NOAA Hydromet Test Bed at HPC

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Primary GOES – Satellite Use at HPC

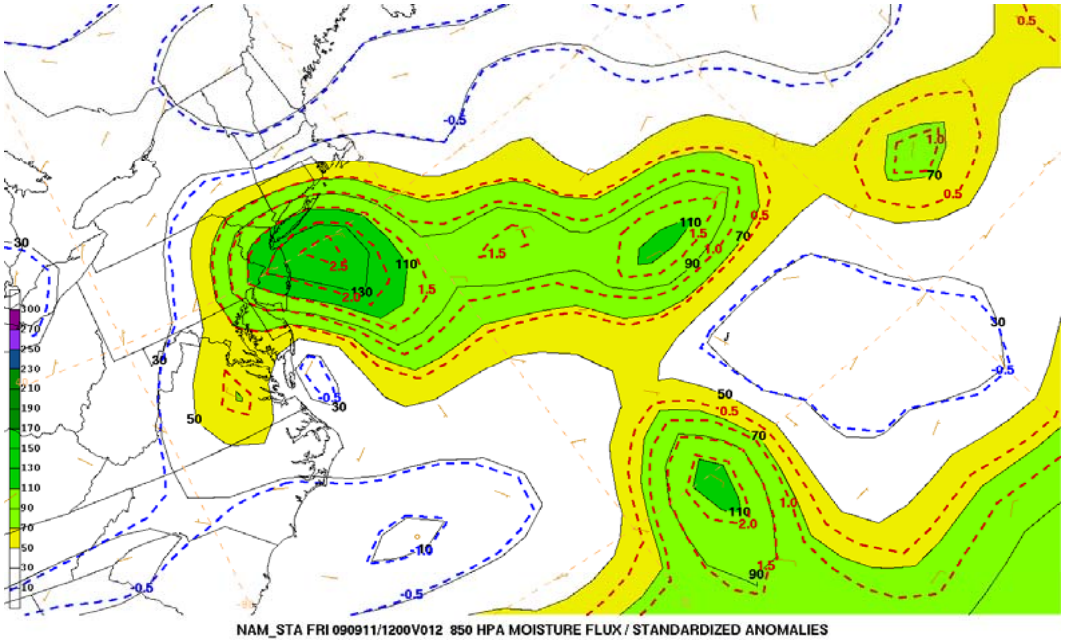
- HPC QPF forecasters utilize GOES data daily to identify features for convective and stratiform precipitation banding.

- Model diagnostic forecasters utilize satellite data to quantify initialization features in each model run, then in turn, send findings to NWS filed office forecasters.

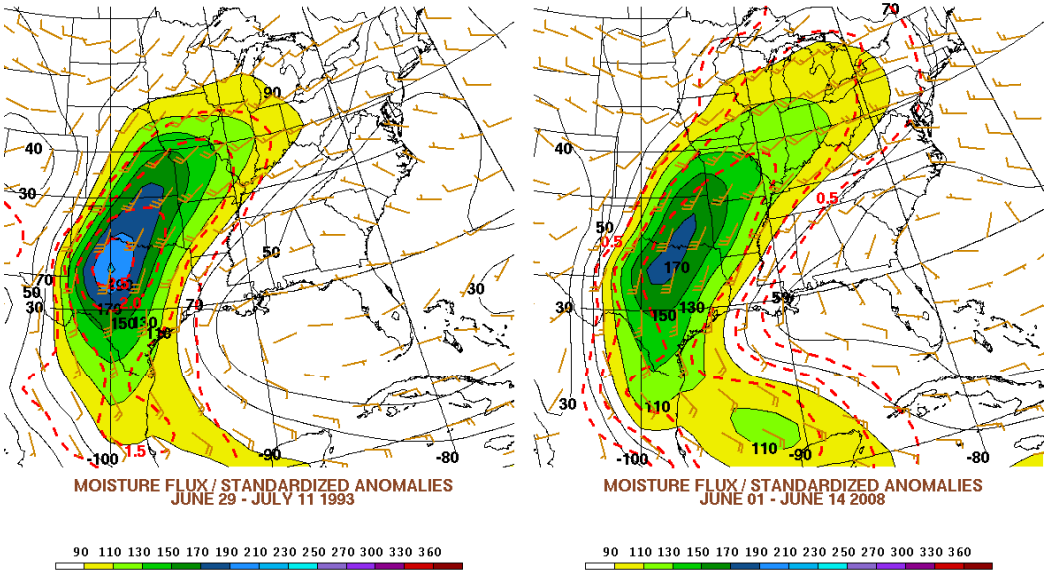
- Satellite data used in training of student meteorologists from Caribbean and Latin American countries on the HPC International Desk

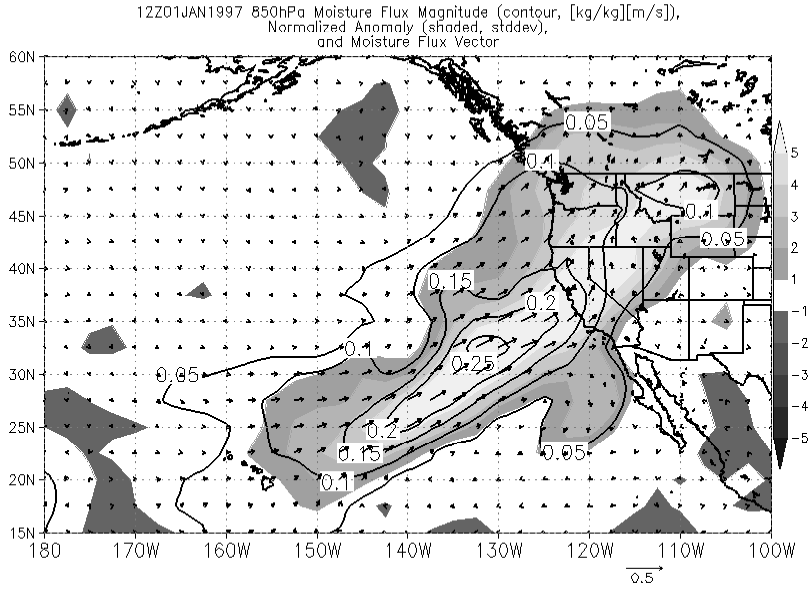
Next Steps for GPM-era data & products

- Currently we have a submitted grant proposal with scientists at ESRL/PSD for funding to work on a quantitative tool for identifying atmospheric rivers.



Atmospheric Rivers are not just a West Coast phenomena.





Next Steps for GPM-era data & products

- A second proposal with PI's from Texas A&M and NESDIS/RAMMB as part of NOAA/NWS Risk Reduction.

- Focus on short term prediction of extreme rainfall and flash flooding – especially over western U.S. where radar coverage is poor.

- Propose to enhance short term prediction of extreme rainfall by using a statistical-dynamical approach which utilizes RUC and Rapid Refresh model data, GOES-R Rainfall Rate, Total Precipitable Water and lighting data sets.

Collaborators

- The Hydromet Test Bed at HPC is engaged in collaboration with NOAA HMT, ESRL and test beds at other NCEP centers

- HPC would welcome opportunity to work with NASA scientists