

Curriculum Vitae

Name: Luis-Fernando Zamudio-López
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Education: Florida State University, Ph.D., Oceanography, 2001.
CICESE, MS, Oceanography, 1992.
Universidad Autónoma de Baja California, BS, Oceanology, 1987.

Present Position: Associate in Research, Center for Ocean and Atmospheric Prediction Studies (Florida State University) -- Naval Research Laboratory.

Awards and Honors:

Naval Research Laboratory Team Award for the work on global HYCOM transition 2014.

Assistant Secretary of the Navy (Research, Development, and Acquisition (ASN (RD&A)) Dr. Delores M. Etter Top Scientists and Engineers 2013 Award as part of the Global Ocean Forecast System (GOFS) Team.

American Geophysical Union, **Geophysical Research Letters Cover Illustration**, December 2002.

Fullbright, Graduate student scholarship **1995-98**.

Universidad Autónoma de Baja California, **Teaching award** 1994-95.

Centro de Investigación Científica y Educación Superior de Ensenada, **Graduate student scholarship** 1992.

Mexican National Council for Science and Technology, **Graduate student scholarship** 1989-91.

Universidad Autónoma de Baja California, **Undergraduate student scholarship** 1985-87.

Professional Experience

(a) Researcher:

2015-present Associate in Research, Center for Ocean and Atmospheric Prediction Studies (Florida State University) -- Naval Research Laboratory.

2014-2015 Research Faculty II, Center for Ocean and Atmospheric Prediction Studies (Florida State University) -- Naval Research Laboratory.

2011-2013 Associate Scholar Scientist, Center for Ocean and Atmospheric Prediction Studies (Florida State University) -- Naval Research Laboratory.

2007-2011 Assistant Scholar Scientist, Center for Ocean and Atmospheric Prediction Studies (Florida State University) -- Naval Research Laboratory.

2005-2007 Research Associate, Center for Ocean and Atmospheric Prediction Studies (Florida State University) -- Naval Research Laboratory.

2001-2004 Postdoctoral Associate, Center for Ocean and Atmospheric Prediction Studies (Florida State University) -- Naval Research Laboratory.

(b) Graduate Research Assistant:

1995-2001 Center for Ocean and Atmospheric Prediction Studies, Florida State University.

(c) Teaching:

1994-1995 **Head of Mathematics Department**, School of Marine Sciences, Universidad Autónoma de Baja California, Mexico.

1991-1995 **Full time teaching position**, School of Marine Sciences, Universidad Autónoma de Baja California, Mexico.

(d) Refereed Articles:

Allende-Arandia, M.E., J. Zavala-Hidalgo, R. Romero-Centeno, A. Mateos-Jasso, and L. Zamudio (2016), Analysis of ocean current observations in the northern Veracruz Coral Reef System, Mexico: 2007-2012. J. Coastal Res., 32(1), 46-55. Coconut Creek (Florida), ISSN 0749-0208.

- Yu, Z., E. J. Metzger, P. Thoppil, H. E. Hurlburt, L. Zamudio, O. M. Smedstad, H. Na, H. Nakamura, and J. H. Park, (2015), Seasonal cycle of volume transport through Kerama Gap revealed by a 20-year global HYbrid Coordinate Ocean Model reanalysis. *Ocean Modelling*, **96**, <http://dx.doi.org/10.1016/j.ocemod.2015.10.012>.
- Muller, M., B. K. Arbic, J. G. Richman, J. F. Shriver, E. L. Kunze, R. B. Scott, A. J. Wallcraft, and L. Zamudio (2015), Toward an internal gravity wave spectrum in global ocean models. *Geophysical Res. Letters*, **42**, 3474-3481, doi:10.1002/2015GL063365.
- Metzger, E.J., O.M. Smedstad, P.G. Thoppil, H.E. Hurlburt, J.A. Cummings, A.J. Wallcraft, L. Zamudio, D.S. Franklin, P.G. Posey, M.W. Phelps, P.J. Hogan, F.L. Bub, and C.J. DeHaan (2014), US Navy operational global ocean and Arctic ice prediction systems. *Oceanography* 27(3):32–43, <http://dx.doi.org/10.5670/oceanog.2014.66>
- González-Rodríguez, E., A. Trasviña-Castro, G. Gaxiola-Castro, L. Zamudio, and R. Cervantes-Duarte (2012), Net primary productivity, upwelling and coastal currents in the Gulf of Ulloa, Baja California, Mexico. *Ocean Sci.*, 8, 703-711, www.ocean-sci.net/8/703/2012, doi:10.5194/os-8-703-2012.
- Zamudio, L., E. J. Metzger, and P. J. Hogan (2011), Modeling the seasonal and interannual variability of the Northern Gulf of California salinity. *J. Geophys. Res.*, 116, C02017, doi:10.1029/2010JC006631.
- Adams, D. K., D. J. McGillicuddy Jr., L. Zamudio, A. M. Thurnherr, X. Liang, O. Rouxel, C. R. German, L. S. Mullineaux (2011), Surface-generated mesoscale eddies transport deep-sea products from hydrothermal vents. *Science* **332**, 580 (2011); DOI: 10.1126/science.1201066.
- Trasviña, A., K. J. Heywood, A. H. H. Renner, S.E. Thorpe, A. F. Thompson, and L. Zamudio (2011), The impact of high frequency currents on dispersion off the eastern Antarctic Peninsula. *J. Geophys. Res.*, 116, C11024, doi:10.1029/2011JC007003.
- Hurlburt H. E. , E. Joseph Metzger, James G. Richman, Eric P. Chassignet, Yann Drillet, Matthew W. Hecht, Olivier Le Galloudec, Jay F. Shriver, Xiaobiao Xu, and Luis Zamudio (2011), Dynamical evaluation of ocean models using the Gulf Stream as an example. In "Operational Oceanography in the 21st Century", A. Schiller, G. B. Brassington (eds.), 545-609, DOI 10.1007/978-94-007-0332-2_21, Springer Science+Business Media B.V.

- Zamudio, L., E. J. Metzger, and P. J. Hogan (2010), Gulf of California response to Hurricane Juliette. *Ocean Modeling*. doi:10.1016/j.ocemod.2009.11.005, 33, 20-32.
- Zamudio, L., P. J. Hogan, and E. J. Metzger (2008), Summer generation of the Southern Gulf of California eddy train. *J. Geophys. Res.*, 113, C06020, doi:10.1029/2007JC004467.
- Zamudio, L., E. J. Metzger, and P. J. Hogan (2008), A note on coastally trapped waves generated by the wind at the northern Bight of Panama, *Atmósfera*, 21(3), 241-248.
- Zamudio, L., and P. J. Hogan (2008), Nesting the Gulf of Mexico in Atlantic HYCOM: Oceanographic Processes Generated by Hurricane Ivan. *Ocean Modelling*, doi:10.1016/j.ocemod.2007.12.002, 21(3-4), 106-125.
- Zamudio, L., H. E. Hurlburt, E. J. Metzger, and C. Tilburg (2007), Tropical wave-induced oceanic eddies at Cabo Corrientes and the María Islands, Mexico, *J. Geophys. Res.*, 112, C05048, doi:10.1029/2006JC004018.
- Zamudio, L., H. E. Hurlburt, E. J. Metzger, S. L. Morey, J. J. O'Brien, C. Tilburg, and J. Zavala-Hidalgo (2006), Interannual variability of Tehuantepec eddies, *J. Geophys. Res.*, 111, C05001, doi:10.1029/2005JC003182.
- Zavala-Hidalgo, J., S. L. Morey, J. J. O'Brien, and L. Zamudio (2006), On the Loop Current eddy shedding variability, *Atmósfera*, 19 (1), 41-48.
- Palacios-Hernández, E., L. Carrillo, M. F. Lavín, L. Zamudio, and A. García-Sandoval (2006), Hydrography and circulation in the Northern Gulf of California during winter of 1994-1995, *Continental Shelf Research*, 26, 82-103.
- López, M., L. Zamudio, and F. Padilla (2005), Effects of the 1997-1998 El Niño on the exchange of the northern Gulf of California. *J. Geophys. Res.*, 110, C11005, doi:10.1029/2004JC002700.
- Zamudio, L., H. E. Hurlburt, E. J. Metzger, and O. M. Smedstad (2002), On the Evolution of Coastally Trapped Waves Generated by Hurricane Juliette Along the Mexican West Coast, *Geophysical Res. Lett.*, **29(23)**, 2141, doi:10.1029/2002GL014769.
- Zamudio, L., A. P. Leonardi, S. D. Meyers, and J. J. O'Brien (2001), ENSO and Eddies on the Southwest Coast of Mexico, *Geophysical Res. Letters*, **28(1)**, 13-16.
- Bourassa, M. A., L. Zamudio, and J. J. O'Brien (1999), Noninertial flow in NSCAT observations of Tehuantepec winds. *J. Geophys. Res.*, 104, 11,311-11,319.

Zamudio, L. and M. López (1994), On the Effect of the Alongshore Pressure Gradient on Numerical Simulations over the Northern California Continental Shelf. *J. Geophys. Res.*, **99**, 16,117-16,129.

(e) Reports:

Spence, L., L. Zamudio, and G. Jacobs (2015), Verification and Validation Report for Navy Operational Regional Ocean Forecast Models. Part I: Overview. NRL internal report.

Zamudio, L., P. Spence, and G. Jacobs (2015), Verification and Validation Report for Navy Operational Regional Ocean Forecast Models. Part II: Evaluation. NRL internal report.

Metzger, E.J., P.G. Posey, P.G. Thoppil, T.L. Townsend, A.J. Wallcraft, O.M. Smedstad, D.S. Franklin, L. Zamudio, and M.W. Phelps (2014), Validation Test Report for the Global Ocean Forecast System 3.1 – 1/12° HYCOM/NCODA/CICE/ISOP, NRL Report NRL/MR/7320—14-9579.

Zamudio, L., and G. Jacobs (2014), Validation and Verification Report for RIMPAC's Model Evaluation. NRL internal report.

Zamudio, L., J. J. O'Brien, and B. Subrahmanyam (2000), Tracking Coastally Generated Eddies in the East Tropical Pacific. *Research Activities in Atmospheric and Oceanic Modeling*, H. Ritchie, Editor. Report (2000).

Zamudio, L. and M. López (1994), On the Effect of the Alongshore Pressure Gradient on a Coastal Circulation Model over the Continental Shelf. *Geos, Bull. Mexican Geophysical Union*. 11, 17-21. (In Spanish).

Zamudio, L. and M. López (1991), Modelling Wind-Driven Currents over the Continental Shelf. *Geos, Bull. Mexican Geophysical Union*. 11, 14-17. (In Spanish).

Mejía, A., E. Pavía, E. García, J. García, L. Zamudio and S. Reyes (1988), Application of the Hurrell Technique to Eastern Pacific Ocean. Technical Report OC8802, CICESE.

Zamudio, L., and J. Ochoa (1987), Ray Theory Applied to Sediment Dispersion (In Spanish). *Memories of the VII National Oceanologic Congress*, Ensenada, B. C.

(f) Journal referee (2001-present) for:

Journal of Geophysical Research, *Geophysical Research Letters*, *Progress in Oceanography*, *Deep Sea Research*, *Continental Shelf Research*, *Journal of Physical*

Oceanography, Estuarine, Coastal and Shelf Science, Journal of Atmospheric Chemistry and Physics, and Journal of Climate.

(g) Oceanographic Campaign:

Participation aboard “EL PUMA” Oceanography Vessel in the CICESE-8511 Oceanographic Campaign in the Gulf of California.