

Operational Hurricane Regional Model (OHMD) Development/Implementation

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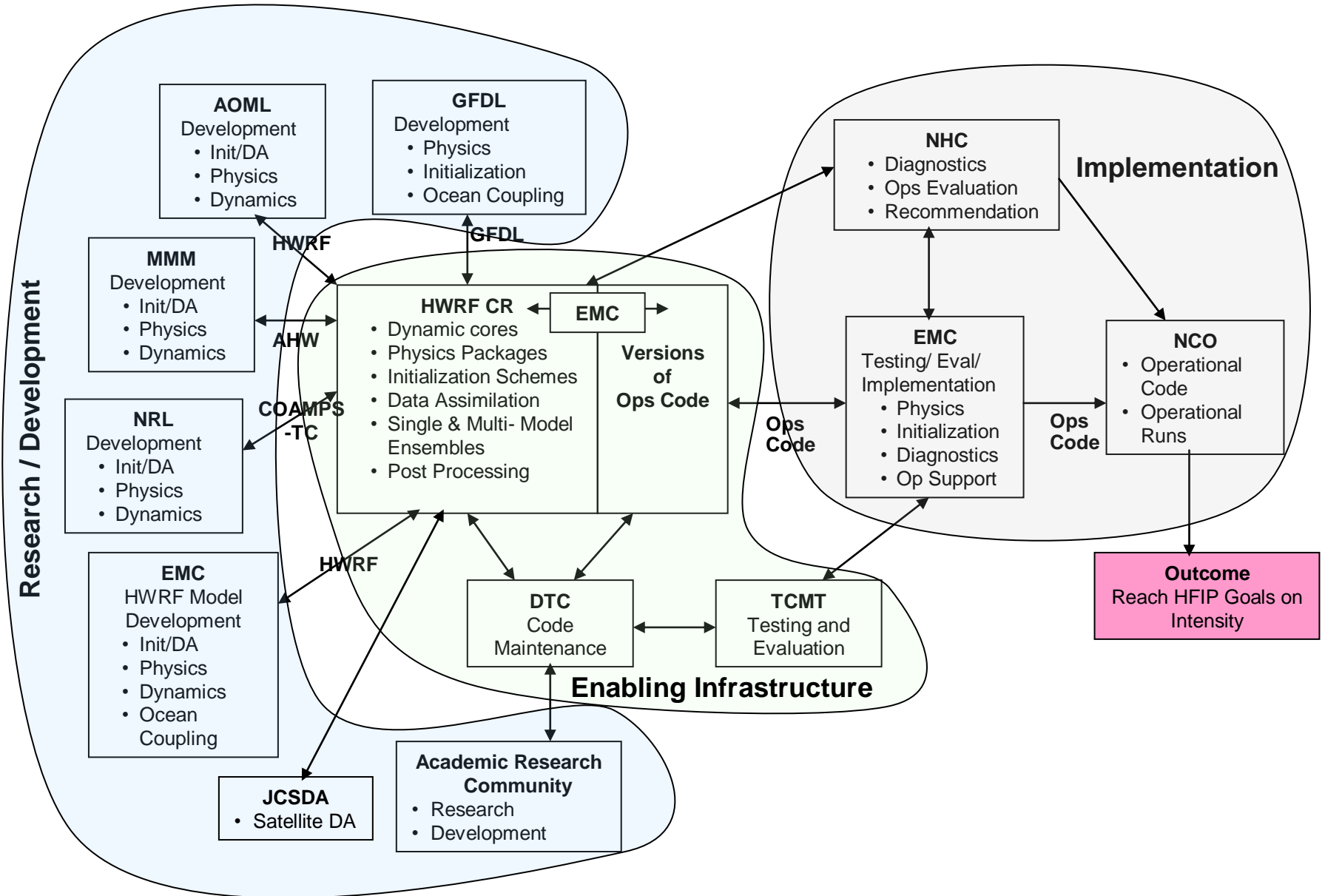
Reasons for Management Change of Stream 1.0

- Much of the HFIP emphasis for the last two years was on Stream 2.0 and more recently 1.5
- Stream 1.0, the operational model at NCEP, will be about half of the HFIP effort.
 - We want more emphasis on improving the operational model.
 - We want the operational model development to be managed by a small committee made up of members of the organizations contributing directly to the development
- Note we view Stream 2 as basically a component of Stream 1 but where the impact is a year or two off.

Major Changes

- Management Structure will be referred to as :
 - **Operational Hurricane Regional Model Development/Implementation (OHMD)**
- Changes will apply only to Stream 1. Stream 2.0 will be managed by the teams and Stream 1.5 by NHC/DTC/TCMT
- Committee will consist of members from:
 - **EMC, AOML, GFDL, DTC, NRL, NHC, NCAR/MMM, JCSDA, plus 2 university representatives.**
- A central Repository similar to WRF will be maintained by the DTC.
 - **Both research and operational codes will be drawn from the repository**
- Final configuration of the operational system will remain unchanged but will use extensive input from the OHMD process

OHMD Development Process



OHMD participating Organizations

- Environmental Modeling Center EMC/NWS/NOAA
- National Hurricane Center NHC/NWS/NOAA
- Atlantic Oceanic and meteorological Laboratory
AOML/OAR/NOAA
- Geophysical Fluid Dynamics laboratory GFDL/OAR/NOAA
- Mesoscale Microscale meteorology Division MMM/NCAR
- Developmental Testbed Center DTC/(NCAR and
ESRL/OAR/NOAA)
- Tropical Cyclone Modeling Testbed TCMT/NCAR
- Naval Research Laboratory-Monterey NRL/MMD
- Joint Center for Satellite Data Assimilation (JCSDA)
- Universities

OHMD Management Committee

- Sets Priorities for the development and implementation of the operational regional hurricane model system.
- Regularly monitoring progress toward achieving annual HFIP regional model milestones and deliverables in the operational model
- Quarterly reports to HFIP management on annual progress
- Monitoring a process in which the participating HFIP stream 1 organizations respond to Oversight Committee recommendations for annual operational model development, testing and implementation.
 - This process will require each organization to submit a work plan prior to assigning funding for a particular fiscal year. The Committee will evaluate these work plans and report their evaluation to the HFIP PO.

OHMD Repository

- The current HWRF repository has many of the attributes that will be necessary for overall OHMD program:
 - Careful version control
 - Agreement for both operations and research to draw from the repository
 - Reasonable documentation
 - Publicly available
 - HFIP will not require that every component of the repository have tutorials and help desks associated with them

OHMD Repository

- **Contents**

- The current HWRF system
- Additional components
 - AHW
 - GFDL
 - COAMPS-TC
- Each of the above should be full systems including initialization, physics packages, and post processing where appropriate.
- All components will run interchangeably under NEMS or ESMF