

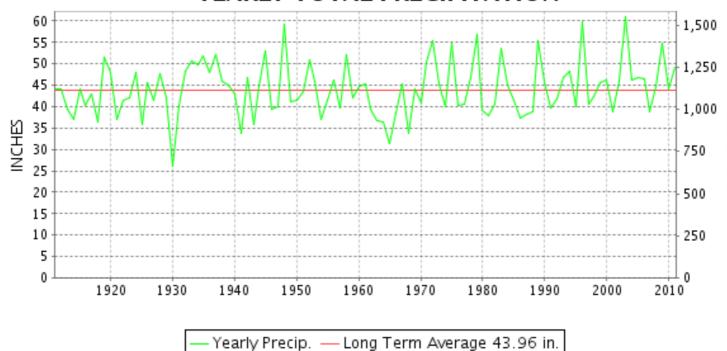
CLIMATOLOGICAL DATA ANNUAL SUMMARY MARYLAND AND DELAWARE



2011

VOLUME 115 NUMBER 13 ISSN 0145-0549 GHCND Ver: 2.93-upd-2012091905

YEARLY TOTAL PRECIPITATION



MARYLAND AND DELAWARE PRECIPITATION 1911-2011

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DIRECTOR

hum R. Karl

NATIONAL CLIMATIC DATA CENTER

STATION	JA	AN	F	EB	MA	AR	AF	PR	M	AY	JU	N
	PRECIP.	DEPART.	PRECIP.	DEPART.	PRECIP.	DEPART.	PRECIP.	DEPART.	PRECIP.	DEPART.	PRECIP.	DEPART.
MARYLAND												
SOUTHERN EASTERN SHORE 01												
ASSATEAGUE	M		1.73	-1.86	3.95	-0.31	2.03	-1.22	M		1.98	-0.87
PRINCESS ANNE	M		M		M		M		M		M	
SNOW HILL 4 N	3.14	-0.88	1.17	-2.24	3.58	-1.09	1.39	-1.85	1.47	-2.17	1.73	-1.70
SALISBURY FAA AP	3.01	-1.08	1.71	-1.85	3.53	-1.09	1.66	-1.75	1.68	-2.19	1.19	-2.38
SALISBURY 2N	M		M	4.00	M	0.50	M		M	204	M	
DIVISIONAL DATA>	3.08	-0.92	1.54	-1.88	3.69	-0.79	1.69	-1.57	1.58	-2.04	1.63	-1.75
CENTRAL EASTERN SHORE 02												
ROYAL OAK 2 SSW	2.29	-1.82	2.40	-0.95	5.72	1.28	M		M		M	
DIVISIONAL DATA>	2.29	-1.69	2.40	-0.91	5.72	1.43	M	M	M	M	M	M
LOWER SOUTHERN 03												
MECHANICSVILLE 5 NE	3.27	-0.72	1.13	-2.24	6.07	1.44	3.74	0.25	2.87	-1.35	1.22	-3.05
SOLOMONS	FM 1.99		FM 0.92		5.94		FM 3.84		3.41		8.00	
DIVISIONAL DATA>	3.27	-0.45	1.13	-1.89	6.01	1.70	3.74	0.54	3.14	-1.00	4.61	0.83
UPPER SOUTHERN 04												
BALTIMORE WASH INTL AP	2.66	-0.81	2.69	-0.33	4.99	1.06	3.52	0.52	2.42	-1.47	3.51	0.08
BELTSVILLE	2.12	-1.31	1.90	-0.79	4.74	0.87	3.49	0.16	2.52	-2.02	2.79	-0.80
DALECARLIA RSVR	1.44	-2.04	1.80	-1.21	6.62	2.49	3.59	0.05	2.61	-1.81	1.19	-2.50
LAUREL 3 W	M		M		M		M		M		M	
MARYLAND SCIENCE CENTER	2.06		2.58		5.26		4.15		2.06		M 1.04	
OXON HILL	2.72		1.58		5.81		5.71		1.98		2.84	
NATL ARBORETUM DC	M 2.91		M 1.63		M 4.22		M 3.24		2.15	-2.14	1.43	-2.20
UPPER MARLBORO 3 NNW	2.04	-1.45	1.64	-1.12	5.33	1.43	3.95	0.67	2.58	-1.73	1.74	-2.09
DIVISIONAL DATA>	2.17	-1.38	2.03	-0.89	5.46	1.44	4.07	0.73	2.33	-2.11	2.25	-1.41
NORTHERN EASTERN SHORE 05												
CHESTERTOWN	2.81	-0.75	2.96	-0.07	4.22	0.06	4.95	1.61	2.67	-1.42	M	
DIVISIONAL DATA>	2.81	-0.84	2.96	-0.06	4.22	0.10	4.95	1.56	2.67	-1.48	M	M
NORTHERN CENTRAL 06												
ABERDEEN PHILLIPS FLD	FM 2.70		FM 2.25		FM 3.55		FM 2.82		FM 1.69		FM 3.23	
CATOCTIN MTN PARK	M		2.88	-0.45	M		M		FM 2.72		FA 1.43	-3.18
BRIGHTON DAM	M 2.19		2.60	-0.58	5.50	1.21	4.92	1.61	2.96	-1.68	1.20	-2.72
EMMITSBURG 2 SE	2.73	-0.93	2.74	-0.23	6.33	2.38	6.94	3.14	3.73	-0.79	1.08	-3.27
DAMASCUS 3 SSW	M 2.46		2.84		5.22		6.89		3.87		1.57	
CYLBURN	M	1.00	FM 2.36	0.42	FM 5.28	2.02	M	1.50	FM 2.63	1 42	FM 0.09	0.06
CONOWINGO DAM	2.08 M 1.64	-1.90	2.49	-0.43	7.09	2.93	5.24	1.59	3.15	-1.43	3.19	-0.96
FREDERICK 2 NNE MILLERS 4 NE	M 1.64 2.77	-0.87	2.31 3.00	0.10	5.36 6.31	2.54	7.14 7.78	4.33	2.54 4.65	0.37	M 1.87	-1.75
POTOMAC FLTR PLT	M 0.23	-0.6/	3.00 M	0.10	6.31 M	2.54	7.78 M	4.33	4.65 M	0.37	1.87 M	-1./5
SMITHSBURG 2NW	1.47		M 2.53		4.92		15.27		3.67		M 1.31	
WESTMINSTER	1.84	-1.31	M 2.33		5.54	1.98	7.20	3.91	M 3.35		M 1.40	
DIVISIONAL DATA>	2.18	-1.42	2.69	-0.23	5.78	1.75	7.67	4.14	3.51	-1.11	1.78	-2.27
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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.
MARYLAND														
SOUTHERN EASTERN SHORE 01														
ASSATEAGUE	5.08	1.46	9.67	5.49	3.99	0.29	2.01	-1.29	2.43	-0.73	1.18	-2.03		
PRINCESS ANNE SNOW HILL 4 N	M 3.78	-0.70	M 10.42 11.52	6.12	FM 3.51 3.12	-0.63	M M 2.42		M 2.33	-0.98	M 1.49	-1.92	M 37.14	-9.04
SALISBURY FAA AP	3.76	-0.70	11.75	6.76	4.75	1.02	2.00	-1.64	2.33	-0.98	1.69	-2.03	39.05	-7.99
SALISBURY 2N	M	0.77	M	0.70	M	1.02	M	1.01	M	0.22	M	2.03	37.03	7.55
DIVISIONAL DATA>	4.21	-0.10	10.98	6.24	3.95	0.19	2.01	-1.36	2.36	-0.82	1.45	-1.95	38.17	-6.75
CENTRAL EASTERN SHORE 02														
ROYAL OAK 2 SSW	3.13	-1.09	M		M		2.44	-1.02	3.95	0.52	4.17	0.50		
DIVISIONAL DATA>	3.13	-1.06	M	M	M	M	2.44	-0.80	3.95	0.66	4.17	0.68		-1.69
LOWER SOUTHERN 03														
MECHANICSVILLE 5 NE	4.11	-0.37	12.55	8.61	F 8.47		F 3.05		3.74	0.31	4.66	1.26	54.88	7.36
SOLOMONS	4.02	0.15	FM 11.16	0.42	MA 5.11		FMA 0.77		3.30	0.25	2.69	0.27	M 51.15	0.62
DIVISIONAL DATA>	4.07	-0.15	12.55	8.42	M	M	M	M	3.52	0.25	3.68	0.37		8.62
UPPER SOUTHERN 04	2.77	1.00	10.20	6.64	12.22	0.24	2.21	0.15	2.45	0.67	4.50	1.15	5 6 50	14.50
BALTIMORE WASH INTL AP	2.77	-1.08	10.38	6.64	13.32	9.34	3.31	0.15	2.45	-0.67	4.50	1.15	56.52	14.58
BELTSVILLE	2.78	-1.31	12.45	8.76	9.80 10.17	5.45 5.87	4.42 FA 3.89	0.86	1.95 2.05	-1.37	4.75	1.45	53.71	9.95
DALECARLIA RSVR LAUREL 3 W	2.58 M	-1.68	7.49 11.43	3.51 7.82	10.17	6.34	FA 3.89 4.26	0.41 0.64	2.05	-1.36 -1.37	4.46 3.87	1.05 0.21	47.89	2.78
MARYLAND SCIENCE CENTER	4.06		11.43	7.62	10.87	0.34	2.67	0.04	3.09	-1.37	4.39	0.21	M 54.06	
OXON HILL	3.50		9.86		11.23		3.80		2.38		5.23		56.64	
NATL ARBORETUM DC	2.16	-2.05	8.76	4.86	M 9.09		M 3.68		M 2.31		M 4.84		M 46.42	2.72
UPPER MARLBORO 3 NNW	3.31	-0.80	FM 9.90		13.89	9.89	3.58	-0.08	2.34	-0.91	5.01	1.81	M 55.31	11.62
DIVISIONAL DATA>	3.02	-1.12	10.33	6.38	11.43	7.25	3.67	0.19	2.41	-0.97	4.60	1.21	53.77	9.32
NORTHERN EASTERN SHORE 05	ļ													
CHESTERTOWN	M		M		M		M		M		M			
DIVISIONAL DATA>	M	M	M	M	M	M	M	M	M	M	M	M		-0.72
NORTHERN CENTRAL 06														
ABERDEEN PHILLIPS FLD	2.57	-1.64	FM 5.45		FA 6.03	1.55	3.37	-0.02	3.93	0.73	4.36	0.95	M 41.95	-2.27
CATOCTIN MTN PARK	M		4.47	0.55	9.23	4.32	6.53	2.64	FA 3.78	-0.09	3.50	0.06		
BRIGHTON DAM	M 4.08		10.15	6.79	9.14	5.25	4.28	0.67	M 3.10		4.30	0.79	M 54.42	9.74
EMMITSBURG 2 SE	3.98	0.34	4.30	0.70	16.46	12.20	5.04	1.56	4.90	1.10	3.54	0.23	61.77	16.43
DAMASCUS 3 SSW	2.49		8.04		11.12		5.74		3.73		4.22		M 58.19	
CYLBURN CONOWINGO DAM	M	-1.38	11.60	7.28	10.99	7.34	3.83 M 5.06		M 3.76 4.94	1 10	4.52	0.69	M 65.49	17.40
FREDERICK 2 NNE	2.82 M	-1.38	11.69 3.72	1.28	12.26 10.25	7.34	M 5.96 4.51		4.94 M	1.18	4.58 3.41	0.09	W 05.49	17.40
MILLERS 4 NE	1.99	-1.58	9.86	6.15	10.23	7.50	4.51	1.22	5.23	1.62	3.41	0.18	63.48	19.81
POTOMAC FLTR PLT	M	1.50	9.80 M	0.13	M	7.50	4.00 M	1.22	J.23 M	1.02	M M	0.10	05.40	17.01
SMITHSBURG 2NW	1.83		7.19		6.22		M 5.60		4.82		3.54		M 58.37	
WESTMINSTER	3.81	0.10	4.99	1.35	9.73	5.71	M		5.00	1.76	3.34	0.13		
DIVISIONAL DATA>	2.78	-1.18	7.16	3.32	10.70	6.37	4.75	1.24	4.65	1.03	3.91	0.41	57.56	12.05
APPALACHIAN MOUNTAIN 07														

STATION	J	AN	Fl	ЕВ	MA	AR	AF	PR	M	AY	JU	N
	PRECIP.	DEPART.	PRECIP.	DEPART.	PRECIP.	DEPART.	PRECIP.	DEPART.	PRECIP.	DEPART.	PRECIP.	DEPART.
CUMBERLAND 2 FROSTBURG 2 SHARPSBURG 5 S WILLIAMSPORT DIVISIONAL DATA>	1.22 1.44 1.87 1.33 1.47	-1.67 -2.13	2.85 3.58 2.26 3.32 3.00	0.42 0.48 0.38	5.07 6.80 5.78 5.67 5.83	1.77 2.96	6.00 8.04 8.33 M 8.75 7.46	2.84 4.07	7.10 8.32 5.45 5.74 6.65	3.13 3.56 2.44	2.14 2.09 M M 2.64 2.12	-0.98 -1.75
ALLEGHENY PLATEAU 08 OAKLAND 1 SE SAVAGE RIVER DAM SINES DEEP CREEKDIVISIONAL DATA>	3.27 1.28 M 2.28	-0.24 -1.61 -1.27	3.16 M 2.99 M 3.16	-0.02 0.07	5.19 5.23 M 5.21	1.24 1.95 1.34	7.90 8.47 M 8.19	3.83 5.09 4.35	5.58 7.26 M 6.42	0.74 3.02 1.88	4.58 4.12 M 4.35	-0.02 0.45 0.14
DELAWARE												
NORTHERN 01 BEAR 2 SW WILMINGTON PORTER RES WILMINGTON NEW CASTLE CO APDIVISIONAL DATA>	3.05 2.72 3.22 3.00	-0.21 -0.70	2.83 2.04 2.90 2.59	0.09 -0.25	4.47 4.88 4.05 4.47	0.08 0.36	4.37 4.58 4.71 4.55	1.32 0.92	3.63 4.58 3.23 3.81	-0.92 -0.61	3.95 3.11 2.49 3.18	-1.10 -0.72
SOUTHERN 02 DOVER LEWES DIVISIONAL DATA>	3.10 M 3.10	-0.84 -0.89	2.53 M 2.53	-0.51 -0.65	3.16 M 3.16	-1.24 -1.24	FA 3.32 M M	-0.15 M	3.37 M 3.37	-0.92 -0.75	1.83 MA 1.75 1.83	-1.94 -1.40 -1.58

2011

STATION	Л	UL	A	UG	SEI	P	OC	Т	NO	OV	DE	EC	ANNU	AL
	PRECIP.	DEPART.	PRECIP.	DEPART.	PRECIP.	DEPART.	PRECIP.	DEPART.	PRECIP.	DEPART.	PRECIP.	DEPART.	PRECIP.	DEPART.
CUMBERLAND 2 FROSTBURG 2 SHARPSBURG 5 S WILLIAMSPORT DIVISIONAL DATA>	0.81 0.96 M M 2.39 0.89	-2.61 -2.95 -2.75	M 3.51 M 4.10 4.03 M 3.87 4.03	0.58	9.68 7.78 6.18 M 7.39 7.88	6.50 4.16 4.39	3.84 6.12 5.53 4.98 5.12	1.15 2.91 2.04	3.09 3.28 3.82 M 4.05 3.40	0.18 -0.48 0.13	2.89 3.14 M M 3.53 3.02	0.28 -0.02 0.15	M 48.20 M 55.65 M 53.66 50.87	10.99 11.09
ALLEGHENY PLATEAU 08 OAKLAND 1 SE SAVAGE RIVER DAM SINES DEEP CREEKDIVISIONAL DATA>	3.50 2.17 M 2.84	-1.73 -2.02 -2.03	4.00 3.26 M 3.63	-0.15 -0.11 -0.28	6.24 6.46 6.34 6.35	2.68 2.98 2.75	6.73 4.47 M 7.58 5.60	3.61 1.66 2.57	3.99 3.39 M 4.44 3.69	0.31 0.39 0.13	3.16 3.00 4.39 3.52	-0.51 0.26 -0.06	57.30 M 52.10 55.24	9.74 12.58 9.59
DELAWARE NORTHERN 01 BEAR 2 SW WILMINGTON PORTER RES WILMINGTON NEW CASTLE CO APDIVISIONAL DATA>	5.48 0.88 3.73 3.36	-0.55 -1.14	15.02 14.75 14.70 14.82	11.19 11.10	6.41 5.96 5.93 6.10	1.92 1.78	3.51 3.75 3.05 3.44	-0.03 0.08	4.01 4.48 4.13 4.21	0.94 0.83	4.48 5.61 4.44 4.84	1.04 1.22	61.21 57.34 56.58 58.37	13.77 12.87
SOUTHERN 02 DOVER LEWES DIVISIONAL DATA>	M 4.22 FMA 2.46 M	-1.73 M	FA 8.63 M M	3.90 M	3.84 MA 1.82 3.84	-0.72 -1.95 -0.31	3.17 M 3.17	-0.09 -0.21	FA 0.55 M M	-2.61 M	4.37 M 4.37	0.87 0.83	M 42.09	-4.19 -4.80

AVERAGE TEMPERATURES AND DEPARTURES FROM NORMAL(°F) MARYLAND AND DELAWARE 2011

STATION	JA	AN	FE	EB	М	AR	API	3	M	ΑY	JU	N	Л	JL	Αl	IJG	SE	P	OC	СТ	NO	OV	DI	EC	ANN	NUAL
	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 33.6F M 31.7 20.3	-3.7 -3.7 -15.7	41.3 41.5M 42.8F M 40.4 25.7	1.7 3.0 3.3 2.7 -12.1	46.6 M 46.5 M 44.8 33.8	1.8 0.1 0.1 -11.5	56.4 M 60.1 M 59.2 47.6	3.1 4.3 5.2 -6.5	M 67.5M 68.1 M 67.4 60.6	3.9 3.4 4.8 -2.6	74.8 M 76.8 M 76.0 67.3	3.1 3.2 4.0 -4.5	79.2 M 80.8 M 81.5 73.2	2.6 3.4 4.7 -3.5	78.0 76.3M 77.3 M 76.9 70.9	1.8 1.9 1.6 2.0 -4.4	72.9 72.6M 72.4F M 72.6 66.0	1.4 4.7 2.6 4.4 -3.3	61.4 M 59.2 M 58.8 52.4	0.2 0.1 1.6 -5.9	53.7 M 52.7MF M 52.9 44.5	2.1 2.7 4.7 -4.3	48.3F M 45.8 M 45.4 35.3	6.7 5.1 6.4 -5.0	M M M 59.7 M 59.0 49.8	2.5 2.6 -79.3
CENTRAL EASTERN SHORE 02 ROYAL OAK 2 SSW DIVISIONAL DATA>	32.5 32.5	-3.6 -2.3	41.1 41.1	2.6 4.2	47.1F 47.1	0.4 1.8	M M	M	M M	M	M M	М	81.2 81.2	2.6 3.5	M M	M	M M	M	59.2 59.2	-0.6 1.0	52.2 52.2	2.1 4.1	45.2 45.2	4.4 5.9	M M	18.2
LOWER SOUTHERN 03 MECHANICSVILLE 5 NE SOLOMONSDIVISIONAL DATA>	30.7 33.4 32.1	-4.2 -3.9 -1.9	38.4 41.0M 39.7	0.5 1.7 2.8	44.3 46.0 45.2	-1.9 -0.2 0.0	57.1 58.9 58.0	1.8 2.5 3.8	64.4 67.9M 66.2	0.5 2.3 2.8	73.2 76.9 75.1	1.2 1.4 3.4	78.2 82.0 80.1	1.6 2.4 3.8	73.8 78.6 76.2	-1.0 0.1 1.5	68.4 73.1 70.8	0.1 1.1 2.7	55.4 60.9 58.2	-1.3 -0.5 1.3	49.6 53.7 51.7	1.7 2.0 4.4	41.7 46.4 44.1	2.2 5.2 5.3	56.3 M 59.9 58.1	0.1 29.9
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>	30.3 30.2 30.7 33.1 30.4 31.9 31.4M 30.6 31.1	-2.0 -2.7 -3.5 -2.7 -3.2 -3.2 -4.1 -2.9 -2.2	38.5 37.6 37.4 41.1 39.1 39.2 39.0M 37.7 38.7	3.0 1.9 -0.4 2.5 2.8 1.3 0.6 1.5 2.4	44.4 44.4 45.7 47.1 44.7 46.0 46.4M 44.4 45.4	0.7 0.7 0.2 0.8 0.1 0.6 0.2 0.2	57.7 57.3 59.4 61.1 58.9 58.6 58.4M 57.6 58.6	4.5 3.6 3.2 4.5 3.8 2.1 2.0 3.3 4.5	67.2 66.6 68.0 71.8 68.4 67.3 68.6 66.9 68.1	4.3 3.2 2.9 5.7 3.4 2.3 2.7 3.4 4.5	75.7 75.4 75.9 80.8M 76.9F 76.0 78.1 75.6 76.8	3.9 2.5 1.8 4.7 3.1 1.6 3.0 2.9 4.5	81.7 80.2 81.6 87.2 M 81.1 83.4 80.5 82.2	5.2 2.9 3.3 6.5 2.8 3.8 3.5 5.1	75.9 76.4 77.0 80.6 76.9 77.2 79.0M 76.1 77.4	1.4 0.6 0.2 1.6 -0.2 0.3 1.0 1.0 2.0	69.3 70.3 69.9 73.9 70.3 70.7 73.5M 70.2 71.0	1.9 1.9 0.2 1.9 0.9 1.0 3.2 2.4 2.7	56.7 56.5 55.3 61.0 56.8 57.2 58.3M 56.3 57.3	1.3 0.1 -2.5 0.9 -1.3 -0.7 -0.2 -0.1	50.6 50.1 50.0 54.8 51.6 50.9 51.9M 49.9 51.2	5.1 3.3 2.4 4.5 3.8 2.5 3.1 2.8 4.5	42.3 41.4 41.9F 47.1 42.9 43.0 42.6M 41.6 42.9	5.6 4.5 4.3 7.7 5.1 4.4 3.4 4.2 5.3	57.2 57.7 M 61.6 56.1 58.3 M 59.2 57.3	2.9 2.1 1.3 0.0 3.4 2.7 35.1
NORTHERN EASTERN SHORE 05 CHESTERTOWN DIVISIONAL DATA>	29.8F 29.8	-3.4 -2.9	37.2F 37.2	1.3 1.9	43.7MF 43.7	-0.7 -0.1	56.8F 56.8	2.7 3.5	66.7F 66.7	2.8 3.7	M M	М	M M	М	M M	М	M M	М	M M	М	M M	М	M M	M	M M	6.1
NORTHERN CENTRAL 06 ABERDEEN PHILLIPS FLD CATOCTIN MTN PARK CONOWINGO DAM DAMASCUS 3 SSW EMMITSBURG 2 SE CYLBURN FREDERICK 2 NNE MILLERS 4 NE SMITHSBURG 2NW WESTMINSTERDIVISIONAL DATA>	29.3 27.5M 28.3 27.6M 27.3 28.1 28.9 27.4 25.1F 27.8 27.7	-4.3 -2.5 -3.6 -3.8 -2.9 -4.5 -2.6 -2.7 -4.9 -3.8 -3.5	35.7M 35.3 34.4 36.4 32.9 34.7 34.7F 35.2 31.3 M 34.5	-1.1 2.5 -0.3 2.1 0.5 -1.0 0.5 2.0 -1.3	43.3 M 42.8F 42.6 41.8 42.1 43.2F 42.0 40.3F 41.1 42.1	-1.5 0.0 0.4 0.9 -0.7 1.5 1.1 0.1 -1.2 -0.6	55.9M M 55.2 56.5 54.3 M 55.8 56.1 52.7F 54.6 55.1	1.3 1.7 3.4 3.2 3.1 4.4 1.2 1.3 2.8	66.0 62.2M 65.7 65.3 63.7 63.9 66.1F 64.9 63.4F 63.2M 64.4	2.1 0.7 1.9 3.6 3.0 1.8 3.6 4.1 3.1 0.9 2.1	74.4 70.8 75.2 72.3 71.8 72.9M M 72.0 70.6MF 73.8M 72.6	2.2 1.4 1.5 1.9 2.0 2.8 2.6 0.1 2.4 1.9	80.8 M 79.9 78.9 77.1 78.0 M 78.3 76.6MF 79.4 78.6	3.8 1.7 4.6 2.6 3.7 4.9 2.1 3.9 3.3	75.6 71.6 74.8 73.9 72.6 72.5 75.7 73.2 72.1 74.2 73.6	0.2 0.0 -1.7 0.9 -0.1 -0.4 0.8 1.2 -1.0 0.9	70.0 65.8 68.8 66.9 66.7 67.6 68.1 67.7 66.7M 68.2 67.7	1.1 1.0 -0.2 1.2 1.6 2.0 1.0 2.8 1.4 1.6	56.0 52.6 56.3M 54.1 53.1 54.5 54.7 53.9 52.6M M	-1.3 -2.1 -0.6 -0.7 -0.9 -1.0 -1.1 -0.3 -1.1	49.1 48.5 47.7 49.1 46.4 50.2 M 48.8 46.3 48.3	1.5 4.1 1.5 3.9 2.5 4.5 4.4 2.3 3.0 3.4	41.9 39.2 39.7 41.2 38.6 41.0 40.1 40.4 37.9 40.1 40.0	3.6 5.5 3.1 5.9 4.3	M 56.5	0.6 1.7 0.2 2.0

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

2011

STATION	JA	AN	FE	В	M	AR	API	2	M	AY	JU	N	J	UL	AU	JG	SE	P	OC	СТ	NC	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.
CUMBERLAND 2 FROSTBURG 2 SHARPSBURG 5 S WILLIAMSPORTDIVISIONAL DATA>	29.2F 21.9 27.1 26.0 26.1	-1.1 -4.1 -3.7 -4.9 -2.9	29.6 34.5 32.8	3.9 1.0 1.2 -0.9 1.6	43.7 36.3 41.6 41.3 40.7	1.0 0.2 0.4 -0.4 0.0	58.9 49.7 54.0 54.0M 54.2	6.0 2.2 2.7 1.9 3.5	66.9 60.2 63.8 64.7 63.9	4.7 3.6 2.7 3.2 3.6	72.8 66.1 71.2 73.0M 70.8	2.6 1.0 1.0 2.5 2.3	80.9 73.1 77.1 78.3M 77.4	6.4 4.1 3.0 3.1 4.6	74.6M 68.8 73.4 74.1M 72.7	1.7 1.0 0.6 0.0 1.5	68.0 62.4 67.2 68.9M 66.6	2.2 1.4 1.6 2.3 2.5	53.7 49.3 52.6 54.3 52.5	-0.2 -0.7 -2.0 -0.3 -0.2	47.6 44.5 46.7 46.9M 46.4	4.0 4.0 2.2 2.2 3.7	38.1 34.1 M 39.2M 37.1	4.2	M 56.0 49.7 55.4 M 54.5 53.5	2.9 2.4 23.8
ALLEGHENY PLATEAU 08 OAKLAND 1 SE SAVAGE RIVER DAM SINES DEEP CREEK	22.2 23.6 M	-4.6 -3.7	30.5 30.6M M	1.2 0.7	36.4 38.7F M	-1.5 0.9	49.9 50.0F M	2.4 1.3	59.8 60.8F M	3.1 3.1	66.0 67.7 M	1.7 1.5	71.1 73.3F M	2.7 3.1	68.0 69.8 M	0.9 0.7	62.0 63.6MF 60.9	1.2 1.6	48.3 50.2 47.1M	-1.7 -0.6	43.5 44.3 42.5M	3.5 3.1	33.8 35.4 32.5	2.5 4.1	49.3 M 50.7 M	1.0 2.1
DELAWARE NORTHERN 01 BEAR 2 SW WILMINGTON PORTER RES WILMINGTON NEW CASTLE CO APDIVISIONAL DATA>	28.6 27.8 28.5 26.1	-2.8 -4.0 -3.9 -5.6	35.9 35.9	1.8 1.3 0.8 -0.5	42.5 41.6 42.3 40.3	0.4 -0.7 -0.7 -2.4	56.6 55.0F 56.0 53.5	4.1 2.3 2.7 1.1	65.9 65.7 66.3 63.7	4.1 3.3 3.5 1.1	73.1 73.6 74.0 70.9	1.6 1.9 1.8 -0.5	79.4 80.4 80.8 77.0	3.4 4.2 4.0 0.8	74.0 74.4 75.0 72.2	-0.5 -0.2 -0.2 -2.3	69.5 68.8 69.8 65.8	3.0 1.6 2.0 -1.6	55.5 55.7 56.1 52.2	0.6 -0.1 -0.1 -3.6	49.1 49.6 49.6 46.4	3.8 3.4 3.0 0.6	41.1 41.5 41.4 37.6	5.3 5.3 4.7 1.0	56.0 55.8 56.3 53.3	1.9 -11.9
SOUTHERN 02 DOVER LEWESDIVISIONAL DATA>	31.1 M 31.1	-4.2 27.6	40.5F M 40.5	2.8 36.9	45.4 M 45.4	0.0 41.0	59.4 M 59.4	4.8 54.1	68.1 M 68.1	3.8 61.8	76.3 M 76.3	3.4 69.1	82.0M M 82.0	4.2 74.4	76.2 M 76.2	0.0 68.7	71.7 M 71.7	1.8 64.9	58.3 M 58.3	-0.5 52.6	51.9 M 51.9	2.7 47.1	45.0 M 45.0	5.1 41.1	M 58.8 M 58.8	2.0 639.3

TEMPERATURE EXTREMES AND FREEZE DATA (°F)

MARYLAND AND DELAWARE 2011

STATION						L	AST S	PRIN	G MIN	IMU	M OF						FII	RST	FALL N	MINI	MUM	OF				UMBI ETWE			3
	ST	-	TS		16° (BELC		20° O BELO		24° O BELO		28° (BELC		32° C BELC		32° (BEL(28° BEL		24° (BELC		20° (BEL0		16° O BELO		BELOW	MOT	BELOW	TOW	BELOW
	HIGHES	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 BE	28° OR BELOW	32° OR BE
MARYLAND																													
SOUTHERN EASTERN SHORE 01 ASSATEAGUE PRINCESS ANNE SALISBURY 2N SALISBURY FAA AP SNOW HILL 4 N	102 101 103	07/23 06/09 07/23 07/22	10 7 8 7	02/11	02/11 02/24 MSG 02/11 02/11	10 16 12 11	02/16 03/29 MSG 02/23 02/24	20 20 20 20 20	02/16 03/29 MSG 03/04 03/25	20 20 24 24	03/02 03/29 MSG 03/29 03/29	25 20 27 26	03/30 04/06 MSG 04/06 04/06	32 31 30 31	11/12 10/31 NONE 10/30 10/31	30 30 31 26	12/19 11/02 NONE 11/12 10/31	24 25 28 26	12/19 12/02 NONE 12/18 12/09	24 20 24 24	NONE 12/02 NONE NONE 12/19	20	NONE NONE NONE NONE			248 298	306 248 289 259	292 218 228 216	227 208 207 208
CENTRAL EASTERN SHORE 02 ROYAL OAK 2 SSW	100	07/22	11	01/24	02/11	16	02/11	16	02/24	24	03/28	27	03/28	27	10/31	31	12/12	23	12/12	23	NONE		NONE				291	259	217
LOWER SOUTHERN 03 MECHANICSVILLE 5 NE SOLOMONS		07/24 07/23	7 17	01/25 01/24	02/12 MSG	14	02/24 02/09	20 20	02/25 02/11	24 23	03/30 02/23	26 26	04/07 03/27	31 29	10/30 12/11	31 32	11/12 NONE	28	12/11 NONE	23	NONE NONE		NONE NONE				289	227	206 259
UPPER SOUTHERN 04 BALTIMORE WASH INTL AP BELTSVILLE DALECARLIA RSVR LAUREL 3 W MD SCI CTR BALTIMORE NATL ARBORETUM DC OXON HILL UPPER MARLBORO 3 NNW	102 103 99 108 106 101	07/22 07/23 07/30 06/09 07/22 07/30 07/30 07/30	10 11 11 16	01/24 01/24 01/24 01/24 01/25	02/11 02/11 02/11 01/24 01/24 02/11 01/25 02/12	13 15 16 11 16 14 11 13	02/23 02/23 02/12 02/23 02/09 02/23 02/12 02/24	18 19 19 20 20 20 18 18	02/24 02/24 02/24 03/03 02/22 02/23 02/24 02/25	23 24 22 23 24 20 23 23 23	03/29 03/28 03/28 03/28 03/03 03/28 03/04 03/28	28 25 27 28 26 26 26 26 25	04/02 04/06 03/30 03/29 03/03 03/29 03/29 04/06	32 31 31 31 26 31 29 32	10/30 10/31 10/30 10/29 NONE 10/31 10/31	31 29 32 32 31 32 32	11/19 11/12 12/02 12/11 NONE 11/19 12/11 10/31	26 28 28 26 26 28 27 28	12/11 12/11 12/12 NONE NONE 12/11 12/12 12/11	23 23 23 23 24 21	NONE NONE NONE NONE NONE NONE 12/12	20	NONE NONE NONE NONE NONE NONE			291	290 290 291 291 291 291 289	235 229 249 258 236 282 217	211 208 214 214 216 216 207
NORTHERN EASTERN SHORE 05 CHESTERTOWN		05/30	12	01/24	02/23	15	02/24	20	02/24	20	03/28	28	03/30	31	NONE		NONE		NONE		NONE		NONE						
NORTHERN CENTRAL 06 ABERDEEN PHILLIPS FLD CATOCTIN MTN PARK CONOWINGO DAM CYLBURN DAMASCUS 3 SSW EMMITSBURG 2 SE FREDERICK 2 NNE MILLERS 4 NE SMITHSBURG 2NW WESTMINSTER	101 104 98 100 99 98 102 98	07/23 07/03 07/23 07/23 07/22 07/23 08/02 07/22 07/30 07/23	10 5 7 6 2 8 1 2	01/24 02/09 01/24 01/25 01/25 02/23 01/25 01/24 02/23 01/25	02/23 03/03 02/24 02/24 02/23 02/25 02/24 02/23 03/07 01/31	15 15 12 15 15 11 10 10 15 15	02/24 03/03 02/25 02/24 03/03 03/04 03/03 03/30 03/04	17 15 20 15 20 20 19 17 19	03/04 03/04 03/05 03/04 03/03 03/29 03/04 03/28 03/30 03/27	24 24 24 21 20 24 19 23 19 24	03/30 03/04 03/31 03/29 03/29 03/30 03/29 03/30 03/29	26 24 28 28 27 28 27 26 19 25	03/31 03/04 04/06 03/30 04/06 04/07 03/30 04/06 04/06 03/30	32 24 30 30 32 31 30 31 32 29	10/31 10/28 10/31 10/30 10/29 10/30 10/29 10/27 11/02	29 30 31 32 32 29 31 32 30 32	11/12 10/30 11/06 12/02 10/30 10/31 12/02 10/30 10/31 11/07	28 27 28 27 28 27 26 27 20 28	12/11 12/11 11/19 12/11 12/11 11/19 12/11 12/11 10/31 12/11	23 18 24 22 22 24 22 19 20 21	NONE 12/11 NONE NONE NONE 12/11 NONE 12/11 10/31 12/12	18 20 19 20 20	NONE NONE NONE NONE NONE NONE NONE NONE			283 282 283 215 283	282 282 259 282 283 235 282 258 215 259	227 240 220 248 215 215 248 214 215 223	214 238 208 214 206 206 214 206 204 217
APPALACHIAN MOUNTAIN 07 CUMBERLAND 2 FROSTBURG 2 SHARPSBURG 5 S WILLIAMSPORT	95 101	07/22 07/23 07/30 07/30	4	01/24 01/24 01/25 01/25	02/11 03/04 02/24 02/24	14 13 10 16	03/04 03/30 03/04 03/04	19 19 20 18	03/29 03/30 03/30 03/30	24 19 21 22	03/30 04/06 04/07 04/07	27 28 28 28	04/06 04/07 04/07 04/07	29 30 28 28	10/28 10/28 10/28 10/30	31 29 31 30	11/06 10/29 10/30 11/06	27 28 24 27	12/09 11/18 10/30 12/12	23 22 24 20	12/11 12/11 NONE 12/12	19 14 20	NONE 12/11 NONE NONE	14	282	282 256 283	255 233 214 257	221 206 206 213	205 204 204 206
ALLEGHENY PLATEAU 08																													

TEMPERATURE EXTREMES AND FREEZE DATA (°F)

MARYLAND AND DELAWARE 2011

STATION						L	AST S	PRIN	G MIN	IIMU	M OF						FII	RST	FALL I	MINI	MUM	OF					ER OF		S
	ST		TS		16° (BEL(20° C BELO		24° O BELO		28° (BELO	-	32° C BELC		32° (BELC		28° BEL	-	24° (BELC		20° (BELO	-	16° C BELC		TOW	TOW	TOW	MOT	TOW
	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
OAKLAND 1 SE SAVAGE RIVER DAM DELAWARE		07/23 07/23		01/25 01/25	03/04 02/12	14 5	03/30 03/03	18 18	03/30 03/30	18 23	04/06 03/30	28 23	04/15 04/07	29 29	10/23 10/23	27 32	10/23 11/05	27 28		21 24	12/02 12/11	18 15	12/09 12/11	11 15		247 283	233 234	200 220	191 199
NORTHERN 01 BEAR 2 SW WILMINGTON NEW CASTLE WILMINGTON PORTER RES	102	07/23 07/22 07/22	8	02/23 01/24 01/24	02/23 02/23 02/11		02/24 02/24 02/22	18 20 20	03/29 03/29 03/03	22 24 21	03/30 03/30 03/29	26 27 25	03/30 03/30 04/06	26 27 32	10/30 NONE 10/30	31	10/31 NONE 12/11	27 26	NONE	22	12/12 NONE NONE	20	NONE NONE NONE			291	257	215 257	214
SOUTHERN 02 DOVER LEWES		07/22 07/25		01/24 10/03	02/23 MSG		02/23 MSG	15	03/03 MSG	23	03/28 MSG	27	03/29 MSG	29	10/31 NONE	32	12/11 NONE	25	12/12 NONE	22	NONE NONE		NONE NONE				284	258	216

MONTHLY AND SEASONAL COOLING DEGREE DAYS BASE = 65 DEGREES FAHENHEIT

MARYLAND AND DELAWARE 2011

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 0 0 -	0 - 0	1 - 63 - 57	151E 169 - 151	302 362 336	446 - 498 - 520	411 356E 388 -	253 240E 238 - 249	37 - 32 - 28	0 - 5E - 3	0 1	- 1756E - 1719	1194 1155
CENTRAL EASTERN SHORE 02 ROYAL OAK 2 SSW	0	0	0	-	-	-	508	-	-	16	1	0	-	1100
LOWER SOUTHERN 03 MECHANICSVILLE 5 NE SOLOMONS	0 0	0 0	1 2	60 50	87 130E	256 366	414 535	280 427	139 256	4 32	0 4	0 0	1241 1802E	1093
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 0 2 0 1 2E 0	44 54 65 69 54 63 48E 61	141 128 143 236 153 133 152 131	328 317 335 479E 368 336 399 324	526 478 521 693 506 575 488	346 360 376 488 374 387 443E 352	164 187 185 280 191 198 258E 189	9 11 6 46 15 10 27E 7	0 0 0 3 0 0 0	0 0 0 0 0 0	1558 1535 1631 2296E - 1634 1904E 1552	1147 1109 1258 1243 1002
NORTHERN EASTERN SHORE 05 CHESTERTOWN	0	0	0	38	129	-	-	-	-	-	-		-	
NORTHERN CENTRAL 06 ABERDEEN PHILLIPS FLD CATOCTIN MTN PARK 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 0	0 0 0 0 0 0 0	41E 25 42 36 - 46 35 21 42	115 46E 109 108 79 86 122 100 75 68E	290 194 314 234 216 249E - 220 198E 278E	498 - 470 440 381 414 - 418 366E 452	336 213 309 283 243 243 243 337 260 228 291	190 94 152 118 111 122 137 128 108E 143	4 0 1E 0 0 1 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	1474E - 1380E 1225 1066 - 1161 996E	1153 1068 918 790
APPALACHIAN MOUNTAIN 07 CUMBERLAND 2 FROSTBURG 2 SHARPSBURG 5 S WILLIAMSPORT	0 0 0 0	0 0 0 0	0 0 0 0	39 11 35 23E	125 38 82 83	243 87 202 249E	500 263 381 416E	301E 142 270 287E	152 44 125 157E	0 0 0 0	0 0 0 0	0 0 0	1360E 585 - 1215E	877 344
ALLEGHENY PLATEAU 08 OAKLAND 1 SE SAVAGE RIVER DAM SINES DEEP CREEK	0 0 -	0 0 -	0 0	9 12 -	35 43	87 113	203 267	125 170	46 58E 30	0 0 0	0 0 0	0 0 0	505 663E	316 414
DELAWARE NORTHERN 01 BEAR 2 SW	0	0	0	34	117	254	452	282	171	1	0	0	1311	

MARYLAND AND DELAWARE 2011

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
WILMINGTON PORTER RES WILMINGTON NEW CASTLE CO AP	0	0	0	31 30	108 122	264 278	481 496	299 319	160 183	12 8	0 0	0	1355 1436	1125
SOUTHERN 02 DOVER LEWES	0 -	0 -	0 -	54	159	343	533E	356	223	13	0 -	0	1681E -	1262

MARYLAND AND DELAWARE 2011

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 MAX TEMP	- - -	- - -	- - -	2971E 5.71E 72.8	1634E 5.68E 82.2	1443E 7.97E 90.3	939E 7.79E 96.5	1381E 7.41E 89.6	868E 3.08E 80.7	1459 3.09 67.0	- 57.0	- - -	- - -
UPPER MARLBORO 3 NNW	MIN TEMP WIND EVAP MAX TEMP MIN TEMP	42.5 32.8	52.5 35.3	59.2 39.5	47.4 - 71.3 47.5	57.4 - 84.4 59.0	64.7 9.00E 92.9 65.3	71.3 - 98.6 71.1	66.5 - 91.4 67.4	62.7 - 82.2 64.2	47.3 - 67.7 49.0	37.0 - 59.5 41.5	- - - -	- - - -
ALLEGHENY PLATEAU 08 SAVAGE RIVER DAM	WIND EVAP MAX TEMP MIN TEMP	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -

MARYLAND AND DELAWARE 2011

STATION INDEX

		o.						EARS OF ECORD		OPENI 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 CHESTERTOWN 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 R MECHANICSVILLE 5 NE MILLERS 4 NE NATL ARBORETUM DC OAKLAND 1 SE OXON HILL POTOMAC FLTR PLT PRINCESS ANNE ROYAL OAK 2 SSW SALISBURY 2N SALISBURY FAA AP SAVAGE RIVER DAM SHARPSBURG 5 S SINES DEEP CREEK SMITHSBURG 2 NW SNOW HILL 4 N SOLOMONS UPPER MARLBORO 3 NNW WESTMINSTER WILLIAMSPORT DELAWARE BEAR 2 SW DOVER LEWES WILMINGTON NEW CASTLE CO AP R R	0015 0335 0465 0700 1125 1530 2060 2282 2308 2325 2336 2906 3353 3415 5111 5718 5865 6620 6800 7272 7330 7806 8004 8005 8005 8371 8380 8405 8207 8315 8371 8380 8405 8970 9570	06 01 04 04 06 06 07 06 06 07 04 06 06 07 04 08 04 06 01 02 01 01 03 04 06 07 07 07 08 09 09 09 09 09 09 09 09 09 09 09 09 09	HARFORD WORCESTER ANNE ARUNDEL PRINCE GEORGE'S MONTGOMERY FREDERICK KENT HARFORD ALLEGANY BALTIMORE PRINCE GEORGE'S MONTGOMERY FREDERICK FREDERICK FREDERICK FREDERICK ALLEGANY PRINCE GEORGE'S BALTIMORE (CITY) ST. MARY'S CARROLL DISTRICT OF COLUMBIA GARRETT PRINCE GEORGE'S MONTGOMERY SOMERSET TALBOT WICOMICO WICOMICO GARRETT WASHINGTON GARRETT WASHINGTON WORCESTER CALVERT PRINCE GEORGE'S CARROLL WASHINGTON NEW CASTLE KENT SUSSEX NEW CASTLE	39 28 38 4 39 10 39 2 39 11 39 39 39 13 39 39 39 21 38 56 39 15 39 41 39 26 39 40 39 5 39 17 38 28 39 43 38 55 39 25 38 47 39 2 38 13 38 43 38 24 38 20 39 31 39 24 39 31 39 24 39 31 39 24 39 31 39 24 39 31 39 36 39 36 39 36 39 36 39 36 39 36 39 36 39 40 39 36 39 36 39 36 39 36 39 36 39 40 39 36 39 36 39 36 39 40 39 36 39 36 39 36 39 40 39 36 39 36 39 36 39 36 39 36 39 36	76 10W 75 13W 76 41W 76 56W 77 0W 77 29W 76 3W 76 11W 78 45W 76 39W 77 6W 77 13W 77 17W 77 24W 78 56W 76 54W 76 58W 76 58W 76 58W 76 42W 76 48W 76 58W 77 15W 75 41W 76 11W 75 36W 75 31W 77 15W 75 41W 76 11W 75 36W 77 50W	57 10 156 145 330 1610 40 40 730 235 150 700 403 280 2170 400 20 100 860 50 2420 120 270 20 10 20 48 1495 500 2040 670 30 12 130 750 360	85 44 73 71 11 44 97 76 38 9 64 19 56 8 40 111 14 38 24 64 113 10 7 116 64 0 64 61 14 37 111 96 101 55 29 14	85 44 73 71 48 44 97 76 38 9 64 19 56 8 40 114 13 47 24 64 113 10 50 116 64 0 64 67 14 37 11 96 101 55 29 46	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	JAN		Снинсиннинниннинниннинниннинниннинниннин

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.

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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NCDC now offers free online access to the *Climatological Data* **publication.** Go to: **www.ncdc.noaa.gov** and choose Most Popular.