MAY 1998
LOCAL CLIMATOLOGICAL DATA
NOAA, National Climatic Data Center

RICHMOND, VA
R.E.BYRD INTERNATIONAL AP. (RIC)
Lat: 37°30' N Long: 77°19' W Elev (Ground): 164 Feet
Time Zone: EASTERN WBAN: 13740 ISSN #:0198−537X

DATE	TEMPERATURE °F MAXIMUM	MINIMUM	AVERAGE	DEP FROM NORMAL	AVERAGE DEW PT	AVERAGE WET BULB	DEG DAYS BASE 65° HEATING	COOLING	WEATHER	SNOW/ICE ON GND(IN) 0700 LST DEPTH	1300 LST WATER EQUIV	PRECIPITATION (INCHES) 2400 LST SNOW−FALL	2400 LST WATER EQUIV	PRESSURE (INCHES OF HG) AVERAGE STATION	AVERAGE SEA LEVEL	WIND SPEED = MPH DIR = TENS OF DEGREES RESULTANT SPEED	RES DIR	AVERAGE SPEED	MAXIMUM 5−SEC SPEED	5−SEC DIR	MAXIMUM 2−MIN SPEED	2−MIN DIR	DATE
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
01	64	57	61	−1	59	60	4	0	TSRA RA BR				0.27	29.52	29.72	4.0	09	4.8	14	07	11	07	01
02	73	54	64	2	50	56	1	0	TS TSRA RA HZ				0.12	29.41	29.61	6.2	23	7.9	26	23	22	23	02
03	80	52	66	4	54	59	0	1	RA BR				0.24	29.54	29.74	8.0	23	9.4	34	24	26	26	03
04	73	57	65	2	58	60	0	0	TS TSRA TSRAGS RA BR				0.24	29.57	29.77	6.5	17	8.0	24	14	17	13	04
05	72	54	63	0	56	59	2	0	RA BR				0.09	29.66	29.86	4.8	20	6.8	20	16	16	24	05
06	76	53	65	2	55	59	0	0	FG+ BR				0.00	29.74	29.94	1.9	01	5.0	14	26	10	29	06
07	74	56	65	2	59	62	0	0	RA BR				0.15	29.66	29.86	5.1	17	7.3	33	20	26	19	07
08	69	59	64	0	60	61	1	0	TS TSRA RA FG BR				1.01	29.35	29.55	3.0	16	6.0	25	22	22	22	08
09	69	59	64	0	58	60	1	0	RA DZ BR				0.02	29.48	29.69	12.4	35	12.9	34*	01	26*	01	09
10	70	58	64	0	56	59	1	0					0.00	29.52	29.72	6.8	01	8.2	17	36	14	36	10
11	60	53	57	−8	53	54	8	0	RA BR				0.02	29.50	29.71	9.4	03	9.7	25	01	21	01	11
12	58	51	55*	−10	52	53	10	0	RA DZ BR				0.26	29.68	29.89	9.8	01	10.2	22	01	17	03	12
13	64	49	57	−8	51	53	8	0	RA DZ BR				0.01	29.90	30.10	8.5	03	9.0	20	01	16	01	13
14	75	45*	60	−5	48	53	5	0	FG+ BR				T	29.94	30.14	5.6	02	6.1	18	01	15	36	14
15	85	47	66	0	51	58	0	1	HZ				0.00	29.87	30.07	0.5	22	2.1	11	22	10	22	15
16	89	57	73	7	59	65	0	8	HZ				0.00	29.79	29.99	1.7	16	2.6	17	20	10	17	16
17	86	65	76	10	64	68	0	11	RA BR HZ				T	29.80	30.00	4.6	01	5.8	20	36	16	01	17
18	86	61	74	7	53	62	0	9	BR				0.00	29.87	30.07	4.8	36	7.4	21	35	15	04	18
19	92*	64	78	11	55	64	0	13					0.00	29.76	29.95	7.4	25	8.1	25	23	20	23	19
20	86	65	76	9	62	67	0	11					0.00	29.67	29.87	6.0	27	6.6	20	24	16	24	20
21	86	63	75	8	60	66	0	10	RA				0.05	29.58	29.78	5.6	34	7.1	23	01	20	01	21
22	78	55	67	−1	46	56	0	2					0.00	29.72	29.92	5.2	35	8.5	22	01	18	01	22
23	66	54	60	−8	52	56	5	0	RA BR				0.31	29.77	29.97	4.6	05	6.4	16	05	13	01	23
24	71	51	61	−7	57	59	4	0	RA BR				0.05	29.81	30.02	2.7	20	3.8	11	21	9	18	24
25	88	64	76	7	63	68	0	11	BR HZ				0.00	29.68	29.88	6.1	26	8.4	23	28	18	28	25
26	84	67	76	7	62	67	0	11	RA BR				0.01	29.72	29.92	3.1	34	6.6	20	30	16	30	26
27	69	62	66	−3	64	64	0	1	TSRA RA FG BR				0.87	29.85	30.05	3.6	06	4.4	15	13	14	13	27
28	78	63	71	2	64	66	0	6	BR				0.00	29.89	30.09	1.5	11	4.1	11	15	9	15	28
29	83	64	74	4	69	70	0	9	TS RA BR HZ				T	29.82	30.02	5.4	18	6.4	17	21	15	13	29
30	89	68	79*	9	67	71	0	14	BR HZ				0.00	29.78	29.98	2.8	16	5.0	32	18	23	17	30
31	88	68	78	8	64	69	0	13	BR HZ				0.00	29.62	29.82	11.2	21	11.5	25	21	22	21	31
	76.8	57.9	67.4		57.5	61.4	1.6	4.2	< MONTHLY AVERAGES	TOTALS−>			3.72	29.69	29.89	1.4	34	7.0					<− MONTHLY AVERAGES
	−1.0	3.7	1.4		<−−−−−−−−−−−−− DEPARTURE FROM NORMAL −−−−−−−−−−−−−>								−.12	SUNSHINE, CLOUD, & VISIBILITY TABLES ON PAGE 3									

DEGREE DAYS

	MONTHLY TOTAL	MONTHLY DEPARTURE	SEASON TO DATE TOTAL	SEASON TO DATE DEPARTURE
HEATING:	50	−11	3644	−319
COOLING:	131	39	191	89

GREATEST 24−HR PRECIPITATION: 1.15 DATE: 07-08
GREATEST 24−HR SNOWFALL: DATE:
GREATEST SNOW DEPTH: DATE:

	SEA LEVEL PRESSURE	DATE	TIME
MAXIMUM	30.19	14	1024
MINIMUM	29.48	08	1810

NUMBER OF DAYS WITH →

MAXIMUM TEMP ≥ 90:	1	MINIMUM TEMP ≤ 32:	0
MAXIMUM TEMP ≤ 32:	0	MINIMUM TEMP ≤ 0:	0
THUNDERSTORMS:	6	HEAVY FOG:	2
PRECIPITATION ≥ 0.01 INCH:	16		
PRECIPITATION ≥ 0.10 INCH:	9		
SNOWFALL ≥ 1.0 INCH:			

MAY 1998
RICHMOND, VA

HOURLY PRECIPITATION

(WATER EQUIVALENT IN INCHES)

RICHMOND, VA

MAY 1998 RIC WBAN # 13740

DATE	FOR HOUR (LST) ENDING AT												DATE	FOR HOUR (LST) ENDING AT												DATE	Sum if Different (See Note 2)	2400 LST Water Equiv.
	1	2	3	4	5	6	7	8	9	10	11	12		13	14	15	16	17	18	19	20	21	22	23	24			
01							T	0.01	0.02	T	0.03	0.03	01	0.04	0.03	0.05	0.01		T	T	T				0.04	01	0.26	0.27
02	0.10	0.02											02					T	0.01							02	0.13	0.12
03				T									03							T	0.06	0.08	0.02	0.01	0.06	03	0.23	0.24
04	0.03									T			04						0.14	0.08						04	0.25	0.24
05					T				T	0.04	0.05		05													05		0.09
06													06													06		0.00
07												T	07	T	0.01	T		T	T	T	T		T	0.10	0.04	07		0.15
08	T	0.04	T	0.08	0.15	0.01	T	0.29	0.24	0.02	0.01		08		0.02	0.08	0.07									08		1.01
09				T		T	T	T	0.01		T	T	09	T	T				0.01							09		0.02
10													10													10		0.00
11						T	T	T	T	T		0.01	11	0.01	T	T		T							T	11		0.02
12							0.01	0.08	0.02	0.05	0.04	0.03	12	T	T	T	T	0.01	T	0.01	T	T	T	0.01	T	12		0.26
13	T	T	T	T	T	T	T						13												0.01	13		0.01
14													14													14	0.00	T
15													15													15		0.00
16													16													16		0.00
17		T											17													17		T
18													18													18		0.00
19													19													19		0.00
20													20													20		0.00
21									0.01				21						0.01	0.03						21		0.05
22													22													22		0.00
23								T	0.04	0.14	0.12	0.01	23													23		0.31
24								0.01	0.01	T	T	0.03	24	T												24		0.05
25													25													25		0.00
26				T	T	0.01							26													26		0.01
27	T	T	T	T	0.04	0.02		0.04	0.04		0.09	0.13	27	0.15		T	T				T	T	T	T		27	0.51	0.87
28													28													28		0.00
29													29				T	T								29		T
30													30													30		0.00
31													31													31		0.00

MAXIMUM SHORT DURATION PRECIPITATION (See Note 1)

Time Period (Minutes)	5	10	15	20	30	45	60	80	100	120	150	180
Precipitation (Inches)												
Ending Date												
Ending Time (Hour/Min)												

Date and time are not entered for TRACE amounts.

Note 1: NCDC derives these data from one–minute ASOS values. The table is not printed when inconsistent with ASOS hourly totals.

Note 2: The sum of the hourly totals is given when it differs from the daily total. NWS does not edit ASOS hourly values but may edit daily and monthly totals. Hourly, daily, and monthly totals are printed as reported by the ASOS site.

REFERENCE NOTES & SUPPLEMENTAL SUMMARIES

* = Extreme for the month (last occurence if more than one)
T = Trace precipitation amount
+ = also occurs on earlier date
FG+ = Heavy fog, visibility .25 miles or less
BLANK entries denote missing or unreported data

Resultant wind is the vector sum of the wind speeds and directions divided by the number of observations.

Wind direction is recorded in tens of degrees (2 digits) clockwise from true north. '00' = calm, 'VR' = variable.

Precipitation is for the 24−hour period ending at the time indicated in the column heading.

Water Equivalent of snow on the ground is reported only when the depth is 2 or more inches.

NORMALS ARE FOR THE YEARS 1961−1990

WEATHER NOTATIONS

QUALIFIER	WEATHER PHENOMENA		
DESCRIPTOR	PRECIPITATION	OBSCURATION	OTHER
BC Patches	DZ Drizzle	BR Mist	DS Duststorm
BL Blowing	GR Hail	DU Widespread Dust	FC Funnel Cloud
DR Low Drifting	GS Small Hail and/or Snow Pellets	FG Fog	+FC Tornado Waterspout
FZ Freezing	IC Ice Crystals	FU Smoke	PO Well−Developed Dust/Sand Whirls
MI Shallow	PE Ice Pellets	HZ Haze	SQ Squalls
PR Partial	RA Rain	PY Spray	SS Sandstorm
SH Shower(s)	SG Snow Grains	SA Sand	GL Glaze
TS Thunderstorm	SN Snow	VA Volcanic Ash	
VC In the Vicinity	UP Unknown Precipitation		

Intensity (as indicated on pages 4 to 6):
'+' = Heavy ' ' = Moderate '−' = Light

RICHMOND, VA
MAY 1998

Ceilometer (30−second) data are used to derive cloudiness at or below 12,000 feet. This cloudiness is the mean cloud cover detected during sunrise to sunset (SR−SS), or midnight to midnight (MN−MN).

Satellite data are used to derive cloudiness above 12,000 feet. Effective Cloud Amount is based on the cloud cover and the transparency of the clouds within the satellite field of view (approx. 31x31 miles).

Sky Condition is based on the sum (not to exceed 8) of the sunrise to sunset cloud cover below and above 12,000 feet. Both ceilometer and satellite data must be present to compute Sky Condition. Clear = 0−2 oktas, Partly Cloudy = 3−6 oktas, Cloudy = 7−8 oktas.

A Heating (Cooling) Degree Day is the difference between the average daily temperature and 65 degrees F. The HDD season begins July 1, the CDD season begins January 1.

Dew Point is the temperature to which the air must be cooled to achieve 100% relative humidity. Wet Bulb is the temperature the air would have if cooled at constant pressure by evaporation of moisture into it, to 100% relative humidity.

Snow Depth, Snowfall, and Sunshine data may come from nearby sites that the National Weather Service deems Climatologically representative of this site.

ADDITIONAL NOTES AND CORRECTIONS:
Sunrise and sunset times listed in the March and April 1998 LCD were incorrect and should not be used.

DATE	SUNSHINE		CLOUDINESS (OKTAS)				VISIBILITY (MILES)		RESERVED
			SR−SS		MN−MN				
	TOTAL MINUTES	PERCENT POSSIBLE	CEILOMETER	SATELLITE	CEILOMETER	SATELLITE	MINIMUM	MAXIMUM	
01							.75	10.00	
02							6.00	10.00	
03							5.00	10.00	
04							1.00	10.00	
05							7.00	10.00	
06							.25	10.00	
07							4.00	10.00	
08							2.00	10.00	
09							5.00	10.00	
10							10.00	10.00	
11							2.50	10.00	
12							1.50	10.00	
13							2.00	10.00	
14							<.25	10.00	
15							6.00	10.00	
16							7.00	10.00	
17							3.00	10.00	
18							4.00	10.00	
19							10.00	10.00	
20							10.00	10.00	
21							7.00	10.00	
22							10.00	10.00	
23							3.00	10.00	
24							2.50	10.00	
25							3.00	10.00	
26							5.00	10.00	
27							.50	7.00	
28							2.00	10.00	
29							1.50	7.00	
30							4.00	9.00	
31							2.00	10.00	
MONTHLY AVGS							4.12	9.77	

SUNSHINE (MINUTES)

Total: Possible:
Percent Possible:

NUMBER OF DAYS WITH:

SKY CONDITION

CLR	PTLY CLDY	CLOUDY	MISSING
			31

MINIMUM VISIBILITY (MILES)

<=0.25	<=3.0	>=7.0
2	16	7

OBSERVATIONS AT 3–HOURLY INTERVALS

RICHMOND, VA

MAY 1998 RIC WBAN # 13740

HOUR (LST)	SKY COVER	CEILING 100'S OF FT	SATELLITE OBSERVATION TIME (LST)	SATELLITE EFF CLD AMT Oktas	VISIBILITY (MILES)	WEATHER	TEMPERATURE °F DRY BULB	TEMPERATURE °F DEW POINT	TEMPERATURE °F WET BULB	RELATIVE HUMIDITY (PCT)	WIND SPEED (MPH)	WIND DIRECTION TENS OF DEG	PRESSURE (INCHES,HG) STATION	PRESSURE (INCHES,HG) SEA LEVEL
					SUNRISE: 0514	**MAY 01**			**SUNSET: 1859**					
01	OVC	075			10.00		60	55	57	84	0	00	29.70	29.91
04	OVC	033			10.00		58	56	57	93	5	13	29.65	29.85
07	OVC	006			2.00	-RA BR	60	59	59	96	7	10	29.60	29.80
10	OVC	005			10.00		61	60	60	97	7	08	29.56	29.76
13	OVC	005			3.00	RA BR	63	62	62	97	8	09	29.49	29.69
16	OVC	005			7.00		63	62	62	97	6	08	29.44	29.64
19	OVC	012			2.50	-RA BR	63	62	62	97	3	09	29.41	29.62
22	OVC	010			2.50	BR	62	60	61	93	5	10	29.42	29.62
					SUNRISE: 0513	**MAY 02**			**SUNSET: 1900**					
01	OVC	090			8.00	-RA	60	53	56	78	5	04	29.38	29.58
04	OVC	004			7.00		58	47	52	67	7	24	29.38	29.58
07	FEW	NC			10.00		58	45	51	62	10	22	29.41	29.61
10	FEW	NC			10.00		65	47	55	52	8	23	29.42	29.62
13	BKN	047			10.00		70	51	59	51	14	22	29.39	29.59
16	BKN	055			10.00		71	51	60	49	16	22	29.38	29.58
19	BKN	200			10.00		64	52	57	65	5	28	29.43	29.63
22	SCT	NC			10.00		54	52	53	93	5	15	29.47	29.67
					SUNRISE: 0512	**MAY 03**			**SUNSET: 1900**					
01	BKN	250			10.00		58	51	54	78	9	25	29.48	29.68
04	FEW	NC			10.00		53	50	51	89	6	21	29.49	29.69
07	SCT	NC			10.00		60	53	56	78	8	26	29.54	29.74
10	CLR	NC			10.00		72	55	62	55	13	23	29.57	29.77
13	BKN	150			10.00		79	54	64	42	16	24	29.53	29.73
16	BKN	250			10.00		80	54	64	41	15	20	29.50	29.70
19	OVC	110			10.00	-RA	70	55	61	59	20	29	29.55	29.75
22	OVC	060			9.00	-RA	61	59	60	93	7	15	29.59	29.79
					SUNRISE: 0511	**MAY 04**			**SUNSET: 1901**					
01	BKN	080			7.00		60	59	59	96	5	16	29.57	29.77
04	BKN	250			5.00	BR	57	57	57	100	6	17	29.55	29.75
07	OVC	008			4.00	BR	60	59	59	96	6	19	29.59	29.78
10	OVC	010			8.00		62	59	60	90	7	18	29.62	29.82
13	BKN	024			10.00		68	59	63	73	5	VR	29.59	29.79
16	OVC	039			10.00		73	59	64	62	7	VR	29.53	29.73
19	OVC	060			10.00		65	61	63	87	13	13	29.54	29.74
22	BKN	055			10.00		61	56	58	84	9	17	29.59	29.80
					SUNRISE: 0510	**MAY 05**			**SUNSET: 1902**					
01	OVC	021			8.00		59	56	57	90	13	17	29.61	29.81
04	OVC	014			8.00		60	57	58	90	13	16	29.62	29.82
07	OVC	013			10.00		61	59	60	93	6	15	29.63	29.83
10	OVC	021			8.00	-RA	64	60	62	87	6	22	29.67	29.87
13	BKN	250			10.00		71	54	61	55	0	00	29.67	29.87
16	OVC	075			10.00		71	52	60	51	7	22	29.66	29.85
19	BKN	250			10.00		66	53	59	63	7	22	29.68	29.88
22	SCT	NC			10.00		56	53	54	90	0	00	29.71	29.91
					SUNRISE: 0509	**MAY 06**			**SUNSET: 1903**					
01	BKN	055			10.00		55	52	53	90	0	00	29.71	29.91
04	SCT	NC			9.00		56	53	54	90	5	33	29.72	29.92
07	OVC	001			0.25	BR	57	57	57	100	6	36	29.77	29.97
10	FEW	NC			10.00		67	58	62	73	6	36	29.78	29.98
13	FEW	NC			10.00		73	54	62	51	3	VR	29.74	29.94
16	SCT	NC			10.00		76	53	62	45	7	VR	29.73	29.93
19	FEW	NC			10.00		69	55	61	61	6	07	29.73	29.93
22	CLR	NC			10.00		61	57	59	87	5	13	29.76	29.97

HOUR (LST)	SKY COVER	CEILING 100'S OF FT	SATELLITE OBSERVATION TIME (LST)	SATELLITE EFF CLD AMT Oktas	VISIBILITY (MILES)	WEATHER	TEMPERATURE °F DRY BULB	TEMPERATURE °F DEW POINT	TEMPERATURE °F WET BULB	RELATIVE HUMIDITY (PCT)	WIND SPEED (MPH)	WIND DIRECTION TENS OF DEG	PRESSURE (INCHES,HG) STATION	PRESSURE (INCHES,HG) SEA LEVEL
					SUNRISE: 0508	**MAY 07**			**SUNSET: 1904**					
01	BKN	090			8.00		60	57	58	90	0	00	29.74	29.93
04	OVC	250			7.00		56	55	55	97	3	15	29.72	29.92
07	OVC	250			5.00	BR	62	58	60	86	3	19	29.73	29.93
10	OVC	130			9.00		74	60	65	62	12	24	29.72	29.92
13	OVC	130			7.00	-RA	68	62	64	81	9	22	29.71	29.91
16	OVC	080			9.00		67	61	63	81	9	12	29.62	29.82
19	OVC	130			6.00	-RA BR	66	62	64	87	9	13	29.56	29.77
22	OVC	100			10.00	-RA	66	59	62	78	18	19	29.55	29.75
					SUNRISE: 0507	**MAY 08**			**SUNSET: 1905**					
01	OVC	070			4.00	RA BR	61	60	60	97	9	22	29.50	29.70
04	OVC	027			2.00	TSRA BR	62	62	62	100	16	15	29.39	29.59
07	OVC	004			3.00	BR	63	62	62	97	6	23	29.38	29.58
10	OVC	120			10.00	TS	62	60	61	93	5	14	29.34	29.54
13	OVC	013			8.00		66	63	64	90	12	20	29.33	29.53
16	OVC	140			10.00		61	59	60	93	5	01	29.28	29.48
19	BKN	250			10.00		61	60	60	97	0	00	29.30	29.50
22	OVC	017			7.00		61	60	60	97	5	36	29.36	29.56
					SUNRISE: 0506	**MAY 09**			**SUNSET: 1905**					
01	OVC	005			7.00		61	60	60	97	10	34	29.37	29.57
04	OVC	008			6.00	BR	60	58	59	93	13	35	29.38	29.58
07	OVC	008			7.00	-RA	59	57	58	93	9	36	29.45	29.65
10	OVC	012			10.00		60	57	58	90	13	32	29.50	29.70
13	OVC	015			6.00	DZ BR	62	59	60	90	12	33	29.50	29.70
16	BKN	055			10.00		68	59	63	73	17	32	29.49	29.69
19	BKN	041			7.00		62	58	60	86	16	36	29.53	29.73
22	OVC	049			10.00		62	56	59	81	12	35	29.57	29.78
					SUNRISE: 0505	**MAY 10**			**SUNSET: 1906**					
01	OVC	039			10.00		61	55	58	81	8	01	29.53	29.73
04	OVC	030			10.00		60	55	57	84	8	32	29.56	29.76
07	OVC	023			10.00		61	56	58	84	7	35	29.54	29.74
10	OVC	029			10.00		64	56	59	75	7	33	29.56	29.76
13	OVC	037			10.00		67	56	61	68	9	36	29.51	29.72
16	OVC	049			10.00		68	58	62	70	7	01	29.47	29.67
19	OVC	042			10.00		62	58	60	86	8	05	29.49	29.69
22	OVC	012			10.00		59	55	57	87	8	05	29.49	29.69
					SUNRISE: 0504	**MAY 11**			**SUNSET: 1907**					
01	OVC	009			10.00		58	55	56	90	8	01	29.45	29.65
04	OVC	009			10.00		55	53	54	93	10	05	29.45	29.65
07	OVC	009			7.00		55	53	54	93	9	01	29.47	29.67
10	OVC	022			10.00		57	54	55	90	12	36	29.49	29.69
13	OVC	014			8.00	-RA	57	54	55	90	15	02	29.50	29.70
16	OVC	015			10.00		58	53	55	84	12	02	29.51	29.71
19	OVC	020			10.00		56	52	54	87	10	02	29.54	29.75
22	OVC	020			10.00		55	52	53	90	6	05	29.58	29.78
					SUNRISE: 0503	**MAY 12**			**SUNSET: 1908**					
01	OVC	027			10.00		53	52	52	96	6	35	29.56	29.76
04	OVC	027			9.00		53	51	52	93	9	36	29.57	29.77
07	OVC	006			5.00	-RA BR	53	52	52	96	10	36	29.61	29.81
10	OVC	011			2.50	RA BR	54	53	53	97	12	36	29.65	29.85
13	OVC	020			10.00	-RA	57	53	55	87	14	03	29.68	29.88
16	OVC	019			10.00		55	53	54	93	9	02	29.72	29.93
19	OVC	020			8.00		53	51	52	93	12	02	29.77	29.97
22	OVC	006			2.00	DZ BR	51	51	51	100	9	01	29.81	30.02

OBSERVATIONS AT 3–HOURLY INTERVALS

RICHMOND, VA

MAY 1998 RIC WBAN # 13740

HOUR (LST)	SKY COVER	CEILING 100'S OF FT	SATELLITE OBSERVATION TIME (LST)	SATELLITE EFF CLD AMT Oktas	VISIBILITY (MILES)	WEATHER	TEMPERATURE °F DRY BULB	TEMPERATURE °F DEW POINT	TEMPERATURE °F WET BULB	RELATIVE HUMIDITY (PCT)	WIND SPEED (MPH)	WIND DIRECTION TENS OF DEG	PRESSURE (INCHES,HG) STATION	PRESSURE (INCHES,HG) SEA LEVEL
					SUNRISE: 0502	**MAY 13**			**SUNSET: 1909**					
01	OVC	013			3.00	DZ BR	51	50	51	96	10	03	29.81	30.01
04	OVC	007			10.00	DZ	51	50	51	96	12	02	29.85	30.05
07	OVC	005			7.00		51	50	51	96	12	03	29.90	30.11
10	OVC	010			10.00		55	51	53	87	12	05	29.93	30.14
13	BKN	032			10.00		61	54	57	78	10	01	29.91	30.11
16	OVC	027			10.00		62	53	57	73	7	02	29.89	30.09
19	SCT	NC			10.00		60	53	56	78	3	03	29.90	30.10
22	CLR	NC			8.00		51	50	51	96	3	06	29.94	30.14
					SUNRISE: 0501	**MAY 14**			**SUNSET: 1910**					
01	CLR	NC			6.00	BR	49	48	48	97	5	33	29.94	30.14
04	VV	001			<.25	FG	46	46	46	100	5	01	29.94	30.14
07	OVC	001			1.00	BR	49	49	49	100	8	02	29.97	30.17
10	CLR	NC			10.00		61	50	55	67	10	02	29.99	30.19
13	CLR	NC			10.00		71	49	59	46	9	01	29.94	30.14
16	CLR	NC			10.00		74	44	58	34	10	05	29.91	30.11
19	CLR	NC			10.00		67	46	56	47	6	08	29.91	30.11
22	CLR	NC			10.00		55	47	51	74	0	00	29.94	30.14
					SUNRISE: 0500	**MAY 15**			**SUNSET: 1911**					
01	CLR	NC			10.00		51	47	49	86	0	00	29.91	30.11
04	CLR	NC			10.00		49	46	47	90	0	00	29.90	30.11
07	CLR	NC			6.00	HZ	59	53	56	81	0	00	29.93	30.13
10	CLR	NC			10.00		75	52	62	45	5	VR	29.93	30.12
13	CLR	NC			10.00		81	47	62	30	5	21	29.87	30.06
16	CLR	NC			10.00		85	49	64	29	5	25	29.83	30.03
19	CLR	NC			10.00		79	55	65	44	0	00	29.82	30.01
22	CLR	NC			10.00		68	56	61	66	0	00	29.83	30.03
					SUNRISE: 0460	**MAY 16**			**SUNSET: 1912**					
01	CLR	NC			10.00		61	56	58	84	3	15	29.81	30.01
04	CLR	NC			10.00		59	56	57	90	0	00	29.81	30.01
07	CLR	NC			7.00		64	59	61	84	0	00	29.83	30.02
10	CLR	NC			10.00		83	60	68	46	3	11	29.81	30.01
13	FEW	NC			10.00		87	57	68	36	5	VR	29.79	29.98
16	SCT	NC			10.00		87	58	69	37	3	18	29.76	29.96
19	SCT	NC			10.00		78	64	69	62	5	16	29.75	29.94
22	SCT	NC			10.00		72	61	65	69	0	00	29.81	30.01
					SUNRISE: 0459	**MAY 17**			**SUNSET: 1912**					
01	CLR	NC			7.00		70	64	66	82	6	14	29.76	29.96
04	CLR	NC			6.00	BR	67	63	64	87	5	15	29.76	29.96
07	BKN	120			3.00	HZ	70	65	67	84	5	35	29.82	30.02
10	CLR	NC			6.00	HZ	80	66	71	62	13	36	29.84	30.03
13	BKN	140			7.00		84	67	73	57	10	34	29.81	30.01
16	FEW	NC			9.00		85	64	71	50	9	01	29.78	29.98
19	SCT	NC			10.00		80	62	69	54	3	36	29.79	29.99
22	CLR	NC			7.00		69	64	66	84	0	00	29.84	30.03
					SUNRISE: 0458	**MAY 18**			**SUNSET: 1913**					
01	CLR	NC			4.00	BR	64	62	63	93	5	VR	29.85	30.05
04	CLR	NC			10.00		63	52	57	68	10	35	29.85	30.05
07	CLR	NC			10.00		68	53	59	59	12	01	29.91	30.11
10	CLR	NC			10.00		79	51	63	38	10	07	29.93	30.13
13	FEW	NC			10.00		84	51	64	32	7	04	29.89	30.09
16	FEW	NC			10.00		85	52	65	32	8	04	29.85	30.05
19	FEW	NC			10.00		81	51	63	35	7	29	29.84	30.03
22	CLR	NC			10.00		73	54	62	51	7	26	29.85	30.05

HOUR (LST)	SKY COVER	CEILING 100'S OF FT	SATELLITE OBSERVATION TIME (LST)	SATELLITE EFF CLD AMT Oktas	VISIBILITY (MILES)	WEATHER	TEMPERATURE °F DRY BULB	TEMPERATURE °F DEW POINT	TEMPERATURE °F WET BULB	RELATIVE HUMIDITY (PCT)	WIND SPEED (MPH)	WIND DIRECTION TENS OF DEG	PRESSURE (INCHES,HG) STATION	PRESSURE (INCHES,HG) SEA LEVEL
					SUNRISE: 0457	**MAY 19**			**SUNSET: 1914**					
01	CLR	NC			10.00		69	51	59	53	5	28	29.83	30.03
04	CLR	NC			10.00		65	50	57	59	5	28	29.81	30.01
07	CLR	NC			10.00		71	53	61	53	5	29	29.84	30.03
10	CLR	NC			10.00		84	58	68	41	7	26	29.82	30.02
13	CLR	NC			10.00		89	55	68	32	9	21	29.76	29.96
16	CLR	NC			10.00		91	53	68	28	10	26	29.70	29.90
19	CLR	NC			10.00		85	56	67	37	6	26	29.67	29.87
22	CLR	NC			10.00		78	59	66	52	9	24	29.68	29.88
					SUNRISE: 0457	**MAY 20**			**SUNSET: 1915**					
01	CLR	NC			10.00		74	58	64	57	5	29	29.68	29.88
04	FEW	NC			10.00		68	58	62	70	3	26	29.67	29.86
07	OVC	250			10.00		73	58	64	59	8	27	29.70	29.90
10	SCT	NC			10.00		86	62	70	45	12	28	29.70	29.89
13	OVC	140			10.00		79	64	69	60	7	28	29.69	29.88
16	BKN	250			10.00		85	63	71	48	9	29	29.65	29.85
19	BKN	250			10.00		81	63	69	54	8	25	29.63	29.83
22	CLR	NC			10.00		72	64	67	76	0	00	29.65	29.84
					SUNRISE: 0456	**MAY 21**			**SUNSET: 1916**					
01	FEW	NC			10.00		73	62	66	69	6	30	29.61	29.81
04	SCT	NC			10.00		65	62	63	90	0	00	29.59	29.79
07	OVC	150			9.00		72	63	66	73	8	26	29.62	29.81
10	SCT	NC			10.00		77	63	68	62	5	30	29.57	29.77
13	SCT	NC			10.00		85	62	70	46	10	34	29.53	29.73
16	SCT	NC			10.00		84	62	70	48	10	35	29.51	29.70
19	BKN	090			10.00		75	67	70	76	0	00	29.54	29.73
22	CLR	NC			10.00		69	45	56	42	10	01	29.63	29.83
					SUNRISE: 0455	**MAY 22**			**SUNSET: 1917**					
01	CLR	NC			10.00		66	42	54	42	15	01	29.67	29.86
04	SCT	NC			10.00		58	43	50	58	8	01	29.71	29.91
07	BKN	250			10.00		63	44	53	50	6	35	29.76	29.96
10	CLR	NC			10.00		70	43	56	38	7	36	29.77	29.97
13	BKN	250			10.00		74	45	58	36	6	30	29.72	29.92
16	BKN	250			10.00		78	46	60	32	13	28	29.67	29.87
19	BKN	250			10.00		72	54	61	53	6	17	29.68	29.88
22	SCT	NC			10.00		64	52	57	65	7	08	29.74	29.94
					SUNRISE: 0455	**MAY 23**			**SUNSET: 1917**					
01	BKN	100			10.00		63	52	57	68	7	07	29.74	29.94
04	BKN	085			10.00		61	55	58	81	7	06	29.73	29.93
07	OVC	048			10.00		62	53	57	73	12	04	29.77	29.97
10	OVC	024			3.00	RA	56	44	50	65	10	02	29.80	30.00
13	OVC	014			10.00		59	47	53	64	8	02	29.78	29.98
16	SCT	NC			10.00		65	50	57	59	9	11	29.73	29.93
19	BKN	250			10.00		64	54	58	70	0	00	29.75	29.96
22	CLR	NC			6.00	BR	57	56	56	96	3	19	29.80	30.01
					SUNRISE: 0454	**MAY 24**			**SUNSET: 1918**					
01	CLR	NC			5.00	BR	54	53	53	97	3	20	29.79	29.99
04	CLR	NC			8.00		52	51	52	97	0	00	29.79	29.99
07	OVC	250			4.00	BR	59	56	57	90	0	00	29.85	30.05
10	OVC	130			10.00		63	55	58	76	3	09	29.85	30.05
13	OVC	040			10.00		65	58	61	78	6	21	29.85	30.05
16	OVC	035			10.00		69	59	63	70	5	21	29.80	30.00
19	OVC	041			10.00		67	59	62	76	5	17	29.78	29.98
22	OVC	027			10.00		66	60	62	81	7	16	29.79	29.99

OBSERVATIONS AT 3−HOURLY INTERVALS

RICHMOND, VA

MAY 1998 RIC WBAN # 13740

HOUR (LST)	SKY COVER	CEILING 100'S OF FT	SATELLITE: OBSERVATION TIME (LST)	SATELLITE: EFF CLD AMT Oktas	VISIBILITY (MILES)	WEATHER	TEMPERATURE °F: DRY BULB	TEMPERATURE °F: DEW POINT	TEMPERATURE °F: WET BULB	RELATIVE HUMIDITY (PCT)	WIND: SPEED (MPH)	WIND: DIRECTION TENS OF DEG	PRESSURE (INCHES,HG): STATION	PRESSURE (INCHES,HG): SEA LEVEL
					SUNRISE: 0453	**MAY 25**			**SUNSET: 1919**					
01	OVC	200			7.00		65	61	63	87	3	05	29.75	29.95
04	OVC	015			8.00		65	62	63	90	6	16	29.72	29.92
07	OVC	008			4.00	BR	67	65	66	93	8	22	29.73	29.93
10	FEW	NC			5.00	HZ	78	68	71	71	8	26	29.68	29.88
13	SCT	NC			10.00		85	61	70	45	16	28	29.67	29.87
16	BKN	250			10.00		87	61	70	42	13	29	29.66	29.85
19	BKN	150			10.00		78	65	70	64	0	00	29.64	29.84
22	BKN	150			10.00		77	63	68	62	7	25	29.65	29.85
					SUNRISE: 0453	**MAY 26**			**SUNSET: 1920**					
01	OVC	200			9.00		74	64	68	71	10	25	29.64	29.84
04	BKN	075			9.00	-RA	72	63	66	73	14	31	29.68	29.87
07	OVC	120			6.00	BR	69	66	67	90	5	23	29.69	29.89
10	FEW	NC			10.00		78	61	67	56	6	VR	29.72	29.91
13	BKN	050			10.00		80	61	68	52	5	35	29.71	29.91
16	BKN	250			10.00		84	59	68	43	10	29	29.71	29.91
19	OVC	250			7.00		75	62	67	64	9	04	29.78	29.98
22	OVC	250			10.00		71	60	64	68	3	07	29.82	30.02
					SUNRISE: 0452	**MAY 27**			**SUNSET: 1920**					
01	BKN	039			7.00	-RA	67	64	65	91	0	00	29.83	30.03
04	OVC	049			7.00		67	62	64	84	5	03	29.82	30.02
07	OVC	027			2.00	RA BR	62	61	61	96	0	00	29.88	30.08
10	OVC	003			1.50	-RA BR	64	63	63	96	5	10	29.88	30.08
13	OVC	005			1.50	BR	65	65	65	100	5	07	29.85	30.05
16	OVC	007			3.00	BR	67	64	65	91	6	04	29.83	30.02
19	OVC	012			4.00	BR	66	65	65	96	5	03	29.85	30.05
22	OVC	028			4.00	-RA BR	66	65	65	96	6	36	29.85	30.05
					SUNRISE: 0452	**MAY 28**			**SUNSET: 1921**					
01	OVC	011			2.00	BR	65	64	64	97	3	02	29.86	30.06
04	OVC	003			2.00	BR	63	63	63	100	0	00	29.87	30.07
07	OVC	005			2.00	BR	64	62	63	93	5	05	29.91	30.11
10	OVC	020			10.00		69	63	65	81	0	00	29.93	30.13
13	BKN	034			10.00		76	65	69	69	3	VR	29.92	30.12
16	SCT	NC			10.00		78	63	68	60	6	VR	29.89	30.09
19	FEW	NC			10.00		75	63	67	66	6	15	29.87	30.07
22	CLR	NC			6.00	BR	67	64	65	91	8	15	29.89	30.09
					SUNRISE: 0451	**MAY 29**			**SUNSET: 1922**					
01	SCT	NC			4.00	BR	64	63	63	96	0	00	29.87	30.07
04	OVC	003			2.50	BR	65	65	65	100	5	18	29.87	30.07
07	OVC	002			1.50	BR	66	66	66	100	7	19	29.88	30.08
10	OVC	018			5.00	HZ	76	69	71	79	8	21	29.87	30.06
13	SCT	NC			4.00	HZ	81	72	75	74	10	17	29.81	30.01
16	BKN	030			4.00	TS HZ	78	72	74	82	6	10	29.76	29.96
19	SCT	NC			5.00	HZ	79	72	74	79	7	19	29.74	29.93
22	CLR	NC			5.00	BR	74	72	73	94	0	00	29.80	30.00
					SUNRISE: 0451	**MAY 30**			**SUNSET: 1923**					
01	CLR	NC			6.00	BR	71	68	69	90	3	21	29.78	29.98
04	CLR	NC			5.00	BR	68	67	67	96	6	20	29.76	29.96
07	FEW	NC			4.00	BR	73	69	70	87	6	26	29.80	30.00
10	SCT	NC			5.00	HZ	83	71	75	67	5	01	29.80	30.00
13	SCT	NC			6.00	HZ	88	72	77	59	6	10	29.79	29.98
16	BKN	250			5.00	HZ	88	72	77	59	8	10	29.73	29.93
19	OVC	250			7.00		78	62	68	58	6	15	29.76	29.96
22	CLR	NC			8.00		72	59	64	64	0	00	29.78	29.98

HOUR (LST)	SKY COVER	CEILING 100'S OF FT	SATELLITE: OBSERVATION TIME (LST)	SATELLITE: EFF CLD AMT Oktas	VISIBILITY (MILES)	WEATHER	TEMPERATURE °F: DRY BULB	TEMPERATURE °F: DEW POINT	TEMPERATURE °F: WET BULB	RELATIVE HUMIDITY (PCT)	WIND: SPEED (MPH)	WIND: DIRECTION TENS OF DEG	PRESSURE (INCHES,HG): STATION	PRESSURE (INCHES,HG): SEA LEVEL
					SUNRISE: 0450	**MAY 31**			**SUNSET: 1923**					
01	BKN	250			6.00	HZ	70	59	63	68	5	19	29.75	29.95
04	BKN	250			4.00	BR	68	64	65	87	7	19	29.71	29.91
07	FEW	NC			3.00	HZ	73	66	69	78	8	22	29.73	29.93
10	BKN	250			8.00		84	66	72	55	15	20	29.70	29.90
13	OVC	250			9.00		86	69	74	57	17	20	29.64	29.84
16	BKN	250			10.00		87	69	75	55	16	20	29.56	29.76
19	BKN	250			9.00		82	59	68	46	12	20	29.50	29.70
22	BKN	250			9.00		80	56	65	44	13	21	29.48	29.67

3−HOURLY OBSERVATION NOTES

Sky Cover is the amount of the sky obscured. CLR or SKC = 0, FEW = 1/8−2/8, SCT = 3/8−4/8, BKN = 5/8−7/8, OVC = 8/8, VV = Vertical Visibilty = 8/8.
Ceiling is reported in hundreds of feet above ground level for clouds at or below 12,000 feet. NC= No ceiling detected.
& = Original observation contained additional weather elements.
See page 3 for additional notes.

SUMMARY BY HOUR

HOUR (LST)	AVERAGES: CEILOMETER	AVERAGES: EFF CLD AMT	AVERAGES: DRY BULB	AVERAGES: DEW POINT	AVERAGES: WET BULB	AVERAGES: RELATIVE HUMIDITY	AVERAGES: PRESSURE (INCHES,HG): STATION	AVERAGES: PRESSURE (INCHES,HG): SEA LEVEL	AVERAGES: VISIBILITY (MILES)	AVERAGES: WIND SPEED (MPH)	RESULTANT WIND (MPH): SPEED	RESULTANT WIND (MPH): DIRECTION
01			62	57	59	84	29.69	29.89	7.68	5	1	33
02			62	56	58	84	29.69	29.89	7.89	6	1	3
03			61	56	58	85	29.69	29.89	7.81	5	0	0
04			60	56	58	87	29.69	29.89	7.57	6	1	1
05			60	56	58	88	29.69	29.89	7.01	5	1	1
06			61	57	58	88	29.70	29.90	5.95	6	1	35
07			63	57	60	84	29.72	29.92	5.90	6	2	32
08			65	58	61	79	29.72	29.92	6.81	8	3	32
09			68	58	62	74	29.72	29.92	7.41	8	2	35
10			70	58	63	69	29.72	29.92	8.42	8	2	32
11			71	58	63	66	29.72	29.92	8.56	8	2	32
12			73	58	64	64	29.71	29.90	8.35	8	2	31
13			74	58	64	62	29.70	29.89	8.69	8	2	30
14			75	58	64	59	29.68	29.88	9.06	9	3	30
15			75	58	64	58	29.67	29.87	8.87	9	2	30
16			75	58	64	58	29.66	29.86	9.26	8	1	32
17			74	58	64	60	29.66	29.86	9.29	8	1	29
18			73	58	64	64	29.66	29.86	8.84	7	1	4
19			70	58	63	69	29.67	29.87	8.89	6	0	0
20			67	59	62	76	29.68	29.88	8.69	5	1	8
21			65	58	61	79	29.69	29.89	8.69	5	1	10
22			65	57	60	79	29.70	29.90	8.50	6	1	15
23			64	57	60	81	29.70	29.90	8.18	5	0	0
24			63	57	59	81	29.69	29.89	7.90	6	1	22

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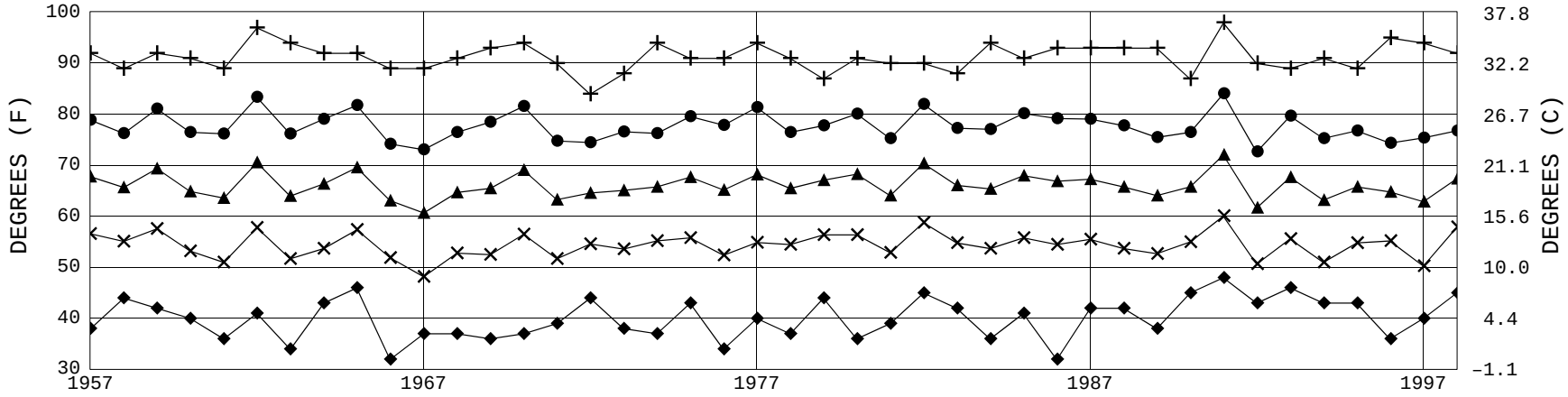
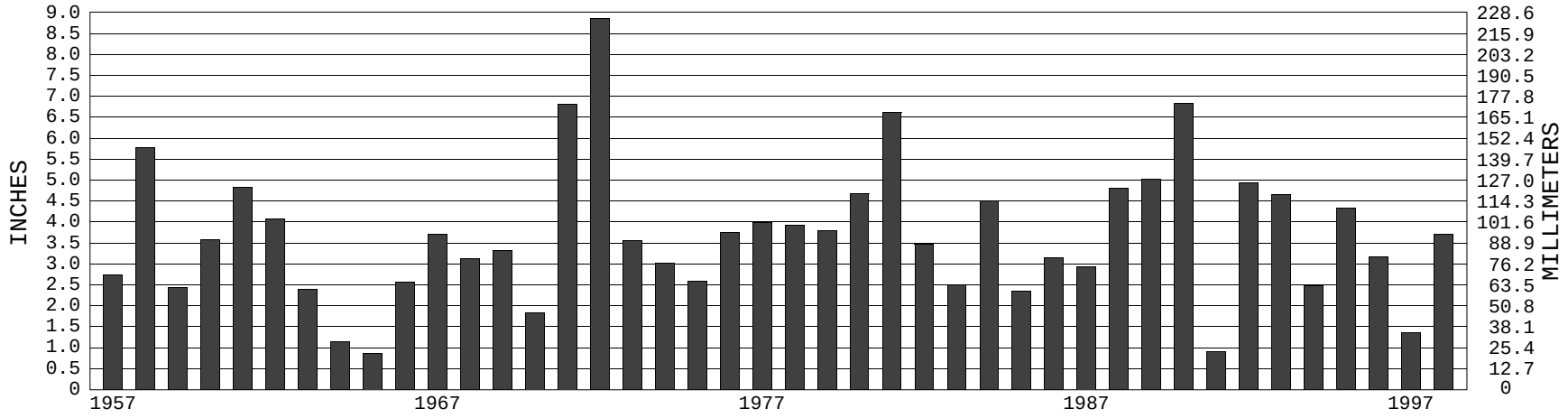
RICHMOND, VA MAY TEMPERATURES



+ Extreme Max. ● Mean Max. ▲ Mean × Mean Min. ◆ Extreme Min.

Long–Term (1957–1998) Mean: 66.1 1961–1990 Normal: 66.0

RICHMOND, VA MAY PRECIPITATION



Long–Term (1957–1998) Mean Monthly Total: 3.70 1961–1990 Normal: 3.84

MAY 1998
RICHMOND, VA

LOCAL CLIMATOLOGICAL DATA

NOAA, National Climatic Data Center

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Thomas R Karl

DIRECTOR

NOTICE

Effective July 1, 1996, the National Weather Service & Federal Aviation Administration began using the METAR format for Hourly Observations.

We welcome your questions or comments, please contact us at
704—271—4800 (voice), 704—271—4876 (fax),
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