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The Canadian Agriculture Weather Prognosticator

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World Weather At A Glance

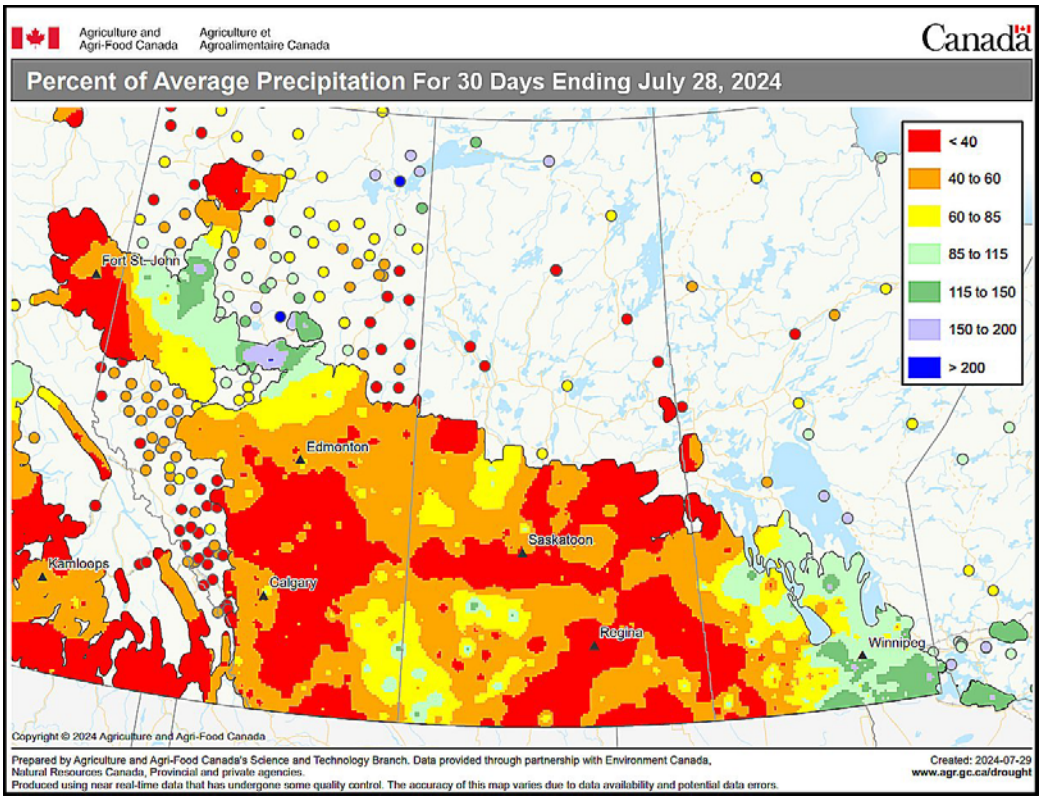
- U.S. Midwest, Delta and southeastern states have been seeing a good mix of rain and sunshine with seasonable temperatures to support corn and soybeans
- East Ukraine to western Kazakhstan is still too dry and the dryness is expanding northward
- China's dry region in the North China Plain is being relieved limiting the downside production potential for this year
- India's monsoon has been sufficient to support crops, though some heavy rain and flooding is forthcoming in central areas
- Australia's winter crops are establishing well
- Argentina will get some needed rain in the coming week to improve winter crop establishment
- Europe is drying out in the southeast and staying wet in the north
- Brazil Safrinha corn harvest going well

No Help For Drying Trend; Crops Staggering

Canada's drying trend in the Prairies has been dramatic and very poignant the past few weeks. The erratic distribution of rain has induced a huge variety of crop conditions especially after spring rainfall was nearly as varied, although much more generalized than anything seen recently outside of western and northern Alberta.

Crop conditions have deteriorated in many areas across the Prairies, although some in the far east and northwest are doing alright thanks to either frequent rain that was a little too much early in the growing season or to the recent deluge of rain that impacted parts of western and northern Alberta.

The month of July was certainly unkind to the middle three fourths of the Prairies with poor rainfall and warmer than usual temperatures taking the breathe of hope away for some production areas in the southwestern Prairies that were trying to escape seven years of drought only to fall into an eighth year. In contrast, some of the exceptionally wet areas in the eastern Prairies that had to abandon some fields have found the excessive moisture of spring for surviving crops to be a blessing and some of the greatest yields may come from those areas that managed to get planted in the spring despite frequent rain that was often a bit too much.

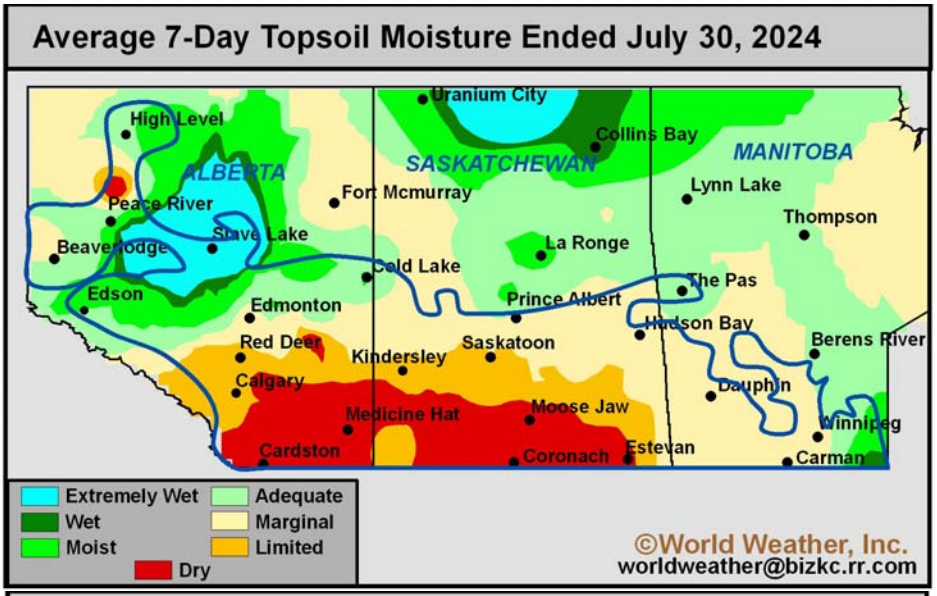


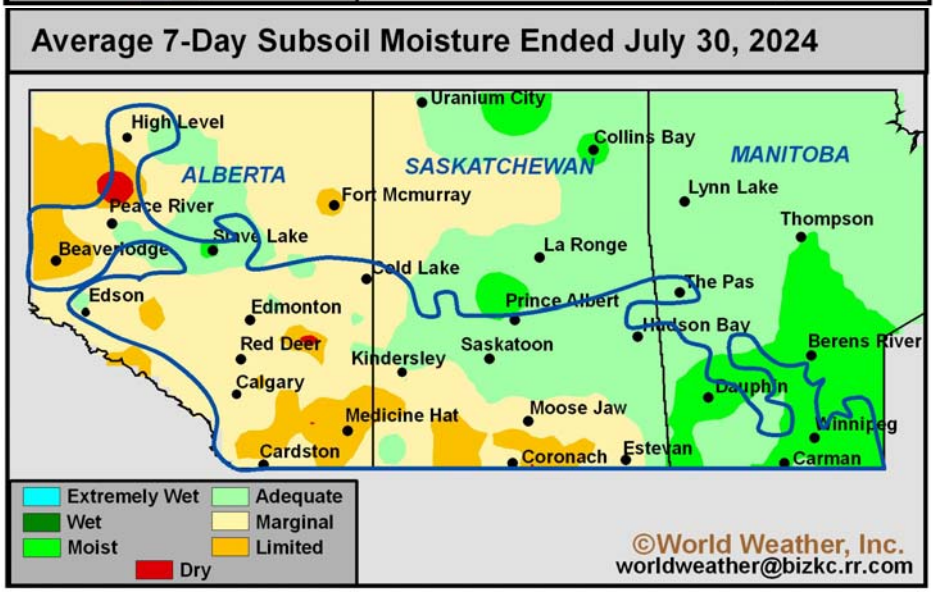
No Help For Drying Trend; Crops Staggering (from page 1)

The Prairies need help with developing a moisture flux into the region, but there is very little hope for such a feed. La Nina has failed to evolve and the negative phase of Pacific Decadal Oscillation has only weakened reducing the potential for forcing either Pacific or monsoonal moisture into the Prairies, but "alas" not all hope is lost...see page 5 article.

High pressure over western North America has proven to be as strong as feared, but its position has been too far to the west once again. Monsoon moisture from Mexico has been blocked and greatly diminished limiting that as a source of moisture for the Prairies and the weakening negative PDO has prevented moisture from fluxing into the U.S. Pacific Northwest.

The original forecast for the summer was to push the ridge eastward out of the western parts of North America to the central parts of the continent. This was going to be accomplished by La Nina and the negative PDO and was consistent with the lunar cycle. But, the spring proved to be too wet in the U.S. Midwest and early summer was wet in the Plains forcing the high pressure ridge to seek a drier region to establish in and that was the western United States. The ridge was allowed to amplify just as expected in the Plains, but much farther to the west blocking the monsoon moisture from flowing northward and actually inhibiting the moisture from even developing normally. Mexico is still in a drought.





The ongoing forecasts for La Nina have constantly disappointed forecasters and producers across North America and around the world because it was thought to be the primary ingredient for change in weather patterns making wetter areas drier and drier areas wetter. Well, that did not occur.

The Australian Bureau of Meteorology suggested indirectly that it was possible that La Nina would not evolve at all in this calendar quarter and possibly this year. In the meantime, the NOAA forecast keeps on predicting a imminent La Nina which shows no sign of developing.

In a similar interesting act of nature or otherwise, Data supporting PDO has not been available for a few weeks, but looking at ocean temperatures it is quite obvious that the negative phase of PDO has either withered or dissipated.

The high pressure ridge over North America has settled into a very dry and warm part of North America and it will stay there now until a seasonal weather change occurs to bring storms back to the Pacific Coast and that is still many weeks away. The pattern that has been evolved into is a very stable one and unless some strange tropical activity takes place to bring moisture to central North America and the Prairies it will be a long wait for significant rain to materialize. That may not be completely true. There is hope—see page 5.

Opportunities For Rain Exist, But Odds Disfavor It

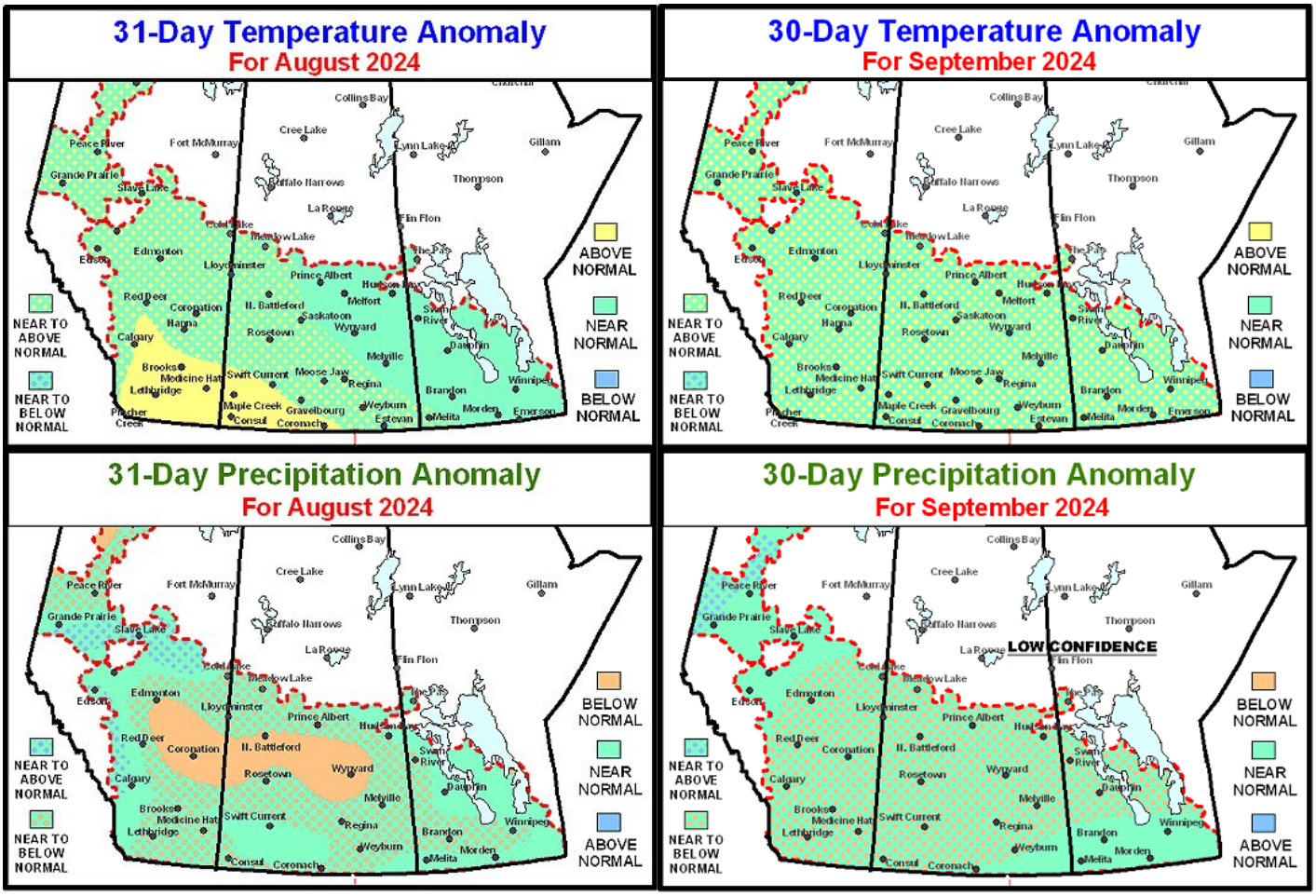
August weather will be mixed and not completely dry for the Prairies. The changes expected would help to derive timely rain of benefit for much of the Prairies in a "normal year", but somehow the Prairies have lost sight of "normal" in recent past years. The bias downplays the potential for good rain in August, but a succession of cool air masses early in the month will provide a temperature contrast and that alone will help to derive a little rain, but without a moisture feed into the Prairies the rain events will only disappoint producers, traders and food companies.

As noted in the page five article, there is at least "some potential" for a single rain event of significance around mid-month that could bring some relief from dryness. Crops might finish out more favorably if the rain event develops; however, not much rain will precede the event and amounts after the event will be low as well. That will make the month of August largely drier biased relative to normal. There will be some pockets of normal rainfall and if prayers are answered a portion of the region could end up with normal rainfall for the month. Only a few areas will end August wetter than usual and most of those areas may be in and near the Peace River, Slave Lake and Swan Hills regions. The driest weather in August will be in the central parts of the Prairies.

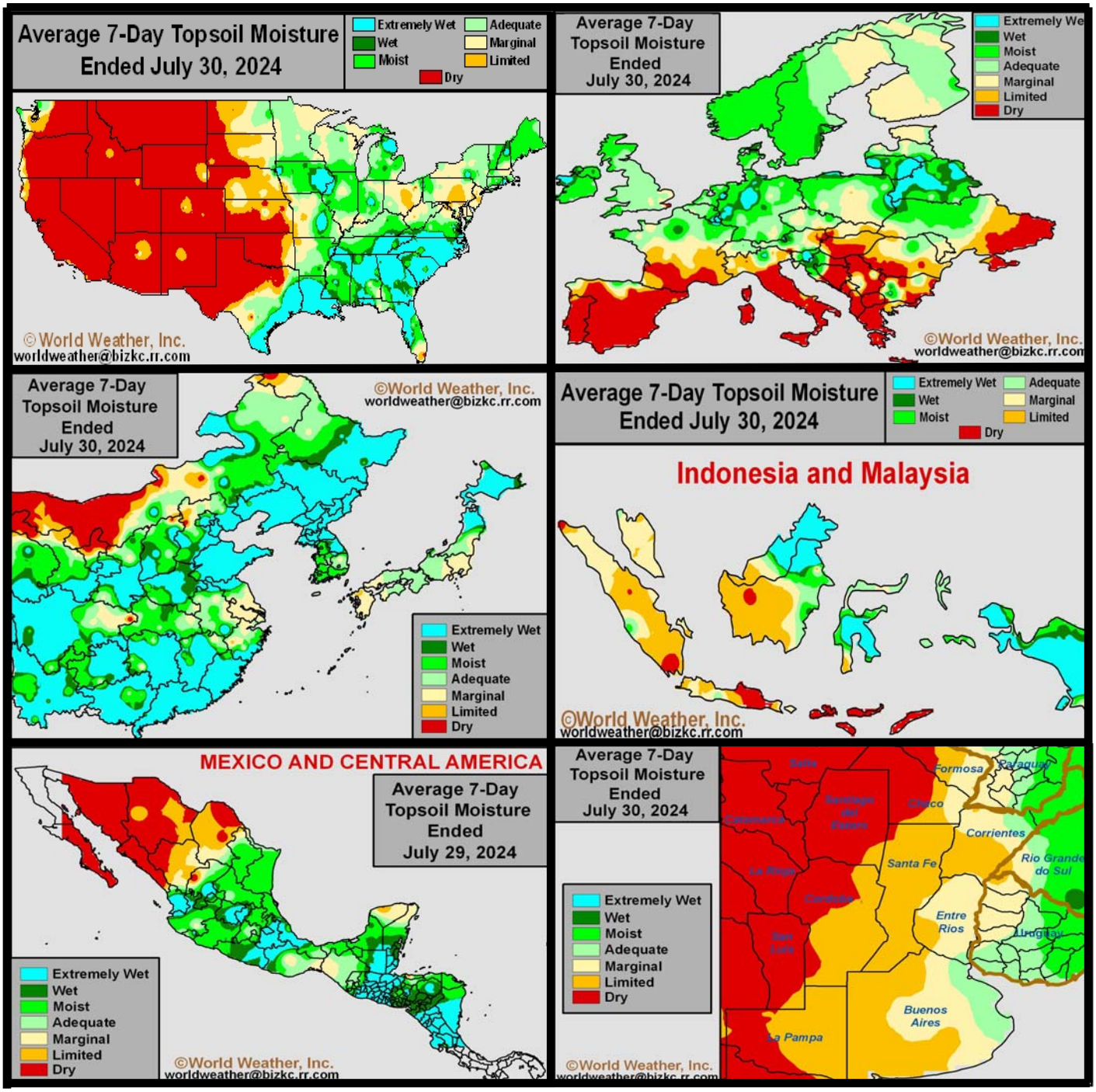
August temperatures will be near to below normal in the first half of the month in the eastern Prairies and then near to above normal in the second half of the month. That will average out close to normal in the eastern Prairies while the west will be more consistently warmer biased during the month.

September precipitation will also be a challenge. If the surprise mid-August rain event fails to evolve the next best chance for rain in the Prairies will not likely evolve until Seasonal cooling begins. Rain would only occur if a series of disturbances moves through the U.S. Pacific Northwest and march through the northern U.S. Plains and southern parts of the Canada's Prairies. This is the trend that is expected during the autumn, but when the pattern evolves is up for much debate.

Most likely the influence of a developing La Nina will interfere with rain development in September leaving the Prairies with a slightly below normal precipitation bias except in the far northwest and southeast where a little more rain is expected. Temperatures in September will continue to be near to above normal.



Selected Weather Images From Around The World



Much of China has saturated soil and a part of the region from Shandong to Jilin is saturated down about 3 feet into the ground suggesting any additional rain will occur as 100% runoff possibly leading to flood conditions. The lower Yangtze River Basin of China is drying out. Mexico's multi-year drought remains in effect for northern parts of the nation where seasonal rains have still not kicked in significantly. Some relief to dryness has occurred in central and some southern crop areas. Argentina is still waiting for significant rain to induce better wheat and barley emergence and establishment. There is plenty of time for improved weather in Argentina, although not much change is expected for a while. Western and southern Indonesia has dried out unexpectedly in recent weeks. Some rain will resume in the next ten days improving crop and soil conditions. Much of the U.S. and Europe summer crop areas have sufficient soil moisture to support normal development, although southern Europe is a little dry along with the U.S. Plains.

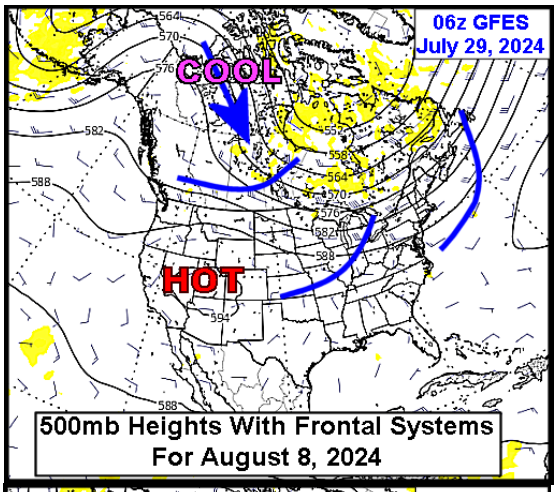
A Ray Of Hope For August Rain May Come Too Late

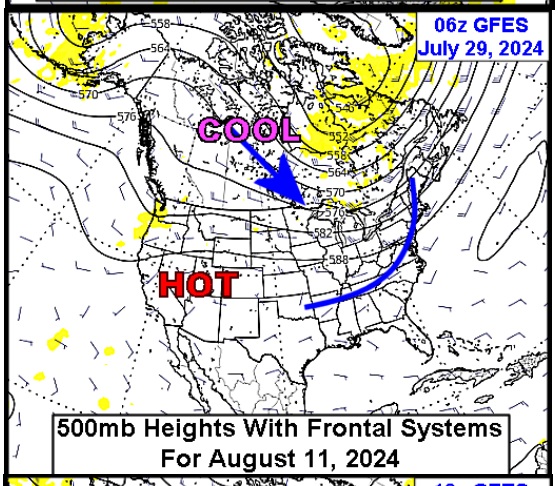
Amongst so much negative there is a vile of hope left for better rain in August; however, it is a big reach that better rain can occur because of the reasons listed below, but if your farm needs rain and you believe in the power of prayer here is a very good opportunity to exercise that tool.

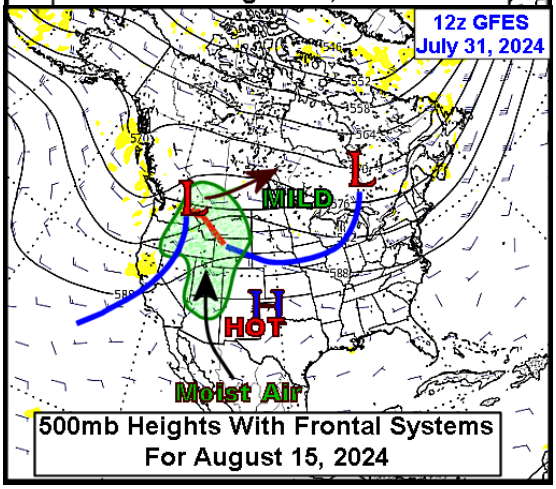
First there will be a succession of cool air masses moving through the Prairies this weekend and next week. The air temperatures will progressively turn colder than usual in Manitoba and portions of eastern Saskatchewan. The core of coldest air will be in Ontario, but temperatures will drop below normal while the western Prairies see near to above normal readings.

The temperature contrast alone is sufficient to generate a boost in scattered shower and thunderstorm activity, but to generate a good soaking rain will require a flow of moisture into the region. Three changes in weather are going to occur in this coming two weeks that "might" provide a little moisture to the Prairies. First, two tropical cyclones expected off the west coast of Mexico and the southwestern U.S. will jointly drag higher humidity and atmospheric moisture into Baja California, northwestern Mexico and parts of the southwestern United States.

Second, the western U.S. ridge of high pressure has potential to weaken and slightly shift into the western Great Plains for at least a little while in the next two weeks. This would help to enhance the southwest monsoon airflow further adding to higher humidity in the southwestern U.S. and giving that moisture a beneficial shove northward through the U.S. Great Basin and Rocky Mountain region. The moisture flux into higher latitudes would then "possibly" become available for frontal systems passing through Canada to tap into for increased rainfall in southern and eastern parts of the Prairies.







Thirdly, the cool air moving through Canada's Prairies and Ontario should peak in about ten days and when it does, warm air will start flowing back into the western and central Prairies. The return of warmer air into the Prairies after a period of cooler than usual weather will lead to scattered showers and thunderstorms, but there may also be a warm front that evolves in Montana and North Dakota before shifting northward. The warm front would allow warm, moist, air to build up to the south due to the displaced high pressure ridge into the central United States and the increase in moisture flux to the western United States. As the warm moist air flows northeast across the Prairies along the warm front there "may" be potential for greater rain to fall in a part of the Prairies.

As noted previously, this combination of changing weather must be perfectly orchestrated to bring needed rain to the Prairies. The potential is there, but the odds are not good for the necessary timing of these ingredients to come together just right to induce significant precipitation. **Given the track record of weather in the past month the odds are against this set up bringing significant moisture to the Prairies, but a little prayer cannot help.**

It may be a little too late for rain to fall in mid-August and turn around production, but some late season crops might benefit and the moisture is needed to improve the outlook for winter crop planting and for the start of spring 2025 fieldwork. World Weather, Inc. admits the odds of all three of these changes occurring exactly right is low, but it is something to hope for.

If significant rain fails to evolve some areas in the Prairies will not be given a good opportunity for significant rain until seasonal weather patterns change in September and that would be too late and might also disrupt crop maturation and harvesting.

Russia's New Lands, Ural Mountains Region Too Wet

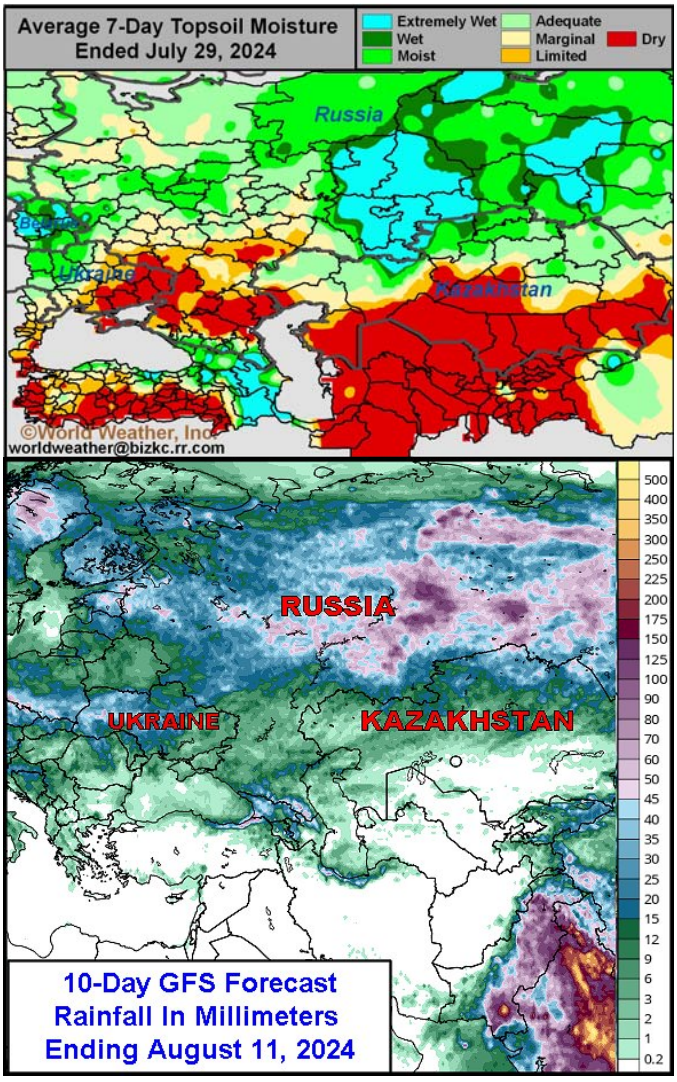
Russia's production areas near and east of the Ural Mountains into the eastern New Lands region received significant rain during the past week. These areas have ample moisture to support new growth, though several wheat and sunseed fields are now excessively wet and need drier weather.

The Ural Mountains region and eastern New Lands have adequate to excessive soil moisture due to waves of rain in recent weeks. In contrast, significant moisture shortages are prevailing in the Volga River Basin and Russia's 'Southern Region' and areas into eastern Ukraine. The remaining production areas in the CIS generally have favorable crop and field conditions.

In the meantime, the Volga River Basin and USDA defined 'Southern Region' into eastern Ukraine will remain drier and warmer biased. The environment will remain less than favorable to poor for the summer grains and concerns for production losses will further increase.

Warmer biased conditions were again noted in the 'Southern Region' and Volga River Basin into Ukraine during a part of the past week, although some cooling was noted as well. Highest temperatures were in the 30s Celsius. The remaining production areas in the western CIS saw highest temperatures reach the upper 20s to 31C.

Spring and summer grain and oilseed conditions are variable across the western CIS. The Ural Mountains region and eastern New Lands are becoming too wet to support ideal development for spring wheat, sunseed, and other crops. Wet weather diseases are a concern for the small grain crop especially if the wet weather persists in coming weeks as it may. The Volga River Basin and Russia's 'Southern Region' into eastern Ukraine are otherwise too dry to support aggressive growth for spring and summer crops . Production may have already been reduced due to ongoing dryness and the need for rain remains high. Additional production losses will be possible if dryness persists in coming weeks. The remaining locations generally received enough rain to support aggressive growth this month.



Harvesting of winter grain and oilseed crops is either complete or winding down during the next two weeks in a large section of the CIS. Production cuts were significant in some areas because of persistent dryness and late season crop freezes. Now, spring and summer crops produced in the same region are suffering from dryness and production cuts may impact those crops as well as the winter cereals and rapeseed. The potential damage resulting from too much moisture in the eastern New Lands will then add additional concern about production in 2024.

Areas near and east of the Ural Mountains will again have several opportunities for rain through the middle of next week. Moisture totals by next Wednesday morning will range from 0.50 to 2.00 inches and locally more. Western Russia, northern Belarus, portions of the Baltic States, and northern Kazakhstan will also see a mix of rain and sunshine. These areas will receive 0.25 to 1.50 inches of rain. The remaining production areas in the western

The Ural Mountains region, eastern New Lands, and northern Kazakhstan will see a mix of rain and sunshine August 8-14 while the remaining production areas in the CIS trend drier than normal. Temperatures will trend near to slightly above normal through the middle of next week.

The ground will remain saturated near and east of the Ural Mountains due to additional rain for at least the next ten days. Development may continue to advance sluggishly and wet weather diseases will remain a concern. Production potentials may be reduced as a result. Dryness in the Volga River Basin, 'Southern Region', and Ukraine will continue to promote poor development conditions.

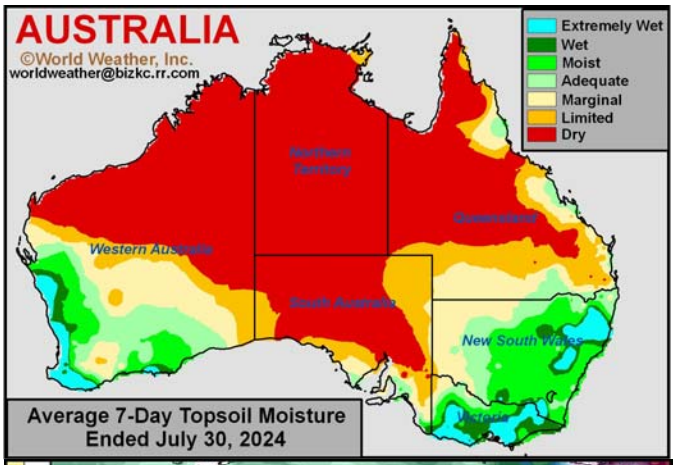
Australia Winter Grain, Oilseed Prospects Favorable

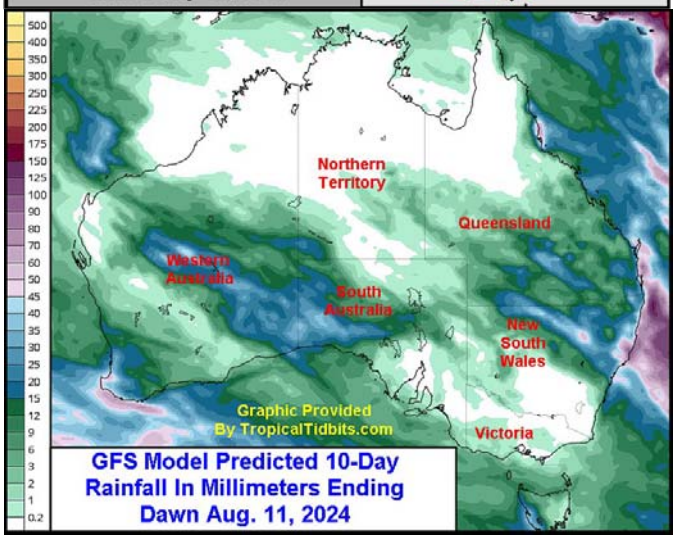
Timely rain was again noted in much of Australia's main winter wheat, barley, and canola production areas during the past week. Soil moisture increased or remained at favorable levels, though portions of Queensland and South Australia would benefit from additional rain to completely fix the moisture deficits. Western Australia, Queensland, and portions of northern New South Wales will see a good mix of rain and sunshine through the middle of next week. Winter grain and oilseed prospects will remain favorable. South Australia, Victoria, and the remaining locations in New South Wales will otherwise trend drier than normal. Crop prospects will remain favorable despite these areas drying down marginally.

Soil moisture is rated adequate to excessive in a large section of Australia's crop country. However, portions of Queensland still have marginally adequate to short soil moisture despite recent rainfall.

Steady rainfall continued to improve the moisture profile for Western Australia in recent weeks. Production potentials improved or remained favorable due to the gradual increase in soil moisture. The remaining production areas have enough moisture to support a generally good outlook for the winter grains and oilseeds as well, though Queensland and South Australia would benefit from a little more rain. There is still hope the evolution of La Nina later this year will enhance rainfall late in the growing season. As long as the rain verifies, yield potentials will be favorable.

Precipitation will vary across Australia through the middle of next week. A frontal boundary will bring rain to much of Western Australia today with a few lingering showers Thursday. Another front will bring rain to the region early next week.





Moisture totals by next Wednesday morning will range from 0.10 to 0.75 inch with portions of southwestern Western Australia receiving 1.50 inches or slightly more of moisture. A disorganized disturbance will also bring rain to Queensland and portions of northern New South Wales Sunday into Tuesday. These areas will receive 0.10 to 0.75 inch of rain by next Wednesday morning, though a few pockets will receive 1.50 inches or slightly more of precipitation. South Australia, Victoria, and the remaining locations in New South Wales will receive little to no rain. Western Australia will again see a good mix of rain and sunshine August 8 – 14 while the remaining production areas trend drier than normal.

Temperatures will trend near normal for much of Australia through next Wednesday. Daytime highs will peak to the teens Celsius with pockets in Queensland and Western Australia occasionally warming to the lower and middle 20s. Low temperatures will be in the single digits with pockets in Queensland only cooling to the range of 10-13. Portions of Victoria and southern New South Wales will also cool to the range of –4 to 0. Seasonable to seasonably warm weather is slated for the country August 8-14.

Western Australia will receive enough rain to keep soil moisture near current levels or slightly bolster soil moisture during the next two weeks. Portions of Queensland and northern New South Wales will also see soil moisture increase slightly next week. Minor drying is slated for the remaining locations, though mild temperatures will limit the amount of moisture that is lost to evaporation. Winter wheat, barley, and canola prospects will remain generally favorable across the country.

Central, Northern India Face Potential Flooding

India's monsoon is ongoing with many areas in the north and east receiving lower than usual rainfall so far this season. In contrast, flooding was noted in Kerala with minor rice and structural damage possible. The environment remained generally favorable for aggressive planting and growth outside the driest locations in Rajasthan.

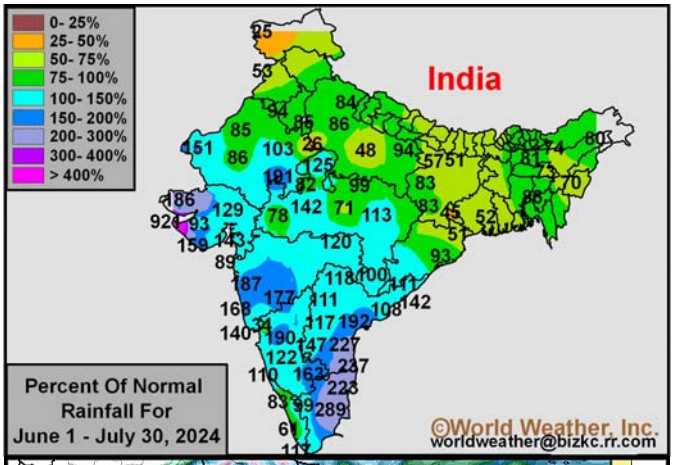
Soil moisture is rated adequate to excessive in much of India. Only western and northern Rajasthan remains short of moisture despite some recent rainfall. Moisture shortages are also intensifying in Tamil Nadu.

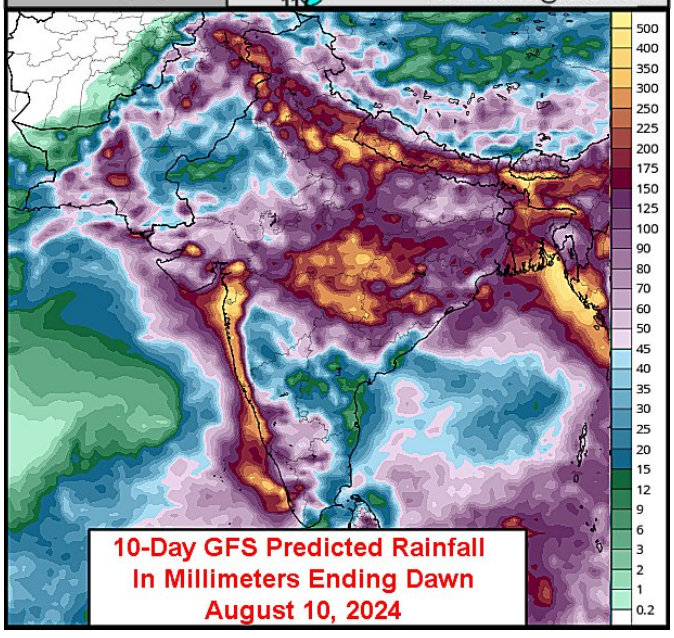
Southern India outside of Kerala and much of western India outside portions of Rajasthan remain wetter than normal so far this monsoon season. June 1 to July 30 rainfall was 103-289% of normal with pockets that were slightly drier than normal. Rainfall in central India was near to slightly above normal as well while northern and eastern India received less than usual rain. Portions of West Bengal, Jharkhand, Bihar, Uttar Pradesh, and Punjab only received 45-83% of normal rain since June 1.

Portions of western and northern Rajasthan remain drier than usual. Spotty rainfall in recent weeks was welcome where it fell, though much more rain is needed to support ideal long-term crop conditions. Many areas in Tamil Nadu are also becoming too dry to maintain favorable development . A good soaking of rain would be welcome.

The remaining production areas have ample moisture to support aggressive crop development despite lighter than usual rainfall . Timely rain is still needed to maintain a good outlook for this season's crops.

Drier biased conditions are slated for much of southern India outside





Kerala and coastal Karnataka during the coming week. Kerala and coastal Karnataka will still have several opportunities for monsoonal rain with totals ranging from 2.00 to 6.00 inches by next Tuesday morning. Local rain totals of 10.00 inches or more will also be possible in Karnataka. Other production areas will not receive enough rain to counter evaporation.

Drying will intensify and may slow development in parts of Tamil Nadu. Rain potentials could increase August 7-13 improving the moisture situation.

Monsoonal rain will fall frequently in the remaining production areas in India during the coming week. Areas from Madhya Pradesh, Telangana, Chhattisgarh, and Maharashtra into Uttar Pradesh and much of Haryana, Uttarakhand, and Himachal Pradesh will receive 2.00 to 6.00 inches of rain with local amounts of 9.00 inches or more by next Tuesday morning. West Bengal, Bangladesh, and the Eastern States will receive 1.50 to 5.00 inches of rain and locally greater amounts. The remaining production areas will receive 0.75 to 3.00 inches with drier pockets in western and northern Rajasthan. Drier than normal weather will then be possible for western India August 7 – 13 while frequent rainfall is expected in central, northern, and eastern India.

Localized flooding will be a concern in the wettest locations of central and northern India Wednesday into Saturday when some of the most significant rain occurs. Minor crop damage will be possible in the wettest locations, though overall production losses should be minimal. Fieldwork will advance slowly in the wettest locations. Crop development will otherwise remain generally favorable outside areas impacted by flooding.