

Curriculum Vitae

Dr. Howard J. Diamond

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Personal Statement:

Howard Diamond has worked in various positions within the National Oceanic and Atmospheric Administration (NOAA) since 1981 and currently works for NOAA's National Climatic Data Center (NCDC) in Silver Spring, Maryland. In 1999, Dr. Diamond began serving as the U.S. Global Climate Observing System Program Manager. Since then he assumed the roles as (a) editor of the Tropics Chapter for the annual State of the Climate reports coordinated and published by NCDC (since 2005); (b) Director of the World Data Center for Meteorology (since 2006); (c) program manager for the U.S. Climate Reference Network program (since 2007); (d) atmospheric climate observing liaison to the NOAA Climate Program Office's Climate Observations Division (since 2007); and (e) member of the International Best Tracks Archive for Climate Stewardship (IBTrACS) science and product team (since 2009).

In these various positions he has concentrated his efforts in implementing sustained climate observing programs (and related data management efforts) both in the U.S., as well as in developing nations with a particular emphasis in the Pacific Islands region. In this regard he has worked closely with many individuals from several organizations from many nations, and particularly from New Zealand and Australia. His specific research areas of interest involve southern hemispheric climate research involving tropical cyclones (including assisting in the production of the annual TC outlook for the southwest Pacific), Antarctic sea ice, and general trends in climate that involve relationships to various global and regional teleconnections such as the El Niño Southern Oscillation, Southern Annular Mode, Pacific Decadal Oscillation, and Madden-Julian Oscillation.

Dr. Diamond has a passion for climate science research, related data management and access activities, and their application to a variety of climate-related studies. As such he enjoys helping users find and use information and data related to all aspects of climate research, and has worked to mentoring and assisting students at the University of the South Pacific in Suva, Fiji, in their climate-related studies. In 2014, he successfully completed the requirements for a PhD degree in Geography from the University of Auckland's School of Environment where he conducted climatological research work on tropical cyclones in the southwest Pacific. He successfully completed the requirements for his PhD thesis in October 2014; and his research web site can be found at <http://apdrc.soest.hawaii.edu/projects/speartc/>.

Education:

- 1981 B.S., Florida State University; Tallahassee, Florida, *Biological Sciences* (Cum Laude)
1994 M.S., University of Maryland; College Park, Maryland, *Technology Management*
2014 PhD., University of Auckland; Auckland, New Zealand, *Geography*; Thesis Title:
A Climatological Study of Tropical Cyclones in the Southwest Pacific Ocean Basin

Honors/Distinctions:

- 2010 U.S. Department of Commerce Silver Medal
2007 U.S. Department of Commerce Bronze Medal
2000 Medal of Recognition from the President's Year 2000 (Y2K) Council
1998 National Weather Association Aviation Meteorology Award
1997 U.S. Department of Commerce Silver Medal
1995 U.S. Department of Commerce Bronze Medal
1994 U.S. National Weather Service Modernization Award

Professional Society Affiliations:

- 2014-Present Professional Member, Royal Society of New Zealand
2006-10 Chair of AMS Southern Hemisphere Meteorology & Oceanography Committee
2009-Present Member Australian Meteorological and Oceanographic Society
2005-Present Member American Geophysical Union
2005-Present Member New Zealand Geographical Society
2003-Present Member New Zealand Meteorological Society
1995-Present Member National Weather Association
1994-Present Member American Meteorological Society

Professional Positions Held:

- 2007-present U.S. Climate Reference Network Program Manager (NOAA/NCDC)
2006-present Director, World Data Center for Meteorology, Asheville (NOAA/NCDC)
1999-present U.S. Global Climate Observing System Program Manager (NOAA/NCDC)
1993-99 Modernization Implementation Manager, NOAA/National Weather Service
1987-93 Configuration Manager, NOAA/National Weather Service
1981-87 Cartographer, NOAA/National Ocean Service

Professional References:

- Greg Bodeker, Bodeker Scientific; greg@bodekerscientific.com
- Elisabeth Holland, University of the South Pacific; elisabeth.holland@usp.ac.fj
- David Jones, Australian Bureau of Meteorology; D.Jones@bom.gov.au
- Penehuro Lefale, Bodeker Scientific; pene@bodekerscientific.com
- James Lunny, NZ Metservice; James.Lunny@metservice.com
- Glenn McGregor, Durham University; glenn.mcgregor@durham.ac.uk
- Brett Mullan, NIWA; Brett.Mullan@niwa.co.nz
- Neil Plummer, Australian Bureau of Meteorology; N.Plummer@bom.gov.au
- James Renwick, Victoria University of Wellington; James.Renwick@vuw.ac.nz
- Andrew Tait, NIWA; Andrew.Tait@niwa.co.nz
- David Wratt, NIWA (retired); David.Wratt@niwa.co.nz

Peer Reviewed Publications:

Diamond, H.J., and J.A. Renwick, 2014: The Climatological Relationship between Tropical Cyclones and the Madden-Julian Oscillation in the Southwest Pacific. *International Journal of Climatology*, doi: 10.1002/joc.4012.

Diamond, H.J., and J.A. Renwick, 2014: The Climatological Relationship between Tropical Cyclones and the Southern Annular Mode in the Southwest Pacific. *International Journal of Climatology*, doi: 10.1002/joc.4007.

Revell, C., S. Ready, J. Renwick, and H.J. Diamond, 2014: A case study of tropical cyclone Wilma, January 2011, *Weather and Climate*. In press.

Rennie, J.J., J. H. Lawrimore, B.E. Gleason, P. W. Thorne, C. P. Morice, M. J. Menne, C. N. Williams, W. Gambi de Almeida, J.R. Christy, M. Flannery, M. Ishihara, K. Kamiguchi, A.M.G. Klein-Tank, A. Mhanda, D.H. Lister, V. Razuvaev, M. Renom, M. Rusticucci, J. Tandy, S. J. Worley, V. Venema W. Angel, M. Brunet, B. Dattore, H. Diamond, M.A. Lazzara, F. Le Blancq, J. Luterbacher, H. Mächel, J. Revadekar, R.S. Vose, X. Yin, 2014. The International Surface Temperature Initiative Global Land Surface Databank: Monthly Temperature Data Version 1 Release Description and Methods. *Geoscience Data Journal*. doi:10.1002/gdj3.8.

Diamond, H.J., Ed., 2014: Tropics [in "State of the Climate in 2013"]. *Bull. Amer. Meteor. Soc.*, **95**(7) S81-S114.

Kruk, M.C., A. M. Lorrey, G.M. Griffiths, M. Lander, J.J. Marra, H.J. Diamond, and E.J. Gibney, 2014. On the State of the Knowledge of Rainfall Extremes in the Pacific Basin. *International Journal of Climatology*. doi: 10.1002/joc.3990.

Jones, D.A., D. A. Collins, S. McGree, B. Trewin, E. Skilling, H. Diamond, O. Fa'anunu, D. Hiriassia, S. Hugony, R. Hutchinson, K. Inape, L. Jacklick, P. Malsale, T. Moniz, M. Ngemaes, A. Porteous, S. Seuseu, L. Tahani, F. Teimitsi, U. Toorua, M. Vaiimene, V. Vuniyayawa, and H. Vavae, 2013: An updated analysis of homogeneous temperature data at Pacific Island stations. *Australian Meteorological and Oceanographic Journal*, **63**, 285–302.

Thorne, P.W., H. Vömel, G. Bodeker, M. Sommer, A. Apituley, F. Berger, S. Bojinski, G. Braathen, B. Calpini, B. Demoz, H. J. Diamond, J. Dykema, A. Fassò, M. Fujiwara, T. Gardiner, 2013. GCOS reference upper air network (GRUAN): Steps towards assuring future climate records *AIP Conf. Proc.* **1552**, 1042-1047; doi:<http://dx.doi.org/10.1063/1.4821421>.

Diamond, H.J., Ed., 2013: Tropics [in "State of the Climate in 2012"]. *Bull. Amer. Meteor. Soc.*, **94**(8) S79-S110.

Lorrey, A.M., G. Griffiths, N. Fauchereau, H.J. Diamond, P.R. Chappell, and J. Renwick, 2013. An ex-tropical cyclone climatology for Auckland, New Zealand. *International Journal of Climatology*, doi: 10.1002/joc.3753.

Diamond, H.J., T.R. Karl, M.A. Palecki, C.B. Baker, J.E. Bell, R.D. Leeper, D.R. Easterling, J.H. Lawrimore, T.P. Meyers, M.R. Helfert, G. Goodge, and P.W. Thorne, 2013: U.S. Climate Reference Network after one decade of operations: status and assessment. *Bull. Amer. Meteor. Soc.*, **94**(4); doi: 10.1175/BAMS-D-12-00170.

Diamond, H.J., A.M. Lorrey, and J.A. Renwick. 2013. A Southwest Pacific Tropical Cyclone Climatology and Linkages to the El Niño–Southern Oscillation. *Journal of Climate*, **26**(1), 3-25. doi:10.1175/JCLI-D-12-00077.1.

Diamond, H.J., 2013. The Global Observing Systems Information Center (GOSIC): A Comprehensive and Evolving Portal for Global Climate Data and Information. *Data Science Journal* Special Issue of the Proceedings of the 1st WDS Conference in Kyoto 2011. **12**, 13-16.

Bell, J.E., M.A. Palecki, W.G. Collins, J.H. Lawrimore, R.D. Leeper, M.E. Hall, J. Kochendorfer, T.P. Meyers, T. Wilson, C.B. Baker, H.J. Diamond, 2013: U.S. Climate Reference Network Soil Moisture and Temperature Observations. *J. Hydrometeorol*, doi: 10.1175/JHM-D-12-0146.1.

Diamond, H.J., A.M. Lorrey, K.R. Knapp, and D.H. Levinson. 2012. Development of an enhanced tropical cyclone tracks database for the southwest Pacific from 1840-2011. *International Journal of Climatology*, **32**: 2240–2250. DOI:10.1002/joc.2412.

Diamond, H.J., Ed., 2012: Tropics [in "State of the Climate in 2011"]. *Bull. Amer. Meteor. Soc.*, **93**(7), S93-S125.

Morrissey M. L., H.J. Diamond, M.J. McPhaden, H.P. Freitag, J.S. Greene, 2012. An Investigation of the Consistency of TAO/TRITON Buoy-mounted Capacitance Rain Gauges. *Journal of Atmospheric and Oceanic Technology*; **29**, 834-845, doi: 10.1175/JTECH-D-11-00171.1.

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T.R. Karl, H.J. Diamond, S. Bojinski, J.H. Butler, H. Dolman, W. Haeberli, D.E. Harrison, A. Nyong, S. Rösner, G. Seiz, K. Trenberth, W. Westermeyer and J. Zillman, 2010. Observation Needs for Climate Information, Prediction and Application: Capabilities of Existing and Future Observing Systems. *Procedia Environmental Sciences*, **1**, 192–205.

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- Diamond, H.J., Ed., 2007: Tropics [in "State of the Climate in 2006"]. *Bull. Amer. Meteor. Soc.*, **88**, S45-S61.
- Diamond, H.J., D.H. Levinson, Eds., 2006: Tropics [in "State of the Climate in 2005"]. *Bull. Amer. Meteor. Soc.*, **87**, S33-S46.