

LOCAL CLIMATOLOGICAL DATA Monthly Summary



R.E. BYRD INTERNATIONAL AP.

LATITUDE 37° 30' N LONGITUDE 77° 20' W ELEVATION (GROUND) 164 FEET TIME ZONE EASTERN 13740

JUL 1989
 RICHMOND, VA

DATE	TEMPERATURE °F					DEGREE DAYS BASE 65°F		WEATHER TYPES 1 FOG 2 HEAVY FOG 3 THUNDERSTORM 4 ICE PELLETS 5 HAIL 6 GLAZE 7 DUSTSTORM 8 SMOKE, HAZE 9 BLOWING SNOW	SNOW ICE PELLETS OR ICE ON GROUND AT 0700 INCHES	PRECIPITATION		AVERAGE STATION PRESSURE IN INCHES ELEV. FEET ABOVE M.S.L.	WIND (M.P.H.)				SUNSHINE		SKY COVER (TENTHS)				
	MAXIMUM	MINIMUM	AVERAGE	DEPARTURE FROM NORMAL	AVERAGE DEW POINT	HEATING SEASON BEGINS WITH JULY	COOLING SEASON BEGINS WITH JANUARY			WATER EQUIVALENT (INCHES)	SNOW, ICE PELLETS (INCHES)		RESULTANT DIR.	RESULTANT SPEED	AVERAGE SPEED	PEAK GUST	DIRECTION	FATEST 1-MIN	DIRECTION	MINUTES	PERCENT OF TOTAL POSSIBLE	SUNRISE TO SUNSET	MIDNIGHT TO MIDNIGHT
01	83	56*	70*	-7	59	0	5		0	0.00	0.0	29.950	18	3.7	4.8	16	SW	9	18	768	87	6	4
02	85	58	72	-5	61	0	7		0	0.00	0.0	29.910	19	4.5	5.3	16	S	9	18	737	84	7	6
03	86	66	76	-1	67	0	11		0	0.00	0.0	29.890	18	4.8	5.8	17	S	9	17	629	71	10	10
04	87	71	79	2	71	0	14	1	8	0.05	0.0	29.870	13	6.6	7.3	18	SE	13	11	498	57	10	10
05	88	71	80	3	74	0	15	1	8	0.01	0.0	29.870	14	1.0	5.8	18	NW	10	33	456	52	10	10
06	90	72	81	4	74	0	16	1	3	0.27	0.0	29.915	23	5.6	7.1	22	W	15	25	289	33	10	9
07	89	73	81	4	75	0	16	1	3	0.15	0.0	29.815	24	3.8	7.1	15	W	14	29	656	75	7	7
08	88	66	77	-1	71	0	12	1	8	0.00	0.0	29.790	36	5.0	7.1	21	N	15	01	689	78	3	3
09	88	63	76	-2	68	0	11	1	8	0.00	0.0	29.870	24	5.5	6.6	18	W	12	22	720	82	8	7
10	93	70	82	4	72	0	17	1	8	0.00	0.0	29.810	25	9.3	9.6	21	W	14	27	673	77	5	5
11	96*	76	86*	8	75	0	21		8	0.00	0.0	29.770	29	6.7	8.6	18	N	12	30	729	83	4	5
12	85*	71	78	0	72	0	13	1	3	0.00	0.0	29.770	07	5.1	6.4	20	E	14	10	541	62	9	9
13	88	69	79	1	72	0	14	1	3	0.05	0.0	29.610	01	4.6	6.8	21	N	15	01	423	48	10	10
14	84	67	76	-2	67	0	11	1	3	0.72	0.0	29.680	36	7.0	7.4	17	N	13	01	599	69	6	7
15	85	66	76	-2	66	0	11	1		0.44	0.0	29.900	10	2.9	6.1	23	SW	16	22	624	72	8	8
16	75	68	72	-6	69	0	7	1		2.03	0.0	29.770	04	3.0	9.8	22	NE	15	03	73	8	10	10
17	74	67	71	-7	66	0	6	1		0.00	0.0	29.810	03	5.4	6.4	13	N	9	02	472	54	10	10
18	82	65	74	-4	67	0	9	1		0.00	0.0	29.870	06	4.7	6.7	16	E	10	09	721	83	7	7
19	85	66	76	-2	71	0	11	1	8	0.02	0.0	29.775	15	7.4	7.8	23	SE	14	13	678	78	8	8
20	86	73	80	2	72	0	15	1	8	0.00	0.0	29.655	21	9.7	10.2	22	SW	15	23	767	89	8	9
21	90	71	81	3	72	0	16	1	8	0.00	0.0	29.880	21	9.9	10.3	24	SW	16	22	748	87	5	5
22	93	72	83	5	74	0	18	1	8	0.00	0.0	30.045	22	8.5	9.1	21	SW	14	23	793	92	6	6
23	92	73	83	5	73	0	18	3		0.00	0.0	30.065	25	5.2	6.8	23	W	15	29	682	79	9	9
24	91	72	82	4	73	0	17	1	8	0.00	0.0	30.050	09	3.4	6.0	20	SE	15	14	686	80	4	3
25	91	70	81	3	69	0	16	1	8	0.00	0.0	30.070	17	3.3	5.6	14	S	9	17	763	89	3	2
26	93	70	82	3	72	0	17	1	3	0.16	0.0	29.980	24	3.7	6.7	20	SW	10	32	479	56	6	6
27	90	70	80	2	72	0	15	1	8	0.00	0.0	29.810	23	5.8	7.6	14	W	12	24	707	83	6	7
28	90	72	81	3	72	0	16	1	8	0.00	0.0	29.680	33	6.3	7.5	21	N	15	35	729	86	8	8
29	82	64	73	-5	62	0	8			0.00	0.0	29.860	04	6.9	8.8	21	N	15	02	702	83	3	3
30	85	62	74	-4	65	0	9	1	8	0.01	0.0	29.895	17	7.3	7.9	20	S	14	17	713	84	10	8
31	81	70	76	-2	71	0	11	1	8	0.09	0.0	29.840	02	4.5	9.0	22	S	18	18	418	49	10	10
SUM	SUM	SUM	SUM	SUM	SUM	TOTAL	TOTAL	NUMBER OF DAYS		TOTAL	TOTAL	FOR THE MONTH:	21	1.3	7.4	24	SW	18	18	19162	FOR	225	221
2695	2120					0	403			4.00	0.0	29.850								26897	71	7.3	7.1
AVG.	AVG.	AVG.	DEP.	AVG.	DEP.	0	6	PRECIPITATION		DEP.						DATE: 21	DATE: 31	POSSIBLE	MONTH	AVG.	AVG.		
86.9	68.4	77.7	-0.1	69.8	0	0	6	≥ .01 INCH	12	-1.14													
NUMBER OF DAYS		SEASON TO DATE		SNOW, ICE PELLETS		GREATEST IN 24 HOURS AND DATES		GREATEST DEPTH ON GROUND OF															
MAXIMUM TEMP.		MINIMUM TEMP.		TOTAL		TOTAL		THUNDERSTORMS		PRECIPITATION		SNOW, ICE PELLETS											
≥ 90°	≤ 32°	≤ 32°	≤ 0°	DEP.	DEP.	0	886	HEAVY FOG	0	2.43	15-16	0.0											
11	0	0	0	0	0	0	119	CLEAR	3	PARTLY CLOUDY	12	CLOUDY	16										

* EXTREME FOR THE MONTH - LAST OCCURRENCE IF MORE THAN ONE.
 † TRACE AMOUNT.
 + ALSO ON EARLIER DATE(S).
 HEAVY FOG: VISIBILITY 1/4 MILE OR LESS.
 BLANK ENTRIES DENOTE MISSING OR UNREPORTED DATA.

DATA IN COLS 6 AND 12-15 ARE BASED ON 21 OR MORE OBSERVATIONS AT HOURLY INTERVALS. RESULTANT WIND IS THE VECTOR SUM OF WIND SPEEDS AND DIRECTIONS DIVIDED BY THE NUMBER OF OBSERVATIONS. COLS 16 & 17: PEAK GUST - HIGHEST INSTANTANEOUS WIND SPEED. ONE OF TWO WIND SPEEDS IS GIVEN UNDER COLS 18 & 19: FASTEST MILE - HIGHEST RECORDED SPEED FOR WHICH A MILE OF WIND PASSES STATION (DIRECTION IN COMPASS POINTS). FASTEST OBSERVED ONE MINUTE WIND - HIGHEST ONE MINUTE SPEED (DIRECTION IN TENS OF DEGREES). ERRORS WILL BE CORRECTED IN SUBSEQUENT PUBLICATIONS.

I CERTIFY THAT THIS IS AN OFFICIAL PUBLICATION OF THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, AND IS COMPILED FROM RECORDS ON FILE AT THE NATIONAL CLIMATIC DATA CENTER

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NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

NATIONAL ENVIRONMENTAL SATELLITE, DATA AND INFORMATION SERVICE

NATIONAL CLIMATIC DATA CENTER ASHEVILLE NORTH CAROLINA

Kenneth D. Wadsworth
 DIRECTOR NATIONAL CLIMATIC DATA CENTER

OBSERVATIONS AT 3-HOUR INTERVALS

JUL 1989
RICHMOND, VA

13740

HOUR L.S.T.	VISI-BILITY				TEMPERATURE				WIND				VISI-BILITY				TEMPERATURE				WIND																										
	SKY COVER (TENTHS)	CEILING IN HUNDREDS OF FEET	WHOLE MILES	1/8THS MILE	AIR OF	WET BULB OF	DEW POINT OF	REL HUMIDITY %	DIRECTION	SPEED (KNOTS)	SKY COVER (TENTHS)	CEILING IN HUNDREDS OF FEET	WHOLE MILES	1/8THS MILE	WEATHER	AIR OF	WET BULB OF	DEW POINT OF	REL HUMIDITY %	DIRECTION	SPEED (KNOTS)	SKY COVER (TENTHS)	CEILING IN HUNDREDS OF FEET	WHOLE MILES	1/8THS MILE	WEATHER	AIR OF	WET BULB OF	DEW POINT OF	REL HUMIDITY %	DIRECTION	SPEED (KNOTS)															
JUL 1st																JUL 2nd																JUL 3rd															
01	0	UNL	10		61	60	59	93	00	0	0	UNL	10			62	60	58	87	19	4	8	250	7			67	64	62	84	17	3															
04	0	UNL	10		58	57	57	97	23	3	0	UNL	7			61	59	58	90	21	4	10	250	7			66	64	63	90	13	3															
07	1	UNL	10		68	64	61	78	27	3	2	UNL	7			67	63	61	81	24	4	10	250	7			70	68	66	87	19	3															
10	8	UNL	10		79	66	58	49	27	6	6	UNL	10			80	68	60	51	20	5	10	250	8			79	72	68	69	22	7															
13	8	UNL	10		79	67	59	51	20	3	10	UNL	10			83	69	60	46	12	6	10	120	8			85	73	67	55	20	8															
16	6	UNL	10		82	68	60	47	18	5	10	UNL	10			82	69	61	49	18	8	10	100	8			84	72	65	53	17	8															
19	3	UNL	10		75	66	61	62	17	5	10	250	10			76	68	64	67	17	5	10	100	8			79	72	67	52	17	5															
22	5	UNL	10		66	62	60	81	14	4	10	150	8			69	66	64	84	00	0	10	250	7			74	71	70	87	12	5															
JUL 4th																JUL 5th																JUL 6th															
01	10	55	7		74	72	71	90	19	7	3	9	25	7		72	72	72	100	07	5	10	55	7			72	72	72	100	16	3															
04	10	40	6		72	71	71	97	14	7	10	9	7			73	73	73	100	00	0	10	80	7			72	72	72	100	19	5															
07	10	100	3		72	72	72	100	16	3	10	8	4		F	75	74	74	97	21	7	10	7	4		F	74	73	73	97	25	7															
10	10	90	5		78	74	72	82	12	5	10	15	5		FH	80	77	75	85	24	5	9	100	6		F	83	77	75	77	20	4															
13	10	70	6		86	75	70	59	14	9	9	31	7		H	86	77	73	65	19	6	10	100	6		H	86	78	75	70	25	9															
16	9	70	7		84	75	70	63	12	9	10	80	7		RW	82	78	76	82	01	5	9	30	5		TRWH	77	76	75	94	25	8															
19	10	250	7		79	74	72	79	11	9	10	80	7			77	76	75	94	02	5	10	45	6		F	74	73	73	97	16	4															
22	10	90	7		74	73	72	94	11	7	10	70	7			72	72	72	100	13	4	4	UNL	5		F	74	74	74	100	12	4															
JUL 7th																JUL 8th																JUL 9th															
01	10	150	5		73	73	73	100	21	5	5	UNL	2		FH	77	76	76	97	26	6	0	UNL	7			66	65	64	93	02	3															
04	6	150	5		73	73	73	100	24	6	6	UNL	2		FH	76	75	74	94	30	7	0	UNL	6		F	64	63	63	97	00	0															
07	3	UNL	6		75	74	74	97	30	7	5	UNL	2		FH	77	74	73	88	29	4	7	UNL	6		H	74	69	66	76	25	4															
10	8	120	6		84	77	74	72	30	7	2	UNL	2		H	83	77	74	74	06	10	9	UNL	8			84	73	68	59	23	9															
13	6	120	6		88	78	74	63	35	8	2	UNL	2		H	87	77	72	61	03	9	10	250	8			87	75	69	55	23	9															
16	8	40	5		83	77	75	77	19	6	2	UNL	3		H	87	78	74	65	36	11	10	200	7			85	74	69	59	25	8															
19	7	250	3		85	78	75	72	25	5	2	UNL	5		H	81	74	70	69	03	7	8	120	7			80	74	71	74	19	6															
22	5	UNL	2		77	76	76	97	16	3	0	UNL	6		H	69	66	64	84	00	0	10	200	7			77	73	71	82	27	5															
JUL 10th																JUL 11th																JUL 12th															
01	10	70	7		75	69	65	71	24	9	3	UNL	2		H	78	75	74	88	25	6	10	50	3		TRWH	79	72	69	72	05	8															
04	10	100	7		70	68	67	90	21	6	3	UNL	2		H	76	73	72	88	28	5	10	250	3		FH	73	72	72	97	03	3															
07	10	UNL	3		76	73	71	85	27	7	2	UNL	2		H	80	75	72	77	27	8	8	80	5		FH	76	74	73	91	02	5															
10	0	UNL	3		86	77	73	65	25	7	2	UNL	2		H	91	80	75	60	33	10	9	250	5		H	83	77	75	77	05	10															
13	7	41	2		91	79	74	58	25	11	3	UNL	2		H	95	81	76	54	33	10	10	60	5		H	81	75	72	74	10	8															
16	5	UNL	2		92	80	76	60	27	12	6	50	2		H	94	81	76	56	31	10	10	65	7			81	73	69	67	10	12															
19	4	UNL	2		87	79	76	70	24	10	9	250	2		H	91	81	77	64	23	6	10	40	7			77	74	72	85	15	6															
22	3	UNL	2		82	76	74	77	25	8	10	250	1		H	86	80	78	77	25	6	10	100	7			74	73	72	94	00	0															
JUL 13th																JUL 14th																JUL 15th															
01	10	15	7		72	72	72	100	03	3	10	5	2		RF	68	68	68	100	36	9	10	55	10			68	67	67	97	19	3															
04	10	20	7		71	70	70	97	04	3	10	6	6		F	68	68	68	100	34	9	10	120	8			68	67	66	93	01	6															
07	10	20	7		74	71	69	85	00	0	10	9	7			68	67	66	93	34	10	8	120	7			70	66	64	81	36	4															
10	10	16	3		80	77	75	85	23	5	4	UNL	10			76	70	67	74	01	8	0	UNL	7			80	69	63	56	06	7															
13	10	29	3		86	80	78	77	32	10	6	37	10			81	71	65	58	35	10	10	250	7			84	72	65	53	15	7															
16	9	80	3		86	76	72	63	02	7	5	UNL	10			83	72	67	59	02	6	9	110	7			84	71	64	51	17	7															
19	10	35	3		79	76	74	85	04	10	9	100	10			77	70	66	69	02	5	10	55	5			71	70	70	97	03	5															
22	10	4	1		72	72	72	100	02	11	4	UNL	10			72	69	68	87	00	0	9	80	6		F	71	70	69	93	11	5															
JUL 16th																JUL 17th																JUL 18th															
01	10	250	6		70	69	69	97	14	5	10	8	5		F	68	67	67	97	34	7	7	100	7			67	67	67	100	01	5															
04	10	80	2		71	70	70	97	13	6	10	8	5		LF	67	66	66	97	32	6	8	110	5		F	66	65	65	97	03	5															
07	10	12	1		72	71	71	97	13	8	10	15	6		F	67	66	66	97	02	5	8	250	5		F	69	68	67	93	03	8															
10	10	8	6		74	73	73	97	19	11	10	20	6		F	72	68	65	79	02	8	8	30	7			76	70	67	74	03	7															
13	10	8	1		68	68	68	100	01	7	10	15	7			71	68	66	84	07	6	8	45	8			79	71	66	65	04	5															
16	10	10	2		69	69	69	100	02	10	10	33	7			74	69	66	76	03	5	9	60	7			79	71	67	67	09	9															
19	10	10	3		69	68	68	97	01	12	10	41	7			72	69	67	84	09	7	3	UNL	7			75	71	69	82	13	6															
22	10	10	5		68	67	67	97	35	8	10	100	7			70	68	67	90	06	4	2	UNL	7			70	69	69	97	13	4															

WEATHER CODES

- * TORNADO
- T THUNDERSTORM
- Q SQUALL
- R RAIN
- RW RAIN SHOWERS
- ZR FREEZING RAIN
- L DRIZZLE
- ZL FREEZING DRIZZLE
- S SNOW
- SW SNOW SHOWERS
- SG SNOW GRAINS
- SP SNOW PELLETS
- IC ICE CRYSTALS
- IP ICE PELLETS
- IPW ICE PELLET SHOWERS
- A HAIL
- F FOG
- IF ICE FOG
- GF GROUND FOG
- BD BLOWING DUST
- BN BLOWING SAND
- BS BLOWING SNOW
- BY BLOWING SPRAY
- X SMOKE
- H HAZE
- D DUST

CEILING: UNL INDICATES UNLIMITED
 WIND DIRECTION: DIRECTIONS ARE THOSE FROM WHICH THE WIND BLOWS, INDICATED IN TENS OF DEGREES FROM TRUE NORTH: I.E., 09 FOR EAST, 18 FOR SOUTH, 27 FOR WEST. AN ENTRY OF 00 INDICATES CALM
 SPEED: THE OBSERVED AVERAGE ONE-MINUTE VALUE, EXPRESSED IN KNOTS (MPH=KNOTS X 1.15).

OBSERVATIONS AT 3-HOUR INTERVALS

JUL 1989
RICHMOND, VA 13740

HOUR L.S.T.	SKY COVER (TENTHS)	VISI-BILITY		WEATHER	TEMPERATURE				WIND		SKY COVER (TENTHS)	VISI-BILITY		WEATHER	TEMPERATURE				WIND																																														
		CEILING IN HUNDREDS OF FEET	WHOLE MILES		16THS MILE	AIR of	WET BULB of	DEW POINT of	REL HUMIDITY %	DIRECTION		SPEED (KNOTS)	CEILING IN HUNDREDS OF FEET		WHOLE MILES	16THS MILE	AIR of	WET BULB of	DEW POINT of	REL HUMIDITY %	DIRECTION	SPEED (KNOTS)																																											
																							CEILING IN HUNDREDS OF FEET	WHOLE MILES	16THS MILE	AIR of	WET BULB of	DEW POINT of	REL HUMIDITY %	DIRECTION	SPEED (KNOTS)																																		
JUL 19th																						JUL 20th																						JUL 21st																					
01	2	UNL	6	F	68	67	67	97	16	4	8	100	7	F	74	73	73	97	18	9	7	120	6	H	75	74	73	94	24	8																																			
04	10	55	5	F	68	67	67	97	00	0	10	9	5	F	74	73	73	97	19	8	2	UNL	7	H	75	74	73	94	24	6																																			
07	10	3	2	F	70	69	68	93	15	4	7	100	3	F	75	73	72	90	21	8	2	UNL	7	H	74	71	70	87	24	10																																			
10	8	13	3	H	77	73	71	82	17	6	10	30	6	H	79	73	70	74	23	13	5	UNL	7	H	82	75	71	69	24	10																																			
13	5	UNL	7	H	83	74	70	65	17	7	8	33	6	H	82	75	72	72	22	10	3	UNL	7	H	88	77	72	59	22	12																																			
16	4	UNL	7	H	84	76	72	67	18	11	8	UNL	6	H	86	77	73	65	22	10	8	UNL	7	H	89	77	72	57	20	12																																			
19	7	UNL	7	H	78	75	73	85	13	10	8	UNL	6	H	81	75	72	74	23	9	8	UNL	7	H	84	77	74	72	21	8																																			
22	7	UNL	6	F	75	74	73	94	16	9	10	UNL	6	H	75	74	73	94	20	4	5	UNL	7	H	76	74	73	91	17	5																																			
JUL 22nd																						JUL 23rd																						JUL 24th																					
01	7	UNL	7	F	75	74	73	94	18	6	7	UNL	7	H	77	76	75	94	22	7	6	UNL	7	FH	75	72	71	87	19	3																																			
04	5	UNL	7	F	74	73	73	97	20	6	10	120	7	H	76	75	74	94	21	5	3	UNL	5	FH	77	72	71	94	34	4																																			
07	5	UNL	3	F	76	75	74	94	21	7	8	120	7	H	78	75	74	88	23	6	0	UNL	5	H	77	74	73	88	01	5																																			
10	8	120	8	H	83	76	73	72	21	7	10	UNL	8	H	86	79	76	72	25	5	2	UNL	5	H	86	80	77	75	10	8																																			
13	8	UNL	8	H	91	76	70	50	25	11	8	250	8	H	90	79	74	59	10	3	5	UNL	3	H	90	78	73	58	08	7																																			
16	8	UNL	8	H	91	78	73	56	25	9	8	250	8	H	88	78	74	63	29	5	4	UNL	3	H	89	78	74	61	09	7																																			
19	5	UNL	8	H	84	78	76	77	22	10	10	250	8	H	82	75	71	69	30	5	4	UNL	2	H	81	76	74	79	16	4																																			
22	5	UNL	8	H	79	77	76	91	22	10	8	UNL	7	H	78	73	70	77	29	5	1	UNL	5	H	75	72	71	87	00	0																																			
JUL 25th																						JUL 26th																						JUL 27th																					
01	0	UNL	5	H	72	69	68	87	16	4	3	UNL	7	H	72	70	69	90	20	6	10	9	2	F	72	72	72	100	29	7																																			
04	0	UNL	5	H	71	69	68	90	20	4	2	UNL	5	H	71	69	68	90	19	6	5	UNL	2	F	72	71	71	97	19	6																																			
07	9	120	3	H	75	72	70	85	23	5	2	UNL	5	H	74	71	69	85	18	5	10	UNL	1	F	73	72	71	94	20	7																																			
10	1	UNL	3	H	85	75	70	61	36	5	2	UNL	5	H	86	78	74	68	30	7	2	UNL	3	H	83	75	72	70	23	7																																			
13	0	UNL	5	H	89	75	68	50	06	6	5	UNL	5	H	93	81	76	58	20	4	7	UNL	6	H	87	77	72	61	21	6																																			
16	0	UNL	5	H	90	77	71	54	12	5	10	40	2	TRWH	78	76	75	91	30	8	4	UNL	5	H	90	77	71	54	22	7																																			
19	6	UNL	6	H	82	74	70	67	15	6	10	55	2	RWFH	73	72	72	97	34	7	10	UNL	5	H	83	77	74	74	23	7																																			
22	4	UNL	7	H	75	71	69	82	18	4	10	80	2	R	73	73	73	100	00	0	10	250	3	H	80	77	75	85	26	8																																			
JUL 28th																						JUL 29th																						JUL 30th																					
01	7	250	3	H	74	73	73	97	22	6	9	95	7	H	73	69	66	79	35	7	0	UNL	7	H	64	62	61	90	00	0																																			
04	10	250	3	H	75	73	72	90	31	9	0	UNL	7	H	71	67	65	81	02	13	0	UNL	7	H	63	62	61	93	20	3																																			
07	10	UNL	2	FH	77	74	73	88	30	3	7	90	7	H	68	63	60	76	03	8	10	250	6	F	69	66	64	84	20	3																																			
10	7	UNL	7	H	84	74	69	61	32	7	2	UNL	7	H	74	66	61	64	04	8	10	250	6	H	79	71	66	65	20	7																																			
13	7	UNL	7	H	89	76	70	54	35	13	0	UNL	7	H	80	68	61	52	01	9	10	250	6	H	81	71	65	58	17	9																																			
16	5	UNL	7	H	88	77	73	61	36	10	4	UNL	7	H	81	68	61	51	06	7	10	250	6	H	83	72	67	59	13	11																																			
19	10	250	7	H	85	77	73	67	36	4	3	UNL	7	H	76	67	61	60	09	7	10	120	6	H	78	71	68	72	16	8																																			
22	10	250	7	H	79	72	69	72	31	4	3	UNL	7	H	67	64	62	84	12	4	10	60	7	RW	72	70	69	90	17	12																																			
JUL 31st																																																																	
01	10	27	7	RW	71	70	70	97	18	16																																																							
04	10	9	5	F	73	73	73	100	29	4																																																							
07	10	11	2	F	73	73	73	100	16	4																																																							
10	10	7	2	F	73	72	72	97	04	8																																																							
13	9	23	6	H	80	75	73	79	36	9																																																							
16	8	19	5	H	78	73	71	79	03	11																																																							
19	10	27	5	H	75	71	69	82	03	9																																																							
22	10	70	6	H	71	70	69	93	02	5																																																							

SUMMARY BY HOURS

HOUR L.S.T.	SKY COVER (TENTHS)	AVERAGES					RESULTANT WIND		
		STATION PRESSURE (INCHES)	TEMPERATURE			WIND SPEED (MPH)	DIRECTION	SPEED (MPH)	
			AIR TEMP of	WET BULB of	DEW POINT of				
01	7	29.850	71	70	69	93	6.4	21	2.1
04	6	29.850	70	69	69	95	5.7	25	1.4
07	7	29.870	73	71	69	89	6.5	25	2.3
10	7	29.880	81	74	70	71	8.4	26	1.4
13	7	29.860	85	75	70	62	9.3	26	0.8
16	7	29.830	84	75	70	65	9.7	16	0.6
19	8	29.830	79	73	71	77	7.9	15	1.5
22	7	29.860	74	72	70	89	5.5	17	1.5

HOURLY PRECIPITATION (WATER EQUIVALENT IN INCHES)

JUL 1989
RICHMOND, VA

13740

DATE	A.M. HOUR ENDING AT												P.M. HOUR ENDING AT												DATE
	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	
01																								01	
02																									02
03																									03
04		T	T		0.01	0.01	0.01	0.01	0.01																04
05						T		T	T													0.01		T	05
06	T	T	0.01	0.01																					06
07														0.15	T	0.10	T	0.13	0.02	T	T				07
08																									08
09																									09
10																									10
11																									11
12	T	T																							12
13																									13
14	0.68	0.04	T																			0.01	T	0.04	14
15																		0.02	0.42						15
16			T	0.04	0.26	0.27	0.09	0.07	0.03	T		0.06	0.41	0.12	0.22	0.21	0.19	0.04	0.02				T	T	16
17				T	T	T																			17
18																									18
19																				0.02	T				19
20																									20
21																									21
22																									22
23																									23
24																									24
25																									25
26																									26
27	T																								27
28																									28
29																									29
30																									30
31	0.08	0.01			T																				31

MAXIMUM SHORT DURATION PRECIPITATION

TIME PERIOD (MINUTES)	5	10	15	20	30	45	60	80	100	120	150	180
PRECIPITATION (INCHES)	0.24	0.46	0.55	0.59	0.63	0.67	0.68	0.70	0.72	0.72	0.73	0.76
ENDED: DATE	14	14	14	14	14	14	14	14	14	14	14	14
ENDED: TIME	0038	0039	0039	0040	0049	0054	0104	0134	0143	0143	0143	0159

THE PRECIPITATION AMOUNTS FOR THE INDICATED TIME INTERVALS MAY OCCUR AT ANY TIME DURING THE MONTH. THE TIME INDICATED IS THE ENDING TIME OF THE INTERVAL. DATE AND TIME ARE NOT ENTERED FOR TRACE AMOUNTS.

VALIDATED BY:
DON HOWELL

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