



CLIMATOLOGICAL DATA

MARYLAND AND DELAWARE

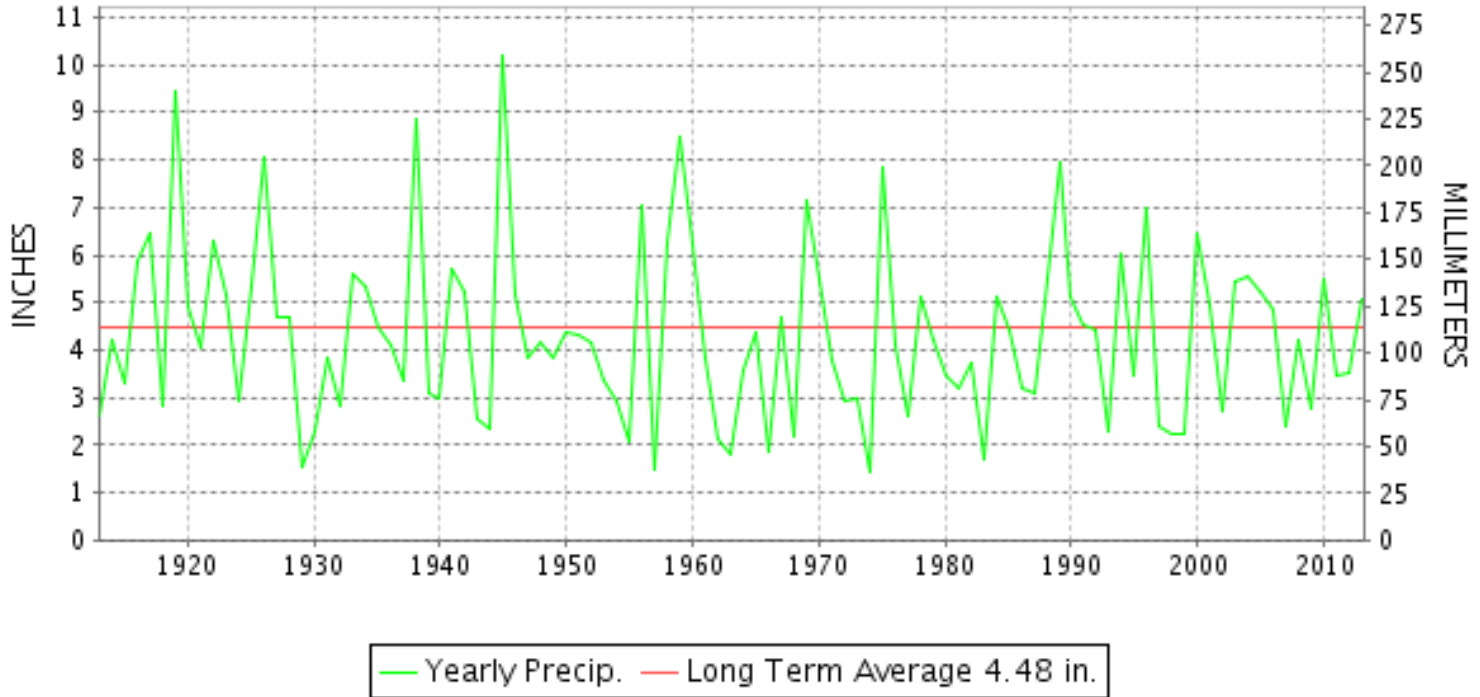
JULY 2013

VOLUME 117 NUMBER 07

ISSN 0145-0549

GHCND Ver: 3.12-upd-2013103005

JULY PRECIPITATION BY YEAR



TEMPERATURE AND PRECIPITATION EXTREMES

MARYLAND

HIGHEST TEMPERATURE	100	JULY 19+	2 STATIONS
LOWEST TEMPERATURE	46	JULY 30++	2 STATIONS
GREATEST TOTAL PRECIPITATION	8.41		CONOWINGO DAM
LEAST TOTAL PRECIPITATION	2.33		CUMBERLAND 2
GREATEST 1 DAY PRECIPITATION	3.82	JULY 12	UPPER MARLBORO 3 NNW

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DELAWARE

HIGHEST TEMPERATURE	98	JULY 19	WILMINGTON PORTER RES
LOWEST TEMPERATURE	60	JULY 30+	2 STATIONS
GREATEST TOTAL PRECIPITATION	9.05		DOVER
LEAST TOTAL PRECIPITATION	4.05		WILMINGTON NEW CASTLE CO AP
GREATEST 1 DAY PRECIPITATION	5.56	JULY 12	DOVER

MONTHLY STATION AND DIVISION SUMMARY

STATION	TEMPERATURE (°F)													PRECIPITATION (IN)												
	AVERAGE MAXIMUM	AVERAGE MINIMUM	AVERAGE	DEPARTURE FROM NORMAL	HIGHEST	DATE	LOWEST	DATE	HEATING DEG. DAYS	COOLING DEG. DAYS	NO. OF DAYS				TOTAL	DEPARTURE FROM NORMAL	GREATEST 24 HOURS	DATE	ICE PELLETS, SNOW			NO. OF DAYS				
											MAX		MIN						TOTAL	MAX DEPTH ON GROUND	DATE	.10 OR MORE	.50 OR MORE	1.00 OR MORE		
											>=90	<=32	<=32	<=0												
--DIVISIONAL DATA-----> APPALACHIAN MOUNTAIN 07			76.4	1.1B										5.03	1.07B											
CUMBERLAND 2	89.2	66.4	77.8	1.0	100	20	55	26	0	405	16	0	0	0	2.33	-1.23	0.52	08	0.0			8	1	0		
FROSTBURG 2	78.6M	61.2M	69.9M	0.9	89	19	51	29+	15E	173E	0	0	0	0	A 3.89	-0.11	0.91	06	0.0			9	3	0		
SHARPSBURG 5 S	86.3	65.3	75.8	1.7	96	19	53	30	0	343	8	0	0	0	A 2.88	-1.22	0.62	12	0.0			5	2	0		
WILLIAMSPORT	86.3M	65.8M	76.0M	0.8	97	19+	56	26+	0	353E	8	0	0	0	A 3.27	-0.63	0.90	23	M 0.0	0		9	2	0		
--DIVISIONAL DATA-----> ALLEGHENY PLATEAU 08			74.9	2.1B										3.09	-0.55B											
OAKLAND 1 SE	79.6	60.2	69.9	1.5	89	20+	46	30+	19	181	0	0	0	0	4.66	-0.80	1.30	23	0.0	0		11	3	1		
SAVAGE RIVER DAM	80.6M	62.5M	71.6M	1.4	90	18	52	27+	4E	217E	1	0	0	0	M 4.77	0.45	0.85	08	0.0			11	5	0		
SINES DEEP CREEK	78.8M	58.6M	68.7M		87	20+	46	30	25E	149E	0	0	0	0	M 5.65		1.53	23	0.0			12	4	1		
--DIVISIONAL DATA-----> DELAWARE NORTHERN 01			70.1	1.5B										4.66	-0.21B											
WILMINGTON NEW CASTLE CO AP	87.2	71.7	79.5	2.7	97	17	60	30	0	455	10	0	0	0	4.05	-0.52	1.50	28	M 0.0	0		7	2	2		
WILMINGTON PORTER RES	87.7	70.5	79.1	2.9	98	19	60	25	0	446	15	0	0	0	M 4.49	-0.87	1.25	12	0.0	0		8	4	1		
--DIVISIONAL DATA-----> SOUTHERN 02			79.3	3.1B										4.05	-0.45B											
DOVER	87.6	70.9	79.3	1.6	97	17	61	30	0	450	10	0	0	0	MA 9.05	4.96	5.56	12	0.0	0		6	4	1		
--DIVISIONAL DATA----->			79.3	2.8B										M	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	
MARYLAND																																	
SOUTHERN																																	
EASTERN SHORE 01																																	
ASSATEAGUE	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PRINCESS ANNE	M	0.78	0.78	-	-	-	-	-	0.41	-	0.36	1.19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.28	-	-	-	0.04	0.12	-
SALISBURY 2N	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SALISBURY FAA AP		3.81	0.67	0.20	-	-	-	-	T	T	-	0.47	2.27	T	-	-	-	-	-	-	-	0.01	T	-	-	0.19	-	-	T	T	-		
SNOW HILL 4 N		5.32	0.41	0.13	0.12	-	-	-	-	-	0.56	1.35	2.33	-	-	-	-	-	-	-	-	-	0.09	0.11	-	0.20	-	-	-	0.02	-		
CENTRAL																																	
EASTERN SHORE 02																																	
ROYAL OAK 2 SSW		3.32	0.45	0.77	-	0.04	-	-	0.03	T	-	0.16	1.16	0.06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.65		
LOWER SOUTHERN 03																																	
MECHANICSVILLE 5 NE		3.06	0.05	0.25	1.03	0.06	-	-	0.03	-	T	0.10	0.84	0.43	0.07	-	-	-	-	-	-	-	0.03	-	-	-	-	-	0.12	0.05	-		
SOLOMONS	MA	8.11	3.68	0.64	0.16	*	0.05 _a	-	0.02	T	-	1.68	1.05	-	0.08	-	-	-	-	-	-	0.03	0.01	-	-	-	-	0.01	0.70	-			
UPPER SOUTHERN 04																																	
BALTIMORE WASH INTL AP		2.77	0.26	0.05	0.59	T	-	0.11	0.01	T	T	0.22	0.66	0.31	-	-	-	-	T	0.38	T	T	0.07	0.06	-	-	0.05	T	-	-			
BELTSVILLE		2.95	0.02	0.25	0.08	0.66	-	-	0.10	-	-	0.17	0.69	0.12	0.50	-	-	-	-	-	-	-	-	0.14	-	-	-	-	0.22	-	-		
DALECARLIA RSVR		6.44	0.30	0.18	0.15	1.00	-	-	0.25	0.40	T	-	2.40	0.58	0.01	-	-	-	-	-	-	-	0.03	0.50	-	-	-	0.64	-	-	-		
LAUREL 3 W		3.18	0.25	0.11	0.81	-	-	0.06	0.04	0.02	0.15	-	0.95	0.20	-	-	-	-	-	-	0.14	0.01	0.02	0.17	-	0.16	-	-	-	0.09	-		
MARYLAND SCIENCE CENTER		3.47	0.13	0.02	0.40	-	-	0.05	-	-	-	0.23	0.94	0.39	-	-	-	-	0.62	0.16	0.18	0.07	0.11	0.10	-	0.02	0.05	-	-	-			
NATL ARBORETUM DC		3.30	0.21	0.63	0.16	0.26	-	-	0.12	0.11	0.03	0.07	0.89	0.10	0.08	-	-	-	-	0.18	-	-	0.16	-	-	-	0.22	0.08	-	-	-		
OXON HILL		4.50	0.06	0.18	0.25	0.01	-	-	0.05	-	T	0.32	2.70	0.09	0.15	-	-	-	-	-	-	-	T	0.60	-	-	0.06	0.03	-	-	-		
UPPER MARLBORO 3 NNW		7.74	1.66	0.12	0.15	0.03	-	-	0.03	T	T	0.22	3.82	-	0.93	-	-	-	-	-	-	-	0.39	0.39	-	-	-	-	-	-	-		
NORTHERN CENTRAL 06																																	
ABERDEEN PHILLIPS FLD	A	6.41	1.63	0.12	0.11	0.07	-	-	0.01	0.09	-	0.03	0.09	1.38	-	-	-	-	-	-	-	*	1.61 _a	0.69	0.14	-	-	-	-	0.44	-		
BRIGHTON DAM		4.04	0.03	0.27	0.13	0.26	-	-	0.31	-	0.04	0.24	0.50	0.25	0.24	-	-	-	-	-	-	0.03	0.39	0.84	-	-	0.48	0.03	-	-	-		
CONOWINGO DAM		8.41	1.46	0.47	-	-	-	-	-	0.25	-	-	3.10	-	-	-	-	-	-	-	-	-	-	2.10	0.15	-	-	-	-	-	-	0.88	
CYLBURN	A	4.96	*	0.21 _a	0.05	*	2.61 _a	-	0.03	-	T	0.12	0.23	0.73	*	*	*	*	*	*	*	*	*	0.74 _a	-	-	-	*	0.24 _a	-	-	-	
DAMASCUS 3 SSW		3.84	0.10	0.05	0.31	-	-	0.38	-	T	T	T	0.60	0.14	-	-	-	-	-	-	-	-	0.80	T	0.75	-	0.15	0.27	0.23	-	0.06		
EMMITSBURG 2 SE		2.83	0.28	0.10	-	0.14	-	-	0.23	-	0.09	-	0.07	0.32	0.01	-	-	-	-	-	-	0.15	0.04	0.69	-	-	0.57	0.14	-	-	-		
FREDERICK 2 NNE	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MILLERS 4 NE		4.73	0.22	0.03	0.21	-	-	0.04	0.15	T	0.25	0.04	0.52	0.19	0.66	-	-	-	-	-	-	-	T	0.02	0.02	0.96	-	0.51	0.27	0.64	-	-	
SMITHSBURG 2NW	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
WESTMINSTER	M	*	0.98 _a	*	*	0.20 _a	*	*	*	*	0.38 _a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
APPALACHIAN																																	
MOUNTAIN 07																																	
CUMBERLAND 2		2.33	0.20	0.06	-	0.05	0.30	-	0.52	0.01	0.32	0.09	0.17	0.03	-	-	-	-	-	-	-	-	0.03	0.03	0.18	0.13	-	0.20	0.01	-	-		
FROSTBURG 2	A	3.89	0.30	0.17	0.10	0.02	0.91	-	0.77	0.04	0.16	*	0.23 _a	0.07	0.02	-	-	-	-	-	-	*	0.09 _a	0.64	0.22	-	0.13	T	-	-	-		
SHARPSBURG 5 S	A	2.88	-	0.01	T	0.02	-	-	0.56	-	T	0.17	0.62	0.16	0.05	-	-	-	-	-	-	T	*	*	*	*	*	0.08	0.11	-	-	-	
WILLIAMSPORT	A	3.27	0.61	0.06	*	0.01 _a	-	-	0.40	-	0.17	0.03	0.16	0.13	-	-	-	-	*	*	0.00 _a	0.30	0.35	0.90	-	-	0.15	-	-	-	-		
ALLEGHENY PLATEAU 08																																	
OAKLAND 1 SE		4.66	0.20	0.26	-	0.21	0.09	0.09	-	0.17	0.04	0.65	0.02	0.30	0.25	0.02	-	-	-	-	-	-	-	1.30	0.57	0.02	-	0.20	-	-	-	-	

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
SAVAGE RIVER DAM	M 4.77	0.16	0.36	0.49	0.65	0.54	0.50		0.85		-	T	-	-								0.13		0.56	0.36					0.17		
SINES DEEP CREEK	M 5.65	0.30	0.30		0.03		0.24		0.72	0.09	0.59		0.20	0.30		0.04		0.04				0.10	0.52	1.53	0.40					0.25	-	
DELAWARE NORTHERN 01																																
WILMINGTON NEW CASTLE CO AP	4.05	0.08	0.02	0.11				0.03	T	T	0.15	0.01	1.40	T							T	0.04	0.21	0.28					1.50	0.22		
WILMINGTON PORTER RES	M 4.49	-	0.10		-			0.20				0.10	1.25	0.05								T	0.10	0.85					0.95	0.89		
SOUTHERN 02																																
DOVER	MA 9.05	0.73	0.07	0.29							0.02	0.79	5.56	0.64								-	0.41	0.51	T				0.03			

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				
MARYLAND SOUTHERN EASTERN SHORE 01 ASSATEAGUE	VA	MAX MIN																																			M M M M M
PRINCESS ANNE	17	MAX MIN	84 72	89 72	88 72					87 75	89 75	91 73	88 75	80 73			92 73	95 78	96 76	96 77	95 78			92 73	93 76	93 72	90 66	85 68			86 67	86 62	85 65				
SALISBURY 2N	17	MAX MIN																																			M M M M M
SALISBURY FAA AP	24	MAX MIN	83 74	88 73	89 73	90 74	90 73	93 76	92 76	88 76	89 74	91 74	82 75	77 72	89 71	91 74	92 73	95 78	97 76	97 77	96 78	94 83	93 77	93 74	93 74	92 72	76 67	86 68	87 64	88 69	86 65	86 62	85 63	85 63	89.3 72.7		
SNOW HILL 4 N	17	MAX MIN	85 73	86 74	88 71	89 73	89 71	91 74	91 72	90 74	87 73	89 72	89 74	78 71	88 67	90 75	94 70	96 79	96 71	96 72	96 81	94 78	93 72	90 73	89 69	90 65	89 65	84 65	87 60	87 64	87 70	85 57	84 59	84 59	89.1 70.7		
CENTRAL EASTERN SHORE 02 ROYAL OAK 2 SSW	17	MAX MIN	80 73	86 73	89 73	89 75	90 75	92 78	93 78	88 72	89 76	90 77	86 74	77 68	87 69	90 74	93 74	95 77	96 74	95 76	95 81	94 81	92 77	91 73	90 78	87 71	78 64	85 63	85 67	88 74	84 66	82 62	83 65	88.4 72.8			
LOWER SOUTHERN 03 MECHANICSVILLE 5 NE	07	MAX MIN	85 71	80 72	80 70	84 71	86 71	86 72	89 73	89 71	84 71	85 72	86 72	81 67	72 67	82 68	86 70	89 74	91 73	91 73	92 74	92 76	89 73	90 69	87 70	86 69	82 67	77 63	80 63	82 66	82 65	83 65	81 59	81 60	84.8 69.4		
SOLOMONS	08	MAX MIN	85 74	81 73	84 73	87 75	89 74	89 77	92 77	90 74	88 77	86 73	90 69	83 70	76 76	85 76	88 74	92 79	91 78	93 79	96 80	95 80	93 77	88 74	90 77	89 76	84 69	76 67	82 69	85 74	87 70	83 69	83 72	83 72	87.1 74.2		
UPPER SOUTHERN 04 BALTIMORE WASH INTL AP	24	MAX MIN	83 73	83 72	86 72	88 73	89 74	93 74	91 71	86 70	83 73	88 74	87 72	76 67	84 69	88 71	95 72	95 75	96 74	97 75	96 74	93 73	92 73	88 72	87 70	85 62	79 64	85 66	85 66	87 70	84 64	84 59	82 63	82 63	87.6 70.5		
BELTSVILLE	08	MAX MIN	85 72	83 74	82 72	86 73	88 72	88 73	91 74	90 70	86 75	89 73	84 70	74 67	85 70	89 77	93 73	92 74	94 75	95 75	95 71	92 72	90 72	88 72	85 69	83 62	79 60	83 60	83 64	84 70	84 61	80 58	81 64	81 64	86.5 70.0		
DALECARLIA RSVR	08	MAX MIN	81 70	83 74	78 72	86 72	90 75	91 74	92 74	92 70	87 71	86 75	90 73	90 67	82 67	88 73	91 72	92 75	92 75	94 76	95 78	98 73	94 73	94 73	91 71	86 62	83 61	79 62	82 66	83 72	87 64	80 60	80 66	82 66	87.6 71.0		
LAUREL 3 W	24	MAX MIN	82 72	82 65	85 71	88 73	89 73	92 75	91 71	86 70	84 72	90 75	87 75	83 66	89 69	89 73	94 72	94 79	96 78	99 79	95 79	93 76	93 75	89 73	87 72	86 73	82 60	85 63	85 68	85 70	85 63	85 66	83 66	84 66	82 66	88.0 71.4	
MARYLAND SCIENCE CENTER	24	MAX MIN	87 77	87 76	90 75	93 77	95 78	98 79	97 76	92 75	87 77	89 74	81 70	88 72	91 77	97 78	97 85	98 84	97 82	97 80	98 77	97 78	94 76	91 75	91 73	87 66	81 61	89 66	88 71	90 73	86 72	86 71	86 73	86 73	91.1 75.7		
NATL ARBORETUM DC	07	MAX MIN	88 73	88 73	84 73	88 74	92 76	91 77	94 76	93 72	88 74	87 72	91 74	87 68	76 68	89 73	93 74	95 79	95 77	96 78	96 80	96 75	94 74	92 73	92 72	88 63	88 69	83 69	86 66	86 69	86 66	86 62	86 64	85 64	85 64	89.4 72.5	
OXON HILL	08	MAX MIN	86 71	84 71	83 71	86 72	89 73	89 74	92 75	90 71	86 71	85 72	89 72	84 68	73 68	86 71	90 71	94 73	95 77	93 75	95 75	95 77	94 79	91 71	90 73	88 72	84 64	81 63	84 64	86 69	85 67	85 63	83 63	83 63	87.5 70.8		
UPPER MARLBORO 3 NNW	08	MAX MIN	84 67	83 73	83 70	86 71	88 72	89 73	92 72	90 70	86 73	85 72	89 72	84 66	72 66	85 70	89 75	93 73	93 74	94 77	95 77	94 77	93 71	92 70	88 72	87 68	83 62	79 62	85 66	85 69	87 64	84 59	83 63	83 63	87.1 69.6		
NORTHERN CENTRAL 06 ABERDEEN PHILLIPS FLD	07	MAX MIN	80 71	82 73	82 74	84 75	87 75	88 77	91 76	90 71	85 72	86 74	89 74	86 71	74 69	83 71	88 71	95 74	94 73	94 75	94 77	94 74	91 72	87 71	87 72	86 71	83 61	76 63	83 64	82 65	84 65	83 65	81 63	81 63	86.1 70.9		

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		
BRIGHTON DAM	08	MAX	83	80	81	83	86	87	91	89	83	81	85	72	71	84	87	91	91	93	95	94	91	88	86	86	82	78	81	82	81	79	80	84.5	
		MIN	69	71	70	70	70	70	71	68	68	70	70	66	67	70	68	73	71	72	74	71	69	70	69	67	59	59	67	60	56	62	67.6		
CONOWINGO DAM	07	MAX	81	79	82	84	86	88	91	90	82	83	85	82	72	82	86	90	91	90	94	93	91	87	87	83	80	73	81	82	83	80	80	84.5	
		MIN	72	72	72	72	72	72	73	68	69	70	72	69	67	70	70	70	73	73	73	72	70	71	70	67	60	61	60	63	62	60	59	68.5	
CYLBURN	08	MAX	83	80	82	84	87	88	90	89	82	80	86	80	80	83	88	88	87	88	91	93	91	75	86	83	78	73	80	81	80	79	78	83.6	
		MIN	73	74	71	72	75	72	70	70	72	74	72	65	65	71	73	77	73	75	72	74	72	71	71	71	59	63	64	68	64	60	62	69.8	
DAMASCUS 3 SSW	22	MAX	80	78	82	86	87	91	89	83	82	85	81	75	81	87	90	89	90	93	93	90	81	85	81	80	75	80	81	78	77	77	76	83.3	
		MIN	68	69	70	70	71	72	68	67	69	72	70	64	67	70	69	72	72	73	75	71	67	69	69	65	56	58	63	67	58	56	62	67.4	
EMMITSBURG 2 SE	07	MAX	84	81	82	82	86	87	89	88	83	80	84	84	72	81	87	91	92	94	94		89	90	88	84	85	77	83	84	81	84	85	85.0	
		MIN	67	68	72	72	69	71	71	68	68	70	71	65	65	71	67	68	71	71	72		69	70	70	66	54	56	57	67	57	56	59	66.6	
FREDERICK 2 NNE	07	MAX																																M	
		MIN																																M	
MILLERS 4 NE	18	MAX	80	81	84	86	87	90	89	82	80	85	84	80	82	87	91	90	92	94	93	91	87	86	83	82	77	80	82	80	78	78	78	84.5	
		MIN	69	70	70	71	71	69	71	66	69	70	69	64	67	69	68	73	70	71	74	71	68	68	68	66	53	58	58	66	57	56	59	66.7	
SMITHSBURG 2NW	08	MAX																																M	
		MIN																																M	
WESTMINSTER	07	MAX		86			88					92																						M	
		MIN	67				72					69																						M	
APPALACHIAN MOUNTAIN 07																																		M	
CUMBERLAND 2	18	MAX	93	87	87	90	93	93	97	92	91	91	90	86	76	85	92	98	98	98	99	100	89	87	84	91	82	82	85	77	87	83	83	89.2	
		MIN	68	70	70	71	59	61	65	67	68	71	69	66	66	69	68	69	74	74	75	73	71	70	71	65	57	55	59	64	57	58	59	66.4	
FROSTBURG 2	07	MAX	82	77	76	82	83	82	87	81	79	80		75	69	76	85	85	85	86	89		77	77	76	78	70	72	78	69	77	71	74	78.6	
		MIN	60	64	64	65	64	64	65	63	63	66		58	58	63	64	67	69	68	69		64	63	64	61	51	51	51	58	51	52	54	61.2	
SHARPSBURG 5 S	07	MAX	86	84	85	85	89	89	92	90	86	85	85	84	76	84	89	93	92	94	96	95	93	84	88	85	80	78	82	83	83	80	81	86.3	
		MIN	67	72	73	70	69	69	68	66	67	69	69	64	64	68	67	68	69	71	71	70	66	66	68	64	54	54	55	66	54	53	54	65.3	
WILLIAMSPORT	06	MAX	88	85		84	89	91	93	90	90	85	86	85	79	85	90	97			97	96	89	84	86	81	79	78	81	81	80	82	84	86.3	
		MIN	65	70		71	71	71	70	67	67	70	70	66	66	68	68	68			72	73	68	71	67	56	59	56	58	58	57	60	60	65.8	
ALLEGHENY PLATEAU 08																																			
OAKLAND 1 SE	07	MAX	82	75	79	81	81	84	84	81	79	79	83	75	68	76	83	86	88	88	89	89	81	80	78	79	71	74	79	71	75	75	75	79.6	
		MIN	55	62	62	63	63	63	65	64	66	68	64	61	61	65	60	62	62	66	66	66	63	64	64	64	49	48	49	58	46	46	52	60.2	
SAVAGE RIVER DAM	08	MAX	81	76	78	81	83	81	85	80	80		83			76	83	87	89	90	89	89	85	81	76	81	73	77	77	70	77	73	76	80.6	
		MIN	60	65	65	66	65	65	66	63	65		68			65	64	63	67	69	67	69	65	65	67	64	54	52	52	58	53	53	55	62.5	
SINES DEEP CREEK	07	MAX	81	77	80	83	82	82	84	79	77	77	82	72	70	78	85	83	86	86	87	87	81	77	78	68	73	78	72		69	74	78.8		
		MIN	54	61	60	60	61	61	61	62	62	65	61	59	60	60	59	59	61	65	64		61	60	62	60	50	47	48	53		46	51	58.6	
DELAWARE NORTHERN 01																																			
WILMINGTON NEW CASTLE CO AP	24	MAX	79	85	88	89	89	92	92	86	87	88	87	76	86	90	95	95	97	96	95	93	92	88	87	82	76	83	84	81	82	82	81	87.2	
		MIN	75	73	73	75	74	76	74	71	73	75	75	71	71	75	73	77	74	77	74	77	81	76	74	76	62	63	67	69	64	60	62	71.7	
WILMINGTON PORTER RES	24	MAX	78	85	86	88	90	93	93	93	93	93	93	76	86	91	93	92	94	96	98	93	90	89	87	80	81	82	84	80	81	80	82	87.7	
		MIN	74	73	71	74	72	72	72	69	69	69	69	69	69	74	73	78	76	77	75	77	73	73	72	68	60	63	66	69	65	63	63	70.5	

MARYLAND AND DELAWARE
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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	
SOUTHERN 02 DOVER	16	MAX MIN	79 72	84 72	88 70	88 73	89 73	92 75	91 75	87 71	86 73	90 74	88 70	84 69	83 69	89 73	92 72	93 78	97 74	96 76	95 78	93 73	90 73	88 72	87 71	86 71	84 64	83 64	85 65	82 67	84 67	82 61	82 64	87.6 70.9

TOTAL SNOWFALL AND NUMBER OF DAYS WITH ONE INCH OR MORE ON GROUND

MARYLAND AND DELAWARE

201307

STATION	JUL		AUG		SEP		OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		TOTAL		TOTAL PRECIPITATION	
	SNOWFALL	1 IN ON GD	SNOWFALL	1 IN ON GD	SNOWFALL	1 IN ON GD	SNOWFALL	1 IN ON GD	SNOWFALL	1 IN ON GD	SNOWFALL	1 IN ON GD	SNOWFALL	1 IN ON GD	SNOWFALL	1 IN ON GD	SNOWFALL	1 IN ON GD	SNOWFALL	1 IN ON GD	SNOWFALL	1 IN ON GD	SNOWFALL	1 IN ON GD	SNOWFALL	1 IN ON GD		
MARYLAND																												
SOUTHERN EASTERN SHORE 01																												
ASSATEAGUE																									0.0	0	0.00	
PRINCESS ANNE																									0.0	0	0.00	
SALISBURY 2N													M 1.2	1	M 0.5										M 1.7	M 1	53.16	
SALISBURY FAA AP	M 0.0						M 0.0				M 0.0		2.8		M T		M T								M 2.8	M 0	56.92	
SNOW HILL 4 N													M 3.5	3	M T		M T								M 3.5	M 3	60.33	
CENTRAL EASTERN SHORE 02																												
ROYAL OAK 2 SSW											T		1.1		2.0	1	3.0	1								6.1	2	52.22
LOWER SOUTHERN 03																												
MECHANICSVILLE 5 NE	M 0.0		M 0.0		M 0.0		M 0.0		M 0.0		M T		M 2.7	4	M 0.4		M 2.5	3	M 0.0						M 5.6	M 7	48.18	
SOLOMONS													4.7	4	0.4		0.8								5.9	4	17.90	
UPPER SOUTHERN 04																												
BALTIMORE WASH INTL AP									T		1.4		2.9	3	0.5		3.2	2		T					8.0	5	45.71	
BELTSVILLE											0.3		2.0	2	1.5		2.5	2							6.3	6	39.39	
DALECARLIA RSVR													T		0.4		M 1.0	1							M 1.4	M 1	49.13	
LAUREL 3 W															M 1.0										M 1.0	0	44.34	
MARYLAND SCIENCE CENTER																									0.0	0	50.90	
NATL ARBORETUM DC									M 0.0		M T		M 1.4	1	M 0.8		M 1.7	1			M 0.0		M 0.0		M 3.9	M 2	38.33	
OXON HILL	M 0.0						M 0.0		T		0.7		1.3	2	1.0	1	5.0	2	M 0.0					M 8.0	M 5	45.02		
UPPER MARLBORO 3 NNW											M 0.4		M 1.3	3	M 1.3	1	M 4.2	3							M 7.2	M 7	42.71	
NORTHERN CENTRAL 06																												
ABERDEEN PHILLIPS FLD												1.2		1.2	1	1.0		1.7	1						5.1	M 2	8.51	
BRIGHTON DAM	M 0.0				M 0.0				M 0.0		M 1.0		2.0	1	0.4		5.0								M 8.4	M 2	24.68	
CONOWINGO DAM											M 1.0		M 1.9		1.5	1									M 4.4	1	50.58	
CYLBURN													M 0.6		M 2.0		M 1.3	1							M 3.9	M 1	4.72	
DAMASCUS 3 SSW							M T		M T		5.7	7	2.3	3	4.9	5	M 9.2	2							M 22.1	M 17	56.71	
EMMITSBURG 2 SE											9.0		3.0		2.0		7.0								21.0	0	43.51	
FREDERICK 2 NNE											4.0	2	2.3	2	0.9		M 1.7	1							M 8.9	M 5	31.26	
MILLERS 4 NE									0.1		9.4	6	2.4	2	6.8	2	11.5	4							30.2	14	54.47	
SMITHSBURG 2NW			M 0.0								M 1.5		M 2.5		M 0.6		M 6.1	2							M 4.0	M 0	26.08	
WESTMINSTER									M 0.0		M 2.5		M 0.6		M 0.9										M 10.1	M 2	7.42	
APPALACHIAN MOUNTAIN 07																												
CUMBERLAND 2												M 12.1	6	M 3.3	12	M 5.3	5	M 17.9	6							M 38.6	M 29	31.95
FROSTBURG 2							M 5.7	2	M 1.0	3	M 21.3	9	M 7.2	20	17.3	17	M 28.4	23	M T						M 80.9	M 74	40.40	
SHARPSBURG 5 S											M T		M 6.1	5	M 1.8	1	M 6.9	4							M 16.0	M 11	19.54	
WILLIAMSPORT	M 0.0		M 0.0		M 0.0		M 0.0		M 0.0		M 4.1		M 2.4		M 0.5		M 1.5		M 0.0		M 0.0				M 8.5	M 0	15.64	
ALLEGHENY PLATEAU 08																												
OAKLAND 1 SE					M 0.0		24.0	2	M 2.5	8	28.0	10	12.9	12	41.3	23	46.5	18								M 155.2	M 73	48.77
SAVAGE RIVER DAM											M 0.2	2	FM 1.0	14	M 5.0	8	M 11.0	9								M 16.2	M 33	23.58
SINES DEEP CREEK							M 18.5		M 1.6	2	M 22.7	6	M 12.0	9	M 40.2	10	M 43.4	24								M 138.4	M 51	50.26
DELAWARE																												
NORTHERN 01																												
BEAR 2 SW										T		M 0.0														M 0.0	M 0	22.37
WILMINGTON NEW CASTLE CO AP	M 0.0									T		0.4		1.9	2	1.6	1	1.3	1						M 5.2	4	49.36	
WILMINGTON PORTER RES														1.1		T		M T							1.1	0	46.62	
SOUTHERN 02																												

TOTAL SNOWFALL AND NUMBER OF DAYS WITH ONE INCH OR MORE ON GROUND

MARYLAND AND DELAWARE

201307

STATION	JUL		AUG		SEP		OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		TOTAL		TOTAL PRECIPITATION	
	SNOWFALL	1 IN ON GD	SNOWFALL	1 IN ON GD	SNOWFALL	1 IN ON GD	SNOWFALL	1 IN ON GD	SNOWFALL	1 IN ON GD	SNOWFALL	1 IN ON GD	SNOWFALL	1 IN ON GD	SNOWFALL	1 IN ON GD	SNOWFALL	1 IN ON GD	SNOWFALL	1 IN ON GD	SNOWFALL	1 IN ON GD	SNOWFALL	1 IN ON GD	SNOWFALL	1 IN ON GD		
DOVER									M T		M T		M 2.0		M 3.0		M 2.0									M 7.0	M 0	M 25.59

MONTHLY AND SEASONAL HEATING DEGREE DAYS

STATION	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL	SEASONAL NORM
MARYLAND														
SOUTHERN EASTERN SHORE 01														
PRINCESS ANNE	0	0	33E	98E	592E	377E	712E	640E	672E	286E	89E	0	3499E	
SALISBURY 2N	0	0	24		591	588	776	737	708	280	117	0	M 3821	
SALISBURY FAA AP	0	0	19	175	550	555	765	714	697	273	114	0	3862	
SNOW HILL 4 N	0	0	33	183	581	565	772	732	714	288E	109	0	3977E	
CENTRAL EASTERN SHORE 02														
ROYAL OAK 2 SSW	0	0	24	199	610	624	802	773	693	295		0	M 4020	
LOWER SOUTHERN 03														
MECHANICSVILLE 5 NE	0	0	70	279	674	714	875	828	779	337	135	6	4697	
SOLOMONS	0	0	7	153	559E	587E	775	768	730	269	100E	0	3948E	
UPPER SOUTHERN 04														
BALTIMORE WASH INTL AP	0	0	28	228	657	684	862	833	749	309	136	0	4486	
BELTSVILLE	0	0	42	240	645	696	877	845	754	314	150	1	4564	
DALECARLIA RSVR	0	0	32	260	657	680	846	811	733	278	166	0	4463	
LAUREL 3 W	0	0	16	218	596	682	842	830	737	289	129	0	4339	
MARYLAND SCIENCE CENTER	0	0	1	127	479	534	719	705	596	186	54	0	3401	
NATL ARBORETUM DC	0	0	17	169E	612E	671	824	782	683E	260E	116	0	4134E	
OXON HILL	0	0	29	210	618	661	836	809	716	283	133	0	4295	
UPPER MARLBORO 3 NNW	0	0	37	250	668	691	856	835	754	318	156	1	4566	
NORTHERN CENTRAL 06														
ABERDEEN PHILLIPS FLD	0	0	47	256	648	712	918	869	769	350	130E	1	4700E	
BRIGHTON DAM	0	0	68	280E	730E	642E			765E	354	183	3	M 3025E	
CONOWINGO DAM	0	0	67	285	730	767	996		848	410	181	1	M 4285	
CYLBURN	0	0	69	286	683	714	910	877	787	339	170	3	4838	
DAMASCUS 3 SSW	0	0	72	283E	696	746	917	897	838E	350	171	7	4977E	
EMMITSBURG 2 SE	0	0	95	334	739	801	966	916	815	400	204	3	5273	
FREDERICK 2 NNE	0	0		289	697	745	909	881	775E				M 4296E	
MILLERS 4 NE	0	0	72	270	691	741	944	919	822	356	166	6	4987	
SMITHSBURG 2NW	0	0	114	381E	820E	869E	1012E	896E					M 4092E	
WESTMINSTER	1	0			785E	730E	977E	927E	856E	395E	155E	3E	M 4829E	
APPALACHIAN MOUNTAIN 07														
CUMBERLAND 2	0	0	79	327E	685	820	955	907	815	320	164	2	5074E	
FROSTBURG 2	4	7	165	439	849	923	1093	1102	1041	487	284	43	6437	
SHARPSBURG 5 S	0	0	88	331	755	800	945	913	863	386	213E	6	5300E	
WILLIAMSPORT	0	0	71E	321E	702E	773E	970E	911E	804E	354E	181E	2E	5089E	
ALLEGHENY PLATEAU 08														
OAKLAND 1 SE	1	17	186E	478	865E	889	1073	1083	1057	510	266	39	6464E	
SAVAGE RIVER DAM	0	0	151E	390E	830E	830E	1064E	1028E	978E	416E	257E	33E	5977E	
SINES DEEP CREEK	1E	35	240	490E	913E	956	1163E	1106	1074E	519E	309	62	6868E	
DELAWARE														
NORTHERN 01														
BEAR 2 SW	0	0	60	259	689	527E							M 1535E	
WILMINGTON NEW CASTLE CO AP	0	0	41	234	672	699	903	847	759	340	125	0	4620	4888
WILMINGTON PORTER RES	0	0	42	247E	670	734E	937	888	790	418E	154E	0	4880E	
SOUTHERN 02														
DOVER	0	0	33	197	640	633	838	806	749	307	123	1	4327	4212

SNOWFALL AND SNOW ON GROUND (INCHES)

STATION		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	
MARYLAND SOUTHERN EASTERN SHORE 01 ASSATEAGUE PRINCESS ANNE SALISBURY 2N SALISBURY FAA AP SNOW HILL 4 N	SNOWFALL SNOWFALL SNOWFALL SNOWFALL SN ON GND SNOWFALL		-	-													-																
DELAWARE NORTHERN 01 WILMINGTON NEW CASTLE CO AP WILMINGTON PORTER RES	SNOWFALL SN ON GND SNOWFALL SN ON GND																														-		

Snowfall: Includes snow and ice. Values for NWS stations (J index note) are Mid-Mid (LST).
 Snow on ground: Includes snow, sleet, ice, and hail. Values for NWS stations (J index note) are observed at 12 UTC (GMT).
 Water Equivalent: Given for NWS stations (J index note) only, when snow depth is 2 inches or more, and is measured at 18 UTC (GMT)

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	45	91	98	70	84	76	72	59	44	38	69	45	53	26	38	30	41	27	28	45	64	24	40	59	85	38	25	49	31	40	28	1562
	EVAP	0.12	0.13	0.11	0.14	0.25	0.30	0.26	0.25	0.22	0.09	0.18	0.17	0.04	0.17	0.20	0.25	0.28	0.26	0.17	3.18	0.29	0.19	0.20	0.26	0.27	0.18	0.20	0.14	0.15	0.26	0.19	9.10
	MAX	86	86	84	90	94	92	96	95	90	86	90	92	74	91	86	90	96	100	98	98	94	94	93	91	83	88	89	88	92	91	88	90.6
	MIN	70	72	70	71	72	72	72	70	70	74	72	68	67	69	72	73	75	75	75	76	73	74	70	70	60	60	65	67	65	60	61	69.7
UPPER MARLBORO 3 NNW	WIND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	M	
	EVAP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	M	
	MAX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	M	
	MIN	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	M	
ALLEGHENY PLATEAU 08 SAVAGE RIVER 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
ASSATEAGUE	0335	01	WORCESTER	38 4	75 13W	10	VAR	VAR		H
BALTIMORE WASH 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	CH
BRIGHTON DAM	1125	06	MONTGOMERY	39 11	77 0W	330	08	08		H
CONOWINGO DAM	2060	06	HARFORD	39 39	76 11W	40	07	07		H
CUMBERLAND 2	2282	07	ALLEGANY	39 39	78 45W	730	18	18		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
FREDERICK 2 NNE	3353	06	FREDERICK	39 26	77 24W	280	07	07		H
FROSTBURG 2	3415	07	ALLEGANY	39 40	78 56W	2170	07	07		H
LAUREL 3 W	5111	04	PRINCE GEORGE'S	39 5	76 54W	400	24	24		H
MARYLAND SCIENCE CENTER R	5718	04	BALTIMORE (CITY)	39 17	76 37W	20	24	24		H
MECHANICSVILLE 5 NE	5865	03	ST. MARY'S	38 28	76 42W	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	07	07		H
OAKLAND 1 SE	6620	08	GARRETT	39 25	79 24W	2420	07	07		H
OXON HILL	6800	04	PRINCE GEORGE'S	38 47	76 60W	120	08	08		H
PRINCESS ANNE	7330	01	SOMERSET	38 13	75 41W	20	17	17		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 FAA AP	8005	01	WICOMICO	38 20	75 31W	48	24	24		H
SAVAGE RIVER 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
UPPER MARLBORO 3 NNW	9070	04	PRINCE GEORGE'S	38 51	76 46W	130	08	08	08	H
WESTMINSTER	9440	06	CARROLL	39 34	76 59W	750	07	07		H
WILLIAMSPORT	9570	07	WASHINGTON	39 37	77 51W	360	06	06		H
DELAWARE										
DOVER	2730	02	KENT	39 15	75 31W	30	16	16		H
WILMINGTON NEW CASTLE CO AP R	9595	01	NEW CASTLE	39 40	75 36W	79	24	24		HJ
WILMINGTON PORTER RES	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 is 1981 to 2010. The normals for National Weather Service localities have been adjusted so as to be representative for the current observation site.

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 NCDC 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 Observation time near sunrise.

SS Observation time near sunset.

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 Climatic Data Center. 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 Climatic Data Center. 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. NCDC's Product Development 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, 1615-1633. 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.

Processing Updates and Errata: The 2011 CD Publications were reproduced in May 2013. This update included the addition of late reports and corrections based on additional investigations of reported data issues through NCDC's Datzilla system. In addition, divisional averages for precipitation were recalculated using the method described in DIVISIONS above. Previous editions of the 2011 Publications included all precipitation stations regardless of missing data in the calculation of divisional averages. HDD/CDD values were recalculated to match the legacy method of calculation (truncation of monthly HDD/CDD values instead of rounding).

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