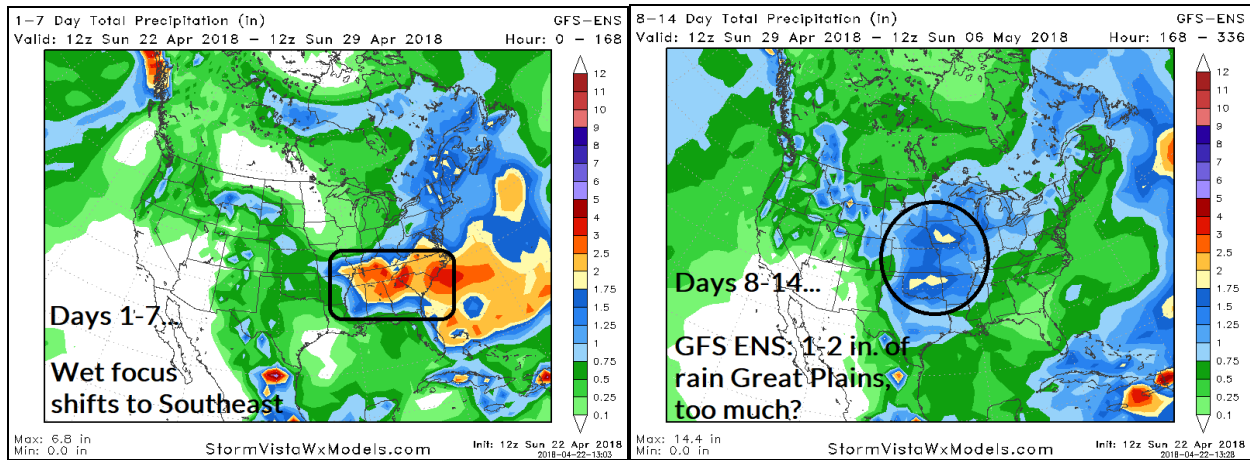


Climate Impact Company Sunday AG Report

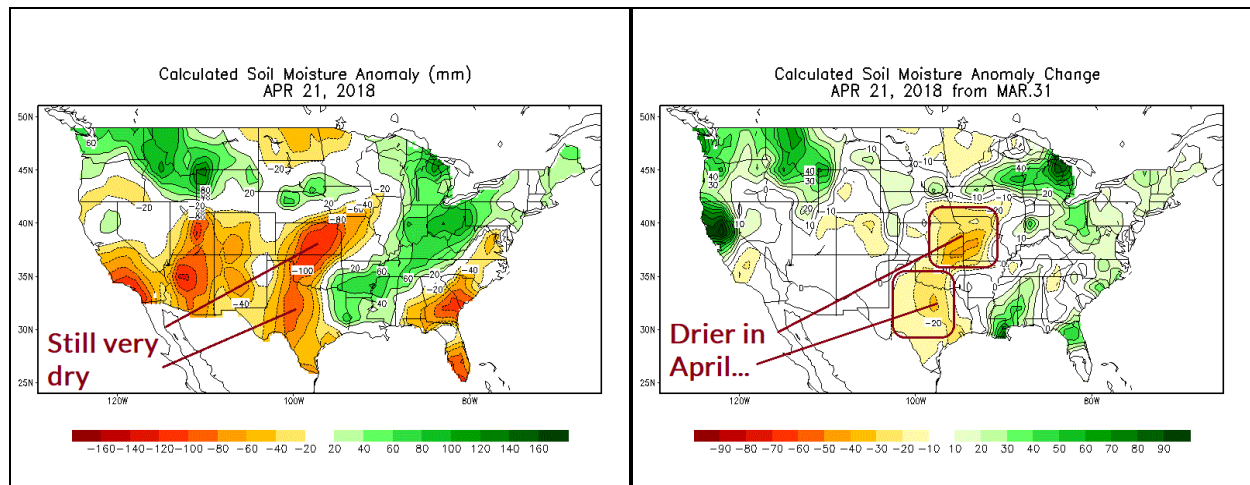
Sunday April 22, 2018

**This week's Highlights: Models Inconsistent with Great Plains Rainfall.**

**U.S. drought:** Last week NOAA indicated the Southwest Plains drought would dissipate and CIC disagrees. Rainfall forecast by the GFS is marginally beneficial (*Fig. 1-2*) and likely too wet for the drought area (*Fig. 3-4*).

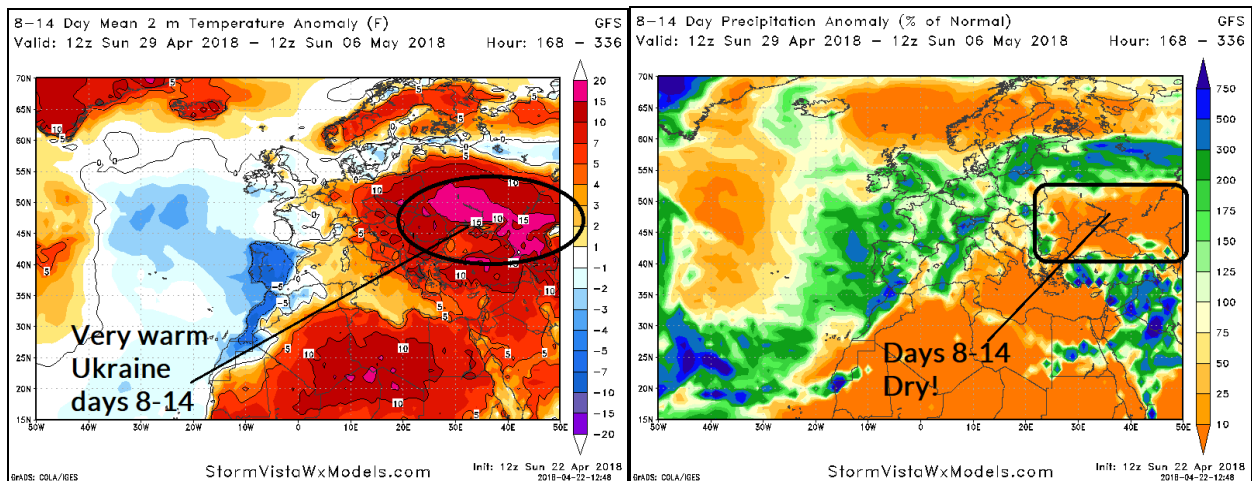


*Fig. 1-2: GFS ENS days 1-7/8-14 precipitation amount forecast for the U.S.*



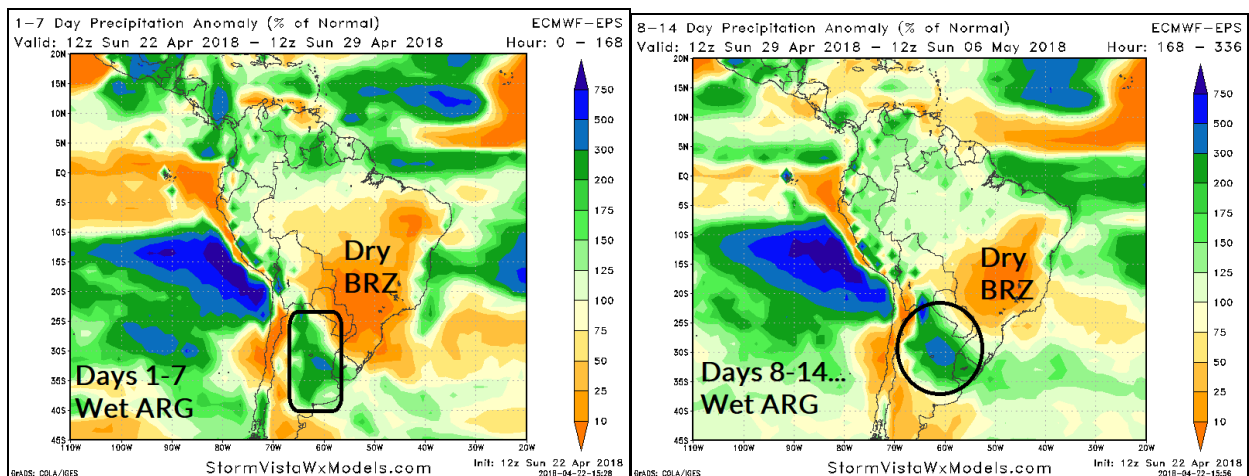
*Fig. 3-4: Current U.S. soil moisture anomalies and April soil moisture change.*

**Europe:** Models trend warmer over the next 2 weeks across Europe. The 8-14 day forecast is very warm! Core of that warmth is across Ukraine and the Black Sea region as temperatures average close to 20F above normal for the 7-day period (*Fig. 5*). Accompanying the warmth is lack of any rainfall although west/central Europe to west-central Russia is wetter than normal in the 8-14 day period (*Fig. 6*).



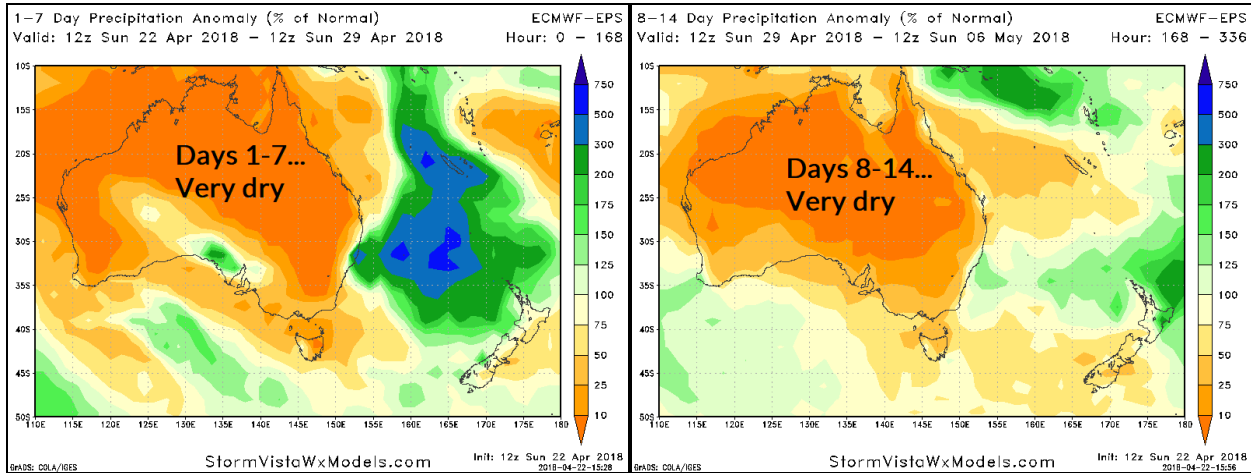
*Fig. 5-6: The 8-14 day period the GFS is very warm centered on Ukraine while that same area is very dry.*

**South America:** A climate pattern change for mid-to-late autumn across South America as Argentina is steadily wetter than normal the next 2 weeks (*Fig. 7-8*) while Brazil is dry. Very warm late April for northern Argentina.



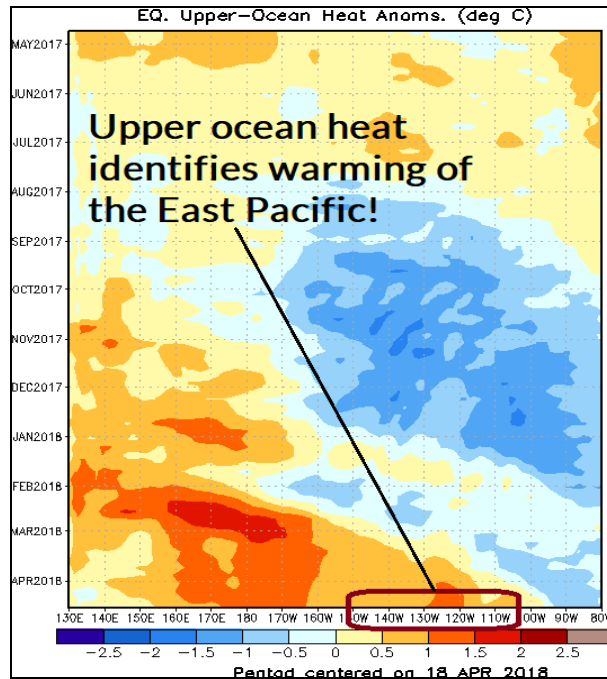
*Fig. 7-8: The ECM ENS percent of normal precipitation forecast for days 1-7/days 8-14 across South America.*

**Australia:** The outlook is dry except for south-central Australia this week (*Fig. 9*). Models vary widely in the 8-14 day period as the GFS indicates a wetter trend while the ECM ENS maintains dryness (*Fig. 10*). The MJO is forecast to potentially strengthen in the Indian Ocean in the 8-14/11-15 day period which could allow wetter weather to shift into Australia.



*Fig. 9-10: The day 1-7/8-14 percent of normal rainfall forecast across Australia.*

**ENSO:** Upper ocean heat continues to increase rapidly in the eastern equatorial Pacific Ocean implying a trend toward El Nino (*Fig. 11*).



*Fig. 11: Upper ocean heat in the equatorial Pacific Ocean.*