

Climate Review for the month of August 2011

Presented by:
Climate Team

Summary

August was an interesting month weather-wise. The month began dry and hot with temperatures continuously above 90 degrees. Several of COOP stations and LCD sites had record breaking maximum temperatures. ENSO was still neutral, but the atmosphere had La Nina characteristics that resulted in hot and dry conditions for the first half of August.

High pressure was the dominated air mass for July, but had a few weak cold fronts move through the area. Overall, rainfall amounts were not enough to significantly reduce year to date moisture deficits. Drought conditions improved somewhat in the northwestern extreme to a D1, but overall our CWA remained under a D2 or D3 drought designation. After Hurricane Irene dropped 8-18 inches of rain across Eastern North Carolina the drought designation was dropped completely.

DISCLAIMER from Bel: The climate data provided are preliminary and have not undergone final quality control by NCDC. Therefore...this data is subject to revision.

Average Temperatures within our CWA

	Avg_ Max	Avg_ Max Normal	Avg_ Min	Avg_ Min Normal
Beaufort	89.4	na	75.3	na
Cape Hatteras	88.0	84.1	75.9	72.9
New Bern	91.3	87.9	71.6	70.4
Greenville	89.7	88.3	70.0	69.2
Kinston AG	89.8	89.6	70.5	69.3
Williamston	88.6	87.3	69.4	67.5
Plymouth	89.1	87.8	69.6	68.6
Aurora	90.5	87.3	74.2	70.7
Bayboro	89.9	88	69.2	70

Overall, the average temperatures were 1 to 4 degrees above normal for the month of August.

Max and Min Temperature within our CWA

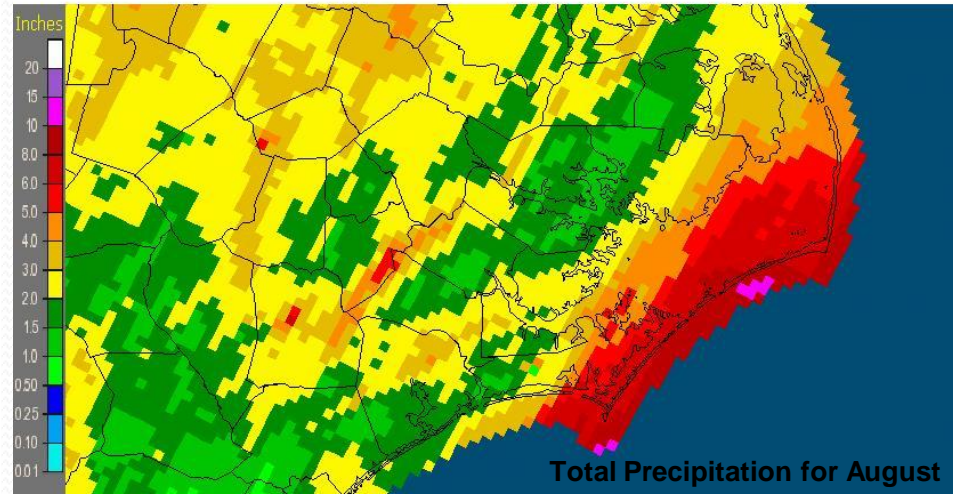
	MAX	MIN	# of Days \geq 90° F
Beaufort	97	64	11
Cape Hatteras	92	72	8
New Bern	100	66	23
Greenville	96	62	18
Kinston AG	98	62	19
Williamston	95	62	13
Plymouth	96	62	14
Aurora	98	66	17
Bayboro	98	62	15

90 degrees was a very common temperature throughout Eastern North Carolina

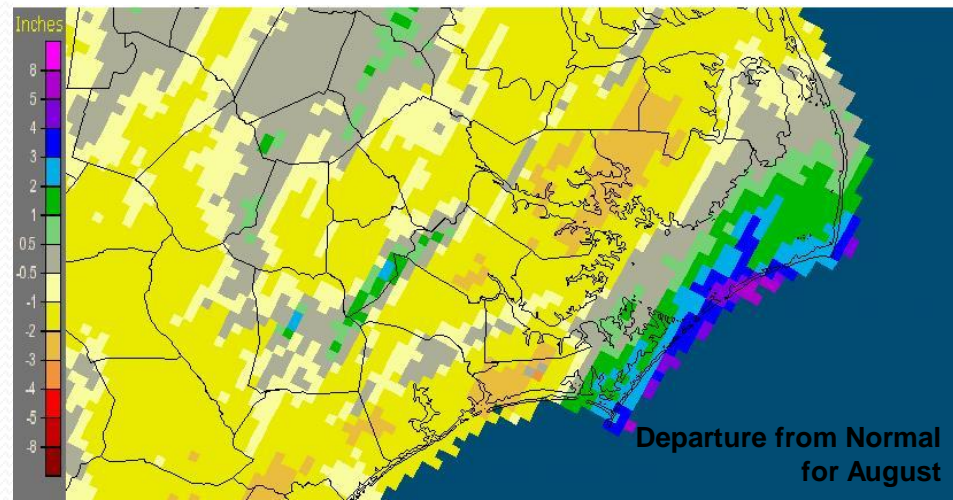
August's Rain versus Normal

	Precipitation (inches)	Normal	Differences
Beaufort	8.15	na	na
Cape Hatteras	8.23	6.93	1.3
New Bern	15.03	6.65	8.38
Greenville	13.78	6.14	7.64
Kinston AG	22.23	5.41	16.82
Williamston	16.37	5.54	10.83
Plymouth	18.44	6.28	12.16
Aurora	17.96	6.12	11.84
Bayboro	20.90	7.25	13.65

Newport/Morehead City, NC (MHX): October, 2011 Monthly Observed Precipitation
Valid at 11/1/2011 1200 UTC- Created 11/3/11 21:38 UTC



Newport/Morehead City, NC (MHX): October, 2011 Monthly Departure from Normal Precipitation
Valid at 11/1/2011 1200 UTC- Created 11/3/11 21:40 UTC

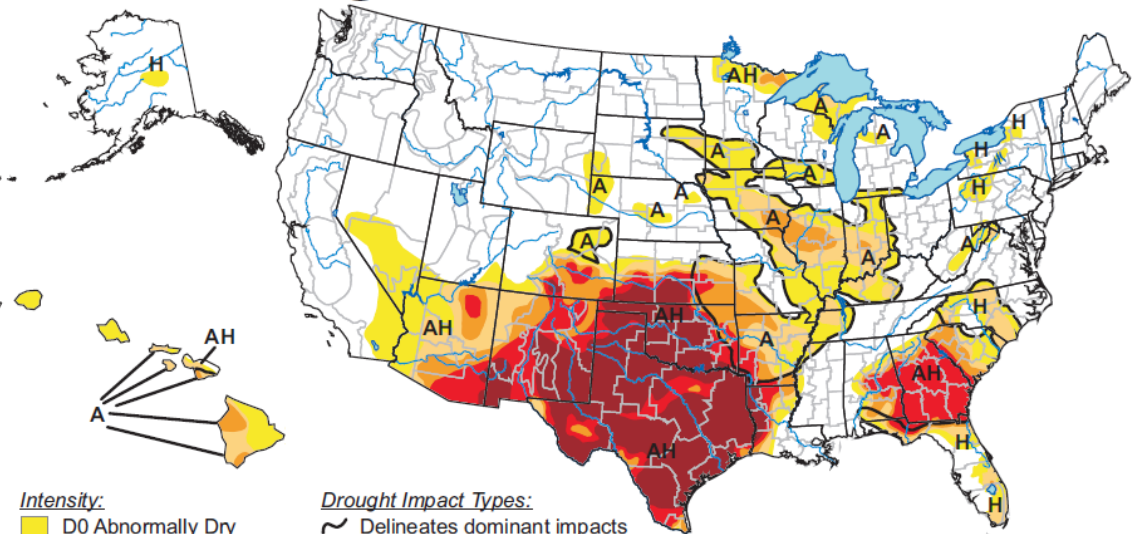


Obviously most of the precipitation in August was from Hurricane Irene. The above table lists the extreme amounts.

U.S. Drought Monitor

September 6, 2011

Valid 8 a.m. EDT



- Intensity:**
- D0 Abnormally Dry
 - D1 Drought - Moderate
 - D2 Drought - Severe
 - D3 Drought - Extreme
 - D4 Drought - Exceptional

- Drought Impact Types:**
- ~ Delineates dominant impacts
 - A = Agricultural (crops, pastures, grasslands)
 - H = Hydrological (water)

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

<http://drought.unl.edu/dm>



Released Thursday, September 8, 2011

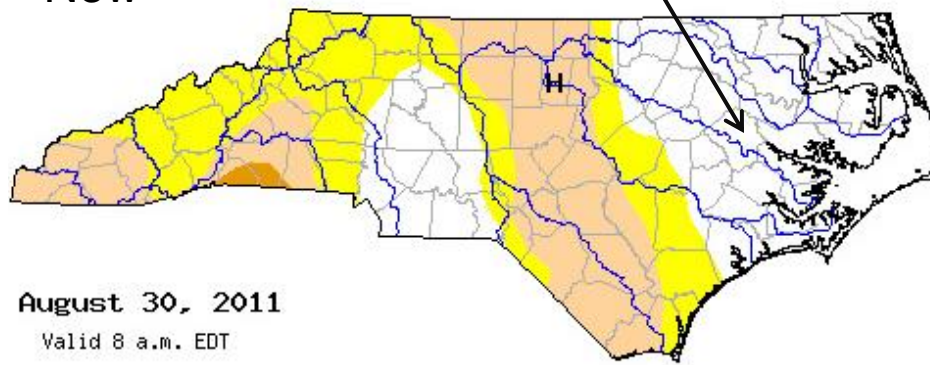
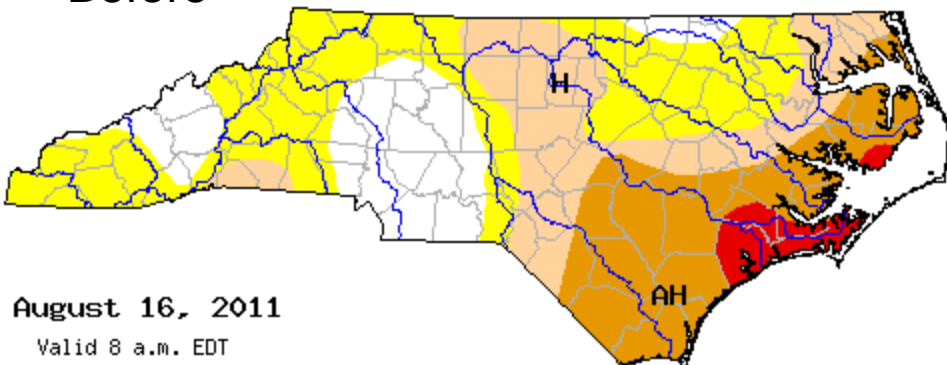
Author: Mark Svoboda, National Drought Mitigation Center

Extreme Drought before Hurricane Irene...

After Hurricane Irene

Before

Now



August 16, 2011

Valid 8 a.m. EDT

August 30, 2011

Valid 8 a.m. EDT

KEWN August, 2011

Date	Observed Low (F)	Observed High (F)	Normal Low (F)	Normal High (F)	Record Low (F)	Year	Record High (F)	year	Observed Precipitation (inches)	...Record... Precipitation (inches)	Observed Snow Fall (inches)	...Record... Snow Fall (inches)
1	73	90	72	89	61	1966	100	1999	0.20	1.07 1949	0	0
2	72	96	72	89	58	1966	96	2011	0	2.51 1973	0	0
3	74	100	71	89	63	1959	100	2011	0	2.31 1976	0	0
4	80	96	71	89	61	1956	99	1980	0	1.53 1974	0	0
5	79	94	71	89	62	1951	103	1954	0	1.01 2004	0	0
6	77	91	71	89	59	1951	97	1980	0.80	2.91 1973	0	0
7	77	95	71	89	56	2004	98	1968	0	1.89 1992	0	0
8	75	98	71	89	58	2004	99	2007	0	1.55 1990	0	0
9	75	99	71	89	59	2002	99	2011	0	1.60 1983	0	0
10	75	96	71	89	61	2002	98	1979	0	4.38 1988	0	0
11	71	91	71	89	59	2002	96	2010	0	4.93 1955	0	0
12	76	90	71	88	59	1974	97	1957	0	7.04 1955	0	0
13	71	91	71	88	61	1954	94	1956	0	5.04 1953	0	0
14	73	92	71	88	56	1950	94	1990	0.63	1.71 1992	0	0
15	67	89	71	88	55	1950	95	2005	0.01	1.65 1994	0	0
16	68	88	71	88	60	1967	99	1954	0	1.56 1973	0	0
17	66	90	70	88	57	1979	97	1997	0	4.44 1955	0	0
18	68	90	70	88	58	1979	101	1988	0	2.46 1971	0	0
19	68	92	70	88	63	1958	99	1988	0.06	8.85 1986	0	0
20	70	89	70	88	61	1998	98	2005	0.06	1.63 1991	0	0
21	71	93	70	88	58	1998	101	2007	0.03	1.15 1979	0	0
22	71	90	70	87	60	1969	100	1983	0.06	3.81 2006	0	0
23	70	87	70	87	57	1969	98	2002	0	1.61 1974	0	0
24	66	90	70	87	56	1953	100	2002	0	1.91 1988	0	0
25	70	94	70	87	57	1969	96	1968	0	1.90 1990	0	0
26	74	87	70	87	59	1986	96	1954	3.30	3.30 2011	0	0
27	71	79	69	87	59	1984	96	1954	9.72	9.72 2011	0	0
28	72	91	69	87	57	1986	96	1987	0	2.09 1959	0	0
29	68	93	69	87	54	1965	98	1993	0	1.10 1964	0	0
30	68	85	69	86	50	1965	95	1993	0.16	4.02 1954	0	0
31	65	85	69	86	53	1965	96	1957	0	3.64 2006	0	0
Average	71.6	91.3	70.4	88.0					15.03 Normal = 6.65		0.0 Normal = 0.0	

Hurricane Irene



KHSE August, 2011

Date	Observed Low (F)	Observed High (F)	Normal Low (F)	Normal High (F)	Record Low (F)	Year	Record High (F)	year	Observed Precipitation (inches)	...Record... Precipitation (inches)	Observed Snow Fall (inches)	...Record... Snow Fall (inches)
1	76	87	74	85	61	1966	91	2002	0.60	2.02 1989	0	0
2	75	92	74	85	58	1964	92	2011	0	1.41 1985	0	0
3	80	90	73	85	60	1959	92	1975	0	6.74 1986	0	0
4	79	89	73	85	57	1959	93	1991	0	1.99 1961	0	0
5	79	89	73	85	60	1976	91	1984	0	2.22 1969	0	0
6	79	91	73	85	57	1976	93	1989	0.08	1.78 1967	0	0
7	82	89	73	85	60	1964	94	1968	0	1.54 1991	0	0
8	82	92	73	85	60	200	92	2011	0	0.81 1963	0	0
9	82	90	73	85	62	1957	91	1960	0	3.70 1976	0	0
10	81	90	73	85	64	1975	92	1979	0	2.29 1996	0	0
11	77	89	73	85	65	1944	93	1958	0	1.46 1989	0	0
12	76	90	73	85	60	1974	92	1881	0	1.88 1979	0	0
13	76	91	73	84	59	1974	91	2011	0	2.02 1959	0	0
14	76	87	73	84	57	1979	90	2005	0.31	1.50 2001	0	0
15	72	86	73	84	61	1983	91	2005	0.01	2.00 1992	0	0
16	76	87	73	84	59	1983	93	1978	0	1.49 1992	0	0
17	73	86	73	84	58	1961	91	1978	0	2.76 1958	0	0
18	72	89	73	84	56	1979	93	1988	0	5.30 1991	0	0
19	73	89	73	84	64	1881	91	1987	0.05	3.51 1981	0	0
20	72	88	73	84	63	1993	91	2005	0.09	1.75 1981	0	0
21	73	88	73	84	62	1995	94	1968	0	1.77 1988	0	0
22	76	89	73	84	62	1998	91	2005	0.01	3.70 1981	0	0
23	74	87	73	84	62	1985	94	1968	0	2.01 1967	0	0
24	74	87	73	84	59	1985	91	1968	0.01	5.27 2010	0	0
25	74	88	73	84	59	1986	90	1993	0.05	1.30 1960	0	0
26	75	85	73	83	60	1986	92	1975	3.67	3.67 2011	0	0
27	73	83	72	83	60	1982	91	1975	3.25	3.25 2011	0	0
28	75	87	72	83	59	1984	92	1881	0	5.72 1962	0	0
29	75	89	72	83	61	1966	92	1993	0	1.66 2000	0	0
30	74	84	72	83	60	1897	92	1932	0.10	8.69 1999	0	0
31	72	80	72	83	61	1982	91	1970	0	7.51 1993	0	0
Average	75.9	88.0	72.9	84.2					8.23 Normal = 6.93		0.0 Normal = 0.0	

Hurricane Irene

