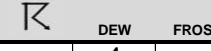



PAGE #1		Nov 2017 West Henrico Co. - Glen Allen Weather Center 37.65537° N. 77.56929° W. - Koontz																		
		TEMPERATURE °F				TEMPERATURE °F				SKY		PRECIPITATION			FROZ. PRECIP.		1st PERIOD			
Nov 2017	Week Day	MAX.	Time	MIN.	Time	RANGE	MEAN	CHANGE	SOIL	AM	PM	Liquid	1 Hr.	5 Min.	NEW	GROUND	START	END		
Nov-01	Wed	67.7	14:04	42.7	6:50	25.0	55.2	1.6	60	2	2									
Nov-02	Thu	77.7	15:10	58.8	7:32	18.9	68.3	13.1	61	0	1									
Nov-03	Fri	82.2	15:08	55.1	7:29	27.1	68.7	0.4	62	0	0	0.08	0.08	0.02			1954	2002		
Nov-04	Sat	65.2	0:01	50.8	22:49	14.4	58.0	-10.7	63	2	2	0.02	0.02	0.01			1440	1445		
Nov-05	Sun	61.6	15:43	50.8	0:56	10.8	56.2	-1.8	62	2	2	0.07	0.04	0.01			0001	0255		
Nov-06	Mon	76.4	14:37	56.7	0:01	19.7	66.6	10.4	62	2	1	0.01	0.01	T			2020	2050		
Nov-07	Tue	59.8	0:01	41.2	23:41	18.6	50.5	-16.1	63	2	2	0.28	0.07	0.03			0940	1005		
Nov-08	Wed	44.9	13:39	40.7	5:58	4.2	42.8	-7.7	60	2	2	0.02	0.01	T			0215	0220		
Nov-09	Thu	54.1	15:21	44.2	6:25	9.9	49.2	6.4	59	2	2	0.09	0.04	0.01			0255	0835		
Nov-10	Fri	51.6	11:27	29.8	23:59	21.8	40.7	-8.5	59	0	0									
Nov-11	Sat	41.1	12:41	24.5	6:28	16.6	32.8	-7.9	57	1	2									
Nov-12	Sun	48.3	12:31	26.2	0:01	22.1	37.3	4.5	55	2	2	0.13	0.13	0.02			1950	2400		
Nov-13	Mon	47.9	14:44	38.8	20:12	9.1	43.4	6.1	54	2	1	0.52	0.16	0.02			0001	0555		
Nov-14	Tue	49.2	11:14	33.4	23:57	15.8	41.3	-2.1	54	2	2									
Nov-15	Wed	54.7	14:00	30.1	3:43	24.6	42.4	1.1	53	1	2									
Nov-16	Thu	65.2	13:12	39.0	23:59	26.2	52.1	9.7	53	0	0	T	T	T			0110	0150		
Nov-17	Fri	55.2	13:27	30.5	6:51	24.7	42.9	-9.3	54	0	1									
Nov-18	Sat	61.4	13:23	32.8	2:03	28.6	47.1	4.2	52	2	2									
Nov-19	Sun	64.7	2:16	34.9	23:14	29.8	49.8	2.7	53	0	0	T	T	T			0141	0435		
Nov-20	Mon	54.9	13:34	28.3	6:35	26.6	41.6	-8.2	53	0	0									
Nov-21	Tue	62.9	12:58	38.4	0:06	24.5	50.7	9.1	52	0	2	T	T	T			2315	2400		
Nov-22	Wed	63.7	12:28	35.7	23:59	28.0	49.7	-0.9	52	1	0	0.28	0.19	0.04			0001	0610		
Nov-23	Thu	46.5	13:58	27.6	0:23	18.9	37.1	-12.7	53	2	0									
Nov-24	Fri	56.3	13:03	25.7	6:58	30.6	41.0	4.0	51	0	0									
Nov-25	Sat	68.6	12:54	31.7	5:11	36.9	50.2	9.2	50	0	2									
Nov-26	Sun	60.0	14:06	32.5	23:59	27.5	46.3	-3.9	50	0	0									
Nov-27	Mon	62.4	14:19	27.9	5:39	34.5	45.2	-1.1	50	0	0									
Nov-28	Tue	65.5	13:26	32.1	7:09	33.4	48.8	3.7	49	0	0									
Nov-29	Wed	71.1	13:35	39.1	7:23	32.0	55.1	6.3	49	0	0									
Nov-30	Thu	65.1	14:40	38.8	3:34	26.3	52.0	-3.2	50	0	1	T	T	T			2205	2225		
TOTAL NUMBER		1806		1119		687.1	1462.4	-1.7	1655	27	31	1.50	0.75	0.16	0	0	Col.26-27			
AVERAGE NORMALS		60.20	12:23	37.29	10:14	22.90	48.75		55.17	0.90	1.03	Ave. Tot.	Ave. Max	Ave. Max	Ave. Tot.	Ave. Days	73.1	Percent		
DEPARTURES		60.35		38.03		22.32	49.19		53.98	0.92	1.05	3.82	0.63	0.14	0.0	0.0	69.2	Percent		
Max. Temps. >=70°F		82.2		58.8		36.9	68.4	13.1	63.0	Whole Day		0.52	0.19	0.02	0	0.0	Precip	24 Hr.		
2017 Ave. Departure		4	Nov-03	5.3	Nov-02	5.9	Nov-03	Nov-02	Nov-04	AVERAGE Normal Depart.	0.97	0.98	Nov-13	Nov-22	Nov-22	0	0.0	Amount Date	0.65	
Min. Temps. <=32°F		41.1		24.5		4.2	32.8	-16.1	49.0	SKY		AM	PM	>= 0.10	Precip.	>= 1.00	Precip.	>= 2.00	Precip.	
2017 Ave. Departure		11	Nov-11	8.4	Nov-11	Nov-08	Nov-11	Nov-07	Nov-28	CLEAR	15	12	4	DAYS	0	DAYS	0	DAYS	0	DAYS
Days Max. <=32°F		0		MAX. DAYS	>= 80	>= 75	>= 70	>= 65	>= 60	>= 55	>= 50	>= 45	>= 40	>= 35	>= 30	>= 25	>= 20			
Days Max. >=90°F		0			1	3	4	11	18	22	24	29	30	30	30	30	30			

#	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38
Nov 2017	2nd PERIOD		WIND			REL. HUMIDITY		BAROMETRIC PRESSURE											
	START	END	RUN	MAX.	TIME	MAX.	MIN.	MAX.	MIN.	AVE.	CHANGE	GLAZE	SLEET	SNOW	FOG	DEW	FROST		
Nov-01			18.9	10	12:07	95	69	30.26	30.17	30.22	0.12						4		
Nov-02			51.1	15	14:08	93	58	30.27	30.17	30.22	0.00						3		
Nov-03	2043	2155	45.7	15	20:20	97	55	30.18	30.03	30.11	-0.11						5		
Nov-04	1615	1650	83.4	17	0:31	94	70	30.31	30.16	30.24	0.13						P		
Nov-05	0001	0250	26.3	9	17:44	96	92	30.24	30.08	30.16	-0.08				2		P		
Nov-06	2130	2135	87.3	19	12:50	98	69	30.10	29.93	30.02	-0.14				1		5		
Nov-07	1120	2225	109.0	17	22:34	96	79	30.17	30.05	30.11	0.09				1		1		
Nov-08	0515	0750	121.4	19	7:40	97	89	30.24	30.12	30.18	0.07				1		P		
Nov-09	1245	1330	51.6	12	0:05	97	91	30.20	30.06	30.13	-0.05				1		P		
Nov-10			121.1	25	19:24	98	48	30.56	30.05	30.31	0.18				3		P		
Nov-11			42.2	12	0:10	89	36	30.65	30.50	30.58	0.27							N	
Nov-12			14.0	7	9:36	95	46	30.52	30.35	30.44	-0.14							4	
Nov-13			36.2	10	11:15	98	85	30.36	30.29	30.33	-0.11						P		
Nov-14			50.0	16	9:45	98	66	30.39	30.29	30.34	0.02						2	3	
Nov-15			23.5	11	9:06	96	64	30.30	30.05	30.18	-0.16							5	
Nov-16			57.0	18	11:32	92	38	30.16	29.91	30.04	-0.14						3		
Nov-17			20.9	10	11:50	94	43	30.25	30.12	30.19	0.15						1	3	
Nov-18			161.9	25	13:29	62	48	30.12	29.47	29.80	-0.39						3		
Nov-19			112.8	29	1:27	83	36	30.01	29.42	29.72	-0.08						P		
Nov-20			43.1	12	11:17	87	34	30.26	30.01	30.14	0.42							3	
Nov-21			119.0	23	13:22	91	43	30.23	30.07	30.15	0.01							N	
Nov-22			78.7	20	16:59	96	41	30.20	29.92	30.06	-0.09						P		
Nov-23			25.5	13	9:26	93	48	30.22	30.08	30.15	0.09							3	
Nov-24			25.7	11	13:35	97	35	30.12	29.95	30.04	-0.11							5	
Nov-25			57.7	18	12:25	96	40	29.96	29.75	29.86	-0.18						1	4	
Nov-26			20.8	10	9:48	89	35	30.10	29.90	30.00	0.15						3	1	
Nov-27			24.8	12	13:02	94	30	30.28	30.08	30.18	0.18							5	
Nov-28			46.9	16	11:57	92	30	30.41	30.28	30.35	0.16						1	3	
Nov-29			48.8	12	4:45	93	31	30.28	30.17	30.23	-0.12						1		
Nov-30			49.6	14	9:43	88	53	30.28	30.04	30.16	-0.07						2		
TOTAL NUMBER	Mar. Wind Run		1774.9	457		2784	1602	907.63	901.47	904.55	TOTAL	0	0	0	6	0	14	11	
AVERAGE	Total		1774.9	59.2	11:03	92.80	53.40	30.25	30.05	30.15	NORMAL	0.0	0.3	0.8	2.6	0.8	11.1	8.8	
NORMALS	Miles		1428.4	47.6	17.43	91.7	46.8	30.24	30.02	30.13	DEPART.	0.0	-0.3	-0.8	3.4	-0.8	2.9	2.2	
Departures	Miles		346.5	11.5	-2.20	1.1	6.6	0.01	0.02	0.02	Rating ▶	0	0	0	9	0	35	39	
MAXIMUM DATES			161.9	29	SSW	98	92	30.65	30.50	30.58	0.42	GLAZE	SLEET	SNOW	FOG		Dew	Frost	
1	Nov-18	Nov-19	1:27	Nov-06	Nov-05	Nov-11	Nov-11	Nov-20											
2				Nov-10															
3				Nov-13															
4				Nov-14															
MINIMUM DATES			14.0	7		62	30	29.96	29.42	29.72	-0.39	5. Very Heavy 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- Precip. prevent obs.							
Days Min. <=32 °F			11	MIN. DAYS	≤ 75	≤ 70	≤ 65	≤ 60	≤ 55	≤ 50	≤ 45	≤ 40	≤ 35	≤ 30	≤ 25	≤ 20	≤ 15		
Days Min >=70°F			0		30	30	30	30	28	25	25	21	15	8	1	0	0		

Nov 2017	REMARKS FOR THE MONTH November - 2017
Nov-01	BEAUTIFUL WEATHER FOR NOV. AND NO KILLING FROST YET THIS FALL
Nov-02	CLOUDS AT NIGHT - NO DEW ON DECK BUT GUTTATION HAD THE GRASS VERY WET-CLOUDS TILL 0900 THEN CLEAR TO 1130 & PC WITH CUMULUS TO 1725 THEN CLEAR TO DARK
Nov-03	VERY HEAVY DEW-VERY WARM FOR NOV. -REC. FOR DATE 83°F -PM HAD SCATTERED CIRRUS BUT EST. ONLY 20% CLOUDS
Nov-04	ALL SURFACES WET FROM RAIN YESTERDAY-ONLY SPRINKLES TODAY UNTIL AFTER DARK -NO SUN SEEN TODAY-3RD PD. OF PRECIP. 2245-2400
Nov-05	SPRINKLES AT NIGHT AND A LITTLE MIST AND DRIZZLE TODAY-NO SUN SEEN-COOL
Nov-06	AM WAS ABOUT 65-70% CLOUDY AND PM EST. TO BE 50-60% CLOUDY
Nov-07	ONLY A LITTLE DEW ON GRASS-VISIBILITY CUT DURING RAIN AT 1410-FALLING TEMPS. DURING DAY
Nov-08	VISIBILITY CUT BY DRIZZLE - ON AND OFF DRIZZLE MOST OF DAY-HEAVIEST PD. 1315-1915
Nov-09	3RD PD. OF PRECIP. 1640-2055, 4TH PD. 2200-2225-DRIZZLE AND MIST-NO REAL SHOWERS TODAY AND NO SUN
Nov-10	FOG CLEARED TO A BLUE SKY AT 0845 AND BECAME A WINDY DAY AS HIGH PRESSURE BUILT IN RAPIDLY
Nov-11	WIND AND LOW REL. HUMIDITY PREVENTED FROST BUT OUR FIRST HARD FREEZE-COLDEST SINCE MARCH 17, 2017 WHEN IT WAS 23.3°F-VERY THIN CIRRUS IN AM BUT MUCH SOLAR RADIATION
Nov-12	CLOUDY ALL DAY BUT IN EARLY AM SUN SEEN THROUGH CIRROSTRATUS CLOUDS
Nov-13	CLOUDY TO 1500 THEN TOTALLY CLEAR-PM EST. 65% CLOUDY
Nov-14	MORE DEW ON GRASS BUT ROOFS HAD HEAVY FROST-CIRROSTRATUS THIN WITH SUN THROUGH CLOUDS-LITTLE SUN AFTER 1000-CLOUDS BECAME ALTOSTRATUS-COOLER DAY THAN EXPECTED
Nov-15	CLEAR UNTIL 1000 THEN CIRRUS GIVING MOSTLY CLOUDY SKIES-ALTOSTRATUS AND ALTOCUMULUS IN PM
Nov-16	ONLY SPRINKLES OVERNIGHT - SKY MIRROR INDICATED DEW RATING OF 3-DAY BECAME BEAUTIFULLY CLEAR AND WARM FOR NOV. DAY-SOME CIRRUS FROM 1040-1150
Nov-17	SKY MIRROR HAS A LITTLE FROZEN DEW UNDER FROST-CLEAR AM BUT CIRRUS AND CIRROSTRATUS IN PM
Nov-18	WARM BREEZY AFTERNOON WITH APPROACHING COLD FRONT TO PASS TOMORROW-PM EST. 65% CLOUDY
Nov-19	29MPH S/SW GUST AT 0127-CLEAR BUT WINDY DAY-SOME CLOUDS AFTER 1615
Nov-20	CLEAR BUT VERY DRY AIR PREVENTED HEAVY FROST-VERY CLEAR WITH LOW DEW POINT OF 21.5°F AT 0756
Nov-21	WIND IN AM PREVENTED DEW-CIRRUS CAME IN ABOUT 1000 AND COMPLETE SKY COVERAGE BY 1115-AM 50-60% CLOUDY AND PM 90% CLOUDY-AM HIGH RH WAS 73%-91% BY 2400 FROM RAIN
Nov-22	CLOUDY UNTIL 0900 THEN TOTALLY CLEAR BY 0940 AND REMAINED CLEAR REST OF DAY
Nov-23	CLOUDY UNTIL 1000 AND TOTALLY CLEAR BY 1015 THEN CLEAR REST OF DAY-MUCH COLDER TODAY
Nov-24	VERY HEAVY FROST-TOTAL SUNSHINE TODAY
Nov-25	CIRRUS CAME IN AT 1130 AND CIRROSTRATUS BY 1330-WARM AND CLOUDY REST OF DAY
Nov-26	A LITTLE ICE ON GRASS BUT NOT SEEN ONLY FELT-FEW CIRRUS IN AM BUT PM WAS VERY CLEAR
Nov-27	BEAUTIFUL DAY FOR END OF NOV.-VERY HEAVY AM FROST BUT STRONG WARM-UP OF 34.5°F
Nov-28	FROZEN DEW ON MIRROR-CLEAR ALL DAY WITH LARGE TEMP. RANGE AGAIN
Nov-29	NO DEW EXCEPT ON GRASS-A REALLY GREAT LATE NOV. AFTERNOON WITH ALMOST FULL SUN & 71°F MAX.
Nov-30	DEW MAINLY ON GRASS-VERY LITTLE CONDENSATION ON SKY MIRROR - ANOTHER WARMER THAN AVE. NOV. DAY - SOME CLOS. NOON TO 1300 & IN LATE PM- PM CLOUDS EST 35-40%
DATE	EXTENSION OF LENGTHY DAILY REMARKS
Nov-11	THROUGH CLOUDS THEN PM SKY WAS COVERED WITH CIRRUS AND CIRROSTRATUS THAT BECAME THICKER

The daily records for the month are listed on page # 4 and not found in the remarks.

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

DAILY RECORDS FOR THE MONTH

41

Nov

2017

The Glen Allen Station had 17 Records or Record Ties in November 2017

1

2

The minimum temperature on the 2nd was 58.8°F, a new 9-year warm daily minimum temperature record for the date - the old record was 55.1°F in 2015.

3

4

5

6

7

The daily precipitation on the 7th was 0.28 inches, a new 9-year HIGH daily precipitation record for the date - the old record was 0.20 inches in 2015.

8

The maximum temperature on the 8th was 44.9°F, a new 9-year cold daily maximum temperature record for the date - the old record was 56°F in 2014.

The daily temperature range on the 8th was 4.2°F, a new 9-year LOW daily temperature range record for the date - the old record was 17.8°F in 2015.

The daily precipitation on the 8th was 0.02 inches, a new 9-year HIGH daily precipitation record for the date - the old record was Trace in 2012 and 2008.

9

The daily temperature range on the 9th was 9.9°F, a new 9-year LOW daily temperature range record for the date - the old record was 15.8°F in 2015.

10

The maximum temperature on the 10th was 49.3°F, a new 9-year cold daily maximum temperature record for the date - the old record was 58°F in 2008.

The minimum temperature on the 10th was 29.8°F, a new 9-year LOW daily minimum temperature record for the date - the old record was 32°F in 2008.

11

The minimum temperature on the 11th was 24.5°F, a new 9-year LOW daily minimum temperature record for the date - the old record was 28°F in 2008.

The maximum temperature on the 11th was 41.1°F, a new 9-year cold daily maximum temperature record for the date - the old record was 52°F in 2008.

12

The minimum temperature on the 12th was 26.2°F, a new 9-year LOW daily minimum temperature record for the date - the old record was 29°F in 2011.

13

The daily precipitation on the 13th was 0.52 inches, a new 9-year HIGH daily precipitation record for the date - the old record was 0.39 inches in 2012.

14

15

16

17

18

19

20

The minimum temperature on the 20th was 28.3°F, a new 9-year LOW daily minimum temperature record for the date - the old record was 29°F in 2008.

21

The daily precipitation on the 21st was a trace, a new 9-year HIGH daily precipitation record for the date - the old record was 0.00 inches.

22

The daily precipitation on the 22nd was 0.28 inches, a new 9-year HIGH daily precipitation record for the date - the old record was 0.06 inches in 2011.

23

24

25

26

27

The daily temperature range on the 27th was 34.5°F, a new 9-year HIGH daily temperature range record for the date - the old record was 30.9°F in 2015.

28

The daily temperature range on the 28th was 33.4°F, a new 9-year HIGH daily temperature range record for the date - the old record was 26.5°F in 2015.

29

30

TEMPERATURE GRAPH FOR NOVEMBER

