



SEPTEMBER 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			
01	91	76	84	2	76	78	0	19	TS TSRA RA	0		0.0	0.23	29.93	30.04	5.2	18	5.8	32	16	24	17	01	
02	96	76	86	4	75	78	0	21		0		0.0	0.00	29.88	30.00	4.1	20	5.1	17	26	13	26	02	
03	96	77	87	5	74	78	0	22		0		0.0	0.00	29.85	29.96	5.1	20	5.7	20	18	13	18	03	
04	97	77	87	5	74	77	0	22		0		0.0	0.00	29.80	29.93	4.0	20	5.2	18	25	13	25	04	
05	98*	75	87*	5	75	78	0	22		0		0.0	0.00	29.77	29.88	3.3	19	4.9	17	18	14	13	05	
06	97	75	86	5	73	77	0	21		0		0.0	0.00	29.78	29.90	2.2	21	3.3	16	14	13	13	06	
07	96	76	86	5	74	78	0	21		0		0.0	0.00	29.74	29.86	2.6	19	3.8	18	16	15	14	07	
08	87	69	78	-2	71	74	0	13	RA	0		0.0	T	29.84	29.93	6.6	35	8.0	26	02	20	36	08	
09	91	64	78	-2	58	65	0	13		0		0.0	0.00	29.93	30.04	3.5	03	4.9	20	36	15	35	09	
10	89	62	76	-4	58	65	0	11		0		0.0	0.00	29.95	30.06	3.5	10	4.9	18	11	14	09	10	
11	90	64	77	-3	64	68	0	12		0		0.0	0.00	29.93	30.04	6.2	11	7.1	24	15	21	15	11	
12	88	71	80	0	72	74	0	15	TS TSRA RA	0		0.0	0.31	29.91	30.02	4.8	14	7.0	33	17	23	17	12	
13	84	70	77	-2	72	73	0	12	TS TSRA RA BR	0		0.0	0.41	29.96	30.07	3.4	10	5.1	26	15	23	13	13	
14	89	71	80	1	72	73	0	15	RA	0		0.0	0.13	30.00	30.11	1.8	02	5.1	31	15	26	15	14	
15	89	70	80	1	70	73	0	15	RA BR	0		0.0	T	29.97	30.09	2.8	34	4.3	16	19	12	03	15	
16	88	71	80	1	70	73	0	15	RA	0		0.0	0.06	29.85	29.99	4.0	35	4.8	20	36	15	34	16	
17	83	70	77	-2	68	71	0	12	RA	0		0.0	0.22	29.72	29.85	4.8	35	5.6	17	30	15	34	17	
18	88	69	79	1	67	70	0	14		0		0.0	0.00	29.85	29.96	4.8	34	5.1	20	02	14	02	18	
19	85	65	75	-3	59	65	0	10		0		0.0	0.00	29.96	30.06	4.5	06	5.4	17	05	13	05	19	
20	88	59	74	-4	57	63	0	9		0		0.0	0.00	29.92	30.04	1.7	10	3.1	17	01	12	06	20	
21	88	59*	74	-4	63	67	0	9		0		0.0	0.00	29.86	29.99	2.4	15	3.6	15	17	10	14	21	
22	92	68	80	3	68	71	0	15	BR	0		0.0	0.00	29.95	30.05	1.4	12	3.4	14	11	10	14	22	
23	92	68	80	3	69	72	0	15		0		0.0	0.00	30.01	30.12	2.3	17	2.6	16	12	12	14	23	
24	91	69	80	3	70	73	0	15		0		0.0	0.00	29.97	30.09	4.3	16	4.9	20	14	17	14	24	
25	91	69	80	3	69	73	0	15	BR	0		0.0	0.00	29.90	30.02	7.4	17	7.5	25	16	21	15	25	
26	91	71	81	5	71	74	0	16		0		0.0	0.00	29.90	30.01	7.1	14	7.4	23	13	18	13	26	
27	88	70	79	3	71	74	0	14		0		0.0	0.00	29.91	30.03	4.3	12	5.2	16	13	13	14	27	
28	91	73	82	6	72	74	0	17	RA BR	0		0.0	T	29.85	29.98	2.7	09	4.0	29	11	23	11	28	
29	80	73	77	1	74	75	0	12	RA BR	0		0.0	0.66	29.68	29.83	6.7	15	7.8	23	16	17	16	29	
30	77	64	71*	-4	65	67	0	6	RA DZ BR	0		0.0	T	29.60	29.71	10.9	32	13.3	37*	36	29*	35	30	

89.7		69.7		79.7		☼	69.0		72.4		0.0		14.9		< MONTHLY AVERAGES TOTALS >		0.0		2.02		29.87		29.99		1.2		14		5.5		< MONTHLY AVERAGES	
0.0		-0.1		-0.1			<-----DEPARTURE FROM NORMAL----->										-2.10		SUNSHINE, CLOUD, & VISIBILITY TABLES ON PAGE 3													
DEGREE DAYS										GREATEST 24-HR PRECIPITATION : 0.66 DATE : 29										SEA LEVEL PRESSURE												
MONTHLY					SEASON TO DATE					GREATEST 24-HR SNOWFALL : 0.0 DATE :					MAXIMUM : 30.17 23 1117																	
TOTAL DEPARTURE					TOTAL DEPARTURE					GREATEST SNOW DEPTH : 0 DATE :					MINIMUM : 29.62 30 0437																	
HEATING :		0		-1		0		-1		NUMBER OF		MAXIMUM TEMP >= 90 : 15		MINIMUM TEMP <= 32 : 0		PRECIPITATION >= 0.01 INCH: 7																
COOLING :		448		5		3199		374		DAYS WITH		MAXIMUM TEMP <= 32 : 0		MINIMUM TEMP <= 0 : 0		PRECIPITATION >= 0.10 INCH: 6																
										THUNDERSTORMS : 3		HEAVY FOG : 0				SNOWFALL >= 1.0 INCH : 0																

**SEPTEMBER 2012
HOUSTON, TX**

HOURLY PRECIPITATION

(WATER EQUIVALENT IN INCHES)

HOUSTON, TX (KIAH)
SEPTEMBER 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													01	0.22	0.01			T							01	0.23	0.23	
02													02												02	0.00	0.00	
03													03												03	0.00	0.00	
04													04												04	0.00	0.00	
05													05												05	0.00	0.00	
06													06												06	0.00	0.00	
07													07												07	0.00	0.00	
08													08												08	T	T	
09													09												09	0.00	0.00	
10													10												10	0.00	0.00	
11													11												11	0.00	0.00	
12													12	T											12	0.31	0.31	
13													13	T	T										13	0.41	0.41	
14													14			0.05	0.04	0.07	0.04	T	T				14	0.13	0.13	
15													15							0.03	0.04	0.01	T		15	T	T	
16													16												16	0.06	0.06	
17	0.02	0.05	0.01	T	T	0.09	0.04	0.01					17	T											17	0.22	0.22	
18													18						T	T	T	T			18	0.00	0.00	
19													19												19	0.00	0.00	
20													20												20	0.00	0.00	
21													21												21	0.00	0.00	
22													22												22	0.00	0.00	
23													23												23	0.00	0.00	
24													24												24	0.00	0.00	
25													25												25	0.00	0.00	
26													26												26	0.00	0.00	
27													27												27	0.00	0.00	
28													28				T	T							28	T	T	
29			T	T		0.12	0.01	0.07	0.03	0.02			29	T	0.03	0.06		0.01	0.01	T	0.03	0.05	0.04	0.08	0.10	29	0.66	0.66
30		T	T										30					T							30	T	T	

* 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)	0.21	0.30	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31
Ending Date	12	12	12	12	12	12	12	12	12	12	12	12
Ending Time (Hr/Min)	1003	1004	1009	1009	1009	1009	1009	1009	1009	1009	1009	1009

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 SEPTEMBER 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							7.00	10.00	
02							10.00	10.00	
03							10.00	10.00	
04							10.00	10.00	
05							10.00	10.00	
06							10.00	10.00	
07							10.00	10.00	
08							10.00	10.00	
09							10.00	10.00	
10							10.00	10.00	
11							10.00	10.00	
12							8.00	10.00	
13							6.00	10.00	
14							9.00	10.00	
15							0.50	10.00	
16							9.00	10.00	
17							8.00	10.00	
18							8.00	10.00	
19							10.00	10.00	
20							10.00	10.00	
21							10.00	10.00	
22							6.00	10.00	
23							8.00	10.00	
24							7.00	10.00	
25							6.00	10.00	
26							7.00	10.00	
27							10.00	10.00	
28							6.00	10.00	
29							1.50	10.00	
30							5.00	10.00	
MONTHLY AVGS							8.07	10.00	
SUNSHINE (Minutes)									
Total : 0					Possible : 22224				
Percent Possible : 0									
NUMBER OF DAYS WITH : SKY CONDITION									
Clear		Partly CLDY		Cloudy		Missing			
MINIMUM VISIBILITY (MILES)									
<= .25		<= 3.0				>= 7.0			
0		2				23			

OBSERVATIONS AT 3-HOURLY INTERVALS

**HOUSTON, TX
SEPTEMBER 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 Cl'd Amt Oktas		VISIBILITY (MILES)	DRY BULB	DEW POINT	WET BULB	RELATIVE HUMIDITY (PCT)	SPEED (MPH)	DIRECTION Tens of Deg	STATION	SEA LEVEL
SUNRISE: 0611						SEP 25			SUNSET: 1816					
03	FEW	250			8.00	71	69	70	93	3	17	29.93	30.03	
06	FEW	250			7.00	70	70	70	100	0	00	29.92	30.03	
09	FEW	250			10.00	83	71	75	67	7	17	29.95	30.06	
12	SCT	250			10.00	87	67	74	52	10	16	29.93	30.04	
15	SCT	250			10.00	91	65	74	42	16	15	29.85	29.96	
18	SCT	250			10.00	85	66	72	53	13	16	29.87	29.98	
21	FEW	045			10.00	77	70	72	79	6	17	29.91	30.02	
24	FEW	035			10.00	77	71	73	82	6	17	29.88	29.98	
SUNRISE: 0612						SEP 26			SUNSET: 1815					
03	FEW	025			10.00	73	71	72	93	0	00	29.88	29.98	
06	SCT	250			9.00	72	71	71	97	0	00	29.89	30.00	
09	SCT	250			8.00	83	73	76	72	8	14	29.93	30.04	
12	SCT	047			10.00	89	69	75	52	8	15	29.91	30.01	
15	SCT	250			10.00	90	69	76	50	14	16	29.86	29.97	
18	SCT	250			10.00	83	70	74	65	14	13	29.87	29.98	
21	SCT	250			10.00	78	71	73	79	5	14	29.93	30.04	
24	FEW	028			10.00	74	71	72	90	7	09	29.93	30.04	
SUNRISE: 0612						SEP 27			SUNSET: 1813					
03	SCT	250			10.00	72	71	71	97	0	00	29.93	30.04	
06	SCT	250			10.00	70	69	69	97	3	02	29.95	30.06	
09	OVC	250			10.00	81	72	75	74	6	11	29.98	30.09	
12	OVC	250			10.00	86	69	74	57	8	11	29.95	30.06	
15	OVC	250			10.00	88	67	74	50	6	12	29.89	29.99	
18	OVC	250			10.00	83	71	75	67	9	13	29.89	30.00	
21	OVC	250			10.00	79	72	74	79	8	13	29.92	30.03	
24	OVC	250			10.00	77	73	74	88	0	00	29.90	30.01	
SUNRISE: 0613						SEP 28			SUNSET: 1812					
03	SCT	250			10.00	73	72	72	97	3	04	29.89	30.00	
06	SCT	250			7.00	73	71	72	93	0	00	29.89	30.00	
09	SCT	250			10.00	80	74	76	82	5	05	29.93	30.03	
12	BKN	250			10.00	88	71	76	57	5	12	29.89	29.99	
15	OVC	100			10.00	82	70	74	67	13	15	29.83	29.94	
18	OVC	130			10.00	73	72	72	97	0	00	29.82	29.93	
21	BKN	130			10.00	75	73	74	94	5	10	29.85	29.95	
24	OVC	250			10.00	75	73	74	94	3	03	29.83	29.94	
SUNRISE: 0614						SEP 29			SUNSET: 1811					
03	OVC	070			10.00	75	74	74	97	3	01	29.79	29.90	
06	OVC	060			5.00	+RA	74	73	73	97	10	15	29.79	29.89
09	OVC	130			10.00	-RA	74	73	73	97	7	16	29.81	29.91
12	OVC	095			10.00		79	73	75	82	11	17	29.76	29.86
15	OVC	095			10.00		77	75	76	94	11	15	29.67	29.78
18	BKN	045			10.00	-RA	76	75	75	97	9	15	29.64	29.75
21	OVC	022			10.00	-RA	76	74	75	94	9	16	29.62	29.72
24	BKN	015			9.00		76	75	75	97	6	17	29.57	29.68
SUNRISE: 0614						SEP 30			SUNSET: 1810					
03	OVC	060			10.00		76	74	75	94	6	25	29.52	29.62
06	OVC	008			10.00		72	70	71	93	8	27	29.53	29.64
09	OVC	007			5.00	-DZ	72	70	71	93	16	32	29.55	29.65
12	OVC	012			10.00		70	65	67	84	18	33	29.59	29.69
15	OVC	030			10.00		71	64	67	79	17	33	29.58	29.68
18	OVC	022			10.00		67	59	62	76	28	35	29.63	29.73
21	SCT	040			10.00		64	58	60	81	14	33	29.67	29.78
24	BKN	035			10.00		65	57	60	75	14	33	29.69	29.79

HOUR (LST)	SKY COVER	CEILING 100's of FT.	SATELLITE		WEATHER	TEMPERATURE °F			WIND		PRESSURE (INCHES, HG)		
			Observation Time (LST)	Eff Cl'd Amt Oktas		VISIBILITY (MILES)	DRY BULB	DEW POINT	WET BULB	RELATIVE HUMIDITY (PCT)	SPEED (MPH)	DIRECTION Tens of Deg	STATION

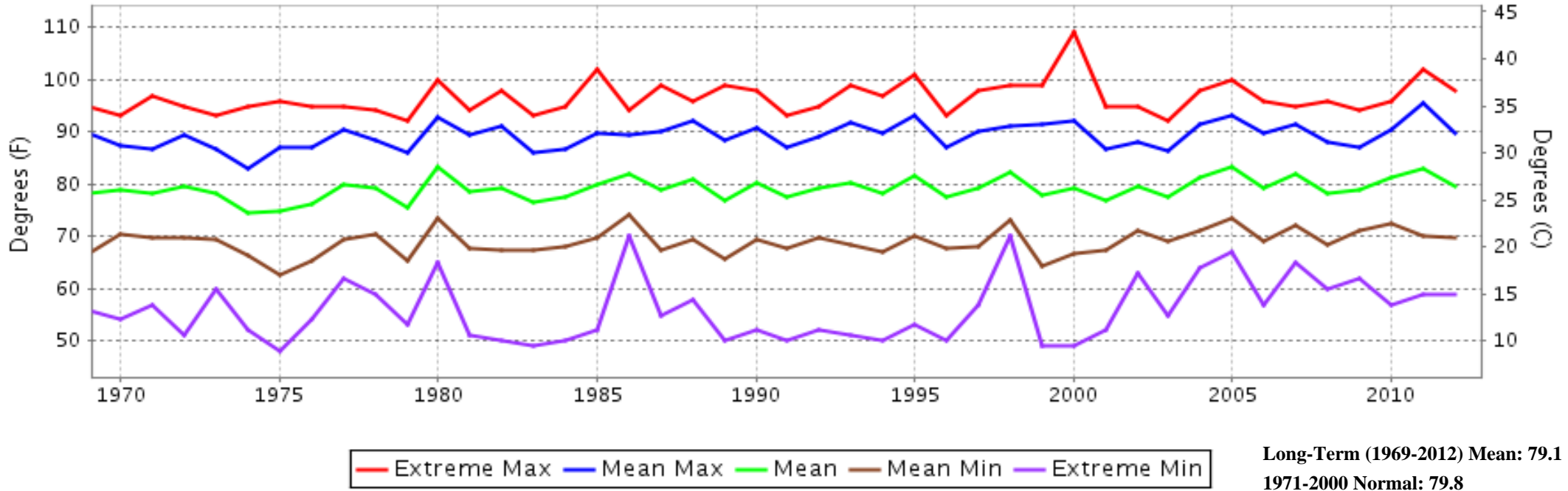
3-HOURLY OBSERVATION NOTES

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.

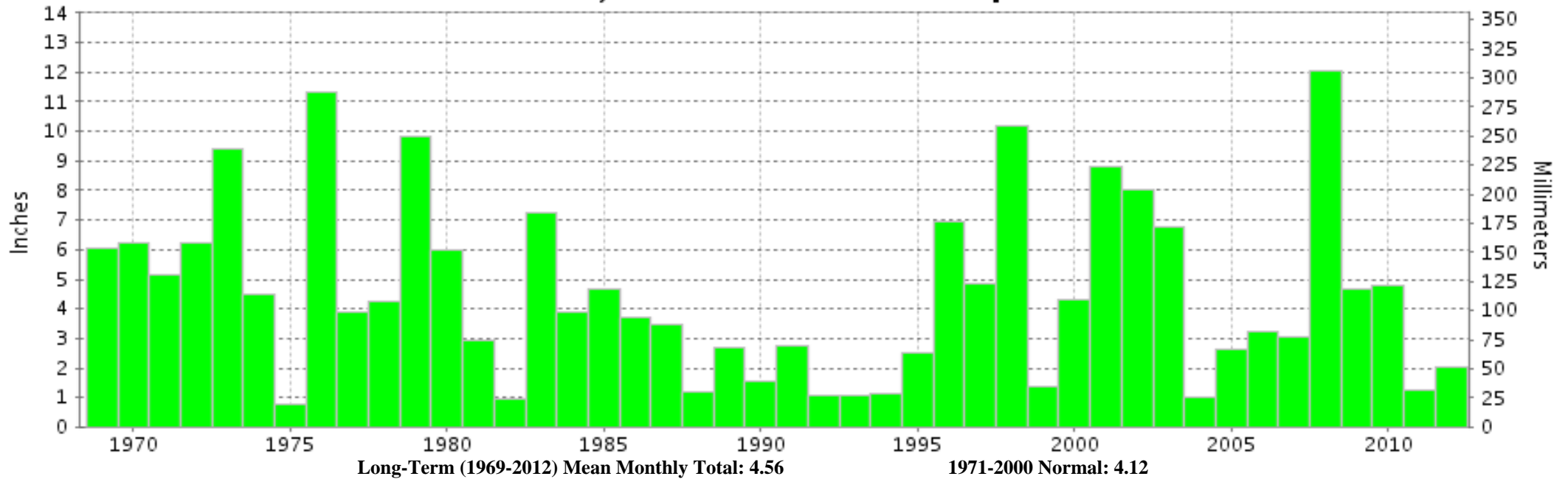
SUMMARY BY HOUR

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			74	70	71	89	29.90	30.00	9.90	2	1	13
02			74	70	71	90	29.88	29.99	9.90	2	1	18
03			73	70	71	91	29.87	29.98	9.52	2	1	17
04			72	70	71	92	29.87	29.98	9.42	3	1	17
05			72	70	70	94	29.88	29.99	9.60	3	1	17
06			71	69	70	94	29.90	30.00	9.12	3	1	14
07			72	70	71	92	29.91	30.01	8.98	3	1	13
08			76	71	73	85	29.91	30.02	9.03	5	0	18
09			80	71	74	75	29.92	30.03	9.77	7	1	14
10			83	70	74	66	29.93	30.04	9.83	7	1	22
11			83	69	74	63	29.92	30.03	10.00	6	1	12
12			85	68	74	57	29.91	30.01	10.00	7	1	13
13			86	67	74	55	29.88	29.99	9.90	7	2	11
14			87	66	73	52	29.86	29.97	9.90	7	2	11
15			87	66	73	52	29.85	29.95	10.00	8	2	10
16			86	67	73	55	29.84	29.95	9.77	8	3	10
17			85	67	73	58	29.84	29.94	9.93	9	2	10
18			83	67	73	63	29.84	29.95	10.00	9	3	10
19			80	68	72	68	29.85	29.95	9.97	8	3	10
20			78	69	72	75	29.86	29.97	9.93	6	2	11
21			77	69	72	78	29.88	29.98	10.00	6	1	11
22			76	70	72	82	29.88	29.99	10.00	5	1	14
23			75	70	72	84	29.88	29.99	9.87	4	1	21
24			74	70	71	86	29.88	29.99	9.93	4	1	15

HOUSTON, TX SEPTEMBER Temperatures



HOUSTON, TX SEPTEMBER Precipitation





**SEPTEMBER 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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