

# CropCAST Agricultural Weather Outlook

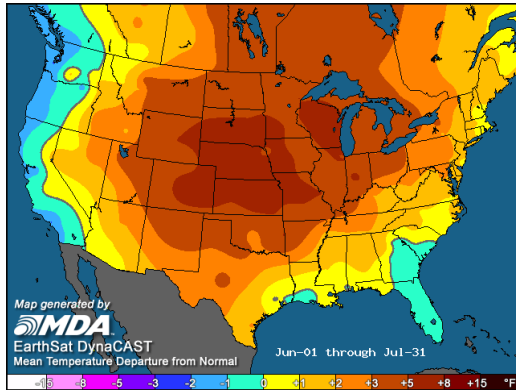
Written by Kyle Tapley, MDA EarthSat Weather (CropCAST)



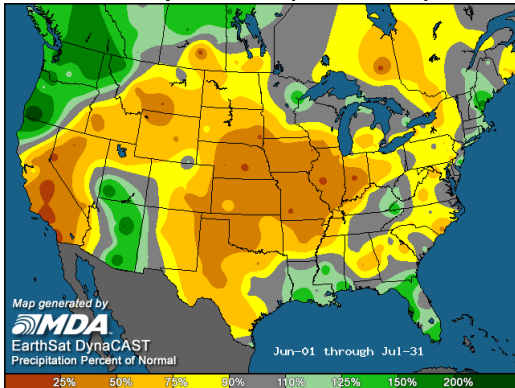
EarthSat Weather

## CURRENT U.S. WEATHER SITUATION

Extreme heat and drought have devastated crop prospects in the U.S. this summer. A record warm spring allowed for record fast planting of corn and soybeans across the U.S., but as the heat continued into June and July, it took its toll on crops. The heat was enhanced by widespread drought conditions across the central U.S., centered on the central and southwestern Midwest and the central Plains.



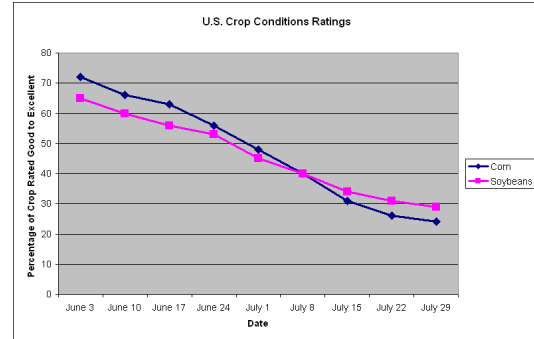
U.S. June-July 2012 Temperature Departure



U.S. June-July 2012 Precipitation Departure

Hopes were high for the corn crop following the planting season, thanks to early planting and increased acreage. The following chart shows that corn condition ratings started out very high, with more than 70% of the crop rated good to excellent. However, crop conditions then went into a free fall, especially during late June and early July. As of July 29, only 23% of the corn crop is rated good to excellent and 50% of the crop is rated poor or very poor, including 74% of

the crop in Illinois. Soybeans have also suffered, with only 29% of the crop rated good to excellent. **These ratings are the worst for this point in the season since 1988, the last year with comparable heat and drought across the U.S.**

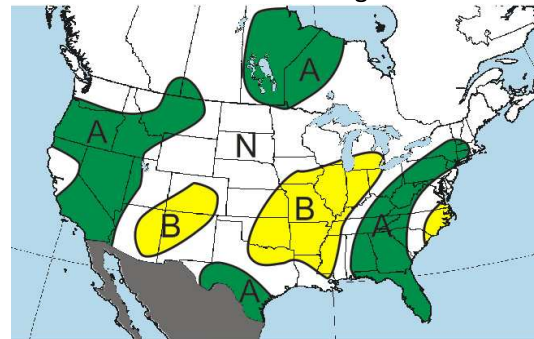


U.S. Crop Conditions Ratings

An incredible number of temperature and precipitation records have been shattered this summer across the Midwest. The following are some of the more impressive records that have been set so far:

- St Louis has broken its record for number of days with high temperatures exceeding 105°F, with 11 so far.
- Champaign, IL recorded no rainfall in July.
- Indianapolis saw both its driest June on record (0.09" of rainfall) and its hottest July on record.

Looking forward, a fairly warm and dry pattern is expected to continue for the balance of August, although not to the extreme that has been seen. In September, when the harvest is likely to reach its peak, below normal rainfall is still expected, which should favor harvesting efforts.



CropCAST September Precipitation Outlook

**CROP TOUR RESULTS**

In order to determine how the extreme heat and dryness has impacted the corn and soybean crops across the Midwest, CropCAST led a crop tour across western Ohio, Indiana, Illinois, Iowa, and far eastern Nebraska July 23-27. **The corn crop was in worse shape than expected in western Ohio, as bad as expected in Indiana and eastern Illinois, and slightly better than expected in western Illinois and Iowa. The tour made 49 stops across the Midwest, with an average yield for the entire tour coming in at 133.4 bu/ac. Variability was very high across Illinois and Iowa, with some fields likely to yield close to zero and a few looking quite good.** Even within the same field, variability was often very high. It was too early to estimate soybean yields based off our samples, but overall **the soybean crop was holding up surprisingly well in most areas. However, significant rainfall will be needed in order for pods to fill out completely.**



*Example of variability seen within fields*

**U.S. PRODUCTION ESTIMATES**

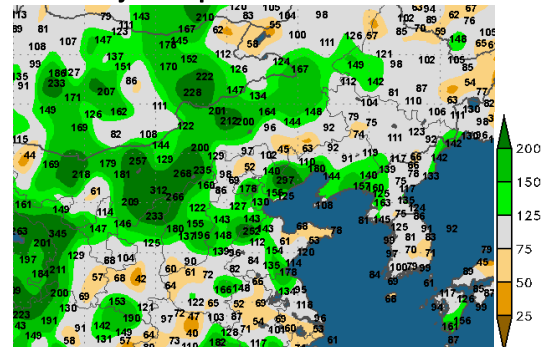
CropCAST’s current projections for corn and soybean yield and production are shown below.

| CropCAST U.S. Yield and Production |             |              |
|------------------------------------|-------------|--------------|
| Crop                               | Yield       | Production   |
| Corn                               | 125.0 bu/ac | 10.11 bil bu |
| Soybeans                           | 36.0 bu/ac  | 2.67 bil bu  |

Estimating corn and soybean yields is particularly difficult this year given the potential for high levels of abandoned acreage and high variability. Ultimately, the key is production, which we currently forecast to be the lowest since 2003.

**INTERNATIONAL WEATHER SITUATION**

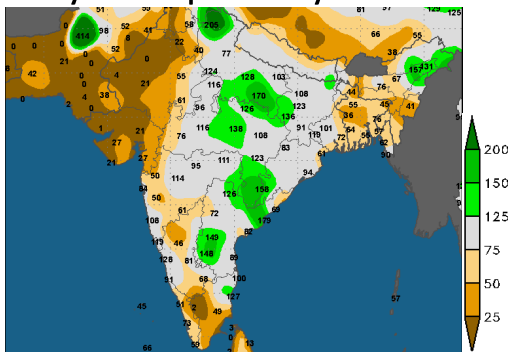
The most significant weather issue for crops around the world is without doubt the drought in the U.S. There are some minor issues around the world, but none come close to the crop disaster that is taking place in the Midwest. In China, conditions have improved significantly since June, when dryness was widespread across North China Plain. Most of the major corn and soybean growing areas in China saw ample rainfall in July, favoring crop development. **CropCAST’s forecast for the next several weeks shows the potential for some dryness to develop in southern and eastern North China Plain, but conditions should remain favorable for crop growth in most major crop areas in China.**



*China Jun 23-Aug 6 Precipitation Departure*

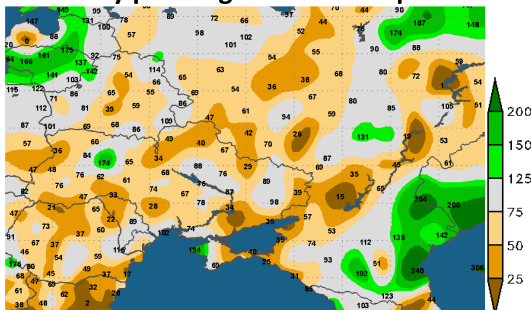
In India, the monsoon started off very slowly, but has recovered in most areas. The main area where dryness has persisted is far northwestern India, which has stressed the cotton and groundnut (peanut) crops. The major soybean producing state of Madhya Pradesh has seen ample rainfall to support crop growth. **CropCASTs’ forecast for the next several weeks calls for some increase in rainfall in northwestern India, but not enough to**

erases the rainfall deficits that currently exist. Ample rainfall will continue to favor the soybean crop in Madhya Pradesh.



*India Jun 23-Aug 6 Precipitation Departure*

The Former Soviet Union (FSU) has been dealing with dryness issues for much of the summer, but few areas have seen extreme drought. Heat has also added stress to the corn and sunflower crops. **Some dryness is expected to continue across much of central Ukraine and southwestern Russia over the next several weeks, which will stress late summer crop growth and may also delay planting of winter crops.**



*FSU Jun 23-Aug 6 Precipitation Departure*

**Other international growing areas dealing with weather issues:**

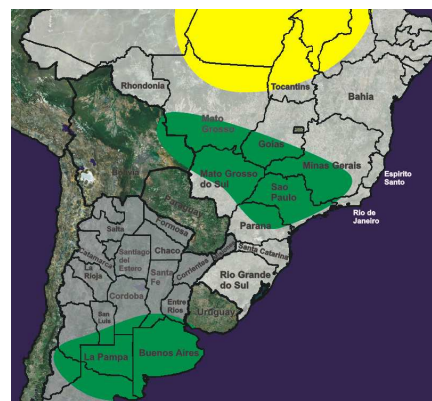
- Heat and dryness in southeastern Europe is stressing corn and sunflower growth.
- Wetness has reduced wheat quality in UK and northern France.
- Dryness is stressing winter wheat growth in Australia.

CropCAST’s current production estimates for key international crops can be found in the table that follows.

| CropCAST International Production |            |            |
|-----------------------------------|------------|------------|
| Region                            | Crop       | Production |
| China                             | Corn       | 193.0 MMT  |
| China                             | Soybeans   | 13.04 MMT  |
| India                             | Soybeans   | 9.44 MMT   |
| FSU                               | Wheat      | 78.1 MMT   |
| FSU                               | Corn       | 31.9 MMT   |
| FSU                               | Sunflowers | 15.91 MMT  |

**EARLY LOOK AT SOUTH AMERICA**

South America will begin planting their corn and soybean crops in September and October and CropCAST is currently expecting a rather favorable start to the planting season. Near to above normal rainfall is expected in most of the major crop areas in Brazil and Argentina over the next few months.



*South America August-October Precip Forecast*

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