

PAGE #1	JULY 1998 ANNANDALE (BARCROFT HILLS) LAT.38°50'25"N.LONG.77°09'58' W. STAT.# 737 KOONTZ																
1 1998 JULY	2 TEMP. MAX.	3 TEMP. MAX.	4 TEMP. MIN.	5 TEMP. MIN.	6 TEMP. RANGE	7 TEMP. MEAN	8 MEAN CHANGE	9 GROUND TEMP.	10 SKY AM	11 SKY PM	12 PRECIP MELTED	13 MAX.1HR PRECIP.	14 MAX.5M PRECIP.	15 FROZ. PRECIP.	16 SNOW ON GROUND	17 START TIME	18 END TIME
7/01/98	85	16:32	64	6:24	21	74.5	-2.5	76	0	0							
7/02/98	85	17:11	63	6:22	22	74.0	-0.5	77	0	0							
7/03/98	87	16:24	63	6:06	24	75.0	1.0	77	0	0							
7/04/98	88	13:36	69	4:59	19	78.5	3.5	77	0	2							
7/05/98	86	17:20	68	23:59	18	77.0	-1.5	77	0	0	T					1720	1730
7/06/98	87	16:39	62	6:08	25	74.5	-2.5	76	1	0							
7/07/98	87	15:56	65	6:03	22	76.0	1.5	77	0	1							
7/08/98	77	17:51	67	6:59	10	72.0	-4.0	76	2	2	0.80	0.28	0.06			0505	0915
7/09/98	85	16:31	63	5:45	22	74.0	2.0	75	2	2							
7/10/98	88	16:59	68	23:59	20	78.0	4.0	77	0	0							
7/11/98	81	17:16	60	6:25	21	70.5	-7.5	77	0	0							
7/12/98	86	16:09	60	6:10	26	73.0	2.5	76	0	0							
7/13/98	88	15:32	63	6:06	25	75.5	2.5	76	0	1							
7/14/98	88	16:50	68	5:46	20	78.0	2.5	77	0	1							
7/15/98	85	15:02	71	6:22	14	78.0	0.0	77	2	2							
7/16/98	91	14:39	71	6:26	20	81.0	3.0	77	0	1							
7/17/98	91	17:00	74	3:33	17	82.5	1.5	78	2	0							
7/18/98	88	17:47	70	6:53	18	79.0	-3.5	78	0	0	0.01	0.01	0.01			0210	0225
7/19/98	89	16:21	67	3:10	22	78.0	-1.0	77	2	1	T					0650	0700
7/20/98	92	14:28	72	6:25	20	82.0	4.0	78	0	0							
7/21/98	95	16:45	71	6:23	24	83.0	1.0	77	0	0	0.25	0.25	0.12			1850	1920
7/22/98	96	16:36	73	2:31	23	84.5	1.5	79	0	0							
7/23/98	92	16:06	73	23:59	19	82.5	-2.0	79	2	1	0.42	0.34	0.10			1759	1945
7/24/98	87	14:46	69	6:26	18	78.0	-4.5	79	0	1							
7/25/98	86	14:43	70	7:02	16	78.0	0.0	78	1	1							
7/26/98	82	16:45	68	9:42	14	75.0	-3.0	77	2	2	0.04	0.04	0.01			0835	0910
7/27/98	84	14:28	65	6:25	19	74.5	-0.5	77	1	1							
7/28/98	89	15:39	69	6:18	20	79.0	4.5	77	0	1							
7/29/98	91	16:04	71	6:21	20	81.0	2.0	78	0	0							
7/30/98	94	16:04	72	6:46	22	83.0	2.0	78	0	0	0.27	0.27	0.15			2110	2120
7/31/98	81	18:03	68	23:59	13	74.5	-8.5	77	2	1	0.37	0.17				0345	0540
TOT.	2711.0	20.9	2097.0	10.8	614.0	2404.0	-2.5	2392.00	19.00	21.00	2.16	1.36	0.45	0.0	0.0	MAX. TEMPS.	
NUMBER	31	31	31	31	31	31	31	31	31	31	7	7	6	0	0	>=55 31	
AVE.	87.45	16:11	67.65	8:22	19.81	77.55	-0.08	77.16	0.61	0.68	0.31	0.19	0.08	0.00	0.00	>=50 31	
MAX.	96	18:03	74	23:59	26	84.5	4.5	CLEAR	20	15	0.80	0.34	0.15	0	0	>=45 31	
MIN.	77	13:36	60	2:31	10	70.5	-8.5	PT.CLO.	3	11	>1 INCH	MAX.	TEMPS	MAX.	TEMPS	>=40 31	
>EQUAL90°DAYS		8	< =32° DAYS		0		CLOUDY		8	5	0	>=95 2		>=75 31			
DATE OF 7-22-98		DATE OF 7-11-98								DATE 7-8-98		>=90 8		>=70 31			
MAX.		MIN.								MAX.		>=85 26		>=65 31			
TEMP.		TEMP. 7-12-98								PREC.		>=80 30		>=60 31			

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19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37
1998	START	END	WIND	MAX.	MAX.	MAX.RH.	MIN.RH.	MAX.	MIN.	AVE.	BAR.	BAR.&	MAP	FEAT.	HP.LP	FRONT	FRONT	FRONT
JULY	TIME	TIME	DOT AVE	SUNRISE	SUNSET	SUNRISE	SUNSET	BAR.	BAR.	BAR.	CHANGE	PREC.	FEAT.	LOC#	TRACK	DIRECT.	INTEN.	PASS.
7/01/98			27	15	25	100	38	29.91	29.64	29.78	0.10		9	SD	SE			
7/02/98			15	9	13	94	24	30.07	29.91	29.99	0.22		9	IL	EAST			
7/03/98			1	5	10	93	24	30.11	29.99	30.05	0.06		9	WV	EAST			
7/04/98			2	5	11	94	41	30.05	29.86	29.96	-0.09	29.90	11			NW	WEAK	
7/05/98	1900	1910	19	10	14	88	40	30.10	29.88	29.99	0.04		11,9	WS	EAST	NW	WEAK	0800
7/06/98			3	3	9	95	31	30.16	30.07	30.12	0.13		9	NY	EAST			
7/07/98			11	6	10	100	46	30.12	30.00	30.06	-0.05		21			SW	WEAK	
7/08/98	1045	1120	3	12	9	100	90	30.01	29.80	29.91	-0.16	29.93	21,11			SW	WEAK	0900
7/09/98			6	8	9	100	56	29.96	29.85	29.91	0.00		8	NCC	SSE			
7/10/98			30	9	17	100	36	30.00	29.86	29.93	0.02		11			NORTH	WEAK	1230
7/11/98			13	3		97	32	30.04	29.96	30.00	0.07		9					
7/12/98			5	6	9	93	27	30.05	29.99	30.02	0.02		9					
7/13/98			5	0	12	98	50	30.07	30.00	30.04	0.02							
7/14/98			5	10	10	90	52	30.09	30.04	30.07	0.03							
7/15/98			1	8	8	100	62	30.09	30.02	30.06	-0.01							
7/16/98			2	0	8	100	53	30.02	29.88	29.95	-0.11							
7/17/98			17	5	12	100	52	29.88	29.76	29.82	-0.13		11			NW	WEAK	2000
7/18/98			42	23	17	96	22	29.95	29.85	29.90	0.08	29.91	9	OH	EAST			
7/19/98			4	4	9	93	56	30.04	29.93	29.99	0.09		21			SW	AVE.	
7/20/98			10	4	16	100	40	30.03	29.89	29.96	-0.02		9	GAC	NE			
7/21/98			8	8	36	100	41	30.08	29.97	30.03	0.06	30.00	9	SCC	STAT.			
7/22/98			3	6	13	100	32	30.01	29.91	29.96	-0.06		9	GA	EAST			
7/23/98			3	3	13	100	49	29.94	29.81	29.88	-0.09	29.85	11			NW	AVE.	
7/24/98			6	8	15	100	36	30.07	29.89	29.98	0.11		9	FGC	STAT.			
7/25/98			0	7	12	84	31	30.14	30.07	30.11	0.13		8, 9R	MN-TN	EAST			
7/26/98			3	0	12	97	49	30.13	30.08	30.11	0.00	30.11	24			SOUTH	AVE.	
7/27/98			3	2	11	100	52	30.12	29.98	30.05	-0.05		24,21			SOUTH	AVE.	
7/28/98			1	3	10	100	46	30.00	29.91	29.96	-0.10		11			NORTH	STRONG	
7/29/98			10	0	15	100	41	29.94	29.88	29.91	-0.04		11			NORTH	STRONG	
7/30/98			4	5	10	100	43	30.01	29.89	29.95	0.04	29.88	11			NORTH	STRONG	2230
7/31/98	0740	0845	18	14	11	100	55	30.18	29.91	30.05	0.09	29.91	8	NJC	NE			
TOT.	MIN. TEMPS.		280	201	386	3012	1347	931.37	927.48	929.43	0.37	239.49	WEATHER FEATURES			DATES OF EXTREMES		
NUMBER	<=75 31		31	31	30	31	31	31	31	31	31	8	LOW	PR.=	3	MAX. TEMP.		7/22/98
AVE.	<=70 22		9.03	6.48	12.87	97.16	43.45	30.04	29.92	29.98	0.01	29.94	HIGH	PR.=	13	MIN. TEMP.		7/11/98
MAX.	<=65 10		42	23	36	100	90	30.18	30.08	30.12	0.22	30.11	ELONG	HP.=	1	MIN. TEMP.		7/12/98
MIN.	<=60 2		0	0	8	84	22	29.88	29.64	29.78	-0.16	29.85	ALL	HPS.=	14	MAX. PREC.		7/8/98
MEDIAN	<=55 0		5	6	12	100	41	30.05	29.91	29.99	0.02	29.91	COLD	FRO.=	9	MAX. AM WIND		7/18/98
	<=50 0		DATE 7-18-98 7-21-98				DATE 7-31-98 7-1-98				WARM FRO.= 4			MAX. PM WIND 7/21/98				
	<=45 0		MAX.				MAX.				STAT. FRO.= 2			MAX. BAR. 7/31/98				
	<=40 0		WIND				BAR.							MIN. BAR. 7/1/98				

7/01/98	PLACED AVERAGE WIND RECORDER (COLUMN #22) AT TOP OF THE BACK HILL
7/02/98	VERY HIGH SOLAR RADIATION AND LOW RH
7/03/98	
7/04/98	TWO PDS. OF SPRINKLES
7/05/98	
7/06/98	CIRRUS IN THE EARLY AM AND SUNLIGHT THROUGH THE CLOUDS
7/07/98	
7/08/98	NNW WEAK COLD F. PASSED @ 1720 RAIN FROM 1805-1810
7/09/98	
7/10/98	
7/11/98	
7/12/98	
7/13/98	
7/14/98	
7/15/98	
7/16/98	
7/17/98	
7/18/98	THREE LIGHTNING STRIKES RECORDED IN THE LOCAL AREA (RECORDED ON WIND DIRECTION TAPE)
7/19/98	SURFACE CONDITIONS BECOMING DRY AND SOME PLANTS SUFFERING FROM THE LACK OF MOISTURE
7/20/98	
7/21/98	HOTTEST DAY OF YEAR HIGHEST MAX. SINCE AUG. 17, 1997 - THUNDERSTORM IN PM
7/22/98	
7/23/98	THUNDERSHOWER
7/24/98	CIRRUS FOR MOST OF DAY
7/25/98	LOW PRESSURE ON STATIONARY FRONT IN NC IN AM
7/26/98	LOW PRESSURE ON STATIONARY FRONT OFF NC COAST CAUSING AM CLOUDS
7/27/98	STATIONARY FRONT WELL TO SOUTH ALSO WARM FRONT APPROACHING FROM SW AND PASSED AREA BY AM OF 28TH
7/28/98	HAZY
7/29/98	
7/30/98	VERY HAZY
7/31/98	

JULY JULY WAS VERY DRY AND A LITTLE BELOW AVERAGE IN TEMP. - THE MEAN TEMP. WAS 77.55° A DEPARTURE OF -0.50° THIS MONTH WAS THE FOURTH DRIEST JULY IN THE LAST 18 YEARS (ONLY 1997,1993,1985 WERE DRIER)

THERE WERE ONLY TWO DAYS WITH TEMPS. EQUAL TO OR ABOVE 95° AND 8 DAYS OF $\Rightarrow$ 90° WHICH WAS A DEPARTURE OF -5 DAYS ONLY JULY 1987 HAD FEWER DAYS (6) WITH MEASUREABLE PRECIP. THAN JULY 1998 WHICH HAD 7 (1997, 1993- TIED WITH 7)

THUNDERSTORM ON THE 21ST CAUSED A WEST WIND GUST OF 36 MPH (SECOND HIGHEST GUST IN 12 YRS.- RECORD OF 48 MPH IN 1996)

LOWEST HIGH MINIMUM TEMPERATURE FOR JULY SINCE 1992 (74° ON 17TH)

JULY WAS THE FIRST MONTH IN 1998 TO HAVE BELOW AVERAGE PRECIPITATION

96°F ON THE 22ND IS HOTTEST DAY OF YEAR SO FAR... HIGHEST MAX. SINCE AUG. 17, 1997

ACON VA / NC / SC JULY 1998 SUMMARY

OBSERVER: LOWELL L. KOONTZ

ALL OBSERVATION TIMES: 2400

LOCATION: 6515 OAKWOOD DR., FALLS CHURCH VA 22041

ALTITUDE : 360 FEET

RECORDS OF TEMPERATURE AND PRECIPITATION SINCE SEPT. 1979

TEMPERATURE:

MEAN MAXIMUM	87.45
MEAN MINIMUM	67.65
MEAN MONTHLY	77.55
MAXIMUM	96
DATE(s) OF MAX.	7/22/98
MINIMUM	60
DATE(s) OF MIN.	11 TH AND 12 TH
# DAYS MAX. $\geq 90^{\circ}$	8
# MAX. $\leq 32^{\circ}$	0
MIN. $\leq 32^{\circ}$	0
MIN. $\leq 0^{\circ}$	0

NUMBER DAYS WITH:

THUNDER	3
HAIL	0
GLAZE	0
ICE PELLETS (SLEET)	0
DENSE FOG	0

WIND

MAX. GUST (MPH)	36
DIRECT. OF GUST	WEST
DATE	7/21/98

PRECIPITATION:

MONTH TOTAL	2.16
DAILY MAXIMUM	0.80
DATE OF MAX.	7/8/98
24-HR. PD. MAX.	0.80
DATE(s) OF MAX. PD.	7/8/98
# DAYS $\geq 0.01"$	7
# DAYS $\geq 1.00"$	0
YR. TO DATE TOT.	35.18

SNOWFALL:

DAILY MAXIMUM	0.0
DATE OF MAX.	-
DAYS $\geq$ TRACE	0
DAYS $\geq 1.0"$	0
MONTHLY TOTAL	0.0
97-'98 SEASON'S TOT.	4.3

BAROMETER

MAX.	30.18
MIN.	29.64

JULY REMARKS:

JULY-VERY DRY AND A LITTLE BELOW AVE. IN TEMP. - THE MEAN TEMP. 77.55° A DEP. -0.50°

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