

PAGE #1		July 2021		West Henrico Co. - Glen Allen Weather Center 37.65537° N. 77.56929° W. - Koontz														
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
July 2021	Week Day	TEMPERATURE °F				TEMPERATURE °F				SKY		PRECIPITATION			FROZ. PRECIP.		1st PERIOD	
		MAX.	Time	MIN.	Time	RANGE	MEAN	CHANGE	SOIL	AM	PM	Liquid	1 Hr.	5 Min.	NEW	GROUND	START	END
July-01	Thu	96.3	14:02	70.9	23:37	25.4	83.6	-1.1	78	1	2	1.06	0.41	0.16			1700	2400
July-02	Fri	81.0	17:36	66.2	23:57	14.8	73.6	-10.0	77	2	2	1.07	0.46	0.14			0001	1050
July-03	Sat	81.9	17:01	56.3	5:53	25.6	69.1	-4.5	76	0	1							
July-04	Sun	86.3	17:06	59.3	5:42	27.0	72.8	3.7	76	0	0							
July-05	Mon	89.6	15:53	69.0	6:47	20.6	79.3	6.5	76	1	1							
July-06	Tue	93.7	14:49	69.5	6:12	24.2	81.6	2.3	77	0	0							
July-07	Wed	93.6	16:16	73.2	6:12	20.4	83.4	1.8	78	0	1							
July-08	Thu	84.5	10:37	70.7	23:54	13.8	77.6	-5.8	78	2	2	1.07	0.50	0.07			1200	1210
July-09	Fri	91.4	15:55	67.4	4:55	24.0	79.4	1.8	77	0	1							
July-10	Sat	87.3	15:20	69.3	5:59	18.0	78.3	-1.1	78	1	1							
July-11	Sun	89.9	15:18	73.4	4:18	16.5	81.7	3.4	78	1	2							
July-12	Mon	92.4	16:37	75.3	5:56	17.1	83.9	2.2	79	1	1							
July-13	Tue	92.3	15:18	75.9	6:24	16.4	84.1	0.3	79	0	1							
July-14	Wed	92.2	16:18	71.2	23:51	21.0	81.7	-2.4	80	0	1	0.09	0.09	0.05			1840	1915
July-15	Thu	93.7	14:36	70.4	1:31	23.3	82.1	0.4	80	0	1							
July-16	Fri	95.4	15:15	73.7	6:14	21.7	84.6	2.5	80	0	0							
July-17	Sat	94.1	15:34	74.9	23:41	19.2	84.5	-0.1	80	0	2	0.18	0.18	0.18			1902	1907
July-18	Sun	90.1	16:37	72.3	6:03	17.8	81.2	-3.3	80	2	2							
July-19	Mon	86.4	15:37	70.0	6:16	16.4	78.2	-3.0	80	2	2							
July-20	Tue	89.3	14:44	66.4	6:07	22.9	77.9	-0.4	78	1	2							
July-21	Wed	92.1	15:38	69.0	6:16	23.1	80.6	2.7	78	0	0	0.01	0.01	0.01			1823	1840
July-22	Thu	85.4	14:09	66.0	6:13	19.4	75.7	-4.8	78	1	1							
July-23	Fri	86.8	17:06	66.1	3:52	20.7	76.5	0.7	78	1	1							
July-24	Sat	86.8	15:07	66.4	6:24	20.4	76.6	0.2	78	2	2	T	T.	T			1303	1308
July-25	Sun	90.8	15:13	72.2	5:26	18.6	81.5	4.9	77	2	2	0.04	0.04	0.03			2143	2208
July-26	Mon	90.9	13:13	73.1	23:58	17.8	82.0	0.5	77	1	2							
July-27	Tue	92.8	14:18	70.3	6:19	22.5	81.6	-0.5	78	1	2							
July-28	Wed	93.7	14:12	72.9	6:34	20.8	83.3	1.8	78	0	1	T	T.	T			2115	2145
July-29	Thu	91.8	16:17	71.3	4:17	20.5	81.6	-1.8	78	0	1							
July-30	Fri	96.0	14:10	75.7	6:12	20.3	85.9	4.3	79	0	1							
July-31	Sat	86.0	16:16	69.8	5:21	16.2	77.9	-7.9	79	2	2	0.01	0.01	T			2138	2148
TOTAL		2795		2168		626.4	2481	-6.8	2423	24	40	3.53	1.70	0.64	0.00	0.00	Col.26-27	
NUMBER		31	31	31	31	31	31	31	31	31	31	8	8	7	0	0	DAILY AVE RH	
AVERAGE		90.15	15:21	69.94	9:10	20.21	80.04		78.16	0.77	1.29	Ave. Tot.	Ave. Max	Ave. Max			73.7	Percent
NORMALS		90.47		70.22		20.41	80.27		79.0	0.91	1.07	4.37	0.99	0.28			70.6	Percent
DEPARTURES		-0.32		-0.28		-0.20	-0.23		-0.9	-0.14	0.23	-0.84	-0.49	-0.10			3.2	Percent
Max. Temps. >= 90°F		96.3	Ave.High Max	75.9	Ave.High Min	27	85.9	6.5	80.0	Whole Day		1.07	0.50	0.18			Precip.	24 Hr.
2021 20		Jul-01	99.2	Jul-13	77.3	Jul-04	Jul-30	Jul-05	Jul-14	AVE. 1.03		Jul-02	Jul-08	Jul-17			Amount	2.13
Ave. 18.3			Dep.		Dep.				Jul-15	Normal 0.98		Jul-08					Date	Jul 01
Departure 1.7			-2.9		-1.4				Jul-16	Depart. 0.05							Date	Jul 02
Min. Temps. >= 70°F		81.0	Ave.Low Max	56.3	Ave.Low Min	13.8	69.1	-10.0	76.0	SKY AM PM		>= 0.10 INCHES		>= 1.00 INCHES		>= 2.00 INCHES		
2021 20		Jul-02	78.7	Jul-03	60.4	Jul-08	Jul-03	Jul-02	Jul-03	CLEAR 14 4		4 DAYS		3 DAYS		0 DAYS		
Ave. 19.2			Dep.		Dep.				Jul-04	PT. CLO. 10 14		HOTTEST 85.9		Highest		Lowest		
Departure 0.8			2.3		-4.1				Jul-05	CLOUDY 7 13		DAY 7-30		Mean		COOLEST 69.1		
Days Max. <=32 °F		0				MAX.	>=100	>=95	>=90	>=85	>=80	>=75	>=70	>=65	>=60	>=55	>=50	>=45
Days Max. >=90°F		20				DAYS	0	3	20	29	31	31	31	31	31	31	31	31

		20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38
July 2021		2nd PERIOD		WIND			REL. HUMIDITY		BAROMETRIC PRESSURE				K							
		START	END	RUN	MAX.	TIME	MAX.	MIN.	MAX.	MIN.	AVE.	CHANGE	GLAZE	SLEET	SNOW	FOG		DEW	FROST	
Jul-01				81.8	20	14:31	96	45	30.00	29.81	29.91	-0.19					2	N		
Jul-02				32.6	10	1:10	98	65	29.86	29.76	29.81	-0.09						P		
Jul-03				36.8	15	10:45	97	50	29.92	29.82	29.87	0.06						4		
Jul-04				37.5	14	13:37	97	44	30.00	29.89	29.95	0.07						5		
Jul-05				50.2	14	14:51	87	52	30.09	29.97	30.03	0.09						2		
Jul-06				65.5	15	16:53	90	48	30.11	30.00	30.06	0.02						3		
Jul-07				91.6	19	0:27	83	48	30.05	29.93	29.99	-0.06						N		
Jul-08	1250	2205		109.8	21	12:53	98	70	30.01	29.75	29.88	-0.11						N		
Jul-09				62.3	13	16:32	99	60	29.95	29.83	29.89	0.01						P		
Jul-10				50.1	12	0:03	95	55	30.07	29.94	30.01	0.12						3		
Jul-11				89.1	18	19:12	94	67	30.07	29.98	30.03	0.02						1		
Jul-12				126.2	20	16:52	95	59	30.18	30.06	30.12	0.09						3		
Jul-13				115.9	21	16:49	93	55	30.23	30.15	30.19	0.07						2		
Jul-14				77.6	22	18:30	95	53	30.23	30.12	30.18	-0.01					1	1		
Jul-15				42.8	12	18:22	99	52	30.18	30.03	30.11	-0.07						P		
Jul-16				54.5	13	18:58	96	47	30.10	30.01	30.06	-0.05						3		
Jul-17				104.0	19	13:33	94	55	30.09	29.99	30.04	-0.02						3		
Jul-18				62.1	16	18:38	95	51	30.11	30.01	30.06	0.02					2	P		
Jul-19				28.3	9	19:11	94	51	30.11	30.00	30.06	-0.01						2		
Jul-20				34.8	11	17:14	98	49	30.03	29.92	29.98	-0.08						5		
Jul-21				35.7	16	18:26	96	47	30.02	29.88	29.95	-0.03						3		
Jul-22				71.1	14	12:36	93	44	30.18	30.02	30.10	0.15						3		
Jul-23				28.9	11	12:20	89	42	30.20	30.09	30.15	0.04						1		
Jul-24	1335	1338		72.9	18	16:09	93	63	30.14	30.02	30.08	-0.07						3		
Jul-25				114.0	19	21:39	93	61	30.05	29.89	29.97	-0.11					1	N		
Jul-26				59.3	18	16:44	95	61	30.02	29.90	29.96	-0.01						P		
Jul-27				32.8	14	19:17	98	56	30.02	29.93	29.98	0.02						4		
Jul-28				57.5	14	10:50	98	45	30.01	29.94	29.98	0.00						5		
Jul-29				73.9	17	16:32	96	55	30.01	29.83	29.92	-0.05						3		
Jul-30				68.9	14	14:45	89	47	29.96	29.79	29.88	-0.05						N		
Jul-31	2333	2400		66.4	14	10:18	89	53	30.03	29.93	29.98	0.11						N		
TOTAL	Column 23		2034.9	483		2922	1650	932.03	928.19	930.11	TOTAL	0	0	0	0	4	20	0		
NUMBER	Mar. Wind Run		31	31	31	31	31	31	31	31	Normal	0.0	0.0	0.0	1.6	7.2	18.5	0.0		
AVE.	Total	2034.9	65.6	15.6	14:28	94.26	53.23	30.07	29.94	30.00	Depart.	0.0	0.0	0.0	-1.6	-3.2	1.5	0.0		
NORMALS	Miles	1378.1	62.6	18.7		92.6	48.3	30.03	29.92	29.98	Rating ▶	0	0	0	0	6	59	0		
Departures	Miles	656.8	3.1	-3.1		1.6	5.0	0.03	0.02	0.02	Intensity	GLAZE	SLEET	SNOW	FOG	K	Dew	Frost		
MAXIMUM DATES		Dates	126.2	22	North	99	70	30.23	30.15	30.19	0.15	5. Very Heavy to Extreme 4. Heavy-Unusual 3. Moderate - Ave. 2. Light - < Ave. 1. Very Light - Slight - Trace M - Event with intensity missing N- None No Dew Obs. P- Precap. prevent obs.								
		1	Jul-12	Jul-14	18:30	Jul-09	Jul-08	Jul-13	Jul-13	Jul-13	Jul-22									
		2				Jul-15		Jul-14												
		3																		
Min. Temps. >= 70°F		4			Ave. Max.															
2021 20		Dates	28.3	9	28.1	83	42	29.86	29.75	29.81	-0.19									
Ave. 19.2		1	Jul-19	Jul-19	Dep.	Jul-07	Jul-23	Jul-02	Jul-08	Jul-02	Jul-01									
Departure 0.8		2			-6.1															
Days Min. <=32 °F		0	<= 75	<= 70	<= 65	<= 60	<= 55	<= 50	<= 45	<= 40	<= 35									
Days Min >=70°F		20	27	12	2	2	0	0	0	0	0									

AGE #3

West Henrico Co. - Glen Allen Weather Center 37.65537° N. 77.56929° W. - Koontz

39

40

July 2021	REMARKS FOR THE MONTH July - 2021
Jul-01	TS-RATED 2-2-4-INTERMITTENT THUNDER WITH NO CLOSE LIGHTNING-TS CELL WITH MUCH LIGHTNING MOVED OVER CHESTER, VA
Jul-02	COLD FRONT PASSED AROUND 1100 WITH ONLY A FEW SHORT PERIODS OF SUN TODAY
Jul-03	VERY CLEAR IN AM UNTIL ABOUT 1000 THEN CUMULUS CLOUDS CAME IN AND IT WAS PC WITH CUMULUS UNTIL 1745
Jul-04	A CLEAR DAY EXCEPT FROM 1000-1145 AND 1300-1530 WAS PC WITH CUMULUS
Jul-05	TROPICAL STORM ELSA TO TRACK OVER KEY WEST, FL TOMORROW.
Jul-06	A VERY CLEAR DAY WITH HIGH TEMPS. BUT NOT EXTREMELY HUMID
Jul-07	AM WAS CLEAR WITH CUMULUS STARTING TO COME IN AT 1430 AND WAS PC TO 1730 FOLLOWED BY CLOUDS TO SUNSET
Jul-08	TROPICAL STORM ELSA GAVE 1.03 INCHES BY 2030 THEN ONLY DRIZZLE
Jul-09	AM WAS CLEAR & CUMULUS STARTED COMING IN AT 1120-PM WAS EST. TO BE 60-65% CLOUDY
Jul-10	THIN AM CIRRUS WITH SOME CUMULUS AFTER 1100 & PM HAD BOTH CIRRUS AND CUMULUS
Jul-11	VERY HUMID DAY WITH MAX. DEW POINT OF 78.3 DEGREES F
Jul-12	A BREEZY VERY HUMID DAY WITH MAX. DEW POINT OF 77.7 DEGREES F UNDER PC SKIES
Jul-13	ANOTHER HUMID DAY WITH A MAX. DEW POINT OF 77 DEGREES F AND WINDY-A MAX. GUST OF 21 MPH AT 1649-CIRRUS CLOUDS FROM 1100-SUNSET & ALTOCUMULUS WERE PRESENT AT 1330
Jul-14	TS-RATED 1-3-1-ONLY 2 THUNDERS HEARD-VERY CLEAR TO 1300 THEN CUMULUS FOLLOWED BY WEAK TS
Jul-15	CUMULUS CLOUDS STARTED COMING IN AT 1130 & AM WAS VERY CLEAR-PM PARTLY CLOUDY WITH CUMULUS
Jul-16	2ND HOTTEST DAY OF MONTH WITH MAX. DEW POINT OF 76 DEGREES F AND MOSTLY CLEAR DAY
Jul-17	THE QUICK 5 MINUTE SHOWER WAS NOT ASSOCIATED WITH ANY LIGHTNING
Jul-18	TS-RATED 2-1-2 and TS SENSOR RECORDED 31 STRIKES-CLEAR AM SKIES WITH SOME CUMULUS COMING IN AT 1210 THEN PC 1400-1530 FOLLOWED BY CLOUDINESS
Jul-19	CLOUDY & COOLER TODAY WITH A WIND SHIFT TO NORTH AT 1550-TS PASSED TO OUR SOUTH & ONE THUNDER HEARD BUT NOT REC. AS TS AS THUNDER WAS SO DISTANT WITH NO STORM OR RAIN
Jul-20	SPRINKLES FROM 0900-NOON SO LIGHT DROPS EVAPORATED IN RAIN GAUGE FUNNEL BEFORE ENTERING THE GAUGE-AM SUNLIGHT DIMMED BY THIN CLOUDS
Jul-21	VERY HAZY SKIES FROM FOREST FIRES IN OREGON AND ALONG WEST COAST
Jul-22	NO HAZE TODAY FROM WEST COAST WILD FIRES-COOLER AND PLEASANT JULY DAY WITH LOW DEW POINT OF 56 DEGREES F AT 1918
Jul-23	TODAY WAS 55-65% CLOUDY ON AVERAGE-STILL COOLER THAN AVE. WITH A LOW DEW POINT OF 60 DEGREES F AT 1731
Jul-24	A CLOUDY AND COOLER THAN AVERAGE JULY DAY WITH A DEW POINT OF 64 DEGREES F AT 0203
Jul-25	TS RATING 1-1-1 - PASSED TO NORTH WITH NO RAIN - ACURITE LIGHTNING SENSOR COUNT WITHIN 25 MILES WAS 26 & CLOSEST WAS 1 MILE.
Jul-26	TS TO EAST AND SOUTH OF SPRINGFIELD PARK BUT NO RAIN HERE
Jul-27	CLOUDY MOST OF DAY EXCEPT 0950-1330-ONE THUNDER HEARD AT 1855 FROM A TS THAT PASSED TO OUR SOUTH BUT NO RAIN AS STORM WAS TOO FAR AWAY TO COUNT AS A TS HERE
Jul-28	A HOT AND HUMID DAY WITH A CLEAR AM AND A PARTLY CLOUDY PM THAT WAS ABOUT 60-65% CLOUDY
Jul-29	HOT AND HUMID WITH A HIGH DEW POINT OF 75.9 DEGREES F AT 1245
Jul-30	3RD HOTTEST DAY OF YEAR WITH A HIGH DEW POINT OF 74 DEGREES F AT 1103 AND VERY DRY CONDITIONS CURRENTLY
Jul-31	CLOUDY AND MUCH COOLER WITH A LOW DEW POINT OF 57.7 DEGREES F AT 0439 WITH A BROKEN OVERCAST OF ALTO CUMULUS IN THE,AM- RAIN IN FORECAST FOR TOMORROW
DATE	EXTENSION OF LENGTHY DAILY REMARKS

July 2021

Springfield Park, Glen Allen, Virginia

July was the 4th coolest, 4th lowest precipitation and tied for the 2nd least days with measurable precip. in the past 13 years.

The mean temperature of 80.0°F which was -0.2 degrees F departure from the 13-year average and the 7th coolest July since 2008. The highest mean temperature for July was 85.9°F which is the 4th lowest on record. This July had 20 days with temperatures of equal to or greater than 90°F which is near the July average of 18.3 days. The max. temperature of 96.3 degrees F on the 1st was the 4th lowest on record for July and a departure of -2.9 degrees F. The average maximum temperature for July is 99.2 degrees F at Springfield Park.

The high temperature range for July was 27 degrees F on the 4th and the lowest monthly daily temperature range was 13.8°F on the 8th. The average temperature range for July was 20.2 degrees F which is near the 13-year average of 20.4 degrees F.

The Richmond International Airport had 3.06 inches more rain than Springfield Park. Springfield Park had only 3.53 inches of precipitation, a departure of -0.84 inches, and the Richmond International Airport had 6.59 inches, a departure of +2.22 inches. Rainfall from thunderstorms was quite variable for July over the area. Springfield Park with only 8 days of measurable precipitation tied for the second least on record.

The highest wind gust was only 22 mph from the north on the 14th at 1830 hours, the 2nd least on record for July. The average relative humidity for July was 73.7 percent which was a 2.7% departure.

Richmond International Airport

The Richmond International Airport's average mean temperature was 79.5°F which was a departure of 0.1 degrees F from the average and was the 36th warmest since 1897. The highest monthly temperature was 96 degrees F on the 1st. The lowest maximum temperature was only 80 degrees F on July 2nd. The highest daily mean temp. was 84.0 degrees F which was the 31st coolest since 1897; the record is 80.5 degrees F set in 1918. The average maximum temperature was 89.2°F which was a -0.3 degrees F departure. The average minimum was 69.8 degrees F which was a 0.6 degrees F departure for the month. July had 16 days with temperatures of equal to or greater than 90 degrees F. July also had 20 nights the low temperature was 70 degrees F or higher; the average is 14.4 degrees F for the 124-year period. The daily temperature range for July was 19.4 degrees F which was the 44th lowest for July since 1897. The maximum daily temperature range for the month was only 25 degrees F on the 1st and 4th; only 7 years had a lower high monthly range since 1897. The minimum range was 11 degrees F on the 8th.

The Airport had 6.59 inches of precipitation which was a departure of +2.22 inches and made July the 27th wettest July since 1887. The Airport had only 7 days of measurable precipitation and only 9 years since 1887 have had less days without precip. in July. The record is 3 days set in 1911 and 1963.

The Richmond International Airport had 1 daily records set in July.

July 8th the 1.94 inches of rain set a new daily record; the previous record was 1.72 inches in 2011.

ACON - VA/NC/SC

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

July 2021

Station summary of Climatological Data

Observer: Lowell L. Koontz

West Henrico - Glen Allen, VA

Observation Times: Temps Recorded 2400 Precipitation Recorded 2400

TEMPERATURE °F

A	MEAN MAXIMUM	90.15
B	MEAN MINIMUM	69.94
C	MEAN MONTHLY	80.04
C1	MEAN TEMP DEP.	-0.2
D	MAXIMUM	96.3
E	DATE(s) OF MAX.	Jul-01
F	MINIMUM	56.3
G	DATE(s) OF MIN.	Jul-03
H	# DAYS MAX. > = 90°	20
I	# MAX. < = 32°	0
J	MIN. < = 32°	0
K	MIN. >= 70°	20
K1	AVE RELATIVE HUMIDITY	73.7

WIND MPH

L	MAX. GUST	22
M	DIRECT. OF GUST	North
N	DATE	Jul-14
	TIME	18:30

NUMBER DAYS WITH -

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

PRECIPITATION INCHES

T	MONTH TOTAL	3.53
U	CALENDAR DAY MAX.	1.07
U1	DATE OF MAX.	Jul-02
V	24-HR. PERIOD MAX.	2.13
V1	DATE(s) OF MAX. PD.	Jul 1 st - Jul 2 nd
W	# DAYS > = 0.01"	8
X	# DAYS > = 1.00"	3
Y	YR. TO DATE TOT.	25.99
	MAX. 1 HR. PRECIP.	0.50
	MAX.5 MIN PRECIP.	0.18

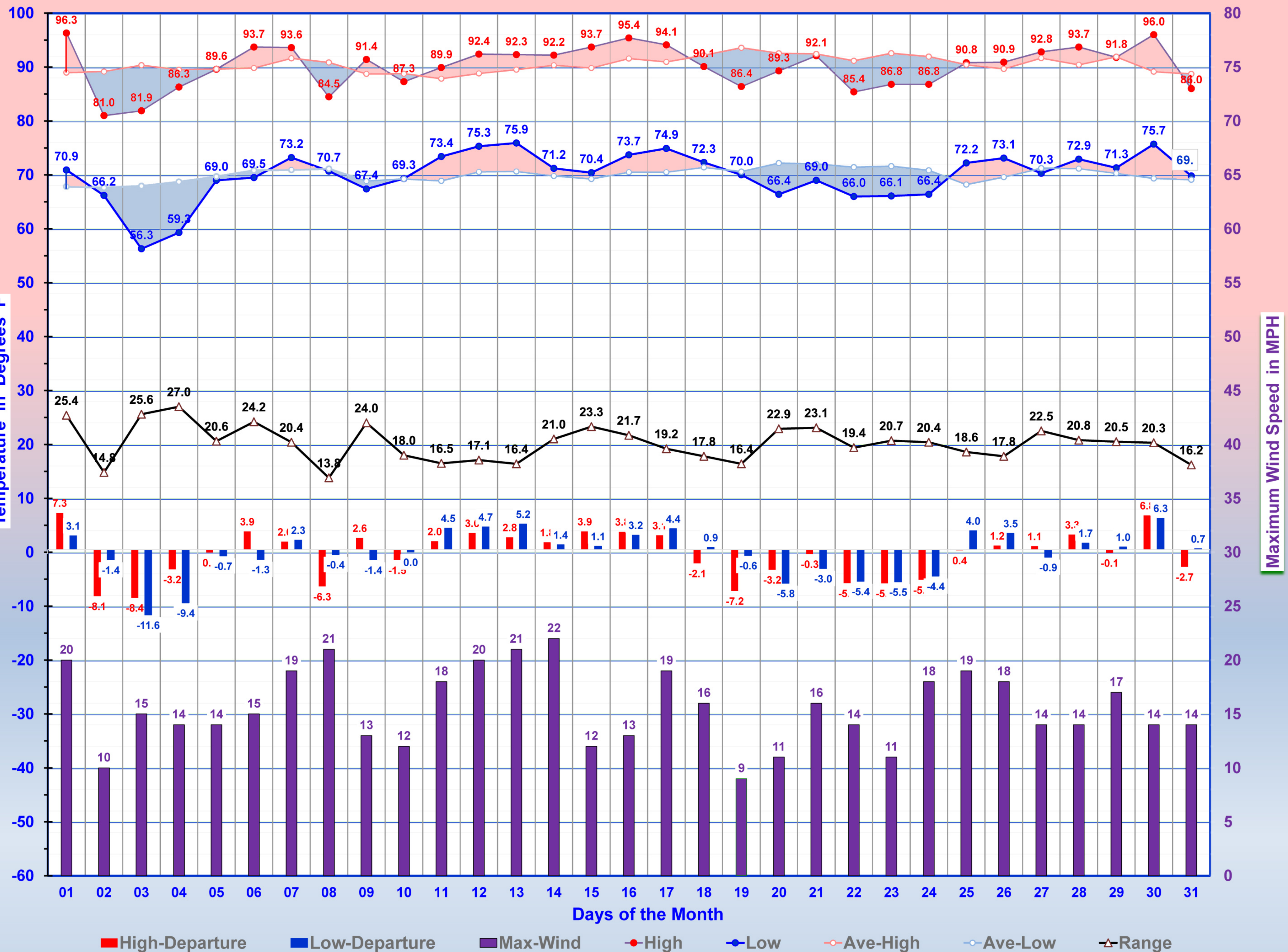
SNOWFALL INCHES

Z	DAILY MAXIMUM	0.0
1	DATE OF MAX.	
2	DAYS= > TRACE	0.0
3	DAYS > = 1.0"	0.0
4	MONTHLY TOTAL	0.0
5	2020 - 2021 SEASON'S TOT.	11.7

BAROMETER

6	MAXIMUM	30.23
6A	DATE	Jul 13 th & 14 th
7	MINIMUM	29.75
7A	DATE	Jul-08
8	AVE. MONTHLY PRESSURE	30.00
CWA	NWS COUNTY WARNING AREA	Henrico

SPRINGFIELD PARK'S JULY TEMPERATURE & WIND GRAPH



The Richmond International Airport JULY TEMPERATURE GRAPH

Temperature in Degrees F

