



Climate Prediction Center Decision Support Services

David DeWitt, CPC Director
With contributions from CPC Staff



Decision Support Services on Climate Timescales



- To date most of the discussion regarding decision support services in the NWS has been on weather timescales. However, from the local to the national level short-term climate forecasts are used to inform decisions that impact life and property. Examples include:
 - Managing water supplies
 - Planning fuel production and distribution
 - Deciding which crops to plant
 - Alerting local governments when they will need to set up facilities to handle illness caused by extended heatwaves



Outline



- CPC Deep Relationships with Core Partners:
 - USDA
 - USAID
 - Regions/WFOs
- DSS During Near-Record El-Nino of 2015-2016
 - CSPM/WFO
 - Briefings to core partners
 - Media interviews
 - ENSO Blog



CPC Deep Relationship with USDA



Joint Agriculture Weather Facility

- *USDA – DOC partnership*
- *Weekly Weather and Crop Bulletin*
- *Briefings & Weather Summaries on global weather and crop conditions*

Volume 93, No. 16 <http://www.usda.gov/ocaweb/weeklyweb.html> April 15, 2008

WEEKLY WEATHER AND CROP BULLETIN

U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Weather Service

U.S. DEPARTMENT OF AGRICULTURE
National Agricultural Statistics Service
and World Agricultural Outlook Board



Midwestern and severe thunderstorms were reported over a five-day period (April 9-13) as a strong low pressure system formed in the southern Plains and rapidly intensified. Heavy to moderate to heavy rain was reported in north Texas and southern Oklahoma on Wednesday, April 9, and severe weather continued in Texas and northern Mississippi through April 10. Severe structural damage and injuries were reported throughout the day. The storm system moved east of Friday, April 11, bringing hail and severe winds to the Great Lakes as well as areas to the south, where 17 tornadoes were reported in Tennessee and northern Alabama, along with numerous reports of severe damage to crops and grain fall conditions.

HIGHLIGHTS

April 6 - 12, 2008
highest amount for December

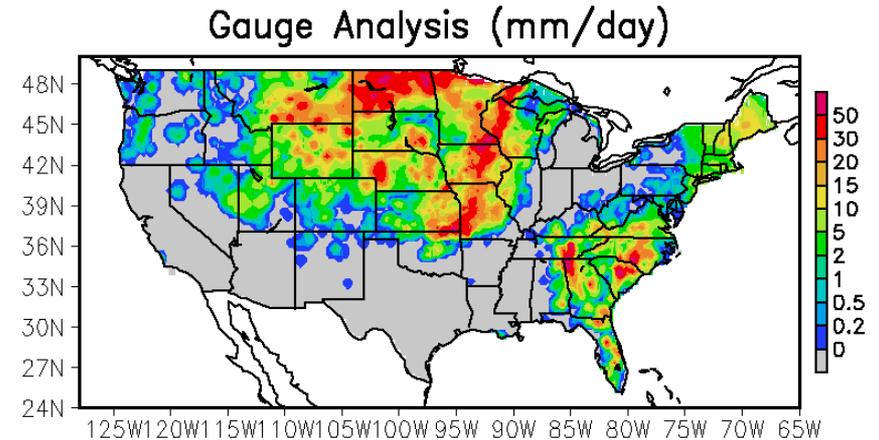
Heavy rain returned to the east-central and southeastern Plains, the Mid-South, and much of the Midwest, further delaying spring planting operations. At least 6 inches of rain fell from central Oklahoma into southern Missouri and western and central Arkansas, setting many areas nearly as high as they had climbed following the mid-March downpour. In addition, the down-flooded regions were struck by as many as five dozen tornadoes, most of which were spotted from April 9-11. At least as much of precipitation fell across a south-trending area stretching from the central and southern Plains to the western slopes of the Appalachians. Moisture was beneficial, however, in several areas, including the High Plains (Continued on page 7).

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CPC Deep Relationship With USDA

20 May, 2013

- **USDA / RMA uses CPC daily precipitation analysis to create their rainfall index for their National Pasture, Rangeland and Forage (PRF) Insurance Initiative**
- For crop year 2015, the USDA/PRF Program:
 - **> 20,000 policies**
 - **54.7M acres**
 - **The program is still expanding**
- An SLA between CPC and USDA/RMA is under development



- *Over CONUS, the CPC unified daily precipitation analysis is constructed on a 0.125° lat/lon grid through interpolation of quality controlled station reports at $\sim 10K$ stations. The analysis is post-processed to a 0.25° lat/lon grid and used by USDA/RMA.*



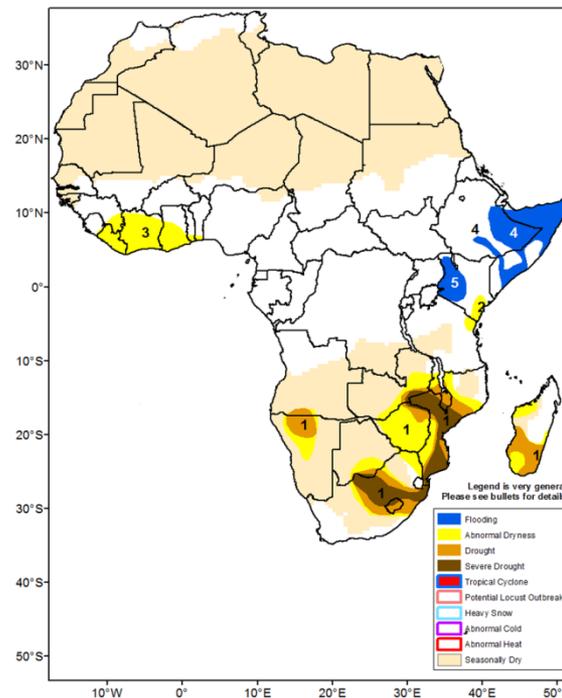
Deep Relationship with USAID



CPC supports the humanitarian missions of the USAID

Food For Peace (FFP)

- CPC provides FEWS NET with timely weather and climate information, including the regional hazards outlooks prepared weekly.
- The outlooks are used together with other food security indicators to issue monthly food security outlooks
- FFP factors the CPC regional hazards outlooks into its decision making process as to where to move food, safe drinking water, and mobilizing the international community to respond to acute famine.



Regional hazards outlooks for food security, valid May 11 2016 are targeted forecasts for areas that are vulnerable to droughts or flooding that might result in adverse impact on crops or pastures



New Paradigm of Decision Support Services to Regions/WFOS



During the 2015-2016 El-Nino CPC initiated enhanced decision support services for the regions/WFOS: Each month the following protocol was follows:

- Prior to the release of the El-Nino Diagnostic Discussion CPC had a telecon with the Climate Services Program Managers (CSPMs) and distributed talking points to be used with the WFOs and local stakeholders.
- Shortly after the release of the monthly/seasonal outlook CPC conducted webinars with the regional headquarters and weather forecast offices.
- Feedback received for these efforts has been extremely positive.
- If you have additional feedback please let me know (david.dewitt@noaa.gov)



Extensive DSS During the 2015-2016 El-Nino



Associated with the 2015-2016 El-Nino CPC provided the following DSS activities:

- Over 55 briefings to a wide range of internal and external stakeholders including the WFOs and the White House Office of Science and Technology Policy (OSTP).
- Hundreds of one-on-one media interviews and 20 organized news conferences.
- Numerous insightful posts on the ENSO blog explaining various aspects of prediction of El-Nino and its impacts.



Stakeholder Engagement for Decision Support Services Associated with 2015-2016 El-Nino



Federal Emergency Management Agency	National Security Council	Federal Aviation Administration	US House of Representatives
NWS Regional Headquarters	Climate Services Program Managers	Weather Forecast Offices	NOAA Regional Climate Centers and Regional Climate Services Directors
Western States Water Council	California Governor's Office	Embassy of Peru	Embassy of Ecuador
Office of Science and Technology Policy	Department of Defense	United States Department of Agriculture	United States Agency for International Development
Department of Energy	Department of the Interior	Office of Science and Technology Policy	House Subcommittee on Disaster Reduction