

# 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

DEC 1987  
 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 ISEASON BEGINS WITH JUL	COOLING ISEASON 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
																SPEED	DIRECTION	SPEED	DIRECTION				
01	51	38	45	1	34	20	0	0	0.00	0.0	29.435	24	8.7	9.3	28	W	16	23	200	34	9	9	
02	49	27	38	-5	25	27	0	0	0.00	0.0	29.735	26	11.0	11.5	30	W	18	27	500	85	3	1	
03	50	24	37	-6	28	28	0	0	0.01	0.0	29.720	19	6.1	6.6	31	SW	15	21	441	76	9	7	
04	43	35	39	-4	35	26	0	1	0.25	0.0	29.440	32	8.4	11.1	32	NW	21	34	76	13	10	9	
05	45	31	38	-4	22	27	0	0	0.00	0.0	29.780	30	10.3	11.2	29	NW	17	31	531	91	3	3	
06	48	28	38	-4	23	27	0	0	0.00	0.0	30.050	32	5.6	7.4	16	N	10	33	581	100	2	2	
07	48	24	36	-6	24	29	0	0	0.00	0.0	30.240	34	1.6	3.7	12	W	9	03	392	67	5	4	
08	51	27	39	-3	29	26	0	1	0.00	0.0	30.175	17	3.9	4.1	12	S	8	18	466	80	8	6	
09	70*	33	52	11	44	13	0	0	0.00	0.0	29.880	21	8.5	8.9	29	SW	20	21	522	90	2	4	
10	61	49	55	14	53	10	0	1	0.85	0.0	29.630	09	2.1	8.1	22	NW	17	33	45	8	10	10	
11	55	41	48	7	39	17	0	1	0.45	0.0	29.505	27	4.2	9.3	29	NW	18	33	511	88	3	6	
12	60	41	51	10	31	14	0	0	0.00	0.0	29.430	25	10.2	11.0	29	W	18	26	534	93	1	2	
13	54	36	45	5	25	20	0	0	0.00	0.0	29.840	30	6.1	8.2	21	W	14	32	408	71	9	7	
14	45	37	41	1	33	24	0	0	0.02	0.0	30.080	08	2.5	5.3	13	N	10	01	100	17	10	10	
15	66	40	53	13	46	12	0	2	0.54	0.0	29.590	20	3.5	12.1	32	S	21	19	14	2	10	9	
16	49	35	42	2	22	23	0	0	0.00	0.0	29.560	28	15.4	15.6	33	W	22	28	515	90	3	2	
17	43	30	37	-2	20	28	0	0	0.00	0.0	29.900	32	10.8	12.3	30	NW	20	32	444	77	7	5	
18	42	25	34	-5	19	31	0	0	0.00	0.0	30.140	31	2.5	6.4	20	N	13	01	515	90	1	0	
19	58	25	42	3	28	23	0	4	0.01	0.0	30.050	21	6.8	8.6	21	SW	14	23	495	86	6	7	
20	65	42	54	15	44	11	0	0	0.01	0.0	29.810	22	12.1	13.3	37	SW	23	22	323	56	8	7	
21	56	40	48	9	38	17	0	0	0.01	0.0	29.910	05	2.2	7.1	17	NE	13	05	202	35	10	9	
22	47	33	40	2	37	25	0	1	0.05	0.0	29.860	22	2.7	5.9	18	W	14	26	126	22	10	9	
23	56	35	46	8	32	19	0	1	0.00	0.0	30.040	27	5.1	7.0	20	W	14	26	575	100	0	1	
24	58	32	45	7	32	20	0	0	0.00	0.0	30.120	18	8.6	8.8	22	S	15	20	516	90	5	5	
25	65	53	59*	21	57	6	0	1	0.21	0.0	29.870	21	12.2	12.5	23	S	16	20	21	4	10	10	
26	66	42	54	16	51	11	0	1	0.12	0.0	29.905	02	3.7	10.7	26	NE	18	03	0	0	10	10	
27	45	39	42	4	36	23	0	0	0.05	0.0	30.100	05	1.7	4.3	9	NE	8	02	0	0	10	10	
28	41	36	39	1	37	26	0	1	0.29	0.0	29.880	04	6.6	7.2	21	E	15	36	0	0	10	10	
29	43	26	35	-2	25	30	0	1	0.03	0.0	29.740	34	14.6	15.8	40	NW	29	34	360	63	7	6	
30	39	16*	28*	-9	12	37	0	0	0.00	0.0	30.270	32	2.1	5.0	18	N	13	30	576	100	0	1	
31	50	25	38	1	24	27	0	0	0.00	0.0	30.185	20	13.1	13.3	32	SW	23	21	506	88	9	9	
SUM	SUM	SUM	SUM	SUM	SUM	TOTAL	TOTAL	NUMBER OF DAYS		TOTAL	TOTAL	FOR THE MONTH:				TOTAL	%	SUM	SUM				
1619	1045					677	0	PRECIPITATION		2.86	1	29.870	26	3.6	9.1	40	NW	29	34	10495	FOR	200	190
AVG.	AVG.	AVG.	AVG.	DEP.	AVG.	DEP.	DEP.	PRECIPITATION		DEP.						DATE:29	DATE: 29	POSSIBLE	MONTH		AVG.	AVG.	
52.2	33.7	43.0	3.1	32.3	-101	0	0	≥ .01 INCH.		11	-0.53									17905	59	6.5	6.1
NUMBER OF DAYS								SEASON TO DATE		GREATEST IN 24 HOURS AND DATES				GREATEST DEPTH ON GROUND OF SNOW, ICE PELLETS OR ICE AND DATE									
								TOTAL	TOTAL														
MAXIMUM TEMP.		MINIMUM TEMP.		1461		1637		THUNDERSTORMS		PRECIPITATION		SNOW, ICE PELLETS											
≥ 90°		≤ 32°		≤ 32°		≤ 0°		HEAVY FOG		1		1.30		10-11		29+							
0		0		13		0		-45		301		CLEAR 10		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 CLIMATIC DATA CENTER ASHEVILLE NORTH CAROLINA

Kenneth D. Walden

DIRECTOR NATIONAL CLIMATIC DATA CENTER

OBSERVATIONS AT 3-HOUR INTERVALS

DEC 1987  
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	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)							
DEC 1st																														
01	10	45	8		42	38	33	71	29	4	0	UNL	10		41	36	29	62	26	12	0	UNL	10		28	27	24	85	22	3
04	10	50	8		41	38	35	79	19	6	0	UNL	10		39	34	27	62	26	11	0	UNL	10		26	25	23	88	16	3
07	10	55	8		42	39	36	79	21	5	0	UNL	10		36	32	26	67	24	9	2	UNL	10		25	24	23	92	00	0
10	10	60	8		46	42	36	68	25	7	2	UNL	10		45	38	27	49	24	13	8	250	3	HK	36	33	29	76	14	4
13	7	250	8		49	42	34	56	23	10	4	UNL	10		48	38	22	36	29	15	10	UNL	7		48	39	27	44	20	12
16	9	250	10		49	42	33	54	23	11	1	UNL	10		48	38	21	34	27	12	10	100	8		49	40	28	44	19	7
19	10	80	10		47	41	34	61	24	10	0	UNL	10		39	33	24	55	23	8	9	120	8		44	38	30	58	16	9
22	4	UNL	10		45	39	30	56	26	12	0	UNL	10		31	29	24	75	20	4	10	55	7	R	44	40	35	71	17	7
DEC 2nd																														
DEC 3rd																														
DEC 4th																														
DEC 5th																														
DEC 6th																														
DEC 7th																														
DEC 8th																														
DEC 9th																														
DEC 10th																														
DEC 11th																														
DEC 12th																														
DEC 13th																														
DEC 14th																														
DEC 15th																														
DEC 16th																														
DEC 17th																														
DEC 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).



HOURLY PRECIPITATION (WATER EQUIVALENT IN INCHES)

DEC 1987  
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	T	T															T	T	T	03	
04									T	0.02	0.03	0.10	0.05	0.05	T	T								04	
05																								05	
06																								06	
07																								07	
08																								08	
09																								09	
10												T	0.05	0.15	0.15	0.26	0.02	0.01	0.04	0.04	T	T	T	0.13	10
11	0.24	0.06	0.10	0.05	T																			11	
12																								12	
13																								13	
14					T																		T	0.02	14
15	T	0.01	0.05	0.09	0.08	0.09	0.08	0.13	0.01			T	T											15	
16																								16	
17																								17	
18																								18	
19					T	T	T																T	T	19
20																								20	
21									T	T	T													21	
22														T	0.04	0.01				T	T			22	
23																								23	
24																								24	
25		T	T	0.06	0.01		T	0.04	0.04	0.04	0.02	T	T	T	T									25	
26							T	T	T	0.04	0.01	T	T	0.04	0.01	T	0.02	T	T					26	
27							0.03	0.02	T	0.05	0.01	0.04	0.02	T	T	T	T	T				0.02	0.03	T	27
28	T	T	T										T	T	T	0.04	0.01	T	T					28	
29	T	0.01	0.02	T									T	T	T	T	T	T						29	
30																								30	
31																								31	

MAXIMUM SHORT DURATION PRECIPITATION

TIME PERIOD (MINUTES)	5	10	15	20	30	45	60	80	100	120	150	180
PRECIPITATION (INCHES)	0.16	0.22	0.22	0.22	0.22	0.24	0.26	0.31	0.36	0.41	0.46	0.56
ENDED: DATE	11	11	11	11	11	11	11	11	11	10	10	10
ENDED: TIME	0052	0052	0052	0052	0052	0125	0143	0203	0052	1559	1608	1559

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:  
DICK WOLF

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