

Ruoying He

Department of Marine, Earth & Atmospheric Sciences
College of Physical and Mathematical Sciences
North Carolina State University
Raleigh, NC 27695

voice: 919-513-0249
fax: 919-513-0943
email: rhe@ncsu.edu
<http://www4.ncsu.edu/~rhe>

PROFESSIONAL PREPARATION

1996 B.S. Oceanography, Ocean University of China
2002 Ph.D. Physical Oceanography, University of South Florida

PROFESSIONAL APPOINTMENTS

2007-present Associate Professor, North Carolina State University
2004-2006 Assistant Scientist, Woods Hole Oceanographic Institution
2003-2004 Postdoctoral Scholar, Woods Hole Oceanographic Institution
2002-2003 Postdoctoral Research Associate, University of South Florida
1998-2002 Research Assistant, University of South Florida
1996-1998 Research Assistant, Chinese Academy of Sciences

RESEARCH INTERESTS

Coastal Circulation Dynamics; Numerical modeling and data assimilation; Biophysical Interaction; Air-Sea Interaction, Coastal Ocean Observing System

HONORS AND AWARDS

2006 New Investigator Award, National Aeronautics and Space Administration
2005 Independent Study Award, Woods Hole Oceanographic Institution
2005 Coastal Ocean Research Award, Woods Hole Oceanographic Institution
2004 Green Innovative Technology Award, Woods Hole Oceanographic Institution
2004 Sackett Innovative Research Award, University of South Florida
2003 Woods Hole Oceanographic Institution Postdoctoral Scholarship Award
2002 National Science Foundation Young Scientist Travel Award
2002 Knight Research Fellowship Award, University of South Florida
2001 Honor Society of PHI KAPPA PHI
2000 Garrels Research Fellowship Award, University of South Florida

RELATED PUBLICATIONS

- [1] He, R., R. H. Weisberg (2002), West Florida Shelf Circulation and Heat Budget for 1999 Spring Transition. *Continental Shelf Research*, Vol. 22, 5, 719-748
- [2] He, R., R. H. Weisberg (2002), Tides on the West Florida Shelf. *Journal of Physical Oceanography*, Vol. 32, 12, 3455-3473
- [3] He, R., R. H. Weisberg (2003), A Case Study of the Loop Current Intrusion on the West Florida Shelf. *Journal of Physical Oceanography*, Vol. 33, 2, 465-477
- [4] He, R., R. H. Weisberg, H. Zhang, F. E. Muller-Karger, and R.W. Helber (2003), A Cloud Free Satellite-derived, Sea Surface Temperature Analysis for the West Florida Shelf. *Geophysical Research Letters*, Vol. 30, 15, 1811, doi:10.1029/2003GL017673

- [5] **He, R.**, Y. Liu and R. H. Weisberg (2004), Coastal Ocean Wind Fields Gauged against the performance of an Ocean Circulation Model. *Geophysical Research Letters*, Vol. 31, 14, 14303, doi:10.1029/2003GL019261
- [6] **He, R.**, and R. H. Weisberg (2003), West Florida Shelf Circulation and Temperature Budget for 1998 Fall Transition. *Continental Shelf Research* Vol. 23, 8, 777-800
- [7] **He, R.**, D. J. McGillicuddy, K. W. Smith, D. R. Lynch, C. A. Stock, and J. P. Manning (2005), Data Assimilative Hindcast of the Gulf of Maine Coastal Circulation. *Journal of Geophysical Research*, Vol. 110, C10, C10011, doi:10.1029/2004JC002807
- [8] **He, R.**, J. L. Wilkin (2006), Tides on the Southeast New England Shelf: A View from a Hybrid Data Assimilative Modeling Approach, *Journal of Geophysical Research*, 111, C08002, doi: 10.1029/2005JC003254 .
- [9] **He, R.**, D. McGillicuddy (2008), Gulf of Maine Harmful Algal Bloom in Summer 2005: Part 1. In-situ observations of coastal hydrography and circulation, *Journal of Geophysical Research*, 113,C07039,doi:10.1029/2007JC004691.
- [10]**He, R.**, D. McGillicuddy, B. Keafer, D. Anderson (2008), Gulf of Maine Harmful Algal Bloom in Summer 2005: Part 2. Coupled biophysical modeling, *Journal of Geophysical Research*, 113, C07040,doi:10.1029/2007JC004602.

SYNERGISTIC ACTIVITIES

- A. Working with a team of scientists to develop data assimilative modeling tools to study coastal circulation, harmful algal blooms, sediment transport in various coastal regions.
- B. Manuscript reviewer for *Continental Shelf Research*, *Geophysical Research Letter*, *Journal of Physical Oceanography*, *Journal of Geophysical Research*, *Journal of Atmospheric and Oceanic Technology*, *Journal of Marine Research*, *Ocean Modeling*.
- C. Proposal Reviewer for *National Science Foundation*, *National Oceanographic Partnership Program*, *National Oceanic & Atmospheric Administration*, *National Aeronautics and Space Administration*

LONG-TERM COLLABORATORS (within last four years):

D. Anderson (WHOI), R. Beardsley (WHOI), K. Carder (USF), K. Fennel (Rutgers), G. Gawarkiewicz (WHOI), W. Geyer (WHOI), S. Glenn (Rutgers), S. Lentz (WHOI), D. Lynch (Dartmouth College), J. Manning (NMFS), D. McGillicuddy (WHOI), C. Mooers (UM), H. Seim (UNC), H. Sosik (WHOI), R. Signell (USGS), C. Sherwood (USGS), O. Schofield (Rutgers), E. Terray (WHOI), J. Trowbridge (WHOI), J. Walsh (USF), J. Warner (USGS), J. Wilkin (Rutgers), R. Weisberg (USF), F. Werner (UNC)

GRADUATE AND POSTDOCTORAL ADVISORS

Ph.D. Advisor: Robert H. Weisberg, University of South Florida
 Postdoctoral Advisors: Robert C. Beardsley and Dennis J. McGillicuddy, Woods Hole Oceanographic Institution

ADVISOR FOR GRADUATE STUDENTS AND POSTDOC (7)

M. Li, K. Hyun, T. Miles, J. Zombon, Y. Li, K. Chen, Y Wang