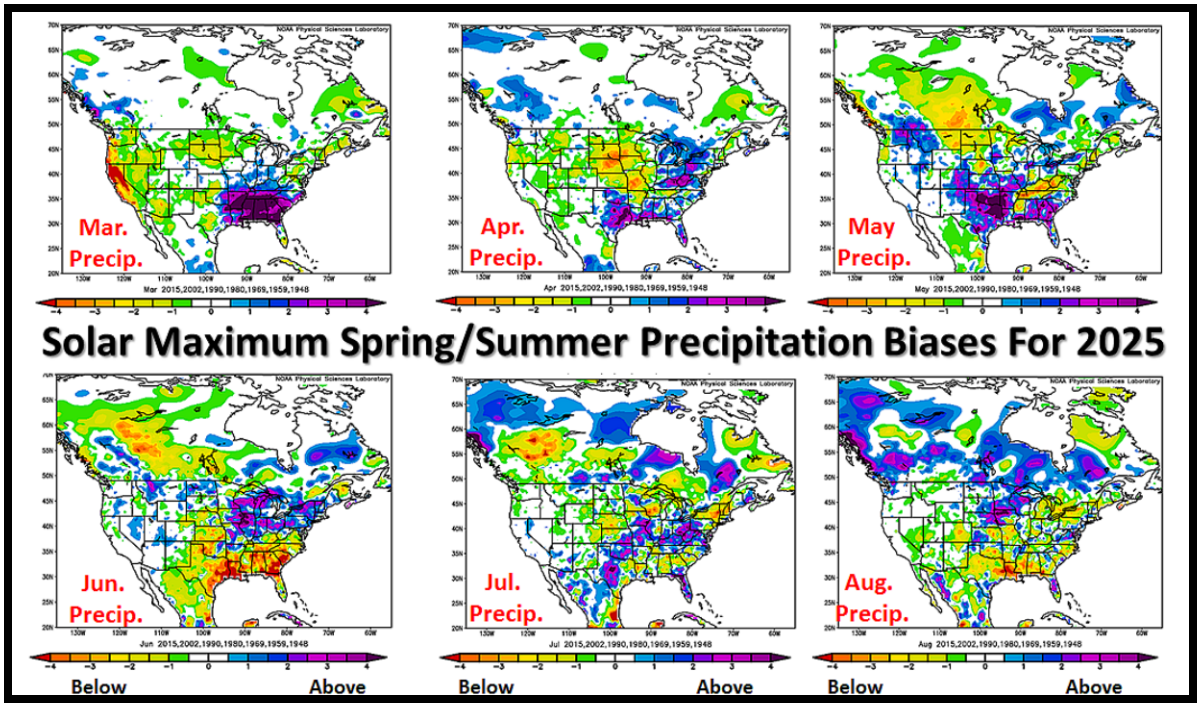
South U.S. Post Solar Max. Years Get Less Late Summer Rain

By Drew Lerner

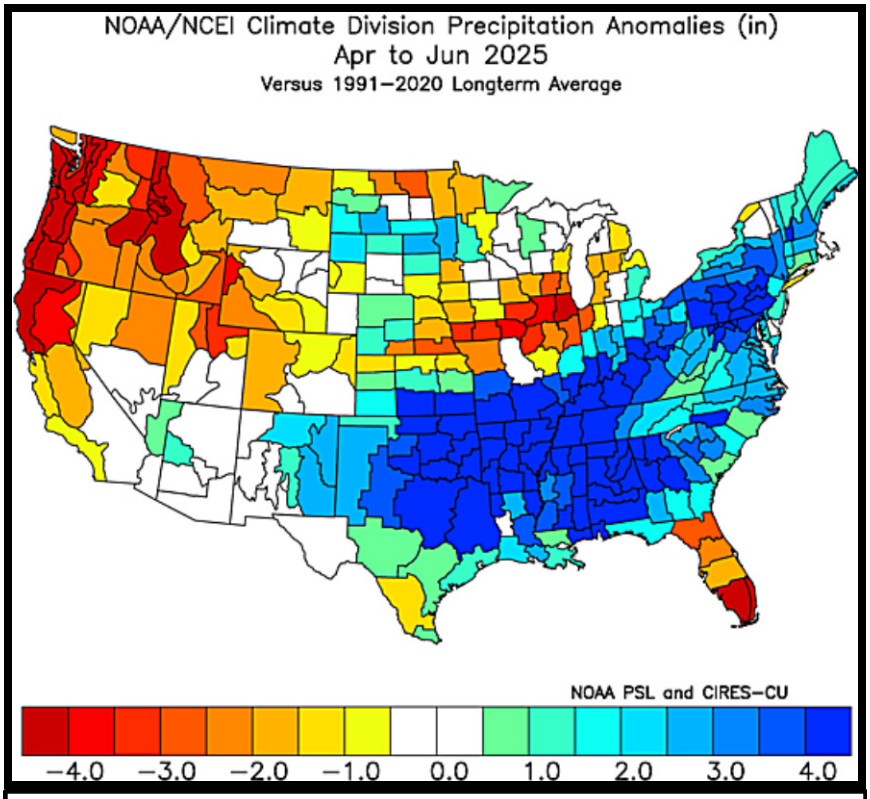
Kansas City, July 10 (World Weather Inc.) – ***Frequent abundant to excessive rains have been reported this year from the U.S. Delta and Tennessee River Basin into Texas and Oklahoma. This anomaly has been substantial, but it is very interesting to note that many of the post solar maximum and the lunar cycle years have all had a tendency to show similar conditions as pointed out in the spring and summer outlooks for 2025 released earlier this year.*** The wet bias may not be over, although the greatest rain anomaly in the coming week will be in West Texas, Oklahoma and parts of Kansas rather than in areas from the heart of Texas into the southeastern states as has been case at times this year. Drier- and warmer-than-usual weather may evolve for a while later this month into early August, but the wet bias may not be quite done for summer.

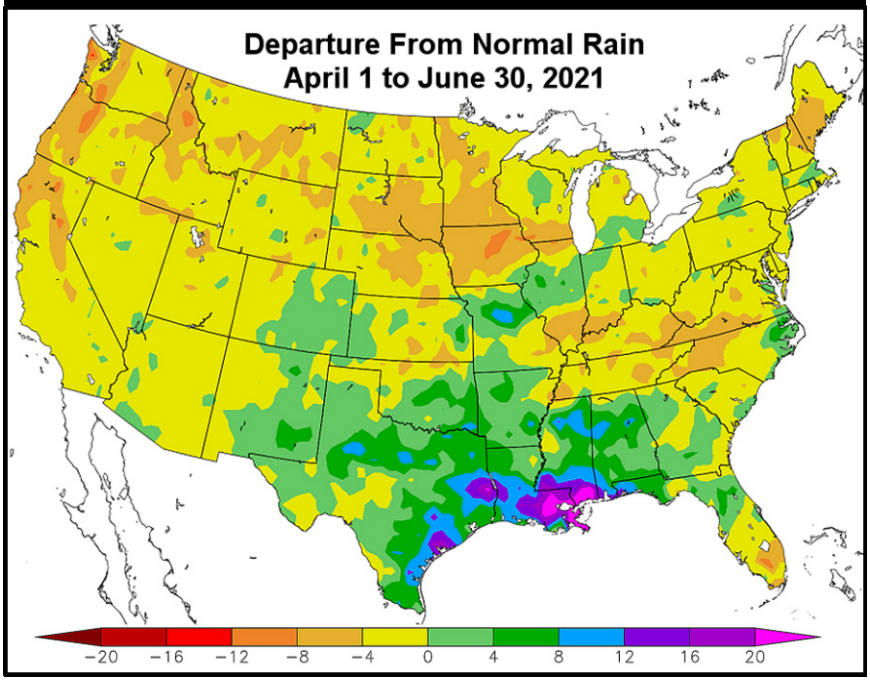


The sunspot (solar) maximum occurred in August 2024. Earlier this year, World Weather, Inc. studied the weather tendencies for the spring and summer seasons that followed the solar maximum. Seven years were looked at and the composite monthly rain anomalies are shown on the above rainfall charts. The blue and magenta colors on the graphic reflect well above normal precipitation anomalies while the orange and red colors suggest below normal precipitation. Notice how much of the southern United States had a tendency in these years to be wet or much wetter than usual. The anomalies seem to match those of this year relatively well. A similar assessment was conducted for the lunar cycle years resulting in some similar tendencies.

This year's April through June rainfall anomaly for the United States is shown below. Notice how much of the southern U.S. was wet biased as was the case in some of the images noted above. This year was, by far, wetter in the Delta, Tennessee River Basin and

areas northeast than in some of the post solar cycle years noted above, but nonetheless there was a wetter tendency in some of the months.

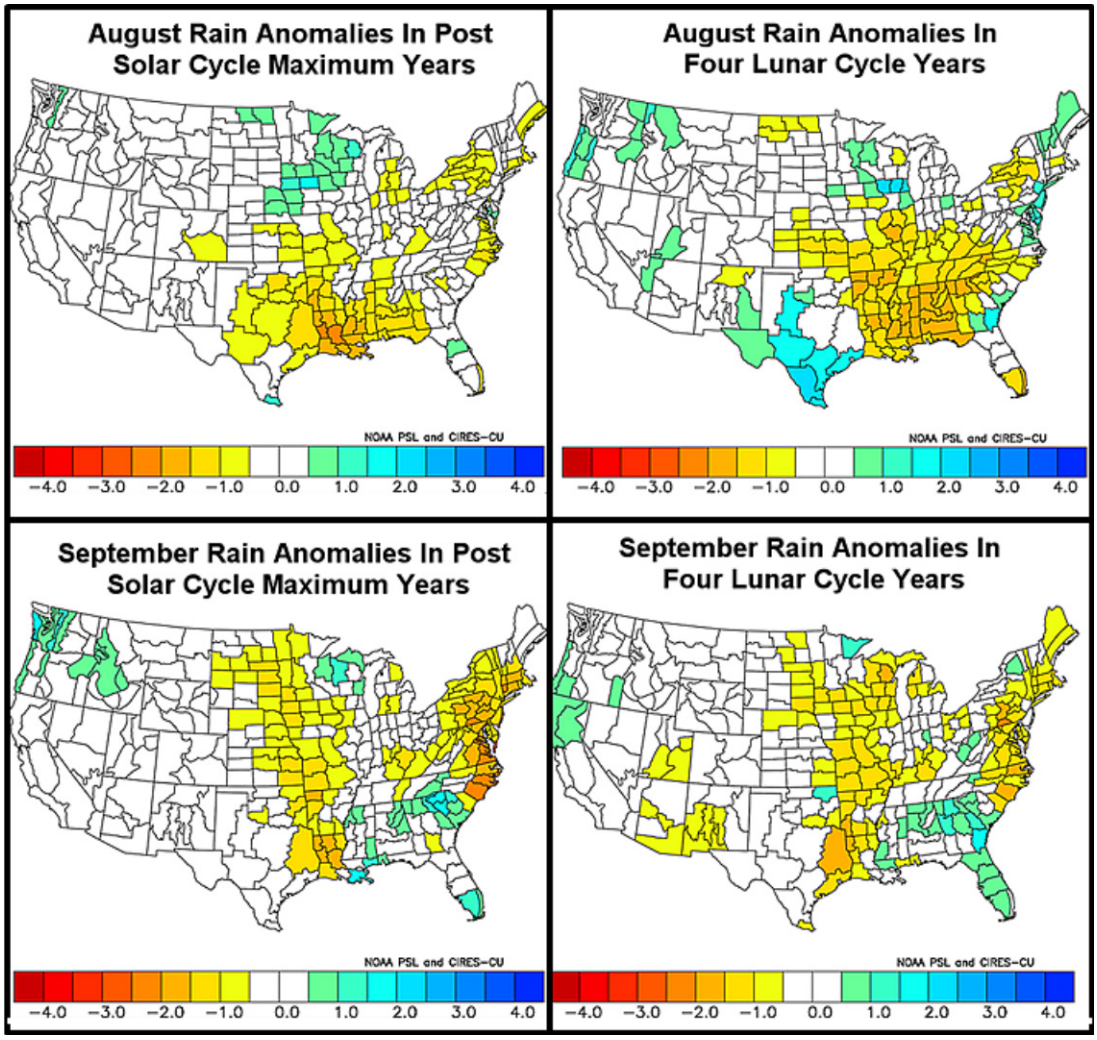




It is also very interesting to note the excessive rain event that occurred in central Texas this past week and compare that event to the 7-year composite chart for July shown above from the post solar maximum years. It may just be a coincidence, but there is enough

similarity in these years that it is worth mentioning here. However, only four out of the seven years were wetter than usual in Texas during July and only two (1990 and 2002) were much wetter than usual.

In addition to all of that there seems to be some similarity between this year's weather in North America and that from 2021 only without the temperature extremes that came in that year. Again, just worth noting. So the next question is what happened in August and September of these post solar maximum and lunar years?



In the post solar cycle years, August tended to be drier biased in the southern Plains and less rain occurred in the lower Delta and parts of Alabama. There was a little more variety for the Midwest and northern Plains, but there was a tendency for rain in the northern half to two-thirds of the Midwest to be timely and supportive of normal crop development. September tended to have a little drier bias in the eastern Plains and western Corn Belt while a greater mix of rain and dryness occurred in the eastern Midwest, Delta and southeastern states.

The most interesting part of the August and September outlook from a post solar maximum cycle perspective is that a very similar looking August and September

precipitation anomaly chart was noted for the two months coming from the lunar cycle, which includes four different analog years not associated with the solar cycle maximum.

The bottom line suggests that the greatest precipitation anomalies may begin waning over the next few weeks, although near-term forecast models suggest significant rain for West Texas in this coming week and also in some areas of the southeastern United States. The following week may be drier biased in the southern Plains and Delta while rain falls in the southeastern states. One more week of drier biased conditions should follow in late July across the southern Plains and Delta, although totally dry weather is not likely. Some warming is expected during late July and August as well. ***If we assume the August and September composite charts from the post solar maximum and lunar cycles are correct we must assume that there will be some timely rain across many areas in the Great Plains Midwest, Delta and southeastern states, although the bias will be for lower volumes of rain and a little warmer temperature bias resulting in more drying between storm systems***. ***That should not be interpreted as a serious threat to crop production, but more like a classic summer weather pattern in which rainfall diminishes and temperatures are warmest during August and early September before cooling takes place and greater rain resumes later in the autumn.***
