

# The Canadian Agriculture Weather Prognosticator

Volume IX, Issue VI

<http://www.worldweather.cc>

June 7, 2017

## Ontario, Quebec Drying

Improved weather has been evolving in Ontario and Quebec recently and the trend will continue. Spring planting fell behind in many areas because of frequent rain and flooding, but the environment is expected to continue improving the next 2 weeks.

## WORLD WEATHER ISSUES

- U.S. Northern Plains, like Canada's Prairies, Are Much Too Dry And Dealing With A Drought Environment. Relief Is Needed And May Come Within A Week
- China's Dry Region In The North Received Rain Recently To Improve Production Outlook
- Ukraine And A Part Of Southern Russia Need Some Rain And Partial Relief Is Coming
- Western Australia Too Dry With A Few Showers Likely This Weekend
- India Monsoon Evolving Favorably
- Southern Brazil Too Wet
- Second Season Crops in Brazil Doing Very Well
- Argentina Harvesting Proceeds Favorably

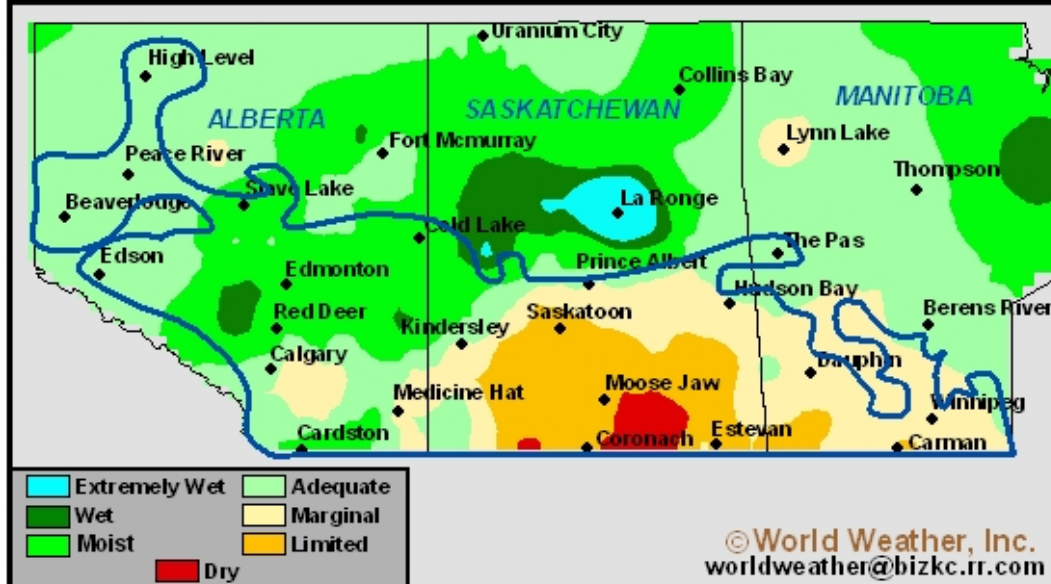
## Is Drought Going To Prevail?

How far out on a limb can a little meteorologist get before he falls to the ground? That is the question we are all pondering today and yet this forecaster is not going to back down on the outlook, despite so much pressure to do so. We are waiting for this next 7-day period to pass. It will be a litmus test for our forecast. The rain event coming up this week fits extremely well in the time frame of our expectation of relief from dryness, but if the rain systems fail to generate the relief then, indeed, the drought is here to stay for a while and our forecasts will change. This forecast-

ing job, like yours, requires a heap of faith and the past week of forecast model runs is certainly testing that – at least for this writer. Computer forecast guidance is anything, but consistent, with this coming week to ten days of weather. Tuesday's mi-day and evening model runs were as much wetter relative to the morning model runs as Monday's model runs were drier. As stupid as it may be, we believe in the data that we have reviewed over and over again and still cannot back down from our transitory forecast for the month of June.

In last week's prognosticator we suggested that the month of June would be a transitional month and that we would move from the old persistent pattern to something new. This week's upper level wind flow pattern is falling into place as dictated by our long range trends, but the orientation of the upper level winds will determine everything about whether significant rain will fall across the dry southern Prairies and northern U.S. Plains in the coming week to ten days or not. Every computer model run offers a different guess as to how the upper level winds will

### Average 7-Day Topsoil Moisture Ended June 6, 2017



## Is Drought Going To Prevail? (continued from page 1)

blow and there is certainly nothing set into stone at this point about the weather outlook in the coming ten days. [We are walking a very fine line between a no-turning-back drought and favorable summer weather and production potentials.](#) The coming week will be about as critical as they come for crops in southern and some central Saskatchewan locations where seed germination, plant emergence and establishment are struggling in dwindling topsoil moisture. Subsoil moisture is still favorable in many areas and 0.50 to 1.00 inch of moisture across the drier areas would go a long way in changing production potentials for the driest areas. At the same time, the drier tendencies in the previously wettest areas in the Prairies needs to prevail awhile longer.

The wetter areas of the northwestern Prairies will likely encounter some new rain in the coming week and some of it may be moderate to heavy. World Weather, Inc. still favors significant rain in western Alberta during the coming week with hefty amounts possible along the front range and in parts of the Peace River region this weekend. Rainfall further to the east is expected to vary greatly, but at least some rain will fall in many areas by the end of next week. The exact amounts are still up for great debate and if you are any kind of a serious prayer and you require a significant change in weather now, this your big moment. A true test in faith.

Today's computer forecast changes look too wet over the next seven days in parts of the Prairies, but the trend about more frequent rain is likely correct. The first of two to three waves of rain should begin to impact the Prairies Thursday and Friday. The event along with that of Monday into Wednesday will help expand the number of areas that will have been relieved from short term

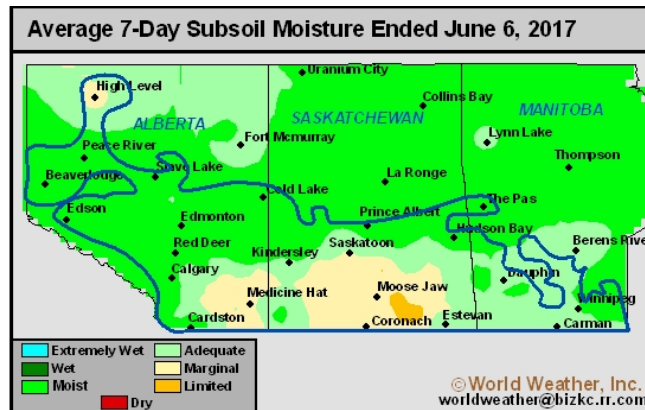
dryness. However, because of the volatility in the forecast models confidence is low. Being conservative, rainfall of 2 to 13 millimeters will occur Thursday and Friday except from the Peace River region east toward northwest of Edmonton where rainfall of two to three times as great will be possible. The precipitation outside of northwestern Alberta will be erratic.

A second storm system advertised for Monday through Wednesday of next week is likely advertised too intensely today for much of the southern Prairies. Certainly, if the event were to evolve as advertised by the European, American and Canadian models today there would be significant relief for all of the drought stricken areas from Saskatchewan to the northern U.S. Plains. However, we are not

Since the main rain event slated for the drought stricken areas is still five to six days away we cannot buy into the wetter forecast as advertised today. If we are in a true drought pattern the rain will mystically disappear in the computer forecast model runs just before it reaches the drought region. Because of this phenomenon we are not going to buy into any computer forecast model run until there is a consistent forecast over a 24 hour period of time. We do not expect such consistency until Friday when the upper level low pressure center gets over land in the northwestern U.S. Once the upper level trough moves over land much more detail will be obtained about the system and its ability to generate rain over the northern U.S. Plains and southern Canada. When these

larger storms are over water there are far fewer data sources to assess the storm and that can greatly change the forecast for our region.

[The question has come up a number of times recently whether we are in a drought in southern Saskatchewan.](#) The answer is definitely yes, by definition. However, the reason our outlook for the summer has not changed is that we expected a transition-



ready to buy into this forecast as much as we would like to. The outlook would be almost perfectly aligned with our prognosticator of last week, but we are in a drought from parts of South Dakota to southern Saskatchewan and Montana and when you are in a drought you must not buy into the computer forecast model data completely because drought patterns tend to make rain disappear at the last minute just before they impact the drought region. Because of this and because of the fact that the upper level low pressure system responsible for our "opportunity" for rain has not reached the U.S. Pacific Northwest yet confidence has to remain low.

al change in weather patterns to occur at this time and since we have a good opportunity for at least some rainfall in the coming week we wanted to use this as a litmus test for our forecast. Certainly, if we miss this rain event in the southern Prairies and northern Plains there will be a need for our summer outlook to be adjusted with a drier bias, but until this next seven days pass we are not going make a change because even though the dryness this spring has been more serious than anticipated we still expect a seasonal change in June that should bring better opportunities for rain to the region. The next week is critical for the region and for the long term outlook.

# Critical Weather For N. Plains, South Canada Prairies

Many phone calls of concern have been received over the expanding northern Plains drought this week. The drought has quickly expanded north into a part of southern Saskatchewan, Canada and there appears to be some expanding dryness in the topsoil into Manitoba and northward into a part of north-central Saskatchewan. The next week to ten days will be critical for the region and relief must occur immediately to stave off some production cuts in the northern Plains and for a few locations in southern Saskatchewan. Crops areas further to the north still have time to avoid production cuts, but changes need to occur now and they need to occur fast.

Today's soil assessments are clear about the expansion of dryness in the northern Plains and Canada's Prairies. Some areas have been quite dry since the start of the planting season and there are a few areas in the region that have been dry enough to prevent germination and emergence. June is supposed to be a transitional month for rain to begin falling across the region and this next week to ten days marks a very critical part of the growing season. Some yield impact has already occurred to some of the driest areas, but a big change can occur to many crop areas if rain falls in the next week to ten days.

Another round of hot, dry, weather is expected Thursday into Saturday across the northern Plains and Canada's southern Prairies. Temperatures will rise into the 80s and 90s Fahrenheit across most of the region

and extremes of 95 to 106 will occur from South Dakota southward into the southwestern Plains. Portions of the southwestern Plains are also becoming quite dry and the heat there will soon become significant, as well, but rain has occurred more recently in the southern Plains than that in the northern Plains or Canada's southern

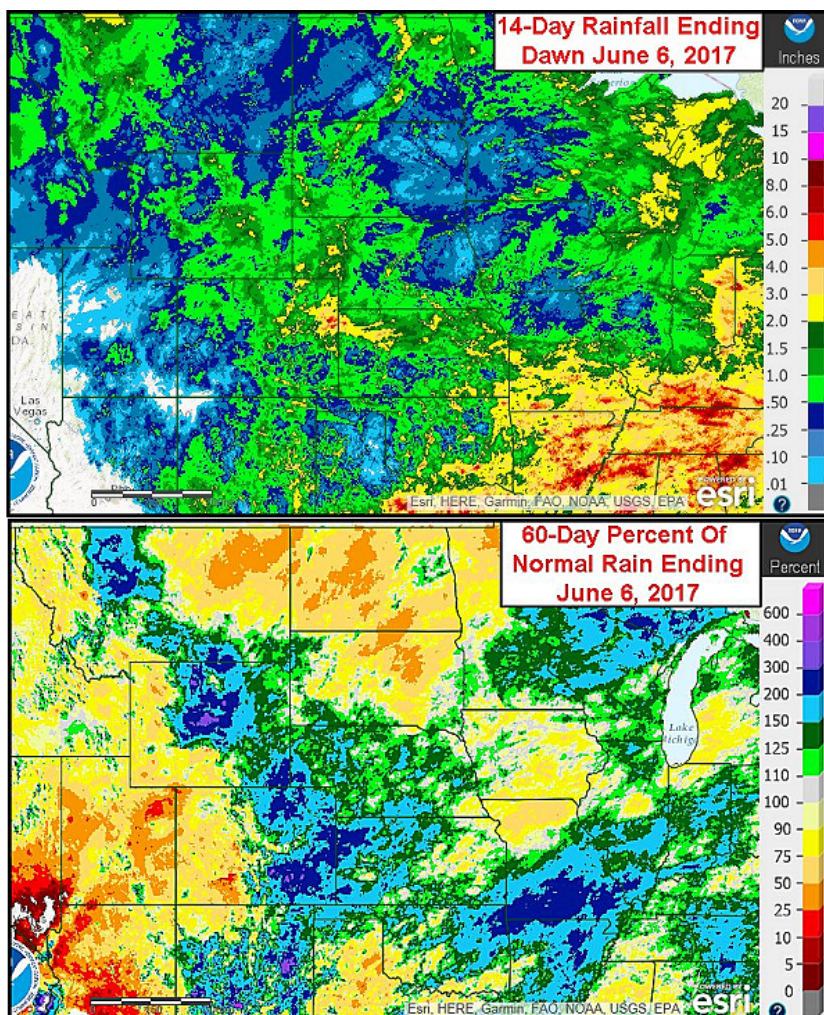
expected in the northwestern U.S. will be significantly cold enough to generate one or two and possibly three low pressure centers and three different opportunities for rain in the northern Plains and Canada's Prairies. Each low pressure system will form a little further to the east and all will march to the east northeast bringing the better rain chances.

Recent computer forecast model runs from all around the world have offered constantly changing forecasts of potential rainfall across the region. The lack of consistency in the forecast leaves quite a bit of debate as to how much, if any, relief to drought will take place. A close monitoring of the region is warranted until the potential for rain passes and that may not occur completely prior to the middle part of next week.

If rain fails to fall in this environment with a significant cool pool in the northwestern U.S., warm to hot weather in the upper Midwest and northern

Plains and Pacific moisture coming into a part of the region then drought will likely fester and be a serious event for a longer period of time. However, there is potential for some relief and if that relief comes by this time next week many crops will still have an opportunity to perform better than feared. With that said, the odds are high that at least some relief will take place.

World Weather, Inc. has suggest-



Prairies.

A complex storm system is expected to push into the U.S. Pacific Northwest and a part of southern British Columbia Friday. The system will be slow enough moving that it will provide the impetus for waves of rain and thunderstorms to occur across the dry region. However, limited atmospheric moisture over the drought-stricken areas may make it difficult for significant rain to fall. The airmass

## Critical Weather For South Prairies (continued from page 4)

ed that rain would begin occurring in June and help bring some partial relief to dryness that will likely buy enough time for the monsoon flow to evolve in the south-western U.S. in July. The monsoon flow will bring moisture northward out of Mexico and into the U.S. Rocky Mountains. As time moves along the moisture influx in July is expected to move into a part of the northern U.S. Plains to help stimulate additional rain and thunderstorm activity. There will also be other troughs of low pressure reaching the northwestern U.S. and those will also help to enhance the northward movement of rain from the southwestern states to the northern Plains, parts of the Canada Prairies and the upper U.S. Midwest during July and August.

This coming week's rainfall may not be the gully washer that many producers are in need of, but enough relief may occur to prevent a serious drought from emerging before additional rainfall has a chance to evolve next month and in August.

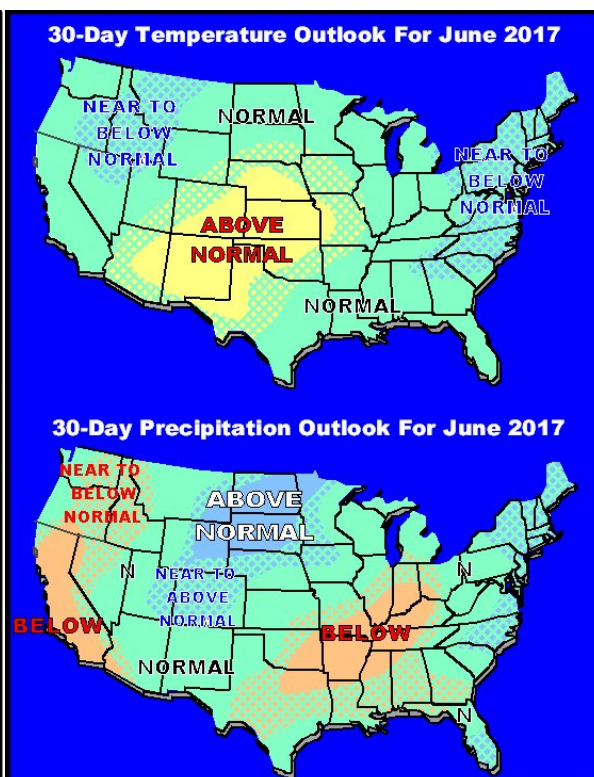
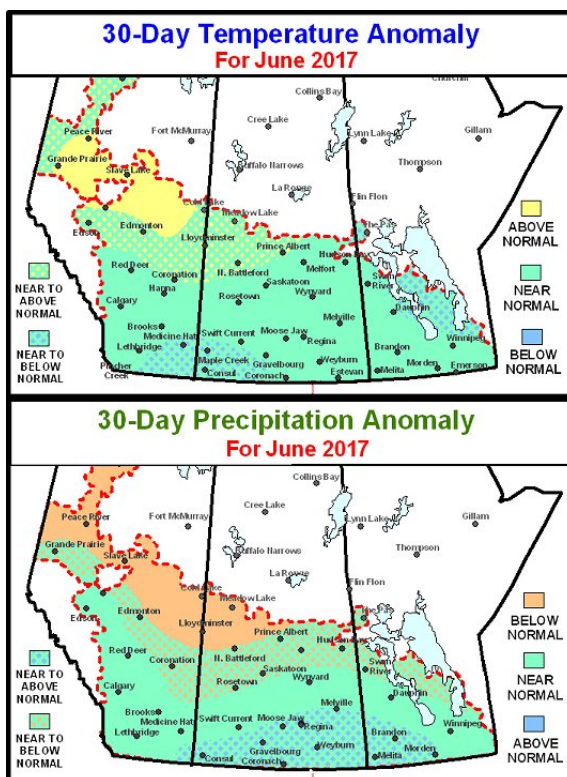
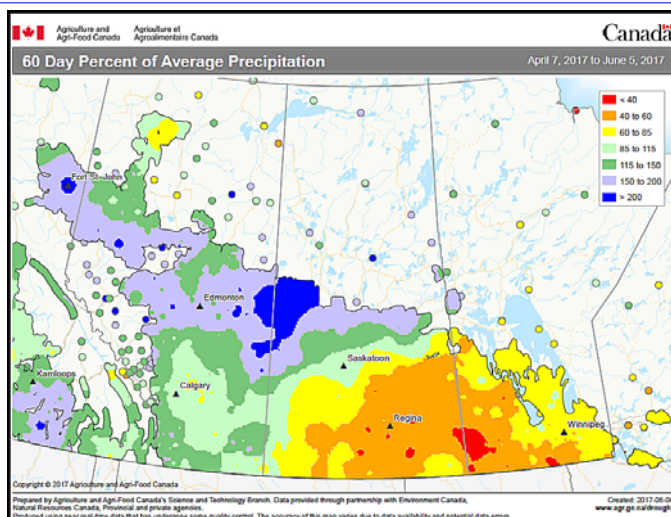
Much of the scenario suggested above will be dependent upon ridge building aloft over the U.S. central and southern Plains. The ridge has to be weak to allow weather systems to move over the top of the system and bring moisture from the northern Plains into the Midwest this summer. If significant dryness relief does not occur in the north-

ern Plains and Canada's Prairies, the ridge in the U.S. Plains will build more significantly northward blocking the monsoon moisture from reaching into the Dakotas and Saskatchewan resulting in a longer lasting drought pattern.

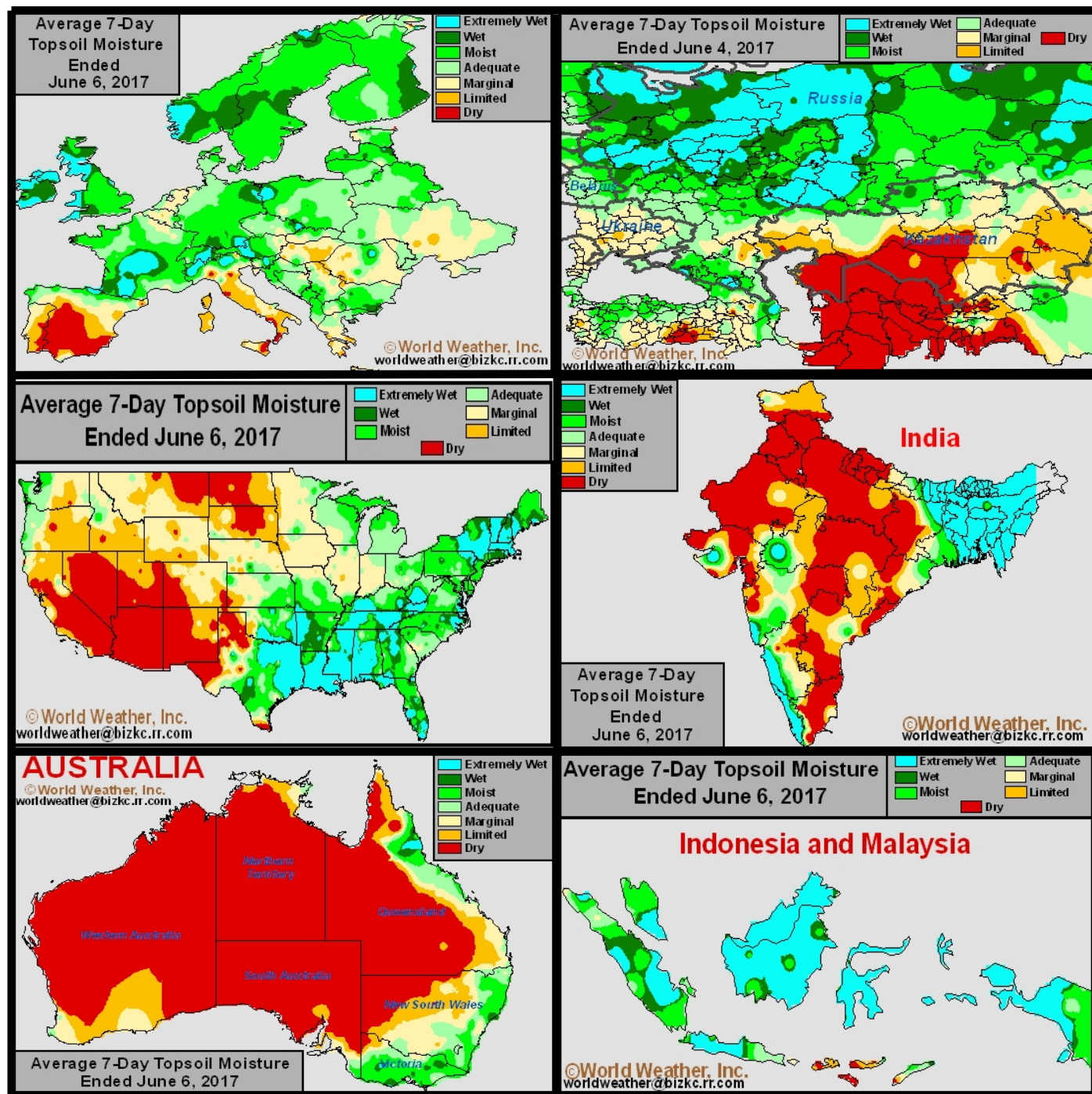
World Weather, Inc. believes the next ten days will be critical in producing enough relief to the northern Plains and Canada so that the ridge does not build strongly to the north and so that the monsoon moisture

will reach into the northern Plains periodically to bring additional timely moisture to the region.

We have been very clear about the pattern this year and this next ten days should determine much about the summer weather pattern. Remember that a critical rain event that occurred in the first week of July 2016 in the lower Midwest took a droughty weather pattern from Missouri to Illinois and Kentucky in late June and turned it into a perfect summer weather pattern with high yields occurring throughout the Midwest. Something like that is still "possible" in the northern Plains and southern Canada's Prairies, but production potentials will be largely determined by weather over the next ten days. If it does not rain enough to ease dryness all bets are off on the summer pattern and the region may be facing greater problems, but if rain occurs the potential impact of dryness will ease for a while.



# Selected Weather Images From Around The World



Rapid drying is under way across the U.S. Midwest, central, southwestern and far northern Plains. The situation will continue through the weekend, but there is a good chance for rain in the northern Plains and southern parts of Canada's Prairies early next week and a boost in rainfall will occur in the Midwest during the second half of next week after a week's worth of drying. India's monsoon is evolving favorably and greater rain is expected in the next two weeks to bolster soil moisture for oilseed, coarse grain, cotton, rice and pulse growing areas. Recent weather in Europe has brought a boost in soil moisture to France and Germany, but Spain, Italy and many areas in from south-eastern Europe into Ukraine have been drying out. Western Australia is also too dry and rain this weekend will help to ease the situation, but much more will be needed to assure a good stand of wheat, barley and canola. Southeast Asia's oil palm production areas are plenty moist and southern Brazil will receive some additional heavy rainfall over the next couple of days resulting in some flooding.