# U. S. DEPARTMENT OF COMMERCE, WEATHER BUREAU

IN COOPERATION WITH MARYLAND STATE WEATHER SERVICE

# CLIMATOLOGICAL

MARYLAND AND DELAWARE SECTION

15

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BALTIMORE, MD., YEAR 1946 No. 13 Vol. L

#### GENERAL SUMMARY

The year 1946 was the sixth consecutive one with above normal temperature. The mean temperature was 55.8°, 1.9° above normal, which was only 0.1° below the record warm years of 1913 and 1931. All the significant above normal departures occurred in the first three and last three months of the year, and the larger minus departures from the normal occurred in the summer months. The Summer was 1.8° cooler than normal, while the Winter was 3.2° above normal. Both Spring and Autumn were slightly more than 2½° warmer than normal. There were no excessively hot periods during the Summer, the highest temperature recorded being 99°, and temperatures this high occurred at only a few stations in July. The last 52 years have had but six occasions when temperatures in Maryland failed to reach 100° the last year in which it failed to reach 100° being 1928. Temperatures of 100° or higher occur in Delaware fit only about two out of three years due to the influence of the Ocean and Chesapeake Bay.

There were only two excessively cold periods during the vear, the first between Jan-

out of three years due to the influence of the Ocean and Chesapeake Bay.

There were only two excessively cold periods during the year, the first between January 20-24, when the temperature in western counties dipped well below zero. However, the coldest temperature recorded, 18° below zero at Oakland, was 21° above the record low for the location. The second coldest period came early in December when most stations reported temperatures between zero and twenty degrees above zero. The highest mean temperature for the year was 61.7° at Crisfield, Maryland, and the lowest was 48.5° at Sines, Maryland. However, the mean temperature at most stations was in the fifties.

was 45.5° at Sines, Maryland. However, the mean temperature at most standing was in the fifties.

After two years with above normal precipitation, 1944 being only slightly above normal and 1945 being the second wettest year on record, 1946 was a little on the dry side. The average precipitation for the section was 37.57 inches, or 4.39 inches below normal. However, the distribution of precipitation with regard to area and the frequency of occurrences, was favorable throughout the year. The first four months were below normal with the average fall about 1½ inches lower than usual. May was the second wettest on record, being only 0.4 inch lower than the all-time May record of 6.44 inches. During this month thunderstorms were frequent and the rain was well distributed ove most sections and throughout the month. From June through October, the season when crops were developing, near normal rainfall occurred in all months, the five-month period receiving only 0.16 inch less than normal. Total rainfall for the year warfed from 46.12 inches at Lewes, Delaware, to 24.63 inches at Annapolis. The greatest twenty-four rainfall during the year was 5.70 inches at Unionville, Maryland, on June 1-2.

In the fifty-one years of record, only three have had less snow than fell during 1946. The average fall of 14.0 inches was 12.2 inches or 47% below the amount which usually falls over this section. All winter months were deficient in snowfall. The pronounced deficiency occurred in March when an average of 0.1 inch of snow fell, which was 4.7 inches below normal. This equals the lowest record which occurred in only three other years, namely, 1918, 1921, and 1928. Total amounts for the year varied from a total of 2 inch at Crisfield, Maryland to 48.4 inches at Oakland, Md. The greatest twenty-four hour snowfall was 14.0 inches at Frostburg, Maryland, on February 19-20.

On the whole, this was a very good year for crops. The first four months were deficient.

hour snowfall was 14.0 inches at Frostburg, Maryland, on February 19-20.

On the whole, this was a very good year for crops. The first four months were dry, but there was ample soil moisture due to above normal precipitation in November and December of the preceding year. Grains and grasses were generally green and made some growth during the winter. In January the monthly mean temperature was 1.9 above normal and the average precipitation for the section was about 50% of normal. In February the mean temperature was 3.4 above normal and the precipitation about 80% of normal. Warm weather continued through March with the mean temperature, 50.70, being the third highest March on record. As a result of the unusual warmth, especially during March, all vegetation was two to three weeks ahead of the season. Grains and grasses were green and growing well. At the close of March, except in the Allegheny Mountain region, tree fruit buds were swelling and in some cases were blossoming. blossoming.

With April near normal in temperature and with sufficient but below normal rainfall in central and northern counties, vegetation continued two to three weeks ahead of the (Continued at bottom of page 50).

# CONDENSED SUMMARY OF CLIMATOLOGICAL DATA 1946

	т	empera	ture		. *	Precipit	ation		Number	of day	direction
Months	Mean	Departure from the normal	Highest	Lowest	Average	Departure from the normal	Greatest in 24 bours	Snowfall	With 0.01 inch or more of precipitation Clear	Partly cloudy	ing
January. February March April May June July August. September October November December	35. 1 36. 8 50. 7 52. 9 63. 0 69. 7 74. 0 70. 2 68. 0 59. 8 49. 8	+1.9 +3.4 +7.7 +0.6 +0.1 -1.2 -3.3 +0.8 +3.0 +4.4 +4.4	74 76 83 92 91 96 99 95 99 90 82 76	-16 2 12 16 32 33 36 35 30 24 15	1.71 2.42 2.49 1.88 6.40 4.24 4.03 4.55 3.52 2.75 1.43 2.15	-1.61 -0.56 -1.12 -1.61 +2.84 +0.28 -0.34 +0.05 +0.16 -0.31 -1.15 -1.02	1. 68 1.80 1.79 2.99 3.18 5.70 5.11 4.30 4.35 1.88	4.1 6.6 0.1 T. 0.0 0.0 0.0 0.0 T. T. 3.2	9 10 14 15 16 16 12 9 15 10 18 10 18 7 16 7 11	5 5 6 8 9 10 7 6	12 nw. 9 nw. 18. 7 nw. 18 sw. 5 s. 8 sw. 5 ne. 7 ne. 8 nw. 11 nw.

#### KILLING FROSTS 1946

	Stations	Last in Spring	First in Autumn	Stations	Last in Spring	First in Autumn
	Maryland			Maryland (cont'd.)		
	Aberdeen	Apr. 13	Nov. 16	Millington	Apr. 18	Nov. 13
-	Annapolis	Apr. 11	Nov. 16	Oakland	Apr. 28	Sept. 15
	Baltimore	Apr. 28	Nov. 13	Oxford		Nov. 16
i	Baltimore (Airport)		Nov. 13	Picardy	Apr. 28	Oct. 14
1	Bell	Apr. 28	Nov. 13	Prettyboy Dam	Apr. 28	Nov. 13
	Blackwater	Apr. 18	Nov. 13	Ridgely	Apr. 18	Nov. 13
1	Cambridge	Apr. 18	Nov. 16	Rock Hall	Apr. 13	Nov. 16
	Charlotte Hall	Apr. 28	Nov. 13	Salisbury	Apr. 18	Nov. 14
1	Cheltenham	Apr. 28	Nov. 13	Sines	Apr. 28	Sept. 15
1	Chestertown		Nov. 16	Snow Hill	Apr. 18	Nov. 14
1	Chewsville	Apr. 28	Oct. 14	Solomons	Mar. 12	Dec. 2
ı	Coleman		Nov. 16	State Sanatorium	Apr. 28	Nov. 16
1	College Park	Apr. 28	Nov. 13	Takoma Park No. 1	Apr. 28	Nov. 13
.	Conowingo Dam		Nov. 13	Takoma Park No. 2	Apr. 28	Nov. 13
- 1	·Crisfield	Mar. 12	Nov. 24	Tonoloway	Apr. 28	Oct. 14
۱	Cumberland	Apr. 21	Oct. 14	Towson	Apr. 28	Nov. 13
١	Easton	Apr. 18	Nov. 13	Trappe	Apr. 18	Nov. 13
٠	Elkton	Apr. 28	Nov. 13	Unionville	Apr. 28	Nov. 13
١	Emmitsburg	Apr. 28	Nov. 16	Western Port		Oct. 14
١	·Fallston	Apr. 28	Nov. 13	Westminster	Apr. 28	Nov. 13
· )	Ferry Landing	Apr. 13	Nov. 13	Woodstock		Nov. 13
١	Fort George G. Meade.	Apr. 28	Nov. 13	Washington, D. C	Mar. 12	Nov. 14
j	Frederick		Nov. 13	Delaware		
. 1	Frostburg		Oct. 13	Bridgeville	Apr. 18	Nov. 13
. [	.Germantown		Nov. 13	Delaware City	Apr. 11	Nov. 13
ı	Great Falls		Nov. 14	Dover	Apr. 11	Nov. 13
.	Hancock	Apr. 28	Oct. 14	Georgetown	Apr. 18	Nov. 13
ı	Huntingtown	Apr. 11	Nov. 13	Lewes	Apr. 18	Nov. 14
,	Keedysville	Apr. 28	Nov. 13	Millsboro	Apr. 18	Nov. 13
ı, İ	La Plata	Apr. 28	Nov. 13	Newark		Nov. 13
ı	Maryland Line	Apr. 28	Nov. 13	Wilmington	Apr. 28	Nov. 15

#### COMPARATIVE DATA FOR THE YEAR

FOR DELAWARE

FOR MARYLAND

	Ter	nperat	ure	Pre	cipita	tion	.Te	mpera	ture	Pre	cipita	tion
Year	Mean	Highest	Lowest	Average	Average	No. of days with .01 in. or more	Mean	Highest	Lowest	Average	Average	No. of days with .01 in. or more
1895 1896 1897 1898 1897 1908 1909 1900 1900 1900 1900 1900 1907 1908 1908 1909 1907 1910 1911 1911 1911 1911 1911	54.0 56.0 58.5 56.0 58.3 56.3 56.3 56.3 56.3 56.3 56.3 56.3 56	1002 1003 1004 1005 1006 1006 1006 1006 1007 1007 1007 1007	-18	84 67 84 86 89 44 15 86 19 14 17 8 18 18 18 18 18 18 18 18 18 18 18 18 1	40, 7 26, 5 8 37, 1 1 188, 6 8 34, 2 7 36, 5 5 34, 4 34, 4 35, 9 36, 5 36, 5 37, 1 36, 5 36, 5 37, 1 36, 5 38, 6 38, 6 3	91 19 19 19 19 19 19 19 19 19 19 19 19 1	53.8 0 54.6 6 6 55.4 6 6 55.4 7 55.8 7 2 6 6 6 8 8 55.1 5 55.7 2 6 56.8 1 56.8 2 55.7 2 55.5 4 5 56.1 2 56.8 2 56.	101   108   97   98   100   101   101   100   101	-4 0 8 0 9 14 3 1 6 1 1 10 6 5 5 8 3 3 1 6 4 12 0 5 1 8 3 7 1 0 1 4 1 6 1 1 5 2 1 6 3 12 4 1 5 7 7 7 7 1 9 7 7 7 1 9 7 7 7 1 9 7 7 7 1 9 7 7 7 1 9 7 7 7 1 9 7 7 7 7	37, 182 48, 48, 48, 48, 48, 48, 48, 48, 48, 48,	19. 9 19. 1 14. 5 10. 22. 5 1	95 96 96 111 108 96 81 99 97 96 106 102 110 99 90 98 103 107 108 108 108 109 109 109 109 109 109 109 109 109 109
1946 <b>Period</b>	55.7 58.9	109	-16 <b>40</b>	37.26 41.71	15.1 26.8	113 - <b>108</b>	56.1 56.0	96 110	. 3 15	39. 58 48. 81	6, 4 18, 2	111 106

## Climatological Data for the Year 1946

· · · · · · · · · · · · · · · · · · ·			Climatological Data for the Year 1946  Temperature, degrees Fahrenheit Precipitation									<u> </u>	·	1 -						
	" A MY",	1. 21	\	GHIDE	Taba10	, degrees	Lanie	III GIV	, -	· · · ·		CIPIUM		1 7	10	'n	5	8ky	Þ	tion
Stations	Counties	Elevation, feet	gth of record, years	Annual mean	Highest	93	Lowest		Length of record years	al for the year	Greatest monthly	Month	st monthly	Month	al snowfall	Number of rai	Number of clear days	Number of partly cloudy days	Number of cloudy days	Prevailing direction of wind
· · · ·		Ele	Length	Αn	Hig	Date	3	Date	Lei	Total	ere G	MS MS	Least	₩ W	Total	N	Nu	Nu	N	F.
Maryland																				
Cheltenham Chestertown Chewsville Coleman \$ College Park	Prince Georges  Kent  Washington  Kent  Prince Georges	61 4 14 16 151 120 5 13 167 280 35 630 80 95	28 81 76 12 26 6 6 52 23 46 41 49 47 60	54.6 57.0 58.4 57.6 56.2 55.7 57.1 57.2 56.1 57.8 57.8 56.6	93 96 95 95 97 95 90 94 96 96 98 98	July 7 July 20 July 20 July 20 July 20 July 25 Sept. 9 July 21 July 21 July 8 July 8 July 19 July 19 July 20 July 20	9 13 15 14 - 4 - 10 - 6 5 9 - 3 8*	Jan. 28 Jan. 23 Jan. 23 Jan. 23 Jan. 28 Jan. 29† Jan. 23 Jan. 28 Jan. 28 Jan. 28 Jan. 28 Jan. 28	28 73 76 12 26 6 6 52 25 46 41 49 49	35. 59 24. 63 37. 65 34. 77 34. 88 34. 45 38. 07 40. 65 38. 40 35. 28 33. 10 44. 38 33. 74	6.68 5.17 6.39 6.36 6.97 5.30 7.98 7.42 5.32 5.82 10.73 7.20	May May July May July June May Aug. May May May	0. 99 0. 83 1. 24 1. 15 1. 56 1. 45 1. 55 1. 65 1. 96 1. 30	Nov. Nov. Nov. Nov. Jan. Feb. Jan. Nov. Nov. Apr. Jan. Nov.	8. 7 8. 3 17. 0 12. 7 18. 8 9. 0 12. 0 13. 7 15. 3 11. 5*	98 115 105 115 115 116 116 116 109 104 112	133 128 144 148 156 186 176 136 171 142 186 153	111 103 97 79 98  75  93 107 84 132 75 109	121 134 124 138 116 104 96 122 110 91 104	nw. 8. S. nw. s. sw. nw. n. nw. nw. nw.
Conowingo Dam Crisfield Cumberland Easton Edgemont Elkton Emmitsburg	Harford Somerset Allegany Talbot Washington Cecil Frederick	40 5 623 35 920 28 720	11 27 64 56 20 79	54.0 61.7 54.7 56.8	92 94 99 91 96	June 8† July 25 July 19† July 8 July 20	6 15 - 5 7	Jan. 23 Jan. 23 Jan. 28 Jan. 28 Jan. 23 Jan. 23	11 27 76 56 8 20 80	40. 28 39. 05 31. 93 39. 14 38. 86 39. 82	7. 32 6. 14 5.00 7. 77 8. 46 7. 72 8. 45	May May June June Aug. May May	1.13 1.97 0.46 1.81 0.70 1.18 0.98	Nov. Dec. Apr. Nov. Nov. Nov. Nov.	4.0 0.5* 21.2 7.2 18.0 2.7* 20.2*	113 94 97 116 95 99	181 189 196 199	84 70 76 71 59	100 106 93 95	s. n. nw.
Frostburg Germantown Great Falls Hancock (River) Huntingtown Keedysville La Plata Luke Millington Oakland Oxford Perry Point Picardy \$	Harford Calvert Anne Arundel Frederick do Allegany Montgomery do Calvert Washington Charles Allegany Kent Garrett Talbot Cecil Allegany Baltimore	460 120 120 1297 371 2,005 460 200 428 160 420 190 950 2,420 10 40 1,030	77 30 5 77 3 42 6 50 11 48 82 49 48 10	55. 2 57. 6 58. 8 54. 6 51. 1 55. 5 56. 6 57. 0 56. 2 56. 4  56. 6 49. 4 58. 1	90 94 99 98 97 96 97 95 94 97 96 99 90	July 207 June 181 July 8 July 20 July 20 July 19 July 20 June 17 July 8 July 21 July 21 July 20 July 20 July 19 July 20 July 20 July 19 July 20 July 20 July 19 July 20 July 20 July 20 July 20	6 4 6 8 5 0	Jan. 23 Jan. 28 Jan. 28 Jan. 28 Jan. 28 Jan. 23 Jan. 23 Jan. 25 Jan. 25 Jan. 23	.77 .80 .5 .75 .85 .65 .83 .71 .148 .82 .948 .49 .10 .20 .16	37, 73 40, 92 39, 80 38, 12 35, 73 36, 17 37, 08 37, 56 33, 77 40, 59 38, 64 35, 17 40, 59 38, 13 38, 13 31, 32 41, 91 33, 65	7. 43 9. 63 5. 98 7. 22 5. 94 8. 34 5. 49 6. 44 6. 39 6. 28 5. 86 5. 86 7. 19 7. 14	May May May May May May May May May Aug Aug May June May June May June May June May June	0.91 1.42 1.27 0.86 0.84 0.93 0.93 1.16 1.45 0.69 1.40 0.39 1.40 1.46 1.21 0.95	Nov. Nov. Apr. Apr. Nov. Nov. Apr. Apr. Nov. Apr. Jan. Apr. Nov. Nov. Nov. Nov. Nov. Nov. Nov. Nov	9.3 15.5 12.0 12.1 14.2 36.7 17.8 15.0 13.5 21.9 16.5 43.4 5.0 2.6 2.2 13.5*	110 116 112 129 108 145 107 107 113 114 112 101 94 105 168 120 117 98	143 169 169 124 125 151 174 	136 86 95 144 125 102 105  79 116 85  72 130 87 67 79	86 110 101 97 115 112 86 105 96 96 105 113 84 118 89	nw. sw. sw. sw. nw. s. ne.  sw.
Ridgely Rock Hall Salisbury Sines (Deep Creek) Snow Hill Solomons State Sanatorium Takoma Park No. 1 Takoma Park No. 2 Tonoloway Tonowon Trappe Unionville Western Port Westminster Williamsport	Caroline. Kent Wicomico Garrett Worcester Calvert Frederick Montgomerydo. Washington Baltimore Talbot Frederick Allegany Carroll Washington Baltimore	67 20 20 20 25 25 25 230 550 475 55 450 1,000 770 360 415	54 33 41 19 31 55 38 48 2 36  4 7	56. 7 56. 7 58. 8 48. 5 57. 0 59. 6 57. 3 56. 1 53. 0 53. 4 63. 5 54. 5	93 95 95 96 96 95 89 97 96 96 96 98 97 98	June 18† June 18 July 25 July 19 July 20 Sept. 9 July 20 Sept. 9 July 20 July 20 Sept. 9 July 20	3 6 7 -10 6 15 6 8 2 - 9 	Jan. 28 Jan. 28 Jan. 28 Jan. 23 Jan. 23 Jan. 23 Jan. 28 Jan. 28 Jan. 28 Jan. 28 Jan. 23 Jan. 23 Jan. 23 Jan. 23 Jan. 23	56 33 41 22 31 55 38 48 2 23 35 7 53 37 8 77	34. 41 40. 84 37. 15 39. 15 44. 78 44. 50 37. 08 36. 12 34. 35 40. 10 40. 25 31. 97 42. 37 33. 89 38. 47	5. 43 8. 78 6. 68 7. 22 6. 61 6. 57 7. 52 6. 70 5. 27 6. 04 7. 28 5. 67 7. 49 6. 57	Aug. May May June May May May May May May June June June June June	1. 52 1. 52 1. 52 1. 37 1. 96 2. 59 1. 33 0. 73 1. 27 0. 90 1. 22  0. 75 1. 02 0. 64 1. 16	Jan. Dec. June July Dec. Jan. Nov. Nov. Nov. Apr. Nov. Apr. Nov. Apr. Nov. Apr. Nov.	8.7* 11.8 8.0* 38.4 7.5 12.0 21.0 17.5 19.3 20.0 13.6 16.5 15.5 16.1	107	186 172 197 126 158 180 144 159 152 195 156 	64 83 59 118 79 89 128 105 104 82 99 103	115 110 109 126 128 96 93 101 109 88 110	sw. nw. sw. nw. sw. nw.
District of Columbia Washington (U.S.W.B.)		72	76	58.6	96	July 8	13	Jan. 28	76	34. 75	6.74	Мау	1, 05	Nov.	11.5	111	111	97	157	s.
Delaware City	New Castledododo	45 15 34 17 20 110 110 42 260	55 60 59 2 54  32	56. 2 56. 4 57. 0 55. 5 58. 0 54. 5	94 92 93 92 95 96	June 18† July 7† July 20† June 8 June 9† July 20 July 7†	4 9 11 3 3 8	Jan. 28 Jan. 20† Jan. 28 Jan. 28 Jan. 28 Jan. 23 Jan. 23	56 60 59 2 54 15 84 53 35	36, 45 38, 42 34, 00 46, 12 45, 32 35, 73 39, 20 43, 09	8. 26 8. 21 5. 17 6. 94 6. 91 6. 10 5. 97 7. 32 7. 12	July May July July July May July May May May May	1.58 1.59 1.54 1.86 2.25 1.41 1.41 1.52 1.38	Nov. Jan. Nov. Oct. Dec. Jan. Jan. Nov.	10. 1 2. 0* 11. 1 7. 4 8. 8 5. 2 5. 2* 4. 5 3. 5	118 106 122 127 101  102 109 108	211 194 204 193 210 201 194 192	57 61 62 74 54 54 59 56	97 110 99 98 101 102 112 117	nw. nw. s. s. nw. nw.
For Maryland and Dis- trict of Columbia	-		.c	55. 7	. 99	July 8†	-16	Jan. 23		37. 26	10.73	Мау	0. 39	Nov.	15. 1	113	167	94	104	nw.
For Delaware			.,	56. 1	. 96	July 20	3	Jan. 28		39. 58	8. 26	July	1. 38	Nov.	6.4	111	199	61	105	nw.
For entire section				55.,8	99	July 9†	-16	Jan. 23		37. 57	10. 73	May	0. 39	Nov.	14.0	112	169	91	105	nw.

† Also on other dates. Post Office addresses of these stations are as follows: Of Bell, Glenndale; of Blackwater, Cambridge; of Charlotte Hall, Mechanicsville; of Coleman, Worton; of Ferry Landing, Owings: of Great Falls, Bethesda; of Picardy, Paw Paw, W. Va.; of Pretty boy Dam, Parkton; of Sines, Oakland; of Tonoloway, Hancock. Municipal Bldg. Porter Reservoir. \*Determined from surrounding stations.

### (Continued from preceding page)

(Continued from preceding page)
season. Wheat, barley, and rye were beginning to head in eastern and southern counties
near the end of the month. Fruit blossoms were damaged some by the freeze and frost
on the 11-13, and were more heavily damaged on the 18th in the interior Eastern Shore
sections. In Western Maryland freezing temperatures damaged fruit blossoms again on
the 28th.
While May was wet and windy with normal temperature, the rainfall was well distributed throughout the mouth and over the section. Vegetation and crops damaged by the
frost and freezing weather improved considerably. Planting of truck crops and gardens
was well advanced in all sections by the end of the month. Wheat, rye, and barley were
heading or headed as far west as Washington County, and had a nice green color in

western counties. Oats were heading and early planted corn was up to a good stand. Tree fruits were developing.

June with normal rainfall and slightly below normal temperatures saw the continuation of very good crop development. At the close of the mouth, wheat and rye were ripening or ripe except in the mountain region. Barley was being threshed and oats were ripening or ripened over most central and southern counties. In northern counties oats were heading. Crops, grasses and pastures were good to excellent. Potatoes were growing well and tomatoes were developing fruit. Early tree fruits were ripening and were being picked by the end of the month.

Near normal rainfall and slightly below normal temperatures in July produced very (Continued at bottom of next page).

(Continued at bottom of next page).

Monthly and Annual Precipitation for the Year 1946 with Departures from the Normal  January February March April May June July August September October November December Annual																										
professional section of the	Jar	ıuary ·	Feb	February March			A	pril ·	M	lay	Jı	me	·J	uly	Áu	gust	Sept	ember	Oct	ober	Nov	ember	December		Anı	nual
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
Maryland Aberdeen Annapolis Baltimore (U.S.W.B.) Baltimore (Airport) Bell. Bell. Beltsville Blackwater Cambridge Charlotte Hall Cheltenham Chestertown Chewsville Clear Spring Coleman College Park Conowingo Dam Crisfield Cumberland Easton Edgemont Elkton Emmitsburg Fallston	1. 22 1. 24 1. 66 1. 73 1. 86 1. 46 1. 96 1. 48 1. 98 1. 48 2. 39 1. 48 1. 22 1. 88 1. 22 1. 48	3 -1.91 3 -2.16 5 -1.84 1 -1.71 1 -1.73 2 -2.03 5 -1.79 5 -1.75 6 -1.75 6 -1.75 6 -1.83 8 -1.83 8 -1.83 8 -1.83 8 -1.44 1 -	*2. 59 1.76 8. 38 2. 71 1. 57 1. 56 2. 24 2. 88 2. 82 1. 78 2. 97 3. 20 2. 59 1. 86 2. 26 2. 26 1. 59 1. 59 1. 50 1.	-0.18 -1.51 -0.06 -0.68 +0.05 -1.84 -0.97 +0.07 -0.21 -0.48 +0.12 -0.52 -0.52 -0.52 -0.84 -0.84 -0.84	2.48 1.06 2.23 1.66 2.02 3.07 1.77 2.77 1.74 2.60 2.62 2.62 2.62 3.41 1.99	-0. 84 -2.73 -1. 82 -1. 48 -1. 90 -1. 27 -1. 49 -0. 84 -1. 33 -1. 27 -1. 108 -1. 65 -1. 65 -1. 69 -0. 60	1. 954 1. 554 1. 559 1. 87 1. 75 2. 82 2. 82 2. 25 2. 25 2. 28 2. 35 2. 35 1. 80 1. 39 3. 27 0. 46 2. 92 0. 74 1. 96 0. 88	-1. 47 -2. 15 -1. 78 -1. 75 -1. 97 -1. 13 -1. 16 -1. 26 -2. 35 -1. 16 -2. 02 -2. 42 -0. 64 -2. 42 -1. 74 -1. 75 -1. 75 -1. 76 -1. 76	6. 68 5. 17 6. 39 6. 54 6. 97 6. 87 6. 69 6. 69 5. 82 10. 73 7. 20 6. 14 4. 68 6. 20 5. 99 7. 72 8. 45 7. 43	+3. 87 +1. 19 +2. 85 +2. 00 +3. 30 +3. 16 +1. 71 +2. 39 +3. 18 +2. 76 +1. 30 +2. 85 +2. 43 +3. 43	2.93 2.12 2.65 2.12 2.13 2.17 5.30 1.36 5.54 4.67 5.70 4.90 6.49 4.65	-0.64 -1.93 -0.28 -1.16 -1.79 -1.79 -1.69 -2.63 +1.12 -0.75 -1.28 +0.19 +0.26 +1.14 +4.02 +0.30 +1.85	4. 98 1. 57 5 6. 36 8. 41 1 55. 31 5 5. 49 8 3. 58 4. 17 5 5. 32 2. 10 5 . 34 5 . 34 5 . 36 5 . 36 6 . 30 6	+0.59 -2.92 +0.78 +1.72 -0.96 -1.83 -0.40 -1.38 -1.62 -1.62 -1.66 -0.08 -2.14 -1.17 -0.94 +1.27 +1.27	2. 76 3. 41 4. 02 4. 09 3. 40 4. 11 8. 19 5. 02 6. 58 7. 42 4. 51 4. 67 3. 69 4. 60 4. 52 8. 74 4. 15	-1. 96 -1. 14 -0. 35 -0. 28 -1. 13 -1. 13 +2. 64 +0. 30 +0. 97 -0. 10 -0. 58 +0. 03 -1. 22 +1. 08 -0. 77 -1. 47 -2. 08	4. 25 2. 51 3. 2. 54 4. 59 3. 29 4. 32 3. 29 3. 54 4. 67 4. 82 3. 69 3. 69 3. 69 4. 17 2. 86 6. 4. 81	+0.95 -1.31 +0.61 -0.83 +0.69 -0.47 +0.27 +1.57 +0.27 +0.58 +0.65 +0.65 -0.99 -0.37 +2.60 +0.38	2.45 1.67 2.59 2.51 8.20 2.86 1.94 1.72 3.05 2.99 2.69 2.75 2.88 8.214 3.38 2.38 2.38 3.26 3.26 3.26 3.26 3.26 3.26 3.26 3.26	-0. 19 -2. 21 -0. 80 -0. 38 -0. 08 -0. 18 +0. 01 -0. 15 -0. 29 -0. 23 -0. 10 -0. 34 -0. 70 +0. 83 -1. 17 -0. 10 -0. 08 -1. 14	0.99 0.83 1.24 1.15 1.24 1.21 1.55 1.55 0.82 1.30 1.18 2.60 0.58 1.30 1.18 0.98	-1. 72 -1. 96 -1. 32 -1. 41 -1. 73 -0. 86 -1. 14 -1. 22 -1. 34 -1. 83 -0. 07 -1. 55 -0. 81 -1. 88 -2. 29 -2. 29	2.85 1.77 1.97 1.54 1.94 2.78 2.66 2.18 1.93 2.00 2.05 2.24 1.97 1.98 2.37 2.06 1.98 2.19 2.06 2.19 2.06	-0. 26 -1.58 -1.40 -1.83 -0. 82 -0. 12 -0. 12 -1. 15 -1. 27 -0. 69 -1. 11 -1.20 -0. 52 -0. 70 -0. 94 -1. 443	35. 59 24, 63 37. 65 34. 77 34. 88 34. 45 38. 40 35. 28 33. 10 44. 38 34. 74 44. 38 34. 74 39. 05 31. 93 39. 14 38. 86 39. 82	-4. 26 -20. 41 -4. 91 -7. 79 -8. 07 -8. 07 -1. 5. 54 -0. 08 -4. 90 -7. 34 -4. 37 -5. 07 -2. 70 -2. 70 -2. 70 -4. 98 -7. 67
Fort George G. Meade Frederick (Airport) Frostburg Frostburg Germantown Great Falls Hancock (River) Huntingtown Keedysville La Plata Luke Maryland Line Millington Oakland Ocean City Oxford Perry Point Picardy	1. 30 1. 46 2. 18 1. 66 2. 5 1. 41 2. 10 1. 5 1. 11 2. 00 2. 3 2. 18 1. 5 1. 15 1. 1	5 -1. 68 5 -1. 18 3 -1. 18 3 -1. 18 3 -1. 18 5 -1. 86 5 -1. 66 6 -1. 66 6 -1. 66 7 -1. 63 8 -1. 63 8 -1. 68	2. 441 2. 17 1. 73 3. 2. 85 2. 26 3. 09 1. 71 6. 2. 63 6. 2. 22 2. 345 2. 245 1. 69 2. 345 2. 45 2. 45	-0.73 +0.25 +0.40 -0.46 -0.12 +0.03 -0.56 -0.56 +0.47	1.96 2.40 1.91 3.12 2.28 2.01 2.87 2.182 2.30 1.82 2.73 3.72 2.83 1.51 2.41 3.25	-1. 33 -1. 01 -0. 58 -1. 22 -0. 31 -1. 127 -1. 109 -0. 87 -0. 31 -0. 31	1.50 0.86 0.84 1.10 0.87 1.69 2.49 0.69 2.90 0.97 2.98 1.78 4.15 2.48 1.80	-2. 69 -2. 70 -1. 50 -2. 52 -2. 52 -1. 23 -2. 58 -1. 11	5. 96 7. 22 5. 94 8. 84 9. 34  5. 49 5. 95 6. 02 5. 86 4. 46 8. 91 5. 98 7. 15	+3.72 +1.90 +5.95 +2.11 +2.58 +1.96 +4.77 +2.58 +0.06	25.55.54.98.88.4.99.55.5.88.4.99.55.69.4.99.55.69.4.99.55.69.4.99.55.69.4.99.59.4.99.59.4.49.59.59.4.49.59.59.4.49.59.59.59.4.49.59.59.59.4.49.59.59.59.59.59.59.59.59.59.59.59.59.59	+1. 11 +1. 14 -1. 60 +0. 12 +0. 84 -1. 69 -2. 51 -0. 62 -1. 43 +1. 14 +0. 63	5. 92 5. 92 2. 79 1. 60 8. 42 4. 63 2. 69 2. 38 8. 49 2. 28 3. 65 0. 98 2. 10 1. 40 3. 01 7. 68 1. 25	-0. 96 -2. 18 +0. 52 -0. 82 -1. 13 -1. 47 -1. 09 -2. 56 -3. 30	4.28 6.20 5.66 8.47 4.66 4.16 5.60 8.14 4.04 8.12 4.04 8.12	+2. 39 -0. 63 +0. 08 +2. 12 +1. 49 +2. 11 +0. 97 -0. 79 -1. 81 -0. 24 -0. 20	5. 49 5. 49 3. 80 2. 88 2. 86 2. 86 2. 79 3. 80 4. 10 1. 71 5. 87 2. 25 3. 75 2. 45	+0.06 +0.11 -1.19 -0.04 +0.11 +0.40 +1.08 +0.39 -1.36 -0.08 -0.21 -0.34	3. 24 2. 98 2. 81 3. 62 2. 74 2. 52 4. 29 3. 67 2. 69 2. 90 2. 54 2. 42 8. 00	-0. 02 +0. 87 -0. 42 +1. 05 +0. 98 -0. 16 -0. 22 -0. 60 -0. 82 -1. 41 +0. 42	1. 27 1. 02 1. 05 0. 93 1. 169 0. 78 1. 56 1. 55 1. 40 0. 39 1. 60 1. 87	-1. 61 -1. 54 -1. 59 -1. 55 -1. 15 -1. 15 -1. 36 -1. 36 -2. 08 -1. 11 -0. 97 -0. 81 -1. 25	1. 74 1. 94 1. 64 2. 17 1. 91 2. 29 2. 06 2. 57 2. 01 2. 40 1. 60 8. 62 1. 99 1. 97 2. 00	-1. 12 -0. 74 -0. 97 -0. 36 -0. 59 -0. 79 -0. 43 -0. 88 -1. 06 -0. 06 -0. 72 -0. 37	39. 80 38. 12 35. 73 36. 17 37. 56 37. 56 38. 64 35. 17 40. 59 27. 76 33. 28 38. 13	-2.54 -5.78 -1.79 -2.55 -4.61 -2.93 -3.30 -10.24 -8.77
Ridgely Rock Hall Salisbury Sines (Deep Creek) Snow Hill Solomons State Sanatorium Takoma Park No. 1 Takoma Park No. 2 Tonoloway Towson Trappe Unionville Western Port Westminster Williamsport Woodstock District of Columbia Washington (U. S. W. B.)	1. 55 1. 55 1. 89 2. 25 2. 80 1. 33 1. 55 1. 77 1. 41 2. 27 1. 41 2. 27 1. 77 1. 78	2 -1.86 3 -1.98 9 -1.79 7 -1.47 0 -0.97 3 -1.72 3 -1.77 3 -1.77 3 -1.77 1 -1.33 1 -1.78 1 -0.51 7 -1.42 4 -1.54	5 2.04 3.14 3.06 3.06 3.06 3.03 3.12 3.13 3.13 3.12 3.12 3.13 4.1.70 2.80 2.81 1.70 2.80 3.03 3.12 3.03 3.12 3.06 3.	-1. 06 -0. 01 -1. 07 -0. 38 -0. 62 -1. 12 -0. 25 +0. 11 -0. 37 +0. 46 -0. 88 +0. 60 -0. 43	2.06 2.68 2.71 3.35 3.12 2.85 3.36 2.11 2.11 7.76 2.41 *1.76 2.50 2.13 2.71	-1. 61 -0. 95 -1. 25 -1. 05 -1. 02 -0. 47 -0. 35 -1. 41 +0.02 -1. 32 -1. 42 -1. 42 -1. 42	2. 80 2. 28 8. 32 2. 13 4. 43 8. 12 0. 96 1. 68 0. 90 1. 50 2. 55 0. 72 1. 19 1. 02 1. 30	0 -0.58 8 -1.31 1 -0.12 1 -2.27 8 -0.05 6 -2.97 8 -1.81 0 -2.70 0 -2.48 0 -1.94 2 -2.55 0 -2.01 1 -39	4. 54 8. 78 6. 68 4. 46 6. 61 7. 52 6. 58 6. 70 7. 60 5. 27 5. 64 *5. 70 7. 60 6. 53 4. 85 6. 57	+0.99 +5.66 +3.21 +0.08 +3.58 +3.58 +3.58 +2.19 	4.70 1.37 7.22 3.54 4.89 4.19 4.98 4.19 5.22 7.28 7.28 5.49 5.86 4.30 2.39	+0.92 -0.71 -2.36 +2.53 +0.07 +1.51 +0.61 -0.82 +0.34 +1.69 +3.54 -1.74	2. 74 4. 36 3. 34 1. 96 4. 12 4. 16 4. 34 5. 18 4. 70 2. 10 4. 54 3. 01 5. 54 6. 77 3. 23 5. 24 3. 82	-1.89 -0.42 -0.95 -2.51 -0.66 -0.46 +0.81 +0.85 -1.25 +0.69 -1.27 -1.25 +1.31 -0.89	5. 43 5. 99 4. 73 3. 11 4. 12 8. 82 6. 98 3. 64 5. 24 5. 01 6. 04 4. 07 4. 04 3. 40 6. 40 4. 16 4. 46	+0. 69 +1. 20 -0. 61 -1. 21 -0. 69 -0. 16 +2. 59 -0. 63 -1. 77 +1. 29 -0. 27 +1. 73 -0. 29 +0. 17	3. 17 3. 88 2. 96 2. 99 2. 73 6. 33 5. 25 2. 89 2. 73 4. 65 3. 07 4. 07 2. 38 3. 90 4. 28 3. 48 3. 95	-0. 85 +0.22 -0. 93 -0. 16 -1. 28 +8. 39 +1. 40 -0. 78 	2.11. 2.39 2.95 2.78 3.71. 2.80 2.78 4.43 2.59 2.76 2.67 2.98 2.75 2.88 2.46 2.50	-0.92 -0.60 -0.24 -0.82 +0.69 -0.39 -0.41  +0.82 -0.60  +0.62 -0.66 -0.67 -0.84	1.57 1.54 2.76 2.13 4.06 2.32 0.73 1.23 1.27 1.06 0.75 1.16 1.16	-1. 17 -1. 23 +0.01 -0. 96 +1. 30 +0. 15 -2. 13 -1. 24 -1. 62 -1. 83 -1. 62 -1. 32	1. 98 1. 52 2. 28 3. 69 2. 59 2. 170 2. 11 1. 93 1. 93 2. 19 2. 12 2. 01 2. 01 2. 01 2. 01 2. 02	-1. 15 -1. 58 -0. 94 +0. 26 -0. 74 +0. 10 -1. 53 -1. 20 -1. 41 -1. 03 -1. 17 -1. 07 -1. 30	34.61 40.84 37.15 39.15 44.72 42.78 44.50 37.08 36.12 34.35 40.10  40.25 31.97 42.37 38.89 38.47	-7.9'-1.7'-7.0'-7.9'+0.4'+4.7'-4.0.2'-4.6'-2.5'2.5'2.6'-7.4'
Delaware Bridgeville Delaware City Dover Georgetown Lewes Millsboro. Newark (Pumping Station) Newark (University Farm) Wilm'n. (Municipal Bldg.) Wilm'n. (Porter Reservoir) For Maryland and District of Columbia.  For Delaware For entire section	1. 74 1. 59 2. 28 2. 30 2. 30 1. 41 1. 72 1. 76 1. 65 2. 01	1 -1.81 9 -1.46 3 -1.18 7 -0.87 -1.99 2 -1.81 3 -1.81 7 -1.62 -1.50	2. 16 2.09 2.25 2. 64 3. 16 2.06 2.08 2.35 1.95 2.48 2.30	-1. 16 -0. 66 -1. 00 -0. 41 -1. 03 -1. 01 -0. 87 -1. 12 -0. 51 -0. 94	1.99 2.49 3.58 4.58 4.30 2.37 2.39 3.29 2.40 3.11	-1. 89 -0. 83 -0. 66 +0. 18 -1. 37 -1. 42 -0. 55 -1. 18 -0. 74	2. 72 1. 92 2. 33 2. 91 2. 74 1. 99 2. 09 1. 83 1. 88 1. 82 2. 27	$ \begin{array}{r} -0.77 \\ -1.51 \\ -1.80 \end{array} $	4.95 8.21 5.06 5.63 4.90 6.10 5.74 7.32 7.12 6.44 6.11	+1.37 +4.90 +1.48  +1.43 +2.26 +1.90 +3.83 +3.65 +2.87 +2.64	3. 06 3. 80 2. 95 5. 81 3. 81 4. 15 3. 94 5. 15 6. 42 4. 23 4. 34	-0. 53 -0. 08 -0. 71  +0. 02 +0. 15 -0. 06 +1. 18 +2. 47 +0. 25 +0. 50	8.26 6.18 5.17 6.94 6.91 5.96 5.97 4.82 4.76 3.71 6.11	+3.22 +2.46 +0.48  +2.15 +1.21 +1.22 +0.03 -0.17 -0.61 +1.34	8. 98 3. 45 2. 95 4. 34 5. 33 3. 53 8. 57 4. 34 6. 26 4. 61 4. 19	-0.67 -0.98 -1.92 -1.42 -1.38 -0.66 +1.08 +0.17 -0.67	2. 28 3. 07 2. 83 3. 04 3. 01 8. 49 2. 75 3. 91 3. 61 2. 91	-1. 18 -0. 48 -1. 44 -0. 19 -0. 76 -0. 77 +0. 21 +0. 25 -0. 53	1. 60 •2. 15 1. 83 1. 94 1. 86 3. 04 2. 29 2. 12 2. 11 2. 85 2. 10	-1, 51 -0, 66 -1, 11 -0, 48 -1, 00 -1, 03 -0, 96 -0, 19 -1, 03	1.53 1.75 1.54 2.23 3.86 2.89 1.59 1.61 1.52 1.38 2.02	-1. 10 -0. 79 -1. 55  0. 00 -1. 35 -1. 33 -1. 49 -1. 67 -1. 20 -0. 74	2. 23 1. 72 1. 78 2. 82 2. 17 2. 25 2. 17 1. 88 2. 29 2. 25 2. 16 2. 11	-0.92 -1.57 -1.54  -1.37 -1.66 -1.19 -0.98	36.45 88.42 34.00 46.12 45.32 35.78 39.20 43.09 37.26 89.58	-6. 98 -1. 61 -10. 40 -0. 88 -9. 02 -5. 16 -1. 88 -4. 41

(Continued from preceding page)

Italics are interpolated.

good crop development during the month. Harvesting of grains was in full swing. Gardens, grasses, and pastures remained good to excellent. Many early garden crops were being harvested, but a late tomato blight was appearing. Tree fruits were ripened and were being picked.

In spite of an August which was three degrees cooler than normal, most crops showed good growth during the month. However, the cool weather made the tomato blight a serious condition, and it eventually caused a loss of about 40° of the Maryland and Delaware crop. Harvesting of fruits and crops continued.

The cool, dry weather of the first half of September retarded the growth of crops, but

\*Determined from surrounding stations.

was excellent for farm operations and harvesting activities. The first killing frosts of the season were reported in Garrett County on September 15th. Beneficial rains and warm weather during the last half of September favored the growth and maturing of crops and by the end of the month, prospects for the corn crop were good to excellent. Cool weather increased the severity of the tomato blight and in heavily intested areas the crop ended during the month. Harvesting of other late crops and fruits continued. The last three months were warm and dry and favorable for farm operations and late harvesting. Killing frosts were general over all sections during the period November 13 to 16th. At the close of the year winter grains were mostly good, and pastures were good for the season of the year.

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		Mon	thly	and	Ann	ual M	lean	Tem	pera	tures	for t	he Y	ear	1946	with	Der	artu	res f	rom	the N	Torm	al			<u>,                                      </u>	
ar section	Jany	uary	Febr	ruary	Mi	rch	A	pril	N	fay	Ju	ne	Ju	aly	Au	gust	Sept	ember	Oct	tober	Nov	ember	Decembe		ber Annu	
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
Maryland																									<b>.</b>	
Aberdeen. Annapolis. Baltimore (U.S.W.B.). Baltimore (Airport) Bell. Beltsville		+1.4	37.4 38.2 37.0	+2.5 +2.8 +3.5	53.0 51.6	<b>+</b> ⋅10. 7	55.6 54.6	+0.6 +2.0 +2.3 +1.0	63.8 65.8 65.2	-0.2	71.0 72.2 72.0		75. 6 77. 3	+0.1 -0.1		-3.9 -3.8 -2.3 -2.4 -3.2	71.0 70.6	-0.2 +1.0 +2.5 +3.0 -0.2	61. 4 62. 2 61. 6	+4.0 +4.4 +3.5	52. 4 51. 8	+5.2 +6.1 +7.1	36.9 41.4 42.4 40.8 39.9		57.0 58.4	+0. +1. +3. +3. +1.
Blackwater	37. 2 37. 2 35. 0 36. 4	+1.8 +3.6 +0.4 +3.4	40.5 36.9 37.6	+3.4 +5.9 +1.7 +4.5	52.8 51.4 51.3	+8.1 +6.9 +8.2	52.5 53.8 55.0 53.5 63.4	-0.7 +1.2 -0.1 +1.1	63.0 64.0 63.8 63.6 64.4	-1.2 -1.3 -0.1 +0.9	69.0 71.0 70.8 70.4 70.7	-2.5 -2.2 -1.2 -0.8 -1.7	71.9 74.0 74.3 74.4 75.6	-2.3 -1.8 -0.6	69.1 71.2 70.8 70.8	-4.8 -4.6 -3.2 -2.3	66. 8 69. 0 68. 4 68. 5 70. 3	-1.8 -0.7 0.0 +2.0 -0.9	58.6 60.6 60.1 59.7 60.7	+1.6 +2.6 +2.7 +4.3	50.8 *52.2 51.4 49.8 51.4	+4.4 +8.8 +5.6	41. 8 41. 8 41. 9 38. 8 39. 9	+5.0 +2.8 +4.2	57.2 56.1 57.0	+0. +1. +1. +2.
Chewsville. Clear Spring Coleman College Park Conowingo Dam Crisfield Cumberland Easton Elkton Elkton Emmitsburg	32.8 35.4 35.9 32.4 40.8 32.4 36.6 34.2 33.8	+1.9 +1.7 +2.0 +2.4 +2.7 +0.9 +1.6	34. 0 7 - 87. 2 9 38. 7 4 33. 8 7 43. 6 9 34. 4 6 88. 9	+3.4 +3.3 +3.9 +1.8 +4.4 +1.2 +3.7 +2.0	50.5 52.0 51.8 48.4 58.7 49.8 51.4 49.6	+9.6 +8.7 +7.9 +6.9 +11.2 +9.3 +7.1	56. 2 54. 4 51. 5 58. 6 53. 2 51. 6 52. 0	+2.2 +1.3 +0.5 +3.1 +0.9 -0.2 -0.2	65. 0 64. 4 62. 2 68. 8 63. 0 64. 0	+1.2 +1.2 -0.8 +3.3 -0.2	67. 8 71. 8 70. 8 68. 0 73. 8 70. 6 70. 7 69. 0 67. 4	-0.8 -0.8 -3.0 -0.7 -0.4 -1.2 -3.0 -3.0	76.8 74.8 74.4 78.1 74.5 74.2	-0.3 -1.4 -0.6 +0.1 -0.1 -2.2	73.2 71.0 69.8 75.6 69.0 71.4	-4.5 -1.4 -3.0 -3.6 -1.2 -3.6 -8.3 -3.8	71.4 68.4 67.3 73.6 66.8	+2.0 +0.3 +0.8 +1.4 +0.8 -0.3 +0.5	56.8 62.1 59.0 57.8 64.9 58.2 60.0 58.6 69.0	+4.0 +2.7 +2.2 +4.0 +3.7 +2.4 +2.8 +3.9	52. 0 50. 5 47. 4 56. 7 47. 0 51. 5 48. 0	+5.2 +5.2 +3.6 +6.3 +4.0	37. 2 41. 0 40. 0 35. 4 46. 8 37. 1 40. 6 37. 2 38. 2	+4.9 +8.8 +1.9 +6.2 +3.0	57.8 56.6 54.0 61.7 54.7 56.8 54.9	+1. +2. +1. +1. +3. +1. +1. +0.
Fallston Ferry Landing Fort George G. Meade Frederick Frederick Frederick (Airport) Frostburg Germantown Great Falls Huntingtown Keedysville La Plata	33.6 33.4 29.6 34.6 35.6	+2.8 +2.1 +1.2 -0.6 +2.4 +1.7 +3.8	35. 0 40. 0 40. 8 34. 8 33. 9 31. 0 86. 6 37. 8	+2.9 +3.2 +1.4 +0.3 +4.0 +2.1 +2.7	52. 6 53. 8 50. 0 49. 4 47. 4 50. 8 51. 2 52. 0 50. 7	+7.6 +8.3 +7.5 +6.5	53. 2 58. 9	+1.3 +1.2 -1.1 -0.2	62.9 64.7 66.0 62.6 63.0 58.8 62.0 64.3	-1.2 -1.3 +0.5	68.7 71.3 73.7 70.0 69.3 66.4 69.0 71.0 71.0 70.6 70.6	-1.2 -1.5 -2.2 -1.5 -0.6 -4.2 -1.8 -0.7 -0.1	75. 0 75. 6 74. 8 74. 4 70. 4 74. 0 74. 4 72. 2 74. 1 74. 8	-1.8 -1.3	71. 4 72.7 69. 4 69. 3 65. 2 69. 4 71. 2	-2.2 -3.2 -4.8 -4.8 -2.7 -5.7 -3.5 -4.4	68.6 70.4 66.0 66.8 63.6 67.5 69.0 64.2	+1.6 -0.4 -1.8 -0.9 -0.9 +0.8 -3.1 +0.8 +1.1 -2.1	59.6 60.6 61.8 58.2 58.8 53.6 58.9 60.6 56.0 59.7 60.8 59.3	+4.3 +2.6 +2.3 +0.5 +4.3 +1.0 +2.4 +5.0 +1.7	52. 5 53. 0 46. 7 47. 4 43. 7 50. 2 50. 6 44. 8 51. 6 50. 5	+5.6	38.8 41.8 43.0 87.0 87.6 84.2 89.7 89.2 35.5 41.9 40.0 40.0	+4.7 +4.1 +2.2 +4.8 +4.5 +2.2 +6.9 +2.1	57.6 58.8 54.6 54.6 51.1 55.5 56.6	+2. +1. +0. +0. +2. +1. +2. +0.
Da Flata	36. 2 29. 9 38.2	+0.9 +2.1 +1.5	32.6 1 37.7	+0.4 +3.5 +2.2	48.8 51.3	+8.4 +7.4 +8.9	53. 7 46. 8 53. 0 55. 2	+0.5 +0.7	60.9 64.8	-1.1 + 0.8	66.4 70.4 63.8	-3.8 -1.2	74.3	-1.8 -0.7	]	-2.5 -8.0	69. 8 69. 0	+2.9 +0.4 -0.6	60.0 52.2 61.8	+2.8	49.6 51.0 44.5	+5.3 +4.9 +6.0 +8.7	37. 6 39. 8 34. 0	+4.2 +3.7	56. 6 49. 4	+1. +1.
Picardy. Prettyboy Dam. Bidgely. Bock Hall Salisbury. Sines (Deep Creek). Snow Hill Solomons. State Sanatorium. Takoma Park No. 1. Takoma Park No. 2 Conoloway.	29. 8 38. 1 38. 8 30. 7 36. 3 35. 3 32. 6 34. 4	+0.9 +1.6 +1.1 +1.6 +2.6 +1.1 +2.8 +2.8 +1.0	9 83. 8 6 88. 7 8 7. 5 42. 3 29. 8 40. 0 41. 6 8 38. 8 8 37. 8 8 37. 8 9 38. 2 9 37. 2	+1.7 +3.8 +2.7 +4.5 +1.7 +2.4 +5.2 -0.5 +4.8	49.5 51.4 50.8 53.2 44.4 46.7 52.0 48.5 53.0 51.5 47.8 50.5	+7.2 +6.6 +7.7 +8.5 +1.9 +7.0 +8.1 +9.2 +6.4	53.6 55.2 46.2 53.2 56.2 50.6 55.9 54.1 50.6 52.2	+0.7 +1.4 -0.1	64.2 64.8 65.6 55.4 64.0 65.9 61.5 64.2 63.5 60.3	-0.6 +0.9 +0.6 -0.4 +0.6	70.0 72.8 66.6 71.2 70.2 67.6 71.4	-1.4 -3.2 -1.6 -1.9 -1.1 -1.2 -2.0 -0.9 -3.8 0.0	74.0 75.6 65.7 74.7 77.2 70.6 74.7 74.0 72.2 75.6	-2.1 $-1.2$	71. 2 73. 0 61. 8 72. 5 74. 9 66. 6 71. 0 69. 8 67. 6 70. 8	-8.2 -4.7 -8.7 -4.13 -2.5 -2.0 -2.3 -5.3 -2.7	69.2 72.1 69.2 67.9 64.5 68.6	-0.7 +1.4 -0.8 -1.0 +0.5 -0.8 +0.1 +0.3 -1.4	57. 4 58. 3 59. 9 60. 6 51. 0 61. 1 63. 4 56. 5 60. 2 58. 9 56. 6 62. 2	+2.5 +3.1 +2.5 +3.0 +3.0 +1.6	*48. 4 51. 5 *51. 4 53. 7 42. 6 51. 9 55. 3 *46. 9 51. 6 50. 5 45. 2	+8.2 +3.6 +4.8 +4.4 +5.8 +4.3 +4.0 +6.2 +3.5 +5.7 +1.9	38.6 37.5 40.8 40.6 43.9 33.0 44.4 36.5 40.8 39.6 37.6	+4.4 +3.2 +4.3 +4.1 +5.2 +3.4 +4.1 +5.3 +5.3 +4.2	54.0 56.7 56.7 58.8 48.5 57.0 59.6 57.2 56.1 53.0	+1. +0. +1. +1. +2. +1. +1. +2. +2. 
Unionville Western Port Westminster Woodstock	33. 2 33. 1 33. 8 33. 8	+1. 4 +2. 8 +1. 7	33.8 34.6 35.1 35.0	+1.9 +3.3	50.4	+9.6	49.9 50.8 52.2 52.5	-1.0 +2.1 +0.3	61. 6 58. 8 62. 2 62. 4	-3.4 +1.1 -0.7	68.1 65.8 66.0 69.2	-3.9 -2.9 -1.8	73. 2 71. 2 73. 2 73. 2	-2.5 +0.2 -2.0	67. 6 68. 2 68. 2 69. 4	-3.8 -2.9 -3.5	65.6 66.8 66.7 66.2	-0.4 +1.2 -0.1	57.0 58.1 59.0 57.2	+8.0 +5.2 +2.3	48.8	+5.3	35. 9 38. 6 87. 6 37. 8	+4.9 +3.7 +3.5		+0. +2. +1.
District of Columbia Washington (U.S. W.B.)	37.0	+3.6	39.4	+4.1	53.6	+11.0	56.0	+2.7	65.5	+1.8	<b>72.</b> 7	+0.5	77. 2	+0.4	73. 2	-1.8	71, 8	+8.2	62.0	+4.6	52. 6	+7.4	41.6	+5.0	58.6	+3.
Delaware  Bridgeville Delaware City Dover Jeorgetown Lewes																-3.5 -3.1	68.4 70.2 69.6	+1.5 +0.8	60. 6 59. 5	+3.8	50.6 51.5	$^{+4.3}_{+5.1}$	39.7 41.4	+3.1 +3.6 +4.5	56.4 57.0	+1. +1. +1.
Millsboro Newark (Univ. Farm) Wilm'n. (Porter Res.)	33.9 34.2	+3. 0 +2. 9 +1. 4	42.8 35. 2 85. 0	+7.0 +5.4 +2.3	52.6 49.4 50.4	+8.2 +8.5 +8.2	52. 9 50. 6 50. 2	0.0 -0.4 -2.0	64. 3 62. 7 61. 6	+1.0 +0.6 -1.5	68. 8 67. 4	-0.1 -1.2 -4.1	74. 8 73. 4 73. 4	-1.5 -1.5 -2.7	69. 1 69. 6	-2.2 -3.7 -4.4	70. 0 67. 2 68. 4	+0.9 +0.9 +0.2	61.0 57.4 59.1	+3.4 +2.2 +2.4	52.2 48.2 47.8	+5.1 +4.8 +2.2	42. 4 37. 6 37. 4	+4.7 $+4.7$ $+2.4$	58.0 54.5 54.5	+2. +2. +0.
For Maryland and Dis- trict of Columbia For Delaware For entire section	35. 0 36.1 35. 1	+2.0 +1.5 +1.9	36. 7 37. 9 36. 8	+3.4 +3.4 +3.4	50. 7 50. 8 50. 7	+7.8 +7.0 +7.7	53.0 52.0 52.9	+0.8 -0.7 +0.6	63.1 63.0 63.0	+0.3 -0.2 +0.1	69.7 69.6 69.7	-1. 1 -2. 0 -1. 2	74. 0 78.8 74. 0	-1.1 -2.3 -1.2	70.1 70.8 70.2	-3.2 -3.6 -3.8	67. 9 68. 8 68. 0	+0.8 +0.1 +0.8	59. 8 59. 5 59. 3	+3.1 +2.1 +3.0	49.7 50.2 49.8	+4.5 +3.5 +4.4	89.4 40.2 39.6	+4.3 +3.5 +4.4	55. 7 56. 1 55. 8	+1. +1. +1.

\*Determined from surrounding stations.

(WBO, Philadelphia, Pa., -8-26-47-1,575)

## COMMENDATION

On December 1, 1946, it became necessary for Mr. John A. Miller, Cooperative Observer at Keedysville, Maryland, since November 1, 1994, to terminate his duties as Cooperative Observer because of failing eyesight. Mr. Miller has been a faithful and competent Observer and has rendered outstanding service to the Weather Bureau for forty-two years.

Mr. Miller was born on December 30, 1858, in York City, Pennsylvania. In 1883 he married Fannie Geeting, daughter of a Washington County, Maryland, farmer. They settled in Keedysville, Maryland, and have two sons and one daughter. From October, 1881, to February, 1884, Mr. Miller was employed by the Coast and Geodetic Survey, being stationed first in Fairfax County, Virginia, and later in Montgomery County,

Maryland. Following this service, he returned to Keedysville and established a General Store where he continued in business for sixty years. From 1887 to 1896, he published a weekly newspaper.

Among weather experiences which stand out in his memory are the record dry months of July, 1930 (0.18 inch precipitation). and February, 1941 (0.16 inch precipitation); the maximum monthly precipitation of record, 10.26 inches, during October, 1927; the hottest days of record, 109° on August 6, 1918, and 108° on August 7, 1918; the record low temperatures, -25° on January 14, 1912. Mr. Miller states that "the work has been unusually interesting and I have had many jovial exchanges of conversation concerning weather. After forty-two years of weather observation, I feel that I have gained a deeper friendship with my fellowmen in this country."