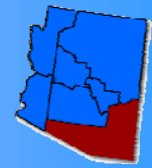




Southeast Arizona Climate Summary

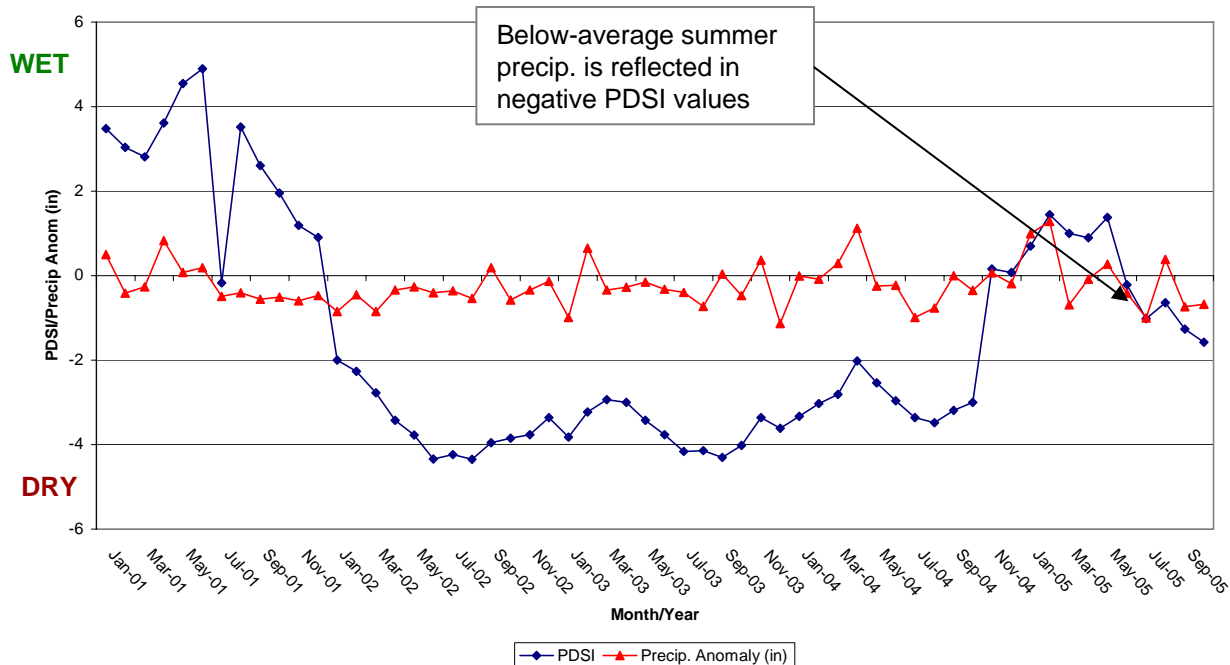
Fall 2005



November 4, 2005 – The southern Arizona monsoon season of 2005 made headlines for the wrong reasons with a dramatic late start. The official start date in Tucson determined by the National Weather Service didn't occur until July 18th missing the all-time late start date of July 25th(which occurred in 1987) by only a week. The late start was accompanied by a record tying streak of 39 above 100 °F days in Tucson that ended with the start of the monsoon. With the late start, most locations across SE Arizona saw below-normal precipitation for July. Monsoon thunderstorm activity ramped up considerably in August with some locations receiving heavy precipitation and resultant flooding from isolated thunderstorms. As is typical with monsoon thunderstorm activity, precipitation amounts were highly variable and many locations received below-average precipitation. Thunderstorm coverage was especially localized this season with very few widespread precipitation events. Monsoon activity ended in early September and no tropical storm systems crossed the area in either September or October. This has led to the continuation of short and long-term conditions across southeast Arizona (see latest National Drought Monitor <http://www.drought.unl.edu/dm/monitor.html>).

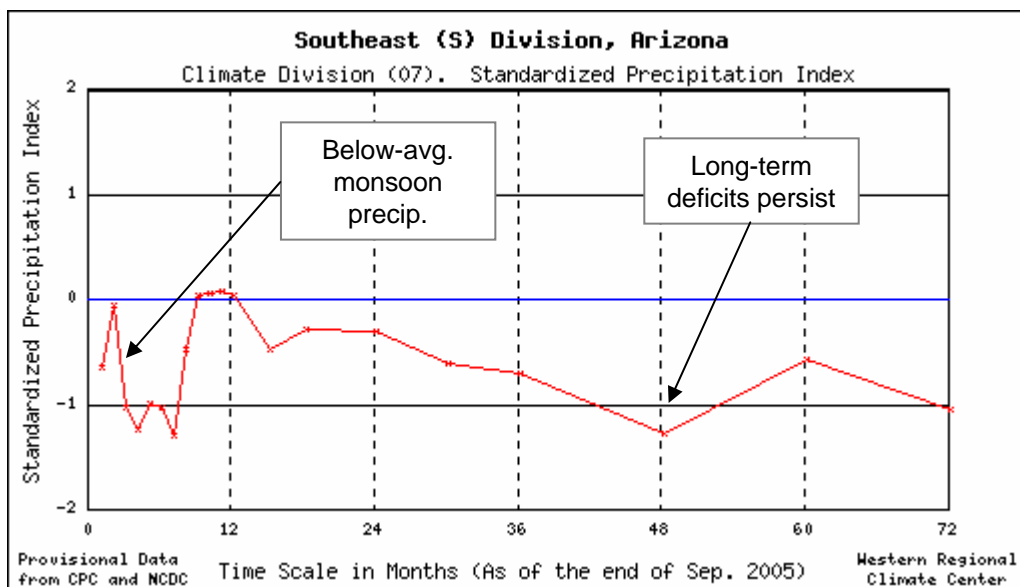
Forecasts for the upcoming winter season (Dec-Jan-Feb) from the Climate Prediction Center indicate that the southwest U.S. will see above normal temperatures with an equal chance of above, below, or normal precipitation. A trend in above normal temperatures is expected to continue leading to the above normal temperature forecast. The 'equal chances' designation for southern Arizona in the precipitation forecast is due to the lack of a strong predictive signal. Winter precipitation forecasts are based on specific sea-surface temperature patterns in the Pacific Ocean, namely El Nino or La Nina events. The current pattern is neutral with neither El Nino or La Nina conditions present which is problematic when making winter precipitation forecasts for the southwest U.S. (More information at <http://www.noaanews.noaa.gov/stories2005/s2520.htm/>)

Southeast Arizona Palmer Drought Severity Index and Precip. Anomaly: Jan. 2001 - Oct. 2005



Below-average summer precipitation has led to a return to short-term drought conditions. Long-term drought conditions remain over SE Arizona due to long-term precipitation deficits. Negative PDSI values reflect the impact of the below normal monsoon precipitation. Some localized areas may have received above-normal monsoon precipitation due to single thunderstorm events, but overall most locations saw below-average precipitation.

Southeast Arizona Climate Summary – Fall 2005



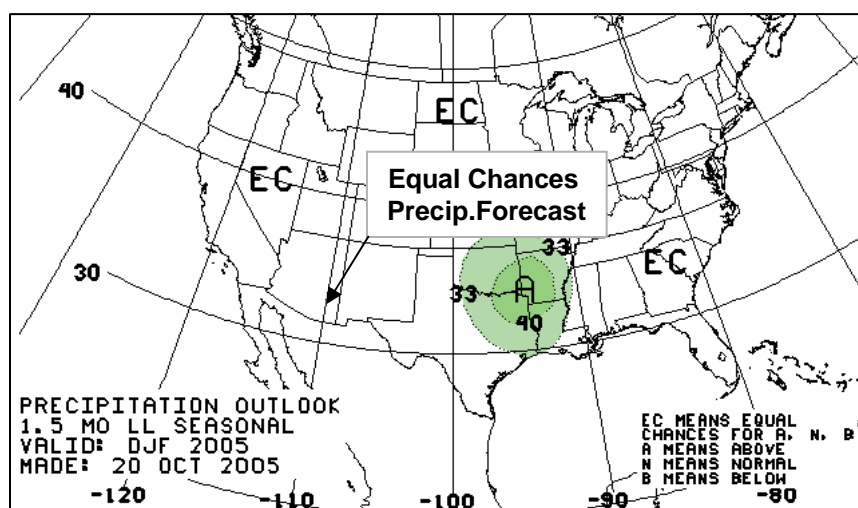
The 8 to 12 month windows show precipitation levels close to average (SPI=0). These values reflect the role of the wet winter of last December-February in improving precipitation deficits over the last year. Below-average monsoon precipitation is indicated as short-term drought conditions with SPI close to -1 in the 3 to 6 months window. Long-term drought conditions still persist in the 3 to 6 year window (36 to 72 months) with SPI values from -0.5 to -1.

Average August temperatures were close to normal at most locations across SE Arizona. Tucson was the only station to see slightly below-normal temperatures. Precipitation amounts were highly variables as is typical with monsoon season precipitation. Several stations listed here received above-normal precipitation for August, but most locations across SE AZ were below-normal for the 3-month July-August-Sept. period.

Location	Aug. 2005 Avg. Temp (F)	Aug. Long-term Avg. Temp (F)	Aug. 2005 Total Precip(in.)	Aug. Long-term Avg. Precip (in)
Willcox	77.5	76.4	3.17"	2.61"
Safford	82.2	80.8	0.96"	1.65"
Chiricahua N.M.	73.6	72.5	3.47"	4.13"
Douglas	77.1	77.1	3.73"	3.20"
Tucson	83.9	84.7	4.52"	2.25"

(data from <http://www.wrh.noaa.gov/twc> and <http://wrcc.dri.edu>)

The December-January-February seasonal forecast from the Climate Prediction Center depicts an 'equal chances' precipitation forecast for southeast Arizona. This forecast means that the probability of above normal or below normal precipitation is no greater than the probability of receiving normal precipitation amounts for the period. Previous forecasts released last month showed a chance of below-normal winter precipitation for Arizona. This forecast has been revised, due to model inconsistencies and lack of a strong-forecasting signal in the Pacific Ocean (no El Nino or La Nina conditions present).



From: http://www.cpc.noaa.gov/products/predictions/long_range/lead02/off02_prpc.gif