

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 1988
 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	DIRECTION	FATEST 1-MIN	DIRECTION	MINUTES	PERCENT OF TOTAL POSSIBLE	SUNRISE TO SUNSET	MIDNIGHT TO MIDNIGHT
1	2	3	4	5	6	7A	7B	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
01	73	53	63*	26	53	2	0		0	0.00	0.0	30.105	21	13.2	13.5	30	SW	21	22	528	85	9	9
02	73*	46	60	23	56	5	0	1	0	0.76	0.0	29.940	22	6.6	14.2	30	NE	23	01	359	58	10	10
03	46	37	42	5	38	23	0	1	0	0.10	0.0	30.130	05	8.8	10.4	23	NE	17	03	0	0	10	10
04	48	31	40	3	36	25	0	2	0	0.15	0.0	29.820	30	4.2	11.3	29	N	20	35	0	0	10	10
05	41	26	34	-3	18	31	0		0	0.00	0.0	30.040	30	5.6	8.5	23	W	16	32	553	88	6	6
06	28	16	22	-15	0	43	0		0	0.00	0.0	30.215	35	9.5	11.7	26	NW	21	33	630	100	2	2
07	32	9*	21*	-16	3	44	0		0	0.00	0.0	30.345	18	4.7	9.2	23	S	17	19	632	100	0	1
08	49	23	36	-2	13	29	0		0	0.00	0.0	30.150	16	2.1	7.8	20	S	13	06	450	71	8	7
09	49	24	37	-1	27	28	0	8	0	0.00	0.0	30.090	10	1.2	5.9	14	SE	10	13	415	65	9	7
10	49	25	37	-1	26	28	0	1	0	0.00	0.0	30.130	04	5.9	6.8	22	N	17	02	638	100	1	1
11	42	25	34	-4	32	31	0	1	0	1.30	0.0	30.080	04	9.2	9.7	21	NW	14	04	351	55	9	7
12	38	26	32	-6	31	33	0	1 4	0	0.38	T	29.550	29	9.1	10.5	31	NW	20	31	0	0	10	9
13	33	20	27	-11	3	38	0		0	0.00	0.0	29.750	29	14.9	15.4	32	W	24	27	645	100	0	0
14	47	17	32	-7	10	33	0		0	0.00	0.0	30.000	21	5.9	8.0	17	S	13	17	637	98	1	1
15	58	33	46	7	41	19	0	1	0	T	0.0	29.610	18	11.6	12.5	28	S	21	18	30	5	10	9
16	53	30	42	3	32	23	0	1	0	0.12	0.0	29.680	34	9.5	11.7	32	N	22	36	565	87	5	5
17	60	25	43	4	26	22	0	1 8	0	0.00	0.0	29.970	20	3.4	4.7	17	NE	9	20	582	89	5	4
18	63	29	46	7	31	19	0	1 8	0	0.00	0.0	29.930	05	4.9	6.3	18	NE	15	06	587	89	7	6
19	49	40	45	5	41	20	0	1 8	0	0.16	0.0	29.690	05	4.2	7.3	18	E	13	10	211	32	10	10
20	54	45	50	10	43	15	0	1 8	0	T	0.0	29.410	23	11.0	11.7	21	SW	15	23	429	65	10	10
21	48	23	36	-4	13	29	0		0	0.00	0.0	29.760	32	8.5	11.0	25	NW	18	33	597	90	4	4
22	56	20	38	-2	19	27	0		0	0.00	0.0	29.960	20	13.7	14.0	32	S	25	21	665	100	1	1
23	68	44	56	16	36	9	0		0	0.09	0.0	29.740	22	10.9	15.4	36	NW	25	30	468	70	8	7
24	45	27	36	-5	23	29	0		0	0.01	0.0	29.860	30	7.9	10.3	33	NW	17	31	652	97	6	4
25	42	19	31	-10	15	34	0		0	0.00	0.0	29.940	29	6.2	8.0	24	W	16	32	552	82	5	3
26	44	20	32	-9	14	33	0		0	0.00	0.0	29.950	22	4.1	7.8	18	W	13	20	675	100	0	1
27	59	29	44	2	24	21	0		0	0.01	0.0	29.620	30	3.6	11.3	37	N	21	01	164	24	9	7
28	42	26	34	-8	26	31	0		0	T	T	29.870	02	7.4	11.0	31	N	18	36	136	20	7	6
29	60	26	43	1	26	22	0		0	0.00	0.0	29.850	24	2.3	7.7	18	NW	12	05	624	92	1	1

SUM		SUM		TOTAL		TOTAL		NUMBER OF DAYS		TOTAL		TOTAL		FOR THE MONTH:				TOTAL		%		SUM		SUM	
1449	814			746	0	PRECIPITATION	DEP.	≥ .01 INCH	10	-0.05				DATE: 27	DATE: 23+	12775	FOR	173	158	18845	68	6.0	5.4		
AVERAGE				AVG.	AVG.	DEP.	AVG.	DEP.	AVG.	DEP.	GREATEST IN 24 HOURS AND DATES				GREATEST DEPTH ON GROUND OF SNOW, ICE PELLETS OR ICE AND DATE										
50.0				28.1	39.1	0.2	26.1	-8	0	0	SNOW, ICE PELLETS ≥ 1.0 INCH				SNOW, ICE PELLETS										
NUMBER OF DAYS				SEASON TO DATE		THUNDERSTORMS		HEAVY FOG		PRECIPITATION		SNOW, ICE PELLETS													
MAXIMUM TEMP.				MINIMUM TEMP.		3215		0		1.63		11-12		trace 28+											
≥ 90°				≤ 32°		≤ 32°		≤ 0°		1		1													
0				2		22		0		75		0		CLEAR 8 PARTLY CLOUDY 8 CLOUDY 13											

* EXTREME FOR THE MONTH - LAST OCCURRENCE IF MORE THAN ONE.
 T 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. Walden
 DIRECTOR NATIONAL CLIMATIC DATA CENTER

OBSERVATIONS AT 3-HOUR INTERVALS

FEB 1988
RICHMOND, VA 13740

HOUR U.S.T.	VISI-BILITY			TEMPERATURE				WIND		SKY COVER (ITEMTHS)	VISI-BILITY			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	WEATHER	AIR OF	WET BULB OF	DEW POINT OF	REL HUMIDITY %	DIRECTION	SPEED (KNOTS)										
FEB 1st																														
01	10	250	10	55	52	49	80	20	11	10	250	10		60	57	55	84	20	13	10	9	6	RF	44	44	43	96	03	15	
04	10	70	10	55	52	50	83	19	8	10	UNL	10		57	56	55	93	19	10	10	23	6	RF	42	42	41	96	03	10	
07	7	55	10	53	51	50	90	20	11	9	70	10		57	57	57	100	21	9	10	7	6	RF	38	38	37	96	03	13	
10	10	80	10	63	59	55	75	21	13	10	13	10	RW	63	61	59	87	21	15	10	5	4	F	37	37	36	96	04	9	
13	8	250	10	70	62	56	61	22	17	8	UNL	10		71	63	58	64	23	14	10	7	4	F	38	38	37	96	06	7	
16	10	UNL	10	70	60	53	55	22	18	10	90	10		71	63	57	61	22	14	10	5	2	8	F	39	38	37	93	06	5
19	10	UNL	10	61	56	52	72	20	8	10	33	3	RF	62	61	61	97	23	5	10	3	1	LF	38	38	38	100	08	7	
22	10	250	10	60	56	53	78	21	11	10	9	4	RF	50	50	49	96	03	19	10	3	2	F	38	38	38	100	09	3	
FEB 2nd																														
FEB 3rd																														
FEB 4th																														
FEB 5th																														
FEB 6th																														
FEB 7th																														
FEB 8th																														
FEB 9th																														
FEB 10th																														
FEB 11th																														
FEB 12th																														
FEB 13th																														
FEB 14th																														
FEB 15th																														
FEB 16th																														
FEB 17th																														
FEB 18th																														

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
- 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

FEB 1988
RICHMOND, VA 13740

HOUR L.S.T.	SKY COVER (TENTHS)	VISI-BILITY		WEATHER	TEMPERATURE				WIND		SKY COVER (TENTHS)	CEILING IN HUNDREDS OF FEET	VISI-BILITY		WEATHER	TEMPERATURE				WIND		SKY COVER (TENTHS)	CEILING IN HUNDREDS OF FEET	VISI-BILITY		WEATHER	TEMPERATURE				WIND																																																										
		WHOLE MILES	16THS MILE		AIR OF	WET BULB OF	DEW POINT OF	REL HUMIDITY %	DIRECTION	SPEED (KNOTS)			WHOLE MILES	16THS MILE		AIR OF	WET BULB OF	DEW POINT OF	REL HUMIDITY %	DIRECTION	SPEED (KNOTS)			WHOLE MILES	16THS MILE		AIR OF	WET BULB OF	DEW POINT OF	REL HUMIDITY %	DIRECTION	SPEED (KNOTS)																																																									
FEB 19th																														FEB 20th																														FEB 21st																													
01	10	250	7		43	38	32	65	05	6	10	3	1	8	F	45	45	44	96	24	11	8	250	7			47	38	24	41	31	11																																																									
04	10	100	7		41	37	31	68	07	4	10	15	3	F	45	45	44	96	22	11	7	250	9			43	35	22	43	29	8																																																										
07	10	100	7		40	37	32	73	04	6	10	8	4	F	45	45	44	96	22	8	9	150	9			39	31	16	39	30	12																																																										
10	10	38	3	H	43	41	39	86	03	6	10	9	3	H	48	47	45	89	25	10	8	200	10			37	30	15	41	33	16																																																										
13	10	12	3	RH	48	46	44	86	09	9	10	15	6	H	51	49	46	83	22	11	4	UNL	10			38	28	6	26	30	13																																																										
16	10	5	1	LF	48	48	48	100	02	4	10	35	7	H	53	49	44	72	22	12	0	UNL	10			41	30	5	22	35	14																																																										
19	10	2	2	LF	48	48	48	100	00	0	10	250	7		51	47	43	74	23	9	0	UNL	15			33	26	9	37	02	5																																																										
22	10	1	1	LF	45	45	45	100	28	9	8	250	7		49	45	41	74	26	7	0	UNL	15			25	21	12	58	15	4																																																										
FEB 22nd																														FEB 23rd																														FEB 24th																													
01	0	UNL	15		21	19	12	68	16	3	0	UNL	10			46	38	25	44	20	13	10	35	7	R	42	40	38	86	16	5																																																										
04	0	UNL	15		21	19	14	74	18	5	0	UNL	10			45	38	27	49	21	14	0	UNL	7			39	39	38	96	24	7																																																									
07	0	UNL	15		22	21	17	81	18	6	6	UNL	10			47	40	29	50	21	18	2	UNL	7			38	35	30	73	29	9																																																									
10	0	UNL	10		40	32	16	38	20	14	4	UNL	10			56	47	36	47	21	16	7	25	10			39	36	31	73	35	11																																																									
13	1	UNL	10		51	38	14	23	21	19	10	250	10			64	52	39	40	22	18	10	35	10			44	35	18	35	29	8																																																									
16	4	UNL	10		56	42	21	26	20	20	10	55	10			64	52	41	43	23	13	8	70	10			43	33	13	29	27	12																																																									
19	0	UNL	10		47	39	26	44	18	11	10	60	10	R	50	45	38	64	02	7	2	UNL	10			39	30	10	30	30	13																																																										
22	0	UNL	10		48	39	26	42	20	16	10	50	10	R	45	45	44	96	19	3	0	UNL	15			33	27	13	44	32	7																																																										
FEB 25th																														FEB 26th																														FEB 27th																													
01	0	UNL	7		24	22	17	75	24	3	4	UNL	10			26	23	15	63	36	6	0	UNL	10			32	27	15	50	19	8																																																									
04	3	UNL	7		20	19	15	81	26	4	0	UNL	10			21	19	15	78	30	3	0	UNL	10			33	28	18	54	20	8																																																									
07	0	UNL	7		25	22	15	66	29	4	1	UNL	10			20	19	15	81	02	4	10	120	10			36	30	19	50	21	7																																																									
10	1	UNL	9		36	29	16	44	28	11	0	UNL	10			32	27	16	52	07	6	10	100	10			43	35	20	40	21	8																																																									
13	8	50	10		40	30	9	28	25	13	0	UNL	10			40	31	13	33	24	9	10	100	10	R	50	40	27	41	23	6																																																										
16	8	70	10		39	30	10	30	30	10	0	UNL	10			43	32	9	25	23	7	10	100	10			54	44	30	40	33	16																																																									
19	7	UNL	10		36	29	14	40	32	8	3	UNL	10			33	27	14	46	20	8	10	100	8			39	36	31	73	02	10																																																									
22	0	UNL	10		28	25	17	63	35	7	2	UNL	10			34	28	14	44	19	9	6	60	8			39	35	28	65	35	13																																																									
FEB 28th																														FEB 29th																																																											
01	10	33	7		37	33	25	62	35	16	0	UNL	8			27	26	23	85	19	7																																																																				
04	10	17	7		36	34	30	79	01	12	0	UNL	8			27	26	24	89	19	8																																																																				
07	10	15	7		34	33	30	85	02	14	2	UNL	7			27	26	24	89	20	7																																																																				
10	10	15	7		36	33	28	73	03	8	0	UNL	7			41	37	30	65	24	8																																																																				
13	10	25	7	S	38	33	25	60	36	6	0	UNL	10			57	44	26	30	22	5																																																																				
16	3	UNL	10		41	34	23	49	02	9	1	UNL	10			59	45	25	27	31	7																																																																				
19	0	UNL	10		34	30	23	64	11	6	4	UNL	10			50	40	26	39	05	10																																																																				
22	0	UNL	8		29	27	23	78	15	7	2	UNL	10			43	36	26	51	04	5																																																																				

SUMMARY BY HOURS

HOUR L.S.T.	SKY COVER (TENTHS)	AVERAGES						RESULTANT WIND	
		STATION PRESSURE (INCHES)	TEMPERATURE			REL HUMIDITY %	WIND SPEED (MPH)	DIRECTION	SPEED (MPH)
			AIR TEMP OF	WET BULB OF	DEW POINT OF				
01	5	29.890	35	32	26	72	9.5	28	2.0
04	4	29.905	33	31	25	76	8.9	26	2.3
07	5	29.930	32	30	25	78	9.3	28	2.2
10	6	29.935	39	35	27	64	11.1	27	3.5
13	6	29.890	46	39	26	50	12.0	24	5.8
16	6	29.850	48	39	26	47	12.2	27	5.4
19	6	29.880	42	37	28	62	8.7	32	0.5
22	5	29.910	38	34	26	66	9.7	32	1.4

HOURLY PRECIPITATION (WATER EQUIVALENT IN INCHES)

FEB 1988
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	T	0.06	0.04	T	T	T	T	T		T	T					0.03	0.03	0.06	0.25	0.13	0.09	0.06	0.11	03		
04	T	0.01	0.02	0.02	T	0.01	0.01	T		T	0.03	0.01	0.04		T	T								04		
05																									05	
06																									06	
07																									07	
08																									08	
09																									09	
10																									10	
11																									11	
12	0.20	0.08	T	T							T	0.01		T	T	0.10	0.14	0.06	0.04	0.14	0.16	0.20	0.07	0.04	0.35	12
13																										13
14																										14
15																					T	T			T	15
16	0.05	0.03	T								0.03	0.01														16
17																										17
18																										18
19																										19
20	T																									20
21																										21
22																										22
23																										23
24	0.01	T																								24
25																										25
26																										26
27																										27
28																										28
29																										29

MAXIMUM SHORT DURATION PRECIPITATION

TIME PERIOD (MINUTES)	5	10	15	20	30	45	60	80	100	120	150	180
PRECIPITATION (INCHES)	0.13	0.15	0.16	0.18	0.23	0.32	0.36	0.39	0.50	0.56	0.61	0.63
ENDED: DATE	11	11	11	11	11	11	11	12	12	12	12	12
ENDED: TIME	2344	2344	2344	2344	2344	2344	2352	0038	0035	0059	0126	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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