



# JULY 2012 LOCAL CLIMATOLOGICAL DATA

## NOAA, National Climatic Data Center

**HOUSTON, TX**  
**G BUSH INTERCONTINENTAL AP/HOUSTON AP (KIAH)**  
 Lat:29° 58'N Long: 95° 21'W Elev (Ground) 95 Feet  
 Time Zone : CENTRAL WBAN: 12960 ISSN#: 0198-5094



Date 1	Temperature °F						Deg Days BASE 65°		WEATHER 10	SNOW/ICE ON GND(IN)		PRECIPITATION ON GND(IN)		PRESSURE (INCHES OF HG)		WIND SPEED = MPH DIR = TENS OF DEGREES								Date 24
	MAXIMUM 2	MINIMUM 3	AVERAGE 4	DEP FROM NORMAL 5	AVERAGE DEW PT 6	AVERAGE WET BULB 7	HEATING 8	COOLING 9		0600 LST 11	1200 LST 12	2400 LST 13	2400 LST 14	AVERAGE STATION 15	AVERAGE SEA LEVEL 16	RESULTANT SPEED 17	RES DIR 18	AVERAGE SPEED 19	MAXIMUM					
																			3-SEC		2-MIN			
20	21	22	23	24																				
01	85	74	80	-3	72	74	0	15	RA	0		0.0	0.02	29.88	30.00	4.1	14	4.7	24	15	22	15	01	
02	91	74	83	0	72	76	0	18		0		0.0	0.00	29.93	30.04	5.7	14	6.5	20	12	15	12	02	
03	93	74	84	1	73	76	0	19	TS	0		0.0	0.00	29.90	30.01	3.5	15	4.3	18	13	14	10	03	
04	93	73	83	0	73	75	0	18	TS RA	0		0.0	0.02	29.88	30.00	4.9	17	5.1	33	15	28	15	04	
05	93	73	83	0	72	76	0	18	RA	0		0.0	T	29.90	30.01	4.7	17	4.9	28	21	21	15	05	
06	95	74	85	2	71	75	0	20		0		0.0	0.00	29.89	30.00	3.0	18	3.1	21	03	13	15	06	
07	95	76	86	3	73	75	0	21	TS TSRA RA HZ	0		0.0	T	29.89	30.00	1.7	16	3.5	30	06	24	11	07	
08	83	76	80	-3	73	75	0	15	RA	0		0.0	T	29.90	30.01	2.9	15	4.3	18	14	15	16	08	
09	90	74	82	-1	73	75	0	17	TS TSRA RA BR	0		0.0	0.50	29.83	29.95	1.7	20	3.4	29	27	21	27	09	
10	84	74	79	-4	72	74	0	14	RA	0		0.0	0.25	29.80	29.92	3.1	22	4.3	21	17	14	18	10	
11	82	74	78	-5	71	73	0	13	RA BR	0		0.0	0.43	29.80	29.93	6.1	20	6.5	26	23	18	23	11	
12	81	72	77	-6	72	73	0	12	TS TSRA RA BR	0		0.0	2.04	29.82	29.93	2.5	18	3.4	23	25	17	25	12	
13	81	73	77*	-6	73	74	0	12	TS TSRA RA BR	0		0.0	0.41	29.84	29.96	1.7	15	3.6	21	08	16	07	13	
14	89	72	81	-2	73	75	0	16	RA	0		0.0	T	29.85	29.97	2.8	11	3.9	28	03	18	13	14	
15	87	72*	80	-4	73	75	0	15	TS TSRA RA FG BR	0		0.0	1.00	29.90	30.00	3.3	15	4.0	26	19	18	19	15	
16	91	73	82	-2	73	75	0	17	TS RA	0		0.0	T	29.86	29.98	2.6	15	3.9	18	14	16	15	16	
17	92	74	83	-1	73	75	0	18	TS TSRA RA	0		0.0	T	29.85	29.97	1.9	16	2.3	22	23	16	23	17	
18	92	73	83	-1	74	76	0	18	RA	0		0.0	T	29.90	30.01	3.1	16	4.0	17	19	13	15	18	
19	94	74	84	0	74	76	0	19	TS RA	0		0.0	T	29.96	30.06	2.6	22	3.7	22	15	20	15	19	
20	94	79	87	3	73	77	0	22		0		0.0	0.00	29.91	30.03	4.3	25	5.3	18	27	14	29	20	
21	95	78	87	3	72	77	0	22	RA	0		0.0	T	29.85	29.97	4.2	23	7.5	31	04	25	04	21	
22	93	75	84	0	73	76	0	19	TSRA RA	0		0.0	0.03	29.91	30.01	2.5	18	3.7	37*	12	30*	12	22	
23	88	76	82	-2	73	76	0	17	TS TSRA RA	0		0.0	0.01	29.96	30.07	3.3	15	4.3	22	14	18	13	23	
24	91	74	83	-1	74	77	0	18		0		0.0	0.00	29.91	30.04	4.1	16	4.5	18	15	15	15	24	
25	93	75	84	0	74	77	0	19	TS RA	0		0.0	T	29.85	29.96	5.6	18	6.0	23	22	17	22	25	
26	94	79	87	3	74	77	0	22	TS TSRA RA	0		0.0	T	29.83	29.94	5.8	20	6.4	28	25	21	25	26	
27	95	75	85	1	74	77	0	20		0		0.0	0.00	29.91	30.01	3.1	18	3.9	20	14	16	15	27	
28	96	78	87	3	72	76	0	22		0		0.0	0.00	29.95	30.06	1.8	24	3.9	15	28	10	14	28	
29	95	79	87	3	74	77	0	22		0		0.0	0.00	29.90	30.02	2.8	21	4.3	16	19	13	19	29	
30	96	78	87	3	72	77	0	22		0		0.0	0.00	29.88	29.99	3.4	22	5.3	17	14	15	14	30	
31	97*	79	88*	4	73	77	0	23		0		0.0	0.00	29.86	29.98	3.7	19	5.7	18	26	14	15	31	
90.9		75.0	83.0	☼	72.8	75.6	0.0	18.2	< MONTHLY AVERAGES   TOTALS >				0.0	4.71	29.88	29.99	2.9	18	4.5	< MONTHLY AVERAGES				
-2.8		-0.1	-1.4		-----DEPARTURE FROM NORMAL ----->								0.92		SUNSHINE, CLOUD, & VISIBILITY TABLES ON PAGE 3									
<b>DEGREE DAYS</b>									GREATEST 24-HR PRECIPITATION : 2.04 DATE : 12				SEA LEVEL PRESSURE				DATE TIME							
MONTHLY									GREATEST 24-HR SNOWFALL : 0.0 DATE :				MAXIMUM : 30.12				28 1130							
TOTAL DEPARTURE									GREATEST SNOW DEPTH : 0 DATE :				MINIMUM : 29.87				10 1753							
SEASON TO DATE									NUMBER OF -> DAYS WITH				MAXIMUM TEMP >= 90 : 22				MINIMUM TEMP <= 32 : 0				PRECIPITATION >= 0.01 INCH : 10			
TOTAL DEPARTURE									THUNDERSTORMS : 14				MAXIMUM TEMP <= 32 : 0				MINIMUM TEMP <= 0 : 0				PRECIPITATION >= 0.10 INCH : 6			
HEATING : 0 0 0 0													HEAVY FOG : 0				SNOWFALL >= 1.0 INCH : 0							
COOLING : 563 -38 2089 316																								

**JULY 2012  
HOUSTON, TX**

# HOURLY PRECIPITATION

(WATER EQUIVALENT IN INCHES)

HOUSTON, TX (KIAH)  
JULY 2012

WBAN # 12960

Date	FOR HOUR (LST) ENDING AT												Date	FOR HOUR (LST) ENDING AT												Date	Sum of Hourly Data	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									T	T	T	T	01	0.01	0.01	T	T	T							01	0.02	0.02	
02													02												02	0.00	0.00	
03													03												03	0.00	0.00	
04													04		0.01	0.01									04	0.02	0.02	
05												T	05												05	T	T	
06													06												06	0.00	0.00	
07													07				T	T	T						07	T	T	
08													08				T	T	T						08	T	T	
09													09	0.36	0.13	0.01	T	T	T						09	0.50	0.50	
10			T	0.25								T	10	T	T										10	0.25	0.25	
11													11												11	0.43	0.43	
12	T	0.01	T		0.11	0.19	0.01	0.09	0.31	0.02	0.04	0.36	12	T	T	T								T	12	2.04	2.04	
13													13	T											13	0.41	0.41	
14													14	T	T										14	T	T	
15													15	0.05											15	1.00	1.00	
16													16			T	T								16	T	T	
17													17			T	T								17	T	T	
18													18												18	T	T	
19													19					T	T						19	T	T	
20													20												20	0.00	0.00	
21													21												21	T	T	
22													22											T	22	0.03	0.03	
23													23			T		0.03	T	T	T				23	0.01	0.01	
24													24												24	0.00	0.00	
25													25		T		T			T					25	T	T	
26													26	T											26	T	T	
27													27												27	0.00	0.00	
28													28												28	0.00	0.00	
29													29												29	0.00	0.00	
30													30												30	0.00	0.00	
31													31												31	0.00	0.00	

\* Indicates sum of Hourly and Daily disagree.

### MAXIMUM SHORT DURATION PRECIPITATION (See Note)

Time Period (Minutes)	5	10	15	20	30	45	60	80	100	120	150	180
Precipitation (Inches)	0.28	0.49	0.64	0.75	0.90	0.98	0.99	1.00	1.00	1.00	1.01	1.16
Ending Date	15	15	15	15	15	15	15	15	15	15	12	12
Ending Time (Hr/Min)	1133	1136	1141	1146	1154	1205	1210	1226	1226	1226	0701	0858

Note : The hourly and daily precipitation totals are printed in the last 2 columns and hi-lighted in red when they disagree. 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.

Date and time are not entered for TRACE amounts.

# 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 1981-2010

## 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	
PR Partial	RA Rain	PY Spray	SQ Squalls
SH Shower(s)	SG Snow Grains	SA Sand	SS Sandstorm
TS Thunderstorm	SN Snow	VA Volcanic Ash	GL Glaze
VC In the Vicinity	UP Unkown Precipitation		

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

# HOUSTON, TX JULY 2012

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	
			Sky Cover	Satellite	Sky Cover	Satellite			
01							9.00	10.00	
02							8.00	10.00	
03							10.00	10.00	
04							7.00	10.00	
05							8.00	10.00	
06							9.00	10.00	
07							10.00	10.00	
08							10.00	10.00	
09							2.00	10.00	
10							8.00	10.00	
11							5.00	10.00	
12							1.75	10.00	
13							7.00	10.00	
14							9.00	10.00	
15							2.00	10.00	
16							10.00	10.00	
17							10.00	10.00	
18							10.00	10.00	
19							10.00	10.00	
20							10.00	10.00	
21							9.00	10.00	
22							8.00	10.00	
23							10.00	10.00	
24							10.00	10.00	
25							10.00	10.00	
26							8.00	10.00	
27							9.00	10.00	
28							8.00	10.00	
29							8.00	10.00	
30							10.00	10.00	
31							10.00	10.00	
MONTHLY AVGS							8.25	10.00	
<b>SUNSHINE (Minutes)</b>									
Total : 0					Possible : 25768				
Percent Possible : 0									
<b>NUMBER OF DAYS WITH :</b>									
<b>SKY CONDITION</b>									
Clear		Partly CLDY		Cloudy		Missing			
<b>MINIMUM VISIBILITY (MILES)</b>									
<= .25			<= 3.0			>= 7.0			
0			3			27			

# OBSERVATIONS AT 3-HOURLY INTERVALS

# HOUSTON, TX JULY 2012

KIAH

WBAN # 12960

HOUR (LST)	SKY COVER	CEILING 100's of FT.	SATELLITE		VISIBILITY (MILES)	WEATHER	TEMPERATURE °F			RELATIVE HUMIDITY (PCT)	WIND		PRESSURE (INCHES, HG)	
			Observation Time (LST)	Eff Cld Amt Oktas			DRY BULB	DEW POINT	WET BULB		SPEED (MPH)	DIRECTION Tens of Deg	STATION	SEA LEVEL
<b>SUNRISE: 0524</b>						<b>JUL 01</b>			<b>SUNSET: 1927</b>					
03	BKN	250			10.00		75	73	74	94	3	14	29.83	29.93
06	BKN	250			10.00	-RA	75	73	74	94	6	10	29.86	29.97
09	BKN	250			10.00		79	69	72	72	5	19	29.92	30.03
12	BKN	140			10.00		84	71	75	65	13	17	29.93	30.04
15	OVC	100			10.00	-RA	78	71	73	79	5	19	29.91	30.02
18	BKN	250			10.00		80	71	74	74	7	12	29.87	29.98
21	BKN	250			10.00		76	73	74	90	6	11	29.91	30.01
24	SCT	250			10.00		75	73	74	94	0	00	29.91	30.01
<b>SUNRISE: 0524</b>						<b>JUL 02</b>			<b>SUNSET: 1927</b>					
03	SCT	250			10.00		74	73	73	97	0	00	29.91	30.02
06	BKN	250			8.00		75	73	74	94	3	12	29.95	30.06
09	SCT	250			10.00		84	74	77	72	8	13	29.98	30.10
12	BKN	250			10.00		90	70	76	52	6	VR	29.97	30.08
15	OVC	250			10.00		90	72	77	56	13	10	29.93	30.03
18	BKN	250			10.00		86	72	76	63	13	13	29.90	30.00
21	BKN	250			10.00		81	72	75	74	7	16	29.93	30.03
24	BKN	250			10.00		79	72	74	79	3	18	29.94	30.04
<b>SUNRISE: 0525</b>						<b>JUL 03</b>			<b>SUNSET: 1926</b>					
03	SCT	250			10.00		74	72	73	94	0	00	29.92	30.02
06	BKN	250			10.00		75	72	73	90	0	00	29.94	30.04
09	BKN	250			10.00		84	75	78	74	6	13	29.97	30.07
12	OVC	250			10.00		89	71	76	55	6	12	29.93	30.04
15	BKN	250			10.00		87	75	78	68	7	11	29.88	29.99
18	BKN	250			10.00		82	75	77	79	5	16	29.84	29.95
21	BKN	250			10.00		82	73	76	74	6	17	29.87	29.97
24	BKN	250			10.00		77	73	74	88	0	00	29.90	30.00
<b>SUNRISE: 0525</b>						<b>JUL 04</b>			<b>SUNSET: 1926</b>					
03	CLR	NC			10.00		75	73	74	94	0	00	29.89	29.99
06	SCT	250			9.00		74	73	73	97	0	00	29.90	30.01
09	SCT	026			10.00		85	73	77	67	6	22	29.94	30.05
12	SCT	250			10.00		92	70	77	49	9	19	29.92	30.03
15	BKN	250			10.00		83	73	76	72	11	15	29.89	29.99
18	SCT	250			10.00		87	73	77	63	8	17	29.85	29.95
21	FEW	250			10.00		81	72	75	74	5	17	29.87	29.98
24	CLR	NC			9.00		79	74	76	85	3	18	29.89	30.00
<b>SUNRISE: 0526</b>						<b>JUL 05</b>			<b>SUNSET: 1926</b>					
03	CLR	NC			9.00		76	73	74	90	0	00	29.89	30.00
06	FEW	030			8.00		75	73	74	94	0	00	29.92	30.03
09	SCT	022			10.00		85	74	77	70	7	16	29.94	30.05
12	BKN	250			10.00		87	74	78	65	3	12	29.93	30.03
15	BKN	250			10.00		90	70	76	52	10	16	29.89	30.00
18	SCT	250			10.00		90	69	76	50	9	17	29.85	29.96
21	FEW	250			10.00		83	73	76	72	6	17	29.88	29.99
24	FEW	250			10.00		79	73	75	82	3	20	29.91	30.01
<b>SUNRISE: 0526</b>						<b>JUL 06</b>			<b>SUNSET: 1926</b>					
03	FEW	250			10.00		75	72	73	90	0	00	29.90	30.01
06	SCT	250			10.00		74	72	73	94	0	00	29.92	30.03
09	SCT	250			10.00		84	73	76	70	0	00	29.95	30.05
12	SCT	043			10.00		91	69	76	49	0	00	29.94	30.04
15	SCT	250			10.00		94	67	75	41	5	18	29.85	29.96
18	SCT	250			10.00		89	69	75	52	5	18	29.84	29.94
21	CLR	NC			10.00		85	72	76	65	6	18	29.88	29.98
24	SCT	250			10.00		82	72	75	72	6	20	29.89	30.00
<b>SUNRISE: 0527</b>						<b>JUL 07</b>			<b>SUNSET: 1926</b>					
03	BKN	250			10.00		80	73	75	79	3	22	29.88	29.98
06	BKN	250			10.00		79	74	76	85	0	00	29.91	30.02
09	BKN	250			10.00		85	74	77	70	3	VR	29.94	30.04
12	BKN	250			10.00		90	70	76	52	0	00	29.92	30.03
15	BKN	150			10.00		90	71	77	54	5	14	29.86	29.97
18	BKN	250			10.00	TS	78	72	74	82	7	13	29.86	29.96
21	SCT	250			10.00		77	73	74	88	5	13	29.90	30.00
24	BKN	250			10.00		76	74	75	94	0	00	29.89	29.99
<b>SUNRISE: 0527</b>						<b>JUL 08</b>			<b>SUNSET: 1926</b>					
03	BKN	250			10.00		76	73	74	90	0	00	29.88	29.99
06	OVC	080			10.00		78	74	75	88	0	00	29.92	30.03
09	OVC	130			10.00		79	73	75	82	3	VR	29.94	30.04
12	BKN	060			10.00		77	71	73	82	13	15	29.95	30.06
15	BKN	130			10.00		81	71	74	72	0	00	29.89	30.00
18	BKN	150			10.00		83	73	76	72	8	17	29.85	29.96
21	BKN	250			10.00		79	74	76	85	6	16	29.87	29.98
24	BKN	250			10.00		79	74	76	85	3	18	29.88	29.99
<b>SUNRISE: 0527</b>						<b>JUL 09</b>			<b>SUNSET: 1926</b>					
03	BKN	250			10.00		78	75	76	91	0	00	29.86	29.97
06	OVC	250			10.00		78	74	75	88	0	00	29.87	29.98
09	BKN	090			10.00		83	74	77	74	5	25	29.87	29.98
12	BKN	110			10.00		84	72	76	67	3	36	29.85	29.95
15	BKN	095			10.00		75	72	73	90	8	16	29.82	29.93
18	OVC	250			10.00		78	73	75	85	3	17	29.80	29.91
21	BKN	250			10.00		76	74	75	94	0	00	29.83	29.94
24	BKN	250			10.00		76	73	74	90	0	00	29.83	29.94
<b>SUNRISE: 0528</b>						<b>JUL 10</b>			<b>SUNSET: 1926</b>					
03	BKN	110			10.00		74	71	72	90	5	25	29.79	29.90
06	BKN	090			10.00		75	72	73	90	0	00	29.81	29.92
09	OVC	130			10.00		78	72	74	82	3	25	29.85	29.95
12	OVC	050			10.00		79	72	74	79	8	19	29.84	29.95
15	OVC	060			10.00		79	71	74	77	9	18	29.80	29.91
18	BKN	250			10.00		80	71	74	74	6	21	29.76	29.87
21	BKN	250			10.00		78	71	73	79	5	18	29.80	29.91
24	BKN	180			10.00		74	72	73	94	0	00	29.81	29.92
<b>SUNRISE: 0528</b>						<b>JUL 11</b>			<b>SUNSET: 1925</b>					
03	OVC	110			10.00		75	72	73	90	0	00	29.78	29.89
06	OVC	080			10.00		75	72	73	90	6	19	29.81	29.92
09	OVC	070			7.00	-RA	74	71	72	90	8	19	29.85	29.96
12	OVC	090			10.00		77	71	73	82	9	21	29.85	29.96
15	BKN	130			10.00		80	69	73	69	17	22	29.82	29.93
18	OVC	250			10.00		80	69	73	69	3	19	29.79	29.89
21	BKN	250			10.00		76	71	73	85	3	15	29.82	29.93
24	OVC	250			10.00		77	72	74	85	7	18	29.81	29.92
<b>SUNRISE: 0529</b>						<b>JUL 12</b>			<b>SUNSET: 1925</b>					
03	OVC	100			10.00	-RA	77	74	75	91	6	17	29.79	29.90
06	OVC	080			2.50	TSRA BR	76	74	75	94	0	00	29.78	29.89
09	OVC	050			1.75	+RA BR	72	71	71	97	0	00	29.88	29.98
12	OVC	090			10.00	-RA	74	70	71	87	6	28	29.89	30.00
15	BKN	130			10.00		76	71	73	85	3	14	29.83	29.93
18	BKN	250			10.00		81	72	75	74	6	15	29.79	29.90
21	SCT	250			10.00		77	72	74	85	0	00	29.81	29.91
24	SCT	250			10.00		73	71	72	93	0	00	29.85	29.96

# OBSERVATIONS AT 3-HOURLY INTERVALS

## HOUSTON, TX

JULY 2012

KIAH

WBAN # 12960

HOUR (LST)	SKY COVER	CEILING 100's of FT.	SATELLITE		VISIBILITY (MILES)	WEATHER	TEMPERATURE °F			RELATIVE HUMIDITY (PCT)	WIND		PRESSURE (INCHES, HG)	
			Observation Time (LST)	Eff Cld Amt Oktas			DRY BULB	DEW POINT	WET BULB		SPEED (MPH)	DIRECTION Tens of Deg	STATION	SEA LEVEL
										Observation Time (LST)				
<b>SUNRISE: 0529      JUL 13      SUNSET: 1925</b>						73	71	72	93	0	00	29.85	29.96	
03	BKN	250			10.00		75	72	73	90	3	32	29.84	29.95
09	BKN	060			10.00		76	74	75	94	0	00	29.87	29.98
12	OVC	100			10.00	-RA	74	70	71	87	5	23	29.88	29.98
15	BKN	180			10.00		79	73	75	82	3	09	29.84	29.95
18	BKN	250			10.00		80	73	75	79	0	00	29.81	29.92
21	SCT	250			10.00		75	72	73	90	6	12	29.84	29.95
24	SCT	250			10.00		74	72	73	94	0	00	29.86	29.97
<b>SUNRISE: 0530      JUL 14      SUNSET: 1925</b>						73	71	72	93	6	04	29.85	29.96	
03	SCT	250			10.00		72	70	71	93	0	00	29.87	29.98
06	SCT	250			10.00		81	75	77	82	0	00	29.91	30.02
09	SCT	250			10.00		86	74	78	68	0	00	29.89	29.99
12	SCT	250			10.00		82	71	74	69	7	04	29.86	29.96
15	BKN	250			10.00		85	73	77	67	13	13	29.81	29.91
18	SCT	250			10.00		78	73	75	85	7	12	29.86	29.97
21	SCT	250			10.00		77	73	74	88	0	00	29.87	29.97
24	SCT	130			10.00									
<b>SUNRISE: 0531      JUL 15      SUNSET: 1924</b>						76	73	74	90	0	00	29.85	29.96	
03	SCT	130			10.00		74	72	73	94	0	00	29.90	30.01
06	SCT	130			10.00		82	74	76	77	0	00	29.94	30.04
09	BKN	250			10.00	TS+RA BR	73	70	71	90	3	28	29.96	30.07
12	OVC	075			2.00		84	73	76	70	5	15	29.86	29.97
15	SCT	250			10.00		86	72	76	63	10	16	29.84	29.95
18	SCT	250			10.00		79	71	74	77	6	14	29.89	30.00
21	SCT	250			10.00		77	71	73	82	3	21	29.92	30.03
24	FEW	250			10.00									
<b>SUNRISE: 0531      JUL 16      SUNSET: 1924</b>						76	72	73	87	3	19	29.87	29.98	
03	FEW	250			10.00		74	72	73	94	0	00	29.89	30.00
06	SCT	250			10.00		84	73	76	70	7	15	29.93	30.03
09	SCT	250			10.00		89	72	77	57	7	15	29.90	30.01
12	SCT	250			10.00		87	72	77	61	10	11	29.85	29.95
15	BKN	250			10.00		83	72	75	70	5	25	29.85	29.96
18	BKN	250			10.00		76	73	74	90	0	00	29.85	29.96
21	SCT	250			10.00		76	73	74	90	0	00	29.86	29.96
24	CLR	NC			10.00									
<b>SUNRISE: 0532      JUL 17      SUNSET: 1924</b>						75	73	74	94	0	00	29.85	29.95	
03	FEW	020			10.00		75	73	74	94	0	00	29.86	29.97
06	SCT	250			10.00		84	74	77	72	5	19	29.90	30.01
09	SCT	250			10.00		90	73	78	57	5	VR	29.87	29.98
12	SCT	250			10.00		77	72	74	85	7	18	29.86	29.97
15	BKN	110			10.00	-TSRA	80	72	75	77	3	21	29.84	29.94
18	BKN	250			10.00		76	73	74	90	3	19	29.84	29.95
21	SCT	250			10.00		75	73	74	94	0	00	29.87	29.97
24	FEW	250			10.00									
<b>SUNRISE: 0532      JUL 18      SUNSET: 1923</b>						75	73	74	94	0	00	29.87	29.98	
03	CLR	NC			10.00		74	72	73	94	3	04	29.90	30.01
06	SCT	250			10.00		85	75	78	72	6	14	29.94	30.04
09	SCT	250			10.00		89	72	77	57	5	VR	29.93	30.03
12	SCT	250			10.00		91	74	79	58	13	13	29.87	29.98
15	SCT	250			10.00		87	72	77	61	6	23	29.85	29.96
18	SCT	250			10.00		81	75	77	82	5	19	29.92	30.02
21	FEW	250			10.00		80	75	77	85	5	18	29.93	30.04
24	CLR	NC			10.00									
<b>SUNRISE: 0533      JUL 19      SUNSET: 1923</b>						76	74	75	94	0	00	29.95	30.05	
03	CLR	NC			10.00		75	73	74	94	0	00	29.97	30.07
06	SCT	250			10.00		86	75	78	70	7	20	30.01	30.11
09	SCT	250			10.00		91	71	77	52	5	30	29.98	30.09
12	SCT	250			10.00		93	71	78	49	0	00	29.93	30.04
15	SCT	250			10.00		82	73	76	74	6	17	29.92	30.02
18	BKN	100			10.00		83	75	77	77	3	19	29.92	30.03
21	SCT	250			10.00		81	74	76	79	3	20	29.97	30.07
24	CLR	NC			10.00									
<b>SUNRISE: 0533      JUL 20      SUNSET: 1922</b>						79	74	76	85	3	24	29.94	30.05	
03	CLR	NC			10.00		79	75	76	88	5	26	29.95	30.06
06	SCT	250			10.00		85	75	78	72	10	27	29.98	30.09
09	SCT	250			10.00		91	74	79	58	9	28	29.96	30.06
12	SCT	250			10.00		94	69	77	44	3	VR	29.90	30.00
15	BKN	250			10.00		93	71	78	49	5	26	29.85	29.96
18	SCT	250			10.00		88	71	76	57	3	22	29.86	29.96
21	BKN	250			10.00		82	74	76	77	3	20	29.91	30.01
24	BKN	250			10.00									
<b>SUNRISE: 0534      JUL 21      SUNSET: 1922</b>						80	75	77	85	3	VR	29.87	29.98	
03	BKN	250			10.00		80	75	77	85	5	25	29.89	30.00
06	BKN	250			10.00		85	73	77	67	10	27	29.91	30.01
09	BKN	250			9.00		90	72	77	56	7	VR	29.90	30.00
12	SCT	250			10.00		94	71	78	47	5	23	29.83	29.93
15	SCT	250			10.00		93	70	77	47	7	18	29.80	29.91
18	BKN	250			10.00		85	75	78	72	10	18	29.83	29.93
21	SCT	250			10.00		78	67	71	69	6	18	29.83	29.93
24	BKN	080			10.00									
<b>SUNRISE: 0534      JUL 22      SUNSET: 1921</b>						76	70	72	82	0	00	29.85	29.95	
03	SCT	250			10.00		76	71	73	85	5	16	29.89	30.00
06	BKN	130			10.00		82	75	77	79	0	00	29.94	30.05
09	OVC	120			9.00		89	73	78	59	3	28	29.94	30.04
12	BKN	250			10.00		92	71	77	50	3	VR	29.89	30.00
15	SCT	250			10.00		83	73	76	72	3	19	29.88	29.99
18	BKN	250			10.00		80	74	76	82	7	16	29.92	30.02
21	SCT	250			10.00		80	73	75	79	6	17	29.94	30.05
24	SCT	250			10.00									
<b>SUNRISE: 0535      JUL 23      SUNSET: 1921</b>						76	74	75	94	0	00	29.95	30.06	
03	SCT	250			10.00		77	74	75	91	5	12	29.97	30.07
06	BKN	130			10.00	-RA	80	75	77	85	6	06	30.01	30.11
09	BKN	150			10.00		82	74	76	77	9	12	30.00	30.10
12	BKN	100			10.00		86	73	77	65	5	VR	29.97	30.08
15	CLR	NC			10.00		80	73	75	79	10	15	29.95	30.06
18	BKN	250			10.00	-TSRA	78	75	76	91	3	17	29.96	30.07
21	SCT	250			10.00		76	73	74	90	3	16	29.97	30.07
24	FEW	250			10.00									
<b>SUNRISE: 0536      JUL 24      SUNSET: 1920</b>						75	73	74	94	0	00	29.96	30.06	
03	CLR	NC			10.00		75	73	74	94	0	00	29.98	30.09
06	SCT	250			10.00		84	75	78	74	6	19	29.98	30.10
09	BKN	070			10.00		89	73	78	59	3	18	29.95	30.06
12	BKN	090			10.00		89	73	78	59	8	15	29.89	30.00
15	BKN	250			10.00		87	74	78	65	15	14	29.87	29.97
18	BKN	250			10.00		83	75	77	77	8	17	29.89	30.00
21	FEW	250			10.00		80	75	77	85	3	19	29.89	30.00
24	SCT	250			10.00									

# OBSERVATIONS AT 3-HOURLY INTERVALS

## HOUSTON, TX JULY 2012

### KIAH

### WBAN # 12960

HOUR (LST)	SKY COVER	CEILING 100's of FT.	SATELLITE		WEATHER	TEMPERATURE °F			WIND		PRESSURE (INCHES, HG)								
			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: 0536 JUL 25 SUNSET: 1920						03	CLR	NC			10.00	76	74	75	94	0	00	29.87	29.98
06	SCT	150				10.00	76	74	75	94	0	00	29.89	29.99					
09	SCT	023				10.00	86	75	78	70	7	21	29.91	30.01					
12	SCT	050				10.00	91	71	77	52	9	19	29.87	29.98					
15	BKN	250				10.00	88	74	78	63	16	22	29.84	29.94					
18	BKN	100				10.00	84	74	77	72	10	16	29.82	29.92					
21	FEW	250				10.00	83	74	77	74	8	16	29.82	29.92					
24	FEW	019				10.00	81	76	77	85	6	17	29.83	29.93					
SUNRISE: 0537 JUL 26 SUNSET: 1919						03	FEW	019			10.00	80	75	77	85	6	19	29.80	29.91
06	SCT	250				10.00	79	75	76	88	0	00	29.83	29.93					
09	BKN	250			-TSRA	10.00	87	75	78	68	11	20	29.87	29.98					
12	BKN	055			-TSRA	8.00	86	73	77	65	11	26	29.86	29.96					
15	SCT	250			-TSRA	10.00	94	71	78	47	7	20	29.81	29.92					
18	BKN	250			-TSRA	10.00	89	71	76	55	6	18	29.78	29.88					
21	SCT	250			-TSRA	10.00	83	73	76	72	5	19	29.84	29.95					
24	SCT	250			-TSRA	10.00	81	74	76	79	3	19	29.87	29.98					
SUNRISE: 0537 JUL 27 SUNSET: 1919						03	FEW	250			10.00	77	74	75	91	0	00	29.87	29.98
06	FEW	250				9.00	75	73	74	94	0	00	29.90	30.01					
09	BKN	250				10.00	86	75	78	70	3	13	29.95	30.06					
12	SCT	045				10.00	91	73	78	56	7	22	29.92	30.03					
15	BKN	060				10.00	94	71	78	47	3	23	29.90	30.00					
18	CLR	NC				10.00	88	77	80	70	9	13	29.87	29.98					
21	CLR	NC				10.00	85	74	77	70	6	18	29.91	30.01					
24	CLR	NC				10.00	82	75	77	79	3	20	29.96	30.06					
SUNRISE: 0538 JUL 28 SUNSET: 1918						03	FEW	250			10.00	80	75	77	85	0	00	29.96	30.06
06	SCT	250				9.00	78	74	75	88	0	00	29.98	30.09					
09	SCT	250				9.00	85	75	78	72	10	28	30.01	30.11					
12	SCT	250				10.00	91	71	77	52	6	30	30.00	30.11					
15	SCT	250				10.00	94	67	75	41	3	VR	29.93	30.04					
18	SCT	250				10.00	93	69	76	46	0	00	29.91	30.02					
21	CLR	NC				10.00	84	74	77	72	5	16	29.92	30.03					
24	SCT	250				10.00	83	74	77	74	3	24	29.93	30.03					
SUNRISE: 0539 JUL 29 SUNSET: 1917						03	SCT	250			10.00	81	73	75	77	6	23	29.92	30.02
06	SCT	250				10.00	79	75	76	88	0	00	29.95	30.06					
09	SCT	250				10.00	85	74	77	70	7	28	29.98	30.09					
12	BKN	250				10.00	92	72	78	52	3	VR	29.94	30.05					
15	BKN	250				10.00	93	73	79	52	7	VR	29.88	29.99					
18	SCT	250				10.00	92	71	77	50	7	17	29.85	29.96					
21	FEW	250				10.00	86	73	77	65	6	19	29.88	29.99					
24	FEW	250				10.00	82	75	77	79	3	19	29.89	29.99					
SUNRISE: 0539 JUL 30 SUNSET: 1917						03	FEW	250			10.00	80	74	76	82	3	26	29.87	29.97
06	FEW	250				10.00	79	75	76	88	0	00	29.91	30.02					
09	FEW	018				10.00	86	74	78	68	7	26	29.95	30.05					
12	FEW	035				10.00	92	71	77	50	6	VR	29.91	30.02					
15	FEW	050				10.00	94	68	76	43	8	20	29.85	29.96					
18	SCT	250				10.00	93	70	77	47	3	VR	29.81	29.91					
21	SCT	250				10.00	86	73	77	65	9	18	29.87	29.97					
24	FEW	250				10.00	82	74	76	77	5	18	29.89	30.00					

HOUR (LST)	SKY COVER	CEILING 100's of FT.	SATELLITE		WEATHER	TEMPERATURE °F			WIND		PRESSURE (INCHES, HG)								
			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: 0540 JUL 31 SUNSET: 1916						03	FEW	250			10.00	80	75	77	85	5	20	29.87	29.97
06	SCT	250				10.00	80	75	77	85	0	00	29.90	30.01					
09	SCT	250				10.00	86	75	78	70	6	24	29.92	30.03					
12	SCT	250				10.00	91	73	78	56	8	28	29.89	29.99					
15	SCT	055				10.00	95	70	77	44	7	14	29.84	29.95					
18	SCT	065				10.00	94	71	78	47	3	20	29.81	29.92					
21	BKN	250				10.00	87	73	77	63	8	19	29.85	29.95					
24	CLR	NC				10.00	82	73	76	74	6	19	29.87	29.97					

### 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, W = Vertical Visibility = 8/8

Ceiling is reported in hundreds of feet above ground level for clouds at or below 12,000 feet. NC = No Ceiling detected.

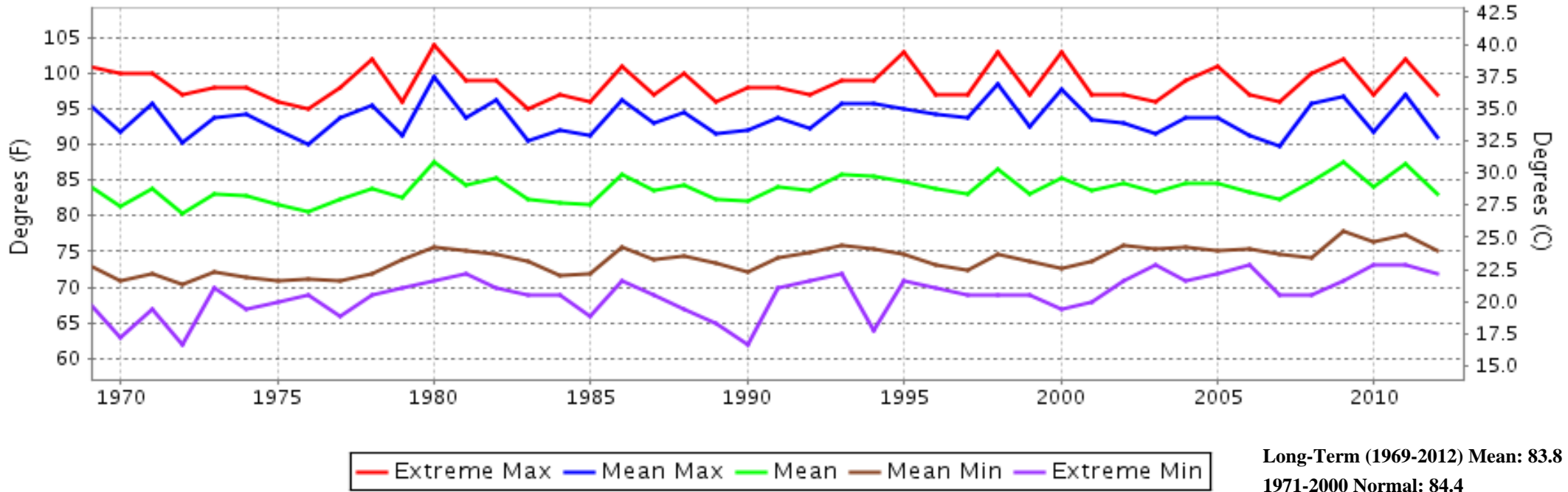
& = Original observation contained additional weather elements.

See page 3 for additional notes.

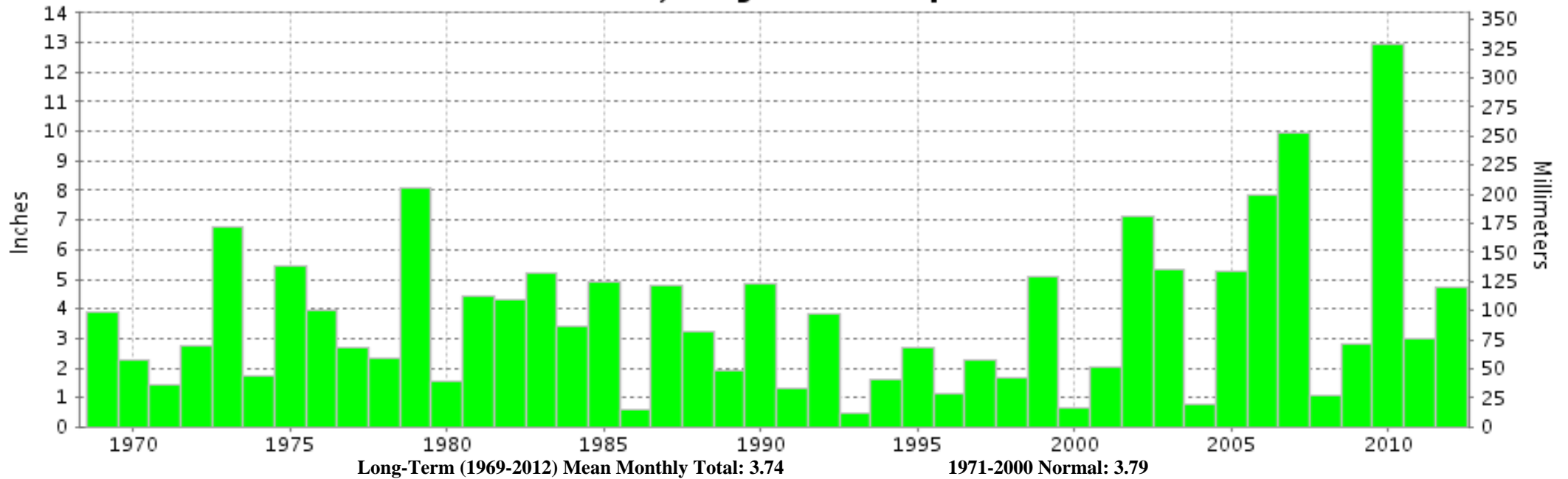
### SUMMARY BY HOUR

HOUR (LST)	AVERAGES									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			78	73	75	87	29.88	29.99	9.97	2	5	18
02			77	73	75	88	29.88	29.98	9.97	2	6	19
03			77	73	74	89	29.88	29.98	9.97	2	7	19
04			76	73	74	90	29.88	29.98	9.97	2	6	19
05			76	73	74	91	29.89	29.99	9.87	1	8	19
06			76	73	74	91	29.90	30.01	9.53	1	8	18
07			78	75	76	88	29.91	30.02	9.52	2	6	20
08			81	75	77	81	29.93	30.03	9.32	4	5	22
09			83	74	77	75	29.93	30.04	9.54	5	4	21
10			85	73	77	69	29.93	30.04	9.71	6	3	20
11			86	73	77	65	29.93	30.04	9.71	6	4	19
12			86	72	76	63	29.92	30.02	9.68	6	4	20
13			87	71	76	61	29.91	30.01	9.71	6	4	20
14			87	71	76	61	29.89	29.99	9.81	7	3	17
15			87	71	76	61	29.87	29.98	10.00	7	4	15
16			87	71	76	62	29.86	29.96	10.00	7	3	15
17			86	71	76	64	29.85	29.95	10.00	7	3	15
18			85	72	76	65	29.84	29.95	10.00	6	3	15
19			84	73	76	71	29.85	29.96	10.00	6	4	15
20			82	73	76	76	29.86	29.96	10.00	6	4	15
21			81	73	76	78	29.87	29.98	10.00	5	3	16
22			80	73	75	80	29.89	29.99	9.94	4	3	17
23			79	73	75	82	29.89	30.00	9.90	5	3	17
24			79	73	75	84	29.89	29.99	9.97	3	4	19

# HOUSTON, TX JULY Temperatures



# HOUSTON, TX JULY Precipitation





**JULY 2012**  
**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.*

A handwritten signature in black ink, appearing to read "Thomas R. Karl".

**DIRECTOR**

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