PAGE #1		Jul						ather Cen										
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Jul	Week	MAY	TEMPER A			544405	TEMPERA			SKY			PRECIPITATION		FROZ. PRECIP.		1st PERIOD	
2017	Day	MAX.	Time	MIN.	Time	RANGE	MEAN	CHANGE	SOIL	AM	PM	Liquid	1 Hr.	5 Min.	NEW	GROUND	START	END
Jul-01	Sat	92.0	16:00	75.2	3:33	16.8	83.6	4.0	76	2	1	-	-	-			0740	0745
Jul-02	Sun	91.7	15:13	73.4	5:56	18.3	82.6	-1.0	77	2	1	Т	Т	Т			0712	0715
Jul-03	Mon	92.3	15:54	70.2	6:01	22.1	81.3	-1.3	78	0	1	0.40						
Jul-04	Tue	90.7	13:47	71.8	5:54	18.9	81.3	0.0	78	2	2	0.10	0.10	0.02			1445	1620
Jul-05	Wed	88.5	14:49	72.1	22:37	16.4	80.3	-1.0	78	2	2	1.76	0.73	0.02			0025	0125
Jul-06	Thu	87.6	16:19	71.4	4:18	16.2	79.5	-0.8	77	2	2	Т	Т	Т			0200	0210
Jul-07	Fri	90.1	15:57	71.9	3:04	18.2	81.0	1.5	78	1	0							
Jul-08	Sat	90.4	15:23	71.8	6:08	18.6	81.1	0.1	78	1	1							
Jul-09	Sun	87.3	16:35	64.0	5:52	23.3	75.7	-5.4	78	0	1							
Jul-10	Mon	91.4	16:50	68.7	6:09	22.7	80.1	4.4	78	1	1							
Jul-11	Tue	93.6	13:54	73.7	6:04	19.9	83.7	3.6	78	1	2							
Jul-12	Wed	96.1	16:40	77.8	6:11	18.3	87.0	3.3	79	1	1							
Jul-13	Thu	96.0	16:05	78.1	6:17	17.9	87.1	0.1	80	0	2	-	_	_			4550	1005
Jul-14	Fri	95.9	14:31	75.3	6:22	20.6	85.6	-1.5	81	0	1	Т	Т	Т			1558	1605
Jul-15	Sat	93.1	14:41	72.4	5:48	20.7	82.8	-2.8	81	1	1							
Jul-16	Sun	91.8	16:25	71.6	6:44	20.2	81.7	-1.1	80	0	1	-	_	_				
Jul-17	Mon	91.0	16:06	71.5	6:17	19.5	81.3	-0.4	80	1	1	Т	T	Т			2145	2305
Jul-18	Tue	91.9	16:01	73.1	6:43	18.8	82.5	1.3	80	1	1							
Jul-19	Wed	96.4	15:20	67.9	5:56	28.5	82.2	-0.3	79	0	1							
Jul-20	Thu	97.4	15:54	74.3	6:32	23.1	85.9	3.7	80	0	0							
Jul-21	Fri	98.6	15:20	74.1	6:07	24.5	86.4	0.5	81	0	0							
Jul-22	Sat	98.8	15:18	72.3	6:13	26.5	85.6	-0.8	81	0	0	0.74						
Jul-23	Sun	96.9	15:30	73.6	23:35	23.3	85.3	-0.3	82	2	1	0.74	0.74	0.22			0110	0115
Jul-24	Mon	93.5	16:07	72.2	5:56	21.3	82.9	-2.4	81	2	2	0.19	0.16	0.05			0050	0240
Jul-25	Tue	86.7	15:02	70.3	23:57	16.4	78.5	-4.3	81	1	0							
Jul-26	Wed	88.7	17:26	65.1	6:43	23.6	76.9	-1.6	79	1	2	_	_	_				
Jul-27	Thu	88.6	15:50	71.1	5:28	17.5	79.9	2.9	79	2	2	T	Т	Т			1805	2155
Jul-28	Fri	89.2	14:11	72.9	6:43	16.3	81.1	1.2	79	2	2	0.03	0.01	0.01			1055	1210
Jul-29	Sat	73.8	0:01	64.6	23:58	9.2	69.2	-11.9	78	2	2	1.29	0.69	0.14			0040	0640
Jul-30	Sun	81.7 87.2	16:13	57.1 58.5	6:08	24.6	69.4	0.2	75 75	0	0							
Jul-31 TOTAL	Mon		14:46		5:57	28.7	72.9	3.4	75 2445	0	0	1 11	2.42	0.46	0.00	0.00		26.27
		2829	24	2198	24	630.9	2513	-6.8	2445	30	34	4.11	2.43	0.46	0.00	0.00		26-27
NUMBER AVERAGE		31 91.25	31 15:06	31 70.90	31 8:10	31 20.35	31 81.08	31	31	31	31	6	6	6	0	0	67.7	AVE RH
			15.06		0.10				78.87	0.97	1.10	Ave. Tot.	Ave. Max	Ave. Max				Percent
NORMALS		90.00		69.78		20.21	79.89		79.0	0.95	1.08	4.34	0.84	0.29			69.8	Percent
May Tom	os. >= 90°F	1.26 99		1.12 78		0.14 28.7	1.19 87.1	4.4	-0.2 82.0	0.02 Who	0.01 le Day	-0.23 1.76	-0.10 0.74	-0.07 0.22			-2.1 Precip.	Percent 24 Hr.
2017		Jul-22									1.03							
Ave.		Jui-22		Jul-13		Jul-31	Jul-13	Jul-10	Jul-23	AVE. Normal	1.03	Jul-05	Jul-23	Jul-23			Amount Date	1.76 Jul 05
Departure										Depart.	0.02						Date	
Min. Temp		74		57		9.2	69.2	-11.9	75.0	SKY	AM	PM	>= 0.10	INCHES	>= 1.00	INCHES	>= 2.00	INCHES
2017		Jul-29		Jul-30		Jul-29	Jul-29	Jul-29	Jul-30	CLEAR	11	7	5	DAYS	2	DAYS	0	DAYS
Ave.									Jul-31	PT. CLO.	10	14	HOTTEST	87.1	Highest	Lowest	COOLEST	69.2
Departure					MAY					CLOUDY	10	10	DAY	7-13	Mean	Mean	DAY	7-29
Days Max Days Max		0 21			MAX. DAYS	>=100 0	>=95	>=90	>=85 29	>=80	>=75 30	>=70 31	>=65 21	>=60 31	>=55 21	>=50	>=45	>=40
Days Wax	. >=30 f	41			DATS	U	8	21	29	30	30	31	31	31	31	31	31	31

PAGE #2	Jul	2017	West He	nrico Co	o Glen	Allen We	ather Co	enter 37	.65537° I	N. 77.56	929° W. ·	- Koontz	<u>.</u>					
20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38
Jul	2nd PERIOD					REL. HUMIDITY		BAROMETRIC PRESSU							K			
2017	START	END	RUN	MAX.	TIME	MAX.	MIN.	MAX.	MIN.	AVE.	CHANGE	GLAZE	SLEET	SNOW	FOG	, ,	DEW	FROST
Jul-01			104.2	22	14:40	83	52	30.00	29.88	29.94	-0.09						N	
Jul-02	1703	1708	17.8	12	14:49	91	44	30.05	29.94	30.00	0.06						4	
Jul-03			19.0	16	11:49	91	34	30.04	29.98	30.01	0.01						5	
Jul-04	1905	1955	11.5	12	17:50	88	51	30.04	29.97	30.01	0.00					_	3	
Jul-05	0338	0405	19.7	18	16:01	91	58	30.10	30.03	30.07	0.06					1	P	
Jul-06	2010	2030	24.1	15	17:47	92	59	30.08	29.89	29.99	-0.08						P	
Jul-07			51.2	17	13:24	90	48	29.89	29.81	29.85	-0.13						P	
Jul-08			45.1	21	16:18	87	43	29.93	29.78	29.86	0.00						4	
Jul-09 Jul-10			23.2 56.8	14 20	8:37 18:53	88 88	38 41	30.08 30.07	29.93 29.95	30.01 30.01	0.15 0.00						3	
Jul-11 Jul-12			54.2 50.8	17 14	12:35 15:16	88 82	41 41	30.02 30.09	29.96 30.01	29.99 30.05	-0.02 0.06						2	
Jul-12 Jul-13			50.8 77.6				46	30.09			-0.02						1	
Jul-13 Jul-14	1705	1715	72.6	16 19	14:28 16:02	83 82	46	30.09	29.98 29.91	30.04 29.98	-0.02						P	
Jul-14 Jul-15	1705	1715	23.5	13		85	39	29.99	29.88	29.98	-0.05						2	
Jul-15 Jul-16			43.7	13	15:00 21:43	78	40	30.00	29.88	29.94	0.02					1	1	
Jul-10 Jul-17			30.6	17	16:02	92	48	30.04	29.93	29.99	0.02					1	3	
Jul-17 Jul-18			19.2	12	19:46	95	46	30.04	30.01	30.05	0.04					1	4	
Jul-19			15.2	12	13:40	92	36	30.08	29.97	30.03	-0.03						3	
Jul-19			30.4	16	13:46	87	38	30.03	29.89	29.96	-0.05						2	
Jul-21			24.5	12	18:11	88	36	29.97	29.84	29.91	-0.05						2	
Jul-22			41.2	17	16:35	97	43	29.92	29.74	29.83	-0.08						3	
Jul-23	0225	0230	47.0	23	22:32	97	42	29.83	29.71	29.77	-0.06					3	P	
Jul-24	0705	0725	43.8	15	0:06	98	47	29.87	29.75	29.81	0.04						P	
Jul-25	0.00	0.20	73.4	16	13:28	83	43	30.16	29.87	30.02	0.20						1	
Jul-26			25.8	10	21:10	89	45	30.20	30.04	30.12	0.10						3	
Jul-27			76.4	19	12:09	87	63	30.08	29.84	29.96	-0.16						1	
Jul-28	1745	2210	29.0	13	18:54	92	60	29.85	29.63	29.74	-0.22					1	2	
Jul-29	0700	1830	114.7	25	11:18	95	85	29.90	29.58	29.74	0.00					1	Р	
Jul-30			69.6	17	10:41	92	39	30.07	29.90	29.99	0.25						4	
Jul-31			21.6	14	13:38	97	39	30.12	30.03	30.08	0.09						5	
TOTAL	Colum	nn 23	1357.4	497		2768	1431	930.73	926.53	928.63	TOTAL	0	0	0	0	7	23	0
NUMBER	Mar. Wii	nd Run	31	31	31	31	31	31	31	31	Normal	0.0	0.0	0.0	1.9	6.8	17.0	0.0
AVE.	Total	1357.4	43.8	16.0	15:04	89.29	46.16	30.02	29.89	29.96	Depart.	0.0	0.0	0.0	-1.9	0.2	6.0	0.0
NORMALS	Miles	1093.8	56.8	18.9		92.6	46.8	30.03	29.91	29.98	Rating ►	0	0	0	0	9	65	0
Departures	Miles	263.6	-13.0	-2.9		-3.3	-0.6	0.00	-0.03	-0.02	Intensity	_ 🖁	EET	≥ .	ø	17	>	ts .
	MAXIMUM	Dates	114.7	25	NNE	98	85	30.20	30.04	30.12	0.25	GLAZE	SLE	SNOW	70 G	K	Dew	Frost
	DATES	1 2	Jul-29	Jul-29	11:18	Jul-24	Jul-29	Jul-26	Jul-26	Jul-26	Jul-30	_	avy to Ext			100		
		3										4. Heavy-l	•	ieilie				
		4										3. Modera						
	MINIMUM	Dates	11.5	10		78	34	29.83	29.58	29.74	-0.22	2. Light -	< Ave.					
	DATES	1	Jul-04	Jul-26		Jul-16	Jul-03	Jul-23	Jul-29	Jul-28	Jul-28		ght - Slight					
		2								Jul-29		4	with intens	•	g			
Days Min.		0	≤ 75	≤ 70	≤ 65	≤ 60	≤ 55	≤ 50	≤ 45	≤ 40	≤ 35		lo Dew Obs					
Days Min	>=/U'F	24	27	7	3	2	0	0	0	0	0	P- Precap	. prevent o	DS.				

PAGE #3	West Henrico Co Glen Allen Weather Center 37.65537° N. 77.56929° W Koontz
Jul	REMARKS FOR THE MONTH
2017	July - 2017
	CLOUDY AM LOW FOG CLOUDS BREAKING UP PAST NOON-UNUSUAL AND VERY HUMID WITH MAX. DEW POINT OF 76.3°F AT 1241
	CLOUDY AM -TWO LAYERS OF CLOUDS UPPER CLOUDS ALTOCUMULUS -PM EST. TO BE 50-60% CLOUDY
	AM MAINLY CLEAR EXCEPT CIRRUS AND THEN SCATTERED CUMULUS BY 1100-PM MAINLY CUMULUS GIVING 50-60% CLOUDINESS
	CLOUDY & HUMID DAY WITH A MAX. DEW POINT OF 76.2°F AT 0731- SPRINKLES FROM 2040-2045 & A LITTE LIGHTNING- TS RATED 1-2-5
	SHOWER FROM 1305-1330 & HEAVY RAIN FROM 1535-2100-MUCH NEEDED RAIN AFTER 10 DAYS OF NO MEASURABLE RAIN
Jul-06	VERY CLOUDY 1100-1300-AM MOSTLY CLOUDY AS A VERY WEAK COLD FRONT PASSED AROUND 1130
Jul-07	AND SHAFF CHARLES AND SERVICE OF CHARLES AND FOR A CONTROL OF THE
	AM PC WITH CUMULUS AND CIRRUS-CLOUDINESS INCREASED IN PM EST. COVERAGE 50-60%
	AM VERY CLEAR & PM HAD 30-40% CLOUD COVER OF MAINLY CUMULUS CLOUDS THAT CAME IN AROUND 1300
	AM WAS ABOUT 40% CLOUDY AND PM WAS PC WITH A FEW CIRRUS BUT MAINLY CUMULUS AM WAS PC WITH CUMULUS & PM BECAME CLOUDY WITH CUMULUS
	AM WAS PC WITH COMOLOS & PM BECAME CLOUDY WITH COMOLOS AM WAS PC WITH CUMULUS AND CIRRUS AND PM WAS PC WITH CIRRUS AND CUMULUS EST. 45-55% CLOUDY -HOTTEST DAY OF 2017 & HIGHEST TEMP, SINCE SEPT. 9, 2016 WHEN IT WAS 96.9°F
	AM WAS PC WITH COMOLOS AND CIRCOS AND FIN WAS PC WITH CIRCOS AND COMOLOS EST. 43-35% CLOUDY -NOTTEST DAT OF 2017 & HIGHEST TEMP. SINCE SEPT. 9, 2016 WHEN THAN 396.9 F
	FEW CLOUDS IN AM THAT INCREASED IN PM TO BECOME PC
	BOTH AM AND PM WERE PC - HOT DAY AGAIN BUT WITH LESS HUMIDITY
	NEW TEMP. AND REL. HUMIDITY PROBE INSTALLED-RH WAS RUNNING 4% LOW-TS AROUND 2200 PASSED STATION TO SE
	TS AROUND 2130 THAT PASSED TO SW-ONLY SPRINKLES IN RAIN PD. LISTED-MAX. ON PRECIP. SENSOR WAS 7/15-HEAVIEST SPRINKLES OF 7 WAS AT 2305
	CLEAR EARLY THEN INCREASING CLOUDINESS-PM WAS EST. TO BE 55-65% CLOUDY-3 THUNDERS HEARD BUT NO RAIN
	VERY CLEAR HOT DRY DAY-LONGEST DRY PD. WITH NO RAIN SINCE OCT. 11, 2015 WHICH WAS ANOTHER 14 DAY PERIOD
	VERY HOT AND HAZY WITH SOME VERY THIN CIRRUS THAT LET MUCH SOLAR RADIATION THROUGH
Jul-21	AM EST. TO BE 30% CLOUDY AND PM ABOUT 10-20% CLOUDY BUT ALSO A VERY HAZY SKY
Jul-22	HAZY BUT GENERALLY CLEAR WITH ONLY SCATTERED CUMULUS-TS TO NORTH THIS EVENING-HOTTEST DAY OF 2017 & HIGHEST TEMP, SINCE JULY 24, 2016 WHEN IT WAS 99.1°F
Jul-23	2 PDS. OF SPRINKLES AND 2 THUNDERS HEARD-SUN THROUGH CIRRUS THAT COVERED MORE THAN 70% OF SKY ON AVERAGE-PM EST. 6070% CLOUDY-3RD RAIN PD. 2225-2400-TS RATED 3-3-3
Jul-24	GLEN ALLEN TIED REC. WITH 17 DAYS OF NO MEASURABLE RAIN FROM 6-22 - A LITTLE COOLER-AM EST. 85-90% CLOUDY & PM HAD MAINLY CIRRUS WITH SUN THROUGH CIRRUS-EST. 70-75% CLO.
Jul-25	TODAY WAS COOLER WITH LOW DEW POINT OF 60.9°F & COMFORTABLE IN SHADE-AM PC BECAUSE OF CIRRUS
Jul-26	AM WAS COOL ENOUGH TO OPEN WINDOWS-FIRST EARLY FALL EXPERIENCE BUT BY PM GLEN ALLEN WAS BACK TO AVERAGE HIGHS
Jul-27	CLOUDY ALL DAY WITH SPRINKLES THAT STARTED AT 1810 AND LASTED TO 2200 BUT MUCH OF PRECIP. EVAPORATED AS FAST AS LIGHT SPRINKLES FELL
Jul-28	THUNDER HEARD WAS VERY DISTANT-LOW PRESSURE WAS SLOW MOVING ON A COLD FRONT TO GLEN ALLEN'S N AND NW-DC HAD HEAVY RAIN-CLOUDY AND VERY HUMID DAY
Jul-29	THUNDER HEARD AT 0301-AM DRIZZLE - ON AND OFF SPRINKLES ALL DAY-LONGEST PD. WITH NO RAIN TODAY WAS LESS THAN AN HOUR
Jul-30	AS NICE A DAY AS ONE COULD EXPECT IN RICHMOND FOR JULY 30 WITH AM TEMPS. IN HIGH 50'S
Jul-31	2ND CONSECUTIVE REC. LOW MIN. TEMPS. FOR DATE & AGAIN BLUE SKIES AND PLEASANT FOR JULY
DATE	EXTENSION OF LENGTHY DAILY REMARKS
	WHEN IT WAS A RECORD FOR DATE
Jul-23	OTHER TS OF 2 GAVE ONLY A TRACE OF RAIN
	THE HIGH MAXIMUM TEMPERATURE OF 98.8°F ON THE 22 ND WAS CHECKED ON THE MAXIMUM MERCURY IN THE WEATHER STATION AND MAY BE THE ANNUAL MAXIMUM.
	THE HIGH MAXIMUM TEMPERATURE OF 98.8°F ON THE 22" WAS CHECKED ON THE MAXIMUM MERCURY IN THE WEATHER STATION AND MAY BE THE ANNUAL MAXIMUM.
['	
	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/glenallenclimate/log/2016/2016 Obs Rules.pdf

Page 4	West Henrico Co Glen Allen Weather Center 37.65537° N. 77.56929° W Koontz
41	DAILY RECORDS FOR THE MONTH
Jul	
2017	The Glen Allen Station had 21 Records or Record Ties in July 2017
1	The minimum temperature on the 1st was 75.2°F, a new 9-year warm daily minimum temperature record for the date - the old record was 71°F in 2012.
2	
3	
4	
5	The daily precipitation on the 5th was 1.76 inches, a new 9-year HIGH daily precipitation record for the date - the old record was 0.65 inches in 2009.
6	
7 8	
9	The delity townsective source on the Oth was 22.25 a new 0 year UCU delity townsective range second for the date, the old second was 23.55 in 2010
10	The daily temperature range on the 9th was 23.3°F, a new 9-year HIGH daily temperature range record for the date - the old record was 22°F in 2010. The maximum temperature on the 10th was 91.4°F, a new 9-year daily HIGH maximum temperature record for the date - the old record was 90.2°F in 2015.
11	The maximum temperature on the 11th was 93.6°F, a new 9-year daily HIGH maximum temperature record for the date - the old record was 93°F in 2011.
	The minimum temperature on the 11th was 93.6 F, a new 9-year daily minimum temperature record for the date - the old record was 93 F in 2011. The minimum temperature on the 11th was 73.7°F, a new 9-year warm daily minimum temperature record for the date - the old record was 91°F in 2013 and 2011.
13	The maximum temperature on the 13th was 96°F, a new 9-year daily HIGH maximum temperature record for the date - the old record was 94°F in 2014 and 2011.
13	The minimum temperature on the 13th was 78.1°F, a new 9-year warm daily minimum temperature record for the date - the old record was 73.7°F in 2016.
14	The minimum competition of the four mas real figures of year maint daily minimum competature record for the date fine of record was 15.7 1 in 2010.
15	
16	
17	
18	
19	The daily temperature range on the 19th was 27.6°F, a new 9-year HIGH daily temperature range record for the date - the old record was 24°F in 2012.
20	
21	The daily temperature range on the 21st was 24.5°F, a new 9-year HIGH daily temperature range record for the date - the old record was 24.2°F in 2016.
22	The daily temperature range on the 22nd was 25.5°F, a new 9-year HIGH daily temperature range record for the date - the old record was 24°F in 2010 and 2008.
23	The daily precipitation on the 23rd was 0.74 inches, a new 9-year HIGH daily precipitation record for the date - the old record was 0.31 inches in 2011.
24	
25	The daily temperature range on the 25th was 15°F, and EQUALED the, 9-year LOW daily minimum temperature range record for the date - the old record was set in 2013.
26	
27	
28	
29	The daily precipitation on the 29th was 1.29 inches, a new 9-year HIGH daily precipitation record for the date - the old record was 0.79 inches in 2010.
	The maximum temperature on the 29th was 73.8°F, a new 9-year cold daily maximum temperature record for the date - the old record was 79°F in 2014.
	The daily temperature range on the 29th was 5.3°F, a new 9-year LOW daily temperature range record for the date - the old record was 11.9°F in 2015.
30	The minimum temperature on the 30th was 57.1°F, a new 9-year LOW daily minimum temperature record for the date - the old record was 58°F in 2014.
	The maximum temperature on the 30th was 81.7°F, a new 9-year cold daily maximum temperature record for the date - the old record was 82°F in 2014.
	The daily temperature range on the 30th was 24.6°F, a new 9-year HIGH daily temperature range record for the date - the old record was 24°F in 2014.
31	The minimum temperature on the 31st was 58.5°F, a new 9-year LOW daily minimum temperature record for the date - the old record was 61°F in 2014.
	The daily temperature range on the 31st was 28.7°F, a new 9-year HIGH daily temperature range record for the date - the old record was 24°F in 2014.