



# JULY 2001

## LOCAL CLIMATOLOGICAL DATA

NOAA, National Climatic Data Center

# HOUSTON, TX

INTERCONTINENTAL AIRPORT (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	87	71	79	-3	71	72	0	14	TS TSRA RA	0		0.0	0.09	29.90	30.01	1.8	07	5.5	31	16	26*	16	01																																		
02	91	68*	80	-2	71	72	0	15	TS TSRA RA BCFG BR	0		0.0	1.13	29.96	30.08	1.7	06	3.5	25	11	20	11	02																																		
03	91	69	80	-2	72	74	0	15	TS BR	0		0.0	0.00	30.00	30.12	1.0	09	3.7	31*	34	20	07	03																																		
04	92	71	82	0	73	75	0	17	TS TSRA FG	0		0.0	0.03	30.01	30.12	1.1	17	2.7	16	07	14	17	04																																		
05	94	73	84	2	73	76	0	19	MIFG	0		0.0	0.00	29.95	30.06	2.3	22	3.8	14	16	12	16	05																																		
06	94	75	85	3	74	77	0	20		0		0.0	0.00	29.93	30.04	1.3	19	3.1	16	13	14	13	06																																		
07	93	74	84	2	74	77	0	19		0		0.0	0.00	29.95	30.06	2.8	18	4.1	28	17	18	18	07																																		
08	93	72	83	1	73	76	0	18		0		0.0	0.00	29.94	30.04	3.7	17	4.7	18	13	16	13	08																																		
09	94	73	84	2	73	77	0	19		0		0.0	0.00	29.88	29.99	4.3	19	5.6	14	11	13	11	09																																		
10	95	74	85	3	74	77	0	20		0		0.0	0.00	29.82	29.93	2.6	19	4.6	15	15	13	12	10																																		
11	96	73	85	3	73	77	0	20		0		0.0	0.00	29.81	29.91	2.6	19	4.4	20	15	17	15	11																																		
12	95	75	85	3	74	77	0	20		0		0.0	0.00	29.85	29.96	3.0	21	3.9	15	22	12	23	12																																		
13	96	77	87*	4	74	77	0	22		0		0.0	0.00	29.86	29.97	3.5	20	5.8	17	19	15	18	13																																		
14	93	76	85	2	74	77	0	20	RA	0		0.0	T	29.82	29.92	1.7	21	3.5	15	26	10	22	14																																		
15	93	76	85	2	76	78	0	20	RA	0		0.0	T	29.78	29.88	3.6	14	4.6	18	13	16	13	15																																		
16	95	74	85	2	75	78	0	20	TS	0		0.0	0.00	29.83	29.93	2.5	15	3.6	22	11	18	12	16																																		
17	93	74	84	1	75	78	0	19		0		0.0	0.00	29.88	29.99	4.9	15	5.1	21	12	17	14	17																																		
18	92	75	84	1	75	78	0	19	TSRA BR HZ	0		0.0	0.22	29.87	29.98	2.1	14	3.5	18	14	15	13	18																																		
19	90	73	82	-1	75	77	0	17	TSRA RA BR HZ	0		0.0	0.02	29.88	29.99	2.5	13	3.5	18	07	15	14	19																																		
20	95	75	85	2	76	78	0	20		0		0.0	0.00	29.87	29.98	3.7	18	4.6	18	13	17	13	20																																		
21	97	72	85	2	73	77	0	20		0		0.0	0.00	29.81	29.91	2.6	17	4.6	17	15	15	15	21																																		
22	97*	75	86	3	73	77	0	21		0		0.0	0.00	29.75	29.86	1.7	18	4.5	15	10	13	10	22																																		
23	96	76	86	3	75	78	0	21		0		0.0	0.00	29.74	29.85	3.5	11	5.0	21	13	17	08	23																																		
24	95	74	85	2	74	77	0	20	BR	0		0.0	0.00	29.75	29.86	4.5	11	6.1	24	12	21	11	24																																		
25	96	74	85	2	74	77	0	20	RA BR	0		0.0	T	29.76	29.87	4.2	13	5.8	24	09	21	10	25																																		
26	91	74	83	0	75	77	0	18	TS TSRA RA BR	0		0.0	0.43	29.83	29.94	2.3	15	3.1	28	14	23	15	26																																		
27	83	75	79*	-4	75	76	0	14	RA MIFG BR	0		0.0	0.10	29.91	30.02	3.9	15	5.1	20	17	16	15	27																																		
28	92	74	83	0	75	77	0	18	TS TSRA RA	0		0.0	0.03	29.95	30.06	4.8	16	5.9	25	18	18	19	28																																		
29	94	74	84	1	75	77	0	19		0		0.0	0.00	29.92	30.03	4.6	18	5.5	18	17	14	18	29																																		
30	95	75	85	2	74	77	0	20		0		0.0	0.00	29.90	30.01	6.2	16	6.8	20	17	16	15	30																																		
31	96	75	86	3	74	77	0	21		0		0.0	0.00	29.95	30.06	5.7	16	6.4	21	14	17	14	31																																		
93.4										73.7		83.6		■ ■		73.9		76.6		0.0		18.9		< MONTHLY AVERAGES		TOTALS->		0.0		2.05		29.87		29.98		1.4		17		4.6		<- MONTHLY AVERAGES															
0.7										1.3		1.0		■ ■		<-----DEPARTURE FROM NORMAL----->																				-1.55		SUNSHINE, CLOUD, & VISIBILITY TABLES ON PAGE 3																			
DEGREE DAYS										GREATEST 24-HR PRECIPITATION: 1.13 DATE :02										SEA LEVEL PRESSURE										DATE		TIME																									
MONTHLY TOTAL DEPARTURE										SEASON TO DATE TOTAL DEPARTURE										GREATEST 24-HR SNOWFALL: 0.0 DATE :										MAXIMUM		: 30.19		04 0853																							
HEATING: 0										0										GREATEST SNOW DEPTH: 0 DATE :										MINIMUM		: 29.80		23 1553																							
COOLING: 585										39										NUMBER OF DAYS WITH →										MAXIMUM TEMP ≥ 90: 29		MINIMUM TEMP ≤ 32: 0		PRECIPITATION ≥ 0.01 INCH : 8																							
																				MAXIMUM TEMP ≤ 32 : 0		MINIMUM TEMP ≤ 0 : 0		PRECIPITATION ≥ 0.10 INCH : 4																																	
																				THUNDERSTORMS : 9		HEAVY FOG : 0		SNOWFALL ≥ 1.0 INCH : 0																																	

JULY 2001  
HOUSTON, TX

# HOURLY PRECIPITATION

(WATER EQUIVALENT IN INCHES)

# HOUSTON, TX

JULY 2001

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												0.09	01													01		0.09	
02													02					0.94	0.19	T						02		1.13	
03													03													03		0.00	
04													04			0.03	T									04		0.03	
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													10		0.00	
11													11													11		0.00	
12													12													12		0.00	
13													13													13		0.00	
14													14													14		T	
15													15													15		T	
16													16													16		0.00	
17													17													17		0.00	
18													18			0.22	T									18		0.22	
19													19			0.01	0.01									19		0.02	
20													20			T										20		0.00	
21													21													21		0.00	
22													22													22		0.00	
23													23													23		0.00	
24													24													24		0.00	
25													25			T										25		T	
26													26			0.41	0.01	T								26		0.43	
27													27			T	T									27		0.10	
28													28			0.02	T	0.01								28		0.03	
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)	.18	.30	.41	.55	.82	1.08	1.12	1.13	1.13	1.13	1.13	1.13
Ending Date	02	02	02	02	02	02	02	02	02	02	02	02
Ending Time (Hour/Min)	1629	1629	1651	1645	1653	1704	1705	1724	1724	1724	1724	1724

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 1961–1990

### 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

## HOUSTON, TX JULY 2001

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
	TOTAL MINUTES	PERCENT POSSIBLE	SR–SS		MN–MN		MINIMUM	MAXIMUM	
			CEILOMETER	SATELLITE	CEILOMETER	SATELLITE			
01							10.00	10.00	
02							1.50	10.00	
03							6.00	10.00	
04							.50	10.00	
05							9.00	10.00	
06							8.00	10.00	
07							9.00	10.00	
08							10.00	10.00	
09							10.00	10.00	
10							10.00	10.00	
11							10.00	10.00	
12							10.00	10.00	
13							8.00	10.00	
14							9.00	10.00	
15							7.00	10.00	
16							8.00	10.00	
17							7.00	10.00	
18							4.00	10.00	
19							4.00	10.00	
20							10.00	10.00	
21							8.00	10.00	
22							9.00	10.00	
23							10.00	10.00	
24							4.00	10.00	
25							5.00	10.00	
26							3.00	10.00	
27							6.00	10.00	
28							8.00	10.00	
29							10.00	10.00	
30							7.00	10.00	
31							7.00	10.00	
<b>MONTHLY AVGS</b>							7.66	10.00	
<b>SUNSHINE (MINUTES)</b>									
Total:                      Possible: Percent Possible:									
<b>NUMBER OF DAYS WITH:</b>									
<b>SKY CONDITION</b>									
CLR   PTLY CLDY   CLOUDY   MISSING 31									
<b>MINIMUM VISIBILITY (MILES)</b>									
<=0.25    <=3.0    >=7.0 0            1            23									

# OBSERVATIONS AT 3-HOURLY INTERVALS

# HOUSTON, TX

JULY 2001

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)
SUNRISE: 0524				JUL 01				SUNSET: 1926				SUNRISE: 0527				JUL 07				SUNSET: 1926					
03	BKN	250		10.00	71	70	70	96	5	04	29.85	29.96	03	BKN	250		10.00	76	74	75	94	0	00	29.94	30.05
06	OVC	023		10.00	71	69	70	94	6	36	29.90	30.01	06	SCT	NC		10.00	74	74	74	100	0	00	29.96	30.07
09	BKN	130		10.00	80	73	75	79	5	VR	29.91	30.03	09	BKN	021		10.00	85	75	78	72	5	VR	29.98	30.09
12	OVC	090		10.00	76	70	72	82	7	29	29.90	30.01	12	BKN	250		10.00	90	72	77	56	5	VR	29.95	30.06
15	OVC	130		10.00	77	70	72	79	7	VR	29.91	30.02	15	BKN	250		10.00	93	74	79	54	7	11	29.93	30.04
18	OVC	250		10.00	76	70	72	82	6	05	29.88	30.00	18	BKN	250		10.00	86	74	78	67	7	16	29.91	30.02
21	OVC	250		10.00	73	70	71	90	3	04	29.90	30.01	21	SCT	NC		10.00	80	74	76	82	5	20	29.92	30.03
24	OVC	250		10.00	72	70	71	94	5	07	29.93	30.05	24	SCT	NC		10.00	78	73	75	85	3	17	29.95	30.06
SUNRISE: 0525				JUL 02				SUNSET: 1926				SUNRISE: 0527				JUL 08				SUNSET: 1926					
03	CLR	NC		6.00	69	69	69	100	3	04	29.92	30.03	03	FEW	NC		10.00	76	72	73	88	3	21	29.94	30.05
06	SCT	NC		10.00	69	69	69	100	3	36	29.94	30.06	06	SCT	NC		10.00	73	72	72	96	0	00	29.97	30.09
09	SCT	NC		10.00	81	71	74	72	6	03	29.97	30.08	09	SCT	NC		10.00	85	75	78	72	3	VR	29.99	30.10
12	BKN	250		10.00	87	72	77	61	7	VR	29.97	30.09	12	BKN	043		10.00	90	72	77	56	7	16	29.98	30.09
15	OVC	065		10.00	88	70	76	55	6	09	29.95	30.06	15	SCT	NC		10.00	92	73	79	54	6	21	29.91	30.02
18	OVC	090		9.00	73	71	72	94	0	00	29.98	30.09	18	SCT	NC		10.00	89	75	79	63	12	16	29.86	29.97
21	SCT	NC		9.00	71	71	71	100	0	00	29.98	30.09	21	SCT	NC		10.00	82	74	76	77	5	17	29.89	30.01
24	BKN	250		7.00	70	70	70	100	0	00	29.98	30.10	24	SCT	NC		10.00	78	73	75	85	3	21	29.91	30.02
SUNRISE: 0525				JUL 03				SUNSET: 1926				SUNRISE: 0528				JUL 09				SUNSET: 1926					
03	BKN	250		7.00	70	70	70	100	0	00	29.97	30.08	03	FEW	NC		10.00	77	73	74	88	3	20	29.91	30.02
06	OVC	130		10.00	71	70	70	96	0	00	30.01	30.13	06	SCT	NC		10.00	75	73	74	94	0	00	29.90	30.01
09	BKN	130		10.00	80	74	76	82	5	01	30.05	30.17	09	SCT	NC		10.00	84	75	78	74	9	22	29.92	30.03
12	BKN	250		10.00	87	74	78	65	6	VR	30.03	30.14	12	SCT	NC		10.00	90	72	77	56	6	26	29.91	30.02
15	CLR	NC		10.00	88	69	75	54	0	00	29.98	30.09	15	SCT	NC		10.00	93	71	78	49	6	14	29.85	29.96
18	OVC	250		10.00	84	72	76	67	5	18	29.98	30.10	18	SCT	NC		10.00	91	73	78	56	8	13	29.80	29.92
21	BKN	250		10.00	76	71	73	85	3	17	30.00	30.11	21	SCT	NC		10.00	84	74	77	72	9	18	29.83	29.94
24	BKN	130		10.00	73	72	72	96	3	03	30.00	30.11	24	SCT	NC		10.00	79	75	76	88	3	21	29.84	29.95
SUNRISE: 0525				JUL 04				SUNSET: 1926				SUNRISE: 0528				JUL 10				SUNSET: 1926					
03	BKN	250		10.00	72	72	72	100	0	00	30.00	30.11	03	SCT	NC		10.00	78	75	76	90	3	22	29.82	29.93
06	OVC	130		10.00	72	71	71	97	5	03	30.03	30.14	06	SCT	NC		10.00	74	73	73	97	0	00	29.84	29.95
09	BKN	100		10.00	80	72	75	76	0	00	30.06	30.18	09	BKN	250		10.00	85	75	78	72	7	VR	29.85	29.96
12	BKN	250		10.00	86	74	78	67	6	22	30.02	30.14	12	SCT	NC		10.00	89	72	77	57	5	VR	29.86	29.97
15	BKN	250		10.00	91	72	78	54	0	00	29.98	30.09	15	BKN	250		10.00	93	70	77	47	3	VR	29.79	29.90
18	BKN	130		10.00	82	74	76	77	3	14	29.97	30.09	18	SCT	NC		10.00	92	73	78	54	8	14	29.75	29.86
21	SCT	NC		10.00	78	75	76	90	3	16	29.97	30.08	21	SCT	NC		10.00	83	72	75	70	7	16	29.78	29.89
24	SCT	NC		9.00	76	74	75	94	3	19	29.98	30.09	24	FEW	NC		10.00	79	74	75	85	5	19	29.80	29.91
SUNRISE: 0526				JUL 05				SUNSET: 1926				SUNRISE: 0529				JUL 11				SUNSET: 1925					
03	SCT	NC		9.00	73	73	73	100	3	24	29.97	30.08	03	CLR	NC		10.00	78	75	76	90	3	21	29.80	29.91
06	SCT	NC		10.00	74	74	74	100	0	00	29.98	30.09	06	SCT	NC		10.00	73	73	73	100	0	00	29.81	29.93
09	SCT	NC		10.00	84	75	78	74	8	25	30.01	30.12	09	SCT	NC		10.00	84	75	78	74	6	26	29.84	29.95
12	SCT	NC		10.00	89	73	78	59	6	22	29.98	30.10	12	SCT	NC		10.00	90	71	77	54	0	00	29.82	29.93
15	SCT	NC		10.00	92	69	76	47	5	18	29.92	30.03	15	BKN	250		10.00	94	69	77	44	6	VR	29.77	29.88
18	SCT	NC		10.00	92	71	77	51	0	00	29.87	29.98	18	SCT	NC		10.00	90	76	80	63	14	14	29.75	29.86
21	BKN	250		10.00	82	74	76	77	7	19	29.90	30.01	21	SCT	NC		10.00	84	73	76	70	7	18	29.79	29.90
24	FEW	NC		10.00	79	75	76	88	0	00	29.92	30.03	24	SCT	NC		10.00	80	74	76	82	5	18	29.84	29.95
SUNRISE: 0526				JUL 06				SUNSET: 1926				SUNRISE: 0529				JUL 12				SUNSET: 1925					
03	FEW	NC		10.00	77	75	76	94	0	00	29.90	30.01	03	FEW	NC		10.00	77	74	75	90	0	00	29.81	29.93
06	OVC	250		9.00	75	74	74	96	0	00	29.95	30.07	06	SCT	NC		10.00	76	75	75	97	0	00	29.85	29.96
09	BKN	250		10.00	83	76	78	79	6	25	29.97	30.08	09	BKN	030		10.00	83	75	77	77	6	24	29.89	30.00
12	SCT	NC		10.00	90	72	77	56	3	VR	29.97	30.08	12	SCT	NC		10.00	90	72	77	56	3	VR	29.88	29.99
15	SCT	NC		10.00	94	72	78	49	5	10	29.92	30.03	15	SCT	NC		10.00	93	72	78	50	5	17	29.82	29.93
18	BKN	250		10.00	90	73	78	58	9	11	29.90	30.01	18	SCT	NC		10.00	91	74	79	57	5	19	29.80	29.91
21	OVC	250		10.00	83	76	78	79	3	19	29.91	30.02	21	FEW	NC		10.00	84	73	76	70	6	19	29.85	29.96
24	BKN	250		10.00	81	74	76	79	0	00	29.94	30.05	24	CLR	NC		10.00	81	75	77	82	6	19	29.86	29.97

# OBSERVATIONS AT 3-HOURLY INTERVALS

# HOUSTON, TX

JULY 2001

IAH

WBAN # 12960

HOUR (LST)	SKY COVER		CEILING 100'S OF FT	SATELLITE		VISIBILITY (MILES)	WEATHER	TEMPERATURE °F				WIND		PRESSURE (INCHES, HG)		HOUR (LST)	SKY COVER		CEILING 100'S OF FT	SATELLITE		VISIBILITY (MILES)	WEATHER	TEMPERATURE °F				WIND		PRESSURE (INCHES, HG)		
	SKY COVER	CEILING 100'S OF FT		OBSERVATION TIME (LST)	EFF CLD AMT Okta			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 Okta			DRY BULB	DEW POINT	WET BULB	RELATIVE HUMIDITY (PCT)	SPEED (MPH)	DIRECTION TENS OF DEG	STATION	SEA LEVEL	
SUNRISE: 0530 JUL 13								SUNSET: 1925								SUNRISE: 0533 JUL 19								SUNSET: 1923								
03	CLR	NC			10.00			78	75	76	90	3	VR	29.85	29.96	03	FEW	NC			9.00				74	74	74	100	0	00	29.88	30.00
06	FEW	NC			8.00			78	75	76	90	5	VR	29.87	29.98	06	FEW	NC			4.00	BR			74	74	74	100	0	00	29.87	29.99
09	SCT	NC			9.00			85	75	78	72	8	26	29.90	30.01	09	SCT	NC			10.00				86	74	78	67	3	VR	29.91	30.02
12	SCT	NC			10.00			91	74	79	57	5	VR	29.90	30.01	12	BKN	070			10.00	-RA			89	74	78	61	8	03	29.90	30.01
15	SCT	NC			10.00			94	71	78	48	0	00	29.85	29.96	15	BKN	250			10.00				85	77	79	77	7	16	29.87	29.99
18	SCT	NC			10.00			93	74	79	54	10	14	29.80	29.91	18	BKN	250			10.00				86	76	79	72	5	14	29.84	29.95
21	SCT	NC			10.00			85	75	78	72	10	19	29.82	29.93	21	SCT	NC			10.00				81	76	77	85	0	00	29.86	29.97
24	SCT	NC			10.00			80	74	76	82	3	24	29.85	29.96	24	FEW	NC			10.00				78	75	76	90	0	00	29.89	30.00
SUNRISE: 0530 JUL 14								SUNSET: 1924								SUNRISE: 0533 JUL 20								SUNSET: 1922								
03	CLR	NC			10.00			77	74	75	90	0	00	29.84	29.95	03	FEW	NC			10.00				76	75	75	97	0	00	29.87	29.98
06	OVC	100			9.00			78	75	76	90	3	24	29.84	29.95	06	SCT	NC			10.00				75	75	75	100	0	00	29.89	30.00
09	BKN	250			10.00			84	76	78	77	6	VR	29.86	29.98	09	BKN	020			10.00				86	77	80	75	6	23	29.92	30.03
12	BKN	085			10.00			87	74	78	65	5	21	29.86	29.97	12	BKN	250			10.00				91	75	80	59	5	VR	29.90	30.01
15	BKN	100			10.00			91	71	77	52	7	26	29.79	29.90	15	BKN	250			10.00				88	77	80	70	14	16	29.86	29.97
18	BKN	250			10.00			91	72	78	54	8	16	29.74	29.85	18	BKN	250			10.00				87	77	80	72	13	13	29.81	29.93
21	SCT	NC			10.00			80	75	77	85	0	00	29.75	29.86	21	SCT	NC			10.00				82	76	78	82	5	18	29.84	29.96
24	CLR	NC			9.00			78	75	76	90	3	19	29.77	29.88	24	FEW	NC			10.00				79	74	75	85	3	19	29.85	29.96
SUNRISE: 0531 JUL 15								SUNSET: 1924								SUNRISE: 0534 JUL 21								SUNSET: 1922								
03	SCT	NC			8.00			77	75	76	94	0	00	29.76	29.87	03	CLR	NC			10.00				73	72	72	96	0	00	29.84	29.95
06	OVC	013			7.00			77	76	76	96	0	00	29.78	29.90	06	FEW	NC			8.00				72	72	72	100	0	00	29.84	29.96
09	BKN	015			10.00			85	77	79	77	6	27	29.81	29.92	09	SCT	NC			10.00				85	76	79	75	6	VR	29.85	29.96
12	SCT	NC			10.00			90	74	79	59	5	VR	29.78	29.90	12	SCT	NC			10.00				92	73	78	54	0	00	29.83	29.94
15	BKN	250			8.00			90	77	81	66	14	15	29.74	29.85	15	SCT	NC			10.00				96	69	77	42	7	VR	29.77	29.88
18	BKN	250			9.00			87	78	81	75	9	12	29.74	29.85	18	SCT	NC			10.00				92	75	80	58	13	12	29.73	29.84
21	BKN	250			10.00			83	76	78	79	8	13	29.77	29.88	21	CLR	NC			10.00				84	77	79	80	7	17	29.77	29.88
24	SCT	NC			10.00			80	76	77	87	5	17	29.79	29.90	24	CLR	NC			10.00				80	75	77	85	5	23	29.77	29.88
SUNRISE: 0531 JUL 16								SUNSET: 1924								SUNRISE: 0535 JUL 22								SUNSET: 1921								
03	BKN	250			10.00			77	74	75	90	3	18	29.79	29.91	03	CLR	NC			10.00				78	75	76	90	0	00	29.76	29.87
06	SCT	NC			8.00			75	74	74	96	0	00	29.82	29.93	06	FEW	NC			9.00				75	75	75	100	0	00	29.77	29.88
09	SCT	NC			10.00			86	75	78	70	3	19	29.85	29.96	09	FEW	NC			10.00				85	73	77	68	5	VR	29.78	29.89
12	SCT	NC			10.00			92	75	80	58	6	08	29.84	29.95	12	SCT	NC			10.00				92	68	75	46	7	23	29.77	29.88
15	BKN	250			10.00			94	75	80	54	8	09	29.80	29.91	15	FEW	NC			10.00				96	69	77	42	9	10	29.72	29.83
18	BKN	060			10.00			84	76	78	77	3	15	29.82	29.93	18	SCT	NC			10.00				94	70	77	46	7	12	29.70	29.81
21	BKN	250			10.00			83	75	77	77	7	16	29.83	29.94	21	FEW	NC			10.00				86	75	78	70	3	19	29.72	29.83
24	SCT	NC			10.00			78	76	77	93	0	00	29.84	29.95	24	FEW	NC			10.00				82	75	77	79	0	00	29.73	29.84
SUNRISE: 0532 JUL 17								SUNSET: 1923								SUNRISE: 0535 JUL 23								SUNSET: 1921								
03	SCT	NC			9.00			76	75	75	97	0	00	29.84	29.95	03	CLR	NC			10.00				77	74	75	90	0	00	29.73	29.84
06	SCT	NC			7.00			75	74	74	96	0	00	29.88	29.99	06	SCT	NC			10.00				79	75	76	88	0	00	29.75	29.86
09	SCT	NC			10.00			86	75	78	70	0	00	29.92	30.03	09	SCT	NC			10.00				85	76	79	75	3	VR	29.78	29.89
12	SCT	NC			10.00			90	74	79	59	5	16	29.90	30.01	12	SCT	NC			10.00				92	75	80	58	3	VR	29.75	29.87
15	BKN	250			10.00			93	76	81	58	12	15	29.87	29.98	15	BKN	250			10.00				96	73	79	48	13	08	29.71	29.82
18	SCT	NC			10.00			89	76	80	65	13	14	29.85	29.96	18	BKN	250			10.00				88	77	80	70	12	13	29.71	29.82
21	SCT	NC			10.00			82	73	76	74	7	16	29.87	29.98	21	SCT	NC			10.00				83	75	77	77	8	13	29.72	29.83
24	FEW	NC			9.00			78	75	76	90	0	00	29.88	29.99	24	FEW	NC			10.00				78	75	76	90	0	00	29.74	29.85
SUNRISE: 0532 JUL 18								SUNSET: 1923								SUNRISE: 0536 JUL 24								SUNSET: 1920								
03	SCT	NC			9.00			76	75	75	97	0	00	29.87	29.98	03	CLR	NC			10.00				76	74	75	94	0	00	29.76	29.87
06	SCT	NC			4.00	BR		75	74	74	96	0	00	29.87	29.98	06	BKN	250			4.00	BR			75	74	74	96	3	01	29.77	29.88
09	SCT	NC			8.00			86	76	79	72	5	11	29.90	30.01	09	SCT	NC			9.00				85	76	79	75	0	00	29.79	29.90
12	BKN	075			10.00			91	74	79	57	5	35	29.88	29.99	12	SCT	NC			10.00				93	72	78	50	9	05	29.76	29.87
15	BKN	250			8.00			85	77	79	77	5	18	29.87	29.98	15	BKN	250			10.00				94	73	79	51	15	10	29.73	29.84
18	BKN	250			9.00			86	76	79	72	9	13	29.83	29.95	18	BKN	250			10.00				88	73	77	61	13	13	29.70	29.82
21	SCT	NC			9.00			81	76	77	85	5	16	29.86	29.97	21	FEW	NC			10.00				83	74	77	74	7	14	29.74	29.85
24	CLR	NC			7.00			78	75	76	90	0	00	29.89	30.01	24	FEW	NC			10.00				77	74	75	90	0	00	29.76	29.87

# OBSERVATIONS AT 3-HOURLY INTERVALS

# HOUSTON, TX

JULY 2001

IAH

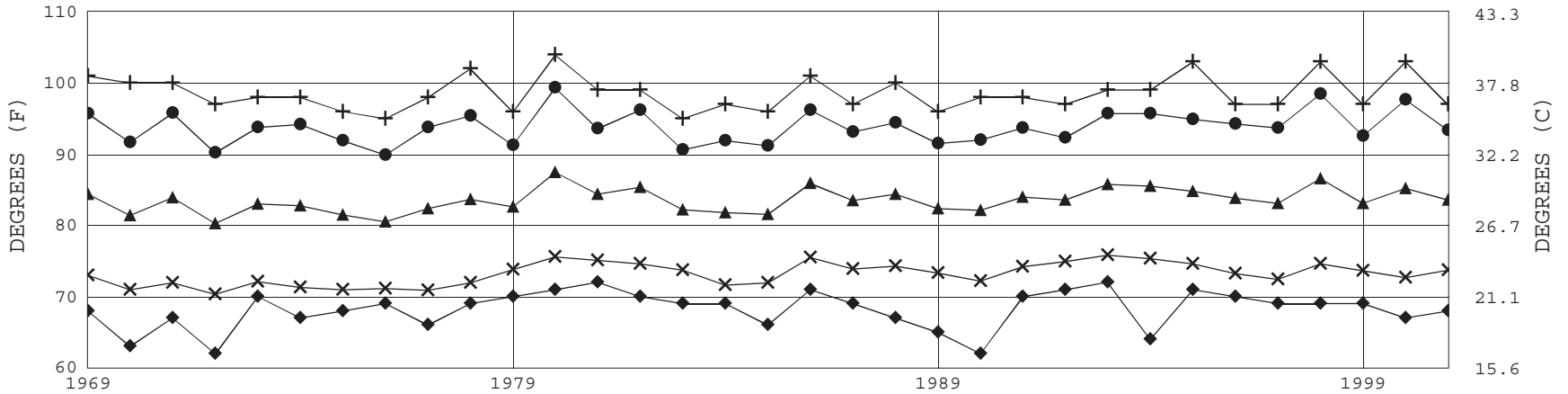
WBAN # 12960

HOUR (LST)	SKY COVER		CEILING 100'S OF FT	SATELLITE		VISIBILITY (MILES)	WEATHER	TEMPERATURE °F				WIND		PRESSURE (INCHES, HG)		HOUR (LST)	SKY COVER		CEILING 100'S OF FT	SATELLITE		VISIBILITY (MILES)	WEATHER	TEMPERATURE °F				WIND		PRESSURE (INCHES, HG)																	
	DRY BULB	DEW POINT		WET BULB	RELATIVE HUMIDITY (PCT)			SPEED (MPH)	DIRECTION TENS OF DEG	STATION	SEA LEVEL	DRY BULB	DEW POINT	WET BULB	RELATIVE HUMIDITY (PCT)		SPEED (MPH)	DIRECTION TENS OF DEG		STATION	SEA LEVEL																										
SUNRISE: 0536								JUL 25								SUNSET: 1920								SUNRISE: 0540								JUL 31								SUNSET: 1916							
03	CLR	NC				8.00		75	73	74	94	0	00	29.75	29.87	03	CLR	NC				10.00		78	75	76	90	0	00	29.92	30.03																
06	SCT	NC				5.00	BR	75	74	74	96	0	00	29.76	29.87	06	FEW	NC				8.00		75	74	74	96	0	00	29.95	30.06																
09	BKN	047				10.00		86	76	79	72	5	34	29.78	29.90	09	FEW	NC				10.00		86	75	78	70	7	18	29.98	30.09																
12	BKN	250				10.00		89	74	78	61	3	19	29.77	29.88	12	BKN	045				10.00		92	73	79	54	6	23	29.97	30.08																
15	BKN	250				10.00		93	74	79	54	14	14	29.74	29.85	15	SCT	NC				10.00		93	74	79	54	13	13	29.93	30.04																
18	BKN	250				10.00		88	75	79	66	8	16	29.74	29.86	18	SCT	NC				10.00		91	72	78	54	12	16	29.91	30.02																
21	BKN	250				10.00		81	74	76	79	6	17	29.78	29.89	21	FEW	NC				10.00		83	75	77	77	9	17	29.95	30.06																
24	SCT	NC				10.00		79	75	76	88	3	19	29.77	29.88	24	CLR	NC				10.00		78	75	76	90	3	21	29.96	30.07																
SUNRISE: 0537								JUL 26								SUNSET: 1919								3-HOURLY OBSERVATION NOTES																							
03	FEW	NC				10.00		76	74	75	94	0	00	29.79	29.90	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				8.00		75	74	74	96	0	00	29.81	29.92	Ceiling is reported in hundreds of feet above ground level for clouds at or below 12,000 feet.																															
09	SCT	NC				10.00		85	77	79	77	0	00	29.84	29.95	NC = No ceiling detected.																															
12	BKN	250				10.00	-TSRA	82	73	76	74	0	00	29.86	29.97	& = Original observation contained additional weather elements.																															
15	BKN	250				10.00		80	75	77	85	0	00	29.84	29.96	See page 3 for additional notes.																															
18	BKN	130				10.00		85	75	78	72	8	15	29.80	29.92																																
21	SCT	NC				10.00		80	75	77	85	7	15	29.82	29.93																																
24	CLR	NC				10.00		77	75	76	94	0	00	29.85	29.97																																
SUNRISE: 0538								JUL 27								SUNSET: 1918																															
03	SCT	NC				7.00		75	74	74	96	0	00	29.86	29.98																																
06	BKN	250				9.00	MIFG	78	77	77	97	3	VR	29.89	30.00																																
09	OVC	023				10.00		80	77	78	90	9	09	29.93	30.05																																
12	OVC	085				10.00	-RA	78	75	76	90	7	19	29.95	30.06																																
15	OVC	100				10.00		82	75	77	79	7	16	29.92	30.03																																
18	OVC	130				10.00		83	75	77	77	7	10	29.88	29.99																																
21	BKN	250				10.00		79	75	76	88	8	14	29.92	30.03																																
24	FEW	NC				10.00		76	75	75	97	6	15	29.93	30.05																																
SUNRISE: 0538								JUL 28								SUNSET: 1918																															
03	SCT	NC				10.00		75	74	74	96	0	00	29.93	30.05																																
06	SCT	NC				10.00		75	75	75	100	0	00	29.96	30.08																																
09	BKN	019				10.00		86	77	80	75	8	17	30.00	30.11																																
12	BKN	035				10.00	TS	87	74	78	65	15	19	29.98	30.09																																
15	OVC	100				10.00	-RA	80	76	77	87	8	13	29.95	30.06																																
18	SCT	NC				10.00		86	75	78	70	12	13	29.90	30.01																																
21	FEW	NC				10.00		81	76	77	85	8	16	29.92	30.03																																
24	FEW	NC				10.00		79	76	77	90	5	18	29.94	30.06																																
SUNRISE: 0539								JUL 29								SUNSET: 1917																															
03	CLR	NC				10.00		76	75	75	97	3	16	29.92	30.04																																
06	SCT	NC				10.00		75	74	74	96	0	00	29.95	30.06																																
09	BKN	023				10.00		86	76	79	72	7	18	29.95	30.07																																
12	SCT	NC				10.00		92	74	79	56	8	19	29.93	30.04																																
15	OVC	250				10.00		89	73	78	59	6	20	29.89	30.00																																
18	BKN	250				10.00		89	73	78	59	12	14	29.86	29.97																																
21	BKN	250				10.00		83	76	78	79	6	17	29.89	30.00																																
24	FEW	NC				10.00		80	75	77	85	5	19	29.89	30.01																																
SUNRISE: 0539								JUL 30								SUNSET: 1916																															
03	BKN	130				10.00		79	75	76	88	5	18	29.87	29.98																																
06	SCT	NC				7.00		75	75	75	100	0	00	29.90	30.01																																
09	SCT	NC				10.00		87	75	78	67	7	VR	29.93	30.04																																
12	SCT	NC				10.00		92	73	79	54	12	15	29.93	30.04																																
15	SCT	NC				10.00		94	72	78	49	10	14	29.88	29.99																																
18	SCT	NC				10.00		90	73	78	58	12	17	29.85	29.96																																
21	FEW	NC				10.00		82	75	77	79	6	17	29.88	29.99																																
24	FEW	NC				10.00		79	75	76	88	5	17	29.92	30.03																																

## SUMMARY BY HOUR

HOUR (LST)	AVERAGES											RESULTANT WIND (MPH)	
	CEILOMETER	EFF CLD AMT	DRY BULB	DEW POINT	WET BULB	RELATIVE HUMIDITY	PRESSURE (INCHES, HG)		VISIBILITY (MILES)	WIND SPEED (MPH)	SPEED	DIRECTION	
							STATION	SEA LEVEL					
01			77	74	75	90	29.86	29.98	9.74	2	1	19	
02			76	74	75	93	29.86	29.97	9.52	1	1	20	
03			76	74	74	94	29.86	29.97	9.42	1	1	19	
04			75	74	74	96	29.86	29.98	9.35	1	0	0	
05			74	74	74	97	29.87	29.98	9.55	1	0	0	
06			75	74	74	97	29.88	29.99	8.52	1	0	0	
07			78	75	76	91	29.89	30.00	8.71	1	0	0	
08			82	76	78	82	29.91	30.02	9.48	4	1	24	
09			84	75	78	74	29.91	30.02	9.87	3	1	22	
10			86	74	78	67	29.91	30.02	9.84	5	3	22	
11			88	73	78	62	29.91	30.02	9.90	4	2	21	
12			89	73	78	60	29.89	30.01	10.00	4	2	19	
13			90	72	78	57	29.88	29.99	9.81	4	2	12	
14			90	73	78	58	29.87	29.98	9.74	6	4	14	
15			90	73	78	58	29.85	29.96	9.87	6	5	14	
16			90	73	78	59	29.84	29.95	9.90	7	6	15	
17			89	73	78	61	29.83	29.95	9.60	7	6	14	
18			88	74	78	65	29.83	29.94	9.90	8	8	14	
19			85	75	78	71	29.83	29.94	9.90	8	8	14	
20			83	74	77	76	29.84	29.95	9.87	7	6	15	
21			81	74	76	80	29.85	29.96	9.94	6	5	17	
22			80	74	76	83	29.87	29.98	9.90	5	4	16	
23			79	74	76	85	29.87	29.98	9.68	3	3	18	
24			78	74	76	88	29.87	29.98	9.71	3	2	18	

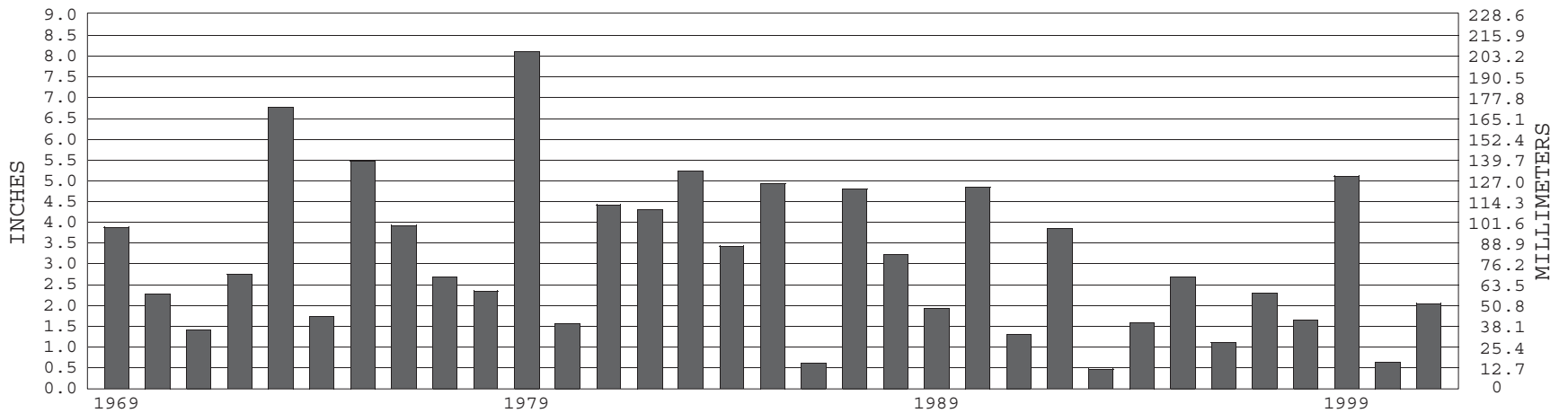
### HOUSTON, TX JULY TEMPERATURES



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

Long-Term (1969-2001) Mean: 83.5      1961-1990 Normal: 82.6

### HOUSTON, TX JULY PRECIPITATION



Long-Term (1969-2001) Mean Monthly Total: 3.14

1961-1990 Normal: 3.60



**JULY 2001  
HOUSTON, TX**

# LOCAL CLIMATOLOGICAL DATA

NOAA, National Climatic Data Center

*I certify that this is an official publication of the National Oceanic and Atmospheric Administration (NOAA). It is compiled using information from weather observing sites operated by NOAA – National Weather Service / Department Of Transportation – Federal Aviation Administration and received at the National Climatic Data Center (NCDC), Asheville, North Carolina 28801.*

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