



# CLIMATOLOGICAL DATA

## MARYLAND AND DELAWARE

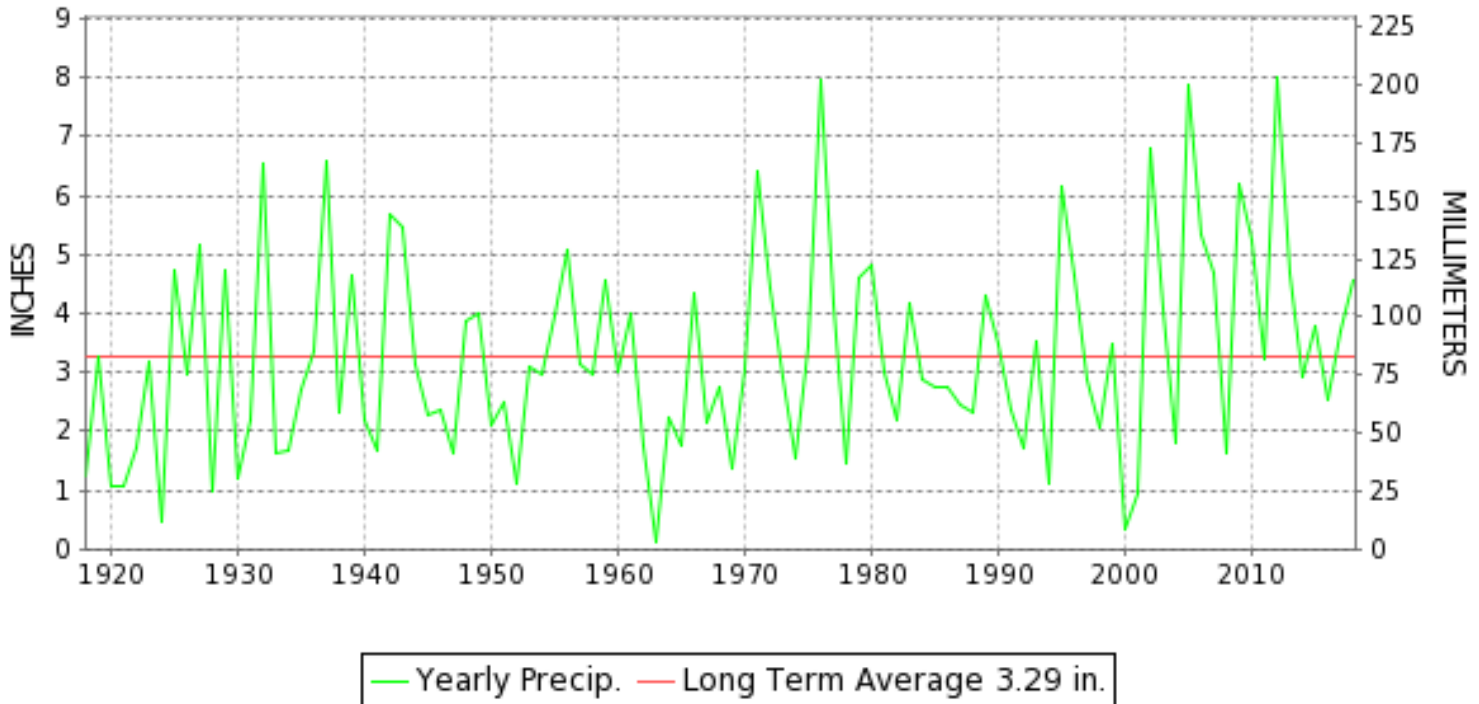
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### OCTOBER PRECIPITATION BY YEAR



#### TEMPERATURE AND PRECIPITATION EXTREMES

##### MARYLAND

HIGHEST TEMPERATURE	91	OCTOBER 07+	SNOW HILL 4 N
LOWEST TEMPERATURE	24	OCTOBER 26	OAKLAND 1 SE
GREATEST TOTAL PRECIPITATION	8.67		SALISBURY-WICOMICO RGNL AP
LEAST TOTAL PRECIPITATION	1.63		HAGERSTOWN RGNL AP
GREATEST 1 DAY PRECIPITATION	6.56	OCTOBER 11	SALISBURY-WICOMICO RGNL AP
GREATEST TOTAL SNOWFALL	0.1		FROSTBURG 2
GREATEST DEPTH OF SNOW OR ICE	T		FROSTBURG 2

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Centers for Environmental Information  
Asheville, North Carolina

**DELAWARE**

HIGHEST TEMPERATURE	90	OCTOBER 04	GEORGETOWN DELEWARE COASTAL AP
LOWEST TEMPERATURE	33	OCTOBER 22	WILMINGTON NEW CASTLE CO AP
GREATEST TOTAL PRECIPITATION	6.08		GEORGETOWN DELEWARE COASTAL AP
LEAST TOTAL PRECIPITATION	2.83		WILMINGTON NEW CASTLE CO AP
GREATEST 1 DAY PRECIPITATION	2.71	OCTOBER 11	GEORGETOWN DELEWARE COASTAL AP





DAILY PRECIPITATION (INCHES)

STATION	TOTAL	DAY OF MONTH																														
		01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
<b>MARYLAND</b>																																
<b>SOUTHERN</b>																																
<b>EASTERN SHORE 01</b>																																
PRINCESS ANNE	A 6.80					0.03					0.49	4.61			0.08		0.16			*	*	0.28 <sub>a</sub>				*	*	*	1.15 <sub>a</sub>			
SALISBURY 2N	8.48					0.02						6.40		0.01	0.07							0.26						1.26	0.42	0.04		
SALISBURY-WICOMICO RGNL AP	8.67									0.01	6.56	0.53	T		0.03	0.01	0.10				0.12	0.01					0.95	0.24	0.11			
SNOW HILL 4 N	F 1.49											0.07	0.14		0.12		1.30 <sup>Z</sup>				0.15						0.60	0.36	0.05			
<b>CENTRAL</b>																																
<b>EASTERN SHORE 02</b>																																
ROYAL OAK 2 SSW	5.91				0.10	T		T			0.10	3.17	0.06	T	0.18	T					0.08	0.31				T	1.83	0.03	0.05			
<b>LOWER SOUTHERN 03</b>																																
MECHANICSVILLE 5 NE	8.27										0.12	5.52	0.03	T	0.13	T	0.05				0.08	0.02					2.26	0.05	0.01			
SOLOMONS	MA 5.01	T	-		T	-	-	-			0.02	*	*	*	2.56 <sub>a</sub>	T	0.10				*	*	0.06 <sub>a</sub>				*	*	2.27 <sub>a</sub>	T		
<b>UPPER SOUTHERN 04</b>																																
BALTIMORE-WASHINGTON INTL AP	2.69			0.19	T	T			T	T	0.77		0.06	0.03	0.16				0.01	0.05	T					0.80	0.58	0.04	T			
BELTSVILLE	3.60				0.64						0.37	0.85	0.05		0.17	0.07					0.11	0.08					1.05	0.18	0.03	T		
DALECARLIA RSVR	M 3.76			-							0.46	1.40	0.04	0.02	0.23	0.10						0.03					1.03	0.32	0.08	0.05		
MARYLAND SCI CTR	2.12			0.10							0.78		0.09	0.02	0.10						0.04					0.54	0.40	0.05				
NATL ARBORETUM DC	3.30				0.02					T	0.17	1.31	0.05	0.03	0.19	0.09					0.10	0.01					1.01	0.26	0.05	0.01		
OXON HILL	4.08										0.26	2.17	0.01	0.03	0.16	0.09					0.09	0.01					1.02	0.21	0.01	0.02		
<b>NORTHERN</b>																																
<b>EASTERN SHORE 05</b>																																
STEVENSVILLE 2SW	4.83				0.11	0.01			0.02		0.02	3.00	0.03	0.03	0.08	0.12					0.06						1.16	0.19				
SUDLERSVILLE 1S	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>NORTHERN CENTRAL 06</b>																																
ABERDEEN PHILLIPS FLD	A 2.58								0.04	0.01	0.01	0.81		*	0.13 <sub>a</sub>	0.21						0.07					*	*	1.30 <sub>a</sub>			
CONOWINGO DAM	2.65				0.42							0.88		0.08	0.12						0.10						0.82	0.17	0.06			
CYLBURN	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
DAMASCUS 3 SSW	2.15			0.05	0.04	0.01			T	T	0.49	T		0.01	0.18						0.07					0.29	0.91	0.06	0.04			
EMMITSBURG 2 SE	3.17				1.05		T		T	T	T	0.51	0.13	0.01	0.11	0.05					0.05	0.10					0.83	0.33				
MILLERS 4 NE	2.00			0.24	T	0.02	T	T	T	T	0.06	0.16	0.17	0.06	0.10	0.02					0.09	0.14				T	0.91	0.01	0.02			
REISTERSTOWN 2 NW	M 1.40				0.25		0.03	0.02	0.01		-	0.45	0.12	0.01	0.08	0.11	0.01				0.10	0.04		-			-	0.16		0.01		
SMITHSBURG 2NW	2.06			0.03	0.48						0.10	0.15	0.15		0.10						0.10						0.47	0.43	0.05			
<b>APPALACHIAN</b>																																
<b>MOUNTAIN 07</b>																																
HAGERSTOWN 1 E	2.04		0.02		0.06	0.13					0.46		0.16	0.08	0.08						0.10					0.32	0.52	0.11	T			
CUMBERLAND 2	3.52			0.04		0.18					1.62	0.38	0.07		0.04	0.01					T	0.10					0.67	0.18	0.23	T		
FROSTBURG 2	3.53			0.17		0.41	0.01	0.02		0.02	0.51	0.41	0.14		0.08	0.07					0.04	0.29	T			0.62	0.25	0.45	0.04			
HAGERSTOWN RGNL AP	1.63		0.02		0.08	T	T			T	0.52		0.12	0.05	0.04						0.03	T				0.27	0.38	0.12				
SHARPSBURG 5 S	1.71			0.01		T					0.03	0.15	0.11		0.08	0.06					0.03	0.04					0.87	0.33		T		
WILLIAMSPORT	M 2.33		-	0.03		0.22					0.28	0.32	0.12	0.04	0.11	0.07					0.01	0.03					0.75	0.24	0.11			
<b>ALLEGHENY PLATEAU 08</b>																																

DAILY PRECIPITATION (INCHES)

STATION	TOTAL	DAY OF MONTH																															
		01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
OAKLAND 1 SE	4.48			0.23	0.01	0.35						0.32	0.75	0.32	0.10	0.27	0.30				0.23	0.47						0.05	0.30	0.70	0.08		
SAVAGE RVR DAM	M 3.26			0.23		0.33				-		0.48	0.67	0.11		0.14	0.08				-	0.34						0.35	0.13	0.40	T		
SINES DEEP CREEK	MA 4.50	0.00 <sub>a</sub>		0.25		0.35	*	*	0.00 <sub>a</sub>			0.50	*	*	*	0.50 <sub>a</sub>	0.50				*	*	0.65 <sub>a</sub>						*	*	1.50 <sub>a</sub>	0.25	-
DELAWARE																																	
NORTHERN 01																																	
WILMINGTON NEW CASTLE CO AP	2.83				0.01	0.03	0.01		0.04	T		0.84	0.22	0.09	T	0.17	T			T	0.07	0.01					0.46	0.88	T	T			
WILMINGTON PORTER RSCH	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SOUTHERN 02																																	
GEORGETOWN DELEWARE COASTAL AP	6.08				0.01	0.01				0.20	T	2.71	1.19	T		0.07	T	0.01			0.26	T					1.20	0.36	0.06	T			

DAILY TEMPERATURES (°F)

STATION	OB. TIME	MAX/MIN	DAY OF MONTH																															AVERAGE			
			01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31				
<b>MARYLAND SOUTHERN EASTERN SHORE 01</b> PRINCESS ANNE	17	MAX MIN																																			M M
SALISBURY 2N	17	MAX MIN	81 59	82 64	85 67	87 65	84 67	79 66	85 64	85 68	85 69	85 70	85 73	80 59	63 49	65 45	77 57	75 57	75 53	64 40	63 36	62 54	62 47	56 32	70 32	64 41	55 34	52 38	65 50	61 47	62 49	61 39	68 37	71.7 52.7			
SALISBURY-WICOMICO RGNL AP	24	MAX MIN	81 57	83 62	85 66	88 64	76 67	77 63	85 63	85 65	85 69	86 68	85 71	86 62	85 44	85 43	86 59	86 54	88 48	82 37	86 34	82 52	82 35	78 31	70 38	64 39	62 36	61 37	61 36	61 37	61 39	69 39	70.5 50.3				
SNOW HILL 4 N	17	MAX MIN	83 59	85 59	88 67	91 65	88 66	91 65	91 64	86 68	86 69	86 70	82 71	78 54	70 50	64 47	82 46	82 61	78 51	65 42	69 38	67 56	61 41	61 48	74 43	69 34	59 36	58 39	68 40	66 50	60 48	66 41	69 47	74.9 52.7			
<b>CENTRAL EASTERN SHORE 02</b> ROYAL OAK 2 SSW	17	MAX MIN	82 62	83 64	82 69	88 65	76 62	80 61	86 68	86 68	85 69	86 69	85 74	76 62	62 54	62 46	73 60	73 52	68 52	66 45	64 38	66 38	58 47	57 36	70 43	60 47	54 42	51 43	57 43	61 45	63 56	63 51	68 42	70.7 54.0			
<b>LOWER SOUTHERN 03</b> MECHANICSVILLE 5 NE	07	MAX MIN	73 56	77 58	79 64	81 65	83 66	67 63	75 64	79 68	81 68	79 66	88 66	80 56	62 48	58 41	60 43	71 55	56 51	64 40	55 35	61 35	62 46	52 33	55 33	67 40	54 33	51 33	55 36	52 43	58 47	60 38	60 38	66.3 49.3			
SOLOMONS	08	MAX MIN	78 64			84 70	76 69						76 73	77 75					74 57	58 56	61 48	50 46			57 43	70 48	55 36	52 44			61 46	62 46	M M				
<b>UPPER SOUTHERN 04</b> BALTIMORE-WASHINGTON INTL AP	24	MAX MIN	83 60	83 63	84 64	88 63	73 64	73 64	84 70	83 69	81 67	83 69	83 69	69 49	60 44	56 44	71 55	64 51	67 45	57 39	64 35	68 50	54 37	57 32	70 42	55 37	54 32	49 37	51 47	59 47	61 40	63 35	70 39	68.3 50.3			
BELTSVILLE	08	MAX MIN	77 60	82 62	82 65	84 64	87 66	67 63	73 65	84 68	83 68	82 68	83 73	81 56	63 49	58 43	58 49	71 53	59 50	66 42	56 36	64 36	67 43	67 33	56 33	69 38	55 32	53 38	51 43	51 44	58 48	59 36	62 40	68.0 50.5			
DALECARLIA RSVR	08	MAX MIN	77 57	83 64			89 65	73 63	85 66	84 67	85 68	83 70	81 72	63 55	59 50	59 44	71 46	59 43	68 42	57 38	64 38	67 44	67 33	56 33	70 41	55 32	53 33	51 41	51 45	59 46	59 35	63 39	67.6 49.3				
MARYLAND SCI CTR	24	MAX MIN	85 64	84 67	85 71	90 69	76 64	74 64	86 72	84 72	82 73	85 71	83 71	71 55	60 50	60 50	71 57	65 55	68 52	57 47	66 44	67 53	54 39	59 48	71 45	57 40	56 40	50 43	52 49	60 48	63 44	72 48	69.4 55.4				
NATL ARBORETUM DC	08	MAX MIN	79 57	83 66	83 68	87 66	89 67	70 65	74 67	84 70	86 70	84 71	84 73	81 57	64 50		59 49	72 55	61 53	69 45	58 39	64 39	67 46	53 35	57 35	70 44	57 37	53 40	55 43	55 47	61 50	60 40	63 40	69.4 52.5			
OXON HILL	07	MAX MIN	78 60	82 62	83 64	86 64	87 66	70 64	75 66	84 68	85 68	84 70	83 70	82 56	64 53	60 45	60 47	72 55	61 53	68 45	59 39	64 42	66 46	54 34	58 34	69 43	56 38	53 39	54 43	54 47	60 49	60 39	63 41	68.8 51.9			
<b>NORTHERN EASTERN SHORE 05</b> STEVENSVILLE 2SW	07	MAX MIN	77 64	82 66	83 67	81 67	89 67	67 62	77 66	84 71	81 70	82 72	85 71	84 60	65 51	60 50	63 50	73 59	62 53	68 49	58 45	61 46	68 47	54 43	56 42	70 44	55 41	53 42	54 42	53 48	60 48	61 47	62 46	68.6 54.9			
<b>NORTHERN CENTRAL 06</b> ABERDEEN PHILLIPS FLD	07	MAX MIN	74 55	79 57	80 63	80 59	85 60	64 62	74 63	81 67	78 68	81 67	84 69	81 58	63 48	60 44	59 45	67 52	59 47	66 43	55 35	61 36	66 44	51 32	55 32	68 40	55 34	53 35	50 39	51 43	55 45	58 37	63 37	66.3 48.9			
CONOWINGO DAM	07	MAX MIN	77 55	79 59	81 64	78 54	82 56	80 62	80 62	74 62	80 67	79 69	77 54	82 70	70 50	60 42	74 47	62 51	51 48	66 44	54 39	63 39	60 49	55 36	68 36	56 44	54 38	53 34	52 38	56 44	61 45	59 43	66.9 49.7				

DAILY TEMPERATURES (°F)

STATION	OB. TIME	MAX/MIN	DAY OF MONTH																															AVERAGE		
			01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31			
CYLBURN	08	MAX																																	M	
		MIN																																M		
DAMASCUS 3 SSW	22	MAX	80	78	79	85	71	69	83	81	79	80	78	68	54	54	65	66	63	52	60	64	50	53	66	52	50	45	47	53	56	58	67	64.7		
		MIN	61	63	64	62	61	61	66	69	69	68	68	47	43	40	52	48	45	40	36	49	39	31	41	40	32	37	41	44	43	37	42	49.6		
EMMITSBURG 2 SE	07	MAX	74	84	78	82	86	71	71	89	83	82	81	78	66	58	55	64	61	65	55	62	64	52	55	67	55	55	48	48	53	56	62	66.5		
		MIN	54	60	64	58	58	59	62	68	68	69	70	55	48	41	41	50	45	40	40	32	42	33	33	38	32	32	37	42	46	35	34	47.9		
MILLERS 4 NE	18	MAX	80	79	78	84	73	68	86	81	80	80	77	70	57	52	63	65	63	57	61	63	58	54	64	58	52	47	45	51	54	59	69	65.4		
		MIN	56	63	63	56	57	59	67	69	68	67	70	51	45	39	49	46	43	37	33	50	38	31	38	39	31	34	40	41	45	35	40	48.4		
REISTERSTOWN 2 NW	08	MAX	74	81	81	81	86		86	82	81																								64.4	
		MIN	56	61	60	60	60	62	60	68	69	69																							46.4	
SMITHSBURG 2NW	08	MAX	73	82	83	80	85	71	74	85	85	85	80	75																					66.2	
		MIN	50	57	58	59	59	59	61	62	62	62	67	52	45	39	42	42	41	39	32	31	31	30	33	36	28	28	39	43	45	35	35	45.2		
<b>APPALACHIAN MOUNTAIN 07</b>																																				
HAGERSTOWN 1 E	24	MAX	84	83	83	88	73	74	88	85	81	83	76	64	56	55	66	60	64	57	63	65	51	57	69	55	52	49	49	54	55	63	71	66.9		
		MIN	59	63	65	60	60	61	66	67	71	70	64	50	42	41	53	47	43	39	33	45	40	32	43	38	31	39	42	45	43	36	41	49.3		
CUMBERLAND 2	07	MAX	77	85	81	85	85	70	85	90	85	83	82	73	59	53	53	71	60	61	57	64	63	44	64	63	53	55	45	50	53	49	64	66.5		
		MIN	50	59	61	64	64	64	65	68	68	64	64	51	46	43	43	45	45	40	32	32	40	31	31	40	30	30	39	43	48	46	41	48.0		
FROSTBURG 2	07	MAX	73	80	78	77	77	63	78	84	80	78	77	68	51	46	49	66	53	55	49	61	55	39	57	59	46	48	40	43	46	43	55	60.5		
		MIN	48	57	58	59	60	59	61	61	62	62	44	38	37	39	39	39	39	34	33	31	32	29	29	37	27	27	35	39	39	39	39	43.7		
HAGERSTOWN RGNL AP	24	MAX	84	82	83	87	73	75	88	85	82	84	76	62	57	56	68	58	66	56	64	66	52	57	70	55	54	50	51	54	55	63	72	67.3		
		MIN	62	67	67	62	61	63	68	69	72	71	61	52	47	44	54	48	48	42	37	46	41	35	44	39	35	39	44	46	45	41	45	51.5		
SHARPSBURG 5 S	07	MAX	74	83	81	83	87	73	75	87	84	82	83	78	61	55	57	65	57	65	57	64	65	49	57	69	55	51	47	49	56	57	63	66.7		
		MIN	54	58	62	61	61	60	63	63	67	67	69	52	45	38	41	47	41	36	31	31	42	27	27	29	28	27	37	44	43	35	35	45.8		
<b>ALLEGHENY PLATEAU 08</b>																																				
OAKLAND 1 SE	07	MAX	76	80	80	77	77	73	82	84	81	77	80	69	54	47	62	67	53	57	57	66	53	37	58	61	48	52	46	49	48	44	58	63.0		
		MIN	48	55	55	58	61	59	61	60	60	64	64	43	40	39	41	41	40	32	28	28		32	28	29	37	25	24	38	38	38	38	38	43.3	
SAVAGE RVR DAM	08	MAX	70	79	76	78	78	69	81	84																										61.1
		MIN	49	55	56	60	59	62	61	64																										45.5
SINES DEEP CREEK	07	MAX	72	70	70	68	74																													M
		MIN	47	50	55	55	56																													M
<b>DELAWARE NORTHERN 01</b>																																				
WILMINGTON NEW CASTLE CO AP	24	MAX	82	82	80	86	74	71	80	75	80	82	83	71	59	58	68	61	66	55	63	66	53	55	68	56	53	50	52	56	61	60	69	66.9		
		MIN	59	64	62	61	62	63	68	66	70	70	71	49	43	43	55	49	44	38	35	51	35	33	48	37	34	37	45	45	41	38	37	50.1		
WILMINGTON PORTER RSCH	24	MAX																																		M
		MIN																																		M
<b>SOUTHERN 02</b>																																				
GEORGETOWN DELEWARE COASTAL AP	24	MAX	83	85	83	90	77	78	87	85	84	87	87	73	62	64	78	75	68	58	66	66	55	59	72	59	55	58	65	62	62	63	71	71.5		
		MIN	60	65	64	63	68	68	68	68	69	71	69	52	45	47	60	54	51	40	37	52	37	34	44	42	38	37	47	50	47	41	42	52.6		



MARYLAND AND DELAWARE  
201810

# DAILY SOIL TEMPERATURES

STATION	DEPTH	TIME	DAY OF MONTH																															AVERAGE	
			01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
MARYLAND UPPER SOUTHERN 04 BELTSVILLE (in)																																			

MARYLAND AND DELAWARE  
201810

## SOILS REFERENCE NOTES

STATION	SOIL TYPE	SOIL COVER	SLOPE	UNITS
BELTSVILLE	UNKNOWN	GRASS	0	F



## PAN EVAPORATION AND WIND

STATION		DAY OF MONTH																															TOTAL OR AVERAGE
		01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
MARYLAND UPPER SOUTHERN 04 BELTSVILLE	WIND	12	19	31	26	42	30	25	15	18	13	36	82	61	59	10	73	60	39	37	51	96	58	24	43	58	29	64	49	39	53	33	1285
	EVAP	0.12	0.14	0.15	0.16	0.25	0.06	0.00	0.11	0.09	0.08	0.06	0.22	0.13	0.10	0.01	0.07	0.11	0.19	0.12	0.09	0.15	0.14	0.10	0.12	0.15	0.06	0.04	0.04	0.07	0.09	0.08	3.30
	MAX	89	89	87	86	90	72	74	87	84	84	84	81	81	64	58	67	66	68	64	66	66	69	61	69	61	62	51	57	59	63	65	71.5
	MIN	62	62	64	67	68	63	63	70	70	70	70	60	50	43	43	53	50	42	38	39	40	36	35	40	37	35	40	46	46	39	38	50.9
ALLEGHENY PLATEAU 08 SAVAGE RVR DAM	WIND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	M
	EVAP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	M
	MAX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MIN	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	M

Evaporation: Is measured in hundreths of inches.

Wind: Is measured in miles.

Max and Min: The maximum and minimum temperatures (Fahrenheit) of the water in the evaporation pan.

# STATION INDEX

STATION	INDEX NO.	DIVISION	COUNTY	LATITUDE	LONGITUDE	ELEVATION (IN FEET)	OBSERVATION TIME AND TABLES			
							LOCAL STD TIME			
							TEMP	PRECIP	EVAP	SPECIAL SEE (NOTES)
MARYLAND										
ABERDEEN PHILLIPS FLD	0015	06	HARFORD	39 28	76 10W	57	07	07		CH
ANNAPOLIS US NAVAL ACADEMY ASO R	0186	04	ANNE ARUNDEL	38 59	76 29W	6	24	24		H
BALTIMORE-WASHINGTON INTL AP R	0465	04	ANNE ARUNDEL	39 10	76 41W	156	24	24		HJ
BELTSVILLE	0700	04	PRINCE GEORGE'S	39 2	76 56W	145	08	08	08	GCH
CONOWINGO DAM	2060	06	HARFORD	39 39	76 11W	40	07	07		H
CUMBERLAND 2	2282	07	ALLEGANY	39 39	78 45W	730	07	07		H
CYLBURN	2308	06	BALTIMORE	39 21	76 39W	235	08	08		H
DALECARLIA RSVR	2325	04	DISTRICT OF COLUMBIA	38 56	77 7W	150	08	08		H
DAMASCUS 3 SSW	2336	06	MONTGOMERY	39 16	77 14W	700	22	22		H
EMMITSBURG 2 SE	2906	06	FREDERICK	39 41	77 17W	403	07	07		H
FROSTBURG 2	3415	07	ALLEGANY	39 40	78 56W	2170	07	07		H
HAGERSTOWN 1 E	1790	07	WASHINGTON	39 38	77 42W	532	24	24		H
HAGERSTOWN RGNL AP R	3976	07	WASHINGTON	39 42	77 44W	705	24	24		H
MARYLAND SCI CTR R	5718	04	BALTIMORE (CITY)	39 17	76 37W	20	24	24		H
MECHANICSVILLE 5 NE	5865	03	ST. MARY'S	38 30	76 44W	100	07	07		H
MILLERS 4 NE	5934	06	CARROLL	39 43	76 48W	860	18	18		CH
NATL ARBORETUM DC	6350	04	DISTRICT OF COLUMBIA	38 55	76 58W	50	08	08		H
OAKLAND 1 SE	6620	08	GARRETT	39 25	79 24W	2420	07	07		H
OXON HILL	6800	04	PRINCE GEORGE'S	38 48	76 60W	186	07	07		H
PRINCESS ANNE	7330	01	SOMERSET	38 13	75 41W	20	17	17		H
REISTERSTOWN 2 NW	7580	06	BALTIMORE	39 30	76 50W	737	08	08		H
ROYAL OAK 2 SSW //	7806	02	TALBOT	38 43	76 11W	10	17	17		H
SALISBURY 2N	8004	01	WICOMICO	38 24	75 36W	20	17	17		H
SALISBURY-WICOMICO RGNL AP //R	8005	01	WICOMICO	38 20	75 31W	47	24	24		H
SAVAGE RVR DAM	8065	08	GARRETT	39 31	79 8W	1495	08	08	08	CH
SHARPSBURG 5 S	8207	07	WASHINGTON	39 24	77 43W	500	07	07		H
SINES DEEP CREEK	8315	08	GARRETT	39 31	79 25W	2040	07	07		H
SMITHSBURG 2NW	8371	06	WASHINGTON	39 40	77 35W	670	08	08		H
SNOW HILL 4 N	8380	01	WORCESTER	38 14	75 23W	30	17	17		H
SOLOMONS	8405	03	CALVERT	38 19	76 27W	12	08	08		H
STEVENSVILLE 2SW	8557	05	QUEEN ANNE'S	38 58	76 20W	10	07	07		H
SUDLERSVILLE 1S	8657	05	QUEEN ANNE'S	39 10	75 51W	100		20		H
WILLIAMSPORT	9570	07	WASHINGTON	39 37	77 51W	360		06		CH
DELAWARE										
GEORGETOWN DELEWARE COASTAL AP //R	3561	02	SUSSEX	38 41	75 22W	46	24	24		H
WILMINGTON NEW CASTLE CO AP //R	9595	01	NEW CASTLE	39 40	75 36W	79	24	24		HJ
WILMINGTON PORTER RSCH	9605	01	NEW CASTLE	39 46	75 32W	270	24	24		H

# REFERENCE NOTES

**STATION NAMES:** Name of the city, town or locality. Figures and letters following the station names indicate the distance in miles and direction from the post office or town community center.

**DIVISIONS:** Areas within a state of similar climatological characteristics. Division averages are calculated using data from stations that record temperature and/or precipitation. Station Precipitation totals flagged with an 'F' or 'M' are excluded from the Divisional Average calculations of precipitation. Stations with monthly Temperature averages flagged with an 'F' or 'M' are included in the Divisional Average if there are no more than 9 flagged or missing daily values in the month, else they are excluded from the divisional average for temperature.

**NORMALS:** The average value of the meteorological element over a time period. Effective 1 January 2012, the averaging period for station departures is 1981 to 2010. The normals for National Weather Service localities have been adjusted so as to be representative for the current observation site.

The January 2011 through December 2015 publications incorrectly state the computation of divisional departures. Climate Division departures have been, and continue to be, computed from 1971-2000 Normals, not 1981-2010 as stated. Station departures are accurately described as departures from 1981-2010.

**MONTHLY DEGREE DAY TOTALS:** One heating (cooling) degree day is accumulated for each whole degree that the daily mean temperature is below (above) 65 degrees Fahrenheit.

**PRECIPITATION:** Values shown in hundredths of inches are water equivalent totals, i.e., total of liquid and melted frozen precipitation. In the "Monthly Summarized Data" table the total snow and sleet values shown in tenths of inches are unmelted amounts. The max depth on ground values of snow and sleet shown in whole inches are cumulative unmelted amounts. The number of days with .10, .50, 1.00 or more refers to water equivalents.

**PRECIPITATION QUALITY CONTROL:** The NCEI quality control process may flag precipitation data that are spatially inconsistent, exceed climatological limits, or are inconsistent with prevailing weather patterns.

**TEMPERATURE:** Original temperature values are given in the "Daily Temperature" table. Summary temperature information (averages, departures, extremes, monthly degree day totals) is based on the values labeled MAX/MIN.

**WIND:** (As shown in the "Evaporation and Wind" table) the total wind movement in miles over the evaporation pan as determined by an anemometer recorder located 6-8 inches above the pan.

## SYMBOLS AND LETTERS USED IN THE STATION INDEX TABLE

C Station is equipped with recording rain gage (R) but values in this bulletin are from a non-recording rain gage unless indicated by an R.

G Observations appear in the "Soil Temperatures" table.

H Observations appear in the "Snowfall and Snow on the Ground" table.

J Station also published as a Local Climatological Data publication.

VAR Observation time varies.

SR / SS Observation time near sunrise / Observation time near sunset, respectively.

## SYMBOLS AND LETTERS USED IN THE DATA TABLES

(DAILY DATA ARE FOR THE 24 HOURS IMMEDIATELY PRECEDING OBSERVATION TIME.)

BLANK Entries in the "Monthly Summarized Data" table indicate no record.

BLANK Entries in the "Daily Precipitation" and "Snowfall and Snow on the Ground" tables indicate zero.

BLANK Entries in the "Daily Temperature" table indicate a missing record

- No record. Data not recorded or not received in time for publication.

+ Precipitation or temperature extremes occurred on one or more previous dates during the month.

\* Rain gage not read. Precipitation is included in the amount following the asterisks.

Time distribution may not be known. A \* preceding the monthly total indicates precipitation amount is being carried forward to next month's total, and may include amounts from the previous month(s).

a As a subscript, indicates accumulated total.

A Amount of precipitation is the total of observer's entries for the current month. It may include precipitation that occurred during the previous month. Refer to earlier bulletin to determine date of last

reading. (Hawaii stations)

B Divisional Departure from normals are computed using 1971-2000 normals.

E Normalized HDD/CDD Calculation. E is appended to the HDD/CDD Calculation when 1-9 individual daily TMAX and/or TMIN values are missing and a Normalized HDD/CDD Calculation is provided. M appears alone if 10 or more daily values are missing.

F Monthly calculation flagged value. F is appended to average and/or total values computed which exclude one or more daily data values that have been flagged by the GHCN-Daily Dataset

M Insufficient or partial data. M is appended to average and/or total values computed with 1-9 daily values missing. M appears alone if 10 or more daily values are missing, (8 or more for wind and evaporation).

N Indicates snow fall or Snowdepth totals are computed with one or more missing days.

R Amounts from recording rain gage.

T Trace. An amount too small to measure.

**SEASONAL TABLES:** Monthly and seasonal snowfall and heating degree days for the 12 months ending with the June data are published in the July issue of this bulletin. Cooling degree days for the calendar year are published in the "Climatological Data Annual Summary."

Information concerning the history of changes in locations, exposure, etc. of substations is kept on file at the National Centers for Environmental Information. Historical information of regular National Weather Service Offices may be obtained from the "Local Climatological Data" annual publication. The contents of this publication may be reprinted or otherwise used freely, with proper credit to the National Centers For Environmental Information. The data are also available digitally.

Effective with the January 2011 Data-Month, COOP Observer Names are no longer included in the Monthly and Annual Climatological Data Publications. This information is not published to ensure the privacy of personal information pursuant to Section 208 of the E-Government Act of 2002 (44 USC 3601).

As of the 2011 Data-Year, Station and Climate Division Maps are no longer being included in the CD Publications. NCEI's Products Branch provides updated Station Maps for various data networks via the Historical Observing Metadata Repository: <http://www.ncdc.noaa.gov/homr>.

The GHCN-Daily Quality Control Flags shown below are displayed as superscripts with the data. For more information on Global Historical Climatology Network - Daily and flags, see: <http://www.ncdc.noaa.gov/oa/climate/ghcn-daily/> and Comprehensive Automated Quality Assurance of Daily Surface Observations. Durre, Imke, Matthew J. Menne, Byron E. Gleason, Tamara G. Houston, Russell S. Vose, 2010: J. Appl. Meteor. Climatol., 49, 16151633. doi: 10.1175/2010JAMC2375.1

Blank = Passed All checks

D = failed duplicate check

G = failed gap check

I = failed internal consistency check

K = failed streak/frequent-value check

L = failed check on length of multiday period

M = failed megaconsistency check

N = failed naught check

O = failed climatological outlier check

R = failed lagged range check

S = failed spatial consistency check

T = failed temporal consistency check

W = temperature too warm for snow

X = failed bounds check

Z = flagged as a result of an official Datzilla investigation

Beginning with the January 2013 CD Publication, monthly mean temperature calculations have changed to the National Data Stewardship Team standard. Monthly maximum and minimum temperatures are not rounded until after the monthly mean temperature is calculated. This is the most accurate outcome, but may be slightly different from the mean derived from rounded monthly maximum and minimum.

The climate division temperature and precipitation values in this publication are based on simple averages from the current set of NWS-Designated Open and Published COOP and First Order Sites within each division. These values differ from those found in NCEI's nClimDiv product. Beginning in February 2014, the nClimDiv product is used by NCEI's Monitoring Branch and in its monthly climate reports. For more details on nClimDiv, please go to <http://www.ncdc.noaa.gov/monitoring-references/maps/us-climate-divisions.php>.

Effective January 2016, Alaska's Climate Divisions are updated to reflect the 13 climate divisional boundaries established by University of Alaska-Fairbanks, NWS, NCEI, Oregon State University, and University of Nebraska-Lincoln. For more details regarding the updated Alaska Climate Divisions, see: <http://journals.ametsoc.org/doi/pdf/10.1175/JAMC-D-11-0168.1> (Bienek et al., 2012).

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