U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU

IN COOPERATION WITH MARYLAND STATE WEATHER SERVICE

CLIMATOLOGICAL DATA

MARYL	AND	AND	DEL.	AWARE	SECTION
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J. R. WEEKS

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Vol. XLI Baltimore, Md., Year 1937 No. 13

GENERAL SUMMARY

January was the rainiest of record. January 17-25 was a very wet period. February and March were windy. There were four cold periods in February and two prolonged ones in March. During the night of February 21-22 a tornado moved from extreme southern Anne Arundel County northeastward to the Quaker Neck area of southwestern Kent County; damage \$100,000. Snowfall was moderate to heavy in the east portion of north-central Maryland on March 11; in western and northcentral Maryland on March 14; and over the northern portion of the section on March 15. Monthly rainfall in April in Washington, Frederick, Carroll, and Baltimore Counties was the greatest of record for April. The heavy rainfall of April 25-28 caused high water in all streams and produced the third greatest flood of record on the Potomac River; damage to roads, bridges, and miscellaneous property in western and central divisions was \$250,000. Local tornadoes on May 6, 13, 22, and 26 caused \$225,000 damage. Severe and damaging local thundergusts occurred on May 19, 22, 23, and 26 Heavy hail at Baltimore on May 26 caused \$75,000 damage. The first decade of June was very warm. Heavy thundershowers on July 5 in Harford, Cecil, and northwestern New Castle Counties flooded fields and roads and caused streams to overflow their banks; some small bridges and portions of some roads were washed away; 20,000 persons were marooned for many hours at the Delaware Park race track near Stanton; and 2 men were drowned in the Christiana River at Cooch's Bridge. Heavy thundershowers on July 22 washed fields and the highway badly in the Bear Creek district of northwestern Garrett County. In August: the weather was very warm during the 17th-21st and very cool during the 23d-25th; daytime temperatures on the 29-30th were very low; the first and second decades were dry; the third decade was very wet, with heavy rains during the 22d-27th. Heavy thundershowers on August 7 and 12 in extreme eastern Baltimore, Hariord, Cecil, and northern New Castle Counties flooded (Continued on next page)

CONDENSED SUMMARY OF CLIMATOLOGICAL DATA 1937

	T	empera	ture			Precipit	ation		Numb	er of d	ays	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	Cloudy	Prevailing direction
January. February March April May June July August. September October November December	41. 9 34. 9 39. 4 51. 2 63. 2 72. 3 74. 9 64. 3 53. 7 44. 4 34. 7	+7. 9 +1. 0 -2. 8 -0. 9 +0. 7 +1. 5 -0. 3 +2. 5 -3. 6 -2. 4 -0. 8 -1. 0	77 72 74 94 95 99 100 100 96 87 79	11 0 1 19 27 41 89 44 26 14 -3 -12	3. 20 2. 02 6. 38 3. 44 4. 99 3. 80 7. 05 1. 72 7. 07 3. 45	+4. 22 +0. 25 -1. 55 +2. 93 +0. 03 +0. 95 -0. 42 +2. 46 -1. 45 +4. 05 +0. 99 -2. 04	2.50 2.90 1.46 5.84 3.90 2.67 3.76 4.24 2.24 3.25 1.07	1.0 8.5 9.0 0.1 0.0 0.0 0.0 0.0 0.0 0.1 0.5 1.7	17 12 8 12 11 12 10 13 6 13 7	3 6 8 8 14 9 9 9 16 12 11 13 14 13 12 11 17 6 11 8 10 9	12 3 6 4 8 7 12 8	nw.

KILLING FROSTS 1937

Stations	Last in Spring	First in Autumn	Stations	Last in Spring	First in Autumn
Maruland			Maryland (con.t.)		
Aberdeen	Apr. 11	Oct. 15	Lutherville	Apr. 13	Oct. 9
Annapolis	Apr. 11	Oct. 15	Maryland Line	Apr. 13	Oct. 15
Baltimore	Apr. 11	Oct. 15	Millington	Apr. 13	Oct. 15
Bell	Apr. 17	Oct. 9	Mt. Savage Summit	Apr. 17	Sept. 18
Boyds		Oct. 9	Oakland	May 11	Sept. 18
Cambridge	Apr. 13	Oct. 15	Oxford	Apr. 13	Oct. 15
Charlotte Hall	Apr. 12	Oct. 15	Parkton	Apr. 13	Oct. 15
Cheltenham	Apr. 12	Oct. 15	Perryville	Apr. 13	Oct. 15
Chestertown	Apr. 11	Oct. 15	Picardy	Apr. 17	Oct. 9
Chewsville	Apr. 17	Oct. 9	Pleasant Hill	Apr. 13	Oct. 9
Clear Spring	Apr. 17	Oct. 9	Princess Anne	Apr. 13	Oct. 9
Cóleman	Mar. 30	Oct. 15	Ridgely	Apr. 12	Oct. 15
College Park	Apr. 17	Oct. 15	Rock Hall	Apr. 11	Oct. 15
Conowingo Dam	Apr. 13	Oct. 11	Salisbury	Apr. 13	Oct. 9
Crisfield	Mar. 27	Nov. 25	Sines	May 11	Sept. 18
Cumberland	Apr. 17	Oct. 9	Snow Hill	Apr. 13	Oct. 9
Darlington	Apr. 13	Oct. 9	Solomons	Mar. 28	Nov. 21
Dundalk	Apr. 11	Oct. 17	State Sanatorium	Apr. 13	Oct. 15
Easton	Apr. 13	Oct. 15	Stevensville	Mar. 30	Oct. 15
Edgewood	Apr. 13	Oct. 15	Takoma	Apr. 12	Oct. 15
Elkton		Oct. 15'	Towson	Apr. 13	Oct. 15
Emmitsburg	Apr. 13	Oct. 15	Western Port	Apr. 17	Oct. 9
Fallston		Oct. 15	Westminster	Apr. 17	Oct. 9
Ferry Landing	Apr. 12	Oct. 15	Woodstock	Apr. 17	Oct. 9
Frederick	Apr. 17	Oct. 15	District of Columbia		
Friendsville	May 11	Sept. 18	Washington	Mar. 28	Oct. 25
Frostburg	Apr. 17	Sept. 18		• • • •	
Georgetown	Apr. 13	Oct. 15	Delaware		
Grantsville	May 11	Sept. 18	Bridgeville		Oct. 9
Great Falls	Apr. 17	Oct. 9	Delaware City		Oct. 15
Hancock	May 11	Oct. 9	Dover	Apr. 13	Oct. 15
Huntingtown	Apr. 12	Oct. 15	Milford	Apr. 11	Oct. 15
Kecdysville	Apr. 17	Oct. 9	Millsboro		Oct. 9
La Plata	Apr. 13	Oct. 15	Odessa	Apr. 13	Oct. 15
Laurel	Apr. 13	Oct. 15	Wilmington	Apr. 11	Oct. 15

COMPARATIVE DATA FOR THE YEAR

		FOR	MARY	LANI)]	FOR I	DELAV	VARE	
	Ten	nperat	ure	Pre	cipita	tion	Ter	nperat	ure	Pre	cipita	
Year	Mean	Highest	Lowest	Average	Average snowfall.	No. of days with joi in. or more	Mean	Highest	Lowest	Average	Average snowfall	No. of days with .01 in. or more
1895	54.5 6 5.0 6 5.1 6 5.0 6 5.1 6 5.0 6 5.1 6 5.0 6 5.1 6	102 100 102 109 102 106 106 106 100 101 102 102 102 102 103 102 103 104 107 100 108 109 109 109 109 109 109 109 109 109 109	-18 -13 -12 -20 -26 -15 -15 -15 -5 -15 -15 -15 -11 -32 -30 -15 -11 -32 -31 -16 -16 -17 -12 -30 -17 -12 -30 -17 -12 -30 -17 -17 -17 -17 -17 -17 -17 -17 -17 -17	34. 67. 38. 49. 44. 55. 46. 19. 14. 46. 75. 36. 36. 36. 47. 30. 36. 36. 36. 36. 36. 36. 36. 36. 36. 36	19, 3 37, 1 18, 6 88, 88, 2 21, 7 36, 9 40, 23, 8 6, 9 40, 23, 2 20, 5 32, 2 20, 5 32, 2 20, 5 32, 2 20, 5 32, 2 20, 5 32, 8 32, 6 32, 6 32, 6 32, 6 32, 6 33, 6 34, 4 36, 9 37, 1 38, 9 38, 1 38, 1	91 90 108 98 99 106 96 106 106 123 121 129 109 119 110 110 111 111 114 112 116 111 112 116 111 112 117 118 119 119 119 119 119 119 119 119 119	53.8 8 55.0 6 54.6 7 54.4 8 53.7 7 54.2 5 55.3 6 55.5 6 55.5 7 57.3 8 55.5 7 57.3 8 56.7 8 57.3 6 57.3 6 58.9 6 58.7 8 58.1 7 57.4 6 58.0 5 58.0 5 58.0 5 58.0 6 58.0 5 58.0 6 58.0 6	101 103 97 100 104 104 104 109 96 102 99 101 101 101 101 101 100 102 102 103 104 104 105 106 107 107 107 108 109 109 109 109 109 109 109 109 109 109	-400	7. 13 40.99 46.81 41.11 43.62 44.11 43.62 44.15 45.80 46.80 46.81 47.21 48.62 48.55 41.22 48.55 41.22 48.55 41.22 48.55 41.22 48.55 41.22 48.55 41.22 48.55 41.22 48.55 41.22 48.55 55 55 55 55 55 55 55 55 55 55 55 55	17. 5 11. 8 14. 5 8. 0 16. 0 14. 5 33. 6 40. 7 16. 0 8. 8	95 96 111 108 96 106 122 117 95 94 101 105 109 90 98 103 107 85 108 110 108 110 108 110 109 110 109 110 109 110 109 110 110
Period	54.0	109	-40	41.31	27.2	110	54.7	110	—15	42.70	18.7	105

Climatological Data for the Year 1937

Standons Counties			1	<u> </u>	Tempe		degrees			1			ecipitat	ion			1	Ī	Sky		
Aberdoen. Harford 29 19 54,6 30 July 10 11 Dec. 10 10 46,6 5,6 5,6 30 5,7 10 10 10 10 10 10 10 1			Elevation, feet	of record,	mean	,				Length of record, years	for th year	monthly		monthly	Month		of	of tys	of partly y days	Number of cloudy days	Prevailing direction of wind
	Aberdeen Annapolis Baltimore (U.S.W. B.) Bell § Bell § Boyds Cambridge (near) Charlotte Hall Cheltenhann Chestertown Chewsville Clear Spring Coleman § College Park Conowingo Dam Crisfield Cumberland Darlington Dundalk Easton Edgewood Elkton Emmitsburg Fallston § Ferry Landing § Ferry Landing § Frederick Friendsville Grant Falls § Georgetown Grantsville Grant Falls § Hancock (City) Hancock (Tonoloway) Huntingtown Keedysville La Plata Laurel Lutherville Maryland Line Millington Mt. Savage Summit § Oakland Oxford. Park ton (Prettyboy Dan Perry ville Picardy § Pleasant Hill § Salisbury Sinos (Deep Creek) § Snow Hill Salisbury Sinos (Deep Creek) § Snow Hill Solomous State Sanatorium Stevensville Takoma Towson Western Port Westminster Woodstock District of Columbia Washington (U.S.W.B.) Delaware Bridgeville Delaware City Dover Milford Millsboro Odessa § Wilmington \$\mathred{S} Wilmingto	Anne Arundel Prince Georges Montgomery Dorchester St. Marys Prince Georges Kent. Washingtondo Kent Prince Georges Harford Somerset Allegany Harford Baltimore Talbot Harford Ccell Frederick Harford Ccell Frederick Harford Calvert Frederick Garrett Allegany Garrett Montgomery Washingtondo Kent Garrett Montgomery Washington Charles Prince Georges Baltimore Calvert Washington Lalvert Washington Charles Prince Georges Baltimore Calvert Washington Charles Prince Georges Baltimore Calvert Washington Charles Prince Georges Baltimore Baltimore Suser Caroline Kent Garrett Wicomico Garrett Wicomic	451 141 1315 131 167 1230 355 6630 360 890 160 40 40 125 366 360 360 120 125 422 430 110 120 120 120 120 120 120 120 120 12	72 67 717 188 444 41 27 42 446 88 111 18 400 1 1 39 1 1 7 7 11 22 446 68 11 18 400 1 1 39 1 1 1 7 7 11 622 446 66 67 67 67 67 67 67 67 67 67 67 67 67	56.9 56.9 6.9 6.5 5.4 2 6.5 5.5 6.9 6.9 6.5 6.9 6.5 6.9 6.5 6.9 6.5 6.9 6.5 6.9 6.5 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9	1000 977 96 100 97 97 97 96 98 96 96 99 99 99 99 99 99 99 99 99 99 99	July 9 July 9 July 10 July 8 July 10 July 8 July 10 July 10 July 10 July 10 July 11 July 9 July 9 July 9 July 9 July 10 July 8 July 8 July 8 July 8 July 8 July 8 July 10 Aug. 19 July 10 Aug. 20 July 10 July 8 July 10 Aug. 20 July 10 July	17 20 6 8 8 16 8 8 16 8 8 16 16	Feb. 26 Feb. 26 Feb. 27 Feb. 17 Dec. 12 Dec. 11 Dec. 12 Dec. 12 Dec. 11 Dec. 12 Dec. 12 Dec. 11 Dec. 12 Dec. 11 Dec. 12 Dec. 12 Dec. 11 Dec. 12 Dec. 12 Dec. 11 Dec. 12	647 647 177 182 144 177 182 145 184 184 184 184 184 184 184 184 184 184	56. 54 56. 54 56. 45 58. 50 62. 47 39. 68 48. 84 48. 64 56. 65 51. 85 52. 29 55. 40 55. 42 55. 43 55. 43 55. 44 55. 44 55. 45 55. 40 55. 50 55. 40 55. 50 55. 50	12. 07 7 7.92 9.09 10.12 10.15	Aug. Apr. Jan. Jan. Jan. Jan. Jan. Jan. Jan. Oct. Apr. Aug. Oct. Aug. Oct. Aug. Oct. Jan. Oct. Jan. Oct. Jan. Oct. Jan. Aug. Jan. Oct. Jan. Aug. Jan. Oct. Jan. Aug. Jan. Oct. Jan. Oct. Jan. Jan. Oct. Jan. Aug. Jan. Aug. Jan. Aug. Jan. Aug. Jan. Aug. Aug. Jan. Aug. Aug. Jan. Aug. Aug. Aug. Aug. Aug. Aug. Aug. Aug	0.91 0.92 0.95	Dec. Dec. Dec. Dec. Dec. Dec. Dec. Dec.	21.8 4.0 5.2 23.0 6.2 24.5 14.5 22.5 8.8 .0 17.2 22.5 20.5 20.5 20.5 22.5 8.2 22.5 8.2 22.5 8.2 22.5 8.2 22.5 8.2 22.5 8.2 22.5 8.2 22.5 22.5	145 127 127 127 127 127 127 127 127 127 127	101 115 115 115 116 117 116 117 117 117 117 117 117 117	139 107 111 1107 103 104 107 107 107 107 107 108 108 109 107 119 109 109 109 109 109 109 109 109 109	125 143 143 143 149 115 145 145 146 146 146 146 146 146 146 146 146 146	DW. SW. INW. INW. INW. INW. INW. INW. INW. IN

(Continued from front page)
low areas, caused high water in streams, and washed fields and roads badly. Heavy hail at Salisbury on August 2 caused \$5,000 loss of crops. Severe thundergust on August 12 caused \$30,000 damage in southeastern Baltimore. September was a typical autumn month. Killing frosts and freezing temperatures occurred September 18, 20, 21, and 27 in the Allegheny Mountain region and October 15, 16, and 17 over the entire section. October 18-24 was a windy week. Heavy to excessive

rains during October 19-20, 22-23, and 27-28 produced high water in all streams. Excessive rains of October 22-23 over northwestern Prince Georges County produced floods in the tributaries of and in the Anacosta River, damage \$500,000; of October 27-28 over western Maryland produced a flood in the Potomac River during the 28-30th, damage \$250,000. In November: the weather was cold during the 17-24th; high winds were frequent, but not damaging; cloudy weather prevailed (Continued on next page)

Monthly and	Annual Precipitat	ion for the Voc	n 1027 with	Donastures from	the Normal
monthly and	Annual Frecipitat	ion for the rea	t 1991 MIN	Departures from	. The Morman

	Jan	uary	Febi	ruary	Ma	rch	A ₁	pril	М	ay	Ju	ine	Jı	ıly	Au	gust	Sept	ember	Oct	ober	Nov	ember	Dece	mber	Anı	ıual
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 berdeen nnapolis altimore (U.S.W.B.) ell	6. 65 7. 55 6. 74	+3,54 +4,00 +3,24	2. 05 3. 29 3. 52	-0.96 +0.06 +0.13	1.45 2.02 1.93	-2.05 -1.77 -1.78 -2.85	4.17 5.56 7.92	+0.82 +1.86 +4.58	3.91 3.79 3.27	+0.96 +0.25 -0.27	6. 11 5. 28 3. 53	+2.64 +0.96 -0.35	2. 87 5. 67 3. 81	-1. 27 +1. 14 -0. 83	6.19 12.07 5.06	+1. 24 +7. 11 +0. 69	0.70 1.99 1.10	-2.76 -1.47 -2.27	6. 27 5. 66 7. 75	+3.59 +2.52 +4.86	2.79 2.75 5.21	+0.36 +0.18 +2.65	1.51 0.91 0.95	-1.60 -2.63 -2.42	44. 67 56. 54 50. 79	+4.5 +12.2 +8.2 +11.9
oyds ambridge (near) harlotte Hall heltenham	6.71 8.43 10.15 9.52	+3.77 $+3.77$ $+4.85$ $+7.09$ $+5.99$	2.28 2.99 3.02	-0.91 -0.25 +0.09	1,72 1,50 1,23 2,59	-2.29 -1.66 -2.52	5. 63 6. 93 7. 86 5. 48	+1. 97 +3. 15 +4. 02 +2. 18	4. 78 3. 89 5. 09 4. 74	+1.44 -0.02 +1.70 +1.36	4.03 4.90 6.62 7.53	+0.15 +1.19 +2.25 +3.69	4.72 6.48 3.86 4.39	+0.48 +2.22 -0.45	5. 92 4. 60 6. 78	+0.78 +0.02 +2.09 +7.20	2.70 2.19 2.34 1.70	-0.33 -1.22 -0.90	5.85 6.92 7.45	+2.54 +4.02 +4.58 +3.41	4.30 4.93 3.81 2.49	+1.69 +2.64 +1.29	1. 02 1. 14 0. 97 0. 92 1. 29	$ \begin{array}{r} 2.38 \\ -1.83 \\ -2.24 \\ -1.92 \\ -2.36 \\ -2.13 \end{array} $	51. 50 56. 45 58. 50 62. 47	+8. 17 +15. 20 +15. 73 +19. 97
newsville car Spring bleman blege Park	5. 09 6. 04 7. 52 7. 67	+2.25 $+2.97$ $+4.17$ $+4.44$	3, 17 3, 90 2, 97 3, 38	+0. 83 +1. 15 -0. 06 +0. 57	1.05 1.82 1.91 1.75	-1. 93 -1. 62 -1. 60 -1. 75	4.81 12.99 4.68 7.17	+1.88 +9.53 +1.24 +3.75	2. 35 3. 24 3. 75 2. 48	-1.05 -0.10 $+0.22$	5. 53 5. 64 3. 82	+1.50 +1.94 -0.20	1. 69 3. 20 4. 83	-2.23 -1.37 $+0.91$	4. 85 8. 06 7. 59	+1.22 $+3.23$ $+3.18$	1. 64 1. 14 1. 59	-1.44 -2.22 -1.62	7. 13 5. 98 8. 70	+3. 10 +6. 00	1.80 3.06 4.32	-0.25 $+0.52$ $+1.92$	0. 57 1. 44 0. 87	-2.05 -2.11 -2.33	39.68 48.84 55.44	+2.9 +6.7 +15.0
ristield imberland arlington undalk	8.38 6.56 6.47 7.01	+5. 17 +3. 88 +2. 97	2. 64 2. 41 3. 67 3. 51	-0.73 +0.07 +0.58	3. 43 1. 32 2. 20 1. 87	+0.09 -1.70 -1.25	6.01 5.97 5.59 7.89 5.65	+2.43 +2.88 +2.23	3. 40 2. 45 2 45 6. 91 4 29	+0.27 -0.88 -0.80	3.55 8.63 6.54 3.48	-0.22 -0.49 +2.56	4.78 2.38 3.24 2.91 5.78	+0.63 -0.70 -1.24	10. 84 4. 48 9. 00 4. 68 5. 44	+5.96 +0.68 +3.82 +0.73	1. 88 1. 58 1. 26 2. 31	-0.78 -1.05 -2.26	4. 78 7. 19 7. 88 7. 23 4. 94	+1.77 $+4.65$ $+4.64$ $+1.66$	5. 16 0. 95 3. 59 4. 80	+2.82 -1.00 +0.93	1.80 1.72 1.29 0.88	-1.75 -0.99 -2.42	56,65 40,64 53,18 53,48	+15.7 +5.8 +9.7
altimore (U.S.W. B.) ell. oyds ambridge (near) harlotte Hall. heltenham hessertown hewsville lear Spring oleman ollege Park onowingo Dam ristield umberland arlington undalk aston dgewood lkton mmitsburg aliston erry Landing rederick riendsville rostburg eorgetown	5. 90 6. 79 6. 15 5. 58 8. 99 6. 21	+3.04 $+2.74$ $+2.01$ $+5.67$ $+2.98$ $+5.48$	2. 37 2. 71 3. 50 3. 29 2. 92 3. 77 3. 76	-0.33 $+0.45$ $+0.18$ $+0.11$ $+0.85$ $+0.91$	1,49 2,20 2,40 1,53 1,30 1,46 3,65	-1.61 -1.58 -2.05 -2.14 -2.02 -0.46	4.81 4.34 10.82 6.45 6.23 6.44 5.22	+0.81 +7.30 +2.77 +2.51 +3.05 +1.73	*3. 20 2. 61 1. 59 2. 61 4. 09 3. 32 3. 74	-1.05 -2.33 -0.68 $+0.76$ -0.12 -0.01	*6.30 4.43 *7.53 4.36 4.69 6.53 4.94	+0.55 +2.92 +0.26 +0.44 +2.23 +0.23	*4.55 3.90 *3.55 6.28 3.21 3.46 6.70	-0.13 -0.56 +2.12 -1.74 -0.57 +2.36	5. 17 9. 40 *5. 37 9. 82 9. 21 6. 34 7. 20	+3.18 +0.93 +4.64 +4.21 +1.99 +3.22	0. 73 1. 48 1. 23 0. 93 2. 02 1.05	-1.65 -2.25 -2.72 -1.32 -2.00 -0.09	6. 84 6. 80 9. 38 8. 08 5. 87 9. 36 7. 41	+3. 39 +5. 86 +4. 66 +2. 88 +6. 33 +4. 45	3. 34 3. 66 4. 15 5. 66 3. 88 1. 38	+0.58 +0.97 +1.40 +3.27 +1.53 -1.13	1. 46 *1. 01 1. 21 0. 86 0. 92 2. 55	$ \begin{array}{r} -1.38 \\ -2.30 \\ -2.39 \\ -2.24 \\ -2.33 \\ -1.10 \end{array} $	49. 46 56. 19 54. 29 55. 05 52. 74 58. 31	+5.4 +12.1 +10.2 +12.4 +11.9 +15.5
ciendsville rostburg. rostburg. sorgetown rantsville reat Falls ancock (City). ancock (Tonoloway). untingtown eedysville. a Plata. urrel utherville aryland Line illington t. Savage Sunmit akland xford arkton (Prettyboy Dam). seryville cardy. leasant Hill rincess Anne idigely ock Hall allisbury. ues (Deep Creek) now Hill. sloomous ate Sanatorium eevensville akoma ouwson restern Port restminster rocatsock. District of Columbia rashington (U.S.W.B.)	7.07 9.89 7.80 5.48 5.84	+3.66 $+6.30$ $+4.70$ $+2.93$ $+3.29$	2.13 3.58 4.06 3.32 3.31	-0.65 $+0.46$ $+1.50$ $+1.04$	1. 67 *3. 20 1. 55 1. 17 1.08	-2.03 -0.78 -1.66 -1.93 -2.02	7. 07 6. 29 5. 94 8. 18 7. 62	+3, 29 +2, 52 +2, 72 +4, 75 +4, 19	3.78 *5.00 3.15 2.77 2.16	-0.05 $+0.95$ -0.06 -0.41 -1.02	3.15 4.19 3.60 3.69 3.93	-1.67 -0.26 -0.30 -1.13 -0.89	1.50 3.50 5.89 2.17 2.26	-2.31 -0.53 $+1.95$ -1.13 -1.04	4.83 7.83 10.89 3.44 4.53	+0.83 +3.56 +6.77 -0.30 +0.79	1.65 *2.59 3.02 1.92 2.76	-1.35 -0.22 -0.26 -0.91 -0.07	8. 39 6. 00 *8. 65 8. 89 8. 39 8. 59	+5. 23 +5. 71 +6. 02 +5. 23 +5. 43	1.15 2.86 1.49 3.43 1.54 1.39	-1.23 -1.21 $+1.32$ -0.42 -0.57	2.14 1.24 *2.50 0.83 1.24 1.11	$ \begin{array}{r} -0.75 \\ -1.03 \\ -2.31 \\ -1.47 \\ -1.60 \end{array} $	44. 53 58. 71 59.05 43. 31 44, 58	+2.9 +15.4 +20.3 +6.2 +7.5
untingtown eedysville a Plata urel utherville aryland Line	$egin{array}{c} 8:42\\ 4:63\\ 10:48\\ 7:23\\ 6:50\\ 8:14\\ 7:49 \end{array}$	+1.71 $+7.26$ $+3.88$ $0+2.71$ $1+4.29$	2. 65 3. 17 3. 44 3. 16 4. 40 4. 68	+0.61 $+0.82$ $+0.42$ $+1.37$ $+1.28$	1.83 1.33 2.52 1.51 2.08 1.62	-1.70 -0.84 -2.16 -1.87 -2.11	6. 78 6. 78 6. 96 8. 34 8. 95 6. 16	+3. 61 +3. 35 +4. 73 +4. 12 +2. 81	3. 37 1. 69 4. 30 2. 52 3. 45 2. 78	-1. 74 +0. 92 -0. 92 -0. 01 -0. 57	4. 70 5. 18 6. 81 2. 32 4. 40 6. 30	+1. 17 +2. 77 -1. 82 +0. 15 +2. 16	3.93 1.29 5.02 4.79 5.15 4.96	-2.53 $+0.45$ $+0.61$ $+1.95$ -0.02	6.06 8.98 4.47 9.18 4.75 5.14	+4.94 +0.07 +4.29 -0.76 -0.06	1. 83 1. 97 2. 82 1. 11 1. 25 0. 85	-0.97 -0.30 -2.14 -2.27 -2.59	5. 81 7. 91 9. 34 10. 07 .9. 05 7. 56	+4.78 +6.39 +7.14 +5.15 +4.54	1. 83 4. 50 4. 45 4. 75 3. 87	-0.41 +2.21 +1.99 +1.84 +1.09	1. 04 0. 51 1. 07 0. 74 1. 25 1. 15	-2.21 -1.92 -2.67 -1.66 -2.45	50, 92 45, 27 61, 73 55, 42 55, 98 53, 21	+7.2 $+21.1$ $+13.3$ $+10.7$ $+8.3$
tt. Savage Summit akland xford arkton (Prettyboy Dam)	5. 95 9. 01 6. 39	+5.22	2. 39 3. 25 4. 36	-0.05	1. 47 3. 28 1. 33	-0.77	7.64 4.85 6.47	+0.93	3. 16 4. 42 2. 25	+0.05	2. 59 4. 06 6. 84	-0.72	1.58 2.32 7.29	-2.34	5. 77 4. 52 4. 11 5. 32	+0.24	1.90 1.15 1.37 1.29	-1.92	8. 62 7. 98 4. 96 8. 49	+4.68	1.25 1.45 2.70 4.69	-1.37	1.00 1.91 3.24 1.17 0.68	-0.68	44. 21 49. 46 55. 40	+3.2
eardyeasant Hillincess Annedgelyock Hall	5.38 6.20 9.00 8.47 7.88	$\begin{array}{c} +2.92 \\ +2.54 \\ +5.79 \\ +5.39 \\ +4.47 \end{array}$	2. 69 2. 69 3. 85 1. 99 2. 76 2. 61	+0.57 $+0.87$ -1.28 -0.03 -0.25	1.40 2.45 3.79 2.63 2.21	-1.78 -1.08 -0.05 -0.86 -1.41	6. 89 7. 30 5.85 4. 22 4. 71	+2.84 +3.20 +2.34 +0.90 +1.17	2.06 *2.90 3.34 4.25 4.10	-1.15 -0.31 $+0.15$ $+0.93$ $+0.86$	3. 77 *5. 54 3. 42 6. 51 5. 50	+0.13 $+1.51$ -0.59 $+2.72$ $+1.85$	1.93 *5.40 3.61 3.38	-0.59 +1.79 -0.54 -0.99 -2.66	7. 26 *5. 20 11. 36 5. 15 8. 76	+3.43 -0.52 $+6.06$ $+0.23$ $+3.93$	2.55 1.53 1.98 2.97 2.11	-0.15 -2.15 -0.92 -0.15 -1.21	8, 06 8 11 4, 04 4, 66 6, 11	+4.52 +4.42 +0.94 +1.68 +3.17	1.00 5.18 5.48 3.45 2.76	-0.87 +2.18 +3.12 +0.85 +0.06	1. 73 0. 94 1. 73 1. 21 1. 17	-0.60 -1.80 -1.62 -2.05 -2.15	54. 60 55. 59 49. 66 49. 61	+9.5 +11.6 +13.6 +8.6 +7.8
ons (Deep Creek)	9, 86 9, 95 9, 30 8, 96 5, 57 8, 02	5+6.69 $5+5.73$ $5+6.10$ $5+6.14$ $7+2.16$ $2+3.90$	2. 86 3. 09 2. 60 2. 38 5. 00 3. 07	$ \begin{array}{c} -0.87 \\ -0.15 \\ -0.68 \\ -0.21 \\ -0.26 \\ -0.$	2:47 3.06 2.90 1.94 1:40 2.56	-1.41 -1.34 -0.58 -1.38 -2.10 -1.53	5.08 5.08 6.00 6.38 10.13 5.73	+2.41 $+0.91$ $+2.88$ $+3.40$ $+6.61$ $+1.26$	4. 41 2. 60 4. 02 2.13 4. 80	+0.11 $+0.35$ -0.07 $+1.16$ -2.03 $+0.96$	3, 58 3, 50 6, 36 6, 89 5, 96	+0.88 -0.62 +0.29 +3.24 +2.07 +2.26	3, 95 2, 90 6, 39 3, 12 5, 73	-0.57 -0.35 -0.70 $+2.26$ -0.90 $+1.89$	9.51 5.05 12.10 4.22 4.35 7.95	+4.28 $+0.78$ $+7.34$ $+0.01$ -0.01 $+2.48$	1.46 2.92 2:10 1.62 1.50 3.88	-1.97 -0.10 -0.70 -1.02 -2.10 +1.24	4.09 7.11 3.90 5.09 9.41 6.53	+0.89 +3.17 +0.86 +2.70 +5.89 +3.23	4. 64 1, 44 3, 00 4. 18 4. 43 3, 08	+2.03 -1.42 +0.56 +2.34 +1.84 +0.40	1. 42 3. 19 2. 35 1. 15 1. 05 1. 38	-2.00 -0.31 -1.40 -1.57 -2.11 -1.55	52, 83 53, 25 52, 69 55, 04 58, 69	+10. +6. +13. +17. +11. +14.
estern Port estern Port oodstock. District of Columbia	6. 94 6. 66 6. 46 7. 05	5 +3.00 1 +3.50 5 +4.00 5 +3.00 5 +3.80	3. 30 3. 80 2. 96 4. 48 3. 35	+0.43 +0.90 5+0.67 5+1.36 5+0.63	1. 97 1. 97 1. 97 2. 14 1. 47	$ \begin{array}{r r} -1.04 \\ -1.49 \\ -0.94 \\ -1.36 \\ -1.85 \end{array} $	*8, 20 6, 38 6, 42 6, 96	+4.68 +3.39 +3.10 +3.64	*3. 20 3. 59 3. 92 2. 34	+0.01 +0.01 -0.02 +0.51 -0.97	*4. 30 3. 86 8. 68 5. 46	-0.31 +0.43 -0.15 +4.50 +1.48	*4. 25 3. 44 4. 16 2. 72	+0.74 -0.08 -0.15 +0.11 -1.48	*4. 95 7. 00 5. 91 4. 42	+1. 99 +0. 11 +3. 40 +1. 02 -0. 07	*1. 17 1. 30 0. 85 0. 89	-1, 89 -1, 98 -1, 26 -2, 85 -2, 30	8, 63 8, 79 8, 24 8, 53	+5.51 +6.25 +5.13 +5.66	4.97 0.95 4.89 4.57	+2.28 -1.00 $+2.64$ $+2.12$	1.40 1.80 1.03 0.93	-2.37 -1.90 -0.65 -2.34 -2.30	53. 78 48. 70 57. 17 48. 69	+11. +13. +14. +8.
Delangana	ľ	}	1	1		ł		1		l	1 1				1	1	•	1 -		٠.	1					
ridgeville elaware Breakwater elaware City over iliford illisboro	9. 68 6. 76 7. 00 8. 00 8. 30 11. 40	5 + 6.26 5 + 4.11 5 + 4.7 7 + 4.65 5 + 7.9	2. 54 2. 75 1 2. 34 1 3. 44 5 3. 04 3 3. 04	1 - 0.61 1 - 0.50 1 + 0.35 1 - 0.23 1 - 0.27	2, 26 2, 16 2, 39 3, 05 2, 77 2, 92	-1.46 0.78 0.87 1.46 1.14	6. 74 3. 59 4. 92 5. 05 6. 14 5. 35	+3. 44 +1. 78 +1. 53 +2. 52 +1. 73	4.48 2.39 3.10 3.71 5.50 3.90	+1.08 +0.16 +0.26 +2.05 +0.67	5. 72 3. 13 3. 84 5. 79 5. 51 10. 33	+1.84 +0.29 +2.15 +1.49 +6.55	2.03 1.52 2.49 3.99 3.62 3.00	-2.90 -1.57 -0.48 -0.92 -1.53	11. 36 5. 49 8. 43 5. 16 9. 93 9. 02	+6.72 +4.17 +0.50 +5.01 +3.65	1. 44 0. 92 1. 33 1. 18 1. 77 1. 72	-1. 56 -1. 93 -2. 28 -1. 04 -1. 17	6. 34 3. 48 5. 53 6. 07 6. 25 6. 29	+3. 23 +2. 79 +3. 11 +2. 98 +3. 13	5.33 -2.41 2.33 3.80 4.76 4.52	+2.89 -0.06 +1.19 +2.01 +1.87	1.17 1.03 1.30 0.91 1.26 1.20	-2.18 -1.77 -2.63 -2.71 -2.66	59.09 35.62 45.03 50.24 58.94 62.75	+16. +6. +7. +14. +18.
lessa ilmington ilm'n(Porter Reservoir), or Maryland and Dis- trict of Columbia	6. 70 6. 36	3 + 3.2 3 + 2.88	$\frac{2.21}{2.30}$	-0.90	2. 58 2. 09	-0.93 -1.42	4. 68 4. 41	+1.26 +0.99	$\begin{array}{c} 3.00 \\ 2.61 \\ 2.37 \end{array}$	-0.63 -0.87	5. 61 5. 48	+1.68 +1.55	2. 20 2. 58	-2.84 -2.46	7. 78 6. 57	$+2.89 \\ +1.68$	1. 53 2. 6 9	$-2.01 \\ -0.85$	4.92 5.29	+1.75 +2.12	2.94 3.19	+0.05 +0.30	1.34 1.38	$ \begin{array}{r} -2.34 \\ -2.30 \end{array} $	45.10 44.71	+1. +0.
trict of Columbiaor Delawareor entire section	7. 48 8. 27 7. 52	3 + 4.14 $7 + 4.89$ $2 + 4.22$	3. 25 2. 78 3. 20	$\begin{array}{c} +0.38 \\ -0.36 \\ +0.25 \end{array}$	1.96 2.56 2.02	-1, 58 -1, 17 -1, 55	6. 52 5. 19 6. 38	+3.07 +1.73 +2.93	3. 42 3. 61 3. 44	0.00 +0.29 +0.03	4.91 5.50 4.99	+0.84 +1.70 +0.95	3, 96 2, 64 3, 80	-0.20 -1.98 -0.42	6, 87 8, 29 7, 05	+2.31 +3.51 +2.46	1.75 1.48 1.72	-1.41 -1.75 -1.45	7. 29 5. 47 7. 07	+4.27 $+2.42$ $+4.05$	3, 43 3, 61 3, 45	+0.99 +1.00 +0.99	1.29 1.18 1.28	-1.99 -2.40 -2.04	52.08 50.58 51.92	+10. +7. +10.

*Determined from surrounding stations.

during the 15th-22d in the Allegheny Mountain region. The easterly storm of November 12-13 produced excessive rain over southern and north-central Maryland; fields and highways were flooded and streams overflowed their banks. The first half of December was cold, sunshiny, and dry; the second half was mild, with much cloudiness and occasional light precipitation.

Annual mean temperatures were mostly slightly colder than normal over the western half of the section and mostly slightly warmer than normal over the eastern half. January, June, and August were warm; February was mild; May was slightly mild; April, July, and November were slightly cool; September and

and October were cool; December was slightly cold; March was cold.

This was the sixth successive wet year. The average annual precipitation for the section was the greatest of record since 1889. Annual amounts were 50 to 60 inches in the eastern and central divisions, except 44.7 to 50 inches over the northern third of the Eastern Shore and 60 to 63 inches in Charles and southeastern Sussex Counties and in the Chestertown district; in western Maryland they were 39.7 to 50 inches, except 50 to 60 inches in the Allegheny Mountain highlands.

Annual snowfall averaged four-fifths of normal. Annual (Continued on next page)

Amaprolis (1.8. W. B.) 44. 46.0 \$3.5 +0.9 \$41.8 \$2.0 \$2.5 +0.9 \$6.5 +1.5 \$72.9 +0.0 \$77.4 +1.3 \$6.8 \$-3.1 \$6.5 -2.2 \$47.0 \$0.0 \$37.2 +0.1 \$60.9 \$40.0 \$80.0 \$40.0 \$80.0 \$40.0 \$80.0 \$40.0 \$80.0 \$40.0			Mon	thly	and	Ann	ual N	Iean	Tem	pera	tures	for (the Y	ear	1987	wit	h Der	artı	ıres f	rom	the I	Vorn	nal				
Marphone		Jan	uary	Feb	ruary	Ma	arch	A	pril	N	fay	Ju	ne	Jı	uly.	Au	gust	Sept	ember	Oc	tober	Nov	ember	Dec	ember	Ar	nual
Aberdeen. 44.2 + \$1.3 x 2 + 0.4 83.4 - 2.0 63.7 + 0.6 66.8 + \$2.7 0.7 + 0.6 66.8 + \$4.1 73.2 + 2.0 75.8 + 0.4 76.8 + 3.2 65.2 - 8.3 5.4 7 - 38 4.3 - 0.8 83.4 - 0.8 85.4 + 0.4 85.2 + 0.0 66.8 + 0.3 85.4 + 0.4 85.2 + 0.0 8	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
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Aberdeen Annapolis Baltimore (U.S. W. B.) Bell Boyds: Cambridge (near) Cheltenham Chestertown Cheltenham Chestertown College Park College Park College Park Conowingo Dam Crisfield Cumberland Darlington Dundalk Easton Edgewood Elkton Emmitsburg Fallston Farry Landing Frederick Friendswille Frostburg Georgetown Grantsville Great Falls Hancock (Tonoloway) Huntingtown Mt. Savage Summit Oakland Oxford Parkton (Prettyboy Dam) Pleardy Princess Anne Ridgely Rock Hall Salisbury Rock Hall Salisbury State Sanatorium Stevensville Takoma Western Port Westminster Woodstock District of Columbia Washington (U.S. W. B.) Delaware Bridgeville Delaware Breakwater Delaware City Dover Millsoro	43. 43. 44. 46. 0. 42. 44. 46. 0. 42. 44. 46. 0. 42. 44. 46. 0. 42. 44. 46. 0. 42. 46. 0. 42. 46. 0. 42. 46. 0. 42. 46. 0. 42. 6. 46. 37. 18. 48. 49. 4. 6. 6. 46. 47. 0. 47. 9. 48. 28. 29. 48. 39. 49. 49. 49. 49. 49. 49. 49. 49. 49. 4	+6.5 +9.2 +7.2 +8.6 +8.1 +8.6 +9.2 +9.1 +10.1 +7.6 +9.1 +7.6 +9.2 +7.2 +7.6 +9.2 +7.6 +9.2 +7.6 +9.2 +7.6 +9.2 +7.6 +9.2 +7.6 +9.2 +7.6 +9.2 +7.6 +9.2 +7.6 +9.2 +7.6 +9.2 +7.6 +9.2 +7.6 +9.2 +7.6 +9.2 +7.6 +9.2 +7.6 +9.2 +7.6 +9.2 +7.6 +9.2 +7.6 +9.2 +7.6 +7.6 +7.6 +7.6 +7.6 +7.6 +7.6 +7.6	0 35.6 3 3.1 4 4 4 4 5 2 3 3 3 4 4 4 5 2 3 3 3 4 3 4 4 3 2 3 3 3 4 3 4 3 4 3 4	\(\) +1.6 \\ \(\) +2.6 \\ \(\) +3.8 \\ \(\) +3.8 \\ \(\) +3.8 \\ \(\) +3.8 \\ \(\) +3.8 \\ \(\) +3.8 \\ \(\) +1.8 \\ \(\) +2.6 \\ \(\) +1.8 \\ \(\) +2.6 \\ \(\) +1.8 \\ \(\) +2.7 \\ \(\) +1.8 \\ \(\) +2.9 \\ \(\) +2.9 \\ \(3 41, 40, 4 4 40, 4	-0.4	53. 4. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5.	3 - 0.9 -0.4 -0.7 -0.2 -0.4 -0.1 -0.2 -0.4 -0.1 -0.2 -0.5	64. 86. 66. 66. 86. 66. 66. 86. 66. 86. 66. 86. 8	$\begin{array}{c} +1.5\\ +2.4\\ +1.1\\ 1.\\ -0.4\\ +0.4\\ +0.4\\ -1.7\\ -1.7\\ -1.6\\ -1.6\\ -1.7\\ -$	73. 2 6 73. 9 73. 9 6 73. 6 6 73. 6 6 73. 6 6 73. 73. 6 6 73. 73. 6 6 74. 73. 8 8 74. 6 7 74. 7 75. 4 4 73. 0 72. 3 77. 7 74. 6 6 73. 2 72. 7 74. 6 6 73. 2 73. 2 74. 6 73. 2 74. 6 73. 2 74. 6 73. 2 74. 6 73. 2 74. 6 73. 2 74. 6 73. 2 74. 6 75. 6 76. 76. 6 76. 6 76. 76. 76. 76. 76. 76. 76. 76. 76. 76.	$\begin{array}{c} +2.6 \\ +2.6 \\ +2.6 \\ -2.7 \\ +2.6 \\ -2.7 \\ +2.7 \\ +2.7 \\ +2.7 \\ +2.1 \\ -2.3 \\ +2.3 \\ -2.3 \\ +2.3 \\ -2.3 \\ +2.3 \\ -2.3 \\ +2.3 \\ -2$	78. 2 1. 76. 60 77. 76. 60 77. 76. 60 77. 76. 60 77. 77. 76. 60 77. 77. 77. 77. 77. 77. 77. 77. 77. 77	$\begin{array}{c} +1.1\\ -0.5\\ -0.8\\ -0.2\\ -0.1\\ -0.2\\ -0.1\\ -0.2\\ -0.1\\ -0.2\\ -0.1\\ -0.2\\ -0.1\\ -0.2\\ -0.1\\ -0.2\\ -0.1\\ -0.2\\ -0.1\\ -0.2\\ -0.1\\ -0.2\\$	77. 4. 6. 7. 6. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7.	$\begin{array}{c} +2.1\\ +2.1\\ +3.1\\ +3.1\\ +3.0\\ +3.3\\ +2.3\\ +2.3\\ +2.3\\ +2.3\\ +2.3\\ +2.3\\ +2.3\\ +2.3\\ +2.3\\ +2.3\\ +2.3\\ +2.3\\ +2.3\\ +3.3\\ +2.3\\ +3.3\\ +2.3\\ +3.3\\ +2.3\\ +3.3\\ +3.3\\ +2.3\\ +3.3\\$	65.7.7.66.6.66.66.66.66.66.66.66.66.66.66.	3 -3.1 (2) -1.3 (3) -3.1 (3) -	55. 8 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	-2.0 -3.4 -3.4 -3.4 -3.5 -2.5 -2.1 -2.5 -3.5 -3.5 -3.5 -3.5 -3.5 -3.5 -3.5 -3	44. 8. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4.	0.0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	34. 3. 3. 3. 3. 3. 3. 3. 3. 3. 3. 3. 3. 3.	-0.1 + 0.8 + 0.1 0.9 + 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1	54. 6. 9. 56. 9. 56. 9. 56. 9. 56. 9. 56. 9. 56. 9. 56. 9. 56. 9. 56. 56. 56. 56. 56. 56. 56. 56. 56. 56	$\begin{vmatrix} +0.2 \\ +1.5 \end{vmatrix}$

ERRATA

July, 1937.—Page 26: Stevensville, rainfall departure published —1.89, should be +1.89.

*Determined from surrounding stations.

(Continued from page 51) amounts increased from 6 to 10 inches over the southeast portion of the section to 60 to 72 inches in the Allegheny Mountain highlands. Snowfall was very light in January; was light in April, November, and December; was normal in October; was above normal in February; and was twice the normal in

Annual sunshine was about 5 per cent above normal. May was the sunniest month. March, July, September, November,

and December were sunny. Sunshine was slightly above normal in June; was normal in April and August; was deficient in February and October; and in January was the least of record for any month.

(WBO, Richmond, Va., 5-24-38-1,400)

Barley, corn, sweet potato, tomato, cowpea, soy bean, and strawberry crops were good; wheat, rye, oats, early potato, tobacco; hay, and tree fruit crops were fair to good; pea and late potato crops were poor to good. $-J. B., \dot{r}$.