

CURRICULUM VITA

GOKHAN DANABASOGLU

Climate and Global Dynamics Division, ESSL
National Center for Atmospheric Research
1850 Table Mesa Dr., Boulder, CO 80305, USA
Tel: (303) 497-1604, fax: (303) 497-1700, e-mail: gokhan@ucar.edu

Educational Information

- 1982-1986 B. S. in Mechanical Engineering (with Honors), Bogazici University, Istanbul, Turkey.
- 1987-1988 M. S. in Aerospace Engineering Sciences, University of Colorado, Boulder, CO, USA.
- 1989-1992 Ph. D. in Aerospace Engineering Sciences, University of Colorado, Boulder, CO, USA. Advisor: Prof. Sedat H. Biringen.
Thesis title: *Spatial simulation of transition in wall-bounded shear flows: Active control and effects of surface roughness.*

Work History

- 1984 Assistant technician, Turkish National Locomotive Plant, Eskisehir, Turkey (summer training).
- 1985 Assistant technician, Arcelik Refrigerator Plant, Eskisehir, Turkey (summer training).
- 1985-1986 Teaching assistant, Department of Physics, Bogazici University, Istanbul, Turkey.
- 1987-1991 Teaching assistant, Department of Aerospace Engineering Sciences, University of Colorado, Boulder, CO.
- 1987-1992 Research assistant, Computational Fluid Dynamics Group, Department of Aerospace Engineering Sciences, University of Colorado, Boulder, CO.
- 1992-1997 Visiting scientist, Oceanography Section, Climate and Global Dynamics Division, National Center for Atmospheric Research, Boulder, CO.
- 1997-1998 Associate scientist II, Oceanography Section, Climate and Global Dynamics Division, National Center for Atmospheric Research, Boulder, CO.
- 1998-2002 Associate scientist III, Oceanography Section, Climate and Global Dynamics Division, National Center for Atmospheric Research, Boulder, CO.
- 2002-2003 Project scientist I, Oceanography Section, Climate and Global Dynamics Division, National Center for Atmospheric Research, Boulder, CO.
- 2003-2004 Project scientist II, Oceanography Section, Climate and Global Dynamics Division, National Center for Atmospheric Research, Boulder, CO.
- 2004-present Scientist II, Oceanography Section, Climate and Global Dynamics Division, ESSL, National Center for Atmospheric Research, Boulder, CO.

Professional Schools Attended

1. The NASA Langley - ICASE Workshop on *Instability and Transition*, Hampton, VA, May 15-June 9, 1989.
2. The NASA Langley - ICASE Workshop on *Transition and Turbulence*, Hampton, VA, July 8-August 2, 1991.
3. The NATO Advanced Study Institute winter school on *Ocean Modeling and Parameterization*, in Centre de Physique des Houches, Les Houches, France, January 20-30, 1998.

Scientific / Technical Accomplishments

- Developed and implemented numerous parameterizations and diagnostic packages in the ocean component of the NCAR Community Climate System Model (CCSM).
- Designed and developed many diagnostic tools for the analysis of the ocean model data for community use.
- Created the first version of the web-based ocean analysis package that has been used extensively at NCAR. This tool makes model results available on the web to university collaborators, thus expediting dissemination of new solutions.
- Published over 30 refereed journal articles that are cited over 980 times.
- Continuous analysis and evaluation of the CCSM simulations.

Honors and Awards

Appointed to *the CLIVAR Working Group on Ocean Model Development (WGOMD)* as a member, September 2007-present.

Professional Memberships

American Geophysical Union
American Meteorological Society

Research Grants Awarded

1. NSF Ocean Sciences, U.S. CLIVAR Climate Process Team, Collaborative Research: Gravity Current Entrainment Climate Process Team. October 2003 - September 2006, \$163,911, Co-Principal Investigator.
2. NSF Ocean Sciences, U.S. CLIVAR Climate Process Team, Collaborative Research: Interaction of Eddies with Mixed Layers. October 2003 - September 2006, \$163,911, Co-Principal Investigator.
3. NSF Ocean Sciences, U.S. CLIVAR Climate Process Team, Collaborative Research: Gravity Current Entrainment Climate Process Team (Renewal). September 2006 - August 2008, \$134,501, Co-Principal Investigator.

4. NSF Ocean Sciences, U.S. CLIVAR Climate Process Team, Collaborative Research: Interaction of Eddies with Mixed Layers. September 2006 - August 2008, \$134,501, Co-Principal Investigator.

Community Service

All of the new ocean parameterizations and model improvements that I have developed and implemented in the Community Climate System Model ocean component are available to and, indeed, used by the general university and research communities both nationally and internationally. I also provide model data to these communities. I regularly help many university researchers in answering their parameterization and model questions and provide guidance on how to design their experiments for their particular research questions.

Committee and Panel Service

Member, *the FY2006 NOAA CLIVAR Proposal Review Panel*, the NOAA Climate Program Office, Silver Spring, Maryland, November 16-18, 2005.

Member, *the FY2007 NOAA CLIVAR Proposal Review Panel*, the NOAA Climate Program Office, Silver Spring, Maryland, December 19-20, 2006.

Member, *the CLIVAR Working Group on Ocean Model Development (WGOMD)*, September 2007-present.

Reviewer, NCAR Advanced Study Program Postdoctoral Applications (ongoing).

Professional Meetings

Session Chair, *the 16th Conference on Atmospheric and Oceanic Fluid Dynamics*, Santa Fe, New Mexico, June 25-29, 2007.

Professional Reviews

For Journals: Atmosphere-Ocean, Climate Dynamics, Geophysical Research Letters, Journal of Atmospheric and Oceanic Technology, Journal of Climate, Journal of Computational Physics, Journal of Geophysical Research - Oceans, Journal of Marine Research, Journal of Physical Oceanography, Ocean Modelling, Ocean Science, Physics of Fluids A.

For Agencies: National Science Foundation Atmospheric Sciences and Physical Oceanography, National Oceanographic and Atmospheric Administration.

Educational and Outreach Activities

Key Lecturer, *the First Latin American School in Ocean and Climate Modeling*, Dichato (Concepcion), Chile, October 16-27, 2000.

Consultant, the United Nations Transfer of Knowledge Through Expatriate Nationals (TOKTEN) / United Nations International Short-term Advisory Resources (UNISTAR)

programs. Middle East Technical University, Institute of Marine Sciences, Erdemli, Icel, Turkey (April 28 - May 2, 2003) and Istanbul Technical University, Eurasia Institute of Earth Sciences, Istanbul, Turkey (May 5-8, 2003).

Primary and Topic Organizer, the *Third Annual UCAR/NCAR Junior Faculty Forum*, Boulder, CO, July 27-29, 2005.

Project Mentor, *the Art of Climate Modeling Workshop*, NCAR, Boulder, CO, June 5-16, 2006.

Guest Investigator, Woods Hole Oceanographic Institution, 2007-present.

Science Fair Judge, Boulder Valley School District, 1996.

Supervisor

Wanli Wu, Associate Scientist II (2004-2006)

Bruce Briegleb, Associate Scientist IV (2006-present)

Invited Presentations

1. Danabasoglu, G., 1995: Tracer distributions and fluxes in the global ocean. *The Middle East Technical University, Institute of Marine Sciences, Erdemli, Icel, Turkey, May 23.*
2. Danabasoglu, G., 2003: NCAR Community Climate System Model and Exploration of the causes and effects of some coupled model biases. Middle East Technical University, Institute of Marine Sciences, Erdemli, Icel, Turkey, April 28.
3. Danabasoglu, G., 2003: Introduction to subgrid scale parameterizations in ocean general circulation models. Middle East Technical University, Institute of Marine Sciences, Erdemli, Icel, Turkey, April 29.
4. Danabasoglu, G., 2003: Vertical mixing parameterizations in ocean general circulation models. Middle East Technical University, Institute of Marine Sciences, Erdemli, Icel, Turkey, April 30.
5. Danabasoglu, G., 2003: NCAR Community Climate System Model and Exploration of the causes and effects of some coupled model biases. Istanbul Technical University, Eurasia Institute of Earth Sciences, Istanbul, Turkey, May 5.
6. Danabasoglu, G., 2003: Introduction to subgrid scale parameterizations in ocean general circulation models. Istanbul Technical University, Eurasia Institute of Earth Sciences, Istanbul, Turkey, May 6.
7. Danabasoglu, G. and W. G. Large, 2005: Remote impacts of large, positive SST biases along the eastern boundaries of subtropical gyres. *The CLIVAR / OOPC / Argo / GOOS / CPPS Workshop on the South Pacific*, Concepcion, Chile, October 11-14.
8. Danabasoglu, G., 2007: Oceanic thermohaline circulation. *Ball Aerospace and Technologies Corp. Seminar Series*, Boulder, CO, August 3.
9. Danabasoglu, G., 2007: Are there remaining issues precluding the use of terrain-following coordinates in global climate models? *The Workshop on Numerical Methods in Ocean Models*, Bergen, Norway, August 24-25.

Publications

A. Thesis

1. Danabasoglu, G., 1992: Spatial simulation of transition in wall-bounded shear flows: Active control and effects of surface roughness. Ph. D. Dissertation, Department of Aerospace Engineering Sciences, University of Colorado, Boulder, CO, 260 pp.

B. Refereed Journal Articles (* From Thesis Work)

1. Biringen, S., and G. Danabasoglu, 1989: Oscillatory flow with heat transfer in a square cavity. *Phys. Fluids A*, **1**, 1796-1812.
2. Biringen, S., and G. Danabasoglu, 1990: Computation of convective flow with gravity modulation in rectangular cavities. *J. Thermophys. Heat Trans.*, **4**, 357-365.
3. Danabasoglu, G., and S. Biringen, 1990: A Chebyshev matrix method for the spatial modes of the Orr-Sommerfeld equation. *Int. J. Num. Meth. in Fluids.*, **11**, 1033-1037.
4. *Danabasoglu, G., A. Saati, and S. Biringen, 1991: Three-Dimensional simulations of incompressible and compressible flow stability. *Computer Phys. Comm.*, **65**, 76-83.
5. *Danabasoglu, G., S. Biringen, and C. L. Streett, 1991: Spatial simulation of instability control by periodic suction blowing. *Phys. Fluids A*, **3**, 2138-2147.
6. *Saiki, E. M., S. Biringen, G. Danabasoglu, and C. L. Streett, 1993: Spatial simulation of secondary instability in plane channel flow: comparison of K- and H-type disturbances. *J. Fluid Mech.*, **253**, 485-507.
7. Danabasoglu, G., J. C. McWilliams, and P. R. Gent, 1994: The role of mesoscale tracer transports in the global ocean circulation. *Science*, **264**, 1123-1126.
8. *Danabasoglu, G., S. Biringen, and C. L. Streett, 1994: Application of the spectral multi-domain method to the Navier-Stokes equations. *J. Comp. Phys.*, **113**, 155-164.
9. Boning, C. W., F. O. Bryan, W. R. Holland, G. Danabasoglu, and J. C. McWilliams, 1995: An overlooked problem in model simulations of the thermohaline circulation and heat transport in the Atlantic Ocean. *J. Climate*, **8**, 515-523.
10. Danabasoglu, G., and J. C. McWilliams, 1995: Sensitivity of the global ocean circulation to parameterizations of mesoscale tracer transports. *J. Climate*, **8**, 2967-2987.
11. McWilliams, J. C., G. Danabasoglu, and P. R. Gent, 1996: Tracer budgets in the warm water sphere. *Tellus*, **48A**, 179-192.
12. Danabasoglu, G., J. C. McWilliams, and W. G. Large, 1996: Approach to equilibrium in accelerated global oceanic models. *J. Climate*, **9**, 1092-1110.

13. Large, W. G., G. Danabasoglu, S. C. Doney, and J. C. McWilliams, 1997: Sensitivity to surface forcing and boundary layer mixing in the NCAR CSM ocean model: Annual-mean climatology. *J. Phys. Oceanogr.*, **27**, 2418-2447.
14. Gent, P. R., F. O. Bryan, G. Danabasoglu, S. C. Doney, W. R. Holland, W. G. Large, and J. C. McWilliams, 1998: The NCAR climate system model global ocean component. *J. Climate*, **11**, 1287-1306.
15. Danabasoglu, G., 1998: On the wind driven circulation of the uncoupled and coupled NCAR climate system ocean model. *J. Climate*, **11**, 1444-1456.
16. Milliff, R. F., W. G. Large, J. Morzel, G. Danabasoglu, and T. M. Chin, 1999: Ocean general circulation model sensitivity to forcing from scatterometer winds. *J. Geophys. Res.*, **104**, 11337-11358.
17. Saravanan, R., G. Danabasoglu, S. C. Doney, and J. C. McWilliams, 2000: Decadal variability and predictability in the midlatitude ocean-atmosphere system. *J. Climate*, **13**, 1073-1097.
18. Danabasoglu, G., and J. C. McWilliams, 2000: An upper-ocean model for short-term climate variability. *J. Climate*, **13**, 3380-3411.
19. Large, W. G., G. Danabasoglu, J. C. McWilliams, P. R. Gent, and F. O. Bryan, 2001: Equatorial circulation of a global ocean climate model with anisotropic horizontal viscosity. *J. Phys. Oceanogr.*, **31**, 518-536.
20. McWilliams, J. C., and G. Danabasoglu, 2002: Eulerian and eddy-induced meridional overturning circulations in the tropics. *J. Phys. Oceanogr.*, **32**, 2054-2071.
21. Danabasoglu, G., 2004: A comparison of global ocean general circulation model solutions obtained with synchronous and accelerated integration methods. *Ocean Modelling*, **7**, 323-341.
22. Gent, P. R., and G. Danabasoglu, 2004: Heat uptake and the thermohaline circulation in the Community Climate System Model, version 2. *J. Climate*, **17**, 4058-4069.
23. Hack, J. J., J. M. Caron, G. Danabasoglu, K. W. Oleson, C. Bitz, and J. E. Truesdale, 2006: CCSM CAM3 climate simulation sensitivity to changes in horizontal resolution. *J. Climate*, **19**, 2267-2289.
24. Large, W. G., and G. Danabasoglu, 2006: Attribution and impacts of upper ocean biases in CCSM3. *J. Climate*, **19**, 2325-2346.
25. Danabasoglu, G., W. G. Large, J. J. Tribbia, P. R. Gent, B. P. Briegleb, and J. C. McWilliams, 2006: Diurnal coupling in the tropical oceans of CCSM3. *J. Climate*, **19**, 2347-2365.
26. Gent, P. R., F. O. Bryan, G. Danabasoglu, K. Lindsay, D. Tsumune, M. W. Hecht, and S. C. Doney, 2006: Ocean chlorofluorocarbon and heat uptake during the 20th century in the CCSM3. *J. Climate*, **19**, 2366-2381.

27. Bryan, F. O., G. Danabasoglu, N. Nakashiki, Y. Yoshida, D.-H. Kim, J. Tsutsui, and S. C. Doney, 2006: Response of the North Atlantic thermohaline circulation and ventilation to increasing carbon dioxide in CCSM3. *J. Climate*, **19**, 2382-2397.
28. Bryan, F. O., G. Danabasoglu, P. R. Gent, and K. Lindsay, 2006: Changes in ocean ventilation during the 21st century in the CCSM3. *Ocean Modelling*, **15**, 141-156.
29. Danabasoglu, G., and J. Marshall, 2007: Effects of vertical variations of thickness diffusivity in an ocean general circulation model. *Ocean Modelling*, **18**, 122-141, doi:10.1016/j.ocemod.2007.03.006.
30. Doney, S. C., S. Yeager, G. Danabasoglu, W. G. Large, and J. C. McWilliams, 2007: Mechanisms governing interannual variability of upper ocean temperature in a global ocean hindcast simulation. *J. Phys. Oceanogr.*, **37**, 1918-1938.
31. Wu, W., G. Danabasoglu, and W. G. Large, 2007: On the effects of parameterized Mediterranean overflow on North Atlantic ocean circulation and climate. *Ocean Modelling*, **19**, 31-52, doi:10.1016/j.ocemod.2007.06.003.
32. Kleypas, J. A., G. Danabasoglu, and J. M. Lough, 2008: Potential role of the ocean thermostat in determining regional differences in coral reef bleaching events. *Geophys. Res. Lett.*, **35**, L03613, doi:10.1029/2007GL032257.
33. Danabasoglu, G., R. Ferrari, and J. C. McWilliams, 2008: Sensitivity of an ocean general circulation model to a parameterization of near-surface eddy fluxes. *J. Climate* (in press).
34. Jochum, M., G. Danabasoglu, M. Holland, Y.-O. Kwon, and W. G. Large, 2008: Ocean viscosity and climate. *J. Geophys. Res.* (in press).

C. Other External Refereed Publications

1. Biringen, S., G. Danabasoglu, and T. K. Eastman, 1990: A finite difference method with direct solvers for thermally-driven cavity problems. *Numerical Simulation of Oscillatory Convection in Low-Pr Fluids*, B. Roux, Ed., NNFM **27**, 35-42, Vieweg, Braunschweig.
2. Danabasoglu, G., S. Biringen, and C. L. Streett, 1990: Numerical simulation of spatially-evolving instability. *Instability and Transition*, M. Y. Hussaini and R. Voigt, Eds., 394-404, Springer-Verlag, New York.
3. Danabasoglu, G., S. Biringen, and C. L. Streett, 1992: A spectral multi-domain code for the Navier-Stokes equations. *Instability, Transition and Turbulence*, M. Y. Hussaini, A. Kumar, and C. L. Streett, Eds., 283-293, Springer-Verlag, New York.
4. Danabasoglu, G., S. Biringen, and C. L. Streett, 1993: Simulation of instabilities in a boundary layer with a roughness element. *13th Int. Conf. Num. Meth. in Fluid Dyn., Proceedings*, M. Napolitano and F. Sabetta, Eds., 205-209, Springer-Verlag, Berlin.
5. Gent, P. R., F. O. Bryan, G. Danabasoglu, S. C. Doney, W. R. Holland, W. G. Large, and J. C. McWilliams, 1997: The NCAR climate system model global ocean component. *EOS, Trans. Amer. Geophys. Union*, **77** (46), F380.

D. Publications Submitted or in Preparation

1. Danabasoglu, G., 2008: On multi-decadal variability of the Atlantic meridional overturning circulation in the Community Climate System Model version 3 (CCSM3). *J. Climate* (submitted).
2. Griffies, S. M., A. Biastoch, C. Boning, F. Bryan, G. Danabasoglu, E. P. Chassignet, M. H. England, R. Gerdes, H. Haak, R. W. Hallberg, W. Hazeleger, J. Jungclaus, W. G. Large, G. Madec, A. Pirani, B. L. Samuels, M. Scheinert, A. S. Gupta, C. A. Severijns, H. L. Simmons, A. M. Treguier, M. Winton, S. Yeager, and J. Yin, 2008: Coordinated Ocean-ice Reference Experiments (COREs). *Ocean Modelling* (submitted).
3. Legg, S., Y. Chang, E. Chassignet, G. Danabasoglu, T. Ezer, A. Gordon, S. Griffies, R. Hallberg, L. Jackson, W. Large, T. Ozgokmen, H. Peters, J. Price, U. Riemenschneider, W. Wu, J. Yang, X. Xu, 2008: Improving oceanic overflow representation in climate models: The Gravity Current Entrainment Climate Process Team. *BAMS* (submitted).

E. Internally Refereed Publications

1. Biringen, S., and G. Danabasoglu, 1988: Solution of the Orr-Sommerfeld equation for the Blasius boundary layer: Documentation of program ORRBL and test cases. NASA Report NASA CR-4169.
2. Danabasoglu, G., and S. Biringen, 1989: A Chebyshev matrix method for spatial modes of the Orr-Sommerfeld equation. NASA Report NASA CR-4247.
3. NCAR Oceanography Section, 1996: The NCAR CSM Ocean Model. NCAR Tech. Note, NCAR/TN-423+STR.
4. Doney, S. C., S. Yeager, G. Danabasoglu, W. G. Large, and J. C. McWilliams, 2003: Modeling Global Oceanic Inter-Annual Variability (1958-1997): Simulation Design and Model-Data Evaluation. NCAR Tech. Note, NCAR/TN-452+STR, 48 pp.
5. Fox-Kemper, B., G. Danabasoglu, R. Ferrari, and R. W. Hallberg, 2008: Parameterizing submesoscale physics in global climate models. *CLIVAR Exchanges* (in press).

F. Non-refereed Publications

1. Biringen, S., G. Danabasoglu, and L. J. Peltier, 1987: Influence of g-jitter on thermal convection at one-g and micro-g environments. Also in *Bull. Am. Phys. Soc.*, **32**, 2025.
2. Danabasoglu, G., and S. Biringen, 1988: Convective flow with g-jitter in rectangular cavities. Also as *American Institute of Aeronautics and Astronautics paper AIAA 88-3727*.
3. Danabasoglu, G., and S. Biringen, 1988: Oscillatory flow with heat transfer in a square cavity. *The SIAM 1988 Ann. Meeting*.

4. Biringen, S., and G. Danabasoglu, 1988: Numerical simulation of oscillatory convection in low-Pr fluids. *The GAMM Workshop*, Marseilles, France, October 12-14.
5. Danabasoglu, G., S. Biringen, and C. L. Streett, 1989: Numerical simulation of spatially-evolving instability. Also in *Bull. Am. Phys. Soc.*, **34**, 2325.
6. Danabasoglu, G., and S. Biringen, 1990: Oscillatory flow with heat transfer in a square cavity. *The 28th Aerospace Sciences Meeting*, Reno, NV, January 8-11. Also as *American Institute of Aeronautics and Astronautics paper AIAA 90-0693*.
7. Danabasoglu, G., S. Biringen, and C. L. Streett, 1990: Numerical simulation of stability control by periodic suction-blowing. *The 21st Fluid Dynamics, Plasma Dynamics and Lasers Conference*, Seattle, WA, June 18-20. Also as *American Institute of Aeronautics and Astronautics paper AIAA 90-1530*.
8. Danabasoglu, G., A. Saati, and S. Biringen, 1990: Three-Dimensional simulations of incompressible and compressible flow stability. *The IMACS 1st International Conference on Computational Physics*, University of Colorado, Boulder, CO, June 11-15.
9. Danabasoglu, G., S. Biringen, and C. L. Streett, 1990: Numerical simulation of spatially-evolving transition in plane channel flow. *The 12th Int. Conf. Num. Meth. in Fluids*, Oxford University, England, July 9-13 (poster).
10. Biringen, S., G. Danabasoglu, and C. L. Streett, 1990: Three-Dimensional numerical simulations of spatially-evolving instability in plane channel flow. Also in *Bull. Am. Phys. Soc.*, **35**, 2280.
11. Danabasoglu, G., S. Biringen, and C. L. Streett, 1990: Control of spatially-evolving instability with periodic suction-blowing. Also in *Bull. Am. Phys. Soc.*, **35**, 2291.
12. Danabasoglu, G., S. Biringen, and C. L. Streett, 1991: Numerical simulation of spatially-evolving instability in plane channel flow. *The 29th Aerospace Sciences Meeting*, Reno, NV, January 7-10. Also as *American Institute of Aeronautics and Astronautics paper AIAA 91-0234*.
13. Saiki, E. M., S. Biringen, G. Danabasoglu, and C. L. Streett, 1991: Three-Dimensional numerical simulations of spatially-evolving instability in plane channel flow. *The Boundary Layer Transition and Control Conference*, Peterhouse College, Cambridge, England, April 9-12.
14. Danabasoglu, G., S. Biringen, and C. L. Streett, 1991: Numerical simulation of spatially-evolving instability control in three-dimensional plane channel flow. *The Boundary Layer Transition and Control Conference*, Peterhouse College, Cambridge, England, April 9-12 (poster).
15. Saiki, E. M., S. Biringen, and G. Danabasoglu, 1991: Effect of inflow disturbance conditions on spatially evolving instability in plane channel flow. Also in *Bull. Am. Phys. Soc.*, **36**, 2677.

16. Danabasoglu, G., S. Biringen, and R. S. Reichert, 1991: Spatial stability of shear flows in the presence of a roughness element. Also in *Bull. Am. Phys. Soc.*, **36**, 2677.
17. Joslin, R. D., C. L. Streett, and G. Danabasoglu, 1992: Spatial simulation of boundary layer transition mechanisms using coupled spectral/compact-difference schemes. *The Int. Conf. on Spectral and High-Order Methods*, Montpellier, France, June 22-26.
18. Danabasoglu, G., S. Biringen, and C. L. Streett, 1992: Simulation of instabilities in a boundary layer with a roughness element. *The 13th Int. Conf. Num. Meth. in Fluid Dyn.*, Rome, Italy, July 6-10.
19. Danabasoglu, G., S. Biringen, and C. L. Streett, 1992: Simulation of boundary layer instability in the presence of a roughness element. Also in *Bull. Am. Phys. Soc.*, **37**, 1813.
20. Danabasoglu, G., S. Biringen, and C. L. Streett, 1993: Spatial simulation of boundary layer instability: effects of surface roughness. *The 31th Aerospace Sciences Meeting*, Reno, NV, January. Also as *American Institute of Aeronautics and Astronautics paper AIAA 93-0075*.
21. McWilliams, J. C., G. Danabasoglu, and W. G. Large, 1993: An evolving global ocean model for studies of climate variability on all time scales. *The ACCP Principal Investigators Meeting*, NOAA Geophysical Fluid Dynamics Laboratory, Princeton, NJ, April 21-23.
22. Danabasoglu, G., and F. O. Bryan, 1994: The effects of a new isopycnal mixing parameterization on the North Atlantic general circulation. *The ACCP Principal Investigators Meeting*, NOAA Geophysical Fluid Dynamics Laboratory, Princeton, NJ, May 9-11.
23. Danabasoglu, G., 1994: Tracer distributions and fluxes in the global ocean. *The 9th WOCE/NEG Meeting*, Los Alamos National Laboratories, Los Alamos, NM, September 19-22.
24. Danabasoglu, G., J. C. McWilliams, and W. G. Large, 1995: Approach to equilibrium in global oceanic models. *The 21st General Assembly of the International Union of Geodesy and Geophysics*, Boulder, CO, July 2-14.
25. Danabasoglu, G., and J. C. McWilliams, 1996: The collapse of the global conveyor circulation. *The Thermohaline Circulation Workshop*, NCAR, Boulder, CO, February 15-16.
26. Danabasoglu G., 1996: The NCAR CSM Ocean Model x3 solutions. *The 1st CSM Workshop*, Breckenridge, CO, May 15-17.
27. Danabasoglu, G., R. Saravanan, and J. C. McWilliams, 1997: A coupled atmosphere-ocean sector model for climate variability studies. *The American Meteorological Society Seventh Conference on Climate Variations*, Long Beach, California, February 2-7. Also in *the Seventh Conference on Climate Variations Preprints*, 17-20.
28. Danabasoglu, G., R. Saravanan, and J. C. McWilliams, 1997: Interdecadal variability in an idealized, coupled atmosphere-ocean model and its sensitivity to the oceanic convection parameterization. *The American Geophysical Union Fall Meeting*, San Francisco, CA, December 8-12.

29. Danabasoglu, G., R. Saravanan, and J. C. McWilliams, 1998: Interdecadal variability in an idealized, coupled atmosphere-ocean model and its sensitivity to the oceanic vertical mixing parameterization. *The NATO Advanced Study Institute Ocean Modeling and Parameterization Winter School*, Centre de Physique des Houches, Les Houches, France, January 20-30 (poster).
30. Danabasoglu, G., and J. C. McWilliams, 1999: Results using the Upper Ocean Model. Two presentations in the Ocean Model and Seasonal-to-Interannual Working Group meetings at *the Fourth Annual CSM Workshop*, Breckenridge, CO, June 22-24.
31. Danabasoglu, G., 2000: Evaluation of upper ocean, coupled model simulations: Equatorial Pacific. *The CSM Ocean Model Working Group Meeting*, NCAR, Boulder, CO, January 18-19.
32. Danabasoglu, G., 2000: Evaluation of upper ocean, coupled model simulations: Equatorial Pacific. *The CSM Joint Decadal-to-Centennial and Seasonal-to-Interannual Working Groups Meeting*, Center for Ocean-Land-Atmosphere Studies (COLA), Calverton, MD February 3-4.
33. Danabasoglu, G., 2000: Coupled POP/CICE integrations. *The Fifth Annual CCSM Workshop Ocean Model Working Group Meeting*, Breckenridge, CO, June 27-29.
34. McWilliams, J. C., and G. Danabasoglu, 2000: Eulerian and eddy-induced meridional overturning circulations in the tropics. *The WOCE/CLIVAR Variability Workshop*, Fukuoka, Japan, October 17-20 (poster).
35. Saravanan, R., G. Danabasoglu, S. Doney, and J. C. McWilliams, 2001: Temperature-salinity correlations and spiciness in oceanic variability. *The 13th Conference on Atmospheric and Oceanic Fluid Dynamics*, Breckenridge, CO, June 4-8.
36. Danabasoglu, G., 2001: A x3 POP equilibrium solution. *The Sixth Annual CCSM Workshop Ocean Model Working Group Meeting*, Breckenridge, CO, June 26-28.
37. Large, W. G., G. Danabasoglu, and S. Yeager, 2002: Aspects of the uncoupled Tropical ocean relevant to full coupling. *The Seventh Annual CCSM Workshop Session on Simulating the Coupled Tropical Climate System*, Breckenridge, CO, June 25-27.
38. Danabasoglu, G., 2002: Status of NCAR ocean-ice integrations. *The Seventh Annual CCSM Workshop Ocean Model Working Group Meeting*, Breckenridge, CO, June 25-27.
39. Danabasoglu, G., and J. C. McWilliams, 2002: Eulerian and eddy-induced meridional overturning circulations in the tropics. *The WOCE and Beyond: Achievements of the World Ocean Circulation Experiment Conference*, San Antonio, Texas, November 18-22 (poster).
40. Danabasoglu, G., and W. G. Large, 2003: Exploration of the causes and effects of some CCSM biases. *The CCSM Atmosphere Model and Climate Variability Joint Working Group Meeting*, Boulder, Colorado, March 6-7.
41. Danabasoglu, G., W. G. Large, and P. R. Gent, 2003: Exploration of the causes and effects of some CCSM biases. *The Tropical Biases Workshop*, NOAA Geophysical Fluid Dynamics Laboratory, Princeton, NJ, May 28-30.

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