

CLIMATOLOGICAL DATA

ANNUAL SUMMARY

MARYLAND AND DELAWARE

1989

VOLUME 93 NUMBER 13



"I CERTIFY THAT THIS IS AN OFFICIAL PUBLICATION OF THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA). IT IS COMPILED USING INFORMATION FROM WEATHER OBSERVING SITES SUPERVISED BY NOAA/NATIONAL WEATHER SERVICE AND RECEIVED AT THE NATIONAL CLIMATIC DATA CENTER (NCDC), ASHEVILLE, NORTH CAROLINA 28801."

Kenneth D. Haden

DIRECTOR
NATIONAL CLIMATIC DATA CENTER

noaa

NATIONAL
OCEANIC AND
ATMOSPHERIC ADMINISTRATION

NATIONAL
ENVIRONMENTAL SATELLITE, DATA
AND INFORMATION SERVICE

NATIONAL
CLIMATIC DATA CENTER
ASHEVILLE NORTH CAROLINA

TOTAL PRECIPITATION AND DEPARTURES FROM NORMAL (INCHES)

MARYLAND AND
DELAWARE
1989

STATION	JAN		FEB		MAR		APR		MAY		JUN	
	PRECIP.	DEPARTURE	PRECIP.	DEPARTURE	PRECIP.	DEPARTURE	PRECIP.	DEPARTURE	PRECIP.	DEPARTURE	PRECIP.	DEPARTURE
MARYLAND												
SOUTHERN EASTERN SHORE 01												
ASSATEAGUE IS NATL SEA	1.84		4.37		7.70	M	4.60		2.69		2.90	
CRISFIELD SOMERS COVE	1.92	-1.31 M	2.97		6.15	2.11	4.52	1.55	2.30	-.94	3.74	.58
PRINCESS ANNE	1.85	-1.48	3.01	-.29	7.00	3.01 M			2.42	-.93	7.18	3.77
SALISBURY	2.29	-1.23	3.92	.51	7.32	3.10	6.27	2.96	2.62	-.70	8.27	4.65
SALISBURY FAA ARPT	2.06	-1.32	3.73	.40 M	7.12		4.76	1.60	2.30	-1.08	6.16	2.61
SNOW HILL 4 N	1.80	-1.83	3.62	.02	8.10	3.50	3.93	.61	3.46	.03	3.78	-.02
--DIVISIONAL DATA----->	1.96	-1.46	3.73	.42	7.25	3.10	4.87	1.71	2.63	-.68	5.34	1.91
CENTRAL EASTERN SHORE 02												
CAMBRIDGE WATER TRMT P	2.69	-.80	3.26	.10	5.51	1.45	5.65	2.35	5.01	1.41	6.93	3.36
DENTON 2 E	2.57	-.75	3.84	.93	5.11	1.19	5.95	2.63	7.84	4.34 M		
ROYAL OAK 2 SSW	2.77	-.67	3.65	.45	5.15	1.08	5.19	1.78	8.60	4.97	9.37	5.94
VIENNA	2.72	-.80 M	3.07		7.01	3.09	5.43	2.09	3.36	.34	11.81	8.25
--DIVISIONAL DATA----->	2.69	-.73	3.58	.46	5.70	1.77	5.56	2.29	6.20	2.77	9.37	5.89
LOWER SOUTHERN 03												
LA PLATA 1 W M	1.47		2.71	-.17	4.99	1.23	4.12	.95	6.65	3.18	7.18	3.40
MECHANICSVILLE 5 NE	2.37		3.36		5.57		4.46		6.38		8.40	
OWINGS FERRY LANDING	2.46	-.68	2.55	-.17	4.47	.93	4.13	.89	7.61	3.81	7.27	3.56
PATUXENT RIVER	2.37		3.87		7.04		4.75		4.59		6.48	
TALL TIMBERS								M		M		M
--DIVISIONAL DATA----->	2.40	-.87	3.12	.21	5.52	1.77	4.37	1.24	6.31	2.72	7.33	3.70
UPPER SOUTHERN 04												
ANNAPOLIS POLICE BRKS	3.60		4.19		5.09		5.09		7.49		7.13	
BALTIMORE WSO ARPT R	3.07	.07	3.36	.38	4.24	.52	3.16	-.19	8.71	5.27	5.98	2.22
BELTSVILLE	2.83	-.08	3.25	.75	4.68	1.19	3.33	-.04	9.33	5.52	5.46	1.57
COLLEGE PARK	2.99	-.02	3.24	.45 M	4.80		3.23	-.14	9.08	5.23	4.77	.92
DALECARLIA RESVR DC	2.82	-.25	3.01	.08	4.20	.37	4.26	.66	9.41	5.64	5.59	1.91
GLENN DALE BELL STN	2.70	-.36	3.31	.56	4.12	.42	4.13	.61	10.28	6.34	6.19	2.32
LAUREL 3 W	3.23	-.36	4.04	1.35	5.29	1.63	3.90	.50	11.17	7.11	7.00	3.11
NATIONAL ARBORETUM DC	2.53	-.64	6.06	3.21 M	3.49		3.96	.59	8.49	4.56	7.02	3.07
UPPER MARLBORO 3 NNW	2.47	-.81	2.54	-.19 M			5.58	2.26	9.66	6.06	9.64	5.80
--DIVISIONAL DATA----->	2.92	-.14	3.67	.88	4.60	.92	4.07	.70	9.29	5.54	6.53	2.73
NORTHERN EASTERN SHORE 05												
CHESTERTOWN	2.93	-.35	4.04	1.09	4.67	.69	4.42	1.17	7.06	3.44	15.44	11.20
MILLINGTON 1 SE	3.16	.00 M	4.11		4.86	1.16	4.49	1.31	6.62	3.20	9.30	5.63
--DIVISIONAL DATA----->	3.05	-.22	4.04	1.16	4.77	1.01	4.46	1.26	6.84	3.39	12.37	8.51
NORTHERN CENTRAL 06												
ABERDEEN PHILLIPS FLD R	2.81		3.30		4.29	M	2.72		8.09		5.83	
BALTIMORE WSO CITY	3.22	.15	3.48	.41	4.05	.12	2.39	-1.12	9.31	5.68	6.25	2.54
BENSON POLICE BARRACKS	3.55	.12	3.59	.71	5.19	1.15	2.54	-1.46	12.24	8.19	6.96	2.66
BOYDS 2 NW	2.63		3.41		5.01		2.04		10.05		3.13	
BRIGHTON DAM	3.00	.04	4.10	1.38	5.30	1.57	2.80	-.67	10.57	6.64	9.20	5.31
CATOCTIN MOUNTAIN PARK	2.57		2.10		4.74		1.13		10.92		4.75	
CLARKSVILLE 3 NNE	3.32		3.30		5.40		3.49		10.84		9.87	

SEE REFERENCE NOTES FOLLOWING STATION INDEX

TOTAL PRECIPITATION AND DEPARTURES FROM NORMAL (INCHES)

MARYLAND AND
DELAWARE
1989

STATION	JUL		AUG		SEP		OCT		NOV		DEC		ANNUAL	
	PRECIP.	DEPARTURE	PRECIP.	DEPARTURE	PRECIP.	DEPARTURE	PRECIP.	DEPARTURE	PRECIP.	DEPARTURE	PRECIP.	DEPARTURE	PRECIP.	DEPARTURE
MARYLAND														
SOUTHERN EASTERN SHORE 01														
ASSATEAGUE IS NATL SEA	6.64		8.88		4.38		5.12		4.33	M .05		M 53.50		
CRISFIELD SOMERS COVE	8.64	4.87	7.98	3.59	2.42	-.85	4.06	.85	2.33	-.76M	.44	M 47.47		
PRINCESS ANNE	7.70	3.88	6.45	.82M			4.05	.37	4.51	1.27M				
SALISBURY	9.03	5.27	7.09	1.37	5.52	1.93M			3.59	.48	1.93	-1.69		
SALISBURY FAA ARPT	8.80	4.40	8.17	2.45	5.90	1.96	5.05	1.32	2.69	-.37	3.06	-.65M	59.80	
SNOW HILL 4 N	7.25	3.26	16.66	11.23	5.67	2.14	3.88	.08	3.10	-.28	1.59	-2.12	62.84	16.62
--DIVISIONAL DATA----->	8.01	4.08	9.21	4.01	4.78	1.19	4.43	.87	3.43	.24	2.19	-1.33	57.83	14.06
CENTRAL EASTERN SHORE 02														
CAMBRIDGE WATER TRMT P	8.00	3.69	2.80	-2.48	4.01	.29	3.02	-.26	1.55	-2.17	1.34	-2.37	49.77	4.57
DENTON 2 E	M 6.62	2.23	M 2.96	-2.13	M 5.24	1.52	M 4.81	1.35	M 2.37	-1.36	M 1.81	-1.93	58.54	13.23
ROYAL OAK 2 SSW	6.45	2.51	3.05	-2.58	7.25	3.28	2.77	-.67	3.41	.09M	.34		56.67	
VIENNA	7.02	2.88	2.94	-2.28	5.50	1.85	3.53	.20	2.44	-1.09	1.58	-2.02	56.11	11.99
--DIVISIONAL DATA----->														
LOWER SOUTHERN 03														
LA PLATA 1 W	5.33	1.30	.59	-4.33	10.18	6.74	5.23	1.82	2.33	-.87	1.72	-1.70M	52.50	
MECHANICSVILLE 5 NE	7.76		1.38		6.43		4.99		2.52		1.97		55.59	
OWINGS FERRY LANDING	6.93	3.27	.89	-3.30	6.71	3.19	5.80	2.53	2.74	-.59	1.55	-1.74	53.11	11.70
PATUXENT RIVER	7.46		3.14		5.06		4.30		2.59		2.28		53.93	
TALL TIMBERS	M		M		M		M		M		M			
--DIVISIONAL DATA----->	6.87	2.77	1.50	-3.12	7.10	3.60	5.08	1.81	2.55	-.79	1.88	-1.50	54.03	11.54
UPPER SOUTHERN 04														
ANNAPOLIS POLICE BRKS	8.12		2.03		4.97		5.28		1.73		1.38		56.10	
BALTIMORE WSO ARPT	R 7.35	3.46	3.38	-1.24	3.64	.18	4.90	1.79	1.97	-1.14	2.12	-1.28	51.88	10.04
BELTSVILLE	6.87	2.73	.83	-3.88	5.11	1.40	5.43	2.19	2.61	-.36	.74	-2.60	50.47	8.39
COLLEGE PARK	5.24	1.18	1.06	-3.94	5.29	1.73	5.21	2.10	2.75	-.35	.98	-2.40M	48.64	
DALECARLIA RESVR DC	6.78	2.74	.24	-4.36	4.51	1.09	5.56	2.26	2.90	-.25	3.17	-.32	52.45	9.57
GLENN DALE BELL STN	5.47	1.16	.70	-4.21	4.18	.52	5.32	2.02	2.38	-.96	1.01	-2.38	49.79	6.04
LAUREL 3 W	5.99	2.11	.06	-4.11	5.20	1.82	6.42	3.29	3.17	-.23	1.88	-1.46	57.35	15.48
NATIONAL ARBORETUM DC	5.97	1.77	.32	-4.78	6.08	2.50	5.11	1.94M			.83	-2.53		
UPPER MARLBORO 3 NNW	5.39	1.33	.70	-3.96	4.88	1.15	6.83	3.54M						
--DIVISIONAL DATA----->	6.35	2.36	1.04	-3.70	4.87	1.35	5.56	2.42	2.50	-.63	1.51	-1.87	52.91	10.56
NORTHERN EASTERN SHORE 05														
CHESTERTOWN	7.13	3.19	1.26	-3.35	4.83	1.25	5.73	2.57	2.26	-1.20	1.61	-2.26	61.38	17.44
MILLINGTON 1 SE	8.06	4.19	1.92	-2.82	6.07	2.28	5.06	2.01	2.26	-1.21	1.30	-2.28M	57.21	
--DIVISIONAL DATA----->	7.60	3.67	1.59	-2.92	5.45	1.78	5.40	2.34	2.26	-1.14	1.46	-2.19	59.29	16.65
NORTHERN CENTRAL 06														
ABERDEEN PHILLIPS FLD.	7.50		1.34		5.06		4.81		1.51	M .59		M 47.85		
BALTIMORE WSO CITY	R 8.28	4.25	1.81	-2.76	3.52	-.14	5.08	1.99	1.92	-1.42	1.51	-2.27	50.82	7.43
BENSON POLICE BARRACKS	8.99	4.64	2.16	-2.75	4.24	.06	5.08	2.10	1.72	-2.17	1.39	-2.60	57.65	10.65
BOYDS 2 NW	2.83		.70		2.57		5.56		2.28		.85		41.06	
BRIGHTON DAM	6.90	3.36	.90	-3.23	4.30	.61	5.50	2.38	3.65	.48	2.10	-1.31	58.32	16.56
CATOCTIN MOUNTAIN PARK	5.98		.92		2.24		4.69		2.55		1.45		44.04	
CLARKSVILLE 3 NNE	5.81		2.01		4.38		4.83		2.44		1.30		56.99	

SEE REFERENCE NOTES FOLLOWING STATION INDEX

TOTAL PRECIPITATION AND DEPARTURES FROM NORMAL (INCHES)

MARYLAND AND
DELAWARE
1989

STATION	JAN		FEB		MAR		APR		MAY		JUN	
	PRECIP.	DEPARTURE	PRECIP.	DEPARTURE	PRECIP.	DEPARTURE	PRECIP.	DEPARTURE	PRECIP.	DEPARTURE	PRECIP.	DEPARTURE
CONOWINGO DAM	2.57	-.76	3.55	.70	4.67	.68	2.07	-1.75	8.15	4.42	5.26	.97
DAMASCUS 2 SW	3.12		3.09		4.97		2.16		10.14		4.48	
EMMITTSBURG 2 SE	2.88		1.92		4.06		1.77		10.59		5.73	
FREDERICK POLICE BRKS	3.42		2.34		2.08		1.85		10.06		4.94	
FREDERICK 3 E	2.91	.03	2.55	.00	4.60	1.08	1.80	-1.81	9.29	5.43	5.31	1.29
MILLERS 4 NE	2.93		2.70		4.33		1.37		9.96		4.91	
POTOMAC FILTER PLANT	M 1.82		M 1.72		3.10		2.26		7.25		5.13	
ROCKVILLE 1 NE	3.12	.17	2.77	.11	5.32	1.78	2.97	-.27	8.92	5.15	5.48	1.49
TOWSON	3.75	.44	4.28	1.10	4.71	.67	3.24	-.74	14.64	10.63	8.70	4.66
UNIONVILLE	M 2.57		2.24	-.17	4.41	1.03	1.40	-2.11	8.38	4.71	5.84	1.76
WESTMINSTER POLICE BRK	2.58	-.54	2.29	-.53	2.56	-1.36	1.28	-2.41	8.97	5.10	5.71	1.62
WOODSTOCK	3.53	.39	3.29	.53	4.64	.70	2.42	-1.20	11.36	7.59	6.01	1.98
--DIVISIONAL DATA----->	3.07	-.06	2.98	.17	4.56	.74	2.14	-1.49	10.30	6.48	5.87	1.82
APPALACHIAN MOUNTAIN 07												
CUMBERLAND 2	2.65	.12	1.95	-.46	4.85	1.24	1.74	-1.62	6.03	2.42	7.30	3.52
EDGEMONT	2.42	-.65	2.11	-.51	3.80	.09	1.03	-2.62	10.76	6.94	4.56	.37
FROSTBURG 2	3.32		2.71		5.28		2.36		7.22		4.83	
HAGERSTOWN	M 1.85		2.02	-.24	3.93	.55	1.00	-2.50	9.26	5.52	4.54	.62
HANCOCK	2.35	-.26	1.98	-.38	4.72	1.23	1.49	-1.75	7.52	4.11	6.31	2.45
--DIVISIONAL DATA----->	2.77	.02	2.17	-.33	4.70	1.04	1.65	-1.78	7.51	3.82	5.75	2.00
ALLEGHENY PLATEAU 08												
MC HENRY 2 NW	4.94		5.15		5.15		3.21		6.16		6.72	
MERRILL	3.13	.22	2.72	.00	4.98	1.06	2.64	-1.03	5.51	1.64	5.52	1.92
OAKLAND 1 SE	4.06	.27	3.18	-.02	5.61	1.19	1.92	-2.59	6.00	1.56	6.44	2.08
SAVAGE RIVER DAM	3.15	.55	2.57	.22	5.43	2.05	1.74	-1.74	6.64	2.97	4.62	1.12
--DIVISIONAL DATA----->	4.05	.52	3.63	.54	5.40	1.19	2.29	-1.90	6.27	2.15	5.93	1.79
DELAWARE												
NORTHERN 01												
NEWARK UNIVERSITY FARM	M 2.25		3.30	.57	4.50	.84	2.99	-.51	6.62	3.10	7.37	3.62
WILMINGTON WSO ARPT	R 2.48	-.63	2.75	-.24	3.69	-.18	2.76	-.63	6.57	3.34	5.43	1.92
WILMINGTON PORTER RSVR	3.11	-.18	3.33	.33	5.31	1.24	3.06	-.82	7.95	4.38	4.75	.75
--DIVISIONAL DATA----->	2.80	-.33	3.13	.26	4.50	.73	2.94	-.60	7.05	3.69	5.85	2.16
SOUTHERN 02												
DOVER	3.35	.11	4.18	1.32	6.31	2.44	5.05	1.84	7.53	4.03	9.13	5.52
GEORGETOWN 5 SW	2.78	-.57	3.22	.20	6.77	2.80	6.48	3.28	3.37	.11	5.96	2.37
GREENWOOD 2 NE	2.61		2.86		7.88		5.90		4.92		7.23	
LEWES	M 2.76		3.10	-.23	7.85	3.64	5.23	1.82	3.34	-.20	6.04	2.34
MILFORD 4 SE	2.56	-.83	2.62	-.51	M 8.21		5.83	2.42	3.14	-.34	4.74	1.02
--DIVISIONAL DATA----->	2.83	-.60	3.20	.06	7.20	3.17	5.70	2.39	4.46	1.06	6.62	2.97

SEE REFERENCE NOTES FOLLOWING STATION INDEX

TOTAL PRECIPITATION AND DEPARTURES FROM NORMAL (INCHES)

MARYLAND AND
DELAWARE
1989

STATION	JUL		AUG		SEP		OCT		NOV		DEC		ANNUAL	
	PRECIP.	DEPARTURE	PRECIP.	DEPARTURE	PRECIP.	DEPARTURE	PRECIP.	DEPARTURE	PRECIP.	DEPARTURE	PRECIP.	DEPARTURE	PRECIP.	DEPARTURE
CONOWINGO DAM	9.84	5.47	2.14	-2.40	5.52	1.63	4.39	1.20M	2.99		2.01	-1.86M	53.16	
DAMASCUS 2 SW	4.25		.50		2.62		4.46		3.08		1.57		44.44	
EMMITSBURG 2 SE	4.95		2.18		1.80		4.76		2.16		1.85		44.65	
FREDERICK POLICE BRKS	3.13		.56		1.70		3.78		2.23		1.70		37.79	
FREDERICK 3 E	3.32	-.32	1.12	-2.59	2.94	-.61	4.96	1.83	2.02	-1.14	.96	-2.27	41.78	.92
MILLERS 4 NE	4.51		2.68		3.52		5.32		2.35		1.49		46.07	
POTOMAC FILTER PLANT	3.61	M	.47		2.89		4.85		2.82		1.14		37.06	
ROCKVILLE 1 NE	4.82	1.04	.33	-4.13	3.17	-.29	5.82	2.82	2.86	-.20	1.59	-1.41	47.17	6.26
TOWSON	8.68	4.55	4.23	-.56	5.67	1.52	6.19	2.76	4.40	.57M	2.15		70.64	
UNIONVILLE	2.12	-1.47	2.14	-1.62	2.36	-1.15	4.86	1.93	2.25	-.84	1.52	-1.78M	40.09	
WESTMINSTER POLICE BRK	2.66	-1.34	1.84	-2.16	3.60	-.23	4.25	1.15	2.40	-.81M	1.82		39.96	
WOODSTOCK	5.96	2.40	1.96	-2.02	4.06	.06	4.95	1.83	2.63	-.65	1.70	-1.82	52.51	9.79
--DIVISIONAL DATA----->	5.64	1.74	1.72	-2.58	3.50	-.33	4.93	1.78	2.45	-.90	1.53	-1.99	48.69	5.38
APPALACHIAN MOUNTAIN 07														
CUMBERLAND 2	7.01	3.82	1.32	-2.01	2.83	-.09	3.63	.92	2.35	-.06	.88	-1.76	42.54	6.04
EDGEMONT	3.83	.58	1.06	-2.77	1.85	-2.31	4.48	1.18	2.80	-.58	.52	-2.50	39.22	-2.78
FROSTBURG 2	10.03		1.90		4.16		4.09		3.17		1.85		50.92	
HAGERSTOWN	3.24	-.10M	.64		1.57	-1.73	4.15	1.02	2.70	-.32	.29	-2.57M	35.19	
HANCOCK	5.24	1.68	1.09	-2.21	2.30	-.92	4.08	1.15	3.15	.48	1.20	-1.39	41.43	4.19
--DIVISIONAL DATA----->	6.38	2.96	1.44	-2.07	2.72	-.47	3.99	1.02	2.84	.10	1.06	-1.78	42.98	4.53
ALLEGHENY PLATEAU 08														
MC HENRY 2 NW	7.08		3.65		2.71		3.69		4.33		3.53		56.32	
MERRILL	9.29	5.62	2.11	-1.55	2.35	-.51	2.83	-.05M	2.58		2.30	-.83M	45.96	
OAKLAND 1 SE	5.97	1.29	3.82	-.78	2.69	-.42	4.29	1.12	3.66	.52M	1.75		49.39	
SAVAGE RIVER DAM	6.82	3.20	2.50	-1.11	3.09	.10	2.91	.03M	2.54		1.18	-1.50M	43.19	
--DIVISIONAL DATA----->	6.62	2.35	3.32	-.86	2.83	-.33	3.63	.50	4.00	1.00	2.36	-1.29	50.33	5.66
DELAWARE														
NORTHERN 01														
NEWARK UNIVERSITY FARM	13.58	9.26	2.31	-2.19	5.42	1.81	5.00	1.82	2.19	-1.00M	.38		55.91	
WILMINGTON WSO ARPT R	12.63	8.73	1.97	-2.06	4.31	.72	3.92	1.03	1.99	-1.34	1.27	-2.27	49.77	8.39
WILMINGTON PORTER RSVR	14.86	10.73	3.20	-1.22	4.75	.94	5.45	2.22	2.10	-1.66	1.27	-2.47	59.14	14.24
--DIVISIONAL DATA----->	13.69	9.69	2.49	-1.68	4.83	1.24	4.79	1.62	2.09	-1.29	1.27	-2.28	55.43	13.21
SOUTHERN 02														
DOVER	6.24	1.97	6.11	.99	7.64	3.50	3.73	.17	2.20	-1.33	1.35	-2.18	62.82	18.38
GEORGETOWN 5 SW	9.26	5.24	10.77	5.34	4.76	1.25	3.89	.41	5.03	1.74M	1.35		63.64	
GREENWOOD 2 NE	7.72		4.70		5.17		3.52		2.80		1.36		56.67	
LEWES	11.26	7.10	8.45	3.09	6.42	3.16	4.94	1.61	3.57	.08	1.27	-2.55M	64.23	
MILFORD 4 SE	6.14	1.76	4.95	.17	6.75	3.00	3.09	-.38	3.65	.22	2.03	-1.78M	53.71	
--DIVISIONAL DATA----->	8.12	3.89	7.00	1.76	6.15	2.48	3.83	.36	3.45	.08	1.50	-2.23	60.06	15.39

SEE REFERENCE NOTES FOLLOWING STATION INDEX

AVERAGE TEMPERATURES AND DEPARTURES FROM NORMAL (°F)

MARYLAND AND
DELAWARE
1989

1989																												
STATION		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		OCT		NOV		DEC		ANNUAL		
		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 IS NATL SEA		40.9	M			40.4		51.1		64.2		75.5		77.0		75.0		71.2		60.3		M50.5		M28.9		M		
CRISFIELD SOMERS COVE		41.6	4.8	38.6		46.8		55.9		65.7		78.2	4.4	79.0		77.0		73.1	1.2	62.0	1.2	50.6		31.1	-9.8	M58.3		.2
PRINCESS ANNE		41.0	5.4	39.4	2.1	46.7	1.7	55.9	-1.5	63.2	-1.6	75.8	4.1	76.4		75.5		73.1	1.2	60.0	2.4	48.3		31.1	-9.8	M58.3		.2
SALISBURY		41.5	4.8	38.6		46.5		54.6	-1.2	63.2	-1.6			M		74.5	-1.5	71.2	1.3	M		48.5	-1.0	28.7	-11.6	M		
SALISBURY FAA ARPT		40.1	5.0	37.5		45.5		53.1	-1.1	62.6	-1.5	75.5	3.9	75.9		75.0	-1.3	70.1	1.5	59.7	2.3	46.9		27.7	-11.1	55.8		.0
SNOW HILL 4 N		41.2	5.2	38.7	1.2	46.4	1.4	53.8	-1.8	63.4	-1.1	76.5	4.9	76.4		75.7		71.2	2.2	59.8	1.7	47.8		27.9	-9.9	56.7		.5
--DIVISIONAL DATA--		41.1	5.1	38.6	1.1	45.4	.3	53.7	-1.2	63.7	-1.1	76.3	4.3	76.9		75.5	-3	71.4	1.8	60.4	1.7	48.8	-1.1	29.2	-10.6	56.8		.2
CENTRAL EASTERN SHORE 02																												
CAMBRIDGE WATER TRMT P		40.2	5.5	37.8	1.5	45.6	1.1	55.3		64.6		76.9	4.4	77.9	1.0	76.7	1.1	71.6	2.1	61.1	2.6	48.8		28.6	-10.1	M57.1		.9
DENTON 2 E		38.7	4.6	37.8	1.7	44.3		53.7	-1.2	63.9	-1.4			M				M		M								
ROYAL OAK 2 SSW		39.7	4.7	38.2	1.5	45.4		53.9	-1.9	63.9	-1.3	76.5	3.0	77.9		75.6	-1.0	70.2	-1	60.4	1.1	48.8	-1.1	27.5	-11.4	56.5		-4
VIENNA		39.7	3.8	38.1		44.6	-1.0	54.5	-1.1	64.9		76.8	3.8	77.6		76.0	-3	70.2		60.9	2.0	47.3	-1.7	26.2	-13.4	M56.4		-6
--DIVISIONAL DATA--		39.6	4.6	38.0	1.3	45.0	.1	54.4	-1.9	64.3	-1.3	76.7	3.8	77.8		76.1	-1	70.7	1.0	60.8	2.1	48.3	-1.2	27.4	-11.4	56.6		.1
LOWER SOUTHERN 03																												
LA PLATA 1 W		39.4	4.8	38.2	1.4	46.7	1.5	54.3	-1.2	62.2	-1.8	73.7	2.1	74.8	-1.1	73.2	-1.6	68.1		58.0		47.9		27.3	-10.6	55.3		-5
MECHANICSVILLE 5 NE		38.8		37.7		45.5		53.4		62.4		74.4		75.2		73.6		68.2		57.8		46.9		26.2		55.0		
OWINGS FERRY LANDING		38.4	3.9	37.7	1.4	45.2		53.6	-1.9	63.1	-1.3	73.7	1.5	74.4	-1.9	74.4	-1.6	69.1		59.5	1.8	47.0	-1.9	26.1	-12.0	M55.2		-8
PATUXENT RIVER		40.0		38.3		45.4		53.9		63.0		76.4		77.7		76.2		71.5		61.3		48.8		29.1		56.8		
TALL TIMBERS																												
--DIVISIONAL DATA--		39.2	4.3	38.0	1.1	45.7	.5	53.8	-1.9	62.7	-1.9	74.6	2.2	75.5	-1.2	74.4	-1.2	69.2		59.2	1.2	47.7	-1.3	27.2	-11.4	55.6		-6
UPPER SOUTHERN 04																												
ANNAPOLIS POLICE BRKS		38.1		37.3		44.0		52.9		62.3		75.0		76.6		74.5		68.9		57.6		45.9		25.1		54.8		
BALTIMORE WSO ARPT		37.9	5.2	36.5	1.8	43.8		52.5	-1.5	62.0	-1.4	73.9	1.7	76.0		74.4	-1.2	69.0		58.3	1.4	44.8	-1.5	25.4	-11.1	54.5		-6
BELTSVILLE		37.0	5.7	34.8	1.8	43.4		51.3	-1.4	61.1	-1.7	73.9	3.6	76.0		73.9	-1	68.5	1.3	57.3	2.3	45.6		24.0	-11.3	M53.9		.3
COLLEGE PARK		37.5	3.5	36.3		43.5	-1.1	53.1	-2.3	62.6	-2.1	75.5	2.6	77.6		74.5	-5	69.9		57.8	1.0	46.6	-1.3	25.7	-11.6	M55.2		-7
DALECARLIA RESVR DC		36.2	2.3	36.6		42.8	-2.1	52.2	-3.5	61.2	-3.8	74.0	1.2	75.4	-1.8	73.3	-2.6	68.2	-1.0	56.9		44.1	-2.9	24.1	-13.3	M53.8		-2.3
GLENN DALE BELL STN		36.9	3.7	37.4	2.0	43.1		52.4	-1.8	61.0	-2.4	73.5	2.3	75.6		74.0	-5	68.3		58.1	1.5	46.2	-1	25.9	-10.8	M54.4		-6
LAUREL 3 W		36.9	3.5	34.9		42.4	-1.8	52.6	-2.6	62.1	-2.3	73.7	1.1	75.5	-1.7	73.7		70.2		59.6	1.4	46.5	-1.0	26.2	-10.7	M		
NATIONAL ARBORETUM DC		35.9	1.1					52.6	-3.6	61.8	-3.4	74.3		75.7	-2.0	72.9	-3.8	66.5	-3.6	54.7	-3.6			26.6	-11.9	M		
UPPER MARLBORO 3 NNW		35.7		34.9				50.5		60.5		73.6		74.9		72.9		67.2		56.0								
--DIVISIONAL DATA--		36.9	3.7	36.1	1.0	43.3	-4	52.2	-2.2	61.6	-2.1	74.2	2.3	75.9	-1.6	73.9	-1.4	68.5	-1.2	57.4		45.6	-1.0	25.4	-11.5	54.3		-9
NORTHERN EASTERN SHORE 05																												
CHESTERTOWN		37.3	4.2	35.8		43.5		52.9	-1.2	63.1	-1.6	75.4	3.1	76.7	-2	75.2	-1.6	69.3		58.3		45.8	-1.2	25.0	-12.0	54.9		-6
MILLINGTON 1 SE		37.1	4.9	37.3	3.2	44.0	1.2	52.6	-1.6	62.8		74.3	3.2	75.2	-4	73.6	-1.9	69.3	1.3	58.6	2.1	46.8		25.1	-11.0	M54.7		.3
--DIVISIONAL DATA--		37.2	4.0	36.6	1.5	43.8	.3	52.8	-1.3	63.0	-1.5	74.9	2.8	76.0	-5	74.4	-1.0	69.3		58.5		46.3	-1.7	25.1	-11.9	54.8		-4
NORTHERN CENTRAL 06																												
ABERDEEN PHILLIPS FLD		M				M44.2		M53.8		63.1		74.0		M80.1		74.4		M71.7		M62.0		M49.1		M28.4		M58.0		.0
BALTIMORE WSO CITY		40.0	4.5	36.9	-4	45.9		57.8	1.0	66.9	.6	78.1	2.8	80.1		78.8		71.7		62.0	1.9	49.1	-1.1	28.4	-10.9	58.0		.0
BENSON POLICE BARRACKS		37.8	6.6	36.1	2.5	43.6	1.5	53.3		62.9		74.2	3.6	76.1		74.4		68.3		58.4	2.4	45.2	-1.1	24.5	-10.6	54.6		.8
BOYDS 2 NW		37.6		M35.6		43.5		52.8		61.1		72.4		74.9		73.5		67.4		58.5		45.0		24.1		M53.9		
CATOCTIN MOUNTAIN PARK		36.0		31.8		M38.9		49.6		58.7		69.3		71.0		69.6		63.7		56.0		41.8		21.3		M50.6		
CLARKSVILLE 3 NNE		37.3		36.2		43.2		51.3		61.3		73.3		75.5		73.7		67.4		56.6		44.9		23.7		53.7		
CONOWINGO DAM		34.4	4.2	33.3	1.0	M41.0		50.4	-1.6	60.1	-1.9	71.9	1.3	74.6	-5	73.5	-5	68.0		56.3	1.0	43.1	-1.0	23.8	-10.3	M52.5		-6
DAMASCUS 2 SW		37.0		34.7		42.6		51.7		60.5		72.1		74.3		72.8		66.9		57.7		44.5		23.7		53.2		
EMMITSBURG 2 SE		36.1		34.7		41.8		51.0		60.0		72.1		74.5		72.5		65.4		56.0		43.6		22.3		52.5		
FREDERICK POLICE BRKS		38.6		37.1		44.4		54.4		63.1		75.1		77.4		76.0		69.7		58.9		46.4		25.8		55.6		
MILLERS 4 NE		36.0		33.6		41.5		50.3		60.2		71.4		73.6		71.8		65.7		57.1		43.4		22.8		52.3		
ROCKVILLE 1 NE		40.5	7.2	37.2	1.8	43.2	-9	52.2	-2.7	61.0	-2.9	73.7	2.2	75.8		74.2	-2	68.0		58.1	1.3	45.6	-1.7	25.0	-11.4	54.5		-5
TOWSON		37.7		35.0		40.9		51.8		61.7		73.5		75.4		74.1		67.5		58.4		45.5		25.4		53.9		
UNIONVILLE		34.1	4.6	33.1	1.2	41.7	.8	50.1	-1.4	60.0	-1.9	72.4	3.1	74.8	1.2	72.4		66.1		55.6	1.8	43.2		21.5	-11.9	52.1		.0

SEE REFERENCE NOTES FOLLOWING STATION INDEX

AVERAGE TEMPERATURES AND DEPARTURES FROM NORMAL (°F)

MARYLAND AND
DELAWARE
1989

STATION	JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		OCT		NOV		DEC		ANNUAL	
	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
WESTMINSTER POLICE BRK	35.7	5.6	32.6	4	40.6	-1.4	50.2	-2.0	60.1	-1.4	70.9	1.0	73.5	-1.7	71.8	-1.2	65.7	-1.6	55.7	-1.8	42.8	-1.5	23.0	-11.0	51.9	-1.9
WOODSTOCK	37.3	5.9	35.8	2.3	43.3	1.2	52.2	-1.7	62.0	-1.4	73.7	3.4	75.7	-1.8	74.1	-1.6	67.8	1.0	57.7	2.5	45.1	-1.4	24.5	-10.7	54.1	-1.5
--DIVISIONAL DATA-->	37.1	5.5	34.9	1.2	42.5	2	52.1	-1.1	61.4	-1.2	73.0	2.2	75.1	-1.0	73.6	-1.3	67.3	-1.1	57.5	1.7	44.6	-1.6	24.0	-11.3	53.6	-1.2
APPALACHIAN MOUNTAIN 07																										
CUMBERLAND 2	36.8	5.9	34.1	1.9	43.2	1.1	50.8	-2.7	60.6	-2.2	71.1	1.7	74.6	-1.2	72.2	-1.0	65.5	-1.1	55.6	-1.6	42.4	-1.7	24.4	-9.9	52.6	-1.8
FROSTBURG 2	32.3	6.2	34.6	1.7	42.1	1.0	52.4	-1.2	61.2	-1.9	72.3	1.3	74.6	-1.2	73.2	-2	65.9	-1.9	56.2	1.9	43.1	-1.2	22.7	-11.5	46.9	-1.8
HAGERSTOWN	36.8	6.2	34.6	1.7	42.1	1.0	52.4	-1.2	61.2	-1.9	72.3	1.3	74.6	-1.2	73.2	-2	65.9	-1.9	56.2	1.9	43.1	-1.2	22.7	-11.5	46.9	-1.8
HANCOCK	35.2	6.0	32.9	1.8	40.0	1.0	48.7	-2.4	58.8	-1.4	70.3	1.8	73.8	-1.9	71.3	-1.4	64.6	-1.3	54.7	1.8	42.6	-2.2	22.7	-10.2	51.3	-1.2
--DIVISIONAL DATA-->	35.3	5.2	32.4	2	40.6	-1.4	48.9	-3.4	58.7	-2.9	69.9	1.4	72.3	-1.1	70.6	-1.7	64.1	-1.6	54.4	1.1	41.6	-2.0	21.9	-11.8	50.9	-1.5
ALLEGHENY PLATEAU 08																										
MC HENRY 2 NW	32.1	8.2	26.0	1.7	38.2	2.6	44.6	-2.6	54.0	-2.3	66.2	2.6	69.4	2.0	66.6	-1.1	61.0	1.5	50.6	1.1	39.0	-2	18.5	-11.4	47.7	-1
OAKLAND 1 SE	34.4	6.3	28.7	1.7	39.1	2.3	45.9	-2.5	55.7	-2.1	67.7	2.3	71.3	1.8	67.8	-1.8	62.5	1.5	51.5	1.7	39.0	-1.3	19.9	-10.3	48.6	-1.1
SAVAGE RIVER DAM	32.7	6.3	29.6	1.7	39.1	2.3	45.9	-2.5	55.7	-2.1	67.7	2.3	71.3	1.8	67.8	-1.8	62.5	1.5	51.5	1.7	39.0	-1.3	19.9	-10.3	48.6	-1.1
--DIVISIONAL DATA-->	33.1	7.6	28.1	1.9	38.8	3.0	44.9	-2.3	54.4	-2.2	66.5	2.5	70.2	2.5	66.8	1.0	61.4	1.8	51.0	1.5	38.5	-1.6	18.6	-10.8	47.7	-1.2
DELAWARE																										
NORTHERN 01																										
NEWARK UNIVERSITY FARM	36.3	4.6	35.2	1.5	42.5	1.4	51.4	-1.4	62.3	-1.4	73.5	2.2	75.7	-1.0	74.5	-1.0	68.7	1.8	57.9	1.6	45.1	-1.7	25.0	-10.6	54.0	-1.2
WILMINGTON WSO ARPT	36.0	4.8	34.3	1.1	42.1	1.3	51.6	-1.8	62.1	-1.1	74.3	3.1	75.9	-1.1	74.4	-1.4	68.4	1.5	57.6	1.3	44.6	-1.0	25.0	-10.5	53.9	-1.2
WILMINGTON PORTER RSVR	36.7	5.9	34.6	2.0	41.5	1.5	51.4	-1.4	61.5	-1.1	73.4	3.0	75.1	-1.2	73.7	-1.0	68.0	1.1	58.6	2.9	44.4	-1.8	24.7	-10.4	53.6	-1.3
--DIVISIONAL DATA-->	36.3	4.7	34.7	1.2	42.0	1.0	51.5	-1.2	62.0	-1.4	73.7	2.5	75.6	-1.1	74.2	-1.3	68.4	1.6	58.0	1.6	44.7	-1.1	24.9	-10.8	53.8	-1.2
SOUTHERN 02																										
DOVER	39.8	5.4	38.1	1.7	43.5	1.8	52.3	-2.4	62.8	-1.4	75.1	2.5	77.2	-1.2	75.9	-1.1	70.7	1.1	59.7	1.1	47.8	-1.4	27.6	-10.8	55.9	-1.3
GEORGETOWN 5 SW	39.2	5.0	36.9	1.1	43.0	1.5	51.5	-2.1	61.7	-1.4	75.2	3.7	75.7	-1.4	74.0	-1.9	68.9	1.5	58.6	1.6	47.0	-1.2	25.9	-11.9	54.8	-1.5
GREENWOOD 2 NE	39.0	6.2	36.8	1.9	45.1	1.8	54.4	-1.3	63.1	-1.0	76.3	5.6	77.2	-2.0	76.2	1.9	71.8	3.4	60.5	3.0	49.4	1.4	29.2	-9.3	56.8	1.7
LEWES	40.8	5.2	37.2	1.4	44.5	2	53.1	-1.3	62.8	-1.1	75.4	3.4	75.9	-1.6	74.5	-1.7	69.8	1.0	59.1	1.4	47.5	-1.1	26.7	-11.2	55.5	-1.2
MILFORD 4 SE	39.5	5.2	37.2	1.4	44.5	2	53.1	-1.3	62.8	-1.1	75.4	3.4	75.9	-1.6	74.5	-1.7	69.8	1.0	59.1	1.4	47.5	-1.1	26.7	-11.2	55.5	-1.2
--DIVISIONAL DATA-->	39.7	5.2	37.4	1.3	44.2	1.3	52.8	-1.3	62.6	-1.8	75.4	3.6	76.3	-1.1	74.9	-1.2	70.0	1.3	59.3	1.6	47.6	-1.2	27.0	-11.3	55.6	-1.0

SEE REFERENCE NOTES FOLLOWING STATION INDEX

TEMPERATURE EXTREMES AND FREEZE DATA (°F)

MARYLAND AND
DELAWARE
1989

STATION	HIGHEST	DATE	LOWEST	DATE	LAST SPRING MINIMUM OF										FIRST FALL MINIMUM OF										NUMBER OF DAYS BETWEEN DATES						
					16° OR BELOW		20° OR BELOW		24° OR BELOW		28° OR BELOW		32° OR BELOW		32° OR BELOW		28° OR BELOW		24° OR BELOW		20° OR BELOW		16° OR BELOW		16° OR BELOW	20° OR BELOW	24° OR BELOW	28° OR BELOW	32° OR BELOW		
					DATE	TEMP.	DATE	TEMP.	DATE	TEMP.	DATE	TEMP.	DATE	TEMP.	DATE	TEMP.	DATE	TEMP.	DATE	TEMP.	DATE	TEMP.	DATE	TEMP.							
MARYLAND																															
SOUTHERN EASTERN SHORE 01																															
ASSATEAGUE IS NATL SEA	102	6/ 3			3/20	13	3/22	19	4/ 2	22	4/ 2	22	4/12	31	11/19	29	11/22	28	11/24	22	12/ 5	15	12/ 5	15	15260	258	236	234	221		
CRISFIELD SOMERS COVE	94	7/11	9	12/23	NONE		2/25	20	3/ 8	22	3/11	28	3/23	32	11/22	28	11/22	28	12/ 4	23	12/16	20	12/21	15	294	271	256	244			
PRINCESS ANNE					2/26	16	2/26	16	MSG		MSG		MSG		MSG		11/22	26	11/23	24	11/24	12	11/24	12	12271	1271					
SALISBURY					2/26	13	3/ 8	20	3/11	23	3/20	26	4/13	32	MSG		MSG		MSG		MSG		MSG								
SALISBURY FAA ARPT	94	7/11	2	12/25	2/25	15	2/26	17	3/20	24	4/12	27	4/23	32	11/ 4	31	11/19	28	11/23	15	11/23	15	11/23	15	15271	1270	248	221	195		
SNOW HILL 4 N	96	7/11	4	12/25	2/26	15	2/26	15	3/20	24	4/12	26	4/23	32	10/10	32	11/ 4	28	11/19	24	11/24	15	11/24	15	15271	1271	244	206	170		
CENTRAL EASTERN SHORE 02																															
CAMBRIDGE WATER TRMT P	97	7/11	6	12/25	3/ 7	14	3/ 8	20	3/ 8	20	3/23	26	4/12	29	11/17	31	11/21	22	11/21	22	11/24	20	12/14	16	282	261	258	243	219		
DENTON 2 E					2/25	12	3/ 8	18	3/23	24	4/12	27	4/23	30	MSG		MSG		MSG		MSG		MSG								
ROYAL OAK 2 SSW	97	7/11	6	12/25	2/25	9	3/ 8	20	3/11	24	3/23	28	4/23	32	11/ 4	32	11/22	28	11/24	21	12/ 9	19	12/14	14	292	276	258	244	195		
VIENNA	98	8/16	-1	12/24	2/25	13	3/10	19	3/22	24	4/12	28	4/13	32	11/ 4	29	11/19	25	11/21	22	11/24	14	11/24	14	427	225	244	221	205		
LOWER SOUTHERN 03																															
LA PLATA 1 W	91	7/11	3	12/25	2/10	13	3/ 8	19	3/11	23	4/12	28	4/14	30	11/ 4	29	11/19	28	11/24	14	11/24	14	11/24	14	11/24	14	287	261	258	221	204
MECHANICSVILLE 5 NE	94	7/11	0	12/25	2/11	14	3/11	20	3/20	23	4/14	28	4/14	28	11/ 4	28	11/ 4	28	11/24	14	11/24	14	11/24	14	11/24	14	286	258	249	204	204
OWINGS FERRY LANDING	93	7/11	0	12/25	2/11	16	3/ 9	19	3/20	24	4/12	26	4/14	30	11/ 4	28	11/ 4	28	11/24	12	11/24	12	11/24	12	11/24	12	286	260	249	206	204
PATUXENT RIVER	96	7/11	6	12/22	2/10	15	2/25	19	3/ 8	22	3/11	26	3/20	32	11/19	31	11/23	25	11/24	19	11/24	19	12/14	15	307	272	261	257	244		
TALL TIMBERS					MSG		MSG		MSG		MSG		MSG		MSG		MSG		MSG		MSG		MSG								
UPPER SOUTHERN 04																															
ANNAPOLIS POLICE BRKS	98	7/11	-1	12/22	3/11	15	3/20	20	3/20	20	4/12	28	4/14	31	11/ 4	28	11/ 4	28	11/19	22	11/23	20	11/24	14	258	248	244	206	204		
BALTIMORE WSO ARPT	94	7/23	4	12/23	2/10	15	3/ 8	19	3/11	22	3/20	26	4/23	32	11/ 4	28	11/ 4	28	11/22	24	11/24	17	12/10	15	303	261	256	229	195		
BELTSVILLE	99	7/12	-1	12/23	3/ 8	14	3/ 8	14	3/23	24	4/14	28	4/24	32	11/ 4	30	11/12	28	11/23	24	11/24	13	11/24	13	11/24	13	261	261	245	212	194
COLLEGE PARK	96	7/12	4	12/23	2/ 9	16	3/ 9	19	3/11	22	3/23	27	4/23	32	11/ 4	29	11/19	27	11/24	17	11/24	17	12/10	14	304	260	258	241	195		
DALECARLIA RESVR DC	95	9/10	-2	12/23	3/ 8	12	3/11	18	4/12	22	4/23	28	4/24	29	10/ 9	31	11/ 4	23	11/ 4	23	11/19	20	11/24	12	11/24	12	261	253	206	195	168
GLENN DALE BELL STN	96	7/12	0	12/19	2/25	16	3/20	19	4/12	23	4/24	28	4/24	28	10/ 8	31	11/ 4	24	11/ 4	24	11/24	9	11/24	9	272	249	206	194	167		
LAUREL 3 W			2	12/22	3/ 8	14	3/ 9	19	3/23	23	3/23	23	4/12	29	11/ 4	32	11/19	27	11/23	20	11/23	20	12/10	15	277	259	245	241	206		
NATIONAL ARBORETUM DC	98	9/11			MSG		MSG		MSG		4/12	28	4/14	30	10/ 8	31	MSG		MSG		MSG		MSG								
UPPER MARLBORO 3 NNW	96	7/12			MSG		MSG		4/12	24	4/14	27	4/24	30	10/ 8	32	MSG		MSG		MSG		MSG								
NORTHERN EASTERN SHORE 05																															
CHESTERTOWN	95	9/10	4	12/23	2/25	15	3/ 8	18	3/11	23	3/23	27	4/23	31	11/ 4	30	11/19	28	11/22	24	11/23	19	12/ 9	16	287	260	256	241	195		
MILLINGTON 1 SE	94	9/11	0	12/23	2/25	15	3/ 8	17	3/20	23	4/12	28	4/24	32	11/ 4	28	11/ 4	28	11/23	24	11/24	12	11/24	12	272	261	248	206	194		
NORTHERN CENTRAL 06																															
ABERDEEN PHILLIPS FLD	101	7/11	7	12/22	NONE		3/ 8	16	3/ 8	16	3/13	23	4/12	28	4/23	30	MSG		MSG		MSG		MSG								
BALTIMORE WSO CITY	96	9/10	-1	12/22	3/ 8	11	3/ 9	20	3/23	24	4/12	27	4/24	32	10/10	32	11/ 4	25	11/18	24	11/22	20	11/24	11	261	258	240	206	169		
BENSON POLICE BARRACKS	94	9/10	-1	12/22	3/ 8	14	3/ 9	18	3/ 9	18	3/23	28	4/14	32	11/ 4	29	11/18	27	11/19	22	11/22	20	12/ 4	16	271	258	255	240	204		
BOYDS 2 NW	87	7/11	-5	12/22	3/ 9	15	3/ 9	15	4/11	24	4/13	28	4/23	29	10/ 9	32	11/ 4	26	11/19	19	11/19	19	12/ 4	14	270	255	222	205	169		
CATOCTIN MOUNTAIN PARK	95	6/27	-6	12/25	3/ 8	16	3/23	20	4/14	24	4/24	27	4/24	27	10/ 8	31	11/ 4	24	11/ 4	24	11/22	19	11/24	15	261	244	204	194	167		
CLARKSVILLE 3 NNE	98	7/23	-1	12/22	3/ 8	13	3/13	20	3/23	23	4/23	27	5/ 4	31	10/10	30	11/ 4	24	11/ 4	24	11/23	14	11/23	14	260	255	226	195	159		
CONOWINGO DAM	92	9/10	-1	12/22	3/ 9	16	3/ 9	16	3/ 9	16	3/23	27	4/23	29	11/ 4	27	11/ 4	27	11/19	23	11/24	19	12/ 4	16	270	260	255	226	195		
DAMASCUS 2 SW	93	7/11	-3	12/25	3/ 9	14	3/11	17	4/12	24	4/23	26	4/24	30	9/28	32	11/ 4	23	11/ 4	23	11/22	19	11/24	16	260	256	206	195	157		
EMMITSBURG 2 SE	97	7/11	2	12/22	3/ 8	14	3/ 8	14	3/11	23	3/23	26	4/14	32	11/ 4	31	11/18	27	11/23	24	12/ 4	18	12/ 9	13	276	271	257	240	204		
FREDERICK POLICE BRKS	91	7/11	-1	12/22	3/ 8	10	3/ 9	17	3/23	24	4/23	27	4/24	29	11/ 4	25	11/ 4	25	11/19	22	11/22	20	11/24	14	261	258	241	195	194		
MILLERS 4 NE	93	7/11	3	12/22	NONE		3/ 8	18	3/11	23	3/23	27	4/14	31	11/ 4	30	11/19	27	11/24	24	12/ 3	20	12/ 9	16							
ROCKVILLE 1 NE	95	6/27	0	12/22	3/ 8	13	3/10	20	3/14	22	4/12	26	4/25	30	11/ 4	29	11/18	27	11/19	23	12/ 4	17	12/ 9	14	276	269	250	220	193		
TOWSON	95	7/11	-6	12/25	3/10	15	3/20	19	4/23	23	4/24	26	5/ 4	32	9/28	32	10/23	28	11/ 4	22	11/18	20	11/24	15	259	243	195	182	147		
UNIONVILLE	96	7/22	0	12/25	3/ 9	15	3/24	19	4/23	24	4/23	24	5/ 8	32	10/ 8	32	11/ 4	24	11/ 4	24	11/18	19	11/23	16	259	239	195	195	153		
WESTMINSTER POLICE BRK	95	7/11	0	12/22	3/ 8	15	3/11	20	3/23	22	4/23	28	4/24	30	11/ 4	26	11/ 4	26	11/18	24	11/24	16	11/24	16	162	158	240	195	194		
WOODSTOCK																															

TEMPERATURE EXTREMES AND FREEZE DATA (°F)

MARYLAND AND
DELAWARE
1989

STATION	HIGHEST	DATE	LOWEST	DATE	LAST SPRING MINIMUM OF										FIRST FALL MINIMUM OF										NUMBER OF DAYS BETWEEN DATES				
					16° OR BELOW		20° OR BELOW		24° OR BELOW		28° OR BELOW		32° OR BELOW		32° OR BELOW		28° OR BELOW		24° OR BELOW		20° OR BELOW		16° OR BELOW		16° OR BELOW	20° OR BELOW	24° OR BELOW	28° OR BELOW	32° OR BELOW
					DATE	TEMP.	DATE	TEMP.	DATE	TEMP.	DATE	TEMP.	DATE	TEMP.	DATE	TEMP.	DATE	TEMP.	DATE	TEMP.	DATE	TEMP.	DATE	TEMP.					
APPALACHIAN MOUNTAIN 07	94	7/11	-2	12/24	2/24	15	3/ 8	18	4/10	24	4/14	28	4/23	32	10/ 8	31	11/ 3	25	11/17	24	11/18	20	12/ 3	16	282	255	221	203	168
CUMBERLAND 2	85	7/26	-11	12/23	3/ 9	10	4/11	20	4/13	24	4/24	27	5/ 8	32	10/ 9	31	11/ 4	22	11/ 4	22	11/19	15	11/19	15	255	222	205	194	154
FROSTBURG 2	94	9/11	-2	12/23	3/ 9	15	3/10	20	3/22	24	4/12	28	4/23	30	10/10	32	11/ 4	27	11/19	21	11/23	19	12/ 4	14	270	258	242	206	170
HAGERSTOWN	94	7/12	-6	12/23	3/10	16	4/11	20	4/14	23	4/24	27	5/ 4	31	10/ 9	31	10/23	28	11/ 4	21	11/18	20	12/ 4	12	269	221	204	182	158
HANCOCK																													
ALLEGHENY PLATEAU 08	87	7/24	-15	12/23	3/22	15	4/12	19	4/13	24	5/ 7	28	5/ 8	29	9/24	32	10/ 9	28	11/ 4	22	11/17	18	11/19	13	242	219	205	155	139
MC HENRY 2 NW	85	7/24	-22	12/24	4/11	14	4/14	18	4/24	21	5/ 4	28	5/ 8	32	9/24	31	9/28	28	10/23	23	11/ 4	17	11/19	11	222	204	182	147	139
OAKLAND 1 SE	95	7/ 8	-9	12/23	3/ 9	15	4/14	19	4/14	19	4/24	28	4/25	31	10/ 9	30	10/10	28	11/ 4	22	11/18	20	12/ 4	14	270	218	204	169	167
SAVAGE RIVER DAM																													
DELAWARE																													
NORTHERN 01																													
NEWARK UNIVERSITY FARM	94	7/27	2	12/22	3/ 8	15	3/ 8	15	3/20	23	4/23	28	4/24	30	10/10	32	11/ 4	27	11/22	23	11/24	17	11/30	15	267	261	247	195	169
WILMINGTON WSO ARPT	96	7/26	4	12/23	3/ 8	16	3/13	20	3/13	20	3/23	27	4/14	32	11/ 4	30	11/18	28	11/22	22	11/23	20	12/ 9	14	276	255	254	240	204
WILMINGTON PORTER RSVR	95	6/27	4	12/22	3/ 8	15	3/ 8	15	3/20	22	3/23	27	4/23	32	11/ 4	32	11/19	26	11/22	23	11/24	20	12/ 9	16	276	261	247	241	195
SOUTHERN 02																													
DOVER	97	8/ 5	2	12/23	2/25	12	3/ 8	17	3/20	24	4/12	28	4/23	30	11/ 4	32	11/19	26	11/22	22	12/ 4	19	12/14	11	292	271	247	221	195
GEORGETOWN 5 SW	95	7/12	2	12/25	2/26	14	3/ 8	20	3/20	23	4/12	26	4/23	31	10/10	32	11/18	25	11/23	23	11/24	16	11/24	16	271	261	248	220	170
GREENWOOD 2 NE	94	7/11	3	12/23	2/25	12	3/ 8	19	3/20	24	4/12	28	4/23	32	11/ 4	30	11/19	27	11/23	24	11/24	9	11/24	9	272	261	248	221	195
LEWES	94	6/ 2	7	12/22	2/25	14	2/25	14	3/ 8	22	3/20	26	4/12	31	11/19	29	11/22	27	11/24	20	11/24	20	12/17	14	295	272	261	247	221
MILFORD 4 SE	94	9/11	5	12/23	2/25	11	3/ 8	20	3/11	23	3/23	27	4/12	29	11/ 4	31	11/19	28	11/24	14	11/24	14	11/24	14	272	261	258	241	206

SEE REFERENCE NOTES FOLLOWING STATION INDEX

MONTHLY AND SEASONAL COOLING DEGREE DAYS
BASE=65 DEGREES FAHRENHEIT

STATION	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL	SEASONAL NORM
MARYLAND														
SOUTHERN EASTERN SHORE 01														
ASSATEAGUE IS NATL SEA	0	-	0	0	91	321	378	319	223	32	B	2	B	0
CRISFIELD SOMERS COVE	0	0	B	6	84	403	441	380	267	38	0	0	B	1626
PRINCESS ANNE	0	B	0	11	64	332	361	332	267	37	3	-	0	1063
SALISBURY	0	0	0	16	8	50	-	302	225	-	0	0	0	1200
SALISBURY FAA ARPT	0	0	0	14	8	51	324	344	207	38	6	0	0	1074
SNOW HILL 4 N	0	0	11	10	67	352	360	339	230	38	2	0	0	1058
CENTRAL EASTERN SHORE 02														
CAMBRIDGE WATER TRMT P	0	0	B	17	5	81	364	408	370	240	40	1	0	B
DENTON 2 E	0	0	B	6	10	79	-	-	-	-	-	-	0	1526
ROYAL OAK 2 SSW	0	0	0	12	3	71	353	407	337	196	39	1	0	1419
VIENNA	0	0	0	6	4	87	359	398	B	350	210	39	0	B
LOWER SOUTHERN LA PLATA 1 W 03	0	0	31	8	65	268	307	264	154	11	2	0	0	1110
MECHANICSVILLE 5 NE	0	0	20	8	62	288	323	276	165	24	3	0	0	1169
OWINGS FERRY LANDING	0	0	20	4	B	66	270	298	301	174	37	1	0	B
PATUXENT RIVER	0	0	15	7	60	349	401	357	236	46	6	0	0	1477
TALL TIMBERS	-	-	-	-	-	-	-	-	-	-	-	-	-	-
UPPER SOUTHERN ANNAPOLIS POLICE BRKS 04	0	0	12	3	70	306	367	298	173	22	0	0	0	1251
BALTIMORE WSO ARPT	0	0	14	5	58	276	351	298	178	25	1	0	0	1206
BELTSVILLE	0	B	0	10	2	52	273	348	288	169	17	4	0	B
COLLEGE PARK	0	0	16	4	81	320	399	333	201	22	2	0	0	B
DALECARLIA RESVR DC	0	0	11	3	57	276	330	270	170	28	0	0	0	B
GLENN DALE BELL STN	0	0	13	3	54	264	333	B	283	153	27	1	0	B
LAUREL 3 W	0	0	13	2	82	269	331	-	193	37	1	0	0	-
NATIONAL ARBORETUM DC	0	-	-	3	65	287	337	256	139	9	-	0	0	-
UPPER MARLBORO 3 NNW	0	0	-	1	44	267	313	258	148	10	-	-	-	-
NORTHERN EASTERN SHORE 05														
CHESTERTOWN	0	0	13	4	73	319	368	327	180	22	3	0	0	1309
MILLINGTON 1 SE	0	0	16	5	57	290	322	B	275	177	23	2	0	B
NORTHERN CENTRAL ABERDEEN PHILLIPS FLD 06	-	-	B	9	B	66	277	-	299	-	-	-	-	-
BALTIMORE WSO CITY	0	0	22	25	143	397	472	432	241	58	7	0	0	1797
BENSON POLICE BARRACKS	0	0	12	1	68	281	351	301	155	21	0	0	0	1190
BOYDS 2 NW	0	B	0	16	3	56	230	316	275	146	30	0	0	B
CATOCTIN MOUNTAIN PARK	0	0	8	2	32	143	192	167	78	21	0	0	0	B
CLARKSVILLE 3 NNE	0	0	15	0	44	256	329	287	144	19	2	0	0	1096
CONOWINGO DAM	0	0	0	0	38	215	304	274	145	9	0	0	0	B
DAMASCUS 2 SW	0	0	13	4	52	220	298	259	134	27	0	0	0	1007
EMMITSBURG 2 SE	0	0	9	0	33	222	303	252	99	18	0	0	0	936
FREDERICK POLICE BRKS	0	0	18	7	82	310	391	348	194	37	0	0	0	1387
MILLERS 4 NE	0	0	11	0	40	200	277	231	113	21	0	0	0	893
ROCKVILLE 1 NE	0	0	12	5	55	266	342	295	152	23	1	0	0	1151
TOWSON	0	0	5	0	56	263	331	290	139	23	0	0	0	1107
UNIONVILLE	0	0	7	0	37	231	310	250	126	12	1	0	0	974
WESTMINSTER POLICE BRK	0	0	11	0	B	48	195	271	107	18	0	0	0	B
WOODSTOCK	0	0	14	1	58	267	338	295	151	22	1	0	0	1147
APPALACHIAN MOUNTAIN 07														
CUMBERLAND 2	B	0	0	16	2	63	191	304	242	104	11	0	0	B
FROSTBURG 2	0	B	0	4	0	14	83	139	90	39	2	0	0	B
HAGERSTOWN	0	0	15	3	62	227	-	265	121	22	0	0	0	-
HANCOCK	0	0	7	0	33	174	281	213	103	8	0	0	0	819

SEE REFERENCE NOTES FOLLOWING STATION INDEX

MONTHLY AND SEASONAL COOLING DEGREE DAYS
BASE=65 DEGREES FAHRENHEIT

MARYLAND AND
DELAWARE
1989

STATION	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL	SEASONAL NORM
ALLEGHENY PLATEAU 08														
MC HENRY 2 NW	0	0	6	0	15	83	171	87	43	1	0	0	406	
OAKLAND 1 SE	0	0	4	0	9	87	155	96	44	2	0	0	397	276
SAVAGE RIVER DAM	0	0	0	0	12	114	209	131	66	2	0	0	534	417
DELAWARE														
NORTHERN 01														
NEWARK UNIVERSITY FARM	0	0	5	0	60	260	339	305	171	21	0	0	1161	1003
WILMINGTON WSO ARPT	0	0	6	0	61	287	345	299	162	17	0	0	1177	1015
WILMINGTON PORTER RSVR	0	0	6	0	54	257	322	277	152	18	0	0	1086	901
SOUTHERN 02														
DOVER	0	0	20	4	61	310	384	345	211	43	0	0	1378	1179
GEORGETOWN 5 SW	0	0	6	3	51	313	339	289	184	29	7	0	1221	1050
GREENWOOD 2 NE	0	0	16	3	63	301	332	282	173	27	0	0	1197	
LEWES	0	0	18	7	60	344	385	350	240	45	4	0	1453	946
MILFORD 4 SE	0	0	15	7	54	319	342	299	193	38	3	0	1270	1101

SEE REFERENCE NOTES FOLLOWING STATION INDEX

TOTAL EVAPORATION AND WIND MOVEMENT

MARYLAND AND
DELAWARE
1989

STATION		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
MARYLAND														
UPPER SOUTHERN	04													
BELTSVILLE														
	WIND	-	-	-	B 1159	750	521	618	883	915	1098	-	-	-
	EVAP	-	-	-	B 4.53	B 4.69	5.70	B 6.61	5.06	B 4.33	B 2.88	-	-	-
	MAX TEMP	-	-	-	M 70.0	M 77.8	89.9	92.4	M 87.7	82.4	M 68.4	-	-	M -
	MIN TEMP	-	-	-	M 44.4	M 55.5	68.0	70.0	M 67.3	60.3	M 47.8	-	-	M -
UPPER MARLBORO 3 NNW														
	WIND	-	-	-	B 217	-	-	-	-	-	-	-	-	-
	EVAP	-	-	-	B 4.92	B 5.13	B 6.08	6.23	4.58	B 4.20	B 3.77	-	-	-
	MAX TEMP	-	-	-	64.5	70.7	77.2	79.3	78.7	76.1	64.2	-	-	M -
	MIN TEMP	-	-	-	45.1	55.6	67.6	67.4	65.6	59.6	47.0	-	-	M -
ALLEGHENY PLATEAU 08														
SAVAGE RIVER DAM														
	WIND	-	-	-	B 1513	1248	774	747	870	841	1040	-	-	-
	EVAP	-	-	-	B 4.77	B 4.44	-	B 4.35	B 4.08	B 2.99	-	-	-	-
	MAX TEMP	-	-	-	-	-	-	-	-	-	-	-	-	-
	MIN TEMP	-	-	-	-	-	-	-	-	-	-	-	-	-
DELAWARE														
NORTHERN	01													
NEWARK UNIVERSITY FARM														
	WIND	-	-	-	1304	1218	905	797	811	1055	1117	-	-	-
	EVAP	-	-	-	-	B 4.88	B 5.92	B 6.47	B 4.79	B 3.89	B 2.79	-	-	-
	MAX TEMP	-	-	-	-	-	-	-	-	-	-	-	-	-
	MIN TEMP	-	-	-	-	-	-	-	-	-	-	-	-	-
SOUTHERN	02													
GEORGETOWN 5 SW														
	WIND	-	-	-	2492	2222	1921	1534	1429	1536	1729	-	-	-
	EVAP	-	-	-	7.60	B 5.81	B 7.51	B 8.33	-	B 4.45	B 4.07	-	-	-
	MAX TEMP	-	-	-	M 69.0	77.1	89.9	92.1	87.0	83.9	71.2	-	-	M -
	MIN TEMP	-	-	-	M 45.3	55.3	69.0	69.4	68.4	62.6	50.0	-	-	M -

SEE REFERENCE NOTES FOLLOWING STATION INDEX

STATION INDEX

MARYLAND AND
DELAWARE
1989

STATION	INDEX NO.	DIVISION NO.	COUNTY	LATITUDE	LONGITUDE	ELEVATION FEET	YEARS OF RECORD			OPENED OR CLOSED DURING YR		SEE REFERENCE NOTES
							TEMP.	PRECIP.	EVAP.	MONTH OPENED	MONTH CLOSED	
MARYLAND												
ABERDEEN PHILLIPS FLD	00115	06	HARFORD	39 28	76 10W	57	64	64	0			C H
ANNAPOLIS POLICE BRKS	01933	04	ANNE ARUNDEL	38 59	76 30W	30	31	31	0			H H
ASSATEAGUE IS NATL SEA	03335	01	WORCESTER	38 14	75 8W	7	22	22	0			H H
BALTIMORE WSO ARPT	04665	04	ANNE ARUNDEL	39 11	76 40W	148	55	55	0			C H J
BALTIMORE WSO CITY #	04700	06	BALTIMORE CI	39 17	76 37W	141	119	119	0			C H
BELTSVILLE	07000	04	PRINCE GEORG	39 2	76 53W	120	52	52	4			C H
BENSON POLICE BARRACKS	07332	06	HARFORD	39 30	76 23W	365	42	42	0			C H
BOYDS 2 NW	10332	06	MONTGOMERY	39 13	77 20W	581	37	37	0			H
BRIGHTON DAM	1125	06	MONTGOMERY	39 12	77 1W	331	0	44	0			
CAMBRIDGE WATER TRMT P	1385	02	DORCHESTER	38 34	76 4W	10	95	95	0			C H
CATOCTIN MOUNTAIN PARK	1530	06	FREDERICK	39 39	77 29W	1610	23	23	0			H H
CHESTERTOWN	1750	05	KENT	39 13	76 4W	39	84	84	0			C H
CLARKSVILLE 3 NNE	1862	06	HOWARD	39 15	76 56W	365	23	23	0			H H
COLLEGE PARK	1995	04	PRINCE GEORG	38 59	76 57W	901	103	103	0			C H
CONOWINGO DAM	2060	06	HARFORD	39 39	76 10W	39	54	54	0			
CRISFIELD SOMERS COVE	2215	01	SOMERSET	37 59	75 52W	8	27	27	0			
CUMBERLAND 2	2282	07	ALLEGANY	39 38	78 45W	730	17	17	0			H
DALECARLIA RESVR DC	2325	04	DIS COLUMBIA	38 56	77 7W	151	44	44	0			
DAMASCUS 2 SW	2335	06	MONTGOMERY	39 16	77 14W	722	17	17	0			H H
DENTON 2 E	2523	02	CAROLINE	38 53	75 48W	49	39	39	0			H H
EDGEMONT	2770	07	WASHINGTON	39 40	77 33W	905	0	51	0			
EMMITTSBURG 2 SE	2906	06	FREDERICK	39 41	77 18W	420	34	34	0			H H
FREDERICK POLICE BRKS	3348	06	FREDERICK	39 25	77 26W	381	17	17	0			H H
FREDERICK 3 E	3355	06	FREDERICK	39 24	77 22W	385	0	41	0			
FROSTBURG 2	3415	07	ALLEGANY	39 40	78 56W	2172	18	18	0			H H
GLENN DALE BELL STN	3675	04	PRINCE GEORG	38 58	76 48W	151	69	69	0			H
HAGERSTOWN	3975	07	WASHINGTON	39 39	77 44W	659	48	48	0			C H
HANCOCK	4030	07	WASHINGTON	39 42	78 11W	428	56	56	0			H H
LA PLATA 1 W	5080	03	CHARLES	38 32	77 0W	140	75	75	0			C H
LAUREL 3 W	5111	04	PRINCE GEORG	39 6	76 54W	400	99	99	0			
MC HENRY 2 NW	5832	08	GARRETT	39 35	79 22W	2680	19	19	0			C H
MECHANICSVILLE 5 NE	5865	03	ST MARYS	38 27	76 41W	100	28	28	0			H H
MERRILL	5894	08	GARRETT	39 36	79 5W	1791	0	38	0			C H
MILLERS 4 NE	5934	06	CARROLL	39 43	76 48W	860	3	3	0			C H
MILLINGTON 1 SE	5985	05	KENT	39 16	75 52W	30	93	93	0			
NATIONAL ARBORETUM DC	6350	04	DIS COLUMBIA	38 54	76 59W	49	43	43	0			H H
OAKLAND 1 SE	6620	08	GARRETT	39 24	79 24W	2421	92	92	0			H H
OWINGS FERRY LANDING	6770	03	CALVERT	38 41	76 40W	160	73	73	0			C H
PATUXENT RIVER	6915	03	ST MARYS	38 20	76 25W	38	14	14	0			H H
POTOMAC FILTER PLANT	7272	06	MONTGOMERY	39 2	77 15W	269	0	28	0			
PRINCESS ANNE	7330	01	SOMERSET	38 13	75 41W	20	41	41	0			
ROCKVILLE 1 NE	7705	06	MONTGOMERY	39 6	77 6W	440	42	42	0			H H
ROYAL OAK 2 SSW	7806	02	TALBOT	38 43	76 11W	10	42	42	0			
SALISBURY	8000	01	WICOMICO	38 22	75 35W	10	83	83	0			
SALISBURY FAA ARPT #	8005	01	WICOMICO	38 20	75 31W	48	42	42	0			C H
SAVAGE RIVER DAM	8065	08	GARRETT	39 31	79 8W	1495	39	42	3			H H
SNOW HILL 4 N	8380	01	WORCESTER	38 14	75 23W	30	74	74	0			H H
TALL TIMBERS	8757	03	ST MARYS	38 10	76 33W	12	2	2	0			H
TOWSON	8877	06	BALTIMORE	39 23	76 34W	390	52	77	0			
UNIONVILLE	9030	06	FREDERICK	39 27	77 11W	430	50	48	0			C H
UPPER MARLBORO 3 NNW	9070	04	PRINCE GEORG	38 52	76 47W	98	34	34	34			H
VIENNA	9140	02	DORCHESTER	38 29	75 50W	10	41	41	0			
WESTMINSTER POLICE BRK	9440	06	CARROLL	39 33	76 58W	765	11	11	0			H

SEE REFERENCE NOTES FOLLOWING STATION INDEX

STATION INDEX

MARYLAND AND
DELAWARE
1989

STATION	INDEX NO.	DIVISION NO.	COUNTY	LATITUDE	LONGITUDE	ELEVATION FEET	YEARS OF RECORD			OPENED OR CLOSED DURING YR		SEE REFERENCE NOTES
							TEMP.	PRECIP.	EVAP.	MONTH OPENED	MONTH CLOSED	
WOODSTOCK	9750	06	BALTIMORE	39 20	76 52 W	459	120	120	0			H
DELAWARE												
DOVER	2730	02	KENT	39 9	75 31 W	30	102	101	0			H
GEORGETOWN 5 SW	35700	02	SUSSEX	38 38	75 27 W	45	44	44	36			C H
GREENWOOD 2 NE	3595	02	SUSSEX	38 50	75 35 W	45	5	5	0			H
LEWES	53200	02	SUSSEX	38 46	75 8 W	15	46	46	0			
MILFORD 4 SE	5915	02	SUSSEX	38 54	75 28 W	30	94	94	0			H
NEWARK UNIVERSITY FARM	6410	01	NEW CASTLE	39 40	75 44 W	90	77	77	33			C H
WILMINGTON WSO ARPT	R 9595	01	NEW CASTLE	39 40	75 36 W	79	42	42	0			C H J
WILMINGTON PORTER RSVR	9605	01	NEW CASTLE	39 46	75 32 W	274	78	78	0			H

SEE REFERENCE NOTES FOLLOWING STATION INDEX

REFERENCE NOTES

MARYLAND AND
DELAWARE
1989

DEFINITIONS

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 both temperature and precipitation (ie: not precipitation alone).

NORMALS: The average value of the meteorological element over the time period - 1951-1980. 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 degree that the daily mean temperature is below (above) 65 deg. F

SOIL TEMPERATURE EXTREMES: The highest and lowest MAX and MIN temperature for each month and the year.

WIND: (As shown in "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.
- * Rain gage not read. Precipitation is included in the amount following the asterisks. Time distribution not known.
- // Rain 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. (HAWAII stations)
- B Estimated total value for wind, evaporation, or cooling degree days.
- 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.
- R Amounts from recording rain gage.
- T Trace. An amount too small to measure.
- V Includes total for previous month(s). (See * above)
- Z Same as M but the Z has overprinted a Negative sign or leading digit (eg. Z14.6 = M-14.6, Z08.2 = M108.2).

SYMBOLS AND LETTERS USED IN THE STATION INDEX TABLE

Thermometers located in a 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 Ground" table in Monthly "Climatological Data" publications.

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, except Alaska.

The graphic displays appearing in this publication were first produced for the 1986 annual. The types of graphs and the information they portray may vary from year to year and from state to state in order to highlight climatic features of state, regional, and historical interest. Some graphs present information for "clusters". A cluster is a group of up to four (4) adjacent divisions that comprise an area of similar climate.

Information concerning the history of changes in locations, exposure, etc. of substations is kept on file at the National Climatic Data Center. Similar historical information for regular National Weather Service Offices is available from the "Local Climatological Data" annual bulletin.

Additional Information regarding the climate of this state may be obtained by writing to the address below or to any weather service office near you. 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 in digital form on magnetic tape and diskette.

SUBSCRIPTION, PRICE AND ORDERING INFORMATION AVAILABLE FROM:

NATIONAL CLIMATIC DATA CENTER
FEDERAL BUILDING
ASHEVILLE, N. C. 28801-2696

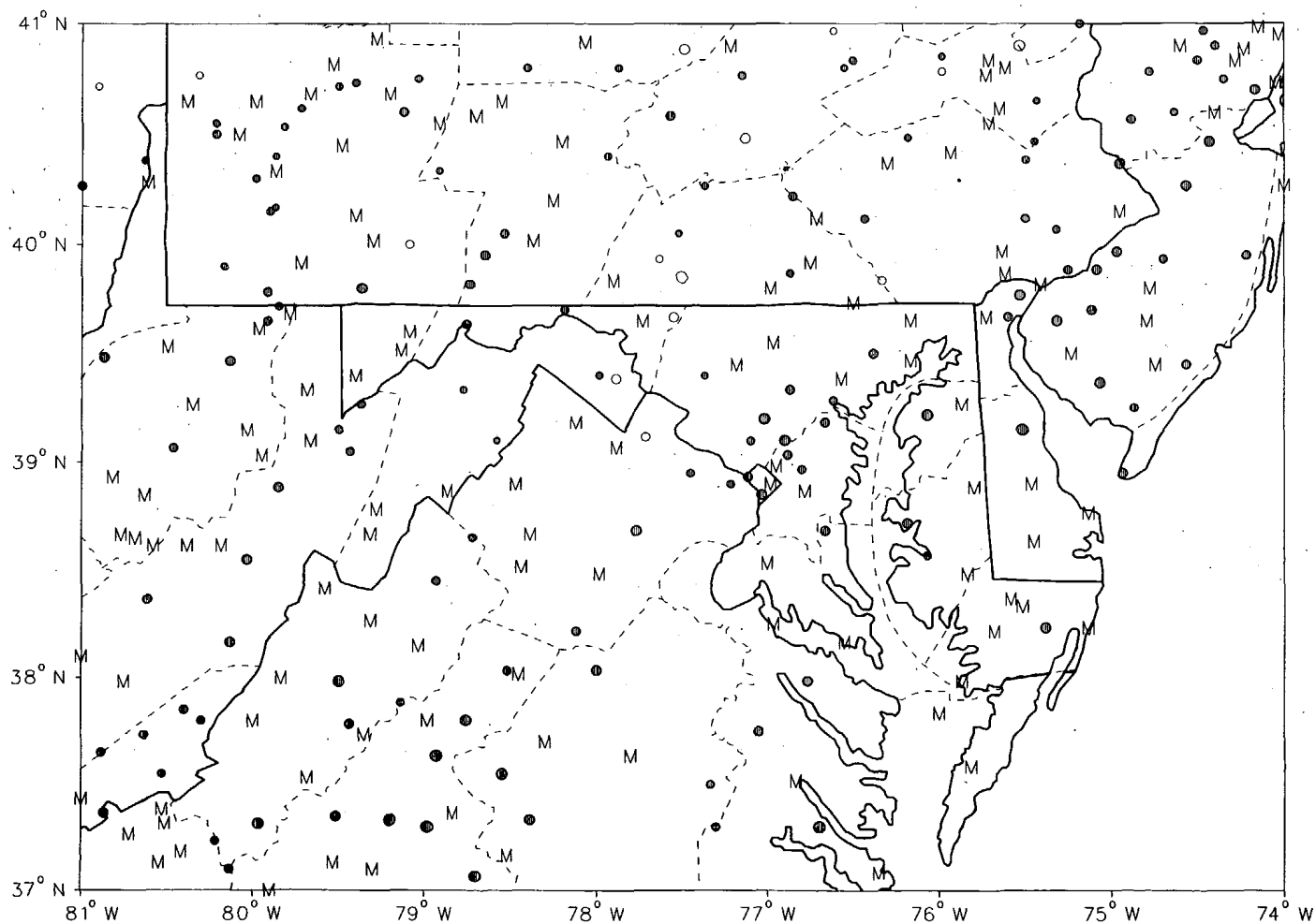
CUMULATIVE ANNUAL PRECIPITATION DEPARTURE FROM INDIVIDUAL STATION NORMALS (1951-1980) FOR 1989 DELAWARE

M INCOMPLETE DATA FOR THE PERIOD

▽ EXACTLY NORMAL

○ ○ ○ ○ 5,10,20,... 50% OR MORE BELOW NORMAL

● ● ● ● 10,20,40,...100% OR MORE ABOVE NORMAL

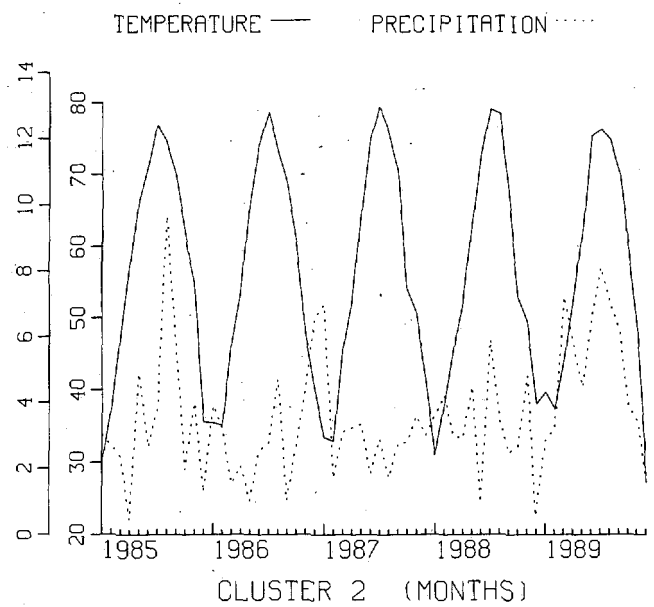
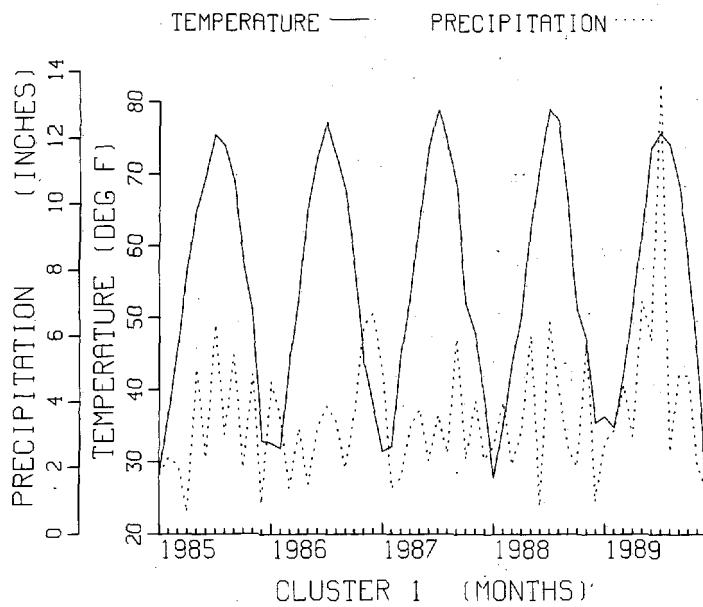


CIRCLE DIAMETER IS PROPORTIONAL TO DEPARTURE ON A CONTINUOUS SCALE

MONTHLY TEMPERATURE AND PRECIPITATION FOR
THE LAST 60 MONTHS
ENDING DECEMBER 1989
DELAWARE

CLUSTER 1 -DIVISION(S):
NORTHERN 01

CLUSTER 2 -DIVISION(S):
SOUTHERN 02



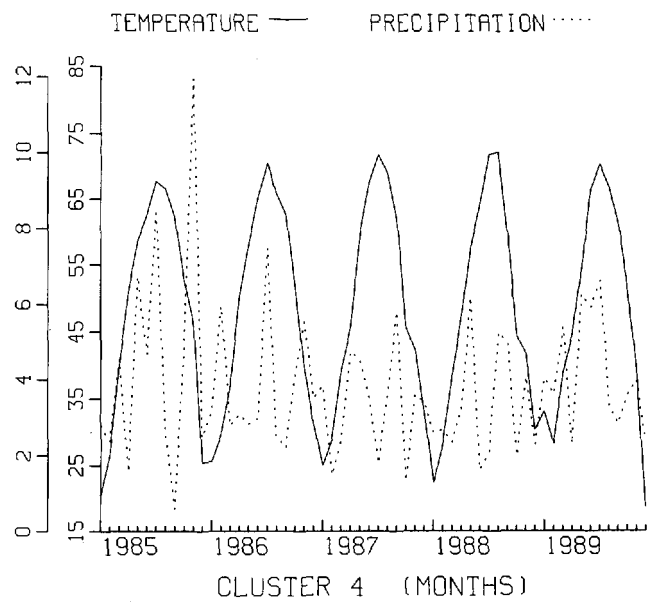
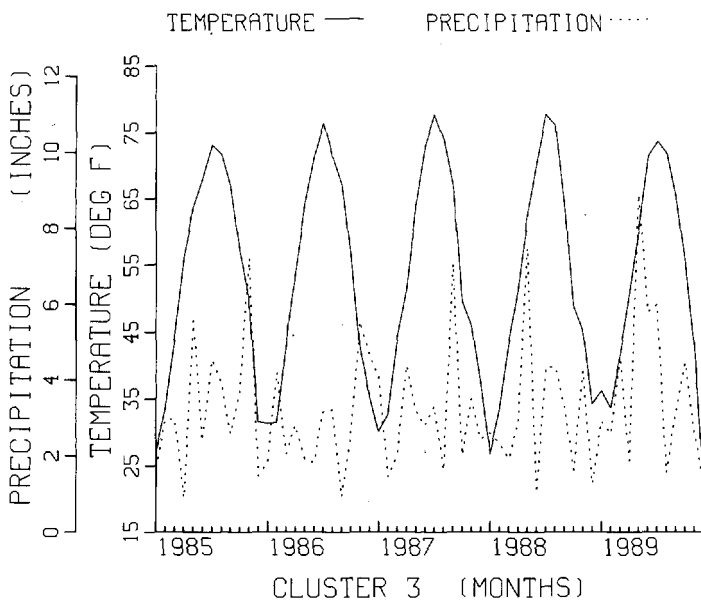
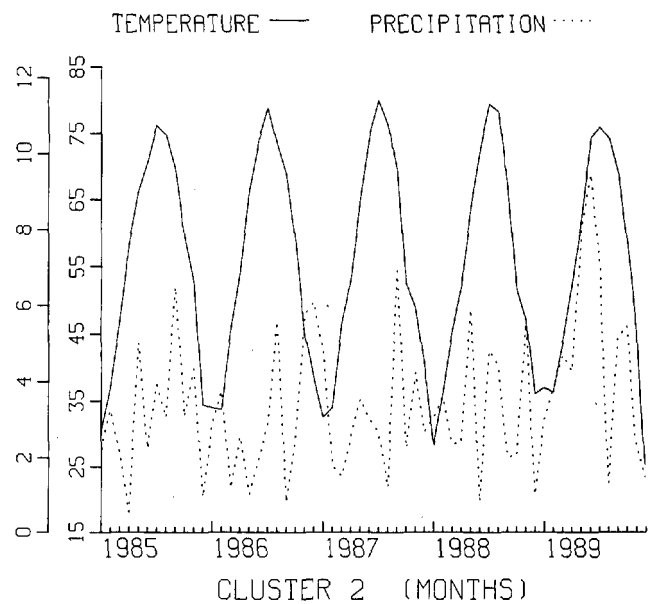
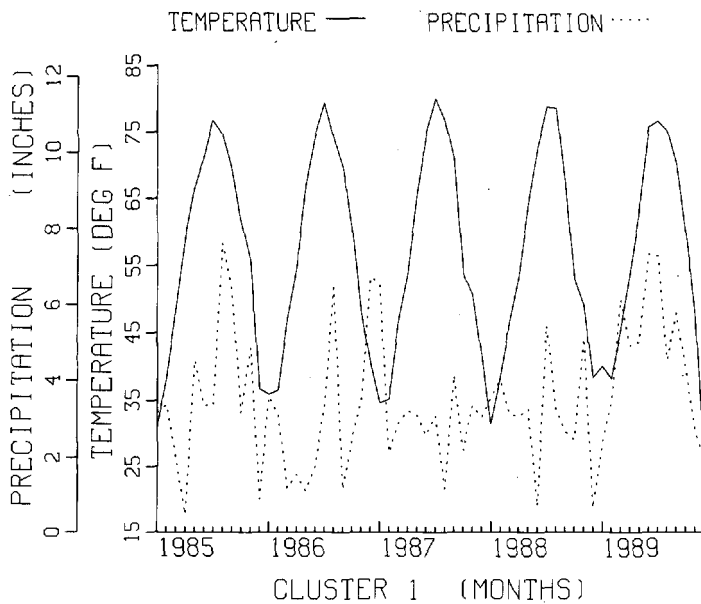
MONTHLY TEMPERATURE AND PRECIPITATION FOR THE LAST 60 MONTHS ENDING DECEMBER 1989 MARYLAND

CLUSTER 1 -DIVISION(S):
SOUTHERN EASTERN SHORE 01
CENTRAL EASTERN SHORE 02
LOWER SOUTHERN 03

CLUSTER 2 -DIVISION(S):
UPPER SOUTHERN 04
NORTHERN EASTERN SHORE 05

CLUSTER 3 -DIVISION(S):
NORTHERN CENTRAL 06
APPALACHIAN MOUNTAIN 07

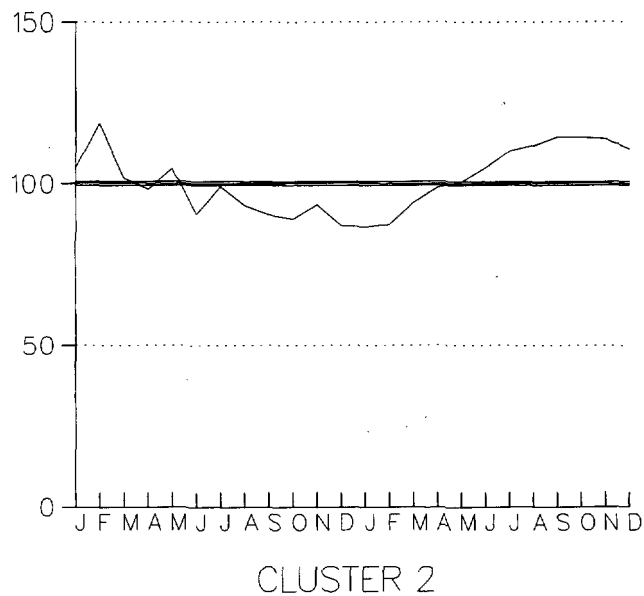
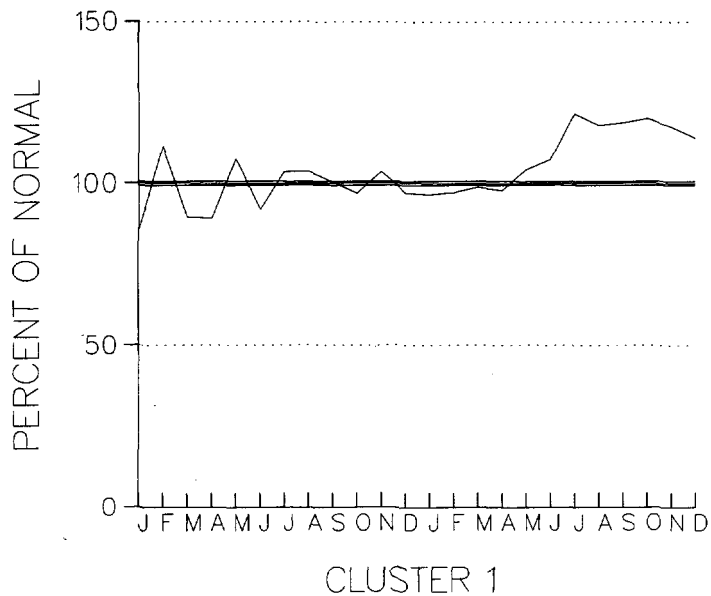
CLUSTER 4 -DIVISION(S):
ALLEGHENY PLATEAU 08



CUMULATIVE PRECIPITATION DEPARTURES FROM NORMAL (1951-1980) FOR THE LAST 24 MONTHS ENDING DECEMBER 1989 DELAWARE

CLUSTER 1 -DIVISION(S):
 NORTHERN 01

CLUSTER 2 -DIVISION(S):
 SOUTHERN 02



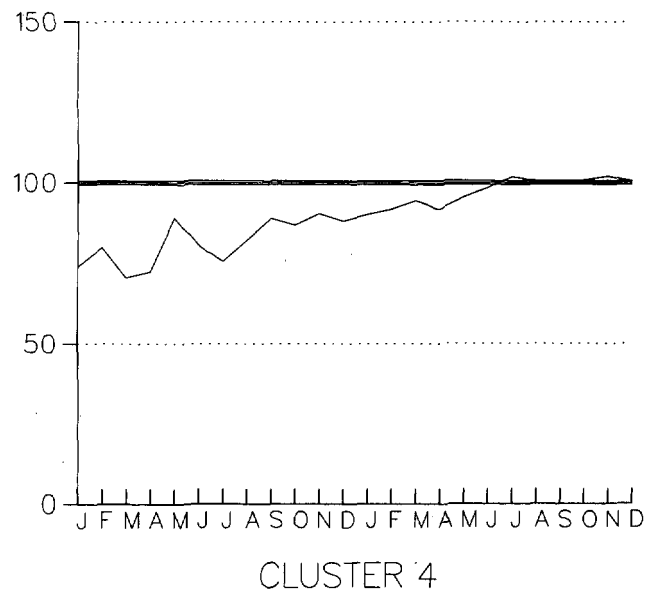
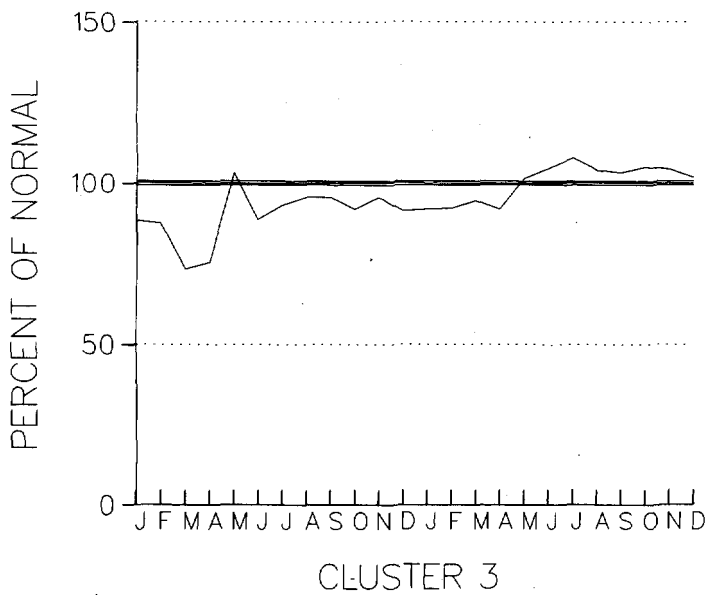
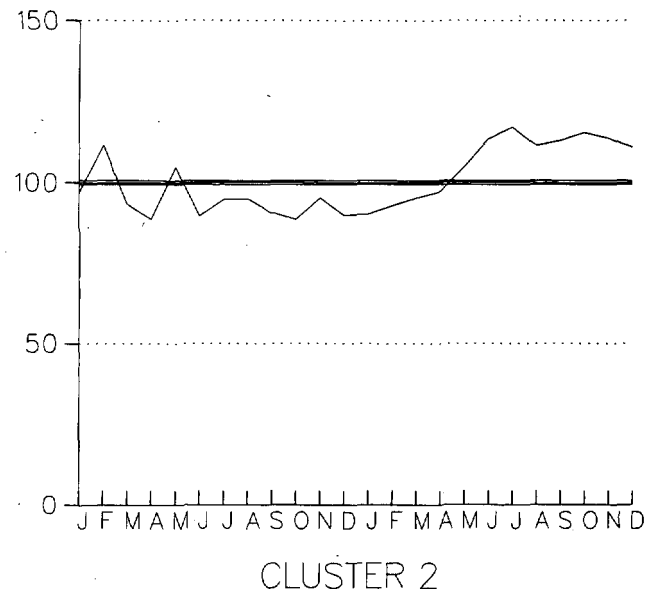
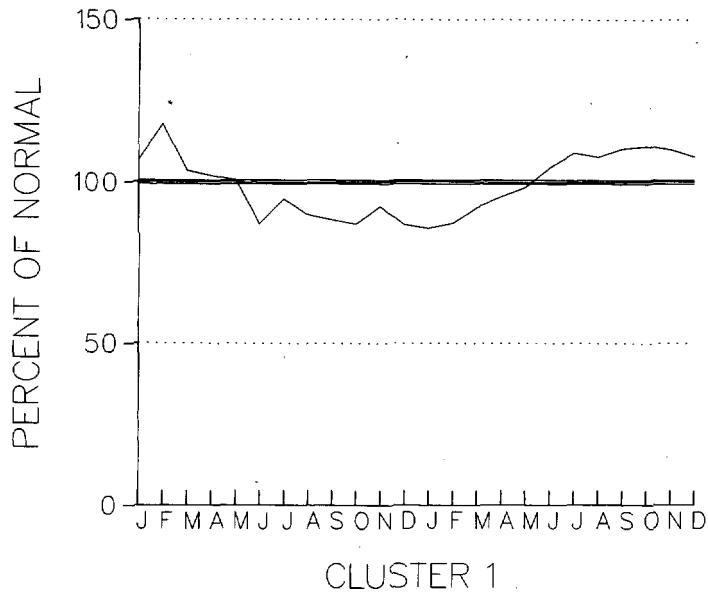
CUMULATIVE PRECIPITATION DEPARTURES FROM NORMAL (1951-1980) FOR THE LAST 24 MONTHS ENDING DECEMBER 1989 MARYLAND

CLUSTER 1 -DIVISION(S):
SOUTHERN EASTERN SHORE 01
CENTRAL EASTERN SHORE 02
LOWER SOUTHERN 03

CLUSTER 2 -DIVISION(S):
UPPER SOUTHERN 04
NORTHERN EASTERN SHORE 05

CLUSTER 3 -DIVISION(S):
NORTHERN CENTRAL 06
APPALACHIAN MOUNTAIN 07

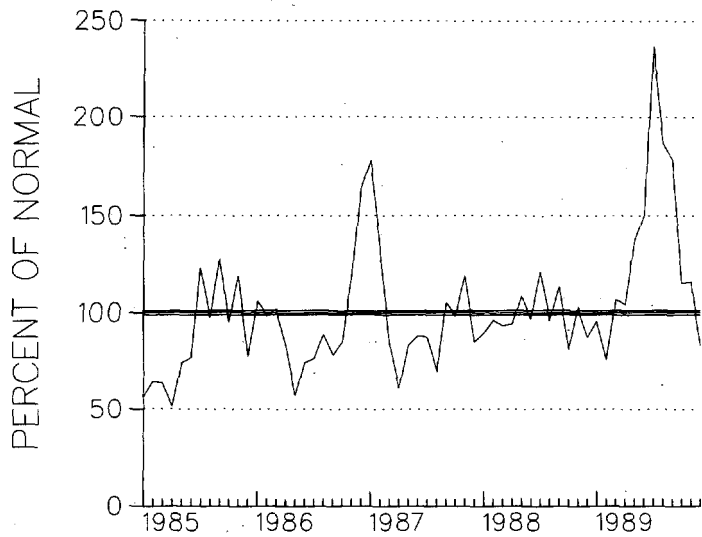
CLUSTER 4 -DIVISION(S):
ALLEGHENY PLATEAU 08



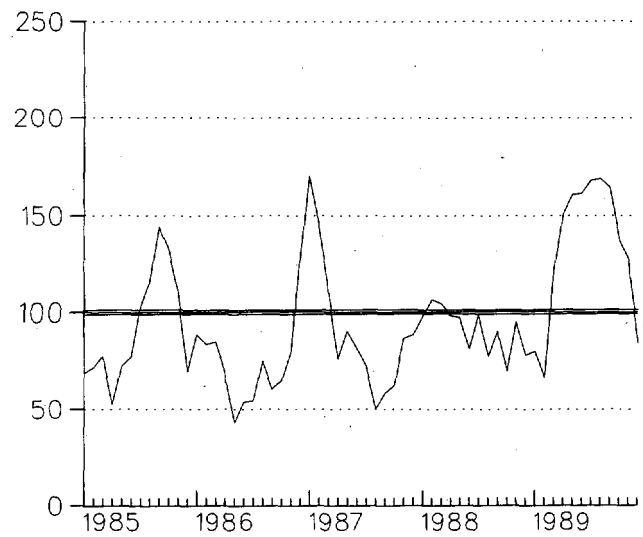
PRECIPITATION DEPARTURES FROM NORMAL (1951-1980)
THREE MONTH RUNNING MEAN
FOR THE 60 MONTHS ENDING WITH DECEMBER 1989 DATA
DELAWARE

CLUSTER 1 -DIVISION(S):
NORTHERN 01

CLUSTER 2 -DIVISION(S):
SOUTHERN 02



CLUSTER 1



CLUSTER 2

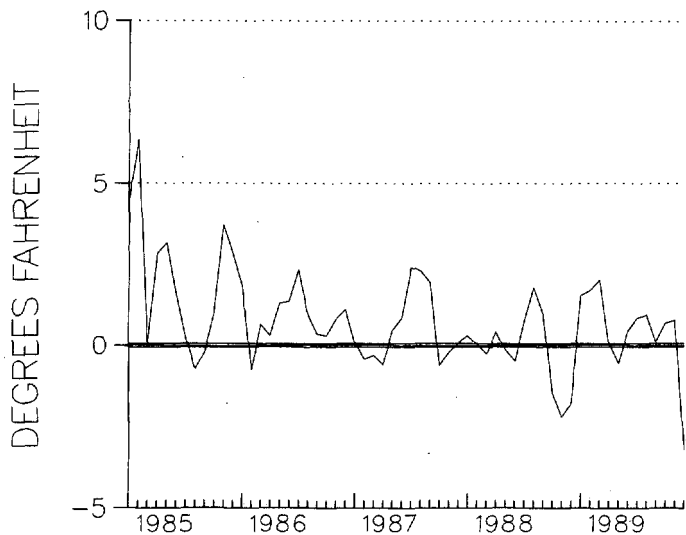
TEMPERATURE DEPARTURES FROM NORMAL (1951-1980)
THREE MONTH RUNNING MEAN
FOR THE 60 MONTHS ENDING WITH DECEMBER 1989 DATA
MARYLAND

CLUSTER 1 -DIVISION(S):
SOUTHERN EASTERN SHORE 01
CENTRAL EASTERN SHORE 02
LOWER SOUTHERN 03

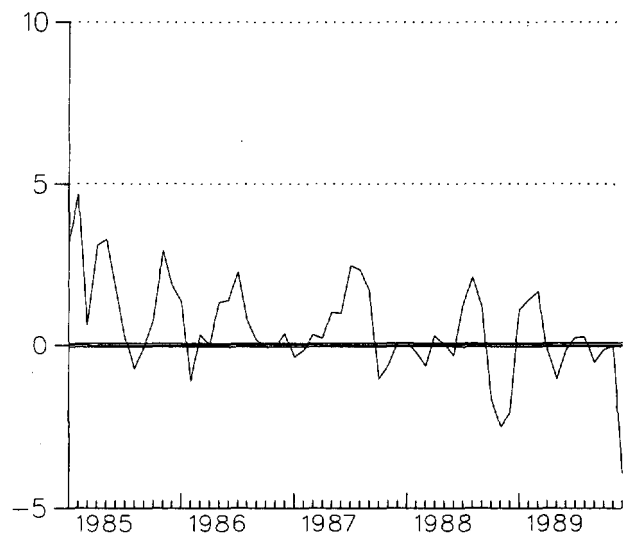
CLUSTER 3 -DIVISION(S):
NORTHERN CENTRAL 06
APPALACHIAN MOUNTAIN 07

CLUSTER 2 -DIVISION(S):
UPPER SOUTHERN 04
NORTHERN EASTERN SHORE 05

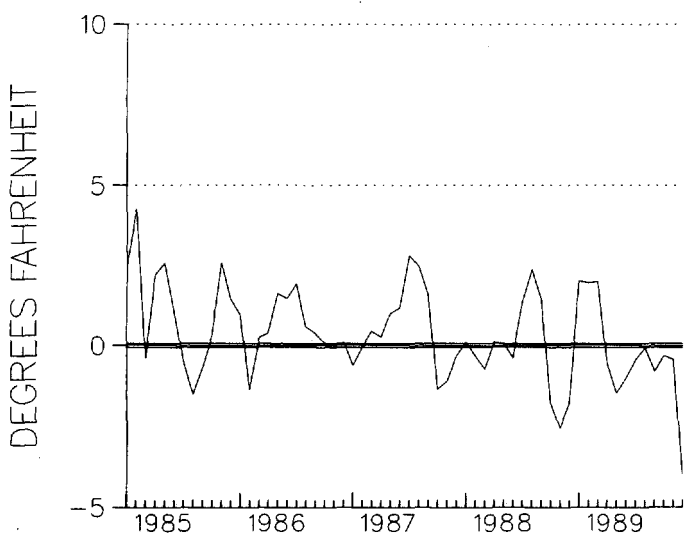
CLUSTER 4 -DIVISION(S):
ALLEGHENY PLATEAU 08



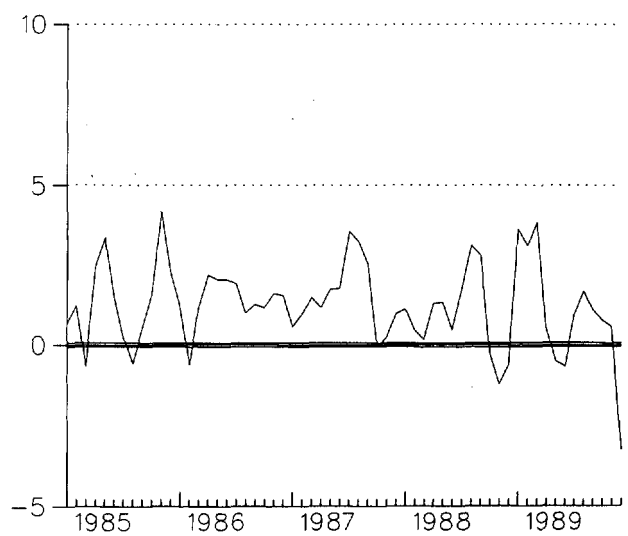
CLUSTER 1



CLUSTER 2



CLUSTER 3



CLUSTER 4

[illegible]

DATA PUBLISHED IN:

- CLIMATOLOGICAL DATA
- HOURLY PRECIPITATION DATA
- △ CLIMATOLOGICAL DATA AND HOURLY PRECIPITATION DATA

For further information, refer to the station index and references notes.

DIVISIONS

- 1 SOUTHERN EASTERN SHORE
- 2 CENTRAL EASTERN SHORE
- 3 LOWER SOUTHERN
- 4 UPPER SOUTHERN
- 5 NORTHERN EASTERN SHORE
- 6 NORTHERN CENTRAL
- 7 APPALACHIAN MOUNTAIN
- 8 ALLEGHENY PLATEAU

76.0
40.0

75.0

40.0

07 - DELAWARE

ALBERT EQUAL AREA PROJECTION
STANDARD PARALLELS AT 29.3 AND 45.3 DEGS.

STATUTE MILES



STATION LEGEND

DATA PUBLISHED IN:

- CLIMATOLOGICAL DATA
- HOURLY PRECIPITATION DATA
- △ CLIMATOLOGICAL DATA AND HOURLY PRECIPITATION DATA

For further information, refer to the
station index and references notes.

DIVISIONS

- 1 NORTHERN
- 2 SOUTHERN

39.0

39.0

2

WILMINGTON PORTER RESERVOIR

NEWARK UNIVERSITY PARK

WILMINGTON WSO AP

1

MIDDLETOWN 1 WSW

DOVER

MILFORD 4 SE

BRIDGEVILLE 1 NW

LEWES

GEORGETOWN 5 SW

38.0
76.0

75.0

38.0

MONTHLY PRECIPITATION TOTALS													ANNUAL 1987 NORTH CAROLINA
STATION	ANNUAL	MONTH											
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
NORTH CAROLINA													
ASHEVILLE WSO AP	34.57	1.11	1.85	2.75	0.57	3.55					4.19	5.28	4.28
ASHEVILLE	29.67	0.71	1.57	1.81	0.53	2.55					2.77	4.15	2.94
ASHFORD	36.74E	1.20	2.70	2.90	0.54E						3.80	4.90	4.80
BADIN			1.30	2.60	1.20						2.40	4.10	2.90
B EVERETT JORDAN DAM		1.70	1.50	3.50							1.70		
BOOMER 5 WSW			1.00	2.10									
BURLINGTON 3 WNE			0.80	1.50E									
CAPE HATTERAS WSO	48.86	5.75											
CARTHAGE 8 SE		1.70											
CATALDOCHEE		0.50											
CHARLOTTE WSO AP	26.91												
CLINTON 2 NE	35												
DALTON													
DOBSON													
EDEN													
ELIZABETH													
FAIRFAX													
GREENSBORO													
GREENVILLE													
HELIOS													
HOBOKEN													
LAKE LURE													
LAKESIDE													
LEXINGTON													
MOORESVILLE 2													
MOREHEAD CITY													
MOUNT PLEASANT													
N WILKESBORO 12													
POLKTON 2 NE													
QUEBEC													
RALPHIGH-DURHAM WSO													
ROANOKE RAPIDS													
ROARING GAP 1 NW													
SHELBY 2													
SNEADS FERRY 2 ENE													
SWANANOA 2 SSE													
WILKESBORO WSO AP													
WILSON 3 SW													
YADKINVILLE 6 E	26												

ISSN 0364-8319

HOURLY
PRECIPITATION DATA
NORTH CAROLINA

DECEMBER 1987
WITH ANNUAL SUPPLEMENT
VOLUME 37 NUMBER 12

NORTH CAROLINA

A WORK
INFO

* Att
* Co
* C
*

75.0
70.0
65.0
60.0
55.0
50.0
45.0
40.0
35.0
30.0
25.0
20.0
15.0
10.0
5.0
0.0

8.0 9.0 9.5 10.0 10.5 11.0 11.5 12.0 12.5 13.0 13.5 14.0 14.5 15.0 15.5 16.0 16.5 17.0 17.5 18.0 18.5 19.0 19.5 20.0 20.5 21.0 21.5 22.0 22.5 23.0 23.5 24.0 24.5 25.0 25.5 26.0 26.5 27.0 27.5 28.0 28.5 29.0 29.5 30.0 30.5 31.0 31.5 32.0 32.5 33.0 33.5 34.0 34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 38.5 39.0 39.5 40.0 40.5 41.0 41.5 42.0 42.5 43.0 43.5 44.0 44.5 45.0 45.5 46.0 46.5 47.0 47.5 48.0 48.5 49.0 49.5 50.0 50.5 51.0 51.5 52.0 52.5 53.0 53.5 54.0 54.5 55.0 55.5 56.0 56.5 57.0 57.5 58.0 58.5 59.0 59.5 60.0 60.5 61.0 61.5 62.0 62.5 63.0 63.5 64.0 64.5 65.0 65.5 66.0 66.5 67.0 67.5 68.0 68.5 69.0 69.5 70.0 70.5 71.0 71.5 72.0 72.5 73.0 73.5 74.0 74.5 75.0 75.5 76.0 76.5 77.0 77.5 78.0 78.5 79.0 79.5 80.0 80.5 81.0 81.5 82.0 82.5 83.0 83.5 84.0 84.5 85.0 85.5 86.0 86.5 87.0 87.5 88.0 88.5 89.0 89.5 90.0 90.5 91.0 91.5 92.0 92.5 93.0 93.5 94.0 94.5 95.0 95.5 96.0 96.5 97.0 97.5 98.0 98.5 99.0 99.5 100.0



HOURLY PRECIPITATION DATA NORTH CAROLINA

DECEMBER 1987
WITH ANNUAL SUPPLEMENT
VOLUME 37 NUMBER 12

A WORLD OF CLIMATIC
INFORMATION FOR . . .

- * Attorneys
- * Colleges & Universities
- * Construction
- * Consultants
- * Governmental Agencies
- * Industry
- * Insurance Companies
- * Public Utilities
- * Research & Development
- * Energy

STATION INDEX												
STATION	COUNTY	STATION	COUNTY	STATION	COUNTY	STATION	COUNTY	STATION	COUNTY	STATION	COUNTY	STATION
NORTH CAROLINA		ASHEVILLE WSO AP	ASHEVILLE	ASHFORD	ASHFORD	BADIN	BADIN	B EVERETT JORDAN DAM	BOOMER 5 WSW	BURLINGTON 3 WNE	CAPITOL HILL	CATALDOCHEE
CHARLOTTE WSO AP	MECKLENBURG	CLINTON 2 NE	CLINTON	DALTON	DALTON	DOBSON	DOBSON	EDEN	ELIZABETH	FAIRFAX	GREENSBORO	GREENVILLE
HELIOS	HELIOS	HOBOKEN	HOBOKEN	LAKE LURE	LAKE LURE	LAKESIDE	LAKESIDE	LEXINGTON	MOORESVILLE 2	MOREHEAD CITY	MOUNT PLEASANT	N WILKESBORO 12
POLKTON 2 NE	POLKTON	QUEBEC	QUEBEC	RALPH-DAWSON WSO	RALPH-DAWSON	ROANOKE RAPIDS	ROANOKE RAPIDS	ROARING GAP 1 NW	SHELBY 2	SNEADS FERRY 2 ENE	SWANANOA 2 SSE	WILKESBORO WSO AP
WILSON 3 SW	WILSON	YADKINVILLE 6 E	YADKINVILLE									

HOURLY PRECIPITATION DATA NORTH CAROLINA

JANUARY 1987

VOLUME 37 NUMBER 1



HOURLY PRECIPITATION DATA is published monthly and presents daily, hourly, and maximum short duration data for recording rain gage stations in each state except Alaska. Also included are a published station index and a locator map for the state. In addition to the regularly published data, the December publication contains a tabulation of monthly and annual total precipitation amounts as an annual supplement.

SHELF STOCK of the printed publication is maintained only for the most recent three years. Earlier years are available on microfiche or paper copies reproduced from microfiche. The data are also available in digital form - on magnetic tape and diskette.

For further information,
call or write to the
NATIONAL CLIMATIC DATA CENTER
Federal Building, Asheville, N. C. 28801-2696
Phone (704) 259-0682 or (704) CLIMATE

noaa

NATIONAL
OCEANIC AND
ATMOSPHERIC ADMINISTRATION

NATIONAL
ENVIRONMENTAL SATELLITE, DATA
AND INFORMATION SERVICE

NATIONAL
CLIMATIC DATA CENTER
ASHEVILLE, NORTH CAROLINA

CLIMATIC DATA STATIONS - WORLDWIDE

[illegible]

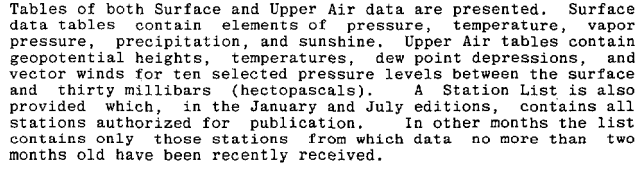
NATIONAL CLIMATIC DATA CENTER

[illegible]

ISSN 0027-0296



MONTHLY CLIMATIC DATA for the WORLD (MCDW) is a publication of monthly summaries of climatic data from around the world. Data are prepared by Members of the World Meteorological Organization for selected stations and exchanged via the Global Telecommunications System in coded format.



Currently, world maps of long term mean temperatures, dew points, and sea level pressures are included on the cover of the MCDW. The maps are generally representative of conditions during the 1950's to mid-1970's, however some data may be from as early as the 1850's.

SHELF STOCK of the printed publication is maintained only for the most recent three years. Earlier years are available on microfiche or paper copies reproduced from microfiche. The data are also available in digital form on magnetic tape and diskette.

"I CERTIFY THAT THIS IS AN OFFICIAL PUBLICATION OF THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION AND IS COMPILED FROM INFORMATION RECEIVED AT THE NATIONAL CLIMATIC DATA CENTER, ASHEVILLE, NORTH CAROLINA."

28801
Kenneth D. Nadeau
DIRECTOR
NATIONAL CLIMATIC DATA CENTER

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL ENVIRONMENTAL SATELLITE, DATA AND INFORMATION SERVICE NATIONAL CLIMATIC DATA CENTER ASHEVILLE, NORTH CAROLINA

For further information,
call or write to the
NATIONAL CLIMATIC DATA CENTER
Federal Building, Asheville, N. C. 28801-2696
Phone (704) 259-0682 or (704)-CLIMATE

CURRENT SERIAL PUBLICATIONS

A WORLD OF INFORMATION

For

- * Industry
- * Research and Development
- * Public Utilities
- * Government Agencies
- * Attorneys
- * Construction
- * Consultants
- * Insurance Companies
- * Colleges and Universities
- * Energy

HOURLY
PRECIPITATION DATA

ARIZONA

DECEMBER
WITH ANNUAL SUPPLEMENT

HOURLY
PRECIPITATION DATA

ARIZONA

VOLUME 35 NUMBER



CLIMATOLOGICAL DATA
ANNUAL SUMMARY
ARIZONA

NUMBER 1

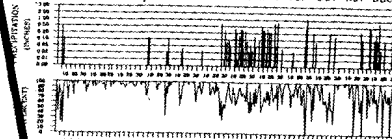
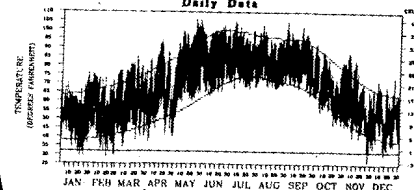
CLIMATOLOGICAL DATA
ARIZONA

LOCAL
CLIMATOLOGICAL DATA
Monthly Summary

[illegible]

LOCAL CLIMATOLOGICAL DATA
ANNUAL SUMMARY WITH COMPARATIVE DATA
TUCSON,
ARIZONA

Daily Data



TEMPERATURE DEFECTS NORMAL HEALTHY NORMAL BROWNS AND ACTUAL BARK PINK AND LOW FALLS (Y HARBORING)
PREDICTION OF REACTION IN PINKS SCALE IS NON LINEAR
BROWNS IS PERCENT OF THE POSSIBLE PINKING

SECRET PAGE 35 NO REFERENCE TO THE NATIONAL DEFENSE AND ECONOMIC ADMINISTRATION, AND TO COMPLEX FOR
(200) IN THE AT THE CLIMATE DATA CENTER, WASHINGTON, MARCH 1990, 2000?

22 MICHIGAN MICHIGAN MICHIGAN Kenneth D. Nelson
 RESIDENTIAL AND COMMERCIAL, SERVICE, AND EXHIBIT AND COUNTRY DIRECTOR
 STAFFING AND RECRUITING AND CONSULTING SERVICES AND ALL OTHER EMPLOYERS MICHIGAN, CLIMATE: 1947

**MONTHLY CLIMATIC
DATA FOR THE WORLD**

PREPARED IN COOPERATION WITH THE
WORLD METEOROLOGICAL ORGANIZATION

NEW YORK: TEMPERATURE, 1960



RECEIPT THAT THIS IS AN OFFICIAL PUBLICATION OF
 THE NATIONAL OCEANOGRAPHIC AND ATMOSPHERIC ADMINISTRATION
 AND IS COMPILED FROM INFORMATION RECEIVED AT THE
 NATIONAL CLIMATIC DATA CENTER, ASHEVILLE NORTH CAROLINA
 28801
 DIRECTOR
 NATIONAL CLIMATIC DATA CENTER
 5115 WINGATE DRIVE
 ASHEVILLE, NC 28801

noaa NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

STORM DATA



"I CERTIFY THAT THIS IS AN OFFICIAL PUBLICATION OF THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION AND IS COMPILED FROM INFORMATION RECEIVED AT THE NATIONAL CLIMATIC DATA CENTER, ASPEYVILLE, N.C. 28801"

DIRECTOR
NATIONAL CLIMATE DATA CENTER

noaa NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION / NATIONAL ENVIRONMENTAL SATELLITE DATA AND INFORMATION SERVICES / NATIONAL CLIMATIC DATA CENTER ASHEVILLE, NC

CD

VALIDATED BY:

Ted Burlew
Betty Edstrom
Bruce Emory
Joyce Morgan
Betty Shuford

DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL ENVIRONMENTAL SATELLITE, DATA, AND INFORMATION SERVICE
NATIONAL CLIMATIC DATA CENTER
FEDERAL BUILDING
ASHEVILLE, N.C. 28801

*TO CHANGE YOUR ADDRESS, PLEASE RETURN A COPY OF
THE MAILING LABEL ALONG WITH YOUR NEW ADDRESS.*

BULK RATE
POSTAGE & FEES PAID
United States Department Of Commerce
NOAA Permit No. G - 19