

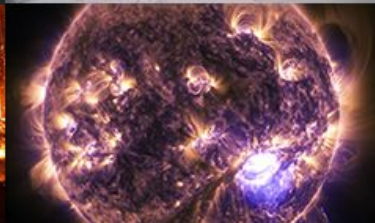
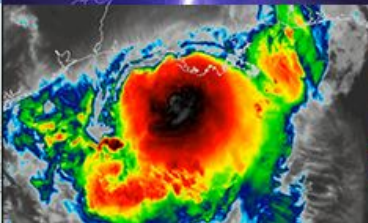
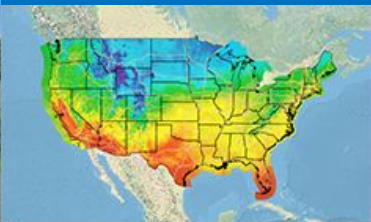


**NATIONAL
WEATHER
SERVICE**

HFIP Annual Meeting

NWS/Office of Science and Technology Integration Welcome

Kevin Garrett, Acting Director, Modeling Program Division
November 7, 2022



NWS/OSTI Modeling

- Program office supporting Earth system model advancements and transition to NWS operations for improved weather forecasts
- Build essential partnerships across the enterprise capture priorities and manage integration into ops

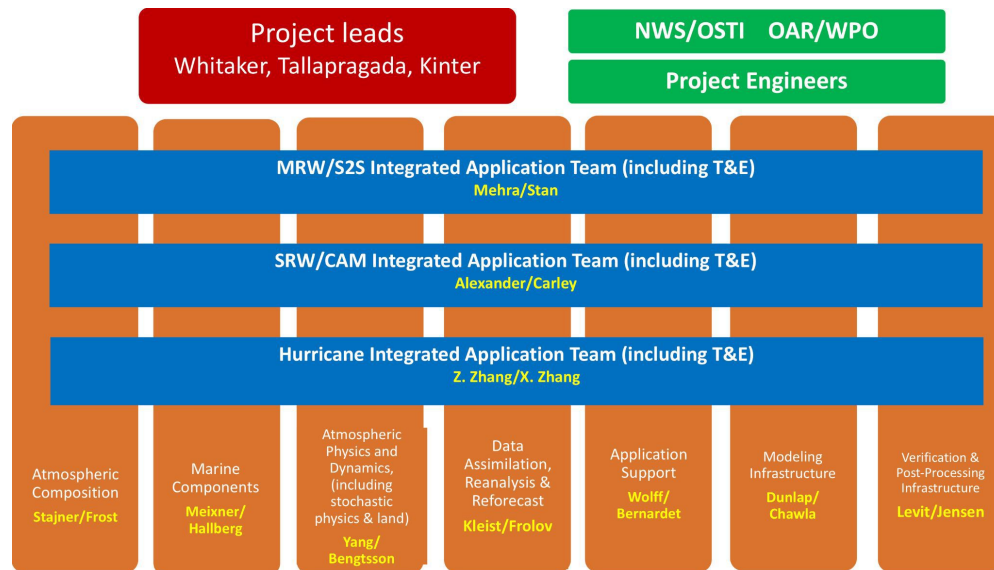


OSTI Modeling Programs

NWS/OSTI UFS-R20 Project



- Bring together NOAA and broader UFS research community to integrate innovative R&D into operations
- Started in 2020, now in Year 3
- Hurricane Application Team
 - HAFS implementation
 - Cross cutting teams








UFS-R20 Hurricane Application Team



Year 3 activities supporting HFIP (EMC, AOML, GFDL, UCAR, Academia)



- Physics improvements / PBL, surface layer, microphysics
 - HAFS configurations for real-time experiments / IOC
 - Tuning, optimization, retrospective analysis, evaluation
 - HAFS-DA finalization for HAFSv1
 - Operational implementation of HAFSv1
 - HAFS/MOM6 coupling
 - Code management, documentation
- 
- 
- 



Additional HFIP Support



OSTI NOFOs



FY20: Extending the Tropical Cyclone Genesis Index to Global Ensemble Forecasts (PI: A. Brammer, CIRA)

Application of Innovation Statistics to Diagnose Biases in the HAFS System (PI: R. Torn, SUNY Albany)



FY22: Tropical Cyclone Wind Gust Guidance for NWS Operations (PI: M. DeMaria, CIRA)



Support to DTC



HWRF support/transition to HAFS/EPIC, T&E

Future OSTI HFIP Focus

UFS-R20 Phase 2 Concept

