TO SUBSCRIBE CALL 913-383-1161 OR WRITE TO WORLDWEATHER@BIZKC.RR.COM

The Canadian Agriculture Weather Prognosticator

Volume XIII, Issue XV http://www.worldweather.cc February 1, 2022

World Weather At A Glance

- The worst of South America's dryness is over, although soil moisture is still below normal in many areas from northern Argentina to southern Brazil
- Northern Brazil will be getting too much rain for a while slowing soybean harvest progress and the planting of Safrinha corn
- India's winter precipitation has set the stage for good pulse, grain and rapeseed production, but a timely rain event or two will be needed in February
- No winterkill has occurred in Europe, Russia, Ukraine or China and each area should have good spring moisture.
- North Africa remains dry and a boost in rain is needed in February and March to protect production
- U.S. dryness is still a concern from Montana to western Texas and some pockets of winterkill may have occurred.

Drought Still Locked into Central, SW

Drought has not budged "one iota" in recent weeks across the central and southwestern Prairies. Another snow free winter has many folks still plenty worried about the future, but confidence is still relatively good that a break in the drought will be occurring in 2022.

Snow cover was absent at the end of January as it was in the beginning for many areas in southern Alberta and southwestern into central Saskatchewan; however, there has been some expansion in the snow free conditions. The area that has little to no snow on the ground is the very same area that has been drought ridden for a very long period of time.

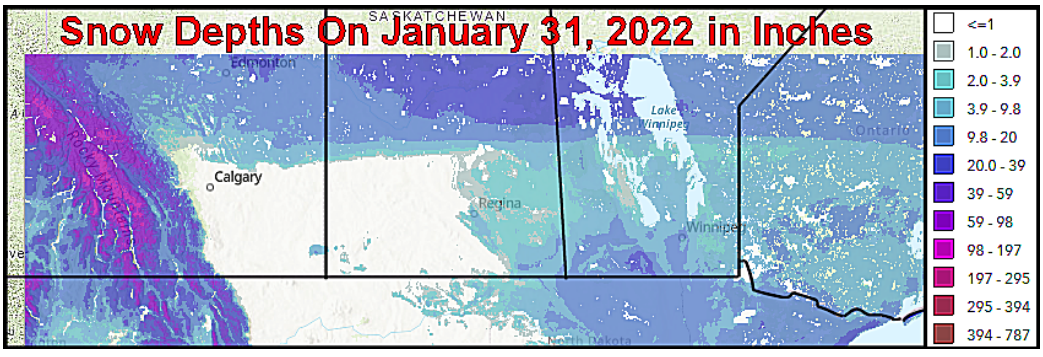
At the rate this winter is moving along there will be very little snow to melt into the spring leaving some grave concerns over planting moisture in the dry areas of the southwest. The outlook for the next two months does not offer any serious change to the situation. There is some potential March will be more active than expected, but for now the forecast is not supporting much serious moisture. That will leave it up to April for getting enough moisture for planting in the driest areas.

In contrast, frequent snowfall and good moisture potential is present in northern and western Alberta, northern and eastern Saskatchewan and across much of Manitoba. Even though the Drought Monitor is still showing drought there has been enough moisture in most of these areas to get a good start on spring.

Some of the northern and eastern Prairies will experience additional precipitation over the next few weeks maintaining some significant snow depths and leaving the spring planting outlook favorably moist with perhaps a little concern for a slow planting season because of the moisture abundance. That comment may be a bit of a reach for now, but it will be closely examined over the next few weeks.

Confidence is still high, though that weather in the drought stricken areas of the Prairies will improve during 2022. There is still some concern about when rain is going to fall and whether it will be timely enough to support field operations in the southwest and central parts of the Prairies.

World Weather, Inc. believes some planting moisture will be available, but the greatest rain will occur from May to August.

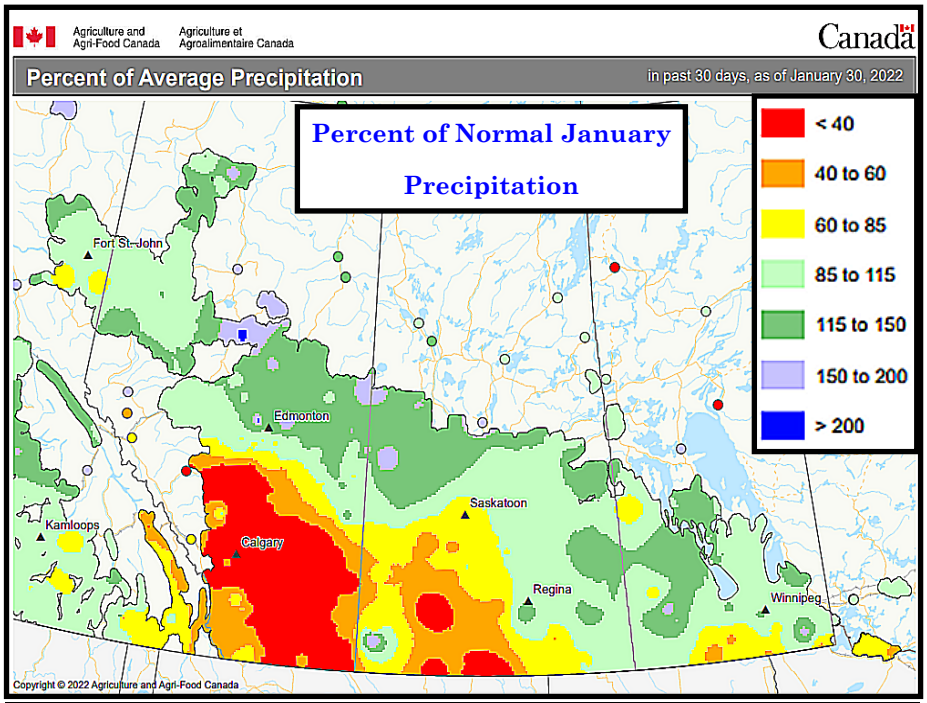


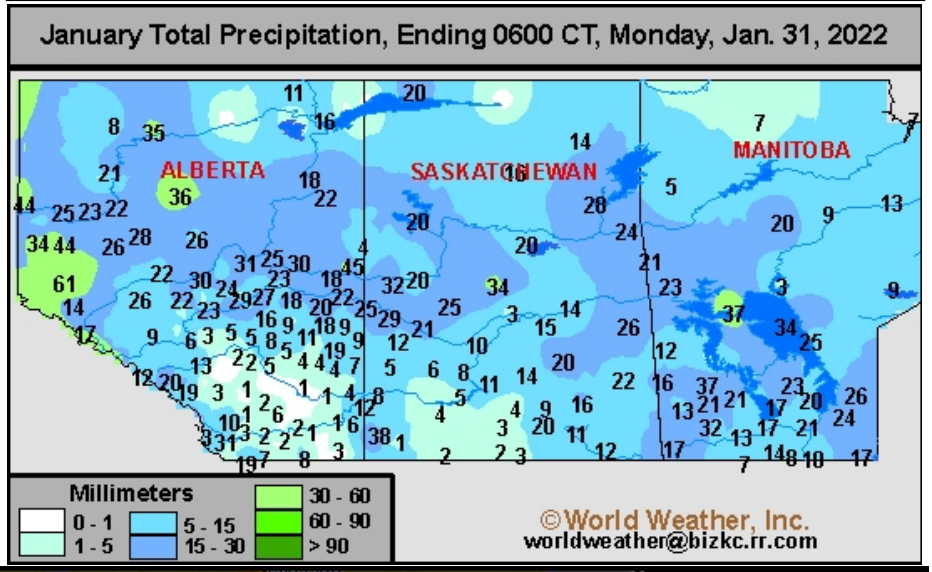
Drought Still Locked into Central, SW (continued from page 1)

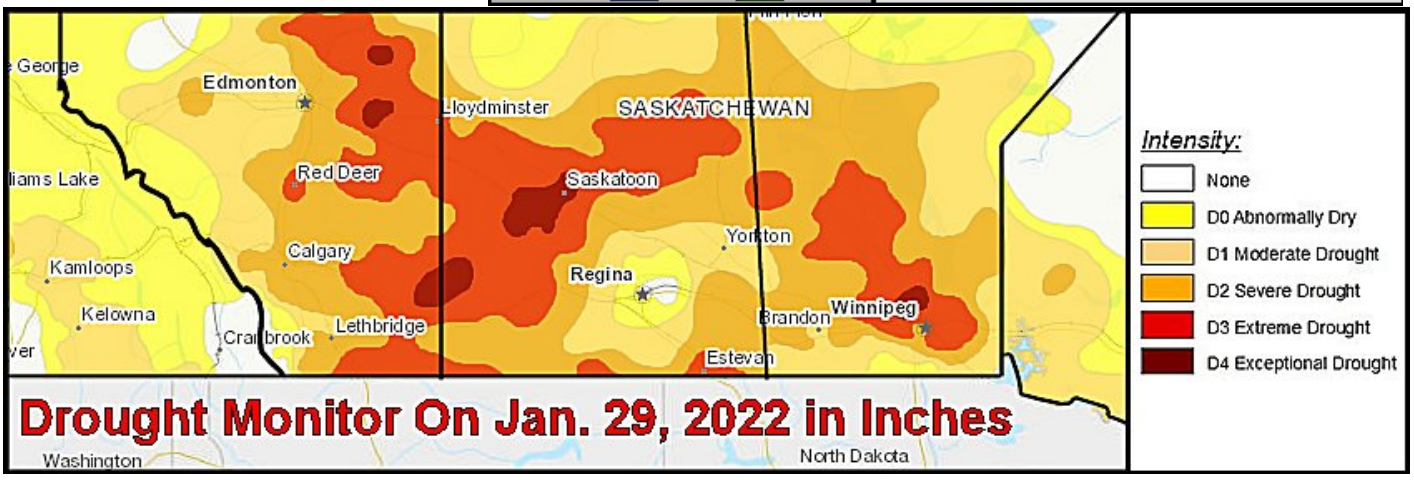
Moisture that fell last autumn was a big help in easing long term dryness in portions of the eastern Prairies, but the latest Drought Monitor still has many areas in the Prairies running notable moisture deficits. That is what happens when drought prevails for 3-5 years. The Regina to Yorkton area was one region that experienced the greatest improvement in soil moisture last autumn and another was in far southern Manitoba. Relief has also occurred in western Alberta, but that region was never as dry as other parts of the Prairies.

A full restoration of normal soil moisture is not necessary this year to support normal crop development, but the driest areas in the central and southwest must have some routinely occurring precipitation to ensure a good planting season and normal crop development throughout the growing season.

Areas from Coronach through Moose Jaw to Saskatoon and west ward to Coronation and to just east of Calgary southward to areas east of Cardston along the U.S. border have the greatest need for immediate moisture in the spring. The exception is in far southwestern Saskatchewan where there was a small pocket of greater moisture. Getting a moisture boost now would not help the drought because of frost in the ground. Getting the moisture after the spring thaw will be critical in supporting this year's planting.







February Weather Will Be Similar To January

Alternating periods of cold and warm weather will occur during February. The cold air masses will outweigh the warmer days and the month will end cooler than usual - like that of January. There is some potential that the warmer weather that occurs in the second week of the month and that which evolves in late February will be greater than expected so there is at least some hope of periodic breaks from the cold.

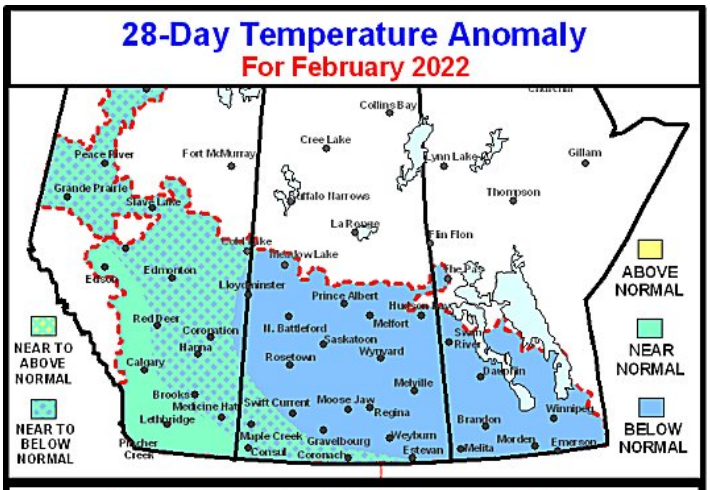
February precipitation will be greater than usual across the northern and eastern most Prairies as well as in the far southwestern corner of Alberta. Below average precipitation will continue in the drought ridden areas of east-central and southeastern Alberta and central through west-central and southwestern Saskatchewan. These drier biased areas may not be completely void of precipitation, but that which occurs will not offer a serious change in drought status. Near normal precipitation is expected in most other areas.

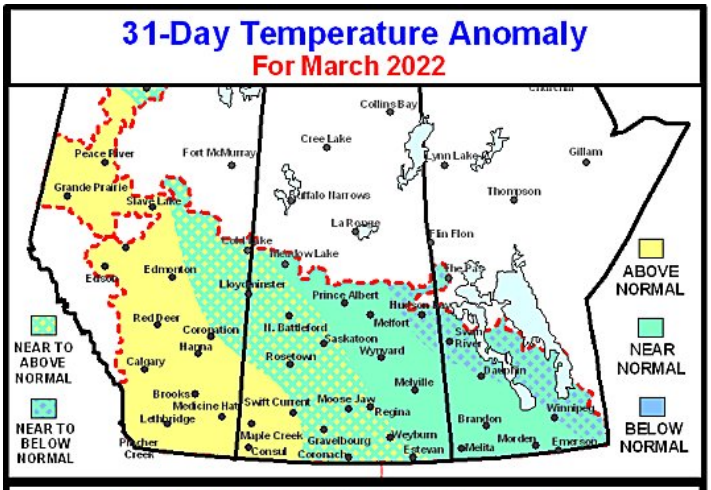
March is a month that still has potential to warm up, but if it does a ridge of high pressure may anchor over the west half of the Prairies resulting in a notable suppression of precipitation. Confidence in the March outlook is low for now because there is still some potential that the atmosphere will be stuck in February's pattern for a longer than expected period of time. The odds are actually relatively good that an updated forecast tilted toward colder biased conditions may be needed for March.

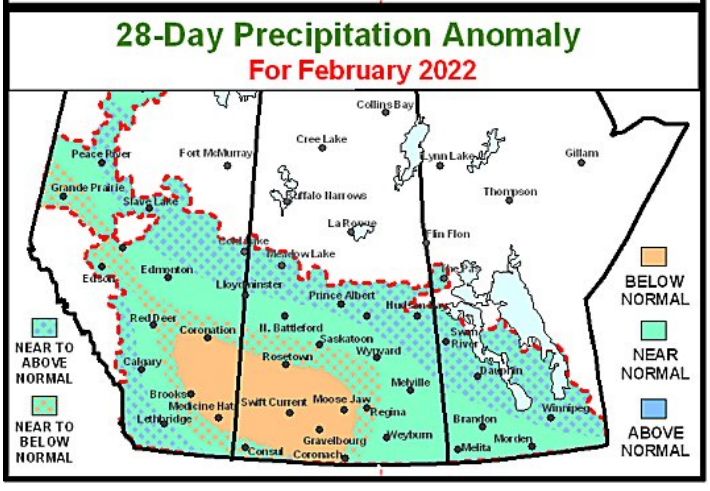
March precipitation will still not be great enough to seriously change the moisture profile in areas that need it most. There is potential that March could be wetter than advertised here, but with La Nina and the negative Phase of Pacific Decadal Oscillation prevailing it will be very hard to get a tremendous amount of moisture to fall across the region.

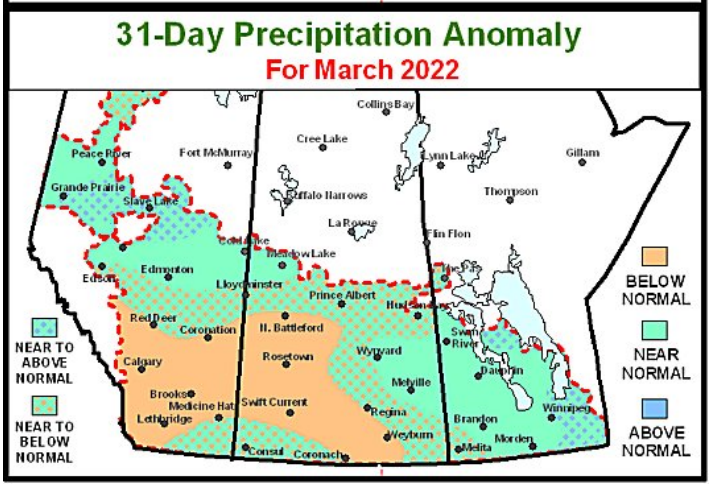
The outlook for March will need to be closely monitored. However, with frost in the ground it is unlikely that any amount of moisture that falls in February or March will get very far into the soil. The only hope for the driest areas is that because the ground was so dry last autumn that when it froze there was not enough moisture in the ground to produce much frost and that could actually improve the potential for melting snow and rain to reach into the soil a little faster once it does warm up.

February and March weather will maintain moisture abundance in the northern and western parts of the Prairies and in Manitoba.

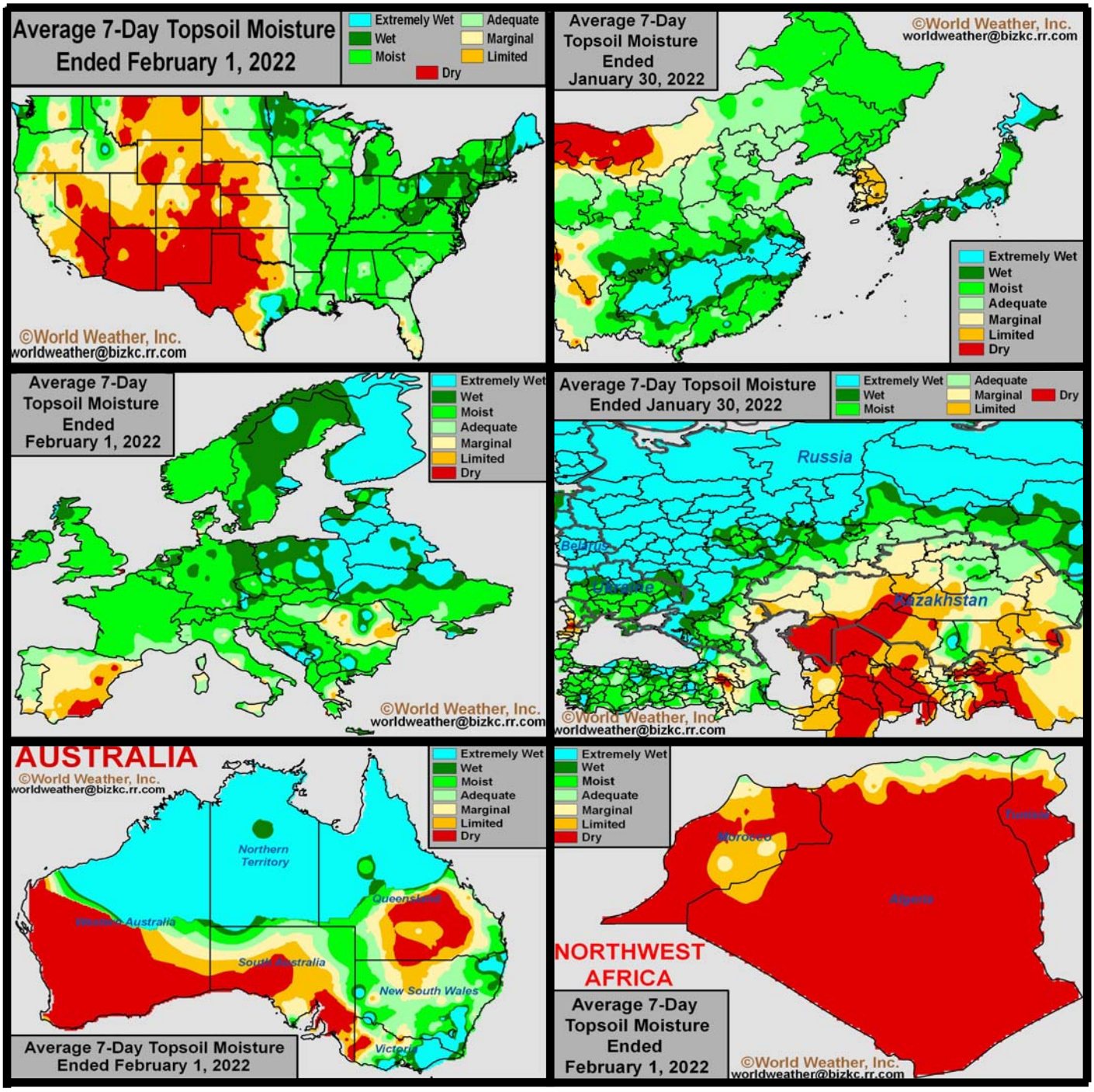








Selected Weather Images From Around The World



North Africa durum wheat and barley production areas need rain. Crops have been semi-dormant, but warming later this month will attempt to stimulate crop development, but significant rain is needed before much growth can occur. Southwestern and far northeastern Morocco and northwestern Algeria are driest. Queensland, Australia is still too dry for livestock and unirrigated sorghum and cotton areas, but rain the remainder of this week will bring some relief. Russia, Ukraine, Europe and China crop weather this winter has been fine with no winterkill suspected and no threats of winterkill. Snow cover is widespread in eastern most Europe, Russia and much of Ukraine and frequent precipitation will continue through Feb. 10. U.S. dryness in the Great Plains is still a concern just as it is in the southwestern Canada Prairies. Substantial relief is unlikely and U.S. soil moisture should not change much through March. India's winter crops are beginning to reproduce and a little rain this month would be welcome.

Spring, Summer Prairies Outlook Mostly Unchanged

Confidence in the spring and summer outlook has increased since we first published the maps in early December. Spring will generate enough precipitation across the Prairies to support planting and early crop development. However, some areas that have been in drought for the past five years will not get enough moisture to support crops for very long without frequent follow up rain.

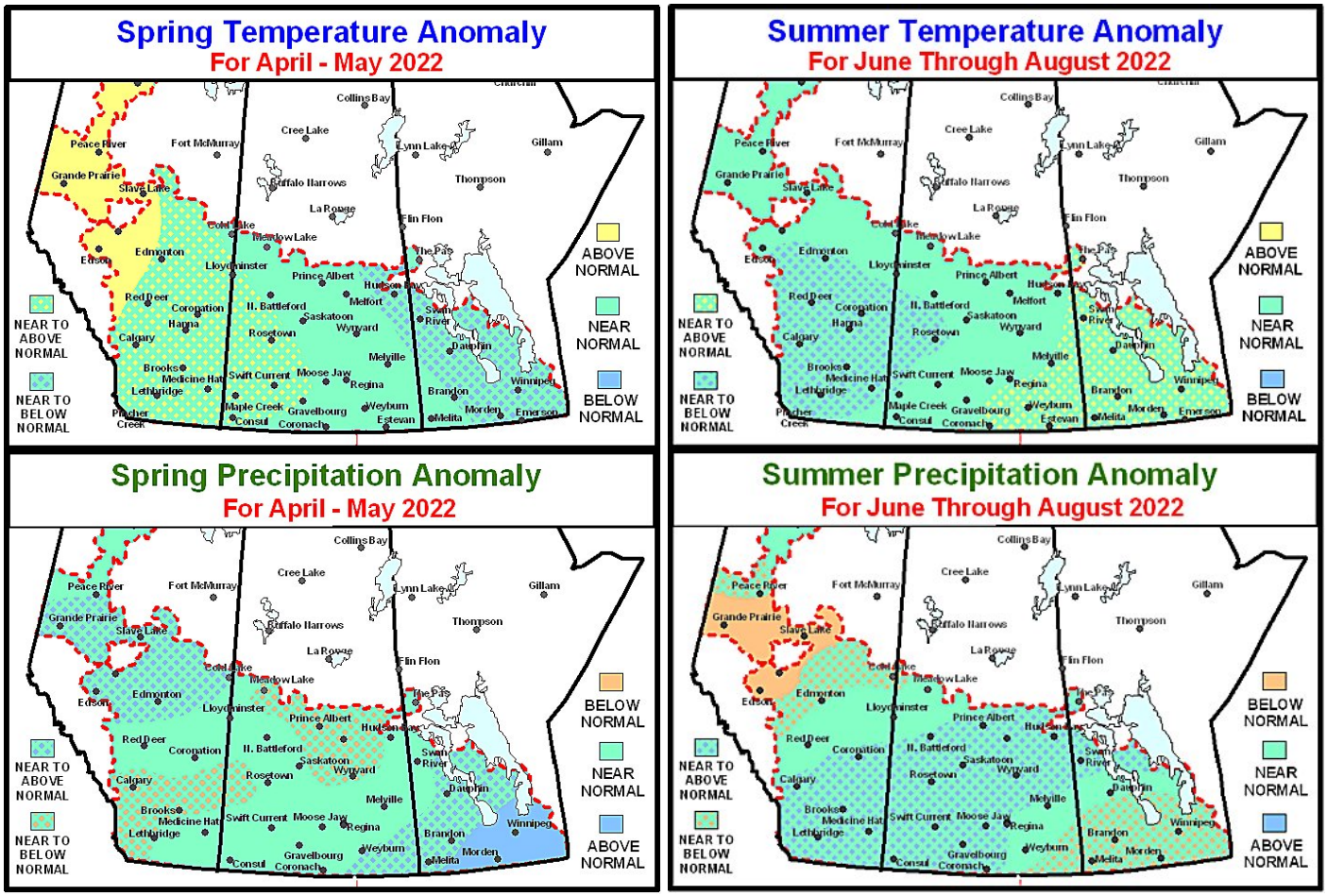
World Weather, Inc. believes that frequent precipitation will eventually occur, although initial rainfall in the spring may be slow in coming and that could raise much worry over the fate of this year's crops. The worst case scenario would delay rainfall in the driest areas of the region until the second half of May, but rain should be falling by that time. We believe it will occur sooner than that, but once it gets started it should gradually occur more frequently.

May will be the first month in which North America's high pressure ridge should be relocating into the central Plains of the United States. That shift to the east will set the stage for a more active weather pattern to begin. Storms coming through the U.S. Pacific Northwest will reach into Montana and march across the Prairies from southwest to northeast during the summer months.

The precipitation increasing will be a slow process initially, but once it gets going it could become significantly wet across portions of the central and southwestern Prairies. Much of the distribution of summer rainfall will be determined by the high pressure ridge positions in the United States and its amplitude.

World Weather, Inc. expects the ridge to set up in the heart of the U.S. Plains and extend north into southern most Manitoba and southeastern Saskatchewan. That could lead to late summer dryness in both areas, but frequent showers and thunderstorms would likely move over the top of the ridge while continuing to originate in the southwestern Prairies.

Be aware that many prolonged droughts will breakdown with some excessive precipitation and that might evolve this summer. That is not the official forecast—at least not yet, but if the U.S. ridge is located in the eastern Plains and western Corn Belt it will drive greater than usual amounts of moisture northward into the Prairies from Mexico through the southwest monsoon flow. That moisture feed in conjunction with storm systems coming inland through the northwestern U.S. and eventually into the Prairies could result in frequent rainfall and some of it might be heavy.



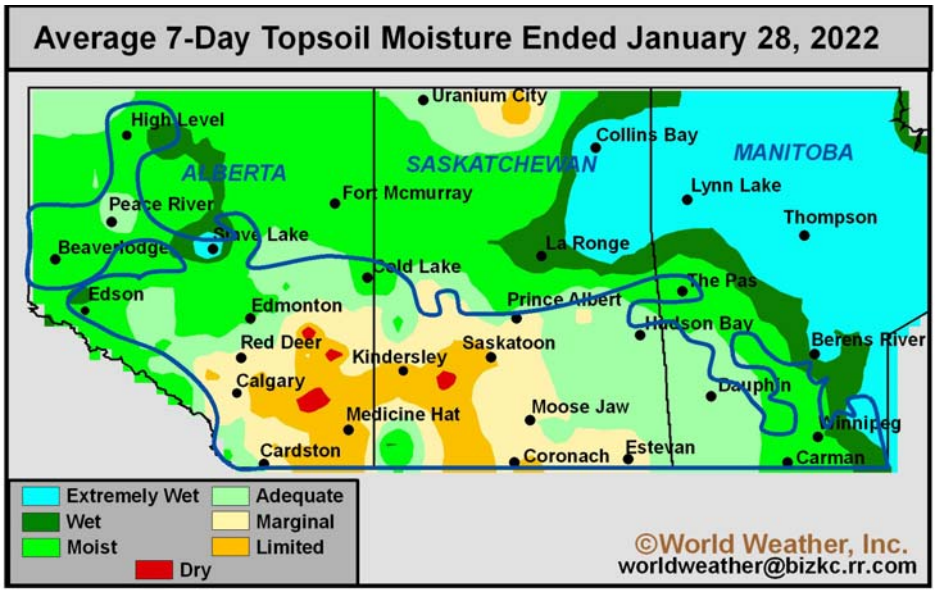
Prairies Moisture Varies From Critically Short To Adequate

Soil moisture across the Prairies contrasts from critically low in east-central and southern Alberta into much of central and southwestern Saskatchewan. Moisture in the remainder of the Prairies is rated mostly adequately.

The drought in central and southwestern parts of the region still extends southward through most of the western United States. There has been some partial relief to drought in California and the intermountain west, but some expansion of dryness has occurred into the Great Plains raising concern over U.S. hard red winter wheat conditions.

The drought south of our border will make it difficult for significant rain to evolve initially this spring because of prevailing La Nina conditions and the strong likelihood that a ridge over western North America will linger at least through March and probably into April.

Seasonal weather changes in April and May will shift the ridge of high pressure to the east and that will open the door for moisture to feed into the Prairies. Before all of that happens, there is some potential that dry soil in a part of the Prairie will actually worsen for a little while before that shift in the high pressure ridge occurs. Much patience will be needed this spring until all of the necessary changes take place, but confidence is still good that the drought will be eased.



Brazil Flood Potential Stays High In Center South

Abundant to excessive rain in recent days caused flooding in portions of Sao Paulo and Minas Gerais and with frequent precipitation expected to continue (some of it heavy) the potential for more flooding is high. Soybean maturation and harvesting will likely be sluggish and some damage or losses will be possible. Early season Safrinha corn planting may also be delayed due to the sluggish soybean harvest and frequent rain. In the meantime, far southern Brazil will receive enough rain to temporarily improve soil moisture. The rain will be too late for some soybeans and first-season corn, though Safrinha corn prospects may improve. The remaining production areas in Brazil will also see a mix of rain and sunshine this week that may impact soybean maturation and harvesting.

Rainfall varied significantly across Brazil's main crop production areas during the past week. The heart of Mato Grosso, central portions of Goias, southern Minas Gerais, and northern and eastern Sao Paulo received 3.25 to 5.24 inches with a local total of 6.77 inches along the Sao Paulo/Minas Gerais border for the seven-day period ending this morning. Many areas in southern Bahia also received 2.36 to 6.54 inches of rain. Mato Grosso do Sul, Parana, and most other areas in Sao Paulo and Goias received 1.18 to 2.83 inches of moisture while Rio Grande do Sul, Santa Catarina and most other areas in Minas Gerais received 0.28 to 1.85 inches of moisture.

Western sections of Rio Grande do Sul, Santa Catarina, and Parana into southern and western Mato Grosso do Sul still experienced warmer than normal temperatures last week before rain evolved. These areas saw highest temperatures ranging from 90 to 110 degrees Fahrenheit. Highest temperatures elsewhere in Brazil were in 80s and 90s.

Many areas in western Rio Grande do Sul still have short to critically short soil moisture despite some recent rainfall. Pockets in eastern Minas Gerais and Espirito Santo also have marginally adequate to short topsoil moisture while subsoil moisture was rated more favorably. Soil moisture in most other areas in Brazil was rated adequate to excessive. Flooding was noted in the wetter areas of Sao Paulo in recent days and suspected in Minas Gerais and central Goias. The extent of the flooding was not fully known, though some crop and structural damage was reported.

As of January 28, soybean harvesting in Brazil was 11.3% done up 6.3 percentage points from the previ-

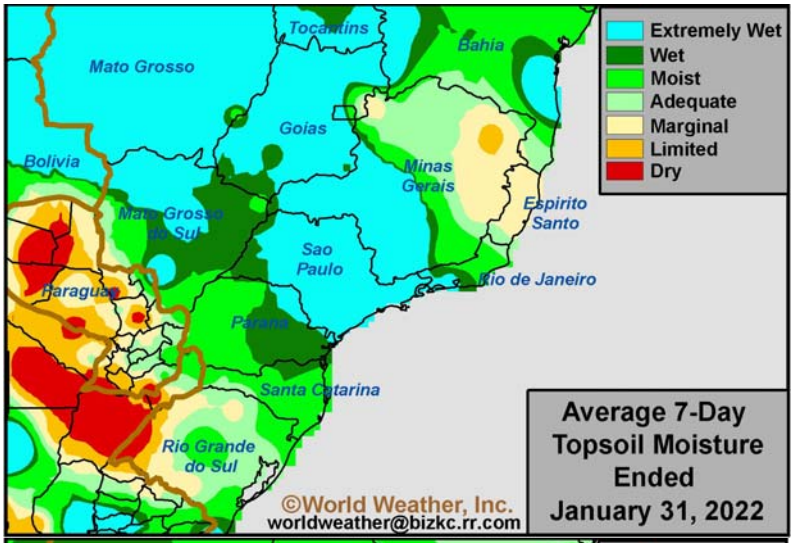
Brazil Flood Potential High In Center South (Continued From Page 6)

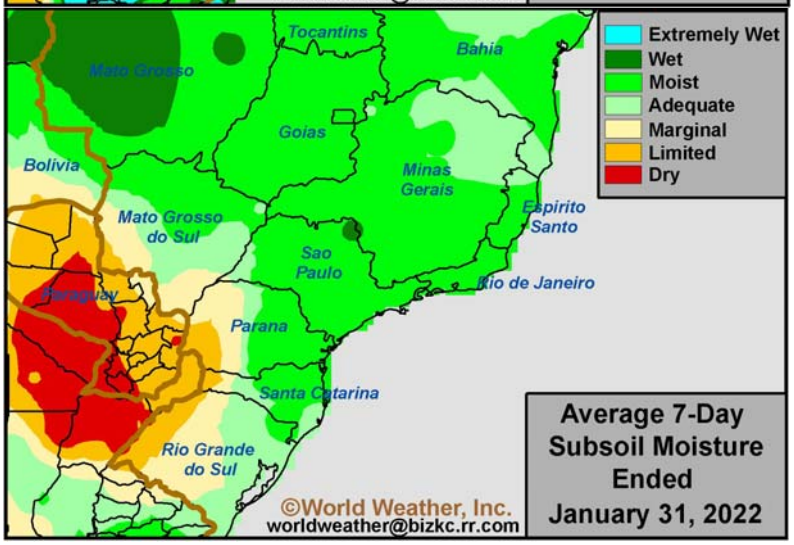
ous week. Heavy rain may have slowed or delayed soybean harvesting in Sao Paulo, Minas Gerais, Mato Grosso, and Bahia. Producers in other production areas had opportunities to get into the fields despite rain.

Many analysts and crop forecasters continue to lower production of soybeans and first season corn in Brazil along with rice. Drought significantly reduced production potentials in western Parana, southwestern Mato Grosso do Sul, portions of Rio Grande do Sul, western Santa Catarina and neighboring areas of Paraguay. Wet weather has also contributed to some decline in production as well as crop quality in portions of Sao Paulo, Minas Gerais, Bahia, and Goias. Drier weather is needed in coming weeks to support a good environment for aggressive maturation and harvesting.

Safrinha corn prospects are good for portions of southern Brazil and Mato Grosso do Sul in recent weeks due to an uptick in rain. Moisture shortages are still prevalent for several of these locations and additional rain would be welcome as planting becomes more widespread in coming weeks after the soybeans are out of the ground. The remainder of Brazil will have plenty of moisture to support Safrinha corn planting.

Rain will affect all of Brazil's crop areas during the next two weeks. Rainfall in this first week of the outlook will be greatest in Minas Gerais, Sao Paulo, Rio de Janeiro, Espirito Santo, and portions of Goias and southern Bahia where 2.00 to 6.00 inches are expected by next Monday. Locally greater rainfall is expected in Minas Gerais and Rio de Janeiro where flooding is possible and some rain totals will reach over 8.00 inches. Flood potentials will either increase or remain high for these locations. Crop and personal property damage will be a significant concern. Harvesting, maturation, and general fieldwork will likely be slow because of the wet conditions and some quality declines are possible in the wettest locations. The continued wet weather will also influence the speed in which Safrinha corn planting advances.





The remaining production areas in Brazil will see a good mix of rain and sunshine this week. Moisture totals by next Monday morning will range from 0.75 to 3.00 inches with locally more in Mato Grosso and Mato Grosso do Sul. Soil moisture will remain at adequate to excessive levels through the end of next week. Soybean harvesting may be sluggish during periods of wetter weather, though most producers will have opportunities to get into the fields. Early season Safrinha corn planting prospects will be good in southern Brazil and Mato Grosso do Sul, but these locations will need additional rain to support favorable long-term corn prospects.

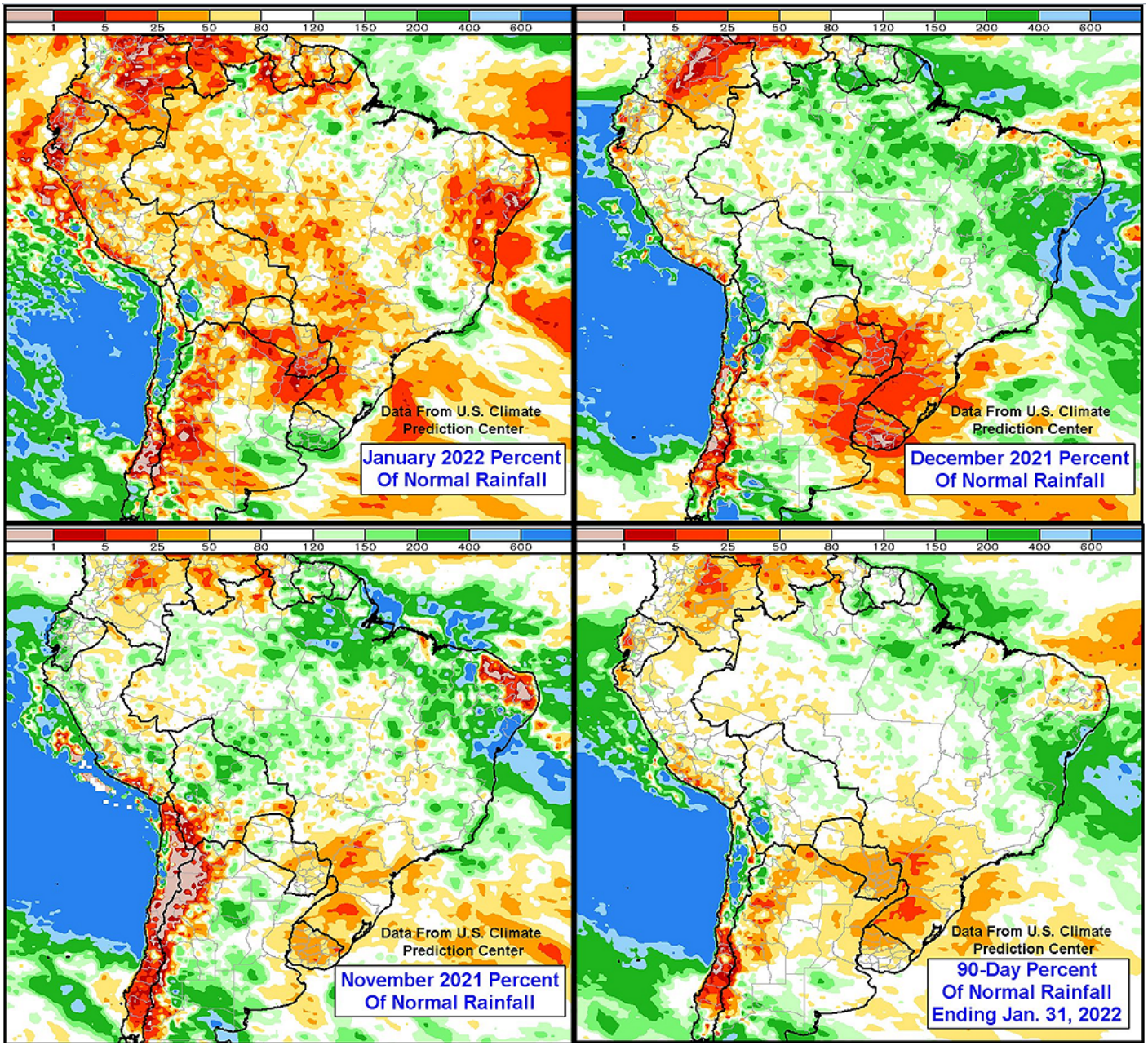
Coffee, citrus and sugarcane areas will be plenty wet if not a little too wet at times over the next couple of weeks. Coffee and citrus should not be seriously impacted by this environment for a while, but sugarcane development may be slowed by the excess moisture.

Impressive Dryness in South America Hurts Production

Drought in South America has brought Brazil soybean production forecasts down from between 138.8 and 144 million metric tons in the fourth quarter of 2021 down to between 134 and 140 million metric tons in early January. Some wild forecasts of production below 130 million tons have been suggested by some forecasters in recent weeks.

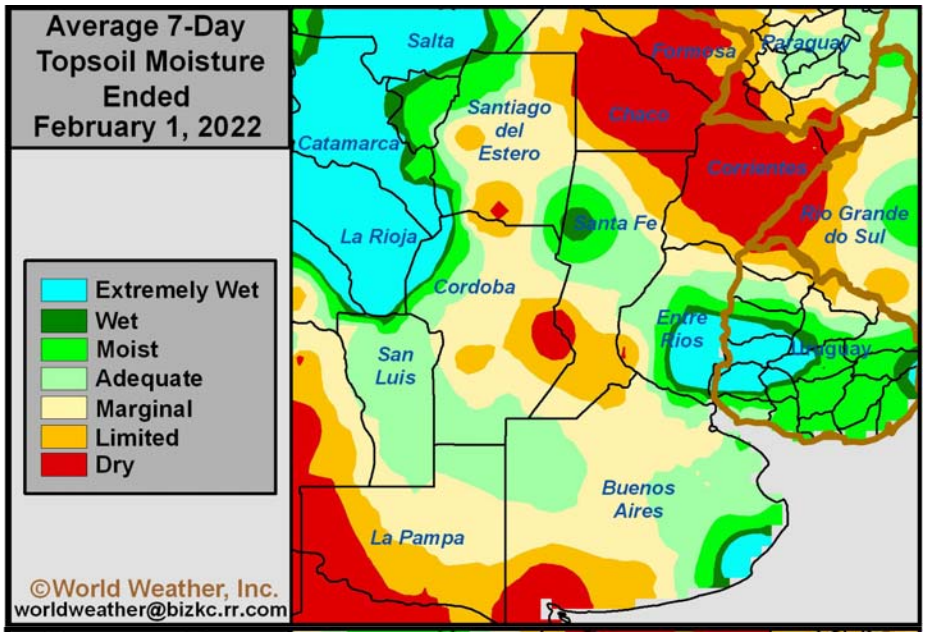
Corn production estimates have also fallen, although Brazil's early corn only represents 25% of the total crop. The Safrinha crop is being planted now and it will account for 75% of the total production and weather conditions will be better for that crop.

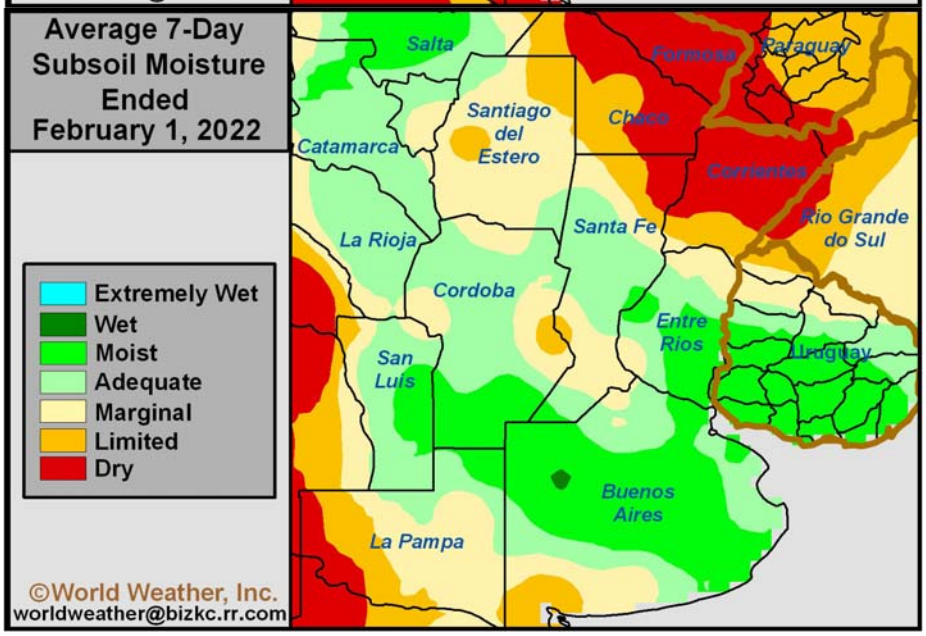
Argentina corn production was also slashed by a number of services with estimates varying from 51 to 54 million tons. Its soybean crop was down too with some estimates of 43-50 million tons down from numbers above 50. Argentina production could still improve with greater rain this month.



Argentina Back Into A Drying Pattern

Drier weather returned to Argentina during the last week of January after widespread significant rain fell in the two previous weeks. There was still some sporadic rainfall that limited drying, but many coarse grain and oilseed areas began to dry down while crop conditions were still improving from the previous rainfall.





A large part of Argentina will experience less frequent and less significant rain, but showers Wednesday through Friday and those that linger in Buenos Aires Saturday will slow the drying rate. Just enough rain will fall to keep crop conditions favorable. Next week's weather will be driest as a weak high pressure ridge evolves. The ridge will lead to some accelerated drying with no precipitation and warmer than usual temperatures evolving for most of the nation. That will place much importance on rain that is advertised after Feb. 15. Some crop areas will become a little too dry during the dry and warm period.

Chaco, Formosa, and Corrientes still have short to critically short soil moisture due to the lack of significant rain and warm to hot weather during the past month. Southern Santa Fe and eastern Cordoba also dried enough in recent days to firm the ground and for a few locations the ground is quickly becoming too dry once again. The remaining production areas in Argentina generally have adequate to marginally adequate soil moisture.

Cotton and the small amount of grains and oilseeds produced in northern Argentina continue to suffer from prolonged dryness and hot weather. Production in these areas will likely be down compared to normal this season even if some rain evolves in the coming weeks as is expected. In the meantime, crop conditions in the main coarse grain and oilseed areas of central and southern Argentina are still much better compared to earlier in January. Dryness is still a concern, most notably for the areas in central Argentina that dried down during the past few days. Crop conditions have improved following recent rain, but more dry and warm weather expected for at least a week beginning this weekend will bring back crop moisture and heat stress raising worry over late season crops as they approach reproduction.

Argentina Back Into A Drying Pattern (continued from page 9)

Rainfall will again vary across Argentina during the coming week. Northern Argentina will receive much-needed rain Thursday into this weekend as two disturbances advance over the Prairies. Chaco, Formosa, and Corrientes will receive 0.75 to 3.00 inches of rain with locally more by next Tuesday morning. Buenos Aires, La Pampa, and immediate neighboring areas will also see a mix of rain and sunshine. Much of the rain for these areas will evolve Wednesday into Saturday. Moisture totals by next Tuesday morning will range from 0.50 to 2.00 inches with local totals to 3.00 inches and possibly a little more. The remaining production areas in Argentina will receive 0.20 to 0.75 inch. Much of the rain in central Argentina will be a little too sporadic and light to improve topsoil moisture for more than a day or two, but the moisture will slow drying rates for a little while and that will conserve soil moisture.

Hot weather will persist in northern Argentina today and Wednesday before cooler air reaches the region with the showers and thunderstorms late this week and into the weekend. High temperatures through Wednesday will peak from 90 to 110 degrees before cooling to the 80s and 90s later in the forecast period. Pockets in central Argentina may warm to near or above 100 degrees today as well. However, central and southern Argentina will see highs in the 80s and 90s with pockets in the 70s.

Warm weather and a lack of rain will promote net drying in Cordoba, Santa Fe, Entre Rios, and Santiago del Estero through early next week. Many fields will have enough moisture to maintain good crop development during the coming week, but once the drier and warmer weather evolves next week crop conditions may begin to deteriorate at a faster pace. The situation may slowly become dire for some crops with poor subsoil moisture in coming weeks and crops may again be notably strained. Concern over potential production declines will increase once again for those driest areas.

Buenos Aires and La Pampa will receive enough rain during the coming week to maintain mostly favorable crop conditions. Drier weather will be possible February 9-15, though there will be enough moisture to maintain generally favorable development for several days.

Rain in northern Argentina will be welcome, but some of it may fall too late to seriously improve crop yield potentials. Cotton will respond best to the expected rainfall.