U. S. DEPARTMENT OF COMMERCE, WEATHER BUREAU

IN COOPERATION WITH MARYLAND STATE WEATHER SERVICE

${f CLIMATOLOGICAL}$

MARYLAND AND DELAWARE SECTION

15

G. N. BRANCATO

PRICE: 5 CENTS A COPY: 25 CENTS A YEAR

Vol. LI BALTIMORE, MD., YEAR 1947 No. 13

GENERAL SUMMARY

Although this was the 7th consecutive year with above normal temperature, the 1947 mean was only 0.2 degree above normal. The greatest departures were $\pm 6.5^{\circ}$ in January, $\pm 5.5^{\circ}$ in October, and $\pm 5.5^{\circ}$ in March. This year was similar to 1946 in that it was a little short on precipitation.

uary, +5.5° in October, and -5.5° in March. This year was similar to 1946 in that it was a little short on precipitation.

January averaged from 5 to 8 degrees above normal, and was the fifth warmest of record. Precipitation was slightly above normal and was well distributed through the mouth and through the section. Snow, glaze and sleet, with some amounts exceeding 8 inches, fell on New Year's Day. Lighter falls of snow and sleet fell but all were followed by warmer weather which quickly melted the snow and sleet. February, however, was cold, dry and windy. The mean temperature was 3.6 degrees below normal but some stations were 9 to 15 degrees below normal. Brief mild periods were recorded near the first and the middle of the month. This was the third driest February in more than 50 years of record, and the driest since 1937. Nevertheless, the precipitation was very well distributed through the month and through the section, and occurred mostly as snow or sleet. The heaviest snowfall occurred on the 20th and 21st and accounted for well over one-half of the month's precipitation. Depths ranged from 2 inches over extreme eastern Maryland and extreme eastern Delaware to 14 inches at some western and north-central stations. Strong northwest winds swept the section during and after the snowfall, causing deep drifts which blocked highways for several days, particularly in the western and north-eastern portions of Maryland.

The wintry weather continued into March which was just 1.5 degrees warmer than the record cold of 1916. Other than brief mild periods near the 14th, 23d and 31st, temperatures were near or below normal. The coldness was sustained through most of the month arther than being the result of extremes. March precipitation, while below normal, was well distributed through the month and through the section. General snows from the 1st to the 3d caused heavy depths, in western counties up to 21 inches and in north-central sections up to 10 inches. High winds caused drifts to 15 feet in the mountains. Ano

As the month ended farm operations were late due to the cold weather of February and March. Melting March snows followed by rain made the ground soft and wet. Winter grains and grasses came through in good to excellent condition and resumed growing in central and eastern areas during the latter half of March.

growing in central and eastern areas during the latter half of March.

The dry weather of the winter months continued through April over most of the section. Local areas near and east of the Chesapeake Bay were above normal in rainfall. In some portions of Maryland, deficiencies for the year to date were in excess of 5 inches with the average for the State approximately 3.5 inches below normal. In Delaware, the average deficiency for the year through April was about 2 inches. No measurable snow was reported during the month. With regard to temperature, it was a characteristic April with warm and cool periods which averaged a little over 2 degrees above normal. Freezing temperatures or killing frosts were reported from many stations on several mornings.

Although the rainfall was not sufficient generally to relieve the dry condition of the soil, it was well distributed through the month and was sufficient in most cases for good growth of crops, grasses, grains, and fruit. Plowing for corn was progressing rapidly. However, early garden crops were growing slowly due to cool weather during the latter part of the month.

May was very wet and brought a sharp reversal from the dry weather which had persisted for several months. However, some areas in western and southeastern counties remained deficient. The average temperature of May was about normal, but it was not indicative of the abournal conditions which prevailed. The period 8-11th was the coldest on record for the season of the year. Except for a few stations protected by relatively warm water areas, killing frosts were reported throughout the

(Continued on bottom of next page.)

CONDENSED SUMMARY OF CLIMATOLOGICAL DATA 1947

						·					
	· T	empera	ture			Precipit	ation	Number	direction		
Months	Mean	Departure from the normal	Lowest	Average	Departure from the normal	Greatest in 24 hours	Snowfall	With 0.01 inch or more of precipitation Clear	Partly cloudy Cloudy	Prevailing direction of wind	
January. February March April May June. July August. September October November December	37.4	+6.5 -3.6 -5.5 +2.8 -0.2 -1.8 +2.8 +0.2 +5.5 -1.8	75 64 71 90 95 99 97 99 95 94 70 66	-3 -7 -6 20 18 33 37 47 22 17 5	3. 95 1. 61 1. 70 2. 81 5. 38 4. 39 4. 29 3. 26 3. 01 1. 52 5. 43 1. 61	+0.62 -1.34 -1.88 -0.67 +1.79 +0.42 -0.07 -1.22 -0.35 -1.51 +2.80 -1.53	1.52 1.71 1.00 4.49 4.20 4.37 3.65 3.37 2.02 2.61 3.55 1.65	5.5 13.2 5.8 T. 0.0 0.0 0.0 0.0 0.0 0.1 3.4	12 5 9 10 14 10 13 8 9 11 7		

KILLING FROSTS 1947

Stations	Last in Spring	First in Autumn	Stations	Last in Spring	First in Autumn
Maryland			Maryland (cont'd.)		
Aberdeen	May 11	Oct. 1	Maryland Line	May 10	Sept. 27
Annapolis	Mar. 31	Nov. 18	Millington	May 11	Oct. 1
Baltimore	Mar. 31	Nov. 13	Oakland	May 31	Sept. 23
Baltimore (Airport)	Mar. 31	Nov. 27	Oxford	Mar. 31	Nov. 20
Bell	May 11	Sept. 27	Picardy	May 11	Sept. 23
Blackwater	May 11	Oct. 2	Prettyboy Dam	May 10	Oct. 1
Cambridge	May 9	Oct. 2	Ridgely	May 10	Oct. 1
Charlotte Hall	May 10	Oct. 1	Rock Hall	Apr. 23	Oct. 1
Cheltenham	May 11	Oct. 1	Salisbury	May 10	Oct. 2
Chestertown	May 10	Nov. 10	Sines	May 31	Sept. 23
Chewsville	May 11	Sept. 23	Snow Hill	May 11	Oct. 2
Clear Spring	May 11	Sept. 27	Solomons	Mar. 28	Nov. 27
Coleman	Apr. 4	Nov. 10	State Sanatorium	May 11	Sept. 23
College Park	May 11	Oct. 1	Takoma Park No. 1	May 10	Oct. 1
Conowingo Dam	May 11	Oct. 1	Takoma Park No. 2	May 10	Oct. · i
Crisfield	Mar. 27	Nov. 27	Tonoloway	May 12	Sept. 23
Cumberland	May 11	Sept. 23	Towson	May 10	Sept. 27
Easton	May 10	Nov. 10	Unionville	May 12	Sept. 23
Elkton	May 11	Sept. 27	Western Port	May 12	Oct. 1
Emmitsburg	May 11	Oct. 1	Westminster		Sept. 27
Fallston	May 10	Oct. 1	Woodstock	May 12	Sept. 27
Ferry Landing	May 10	Oct. 1	Washington, D. C	May 10	Nov. 10
Fort George G. Meade.	May 11	Sept. 23	Delaware		
Frederick	May 12	Sept. 27	Bridgeville	May 11	Oct. 1
Frostburg	May 12	Sept. 23	Delaware City	May 10	Oct. 1
Germantown	May 11	Sept. 27	Dover	May 10	Oct. 1
Great Falls	May 11	Oct. 1	Georgetown	May 11	Oct. 1
Hancock	May 12	Sept. 23	Lewes	May 11	Oct. 1
Huntingtown	May 10	Oct. 11	Millsboro	May 11	Oct. i
Keedysville	May 11	Sept. 27	Newark	May 11	Sept. 27
La Plata	May 11	Oct. 1	Wilmington	May 10	Oct. 1

COMPARATIVE DATA FOR THE YEAR

FOR DELAWARE

FOR MARYLAND

	. Tei	nperat	u r e	Pro	ecipita	tion	Ter	mpera	ture	Pre	cipita	tion.
Year	Mean	Highest	Lowest	Average	Average	No. of days with .01 in. or more	Mean	Highest	Lowest	Average	Average snowfall	No. of days with .01 in. or more
1895 1896 1896 1897 1898 1899 1900 1902 1902 1904 1906 1906 1907 1908 1909 1909 1909 1909 1909 1909 1909	54.0 56.5 56.5 56.5 56.5 56.5 56.5 56.5 56	102 100 102 109 102 106 104 101 101 102 102 104 101 102 102 102 102 102 102 103 104 101 102 102 103 104 101 102 102 103 104 101 102 102 103 104 105 106 106 106 107 107 108 108 109 109 109 109 109 109 109 109 109 109	-18 -13 -12 -20 -20 -15 -15 -17 -12 -20 -20 -5 -5 -17 -15 -15 -15 -17 -15 -15 -15 -17 -15 -15 -15 -17 -15 -15 -15 -15 -15 -15 -15 -15 -15 -15	34. 67 74 105 104 144 55 107 126 126 126 126 126 126 126 126 126 126	24.8.6.5.5.37.1.1.88.8.8.34.2.7.386.5.8.8.4.2.7.386.5.8.8.34.2.7.386.5.8.8.34.2.7.386.5.8.8.32.2.38.3.2.2.388.3.2.2.2.388.3.2.2.388.3.2.2.388.3.2.2.388.3.2.2.388.3.2.2.388.3.2.2.388.3.2.2.388.3.2.2.388.3.2.2.388.3.2.2.388.3.2.2.388.3.2.2.388.3.2.2.388.3.2.2.388.3.2.2.388.3.2.2.388.3.2.2.388.3.2.2.388.3.2.2.2.388.3.2.2.2.388.3.2.2.2.388.3.2.2.2.388.3.2.2.2.2	91 91 91 91 91 91 91 91 92 92 93 95 95 96 96 96 96 96 96 96 96 96 96 96 96 96	33.8 55.0 6 55.0 6 55.0 6 55.1 1 55.0 6 8 8 52.7 7 56.2 2 55.5 1 55.2 1 55.1 1 55.2 1 55.2 1 55.2 1 55.2 1 55.3 1	101 103 97 99 100 104 104 104 100 99 101 101 101 101 101 101 102 102 102 102	-4 0 3 0 0 1 1 6 1 -10 0 1 5 -5 5 3 3 1 -6 6 -4 4 1 1 2 0 0 1 5 -7 7 -10 0 1 1 4 1 1 -15 2 2 1 1 6 1 1 -1 5 2 2 1 1 6 1 3 2 1 2 4 4 1 1 5 2 2 1 1 6 1 3 2 1 2 4 1 1 5 2 2 1 1 3 2 1 3 2 1 3 2 1 3 2 1 3 2 1 3 2 1 3 2 1 3 2 1 3 2 1 3 3 2 1 3 3 3 3	37. 13 40. 99 43 44 44. 14. 14. 14. 14. 14. 14. 14. 14.	19.9 18.15 10.7 22.5 22.5 24.6 22.5 33.1 25.5 15.3 10.9 10.7 11.1 12.1 13.3 13.7 15.3 15.3 17.2 12.5 15.3 17.5 17.5 17.5 17.5 17.5 17.5 17.5 18.5 17.5 18.5 18.5 17.5 18.5	95 96 111 108 83 81 99 97 96 122 117 96 126 94 101 105 100 99 98 103 107 85 108 112 110 105 120 114 124 124 124 124 129 118 119 92 128 110 108 1109 1119 129 1119
Period	54. 2 54. 0	109	-40	38, 54 41, 65	28. 5 26. 7	113 113	54. 6 55. 0	110	-15	41. 57 43. 79	24. 5 18. 2	112 108

- Climatological Data for the Year 1947

			Climatological Data for the Year 1947 Temperature, degrees Fahrenheit Precipitation																	
	ï	, ·-		empe	rature	, degrees	Fahre	nheit	ļ	<u> </u>		ecipitati	on	1	<u>\$</u>	iny		Sky	-	e e
Stations	Counties	Elevation, feet	Length of record, years	Annual mean	Highest	Date	Lowest	Date	Length of record, years	Total for the year	Greatest monthly	Month	Least monthly	Month	Total snowfall	Number of rail days	Number of clear days	Number of partly cloudy days	Number of cloudy days	Prevailing direction of wind
' Maryland					[
Aberdeen Annapolis Baltimore (U.S.W. B.) Baltimore (Airport) Beil § Black water§ Cambridge Charlotte Hall§ Cheltenham Chestertown Chewsville Clear Spring Coleman § College Park Conowingo Dam Crisfield Cumberland Easton Edgemont§ Elkton	Prince Georges Dorchesterdo St. Marys Prince Georges Kent Washington Kent Prince Georges Harford Somerset Allegany Talbot Washington	61 40 14 16 151 13 167 230 35 630 560 80 95 40 5 623 35 623 35 623 82 82 82 82 83 84 84 85 86 86 86 87 88 88 88 88 88 88 88 88 88 88 88 88	29 82 77 18 27 58 24 47 42 50 49 48 61 12 28 65 57	53. 2 55. 3 56. 6 55. 8 54. 4 7 55. 7 55. 6 54. 0 53. 4 56. 3 55. 4 55. 4 55. 5 55. 5 55. 5 55. 6 55. 8 55. 8 55. 8 55. 8 55. 7 55. 6 55. 8 55.	95 92 97 97 95 94 97 95 96 95 97 95 94 98 94	July 30† July 30 Aug. 14 Aug. 14† Aug. 13† June 12† Aug. 14† Aug. 16† Aug. 16† Aug. 18	68 68 35 95 57 22 56 44 12 37	Feb. 5	29 74 77 13 27 7 53 26 47 42 50 61 12 28 77 57 9	34. 48 31. 27 46. 24 42. 87 41. 52 38. 80 37. 06 40. 36 40. 36 41. 30 34. 05 37. 78 41. 45 41. 17 41. 45 41. 17 41. 45 41. 20 26. 49 41. 24 40. 89	5. 35 4.88 7. 48 6. 66 6. 42 6. 18 7. 17 6. 35 7. 79 6. 7. 70 5. 55 5. 56 7. 70 6. 3. 97 6. 88 9. 36	Nov. Nov. June Nov. Nov. Nov. June Nov. May Jule May	1. 02 0. 90 1. 20 1. 62 1. 10 1. 25 1. 50 1. 20 1. 36 0. 74 0. 75 1. 61 1. 138 0. 99 1. 50 0. 63 1. 55 0. 80 1. 34	Oct. Mar. Oct. Feb. Feb. Mar. Dec. Sept. Mar. Aug. Dec. Feb. Dec. Feb.	25. 9 18. 3 26. 0 23. 4 26. 8 30. 3 29. 8 28. 5 27. 7 23. 9 26. 6 13. 5 27. 7 23. 9 26. 6 13. 5 27. 5 27. 7 23. 9 26. 9 27. 5 27. 7 28. 5 27. 7 28. 5 27. 7 28. 5 27. 7 28. 5 29. 6 20. 6	104 97 110 107 116 88 95 104 122 117 108 109 117 .115 83 111 105 94				
Fallston Ferry Landing §. Fort George G. Meade Frederick (Airport) Frostburg Germantown Great Falls §. Hancock (River). Hancock Huntingtown Keedysville La Plata Luke Maryland Line Millington Oakland. Oxford. Perry Point Picardy §. Prettyboy Dam §.	Anne Arundel Frederickdo Allegany Montgomerydo. Washingtondo. Calvert Washington Charles Allegany Baltimore Kent Garrett Talbot Cecil	460 200 428 428 160 420 190 950 840 27 2, 420 10	78 81 6 78 4 43 7 51 12 444 33 50 49 11 17	53. 5 55. 6 54. 5 53. 5 49. 6 54. 1 55. 0 51. 6 55. 4 56. 0 53. 3 47. 9 56. 4 52. 9 52. 6	95 96 99 97 96 92 94 97 96 96 99 97 94 96 90 91	Aug. 15 Aug. 16 June 12 Aug. 18† Aug. 19† Aug. 14 Aug. 15 Aug. 15 Aug. 15 Aug. 14† July 30 Aug. 13 June 11† June 11†	3 5 9 5 4 4 - 5 3 4 2 4 4 5 - 7 10 10 10 10 10 10 10 10 10 10 10 10 10 10	Feb. 5	78 31 6 76 46 7 59 38 17 12 44 33 10 23 49 50 11 7 21 17	42. 02 39. 74 39. 68 35. 67 35. 73 40. 81 33. 53 36. 67 30. 03 41. 83 37. 79 31. 03 36. 37 38. 46 43. 57 49. 63 40. 63 41. 42. 20	9.06 6.80 6.242 4.866 10.207 5.12 3.802 7.25 6.55 5.80 7.80 7.80 6.64	May Nov. June May May May May July Nov. July Nov. May Nov. Nov. May Nov. May Nov. May Nov. May Nov. May Nov. May Nov. May Nov. May Nov. May Nov. Nov. Nov. Nov. Nov. Nov. May Nov. Nov. Nov. Nov. Nov. Nov. Nov. Nov.	1. 31 1. 45 1. 36 1. 24 1. 23 0. 98 1. 32 0. 98 1. 03 1. 08 1. 20 0. 60 1. 35 1. 12 1. 35 1. 12 1. 35 1. 35	Mar. Oct. Mar. Oct. Oct. † Dec. Oct. Oct. Feb. † Dec. Oct. Feb. † Dec. Oct. Feb. † Dec. Oct. Oct. Oct. Oct. Oct. Oct. Oct. Oc	27. 0 24. 8 26. 6 28. 5 22. 3 50. 5 26. 7 27. 2 27. 2 29. 5 27. 2 22. 8 41. 7 30. 0 93. 9 22. 0 28. 0 28. 2	129 128 150 98 95 120 120 116 118 94 118 94 117 173 109 121				
Ridgely Rock Hall Salisbury Sines (Deep Creek) \$ Snow Hill Solomons State Sanatorium Takoma Park No. 1 Takoma Park No. 2,9 Unionville Western Port Western Port Westminster Williamsport Woodstock	Kent Wicomico Garrett Worcester Culvert Frederick Montgomery do. Washington Frederick Allegany Carroll Washington	20 20 1,460 320 230 550 450 1,000 770	55 34 42 20 32 56 39 49 3 37 8 54 38	55. 1 55. 7 57. 5 46. 8 55. 7 58. 0 55. 5 54. 6 51. 9 50. 7 53. 4 53. 4	96 97 96 90 97 95 95 95 95 95 95 97 97	Aug. 20† Aug. 14† July 30† July 16 June 12 Aug. 14† Aug. 15† June 11 June 11† Aug. 15 Aug. 13† June 11†	8 8 9 9 - 5 10 9 - 2 5 5 2 4 2 1 5	Feb. 5 Feb. 5	57 34 42 23 32 56 39 49 3 24 8 .54 38	38. 05 41. 73 36. 42 46. 56 45. 26 39. 47 41. 56 43. 29 42. 61 30. 00 38. 10 35. 26 34. 93 40. 06 36. 54	6.88 6.10. 5.45 8.50 5.66 6.65 7.49 6.71 6.33 6.40 7.298 4.98 6.98 6.08	May Nov. Jan. July Nov. Nov. July May May July July July Nov. Aug. Nov.	0.95 1.12 1.14 1.46 1.63 1.64 1.05 1.34 0.97 0.38 1.13 0.73 0.98 0.60 1.30	Feb. Mar. Feb. Oct. Feb. Oct. Dec. Oct. Oct. Oct. Sept. Feb.	22.8 27.1 25.7 90.4 17.3 21.4 32.5 27.0 25.0 24.3 27.6 36.5 32.5 26.2 21.0	111 124 114 116 103				
District of Columbia Washington (U.S.W.B.) Delaware		72	77	57.0	97	Aug. 14	7	Feb. 5	77	40. 39	5. 76	June	1.24	Mar.	22. 9	116				· ,
Bridgeville. Delaware City Dover Georgetown Lewes Millsboro Newark (Pumping Sta.) Newark (Univ. Farm) Wilmington % Wilmington % For Maryland and Dis-	New Castle Kent Sussex do do New Castle do do do do do do do d	34 50 10 20 110	56 61 60 2 3 55 33	54. 8 54. 4 55. 4 55. 2 54. 3 56. 3 53. 4	97 93 93 95 95 95 99 	Aug. 16 July 30 June 11† June 11† June 11† Aug. 15 Aug. 15†	6 2 6 7 7 8 5	Feb. 5 Feb. 5 Feb. 5 Feb. 5 Feb. 5 Feb. 5	57 61 60 2 3 55 16 35 54 36	39. 05 42. 25 40. 17 39. 40 38. 58 39. 79 41. 47 43. 32 43. 82 44. 92	5. 79 6. 89 6. 49 5. 25 5. 81 5. 68 10. 14 10. 16 9. 99 8. 11	May May May Jan. Jan. Jan. May May May Nov.	1. 07 1. 31 1. 08 1. 01 1. 12 1. 44 1. 55 1. 39 1. 79 1. 47	Feb. Oct. Feb. Feb. Mar. Feb. Aug. Oct. Feb. Feb.	24. 2 22. 0 21. 0 21. 2 19. 9 25. 2 27. 6 27. 1 31. 6 26. 0	121 132 103 117 96 104 111				
trict of Columbia			ļ	54.2	99	June 12†		Feb. 5		38. 54	12. 17	June -	0.38	Dec.	28.5	113				
For Delaware For entire section	1.			54.6 54.2	99 99	Aug. 15 June 12†	2: - 7	Feb. 5 Feb. 5		41.57 38.96	10.16 12.17	May June .	1. 01 0. 38	Feb.	24.5 28.0	112 113			- 1	•••••
For emule section				54. 2	1	June 121	- ,	reu. o		90.90	12.17	June .	.0. 36	Dec.	20.0	110				

[†]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 Edgemont, Smithburg: of Ferry Landing, Owings: of Great Falls, Bethesda: of Picardy, Paw Paw, W. Va.; of Pretty boy Dam, Parkton; of Sines, Oakland; of Takoma Park No. 2, Silver Spring; of Tonoloway, Hancock. Municipal Bldg. MPorter Reservoir. *Determined from surrounding stations.

(Continued from preceding page)

Section, in most places on two or more mornings.

By the end of the month, truck crops and gardens damaged by the freeze had been replanted or were recovering. Fruits had variable damage up to 100% in some central and northern areas. However, the heavy rains delayed planting of crops and farm operations. Pastures and hays were in good to excellent condition and grains were making good progress, although freeze-damaged on the Del-Mar Peninsula.

This June was the coolest one since 1928 and had only one appreciably warm period. A few stations near the District of Columbia were slightly above normal but all other stations were below normal. With Maryland having the wettest June since 1941 and Delaware the driest one since 1940, precipitation was somewhat a paradox.

Distribution of the rain was fairly good through the month, but just fair through the section, the area near Baltimore and Washington reporting amounts over 6 inches. June contributed to a late season for crops. The coolness and wetness were not conducive to normal crop growth and slowed farm operations. By the end of the month, grains were being harvested. Corn was being cultivated but was growing slowly. Truck crops were variable, mostly good and improving. Tree fruits were string with the earliest varieties ripening. Conditions in the southern Maryland tobacco belt were fair and improving. Pastures and hay crops were mostly good to excellent. The cool weather continued into July. There were no unusually warm periods, but the warmest days were near the 1st, 14th, and 36th. A pronounced cool period from the

(Continued at bottom of next page)

	Monthly and Annual Precipitation for the Year 194												947	with	Depa	irtur	es fr	om t	he N	orme	ıl					
	Jan	uary	Feb	ruary	Ма	irch	, A;	pril	_ N	lay	Jı	une	J	uly	Au	gust	Sept	ember	Oet	obe r	Nov	ember	Dece	mber	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 Blackwater Cambridge Charlotte Hall Cheirenham Chestertown Chewsville Colear Spring Cotennan College Park Conowingo Dam Crisfield Cumberland Easton Edgemont Elkton Elmmitsburg	4. 20 4. 66 4. 32 2. 99 2. 13 3. 78 3. 76 3. 31 4. 59 2. 49 5. 78 2. 78 9. 78	+0.03 +0.39 +0.27 -0.98 +0.28 +0.45 0.00 +0.94 -0.02 +2.44	1. 20 1. 50 1. 45 1. 71 1. 24 1. 74 1. 80 1. 27 1. 94 1. 50 1. 29 1. 30	-2.10 -1.71 -1.36 -1.32 -0.97 -0.88 -1.25 -1.81 -0.68 -2.01 -1.09 -1.66	1. 87 1. 20 1. 36 1. 40 1. 61 1. 61 1. 88 2. 24 1. 18 1. 68 1. 18	-1. 44 -2. 06 -2. 25 -1. 67 -2. 00 -2. 18 -1. 16 -2. 33 -1. 86 -2. 07	3. 70 2. 78 3. 70 2. 13 2. 50 3. 37 2. 81 2. 85 3. 30 1. 25 3. 38 1. 45	+0.66 -1.26 +0.01 -0.87 -1.12 -0.14 -1.25 -0.51 -0.61 -1.63 0.00	3.62 4.22 5.46 5.52 4.54 7.70 8.48 2.33 3.09 5.37 6.88	+0. 26 +0. 69 +1. 85 +2. 09 +0. 76 +4. 59 +3. 98 -1. 06 -0. 29 +2. 02	4. 40 12. 17 4. 80 4. 23 5. 06 6. 67 5. 15 5. 29 4. 55 5. 02	+0.80 +8.07 +0.92 +0.87 +0.12 +1.38 +2.85 +0.52 +2.25 -0.57 +0.80	2.44 2.67 3.75 4.88 7.53 4.26 4.41 4.67 2.80 3.19 3.15 5.34	-0.90 -2.88 +0.28 +0.59 -0.19 -1.54 -2.92 -1.9 -0.53 +1.19 +3.54 -0.16 +0.21 -0.54 -0.08 -1.45 -0.044 -0.92	3, 42 3, 45 2, 12 3, 88 5, 37 2, 16 4, 71 0, 99 2, 36 3, 97 2, 22 2, 53 1, 79	-0.03 -1.33 -2.0 +0.05 +1.21 -2.61 +0.44 -3.28 -2.26 +0.53 -2.28	4. 92 4. 28 4. 14 0. 92 0. 75 3. 81 3. 90 3. 23 3. 62 1. 49 4. 35 1. 22	+2.00 +0.71 +0.78 -2.18 -2.88 +0.36 +0.47 +0.06 +0.24 -1.20 +0.98	1.62 1.43 1.68 1.46 1.02 2.05 1.72 1.08 8.43 0.86 1.69 1.89	-1.69 -1.61 -1.46 -1.52 -2.10 -0.93 -1.19 -2.42 +0.54 -1.69 -1.55	7.17 6.10 6.35 4.09 4.75 5.84 5.98 5.31 3.76 5.97 4.83	+4.76 +3.41 +3.51 +1.98 +2.41 +4.31 +3.20 +2.77 +2.64 +1.63 +3.85	1. 72 1. 40 1. 87 0. 74 1. 61 1. 90 1. 50 1. 71 2. 07 0. 63 1. 60 0. 80 1. 34	-1. 164 -1. 584 -1. 584 -1. 478 -1. 554 -1. 504 -1. 504 -1. 103 -1. 474	10. 36 15. 25 11. 30 34. 05 37. 78 14. 71 15. 17 11. 68 18. 90 11. 24 15. 46.	-0.8° +1.9° -1.3° -2.6° -2.8° +2.2° +3.5° -2.7° -5.2° -8.14 -0.8° +3.8°
Ferry Landing	3.52 4.43 4.03 3.74 3.52 3.17 8.21 8.79 3.33 3.37 4.66 3.03 5.46 3.49 4.67 4.98 5.23 3.41	+0.77 +0.60 -0.19 +0.61 +0.72 +0.76 +1.22 +1.70 +0.47 -0.13 +1.02 +0.98 +2.32	1. 70 2. 08 1. 60 1. 54 2. 33 1. 45 1. 30 1. 21 1. 21 1. 22 1. 20 0. 90 1. 95 1. 76 3. 15 1. 43 1. 43	- 1. 04 - 1. 30 - 0. 27 - 1. 19 - 0. 79 - 0. 96 - 0. 52 - 1. 77 - 0. 91 - 0. 85 - 1. 48 - 0. 20 - 1. 15	1, 56 1, 45 1, 61 1, 1, 84 1, 79 1, 52 1, 46 1, 49 1, 88 1, 54 *1, 63 1, 47 1, 75 3, 20 1, 12 1, 12 1, 12 1, 14	-1.92 -1.96 -1.71 -1.72 -1.69 -1.45 -1.76 -1.53 -2.22 -0.83 -1.90	2.48 2.27 1.85 2.75 1.90 1.90 1.63 1.63 2.47 1.56 2.47 1.56 2.55 1.41 2.31 2.85	-1.55 -1.70 -1.90 -1.43 -1.53 -1.47 -1.46 -1.71 -1.46 -1.79 -1.72 -1.27 +0.21	4. 18 5. 98 5. 42 4. 86 4. 53 5. 27 5. 12 3. 80 4. 05 4. 53 8. 43 6. 55 5. 44 4. 26 4. 86 7. 86 8. 90	+0.55 +1.76 	6. 10 6. 25 9. 40 3. 19 3. 65 4. 25 3. 68 4. 25 3. 68 4. 25 3. 68 4. 25 4. 28 4. 36 5. 40 4. 36 5. 25 4. 25 5. 25 5. 25 7. 36 7. 36 76 76 76 76 76 76 76 76 76 76 76 76 76	+2.61 -0.21 -1.56 +0.67 -0.85 -0.53 +0.68 +0.91 +0.12 -1.28 -1.74 -0.62 +0.55 -0.62	2.65 2.11 4.36 3.71 5.12 3.94 4.48 8.93 5.12 4.64 6.90 3.60 3.83 2.66 5.40 4.52 5.20	-2,31	1. 97 4. 04 3. 44 4. 18 10. 20 3. 21 4. 43 2. 77 2. 83 2. 38 2. 61 1. 03 3. 81 3. 81 3. 44 2. 84 2. 84 2. 84 3. 65	-3. 14 -0. 37 +6. 10 +0. 35 -0. 40 -0. 34 -1. 44 -2. 18 +3. 24 -3. 65 -1. 02 -0. 99 -1. 08	4. 85 1. 99 2. 15 2. 88 3. 99 1. 73 1. 82 4. 22 1. 23 2. 71 1. 97 2. 71 3. 22 3. 47 2. 71 3. 22 3. 47 7. 71	+0.91 -1.08 -1.04 +0.48 -1.17 -1.08 +0.72 -2.04 +0.32 +0.99 -1.99 -0.89 -0.02 +0.33 -0.02	1. 45 1. 75 1. 24 1. 23 0. 98 0. 74 0. 78 1. 08 2. 21 0. 99 1. 20 0. 79 0. 79 1. 35 1. 35 1. 38 1. 38	-1.55 -1.71 -2.27 -2.16 -2.22 -2.17 -1.92 -1.63 -1.32 -2.06 -1.97 -1.46	6.80 6.19 5.02 4.42 4.17 8.86 3.20 3.37 7.25 5.88 4.33 6.09 6.65 5.23 5.38 5.38 5.38	+4.03 +2.39 +1.95 +1.47 +0.92 +1.09 +1.36 +1.36 +1.98 +2.94 +2.39 +2.65	1. 62 - 1. 63 - 1. 24 - 0. 98 - 1. 32 - 1. 70 - 0. 47 - 1. 70 - 0. 60 - 1. 92 - 1. 92 - 1. 93	-1. 18 3 -1. 80 3 -1. 80 3 -1. 93 4 -2. 03 2 -2. 18 3 -2. 18 3 -1. 18 4 -2. 08 3 -1. 18 4 -1. 36 4 -0. 87 3 -1. 86 3 -1. 86 3 -1. 86 3 -1. 86 3 -1. 87 3	9. 74 9. 68 9. 68 5. 67 5. 73 6. 67 8. 09 1. 88 1. 89 1. 79 1. 08 5. 37 8. 46 8. 57 9. 82 1. 63 1. 64 1. 64 1. 65 1.	-2.68 -8.28 -6.29 -1.30 -6.18 -6.10 -1.56 -9.49 -5.00 -3.38 -0.30
Ridgely Rock Hall Salisbury Sines (Deep Creek) Snow Hill Solomons State Sanetorium Takoma Park No. 1 Takoma Park No. 2 Tonoloway Unionville Western Port Westminster Williamsport Woodstock District of Columbia Washington (U. S. W. B.)	5. 45 4. 67 4. 72 5. 21 8. 49 4. 05 4. 00 2. 93 3. 73 8. 20 8. 61 8. 30 8. 72	+1.77 +0.93 +0.95 +2.16 +0.11 +0.50 +0.44 +0.42 +0.42 +0.17	1. 14 3. 73 1. 63 1. 84 1. 92 1. 63 1. 55 1. 20 1. 79 1. 82 2. 38 1. 62 1. 30	-2.09 +0.29 -1.88 -1.05 -0.89 -1.29 -0.90 -0.48 -0.61 -1.72	2.02 2.67 2.25 1.89 1.53 1.41 1.30 2.03 1.68 1.48 1.41	-1.94 -1.73 -1.89 -1.43 -2.17 -2.12 -2.01 -0.98 -2.14 -2.51	4 00 2.77 5 45 3.60 1.87 2.52 2.09 2.55 1.63 1.97 1.76 1.69 1.79	+0. 56 -1. 63 +1. 84 +0. 43 -2. 06 -0. 97 -1. 16 -1. 81 -1. 52 +0. 10	2 71 4. 42 3. 60 5. 01 *5. 69 6. 71 6. 33 2. 70 6. 52 2. 58 4. 94 6. 02 5. 99 4. 05	+3.34 -0.81 -1.06 +1.34 +2.40 +0.35	2.56 4.99 3.67 5.55 5.491 8.09 8.22 2.54 4.11 5.88 3.87 5.76	-1.17 +0.30 +1.52 +0.29 +1.17 +1.68 -1.07 -1.44 +0.16 +1.63	2. 17 8. 50 2. 48 2. 69 7. 49 5. 66 4. 79 6. 40 7. 29 4. 98 3. 75 6. 31 3. 96 5. 35	+1.38 +3.05 +1.25 -0.19 +0.03 +0.64	2.21 - 3.27 - 3.26 - 4.92 - 2.58 - 4.91 - 3.67 - 4.91 - 3.43 - 2.71 - 6.91 - 1.92 - 6.98 - 2.08 - 3.68 - 3.	-2.58 -2.07 -1.06 +0.11 -1.40 +0.52 -0.60 +0.19 +3.24 -2.75 -2.09 -0.38	3.86 3.61 2.85 3.11 2.89 1.57 3.87 4.80 1.41 1.60 3.54 1.52 0.60 2.89 3.70	+0.20 -0.28 -0.30 -0.90 -0.05 -2.28 +0.23 -1.58 -1.58 -2.36 -0.68 +0.46	2. 40 2. 06 1. 46 3. 24 1. 64 1. 14 0. 97 1. 36 1. 18 0. 78 0. 98 1. 68 1. 89	-0.59 -1.13 -2.14 +0.15 -1.67 -2.17 -1.86 -2.25 -1.89 -2.40 -1.24 -1.58	6.16 4.63 4.65 5.66 6.65 4.93 5.71 3.43 5.76 4.13 6.43 3.77 6.08	+1.56 +2.90 +4.48 +2.07 +3.27 +1.09 +2.10 +3.49 +3.30 +2.72	1. 80 - 2. 80 - 2. 59 - 3. 21 - 1. 80 - 11. 34 - 11. 25	-1. 30 4 -0. 42 8 -0. 84 4 -0. 92 4 -0. 92 8 -1. 97 4 -1. 97 4 -1. 38 3 -1. 38 3 -1. 85 4	1 73 6. 42 6. 56 5. 26 9. 47 1. 56 2. 61 0. 00 8. 10 5. 26 4. 93 0. 06 6. 54 0. 39	-8.28 -4.69 -1.79
Delaware Bridgeville. Delaware City Dover Georgetown Lewes Millsboro Newark (Pumping Station) Newark (University Farm) Wilm'n. (Municipal Bldg.) Wilm'n. (Porter Reservoir)	5. 12 5. 11 5. 26 5. 25 5. 81 5. 68 *3. 60 3. 58 3. 60 3. 72	+1.57 +2.06 +1.80 +1.91 +0.20 +0.18 +0.07 +0.15	1.07 1.41 1.08 1.01 1.74 1.44 *1.70 1.70 1.79	-2. 25 -1. 34 -2. 17 -2. 13 -1. 39 -1. 43 -1. 60	1. 73 2. 12 1. 84 1. 81 1. 12 1. 85 1. 90 2. 11 2. 28 2. 39	-2. 15 -1. 20 -2. 25 -2. 27 -1. 84 -1. 63 -1. 35 -1. 45	3.88 2.82 2.85 4.05 4.42 4.39 2.69 3.16 3.25 6.20	+0.39 -0.61 -0.78 -0.72 -0.93 -0.46 -0.32 +2.37	5. 79 6. 89 6. 49 3. 00 4. 27 2. 31 10. 14 10. 16 9. 99 7. 24	+2. 21 +3. 58 +2. 91 -1. 16 +6. 80 +6. 32 +6. 50 +3. 77	3. 10 4. 10 3. 71 2. 21 3. 36 3. 42 3. 73 3. 75 8. 78 4. 27	-0.49 +0.22 +0.05 -0.37 -0.27 -0.25 -0.19 +0.32	4.48 3.45 3.15 4.28 1.33 *4.22 4.45 4.68 3.22 2.99	-0.56 -0.27 -1.59 -0.54 -0.80 -0.07 -1.57 -1.94	1.95 - 5.86 - 4.84 . 1.43 . 3.00 - 1.55 - 1.91 - 2.00 - 2.31 -	-2.70 +0.94 +0.99 -2.34 -3.40 -3.04 -3.00 -2.87	3. 68 1. 93 2. 43 4. 60 5. 48 3. 74 2. 77 3. 12 2. 88 2. 19	+0. 22 -1. 57 -1. 34 -0. 82 -0. 47 -1. 14 -1. 51	1. 76 1. 81 1. 83 1. 51 1. 97 2. 19 1. 74 1. 39 2. 74 2. 23	-1.85 -1.50 -1.61 -1.83 -1.55 -1.90 -0.41 -0.84	4 24 5 94 4 38 4 29 4 92 4 61 5 24 6 09 6 96 8 11	+1. 61 +3.40 +1.29 +1.72 +2.30 +3.15 +3.95 +5.06	2. 30 - 1. 80 - 1. 79 - 3. 05 . 2. 78 . 2. 94 - 1. 96 - 1. 67 - 1. 83 - 1. 80 -	-0. 85 3 -1. 49 4 -1. 53 4 -1. 53 4 -1. 58 4 -1. 58 4 -1. 65 4 -1. 51 4	9.05 2.25 0.17 9.40 8.58 9.79 1.47 8.32 3.82 4.92	-4.35 +2.25 -4.23 -6.41 -3.78 -1.41 -0.56
For Maryland and District of Columbia For Delaware For entire section	3.82 4.79	+0.52 +1.25	1. 64 1. 41	-1.28 -1.80	1.66 1.92	-1.88 -1.89	2. 65 3. 89	-0.83 +0.35	5. 17 6. 63	+1.57 +3.10	4. 53 8. 54	+0.54 -0.29	4.40 3.66	+0.08 -1.07 -0.07	3. 30 2. 97	-1.12 -1.88	2. 98 3. 23	-0.38 -0.21	1.47	-1.54 -1.24	5. 42 5. 47	+2.81 +2.66	1. 50 - 2. 19 -	- 1. 61 3 - 1. 18 4	8.54 1.57	

^{*}Determined from surrounding stations.

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20th to the 25th caused light frost in "frost pockets" of Garrett County. Precipitation averaged near the July normal but amounts for the various stations ranged from 14 inches to 9 inches but was well distributed through the month. Showers were reported from some portion of the section on all except 4 days, but many were very light.

As the month came to an end, crops were making good growth, except where soil moisture was locally deficient, and farm work was proceeding rapidly. Most small grains were cut and were being threshed as weather permitted. Corn was thriving as it recovered from a slow start. Truck crops and gardens were mostly good to very good, although deteriorating locally due to dry weather, Japanese beetles, and tomato blight. Early tree fruits were being harvested as later varieties were developing and coloring. Tobacco was improving and some plants were blooming but the crop was only fair.

Pastures and hay crops were mostly good to excellent.

Summer heat prevailed through most of August to make it the second warmest of record. This August was 63 degrees warmer than August 1946, which was next to the coclest such month of record. The first week was below normal, but the rest of the month was generally well above normal. August was a little deficient in rainfall. The greatest deficiencies were near and east of the Chesapeake Bay. Precipitation was well distributed through the month in most of Delaware and near the District of Columbia but elsewhere most of the rain fell during the latter half of the month.

Warm temperatures and generally ample soil moisture made August weather good for crops. As the month ended, corn was thriving and improving but still was late. Preparation of the ground for winter grain was beginning. Truck crops and gardens were

(Continued at bottom of next page),

Monthly and Annual Mean Temperatures for the Year 19													ear 1947 with Departures from							Jorn	al					
•	Janu	nary	Febr	February . M		arch	• A	pril	N	lay	Ju	ine	Jı	ıly	Au	gust	Sept	ember	Oct	ober	r Novemb		Dece	mber	Anı	nual
Stations	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Тетрегатиге	Departure	Temperature	Departure
Marpland Aberdeen. Annapolis. Baltimore (U.S.W.B.). Baltimore (Airport) Bell. Beltsville Beltsville Blackwater Cambridge: Charlotte Hall Cheltenham Chestertown Chewsville. Clear Spring. Coleman College Park. Conowingo Dam Crisfield	40.0 40.4 42.4 42.4 41.2 39.6 39.8 37.0 37.8 40.6	+6.5 +7.6 +5.0 +6.8 +6.9 +6.9	30.8 30.2 33.2 6 32.0 6 81.6 28.8 8 30.4 27.6 9 29.0 9 31.6	-4.5 -3.6 -2.7 -5.1 -4.2 -3.0 -6.4 -2.7 -3.6 -1.6 -2.3	39. 4 37. 1 40. 0 38. 8 38. 4 37. 6 37. 9 34. 6 38. 5 39. 7	-1.1 -6.8 -6.2 -6.3 -6.9 -5.2 -6.4 -2.4 -3.6 -5.2 -5.2 -5.7	53.4 55.8 55.8 55.8 55.2 56.8 56.5 56.8 56.5 56.8	+3.2 +0.4 +3.0 +0.9 +1.3 +2.6 +4.7 +2.9 +3.3 +0.7	62. 2 64. 5 64. 0 63. 6 62. 2 65. 3 64. 6 63. 4 63. 2 60. 0 61. 6 64. 2 64. 6	-0.5 -0.3 -0.3 -1.0 -0.1 +0.4 +1.4 -2.0 +2.3	70. 6 71. 6 71. 4 69. 8 69. 8 71. 3 70. 0 69. 8 69. 4 70. 4 67. 9 68. 4 71. 6	-3.2 -2.5 -1.1 -2.4 -3.5 -3.2 -2.2 -1.6 -0.9 -0.5 -0.4 -2.6	76. 7 76. 4 73. 5 72. 5 75. 7 74. 6 74. 5 73. 8 75. 4 70. 7 71. 6 76. 2 74. 4 73. 0 78. 6	-0.5 -0.3 -2.2 -3.1 -2.1 -0.8 -3.4 -2.7 -0.9 -1.3	77. 2 78. 6 78. 4 76. 4 75. 2 77. 6 77. 6 77. 4 75. 5 78. 2 76. 8 77. 4 75. 5 76. 2	+2.9 +1.6 +3.4	70. 0 69. 4 68. 8 66. 8 70. 6 68. 6 68. 1 69. 2 65. 6 66. 8 70. 8 69. 4 67. 0 74. 8	-0.6 -0.5 -0.4 +0.9 -0.4 +0.4 +1.4	64. 8 63. 8 61. 2 60. 2 64. 2 63. 0 62. 6 62. 6 62. 1 63. 5 59. 0 61. 4 65. 2	+5.7	46. 1 46. 4 45. 8 43. 2 41. 9 45. 9 45. 2 44. 9 44. 8 42. 4 40. 8 42. 7 44. 2 42. 3	-0.9 +0.1 +1.1 -2.3 -2.7 -2.1 -1.2 -1.4 -2.3 -0.9 -1.1 -1.4	36. 2 37. 0 35. 8 33. 3 31. 7 36. 2 34. 2 34. 2 34. 8 31. 7 32. 6 85. 8 34. 6 30. 9	-0.8 -0.2 +0.4 -2.3 -2.6 -0.7 -1.8 -0.9 -1.1 +0.3 -0.3 -1.6 -2.8	55.3 56.6 55.8 54.4 55.7 55.6 54.4 55.0 51.9 53.4 56.3	-0.8 -0.2 +1.2 +1.6 -0.2 -0.9 0.00 -0.6 +0.6 -0.3 +1.1 +1.1 +0.7 -0.6 +1.6
Conowingo Dam Crisfield Crisfield Cumberland Easton Elkton Emmitsburg Fallston Ferry Landing Fort George G. Meade Frederick Frederick (Airport) Frostburg Germantown Great Falls Hancock Huntingtown Keedysville La Plata	37. 9 38. 0 38. 4 42.2 43.8 38. 2 37. 9 33. 9 39. 4	+6.8 +7.0 +6.9 +5.8 +3.7	29.4 29.5 29.0 32.0 32.5 29.0 28.6 23.6 29.4	-4.0 -2.9 -3.1 -4.8 -4.4 -7.1	36. 1 39. 2 37. 6 37. 3 36. 7 38. 9 41. 2 36. 0 36. 6 31. 8 37. 1 38. 0 34. 6 38. 2	-4.4 -5.1 -4.7 -3.5 -3.6 -6.6 -7.3 	54.6 55.9 58.6 54.0 53.6 56.6 57.6 54.5 52.6 54.8 55.8 55.8 55.8	+2.5 +1.8 +2.1 +2.7 +2.8 +1.8 +3.1 +2.7 +0.3 +2.1	63. 9 62. 4 61. 6 64. 0 64. 6 61. 6 57. 6 62. 6 64. 2 60. 4 64. 2	-0.6 +0.1 -0.9 -0.1 -0.1 -2.2 -2.5 -0.4 -0.4	69. 6 70. 6 70. 0 	-1.4 -1.3 -1.9 -1.1 -2.8 -2.8 -1.6 -3.7 -2.4	70. 7 74. 7 74. 5 73. 2 74. 2 70. 2 73. 2 72. 8 68. 6 73. 2 70. 6 74. 2	-1. 1 -2. 1 -3. 4 -3. 1 -2. 7 -3. 9 -1. 1	77. 0 76. 5 75. 4 77. 0 74. 4 76. 8 76. 0 72. 8 76. 3 77. 6 75. 3 76. 7	+2.9 +2.3 +2.4 +3.0 +2.4 +2.6 +2.8 +2.8 +2.5	65.4 69.1 68.3 67.6 68.8 64.8 67.8 66.5 63.8 67.6	-0.6 +0.2 +0.2 +1.2 -0.2 0.0 -0.7 +0.8 -1.7 +0.7	60.3 62.4 61.6 61.6 62.4 62.9 60.2 60.4 61.0 57.4 62.1	+5.8 +4.8 +5.6 +6.5 +7.1 +4.9 +4.3 +4.3 +6.3 +3.4 +5.2	40: 4 44: 4 42: 9 42: 4 42: 7 45: 2 41: 8 42: 0 41: 8 37: 2 43: 4 44: 2 40: 5 45: 2	-2.6 -2.5 -2.8 -1.2 -1.3 -2.4 -2.5 -4.8 -2.9 -2.5	30.6 35.3 32.9 33.6 32.9 36.0 32.3 32.6 32.7 30.2 34.6 33.8 31.2 35.6	-3.5 -1.8 -2.2 +0.1 -1.2 -1.7 -2.2 +0.8 -0.9 -1.9	52.6 55.5 54.0 53.5 55.6 54.5 53.2 49.6 54.1 55.0 55.4	+0.4 +0.1 -0.2 +0.8 -0.4 -0.7 -1.1 +0.7 -1.3 -0.4
Keedysville. La Platta. Maryland Line. Millington Oakland Oxford Picardy Prettyboy Dam Ridgely Rock Hall Salisbury Sines (Deep Creek) Snow Hill Solomons.	34. 9 34. 9 42. 2 39. 0 37. 4 41. 8 40. 8 44. 4	+6.8 +6.5 +6.5 +4.7 +5.8 +7.0 +6.5 +6.8	30.8 30.8 19.5 83.4 7 28.2 27.8 31.5 31.6 34.6 20.2 6 33.0	-3.4 -8.9 -4.3 -5.7 -4.0 -3.4 -3.2 -3.2 -7.5 -4.6	37. 0 38. 8 35. 9 38. 0 28. 0 39. 8 85. 9 34. 9 38. 2 39. 1 40. 6	-7.3 -4.5 -5.9 -6.4 -6.0 -5.1 -1.9 -7.7 -5.0	58. 6 55. 7 51. 2 56. 1 56. 2 58. 0 55. 2 55. 0 57. 4	+2.4 +3.3 +2.5 +5.1 +0.1 +5.0 +2.3 +2.0 +3.2 +3.9 +2.7	65.1 61.3 63.4 55.4 65.3 61.7 60.6 64.0 64.5 66.4	+1.2 -0.7 -0.1 -0.6 -1.3 -0.7 -2.0 +0.2 +0.8 +2.2 -0.9 +1.7	70. 8 68. 5 70. 4 63. 8 70. 8 69. 2 68. 2 70. 2 71. 4 71. 6 62. 7 70. 6	-1.5 +0.7 -1.7 -1.2 -0.3 -3.6 -0.8 -2.2 -2.0 -1.6 -1.1 -1.6 -1.4	74. 6 72.8 75.1 65.4 75.2 71.0 72.0 74.0 75. 7 76. 2 65. 2 74. 2	-1.9 -1.4 -1.0 -1.9 -2.4 -3.2 -2.3 -2.5 -1.4 -0.6 -2.1 -1.8	75.6 77.2 71.2 77.2 75.3 75.0 75.9 78.0 79.1	+3.53 +3.30 +3.11 +5.21 +0.13 +2.22 +1.4 +2.7 +3.8 +2.8 +2.6	69. 6 67. 5 69. 3 62. 6 70. 1 65. 2 66. 5 68. 6 69. 8 71. 4 60. 1 69. 4	-0.3 +0.6 +0.7 +1.7 -0.8 -0.9 -0.1 -0.3 +1.8 +0.5 +0.3	56. 5 63. 6 59. 4 61. 5 62. 5 63. 4 65. 0 54. 6 61. 7	+6.9 +6.4 +8.5 +6.8 +6.9 +5.8 +4.9 +5.1 +5.3 +6.6 +3.6 +5.0	45.7 41.8 44.6 87.3 46.0 41.4 41.4 *44.5 46.4 35.0 44.3	-1.6 -2.5 -1.5 -1.2 -3.4 -3.1 -3.2 -2.3 -2.5 -1.5	32. 4 34. 6 29. 4 36. 8 32. 8 32. 2 35. 0 *35. 0 37. 2 27. 2 35. 5	~0.4 ~1.9 ~1.4 ~2.0 ~1.5	56 0 58.2 55.3 47.9 56.4 52.9 52.6 55.1 55.7 57.5	+0.4 0.0 +0.5 +0.4 +0.3 -1.2 -0.4 -0.2 +0.1 +0.9 -0.4 -0.3 +0.7
Soloholis State Sanatorium Takoma Park No. 1 Takoma Park No. 2 Tonoloway Unionville Western Port Westminster Woodstock District of Cotumbia Washington (U.S. W.B.) Delaware	35. 8 41. 0 40. 4 36. 6 35. 4 38. 4 38. 2 38. 7	+5.2 +7.5 +5.6 +6.7 +7.2 +6.6	2 26. 1 5 31. 5 30. 4 27. 4 26. 8 7 27. 2 28. 8 5 29. 2	-5. 2 -2. 5 -6. 0 -5. 5 -3. 0 -4. 0	32.6 39.2 37.8 34.6 *35.0 35.6 36.4 36.9	-7.8 -4.6 -6.8 -6.6 -4.4 -4.7	50. 1 59. 2 56. 6 53. 4 50. 8 56. 4 54. 6	-0.6 +3.9 +2.8 +4.6 +4.5 +2.4	64.4 63.0 60.6 58.8 62.0	+0.8 -0.5 -0.2 +0.6 -0.6	70. 6 69. 7 67. 2 66. 4 68. 6 69. 0 69. 3	-0.6 -2.5 -1.1 +0.1 -1.7	73. 8 73. 2 70. 6 69. 9 71. 2 73. 4 73. 2	-1.8 -3.1 -2.5	76.6 76.0 74.6 73.2 76.2 75.6 76.1	+2.9 +3.1 +4.2 +4.5 +3.2	65. 5 68. 5 67. 8 65. 0 64. 2 66. 8 67. 6 66. 8	-0.3 +0.7 -0.9 +0.1 +2.1	60. 3 62. 8 61. 6 59. 1 56 6 61. 9 61. 6 59. 9	+5. 4 +6. 1 +5. 5 +6. 8 +7. 8 +5. 0	42.0 45.0 44.2 41.2 40.8 42.1 41.8 42.2	-1.4 -0.9 -2.1 -1.5 -1.7 -1.5	33.2 35.6 34.2 32.0 31.0 33.8 32.4 32.0	+0.6 +0.1 -1.4 +0.1 -1.5 -2 3	55. 5 54. 6 61 9 50. 7 53. 4 53. 4 53. 4	+0.9 -0.5 +0.5 +1.4 0.0 +2.0
Bridge ville Delaware City Dover Georgetown Lewes Millsboro Newark (Univ. Farm) Wilm'n. (Porter Res.) For Maryland and District of Columbia. For Delaware For entire section	41.7 44.5 38.7 37.8 39.6 41.0	+8.7 +7.7 +5.0 +6.5 +6.2	30. 9 32. 8 28. 8 27. 8 29. 6 30. 5	-3.0 -1.0 -5.9 -3.6	36.6 40.2 36.4 36.5 37.3	-4.2 -4.5 -5.7 -5.4 -5.9	53.3 55.3 52.6 51.4	+2.4 +1.6 -0.8 +2.4 +1.1	61.6 65.4 61.7 60.9 62.7	-0.1 -0.6 -0.1 -0.4 -2.2 -0.1 -0.4 -0.2	67. 0 70. 6 68. 6 68. 0 69. 7 69. 2	-1.1 -1.4 -3.5	73. 1 75. 8 73. 6 73. 8 73. 3	-0.5 -1.3 -2.3 -1.8	75. 5 77. 3 75. 2 75. 2 75. 2 76. 4 75. 9	+1.3 +1 0 +1.7 +2.5 +2.4 +1.2 +3.0 +1.5 +2.8	67.9 68.6	+0.3 +1.0 -0.7 +0.3	62. 4 62. 2 63. 4 62. 0 62. 2 61. 8 62. 6	+5.8 +6.8	44. 6 45. 2 42. 8 42. 9 43. 4 44. 2	-1.9 -0.6 -2.7 -1.8	35. 5 35. 6 33. 2 83. 4 33. 9 34. 7	-2.1	54.3 56.3 53.4 53.1 54.2	-0.4 +0.8 +0.1 +0.8 +0.9 -1.1 +0.2 -0.4 +0.1

*Determined from surrounding stations

(WBO, Philadelphia, Pa., -6-11-48-1,575)

(Continued from preceding page)

good or better. Early tree fruits were being harvested. Tobacco was only fair as late August rains greened the plants and delayed cutting. Pastures were good to excellent. September temperatures and precipitation were about normal. The first 22 days were above normal but the last 8 days were 8 to 10 degrees below normal. The coldest period was the 27-28th when killing frost occurred in mountains and sporty frost in Piedmont and interior Del-Mar sections. A 31-degree reading at Newark on the 27th was the lowest September temperature in the Delaware records. Rainfall was well distributed through September and distribution over the section was very good. The month was generally good for crop development. As September ended, corn was in various stages of harvest through the section. The ground was being prepared for winter grains with some fields already seeded. Truck crops were in diminishing supply. Tree fruits were being harvested. The tobacco crop was mostly in the barns. Pastures were mostly good to very good.

The mean monthly temperature for October was only 0.5 degree lower than the record highest for the month. The month was coldest on the 1st and the last half was

much warmer than the first half, and averaged 12 to 15 degrees above normal. Except for substantial rains in southern Delaware and southeastern Maryland on the 8th, only light rain fell between September 25th and October 25th. The last 4 days brought an end to the dry soil and low stream and well conditions.

October's warm, dry weather was ideal for the corn harvest. The unusual cold of the 1st killed tender vegetation and damaged some harder plants. Where soils were dry, seeding and germination of winter grains were delayed, but these activities accelerated greatly at the end of the month. Pastures deteriorated during the month on account of the freezing temperatures on the 1st and the later dry weather.

November was wet with the only measurable snow in Garrett and Allegany Counties. Precipitation distribution through the month was excellent. Temperatures averaged 1.8 degrees below normal. The seeding of winter grains accelerated.

December was dry but the precipitation had very good distribution through the month. The first general snow of the winter fell on the 25-26th, with most amounts from 3 to 6 inches. December temperatures were slightly below normal. As a whole, moderately cold weather, with no extremely warm or cold periods, predominated. Winter grains and grasses were mostly in a fair condition but were snow-covered and dormant.