

Baton Rouge Climate Summary: June 2014

(based on available data as of 10 July 2014)

June Weather Highlights:

- the second consecutive 'wet' month for the Red Stick, the third 'wet' month for 2014
- the fifth cooler-than-normal month for 2014
- a "quiet" first month of the 2014 tropical season for Louisiana

June 2014's monthly average temperature of 80.5°F for Baton Rouge's Metro Airport (AP) was 0.6° below the norm, making June the fifth cooler-than-normal month of 2014. (Thus far, only April has registered warmer-than-normal for 2014.) While June's modest monthly departure is not especially noteworthy on its own merit, 2014's run of cooler-than-normal months ranks the first half of the year among the dozen or so "coolest" first-half-years since 1893 and the "coolest" since 1983.

High and low temperatures (Figure 1) stayed relatively close to their respective daily norms through most of June. Daytime highs during the month ranged from 81° (June 1st) to the low 90's. There were 18 days with highs of 90° or more (long-term average is about 20 days), including the monthly maximum of 93° recorded on June 19th and again on the 30th. Daily minimums ranged from 66° (June 13th) to 74° (June 7th, 8th & 21st); daily minimums were in the 70's for all but four days.

Table 1: June 2014 Temperature and Degree-Day Summaries

Temperatures & Departures (°F)									
Monthly MeanT		Monthly MaxT		Monthly MinT		3-mo. MeanT		YTD MeanT	
80.5°	-0.6°	89.4°	-1.5°	71.5°	+0.1°	74.4°	-0.6°	63.1°	-2.4°
Cooling Degree-Days & %Normal					Heating Degree-Days & %Normal				
Monthly CDDs		Seasonal* CDDs			Monthly HDDs		Seasonal* HDDs		
469	97%	975	93%	0	--	1984	128%		
*CDD Season: Jan 1 thru Dec 31					*HDD Season: Jul 1 thru Jun 30				

A review of synoptic weather maps indicates that only one front made it into the Baton Rouge metro area during June 2014. That occurred during the morning hours of the 11th, and that front essentially dissipated as it worked its way through the Capital region. Another cold front approached the region on June 13-14, but it stalled to the north before reaching the metro area. It is worth noting that the rainy spell of June 25-27 (see Figure 1) was not associated with frontal weather either. Indeed, with a lack of significant frontal passages during June, air mass characteristics for the Red Stick remained essentially sub-tropical throughout the month, as suggested by daily dew point temperatures hovering in the upper 60's to low 70's.

With a June total of 11.36", Metro Airport (BTR) has recorded back-to-back wetter-than-normal months; June is the third month of 2014 with monthly rainfall running more than 2" above the norm for BTR (February, May & June).

Note that Metro Airport was the second wettest site among the stations included in Table 2, with a June total nearly 5" above the norm. While every site in Table 2 did report above-normal June rains, none displayed so large a departure as that for BTR. For Metro Airport, June 2014's total is the largest monthly total for any month since January 2013 (14.67") and is the wettest June for BTR since June 2001, when Sub-Tropical Storm **Allison** set rainfall records for a number of southeastern Louisiana communities. Indeed, BTR's total for June 2014 is tied with 1962 as the sixth wettest June on record (monthly records dating back to 1892).

Based on 16 reporting sites in Table 2 (with complete records), metro area regional rainfall for June 2014 averaged well over 8" (with a median of 8.56"), roughly 2" above the regional June average.

Table 2: June 2014 rainfall for selected sites across the greater Baton Rouge metro area. (Data are preliminary and provided courtesy of the National Weather Service, the LSU Southern Regional Climate Center, the LSU AgCenter, and additional volunteer sites.)

Rain-Reporting Site	June 2014 Rainfall					Two-Month Rainfall		Year-to-Date Rainfall	
	Total	DFN	1-Day Max*	No. Days ≥0.01" ≥1.0"		Total	DFN	Total	DFN
BR - Metro Airport	11.36"	+4.95"	3.84"	12	4	19.68"	+8.38"	35.70"	+4.77"
BR - Concord Estates	8.87"	+1.81"	4.17"	13	3	20.75"	+8.60"	39.66"	+6.86"
BR - Sherwood Forest	8.05"	+1.62"	2.36"	15	2	19.36"	+7.77"	37.60"	+5.71"
Clinton 5 SE	8.48"	+2.57"	2.00"	9	4	--	--	--	--
Denham Springs	7.79"	+1.68"	2.10"	10	4	25.38"	+14.52"	44.18"	+13.42"
Dutchtown #2	8.87"	--	3.69"	13	3	23.87"	--	43.20"	--
Gonzales	7.91"	+0.87"	2.40"	11	2	25.12"	13.75"	38.66"	+7.19"
Livingston	8.68"	+1.81"	2.44"	11	4	25.61"	+13.61"	42.33"	+9.55"
New Roads	6.12"	+0.49"	1.55"	10	2	17.32"	+6.92"	35.04"	+4.04"
Oaknolia	8.14"	+2.12"	1.82"	11	5	16.65"	+6.07"	36.61"	+3.96"
Plaquemine	8.48"	+2.03"	2.05"	12	5	19.17"	+8.31"	35.60"	+4.83"
Port Allen	11.75"	+4.84"	4.33"	9	3	21.71"	+9.79"	40.32"	+8.12"
St. Francisville	6.54"	+0.12"	1.50"	13	2	19.80"	+8.67"	38.61"	+5.79"
St. Gabriel	9.76"	+2.63"	3.05"	11	3	21.29"	+9.75"	38.06"	+8.13"
LSU-Ben Hur Farm	3.78" <i>(i)</i>	M	2.57"	--	--	--	--	--	--
LSU Campus	8.64"	--	3.87"	12	3	18.61"	--	38.15"	--
WAFB-TV Studio	8.71"	--	3.66"	14	3	18.68"	--	38.22"	--
Regional Average	8.63"	+2.12"	2.79"	12	3	20.87"	+9.68"	38.80"	+6.86"
Regional Median	8.56"	+1.81"	2.44"	12	3	19.80"	+8.64"	38.22"	+6.33"

DFN - Departure-from-Normal

"--" - Not Available

M - Missing Value

(e) - Estimated *(i)* - Incomplete Total

1-Day Max* - largest "daily" total; based on the daily observation time for each location

Table 3: Distribution of June 2014 rain totals based on selected regional sites (Table 2, 16 sites).

No. Sites ≤ 7.00"	No. Sites 7.01" - 8.00"	No. Sites 8.01" - 9.00"	No. Sites 9.01" - 10.00"	No. Sites 10.01" - 11.00"	No. Sites > 11.00"
2	2	9	1	0	2

The array of stations in Table 2 shows that the metro area averaged 12 raindays during June -- matching the average number of June raindays for BTR. While June's rains were reasonably-well distributed, BTR daily data (Figure 1) suggest that a large portion of June's rain fell during June 25-27. Note that during this same period a number of locations (Table 1) recorded single-day maximums in excess of 3" -- the equivalent of almost half of June's normal rainfall in just a 24-hour period.

Metro Airport's two-month accumulated total of 19.68" ranks as the 5th 'wettest' May+June combination since 1892: 'wetter' May+June periods included 1989 (37.86"), 1907 (25.23"), 2001 (22.19") and 2004 (21.05"). Stations in Table 2 display two-month totals ranging from just under 17" to more than 25", and average roughly 20" for the metro area, nearly double the May+June normal.

Through the first half of 2014, rainfall for Metro Airport -- and the entire metro area -- is running above average. For the region, rainfall is running close to 40" (based on Table 2 data), roughly 20% above the six-month average. IN fact, while Metro Airport's year-to-date total is among the lowest of the sites listed in Table 2, it still more than 15% above its January-thru-June normal.

Table 4: June 2014 additional reports and observations from the ASOS (Automated Surface Observing System) weather platform at Baton Rouge Metro Airport (BTR). (*Data are preliminary.*)

4a. Notable Weather Occurrences

No Days:	Jun 2014	Median*
Thunderstorms	12	12
"Heavy" Fog (Vis** ≤ ¼ mi.)	2	1
All Visibility*** (Vis** < 7.0 mi.)	18	16
Fog / Mist (Vis** < 7.0 mi.)	17	16
Smoke / Haze (Vis** < 7.0 mi.)	2	2

Median* - based on observations during 2000-2012 (13 years)

Vis** - Sensor Equivalent Visibility; Fog/Mist are distinguished from Haze/Smoke through evaluation of temperature and humidity at the time of observation

All Visibility*** - total number of days with any obstructions leading to at least one observation with Visibility estimated at less than 7 miles

4b. Average Daily Wind Speed

June 2014	< 3.0 mph (Near Calm)	3.0 mph < 5.0 mph	5.0 mph < 10.0 mph	10.0 mph < 15.0 mph	≥ 15.0 mph
No. Days	1	8	20	1	0

4c. Average Sky Conditions (cloud-cover estimate to 12,000 ft) during "Daylight"

June 2014	Clear to Mostly Sunny (0/10ths – 3/10ths)	Partly Cloudy To Partly Sunny (4/10ths – 6/10ths)	Mostly Cloudy To Overcast (7/10ths – 10/10ths)
No. Days	16	11	3

4d. Sunrise/Sunset Summary

Sunrise, Sunset & daylight Duration: (excludes 'Civil Twilight')

June 1	June 21 (Solstice)	June 30
6:03 am 8:02 pm 14.0 hours	6:03 am 8:10 pm 14.1 hours	6:06 am 8:11 pm 14.0 hours

Figure 1: June 2014 *Daily Maximum and Minimum Temperatures, Daily Average Dew Points and Precipitation* from the Baton Rouge Metro Airport ASOS.

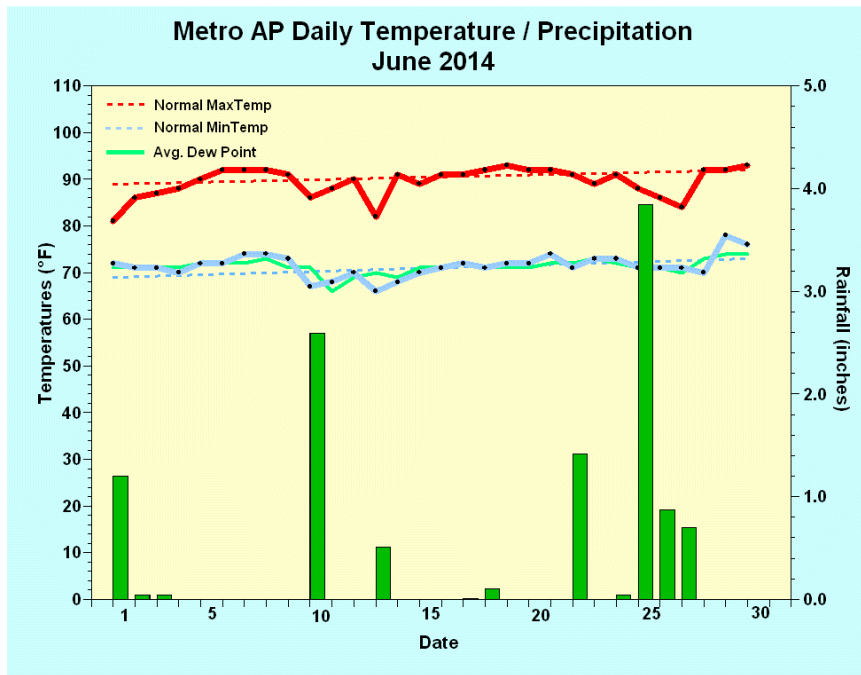
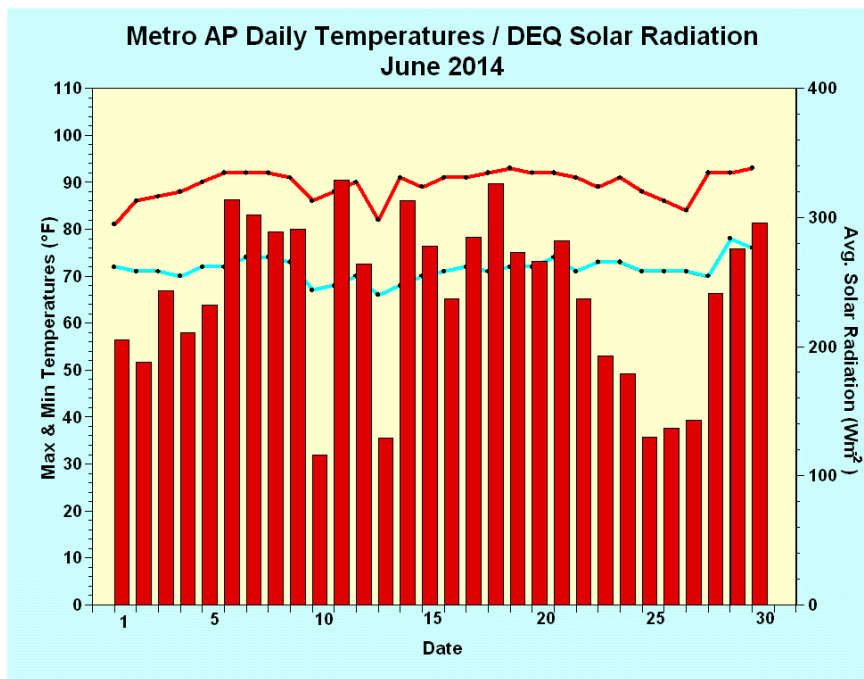


Figure 2: June 2014 *Daily Average Solar Radiation* as recorded at DEQ’s Capitol site and *Daily Maximum and Minimum Temperatures* from the Baton Rouge Metro Airport ASOS.



Figures 3 & 4: 2014 monthly rainfall and average monthly temperatures plus comparative monthly normals for Baton Rouge Metro Airport (Normals based on 1981 - 2010).

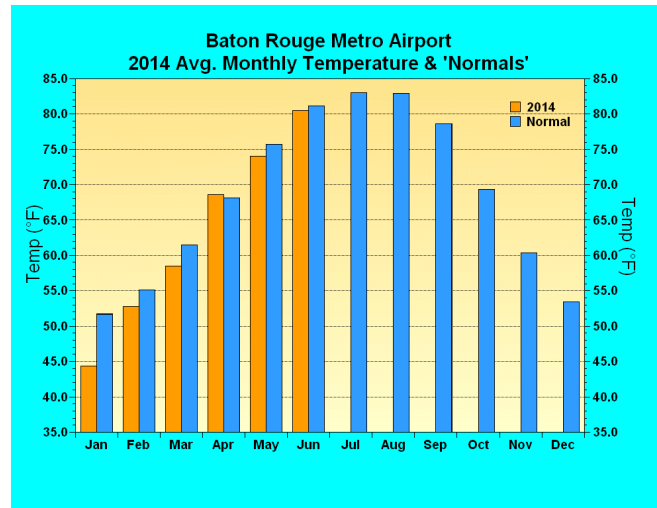
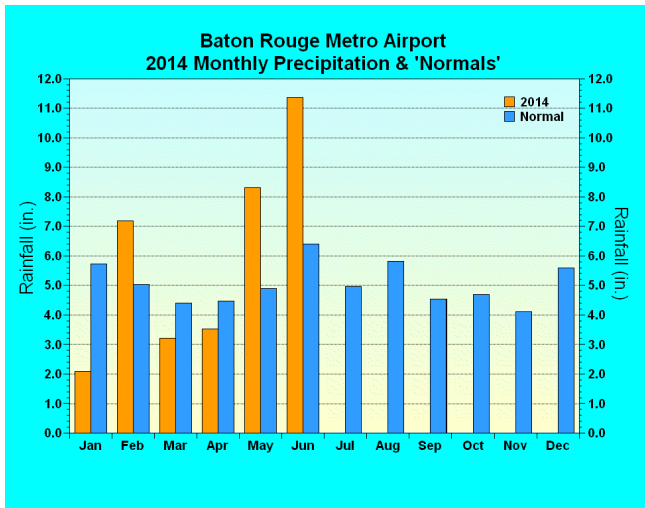


Figure 5: 2014 daily temperature and cumulative rainfall for Baton Rouge Metro Airport compared to long-term averages (as of 2 July 2014).

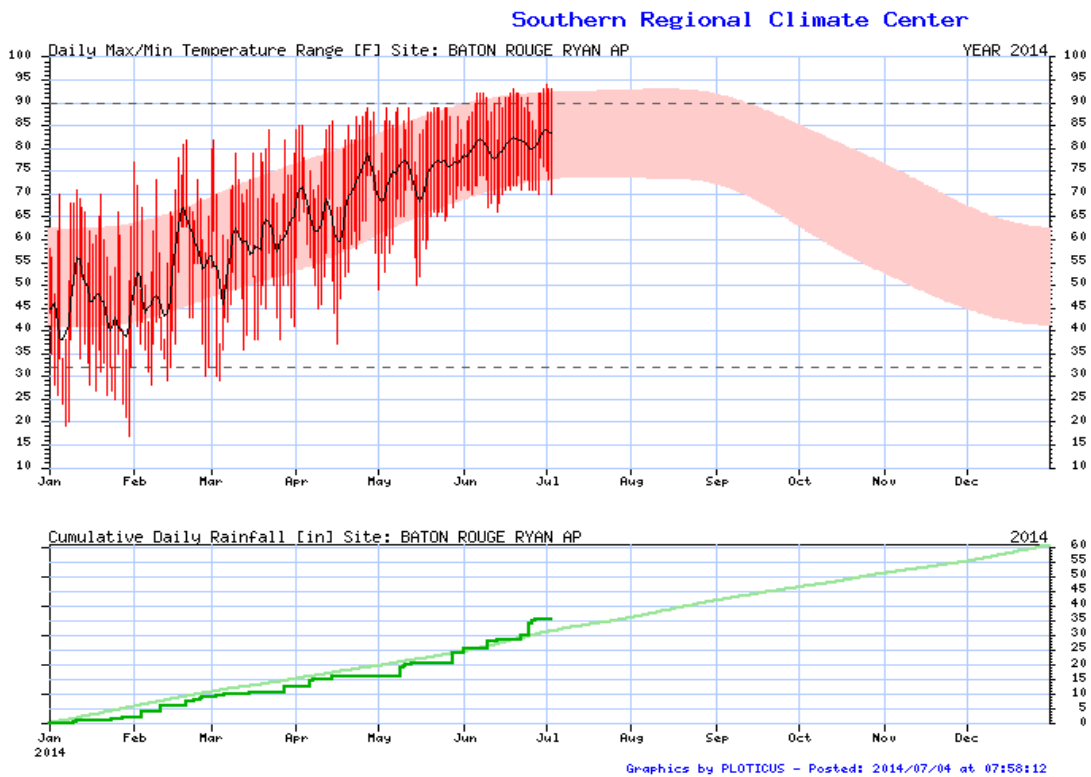


Table 5: June 2014 significant Preliminary 'Local Storm Reports' as posted by the NWS for the greater Baton Rouge metro area. (Final Reports available through the NWS.)

Date	Time (CDT)	Event	Location*	Parish
6 / 10	7:15 AM	Wind damage, tree down	Batchelor	Pte. Coupee
6 / 10	7:45 AM	Wind damage, trees down	10 mi. NW Jackson	W. Feliciana
6 / 24	1:50 PM	Wind damage, trees down	1 mi. S Livonia	Pte. Coupee
6 / 24	2:53 PM	Wind damage, tree down	Innis	Pte. Coupee

*Locations approximated in whole miles from town center where noted

Table 6: June 2014 Watches, Warnings and Key Advisories issued for East Baton Rouge Parish.

Date(s)	Event	Approx. Time in Effect (CDT)
--	** None during June **	--