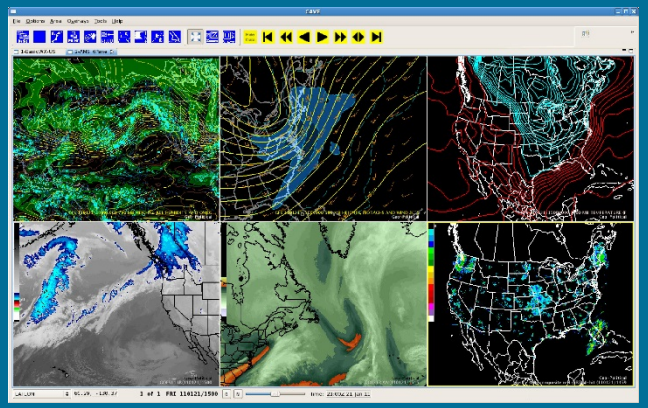
National Hurricane Center

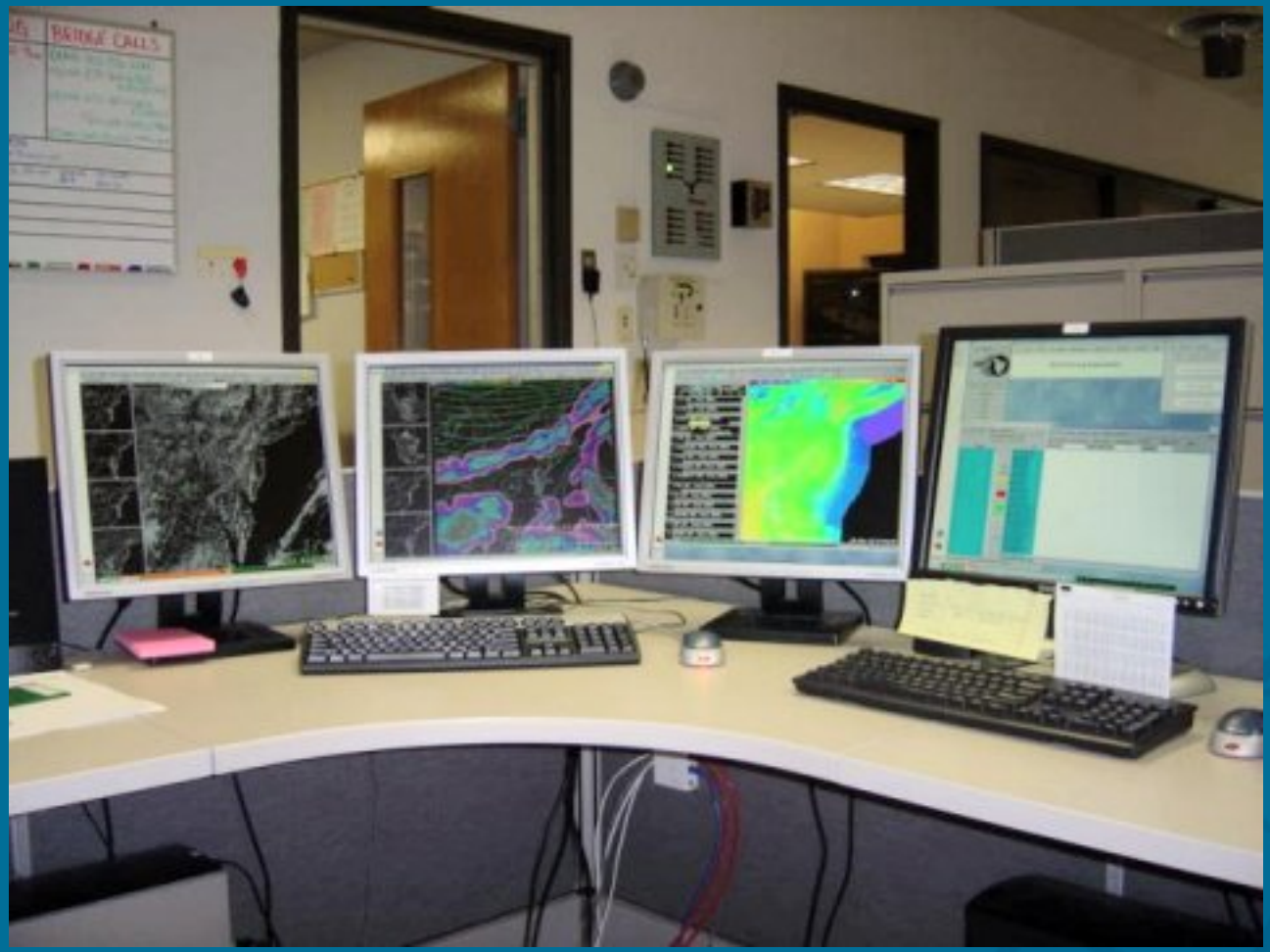
The NHC Transition from NAWIPS to AWIPS2/NCP



What Is AWIPS2?

- Automated Weather Information Processing System
- Modern System to support NWS forecast operations at all sites
- National Centers, Local Forecast Offices, River Forecast Centers
- Service-oriented architecture, meaning frontend user interface (client) is independent of from the supporting backend (services)
- Cave Client (display window for data) is a GIS type display system
- Common AWIPS Visualization Environment
- Services consist of data decoders, datastores and other infrastructures
- Software is plugin based technology
- Data distributed via satellite broadcast and terrestrial network

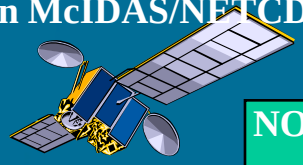
AWIP2 Workstation



NHC AWIPS2 Data Flow

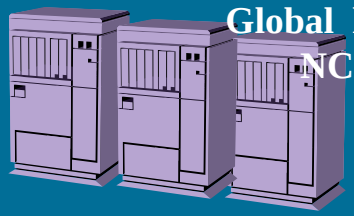
Local NHC data sets
Hurricane Hunter observations

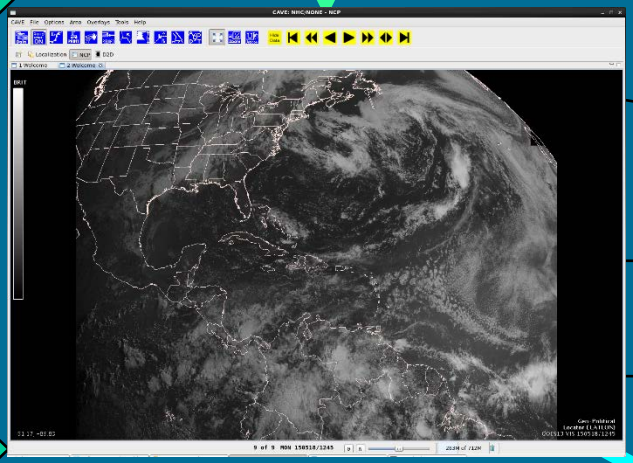
High resolution McIDAS/NETCDF4 data



NON-SBN DBNET

Global high resolution
NCEP Models



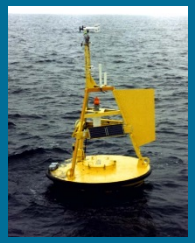


NCP MENUS

GFE MENUS

ANALYSIS

PRODUCTS



Buoys,
Ships

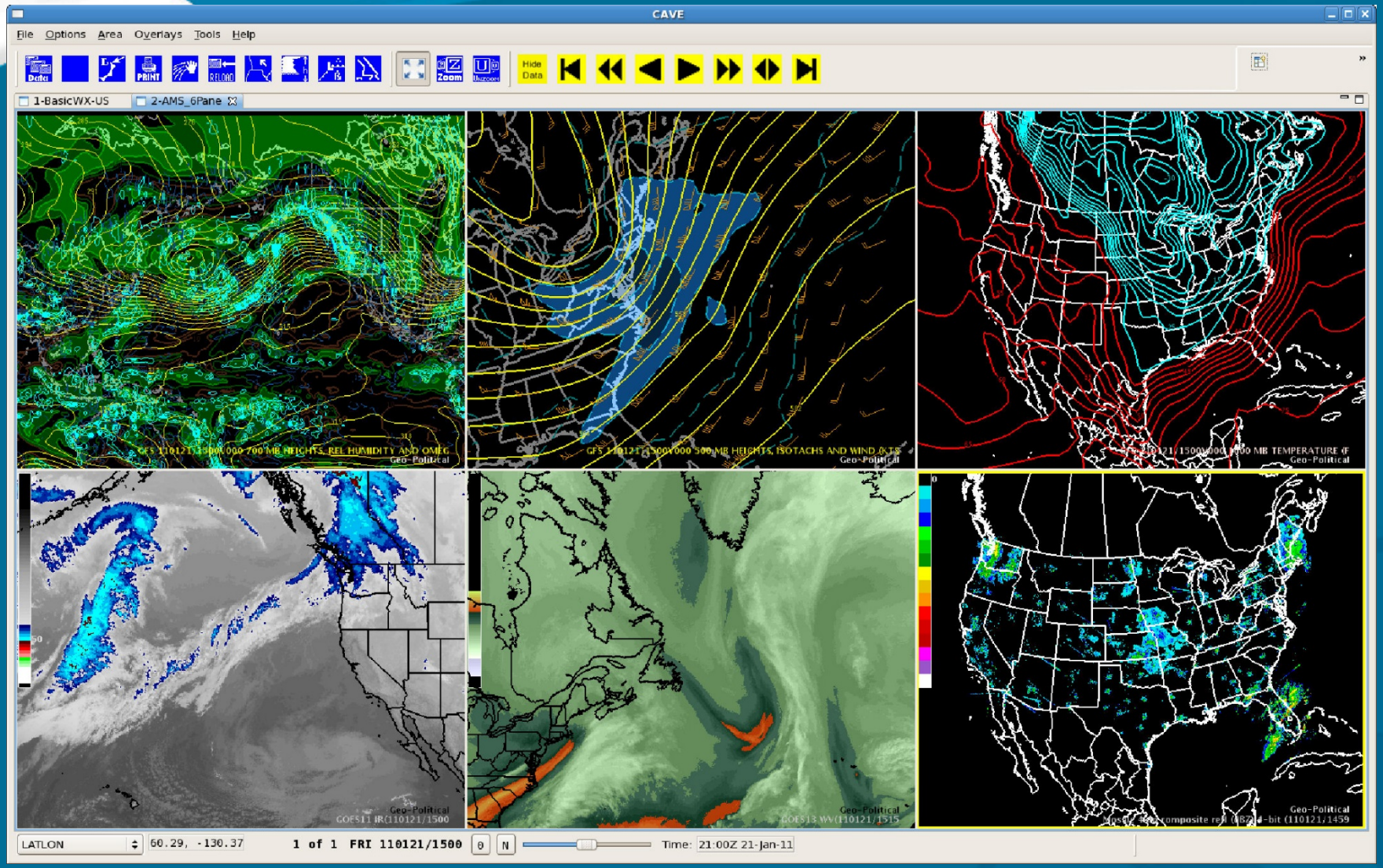
SBN LDM flow

AWIPS Workstations and Servers

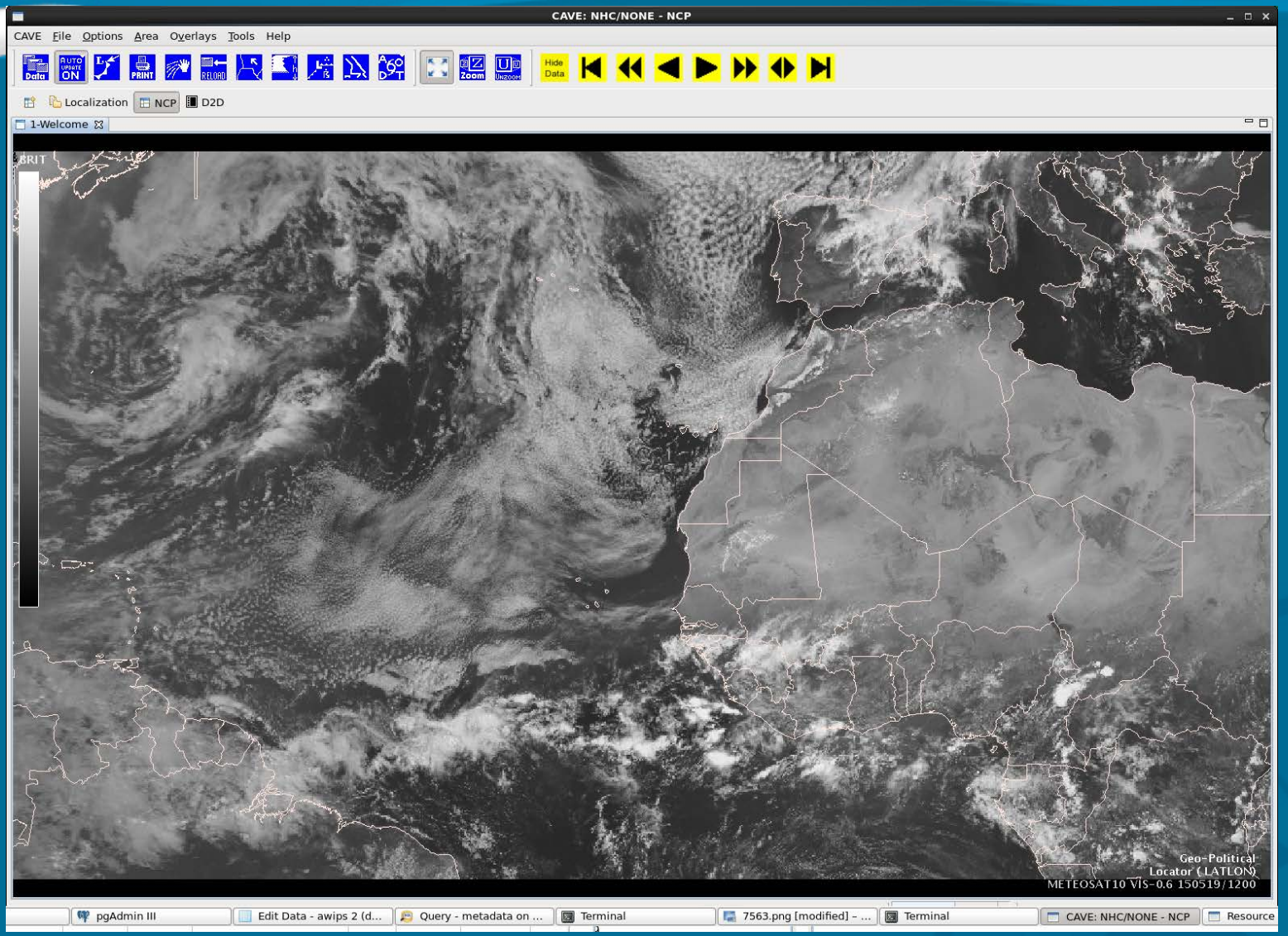
~18 AWIPS Workstations
4 EDEX Servers

Service provided
24 hrs/day,
365 days/yr.

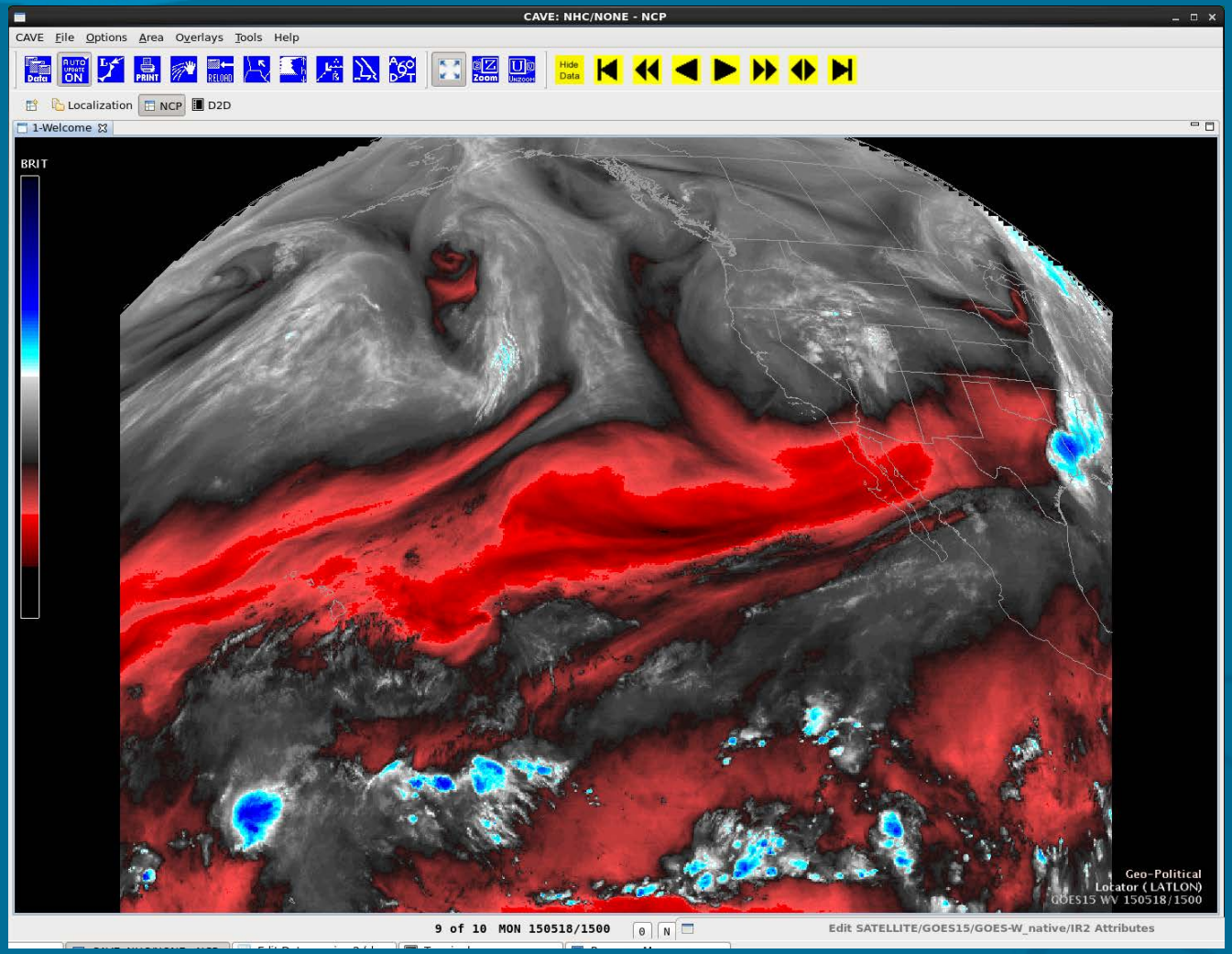
Example of CAVE/NCP Display



METEOSAT Visible



GOES-W Water Vapor



Current Status of NHC AWIPS2 Transition

Summary:

- **~ NHC configured ~80 percent of Non-SBN grib2 last summer for AWIPS2 (EDEX) ingest.**
- **The vast majority of McIDAS files are already ingesting in real time on the nhcr system. However. need ability to create SPFS.**
- **NCP Menu configuration using NAWIPS ported restore files is 90 percent compete. Waiting on fixes to increase loading speed.**
- **GEF Ensemble 20 members represents the largest grib2 data set**
- **The HWRF and GFDL currently cannot ingest into AWIPS2**
- **OPC identified a list of critical fixes required to move forward with OTE. Theses fixes will be included in national releases this year. NHC will begin building SPF's and testing NCP this spring.**

The NHC Path Forward

- **Short-term (2016)**
  - ***Work with OPC who will begin Field Testing NCP this fall***
  - ***Ensure the SBN feed ingests all required text and radar products***
  - ***Monitor the non-SBN global model data flow in real time***
  - ***Finish most of the McIDAS Satellite project***
  - ***Fine tune NCP menus in conjunction with TAFB and HSU***
- **Long-term (2017)**
  - ***Rewrite/transition product generation scripts***
  - ***Ingest Hurricane hunter observations graphically***
  - ***Monitor and test performance of NCP***
  - ***Training and transition (based on OPC lessons learned)***