MONSOON MISCHIEF

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It has by no means been a typical summer in the United States. The Bermuda high with warm moist tropical southwest winds has not dominated. The ridge over the central or now west has. Many climatologists refer to the US southeast summer rains as monsoonal in nature. Asia has had the same weakness to their monsoon flow.

Rainfall in much of southern and eastern Asia is strongly controlled by the monsoon. For many months from the mid fall into the spring, the Siberian high dominates and the flow is from the dry interior. This is called the Dry Monsoon. As the land heats in the spring and the Siberian high melts away, the flow reverses and rains come in a big way to southern and eastern Asia. This is the Wet Monsoon.





We had anticipated an erratic Southeast Asia monsoon affecting India, Southeast Asia and parts of China.

Over the years, correlations between a weak wet monsoon and an El Nino in place or developing, an oscillation called the Indian Ocean Dipole that tends towards negative, a North Pacific in its cold mode, low solar activity and after high latitude volcanism. Three of the five are in place and the solar cycle is feeble, so in February we began highlighting that threat to the ag market because these areas are big producers of soft commodities and also grains.

You can see the correlation of El Ninos in a cold PDO with rainfall in the wet monsoon season (colors reversed so that negative shown in blue is negative precipitation). See the dryness in Indian parts of China and also Indonesia and Australia.



Likewise with low solar. when it is dry especially in India.



The Indian Ocean Dipole relates to a flip of the ocean warm and cold poles east to west in the Indian Ocean. The negative IOD favors dryness over India, wet weather over Indonesia.



You can see a weak negative IOD is in place.



You can see over the last month, it has been dry in parts of India, Southeast Asia and China.



Data Source: CPC Unified (gauge-based & 0.5x0.5 deg resolution) Precipitation Analysis Climatology (1979-1995)

For India, you can see a patchwork of below and above normal rain with 16% below normal rainfall in total to date.



Seasonal Rainfall (in mm) from 1 June-18 August, 2012			
Region	Actual	Normal	% Departure from Long Period Average
All India	515.2	614.4	-16
East & Northeast India	856.8	997.6	-14
Northwest India	312.8	424.6	-26
Central India	603.2	679.8	-11
South Peninsula	404.0	488.3	-17

You can see just a few storms over India in the latest imagery and quiet Arabian and Bay of Bengal.



The next week is forecast to be mainly below normal except in the central and north.



Normal rainfall derived from Xie—Arkin (CMAP) Monthly Climatology for 1979—2003. Forecast Initialization Time: 12Z19AUG2012

GrADS: COLA/IGES

The rainfall has been generally below normal with a few days above the normal. The activity pulses down again after each spike.



China has a monsoon season, too. In southeast areas, the rains start in the spring.



The Meiyu front usually lifts north to reach the NCP near Beijing by June and July.



The Meiyu front this year has been erratic, and although precipitation has been below normal from that feature, a succession of tropical storms have made up for the reduced monsoon rains, but again in a patchwork fashion as shown above. The Western Pacific Is still very active with a series of tropical systems like airplanes on approach towards Hong Kong (where I travelled twice and once to Beijing).



Tropical storm Tembin is forecast to come ashore in south China north of Hong Kong by the 24th, but models have it weakening. Another tropical system on its heels explodes and recurves towards Korea, week 2.

