

## **US GRAIN WEATHER 3/14/17**

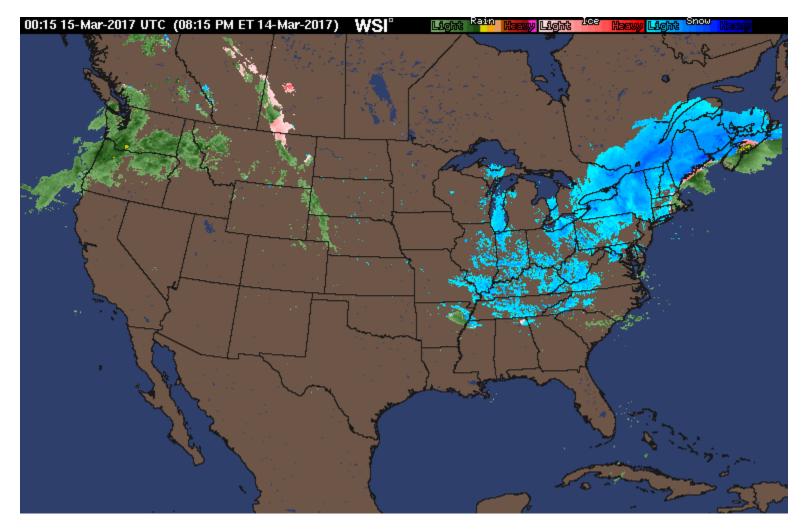
### **OVERVIEW**

We are now switching over to SPRING and SUMMER U.S. grain weather and using this new format for the big reports.

For most of the winter the pattern has been dominated by a very strong Pacific jet stream which is brought the extreme amounts of record shattering rain and mountain snows to the West Coast and the western third of the country. It does also ensured that much of the Plains ...the Midwest ...and the East Coast has seen a mild winter with below normal precipitation and very little snowl. Over the past two weeks that pattern has taken a break and this in turn has allowed March to turn colder than normal over the central and eastern portion of the country and snowier. However the main feature driving the enhance Pacific jet stream -the QBO --is still extremely active as the report in mid March shows the QBO at record intensity (near +15). This in turn means that the Pacific jet pattern ...while temporarily being denied ...is likely to make a comeback. Sure enough as we take a look of the jet stream patterns in the 6 to 10 day and 11 to 15 day ...we see a series of massive trough slamming into the west coast of North America bringing in more widespread significant coastal rains mountain snows over the western third of the country. Eventually all this energy is going to move east and reach the Plains and e Midwest while at the same time cold air moving out of Canada will drive a series of cold fronts into the central portions of the country. The potential exists for significant above normal snow and rain over large portions of the Plains and the Midwest 6-10D... 11 -15D and in the 16 -20 day forecast periods

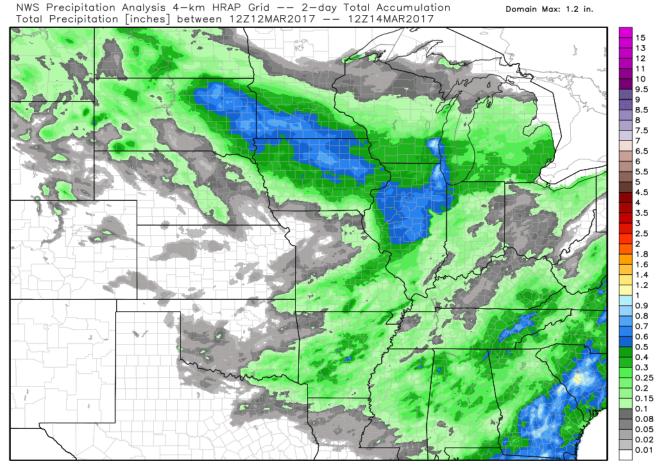
TUESDAY EVENING RADAR.

#### LIVE FREE RADAR



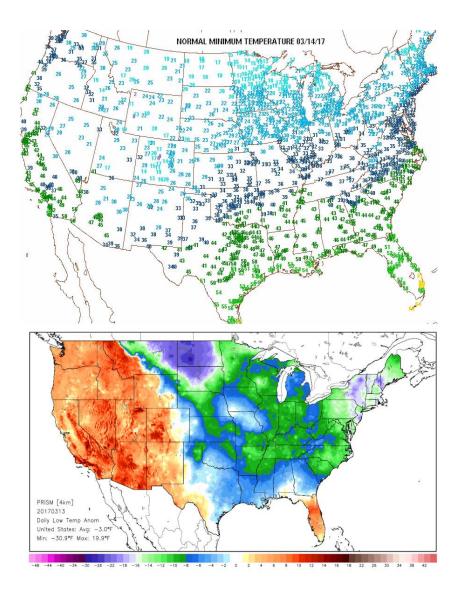
### RAINFALL LAST 2 DAYS FEB 12-14

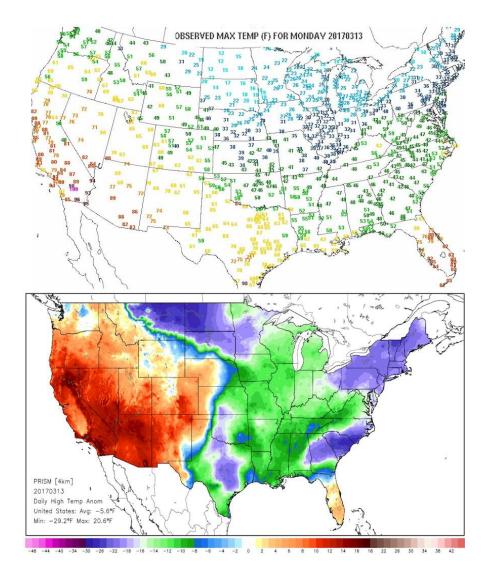
heavy rains over Central Argentina. Rainfall amounts range from 25 to 150mm/ 1-6" with 70% coverage over northern Cordoba ...southern Santa Fe and all of Entre Rios. Lighter rains fell over southern Buenos Aires. All of Paraguay as well as most of southeastern Brazil was also dry. Eastern Brazil from Parana to northern Bahia was 90% dry as was most of Mato Grosso and MGDS. Goias and Tocantins saw 10-50mm/0.40-2.0" with 40-50% coverage



4 km HRAP grid | End of hydrological day at 1200 UTC | http://water.weather.gov/precip

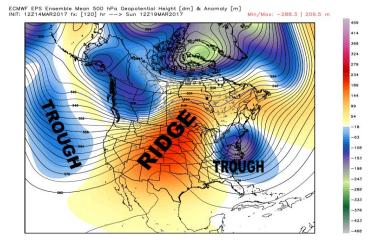
# NORMAL MIN / MAX TEMPS MARCH 13 and ACTUAL ANOMALIES MARCH 13



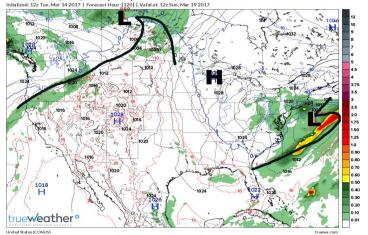


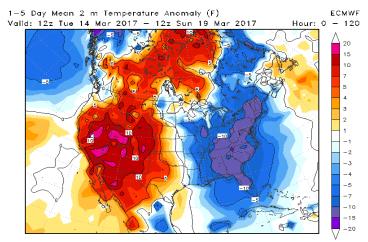
### **NEXT 5 DAYS**

As forecasted the pattern has turned quite stormy and active with a lot of more winter weather chances than what we saw on February. All the next 5days as another major trough is going to move through the Great Lakes and the East Coast and develop a significant area of LOW ow pressure over New England which could bring that area more snow. The main impact of this trough however will be to keep the cold air in place east the Mississippi River. Meanwhile the western half the country will see above normal temperatures. Notice that the rainfall anomalies are quite dry across most of the plains Midwest and the Delta regions..



ECMWF | 6-hourly Precipitation (Inches), 850mb Temperature & MSLP

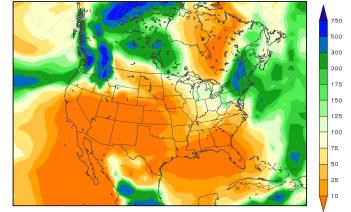




 
 Bit Storm VistaWx Models.com
 Init: 12z Tue 14 Mar 2017 2017-03-14-1420

 1-5 Day Precipitation Anomaly (% of Normal)
 ECMWF-EPS

 Valid: 12z Tue 14 Mar 2017 - 12z Sun 19 Mar 2017
 Hour: 0 - 120



StormVistaWxModels.com

Init: 12z Tue 14 Mar 2017

GrADS: COLA/IGES

### 6-10 DAY

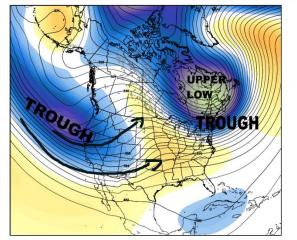
ECMWF-EPS

Hour: 120 - 240

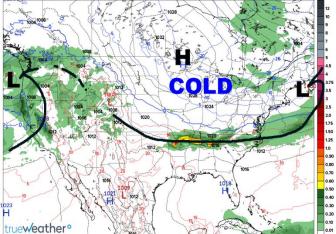
6-10 Day Mean 2 m Temperature Anomaly (F)

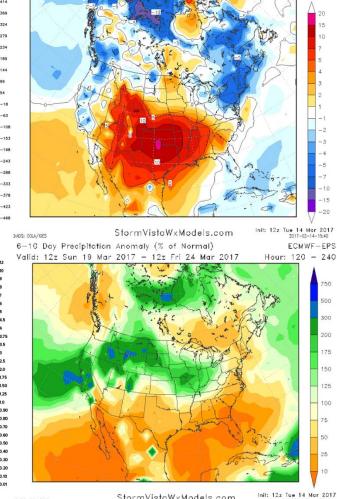
Valid: 12z Sun 19 Mar 2017 - 12z Fri 24 Mar 2017

ECMWF EPS Ensemble Mean 500 hPa Geopotential Height [dm] & Anomaly [m] INIT: 12Z14MAR2017 fx: [192] hr --> Wed 12Z22MAR2017 Min/Max: -257.4 | 116.1 m



ECMWF | 6-hourly Precipitation (Inches), 850mb Temperature & MSLP nitalized: 12z Tue, Mar 14 2017 | Forecast Hour:[186] | Valid at: 06z Wed, Mar 22 2017





That deep trough over the East Coast will rotate up into southeastern Canada where it will I become trapped by a blocking pattern over Greenland. This will keep the northern jet stream strong and active bring in cold air from Western Canada. This in turn will cause a series of cold fronts to be driving southward into the Midwest and the northeast keeping temperatures even near normal or below normal. On the West Coast the winter pattern appears to be returning with a series a powerful a deep trough slamming through the eastern Pacific into the West Coast bring that area more widespread rain and heavy mountain snows. Notice the increase in much above normal rainfall over California the great basin and the northern central Rockies and into the Midwest. Most of this rain / snow this occurs at Day 9-10

United States (CONUS

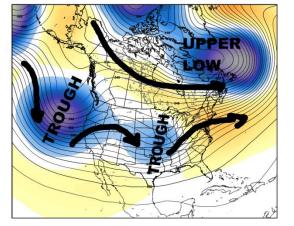
99

54

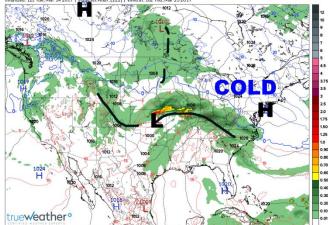
StormVistaWxModels.com

### 11 - 15 DAY

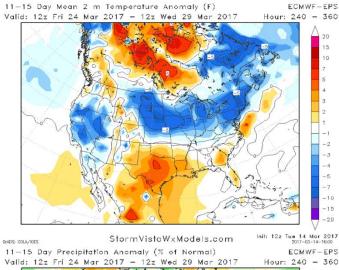
ECMWF EPS Ensemble Mean 500 hPa Geopotential Height [dm] & Anomaly [m] INIT: 12Z14MAR2017 fx: [240] hr --> Fri 12Z24MAR2017 Min/Max: -322.6 | 135.2 m

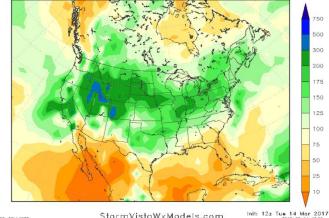


ECMWF | 6-hourly Precipitation (Inches), 850mb Temperature & MSLP









StormVistaWxModels.com

The enhanced powerful Pacific jet continues to dominate the pattern in the 11 to 15 day. The major trough which moved into the West Coast at the end of the 6 to 10 day has now moved into the Plains and Midwest. With the strong northern jet stream still bringing down cold arctic HIGH pressure areas ... the potential exists for below normal temperatures and potential significant snowfall over portions of the central and upper Plains and Midwest. Notice that the rainfall anomalies across entire country are either above or much above normal. And notice the temperature anomalies are below normal over the upper Plains and the heart of the Midwest. This is a stormy winter like pattern that will bring some areas significant moisture --which is needed -but it also has the potential to bring in prolonged amounts of rain and or snow as we move into April.

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GOIDS: COLA/IDES