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EDUCATION

Ph.D. Oceanography, 2006, Oregon State University, College of Oceanic and Atmospheric Sciences, *Dissertation*: Numerical and assimilative studies of the equatorial Pacific cold tongue, *Advisor*: Prof. Robert N. Miller

M.S. Applied Marine Physics, 1999, University of Miami, Rosenstiel School of Marine and Atmospheric Science, *Thesis*: Model skill assessment in the Louisiana-Texas (LATEX) shelfbreak zone, *Advisor*: Prof. Christopher N. K. Mooers

B.S. Applied Mathematics and Pure Physics, 1995, University of Miami, Cum Laude

RESEARCH INTERESTS

Physical oceanography, climate science, air-sea interactions, ocean's impact on society - Investigating the dynamical and thermodynamical processes that drive equatorial ocean currents, equatorial waves, and tropical instability waves and how they influence sea surface temperature variability in the Atlantic and Pacific oceans; characterizing the variability of boundary currents and the overturning circulations in the South Atlantic, and their influence on regional and global heat and salt distributions, as well as their impact on weather, climate, and sea level; observing deep and abyssal changes in temperature in the South and North Atlantic Oceans; examining how sea level pressure changes over the central North Pacific can be an early precursor for El Niño events.

PROFESSIONAL EXPERIENCE

10/2024-present, *Supervisory Research Physical Scientist (ZP1301-IV)*, Deputy Director, NOAA/AOML/Physical Oceanography Division (PhOD).

07/2024-10/2024, *Supervisory Research Physical Scientist (ZP1301-V)*, Temporary Acting Director, NOAA/AOML/Physical Oceanography Division (PhOD).

08/2022-07/2024, *Supervisory Research Physical Scientist (ZP1301-IV)*, Deputy Director, NOAA/AOML/Physical Oceanography Division (PhOD).

08/2021-08/2022, *Research Oceanographer (ZP1360-III-03)*, NOAA/AOML/PhOD.

04/2021-08/2021, *Supervisory Research Oceanographer (ZP1360-IV-01)*, Temporary Acting Deputy Director, NOAA/AOML/Ocean Chemistry and Ecosystem Division (OCED).

10/2017-04/2021, *Research Oceanographer (ZP1360-III-03)*, NOAA/AOML/PhOD.

06/2011-09/2017, *Associate Scientist,* University of Miami (UM), Cooperative Institute for Marine and Atmospheric Studies (CIMAS) and NOAA/AOML/PhOD.

11/2008-05/2011, *Assistant Scientist,* UM, CIMAS and NOAA/AOML/PhOD.

12/2005-10/2008, *National Research Council* (NRC) *Postdoctoral Fellow*, NOAA/Pacific Marine Environmental Laboratory/Ocean Climate Research Division, *Postdoctoral Fellow.*

10/2005-12/2005, *Postdoctoral Fellow,* University of Washington, Joint Institute for the Study of the Atmosphere and Ocean.

08/1998-10/2005, *Graduate Research/Teaching Assistant,* Oregon State University, College of Oceanic and Atmospheric Sciences.

08/1995-07/1998, *Graduate Research Assistant.* UM, Rosenstiel School.

01/1992-07/1995, *Undergraduate Research Assistant,* UM, Rosenstiel School.

EXTERNAL FUNDING

2022 Developing a more resilient Southwest Atlantic Meridional overturning circulation (SAM) array, NOAA, 10/01/2022-09/30/2024, $325,000 (lead-PI)

2021 Innovative analysis of deep and abyssal temperatures from bottom-moored instruments, NOAA, 09/01/21-08/31/24, $440,292 (lead-PI)

2020 An optimized hybrid seasonal forecast system for U. S. regional precipitation in late-summer to mid-fall based on inter-basin SST and convection parameters, NOAA, 09/01/20-08/31/21, $204,400 (unfunded co-PI)

2018 Combining coastal altimetry and in situ observations to improve Meridional Overturning Circulation estimates in the South Atlantic, NASA, $161,878, 01/01/18-12/31/20 (co-PI)

2016 Collaborative Research: Extratropical triggering of ENSO events through the trade-Wind charging mechanism, NSF-CLD, 09/15/16-09/14/19, $343,452 (lead-PI)

2016 South Atlantic-North Atlantic Meridional Overturning Circulation (MOC) linkages: Analysis of the upper and lower limbs with in situ moored instruments, NOAA, 07/01/16-06/30/19, $353,031 (co-PI)

2014 Variability of the South Atlantic Subtropical Gyre, NASA, 05/01/14-04/30/17, $346,494 (lead-PI)

2013 South Atlantic Meridional Overturning Circulation: Pathways and Modes of Variability, NOAA, 09/01/13-8/31/16, $222,723 (lead-PI)

2010 Collaborative Research: Global Impact of Eddies on Inertial Oscillations of the Mixed Layer. NSF-OCE-1031278, 10/01/10-09/30/14, $66,313 (lead-PI)

PUBLICATIONS (PEER-REVIEWED)

(1) Tuchen, F. P., **R. C. Perez**, G. R. Foltz, M. J. McPhaden, and R. Lumpkin, 2024: Multidecadal intensification of the equatorial Pacific upper-ocean circulation. *J. Geophys. Res. Oceans*., 129, e2024JC021343, https://doi.org/10.1029/2024JC021343.

(2) Lumpkin, R., F. Bringas, and **R. C. Perez**, 2024: Surface currents. In Chapter 3, State of the Climate in 2023. *Bulletin of the American Meteorological Society*, https://doi.org/10.1175/BAMS-D-24-0100.1.

(3) Arumi-Planas, C. S. Dong, **R. C. Perez**, M. J. Harrison, R. Farneti, and A. Hernández-Guerra, 2024: A multi-data set analysis of the Freshwater Transport by the Atlantic Meridional Overturning Circulation at nominally 34.5ºS, *J. Geophys. Res. Oceans*, https://agupubs.onlinelibrary.wiley.com/doi/10.1029/2023JC020558.

(4) Biló, T. C., **R. C. Perez**, S. Dong, W. Johns, and T. Kanzow, 2024: Weakening of the Atlantic meridional overturning circulation abyssal limb in the North Atlantic. *Nature Geoscience,* **17**, 419–425. https://doi.org/10.1038/s41561-024-01422-4.

(5) Tuchen, F. P., **R. C. Perez**, G. R. Foltz, P. Brandt, A. Subramaniam, S.-K. Lee, R. Lumpkin, and R. Hummels, 2024: Modulation of equatorial currents and tropical instability waves during the 2021 Atlantic Niño. *J. Geophys. Res. Oceans*, 129(1):e2023JC020431, doi:/10.1029/2023JC020431.

(6) McPhaden, M. J., K. J. Connell, G. R. Foltz, **R. C. Perez**, K. Grissom, 2023: Tropical ocean observations for weather and climate: A decadal overview of the Global Tropical Moored Buoy Array. *Oceanography*, 36(2–3), 32–43, doi:10.5670/oceanog.2023.211.

(7) Connell, K. J., M. J. McPhaden, G. R. Foltz, **R. C. Perez**, and K. Grissom, 2023: Surviving piracy and the coronavirus pandemic. *Oceanography,* 36(2–3), 44–45, doi:10.5670/oceanog.2023.212.

(8) Baker, J. A., R. Renshaw, L. C. Jackson, C. Dubois, D. Iovino, H. Zuo, **R. C. Perez**, S. Dong, M. Kersalé, M. Mayer, J. Mayer, S. Speich, and T. Lamont, 2023: South Atlantic overturning and heat transport variations in ocean reanalyses and observation-based estimates, in: 7th edition of the Copernicus Ocean State Report (OSR7), edited by: von Schuckmann, K., Moreira, L., Le Traon, P.-Y., Grégoire, M., Marcos, M., Staneva, J., Brasseur, P., Garric, G., Lionello, P., Karstensen, J., and Neukermans, G., Copernicus Publications, *State Planet*, 1-osr7, 4, doi:10.5194/sp-1-osr7-4-2023.

(9) Chidichimo, M. P., **R. C. Perez**, S. Speich, M. Kersalé, J. Sprintall, S. Dong, T. Lamont, O. T. Sato, T. K. Chereskin, R. Hummels, and C. Schmid, 2023: Energetic overturning flows, dynamic interocean exchanges, and ocean warming observed in the South Atlantic. *Commun. Earth Environ.,* 4, 10, doi:10.1038/s43247-022-00644-x.

(10) Tuchen, F.P., **R. C. Perez**, G.R. Foltz, P. Brandt, and R. Lumpkin, 2022: Multidecadal intensification of Atlantic tropical instability waves. *Geophysical Research Letters*, **49**(22):e2022GL101073, doi:10.1029/2022GL101073.

(11) Hummels, R., B. Johns, S. Speich, **R. Perez**, P. Brandt, M. Lankhorst, and U. Send, 2022: The AMOC in the Tropical Atlantic, *CLIVAR Exchanges*, **82**, 22-28, doi:10.36071/clivar.82.2022.

(12) **Perez, R. C.**, G. R. Foltz, R. Lumpkin, J. Wei, K. Voss, M. Ondrusek, M. Wang, and M. Bourassa, 2022: Oceanographic buoys: providing ocean data to assess the accuracy of variables derived from satellite measurements. *In: Field Measurements for Passive Environmental Remote Sensing (ed., Nick Nalli),79-96,* doi:10.1016/B978-0-12-823953-7.00002-2.

(13) Nalli, N. R., G. R. Foltz, J. Gero, L. Gibson, R. O. Knuteson, R. Lumpkin, P. J. Minnett, V. R. Morris, M. Ondrusek, **R. C. Perez**, M. Wang, and J. Wei, 2022: Ship-based cal/val campaigns. In: Field Measurements for Passive Environmental Remote Sensing (ed., Nick Nalli), 195-215, doi:10.1016/B978-0-12-823953-7.00002-2.

(14) Volkov, D.L., S. Dong, E. Frajka-Williams, Y. Fu, G. Goni, W. Hobbs, W. Johns, M. Kersalé, S. Lozier, B. Moat, **R. Perez**, D. Rayner, D. Smeed, and J. Willis, 2022: Atlantic meridional

overturning circulation and heat transport. [In: State of the Climate 2021], *Bull. Am. Met. Soc.*, 103(8):S175-178, doi:10.1175/BAMS-D-22-0072.1.

(15) Campos, E. J. D., M. C. van Caspel, W. Zenk, E. G. Morozov, D. I. Frey, A. R. Piola, C. S. Meinen, O. T. Sato, **R. C. Perez**, and S. Dong, 2021: Warming trend in the abyssal flow through the Vema Channel in the South Atlantic. *Geophys. Res. Lett.*, doi: 10.1029/2021GL094709.

(16) Chakravorty, S., **R. C. Perez**, B.T. Anderson, S. M. Larson, and B. S. Giese, 2021: Ocean dynamics are key to extratropical forcing of El Niño. *J. Clim.,* doi:10.1175/JCLI-D-20-0933.1.

(17) Chakravorty, S., **R. C. Perez**, C. Gnanaseelan, and B. T. Anderson, 2021: Revisiting the recharge and discharge processes for different flavors of El Niño. *Journal of Geophysical Research–Oceans*, 126, e2020JC017075, doi:10.1029/2020JC017075.

(18) Chidichimo, M. P., A. R. Piola, C. S. Meinen, **R. C. Perez**, E. J. D. Campos, S. Dong, R. Lumpkin, and S. L. Garzoli, 2021: Brazil Current volume transport variability during 2009-2015 from a long-term moored array at 34.5°S. *J. Geophys. Res*., doi:10.1029/2020JC017146.

(19) Kersalé, M., C. S. Meinen, **R. C. Perez**, A. R. Pola, S. Speich, E. J. D. Campos, S. L. Garzoli, I. Ansorge, D. L. Volkov, M. Le Hénaff, S. Dong, T. Lamont, O. T. Sato, M. van den Berg, 2021: Multi-year estimates of Daily Heat Transport by the Atlantic Meridional Overturning Circulation at 34.5°S. *J. Geophys. Res*., doi:10.1029/2020JC016947.

(20) Volkov, D. L., S. Dong, M. Lankhorst, M. Kersalé, A. Sanchez-Franks, C. Schmid, J. Herrford, **R. C. Perez**, B. I. Moat, P. Brandt, C. S. Meinen, M. O. Baringer, E. Frajka-Williams, and D. Smeed, 2021: Meridional overturning circulation and heat transport in the Atlantic Ocean [in "State of the Climate in 2020"]. *Bull. Amer. Meteor. Soc*., 102(8): S176-S179, doi:10.1175/BAMS-D-21-0083.1.

(21) Chakravorty, S., **R. C. Perez**, B. T. Anderson, B. S. Giese, S. M. Larson, and V. Pivotti, 2020: Testing the trade wind charging mechanism and its influence on ENSO variability. *J. Clim*., 33, 7391–7411, doi:10.1175/JCLI-D-19-0727.1.

(22) Christophersen, J. A., G. Foltz, and **R. C. Perez**, 2020: Surface expressions of atmospheric thermal tides in the tropical Atlantic and their impact on open-ocean precipitation. *J. Geophys. Res. Atmos.,* 125*,* doi:10.1029/2019JD031997.

(23) Foltz, G. R., R. Hummels, M. Dengler, **R. C. Perez**, and M. Araujo, 2020: Vertical turbulent cooling of the mixed layer in the Atlantic ITCZ and trade wind regions. *Journal of Geophysical Research Oceans*, 125, doi:10.1029/2019JC015529.

(24) Kersalé, M., C. S. Meinen, **R. C. Perez,** M. Le Hénaff, D. Valla, T. Lamont, O. T. Sato, S. Dong, T. Terre, M. van Caspel, M. P. Chidichimo, M. van den Berg, S. Speich, A. R. Piola, E. J. D. Campos, I. Ansorge, D. L. Volkov, R. Lumpkin, S. Garzoli, 2020: Highly variable upper and abyssal overturning cells in the South Atlantic, *Science Advances*, 6, 32, eaba7573, doi:10.1126/sciadv.aba7573.

(25) Meinen, C. S., **R. C. Perez**, S. Dong, A. R. Piola, and E. Campos, 2020: Observed ocean bottom temperature variability at four sites in the Argentine Basin: Evidence of decadal deep/abyssal warming amidst hourly to interannual variability during 2009-2019. *Geophys. Res. Lett.*, 47, doi:10.1029/2020GL089093.

(26) Volkov, D.L., C.S. Meinen, C. Schmid, B. Moat, M. Lankhorst, S. Dong, F. Li, W. Johns, S. Lozier, **R. Perez**, G. Goni, M. Kersale, E. Frajka-Williams, M. Baringer, D. Smeed, D. Rayner, A. Sanchez-Franks, and U. Send, 2020: Atlantic meridional overturning circulation and associated heat transport [in "State of the Climate in 2019"]. Bull. Amer. Meteor. Soc., 101 (8), S163–S169, doi:10.1175/BAMS-D-20-0105.1.

(27) Bourlès, B., M. Araujo, M. J. McPhaden, P. Brandt, G. R. Foltz, R. Lumpkin, H. Giordani, F. Hernandez, N. Lefevre, P. Nobre, E. Campos, R. Saravanan, J. Trotte-Duha, M. Dengler, J. Hahn, R. Hummels, J. F. Lubbecke, M. Rouault, L. Cotrim, A. Sutton, M. Jochum, and **R. C. Perez**, 2019: PIRATA: A sustained observing system for tropical Atlantic climate research and forecasting. *Earth and Space Sciences*, 6, 577-616, doi:10.1029/2018EA000428.

(28) Foltz, G. R., … **R. C. Perez**, …, 2019: The tropical Atlantic observing system. *Frontiers in Marine Science*, 6, 206, doi:10.3389/fmars.2019.00206.

(29) Frajka-Williams, E., …, **R. C. Perez**, …, 2019: Atlantic meridional overturning circulation: Observed transport and variability. *Frontiers in Marine Science*, 6, 260, doi: 10.3389/fmars.2019.00260.

(30) Inoue, R., R.-C. Lien, J. N. Moum, **R. C. Perez**, and M. C. Gregg, 2019: Variations of equatorial shear, stratification, and turbulence within a tropical instability wave cycle. *J. Geophys. Res.,* 124, 1858-1875, doi:10.1029/2018JC014480.

(31) Kersalé, M., **R. C. Perez**, S. Speich, C. S. Meinen, T. Lamont, M. Le Hénaff, M. A. van den Berg, S. Majumder, I. J. Ansorge, S. Dong, C. Schmid, T. Terre, and S. L. Garzoli, 2019: Shallow and Deep Eastern Boundary Currents in the South Atlantic at 34.5°S: Mean structure and variability. *J. Geophys. Res*., 124, 1634-1659, doi:10.1029/2018JC014554.

(32) **Perez, R. C.,** G. R. Foltz, R. Lumpkin, C. Schmid, 2019: Direct Measurements of Upper Ocean Horizontal Velocity and Vertical Shear in the Tropical North Atlantic at 4°N, 23°W. *J. Geophys. Res.,* 124, 4133-4151*,* doi:10.1029/2019JC015064.

(33) Meinen, C. S., S. Speich, A. R. Piola, I. Ansorge, E. Campos, M. Kersalé, T. Terre, M. P. Chidichimo, T. Lamont, O. T. Sato, **R. C. Perez**, D. Valla, M. van den Berg, M. Le Hénaff, S. Dong, and S. L. Garzoli, 2018: Meridional Overturning Circulation transport variability at 34.5°S during 2009-2017: Baroclinic and barotropic flows and the dueling influence of the boundaries. *Geophys. Res. Lett.,* 45, 4180-4188, doi:10.1029/2018GL077408.

(34) Meinen, C. S., S. L. Garzoli, **R. C. Perez**, E. Campos, A. R. Piola, S. Dong, M.-P. Chidichimo, and O. Sato, 2017: Characteristics and causes of Deep Western Boundary Current variability at 34.5°S during 2009-2014. *Ocean Science,* 13, 175-194, doi:10.5194/os-13-175-2017.

(35) Rugg, A., G. R. Foltz, and **R. C. Perez**, 2016: Role of mixed layer dynamics in tropical North Atlantic interannual sea surface temperature variability. *J. Clim*., 29, 8083-8101, doi:10.1175/JCLI-D-15-0867.1.

(36) Elipot, S., R. Lumpkin, **R. C. Perez**, J. M. Lilly, J. Early, and A. Sykulski, 2016: A global surface drifter dataset at hourly resolution. *J. Geophys. Res.*, 121, 2937-2966, doi:10.1002/2016JC011716.

(37) Lumpkin, R., L. Centurioni, and **R. C. Perez**, 2016: Fulfilling observing system implementation requirements with the global drifter array. *Journal of Atmos. Oceanic Technol.,* 33, 685-695, doi:10.1175/JTECH-D-15-0255.1.

(38) **Perez, R. C.**, M. O. Baringer, S. Dong, S. L. Garzoli, M. Goes, G. J. Goni, R. Lumpkin, C. S. Meinen, R. Msadek, and U. Rivero, 2015: Measuring the Atlantic meridional overturning circulation. *Mar. Tech. Soc. Journal*, 49(2), 167-177, doi:10.4031/MTSJ.49.2.14.

(39) Anderson, B. T., and **R. C. Perez**, 2015: ENSO and Non-ENSO induced charging and discharging of the equatorial Pacific. *Clim. Dyn.*, 45, 2309-2327, doi:10.1007/s00382-015-2472-x.

(40) Garzoli, S. L., S. Dong, R. Fine, C. Meinen, **R. C. Perez**, C. Schmid, E. van Sebille, and Q. Yao, 2015: The fate of the Deep Western Boundary Current in the South Atlantic. *Deep Sea Res.*, 103, 125-136, doi:10.1016/j.dsr.2015.05.008.

(41) **Perez, R. C.**, V. Hormann, R. Lumpkin, P. Brandt, W. E. Johns, F. Hernandez, C. Schmid, and B. Bourlès, 2014: Mean meridional currents in the central and eastern equatorial Atlantic. *Clim. Dyn.,* 43, 2943-2962, doi:10.1007/s00382-013-1968-5.

(42) Johns, E. M., B. A. Muhling, **R. C. Perez**, F. E. Müller-Karger, N. Melo, R. H. Smith, J. T. Lamkin, T. L. Gerard, and E. Malca, 2014: Amazon River water in the northeastern Caribbean Sea and its effect on larval reef fish assemblages during April 2009. *Fisheries Oceanogr.*, 23:6, 472-494, doi:10.1111/fog.12082.

(43) Anderson, B. T., **R. C. Perez**, A. Karspeck, 2013: Triggering of El Niño onset through the trade wind-induced charging of the equatorial Pacific. *Geophys. Res. Lett*., 40, 1212-1216, doi:10.1002/grl.50200.

(44) Garzoli, S. L., M. O. Baringer, S. Dong, **R. C. Perez**, and Q. Yao, 2013: South Atlantic meridional fluxes. *Deep Sea Res. I*, 71, 21–32, doi: 10.1016/j.dsr.2012.09.003.

(45) Goes, M., G. J. Goni, V. Hormann, and **R. C. Perez**, 2013: Variability of the Atlantic off-equatorial eastward currents during 1993-2010 using a synthetic method. *J. Geophys. Res.,* 118, 3026-3045, doi:10.1002/jgrc.20186.

(46) Hormann, V., R. Lumpkin, and **R. C. Perez**, 2013: A generalized method for estimating the structure of the equatorial Atlantic cold tongue: Application to drifter observations. *Journal of Atmos. Oceanic Technol.,* 30, 1884–1895, doi:10.1175/JTECH-D-12-00173.1.

(47) Meinen, C. S., S. Speich, **R. C. Perez**, S. Dong, A. R. Piola, S. L. Garzoli, M. Baringer, S. Gladyshev, and E. Campos, 2013: Temporal variability of the meridional overturning circulation at 34.5°S: Results from two pilot boundary arrays in the South Atlantic. *J. Geophys. Res.*, 118, 6461-6478, doi:10.1002/2013JC009228.

(48) Meinen, C. S., A. Piola, **R. C. Perez**, and S. L. Garzoli, 2012: Deep Western Boundary Current transport variability in the South Atlantic: Preliminary results from a pilot array at 34.5°S. *Ocean Science*, 8, 1041-1054, doi:10.5194/os-8-1041-2012.

(49) **Perez, R. C.**, R. Lumpkin, W. E. Johns, G. R. Foltz, and V. Hormann, 2012: Interannual variations of Atlantic tropical instability waves. *J. Geophys. Res.,* 117, C03011, doi:10.1029/2011JC007584.

(50) **Perez, R. C.**, S. L. Garzoli, C. S. Meinen, and R. P. Matano, 2011: Geostrophic velocity measurement techniques for the meridional overturning circulation and meridional heat transport in the South Atlantic. *Journal of Atmos. Oceanic Technol.,* 28, 1504-1521, doi:10.1175/JTECH-D-11-00058.1.

(51) **Perez, R. C.**, M. F. Cronin, and W. S. Kessler, 2010: Tropical cells and a secondary circulation near the northern front of the equatorial Pacific cold tongue. *J. Phys. Oceanogr.,* 40, 2091-2106, doi:10.1175/2010JPO4366.1.

(52) **Perez, R. C.**, and W. S. Kessler, 2009: The three-dimensional structure of tropical cells in the central equatorial Pacific ocean. *J. Phys. Oceanogr.,* 39(1), 27-49,doi:10.1175/2008JPO4029.1.

(53) **Perez, R. C.**, D. B. Chelton, and R. N. Miller, 2005: The effects of wind forcing and background mean currents on the latitudinal structure of equatorial Rossby waves. *J. Phys. Oceanogr.,* 35(5), 666-682, doi:10.1175/JPO2714.1.

PUBLICATIONS (NON-PEER-REVIEWED)

(1) **Perez, R. C.**, S. Garzoli, R. Hummels, and I. Ansorge, 2022: Inclusive science in the South Atlantic. *Commun. Earth Environ.,* 4, 10, doi:10.1038/s43247-022-00644-x.

(2) Berx, B., D. Volkov, J. Baehr, M.O. Baringer, P. Brandt, K. Burmeister, S. Cunningham, M.F. de Jong, L. de Steur, S. Dong, E. Frajka-Williams, G.J. Goni, N.P. Holliday, R. Hummels, R.

Ingvaldsen, K. Jochumsen, W. Johns, S. Jónsson, J. Karstensen, D. Kieke, R. Krishfield, M. Lankhorst, K.M.H. Larsen, I. Le Bras, C.M. Lee, F. Li, S. Lozier, A. Macrander, G. McCarthy, C. Mertens, B. Moat, M. Moritz, **R. Perez**, I. Polyakov, A. Proshutinsky, B. Rabe, M. Rhein, C. Schmid, Ø. Skagseth, D.A. Smeed, M.-L. Timmermans, W.-J. von Appen, B. Williams, R. Woodgate, and I. Yashayaev. 2021. Climate-relevant ocean transport measurements in the Atlantic and Arctic Oceans. Pp. 10–11 in Frontiers in Ocean Observing: Documenting Ecosystems, Understanding Environmental Changes, Forecasting Hazards. E.S. Kappel, S.K. Juniper, S. Seeyave, E. Smith, and M. Visbeck, eds, *A Supplement to Oceanography 34(4)*, https://doi.org/10.5670/oceanog.2021.supplement.02-04.

(3) **Perez, R.,** M. Srokosz, and G. Danabasoglu, 2019: Atlantic overturning circulation questions abound, *Eos, 100,* https://doi.org/10.1029/2019EO114603.

(4) Danabasoglu, G., M. F. de Jong, A. Karspeck, M. Lankhorst, M. Patterson, **R. Perez**, A. Schmittner, W. Weijer, S. Yeager, and R. Zhang, 2016: 2016 US AMOC Science Team Report on Progress and Priorities. A US CLIVAR Report, *Report 2016-4*, 178pp., doi:10.5072/FK2125WB5P.

(5) Danabasoglu, G., R. Curry, A. Karspeck, C. Meinen, R. Msadek, M. Patterson, **R. Perez**, A. Schmittner, L. Thompson, and S. Yeager, 2015: 2014 US AMOC Science Team Annual Report on Progress and Priorities. *Report 2015-1*, US CLIVAR Project Office, 165 pp.

(6) **Perez, R. C.**, 2014: Autobiographical sketches of women in oceanography. *Oceanography Supplement*, 27(7), 186.

(7) Ansorge, I. J., M. O. Baringer, E. J. D. Campos, S. Dong, R. A. Fine, S. L. Garzoli, C. S. Meinen, **R. C. Perez**, A. R. Piola, M. J. Roberts, S. Speich, J. Sprintall, T. Terre, M. A. Van de Berg, 2014: Basin-wide oceanographic array bridges the South Atlantic. *EOS*, 95, 53-54, doi: 10.1002/2014EO060001.

(8) Garzoli, S., P. Abrahamsen, I. Ansorge, A. Biastoch, E. Campos, M. Mata, C. Meinen, J. Pelegri, **R. Perez**, A. Piola, C. Reason, M. Roberts, S. Speich, J. Sprintall, R. Watts, and all of the SAMOC IV participants, 2012. South Atlantic Meridional Overturning Circulation (SAMOC) – Fourth Workshop. *CLIVAR Exchanges*, No. 58 pp. 2-4.

(9) Thompson, L., **R. C. Perez**, and A. E. Shevenell, 2011: Closed ranks in oceanography. *Nature Geoscience*, doi:10.1038/ngeo1113.

(10) Thompson, L., **R. C. Perez**, and A. E. Shevenell, 2011: Reply to "Not just family matters". *Nature Geoscience*, doi:10.1038/ngeo1165.

(11) **Perez**, R. C., 2006: Numerical and assimilative studies of the equatorial Pacific cold tongue. Ph. D. Dissertation, Oregon State University, Corvallis, Oregon.

(12) Mooers, C.N.K. and **R.C. Perez**. 1999: Evaluation of the DYNALYSIS Gulf of Mexico Princeton ocean model's skill in simulating the Louisiana-Texas shelf circulation during the LATEX field program (April 1992 to March 1994). (Section 8 of DYNALYSIS Final Technical Report). OCS Study. U.S. Department of the Interior, Minerals Management Service, Gulf of Mexico OCS Region, New Orleans, La.

(13) **Perez, R. C.**, 1998: Evaluation of the DYNALYSIS Gulf of Mexico Princeton ocean model's skill in simulating the Louisiana-Texas shelf circulation during the LATEX field program (April 1992 to March 1994). University of Miami technical report, No. RSMAS98-004.

SELECTED PRESENTATIONS (LAST THREE YEARS)

Fall AGU Meeting (December 2024)

"Observed Interannual Variations of the Atlantic Meridional Overturning Circulation and the Deep Western Boundary Current along 34.5S" (given by coauthor, F. Philip Tuchen)

PhOD retreat (July 2024)

"PhOD 101"

10th SAMOC Logistics Workshop (May 2024)

"SAMBA-West update"

Florida LambdaRail (May 2024)

"Welcome to AOML"

OceanSites Meeting (November 2023)

"South Atlantic Meridional overturning circulation Basin-wide Array (SAMBA) at 34.5S"

SAMOC lightning talk (July 2023)

"South Atlantic Meridional Overturning Circulation"

AMOC webinar (June 2023)

"Recent Observational Advances from the South Atlantic Meridional Overturning Circulation (SAMOC) initiative at 34.5S"

ORTA Meeting (April 2023)

"Ocean Observing Platforms used for Hurricane Research and Improving Forecasts"

TRIATLAS/PIRATA-25 Meeting (October 2022)

"Recent Observational Advances from the South Atlantic Meridional Overturning Circulation (SAMOC) initiative at 34.5S"

AOML Interview (June 2022)

"Energetic Flows in the Tropical and South Atlantic Oceans"

GOOS/UN Decade Co-Design conference (June 2022)

"Tropical Atlantic Observing System (TAOS) Review" (invited talk)

All-Atlantic Ocean Research Alliance Forum (May 2022)

"South Atlantic Meridional overturning circulation Basin-wide Array (SAMBA) at 34.5S"

USAMOC Science Team Meeting (April 2022)

"Recent observational advances from the South Atlantic Meridional overturning circulation Basin-wide Array (SAMBA) at 34.5S"

"10-year time series of Deep Western Boundary Current Volume Transport at 34.5S"

NOAA/AOML/PhOD Seminar (March 2022)

"Deep Western Boundary Current Volume Transport at 34.5S"

American Geophysical Union Ocean Sciences Meeting (March 2022)

"Deep Western Boundary Current Volume Transport at 34.5S"

AWARDS

2024	NOAA Bronze Medal (NOAA Ambassadors Program)
2020	NOAA OAR EEO/Diversity Award for Exemplary Service
2014	NOAA/AOML/PhOD Outreach Award
2006	Selected to attend Physical Oceanography Dissertation Symposium (Honolulu, HI)
2005	National Research Council Postdoctoral Fellow
2003	Wayne Burt Excellence in Physical Oceanography Award (Oregon State University)
1995	Distinguished Undergraduate in Mathematics (University of Miami)
1995	Distinguished Undergraduate in Physics (University of Miami)
1994	NSF Incentives for Excellence Scholarship (University of Miami)
1994	Phi Beta Kappa Honor Society (University of Miami)

1993 Golden Key National Honor Society (University of Miami)

PROFESSIONAL SERVICE ACTIVITIES (LAST THREE YEARS AND CURRENT ACTIVITIES)

2024 Organized PhOD divisional retreat (July 2024; Miami, FL)
2024 AMS Summer Policy Colloquium (Washington, DC)
2024 Co-Organized 10th SAMOC Logistics Meeting
2023 Lead US Delegate at the Seventeenth Intergovernmental Session of the IOC Sub-commission for the Caribbean and Adjacent Regions (SC-IOCARIBE-XVII)
2022-pres. PIRATA SSG Member
2022-pres. AtlantOS Steering Committee Member
2021-pres. Elected to Latinos@NOAA Executive Board
2020-pres. Member of U.S. National Academy of Sciences Geodesy and Geophysics panel
2020-pres. Member of SAMOC Executive Committee
2008-pres. Reviewer for the following journals: BAMS, Biogeosciences, Climate Dynamics, Communications Earth and Environment, Deep Sea Research, Dynamics of Atmospheres and Oceans, Geophysical Research Letters, Journal of Climate, Journal of Geophysical Research, Journal of Physical Oceanography, Ocean Dynamics, Ocean Modelling, Ocean Science, Philosophical Transactions of the Royal Society; and, funding agencies: the National Science Foundation, the Brazilian funding agency FAPESP, and the South African funding agency NRF.

MENTORING AND OUTREACH ACTIVITIES (LAST THREE YEARS)

2025 CIMAS Mentor
2024 Presentation at MAST Academy on how ocean currents can influence weather, climate, sea-level and Sargassum (November 2024)
2024 Interview with a Communications & Legislative Affairs Specialist (Contractor) for the NOAA Climate Program Office regarding an article on AMOC and the Gulf Stream (November 2024)
2024 Presentation for the Hispanic Heritage Month Buen Provecho event (October 2024)
2024 Mentoring interviews with two early career researchers (October 2024)
2024 Participated in the Letters to a Pre-Scientist program
2024 Participated in AOML's Bring Your Child to Work day (April 2024)
2024 Participated in Miami Children's Museum earth day activities (April 2024)
2024 Interview for Italian news story by Resource Solutions International entitled "What's Happening with the Atlantic Meridional Overturning Circulation"
2024 Participated in the Letters to a Pre-Scientist program
2023 Gave one Skype a Scientist Talk (August 2023)
2023 Density demonstrations for the Thompson Earth Systems Institute-Scientist in Every Florida School teacher training event (June 2023)
2023 Gave one interview to Live Science (June 2023)
2023 Panelist during NWS Mentoring ERG Forum (May 2023)
2023 Density demonstrations during your child to work day (April 2023)
2023 Gave a tour of the engineering space to Wall Street Journal Podcast (March 2023)
2023 Gave a career presentation for Girl Scouts of Tropical Florida's Women in STEM virtual series (February 2023)

2022 Co-mentored two Ph.D. students from the Canary Islands, V. Cainzos and C. Arumi (September-November 2022)
2022 Gave 1 Scientist in Every Florida School Talk (November 2022)
2022 Organized a PIES telemetry training session for five visitors from Spain (October 2022)
2022 Attended the SACNAS conference (October 2022)
2022 Mentored a NOAA William M. Lapenta Scholar, C. Hank Dolce (June-August 2022)
2022 Latinos@NOAA Summer Presentation @ CUNY (July 2022)
2022 BIMS Density Demonstration (May 2022)
2022 Guest speaker presentation for AOML's Outreach & Education webpage (April 2022)
2022 MPOWIR Mentor Group Co-leader
2022 AOML Mentor/Ambassador to Jasmin John
2022 NOAA Ambassador
2022 Gave 2 Skype-A-Scientist Talks (March 2022)

POSTDOCTORAL RESEARCHER MENTORED
Dr. Franz Philip Tuchen (2022-pres.)
Dr. Soumi Charkravorty (2017-2021)
Dr. Marion Kersalé (2017-2020)

DOCTORAL COMMITTEE
Dr. Veronica Cainzos Diaz (2023)

CRUISE LEADERSHIP
2024 *Chief Scientist,* PIRATA Northeast Extension Cruise (NOAA Gordon Gunter)
2021 *Chief Scientist,* PIRATA Northeast Extension Cruise (NOAA Ronald H. Brown)
2019 *Chief Scientist,* PIRATA Northeast Extension Cruise (NOAA Ronald H. Brown)
2017 *Chief Scientist,* PIRATA Northeast Extension Cruise (NOAA Ronald H. Brown)
2013 *Co-chief Scientist,* PIRATA Northeast Extension Cruise (NOAA Ship Ronald H. Brown)
2012 *Shadow Co-Chief Scientist,* Fall Western Boundary Time Series Cruise (R/V Endeavor)

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Researcher ID: 20 (1538 citations), Google Scholar: 24 (1959 citations)