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The Canadian Agriculture Weather Prognosticator

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Ontario And Quebec

Stormy Weather Will Continue For One More Week to Ten-Day Period. Flooding and Cool Soil Temperatures Will Keep Producers Out Of The Fields For A While. Warming And Drying are Needed

WORLD WEATHER ISSUES

- Argentina Weather Has Trended Much Wetter This Month And That Process Will Continue
- Second Season Corn Crops In Brazil Have Been Drying Down Recently, But Colder Temperatures In Argentina Soon Should Help Push Rain Into Brazil
- Southern Australia Wheat, Barley And Canola Areas Need Rain To Support Planting
- China Weather Remains Nearly Ideal For This Time Of Year
- Europe And Western CIS Have Warmed Greatly Recently Supporting Better Planting Conditions And Crop Growth
- U.S. Hard Red Winter Wheat Areas Received Significant Rain Recently Easing Drought

Ready, Set…Go!!!

What a difference one week makes. Early last week snow was still widespread across the Prairies and across most of the northern United States. Snow cover in the second week of April in these areas is rare, but certainly not an unprecedented occurrence. In the past 15 years there were 5 years that still had significant snow on the ground in the second week of April.

Notable warming began in the second half of last week and continued through the weekend. Additional warming was expected this week and some areas will see extreme highs over 20 degrees Celsius in this coming weekend. The warmth will be accompanied by a strong southerly wind that might help to accelerate drying rates across the region which is needed due to significant frost still in the ground and huge areas of standing water left over from the big snowmelt event of the past week.

Some computer forecast models have suggested a larger storm system may bear down on the Prairies next week shortly after the warm and windy conditions occur during the weekend, but World Weather, Inc. believes that storm system will be weaker than advertised and its impact on the Prairies should be kept low. If, by some fluke, the storm turns out to be more significant it is unlikely to be followed by additional major storm systems—at least not for a while.

Looking back at the 18-year cycle, one of the dominating features of May weather is an active jet stream over the United States. The month of May in 2000, 1982 and 1964 tended to produce frequent storm systems across the contiguous United States. Only rarely would one of those storms come far enough to the north to produce significant precipitation in the Prairies.

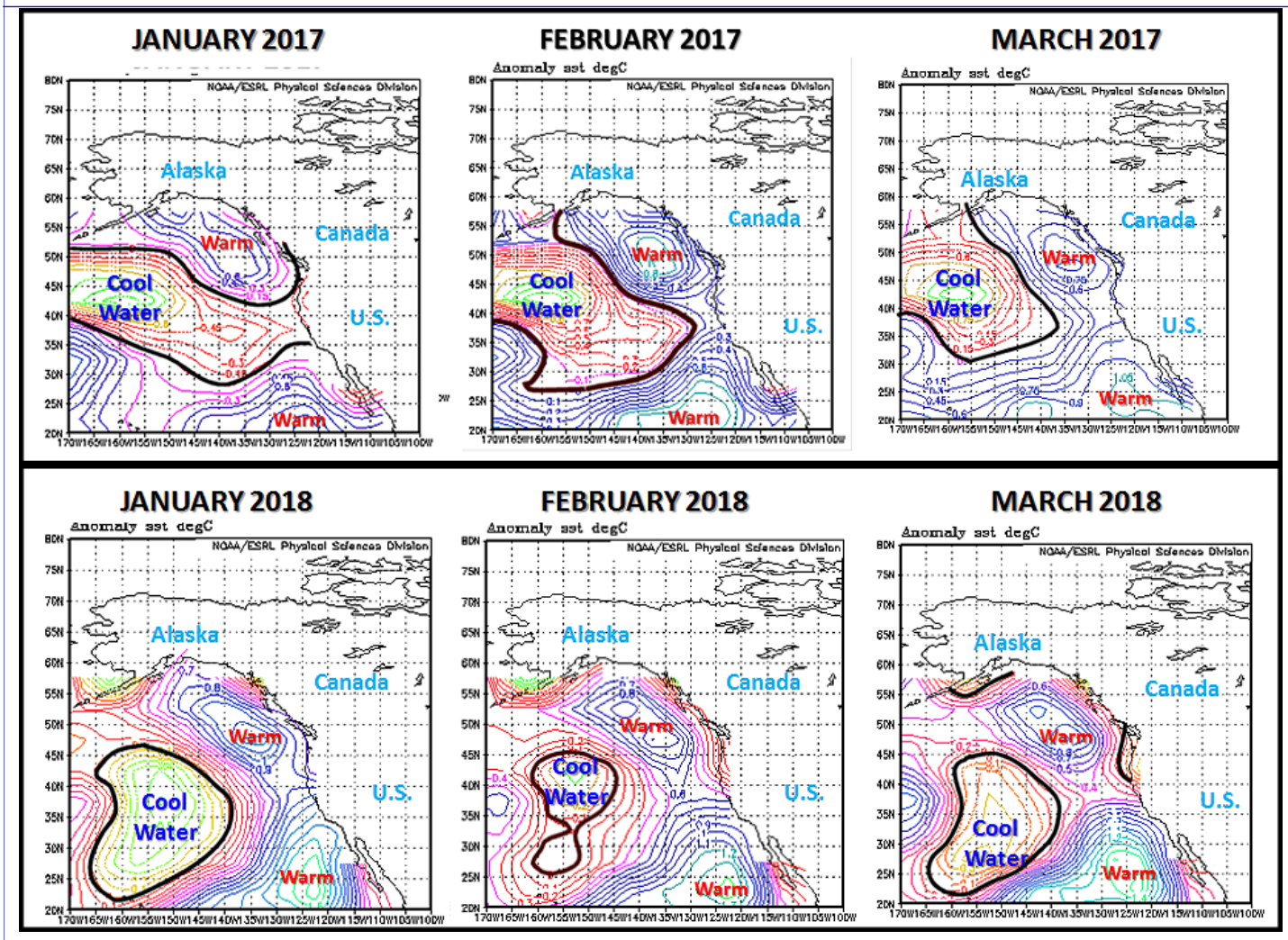
That should not be interpreted as if the Prairies will not be impacted by precipitation in May, but it does imply the highest frequency in precipitation and its greatest impact is expected in the U.S. Plains, Midwest, parts of the Delta and southeastern states—well removed from here which should minimize the number of large storms and major precipitation events in the Prairies.

For the start of the planting season, having the greatest storminess in the United States is a blessing because it will allow the Prairies to experience additional warming and brief periods of light precipitation that should not interfere with long term fieldwork.

With that said, the Prairies are still suffering from low subsoil moisture—at least across the southern and some eastern portions of the region. The low subsoil moisture is of little concern today because everyone's attention is on getting into the fields for planting. Worry over low subsoil moisture will come after the crop gets into the ground and begins to germinate, emerge and establish.

A limited precipitation pattern over the next few weeks and warm temperatures should bode well for getting into the fields for some planting and for that reason it is time to make sure your equipment is ready to go. Planting should begin soon, but if the warming trend is disrupted by a major storm system or sudden bout of cold more time will be needed. Western Alberta is a different story (See Page 6)

Gulf of Alaska Cool Water Similar To 2017



Some scientists believe ocean temperature anomalies in the Gulf of Alaska have much to say about weather conditions in the Prairies during the spring and summer.

Last year's innocently looking cool ocean water in the Gulf of Alaska during the first quarter of the calendar year advanced to a substantial pool of cold water over the region by June. The cool water temperatures reduced evaporation rates, reduced the introduction of water vapor into the atmosphere and was instrumental in developing a high pressure ridge over western Canada that minimized spring and summer storm systems as they moved into the heart of the Prairies. The ocean water temperature anomalies became as big as those in the major drought years of 1961 and 1988. By July and August it was obvious that a serious drought was under way.

Today there is no sign of significant ocean cooling like that of April, May and June 2017, but the similar ocean temperature anomalies today with those of last year at this time do imply the potential for similar light amounts of precipitation —at least for a little while this spring. The combination of the 18-year cycle similarities of this year versus 2000, 1982 and 1964 and the fact that ocean temperatures are anomalously cool similar to those of 2017 suggests light precipitation in May, but it will be cooler and not as threatening as last year.

Another factor to consider is the warm ocean pool that is present off the southwestern United States. This warm pool will perpetuate the recent succession of storm systems marching through the central and southern Plains to the Midwest and that will keep the jet stream far enough removed from the Prairies to maintain a lighter than usual precipitation bias in the Prairies.

Below average precipitation in the Prairies during the planting season is a very good pattern because it will expedite fieldwork by limiting the number of days with excessive soil moisture. However, if the dryness prevails during the summer like that of 2017 a more potentially serious problem with dryness is possible since subsoil moisture is already low in the Prairies. A second year of limited subsoil moisture will hurt crops.

May Weather Outlook Mostly Unchanged

As suggested in Page 2, there are many reasons to expect precipitation in the Prairies during May to be a little light and erratic. Subsoil moisture is already low, but topsoil moisture is most important for planting, germination and emergence. The latest soil moisture and two-week weather outlook favors some timely precipitation of light intensity to occur over a large part of the Prairies in May.

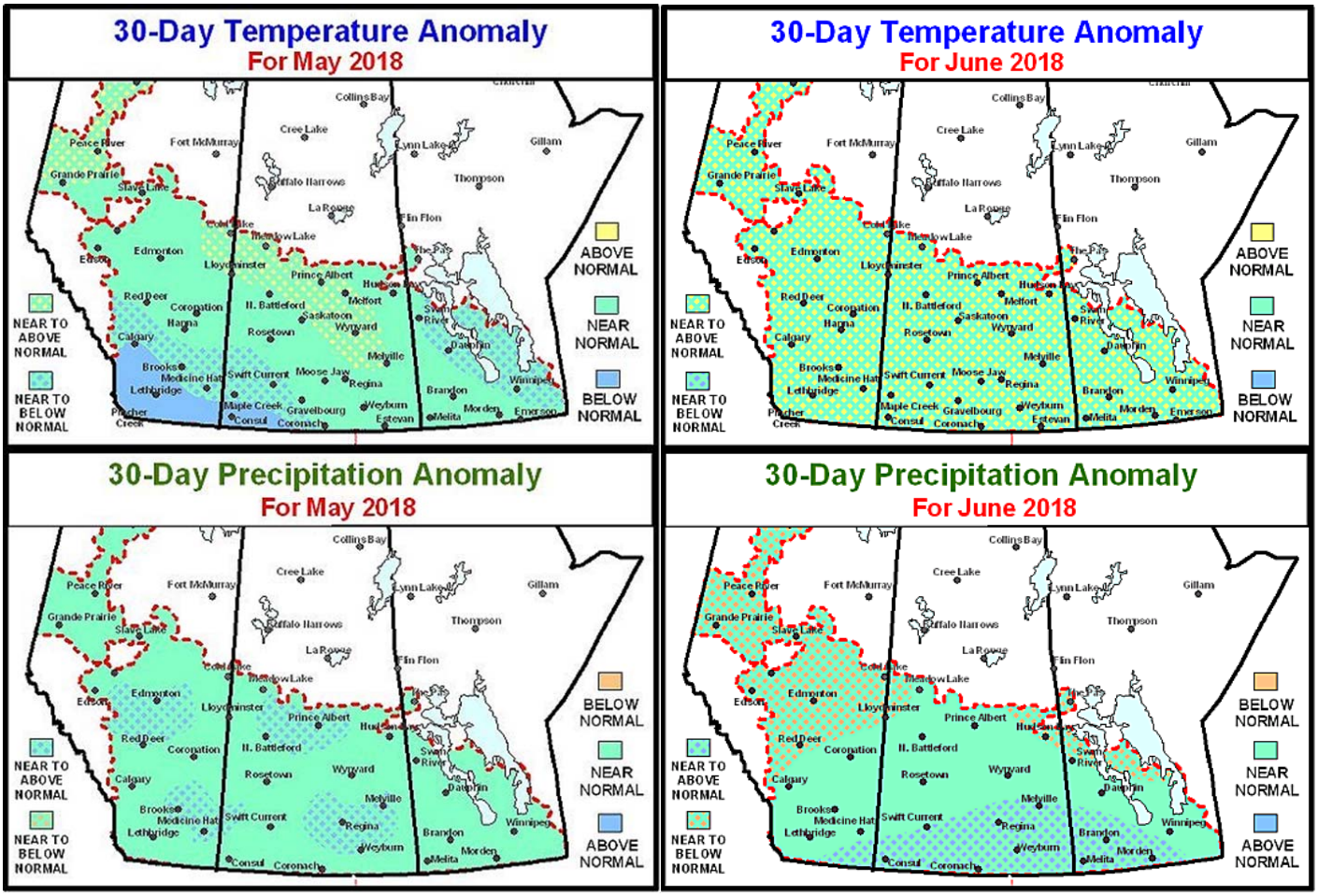
The environment should leave pockets of adequate to abundant soil moisture intertwined with pockets of near normal precipitation. Such conditions will fine for planting once soil temperatures rise sufficiently to support seeding, germination and emergence. Air temperatures in May should trend a little cooler in the southwestern and far eastern parts of the Prairies while trending warmer elsewhere

There is some concern that a new bout of persistent colder than usual air will arrive in the Prairies during mid-May. This repeating weather pattern has dominated the region since October and it is a pattern that overrides most others. If the Prairies do see a new succession of cold air masses they are likely to favor eastern parts of the Prairies more than the west and the cold should suppress precipitation additionally over that already dictated by the 18-year cycle and the fact that the jet stream will be most active in the United States.

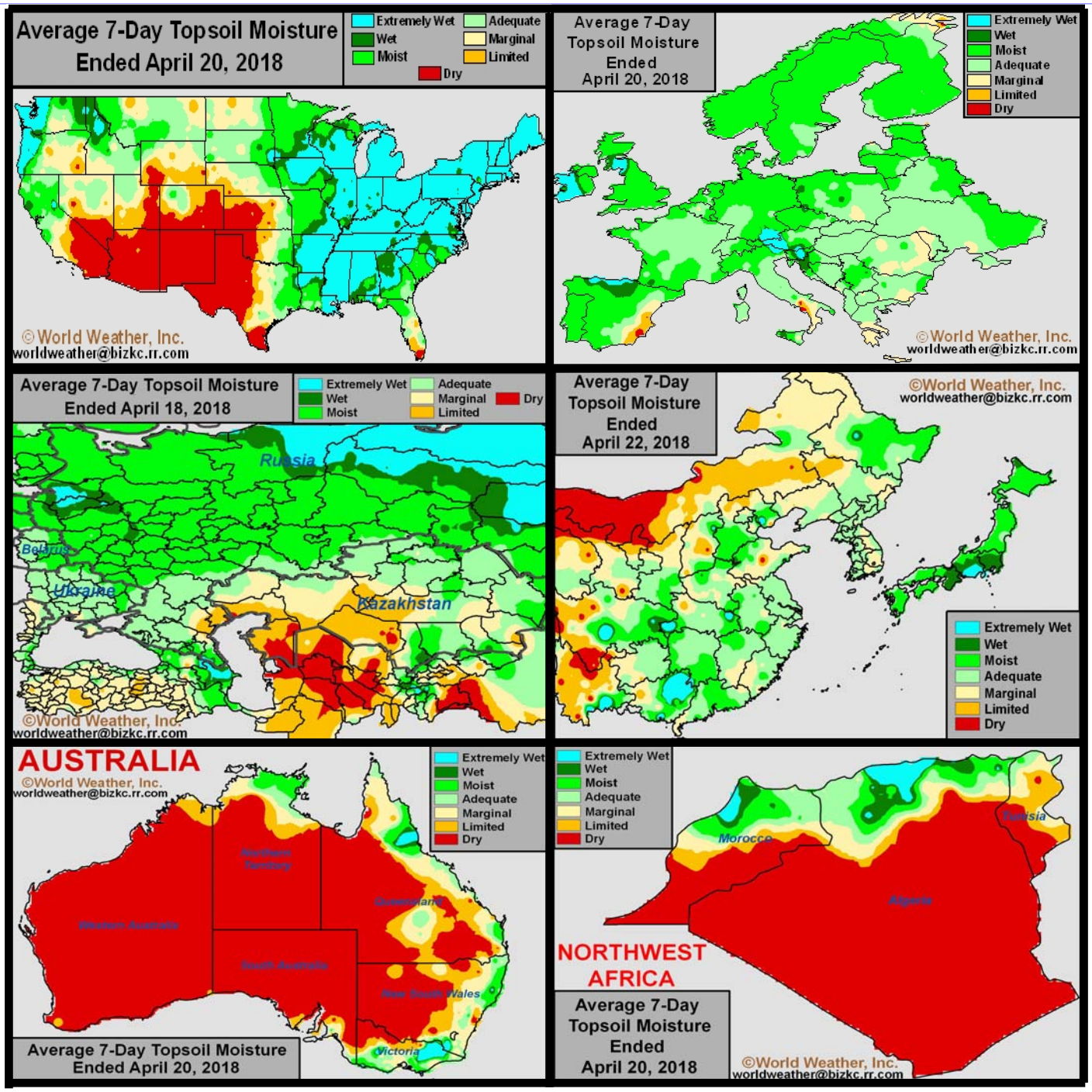
Confidence in the returning cold surge is a little low and if the 18-year cycle can prevail during May, temperatures will be warmer than usual except in eastern Saskatchewan and Manitoba where some cooling is expected. Frosty weather is still expected in May over the eastern Prairies, but the odds are low of having any crop emerged and more advanced than usual at that time.

June weather is expected to finally begin consolidating the jet stream. A northward shift in the jet with less splits and cutoff storm systems should evolve and that should bring the Prairies a favorable mix of rain and sunshine along with temperatures that will be seasonable to slightly warmer biased.

June should be a well balanced month of weather. However, with that said there is still not much reason to anticipate huge volumes of rain that will soak the Prairies. In stead small weather systems will come and go periodically resulting in near normal rainfall. Such conditions will be good for timely rain and supporting crops, but it will not likely support restored subsoil moisture.



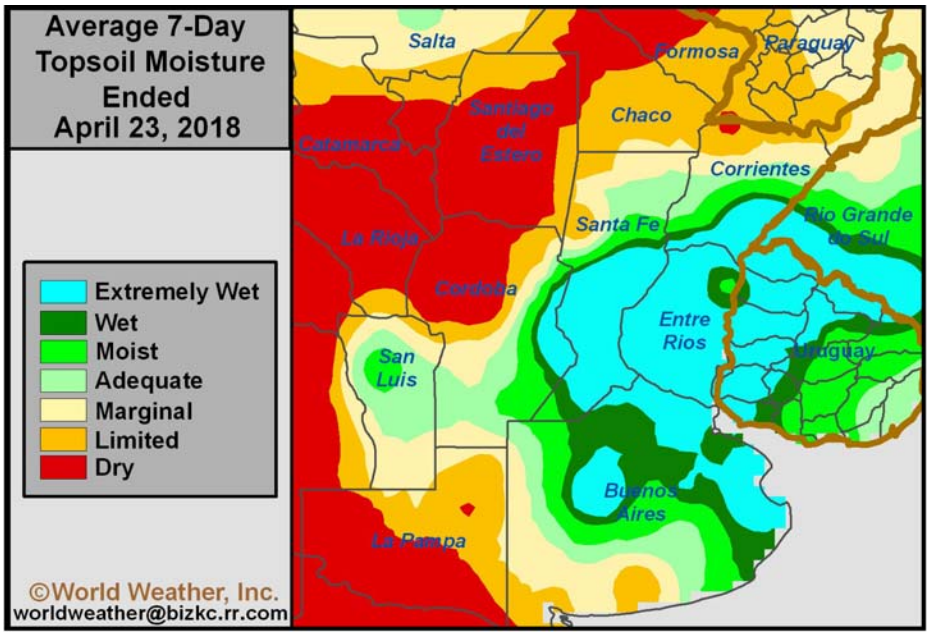
Selected Weather Images From Around The World



China received significant rain during the most recent weekend bolstering topsoil moisture in northern parts of the nation. The moisture boost was needed after several days last week were unusually warm and dry. Additional moisture is needed, but seasonal rains do not usually evolve this early in the year and net drying may resume for a while. North Africa soil moisture and crop conditions are rated quite favorably. Wheat and barley yields are expected to be high except in Tunisia and southwestern Morocco where dryness has been a little too persistent. Eastern Australia has had great summer crop harvest weather, but rain is needed throughout the south to bolster topsoil moisture for wheat, barley and canola planting that remains on hold due to dryness today. Net drying has been occurring in parts of Europe and the western CIS which has firmed the topsoil and supported spring planting and more of the same is expected this week. U.S. Midwest, Delta and interior southeastern states became too wet in the past week while drought in hard red winter wheat country was finally eased during this past weekend. More rain is expected.

Argentina Rainfall To Set Back Fieldwork Once Again

Significant rain fell in central and southern Argentina during the weekend ending a period of recovery after rainy weather occurred earlier last week and earlier this month. The precipitation bolstered topsoil moisture once again raising the potential for slower harvest progress over the coming week especially when considering daily rain will impact a part of the nation through the next seven to ten days. The rain came too late in the season to have much benefit for immature soybeans and peanuts, but some of the very latest maturing crops (especially peanuts) might have benefited somewhat.



Areas from northern Buenos Aires through central Santa Fe and southern Corrientes have abundant topsoil moisture due to the recent rainfall. Fieldwork likely deteriorated in the past few days as soil moisture gradually increased. Most areas did not receive enough rain to promote any significant flooding. Harvesting and general fieldwork likely advanced swiftly between periods of rain in the remaining production areas.

This year's dry and warm biased weather expedited crop development. Crop maturity occurred quickly and that supported a faster harvest pace for many areas. The recent rain-induced field working delays have not had much of a significant impact on harvest progress because of crops being mature quicker than usual. As of last Thursday, corn harvesting was 34% complete compared to 24% done one year ago. Soybean harvesting was 40% complete compared to 20% last year and sunseed harvesting was nearly done at 98%. The fact that sunseed harvesting was nearly complete last week helped to further minimize harvest delays and oilseed quality declines. Sunseed is very sensitive to rainy weather at harvest. Rice harvesting was 87% done which is the same as last year at this time.

In the meantime, some of the first reports verifying some frost damage (from April 12) were received in this past week from southern western Buenos Aires in the Salliquelo area. However, the frost damage was low and crops were mature enough to handle the situation relatively well. Confirmation of peanut production losses due to drought are beginning to filter in, although that comes as no surprise after corn, soybeans, sunseed and sorghum have all experienced a similar decline due to drought.

Alternating periods of rain and sunshine will evolve for much of Argentina this week. Rainfall will favor areas from Cordoba and southern Santiago del Estero through Entre Rios and Corrientes. Moisture totals through next Monday morning for these areas will range from 1.00 to 4.00 inches and locally greater amounts. The remaining production areas will receive 0.50 to 2.00 inches of rain by the beginning of next week, though much of Formosa will receive little to no rain. A frequent rain pattern is slated for northern and eastern Argentina May 1 – 7 while the western and southern production areas are drier biased.

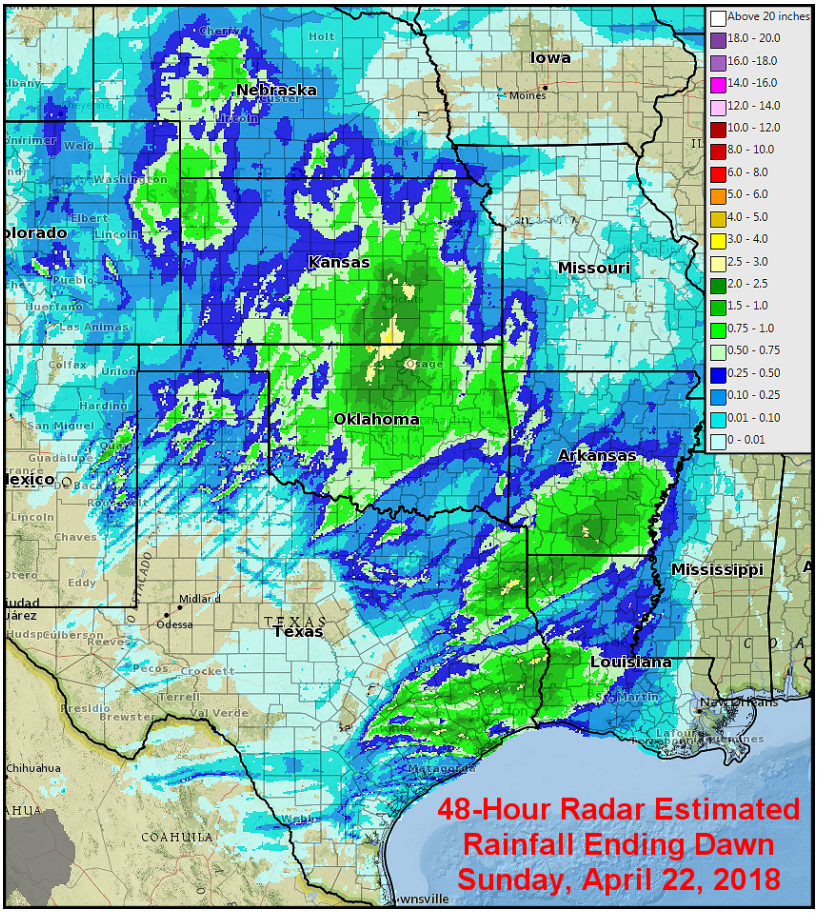
Temperatures will be above to well above average for Argentina this week despite the frequent rain pattern. Daytime highs will often peak into the 80s and 90s Fahrenheit, but rain and cloudiness in several portions of southern and central Argentina will force afternoon highs to the 70s periodically. The warm weather will help promote aggressive drying between rain events.

Harvesting will be slowed at times in much of Argentina this week. Producers will have opportunities to get into the fields between rain events, although field working conditions will be far from ideal in the wetter biased locations of central and southern Argentina. No significant quality declines are expected outside a few pockets in Santa Fe and Entre Rios where the additional rainfall will be greatest.

Winter wheat planting for Argentina normally begins in May and continues through July. Recent rainfall coupled with the expected precipitation during the next two weeks will help promote a good environment for early season planting and establishment. Additional precipitation will still be needed later in May to completely reverse the moisture deficits and promote a good environment for much of the crop.

Beneficial, But Erratic Central U.S. Plains Weekend Rain

Beneficial rainfall occurred erratically across the central Plains during the 48-hour period ending dawn Sunday. Coverage in hard red winter wheat country was close to 100%, but parts of West and South Texas were left dry. Rainfall was most generalized and significant from south-central Kansas into north-central Oklahoma, although a few areas of significant moisture also occurred in the Texas Panhandle and a few interior western and southern Oklahoma locations, as well. Some follow up rain will occur during midweek this week and again next weekend.



Doppler radar estimates and surface weather observations suggested rainfall during the two day period ending dawn today ranged from 0.23 inch to 0.94 inch from the Texas Panhandle to far southwestern Kansas. Rainfall in western Oklahoma reached 1.08 inches amounts in most areas ranged from 0.16 to 0.65 inch.

Central Oklahoma and south-central Kansas were wettest with rain totals of 1.00 to 2.00 inches. In Western Kansas rain totals varied from 0.10 to 0.55 inch and amounts in central Kansas ranged from 0.48 inch 0.70 inch with one location reaching 0.92 inch.

In the meantime, the most disappointing rainfall occurred in West and South Texas where very little precipitation of significance fell. Some areas in West Texas have only recorded one significant precipitation event in recent weeks and that was long enough ago that the ground remains critically dry. Unirrigated crops in West Texas are vulnerable to some serious delays in planting of cotton, corn, sorghum and peanuts this spring if significant rain does not fall soon. Irrigated crops will perform relatively well as long as water supply holds out well and there are not extended periods of extreme heat.

Some follow up showers are expected this week across the central and southwestern Plains over the next ten days. Tuesday into Wednesday will be the wettest period this week with rain totals varying from 0.20 to 0.75 inch and a few totals near or slightly over 1.00 inch. Areas from the northwestern Texas Panhandle to western Kansas will receive less than 0.25 inch leaving those areas quite dry and in need of additional rain.

Another rain event is possible during the middle part of next week (May 1-2).

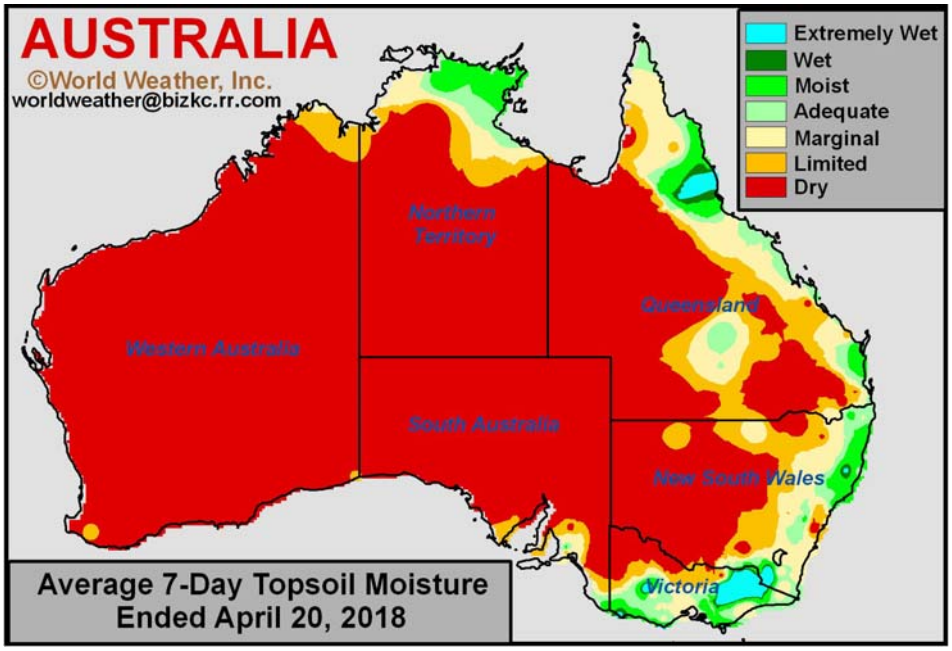
Overall, sufficient rain has occurred in U.S. hard red winter wheat production areas to offer some relief to serious drought and additional rain is expected. Drought will not end in the southwestern Plains, but sufficient rainfall elsewhere will help to improve soil and crop conditions.

Canada Prairies Bottom Line

Too much snow is on top of the ground in western Alberta and too much moisture is in the ground over the same region. Flooding is expected in the region during the next couple of weeks as the snow melt season peaks. Field access will come slowly for areas west of a line from Red Deer to Edmonton and Slave Lake, Alberta. A few areas in northeastern most Saskatchewan and northern Manitoba will also remain a little too wet. Most other areas should get timely precipitation in May and June to support crops, although the subsoil moisture may not get restored to normal in southern or east-central Saskatchewan, southeastern Alberta of southern Manitoba without a more general soaking of rain. Mid– to late-summer weather in the Prairies may be a little warm and dry in some south-central and southeastern crop areas while trending drier in western Alberta and remaining favorably moist in many other areas. One more round of cold may impact a part of the Prairies in mid– to late May. Overall, Prairies production should be favorable, but not necessarily stellar.

Australia Winter Crops Need Precipitation

Winter wheat, barley, and canola planting normally begins at this time of year in Australia. Planting will likely get off to a slow start this year due to a shortage of moisture in much of the main production areas. Only a few pockets in Victoria have adequate soil moisture for planting due to timely rain in recent weeks and planting may get off to good quick start in that state. However, most other areas will not receive much rain for a while and that may delay the start of fieldwork for a while. The planting window for wheat, barley and canola usually occurs from late April through June and in some years it can continue in July which leaves plenty of time for improved rainfall and planting to proceed. Portions of Victoria and southern New South Wales could see a boost in rain during the last few days of April into early May, although precipitation will generally be too light to significantly bolster soil moisture. Planting prospects will remain poor until precipitation begins to fall more routinely and significantly.



The main winter crop production areas in Victoria, southern New South Wales, South Australia, and Western Australia were generally drier biased in recent months – which is not unusual for the late summer. Pockets in Victoria and southeastern New South Wales reported timely rain since the beginning of February, though much of the precipitation was too light to significantly improve long-term soil conditions. Soil moisture is short to critically short outside pockets in Victoria that reported significant rain during the past week. However, it is very important to keep all of this in perspective. Dryness in late April is not unusual and worry over 2018 planting should not begin for a few more weeks. World Weather, Inc. believes adequate rainfall and soil moisture will be present in a few weeks to support planting and establishment.

Summer crop areas in northern New South Wales and southern Queensland were also generally drier biased since the beginning of March. Central Queensland was wetter than normal in March before trending drier than normal since the beginning of April. The lack of significant precipitation in recent weeks promoted aggressive crop maturation and harvesting. Similar conditions are desired for a while to help promote additional fieldwork and to protect unharvested cotton and oilseed quality.

Extreme southwestern Western Australia will receive some rain during the next several days as a disturbance settles to the south over the Indian Ocean. The precipitation will help bolster soil moisture in several areas and could promote periods of planting. Moisture totals through next Wednesday morning will range from 0.40 to 1.50 inches most often. The rain will not be sufficient to fully restore soil moisture to normal, but it will help stimulate a little fieldwork. Production areas further inland will only see brief periods of light rain and much more moisture will be needed before planting can begin in those areas.

South Australia, Victoria, and New South Wales will receive some moisture in the middle of next week, but greater rainfall will be needed before aggressive fieldwork can begin. The only exception will be in southern Victoria where soil moisture is already sufficient to support fieldwork.

Portions of Victoria and southern New South Wales could see increased precipitation April 26 – May 2 if the latest computer forecast models verify. The boost in rain could promote a better environment for planting and establishment for the areas that receive the greatest rain. Extreme southwest Western Australia could also receive timely rain in the last few days of April and early May as well. However, confidence is low and a close monitoring of the situation is warranted.

Pockets near the New South Wales and Queensland border will receive 0.50 to 2.00 inches of rain by the middle of next week. However, much of the main summer crop region will only receive light rain and no serious disruption to farming activity is likely.