

7B.D2 - 5 & 10 year Strategy Goal Planning  
2019 Goals, Metrics in Appendix  
On the way to 50% goal  
2025- Intensity a stretch  
4 Strategic Plan  
Timing & Location or Genesis  
Improve Hazard Guidance all Products -> Lead Times.  
2019-6 Key Strategies  
3. Work Trop Road map  
2023 - Modeling Issues Id by forecasters  
Diversity in Initial Conditions  
Work more w/ GFS the react to  
All driven by GFS, 6 months behind  
How Tracker Prefinance to R34?  
Gopal: HASF v2+  
Plan to address Frank-s Issues?  
Wei Yu-1st Order to do, then find Solution  
No solutions, Otis/ Philippe yet.  
Stay on topic @ Hurr Conference, will present solutions  
EMC on investigating Lee & Jose  
Studies/ Exp. Ocean Response/Model Physics  
Good ideas on Lee  
Otis/Philippe none yet. -> Collbrate with HRD & academia  
Ideas by AMS  
Wei- Track problem before Intensity on Otis/ Phil.  
HAFS-B was right - Frank, A terrible but why?  
VI- Initialization  
When turned North  
A vs B Configs?  
Phil: Track, large uncertainties, huge predictability issues.  
B lucky/ chance.  
B was better all cycles  
Dare-Why time based improvement in spatial? Unsure, localization may have been overlooked  
Phillip - Philippe errors, Vertical Structure  
B better as it had this correct.  
Get Vertical Tilt. Structure as Important Track & Intensity  
Diagnosis  
Look at physics differences. Diagnosis not it.  
Can isolate physical differences

Binary Interaction of Ophelia - Will

Gus- Preform diff in the basin, need better guidance on bias in basins. HRD needs help.

Share in Monthly Meets, Target AMS. Tell problem on EMC website.

Stan-Track not always tied to Intensity. Complicated problem. Diff storm to storm.

HAFSv2+

2 year Plan

Zack- Move Nest, #2 important to RI/Otis, increase Horizontal Res.

Wei-3km refinement. Otis beyond Res. Gain 1 /Lose 1, discuss, Physics items discuss

HAFS-JEDI Key Points

Expectations & Challenges, 2 options Basin Uniform Nest.

3km miss Domain, Which one?

6km moving nest, likely reduce to 2 times per day for cost reasons.

Ensemble in Cloud go to 3km, 2 cycle split members

Not Start Test Moving Nest yet. Must be done! Pull S3 Real Time. > example

Wallace- Look @ GEFS errors 1st to optimize. \Same baseline ensemble, compare them. Multi in that domain

Projection Limited. Can't cover whole NHC region, will test real time this summer

How to phase with other developments?

DA & Global Analysis@6km, lets use this

Tweak #2, explore what global sys can do to make Hurricane side easier. Get around self run cycle sys. Reduce complexity. - Beyond 2yrs.

Zach: Running 6km now

GSDI to JEDI must happen 1st DA. 5 years probably

Open to discuss? Shouldn't wait.

6 in line w/ GFSv18. 5yrs ahead. Need to be in line w/ JEDI schedule for v18

Frank: Converge in 5 years but how? Global DA lot of physics in Global. Can't wait 5yrs

HAFS basin building for all, exploring to be flexible and open.

Arichal: Have some cooking for DA in v2. Sub Cycle, 1.1D experiment need to evaluate.

Tell how good + what tweaks needed. Other things can be tried. Multi Scale DA, low hanging fruit.

JEDI 1st best

Work w/ what we have

Ensembles

Minimize loss. Wallace: Caused by winds over water (surge) & land 20% chance must be real 20%. credibility on the line

Structure Radii & Land more ->Focus Areas.

Can't do in deterministic model-#6

Kate-Data Mine needed, provide products on website, have Reg. for new ones?

Prods helpful, data is there

Optimize-20% means 20%

Good @ this stage, Awips road. Think now, present in Awips, local offices use to make warnings. Starting point.

Wind Speed Prob, all will be done in Awips. Web could go away

Must plan for Awips. Not Operational on AWS yet w/ High Res HAFS

Aviachal- 2 diff things

Science Improve-Wallace 20%

Products Side- Possible in Awips?

Other Customers, OPC, NOS, etc.

Verify vs Forecasters /Decision Makers

Wallace- John begin to prototype some products, early stage

#8 - Prob Products-Wind, Swath, Structure.

Model side by side w/ Obs. & Tdr to simulated data - Gus

4 member to actual models. Range of possibilities. - Need to reframe.

NHC Req. - Top, Ensemble Spread appropriate to area. Tuned had won't use products.

Kate-Beginning to build Sfc winds analysis. Data + model or advance DA

Work w/ storm surge unit

Tiger Team? to build

Localize & better visualization

Last 2 - Rainfall+ Precip

Arivchal: Discus with Jim Nelson

Jim showed HAFS analysis, prelim 3 years - Frank.

WPC are interested in post precip HAFS after Winter in Spring 24, Feed back next year

New Obs-Brian Cole - 3 nice concepts w/UAS. None have a path to Ops. Test or Ops

How evaluate, req. pay for?

Prob wind products - Will

Need to verify good 1st Step.

Joe-Cont more resources

Jason Sipple. Adhoc now, not funded

Get DA \$

Good Mesonet would help

How assimilate w/o observations

Frank proposals

2 Tiger Teams Next Yr.

JEDI-HAFS DA Transition, coordinate w/ GFS. FY -25 HAFS v3 target, v4 for sure.

Jason Sipple co-lead, next gen strategy

Uncertainty, develop proof of concept, PDF to drive real products

Provide data & how to use

JWCM? Analysis, Land Sfc Model

What can model provide and be used? Spread, which models?

Wallace & Kate? / Cira, Focus on what NHC needs and the data they want

Need members, Be flexible

New obs, do w/ What? Can't before JEDI

Jim: Verifications too!!

Aaron. Do right things @ right time. Be realistic, or so rough. Talk regularly.

Strong NOAA support w/ the Kens

Increase to Quarterly Briefs