

JUN 1991
 RICHMOND, VA
 NOAA-NATIONAL WEATHER SERVICE
 RIC INTL APT/EXECUTIVE TERMINAL

ISSN 0198-537X

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

JUN 1991
 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. 177 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 JUL)	COOLING (SEASON BEGINS WITH JAN)			WATER EQUIVALENT (INCHES)	SNOW, ICE PELLETS (INCHES)		RESULTANT DIR.	RESULTANT SPEED	AVERAGE SPEED	PEAK GUST		FASTEST 1-MIN		MINUTES	PERCENT OF TOTAL POSSIBLE	SUNRISE TO SUNSET	MIDNIGHT TO MIDNIGHT
01	97	71	84	14	69	0	19	1 8	0	T	0.0	29.620	34	2.5	5.9	32	NW	20	36	655	75	5	5
02	89	70	80	10	70	0	15	1 3 8	0	0.24	0.0	29.620	06	2.3	4.9	20	NE	14	03	680	78	8	8
03	86	71	79	8	70	0	14	1 8	0	0.80	0.0	29.570	15	1.0	3.8	15	N	12	05	391	45	9	9
04	82	60	71	0	59	0	6	1 8	0	0.00	0.0	29.600	34	11.2	12.1	29	N	21	36	770	88	4	3
05	73	56	65	-6	52	0	0		0	0.00	0.0	29.880	02	6.5	7.8	17	N	13	07	682	78	6	4
06	76	52	64*	-8	52	1	0	1	0	0.00	0.0	30.040	05	5.1	6.2	22	NE	15	03	687	78	5	4
07	78	51	65	-7	51	0	0	1	0	0.00	0.0	30.080	05	4.4	6.1	18	NE	12	04	796	90	4	2
08	83	50*	67	-5	50	0	2		0	0.00	0.0	29.975	28	1.4	4.7	20	NE	12	28	812	92	4	2
09	90	56	73	1	55	0	8		0	0.00	0.0	29.990	10	1.8	5.4	14	E	14	07	767	87	2	2
10	92	60	76	4	57	0	11		0	0.00	0.0	29.960	20	6.9	7.4	18	S	15	21	760	86	7	6
11	91	63	77	4	61	0	12		0	0.00	0.0	29.850	21	9.0	9.5	23	SW	16	24	737	84	9	8
12	91	67	79	6	65	0	14	1 8	0	0.04	0.0	29.740	22	8.5	10.4	26	SW	16	24	607	69	5	6
13	88	65	77	4	51	0	12		0	0.00	0.0	29.850	36	7.5	9.6	24	N	16	35	772	87	1	1
14	89	60	75	2	60	0	10		0	0.00	0.0	29.900	11	4.3	6.2	20	E	13	07	812	92	4	3
15	97	66	82	8	67	0	17	1 8	0	0.00	0.0	29.770	20	9.2	9.7	23	S	16	21	762	86	4	4
16	100*	72	86	12	71	0	21	3	0	0.09	0.0	29.670	21	9.1	10.1	24	SW	16	20	655	74	5	6
17	97	72	85	11	71	0	20	1 3	0	1.27	0.0	29.710	20	2.5	6.2	25	N	20	02	665	75	4	6
18	82	68	75	1	71	0	10	1 8	0	0.60	0.0	29.830	04	6.3	7.6	20	NE	13	04	487	55	10	10
19	75	67	71	-3	68	0	6	1	0	0.01	0.0	29.900	02	5.5	6.4	13	N	10	01	233	26	10	10
20	87	70	79	4	71	0	14	1 8	0	T	0.0	29.860	09	2.2	4.6	12	N	8	24	642	73	9	10
21	91	69	80	5	70	0	15	2 8	0	T	0.0	29.760	11	4.1	5.9	14	NE	9	10	675	76	8	8
22	81	69	75	0	72	0	10	1 3 8	0	2.98	0.0	29.680	07	3.6	6.6	32	S	23	18	302	34	9	9
23	72	63	68	-7	64	0	3	1	0	0.21	0.0	29.810	02	9.5	9.7	20	NE	13	02	137	15	10	10
24	80	59	70	-5	55	0	5	1	0	0.00	0.0	30.030	04	4.7	7.7	17	E	13	07	797	90	3	4
25	81	55	68	-7	53	0	3	1	0	0.00	0.0	30.060	08	5.6	6.2	20	E	15	08	789	89	7	7
26	82	59	71	-5	58	0	6		0	0.00	0.0	30.040	09	3.9	5.2	15	NE	12	12	784	89	8	8
27	87	63	75	-1	62	0	10		0	0.00	0.0	30.050	14	3.9	4.9	12	S	9	14	723	82	5	5
28	92	63	78	2	66	0	13		8	0.00	0.0	29.960	21	6.5	7.1	16	SW	12	20	776	88	7	5
29	96	70	83	7	72	0	18		8	0.00	0.0	29.810	25	3.5	6.0	18	W	12	28	742	84	1	2
30	97	76	87*	11	74	0	22		8	0.00	0.0	29.690	24	7.3	9.0	23	SW	15	23	724	82	4	6
SUM	SUM	SUM	SUM	SUM	TOTAL	TOTAL	NUMBER OF DAYS	FOR THE MONTH:		TOTAL	%	SUM	SUM										
2602	1913				1	316	PRECIPITATION			6.24	0.0	29.840	08 0.4 7.1 32 S 23 18 19821										
AVG.	AVG.	AVG.	DEP.	AVG.	DEP.	DEP.	PRECIPITATION			DATE: 22+	DATE: 22	POSSIBLE	MONTH										
86.7	63.8	75.3	1.8	62.8	1	58	≥ .01 INCH.	9	2.64			26469	75 5.9 5.8										
NUMBER OF DAYS							SEASON TO DATE		GREATEST IN 24 HOURS AND DATES				GREATEST DEPTH ON GROUND OF SNOW, ICE PELLETS OR ICE AND DATE										
MAXIMUM TEMP.							TOTAL		SNOW, ICE PELLETS		PRECIPITATION		SNOW, ICE PELLETS										
≥ 90°	≤ 32°	≤ 32°	≤ 0°	DEP.	DEP.	HEAVY FOG	THUNDERSTORMS	4	PRECIPITATION	SNOW, ICE PELLETS													
12	0	0	0	-834	263	CLEAR	4	2.98	22	0.0			0										

* 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 Wade
 DIRECTOR NATIONAL CLIMATIC DATA CENTER

OBSERVATIONS AT 3-HOUR INTERVALS

JUN 1991
RICHMOND, VA

13740

HOUR	L.S.T.	VISI-BILITY			TEMPERATURE				WIND			SKY COVER (TENTHS)	VISI-BILITY			TEMPERATURE				WIND													
		CEILING IN HUNDREDS OF FEET	WHOLE MILES	16THS 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	16THS MILE	WEATHER	AIR OF	WET BULB OF	DEW POINT OF	REL HUMIDITY %	DIRECTION	SPEED (KNOTS)										
																								AIR OF	WET BULB OF	DEW POINT OF	REL HUMIDITY %	DIRECTION	SPEED (KNOTS)				
JUN 1st																																	
01	0	UNL	5		FH	74	73	72	94	25	3	10	250	6		H	72	70	69	90	00	0	10	UNL	4		FH	71	70	70	97	00	0
04	0	UNL	5		FH	72	71	71	97	31	3	10	120	6		H	71	70	69	93	32	3	10	120	4		FH	71	70	70	97	08	4
07	9	UNL	6		H	79	74	71	77	28	4	10	UNL	6		H	75	71	69	82	02	4	10	120	2		FH	74	72	71	90	34	3
10	1	UNL	8			89	74	67	48	36	5	10	UNL	7		H	82	73	69	65	05	5	10	80	6		H	71	75	72	74	20	7
13	4	UNL	10			95	75	65	37	28	6	10	200	6		TH	80	73	70	72	03	12	10	60	6		FH	79	72	69	72	12	5
16	4	UNL	8			96	74	63	34	27	4	8	250	8			81	74	71	72	11	6	8	250	6		FH	85	74	69	59	12	4
19	10	75	8			76	72	70	82	06	8	5	UNL	8		F	79	74	71	77	15	5	8	250	2		FH	77	74	73	88	31	4
22	10	150	8			75	72	70	85	36	5	4	UNL	6			73	72	71	94	33	3	3	UNL	5		FH	73	71	70	90	00	0
JUN 2nd																																	
JUN 3rd																																	
JUN 4th																																	
JUN 5th																																	
JUN 6th																																	
JUN 7th																																	
JUN 8th																																	
JUN 9th																																	
JUN 10th																																	
JUN 11th																																	
JUN 12th																																	
JUN 13th																																	
JUN 14th																																	
JUN 15th																																	
JUN 16th																																	
JUN 17th																																	
JUN 18th																																	

WEATHER CODES

- * TORNADO
- T THUNDERSTORM
- O 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
- K 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

JUN 1991
RICHMOND, VA

13740

HOUR L.S.T.	SKY COVER (TENTHS)			VISI-BILITY		TEMPERATURE				WIND		SKY COVER (TENTHS)			VISI-BILITY		TEMPERATURE				WIND													
	CEILING IN HUNDREDS OF FEET	WHOLE MILES	16THS MILE	WEATHER	AIR OF	WET BULB OF	DEW POINT OF	REL HUMIDITY %	DIRECTION	SPEED (KNOTS)	CEILING IN HUNDREDS OF FEET	WHOLE MILES	16THS MILE	WEATHER	AIR OF	WET BULB OF	DEW POINT OF	REL HUMIDITY %	DIRECTION	SPEED (KNOTS)	CEILING IN HUNDREDS OF FEET	WHOLE MILES	16THS MILE	WEATHER	AIR OF	WET BULB OF	DEW POINT OF	REL HUMIDITY %	DIRECTION	SPEED (KNOTS)				
JUN 19th																																		
01	10	3	2	8	LF	67	66	66	97	01	7	7	10	3	0	12	LF	70	70	70	100	06	4	10	150	3	H	75	74	73	94	24	4	
04	10	3	3	8	LF	67	66	66	97	01	7	7	10	21	2	1	F	70	69	69	97	13	4	7	UNL	3	FH	71	71	71	100	13	4	
07	10	3	2	8	F	68	67	66	93	36	6	6	10	23	1	1	F	72	71	70	94	00	0	10	2	0	4	FH	72	72	72	100	18	3
10	10	5	2	8	F	70	68	66	87	02	4	4	10	10	2	2	H	78	72	69	74	05	6	9	150	7	4	FH	85	75	70	61	16	5
13	10	5	2	8	F	72	69	68	87	36	6	6	10	35	3	3	H	81	74	70	69	34	6	9	UNL	7	7	7	86	74	69	57	06	6
16	10	12	5	5	F	74	71	69	85	07	6	6	8	150	3	3	H	84	75	71	65	05	6	6	UNL	7	7	7	89	75	68	50	11	7
19	10	15	2	2	F	74	70	68	82	06	3	3	10	UNL	5	5	H	80	75	72	77	10	5	10	UNL	7	7	7	82	73	69	65	10	6
22	10	13	2	2	F	73	71	70	90	05	5	5	10	150	3	3	H	75	73	72	90	14	4	10	UNL	5	H	76	72	70	82	10	6	
JUN 20th																																		
JUN 21st																																		
JUN 22nd																																		
JUN 23rd																																		
JUN 24th																																		
JUN 25th																																		
JUN 26th																																		
JUN 27th																																		
JUN 28th																																		
JUN 29th																																		
JUN 30th																																		

SUMMARY BY HOURS

HOUR L.S.T.	SKY COVER (TENTHS)	STATION PRESSURE (INCHES)	AVERAGES				RESULTANT WIND		
			TEMPERATURE			REL HUMIDITY %	WIND SPEED (MPH)	DIRECTION	SPEED (MPH)
			AIR TEMP OF	WET BULB OF	DEW POINT OF				
01	5	29.840	68	65	63	86	5.3	18	1.5
04	5	29.840	66	64	63	90	4.9	22	0.3
07	5	29.860	71	66	64	78	6.4	30	2.2
10	5	29.870	80	69	63	58	8.1	36	2.1
13	7	29.850	84	70	62	51	9.3	01	1.1
16	6	29.810	84	70	62	50	10.0	09	1.6
19	7	29.820	78	68	63	62	7.9	10	2.8
22	6	29.850	71	66	63	79	6.0	13	2.3

HOURLY PRECIPITATION (WATER EQUIVALENT IN INCHES)

JUN 1991
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											0.35	0.40	0.01	0.23		T									03
04													0.03				0.02	T							04
05																									05
06																									06
07																									07
08																									08
09																									09
10																									10
11																									11
12				0.02	0.02	T														T	T				12
13																									13
14																									14
15																									15
16																		0.01	T	0.03	0.01	0.03	0.01		16
17	T																0.07	0.49	0.58	0.04	0.08	0.01		17	
18	T	T	T	T	T	T	T				0.01	T	T	0.42	0.18	T		T	T	T	T	T	T	18	
19	T	T	T	T	T	T	T																		19
20	T	T	T	T	T	T	T																		20
21		T																							21
22		T					0.95	0.23					0.30				T	T	T	T	0.03	T	T		22
23							0.03	T	0.06	0.06	0.01	0.04	0.25	1.22	T		T	T	T	0.01	T	T	T		23
24																									24
25																									25
26																									26
27																									27
28																									28
29																									29
30																									30

MAXIMUM SHORT DURATION PRECIPITATION

TIME PERIOD (MINUTES)	5	10	15	20	30	45	60	80	100	120	150	180
PRECIPITATION (INCHES)	0.22	0.41	0.55	0.69	0.93	1.17	1.27	1.41	1.47	1.68	1.77	1.77
ENDED: DATE	22	22	22	22	22	22	22	22	22	22	22	22
ENDED: TIME	1321	1322	1327	1330	1338	1341	1355	1353	1401	1347	1401	1415

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:
MATTHEW BODOSKY

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