
FMS AM2 Model

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The AM2 package contains source code and scripts for GFDL's atmosphere-only experiment using observed sea surface temperatures, time varying radiative forcings (including volcanos) and time varying land cover type. This version of AM2 (also called AM2.1) uses the finite-volume dynamical core (Lin 2004). The test case included with this release uses the same cloud tuning, radiative forcing and land cover type as the coupled model (Delworth et al. 2006). Several bug fixes are included that increase the stability of the model but do not appreciably change the climate from the previous version (GAMDT 2004). The resolution is 2.5 degrees longitude by approximately 2 degrees latitude (M45) with 24 vertical levels (L24). The model version is AM2p14. This document describes the available documentation and reference material for the FMS AM2 model.

References:

The GFDL Global Atmospheric Model Development Team, 2004: **The new GFDL global atmosphere and land model AM2-LM2: Evaluation with prescribed SST simulations.** *Journal of Climate*, **17(24)**, 4641-4673. [Abstract](http://www.gfdl.noaa.gov/reference/bibliography/2004/gamdt0401.html) [http://www.gfdl.noaa.gov/reference/bibliography/2004/gamdt0401.html] / [PDF](http://www.gfdl.noaa.gov/reference/bibliography/2004/gamdt0401.pdf) [http://www.gfdl.noaa.gov/reference/bibliography/2004/gamdt0401.pdf]

Delworth, T. L., et al., 2006: **GFDL's CM2 Global Coupled Climate Models. Part I: Formulation and simulation characteristics.** *Journal of Climate*, **19(5)**, 643-674.

Lin, S-J., 2004: A "vertically Lagrangian" finite-volume dynamical core for global models. *Monthly Weather Review*, **132(10)**, 2293-2307.

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1. Available Documentation and Reference Material

1. [Quickstart Guide](#) [quickstart.html]: describes how to acquire, compile, and run the FMS AM2 model.
2. [List of Fortran module documentation](#) [../exp/fv/path_names.html]
3. [Figures to illustrate the AM2 Model climatology](http://www.gfdl.noaa.gov/fms/pubrel/analysis/am2.html) [http://www.gfdl.noaa.gov/fms/pubrel/analysis/am2.html]