

Albert J. Plueddemann

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Education:

B.S., University of Michigan, 1980 (atmospheric and oceanic science); B.S., University of Michigan, 1980 (engineering); M.S., University of California, San Diego, 1981 (oceanography); Ph.D., University of California, San Diego, 1987 (oceanography).

Employment:

Associate Scientist, 1992–present; tenure awarded, 1996; Assistant Scientist, September 1988–92; Postdoctoral Investigator, 1987–1988; Guest Investigator, November 1986–February 1987, Woods Hole Oceanographic Institution. Graduate Research Assistant, 1980–87, Marine Physical Laboratory, Scripps Institution of Oceanography, University of California. Research Assistant, 1979–80, Department of Atmospheric and Oceanic Science, University of Michigan.

Awards:

Scripps Industrial Associates Tuition Scholarship, 1980
Institute of Marine Resources Student Fellowship, 1981
Vetlesen Foundation Independent Study Award, 1990
American Meteorological Society Editor's Award, 1993

Research Interests:

Upper ocean dynamics; structure of the oceanic surface boundary layer; air-sea interaction and the oceanic response to surface forcing; Arctic shelf processes and maintenance of the halocline; internal waves; fronts; oceanographic instrumentation.

Publications:

- Timmermans, M. L., J. Toole, A. Proshutinsky, R. Krishfield, and A. Plueddemann, 2008. Eddies in the Canada Basin, Arctic Ocean, observed from ice tethered profilers. *Journal of Physical Oceanography*, accepted.
- Gerbi, G. P., J. H. Trowbridge, J. B. Edson, A. J. Plueddemann, E. A. Terray, and J. J. Fredericks, 2008. Measurements of momentum and heat transfer across the air-sea interface. *Journal of Physical Oceanography*, accepted.
- Spall, M. A., R. S. Pickart, P. S. Fratantoni, and A. J. Plueddemann. Western Arctic shelfbreak eddies: Formation and transport. *Journal of Physical Oceanography*, in review.
- Plueddemann, A. J. Profiling Current Meters. *Encyclopedia of Ocean Science*, first online update, in review.
- Plueddemann, A. J., and R. A. Krishfield. Physical properties of eddies in the western Arctic. *Journal of Physical Oceanography*, submitted.

Synergistic Activities: Dr. Plueddemann has been Associate Editor for *Reviews of Geophysics*, Guest Editor for the *IEEE Journal of Oceanic Engineering*, and is presently Associate Editor for the *Journal of Atmospheric and Oceanic Technology*. He has served on advisory committees for the Surface Ocean Lower Atmosphere Study (SOLAS), the New England Center for Ocean Sciences Education Excellence (COSEE), the Marine Metadata Initiative (MMI) and the Ocean Observatories Initiative (OOI). He is presently a Project Scientist for the Coastal/Global Scale Nodes of the OOI. He has served on multiple Agency proposal review panels and spent 18 months on assignment as Associate Program Director at the National Science Foundation. He routinely participates in national and international scientific meetings and has also presented numerous scientific talks suitable for a general audience, for example to incoming graduate students, visiting officials and journalists. He has advised or co-advised 3 postdoctoral scholars, 1 Ph.D. student, 1 M.S. student, 3 guest students, 8 Summer Student Fellows and 1 Undergraduate Research Fellow. A database of historical surface mooring observations is maintained at <http://uop.whoi.edu/archives/dataarchives.htm>. New instrumentation and observational techniques have been developed for upper ocean studies.

Graduate Students: Carolyn L. Harris (M.S., 1996); Anand Gnanadesikan (Ph.D., 1994), co-advisor.

Postdoctoral Scholars: Steven P. Anderson (1994), co-advisor; Burkard Baschek, 2003, co-advisor; Tobias Kukulka, 2007.

Collaborating Scientists over last 48 months (not in publications list); co-editors of a journal, compendium or conference proceeding over last 24 months (not in publications list): John Graybeal, MBARI; Tom Weingartner, U. Alaska, Fairbanks; Jim Edson, Univ. Connecticut; W. Balch, Bigelow Lab, Maine; U. Send, Scripps Institution of Oceanography.

Advisors: Ph.D., Dr. Robert Pinkel, Scripps Institution of Oceanography, La Jolla, CA.