

U. S. DEPARTMENT OF COMMERCE, WEATHER BUREAU
LOCAL CLIMATOLOGICAL DATA

RICHMOND, VA.
BYRD FIELD
JULY 1959

Latitude 37° 30' N. Longitude 77° 20' W. Elevation (ground) 162 ft. EASTERN Standard time used

Date	Temperature (°F)						Precipitation		Snow, Sleet, or Ice on ground at 7:00AM (In.)	Prevailing direction	Wind			Sunshine		Sky cover		Thunderstorm or distant lightning	Weather restricting visibility to 1/4 mile or less	Cooling Degree Days (base 60)	STAGE James River 8:00AM (feet)	Date
	Maximum	Minimum	Average	Departure from normal	Degree days (base 65°)	Total (Water equivalent) (In.)	Snow, Sleet (In.)	Average speed (m. p. h.)			Speed (m. p. h.)	Direction	Total (hours and minutes)	Percent of possible	Sunrise to sunset (tenths)	Midnight to midnight (tenths)						
1	93	72	83	+6	0	4.58	0	0	SSE	10.1	27	N	7:59	54	5	7	T		16	-1.7	1	
2	91	68	80	+3	0	.64	0	0	NNE	7.6	21	SE	11:48	80	6	7	T		16	-1.7	2	
3	84	66	75	-3	0	.02	0	0	N	7.1	15	NE	9:07	62	10	9			9	-1.2	3	
4	84	61	73	-4	0	0	0	0	ESE	6.6	17	E	14:16	97	2	1			9	-1.0	4	
5	85	64	75	-2	0	0	0	0	ESE	7.5	18	E	13:15	90	5	3			11	-0.2	5	
6	86	64	75	-2	0	0	0	0	N	3.7	21	N	4:16	29	6	6			12	0.4	6	
7	85	63	74	-5	0	0	0	0	NNE	7.9	20	NE	12:57	88	1	0			11	0.4	7	
8	86	60	73	-4	0	0	0	0	SE	8.5	18	SE	14:04	96	2	4			9	0.8	8	
9	87	66	77	-1	0	.03	0	0	ESE	6.3	11	SE	1:32	10	9	9			13	1.5	9	
10	77	72	75	-3	0	1.10	0	0	ENE	9.1	17	N	0:00	0	10	10	T		13	1.6	10	
11	81	68	75	-3	0	.02	0	0	S	6.5	12	SE	3:16	22	10	9			12	1.2	11	
12	78	70	74	-4	0	.01	0	0	S	5.7	10	SW	0:05	1	10	10			12	1.2	12	
13	80	71	76	-2	0	.24	0	0	ESE	5.8	15	SE	2:29	17	10	10	T		13	1.1	13	
14	81	71	76	-2	0	1.81	0	0	S	5.6	23	S	1:51	13	10	10	T		13	1.1	14	
15	80	70	75	-3	0	1.18	0	0	S	5.2	11	S	5:06	35	10	10			13	0.5	15	
16	81	69	75	-3	0	T	0	0	NE	6.7	16	N	7:46	54	8	8			12	-1.5	16	
17	84	66	75	-3	0	0	0	0	SE	4.9	11	SE	10:04	70	8	7			12	-1.3	17	
18	87	69	78	0	0	.33	0	0	S	7.8	14	SW	6:03	42	9	8			14	-0.1	18	
19	80	74	82	+4	0	T	0	0	SSW	11.5	18	SW	8:46	61	7	7	T,DL		17	0.0	19	
20	89	72	81	+3	0	2.33	0	0	S	9.4	22	S	4:13	29	10	10	T,DL		15	0.0	20	
21	86	72	79	+1	0	.06	0	0	S	7.6	18	S	3:38	25	10	9			14	0.1	21	
22	88	72	80	+2	0	.12	0	0	S	6.0	14	SW	7:30	52	9	9	T,DL		16	1.6	22	
23	91	76	84	+6	0	0	0	0	SW	8.1	13	SW	11:32	80	8	8			18	1.9	23	
24	92	74	83	+5	0	0	0	0	SSW	9.3	16	W	12:09	85	4	4	DL		17	1.5	24	
25	88	75	82	+4	0	.26	0	0	SW	6.3	14	N	8:54	62	9	8	T,DL		16	1.4	25	
26	88	73	81	+3	0	.01	0	0	S	5.0	12	N	7:47	55	10	10	T,DL		16	1.0	26	
27	88	71	80	+2	0	.11	0	0	SSW	5.1	17	SE	6:21	45	10	10	T		15	0.6	27	
28	90	73	82	+4	0	T	0	0	SW	5.1	11	NW	10:21	73	8	8	DL		15	-0.6	28	
29	91	72	82	+4	0	T	0	0	WSW	4.7	22	SE	9:59	70	6	6	T		16	-0.9	29	
30	92	73	83	+5	0	T	0	0	SSW	5.0	17	SE	7:06	50	6	6	T		16	-1.2	30	
31	89	73	81	+3	0	0	0	0	E	4.7	14	E	4:51	34	9	9	T		16	-1.1	31	
Sum	2669	2160				12.85	0			210.4			215:01		240	233			427	5.4	Sum	
Avg	86.1	69.7								6.8	Fastest 27	Dir. N	Possible 48:35	% 50	7.7	7.5				0.2	Avg. Misc.	

T in columns 7, 8, 9 and in the Hourly Precipitation table indicates an amount too small to measure.

TEMPERATURE: (°F)
Average monthly 77.9
Departure from normal +0.4
Highest 93 on 1st
Lowest 60 on 8th
Number of days with -
Max. 32° or below 0
Max. 90° or above 8
Min. 32° or below 0
Min. 0° or below 0

HEATING DEGREE DAYS (base 65°):
Total this month 0
Departure from normal 0
Seasonal total (since July 1) 0
Seasonal departure from normal 0
BAROMETRIC PRESSURE (In.)
Avg. station (elev. 164 *feet, m. s. l.) 29.927
Highest sea level 30.34 on 8th
Lowest sea level 29.83 on 10th

PRECIPITATION: (In.)
Total for the month 12.85
Departure from normal +7.21
Greatest in 24 hours 4.58 on 1st
Snow, Sleet -
Total for the month 0
Greatest in 24 hours 0 on -
Greatest depth on ground 0 on -
Dates of - Hail None
Sleet None Glaze None

Symbols used in columns 18-19
A = Hail L = Drizzle
BS = Blowing snow N = Sand
DL = Distant lightning R = Rain
D = Dust S = Snow
E = Sleet T = Thunderstorm
F = Fog ZL = Freezing drizzle
H = Haze
K = Smoke
*When this elevation differs from the present station elevation this level was selected to permit comparison of data for a longer period of homogeneous record.

This was the second wettest July, and third wettest month in 23 years of record. Excessive rainfall amounts for the periods of 5, 10, 15, and 30, minutes were the greatest of record for these intervals, on the 20th. More rain fell in three hours on the first than in any equal period. The rainfall on the 1st was badly needed, but subsequent heavy rains created excessive soil moisture.

Excessive Precipitation

Period:	Minutes	5	10	15	20	30	45	60	80	100	120	150	180
July 1	Amounts	.51	.87	1.17	1.39	1.57	1.73	1.99	2.18	2.28	3.20	4.10	4.19
July 20		.58	1.09	1.31	1.50	1.63	1.88	2.02	2.13	2.16	2.18	2.22	2.22

HOURLY PRECIPITATION (In.)

Date	A. M. Hour ending at												P. M. Hour ending at												Date
	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	
1	1.17	.86	1.93	.25	.28	.07	.02	T																	1
2																				.23	.19	.19	.01	.02	2
3		.02																							3
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DEPARTMENT OF COMMERCE, WEATHER BUREAU
LOCAL CLIMATOLOGICAL DATA

CHIMBORAZO PARK, RICHMOND, VA.
 BATTLEFIELD PARK HEADQUARTERS
 JULY 1959

Latitude 37° 32' N. Longitude 77° 27' W. Elevation (ground) 170 ft. EASTERN Standard time used

Date	Temperature (°F)			Precipitation		Snow, Sleet, or Ice on ground at 8:00AM (In.)	Wind			Sunshine		Sky cover		Thunderstorm or distant lightning	Weather restricting visibility to 1/4 mile or less					Date			
	Maximum	Minimum	Average	Departure from normal	Degree days (base 65°)		Prevailing direction	Average speed (m. p. h.)	Fastest mile	Total (hours and minutes)	Percent of possible	Sunrise to sunset (tenths)	Midnight to midnight (tenths)										
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	100	68	84	+6	0	3.75											T						1
2	95	64	80	+2	0	T																	2
3	91	65	78	0	0	.28											T						3
4	82	61	72	-6	0	T																	4
5	85	63	74	-4	0	0																	5
6	85	64	75	-3	0	0																	6
7	86	66	76	-2	0	0																	7
8	83	60	74	-4	0	0																	8
9	87	61	74	-4	0	0																	9
10	79	72	76	-2	0	.04																	10
11	84	67	76	-2	0	.75											T						11
12	82	68	75	-3	0	.03																	12
13	80	68	74	-4	0	.02																	13
14	82	70	76	-2	0	.25																	14
15	80	68	74	-4	0	1.80											T						15
16	82	69	76	-2	0	.10																	16
17	84	64	74	-4	0	T																	17
18	85	67	76	-3	0	0																	18
19	88	71	80	+1	0	.07																	19
20	90	73	82	+3	0	.12																	20
21	88	70	79	0	0	.93											T						21
22	80	71	76	-3	0	.17											T						22
23	88	73	81	+2	0	T											T						23
24	91	71	81	+2	0	0																	24
25	95	72	84	+5	0	0																	25
26	91	71	81	+3	0	.40																	26
27	88	68	78	0	0	.46																	27
28	89	70	80	+2	0	.01																	28
29	88	69	79	+1	0	.05																	29
30	91	70	81	+3	0	T																	30
31	93	70	82	+4	0	.54											T						31
Sum	2697	2104				9.77																	Sum
Avg	87.0	67.9									Fastest	Dir.	Possible	%									Avg.

T in columns 7, 8, 9 and in the Hourly Precipitation table indicates an amount too small to measure. Misc. Fastest Dir. Possible %

TEMPERATURE: (°F) HEATING DEGREE DAYS (base 65°): PRECIPITATION: (In.) Symbols used in columns 18-19

Average monthly 77.5 Total this month 0
 Departure from normal -0.4 Departure from normal 0
 Highest 100 on 1 Seasonal total (since July 1) 0
 Lowest 60 on 8 Seasonal departure from normal 0

Number of days with -
 Max. 32° or below 0
 Max. 90° or above 9
 Min. 32° or below 0
 Min. 0° or below 0

BAROMETRIC PRESSURE (In.)
 Avg. station (elev. *feet, m. s. l.)
 Highest sea level on
 Lowest sea level on

Total for the month 9.77
 Departure from normal +4.39
 Greatest in 24 hours 3.75 on 1
 Snow, Sleet -
 Total for the month 0
 Greatest in 24 hours 0 on
 Greatest depth on ground 0 on
 Dates of - Hail 0
 Sleet 0 Glaze 0

A - Hail L - Drizzle
 BS - Blowing snow N - Sand
 DL - Distant lightning R - Rain
 D - Dust S - Snow
 E - Sleet T - Thunderstorm
 F - Fog ZL - Freezing drizzle
 H - Haze ZR - Freezing rain
 K - Smoke

*When this elevation differs from the present station elevation this level was selected to permit comparison of data for a longer period of homogeneous record.

1 Observation day for 24 hours ending at 8 A.M. Maximum temperatures will usually have occurred on the calendar day preceding date of entry.