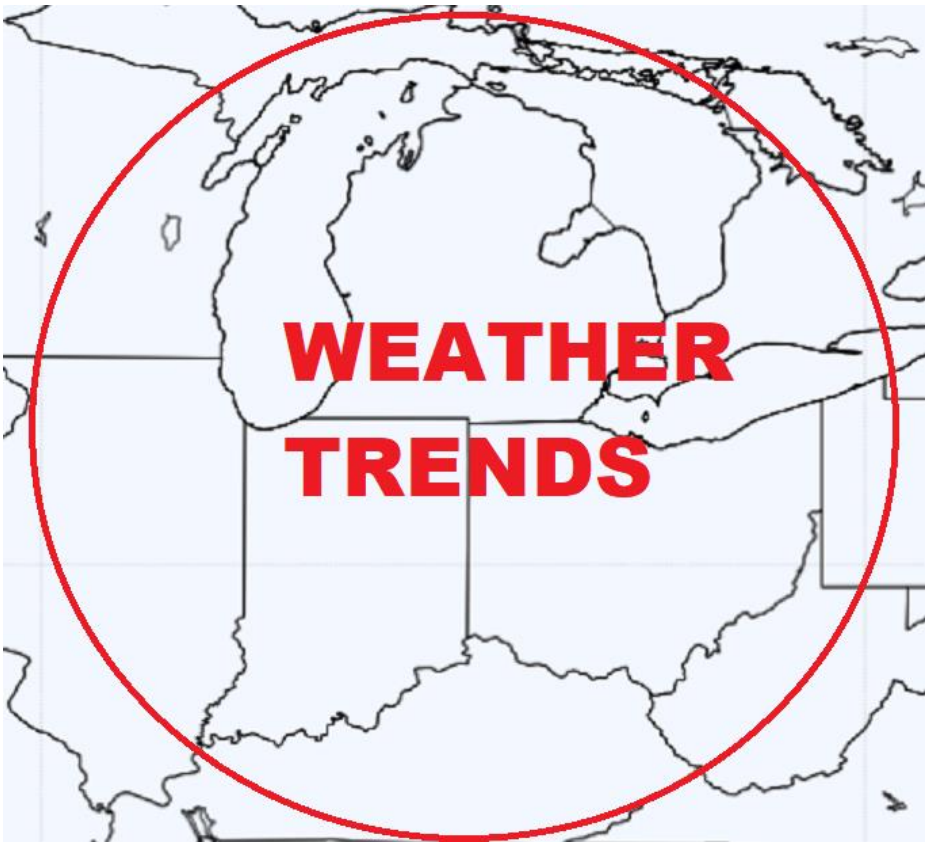
FAX-ALERT WEATHER SERVICE



OHIO, MICHIGAN AND INDIANA PATTERN TRENDS UPDATE

THE PERSISTENT COOLER THAN NORMAL PATTERN THAT DEVELOPED DURING EARLY JULY AND MAINTAINED ITSELF THROUGH THE MIDMONTH PERIOD IS IN THE PROCESS OF MORPHING INTO A SIGNIFICANT HOTTER THAN NORMAL REGIME TO FINISH OUT THE MONTH

Excessively hot conditions will continue to build across portions of the central and northern Plains in the short-term, and some of the hot weather will overspread and dominate the OH / IN / MI areas over the next 2 weeks…

Triple digit heat will become common just to the west of the OH / IN / MI areas, and there is some potential for a surge of excessive heat levels to spill eastward into the Upper Midwest and Great Lakes region…

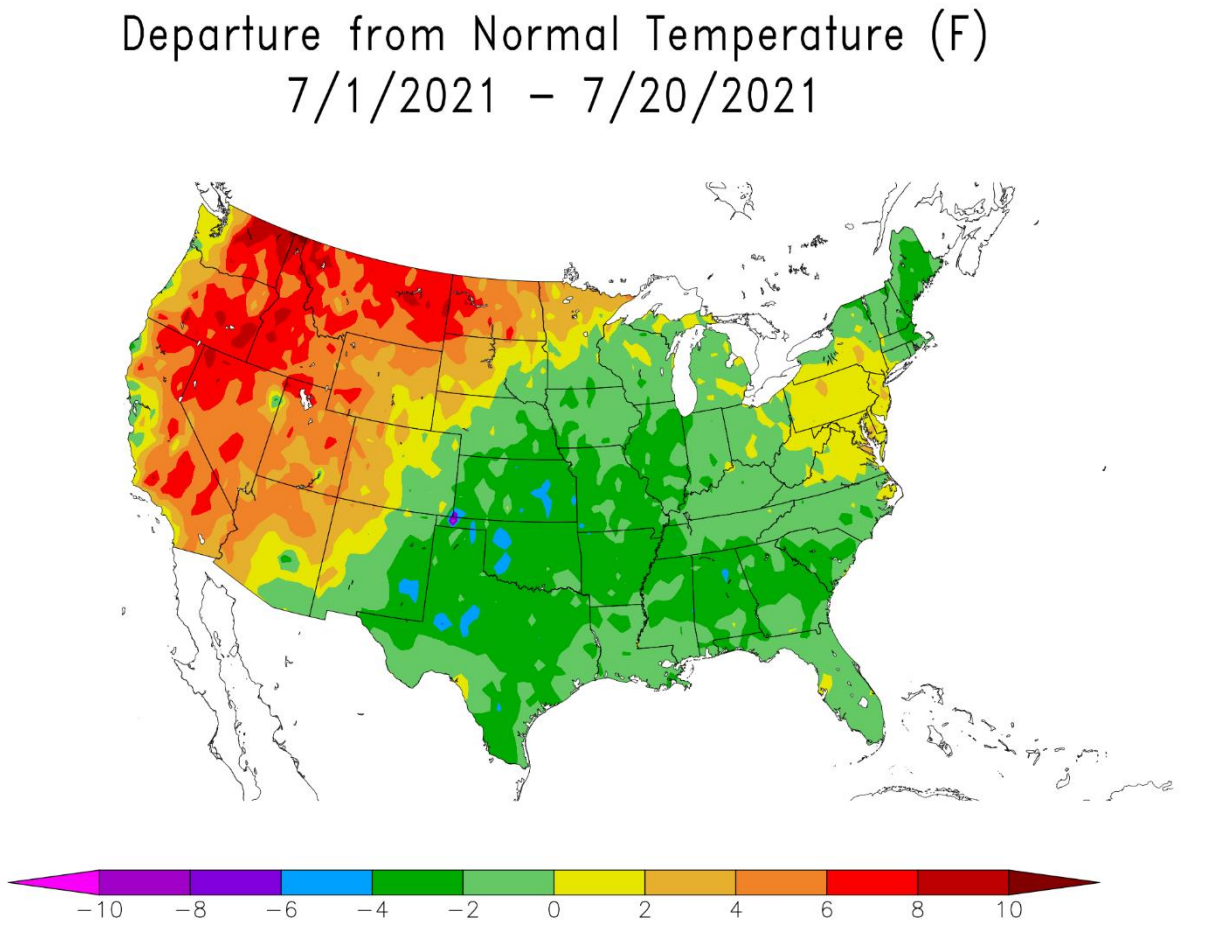
Discussion: **In my last update during the closing days of June, the large-scale pattern appeared to be fairly stable; featuring a strong upper-level ridge across the western U.S. and strong upper-level troughing across much of eastern Canada. At that time, the configuration of the upper air features favored hot weather staying well west of the OH / IN / MI areas most of the time, and cooler than normal conditions staying bottled up across eastern Canada. With that in mind, a call for a modestly warmer than normal first half of July seemed appropriate. I noted the chance we could see some brief pushes of hot weather into the region depending on the position of the western upper-level ridge.**

I also noted that it the eastern Canadian upper-level trough were to shift westward a bit, cooling might be greater than expected.

Well, the western ridge went bonkers across the Pacific Northwest and western Canada, and that induced a historic heat wave across these areas with all-time record heat smashing the old records. In fact, the intensity of the Northwest and western Canadian heat was other-worldly. Records were smashed by 10 to 20 degrees several days in a row.

As is often the case with the atmosphere, one area of extreme is often offset by an attempt to compensate elsewhere. Well, we did not see any historic cold across the central and eastern U.S., but the incredibly strong western ridge allowed the Canadian upper-level trough to intensify a bit and shift westward. This opened the door for cooler than normal conditions to dominate much of the time across the Upper Midwest on across much of the Northeast. So, what looked like a pretty easy call for a modestly warmer than normal first half of July morphed into a solidly colder than normal period.

Here is the Departure from Normal Temperature anomaly map for the July 1st through July 20th period.



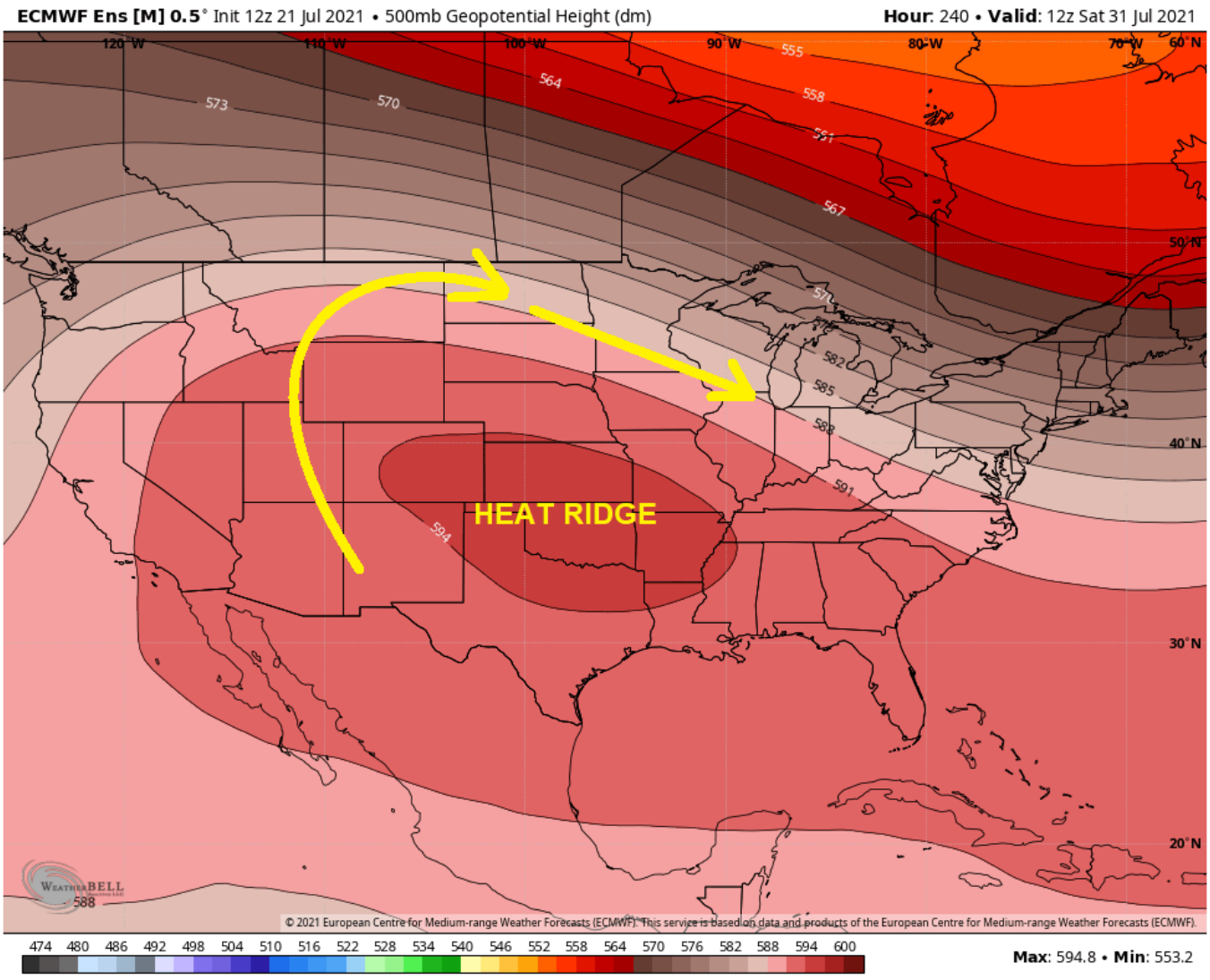
Note the widespread negative departures across the eastern 2/3's of the country.

With the exception of portions of the Middle Atlantic, cooler than normal conditions on average have prevailed from the Plains on eastward.

These negative departures are actually a bit less than they were on July 15th, as a warming trend has started to kick from the Plains on eastward across the Upper Midwest.

Currently, all signs point toward the western heat ridge bodily shifting eastward into the Plains, and going through a period of rapid intensification. This is actually already underway and it will get stronger and stronger on through next week.

Here is the projected upper-level flow by the time we get to Saturday, July 31st.



This evolution will likely produce a zone of triple digit heat across the central and northern Plains.

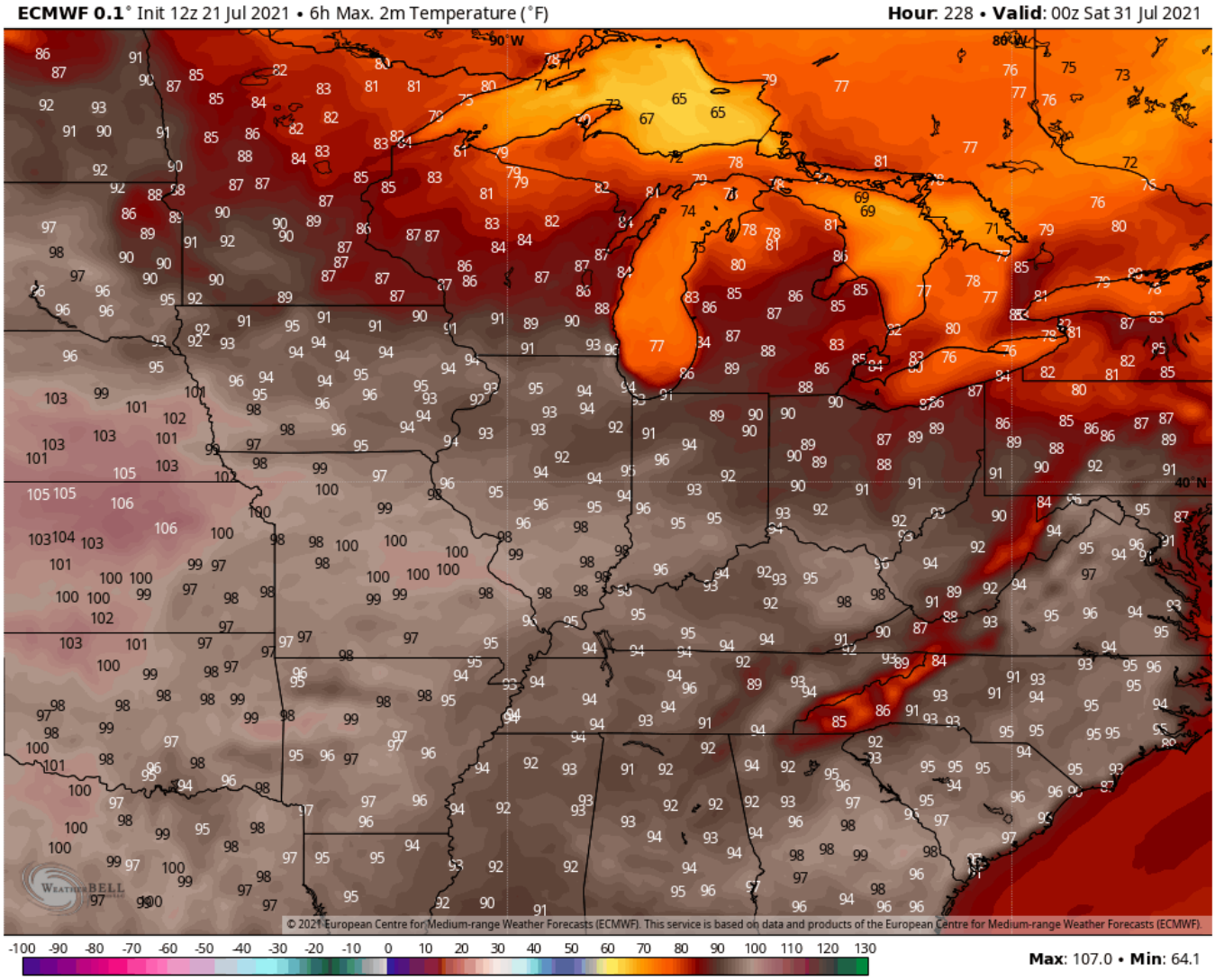
The question will then be, how much of the truly, disruptive heat spills eastward from the northern portions of the upper-level ridge into the OH / IN / MI area?

Right now, it appears that triple digit heat will spread into at least portions of IL and WI.

The greater OH / IN / MI area is likely to see much hotter than normal conditions with widespread 90+ degree temps developing and high levels of humidity mostly next week. This might push heat index values into the low to mid 100's, even if actual high temps stay only in the low to mid 90's.

The hot pattern for the Upper Midwest will slowly evolve as we move into the through this upcoming weekend. High temps will start moving toward or int the 90's across portions of IN, but OH and MI will likely stay considerably less hot until next week. But by the time we get to late next week, I expect to see widespread upper 80's to mid 90's across the region.

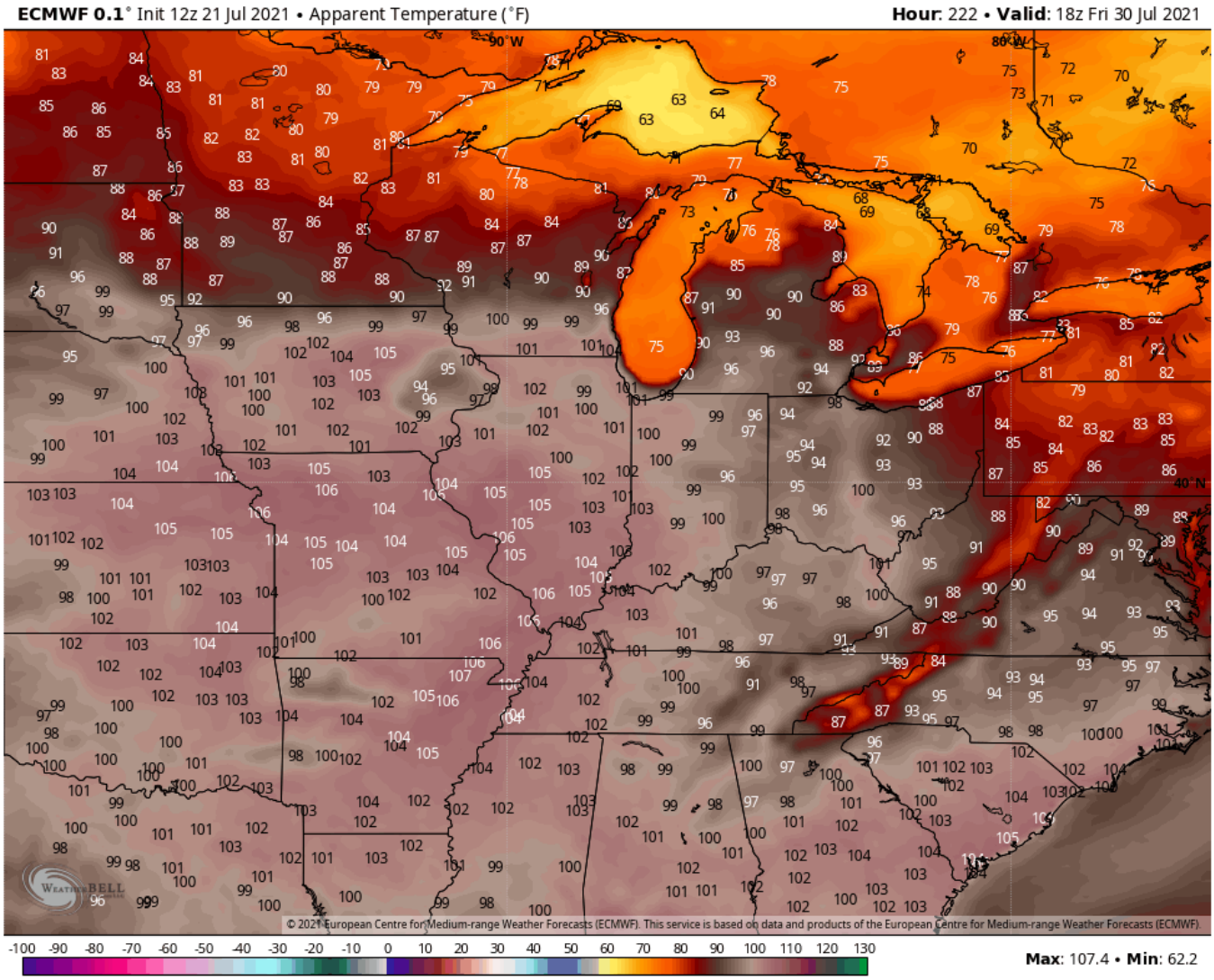
Here are the estimated high temps for next Friday, July 30th…



- Note the high temps get progressively hotter as you move westward from the Ohio Valley into the central Plains, where high temps are expected to reach 106 degrees.

But the combination of heat and humidity across the OH / IN / MI areas will push heat index values to excessive levels.

Here are the projected heat index values (apparent temperatures) for 2 pm next Friday!!!



- At that time, +100 degree heat indexes will likely be in play across a good deal of IN, with some spotty areas of near 100 degree heat indexes across parts of OH and MI.

There are times the modeling underplays these hot patterns and I would be wary of this heat wave setup verifying at higher levels.

The bottom line is that we are going to see a very impressive flip from the cooler than normal conditions of early & mid July with a solidly hotter, if not excessively hot, pattern evolving neat week. Cooling demand likely to spike big time…

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