

STEPHEN MATTHEW GRIFFIES

NOAA GEOPHYSICAL FLUID DYNAMICS LABORATORY • PRINCETON USA

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EDUCATION

1993	Ph.D in Theoretical Physics	University of Pennsylvania
1988	Physics undergraduate training	University of Washington
1987	Masters in Engineering Sciences & Applied Mathematics	Northwestern University
1986	Bachelor of Science in Chemical Engineering	Louisiana State University

EMPLOYMENT AND APPOINTMENTS

1996-present	GFDL Physical Scientist (civil service grade GS-15)
Jun-Aug 2012	Visiting Scientist, National Center for Atmospheric Research, Boulder, USA
Jan-Jun 2011	CSIRO Distinguished Visiting Scientist Fellow, Hobart, Australia
Mar 2009	Visiting Professor, Universite catholique de Louvain, Belgium
Jan-Nov 2005	Visiting Scientist, CSIRO Marine and Atmospheric Research, Hobart, Australia
2001–2005	GFDL Oceans and Climate Group Leader
2000–present	GFDL Ocean Model and Climate Model Development Team co-Leader
1995–1996	GFDL Visiting Research Scientist
1993–1995	UCAR Global & Climate Change Fellow at Princeton University
1988–1993	University of Pennsylvania Physics Graduate Research Fellow
1986–1987	Northwestern University Engineering Sciences and Applied Mathematics Fellow
1984–1986	Louisiana State University Chemical Engineering Research Technician

OCEANOGRAPHIC CRUISES

1993 **Technical Assistant:** WOCE Line AR7W / Atlantic Circulation Experiment, Labrador Sea,
CCGS Hudson (John Lazier, Chief Scientist)

AWARDS

2012	NOAA Administrator's Award for scientific vision, leadership and development of the Modular Ocean Model (MOM) for climate modeling, research and predictions
2011	CSIRO Distinguished Visiting Scientist Fellow, Australia
2009	Visiting Professor, Universite catholique de Louvain, Belgium
2001	NOAA/Oceanic and Atmospheric Research Outstanding Scientific Paper
1999	NOAA/Oceanic and Atmospheric Research Outstanding Scientific Paper
1998	NOAA/Oceanic and Atmospheric Research Employee of the Year
1997	NOAA/Environmental Research Laboratories Outstanding Scientific Paper

PROFESSIONAL SERVICES AND MEMBERSHIPS

2012-present	Member CLIVAR/CliC/SCAR Southern Ocean Region Implementation Panel
2010-present	Member of the European Geophysical Union
2009-present	Member of the Scientific Advisory Board for the Catalan Climate Institute IC3, Barcelona, Spain
2007-present	Associate Editor of Ocean Modelling
2006-2009	CLIVAR Scientific Steering Group
2004-2009	CLIVAR Working Group on Coupled Modeling (ex officio)
2004-2007	Editorial Board of Ocean Science
1999-2012	CLIVAR Working Group on Ocean Model Development (co-chair 2004-2009)
1993-present	Member of the American Geophysical Union
1993-present	Member of the American Meteorological Society

EDUCATIONAL ADVISING

1999-2002	Shafer Smith	Princeton University / GFDL visiting post-doctoral scientist
2001-2002	Harper Simmons	GFDL visiting post-doctoral scientist
2005-2009	Andreas Klocker	PhD co-advisor (with Trevor McDougall), University of Tasmania
2008-2011	Michael Bates	PhD co-advisor (with Matthew England), University of New South Wales
2011-present	Michael Bueti	PhD co-advisor (with Isaac Ginis), University of Rhode Island
2012-present	Yalin Fan	Princeton University / GFDL visiting post-doctoral scientist

INVITED PRESENTATIONS AND TEACHING EXPERIENCE

- Feb 2013: **SEA LEVEL IN A SUITE OF FORCED GLOBAL OCEAN-ICE SIMULATIONS:** CLIVAR workshop on Sea-Level Rise, Ocean/Ice-Shelf Interactions, and Ice Sheets, Hobart, Australia
- Sep 2012: **SEA LEVEL IN OCEAN CLIMATE MODELS: FUNDAMENTALS AND PRACTICES:** University of Tasmania, Hobart, Australia
- Feb 2012: **OCEAN MODELLING WITH MOM AND ITS RELATION TO AUSTRALIAN OCEAN CLIMATE SCIENCE:** First meeting of Consortia for Ocean Modelling in Australia, Hobart, Australia
- Feb 2011: **OCEAN MODEL ALGORITHMS DIRECTLY IMPACTING SEA LEVEL SIMULATIONS, AND ANALYSIS METHODS USED TO CHARACTERIZE SEA LEVEL CHANGE:** WCRP/IOC Workshop on Regional Sea Level Change, Paris, France
- Nov 2010: **OCEAN CLIMATE MODELING AT GFDL:** Scientific Workshop for the Centre for Australian Weather and Climate Research, Hobart, Australia
- Sep 2010: **SENSITIVITY OF ATLANTIC OCEAN VARIABILITY TO OCEAN PHYSICS AND VERTICAL COORDINATE:** CLIVAR WGOMD/GSOP Workshop on Decadal Variability, Predictability, and Predictions: Understanding the Role of the Ocean. Boulder USA
- Mar 2009: **PHYSICAL PROCESSES SETTING THE OCEAN'S WATER MASSES:** four lectures at Université Catholique de Louvain, Belgium
- Apr 2008: **PHYSICAL PROBLEMS IN SIMULATING THE OCEAN CLIMATE SYSTEM:** presentation given during a workshop on Oceans and Climate at Yale University
- Mar 2008: **PHYSICAL PROBLEMS IN SIMULATING THE OCEAN CLIMATE SYSTEM:** presentation given during a special session on Climate Physics at the American Physical Society's March Meeting of Condensed Matter Physics
- Nov 2007: **OCEAN MODEL FUNDAMENTALS:** 20 hour intensive course at the University of Tasmania, Australia
- Aug 2006: **OCEAN MODEL FUNDAMENTALS:** two lectures at the NSF summer school, MODERN MATHEMATICAL METHODS IN PHYSICAL OCEANOGRAPHY, Breckenridge, USA
- Oct 2004: **OCEAN MODEL FUNDAMENTALS:** 20 hour intensive course at the INDIAN INTENSIVE SCHOOL ON LARGE-SCALE OCEAN MODELLING, Bangalore, India
- Sep 2004: **OCEAN MODEL FUNDAMENTALS:** three lectures at the GLOBAL OCEAN DATA ASSIMILATION EXPERIMENT SUMMER SCHOOL, La Londe Les Maures, France
- May 2003: **OCEAN CLIMATE MODELING AT NOAA-GFDL:** two presentations for a workshop on ocean modeling. Hobart, Australia
- May 2002: **OCEAN CLIMATE MODELING WITH MOM4:** three presentations for a workshop on ocean modeling. Kiel, Germany
- Jan 2001: **OCEAN DYNAMICS AND MODELING:** three lectures at La Escuela de Verano de Universidad de Concepción, Chile
- Mar 1999: **OCEAN AND CLIMATE MODELING:** two presentations at Conference on Global Climate. Barcelona, Spain
- Sep-Dec 1993: Co-Lecturer: Atmospheric and Oceanic Data Assimilation, Princeton University
- 1990–1993: Instructor, Undergraduate Physics Laboratory, University of Pennsylvania
- 1990–1993: Teaching Assistant, General Relativity and Quantum Field Theory, University of Pennsylvania

CONVENER/ORGANIZER OF WORKSHOPS & MEETINGS

- Feb 2013 CLIVAR WGOMD/SOP WORKSHOP ON SEA-LEVEL RISE, OCEAN/ICE-SHELF INTERACTIONS, AND ICE SHEETS, Hobart, Australia.
- Apr 2012 PHYSICAL AND BIOGEOCHEMICAL OCEAN MODELLING: DEVELOPMENT, ASSESSMENT, AND APPLICATIONS, Session at the European Geophysical Union General Assembly, Vienna, Austria.
- Oct 2011 OCEAN CIRCULATION AND VENTILATION, Session at the WCRP Open Science Conference, Denver, USA.
- Apr 2011 PHYSICAL AND BIOGEOCHEMICAL OCEAN MODELLING: DEVELOPMENT, ASSESSMENT, AND APPLICATIONS, Session at the European Geophysical Union General Assembly, Vienna, Austria.
- Oct 2009 WORKSHOP ON OCEAN CLIMATE MODELING, GFDL/Princeton, USA.
- Apr 2009 CLIVAR WORKSHOP ON OCEAN MESOSCALE EDDIES: OBSERVATIONS, SIMULATIONS, AND PARAMETERIZATIONS, Exeter, UK.
- Aug 2007 CLIVAR WORKSHOP ON NUMERICAL METHODS IN OCEAN MODELLING, Bergen, Norway.
- Nov 2005 CLIVAR WORKSHOP ON MODELLING THE SOUTHERN OCEAN, Hobart, Australia.
- Jun 2004 CLIVAR WORKSHOP ON EVALUATING THE OCEAN COMPONENT OF IPCC MODELS, Princeton, USA.
- Aug 2002 WORKSHOP ON Z-COORDINATE OCEAN MODELING, Massachusetts Institute of Technology, USA.
- Nov 1999 MEETING OF Z-COORDINATE OCEAN MODELING AT GFDL, LANL, MIT, AND NCAR, Princeton, USA.
- Jul 1999 OCEAN/ATMOSPHERE VARIABILITY AND PREDICTABILITY, Session at the International Union of Geodesy and Geophysics, Session, Birmingham, UK.

PARTICIPANT IN SCHOOLS

- Jan 1998 NATO Advanced Study Institute: OCEAN MODELING AND PARAMETERIZATION, Les Houches, France.
- Jan 1996 NATO Advanced Study Institute: CLIMATE VARIABILITY AND PREDICTABILITY, Les Houches, France.
- Jul 1994 Meeting of UCAR Global and Climate Change Fellows. Steamboat Springs, USA.
- Jul 1992 Theoretical Advanced Study Institute: FROM STRING THEORY TO BLACK HOLES, Boulder, USA.
- Jul 1991 High Energy Physics and Cosmology School, Center for Theoretical Physics. Trieste, Italy.
- Jun 1991 Theoretical Physics Summer School: PARTICLE PHYSICS IN THE 1990's, Les Houches, France.

REFEREED PUBLICATIONS AND MANUSCRIPTS UNDER REVIEW

1. Challenges to Understand the Dynamic Response of Greenland's Marine Terminating Glaciers to Oceanic and Atmospheric Forcing, 2012: F. Straneo, P. Heimbach, O. Sergienko, G. Hamilton, G. Catania, **S.M. Griffies**, R. W. Hallberg, A. Jenkins, I. Joughin, R. Motyka, L. Padman, W. T. Pfeffer, S. F. Price, E. Rignot, T. Scambos, M. Truffer, A. Vieli, *submitted to Bulletin of the American Meteorological Society*.
2. The ACCESS coupled model: description, control climate and evalution, 2012: D. Bi, M. Dix, S.J. Marsland, S. O'Farrell, H. Rashid, P. Uotila, A.C. Hirst, E. Kowalczyk, M. Golebiewski, A. Sullivan, H. Yan, N. Hanna, C. Franklin, Z. Sun, P. Vohralik, I. Watterson, X. Zhou, R. Fiedler, M. Collier, Y. Ma, J. Noonan, L. Stevens, P. Uhe, H. Zhu, **S.M. Griffies**, R. Hill, and K. Puri, *submitted to Australian Meteorological and Oceanographic Journal*.
3. ACCESS-OM: the ocean and sea ice core of the ACCESS coupled model, 2012: D. Bi, S.J. Marsland, P. Uotila, S. O'Farrell, R. Fiedler, A. Sullivan, **S.M. Griffies**, X. Zhou, and A.C. Hirst, *submitted to Australian Meteorological and Oceanographic Journal*.
4. Evaluation of ACCESS climate mdoel ocean metrics in CMIP5 simulations, 2012: S.J. Marsland, D. Bi, P. Uotila, R. Fiedler, **S.M. Griffies**, K. Lorbacher, S. O'Farrell, A. Sullivan, P. Uhe, and X. Zhou, *submitted to Australian Meteorological and Oceanographic Journal*.
5. GFDLs ESM2 global coupled climate-carbon Earth System Models Part II: Carbon system formulation and baseline simulation characteristics, 2012: J.P. Dunne, J.G. John, R.W. Hallberg, **S.M. Griffies**, E.N. Shevliakova, R.J. Stouffer, J.P. Krasting, L.A. Sentman, P.C.D. Milly, S.L. Malyshev, A.J. Adcroft, W. Cooke, K.A. Dunne, M.J. Harrison, H. Levy, A.T. Wittenberg, P.J. Phillipps, *submitted to Journal of Climate*.
6. Connecting changing ocean circulation with changing climate, 2012: M. Winton, **S.M. Griffies**, B.L. Samuels, J.L. Sarmiento, and T.L. Froelicher, *in revision with Journal of Climate*.
7. Influence of Ocean and Atmosphere Components on Simulated Climate Sensitivities, 2012: M. Winton, A.J. Adcroft, **S.M. Griffies**, R.W. Hallberg, L.W. Horowitz and R.J. Stouffer, *in revision with Journal of Climate*.
8. A dynamic, embedded Lagrangian model for ocean climate models, Part II: Idealised overflow tests, 2012: M.L. Bates, **S.M. Griffies**, and M.H. England, *accepted by Ocean Modelling*.
9. GFDLs ESM2 global coupled climate-carbon Earth System Models Part I: Physical formulation and baseline simulation characteristics, 2012: J.P. Dunne, J.G. John, A.J. Adcroft, **S.M. Griffies**, R.W. Hallberg, E.N. Shevliakova, R.J. Stouffer, W. Cooke, K.A. Dunne, M.J. Harrison, J.P. Krasting, S.L. Malyshev, P.C.D. Milly, P.J. Phillipps, L.A. Sentman, B.L. Samuels, M.J. Spelman, M. Winton, A.T. Wittenberg, N. Zadeh, *accepted by Journal of Climate*.
10. Northern high latitude heat budget decomposition and transient warming, 2012: M.A.A. Rugenstein, M. Winton, R.J. Stouffer, **S.M. Griffies**, and R.W. Hallberg, *accepted by Journal of Climate*.
11. The catalytic role of beta effect in barotropization processes, 2012: A. Venaille, G.K. Vallis, and **S.M. Griffies**, *Journal of Fluid Mechanics*, doi:10.1017/jfm.2012.344.
12. A dynamic, embedded Lagrangian model for ocean climate models, Part I: Theory and implementation, 2012: M.L. Bates, **S.M. Griffies**, and M.H. England, <http://dx.doi.org/10.1016/j.ocemod.2012.05.004>, *Ocean Modelling*.
13. Rapid barotropic sea level rise from simulated ice-sheet melting scenarios, 2012: K. Lorbacher, S. J. Marsland, J. A. Church, **S.M. Griffies**, and D. Stammer, doi:10.1029/2011JC007733, 117, C06003, *Journal of Geophysical Research*.
14. Physical processes that impact the evolution of global mean sea level in ocean climate models, 2012: **S.M. Griffies** and R. J. Greatbatch, *Ocean Modelling*, 51, 37–72, doi:10.1016/j.ocemod.2012.04.003.
15. Impact of climate warming on upper layer of the Bering Sea, 2012: H.-C. Lee, T.L. Delworth, A. Rosati, R. Zhang, W.G. Anderson, F. Zeng, C.A. Stock, A. Gnanadesikan, K.W. Dixon, **S.M. Griffies**, *Climate Dynamics*, doi: 10.1007/s00382-012-1301-8.
16. Simulated climate and climate change in the GFDL CM2.5 high-resolution coupled climate model, 2012: T.L. Delworth, A. Rosati, W. Anderson, A.J. Adcroft, V. Balaji, R. Benson, K. Dixon, **S.M. Griffies**, H.-C. Lee, R.C. Pacanowski, G.A. Vecchi, A.T. Wittenberg, F. Zeng, and R. Zhang, *Journal of Climate*, 25, 2755–2781, doi: 10.1175/JCLI-D-11-00316.1.
17. Spurious dianeutral mixing and the role of momentum dissipation, 2012: M. Ilicak, A. J. Adcroft, **S.M. Griffies**, and R. W. Hallberg, *Ocean Modelling*, 45-46, 37–58, doi: 10.1016/j.ocemod.2011.10.003.
18. Different magnitudes of projected subsurface ocean warming around Greenland and Antarctica, 2011: J. Yin, J.T. Overpeck, **S.M. Griffies**, A. Hu, J.L. Russell, and R.J. Stouffer, *Nature Geosciences*, doi:10.1038/NGEO1189.
19. Water mass exchange in the Southern Ocean in coupled climate models, 2011: S.M. Downes, A. Gnanadesikan, **S.M. Griffies**, and J.L. Sarmiento, *Journal of Physical Oceanography*, 41, 1756–1771. doi:10.1175/2011JPO4586.1.
20. The Impact of Decadal-Centennial Climate Variability on the Distribution of Radiocarbon in CM2Mc, a New Earth System Model, 2011: E. Galbraith, E.Y. Hwon, A. Gnanadesikan, **S.M. Griffies**, J. Dunne, K. Rodgers, J.L. Sarmiento, D. Bianchi, J. Simeon, A. Wittenberg, I.M. Held, and R. Slater, *Journal of Climate*, 24, 4230–4254. doi:10.1175/2011JCLI3919.1.

21. GFDL's CM3 Coupled Climate Model: Characteristics of the Ocean and Sea Ice Simulations, 2011: **S.M. Griffies**, M. Winton, L.J. Donner, L.W. Horowitz, S.M. Downes, R. Farneti, A. Gnanadesikan, W.J. Hurlin, H.-C. Lee, Z. Liang, J.B. Palter, B.L. Samuels, A.T. Wittenberg, B.L. Wyman, J. Yin, and N.T. Zadeh, *Journal of Climate*, **24**, 3520–3544. doi: 10.1175/2011JCLI3964.1.
22. The Dynamical Core, Physical Parameterizations, and Basic Simulation Characteristics of the Atmospheric Component of the GFDL Global Coupled Model CM3, 2011: L.J. Donner, B.L. Wyman, R.S. Hemler, L.W. Horowitz,, Y. Ming, M. Zhao, J.-C. Golaz, J. Austin, W.F. Cooke, S.R. Freidenreich, P. Ginoux, C.T. Gordon, **S.M. Griffies**, I.M. Held, W.J. Hurlin, S.A. Klein, A.R. Langenhorst, H.-C. Lee, S.-J. Lin, S. L. Maleyshev, P.C.D. Milly, R. Pincus, J.J. Plosky, V. Ramaswamy, M.D. Schwarzkopf, C.J. Seman, E. Shevliakova, W.F. Stern, R.J. Stouffer, R. John Wilson, M. Winton, and A.T. Wittenberg, *Journal of Climate*, **24**, 3484–3519. doi: 10.1175/2011JCLI3955.1.
23. Realistic test cases for limited area ocean modelling, 2011: M. Herzfeld, M. Schmidt, **S.M. Griffies**, and Z. Liang, *Ocean Modelling*, **37**, 1–34, doi:10.1016/j.ocemod.2010.12.008.
24. On the use of IPCC-class models to assess the impact of climate on living marine resources, 2010: C.A. Stock, M.A. Alexander, N.A. Bond, K. Brander, W.W.L. Cheung, E.N. Curchitser, T.L. Delworth, J.P. Dunne, **S.M. Griffies**, M.A. Haltuch, J.A. Hare, A.B. Hollowed, P. Lehodey, S.A. Levin, J.S. Link, K.A. Rose, R.R. Rykaczewski, J.L. Sarmiento, R.J. Stouffer, F.B. Schwinger, G.A. Vecchi, and F.E. Werner, *Progress in Oceanography*, **88**, 1–27, doi:10.1016/j.pocean.2010.09.001.
25. Parameterization of mixed layer eddies. III: Implementation and impact in global ocean climate simulations, 2010: N. Fox-Kemper, G. Danabasoglu, R. Ferrari, **S.M. Griffies**, R.W. Hallberg, M.M. Holland, M.E. Maltrud, S. Peacock, and B.L. Samuels, *Ocean Modelling*, doi:10.1016/j.ocemod.2010.09.002.
26. The impact of Greenland melt on regional sea level: a preliminary comparison of dynamic and static equilibrium effects, 2010: R.E. Kopp, J.X. Mitrovica, **S.M. Griffies**, C.C. Hay, J. Yin, and R.J. Stouffer, *Climatic Change Letter*. **103**, 619–625, doi:10.1007/s10584-010-9935-1.
27. The role of mesoscale eddies in the rectification of the Southern Ocean response to climate change, 2010: R. Farneti, T.D. Delworth, A.J. Rosati, **S.M. Griffies**, and F. Zeng, *Journal of Physical Oceanography*, **40**, 1539–1557.
28. Spatial Variability of Sea-Level Rise in 21st Century Projections, 2010: J. Yin, **S.M. Griffies**, and R.J. Stouffer, *Journal of Climate*, **23**, 4585–4607.
29. Boundary-Value Problem for the Parameterized Mesoscale Eddy Transport, 2010: R. Ferrari, **S.M. Griffies**, A.J.G. Nurser, and G.K. Vallis, *Ocean Modelling*, **32**, 143–156.
30. Evaluating the Uncertainty Induced by the Virtual Salt Flux Assumption in Climate Simulations and Future Projections, 2010: J. Yin, R.J. Stouffer, M.J. Spelman, and **S.M. Griffies**, *Journal of Climate*, **23**, 80–96.
31. Improving oceanic overflow representation in climate models: the Gravity Current Entrainment Climate Process Team, 2009: S. Legg, B. Briegleb, Y. Chang, E.P. Chassignet, G. Danabasoglu, T. Ezer, A.L. Gordon, **S.M. Griffies**, R. Hallberg, L. Jackson, W. Large, T. Özgökmen, H. Peters, J. Price, U. Riemschneider, W. Wu , X. Xu, and J. Yang. *Bulletin of the American Meteorological Society*, **90**, 657–670.
32. The science of ocean climate models, 2009: **S.M. Griffies**. In *Encyclopedia of Ocean Sciences* 2nd Edition, J.H. Steele, K.K. Turekian, and S.A. Thorpe, editors. Elsevier, 133–140.
33. Coordinated Ocean-ice Reference Experiments (COREs), 2009: **S.M. Griffies**, A. Biastoch, C. Böning, F. Bryan, E. Chassignet, M. England, R. Gerdes, H. Haak, R.W. Hallberg, W. Hazeleger, J. Jungclaus, W.G. Large, G. Madec, B.L. Samuels, M. Scheinert, A. Sen Gupta, C.A. Severijns, H.L. Simmons, A.-M. Treguier, M. Winton, S. Yeager, J. Yin. *Ocean Modelling*, **26**, 1–46.
34. Effects in a climate model of slope tapering in neutral physics schemes, 2007: A. Gnanadesikan, **S.M. Griffies**, B.L. Samuels, *Ocean Modelling*, **16**, 1–16.
35. Algorithms for density, potential temperature, conservative temperature and freezing temperature of seawater, 2006: D.R. Jackett, T.J. McDougall, R. Feistel, D.G. Wright, and **S.M. Griffies**. *Journal of Atmospheric and Oceanic Technology*, **23**, 1709–1728.
36. GFDL's CM2 Global Coupled Climate Models-Part 2: The Baseline Ocean Simulation, 2006: A. Gnanadesikan, K.W. Dixon, **S.M. Griffies**, V. Balaji, J.A. Beesley, W.F. Cooke, T.L. Delworth, R. Gerdes, M.J. Harrison, I.M. Held, W.J. Hurlin, H.-C. Lee, Z. Liang, G. Nong, R.C. Pacanowski, A. Rosati, J. Russell, B.L. Samuels, S.M. Song, M.J. Spelman, R.J. Stouffer, C.O. Sweeney, G. Vecchi, M. Winton, A.T. Wittenberg, F. Zeng, and R. Zhang. *Journal of Climate*, **19**, 675–697.
37. GFDL's CM2 Global Coupled Climate Models-Part 1: Formulation and Simulation Characteristics, 2006: T.L. Delworth, A.J. Broccoli, A. Rosati, R.J. Stouffer, V. Balaji, J.A. Beesley, W.F. Cooke, K.W. Dixon, J. Dunne, K.A. Dunne, J.W. Durachta, K.L. Findell, P. Ginoux, A. Gnanadesikan, C.T. Gordon, **S.M. Griffies**, R. Gudgel, M.J. Harrison, I.M. Held, R.S. Hemler, L.W. Horowitz, S.A. Klein, T.R. Knutson, P.J. Kushner, A.L. Langenhorst, H.-C. Lee, S.J. Lin, L. Lu, S.L. Maleyshev, P.C. Milly, V. Ramaswamy, J. Russell, M.D. Schwarzkopf, E. Shevliakova, J. Sirutis, M.J. Spelman, W.F. Stern, M. Winton, A.T. Wittenberg, B. Wyman, F. Zeng, R. Zhang. *Journal of Climate*, **19**, 643–674.
38. Sensitivity of a global ocean model to increased run-off from Greenland, 2006: R. Gerdes, W.J. Hurlin, and **S.M. Griffies**, *Ocean Modelling*, **12**, 416–435.

39. Formulation of an ocean model for global climate simulations, 2005: **S.M. Griffies**, A. Gnanadesikan, K.W. Dixon, J.P. Dunne, R. Gerdes, M.J. Harrison, A. Rosati, J. Russell, B.L. Samuels, M.J. Spelman, M. Winton, R. Zhang. *Ocean Science*, **1**, 45–79.
40. Impacts of shortwave penetration depth on large-scale ocean circulation and heat transport, 2005: C. Sweeney, A. Gnanadesikan, **S. M. Griffies**, M. J. Harrison, A. J. Rosati, and B. L. Samuels. *Journal of Physical Oceanography*, **35**, 1103–1119.
41. Tracer Conservation with an Explicit Free Surface Method for Z-coordinate Ocean Models, 2001: **S.M. Griffies**, R.C. Pacanowski, M. Schmidt, and V. Balaji, *Monthly Weather Review*, **129**, 1081–1098.
42. Developments in Ocean Climate Modelling, 2000: **S.M. Griffies**, C. Böning, F.O. Bryan, E.P. Chassignet, R. Gerdes, H. Hasumi, A. Hirst, A.-M. Treguier, and D. Webb, *Ocean Modelling*, **2**, 123–192. NOAA/Oceanic and Atmospheric Research Laboratories 2001 Outstanding Scientific Review Paper Award.
43. Biharmonic friction with a Smagorinsky-like viscosity for use in large-scale eddy-permitting ocean models, 2000: **S.M. Griffies** and R. W. Hallberg. *Monthly Weather Review*, **128**, 2935–2946.
44. Spurious diapycnal mixing associated with advection in a z-coordinate ocean model, 2000: **S.M. Griffies**, R. C. Pacanowski, and R. W. Hallberg. *Monthly Weather Review*, **128**, 538–564.
45. A conceptual framework for predictability studies, 1999: T. Schneider and **S.M. Griffies**. *Journal of Climate*, **12**, 3133–3155.
46. The Gent-McWilliams Skew-Flux, 1998: **S.M. Griffies**, *Journal of Physical Oceanography*, **28**, 831–841.
47. Isoneutral diffusion in a z-coordinate ocean model, 1998: **S.M. Griffies**, A. Gnanadesikan, R. C. Pacanowski, V. Larichev, J. K. Dukowicz, and R. D. Smith, *Journal of Physical Oceanography*, **28**, 805–830. NOAA/Oceanic and Atmospheric Research Laboratories 1999 Outstanding Scientific Paper Award.
48. A Predictability Study of Simulated North Atlantic Multidecadal Variability, 1997: **S.M. Griffies** and K. Bryan, *Climate Dynamics*, **13**, 459–488.
49. Predictability of North Atlantic Multidecadal Climate Variability, 1997: **S.M. Griffies** and K. Bryan, *Science* **275**, 181–184. NOAA/Environmental Research Laboratories 1997 Outstanding Scientific Paper Award.
50. Reply to Comment on “Instability of the Thermohaline Circulation with Respect to Mixed Boundary Conditions”, 1996: J. R. Toggweiler, E. Tziperman, Y. Feliks, K. Bryan, **S.M. Griffies**, and B. Samuels, *Journal of Physical Oceanography*, **26**, 1106–1110.
51. A Linear Thermohaline Oscillator Driven by Stochastic Atmospheric Forcing, 1995: **S.M. Griffies** and E. Tziperman, *Journal of Climate*, **8**, 2440–2453.
52. Local and global aspects of domain wall space-times, 1993: M. Cvetic, **S.M. Griffies**, and H. H. Soleng, *Physical Review D* **48**, 2613–2634.
53. Nonextreme and ultraextreme domain walls and their global space-times, 1993: M. Cvetic, **S.M. Griffies**, and H. H. Soleng, *Physical Review Letters*, **71**, 670–673.
54. Cauchy horizons, thermodynamics and closed time-like curves in planar supersymmetric space-times, 1993: M. Cvetic, R. Davis, **S.M. Griffies**, and H. H. Soleng, *Physical Review Letters*, **70**, 1191–1194.
55. Nonperturbative stability of supergravity and superstring vacua, 1993: M. Cvetic, **S.M. Griffies**, and S.-J. Rey, *Nuclear Physics*, **B389**, 3–24.
56. Gravitational effects in supersymmetric domain wall backgrounds, 1992: M. Cvetic and **S.M. Griffies**, *Physics Letters*, **285B**, 27–34.
57. Static domain walls in $N = 1$ supergravity, 1992: M. Cvetic, **S.M. Griffies**, and S.-J. Rey, *Nuclear Physics* **B381**, 301–328.
58. Two skyrmion interaction for the Atiyah-Manton ansatz, 1990: A. Hosaka, **S.M. Griffies**, M. Oka, and R. D. Amado, *Physics Letters* **251B**, 1–5.

BOOKS, BOOK CHAPTERS, SPECIAL JOURNAL EDITIONS, AND CONFERENCE PROCEEDINGS

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