PAGE #1		Dec	2016			Wes	st Henric	o Co Gl	len Allen	Weather	Center	37.65537	7° N. 77.	56929° V	V Koon	ıtz		
Dec	Week	3	TEMPERA	5	6	7 8 9 TEMPERATURE °F			10	11 12		13	14 DECIDITATI	15 ION	16 FDO7	PRECIP.	18 19	
2016	Day	MAX.	Time	MIN.	Time	RANGE	MEAN	CHANGE	SOIL	SKY AM PM		Liquid	PRECIPITATION quid 1 Hr. 5 Min.		NEW	GROUND	1st PERIOD START END	
Dec-01	Thu	68.2	0:44	37.3	23:57	30.9	52.8	13.3	56	0	0	T	Т.	T	IVEVV	GROOND	0010	0015
Dec-02	Fri	56.4	14:02	31.3	6:39	25.1	43.9	-8.9	52	0	0	† ·					0010	0010
Dec-03	Sat	53.2	14:36	28.7	7:06	24.5	41.0	-2.9	49	1	1							
Dec-04	Sun	43.8	13:51	31.2	2:33	12.6	37.5	-3.5	48	2	2	0.11	0.07	0.01			1530	1545
Dec-05	Mon	51.7	14:39	39.5	8:29	12.2	45.6	8.1	49	2	2	0.23	0.10	0.02			0001	0425
Dec-06	Tue	44.5	14:54	41.4	9:09	3.1	43.0	-2.7	49	2	2	1.53	0.56	0.09			0445	0620
Dec-07	Wed	57.0	13:55	37.3	7:21	19.7	47.2	4.2	49	1	0							
Dec-08	Thu	53.5	13:26	35.6	23:59	17.9	44.6	-2.6	48	2	1							
Dec-09	Fri	41.9	14:37	24.0	7:12	17.9	33.0	-11.6	47	0	0							
Dec-10	Sat	40.4	14:17	18.3	7:18	22.1	29.4	-3.6	44	0	0							
Dec-11	Sun	43.1	22:54	26.5	0:01	16.6	34.8	5.5	43	2	2	T	T	T			2345	2400
Dec-12	Mon	58.2	14:43	41.4	1:01	16.8	49.8	15.0	45	2	1	0.48	0.18	0.03			0001	0125
Dec-13	Tue	49.2	14:51	38.8	7:25	10.4	44.0	-5.8	46	2	2	0.01	0.01	0.01			1850	2005
Dec-14	Wed	49.8	13:00	34.1	7:20	15.7	42.0	-2.1	47	2	2							
Dec-15	Thu	41.2	0:07	14.3	23:55	26.9	27.8	-14.2	46	0	0							
Dec-16	Fri	29.7	12:27	13.0	5:13	16.7	21.4	-6.4	41	2	2							
Dec-17	Sat	57.3	16:02	27.7	6:08	29.6	42.5	21.2	41	2	1	0.01	0.01	T	T	None	0255	0305
Dec-18	Sun	67.0	11:14	38.1	23:57	28.9	52.6	10.1	45	2	2	0.01	0.01	T			1145	1155
Dec-19	Mon	39.9	14:14	28.9	23:51	11	34.4	-18.2	46	1	0							
Dec-20	Tue	42.6	14:32	22.4	7:28	20.2	32.5	-1.9	44	0	0							
Dec-21	Wed	54.8	13:49	22.4	7:04	32.4	38.6	6.1	42	1	0							
Dec-22	Thu	63.0	14:10	36.9	23:59	26.1	50.0	11.4	42	0	0							
Dec-23	Fri	50.1	14:36	24.1	7:16	26	37.1	-12.9	42	2	2							
Dec-24	Sat	51.1	14:31	39.6	23:59	11.5	45.4	8.3	44	2	2	0.53	0.29	0.02			0440	1255
Dec-25	Sun	48.9	13:13	32.1	7:23	16.8	40.5	-4.9	44	2	2							
Dec-26	Mon	52.3	15:48	42.5	7:33	9.8	47.4	6.9	46	2	2							
Dec-27	Tue	66.5	14:44	47.6	23:58	18.9	57.1	9.7	47	2	2							
Dec-28	Wed	55.4	14:06	36.8	7:35	18.6	46.1	-11.0	47	0	0	0.00	0.44	0.00			0054	0755
Dec-29	Thu	59.1	13:41	35.0	23:34	24.1	47.1	1.0	46	2	1	0.20	0.11	0.02		+	0354	0755
Dec-30 Dec-31	Fri Sat	46.5 49.4	11:48 13:44	27.2 24.1	23:49 6:40	19.3 25.3	36.9 36.8	-10.2 -0.1	45 42	0	2		-			-		
TOTAL	Jai	1586	13.44	978	0.40	607.6	1281.9	-0.1 -2.7	1422	38	35	3.11	1.34	0.20	Т	0	Cal	.26-27
NUMBER		31	31	31	31	31	31	-2.7 31	31	31	31	9	9	7	'0	0		AVE RH
AVERAGE		51.15	13:27	31.55	12:01	19.60	41.35	31	45.87	1.23	1.13	Ave. Tot.	Ave.Max	Ave.Max	Ave.Tot.	Ave.Days	67.34	Percent
Norm	als	52.64	10.27	33.28	12.01	19.37	42.96		47.2	1.10	1.17	4.72	0.91	0.10	5.2	2.3	71.3	Percent
EPARTURE		-1.49		-1.72		0.23	-1.61		-1.3	0.13	-0.04	-1.61	0.43	0.10	-5.2	-2.3	-4.0	Percent
Max ≥70°F	Dates	68.2		47.6		32.4	57.1	21.2	-1.3 56		e Day	1.53	0.43	0.10	-3.2 T	0.0	Precip	24 Hr.
0 DAYS	1	Dec-01		Dec-27		Dec-21	Dec-27	Dec-17	Dec-01	AVERAGE	1.18	Dec-06	Dec-06	Dec-06	Dec-17	0.0	Amount	1.53
Departure	2	Dec-01		Dec-27		Dec-21	Dec-27	Dec-17	Dec-01	NORMAL	0.00	Dec-06	Dec-06	Dec-06	Dec-17		Date	Dec. 06
-2.0	3									DEPART.	1.18						Date	200.00
MINIMUM	Dates	29.7		13		3.1	21.4	-18.2	41	SKY	AM	PM	≥ 0.10	INCHES	≥ 1.00	INCHES	≥ 2.00	INCHES
MIN ≥32°F	1	Dec-16		Dec-16		Dec-06	Dec-16	Dec-19	Dec-16	CLEAR	10	11	6	DAYS	1	DAYS	0	DAYS
15	2								Dec-17	PT. CLO.	4	5	HOTTEST	57.1	Highest	Lowest	COOLEST	21.4
DAYS	3									CLOUDY	17	15	DAY	12-27	Mean	Mean	DAY	12-16
Departure	≤ 32°F	1	≤32°F	16	MAX.	≥ 80	≥ 75	≥ 70	≥ 65	≥ 60	≥ 55	≥ 50	≥ 45	≥ 40	≥ 35	≥ 30	≥ 25	≥ 20
-1.8	≥90°F	0	≥70°F	0	DAYS	0	0	0	3	4	11	18	23	30	30	30	31	31

PAGE #2	Dec	2016			We	st Henric	o Co G	len Allen	Weather	Center	37.65537°	° N. 77.	56929°	W Ko	ontz			
20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38
Dec	2nd Pl			WIND			JMIDITY	BAROMETRIC PRESSURE							K			
2016	START	END	RUN	MAX.	TIME	MAX.	MIN.	MAX.	MIN.	AVE.	CHANGE	GLAZE	SLEET	SNOW	FOG	1.7	DEW	FROST
Dec-01			49.2	24	1:21	94	38	30.01	29.59	29.80	0.04						Р	
Dec-02			25.2	15	13:05	95	38	30.20	30.00	30.10	0.30							3
Dec-03	4000	0.400	30.2	14	20:10	91	45	30.32	30.18	30.25	0.15						•	2
Dec-04	1800	2400	7.8	7	4:37	89	62	30.33	30.09	30.21	-0.04						2 P	
Dec-05	0050	0055	12.4	9 22	1:25	98	75 86	30.13	30.00	30.07 29.93	-0.15						P	
Dec-06	0650	2055	73.9		17:10			30.13	29.73		-0.13						P	
Dec-07 Dec-08			19.3 37.9	11 19	11:27 14:28	99 95	52 30	30.10 30.22	29.85 30.02	29.98 30.12	0.05 0.14						3	
Dec-08			46.0	16	12:16	73	33	30.49	30.02	30.12	0.14						3	1
Dec-10			21.1	12	11:53	87	34	30.49	30.46	30.52	0.23							4
Dec-10			42.0	15	20:06	69	41	30.58	30.16	30.37	-0.15							1
Dec-11 Dec-12	0600	1240	78.0	26	7:21	100	56	30.58	29.87	30.37	-0.15 -0.35					 	Р	1
Dec-12 Dec-13	0000	1240	20.7	10	11:11	99	68	30.10	30.01	30.02	0.10					 	4	
Dec-13			32.9	12	10:09	98	55	30.16	29.98	30.07	-0.05						3	
Dec-15			86.8	31	7:11	78	20	30.43	29.91	30.17	0.10							N
Dec-16			15.2	13	19:14	65	24	30.58	30.33	30.46	0.28							2
Dec-17	0530	0625	120.7	28	22:15	94	35	30.34	29.95	30.15	-0.31	1	1					P
Dec-18	1545	1835	166.5	33	9:24	95	65	30.49	29.89	30.19	0.04		•				3	•
Dec-19	.0.0	.000	113.4	23	0:29	72	42	30.70	30.48	30.59	0.40						N	
Dec-20			28.0	9	1:47	85	41	30.65	30.24	30.45	-0.15							3
Dec-21			9.6	10	23:42	92	23	30.31	30.19	30.25	-0.20							5
Dec-22			107.6	25	18:15	62	27	30.38	29.99	30.19	-0.07						N	
Dec-23			15.4	10	21:40	93	39	30.57	30.37	30.47	0.29							4
Dec-24			43.7	17	10:21	99	58	30.40	30.17	30.29	-0.18				1		Р	
Dec-25			13.8	14	11:38	100	74	30.63	30.34	30.49	0.20				2		3	3
Dec-26			27.3	16	23:32	88	70	30.64	30.25	30.45	-0.04						N	
Dec-27			137.9	30	6:07	96	66	30.26	29.92	30.09	-0.35						N	
Dec-28			25.2	12	9:47	84	38	30.22	30.01	30.12	0.02						2	
Dec-29	1408	1417	72.7	24	14:12	98	33	30.08	29.64	29.86	-0.26						Р	
Dec-30			61.8	20	12:00	73	34	30.19	29.80	30.00	0.14						N	
Dec-31			119.6	32	12:23	81	31	30.23	30.04	30.14	0.14							3
TOTAL	Colur	nn 23	1661.8	559		2742	1433	940.72	931.67	936.20	TOTAL	1	1	0	2	0	7	12
NUMBER	Max. W	ind Run	31	31	31	31	31	31	31	31	Normal	0.4	1.0	1.8	3.5	0.5	4.3	10.3
AVERAGE	Total	1661.8	53.61	18.03	12:16	88.45	46.23	30.35	30.05	30.20	Depart.	0.6	0.0	-1.8	-1.5	-0.5	2.8	1.8
Normals	Miles	1538.2	49.9	17.6		91.2	51.3	30.24	29.98	30.10	DAYS	щ	-	>		200000		ļ <u>.</u>
DEPARTURES	Miles	123.6	1611.9	0.5		-2.8	-5.1	0.11	0.08	0.10	OF ▶	- GLAZE	SLEET	SNOW	506	7	DEW	FROST
MAXIMU	JM	Dates	166.5	33	NNE	100	86	30.70	30.48	30.59	0.40	G	S	S	5	1 /	8	H.
	DATES	1	Dec-18	Dec-18	9:24	Dec-06	Dec-06	Dec-19	Dec-19	Dec-19	Dec-19	5.	Very Heav	/y			N- None	
		2				Dec-12						eavy-Unus						
		3				Dec-25						oderate - A						
		4										light - < A						
MINIMUM		Dates	7.8	7		62	20	30.01	29.59	29.80	-0.35	ight - Sligl						
	DATES	1	Dec-04	Dec-04		Dec-22	Dec-15	Dec-01	Dec-01	Dec-01	Dec-12		sity missin	•				
		2									Dec-27	Ū	Observat					
	MIN.	≤ 75	≤ 70	≤ 65	≤ 60	≤ 55	≤ 50	≤ 45	≤ 40	≤ 35	≤ 30	≤ 25	≤ 20	≤ 15	≤ 10	≤ 5	≤ 0	
	DAYS	31	31	31	31	31	31	30	27	18	13	8	3	2	0	0	0	

PAGE #3	West Henrico Co Glen Allen Weather Center 37.65537° N. 77.56929° W Koontz
Dec	REMARKS FOR THE MONTH
2016	December - 2016
Dec-01	ALMOST TOTAL SUN WITH A 68°F MAX A BEAUTIFUL START TO DEC.
Dec-02	COOLER BUT A VERY CLEAR SUNNY DAY
Dec-03	AM HAD SUNLIGHT THROUGH CIRRUS AM EST. COVERAGE 60%-PM WAS CLEAR FROM 1300-1530 THEN CLOUDS INCREASED TO DARKNESS-PM. EST. 45-55% CLOUDY
Dec-04	VERY COLD DAY COMPARED TO RECENT CONDITIONS-ONLY AN AVERAGE NOW OF 5-10% OF FOLIAGE ON TREES
Dec-05	CLEARING STARTED AT 1315 AND CLEAR BY 1345 THEN CIRRUS CLOUDS AGAIN BY 1520-PM EST. 70-80% CLOUDY
Dec-06	AN ALL DAY RAIN THE HEAVIEST SINCE October 8, 2016 -CHERRY TREES SEEN BLOOMING IN APPROX. 5 DIFFERENT LOCATIONS
Dec-07	CIRRUS IN AM AND ALSO ALTOCUMULUS-AM EST. 40-50% CLOUDY-PM CUMULUS AND CIRRUS BUT MOSTLY CLEAR TO 1315 AND TOTALLY CLOUDY 1445-1615-PM EST. 20-30% CLOUDY
Dec-08	CLOUDY NIGHT REDUCED DEW-CLEARING STARTED AT 1130-PM HAD MANY CIRRUS AND CLOUDS EST. 60-65%
Dec-09	AM VERY CLEAR - PM A FEW STRATOCUMULUS-PM EST. 20-30% CLOUDY-LIGHT FROST BECAUSE OF BREEZE
Dec-10	COLDEST AM SINCE FEB. 14, 2016 WHEN IT WAS 8.2°F -A VERY CLEAR BUT COLD DAY
Dec-11	CLOUDS AND LOW REL. HUMIDITY-LITTLE FROST-AM WITH SUN THROUGH THIN CIRRUS CLOUDS UNTIL 1115-EST. 65-75% CLOUDY
Dec-12	AM RAIN AND QUICK PM CLEARING STARTED AT 1345 AND PM EST. 55% CLOUDY
Dec-13	CLOUDY ALL DAY EXCEPT FOR A FEW BREAKS IN CLOUDS
Dec-14	DECK WET FROM SHOWER YESTERDAY EVENING-DEW AMT. DETERMINED FROM SKY MIRROR-SOME AM SUN THROUGH CIRRUS AND IN AFTERNOON CIRROSTRATUS BECAME ALTOSTRATUS BY 1600
Dec-15	ARCTIC COLD FRONT CAME IN AT 0600 AS DEW POINT DROPPED RAPIDLY-MIN. DEW POINT -7.3°F AT 1515
Dec-16	FROST ONLY ON GRASS NOT ON SKY MIRROR-LITTLE SUN THROUGH AM CLOUDS
Dec-17	FREEZING RAIN FROM 0725-0730 THEN RAIN FROM 1105-1125 AND 1210-1220-CLEARING AT 1345-PM EST. 40-50% CLOUDY-TRACE OF SLEET WAS OF THE SMALLEST AMT. DISCERNIBLE
Dec-18	COLD FRONT PASSED AT 1640-GREAT WARM-UP OF 28 DEGREES IN 24 HRS. BY 0700-WARM MOIST AIR OVER COLD ROADS GAVE SO MUCH CONDENSATION THAT SMALL PUDDLES FORMED IN SOME
Dec-19	AM REL. HUMIDITY 60% AND WITH BREEZE THERE WAS NO DEW-HIGHEST BAROMETER SINCE DEC. 5, 2015 WHEN IT WAS 30.75 INCHES-CLEARING TO CIRRUS BY 0930 AND VERY CLEAR AFTER 1100
Dec-20	NO CLOUDS TODAY AND LITTLE WIND BUT COLD FOR DEC.
Dec-21	VERY HEAVY FROST-A THIN LAYER OF CIRRUS EARLY BUT PM WAS MOSTLY CLEAR
Dec-22	NO FROST BECAUSE OF AM WIND-AM A LITTLE CIRRUS FROM 0915-1100 BUT MOSTLY CLEAR
Dec-23	A COLD FRONT PASSED AT 0620 AND CLOUDS FOR MOST OF DAY WITH MAINLY ALTOCUMULUS
Dec-24	AM RAIN AND AFTER DARK A LIGHT FOG
Dec-25	AM FOG ONLY TO WEST OF WHICH WE WERE ON EASTERN EDGE WHICH WAS RATED MODERATE-AM FROST ON ROOFS AND GROUND-MAX. FOG WAS AT 0745
Dec-26	LOW AM REL. HUMIDITY AT 86% AND CLOUDY YIELDED NO DEW-CLOUDY ALL DAY WITH A LITTLE ABOVE AVERAGE TEMPS.
Dec-27	CLOUDY AND WINDY-NO DEW-VERY WARM FOR DEC. BUT CLOUDY ALL DAY
Dec-28	WEAK COLD FRONT PASSED AT 0600-ONLY A FEW CIRRUS FROM 1100-1230 BUT THE DAY WAS MOSTLY CLEAR
Dec-29	CLEARING STARTED AT 1130 AND TOTALLY CLEAR BY NOON THEN CLOUDED UP WITH FRONTAL PASSAGE BET. 1400-1500 THEN MOSTLY CLEAR AGAIN
Dec-30	NO DEW BECAUSE OF AM WIND-CLEAR BUT COLD DAY-CLOUDS CAME IN AT 1100 AND STRATOCUMULUS BY 1130 THEN CLEARING SOME BY 1615
Dec-31	THE AM WAS ABOUT 30% CLOUDY AND THE PM WAS ABOUT 80 TO 90% CLOUDY.
DATE Dec-18	EXTENSION OF LENGTHY DAILY REMARKS IROADS IN EARLY MORNING BEFORE ANY RAIN OCCURRED-THERE WERE 2 SPRINKLES LATER FROM 1325-1330 AND 1450-1455
Dec-10	INCADO IN EARCH WORKING DEL ONE ANT NAIM GOODINGEDTHERE WERE 2 STRINGED EATER FROM 1923-1930 AND 1430-1493
	ONLY A TRACE OF SLEET ON THE 17TH NO SNOW-
	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 DAILY RECORDS FOR THE MONTH
Dec 2016	The Glen Allen Station had 12 Records or Record Ties in December 2016
1	The Gien Alien Station had 12 Necolds of Necold Ties in December 2010
2	
3	
4	The daily precipitation on the 4th was 0.11 inches, a new 8 year HIGH daily precipitation record for the date - the old record was 0.02 inches in 2014 and 2010.
5	The maximum temperature on the 4th was 43.8°F, a new 8 year LOW daily maximum temperature record for the date - the old record was 44°F in 2010.
_	The daily precipitation on the 6th was 1.53 inches, a new 8 year HIGH daily precipitation record for the date - the old record was 0.44 inches in 2014.
	The daily temperature range on the 6th was 3.1°F, a new 8 year LOW daily temperature range record for the date - the old record was 7°F in 2011.
7	, , , , , , , , , , , , , , , , , , , ,
8	
9	
10	The minimum temperature on the 10th was 18.3°F, a new 8 year LOW daily minimum temperature record for the date - the old record was 24°F in 2010. Comment- The minimum temperature last night was 18.3°F the lowest minimum temperature since February 14, 2016 when the minimum temperature was 8°F.
11	Comment- The minimum temperature ast might was 16.3 r the lowest minimum temperature since repruary 14, 2010 when the minimum temperature was 8 r.
12	
13	The minimum temperature on the 16th was 13.0°F, a new 8 year LOW daily minimum temperature record for the date - the old record was 17°F in 2010.
	Comment- The minimum temperature last night was 13.0°F the lowest minimum temperature since February 14, 2016 when the minimum temperature was 8°F.
14	
15	
16	
17	The daily temperature range on the 17th was 29.6°F, a new 8 year HIGH daily temperature range record for the date - the old record was 25.5°F in 2014.
18	The maximum temperature on the 18th was 67°F, a new 8 year HIGH daily maximum temperature record for the date - the old record was 63°F in 2012. The daily temperature range on the 18th was 32°F, a new 8 year HIGH daily temperature range record for the date - the old record was 23°F in 2012.
19	The daily temperature range on the roth was 32 F, a new 6 year mon daily temperature range record for the date - the old record was 23 F in 2012.
20	
21	The daily temperature range on the 21st was 32.4°F, a new 8 year HIGH daily temperature range record for the date - the old record was 28°F in 2009.
22	The daily temperature range on the 22nd was 26.1°F, a new 8 year HIGH daily temperature range record for the date - the old record was 26°F in 2009.
23	
24	
25 26	
27	
28	
29	The maximum temperature on the 29th was 59.1°F, a new 8 year HIGH daily maximum temperature record for the date - the old record was 59°F in 2015.
30	
31	