Team Meeting Feb. 2, 2009

1) Update from Will (Brian and Jim?) based on quick work summary

- status of test case implementation, dynamics-physics interface (Will, Pat) --> see Will's summary mail.

- creation of initial data netcdf files for the cubed-sphere with staggered grid point positions --> currently FV^3 supplies both staggered and unstaggered winds. In p_d_coupling, the wind tendencies will be interpolated from A- to D-grid, then added to the D-grid winds.
- creation of new namelist for fv cubed-sphere --> implemented, using HOMME as a template.
- interpic_new, status and use of the interpolation tool, creation of data files for APE simulations --> files generated, but still need to be tested (next step). Not clear when (if) D-grid winds have to added to these files, but it seems to be straightforward to interpolate to staggered locations by generating slon and slat arrays.
- flexibility of model resolutions --> simple reconfiguration at compile time (as for other CAM dycores).
- code portability issues --> Baselib portability issues mentioned previously do not affect this project since ESMF and MAPL dependencies have been removed from FVCUBED. There are still some compilation issues with the Lahey compiler (extremely slow compilation). These need to be addressed.
- Will's visit to UM and NCAR --> perspective dates May 20 - Jun. 2. Exact timetable at UM and NCAR to be determined.
- CCSM Meeting (Breckenridge) --> We should plan a poster and presentation (given by Christiane?)

2) Visualization of cubed-sphere data, test cases (Will, Christiane, Mark)

   Script provided by Mark; Will to revise script, add shell scripts to generate other formats, e.g. animated gifs.   Lat-lon output: needed CAM-AMIP (low priority)
        also makes sense to write out staggered value

3) Use of NCAR wiki (all)

   Old FVCUBED Wiki page seems not to work. Still has minimal information. So let's remove it entirely, and Willl will add new space to CSEG page and populate it with content.

4) Parallel computing aspects, next steps (Art, Pat?)

   Art and Pat may have some time to look into this, subject to constraints.   Will will establish a robust tag in the next few days so that they (or anyone) can run the Baroclinic Steady-State Wave test on various resolutions.

5) Plan for the next few weeks:

- other adiabatic tests: Baroclinic Wave with perturbation (test case 2).

- ideal_phys (Held-Suarez) setting ==> ideal_phys flag should be still available; p_d_coupling should be completed in the next week or two.

- non_adiabatic tests: aqua-planet ==> Needs to be run with interpolated initial data. Staggered U's and V's have to read in. Generate slat, slon positions, write to history file, and use these in the interpic_new template to interpolate winds to corresponding positions.

- Shallow water flag: shallow water tests are supported by FV^3 in principle, but there is no single flag to toggle them. Will (+ Bill?) will investigate if this will be easy to implement.