FMS Atmospheric Dynamical Cores

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This document describes the available documentation and reference material for the FMS Atmospheric Dynamical Cores, as originally described in:

Held, I. M., and M. J. Suarez, 1994: **A proposal for the intercomparison of the dynamical cores of atmospheric general circulation models.** *Bulletin of the American Meteorological Society,* **75(10)**, 1825-1830.

Abstract [http://www.gfdl.noaa.gov/reference/bibliography/1994/ih9401.html] / PDF [http://www.gfdl.noaa.gov/reference/bibliography/1994/ih9401.pdf]

Table of Contents

1. Available Documentation and Reference Material

1. The top level readme file [../readme] contains a short description of the contents of this package.

2. Quickstart Guide [quickstart.html]: describes how to acquire, compile, and run the atmospheric dynamical core models.

3. Users Guide [guide.html]: documentation of the release package

4. B-grid Atmospheric Core Documentation

   - Description of finite differencing (pdf) [../src/atmos_bgrid/documentation/bgrid.pdf]

   - Supplementary documentation [../src/atmos_bgrid/documentation/bgrid_supdoc.html]

   - List of Fortran module documentation for B-grid core [../exp/bgrid/path_names.html]

5. Spectral Atmospheric Core Documentation

   - Spectral core (pdf) [../src/atmos_spectral/documentation/spectral_core.pdf]

   - List of Fortran module documentation for spectral core [../exp/spectral/path_names.html]

   - Barotropic model (pdf) [../src/atmos_spectral_barotropic/barotropic.pdf]

   - List of Fortran module documentation for spectral barotropic model [../ exp/ spectral_barotropic/ path_names.html]

   - Shallow water model (pdf) [../src/atmos_spectral_shallow/shallow.pdf]

   - List of Fortran module documentation for spectral shallow model [../ exp/ spectral_shallow/ path_names.html]

6. Finite Volume Atmospheric Core Documentation

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

  Abstract [http:/ / www.gfdl.noaa.gov/ reference/ bibliography/ 2004/ sjl0402.html] / PDF [http:/ / www.gfdl.noaa.gov/reference/bibliography/2004/sjl0402.pdf]

- List of Fortran module documentation for FV core [../exp/fv/path_names.html]