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The Canadian Agriculture Weather Prognosticator

Volume VI, Issue X | http://www.worldweather.cc | October 1, 2014

Canada Crop Weather Issues At A Glance

- Quebec and northeastern crop areas of SE Ontario were drier than usual in September favoring corn and soybean maturation
- Southern parts of SE Ontario were wetter biased like most of the southern Prairies

WORLD WEATHER ISSUES

- Southern Australia Crops Are In Mostly Good Shape; South Australia Needs Rain
- China's Weather In September Was Much Wetter Than Usual Resulting In Delays To Crop Maturation, Harvesting And Winter Wheat Planting
- China Weather Will Trend Much Drier The Next Two Weeks
- Freezes Occurred In NE China This Week, But No Serious Damage Resulted Other Than Some Crop Quality Issues
- India's Monsoon Has Withdrawn From Much Of The Nation; Crops Are In Good Condition
- Eastern Europe, Western Russia And Ukraine Will Be Mostly Dry For Ten Days Favoring Fieldwork
- Recent Rain In Eastern Ukraine And SW Russia Improved Wheat Planting Conditions
- U.S. Harvest Progresses Well

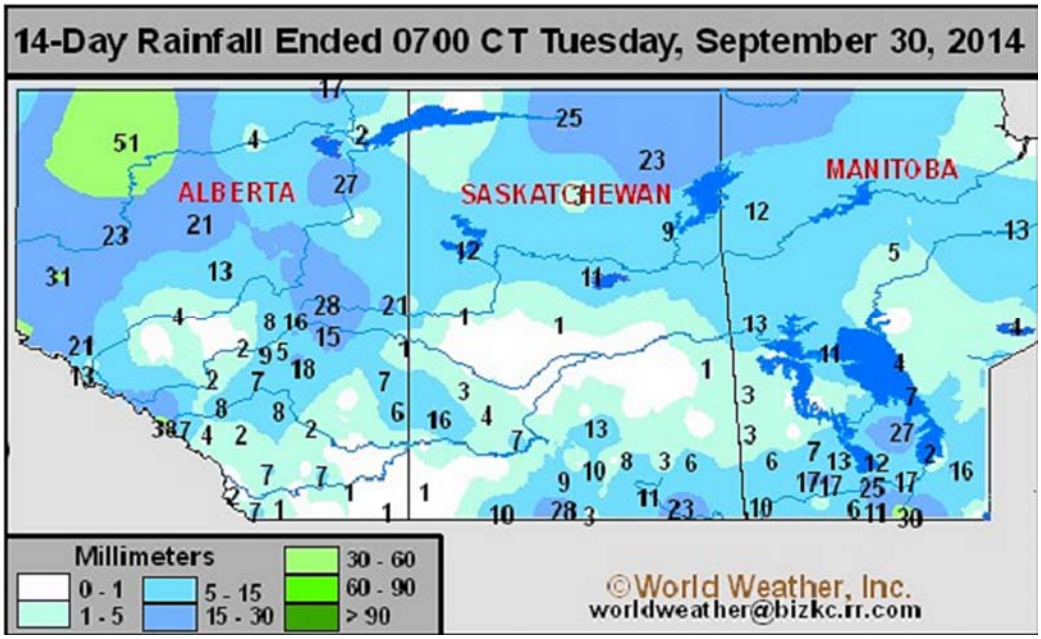
October Will Treat The Prairies Fairly

The last two weeks of September brought on some of the best harvest conditions of the season. A large part of northern, central and southwestern Saskatchewan, central and southern Alberta and a few northern crop areas in Manitoba received little to no rain. The drier bias also occurred along with much warmer than usual temperatures resulting in quick drying conditions and a sudden uptick in field progress.

Not all of the Prairies were enjoying the same level of improvement in late September. Many of water logged areas in central and eastern parts of the Prairies were still dealing with boggy fields. Rain that fell in eastern Saskatchewan the past two days (Sep. 30-Oct 1) induced a setback to the improving conditions for quite a few areas. Two-day rain totals reached up to 30 millimeters in a part of interior eastern Saskatchewan which was way too much for some areas and it will be a while before fieldwork can advanced aggressively again.

This week's rain and that which occurred in far western and some central Alberta locations favorably lifted soil moisture for some areas. Parts of Alberta were becoming a little too dry again and the rain proved to be timely for winter crops and for assuring winter will begin with a favorable amount of topsoil moisture in at least some areas.

Southern portions of Manitoba also reported a little more rain than the central and southwestern parts of the Prairies in late September and fieldwork was not moving along quite as fast either. October will become a critical month for harvesting and early indications suggest that weather conditions should prove favorable—at least from a precipitation perspective. There will be some bouts



October Will Treat The Prairies Fairly (continued from page 1)

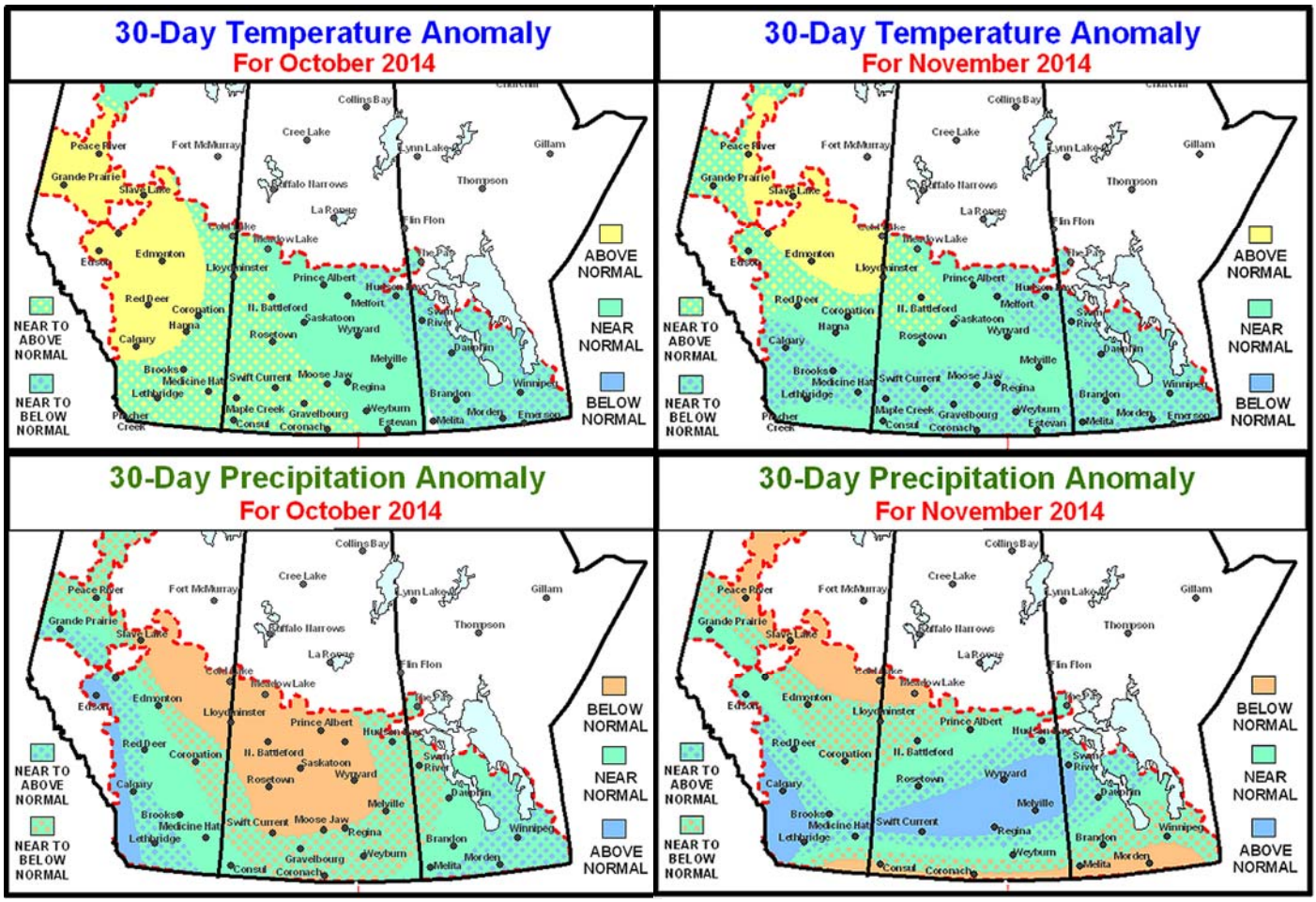
of cold weather, however, and that may slow drying rates.

Autumn and winter will be controlled by three weather patterns and each will reinforce the other for the most part. The patterns include the negative phase of Arctic Oscillation (at least during the Autumn), El Nino-like conditions and the 18-year cycle. A full blown El Nino event is not expected and because of that the traditional El Nino experience during the autumn may not be achieved without influence from the other two patterns. With that said, the 18-year pattern provides a similar solution to the upper air flow pattern (jet stream) as that of the El Nino-like pattern. Both patterns will produce a ridge of high pressure over western Canada—mostly British Columbia and Alberta while a deep trough of low pressure prevails in eastern Canada. These two features will create a northwest flow pattern aloft and if El Nino evolves there may be some warmer than usual temperatures in the western half of the Prairies.

Arctic Oscillation will complicate the temperature outlook. The negative phase of Arctic Oscillation (AO) usually creates colder than usual biased conditions from the heart of the Prairies into the U.S. Great Plains and Midwest. Negative AO with El Nino like conditions will place the coldest air a little further to the east relative to normal leaving Alberta and much of Saskatchewan in a warmer biased pattern especially in October and to a lesser degree in November.

All three of these weather features will discount precipitation events. There will still be rain and snow events, but they may not have the intensity that they would otherwise have especially once the El Nino like conditions evolve which may be late this autumn. The reduced precipitation bias and warmer temperatures could bring some favorable harvest conditions to the region. With all of that said, there is potential that a strongly negative AO might cause it to be colder in many areas and a little wetter along the front range of the Rocky Mountains and periodically in the southern Prairies.

November weather is probably a little more confusing and confidence in the outlook is low for right now. The primary reason for the low confidence is due to the 18-year cycle analog years suggesting a more frequent precipitation pattern may evolve leaving a swath of wetter biased conditions in southwestern Alberta and in the heart of Saskatchewan to northwestern Manitoba. Two out of the three analog years are wet while the third is, of course, drier biased.



Winter Outlook Not Too Wild - Similar To Autumn

The preliminary winter weather outlook is quite warm in the western Prairies. The warmer biased conditions come from a dominating ridge of high pressure that is expected to be prevailing over western North America. This ridge feature is quite impressive on the 18-year cycle charts and it is expected to act as a blocking weather pattern for British Columbia and a part of the U.S. Pacific Northwest.

If the ridge dominates as suggested some of the western areas under the influence of the ridge may come into spring a little dry. This will be more true for central and southern British Columbia and western and northern portions of Alberta, as well as Washington and Oregon. A dry winter for parts of the western Prairies might raise some issues for spring and summer crop moisture, especially if the dry and warm bias begins early enough this autumn to dry down the soil prior to the soil freezing up.

There are a few pockets in Alberta and western Saskatchewan that are already running a little dry today and those areas will be closely monitoring rain and snowfall in the next few weeks to better determine spring moisture potentials.

World Weather, Inc. has only scratched the surface of the 2015 growing season outlook, but there is potential for it start out warm and drier biased in the west and then give way to timely showers and a mild summer. But, that is mere speculation for now until the research is complete.

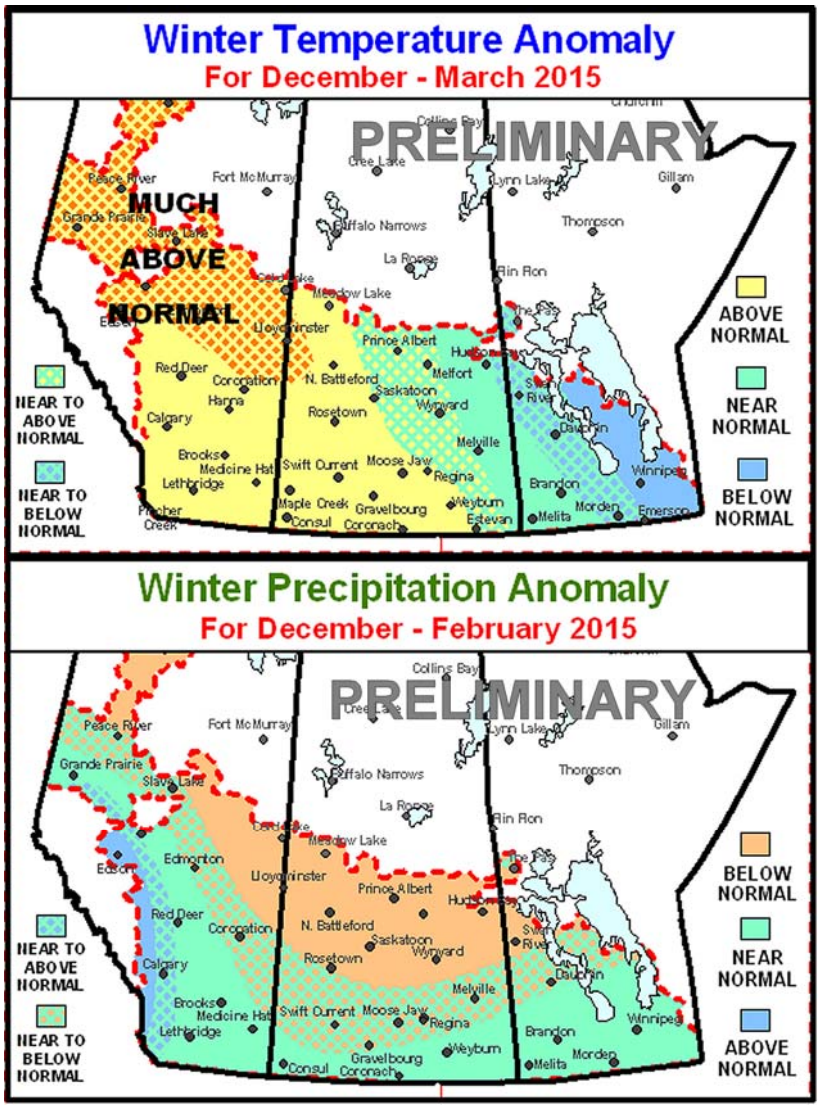
In the meantime, the ridge of high pressure in western North America will create a northwesterly flow aloft that will carry some bitter cold into eastern Canada. Ontario and Quebec will be dealing with high energy costs to heat homes and businesses and there may be a few significant snow events there, as well.

Precipitation in the Prairies will be below average in the northern and central sections of Saskatchewan, as well as northern portions of the Peace River Region and northwestern Manitoba. Some of southwestern Alberta's front range region of the Rocky Mountains will be wetter than usual and a more normal precipitation pattern will occur across portions of the southern Prairies.

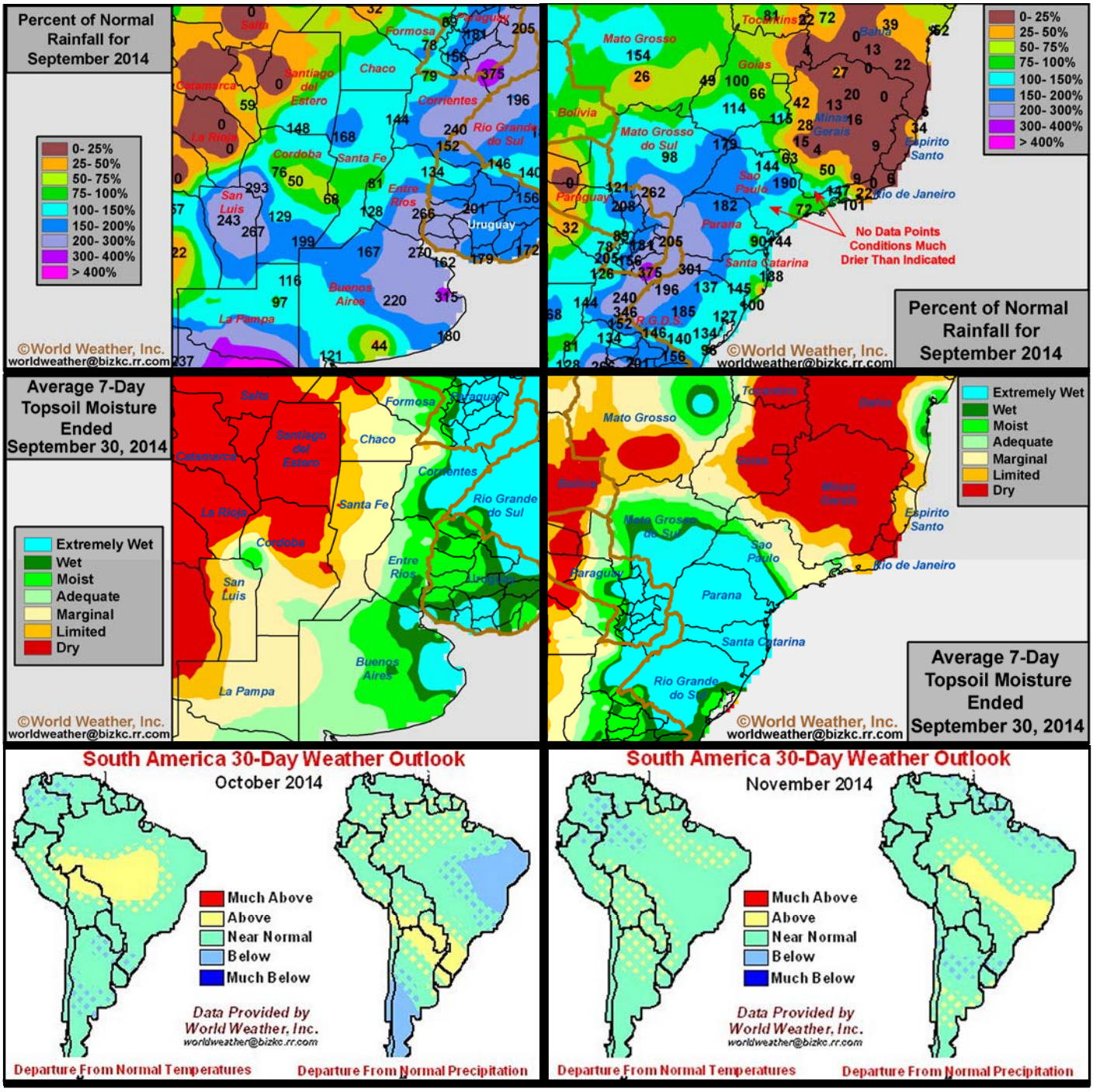
The precipitation outlook will help reduce fears of serious spring flooding in the southeastern Prairies where excessive rain fell in the late summer and early part of autumn. The ground must dry down this autumn and winter or flood potentials in the spring could be as serious as those of 2010. That is not the official forecast, but that will certainly be the most talked about issue for a while in the various coffee shops throughout those areas.

Some of the cold weather in eastern Canada will back into a part of the eastern Prairies at times this winter. Some of our Trend Model work has identified some very potent surges of cold that will impact eastern Saskatchewan, Manitoba and Ontario periodically during the winter months. The good news is that most of the cold surges will be of relatively short duration preventing the Prairies from suffering another prolonged bitter cold winter like that of last year.

The temperature trend will largely be determined by Arctic Oscillation and that is expected to be in its cold phase, but at the same time the 18-year cycle and El Nino like conditions will generate a warm bias.



South America Pre-Planting Conditions In Pictures



October will perpetuate wet weather conditions in southern Brazil and a part of eastern Argentina, as well as Uruguay and Paraguay. Seasonal rain may be a little slow starting in northern Brazil and it may be a little erratic to begin with, but improved rainfall is expected in late October and November.

Southwestern Argentina will be drier biased in October while temperatures are seasonable to slightly cooler biased. The environment should bring some improvement to the dryness situation that is prevailing in western crop areas today. A storm this weekend and another next week should bring soil moisture up significantly in Argentina to support corn, sunseed and peanut planting while improving wheat conditions.

November will be much wetter in center west and center south Brazil, drier in central Argentina and wetter in far southern Argentina. The planting and early growth outlook is good.

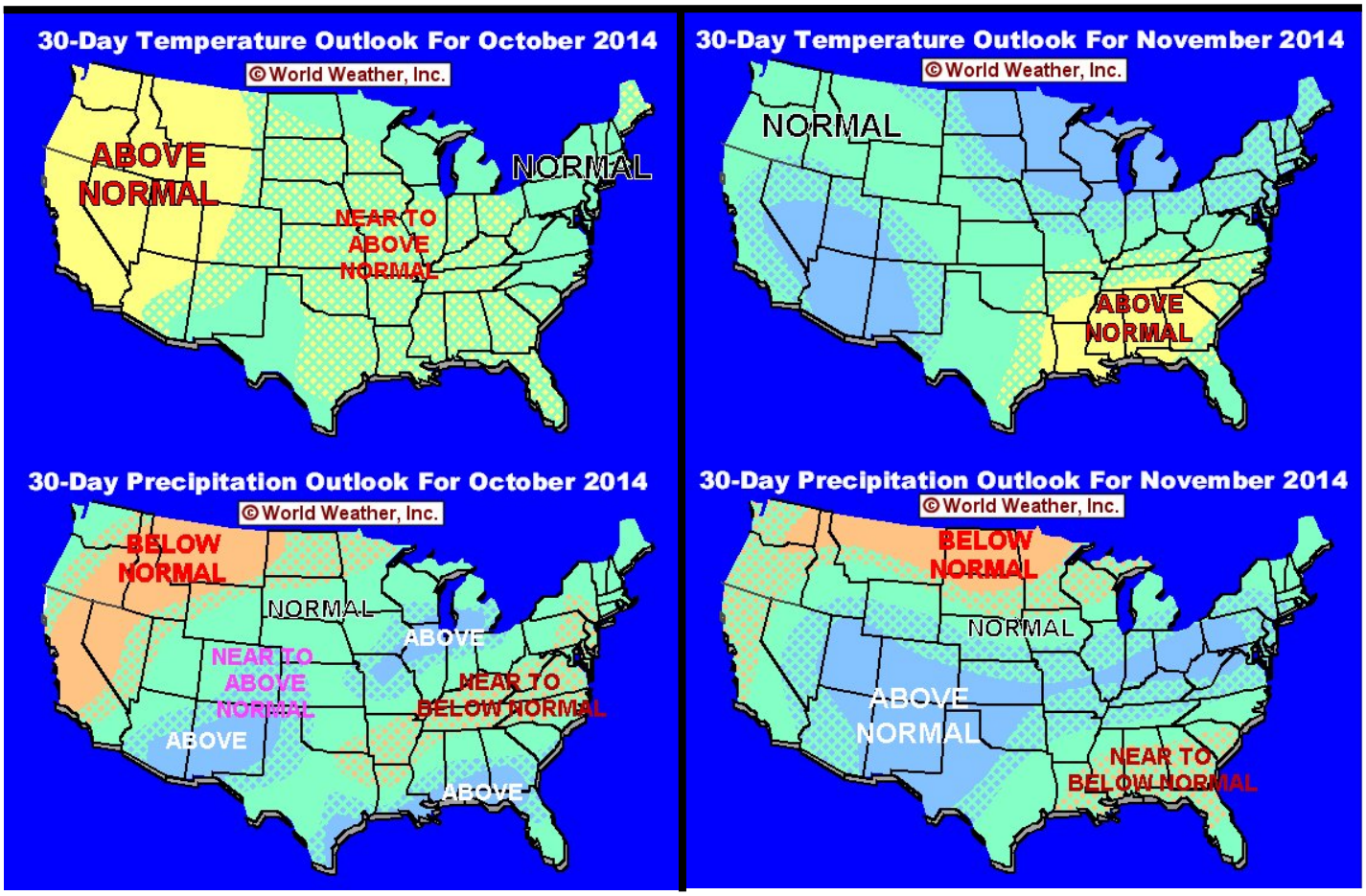
U.S. October Weather Transitional To Active November

October weather will have some similarities to September with another bout of rainy weather expected in the southwestern corner of the nation and some moderate to locally heavy rainfall in the heart of the Midwest. Both areas are expected to end the month with greater than usual rainfall. There is also some potential for another tropical insurgence of moisture in the Gulf of Mexico coast states where some greater than usual rainfall will be possible at times.

The wetter-biased areas during October will be surrounded by regions of near normal precipitation. The driest weather in the coming 30 days will be in the interior northwestern states, the northwestern Great Plains and from the Great Basin into the heart of California. A portion of the northeastern Plains will also receive below-average precipitation as will areas from the northern Delta to the middle Atlantic Coast States.

The month of October will be warmer than usual in a large part of the nation. The warmest bias will be in the western states where a ridge of high pressure is expected to develop occasionally forcing notably warm air much further north than usual for this time of year. Areas to the east from the Great Plains into the western and southern parts of the Midwest, Delta and southeastern states will also end the month of October with a slightly warmer biased anomaly. With that said, there will be some periodic shots of colder air, especially from the north-central into the eastern portions of the nation. None of the cold is expected to be deep or long lasting enough to seriously drop the averages below normal for the month.

November's weather is expected to be a bit different. El Nino like conditions should be in place by then and that will reinforce the 18-year cycle of a ridge of high pressure over western North America and a trough of lower pressure in the east. This kind of pattern will support a few notable cold surges into the north-central and northeastern portions of the nation. A part of the month will be dominated by the ridge in the west and trough in the east as noted above, but another part of the month will generate frequent storm systems over the southern Rocky Mountain region that will tap into Gulf of Mexico moisture to help stimulate larger storm systems. Areas from the southern Great Basin into the southwestern desert region and southern Rocky Mountain states will be cooler than usual. This new pattern will create a warmer than usual temperature bias in the southeastern corner of the United States. The warmest areas will be in the Delta and southeastern states. All other areas in the nation will experience a more normal temperature distribution.

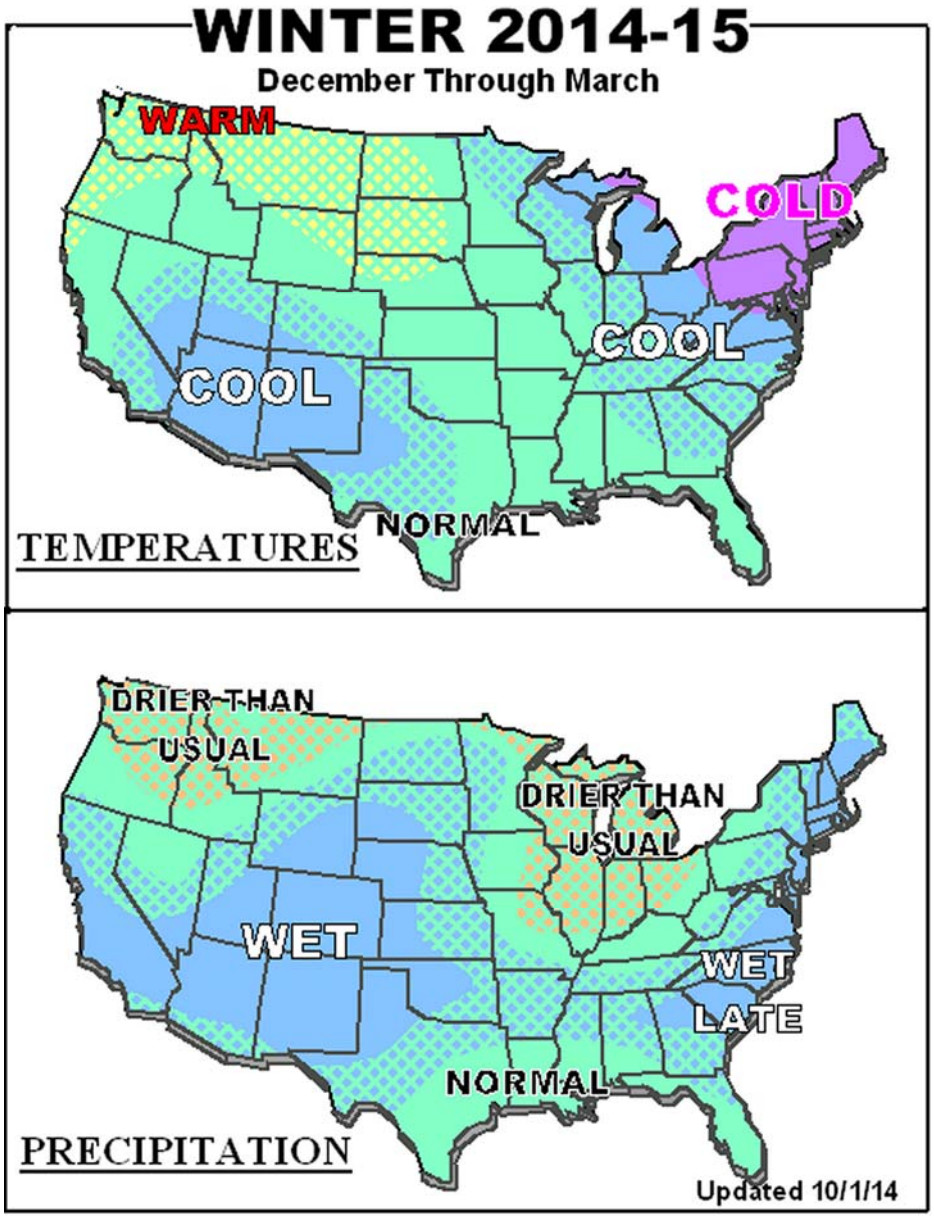


U.S. Weather To Transition To Active November (continued from p. 6)

November precipitation is expected to be abundant in the central and southern Rocky Mountain region, across the central and southwestern Plains and into the heart of the Midwest. Rainfall will be near to above average most often and there is some potential for greater snow to fall in the southern Rocky Mountains and parts of the west-central and southwestern high Plains as well as in areas in the northeastern Midwest and northeastern states.

November will generate two areas of below-average precipitation. the first will be across the northern Plains and into the Pacific Northwest. Some of the drier bias will also impact the upper Midwest. A second area of drier biased conditions will occur from southeastern Louisiana through southern Alabama to South Carolina, Georgia and northern Florida.

The weather pattern change expected in November will produce some earlier than usual winter-like conditions across the lower Midwest and into a part of the central and southwestern Plains. A good start to the snowfall season is expected in the southern and central Rocky Mountains and that will be good for skiers and future water supply. Some late season harvest delays will occur from the southwestern desert region into a part of the northern Delta and lower Midwest.



U.S. SEPTEMBER RAINFALL

U.S. Precipitation during September was less than usual in the Northern Plains, Pacific Northwest, northeastern States, portions of the Central Plains and lower Mississippi River Basin. West Texas was quite wet along with parts of the Intermountain west. South Texas and the heart of the Midwest were also wetter than usual along with some areas in the southeastern states.

Crop maturation and harvest weather was rated quite favorably.