

CCSM Data Model v7 Project. Charter

CCSM Data Model v7 Project

Project Charter

<html>

Name:

CCSM Data Model v7 Project: datm7, dice7, dlnd7, docn7

Mission Statement:

Upgrade the existing CCSM3 data models to include scientific functionality commonly used in existing embedded/non-standard data models and to prepare the data models for use in ESMF and single-executable implementations of CCSM3.

Goals:

- 1) Extend the scientific functionality of the existing data models to include that commonly used in embedded or non-standard data models.
(eg. SST data cycling in cam, slab ocean in CSIM, Gokhan's dice7+ model, etc.)
- 2) Re-design code so it is suitable for use in these frameworks:
 - (a) the released CCSM3.0 code
 - (b) a single executable proto-type implementation of CCSM3
 - (c) an ESMF-framework implementation of CCSM3Code must work out-of-the-box for (a), but some code mods may be necessary for use in frameworks (b) & (c).
- 3) Coordinate the design of all data models, assure they meet a uniform set of basic functionality, and consolidate similar functionality into shared code where feasible.
- 4) Complete the project quickly (order months) so that it is available for scientific research using CCSM3 (2-a) and for projects prototyping single-executable (2-b) and ESMF (2-c) versions of CCSM3.

Motivation:

- 1) Minimize the need for, and use of, embedded/non-standard data models.
- 2) Facilitate proto-typing or adoption of ESMF, single-executable, and/or CAM-unified versions of CCSM3.
- 3) Reduce the maintenance overhead of the data model suite and make it easier to extend their functionality in the future.

Authority:

Mariana (project plan approved November 2004)

Project Lead:

Brian

Scientific Lead(s):

All CSEG/component-model liaisons are involved and will consult WG scientists as they see fit.

</html>