Protocol

- Harvard produces 3-day nested simulations
 - o Channel and North-of-Elba domains
 - Start 1 day in past to incorporate new data and forcing
 - o Extract mini-HOPS domains IC/BCs from last day
 - o Use:
 - CTDs
 - good SST
 - ALADIN winds
 - NODDS net heat flux & E-P
- Alliance produces 1day stand-alone mini-HOPS simulations every 12 hours
 - Assimilation to correspond with collection of blocks of CTDs
 - IC/BCs from Harvard
 - o Use
 - CTDs
 - ALADIN winds
 - NODDS net heat flux & E-P

At Harvard Schedule (Eastern times)

0900-1215 Down load any new data

- CTDs
- ALADIN atmospheric forcing
- SST images

Quality control data

Verify previous forecast against new data

1215 Last chance to down load any new data

- CTDs
- ALADIN atmospheric forcing
- SST images

1245 Process data

Objectively analyze CTDs Construct wind stress from ALADIN wind fields.

- 1315 Combine good SST with CTD OA's
- 1330 Construct net heat flux, E-P from FNMOC forcings. Process assimilation fields with PE_initial
- 1345 Upload new fluxes from FNMOC to Alliance Use PE_forcing to prepare PE-ready forcings.
- 1400 Launch nested simulations
- 1530 Examine nested results
- 1600 Upload IC/BC's to Alliance or notify of delay
- 1600-1700 Plan and launch additional sensitivity tests

Alliance Schedule (European times)

0930 Download updated fields

- IC/BC's
- processed NODDS
- ALADIN

0945 Process forcing files

Every ~ 12 hrs – Map and assimilate new block of data into a Mini-HOPS simulation