

Drought research & applications

Drought Operations

- Drought briefing each month
- Objective drought monitoring : using drought indices to identify and classify drought and persistent wet spells
- Attribution

Drought related research

Funding: CPPA

Our focus for the next few years:

- Drought prediction for the U. S. out to 3 months based on CFS
- Expand drought monitoring to cover Pan America based on the CFSR
- Use satellite derived indices for monitoring (CTB funding. New project)

Drought research & applications

Project: Improve streamflow forecasts at the CBRFC

Funding source: TRACS

Work on going:

- A) Improve Evaporation by improve PET for the San Juan basin
- B) Test whether dynamical downscaling will improve hydrological forecasts,
- C) Test using daily forecast information to improve streamflow forecasts at the CBRFC

Benefits:

- Improve NLDAS models (EMC/NCEP)
- Improve drought prediction at the CPC
- Improve RFC streamflow prediction at the CBRFC
- Better coordination with the OHD , EMC and CPC

Drought research & applications

Project: Seasonal forecasts and hydrological applications over the Southeast

Funding source: TRACS

Work on going:

- A) Improve and test the EMC/Princeton system to forecast soil moisture, runoff and standardized precipitation indices over the Southeast
- B) Develop applications for specific river basins over the Southeast
- C) Forecast SPI index out to 6 months based on the CFS forecasts after bias correction

Benefits:

- Improve CPC drought prediction :
- Improve RFC streamflow prediction at the SERFC