

August 2007

August was hot but near average in precipitation. The average mean temperature was 78.1 degrees, a departure of +2.5° F. It was the sixth hottest August in the last 27 years and the warmest since 2005. On 14 days the temperature was equal to or above 90° F and 4 days equal to or above 95° F. Only four Augusts had more ninety-degree days in the last 27 years. (1980, 1983, 1988, 2002) Only 1983 and 1988 had a higher maximum temperature reading for August in the last 27 years than this month's 99° F recorded on the 8th. It was also the highest temperature record here since July 6, 1999 when it was 100 °F and the highest in August since August 15, 1988 when it was also 100. Only five times in the past 27 years has the maximum temperature been higher than it was on the 8th. The daily mean temperature for the 8th was 88.5°F the warmest day every recorded in August. This year has had 38 days with a maximum temperature of 90°F or more. The minimum temperature of 78 °F on the 8th also tied for the highest minimum temperature ever recorded in August in the past 27 years. It is also interesting that the lowest temperature during this August was 62 °F and in every August in the past 27 years it has been lower except 2001 when it was also 62 °F. The average is 56 °F and the record minimum for August is 46 °F.

We had eleven days with measurable precipitation that was the most since 2004 but the total for August was still - 0.05 inches below average. The August rainfall was essentially average but 49 percent of the rain came on the 20th and 21st. Since Dec. 2006 only two of the last nine months have had above average rainfall. For the year we have a deficit of -8.26 inches in precipitation.

A 27 mph wind gust from the west on the 16th at 924 hours was the highest wind recorded in August but less than the average of 30 mph. The wind run for August was 781.1 miles the most since wind run records were started in 2002.

The lowest relative humidity for the month was 25 % on the 18th and was the least in August since 1998 and dew point temperature fell to 40 °F on the 18th which is a new record for August since dew point records were started in 2003.

7 August DAILY Records Tied or Broken - (27-Years of records)

3 daily **HIGH** maximum 27-year temperature records for the date August 7, 8, 25

0 daily **LOW** maximum 27-year temperature records for the date

2 daily **HIGH** minimum 27-year temperature records for the date August 7, 8

0 daily **LOW** minimum 27-year temperature records for the date

1 daily **HIGH** range 27-year temperature record for the date August 12

0 daily **LOW** range 27-year temperature records for the date

1 daily **HIGH** 27-year precipitation record for the date August 21

Summer Records-- June, July, August---

The average mean temperature for June, July and August was 76.9 ° F. It was the sixth hottest summer on record at this station in the last 27 years.

Rainfall for the summer was 7.05 inches. The summer of 2007 came out as the 2nd driest in the last 27 years. The record is only 6.13 inches in 1985.

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AUG 2007 Annandale (Barcroft Hills Weather Center) 38° 50' 26" N 77° 09' 58" W Stat. # 21517 Koontz

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
2007	TEMP.	TIME	TEMP.	TIME	TEMP.	TEMP.	MEAN	SOIL	SKY	SKY	PRECIP	MAX.1HR	MAX.5M	FROZ.	SNOW ON	START	END
AUG	MAX.	MAX.	MIN.	MIN.	RANGE	MEAN	CHANGE	TEMP.	AM	PM	MELTED	PRECIP.	PRECIP.	PRECIP.	GROUND	TIME	TIME
Aug-01	93	16:02	69	6:40	24	81.0	1.0	74	0	0							
Aug-02	95	15:53	71	6:33	24	83.0	2.0	74	0	0							
Aug-03	94	14:46	72	6:04	22	83.0	0.0	75	0	1							
Aug-04	95	15:50	71	6:17	24	83.0	0.0	75	0	1							
Aug-05	89	14:01	73	22:59	16	81.0	-2.0	75	1	2	0.02	0.02	0.01			1823	1900
Aug-06	93	15:52	73	6:51	20	83.0	2.0	75	1	2	0.15	0.10	0.04			0428	0700
Aug-07	94	15:20	75	6:10	19	84.5	1.5	76	1	1							
Aug-08	99	15:50	78	6:13	21	88.5	4.0	76	1	1	T	T	T			0727	0732
Aug-09	95	12:13	76	23:24	19	85.5	-3.0	76	1	2	0.15	0.07	0.01			1355	1405
Aug-10	90	17:52	74	6:44	16	82.0	-3.5	76	1	1	0.01	T	T			0001	0030
Aug-11	86	17:47	66	6:56	20	76.0	-6.0	76	0	0							
Aug-12	90	15:47	64	6:29	26	77.0	1.0	75	0	0							
Aug-13	90	18:08	70	6:11	20	80.0	3.0	75	0	1							
Aug-14	86	17:53	64	6:04	22	75.0	-5.0	74	0	0							
Aug-15	90	15:42	65	6:10	25	77.5	2.5	73	0	0							
Aug-16	89	17:41	72	4:33	17	80.5	3.0	73	2	1	0.14	0.08	0.05			0957	1105
Aug-17	92	15:52	71	6:29	21	81.5	1.0	74	1	1	0.22	0.14	0.08			0037	0230
Aug-18	79	17:05	64	23:54	15	71.5	-10.0	74	0	0							
Aug-19	81	15:25	62	1:04	19	71.5	0.0	73	2	2	T	T	T			0531	0538
Aug-20	71	15:17	62	6:29	9	66.5	-5.0	72	2	2	0.57	0.35	0.05			0117	0420
Aug-21	71	11:58	64	21:14	7	67.5	1.0	71	2	2	1.01	0.82	0.31			0119	0945
Aug-22	72	17:01	63	6:29	9	67.5	0.0	71	2	2	0.03	0.01	T			0157	0505
Aug-23	77	15:39	67	4:03	10	72.0	4.5	71	2	2							
Aug-24	89	15:47	71	5:37	18	80.0	8.0	71	2	1							
Aug-25	93	15:53	71	23:14	22	82.0	2.0	72	0	0	0.82	0.74	0.28			1918	2155
Aug-26	85	16:14	70	4:53	15	77.5	-4.5	73	2	2	0.13	0.09	0.02			0001	0340
Aug-27	84	15:51	67	6:30	17	75.5	-2.0	74	0	0							
Aug-28	83	13:49	68	3:57	15	75.5	0.0	73	1	2							
Aug-29	84	16:12	70	4:28	14	77.0	1.5	73	2	1							
Aug-30	84	13:44	69	6:52	15	76.5	-0.5	73	1	1							
Aug-31	85	15:48	70	23:57	15	77.5	1.0	73	1	1							
TOTAL	2698	48092	2142	27728	556.0	2420.0	-2.5	2286.0	28.0	32.0	3.25	2.42	0.85	0.0	0.0	MAX.	TEMP
NUM	31	31	31	31	31	31	31	31	31	31	11	10	9	0	0	>=95	4
AVE.	87.03	15:44	69.10	9:08	17.94	78.06	-0.08	73.74	0.90	1.03	0.30	0.24	0.09	0.00	0.00	>=85	21
MAX.	99	18:08	78	23:57	26	88.5	8.0	CLEAR	12	9	24 Hr.	0.82	0.31	0.0	0	>=80	26
MIN.	71	11:58	62	1:04	7	66.5	-10.0	P.CLO.	10	12	1.09	>= 1.00	>= 2.00	Inches	THUNDER	>=75	28
>=90°	14	<=32°	0					CLO.	9	10	1.01	1	0	Days	8	>=70	31
DATE	8-08	DATE	8-19	DATE OF	8-08	DATE OF	8-20			DATE	8-21					>=65	31
MAX.		MIN.		HOTTEST		COOLEST				MAX.						>=60	31
TEMP.		TEMP.	8-20	DAY		DAY				PREC.						>=55	31

PAGE #2 AUG 2007 Annandale (Barcroft Hills Weather Center) 38° 50' 26" N 77° 09' 58" W Stat. # 21517 Koontz																		
19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37
2007	START	END	WIND	MAX.	TIME	MAX.	MIN.	MAX.	MIN.	AVE.	BAR.	BAR.&	MAP	FEAT.	HP.LP.	FRONT	FRONT	FRONT
AUG	TIME	TIME	RUN	GUST	GUST	RH	RH	BAR.	BAR.	BAR.	CHANGE	PREC.	FEAT.	LOC.	TRACK	DIRCT.	INTEN.	PASSED
Aug-01			20.2	13	1539	81	34	30.01	29.94	29.98	0.04		9	IN	EAST			
Aug-02			16.1	12	1808	88	32	30.06	29.99	30.03	0.05		9R	MD-VAC	NE			
Aug-03			15.9	12	1737	81	41	30.03	29.95	29.99	-0.03		9	MAC	NE			
Aug-04			15.1	16	1333	91	37	30.01	29.92	29.97	-0.02		11					
Aug-05	1930	1950	27.4	14	1824	93	53	30.01	29.92	29.97	0.00	29.94	11, 9	QU	EAST	NW	WEAK	
Aug-06			22.4	17	1301	96	55	29.92	29.81	29.87	-0.10	29.91	21, 9	ALGC	WEST	NORTH	WEAK	0500
Aug-07			20.4	9	1211	92	51	29.94	29.85	29.90	0.03		9	LAGC	STAT.	NORTH	WEAK	0415
Aug-08			53.8	21	1214	89	44	29.85	29.75	29.80	-0.10	29.83	9	LAGC	STAT.			
Aug-09	1510	1515	38.5	21	1421	95	45	29.92	29.82	29.87	0.07	29.92	11, 9	QU	EAST	NNE	WEAK	0700
Aug-10	0539	0545	39.3	20	1609	96	51	29.90	29.76	29.83	-0.04	29.90	8, 11	PA	NE	NW	AVE	2200
Aug-11			34.4	12	1225	86	41	30.09	29.88	29.99	0.16		9	OH	SE			
Aug-12			17.6	11	1301	91	34	30.11	29.97	30.04	0.05		9	VA	EAST			
Aug-13			49.9	18	1402	86	31	29.98	29.87	29.93	-0.11		11			NW	AVE.	1345
Aug-14			24.7	13	1436	79	29	30.03	29.93	29.98	0.05		9	MI	SE			
Aug-15			16.2	10	1307	81	33	29.98	29.94	29.96	-0.02		9R	NC-VA	SE			
Aug-16	1115	1220	15.8	27	0924	94	58	30.04	29.88	29.96	0.00	30.03	9R	VA-GA	EAST			
Aug-17			45.8	26	0038	99	44	29.97	29.84	29.91	-0.05	29.94	11			NW	AVE	0745
Aug-18			38.5	19	1156	71	25	30.22	29.97	30.10	0.19		9	MI	SE			
Aug-19	0548	0625	22.6	12	1355	88	61	30.21	30.05	30.13	0.04	30.19	9	DEC	EAST			
Aug-20	1704	1715	21.8	13	0108	97	78	30.15	30.07	30.11	-0.02	30.09	24			SOUTH	STRONG	
Aug-21	1225	1455	28.2	14	1518	100	94	30.12	30.04	30.08	-0.03	30.10	24, 9	QU	EAST		STRONG	
Aug-22			20.7	10	1607	98	76	30.20	30.11	30.16	0.08	30.11	24, 9	QU	EAST		STRONG	
Aug-23			18.9	8	1756	93	78	30.20	30.11	30.16	0.00		24, 9	NB	EAST	WEST	AVE.	
Aug-24			20.8	10	1302	96	65	30.11	29.94	30.03	-0.13		24, 8	DEC	ENE	WEST	WEAK	
Aug-25	2225	2400	22.4	24	2240	98	56	29.97	29.83	29.90	-0.13	29.86	9	AR	SE			
Aug-26			19.4	12	0004	98	66	30.07	29.85	29.96	0.06	29.98	11			NW	WEAK	1630
Aug-27			17.2	8	1008	88	47	30.17	30.07	30.12	0.16		9	ON	SE			
Aug-28			25.4	12	1540	96	56	30.19	30.10	30.15	0.03		9	VT	NE			
Aug-29			11.4	13	1451	90	55	30.16	30.05	30.11	-0.04		9	NJ	NE			
Aug-30			13.8	9	1220	86	55	30.07	29.92	30.00	-0.11		11			NW	AVE.	
Aug-31			26.5	13	1400	92	57	30.07	29.94	30.01	0.01		11			NW	AVE.	0730
MIN.	TEMP	TOT.	781.1	449		2809	1582	931.76	928.07	929.92	0.07	389.80				EXTREMES		DATES
<=70	18	NUM.	31.0	31	31	31	31	31	31	31	31	13	WX.	FEAT.		MAX.	TEMP.	8-08
<=65	8	AVE.	25.20	14.48		90.61	51.03	30.06	29.94	30.00	0.00	29.98	LOW	PR.=	2	MIN.	TEMP.	8-19
<=60	0	MAX.	53.8	27		100	94	30.22	30.11	30.16	0.19	30.19	HIGH	PR.=	19	MAX.	MEAN	8-08
<=55	0	MIN.	11.4	8		71	25	29.85	29.75	29.80	-0.13	29.83	ELONG	HP.=	3	MIN.	MEAN	8-20
<=50	0	MEDI	21.8	13	1355	92	51	30.06	29.94	29.99	0.00	29.94	COLD	FRO.=	9	MAX.	PREC.	8-21
<=45	0		DATE	8-16	0924		DATE	8-18	8-08				WARM	FRO.=	1	MAX.	WIND	8-16
<=40	0		MAX.				MAX.						STAT.	FRO.=	5	MAX.	BAR.	8-18
<=35	0		WIND				BAR.						ALL	HPS.=	22	MIN.	BAR.	8-08

Annandale (Barcroft Hills Weather Center) 38° 50' 26" N 77° 09' 58" W Stat. # 21517 Koontz

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2007 AUG	REMARKS FOR THE MONTH Aug-2007
Aug-01	HIGH DEW POINT OF 69 °F - CLEAR TO 0930 THE PARTLY CLOUDY TILL 1220 THEN CLEAR UNTIL 1310 FOLLOWED BY SCATTERED CUMULUS REST OF DAY
Aug-02	A FEW SCATTERED CUMULUS FROM 1210-1640 BUT ALMOST TOTALLY CLEAR REST OF THE DAY
Aug-03	NO RAIN BUT THUNDER TODAY BETWEEN 1605-1615-FIRST THIN CIRRUS CLOUDS FROM 1250-1500 THEN PARTLY CLOUDY WITH CUMULUS CLOUDS REST OF DAY
Aug-04	FIRST CLOUDS SEEN AROUND 1340 THEN PC TO MOSTLY CLOUDY TO SUNSET
Aug-05	HAZY WITH AM CIRRUS AND BY 1400 TOTALLY CLOUDY-3RD PD. OF RAIN 2020-2100, 4TH PD. OF RAIN 2220-2330
Aug-06	COLD FRONT CAME BACK AS WARM FRONT-MODERATE AM FOG-HAZY DAY
Aug-07	RECORD HIGH MAX. AND MIN. FOR DATE TODAY-HAZY WITH CIRRUS MOST OF DAY
Aug-08	REC. HIGH MAX. AND MIN. TEMP. FOR DATE-A WEAK HIGH PRESSURE ALSO OFF OF SC COAST-CUMULUS UNTIL 830 THEN CIRRUS UNTIL 1230 THEN MAINLY CUMULUS-
Aug-09	THUNDER 1420-1440- 3RD PD. RAIN 1730-1750, 4TH PD. RAIN 2020-2400-REC. THUNDER HEARD 1930-2005
Aug-10	NO PRECIP. WITH COLD FRONTAL PASSAGE BUT 0.16 INS. FELL LAST NIGHT-VERY HOT IN SE UNITED STATES
Aug-11	ALSO A LOW PRESSURE OFF NJ COAST GIVING MUCH COOLER AM-MUCH COOLER TODAY WITH DEW POINT IN LOW 60'S
Aug-12	MODERATE DEW-WARM DAY BUT LOW DEW POINTS AND VERY DRY-SCATTERED FAIR WEATHER CUMULUS 1150-1720 AND 27 YR. REC. HIGH TEMP. RANGE FOR DATE
Aug-13	UPPER LEVEL TROUGH PASSED EARLY IN AM AND VERY WEAK COLD FRONT PASSED AT 1345
Aug-14	VERY FEW THIN FIBROUS CIRRUS FROM 940-1330 BUT BLUE SKY WITH LOW REL. HUMIDITY
Aug-15	CLEAR IN AM AND FEW THIN CIRRUS WITH A HAZY PM SKY
Aug-16	SUN THROUGH HAZE AND THIN PM CIRRUS-UPPER LEVEL TROUGH PASSED ABOUT 0925-THUNDERSTORM 1120-1210
Aug-17	AM MOISTURE HAZE - THUNDER FROM 0030-0115
Aug-18	CIRRUS STARTED COMING IN AT 1520 BUT NOT ENOUGH TO MAKE IT PARTLY CLOUDY ONLY ABOUT 25%-COOLEST DAY SINCE JUNE 29, 2007 WHEN IT WAS 78 °F
Aug-19	COOLEST NIGHT SINCE JULY 21 WHEN IT WAS 62 °F-3RD PD. OF SPRINKLES OCCURRED 2307-2328
Aug-20	THUNDER 0100-0230-3RD SHOWER OCCURRED 1834-2105-COOLEST DAY SINCE JUNE 15, 2007
Aug-21	MOST RAIN SINCE APRIL 15, 2007 WHEN 2.42 INS. OCCURRED-27 YR. REC. PRECIP. AMOUNT FOR DATE-3RD PD. OF PRECIP. 1900-2100,4TH PD. OF PRECIP. 2125-2320-LIGHT T
Aug-22	DRIZZLE FROM 0157-0505-CLOUDY COOL DAY FOR AUG.
Aug-23	ALSO A LOW PRESSURE FAR OFF VA COAST-HEAVY AM DEW AND HIGH DEW POINT TEMPS. WITH MAX. DEW POINT OF 71 °F
Aug-24	HAZY HOT AND VERY HUMID DAY
Aug-25	MOISTURE HAZE OR LIGHT AM FOG AND HEAVY AM DEW-STATIONARY FRONT TO WEST DISSIPATED-CLOUDY AFTER 1600-NEW 27 YR. REC. MAX. TEMP. FOR DATE
Aug-26	THUNDERSTORM ENDING AFTER MIDNIGHT
Aug-27	ALMOST TOTALLY CLEAR ALL DAY
Aug-28	ALSO A LOW PRESSURE OFF DE COAST AND HEAVY AM DEW-MOSTLY CLOUDY FROM NOON TO 1630 THEN CLEAR TO SUNSET
Aug-29	ALSO A LOW PRESSURE OFF DE COAST AND OFF OF SC COAST
Aug-30	COLD FRONT TO THE NW MOVING SLOWER THAN EXPECTED TOWARD OUR AREA
Aug-31	CF ALMOST OVER THE ANNANDALE AREA AT 0700 BUT THE FRONT IS MOVING VERY SLOW AND THE COOL AIR REALLY WASN'T FELT UNTIL SUNSET
DATE	EXTENSION OF LENGTHY DAILY REMARKS
Aug-08	HIGHEST MAX. TEMP. TODAY SINCE JULY 6, 1999 AND HIGHEST IN AUG. SINCE 1988 AND ONLY 2 AUG. DAYS WERE WARMER IN PAST 27 YRS. AND ONLY 5 DAYS WERE
	WARMER IN ANY MONTH-NIMBUS INSTRUMENT MAX. WAS 98.7 °F, THERMOGRAPH READ MAX. OF 98 °F AND DAVIS READ 98.6 °F
Aug-21	MODERATE FOG 2100 TO MIDNIGHT -THUNDER 0445-0500
Aug-25	THUNDERSTORM FROM 1850-2000

ACON - VA/NC/SC

The Atlantic Coast Observer Network: Virginia, North Carolina, South Carolina

August 2007

Station summary of Climatological Data

Observer: Lowell L. Koontz Acon Station ID: Annandale -Weather Center

Observation Times: Temps Recorded 2400 Precipitation Recorded 2400

TEMPERATURE °F

A	MEAN MAXIMUM	87.03
B	MEAN MINIMUM	69.10
C	MEAN MONTHLY	78.06
C1	MEAN TEMP DEP.	2.46
D	MAXIMUM	99
E	DATE(s) OF MAX.	Aug-08
F	MINIMUM	62
G	DATE(s) OF MIN.	19 TH & 20 TH
H	# DAYS MAX. > = 90°	14
I	# MAX. < = 32°	0
J	MIN. < = 32°	0
K	MIN. < = 0°	0
K1	AVE RELATIVE HUMIDITY	70.8

WIND MPH

L	MAX. GUST	27
M	DIRECT. OF GUST	West
N	DATE	Aug-16
	TIME	0924

NUMBER DAYS WITH -

O	THUNDER	8
P	HAIL	0
Q	GLAZE	0
R	ICE PELLETS (SLEET)	0
R1	DENSE FOG < = 1/4 MILE	0

PRECIPITATION INCHES

T	MONTH TOTAL	3.25
U	CALENDAR DAY MAX.	1.01
U1	DATE OF MAX.	Aug-21
V	24-HR. PERIOD MAX.	1.09
V1	DATE(s) OF MAX. PD.	20 TH - 21 ST
W	# DAYS > = 0.01"	11
X	# DAYS > = 1.00"	1
Y	YR. TO DATE TOT.	21.69
	MAX. 1 HR. PRECIP.	0.82
	MAX. 5 MIN PRECIP.	0.31

SNOWFALL INCHES

Z	DAILY MAXIMUM	0
1	DATE OF MAX.	0
2	DAYS= > TRACE	0
3	DAYS > = 1.0"	0
4	MONTHLY TOTAL	0
5	2006 - '07 SEASON'S TOT.	15.3

BAROMETER

6	MAXIMUM	30.22
6A	DATE	Aug-18
7	MINIMUM	29.75
7A	DATE	Aug-08
8	AVE. MONTHLY PRESSURE	30.00
CWA	NWS COUNTY WARNING AREA	FAIRFAX