

Monitoring the Indonesian Throughflow

Arnold L. Gordon, Principal Investigator,
Bruce A. Huber, co-PI

Lamont-Doherty Earth Observatory
of Columbia University

Publications by or including Principal Investigators

- Cazenave, A., Henry, O., Munier, S., Delcroiz, T., Gordon, A.L. Meyssignac, B., Llovel, W., Palanisamy, H., Becker, M. (2012) “Estimating ENSO influence on the global mean sea level over 1993-2010” *Marine Geodesy* 35(sup1): 82-97.
DOI:10.1080/01490419.2012.718209
- Gordon, A.L., Huber, B.A., Metzger, E.J., Susanto, R.D., Hurlburt, H.E., Adi, T.R. (2012) South China Sea Throughflow Impact on the Indonesian Throughflow” *Geophysical Research Letters*: doi:10.1029/2012GL052021 vol (39) L11602.
- Hu D, L Wu, W Cai, A S Gupta, A Ganachaud, B Qiu, A L. Gordon, X Lin, Z Chen, S. Hu, G Wang, Q Wang, J Sprintall, T Qu, Y Kashino, F Wang, & W Kessler, 2015: Pacific western boundary currents and their roles in climate. *Nature*, **522**, 299-308, doi: 10.1038/nature14504 .
- Lee, S.-K., W. Park, M. O. Baringer, A. L. Gordon, B. Huber, and Y. Liu, 2015: Pacific origin of the abrupt increase in Indian Ocean heat content during the warming hiatus, *Nature Geosci*, **8**, 445-449, doi:10.1038/ngeo2438.
- Napitu, A. M., A.L. Gordon, K. Pujiana, 2015: Intraseasonal Sea Surface Temperature Variability Across the Indonesian Sea, *Jour of Climate*., *in press*.
- Pujiana, K., Gordon, A.L., Sprintall, J. (2013) “Intraseasonal Kelvin wave in Makassar Strait” *Journal of Geophysical Research Oceans*: doi:10.1002/jgrc.20069 vol(118), 2023-2034.
- Sprintall, J., Gordon, A.L., Koch-Larrouy, A., Lee, T., Potemra, J.T., Pujiana, K., Wijffels, S.E., ,2014: The Indonesian Seas and their impact on the Coupled Ocean-Climate System. *Nature Geosciences*, **7**, 487 – 492, doi: 10.1038/NGEO2188.
- Susanto, R.D., Ffield, A., Gordon, A.L., Adi, T.R.(2012) “Variability of Indonesian Throughflow within Makassar Strait: 2004 – 2009” *Journal of Geophysical Research Oceans*: doi:10.1029/2012JC008096 vol(117) C09013.
- Wilson, E. Gordon, A.L., Kim, D., (2013) “Observations of the Madden Julian Oscillation during Indian Ocean Dipole Events” *Journal of Geophysical Research – Atmospheres*: doi:10.1002/jgrd.50241 vol(118).

Other relevant publications:

These publications cite one or more publications listed above, or cite use of project data:

- Castruccio, Frederic S.; Curchitser, Enrique N.; Kleypas, Joan A. (2013) A model for quantifying oceanic transport and mesoscale variability in the Coral Triangle of the Indonesian/Philippines Archipelago By: JOURNAL OF GEOPHYSICAL RESEARCH-OCEANS Volume: 118 Issue: 11 Pages: 6123-6144
- Cazenave, A., Dieng, H-B., Meyssignac, B., von Schuckmann, K., Decharme, B., Berthier, E. (2014) The rate of sea-level rise. Nature Climate Change 4, 358–361 (2014) doi:10.1038/nclimate2159
- Fan, Weijia; Jian, Zhimin; Bassinot, Franck; et al. (2013) Holocene centennial-scale changes of the Indonesian and South China Sea throughflows: Evidences from the Makassar Strait By: GLOBAL AND PLANETARY CHANGE Volume: 111 Pages: 111-117
- Jevrejeva, S.; Moore, J. C.; Grinsted, A.; et al. , 2014: Trends and acceleration in global and regional sea levels since 1807. Global and Planetary Change **113** . 11-22
- Jevrejeva, S.; Moore, J. C.; Grinsted, A.; et al. (2014) Trends and acceleration in global and regional sea levels since 1807 By: GLOBAL AND PLANETARY CHANGE Volume: 113 Pages: 11-22
- Meyssignac, B.; Lemoine, J. M.; Cheng, M.; et al. (2013) Interannual variations in degree-2 Earth's gravity coefficients C-2,C-0, C-2,C-2, and S-2,S-2 reveal large-scale mass transfers of climatic origin. GEOPHYSICAL RESEARCH LETTERS Volume: 40 Issue: 15 Pages: 4060-4065
- Piecuch, C.r G. (2013) Dynamics of satellite-derived interannual ocean bottom pressure variability in the western tropical North Pacific By: JOURNAL OF GEOPHYSICAL RESEARCH-OCEANS Volume: 118 Issue: 10 Pages: 5117-5128
- Susanto, R. D., and Y. T. Song, 2015: Indonesian throughflow proxy from satellite altimeters and gravimeters. Journal of Geophysical Research-Oceans, **120**, 2844-2855.
- van Sebillé, E., and Coauthors, 2014: Pacific-to-Indian Ocean connectivity: Tasman leakage, Indonesian Throughflow, and the role of ENSO. Journal of Geophysical Research-Oceans, **119**, 1365-1382.
- Wei, J., P Malanotte-Rizzoli, P., Eltahir , E. A. B., Xue, P. Xu, D. (2013). Coupling of a regional atmospheric model (RegCM3) and a regional oceanic model (FVCOM) over the maritime continent. Clim Dyn DOI 10.1007/s00382-013-1986-3
- Wei, J., P. Malanotte-Rizzoli, E. A. B. Eltahir, P. F. Xue, and D. Y. Xu, 2014: Coupling of a regional atmospheric model (RegCM3) and a regional oceanic model (FVCOM) over the maritime continent. Climate Dynamics, **43**, 1575-1594.
- Xu, Danya; Malanotte-Rizzoli, Paola (2013). The seasonal variation of the upper layers of the South China Sea (SCS) Circulation and the Indonesian through flow (ITF): An ocean model study By: DYNAMICS OF ATMOSPHERES AND OCEANS Volume: 63 Pages: 103-130
- Yu, Kai; Qu, Tangdong (2013) Imprint of the Pacific Decadal Oscillation on the South China Sea Throughflow Variability By: JOURNAL OF CLIMATE Volume: 26 Issue: 24 Pages: 9797-9805

Zhuang, Wei; Qiu, Bo; Du, Yan (2013) Low-frequency western Pacific Ocean sea level and circulation changes due to the connectivity of the Philippine Archipelago By: JOURNAL OF GEOPHYSICAL RESEARCH-OCEANS Volume: 118 Issue: 12 Pages: 6759-6773