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Education

Ph.D. in Applied Marine Physics/Ocean Engineering, May 1991.
The University of Miami, Coral Gables, FL, USA.
Dissertation title: *Ray and wave chaos in underwater acoustics.*

M.S. in Acoustics, January 1986.
The Pennsylvania State University, State College, PA, USA.
Thesis title: *Effect of the Biot's slow compressional wave on the normal mode attenuation coefficient for shallow water sound propagation.*

B.S (Lic). in Physical Oceanography/Ocean Engineering, May 1982.
Buenos Aires Institute of Technology (Instituto Tecnológico de Buenos Aires).

Experience

Oceanographer, November 1997 – Present
Physical Oceanography Division Director, May 2009 – Present
United States Department of Commerce, National Oceanic and Atmospheric Administration,
Atlantic Oceanographic and Meteorological Laboratory, Miami, FL, USA.

Adjunct Associate Professor. June 1999 – Present.
The University of Miami, Rosenstiel School of Marine and Atmospheric Science, Coral Gables,
FL, USA.

Senior Research Associate. June 1991 - October 1997.
The University of Miami, Rosenstiel School of Marine and Atmospheric Science, Coral Gables,
FL, USA.

Research Assistant, August 1981 - August 1983.
Naval Hydrographic Service, Buenos Aires, Argentina.

Editorial

Journal of Atmospheric and Oceanic Technology, Editor, 2015- present

Interhemispheric Water Exchange in the Atlantic Ocean, Elsevier Oceanographic Series. **68**, G. Goni and P. Malanotte-Rizzoli, Editors, Elsevier Science, 2003.

Panels

- XBT Science Team, co-chairperson
- Climate Societal Benefit Area (SBA), for the second Earth Observation Assessment (EOA), member
- IQUOD (International Quality controlled Ocean Database), steering team and historical XBT data working group, member
- WMO-IOC (World Meteorological Organization, Intergovernmental Oceanographic Commission) Ship Of Opportunity Program, vice-chairman
- NASA Ocean Surface Topography Science Team, member
- NASA Aquarius – SPURS II, team member
- U.S CLIVAR (Climate Variability and Predictability) Atlantic Meridional Overturning Circulation Science Team Panel, member
- WMO Global Temperature Salinity Profile Program (GTSP), steering team member
- CIMAS Fellow
- US-Brazil and US-Argentina JCM Ocean Sciences Panels, chairperson
- GOSUD (Global Ocean Surface Underway Data) Steering Team, member

Student Committees

Carlos Fonseca, MS, University of Sao Paulo, 1998.

Carlos Lentini, PhD, University of Miami, 2001.

Sebastian Swart, PhD, University of Cape Town, 2009.

Christopher Jacobs, MS, University of Cape Town, 2014.

Yan Wang, PHD, University of Miami, 2015.

Publications

H-Index: 22

Domingues, R., M. Baringer, and G. Goni, 2016: Remote sources for year-to-year changes in the seasonality of the Florida Current transport. J. Geophys. Res. -Oceans, accepted.

Cheng, L., J. Abraham, G. Goni, T. Boyer, S. Wijffels, R. Cowley, V. Gouretski, F. Reseghetti, S. Kizu, S. Dong, F. Bringas, M. Goes, Loïc Houpert, Janet Sprintall, Jiang Zhu, 2015: XBT Science: Assessment of instrumental biases and errors. *Bull. Amer. Meteor. Soc.* (BAMS), 97(6):924-933 (doi:10.1175/BAMS-D-15-00031.1). [\[pdf\]](#)

Domingues, R., G. Goni, F. Bringas, B. Muhling, D. Lindo-Atichati, and J. Walter. Variability of preferred environmental conditions for Atlantic bluefin tuna (*Thunnus thynnus*) larvae in the Gulf of Mexico during 1993-2011. *Fisheries Oceanography*, 25(3):320-336 (doi:10.1111/fog.12152). [\[pdf\]](#)

Goni, G.J., J.A. Knaff, and I.-I. Lin. Tropical cyclone heat potential. In *State of the Climate in 2015*, J. Blunden and D.S. Arndt (eds.). *Bulletin of the American Meteorological Society*, 97(8):S120-S123 (2016). [\[pdf\]](#)

Lima, M.O., M. Cirano, M.M. Mata, M. Goes, G. Goni, and M. Baringer. An assessment of the Brazil Current baroclinic structure and variability near 22°S in distinct ocean forecasting and analysis systems. *Ocean Dynamics*, 66(6):893-916 (doi:10.1007/s10236-016-0959-6). [\[pdf\]](#)

Lopez, H., S. Dong, S.-K. Lee, and G. Goni. The role of the South Atlantic Meridional Overturning Circulation variability on modulating interhemispheric atmospheric circulation and monsoons. *Journal of Climate*, 29(5):1831 - 1851, (doi:10.1175/JCLI-D-15-0491.1). [\[pdf\]](#)

Lumpkin, R., G. Goni, and K. Dohan. Surface currents. In *State of the Climate in 2015*, J. Blunden and D.S. Arndt (eds.). *Bulletin of the American Meteorological Society*, 97(8):S82-S84 (2016). [\[pdf\]](#)

Ali, M.M., P.V. Nagamani, N. Sharma, R.T. Venu Gopal, M. Rajeevan, G.J. Goni and M. A. Bourassa, 2015: Relationship between ocean mean temperatures and Indian summer monsoon rainfall. *Atmos. Sci. Lett.* 16(3):408-413, DOI: 10.1002/asl2.576. [\[pdf\]](#)

Bringas, F., and G. Goni, 2015: Early dynamics of deep blue XBT probes. *J. Atmos. Ocean. Technol.*, 32(12):2253-2263 (doi:10.1175/JTECH-D-15-0048.1). [\[pdf\]](#)

Dohan, K., G. Goni, and R. Lumpkin, 2015: Global oceans: Surface currents. In *State of the Climate in 2014*, J. Blunden and D.S. Arndt (eds.). *Bull. Amer. Meteor. Soc.*, 96(7):S76-S78. [\[pdf\]](#)

Domingues, R., G. Goni, F. Bringas, S.-K. Lee, H-S Kim, G. Halliwell, J. Dong, J. Morell, and L. Pomales. 2015: Upper ocean response to Hurricane Gonzalo (2014): Salinity effects revealed by sustained and targeted observations from underwater gliders. *Geophys. Res. Lett.*, 42(17):7131-7138, (doi:10.1002/2015GL065378). [\[pdf\]](#)

Dong, S., G. Goni, and F. Bringas, 2015: Temporal variability of the Meridional Overturning Circulation in the South Atlantic between 20S and 35S. *Geophys. Res. Lett.* 42, 7655 - 7662, (doi:10.1002/2015GL065603). [\[pdf\]](#)

Dong S., G. Goni, and R. Lumpkin, 2015: Mixed-layer salinity budget in the SPURS (Salinity Processes in the Upper ocean Regional Study) region on seasonal to interannual time scales. *Oceanogr.*, 28(1):28-35, (doi:10.5670/oceanog.2015.05). [\[pdf\]](#)

Goes, M., M. Baringer, and G. Goni, 2015: The impact of historical biases on the XBT-derived meridional overturning circulation estimates at 34°S. *Geophys. Res. Lett.*, 42(6):1848-1855, doi:10.1002/2014GL061802. [\[pdf\]](#)

Goes M., G. Goni, and S. Dong, 2015: An optimal XBT-based monitoring system for the South Atlantic meridional overturning circulation at 34°S. *J. Geophys. Res.*, 120(1):161-181, doi:10.1002/2014JC010202. [\[pdf\]](#)

Goni, G.J., J.A. Knaff, and I.-I. Lin, 2015: Tropical cyclones: Tropical cyclone heat potential. In State of the Climate in 2014, J. Blunden and D.S. Arndt (eds.). *Bull. Amer. Meteor. Soc.*, 96(7):S121-S122. [\[pdf\]](#)

Goni, G., J. Trinanes, A. MacFadyen, D. Streett, M.J. Olascoaga, M.L. Imhoff, F. Muller-Karger, and M.A. Roffer, 2015: Variability of the Deepwater Horizon surface oil spill extent and its relationship to varying ocean currents and extreme weather conditions. In *Mathematical Modelling and Numerical Simulation of Oil Pollution Problems*, pp: 1-22, M. Ehrhardt (ed.), Springer-Verlag, New York, 1-22, (doi:10.1007/978-3-319-16459-5_1). [\[pdf\]](#)

Legler, D., H. J. Freeland, R. Lumpkin, G. Ball, M. J. McPhaden, S. North, R. Cowley, G. Goni, U. Send and M. Merrifield, 2015: The current status of the real-time in situ global ocean observing system for operational oceanography. *J. Oper. Oceanogr.*, 8(S2):s189-s200 (doi:10.1080/1755876X.2015.1049883). [\[pdf\]](#)

Nagamani, P.V., M.M. Ali, G.J. Goni, T.V.S. Udaya Bhaskar, J.P. McCreary, R.A. Weller, M. Rajeevan, V.V. Gopala Krishna, and J.C. Pezzullo, 2015: Heat content of the Arabian Sea mini warm pool is increasing. *Atmos. Sci. Lett.*, 17(1):39-42 (doi:10.1002/asl.596). [\[pdf\]](#)

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. Measuring the Atlantic meridional overturning circulation. *Mar. Tech. Soc. J.*, 49(2):167-177, doi:10.4031/MTSJ.49.2.14. [\[pdf\]](#)

Domingues, R., G. J. Goni, S. Swart, and D. Dong, 2014: Atmospherically forced variability of the Antarctic Circumpolar Current south of Africa between 1993 - 2010, *J. Geophys. Res.* Doi: 10.1016/j.csr.2013.12.009. [\[pdf\]](#)

Ansorge I., M. Baringer, E. Campos, S. Dong, Rana A. Fine, S. Garzoli, G. Goni, C. Meinen, R. Perez, Alberto Piola, Michael Roberts, Sabrina Speich, Janet Sprintall, Thierry Terre, and Marcel Van den Berg, 2014: "Bridging the Atlantic," EOS. [\[pdf\]](#)

Smith, R.H., E.M. Johns, G.J. Goni, J. Trinanes, R. Lumpkin, A.M. Wood, C.R. Kelble, S.R. Cummings, J.T. Lamkin and S. Privoznik, 2014: Oceanographic conditions in the Gulf of Mexico in July 2010, during the Deepwater Horizon oil spill. *Cont. Shelf Res.*, 77, 118-131. [\[pdf\]](#)

Abraham J. P., M. O. Baringer, N.L. Bindoff, T. Boyer, L.J. Cheng, J.A. Church, J.L. Conroy, C.M. Domingues, J.T. Fasullo, J. Gilson, G. Goni, S.A. Good, J. M. Gorman, V. Gouretski, M. Ishii, G.C. Johnson, S. Kizu, J.M. Lyman, A. M. Macdonald, W.J. Minkowycz, S.E. Moffitt, M.D. Palmer, A. Piola, F. Reseghetti, K. Schuckmann, K.E. Trenberth, I. Velicogna, J.K. Willis, 2013: Monitoring systems of global ocean heat content and the implications for climate change, a review. *Rev Geophys*, doi: 10.1002/rog.20022, Volume 51 , Issue 3 , pages 450-483 , 3rd Quarter 2013. [\[pdf\]](#)

Beron-Vera F., J. Olascoaga, G. Haller, G. Goni, and Y. Wang, 2013: Objective detection of oceanic eddies and the Agulhas leakage. *J. Phys. Oceanogr.*, doi:10.1175/JPO-D-12-0171.1. in press. [\[pdf\]](#)

Goes, M., G.J. Goni, and K. Keller, 2013: Reducing Biases in XBT Measurements by Including Discrete Information from Pressure Switches. *J. Atmos. Ocean. Techn.*, in press. doi:10.1175/JTECH-D-12-00126.1. [\[pdf\]](#)

Goes, M., G. J. Goni, V. Hormann, and R. C. Perez, 2013: Variability of eastward currents in the equatorial Atlantic during 1993-2010. *J. Geophys. Res.*, doi:10.1002/jgrc.20186, in press. [\[pdf\]](#)

Lindo-Atichati, D. F. Bringas, and G. Goni, 2013: Loop Current excursion and ring detachments during 1993-2009. *Int. J. Rem. Sens.*, 34(14):5042-5053 doi:10.1080/01431161.2013.787504. [\[pdf\]](#)

Goni, J.G., J.A. Knaff, and I-I Lin, 2012: State of the Ocean in 2011: Tropical cyclone heat potential. Blunden, J., D. S. Arndt (eds.), *Bull. Am. Met. Soc.*, 93(7):S114-S116. [\[pdf\]](#)

Lin, I.-I., G.J. Goni, J.A. Knaff, C. Forbes and M. M. Ali, 2012: Ocean heat content for tropical cyclone intensity forecasting and its impact on storm surge. *Nat. Hazards*, 66(3):1481-1500, doi:10.1007/s11069-012-0214-5 [\[pdf\]](#)

Lindo-Atichati, D., F. Bringas, G.J. Goni, B. Muhling, F.E. Muller-Karger and S. Habtes, 2012: Varying mesoscale structures influence larval fish distribution in the northern Gulf of Mexico [\[pdf\]](#)

Lumpkin R., G. Goni and K. Dohan, 2012: State of the Ocean in 2011: Surface Currents. In "State of the Climate in 2011", M. Gregg and J. Levy (eds), *Bull. Am. Met. Soc.*, 93(7):S75-S78. [\[pdf\]](#)

Mata M.M., M. Cirano, M.R. van Caspe, C.S. Fonteles, G. Goni, and M. Baringer, 2012: Observations of Brazil Current baroclinic transport near 22°S: variability from the AX97 XBT transect. *CLIVAR Exchanges* 58(17):5-10. [\[pdf\]](#)

Nagamani, P.V., M.M. Ali, G.J. Goni, P.N. DiNezio, J.C. Pezzullo, T.V.S. Udaya Bhaskar, V.V. Gopalakrishna, and N. Kurian, 2012: Validation of Satellite-Derived Tropical Cyclone Heat Potential With In situ Observations in the North Indian Ocean. *Remote Sens. Lett.*, 3(7):615-620, doi:10.1080/01431161.2011.640959. [\[pdf\]](#)

Di Nezio, P.N., and G. Goni, 2011: Direct Evidence of Changes in the XBT Fall-rate Bias During 1986-2008. *J. Atmos. Ocean. Techn.*, 28(11), 1569-1578, doi:10.1175/JTECH-D-11-00017.1. [\[pdf\]](#)

Dong, S., M. Baringer, G. Goni, and S. Garzoli, 2011: Importance of the assimilation of Argo Float Measurements on the Meridional Overturning Circulation in the South Atlantic. *Geophys. Res. Lett.*, 38, L18603, doi:10.1029/2011GL048982. [\[pdf\]](#)

Goni, G.J., F. Bringas, and P.N. Di Nezio, 2011: Observed Low Frequency Variability of the Brazil Current Front. *J. Geophys. Res.*, 116, C10037, doi:10.1029/2011JC007198 [\[pdf\]](#)

Goni, G.J., J.A. Knaff, and I.-I. Lin, 2011: Tropical Cyclone Heat Potential. In "State of the Climate in 2010", J. Blunden, D. S. Arndt, M. O. Baringer (eds.). *Bull. Am. Met. Soc.*, 92(6):S132-S134. [\[pdf\]](#)

Lumpkin R., G. Goni and K. Dohan, 2011: State of the Ocean in 2010: Surface Currents. In "State of the Climate in 2010", *Bull. Am. Met. Soc.*, 92(6):S92-S95. [\[pdf\]](#)

Beron-Vera, F., M. Olascoaga, and G. Goni, 2010: Surface ocean mixing inferred from different multisatellite altimetry measurements. *J. Phys. Oceanogr.*, 40:2466-2480. [\[pdf\]](#)

Di Nezio, P.N., and G. Goni, 2010: Identifying and Estimating Biases between XBT and Argo Observations Using Satellite Altimetry. *J. Atmos. Ocean. Techn.*, 27(1):226-240. [\[pdf\]](#)

Goni, G.J., J.A. Knaff, and I.-I. Lin, 2010: TC heat potential. In "State of the Climate in 2009", D.S. Arndt, M.O. Baringer, and M.R. Johnson (eds.). *Bull. Am. Met. Soc.*, 91(6):99-100. [\[pdf\]](#)

Goni G.J., D. Roemmich, R. Molinari, G. Meyers, C. Sun, T. Boyer, M. Baringer, V. Gouretski, P. DiNezio, F. Reseghetti, G. Vissa, S. Swart, R. Keeley, S. Garzoli, T. Rossby, C. Maes, and G. Reverdin, 2010: The Ship Of Opportunity Program. In Proceedings of the "OceanObs'09: Sustained Ocean Observations and Information for Society" Conference (Vol. 2), Venice, Italy, 21-25 September 2009, Hall, J., Harrison D.E. and Stammer, D., Eds., ESA Publication WPP-306. [\[pdf\]](#)

Lumpkin R., G. Goni, and K. Dohan, 2010: State of the Ocean in 2009: Surface Currents. In "State of the Climate in 2009", *Bull. Am. Met. Soc.*, 91(6):65-66. [\[pdf\]](#)

Roemmich D., L. Boehme, H. Claustre, H. Freeland, M. Fukasawa, G. Goni, W.J. Gould, N. Gruber, M. Hood, E. Kent, R. Lumpkin, S. Smith, and P. Testor, 2010: Integrating the Ocean Observing System: Mobile Platforms. In Proceedings of the "OceanObs'09: Sustained Ocean Observations and Information for Society" Conference (Vol. 2), Venice, Italy, 21-25 September 2009, Hall, J., Harrison D.E. and Stammer, D., Eds., ESA Publication WPP-306. [\[pdf\]](#)

Smith, S.R., M. Bourassa, F. Bradley, C. Cosca, C. Fairall, G. Goni, J. Gunn, M. Hood, D. Jackson, E.C. Kent, G. Lagerloef, P. McGillivray, L. Petit de la Villeon, , R. Pinker, E. Schulz, J. Sprintall, D. Stammer, A. Weill, G. Wick, and M. Yelland, 2010: Automated Underway Oceanic and

Atmospheric Measurements from Ships Shawn R. Smith. In Proceedings of the "OceanObs'09: Sustained Ocean Observations and Information for Society" Conference (Vol. 2), Venice, Italy, 21-25 September 2009, Hall, J., Harrison D.E. and Stammer, D., Eds., ESA Publication WPP-306. [\[pdf\]](#)

Sun, C., A. Thresher, R. Keeley, N. Hall, M. Hamilton, P. Chinn, A. Tran, G. Goni, L. Petit de la Villeon, T. Carval, L. Cowen, G. Manzella, V. Gopalakrishna, R. Guerrero, F. Reseghetti, Y. Kanno, B. Klein, L. Rickards, A. Baldoni, S. Lin, F. Ji, and Y. Nagaya, 2010: The Data Management System for the Global Temperature and Salinity Profile Programme. In Proceedings of the "Ocean'09: Sustained Ocean Observations and Information for Society" Conference (Vol. 2), Venice, Italy, 21-25 September 2009, Hall, J., Harrison D.E. and Stammer, D., Eds., ESA Publication WPP-306. [\[pdf\]](#)

Clark, C., D.E. Harrison, M. Johnson, G. Ball, H. Freeland, G.J. Goni, M. Hood, M. McPhaden, D. Meldrum, M. Merrifield, D. Roemmich, C. Sabine, U. Send, R. Weller, S. Wilson, J. Benveniste, H. Bonekamp, C. Donlon, M. Drinkwater, J.-L. Fellous, B.S. Gohil, G. Jacobs, P.-Y. Le Traon, E. Lindstrom, L. Mingsen, K. Nakagawa, and F. Parisot, 2009: An overview of the global observing systems relevant to GODAE. *Oceanogr.*, 22(3):22-33. [\[pdf\]](#)

Dong, S. S. L. Garzoli, M. O. Baringer, C. S. Meinen, and G. J. Goni, 2009: Interannual variations in the Atlantic meridional overturning circulation and its relationship with the net northward heat transport in the South Atlantic [\[pdf\]](#)

Goni G. J. and J. Knaff, 2009: Tropical Cyclone Heat Potential. *Bull. Am. Met. Soc.*, 90:S54-S56. [\[pdf\]](#)

Goni G. J., M. DeMaria, J. Knaff, C. Sampson, I. Ginis, F. Bringas, A. Mavume, C. Lauer, I-I Lin, M. M. Ali, Paul Sandery, S. Ramos-Buarque, K. Kang, A. Mehra, E. Chassignet, and G. Halliwell, 2009: Applications of satellite-derived ocean measurements to tropical cyclone intensity forecasting. *Oceanogr.*, 22(3):176-183 [\[pdf\]](#)

Johnson G. C., J. M. Lyman, J. K. Willis, S. Levitus, T. Boyer, J. Antonov, C. Schmid and G. J. Goni, 2009: Ocean Heat Content. *Bull. Am. Met. Soc.*, S49-S54. [\[pdf\]](#)

Lumpkin R., G. Goni, and K. Dohan, 2009: State of the Ocean in 2008: Surface Currents. In "State of the Climate in 2008", T. Peterson and M. Baringer (eds), *Bull. Am. Met. Soc.*, 90:S12-S15. [\[pdf\]](#)

Beron-Vera, F.J., M.J. Olascoaga, and G.J. Goni, 2008: Oceanic mesoscale eddies as revealed by Lagrangian coherent structures. *Geophys. Res. Lett.*, 35(8):L12603, doi:10.1029/2008GL033957. [\[pdf\]](#)

Goni, G.J., 2009: Tropical cyclone heat potential. In State of the Climate in 2007, D.H. Levinson and J.H. Lawrimore (eds.). *Bull. Am. Met. Soc.*, 88(7):S43-S45. [\[pdf\]](#)
Lumpkin, R., and G.J. Goni, 2008: Surface current observations. In State of the Climate in 2007, D.H. Levinson and J.H. Lawrimore (eds.). *Bull. Am. Met. Soc.*, 88(7):S47-S49 [\[pdf\]](#)

Mainelli, M., M. DeMaria, L. Shay, and G. Goni, 2008. Application of oceanic heat content estimation to operational forecasting of recent Atlantic category 5 hurricanes. *Weather Forecast.*, 23(1):3-16. [\[pdf\]](#)

Swart, S., S. Speich, I.J. Ansorge, G.J. Goni, S. Gladyshev, and J.R.E. Lutjeharms, 2008: Transport and variability of the Antarctic Circumpolar Current south of Africa. *J. Geophys. Res.*, 113(C9):C09014, doi:10.1029/2007JC004223. [\[pdf\]](#)

Lumpkin, R., and G.J. Goni, 2007: Global oceans: Surface current observations. In *State of the Climate in 2006*, A. Arguez, A.M. Waple, and A.M. Sanchez-Lugo (eds.). *Bull. Am. Met. Soc.*, 88(6):S36-S37. [\[pdf\]](#)

Lentini C., G.J. Goni and D. Olson, 2006: Investigation of Brazil Current rings in the confluence region. *J. Geophys. Res.*, 111(C6):C06013, doi:10.1029/2005JC002988. [\[pdf\]](#)

Lumpkin, R., and G.J. Goni, 2006: Global oceans: Surface currents. In *State of the Climate in 2005*. K.A. Shein, A.M. Waple, H.J. Diamond, and J.M. Levy (eds.). *Bull. Am. Met. Soc.*, 87(6):S25-S26. [\[pdf\]](#)

Ansorge I., S. Speich, J. Lutjeharms, G. Goni, C. Rautenback, P. Froneman and S. Garzoli, 2005: Monitoring the oceanic flow between Africa and Antarctica: Report of the first Good Hope cruise. *South African. J. Sci.*, 101(3-4):29-35. [\[pdf\]](#)

Fonseca, C., G.J. Goni, W. Johns, and E. Campos, 2004: Investigation of the North Brazil Current retroflection and North Equatorial Countercurrent variability. *Geophys. Res. Lett.*, 31(21):L21304, doi:10.1029/2004GL020054 [\[pdf\]](#)

Franca, C., I. Wainer, A.R. de Mesquita, and G.J. Goni, 2003: Planetary equatorial trapped waves in the Atlantic Ocean from TOPEX/Poseidon altimetry. In: *Interhemispheric Water Exchange in the Atlantic Ocean*, G.J. Goni and P. Malanotte-Rizzoli (eds.). *EOS*, 68 (ISBN 0444512675), 213-232. [\[pdf\]](#)

Garraffo, Z.D., W.E. Johns, E.P. Chassignet, and G.J. Goni, 2003: North Brazil Current rings and transport of southern waters in a high resolution numerical simulation of the North Atlantic. In: *Interhemispheric Water Exchange in the Atlantic Ocean*, G.J. Goni and P. Malanotte-Rizzoli (eds.). *EOS*, 68 (ISBN 0444512675), 375-409. [\[pdf\]](#)

Goni, G.J., and J.A. Trinanes, 2003: Ocean thermal structure monitoring could aid in the intensity forecast of tropical cyclones. *EOS, Transactions, AGU*, 84(51):573-578 (2003). [\[pdf\]](#)

Goni, G.J., P. Black and J. Trinanes, 2003: Using satellite altimetry to identify regions of hurricane intensification, *AVISO Newsletter*, May 2003. [\[pdf\]](#)

Goni, G.J., and W.E. Johns, 2003: Synoptic study of warm rings in the North Brazil Current retroflection region using satellite altimetry. In: *Interhemispheric Water Exchange in the*

Atlantic Ocean, G.J. Goni and P. Malanotte-Rizzoli (eds.). EOS, 68 (ISBN 0444512675), 335-356. [\[pdf\]](#)

Johns, W.E., R.J. Zantopp, and G.J. Goni, 2003: Cross-gyre transport by North Brazil Current rings. In: Interhemispheric Water Exchange in the Atlantic Ocean, G.J. Goni and P. Malanotte-Rizzoli (eds.). EOS, 68 (ISBN 0444512675), 411-441. [\[pdf\]](#)

Mayer, D.A., M.O. Baringer, and G.J. Goni, 2003: Comparison of hydrographic and altimeter based estimates of sea level height variability in the Atlantic Ocean. In: Interhemispheric Water Exchange in the Atlantic Ocean, G.J. Goni and P. Malanotte-Rizzoli (eds.). EOS, 68 (ISBN 0444512675), 23-48. [\[pdf\]](#)

Molinari, R., R. Lusic, S. Garzoli, M. Baringer and G.J. Goni, 2003: Benchmarks for Atlantic Ocean Circulation, CLIVAR Exchanges, Number 25, Vol7, No.3-4, 2003. [\[pdf\]](#)

Trinanes, J.A., and G.J. Goni, 2003: A web application to distribute and visualize altimeter-related products, AVISO Newsletter, May 2003. [\[pdf\]](#)

Goni, G.J., and M.O. Baringer, 2002: Surface currents in the tropical Atlantic across high density XBT line AX08. Geophys. Res. Lett., 9(24):2218 ,doi:10.1029/2002GL015873 [\[pdf\]](#)

Goni, G.J., P. Black, J. Cione and L. Shay, 2002. Use of Satellite Altimetry to Identify Regions of Hurricane Intensification, Remote Sensing for Marine and Coastal Environments, pp.1-4. [\[pdf\]](#)

Goni, G.J. and W.E. Johns, 2001: A Census of North Brazil Current Rings Observed from TOPEX/POSEIDON Altimetry: 1992-1998. Geophys. Res. Lett., 28:1-4. [\[pdf\]](#)

Goni, G.J. and I. Wainer, 2001: Investigation of the Brazil Current front variability from altimeter data. J. Geophys. Res.,106:31117-31128. [\[pdf\]](#)

Mayer, D.A., R.L. Molinari, M.O. Baringer, and G.J. Goni, 2001: Transition regions and their role in the relationship between sea surface height and subsurface temperature structure in the Atlantic Ocean. Geophys. Res. Lett., 28:3943-3946. [\[pdf\]](#)

Sainz-Trapaga S., G. Goni, T. Sugimoto, 2001: Identification of the Kuroshio Extension, its bifurcations and northern branch from altimeter and hydrographic Data During October 1992 - August 1999: Spatial and temporal variability. Geophys. Res. Lett., 28(9):1759-1762. [\[pdf\]](#)

Garzoli, S.L., and G.J. Goni, 2000: Combining altimeter observations and oceanographic data for ocean circulation and climate studies. In Satellites, Oceanography, and Society, D. Halpern (ed.). Elsevier Oceanographic Series, 63 (ISBN 0-444-50501-6),79-95. [\[pdf\]](#)

Kelly, P.S., K.M.M. Lwiza, R.K. Cowen, and G.J. Goni, 2000: Low-salinity pools at Barbados, West Indies: Their origin, frequency, and variability. J. Geophys. Res., 105:19699-19708. [\[pdf\]](#)

Shay, L.K., G.J. Goni, and P.G. Black, 2000: Effects of Warm Oceanic Features on Hurricane Opal. Mon. Weather Rev., 128:131-148. [\[pdf\]](#)

Wainer, I., P. Gent, and G.J. Goni, 2000: Annual cycle of the Brazil-Malvinas confluence region in the National Center for Atmospheric Research climate system model. *J. Geophys. Res.*, 105(C11):26,167-26,177. [\[pdf\]](#)

Garzoli, S.L., P.L. Richardson, C.M. Duncombe Rae, D.M. Fratantoni, G.J. Goni, and A.J. Roubicek, 1999: Three Agulhas rings observed during the Benguela Current Experiment. *J. Geophys. Res.*, 104(C9):20,971-20,986. [\[pdf\]](#)

Shay, L.K., G.J. Goni, F.D. Marks, J.J. Cione and P.G. Black, 1998: Role of Warm Ocean Features on Intensity Change: Hurricane Opal, In Symposium on Tropical Cyclones, American Meteorological Society, 131-138. [\[pdf\]](#)

Garzoli, S.L., G.J. Goni, A.J. Mariano, and D.B. Olson, 1997: Monitoring the upper southeastern Atlantic transports using altimeter data. *Journal of Marine Research*, 55(3): 453-481. [\[pdf\]](#)

Goni, G.J., S.L. Garzoli, A.J. Roubicek, D.B. Olson, and O.B. Brown, 1997: Agulhas ring dynamics from TOPEX/POSEIDON satellite altimeter data. *Journal of Marine Research*, 55(5): 861-883. [\[pdf\]](#)

Goni, G.J., S. Kamholz, S.L. Garzoli, and D.B. Olson, 1996: Dynamics of the Brazil-Malvinas Confluence based on inverted echo sounders and altimetry. *Journal of Geophysical Research*, 101(C7):16,273-16,289. [\[pdf\]](#)

Goni, G.J., G. Podesta, O.B. Brown, and J. Brown, 1995: Mesoscale ocean variability signal recovered from altimeter data in the southwest Atlantic Ocean: A comparison of orbit error correction in three GEOSAT data sets. *Bolm Inst. Oceanogr.*, S. Paulo, 43(2): 101-110. [\[pdf\]](#)

Brown, M.G., F.D. Tappert, and G.J. Goni, 1991: An investigation of sound ray dynamics in the ocean volume using an area preserving mapping. *Wave Motion*, 14(1):93-99. [\[link\]](#)

Brown, M.G., F.D. Tappert, G.J. Goni, K.B. Smith, 1991: Chaos in underwater acoustics. In *Ocean Variability and Acoustic Propagation*, J. Potter and A. Warn-Varnas (eds.). Kluwer Academic Publishers, The Netherlands, 139-160 [\[pdf\]](#)

Tappert, F.D., G.J. Goni, and M.G. Brown, 1991: Weak chaos in an area-preserving mapping for sound ray propagation. *Physics Letters A*, 153(4-5):181-185. [\[link\]](#)

Blanc, S., G. Goni, and J. Novarini, 1983: Surface Mixed Layer Temperature and Layer Depth in Water Off the Argentinian Coast, *J. Geophys. Res.*, 88(C10), 5987-5996, doi:10.1029/JC088iC10p05987 [\[pdf\]](#)