

**Dr. Xiao-Hai Yan, Co-Science PI (2-page limit)**

Mary A. S. Lighthipe Chair Professor

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Latest Award: <https://www.udel.edu/udaily/2019/may/doctoral-mentoring-award-Xiao-Hai-Yan/>

**(A) Professional Preparation**

**Education:**

Ph.D., Satellite and Physical Oceanography, State University of New York, Stony Brook, NY, 1989

Post Doc., Scripps Institution of Oceanography, University of California, San Diego, CA, 1989

**Honors**

University of Delaware Outstanding Doctoral Graduate Advising and Mentoring Award, 2019

AGU Top 10 most downloaded and cited paper of the year in recent AGU publication history, 2017

"Science Spectrum Trailblazer" named by Science Spectrum Magazine, 2005-2012

AGU Top 10 most significant scientific findings of the year, 2002

NASA Center for Excellence Award, NASA, 1997

National Presidential Faculty Fellow (PFF) Award, White House through NSF - 1994

NASA Graduate Student Research Fellowship Award, NASA – 1988, 1989

**(B) Academic Appointments**

Mary A. S. Lighthipe Professor, University of Delaware, 2004-Present

Professor, University of Delaware, 1995-2004

Associate Professor, University of Delaware, 1993-1995

Assistant Professor, University of Delaware, 1990-1993

**Other Professional Appointments and Editorships:**

Director, Center for Remote Sensing, University of Delaware, 2002-Present

Associate Director, NASA-Delaware Space Grant Program, 2005-Present

Co-Director, Center for Remote Sensing, University of Delaware, 1990-2001

Postdoctoral Researcher, Scripps Institution of Oceanography, University of California, 1989-90

Research Assistant, Marine Sciences Research Center, SUNY, Stony Brook, 1985-89

Editor Board, *Nature Scientific Report*, 2016-Present

Editor, International Journal of Oceanography, 2008-present

Guest Editor, Remote Sensing, Special Issues "Observing the Ocean's Interior from Satellite Remote Sensing", 2012-present

US AMOC Science Team Member, 2009-present

US CLIVAR SSC/POS Panel Member, 2012-2016

**(C) Products (\*corresponding author, from over 300 peer-reviewed scientific publications, see web page link for journal publications: <https://sites.udel.edu/ceoe-xiaohai/publications/>)**

**(i) Five publications most closely related to the proposed project**

Meng, L., W. Zhuang, W. Zhang and **Xiao-Hai Yan\***, (2020): "Variability of the Shallow

Overturning Circulation in the Indian Ocean" Published by *Journal of Geophysical Research*

*(Ocean)* DOI: 10.1029/2019JC015651, 2020.

**Yan\*, X-H.**, T. Boyer, K. Trenberth, T. Karl, S-P. Xie, V. Nieves, K-K. Tung, and D. Roemmich,

2016. The global warming hiatus: Slowdown or redistribution? *Earth's Future*, doi:10.1002/

2016ef000417.

Li, F., Y.-H. Jo, and **X.-H. Yan\***, 2015: Climate signals in the mid to high latitude North Atlantic from altimeter observations, *J. Climate*, DOI: 10.1175/JCLI-D-12-00670.1.

**Yan\*, X.-H.**, Y.-H. Jo and W. T. Liu, 2006, A new study of the Mediterranean Outflow, air-sea interactions and Meddies using multi-sensor data, *J. of Physical Oceanogr.* 36(4), 691-710.

**Yan\*, X.-H.**, Y. Zhou, J. Pan, D. Zheng, M. Fang, X. Liao, M.-X. He, W. Liu, and X. Ding. 2002. Pacific Warm Pool Excitation, Earth Rotation and El Nino Southern Oscillations, *Geophysical Research Lett.*, 19(21):15,685-15,690.

**(ii) Five other significant publications**

**Yan\*, X.-H.**, J. Pan, Y.-H. Jo, M.-X. He, W. Liu and L. Jiang, 2004, The Role of Winds on Estimation of Ocean Heat Storage Anomaly using Satellite Data, *J. Geophys. Res.* 109(C3):C03041 10.1029/2003JC002202

**Yan\*, X.-H.**, Q. Zheng, Y. He, C. Ho and W.T. Liu, 1998, Centroid rotation of the western Pacific warm pool for the recent three El Nino events, *J. Physical Oceanogr.*, 27(5):837-846.

**Yan\*, X.-H.**, P. Niiler, S. Nadiga, R. Stewart, and D. Cayan, 1995, Heat storage in the North Pacific: 1976-1989, *Journal of Geophysical Research*, in 100(C4):6899-6926.

**Yan\*, X.-H.**, C. Ho, Q. Zheng and V. Klemas. 1993. Using satellite IR in studies of the variabilities of the western Pacific warm pool, *Science*, 262:440-441.

**Yan\*, X.-H.**, C.-R. Ho, Q. Zheng and V. Klemas, 1992, Temperature and size variabilities of the western Pacific warm pool, *Science*, 258(5088):1643- 1645.

**(D) Synergistic Activities (5 examples)**

1. *Courses developed and taught:* Satellite Oceanography; Ocean&Atmosphere Remote Sensing; Principle of Applied Ocean Sciences; Oceanography Seminar; Remote Sensing Seminar, Special Problems in Oceanography, etc. 1990-2019

2. *Education outreach:* Seminars and lectures to Coast Day, Space Day activities; Volunteer tutor at A. I. DuPont High School and Independence Middle School, DE, 1995-2019

3. *Invited Conference Organizers, Session Chairman, Invited Talks, Keynote Speakers in many meetings.*

4. *Invited Editors, Editors, Associate Editors, Reviewers for many funding agencies and for many scientific journals*

5. *Serve on US CLIVAR Science Steering Committee/Panel, AMOC Science Team, 2012-2019*

**(E) Collaborators & Other Affiliations:**

Peter Niiler, Bob Stewart, Scripps Institute of Oceanography

Pablo Clemente-Colon, Lide Jiang, NOAA/NESDIS

W. Timothy Liu and Tong (Tony) Lee, NASA/JPL

Quanan Zhang/University of Delaware/University of Maryland; N. Huang, NASA/GSFC

Brian Dzwonkowski, University of Maine,

L. Breaker, Moss Landing Marine Lab

**Graduate and Postdoctoral Advisors:**

D. W. Pritchard, and J. R. Schubel, SUNY Stony Brook, Ph. D. Co-Advisors

P. P. Niiler and Bob Stewart, SIO, UCSD, Post Doc Co-Advisors

**Recent Students Advised (Total Graduate Students Advised Over 50, Postdoctoral Over 10):**

Louis Keiner, South Carolina University, Y.-H. Jo, National Pusha University

Sudhir Nadiga, NOAA-NESDIS, Chung-Ru Ho and Nan-Jun Kuo, Taiwan Ocean University

Yun He, Berkley National Lab, Brian Dzwonkowski, NOAA, Lide Jiang, NOAA

R. DwiSusanto, Lamont Dougherty Earth Observatory, Jin Sha, Ocean University of China

Pablo Clemente-Colón, NOAA/National Ice Center, Amelie Davis, Columbia University

Autumn Kidwell U. Taxes, Federico Ienna, ESA, Feili Li, Geoge Tech, WW Zhang, Xiamen U.

Enhui Liao, Princeton U., Angela Ditri, U. Miami, Tim Donato, ONR, Reid Nichol, ONR.