

Draft Agenda ECCO Meetings. MIT 31 Jan -2 Feb 2006

24 Jan 2006

Note that we are really having four overlapping meetings rolled into one: (1) Last meeting/reports of ECCO (MIT/SIO/JPL); (2) first meeting of ECCO-GODAE participants; (3) first meeting of ECCO-2 participants; (4) a discussion of possible CLIVAR initiatives in ocean and coupled ocean/atmosphere state estimation.

The meeting will take place in Room 54-915 of the Green Building on the MIT Campus. We will provide lunch on all three days. A campus map can be found at <http://whereis.mit.edu/map-jpg>

On Tuesday night we will have drinks/food at the Wunsch house (in Cambridge. A map is attached if you are not coming to MIT first.)

All times are nominal (that is, guesses). We will have projectors, laptops, etc., so please come prepared to participate. We hope primarily for discussion, not a lengthy series of talks. If your name does not appear, do not assume that you shouldn't speak. If the time looks inadequate to you, let us know.

Tuesday 31 Jan. - ECCO & ECCO-GODAE Reports and Discussion

9:00 AM Introductions, explanation and discussion of agenda
(Wunsch/Marshall)

9:20 Reports from the participating ECCO and ECCO-GODAE groups, What was accomplished in ECCO; summary of ECCO-GODAE activities thus far; summary of science.

ECCO Overview. (Stammer--to be reported by Wunsch+)

9:30 JPL (Fukumori,+)

10:00 MIT-AER (Heimbach/Ponte/Wunsch, +)

11:00 Break

11:15 SIO (Cornuelle)

12:00 Harvard/GFDL/JPO (Gebbie/Tziperman/Rosati/Zanna, +)

12:30-1:30 Lunch

Tuesday Afternoon

1:30 Goddard (Rienecker).

2:00-3:00 ECCO-GODAE plans for next year to 18 months (each of the groups)

3:00 Break

3:15-5:00 Open discussion of ECCO version 3 possibilities (Campin, Heimbach, Hill-1, Hill-2, Menemenlis,+) See attachment. Long term future of ECCO-GODAE. What will the community need? What should be done? (All)

7:00 Drinks, food at Wunsch house. See attachment.

Wednesday 1 February AM. Completion of ECCO/ECCO-GODAE Meeting

(Anything left from Tuesday)

9:00 OpenAD (Utke/Hovland/Heimbach,+)

10:00 Generic problems (error estimates, non-adjointable codes, difficult or unused observations, climatologies, meteorological fields,..., All))

11:00 User needs, comments (Edwards, Follows, Menemenlis, Winsor,+)

12:00 Comments from Program managers (Wilson, Lindstrom)
Summing up (all)
1:00-2:00 Lunch

Wednesday PM

2:00 CLIVAR discussion of Coupled
and Broader Problems of Oceanic State Estimation and ECCO-2 Discussion
(Marshall, Tziperman, Wunsch, Menemenlis, Rienecker, Program managers (Wilson,
Lindstrom), Fukumori, Heimbach, +)
5:00 Adjourn

Thursday Morning 2 February

9:00 ECCO-2 discussion.
Introduction. Marshall
(i) High resolution ocean/ice modeling/assimilation: Menemenlis, Hill,
Marshall
 Cube and 1/8 configurations
 scaling tests with 2000 processors

(ii) Model formulation/development: Campin
 IGW, p, p*, p**: Campin/Adcroft
 Gridding the sphere: Hill

(iii) Coupled modeling/seasonal-to interannual: Rienecker/Tziperman/Hill

(iv) Assimilation strategies at eddy resolving scales: Wunsch/Menemenlis

 Green Functions
 Adjoint
 Multiscale strategies
 Cost function(s) and quantifying model-data differences
 estimating sub-grid-scale errors

End of Wednesday session

Thursday Afternoon

(v) Computation/visualization/software: Hill

 computation/visualization/software tools: Hill/Utke
 computational resources (Tsengdar Lee)

(vi) Science/Collaborations

 WHOI
 CliMode (Marshall)
 CPT (Ferrari)
 Biogeochemical cycles (Follows)

(vii) Work plan - the first year: Marshall

5:00 End of Meeting