

U. S. DEPARTMENT OF COMMERCE, WEATHER BUREAU

LOCAL CLIMATOLOGICAL DATA

RICHMOND, VIRGINIA
BYRD FIELD
SEPTEMBER 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.) | | | Fastest mile | | Total (hours and minutes) | Percent of possible | Sunrise to sunset (tenths) | Midnight to midnight (tenths) | | | | | | |
| | | | | | | | | | | | Speed (m. p. h.) | Direction | | | | | | | | | | |
| 1 | 90 | 74 | 82 | +8 | 0 | 0 | 0 | 0 | S | 6.8 | 13 | S | 5:45 | 44 | 9 | 9 | DL | | 16 | 0.9 | 1 | |
| 2 | 90 | 76 | 83 | +9 | 0 | 0 | 0 | 0 | S | 5.9 | 10 | SW | 5:47 | 45 | 8 | 9 | DL | | 17 | 1.3 | 2 | |
| 3 | 90 | 74 | 82 | +8 | 0 | 0 | 0 | 0 | N | 5.8 | 14 | N | 9:27 | 73 | 4 | 3 | DL | | 16 | 1.8 | 3 | |
| 4 | 87 | 71 | 79 | +6 | 0 | 0 | 0 | 0 | N | 5.3 | 15 | N | 3:38 | 28 | 9 | 9 | | | 14 | 1.9 | 4 | |
| 5 | 84 | 71 | 78 | +5 | 0 | 0 | 0 | 0 | NE | 6.2 | 18 | E | 1:52 | 15 | 10 | 10 | | | 13 | 2.7 | 5 | |
| 6 | 83 | 72 | 78 | +5 | 0 | 0 | 0 | 0 | NE | 7.0 | 19 | E | 1:40 | 13 | 10 | 9 | T | | 13 | 3.3 | 6 | |
| 7 | 86 | 70 | 78 | +5 | 0 | 0 | 0 | 0 | NE | 3.8 | 17 | SE | 4:00 | 33 | 10 | 9 | | | 13 | 3.2 | 7 | |
| 8 | 87 | 70 | 79 | +6 | 0 | 0 | 0 | 0 | E | 5.0 | 11 | SE | 9:21 | 74 | 6 | 4 | | | 14 | 3.3 | 8 | |
| 9 | 87 | 65 | 76 | +3 | 0 | 0 | 0 | 0 | E | 4.2 | 9 | E | 12:07 | 96 | 3 | 2 | | | 12 | 2.4 | 9 | |
| 10 | 85 | 62 | 74 | +2 | 0 | 0 | 0 | 0 | SE | 3.1 | 7 | SW | 12:19 | 97 | 5 | 3 | | | 10 | 1.6 | 10 | |
| 11 | 75 | 58 | 67 | -5 | 0 | 0 | 0 | 0 | N | 9.6 | 16 | N | 8:59 | 71 | 9 | 6 | | | 6 | 0.4 | 11 | |
| 12 | 73 | 54 | 64 | -8 | 1 | 0 | 0 | 0 | NNW | 6.9 | 11 | N | 9:28 | 75 | 5 | 4 | | | 3 | -0.5 | 12 | |
| 13 | 77 | 52 | 65 | -7 | 0 | 0 | 0 | 0 | NW | 5.8 | 13 | NE | 10:38 | 85 | 8 | 6 | | | 3 | -0.2 | 13 | |
| 14 | 75 | 52 | 64 | -7 | 1 | 0 | 0 | 0 | NNW | 4.5 | 9 | E | 8:05 | 65 | 9 | 8 | | | 3 | -0.1 | 14 | |
| 15 | 81 | 55 | 68 | -3 | 0 | 0 | 0 | 0 | S | 5.4 | 11 | SW | 7:48 | 63 | 8 | 8 | | | 6 | 0.5 | 15 | |
| 16 | 65 | 60 | 63 | -8 | 2 | 0 | 0 | 0 | NNE | 8.0 | 13 | N | 0:00 | 0 | 10 | 10 | | | 4 | 0.6 | 16 | |
| 17 | 64 | 49 | 57 | -14 | 8 | 0 | 0 | 0 | N | 7.3 | 16 | NE | 3:24 | 27 | 9 | 8 | | | 0 | 1.6 | 17 | |
| 18 | 70 | 45 | 58 | -12 | 7 | 0 | 0 | 0 | NW | 5.4 | 12 | NW | 10:57 | 86 | 2 | 3 | | | 0 | 1.4 | 18 | |
| 19 | 69 | 44 | 57 | -13 | 8 | 0 | 0 | 0 | NNE | 6.3 | 11 | N | 12:17 | 100 | 1 | 2 | | | 0 | 1.5 | 19 | |
| 20 | 72 | 43 | 58 | -12 | 7 | 0 | 0 | 0 | S | 3.0 | 8 | S | 11:56 | 97 | 4 | 2 | | | 0 | 1.4 | 20 | |
| 21 | 80 | 46 | 63 | +6 | 2 | 0 | 0 | 0 | SW | 5.1 | 11 | S | 11:39 | 95 | 0 | 1 | | | 1 | 2.0 | 21 | |
| 22 | 85 | 53 | 69 | 0 | 0 | 0 | 0 | 0 | SSW | 5.6 | 9 | E | 12:11 | 100 | 0 | 0 | | | 7 | 1.8 | 22 | |
| 23 | 85 | 57 | 71 | +2 | 0 | 0 | 0 | 0 | S | 6.3 | 13 | SE | 12:08 | 100 | 0 | 0 | | | 8 | 1.5 | 23 | |
| 24 | 86 | 59 | 73 | +5 | 0 | 0 | 0 | 0 | S | 6.7 | 12 | S | 12:05 | 100 | 0 | 0 | | | 9 | 1.2 | 24 | |
| 25 | 86 | 59 | 73 | +5 | 0 | 0 | 0 | 0 | E | 6.4 | 13 | SE | 12:03 | 100 | 0 | 1 | | | 10 | 1.2 | 25 | |
| 26 | 83 | 64 | 74 | +7 | 0 | 0 | 0 | 0 | E | 7.1 | 12 | SE | 9:33 | 80 | 4 | 6 | | | 10 | 1.3 | 26 | |
| 27 | 84 | 64 | 74 | +7 | 0 | 0 | 0 | 0 | E | 6.9 | 12 | SE | 8:57 | 75 | 9 | 7 | | | 10 | 1.1 | 27 | |
| 28 | 85 | 60 | 73 | +6 | 0 | 0 | 0 | 0 | E | 6.6 | 24 | E | 5:36 | 47 | 8 | 8 | | | 10 | -0.3 | 28 | |
| 29 | 83 | 71 | 77 | +11 | 0 | 0 | 0 | 0 | E | 10.1 | 21 | E | 2:31 | 21 | 10 | 10 | | | 13 | -0.2 | 29 | |
| 30 | 81 | 71 | 76 | +10 | 0 | 0 | 0 | 0 | ESE | 17.4 | 30 | SE | 2:39 | 22 | 10 | 10 | | | 13 | 0.7 | 30 | |
| 31 | | | | | | | | | | | | | | | | | | | | | | 31 |
| Sum | 2428 | 1821 | | | | | 3.30 | | | 193.5 | | | 238:30 | | 180 | 167 | | | 254 | 39.3 | Sum | |
| Avg | 80.9 | 60.7 | | | | | | | | 6.5 | Fastest | | Dir. Possible | | 6.0 | 5.6 | | | | 1.3 | Avg | |
| | | | | | | | | | | Misc. | 30 | SE | 272:34 | 64 | | | | | | | Misc. | |

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

TEMPERATURE: (°F)
 Average monthly 70.8
 Departure from normal +0.5
 Highest 90 on 1, 2, 3
 Lowest 43 on 20
 Number of days with -
 Max. 32° or below 0
 Max. 90° or above 3
 Min. 32° or below 0
 Min. 0° or below 0

HEATING DEGREE DAYS (base 65°):
 Total this month 36
 Departure from normal +3
 Seasonal total (since July 1) 36
 Seasonal departure from normal +3

BAROMETRIC PRESSURE (In.)
 Avg. station (elev. 164 feet, m. s. l.) 29.961
 Highest sea level 30.59 on 19th
 Lowest sea level 29.76 on 15th

PRECIPITATION: (In.)
 Total for the month 3.30
 Departure from normal -0.35
 Greatest in 24 hours 2.17 on 30-Oct.1
 Snow, Sleet -
 Total for the month 0
 Greatest in 24 hours 0 on -
 Greatest depth on ground 0 on -
 Dates of -
 Sleet 0
 Glaze 0

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.

A new low record for the date was set with a minimum of 44° on the 19th. Soil moisture, which had been plentiful since July 1st, became quite deficient during September until replenished on the last two days.

| Period: | Minutes | Excessive Precipitation | | | | | | | | | | | |
|----------|---------|-------------------------|-----|-----|-----|-----|------|------|------|------|------|------|------|
| | | 5 | 10 | 15 | 20 | 30 | 45 | 60 | 80 | 100 | 120 | 150 | 180 |
| Sept. 29 | Amounts | .29 | .44 | .54 | .55 | .55 | .55 | .55 | .55 | .55 | .55 | .55 | .55 |
| Sept. 30 | Amounts | .43 | .56 | .59 | .61 | .93 | 1.24 | 1.46 | 1.76 | 1.80 | 1.82 | 1.83 | 1.84 |

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 | |
| 2 | | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | 3 |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | 4 |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | 5 |
| 6 | | | | | | | | | | | | | | | | | | | | | | | | | 6 |
| 7 | | | | | | | | | | | | | | | | | | | | | | | | | 7 |
| 8 | | | | | | | | | | | | | | | | | | | | | | | | | 8 |
| 9 | | | | | | | | | | | | | | | | | | | | | | | | | 9 |
| 10 | | | | | | | | | | | | | | | | | | | | | | | | | 10 |
| 11 | | | | | | | | | | | | | | | | | | | | | | | | | 11 |
| 12 | | | | | | | | | | | | | | | | | | | | | | | | | 12 |
| 13 | | | | | | | | | | | | | | | | | | | | | | | | | 13 |
| 14 | | | | | | | | | | | | | | | | | | | | | | | | | 14 |
| 15 | | | | | | | | | | | | | | | | | | | | | | | | | 15 |
| 16 | | | | | | | | | | | | | | | | | | | | | | | | | 16 |
| 17 | | | | | | | | | | | | | | | | | | | | | | | | | 17 |
| 18 | | | | | | | | | | | | | | | | | | | | | | | | | 18 |
| 19 | | | | | | | | | | | | | | | | | | | | | | | | | 19 |
| 20 | | | | | | | | | | | | | | | | | | | | | | | | | 20 |
| 21 | | | | | | | | | | | | | | | | | | | | | | | | | 21 |
| 22 | | | | | | | | | | | | | | | | | | | | | | | | | 22 |
| 23 | | | | | | | | | | | | | | | | | | | | | | | | | 23 |
| 24 | | | | | | | | | | | | | | | | | | | | | | | | | 24 |
| 25 | | | | | | | | | | | | | | | | | | | | | | | | | 25 |
| 26 | | | | | | | | | | | | | | | | | | | | | | | | | 26 |
| 27 | | | | | | | | | | | | | | | | | | | | | | | | | 27 |
| 28 | | | | | | | | | | | | | | | | | | | | | | | | | 28 |
| 29 | | | | | | | | | | | | | | | | | | | | | | | | | 29 |
| 30 | | | | | | | | | | | | | | | | | | | | | | | | | 30 |
| 31 | | | | | | | | | | | | | | | | | | | | | | | | | 31 |

Known errors found in this issue will be published as errata in later issues.
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U. S. DEPARTMENT OF COMMERCE, WEATHER BUREAU
LOCAL CLIMATOLOGICAL DATA

CHIMBORAZO PARK, RICHMOND, VA.
 NATIONAL BATTLEFIELD PARK HEADQUARTERS
 SEPTEMBER 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.) | Snow, Sleet (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 | 85 | 70 | 78 | +3 | 0 | .33 | 0 | | | | | | | | | | | | | | | | 1 |
| 2 | 90 | 72 | 81 | +6 | 0 | .03 | 0 | | | | | | | | | | | | | | | | 2 |
| 3 | 91 | 73 | 82 | +7 | 0 | 0 | 0 | | | | | | | | | | | | | | | | 3 |
| 4 | 91 | 70 | 81 | +6 | 0 | 0 | 0 | | | | | | | | | | | | | | | | 4 |
| 5 | 88 | 68 | 78 | +4 | 0 | 0 | 0 | | | | | | | | | | | | | | | | 5 |
| 6 | 87 | 70 | 79 | +5 | 0 | .40 | 0 | | | | | | | | | | | | | | | | 6 |
| 7 | 84 | 68 | 76 | +2 | 0 | .03 | 0 | | | | | | | | | | | | | | | | 7 |
| 8 | 86 | 68 | 77 | +3 | 0 | .05 | 0 | | | | | | | | | | | | | | | | 8 |
| 9 | 88 | 65 | 77 | +3 | 0 | 0 | 0 | | | | | | | | | | | | | | | | 9 |
| 10 | 88 | 62 | 75 | +2 | 0 | 0 | 0 | | | | | | | | | | | | | | | | 10 |
| 11 | 85 | 63 | 74 | +1 | 0 | 0 | 0 | | | | | | | | | | | | | | | | 11 |
| 12 | 78 | 53 | 66 | -7 | 0 | 0 | 0 | | | | | | | | | | | | | | | | 12 |
| 13 | 76 | 52 | 64 | -9 | 1 | 0 | 0 | | | | | | | | | | | | | | | | 13 |
| 14 | 78 | 52 | 65 | -7 | 0 | 0 | 0 | | | | | | | | | | | | | | | | 14 |
| 15 | 79 | 54 | 67 | -5 | 0 | 0 | 0 | | | | | | | | | | | | | | | | 15 |
| 16 | 82 | 52 | 67 | -5 | 0 | 0 | 0 | | | | | | | | | | | | | | | | 16 |
| 17 | 68 | 51 | 60 | -12 | 5 | 0 | 0 | | | | | | | | | | | | | | | | 17 |
| 18 | 67 | 48 | 58 | -13 | 7 | 0 | 0 | | | | | | | | | | | | | | | | 18 |
| 19 | 72 | 45 | 59 | -12 | 6 | 0 | 0 | | | | | | | | | | | | | | | | 19 |
| 20 | 72 | 44 | 58 | -12 | 7 | 0 | 0 | | | | | | | | | | | | | | | | 20 |
| 21 | 75 | 47 | 61 | -9 | 4 | 0 | 0 | | | | | | | | | | | | | | | | 21 |
| 22 | 82 | 48 | 65 | -5 | 0 | 0 | 0 | | | | | | | | | | | | | | | | 22 |
| 23 | 87 | 54 | 71 | +2 | 0 | 0 | 0 | | | | | | | | | | | | | | | | 23 |
| 24 | 90 | 54 | 72 | +3 | 0 | 0 | 0 | | | | | | | | | | | | | | | | 24 |
| 25 | 88 | 59 | 74 | +6 | 0 | 0 | 0 | | | | | | | | | | | | | | | | 25 |
| 26 | 91 | 61 | 76 | +8 | 0 | 0 | 0 | | | | | | | | | | | | | | | | 26 |
| 27 | 85 | 64 | 75 | +7 | 0 | 0 | 0 | | | | | | | | | | | | | | | | 27 |
| 28 | 92 | 61 | 77 | +10 | 0 | 0 | 0 | | | | | | | | | | | | | | | | 28 |
| 29 | 86 | 62 | 74 | +7 | 0 | .10 | 0 | | | | | | | | | | | | | | | | 29 |
| 30 | 84 | 69 | 77 | +10 | 0 | .68 | 0 | | | | | | | | | | | | | | | | 30 |
| 31 | | | | | | | | | | | | | | | | | | | | | | | 31 |
| Sum | 2495 | 1779 | | | | 1.62 | 0 | | | | | | | | | | | | | | | | Sum |
| Avg | 83.2 | 59.3 | | | | | | | | | Fastest | Dir. | Possible | % | | | | | | | | | Avg. |

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

TEMPERATURE: (°F)
 Average monthly 71.2
 Departure from normal 0.0
 Highest 92 on 28th
 Lowest 44 on 20th
 Number of days with -
 Max. 32° or below 0
 Max. 90° or above 6
 Min. 32° or below 6
 Min. 0° or below 0

HEATING DEGREE DAYS (base 65°):
 Total this month 30
 Departure from normal -1
 Seasonal total (since July 1) 30
 Seasonal departure from normal -2

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

PRECIPITATION: (In.)
 Total for the month 1.62
 Departure from normal -1.74
 Greatest in 24 hours 0.68 on 30th
 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

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 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 the date of entry.