CLIMATOLOGICAL DATA

VIRGINIA SECTION

EDWARD A. EVANS, Meteorologist

Vol. XXXVII RICHMOND, VA., YEAR 1927

No. 13

GENERAL SUMMARY

The latter part of 1926 was cold, the last two months having mean temperatures well below normal. Early in the month following, however, there was a change to milder weather, and although there were rather marked changes in temperature through January, 1927, the mean of the month for the section. as a whole, was above normal. This tendency to milder temperature increased through February, and that month, normally a midwinter month, with temperatures but slightly higher than those of January, was the warmest February of record, the mean for the State being nearly as high as the normal for March. Temperatures continued well above normal until the latter part of March, when colder weather set in, and, excepting May and July, both of which were about normal as to temperature, the summer season was characterized by a deficiency in that element, in marked contrast with the excesses of winter and early spring, the mean for August being the lowest of record for that month. Beginning with September, the remainder of the year was warm. with temperatures well above normal. The excesses of winter, early spring, and the fall months more than offset deficiencies of the summer, giving an average for the year slightly above normal.

There were no abnormalities in rainfall of sufficient amount to characterize the year as either wet or dry, the winter, spring, and summer months alternating above and below normal, with respect to precipitation, and while the last three months furnished excesses amounting to more than 3.5 inches, this was not sufficient to offset deficiencies in other months, which were quite large in January, March, and September, the average for the State, as a whole, being slightly more than 1 inch below normal. The bulk of the deficiency was over middle counties, where the average exceeded 2.5 inches.

The condition of the weather elements favored agriculture in most respects, the spring and fall temperature excesses resulting in an unusually long growing season, and quite satisfactory staple crops were harvested. The unseasonably warm weather in February and March, however, followed by frosts, was unfavorable for fruits, these crops being light, as a rule. Notes on severe storms may be found in CLIMATOLOGICAL DATA for May, July, August, November, and December.—H. A. F.

ERRATA, 1927

January.—Page 2, Damascus, total precipitation, 2.72; Dante, total precipitation, 3.35.

February.—Page 6, Mount Weather, temperature departure, +8.5.

April.—Page 13, Wytheville, average wind velocity, 6.7. August.—Page 30, State temperature departure, -4.0.

October.—Page 37, "Comparative Data", total precipitation, 1927, 4.67. Page 38, Tidewater precipitation departure, +0.66; State average precipitation, 4.67; departure, +1.71.

MONTHLY STATE DATA, 1927

	Ten	nperat	ure	Pre	cipitat	ion	Number of days						
Month	Mean	Highest	Lowest	Average	Greatest 24- hour rain	Average snow-fall	Rainy	Clear .	Partly cloudy	Cloudy			
January Pebruary March April May June June October November December	48, 1 52, 8 64, 1 68, 3 74, 6	78 85 89 94 95 102 104 95 102 99 86 79	-7 14 0 17 24 36 40 35 27 21 15	1. 34 3. 75 1. 80 5. 21 2. 87 3. 17 4. 98 4. 78 1. 79 4. 72 2. 86 4. 82	0.90 3.25 2.50 2.15 2.10 2.95 4.34 3.85 4.33 6.00 4.07 3.65	2.5 2.8 3.8 T. 0 0 0 T. 0.2 2.0	8 12 8 14 11 9 11 11. 5 7 6	9 10 12 10 9 12 14 10 19 20 12 14	8 7 8 8 12 10 11 9 7 5 10 6	14 11 11 12 10 8 6 12 4 6 8			

COMPARATIVE ANNUAL DATA FOR THE STATE

Year	Mean tempera- ture	Highest	Lowest	Average pre- cipitation	Average snow-fall	No. of rainy days	No. of clear days	No. of partly cloudy days	No. of cloudy days
1892 1893 1894 1895 1896 1897 1896 1897 1899 1900 1901 1901 1902 1903 1904 1905 1906 1907 1908 1909 1910 1911 1912 1913 1914 1915 1916 1917 1917 1918 1919 1919 1919 1919 1919	54.8 55.1 64.6 56.6 0 56.6 4 56.6 56.5 56.5 68.8 56.4 57.0 68.8 56.3 56.4 56.8 56.8 56.8 56.8 56.8 56.8 56.8 56.8	106 104 106 107 105 106 107 105 106 107 105 106 107 105 106 108 102 102 102 102 102 102 102 103 108 103 107 104 100 102 103 107 104 106 107 107 107 107 107 107 107 107 107 107	-8 -26 -26 -26 -27 -27 -27 -27 -27 -27 -27 -27 -27 -27	40. 01 46. 83 35. 97 38. 09 40. 81 44. 80 43. 18 39. 33 39. 33 36. 17 51. 44. 85 49. 56 44. 19 45. 21 39. 81 41. 57 41. 50 39. 19 45. 21 39. 21 41. 85 40. 82 44. 41 41. 66 44. 44. 47 41. 46. 30 34. 94 44. 72 46. 30 34. 94 41. 95 41. 96 41. 96 44. 94 44. 72 46. 30 34. 94 41. 95 41. 96 41. 96 41. 96 42. 84 44. 19 46. 30 34. 94 44. 19 46. 30 34. 94 46. 30 34. 94 47. 41 48. 20 48. 41 49. 41 49. 41 41. 95 41. 96 41.	23.1 17.0 38.8 11.8 7 36.7 19.5 14.9 15.2 24.9 15.2 24.6 4.0 30.0 11.7 4.3 30.0 11.7 4.3 30.0 11.7 4.3 30.0 11.7 4.3 30.0 11.7 4.6 15.2 24.6 15.2 24.6 16.2 24.7 7 7.4 17.4 18.8 18.8 19.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10	96 103 88 94 93 92 96 96 96 96 96 96 96 96 96 96 96 96 96	163 156 157	101 100 100 104 103 106 99 101 195 91 101 112 120 115 108 104 116 116 107 107 108 109 109 101 116 109 101 101 101 101 101 101 101 101 101	1020 1099 55 88 977 95 7102 94 104 98 104 95 95 105 105 105 105 115 115 111 114 99 99
Z.orimiz and explemes	00.7	108	29.	12. 30	1	102	104	102	99

Climatological Data for the Year 1927

		\		Temp		e, degrees			<u> </u>			ecipitat	ion			P:		Sky		Ę.
Stations	Counties	Elevation, feet	Length of record,	Annual mean	Highest	Date	Lowest	Date	Length of record,	Total for the year	Greatest monthly	Month	Least monthly	Month	Total snowfall	Number of rain days	Number of clear days	Number of partly cloudy days	Number of cloudy days	Prevailing direction of wind
Tidewater Virginia																				
AshlandCape HenryChrist ChurchDahlgrenDiamond Springs!;	Hanover Princess Anne Middlesex King George Princess Anne	221 20 87 21 25	34 54 4 8 19	55. 5 59. 2 58. 7 55. 1 59. 9	96 96 95 96 95	June 29* July 29 July 29 June 29* July 29	-2 17 19 8 13	Jan. 16 Jan. 27 Jan. 16 Jan. 27 Jan. 13	34 54 4 8 19	38. 25 47. 09 46. 80 34. 58	4.26 7.89 6.74 5.07 10.20	June July July July July July	1. 04 0. 85 0. 74 0. 35	Jan. Jan. Jan. Sept.	11.7	118 124 110 123	153 120 106 199	91 134 109 95	121 111 150 71	sw. sw. sw. nw. sw.
Franklin Hopewell Langley Field Norfolk Onley	Southampton Prince George Elizabeth City Norfolk Accomac	21 40 5 691 40	11 8 57 9	58.8 60.0 57.9	95 95 95 94	July 28* July 29 July 28 June 12*	10 14 , 14 , 8	Jan. 16 Jan. 16 Jan. 16 Jan. 27	11 8 57 9	38. 81 38. 50 44. 89 41. 70	6. 10 5. 26 6. 72 6. 58	Aug. Aug. July Dec.	0.69 0.89 0.61 1 00	Jan. Jan. Jan. Jan. Jan.	10.3 12.8 15.3 6.0	122 115 122 106	118 95 101 117	158 126 140 145	89 144 124 103	sw. w. s. se.
RichmondRunnymede (near)‡‡ Wallaceton Warsaw (near) Williamsburg	Henrico Surry Norfolk Richmond James City	144 25 160 70	48 38 34 34	58.1 58.8	95 94 96	June 29 July 29 July 29	11 10 	Jan. 27 Jan. 12 Jan. 16	48 38 1 34 34	44.36 55.07 65.56 38.25	9.10 8.79 9.48 6.47	July Aug. Dec. Aug.	0. 70 0. 48 1. 31 0. 89	Jan. Jan. Jan. Jan.	1.6 9.4 25.2 3.0	124 99 125	129 187 205	123 78 79	113 100 81	SW. S. SW. S. SW.
Means and extremes Middle Virginia	•		;····	58.3	96	June 29*	-2	Jan. 16		46.01	10. 20	July	0. 35	Sept.	9.6	117	139	116	110	sw.
Callaville	Brunswick Albemarle Pittsylvania Arlington Mecklenburg	250 854 852 200 286	33 36 5 	57. 5 57. 3 58. 4 57. 4	96 100 102 96	Sept. 15 June 29 June 30 June 30*	1 7 5 5	Jan. 12 Jan. 27 Jan. 12 Jan. 12*	33 36 5 2 30	50.47 41.87 45.40 35.91 43.53	6. 96 6. 51 8. 65 5. 56 6. 55	July Oct. Oct. Oct. Aug.	1.91 1.05 1.65 1.14 1.49	Jan. Jan. Jan. Sept. Nov.	17.0 5.8 16.3	74 105 100 120 90	211 130 210	79 98 78	75 137 77	w. s. s. w.
Columbia	Fluvanna Culpeper Pittsylvania Fairfax Spottsylvania	246 450 430 310 100	29 20 27 	56. 6 54. 8 60. 1 58. 0	99 95 100 99	June 29 Sept. 15 June 30 June 29*	7 7 6	Jan. 27 Jan. 27 Jan. 12 Jan. 27	29 20 27 2 27	41, 56 35, 68 41, 68 34, 28 37, 36	6. 35 6. 98 7. 71 5. 94 6. 35	Oct. Apr. July Oct. July	0. 98 0. 72 0.94 1. 05 0. 36	Jan. Jan. Sept. Sept. Jan.	3.0 2.2 19.5 6.1	84 88 116 106 90	164 127 166	106 147 	95 91 91	s. s. s.
Hawfield ‡‡ Lincoln ‡‡ Lynchburg Massinacac‡‡ Mayhurst ‡‡	Orange	400 500 681 350 500	26 56 	58. 2 58. 2	101 100 100	Sept. 15 June 30 Sept. 15	5 10 8	Jan. 16* Jan. 16 Jan. 27	10 26 56 6 12	37, 22 36, 10 35, 58 42, 94 34, 06	5. 79 9. 15 6. 51 6. 41 6. 19	Apr. Oct. Oct. July Apr.	0.53 0.91 0.31 1.12 0.64	Mar. Sept. Sept. Sept. Jan.	12.0 7.8 6.5	79 120 130 92 87	130 187 136	123 92 167	112 86 62	s. w. s. se.
Mineral (near) Mount Weather !! New Canton Pedlar Dam!! Powhatan.	Louisa	300	12 23 33 1	55. 0 51. 9 56. 6 54. 9	98 91 96 96	June 29 Sept. 15 June 29 July 1	3 0 6 7	Jan. 16 Jan. 27 Jan. 12 Jan. 27	12 23 33 1 4	33. 84 37. 92 39. 99 47, 63	5. 19 11. 84 6. 81 7. 54	Oct. Oct. Oct. Oct.	0.77 0.99 1.06 1.18 0.88	Jan. July Jan. Mar. Jan.	9.0 9.0 9.0	102 111 111 97 92	151 60 147 98	104 111 126	110 194 92 210	sw. w. sw.
Quantico Randolph Rocky Mount Stuart Vienna Washington, D. C.	Prince William Charlotte Franklin Patrick Fairfax	17 344 1, 150 1, 188 375 112	27 32 5 57	55. 3 57. 6 58. 3 56. 3	94 99 97 97	June 30 June 30 June 30 Sept 15	9 6 5	Jan. 27 Jan. 12 Jan. 16 Jan. 27	27 23 32 5 2 57	36. 51 44. 39 48. 50 47. 06 36. 34 35. 33	6.92 7.64 10.38 8.71 7.05 5.33	Apr. Aug. July July Oct. Oct.	0.65 1.55 1.38 1.36 0.97 1.19	Jan. Jan. Jan. Jan. Sept. Sept.	9.5 10.0 10.0 5.5 5.8	108 114 101 105 105 123	111 208 189 151 160 110	109 44 3 132 109 112	145 113 173 82 96 143	nw. sw. nw. w.
Means and extremes				56.8	102	June 30	0	Jan. 27		39.90	11.84	Oct.	0. 31	Sept.	9.5	102	152	95	118	s.
The Great Valley	'																	}		
Blacksburg Buchanan Burkes Garden Catawba Sanatorium Dale Enterprise Dannascus Dante	Montgomery Botetourt Tazewell Roanoke Rockingham Washington Russell	820 3, 250 2, 100 1, 350 1, 900	36 26 32 17 48	53. 6 57. 5 49. 2 55. 3 54. 4	92 101 85 95 98	June 30 June 30 Sept. 18 June 30 July 27 Sept. 16	-1 4 -7 2 1	Jan. 12 Jan. 4 Jan. 12 Jan. 16 Jan. 12 Jan. 16	36 26 32 17 48 1	44. 40 45. 60 44. 44 42. 11 33. 99 44. 50 45. 85	6.67 7.86 6.50 6.01 6.02 6.45 6.28	July Aug. Apr. Apr. Apr. Apr. Apr.	1.21 1.60 0.82 0.75 0.62 0.71 1.33	Mar. Mar. Sept. Sept. Sept. Sept. Oct.	14.8 15.0 17.0 17.1 10.5	135 83 79 96 141 150 152	142 148 127 203 131 127 98	61 41 60 116 130 131 184	162 176 178 46 104 107 83	w. w. w. s. ne.
Emory Gienlyn Hot Springs Ivanhoe Lexington Marion Mendota	Washington	2, 195 2, 028 1, 060 2, 145	35 50 6	54.9 51.7 54.3 55.1	98 89 96 94	July 1* July 1 June 30 Sept. 16	1 -1 -4 -3	Jan. 11 Jan. 16 Jan. 12 Jan. 12	1 13 35 21 50 6 22	49.27 42.83 47.04 40.68 40.08 44.10 46.99	6. 97 5. 72 7. 72 6. 16 7. 07 6. 66 7. 75	May Apr. Apr. Dec. Aug. Dec. May	1. 43 1. 52 1. 02 0. 81 1. 01 1. 27 0. 91	Sept. Jan. Mar. Sept. Mar. Oct. Sept.	10. 4 10. 5 10. 6 11. 0 10. 0	160 123 134 111 103 138 125	136	117 151	69	w. w.
Radford Roanoke Saltville Speers Ferry Staunton Winchester Woodstock Wytheville	Montgomery Roanoke Smyth Scott Augusta Frederick Shenandoah Wythe	1, 773 907 1, 739 1, 221	23 4 36 23 36 25	57. 7 56. 8 55. 2 56. 0 56. 7 53. 5	100 96 96 104 102 90	June 30 July 12* June 30 July 15 Sept. 18 Sept. 16	8 4 2 6 5	Jan. 12 Jan. 15 Jan. 12 Jan. 16 Jan. 27 Jan. 12	32 23 4 31 36 23 36 25	34. 74 43. 29 45. 86 49. 28 39. 74 33. 92 32. 91 34. 81	5. 46- 7. 57 6. 80 7. 45 6. 74 7. 16 6. 34 5. 01	Apr. Aug. Feb. Aug. Apr. Oct. Oct. Dec.	0.72 0.50 1.17 1.08 1.12 0.33 0.85 1.09	Jan. Sept. Sept. Oct. Sept. Sept. Mar. Jan.	15. 0 12. 3 7. 7 1. 7 9. 4 19. 7	112 133 150 117 98 108 120 143	162 189 208 169 192 119 100	147 55 14 100 85 110 135	56 121 143 96 88 136 130	se. w. w. w. nw. sw.
Means and extremes State means and ex		. 1		54. 9 56. 5	i	July 15 July 15	-7 -7	Jan. 12		42.01	7. 86 11. 84	Aug.	0. 33 0. 31	Sept.	12. 0 10. 4	123 113	150 148	102 103	113 114	w. w.

Section and State averages are computed from monthly means. Estimated and incomplete data not considered in means.

All other records are used in determining section and division means, but the mean departures from normal temperature and precipitation are based only on records from stations that have ten or more years of observation.

Reference letters, *, *, appearing in the tables indicate number of days missing: for example, * represents two days, etc.

*Also on other dates.

*Also on other dates.

*It Post-office addresses of these stations are as follows: Diamond Springs, Norfolk; Runnymede, Elberon: Hawfield, Rapidan: Lincoln, Purcellville; Massinacac, Guinea Mills; Mayhurst, Orange: Mount Weather, Bluemont; Pedlar Dam, Pleasant View.

T. Precipitation is less than 0.01 inch rain or snow.

Monthly and Annual Precipitation for the Year 1927, with Departures from the Normal

70		Monthly and January February		1	Ma		Ap	- · - 1	M	1	Ju			ly				mber		T		mber	Dece	mher	Annual	
·	J&11	uan y	1.60	ualy	MI AL			111		y	- Ju	HE			Au	,430	Jepite 	.m.Jer	- Jea	. Jet		AII DC1	2000		And	
Stations	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure
Tidewater																								Ì	ĺ	
Ashland Cape Henry Christchurch Dahlgren Diamond Springs	0. 74 0. 79		4.31 3.18 4.65	 +1 35	3.57 1.47 2.45	-1 19	3.03 4.03 4.30	+0.93	2.08 4.05 4.43	÷0 30	4. 17 2. 79 5. 10	-0.21	6. 74 5. 07	 +4 49	5.39 3.03 6.60	 +9 33	4. 21 0. 35 2. 55	-0.90	4.55 3.86 5.85	+3 16	2.19 2.24 3.00	+0.81	5. 82 3. 72 8. 74	+4 95	46. 80 34. 58	
Franklin Hopewell Langley Field Norfolk Onley	0. 69 0. 89 0. 61 1. 00	-2, 28 -1, 84 -2, 76	2.82 3.20 3.24 3.89	-0.73 -0.46 -0.51	1.27 1.95 2.07 2.18 2.25	-2.40 -1.82 -2.10	6. 27 3. 23 3. 89 4. 87 2. 71	-0.26 +0.65 +1.08	3.73 1.89 2.98 3.57 2.12	-2.27 -0.66 -0.50	4.84 2.79 4.71 4.68 4.65	-1.62 +0.65 +0.35	6. 77 4. 23 4. 10 6. 72 5. 99	-0.44 -0.80 +0.92	7, 79 6, 10 5, 26 3, 85 3, 36	+1.64 +0.46 -2.12	5.39 2.58 1.68 1.38	+1.67 -0.29 -2.38	3. 47 2. 73 5. 14 4. 60	+0.62 -0.09 +1.23	1. 37 2. 73 2. 36 3. 17	-0.96 +0.16 -0.36	4. 88 3. 36 5. 99 6. 58	+1. 61 +0. 36 +2. 50	38.81 38.50 44.89 41.70	-5.45 -3.66 -4.66
Richmond	0.70 0.48 1.31 0.89 0.68	-2.32 -2.92 -2.32 -2.76	2.87 5.77 4.24 2.45	-0.23 +1.78 -0.95	1.95 2.99 3.82 1.78	-1.77 -1.65 -2.11	3, 47 4, 90 7, 31 2, 84	+0.02 +0.98 -0.43	3, 30 3, 89 4, 49 1, 67 2, 12	-0.55 -0.33 -1.83 -1.54	3. 12 4. 21 6. 01 3. 90 6. 24	$ \begin{array}{r} -0.40 \\ -0.72 \\ -0.28 \\ +1.60 \end{array} $	9.10 7.20 7.50 3.87 7.66	+4.68 +1.14 -0.72 +1.47	7. 19 8. 79 8. 10 6. 47 4. 62	+2.78 +3.91 +2.27 -1.58	4.01 3.82 2.17 4.03 2.43	+0.58 -0.11 +1.32 -1.02	2.02 2.79 7.01 2.97 3.78	-1.30 -0.75 -0.10 +0.75	1. 61 4. 25 4. 12 2. 31 3. 51	-0.78 +1.65 -0.13 +1.40	5. 02 6. 48 9. 48 5. 07	+2.02 +3.11 +2.21	44. 36 55. 07 65. 56 38. 25	+2.73 +6.09
Means Middle Virginia	0.82	-2.40	3.6 3	+0.02	2.30	-1.81	4.20	+0.39	8.05	-0.99	4, 38	-0.07	6, 40	1.11	5. 73	+0.85	2.78	-0.35	4.09	+0.50	2.85	+0.38	5.78	+2.26	46.01	-0.1
Callaville	1.05	- 2.37	3.08	+0.14	$\frac{1.21}{2.27}$	-2.28	5.83 4.78	+2.45	1.45	-3.00	1.65 2.02	-3.75	5, 33	+0.72	3.72 6.71	-1.17	3.47	-0.22	6.51 8.65	+3.15	4.27	+1.77	4.30	+1.05	41.87	-3.5
Columbia Culpeper Danville. Falls Church Fredericksburg.	0. 98 0. 72 1. 43 1. 46 0. 36	-2.79 -2.72 -2.00 -3.04	2. 65 2. 59 3. 88 3. 07 2. 59	$ \begin{array}{c} -0.32 \\ +0.11 \\ +0.61 \\ +0.31 \end{array} $	1. 80 1. 03 2. 57 1. 42 1. 72	-1.79 -1.76 -0.96 -1.89	4.52 6.98 4.09 4.58 5.27	+1.07 +3.77 +0.82 +1.72	1. 63 1. 50 1. 67 2. 42 2. 74	-2. 15 -2. 64 -2. 21	2, 79 2, 75 1, 99 4, 36 2, 18	-1.49 -2.37 -2.39	5, 85 1, 59 7, 71 1, 55 6, 35	+1.38 -2.13 +3.53 +1.99	4.60 6.37 3.87 3.03 2.88	+0. 15 +2. 44 -0. 71	1. 39 1. 56 0.94 1. 05 2. 12	$ \begin{array}{c} -1.75 \\ -1.54 \\ -2.23 \\ -1.16 \end{array} $	6. 35 5. 47 4. 49 5. 94 4. 32	+3.40 +3.00 +1.62	4.99 1.90 2.14 2.20 2.20	+2.75 -0.50 -0.04 -0.20	4.01 3.22 6.90 3.14 4.75	+0.67 +0.13 +3.64 +1.60	41.56 35.68 41.68 34.28 37.36	-0.8 -4.2 +0.0
Hawfield Lincoln Lynchburg Massinacae Mayhurst	3.38 1.40 1.09	$ \begin{array}{c} -0.22 \\ -1.65 \\ -2.63 \\ -2.71 \end{array} $	3.46 3.90	+0.31 $+1.51$ -0.35	0.53 1.33 1.29	-3.07 -1.72 -2.52	5.79 5.50 3.99	+2.35 +2.23 +0.82	1.92 2.91 1.42	-2.76 -0.62 -2.57	1.36 2.49 1.87	-3.19 -2.54 -2.02	4.70 1.26 5.96	-0.06 -2.22 $+1.87$	4. 14 1. 76 4. 27	+0.35 -2.53 $+0.02$	1. 14 0. 91	-2.35 -1.78 -3.32	5. 71 9. 16 6. 51	+2.60 +6.26 +3.13	2. 36 1. 98	-0.16 -0.16 -0.88	2.73 3.45 3.88	-0.18 +0.55 +0.61	37 22 36. 10 35, 58	-6.3 -2.6 -7.8
Mineral	0.7 1.48 1.00 1.58 0.88	7 -2.80 -1.69 -2.56	1.84 2.65 2.77 4.18 2.22	-0.47 +0.56 -0.29	1. 36 1. 60 1. 69 1. 18 1. 16	-2, 75 -1, 04 -2, 34	4. 62 6. 58 4. 64 6. 35 4. 23	+1.07 +3.31 +1.47	2.66 2.65 1.17 1.81 1.66	-1.02 -1.15 -2.37	$\begin{array}{c} 2.12 \\ 2.04 \\ 2.26 \\ 2.50 \\ 3.46 \end{array}$	-2.08 -2.99 -1.49	3. 50 0. 99 6. 08 4. 84 3. 68	-1. 72 -3. 28 +2. 15	3. 16 1. 53 3. 44 7. 23	~1.04 ~3.43 ~1.22	1.62 0.21 2.00 1.63 1.35	-1.02 -2.90 -1.39	5. 19 11. 84 6. 81 7. 64	+3.26 +8.51 +3.86	3. 50 3. 50 3. 80	5 +1.46 5 +1.18 0 +1.18	3. 44 3. 04 4. 60 5. 02	+0.67 +0.27 +1.51	33.84 37.92 39.99 47.63	-6.4 -2.6 -1.4
Quantico Randolph Rocky Mount. Stuart Vienna Washington, D. C.	0. 68 1. 56 1. 38 1. 38	$ \begin{array}{r} -2.50 \\ -2.17 \\ 8 -2.06 \\ \end{array} $	2.09 4.36 5.46 5.11	$ \begin{array}{c} -0.47 \\ +1.26 \\ +2.09 \end{array} $	1. 66 2. 76 1. 47 1. 97	-1.79 -0.96 -2.54	6. 92 4. 31 4. 19 3. 31	+4.00 $+1.35$ $+0.76$	1.81 1.98 1.40 2.78	$ \begin{array}{r} -1.50 \\ -2.09 \\ -2.58 \end{array} $	$ \begin{array}{c c} 2.19 \\ 1.62 \\ 2.36 \\ 1.55 \end{array} $	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	6.31 4.50 10.38	+2.30 -0.15 $+5.48$	4. 73 7. 64 5. 61 6. 29	+0.32 +3.87 +1.43	1. 48 2. 14 1. 51 1. 46	$ \begin{array}{c} -1.42 \\ -0.46 \\ -2.03 \end{array} $	4.5 4.2 6.0 5.79	$\begin{array}{c} +1.64 \\ +1.45 \\ +2.45 \end{array}$	1.2 2.99 2.4 1.6	7 -0.62 9 +0.82 7 -0.06	2.92 6.27 6.28 7.14	+0.03 +3.06 +2.70	36.51 44.89 48.50 47.06	1.9 +3.8 +3.3
Means		1	ſ	ſ	1	1	ſ	1	ì		i	i	i	1	1	1	1	1	1	1	ł	}	1	1	ļ	1
Great Valley Blacksburg	1.3	2 _2 0	1 6	1 46	1 2	_2 41	6 41	To 30	2 0		1 95	2 6	8 6 6	1 1 4	1 4 08	LO 16			4 1	1 1 20	2 6			±2.05	41.40	+2.2
Broadway. Buchanan Burkes Garden Catawba Sanatorium	1. 6 1. 3 2. 4 1. 0	$ \begin{array}{c} 3 \\ -2 \\ 3 \\ -1 \\ 5 \\ -2 \\ 2 \end{array} $	3. 3. 4. 88 4. 38 5. 58	$ \begin{array}{c} 4 \\ +2.19 \\ +0.71 \\ +2.79 \\ +2.79 \end{array} $	0.73 1.00 3.04 1.23	-1, 82 -1, 82 -2, 59	5.85 6.33 6.50 6.01	+3.78 +2.76 +3.08	2.58 5.08 1.98	$ \begin{array}{c} -1.34 \\ -1.34 \\ -1.53 \\ -1.53 \end{array} $	2. 18 3. 37 4. 77 2. 54	$ \begin{array}{c} 3 \\ 7 \\ -0.73 \\ -0.30 \\ 4 \\ -1.85 \end{array} $	3, 20 3, 5, 3 3, 59 5, 98	$\begin{array}{c} +1.85 \\ -0.98 \\ +1.18 \end{array}$	7. 86 3. 85 4. 32	+3.76 -0.56 -0.30	1. 29 0. 82 0. 78	-2.28 -2.78 -2.78	5. 14. 90 3 1. 20 4 5. 7.	$ \begin{array}{c} 1 & 1.50 \\ 1 & 1.50 \\ 1 & 1.86 \\ 2 & +2.26 \end{array} $	2.0 8 3.4 8 2.6	-0.05 9 +0.70 7 +0.35	4. 70 5. 23 4. 83	+1.48 +1.58 +1.08	45. 60 44. 44 42. 11	$\begin{array}{c} +5.4 \\ -2.9 \\ -0.4 \end{array}$
Dale Enterprise Damascus Dante Deerfield Edith	1.0	o	. 2.0	U	1.14	1	6.02 6.45 6.28 6.94 6.87	+3.06	5 1.74 5.55 5.60	2	2.38 3.96 2.56 2.89 3.98	3 -2.73 6 6	3.6 3.2 4.5 6.1	0.71	4.50 2.81 5.22	+0.5	0. 6: 0. 7: 1. 8:	2 -2.61	5. 73 1. 00 1. 33 6. 10	3 +3.0	7 2. 42 3. 64 3. 25	9	2.88 5.76 4.55	+0.27	33. 99 44. 50 45. 85	-5.6
Emory Glenlyn Hot Springs Ivanhoe Lexington																										
Marion Mendota Radford Roanoke Saltville	2.3 2.4 0.7 1.1 2.2	$ \begin{array}{c ccccc} 4 & -0.89 \\ $	9 5. 1: 3 5. 3 0 3. 9 5 4. 0 6. 8	$ \begin{array}{c} $	5 2.30 3 2.6 1.00 3 1.23 3.20	$ \begin{array}{c} -1.79 \\ -2.06 \\ -2.48 \\ -2.17 \\ \dots \end{array} $	6. 21 5. 02 5. 46 5. 77 5. 66	$\begin{array}{c} +2.99 \\ +1.25 \\ +2.77 \\ +3.05 \\ \end{array}$	4. 39 7. 78 7. 2. 89 2. 1. 88 6. 0	$ \begin{array}{c} +0.38 \\ +3.88 \\ -0.69 \\ -1.34 \\ \dots \end{array} $	2.96 5.34 1.99 2.28 3.16	$ \begin{array}{c} -2.1 \\ 4 + 0.4 \\ -1.9 \\ -2.1 \\ 6 -2.1 \\ \end{array} $	6 3.42 4 2.2 9 3.00 7.95 3.30	$ \begin{array}{c} -1.13 \\ 7 -2.71 \\ -1.48 \\ 2 +3.64 \\ \dots \end{array} $	4. 29 5. 08 1. 79 4. 7. 57 4. 7. 57	-0.1 +0.6 -1.6 +4.0	1 1.49 5 0.9 1 3.09 6 0.56 1.1	$ \begin{array}{c} -1.29 \\ -2.79 \\ +0.26 \\ -2.57 \end{array} $	1. 2' 1. 8' 6 3. 2' 2 4. 0' 1. 6'	7 -1.20 8 -1.56 3 +0.16 2 +0.8	3.6 5 2.6 8 2.7 7 2.1 4.2	5 + 1.55 $3 - 0.15$ $6 + 0.7$ $9 - 0.1$	6.66 5.60 4.87 4.75 5.08	3 + 3.46 $3 + 1.37$ $3 + 1.92$ $3 + 2.11$	44. 10 46. 99 34. 74 43. 29 45. 86	+1.1 -1.9 -3.6 +4.2
Speers Ferry Staunton Winchester Woodstock Wytheville	2.4 1.7 1.2 1.2 1.0	0 - 1.7 $7 - 1.0$ $6 - 1.4$ $2 - 1.3$ $9 - 3.2$	4 4.9 9 4.0 6 2.4 2 3.6 1 3.6	$\begin{vmatrix} +0.93 \\ 2 +1.36 \\ +0.5 \end{vmatrix}$ $\begin{vmatrix} +1.36 \\ +1.36 \\ -0.46 \end{vmatrix}$	3 2.66 1.36 7 1.20 9 0.86 5 1.5	$ \begin{array}{c c} -2.46 \\ -2.06 \\ -1.42 \\ -2.06 \\ -2.95 \end{array} $	5. 35 6. 74 4. 55 5. 89 4. 12	$\begin{array}{c} +1.98 \\ +3.73 \\ +1.16 \\ +3.33 \\ +0.46 \end{array}$	7. 2- 7. 1. 60 6. 2. 8: 7. 2. 1: 6. 2. 7:	$ \begin{array}{c} +3.96 \\ -2.06 \\ -1.36 \\ -1.36 \\ -1.16 \end{array} $	4. 65 2. 99 3. 09 2. 31 3. 65 2. 65	$ \begin{array}{r} +0.5 \\ $	2 2.0° 4 6.16 1 3.5° 7 2.4° 4 4.4°	$ \begin{vmatrix} -2.58 \\ +2.01 \\ -0.02 \\ -1.01 \\ -0.03 \end{vmatrix} $	7. 45 1 4. 27 2 1. 86 1 1. 80 7 3. 26	$ \begin{array}{r} +3.13 \\ +0.47 \\ -1.85 \\ -1.97 \\ -1.36 \\ \end{array} $	8 3. 25 7 1. 1: 2 0. 33 1 1. 50 0 1. 2	$ \begin{array}{c} +0.43 \\ -2.19 \\ -2.88 \\ -1.07 \\ -2.08 \end{array} $	2 1.00 9 4.10 7.10 6.30 1.90	$ \begin{array}{r} $	8 3. 0 9 3. 19 0 3. 19 7 2. 0 6 3. 19	$ \begin{array}{r} $	5. 08 2. 46 2. 45 2. 64 5. 01	+0.76 -0.18 -0.38 $+0.33$ $+1.27$	49. 28 39. 74 33. 92 32. 91 34. 81	+4.8 +0.6 -3.0 -1.6 -11.9
Means	. 1.6	6 -1.9	4 4.2	5 +1.2	1.7	-2.2	5.98	+2.7	2 3. 7	6 -0.4	3.01	7 -1.3	8 4.3	2 +0.1	5 4.46	+0.6	1.3	6 -1.8	2 3. 7	3 +1.0	3.0	7 +0.6	4. 67	+1.87	42.01	-0.0

Note.—In this publication, annual means are computed from data for all stations: whereas, in monthly reports, means may not include all stations, as in some cases reports are not received in time to be used in the computations.

		- 1000 111	
Monthly and Annual Mean	Temperatures for the	Year 1927, With	Departures from the Normal

					April Moss						1		1				er October November December						er Annual			
	Jan	uary	Feb	ruary	Ma	rch	A _I	oril	M	ау	Jt	me	Jı	uly	Au	gust	Septe	ember	Oct	ober	Nov	ember	Dece	mber	Anr	nual
Stations	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure
Tidewater																										
Ashland Cape Henry Christchurch Dahlgren Diamond Springs	*38. 2 33. 9		46.6 45.6 41.2		47.2 50.0 52.4 46.7 51.9		50.8	-4.8 -1.6 -3.1	62.9		*67.3 68.6 *70.0 67.2 70.4		74.4	-2. 2 -0. 9	69.1		68.4	-1.7 +0.3 -0.6	59.U		54.6 50.3	+3.7	43. 6 45. 1 43. 2 37. 8 46. 4	+1.4	55. 5 59. 2 58. 7 55. 1 59. 9	-1.1 +0.6
Franklin Hopewell Langley Field Norfolk Onley	39. 8 38. 6 40. 2 37. 8	+0.4 -2.0 -0.4	48. 4 47.2 48. 3 45. 2	+8.6 +6.7 +5.6	°51.8 51.2 49.2 51.6 48.0	+2.3 +0.9 +3.4	53.6 56.2 53.3 54.8 52.4	-1.3 -2.9 -2.0	66. 2 66. 7 65. 2	÷0.3 +0.5	68. 8 70. 1 68. 9	-6.0 -4.3	75.8 80.0 76.2 76.8 76.0	-2.6 -1.9	73.7	-4.6 -3.7	73. 2		62. 8 62. 9 64. 6 62. 5	$^{+1.9}_{+2.1}$	54.6	+4.4 +4.2	42.8 43.9 44.5 42.4	+2.8	58.8 60.0 57.9	-0.1 +0.5
Richmond	40.0 37.2	$+0.3 \\ +0.4$	48.0 44.9	+6.3 +8.4 +7.4	50. 2 50. 4 44. 4	+3.0 +1.8 -1.7	53. 8 54. 0	-2.8 -2.5	66. 2 65. 8		1 63.6	-4.3 -9.0	[-2.0	71.3 72.0 169.3 72.4	-3.7 -5.8	70.6 70.9 67.0 71.2	+0.1 +1.0 -2.3 +1.3	61. 4 62. 2 62. 5		54.6	+5.6			58. 1 58. 8	+0.2 +0.9
Means	38. 3	-0.7	46.0	+6.6	49.6	+1.7	53.4	-2.6	65. 5	+0.3	68.8	-5.0	76. 1	-1.1	71.6	-4.3	70.5	-0.1	62.2	+1.9	54.0	+4.8	42.3	+1.6	58.3	+0.2
Middle Virginia									İ															1	į	
Callaville	35. 5 38. 2		46. 7 43. 8 47. 4 46. 0 44. 2	+7.1	48. 4 50. 3 50. 2 48. 6 48. 6	-0.4 +3.8 +	55. 8 55. 0	-3.7 -3.2 -2.9	65. 0 66. 6 66. 4	+0.1 -0.7 +0.4	70.0 71.1 70.6	-2.7	76.2	-0.7	72.0 71.2	-4.5	71.1 169.9 69.4	+0.5 +2.2 	61.2 60.0 59.6		52.3 52.0 50.1	+4.6	39. 9 39. 4 40. 8 38. 7 39. 0	+1.4	57. 5 57. 3 58. 4 57. 4 56. 6	-0.2 +0.8 +0.6
Culpeper Danville. Fredericksburg Lincoln Lynchburg	34. 0 39. 8 36. 6 33. 6 38. 4	+0.9 +0.3	48.6 44.5 40.4	+6.2 +8.3 +7.7	47. 2	+3.9 +4.1	50. 6 56. 6 53. 6 50. 9 55. 4	-1.6 -2.7	67. 4 66. 0	-1.3 +0.2 +1.2 -1.1		-4.3 -1.8	78.4 77.6 76.6	$ \begin{array}{r} -0.8 \\ +1.2 \\ +3.9 \end{array} $	72.0	-3.9 -2.8	70.6 71.9	+3.8	62. 6 61. 1 60. 9	+1.4 +3.3 +4.1	52.2	$\begin{vmatrix} +4.1 \\ +6.2 \\ +7.6 \end{vmatrix}$		+4.3	54. 8 60. 1 58. 0	+0.1 +0.3 +1.9 +0.6
Mayhurst	34, 4 29, 2 37, 4	+1.0 -0.9 $+1.0$	42.6	+9.0 +8.5 +7.9	46.0 42.8	+3.0 -0.6 +3.5 +2.0	*51.2 45.6	-3.8 -2.6	63.2	+0.9 -0.2	69. 3 66. 8 63. 6 67. 9 ^b 66. 6	-3.9 -3.4 -4.5	76.0 73.6 71.4 74.0 °71.1	$\begin{array}{r} -0.8 \\ +0.6 \\ -2.2 \end{array}$	73. 1 *68. 5 65. 6 69. 2 67. 2	-5.4	67.3 67.8	+3.6 -3.2	58. 2 58. 4	+4.1 +3.4 +6.7 +1.6	53.6 850.4 47.5 51.5 47.4	+5.6 +5.7 +4.9	38.4 33.5	+1.5	58. 2 55. 0 51. 9 56. 6 54. 9	+1.9 +0.7 +1.6 +0.1
Quantico	39. 2	+1.1	48.0	+9.3	49. 9 49. 8		55. 4 55. 6	-2.9 -0.7 -1.4	63. 6 66. 7 65. 7 63. 9	+0.4 +1.9 +0.3	70.3 70.2	-2.0	74.0 74.8	-1.0	70.2 71.0		69.6 71.4	+0.6	59.0 61.0	+1.9	50. 4 *50. 4 52. 3 51. 0	+3.0	37. 6 39. 3 40. 2 39. 0		55. 3 57. 6 58. 3 56. 3	-0.1 +1.1 +1.3
Means Great Valley	36.1	+0.3	44. 5	+7.7	48. 6	+2.4	52. 9	-2.7	64.8	+0.2	68. 9	-3.6	75. 6	-0.5	70.2	-4.2	69.7	+1.2	60.0	+2.8	51.2	+5.1	39.1	+1.8	56. 8	+0.9
Blacksburg Buchanan Burkes Garden Cataw ba Sanatorium Dale Enterprise	37.3 30.8 36.0	-0.7 -0.1	46. 6 39. 2 45. 2	+7.9	49.8	-1.9	55.2 46.8	-0.7	65.6 55.0	-1.8	70.2	-2.2 -3.4 -3.6 -4.4	I 75 61		67. 3 71. 0 61. 4 67. 4 67. 3	-2.4 -4.3 -4.1 -4.7	65. 8 70. 6 60. 8 68. 3 67. 8		50 6		50 4	ı	38.2 33.4 37.6	+1.2 -0.7	53. 6 57. 5 49. 2 55. 3 54. 4	+1.7 +0.6 +0.5 +1.0
Dante Emory Hot Springs Lexington Marion	$\begin{vmatrix} 40.7 \\ 32.4 \\ 32.0 \end{vmatrix}$	-2.0	45. 6 42. 7 40. 6 42. 6 45. 2	+8.9 +7.3	44.2 46.5	+1.9 +2.4 +2.3	56.3 51.6 50.6 51.0 53.6	+0.5 -2.2 +1.2	62. 4 60. 3 60. 6 62. 5 61. 9	+0,9 -0,2 -0,4	66. 9 70. 4 64. 2 66. 8 67. 2	-2.7 -3.9 -2.8	71. 4 74. 0 68. 8 72. 8 *72. 2		67. 0		67.2		58. 2		48. 2 46. 8 45. 0 47. 7 47. 4	+2.3 +4.2	36. 0 36. 8 33. 5 36. 9 37. 4		55. 2 54. 9 51. 7 54. 3 55. 1	+0.8 +0.3 +1.8
Roanoke Saltville Statuton Winchester Woodstock Wytheville	37.8 35.7 35.5 33.6 36.0 35.1	+0.1 +2.4 +2.9	47.6 46.8 41.4 40.0 43.4 43.9	+6.5 +5.9 +10.3	48. 1 45. 2 48. 2 48. 6	+0.7	55. 6 51. 9 49. 6 53. 0	-1.5 -3.7	64. 5 64. 0 65. 0 64. 9		70.1 68.2 68.0 68.4	-2.3 -4.5 -1.7	75. 0 74. 4	+0.4 +1.6 +0.8	70.2	$ \begin{array}{c} -3.9 \\ +1.3 \\ -2.9 \end{array} $	69.4	+2.7 +0.6 +4.2 +2.4 +2.3	60.7 57.4 60.7 60.2	+1.1 +4.6 +3.9	51. 5 48. 6 50. 3 50. 2 51. 4 46. 4	+4.9 +5.3 +6.7	40. 2 36. 4 37. 6 36. 2 39. 2 35. 6	+0.9 +0.2 +3.0	57. 7 56. 8 55. 2 56. 0 56. 7 53. 5	+1.7 +0.9 +2.0 +2.7 +0.6
Means		+1.1	43, 5	1	1	+2.2 +2.1	i	-1.0 -2.1	. !	1			1	-0.2 -0.6	1		67. 5 69. 2	- 1	i i	•	48. 5 51. 0	+4.4 +4.8	36. 7 39. 2	+0.9 +1.5	54. 9 56. 5	+1.2
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For explanation of reference marks, see page 50.

KILLING FROSTS, 1927

Stations	Last in spring	First in autumn	Stations	Last in spring	First in autumn	Stations	Last in spring	First in autumn	Stations	Last in spring	First in autumn			
Tidewater Virginia			Middle Virginia	, .		Middle Virginia—Con.			Great Valley—Con.					
Ashland Cape Henry Christchurch Dahigren Diamond Springs Hopewell Laugley Field Norfolk Onley Richmond Runnymede Wallaceton Warsaw Williamsburg	Mar. 5 Mar, 5 Apr. 12 Mar. 5 Mar. 5 Mar. 5 Mar. 4 Mar. 5 Mar. 11 Mar. 5 Mar. 5 Apr. 11 Apr. 25	Nov. 7 Nov. 7 Nov. 7 Nov. 7 Nov. 7 Nov. 7 Nov. 7 Nov. 7 Nov. 7 Nov. 6 Nov. 7 Nov. 6 Nov. 7	Charlottesville Chatham Clarksville Columbia Cuipeper Danville Fredericksburg Lincoln Lynchburg Massinacac Mayhurst Mineral	Apr. 11 Apr. 24 Apr. 12 Apr. 12 Apr. 25 Mar. 5 Mar. 5 Mar. 5 Apr. 28 Mar. 5 Apr. 28 Apr. 26 Apr. 26	Nov. 7 Nov. 7 Nov. 5 Nov. 6 Nov. 7 Nov. 7 Nov. 7 Nov. 7 Nov. 7 Nov. 7 Nov. 6 Nov. 6	Stnart. Vienna. Washington Great Valley Blacksburg Broadway Buchanan Burkes Garden Catawba Sanatorium	Mar. 11 Apr. 23 Apr. 23 Apr. 24 Mar. 5	Nov. 7 Nov. 7 Nov. 7 Nov. 7 Nov. 7 Nov. 7	Damaseus Dante Emory Hot Springs Lexington Marion Roanoke Saltville Staunton Winchester Woodstock Wytheville	May 2 Apr. 24 May 2 Apr. 24 Apr. 25 Apr. 24 Apr. 25 Apr. 28 Apr. 25	Nov. 6. Oct. 14 Nov. 5 Nov. 7 Nov. 6 Nov. 7 Nov. 5 Nov. 5 Nov. 6			

(WB-2-27-28-1,175)