

PAGE #1	Jul 2016 West Henrico Co. - Glen Allen Weather Center 37.65537° N. 77.56929° W. - Koontz																		
		TEMPERATURE °F				TEMPERATURE °F				SKY		PRECIPITATION			FROZ. PRECIP.		1st PERIOD		
Jul 2016	Week Day	MAX.	Time	MIN.	Time	RANGE	MEAN	CHANGE	SOIL	AM	PM	Liquid	1 Hr.	5 Min.	NEW	GROUND	START	END	
Jul-01	Fri	87.2	16:46	68.0	3:50	19.2	77.6	1.2	75	2	2	0.33	0.26	0.11			0549	0645	
Jul-02	Sat	84.1	16:35	66.8	5:52	17.3	75.5	-2.2	75	0	1	T	T	T			2345	2400	
Jul-03	Sun	73.3	0:01	63.9	5:22	9.4	68.6	-6.8	76	2	2	0.09	0.05	0.02			0001	0320	
Jul-04	Mon	75.4	18:21	67.2	1:56	8.2	71.3	2.7	74	2	2	0.60	0.30	0.14			0124	0128	
Jul-05	Tue	90.9	17:14	73.3	5:14	17.6	82.1	10.8	75	2	1	0.06	0.06	0.02			0114	0215	
Jul-06	Wed	91.8	16:21	74.0	6:00	17.8	82.9	0.8	77	1	2								
Jul-07	Thu	94.4	15:31	74.4	5:53	20	84.4	1.5	78	1	1	0.04	0.04	0.01			2148	2205	
Jul-08	Fri	93.1	15:52	72.1	6:00	21	82.6	-1.8	80	0	2	0.01	0.01	T			0001	0015	
Jul-09	Sat	92.4	15:51	72.1	6:10	20.3	82.3	-0.3	80	1	1								
Jul-10	Sun	87.7	14:50	67.5	6:03	20.2	77.6	-4.7	79	2	1								
Jul-11	Mon	87.5	16:11	68.0	6:07	19.5	77.8	0.2	78	1	1								
Jul-12	Tue	90.0	14:40	71.4	6:38	18.6	80.7	3.0	78	2	1	T	T	T			2340	2355	
Jul-13	Wed	92.7	16:45	73.7	5:49	19	83.2	2.5	79	1	1	0.01	0.01	T			0001	0025	
Jul-14	Thu	96.5	15:32	71.8	4:52	24.7	84.2	1.0	79	0	1								
Jul-15	Fri	93.3	15:29	74.0	6:22	19.3	83.7	-0.5	80	2	2								
Jul-16	Sat	90.4	16:26	71.1	23:55	19.3	80.8	-2.9	80	2	2	0.14	0.14	0.04			1944	2110	
Jul-17	Sun	92.0	17:32	68.8	6:28	23.2	80.4	-0.3	79	0	0								
Jul-18	Mon	95.3	14:53	73.0	6:07	22.3	84.2	3.8	80	0	1	0.68	0.68	0.14			2253	2355	
Jul-19	Tue	89.8	14:07	68.5	23:56	21.3	79.2	-5.0	80	0	2	1.05	0.98	0.21			1609	1745	
Jul-20	Wed	88.7	14:52	65.9	5:56	22.8	77.3	-1.8	78	0	1								
Jul-21	Thu	89.8	14:16	65.6	5:48	24.2	77.7	0.4	78	0	0								
Jul-22	Fri	93.3	15:42	72.0	6:06	21.3	82.7	5.0	79	0	1								
Jul-23	Sat	97.4	14:52	74.2	6:21	23.2	85.8	3.2	80	0	0								
Jul-24	Sun	99.1	15:45	76.5	5:56	22.6	87.8	2.0	81	0	0								
Jul-25	Mon	97.4	13:53	76.5	5:22	20.9	87.0	-0.8	82	1	1								
Jul-26	Tue	97.4	15:18	73.3	22:22	24.1	85.4	-1.6	82	1	1	1.00	0.95	0.23			2124	2400	
Jul-27	Wed	95.3	15:07	73.2	4:35	22.1	84.3	-1.1	81	0	2	T	T	T			0001	0010	
Jul-28	Thu	95.5	14:29	74.2	5:03	21.3	84.9	0.6	81	1	1	0.91	0.74	0.29			2138	2330	
Jul-29	Fri	88.5	17:17	74.2	6:04	14.3	81.4	-3.5	82	2	1	0.12	0.09	0.01			0115	0210	
Jul-30	Sat	85.6	13:18	74.4	4:21	11.2	80.0	-1.3	81	2	2	0.18	0.15	0.03			1018	1230	
Jul-31	Sun	90.9	17:13	72.3	23:58	18.6	81.6	1.6	81	2	1	0.57	0.57	0.26			2030	2200	
TOTAL NUMBER		2817		2212		604.8	2514	5.2	2448	30	37	5.79	5.03	1.51	0.00	0.00	Col.26-27 DAILY AVE RH		
		31	31	31	31	31	31	31	31	31	31	15	15	13					
AVERAGE		90.86	15:11	71.35	7:53	19.51	81.11		78.97	0.97	1.19	Ave. Tot.	Ave. Max	Ave. Max			74.1	Percent	
NORMALS		89.89		69.59		20.30	79.74		79.0	0.95	1.04	4.16	1.47	0.29			69.3	Percent	
DEPARTURES		0.97		1.77		-0.79	1.37		-0.1	0.02	0.15	1.63	-0.49	0.00			4.8	Percent	
Max ≥70°F	Dates	99		77		24.7	87.8	10.8	82.0	Whole Day		1.05	0.98	0.29			Precip	24 Hr.	
31 DAYS	1	Jul-24		Jul-24		Jul-14	Jul-24	Jul-05	Jul-25	AVE.	1.08	Jul-19	Jul-19	Jul-28			Amount	1.73	
Departure	2			Jul-25					Jul-26	Normal	1.00						Date	Jul 18	
0.0	3								Jul-29	Depart.	0.08						Time	Jul 19	
MINIMUM	Dates	73		64		8.2	68.6	-6.8	74.0	SKY	AM	PM	≥= 0.10 INCHES		≥= 1.00 INCHES		≥= 2.00 INCHES		
MIN >70°F	1	Jul-03		Jul-03		Jul-04	Jul-03	Jul-03	Jul-04	CLEAR	12	4	10	DAYS	2	DAYS	0	DAYS	
21	2									PT. CLO.	8	17	HOTTEST		87.8	Highest	Lowest	COOLEST	68.6
DAYS	3									CLOUDY	11	10	DAY		7-24	Mean	Mean	DAY	7-03
Departure	≤32 °F	0	<=32 °F	0	MAX.	≥=100	≥=95	≥=90	≥=85	≥=80	≥=75	≥=70	≥=65	≥=60	≥=55	≥=50	≥=45	≥=40	
-16.7	≥90 °F	22	≥=70 °F	21	DAYS	0	8	22	28	29	30	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
Jul 2016	2nd PERIOD		WIND			REL. HUMIDITY		BAROMETRIC PRESSURE				GLAZE	SLEET	SNOW	FOG	R	DEW	FROST
	START	END	RUN	MAX.	TIME	MAX.	MIN.	MAX.	MIN.	AVE.	CHANGE							
Jul-01	1158	1305	30.0	14	12:31	98	60	30.02	29.88	29.95	-0.09					2	P	
Jul-02			40.0	14	9:21	98	53	30.12	29.96	30.04	0.09						4	
Jul-03	0440	0445	34.4	13	4:29	95	68	30.15	30.08	30.12	0.07						P	
Jul-04	0505	1530	25.6	14	11:51	98	93	30.13	29.94	30.04	-0.08						P	
Jul-05			52.8	18	2:53	100	59	29.94	29.85	29.90	-0.14						P	
Jul-06			17.4	12	15:12	98	57	29.95	29.84	29.90	0.00						4	
Jul-07	2244	2400	34.7	18	20:52	97	48	29.89	29.79	29.84	-0.05						4	
Jul-08			30.9	16	15:41	98	51	29.86	29.78	29.82	-0.02						P	
Jul-09			41.1	18	15:56	85	43	29.88	29.79	29.84	0.02						2	
Jul-10			13.1	10	14:08	88	48	30.04	29.88	29.96	0.13						3	
Jul-11			25.7	12	6:22	94	47	30.12	30.03	30.08	0.12						4	
Jul-12			38.9	13	14:01	94	54	30.13	30.02	30.08	0.00				1		M	
Jul-13			29.2	13	19:27	96	52	30.07	29.95	30.01	-0.07						P	
Jul-14			53.5	18	15:55	94	43	30.01	29.89	29.95	-0.06						2	
Jul-15			39.4	16	23:30	89	49	30.04	29.91	29.98	0.02						N	
Jul-16			50.2	20	19:47	96	56	30.13	29.99	30.06	0.08						M	
Jul-17			31.3	14	15:15	99	44	30.20	30.10	30.15	0.09						P	
Jul-18			65.2	22	22:11	95	47	30.19	30.05	30.12	-0.03					1	3	
Jul-19			16.9	22	16:14	99	55	30.19	30.08	30.14	0.01					4	P	
Jul-20			35.9	13	12:44	99	41	30.21	30.13	30.17	0.04						P	
Jul-21			16.1	9	14:19	98	42	30.20	30.08	30.14	-0.03						4	
Jul-22			29.1	13	8:35	92	45	30.12	29.93	30.03	-0.12						3	
Jul-23			34.4	16	18:32	97	41	29.98	29.88	29.93	-0.09						3	
Jul-24			21.1	11	14:46	93	42	30.00	29.94	29.97	0.04						3	
Jul-25			72.6	17	13:53	92	43	30.00	29.88	29.94	-0.03						3	
Jul-26			41.4	27	21:58	96	46	30.02	29.89	29.96	0.02					4	3	
Jul-27	1740	1840	7.9	7	13:14	98	54	29.98	29.90	29.94	-0.02					1	P	
Jul-28			42.9	18	17:31	98	54	29.95	29.76	29.86	-0.08						P	
Jul-29			30.0	13	11:38	98	59	29.96	29.79	29.88	0.02						P	
Jul-30	1315	1420	27.6	16	17:44	96	75	30.02	29.93	29.98	0.10					1	4	
Jul-31			18.0	19	21:07	98	58	30.06	29.93	30.00	0.02					2	P	
TOTAL NUMBER	Column 23		1007.9	476		2966	1627	931.56	927.85	929.71	TOTAL	0	0	0	1	7	15	0
	Mar. Wind Run		30	31	31	31	31	31	31	31	Normal	0.0	0.0	0.0	4.4	6.1	17.7	0.1
AVE.	Total	1007.9	33.6	15.4	14:53	95.68	52.48	30.05	29.93	29.99	Depart.	0.0	0.0	0.0	-3.4	0.9	-2.7	-0.1
NORMALS	Miles	0.0	0.0	0.0		0.0	0.0	0.00	0.00	0.00	DAYS							
Departures	Miles	1007.9	33.6	15.4		95.7	52.5	30.05	29.93	29.99	OF ▶	GLAZE	SLEET	SNOW	FOG	R	DEW	FROST
MAXIMUM DATES	Dates		72.6	27	ENE	100	93	30.21	30.13	30.17	0.13							
	1		Jul-25	Jul-26	21:58	Jul-05	Jul-04	Jul-20	Jul-20	Jul-20	Jul-10	5. Very Heavy to Extreme						
	2											4. Heavy-Unusual						
	3											3. Moderate - Ave.						
	4											2. Light - < Ave.						
MINIMUM DATES	Dates		7.9	7		85	41	29.86	29.76	29.82	-0.14	1. Very Light - Slight - Trace						
	1		Jul-27	Jul-27		Jul-09	Jul-20	Jul-08	Jul-28	Jul-08	Jul-05	M - Event with intensity missing						
	2						Jul-23					N- None No Dew Obs.						
MIN. DAYS	<=80		<=75	<=70	<=65	<=60	<=55	<=50	<=45	<=40	<=35	P- Precip. prevent obs.						
	31		29	10	1	0	0	0	0	0	0							

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## REMARKS FOR THE MONTH

July - 2016

<b>Jul-01</b>	TWO TS TODAY-1ST RATED 2 AND THE 2ND RATED 1-NOON TS WAS 1 CLOUDY MOST OF DAY BUT BROKEN CUMULUS FROM 1330-1515 & A 45 MIN. CLEAR PERIOD-MAX. DEW POINT WAS 76.7°F AT 1453
<b>Jul-02</b>	ALTOCUMULUS CAME IN AROUND 0215 AND CUMULUS BY 1330 THEN PC AFTER 1515
<b>Jul-03</b>	3RD PD. OF RAIN 1040-1305, 4TH PD. 1715-1845-VERY COOL DAY FOR JULY BUT WARM FRONT IS TO SOUTH HEADED BACK - DAY TIME MAX. TEMP. WAS ONLY 68°F - TODAYS MAXIMUM CAME AT MIDNIGHT &
<b>Jul-04</b>	VERY WET AND COOL 4TH OF JULY BUT RAIN ENDED BEFORE FIREWORKS AND DARK
<b>Jul-05</b>	VERY HUMID AND HOT DAY AFTER COOL TEMPS. OF 3RD-MAX. DEW POINT TODAY WAS 77.9°F AT 1459
<b>Jul-06</b>	HOT AND VERY HUMID - MAX. DEW POINT WAS 79.1°F AT 1515-CIRRUS CLOUDS TO 0915 THEN NEARLY CLEAR TO 1115 THEN CUMULUS CAME IN -PM EST. 65% CLOUDY
<b>Jul-07</b>	HOT AND VERY HUMID - MAX. DEW POINT WAS 77.4°F AT 0948
<b>Jul-08</b>	VERY CLEAR TO 1130 THEN SCATTERED CLOUDS MAINLY CUMULUS AFTER 1345-PM ABOUT 70% CLOUDY
<b>Jul-09</b>	CIRRUS CAME IN AT 0615 BUT THIN UNTIL 0800 THEN ALTOCUMULUS AND CIRROSTRATUS TO NOON
<b>Jul-10</b>	CLEAR AFTER 1900 AND COOLER AND LESS HUMID-AM WAS CIRRUS AND ALTOCUMULUS THAT BECAME CUMULUS IN PM
<b>Jul-11</b>	CIRRUS CAME IN AROUND 0900 TO 1130 THEN PC WITH CIRRUS TO NOON-EST. AM 55% CLOUDY, PM PARTLY CLOUDY WITH CUMULUS EST. 40% CLOUDY
<b>Jul-12</b>	CLOUDY PM 80-90%-PM EST. TO BE 60-65% CLOUDY-EXACT DEW RATING WAS ESTIMATED BUT WAS LOW-ACTUAL OBSERVATION MISSING
<b>Jul-13</b>	AM WAS PC WITH CUMULUS-PM WAS MOSTLY CLEAR AFTER 1700
<b>Jul-14</b>	HOTTEST DAY OF 2016 WITH A HEAT INDEX OF 106.1 AND A DEW POINT OF 76.3°F AT 1528-AM WAS VERY CLEAR AND PM WAS PC WITH MOSTLY CUMULUS AND SOME CIRRUS
<b>Jul-15</b>	ANOTHER VERY HOT DAY WITH A MAX. DEW POINT OF 76.5°F AT 1502-AM WAS 90% CLOUDY AND PM EST. 50-60% CLOUDY
<b>Jul-16</b>	AM TOTALLY CLOUDY AND PM MOSTLY CLOUDY EST. 80%-EST. DEW RATING WAS LOW BUT OBS. MISSING
<b>Jul-17</b>	SOME AM CUMULUS UNTIL 0900 THEN VERY CLEAR 0915-1230-PM HAD A FEW SCATTERED CUMULUS
<b>Jul-18</b>	THIN CIRRUS IN AM AND CUMULUS CAME IN AT 1230 AND WAS PC-CLOUDS IN PM EST. 50-60%
<b>Jul-19</b>	HAIL 3/8 IN. IN DIAMETER FROM 16 HR. 17 MINS. 30 SEC TO 16 HR. 19 MINS. 0 SEC.- A FEW HAIL STONES WERE 0.5 INS. -TS IS RATED 4 BECAUSE OF HAIL
<b>Jul-20</b>	AM WAS ABOUT 10-15% CLOUDY AND PM EST. 40-50% CLOUDY
<b>Jul-21</b>	DEW WAS A HIGH 3 OR LOW 4 RATING-AVERAGE CLEAR SUMMER DAY WITH SCATTERED CUMULUS BUT HEAT WAVE COMING
<b>Jul-22</b>	CIRRUS IN AM BUT THIN AND SCATTERED-CUMULUS CAME IN AT 1300 AND WAS PC TO 1600 THEN CLEAR AGAIN TO SUNSET
<b>Jul-23</b>	VERY CLEAR EXCEPT CUMULUS FROM 1545-1615-MAX. DEW POINT 76.6°F AT 1601 AND MAX. HEAT INDEX 110°F
<b>Jul-24</b>	<b>HOTTEST DAY SINCE JULY 26, 2012 WHEN IT WAS 100°F</b> -AM 10% CLOUDY WITH CIRRUS-PM EST. 10-20% CLOUDY WITH CUMULUS-MAX. DEW POINT WAS 79.7°F 4TH HIGHEST ON REC. AT THIS STATION AND A MAX.
<b>Jul-25</b>	PC WITH THIN AM CIRRUS TO NOON THEN SCATTERED CUMULUS 1345-SUNSET-PM 30-40% CLOUDY-MAX. HEAT INDEX 112.5°F AT 1430
<b>Jul-26</b>	ANOTHER HOT DAY-MAX. DEW POINT 79.6°F AT 0947-MAX. HEAT INDEX 113°F AT 1455-CIRRUS 1145 THEN CUMULUS TO 1715-TS WITH MUCH LIGHTNING RATED 5-3-4 THE OVER ALL RATING WAS 4.
<b>Jul-27</b>	3RD PD. OF SPRINKLES 1945-2025-STRONG TS TO SOUTH-TS HERE RATED 1-1-1-CUMULUS CAME IN AT 1130 AND THICK CUMULUS AFTER 1530-HEAT INDEX 113°F AND MAX. DEW POINT 79.3°F AT 1849
<b>Jul-28</b>	TS PASSED TO NORTH AND HIT WYNDHAM AREA-CLEAREST PART OF DAY WAS 1215-1430
<b>Jul-29</b>	CLOUDY AM WITH EVEN A LITTLE VERY LIGHT DRIZZLE EARLY (DIDNT REGISTER ON RAIN SENSOR)-PC AFTER 1500 AND CLEAR FROM 1750-SUNSET-PM EST. 60-65% CLOUDY
<b>Jul-30</b>	UNEXPECTED SPRINKLES 0840-1015AM THEN SHOWERS FROM 1015 to 1150 THEN MORE SPRINKLES TO 1235 & A TS PASED TO THE SOUTH OF RICHMOND.
<b>Jul-31</b>	EARLY AM FOG TO OUR WEST & LOW STRATUS CLOUDS MOST OF THE AM UNTIL 1115 THEN PT CLO. -CLEAR PERIOD ONLY 1600-1800 - TS AT 2030 JULY IS OUR 2nd WETTEST AND A VERY HUMID MONTH

## DATE

## EXTENSION OF LENGTHY DAILY REMARKS

<b>Jul-03</b>	WAS THE LOWEST MAXIMUM ON RECORD FOR MONTH OF JULY - THE OLD REC. WAS 74°F SET ON JULY 5, 2009.
<b>Jul-24</b>	HEAT INDEX WAS 117.6°F AT 1538

The link below explains how observations are taken at the Glen Allen Weather Station - Note the Numbers match the column numbers on the Observation Sheet

[www.glenallenweather.com/upload/glenallencimate/log/2016/2016\\_Obs\\_Rules.pdf](http://www.glenallenweather.com/upload/glenallencimate/log/2016/2016_Obs_Rules.pdf)

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## DAILY RECORDS FOR THE MONTH

Jul  
2016

The Glen Allen Station had 17 Records or Record Ties in July 2016

1

2

3

The maximum temperature on the 3rd was 73.3°F, a new 8 year LOW daily maximum temperature record for the date - the old record was 81.7°F in 2015.

The daily temperature range on the 3rd was 9.4°F, a new 8 year LOW daily temperature range record for the date - the old record was 14°F in 2013.

\*

The maximum temperature on the 3rd was 73.3°F the lowest maximum temperature on record at Glen Allen for the month of July - the old record was 74.4°F on July 5, 2009.

4

The maximum temperature on the 4th was 79°F, a new 8 year LOW daily maximum temperature record for the date - the old record was 84°F in 2014.

The daily temperature range on the 4th was 11.8°F, a new 8 year LOW daily temperature range record for the date - the old record was 16°F in 2013.

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The minimum temperature on the 13th was 73.7°F, a new 8 year warm daily minimum temperature record for the date - the old record was 73°F in 2014 and 2010.

14

The daily temperature range on the 14th was 24.7°F, a new 8 year HIGH daily temperature range record for the date - the old record was 20°F in 2014 and 2009.

15

The minimum temperature on the 15th was 74°F, a new 8 year warm daily minimum temperature record for the date - the old record was 73°F in 2014 and 2012.

16

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The daily precipitation on the 19th was 1.05 inches, a new 8 year HIGH daily precipitation record for the date - the old record was T inches in 2014 and 2012.

20

The minimum temperature on the 20th was 65.9°F, a new 8 year LOW daily minimum temperature record for the date - the old record was 66°F in 2014.

21

The daily temperature range on the 21st was 24.2°F, a new 8 year HIGH daily temperature range record for the date - the old record was 24°F in 2008.

22

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24

\*The maximum temperature today was 99.1°F the highest maximum temperature on record at Glen Allen since July 26, 2012 when it was 100°F.

25

26

The daily precipitation on the 26th was 1.00 inches, a new 8 year HIGH daily precipitation record for the date - the old record was T inches in 2009.

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28

The minimum temperature on the 28th was 74.2°F, a new 8 year warm daily minimum temperature record for the date - the old record was 74°F in 2010.

The daily precipitation on the 28th was 0.91 inches, a new 8 year HIGH daily precipitation record for the date - the old record was 0.49 inches in 2013.

29

30

The daily temperature range on the 30th was 11.2°F, a new 8 year LOW daily temperature range record for the date - the old record was 18°F in 2011.

31

The daily precipitation on the 31st was 0.57 inches, a new 8 year HIGH daily precipitation record for the date - the old record was 0.37 inches in 2013.