

QUALITY CONTROLLED LOCAL CLIMATOLOGICAL DATA

(final)

NOAA, National Climatic Data Center

Month: 09/2011

Station Location: SOUTHERN ILLINOIS AIRPORT (93810)

CARBONDALE/MURPHYBORO, IL

Lat. 37.779 Lon. -89.249

Elevation(Ground): 406 ft. above sea level

Date	Temperature (Fahrenheit)					Degree Days Base 65 Degrees			Sun		Significant Weather	Snow/Ice on Ground(In) Precipitation (In)				Pressure(inches of Hg)		Wind: Speed=mph Dir=tens of degrees							
	Max.	Min.	Avg.	Dep From Normal	Avg. Dew pt.	Avg Wet Bulb	Heating	Cooling	Sunrise LST	Sunset LST		1200 UTC	1800 UTC	2400 LST	2400 LST	Avg. Station	Avg. Sea Level	Resultant Speed	Res Dir	Avg. Speed	max		max		
												Depth	Water Equiv	Snow Fall	Water Equiv						5-second	2-minute			
												Speed	Dir	Speed	Dir						Speed	Dir			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
01	97	68	83	M	66	71	0	18	-	-	BR	M	M	M	0.00	29.57	30.00	4.9	20	4.7	20	220	14	200	01
02	98	67	83	M	67	72	0	18	-	-	BR HZ	M	M	M	0.00	29.52	29.96	1.6	19	2.6	15	240	10	250	02
03	98*	70	84*	M	69	73	0	19	-	-	BR HZ	M	M	M	T	29.43	29.87	0.5	09	1.4	17	340	15	110	03
04	79	67	73	M	62	66	0	8	-	-		M	M	M	T	29.49	29.92	8.4	35	8.8	25	340	20	360	04
05	75	57	66	M	50	57	0	1	-	-		M	M	M	0.00	29.54	29.97	11.8	02	12.1	33	030	25	030	05
06	75	50	63	M	45	53	2	0	-	-		M	M	M	0.00	29.59	30.03	10.8	36	11.0	30	350	22	350	06
07	78	51	65	M	46	54	0	0	-	-		M	M	M	0.00	29.64	30.08	8.9	34	9.2	36	320	22	340	07
08	80	51	66	M	49	56	0	1	-	-		M	M	M	0.00	29.57	30.02	6.7	34	7.8	28	020	20	020	08
09	69	60	65	M	57	60	0	0	-	-	RA DZ BR	M	M	M	T	29.49	29.93	2.6	28	3.2	15	310	10	290	09
10	76	60	68	M	61	63	0	3	-	-	RA FG BR VCTS	M	M	M	0.02	29.54	29.99	1.7	25	2.3	14	240	12	230	10
11	83	59	71	M	60	63	0	6	-	-	FG+ FG BR	M	M	M	0.01s	29.60	30.04	0.9	34	1.2	15	010	8	300	11
12	87	54	71	M	59	64	0	6	-	-	FG BR HZ	M	M	M	0.00	29.59	30.04	2.8	19	3.3	16	250	13	210	12
13	95	63	79	M	59	66	0	14	-	-		M	M	M	0.00	29.49	29.93	7.5	21	7.8	25	240	20	230	13
14	71	56	64	M	58	60	1	0	-	-	TSRA RA BR VCTS	M	M	M	0.85	29.57	29.99	7.8	01	9.3	32	360	22	010	14
15	66	47	57	M	42	49	8	0	-	-		M	M	M	0.00	29.81	30.25	9.3	02	10.1	25	060	21	050	15
16	70	52	61	M	44	52	4	0	-	-		M	M	M	0.00	29.78	30.24	3.5	07	3.9	14	030	10	030	16
17	70	56	63	M	52	56	2	0	-	-	RA	M	M	M	0.01	29.73	30.19	0.7	08	1.2	10	120	7	090	17
18	75	58	67	M	63	64	0	2	-	-	TSRA RA BR VCTS	M	M	M	0.90	29.60	30.07	4.4	15	5.9	24	160	17	160	18
19	73	57	65	M	62	64	0	0	-	-	DZ FG+ FG BR	M	M	M	T	29.55	30.00	2.6	28	4.3	17	330	13	320	19
20	78	54	66	M	61	63	0	1	-	-	FG+ FG BR	M	M	M	0.01s	29.57	30.01	0.2	11	1.3	10	170	7	170	20
21	81	56	69	M	58	62	0	4	-	-	FG+ BR	M	M	M	0.01s	29.60	30.04	2.3	26	3.0	16	310	13	240	21
22	65	51	58	M	54	56	7	0	-	-	RA FG+ BR	M	M	M	0.13	29.68	30.13	2.7	34	3.2	13	330	10	330	22
23	69	47*	58	M	52	55	7	0	-	-	RA FG+ BR	M	M	M	0.13	29.60	30.07	2.0	20	2.3	21	220	16	210	23
24	65	54	60	M	55	57	5	0	-	-	TSRA RA BR	M	M	M	0.72	29.47	29.94	0.9	11	2.4	14	220	12	210	24
25	58	52	55*	M	54	55	10	0	-	-	RA BR VCTS	M	M	M	3.27	29.38	29.84	1.9	04	6.0	20	130	15	350	25
26	71	48	60	M	49	53	5	0	-	-	BR	M	M	M	0.01s	29.39	29.84	5.7	24	6.6	25	240	20	240	26
27	74	50	62	M	49	55	3	0	-	-	RA	M	M	M	T	29.41	29.84	5.5	26	7.0	22	240	16	260	27
28	76	49	63	M	55	59	2	0	-	-		M	M	M	T	29.40	29.84	2.6	28	3.6	17	330	12	340	28
29	86	55	71	M	51	59	0	6	-	-		M	M	M	0.01s	29.44	29.87	5.0	30	6.3	31	310	21	320	29
30	71	51	61	M	41	51	4	0	-	-		M	M	M	0.00	29.62	30.04	9.9	33	10.5	32	320	24	350	30

77.0	55.7	66.4		55.0	59.6	2.0	3.6	<-----Monthly Averages Totals----->				M	M	6.08s	29.55	30.00	2.0	33	5.4	<Monthly Average					
M	M	M	<-----Departure From Normal----->											M											

Degree Days	Monthly	Season to Date	Greatest 24-hr Precipitation: 3.27 Date: 25													Sea Level	Pressure	Time (LST)					
	Total	Departure	Total	Departure	Greatest 24-hr Snowfall: M Date: M													Maximum	30.32	16	0823		
	Heating: 60	M	M	M	Greatest Snow Depth: M Date: M													Minimum	29.74	25	1852		
Cooling: 107	M	M	M	Number of Days with ----->													Max Temp >=90: 4	Min Temp <=32: 0			Precipitation >=.01 inch: 13		
																	Max Temp <=32: 0	Min Temp <=0 : 0			Precipitation >=.10 inch: M		
																	Thunderstorms : 3	Heavy Fog : 6			Snowfall >=1.0 inch : M		

* EXTREME FOR THE MONTH - LAST OCCURRENCE IF MORE THAN ONE.

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CARBONDALE/MURPHYBORO, IL

Lat. 37.779 Lon. -89.249

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Date	Temperature (Fahrenheit)					Degree Days Base 65 Degrees			Sun		Significant Weather	Snow/Ice on Ground(In) Precipitation (In)				Pressure(inches of Hg)		Wind: Speed=mph Dir=tens of degrees							
	Max.	Min.	Avg.	Dep From Normal	Avg. Dew pt.	Avg Wet Bulb	Heating	Cooling	Sunrise LST	Sunset LST		1200 UTC	1800 UTC	2400 LST	2400 LST	Avg. Station	Avg. Sea Level	Resultant Speed	Res Dir	Avg. Speed	max 5-second		max 2-minute		
	1	2	3	4	5	6	7	8	9	10		11	13	14	15	16	17	18	19	20	21	22	23	24	25
01	65	42	54	M	40	47	11	0	-	-		0	M	0.0	0.00	29.78	30.23	5.5	36	5.6	24	020	16	350	01
02	69	37	53	M	40	46	12	0	-	-		0	M	0.0	0.00	29.78	30.24	2.2	35	2.8	15	020	12	020	02
03	75	39	57	M	42	49	8	0	-	-		0	M	0.0	0.00	29.78	30.23	1.9	31	2.3	13	270	9	280	03
04	81	44	63	M	47	M	2	0	-	-		0	M	0.0	0.00	29.80	M	0.3	12	0.4	13	150	8	210	04
05	81	46	64	M	51	56	1	0	-	-	BR	0	M	0.0	0.00	29.76	30.22	1.0	15	1.2	14	150	9	170	05
06	82	50	66	M	54	58	0	1	-	-	BR	0	M	0.0	0.00	29.75	30.20	3.1	16	3.4	18	170	13	150	06
07	82	53	68	M	55	59	0	3	-	-	BR	0	M	0.0	0.00	29.81	30.26	3.8	17	4.2	20	170	15	170	07
08	80	53	67	M	55	59	0	2	-	-	BR	0	M	0.0	0.00	29.83	30.28	4.8	16	5.5	20	190	16	180	08
09	79	49	64	M	52	57	1	0	-	-	BR	0	M	0.0	0.00	29.78	30.23	2.6	13	3.0	18	140	14	110	09
10	79	49	64	M	55	59	1	0	-	-	BR	0	M	0.0	0.00	29.64	30.10	2.1	16	2.8	14	200	12	180	10
11	82	57	70	M	58	61	0	5	-	-	BR	0	M	0.0	0.00	29.48	29.95	0.3	12	0.3	10	090	9	100	11
12	75	56	66	M	60	62	0	1	-	-	TS TSRA RA BR	0	M	0.0	0.24	29.30	29.77	3.1	21	4.6	17	290	13	320	12
13	73	55	64	M	52	57	1	0	-	-	RA BR	0	M	0.0	0.06	29.23	29.66	7.0	28	8.1	28	310	18	310	13
14	73	50	62	M	39	50	3	0	-	-		0	M	0.0	0.00	29.42	29.84	8.5	28	8.9	17s	290	12s	290	14
15	71	43	57	M	38	48	8	0	-	-		0	M	0.0	0.00	29.59	30.03	4.1	27	6.0	21	280	16	270	15
16	85*	56	71*	M	45	56	0	6	-	-		0	M	0.0	0.00	29.47	29.92	8.9	22	13.4	31	230	23	220	16
17	67	47	57	M	39	49	8	0	-	-		0	M	0.0	0.00	29.47	29.94	3.7	03	4.4	20	010	15	350	17
18	51	45	48	M	43	45	17	0	-	-	RA BR VCTS	0	M	0.0	0.67	29.36	29.83	8.5	35	9.0	23	350	17	350	18
19	48	44	46*	M	40	43	19	0	-	-	RA	0	M	0.0	0.18	29.28	29.73	12.5	31	12.7	32	320	23	310	19
20	57	38	48	M	34	41	17	0	-	-		0	M	0.0	T	29.47	29.90	8.9	29	9.4	30	310	22	280	20
21	62	36	49	M	34	41	16	0	-	-		0	M	0.0	0.00	29.69	30.13	3.8	29	4.4	21	340	14	310	21
22	71	34	53	M	41	46	12	0	-	-		0	M	0.0	0.00	29.64	30.09	2.9	19	3.0	16	190	14	180	22
23	71	45	58	M	47	52	7	0	-	-	RA	0	M	M	T	29.59	30.04	5.4	19	5.6	21	200	15	210	23
24	75	45	60	M	45	52	5	0	-	-		0	M	0.0	0.00	29.70	30.13	2.6	27	6.1	21	330	15	320	24
25	79	46	63	M	46	55	2	0	-	-		0	M	0.0	0.00	29.54	30.02	13.8	19	14.4	38	210	30	210	25
26	70	50	60	M	50	54	5	0	-	-	TS RA BR	0	M	0.0	0.64	29.46	29.91	3.8	27	9.2	25	210	20	210	26
27	54	39	47	M	41	45	18	0	-	-	BR	0	M	0.0	0.02	29.62	30.05	7.5	35	7.9	23	350	18	350	27
28	58	36	47	M	37	42	18	0	-	-		0	M	0.0	0.00	29.70	30.15	1.8	02	3.4	16	020	12	040	28
29	61	32*	47	M	31	40	18	0	-	-		0	M	0.0	0.00	29.70	30.15	2.3	30	2.9	20	340	15	320	29
30	63	37	50	M	33	43	15	0	-	-		0	M	0.0	T	29.67	30.12	10.6	20	11.0	28	190	23	190	30
31	64	36	50	M	32	41	15	0	-	-		0	M	0.0	0.00	29.68	30.13	3.6	28	4.9	23	310	16	300	31

70.4 44.8 57.6 44.4 50.4 7.7 0.6 <-----Monthly Averages | Totals-----> M M 1.85s 29.60 30.05 2.0 26 5.8 <Monthly Average

M M M <-----Departure From Normal-----> M

Degree Days	Monthly	Season to Date	Greatest 24-hr Precipitation: 0.67 Date: 18		Sea Level Pressure Date Time (LST)	
			Greatest 24-hr Snowfall: M Date: M		Maximum 30.35 08 0856	
			Greatest Snow Depth: M Date: M		Minimum 29.60 13 0429	
Total Departure	Total	Departure	Number of Days with ----->		Max Temp >=90: 0	Precipitation >=.01 inch: 10s
Heating: 240	M	M			Min Temp <=32: 1	Precipitation >=.10 inch: 0
Cooling: 18	M	M			Min Temp <=0 : 0	Snowfall >=1.0 inch : M
					Thunderstorms : 3	
					Heavy Fog : 0	

* EXTREME FOR THE MONTH - LAST OCCURRENCE IF MORE THAN ONE.

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Date	Temperature (Fahrenheit)					Degree Days Base 65 Degrees			Sun		Significant Weather	Snow/Ice on Ground (In) / Precipitation (In)				Pressure (inches of Hg)		Wind: Speed=mph / Dir=tens of degrees							
	Max.	Min.	Avg.	Dep From Normal	Avg. Dew pt.	Avg. Wet Bulb	Heating	Cooling	Sunrise LST	Sunset LST		1200 UTC	1800 UTC	2400 LST	2400 LST	Avg. Station	Avg. Sea Level	Resultant Speed	Res Dir	Avg. Speed	max 5-second		max 2-minute		
	1	2	3	4	5	6	7	8	9	10		11	13	14	15	16	17	18	19	20	21	22	23	24	25
01	70	35	53	M	34	45	12	0	-	-		0	M	0.0	0.00	29.72	30.17	8.6	19	8.9	26	200	22	210	01
02	70	43	57	M	40	49	8	0	-	-		0	M	0.0	0.00	29.61	30.09	10.8	18	11.5	33	200	25	200	02
03	59	44	52	M	44	47	13	0	-	-	RA BR	0	M	0.0	0.39	29.44	29.88	4.7	24	10.5	28	360	22	350	03
04	51	34	43	M	41	44	22	0	-	-	FG+ FG BR	0	M	0.0	0.00	29.77	30.20	5.2	36	4.7	22	350	17	350	04
05	62	32	47	M	40	43	18	0	-	-	FG+ BR	0	M	0.0	0.00	29.70	30.16	4.1	15	4.6	18	130	14	140	05
06	61	51	56	M	41	48	9	0	-	-		0	M	0.0	0.00	29.72	30.17	13.0	18	13.2	29	190	23	180	06
07	70	57	64	M	52	57	1	0	-	-		0	M	0.0	0.00	29.70	30.16	7.5	18	8.2	26	190	20	200	07
08	72	59	66	M	55	59	0	1	-	-	RA BR	0	M	0.0	1.25	29.49	29.98	9.4	18	11.7	29	190	23	200	08
09	64	35	50	M	41	46	15	0	-	-	RA BR	0	M	0.0	0.32	29.60	30.02	7.9	26	11.0	37	240	26	250	09
10	49	29	39	M	24	35	26	0	-	-		0	M	0.0	0.00	29.73	30.17	7.9	29	8.2	32	300	23	300	10
11	59	25*	42	M	30	38	23	0	-	-		0	M	0.0	0.00	29.55	30.04	10.9	20	11.1	32	210	25	200	11
12	61	45	53	M	40	47	12	0	-	-		0	M	0.0	0.00	29.44	29.92	20.0	20	20.1	47	210	36	200	12
13	71	60	66*	M	54	59	0	1	-	-		0	M	0.0	0.00	29.25	29.71	26.2	20	26.5	56	200	44	200	13
14	73*	54	64	M	59	62	1	0	-	-	RA VCTS	0	M	0.0	0.45	29.28	29.71	17.6	20	18.4	46	200	35	200	14
15	59	51	55	M	53	55	10	0	-	-	RA BR	0	M	0.0	0.35	29.37	29.82	5.4	17	5.8	18	170	15	160	15
16	57	39	48	M	31	40	17	0	-	-	RA BR	0	M	0.0	0.04	29.65	30.07	10.7	35	11.0	31	360	24	360	16
17	47	29	38	M	21	32	27	0	-	-		0	M	0.0	0.00	29.88	30.32	3.4	32	5.5	22	330	15	330	17
18	53	31	42	M	22	M	23	0	-	-		0	M	0.0	0.00	M	M	12.4	18	12.6	35	200	29	200	18
19	64	48	56	M	43	M	9	0	-	-	RA	0	M	0.0	0.01	29.54	M	16.1	19	16.4	41	200	30	200	19
20	60	42	51	M	45	47	14	0	-	-	RA BR	0	M	0.0	0.27	29.70	30.15	2.0	30	6.6	25	200	21	190	20
21	50	44	47	M	46	47	18	0	-	-	RA FG+ FG BR	0	M	0.0	0.25	29.67	30.14	3.1	35	3.4	21	270	17	280	21
22	56	46	51	M	47	48	14	0	-	-	RA BR	0	M	0.0	1.05	29.46	29.91	4.4	32	8.0	26	240	20	240	22
23	47	44	46	M	41	43	19	0	-	-	BR	0	M	0.0	0.00	29.83	30.26	3.9	31	5.8	22	320	16	330	23
24	50	43	47	M	41	44	18	0	-	-	BR HZ	0	M	0.0	0.00	29.84	30.31	9.8	19	9.9	21	180	17	190	24
25	62	43	53	M	43	48	12	0	-	-	BR	0	M	0.0	0.00	29.65	30.12	12.6	19	12.8	36	200	29	210	25
26	64	45	55	M	50	53	10	0	-	-	RA BR	0	M	0.0	1.11	29.48	29.94	7.5	19	10.5	30	180	23	320	26
27	45	38	42	M	36	39	23	0	-	-	RA BR	0	M	0.0	0.40	29.59	30.04	12.1	33	12.3	26	340	21	330	27
28	39	37	38	M	34	37	27	0	-	-	RA SN BR	0	M	0.0s	0.76	29.41	29.90	15.4	35	15.9	40	350	30	350	28
29	41	32	37	M	32	35	28	0	-	-	RA BR UP	0	M	0.0s	0.53	29.50	29.93	13.4	33	13.7	33	330	24	340	29
30	43	26	35*	M	24	30	30	0	-	-		0	M	0.0	0.00	29.73	30.16	1.9	29	3.5	13	320	10	320	30

57.6	41.4	49.5		40.1	45.6	15.3	0.1	<-----Monthly Averages Totals----->				M	M	7.34s	29.59	30.05	4.8	21	10.7	<Monthly Average					
M	M	M	<-----Departure From Normal----->											M											

Degree Days	Monthly	Season to Date	Greatest 24-hr Precipitation: 1.72s Date: 08-09											Sea Level		Pressure Date		Time (LST)						
	Total	Departure	Total	Departure	Greatest 24-hr Snowfall: M Date: M											Maximum	30.40	17	1101					
Heating:	459	M	M	M	Greatest Snow Depth: M Date: M											Minimum	29.61	14	1606					
Cooling:	2	M	M	M	Number of Days with ----->											Max Temp >=90:	0		Min Temp <=32:	7		Precipitation >=.01 inch:	14	
																Max Temp <=32:	0		Min Temp <=0 :	0		Precipitation >=.10 inch:		
																Thunderstorms :	0		Heavy Fog :	3		Snowfall >=1.0 inch :	M	

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Elevation(Ground): 406 ft. above sea level

Date	Temperature (Fahrenheit)					Degree Days Base 65 Degrees			Sun		Significant Weather	Snow/Ice on Ground(In) Precipitation (In)				Pressure(inches of Hg)		Wind: Speed=mph Dir=tens of degrees							
	Max.	Min.	Avg.	Dep From Normal	Avg. Dew pt.	Avg Wet Bulb	Heating	Cooling	Sunrise LST	Sunset LST		1200 UTC	1800 UTC	2400 LST	2400 LST	Avg. Station	Avg. Sea Level	Resultant Speed	Res Dir	Avg. Speed	max		max		
												Depth	Water Equiv	Snow Fall	Water Equiv						5-second	2-minute			
																							Speed	Dir	Speed
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
01	51	24	38	M	28	34	27	0	-	-		0	M	0.0	0.00	29.84	30.30	3.8	19	4.4	13	220	10	200	01
02	51	32	42	M	35	39	23	0	-	-		0	M	0.0	0.00	29.94	30.39	1.6	36	3.3	16	320	12	320	02
03	60	42	51	M	37	45	14	0	-	-		0	M	0.0	T	29.74	30.22	11.6	17	11.8	37	170	28	190	03
04	60	39	50	M	46	47	15	0	-	-	RA BR	0	M	0.0	1.36	29.69	30.14	3.4	19	12.0	43	180	31	180	04
05	39	33	36	M	33	34	29	0	-	-	RA SN BR UP	0	M	0.0s	0.85	29.74	30.20	12.5	35	12.8	29	340	22	350	05
06	37	34	36	M	34	35	29	0	-	-	DZ SN BR	0	M	M	0.01	29.71	30.18	8.5	33	8.6	20	330	15	320	06
07	37	27	32	M	29	31	33	0	-	-	SN BR	0	M	M	T	29.73	30.18	4.9	31	7.1	18	340	14	330	07
08	44	25	35	M	26	31	30	0	-	-		0	M	0.0	0.00	29.80	30.26	5.1	20	5.3	17	230	14	230	08
09	39	26	33	M	28	31	32	0	-	-	HZ	0	M	0.0	0.00	29.92	30.36	3.1	33	4.8	18	340	15	350	09
10	37	21	29*	M	19	25	36	0	-	-		0	M	0.0	0.00	30.09	30.56	0.9	35	1.2	15	360	7	250	10
11	45	21*	33	M	23	28	32	0	-	-		0	M	0.0	0.00	30.01	30.50	1.6	17	1.6	15	200	10	190	11
12	52	24	38	M	29	34	27	0	-	-		0	M	0.0	0.00	29.94	30.41	1.1	18	1.5	13	210	10	210	12
13	49	40	45	M	42	43	20	0	-	-	RA BR	0	M	M	0.39	29.91	30.39	2.9	17	3.2	13	190	10	180	13
14	61	48	55*	M	51	52	10	0	-	-	RA DZ BR	0	M	M	0.94	29.59	30.08	15.4	20	16.1	38	200	29	200	14
15	62*	36	49	M	45	48	16	0	-	-	RA	0	M	M	0.12	29.67	30.09	6.9	28	13.5	41	190	33	190	15
16	40	26	33	M	29	33	32	0	-	-	BR	M	M	0.0	0.00	29.91	30.37	5.1	35	5.5	15	350	12	350	16
17	47	23	35	M	27	32	30	0	-	-	BR	0	M	0.0	0.00	29.89	30.36	3.8	23	4.4	20	250	15	220	17
18	54	27	41	M	33	38	24	0	-	-		0	M	0.0	0.00	29.77	30.26	7.1	20	7.2	26	220	21	210	18
19	50	42	46	M	39	43	19	0	-	-	RA	0	M	0.0	0.04	29.65	30.11	7.5	20	8.4	30	210	23	200	19
20	53	39	46	M	46	47	19	0	-	-	RA DZ FG+ FG BR	0	M	M	0.17	29.42	29.90	1.4	11	2.5	16	110	14	130	20
21	54	44	49	M	43	46	16	0	-	-	FG+ FG BR	0	M	M	0.01s	29.45	29.88	5.2	25	5.8	21	240	15	260	21
22	45	38	42	M	40	41	23	0	-	-	RA	0	M	M	0.05	29.67	30.09	3.6	33	4.7	23	330	17	330	22
23	39	27	33	M	31	33	32	0	-	-	BR	0	M	0.0	0.00	29.92	30.36	5.1	31	7.3	21	330	15	330	23
24	45	23	34	M	27	31	31	0	-	-		0	M	0.0	0.00	29.94	30.40	5.7	20	6.0	17	190	15	190	24
25	57	26	42	M	27	34	23	0	-	-		0	M	0.0	0.00	29.88	30.35	3.4	27	4.7	25	320	18	320	25
26	40	23	32	M	29	32	33	0	-	-	RA BR	0	M	M	0.16	29.69	30.20	1.1	12	2.1	20	170	15	170	26
27	47	32	40	M	32	36	25	0	-	-	RA SN BR	0	M	M	0.39	29.44	29.90	7.3	31	8.3	33	300	23	290	27
28	47	28	38	M	30	34	27	0	-	-		0	M	0.0	0.00	29.60	30.07	3.9	22	5.3	33s	150	13	210	28
29	56	35	46	M	36	42	19	0	-	-		0	M	M	Ts	29.37	29.85	12.5	20	12.7	26	210	21	210	29
30	60	46	53	M	39	46	12	0	-	-		0	M	M	T	29.31	29.75	12.1	24	15.1	36	200	30	210	30
31	58	33	46	M	35	42	19	0	-	-		0	M	0.0	0.00	29.47	29.95	9.2	18	10.3	36	210	26	200	31

48.9 31.7 40.3 33.8 37.6 24.4 0.0 <-----Monthly Averages | Totals-----> M M 4.49s 29.73 30.19 2.8 23 7.0 <Monthly Average

M M M <-----Departure From Normal-----> M

Degree Days	Monthly	Season to Date	Greatest 24-hr Precipitation: 1.71s Date: 04-05	Greatest 24-hr Snowfall: M Date: M	Greatest Snow Depth: M Date: M	Sea Level Pressure	Date	Time (LST)
	Total	Departure				Total	Departure	Maximum
Heating:	757	M	M	M	Max Temp >=90:	Min Temp <=32: 17		
Cooling:	0	M	M	M	Max Temp <=32:	Min Temp <=0 : 0		
					Thunderstorms :	Heavy Fog : 2		
						Precipitation >=.01 inch: 12		
						Precipitation >=.10 inch: Snowfall >=1.0 inch : M		

* EXTREME FOR THE MONTH - LAST OCCURRENCE IF MORE THAN ONE.

Data Version: VER2

QUALITY CONTROLLED LOCAL CLIMATOLOGICAL DATA

(final)

NOAA, National Climatic Data Center

Month: 01/2012

Station Location: SOUTHERN ILLINOIS AIRPORT (93810)

CARBONDALE/MURPHYBORO, IL

Lat. 37.779 Lon. -89.249

Elevation(Ground): 406 ft. above sea level

Date	Temperature (Fahrenheit)					Degree Days Base 65 Degrees			Sun		Significant Weather	Snow/Ice on Ground(In) Precipitation (In)				Pressure(inches of Hg)		Wind: Speed=mph Dir=tens of degrees							
	Max.	Min.	Avg.	Dep From Normal	Avg. Dew pt.	Avg. Wet Bulb	Heating	Cooling	Sunrise LST	Sunset LST		1200 UTC	1800 UTC	2400 LST	2400 LST	Avg. Station	Avg. Sea Level	Resultant Speed	Res Dir	Avg. Speed	max 5-second		max 2-minute		
	1	2	3	4	5	6	7	8	9	10		11	13	14	15	16	17	18	19	20	21	22	23	24	25
01	57	36	47	M	26	38	18	0	-	-		0	M	0.0	0.00	29.74	30.15	15.0	29	17.2	41	280	30	310	01
02	36	22	29	M	13	25	36	0	-	-		0	M	0.0	0.00	29.94	30.37	14.4	31	15.3	38	330	26	320	02
03	36	17	27	M	12	23	38	0	-	-		0	M	0.0	0.00	29.93	30.42	5.4	21	7.8	22	200	17	200	03
04	51	30	41	M	23	32	24	0	-	-		0	M	0.0	0.00	29.68	30.16	7.5	22	8.6	22	200	18	200	04
05	58	25	42	M	30	37	23	0	-	-		0	M	0.0	0.00	29.60	30.08	9.3	20	9.6	23	210	17	190	05
06	62	36	49	M	37	44	16	0	-	-		0	M	0.0	0.00	29.44	29.90	11.5	20	11.7	24	210	21	200	06
07	54	31	43	M	29	38	22	0	-	-		0	M	0.0	0.00	29.68	30.10	4.3	35	5.2	14	320	12	330	07
08	47	25	36	M	31	36	29	0	-	-	RA	0	M	M	0.02	29.79	30.25	3.4	03	3.8	15	020	12	040	08
09	51	27	39	M	29	35	26	0	-	-		0	M	0.0	0.00	29.72	30.19	1.9	34	2.5	16	340	9	340	09
10	56	24	40	M	30	36	25	0	-	-	RA BR	0	M	0.0	0.34	29.49	29.99	2.0	09	3.0	13	110	9	110	10
11	46	34	40	M	40	41	25	0	-	-	RA FG+ FG BR	0	M	0.0	0.64	29.13	29.61	3.0	30	5.2	16	290	12	310	11
12	39	18	29	M	19	24	36	0	-	-	SN FG BR	0	M	T	T	29.36	29.79	13.4	30	13.9	35	300	23	310	12
13	28	16	22*	M	14	20	43	0	-	-	SN	0	M	M	T	29.65	30.09	6.2	28	6.4	25	280	20	290	13
14	41	16*	29	M	19	25	36	0	-	-		0	M	0.0	0.00	29.70	30.15	2.2	30	4.9	24	330	18	330	14
15	43	20	32	M	24	30	33	0	-	-	BR	0	M	0.0	0.00	29.83	30.31	7.8	17	8.1	24	190	21	180	15
16	65*	42	54	M	46	51	11	0	-	-	RA VCTS	0	M	0.0	T	29.44	29.94	23.5	20	23.7	48	210	35	210	16
17	63	26	45	M	35	40	20	0	-	-	TSRA RA	0	M	M	0.37	29.61	30.02	10.7	28	18.6	41	280	33	210	17
18	34	19	27	M	20	25	38	0	-	-		0	M	0.0	0.00	29.75	30.23	2.4	23	6.6	20	350	15	340	18
19	44	25	35	M	25	30	30	0	-	-		0	M	0.0	0.00	29.58	30.05	0.5	27	8.5	20	350	15	360	19
20	36	23	30	M	24	28	35	0	-	-	RA BR UP	0	M	0.0	0.03	29.52	29.98	5.9	04	8.2	24	350	21	340	20
21	31	24	28	M	24	26	37	0	-	-	BR	0	M	0.0	0.00	29.66	30.13	5.9	02	9.8	26	330	21	360	21
22	63	31	47	M	42	43	18	0	-	-	TSRA RA BR VCTS	0	M	0.0	0.56	29.31	29.81	10.8	16	11.5	55	220	39	230	22
23	57	30	44	M	36	40	21	0	-	-		0	M	0.0	0.00	29.44	29.85	8.6	24	10.4	38	260	29	250	23
24	47	26	37	M	30	34	28	0	-	-		0	M	0.0	0.00	29.83	30.24	1.9	03	3.6	10	080	8	050	24
25	38	32	35	M	32	34	30	0	-	-	RA BR UP	0	M	0.0	0.27	29.67	30.16	5.0	07	5.5	15	060	12	060	25
26	40	37	39	M	36	38	26	0	-	-	RA BR	0	M	0.0	0.19	29.33	29.82	5.0	31	5.9	21	320	14	320	26
27	44	34	39	M	34	37	26	0	-	-	RA BR	0	M	M	0.02	29.55	29.99	1.6	26	3.6	15	320	13	330	27
28	44	28	36	M	25	32	29	0	-	-	RA BR	0	M	M	0.04	29.83	30.26	6.7	29	8.9	36	300	25	310	28
29	51	28	40	M	24	34	25	0	-	-		0	M	0.0	0.00	29.80	30.26	4.7	24	8.6	25	270	18	250	29
30	60	31	46	M	33	41	19	0	-	-		0	M	0.0	0.00	29.67	30.16	12.7	20	12.9	33	200	26	200	30
31	61	48	55*	M	44	49	10	0	-	-		0	M	M	T	29.60	30.06	17.3	20	17.3	32	200	26	200	31

47.8 27.8 37.8 28.6 34.4 26.9 0.0 <-----Monthly Averages | Totals-----> M M 2.48s 29.62 30.11 3.6 24 9.3 <Monthly Average

M M M <-----Departure From Normal-----> M

Degree Days	Monthly	Season to Date	Greatest 24-hr Precipitation: 0.97s Date: 10-11		Sea Level Pressure Date Time (LST)	
	Total	Departure	Total	Departure	Maximum 30.58 03 0917	Minimum 29.49 22 2321
Heating:	833	M	M	M	Number of Days with ----->	Precipitation >=.01 inch: 10 Precipitation >=.10 inch: Snowfall >=1.0 inch : M
Cooling:	0	M	M	M		

* EXTREME FOR THE MONTH - LAST OCCURRENCE IF MORE THAN ONE.

Data Version:
VER2

QUALITY CONTROLLED LOCAL CLIMATOLOGICAL DATA

(final)

NOAA, National Climatic Data Center

Month: 02/2012

Station Location: SOUTHERN ILLINOIS AIRPORT (93810)

CARBONDALE/MURPHYBORO, IL

Lat. 37.779 Lon. -89.249

Elevation(Ground): 406 ft. above sea level

Date	Temperature (Fahrenheit)					Degree Days Base 65 Degrees			Sun		Significant Weather	Snow/Ice on Ground(In) Precipitation (In)				Pressure(inches of Hg)		Wind: Speed=mph Dir=tens of degrees							
	Max.	Min.	Avg.	Dep From Normal	Avg. Dew pt.	Avg Wet Bulb	Heating	Cooling	Sunrise LST	Sunset LST		1200 UTC	1800 UTC	2400 LST	2400 LST	Avg. Station	Avg. Sea Level	Resultant Speed	Res Dir	Avg. Speed	max		max		
												Depth	Water Equiv	Snow Fall	Water Equiv						5-second	2-minute			
																							Speed	Dir	Speed
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
01	64	42	53	M	46	49	12	0	-	-	FG+ BR	0	M	0.0	0.00	29.65	30.09	2.6	31	4.7	16	220	14	220	01
02	62	31	47	M	37	43	18	0	-	-	BR	0	M	0.0	0.00	29.84	30.28	1.8	09	2.3	10	100	8	090	02
03	54	38	46	M	40	43	19	0	-	-	RA BR	0	M	0.0	0.25	29.78	30.25	4.5	09	4.8	17	080	14	080	03
04	55	47	51	M	48	49	14	0	-	-	RA BR	0	M	0.0	0.36	29.60	30.07	3.2	36	5.3	29	100	23	100	04
05	48	30	39	M	39	41	26	0	-	-	RA BR	0	M	0.0	0.02	29.78	30.22	4.8	35	5.2	15	350	13	350	05
06	50	27	39	M	32	35	26	0	-	-	FG+ FZFG BR	0	M	0.0	0.00	29.79	30.25	1.8	28	2.7	15	280	12	250	06
07	50	26	38	M	32	36	27	0	-	-	RA BR	0	M	0.0	0.02	29.81	30.26	1.7	32	2.2	17	350	14	340	07
08	37	33	35	M	30	33	30	0	-	-	RA SN BR	0	M	M	0.05	29.93	30.39	6.9	34	7.2	18	340	14	350	08
09	37	29	33	M	27	31	32	0	-	-		0	M	0.0	0.13s	29.84	30.32	3.6	22	4.0	12	260	8	190	09
10	38	26	32	M	29	32	33	0	-	-	RA SN PL BR UP	0	M	T	0.03	29.67	30.13	5.4	26	11.3	33	340	25	330	10
11	29	19	24*	M	10	20	41	0	-	-	SN	0	M	T	T	30.03	30.47	14.1	33	14.2	36	350	26	340	11
12	36	18*	27	M	9	21	38	0	-	-		0	M	0.0	0.00	29.99	30.47	5.2	31	6.2	20	330	15	320	12
13	37	21	29	M	22	27	36	0	-	-	SN BR	0	M	0.0s	0.11	29.62	30.14	7.7	18	7.8	23	190	20	190	13
14	43	32	38	M	31	34	27	0	-	-	SN BR	0	M	0.0s	T	29.54	30.00	5.2	21	6.6	14	210	12	220	14
15	47	35	41	M	40	42	24	0	-	-	RA FG BR	0	M	0.0	0.49	29.59	30.05	5.5	16	6.6	18	180	14	190	15
16	48	30	39	M	39	42	26	0	-	-	FG BR HZ	0	M	0.0	0.02	29.72	30.16	5.8	31	6.0	23	330	17	330	16
17	53	27	40	M	31	36	25	0	-	-	FG+ FZFG BR	0	M	0.0	0.00	29.72	30.18	2.6	18	2.7	16	210	13	210	17
18	46	31	39	M	32	37	26	0	-	-		0	M	0.0	0.00	29.65	30.12	5.9	01	6.1	18	020	13	010	18
19	45	28	37	M	26	32	28	0	-	-		0	M	0.0	0.00	29.66	30.11	7.5	01	8.0	22	360	16	340	19
20	51	23	37	M	25	34	28	0	-	-	BR HZ	0	M	0.0	0.00	29.64	30.13	6.0	15	6.9	25	170	18	160	20
21	56	37	47	M	35	41	18	0	-	-		0	M	M	0.03	29.43	29.88	11.7	22	12.7	43	180	32	180	21
22	61	35	48	M	37	44	17	0	-	-		0	M	0.0	0.00	29.13	29.61	5.9	20	7.3	25	260	21	250	22
23	70	40	55	M	45	50	10	0	-	-		0	M	M	T	28.96	29.40	4.5	20	10.4	35	200	24	310	23
24	53	34	44	M	26	36	21	0	-	-		0	M	M	T	29.54	29.92	12.2	29	12.6	37	290	26	270	24
25	43	31	37	M	19	31	28	0	-	-		0	M	0.0	0.00	29.83	30.26	4.4	30	7.7	29	310	21	320	25
26	60	30	45	M	25	37	20	0	-	-		0	M	0.0	0.00	29.75	30.21	11.2	18	12.4	37	190	28	210	26
27	57	37	47	M	29	40	18	0	-	-		0	M	0.0	0.00	29.93	30.37	3.9	35	8.0	21	350	16	350	27
28	66	31	49	M	37	44	16	0	-	-	VCTS	0	M	0.0	T	29.65	30.16	5.9	15	7.1	35	210	25	200	28
29	71*	51	61*	M	39	51	4	0	-	-	RA	0	M	0.0	0.49	29.33	29.78	14.7	24	16.2	41	280	30	250	29

50.6	31.7	41.2		31.6	37.6	23.7	0.0	<-----Monthly Averages Totals----->				M	M	2.00s	29.67	30.13	2.0	26	7.4	<Monthly Average								
M	M	M	<-----Departure From Normal----->											M														

Degree Days	Monthly	Season to Date	Greatest 24-hr Precipitation: 0.60s Date: 03-04												Sea Level Pressure Date (LST)							
	Total	Departure	Total	Departure	Greatest 24-hr Snowfall: M Date: M												Maximum 30.58 12 0834					
Heating:	688	M	M	M	Greatest Snow Depth: M Date: M												Minimum 29.22 23 1405					
Cooling:	0	M	M	M	Number of Days with ----->												Max Temp >=90: 0 Max Temp <=32: 1 Thunderstorms : 0 Min Temp <=32: 18 Min Temp <=0 : 0 Heavy Fog : 3 Precipitation >=.01 inch: 12 Precipitation >=.10 inch: : M Snowfall >=1.0 inch : M					

* EXTREME FOR THE MONTH - LAST OCCURRENCE IF MORE THAN ONE.

Data Version:
VER2

QUALITY CONTROLLED LOCAL CLIMATOLOGICAL DATA

(final)

NOAA, National Climatic Data Center

Month: 03/2012

Station Location: SOUTHERN ILLINOIS AIRPORT (93810)

CARBONDALE/MURPHYBORO, IL

Lat. 37.779 Lon. -89.249

Elevation(Ground): 406 ft. above sea level

Date	Temperature (Fahrenheit)					Degree Days Base 65 Degrees			Sun		Significant Weather	Snow/Ice on Ground(In) Precipitation (In)				Pressure(inches of Hg)		Wind: Speed=mph Dir=tens of degrees							
	Max.	Min.	Avg.	Dep From Normal	Avg. Dew pt.	Avg. Wet Bulb	Heating	Cooling	Sunrise LST	Sunset LST		1200 UTC	1800 UTC	2400 LST	2400 LST	Avg. Station	Avg. Sea Level	Resultant Speed	Res Dir	Avg. Speed	max 5-second		max 2-minute		
	1	2	3	4	5	6	7	8	9	10		11	13	14	15	16	17	18	19	20	21	22	23	24	25
01	66	37	52	M	31	44	13	0	-	-		0	M	0.0	0.00	29.34	29.82	4.4	19	6.9	26	170	22	170	01
02	74	35	55	M	45	50	10	0	-	-	TSRA	0	M	M	0.59	29.16	29.59	8.8	25	14.9	53	290	36	240	02
03	50	32	41	M	25	35	24	0	-	-		0	M	0.0	0.00	29.47	29.91	7.9	28	8.8	24	320	17	310	03
04	50	29	40	M	27	35	25	0	-	-		0	M	0.0	0.00	29.49	29.94	4.0	29	7.4	40	330	28	320	04
05	49	31	40*	M	24	33	25	0	-	-		0	M	0.0	0.00	29.91	30.35	1.8	34	7.9	44	330	32	330	05
06	69	39	54	M	30	44	11	0	-	-		0	M	0.0	0.00	29.72	30.19	19.2	19	19.5	44	200	33	210	06
07	69	57	63	M	43	53	2	0	-	-		0	M	0.0	0.00	29.64	30.10	20.3	19	20.5	43	180	35	200	07
08	68	34	51	M	40	44	14	0	-	-	TSRA RA BR	0	M	M	0.72	29.78	30.20	4.0	28	11.8	44	310	31	330	08
09	56	30	43	M	28	38	22	0	-	-		0	M	0.0	0.00	30.03	30.47	6.4	35	7.0	25	340	20	340	09
10	62	29*	46	M	29	39	19	0	-	-		0	M	0.0	0.00	29.93	30.41	2.4	13	3.1	15	130	12	130	10
11	64	36	50	M	42	47	15	0	-	-	RA	0	M	0.0	0.06	29.71	30.20	9.1	16	9.9	25	120	20	160	11
12	74	60	67	M	56	60	0	2	-	-	RA	0	M	0.0	0.01	29.52	29.98	18.2	20	18.4	41	190	31	200	12
13	77	50	64	M	54	59	1	0	-	-		0	M	0.0	0.00	29.64	30.08	5.9	19	6.2	20	190	15	210	13
14	81*	56	69	M	M	M	0	4	-	-		0	M	0.0	0.00	M	M	M	M	11.1	31	190	23	190	14
15	74	58	66	M	60	M	0	1	-	-	TS TSRA BR	0	M	0.0	0.41	M	M	6.7	21	8.3	30	280	21	280	15
16	72	51	62	M	58	M	3	0	-	-	RA	0	M	0.0	0.03	M	M	3.0	20	4.6	M	M	9s	230	16
17	78	54	66	M	60	M	0	1	-	-	RA FG BR VCTS	0	M	0.0	0.18	M	M	6.6	18	6.7	M	M	17	190	17
18	78	55	67	M	60	M	0	2	-	-		0	M	0.0	0.01s	M	M	8.9	19	9.5	32	200	25	200	18
19	79	63	71	M	57	M	0	6	-	-		0	M	0.0	0.00	29.51	M	11.6	16	11.8	35	170	24	180	19
20	80	64	72	M	55	62	0	7	-	-		0	M	0.0	0.00	29.51	29.95	11.0	16	11.6	38	190	32	180	20
21	80	66	73*	M	56	63	0	8	-	-		0	M	0.0	0.00	29.54	29.98	11.3	15	11.7	33	160	25	160	21
22	73	54	64	M	57	59	1	0	-	-	RA BR	0	M	0.0	0.67	29.54	30.00	3.9	17	4.7	21	140	15	140	22
23	66	49	58	M	53	55	7	0	-	-	TS TSRA FG+ FG BR	0	M	M	0.06	29.42	29.88	3.3	23	5.5	36	230	26	100	23
24	69	49	59	M	52	55	6	0	-	-	RA BR	0	M	M	0.19	29.44	29.88	2.9	29	4.8	18	360	13	030	24
25	70	52	61	M	55	57	4	0	-	-	BR	0	M	0.0	0.00	29.58	30.01	4.8	34	4.9	17	010	14	010	25
26	75	49	62	M	51	56	3	0	-	-	FG BR	0	M	0.0	0.00	29.68	30.12	4.2	08	4.8	16	050	13	030	26
27	76	48	62	M	49	55	3	0	-	-		0	M	0.0	0.00	29.61	30.07	7.0	17	9.0	24	200	18	210	27
28	79	59	69	M	59	63	0	4	-	-	RA BR	0	M	0.0	T	29.53	29.98	3.8	25	5.4	18	210	14	260	28
29	79	57	68	M	55	60	0	3	-	-	BR	0	M	0.0	0.00	29.47	29.92	3.3	08	4.6	15	030	13	020	29
30	78	56	67	M	59	62	0	2	-	-		0	M	0.0	T	29.34	29.79	7.4	21	7.7	26	180	21	200	30
31	77	53	65	M	56	59	0	0	-	-	BR HZ	0	M	0.0	0.00	29.39	29.85	2.1	06	3.4	17	120	9	050	31

70.7 48.1 59.4 47.5 M 6.7 1.3 <-----Monthly Averages | Totals-----> M M 2.94s 29.57 30.03 4.6 19 8.8 <Monthly Average

M M M <-----Departure From Normal-----> M

Degree Days	Monthly	Season to Date	Greatest 24-hr Precipitation: 0.72 Date: 08		Sea Level Pressure Date Time (LST)	
	Total	Departure	Total	Departure	Maximum 30.53 09 1031	Minimum 29.32 02 1350
Heating:	208	M	M	M	Number of Days with ----->	Precipitation >=.01 inch: 12s Precipitation >=.10 inch: Snowfall >=1.0 inch : M
Cooling:	40	M	M	M		
					Max Temp >=90: 0	Min Temp <=32: 5 Min Temp <=0 : 0 Heavy Fog : 1
					Max Temp <=32: 0	
					Thunderstorms : 6	

* EXTREME FOR THE MONTH - LAST OCCURRENCE IF MORE THAN ONE.

Data Version:
VER2

QUALITY CONTROLLED LOCAL CLIMATOLOGICAL DATA

(final)

NOAA, National Climatic Data Center

Month: 04/2012

Station Location: SOUTHERN ILLINOIS AIRPORT (93810)

CARBONDALE/MURPHYBORO, IL

Lat. 37.779 Lon. -89.249

Elevation(Ground): 406 ft. above sea level

Date	Temperature (Fahrenheit)					Degree Days Base 65 Degrees			Sun		Significant Weather	Snow/Ice on Ground (In) Precipitation (In)				Pressure (inches of Hg)		Wind: Speed=mph Dir=tens of degrees							
	Max.	Min.	Avg.	Dep From Normal	Avg. Dew pt.	Avg. Wet Bulb	Heating	Cooling	Sunrise LST	Sunset LST		1200 UTC	1800 UTC	2400 LST	2400 LST	Avg. Station	Avg. Sea Level	Resultant Speed	Res Dir	Avg. Speed	max 5-second		max 2-minute		
	1	2	3	4	5	6	7	8	9	10		11	13	14	15	16	17	18	19	20	21	22	23	24	25
01	85	58	72	M	61	65	0	7	-	-		0	M	0.0	0.00	29.25	29.70	8.7	21	8.8	23	220	18	220	01
02	86*	61	74*	M	62	66	0	9	-	-	BR	0	M	0.0	0.00	29.33	29.75	4.4	19	4.9	16	240	12	220	02
03	78	58	68	M	61	64	0	3	-	-	RA VCTS	0	M	0.0	0.09	29.41	29.84	4.7	20	5.5	21	180	17	180	03
04	74	57	66	M	61	63	0	1	-	-	RA FG BR HZ VCTS	0	M	0.0	0.61	29.29	29.74	1.9	36	3.8	28	310	17	310	04
05	62	49	56	M	50	54	9	0	-	-	BR	0	M	0.0	0.00	29.42	29.83	6.7	04	8.1	21	040	16	060	05
06	61	41	51	M	38	45	14	0	-	-		0	M	0.0	0.00	29.71	30.13	6.0	04	6.4	21	050	14	060	06
07	70	36	53	M	42	48	12	0	-	-	FG BR	0	M	0.0	0.00	29.77	30.21	1.3	23	2.1	12	290	8	290	07
08	67	43	55	M	41	49	10	0	-	-		0	M	0.0	0.00	29.80	30.26	4.6	36	6.2	22	360	16	050	08
09	71	39	55	M	38	48	10	0	-	-		0	M	0.0	0.00	29.65	30.11	4.2	32	5.5	26	350	22	330	09
10	60	38	49	M	33	43	16	0	-	-		0	M	0.0	0.00	29.69	30.14	7.0	33	7.3	25	300	18	320	10
11	56	35	46*	M	31	39	19	0	-	-		0	M	0.0	0.00	29.80	30.25	3.8	36	4.6	23	340	14	340	11
12	64	31*	48	M	35	42	17	0	-	-	BR	0	M	0.0	0.00	29.75	30.21	2.1	16	2.5	17	100	12	130	12
13	59	44	52	M	43	47	13	0	-	-	RA BR	0	M	0.0	0.22	29.65	30.12	5.6	12	6.9	24	110	18	120	13
14	79	51	65	M	55	60	0	0	-	-		0	M	0.0	0.00	29.48	29.95	9.3	20	11.4	36	210	26	210	14
15	80	60	70	M	59	63	0	5	-	-	RA BR	0	M	0.0	0.47	29.38	29.83	15.2	19	16.8	40	180	30	180	15
16	66	49	58	M	49	53	7	0	-	-	RA BR	0	M	0.0	0.29	29.65	30.06	7.2	24	8.4	31	270	25	250	16
17	66	44	55	M	48	51	10	0	-	-		0	M	0.0	0.00	29.83	30.27	1.8	08	2.0	M	M	10	090	17
18	73	40	57	M	45	51	8	0	-	-		0	M	0.0	0.00	29.67	30.15	0.5	15	1.0	13	140	9	100	18
19	75	44	60	M	46	53	5	0	-	-		0	M	0.0	0.00	29.47	29.95	4.8	17	5.4	22	150	17	160	19
20	66	47	57	M	47	50	8	0	-	-	RA BR	0	M	0.0	0.13	29.44	29.87	5.5	32	10.8	28	320	22	320	20
21	56	40	48	M	40	44	17	0	-	-	BR	0	M	0.0	0.00	29.54	29.99	6.6	36	7.0	21	360	16	340	21
22	59	38	49	M	39	45	16	0	-	-	RA BR	0	M	0.0	0.13	29.54	29.97	5.9	34	6.6	29	010	21	010	22
23	63	36	50	M	34	42	15	0	-	-		0	M	0.0	0.00	29.54	30.01	7.8	32	8.5	32	300	21	290	23
24	74	41	58	M	43	51	7	0	-	-		0	M	0.0	0.00	29.34	29.81	7.0	22	8.1	24	180	18	200	24
25	80	54	67	M	56	62	0	2	-	-		0	M	0.0	0.00	29.21	29.66	11.4	20	11.8	35	220	26	210	25
26	81	57	69	M	56	62	0	4	-	-		0	M	0.0	0.00	29.44	29.84	5.9	36	8.7	26	060	20	060	26
27	61	47	54	M	39	48	11	0	-	-	TSRA RA	0	M	M	0.04	29.59	30.03	8.8	09	9.8	26	110	20	120	27
28	81	52	67	M	59	63	0	2	-	-		0	M	0.0	0.00	29.47	29.92	5.7	18	7.7	25	220	20	200	28
29	81	59	70	M	62	64	0	5	-	-	FG BR	0	M	0.0	0.00	29.57	30.00	1.2	07	2.0	14	130	12	130	29
30	79	60	70	M	62	65	0	5	-	-	TSRA BR	0	M	0.0	0.55	29.53	29.97	5.5	22	6.8	25	270	21	240	30

70.4	47.0	58.7		47.8	53.3	7.5	1.4	<-----Monthly Averages Totals----->				M	M	2.55s	29.54	29.99	1.0	22	6.8	<Monthly Average				
M	M	M	<-----Departure From Normal----->											M										

Degree Days	Monthly	Season to Date	Greatest 24-hr Precipitation: 0.76s Date: 15-16														
	Total	Departure	Total	Departure	Greatest 24-hr Snowfall: M Date: M												
Heating:	224	M	M	M	Greatest Snow Depth: M Date: M												
Cooling:	43	M	M	M	Sea Level Pressure Date Time (LST)												
					Maximum 30.37 17 0950												
					Minimum 29.58 25 1525												
					Number of Days with ----->												
					Max Temp >=90: 0												
					Max Temp <=32: 0												
					Thunderstorms : 2												
					Min Temp <=32: 1												
					Min Temp <=0 : 0												
					Heavy Fog : 0												
					Precipitation >=.01 inch: 10s												
					Precipitation >=.10 inch: M												
					Snowfall >=1.0 inch : M												

* EXTREME FOR THE MONTH - LAST OCCURRENCE IF MORE THAN ONE.

Data Version: VER2

QUALITY CONTROLLED LOCAL CLIMATOLOGICAL DATA

(final)

NOAA, National Climatic Data Center

Month: 05/2012

Station Location: SOUTHERN ILLINOIS AIRPORT (93810)

CARBONDALE/MURPHYBORO, IL

Lat. 37.779 Lon. -89.249

Elevation(Ground): 406 ft. above sea level

Date	Temperature (Fahrenheit)					Degree Days Base 65 Degrees			Sun		Significant Weather	Snow/Ice on Ground(In) Precipitation (In)				Pressure(inches of Hg)		Wind: Speed=mph Dir=tens of degrees							
	Max.	Min.	Avg.	Dep From Normal	Avg. Dew pt.	Avg. Wet Bulb	Heating	Cooling	Sunrise LST	Sunset LST		1200 UTC	1800 UTC	2400 LST	2400 LST	Avg. Station	Avg. Sea Level	Resultant Speed	Res Dir	Avg. Speed	max 5-second		max 2-minute		
	1	2	3	4	5	6	7	8	9	10		11	13	14	15	16	17	18	19	20	21	22	23	24	25
01	86	60	73	M	63	67	0	8	-	-	BR	0	M	0.0	0.01	29.45	29.90	9.4	20	10.2	33	200	25	200	01
02	87	67	77	M	64	69	0	12	-	-		0	M	0.0	0.00	29.51	29.94	10.3	19	10.6	28	210	21	200	02
03	82	67	75	M	65	68	0	10	-	-		0	M	0.0	0.00	29.54	29.98	8.5	19	8.9	21	190	17	200	03
04	87	68	78	M	69	71	0	13	-	-		0	M	0.0	T	29.47	29.92	5.8	20	6.9	25	190	20	180	04
05	89	69	79	M	69	72	0	14	-	-	VCTS	0	M	0.0	0.00	29.46	29.90	5.0	16	6.8	22	060	18	050	05
06	90	68	79	M	67	71	0	14	-	-	RA BR HZ VCTS	0	M	0.0	0.14	29.43	29.87	5.1	20	6.2	48	230	32s	220	06
07	77	64	71	M	64	66	0	6	-	-	RA	0	M	0.0	0.07	29.43	29.87	3.5	29	5.1	20	320	14	330	07
08	74	55	65	M	53	58	0	0	-	-	BR	0	M	0.0	0.00	29.52	29.95	4.7	32	5.4	17	320	13	310	08
09	73	49	61	M	47	54	4	0	-	-		0	M	0.0	0.00	29.50	29.95	5.7	32	5.9	25	340	18	350	09
10	74	47	61	M	47	53	4	0	-	-		0	M	0.0	0.00	29.55	29.99	1.0	06	2.0	16	020	12	020	10
11	75	45	60*	M	47	54	5	0	-	-		0	M	0.0	0.00	29.67	30.11	2.2	14	3.1	22s	160	35s	220	11
12	77	52	65	M	52	57	0	0	-	-	BR	0	M	0.0	0.00	29.71	30.16	2.7	09	3.1	15	130	13	130	12
13	80	52	66	M	51	58	0	1	-	-	BR	0	M	0.0	0.00	29.62	30.08	7.3	01	8.0	26	030	18	020	13
14	80	53	67	M	52	58	0	2	-	-		0	M	0.0	0.00	29.59	30.04	3.9	36	4.7	21	010	14	030	14
15	83	49	66	M	48	57	0	1	-	-	BR	0	M	0.0	0.00	29.55	30.01	2.0	29	2.9	26	280	10	230	15
16	86	50	68	M	50	58	0	3	-	-		0	M	0.0	0.00	29.54	29.98	3.9	35	5.6	20	350	15	340	16
17	82	45*	64	M	46	55	1	0	-	-		0	M	0.0	0.00	29.57	30.02	3.1	05	3.3	21	210	14	050	17
18	88	51	70	M	55	62	0	5	-	-		0	M	0.0	0.00	29.54	29.98	2.6	15	3.6	16	190	13	190	18
19	90	60	75	M	60	66	0	10	-	-		0	M	0.0	0.00	29.59	30.01	5.1	18	5.6	25	180	15	210	19
20	91	61	76	M	62	66	0	11	-	-	TS RA BR VCTS	0	M	0.0	0.93	29.62	30.06	5.2	23	6.6	32	250	25	260	20
21	76	56	66	M	55	60	0	1	-	-	BR	0	M	0.0	0.01	29.63	30.07	8.8	34	9.1	26	020	18	330	21
22	77	50	64	M	48	55	1	0	-	-		0	M	0.0	0.00	29.52	29.98	5.5	01	6.1	28	030	17	030	22
23	83	48	66	M	49	57	0	1	-	-	BR	0	M	0.0	0.00	29.38	29.84	4.0	17	4.5	32	180	16	190	23
24	91	58	75	M	57	65	0	10	-	-		0	M	0.0	0.00	29.31	29.75	11.8	18	12.2	37	210	30	190	24
25	91	69	80	M	66	70	0	15	-	-		0	M	0.0	0.00	29.52	29.94	8.3	18	9.2	23	190	20	210	25
26	95	66	81	M	64	70	0	16	-	-		0	M	0.0	0.00	29.59	30.02	7.8	19	8.4	26	210	21	210	26
27	94	64	79	M	64	69	0	14	-	-		0	M	0.0	0.00	29.52	29.97	5.5	19	6.1	25	190	16	180	27
28	95*	68	82*	M	65	71	0	17	-	-		0	M	0.0	0.00	29.41	29.86	8.0	20	8.3	33	200	21	220	28
29	88	62	75	M	61	67	0	10	-	-	TSRA	0	M	0.0	0.01	29.42	29.86	1.6	35	4.4	20	340	15	330	29
30	83	58	71	M	56	61	0	6	-	-	RA	0	M	0.0	0.02	29.46	29.90	1.8	36	3.1	23	340	16	330	30
31	80	54	67	M	57	60	0	2	-	-	RA BR	0	M	0.0	0.14	29.34	29.78	4.1	29	8.0	36	300	26	290	31
	84.0	57.6	70.8		57.2	62.7	0.5	6.5	<-----Monthly Averages Totals----->			M	M	1.35s	29.52	29.96	1.9	21	6.3	<Monthly Average					
	M	M	M		<-----Departure From Normal----->										M										

Degree Days	Monthly	Season to Date	Greatest 24-hr Precipitation: 0.94 Date: 20-21		Sea Level Pressure Date Time (LST)	
			Greatest 24-hr Snowfall: M Date: M		Maximum 30.22 12 0754	
			Greatest Snow Depth: M Date: M		Minimum 29.66 24 1806	
Total Departure	Total	Departure	Number of Days with ----->		Max Temp >=90: 8	Precipitation >=.01 inch: 10s
Heating: 15	M	M	M		Min Temp <=32: 0	Precipitation >=.10 inch: 0
Cooling: 202	M	M	M		Min Temp <=0 : 0	Snowfall >=1.0 inch : M
					Thunderstorms : 2	Heavy Fog : 0

* EXTREME FOR THE MONTH - LAST OCCURRENCE IF MORE THAN ONE.

Data Version:
VER2

QUALITY CONTROLLED LOCAL CLIMATOLOGICAL DATA

(final)

NOAA, National Climatic Data Center

Month: 06/2012

Station Location: SOUTHERN ILLINOIS AIRPORT (93810)

CARBONDALE/MURPHYBORO, IL

Lat. 37.779 Lon. -89.249

Elevation(Ground): 406 ft. above sea level

Date	Temperature (Fahrenheit)					Degree Days Base 65 Degrees			Sun		Significant Weather	Snow/Ice on Ground (In) Precipitation (In)				Pressure (inches of Hg)		Wind: Speed=mph Dir=tens of degrees							
	Max.	Min.	Avg.	Dep From Normal	Avg. Dew pt.	Avg. Wet Bulb	Heating	Cooling	Sunrise LST	Sunset LST		1200 UTC	1800 UTC	2400 LST	2400 LST	Avg. Station	Avg. Sea Level	Resultant Speed	Res Dir	Avg. Speed	max 5-second		max 2-minute		
	1	2	3	4	5	6	7	8	9	10		11	13	14	15	16	17	18	19	20	21	22	23	24	25
01	69	48	59*	M	45	51	6	0	-	-		0	M	M	T	29.47	29.90	9.4	31	9.8	26	330	18	320	01
02	79	45*	62	M	50	56	3	0	-	-	RA	0	M	M	T	29.45	29.90	5.0	23	5.5	24	200	16	240	02
03	89	56	73	M	55	62	0	8	-	-	RA	0	M	0.0	T	29.42	29.87	2.5	24	3.5	17	200	14	210	03
04	92	60	76	M	62	66	0	11	-	-	TSRA BR	0	M	0.0	0.49	29.36	29.80	1.3	20	5.8	30	280	21	050	04
05	82	57	70	M	54	61	0	5	-	-	BR	0	M	0.0	0.00	29.46	29.88	5.5	04	6.3	23	020	16	030	05
06	79	53	66	M	49	57	0	1	-	-		0	M	0.0	0.00	29.57	29.99	4.3	04	4.7	21	070	16	040	06
07	84	50	67	M	50	58	0	2	-	-		0	M	0.0	0.00	29.62	30.06	2.9	05	2.9	21	040	13	060	07
08	89	51	70	M	51	59	0	5	-	-	BR	0	M	0.0	0.00	29.57	30.03	1.9	16	2.7	17	140	14	160	08
09	92	55	74	M	56	64	0	9	-	-	BR	0	M	0.0	0.00	29.48	29.93	6.0	18	6.3	38	200	20	200	09
10	87	61	74	M	63	67	0	9	-	-		0	M	0.0	0.00	29.47	29.92	6.5	15	6.8	22	150	17	160	10
11	85	63	74	M	67	69	0	9	-	-	TS RA BR	0	M	0.0	0.21	29.48	29.91	4.8	20	6.0	32	320	23	310	11
12	85	56	71	M	55	63	0	6	-	-		0	M	0.0	0.00	29.62	30.04	6.8	34	7.4	21	350	16	350	12
13	85	50	68	M	51	59	0	3	-	-		0	M	0.0	0.00	29.62	30.06	2.2	07	3.4	26	340	12	020	13
14	91	53	72	M	54	62	0	7	-	-	BR	0	M	0.0	0.00	29.59	30.03	3.4	12	3.9	18	090	12	120	14
15	93	57	75	M	61	67	0	10	-	-		0	M	0.0	0.00	29.59	30.02	3.4	19	4.1	24	200	14	170	15
16	94	65	80	M	65	71	0	15	-	-	BR	0	M	0.0	0.00	29.59	30.03	8.9	19	9.3	25	210	21	210	16
17	90	68	79	M	66	71	0	14	-	-	RA	0	M	0.0	0.03	29.49	29.93	9.0	22	9.7	26	210	24	300	17
18	93	70	82	M	63	70	0	17	-	-		0	M	0.0	0.00	29.46	29.89	12.9	20	13.3	32	210	25	200	18
19	94	69	82	M	63	70	0	17	-	-		0	M	0.0	0.00	29.58	30.00	9.6	19	10.2	29	180	21	200	19
20	95	68	82	M	61	69	0	17	-	-		0	M	0.0	0.00	29.59	30.03	9.2	19	9.5	30	210	20	220	20
21	94	65	80	M	64	69	0	15	-	-		0	M	0.0	0.00	29.54	29.98	3.7	25	6.4	24	340	18	330	21
22	91	60	76	M	56	65	0	11	-	-	FG+ BR	0	M	0.0	0.00	29.54	29.98	3.6	01	4.6	32	330	18	240	22
23	92	55	74	M	55	63	0	9	-	-		0	M	0.0	0.00	29.54	29.98	0.8	06	1.9	20	060	10	060	23
24	97	59	78	M	59	67	0	13	-	-	BR	0	M	0.0	0.00	29.49	29.94	0.6	32	1.9	10	240	8	230	24
25	97	66	82	M	59	67	0	17	-	-		0	M	0.0	0.00	29.44	29.88	5.4	04	6.4	31	330	16	030	25
26	88	53	71	M	47	58	0	6	-	-		0	M	0.0	0.00	29.51	29.94	4.4	07	5.1	31	210	14	080	26
27	96	51	74	M	49	61	0	9	-	-		0	M	0.0	0.00	29.51	29.95	4.6	19	5.2	18	190	14	220	27
28	106	69	88	M	57	68	0	23	-	-		0	M	0.0	0.00	29.49	29.92	6.1	21	6.8	21	190	16	190	28
29	107*	69	88	M	63	72	0	23	-	-		0	M	0.0	0.00	29.42	29.86	3.2	24	5.2	22	220	12	200	29
30	105	74	90*	M	64	73	0	25	-	-		0	M	0.0	0.00	29.41	29.84	4.0	23	5.9	20	190	16	200	30

90.7	59.2	75.0		57.1	64.5	0.3	10.5	<-----Monthly Averages Totals----->				M	M	0.73s	29.51	29.95	2.0	20	6.0	<Monthly Average					
M	M	M	<-----Departure From Normal----->													M									

Degree Days	Monthly	Season to Date	Greatest 24-hr Precipitation: 0.49 Date: 04													Sea Level	Pressure	Date	Time (LST)					
	Total	Departure	Total	Departure	Greatest 24-hr Snowfall: M Date: M													Maximum	30.14	13	0705			
Heating:	9	M	M	M	Greatest Snow Depth: M Date: M													Minimum	29.70	04	1752			
Cooling:	316	M	M	M	Number of Days with ----->													Max Temp >=90: 18	Min Temp <=32: 0			Precipitation >=.01 inch: 3		
																		Max Temp <=32: 0	Min Temp <=0 : 0			Precipitation >=.10 inch: M		
																		Thunderstorms : 2	Heavy Fog : 1			Snowfall >=1.0 inch : M		

* EXTREME FOR THE MONTH - LAST OCCURRENCE IF MORE THAN ONE.

Data Version: VER2

QUALITY CONTROLLED LOCAL CLIMATOLOGICAL DATA

(final)

NOAA, National Climatic Data Center

Month: 07/2012

Station Location: SOUTHERN ILLINOIS AIRPORT (93810)

CARBONDALE/MURPHYBORO, IL

Lat. 37.779 Lon. -89.249

Elevation(Ground): 406 ft. above sea level

Date	Temperature (Fahrenheit)					Degree Days Base 65 Degrees			Sun		Significant Weather	Snow/Ice on Ground(In) Precipitation (In)				Pressure(inches of Hg)		Wind: Speed=mph Dir=tens of degrees							
	Max.	Min.	Avg.	Dep From Normal	Avg. Dew pt.	Avg. Wet Bulb	Heating	Cooling	Sunrise LST	Sunset LST		1200 UTC	1800 UTC	2400 LST	2400 LST	Avg. Station	Avg. Sea Level	Resultant Speed	Res Dir	Avg. Speed	max 5-second		max 2-minute		
	1	2	3	4	5	6	7	8	9	10		11	13	14	15	16	17	18	19	20	21	22	23	24	25
01	106	73	90	M	66	72	0	25	-	-	RA HZ VCTS	0	M	0.0	0.01	29.49	29.92	1.9	25	3.6	M	M	M	M	01
02	100	69	85	M	67	73	0	20	-	-	TS	0	M	0.0	T	29.53	29.96	1.9	21	5.5	26	270	20	280	02
03	98	77	88	M	67	73	0	23	-	-		0	M	0.0	0.00	29.49	29.93	4.0	23	5.8	M	M	M	M	03
04	104	73	89	M	66	73	0	24	-	-		0	M	0.0	0.00	29.49	29.93	1.6	24	3.2	M	M	10	340	04
05	107	73	90	M	67	74	0	25	-	-	VCTS	0	M	0.0	0.00	29.50	29.93	1.3	23	3.3	M	M	M	M	05
06	107*	74	91	M	67	74	0	26	-	-	SQ	0	M	0.0	0.00	29.51	29.94	1.2	03	0.0	M	M	M	M	06
07	106	73	90	M	67	74	0	25	-	-		0	M	0.0	T	29.50	29.93	1.7	24	3.8	17	260	13	290	07
08	103	74	89	M	69	73	0	24	-	-	TSRA RA BR SQ VCTS	0	M	0.0	0.07	29.54	29.95	3.8	25	7.4	M	M	M	M	08
09	88	72	80	M	71	73	0	15	-	-	RA BR	0	M	0.0	0.12	29.54	29.98	2.4	03	3.2	M	M	M	M	09
10	95	70	83	M	62	69	0	18	-	-		0	M	0.0	0.00	29.54	29.97	4.0	06	4.6	M	M	M	M	10
11	97	65	81	M	63	69	0	16	-	-	BR	0	M	0.0	0.00	29.55	29.99	2.5	07	3.3	18	080	12	050	11
12	95	65	80	M	65	70	0	15	-	-	BR HZ	0	M	0.0	0.00	29.57	M	3.8	12	4.8	99s	330	17	170	12
13	93	66	80	M	67	71	0	15	-	-	BR	0	M	0.0	0.00	29.58	30.02	3.4	15	4.7	21	330	18	320	13
14	87	74	81	M	70	73	0	16	-	-	RA	0	M	0.0	0.02	29.61	30.05	4.1	20	4.9	24	160	10	200	14
15	95	68	82	M	69	73	0	17	-	-		0	M	0.0	0.00	29.62	30.06	4.2	19	4.9	17	210	14	210	15
16	96	72	84	M	70	75	0	19	-	-		0	M	0.0	0.00	29.54	29.98	7.9	20	8.1	24	180	18	210	16
17	99	75	87	M	72	75	0	22	-	-	RA	0	M	0.0	0.03	29.47	29.92	4.5	21	5.4	28	220	23	220	17
18	103	75	89	M	71	76	0	24	-	-		0	M	0.0	0.00	29.47	29.91	5.3	22	6.2	20	320	15	230	18
19	105	79	92	M	68	75	0	27	-	-	VCTS	0	M	0.0	T	29.46	29.89	3.9	26	7.0	28	270	18	330	19
20	92	74	83	M	68	73	0	18	-	-		0	M	0.0	0.00	29.52	29.95	6.6	01	6.9	24	360	17	020	20
21	94	64	79	M	58	66	0	14	-	-		0	M	0.0	0.00	29.60	30.03	5.0	05	5.6	21	090	15	090	21
22	99	59*	79	M	62	69	0	14	-	-		0	M	0.0	0.00	29.63	30.06	0.8	17	2.7	15	090	12	150	22
23	102	74	88	M	70	75	0	23	-	-		0	M	0.0	0.00	29.60	30.05	8.7	21	9.4	24	200	20	200	23
24	106	79	93*	M	68	75	0	28	-	-		0	M	0.0	0.00	29.49	29.94	8.0	22	9.6	22	190	17	210	24
25	104	80	92	M	69	75	0	27	-	-		0	M	0.0	0.00	29.39	29.84	11.2	21	M	M	M	M	M	25
26	97	71	84	M	70	74	0	19	-	-	TS BR VCTS	0	M	0.0	1.41	29.38	29.81	6.9	23	8.1	M	M	24	250	26
27	100	69	85	M	68	72	0	20	-	-	BR	0	M	0.0	0.00	29.48	29.90	5.3	24	6.4	M	M	M	M	27
28	93	66	80	M	63	69	0	15	-	-		0	M	0.0	0.01s	29.62	30.04	3.2	01	3.6	25	010	16	350	28
29	82	66	74*	M	68	70	0	9	-	-	RA BR	0	M	0.0	0.24	29.57	30.03	3.2	20	3.9	118s	030	53s	270	29
30	90	69	80	M	70	73	0	15	-	-	BR	0	M	0.0	0.00s	29.45	29.90	2.0	16	7.8	147	270	59s	290	30
31	98	70	84	M	70	74	0	19	-	-	BR	M	M	M	0.01s	29.46	29.90	1.6	36	6.0	85s	210	51	090	31
	98.1	71.2	84.7		67.4	72.6	0.0	19.9	<-----Monthly Averages Totals----->			M	M	1.92s		29.52	29.96	2.0	21	5.3	<Monthly Average				
	M	M	M	<-----Departure From Normal----->										M											

Degree Days	Monthly	Season to Date	Greatest 24-hr Precipitation: 1.41 Date: 26		Sea Level Pressure Date Time (LST)	
	Total	Departure Total	Greatest 24-hr Snowfall: M Date: M		Maximum 30.13 15 0839	
		Departure	Greatest Snow Depth: M Date: M		Minimum 29.73 26 1437	
Heating:	0	M	M	M	Max Temp >=90: 28	Precipitation >=.01 inch: 9 Precipitation >=.10 inch: : M
Cooling:	617	M	M	M	Max Temp <=32: 0	
					Min Temp <=0 : 0 Thunderstorms : 3 Heavy Fog : 0	

* EXTREME FOR THE MONTH - LAST OCCURRENCE IF MORE THAN ONE.

Data Version:
VER2

QUALITY CONTROLLED LOCAL CLIMATOLOGICAL DATA

(final)

NOAA, National Climatic Data Center

Month: 08/2012

Station Location: SOUTHERN ILLINOIS AIRPORT (93810)

CARBONDALE/MURPHYBORO, IL

Lat. 37.779 Lon. -89.249

Elevation(Ground): 406 ft. above sea level

Date	Temperature (Fahrenheit)					Degree Days Base 65 Degrees			Sun		Significant Weather	Snow/Ice on Ground(In) Precipitation (In)				Pressure(inches of Hg)		Wind: Speed=mph Dir=tens of degrees								
	Max.	Min.	Avg.	Dep From Normal	Avg. Dew pt.	Avg Wet Bulb	Heating	Cooling	Sunrise LST	Sunset LST		1200 UTC	1800 UTC	2400 LST	2400 LST	Avg. Station	Avg. Sea Level	Resultant Speed	Res Dir	Avg. Speed	max 5-second		max 2-minute			
	1	2	3	4	5	6	7	8	9	10		11	13	14	15	16	17	18	19	20	21	22	23	24	25	26
01	99*	73	86*	M	69	74	0	21	-	-	BR	0	M	0.0	0.00	29.42	29.86	2.1	10	4.3	M	M	M	M	01	
02	98	71	85	M	71	75	0	20	-	-	TS RA BR	0	M	0.0	0.08	29.37	29.81	3.4	20	5.2	26	350	21	270	02	
03	96	74	85	M	73	76	0	20	-	-		0	M	0.0	0.00	29.39	29.81	4.0	17	5.4	28	210	15	210	03	
04	91	72	82	M	74	76	0	17	-	-	TSRA RA BR VCTS	0	M	0.0	3.29	29.49	29.90	6.6	20	8.3	46	210	26	250	04	
05	90	68	79	M	70	73	0	14	-	-	TSRA RA BR	0	M	0.0	0.21	29.62	30.05	1.3	32	4.0	32	170	22	200	05	
06	91	64	78	M	62	68	0	13	-	-	BR	0	M	0.0	0.00	29.61	30.06	0.6	10	1.1	45s	210	20	200	06	
07	94	63	79	M	62	68	0	14	-	-		0	M	0.0	0.00	29.54	29.98	0.5	13	1.5	21	270	7	190	07	
08	96	64	80	M	66	71	0	15	-	-		0	M	0.0	0.00	29.49	29.93	0.9	26	2.1	M	M	13	190	08	
09	92	68	80	M	65	70	0	15	-	-		0	M	0.0	0.00	29.38	29.82	2.1	32	3.8	M	M	21	310	09	
10	82	62	72	M	60	65	0	7	-	-		0	M	0.0	0.00	29.47	29.90	7.7	34	7.9	25s	330	17	320	10	
11	84	55	70	M	54	61	0	5	-	-		0	M	0.0	0.00	29.56	29.99	1.5	31	3.1	17	010	14	010	11	
12	83	56	70	M	58	62	0	5	-	-		0	M	0.0	0.01	29.54	30.00	2.0	18	2.8	24	210	17	350	12	
13	84	65	75	M	64	67	0	10	-	-	TSRA RA BR VCTS	0	M	0.0	0.15	29.45	29.89	2.7	13	7.5	25	060	17	130	13	
14	80	61	71	M	61	64	0	6	-	-	BR	0	M	0.0	0.00	29.52	29.96	3.2	34	3.8	16	340	13	340	14	
15	88	56	72	M	60	65	0	7	-	-	FG BR	0	M	0.0	0.00	29.52	29.97	1.6	14	2.8	18	260	8	110	15	
16	94	64	79	M	67	70	0	14	-	-	RA BR VCTS	0	M	0.0	0.48	29.48	29.92	4.5	21	7.5	28	250	20	260	16	
17	81	57	69	M	59	63	0	4	-	-	BR	0	M	0.0	T	29.55	29.99	4.2	34	4.6	16	340	12	330	17	
18	81	52*	67*	M	55	60	0	2	-	-	FG BR	0	M	0.0	0.00	29.51	29.96	0.9	02	1.3	21	360	12	030	18	
19	83	57	70	M	55	61	0	5	-	-		0	M	0.0	0.00	29.49	29.94	1.4	36	2.2	21	210	14	190	19	
20	84	54	69	M	55	61	0	4	-	-	BR	0	M	0.0	0.00	29.52	29.97	1.4	29	1.9	15	300	10	340	20	
21	87	55	71	M	56	62	0	6	-	-	BR	0	M	0.0	0.00s	29.59	30.02	0.3	06	2.3	16	130	9	110	21	
22	91	55	73	M	57	63	0	8	-	-	BR	0	M	0.0	0.00	29.60	30.04	0.5	08	0.8	12	030	8	020	22	
23	94	57	76	M	57	64	0	11	-	-	BR	0	M	0.0	0.00	29.59	30.04	1.1	01	2.5	12	040	8	330	23	
24	93	61	77	M	61	66	0	12	-	-		0	M	0.0	0.00	29.58	30.02	2.1	23	2.6	18	250	15	250	24	
25	90	63	77	M	64	68	0	12	-	-		0	M	0.0	0.00	29.59	30.02	7.0	18	7.5	29	170	21	170	25	
26	91	70	81	M	67	71	0	16	-	-		0	M	0.0	0.00	29.57	30.02	9.4	19	9.8	63s	240	21	220	26	
27	90	66	78	M	68	71	0	13	-	-	RA	0	M	0.0	T	29.59	30.02	2.9	35	4.6	20	060	15	350	27	
28	92	57	75	M	57	64	0	10	-	-	FG+ BR	0	M	0.0	0.00	29.59	30.03	3.8	04	4.4	24	060	17	050	28	
29	93	55	74	M	57	63	0	9	-	-		0	M	0.0	0.00	29.54	29.99	4.3	07	5.1	25	340	14	110	29	
30	96	57	77	M	63	68	0	12	-	-	BR	0	M	0.0	0.00	29.55	29.98	5.4	13	6.2	22	130	16	160	30	
31	91	75	83	M	71	74	0	18	-	-	RA FG BR VCTS	0	M	0.0	2.02	29.54	29.97	9.5	15	10.4	33	130	23	140	31	
89.6 62.2 75.9 62.5 67.2 0.0 11.1 <-----Monthly Averages Totals----->													M	M	6.34s	29.52	29.96	0.8	17	4.4	<Monthly Average					
M M M <-----Departure From Normal----->													M													

Degree Days	Monthly	Season to Date	Greatest 24-hr Precipitation: 3.50s Date: 04-05		Sea Level Pressure Date Time (LST)	
			Greatest 24-hr Snowfall: M Date: M		Maximum 30.14 06 0645	
			Greatest Snow Depth: M Date: M		Minimum 29.73 02 1553	
Total Departure	Total	Total	Number of Days with ----->		Max Temp >=90: 20	Precipitation >=.01 inch: 13s
Heating: 0	M	M	M		Max Temp <=32: 0	Precipitation >=.10 inch: 13s
Cooling: 345	M	M	M		Thunderstorms : 4	Snowfall >=1.0 inch : M
					Min Temp <=0 : 0	
					Heavy Fog : 1	

* EXTREME FOR THE MONTH - LAST OCCURRENCE IF MORE THAN ONE.

Data Version:
VER2

QUALITY CONTROLLED LOCAL CLIMATOLOGICAL DATA

(final)

NOAA, National Climatic Data Center

Month: 09/2012

Station Location: SOUTHERN ILLINOIS AIRPORT (93810)

CARBONDALE/MURPHYBORO, IL

Lat. 37.779 Lon. -89.249

Elevation(Ground): 406 ft. above sea level

Date	Temperature (Fahrenheit)						Degree Days Base 65 Degrees		Sun		Significant Weather	Snow/Ice on Ground (In)				Precipitation (In)		Pressure (inches of Hg)		Wind: Speed=mph Dir=tens of degrees								
	Max.	Min.	Avg.	Dep From Normal	Avg. Dew pt.	Avg. Wet Bulb	Heating	Cooling	Sunrise LST	Sunset LST		1200 UTC	1800 UTC	2400 LST	2400 LST	Avg. Station	Avg. Sea Level	Resultant Speed	Res Dir	Avg. Speed	max 5-second		max 2-minute					
												Depth	Water Equiv	Snow Fall	Water Equiv						Speed	Dir	Speed	Dir	Speed	Dir		
1	2	3	4	5	6	7	8	9	10	11	12				13	14	15	16	17	18	19	20	21	22	23	24	25	26
01	88	73	81*	M	72	74	0	16	-	-	TSRA RA BR VCTS	0	M	0.0	2.70	29.41	29.86	13.3	18	12.9	33	160	24	230	01			
02	82	73	78	M	72	73	0	13	-	-	RA BR	0	M	0.0	0.24	29.35	29.79	9.0	25	9.9	25	240	18	260	02			
03	83	70	77	M	72	73	0	12	-	-	RA BR	0	M	0.0	0.03	29.41	29.84	5.5	33	7.1	M	M	10	330	03			
04	92	67	80	M	71	74	0	15	-	-	FG+ FG BR	0	M	0.0	0.00	29.42	29.86	0.8	06	1.9	12	110	9	120	04			
05	84	70	77	M	71	73	0	12	-	-	TS RA BR	0	M	0.0	0.06	29.42	29.85	2.7	09	3.9	21	010	15	010	05			
06	92*	63	78	M	69	71	0	13	-	-	TSRA FG+ FG BR	0	M	0.0	0.07	29.49	29.91	2.4	23	4.5	40	300	30	290	06			
07	91	61	76	M	68	70	0	11	-	-	TSRA RA BR VCTS	0	M	0.0	0.58	29.37	29.81	4.8	21	9.3	M	M	M	M	07			
08	74	54	64	M	54	59	1	0	-	-		0	M	0.0	0.01	29.52	29.96	7.9	33	8.3	24	330	20	340	08			
09	76	51	64	M	53	58	1	0	-	-		0	M	0.0	0.00	29.62	30.04	4.2	34	4.9	24	330	17	340	09			
10	79	51	65	M	54	58	0	0	-	-	BR	0	M	0.0	0.01s	29.71	30.15	0.4	11	0.8	13	320	8	110	10			
11	84	53	69	M	56	61	0	4	-	-	BR	0	M	0.0	0.00	29.70	30.15	2.6	17	3.5	29	170	13	150	11			
12	86	56	71	M	58	62	0	6	-	-	BR	0	M	0.0	0.00	29.73	30.17	5.0	17	5.6	20	200	16	200	12			
13	83	59	71	M	61	65	0	6	-	-	BR	0	M	0.0	0.00	29.76	30.20	1.9	20	3.5	16	200	13	200	13			
14	69	59	64	M	58	60	1	0	-	-		0	M	0.0	0.00	29.83	30.27	4.9	36	5.5	14	030	12	360	14			
15	76	55	66	M	53	59	0	1	-	-	RA	0	M	0.0	0.01	29.75	30.21	3.8	09	4.6	24	110	20	100	15			
16	74	63	69	M	63	64	0	4	-	-	RA BR	0	M	0.0	T	29.59	30.06	0.4	12	0.8	16	210	6	200	16			
17	77	64	71	M	66	67	0	6	-	-	RA BR HZ	0	M	0.0	0.02	29.39	29.86	1.5	26	2.4	12	230	9	240	17			
18	70	45	58	M	46	52	7	0	-	-	RA	0	M	0.0	T	29.55	29.97	9.6	34	10.1	29	360	22	360	18			
19	73	42	58	M	43	51	7	0	-	-	BR	0	M	0.0	0.00	29.64	30.08	5.7	19	5.9	24	170	15	210	19			
20	80	52	66	M	51	57	0	1	-	-		0	M	0.0	0.00	29.54	29.99	5.7	22	6.7	22	230	16	210	20			
21	80	50	65	M	56	60	0	0	-	-	BR	0	M	0.0	0.00s	29.42	29.88	8.6	21	9.4	35	210	28	210	21			
22	77	41	59	M	42	51	6	0	-	-		0	M	0.0	0.00	29.65	30.07	5.3	31	6.2	26	330	20	340	22			
23	67	37	52*	M	39	46	13	0	-	-		0	M	0.0	0.00	29.82	30.26	3.0	34	3.2	20	330	15	340	23			
24	72	36*	54	M	41	48	11	0	-	-	BR	0	M	0.0	0.00	29.67	30.15	4.8	18	5.1	21	130	15	200	24			
25	87	60	74	M	59	64	0	9	-	-	TS	0	M	0.0	0.00	29.49	29.94	7.1	19	10.2	25	200	18	210	25			
26	78	63	71	M	64	66	0	6	-	-	TS TSRA RA BR HZ VCTS	0	M	0.0	0.16	29.57	30.02	4.7	20	6.0	25	240	20	240	26			
27	77	63	70	M	65	66	0	5	-	-	RA BR HZ	0	M	0.0	0.02	29.67	30.10	0.6	29	2.1	M	M	9	190	27			
28	72	52	62	M	56	60	3	0	-	-	RA BR	0	M	0.0	0.04	29.65	30.11	2.5	36	2.8	M	M	9	350	28			
29	76	46	61	M	52	56	4	0	-	-	BR	0	M	0.0	0.00	29.59	30.05	1.7	02	2.2	18	040	13	350	29			
30	74	48	61	M	52	55	4	0	-	-	BR	0	M	0.0	0.00	29.42	29.89	1.5	36	2.3	12	040	8	040	30			

79.1 55.9 67.5 57.9 61.8 1.9 4.7 <-----Monthly Averages | Totals-----> M M 3.97s 29.57 30.01 1.4 24 5.4 <Monthly Average

M M M <-----Departure From Normal-----> M

Degree Days	Monthly	Season to Date	Greatest 24-hr Precipitation: 4.32s Date: 01		Sea Level Pressure Date Time (LST)	
	Total	Departure	Total	Departure	Maximum 30.33 23 0916	Minimum 29.64 07 1817
Heating:	58	M	M	M	Max Temp >=90: 3 Max Temp <=32: 0 Thunderstorms : 7	Min Temp <=32: 0 Min Temp <=0 : 0 Heavy Fog : 2
Cooling:	140	M	M	M		

* EXTREME FOR THE MONTH - LAST OCCURRENCE IF MORE THAN ONE.

Data Version:
VER2

QUALITY CONTROLLED LOCAL CLIMATOLOGICAL DATA

(final)

NOAA, National Climatic Data Center

Month: 10/2012

Station Location: SOUTHERN ILLINOIS AIRPORT (93810)

CARBONDALE/MURPHYBORO, IL

Lat. 37.779 Lon. -89.249

Elevation(Ground): 406 ft. above sea level

Date	Temperature (Fahrenheit)					Degree Days Base 65 Degrees			Sun		Significant Weather	Snow/Ice on Ground(In) Precipitation (In)				Pressure(inches of Hg)		Wind: Speed=mph Dir=tens of degrees							
	Max.	Min.	Avg.	Dep From Normal	Avg. Dew pt.	Avg Wet Bulb	Heating	Cooling	Sunrise LST	Sunset LST		1200 UTC	1800 UTC	2400 LST	2400 LST	Avg. Station	Avg. Sea Level	Resultant Speed	Res Dir	Avg. Speed	max 5-second		max 2-minute		
	1	2	3	4	5	6	7	8	9	10		11	13	14	15	16	17	18	19	20	21	22	23	24	25
01	60	54	57	M	52	54	8	0	-	-	RA BR	0	M	0.0	0.35	29.29	29.74	7.2	36	7.5	26	330	14	010	01
02	62	51	57	M	51	54	8	0	-	-	RA BR	0	M	0.0	0.01	29.40	29.83	4.8	33	5.9	24	330	16	330	02
03	78	55	67	M	54	58	0	2	-	-	RA VCTS	0	M	0.0	0.26	29.59	30.01	6.0	20	6.2	26	280	20	260	03
04	80	54	67	M	55	60	0	2	-	-		0	M	0.0	0.00	29.70	30.14	5.4	20	6.6	24	180	17	190	04
05	59	41	50	M	45	48	15	0	-	-	RA BR	0	M	0.0	0.45	29.71	30.16	6.8	35	7.6	25	350	21	340	05
06	54	35	45	M	36	41	20	0	-	-		0	M	0.0	T	29.77	30.23	4.8	34	5.5	18	350	15	350	06
07	56	39	48	M	34	41	17	0	-	-		0	M	0.0	0.00	29.78	30.23	2.8	33	3.9	18	320	14	320	07
08	61	35	48	M	36	42	17	0	-	-	FG BR	0	M	0.0	0.00	29.72	30.18	2.1	18	2.5	15	180	12	190	08
09	65	35	50	M	41	46	15	0	-	-		0	M	0.0	0.00	29.59	30.05	6.6	20	7.0	24	190	20	230	09
10	58	35	47	M	33	42	18	0	-	-		0	M	0.0	0.00	29.78	30.22	6.9	33	7.3	29	330	22	330	10
11	63	32	48	M	37	44	17	0	-	-	RA BR VCTS	0	M	M	0.76	29.78	30.23	4.6	19	4.7	20	170	14	190	11
12	64	48	56	M	49	52	9	0	-	-	FG BR	0	M	0.0	0.00	29.82	30.27	2.1	09	2.6	15	110	9	060	12
13	79	47	63	M	59	62	2	0	-	-	BR	0	M	0.0	0.00	29.57	30.05	11.3	19	11.9	30	180	23	180	13
14	74	53	64	M	57	60	1	0	-	-	RA	0	M	0.0	0.24	29.39	29.84	12.2	21	14.7	41	210	31	210	14
15	71	44	58	M	45	51	7	0	-	-		0	M	0.0	0.00	29.53	29.97	2.5	32	2.9	16	300	13	310	15
16	79	45	62	M	49	55	3	0	-	-		0	M	0.0	0.00	29.35	29.82	8.8	19	9.4	28	210	23	200	16
17	77	54	66	M	53	58	0	1	-	-	TSRA RA BR	0	M	0.0	0.93	29.13	29.59	12.6	20	14.5	43	200	33	200	17
18	65	45	55	M	37	47	10	0	-	-		0	M	0.0	0.00	29.20	29.65	12.8	23	13.2	38	220	30	230	18
19	56	46	51	M	40	46	14	0	-	-	RA	0	M	0.0	0.05	29.28	29.70	8.6	26	9.0	26	300	20	260	19
20	65	45	55	M	43	48	10	0	-	-		0	M	0.0	0.00	29.46	29.89	3.1	22	4.9	15	240	12	260	20
21	77	45	61	M	52	57	4	0	-	-		0	M	0.0	0.00	29.52	29.96	8.1	18	8.6	26	260	18	190	21
22	80	62	71	M	52	60	0	6	-	-		0	M	0.0	0.00	29.54	29.99	14.0	19	14.1	40	190	35	200	22
23	79	63	71*	M	54	61	0	6	-	-		0	M	0.0	T	29.54	29.98	11.6	19	11.7	32	190	26	190	23
24	81	59	70	M	58	63	0	5	-	-		0	M	0.0	0.00	29.53	29.98	9.3	19	9.8	25	200	21	190	24
25	81*	46	64	M	56	60	1	0	-	-	RA BR	0	M	0.0	0.34	29.51	29.94	8.0	22	14.7	35	310	26	320	25
26	49	39	44	M	37	41	21	0	-	-	RA BR	0	M	0.0	0.36	29.80	30.23	12.2	35	12.5	30	350	22	350	26
27	54	34	44	M	34	39	21	0	-	-		0	M	0.0	0.00	29.76	30.22	10.6	35	10.9	28	340	21	340	27
28	53	34	44	M	33	38	21	0	-	-		0	M	0.0	0.00	29.75	30.21	7.7	34	8.0	24	330	17	330	28
29	55	33	44	M	30	37	21	0	-	-		0	M	0.0	0.00	29.72	30.19	9.1	34	9.3	24	350	21	350	29
30	58	37	48	M	27	38	17	0	-	-		0	M	0.0	0.00	29.47	29.94	10.6	32	10.8	33	310	24	320	30
31	56	30*	43*	M	25	36	22	0	-	-		0	M	0.0	0.00	29.50	29.96	6.1	31	6.5	23	320	17	340	31

66.1 44.4 55.3 44.0 49.6 10.3 0.7 <-----Monthly Averages | Totals-----> M M 3.77s 29.57 30.01 3.0 24 8.5 <Monthly Average

M M M <-----Departure From Normal-----> M

Degree Days	Monthly	Season to Date	Greatest 24-hr Precipitation: 0.93 Date: 17		Sea Level Pressure Date Time (LST)	
			Greatest 24-hr Snowfall: M Date: M		Maximum 30.35 12 1115	
			Greatest Snow Depth: M Date: M		Minimum 29.32 17 1731	
Total Heating	Total Departure	Total Departure	Number of Days with ----->		Max Temp >=90: 0	Precipitation >=.01 inch: 12s Snowfall >=1.0 inch : M
319	M	M			Min Temp <=32: 2	
Cooling: 22	M	M			Min Temp <=0 : 0	Heavy Fog : 0
					Thunderstorms : 1	

* EXTREME FOR THE MONTH - LAST OCCURRENCE IF MORE THAN ONE.

Data Version:
VER2

QUALITY CONTROLLED LOCAL CLIMATOLOGICAL DATA

Effective January, 2005, flags will be available for most data elements:

If data are suspect:

s will appended to the value on the web form

s will be placed in a column following the suspect value in the ASCII form

If data are flagged as erroneous, it will not be printed.

**NOTICE OF CHANGE:

Effective July 28, 2000, observations contained in the Quality Controlled Local Climatological Data Hourly Observations table are reported in whole degrees Fahrenheit. The dry bulb, dew point and wet bulb temperatures were originally reported to the nearest tenth of a degree Fahrenheit. The Automated Surface Observing System (ASOS) records temperatures and dew points in whole degrees Fahrenheit and converts these values to the nearest tenth of a degree Celsius for observation transmission. Until this date, these values online have incorrectly been converted back to the nearest tenth of a degree Fahrenheit, implying a level of precision that is not present at the instrument level. We apologize for any inconvenience this may cause.

The Automated Weather Observing System (AWOS) generally records temperatures and dew points in whole degrees Fahrenheit and converts these values to the nearest whole degree Celsius for observation transmission. Also, AWOS stations will often have less data (i.e., fewer weather elements) than ASOS stations.

NCDC forms contain:

whole degree Celsius temperature values for AWOS stations

tenths degrees Celsius temperature values for ASOS stations

FORMAT FOR DAILY TABLE

COLUMN	TERMINOLOGY
1	DATE
Temp	Degrees Fahrenheit
2	MAXIMUM
3	MINIMUM
4	AVERAGE
5	DEPARTURE FROM NORMAL
6	AVERAGE DEW POINT
7	AVERAGE WET BULB
Degree Days: Base 65 F	
8	HEATING (SEASON BEGINS WITH JULY)
9	COOLING (SEASON BEGINS WITH JANUARY)
10	SUNRISE (Calculated, not observed)
11	SUNSET (Calculated, not observed)
Significant Weather Types	Weather Phenomena
12	+FC TORNADO/WATERSPOUT FC FUNNEL CLOUD TS THUNDERSTORM GR HAIL RA RAIN

	DZ DRIZZLE SN SNOW SG SNOW GRAINS GS SMALL HAIL &/OR SNOW PELLETS PL ICE PELLETS IC ICE CRYSTALS FG+ HEAVY FOG (FG & LE.25 MILES VISIBILITY) FG FOG BR MIST UP UNKNOWN PRECIPITATION HZ HAZE FU SMOKE VA VOLCANIC ASH DU WIDESPREAD DUST DS DUSTSTORM PO SAND/DUST WHIRLS SA SAND SS SANDSTORM PY SPRAY SQ SQUALL DR LOW DRIFTING SH SHOWER FZ FREEZING MI SHALLOW PR PARTIAL BC PATCHES BL BLOWING VC VICINITY - LIGHT + HEAVY "NO SIGN" MODERATE
Snow/Ice	INCHES
13	SNOW/ICE (ON GROUND)(1200 UTC) T = TRACE M = MISSING DATA
14	WATER EQUIVALENT (1800 UTC) M = MISSING DATA
Precipitation:	INCHES (24-HR PERIOD ENDING AT INDICATED LOCAL STANDARD TIME)
15	SNOWFALL (INCHES AND TENTHS)(2400 LST)* T = TRACE M = MISSING DATA
16	WATER EQUIVALENT(INCHES & HUNDREDTHS(2400 LST) RAINFALL & MELTED SNOW M = MISSING DATA T = TRACE
Pressure	INCHES OF HG
17	AVERAGE STATION PRESSURE
18	AVERAGE SEA LEVEL PRESSURE
Wind	SPEED IN MILES PER HOUR DIRECTION TO TENS OF DEGREES
19	RESULTANT WIND SPEED
20	RESULTANT DIRECTION - (WHOLE DEGREES)
21	AVERAGE SPEED
22	MAXIMUM 5 SECOND SPEED
23	MAXIMUM 5 SECOND DIRECTION
24	MAXIMUM 2 MINUTE SPEED
25	MAXIMUM 2 MINUTE DIRECTION

26	DATE
	NOTE: RESULTANT WIND IS THE VECTOR SUM OF WIND SPEEDS AND DIRECTIONS
ELEMENTS:	
27	AVERAGE MONTHLY MAXIMUM TEMPERATURE (DEGREES F)
28	MONTHLY MAXIMUM TEMPERATURE DEPARTURE FROM NORMAL (DEGREES F)
29	AVERAGE MONTHLY MINIMUM TEMPERATURE (DEGREES F)
30	MONTHLY MINIMUM TEMPERATURE DEPARTURE FROM NORMAL (DEGREES F)
31	MONTHLY AVERAGE TEMPERATURE (DEGREES F)
32	MONTHLY AVERAGE TEMPERATURE DEPARTURE FROM NORMAL (DEGREES F)
33	MONTHLY AVERAGE DEW POINT (DEGREES F)
34	MONTHLY AVERAGE WET BULB (DEGREES F)
35	MONTHLY AVERAGE HDD
36	MONTHLY AVERAGE CDD
37	MONTHLY TOTAL HDD
38	MONTHLY HDD DEPARTURE FROM NORMAL
39	SEASON TO DATE TOTAL HDD
40	SEASON TO DATE DEPARTURE FROM NORMAL HDD
41	MONTHLY TOTAL CDD
42	MONTHLY CDD DEPARTURE FROM NORMAL
43	SEASON TO DATE TOTAL CDD
44	SEASON TO DATE DEPARTURE FROM NORMAL CDD
45	TOTAL MONTHLY SNOW/ICE WATER EQUIVALENT (INCHES)
46	TOTAL MONTHLY SNOWFALL (INCHES)*
47	GREATEST MONTHLY 24HR SNOWFALL (INCHES)
48	DATE OF GREATEST MONTHLY 24HR SNOWFALL
49	GREATEST MONTHLY 24HR SNOW DEPTH (INCHES)
50	DATE OF GREATEST MONTHLY 24HR SNOW DEPTH
51	TOTAL MONTHLY PRECIPITATION (INCHES)
52	MONTHLY PRECIPITATION DEPARTURE FROM NORMAL (INCHES)
53	GREATEST 24HR PRECIPITATION (INCHES)
54	DATE OF GREATEST 24HR PRECIPITATION
55	MONTHLY AVERAGE STATION PRESSURE (INCHES HG)
56	MONTHLY AVERAGE SEA LEVEL PRESSURE (INCHES HG)
57	MONTHLY RESULTANT WIND SPEED (MPH)
58	MONTHLY RESULTANT WIND DIRECTION (TENS OF DEGREES)
59	MONTHLY AVERAGE WIND SPEED (MPH)
60	MONTHLY MAXIMUM SEA LEVEL PRESSURE (INCHES OF HG)
61	DATE OF MONTHLY MAXIMUM SEA LEVEL PRESSURE
62	TIME OF MONTHLY MAXIMUM SEA LEVEL PRESSURE
63	MONTHLY MINIMUM SEA LEVEL PRESSURE (INCHES OF HG)
64	DATE OF MONTHLY MINIMUM SEA LEVEL PRESSURE
65	TIME OF MONTHLY MINIMUM SEA LEVEL PRESSURE
66	NUMBER OF DAYS WITH MAXIMUM TEMPERATURE >= 90 F
67	NUMBER OF DAYS WITH MAXIMUM TEMPERATURE <= 32 F
68	NUMBER OF DAYS WITH THUNDERSTORMS
69	NUMBER OF DAYS WITH MINIMUM TEMPERATURE <= 32 F
70	NUMBER OF DAYS WITH MINIMUM TEMPERATURE <= 0 F
71	NUMBER OF DAYS WITH HEAVY FOG
72	NUMBER OF DAYS WITH PRECIPITATION >= .01 INCH
73	NUMBER OF DAYS WITH PRECIPITATION >= .10 INCH
74	NUMBER OF DAYS WITH SNOWFALL >= 1.0 INCH

* Not all stations report snow totals

M = Missing Data, or data that are not normally reported for the station.

- = values not available for sunrise/sunset.

Table of Remarks and Supplemental Coded Data

The following groups are reported in the **Remarks** section of the SWO reports. Remarks include clarifying or augmenting data concerning elements in the body of the SWO reports, additive coded data, and maintenance data. If an element or phenomena does not occur, is missing, or cannot be observed, the corresponding group and space are omitted (body and/or remarks) from that particular report, except for Sea-level Pressure (SLPppp). SLPNO shall be reported in a METAR when the SLP is not available. The left most column are examples.

TORNADO, FUNNEL CLOUD or WATERSPOUT	TORNADIC ACTIVITY	Augmented; report should include TORNADO, FUNNEL CLOUD or WATERSPOUT, time (after the hour) of beginning/end, location, movement; e.g.,TORNADO B25 N MOVE E
AO2	TYPE OF AUTOMATED STATION	AO1; automated station without a precipitation discriminator. AO2; automated station with precipitation discriminator.
PK WND 20032/25	PEAK WIND	PK WND dddff(F)/(hh)mm; direction in tens of degrees, speed in whole knots, time (reported in UTC) in minutes after the hour. Only minutes after the hour is included if the hour can be inferred from the report.
WSHFT 1715	WIND SHIFT,/FONT>	WSHFT followed by hours and minutes of occurrence. The term FROPA may be entered after the time if it is reasonably certain that the wind shift was a result of a frontal passage.
TWR VIS 2	TOWER OR SURFACE VISIBILITY	TWR VIS vvvvv: visibility reported by tower personnel,e.g., TWR VIS 2; SFC VIS vvvvv: visibility reported by ASOS or observer.
VIS 3/4V1 1/2	VARIABLE PREVAILING VISIBILITY	VIS v _n v _n v _n v _n Vv _x v _x v _x v _x v _x ; reported if prevailing visibility is <3 statute miles and variable.
VIS 3/4 RWY11	VISIBILITY AT SECOND LOCATION	VIS vvvvv(LOC); reported if different than the reported prevailing visibility in the body of the report.
FRQ LTG NE	LIGHTNING	(FREQUENCY) LTG (LOCATION); when detected the frequency and location is reported, e.g., FRQ LTG NE, meaning frequent lightning to northeast of station. (See code details in table below)
RAB07	BEGINNING AND ENDING TIME OF PRECIPITATION AND THUNDERSTORMS	w'w'B(hh)mmE(hh)mm; TSB(hh)mmE(hh)mm, where w'w' is the present weather precipitation contraction, B indicates began, E indicates ended; (hh)indicates the hour (reported in UTC) the phenomena began or ended and can be omitted if the hour can be inferred from the report, mm indicates the minutes after the hour the phenomenon began or ended.
	VIRGA	Augmented to report by human observer; indicates precipitation not reaching the ground is observed.
CIG 013V017	VARIABLE CEILING	CIG h _n h _n h _n Vh _x h _x h _x ; reported if the ceiling in the body of the report is <3000 feet and variable.
CIG 017	CEILING HEIGHT	CIG hhh[LOC]; Ceiling height reported if secondary

RWY11	AT SECOND LOCATION	ceilometer site ceiling value is different than the ceiling height in the body of the report.
PRESFR	PRESSURE RISING OR FALLING RAPIDLY	PRESRR or PRESFR; pressure rising or falling rapidly at time of observation.
SLP125	SEA LEVEL PRESSURE	SLPppp; sea level pressure reported for ppp in tens, units, and tenths of hPa.
P0003	HOURLY PRECIPITATION AMOUNT	Prrrrr; in tens, units, tenths and hundredths of an inch since last regular hourly METAR. A trace is reported as P0000.
60009	3- AND 6-HOUR PRECIPITATION AMOUNT	6RRRR; precipitation amount, including water equivalent, to nearest 0.01 inches for past 6 hours reported in 00, 06, 12, and 18 UTC observations and for past 3 hours in 03, 09, 15, and 21 UTC observations. A trace is 60000.
70015	24-HOUR PRECIPITATION AMOUNT	7R ₂₄ R ₂₄ R ₂₄ R ₂₄ ; precipitation amount to nearest 0.01 inches for past 24 hours reported in 12 UTC observation; e.g., 70015 indicates 0.15 inches of precipitation for past 24 hours.
T00640036	HOURLY TEMPERATURE AND DEW POINT	Ts _n T _a T _a T _a T _a s _n T' _a T' _a T' _a ; reported to nearest tenth of °C; s _n : 1 if temperature or dew point below 0°C and 0 if temperature/dew point 0°C or higher.
10066	6-HOUR MAXIMUM TEMPERATURE	1s _n T _x T _x T _x ; maximum temperature for past 6 hours reported to nearest tenth of degree Celsius; reported on 00, 06, 12, 18 UTC reports; s _n = 1 if temperature below 0°C and 0 if temperature 0°C or higher.
21012	6-HOUR MINIMUM TEMPERATURE	2s _n T _n T _n T _n ; minimum temperature for past 6 hours reported to nearest tenth of degree Celsius; reported on 00, 06, 12, 18 UTC reports; s _n = 1 if temperature below 0°C and 0 if temperature 0°C or higher.
400461006	24-HOUR MAXIMUM AND MINIMUM TEMPERATURE	4s _n T _x T _x T _x s _n T _n T _n T _n ; maximum temperature for past 6 hours reported to nearest tenth of degree Celsius; reported on midnight local standard time reports; s _n = 1 if temperature below 0°C and 0 if temperature 0°C or higher; e.g., 400461006 indicates a 24-hour maximum temperature of 4.6°C and a 24-hour minimum temperature of -0.6°C.
58033	PRESSURE TENDENCY	5appp; the character (a) and amount of change in pressure (ppp) in tenths of hPa for the past 3 hours. (See code details in table below)
TSNO	SENSOR STATUS INDICATORS	RVRNO: RVR missing; PWINO: precipitation identifier information not available; PNO: precipitation amount not available; FZRANO: freezing rain information not available; TSNO: thunderstorm information not available (may indicate augmenting weather observer not logged on); VISNO [LOC] visibility at second location not available, e.g. VISNO RWY06; CHINO [LOC]: (cloud-height- indicator) sky condition at secondary location not available, e.g., CHINO RWY06.
\$	MAINTENANCE	Maintenance is needed on the system.

	CHECK INDICATOR	
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Table of Remarks Referring to Type and Frequency of Lightning

Type of Lightning		
Type	Contraction	Definition
Cloud-ground	CG	Lightning occurring between cloud and ground.
In-cloud	IC	Lightning which takes place within the cloud.
Cloud-cloud	CC	Streaks of lightning reaching from one cloud to another.
Cloud-air	CA	Streaks of lightning which pass from a cloud to the air, but do not strike the ground.

Frequency of Lightning		
Frequency	Contraction	Definition
Occasional	OCNL	Less than 1 flash per minute.
Frequent	FRQ	About 1 to 6 flashes per minute.
Continuous	CONS	More than 6 flashes per minute.

HOURLY OBSERVATIONS DOCUMENTATION

WATER EQUIVALENT IN INCHES
 T = TRACE PRECIPITATION AMOUNT
 M = MISSING DATA

** 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.

HOURLY PRECIPITATION DATA ARE NOT NORMALLY AVAILABLE FOR AWOS SITES.

** NCDC DERIVES THE MONTHLY SHORT DURATION PRECIPITATION FROM 1 MINUTE ASOS DATA. THE MONTHLY SHORT DURATION PRECIPITATION DATA ARE NOT PRINTED WHEN INCONSISTENT WITH ASOS HOURLY TOTALS.

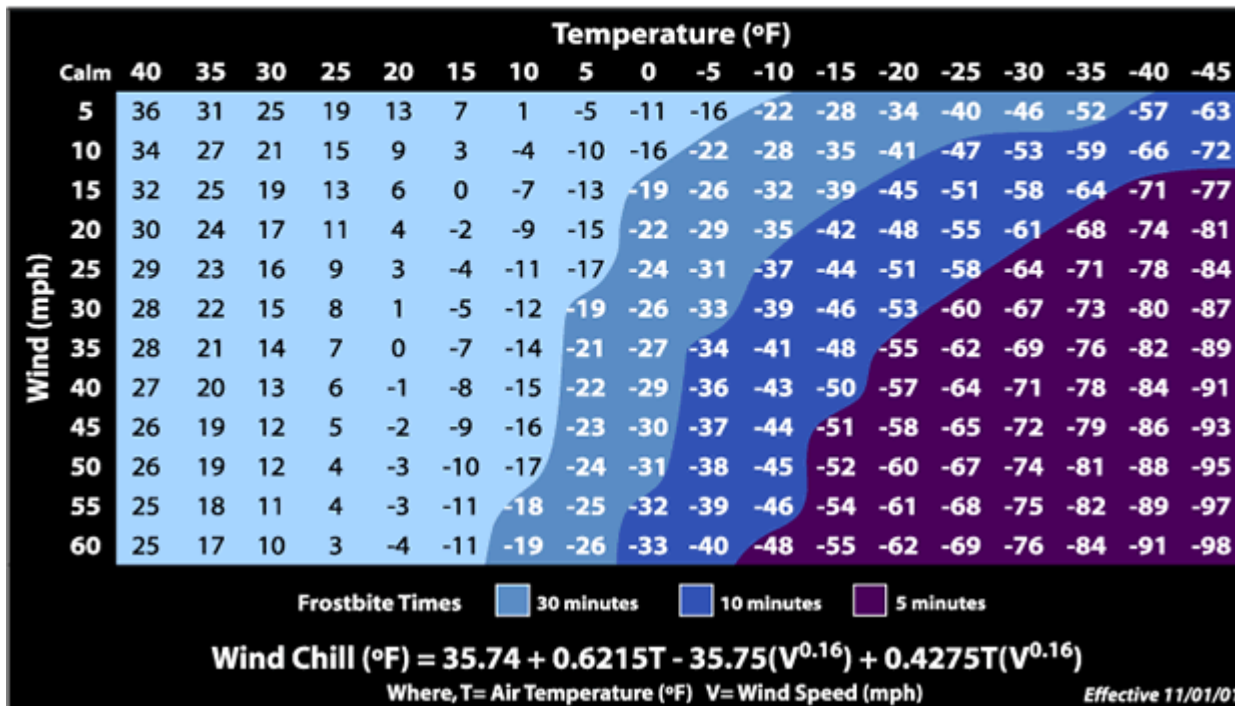
NUMERICAL CODES LISTING FOR HOURLY OBSERVATIONS

COLUMN	TERMINOLOGY
1	DATE
2	TIME: TIME IN LST (LOCAL STANDARD TIME)
3	STATION TYPE 0 AMOS now AWOS, also USAF stations 4 MAPSO 5 Navy METAR 6 Navy Airways(obsolete) 8 SOD- Keyed from 10C 9 SOD/HPD- Keyed B16, F-6, Navy Forms 11 ASOS (NWS) 12 ASOS (FAA) 15 Climate Reference Network (CRN)
4	Sky Conditions SKY CONDITIONS BELOW 12,000 FEET AGL (ABOVE GROUND LEVEL) SKY CONDITIONS CONTRACTIONS ARE FOR EACH LAYER IN ASCENDING ORDER. NUMBERS FOLLOWING CONTRACTIONS ARE BASE HEIGHT IN HUNDREDS OF FEET ABOVE GROUND LEVEL (AGL). CLR: CLEAR BELOW 12,000 FT FEW: > 0/8 - 2/8 SKY COVER SCT SCATTERED: 3/8 - 4/8 SKY COVER BKN BROKEN: 5/8 - 7/8 SKY COVER OVC OVERCAST: 8/8 SKY COVER VVXXX INDICATES INDEFINITE CEILING WITH THE VERTICAL VISIBILITY (XXX) LISTED IN HUNDREDS OF FEET. WHEN CLOUDS ARE COMPOSED OF TOWERING CUMULUS OR CUMULONIMBUS, TCU OR CB (RESPECTIVELY) FOLLOW CLOUD HEIGHT.

	SOME STATIONS REPORT CLOUDS ABOVE 12,000 FEET.
5	VISIBILITY IN STATUTE MILES (SM)
6	(SEE DAILY TABLE #12 FOR EXPLANATION OF WEATHER TYPES)
7	DRY BULB TEMPERATURE (DEGREES F) WHOLE DEGREES
8	DRY BULB TEMPERATURE (DEGREES C) ASOS IN TENTHS; AWOS IN WHOLE DEGREES
9	WET BULB TEMPERATURE (DEGREES F) WHOLE DEGREES
10	WET BULB TEMPERATURE (DEGREES C) ASOS IN TENTHS; AWOS IN WHOLE DEGREES
11	DEW POINT TEMPERATURE (DEGREES F) WHOLE DEGREES
12	WET BULB TEMPERATURE (DEGREES C) ASOS IN TENTHS; AWOS IN WHOLE DEGREES
13	RELATIVE HUMIDITY (PERCENT)
14	WIND SPEED (MPH)
15	WIND DIRECTION (TENS OF DEGREES FROM TRUE NORTH) VRB = VARIABLE WITH SPEED EQUAL TO OR LESS THAN 6 KNOTS
16	WIND CHARACTERISTIC GUSTS (MPH)
17	STATION PRESSURE (INCHES IN HUNDREDTHS)
18	PRESSURE TENDENCY
19	NET 3 HOUR CHANGE (MILLIBARS)
20	SEA LEVEL PRESSURE (INCHES IN HUNDREDTHS)
21	REPORT TYPE: AA - METAR (AVIATION ROUTINE WEATHER REPORT) - HOURLY SP - METAR SPECIAL REPORT
22	PRECIPITATION TOTALS (INCHES AND HUNDREDTHS) HOURLY TOTALS IF COLUMN 20 IS "AA" (HOURLY METAR REPORT).
23	ALTIMETER (INCHES IN HUNDREDTHS)



Wind Chill Chart



Source: <http://www.nws.noaa.gov/om/windchill/index.shtml>

Surface Weather Observations - METAR always have wind speeds originally reported in knots. The conversion table below will provide a quick conversion for winds from calm to 99 knots. The converted values are all rounded to the nearest integer. For a more accurate conversion use the following formula:

$$\text{KNOT} = 1.15155 \text{ MILES PER HOUR}$$

Knots to Miles Per Hour Conversion Chart										
K T S	0 MPH	1 MPH	2 MPH	3 MPH	4 MPH	5 MPH	6 MPH	7 MPH	8 MPH	9 MPH
0	0	1	2	3	5	6	7	8	9	10
10	12	13	14	15	16	17	18	20	21	22
20	23	24	25	26	28	29	30	31	32	33
30	35	36	37	38	39	40	41	43	44	45
40	46	47	48	49	51	52	53	54	55	56
50	58	59	60	61	62	63	64	66	67	68
60	69	70	71	72	74	75	76	77	78	79
70	81	82	83	84	85	86	87	89	90	91
80	92	93	94	96	97	98	99	100	101	102
90	104	105	106	107	108	109	110	112	113	114

TEMPERATURE - HUMIDITY INDEX (STEADMAN, 1979)												
	RELATIVE HUMIDITY (PERCENT)											
	0	10	20	30	40	50	60	70	80	90	100	
T > 120	107	116	130	148								
E > 115	103	111	120	135	151							
M > 110	99	105	112	123	137	150						
P > 105	95	100	105	113	123	135	149					
E > 100	91	95	99	104	110	120	132	144				
R > 95	87	90	93	96	101	107	114	124	136			
A > 90	83	85	87	90	93	96	100	106	113	122		
T > 85	78	80	82	84	86	88	90	93	97	102	108	
U > 80	73	75	77	78	79	81	82	85	86	88	91	
R > 75	69	70	72	73	74	75	76	77	78	79	80	
E > 70	64	65	66	67	68	69	70	70	71	71	72	

Pressure Tendency description:

- 0: Increasing, then decreasing; atmospheric pressure the same or higher than 3 hours ago
- 1: Increasing then steady; or increasing, then increasing more slowly; atmospheric pressure now higher than 3 hours ago
- 2: Increasing (steadily or unsteadily); atmospheric pressure now higher than 3 hours ago
- 3: Decreasing or steady, then increasing; or increasing, then increasing more rapidly; atmospheric pressure now higher than 3 hours ago
- 4: Steady; atmospheric pressure the same as 3 hours ago
- 5: Decreasing, then increasing; atmospheric pressure the same or lower than 3 hours ago
- 6: Decreasing, then steady; or decreasing, then decreasing more slowly; atmospheric pressure

now lower than 3 hours ago

7: Decreasing (steadily or unsteadily); atmospheric pressure now lower than 3 hours ago

8: Steady or increasing, then decreasing; or decreasing, then decreasing more rapidly;
atmospheric pressure now lower than 3 hours ago

9: Missing