# CLIMATOLOGICAL DATA ANNUAL SUMMARY

### VIRGINIA 1988

**VOLUME 98 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."

Kennell D Wadlen

DIRECTOR
NATIONAL CLIMATIC DATA CENTER

### TOTAL PRECIPITATION AND DEPARTURES FROM NORMAL (INCHES) VIRGINIA

STATION	JF	N	FE	В	M A	R.	AF	· R	MA	\ Y	·JL	1988 I N
	PRECIP.	DEPARTURE	PRECIP.	DEPARTURE	PRECIP.	DEPARTURE	PRECIP.	DEPARTURE	PRECIP.	DEPARTURE	PRECIP.	DEPARTURE
VIRGINIA TIDEWATER 01												:
COLONIAL BEACH EMPORIA 1 WNW FREDERICKSBURG NATL PK HOLLAND 1 E HOPEWELL KILMARNOCK 1 N LANGLEY AFB MATHEWS 2 ENE NORFOLK WSO AP PAINTER 2 W STONY CREEK 3 ESE SUFFOLK LAKE KILBY TANGIER ISLAND WAKEFIELD 2 NW WAKEFIELD 2 NW WALKERTON 2 NW WARSAW 2 NW WEST POINT 2 SW	M 3	7 6	2 . 2 4 3 . 4 0 2 . 5 0 2 . 5 0 3 . 3 9 4 . 2 8 4 . 3 7 4 . 0 5 4 . 0 5 4 . 0 7 3 . 3 9 4 . 1 7 3 . 7 8 4 . 2 2 3 . 5 0 4 . 2 8 4 . 1 7 3 . 3 9 4 . 2 8 4 . 2 8 4 . 3 7 8 . 3 9 8 . 3 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7 8	. 1 1 3 8 . 2 3 . 1 4 . 2 9 5 8 . 3 4 2 5 . 9 9 . 3 4 . 9 9	2.26 2.21 11.79 1.79 1.67 2.95 4.21 3.35 24.60 2.91 1.89 4.20 2.91 1.89 4.20 2.91 2.95	-1.35 -2.05 -2.20 -2.20 -1.31 -1.75 -1.46 -1.59	3 . 5 1 2 1 . 9 5 5 1 2 1 . 9 5 5 5 5 1 . 9 5 9 5 1 . 9 9 9 3 . 4 0 4 0 3 3 . 5 2 8 3 . 5 7 3 3 . 7 5 0 4 . 4 7 7 2 2 . 9 1 1 . 9 1 . 9 1 . 9 1 1 . 9 1 1 . 9 1 .	1 . 6 5 - 1 . 1 1 . 3 0 - 1 . 1 8 1 . 2 5 . 6 6 . 3 6 . 7 8 1 4 1 . 2 6 7 0	M 5.339 5.41845 5.495 6.1845 53.996 6.815 3.985 64.845 63.906 7.1815 7.1815 7.14	. 26 3 . 3 7 1 . 1 2 . 1 3 3 . 0 3 1 . 7 4 3 1 2 . 4 7 1 . 2 7 3 . 6 7 1 . 2 4 3 . 0 1	6.23 3.29 3.29 1.89 2.08 2.08 2.07 2.70 3.82 5.11 3.04 4 1.82 7 2.68 8 1.82 7 2.68 8 3.21	- 1 . 7 5 6 - 1 . 3 8 5 3 8 4 9 - 1 . 0 0 0 - 2 . 2 3 1 . 2 0 0 - 1 . 0 2
BUCKINGHAM CAMP. PICKETT CHASE CITY CLARKSVILLE CORBIN CROZIER CUMBERLAND FARMVILLE 2' N GORDONSVILLE 3 S JOHN H KERR DAM KEYSVILLE 8 N LAWRENCEVILLE 5 W LOUISA PALMYRA 1 E POWHATAN RICHMOND WSO AP WINTERPOCK 4 WDIVISIONAL DATA>	2 . 38 3 . 28 M 2 . 61 M 1 . 8 61 M 2 . 7 3 3 . 7 4 3 . 7 4 3 28 2 3 3 1 2 . 2 9 8 M 3 2 8 3 2 8 3 2 9 8 7 . 3 9 .	28 42 28 48 18	2 . 1 8 2 . 8 1 2 . 4 2 2 . 1 8 1 . 6 7 1 . 6 7 1 . 5 6	- 2 . 1 4 - 1 . 5 5 - 1 . 2 1 - 1 . 6 3 - 1 . 2 0 - 1 . 1 1 0 5	1 . 9 4 2 . 0 7 1 . 2 2 1 . 4 1 4 1 . 9 0 2 . 2 9 5 2 . 0 4 0 1 . 6 7 1 . 8 2 2 . 1 3 5 2 . 0 4 0 1 . 6 7 1 . 8 2 2 . 2 9 5 2 . 2 9 5 2 . 3 9 7 1 . 8 9 7 1 . 9 0	- 2 . 5 9 - 1 . 9 9 - 1 . 8 4 - 2 . 2 0 - 2 . 2 2 - 1 . 9 9 - 1 . 5 9	2 . 8 4 3 . 1 8 3 . 4 2	2 2 1 . 2 2 . 2 2 - 1 . 7 3	3 4 9 7 1 2 6 4 7 1 2 6 6 4 7 1 2 6 6 4 7 1 2 6 6 6 7 1 2 6 7 1 2 6 7 1 2 7 1	4 2 1 . 2 2 4 7 - 1 . 6 0 2 . 9 9 - 1 . 2 5 - 2 . 9 4 1 . 9 3	99489485916484109992855.552134.84939928510	72 63 2 . 01 02 . 85 99 2 . 38 - 1 . 95
WESTERN PIEDMONT 03  ALTAVISTA APPOMATTOX BEDFORD CHARLOTTE COURT HOUSE 3 W CHARLOTTESVILLE 2 W CHATHAM	2 . 3 3 2 . 2 6 1 . 9 1 2 . 7 2 2 . 6 4 2 . 1 8	7 4 -1 . 1 7 5 3 6 4	1 . 5 1 1 . 3 1 1 . 1 5 1 . 7 6 1	-2.06 -1.40	2 . 3 0 1 . 6 8 1 . 1 2 2 . 3 5 M	- 2 . 1 9 - 2 . 7 5 - 1 . 4 5	3 . 7 1 4 . 0 3 3 . 1 3 3 . 0 7 1 . 3 4 3 . 6 8	. 7 9 . 7 0 1 6 1 9 - 1 . 9 41 . 1 4	4 . 1 1 7 . 4 4 3 . 5 3 3 . 5 6 7 . 0 1 4 . 0 8	3 . 6 5 2 7 . 0 9 2 . 8 4	2.06 2.00 1.59 2.37	-/1 . 3 4 - 1 . 8 8 - 2 . 1 4 - 1 . 5 4
		SEE R	EFERENCE	NOTES	OLLOWING	STATION	INDEX					

TOTAL PRECIPITATION AND DEPARTURES FROM NORMAL (INCHES)

VIRGINIA

TOTAL TREET					TONL			אוואב		) I I L O )		т		1988
STATION	JL		A U	G	SE	. P	0.0	: T	NC	' V	DE	. C	ANN	IUAL
	PRECIP.	DEPARTURE	PRECIP.	DEPARTURE	PRECIP.	DEPARTURE	PRECIP.	DEPARTURE	PRECIP.	DEPARTURE	PRECIP.	DEPARTURE	PRECIP.	DEPARTURE
VIRGINIA											<del></del>			
TIDEWATER 01				i						1				٠
BACK BAY WL REF- COLONIAL BEACH EMPORIA 1 WNW FREDERICKSBURG NATL PK HOLLAND 1 E HOPEWELL KILMARNOCK 1 N LANGLEY AFB MATHEWS 2 ENE NORFOLK WSO AP PAINTER 2 W STONY CREEK 3 ESE SUFFOLK LAKE KILBY TANGIER ISLAND WAKEFIELD 2 WALKERTON 2 NW WALLACETON LK DRUMMOND WARSAW 2 NW WEST POINT 2 SW WILLIAMSBURG 2 N	2.29 4.390 3.533 4.22 4.48 4.70 2.48 3.67 3.67 3.93 4.32 4.32 4.31 8.01 5.76 3.18 3.47 2.76	-1.38 .54 74 35 -1.13 -2.22 .77 67	7.535 4.764 4.944 4.944 2.346 5.633 5.031 5.031 5.031 5.031 5.031 7.386	- 2 , 6 6 6 7 4 0 0 1 1 2 1 2 8 1 1 2 1 2 1 1 1 2 1 1 1 1 1	1 .820 1 .904 3 .544 1 .654 2 .672 3 .452 3 .549 1 .656 2 .900 2 .402 2 .40	-1.51 -1.41 -67 -1.06 -2.61 -37 -82 -1.78 -1.78 -1.17	2.607 3.888221 2.8521 2.328322 2.85322 2.85322 2.85322 2.85322 2.5532 2.	. 89 -1.32 -1.22 -31 07 56 33 44 71 .41 -1.01	3.27 4.80 3.80 5.81 4.14 4.4.67 3.96 4.06 3.49 3.49 3.61 3.75 4.35 2.70 4.35 4.35 4.35 4.35 4.35 4.35 4.35 4.35	1 . 0 6 1 . 7 6 1 . 1 4 . 5 3 . 8 1 1 . 4 4 . 6 1 1 . 7 4 1 . 0 3		-2.81 -2.30 -2.90 -2.62 -2.50 -2.52 -2.92 -2.92 -2.67	1 40.60 39.18 38.68 37.60 40.45 34.50 32.84 40.16 38.29 437.49 43.33 38.40 49.47 33.45 49.47	-3.74 -3.39 -7.70 -10.31 -2.71 -6.54 -3.15 -3.60 -6.13 1.26 -9.14
DIVISIONAL DATA>	4.06	46	4.04	68	2.54	-1.40	2 . 8 1	58	4.22	1.19	. 71	-2.57	38.64	-5.23
EASTERN PIEDMONT 02  AMELIA 4 SW ASHLAND BREMO BLUFF BUCKINGHAM CAMP PICKETT CHASE CITY CLARKSVILLE CORBIN CROZIER CUMBERLAND FARMVILLE 2 N GORDONSVILLE 3 S JOHN H KERR DAM KEYSVILLE 8 N LAWRENCEVILLE 5 W LOUISA PALMYRA 1 E POWHATAN RICHMOND WSO AP R WINTERPOCK 4 WDIVISIONAL DATA> WESTERN PIEDMONT 03	7.50 7.219 2.0759 3.859 7.1159 3.855 5.733 4.203 4.203 4.203 4.401 3.937 7.505 8.65	- 1 . 6 9 3 . 4 7 1 . 3 0 0 4 1 1 - 1 . 2 0 . 5 4 2 . 3 6	3 . 8 1 3 . 0 4 8 2 . 2 6 7 3 . 8 6 3 . 2 1 4 . 4 3 3 . 2 1 2 . 7 7 3 3 . 2 4 2 . 9 6 4 . 3 5 2 . 9 6 3 . 1 1 3 . 2 5	5 6	1 . 5 4 8 1 . 1 7 8 1 . 1 1 4 3 2 . 1 4 3 2 . 2 6 3 1 . 3 6 8 8 1 . 7 4 4 1 . 1 4 5 1 1 . 7 5 5 3 . 8 8 1 . 5 1 4 5 1 1 . 7 5 4 2 . 8 2 2 . 2 0	36 - 1 . 6 4 . 26 - 1 . 7 8 - 1 . 7 8	2.83 2.73 1.58 1.91 4.10 3.85 3.33 2.13 7.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2	- 2 . 06 - 1 . 6 4 . 3 8 . 2 4 - 1 . 4 9 1 . 6 2 . 6 8 - 2 . 5 6 - 1 . 0 0	5.28 4.918 5.488 4.404 5.007 6.669 4.642 54.662 6.628 74.69 6.908 4.34 6.37 4.31 71 71	1.24 2.09 1.45 1.51 3.74 1.05	1 .83 .882 .702 1.389 .79 .3649 1.093 4 .793 4 .793	- 2 . 6 8 - 2 . 4 2 - 2 . 3 8 - 2 . 4 3 - 3 . 0 1 - 2 . 3 0 - 2 . 6 0	33,55 35,18 32,74 37,26 39,41 36,16	-10.17 -4.33 -4.91 -8.53 -6.81 -6.85
ALTAVISTA APPOMATTOX BEDFORD CHARLOTTE COURT HOUSE 3 W CHARLOTTESVILLE 2 W CHATHAM	8 . 1 3 4 . 9 9 3 . 4 9 6 . 2 0 4 . 4 6 8 . 1 7	.96 58 2.49	6.21 5.36 4.78 5.07 4.14 3.95	. 8 3 1 . 0 8	2.14 1.58 3.78 3.78 7.1.97 1.73 2.60	-2.03 .38 -1.69 -2.17	2.60 1.72 1.05 1.37 1.76	-1.72 -2.51 -1.21 -2.83	4 . 0 9 4 . 6 4 4 . 1 2 5 . 7 4 4 4 . 4 4	1.58	1.65	-2.23 -1.44 -2.19 -1.92	40.16 37.99 31.71 37.34 39.19	. 71 -3.55 -10.39 -4.30 -4.29
		:		REFEREN	ICE NOTES	FOLLOWI 3	NG STATI	ON INDEX				, I		

TOTAL PRECIPITATION AND DEPARTURES FROM NORMAL (INCHES) VIRGINIA 1988 JAN FEB MAR APR MAY NUUSTATION PRECIP. DEPARTURE PRECIP. DEPARTURE PRECIP DEPARTURE PRECIP. DEPARTURE PRECIP. DEPARTURE DEPARTURE PRECIP. CONCORD 4 SSW 2.64 - . 6 9 -2.44 2 , 18 -1.71 3.57 5.60 2.00 - . 77 4 . 6 0 DANVILLE-BRIDGE ST 3 . 1 5 1 . 8 2 -1.50 2.10 . . 5 2 1 98 - . 28 .-1.91 1.15 4.25 6.76 -1.88 2.35 2 . 8 3 FREE UNION 1.61 1.96 2.39 HUDDLESTON 4 SW - 79 1 . 1 9 -1.88 1.64 -2.32 3.63 . 26 3.56 .05 2.25 LYNCHBURG WSO AP 2.09 - , 9 7 1.26 -1.67 -1.91 1 . 5.5 -2.14 3.72 . 82 4.20 . 5 5 2.04 -1.43 MARTINSVILLE FILT PL 1.77 1 . 8 3 - 87 1.62 2 . 34 3 . 6 8 - . 0 3 -2.04 3.06 - 2 . 6 5 MEADONS OF DAN 5 SW 2.59 1 6 2 2 . 8 9 -1.43 -.2 . 3 5 2.38 -2,86M 2.03 7.18 - . 75 4.36 1 . 7 8 MONTEBELLO 2 NE 2 . 7 0 -1.02 -2.20 2.67 -2.15 -1.45 . 9 1 -3.22 2.50 MONTICELLO . 3 5 1.01 . 70 4 . 5 3 3.00 PEDLAR DAM 1 . 2 B - 2 . 1 2 -2.74M 2.01 -1,23 PHILPOTT DAM 2 2.52 2.17 1 . 4 2 3 . 7 4. 2.69 2.46 2.65 ROCKFISH 1 . 4 8 1 98 ~ 2 . 26 -1.85 2.06 -1.49 6.96 2.98 1.29 -3.26 ROCKY MOUNT - . 90 - 1 . . 9 0]. 1 . 6 4 ~ 2 , .3 9 3 . 3 3 - . 28 3.67 - . 1 1 . 00 ROSELAND 1 NNW 1.99 2.25 1.29 3 . 19 2 . 4 1. 5 . 8 8 SOUTH BOSTON 2.92 2.42 2.21 3 . 5 1 1.80 5.18 STUART 1 SSE 1 . 9 3 3 2 2 2 4 9 2.94 - . 8 3 TYE RIVER 1 SE 2.48 -1.59 1 . 5 3 2.04 -2.00 ~1.08 2.74 1.60 -2.06 3.27 -1.72 2.26 6.64 WOOLWINE - . 78 -2.15 1.67 3.21 -3.49 3.26 -1.53 2 . 2 6 -2.45 --DIVISIONAL DATA--2.49 - .80 1 . 48 -1.79 1.97 -2.15 3 . 3 3 - . 16 4.16 . 25 2:65 -1.12 NORTHERN 0.4 BERRYVILLE BIG MEADOWS 2,51 - . 99 1.65 1.29 1.54 5.72 -1.41 2.50 -1.70M 2.70 10,20 1.24 -3.08 LINCOLN 75 2.37 - . 5 7 2.55 -1.35 - 1 , 3 3 3 . 38 - . 09 8 . 6 8 4.67 -3.51 LURAY 1.59 -1.40 - . 85 1 . 2 3 - 2 . 0 2 2 . 3 3 - . 5 6 3.05 -1.68 6.49 MOUNT WEATHER 2 . 1 2 - . 9 7 - . 3 9 1.30 2.00 -1.12 1 . 9 1 2 . 9 2 - . 4 3 8 . 5 2 4.40 -2.55 PIEDMONT RESEARCH STN STERLING (RCS) 2 . 7 2 - , 0 7 1.75 - . 8 3 1.58 72.11 -1.52 5 . 2 7 1 . 5 5 1.57 3.50 - . 19 2.77 2.48 2.23 2 . 4 1 8 . 5 8 . 76 THE PLAINS 2 NNE 2.26 2.63 8.98 1.27 2.69 - . 2 7 -2.63 -2.53 -3.71 VIENNA DUNN LORING 2.27 - . 4 4 2.67 -1.04 2.36 -1.02 6.10 2,18 1 . 48 WARRENTON 3 SE 2.57 2.21 1.30 - . 45 - . 40 1.86 -1.64 2.18 -1.04 5 . 6 2 2.08 WASH DULLES WSO AP 2,47 - . 36 2.06 - . 58 2.31 -1.12 2 . 35 - . 79 10.26 . 5 2 6.64 . 3 8 2.52 WASH NATL WSCMO AP 3.14 2.27 - . 9 3 - . 10 -1.19 2.00 4.50 1.02 -2.40 WINCHESTER "WINC" 1.94 1.55 2.20 9.03 1.01 WINCHESTER 3 ESE 2.05 - . 45 . 76 -1.60 2.89 9.40 5 . 8 OM WOO'DSTOCK 2 NE 2.30 - . 10 1,12 - .86 -1.51 . 96 1.41 2 . 4 1 - . 4 4 6 . 1 2 2.89 -2.52 --DIVISIONAL DATA----> 2.36 - . 46 1 . 6 0 ~ . 90 7 . 7 2 1.94 -1.52 2.45 - . 76 3., 99 1.35 -2.54 CENTRAL MOUNTAIN BUENA VISTA . 1.40 -1.38M . 1 3 1 . 5 4 -1.29 4.72 1.37 1 . 4 1 -1.86 . 9 0 COVINGTON 2.37 - . 0 5 -1.74 . 68 -2.48 1 . 3 4 -1.40 3 . 6 5 . 27 1.50 -1.73 COVINGTON FILT PLANT 1 . 98 . 9 9 1.31 1 . 4 8 3.17 1.78 8 1 CRAIGSVILLE 2 S 2.06 1.24 1.61 3 . 5 8 1.05 DALE ENTERPRISE EARLEHURST - . 0 3 1,96 . 89 -1.18 . 8 9 -1.98 1 . 4 0 -1.17 5.10 1.74 1.87 -1.40 2 5 3 1.82 1.00 2.88 1.59 GATHRIGHT DAM 2.41 1 44 1.11 1.70 3.32 1 . 6 6 2.31 GLASGOW 1 SE 11 1 . 48 1.52 2.57 7.81 1.72 GOSHEN - . 4 2 1.06 -1.81 2.01 -2.01M 4 . 3 4 . 5 7 - 2 . 4 9 - 2 . 2 4 1.16 1.06 HOT SPRINGS 1.57 1.03 1.52 -1.42 -2.55 2.13 -1.18 - . 5 3 3,32 1 . 4 3 1.71 KERRS CREEK 6 WNW 1 . 58 4 . 8 7 1 . 75 1,21 LEXINGTON 9.5 - . 80 1.17 -1.72 1.64 ~ 2 . 15 1 . 90 - . 97 5 . 46 2.13 1.30 -2.06 MC DOWELL 3 W 1.07 1.55 . 92 1.95 4.31 1.02 MILLGAP 2 NNW 2.65 1 . 4 1 1,18 56 : 17 4.36 MONTEREY 2.27 - . 6 9 1.50 -1.40 -2.54 1,31 3.09 - . 38 3 . 9 3 . 28 2 . 3 9 -1.49 MOUNTAIN GROVE . 5 7 2 . 35 . 6 4 1 . 9 5 . 76 3.30 ROANOKE WSO AP RÌ . 3 1 1,87 1.07 -2.12 . 88 -2.81 3 . 4 0 2.76 - . 75 .32 STAUNTON SEWAGE PLANT . o ó 2.53 . 78 -1,41 1.00 -2.19 2.76 5.05 1.69 1 . 3 3

SEE REFERENCE NOTES FOLLOWING STATION INDEX

STATION	JU	L	ΑL	G	SE	.P	0.0	Т	NC	) V	DE	С	ANN	1988 IUAL
317711017	PRECIP.	DEPARTURE	PRECIP.	DEPARTURE	PRECIP.	DEPARTURE	PRECIP.	DEPARTURE	PRECIP.	DEPARTURE	PRECIP	DEPARTURE	PRECIP.	DEPARTURE
CONCORD 4 SSW DANVILLE-BRIDGE ST FREE UNION HUDDLESTON 4 SW LYNCHBURG WSO AP MARTINSVILLE FILT PL MEADOWS OF DAN 5 SW MONTEBELLO 2 NE	2.37 5.680 4.83 3.04 8.62 6.04 5.95	-1.40 1.60 1.16 81 4.43 -1.73	2.82 3.81 4.24 3.68 4.23 6.01	-1.22 .63 01 .13 .98	4.38	73 - 1 . 60 - 1 . 50 85 - 1 . 48	1.49 1.96 1.84 2.35 2.04	8 9 - 1 . 5 2 - 1 . 5 2 - 1 . 2 0 - 2 . 5 2 - 3 . 3 7	4 . 3 3 6 . 1 3 3 . 6 9 3 . 7 2 4 . 2 5 4 . 1 5 6 . 3 2 6 . 4 4 3 . 5 6	3.31 .74 1.33 1.21 2.61 2.21	. 76 1 . 16 1 . 36 1 . 02 1 . 20 M 1 . 00 1 . 61 1 . 45	-2.13 -2.08 -1.96 -2.34 -2.27	32.00 38.98 34.99 32.40 30.60 1 39.85 41.89	-9.37 -3.96 -8.34 -9.31
PEDLAR DAM PHILPOTT DAM 2 ROCKFISH ROCKY MOUNT ROSELAND 1 NNH SOUTH BOSTON STUART 1 SSE TYE RIVER 1 SE WOOLWINEDIVISIONAL DATA> NORTHERN 04	7 . 37 3 . 40 6 . 90 3 . 65 7 . 6 . 30 3 . 11 5 . 62 5 . 86	7 4 2 . 7 8 - 1 . 0 1 . 5 3 1 . 6 5	5.41 3.44 3.63 M 2.65 4.15	. 22 1 . 5 5 - 1 . 1 2 2 4	3 . 6 8 2 . 3 9 2 . 7 3 5 . 1 2 2 . 4 . 9 6 1 . 6 9 3 . 2 6	-1.87 -1.29 -1.86 -2.46	1 . 35 3 . 42 2 . 37 1 . 15	-2.12 -2.65 -2.86	3 . 8 1 4 . 3 6 4 . 0 7 4 . 2 7 4 . 9 1 3 . 8 4 5 . 0 7 4 . 7 1 4 . 5 2	1 00 1 28 1 96	1 . 0 8 1 . 5 4 . 9 1 1 . 5 5 M . 9 2 1 . 5 4 1 . 0 8	-2.07 -2.24 -1.77 -2.96	36.64 33.66 37.39 36.39 41.40 31.76 36.29 36.21	- 1 3 . 3 9 - 5 . 6 2 - 1 1 . 2 7 - 1 9 . 1 6 - 7 . 7 0
BERRYVILLE BIG MEADOHS LINCOLN LURAY 5 E MOUNT HEATHER PIEDMONT RESEARCH STN STERLING (RCS) THE PLAINS 2 NNE VIENNA DUNN LORING WARRENTON 3 SE WASH DULLES WSO AP WASH NATL WSCMO AP WINCHESTER "WINC" WINCHESTER "WINC" WINCHESTER SESE WOODSTOCK 2 NEDIVISIONAL DATA> CENTRAL MOUNTAIN 05	3 . 7 3 6 . 8 6 2 8 6 . 7 8 0 2 5 . 7 8 0 2 2 . 2 7 7 . 1 2 2 . 2 3 . 0 5 3 .	2.92 55 1.91 2.43 34	3.88 3.83 3.98 3.37 4.42 2.71 2.90 2.89 2.39 M 5.68	46 29 07 - 1 . 07 - 1 . 01 24 - 2 . 01 1 . 94 . 1 4	1.85 1.74 1.96 2.48	21 59 87 - 1 . 68 - 1 . 91 - 1 . 29 - 1 . 46 - 1 . 37	1 . 6 4 . 9 1 1 . 7 7 1 . 4 3 1 . 7 5 1 . 3 5	-1.69 -2.38 -1.30 -1.66 -1.41 -1.15 -2.73 -2.14	M 3.71 4.15 4.15 4.63 4.59 4.96 4.48 5.33 2.89 2.49 4.02	1 . 1 4 . 8 7 1 . 5 4 2 . 0 8 1 . 9 8 1 . 4 9 2 . 5 1 . 2 6 . 1 4	.91 .96 .83 1.16 1.71 .93	-2.41 -1.99 -2.07 -2.19 -2.19 -1.35 -2.37 -1.88 -1.64 -1.39	39.04 30.83 37.82 34.59 40.38 33.82 31.08 39.81 31.74 27.63 34.30	- 3.09 - 8.42 - 2.98 - 6.50 - 8.53 - 8.97 54 - 7.26 - 7.09 - 6.24
BUENA VISTA COVINGTON COVINGTON FILT PLANT CRAIGSVILLE 2 S DALE ENTERPRISE EARLEHURST GATHRIGHT DAM GLASGOW 1 SE // GOSHEN HOT SPRINGS KERRS CREEK 6 WNW LEXINGTON MC DOWELL 3 W MILLGAP 2 NNW MONTEREY MOUNTAIN GROVE ROANOKE WSO AP STAUNTON SEWAGE PLANT	2 4 4 1 6 8 8 7 7 7 7 2 4 . 0 3 9 4 9 1 5 2 9 3 0 6 6 8 7 7 7 5 8 5 5 5 2 4 3 3 5 6	-1.10 4.69 1.19	3.66 4.10 2.90 3.03 3.31 4.66 6.13 3.26 4.44 3.72 3.49 1.89 4.30	. 04 -1.00 2.66 56 1.35 .17 .39	M 3.45 3.86 3.652 3.52 3.42 3.93 4.16	21 09 13	1.09 1.39 2.14 1.55 1.09 1.85 1.29 1.33 1.13 1.15	-1.65 -2.10 -2.09 -1.68 -2.02 -2.27 -2.27	M 3.107 5.07 3.37 3.27 3.27 4.53 4.53 4.67 4.33 4.67 4.33 4.67 4.33 4.67 4.33 4.67 4.33 4.67 6.67 6.67 6.67 6.67 6.67 6.67 6.67	. 98 1 . 55 1 . 51 1 . 0,1 1 . 67 17	1 . 6 7 2 . 5 5 1 . 0 2 1 . 8 5 1 . 7 5 1 . 6 4	-1.18 -1.21 -1.48 -1.97	30.79 34.77 26.07 1 29.91 31.14 1 37.51 1 31.47 32.66 25.87 31.20 25.56 33.16	-4.14 -8.34 -5.20 -9.21 -9.49 -2.76
			SEE	REFERE	NCE NOTES	FOLLOWI	NG STATI	ON INDEX	•					

TOTAL	PRECIPITATION	AND	DEPARTURES	FROM	NORMAL	(INCHES)

VIRGINIA 1988 FEB NAL MAR APR MAY $\mathsf{N}\mathsf{U}\mathsf{L}$ STATION PRECIP. DEPARTURE PRECIP. DEPARTURE PRECIP. DEPARTURE PRECIP. DEPARTURE PRECIP. DEPARTURE PRECIP. DEPARTURE TIMBERVILLE 3 E 1.80 - . 49 . 92 -1.17 1.26 -1.73 1,30 -1.26 6.27 3.04 1,36 -2.06 WEST AUGUSTA 1.00 3 . 5 5 . 55 4.25 --DIVISIONAL DATA----> 2.10 1 . 1 4 1.22 - . 90 - . 6 2 -1.54 - 2 . 4 0 2 . 1 3 4.26 1.86 . 67 -1.65 SOUTHWESTERN MOUNTAIN 06 ABINGDON 3 S 1.91 1.28 2.82 3 . 1 2 ALLISONIA 2 S 1.74 -1.03 1 5 1 . 88 2.55 . 14 -1.12 - 2 . 7,5 -1.45 3.38 - . 65 2 . 3 4 1 . 5 3 1 . 2 5 1 . 7 4 1.98 - . 9 7 BLACKSBURG 3 SE -1.41M 1 . 3 3 -1.94 1 . 68 3.21 - . 40 BLAND 2.30 2.55 2.39 - . 7 2 . 9 4 -2.95 . 2 3 1.11 -2,36 -1.67 3.07 - . 1 1 3 . 8 2 BURKES GARDEN 2.90 3.29 - . 95 1.46 -1.95 -2.64 - . 78 2.00 BYLLESBY 3 W 1.59 . 86 2.02 COPPER HILL 1 NNE 1,98 - . 9 9 1 . 19 -1.96 -2.83 3 . 7 2 - . 98 . 42 1.17 - . 1 4 3.08 4.57 FLOYD 2 NE GALAX RADIO WBOB 1.64 1 . 3 4 -2.00 . 6 6 -3.28 M 2.73 1 , 3 7 - 2 . 1 4 2 . 4 2 -1.32 . 3 1 lΜ 1.47 1 . 9 6 -1.14 - 3 . 1 7 2.89 -1.04 2.55 -1.47 1 4 9 - . 8 9 1.90 GLEN LYN 1.50 -1.16 -1.16 1 . 1 1 -2.38 2.26 -1.39 -1,26 GRUNDY 1.53 1 . 1 2 2.88 2.37 1.16 1.71 HILLSVILLE 2 . 1 7 2 . 0 4 - . 6 9 1.37 -1.72 . 72 - 3 . 4 3 2.93 - . 6 1 3.21 2.85 -1.17 INDEPENDENCE 2 1.50 . в в 3 . 4 0 1.67 JOHN W FLANNAGAN LAKE 1.77 2.95 2.65 1.66 . 85 LAFAYETTE 1 NE 1.67 -1.34 1 . 1 3 -1.56 - 2 . 3 0 3.68 . 6 2 2 . 1 3 -1.30 2.81 1.02 - . 5 4 MARION EVAP STATION 2 88 2.54 1.45 MT LAKE BIOLOGICAL STA 99 1.31 3.14 1.49 5.07 . 8 0 NEWPORT 2 NNW М .95 1.01 -1.56 3 . 9 5 3 . 7 8 . 96 - , 9 3 -2.56 2.30 -1,20 2 . 4 7 NORTH FORK LAKE 1.26 1.55 3.37 1.51 1 . 7 9 PENNINGTON GAP -3.09 2.40 -2:00 1.50 -4.25 4.34 - . 0 1 4.17 1.58 -2.59 PULASKI 1.98 1,18 . 94 2.08 2.38 2.34 RADFORD 1.52 1 . 4 4 2.76 - . 4 2 2.76 - . 3 4 - . 30 STAFFORDSVILLE 3 ENE -1,63 1.07 -1.63 1 , 1 4 -2.47 2.94 2.00 - . 4 2 -1.43 2.58 2.18 TROUT DALE 3 SSE -1.93 1.89 -2.26 1 . 1 4 3 . 1.2 -4.11 -1.46 1.97 -2,70 1,81 -2.78 WILLIS 2.88 1.20 . 78 3 ..6 1 2.96 WISE 1 SE 2.29 2.38 3.06 2.67 2.32 WYTHEVILLE 1 S 2,11 1.55 - . 5 2 -1.18 - . 6 4 . 8 5 -2.61 2 , 4 7 2.89 - . 69 1 . 8 4 **-1**.27 --DIVISIONAL DATA------ . 5 0 2.11 -1.25 1 . 85 -1:48 1.28 -2.95 3,21 2.73 -1.22 2.06 -1.72

> SEE REFERENCE NOTES FOLLOWING STATION INDEX. 6

#### TOTAL PRECIPITATION AND DEPARTURES FROM NORMAL (INCHES)

VIRGINIA

STATION '	JL	JL	AU		SE		0.0		NO	V	DE	C	ANN	1988 IUAL
21711011	PRECIP.	DEPARTURE	PRECIP.	DEPARTURE	PRECIP.	DEPARTURE	PRECIP.	DEPARTURE	PRECIP.	DEPARTURE	PRECIP.	DEPARTURE	PRECIP.	DEPARTURE
TIMBERVILLE 3 E WEST AUGUSTA DIVISIONAL DATA>	1.46 M 4.59		2.78 2.50 3.72	- 1 . 2 4 0 8	2.15 M .50 3.02		. 78 1.65 1.17	ļ	2.67 M 3.53	. 26	, 8 4 M	-1.55	23.59	-11.73 -9.17
SOUTHWESTERN MOUNTAIN ABINGDON 3 S ALLISONIA 2 S BLAKSBURG 3 SE BLAND BURKES GARDEN BYLLESBY 3 W COPPER HILL 1 NNE FLOYD 2 NE GALAX RADIO WBOB GLEN LYN GRUNDY HILLSVILLE INDEPENDENCE 2 JOHN W FLANNAGAN LAKE LAFAYETTE 1 NE MARION EVAP STATION MT LAKE BIOLOGICAL STA NEHPORT 2 NNW NORTH FORK LAKE PENNINGTON GAP PULASKI RADFORD STAFFORDSVILLE 3 ENE TROUT DALE 3 SSE WILLIS WISE 1 SE WYTHEVILLE 1 SDIVISIONAL DATA>	4	. 97 1 . 74 -1 . 40 -1 . 83 4 . 18 1 . 76 1 . 13 17 . 14 54 2 . 68 1 . 14 73 - 1 . 25 65	3	. 33 2.04 .98 .58 2.63 1.84 48 -1.45 49 91	3 . 9 9 8 4 4 8 9 5 3 5 3 5 6 9 6 9 8 4 2 2 2 2 4 3 8 4 3 5 3 4 5 5 2 6 1 5 5 6 2 2 2 2 4 5 5 3 6 1 5 5 6 6 2 2 3 3 6 1 5 5 6 6 2 2 3 3 6 1 5 6 9 6 3 6 1 5 6 9 6 2 6 1 5 6 9 6 7 7 3 2 2 3 7 1 5 5 6 6 2 2 6 1 5	16	2.950 1.196 2.956 3.0271 1.225	-1.06 -1.58 29 .15 -3.25 -2.51 -2.48 34 -2.37 -2.38 -1.44 -1.43 -2.00 -1.15 -1.72	3 4 3 4 3 6 3 5 1 6 4 2 3 6 3 6 5 2 4 6 4 3 3 2 2 3 2 5 5 4 5 1 2 4 5 6 5 2 4 6 4 2 7 7 5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	. 30 65 18 .24 2.19 1.04 2.23 .20 1.40 .00 41 1.26 25 -1.14 57	2.2060 2.2060 1.852 1.970 1.31564 2.325 4.323 4.323 4.323 4.323 4.323 4.323 4.323 4.323 4.323 4.323 4.323 4.323 4.323 4.323 4.323	-1.56 -1.329476 -1.86 -2.15 -1.30 -2.03 -1.38 -1.79 -1.17 -1.19 -2.26	37.28 29.11 4 33.81 29.04 33.88 28.41 40.58 4 27.70	-8.04 -9.39 -9.79 -4.23 -9.86 -12.36 -11.89 -8.80 -13.07 -22.09 -10.09 -10.48
		]	SÉE	REFERE	NCE NOTES	FOLLOWI 7	NG STATI	ON INDEX		}		1	ı	

	AVE	RA	GE_	TE	MPE	RA	TUF	ES	A۱	ID	DEF	AR	TUR	ES	FR	OM	NC	RM.	AL	( 0	F)				VIRGI 1	N I A 988
	J	ΑN	F	ЕВ	М	AR	А	PR	М	ΑΥ	J	UN	J	UL	Αι	JG	S	ΕP	0	СТ	N	0 V	D	ЕC		NUAL
STATION	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
VIRGINIA																										
TIDEWATER 01										1																
BACK BAY HE REF COLONIAL BEACH EMPORIA 1 HNW FREDERICKSBURG NATE PK HOLLAND 1 E HOPEWELL KILMARNOCK 1 N LANGLEY AFB MATHENS 2 ENE NORFOLK WSO AP PAINTER 2 W STONY CREEK 3 ESE SUFFOLK LAKE KILBY TANGIER ISLAND WAKEFIELD 2 WALKERTON 2 NW WEST POINT 2 SW WILLIAMSBURG 2 NDIVISIONAL DATA	M37.3 33.2 31.1 28.9 M33.6 34.0 29.5 36.7 37.3 7.37.3 7.37.3 7.37.3 31.0 31.0 31.0 32.6	-5.8 -5.0 -5.7 -2.5 -2.6 -2.7 -3.3	41.4 41.9 37.5 42.9 40.0 42.5 40.8 M39.6 41.7 39.8 39.8 40.5 40.0 41.1 M39.2	1.1 .0 2.0 1.4 1.7 .8 1.8	48.7 49.6 44.5 50.3 47.4 49.5 47.3 47.5 49.4 M46.8 46.7 48.4 48.8 49.2	1.2 .5 3 2.0 1.0 .9 1.1		-2.4 -1.9 -2.7 -1.1 -1.7 -1.4 -1.2 3	65.5 62.1 67.0 63.4 65.8 65.9 66.7 65.8 65.8	8 -2.6 .8 -1.0 .3	72.4 73.0 69.8 74.6 71.8 73.6 72.7 72.0 72.1 74.3 M 72.4 72.9 73.6 72.3	-1.1 -2.1 .5 7 .2 -1.8 8 5	77.7 80.1 78.8 79.1 78.1 81.3 80.1 79.4 79.9 79.9	.8 3 2.0 1.7 1.8 .2 2.1 2.5	79.2 79.1 80.5 78.0 80.8 78.7 79.1 81.7 78.8 79.4 79.6 78.9	3.1 2.7 1.9 3.2 3.2	68.96 67.35 69.45 69.57 69.57 69.57 69.57 69.57 69.57 68.87	-2.0 -3.7 -2.4 -1.7 -1.4 -1.7	52.9 52.7 56.7 54.6 56.9 51.6 57.9 54.7 53.2 54.2 54.4	-7.4 -5.0 -8.2 -4.3 -4.4 -5.4	51.6 50.0 49.3 51.4 51.4 51.9 48.9 52.6 51.9 50.3 50.3	-2.1 1.0 -1.6 2.5 2.3 1.9 1.8	40.6 39.6 39.3 42.8 41.0 42.4 41.2 38.9 40.7 39.1 37.7 39.1 40.3 40.3	-1.0 -3.1 .1 -1.1 -1.3 -1.3	55.3 59.3 56.9 59.2 M57.4 M56.4 58.1 M 57.4 57.4 57.8 M57.0	9 -2.4 .2 3 2 7 1 .0
DIVISIONAL DATA	30.0 M31.2 25.7 27.8 M32.4 29.2 30.0 M30.4 32.6 29.8 R 32.3	-6.6 -4.5 -5.9 -5.3	39.3 M39.6 38.3 39.1	-1.4 .4 8 .8	47.4 48.4 46.4	-1.2 .2 .0 .3	55.9	-2.3 -2.4 -1.9	65.2 62.7 63.9 65.8	-1.8 -1.1 -3.3 7 3	72.5 69.9 70.7 72.8	-1.5 -1.0 -2.9 -1.2 7		1.6 2.1	79.8 75.9 77.0	3.3	68.3 M65.2 66.1 68.4	-1.6 -4.7 -2.3 -1.8	53.7 54.0 51.1	-6.7 -4.7 -4.7 -6.1	48.4 47.9 46.4 50.6	-1.7 4 -1.7 8	39.6 40.8 37.3 39.2	-2.5 5 .0 8		9 -2.4 -1.2 6
APPOMATIOX BEDFORD CHARLOTIE COURT HOUSE 3 CHARLOTIESVILLE 2 W CHAITHAM DANVILLE-BRIDGE ST LYNCHBURG WSO AP MARTINSVILLE FILT PL MONTICELLO PHILPOTT DAM 2 ROCKY MOUNT SOUTH BOSTON STUART 1 SSE TYE RIVER 1 SEDIVISIONAL DATA	M31.9 27.7 31.9 31.5 30.1 M29.3 30.6 29.4 M28.8 M29.7 M30.5	-7.1 -3.2 -3.4 -8.1 -5.7 -3.6	35.4 39.7 37.8 M37.8 M36.7 37.1 37.1 M36.3 M35.9	-3.0 .5 -2.3 1 .4 2	M 44.3 48.2 47.6 47.4 M 45.7 46.4 44.9 47.0	-3.2 2.4 -1.5 .2 1.9	54.3 55.84 55.63 5	7 -1 . 7 -3 . 6 -1 . 7 8 2	63.5 59.9 64.3 M63.9 61.5 64.1 63.7 63.0 62.7 62.8 61.0 64.4 63.5	-5.4 -1.5 -2.9 6 4	71.8 73.0 68.4 74.2 71.4 71.5 M72.8 70.8 71.0 69.5	1	79.6	1.2 1.4 -1.2 1.8 2.5 1.2	78.6 74.4 78.4 75.6 81.0 78.4 M76.5 77.1 76.5 77.3 M 78.7	3.6 <sub>1</sub> 2.7	65.8 64.6 69.1 66.7	-1.6 -3.8 -3.7 -1.4 -1.7	52.7 53.4 48.4 53.7 51.4 50.0 49.9 50.9 51.2 50.5 48.4 51.8	- 9 , 5 - 4 , 5 - 5 , 3 - 8 , 5 - 5 , 7 - 6 , 1	43.0 47.9 47.5 47.5 46.8 45.6 45.6 45.6	-4.5 1.5 -4.3 8	39.9 38.1	-2.4 1.2 .0 -3.2 1 2	57.4 55.7 M M 54.7 54.5 M53.8 M	.0 -3.4 8 3
·								SEE RE	     FERENC	E NOTE	S FOLL(	) HING S	TATION	INDEX												

	AVE	RA	GE	TEI	MPE	RA	TUF	RES	A۱	ID I	DEP	AR	TUF	RES	FR	MO	NC	RM	AL	( 0	- )				VIRGI 1	N I A 988
	J	AN	F	ΕB	М	AR	А	PR	М	ΑY	J	UN	J	UL	Αι	IJG	S	EΡ	0.0	СТ	N t	V C	D E	E C	ANI	NUAL
STATION	TEMPERATURE	DEPARTURE	TEMPERATURE	DEPARTURE	TEMPERATURE	DEPARTURE	TEMPERATURE	DEPARTURE	TEMPERATURE	DEPARIURE	TEMPERATURE	DEPARTURE	TEMPERATURE	DEPARTURE	TEMPERATURE	DEPARTURE	TEMPERATURE	DEPARTURE	TEMPERATURE	DEPARTURE	TEMPERATURE	DEPARTURE	TEMPERATURE	DEPARTURE	TEMPERATURE	DEPARTURE
NORTHERN 04																										
BERRYVILLE BIG MEADOWS LINCOLN LURAY 5 E MOUNT WEATHER PIEDMONT RESEARCH STN STERLING (RCS) WARRENTON 3 SE WASH DULLES WSO AP WASH NATL WSCMO AP FINCHESTER "WINC" WINCHESTER 3 ESE HOODSTOCK 2 NEDIVISIONAL DATA	M 20.7 30.3 26.3 M24.9 28.7 25.7 27.6 31.0 25.9 24.8 29.2	-3.0 -5.7 -3.8 -5.0 -3.8 -4.2 -7.4 -3.9	25.7 36.8 33.4 30.8 36.9 34.5 37.3 37.3 33.1 32.5 35.9	1.0 8 .3 1.2 1.7 .9 2	M46.1 44.7 40.9 46.3 43.3 44.4 43.9 47.2 42.4 40.6	1.7 2.0 1.8 1.9 1.5 1.5 1.4	54.6 52.8 48.8 54.0 51.8 52.2 54.4 51.5 49.9	6 6 - 1 . 7 - 1 . 3 - 1 . 2 - 1 . 1 - 2 . 3 - 4 . 5 - 1 . 0	65.3 61.7 60.0 63.9 62.4 63.5 65.8 61.7 60.4 63.3	1.1 3 .0 1 .7 1.1 2	67.4 71.8 69.6 71.9 70.9 74.4 70.1	1 . 6 8 7 1 1 . 2 1	77.2 76.2 77.6 76.7 78.6	4.3 4.1 4.1 1.5 3.4 3.2 3.0 1.3 2.2	80.7 M 75.4 77.0	2.5 4.2 3.4 2.8 4.0 4.1 3.1	66.4 68.9 63.5 62.6	-1.5 -2.3 -2.2 -2.7 -2.0 -1.0 -2.2 -4.9 -2.1	52.9 50.2 48.1 49.2 49.2 49.5 50.7 49.6	-4.5 -3.9 -5.4 -4.8 -4.9 -7.3 -6.4	48.4 46.8 47.2 45.4 47.0 46.0 49.9 45.2 M	2.2 .6 .6 .8 1.2 1.2	33.7 32.3 34.3 35.8 35.8 35.4 M	-1.6 6 6	M55.9 M53.0 M50.9 54.9 M52.8	3 3 6 .2 .1 5
CENTRAL MOUNTAIN 05							1	ł	ł	1	l	]		 				,			}	,				
COVINGTON FILT PLANT DALE ENTERPRISE GATHRIGHT DAM HOT SPRINGS LEXINGTON MONTEREY FOANOKE HSO AP STAUNTON SEHAGE PLANT TIMBERVILLE 3 EDIVISIONAL DATA>	30.8 28.3 25.5 24.6 29.3 25.3 30.8 26.3 28.5	-3.5 -6.2 -5.3 -4.7 -6.1	38.0 35.0 31.6 31.1 36.6 30.8 37.9 33.7 35.9	.8 -1.7 5 .0 3	42.6 40.7 46.3 41.1 47.5 42.9 44.9	1.8 1 .6 1.4 .4	55.3 52.1 50.5 49.3 55.2 49.8 55.4 49.8 52.8	9 -2.2 7 9 -3.3	60.1 M58.4 63.0 58.4 63.4	2 -1 . 7 -1 . 2 -1 . 3 -2 . 4		7 -1 . 0 7 -2 . 7	76.9 75.9 72.9 72.1 75.5 70.0 77.1 74.0 76.7	1.4 .6 1.4 .6 2.9	76.6 76.3 73.3 73.1 75.8 71.0 77.5 73.5 77.1	4.2 3.2 1.8 2.8 1.4 4.4	61.4 65.4	-2.3 -2.2 -2.2 -4.1 9	46.7 45.8 49.7 44.8 51.2 46.5 49.5	-7.0 -6.6 -5.6 -7.9 -5.4	45.4 42.3	-1.4 6 2 -1.6	32.3 32.6 37.5 31.9 38.9 33.4	-1.3 -2.3	54.2 49.3 55.3	7 -1.7 2 -1.3 88 9 -2.4 .3
SOUTHWESTERN MOUNTAIN 06 ABINGDON 3 S BLACKSBURG 3 SE BURKES GARDEN FLOYD 2 NE GALAX RADIO WBOB GRUNDY MARION EVAP STATION MT LAKE BIOLOGICAL STA	M30 . 9 26 . 3 23 . 9 26 . 9 27 . 6 M30 . 6 26 . 1	-4.6 -6.1 -5.8	37.1 32.6 30.1 33.6 33.5 35.6 32.3 28.1	3 -2.0 -1.1	47.3 43.7 M39.6 43.2 43.5 46.3 M	2.6 4 .9	M53.6 51.2 47.7 50.6 52.7 53.4 M	1 -1.8 -1.5	60 .5 59 .4 54 .0 57 .5 59 .1 61 .5	6 - 3 . 4 - 2 . 6	68.3 67.3 62.0 64.8 67.3 M69.9 65.1 62.9	.5 -1.7 -1.7	67.7	. 8 . 4 5	68.6	1.7 2.3 1.5	63.9 60.9 58.7 62.4 63.3 66.1 M	-2.9 -2.0 -1.0	45.8 45.2 42.1 46.2 46.7 49.1 44.6 38.7	-8.0 -6.6	M 42.7 39.4 42.7 42.6 46.5 M 38.6	-1.2 3	31.3 34.1 34.5 36.6 31.1 M27.3	-1.5 -1.5	51.3 M53.9 M M45.3	-2.2 -1.7
PENNINGTON GAP PULASKI STAFFORDSVILLE 3 ENE WISE 1 SE WYTHEVILLE 1 SDIVISIONAL DATA>	M32.2 26.3 27.4 30.3 28.7	-1.5 -4.1	M37.4 32.2 M36.7 34.9 36.2	1.0	47.7 M43.2 46.6 M45.6 45.2	2.7	M55.7 51.0 51.6 53.1 M53.0		58,4 60,4 61,2 59,7	-1.2		. 4	75.3 72.6 73.9 73.1 73.0	1.9	76.2 72.5 74.1 73.0 73.8 72.3	3.5	68.3 61.5 63.9 65.2 65.1	. 4	49.9 45.3 48.8 48.0 48.6 46.1	-5.1	42.0 45.2 47.5 45.6	2.1	ł	- , :	M55.2 M50.4 M52.8 M53.0 2M52.3	1 3 0 7 . 1
											S FOLL		TATION	INDEX												

. . . . . .

		TEI	MPE	RATUF	RE EX	TREM	1E	S ANI	) FRE	ΕZ	ZE I	DAT	Д	(°F	)						٧		INIA 1988	
				LAS	ST SPF	RING	Μ.	INIMU	M OF		FIF	RST	FΑ	LL	ΜI	NIM	1 U N	1 OF				0 F	DAYS	S
STATION 5		⊢		16°OR BELOW	20° OR BELOW	24° OR BELOW		28° OR BELOW	32° OR BELOW		2° OR ELGW	28° 0 BELOW		24° 01		20° 0		16° 0 BELOI	R	BELOW	BELOW	BELON	BELOW	_
HIGHE	ATE	OWES	ATE	DATE TEMP.	DATE TEMP.	<del>                                     </del>	TEMP.	DATE TEMP.	DATE TEMP.	<del>  -</del>	TEMP.	DATE	TEMP.	DATE	TEMP.	DATE	TEMP.	OATE		16°0R B	8		28°0R B	
VIRGINIA		+-		_ O F	0 -	+ -	_	0 -	0 -	-	5 -		-	-0			-		-	=	-	- 5	N m	-
TIDEWATER 01															Ì					Ì				
BACK BAY HL REF  COLONIAL BEACH EMPORIA 1 HNN 101 FREDERICKSBURG NATL PK HOLLAND 1 E HOPEWELL KILMARNOCK 1 N LANGLEY AFB MATHEWS 2 ENE MORFOLK WSO AP PAINTER 2 W STONY CREEK 3 ESE SUFFOLK LAKE KILBY TANGIER ISLAND WAKEFIELD 2 WALKERTON 2 NW HEST POINT 2 SH HILLIAMSBURG 2 N 99	7/11 7/11 7/11 8/11 8/11 6/2 8/11 6/2 7/11 7/11 7/11	7 8 3 0 0 1 1 1 8 6 7 7 7 3 1 8 8 8 6 1 3 7 4 2 5	1/12 1/11 1/15 1/12 1/15 1/12 1/17 1/16 1/12 1/16 1/12 1/16	1 / 7   16   2 / 12   15   2 / 12   16   2 / 12   16   2 / 12   16   2 / 12   16   2 / 13   16   15   16   16   16   16   16   16	2/14 1: 2/26 1: 3/22 1: 3/28 2: 2/14 1: 3/28 2: 2/7 1: 3/28 2: 2/7 1: 2/22 2: 3/22 1: 3/22 1:	5 3/22 7 3/22 9 3/22 9 3/22 9 3/22 0 3/23 9 3/23 9 3/23 9 3/23 9 3/23 9 3/23 9 3/23 9 3/23 9 3/23	21 18 24 24 20 22 21 24 21 20 24 21 29 19	3/22 27 3/22 21 4/14 28 4/20 27 3/22 21 3/23 28 3/22 25 3/22 25 3/22 24 3/22 24 3/22 24 3/23 28 3/22 24 3/23 28	5/3 30 3/22 25 4/20 25 3/28 32 4/21 30 MSG 3/28 32 4/20 30 4/20 30 4/20 30	2 10 10 2 10 2 10 0 10 0 10 11 2 10 11 12 10 11 10 10 11 10 10 10 11 10 10 10 10	/13 31 / 9 28 / 6 30 / 9 32 / 8 32 / 9 30 / 25 32 / 13 32 / 13 32 / 14 32 / 10 30 / 9 31 / 1 9 31 / 1 1 3 29	10/9 10/9 11/19 10/13 10/14 12/11 11/19 12/ 4 12/ 6 10/ 9 12/ 11 10/14 10/13 10/14	28 27 25 26 28 27 28 27 28 28 27 28 28 27 28 28 27 28 28 28 27 28 28 28 28 28 28 28 28 28 28 28 28 28	MSG 12/6 10/14 10/13 12/5 10/14 11/25 12/12 12/12 12/12 12/11 12/11 12/11 12/5 12/5	23 22 24 24 22 23 16 24 24 22 19 20 24 23	MSG 12/10 12/10 12/12 12/12 12/12 12/12 12/12 12/12 12/12 12/12 12/11 12/12 12/12 12/12 12/12 12/12 12/12	16 20 17 19 20 18 16 14 20 16 19 17	12/10 12/12 12/13 12/13 12/13 NONE 12/12 12/12 NONE 12/12 12/12 12/12 12/13 12/12	162 163 113 72 143 163 143 153 153 163 103	88 94 102 70 03 09 02 09 03 65 09	288 2255 2302 2302 257 2304 2304 2265 2304 2265 2265 2265 2265 2265 2265 2265 226	2051 2051 2052 2062 2191 2191 2194 2258 2264 2264 2257 2258 2258 2258 2258 2258 2258 2258	48176 78172 72164 42175 72159 64248 41176 57236 57236 00170 05172 05172	24519863605 5226
WILLIAMSBURG 2 N 99 EASTERN PIEDMONT 02	7/1	6 5	1/16	3/22 16	3/22 1	3/23	23	4/20 27	4/25 32	2 10	/13 30	11/25	28	12/12	19	12/12	19	12/13	152	66	2652	2642	19 171	1
AMELIA 4 SH 99 ASHLAND 100 BREMO BLUFF 97 CAMP PICKETT 100 CORBIN 103 CROZIER FARMVILLE 2 N 99 JOHN H KERR DAM 105 LAHRENCEVILLE 5 W 99 LOUISA 100 RICHMOND WSO AP R101	8 / 1 8 / 1 8 / 1 8 / 1	7 1 7 -5 9 -5 7 2 8 0 9 7 7 3 6 -6	1/11 1/12 2/13 1/11 1/11 1/12 1/10	2/14 15 2/26 16 3/23 16 3/23 16 3/17 16 2/22 16 2/8 12 2/26 16 2/26 15 3/22 17	3/22 1 3/23 1 3/23 1 3/17 1 3/22 1 3/22 1 3/22 1 3/23 2 2/27 1 3/22 1	3 / 2 2 3 / 2 4 6 4 / 2 1 5 3 / 2 2 7 3 / 2 2 3 / 2 3 9 3 / 2 2 9 3 / 2 2	19 24 23 21 17 24 20 21 19 23	4/15 28 3/28 28 4/17 27 4/25 28 3/22 21 4/20 27 3/23 24 3/24 28 3/23 25 4/20 26 4/20 27 3/22 19	4/20 33 4/25 33 4/26 30 4/20 30 4/20 27 4/14 32 4/21 29 4/21 29 4/21 33	1 10 1 10 1 10 1 10 7 10 2 MS 1 10 2 10 1 10	/ 6 31 / 9 30 / 13 29 / 6 30 G / 6 32 / 13 29 / 10 29 / 6 28	10/14 10/9 10/13 10/14 10/9 MSG 10/13 10/14	27 25 27 28 28 28 28 25 28	10/13 12/5 10/14 11/25 12/5 10/13 12/10 11/23 12/5 11/3 10/13 12/4	24 23 24 20 24 22 24 23 24 23	12/10 11/22 12/10 12/ 5 12/10 12/12 12/10 12/12 11/19	19 19 18 20 13 15 17 17 20 20	MSG 12/12 12/12 12/10 12/12 12/12 12/13	112 142 132 153 162 152 152	90 64 70 92 90 90 90	263 244 262 263 263 265 265 262 262 289 2255	2582 2041 2181 2582 2051 262 2452 2582 261	81168 00172 75164 71166 06176 72169 03168 05175 90173 69163	2 4 6 6 9 8 5 3 3
WESTERN PIEDMONT 03					. [																			
APPOMATTOX BEDFORD CHARLOTTE COURT HOUSE 3 W1000 CHARLOTTESVILLE 2 W CHARTHAM DANNILLE-BRIDGE ST LYNCHBURG WSO AP MARTINSVILLE FILT PL MONTICELLO PHILPOTT DAM 2 ROCKY MOUNT SOUTH BOSTON STUART 1 SSE TYE RIVER 1 SE 103	8/1 8/1 8/1 8/1 7/1 8/1	8 - 1 6 6 6 7 7 9 0 9 - 3 5	1/11 2/ 7 1/11 2/ 8 1/12 1/12 2/ 6	2/15 3/22 16 2/26 MSG 2/27 5/2 2/14 12 3/2 14 MSG 2/22 16 2/14 13 2/17 14 2/14 15 2/14 15 16 17 17 18 18 18 18 18 18 18 18 18 18 18 18 18	3/22 11 3/22 11 MSG 3/23 21 2/27 11 2/26 11 3/22 21 MSG 3/16 21 3/23 21 3/24 21 3/15 20	3 / 23 3 / 22 MSG 3 / 23 3 / 23 3 / 22 3 / 22 MSG 3 / 22 MSG 3 / 23 3 / 23	20 23 19 20 19 21 20 23 23 23	3/23 20 4/14 27 3/22 19 MSG 4/21 25 3/23 26 3/22 21 4/20 28 MSG 3/24 28 3/24 28 4/19 28 3/24 28	4/20 29 4/17 32 MSG 4/29 3: 3/28 32 4/20 28 4/20 32 4/20 32 4/21 29 4/21 29 4/21 29 4/21 29 4/21 29 4/21 29	1 10 1 10 1 10 1 10 2 10 2 10 3 MS 2 10 1 10 1 10 1 10 1 10 3 10	/ 7 30 /13 31 /13 31 /6 28 /13 31 /13 29 G 31 /6 31 / 6 31 / 6 32	10/14 MSG 10/14 10/14 10/14 MSG 10/26 10/13 10/13	24 27 28 28 27 28 28 26 28 24	10/12 12/10 MSG 10/13 12/10 12/5 MSG 12/10 12/10 11/12 10/14 10/12	24 19 22 23 24 21 23 24 24 24 24	11/12 12/10 MSG 10/14 12/12 12/10 MSG 12/11 12/12 12/12	19 19 20 18 20 8 12 20 20	12/12 12/12 MSG 12/ 5 12/13 12/12 12/10 12/11 12/12 12/12 12/12	42 142 143 123 152 8 122 113 152 73	65 90 82 02 80 92 80 92 80 93	2352 2632 2052 2892 2882 2712 2642 2561 2642	2031 2632 2041 2872 2582 2622 26342 791	04177 81177 06179 68160 05199 06176 176 03171 03169 69132 76170 01180	09 09 6 61920
NORTHERN 04																								
BERRYVILLE BIG MEADOWS LINCOLN 105 LURAY 5 E MOUNT WEATHER 99	7/	8 0		MSG 3/22 4 2/22 16 3/22 15 2/15 15	3/22 1 3/22 1	3/22 3/22 3/22	2 2 1 8 1 5 1 7	MSG 5/27 28 3/23 26 4/14 28 3/23 26 ES FOLLOWIN	MSG 6/10 32 4/20 32 4/26 32 4/22 32 6 STATION	2 10	/ 8 32 /10 30 / 6 30 /13 30	MSG 10/5 10/14 10/9 11/24	25 26 28 25	MSG 10/ 7 11/23 10/13 12/10	22 23 24 17	MSG 10/ 9 12/11 12/11 12/10	20 20 18 17	MSG MSG 12/12 12/12 12/11	52 42 143	65	2642	10511	31 90 05173 78163 46174	3

### TEMPERATURE EXTREMES AND FREEZE DATA (°F)

		7	EI	1PE P	RATU	JR	EE	X	REI	ME	SA	NE	) F{	RE	EZE	= [	DAT	A	( ° F	)						٧		INIA 1988
					L/	7 S .	T SI	PR	ING	М	INI	MUI	M 01	F	F	- I b	RST	F-F	LL	ΜI	INI	1U1	1 OF				0 F	DAYS
STATION	ST		-		16°01 BELOM		20°01 BELON		24° 0 BELO		28° 01 BELON		32° 0		32° 0		28° BELC		24° 0 BELOI		20°C		16°0 BELO	R W	BELOW	BELOW	BELON	BELOW BELOW
	нібн	DATE	OWES	DATE	DATE	TEMP.	DATE	ENP.	DATE	TEMP.	DATE	TEMP.	DATE	TEMP.	DATE	TEMP.	DATE	TEMP.	DATE	TEMP.	DATE	TEMP.	DATE		8		8 8	28 OR E
PIEDMONT RESEARCH STN STERLING (RCS) WARRENTON 3 SE WASH DULLES WSO AP WASH NATL WSCMO AP WINCHESTER "WINC" WINCHESTER 3 ESE WDODSTOCK 2 NE	100 103 104 104 104	7 / 1 7 7 / 1 7 8 / 1 8 7 / 1 6 7 / 1 6	-6 0 -5 10 3	2/ 7 1/11 2/ 8 1/11 1/11 1/12	2/26 3/22 3/17 3/22 2/ 7 3/22 3/23 3/23	16 12 14 12 11 16	2/26 3/22 3/22 3/22 2/14 3/22 3/23 3/23	12 20 12 20 16 11	3/22 3/23 3/22 3/23 2/26 3/23 3/23	21 21 20 22 24 22 11	3/23 4/20 3/23 4/14 3/22 3/23 4/22 4/14	28 28 25 28 25 22 22	4/14 4/26 4/30 4/26 3/23 4/20 MSG 4/26	30 31 32 32 32 32 32	10/13 10/ 6 10/14 10/ 6 11/25	3 29 6 29 4 29 6 30 5 32 4 27 6 30	10/1 10/ 11/2 10/ 12/1 10/1	4 28 9 26 2 27 9 27 0 26 4 27 9 28	12/10 10/14 12/ 2 10/14 12/11 10/31 10/14	19 21 24 23 22 24 21	12/10 10/27 12/10 12/10 12/10 12/10	19 7 20 19 19 13 2 13 2 20	12/12 12/12 12/12 12/12 12/12 12/12 10/31	132 82 82 92 133 82	902 902 702 965 265 265 265 265 265 265 265 265 265 2	2882 2192 2632 2632 3022 2632	6320 051 5524 051 8920 2220	05182 72163 44167 78163 63247 05177
CENTRAL MOUNTAIN 05														}														
COVINGTON FILT PLANT DALE ENTERPRISE GATHRIGHT DAM HOT SPRINGS LEXINGTON MONTEREY ROANOKE HSO AP STAUNTON SEMAGE PLANT TIMBERVILLE 3 E	102 100 99 94 102 100 105	8/17 8/18 8/18 8/18 8/17 8/17 8/17	-2 0 -4 -7 4	12/12/ 1/11 12/13 1/7/ 1/11/ 12/12/ 1/11/ 1/11/ 1/11/	2/26 3/22 2/27 3/16 2/22 3/22 2/14 2/26 3/22	16 16 12 16 15 13	3/16 3/22 3/23 3/23 3/22 3/22 3/18 3/22	16 19 20 18 16 18	3/22 3/22 3/22 3/23 3/22 3/22 3/28 3/28	16 19 20 18 16 22 24	4/20 4/15 4/25 4/30 4/20 4/29 3/22 4/20	28 28 28 27 27 22	4/26 5/ 1 5/ 27 4/25 5/26 4/14 5/ 2	32 31 32 32 32 32 29	10/ 6 10/ 6 10/ 6 10/ 6 10/ 6	6 29 6 28 6 32 6 25 7 32 6 28	10/ 10/1 10/ 10/1 10/1	8 28 6 28 3 24 6 25 4 26 6 28	MSG 10/14 10/13 10/ 8 10/13 10/13 11/22 10/13	21 24 24 24 24 24	10/27 10/28 12/10 10/14	12 7 20 8 20 1 4 1 19 1 17 4 18	12/10 12/10 12/10 12/10 12/10 11/12	122 72 92 142 162 113	2632 2692 2692 2922 2352 3022	2632 2192 2191 2632 2062 2932 2101	0516 9915 051 0516 4526	81158 66158 59132 76164 60133 06176 69157 69158
SOUTHWESTERN MOUNTAIN 06 ABINGDON 3 S BLACKSBURG 3 SE BURKES GARDEN FLOYD 2 NE GALAX RADIO WBOB GRUNDY MARION EVAP STATION MT LAKE BIOLOGICAL STA PENNINGTON GAP PULASKI STAFFOROSVILLE 3 ENE WISE 1 SE WYTHEVILLE 1 S	100 97 93 92 97 101 88 98 95 100 94 98	8/17 7/ 9 8/18 8/18 7/17 8/18 8/18 8/18 8/18	- 1 - 13 - 9 - 4 - 5 - 10 - 3 0 - 7 - 2	1/12 1/11 1/11 1/11 1/7 12/12 1/11 12/11 1/11 1	3/17 3/16 3/17 3/12 3/15 2/27 MSG 3/16 3/17 2/22 2/22 3/16 3/11	15 15 15 15 15 15 15 16 17 17 18	3/17 3/16 3/24 3/22 3/16 2/28 MSG 3/22 3/17 3/15 3/15 3/16	15 20 16 17 17 18 15 19 17	3/18 3/22 3/24 4/17 3/28 3/18 MSG 3/23 3/17 3/15 3/19 4/20	22 20 24 23 22 24 15 21 17 24	4/20 4/17 5/3 5/1 4/20 4/20 MSG 4/29 4/29 4/29 4/20 4/20	28 28 26 28 28 28 28 28 26 27	4/21 6/6/5/5/30 6/10 6/10 4/30 5/11 6/10 4/30 5/31	32 31 32 30 31 32 32 32 31 32	10/ 6 10/ 6 10/ 6 10/ 6 10/ 6 10/ 6 10/ 6	6 25 6 23 6 28 6 27 7 32 5 27 6 29 6 30 6 30	10/ 10/ 10/ 10/ 10/1 MSG 10/ 10/ 10/ 10/	6 25 6 23 6 27 3 27 5 27 8 28 7 28 7 28 3 24	10/12 10/11 10/6 10/8 10/13 10/14 MSG 10/14 10/13 11/3 10/13	24 23 24 23 24 22 24 22 24 24 24	10/2: 10/13: 10/13: 10/2: 12/3: MSG 10/12: 11/13: 11/18:	7 18 3 20 7 19 7 19 3 20 2 17 2 20 7 20 8 20 8 20	12/12 10/14 12/12 12/15 12/10 MSG 10/14 12/16 12/10	152 - 42 162 162 163 163 163 173 173	2712 2112 265 265 265 287 212 264 2912 292	2252 2031 2051 2251 2792 2041 2242 2472 2482 2572	031 961 741 991 101 971 111 061 331	68162 72168 56122 56123 569157 76160 59117 762159 798160 769156
							382	EE RE	FERENCE	NOT	ES FOLL	ONINI	G STATI	ON 1	NDEX													

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

				'	BASE=	62 . NF	GREE	2 1 71	HKFNH						
STATION	J	AN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL	SEASONAL NORM
VIRGINIA															
TIDEWATER 01															
BACK BAY WL REF COLONIAL BEACH EMPORIAL I WNW FREDERICKSBURG NATL PK HOLLAND 1 E KILMARNOCK I N LANGLEY AFB MATHEWS 2 ENE NORFOLK WSO AP PAINTER 2 W STONY CREEK 3 ESE SUFFOLK LAKE KILBY. TANGIER ISLAND WAKEFIELD 2 WALKERTON 2 NW WEST POINT 2 SW WILLIAMSBURG 2 N	B B	0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 2 7 4 3 0 0 1 0 4 0 0 B 3 0 1 2 0 0	19 67 70 99 160 17 4 18 16 - 2 166 5	B 97 120 84 106 106 131 118 72 118 1128 1103 104 1109 68	2950 3407 22560 22567 2203 2203 2203 2203 2203 2203 2203 220	4 5 5 0 5 4 9 9 5 4 9 9 5 4 4 1 9 6 4 3 7 6 4 8 7 1 7 4 4 3 6 7 4 7 1 8 4 7 1 8 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	4 5 7 4 7 2 0 2 8 0 0 4 4 4 9 3 2 0 4 4 5 4 5 2 0 1 5 4 4 4 5 2 4 5 2 0 1 4 4 4 5 6 4 4 4 5 6 6 6 6 6 6 6 6 6 6 6	217 1837 772 138 134 115 1467 1773 1382 148 1992 1405 1457 150	2 1 8 6 1 8 1 0 1 1 2 1 1 7 1 0 1 7 1 0 6 1 7 2 1 3 1 6 1 1 7 1 1 0 1 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	B 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	B 1 6 2 9 1 2 4 9 9 1 2 4 9 3 3 B 1 4 0 1 1 4 2 4 1 3 0 0 1 1 6 0 8 1 2 5 5 2 B 1 3 5 5 7 B 1 4 4 0 4 1 4 3 5 1 4 8 1 B 1 3 8 0	1 2 0 3 1 3 2 9 1 5 7 1 1 4 7 2 1 4 5 8 1 2 0 5 1 3 7 7 1 2 5 6 1 2 7 3 1 3 2 3
EASTERN PIEDMONT 02	İ														
AMELIA 4 SW ASHLAND BREMO BLUFF CAMP PICKETT CHASE CITY CORBIN CROZIER FARMVILLE 2 N JOHN H KERR DAM LAWRENCEVILLE 5 W LOUISA RICHMOND WSO AP	B B	0 0 0 0 0	0	B 2 B 0 0 B 6 4 6 2 0 0 1 3	5 1 4 8 0 2 8 2 1 2 9 3 4 4 4 1 6	65 80 38 48 88 70 77 63 95 76 108	257 255 185 149 237 278 265 180 269	383 437 303 342 417 428 449 401 430 323 401 466	3 8 4 4 4 3 3 2 6 3 8 7 4 7 3 4 0 1 4 6 6 3 4 8 3 '4 6 5	7 2 B 110 28 86 118 85 77 130 B 58 90 137	6 10 0 9 11 8 - 4 16 8 2 12	B 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	- 0000000000000000000000000000000000000	1 1 4 2 B 1 3 4 6 I 0 2 3 B 1 3 5 3 1 2 4 9 B 1 1 9 5 I 4 0 0 B 9 7 8 I 1 7 7 I 4 7 6	1170 1323 1275 1090 1336
HESTERN PIEDMONT 03		ĺ													
APPOMATIOX BEDFORD CHARLOTTE COURT HOUSE 3 CHARLOTTESVILLE 2 W CHATHAM DANVILLE-BRIDGE ST LYNCHBURG WSO AP MARTINSVILLE FILT PL MONTICELLO PHILPOTT DAM 2 ROCKY MOUNT SOUTH BOSTON STUART 1 SSE TYE RIVER 1 SE	ж В В В В В В В В В В В В В В В В В В В	0 0 0 0 0 0 0 0 0 0 0 0	8 0 0 0 B 0 B 0	B 1 0 4 - 1 0 1 0 0 0 0 0 2	0 9 7 0 1 1 7 1 8 4 0 0 0 3 6	516621357830401 B 55545276	2 4 6 1 8 9 2 4 9 2 7 7 2 3 0 4 2 3 3 2 2 8 2 8 3 2 1 6 2 2 9 2 2 4 2		4 3 1 2 9 5 5 2 4 2 2 5 5 2 1 2 8 8 3 3 6 8 3 3 6 8 7 4 3 4	9 4 3 6 1 0 5 8 0 6 6 6 1 4 9 9 4 5 2 8 2 1 8 7 0 7 3 9 1	6 0 1 1 1 3 3 3 3 1 3 1 1 2 6 4 0 4	B 000000000000000000000000000000000000	B 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	B 1 2 5 2	1079 11220 1220 1108 1384 1074 991
NORTHERN 04															
BERRYVILLE BIG MEADONS LINCOLN LURAY 5 E MOUNT HEATHER PIEDMONT RESEARCH STN STERLING (RCS) WARRENTON 3 SE WASH DULLES WSO AP	В	0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	B 0 0 0 3 3 2 1 SEE REF	- 0 4 1 0 1 0 1 2	- 4 100 39 35 72 49 68 71	4 2 2 9 7 1 9 1 1 5 9 7 2 5 5 1 2 3 1 L O W I N G	4 8 9 3 9 9 3 6 4 3 9 9 3 8 2 4 2 6 4 3 9	B 104 407 B 358 310 399 417 423 INDEX	- 0 109 8 39 37 79 8 60 89	0 4 7 2 6 7 5 5	0 0 0 0 0 0		B 1 4 1 0 B 1 0 3 4 B 9 0 7 1 2 1 6 B 1 0 6 5 1 2 5 8	206 1128 811 650 1105 985 970

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

					D H 2 E -	וט כס-		3 1 AT	111111	L 1 I					
STATION		NAU	FEE	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL	SEASONAL NORM
WASH NATL WSCMO AP WINCHESTER "WINC" WINCHESTER 3 ESE WOODSTOCK 2 NE	R	0 0 0	0 0	1 0 0 0	4 0 0 5	1 0 1 3 9 3 2 5 6	3 1 3 2 1 4 - 2 0 3	5 3 4 4 1 6 3 7 3 3 8 2	490 - 331 381	1 4 4 5 1 2 8 6 9	1 1 2 0 5	- 0	0 0 - 0	1598	1430 985 936
CENTRAL MOUNTAIN 05															
COVINGTON FILT PLANT DALE ENTERPRISE GATHRIGHT DAM HOT SPRINGS LEXINGTON MONTEREY ROANOKE WSO AP STAUNTON SEWAGE PLANT TIMBERVILLE 3 E	R	00000000	0 0 0 0 0 0	000000000000000000000000000000000000000	0 1 0 0 3 0 7 0 0	67 44 29 8 9 46 15 58 23 55	233 191 154 134 198 106 232 143 204	375 3563 2642 3388 189 386 293 378	3651 2682 3682 3795 2776 383	- 68 19 18 69 20 90 17 67	5.2 1 0 0 0 1 0 5	0 0 0 0 0 0	000000000000000000000000000000000000000	1 0 1 7 7 3 4 B 66 5 9 9 3 5 3 1 1 1 6 9 7 5 2 B 1 0 9 2	773 535 979 1085 809 823
SOUTHWESTERN MOUNTAIN 06 ABINGDON 3 S BLACKSBURG 3 SE BURKES GARDEN FLOYD 2 NE GALAX RADIO WBOB GRUNDY MARION EVAP STATION		B 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	000000000000000000000000000000000000000	B 0 0 0 0	B 2 0 0 0 0 2	2 9 1 1 0 2 1 2 3 6	166 149 51 89 127 8 192	283 234 134 180 248 360	291 222 134 196 256 320 206	4 5 1 7 1 5 3 2 4 5 8 5	2 0 0 0 0 0 1 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0	633 B 334 499 688 B1005	5 8 5 2 5 2 5 4 4
MT LAKE BIOLOGICAL STA PENNINGTON GAP PULASKI		0 B 0	B 0	B 0	B 0	2 5 9	47 228 142	8 4 3 3 1 2 5 1	85 352 250	B 0 125 29	6 0	0 0	B 0	B 216 B1067 B 681	830
STAFFORDSVILLE 3 ENE WISE 1 SE WYTHEVILLE 1 S		000	B 0	B 0	0 5 8 0	2 3 2 2 1 3	1 4 7 1 5 1 1 4 2	291 263 264	2 8 9 2 6 1 2 7 9	3 0 6 3 6 4	0 4	0 0	0 0	B 780 B 769 B 763	576
				SEE REI	ERENCE	NOTES FO	LLOWING	STATION	INDEX						

		TOTAL	_ EV	APOR.	ATIO	N ANI	IIW C	ND M	OVEMI	ENT			V I	RG I N I A 1988
STATION		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ОСТ	NOV	DEC	ANNUAL
VIRGINIA TIDEWATER 01								_						
HOLLAND 1 E	WIND EVAP MAX TEMP MIN TEMP	- - -	- - -	- - - , -	- - -	- - -	<u>.</u> - -	, - - -	- - -	- - -	- - -	-	- - -	- - -
EASTERN PIEDMONT 02														
JOHN H KERR DAM	WIND EVAP MAX TEMP MIN TEMP	- - -	- - -	- - -	8 1832 4.36 - -	1297 5.58 -	1403 7.17 - -	1466 6.94 -	1357 6.74 - -	1372 4.01 -	1299	1318	- - -	- - -
WESTERN PIEDMONT 03														
PHILPOTT DAM 2	WIND EVAP MAX TEMP MIN TEMP	- - -	- - - -	- - -	739 B 3.84 - -	445 4.13 - -	417 5.33	361 B 5.49 M - M -	B 265 B 5.17 M 93.4 M 69.1	441 B 2.69 76.6 58.4	654 B 2.13 60.8 41.0	-	- - - -	- - M - M -
NORTHERN 04														
PIEDMONT RESEARCH STN	WIND EVAP MAX TEMP MIN TEMP	- - - -	- - -	- , - - -	1825 4.91 70.6 46.4	1200 B 6.46 B1.0 56.9	1297 7.95 89.7 62.6	1009 B 8.49 94.5 70.0	869 B 6.59 94.3 70.9	873 4.26 . 83.3 59.1	1347 3.74 66.9 43.7	- - -	- - -	- - M - M -
CENTRAL MOUNTAIN 05														
GATHRIGHT DAM .	WIND EVAP MAX TEMP MIN TEMP	- - -	- - -	- - -	- - -	738 4.41 70.5 47.7	624 5.78 80.7 54.2	512 5.83 83.9 60.3	497 5.37 84.8 61.0	469 3.17 73.8 - 52.1	770 2.59 54.5 36.2	-	- - -	- - M - M -
SOUTHWESTERN MOUNTAIN OG MARION EVAP STATION	WIND EVAP MAX TEMP MIN TEMP		- - - -		- - -	- - -	-	- - -	- - - -	- - - -	- - -	-	~ - -	- - - -
				SEE REF	ÉRENCE NOT	ES FOLLOWIN	NG STATION	INDEX						

STATION INDEX										VIRGINIA 1988		
STATION	NO.	ION NO	COUNTY	UDE	TUDE	ATION		RS 0 CORD		DURI	LOSED NG YR	SEE REFERENCE
	INDEX	DIVIS		LATIT	LONGI	ELEV <i>A</i>	TEMP.	PRECI	EVAP.	MONTH	MONTH	NOTES
VIRGINIA ABINGDON 3 S ALLISONIA 2 S ALLISONIA 2 S ALTAVISTA AMELIA 4 SW APPOMATTOX ASHLAND BACK BAY WL REF BEDFORD	0 0 2 1 0 1 3 5 0 1 6 6 0 1 8 7 0 2 4 3 0 3 2 7 0 3 8 5 0 5 5 1	06 03 03 03 03 03	WASHINGTON PULASKI CAMPBELL AMELIA APPOMATTOX HANOVER BEDFORD	3 6 4 0 3 6 5 4 3 7 6 3 7 1 8 3 7 2 2 3 7 4 5 3 6 4 0 3 7 2 1	8 1 5 8 W 8 0 4 4 W 7 9 1 8 W 7 8 5 0 W 7 7 2 9 W 7 5 5 5 W 7 9 3 1 W	1 9 2 0 1 8 5 0 5 1 0 3 6 0 9 1 0 2 2 0 5 7 5	0 0 2 0 2 7 7 6 3 6	2 0 3 7 4 3 2 0 5 0 7 6 3 6 7 4	0000000			н с н
BERRYVILLE BIG MEADOWS BLACKSBURG 3 SE BLAND BREMO BLUFF BROOKNEAL BUCHANAN BUCKINGHAM BUENA VISTA	0 6 7 0 0 7 2 0 0 7 6 6 0 7 9 2 0 9 9 3 1 0 8 2 1 1 2 1 1 1 3 6 1 1 5 9	0446623525 00000000	CLARKE MADISON MONTGOMERY BLAND FLUVANNA CAMPBELL BOTETOURT BUCKINGHAM ROCKBRIDGE	3 9 9 3 8 3 1 3 7 1 1 3 7 6 3 7 4 2 3 7 3 3 7 3 2 3 7 3 3 3 7 4 4	7 7 5 9 W 7 8 2 6 W 8 0 2 5 W 8 1 6 W 7 8 1 8 W 7 8 5 6 W 7 9 4 1 W 7 8 3 3 W 7 9 2 1 W	600 35000 20005 4460 460 840	5 3 3 7 0 3 1 2 6 8 0	47 537 38 48 38 55 51	00000000		MAR	H H H
BURKES GARDEN BYLLESBY 3 W CAMP PICKETT CHARLOTTE COURT HOUSE 3 N CHARLOTTESVILLE 2 W CHASE CITY CHATHAM CLARKSVILLE COLONIAL BEACH	1 2 0 9 1 2 5 9 1 3 2 2 2 1 5 8 5 1 5 9 3 1 6 0 6 1 6 1 4 1 7 4 6 1 9 1 3	06 06 03 03 03 03 03 01	TAZEWELL CARROLL NOTTOWAY CHARLOTTE ALBEMARLE MECKLENBURG PITTSYLVANIA MECKLENBURG WESTMORELAND	3 7 5 3 6 4 8 3 7 2 3 7 4 3 8 2 3 6 5 0 3 6 4 9 3 6 3 7 3 8 1 5	8 1 2 0 W 8 0 5 9 W 7 7 5 7 W 7 8 4 2 W 7 8 2 8 W 7 8 2 8 W 7 9 2 4 W 7 8 3 4 W 7 6 5 8 W	3 3 0 0 2 6 1 0 3 3 0 5 9 0 8 7 0 5 1 0 4 0 3 1 0	1 7 4 2 8 5 4 1 6 5	93 23 17 42 112 41 657 26	00000000			н С н С н
CONCORD 4 SSW COPPER HILL 1 NNE CORBIN COVINGTON COVINGTON FILT PLANT CRAIGSVILLE 2 S CROZIER CUMBERLAND DALE ENTERPRISE	1 9 5 5 1 9 9 9 2 0 0 9 2 0 4 1 2 0 6 4 2 1 4 0 2 2 1 6 0 2 2 0 8	0 3 6 2 5 5 0 0 5 0 0 0 0 0 0 0 0 0 0 0 0 0 0	C A M P B E L L F L O Y D C A R O L I N E A L L E G H A N Y A L E G H A N Y A U G U S T A G O O C H L A N D C U M B E R L A N D R O C K I N G H A M	3 7 1 8 3 7 6 3 8 1 2 3 7 4 8 3 7 4 8 3 7 4 8 3 8 3 3 7 3 8 3 7 3 0 3 8 2 7	78 59W 80 8W 77 22W 80 0W 79 23W 77 48W 78 15W 78 56W	6 4 0 2 7 2 0 2 2 2 0 1 2 4 5 1 2 3 0 1 7 8 0 4 6 0 1 4 0 0	0 2 8 0 1 3 0	3 9 4 7 3 0 5 1 2 8 5 0 1 0 8	00000000			H H H C H H C H
DANVILLE-BRIDGE ST EARLEHURST EMPORIA 1 WNW FARMVILLE 2 N FLOYD 2 NE FREDERICKSBURG NATL PK FREE UNION GALAX RADIO WBOB GATHRIGHT DAM	2 2 4 5 2 6 0 0 2 7 9 0 2 9 4 1 3 0 7 1 3 1 9 2 3 2 1 3 3 2 6 7 3 3 1 0	0 3 5 0 1 2 0 6 1 3 6 5 0 0 5	PITTSYLVANIA ALLEGHANY GREENSVILLE CUMBERLAND FLOYD SPOTSYLVANIA ALBEMARLE CARROLL ALLEGHANY	3 6 3 5 3 7 4 0 3 6 4 1 3 7 2 0 3 8 5 6 3 8 1 9 3 8 9 3 6 4 0 3 7 5 7	79 23 W 80 1 4 W 7 7 33 W 80 1 8 W 7 8 23 W 80 1 8 W 7 7 8 34 W 80 55 W 7 9 5 7 W	4 1 0 2 0 4 0 1 0 0 4 5 0 2 6 0 0 5 7 0 2 3 8 5 1 7 7 0	6 67 56 95 0 34	9158967450	000000000			н н
GLASGOW 1 SE // GLEN LYN GORDONSVILLE 3 S GOSHEN GRUNDY HILLSVILLE HOLCOMBS ROCK HOLLAND 1 E HOPEWELL	3 3 9 7 3 4 6 6 3 4 7 0 3 6 4 0 3 9 9 1 4 0 3 9 4 0 4 4	06 02 05 06	ROCKBRIDGE GILES LOUISA ROCKBRIDGE BUCHANAN CARROLL BEDFORD PR GEORGE	3 7 3 7 3 7 2 2 3 8 5 3 7 5 9 3 7 1 6 3 6 4 4 3 7 3 0 3 6 4 1 3 7 1 8	79 26 W 80 52 W 78 11 W 79 30 W 82 44 W 79 16 W 76 47 W 77 18 W	7 4 0 1 5 2 0 4 6 0 1 3 5 0 1 1 7 0 2 5 9 5 8 0 4 0	48 0 28 0 56	258986861 272434250	000000000000000000000000000000000000000			н н н н
SEE REFERENCE NOTES FOLLOWING STATION INDEX  15												

STATION INDEX										VIRGINIA 1988		
	O Z	ON NO		DE	TUDE	NOI	YEARS OF RECORD			OPENED OR CLOSED DURING YR		SEE
STATION	INDEX	DIVISIO	COUNTY	LATITUE	LONGITU	ELEVAT] FEET	ТЕМР.	PRECIP	EVAP.	MONTH	MONTH	REFERENCE
HOT SPRINGS HUDDLESTON 4 SW INDEPENDENCE 2 JOHN W FLANNAGAN LAKE JOHN H KERR DAM KERRS CREEK 6 WNW KERRS CREEK 6 WNW KEYSVILLE 8 N KILMARNOCK 1 N LAFAYETTE 1 NE	4 1 2 8 4 1 4 8 4 2 3 4 4 4 1 0 4 4 1 4 4 5 6 5 4 5 6 8 4 6 0 0 4 6 7 6	05 03 06 02 05 02 06	GRAYSON DICKENSON MECKLENBURG ROCKBRIDGE PRINCE EDWAR LANČASTER	3 8 0 3 7 8 3 6 3 9 3 7 1 4 3 6 3 6 3 7 5 1 3 7 1 0 3 7 4 3 3 7 1 4	7 9 5 0 W 7 9 3 2 W 8 1 1 0 W 8 2 2 1 W 7 8 1 7 W 7 9 3 5 W 7 8 3 1 W 7 6 2 3 W 8 0 1 3 W	2 2 3 8 9 7 0 2 6 1 0 1 4 6 2 2 5 0 1 5 0 0 6 0 1 3 8 0	9 5 0 0 4 0 0 0 1 0 0	9 7 3 9 3 6 2 0 4 0 2 7 1 0 1 0 3 B	0 0 0 0 3 7 0 0 0			С Н С Н Н
LANGLEY AFB LAWRENCEVILLE 5 W LEXINGTON LINCOLN LOUISA LURAY 5 E LYNCHBURG WSO AP MARION EVAP STATION MARTINSVILLE FILT PL	4 7 2 0 4 7 6 8 4 8 7 6 4 9 0 9 5 0 5 0 5 0 9 6 8 5 1 2 0 5 2 7 1 5 3 0 0	0 1 0 2 0 5 0 4 0 2 0 4 0 3 0 6 0 3	BRUNSHICK ROCKBRIDGE LOUDOUN LOUISA PAGE CAMPBELL SMYTH	3 7 5 3 6 4 6 3 7 4 7 3 9 7 3 8 2 3 8 4 0 3 7 2 0 3 6 4 9 3 6 4 2	76 21 W 77 56 W 79 26 W 77 43 W 78 0 W 78 23 W 78 12 W 81 31 W 79 53 W	1 0 3 0 0 1 0 6 0 5 0 0 4 2 0 1 2 0 0 9 1 6 2 1 0 0 7 6 0	1 1 0 8 7 7 3 4 7 1 1 7 2 9	1 5 2 4 3 1 1 7 8 8 7 3 4 7 1 1 7 2 5 7	0 0 0 0 0 0 0 2 9			С Н Л Н Н Н Н Н Н Н Н Н Н Н Н Н Н Н Н Н Н
MATHEWS 2 ENE MC DOWELL 3 W MEADOWS OF DAN 5 SW MILLGAP 2 NNW MONTEBELLO 2 NE MONTEREY MONTICELLO MOUNTAIN GROVE MT LAKE BIOLOGICAL STA	5 3 3 8 5 4 4 5 3 5 5 5 8 8 8 5 6 7 7 5 2 5 8 8	01 05 03 05 05 05 05 05 06	HIGHLAND PATRICK HIGHLAND NELSON HIGHLAND ALBEMARLE BATH	3 7 2 7 3 8 2 1 3 6 4 0 3 8 2 1 3 7 5 3 3 8 2 5 3 8 1 3 8 6 3 7 2 3	76 17 W 79 32 W 80 27 W 79 43 W 79 8 W 79 35 W 78 53 W 79 32 W	2 4 0 0 1 5 0 0 2 5 2 0 2 6 8 0 2 9 2 0 7 8 0 1 7 6 7 3 8 7 0	3 8 0 0 0 0 4 7 7 0 1 8	3 8 3 9 1 3 5 1 6 7 1 8	000000000	JAN		H C H H
MOUNT WEATHER NEW CASTLE NEWPORT 2 NNW NORFOLK WSO AP NORTH FORK LAKE PAINTER 2 W PALMYRA 1 E PEDLAR DAM PENNINGTON GAP	5 8 5 1 6 0 1 2 6 0 4 6 6 1 3 9 6 1 7 3 6 4 9 1 6 5 9 3 6 6 2 6	0 4 0 5 0 6 0 1 0 6 0 1 0 2 0 3	CRAIG GILES WISE ACCOMACK FLUVANNA	3 9 4 3 7 3 0 3 7 1 9 3 6 5 4 3 7 3 5 3 7 3 5 3 7 4 0 3 6 4 5	7 7 5 3 K 8 0 6 W 8 0 3 1 W 7 6 1 2 W 8 2 3 8 W 7 5 4 9 W 7 8 1 5 W 7 9 1 7 W 8 3 3 W	1 7 2 0 1 3 1 0 2 0 6 0 2 2 1 6 7 5 3 0 4 1 0 1 0 1 0 1 5 1 0	0	8513303246 4233355			F E B	C H J H H H
PHILPOTT DAM 2 PIEDMONT RESEARCH STN POWHATAN PULASKI RADFORD RICHMOND WSO AP ROANOKE WSO AP ROCKFISH ROCKY MOUNT	6 6 9 2 6 7 1 2 6 9 0 6 6 9 5 5 6 9 9 9 7 2 0 1 R 7 2 8 5 7 3 1 2 7 3 3 8	0 3 0 4 0 2 0 6 0 6 0 2 0 3 0 3	ORANGE POWHATAN PULASKI HENRICO ROANOKE NELSON	3 6 4 7 3 8 1 3 3 7 3 3 3 7 4 3 7 8 3 7 8 3 7 3 0 3 7 1 9 3 7 4 8 3 7 0	8 0 2 W 7 8 7 W 7 7 5 6 W 8 0 4 7 W 8 0 3 3 W 7 7 20 W 7 9 5 8 W 7 9 5 4 W	1 1 2 3 5 1 5 3 7 0 1 8 5 0 1 6 4 1 1 4 9 4 8 5 1 2 3 2	0 5 1	3422811615	3 6 6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			C H C H J C
ROSELAND 1 NNW SOUTH BOSTON STAFFORDSVILLE 3 ENE STAUNTON SEWAGE PLANT STERLING (RCS) STONY CREEK 3 ESE STUART 1 SSE SUFFOLK LAKE KILBY TANGIER ISLAND	7 4 0 2 7 9 2 5 8 0 2 2 8 0 6 2 8 0 8 4 8 1 2 9 8 1 7 0 8 1 9 2 8 3 2 3	0 3 0 3 0 6 0 5 0 4 0 1 0 3 0 1	HALIFAX GILES AUGUSTA LOUDOUN SUSSEX PATRICK	37 48 36 42 37 16 38 59 38 55 36 38 36 44 37 50	78 59 W 78 53 W 80 43 W 79 2 W 77 28 W 77 21 W 80 16 W 76 36 W 76 0 W	8 8 0 3 4 0 1 9 5 0 1 3 8 5 2 8 0 1 4 5 5 1 4 5 5 5	196 1230 2942	3 3 7 1 0 2 3 0 2 9 4 2 6 3 6	00000000			H C H C H H H
SEE REFERENCE NOTES FOLLOWING STATION INDEX 16									I			

$\circ$ $T$	Λ -	T	$\bigcirc $ $\wedge$ $\wedge$ $\wedge$	Ť	K : [ T T T ]	<u> </u>
<u> </u>	$\triangle$	1 1	$\cap N$		NΩI	⊢ X
$\cup$ $\cup$	/ \	1 1	$\cup$		IVL21	. /\

STATION INDEX										V	
STATION	NDEX NO	DIVISION NO.	COUNTY	LATITUDE	LONGITUDE	ELEVATION FEET	YEA RE	RS OF CORD EVAP	MONTH OPENED TO SOPENED OPENED	MONTH CLOSED	SEE REFERENCE NOTES
THE PLAINS 2 NNE TIMBERVILLE 3 E TROUT DALE 3 SSE TYE RIVER 1 SE VIENNA DÜNN LORING WAKEFIELD 2 WALKERTON 2 NW WALLACETON LK DRUMMOND WARRENTON 3 SE	8 3 9 6 0 8 4 4 8 0 8 5 4 7 0 8 6 0 0 0 8 7 3 7 0 8 8 0 0 0 8 8 2 9 0 8 8 3 7 0 8 8 8 8	5 6 3 4 1 1 4	FAUQUIER ROCKINGHAM GRAYSON NELSON FAIRFAX SUSSEX KING & QUEEN FAUQUIER	3 8 5 4 3 8 3 9 3 6 4 0 3 7 3 8 5 4 3 6 5 9 3 7 4 5 3 6 3 6 3 8 4 1	77 45 W 78 43 W 81 24 W 78 56 W 77 13 W 77 0 W 77 3 W 76 26 W 77 46 W	1 0 0 0 2 8 2 0 7 2 0 4 1 8 9 0 5 0 5 0	55 · 0 38	4 3 CC C			C H C H H
WEST AUGUSTA WEST POINT 2 SW WILLIAMSBURG 2 N WILLIS WINCHESTER WINC" WINCHESTER 3 ESE	8 8 9 4 0 0 8 8 9 0 7 5 0 0 0 9 1 5 1 0 0 0 9 1 8 6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	4 4 5 1 1 6 4 4	RICHMOND LOUDOUN ARLINGTON AUGUSTA NEW KENT YORK FLOYD FREDERICK FREDERICK	3 7 5 9 3 8 5 5 1 3 8 5 1 3 7 3 1 3 3 5 1 1 3 5 1 1 3 5 1 1 3 5 1 1 3 7 1 1 1 3 7 1 1 1 1 1 1 1 1 1 1 1	76 46W 77 27W 77 2 W 79 19W 76 50W 76 42W 80 29W 78 7W 78 7W	1 0 1 8 9 0 1 8 7 0 2 9 0 0 7 2 0 6 8 0	4 8 0 3 5 3 8 0 7 8 3	82 0	ИAL		H C H H H H H
WINTERPOCK 4 W WISE 1 SE WOODSTOCK 2 NE WOOLWINE WYTHEVILLE 1 S	9213	6 4 3	CHESTERFIELD WISE SHENANDOAH PATRICK WYTHE	3 7 2 0 3 6 5 8 3 8 5 4 3 6 5 6	77 39 W 82 34 W 78 28 W 80 17 W 81 5 W	6.60 1520	90	1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			С Н Н С Н
		,									
	.		SEE REFERENCE NOTES FOL 17	LOWING	 Station i	NDEX				e.	

#### 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 lie: 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.
- 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 leg. Z14.6 = M-14.6, Z08.2 = M108.21.

#### 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.

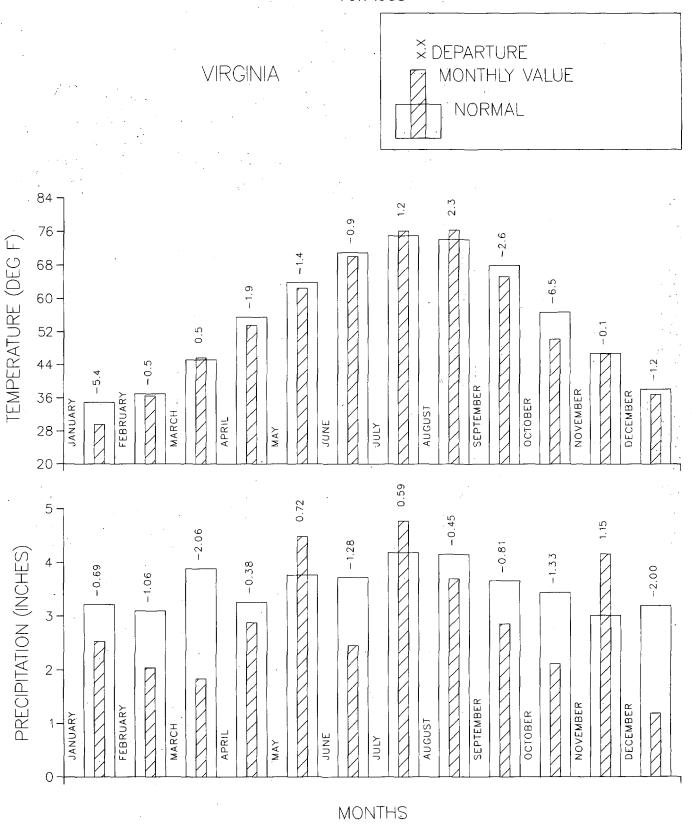
Information concerning the history of changes in locations, exposure, etc. of substations is kept on file at the National Climatic Data Center. Similar historical information for regular National Weather Service Offices is available from the "Local Climatological Data" annual bulletin.

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

#### TEMPERATURE AND PRECIPITATION AREALLY WEIGHTED STATE AVERAGES AND DEPARTURES FROM NORMAL (1951–1980) FOR 1988



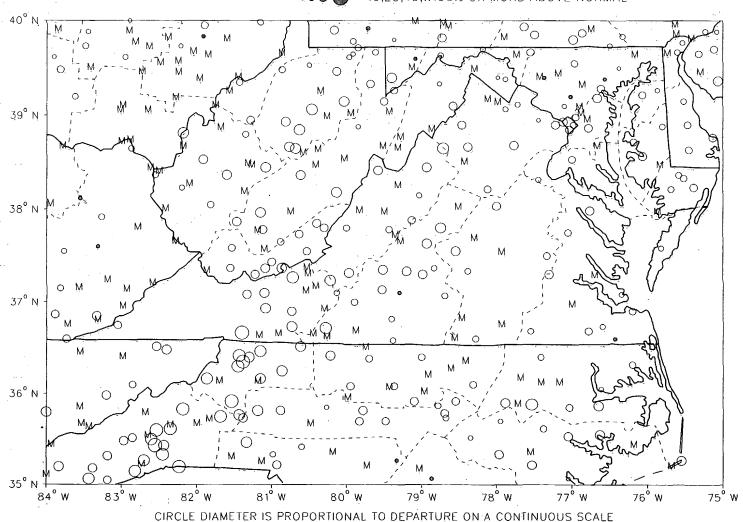
### CUMULATIVE ANNUAL PRECIPITATION DEPARTURE FROM INDIVIDUAL STATION NORMALS (1951–1980) FOR 1988 VIRGINIA

M INCOMPLETE DATA FOR THE PERIOD

▼ EXACTLY NORMAL

900 () 5,10,20,... 50% OR MORE BELOW NORMAL

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

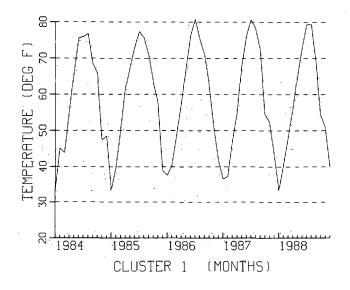


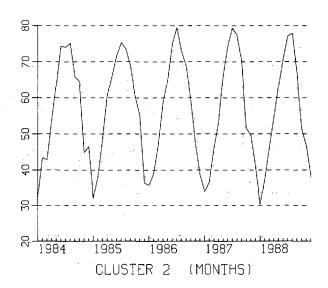
#### MONTHLY TEMPERATURE FOR THE LAST 60 MONTHS ENDING DECEMBER 1988 VIRGINIA

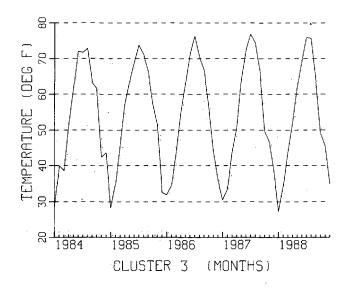
CLUSTER 1 -DIVISION(S): TIDEWATER 01 CLUSTER 2 -DIVISION(S): EASTERN PIEDMONT 02 WESTERN PIEDMONT 03

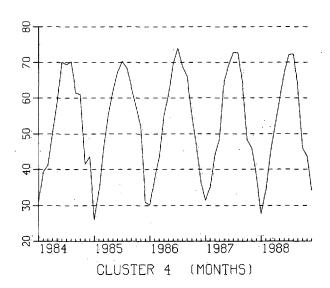
CLUSTER 3 -DIVISION(S): NORTHERN 04 CENTRAL MOUNTAIN 05

CLUSTER 4 -DIVISION(S): SOUTHWESTERN MOUNTAIN 06







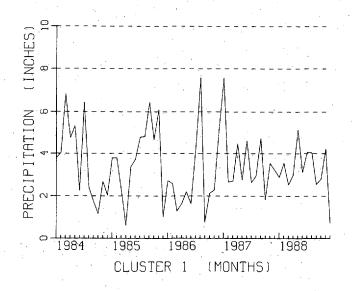


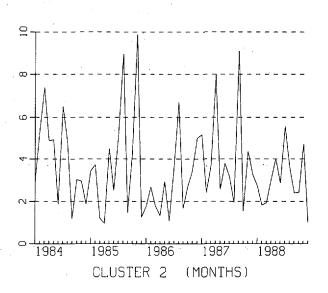
## MONTHLY PRECIPITATION FOR THE LAST 60 MONTHS ENDING DECEMBER 1988 VIRGINIA

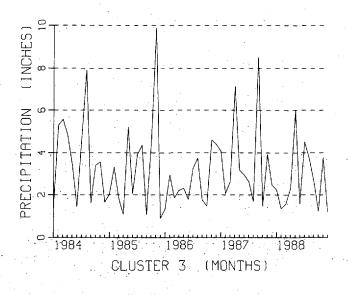
CLUSTER 1 -DIVISION(S): TIDEWATER 01

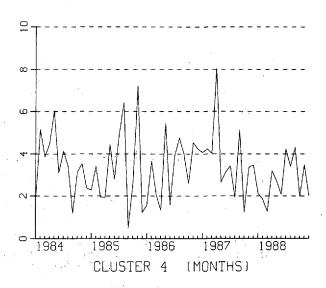
CLUSTER 3 -DIVISION(S): NORTHERN 04 CENTRAL MOUNTAIN 05 CLUSTER 2 -DIVISION(S): EASTERN PIEDMONT 02 WESTERN PIEDMONT 03

CLUSTER 4 -DIVISION(S): SOUTHWESTERN MOUNTAIN 06

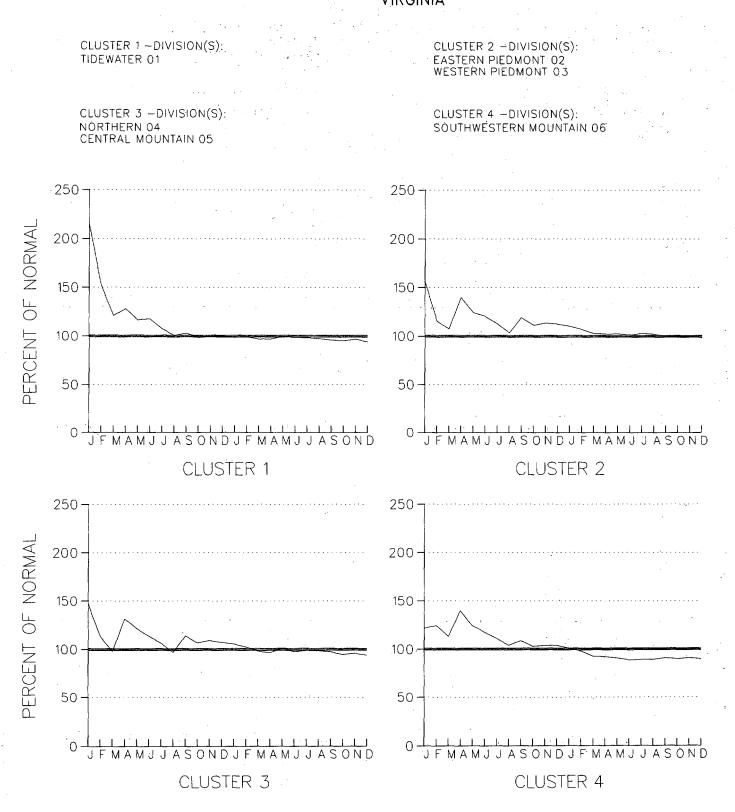








## CUMULATIVE PRECIPITATION DEPARTURES FROM NORMAL (1951–1980) FOR THE LAST 24 MONTHS ENDING DECEMBER 1988 VIRGINIA

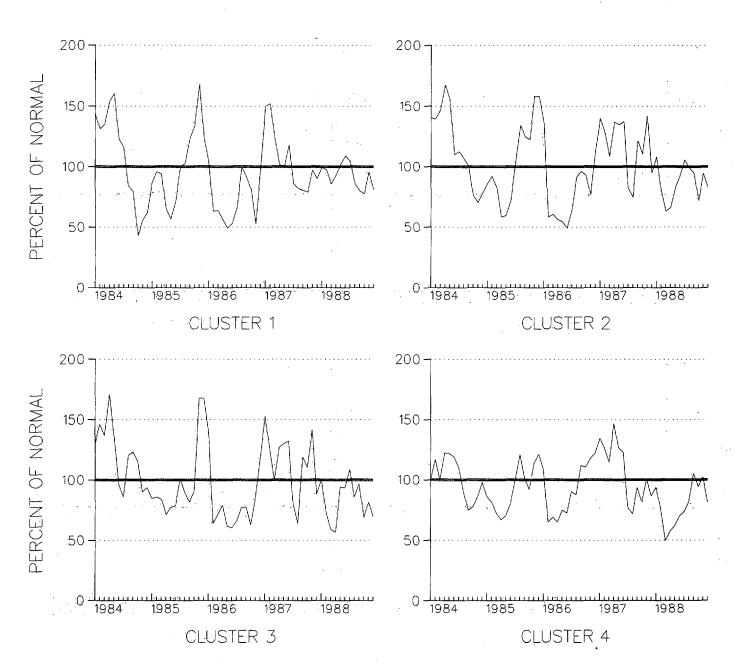


## PRECIPITATION DEPARTURES FROM NORMAL (1951–1980) THREE MONTH RUNNING MEAN FOR THE 60 MONTHS ENDING WITH DECEMBER 1988 DATA VIRGINIA

CLUSTER 1 - DIVISION(S): TIDEWATER 01

CLUSTER 2 - DIVISION(S): EASTERN PIEDMONT 02 WESTERN PIEDMONT 03

CLUSTER 3 - DIVISION(S): NORTHERN 04 CENTRAL MOUNTAIN 05 CLUSTER 4 -DIVISION(S): SOUTHWESTERN MOUNTAIN 06

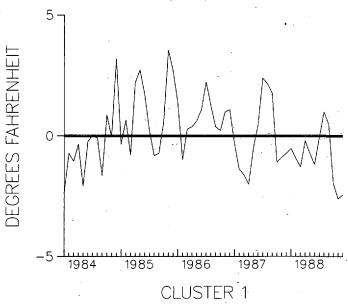


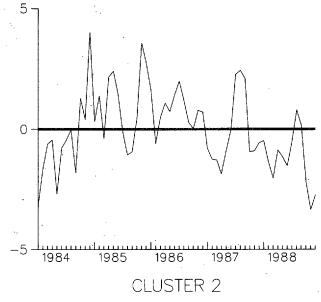
## TEMPERATURE DEPARTURES FROM NORMAL (1951–1980) THREE MONTH RUNNING MEAN FOR THE 60 MONTHS ENDING WITH DECEMBER 1988 DATA VIRGINIA

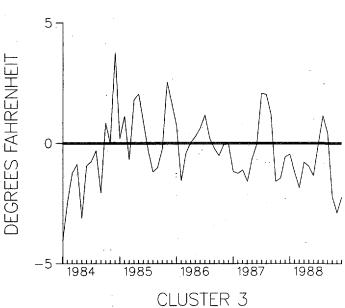
CLUSTER 1 - DIVISION(S): TIDEWATER 01

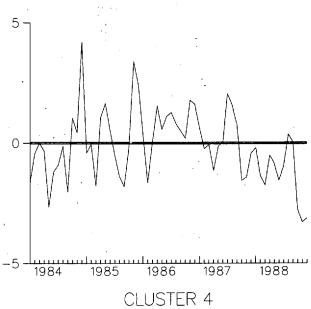
CLUSTER 3 -DIVISION(S): NORTHERN 04 CENTRAL MOUNTAIN 05 CLUSTER 2 - DIVISION(S): EASTERN PIEDMONT 02 WESTERN PIEDMONT 03

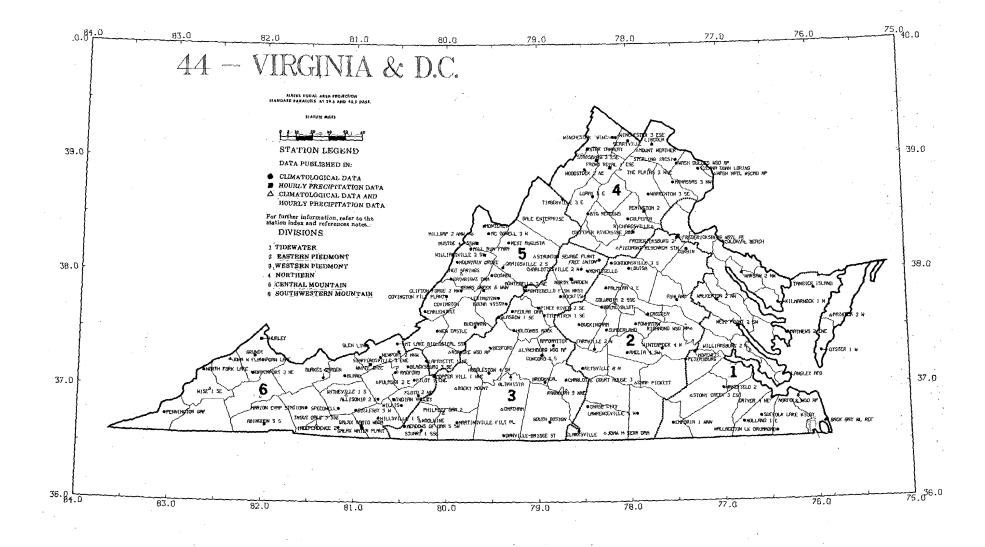
CLUSTER 4 - DIVISION(S): SOUTHWESTERN MOUNTAIN 06

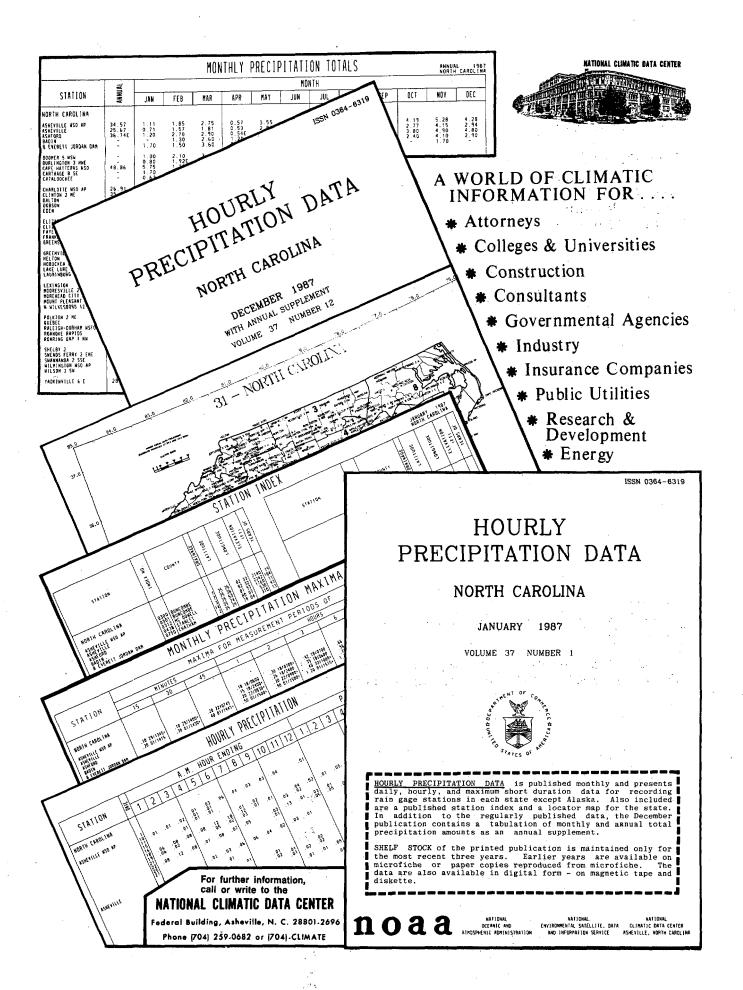












CD VALIDATED BY:

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