

# 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

FEB 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	51	20	36	-1	12	29	0	0	0	0.00	0.0	30.460	18	4.3	5.0	17	SW	9	21	601	97	1	1
02	62	27	45	8	21	20	0	0	0	0.00	0.0	30.380	20	10.3	10.7	25	SW	18	22	535	86	5	4
03	68	29	49	12	29	16	0	0	0	0.00	0.0	30.210	21	3.4	4.5	15	SW	9	23	617	99	0	0
04	72	29	51	14	28	14	0	0	0	0.00	0.0	30.130	13	1.4	3.4	14	NE	8	05	581	93	2	1
05	76*	32	54	17	33	11	0	0	0	0.00	0.0	30.040	19	4.8	5.3	17	S	10	18	514	82	8	6
06	60	51	56	19	45	9	0	0	0	0.01	0.0	30.010	16	1.8	5.7	14	E	10	28	0	0	10	10
07	61	49	55	18	54	10	0	1	0	0.19	0.0	29.810	16	3.0	8.9	22	S	16	36	43	7	10	10
08	51	31	41	3	40	24	0	1	0	0	0.0	29.800	01	10.6	10.7	25	N	18	01	285	45	9	7
09	60	27	44	6	31	21	0	1	0	0.00	0.0	29.700	36	3.5	4.3	17	NW	13	34	636	100	0	0
10	54	30	42	4	32	23	0	1	0	0.00	0.0	29.670	36	4.3	5.5	18	NE	13	05	519	81	8	5
11	48	29	39	1	21	26	0	1	0	0.00	0.0	29.750	34	5.3	6.4	29	NW	17	33	518	81	5	4
12	42	24	33	-5	11	32	0	0	0	0.00	0.0	29.950	36	3.5	8.9	20	N	14	18	642	100	0	0
13	53	33	43	5	34	22	0	1	0	0.16	0.0	29.550	19	10.6	10.9	28	SW	15	22	270	42	10	9
14	63	45	54	15	40	11	0	1	0	0.04	0.0	29.030	24	13.9	16.1	43	W	29	22	558	86	5	6
15	45	23	34	-5	10	31	0	0	0	0.00	0.0	29.320	29	15.6	16.2	33	NW	21	28	527	81	7	5
16	34	18*	26*	-13	1	39	0	0	0	0.00	0.0	29.930	28	12.5	14.6	31	W	21	29	651	100	0	0
17	47	21	34	-5	19	31	0	0	4	0.05	T	30.030	21	8.1	9.4	21	SW	17	22	234	36	10	10
18	49	38	44	5	40	21	0	1	0	0.06	0.0	30.130	17	7.2	7.5	16	S	13	16	36	5	10	10
19	68	49	59	19	56	6	0	1	0	0.25	0.0	30.010	19	10.0	10.2	26	S	21	19	148	22	10	10
20	70	50	60*	20	53	5	0	0	0	T	0.0	29.880	24	13.0	15.3	31	S	24	22	153	23	10	9
21	63	33	48	8	34	17	0	0	0	0.00	0.0	29.990	18	4.8	5.3	14	S	12	18	510	77	10	6
22	71	40	56	16	36	9	0	0	0	0.00	0.0	29.750	26	6.3	10.9	29	N	22	01	514	77	9	8
23	46	27	37	-3	20	28	0	0	0	T	T	30.060	03	10.6	12.1	25	N	20	01	428	64	9	7
24	48	26	37	-4	31	28	0	0	0	T	0.0	30.010	36	3.8	4.6	10	N	9	01	348	52	10	9
25	52	34	43	2	36	22	0	1	0	0.03	0.0	29.810	01	7.6	7.8	18	N	15	01	382	57	10	10
26	42	31	37	-4	33	28	0	1	4	T	0.30	29.780	35	8.3	9.2	22	NW	15	30	318	47	10	9
27	49	21	35	-7	24	30	0	1	1	0.00	0.0	29.905	24	8.5	9.6	25	SW	18	25	616	91	2	2
28	63	29	46	4	31	19	0	0	0	0.00	0.0	30.050	19	7.9	8.4	29	SW	16	23	618	91	5	3
SUM	SUM					TOTAL	TOTAL		NUMBER OF DAYS	TOTAL	TOTAL	FOR THE MONTH:				TOTAL	%	SUM	SUM				
1568	896					582	0			1.09	1.9	29.900	25	2.8	8.8	43	W	29	22	11802	FOR	185	161
AVG	AVG	AVG	DEP	AVG	DEP	AVG	DEP		PRECIPITATION	DEP						DATE: 14	DATE: 14		POSSIBLE	MONTH	AVG	AVG	
56.0	32.0	44.0	5.1	30.4	-14.9		0		≥ .01 INCH.	9	-2.04									18164	65	6.6	5.8
NUMBER OF DAYS						SEASON TO DATE		SNOW, ICE PELLETS		GREATEST IN 24 HOURS AND DATES				GREATEST DEPTH ON GROUND OF									
						TOTAL	TOTAL	≥ 1.0 INCH						SNOW, ICE PELLETS OR ICE AND DATE									
MAXIMUM TEMP.		MINIMUM TEMP.		2462		0		THUNDERSTORMS		0		PRECIPITATION		SNOW, ICE PELLETS									
≥ 90°		≤ 32°		≤ 32°		≤ 0°		HEAVY FOG		0		0.32		25-26		1.9 26							
0		0		18		0		CLEAR		7		PARTLY CLOUDY		5		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 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

FEB 1991  
RICHMOND, VA 13740

HOUR L.S.T.	VISI-BILITY				WEATHER	TEMPERATURE			WIND		VISI-BILITY	WEATHER	TEMPERATURE			WIND		VISI-BILITY	WEATHER	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)	AIR OF	WET BULB OF	DEW POINT OF	REL HUMIDITY %			DIRECTION	SPEED (KNOTS)	AIR OF	WET BULB OF	DEW POINT OF
FEB 19th																								
01	10	2	2		F	49	49	49	100	19	8													
04	10	5	2		RF	50	50	50	100	20	5													
07	10	3	2		RF	52	52	52	100	19	4													
10	10	6	2		RF	57	57	57	100	18	11													
13	10	21	6		F	60	59	59	97	20	11													
16	10	23	7			65	62	60	84	18	10													
19	10	150	8			60	59	58	93	21	6													
22	10	50	8			61	59	58	90	19	10													
FEB 20th																								
01	10	8	8			64	61	58	81	20	17													
04	10	19	8			63	61	59	87	24	15													
07	10	10	10			64	61	59	84	20	18													
10	10	23	7		RN	67	63	60	78	23	15													
13	10	28	7			70	64	60	71	24	15													
16	10	28	7			69	63	59	71	24	17													
19	10	28	7			66	56	47	51	29	11													
22	10	10	10			57	46	34	42	30	9													
FEB 21st																								
01	UNL	10				46	41	35	66	00	0													
04	UNL	10				37	35	33	86	00	0													
07	250	10				34	33	32	92	16	3													
10	UNL	12				52	43	32	47	13	6													
13	UNL	10				58	47	33	39	18	10													
16	250	10				62	49	35	37	20	7													
19	UNL	10				53	45	36	53	18	6													
22	UNL	10				48	43	36	63	20	6													
FEB 22nd																								
01	3	UNL	10			44	41	36	74	20	5													
04	8	UNL	10			48	42	34	59	25	5													
07	7	UNL	10			43	39	33	68	19	4													
10	10	UNL	10			61	50	38	43	23	10													
13	10	UNL	10			70	55	40	34	24	13													
16	10	UNL	10			70	55	40	34	27	13													
19	10	UNL	10			64	50	35	34	24	9													
22	10	UNL	10			56	46	34	44	01	19													
FEB 23rd																								
01	7	250	10			44	38	28	54	01	12													
04	10	150	10			42	35	24	49	01	12													
07	10	130	10			40	34	24	53	01	8													
10	10	250	12			42	34	19	40	01	13													
13	10	250	12			41	33	19	41	01	14													
16	10	150	12			40	33	22	49	07	11													
19	10	UNL	15			34	28	15	46	08	6													
22	10	UNL	15			30	26	18	61	09	6													
FEB 24th																								
01	UNL	12				27	24	18	69	01	5													
04	UNL	10				31	28	22	69	01	6													
07	35	10				32	29	23	69	36	6													
10	36	10				37	33	27	67	01	8													
13	65	10				37	33	27	67	01	8													
16	55	7				40	38	34	79	34	3													
19	50	10				47	43	38	71	30	5													
22	UNL	10				45	42	39	80	11	3													
FEB 25th																								
01	10	UNL	6		F	37	37	36	96	00	0													
04	10	UNL	5		F	36	36	35	96	32	3													
07	10	200	5		F	39	38	36	89	01	4													
10	10	180	7			46	42	36	68	01	10													
13	10	140	7			51	44	36	57	01	8													
16	10	33	7			48	42	34	59	02	7													
19	10	45	7			45	41	36	71	01	5													
22	10	40	7			41	39	36	83	01	10													
FEB 26th																								
01	10	5	3		R	37	37	36	96	36	10													
04	10	3	1		SF	34	34	34	100	36	8													
07	10	1	4		SF	34	34	34	100	36	8													
10	10	9	7			38	37	35	89	01	10													
13	10	7	7			41	37	32	70	01	10													
16	10	7	7			41	36	28	60	29	5													
19	10	3	3		SF	36	36	35	96	32	8													
22	10	0	8		SF	33	33	32	96	34	12													
FEB 27th																								
01	UNL	7				30	28	25	82	30	8													
04	UNL	10				26	25	24	92	25	5													
07	UNL	10				27	25	21	78	25	6													
10	UNL	10				37	33	26	65	24	9													
13	UNL	10				44	36	22	42	26	9													
16	UNL	10				48	39	24	39	26	12													
19	UNL	12				39	33	24	55	18	7													
22	UNL	12				36	32	25	64	19	8													
FEB 28th																								
01	7	UNL	10			38	33	25	60	23	4													
04	2	UNL	10			34	31	25	70	19	4													
07	2	UNL	10			32	30	26	79	00	0													
10	1	UNL	10			49	41	31	50	22	7													
13	8	UNL	10			60	48	35	39	17	5													
16	9	UNL	10			62	49	35	37	21	12													
19	0	UNL	10			51	43	32	48	18	10													
22	0	UNL	10			45	40	32	61	19	9													

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	29.910	39	36	29	69	8.1	25	2.2
04	6	29.900	38	35	29	74	7.0	25	2.3
07	6	29.910	36	34	29	76	7.4	23	2.1
10	6	29.940	46	40	31	59	11.2	26	3.1
13	7	29.890	52	43	31	49	10.8	26	4.3

HOURLY PRECIPITATION (WATER EQUIVALENT IN INCHES)

FEB 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																								03	
04																								04	
05																								05	
06																								06	
07	T	0.12	0.01	0.02	0.02	0.01	0.01	T		T	T	0.01	T	T						T	T	T	T	07	
08	T	T	T	T	T	T							T							T	T	T	T	08	
09																								09	
10																								10	
11																								11	
12																								12	
13																								13	
14	0.03	0.01																						14	
15																								15	
16																								16	
17					T	T																		17	
18				T	T	T																		18	
19			T	T	0.04	0.02	0.07	0.02	0.01	0.07	0.02	T	0.06	T	T	0.02	0.02	0.01	T	T				19	
20			T	T																				20	
21																								21	
22																								22	
23					T	T																		23	
24																								24	
25																								25	
26	0.03	0.03	0.07	0.03	0.04	0.02	0.02	T	T															26	
27																								27	
28																								28	

MAXIMUM SHORT DURATION PRECIPITATION

TIME PERIOD (MINUTES)	5	10	15	20	30	45	60	80	100	120	150	180
PRECIPITATION (INCHES)	0.03	0.05	0.06	0.08	0.09	0.12	0.13	0.14	0.14	0.15	0.15	0.15
ENDED: DATE	07	07	07	07	07	07	07	07	07	07	07	07
ENDED: TIME	0116	0122	0122	0122	0134	0146	0228	0305	0305	0315	0356	0356

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  
CHARLOTTE WARD

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