## WEDNESDAY US GRAIN WEATHER 5/3/17 OVERVIEW

The Wednesday midday weather maps and radar shows that the rains are developing exactly as the models of forecasted and once again we are going to see widespread heavy rain of several inches across the flooded areas of Northern Arkansas central and Southern Missouri central and Southern Illinois into Indiana. The rise in some liberal levels over the Central Mississippi Valley is becoming quite significant and breaking records last seen since 1993. Longer term there are some uncertainty as to when the rains return to the Midwest in the 6-0 day and in the 11 to 15 day.

Given the overall pattern it would seem that the best chance is the rain to return first to the central Plains and WCB during the 6 to 10 day while the ECB region stays fairly dry. Longer term the week 3 and weak 4 CFS show some improvement especially east the Mississippi River with regard to temperatures. However these models continue to give off strong signals of above normal precipitation of the Plains and the WCB

## RAINFALL OVER THE LAST 24 HRS - 0700 CDT TUES 2 MAY - 0700 CDT 3 MAY

Moderate to heavy rain has fallen in last 24 hours ending as of 0700 CDT over southwestern and southern portions of Nebraska and the northern half of Kansas. Rainfall amounts there were in the 0.5-1.5" $12-38 \mathrm{~mm}$


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

## FAST LOADING RADAR

The mid morning Wednesday radar shows heavy rain \&storms covering $80 \%$ of $\mathrm{MO} /$ southern third of ILL/ $70 \%$ of the eastern third of KS .
There were additional scattered showers with 30 to $40 \%$ coverage are found over western MN eastern SD / northern NEB

## TEMPS MAY 3

## MAX TEMPS MAY 3 - NORMAL MAX TEMPS FOR EARLY MAY

## MIN TEMPS MAY $3 \quad$ NORMAL MIN TEMPS FOR EARLY MAY

TUESDAY morning Min saw readings near 32 degrees over eastern SD /ND / western NEB ... Low to Mid 30s over the rest of the Dakotas rest of NEB northwest KS/ eastern COL NY/ MT all of MN and IA into WI... 40s over the ECB into KY TN MO ARK rest of KS all of OK and TX Panhandle. TUESDAY Max temperatures were a little warmer over the Plains \& WCB with readings pushing into the 60 s but it remained in the 50 s over much of the ECB. Much of the Deep south saw temperatures in the 80 s with some low 90 s over sw Texas. There was a stripe of readings in the 70s over KY TN \& all of north ARK.

## NEXT 5 DAYS



The official rainfall forecast from NWS for next 3 days is in strong agreement with all the model guidance -- which shows a large area of $3-4$ " $/ 75-100 \mathrm{~mm}$ rains over significant portions of central \& se MO / central \& south ILL/ central \& southern IND. Undoubtedly this is going to make the flooding situation dramatically worse and it's going to cause major river rises on the Ohio and Mississippi River and many other important river systems. Notice that these rains do not reach into the WCB or the central and Upper Plains.


Note that temperature anomalies over the next 5 days and the impressive cold relative to normal for early MAY is quite evident over all the Midwest as well as the lower Plains and the Delta regions. Notice however that by the time we reach the weekend most of strong negative anomaly to locate east the Mississippi River and temperatures actually turned much above normal over the Dakotas and Eastern Montana.

## 6-10 DAY

There are some minor changes in the various weather models in the 6-10D but for the most part these are not significant The WED morning Euro model shifts the light to moderate rain showers back into IA south ILL/ west KY/ central TN while the GFS from early WED
was much wetter and showed significant increases the rain over $75 \%$ of the Midwest. See images -- note the 0 GFS has widespread heavy rains covering $75 \%$ of the entire Midwest as well as all of NEB with amounts of $1-3$ "/ 25-75mm quite common. The updated $6 z$ GFS is not quite that wet but it does continue to show a fairly wet pattern.


BUT the Euro \& GFS ensembles show a much more uniform and consensus forecast of moderate rains between $0.5-1.0^{\prime \prime} / 12-25 \mathrm{~mm}$ over 60 to $70 \%$ of the Midwest with somewhat higher amounts over KS/ NEB/ west SD/ far west OK. NOTE the surface temperature anomalies are warming fast over the Plains and WCB


## 11-15 DAY

All models show that early in the $11-15 \mathrm{D}$ there are good rains over central Plains into the WCB -- $0.50-1.5 \mathrm{~L} / 12-38 \mathrm{~mm} \mathrm{~mm}$ with lessor amounts over the ECB. Clearly however the Wednesday morning Canadian ensemble is much wetter than the other two models. What is happening here is that the Canadian model because it has a tendency to be more progressive of all 3 weather models.... weakens the strong blocking pattern over southeastern Canada and Greenland. Once this pattern is removed ...the atmosphere shifts back to a Pacific jet stream pattern which is what we have been seeing for the last several weeks. This in turn allows for the rains to redevelop across most of the central plains and Midwest. The other models are not showing this the same degree and as a result they have keep the better rains the rains restricted more towards the central Plains with lighter rains over the Midwest moving into portions of the Plains and the WCB late in the

11 to 15 day timeframe


