

David A. Sutherland

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Education

- Woods Hole Oceanographic Institution**, WHOI, Woods Hole, MA 2002-present
Massachusetts Institute of Technology, MIT, Cambridge, MA
Ph.D. Candidate in Physical Oceanography, GPA: 4.7/5.0
Advisor: Dr. Robert S. Pickart
Dissertation title: *The East Greenland Coastal Current: its structure, origin, and larger scale impact*
- University of North Carolina at Wilmington**, Wilmington, NC 2001
B.A. in Mathematics
Department and University Honors, *magna cum laude*
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Research Experience

- Graduate Research Assistant**, Woods Hole Oceanographic Institution 2002-present
Analysis of hydrographic, velocity, and chemical tracer observations from the southeast Greenland shelf. Performed laboratory studies on Southern Ocean dynamics and planned laboratory studies on flow-topography interactions.
Advisor: Robert Pickart.
- Summer Student**, Friday Harbor Laboratories 2006
Intensive course on coastal and estuarine fluid dynamics. Included lectures and the planning, execution, and analysis of a field project in East Sound, WA that used mooring, CTD, and meteorological data.
Advisors: Rocky Geyer and Parker MacCready
- Summer Intern**, US Army Corps of Engineers Field Research Facility, Duck, NC 2000
Built website of archived aerial images of Oregon Inlet, NC. Participated in beach surveys and analysis of oceanographic data collected from the research pier.
Advisor: William Birkemeier.
- Research Experiences for Undergraduates Student**, University of Hawaii 1999
Designed and ran laboratory experiments on wave-induced water flow through sand. Advisors: Frank Sansone and Mark Merrifield.

Teaching Experience

- Teaching Assistant**, MIT/WHOI Joint Program 2006
Introduction to Observational Physical Oceanography graduate course, Prof. Jim Price. Graded homework sets, led review sessions, and taught one lecture on ocean heat transport.
- Teaching Assistant**, MIT/WHOI Joint Program 2005
Introduction to Geophysical Fluid Dynamics of the Ocean and Atmosphere graduate course, Prof. Joe Pedlosky. Led weekly recitations, graded homework sets and final exam.
- Assistant Scientist**, Sea Education Association 2005
Responsible for leading one team of new graduate students in the MIT/WHOI Joint Program in the use of oceanographic (physical, chemical, and biological) equipment on the ship and its subsequent analysis.
- Teaching Assistant**, Massachusetts Institute of Technology 2003
Physics of the Ocean and Atmosphere undergraduate course, Prof. John Marshall. Presented one lecture on abyssal ocean circulation, graded homework sets, and led review sessions.

Field Experience

- R/V Centennial*, 2 days, August 2006.
Mooring deployment/recovery for coastal oceanography class in Friday Harbor, WA. Also piloted small powerboats for CTD deployments over 10 days. Chief Scientist, Rocky Geyer.
- SSV Corwith Cramer*, 10 days, July 2005.
Sailed as Assistant Scientist on board the MIT/WHOI Joint Program Intro cruise out of Woods Hole, MA. Chief Scientist, Lisa Graziano.
- RRS James Clark Ross*, 20 days, July-August 2004.
Hydrographic survey and mooring operations on the southeast Greenland shelf. Worked with CTDs and ran nutrient samples through AutoAnalyzer. Chief Scientist, Robert Pickart.
- R/V Point Lobos*, 5 days, July 2003.
Adaptive Ocean Sampling Network (AOSN) project, Monterey, CA. Tested autonomous gliders in ocean and on land. Chief Scientist, David Fratantoni.
- R/V Walton Smith*, 7 days, January 2003.
Tongue of the Ocean (TOTO) autonomous glider tests, Bahamas. Tested gliders in ocean and on land. Chief Scientist, David Fratantoni.
- SSV Corwith Cramer*, 10 days, July 2002.
Participated in the MIT/WHOI Joint Program introduction cruise, sampling and sailing in Cape Cod Bay and New England shelf waters. Chief Scientist, Gary Jaroslow.

R/V Kaimikai-O-Kanaloa, 5 days, Summer 1999.

Performed CTD and oxygen analysis on the Hawaiian Ocean Time Series (HOT) cruise 106.
Chief Scientist, Louie Tupas.

R/V Cape Fear, 2 days, 1998.

UNCW oceanography research in Onslow Bay, NC. Chief Scientist, Nancy Grindlay.

Awards and Honors

Invited poster , AGU/ASLO Ocean Sciences Meeting, San Antonio, TX.	2000
J. Marshall Crews Scholarship , UNC-Wilmington Dept. of Mathematics	1999-2000
Athletic Scholarship , UNC-Wilmington, Men's Varsity Swimming	1998-1999
Eagle Scout rank, Boy Scouts of America.	1997

Reviewed Publications

Girton, J.B., L.J. Pratt, **D.A. Sutherland**, and J.F. Price, 2006: Is the Faroe Bank Channel overflow hydraulically controlled? *Journal of Physical Oceanography*, **12**, 2340-2349.

Sutherland, D.A. and R.S. Pickart, 2007: The East Greenland Coastal Current: structure, variability, and forcing. Submitted to *Progress in Oceanography*.

Presentations

Observations of the East Greenland Coastal Current: A high-latitude, wind-forced, buoyant plume. Poster, Ocean Sciences Meeting, Honolulu, HI. February 2006.

Structure and variability of the East Greenland Coastal Current. Arctic/Subarctic Ocean Fluxes (ASOF) Meeting, Torshavn, Faroe Islands. June 2006.

Observations of the East Greenland Coastal Current. Poster, Gordon Conference on Coastal Ocean Circulation, Colby-Sawyer College, NH. June 2005.

The role of eddies in a laboratory study of the Antarctic Circumpolar Current. Poster, MTS/IEEE Oceans Conference, San Diego, CA. 2003.

Tidal dynamics of Onslow Bay, NC. Undergraduate Honors thesis defense, University of North Carolina at Wilmington. Advisor: Dr. F. Bingham, Wilmington, NC, 2001.

Wave-induced porewater transport in permeable sediments. Invited Poster, Ocean Sciences Meeting, San Antonio, TX, 2000.

Related Professional Experience

AAUS certified , research SCUBA diver	2006-present
Student representative to WHOI Gender Equity Program Advisory Committee	2006-present
Member , American Geophysical Union (AGU)	2002-present
Swim Coach , USA Swimming certified coach. Design and run practice for the high school age group of the Cape Cod Swim Club, Pocasset, MA.	2004-present
Student representative to <i>ad hoc</i> WHOI committee on Gender Equity at Sea, appointed by WHOI Dean of Education, John Farrington.	2006
Student representative , MIT/WHOI Joint Program Student Advisory council.	2004
Community Sanitation/Health Advisor , US Peace Corps, Kingston, Jamaica Aided in construction of school, pit latrines, and other public health issues with local non-profit called the Construction Resource and Development Centre.	2001-2002

References

Dr. Robert S. Pickart
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Cape Cod Swim Club
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Dr. Claudia Cenedese
Associate Scientist, Physical Oceanography
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Dr. James F. Price
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