

# Climate Monitoring & Forecast Talks

**MOTIVATION:** An improved understanding of what various monitoring and forecast products represent, how they are made, and how they should be interpreted should lead to better informed decision making.

- Describe the strengths and limitations of a number of NOAA operational and research forecast and monitoring products.
- Characterize uncertainty and provide insights into the limits of predictability.
- Introduce research forecast and monitoring products while clarifying the relationship to operational counter parts.
- Use end-user guidance on needs for climate forecast and monitoring products in developing research priorities

# Climate Monitoring Products

[http://www.cpc.ncep.noaa.gov/products/expert\\_assessment/](http://www.cpc.ncep.noaa.gov/products/expert_assessment/)

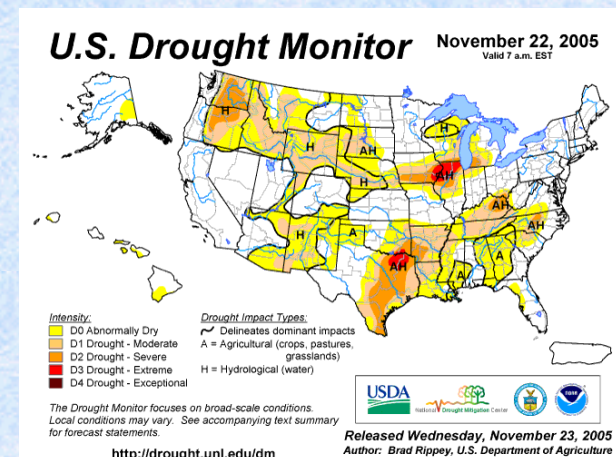
Hazards Assessment

ENSO Assessment Weekly Update

Drought Assessment  
(**Drought Monitor** and Drought Outlook)

Degree Day Assessment

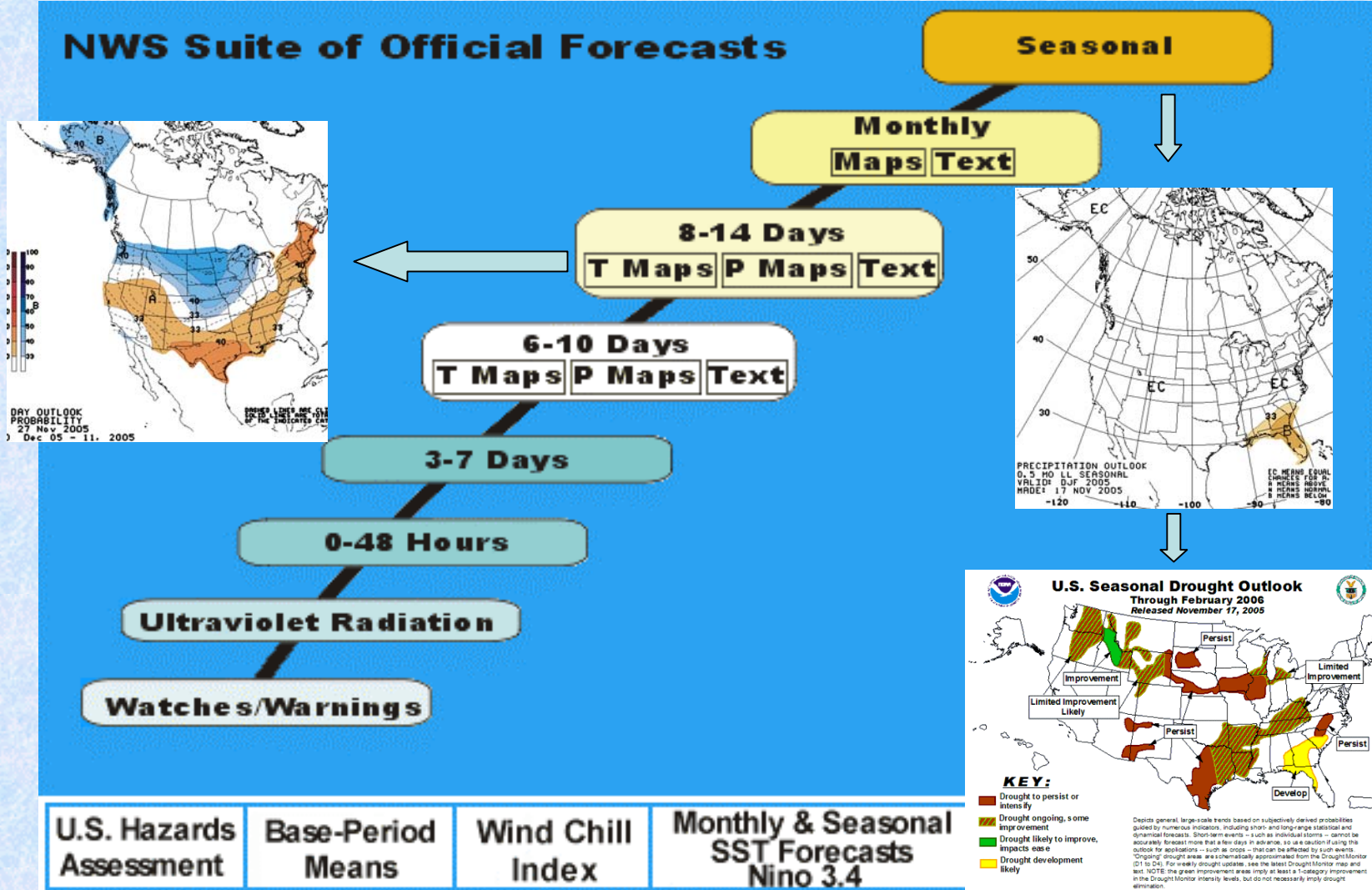
Climate Assessments



# Operational Climate Forecasts

*conservative, broad scale, measured response to changes*

## NWS Suite of Official Forecasts



<http://www.cpc.ncep.noaa.gov/products/forecasts/>

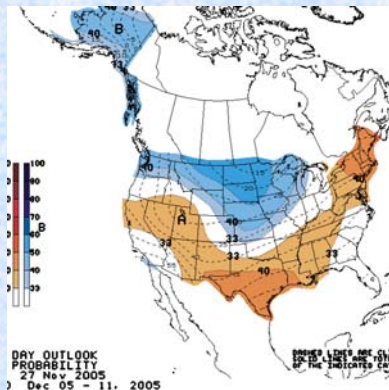
# Experimental Forecast Guidance

*technique specific, regional, dynamic response to changes*

## Experimental 6-10 Day and 8-14 Day Guidance



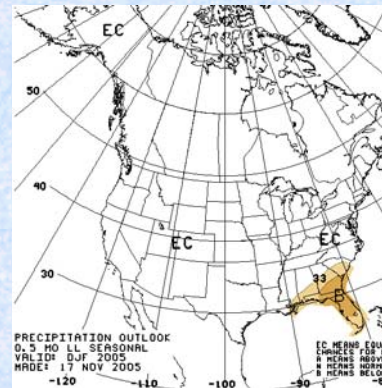
*starting point for developing operational 6-10 day and 8-14 day climate forecasts*



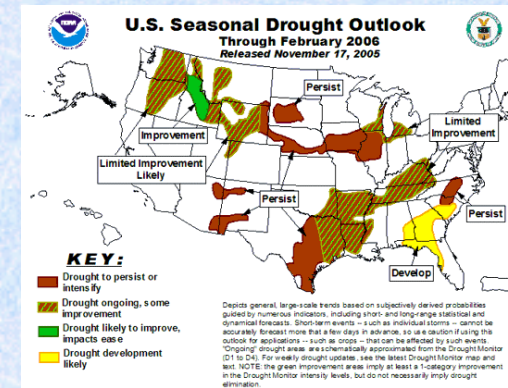
## Experimental Colorado and interior Southwest Forecast Guidance



*regionally resolved ENSO impacts*



*highly resolved climate information*



# Experimental Forecast Guidance

*technique specific, regional scale, dynamic response to changes*

- ***Developed as research tools to inform and enhance operational forecast products***
- ***Augmenting or complementing operational forecasts***
- ***No long term commitment for routine, systematic or sustained production***
- ***Insights and improvements expected to be infused into operational products***



# Operational Climate Forecasts

*conservative, broad scale, measured response to changes*

# ***Critical Insights to Keep in Mind***

- ***Vast majority of the strengths, limitations and uncertainties that will be discussed are not forecast or monitoring product specific, but are shared regardless of the source.***  
***NOAA, USGS, NASA, universities, private sector, fortune tellers, snake oil salesmen, or even the great and powerful Oz***
- ***"I canna change the laws of physics, Captain!"***  
***-Montgomery Scott, Chief Engineer, USS Enterprise***
- ***"It's tough to make predictions, especially about the future."***  
***-Yogi Berra, Emeritus Scholar, NY Yankees***