SC, April 2019 (*Poster Presentation*).
19. Brokaw, R.J. and **B. Subrahmanyam** (2019). Investigating the Role of the Loop Current System in Developing Patterns of Sea Surface Salinity in the Gulf of Mexico, Discover USC 2019 (*Poster Presentation*).
20. **Subrahmanyam, B.** (2019). Utilization of Satellite-derived Salinity as a Predictor for the Indian Monsoon Forecasting, First International Operational Satellite Oceanography Symposium, 18-20, June 2019 NOAA Center for Weather and Climate Prediction, College Park, MD (*Oral Presentation*).
21. Subrahmanyam, B. (2019). Utilization of Satellite-derived Salinity as a Predictor for the Indian Monsoon Forecasting, First International Operational Satellite Oceanography Symposium, 18-20, June 2019 NOAA Center for Weather and Climate Prediction, College Park, MD (*Oral Presentation*).
22. Roman-Stork, H.L., **B. Subrahmanyam** (2019). Tracking Mesoscale Eddies with Satellite Altimetric Data and the Associated Deep Convection for Operational Use in the Bay of Bengal, First International Operational Satellite Oceanography Symposium, 18-20, June 2019 NOAA Center for Weather and Climate Prediction, College Park, MD (*Poster Presentation*).
23. Nichols, R.E., **B. Subrahmanyam**, and B.S. Ferster (2019). Estimation of Freshwater Fluxes of Arctic Ocean and Subarctic Seas using Satellite-derived Salinity, First International Operational Satellite Oceanography Symposium, 18-20, June 2019 NOAA Center for Weather and Climate Prediction, College Park, MD (*Poster Presentation*).
24. Brokaw, R.J., **B. Subrahmanyam** (2019). The Role of Loop Current System in Determining Patterns of Sea Surface Salinity Signatures in the Gulf of Mexico and the Impacts of Hurricanes, First International Operational Satellite Oceanography Symposium, 18-20, June 2019 NOAA Center for Weather and Climate Prediction, College Park, MD (*Poster Presentation*).
25. **Subrahmanyam, B.** (2018). "Research Needs in the Gulf of Mexico", NAS Gulf Advisory Board Meeting, May 16-17, Gulfport, MS (*Invited Oral Presentation*).
26. **Subrahmanyam, B.**, C.B. Trott, and V.S.N. Murty (2018). "Detection of Intraseasonal oscillations in the Indian Ocean from satellite Altimetry, 11<sup>th</sup> Coastal Altimetry workshop, 12-15 June, 2018 at ESA-ESRIN, Frascati, Italy (*Invited Oral Presentation*).
27. Kerfonta, C., **B. Subrahmanyam** (2018). Estimation of Freshwater Fluxes from the Arctic Ocean using satellite observations and Climate Forecast System, Discover USC 2018, April 20, 2018 (*Oral Presentation*).
28. **Subrahmanyam, B.** (2018). "SMAP Salinity Observations detect Indian Monsoon Intraseasonal Oscillations", 2018 Fall, AGU meeting December 10-14, 2018, Washington, DC. (*Poster Presentation*)
29. Ferster, B.S., **B. Subrahmanyam** (2018). "The role of Southern Ocean Transports on the Global Ocean Circulation", 2018 Fall, AGU meeting December 10-14, 2018, Washington, DC. (*Poster Presentation*)
30. Roman-Stork, H.L., **B. Subrahmanyam** (2018). Analysis of the Quasi-biweekly Oscillation in the Indian Ocean using Satellite Observations and Coupled Model Simulations, 2018 Fall, AGU meeting December 10-14, 2018, Washington, DC. (*Oral Presentation*)
31. Nichols, R.E., **B. Subrahmanyam** (2018). Estimation of Freshwater Fluxes from the Arctic Ocean using SMAP and CFS Salinity, 2018 Fall, AGU meeting December 10-14, 2018, Washington, DC. (*Poster Presentation*)

32. Brokaw, R. J., **B. Subrahmanyam** (2018). Influence of Hurricane Michael (2018) on Upper Ocean Circulation in the Gulf of Mexico, 2018 Fall, AGU meeting December 10-14, 2018, Washington, DC. (*Oral Presentation*).
33. Shoup, C. G. and **Subrahmanyam, B.** (2018). New Approaches to Understanding the MJO initiation over the Indian Ocean. Fall American Geophysical Union meeting, Washington, D.C., December 2018 (*Poster Presentation*).
34. Trott, C.B., **B. Subrahmanyam** (2018). Mesoscale and Sub-mesoscale Structures in the Arabian Sea using Sea Surface Height 2018 Fall, AGU meeting December 10-14, 2018, Washington, DC. (*Poster Presentation*)
35. **Subrahmanyam, B** (2018). The Role of SST and Salinity on the Intra-Seasonal Oscillations in the Bay of Bengal, 2018 Ocean Sciences meeting, 11-16 February, Portland, Oregon (*Oral Presentation*).
36. **Subrahmanyam, B** (2018). Recent Changes in the Arctic Circulation and Fresh Water Fluxes, 2018 Ocean Sciences meeting, 11-16 February, Portland, Oregon (*Invited Poster Presentation*).
37. Ferster, B.S. and **B. Subrahmanyam** (2018). Variability of Volume and Salt Transports in the Southern Ocean, 2018 Ocean Sciences meeting, 11-16 February, Portland, Oregon (*Poster Presentation*).
38. Trott, C.B., and **B. Subrahmanyam** (2018). Decadal variability of Fresh and Salt Water in the Tropical Indian Ocean, 2018 Ocean Sciences meeting, 11-16 February, Portland, Oregon (*Poster Presentation*).
39. Paris, M.L., and **B. Subrahmanyam** (2018). Identifying the linkage between upstream Agulhas Current and Agulhas Leakage, 2018 Ocean Sciences meeting, 11-16 February, Portland, Oregon (*Poster Presentation*).
40. **Subrahmanyam, B** (2017). Decadal Changes in Salinity in the Oceanic Subtropical Gyres, 5<sup>th</sup> WGNE Workshop on Systematic errors in weather and climate models, June 19-23, Montreal Canada. (*Poster Presentation*)
41. **Subrahmanyam, B.**, B.S. Ferster (2017). Southern Ocean Circulation and Climate Variability, 2017 Ocean Surface Topography Science Team Meeting, Miami, 23-27, October 2017. (*Invited Oral Presentation*).
42. **Subrahmanyam, B.**, B.S. Ferster (2017). Investigating the Role of the Southern Ocean on Global Climate Change, MTS/IEEE Oceans'17, Anchorage, Alaska, September 18-21, 2017 (*Invited Oral Presentation*).
43. **Subrahmanyam, B.**, (2017). Overview of Remote Sensing Activities in the Indian Ocean. 2nd International Indian Ocean Expedition (IIOE-2), Indian Ocean Science workshop, Scripps Institution of Oceanography (La Jolla, CA), September 11-13, 2017 (*Invited Oral Presentation*).
44. **Subrahmanyam, B.** (2017). Investigating Interannual and Decadal changes in sea surface salinity in the oceanic subtropical gyres and their connection to Global Water Cycle, Global Ocean Salinity and Water Cycle Workshop, May 22-26, 2017, Woods Hole MA. (*Invited Oral Presentation*)
45. Ferster, B.S. and **B. Subrahmanyam** (2017). Estimation of Salt Fluxes and Transports in the Southern Ocean, Global Ocean Salinity and Water Cycle Workshop, May 22-26, 2017, Woods Hole MA. (*Oral Presentation*)
46. Trott, C.B., and **B. Subrahmanyam** (2017). Interannual and Decadal basin-scale exchange of fresh and salt water in the Northern Indian Ocean, Global Ocean Salinity and Water Cycle Workshop, May 22-26, 2017, Woods Hole MA. (*Oral Presentation*)
47. Paris, M.L., and **B. Subrahmanyam.** (2017). Role of ENSO Events on Temperature and Salinity Variability in the Agulhas Leakage Region. Global Ocean Salinity and Water Cycle Workshop, May 22-26, 2017, Woods Hole MA. (*Oral Presentation*)
48. **Subrahmanyam, B.** (2017). Upper Ocean Mixing Processes and Circulation in the Arabian Sea during Monsoons, Office of Naval Research (ONR) Program Review, Washington, DC, March 29, 2017 (*Invited Oral Presentation*).

49. **Subrahmanyam, B** and Bryce Melzer (2017). Interannual and Decadal changes in salinity in the oceanic subtropical gyres, European Geophysical Union, 23-28, April 2017, Vienna, Austria (*Poster Presentation*).
50. **Subrahmanyam, B.** and J.M. D'Addezio (2016). Linkage between Seasonal Seychelles-Chagos Thermocline Ridge and MJO formation, American Meteorological Society Annual meeting, New Orleans, 10-14 January 2016 (*Poster Presentation*).
51. **Subrahmanyam, B** (2016). Dynamics of the Seychelles-Chagos Thermocline Ridge, 2016 Ocean Sciences Meeting, 21-16 February, 2016, New Orleans. (*Oral Presentation*)
52. Corbett, C.M., **B. Subrahmanyam** (2016). Salinity variations in the Equatorial Pacific during the 2014-15 El Niño, 2016 Ocean Sciences Meeting, 21-16 February, 2016, New Orleans. (*Poster Presentation*)
53. J.M. D'Addezio and **B. Subrahmanyam** (2016). Seasonal variability of salt transports in the Northern Indian Ocean, 2016 Ocean Sciences Meeting, 21-16 February, 2016, New Orleans. (*Poster Presentation*)
54. Burns, J.M., and **B. Subrahmanyam** (2016). Role of the Southwest Tropical Indian Ocean on the Modulation of Tropical Cyclones, 2016 Ocean Sciences Meeting, 21-16 February, 2016, New Orleans. (*Poster Presentation*)
55. Melzer, B.A. and **B. Subrahmanyam** (2016). Interannual and Decadal Salinity Variations in Oceanic Subtropical Gyres, 2016 Ocean Sciences Meeting, 21-16 February, 2016, New Orleans. (*Poster Presentation*)
56. **Subrahmanyam, B.** (2016). Scatterometer and Salinity missions: Status and Future needs, US CLIVAR Meeting July 17-20, University of Washington, Seattle, CA (*Oral Presentation*)
57. **Subrahmanyam, B.** (2016). Dynamics of the Seychelles-Chagos Thermocline Ridge, ONR Northern Arabian Sea Circulation –autonomous research (NASCar) meeting, University of Washington, Seattle, 4-5 October 2016 (*Oral Presentation*)
58. **Subrahmanyam, B.** and C.B. Trott (2016). Upper Ocean Mixing Processes and Circulation in the Arabian Sea during monsoons, 2016 Ocean Surface Topography Meeting, La Rochelle, France October 31-November 4, 2016. (*Poster Presentation*)
59. **Subrahmanyam, B.**, and B.A. Melzer (2016). Decadal Surface and Subsurface Salinity Changes in the Oceanic Subtropical Gyres, 2016 Fall AGU Meeting, 12-16, San Francisco, CA. (*Oral Presentation*)
60. Ferster, B.S., and **B. Subrahmanyam** (2016). Estimation of Fresh and Salt Water Fluxes and Transports in the Southern Ocean, 2016 Fall AGU Meeting, 12-16, San Francisco, CA. (*Poster Presentation*)
61. Burns, J.M., and **B. Subrahmanyam** (2016). Air-Sea Interactions in the Southwest Tropical Indian Ocean, 2016 Fall AGU Meeting, 12-16, San Francisco, CA. (*Oral Presentation*)
62. Trott, C.B., and **B. Subrahmanyam** (2016). Eddy Interactions in the Somali Current Region during Summer Monsoon Seasons, 2016 Fall AGU Meeting, 12-16, San Francisco, CA. (*Poster Presentation*)
63. **Subrahmanyam, B.** (2015). Need for sustained and improved ocean observations and synthesis for water cycle studies, 2015 US CLIVAR Summit, August 4-6, 2015 in Tuscon, AZ. (*Invited Oral Presentation*).
64. **Subrahmanyam, B.** (2015). Upper ocean mixing processes and circulation in the Arabian during monsoons using Remote Sensing, Hydrographic observations and model simulations, NASCar, Office of Naval Research meeting, Reston, VA, June 2-3, 2015. (*Invited Oral Presentation*).
65. **Subrahmanyam, B.**, and E.S. Nyadjro (2015). Indian Ocean Salinity fronts observed by SMOS and Aquarius, Open Science Conference on Salinity and Freshwater Changes in the Ocean, Hamburg, Germany, 12-15 October 2015. (*Invited Oral Presentation*).

66. D'Addezio, J.M., and **B. Subrahmanyam** (2015). The role of salinity on the interannual variability of the Seychelles-Chagos Thermocline Ridge, Open Science Conference on Salinity and Freshwater Changes in the Ocean, Hamburg, Germany, 12-15 October 2015. (*Poster Presentation*).
67. **Subrahmanyam, B.**, and E.S. Nyadjro (2015). Indian Ocean Salinity fronts observed by SMOS and Aquarius, Open Science Conference on Salinity and Freshwater Changes in the Ocean, Hamburg, Germany, 12-15 October 2015.
68. **Subrahmanyam, B.**, and E.S. Nyadjro (2014). Estimation of Fresh and Salt Water Fluxes and Transports in the Indian Ocean using satellite observations and model simulations, 2014 EGU Meeting, Vienna, Austria April 27-May 02, 2014. (*Poster Presentation*).
69. **Bartlett, J.T.**, Subrahmanyam, B (2014). Estimation of Global Freshwater Fluxes using Aquarius/SAC-D salinity mission, 2014 Ocean Sciences meeting, 23-28 February, 2014, Honolulu, Hawaii. (*Poster Presentation*).
70. D'Addezio, J., **B. Subrahmanyam**, V.S.N. Murty, Ebenezer S. Nyadjro (2014). Estimation of Fresh Water and Salt Transports in the Northern Indian Ocean Using Aquarius and Model Simulations, 2014 Fall AGU Meeting, San Francisco, December 15-19, 2014. (*Poster Presentation*).
71. **Subrahmanyam, B** (2014). Need for sustained and improved ocean observations and Synthesis for Water Cycle Studies, US CLIVAR, July 11 2014 Denver, Co. (*Invited Oral Presentation*)
72. **Young, V.**, **B. Subrahmanyam**, V.S.N. Murty, Ebenezer S. Nyadjro (2014). The Role of Fresh Water and Salt Fluxes in Southern Ocean Deep-Ocean Warming, 2014 Fall AGU Meeting, San Francisco, December 15-19, 2014. (*Poster Presentation*).
73. **Subrahmanyam, B.**, and E.S. Nyadjro (2014). Utilization of Aquarius and SMOS Salinity to Study Indian Ocean Climate Dynamics, 2014 EGU Meeting, Vienna, Austria April 27-May 02, 2014. (*Invited Oral Presentation*).
74. **Subrahmanyam, B.**, (2014). Estimation of the Barrier Layer Thickness in the Indian Ocean using satellite derived salinity, NASA Aquarius Salinity Science Team meeting, Seattle, WA, November 11-14, 2014 (*Invited Oral Presentation*)
75. **Subrahmanyam, B.** and G. Grunseich (2013). Integrated multi-mission satellite altimetry data in climate studies-Detection of the Madden-Julian Oscillation, Ocean Surface Topography Science Team (OSTST) Meeting, October 7-11, 2013, Boulder, Co.
76. **Subrahmanyam, B. (2013)**. Validation of Aquarius and SMOS salinity measurements in the Indian Ocean, 15-17 April 2013, IFREMER, Brest, France.
77. **Button, N.**, **B. Subrahmanyam** (2013). Validation of SMOS and Aquarius Salinity data in the Agulhas region, 15-17 April 2013, IFREMER, Brest, France (*Invited Presentation*).
78. **Subrahmanyam, B. (2013)**. Validation of Aquarius and SMOS salinity measurements in the Indian Ocean, 15-17 April 2013, IFREMER, Brest, France (*Invited Presentation*).
79. **Subrahmanyam, B.**, **E.S. Nyadjro**, **G. Grunseich** (2012). Preliminary Aquarius and SMOS salinity measurements validation in the Indian Ocean, Fall AGU Meeting, San Francisco, 3-7 December 2012 (*Poster Presentation*).
80. **Nyadjro, E.S.**, **B. Subrahmanyam** (2012). Variability of salt transport in the Indian Ocean , Fall AGU Meeting, San Francisco, 3-7 December 2012 (*Oral Presentation*).
81. **Nyadjro, E.S.**, **B. Subrahmanyam** (2012). Variability of Salt Transports in the Indian Ocean, Fall AGU Meeting, San Francisco, 3-7 December 2012 (*Oral Presentation*).
82. **Subrahmanyam, B.** (2012). Estimation of Fresh and Saltwater transports in the Indian Ocean, 4<sup>th</sup> Argo Science workshop, September 27-29, 2012, Venice, Italy. (*Invited oral Presentation*).
83. **Grunseich, G.**, and **B. Subrahmanyam** (2011). Validation of SMOS salinity data and its applications to Indian Ocean climate events, *Oceans 2011 MTS/IEEE Kona*, Kona, HI. Sept. 17, 2011-Sept. 22, 2011 (*Invited Presentation*).



84. Nienhaus, M., and **B. Subrahmanyam** (2011). Role of costal Kelvin waves on the Bay of Bengal Circulation, Fall AGU meeting, San Francisco, 13-17 December, 2011 (*Oral Presentation*).
85. Nienhaus, M., and **B. Subrahmanyam** (2011). Altimetric Observations of Coastal Kelvin waves in the Bay of Bengal Circulation, Costal Altimetry meeting & NASA/OSTST meeting, San Diego, 10/16-10/20, 2011 (*Oral Presentation*).
86. Nyadjro, E.S., and **B. Subrahmanyam**, 2011. Variability of salt transport in the Indian Ocean. AGU *Fall Meeting*, San Francisco, 13-17 December, 2011(*Oral Presentation*).
87. **Subrahmanyam, B.** E.S. Nyadjro, and V.S.N. Murty (2011). Near Surface Salt Transport in the Indian Ocean using HYCOM, submitted for Oral Presentation in 2011 ASLO Aquatic Science Meeting, San Juan Puerto Rico, 13-18, Feb 2011. (*Oral Presentation*).
88. **Subrahmanyam, B.**, D.M. Heffner, and J.F. Shriver (2010). Understanding the Dynamics of Global Oceanic Rossby Waves using Salinity, 2010 Ocean Science Meeting, 22-26, February, 2010, Portland, Oregon.
89. Nyadjro, E., **B. Subrahmanyam**, and V.S.N. Murty (2010). Salt Transports in the Indian Ocean monsoon season using HYCOM data, 2010 Ocean Science Meeting, 22-26, February, 2010, Portland, Oregon. (*Poster Presentation*).
90. **Subrahmanyam, B.**, D.M. Heffner, D. Cromwell, J.F. Shriver (2009). Detection of Rossby waves in SST and Salinity, GHRSSST user's symposium, Santa Rosa, California, USA, May 28-29, 2009 (*Oral Presentation*).
91. Murty, V.S.N., **B. Subrahmanyam**, T.V.S. Uday Bhaskar, and M. Ravichandran (2009). Seasonal and Interannual variability of Sea Surface Salinity during 2002-06 from Argo profiles in the Tropical Indian Ocean. Third Argo Science Workshop: The future of Argo, Hangzhou, China, 25-27 March 2009 (*Oral Presentation*).
92. Cadden, D.D.H. and **B. Subrahmanyam** (2008). Surface and subsurface geostrophic current variability from altimetry during Indian Ocean Dipole periods. *AGU Ocean Sciences Meeting*, Orlando, March 3-7, 2008 (*Poster Presentation*).
93. Cadden, D.D.H. and **B. Subrahmanyam** (2008). Surface and subsurface geostrophic current variability from altimetry during Indian Ocean Dipole periods. *Southeast Coastal Oceanography & Meteorology Group (SECOM 2008) Meeting*, University of South Carolina, Columbia, SC (*Oral Presentation*).
94. Gierach, M.M. and **B. Subrahmanyam** (2008). Gulf of Mexico Response to Hurricane Katrina (2005). *NASA Carbon Cycle & Ecosystem joint science workshop*, Univ. of Maryland, Apr 28-30, 2008 (*Poster Presentation*).
95. Gierach, M.M. and **B. Subrahmanyam** (2008). Hurricane induced responses in the Gulf of Mexico as observed through a 1/25° nested Gulf of Mexico HYCOM. *SC08 International conference for High Performance Computing, Net Working and Storage and Analysis*, November 15-21, 2008, Austin, Texas (*Poster Presentation*).
96. Gierach, M. M., **B. Subrahmanyam** (2008). Multi-sensor satellite and HYCOM analysis of the upper ocean response to Hurricane Katrina in the Gulf of Mexico. *28<sup>th</sup> Conference on Hurricanes and Tropical Meteorology*, American Meteorological Society, April, Orlando, FL (*Poster Presentation*).
97. Gierach, M. M., **B. Subrahmanyam**, and P. Thoppil, 2008, Upper Ocean response to Hurricane Katrina (2005) in a 1/25° nested Gulf of Mexico HYCOM. *2008 Ocean Sciences Meeting*, American Geophysical Union, March, Orlando, FL (*Poster Presentation*).
98. Gierach, M. M., and **B. Subrahmanyam**, 2008, Hurricane Contribution to pCO<sub>2</sub> Distribution in the Gulf of Mexico. *2008 Fall Meeting*, American Geophysical Union, December, San Francisco, CA (*Poster Presentation*).
99. Heffner, D.M., **B. Subrahmanyam** (2008). Indian Ocean Rossby waves examined using HYCOM simulations and multiple satellite sensors, *AGU Ocean Sciences Meeting*, Orlando FL, March 3 - 7, 2008 (*Poster Presentation*).

100. Heffner, D.M., **B. Subrahmanyam**, J.F. Shriver, and J.R. Blundell (2008). Indian Ocean Rossby wave structure examined using multi-sensor satellite observations and HYCOM simulations, *AGU Fall Meeting*, San Francisco, CA, December 15 - 19, 2008 (*Poster Presentation*).
101. **Subrahmanyam, B.**, D.M. Heffner (2008). Rossby waves in multi-sensor satellites (2008). *PACON 2008 International meeting*, Honolulu, Hawaii, June 1-5, 2008 (*Oral Presentation*).
102. **Subrahmanyam, B.**, V.S.N. Murty (2008). Interannual variability of sea surface salinity from Argo profiles and HYCOM simulations in the tropical Indian Ocean. *AGU Ocean Sciences Meeting*, Orlando, March 3-7, 2008 (*Poster Presentation*).
103. Gierach, M.M. and **B. Subrahmanyam** (2007). Bio-physical Feedback Mechanisms during Gulf of Mexico Hurricanes using Satellite Observations and HYCOM Simulations, NASA Ocean Color Science Team, Seattle, WA, 11-13 April, 2007 (*Poster Presentation*).
104. **Subrahmanyam, B.**, D.M. Heffner, J.F. Shriver (2007). Rossby Waves detected in HYCOM Sea Surface Salinity in the Indian Ocean, Fall AGU 2007, San Francisco, 10-14 December, 2007 (*Poster Presentation*).
105. **Subrahmanyam, B.** (2006). Remote Sensing Needs for the Southeast Region. Workshop on Regional needs for coastal remote sensing, New England Center, University of New Hampshire, October 3-5, 2006 (*Invited Oral presentation*).
106. **Subrahmanyam, B.** (2006). Phytoplankton Influence on Ocean Circulation, NASA Ocean Color Science team meeting, Newport, RI, April 4-13, 2006 (*Oral Presentation*).
107. **Subrahmanyam, B.** (2006). Estimation of Sea Surface Salinity in the Tropical Indian Ocean from OLR, US CLIVAR salinity workshop, May 8-10, 2006, Woods Hole Oceanographic Institution (*Poster Presentation*).
108. **Subrahmanyam, B.** (2006). Estimation of Heat Fluxes from altimetry, Fall AGU meeting, December 11-15, 2006, San Francisco (*Poster Presentation*).
109. Ueyoshi, K., R. Frouin, S. Nakamoto, and **B. Subrahmanyam** (2005). Sensitivity of equatorial Pacific Ocean circulation to solar radiation absorbed by phytoplankton, SPIE (The International Society of Optical Engineering) Conference, Scripps Institute of Oceanography, San Diego, 2005 (*Oral Presentation*).
110. **Subrahmanyam, B.** (2004). New Salinity Product in the Tropical Indian Ocean Estimated from OLR, Indian Ocean Modeling workshop-2004, November 27-December 2, 2004, East-West Center, University of Hawaii at Manoa, Honolulu, Hawaii (*Oral Presentation*).
111. Chambers, D.P., **B. Subrahmanyam** (2004). Observing low frequency variability in the Indian Ocean with satellite Altimetry, *Proceedings of IEEE International Geoscience and Remote Sensing Symposium (IGARSS 2004)*, Anchorage, Alaska, September 20-24, 2004 (*Oral Presentation*).
112. **Subrahmanyam, B.** V.S.N. Murty, J.J. O'Brien (2004). Estimation of Sea Surface Salinity from Outgoing Longwave Radiation. CLIVAR 2004 Conference, June 21-25, 2004 in Baltimore, Maryland, USA (*Poster Presentation*).
113. **Subrahmanyam, B.** (2004). A new technique for the estimation of sea surface salinity in the tropical Indian Ocean from OLR. Aquarius/SAC-D-SMOS-HYDOS Joint Science Workshop, Salinity and Soil Moisture Remote Sensing, Miami, April 20-22, 2004 (*Oral Presentation*).
114. **Subrahmanyam, B.**, K. Ueyoshi, R. Frouin, J.J. O'Brien (2004). Sensitivity of the Equatorial Pacific Ocean Circulation to solar radiation absorbed by phytoplankton. NASA's Ocean Color Research Team Meeting in Washington, D.C., 14-16 April 2004 (*Poster Presentation*).
115. **Subrahmanyam, B.** V.S.N. Murty, and J.J. O'Brien (2004). Estimation of Daily Sea Surface Salinity in the Tropical Indian Ocean from OLR- Its applications, 2004 Ocean Sciences Meeting, Portland, Oregon, 26-30 January, 2004 (*Oral Presentation*).

116. **Subrahmanyam, B.**, V.S.N. Murty, and J.J. O'Brien (2003). New Sea Surface Salinity Product in the Tropical Indian Ocean Estimated from Outgoing Longwave Radiation. OCEANS 2003, San Diego, California, USA, September 22-26, 2003 (*Oral Presentation*).
117. Murty, V.S.N., **B. Subrahmanyam**, V. Tilvi, and M.S.S. Sarma (2003). Seasonal and interannual variability of the estimated sea surface salinity from Outgoing Longwave Radiation in the tropical Indian Ocean. In: Proceedings of the International workshop on 'Biogeochemical processes in the northern Indian Ocean' held at NIO, Goa during 24-25 February, 2003 (*Oral Presentation*).
118. O'Brien, J.J., P. Yu, **B. Subrahmanyam** (2003). A New Mapping Method for Propagating Data. Topex/Poseidon - Jason-1 Science Working Team 2003 meeting, Arles, France, November 18-21, 2003 (*Poster Presentation*).
119. **Subrahmanyam, B.**, and J.J. O'Brien (2003). Influence of a Tropical Cyclone on Chlorophyll-a Concentration in the Arabian Sea, Ocean Color Research Team Meeting, Sheraton Biscayne Hotel, Miami, Florida, April 15-17, 2003 (*Poster Presentation*).
120. **Subrahmanyam B.**, and J.J. O'Brien (2003). Estimation of Ocean Sea Surface Salinity in the Indian Ocean from Satellite Observations. AMS 83rd Annual Meeting (Satellite Oceanography and Meteorology), Long Beach, California, USA 9-13 February, 2003 (*Poster Presentation*).
121. **Subrahmanyam, B.**, J.J. O'Brien and W. Shi (2002). Estimation of Heat and Salt Storage in the Indian Ocean from Altimetry, Jason-1/TOPEX/POSEIDON Science Working Team meeting, Radisson Hotel, New Orleans, 21-23 October, 2002 (*Poster Presentation*).
122. **Subrahmanyam, B.**, and J.J. O'Brien (2002). Near-real time temperature and salinity profiles in the Indian Ocean from JASON-1 altimetry. AGU 2002 Fall Meeting (JASON-1 Special Session), 6-10 December 2002, San Francisco, California, USA (*Poster Presentation*).
123. **Subrahmanyam, B.**, J.J. O'Brien, W. Shi, J.M. Morrison (2002). Heat and Salt Variability in the Indian Ocean from Satellite Observations. WOCE and Beyond Conference, 18-22 November, 2002, San Antonio, Texas, USA (*Poster Presentation*).
124. **Subrahmanyam, B.**, V. Manghanai, J.J. O'Brien, J.M. Morrison, L. Xie (2001). A study of the Indian Ocean dipole mode dynamics using satellite observations and MICOM simulations. Presented at American Meteorological Society (AMS) meeting at San Diego, USA, May 14-18, 2001 (*Oral Presentation*).
125. **Subrahmanyam, B.**, and J. J. O'Brien (2001). Observation of Tropical Instability Waves in the Pacific Ocean using multi sensor satellite observations. Presented in the Oceanography Society, Biannual Scientific Meeting, April 2-5, 2001, Miami, Florida, USA (*Poster Presentation*).
126. Montenegro, A., G. Weatherly, and **B. Subrahmanyam** (2001). Annual variability in the Brazil Basin through altimetry (Abstract submitted), IAPSO/IABO meeting held in Mar del Plata, Argentina, October 21-28, 2001 (*Poster Presentation*).
127. Shi, W., J. M. Morrison, and **B. Subrahmanyam** (2001). Estimate of temperature and salinity variability in the Indian Ocean using satellite altimetry (Abstract). Presented at Fall AGU, 2001 (*Oral Presentation*).
128. **Subrahmanyam, B.**, J. J. O'Brien, V. Manghanai, J. Morrison, and L. Xie (2001). Heat transports in the Indian Ocean estimated from Topex/Poseidon altimetry and MICOM simulations. Presented at the Layered Ocean Meeting, RSMAS / University of Miami, USA, February 26-28 (*Poster Presentation*).
129. **Subrahmanyam, B.**, D. M. Legler, B. Barnier, J.J. O'Brien, A.P. de Miranda, and M. Bourassa (2001). Sensitivity of an ocean general circulation model to changes in the surface momentum forcing. WMO WORLD Climate Research Programme, CAS/JSC Working Group on Numerical Experimentation, Research Activities in Atmospheric and Oceanic Modelling, 2001 (*Poster Presentation*).

130. **Subrahmanyam, B.**, D.M. Legler, B. Barnier, M. Bourassa, and J.J. O'Brien (2000). Sensitivity of an ocean general circulation model to changes in the surface momentum forcing. AGU Fall 2000 meeting, December 15-19, San Francisco, CA (*Poster Presentation*).
131. **Subrahmanyam, B.**, J.J. O'Brien (2000). Process studies in the Indian Ocean from Altimetry, Third joint TOPEX/POSEIDON and JASON-1 Science Working Team meeting, November 15-17, 2000, Miami Beach, FL, USA (*Poster Presentation*).
132. **Subrahmanyam, B.**, D.M. Legler, B. Barnier, A.P. de Miranda, and J.J. O'Brien (2000). Sensitivity of the North Atlantic circulation to momentum forcing using SPEM. Proceedings of *IEEE International Geoscience and Remote Sensing Symposium* (IGARSS 2000), Honolulu, Hawaii, 24-28 July 2000 (*Oral Presentation*).
133. **Subrahmanyam, B.**, J.J. O'Brien, D.M. Legler, B. Barnier, A.P. de Miranda, M. Bourassa (2000). Sensitivity of an ocean general circulation model to changes on the surface momentum forcing. Presented at American Geophysical Union (AGU) 2000- Fall Meeting, December 15-19, 2000 at San Francisco, California, USA (*Poster Presentation*).
134. **Subrahmanyam, B.**, J.J. O'Brien (2000). Process studies in the Indian Ocean from altimetry. Presented at Topex/Poseidon-JASON-1 Scientific Working Meeting at Miami Beach, Florida, USA, 15-17 November, 2000 (*Poster Presentation*).
135. **Subrahmanyam, B.**, D.M. Legler, J.J. O'Brien (2000). Rossby waves observation from multi-sensor satellites. Presented at *Oceanic Imaging Conference*, May 2-5, 2000, Newport, Rhode Island, USA (*Oral Presentation*).
136. Luis, Z., J.J. O'Brien and **B. Subrahmanyam** (2000). Tracking Coastally Generated Eddies in the East Tropical Pacific Ocean from Space Conference, Venice, Italy, October 9-13, 2000 (*Poster Presentation*).
137. **Subrahmanyam, B.** (1999). Altimetry and Ocean Model Simulations in the Indian Ocean, Presented at the WOCE Workshop on Arabian Sea – BOB Exchange, May 10-11, 1999, RASMAS, Univ. of Miami, USA (*Oral Presentation*).
138. **Subrahmanyam, B.**, I.S. Robinson, P.G. Challenor, and J.R. Blundell (1998). Interannual variability of the Indian Ocean circulation using satellite observations and model simulations. Presented at UK Oceanography' 98, 7-11 September, University of Southampton, Southampton, UK (*Poster Presentation*).
139. **Subrahmanyam, B.**, I.S. Robinson & P.G. Challenor (1997). Seasonal variability of the Arabian Sea circulation from the TOPEX/POSEIDON altimeter. In: Symposium of Monitoring the oceans in the 2000s: An integrated approach, Coastal and regional environment section, Biarritz, France, October 15-17, 1997 (*Poster Presentation*).
140. **Subrahmanyam, B.**, H.M. Snaith, M.S. Jones, P.G. Challenor, and I.S. Robinson (1996). Circulation in North Indian Ocean during SW and NE monsoon seasons using Topex/Poseidon Altimeter data. Presented at UK Oceanography' 96 (Section 5 Deep Ocean) 2-6 September, University of Wales, Bangor, UK (*Oral Presentation*).
141. **Subrahmanyam, B.**, H.M. Snaith, M.S. Jones, P.G. Challenor, and I.S. Robinson, (1996). Identification of the east India coastal current during 1993 using TOPEX/POSEIDON altimeter data, *In: TOPEX/POSEIDON Science Working Team, Southampton, UK, 23-25 Oct 1996, abstracts, Southampton Oceanography Centre, 1996, p. 20.* (*Oral Presentation*).
142. Murty, V.S.N., **B. Subrahmanyam**, L.V. Gangadhra Rao (1994). Seasonal variability of thermal field of the Bay of Bengal derived from NOAA AVHRR during 1992. Presented in the 15th Asian Conference on Remote Sensing, November 17-23, 1994 at Bangalore, India. Vol. II, G-6-1 G-6-6 (*Oral Presentation*).

## INVITED SEMINAR PRESENTATIONS (TOTAL 45)

---

1. **Subrahmanaym, B.** (2021). Intercomparison of Salinity Observations and Model Simulations in the Arctic Ocean, Interagency Arctic Research Policy Committee (IARPC), November 4, 2021 (*Virtual Oral Presentation*).
2. The Role of salinity in Southwest Monsoon Onset and Intraseasonal Oscillations, NASA Salinity teleconference, 10 November 2020.
3. Utilization of Satellite-derived Salinity in the Indian Monsoon Studies, NOAA National Centers for Environmental Information, Ashville, NC, June 6, 2019.
4. Intraseasonal Oscillations in the Indian Ocean and Their Impact on Indian Summer Monsoon Variability, North Carolina State University, Raleigh, 22 April, 2019.
5. Intraseasonal Oscillations in the Bay of Bengal and their impact on Indian Summer Monsoon Variability, Department of Meteorology and Atmospheric Science, Penn State October 17, 2018.
6. Utilizing satellite derived salinity in Climate Studies ((Brown bag seminar), Department of Meteorology and Atmospheric Science, Penn State October 17, 2018 .
7. Decadal Changes in Salinity in the Oceanic Subtropical Gyres, Texas A&M University, April 3, 2017.
8. Decadal Changes in Salinity in the Oceanic Subtropical Gyres, Norwegian Institute of Marine Research (IMR), Bergan, Norway, April 18, 2017.
9. Decadal Changes in Salinity in the Oceanic Subtropical Gyres, Nansen Environmental and Remote Sensing Center (NERSC), Bergan, Norway, April 19, 2017.
10. Interannual and Decadal Changes in Salinity in Oceanic Subtropical Gyres and Connection to the Global Water Cycle, Laboratoire d'Etudes en Géophysique et Océanographie Spatiales (LEGOS) in Toulouse, France, 21 April, 2017.
11. The Role of Ocean Dynamics in the MJO initiation over the Indian ocean, University of Wisconsin. Madison, September 12, 2016.
12. Role of Ocean Dynamics in the MJO initiation over the Indian ocean, Indian Institute of Tropical Meteorology, Pune, India June 17, 2016.
13. Eyes in the Sky: Linking Satellite Oceanography and Ocean Models to explore ocean and climate dynamics, Marine Science Seminar Series, USC, October 3, 2014.
14. Utilization of satellite derived sea surface salinity data to study Indian Ocean climate dynamics, Cornell University, September 25, 2013.
15. Satellite measurements of ocean salinity, University of Texas at San Antonio, September 5, 2013.
16. Satellite Measurements of Sea Surface Salinity, National Institute of Oceanography-CSIR, Visakhapatnam, India, 31 July 2013.
17. Measuring Salinity from Space, Computer Science & Engineering Department, University of South Carolina, Columbia, April 25, 2013.
18. Satellite Measurements of Sea Surface Salinity, Department of Physics and Astronomy, University of South Carolina, Columbia, March 21, 2013.
19. Estimation of Fresh and Salt water transports in the Indian Ocean, Earth Sciences, University of New Hampshire, February 21, 2013.
20. Studies of the Indian Ocean Processes and inter-basin salt exchange using satellite observations and model simulations, National Oceanography Center, University of Southampton, UK, June 6, 2011.
21. Studies of the Indian Ocean Processes and inter-basin salt exchange using satellite observations and model simulations, Department of Meteorology, University of Reading, UK, June 9, 2011.
22. Bio-Physical Responses of upper ocean to major Gulf of Mexico hurricanes, Okinawa Institute of Science and Technology, Japan, March 11, 2011.
23. Hybrid Coordinate Ocean Model in the Gulf of Mexico, Nagasaki University, Japan. March 8, 2011.

24. Bio-Physical Responses of upper Ocean to major Gulf of Mexico hurricanes during 2005, University of North Carolina, Wilmington (UNCW), April 15, 2011.
25. Salt Transport in the near-Surface Layer in the monsoon influenced Indian Ocean using HYCOM" seminar given at the National Institute of Oceanography (NIO), India, December 13, 2010.
26. Satellite Oceanography-The Next Space Technology Challenges, Department of Civil & Environmental Engineering & Geodetic Science, Ohio State University, Columbus, April 4, 2008.
27. The Next Space Technology Challenges, Marine Science Program, University of Georgia, Athens, March 31, 2008.
28. Satellite Oceanography-The Next Space Technology Challenges, Physics Department, University of South Carolina, March 27, 2008.
29. Upper Ocean Response to Hurricanes using Satellite Observations, Elizabeth State University, Elizabeth City, November 30, 2006.
30. Influence of Phytoplankton on Ocean Surface Circulation, Marine, Earth and Atmospheric Sciences, North Carolina State University, Raleigh, October 25, 2006.
31. Influence of Phytoplankton on Ocean Surface Circulation, Center for Coastal Physical Oceanography, Old Dominion University, Norfolk, VA, September 18, 2006.
32. New Technique for Estimation of Sea Surface Salinity in the Tropical Oceans from OLR, NOAA/NCEP, Washington D.C, March 7, 2006.
33. Satellite Oceanography and Its Applications, Students Engaged in Aquatic Science (SEAS) Marine Science Program, University of South Carolina, Columbia, Fall 2005.
34. Satellite Oceanography and Ocean Models, Department of Computer Science, University of South Carolina, Columbia, November 18, 2005.
35. New Techniques for Oceanographic Studies from Remotely Sensed Data and Ocean Models, Indian Institute of Technology, Delhi, June 14, 2005.
36. New Techniques for Oceanographic Studies from Remotely Sensed Data and Ocean Models, Department of Marine Science, University of Southern Mississippi, May 11, 2005.
37. New Techniques for Oceanographic Studies from Remotely Sensed Data and Ocean Models, Marine Science Program & Department of Earth and Ocean Sciences (*formerly* Department of Geological Sciences), University of South Carolina, Columbia, March 18, 2005.
38. Estimation of Heat and Salt Variability in the Indian Ocean from TOPEX/Poseidon Altimetry, Naval Post-graduate School, Monterey, August 18, 2003.
39. Estimation of Heat and Salt Variability in the Indian Ocean from TOPEX/Poseidon Altimetry, Center for Ocean-Land-Atmosphere Studies, Calverton, July 31, 2002.
40. Estimation of Heat and Salt Variability in the Indian Ocean using altimetry and MICOM simulations, NOAA/NSCEP, Washington, D.C., July 30, 2002.
41. Heat transports in the Indian Ocean estimated from TOPEX/Poseidon altimetry and MICOM simulations, Jet Propulsion Laboratory (JPL)/NASA, March 18, 2001.
42. Heat transports in the Indian Ocean estimated from altimetry and MICOM simulations, Scripps Institution of Oceanography, May 16, 2001.
43. Heat transports in the Indian Ocean estimated from altimetry and MICOM simulations, University of Delaware, Delaware, June 26, 2002.
44. Estimation of heat transports in the Indian Ocean using altimetry and MICOM, National Institute of Oceanography, India, March 14, 2002.
45. Satellite Oceanography Altimetry Applications, National Remote Sensing Agency (NRSA), India, March 8, 2002.

## PROFESSIONAL ACTIVITIES

---

- 2022-Present Member, The UK National Committee for the UN Decade of Ocean Science for Sustainable Development
- 2004-present Adjunct Faculty, Marine, Earth, and Atmospheric Science Department (MEAS), North Carolina State University, Raleigh
- 2017-Present US Steering Committee member, IIOE-2 (Second International Indian Ocean Expedition)
- 2017-present Member, IIOE-2 working Group-01 (Science and Research),  
2018-2020 Advisory Committee Member, **National Academy of Sciences, Engineering, and Medicine- Gulf Research Program**
- 2020 Overseas Panel member for the Global Summit of Indian Overseas Research and Academicians, "Vaishvik Bharatiya Vaigyanik (Vaibhav) Summit", October 2020.
- 2012-2016 USC Campus Director for NASA/South Carolina Space Grant Consortium  
2017-2018 Ocean Sciences (2018) Program committee member (Co-Chair for Air-Sea Interaction and Regional Studies), 2017-2018
- 2011-2020 NSF Graduate Student Fellowship Panel  
2013-2015 The U.S. Climate Variability and Predictability (U.S. CLIVAR) Phenomena Observations and Synthesis (POS) Panel
- 2015 Technical Review committee member, International conference on Water Resources, Coastal and Ocean Engineering, India.
- 2014 NASA Physical Oceanography Panel
- 2014 SARAL-Altika Altimetry Science Team member awarded by CNES, France
- 2014 Session Convener, Fall AGU meeting, 2014
- 2012 Session Convener, Ocean Sciences Meeting, Salt Lake City
- 2010 Session Convener, Ocean Sciences meeting, Portland, Oregon, 2010
- 2009 NSF Physical Oceanography Panel, 2009
- 2009-2012 ESA SMOS Science Team Member
- 2012 Department of Defense, Science, Mathematics & Research for Transformation – SMART Scholarships panel
- 2008 Session Convener, Passive and Active Ocean Remote Sensing Session, The Pacific Congress on Marine Science and Technology (PACON)
- 2008 Local organizing committee member for 2008 Southeast Coastal Oceanography & Meteorology Meeting (SECOM)
- 2005-2012 Regional Representative for US Southeast Region for Remote Sensing needs, Southeast Coastal Observing Regional Association (SECOORA). Also helped NOAA CoastWatch East Coast Node (Carolina Coast).
- 2015-Present. External PhD Examiner for the Indian Universities- Allahabad University, Annamalai University, Indian Institute of Technology (Kharagpur), Gujarat University, National Institute of Technology (Suratkal), Pune University & Indian Institute of Tropical Meteorology (IITM).

## EDITOR FOR REFEREED JOURNALS

---

- 2014-Present Associate Editor, IEEE Geoscience Remote Sensing Letters
- 2007-2018 Associate Editor, Journal of Geophysical Research (JGR-Oceans)
- 2010-2012 Guest Editor (with Dr. George Born), Special issue on OSTM/Jason-2 Applications, Journal of Marine Geodesy (1 Volume)
- 2010-2011 Guest Editor (with Dr. George Born), Special issue on OSTM/Jason-2 calibration & Validation, Journal of Marine Geodesy (2 Volumes)
- 2005-2014 Associate Editor (*Satellite Altimetry and Remote Sensing*), Marine Geodesy

---

**REVIEWER FOR REFEREED JOURNALS (TOTAL 571 MANUSCRIPT REVIEWS FOR 50 JOURNAL)**

---

Advanced Journal of Meteorology; Advances in Space Research; Advances in Atmospheric Sciences; Applied Mathematical Modeling; Atmósfera; Atmospheric Science Letters; Biogeosciences; Bulletin of American Meteorological Society (BAMS); Canadian Journal of Remote Sensing; Climate Dynamics; Climate Research; Continental Shelf Research; Geophysical Research Letters; Deep-Sea Research; Dynamics of Atmosphere; Dynamics of Atmosphere and Oceans; IEEE Applied Earth Observations and Remote Sensing; IEEE Geoscience and Remote Sensing Letters; IEEE Transactions on Geoscience and Remote Sensing; International Journal of Oceanography; International Journal of Remote Sensing; Indian Journal of Geo-Marine Sciences; Indian Journal of Marine Sciences; Indian Journal of Radio and Space Physics; JSTARS (Journal of selected Topics in Applied Earth Observations and Remote Sensing); Journal of Climate; Journal of Applied Remote Sensing; Journal of Geophysical Research-Oceans; Journal of the Atmospheric Sciences; Journal of Marine Geodesy; Journal of Geophysical Research-Oceans; Journal of Climate; Journal of Marine Systems; Journal of Oceanography; Journal of Oceanography and Limnology; Journal of Physical Oceanography; Marine Ecology Progress Series; Marine Geodesy; Marine Technology Society Journal; Meteorologische Zeitschrift; Natural Hazards; Ocean Modeling; Ocean Dynamics; Oceanography Journal; Progress in Oceanography; Quarterly Journal of Royal Meteorological Society; Remote Sensing Journal; Remote Sensing Journal-Atmosphere; Remote Sensing of Environment; Theoretical and Applied Climatology.

---

**REVIEWER FOR GRANT APPLICATIONS (TOTAL 435 PROPOSAL REVIEWS, WHICH INCLUDES PANEL PROPOSALS FOR 20 AGENCIES)**

---

- NAS Gulf Research Program
- Academy of Finland
- Belgium Remote Sensing Research Program
- Department of Defense, Science, Mathematics & Research for Transformation – SMART Scholarships
- Indo-US bilateral exchange- Global Challenges: Climate Change
- Indo-US bilateral funding
- Indo-US Science & Technology
- King Fahd University of Petroleum & minerals, Saudi Arabia
- Magellan Scholar Proposals
- NASA/South Carolina Space Grant Consortium Research and Education Award Program (REAP)
- NASA/EPSCoR proposals
- SC Space grant Palmetto proposals
- NSF- Physical Oceanography
- NSF –Ocean Technology
- NSF Graduate Research Fellowships
- New York Sea Grant
- Portuguese Foundation for Science & Technology
- Romanian National Council for Research and Development
- Sultan Qaboos University, Sultanate of Oman, Muscat
- USC ASPIRE Track I&II proposals



---

**TEACHING, STUDENT ADVISING, AND OUTREACH AND SERVICE AT UNIVERSITY**

---

**COURSES TAUGHT**

---

1.	MSCI/GEOL 215	Coastal Environment of SE US.	Spring 2009, 2012, 2014, 2016, 2019, 2021
2.	MSCI 312	Physical Oceanography	Spring 2006, 2007, 2011
3.	MSCI 505	Senior Seminar	Spring 2011
4.	MSCI/GEOL 579	Air-Sea Interaction	Spring 2008, 2010, 2013, 2015, 2018, 2020, 2022
5.	MSCI/GEOL 580	Satellite Oceanography	Fall 2006, 2008, 2010, 2012, 2014, 2016, 2018, 2020
6.	MSCI/GEOL 781	Physical Oceanography	Fall 2009, 2011, 2013
7.	MSCI/GEOL 783	Ocean Time Series Analysis	2015; 2017; 2019, 2021
			Fall 2007
8.	MSCI/GEOL 785	Atmospheric Dynamics	Spring 2020, 2022

---

**UNDERGRADUATE RESEARCH MENTOR (TOTAL 12)**

---

<b>Brandon Long</b>	B.S. Marine Science (Summer, 2010) Research Topic: "2010 Gulf of Mexico Oil Spill"
<b>Dylan Kane</b>	B.S. Computer Science (Summer, 2008) Research Topic: "Developing satellite data processing tools"
<b>Jamie Shutta</b>	B.S. Marine Science (Fall 2006-Spring 2007) Research Topic: "Detection of Yanai Waves in the Indian Ocean from Satellite Observations and HYCOM simulations"
<b>Stephanie Ayres</b>	B.S. Marine Science (Summer, Fall 2013) Research Topic: "Aquarius and SMOS Salinity data Processing" (At Present: Ph.D. student at the University of Maine)
<b>Victoria Yung</b>	B.S. Marine Science (Fall 2013-Fall 2014) Research Topic: "Warming of the Southern Ocean since 1950's using Simple Ocean Data Assimilation (SODA) re-analysis and satellite observations.
<b>Bryce Melzer</b>	B.S. (Hons) Marine Science (Spring 2014-Summer 2015) Research Topic: Investigating Decadal changes in Sea Surface Salinity as an indicator of Global Water Cycle intensification (Honors Thesis)
<b>Morgan Paris</b>	B.S. Marine Science (Fall 2016-Spring 2017) Research Topic: Investigating Role of Salinity on the Agulhas Current.
<b>Caroline Kerfonta</b>	B.S. (Hons) Statistics (Fall, 2017-Spring 2018) Estimation of Volume and Freshwater flux from Arctic Ocean

- Rachel Nichols** B.S. Marine Science (Summer 2018-December 2018)  
Research Topic: Investigating Role of Arctic on Global Ocean Circulation
- Richard Brokaw** B.S. Marine Science (Summer 2018-Summer 2019)  
Understanding the Role of Salinity on the Gulf of Mexico Loop Current Dynamics (Magellan Scholar Award)
- Caroline Washburn** B.S. Marine Science (August 2020-December 2021)  
Research Topic: Role of Salinity on the Loop Current eddies
- Lydia Duncan** B.S. Marine Science (August-December 2021)  
Research Topic: The role of NAO and Jet Stream positioning in producing the recent extreme Marine Heatwaves in the Northwest Atlantic

#### UNDERGRADUATE ADVISOR

---

I regularly advise 25-30 undergraduates in the Marine Science Program in the School of the Earth, Ocean and Environment.

#### RESEARCH SUPERVISION (POSTDOCTORAL RESEARCH) (TOTAL: 3)

---

- |                             |   |   |
|-----------------------------|---|---|
| <b>Dr. Daria Martynova</b>  | Fulbright Visiting Professor<br>January – June, 2011<br>Research Topic: Role of White Sea in the Arctic water circulation                           | <b>At Present:</b> White Sea Biological Station, Zoological Institute of Russian Academy of Sciences St. Petersburg, Russia |
| <b>Dr. Kyoze Ueyoshi</b>    | Research Associate May-Nov., 2007<br>Research Topic: “Developing Bio-Physical Coupled Model for the Gulf of Mexico”                                 | <b>At Present:</b> Associate Research Specialist, Scripps Institution of Oceanography, UC San Diego.                        |
| <b>Dr. Yuichiro Shibata</b> | Fulbright Visiting Professor<br>Sept-Dec, 2006<br>Research Topic: “Running High Resolution Global HYCOM Model using Field Programmable Gate Arrays” | <b>At Present:</b> Professor, Dept. of Computer and Information Sciences, Nagasaki University, Japan.                       |

#### CHAIR OF DOCTORAL DISSERTATION SUPERVISORY COMMITTEES (TOTAL 10)

---

- Emma Hoffman** **PhD. Marine Science (2022-present)**  
Dissertation Topic: Transport of Freshwater by the Arctic Ocean
- Katherine Seikel** **PhD. Marine Science (2022-present)**  
Dissertation Topic: Understanding the Gulf of Mexico Loop Current Dynamics
- Sara Hall** **PhD. Marine Science (2021-present)**  
Dissertation Topic: The Role of the Arctic Ocean and Subarctic Seas and their Connections to the Global Ocean and Climate

<b>Paul Ernst</b>	<b>PhD. Marine Science (2021-present)</b> Dissertation Topic: New Techniques for understanding Eddy Dynamics and Mixing using Satellite Data And Model Simulations in the North Indian Ocean	
<b>Heather Roman-Stork</b>	<b>PhD. Marine Science (December, 2020)</b> Dissertation Topic: Ocean Atmospheric Coupling during Intraseasonal Oscillations in the Indian Ocean	<b>Ocean Scientist</b> Global Science Technology contractor, NOAA/STAR College Park, Maryland.
<b>Brady Ferster</b>	<b>PhD. Marine Science (Summer, 2019)</b> Dissertation Topic: The Role of the Southern Ocean on Global Ocean Circulation and Climate	<b>At Present:</b> Oceanographer, L'OCEAN – Sorbonne Univ. Paris, France.
<b>Corinne Trott</b>	<b>PhD. Marine Science (Spring, 2019)</b> Dissertation Topic: Upper Ocean Mixing Processes and Circulation in the Arabian Sea during Monsoons.	<b>At Present:</b> Oceanographer, Naval Research Laboratory, Stennis Space Center, MS.
<b>Joseph D'Addezio</b>	<b>Ph.D. Marine Science (Summer, 2016)</b> Dissertation Topic: Utilization of Satellite Derived Salinity to study Indian Ocean Climate Variability	<b>At Present:</b> Oceanographer, Naval Research Laboratory, Stennis Space Center, MS.
<b>Ebenezer S. Nyadjro</b>	<b>Ph.D. Marine Science (May, 2012)</b> Dissertation Topic: "Study on the Basin scale salt exchange in the Indian Ocean using satellite observations and model simulation"	<b>At Present:</b> Associate, Professor (Research), Mississippi State University / NOAA Northern Gulf Institute.
<b>Dara D.H. Cadden</b>	<b>Ph.D. Marine Science (Aug, 2009)</b> Dissertation Topic: "A Study of the Indian Ocean Response to ENSO and IOD using Satellite Observations.	<b>At Present:</b> Oceanographer, Naval Oceanographic Office, Stennis Space Center, MS.
<b>Michelle Gierach</b>	<b>Ph.D. Marine Science (May, 2009)</b> Dissertation Topic: "Analysis of The Upper Ocean Response to Hurricanes in the Gulf of Mexico Using Satellite Observations and Model Simulations".	<b>At Present:</b> Lead Scientist, NASA /JPL Pasadena, CA.

---

**CHAIR OF MASTER'S THESIS SUPERVISORY COMMITTEES (TOTAL 13)**

<b>Lydia Duncan</b>	<b>MS. Marine Science (2022-present)</b> Thesis: Dynamics of 3-7-day Synoptic Oscillations in the Bay of Bengal.
<b>Emily Eley</b>	<b>MS. Marine Science (2021-present)</b> Thesis: Ocean-Atmosphere and Biophysical Interactions During hurricanes in the Gulf of Mexico

<b>Richard Brokaw</b>	<b>MS. Marine Science (May 2020)</b> Thesis: Dynamics of the Loop Current System and its effects on Surface and Subsurface Properties in the Gulf of Mexico.
<b>Casey Shoup</b>	<b>M.S. Marine Science (May 2020)</b> Thesis: New Approaches to understanding the MJO Dynamics.
<b>Rachel Nichols</b>	<b>M.S. Marine Science (May 2020)</b> Thesis: Circulation Changes in the Arctic Ocean and Subarctic Seas and their Connection to the Global Ocean and Climate.
<b>Morgan Paris</b>	<b>M.S. Marine Science (May, 2018)</b> Thesis: The Role of ENSO on the Agulhas Current System and Benguela upwelling
<b>Jessica Burns</b>	<b>M.S. Marine Science (May, 2017)</b> Thesis: Air-Sea Interactions and Ocean Dynamics in the Southwest Tropical Indian Ocean
<b>Caroline Corbett</b>	<b>M.S. Geological Sciences (December, 2016)</b> Thesis: Utilization of Satellite derived Salinity for ENSO studies and Climate Indices
<b>Bryce Melzer</b>	<b>M.S. Marine Science (December, 2016)</b> Thesis: Decadal Salinity Changes in the Oceanic Subtropical Gyres and connection to changes in the Global Water Cycle.
<b>Clifford Felton</b>	<b>M.S. Marine Science (May, 2014)</b> Thesis: The Role of ENSO on the Modulation of Bay of Bengal Cyclones
<b>Matthew Nienhaus</b>	<b>M.S. Marine Science (December, 2012)</b> Thesis Topic: The Role of Kelvin Waves on the Circulation and salt transport variability in the coastal Bay of Bengal.
<b>Gary Grunseich</b>	<b>M.S. Geological Sciences (August, 2012)</b> Thesis Topic: The study of the Indian Ocean Response to climatic events using Satellite observations and model simulations.
<b>David M. Heffner</b>	<b>M.S. Geological Sciences (December, 2008)</b> Thesis Topic: "Detection of Indian Ocean Rossby Waves in Satellite Observations and HYCOM simulations"

#### **STUDENT AWARDS**

---

2022	Emily Eley has been awarded <b>The National Association of Geoscience Teacher (NAGT) Outstanding Teaching Award.</b>
2021	Paul Ernst has been awarded Department of Defense (DoD), and the Science Mathematics and Research for Transformation (SMART) Scholarship
2021	Paul Ernst has been awarded <b>Presidential Fellowship</b> from UofSC
2021	Sarah Hall made first place in iPoster presentation at USC Discovery Day
2021	Emily Eley Sarah Hall made first place in iPoster presentation at USC Discovery
2011	Heather Roman Stork has been selected as a participant in the Physical Oceanography Dissertation Symposium (PODS XI) held at Lihue, Kauai during

October 17-21, 2021.

- 2020 Samantha Greaser has been awarded **Presidential Fellowship** from UofSC.
- 2020 Heather Roman-Stork was the recipient of the UofSC's the Office of the Vice President for Research's **Breakthrough Graduate Scholar Award**
- 2020 Heather Roman-Stork has been awarded **Outstanding Publication Award in Marine Science**
- 2020 Heather Roman-Stork has been awarded **The National Association of Geoscience Teacher (NAGT) Outstanding Teaching Award.**
- 2020 Heather Roman-Stork has been awarded **The National Academies/National Research Council (NRC)/ Research Associateship.**
- 2019-2020 Heather Roman-Stork was the recipient of the 2018-2019 NASA/South Carolina Space Grant Graduate Fellowship Award.
- 2020 Richard Brokaw was the recipient of the 2020 NSF Graduate Research Fellowship
- 2019 Corinne Trott has been awarded **SPARC grant** by the Vice-President for Research, University of South Carolina
- 2019 Corinne Trott has been awarded **Outstanding Publication Award in Marine Science**
- 2019 Brady Ferster was the recipient of the **Breakthrough Graduate Scholar Award**
- 2019 Casey Shoup has been awarded **Outstanding Teaching Award in Marine Science**
- 2019 Corinne Trott has been awarded **first place for Poster Competition** at Discover USC Day in Graduate Students Category
- 2019 Richard Brokaw (my Accelerated BS/MS student) has been awarded **first place for Poster Competition** at Discover USC Day in undergraduate Students Category
- 2019 Richard Brokaw has been awarded **USC's Magellan Scholarship**
- 2018 Corinne Trott was recipient of the 2018 **Outstanding Teaching Award in Marine Science**
- 2017-2019 Brady Ferster was the recipient of the 2017-2018 & 2018-2019 NASA/South Carolina Space Grant Graduate Fellowship Award.
- 2017 Jessica Burns has been awarded **Outstanding Publication Award in Marine Science**
- 2016 Joseph D'Addezio has been selected as a participant in the Physical Oceanography Dissertation Symposium (PODS IX) held at Lihue, Kauai during October 9-13, 2016.
- 2015 Bryce Melzer receives First place in Discovery Day Oral Competition
- 2014 Victoria Young has been awarded USC's Magellan Scholarship.
- 2012 Gary Grunseich has been awarded **2012 Outstanding Thesis Award.**
- 2012-2013 Matthew Nienhaus was the recipient of the 2012-2013 NASA/South Carolina Space Grant Graduate Fellowship Award.
- 2012 Ebenezer Nyadjro has been selected as a participant in the Physical Oceanography Dissertation Symposium (PODS VII) held at Lihue, Kauai during October 7-11, 2012.
- 2012 Ebenezer Nyadjro has been awarded **2012 Outstanding Dissertation Award.**
- 2012 Ebenezer Nyadjro has been awarded **The National Academies/National Research Council (NRC)/ Research Associateship** to work at NOAA/PMEL, Seattle, Washington.
- 2012 Ebenezer Nyadjro has been awarded **F. John Vernberg Best Publication Award**
- 2012 Ebenezer Nyadjro has been awarded USC Graduate Student Day oral presentation second prize.
- 2012 Ebenezer Nyadjro has been awarded **F. John Vernberg Outstanding Graduate Teaching award**

2012	Gary Grunseich has been the recipient of <b>Taber Award for Outstanding Masters Research</b> in the Field of Geological Sciences
2011-2012	Gary Grunseich was the recipient of the 2011-2012 NASA/South Carolina Space Grant Graduate Fellowship Award.
2011	Ebenezer Nyadjro has been awarded USC Graduate Student Day oral presentation second prize.
2009	Michelle Gierach has been awarded <b>Dean's Excellence Award for Graduate Studies</b>
2009	David Heffner was the recipient of <b>Taber Award for Outstanding Masters Research</b> in the Field of Geological Sciences
2008	Jamie Shutta (Marine Science Junior) has been awarded <b>the NOAA Ernest F. Hollings Undergraduate Scholarship</b> .
2008	Michelle Gierach has been awarded <b>F. John Vernberg Best Publication Award</b> .
2008	Michelle Gierach has been awarded USC Graduate Student Day award for poster presentation first prize.
2008	Michelle Gierach has been selected as a Participant in the Physical Oceanography Dissertation Symposium held at the East-West Center, Honolulu, Hawaii, during October 5-10, 2008.
2007	Michelle Gierach has been awarded USC Graduate Research Assistant Fellowship for Spring, 2007.
2008-2009	Michelle Gierach was the recipient of the NASA/South Carolina Space Grant Graduate Fellowship.
2006-2009	Dara D.H. Cadden was the recipient of the NASA/South Carolina Space Grant Graduate Fellowship.
2006	Dara D.H. Cadden has been awarded <b>F. John Vernberg Best Teaching Award</b> .

#### UNIVERSITY SERVICE

---

2021-present	USC Graduate Council
2021-present	USC Tenure Review Board
2021-present	Faculty Advisory Committee
2019-present	Faculty Grievance Committee
2010-present	Magellan Scholar proposal review committee
2005-2018	Judge for the Grad Day/Discover USC
2016-2019	University Committee for Tenure and Promotion (Panel Chair 2018-2019)
2016-2019	Faculty Welfare Committee (Chair in 2017-2018)
2013-2016	Faculty Advisory Committee
2015	Faculty Senate Informational Technology Adhoc Committee, Co-Chair
2012-2016	USC Campus Director for the NASA/South Carolina Space Grant Consortium
2010-2013	University Committee on Scholastic Standards and Petitions
2010-2013	Faculty Committee member for University Libraries
2010-2013	Graduate School Council Member
2010-2013	Graduate Council Science, Math, and Related Professional Programs subcommittee member (Curriculum Committee)
2011-2013	University wide Graduate Scholarships/Fellowships subcommittee
2009-2015	Advisory Board Member, Office of Undergraduate Research
2008-2011	Faculty Senator for the Department of Earth and Ocean Sciences

## COLLEGE & SCHOOL LEVEL SERVICE

---

2020-2021	Unit Deployment Team Faculty Lead for COVID-19
2020	Chair, SEOE Tenure & Promotion Committee (December 2019-May 2020)
2005-present	Marine Science Program Graduate Committee (not in 2018-2019)
2012-2018	Computing Committee (ITAC)
2014-2016	Chair, Marine Science Graduate Committee
2013-2014	Marine Science Program Undergraduate Studies Committee
2009-2011	SEOE Graduate Studies Committee member
2006-2009	Computing Committee Representative for Marine Science
2010	Chair, Marine Science Program Director's search
2005-2010	Graduate Studies Committee for Geological Science (not in 2007)
2009-2010	Chair, Taber Awards and Graduate Day Students Selection Committee Peer-
2007,2008,2013	Review committee
2005-2006	New faculty hires committee - Physical Oceanography Search
2007-2008	Marine Science Faculty hires committee- Physical Oceanographer (Wave modeler) Search Committee
2006	Research faculty appointment review committee
2006	F. John Vernberg Award Committee, Marine Science Program
2006-present	Seminar Host for several Marine Science and Geological Sciences seminars

## MEDIA APPEARANCES

---

September 9, 2020	The Impact of Madden Julian Oscillation on Cyclone Amphan (2020) and Southwest Monsoon onset, 2 <sup>nd</sup> International Indian ocean Expedition 2015-2020, Newsletter, Volume 4, Issue 9, September 2020.
September 2, 2020	Oscillations & Dipole, Interview with NASA Salinity group, September 2, 2020 ( <a href="https://salinity.oceansciences.org/highlights06.htm">https://salinity.oceansciences.org/highlights06.htm</a> )
May 5, 2020	Response of the Bay of Bengal to 3-7-day Intraseasonal Oscillations during the 2019 Southwest monsoon, 2 <sup>nd</sup> International Indian ocean Expedition 2015-2020, Newsletter, Volume 4, Issue 5, May 2020.
June 6, 2020	Monitoring Monsoon Intraseasonal Oscillations in the Indian Ocean, 2 <sup>nd</sup> International Indian ocean Expedition 2015-2020, Newsletter, Volume 4, Issue 6, June 2020.
June 6, 2020	The Role of Salinity in the Southeastern Arabian Sea in Determining Monsoon Onset and Strength, 2 <sup>nd</sup> International Indian ocean Expedition 2015-2020, Newsletter, Volume 4, Issue 6, June 2020.
November 2019	2019 Monsoon Monitored Using Altimetry, Image of the Month-November 2019, AVISO+ Satellite Altimetry Newsletter, France.
April 2, 2018	Teleconnections in the Southern Ocean, US Climate Variability and Predictability Program (US CLIVAR), Newsletter April 2, 2018.
August 8, 2018	Detection of ISO's in SMAP salinity in BoB, 2 <sup>nd</sup> International Indian ocean Expedition 2015-2020, Volume 2, Issue 8, August, 2018.
November 18, 2015	UofSC Today, Eluding Pirates with NASCar
December 6, 2013	Deccan Chronical, Indian News Paper "La Nina brews storms in Bay-Stronger cyclones due to hot oceans"
June 5, 2013	South Carolina Space Grant Consortium, Student Spotlight- Gary Grunseich
June 5, 2013	USC Times "Mapping Sea Salt from Orbit: Building better ocean and climate models with salinity data"
May 31, 2013	Science Daily "Mapping Sea Salt from Orbit: Building better ocean and climate models with salinity data"

May 3, 2012 USC Times, Ready to launch- Satellite Oceanography propels young scientists (by Steven Powell).

April, 2012 USC Office of the Vice-President for Research, Featured Scholars of the Month.

August 2, 2007 USC Times, Student Speak- Michelle Gearch (Ph.D. Candidate in Marine Science) by Marshall Swanson.

February 2, 2006 USC Times, Satellite Oceanography- New course puts USC in selected company (by Marshall Swanson).