

Air Quality Summary—July 2008

Baton Rouge Area

There were five days during the month of July with air quality levels in the “Unhealthy for Sensitive Groups” level in the Baton Rouge area. Three air monitoring stations recorded 8-hour ozone levels above the standard on July 2: New Roads-81 ppb/114 AQI, LSU-78 ppb/106 AQI, and French Settlement-76 ppb/101AQI. Bayou Plaquemine was the only monitor to reach the USG level on July 15 with a high reading of 80 ppb/111 AQI. On July 16, there were two monitors that went over the standard: Grosse Tete-79ppb/109 AQI and Bayou Plaquemine-76 ppb/101AQI. The New Roads monitor recorded a high of 83 ppb/119 AQI and Grosse Tete had a high value of 78 ppb/106 AQI on July 17. Ozone levels were over the standard at three monitors on July 18: Grosse Tete-78 ppb/106 AQI, Bayou Plaquemine-76 ppb/101 AQI and New Roads-76 ppb/101 AQI.

Ozone Action Days were called on July 16, 17, 18, 20 and 28.

Other Areas of the State

During the month of July, both the Lafayette and Shreveport areas had days in which air quality levels were in the “Unhealthy for Sensitive Groups” range. Ozone levels were over the standard at Lafayette on July 16 with a high 8-hour reading of 80 ppb/111 AQI. On July 17, both monitors in the Shreveport area recorded ozone levels over the standard: Dixie-81 ppb/114 AQI and Shreveport Airport-79 ppb/109 AQI. Dixie was in the USG range again the following day (July 18) with a high of 77 ppb/104 AQI.

Ozone Action Days:

Lafayette, Lake Charles and Houma/Thibodaux areas-July 17 and 18

New Orleans area-July 16, 17, 18 and 28

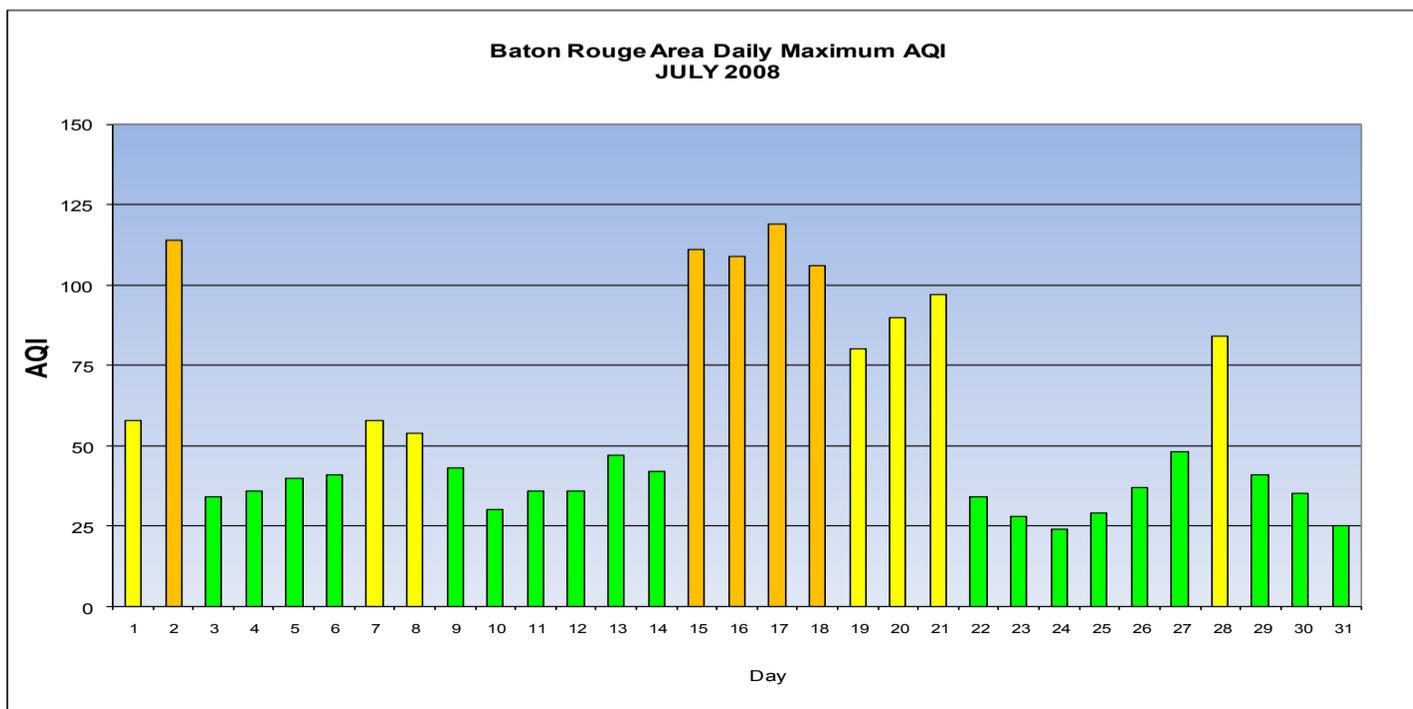
Shreveport area-July 19, 20 and 29

Statewide 8-HR Ozone Readings /AQI Above 75 ppb



0-50	Good
51-100	Moderate
101-150	Unhealthy for Sensitive Groups
151-200	Unhealthy
201-300	Very Unhealthy

DATE	AQI	8-HR OZONE Concentration (ppb)	MONITORING SITE
7/2/08	114	81	New Roads
	106	78	LSU
	101	76	French Settlement
7/15/08	111	80	Bayou Plaquemine
7/16/08	111	80	Lafayette-USGS
	109	79	Grosse Tete
	101	76	Bayou Plaquemine
7/17/08	119	83	New Roads
	114	81	Dixie
	109	79	Shreveport Airport
	106	78	Grosse Tete
7/18/08	106	78	Grosse Tete
	104	77	Dixie
	101	76	Bayou Plaquemine
	101	76	New Roads



Baton Rouge Climate Summary—July 2008

**Prepared by: Jay Grymes*
(based on available preliminary data as of August 17, 2008)

The greater Baton Rouge area was flirting with "drought-like" conditions by the end of July, as July continued a "hot and dry" weather pattern that had become well-established during June. At Metro Airport, July's average temperature was a warm 84.1°F (+2.4°) with rainfall totaling a modest 3.37" (-2.59").

July is the fourth consecutive month with an average temperature more than 2° above the 30-year normal -- monthly temperatures at Metro Airport have averaged above-the-norm for each of the past twelve months (Aug '07 - Jul '08), with ten of those months showing departures of more than +2.0°F.

July's monthly average temperature ranks as the "fifth warmest" July for Metro Airport since 1930. Average daily temperatures were above-normal for all but four dates (Jul 1, 2, 4 & 24), with seven days in July when average temperatures were 5° or more above the norm. Maximum daily temperatures ("daytime highs") during July averaged 93.9°F, 3.2° above-average and ranking second among all Julys since 1930! High temperatures reached or exceeded 90° on every date except July 31st, with twelve days reaching 95°F or more, including a 7-consecutive-day stretch at mid-month (Jul 15-21). By comparison, Metro Airport averages 24 days with highs at or above 90° during July.

Table 1: Average "daylight hours" sky conditions (to 12,000 ft) during July, based on ASOS observations from Baton Rouge Metro Airport.

Sky Condition: Sunrise to Sunset (Sky Coverage)	Clear to Mostly Sunny (0/10ths – 3/10ths)	Partly Cloudy / Partly Sunny (4/10ths – 6/10ths)	Mostly Cloudy to Cloudy (7/10ths – 10/10ths)
No. Days	14	16	1

In addition to above-normal temperatures, July was marked by considerable sunshine throughout the month (Table 1). Records from Metro Airport indicate that July 23rd was the only day when cloud-cover was rated as "mostly cloudy to cloudy" (during daylight hours), with nearly half the month's days being categorized as "clear to mostly sunny." Figure 1 confirms the abundance of sunshine during July -- note that daily solar radiation loads tended to be greater during the first half of the month, which corresponds well with the "Sky Condition" calendar for Metro Airport. July daylight hours (Sunrise to Sunset) range from approximately 14.1 hours (July 1) to 13.6 hours (July 31).

July continues an extended run of drier-than-normal weather for the Baton Rouge metro area -- July is the fifth month of 2008 and the tenth month of the past twelve with below-normal rainfall at Metro Airport. July 2008's total of 3.37" for Metro Airport ranks among the fifteen "driest" Julys since 1930 for that location. Metro Airport reported 9 days-with-rain (≥ 0.01 "") and 1 day (July 3) with more than 1" for a 24-hour total -- both numbers being slightly below the 30-year averages of 12.7 and 1.8 days, respectively. Although a handful of sites in the metro area recorded more than 4.0" of rain for July, Table 2 indicates that virtually the entire region reported below-normal rainfall, with a few areas receiving less than 1.0" of rain during July.

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Table 2: July 2008 rainfall for selected NWS and LSU stations across the Baton Rouge metro area.
(Data are preliminary.)

NWS Location	Monthly Rainfall	Monthly DFN	No. Days ≥ 0.01"	No. Days ≥ 1.00"
Baker	M	M	M	M
BR - Metro AP	3.37"	-2.59"	9	1
BR - Concord Estates	5.28"	-0.60"	9	3
BR - Sherwood Forest	4.34"	-1.41"	10	1
BR - LSU Campus	4.37"	--	11	2
Brusly (2 W)	1.22"	-4.80"	7	0
Clinton (5 SE)	3.46"	-1.71"	10	1
Denham Springs	3.46"	-2.43"	10	1
Gonzales	2.42"	-3.79"	8	0
Jackson (3 E)	1.76"	--	7	0
Livingston	M	M	M	M
LSU-Ben Hur Farm	4.22"	-1.18"	10	2
New Roads	0.83"	-3.91"	9	0
Oaknolia	2.35"	-2.91"	9	0
Port Allen	M	M	M	M
Plaquemine (2 N)	1.69"	-3.66"	6	0
St. Francisville	0.80"	-3.61"	8	0
St. Gabriel	M	M	M	M
Zachary	2.14"	-2.98"	10	0

DFN - Departure-from-Normal "--" - Normals are not available
"M" -"Missing" / data currently unavailable for July 2008

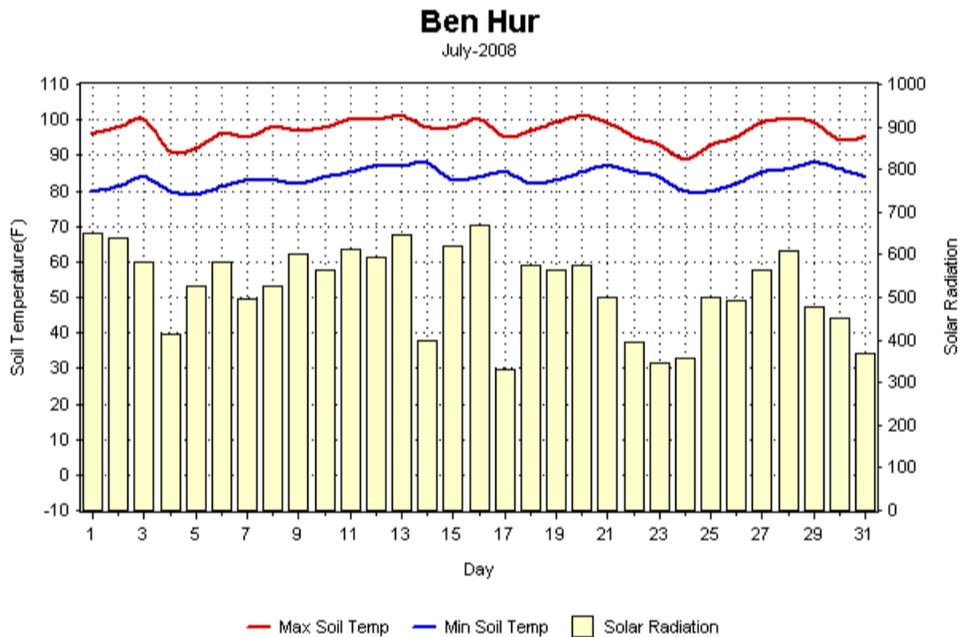
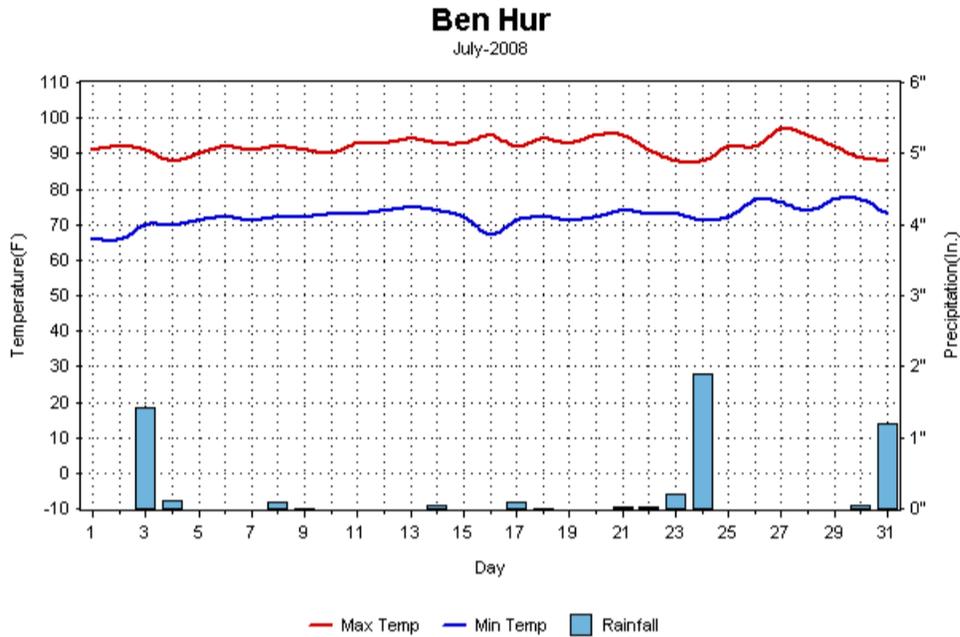
Historically, July and August tend to display the lightest average wind speeds during the year, with winds generally averaging about 5-6 mph during these months. Wind data from Metro Airport and regional LAIS stations indicate that surface wind speeds (10-meter observations) during July 2008 were slightly below average, averaging less than 5 mph for the month. Metro Airport data indicate that daily winds averaged 7.0 mph or greater on only four dates (Jul 13, 26, 27, & 30), while averaging under 4.0 mph on nineteen dates. Winds were especially light through the first three weeks of July, with daily average wind speeds under 4.0 mph from July 1-10 and again from July 14-21.

From a meteorological perspective -- with respect to daily temperatures, sunshine and light winds -- it appears as though July 2008 was a month very conducive to the development of surface-based ozone in the greater Baton Rouge area.

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Figures 1 & 2: July 'Daily Max/Min Temperatures and Precipitation' and 'Daily Solar Radiation and Soil Temperatures' recorded by the LSU AgCenter/LAIS Weather Station located at LSU-Ben Hur Farm (Nicholson Dr.)



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