

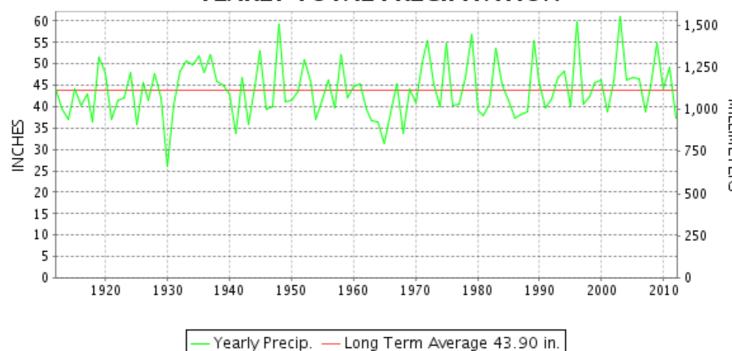
## CLIMATOLOGICAL DATA ANNUAL SUMMARY MARYLAND AND DELAWARE



#### 2012

VOLUME 116 NUMBER 13 ISSN 0145-0549 GHCND Ver: 3.03-upd-2013062605

#### YEARLY TOTAL PRECIPITATION



MARYLAND AND DELAWARE PRECIPITATION 1912-2012

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DIRECTOR

hum R. Karl

NATIONAL CLIMATIC DATA CENTER

STATION	J	AN	Fl	EB	MA	AR	AF	PR	M	AY	JU	N
21111011	PRECIP.	DEPART.	PRECIP.	DEPART.	PRECIP.	DEPART.	PRECIP.	DEPART.	PRECIP.	DEPART.	PRECIP.	DEPART.
MARYLAND												
SOUTHERN EASTERN SHORE 01 ASSATEAGUE PRINCESS ANNE	M M 2.82	-0.76	M MA 2.97	0.06	1.87 M	-2.63	4.66 M 0.38	1.26 -3.12	M M 2.49	-1.09	2.78 M 2.25	-0.37 -1.28
SNOW HILL 4 N SALISBURY 2N	M M		3.24 3.34	0.10	2.07 2.03	-2.45	3.22 3.41	-0.26	4.95 2.09	1.43	M 3.33 2.89	-0.14
SALISBURY FAA APDIVISIONAL DATA>	2.09 2.09	-1.52 -1.91	3.60 3.39	0.25 -0.03	1.10 1.77	-3.32 -2.71	2.95 3.56	-0.60 0.30	2.60 3.21	-1.02 -0.41	3.52 3.06	-0.19 -0.32
CENTRAL EASTERN SHORE 02 ROYAL OAK 2 SSW DIVISIONAL DATA>	1.63 1.63	-2.35	2.80 2.80	-0.51	1.21 1.21	-3.08	3.30 3.30	-0.09	2.43 2.43	-1.48	2.07 2.07	-1.48
LOWER SOUTHERN 03	1.03	-2.33	2.80	-0.51	1.21	-3.06	3.30	-0.09	2.43	-1.46	2.07	-1.40
MECHANICSVILLE 5 NE SOLOMONS DIVISIONAL DATA>	1.62 1.39 1.51	1.39 -2.21	F 1.67 2.05 2.05	2.05 -0.97	2.37 3.13 2.75	3.13 -1.56	2.32 3.47 2.90	3.47 -0.30	M 2.61 2.61	2.61 -1.53	2.42 1.39 1.91	1.39 -1.87
UPPER SOUTHERN 04 BALTIMORE WASH INTL AP	2.54 2.37	-0.49	2.42	-1.84	1.76	-0.60	1.99	1 22	1.99 2.70	-1.62	2.68	-0.57
BELTSVILLE DALECARLIA RSVR MARYLAND SCIENCE CENTER	2.37 2.78 1.75	-0.49 -0.24 -1.17	0.76 1.95 2.39	-1.08 -0.21	3.08 2.91 1.17	-0.60 -1.09 -2.69	2.02 2.35 2.25	-1.33 -1.31 -0.97	4.03 2.44	-0.41 -1.05	3.13 3.02 1.88	-0.37 -1.19 -1.39
LAUREL 3 W OXON HILL	2.28 2.10	-0.88 -0.92	2.51 1.15	-0.52 -1.78	1.89 2.28	-2.21 -1.50	2.18 2.16	-1.63 -1.24	3.69 3.70	-0.87 -0.66	3.37 3.62	-0.86 -0.74
NATL ARBORETUM DC UPPER MARLBORO 3 NNW	1.98 2.21	-1.11 -0.67	M 0.80 1.17	-2.10 -1.55	4.01 2.51	0.29 -1.25	M 2.06 1.98	-1.45 -1.57	3.05 2.59	-1.23 -1.73	M 2.85 2.26	-1.23 -1.81
DIVISIONAL DATA>	2.25	-1.30	1.76	-1.16	2.45	-1.57	2.13	-1.21	3.02	-1.42	2.85	-0.81
NORTHERN CENTRAL 06 ABERDEEN PHILLIPS FLD CATOCTIN MTN PARK	2.16 2.99	-0.58	0.67 1.60	-1.65	1.72 M		2.41 M		3.39 M		FMA 2.59 M	
BRIGHTON DAM CONOWINGO DAM	M 2.02 3.07	-0.37	FA 0.36 0.88	-1.97	FMA 1.30 1.78	-2.47	2.23 3.32	-0.61	FA 2.22 2.11	-1.85	FA 0.16 5.98	1.80
DAMASCUS 3 SSW EMMITSBURG 2 SE	2.14 2.44	-1.23 -0.74	2.84 0.93	-0.33 -1.77	1.86 3.63	-1.83 -0.42	1.82 2.49	-1.81 -1.42	M 5.67 4.88	1.50 0.54	4.79 4.09	0.65 0.17
CYLBURN FREDERICK 2 NNE	MA 1.55 M 2.15	1.55 -0.84	MA 1.07 1.74	1.07 -1.08	2.28 3.87	2.28 0.13	2.61 1.95	2.61 -1.67	MA 4.41 4.33	4.41 -0.23	FA 6.97 M 3.64	6.97 -0.36
MILLERS 4 NE SMITHSBURG 2NW	2.73 2.97	-0.48 0.31	2.32 M	-0.87	1.70 M	-2.02	2.77 3.78	-0.94 -0.03	5.12 M 6.64	0.86 2.50	4.66 M 3.12	1.27 -1.07
WESTMINSTERDIVISIONAL DATA>	M 2.64	-0.96	0.94 1.49	-1.55 -1.43	1.89 2.34	-1.70 -1.69	1.88 2.53	-1.62 -1.00	3.53 3.89	-0.62 -0.73	3.86 4.68	-0.06 0.63
APPALACHIAN MOUNTAIN 07	2 10		1 27		2.07		1.00		4.00		1.07	
CUMBERLAND 2 FROSTBURG 2 SHARPSBURG 5 S	3.10 3.38 M	0.06	1.37 1.65 M	-1.47	3.97 4.17 M	0.23	1.00 1.27 2.75	-2.60 -0.87	4.08 5.97 5.95	1.09 1.79	1.97 3.75 3.41	-0.25 -0.47
WILLIAMSPORT	M 1.68	-1.32	M 1.26	-0.71	M 2.71	-1.52	M 2.34	-0.86	M 5.09	0.94	M 2.49	-1.29

STATION	Л	JL	A	UG	SE	P	OC	СТ	N	VC	DE	EC	ANNU	JAL
	PRECIP.	DEPART.	PRECIP.	DEPART.	PRECIP.	DEPART.	PRECIP.	DEPART.	PRECIP.	DEPART.	PRECIP.	DEPART.	PRECIP.	DEPART.
MARYLAND														
SOUTHERN EASTERN SHORE 01 ASSATEAGUE PRINCESS ANNE SNOW HILL 4 N SALISBURY 2N SALISBURY FAA APDIVISIONAL DATA>	M MA 3.57 3.58 FA 3.74 2.34 2.96	-0.76 -0.81 -2.04 -1.35	M FMA 6.39 6.52 8.51 5.38 6.80	1.73 1.62 0.95 2.06	M FMA 3.96 7.45 10.66 7.74 8.62	0.12 3.05 3.76 4.86	M M 10.67 M 9.20 9.94	7.14 5.71 6.57	M M 0.51 0.67 0.44 0.54	-3.01 -2.99 -2.64	M M 4.81 4.10 3.25 4.05	1.14 -0.46 0.65	44.21 49.99	-2.83 5.07
CENTRAL EASTERN SHORE 02 ROYAL OAK 2 SSW DIVISIONAL DATA>	2.70 2.70	-1.49	8.55 8.55	4.29	2.82 2.82	-1.00	10.39 10.39	7.15	0.93 0.93	-2.36	5.04 5.04	1.55	43.87 43.87	-2.00 -0.85
LOWER SOUTHERN 03 MECHANICS VILLE 5 NE SOLOMONSDIVISIONAL DATA>	3.86 1.98 2.92	1.98 -1.30	6.06 MA 7.52 6.06	7.52 1.93	1.64 3.81 2.73	3.81 -1.44	8.24 10.27 9.26	10.27 5.78	0.89 0.57 0.73	0.57 -2.54	4.20 4.14 4.17	4.14 0.86	M 42.33 39.60	-5.15
UPPER SOUTHERN 04 BALTIMORE WASH INTL AP BELTSVILLE DALECARLIA RSVR MARYLAND SCIENCE CENTER LAUREL 3 W OXON HILL NATL ARBORETUM DC UPPER MARLBORO 3 NNWDIVISIONAL DATA>	3.27 2.98 3.37 5.98 3.60 2.96 M 3.43 3.57 3.68	-0.96 -1.22 1.36 -0.45 -1.39 -0.89 -0.45 -0.46	5.82 2.18 3.45 5.89 2.75 2.96 2.41 2.33 3.47	-1.09 -0.41 2.50 -0.68 -0.66 -1.00 -1.39 -0.48	2.21 2.41 3.18 3.00 2.16 4.68 3.75 3.16 3.07	-1.67 -0.99 -1.09 -2.44 0.55 -0.01 -0.83 -1.11	8.92 8.33 9.66 9.36 10.60 6.79 M 6.76 8.35 8.86	4.66 5.82 6.31 6.62 3.07 2.97 4.75 5.38	0.71 0.67 0.87 0.64 0.71 0.58 M 0.62 FA 0.24 0.70	-2.57 -2.75 -2.33 -3.50 -3.02 -2.85 -3.23 -2.68	3.11 2.80 4.38 3.19 3.34 3.26 3.28 3.71 3.38	-0.33 1.16 -0.22 -0.43 -0.01 0.08 0.57 -0.01	37.42 33.43 41.95 39.94 39.08 36.24 M 35.00 34.08 37.62	-4.52 -10.33 -3.16 -7.32 -8.70 -9.61 -6.83
NORTHERN CENTRAL 06 ABERDEEN PHILLIPS FLD CATOCTIN MTN PARK BRIGHTON DAM CONOWINGO DAM DAMASCUS 3 SSW EMMITSBURG 2 SE CYLBURN FREDERICK 2 NNE MILLERS 4 NE SMITHSBURG 2NW WESTMINSTERDIVISIONAL DATA>	FA 1.57 M FA 4.90 2.33 6.18 3.82 4.14 8.29 5.27 3.39 5.27 4.84	-1.96 2.06 0.17 4.14 4.06 1.28 -0.35 0.95 0.88	FA 6.48 M FA 2.05 4.77 4.40 4.05 MA 7.55 2.74 5.03 M 4.82 2.15 3.86	0.86 0.11 0.65 7.55 -0.77 1.31 1.68 -1.57 0.02	2.14 M FA 2.48 4.14 3.02 6.41 MA 3.70 M 5.25 4.43 M 4.23	-0.81 -1.49 2.17 3.70 0.78 0.39	9.53 M FA 2.60 8.20 M 10.36 7.59 MA 11.44 8.06 12.09 8.34 M	4.08 6.64 4.21 11.44 4.53 8.34 5.10	0.83 M 0.66 0.87 1.16 1.10 0.92 1.09 1.08 M 1.43 MA 1.02 0.96	-2.67 -2.76 -2.51 0.92 -2.61 -2.51 -2.23 -2.25 -2.66	3.34 M M 3.41 4.12 3.59 3.60 MA 2.10 3.37 4.12 M 3.67 MA 3.68 3.69	0.09 -0.04 0.27 2.10 0.06 0.48 0.32 0.04 0.19	M 36.83  M 24.39 41.57 M 47.83 45.03 M 48.74 52.14	-7.39 -20.29 -6.52 -0.31 8.47
APPALACHIAN MOUNTAIN 07 CUMBERLAND 2 FROSTBURG 2 SHARPSBURG 5 S WILLIAMSPORT	2.52 4.61 4.39 M	0.61 0.29	2.42 2.43 4.64 M 5.66	-1.17 1.41 2.74	3.05 3.75 5.09 FMA 4.56	0.07 1.09 0.70	M 4.42 4.89 FA 8.78 M 3.67	1.85 5.37 0.61	0.39 0.35 1.16 M 0.82	-3.32 -2.24 -2.60	3.59 4.51 3.33 M 2.98	1.22 0.18 -0.12	M 31.88 40.73	-5.33 -3.83

STATION	JA	AN	Fl	EΒ	MA	AR .	AF	PR	M	AY	JU	N
	PRECIP.	DEPART.	PRECIP.	DEPART.	PRECIP.	DEPART.	PRECIP.	DEPART.	PRECIP.	DEPART.	PRECIP.	DEPART.
DIVISIONAL DATA>	3.24	0.14	1.51	-1.11	4.07	0.65	1.67	-1.72	5.33	1.12	3.04	-0.48
ALLEGHENY PLATEAU 08 OAKLAND 1 SE SAVAGE RIVER DAM SINES DEEP CREEKDIVISIONAL DATA>	5.76 3.28 5.54 4.86	0.53	3.16 M 1.62 2.45 2.81	-0.81 -0.28	M 5.14 4.02 5.70 4.86	0.62 0.99	1.82 1.31 M 1.99 1.57	-2.02 -2.27	M 4.06 3.87 4.60 4.24	-0.65 -0.30	3.26 3.63 4.16 3.68	-0.27 -0.53
DELAWARE												
NORTHERN 01 BEAR 2 SW WILMINGTON PORTER RES WILMINGTON NEW CASTLE CO APDIVISIONAL DATA>	2.84 3.01 2.55 2.80	-0.39 -0.70 -0.46 -0.90	1.88 2.00 2.09 1.99	-0.91 -0.99 -0.59 -0.85	0.79 1.23 0.92 0.98	-3.44 -3.29 -3.00 -3.13	2.82 2.63 2.56 2.67	-1.04 -1.58 -0.94 -0.96	2.04 3.26 2.25 2.52	-2.10 -1.12 -1.70 -1.90	7.24 4.02 3.62 4.96	3.31 -0.17 -0.26 1.06
SOUTHERN 02 DOVER LEWES DIVISIONAL DATA>	1.65 M 1.65	-2.34	FA 0.98 M M	М	1.33 M 1.33	-3.07	FA 0.35 M M	М	2.29 M 2.29	-1.83	1.46 M 1.46	-1.95

STATION	Л	JL	A	UG	SE	P	OC	СТ	NO	OV	DE	EC	ANNU	AL
	PRECIP.	DEPART.	PRECIP.	DEPART.	PRECIP.	DEPART.	PRECIP.	DEPART.	PRECIP.	DEPART.	PRECIP.	DEPART.	PRECIP.	DEPART.
DIVISIONAL DATA>	3.84	0.20	3.16	-0.29	3.96	0.47	4.89	1.81	0.63	-2.64	3.81	0.94	39.15	-0.91
ALLEGHENY PLATEAU 08 OAKLAND 1 SE SAVAGE RIVER DAM SINES DEEP CREEKDIVISIONAL DATA>	3.45 M 3.61 M 4.75 3.45	-0.71 -1.42	2.70 M 0.57 2.35 2.53	-2.76 -1.38	M 3.87 M 3.57 4.37 4.37	0.25 0.77	3.98 M M 2.75 3.98	0.95	M 0.64 M 0.12 5.17 5.17	-2.88 1.61	5.94 M 6.86 6.40	2.82	M 43.78 M 50.69 47.92	-3.78 2.27
DELAWARE														
NORTHERN 01 BEAR 2 SW WILMINGTON PORTER RES WILMINGTON NEW CASTLE CO APDIVISIONAL DATA>	3.36 M 1.39 3.05 3.21	-1.19 -3.97 -1.52 -1.29	4.10 4.07 2.81 3.66	0.33 0.40 -0.44 -0.06	5.59 6.48 5.29 5.79	0.96 1.58 0.97 1.47	8.36 M 7.40 6.25 7.31	4.85 3.59 2.83 3.95	0.96 1.39 0.98 1.11	-2.51 -2.09 -2.12 -2.27	M M 4.81 3.92 3.92	0.71 0.44 0.30	M 41.69 36.29 40.92	-6.52 -4.58
SOUTHERN 02 DOVER LEWES DIVISIONAL DATA>	3.17 M 3.17	-0.75	2.68 M 2.68	-2.21	3.73 M 3.73	-0.42	FA 0.89 M M	М	1.28 M 1.28	-2.01	FA 4.11 M M	M	23.92	-22.36 -14.58

## AVERAGE TEMPERATURES AND DEPARTURES FROM NORMAL(°F) MARYLAND AND DELAWARE

STATION	JA	AN	FE	ЕВ	M	AR	API	R	M	AY	JU	N	J	UL	Αl	JG	SE	P	OC	СТ	NO	OV	DI	EC	ANN	IUAL
	TEMPERATURE	DEPARTURE.	TEMPERATURE	DEPARTURE.	TEMPERATURE	DEPARTURE.	TEMPERATURE	DEPARTURE.	TEMPERATURE	DEPARTURE.	TEMPERATURE	DEPARTURE.	TEMPERATURE	DEPARTURE.	TEMPERATURE	DEPARTURE.	TEMPERATURE	DEPARTURE.	TEMPERATURE	DEPARTURE.	TEMPERATURE	DEPARTURE.	TEMPERATURE	DEPARTURE.	TEMPERATURE	DEPARTURE.
MARYLAND																										
SOUTHERN EASTERN SHORE 01 ASSATEAGUE PRINCESS ANNE SNOW HILL 4 N SALISBURY 2N SALISBURY FAA APDIVISIONAL DATA>	M M M M 41.6	5.9 5.6	M 44.3M 43.4 43.2 42.6 43.4	5.8 4.4 4.7 5.6	52.9 M 54.7 55.5 54.0 54.3	9.0 8.2 8.5 9.0	66.7F 55.3M 56.6F 56.8 56.3 58.3	14.2 0.9 1.1 2.0 4.2	M 69.9MF 68.8 68.9 69.1 69.2	6.4 4.0 5.7 6.0	73.6 73.6M 73.0M 72.9 73.7 73.4	3.4 1.7 0.1 1.5 1.6	M 82.5M 81.7 81.4 82.8 82.1	5.9 4.7 5.5 5.4	M 76.6M 76.8 77.5F 78.8 77.4	1.8 1.5 3.3 2.1	M M 68.8 70.0 70.2 69.7	-0.8 1.1 0.4	M 60.8 M 61.4 61.1	2.4 3.8 2.8	M 45.4 45.1 46.4 45.6	-4.0 -2.2 -3.2	M M 46.6 45.8 46.9 46.4	5.6 6.9 6.1	M M 61.5 M 60.3 60.2	4.3 3.9 45.6
CENTRAL EASTERN SHORE 02 ROYAL OAK 2 SSW DIVISIONAL DATA>	40.0 40.0	5.2	43.4 43.4	6.5	55.1 55.1	9.8	56.8 56.8	2.3	69.8 69.8	5.5	74.0 74.0	1.1	82.4 82.4	4.7	78.3 78.3	2.4	69.8 69.8	0.6	59.9 59.9	1.7	44.5 44.5	-3.6	44.7 44.7	5.4	59.9 59.9	2.0 41.6
LOWER SOUTHERN 03 MECHANICSVILLE 5 NE SOLOMONSDIVISIONAL DATA>	37.2 40.8 39.0	5.0	40.6 43.5 42.1	5.2	52.9 54.1 53.5	8.3	53.8 57.2 55.5	1.3	M 69.0 69.0	5.6	70.3 74.7 72.5	0.8	78.9 83.0 81.0	4.7	74.8 78.8 76.8	2.1	66.1 72.4 69.3	1.2	56.3 61.1 58.7	1.8	42.3 46.0M 44.2	-3.1	41.7 45.8M 43.8	5.0	55.9 M 60.5 58.8	-0.3 37.9
UPPER SOUTHERN 04 BALTIMORE WASH INTL AP BELTSVILLE DALECARLIA RSVR MARYLAND SCIENCE CENTER LAUREL 3 W OXON HILL NATL ARBORETUM DC UPPER MARLBORO 3 NNWDIVISIONAL DATA>	38.3 37.2 37.9 42.1 37.9 38.6 38.7 37.7 38.6	4.6 3.9 4.8 5.2 5.2 5.3	42.5 43.2M 41.1	5.5 4.3 5.7 7.0 5.7 6.1	53.7 52.7 54.3 57.3 54.6 54.5 55.8 52.8 54.5	8.9 8.6 9.7 11.4 9.0 10.0	55.3 54.0 55.7 59.6 56.1 55.9 57.6M 54.9 56.1	0.7 0.1 1.2 3.5 1.5 2.0	69.0 68.3 69.2 73.2 69.4 68.8 70.1 68.5 69.6	5.3 4.3 4.8 6.0 5.8 6.0	73.6 72.1 72.6 78.9 74.3 73.3 75.0M 72.6 74.1	0.0 -0.6 1.5 1.9 1.3 1.8	81.5 79.8 81.0 86.3 81.5 81.7 82.4M 81.1 81.9	2.9 3.4 3.7 4.5 5.2 4.8	77.3 76.7 77.5 82.3 78.2 78.1 79.2 77.2 78.3	1.4 1.3 1.7 3.1 3.1 2.9	69.5 69.1 69.1 74.3 70.6 69.7 71.2 69.0 70.3	0.7 -0.2 1.5 2.5 1.8 2.0	58.3 57.8 56.9 62.6 58.9 58.8 60.3M 57.6 58.9	1.7 -0.4 1.3 3.7 2.3 2.5	42.9 43.3 42.8 48.8 44.9 44.1 44.4M 42.5 44.2	-3.4 -4.4 -2.6 -2.5 -3.8 -2.5	42.7 42.3 42.9 47.6 42.7 43.4 43.1 42.4 43.4	5.0 4.7 4.9 5.1 5.4 5.8	58.5 63.2 59.3 59.1 M 60.1 58.1	4.0 2.8 2.1 3.2 4.3 3.5 46.7
NORTHERN CENTRAL 06 ABERDEEN PHILLIPS FLD CATOCTIN MTN PARK BRIGHTON DAM CONOWINGO DAM DAMASCUS 3 SSW EMMITSBURG 2 SE CYLBURN FREDERICK 2 NNE MILLERS 4 NE SMITHSBURG 2NW WESTMINSTERDIVISIONAL DATA>	36.3 34.4 35.8M 35.3 36.4 34.0 36.3 35.6 35.5 33.1 M 35.3	5.4 4.4 3.0 5.1	39.8 M 39.3 M 39.3 38.0 40.4 39.7 38.8 M 39.0 39.3	3.9 5.4 4.5 5.3	50.7 M 51.4M 50.8 52.8 50.2 51.5 52.1 52.4 M 50.9 51.4	8.4 7.2 10.7 7.9 8.7	53.3 M 51.3M 53.0 52.9 51.5 52.6 53.1 53.2 49.6M 51.8 52.2	0.6 -1.3 1.4 -1.5 -0.1	67.5 M 64.8M 66.4 66.9M 66.1 65.6 68.3 67.3 65.3M 66.7 66.5	3.8 3.9 6.0 3.6 4.2	72.6 M M 69.1 69.4 69.0 69.0M 71.3M 70.0 67.7M 70.4 69.8	-2.4 -1.5 0.3 -1.0 -0.9	79.9M M 77.8 76.8 76.3 77.5M 79.4 77.1 75.9 78.2 77.7	1.6 1.3 3.2 2.4 2.4	76.4M M 75.5 74.4 74.1 72.7 M 75.6 73.2 71.6M 75.5 74.3	-0.4 -0.6 0.7 1.5 0.8	68.2 M 66.1 66.3 66.2 64.8 66.5 M 66.0 64.2 M	-1.4 -1.6 0.4 -0.6	57.2 M 56.1M 55.8 56.0M 54.1 55.9 56.0 56.5 52.5M M 55.6	0.2 -0.8 1.5	43.2 M 40.5M 40.4 41.5 40.1 42.0 41.5 41.7 37.5M M 40.9	-4.5 -4.7 -3.1	41.9 M M 39.9 40.7 39.0 41.7 40.8 40.9 36.8M M	4.1	M 57.3 M M 57.2 M 56.1 54.7 M 54.5 M 55.8 56.1 M	1.4 3.2 1.0 3.1 24.6
APPALACHIAN MOUNTAIN 07 CUMBERLAND 2 FROSTBURG 2 SHARPSBURG 5 S	34.4 29.3 M	4.8	39.5 33.4 M	6.1	52.6 47.8 49.8	12.5	53.4 47.9 50.7	2.0	68.0 62.7 66.1	6.5	70.7 64.9 68.5	0.7	79.0 72.4 76.9	3.9	74.4 68.1 73.6	0.9	66.9 61.5 65.5	1.2	54.5M 50.6 54.3	1.3	41.9 36.5 39.6	-2.6	38.3 34.9 38.9	5.4	M 56.1 50.8 M	3.0 3.5

## AVERAGE TEMPERATURES AND DEPARTURES FROM NORMAL(°F) MARYLAND AND DELAWARE

2012

STATION	JA	AN	FE	EB	M	AR	API	₹	M	AY	JU	N	J	UL	AU	JG	SE	P	00	СТ	NO	OV	DE	EC	ANN	IUAL
	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.
WILLIAMSPORTDIVISIONAL DATA>	34.4M 32.7	3.7	39.4M 37.4	5.3	51.0M 50.3	9.6	52.9M 51.2	0.5	67.9M 66.2	5.9	70.0M 68.5	0.0	M 76.1	3.3	74.8M 72.7	1.5	67.1M 65.3	1.2	54.7M 53.5	0.8	41.3M 39.8	-2.9	39.9M 38.0	4.5	M 53.9 54.3	33.4
ALLEGHENY PLATEAU 08 OAKLAND 1 SE SAVAGE RIVER DAM SINES DEEP CREEKDIVISIONAL DATA>	30.8 31.3F 28.9 30.3	5.1 27.7	32.5 35.4 32.1 33.3	6.8	47.2M 47.9 46.0 47.0	10.8 43.3	46.1 48.7 45.3M 46.7	1.3 42.0	61.1	6.0 56.7	65.3 65.3 61.5 64.0	-0.2 57.6	72.7 74.2M 70.1M 72.3	4.5 65.4	67.3 68.6M 65.2 67.0	0.3	61.0M 62.1M 58.0 60.4	0.6 54.4	49.4 M 48.9M 49.2	44.3	35.9M 37.2M 34.3M 35.8	-3.2 31.8	34.0		M 50.6 M M 48.8 50.3	2.3
DELAWARE																										
NORTHERN 01 BEAR 2 SW WILMINGTON PORTER RES WILMINGTON NEW CASTLE CO APDIVISIONAL DATA>	36.9 35.6F 37.2 36.6	5.7 4.9	39.3 39.2 40.0 39.5	5.8 5.2	51.1 50.3 51.4 50.9	8.7 8.2	52.8 52.9 53.4 53.0	1.0 0.6		4.6 3.8	70.8 71.6 72.3 71.6	0.8 0.2	79.1 80.7 80.4 80.1	3.8 3.9	75.5 76.1 76.4 76.0	1.4 1.5	67.2 67.3 68.3 67.6	0.6 0.2	57.1 57.1M 58.0 57.4	2.2 1.6	41.8 42.5 42.4 42.2	-3.5 -3.6	1 1	5.9 5.1	58.0 M 56.7 57.4 56.9	3.0 31.6
SOUTHERN 02 DOVER LEWES DIVISIONAL DATA>	40.8 M 40.8	37.3	42.5 M 42.5	38.9	53.2 M 53.2	48.8	55.6 M 55.6	50.3	67.3 M 67.3	61.0	73.1 M 73.1	65.9	81.2 M 81.2	73.6	77.5 M 77.5	70.0	69.1 M 69.1	62.3	60.0 M 60.0	54.3	43.4 M 43.4	38.6	44.4 M 44.4	40.5	59.0 M 59.0	2.2 641.5

## TEMPERATURE EXTREMES AND FREEZE DATA (°F)

## MARYLAND AND DELAWARE 2012

STATION						L	AST S	PRIN	G MIN	IMU	M OF						FII	RST	FALL I	MINI	MUM	OF					ER OF EN D	DAYS ATES	}
	ST	m	ST	m	16° ( BELC		20° C BELO	- 1	24° O BELO	- 1	28° ( BEL(		32° ( BELC		32° ( BELC		28° (		24° ( BEL	-	20° ( BEL0		16° O BELO		BELOW	HOTE	BELOW	BELOW	BELOW
	HIGHEST	DATE	LOWEST	DATE	DATE	TEMP.	DATE	TEMP.	DATE	TEMP.	DATE	TEMP.	DATE	TEMP.	DATE	TEMP.	DATE	TEMP.	DATE	TEMP.	DATE	TEMP.	DATE	TEMP.	16° OR BE	20° OR BELOW	24° OR BI	$28^{\circ}$ OR BE	$32^{\circ}$ OR BE
MARYLAND																													
SOUTHERN EASTERN SHORE 01 ASSATEAGUE PRINCESS ANNE SALISBURY 2N SALISBURY FAA AP SNOW HILL 4 N	97 101 101 102 102	06/21 07/24 07/08 07/07 07/07	28 10 15 15 16	01/04 01/04 01/16	MSG 01/04 01/16 01/16 02/13	10 16 15 16	MSG 01/16 02/13 02/13 02/13	17 18 18 16	MSG 02/21 02/21 02/21 03/11	22 23 22 24	03/11 03/29 03/27 03/11 04/08	28 25 28 25 28	03/11 04/12 04/08 04/08 04/08	28 32 32 32 32 28	NONE 11/05 11/05 11/05 10/13	21 32 32 32	NONE 11/05 11/06 11/25 11/06	21 28 28 27	NONE 11/05 NONE 11/29 11/09	21 24 24	NONE 11/29 NONE NONE NONE	16	NONE 11/29 NONE NONE NONE	16	330	318	258 282 243	221 224 259 212	207 211 211 188
CENTRAL EASTERN SHORE 02 ROYAL OAK 2 SSW	102	07/07	17	01/16	MSG		01/16	17	02/21	23	02/21	23	03/11	30	11/05	32	11/06	28	NONE		NONE		NONE					259	239
LOWER SOUTHERN 03 MECHANICSVILLE 5 NE SOLOMONS	99 102	06/30 07/08	14 18		02/14 MSG	16	02/14 01/05	16 19	03/07 02/13	24 24	03/07 02/14	24 28	04/08 03/06	32 31	11/04 12/14	32 32	11/06 NONE	27	12/14 NONE	23	NONE NONE		NONE NONE				282	244	210 283
UPPER SOUTHERN 04 BALTIMORE WASH INTL AP BELTSVILLE DALECARLIA RSVR LAUREL 3 W MARYLAND SCIENCE CENTER NATL ARBORETUM DC OXON HILL UPPER MARLBORO 3 NNW	104 101 102 102 108 104 103 105	07/08 07/19 07/18 07/07 07/09 07/08	14	01/04 01/05 01/04 01/04 01/04 01/05	01/04 01/05 01/05 01/04 MSG 01/04 01/05 01/17	13 16 14 11 15 15 16	02/13 02/13 01/16 02/13 01/04 01/19 01/20 02/14	20 18 20 20 17 18 20 19	02/21 03/06 02/14 02/13 01/04 02/13 02/14 03/07	23 24 24 20 17 22 22 24	03/11 03/11 03/06 03/06 02/13 03/06 03/07 03/12	28 27 26 26 25 25 27 28	04/03 04/03 03/11 03/27 03/06 03/27 03/11 04/03	32 32 32 30 32 31 31 31	11/05 10/13 11/14 11/07 12/31 11/06 11/06 10/13	30 32 30 30 32 29 31 31	11/06 11/06 11/26 12/23 NONE 11/26 11/26 11/06	28 28 26 27 27 28 27	NONE 12/14 NONE NONE NONE 12/15 NONE 11/26	24 24 23	NONE NONE NONE NONE NONE NONE NONE		NONE NONE NONE NONE NONE NONE				283 306 264	240 240 265 292 265 264 239	216 193 248 225 300 224 240 193
NORTHERN CENTRAL 06 ABERDEEN PHILLIPS FLD BRIGHTON DAM CATOCTIN MTN PARK CONOWINGO DAM CYLBURN DAMASCUS 3 SSW EMMITSBURG 2 SE FREDERICK 2 NNE MILLERS 4 NE SMITHSBURG 2NW WESTMINSTER	100 100 62 98 96 96 97 99 97	07/19 07/08 01/31 07/18 07/19 07/07 07/08 07/08 07/07 07/08 07/19	11 10 11 15 9 8	01/16 01/04 01/05 01/04 01/04 01/04 01/05	01/16 01/16 01/19 01/16 01/16 01/20 01/16 02/12 01/22 MSG	15 15 14 13 16 10 15 16 16	02/13 02/13 01/20 01/20 02/12 02/13 02/21 01/20 03/06 01/22 02/13	19 17 17 20 19 20 20 17 19 16	02/14 03/10 01/30 01/23 02/13 03/06 03/07 03/06 01/23 03/07	23 24 24 23 21 22 23 24 19 23 24	03/07 03/27 01/30 03/12 03/07 03/27 03/11 03/07 03/30 04/07 03/10	26 28 24 28 26 26 28 24 28 27 28	03/28 04/08 01/30 04/08 03/28 03/27 04/07 04/08 04/28 05/11 04/04	32 31 24 32 31 26 30 32 32 31 32	11/06 10/13 NONE 10/14 10/13 10/13 10/13 10/13 11/03 11/09	29 30 32 32 31 29 32 28 27 32	11/26 11/06 NONE 11/06 11/06 11/06 11/06 11/06 10/13 11/03	25 25 27 27 26 23 26 28 27 28	12/14 11/26 NONE 11/26 NONE 12/23 11/06 11/26 11/06 11/26	24 23 24 24 23 24 23 22 22 23	NONE NONE NONE NONE 12/15 NONE 12/06 NONE	20 20	NONE NONE NONE NONE NONE NONE NONE NONE			298	304 261 308 292 244 264 245 288 264	264 224 239 244 224 240 244 197 210 250	223 188 189 199 200 189 188 168 176 219
APPALACHIAN MOUNTAIN 07 CUMBERLAND 2 FROSTBURG 2 WILLIAMSPORT	104 91 101	07/08 07/08 06/30	10 5 11	01/04 01/04	01/17 03/07 01/20	15 15 16	02/13 02/13 03/11 02/13	19 19 20 20	03/07 03/28 03/07	22 22 22 22	03/10 03/12 03/28 03/12	26 22 26	03/28 04/28 04/08	29 31 32	10/13 10/13 10/13	29 28 30	11/13 11/06 10/13 11/06	24 28 25	11/26 11/06 11/06 11/07	24 22 24 24	12/31 12/06 12/31	20 19 20	NONE NONE NONE			322 270 322	244 223 245	239 199 239	199 168 188
ALLEGHENY PLATEAU 08 OAKLAND 1 SE SAVAGE RIVER DAM SINES DEEP CREEK	94 94	07/08	-2 10	01/16	03/07 02/13 03/07	15 13 14	03/10 03/08 03/07	20 18 14	03/12 03/08 03/28	22 18 22	04/11 03/28 04/24	28 26 28	05/11 04/15 05/12	31 32 31	10/08 11/07 09/25	32 24 31	10/12 11/07 10/12	26 24 28	11/06 11/07 11/06	21 24 23	11/14 12/13 11/30	20 20 20 20	NONE NONE 12/23	16	291	249 280 268	239 244 223	184 224 171	150 206 136

## TEMPERATURE EXTREMES AND FREEZE DATA (°F)

## MARYLAND AND DELAWARE 2012

STATION						L	AST S	PRIN	G MIN	NIMU	M OF						FII	RST	FALL I	MINI	MUM	OF			N Bl	UMB ETWI	ER OF EEN D	DAY ATES	S
	ST	m	ST	(T)	16° ( BEL		20° C BELO		24° C BELO		28° BEL	-	32° ( BELC		32° ( BEL(	- 1	28° BELO	-	24° ( BELC	-	20° BELO		16° C BELC		ELOW	HOM	ELOW	ELOW	ELOW
	HIGHEST	DATE	LOWEST	DATE	DATE	TEMP.	DATE	TEMP.	DATE	TEMP.	DATE	TEMP.	DATE	TEMP.	DATE	TEMP.	DATE	TEMP.	DATE	TEMP.	DATE	TEMP.	DATE	TEMP.	16° OR BELOW	20° OR BELOW	24° OR BELOW	28° OR BELOW	32° OR BELOW
DELAWARE  NORTHERN 01 BEAR 2 SW WILMINGTON NEW CASTLE CO AP WILMINGTON PORTER RES  SOUTHERN 02 DOVER LEWES	101 101	07/18 07/18 07/18 07/07	14 13 12	01/16 01/04 01/04 01/04	01/16 01/16 01/16 01/04 MSG	14 16 16	02/12 02/12 02/12 02/12 MSG	20 18 17 19	03/06 03/06 02/13 02/13 MSG	23 23 22	03/11 03/27 03/06	27 28 27 26	04/28 04/28 04/28 03/27 03/27 MSG	31 32	10/13 11/05 11/06 11/06 NONE	30 30 30	11/05 11/06 11/26 11/26 NONE	28 26 28 25	11/25 12/24 NONE	24 23 24	NONE NONE NONE		NONE NONE NONE	IT	16°	200	264 293 290	239 224 265 265	168 191 224 224

#### MONTHLY AND SEASONAL COOLING DEGREE DAYS BASE = 65 DEGREES FAHENHEIT

## MARYLAND AND DELAWARE 2012

STATION	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL	SEASONAL NORM
MARYLAND SOUTHERN EASTERN SHORE 01 ASSATEAGUE PRINCESS ANNE SNOW HILL 4 N SALISBURY 2N SALISBURY FAA AP		0 0 0	1 - 5 9	88 11E 35 26 30	190E 164 157 166	271 274E 267E 251 281	550E 524 513 558	367E 375 396 436	- 153 177 184	- - 61 - 70	- - 0 0	0 0	1732	1155
CENTRAL EASTERN SHORE 02 ROYAL OAK 2 SSW	0	0	6	23	173	276	547	417	175	48	0	0	1665	1392
LOWER SOUTHERN 03 MECHANICSVILLE 5 NE SOLOMONS	0 0	0 0	5 2	13 26	152	177 296	439 561	309 435	111 236	19 40	0 0	0 0	- 1748	
UPPER SOUTHERN 04 BALTIMORE WASH INTL AP BELTSVILLE DALECARLIA RSVR MARYLAND SCIENCE CENTER LAUREL 3 W OXON HILL NATL ARBORETUM DC UPPER MARLBORO 3 NNW	0 0 0 0 0 0 0	0 0 0 0 0 0 0	10 7 10 35 22 15 18 7	22 14 16 38 24 23 29E 23	160 150 167 265 162 154 182 154	271 231 242 425 290 261 309E 245	517 466 504 665 521 528 546E 507	391 371 393 544 417 414 447 386	170 170 160 287 192 177 210 165	28 24 17 62 34 26 30E 27	0 0 0 0 0 0	0 0 0 0 0 0	1569 1433 1509 2321 1662 1598 1771E 1514	1147 1109 1258 1271 1243 1002
NORTHERN CENTRAL 06 ABERDEEN PHILLIPS FLD CATOCTIN MTN PARK BRIGHTON DAM CONOWINGO DAM DAMASCUS 3 SSW EMMITSBURG 2 SE CYLBURN FREDERICK 2 NNE MILLERS 4 NE SMITHSBURG 2NW WESTMINSTER	0 0 0 0 0 0 0 0 0	0 - 0 0 0 0 0	2 3E 2 11 1 5 3 0	12 7E 13 11 8 13 9 15 8E 14	142 - 78E 101 109E 106 91 147 114 91E 123	246 - - 148 168 151 149E 209E 178 125E 190	471E - 404 375 357 398E 454 381 345 417	346E - 333 300 290 247 - 338 263 214E 331	148 109 111 114 96 120 - 108 98	23 -9E 9 12E 6 14 14 14 3E	0 0 0 0 0 0 0 0	0 0 0 0 0 0	1390E - - 1090E 972 - 1073 -	918 790
APPALACHIAN MOUNTAIN 07 CUMBERLAND 2 FROSTBURG 2 SHARPSBURG 5 S WILLIAMSPORT	0 0 - 0	0 0 -	13 1 2 3E	12 4 9 6E	148 46 111 151E	189 77 144 176E	440 242 374	298 111 272 311E	140 69 109 144E	6E 0 7 9E	0 0 0 0	0 0 0 0	1246E 550 -	877 344
ALLEGHENY PLATEAU 08 OAKLAND 1 SE SAVAGE RIVER DAM SINES DEEP CREEK	0 0 0	0 0 0	0 0 0	0 1 0	51E 56 29	93 73 36	247 292E 168E	94 121E 48	74E 69E 37	0 - 0	0 0 0	0	559E 318E	316
DELAWARE NORTHERN 01 BEAR 2 SW WILMINGTON PORTER RES WILMINGTON NEW CASTLE CO AP	0 0 0	0 0 0	2 2 3	10 0 14	109 92 122	198 221 236	443 494 482	333 352 361	128 117 143	23 11E 26	0 0 0	0 0	1289E 1387	1125

## MARYLAND AND DELAWARE 2012

### MONTHLY AND SEASONAL COOLING DEGREE DAYS BASE = 65 DEGREES FAHENHEIT

STATION	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL	SEASONAL NORM
SOUTHERN 02 DOVER LEWES	0 -	0 -	4 -	29	124	260	509	395 -	162	49 -	0	0	1532	1262

## MARYLAND AND DELAWARE 2012

### TOTAL PAN EVAPORATION AND WIND MOVEMENT

STATION		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
MARYLAND UPPER SOUTHERN 04 BELTSVILLE	WIND EVAP	- -	- -	- -	1534 4.81	1324E 5.28E	1597E 7.93E	1360 7.61	1193 8.46	1606 5.32	1669 3.32E	- -	- -	- -
UPPER MARLBORO 3 NNW	MAX TEMP MIN TEMP WIND EVAP MAX TEMP MIN TEMP	- - - - -	- - - - -	67.0 44.3	70.2 43.2 52.37E 72.6 44.3	85.0 58.5 - 52.34E 86.3 59.7	88.6 60.8 - - -	93.9 69.5 - - -	90.6 66.4 - - -	83.4 56.0 - - -	67.9 47.0 - - -	55.0 38.0 - - -	- - - -	- - - - -
ALLEGHENY PLATEAU 08 SAVAGE RIVER DAM	WIND EVAP MAX TEMP MIN TEMP	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -

## MARYLAND AND DELAWARE 2012

### STATION INDEX

		O						EARS OF ECORD		OPENE OR CLO DURING	OSED	SEE
STATION	INDEX NO.	DIVISION NO	COUNTY	LATITUDE	LONGITUDE	ELEVATION FEET	TEMP.	PRECIP.	EVAP.	MONTH	MONTH	REFERENCE NOTES
MARYLAND ABERDEEN PHILLIPS FLD ASSATEAGUE BALTIMORE WASH INTL AP R BELTSVILLE BRIGHTON DAM CATOCTIN MTN PARK CONOWINGO DAM CUMBERLAND 2 CYLBURN DALECARLIA RSVR DAMASCUS 3 SSW EMMITSBURG 2 SE FREDERICK 2 NNE FROSTBURG 2 LAUREL 3 W MARYLAND SCIENCE CENTER R MECHANICSVILLE 5 NE MILLERS 4 NE NATL ARBORETUM DC OAKLAND 1 SE OXON HILL PRINCESS ANNE ROYAL OAK 2 SSW SALISBURY 2N SALISBURY FAA AP SAVAGE RIVER DAM SHARPSBURG 5 S SINES DEEP CREEK SMITHSBURG 2NW SNOW HILL 4 N SOLOMONS UPPER MARLBORO 3 NNW WESTMINSTER WILLIAMSPORT	0015 0335 0465 0700 1125 1530 2060 2282 2308 2325 2336 2906 3353 3415 5111 5718 5865 5934 6350 6620 6800 7330 7806 8004 8004 8005 8065 8207 8315 8371 8380 8405 9070 9440 9570	06 01 04 06 06 06 06 06 06 06 06 06 06 07 04 08 04 01 02 01 01 08 07 08 06 07 08 06 07	HARFORD WORCESTER ANNE ARUNDEL PRINCE GEORGE'S MONTGOMERY FREDERICK HARFORD ALLEGANY BALTIMORE DISTRICT OF COLUMBIA MONTGOMERY FREDERICK FREDERICK ALLEGANY PRINCE GEORGE'S BALTIMORE (CITY) ST. MARY'S CARROLL DISTRICT OF COLUMBIA GARRETT PRINCE GEORGE'S SOMERSET TALBOT WICOMICO WICOMICO GARRETT WASHINGTON GARRETT WASHINGTON WORCESTER CALVERT PRINCE GEORGE'S CARROLL WASHINGTON	39 28 38 4 39 10 39 2 39 11 39 39 39 39 39 39 39 39 39 21 38 56 39 16 39 41 39 26 39 40 39 5 39 17 38 28 39 43 38 55 39 25 38 47 38 13 38 43 38 24 38 20 39 31 39 24 39 31 39 40 38 14 38 26 39 39 39 39 39 40 39 5 39 17 38 28 39 43 38 55 39 25 38 47 38 13 38 24 38 20 39 31 39 24 39 31 39 40 38 14 38 26 39 39 39 38 38 55 39 25 38 47 38 13 38 24 38 20 39 31 39 40 39 31 39 31 39 31 39 31 39 31 39 40 39 31 39 31 39 31 39 31 39 31 39 40 39 31 39 31 39 31 39 31 39 40 39 31 39 31 39 31 39 31 39 31 39 31 39 40 39 31 39 30 30 31 30 31 3	76 10W 75 13W 76 41W 76 56W 77 0W 77 29W 76 11W 78 45W 76 39W 77 14W 77 17W 77 14W 78 56W 76 54W 76 37W 76 42W 76 48W 76 58W 79 24W 76 60W 75 41W 76 11W 75 36W 75 31W 76 11W 77 35W 77 35W 77 35W 77 43W 79 25W 77 35W 77 523W 76 46W 76 59W 77 51W	57 10 156 145 330 1610 40 730 235 150 700 403 280 2170 400 20 100 860 50 2420 120 20 10 20 48 1495 500 2040 670 30 12 130 750 360	86 45 74 72 12 45 77 39 10 65 20 57 9 41 112 15 39 25 65 114 11 117 65 62 15 38 12 97 102 56 30 15	86 45 74 72 49 45 77 39 10 65 20 57 9 41 115 14 48 25 65 114 11 117 65 68 15 38 12 97 102 56 30 47	0 0 0 71 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		FEB	СН Н Н С Н Н Н Н Н Н Н Н Н Н Н Н Н Н Н Н
DELAWARE BEAR 2 SW DOVER LEWES WILMINGTON NEW CASTLE CO AP R WILMINGTON PORTER RES	1200 2730 5320 9595 9605	01 02 02 01 01	NEW CASTLE KENT SUSSEX NEW CASTLE NEW CASTLE	39 36 39 15 38 47 39 40 39 46	75 44W 75 31W 75 8W 75 36W 75 32W	80 30 15 79 270	10 110 66 65 81	10 110 66 65 82	0 0 0 0		APR	н н н н

#### 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 2002, the averaging period is 1971 to 2000. The normals for National Weather Service localities have been adjusted so as to be representative for the current observation site.

TEMPERATURE EXTREMES AND FREEZE DATA: Spring minimum dates are obtained from data for January through June; Fall dates are from July through December data. "NONE" indicates temperature threshold not reached. "MSG" indicates available data insufficient to determine date.

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.

SOIL TEMPERATURE EXTREMES: The highest and lowest Max and Min temperature for each month and the year.

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 DATA TABLES

- No record. Data not recorded, determined unreliable by quality control checks, or not received in time for publication.
- \* Equipment gage not read. Precipitation is included in the amount following asterisks. Time distribution not known.
- // Equipment gage equipped with a windshield.
- 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 monthly bulletins to determine date of last reading.
- 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 are missing or flagged.
- F Monthly Calculation Flagged Value. F is appended to the average of the monthly station values when 1-9 daily observations were determined to be invalid during the Quality Control process.
- 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 or flagged.
- R Amounts from recording rain gage.
- T Trace. An amount too small to measure.

#### SYMBOLS AND LETTERS USED IN THE STATION INDEX TABLE

- # Thermometers located in rooftop shelter.
- C Station is equipped with a 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 "Soil Temperatures" table.
- H Observations appear in "Snowfall and Snow on the Ground" table in monthly "Climatological Data" publication.
- J Station also published as a "Local Climatological Data" bulletin.

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 "Climatological Data".

Cooling degree days for the calendar year are published in the "Climatological Data Annual Summary".

Additional precipitation data are contained in the "Hourly Precipitation Data" bulletin for each state.

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.

#### ERRATA

Beginning in January of 2011, CD Publications are produced from the Global Historical Climatology Network data set. (http://www.ncdc.noaa.gov/oa/climate/ghcn-daily/) The GHCND data Version is printed on first page of the publication.

New flags were added to indicate:

E Normalized HDD/CDD, Evap, and Wind Movement Calculations in 2011, previously was B.

F Monthly calculation flagged value.

Station metadata is provided by NCDC's Product Development Branch from the Historical Observing Metadata Repository: http://www.ncdc.noaa.gov/homr

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.

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 June 2013. This update included the addition of late reports and corrections based on additional investigations of reported data issues through NCDCs 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).

#### These and other publications are available from the National Climatic Data Center

#### **Hourly Precipitation Data**

This publication contains hourly precipitation amounts obtained from recording rain gages located at National Weather Service, Federal Aviation Administration, and cooperative observer stations. Published data are displayed in inches and tenths or inches and hundredths at local standard time. HPD includes maximum precipitation for nine (9) time periods from 15 minutes to 24 hours, for selected stations.

#### **Climatological Data**

Monthly editions contain station daily maximum and minimum temperatures and precipitation. Some Stations provide daily snowfall, snow depth, evaporation, and soil temperature data. Each edition also contains monthly summaries for heating and cooling degree days (65 degree F base). The July issue contains a recap of monthly heating degree days and snow data for the preceding July through June.

The Annual issue contains monthly and annual averages of temperature, precipitation, temperature extremes, freeze data, soil temperatures, evaporation, and a recap of monthly cooling degree days.

#### **Storm Data**

Monthly issues contain a chronological listing, by states, of occurrences of storms and unusual weather phenomena. Reports contain information on storm paths, deaths, injuries, and property damage. An "Outstanding storms of the month" section highlights severe weather events with photographs, illustrations, and narratives. The December issue includes annual tornado, lightning, flash flood, and tropical cyclone summaries.

#### Monthly Climatic Data for the World

This publication contains monthly means for temperature, pressure, precipitation, vapor pressure, and sunshine for approximately 2,000 surface data collection stations worldwide and monthly mean upper air temperatures, dew point depressions, and wind velocities for approximately 500 observing sites.

#### **Local Climatological Data**

LCD publications summmarize temperature, relative humidity, precipitation, cloudiness, wind speed and direction observations for several hundred cities in the U.S. and its territories. Each monthly publication also contains 3 hourly weather observations for that month and a hourly summary of precipitation. Annual LCD publications contain a summary of the past calendar year as well as historical averages and extremes.

For Information Call:

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