

Final Agenda

I. NOAA Community Modeling Workshop &

II. Strategic Implementation Plan (SIP) Coordination Workshop

NCWCP, College Park

Rooms: Conference Center/Auditorium

Remote Participation (for plenary sessions in Part 1; Apr 18-19, 2017): Phone:
866-756-2072 / Passcode: 4546287#

WebEx Meeting number: 900 742 511 (& password for devices: T2NKtWT3)

Part 1: The “Community Modeling Workshop” is an opportunity for the community to tell NOAA how they would like to engage with us. A brief remark on the *format* of this part of the workshop: the goal is to keep prepared remarks brief (provided for context and as fodder for discussion) and to allow for maximum dialogue.

Part 2: The Strategic Implementation Plan (SIP) Coordination Workshop seeks to delve into the topical issues associated with the SIP/Next Generation Global Prediction System (NGGPS) Working Groups.

Objectives:

NOAA seeks to engage with the community to form and shape the community, and to consider how to best execute shared infrastructure, support, management, and governance. Other objectives include identifying “best practices”, discussing how community-based unified modeling system will actually work, and to evolve and coordinate between the SIP/NGGPS Working Groups (WGs).

Outcomes:

These workshops are parts of an open and transparent process of ongoing engagement, and will provide an important vehicle for NOAA to listen to the community regarding how it wants to engage. Outcomes include timely sharing of vital information (e.g. how people can plug in and contribute, timelines and status, etc.), generating a greater sense of community and mutual trust, and for NOAA, tapping the wisdom of the community. Output from the workshops will help NOAA to plan and establish the NOAA Modeling Community and to refine and improve its Strategic Implementation Plan for the FV3 model.

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Part 1: NOAA Community Modeling Workshop

Day 1: Tuesday, April 18, 2017

8:00 - 8:30 Social interaction with light refreshments

8:30 - 9:00 Introduction

(<5 mins) Welcome, admin remarks (Mike Farrar, Director, EMC) (<10 mins) NGGPS Program Overview (Ming Ji, Director NWS/OSTI)

(<10 mins) Strategic Implementation Plan (SIP) Overview (Mike Farrar, Director, EMC) (5+ mins) Discussion

9:00 - 10:30 Panel: "Goals and Needs of a Community Unified Modeling System" Panelists: Tony Busalacchi (UCAR), Fred Carr (Academia/OU), Mary Glackin (IBM/The Weather Company), Pat Harr (NSF), Craig McLean (OAR), Louis Uccellini (NWS), Christa Peters-Lidard (NASA), Dave McCarren (Navy/DoD)

Moderator: Mike Farrar

Brief remarks (< 5 mins) from each panelist followed by group discussion

10:30 - 11:00 **BREAK**

Note: The format of the 'Moderated Discussion' sessions includes brief remarks from each WG representative followed by group discussion.

11:00 - 12:00 Moderated Discussion with the Governance WG (Ricky Rood, U. Mich.) and System Architecture WG (Jim Kinter, GMU)

Moderator: Mike Farrar

Governance - Decision making, roles/responsibilities, advisory boards, org. alignment.
System Architecture - NEMS evolution for coupling approach, etc.

12:00 - 1:00 **WORKING LUNCH – Self-Organized Small Group Interaction**

1:00 - 2:00 **Moderated Discussion with Infrastructure WG (Rusty Benson, GFDL) and Global Modeling Test Bed/GMTB (Bill Kuo, DTC)**

Moderator: Whit Anderson

Infrastructure - Standards/documentation; CM; code repository; testing; etc.

GMTB - Its role, how it will work, Common Community Physics Package (CCPP), etc.

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2:00 - 3:00 **Moderated Discussion with the Dynamics/Nesting WG (Vijay Tallapragada), Model Physics (Jim Doyle, NRL), Convective Allowing Model (CAM) WG (Stan Benjamin, ESRL)**

Moderator: Whit Anderson

*Dynamics/Nesting - FV3 transition on global weather/S2S/climate; hurricane nests
Physics - Stochastic, scale-aware physics; relationship to the CCM, etc.*

CAM - Intermediate steps to CAM ensembles, Warn on Forecast; test/evaluation w/community

3:00 - 3:30 **BREAK**

3:30 - 4:40 **Moderated Discussion with Data Assimilation WG (Tom Auligne, JCSDA), Ensembles WG (Tom Hamill, ESRL/PSD), Verification & Validation (V&V) WG (Tara Jensen, NCAR/RAL), and Post-Processing WG (Matt Peroutka, NWS/MDL).**

Moderator: Whit Anderson

DA - FV3 integ. between NOAA, NASA; Joint Effort for DA Integration (JEDI); coupled DA.

Ensembles: Strategy across scales; model uncertainty

V&V: V&V of ops forecasts vs. R&D testing/evaluation; unified/standard tools and data formats

Post-Processing: Community infrastructure (e.g., Unified Post Processor/UPP); standard formats/tools

4:40 - 5:30 **Moderated Discussion with the Marine Models WG (Robert Hallberg, GFDL), Land Surface Models (LSMs) + Hydrology WG (Christa Peters-Lidard, NASA/Goddard), and Aerosols/Atmospheric Composition WG (Ivanka Stajner, NWS/OSTI)**

Moderator: Whit Anderson

Marine - Current marine models, NOS coastal/bay models, future ecological models

Land/Hydro - LSMs within coupled system, connections with National Water Model, etc.

Aerosols/Atm. Comp. - Downstream vs. inline applications; science challenges, etc.

5:30 - 5:45 Day-1 wrap-up, setup for Day-2

5:45 **ADJOURN – for the Day**

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Day 2: Wednesday, April 19, 2017

8:00 - 8:30 Social interaction with light refreshments

8:30 - 8:45 Recap of Day 1; Motivations & Instructions for Breakout session

Moderator: Tim Schneider

Key questions for breakout groups to address:

Based on what you've seen thus far (what looks right and what does not?), please identify:

1. **Best practices:** What are the major things that we're getting right?
2. **Gaps:** What are the major things that we're missing, or that we're heading down the wrong tracks on?

8:45 - 10:15 Breakout session. No remote (virtual) access. 10:15

10:45 **BREAK**

10:45 - 12:00 Breakout summary reports, discussion, and wrap up.

Moderator: Tim Schneider

12:00 **ADJOURN – Part 1 Complete**

12:00 - 1:00 **Lunch (on your own -or- pre-order box lunches)**

Part 2: Strategic Implementation Plan (SIP) Coordination Workshop

The thirteen NGGPS/SIP Working Groups that have been formed are: Governance (#1); System Architecture (#2); Infrastructure (#3); Dynamics/Nesting (#4); Physics (#5); Data Assimilation (#6); Ensemble Development (#7); Post Processing (#8); Verification/Validation (#9); Marine (#10); Land/Hydrology (#11); Aerosols/Atmospheric Composition (#12); Mesoscale/CAM (#13). This part of the workshop is aimed at advancing the technical planning within each working group and ensuring that they are well-coordinated across them.

A few notes about the breakouts:

- The breakouts are one hour long each, with 15 minutes for transition between the breakouts
- CC = Conference Center (includes the Auditorium and 3 side rooms)
- Room 2155 is inside security
- Part 2, plenary and breakouts, is open to those present at NCWCP (i.e. in-person only) – however there will be no remote access.

Day 2: Wednesday, April 19, 2017

1:00 - 1:15 Plenary (Auditorium): Kick-off SIP/NGGPS Working Group Meeting

1:15 - 5:00 SIP Working Group Technical Sessions/Breakouts - Open

1:15 - 2:30 Breakout #1

Room	Working Groups
Auditorium	System Arch. (#2); Marine (#10); Land/Hydro (#11); Atmos. Comp.
CC #1	Ensembles (#7); V&V (#9); Meso/CAM (#13)
CC #2	Dynamics (#4); Physics (#5)
CC #3	Infrastructure (#3); Data Assimilation (#6)
2155	Governance (#1); Post Proc. (#8)
Free	N/A

2:30 - 3:45 Breakout #2

Room	Working Groups
Auditorium	V&V (#9); Marine (#10); Land/Hydro (#11); Atmos. Comp. (#12)
CC #1	Dynamics (#4); Ensembles (#7); Meso/CAM (#13)
CC #2	Physics (#5); Data Assimilation (#6)
CC #3	Infrastructure (#3); Post Proc. (#8)
2155	Governance (#1); System Arch. (#2)
Free	N/A

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3:45 - 5:00 Breakout #3

Room	Working Groups
Auditorium	Infrastructure (#3); Marine (#10); Land/Hydro (#11); Atmos. Comp.
CC #1	System Arch. (#2); Physics (#5)
CC #2	Post Proc. (#8); Meso/CAM (#13)
CC #3	Dynamics (#4); V&V (#9)
2155	Data Assimilation (#6); Ensembles (#7)
Free	Governance (#1)

5:00 **ADJOURN – for the Day**

Day 3: Thursday, April 20, 2017

8:00 - 8:30 Social interaction with light refreshments

8:30 - 5:00 SIP Working Group Technical Sessions/Breakouts

8:30 - 9:45 Breakout #4

Room	Working Groups
Auditorium	Physics (#5); Marine (#10); Land/Hydro (#11); Atmos. Comp. (#12)
CC #1	Governance (#1); V&V (#9)
CC #2	Dynamics (#4); Data Assimilation (#6)
CC #3	Ensembles (#7); Post Proc. (#8)
2155	System Arch. (#2); Infrastructure (#3)
Free	Meso/CAM (#13)

9:45 - 11:00 Breakout #5

Room	Working Groups
Auditorium	Governance (#1); Marine (#10); Land/Hydro (#11); Atmos. Comp.
CC #1	Infrastructure (#3); Dynamics (#4)
CC #2	Post Proc. (#8); V&V (#9)
CC #3	Physics (#5); Meso/CAM (#13)
2155	System Arch. (#2); Data Assimilation (#6)
Free	Ensembles (#7)

11:00 - 12:15 Breakout #6

Room	Working Groups
Auditorium	Post Proc. (#8); Marine (#10); Land/Hydro (#11); Atmos. Comp. (#12)
CC #1	Governance (#1); Infrastructure (#3)
CC #2	System Arch. (#2); V&V (#9)
CC #3	Data Assimilation (#6); Meso/CAM (#13)
2155	Physics (#5); Ensembles (#7)
Free	Dynamics (#4)

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12:15 - 1:15 **Lunch (on your own -or- pre-order box lunches)**

1:15 - 2:30 Breakout #7

Room	Working Groups
Auditorium	Dynamics (#4); Marine (#10); Land/Hydro (#11); Atmos. Comp. (#12)
CC #1	Governance (#1); Meso/CAM (#13)
CC #2	Data Assimilation (#6); V&V (#9)
CC #3	System Arch. (#2); Ensembles (#7)
2155	N/A
Free	Infrastructure (#3); Physics (#5); Post Proc. (#8)

2:30 - 3:45 Breakout #8

Room	Working Groups
Auditorium	Data Assimilation (#6); Marine (#10); Land/Hydro (#11); Atmos.Comp. (#12)
CC #1	Governance (#1); Ensembles (#7)
CC #2	Physics (#5); V&V (#9)
CC #3	Infrastructure (#3); Meso/CAM (#13)
2155	Communications & Outreach (#14) – Kickoff Part I
Free	System Arch. (#2); Dynamics (#4); Post Proc. (#8)

3:45 - 5:00 Breakout #9

Room	Working Groups
Auditorium	Governance (#1); Dynamics (#4); Physics (#5); Data Assimilation
CC #1	Ensembles (#7); Marine (#10)
CC #2	Infrastructure (#3); V&V (#9)
CC #3	Land/Hydro (#11); Meso/CAM (#13)
2155	Communications & Outreach (#14) – Kickoff Part II
Free	System Arch. (#2); Post Proc. (#8); Atmos. Comp. (#12)

5:00 **ADJOURN – Part 2 Complete**