

Curriculum Vitae

Kandaga Pujiana

NOAA Pacific Marine Environmental Laboratory

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Education

Ph.D. in Ocean and Climate Physics division, Dept. of Earth and Environmental Sciences, Columbia University in the city of New York, 2012.

M.Phil. in Ocean and Climate Physics division, Dept. of Earth and Environmental Sciences, Columbia University in the city of New York, 2011.

M.A. in Ocean and Climate Physics division, Dept. of Earth and Environmental Sciences, Columbia University in the city of New York, 2007.

M.Sc. in Physical Oceanography and Atmospheric Sciences, Bandung Institute of Technology, Indonesia, 2005.

B.Sc. in Physical Oceanography, Bandung Institute of Technology, Indonesia, 2001.

Research Experience

National Research Council Research Associate, NOAA Pacific Marine Environmental Laboratory, March 2017 – present.

Advisor: Dr. Michael J. McPhaden; subject: *Ocean-atmosphere exchanges in the tropical Indian Ocean and their impacts on the maritime continent.*

Research Associate (Postdoc), Oregon State University, September 2013 - November 2016.

Advisor: Dr. James N. Moum; subject: *Role of turbulent fluxes in the Madden-Julian oscillation.*

Postdoctoral Research Scientist, Lamont-Doherty Earth Observatory, October 2012 – August 2013.

Advisor: Dr. Arnold L. Gordon; subject: *The Indonesian throughflow in Makassar Strait on intraseasonal timescales.*

Appointments

Adjunct Associate Research Scientist, Lamont-Doherty Earth Observatory of Columbia University, September 2017-present.

Assistant Professor (on leave), Bandung Institute of Technology-Indonesia, December 2012 – present.

Awards

NRC Research Associateship, November 2016.

Student travel grant, Asia-Oceania Geoscience Society, 2010.

Outstanding student paper award, summer school on geophysical fluid dynamics, Kyoto University Active Geosphere, 2007.

Faculty Fellowship, Columbia University, 2005.

Publications

17. Pujiana, K. McPhaden, M. J, Gordon, A. L, and Napitu, A. M, 2019. Unprecedented response of Indonesian throughflow to anomalous Indo-Pacific climatic forcing in 2016. *Journal of Geophysical Research-Oceans*, 124, doi: 10.1029/2018JC014574.
16. Napitu, A. M., Pujiana, K., and Gordon, A. L, 2019. The Madden-Julian Oscillation's Impact on the Makassar Strait Surface Layer Transport. *Journal of Geophysical Research-Oceans*, 124, doi: 10.1029/2018JC014729.
15. Gordon, A. L., Napitu, A.M., Huber, B. A., Gruenburg, L. K., Pujiana., K., Agustiadi, T., Mbay, N., Setiawan, A., and Kuswardani, A, 2019. Makassar Strait Throughflow Seasonal and Interannual Variability, an Overview. *Journal of Geophysical Research-Oceans*, 124, doi: 10.1029/2018JC014502.
14. Sprintall, J., Gordon, A., Wijffels, S., Feng, M., Hu, S., Koch-Larrouy, A., Phillips, H., Nugroho, D., Napitu, A., Pujiana, K., et al., 2019. Detecting Change in the Indonesian seas. *Frontiers in Marine Science*, 6:257, doi: 10.3389/fmars.2019.00257
13. Pujiana, K. and McPhaden, M. J, 2018. Ocean surface layer response to convectively-coupled Kelvin waves in the eastern equatorial Indian Ocean. *Journal of Geophysical Research-Oceans*, 123(8), 5727 – 5741, doi: 10.1029/2018JC013858.
12. Pujiana, K., Moum, J. N., and Smyth, W. D., 2018. The role of subsurface turbulence in redistributing upper ocean heat, freshwater and momentum in response to the Madden-Julian Oscillation in the equatorial Indian Ocean. *Journal of Physical Oceanography*, 48(1), 197-220, doi: 10.1175/JPO-D-17-0146.1.
11. Moum, J. N., Pujiana, K., Lien, R. C., and Smyth, W., D., 2016. Oceanic Feedback to Pulses of the Madden-Julian Oscillation in the Equatorial Indian Ocean. *Nature Communications*, 7, 13203 EP, doi: 10.1038/ncomms13203.
10. Warner, S., Becherer, J., Pujiana, K., Shroyer, E., Ravichandran, M., and Moum, J. N., 2016. Monsoon Mixing Cycle in the Bay of Bengal: A Year Long Subsurface Mixing Record. *Oceanography* 29(2):158–169, <http://dx.doi.org/10.5670/oceanog.2016.48>.
9. Pujiana, K., Moum, J.N., Smyth, W.D., and Warner, S. J., 2015. Distinguishing Ichthyogenic Turbulence from Geophysical Turbulence. *Journal of Geophysical Research-Oceans*, 120, 3792-3804, doi:10.1002/2014JC010659.
8. Napitu, A. M., Gordon, A. L., and Pujiana, K., 2015. Intraseasonal Sea Surface Temperature Variability across the Indonesian Seas. *Journal of Climate*, 28, 8710-8727, doi: <http://dx.doi.org/10.1175/JCLI-D-14-00758.1>.
7. Sprintall, J., Gordon, A. L., Koch-Larrouy, A., Lee, T., Potemra, J. T., Pujiana, K., and Wijffels, S.E., 2014. The Indonesian seas and their role in the coupled ocean–climate system, *Nature Geoscience*, 7, 487-492. doi:10.1038/ngeo2188.
6. Pujiana, K., Gordon, A. L., and Sprintall, J., 2013. Intraseasonal Kelvin Waves in Makassar Strait. *Journal of Geophysical Research-Oceans*, 118, 2023–2034, doi: 10.1002/jgrc.20069.

5. Pujiana, K. 2012. Makassar Strait Intraseasonal Variability. Columbia University Academic Commons, <http://hdl.handle.net/10022/AC:P:14434>.
4. Pujiana, K., Gordon, A. L., Metzger, E. J., and Ffield, A., 2012. The Makassar Strait Pycnocline at 20-40 days, *Dynamics of Atmospheres and Oceans*, 53-54, 17-35, doi:10.1016/j.dynatmoce.2012.01.001.
3. Napitu, A.M., Pujiana, K., and Priyono, B, 2010. Investigation of the Coastally Trapped Waves at South of the Indonesian Archipelago. *Marine Research Indonesia*. 35, 1-7.
2. Pujiana, K., Gordon, A. L., Sprintall, J., and Susanto, R.D., 2009. Intraseasonal Variability in the Makassar Strait Thermocline, *Journal of Marine Research*, 67, 757-777. doi:10.1357/002224009792006115.
1. Hadi, S., Ningsih, N. S., and Pujiana, K., 2005. A modelling study of wave field characteristics in Java Sea, *Marine Research Indonesia*. 10, 169-176.

Selected Presentations

- Pujiana, K. McPhaden, M. J., Gordon, A. L., and Napitu, A.M., 2018. Unprecedented response of Indonesian throughflow to anomalous Indo-Pacific climatic forcing in 2016. Abstract A24F-04, American Geophysical Union Fall Meeting, Washington D.C., 10-14 December (Oral presentation).
- Pujiana, K. and McPhaden, M. J., 2018. Air-Sea Interactions in the eastern equatorial Indian Ocean. Abstract AI53A-02, 2018 Ocean Sciences Meeting, AGU/ASLO/TOS, Portland, OR, 11-16 February (Oral presentation).
- Pujiana, K., Moum, J. N., and Smyth, W. D., 2016. Ocean Surface Layer Response Under Madden-Julian Oscillation Convective Systems in the Equatorial Indian Ocean. Abstract P03p-246, 2016 Ocean Sciences Meeting, AGU/ASLO/TOS, New Orleans, LA, 21-27 February (Poster presentation).
- Pujiana, K. and Moum, J. N., 2015. Ocean Mixing due to the Madden-Julian Oscillation wind bursts. Abstract OS53C-04, 2015 Fall Meeting, AGU, San Francisco, Calif., 14-18 December (Oral presentation).
- Pujiana, K. and Moum, J. N., 2014. Surface Layer Response to the Equatorial Jet During an MJO event. Abstract 17427, 2014 Ocean Sciences Meeting, AGU/ASLO/TOS, Honolulu, Hawaii, 23-28 December (Poster presentation).
- Pujiana, K. and Gordon, A. L., 2013. Intraseasonal eddies in Makassar Strait., Indian Ocean and Pacific Conference, Bali-Indonesia, 18 - 21 June (Oral presentation).
- Pujiana, K., Gordon, A.L. Intraseasonal baroclinic trapped waves in the internal of Indonesian Seas. Abstract PO24D-07, 2010 Ocean Sciences Meeting, AGU, Portland, OR, 22-26 February (Oral presentation).

Teaching experience

- Teaching Assistant, Earth's Ocean and Climate, Columbia University, Spring 2007 – 2009.
- Teaching Assistant, Principle of Physical Oceanography, Columbia University, Fall 2006 – 2008.
- Teaching Assistant, Fluid Mechanics, Bandung Institute of Technology, Fall 2003 – 2004.

Research Cruises

Scientist, Coastal River-Dominated Ecosystem project, R/V Pelican, Gulf of Mexico, April 2016.

Scientist, Portable mixing instrumentation development project, R/V Elakha, Oregon Coast, September 2015.

Chief Scientist, Monitoring of the Indonesian Throughflow, R/V Baruna Jaya 7, Makassar Strait, August 2013.

Student, Philippine Seas Exploration, R/V Melville, Philippine Seas, July 2007.

Student, International Nusantara Stratification and Transport Program [INSTANT] program, R/V Baruna Jaya 1, Java Sea - Makassar Strait, August 2005.

Student, INSTANT program, R/V Baruna Jaya 8, Java Sea – Lombok Strait - Timor Sea, June 2005.

Junior Oceanographer, Oceanographic, topographic, and geophysical surveys, December 2000 - March 2001.

Student, Surface wave surveys, offshore southern coasts of Java, July - December 1999.

Synergistic Activities

Organizing committee for a Climate and Ocean - Variability, Predictability, and Change [CLIVAR] capacity building workshop, Bandung-Indonesia, 2014.

Associate of Committee on Space Research [COSPAR], 2014 – present.

Guest Editor of Marine Research Indonesia, 2012 – present.

Reviewer of Journal of Geophysical Research-Oceans, Geophysical Research Letters, Journal of Physical Oceanography, 2012 – present.

Member of American Geophysical Union.