

Eun Young Kwon

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Atmospheric and Oceanic Sciences Program
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PERSONAL INFORMATION

Citizenship: the Republic of Korea
Marital Status: married with one child

EDUCATION

Ph.D. (2004~2008), Department of Earth System Science, University of California, Irvine, USA
M.S. (2002~2004), Department of Earth System Science, University of California, Irvine, USA
B.S. (1995~2000), Department of Earth Sciences Education, Seoul National University, Korea

RESEARCH INTERESTS

Climate variations; Ocean biogeochemistry modeling; Ocean dynamics; Climate-marine ecosystem feedbacks; Data analysis; Data assimilation; Inverse modeling; Global carbon cycle; Fluid dynamics; Paleoceanography

GRANTS AND AWARDS

Outstanding student poster award at Ocean Sciences Meeting, 2008
Outstanding presentation at the ESS/IGPP Symposium, awarded by Institute for Geophysics and Planetary Physics (IGPP) and department of Earth System Science (ESS), 2006
Excellence in research, awarded by Institute for Geophysics and Planetary Physics (IGPP), 2004
Korean Government Graduate Scholarship, 2002-2003
Brain Korea 21 research fellowship, 2000-2001
Eun Sung Foundation scholarship, 1997-2000
Merit-based partial scholarship, awarded by Seoul National University, 1995-2000
First class full scholarship, awarded by Seoul National University, 1995

PROFESSIONAL EXPERIENCE

Summer School Participant:

Climate Changes Impacts on Marine Ecosystems, August 2006, Ankara, Turkey
<http://www.ims.metu.edu.tr/SummerSchool/index.htm>

Graduate Research Assistant: 2002-2008

Graduate Teaching Assistant:

Oceanography taught by Dr. Primeau during winter quarter, 2005
The Atmosphere taught by Dr. Zender during spring quarter, 2005

Grader:

The Atmosphere taught by Dr. Zender during spring quarter, 2004

MEMBERSHIP OF PROFESSIONAL SOCIETY

American Geophysical Union

PROFESSIONAL PRESENTATIONS

- Kwon, E. Y., F. Primeau, and J. Sarmiento (2009): The impact of remineralization depth on the air-sea carbon balance, AGU Chapman Conference on the Biological Carbon Pump of the Oceans, Brockenhurst, UK.
- Kwon, E. Y. and E. Galbraith (2009): Carbon and climate variability simulated by coarse resolution climate models, Climate Process Team Meeting, Princeton, USA.
- Kwon, E. Y., J. Sarmineto, J. Majkut, E. Galbraith, and D. Bianchi (2009): Do coupled climate models correctly simulate the upward branch of the deep ocean great conveyor, Climate Change Prediction Program Science Team Meeting, Bethesda, USA.
- Kwon, E. Y. (2008): Optimization and sensitivity analysis of a global ocean biogeochemistry model, invited to Dissertation Symposium on Chemical Oceanography (DISCO) XXI, Hawaii, USA.
- Kwon, E. Y. and F. Primeau (2008): The sensitivity of air-sea carbon partitioning in a global ocean biogeochemistry model, presented at Ocean Carbon and Biogeochemistry Workshop, Woods Hole, MA, USA.
- Kwon, E. Y. and F. Primeau (2008): The present-day strength of carbonate pump and the impact of its change on global carbon cycling, presented at Ocean Science Meeting, Orlando, Florida, Hawaii, USA.
- Kwon, E. Y. and F. Primeau (2006): How sensitive is the ocean-atmosphere carbon partitioning to changes in the strength of the biological pump?, presented at American Geophysical Union (AGU) Fall Meeting, San Francisco, California, USA.
- Kwon, E. Y. and F. Primeau (2006): Sensitivity and optimization study using an implicit biogeochemistry ocean model and in-situ phosphate, alkalinity, and DIC data, presented at Ocean Science Meeting, Honolulu, Hawaii, USA.
- Kwon, E. Y. and F. Primeau (2004): An implicit biogeochemistry ocean model, presented at American Geophysical Union (AGU) Fall Meeting, San Francisco, California, USA.
- Kwon, E. Y., S. E. Park, K.-K. Lee, and W. M. Moon (2002): Estimation of soil moisture content from L- and P- band AIRSAR data: A case study in Jeju, Korea, presented at AIRSAR Earth Science and Applications Workshop, Pasadena, USA.
- Kwon, E. Y., D. Ryu, K.-K. Lee, and W. M. Moon (2001): Retrieval of soil moisture content with the use of neural network-scattering model, presented at Annual International Geoscience and Remote Sensing Symposium (IGARSS), Sydney, Australia.

PUBLICATIONS – PUBLISHED

- Kwon, E. Y., F. Primeau, and J. L. Sarmiento (2009): The impact of remineralization depth on the air-sea carbon balance, *Nature Geoscience*, **2**, 630-635.
- Kwon, E. Y. (2008): Optimization and sensitivity analysis of a global ocean biogeochemistry model, *Ph.D. Dissertation*, University of California at Irvine.
- Kwon, E. Y., and F. Primeau (2008): Optimization and sensitivity of a global biogeochemistry ocean model using combined in situ DIC, alkalinity, and phosphate data, *Journal of Geophysical Research*, **113**, C08011, doi:10.1029/2007JC004520.
- Kwon, E. Y. and F. Primeau (2006): Optimization and sensitivity study of a biogeochemistry ocean model using an implicit solver and in-situ phosphate data, *Global Biogeochemical Cycles*, **20**, GB4009, doi:10.1029/2005GB002631.
- Zender, C. S. and E. Y. Kwon (2005): Regional contrasts in erodibility responses to climate, *Journal of Geophysical Research*, **110**, D13201, doi:10.1029/2004JD005501.