

TUESDAY MORNING US GRAIN WEATHER

8/8/17 OVERVIEW

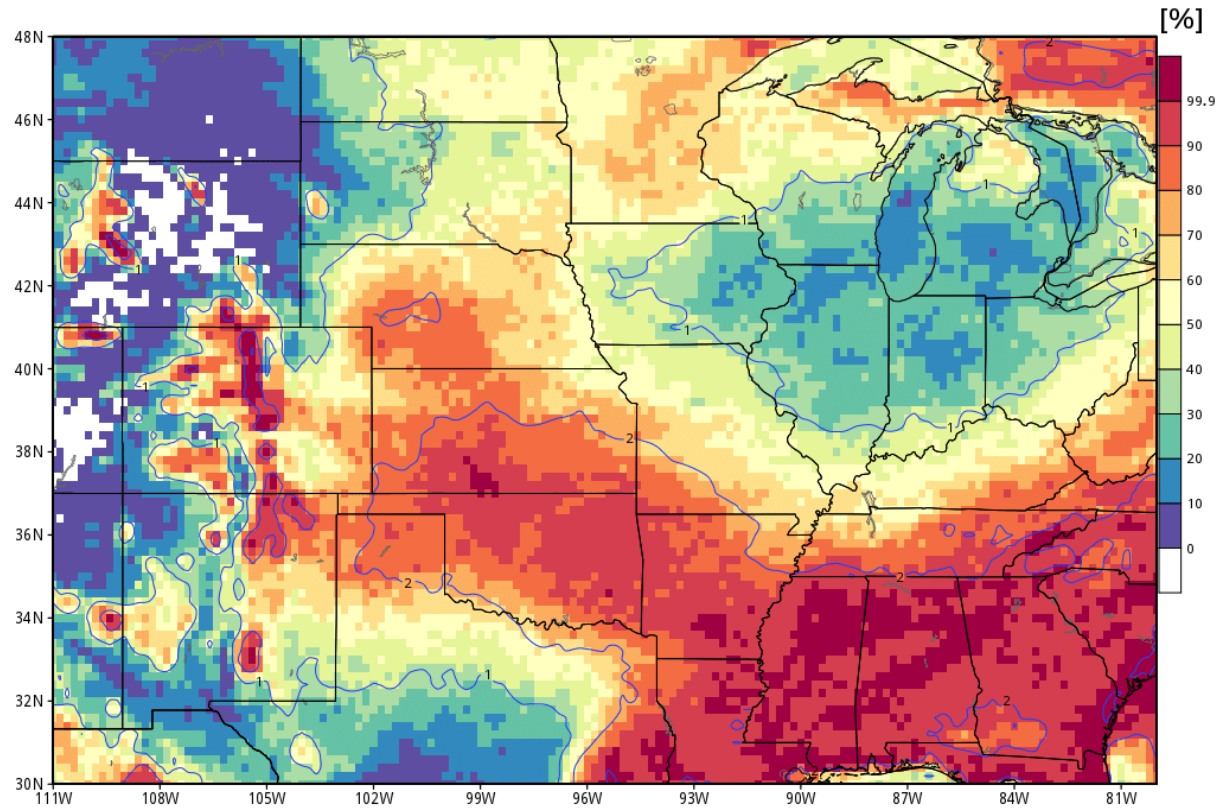
SUMMARY

With the issuance of the Monday evening European weekly model along with the Monday afternoon CFS model we can clearly see a distinct trend for wetter conditions developing over the eastern half of the Central and Upper Plains and all the WCB after August 15. In fact the data turns quite wet after August 18 and continues into the first week of September. This is in close agreement with how we saw August developing back in the middle of July. In the shorter and more medium range forecasts.. the data is unchanged. Most the Midwest will not see significant rain over the next 10 days. Below you will see an image which shows the probability of seeing rainfall over 1 inch in the next 10 days across all the Plains Deep South and the Midwest. Notice that for many areas in the Midwest the probabilities under 30% which is quite striking.

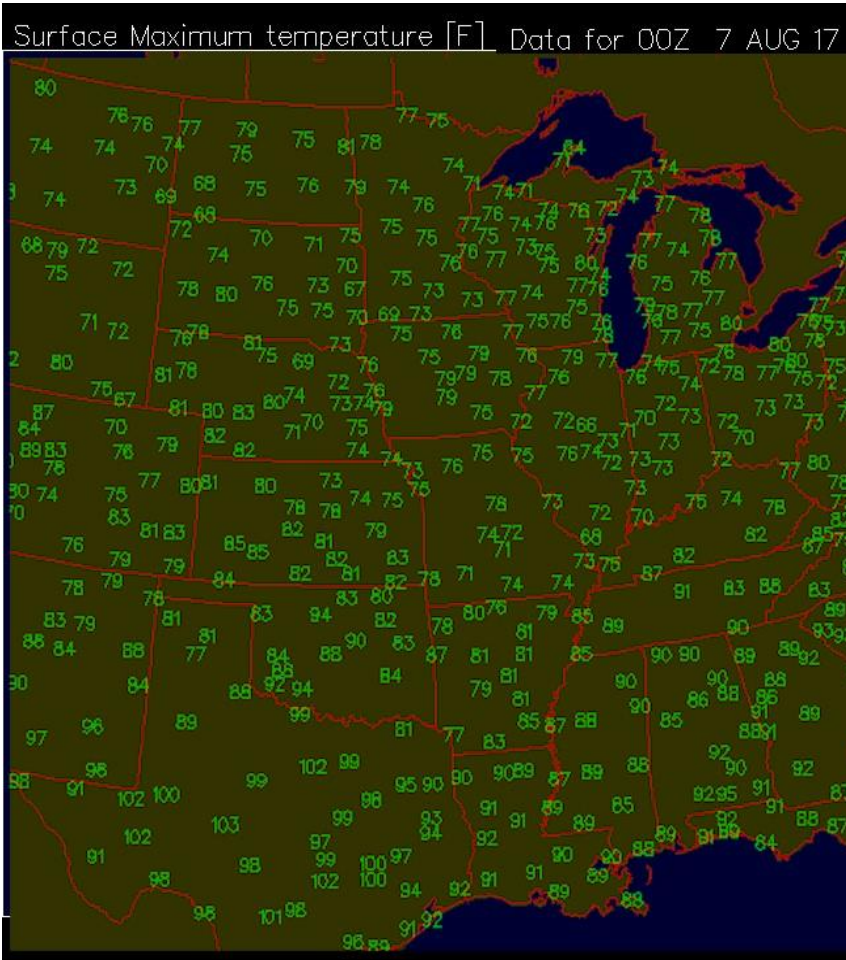
When the deep trough over the Plains and the Midwest finally breaks down a milder more typical pattern will develop which will bring the rain back into portions of the Plains and the Midwest. If there is a RIDGE which develops over the Deep South or even a dome in Texas and New Mexico ...that would increase to rainfall chances over the WCB in late August.

With regard to the tropical activity Franklin did not become a hurricane before making landfall in the Yucatan Peninsula and will cross over the bay of Campeche she and possibly make hurricane strength before making a secular fall in Northern Mexico. The moisture from the system shows no signs of being pulled northward and will likely rain itself out of existence all the mountains of North Central Mexico. The others tropical system as a disturbance designated 99 L which the models are now developing into a major system and threatens Florida and the East Coast or going out to sea just off the coast. Below you will see maps and plots for both of these systems.

ECMWF EPS Probability [%] Accumulated Precipitation \geq 1 inch +Ensemble Mean Contours
Init: 00Z08AUG2017 000 - 240 hrs Valid --> Fri 00Z18AUG2017



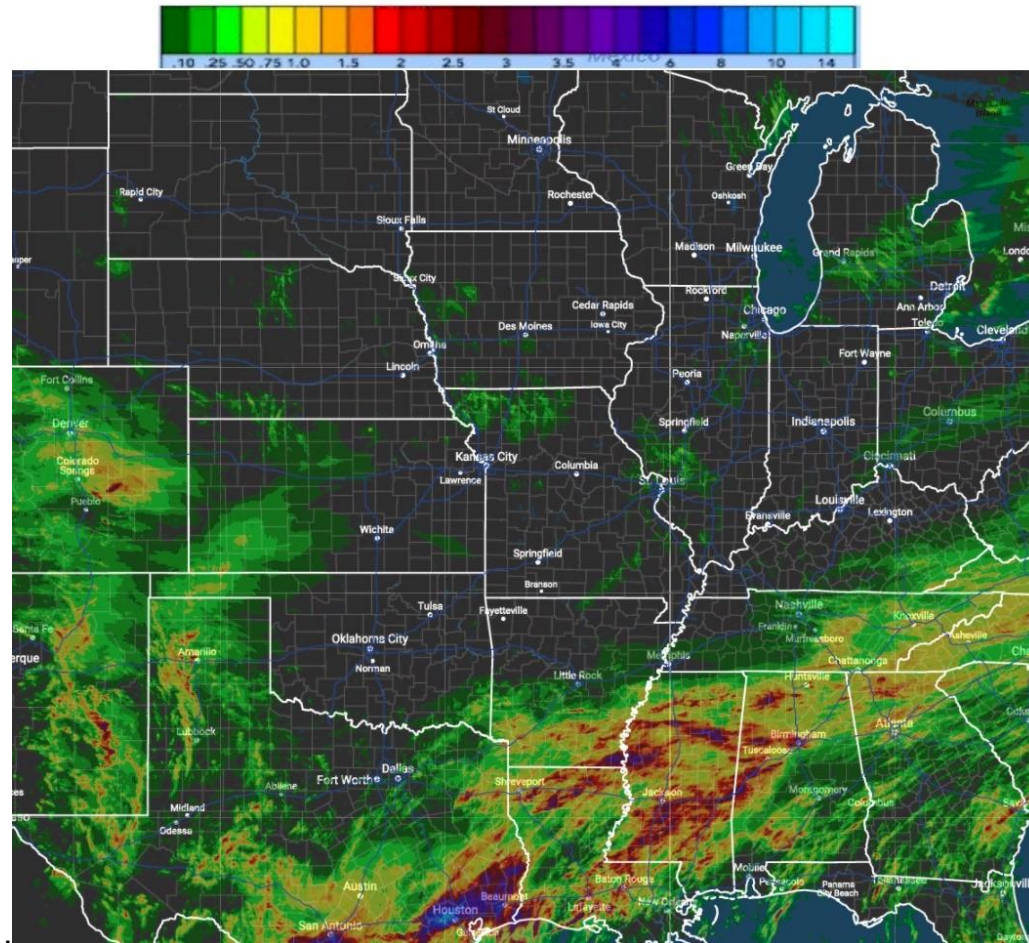
MAX TEMPS 7 AUGUST



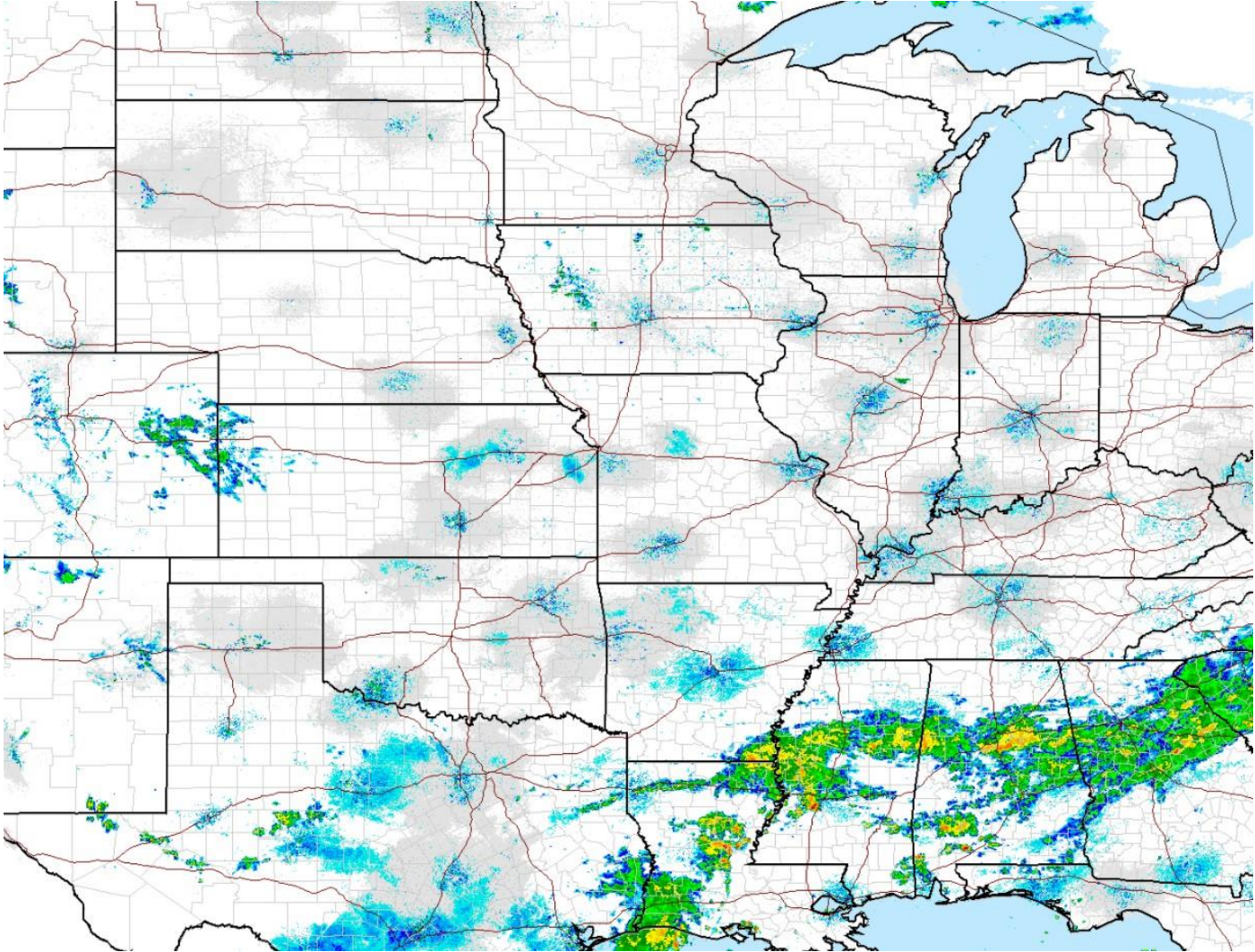
70s eastern MT WY SD ND eastern NEB eastern MO IA MN WI ILL IND OH MI KY... 80s GA AL MS ARK OK Tx Panhandle western KS/NEB eastern COL ... 90s over eastern TX/LA... 100+ central/ sw TX

RAINFALL MONDAY 7 AUGUST 0700 cdt - TUESDAY 8 AUGUST 0700 CDT

it was dry ALL of Midwest and most of Lower Plains but rains of 0.25-2.0"/ 6-25mm fell over 50% of Tx Panhandle. Heavier rains of 1-4"/25-100mm over far southern TX into southeast X with 60-70% coverage... 50% coverage over the southern third of ARK70% LA MS AL... and 0.25-1.5"/ 6-38mm with 60% coverage over northern GA far southeast TN all of NC and 1-4"/25-100mm with 70% coverage over central and eastern VA

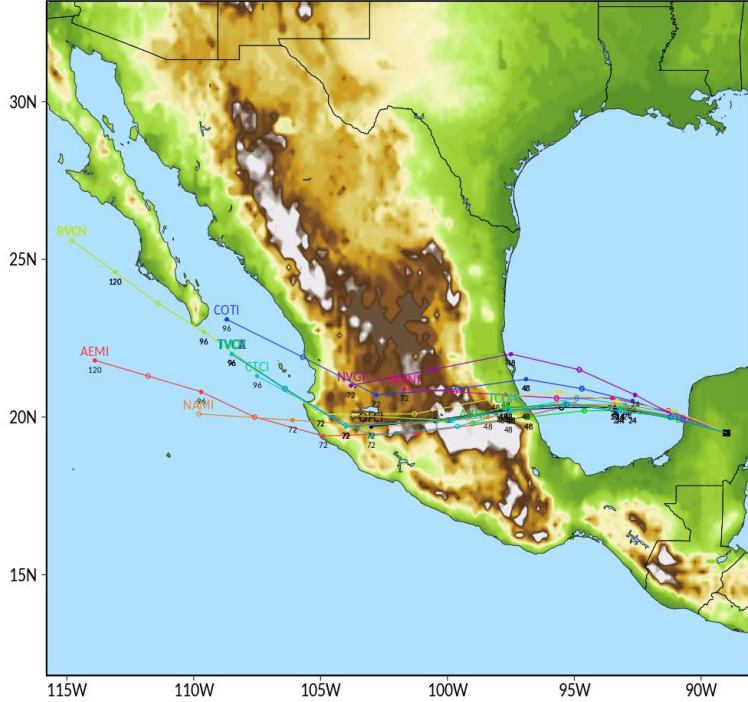


TUESDAY AM RADAR



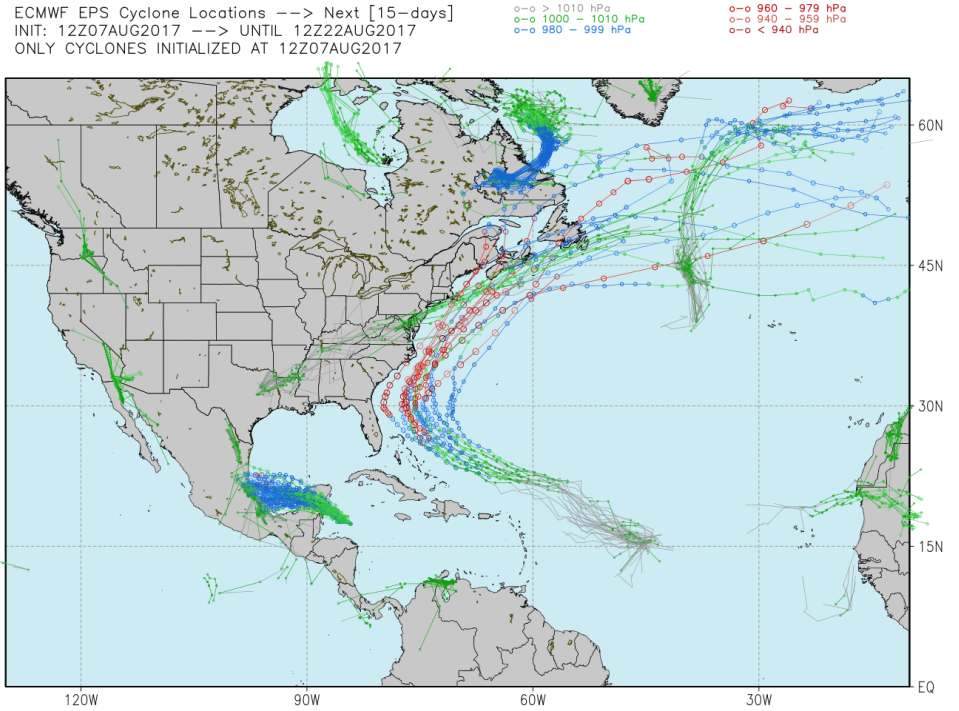
FRANKLIN AND 99L

Atlantic Tropical Storm FRANKLIN Model Tracks Valid Time: 1200 UTC 08 August 2017



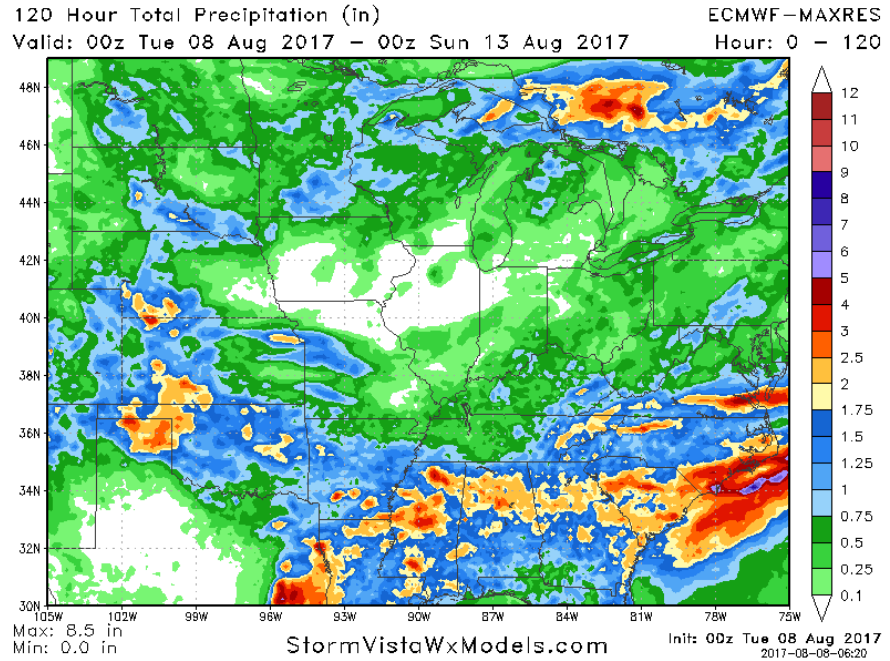
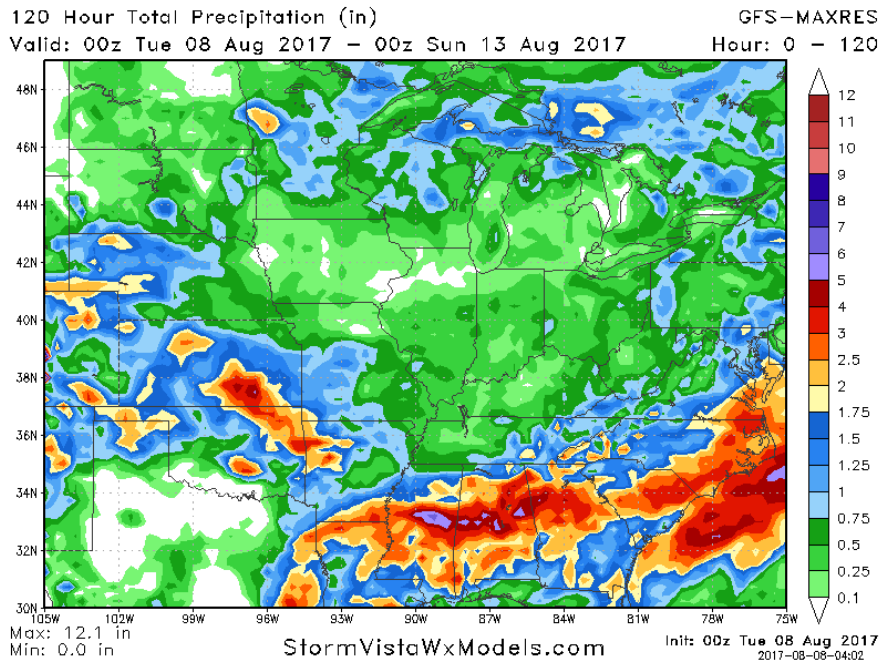
Hurricane Forecast Model Output
<http://derecho.math.uwm.edu/models/>
 @hurricaneModels, <http://www.facebook.com/HurrModels>

DISCLAIMER: Do not use this image in place of official sources!
 Official forecasts are always available from the NHC or CPHC.
 Forecast points above are shown in 12 hr increments. Initial points denoted by black squares.

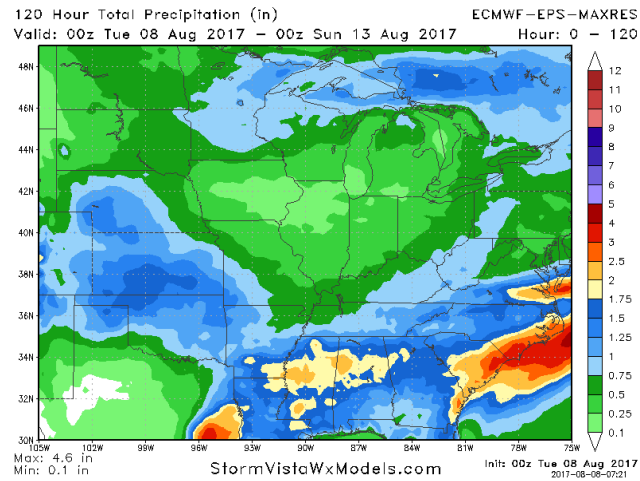
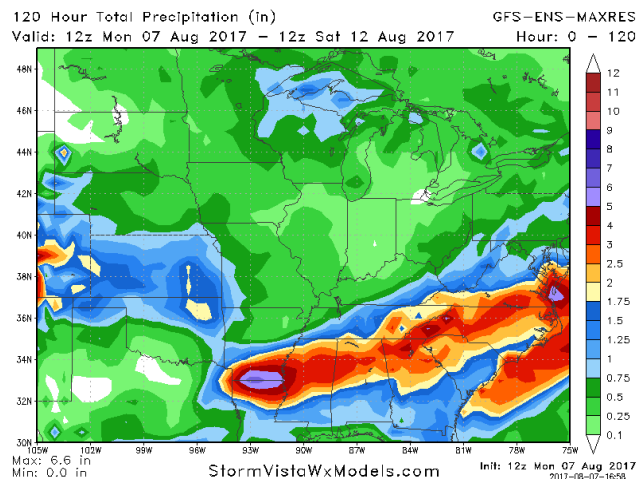


1-5 DAY

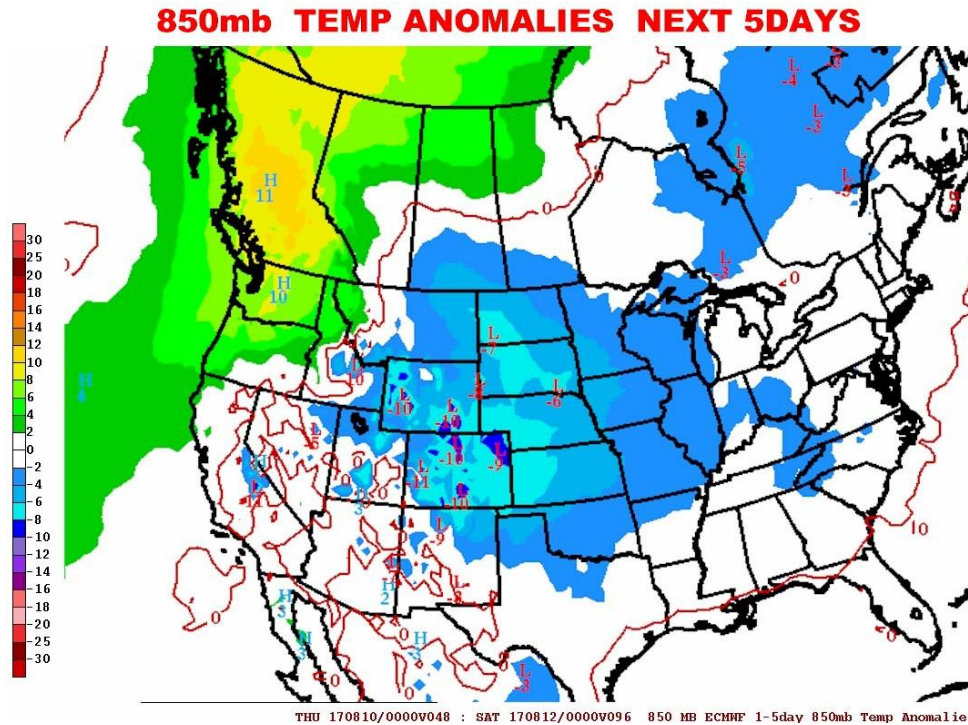
The GFS European & Canadian Models are unchanged-- DRY or mostly Dry over OH IND ILL IA KY eastern and northern MO. All 3 models show some light to Moderate rains 0.50-1.5"/ 12-38mm with 40-50% of WI MN eastern SD NEB. To the south the rains are in the 1-4"/25-100mm range and cover a large area -- 50 % of western NEB 70% of KS OK southwest MO ARK LA MS AL GA SC NC



The ensemble data over the next five days is also in really good agreement. Clearly all models show the best rains over the Delta ...the Southeastern states as far north as Tennessee and central and Southern Virginia but they also show a second area of 1-2"/ 25-50mm rains covering much of Oklahoma Kansas southern Missouri ... and perhaps into western and southwest Nebraska. The ensemble model agreement is very strong that the heart of the Midwest remains essentially dry all the next five days

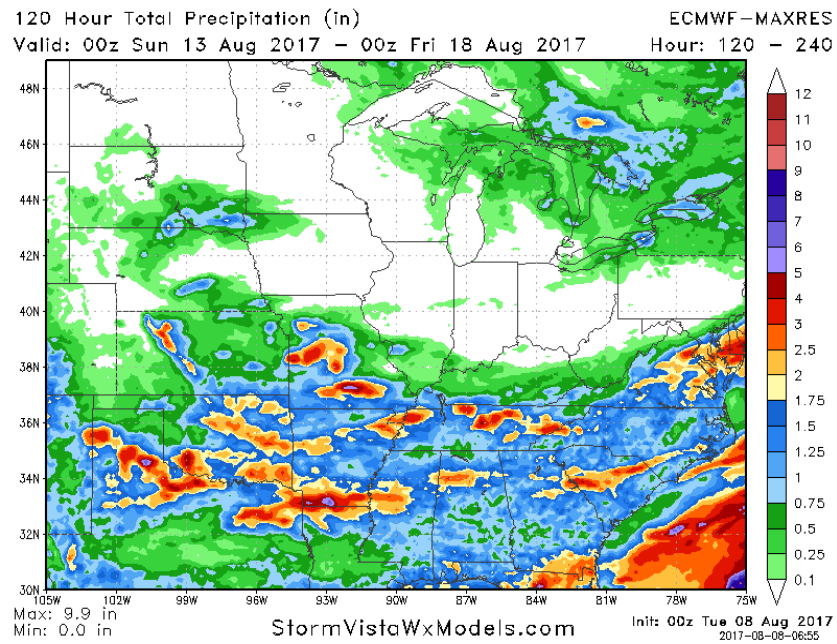
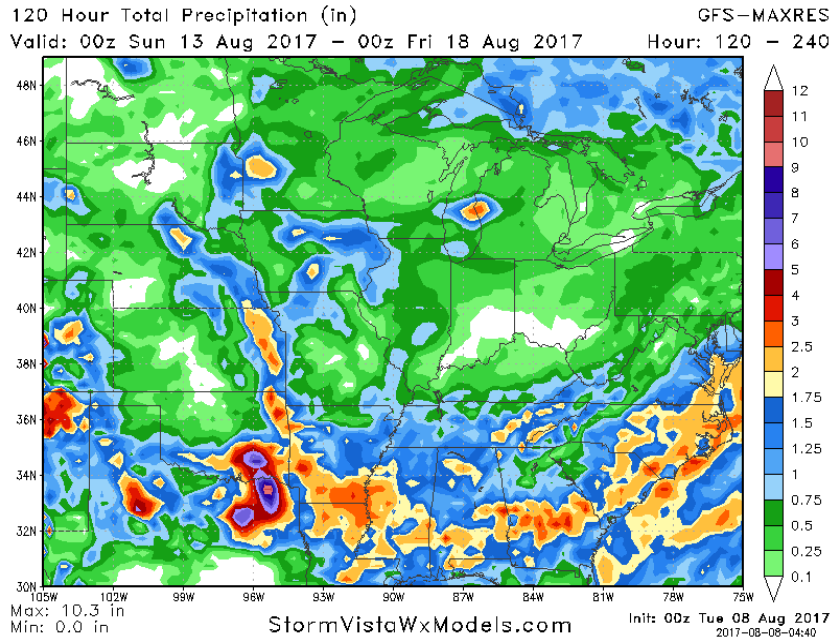


850 mb temperatures -- 1 mile above the ground- still show large area of Below Normal or Much Below Normal over all of the central and lower Plains and all of the Midwest

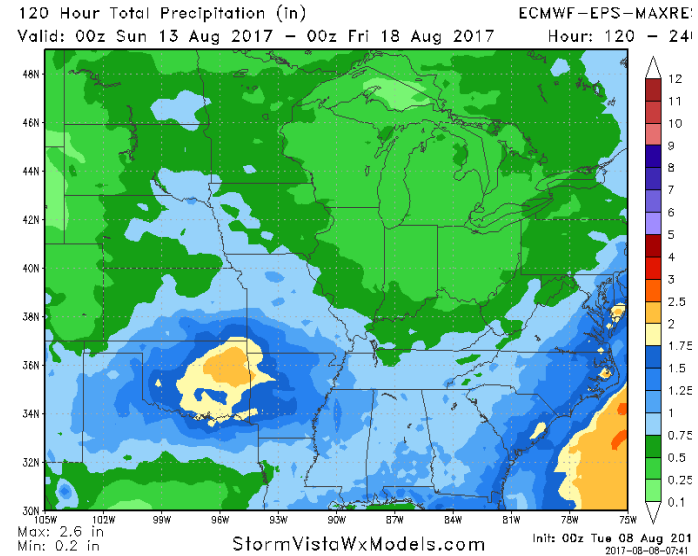
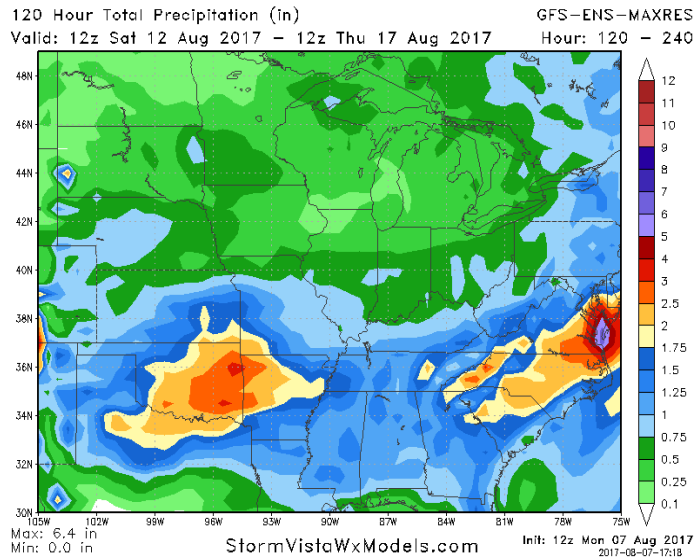


6-10 DAY

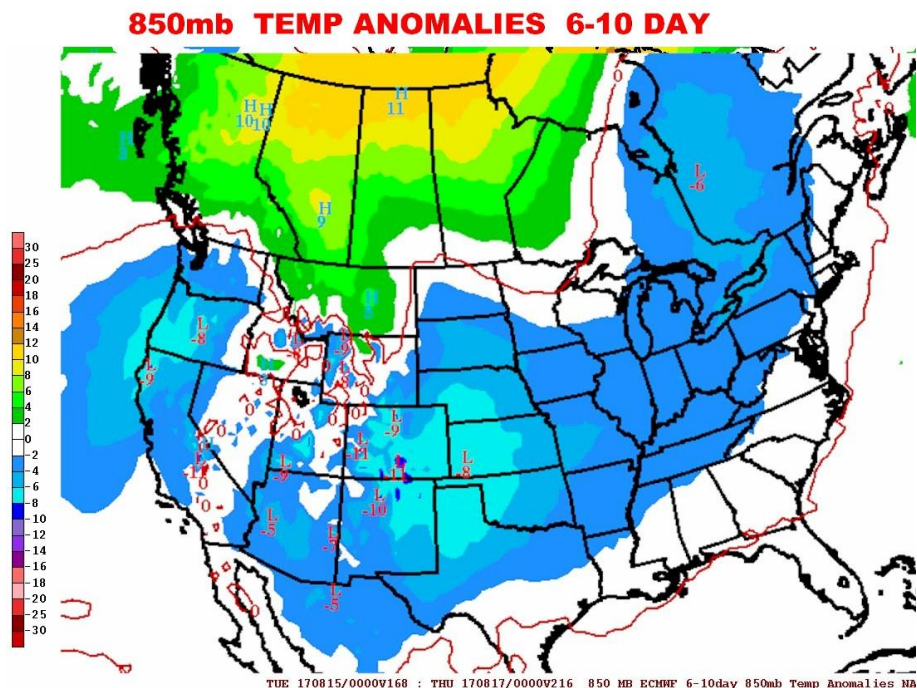
There is good general agreement here. Most of the significant rains stay south of I-70-- in fact along to close to I-40. The rains over the Deep South and Lower Plains are in 1-3"/25-75mm range and cover NC SC GA AL MS TN ARK north LA north TX eastern OK. Some ome areas could see 4-5"/ 100-125mm. The Operational GFS has more rains over central Plains and WCB than the European



Key change-- The EURO ENSEMBLES do support the idea of rains in the amounts of 0.25-1.0"/ 6-25mm developing late in the period over 60% of KS MO IA eastern NEB eastern SD/ eastern ND and MN



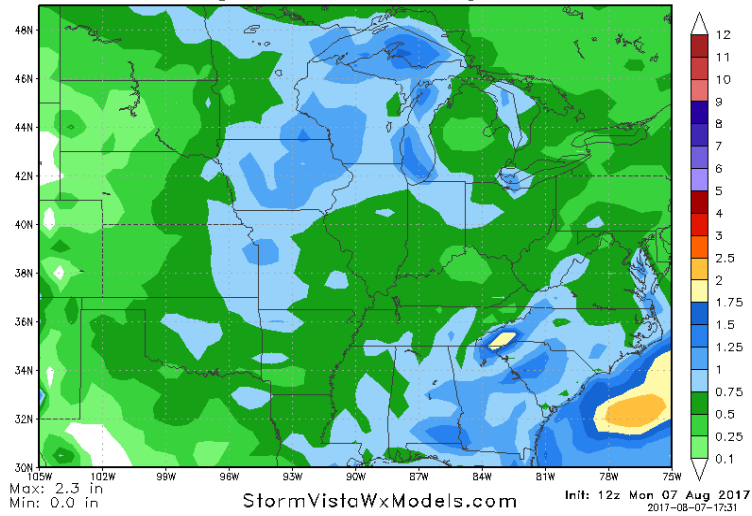
850 mb temperatures -- 1 mile above the ground- still show large area of Below Normal over all of the central and lower Plains and all of the Midwest



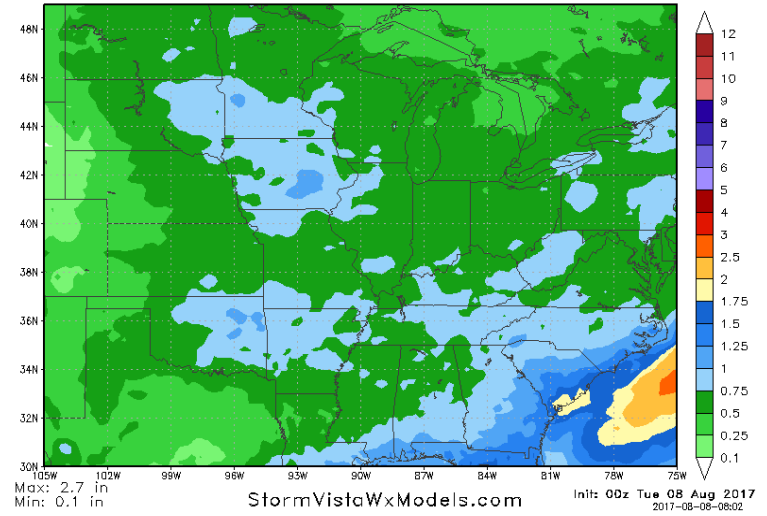
11-15 DAY

The GFS ensemble is somewhat wetter over all of Midwest and eastern portions of the central and Upper Plains --but especially over WCB. The European ensemble is about the same and both models show something like 60% coverage maybe 70% with amounts 0.50-1.5"/ 12-38mm. Notice the Below and Much Below Normal over the Plains and Midwest are now gone.

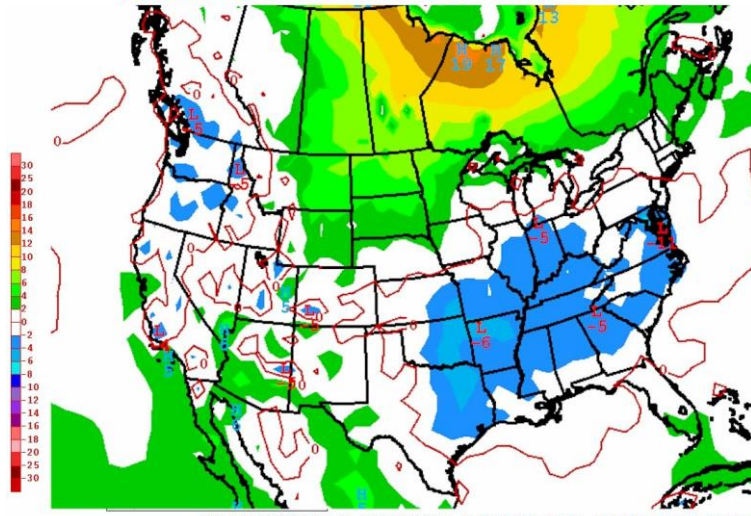
120 Hour Total Precipitation (in)
Valid: 12z Thu 17 Aug 2017 - 12z Tue 22 Aug 2017



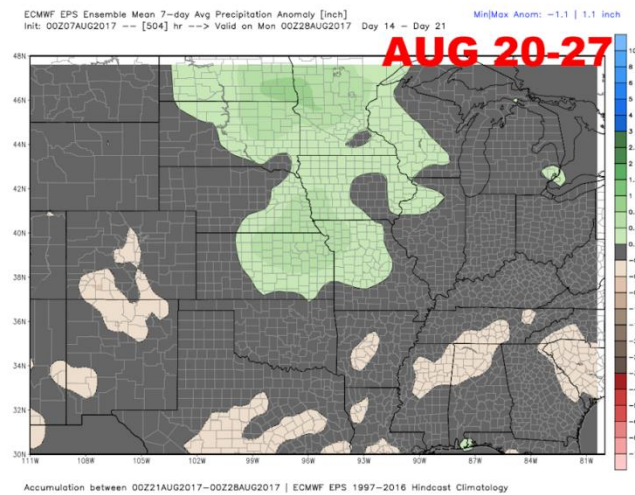
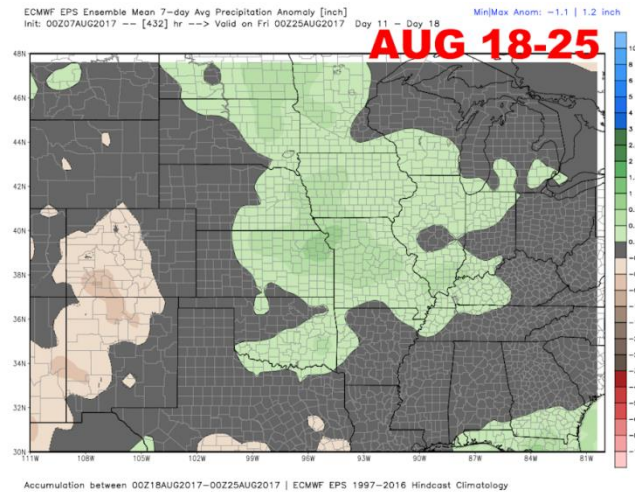
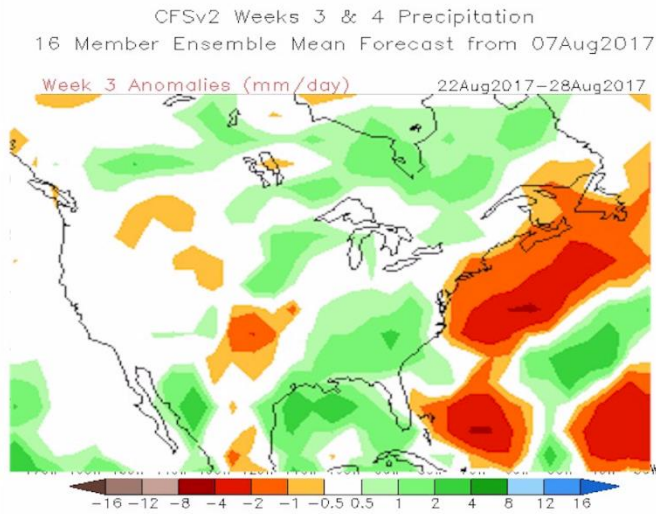
120 Hour Total Precipitation (in)
Valid: 00z Fri 18 Aug 2017 - 00z Wed 23 Aug 2017



850mb TEMP ANOMALIES 11-15 DAYS



WEEK 3 AND BEYOND



Looking at week3 -- the rest of August and into the beginning of September ...we see that the CFS and European weekly models are in excellent agreement as to how the rest of August and early September will develop. **The two maps on the left hand side are from the CFS as of August 7.** The top left map refers to August 22 -28 while the bottom right map refers to August 29 - SEPT 4. Notice that there is a lot of green color - above normal rainfall over much of the WCB and the central plains. **The 2 images on the right hand side are the latest European weekly model which came out Monday night and it has a very similar finding .** In fact the last several runs of the European model have been insisting that the central upper plains as Wells the WCB would turn significantly wetter after August 15. Although the time intervals are somewhat e different from the CFS the same general trend shows out with

significant areas of above normal rainfall for the WCB and portions of the eastern half of the central and upper Plains from August 18 through the 27th. In fact the European weekly continues the wet pattern right in through until September 4. This in turn supports our contention that the first half of August would be cool and dry the second half of August would turn wetter and somewhat milder with regard to temperatures.

DT wxrisk.com OFFICE 804 715 8330 CELL 804 307 8070