

72317 GSO Greensboro Observations at 00Z 24 Jul 2015

PRES hPa	HGHT m	TEMP C	DWPT C	RELH %	MIXR g/kg	DRCT deg	SKNT knot	THTA K	THTE K	THTV K
1000.0	105									
981.0	270	24.6	22.3	87	17.62	80	4	299.4	351.1	302.5
969.0	379	23.6	20.8	84	16.24	78	6	299.4	347.1	302.3
943.9	610	21.9	18.6	81	14.46	75	10	299.9	342.4	302.5
940.0	646	21.6	18.2	81	14.19	73	11	300.0	341.8	302.6
925.0	787	21.2	17.2	78	13.53	65	13	301.0	341.0	303.4
911.5	914	20.8	15.8	73	12.57	50	11	301.9	339.2	304.1
884.0	1180	20.0	13.0	64	10.75	28	12	303.7	335.9	305.6
880.0	1219	19.7	12.8	64	10.69	25	12	303.8	335.9	305.7
850.0	1517	17.6	11.6	68	10.19	10	13	304.6	335.3	306.4
842.0	1598	16.8	10.8	68	9.75	5	13	304.6	334.0	306.3
824.0	1782	16.0	11.0	72	10.10	353	13	305.6	336.2	307.4
819.5	1829	15.8	10.3	70	9.72	350	13	305.8	335.3	307.6
802.0	2012	14.8	7.8	63	8.34	335	15	306.7	332.2	308.2
790.5	2134	14.0	8.4	69	8.82	325	16	307.1	334.1	308.7
777.0	2280	13.0	9.1	77	9.42	320	16	307.5	336.4	309.3
762.5	2438	12.1	8.2	77	9.01	315	16	308.2	335.9	309.9
735.1	2743	10.3	6.4	77	8.26	310	20	309.5	335.1	311.0
719.0	2929	9.2	5.3	77	7.83	310	19	310.3	334.6	311.7
708.0	3057	8.6	5.9	83	8.29	310	18	311.0	336.8	312.5
700.0	3151	8.0	5.4	84	8.10	310	17	311.3	336.6	312.8
685.0	3330	7.0	2.8	75	6.88	314	18	312.1	333.8	313.4
683.1	3353	6.8	2.8	76	6.92	315	18	312.2	334.0	313.5
673.0	3475	5.8	3.0	82	7.11	305	18	312.4	334.7	313.7
666.0	3561	5.4	2.6	82	6.98	298	18	312.9	334.9	314.2
664.0	3585	5.6	1.2	73	6.33	296	18	313.4	333.4	314.5
660.0	3635	6.4	-7.6	36	3.29	292	18	314.8	325.6	315.4
658.1	3658	6.3	-8.8	33	3.00	290	18	315.0	324.9	315.6
652.0	3735	6.2	-12.8	24	2.20	287	18	315.7	323.1	316.1
645.0	3823	5.4	-11.6	28	2.45	285	19	315.7	324.0	316.2
637.0	3925	4.4	-4.6	52	4.29	281	19	315.7	329.7	316.5
634.1	3962	4.0	0.1	76	6.13	280	19	315.7	335.4	316.9
634.0	3963	4.0	0.3	77	6.21	280	19	315.7	335.6	316.9
627.0	4054	3.4	0.1	79	6.19	285	19	316.0	335.9	317.2
624.0	4093	3.2	-0.8	75	5.82	286	19	316.2	335.0	317.3
617.0	4184	3.4	-9.6	38	3.01	291	20	317.5	327.5	318.0
613.0	4237	3.2	-12.8	30	2.34	294	20	317.8	325.8	318.3
610.7	4267	3.0	-12.1	32	2.48	295	20	317.9	326.3	318.4
600.0	4410	2.0	-9.0	44	3.24	296	19	318.4	329.2	319.0
596.0	4464	1.6	-3.4	69	5.02	297	19	318.5	335.0	319.5
593.0	4505	1.2	-2.6	76	5.36	297	18	318.5	336.0	319.6
584.0	4628	0.8	-7.2	55	3.83	298	18	319.5	332.2	320.2
573.0	4781	-0.5	-9.5	51	3.26	299	17	319.7	330.6	320.3
569.0	4837	-0.9	-7.9	59	3.73	300	16	319.8	332.3	320.6
567.0	4865	-0.9	-5.9	69	4.37	300	16	320.2	334.6	321.0
566.1	4877	-1.0	-6.0	69	4.33	300	16	320.2	334.6	321.1
549.0	5122	-2.3	-8.3	63	3.74	316	17	321.5	334.0	322.2
544.9	5182	-2.6	-8.1	66	3.82	320	17	321.8	334.7	322.6
524.3	5486	-4.0	-7.3	78	4.22	290	14	323.7	337.9	324.5
523.0	5506	-4.1	-7.3	78	4.25	289	15	323.8	338.1	324.6
513.0	5659	-4.7	-8.3	76	4.01	285	19	324.9	338.4	325.6
500.0	5860	-6.7	-8.8	85	3.95	280	25	324.8	338.2	325.6
491.0	6002	-7.7	-9.1	90	3.93	280	28	325.3	338.6	326.1

485.1	6096	-8.2	-9.6	89	3.83	280	30	325.8	338.9	326.6
466.4	6401	-9.6	-11.2	88	3.51	285	40	327.7	339.8	328.4
444.0	6782	-11.5	-13.2	87	3.13	280	39	330.0	340.9	330.6
422.0	7172	-12.7	-14.4	87	2.99	275	37	333.3	343.9	333.9
400.0	7580	-15.1	-17.2	84	2.50	270	36	335.3	344.3	335.8
397.9	7620	-15.3	-17.4	84	2.47	270	36	335.5	344.4	336.0
383.0	7907	-16.7	-18.8	84	2.28	270	34	337.4	345.7	337.8
382.1	7925	-16.9	-19.0	84	2.25	270	34	337.4	345.6	337.8
361.0	8349	-20.7	-23.3	80	1.63	265	40	337.8	343.8	338.1
347.0	8640	-22.5	-25.1	79	1.44	261	44	339.2	344.6	339.5
332.0	8962	-26.1	-32.1	57	0.79	257	49	338.5	341.6	338.7
323.8	9144	-26.6	-32.6	57	0.76	255	52	340.2	343.2	340.4
320.0	9228	-26.9	-32.9	57	0.75	256	52	341.0	344.0	341.2
300.0	9690	-30.5	-35.0	65	0.65	260	51	342.3	344.9	342.4
278.0	10223	-34.9	-38.0	73	0.52	262	56	343.5	345.6	343.6
257.0	10763	-39.1	-44.1	59	0.30	264	61	345.1	346.3	345.1
250.0	10950	-40.7	-45.6	59	0.26	265	63	345.4	346.5	345.5
219.0	11837	-47.9	-52.3	60	0.14	273	67	347.6	348.2	347.6
212.0	12051	-49.5	-55.5	49	0.10	274	68	348.4	348.8	348.4
210.0	12113	-50.0	-56.2	48	0.09	275	68	348.5	348.9	348.5
207.4	12192	-50.7	-57.1	47	0.08	275	68	348.7	349.0	348.7
200.0	12430	-52.7	-59.7	42	0.06	275	67	349.1	349.4	349.2
193.0	12659	-54.7	-62.7	36	0.04	274	65	349.5	349.7	349.5
176.0	13246	-57.1	-70.1	18	0.02	271	60	354.9	355.0	354.9
160.0	13843	-61.9	-72.9	22	0.01	267	55	356.6	356.7	356.6
150.0	14240	-64.3	-75.3	21	0.01	265	51	359.1	359.2	359.1
143.0	14531	-66.3	-77.3	20	0.01	266	48	360.6	360.6	360.6
140.0	14659	-65.1	-77.1	18	0.01	267	46	364.9	364.9	364.9
138.0	14747	-65.1	-77.1	18	0.01	268	45	366.4	366.4	366.4
131.0	15062	-67.5	-78.5	20	0.01	269	42	367.6	367.6	367.6
127.2	15240	-67.9	-78.9	19	0.01	270	40	369.9	369.9	369.9
124.0	15392	-68.3	-79.3	19	0.01	274	40	371.9	372.0	371.9
119.0	15638	-70.1	-80.1	22	0.01	280	39	373.0	373.1	373.0
114.8	15850	-70.5	-81.0	20	0.00	280	42	376.2	376.2	376.2
112.0	15997	-70.7	-81.7	18	0.00	286	40	378.4	378.4	378.4
107.0	16271	-66.7	-78.7	17	0.01	298	35	391.0	391.0	391.0
105.0	16385	-66.1	-78.1	17	0.01	303	34	394.2	394.3	394.2
100.0	16680	-66.9	-78.9	17	0.01	315	29	398.2	398.2	398.2
98.6	16764	-67.3	-79.1	17	0.01	310	18	399.1	399.1	399.1
93.8	17069	-68.6	-79.7	19	0.01	310	21	402.3	402.4	402.3
92.6	17143	-68.9	-79.9	19	0.01	315	22	403.1	403.1	403.1
89.1	17374	-64.6	-77.2	16	0.01	330	27	416.1	416.2	416.1
88.3	17432	-63.5	-76.5	16	0.01	336	22	419.4	419.5	419.4
84.8	17678	-64.1	-76.8	16	0.01	0	0	423.0	423.1	423.0
78.8	18129	-65.3	-77.3	17	0.01	345	12	429.6	429.6	429.6
76.8	18288	-63.9	-76.7	16	0.01	340	16	435.6	435.7	435.6
73.9	18524	-61.9	-75.9	14	0.02	26	12	444.7	444.8	444.7
73.1	18593	-61.9	-75.7	14	0.02	40	11	446.2	446.3	446.2
70.0	18860	-61.7	-74.7	16	0.02	250	3	452.0	452.2	452.1
68.0	19039	-62.3	-75.3	16	0.02	255	3	454.5	454.6	454.5
65.6	19263	-59.5	-74.5	13	0.02	261	3	465.3	465.5	465.3
60.1	19812	-58.9	-74.2	12	0.03	275	2	478.4	478.5	478.4
50.0	20970	-57.7	-73.7	11	0.04	80	17	507.1	507.3	507.1
49.5	21033	-57.9	-72.9	13	0.04	80	17	508.1	508.4	508.1
49.5	21031	-57.9	-72.9	13	0.04	80	17	508.0	508.3	508.0
47.4	21308	-56.1	-72.1	12	0.05	94	19	518.7	519.0	518.7
47.2	21336	-56.3	-72.2	12	0.05	95	19	518.9	519.3	518.9
45.3	21595	-57.9	-72.9	13	0.04	108	19	521.1	521.4	521.1
45.0	21641	-57.9	-72.9	13	0.04	110	19	522.1	522.5	522.1
42.8	21946	-58.1	-73.1	13	0.05	80	16	529.0	529.3	529.0
40.8	22250	-58.3	-73.3	13	0.05	85	12	535.9	536.3	535.9

40.3	22332	-58.3	-73.3	13	0.05	77	13	537.8	538.2	537.8
38.9	22555	-57.7	-73.0	13	0.05	55	17	544.7	545.1	544.7
35.4	23165	-56.2	-72.1	12	0.06	85	16	563.8	564.4	563.9
32.1	23774	-54.6	-71.2	11	0.08	70	20	583.6	584.3	583.6
30.0	24210	-53.5	-70.5	11	0.09	90	28	598.2	599.0	598.2
29.5	24318	-53.1	-70.1	11	0.10	93	30	602.2	603.0	602.2
29.2	24384	-53.2	-70.1	11	0.10	95	31	603.6	604.5	603.7
27.8	24689	-53.7	-70.0	12	0.11	105	27	610.5	611.4	610.5
25.4	25277	-54.7	-69.7	14	0.13	86	30	623.9	625.0	624.0
24.1	25603	-53.2	-68.9	13	0.15	75	31	637.4	638.7	637.5
23.6	25749	-52.5	-68.5	13	0.16	77	32	643.6	645.0	643.6
20.0	26820	-51.1	-67.1	13	0.23	90	37	679.0	681.1	679.1
19.8	26885	-50.7	-66.7	13	0.24	91	38	682.2	684.5	682.3
19.1	27127	-51.1	-66.3	15	0.27	95	42	688.1	690.6	688.2
18.2	27432	-51.7	-65.7	17	0.31	110	37	695.7	698.6	695.8
18.2	27432	-51.7	-65.7	17	0.31	110	37	695.7	698.5	695.8
17.2	27799	-49.9	-64.9	15	0.36	95	37	712.7	716.2	712.9
16.6	28042	-50.2	-64.8	16	0.38	85	37	719.5	723.1	719.6
15.5	28476	-50.7	-64.7	17	0.41	90	33	731.6	735.7	731.8
14.2	29048	-49.1	-65.1	14	0.42	97	29	755.5	759.9	755.7
13.8	29261	-49.0	-64.9	14	0.45	100	27	763.0	767.6	763.2
13.1	29566	-48.8	-64.6	14	0.49	85	35	773.7	778.9	773.9
12.5	29870	-48.7	-64.3	15	0.53	95	40	784.6	790.2	784.8
11.4	30480	-48.4	-63.7	15	0.63	90	38	806.8	813.7	807.1
10.0	31350	-47.9	-62.9	16	0.81	80	46	839.6	848.7	840.0
8.7	32309	-48.2	-63.2	16	0.90	80	52	873.9	884.4	874.3
8.4	32503	-48.3	-63.3	16	0.91	82	51	881.0	891.8	881.5
7.2	33528	-44.4	-63.6	10	1.02	95	46	936.3	949.2	936.9
7.0	33720	-43.7	-63.7	9	1.04	95	45	947.0	960.3	947.6
6.9	33833	-43.1	-63.7	9	1.06	90	43	954.0	967.6	954.6
6.6	34117	-41.7	-63.7	7	1.10			971.5	986.0	972.1

Station information and sounding indices

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Station identifier: GSO
Station number: 72317
Observation time: 150724/0000
Station latitude: 36.08
Station longitude: -79.95
Station elevation: 270.0
Showalter index: 2.19
Lifted index: -1.61
LIFT computed using virtual temperature: -1.83
SWEAT index: 190.19
K index: 33.30
Cross totals index: 18.30
Vertical totals index: 24.30
Totals totals index: 42.60
Convective Available Potential Energy: 163.34
CAPE using virtual temperature: 237.84
Convective Inhibition: -65.09
CINS using virtual temperature: -36.82
Equilibrium Level: 327.98
Equilibrium Level using virtual temperature: 327.21
Level of Free Convection: 771.26
LFCT using virtual temperature: 806.08
Bulk Richardson Number: 3.93
Bulk Richardson Number using CAPV: 5.73
Temp [K] of the Lifted Condensation Level: 291.94
Pres [hPa] of the Lifted Condensation Level: 911.10

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Mean mixed layer potential temperature: 299.82

Mean mixed layer mixing ratio: 15.27

1000 hPa to 500 hPa thickness: 5755.00

Precipitable water [mm] for entire sounding: 45.51

Description of the [data columns](#) or [sounding indices](#).

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Questions about the weather data provided by this site can be addressed to [Larry Oolman \(ldoolman@uwyo.edu\)](mailto:Larry.Oolman@uwyo.edu)
