

MICHAEL WINTON

(a) Professional Preparation:

University of Michigan	Mathematics and Economics	B.A. 1979
Purdue University	Computer Science	M.S. 1982
University of Washington	Atmospheric Sciences	Ph.D. 1993

(b) Professional Experience:

2012-present: Group leader, GFDL Climate Processes and Sensitivity group
1995-present: Oceanographer, Geophysical Fluid Dynamics Laboratory
1993-1995: UCAR Ocean Modeling Postdoctoral Fellowship

(c) Five publications most closely related to current proposal:

Winton, M., A. Adcroft, S.M. Griffies, R.W. Hallberg, L.W. Horowitz, and R.J. Stouffer, 2012: Influence of ocean and atmosphere components on simulated climate sensitivities, *J. Climate*, in press.
Winton, M., 2011: Do climate models underestimate the sensitivity of Northern Hemisphere sea ice cover? *J. Climate*, 24(15), doi:10.1175/2011JCLI4146.1.
Winton, M., K. Takahashi, and I.M. Held, 2010: Importance of ocean heat uptake efficacy to transient climate change. *J. Climate*, 23(9), doi:10.1175/2009JCLI3139.1.
Winton, M., 2003: On the climatic impact of ocean circulation. *J. Climate*, 16(17), 2875-2889.
Winton, M., 1999: Polar water column stability. *J. Phys. Oceanogr.*, 29(6), 1368-1371.

Five other publications:

Held, I.M., M. Winton, K. Takahashi, T.L. Delworth, F. Zeng, and G.K. Vallis, 2010: Probing the fast and slow components of global warming by returning abruptly to pre-industrial forcing. *J. Climate*, 23(9), doi:10.1175/2009JCLI3466.1.
Winton, M., 2008: Sea ice - Albedo feedback and nonlinear Arctic climate change In *Arctic Sea Ice Decline*, Washington, DC, American Geophysical Union, 111-131.
Winton, M., 2006: Amplified Arctic climate change: What does surface albedo feedback have to do with it? *Geophys. Res. Lett.*, 33, L03701, doi:10.1029/2005GL025244.
Gregory, J.M., J.A. Church, G.J. Boer, K.W. Dixon, G.M. Flato, D.R. Jackett, J.A. Lowe, S.P. O'Farrell, M.M. Rienecker, G. Russell, R.J. Stouffer, and M. Winton, 2001: Comparison of results from several AOGCMs for global and regional sea-level change 1900-2100. *Climate Dynamics*, 18(3/4), 225-240.
Martinson, D.G., D.S. Battisti, R. Bradley, J. Cole, R. Fine, M. Ghil, Y. Kushnir, S. Manabe, M.S. McCartney, P. McCormick, M.J. Prather, E. Sarachik, P.P. Tans, L. Thompson, and M. Winton, 1998: *Decade-to-Century-Scale Climate Variability and Climate Change: A Science Strategy*, Washington, D.C.: National Research Council, 42 pp.

(d) Synergistic activities

2012-present: Member, CLIVAR Working Group on Ocean Model Development
2005-2012: Co-leader, GFDL Climate Model Development Team
1998-present: Primary developer of GFDL sea ice model
1995-1997: Member, NRC Panel on Climate Variability on Decade-to-Century Timescales

(e) Collaborators and Other Affiliations

Adcroft, A. (Princeton), Alaka, G. (CSU), Austin, J. (GFDL), Balaji, V. (Princeton), Collier, W. (C&A Tech. Inc.), Cooke (HPTi), W., Delworth, T. (GFDL), Donner, L. (GFDL), Downes, S., Dunne, K. (USGS), Dunne, J. (GFDL), Farneti, R. (ICTP Trieste), Freidenreich, S. (GFDL), Froelicher, T. (Princeton), Ginoux, P. (GFDL), Gnanadesikan, A. (Johns Hopkins), Golaz, J-C. (GFDL), Griffes, S.

(GFDL), Hallberg, R. (GFDL), Harrison, M. (GFDL), Held, I. (GFDL), Hemler R. (GFDL), Horowitz L. (GFDL), Hotinski, R. (Princeton), Hurlin, W. (GFDL), John, J. (GFDL), Klein, S. (PCMDI), Knutson, T. (GFDL), Krasting, J. (GFDL), Langenhorst, A. (HPTi), Lee, H-C. (HPTi), Levy, H. (GFDL), Liang, Z. (HPTi), Lin, S-J. (GFDL), Lin, Y. (UCAR), Magi, B. (UNC Charlotte), Malyshev, S. (GFDL/Princeton), Milly, C. (USGS), Ming, Y. (GFDL), Moritz (U. Washington), R., Naik, V.(GFDL), Nath, M. (GFDL), Palter, J. (McGill), Phillipps, P. (GFDL), Pincus, R. (NOAA/ESRL), Pirani, A. (CLIVAR), Ploshay, J. (GFDL), Ramaswamy, V. (GFDL), Rugenstein, M. (U. Utrecht), Samuels, B. (GFDL), Sarachik, E. (U. Washington), Sarmiento, J. (Princeton), Schwarzkopf, D. (GFDL), Seman (GFDL), C. (GFDL), Sentman, L. (GFDL), Shevliakova, E. (GFDL/Princeton), Sirutis, J. (GFDL), Spelman, M. (GFDL), Stern, W. (GFDL), Stouffer, R. (GFDL), Takahashi, K. (IGP, Peru), Vallis, G. (GFDL/Princeton), Wilson, J. (GFDL), Wittenberg, A. (GFDL), Wyman, B. (GFDL), Yin, J., Zadeh, N. (GFDL), Zeng, F. (GFDL), Zhao, M. (GFDL)

Graduate and Postdoctoral Advisors:

E. Sarachik (U. of Washington), R. Moritz (U. of Washington)

Thesis and Postdoctoral Advisees: Total =2, Students =0, Postdocs=2

Torge Martin (University of Washington), Tony Beesley