JUNE 2004
LOCAL CLIMATOLOGICAL DATA
NOAA, National Climatic Data Center

HOUSTON, TX
G BUSH INTCNTL APT/HOU APT (IAH)
Lat: 29°59' N Long: 95°21' W Elev (Ground): 118 Feet
Time Zone: CENTRAL WBAN: 12960 ISSN #:0198–5094

DATE	TEMPERATURE °F MAXIMUM	MINIMUM	AVERAGE	DEP FROM NORMAL	AVERAGE DEW PT	AVERAGE WET BULB	DEG DAYS BASE 65° HEATING	COOLING	WEATHER	SNOW/ICE ON GND(IN) 0600 LST DEPTH	1200 LST WATER EQUIV	PRECIPITATION (INCHES) 2400 LST SNOW–FALL	2400 LST WATER EQUIV	PRESSURE (INCHES OF HG) AVERAGE STATION	AVERAGE SEA LEVEL	WIND SPEED = MPH DIR = TENS OF DEGREES RESULTANT SPEED	RES DIR	AVERAGE SPEED	MAXIMUM 5–SEC SPEED	5–SEC DIR	MAXIMUM 2–MIN SPEED	2–MIN DIR	DATE
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
01	96*	73	85	6	73	76	0	20		0		0.0	0.00	29.68	29.80	5.1	17	7.8	22	15	21	15	01
02	93	75	84	4	73	76	0	19		0		0.0	0.00	29.83	29.94	7.1	13	11.0	22	13	18	16	02
03	93	68	81	1	68	71	0	16	RA	0		0.0	0.14	29.99	30.11	2.0	05	6.0	38	03	31	04	03
04	93	72	83	3	71	73	0	18	TS TSRA RA HZ	0		0.0	1.03	29.96	30.08	1.3	10	5.2	47	06	40	06	04
05	88	72	80	0	70	73	0	15	TS TSRA RA	0		0.0	0.09	29.85	29.96	3.7	16	5.8	22	18	16	20	05
06	92	75	84	4	72	75	0	19		0		0.0	0.00	29.80	29.91	8.2	17	8.4	23	17	20	15	06
07	91	74	83	3	74	76	0	18	TS RA	0		0.0	0.26	29.83	29.94	7.9	16	9.2	28	18	23	15	07
08	82	72	77	-3	74	75	0	12	TSRA RA FG BR	0		0.0	2.00	29.86	29.97	7.4	13	9.4	26	20	22	21	08
09	89	79	84	4	74	77	0	19	RA	0		0.0	T	29.86	29.97	14.3	14	14.5	28	12	23	13	09
10	90	78	84	3	73	76	0	19		0		0.0	0.00	29.81	29.92	10.6	16	10.7	23	15	20	15	10
11	93	79	86	5	74	77	0	21		0		0.0	0.00	29.80	29.91	10.5	17	10.6	22	15	18	16	11
12	93	78	86	5	73	76	0	21		0		0.0	0.00	29.85	29.96	8.8	17	9.1	23	16	18	13	12
13	92	70	81	0	73	75	0	16	TS TSRA RA FG BR	0		0.0	3.58	29.83	29.94	3.7	13	8.3	54*	13	45*	13	13
14	90	70	80	-1	72	74	0	15	TS RA	0		0.0	0.02	29.76	29.88	2.3	03	4.3	20	06	16	07	14
15	84	67*	76	-5	69	71	0	11	TS TSRA RA BR	0		0.0	2.63	29.77	29.89	1.8	30	4.4	40	02	32	02	15
16	80	72	76	-5	72	73	0	11	RA	0		0.0	0.40	29.86	29.97	2.2	14	4.6	14	13	10	12	16
17	89	74	82	0	75	77	0	17	TSRA RA BR	0		0.0	0.06	29.95	30.06	0.9	12	4.4	20	25	15	06	17
18	94	74	84	2	75	77	0	19	BR	0		0.0	0.00	29.99	30.10	2.8	17	3.7	20	13	18	14	18
19	93	76	85	3	72	76	0	20		0		0.0	0.00	29.98	30.09	1.7	19	3.1	10	22	8	21	19
20	95	76	86*	4	73	76	0	21	TS TSRA	0		0.0	0.09	29.88	30.00	1.4	19	4.6	35	08	29	08	20
21	92	77	85	3	74	77	0	20		0		0.0	0.00	29.75	29.87	6.6	17	6.9	22	16	18	16	21
22	89	72	81	-1	74	75	0	16	TS TSRA RA BR	0		0.0	1.10	29.79	29.90	4.0	17	7.0	43	24	31	24	22
23	81	73	77	-5	73	74	0	12	TSRA RA FG BR	0		0.0	1.29	29.89	30.00	5.1	11	6.8	17	09	15	09	23
24	79	72	76	-6	72	73	0	11	TSRA RA BR	0		0.0	0.91	29.86	29.97	3.6	15	5.3	15	17	12	11	24
25	78	73	76*	-6	72	73	0	11	TSRA RA BR	0		0.0	0.75	29.86	29.98	3.9	14	5.9	17	15	15	15	25
26	82	73	78	-4	73	74	0	13	TSRA RA BR	0		0.0	1.26	29.88	30.00	4.9	10	6.6	16	15	15	15	26
27	85	75	80	-3	73	75	0	15	TS TSRA RA	0		0.0	0.32	29.92	30.04	2.1	04	3.7	26	32	22	31	27
28	91	73	82	-1	73	75	0	17	TS TSRA RA FG+ BR	0		0.0	1.49	29.97	30.08	2.7	11	4.2	45	16	30	15	28
29	87	71	79	-4	74	75	0	14	TS TSRA RA BR	0		0.0	0.74	29.96	30.08	2.1	08	3.8	26	09	23	10	29
30	85	75	80	-3	75	76	0	15	TS TSRA RA BR	0		0.0	0.17	29.94	30.05	2.7	17	4.0	31	22	17	19	30
	88.6	73.6	81.1		72.8	74.9	0.0	16.4	< MONTHLY AVERAGES TOTALS–>			0.0	18.33	29.87	29.98	1.6	11	6.7					<– MONTHLY AVERAGES
	-2.1	1.8	-.2		<–––––––––––DEPARTURE FROM NORMAL–––––––––––>								12.98	SUNSHINE, CLOUD, & VISIBILITY TABLES ON PAGE 3									

DEGREE DAYS

	MONTHLY TOTAL	MONTHLY DEPARTURE	SEASON TO DATE TOTAL	SEASON TO DATE DEPARTURE
HEATING:	0	0	1177	-348
COOLING:	491	6	1172	113

GREATEST 24–HR PRECIPITATION: 3.58 DATE :13
GREATEST 24–HR SNOWFALL: 0.0 DATE :
GREATEST SNOW DEPTH: 0 DATE :

SEA LEVEL PRESSURE		DATE	TIME
MAXIMUM	30.17	19	0753
MINIMUM	29.75	01	1753

NUMBER OF DAYS WITH →

MAXIMUM TEMP ≥ 90:	16	MINIMUM TEMP ≤ 32 :	0
MAXIMUM TEMP ≤ 32 :	0	MINIMUM TEMP ≤ 0 :	0
THUNDERSTORMS :	18	HEAVY FOG :	1
PRECIPITATION ≥ 0.01 INCH :	20		
PRECIPITATION ≥ 0.10 INCH :	16		
SNOWFALL ≥ 1.0 INCH :	0		

JUNE 2004
HOUSTON, TX

HOURLY PRECIPITATION

(WATER EQUIVALENT IN INCHES)

HOUSTON, TX

JUNE 2004 IAH WBAN # 12960

DATE	FOR HOUR (LST) ENDING AT												DATE	FOR HOUR (LST) ENDING AT											DATE	Sum if Different (See Note)	2400 LST Water Equiv.
	1	2	3	4	5	6	7	8	9	10	11	12		13	14	15	16	17	18	19	20	21	22	23	24			
01													01													01		0.00
02													02													02		0.00
03	0.06	0.07	T			0.01	T					T	03	T												03		0.14
04													04				T	0.02	0.97	T				T	0.04	04		1.03
05	T										0.03	0.01	05	T							0.05					05		0.09
06													06													06		0.00
07										T	T	0.21	07							0.01	T	0.01	0.01	0.02		07		0.26
08	0.07	T				T				T	0.30	1.03	08	0.26	0.01	T	0.33	T			T					08		2.00
09													09							T	T					09		T
10													10													10		0.00
11													11													11		0.00
12													12													12		0.00
13													13	0.11	0.06	0.05	1.07	2.17	0.12	T					13		3.58
14													14		T	T	0.01	T								14	0.01	0.02
15						0.87	0.89	0.12	T	0.39	0.34	0.01	15	T			T									15	2.62	2.63
16				T	0.10	T	0.21	T	0.01	T	0.01	0.05	16	0.01	0.01	T	T									16		0.40
17							T		0.01	T			17	0.03	T	T	0.02									17		0.06
18													18													18		0.00
19													19													19		0.00
20													20						0.09							20		0.09
21													21													21		0.00
22											T	0.71	22	0.17	0.02					0.01	0.11	0.01		T	0.07	22		1.10
23	0.10	0.07	0.05	0.14	0.08	0.04	0.01	T	T	T			23				T	0.05	0.48	0.03	0.16		T			23	1.21	1.29
24	0.07	T			0.06	0.20	0.12	0.07	0.09	0.18	0.08	0.03	24	0.01			T		T		T					24		0.91
25		T	0.01	0.16	T	T	0.08	0.44	0.05	T	0.01	T	25	T												25		0.75
26								0.04	T	T	T	0.25	26	0.09	0.06	0.38	0.42		T	0.02					T	26		1.26
27												0.05	27	0.24	0.01	T		0.01								27	0.31	0.32
28													28			0.45	0.98	0.06	T							28		1.49
29													29		0.33	0.40	T		T	T						29	0.73	0.74
30									T	0.01	T	T	30	T	T	0.13	0.02	T				T	0.01			30		0.17

MAXIMUM SHORT DURATION PRECIPITATION (See Note)

Time Period (Minutes)	5	10	15	20	30	45	60	80	100	120	150	180
Precipitation (Inches)												
Ending Date												
Ending Time (Hour/Min)												

Date and time are not entered for TRACE amounts.

Note : The sum of the hourly totals is given when it differs from the daily total. NWS does not edit ASOS hourly values but may edit daily and monthly totals. Hourly, daily, and monthly totals are printed as reported by the ASOS site.

REFERENCE NOTES & SUPPLEMENTAL SUMMARIES

* = Extreme for the month (last occurence if more than one)
T = Trace precipitation amount
+ = also occurs on earlier date
FG+ = Heavy fog, visibility .25 miles or less
BLANK entries denote missing or unreported data

Resultant wind is the vector sum of the wind speeds and directions divided by the number of observations.

Wind direction is recorded in tens of degrees (2 digits) clockwise from true north. '00' = calm, 'VR' = variable.

Precipitation is for the 24−hour period ending at the time indicated in the column heading.

Water Equivalent of snow on the ground is reported only when the depth is 2 or more inches.

NORMALS ARE FOR THE YEARS 1971−2000

WEATHER NOTATIONS

QUALIFIER	WEATHER PHENOMENA		
DESCRIPTOR	PRECIPITATION	OBSCURATION	OTHER
BC Patches	DZ Drizzle	BR Mist	DS Duststorm
BL Blowing	GR Hail	DU Widespread Dust	FC Funnel Cloud
DR Low Drifting	GS Small Hail and/or Snow Pellets	FG Fog	+FC Tornado Waterspout
FZ Freezing	IC Ice Crystals	FU Smoke	PO Well−Developed Dust/Sand Whirls
MI Shallow	PL Ice Pellets	HZ Haze	SQ Squalls
PR Partial	RA Rain	PY Spray	SS Sandstorm
SH Shower(s)	SG Snow Grains	SA Sand	GL Glaze
TS Thunderstorm	SN Snow	VA Volcanic Ash	
VC In the Vicinity	UP Unknown Precipitation		

Intensity (as indicated on pages 4 to 6):
'+' = Heavy ' ' = Moderate '−' = Light

HOUSTON, TX
JUNE 2004

Ceilometer (30−second) data are used to derive cloudiness at or below 12,000 feet. This cloudiness is the mean cloud cover detected during sunrise to sunset (SR−SS), or midnight to midnight (MN−MN).

Satellite data are used to derive cloudiness above 12,000 feet. Effective Cloud Amount is based on the cloud cover and the transparency of the clouds within the satellite field of view (approx. 31x31 miles).

Sky Condition is based on the sum (not to exceed 8) of the sunrise to sunset cloud cover below and above 12,000 feet. Both ceilometer and satellite data must be present to compute Sky Condition. Clear = 0−2 oktas, Partly Cloudy = 3−6 oktas, Cloudy = 7−8 oktas.

A Heating (Cooling) Degree Day is the difference between the average daily temperature and 65 degrees F. The HDD season begins July 1, the CDD season begins January 1.

Dew Point is the temperature to which the air must be cooled to achieve 100% relative humidity.
Wet Bulb is the temperature the air would have if cooled to saturation at constant pressure by evaporation of water into it.

Snow Depth, Snowfall, and Sunshine data may come from nearby sites that the National Weather Service deems Climatologically representative of this site.

ADDITIONAL NOTES:

DATE	SUNSHINE		CLOUDINESS (OKTAS)				VISIBILITY (MILES)		RESERVED
			SR−SS		MN−MN				
	TOTAL MINUTES	PERCENT POSSIBLE	CEILOMETER	SATELLITE	CEILOMETER	SATELLITE	MINIMUM	MAXIMUM	
01							10.00	10.00	
02							10.00	10.00	
03							10.00	10.00	
04							.25	10.00	
05							10.00	10.00	
06							7.00	10.00	
07							.50	10.00	
08							.50	10.00	
09							10.00	10.00	
10							10.00	10.00	
11							10.00	10.00	
12							10.00	10.00	
13							.50	10.00	
14							10.00	10.00	
15							1.00	10.00	
16							8.00	10.00	
17							3.00	10.00	
18							6.00	10.00	
19							8.00	10.00	
20							6.00	10.00	
21							8.00	10.00	
22							.75	10.00	
23							.50	10.00	
24							2.00	10.00	
25							.50	10.00	
26							.75	10.00	
27							7.00	10.00	
28							.25	10.00	
29							1.00	10.00	
30							.50	10.00	
MONTHLY AVGS							6.08	10.00	

SUNSHINE (MINUTES)

Total: Possible:
Percent Possible:

NUMBER OF DAYS WITH:

SKY CONDITION

CLR	PTLY CLDY	CLOUDY	MISSING
			30

MINIMUM VISIBILITY (MILES)

<=0.25	<=3.0	>=7.0
0	10	17

OBSERVATIONS AT 3–HOURLY INTERVALS

HOUSTON, TX

JUNE 2004 IAH WBAN # 12960

HOUR (LST)	SKY COVER	CEILING 100'S OF FT	SATELLITE OBSERVATION TIME (LST)	SATELLITE EFF CLD AMT Oktas	VISIBILITY (MILES)	WEATHER	TEMPERATURE ℉ DRY BULB	TEMPERATURE ℉ DEW POINT	TEMPERATURE ℉ WET BULB	RELATIVE HUMIDITY (PCT)	WIND SPEED (MPH)	WIND DIRECTION TENS OF DEG	PRESSURE (INCHES,HG) STATION	PRESSURE (INCHES,HG) SEA LEVEL
					SUNRISE: 0521	JUN 01			SUNSET: 1918					
03	BKN	025			10.00		76	69	71	79	3	28	29.69	29.81
06	SCT	NC			10.00		74	69	71	85	3	17	29.66	29.77
09	SCT	NC			10.00		87	74	78	65	7	22	29.70	29.81
12	BKN	041			10.00		92	74	79	56	7	VR	29.69	29.81
15	BKN	046			10.00		94	74	80	52	10	16	29.65	29.76
18	BKN	250			10.00		90	76	80	63	17	16	29.63	29.75
21	FEW	NC			10.00		82	74	76	77	10	17	29.69	29.80
24	BKN	250			10.00		79	74	75	85	12	17	29.70	29.81
					SUNRISE: 0521	JUN 02			SUNSET: 1918					
03	OVC	020			10.00		79	74	75	85	8	07	29.78	29.89
06	BKN	025			10.00		75	67	70	76	9	11	29.80	29.92
09	BKN	041			10.00		84	70	74	63	10	11	29.85	29.96
12	BKN	044			10.00		89	75	79	63	13	14	29.85	29.97
15	BKN	033			10.00		90	76	80	63	15	16	29.83	29.94
18	SCT	NC			10.00		89	75	79	63	12	17	29.77	29.89
21	SCT	NC			10.00		82	75	77	79	7	16	29.83	29.95
24	OVC	016			10.00		80	75	77	85	14	02	29.98	30.10
					SUNRISE: 0521	JUN 03			SUNSET: 1919					
03	SCT	NC			10.00		68	64	66	87	9	02	30.00	30.11
06	OVC	045			10.00	-RA	69	65	66	87	0	00	30.02	30.14
09	OVC	250			10.00		74	67	69	79	9	18	30.00	30.11
12	BKN	080			10.00	-RA	81	70	74	69	0	00	29.99	30.10
15	SCT	NC			10.00		92	69	76	47	8	32	29.96	30.08
18	SCT	NC			10.00		90	72	77	56	9	01	29.95	30.07
21	BKN	250			10.00		78	67	71	69	3	16	29.97	30.09
24	FEW	NC			10.00		76	70	72	82	0	00	30.00	30.11
					SUNRISE: 0520	JUN 04			SUNSET: 1919					
03	SCT	NC			10.00		74	70	71	88	0	00	29.99	30.11
06	SCT	NC			9.00		74	70	71	88	3	36	30.00	30.12
09	SCT	NC			10.00		84	70	74	63	3	VR	30.01	30.13
12	BKN	035			10.00		89	72	77	57	0	00	30.00	30.11
15	SCT	NC			10.00		93	72	78	50	7	27	29.92	30.04
18	OVC	070			2.00	-TSRA	73	70	71	90	10	04	29.90	30.02
21	BKN	130			10.00		73	69	70	87	7	16	29.92	30.03
24	BKN	060			10.00	-RA	72	70	71	94	14	19	29.87	29.98
					SUNRISE: 0520	JUN 05			SUNSET: 1920					
03	OVC	250			10.00		72	68	69	87	5	22	29.88	29.99
06	OVC	250			10.00		72	68	69	87	6	14	29.89	30.01
09	OVC	100			10.00		81	71	74	72	6	18	29.89	30.01
12	OVC	110			10.00		77	69	72	77	5	18	29.89	30.01
15	OVC	120			10.00		86	68	74	55	5	16	29.82	29.94
18	BKN	250			10.00		86	74	77	67	15	12	29.78	29.90
21	BKN	250			10.00		76	74	75	94	6	16	29.78	29.90
24	OVC	130			10.00		77	75	76	94	5	17	29.80	29.91
					SUNRISE: 0520	JUN 06			SUNSET: 1920					
03	BKN	250			8.00		76	74	75	94	3	16	29.79	29.91
06	BKN	250			7.00		76	74	75	94	3	17	29.81	29.93
09	BKN	024			10.00		83	73	76	72	6	21	29.84	29.96
12	SCT	NC			10.00		90	68	75	49	12	18	29.83	29.94
15	SCT	NC			10.00		91	68	75	47	14	16	29.78	29.90
18	SCT	NC			10.00		87	70	75	57	15	16	29.76	29.87
21	SCT	NC			10.00		81	72	75	74	13	17	29.78	29.89
24	BKN	250			10.00		79	73	75	82	3	17	29.81	29.93

HOUR (LST)	SKY COVER	CEILING 100'S OF FT	SATELLITE OBSERVATION TIME (LST)	SATELLITE EFF CLD AMT Oktas	VISIBILITY (MILES)	WEATHER	TEMPERATURE ℉ DRY BULB	TEMPERATURE ℉ DEW POINT	TEMPERATURE ℉ WET BULB	RELATIVE HUMIDITY (PCT)	WIND SPEED (MPH)	WIND DIRECTION TENS OF DEG	PRESSURE (INCHES,HG) STATION	PRESSURE (INCHES,HG) SEA LEVEL
					SUNRISE: 0520	JUN 07			SUNSET: 1921					
03	BKN	130			10.00		78	73	75	85	6	16	29.80	29.91
06	BKN	250			10.00		77	74	75	90	6	13	29.81	29.93
09	SCT	NC			10.00		86	74	77	67	15	17	29.83	29.94
12	BKN	250			10.00		79	72	74	79	6	18	29.83	29.95
15	BKN	250			10.00		90	71	77	54	18	15	29.81	29.93
18	OVC	130			10.00		84	75	78	74	12	12	29.79	29.91
21	BKN	250			10.00		80	74	76	82	5	17	29.86	29.97
24	OVC	022			10.00		75	72	73	90	8	01	29.87	29.98
					SUNRISE: 0520	JUN 08			SUNSET: 1921					
03	OVC	032			10.00		76	74	75	94	3	11	29.83	29.95
06	OVC	120			10.00		78	74	75	87	6	12	29.83	29.94
09	OVC	110			7.00		82	75	77	79	14	13	29.85	29.96
12	OVC	019			2.00	TSRA BR	73	70	71	90	13	19	29.90	30.02
15	OVC	075			10.00		76	73	74	91	12	05	29.87	29.99
18	OVC	130			9.00		82	76	78	82	14	14	29.84	29.96
21	BKN	250			9.00		80	75	77	85	10	13	29.86	29.98
24	BKN	250			10.00		80	74	76	82	16	14	29.89	30.01
					SUNRISE: 0520	JUN 09			SUNSET: 1922					
03	OVC	130			10.00		79	74	75	85	10	14	29.86	29.97
06	OVC	130			10.00		79	74	75	85	9	15	29.87	29.98
09	OVC	130			10.00		84	74	77	72	15	14	29.88	30.00
12	BKN	130			10.00		87	75	78	67	16	13	29.89	30.00
15	BKN	130			10.00		86	74	77	67	16	12	29.85	29.97
18	BKN	130			10.00		83	75	77	77	15	12	29.82	29.94
21	BKN	250			10.00		81	75	77	82	13	14	29.83	29.95
24	OVC	130			10.00		80	75	77	85	14	14	29.84	29.96
					SUNRISE: 0520	JUN 10			SUNSET: 1922					
03	OVC	130			10.00		80	74	76	82	10	16	29.81	29.93
06	OVC	130			10.00		78	74	75	87	3	17	29.83	29.94
09	BKN	130			10.00		83	74	77	74	12	16	29.85	29.96
12	BKN	037			10.00		89	73	78	59	16	15	29.82	29.93
15	BKN	250			10.00		89	69	75	52	12	18	29.78	29.89
18	BKN	130			10.00		85	72	76	65	9	17	29.76	29.87
21	BKN	130			10.00		81	74	76	79	9	15	29.77	29.88
24	BKN	250			10.00		80	75	77	85	12	15	29.78	29.90
					SUNRISE: 0520	JUN 11			SUNSET: 1922					
03	BKN	250			10.00		80	75	77	85	12	17	29.75	29.87
06	BKN	130			10.00		80	75	77	85	9	17	29.80	29.91
09	BKN	025			10.00		85	73	77	68	12	19	29.83	29.94
12	BKN	050			10.00		89	71	77	55	10	18	29.81	29.93
15	BKN	250			10.00		92	71	77	51	9	16	29.77	29.89
18	SCT	NC			10.00		87	73	77	63	16	16	29.77	29.88
21	SCT	NC			10.00		82	74	76	77	10	16	29.81	29.92
24	BKN	250			10.00		80	75	77	85	7	18	29.85	29.96
					SUNRISE: 0520	JUN 12			SUNSET: 1923					
03	SCT	NC			10.00		79	74	75	85	7	17	29.83	29.94
06	BKN	250			10.00		78	74	75	87	7	16	29.84	29.96
09	BKN	026			10.00		84	73	76	70	10	21	29.89	30.00
12	SCT	NC			10.00		91	69	76	49	12	17	29.86	29.98
15	SCT	NC			10.00		92	69	76	47	10	17	29.82	29.93
18	SCT	NC			10.00		89	71	77	55	9	17	29.80	29.92
21	SCT	NC			10.00		82	74	76	77	8	17	29.84	29.95
24	SCT	NC			10.00		80	74	76	82	5	16	29.86	29.97

OBSERVATIONS AT 3–HOURLY INTERVALS

HOUSTON, TX

JUNE 2004 IAH WBAN # 12960

HOUR (LST)	SKY COVER	CEILING 100'S OF FT	SATELLITE: OBSERVATION TIME (LST)	SATELLITE: EFF CLD AMT Oktas	VISIBILITY (MILES)	WEATHER	TEMPERATURE ℉: DRY BULB	TEMPERATURE ℉: DEW POINT	TEMPERATURE ℉: WET BULB	RELATIVE HUMIDITY (PCT)	WIND: SPEED (MPH)	WIND: DIRECTION TENS OF DEG	PRESSURE (INCHES,HG): STATION	PRESSURE (INCHES,HG): SEA LEVEL
					SUNRISE: 0520	**JUN 13**			**SUNSET: 1923**					
03	SCT	NC			10.00		79	75	76	88	0	00	29.87	29.99
06	BKN	250			10.00		78	75	76	90	5	11	29.84	29.95
09	SCT	NC			10.00		86	74	77	67	12	13	29.84	29.96
12	BKN	034			10.00		91	73	78	56	12	15	29.84	29.95
15	BKN	033			10.00	-TSRA	77	73	74	88	9	28	29.78	29.90
18	BKN	060			9.00	-TSRA	72	68	69	87	9	20	29.77	29.89
21	BKN	250			10.00		75	72	73	90	10	06	29.82	29.93
24	SCT	NC			10.00		72	70	71	94	10	04	29.82	29.94
					SUNRISE: 0520	**JUN 14**			**SUNSET: 1923**					
03	BKN	020			10.00		70	69	69	97	5	03	29.77	29.89
06	SCT	NC			10.00		71	69	70	94	3	VR	29.78	29.90
09	SCT	NC			10.00		80	73	75	79	5	VR	29.81	29.92
12	BKN	120			10.00		88	72	77	59	5	34	29.79	29.91
15	BKN	042			10.00	-RA	87	70	75	57	8	06	29.73	29.85
18	SCT	NC			10.00		81	72	75	74	3	27	29.70	29.82
21	FEW	NC			10.00		76	73	74	91	3	22	29.72	29.84
24	SCT	NC			10.00		76	72	73	88	0	00	29.75	29.87
					SUNRISE: 0520	**JUN 15**			**SUNSET: 1924**					
03	BKN	250			10.00		75	72	73	90	0	00	29.72	29.84
06	OVC	011			1.00	+TSRA BR	68	65	66	90	30	02	29.79	29.90
09	OVC	100			10.00	-RA	73	69	70	87	0	00	29.81	29.93
12	OVC	038			10.00	-RA	73	66	69	79	0	00	29.80	29.92
15	BKN	042			10.00		82	70	74	67	14	27	29.77	29.89
18	BKN	250			10.00		77	67	70	71	5	25	29.76	29.88
21	SCT	NC			10.00		74	70	71	88	0	00	29.76	29.88
24	BKN	250			10.00		73	70	71	90	0	00	29.81	29.93
					SUNRISE: 0520	**JUN 16**			**SUNSET: 1924**					
03	OVC	027			10.00		73	68	70	84	9	09	29.77	29.89
06	OVC	020			10.00	-RA	73	71	72	94	9	31	29.81	29.93
09	BKN	044			10.00	-RA	75	71	72	88	8	12	29.89	30.01
12	SCT	NC			10.00		75	72	73	90	3	16	29.92	30.03
15	SCT	NC			10.00	-RA	78	73	75	85	3	24	29.86	29.98
18	BKN	250			10.00		79	73	75	82	7	12	29.86	29.98
21	BKN	250			10.00		77	73	74	88	7	13	29.87	29.99
24	SCT	NC			10.00		75	73	74	94	5	14	29.89	30.00
					SUNRISE: 0520	**JUN 17**			**SUNSET: 1924**					
03	BKN	250			9.00		74	73	73	97	0	00	29.92	30.03
06	SCT	NC			8.00		75	73	74	94	0	00	29.95	30.06
09	BKN	110			10.00	-RA	75	72	73	90	5	24	29.99	30.11
12	BKN	250			10.00		89	77	80	68	5	13	29.97	30.09
15	OVC	039			10.00	-RA	86	77	80	75	10	32	29.94	30.06
18	BKN	250			10.00		86	79	81	80	5	04	29.91	30.02
21	BKN	250			10.00		80	77	78	90	6	15	29.93	30.05
24	SCT	NC			9.00		78	74	75	87	0	00	29.97	30.09
					SUNRISE: 0521	**JUN 18**			**SUNSET: 1925**					
03	SCT	NC			7.00		75	73	74	94	0	00	29.97	30.08
06	SCT	NC			7.00		75	73	74	94	0	00	30.00	30.11
09	BKN	250			10.00		84	76	78	77	6	22	30.03	30.14
12	BKN	250			10.00		90	73	78	58	0	00	30.01	30.13
15	SCT	NC			9.00		93	73	79	52	5	26	29.96	30.08
18	SCT	NC			9.00		87	76	79	70	13	14	29.94	30.05
21	OVC	049			10.00		83	78	79	85	6	16	30.00	30.11
24	SCT	NC			10.00		80	76	77	87	5	20	30.00	30.12

HOUR (LST)	SKY COVER	CEILING 100'S OF FT	SATELLITE: OBSERVATION TIME (LST)	SATELLITE: EFF CLD AMT Oktas	VISIBILITY (MILES)	WEATHER	TEMPERATURE ℉: DRY BULB	TEMPERATURE ℉: DEW POINT	TEMPERATURE ℉: WET BULB	RELATIVE HUMIDITY (PCT)	WIND: SPEED (MPH)	WIND: DIRECTION TENS OF DEG	PRESSURE (INCHES,HG): STATION	PRESSURE (INCHES,HG): SEA LEVEL
					SUNRISE: 0521	**JUN 19**			**SUNSET: 1925**					
03	FEW	NC			9.00		78	75	76	90	0	00	29.97	30.08
06	SCT	NC			8.00		76	74	75	94	0	00	30.02	30.14
09	SCT	NC			8.00		83	74	77	74	0	00	30.05	30.16
12	SCT	NC			10.00		90	71	77	54	5	VR	30.02	30.14
15	SCT	NC			9.00		92	69	76	47	0	00	29.94	30.06
18	SCT	NC			10.00		92	69	76	47	5	18	29.91	30.02
21	SCT	NC			10.00		84	72	76	67	6	17	29.92	30.04
24	FEW	NC			10.00		82	74	76	77	6	21	29.92	30.03
					SUNRISE: 0521	**JUN 20**			**SUNSET: 1925**					
03	FEW	NC			10.00		79	74	75	85	3	02	29.93	30.05
06	SCT	NC			7.00		76	74	75	94	0	00	29.94	30.05
09	SCT	NC			9.00		84	74	77	72	3	24	29.94	30.05
12	SCT	NC			10.00		89	73	78	59	5	29	29.90	30.02
15	SCT	NC			10.00		93	69	76	46	5	29	29.84	29.95
18	BKN	250			10.00	TS	81	73	75	77	9	16	29.82	29.94
21	OVC	250			10.00		78	73	75	85	10	13	29.84	29.96
24	BKN	250			9.00		77	74	75	90	5	19	29.81	29.93
					SUNRISE: 0521	**JUN 21**			**SUNSET: 1925**					
03	SCT	NC			10.00		79	75	76	88	0	00	29.78	29.90
06	SCT	NC			8.00		78	75	76	90	0	00	29.79	29.91
09	BKN	250			10.00		85	74	77	70	9	17	29.80	29.91
12	BKN	250			10.00		89	70	76	53	0	00	29.77	29.88
15	BKN	046			10.00		91	71	77	52	15	16	29.70	29.82
18	BKN	250			10.00		86	74	77	67	9	17	29.68	29.79
21	SCT	NC			10.00		83	74	77	74	6	18	29.72	29.83
24	SCT	NC			10.00		80	74	76	82	7	17	29.73	29.85
					SUNRISE: 0521	**JUN 22**			**SUNSET: 1926**					
03	SCT	NC			10.00		79	74	75	85	6	18	29.72	29.84
06	BKN	250			10.00		78	74	75	87	6	16	29.76	29.87
09	OVC	026			10.00		85	74	77	70	10	19	29.81	29.92
12	OVC	019			0.75	+TSRA BR	73	71	72	94	12	22	29.83	29.95
15	BKN	060			10.00		77	73	74	88	5	31	29.80	29.92
18	BKN	042			10.00		79	74	75	85	10	06	29.77	29.89
21	OVC	032			10.00		77	74	75	90	6	36	29.82	29.93
24	OVC	027			10.00	-TSRA	75	73	74	94	8	18	29.85	29.97
					SUNRISE: 0522	**JUN 23**			**SUNSET: 1926**					
03	OVC	045			10.00	-RA	73	71	72	94	5	25	29.85	29.97
06	BKN	050			10.00	-RA	73	71	72	94	3	16	29.88	29.99
09	BKN	075			10.00	-RA	75	72	73	90	7	04	29.91	30.02
12	OVC	130			10.00		79	74	75	85	8	12	29.91	30.02
15	OVC	014			10.00		80	73	75	79	12	12	29.88	29.99
18	OVC	015			0.75	-TSRA BR	75	72	73	90	10	09	29.88	29.99
21	OVC	012			5.00	-RA BR	75	73	74	94	8	10	29.89	30.00
24	OVC	070			10.00		74	73	73	97	5	05	29.90	30.01
					SUNRISE: 0522	**JUN 24**			**SUNSET: 1926**					
03	OVC	024			10.00		75	73	74	94	5	08	29.85	29.97
06	OVC	025			6.00	RA BR	72	70	71	94	3	28	29.84	29.96
09	BKN	022			8.00	TSRA	73	71	72	94	8	14	29.89	30.01
12	BKN	040			10.00	-RA	75	73	74	94	6	19	29.88	30.00
15	OVC	011			10.00		76	72	73	88	8	17	29.85	29.97
18	OVC	250			10.00		79	72	74	79	6	13	29.79	29.91
21	BKN	050			10.00		77	73	74	88	9	12	29.83	29.95
24	SCT	NC			10.00		75	73	74	94	0	00	29.85	29.97

OBSERVATIONS AT 3–HOURLY INTERVALS

HOUSTON, TX

JUNE 2004 IAH WBAN # 12960

HOUR (LST)	SKY COVER	CEILING 100'S OF FT	SATELLITE: OBSERVATION TIME (LST)	SATELLITE: EFF CLD AMT Oktas	VISIBILITY (MILES)	WEATHER	TEMPERATURE ℉: DRY BULB	TEMPERATURE ℉: DEW POINT	TEMPERATURE ℉: WET BULB	RELATIVE HUMIDITY (PCT)	WIND: SPEED (MPH)	WIND: DIRECTION TENS OF DEG	PRESSURE (INCHES,HG): STATION	PRESSURE (INCHES,HG): SEA LEVEL
					SUNRISE: 0522	**JUN 25**			**SUNSET: 1926**					
03	BKN	055			10.00	-RA	75	74	74	96	0	00	29.83	29.95
06	BKN	027			10.00		75	73	74	94	5	01	29.84	29.96
09	SCT	NC			10.00		75	72	73	90	8	06	29.87	29.99
12	BKN	130			10.00		77	73	74	88	6	18	29.86	29.98
15	OVC	014			10.00		77	72	74	85	13	15	29.85	29.97
18	OVC	250			10.00		77	71	73	82	6	16	29.84	29.96
21	OVC	022			10.00		74	71	72	91	0	00	29.88	30.00
24	OVC	250			10.00		73	70	71	90	9	12	29.86	29.98
					SUNRISE: 0522	**JUN 26**			**SUNSET: 1926**					
03	BKN	029			10.00		73	70	71	90	5	09	29.84	29.96
06	BKN	036			10.00		73	71	72	94	5	36	29.89	30.01
09	OVC	007			8.00	-RA	75	72	73	90	7	04	29.90	30.02
12	OVC	100			6.00	RA BR	76	73	74	91	8	12	29.90	30.02
15	OVC	016			10.00	+TSRA	75	73	74	94	3	VR	29.86	29.98
18	BKN	034			10.00		80	73	75	79	12	12	29.84	29.96
21	BKN	250			10.00		76	73	74	91	9	09	29.88	30.00
24	OVC	055			10.00		75	73	74	94	5	14	29.91	30.03
					SUNRISE: 0523	**JUN 27**			**SUNSET: 1926**					
03	BKN	110			10.00		75	73	74	94	5	11	29.88	29.99
06	BKN	110			10.00		75	73	74	94	0	00	29.90	30.01
09	OVC	012			8.00		81	77	78	88	0	00	29.96	30.08
12	BKN	042			10.00	TSRA	83	76	78	79	5	32	29.94	30.06
15	BKN	250			10.00		78	70	73	76	6	15	29.91	30.03
18	BKN	250			10.00		80	73	75	79	8	06	29.90	30.02
21	BKN	250			10.00		77	73	74	88	5	01	29.92	30.04
24	BKN	014			10.00		75	73	74	94	0	00	29.96	30.08
					SUNRISE: 0523	**JUN 28**			**SUNSET: 1926**					
03	BKN	250			7.00		75	74	74	96	0	00	29.94	30.06
06	BKN	250			8.00		75	73	74	94	0	00	29.97	30.09
09	BKN	130			10.00		82	77	78	85	3	17	30.00	30.11
12	BKN	130			10.00		88	73	77	61	6	19	29.97	30.08
15	OVC	015			10.00	-TSRA	78	68	71	71	10	07	29.94	30.06
18	OVC	130			10.00		77	73	74	88	0	00	29.94	30.06
21	BKN	250			10.00		75	72	73	90	6	VR	29.97	30.09
24	BKN	130			10.00		74	73	73	97	0	00	29.97	30.08
					SUNRISE: 0523	**JUN 29**			**SUNSET: 1926**					
03	OVC	130			10.00		74	72	73	94	3	05	29.94	30.06
06	BKN	250			10.00		73	72	72	96	0	00	29.98	30.09
09	BKN	110			10.00		82	77	78	85	3	16	30.00	30.11
12	BKN	050			10.00		84	71	75	65	7	12	29.97	30.09
15	OVC	250			10.00	-RA	77	71	73	82	3	VR	29.93	30.05
18	OVC	250			10.00	-RA	79	75	76	88	6	01	29.93	30.05
21	BKN	250			10.00		78	76	77	93	5	03	29.94	30.06
24	BKN	250			8.00		77	75	76	94	0	00	29.95	30.06
					SUNRISE: 0524	**JUN 30**			**SUNSET: 1926**					
03	OVC	250			9.00		77	75	76	94	0	00	29.93	30.05
06	OVC	250			9.00		77	75	76	94	3	12	29.94	30.06
09	OVC	130			10.00	-RA	81	77	78	88	5	18	29.96	30.08
12	OVC	130			10.00		85	75	78	72	8	18	29.95	30.06
15	OVC	022			5.00	+TSRA BR	75	72	73	90	12	26	29.93	30.05
18	OVC	130			10.00		78	73	75	85	3	12	29.90	30.01
21	BKN	110			10.00	-RA	77	74	75	90	5	05	29.92	30.04
24	BKN	250			9.00		76	75	75	97	3	16	29.94	30.05

HOUR (LST)	SKY COVER	CEILING 100'S OF FT	SATELLITE: OBSERVATION TIME (LST)	SATELLITE: EFF CLD AMT Oktas	VISIBILITY (MILES)	WEATHER	TEMPERATURE ℉: DRY BULB	TEMPERATURE ℉: DEW POINT	TEMPERATURE ℉: WET BULB	RELATIVE HUMIDITY (PCT)	WIND: SPEED (MPH)	WIND: DIRECTION TENS OF DEG	PRESSURE (INCHES,HG): STATION	PRESSURE (INCHES,HG): SEA LEVEL
					SUNRISE:	**JUN 31**			**SUNSET:**					

3–HOURLY OBSERVATION NOTES

Sky Cover is the amount of the sky obscured. CLR or SKC = 0, FEW = 1/8–2/8, SCT = 3/8–4/8, BKN = 5/8–7/8, OVC = 8/8, VV = Vertical Visibilty = 8/8.
Ceiling is reported in hundreds of feet above ground level for clouds at or below 12,000 feet. NC= No ceiling detected.
& = Original observation contained additional weather elements.
See page 3 for additional notes.

SUMMARY BY HOUR

HOUR (LST)	AVERAGES: CEILOMETER	AVERAGES: EFF CLD AMT	AVERAGES: DRY BULB	AVERAGES: DEW POINT	AVERAGES: WET BULB	AVERAGES: RELATIVE HUMIDITY	AVERAGES: PRESSURE (INCHES,HG): STATION	AVERAGES: PRESSURE (INCHES,HG): SEA LEVEL	AVERAGES: VISIBILITY (MILES)	AVERAGES: WIND SPEED (MPH)	RESULTANT WIND (MPH): SPEED	RESULTANT WIND (MPH): DIRECTION
01			76	73	74	88	29.86	29.98	9.70	6	2	13
02			76	73	74	89	29.85	29.97	9.73	5	2	12
03			76	72	74	90	29.85	29.97	9.63	4	2	13
04			76	72	74	90	29.85	29.97	9.43	5	2	12
05			75	72	73	90	29.86	29.98	9.37	4	2	13
06			75	72	73	90	29.87	29.98	8.93	4	1	11
07			77	73	74	87	29.88	29.99	9.17	5	3	12
08			79	73	75	82	29.89	30.01	9.25	6	4	16
09			81	73	75	78	29.90	30.01	9.60	7	5	16
10			82	73	76	73	29.90	30.01	9.40	8	6	16
11			84	73	76	69	29.89	30.01	9.17	7	5	16
12			84	72	76	69	29.89	30.00	9.29	6	5	16
13			85	72	76	68	29.87	29.99	9.53	8	5	15
14			85	72	76	67	29.86	29.98	9.43	8	6	15
15			85	71	76	67	29.84	29.96	9.77	9	4	17
16			85	72	76	67	29.83	29.95	9.50	8	4	14
17			84	72	76	70	29.82	29.94	9.32	9	6	14
18			82	73	76	74	29.82	29.94	9.32	9	6	14
19			81	73	75	77	29.84	29.95	9.63	8	6	15
20			79	73	75	81	29.84	29.96	9.67	7	5	15
21			78	73	75	84	29.85	29.97	9.80	7	5	14
22			78	73	75	86	29.87	29.98	9.93	5	4	15
23			78	73	75	88	29.87	29.99	9.93	5	3	16
24			77	73	74	89	29.87	29.99	9.83	6	3	15

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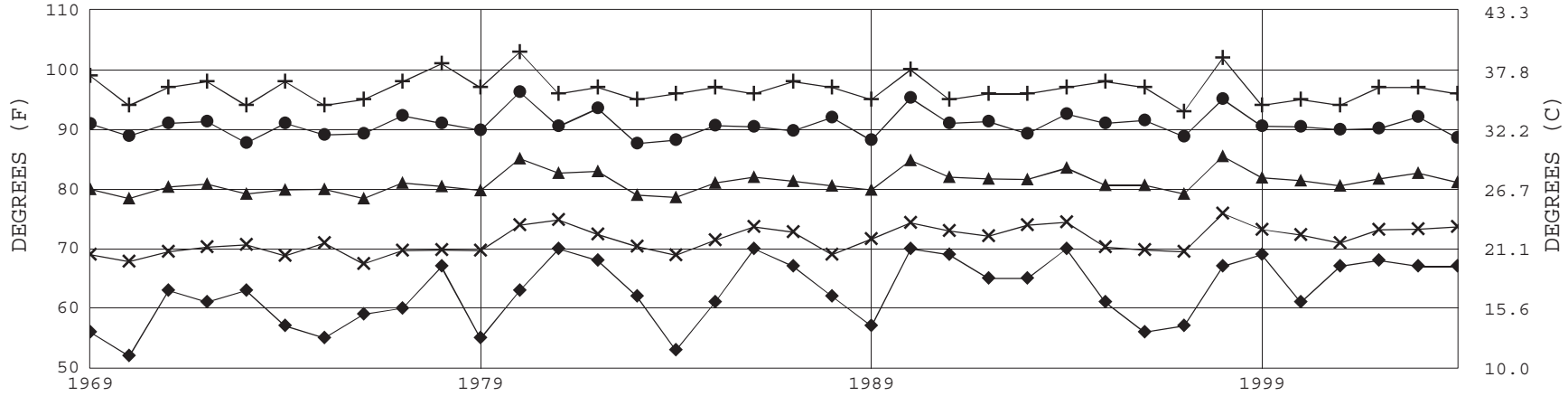
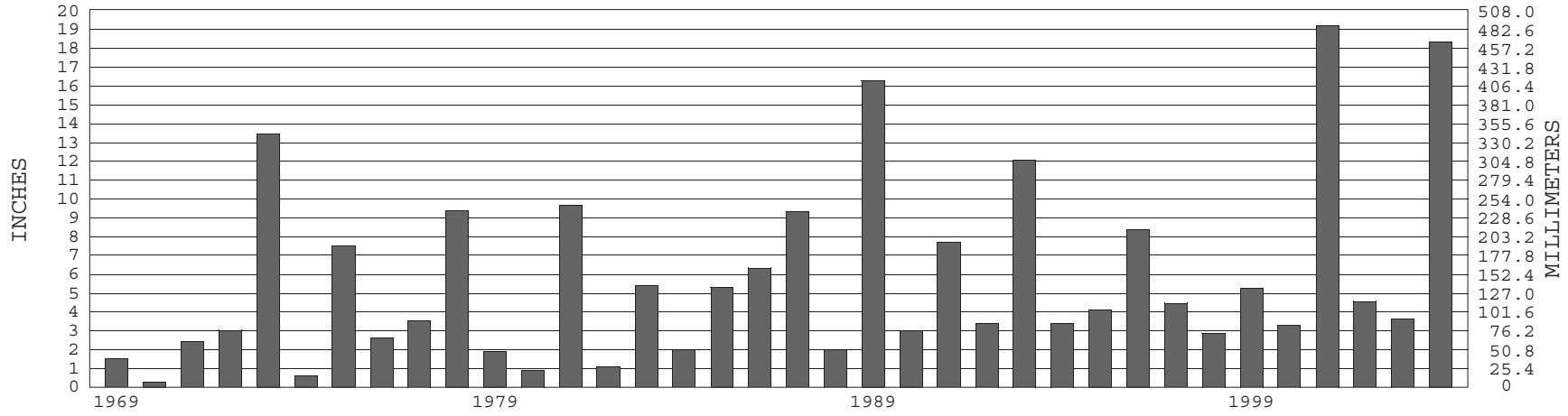
HOUSTON, TX JUNE TEMPERATURES



Long-Term (1969-2004) Mean: 81.1 1971-2000 Normal: 81.3

HOUSTON, TX JUNE PRECIPITATION



Long-Term (1969-2004) Mean Monthly Total: 5.78 1971-2000 Normal: 5.35

JUNE 2004

HOUSTON, TX

LOCAL CLIMATOLOGICAL DATA

NOAA, National Climatic Data Center

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