



OCTOBER 2010 LOCAL CLIMATOLOGICAL DATA

NOAA, National Climatic Data Center

HOUSTON, TX
G BUSH INTERCONTINENTAL AP/HOUSTON AP (KIAH)
Lat:29° 59'N Long: 95° 21'W Elev (Ground) 94 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			
									DEPTH 11	WATER- EQUIV 12	SNOW- FALL 13	WATER EQUIV 14			SPEED 17	DIR 18	AVERAGE SPEED 19	SPEED 20	DIR 21	SPEED 22	DIR 23			
01	90	66	78	3	57	64	0	13		0		0.0	0.00	29.87	29.98	4.9	02	5.3	18	02	14	35	01	
02	87	58	73	-2	47	59	0	8		0		0.0	0.00	29.93	30.03	5.5	01	6.3	23	02	17	35	02	
03	81	57	69	-6	49	57	0	4		0		0.0	0.00	30.06	30.15	7.7	02	8.4	23	02	17	36	03	
04	77	53	65	-9	43	53	0	0		0		0.0	0.00	30.14	30.24	4.2	05	4.9	17	05	13	08	04	
05	79	49	64	-10	42	52	1	0		0		0.0	0.00	30.17	30.28	3.1	07	3.5	16	06	12	06	05	
06	84	49	67	-6	43	54	0	2		0		0.0	0.00	30.13	30.25	1.1	05	2.8	15	04	12	04	06	
07	87	51	69	-4	45	56	0	4		0		0.0	0.00	30.06	30.19	0.9	22	2.3		8		21	07	
08	89	53	71	-2	48	58	0	6		0		0.0	0.00	30.00	30.12	1.8	23	3.1	22	21	9	21	08	
09	86	54	70	-3	56	62	0	5		0		0.0	0.00	29.95	30.08	2.1	19	3.2		10		18	09	
10	87	56	72	0	60	65	0	7	MIFG	0		0.0	0.00	29.85	29.98	3.8	16	4.7	22	13	17	12	10	
11	90	65	78	6	64	69	0	13		0		0.0	0.00	29.78	29.91	4.0	19	5.0	20	14	16	13	11	
12	92	66	79	7	61	67	0	14	BR	0		0.0	0.00	29.88	29.99	4.0	32	6.1	20	31	14	28	12	
13	88	62	75	4	55	63	0	10		0		0.0	0.00	30.02	30.11	9.3	33	9.7	33	36	23	35	13	
14	84	59	72	1	49	59	0	7		0		0.0	0.00	30.06	30.18	6.0	35	6.5	23	05	15	35	14	
15	85	52	69	-2	48	57	0	4		0		0.0	0.00	30.01	30.13	0.8	15	1.9		7		19	15	
16	86	54	70	0	53	60	0	5	MIFG	0		0.0	0.00	30.01	30.13	2.5	16	3.2		11		11	16	
17	86	55	71	1	60	64	0	6	MIFG	0		0.0	0.00	29.96	30.08	2.5	15	3.4	17	14	15	14	17	
18	89	62	76	6	63	67	0	11		0		0.0	0.00	29.85	29.98	3.2	17	4.0	25	21	17	14	18	
19	88	63	76	6	62	67	0	11		0		0.0	0.00	29.85	29.97	2.5	19	2.9	26	21	10	22	19	
20	90	64	77	8	64	69	0	12		0		0.0	0.00	29.90	30.00	2.5	24	3.5	25	28	10	26	20	
21	88	64	76	7	65	69	0	11		0		0.0	0.00	29.88	30.00	3.3	17	4.0	26	21	15	14	21	
22	86	66	76	8	68	71	0	11	BR	0		0.0	0.00	29.88	30.00	10.2	14	10.4	37	18	25	13	22	
23	87	67	77	9	67	70	0	12		0		0.0	0.00	29.85	29.97	10.9	15	11.4	40*	18	24	14	23	
24	90	69	80	12	67	71	0	15	BR	0		0.0	0.00	29.77	29.90	5.3	19	6.3	21	21	15	19	24	
25	90	73	82	15	69	73	0	17		0		0.0	0.00	29.56	29.70	11.1	19	11.3	35	19	22	18	25	
26	92	78	85	18	70	74	0	20	RA	0		0.0	T	29.59	29.69	8.1	21	8.7	29	17	17	22	26	
27	94*	76	85*	18	73	76	0	20	RA BR	0		0.0	T	29.82	29.89	4.0	18	5.3	26	21	15	16	27	
28	83	60	72	6	30	53	0	7	RA BR	0		0.0	0.02	30.19	30.27	16.5	01	16.9	36	01	29*	02	28	
29	77	46	62	-4	35	49	3	0		0		0.0	0.00	30.17	30.29	3.0	01	4.4	16	07	12	06	29	
30	79	45*	62*	-4	40	51	3	0		0		0.0	0.00	29.98	30.12	2.6	18	3.4	16	19	12	14	30	
31	86	51	69	3	56	61	0	4		0		0.0	0.00	29.86	30.00	3.1	17	3.8	16	16	13	16	31	
86.4		59.5	73.0	Σ	55.1	62.6	0.2	8.4	< MONTHLY AVERAGES TOTALS >				0.0	0.02	29.93	30.05	0.7	15	5.7	< MONTHLY AVERAGES				
4.4	0.7	2.6	<----- DEPARTURE FROM NORMAL ----->				-4.48	SUNSHINE, CLOUD, & VISIBILITY TABLES ON PAGE 3																
DEGREE DAYS									GREATEST 24-HR PRECIPITATION : 0.02 DATE : 28				SEA LEVEL PRESSURE				DATE TIME							
MONTHLY				SEASON TO DATE					GREATEST 24-HR SNOWFALL : 0.0 DATE :				MAXIMUM : 30.41 29 0932											
TOTAL DEPARTURE				TOTAL DEPARTURE					GREATEST SNOW DEPTH : 0 DATE :				MINIMUM : 29.58 25 1813											
HEATING :		7	-30	7		-31	NUMBER OF -> DAYS WITH				MAXIMUM TEMP >= 90 : 8		MINIMUM TEMP <= 32 : 0		PRECIPITATION >= 0.01 INCH : 1									
COOLING :		259	63	3310		507			MAXIMUM TEMP <= 32 : 0		MINIMUM TEMP <= 0 : 0		PRECIPITATION >= 0.10 INCH : 0											
										THUNDERSTORMS : 0		HEAVY FOG : 0		SNOWFALL >= 1.0 INCH : 0										

OCTOBER 2010
HOUSTON, TX

HOURLY PRECIPITATION

(WATER EQUIVALENT IN INCHES)

HOUSTON, TX (KIAH)
OCTOBER 2010

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												01	0.00	0.00	
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	0.00	0.00	
09													09												09	0.00	0.00	
10													10												10	0.00	0.00	
11													11												11	0.00	0.00	
12													12												12	0.00	0.00	
13													13												13	0.00	0.00	
14													14												14	0.00	0.00	
15													15												15	0.00	0.00	
16													16												16	0.00	0.00	
17													17												17	0.00	0.00	
18													18												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	T	T	
27													27												27	T	T	
28	0.01	0.01											28												28	0.02	0.02	
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)												
Ending Date												
Ending Time (Hr/Min)												

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 1971-2000

WEATHER NOTATIONS

QUALIFIER	WEATHER PHENOMENA		
DESCRIPTOR	PRECIPITATION	OBSCURATION	OTHER
BC Patches	DZ Drizzle	BR Mist	DS Duststorm
BL Blowing	GR Hail	DU Widespread Dust	FC Funnel Cloud
DR Low Drifting	GS Small Hail and/or Snow Pellets	FG Fog	+FC Tornado Waterspout
FZ Freezing	IC Ice Crystals	FU Smoke	PO Well-Developed Dust/Sand Whirls
MI Shallow	PL Ice Pellets	HZ Haze	
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 OCTOBER 2010

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							10.00	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							9.00	10.00	
10							7.00	10.00	
11							10.00	10.00	
12							0.12	10.00	
13							10.00	10.00	
14							10.00	10.00	
15							10.00	10.00	
16							7.00	10.00	
17							7.00	10.00	
18							9.00	10.00	
19							8.00	10.00	
20							10.00	10.00	
21							10.00	10.00	
22							6.00	10.00	
23							9.00	10.00	
24							6.00	10.00	
25							9.00	10.00	
26							10.00	10.00	
27							6.00	10.00	
28							10.00	10.00	
29							6.00	10.00	
30							10.00	10.00	
31							10.00	10.00	
MONTHLY AVGS							8.68	10.00	
SUNSHINE (Minutes)									
Total : 0					Possible : 21264				
Percent Possible : 0									
NUMBER OF DAYS WITH : SKY CONDITION									
Clear		Partly CLDY		Cloudy		Missing			
MINIMUM VISIBILITY (MILES)									
<= .25			<= 3.0			>= 7.0			
1			1			26			

OBSERVATIONS AT 3-HOURLY INTERVALS

HOUSTON, TX
OCTOBER 2010

KIAH

WBAN # 12960

Table with columns for Hour (LST), Sky Cover, Ceiling, Satellite, Visibility, Weather, Temperature (Dry Bulb, Dew Point, Wet Bulb), Wind (Speed, Direction), Pressure (Station, Sea Level). It contains hourly data for October 01 through October 24, 2010, with sub-headers for sunrise and sunset times.

OBSERVATIONS AT 3-HOURLY INTERVALS

HOUSTON, TX OCTOBER 2010

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: 0630 OCT 25 SUNSET: 1741														
03	FEW	017				74	70	71	87	6	19	29.69	29.79	
06	BKN	025				74	69	71	84	6	19	29.68	29.78	
09	BKN	033				78	70	73	77	11	19	29.66	29.77	
12	SCT	039				87	67	74	52	13	21	29.60	29.70	
15	SCT	046				88	68	74	52	17	17	29.50	29.60	
18	BKN	250				81	68	72	65	15	19	29.48	29.59	
21	BKN	250				80	71	74	74	13	18	29.50	29.60	
24	BKN	027				80	71	74	74	10	19	29.51	29.61	
SUNRISE: 0631 OCT 26 SUNSET: 1740														
03	BKN	026				79	71	74	77	10	18	29.49	29.59	
06	BKN	031				80	72	75	77	9	19	29.52	29.62	
09	BKN	044				81	72	75	74	5	22	29.62	29.73	
12	SCT	045				89	68	75	50	11	22	29.60	29.71	
15	SCT	050				90	67	74	47	8	24	29.55	29.66	
18	BKN	250				86	67	73	53	5	21	29.57	29.68	
21	FEW	250				80	72	75	77	7	19	29.64	29.75	
24	BKN	250				78	74	75	88	7	18	29.67	29.78	
SUNRISE: 0631 OCT 27 SUNSET: 1739														
03	BKN	050				79	75	76	88	0	00	29.70	29.80	
06	SCT	046				77	74	75	91	0	00	29.73	29.84	
09	BKN	041				82	75	77	79	6	20	29.80	29.91	
12	SCT	040				90	70	76	52	9	23	29.80	29.90	
15	SCT	055				92	68	75	45	9	17	29.76	29.87	
18	SCT	250				85	74	77	70	8	16	29.81	29.91	
21	SCT	250				81	76	77	85	5	18	29.90	30.01	
24	OVC	070			-RA BR	80	76	77	88	5	31	29.97	30.07	
SUNRISE: 0632 OCT 28 SUNSET: 1738														
03	BKN	065				74	50	60	43	18	01	30.05	30.16	
06	BKN	055				72	29	52	20	18	01	30.11	30.23	
09	SCT	250				76	27	53	16	18	02	30.22	30.33	
12	FEW	250				81	22	54	11	17	02	30.22	30.32	
15	FEW	250				82	20	54	10	22	35	30.16	30.28	
18	FEW	250				72	20	50	14	10	36	30.19	30.30	
21	CLR	NC				65	27	48	24	11	35	30.24	30.35	
24	CLR	NC				60	29	46	31	10	35	30.24	30.36	
SUNRISE: 0633 OCT 29 SUNSET: 1737														
03	CLR	NC				56	30	45	37	8	35	30.24	30.35	
06	CLR	NC				49	31	41	50	0	00	30.27	30.37	
09	CLR	NC				60	33	48	36	9	05	30.29	30.41	
12	CLR	NC				70	34	52	27	8	01	30.24	30.35	
15	CLR	NC				75	31	54	20	0	00	30.14	30.24	
18	FEW	250				68	30	50	24	7	04	30.11	30.22	
21	CLR	NC				56	37	47	49	0	00	30.11	30.22	
24	CLR	NC				51	38	45	61	0	00	30.10	30.21	
SUNRISE: 0634 OCT 30 SUNSET: 1736														
03	CLR	NC				49	39	44	69	0	00	30.06	30.17	
06	FEW	250				47	39	43	74	0	00	30.06	30.17	
09	CLR	NC				63	46	54	54	5	VR	30.09	30.20	
12	CLR	NC				74	34	54	23	5	VR	30.03	30.15	
15	FEW	035				79	28	54	15	8	21	29.94	30.05	
18	FEW	030				69	47	57	46	8	13	29.91	30.02	
21	FEW	030				60	49	54	67	3	18	29.94	30.05	
24	FEW	020				63	50	56	63	3	18	29.92	30.02	

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: 0634 OCT 31 SUNSET: 1736														
03	FEW	025				55	50	52	83	0	00	29.89	30.00	
06	FEW	250				53	50	51	90	0	00	29.90	30.01	
09	FEW	250				71	58	63	64	0	00	29.93	30.03	
12	FEW	035				83	52	65	34	6	22	29.90	30.01	
15	FEW	050				85	53	66	33	0	00	29.82	29.93	
18	FEW	050				77	62	68	60	5	16	29.83	29.93	
21	SCT	040				75	67	70	76	6	17	29.88	29.99	
24	BKN	045				72	68	69	87	5	15	29.88		

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

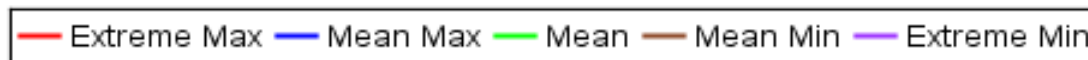
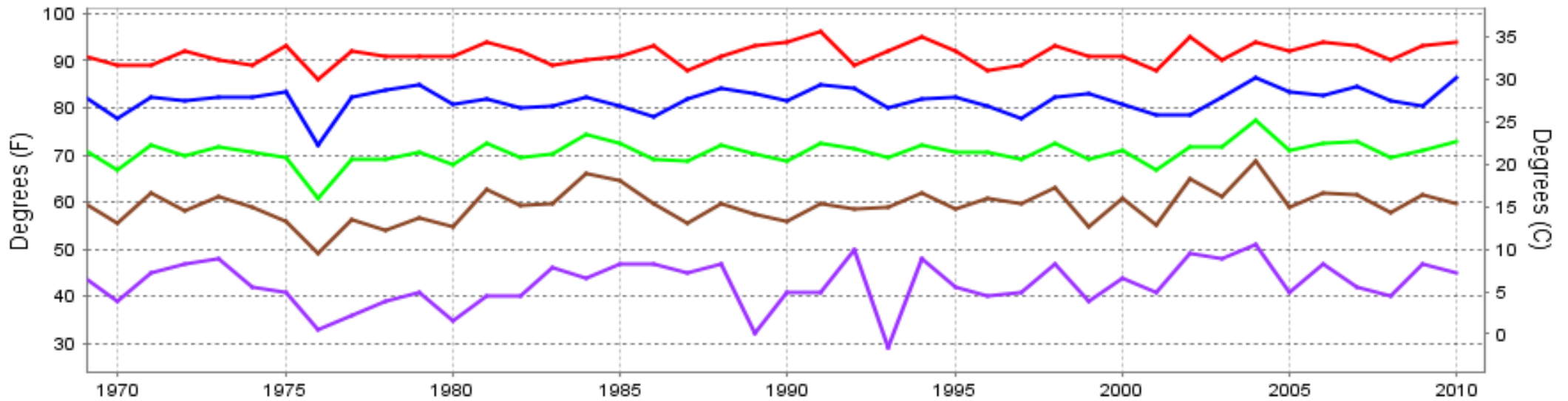
Ceiling is reported in hundreds of feet above ground level for clouds at or below 12,000 feet. NC = No Ceiling detected.

& = Original observation contained additional weather elements.
See page 3 for additional notes.

SUMMARY BY HOUR

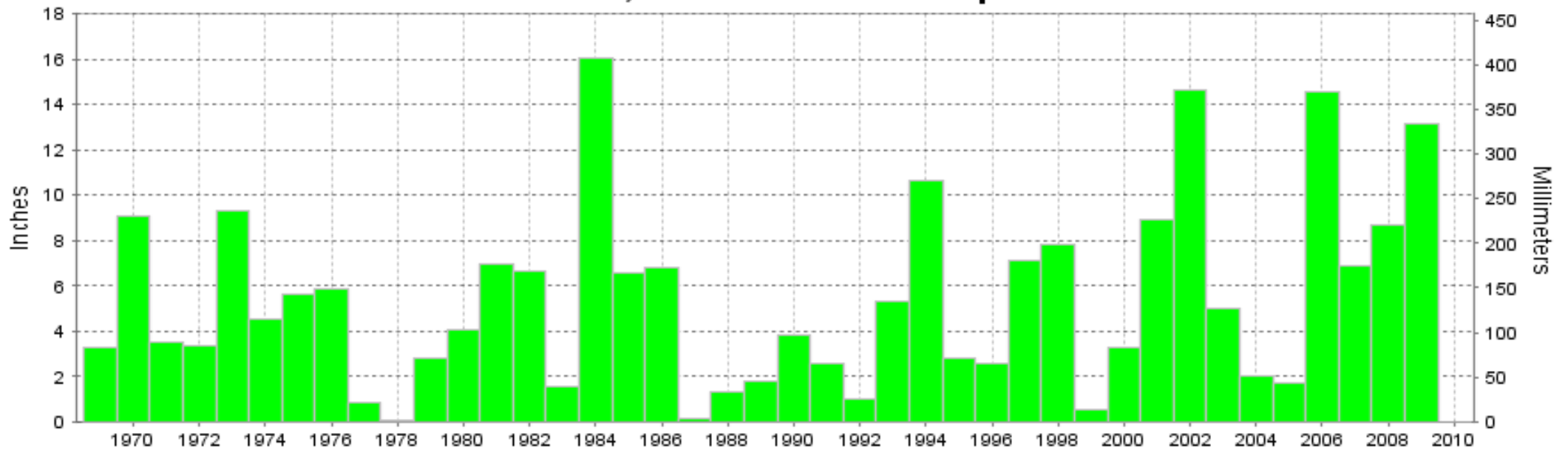
HOUR (LST)	AVERAGES										RESULTANT WIND (MPH)	
	CEILOMETER	EFF CLD AMT	DRY BULB	DEW POINT	WET BULB	RELATIVE HUMIDITY	PRESSURE (Inches, HG)		VISIBILITY (Miles)	WIND SPEED (MPH)	SPEED	DIRECTION
							STATION	SEA LEVEL				
01			65	57	61	77	29.94	30.05	9.77	3	2	23
02			64	57	60	78	29.94	30.05	9.87	3	2	21
03			64	56	59	78	29.93	30.04	9.84	3	2	18
04			63	55	59	79	29.94	30.04	9.71	3	2	16
05			62	55	58	80	29.95	30.06	9.33	3	2	14
06			62	55	58	80	29.96	30.07	9.39	3	2	15
07			62	55	58	81	29.97	30.08	9.48	4	1	14
08			68	57	62	70	29.99	30.10	9.65	5	2	12
09			73	57	64	58	30.01	30.11	9.97	7	2	11
10			78	56	65	49	30.01	30.11	9.97	8	1	12
11			80	55	66	43	29.99	30.10	10.00	8	1	17
12			82	54	66	39	29.97	30.08	10.00	8	1	22
13			84	53	66	37	29.94	30.05	10.00	8	1	18
14			85	52	66	35	29.91	30.02	9.97	8	2	13
15			85	52	66	34	29.90	30.01	9.97	9	1	23
16			84	51	65	34	29.89	30.00	10.00	9	1	16
17			82	52	65	37	29.89	30.00	10.00	9	3	11
18			77	54	64	47	29.90	30.01	10.00	7	2	11
19			74	55	63	53	29.91	30.02	10.00	7	2	11
20			73	56	63	58	29.93	30.04	10.00	6	1	14
21			71	57	63	62	29.94	30.05	9.90	5	1	20
22			70	57	62	66	29.95	30.06	9.90	4	1	21
23			68	57	62	70	29.95	30.06	9.90	4	1	21
24			67	57	62	74	29.94	30.05	9.77	3	1	21

HOUSTON, TX OCTOBER Temperatures



Long-Term (1969-2010) Mean: 70.5
1971-2000 Normal: 70.4

HOUSTON, TX OCTOBER Precipitation



Long-Term (1969-2010) Mean Monthly Total: 5.31

1971-2000 Normal: 4.50



OCTOBER 2010
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.

DIRECTOR

NCDC now offers an annual online subscription for the **Edited Local Climatological Data Publication**. When you purchase this subscription service, you will have **immediate online access** to all previous publications back to July 1996 and all publications thereafter until the expiration of the subscription. Your subscription is valid for one year after purchase. **The total cost for online delivery (including back issues) is significantly less than the cost for offline delivery.**

To order this and other subscriptions online with your credit card, go to: www.ncdc.noaa.gov and choose subscriptions.

We welcome your questions or comments, please contact us at:

Toll Free Number (866) 742-3322 (voice)

Fax Number : (304) 726-4409

TDD : (828) 271-4010

or Email : ncdc.info@noaa.gov

Local Climatological Data is available at www.ncdc.noaa.gov

NCDC Subscription Services Center
310 State Route 956 Building 300
Rocket Center, WV 26726
OFFICIAL BUSINESS, PENALTY FOR PRIVATE USE \$300

FIRST CLASS
POSTAGE AND FEES PAID
NOAA
PERMIT G-19

For address correction, please return a photocopy of this page to Subscription Services indicating changes