

DEC 1986
 RICHMOND, VA
 NAT'L WEA SER OFC
 BOX A-63, RICHMOND INT'L AIRPORT

ISSN 0198-537X

LOCAL CLIMATOLOGICAL DATA

Monthly Summary



R.E. BYRD INTERNATIONAL AP.

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

DEC 1986
 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 INCHES ELEV. FEET ABOVE M.S.L.	WIND (M.P.H.)			SUNSHINE		SKY COVER (TENTHS)		DATE		
	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	MINUTES	PERCENT OF TOTAL POSSIBLE	SUNRISE TO SUNSET	MIDNIGHT TO MIDNIGHT			
01	44	37	41	-3	30	24	0		0	T	0.0	30.230	04	14.9	15.1	18	05	212	36	10	9	01
02	63	42	53	10	54	12	0	1	0	1.06	0.0	29.780	10	7.2	11.5	23	13	52	11	10	10	02
03	61	44	53	10	43	12	0	1	0	0.04	0.0	29.640	25	12.5	13.2	16	27	513	88	3	5	03
04	51	32	42	-1	23	23	0	0	0	0.00	0.0	29.995	27	8.5	9.7	14	30	583	100	1	1	04
05	46	26	36	-6	21	29	0	0	0	0.00	0.0	30.230	01	5.0	6.2	12	32	582	100	2	1	05
06	48	24	36	-6	22	29	0	0	0	0.00	0.0	30.310	32	1.6	3.8	7	21	581	100	0	0	06
07	52	24	38	-4	26	27	0	0	0	0.00	0.0	30.155	20	5.6	5.8	12	22	496	85	6	6	07
08	50	40	45	3	33	20	0	0	0	T	0.0	30.060	18	3.3	5.2	12	21	46	8	10	10	08
09	61	46	54	13	50	11	0	1	0	0.63	0.0	29.895	20	7.3	8.7	22	21	0	0	10	10	09
10	64*	50	57*	16	52	8	0	0	0	T	0.0	29.800	25	6.1	10.4	15	06	278	48	10	10	10
11	50	35	43	2	34	22	0	1	0	0.65	0.0	29.920	02	7.8	9.2	14	01	0	0	10	10	11
12	42	37	40	-1	37	25	0	1	0	T	0.0	29.830	27	1.1	6.5	9	04	72	12	10	10	12
13	39	23	31	-9	17	34	0	0	0	0.00	0.0	30.280	35	10.8	11.5	22	35	577	100	0	0	13
14	43	18*	31*	-9	17	34	0	0	0	0.00	0.0	30.320	22	5.3	6.3	15	23	551	96	1	2	14
15	56	26	41	1	22	24	0	0	0	0.00	0.0	30.130	20	1.7	3.8	8	34	548	95	1	4	15
16	52	26	39	-1	30	26	0	0	0	0.00	0.0	30.080	13	2.2	3.3	9	17	375	65	8	8	16
17	51	36	44	5	37	21	0	0	0	T	0.0	30.030	06	5.6	6.8	9	08	295	51	10	10	17
18	51	38	45	6	38	20	0	1	0	0.12	0.0	29.730	29	4.6	8.0	23	32	95	17	10	8	18
19	53	35	44	5	25	21	0	0	0	0.00	0.0	29.800	31	8.9	10.7	16	29	570	99	0	2	19
20	45	28	37	-2	26	28	0	0	0	0.00	0.0	29.970	01	5.9	6.1	8	01	503	88	2	2	20
21	44	25	35	-4	22	30	0	0	0	0.00	0.0	30.160	36	9.9	10.3	16	36	414	72	5	2	21
22	46	22	34	-4	20	31	0	0	0	0.00	0.0	30.250	36	3.0	4.1	9	35	529	92	1	1	22
23	51	19	35	-3	27	30	0	1	0	0.30	0.0	30.070	18	2.5	4.8	10	23	495	86	9	7	23
24	59	42	51	13	45	14	0	0	0	2.35	0.0	29.670	04	5.7	10.7	28	27	0	0	10	10	24
25	57	40	49	11	44	16	0	1	0	0.00	0.0	29.680	23	5.5	8.5	14	23	508	88	5	7	25
26	50	34	42	4	33	23	0	1	0	0.00	0.0	29.980	03	8.9	9.2	14	36	490	85	5	6	26
27	46	29	38	0	28	27	0	1	0	0.00	0.0	30.080	02	7.3	7.7	14	02	523	91	1	3	27
28	44	27	36	-2	25	29	0	1	0	0.00	0.0	30.080	01	8.0	8.3	14	35	576	100	0	0	28
29	45	23	34	-3	25	31	0	1	0	0.00	0.0	30.040	29	0.2	3.9	6	12	561	97	0	2	29
30	45	25	35	-2	29	30	0	1	0	0.00	0.0	29.750	32	5.3	5.8	14	33	515	89	3	3	30
31	47	23	35	-2	26	30	0	0	0	0.00	0.0	30.030	01	3.3	5.1	14	04	510	88	2	3	31
SUM	SUM				TOTAL	TOTAL		NUMBER OF DAYS		TOTAL	TOTAL	FOR THE MONTH:					TOTAL	%	SUM	SUM		
1556	976				741	0				5.15	0.0	30.000	35	2.1	7.8	28	27	12060	FOR	155	162	
AVG.	AVG.	AVG.	DEP.	AVG.	DEP.	DEP.		PRECIPITATION		DATE: 24	POSSIBLE	MONTH	AVG.	AVG.			17905	67	5.0	5.2		
50.2	31.5	40.9	1.0	31.0	-37	0		> .01 INCH.	7	1.76												
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.		1429		1609		THUNDERSTORMS		PRECIPITATION		SNOW, ICE PELLETS										
5 90°		2 32°		2 32°		2 0°		DEP.		2.64		23-24		0								
0		0		17		0		-77		273		CLEAR 15		PARTLY CLOUDY 4		CLOUDY 12						

* 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. ONE OF THREE WIND SPEEDS IS GIVEN UNDER FASTEST MILE: 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). PEAK GUST - HIGHEST INSTANTANEOUS WIND SPEED (A / APPEARS IN THE DIRECTION COLUMN). ERRORS WILL BE CORRECTED AND NOTED 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, ASHEVILLE, NORTH CAROLINA, 28801

noaa

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

NATIONAL ENVIRONMENTAL SATELLITE, DATA AND INFORMATION SERVICE

NATIONAL CLIMATIC DATA CENTER ASHEVILLE NORTH CAROLINA

Kenneth D. Haden
 DIRECTOR
 NATIONAL CLIMATIC DATA CENTER

OBSERVATIONS AT 3-HOUR INTERVALS

DEC 1986
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	1/16THS 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	1/16THS MILE	WEATHER	AIR OF	WET BULB OF	DEW POINT OF	REL HUMIDITY %	DIRECTION	SPEED (KNOTS)																																											
DEC 1st																						DEC 2nd																						DEC 3rd																					
01	10	250	10		43	38	30	60	02	11	10	19	7		R	43	40	37	80	06	13	10	1	1		RF	55	55	55	100	20	8																																	
04	8	250	10		40	34	25	55	04	12	10	3	2		RF	43	43	43	100	02	8	10	6	7			51	51	50	96	23	12																																	
07	10	250	10		38	33	25	60	04	13	10	4	2		RF	50	50	49	96	06	12	10	6	7			51	50	49	93	23	13																																	
10	9	100	10		39	34	27	62	05	14	10	5	0	12	LF	54	54	53	96	07	12	1	UNL	10			55	51	47	75	24	14																																	
13	9	23	10		44	39	31	60	05	16	10	6	1		RF	59	58	58	97	11	14	3	UNL	15			61	52	44	54	25	14																																	
16	10	23	10		42	38	32	68	05	16	10	6	5		F	62	61	61	97	13	10	3	UNL	15			57	48	37	47	27	14																																	
19	10	80	10		41	38	33	73	04	13	10	6	6		F	61	61	61	100	17	5	3	UNL	15			51	44	36	57	26	7																																	
22	10	17	8	R	42	39	35	76	05	11	10	6	6		RF	59	58	58	97	24	13	0	UNL	15			47	41	33	58	26	10																																	
DEC 4th																						DEC 5th																						DEC 6th																					
01	0	UNL	10		44	38	29	56	30	8	0	UNL	15			35	29	18	50	33	4	0	UNL	15			29	26	21	72	01	5																																	
04	0	UNL	10		40	34	24	53	29	9	0	UNL	15			28	26	22	78	18	4	0	UNL	15			27	25	20	75	35	5																																	
07	0	UNL	10		37	32	23	57	28	8	4	UNL	15			28	26	21	75	00	0	0	UNL	10			24	22	19	81	35	5																																	
10	1	UNL	10		44	36	24	45	25	10	3	UNL	10			40	34	23	51	32	5	0	UNL	10			37	32	22	55	30	3																																	
13	2	UNL	12		49	38	21	33	30	12	4	UNL	10			45	36	20	37	01	9	0	UNL	10			44	35	21	40	18	5																																	
16	2	UNL	15		50	39	20	31	22	8	0	UNL	10			45	36	20	37	36	9	0	UNL	10			47	37	22	37	21	6																																	
19	0	UNL	15		38	33	23	55	21	7	0	UNL	10			36	31	21	55	03	7	0	UNL	15			33	30	25	73	00	0																																	
22	0	UNL	15		38	32	21	50	27	7	0	UNL	10			32	28	20	61	01	7	0	UNL	15			27	25	22	81	00	0																																	
DEC 7th																						DEC 8th																						DEC 9th																					
01	0	UNL	15		25	24	23	92	00	0	10	250	15			42	36	28	58	19	5	10	25	15			49	45	40	71	21	3																																	
04	0	UNL	15		25	24	23	92	00	0	10	120	15			43	37	27	53	28	4	10	23	5		RF	47	46	45	93	16	4																																	
07	1	UNL	7		24	23	22	92	00	0	10	100	10			41	38	34	76	00	0	10	15	3		RF	47	47	46	96	15	6																																	
10	3	UNL	5	H	41	36	29	62	21	3	10	45	10			46	40	31	56	26	3	10	4	1		RF	47	47	46	96	18	7																																	
13	8	UNL	7		50	40	26	39	19	9	10	250	10			50	43	33	52	20	5	10	3	1	8	F	51	51	50	96	20	9																																	
16	9	100	10		49	40	27	43	18	8	10	50	7			50	43	35	57	12	6	10	15	1	8	F	57	55	54	90	20	4																																	
19	10	120	15		45	39	29	54	20	9	10	33	7			49	43	35	59	13	4	10	5	3		RF	57	56	56	97	29	13																																	
22	10	250	15		43	37	27	53	20	8	10	25	7			49	44	38	66	17	7	10	28	4		RF	60	59	58	93	21	19																																	
DEC 10th																						DEC 11th																						DEC 12th																					
01	10	75	10		60	58	57	90	21	9	10	20	10			48	42	33	56	06	10	10	5	6		F	38	37	36	93	19	4																																	
04	10	80	10		59	57	56	90	24	10	10	55	10			45	38	27	49	05	11	10	3	5		F	38	38	37	96	19	7																																	
07	10	90	10		59	57	56	90	21	10	10	50	7			38	37	35	89	06	5	10	3	5		F	38	38	37	96	20	7																																	
10	10	80	7		60	59	58	93	24	8	10	6	4			36	35	34	93	03	9	10	5	6		F	39	38	37	93	23	8																																	
13	10	90	7		63	60	57	81	26	9	10	5	1	8	RF	36	36	35	96	02	12	10	60	6		F	42	40	37	83	00	0																																	
16	9	90	10		63	56	51	65	29	9	10	5	1	8	RF	36	36	35	96	01	9	10	60	6		F	41	40	38	89	01	7																																	
19	10	100	10		58	51	44	60	31	6	10	5	2			36	36	35	96	34	6	10	38	7			40	39	37	89	34	7																																	
22	10	250	10		54	47	40	59	33	4	10	9	5			37	36	35	93	32	5	10	23	7			39	38	36	89	03	5																																	
DEC 13th																						DEC 14th																						DEC 15th																					
01	3	UNL	7		37	37	36	96	27	6	0	UNL	15			23	21	16	75	36	4	10	UNL	15			30	26	19	64	21	5																																	
04	0	UNL	7		35	33	29	79	30	8	0	UNL	15			19	18	15	84	12	3	10	UNL	15			31	27	18	59	25	5																																	
07	0	UNL	15		31	27	17	56	36	12	0	UNL	15			20	18	13	74	29	3	4	UNL	15			28	26	21	75	00	0																																	
10	1	UNL	15		32	26	11	42	36	14	0	UNL	15			32	27	17	54	18	4	1	UNL	7			41	34	22	47	31	3																																	
13	0	UNL	15		35	27	10	35	34	15	0	UNL	15			40	32	16	38	23	13	0	UNL	8			54	41	22	29	00	0																																	
16	0	UNL	15		34	27	11	38	33	9	6	UNL	15			42	33	15	33	22	9	1	UNL	10			54	42	25	33	18	5																																	
19	0	UNL	15		27	23	14	58	36	6	3	UNL	15			33	28	17	52	20	6	3	UNL	10			38	34	26	62	14	3																																	
22	0	UNL	15		25	22	15	66	01	5	10	UNL	15			29	26	19	66	20	6	10	UNL	10			34	31	26	73	13	4																																	
DEC 16th																						DEC 17th																						DEC 18th																					
01	6	UNL	10		33	30	26	76	00	0	10	55	7			42	39	36	79	06	5	10	38	6		R	44	43	41	89	06	4																																	
04	6	UNL	7		29	28	26	89	00	0	10	46	7			41	39	37	86	03	6	10	38	2		RF	43	43	42	96	36	3																																	
07	2	UNL	7		28	27	25	89	03	4	10	46	7			36	35	34	93	02	8	10	33	3		RF	44	44	43	96	13	3																																	
10	10	UNL	7		39	36	31	73	13	4	10	250	7			43	41	38	83	04	5	10	33	2	8	F	47	40	29	50	22	5																																	
13	10	120	7		50	42	31	48	18	3	10	250	7			50	44	36	59	08	7	10	28	1	12	F	50	48	46	86	29	7																																	
16	9	100	8		51	43	32	48	16	6	8	100	7			50	44	37	61	09	6	10	12	2		F	48	48	47	96	27	7																																	
19	9	75	8		46	41	35	66	15	5	10	38	7			47	42	36	66	09	7	8	100	5		F	47	46	45	93	29	10																																	
22	9	55	7		45	41	35	68	06	4	10	25	7			46	42	38	74	11	6	0	UNL	15			40	34	24	53	30	11																																	

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

DEC 1986
RICHMOND, VA 13740

HOUR	L. S. T.	DEC 19th							DEC 20th							DEC 21st												
		SKY COVER (TENTHS)		CEILING IN HUNDREDS OF FEET	VISI-BILITY		TEMPERATURE			WIND			SKY COVER (TENTHS)		CEILING IN HUNDREDS OF FEET	VISI-BILITY		TEMPERATURE			WIND							
		0	1		WHOLE MILES	1/16THS MILE	DIR	WIND	SPEED	0	1	WHOLE MILES	1/16THS MILE	DIR		WIND	SPEED	0	1	WHOLE MILES	1/16THS MILE	DIR	WIND	SPEED				
		of	of	of	%	DIRECTION	(KNOTS)		of	of	of	%	DIRECTION	(KNOTS)		of	of	of	%	DIRECTION	(KNOTS)		of	of	of	%	DIRECTION	(KNOTS)
01																												

SUMMARY BY HOURS

HOUR	L. S. T.	AVERAGES							RESULTANT WIND	
		SKY COVER (TENTHS)	STATION PRESSURE (INCHES)	TEMPERATURE			REL HUMIDITY %	WIND SPEED (MPH)	DIRECTION	SPEED (MPH)
				AIR TEMP OF	MET BULB OF	DEW POINT OF				
01		6	29.995	37	35	31	78	6.9	36	2.2
04		5	30.000	36	33	30	80	6.7	33	2.5
07		5	30.020	34	33	29	83	7.0	36	2.4
10		5	30.050	41	37	31	69	8.5	34	2.7
13		5	29.985	47	41	31	57	10.6	35	3.1
16		5	29.960	48	42	32	57	8.8	35	0.8
19		5	29.990	41	38	32	72	6.5	34	1.3
22		5	30.000	39	36	31	76	7.5	31	1.1

HOURLY PRECIPITATION (WATER EQUIVALENT IN INCHES)

DEC 1986
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	T	T		0.05	0.08	0.02	0.09	0.05	0.05	0.08	0.08	0.08	0.09	0.04	T					T	T	T	T	02	
03	0.04	T																			0.08	0.09	0.18	03	
04																								04	
05																								05	
06																								06	
07																								07	
08																								08	
09		T	T	0.02	0.01	0.02	0.04	0.12	0.14	0.03	0.03		T					0.02	0.05	0.10	0.05	T		09	
10				T	T			T	T	T	T													10	
11				T	0.03	0.07	0.06	0.05	0.05	0.08	0.07		0.07	0.05	0.03	0.05	0.01	0.02	0.01	T				11	
12																			T	T				12	
13																								13	
14																								14	
15																								15	
16																								16	
17																							T	17	
18	0.01	T	0.03	0.02	T	0.02	0.01	0.01		T	T				0.02	T								18	
19																								19	
20																								20	
21																								21	
22																								22	
23																					0.01	0.07	0.12	0.10	23
24	0.12	0.06	0.06	0.06	0.02	0.05	0.02	0.03	0.05	0.15	0.05	0.08	0.24	0.21	0.33	0.17	0.45	0.13	0.05	0.01	T			24	
25																								25	
26																								26	
27																								27	
28																								28	
29																								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)	0.05	0.09	0.13	0.17	0.24	0.35	0.45	0.47	0.53	0.62	0.75	0.95
ENDED: DATE	24	24	24	24	24	24	24	24	24	24	24	24
ENDED: TIME	1657	1639	1657	1649	1653	1657	1659	1727	1747	1659	1700	1659

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 GRISINGER

SUBSCRIPTION PRICE AND ORDERING INFORMATION AVAILABLE FROM:
THE NATIONAL CLIMATIC DATA CENTER, FEDERAL BUILDING
ASHEVILLE, NORTH CAROLINA 28801
ATTN: PUBLICATIONS

RICHMOND, VA
USCOMM - NOAA - ASHEVILLE, NC 455

U.S. DEPARTMENT OF COMMERCE
NATIONAL CLIMATIC DATA CENTER
FEDERAL BUILDING
ASHEVILLE, N.C. 28801

AN EQUAL OPPORTUNITY EMPLOYER

POSTAGE AND FEES PAID
U.S. DEPARTMENT OF COMMERCE

COM 210



FIRST CLASS