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The Canadian Agriculture Weather Prognosticator

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Broadcast Reminder

Quickly changing weather in the autumn and spring can be a very stressful situation especially while trying to plant or harvest crops. World Weather, Inc. would like to remind its subscribers of services that are not fully utilized that are a part of your subscription and might defray some of the stress.

Daily, late afternoon and early evening, weather update audio recordings are available by province from our website using your login credentials. You can bookmark the recordings page and put it on your telephone. These recordings are designed to give more insight about changes in the atmosphere; including hints of changing weather that might impact fieldwork and farming decisions in coming weeks. It is designed to provide you with important details about weather that may not have been included in the morning written forecast and to prevent you from being caught off guard by sudden pattern changes like that of this past week. You are also welcome to call the office.

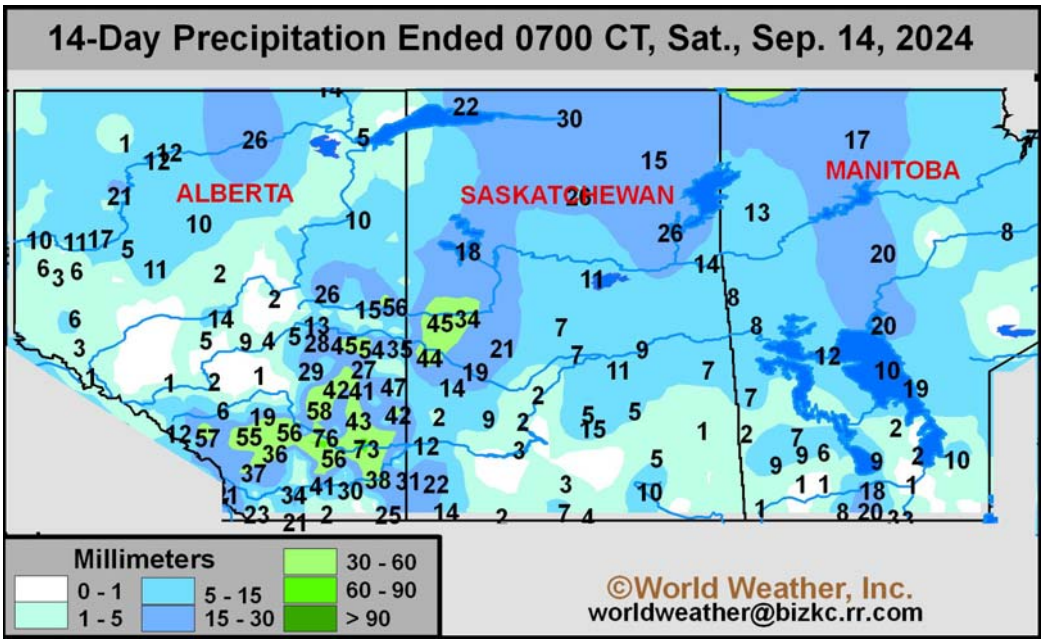
Colder Air to Follow Rainy Weather

A breakdown in the summer warm and dry weather occurred earlier this week bringing significant rain to eastern and southern Alberta and northwestern Saskatchewan. This change was only hinted at in our Sep. 1 prognosticator and it turned out to be a significant rain event, obviously. This change to a more active weather pattern will continue for another week to perhaps ten days and will then be followed by a shot of colder temperatures and some drier days.

The colder weather expected in Alberta a week from now and in the remaining Prairies over the following few days will dry out the atmosphere and help bring back some improved drying conditions; however, it does not look like the break in weather will last very long.

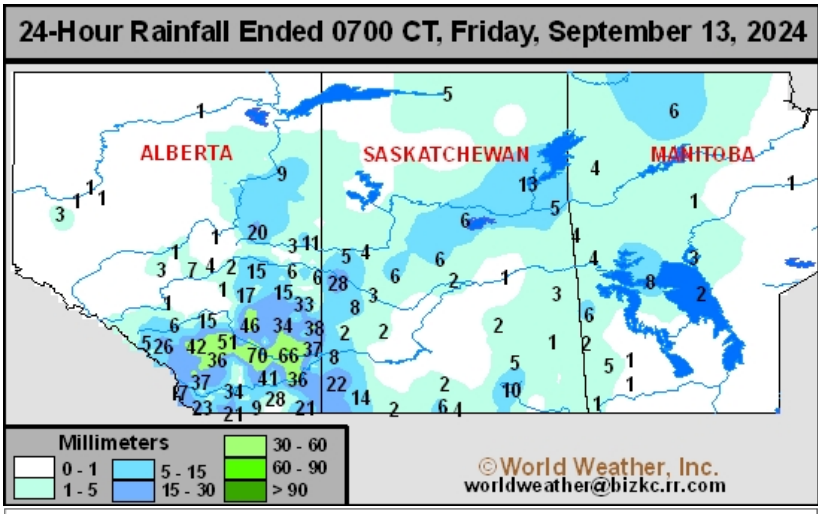
A frequent occurrence of big rain events does not seem very likely in the last days or September or early October, although it does look as though there will be some periodic rain and the perfect harvest environment that has occurred in years past may not be with us during the balance of this year's fieldwork. That should not be interpreted as a wet weather outlook that will threaten getting the harvest complete, but it does suggest the harvest season will be more like those of many years ago in which we will have to deal with some periods of precipitation alternating with some drier weather. An extended period of "open weather" like that of the first 13 days in September is probably not going to return right away and certainly not with the same level of unusual warmth occurring at the same time.

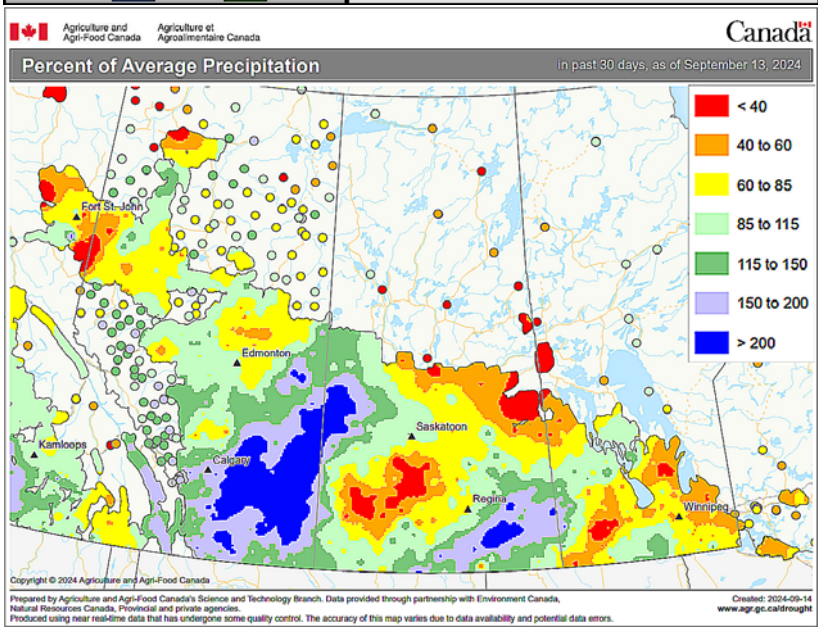
The most disruptive weather for a while is expected over the coming week followed by a break in the pattern for a little while.



Another Two Rain Events Coming To The Prairies

A strong disturbance tracking ahead of an upper-level trough of low pressure brought significant rain to portions of southern and central Alberta Thursday into Friday . Moisture totals ranged from 0.59 to 2.76 inches with several pockets that only received light amounts of rain. Portions of southwestern and northwestern Saskatchewan also received 0.32 to 1.10 inches of rain. Other production areas received light amounts of rain or were dry as the disturbance initially advanced into the Prairies. However, some thunderstorms produced hail and damaging wind in portions of Saskatchewan.





Before the recent disturbance entered the Prairies, a large section of the Prairies were dry or mostly dry for nearly two weeks favoring aggressive field progress. Conditions were a little less favorable for crop maturation and harvesting during late August. Over the 30-day period ending September 11, portions of southeastern and south-central Saskatchewan, pockets in southern and west-central Manitoba, and portions of southern and west-central Alberta received near to above normal rainfall. A band from southwestern and central into northern Saskatchewan, along with portions of northern Alberta, northwestern Manitoba, southeastern Manitoba, and the Interlake region received less than 60% of normal rainfall during this time.

Most of those anomalies remained on Sep. 13; however, the rain event in Alberta and northwestern Saskatchewan greatly changed the moisture profile and the 30-day precipitation noted through Sep. 11 that was near to below normal suddenly become well above normal resulting from this week's single impressive rain event.

Temperatures during the past month were near to slightly above normal in Manitoba and southeastern Saskatchewan. Alberta and the remaining portions of Saskatchewan experienced above normal temperatures for the 30-day period September 9 as a high-pressure ridge often kept warm air over the region.

Harvesting continues across the main production areas in the Prairies. As of September 9, Saskatchewan had 61% of its crop out of the ground, up from 42% the previous week and up from 50% for the previous five-year average. In Manitoba, 40% of the crop was out of the ground as of September 9. Alberta had 31.5% of the crop out of the ground, well ahead of 16.2% for the 2019-2023 average.

Before Thursday's rain and storm event, drier and warmer than normal weather in a large section of the Prairies during the past month supported aggressive maturation and harvesting. The periods of spotty rain that did occur were not enough to significantly impact harvest conditions outside the pockets that were wetter than normal. Drier weather is still needed in the coming weeks to get the remainder of the crop out of the ground.

Although drier weather would be ideal in coming weeks, several areas in Alberta and Saskatchewan are still struggling with drought or abnormally dry conditions. Timely precipitation would be welcome not only for the small amount of winter grains that are planted this time of year, but also to support a better outlook for the spring 2025 planting season. Manitoba is generally drought-free and winter crop prospects are more favorable there especially with timely rain that is coming in the next week to ten days. **(continued on page 5)**

October Will Continue To Provide Rain Opportunities

The next week to ten days of weather will dominate the balance of September. The anomalous precipitation that is expected will easily carry through the end of the month. More delays to fieldwork are expected, but they will be greatest in this coming week when rainfall is most significant.

Temperatures in the balance of September will trend a little cooler than usual for a short period of time during the middle to latter part of next week, but the anomalies may not be enough to push temperatures below normal for the two weeks. Most of the temperatures will be seasonable in the western Prairies with a slight cooler bias. Some warmer than usual weather is expected to dominate in Manitoba and eastern Saskatchewan for a while.

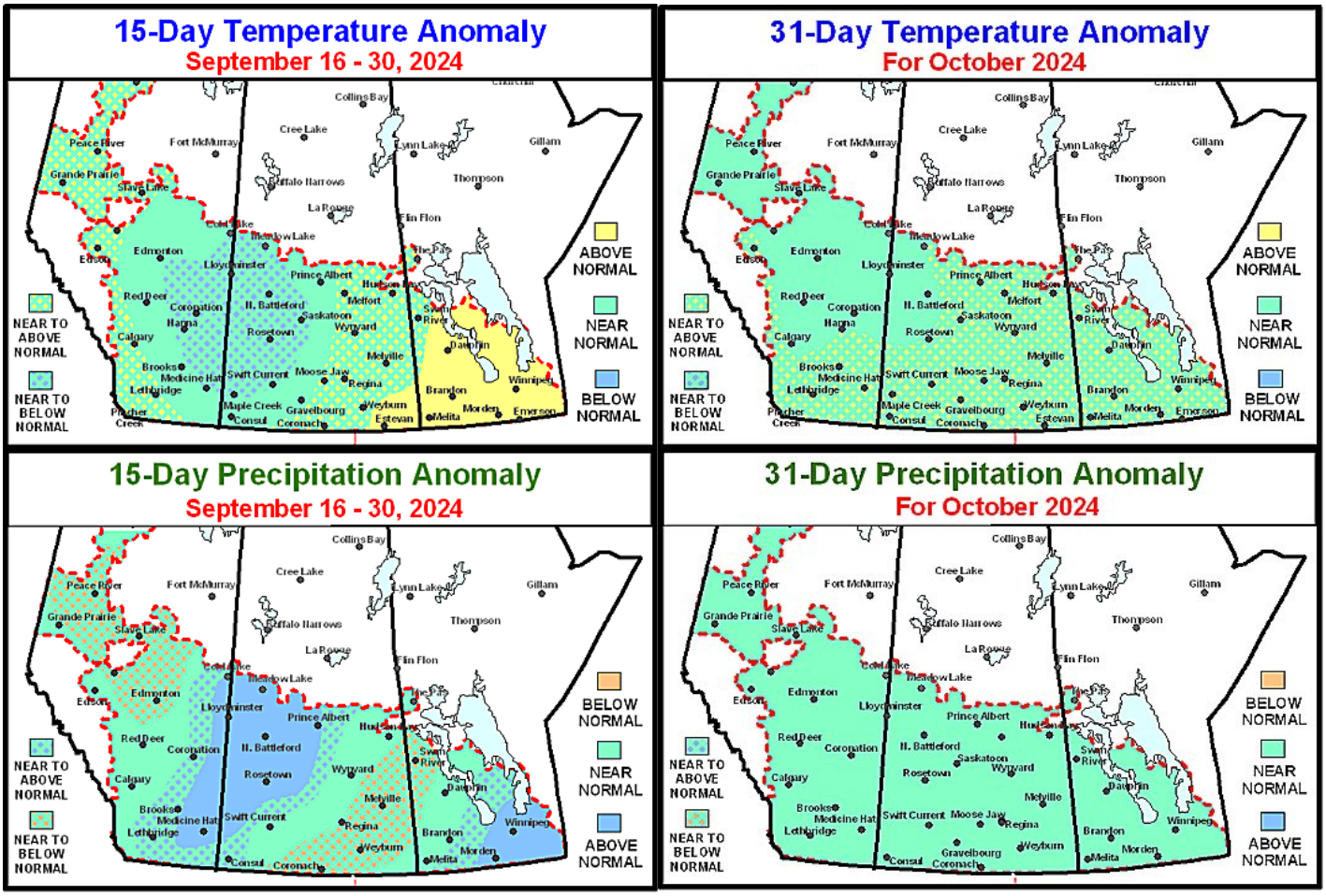
Precipitation during October is expected to be active enough that producers will have to keep a daily watch on radar and changing forecasts. A prolonged period of dry and warm weather is unlikely in October, but it should not be wet enough to seriously set back fieldwork. With that said, some disruption should be expected.

Temperatures in October will be near to slightly warmer than usual. Sufficient warmth should be present to help induce some periods of drying between rain events. Rain is not expected to be so frequent and significant that prolonged delays occur in farming activity, but the frequency will be rising and that may gradually lead to more moisture in the topsoil as seasonal cooling continues.

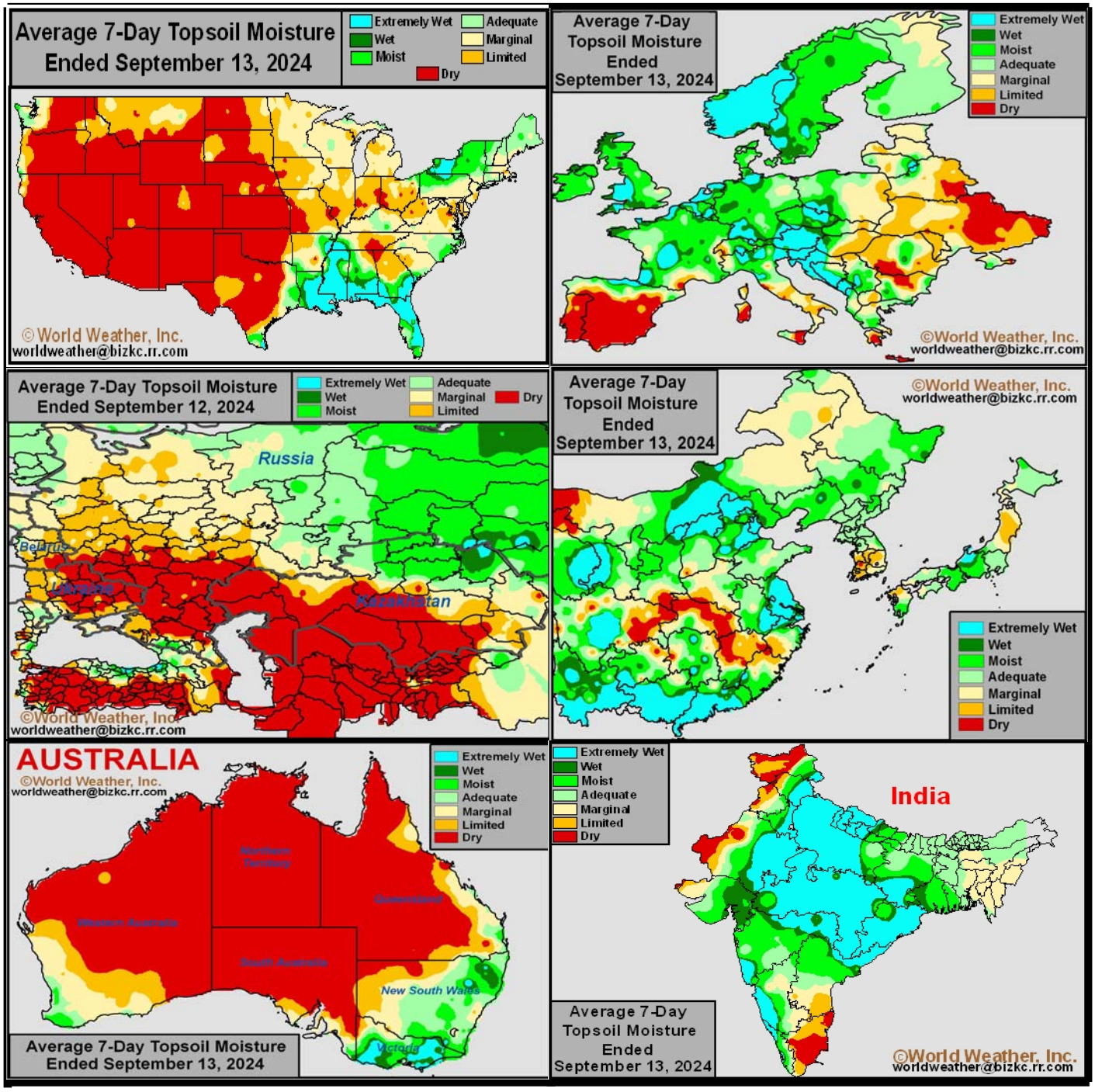
October is quite often the month in which new patterns develop that dominate the winter. The set up for changing weather may begin a little later than usual which will perpetuate the lower confidence present in longer range forecasts right now. The failure of La Nina to develop and other weakened weather signals may open the door for some surprising weather changes later in November and December; however, for now no seriously extreme conditions are predicted.

Winter weather this year should be a little wetter than usual near the front range of mountains in southwestern Alberta as well as in both southern Alberta and southwestern Saskatchewan. Near normal precipitation may occur in other areas across the Prairies and that should include a normal to slightly below normal snow depth this year outside of the wetter areas mentioned above.

Winter temperatures are likely to be near to below normal.



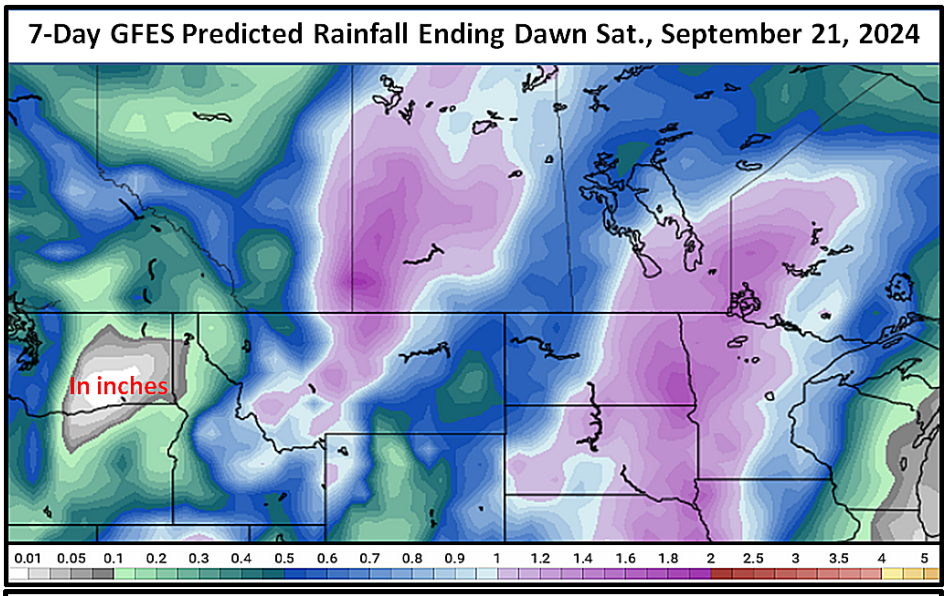
Selected Weather Images From Around The World

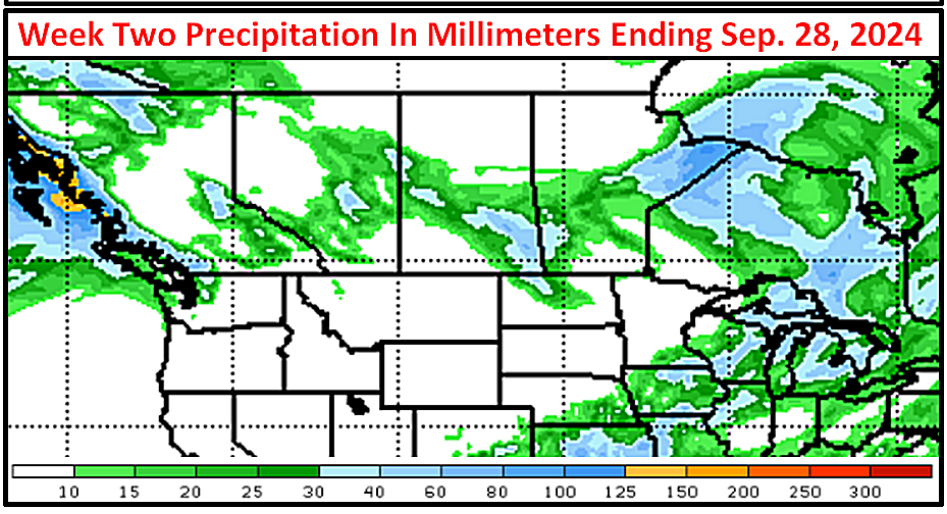


Dryness continues in the central and western United States. Had it not been for Hurricane Francine, the Delta and southeastern states would also be quite dry. Dryness is not just an issue in the United States, but remains a concern in western and southern Russia, Ukraine and portions of southeastern Europe. Relief from dryness has occurred in central and western Europe and that situation is quickly changing and will soon be a flood problem. Flooding (some serious) in Europe is expected from western Poland through Czech Republic and Austria to the eastern Adriatic Sea countries in this coming week. Some crop damage is expected with notable river flooding on the Danube. Central China's dryness is beginning to be whittled down and a tropical cyclone expected in the next few days will help bring more relief to the region. Western Australia is also trending drier and that may raise some concern over wheat, barley and canola growth, although greater rain should evolve in October. India's moisture profile remains mostly good.

Another Two Rain Events Coming To The Prairies (from page2)

Precipitation will vary significantly across the Prairies through the end of next week. Mostly light rain will be scattered across portions of western and northern Alberta, northwestern Saskatchewan, and southeastern Manitoba during the balance of this weekend. Another trough of low pressure will then help generate rain for portions of the Prairies Monday through Wednesday. Much of Alberta (outside the Peace River country, the Swan Hills region and Slave Lake area) into northern and western Saskatchewan will again receive significant amounts of rain while light rain is expected to scatter in Manitoba and the remaining portions of Saskatchewan. Another disturbance and frontal boundary will likely generate additional rain later next week and into the following weekend.





Rainfall in southwestern Alberta (along the front range of mountains) and in portions of southern and eastern Alberta as well as western and northern Saskatchewan will receive 0.70 to 1.50 inches (18-38mm) of rain by next Saturday afternoon with many areas along the Alberta/Saskatchewan border and extending through the Lake Diefenbaker area to Saskatoon, Melfort, Wynyard and Watrous areas getting 0.80 to nearly 2.00 inches (20-50mm) and possibly localized greater amounts. Some changes to the location of the heavier rain will be possible during the next few days and a close monitoring of the situation is warranted.

Additional rain in Alberta from next week's disturbances will continue to slow or delay the harvest in the wettest fields. Localized flooding will be possible and may even damage some of the unharvested crop, although the greatest rainfall may be slightly farther to the east from the greater rainfall region of this past week. Crop quality declines will be possible especially if drier weather does not evolve soon after the mid-week rain event next week.

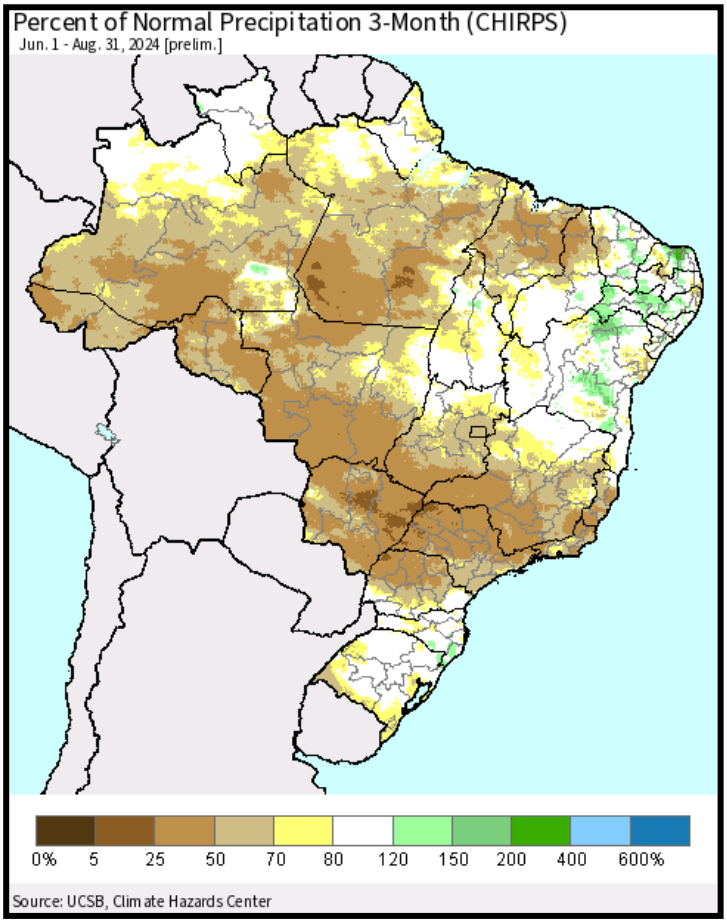
Some harvest delays will also be possible in Manitoba and Saskatchewan due to the periods of rain. However, western and northern Saskatchewan will see most of the greatest rain leaving other areas and those in western and northern Manitoba with a little less risk to crop conditions. Without doubt, the Prairies will be seeking the return of drier weather to help get fieldwork back on track.

Cooler air is expected to follow this coming week's stormy weather. Frost and freezes will become a little more common as time moves along, although the periods of stable weather that is dominated by high pressure should be short in duration limiting the significance of each bout of frost and light freezes initially.

With that said, a notable pooling of cool air is expected in Alberta and western Saskatchewan following the mid-week rain. The airmass will moderate while moving to the east late next week and into the following weekend resulting in some pockets of cold with frost and freezes, but a generalized occurrence may not evolve unless a better defined trough of low pressure evolves in eastern North America during the second week of the forecast and that is still a possibility.

Brazil Early Season Showers To Be Slow In Developing

Brazil's dry season began a little early this year, but winter precipitation is rarely ever enough to counter evaporation and it is not uncommon to come into the new rainy season with talk about drought and potential production issues in the coming season. The only drought that is worthy of addressing right now is that which is impacting the Amazon River Basin because of the terribly low water levels on all of the basin's river systems. A number of Brazil corn, soybean, sugarcane, coffee and citrus production areas have accumulated some notable precipitation anomalies in the past year, but as long as timely spring rain arrives in October the impact on summer crop production is likely to be low. Early season showers will be more sporadic and limited than usual in the second half of September, but October weather should slowly improve.



Several locations in center-west and center-south Brazil into northern Parana experienced below to well below normal precipitation in recent months, but the level of dryness in the soil is not much different than any year at the end of the dry season. The winter is normally dry enough and warm enough that any moisture that was retained from the previous growing season would be lost to evaporation north of Parana. The below normal precipitation does have deep subsoil moisture below normal and it does have water supply down in several areas.

Several locations reported some of the driest weather on record for the June 1 – August 31 time period, but as pointed out in our previous report, normal rainfall is rarely enough to leave usable moisture in the soil for early season crops to use without timely early season rainfall. Rainfall as a percent of normal during this time was generally 25% to 50% with pockets that only received 5% to 25% of normal precipitation. Normal precipitation, however, varies from 0.50 to 2.00 inches and with daily temperatures in the 80s and lower 90s Fahrenheit during much of the winter that much moisture is lost in just several sunny and dry days leaving the ground dry no matter how much rain falls during the June through August period. Rainfall was closer to normal in southern and northeastern Brazil, though several pockets were slightly drier than usual as well.

A large section of center-west and center-south Brazil have very short top and subsoil moisture today, which is common at this time of year. However, with temperatures trending above or well above normal at times in recent weeks, there is more concern about the future than usual. Much of southern Brazil from Parana southward either has or has recently had more favorable soil moisture due to the periods of rain in recent months.

One of the main concerns heading into the planting season will be the need for abundant rainfall. Seasonal rain normally begins in center-west Brazil later in September and expands to the remaining production areas in October. Late September rainfall is often sporadic and light. Early season soybean planting benefits most when the early season rainfall begins normally or earlier than usual, but it is not unusual to have to wait for significant rain into mid-October. The earlier that pre-monsoonal showers and thunderstorms begin the quicker early season soybean planting can begin and the best production years for corn and soybeans usually come out of years in which early season rainfall begins early and is consistent.

Monsoonal rains that are consistent enough to support aggressive crop development rarely begin in center west and center south crop areas before the end of October, but if the early season rainfall has begun favorably planting will already be occurring prior to the greater rainfall arriving in late October giving early season crops a big jump on development and aggressive growth.

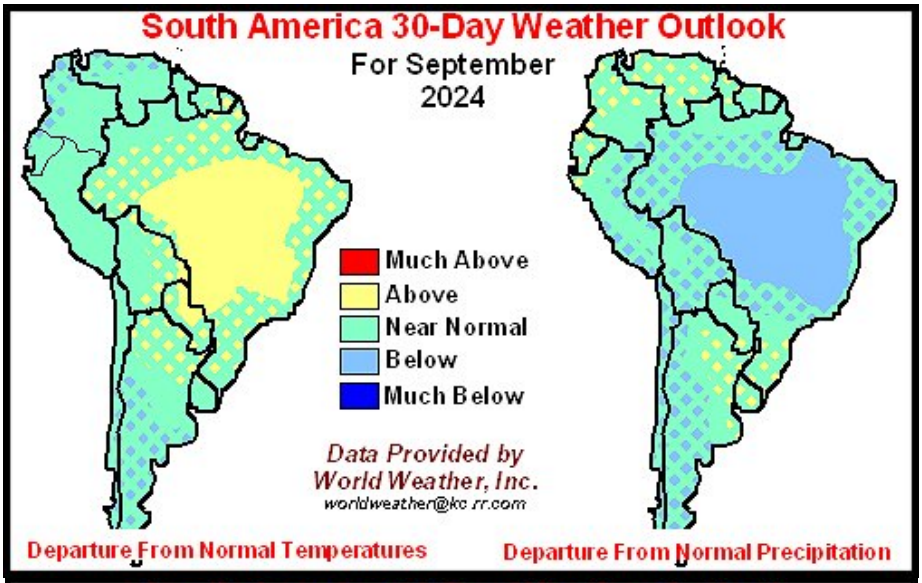
Abundant rainfall will be needed early this year to appease the commodity market and farming mentality that the ground is too dry to sup-

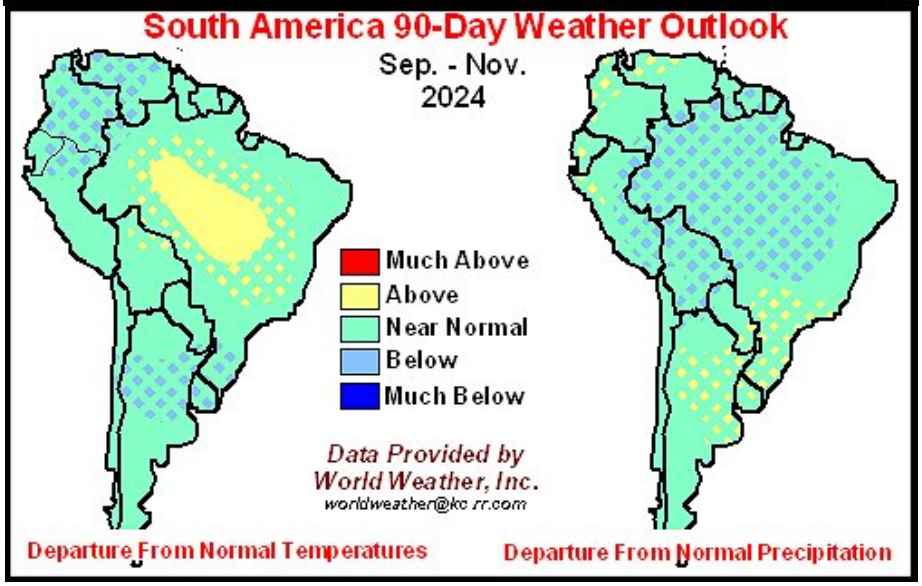
Brazil Early Season Showers Slow In Developing (from page 6)

port crops this year. Once seasonal rains have begun and topsoil moisture improves the fears of drought will be relaxed. This has tended to be the pattern for market and farming mentality for years.

In the meantime, winter wheat development conditions remain generally favorable for southern Brazil. Harvesting has begun in Parana with 11% of the crop out of the ground as of September 8. Much of the harvest in Rio Grande do Sul and Santa Catarina will not start until late this month or October. Yields may trend a little lower than usual for this season due to adverse conditions during the planting season and earlier in the growing season.

A slow-moving frontal boundary will bring rain to southern Brazil, Sao Paulo, and southern Mato Grosso do Sul Thursday into early next week. The main band of rain will shift from south to north over these locations during this time. Portions of Parana, Santa Catarina, eastern and northern Rio Grande do Sul, and southern fringes of Mato Grosso do Sul will receive 0.50 to 2.00 inches of rain with local amounts of 3.00 inches or more in eastern Parana by next Wednesday morning. Other locations will receive 0.10 to 0.75 inch of rain.





The remaining production areas in Brazil will remain seasonally dry through the middle of next week.

Southern Brazil will again experience a mix of rain and sunshine September 19-25. Resulting rainfall will help keep soil moisture at adequate levels. A few light showers may also reach center-west and center-south Brazil, though any rain that does occur will either be lost to evaporation or too light to impact long-term soil conditions. There is potential center-west and center-south Brazil remains drier biased during the last few days of September as well before rain potentials increase during the first half of October.

The waves of rain for southern Brazil may slow or delay maturation and early-season harvesting of winter wheat in coming weeks. No major quality declines are anticipated and producers will still be able to enter their fields between rain events. Yield potentials should remain mostly unchanged.

Delayed seasonal rainfall in center-west and center-south Brazil later this month may limit early-season soybean and first-season corn planting. The rain that does occur later this month will be unable to fix dryness in the topsoil and producers may wait until rain increases significantly before putting a significant amount of crop in the ground.