



AUGUST 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						DEG DAYS BASE 65°		WEATHER	SNOW/ICE ON GND(IN)		PRECIPITATION (INCHES)		PRESSURE (INCHES OF HG)		WIND SPEED = MPH DIR = TENS OF DEGREES						DATE	
	MAXIMUM	MINIMUM	AVERAGE	DEP FROM NORMAL	AVERAGE DEW PT	AVERAGE WET BULB	HEATING	COOLING		0600 LST	1200 LST	2400 LST	2400 LST	AVERAGE STATION	AVERAGE SEA LEVEL	RESULTANT SPEED	RES DIR	AVERAGE SPEED	MAXIMUM				
																			5-SEC		2-MIN		
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	98	78	88	4	75	78	0	23	TS	0		0.0	0.00	29.86	29.97	1.9	04	4.3	17	14	15	13	01
02	98	77	88	4	75	78	0	23	BR	0		0.0	0.00	29.82	29.94	3.2	04	5.0	16	05	13	11	02
03	100*	78	89	5	73	77	0	24		0		0.0	0.00	29.79	29.90	1.4	03	3.9	15	04	13	04	03
04	97	78	88	4	73	77	0	23		0		0.0	0.00	29.77	29.88	2.6	20	5.0	14	18	12	13	04
05	99	79	89*	5	74	78	0	24		0		0.0	0.00	29.80	29.91	2.7	25	4.6	15	27	13	27	05
06	92	76	84	0	72	76	0	19		0		0.0	0.00	29.81	29.92	5.8	05	8.3	18	01	15	04	06
07	90	70	80	-4	63	69	0	15		0		0.0	0.00	29.82	29.93	5.5	07	6.7			12	09	07
08	94	71	83	-1	66	71	0	18		0		0.0	0.00	29.85	29.97	3.1	08	4.8			12	12	08
09	93	74	84	0	72	76	0	19	BR HZ	0		0.0	0.00	29.90	29.97	2.9	08	5.3	18	13	17	12	09
10	92	76	84	0	73	76	0	19	RA	0		0.0	T	29.87	29.99	2.0	36	3.7	17	01	14	31	10
11	96	74	85	1	71	75	0	20	RA BR HZ	0		0.0	0.01	29.80	29.91	1.4	36	5.1	22	02	17	02	11
12	89	69	79	-5	60	67	0	14		0		0.0	0.00	29.88	30.00	11.3	01	11.8	29	01	24	01	12
13	87	64	76	-8	58	65	0	11		0		0.0	0.00	29.98	30.09	5.8	07	7.1	20	12	15	11	13
14	89	65	77	-7	57	64	0	12		0		0.0	0.00	30.04	30.15	5.2	07	5.9	20	08	15	06	14
15	88	61*	75*	-9	56	64	0	10		0		0.0	0.00	30.06	30.17	4.3	08	5.6	22	06	15	03	15
16	91	63	77	-6	58	66	0	12		0		0.0	0.00	30.04	30.16	4.0	07	6.1	20	04	16	07	16
17	92	66	79	-4	62	68	0	14	RA	0		0.0	T	29.98	30.09	3.6	10	6.2	18	13	15	14	17
18	92	67	80	-3	71	73	0	15	TS TSRA HZ	0		0.0	0.07	29.89	30.01	4.9	14	6.2	24	15	22	14	18
19	93	76	85	2	75	77	0	20	TS TSRA RA	0		0.0	0.98	29.87	29.99	6.8	17	7.8	35*	21	23	17	19
20	97	73	85	2	73	77	0	20	RA	0		0.0	0.02	29.87	29.98	5.5	20	7.9	24	31	22	31	20
21	91	72	82	-1	72	74	0	17	TS TSRA RA BR	0		0.0	1.17	29.90	30.01	1.4	14	6.8	30	22	24*	34	21
22	91	74	83	0	73	75	0	18	TS TSRA RA BR	0		0.0	0.22	29.85	29.96	2.9	13	5.2	25	13	23	13	22
23	93	77	85	2	75	78	0	20		0		0.0	0.00	29.80	29.92	8.5	17	8.8	22	15	17	14	23
24	96	78	87	4	75	78	0	22	TS	0		0.0	0.00	29.83	29.94	8.0	18	8.3	24	15	21	16	24
25	96	79	88	6	75	78	0	23		0		0.0	0.00	29.86	29.97	7.7	18	8.2	21	16	16	16	25
26	96	80	88	6	75	78	0	23	RA	0		0.0	T	29.86	29.98	8.8	18	9.1	21	17	17	16	26
27	94	76	85	3	75	78	0	20		0		0.0	0.00	29.88	29.99	7.2	14	8.2	23	12	20	11	27
28	91	71	81	-1	73	75	0	16	RA BR HZ	0		0.0	0.02	29.86	29.97	0.1	31	4.0	24	34	22	34	28
29	92	71	82	0	71	74	0	17		0		0.0	0.00	29.83	29.95	2.2	32	3.0	15	36	13	35	29
30	95	74	85	3	70	74	0	20		0		0.0	0.00	29.88	30.00	5.0	01	7.0	20	02	14	03	30
31	91	72	82	0	63	69	0	17	TS	0		0.0	0.00	29.97	30.09	6.5	04	7.0	20	08	13	07	31

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93.3	72.9	83.1	■ ■	69.5	73.7	0.0	18.3	< MONTHLY AVERAGES	TOTALS->	0.0	2.49	29.88		2.0	19	6.4	<- MONTHLY AVERAGES
- .2	- .1	- .2	■ ■	->-----DEPARTURE FROM NORMAL-----<						-1.34	SUNSHINE, CLOUD, & VISIBILITY TABLES ON PAGE 3						
DEGREE DAYS								GREATEST 24-HR PRECIPITATION: 1.17 DATE :21				SEA LEVEL PRESSURE DATE TIME					
MONTHLY TOTAL DEPARTURE								GREATEST 24-HR SNOWFALL: 0.0 DATE :				MAXIMUM : 30.22 15 1053					
SEASON TO DATE TOTAL DEPARTURE								GREATEST SNOW DEPTH: 0 DATE :				MINIMUM : 29.82 11 1553					
HEATING: 0		0		0		0		NUMBER OF DAYS WITH =>		MAXIMUM TEMP ≥ 90: 27		MINIMUM TEMP ≤ 32: 0		PRECIPITATION ≥ 0.01 INCH : 7			
COOLING: 568		5		2356		161				MAXIMUM TEMP ≤ 32 : 0		MINIMUM TEMP ≤ 0 : 0		PRECIPITATION ≥ 0.10 INCH : 3			
										THUNDERSTORMS : 7		HEAVY FOG : 0		SNOWFALL ≥ 1.0 INCH : 0			

HOURLY PRECIPITATION

(WATER EQUIVALENT IN INCHES)

HOUSTON, TX

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IAH

WBAN # 12960

DATE	FOR HOUR (LST) ENDING AT												DATE	FOR HOUR (LST) ENDING AT												DATE	Sum if Different (See Note)	2400 LST	
	1	2	3	4	5	6	7	8	9	10	11	12		13	14	15	16	17	18	19	20	21	22	23	24			Water	Equiv.
01													01												01		0.00		
02													02												02		0.00		
03													03												03		0.00		
04													04												04		0.00		
05													05												05		0.00		
06													06												06		0.00		
07													07												07		0.00		
08													08												08		0.00		
09													09												09		0.00		
10													10			T			T						10		T		
11													11			T									11		0.01		
12													12												12		0.00		
13													13												13		0.00		
14													14												14		0.00		
15													15												15		0.00		
16													16												16		0.00		
17													17			T									17		T		
18													18			0.07			T						18		0.07		
19													19			0.01									19		0.98		
20		T	T										20			0.02									20		0.02		
21													21			0.10									21		1.17		
22					0.38	0.10							22			0.01									22		0.22		
23													23												23		0.00		
24													24												24		0.00		
25													25												25		0.00		
26													26												26		T		
27													27												27		0.00		
28													28			T									28		0.02		
29													29												29		0.00		
30													30												30		0.00		
31													31												31		0.00		

MAXIMUM SHORT DURATION PRECIPITATION (See Note)

Time Period (Minutes)	5	10	15	20	30	45	60	80	100	120	150	180
Precipitation (Inches)	.42	.68	.79	.83	.86	.86	.86	.86	.86	.86	.96	.98
Ending Date	19	19	19	19	19	19	19	19	19	19	19	19
Ending Time (Hour/Min)	1508	1509	1512	1515	1521	1521	1521	1521	1521	1521	1521	1521

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 occurrence 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		
	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

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Ceilorometer (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
	TOTAL MINUTES	PERCENT POSSIBLE	SR–SS		MN–MN		MINIMUM	MAXIMUM	
			CEILOMETER	SATELLITE	CEILOMETER	SATELLITE			
01							10.00	10.00	
02							6.00	10.00	
03							8.00	10.00	
04							9.00	10.00	
05							10.00	10.00	
06							8.00	10.00	
07							10.00	10.00	
08							8.00	10.00	
09							5.00	10.00	
10							7.00	10.00	
11							5.00	10.00	
12							10.00	10.00	
13							10.00	10.00	
14							10.00	10.00	
15							10.00	10.00	
16							10.00	10.00	
17							8.00	10.00	
18							6.00	10.00	
19							4.00	10.00	
20							10.00	10.00	
21							.75	10.00	
22							10.00	10.00	
23							9.00	10.00	
24							10.00	10.00	
25							10.00	10.00	
26							10.00	10.00	
27							10.00	10.00	
28							6.00	10.00	
29							10.00	10.00	
30							10.00	10.00	
31							10.00	10.00	
MONTHLY AVGS							8.51	10.00	
SUNSHINE (MINUTES)									
Total: Possible: Percent Possible:									
NUMBER OF DAYS WITH:									
SKY CONDITION									
CLR PTLY CLDY CLOUDY MISSING 31									
MINIMUM VISIBILITY (MILES)									
<=0.25 <=3.0 >=7.0 0 1 25									

OBSERVATIONS AT 3-HOURLY INTERVALS

HOUSTON, TX

AUGUST 2004

IAH

WBAN # 12960

HOUR (LST)	SATELLITE		VISIBILITY (MILES)	WEATHER	TEMPERATURE °F				WIND		PRESSURE (INCHES, HG)		HOUR (LST)	SATELLITE		VISIBILITY (MILES)	WEATHER	TEMPERATURE °F				WIND		PRESSURE (INCHES, HG)					
	SKY COVER	CEILING 100'S OF FT			OBSERVATION TIME (LST)	EFF CLD AMT Oktas	DRY BULB	DEW POINT	WET BULB	RELATIVE HUMIDITY (PCT)	SPEED (MPH)	DIRECTION TENS OF DEG		STATION	SEA LEVEL			SKY COVER	CEILING 100'S OF FT	OBSERVATION TIME (LST)	EFF CLD AMT Oktas	DRY BULB	DEW POINT	WET BULB	RELATIVE HUMIDITY (PCT)	SPEED (MPH)	DIRECTION TENS OF DEG	STATION	SEA LEVEL
SUNRISE: 0541					AUG 01					SUNSET: 1915					SUNRISE: 0544					AUG 07					SUNSET: 1910				
03	FEW	NC		10.00		80	76	77	87	0	00	29.83	29.94	03	SCT	NC		10.00		72	64	67	76	7	06	29.80	29.91		
06	FEW	NC		10.00		79	76	77	90	0	00	29.85	29.97	06	SCT	NC		10.00		70	63	66	79	7	06	29.83	29.95		
09	SCT	NC		10.00		91	76	80	61	5	34	29.89	30.01	09	BKN	250		10.00		80	62	69	54	8	05	29.85	29.97		
12	BKN	090		10.00		94	75	80	54	8	06	29.87	29.98	12	OVC	250		10.00		86	59	69	40	3	VR	29.83	29.95		
15	BKN	250		10.00		93	74	79	54	9	03	29.81	29.93	15	BKN	250		10.00		90	59	70	35	9	04	29.79	29.91		
18	BKN	250		10.00		81	72	75	74	10	13	29.85	29.97	18	BKN	250		10.00		86	63	71	46	9	08	29.77	29.89		
21	BKN	250		10.00		80	76	77	87	3	VR	29.85	29.96	21	SCT	NC		10.00		76	66	70	72	0	00	29.81	29.92		
24	BKN	250		10.00		79	76	77	90	5	01	29.86	29.98	24	SCT	NC		10.00		74	67	69	79	3	35	29.81	29.93		
SUNRISE: 0541					AUG 02					SUNSET: 1914					SUNRISE: 0545					AUG 08					SUNSET: 1909				
03	BKN	250		8.00		78	75	76	90	3	31	29.82	29.94	03	FEW	NC		10.00		73	67	69	81	3	33	29.82	29.94		
06	BKN	250		6.00	BR	77	75	76	94	0	00	29.85	29.97	06	SCT	NC		10.00		71	64	67	79	6	05	29.85	29.96		
09	SCT	NC		10.00		87	78	81	75	5	VR	29.87	29.99	09	SCT	NC		8.00		83	66	72	57	6	06	29.88	30.00		
12	BKN	250		10.00		92	74	79	56	5	36	29.84	29.96	12	OVC	250		10.00		90	66	74	45	8	06	29.87	29.98		
15	SCT	NC		10.00		98	72	79	43	10	05	29.79	29.90	15	BKN	250		10.00		91	61	71	37	0	00	29.83	29.95		
18	SCT	NC		10.00		94	74	80	52	9	05	29.76	29.88	18	SCT	NC		10.00		89	66	74	47	8	03	29.82	29.94		
21	BKN	250		10.00		86	76	79	72	7	17	29.79	29.91	21	SCT	NC		10.00		80	70	73	71	7	14	29.86	29.97		
24	SCT	NC		10.00		81	74	76	79	0	00	29.80	29.92	24	FEW	NC		10.00		76	71	73	85	0	00	29.88	29.99		
SUNRISE: 0542					AUG 03					SUNSET: 1913					SUNRISE: 0546					AUG 09					SUNSET: 1908				
03	CLR	NC		10.00		79	75	76	88	0	00	29.79	29.91	03	SCT	NC		9.00		75	72	73	90	0	00	29.87	29.98		
06	SCT	NC		8.00		78	76	77	93	0	00	29.82	29.93	06	BKN	250		5.00	BR	76	72	73	88	3	33	29.92	30.03		
09	SCT	NC		10.00		88	75	79	66	7	31	29.83	29.94	09	BKN	042		10.00		85	74	77	70	8	03	29.95	30.07		
12	BKN	250		10.00		95	70	77	44	6	04	29.80	29.92	12	BKN	250		10.00		93	72	78	50	5	VR	29.93			
15	SCT	NC		10.00		98	70	78	40	6	35	29.76	29.87	15	BKN	090		10.00		91	71	77	52	14	11	29.87			
18	FEW	NC		10.00		95	70	77	44	6	07	29.73	29.85	18	SCT	NC		10.00		89	71	77	55	9	12	29.85			
21	FEW	NC		10.00		83	74	77	74	3	17	29.76	29.87	21	BKN	100		10.00		82	73	76	74	3	12	29.91			
24	FEW	NC		10.00		83	76	78	79	0	00	29.76	29.88	24	OVC	110		10.00		80	72	75	76	0	00	29.90	30.01		
SUNRISE: 0543					AUG 04					SUNSET: 1913					SUNRISE: 0546					AUG 10					SUNSET: 1908				
03	FEW	NC		10.00		80	77	78	90	0	00	29.77	29.89	03	OVC	100		10.00		78	73	75	85	0	00	29.88	30.00		
06	FEW	NC		10.00		78	76	77	93	0	00	29.78	29.89	06	BKN	250		9.00		79	73	75	82	0	00	29.90	30.01		
09	SCT	NC		10.00		87	75	78	67	7	29	29.79	29.91	09	OVC	080		8.00		80	74	76	82	5	05	29.93	30.04		
12	SCT	NC		10.00		92	70	77	49	8	28	29.79	29.90	12	OVC	250		8.00		88	71	76	57	3	31	29.90	30.02		
15	SCT	NC		10.00		97	69	77	40	8	15	29.74	29.85	15	OVC	250		10.00		87	72	77	61	8	06	29.84	29.96		
18	SCT	NC		10.00		94	70	77	46	7	12	29.73	29.85	18	OVC	250		7.00		82	73	76	74	3	27	29.81	29.93		
21	SCT	NC		10.00		86	73	77	65	6	20	29.75	29.87	21	BKN	250		7.00		81	73	75	77	5	20	29.84	29.96		
24	FEW	NC		10.00		83	74	77	74	3	21	29.77	29.89	24	BKN	130		7.00		78	73	75	85	3	31	29.84	29.96		
SUNRISE: 0543					AUG 05					SUNSET: 1912					SUNRISE: 0547					AUG 11					SUNSET: 1907				
03	SCT	NC		10.00		80	74	76	82	0	00	29.79	29.91	03	BKN	250		7.00		77	73	74	88	0	00	29.83	29.94		
06	SCT	NC		10.00		80	75	77	85	3	27	29.81	29.93	06	BKN	075		5.00	BR	76	73	74	91	0	00	29.81	29.93		
09	SCT	NC		10.00		86	77	80	75	8	26	29.84	29.96	09	SCT	NC		10.00		85	75	78	72	7	28	29.84	29.96		
12	SCT	NC		10.00		93	73	79	52	5	VR	29.82	29.93	12	BKN	250		10.00		93	67	75	42	7	32	29.82	29.94		
15	SCT	NC		10.00		96	70	78	43	0	00	29.76	29.88	15	BKN	250		10.00		95	67	76	40	3	VR	29.73	29.84		
18	SCT	NC		10.00		96	71	78	44	3	30	29.72	29.83	18	BKN	250		9.00		88	73	77	61	7	11	29.73	29.85		
21														21	BKN	055		10.00		82	70	74	67	8	33	29.79	29.91		
24	BKN	250		10.00		86	75	78	70	5	24	29.77	29.88	24	BKN	250		10.00		76	68	71	77	8	35	29.83	29.95		
SUNRISE: 0544					AUG 06					SUNSET: 1911					SUNRISE: 0547					AUG 12					SUNSET: 1906				
03	OVC	250		10.00		82	75	77	79	0	00	29.77	29.89	03	SCT	NC		10.00		73	69	70	87	7	35	29.83	29.94		
06	BKN	030		10.00		80	71	74	74	9	07	29.81	29.93	06	BKN	250		10.00		72	65	68	79	9	36	29.86	29.98		
09	BKN	015		10.00		81	73	75	77	13	06	29.86	29.97	09	SCT	NC		10.00		78	64	69	62	14	33	29.89	30.01		
12	OVC	018		8.00		85	74	77	70	5	VR	29.84	29.95	12	SCT	NC		10.00		85	59	69	42	18	01	29.89	30.01		
15	BKN	130		10.00		89	73	78	59	9	35	29.79	29.91	15	SCT	NC		10.00		87	53	66	31	20	01	29.88	29.99		
18	BKN	120		10.00		88	70	76	55	10	03	29.75	29.87	18	SCT	NC		10.00		85	53	66	34	15	01	29.87	29.99		
21	SCT	NC		10.00		81	69	73	67	7	02	29.81	29.92	21	FEW	NC		10.00		76	57	65	52	6	02	29.92	30.03		
24	SCT	NC		10.00		77	66	70	69	9	07	29.82	29.93	24	CLR	NC		10.00		70	58	63	66	3	36	29.93	30.05		

OBSERVATIONS AT 3-HOURLY INTERVALS

HOUSTON, TX

AUGUST 2004

IAH

WBAN # 12960

HOUR (LST)	SATELLITE		WEATHER	TEMPERATURE °F				WIND		PRESSURE (INCHES, HG)		HOUR (LST)	SATELLITE		WEATHER	TEMPERATURE °F				WIND		PRESSURE (INCHES, HG)							
	SKY COVER	CEILING 100'S OF FT		OBSERVATION TIME (LST)	EFF CLD AMT Oktas	VISIBILITY (MILES)	DRY BULB	DEW POINT	WET BULB	RELATIVE HUMIDITY (PCT)	SPEED (MPH)		DIRECTION TENS OF DEG	STATION		SEA LEVEL	SKY COVER	CEILING 100'S OF FT	OBSERVATION TIME (LST)	EFF CLD AMT Oktas	VISIBILITY (MILES)	DRY BULB	DEW POINT	WET BULB	RELATIVE HUMIDITY (PCT)	SPEED (MPH)	DIRECTION TENS OF DEG	STATION	SEA LEVEL
SUNRISE: 0548				AUG 13				SUNSET: 1905				SUNRISE: 0551				AUG 19				SUNSET: 1859									
03	CLR	NC			10.00	66	58	61	75	5	02	29.93	30.04	03	BKN	250			10.00	77	74	75	90	0	00	29.88	30.00		
06	BKN	250			10.00	64	57	60	78	0	00	29.98	30.10	06	SCT	NC			10.00	77	75	76	94	7	15	29.90	30.01		
09	SCT	NC			10.00	77	55	64	47	14	12	30.00	30.12	09	BKN	250			10.00	86	74	78	67	10	18	29.91	30.03		
12	BKN	250			10.00	83	55	66	38	12	07	30.01	30.13	12	BKN	060			10.00	91	71	77	52	14	19	29.86	29.98		
15	BKN	250			10.00	85	57	68	39	7	VR	29.97	30.09	15	OVC	042			10.00	82	76	78	82	10	24	29.86	29.98		
18	SCT	NC			10.00	85	59	69	42	5	02	29.95	30.06	18	BKN	250			10.00	88	73	77	61	13	16	29.80	29.91		
21	SCT	NC			10.00	78	60	67	54	8	05	29.98	30.09	21	SCT	NC			10.00	83	76	78	79	5	18	29.87	29.98		
24	SCT	NC			10.00	71	59	64	66	7	06	30.00	30.12	24	BKN	250			10.00	79	77	78	94	3	17	29.90	30.01		
SUNRISE: 0548				AUG 14				SUNSET: 1904				SUNRISE: 0552				AUG 20				SUNSET: 1858									
03	OVC	065			10.00	71	59	64	66	6	09	30.02	30.14	03	BKN	250			10.00	74	71	72	91	8	13	29.86	29.98		
06	BKN	060			10.00	66	57	61	73	6	06	30.05	30.16	06	SCT	NC			10.00	73	72	72	96	3	15	29.86	29.98		
09	SCT	NC			10.00	75	55	63	50	8	06	30.08	30.20	09	BKN	250			10.00	85	76	79	75	8	21	29.91	30.03		
12	SCT	NC			10.00	84	51	65	32	8	06	30.07	30.19	12	BKN	250			10.00	93	73	79	52	9	24	29.87	29.98		
15	BKN	250			10.00	86	53	66	32	12	06	30.01	30.12	15	BKN	055			10.00	96	71	78	44	12	21	29.81	29.93		
18	BKN	250			10.00	84	56	67	38	0	00	29.99	30.11	18	BKN	250			10.00	92	71	77	51	9	21	29.81	29.92		
21	BKN	250			10.00	77	59	66	54	7	05	30.03	30.14	21	SCT	NC			10.00	85	74	77	70	10	19	29.87	29.98		
24	SCT	NC			10.00	70	57	62	64	3	13	30.05	30.17	24	BKN	250			10.00	82	76	78	82	6	18	29.89	30.00		
SUNRISE: 0549				AUG 15				SUNSET: 1903				SUNRISE: 0553				AUG 21				SUNSET: 1857									
03	SCT	NC			10.00	65	56	60	73	3	31	30.05	30.17	03	BKN	026			10.00	80	77	78	90	0	00	29.89	30.01		
06	BKN	250			10.00	62	57	59	84	6	03	30.07	30.19	06	OVC	048			10.00	73	71	72	94	12	15	29.91	30.02		
09	SCT	NC			10.00	77	54	63	45	10	10	30.09	30.21	09	SCT	NC			10.00	79	73	75	82	5	17	29.92	30.03		
12	SCT	NC			10.00	85	52	65	32	6	VR	30.09	30.21	12	BKN	250			10.00	90	75	79	62	3	25	29.90	30.01		
15	SCT	NC			10.00	87	53	66	31	9	06	30.04	30.16	15	OVC	140			10.00	80	71	74	74	0	00	29.86	29.98		
18	BKN	250			10.00	84	55	66	37	6	08	30.00	30.12	18	OVC	140			10.00	78	71	73	79	7	35	29.86	29.98		
21	SCT	NC			10.00	73	58	64	59	0	00	30.03	30.15	21	BKN	250			10.00	75	71	72	88	6	06	29.90	30.02		
24	FEW	NC			10.00	69	59	63	70	0	00	30.04	30.16	24	OVC	140			10.00	75	70	72	84	7	12	29.84	29.96		
SUNRISE: 0550				AUG 16				SUNSET: 1902				SUNRISE: 0553				AUG 22				SUNSET: 1856									
03	FEW	NC			10.00	68	60	63	76	0	00	30.05	30.17	03	OVC	030			10.00	74	72	73	94	0	00	29.82	29.94		
06	SCT	NC			10.00	64	59	61	84	6	35	30.05	30.17	06	BKN	140			10.00	74	71	72	91	5	36	29.85	29.97		
09	SCT	NC			10.00	80	58	66	47	10	09	30.08	30.20	09	SCT	NC			10.00	85	77	79	77	6	16	29.88	30.00		
12	SCT	NC			10.00	88	53	67	30	8	02	30.06	30.18	12	BKN	034			10.00	77	72	74	85	21	13	29.88	30.00		
15	SCT	NC			10.00	90	53	67	28	8	07	30.01	30.13	15	OVC	100			10.00	81	74	76	79	5	17	29.85	29.97		
18	SCT	NC			10.00	87	55	67	34	8	05	29.98	30.10	18	OVC	120			10.00	77	73	74	88	6	16	29.79	29.91		
21	FEW	NC			10.00	77	62	68	60	7	18	30.02	30.14	21	BKN	250			10.00	76	74	75	94	5	10	29.83	29.94		
24	FEW	NC			10.00	71	62	66	73	0	00	30.02	30.14	24	BKN	250			10.00	77	76	76	96	6	13	29.82	29.94		
SUNRISE: 0550				AUG 17				SUNSET: 1901				SUNRISE: 0554				AUG 23				SUNSET: 1855									
03	FEW	NC			10.00	68	62	64	81	3	33	30.00	30.11	03	OVC	130			9.00	79	77	78	94	5	18	29.80	29.92		
06	FEW	NC			8.00	66	62	64	87	0	00	30.01	30.13	06	BKN	250			9.00	77	76	76	96	0	00	29.83	29.94		
09	FEW	NC			10.00	81	61	68	51	7	04	30.04	30.15	09	BKN	250			10.00	86	75	78	70	12	17	29.84	29.96		
12	FEW	NC			10.00	88	58	69	36	10	06	30.00	30.12	12	OVC	130			10.00	91	73	78	56	12	22	29.82	29.93		
15	SCT	NC			10.00	91	59	70	34	10	14	29.95	30.07	15	BKN	250			10.00	92	73	78	54	15	15	29.74	29.86		
18	SCT	NC			10.00	87	63	71	45	13	12	29.92	30.03	18	BKN	250			10.00	88	73	77	61	12	18	29.76	29.88		
21	SCT	NC			10.00	78	63	68	60	6	18	29.92	30.04	21	SCT	NC			10.00	84	76	78	77	10	16	29.80	29.92		
24	SCT	NC			10.00	72	66	68	82	0	00	29.92	30.04	24	BKN	130			10.00	82	77	78	85	7	16	29.80	29.91		
SUNRISE: 0551				AUG 18				SUNSET: 1860				SUNRISE: 0554				AUG 24				SUNSET: 1854									
03	FEW	NC			9.00	69	65	66	87	3	34	29.92	30.03	03	SCT	NC			10.00	79	77	78	94	3	17	29.79	29.91		
06	SCT	NC			8.00	69	66	67	90	0	00	29.93	30.05	06	BKN	250			10.00	80	76	77	87	0	00	29.83	29.94		
09	BKN	250			10.00	83	70	74	65	8	10	29.93	30.05	09	BKN	030			10.00	87	75	78	67	12	20	29.86	29.97		
12	BKN	250			10.00	88	71	76	57	5	15	29.90	30.02	12	BKN	048			10.00	90	74	79	59	12	20	29.84	29.96		
15	OVC	050			7.00	83	75	77	77	5	VR	29.86	29.98	15	BKN	250			10.00	94	70	77	46	8	19	29.79	29.90		
18	BKN	250			10.00	83	73	76	72	12	15	29.84	29.96	18	SCT	NC			10.00	91	71	77	52	13	16	29.78	29.90		
21	BKN	250			10.00	80	74	76	82	5	17	29.85	29.97	21	SCT	NC			10.00	84	75	78	74	13	17	29.85	29.96		
24	SCT	NC			10.00	77	74	75	90	3	15	29.88	30.00	24	SCT	NC			10.00	82	77	78	85	8	17	29.85	29.96		

OBSERVATIONS AT 3-HOURLY INTERVALS

HOUSTON, TX

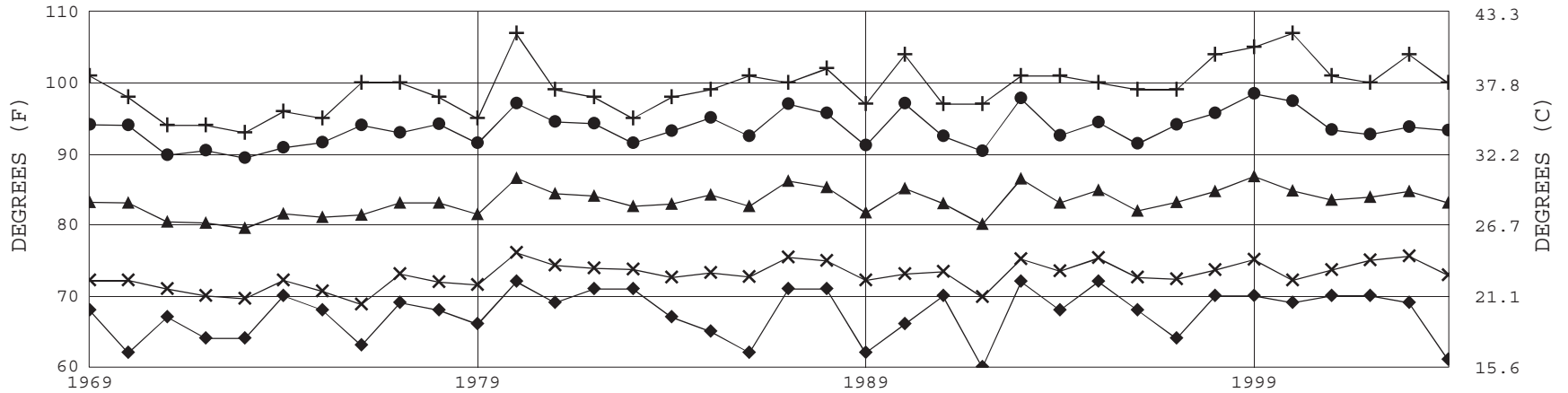
AUGUST 2004

IAH

WBAN # 12960

HOUR (LST)	SATELLITE		WEATHER	TEMPERATURE °F				WIND		PRESSURE (INCHES, HG)		HOUR (LST)	SATELLITE		WEATHER	TEMPERATURE °F				WIND		PRESSURE (INCHES, HG)			
	SKY COVER	CEILING 100'S OF FT		OBSERVATION TIME (LST)	EFF CLD AMT Oktas	VISIBILITY (MILES)	DRY BULB	DEW POINT	WET BULB	RELATIVE HUMIDITY (PCT)	SPEED (MPH)		DIRECTION TENS OF DEG	STATION		SEA LEVEL	OBSERVATION TIME (LST)	EFF CLD AMT Oktas	VISIBILITY (MILES)	DRY BULB	DEW POINT	WET BULB	RELATIVE HUMIDITY (PCT)	SPEED (MPH)	DIRECTION TENS OF DEG
SUNRISE: 0555 AUG 25 SUNSET: 1852												SUNRISE: 0558 AUG 31 SUNSET: 1846													
03	SCT	NC		10.00	81	77	78	88	7	17	29.85	29.96	03	BKN	035		10.00	77	67	70	71	0	00	29.95	30.06
06	SCT	NC		10.00	79	76	77	90	0	00	29.87	29.98	06	BKN	045		10.00	74	65	68	74	6	05	29.97	30.09
09	BKN	250		10.00	87	75	78	67	10	21	29.91	30.02	09	SCT	NC		10.00	79	64	69	60	8	07	30.01	30.13
12	BKN	042		10.00	93	72	78	50	7	22	29.89	30.01	12	SCT	NC		10.00	87	63	71	45	12	01	30.00	30.11
15	BKN	250		10.00	95	71	78	46	7	17	29.82	29.93	15	BKN	250		10.00	87	63	71	45	9	03	29.94	30.06
18	BKN	250		10.00	91	74	79	57	14	16	29.80	29.92	18	BKN	250		10.00	85	61	70	45	9	03	29.94	30.06
21	SCT	NC		10.00	84	75	78	74	8	17	29.86	29.98	21	SCT	NC		10.00	78	59	66	52	5	02	29.98	30.09
24	SCT	NC		10.00	82	76	78	82	10	16	29.86	29.98	24	BKN	065		10.00	73	61	66	66	3	03	30.00	30.11
SUNRISE: 0555 AUG 26 SUNSET: 1851												3-HOURLY OBSERVATION NOTES													
03	SCT	NC		10.00	81	76	77	85	6	17	29.86	29.98	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 Visibility = 8/8.												
06	SCT	NC		10.00	80	76	77	87	3	18	29.87	29.98	Ceiling is reported in hundreds of feet above ground level for clouds at or below 12,000 feet.												
09	BKN	021		10.00	87	76	79	70	13	18	29.90	30.02	NC = No ceiling detected.												
12	SCT	NC		10.00	92	73	78	54	8	22	29.88	29.99	& = Original observation contained additional weather elements.												
15	BKN	050		10.00	95	73	79	49	9	18	29.81	29.92	See page 3 for additional notes.												
18	BKN	250		10.00	91	72	78	54	13	17	29.81	29.93													
21	CLR	NC		10.00	84	74	77	72	8	16	29.87	29.99													
24	FEW	NC		10.00	82	75	77	79	6	17	29.88	29.99													
SUNRISE: 0556 AUG 27 SUNSET: 1850												SUMMARY BY HOUR													
03	SCT	NC		10.00	81	75	77	82	6	16	29.86	29.98	AVERAGES												
06	SCT	NC		10.00	77	75	76	94	3	16	29.89	30.01	RESULTANT WIND (MPH)												
09	BKN	034		10.00	86	76	79	72	6	18	29.93	30.05	HOUR (LST)												
12	BKN	250		10.00	91	75	80	59	9	14	29.90	30.02	CEILOMETER												
15	BKN	250		10.00	93	74	79	54	15	12	29.84	29.95	EFF CLD AMT												
18	BKN	250		10.00	88	75	79	66	17	12	29.84	29.95	DRY BULB												
21	SCT	NC		10.00	82	75	77	79	6	15	29.88	30.00	DEW POINT												
24	SCT	NC		10.00	79	75	76	88	3	19	29.87	29.99	WET BULB												
SUNRISE: 0556 AUG 28 SUNSET: 1849												PRESSURE (INCHES, HG)													
03	SCT	NC		9.00	78	76	77	93	0	00	29.85	29.96	STATION												
06	SCT	NC		7.00	76	75	75	97	0	00	29.86	29.98	SEA LEVEL												
09	SCT	NC		10.00	85	76	79	75	3	VR	29.89	30.01	VISIBILITY (MILES)												
12	BKN	100		10.00	90	73	78	58	9	01	29.86	29.97	WIND SPEED (MPH)												
15	OVC	250		10.00	80	72	75	76	7	23	29.85	29.97	SPEED												
18	OVC	130		10.00	75	72	73	90	0	00	29.80	29.92	DIRECTION												
21	OVC	130		10.00	74	71	72	91	8	35	29.85	29.96													
24	BKN	250		10.00	72	71	71	97	3	36	29.85	29.96													
SUNRISE: 0557 AUG 29 SUNSET: 1848																									
03	BKN	250		10.00	73	69	70	87	5	33	29.81	29.93													
06	SCT	NC		10.00	73	69	70	87	0	00	29.83	29.95													
09	SCT	NC		10.00	84	70	74	63	0	00	29.87	29.99													
12	BKN	250		10.00	90	71	77	54	6	VR	29.86	29.97													
15	OVC	250		10.00	88	70	76	55	5	31	29.79	29.91													
18	BKN	250		10.00	86	71	76	61	5	34	29.78	29.90													
21	SCT	NC		10.00	80	73	75	79	0	00	29.83	29.94													
24	SCT	NC		10.00	77	71	73	82	0	00	29.85	29.96													
SUNRISE: 0558 AUG 30 SUNSET: 1847																									
03	SCT	NC		10.00	76	71	73	85	6	30	29.86	29.97													
06	FEW	NC		10.00	75	71	72	88	3	32	29.86	29.97													
09	FEW	NC		10.00	84	71	75	65	5	03	29.89	30.01													
12	SCT	NC		10.00	89	69	75	52	9	36	29.90	30.01													
15	SCT	NC		10.00	92	67	75	44	9	36	29.86	29.97													
18	FEW	NC		10.00	90	62	72	39	8	04	29.85	29.96													
21	FEW	NC		10.00	79	72	74	79	8	10	29.92	30.04													
24	BKN	060		10.00	80	70	73	71	10	04	29.93	30.04													

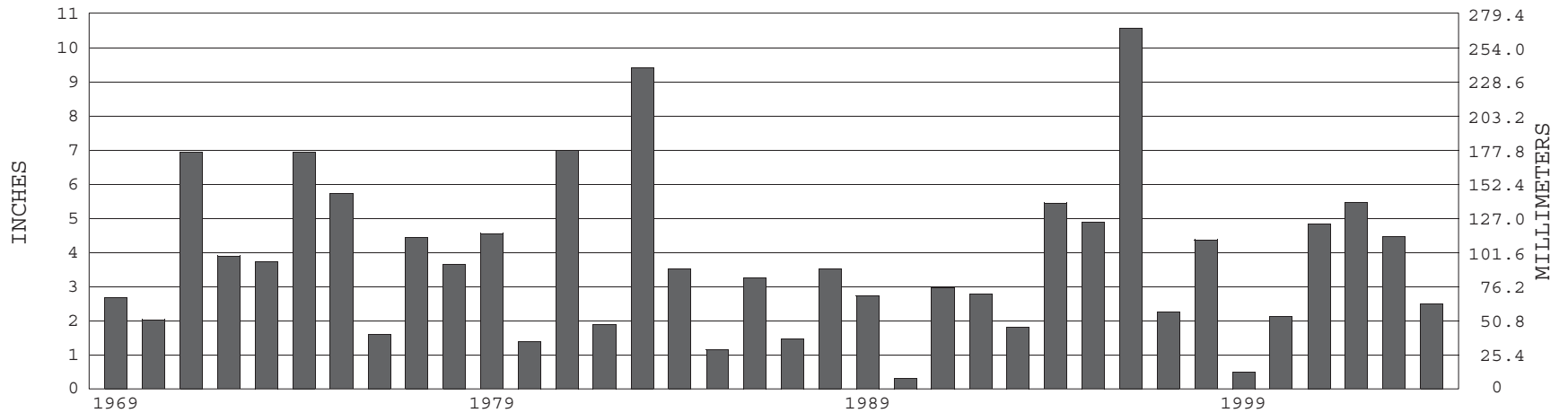
HOUSTON, TX AUGUST TEMPERATURES



+ Extreme Max. ● Mean Max. ▲ Mean × Mean Min. ◆ Extreme Min.

Long-Term (1969-2004) Mean: 83.3 1971-2000 Normal: 83.3

HOUSTON, TX AUGUST PRECIPITATION



Long-Term (1969-2004) Mean Monthly Total: 3.80

1971-2000 Normal: 3.83



AUGUST 2004

HOUSTON, TX

LOCAL CLIMATOLOGICAL DATA

NOAA, National Climatic Data Center

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