

JUL 1984
 RICHMOND, VIRGINIA
 NAT'L WEA SER OFC
 BOX A-63 BYRD 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

JUL 1984
 RICHMOND, VIRGINIA

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)		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	FASTEST MILE	MINUTES	PERCENT OF TOTAL POSSIBLE	SUNRISE TO SUNSET	MIDNIGHT TO MIDNIGHT			
01	85	69	77	0	67	0	12	1	0	0.00	0.0	29.705	23	10.1	10.6	16	23	688	78	6	6	01	
02	93	67	80	3	67	0	15	1 3	8	0.42	0.0	29.860	19	4.3	5.7	18	19	593	67	6	7	02	
03	91	63	77	0	67	0	12	2	8	0.00	0.0	29.860	20	3.9	6.2	9	21	734	83	3	4	03	
04	93	70	82	5	67	0	17		8	0.00	0.0	29.780	20	9.2	9.6	16	21	781	89	6	6	04	
05	94	70	82	5	70	0	17	3		0.27	0.0	29.730	20	14.1	14.7	20	19	381	43	8	8	05	
06	89	70	80	3	69	0	15	3		0.04	0.0	29.760	20	12.3	12.7	18	21	482	55	8	8	06	
07	91	65	78	-1	66	0	13			0.11	0.0	29.750	25	3.3	11.1	18	35	716	82	9	9	07	
08	79	57*	68	-10	51	0	3			0.00	0.0	29.910	36	7.8	8.5	16	01	878	100	2	3	08	
09	84	58	71	-7	57	0	6			0.00	0.0	29.925	20	2.4	3.5	8	18	845	96	7	5	09	
10	80	65	73	-5	66	0	8	3	8	0.25	0.0	29.805	22	5.8	7.6	18	36	228	26	10	10	10	
11	96*	70	83*	5	70	0	18	3	8	0.03	0.0	29.650	22	8.0	9.3	32	27	723	83	2	5	11	
12	88	73	81	3	68	0	16	3	8	0.0	0.0	29.690	34	2.6	7.5	14	27	537	61	8	8	12	
13	83	67	75	-3	68	0	10	1 3	8	0.03	0.0	29.850	10	2.4	3.4	9	15	278	32	10	9	13	
14	89	63	76	-2	67	0	11	1	8	0.00	0.0	29.950	14	3.5	4.4	10	10	674	77	3	4	14	
15	90	67	79	1	71	0	14	1	8	0.00	0.0	29.865	19	8.0	8.6	15	20	557	64	6	5	15	
16	86	73	80	2	71	0	15	3	8	0.08	0.0	29.705	21	11.1	11.6	20	19	320	37	10	9	16	
17	87	70	79	1	71	0	14	1 3	8	0.0	0.0	29.700	20	8.5	9.1	14	19	370	43	10	10	17	
18	84	68	76	-2	68	0	11	1	8	0.41	0.0	29.640	20	6.2	9.3	28	24	373	43	9	9	18	
19	83	62	73	-5	59	0	8	1	8	0.00	0.0	29.910	03	2.9	5.1	9	36	497	57	2	1	19	
20	86	63	75	-3	66	0	10	1 3	8	0.45	0.0	29.960	14	5.4	7.3	20	18	492	57	9	7	20	
21	79	68	74	-4	67	0	9			0.0	0.0	29.920	34	2.0	7.9	13	35	152	18	10	10	21	
22	80	68	74	-4	69	0	9	1		0.16	0.0	29.930	07	6.7	7.8	15	10	322	37	9	8	22	
23	88	68	78	0	71	0	13	1		0.0	0.0	29.970	20	4.6	6.9	12	24	414	48	8	7	23	
24	92	71	82	4	72	0	17	3	8	0.00	0.0	29.870	25	7.1	8.0	15	23	586	68	9	7	24	
25	83	67	75	-3	64	0	10	3	8	0.62	0.0	29.900	02	5.9	6.7	13	36	535	62	8	8	25	
26	78	68	73	-6	67	0	8	1 3	8	0.46	0.0	29.860	11	5.2	6.5	12	10	70	8	10	10	26	
27	89	68	79	1	68	0	14	1	8	0.01	0.0	29.720	26	7.3	11.2	20	26	555	65	8	9	27	
28	74	64	69	-9	62	0	4	1	8	0.17	0.0	29.940	02	5.0	5.8	9	36	193	23	10	9	28	
29	72	63	68*	-10	62	0	3	1	8	0.04	0.0	30.030	02	7.2	7.9	13	04	53	6	10	10	29	
30	76	64	70	-8	64	0	5	1		0.0	0.0	30.020	03	4.3	5.7	10	04	104	12	10	10	30	
31	84	64	74	-4	67	0	9	1	8	0.00	0.0	30.000	14	3.3	3.9	9	19	466	55	10	9	31	
SUM	SUM				TOTAL	TOTAL		NUMBER OF DAYS		TOTAL	TOTAL	FOR THE MONTH:			TOTAL	%	SUM	SUM					
2646	2063				0	346				3.55	0.0	29.840	20	2.7	7.9	32	27	14597		236	230		
AVG.	AVG.	AVG.	DEP.	AVG.	DEP.	DEP.		PRECIPITATION		DEP.						DATE: 11	POSSIBLE	MONTH	AVG.	AVG.			
85.4	66.5	76.0	-1.8	66.4	0	-51		> .01 INCH		16	-1.59							26897	54	7.6	7.4		
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.						TOTAL		THUNDERSTORMS		PRECIPITATION		SNOW, ICE PELLETS		0									
> 90 °						0		13		0.62		25		0 0									
8						0		95		CLEAR 5		PARTLY CLOUDY 5		CLOUDY 21									

* 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. 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. Wadsworth
 DIRECTOR
 NATIONAL CLIMATIC DATA CENTER

OBSERVATIONS AT 3-HOUR INTERVALS

JUL 1984 13740
RICHMOND, VIRGINIA

HOUR	L. S. T.	VISI-BILITY				WEATHER	TEMPERATURE				WIND		SKY COVER (TENTHS)	VISI-BILITY				WEATHER	TEMPERATURE				WIND										
		CEILING IN HUNDREDS OF FEET	WHOLE MILES	16THS MILE	1/8 MILE		AIR OF	NET BULB OF	DEW POINT OF	REL HUMIDITY %	DIRECTION	SPEED (KNOTS)		CEILING IN HUNDREDS OF FEET	WHOLE MILES	16THS MILE	1/8 MILE		AIR OF	NET BULB OF	DEW POINT OF	REL HUMIDITY %	DIRECTION	SPEED (KNOTS)									
JUL 1st																																	
01	10	1	2		F	70	70	70	100	19	3	7	250	7			65	62	76	19	5	3	UNL	2		F	67	67	66	93	20	3	
04	10	8	5		F	70	69	69	97	21	10	7	UNL	7			67	65	64	90	0	0	1	UNL	0	8	F	65	64	63	93	18	4
07	10	12	6		F	70	68	67	90	23	10	8	100	3		F	71	67	65	81	33	3	2	UNL	4		FH	68	66	65	90	18	6
10	6	16	7			78	71	68	72	26	12	4	UNL	5		H	82	73	68	63	14	4	0	UNL	6		H	79	72	69	72	23	6
13	5	UNL	10			84	72	66	55	23	13	2	UNL	2		H	91	73	63	39	14	7	2	UNL	7			88	72	64	45	05	4
16	6	30	8			85	73	67	55	23	14	9	80	5		H	91	76	70	50	16	9	6	30	7			90	76	70	52	18	6
19	3	UNL	8			81	69	63	54	25	9	10	30	3		TRWF	69	68	68	97	00	0	1	UNL	7			82	72	67	61	19	6
22	3	UNL	7			74	68	64	71	22	4	10	30	4		RWF	69	68	68	97	00	0	3	UNL	7			74	70	68	82	18	5
JUL 2nd																																	
JUL 3rd																																	
JUL 4th																																	
JUL 5th																																	
JUL 6th																																	
JUL 7th																																	
JUL 8th																																	
JUL 9th																																	
JUL 10th																																	
JUL 11th																																	
JUL 12th																																	
JUL 13th																																	
JUL 14th																																	
JUL 15th																																	
JUL 16th																																	
JUL 17th																																	
JUL 18th																																	

WEATHER CODES

- * TORNADO
- T THUNDERSTORM
- G 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

JUL 1984 13740
RICHMOND, VIRGINIA

HOUR L.S.T.	VISI-BILITY			TEMPERATURE				WIND		VISI-BILITY	TEMPERATURE				WIND		VISI-BILITY	TEMPERATURE				WIND					
	SKY COVER (TENTHS)	CEILING IN HUNDREDS OF FEET	WHOLE MILES	AIR OF	WET BULB OF	DEN POINT OF	REL HUMIDITY %	DIRECTION	SPEED (KNOTS)		CEILING IN HUNDREDS OF FEET	WHOLE MILES	AIR OF	WET BULB OF	DEN POINT OF	REL HUMIDITY %		DIRECTION	SPEED (KNOTS)	CEILING IN HUNDREDS OF FEET	WHOLE MILES	AIR OF	WET BULB OF	DEN POINT OF	REL HUMIDITY %	DIRECTION	SPEED (KNOTS)
JUL 19th																											
01	2	UNL	7	66	64	63	90	30	3	0	UNL	8	65	63	62	90	15	5	10	50	8	69	68	67	93	18	6
04	0	UNL	5	63	62	61	93	33	3	0	UNL	7	64	62	60	87	13	5	10	100	8	68	67	66	93	17	6
07	0	UNL	5	68	65	63	84	01	4	10	80	2	68	66	64	87	12	3	9	100	7	70	69	68	93	17	4
10	0	UNL	10	76	65	58	54	01	6	9	80	2	80	73	70	72	11	11	10	12	8	75	71	69	82	17	6
13	2	UNL	15	80	65	56	44	06	5	9	28	5	83	75	71	67	17	9	9	28	8	72	69	67	84	30	7
16	3	UNL	15	82	67	57	43	06	5	10	28	6	78	71	67	69	15	13	10	14	12	74	70	67	79	34	8
19	3	UNL	15	76	66	60	58	05	5	9	50	6	69	68	67	93	36	6	10	20	12	72	69	67	84	36	7
22	1	UNL	12	69	64	60	73	11	4	8	UNL	7	69	68	67	93	13	6	10	12	10	70	68	66	87	01	5
JUL 20th																											
JUL 21st																											
JUL 22nd																											
JUL 23rd																											
JUL 24th																											
JUL 25th																											
JUL 26th																											
JUL 27th																											
JUL 28th																											
JUL 29th																											
JUL 30th																											
JUL 31st																											

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	DEN POINT OF				
01	7	29.840	70	68	66	87	6.1	21	2.8
04	8	29.830	68	66	65	88	6.3	21	2.9
07	8	29.855	70	68	66	86	7.3	20	3.3
10	7	29.870	78	71	67	71	9.0	22	2.9
13	7	29.850	82	72	67	63	9.5	23	2.9
16	8	29.820	83	73	67	60	10.5	19	3.9
19	7	29.820	78	71	67	70	8.0	16	2.4
22	7	29.850	72	68	66	83	6.1	18	2.4

HOURLY PRECIPITATION (WATER EQUIVALENT IN INCHES)

JUL 1984
RICHMOND, VIRGINIA

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				T	T																	0.06	0.19	0.02	05	
06	0.03																							06		
07	T	T															0.01	T					0.04	0.06	07	
08																	0.01								08	
09																									09	
10																									10	
11																									11	
12																									12	
13	T	T	0.01	0.01	T	T		T	T	T	T	0.01	T	T										13		
14																									14	
15																									15	
16																									16	
17																									17	
18	T	T	0.05	0.02	0.03	0.10	0.10	T	0.03	0.08														T	18	
19																									19	
20																									20	
21																									21	
22		T	T																						22	
23																									23	
24																									24	
25																									25	
26				0.21	0.39	0.02	T																		26	
27	T					0.01	0.17	0.05	0.02	T	0.01	T	T										0.11	0.05	0.04	27
28	T	T			0.01	0.07	0.07	T		T	T	0.01	0.01	T									0.01	T		28
29	T	T	T	T	T	T	0.03	T	T	0.01	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)	0.20	0.34	0.40	0.51	0.59	0.59	0.60	0.60	0.60	0.61	0.62	0.62
ENDED: DATE	25	25	25	25	25	25	25	25	25	25	25	25
ENDED: TIME	0413	0413	0413	0413	0422	0437	0448	0508	0528	0548	0618	0648

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.

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

RICHMOND, VIRGINIA
USCOMM - NOAA - ASHEVILLE, NC 500

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