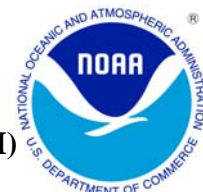




FEBRUARY 2009 LOCAL CLIMATOLOGICAL DATA

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																												
																			SPEED 20	DIR 21	SPEED 22	DIR 23																											
01	75	49	62	9	55	58	3	0	TS TSRA RA BR	0		0.0	0.03	29.83	29.96	4.9	15	5.5	16	21	14	10	01																										
02	64	38	51	-2	38	47	14	0	RA BR	0		0.0	T	30.07	30.16	10.5	36	11.5	32	01	28	01	02																										
03	71	33*	52	-1	30	42	13	0		0		0.0	0.00	30.17	30.27	1.9	25	2.6	17	27	13	27	03																										
04	60	40	50	-3	31	41	15	0		0		0.0	0.00	30.40	30.50	5.4	09	7.2	17	09	15	09	04																										
05	71	37	54	1	44	49	11	0		0		0.0	0.00	30.33	30.45	7.3	15	8.0	24	14	21	15	05																										
06	76	53	65	11	53	58	0	0		0		0.0	0.00	30.17	30.30	13.7	16	13.8	31	16	26	15	06																										
07	77	55	66	12	54	59	0	1		0		0.0	0.00	30.14	30.25	11.9	16	12.1	31	17	24	16	07																										
08	75	53	64	10	57	60	1	0	BR	0		0.0	0.00	30.04	30.19	14.7	13	15.0	36	14	31	13	08																										
09	76	65	71	17	62	64	0	6	RA BR	0		0.0	0.10	29.87	29.99	12.1	16	12.5	29	13	22	15	09																										
10	74	68	71	17	66	67	0	6	RA BR	0		0.0	0.09	29.72	29.85	15.8	17	15.9	35	18	26	17	10																										
11	73	48	61	6	41	51	4	0	RA BR	0		0.0	0.39	29.96	30.04	5.3	28	6.4	43*	27	30	29	11																										
12	74	45	60	5	43	51	5	0		0		0.0	0.00	30.01	30.13	6.9	12	7.8	21	14	18	15	12																										
13	73	54	64	9	63	64	1	0	RA FG+ BR	0		0.0	0.16	29.83	29.97	1.4	12	3.1	12	20	9	15	13																										
14	70	56	63	8	52	57	2	0	TS TSRA RA BR	0		0.0	0.61	29.85	29.96	7.2	01	8.8	26	02	17	02	14																										
15	71	56	64	9	54	57	1	0	RA BR	0		0.0	T	30.03	30.10	9.4	01	10.2	25	04	21	01	15																										
16	63	50	57	1	44	50	8	0		0		0.0	0.00	30.14	30.26	8.0	08	9.6	18	06	15	10	16																										
17	72	52	62	6	60	61	3	0	RA BR HZ	0		0.0	0.04	29.86	30.01	8.4	14	9.8	23	17	18	16	17																										
18	82	55	69	13	57	63	0	4	RA BR	0		0.0	0.01	29.77	29.88	5.7	24	7.4	18	20	14	21	18																										
19	69	48	59	3	32	47	6	0		0		0.0	0.00	30.11	30.19	8.6	01	9.6	26	01	22	01	19																										
20	67	39	53	-3	34	45	12	0		0		0.0	0.00	30.11	30.23	6.0	14	7.7	23	14	20	14	20																										
21	71	46	59	2	45	52	6	0	RA	0		0.0	0.09	30.06	30.16	3.5	34	10.2	29	36	23	01	21																										
22	64	36	50*	-7	24	39	15	0		0		0.0	0.00	30.34	30.44	4.8	01	6.2	22	34	18	34	22																										
23	65	37	51	-6	38	45	14	0		0		0.0	0.00	30.27	30.40	5.8	12	7.1	23	13	18	13	23																										
24	77	47	62	5	54	58	3	0		0		0.0	0.00	29.97	30.12	8.4	16	9.2	25	19	18	16	24																										
25	79	63	71	13	62	64	0	6		0		0.0	0.00	29.91	30.04	10.6	16	10.7	23	15	21	14	25																										
26	81	67	74	16	63	66	0	9		0		0.0	0.00	29.81	29.94	11.6	17	11.7	26	16	22	16	26																										
27	85*	69	77*	19	65	68	0	12	BR	0		0.0	0.00	29.70	29.82	9.5	20	10.0	25	21	18	17	27																										
28	71	42	57	-1	37	49	8	0	RA BR	0		0.0	T	30.08	30.14	17.0	33	17.2	38	33	31*	33	28																										
										72.4		50.0		61.2		α		48.5		54.7		5.2		1.6		< MONTHLY AVERAGES TOTALS >				0.0		1.52		30.03		30.14		3.2		14		9.5		< MONTHLY AVERAGES					
										5.9		5.7		5.8		α		<-----DEPARTURE FROM NORMAL----->										-1.46		SUNSHINE, CLOUD, & VISIBILITY TABLES ON PAGE 3																			
DEGREE DAYS										GREATEST 24-HR PRECIPITATION : 0.61 DATE : 14										SEA LEVEL PRESSURE																													
MONTHLY										GREATEST 24-HR SNOWFALL : 0.0 DATE :										MAXIMUM : 30.59 04 1059																													
TOTAL DEPARTURE										GREATEST SNOW DEPTH : 0 DATE :										MINIMUM : 29.72 10 2256																													
SEASON TO DATE										NUMBER OF -> DAYS WITH										MAXIMUM TEMP >= 90 : 0										MINIMUM TEMP <= 32 : 0										PRECIPITATION >= 0.01 INCH : 9									
HEATING : 145 -153 976 -343										MAXIMUM TEMP <= 32 : 0										MINIMUM TEMP <= 0 : 0										PRECIPITATION >= 0.10 INCH : 4																			
COOLING : 44 123 63 27										THUNDERSTORMS : 2										HEAVY FOG : 1										SNOWFALL >= 1.0 INCH : 0																			

FEBRUARY 2009
HOUSTON, TX

HOURLY PRECIPITATION

(WATER EQUIVALENT IN INCHES)

HOUSTON, TX (KIAH)
FEBRUARY 2009

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						01					T	0.03						01	0.03	0.03	
02													02												02	T	T	
03				T									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				T	T								09												09	0.10	0.10	
10	T					0.02	0.05	T					10			T	0.01	0.01	0.03	T	T	T	0.01	0.02	0.01	10	0.09	0.09
11	T	0.38	0.01										11												11	0.39	0.39	
12													12												12	0.00	0.00	
13						0.02	0.02	T				T	13	0.06	0.06	T	T	T	T	T				T	13	0.16	0.16	
14	0.23	0.14										T	14	T	0.01			0.01	0.02	0.11	0.09	T	T		14	0.61	0.61	
15	T	T										T	15												15	T	T	
16													16												16	0.00	0.00	
17													17			T	T	0.01	T	0.03					17	0.04	0.04	
18						T	T	T				T	18												18	0.01	0.01	
19									T			T	19												19	0.00	0.00	
20											0.01		20												20	0.00	0.00	
21													21	0.06	0.03										21	0.09	0.09	
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				T									28												28	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)	0.11	0.18	0.25	0.27	0.35	0.36	0.38	0.38	0.39	0.39	0.39	0.40
Ending Date	11	11	11	11	11	14	11	11	11	11	11	11
Ending Time (Hr/Min)	0107	0112	0115	0119	0129	0119	0150	0150	0230	0230	0230	0230

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 FEBRUARY 2009

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							5.00	10.00	
02							2.00	10.00	
03							5.00	10.00	
04							8.00	10.00	
05							10.00	10.00	
06							9.00	10.00	
07							10.00	10.00	
08							5.00	10.00	
09							6.00	10.00	
10							6.00	10.00	
11							5.00	10.00	
12							8.00	10.00	
13							0.25	10.00	
14							3.00	10.00	
15							0.50	10.00	
16							5.00	10.00	
17							2.00	10.00	
18							0.50	10.00	
19							8.00	10.00	
20							10.00	10.00	
21							10.00	10.00	
22							10.00	10.00	
23							10.00	10.00	
24							7.00	10.00	
25							9.00	10.00	
26							8.00	10.00	
27							6.00	10.00	
28							5.00	10.00	
MONTHLY AVGS							6.19	10.00	
SUNSHINE (Minutes)									
Total : 0			Possible : 18712						
Percent Possible : 0									
NUMBER OF DAYS WITH : SKY CONDITION									
Clear		Partly CLDY			Cloudy			Missing	
MINIMUM VISIBILITY (MILES)									
<= .25			<= 3.0			>= 7.0			
1			6			13			

OBSERVATIONS AT 3-HOURLY INTERVALS

HOUSTON, TX
FEBRUARY 2009

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 Okta		VISIBILITY (MILES)	DRY BULB	DEW POINT	WET BULB	RELATIVE HUMIDITY (PCT)	SPEED (MPH)	DIRECTION Tens of Deg	STATION	SEA LEVEL			
															Observation Time (LST)	Eff Cld Amt Okta	
SUNRISE: 0652						FEB 25						SUNSET: 1817					
03	BKN	028				64	60	62	87	7	17	29.92	30.03				
06	BKN	034				64	61	62	90	9	15	29.90	30.01				
09	OVC	037				68	63	65	84	7	16	29.97	30.08				
12	OVC	250				75	63	67	66	16	16	29.95	30.06				
15	OVC	250				76	63	68	64	16	17	29.89	29.99				
18	BKN	048				73	63	67	71	16	15	29.89	29.99				
21	OVC	035				68	63	65	84	9	15	29.92	30.03				
24	FEW	014				67	63	65	87	10	16	29.91	30.02				
SUNRISE: 0651						FEB 26						SUNSET: 1817					
03	BKN	040				67	62	64	84	8	16	29.89	30.00				
06	BKN	042				67	62	64	84	9	17	29.88	29.99				
09	BKN	042				70	63	66	79	11	16	29.90	30.01				
12	BKN	250				78	62	68	58	8	19	29.87	29.98				
15	BKN	045				81	62	69	53	21	17	29.78	29.89				
18	BKN	040				75	62	67	64	13	18	29.76	29.86				
21	BKN	039				71	65	67	81	10	18	29.78	29.88				
24	BKN	019				70	66	67	87	13	18	29.76	29.87				
SUNRISE: 0650						FEB 27						SUNSET: 1818					
03	OVC	020				71	66	68	84	9	18	29.70	29.81				
06	OVC	035				72	65	68	79	9	22	29.71	29.82				
09	BKN	250				74	64	68	71	10	21	29.76	29.87				
12	BKN	250				81	62	69	53	8	22	29.72	29.83				
15	OVC	250				82	62	69	51	14	21	29.66	29.76				
18	OVC	090				78	64	69	62	8	19	29.66	29.76				
21	BKN	250				72	67	69	84	8	17	29.71	29.81				
24	OVC	021			BR	70	67	68	90	0	00	29.74	29.85				
SUNRISE: 0649						FEB 28						SUNSET: 1819					
03	OVC	023				63	59	61	87	9	33	29.76	29.87				
06	OVC	019				58	47	52	67	18	34	29.88	29.98				
09	OVC	033				54	45	49	72	18	35	30.00	30.10				
12	SCT	250				60	40	50	48	24	32	30.06	30.18				
15	FEW	250				63	29	48	28	21	32	30.06	30.17				
18	CLR	NC				58	23	43	26	21	32	30.11	30.23				
21	CLR	NC				49	18	37	29	16	33	30.24	30.35				
24	CLR	NC				42	14	33	32	20	34	30.29	30.40				

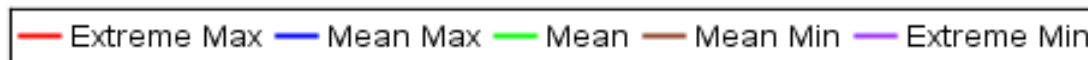
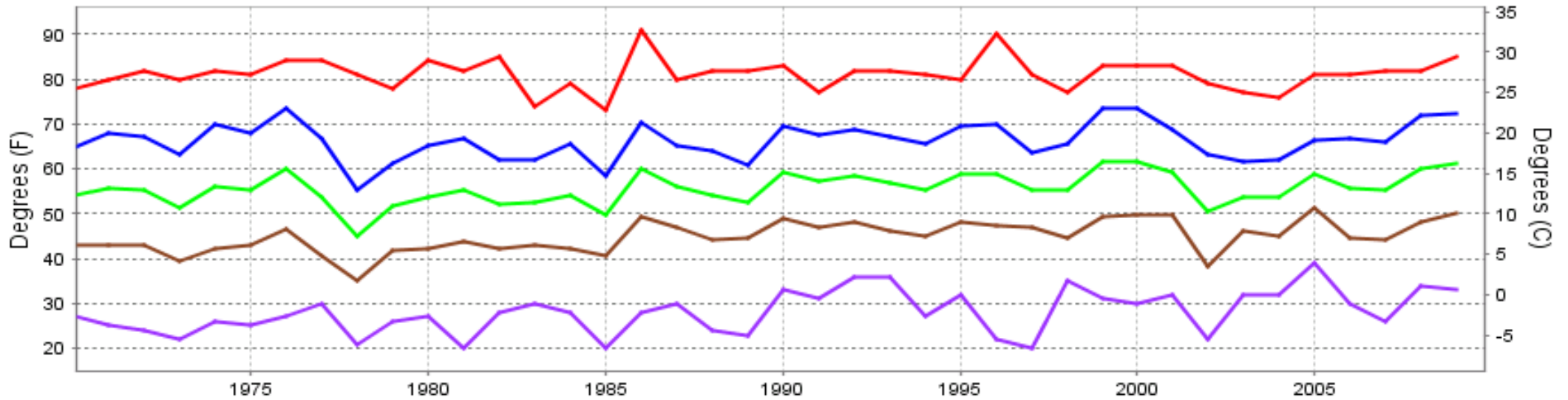
HOUR (LST)	SKY COVER	CEILING 100's of FT.	SATELLITE		WEATHER	TEMPERATURE °F			WIND		PRESSURE (INCHES, HG)			
			Observation Time (LST)	Eff Cld Amt Okta		VISIBILITY (MILES)	DRY BULB	DEW POINT	WET BULB	RELATIVE HUMIDITY (PCT)	SPEED (MPH)	DIRECTION Tens of Deg	STATION	SEA LEVEL

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

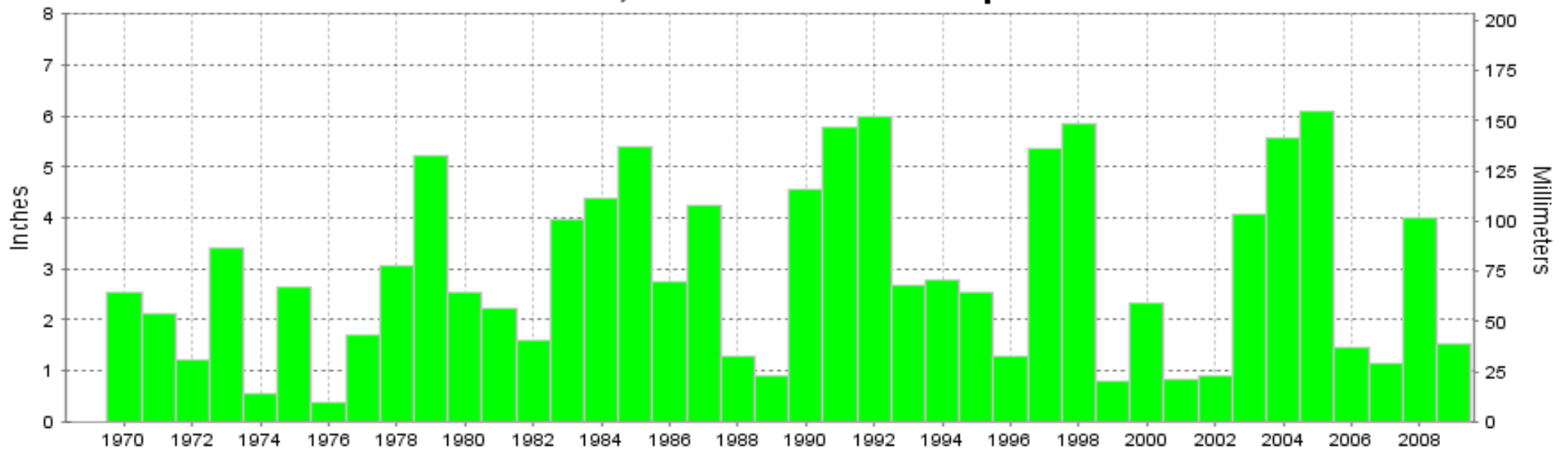
HOUR (LST)	AVERAGES										RESULTANT WIND (MPH)	
	CEILOMETER	EFF CLD AMT	DRY BULB	DEW POINT	WET BULB	RELATIVE HUMIDITY	PRESSURE (Inches, HG)		VISIBILITY (Miles)	WIND SPEED (MPH)	SPEED	DIRECTION
							STATION	SEA LEVEL				
01			56	49	53	78	30.03	30.14	8.96	7	4	16
02			56	49	53	80	30.02	30.13	8.53	6	3	17
03			56	49	52	80	30.01	30.12	8.74	6	4	15
04			55	48	52	79	30.01	30.12	9.17	7	3	15
05			55	48	52	80	30.01	30.12	9.21	7	4	15
06			55	48	51	79	30.02	30.13	8.92	8	3	14
07			54	48	51	81	30.04	30.15	8.71	7	3	15
08			56	49	52	80	30.05	30.16	8.27	7	4	14
09			59	49	54	72	30.06	30.18	8.60	11	4	13
10			63	49	56	63	30.08	30.19	8.83	12	4	12
11			65	49	57	58	30.07	30.19	9.04	12	4	13
12			67	48	57	54	30.06	30.17	9.21	12	3	15
13			69	48	58	51	30.03	30.15	9.29	13	4	13
14			70	48	58	50	30.01	30.12	9.68	12	3	14
15			70	48	59	48	29.99	30.10	9.68	13	3	15
16			70	47	58	48	29.99	30.09	9.54	12	4	14
17			69	47	58	49	29.98	30.09	9.68	13	4	13
18			66	47	57	54	29.99	30.10	9.39	12	4	13
19			63	48	56	61	30.00	30.11	9.54	10	4	14
20			61	48	55	66	30.02	30.13	9.46	10	4	14
21			60	49	54	70	30.03	30.14	9.32	8	4	14
22			58	49	54	73	30.03	30.14	9.21	8	4	14
23			57	49	53	75	30.03	30.14	9.14	7	4	15
24			57	49	53	77	30.03	30.14	9.00	7	4	15

HOUSTON, TX FEBRUARY Temperatures



Long-Term (1970-2009) Mean: 55.6
 1971-2000 Normal: 55.4

HOUSTON, TX FEBRUARY Precipitation



Long-Term (1970-2009) Mean Monthly Total: 2.87

1971-2000 Normal: 2.98



**FEBRUARY 2009
HOUSTON, TX**

**LOCAL CLIMATOLOGICAL DATA
NOAA, National Climatic Data Center**

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