Papers using the GFDL CM2.6 climate model and its ocean/sea-ice configuration

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Atmosphere/Ocean

1. Simulated climate and climate change in the GFDL CM2.5 high-resolution coupled climate model: *Delworth et al.* (2012)
2. Analysis of the characteristics and mechanisms of the Pacific Decadal Oscillation in a suite of coupled models from the Geophysical Fluid Dynamics Laboratory: *Zhang and Delworth* (2015)
3. The impact of horizontal resolution on North American monsoon Gulf of California moisture surges in a suite of high-resolution coupled models: *Pascale et al.* (2016)
4. Changes in North Atlantic atmospheric circulation in a warmer climate favor winter flooding and summer drought over Europe: *Rousi et al.* (2021)

Ocean Physics

1. Has coarse ocean resolution biased simulations of transient climate sensitivity: *Winton et al.* (2014)
2. Climate modeling with an energetic ocean mesoscale: *Griffies* (2014)
3. Impacts on ocean heat from transient mesoscale eddies in a hierarchy of climate models: *Griffies et al.* (2015)
4. Atlantic multi-decadal oscillation covaries with Agulhas leakage: *Biastoch et al.* (2015)
5. An extreme event of sea-level rise along the northeast coast of North America in 2009-2010: *Goddard et al.* (2015)
6. Enhanced warming of the northwest Atlantic Ocean under climate change: *Saba et al.* (2016)
7. Mechanisms of Southern Ocean heat uptake and transport in a global eddying climate model: *Morrison et al.* (2016)
8. Preconditioning of the Weddell Sea polynya by the ocean mesoscale and dense water overflows: *Dufour et al.* (2017)
9. Spiraling pathways of global deep waters to the surface of the Southern Ocean: *Tamsitt et al.* (2017)
10. CO_2-induced ocean warming of the Antarctic continental shelf in an eddying global climate model: *Goddard et al.* (2017)
11. Frequency-domain analysis of atmospherically forced versus intrinsic ocean surface kinetic energy variability in GFDL's CM2-O model hierarchy: *O'Rourke et al.* (2018)
12. Lagrangian timescales of Southern Ocean upwelling in a hierarchy of model resolutions: *Drake et al.* (2018)
13. Identifying Lagrangian coherent vortices in a mesocale ocean model: *Tarshish et al.* (2018)
14. Observed fingerprint of a weakening Atlantic Ocean overturning circulation: *Caesar et al.* (2018)

Ocean Biogeochemistry/Physics

1. The Southern Ocean Carbon and Climate Observations and Modeling Program (SOCCOM): *Russell et al.* (2014)
2. Role of mesoscale eddies in cross-frontal transport of heat and biogeochemical tracers in the Southern Ocean: *Dufour et al.* (2015)
3. Representation of Eastern Boundary Currents in GFDL's Earth System Models: *Dunne et al.* (2015)
4. Multidecadal wind-driven shifts in northwest Pacific temperature, salinity, O2, and PO4: *Kwon et al.* (2016)

5. Observing System simulation experiments for an array of autonomous biogeochemical profiling floats in the Southern Ocean: *Kamenkovich et al.* (2017)
6. Oxygen in the Southern Ocean from Argo floats: determination of processes driving air-sea fluxes: *Bushinsky et al.* (2017)
7. Response of O2 and pH to ENSO in the California Current System in a high resolution global climate model: *Turi et al.* (2017)
8. Biogeochemical role of subsurface coherent eddies in the ocean: tracer cannonballs, hypoxic storms, and microbial stewpots?: *Frenger et al.* (2017)
9. Roles of the ocean mesoscale in the lateral supply of mass, heat, carbon and nutrients to the Northern Hemisphere subtropical gyres: *Yamamoto et al.* (2018)
10. Rapid coastal deoxygenation due to ocean circulation shift in the northwest Atlantic: *Claret et al.* (2018)
11. The Equatorial Undercurrent and the oxygen minimum zone in the Pacific: *Busecke et al.* (2019)

Ocean Ecosystem/Fisheries

1. Projected asymmetric response of Adélie penguins to Antarctic climate change: *Cimino et al.* (2016)
2. Diversity in thermal affinity among key piscivores buffers impacts of ocean warming on predator-prey interactions: *Selden et al.* (2017)
3. Projecting the effects of climate change on Calanus finnmarchicus distribution within the U.S. Northeast Continental Shelf: *Grieve et al.* (2017)
4. Marine species distribution shifts in the U.S. Northeast Continental Shelf under continued ocean warming: *Kleisner et al.* (2017)
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7. Managing living marine resources in a dynamic environment: The role of seasonal to decadal climate forecasts: *Tommasi et al.* (2017)
8. Projecting marine species range shifts from only temperature can mask climate vulnerability: *McHenry et al.* (2019)
9. Climate change vulnerability of American lobster fishing communities in Atlantic Canada: *Greenan et al.* (2019)
10. An ensemble high-resolution projection of changes in the future habitat of American lobster and sea scallop in the Northeast US continental shelf: *Tanaka et al.* (2020)
11. Contemporary and future distributions of cobia, *Rachycentron canadum*: *Crear et al.* (2020)

Ocean/sea-ice

1. Localized rapid warming of West Antarctic subsurface waters by remote winds: *Spence et al.* (2017)
2. Vertical resolution of baroclinic modes in global ocean models: *Stewart et al.* (2017)
3. Warm Circumpolar Deep Water transport toward Antarctica driven by local dense water export in canyons: *Morrison et al.* (2020)

Computational

1. NOAA holistic climate and earth system model strategy phase I: current state: *DeWitt et al.* (2015)
2. CPMIP: measurements of real computational performance of Earth system models in CMIP6: *Balaji et al.* (2017)
3. Prospects for improving the representation of coastal and shelf seas in global ocean models: *Holt et al.* (2017)

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