

HFIP Priorities for the next 3-5 Years

A Starting Place from the NHC Perspective

Program drivers, by importance

- Rapid intensity forecast accuracy (1)
- Track forecast accuracy (2)
- Overall intensity forecast accuracy (3)
- Forecaster/User “tools” (4)

Priority of Applied Research Areas (top 9), with primary associated drivers

1. Aircraft inner core data assessment (and implementation if justified) (1, 3)
2. Improved/more realistic intensity and structure initialization in regional models (1, 3)
3. Maximize use of satellite data that improve model initialization in all models (1, 2, 3)
4. Statistical approaches (1, 2, 3)
5. Extended (3-5 day) forecasts of disturbances (1, 2, 3)
6. Post-processing products to convey official forecast information to users (limited effort) (4)
7. Develop applications that improve and expedite the use of model guidance (includes diagnostics) (1, 2, 3, 4)
8. Global model development, including resolution increases, physics work and further advances in data assimilation (1, 2, 3)
9. Quantify importance of ocean forecasts (3)

HFIP Priorities for the next 3-5 Years

A Starting Place from the NHC Perspective (continued)

Priority of Applied Research Areas (10-18), with primary associated drivers

10. 7-day forecasting (2)
11. Stream 1.5 (1, 2, 3)
12. Tropical cyclone genesis forecasting (3)
13. Single model ensembling (2, 3)
14. Ocean modeling (final priority contingent on 9, above) (1, 3)
15. Social science to improve messaging and response from end users (4)
16. UAVs (1, 2, 3)
17. Visiting Scientist Program (1, 2, 3, 4)
18. (Last) Activities lacking an operational pathway (0)

Other: ?