WRF for Hurricanes

Status report by the Developmental Testbed Center

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HRD Modeling Meeting, August 19 2010

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Goal

Support HFIP goal of improving hurricane forecast skill by facilitating transition of new developments onto operations

Method

- Make HWRF model available and supported to community
- Add new developments to community code
- Create HWRF testing infrastructure in HFIP computer
- Perform testing and evaluation of HWRF in support of EMC and HFIP
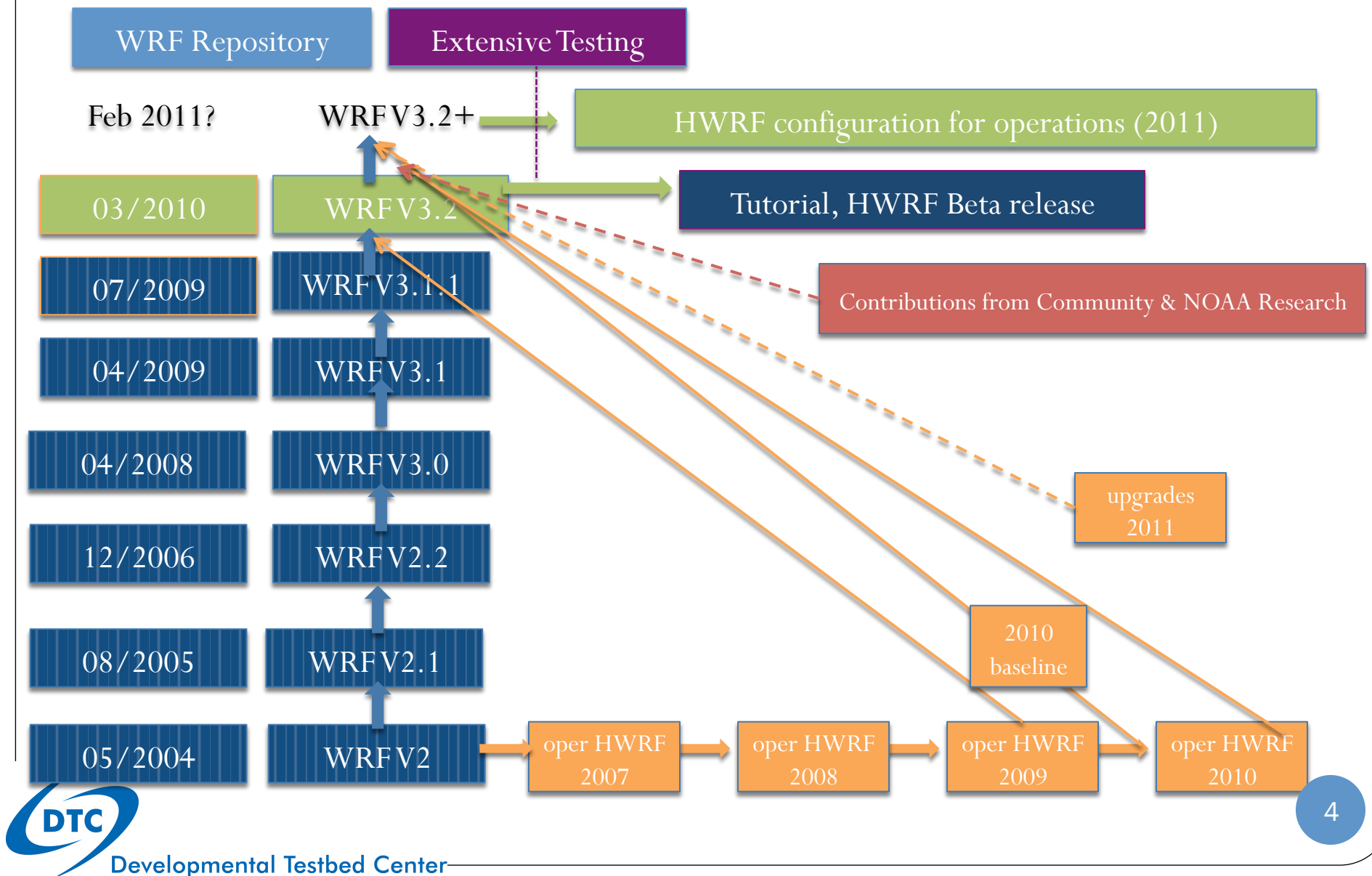
Community HWRF released in March 2010:
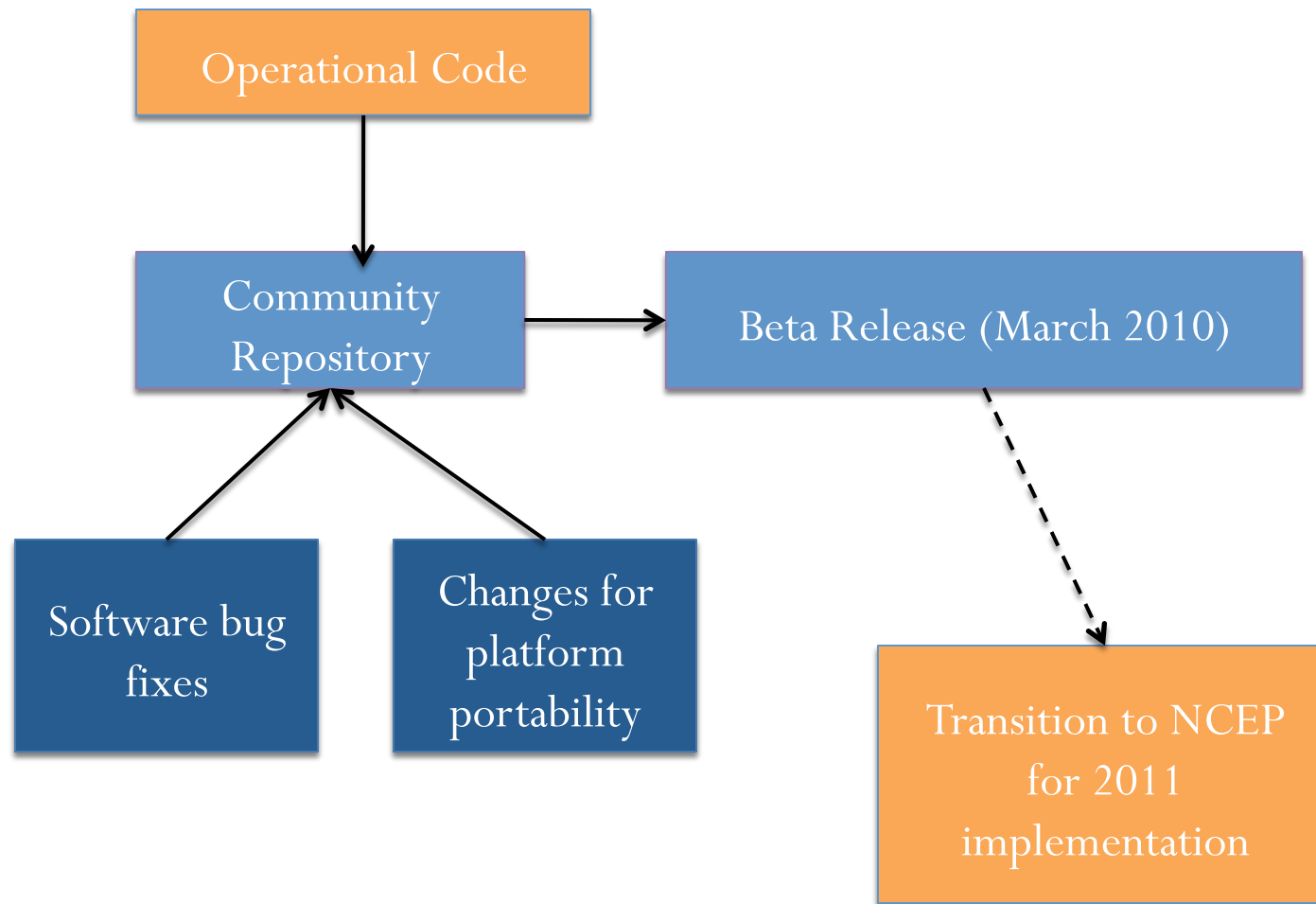a coupled atmospheric-ocean prediction system
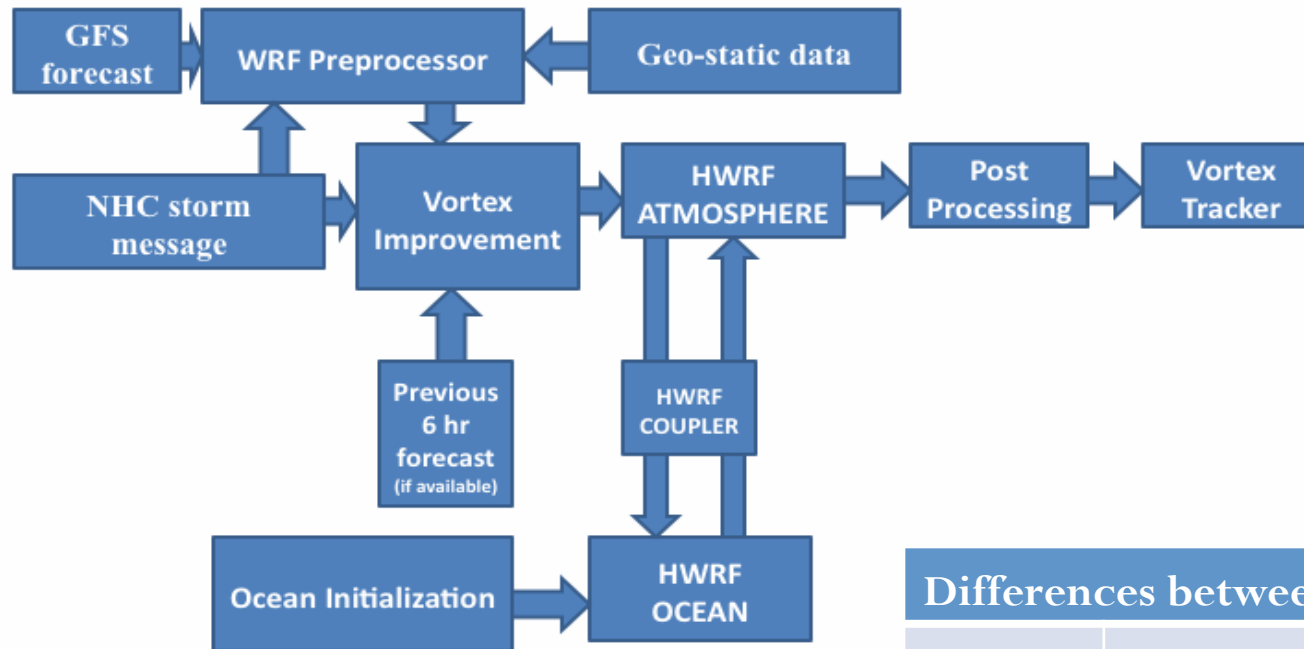
Differences between Oper / Comm		
	Operational	**Comm**
WRF	V 2.0 + dev	V3.2
GSI	Yes	No
Pre-pr	WRF SI	WPS
GFS	Bin/Spec/native	Grib/isob
POM	United & East Atl	United

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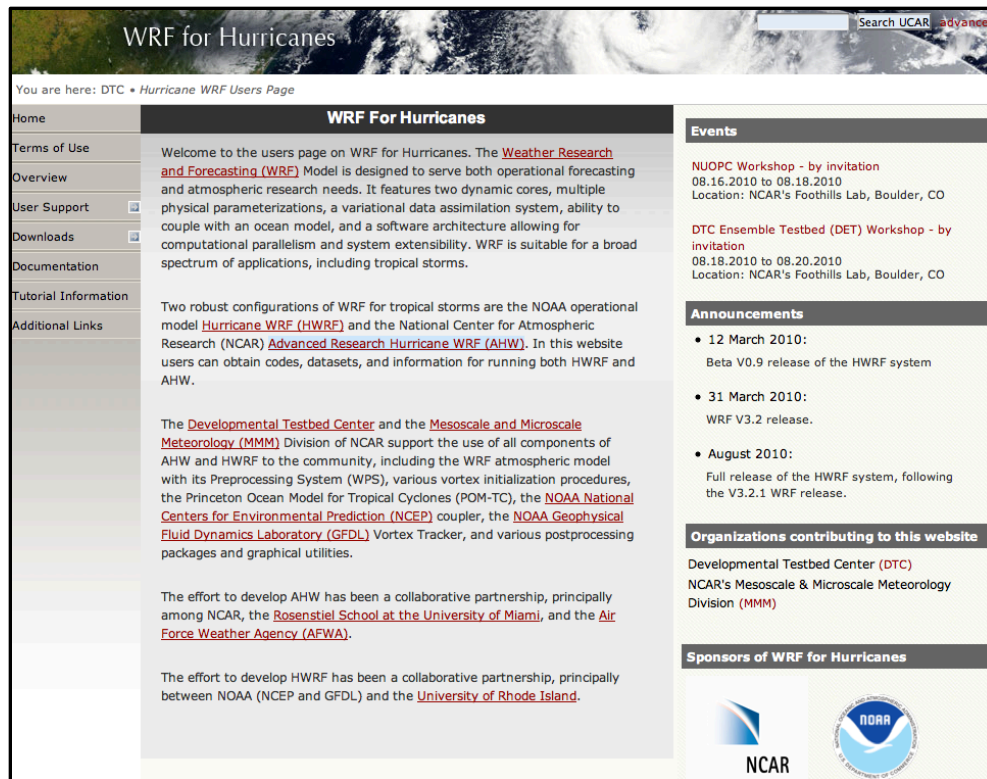Developmental Testbed Center

HWRF code management. Part 1: WRF.

HWRF code management. Part 2: Vortex initialization, POM, POM initialization, coupler, tracker

WRF for Hurricanes: joint site DTC/MMM/EMC
http://www.dtcenter.org/HurrWRF/users/

AHW and HWRF
- Code downloads
- Users' Guide
- Scientific documentation
- Datasets
- Helpdesk

One hundred registered users

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Testing infrastructure on njet

- DTC has created testing suite for HWRF on jet using NOAA Workflow Manager for automation – now including GSI.

- This suite will be made available to HFIP participants for HWRF testing.

- Further testing will continue to:

  - Quantify impacts of bug fixes and porting changes in vortex initialization and other non-WRF codes

  - Assess forecast skill using HYCOM

  - Assist EMC with 2011 implementation

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