

SEP 1993  
 RICHMOND, VA  
 NOAA-NATIONAL WEATHER SERVICE  
 RIC INTL APT/EXECUTIVE TERMINAL

ISSN 0198-537X

INQUIRIES/COMMENTS CALL  
 (704) 271-4800

# 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

SEP 1993  
 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 H.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	FASTEST 1-MIN	DIRECTION	MINUTES	PERCENT OF TOTAL POSSIBLE	SUNRISE TO SUNSET	MIDNIGHT TO MIDNIGHT
01	99	72	86	12	72	0	21	1 3 8	0	0.16	0.0	29.800	31	2.6	6.7	35	NW	17	33			2	4
02	99*	72	86	12	73	0	21	1 8	0	0.0	0.0	29.890	18	6.2	7.4	21	S	16	19			5	7
03	96	77	87*	13	72	0	22	1	0	0.00	0.0	29.830	20	14.2	14.7	28	SW	20	18	653	84	7	5
04	83	73	78	4	73	0	13	1	0	0.15	0.0	29.720	21	9.3	10.8	26	S	18	18	368	48	10	9
05	86	69	78	5	71	0	13	1 8	0	0.56	0.0	29.780	03	3.4	5.5	13	SE	12	12	495	64	9	9
06	89	68	79	6	68	0	14	1 8	0	0.00	0.0	29.870	10	2.0	5.8	10	E	9	13	602	78	4	4
07	90	67	79	6	68	0	14	1 3 8	0	0.25	0.0	29.870	15	2.6	5.0	23	NW	16	29	470	62	9	8
08	85	67	76	3	68	0	11	1 8	0	0.04	0.0	29.790	04	2.8	4.3	21	N	17	36	481	63	10	9
09	90	66	78	6	69	0	13	2 8	0	0.03	0.0	29.690	18	6.4	7.3	20	S	14	19	550	72	9	9
10	88	68	78	6	61	0	13	8	0	0.00	0.0	29.620	26	9.3	11.9	25	W	16	27	676	89	3	3
11	76	52	64	-8	42	1	0		0	0.00	0.0	29.920	33	5.4	7.2	21	NW	15	31	755	100	0	0
12	83	48	66	-5	51	0	1		0	0.00	0.0	30.060	17	6.6	8.0	21	S	14	17	694	92	3	3
13	88	60	74	-3	60	0	9		0	0.00	0.0	30.120	17	6.6	7.3	15	SW	10	18	725	97	1	1
14	90	65	78	7	67	0	13	1	0	0.00	0.0	30.045	18	8.9	9.1	20	S	15	17	726	97	5	3
15	93	70	82	12	69	0	17	1	0	0.00	0.0	29.900	20	10.9	11.4	23	SW	17	21	658	88	5	4
16	81	70	76	6	72	0	11	1 8	0	0.09	0.0	29.920	07	4.2	6.8	13	E	10	08	430	58	10	9
17	76	68	72	2	72	0	7	1	0	0.14	0.0	29.920	09	1.2	5.6	12	SE	9	14	0	0	10	10
18	76	64	70	1	68	0	5	2 8	0	0.13	0.0	29.830	34	5.6	6.6	15	N	9	36	78	11	9	8
19	77	60	69	0	57	0	4	1 8	0	0.00	0.0	29.920	01	7.1	7.4	17	N	14	36	522	71	1	2
20	76	56	66	-3	55	0	1	1	0	0.01	0.0	29.990	11	4.5	7.2	17	SE	14	15	580	79	8	8
21	83	60	72	3	65	0	7	1 8	0	0.28	0.0	29.860	17	2.7	8.0	17	SE	15	01	497	68	7	7
22	78	61	70	2	61	0	5	1 8	0	0.00	0.0	29.950	01	5.7	7.9	20	N	15	02	634	87	3	5
23	84	60	72	4	64	0	7	1	0	0.03	0.0	29.870	21	6.8	8.5	21	SW	15	22	505	69	9	8
24	73	54	64	-3	57	1	0		0	0.0	0.0	29.920	36	6.8	8.6	20	N	16	02	592	82	9	9
25	66	55	61	-6	57	4	0	1 3	0	0.70	0.0	29.905	36	1.4	3.9	16	NW	13	30	156	22	10	10
26	91	60	76	10	68	0	11	2 8	0	0.00	0.0	29.720	20	10.8	11.3	30	SW	22	19	526	73	3	5
27	85	60	73	7	67	0	8	1 3 8	0	0.31	0.0	29.660	20	9.1	12.7	38	W	23	27	297	41	8	7
28	72	49	61	-4	45	4	0		0	0.00	0.0	29.850	23	6.8	8.1	18	W	14	29	704	98	0	0
29	73	48	61	-4	45	4	0		0	0.00	0.0	29.950	31	4.0	5.5	16	W	14	29	694	97	1	1
30	64	42*	53*	-12	43	12	0		0	0.09	0.0	30.015	34	10.0	10.8	25	NW	18	31	554	78	4	4
SUM	SUM				TOTAL	TOTAL	NUMBER OF DAYS		TOTAL	TOTAL	FOR THE MONTH:					TOTAL	%	SUM	SUM				
2490	1861				26	261			2.97	0.0	29.870	21	2.0	8.0	38	W	23	27	14622	65	174	171	
AVG.	AVG.	AVG.	DEP.	AVG.	DEP.	DEP.	PRECIPITATION		DEP.						DATE: 27	DATE: 27	POSSIBLE	MONTH	AVG.	AVG.			
83.0	62.0	72.5	2.5	62.6	3	88	≥ .01 INCH.		15	-0.37									22333	65	5.8	5.7	
NUMBER OF DAYS						SEASON TO DATE		SNOW, ICE PELLETS ≥ 1.0 INCH		GREATEST IN 24 HOURS AND DATES					GREATEST DEPTH ON GROUND OF SNOW, ICE PELLETS OR ICE AND DATE								
MAXIMUM TEMP.		MINIMUM TEMP.		TOTAL		TOTAL		THUNDERSTORMS		PRECIPITATION		SNOW, ICE PELLETS											
≥ 90°		≤ 32°		26		1667		4		0.70		25		0.0									
8		0		3		353		CLEAR 10		PARTLY CLOUDY 7		CLOUDY 13											

\* 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

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 DIRECTOR NATIONAL CLIMATIC DATA CENTER

OBSERVATIONS AT 3-HOUR INTERVALS

SEP 1993  
RICHMOND, VA

13740

HOUR L.S.T.	SKY COVER (TENTHS)	CEILING IN HUNDREDS OF FEET	VISI-BILITY WHOLE MILES 16THS MILE	WEATHER	TEMPERATURE			WIND			SKY COVER (TENTHS)	CEILING IN HUNDREDS OF FEET	VISI-BILITY WHOLE MILES 16THS MILE	WEATHER	TEMPERATURE			WIND			SKY COVER (TENTHS)	CEILING IN HUNDREDS OF FEET	VISI-BILITY WHOLE MILES 16THS MILE	WEATHER	TEMPERATURE			WIND				
					AIR of	NET BULB of	DEW POINT of	REL HUMIDITY %	DIRECTION	SPEED (KNOTS)					AIR of	NET BULB of	DEW POINT of	REL HUMIDITY %	DIRECTION	SPEED (KNOTS)					AIR of	NET BULB of	DEW POINT of	REL HUMIDITY %	DIRECTION	SPEED (KNOTS)		
SEP 1st																																
01	1	UNL	7		75	74	73	94	33	6	10	65	6	F	76	74	73	91	23	3	0	UNL	10				82	76	73	74	20	13
04	3	UNL	5	F	74	73	73	97	31	8	10	130	6	F	74	73	73	97	13	6	6	UNL	12				79	76	74	85	19	12
07	1	UNL	4	F	73	73	73	100	35	3	9	150	2	F	75	74	74	97	00	0	8	UNL	12				80	76	74	82	21	10
10	0	UNL	5	H	88	77	73	61	23	5	1	UNL	3	H	86	78	75	70	22	8	7	UNL	12				87	77	73	63	23	14
13	0	UNL	5	H	96	80	73	48	27	4	4	UNL	5	H	95	81	75	53	17	7	7	250	10				93	78	72	51	22	17
16	4	UNL	5	H	99	78	69	38	10	4	5	UNL	6	H	98	79	71	42	19	14	7	UNL	10				92	76	69	47	21	13
19	10	130	6	H	78	74	72	82	03	8	10	110	7	H	88	77	73	61	21	7	2	UNL	10				87	75	70	57	19	8
22	10	70	6	RWF	75	74	73	94	13	8	8	150	7	F	82	77	75	79	20	5	1	UNL	8				86	76	72	63	18	17
SEP 2nd																																
SEP 3rd																																
SEP 4th																																
SEP 5th																																
SEP 6th																																
SEP 7th																																
SEP 8th																																
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SEP 13th																																
SEP 14th																																
SEP 15th																																
SEP 16th																																
SEP 17th																																
SEP 18th																																

MAXIMUM SHORT DURATION PRECIPITATION

TIME PERIOD (MINUTES)	5	10	15	20	30	45	60	80	100	120	150	180
PRECIPITATION (INCHES)	M	M	M	M	M	M	M	M	M	M	M	M
ENDED: DATE												
ENDED: TIME												

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.

OBSERVATIONS AT 3-HOUR INTERVALS

SEP 1993 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	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	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	AIR OF	WET BULB OF	DEW POINT OF	REL HUMIDITY %	DIRECTION	SPEED (KNOTS)	
SEP 19th																															
01	0	UNL	5		F	64	63	63	97	35	5	0	UNL	6	F	58	57	57	97	02	6	10	55	7	R	62	60	59	90	12	3
04	10	60	6		F	63	62	61	93	35	8	6	60	7	F	57	56	55	93	00	0	10	33	5	RF	61	60	60	97	19	3
07	2	UNL	6		F	61	59	58	90	35	10	10	250	7	F	58	56	55	90	03	3	10	25	2	F	64	63	63	97	18	11
10	0	UNL	7			69	60	53	57	36	12	1	UNL	7		69	61	56	63	03	6	10	9	2	F	69	67	66	90	22	7
13	0	UNL	7			75	63	54	48	02	7	10	75	8		74	62	53	48	18	6	6	20	3	H	77	71	67	71	29	7
16	2	UNL	10			76	63	53	45	03	5	10	UNL	8		74	64	57	56	08	7	4	UNL	6	H	80	72	68	67	07	7
19	0	UNL	10			67	61	56	68	03	3	10	150	7		68	61	55	63	11	9	2	UNL	6	H	73	70	69	87	15	6
22	0	UNL	7			61	59	57	87	00	0	10	55	7		63	58	54	73	15	12	5	UNL	6	F	70	68	66	87	01	13
SEP 20th																															
SEP 21st																															
SEP 22nd																															
SEP 23rd																															
SEP 24th																															
SEP 25th																															
SEP 26th																															
SEP 27th																															
SEP 28th																															
SEP 29th																															
SEP 30th																															

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).

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	4	29.870	67	65	63	88	6.8	21	2.0
04	6	29.860	66	64	63	92	6.8	20	1.7
07	7	29.895	67	65	64	90	6.7	22	1.5
10	5	29.910	75	68	64	69	10.4	24	2.6
13	6	29.870	81	69	62	55	9.9	24	4.6
16	6	29.840	80	69	62	57	10.4	22	1.9
19	6	29.850	72	66	63	74	7.4	15	2.7
22	5	29.880	69	65	62	81	7.3	17	1.7

