Agricultural Outlook Forum
Crystal Gateway Marriott Hotel
February 25, 2011

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Northern Hemisphere Crop-Weather Outlook for the 2011 Growing Season

• A review of conditions experienced in the winter of 2010-2011
• Current conditions
• Projected weather patterns for the spring of 2011
• Outlook for the summer of 2011
# U.S. Winter Wheat Condition, 2010-11

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</table>
9 - HENAN

Percent of Normal Precipitation: Dec 1 to Feb 16
05 - NORTH CHINA PLAIN
Daily Normal Precip (Based on Monthly Normals)

Wheat Season
IRRIGATED agricultural land in China

Share of agricultural land under irrigation:
- <10%
- 10-20%
- 20-30%
- 30-40%
- 40-50%
- 50-60%
- 60-70%
- 70-80%
- 80-90%
- >90%

Legend:
- No crops
- No data
- Province boundaries
Northern Hemisphere Crop-Weather Outlook for the 2011 Growing Season

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- **Current conditions**
- Projected weather patterns for the spring of 2011
- Outlook for the summer of 2011
Large positive anomalies associated with El Niño decreased beginning in late February 2010, becoming negative in late April. The negative anomalies since June 2010 are consistent with La Niña. Since the beginning of January 2011, the negative anomalies have weakened.

La Niña conditions began in June 2010 but are currently weakening. La Niña is expected to continue into the Northern Hemisphere spring.
ENSO Current Status

For more information go to: http://www.cpc.noaa.gov/products/precip/CWlink/MJO/ens.shtml
Sea Surface Temperature (SST) Animation
North Atlantic Oscillation

- Strongly negative most of the time since October 2009 (e.g. blocking high-pressure system over the N. Atlantic Ocean).
- Profound impact on N. Hemisphere weather conditions, both winter and summer (e.g. freezes in Florida, Jan. and Dec. 2010; Russian drought of summer 2010).
Northern Hemisphere Crop-Weather Outlook for the 2011 Growing Season

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Note: USDA does not make official weather or climate forecasts for the federal government. The National Weather Service’s Climate Prediction Center provides such outlooks.
Typical U.S. Temperature, Precipitation, and Jet Stream Patterns During La Niña Winters

La Niña

La Niña develops when stronger than normal trade winds push warm water farther west. Enhanced upwelling makes surface waters in the eastern Pacific cooler than normal.
Pacific Niño 3.4 SST Outlook

• Nearly all models indicate that La Niña will weaken in the coming months.
• A majority of models and all three multi-model forecasts indicate ENSO-neutral conditions by May-June-July 2011 (Niño-3.4 SST anomalies between -0.5 C and +0.5 C ).

For more information go to: http://www.cpc.noaa.gov/products/precip/CWlink/MJO/ enso.shtml
NWS Outlook
March 2011
Issued February 17

Temperature

Precipitation
U.S. Seasonal Drought Outlook
Drought Tendency During the Valid Period
Valid Spring (March-May) 2011
Released February 17, 2011

KEY:
- Brown: Drought to persist or intensify
- Orange: Drought ongoing, some improvement
- Green: Drought likely to improve, impacts ease
- Yellow: Drought development likely

Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Short-term events such as individual storms cannot be accurately forecast more than a few days in advance. Use caution for applications such as crops that can be affected by such events. "On-going" drought areas are approximated from the Drought Monitor (D1 to D4 intensity). For weekly drought updates, see the latest U.S. Drought Monitor. NOTE: the green improvement areas imply at least a 1-category improvement in the Drought Monitor intensity levels, but do not necessarily imply drought elimination.
IRI Global Outlook
March – May (Spring) 2011
Issued February 17

IRI Multi-Model Probability Forecast for Temperature
for March-April-May 2011, Issued February 2011

IRI Multi-Model Probability Forecast for Precipitation
for March-April-May 2011, Issued February 2011

Temperature

Precipitation
IRI Eurasian Outlook
March – May (Spring) 2011
Issued February 17

IRI Multi-Model Probability Forecast for Temperature
for March-April-May 2011, Issued February 2011

IRI Multi-Model Probability Forecast for Precipitation
for March-April-May 2011, Issued February 2011
Northern Hemisphere Crop-Weather Outlook for the 2011 Growing Season

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IRI Outlook
June – August (Summer) 2011
Issued February 17

IRI Multi-Model Probability Forecast for Temperature
for June-July-August 2011, Issued February 2011

Colors show probability of most likely category.
White indicates climatology.

Probability (% of Most Likely Category)
Below-Normal
40 45 50 60 70
Normal
40 45 50 60 70
Above-Normal
40 45 50 60 70

IRI Multi-Model Probability Forecast for Precipitation
for June-July-August 2011, Issued February 2011

Colors show probability of most likely category.
White indicates climatology.

Dry season (no forecast)

Probability (% of Most Likely Category)
Below-Normal
40 45 50 60 70
Normal
40 45 50 60 70
Above-Normal
40 45 50 60 70

Temperature
Precipitation
Questions or Comments?

• Contact Information:
  – E-mail: brippey@oce.usda.gov
  – Phone: (202) 720-2397
Wheat Production

- EU-27: 1400000 MT
- China: 1200000 MT
- India: 1000000 MT
- United States: 600000 MT
- Russia: 500000 MT

2008 to 2010 Average (Last Update: February 2011)
Corn Production

- United States
- China
- EU-27
- Brazil
- Mexico

2008 to 2010 Average (Last Update: February 2011)
Oilseed, Soybean Production

- United States
- Brazil
- Argentina
- China
- India

2008 to 2010 Average (Last Update: February 2011)
Oilseed, Soybean MY Imp. from U.S.

- China: 25,000
- Mexico: 5,000
- EU-27: 2,500
- Japan: 2,000
- Taiwan: 1,000

(1000 MT)

2008 to 2010 Average (Last Update: February 2011)
United States: Corn

Yellow numbers indicate the percent each state contributed to the total national production. States not numbered contributed less than 1% to the national total.

Note: The agricultural data used to create the map and crop calendar were obtained from the National Agricultural Statistics Service at: http://www.usda.gov/nass/.

- Major areas combined account for 75% of the total national production.
- Major and minor areas combined account for 99% of the total national production.
- Major and minor areas and state production percentages are based upon averaged NASS county-level and state production data from 2000-2004.

Corn crop calendar for most of the United States

Crop calendar dates are based upon NASS crop progress data from 2000-2004. The field activities and crop development stages illustrated in the crop calendar represent the average time period when national progress advanced from 10 to 90 percent.

USDA World Agricultural Outlook Board
Joint Agricultural Weather Facility
United States: Soybeans

Yellow numbers indicate the percent each state contributed to the total national production. States not numbered contributed less than 1% to the national total.

Note: The agricultural data used to create the map and crop calendar were obtained from the National Agricultural Statistics Service at: http://www.usda.gov/nass/.

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