# Elizabeth M. Douglass

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#### **EDUCATION**

# Scripps Institution of Oceanography

2001-2007

University of California, San Diego, California

#### Ph.D. in Physical Oceanography (December 2007)

- Dissertation Title: "Interannual Variability in the North Pacific Ocean from Observations and a Data-Assimilating Model"
- Co-advisors: Dean Roemmich and Detlef Stammer
- Doctoral committee: Bruce Cornuelle, Peter Franks, Juan Lasheras, Art Miller

# Villanova University

1996-2000

Villanova, PA

Bachelor of Science in Physics (magna cum laude)

Minor in Computer Science

Minor in Honors

# Work Experience

#### Postdoctoral Scholar

August 2008-present

Woods Hole Oceanographic Institution, Woods Hole, Massachusetts

• Comparison of model results with observations in the Northwest Pacific Ocean

#### Postdoctoral Researcher

December 2007-August 2008

Scripps Institution of Oceanography, La Jolla, California

• Comparison and analysis of modeled and observed large-scale circulation and property transports in North Pacific.

Research Assistant 2001-2007

Scripps Institution of Oceanography, La Jolla, California

- Comparison of model output with observations in the Northeast Pacific
- Sensitivity study of data assimilating model, and development of improved assimilation product
- Analysis of large-scale circulation and property transports in North Pacific from model and data.

# Summer Research Assistant

1999

Lamont-Doherty Earth Observatory, Palisades, NY

- Analysis of subsurface observations from the Hudson River.
- Advisor: Robin Bell

#### Summer Research Assistant

1998

NASA Goddard Space Flight Center, Greenbelt, MD

- Merged precipitation data from 6 satellites into a single dataset with global coverage using PSAS assimilation product.
- Advisor: Paul Houser

Teaching Assistant 1998-2000

Villanova University, Villanova, PA

• General Physics Lab I and II (PHY 1101 and PHY 1103): Duties including leading laboratory

• Physics I Mechanics and Physics II Electricity and Magnetism (PHY 2400 and PHY 2402): Duties included grading homework and exams.

#### Summer Research Assistant

1997

NASA Goddard Space Flight Center, Greenbelt, MD

- Analysis of spatial patterns of precipitation
- Advisor: Chris Kidd

#### Related EXPERIENCE

### Participant, GODAE Summer School

2004

Two-week program included lectures on fundamentals of modeling, in situ and remote observation systems, fundamentals of data assimilation, and applications, as well as laboratory exercises with data assimilation and modeling systems.

#### SEA-GOING EXPERIENCE

North Pacific: Horizon Enterprise. Deployment of XBTs from cargo ship (two trips) 2004-2005

Membership Member, American Geophysical Union 2002-present

Member, Phi Beta Kappa

2000-present 1998-present

Member, Sigma Pi Sigma (Physics Honor Society)

**Publications** 

Douglass, E., D. Roemmich, and D. Stammer, 2006. "Interannual Variability in the Northeast Pacific." Journal of Geophysical Research-Oceans 15:1573-1590.

#### Papers in PREPARATION

Douglass, E., D. Roemmich, and D. Stammer. Data-sensitivity of the ECCO state estimate in a regional setting. (submitted for publication).

Douglass, E., D. Roemmich, and D. Stammer. Interannual Variability in North Pacific Heat and Freshwater Budgets. (submitted for publication).

PRESENTATIONS Douglass, E., D. Roemmich and D. Stammer. "North Pacific Data Assimilation" Oral Presentation, International Meeting of Students in Physical Oceanography, Ensenada, Mexico. May 2007.

> Douglass, E., D. Roemmich and D. Stammer. "North Pacific Variability From a Data-Assimilating Model" Oral Presentation, AGU Joint Assembly, Acapulco, Mexico. May 2007.

> Douglass, E., D. Roemmich and D. Stammer. "Interannual Variability in North Pacific Heat and Salt Transport." Poster Presentation, AGU, San Francisco, CA. December 2006.

> Douglass, E., D. Roemmich, and D. Stammer. "Interannual Variability in North Pacific Heat and Salt Transport." Poster Presentation, AGU Ocean Sciences Meeting, Honolulu, HI. February 2006.

> Douglass, E. "Interannual Variability in Northeast Pacific Circulation". Oral presentation at CI-CESE, part of the Mexican-American Physical Oceanography Summer Student Seminar Series. Ensenada, Baja California, Mexico. August 2005.

> Douglass, E., D. Roemmich, and D. Stammer. "Interannual Variability in the Northeast Pacific Ocean." Poster Presentation, 1st International CLIVAR Science Conference, Baltimore, MD. June 2004.

Douglass, E., D. Roemmich, and D. Stammer. "Mean and Interannual variability in the Circulation of the Pacific Ocean." Poster Presentation, AGU Ocean Sciences Meeting, Portland, OR. January 2004.

Douglass, E., D. Roemmich, J. Gilson and D. Stammer. "The Role of Salinity in Pacific Surface Height Variability and in Diagnosing the Hydrological Cycle." Poster Presentation, WOCE and Beyond Meeting, San Antonio, TX. November 2002.