

72764 BIS Bismarck Observations at 00Z 26 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	61									
951.0	506	31.4	13.4	33	10.26	130	4	308.9	340.5	310.9
943.0	582	30.0	13.0	35	10.07	128	4	308.3	339.2	310.1
925.0	753	28.6	12.6	37	10.00	125	4	308.6	339.3	310.4
919.0	811	27.8	11.8	37	9.54	121	3	308.3	337.6	310.1
908.3	914	26.9	11.3	38	9.37	115	2	308.4	337.2	310.1
877.2	1219	24.2	10.0	41	8.87	160	3	308.7	336.1	310.4
850.0	1496	21.8	8.8	43	8.43	300	3	309.0	335.0	310.5
817.7	1829	18.9	7.6	48	8.09	315	7	309.3	334.4	310.9
795.0	2071	16.8	6.8	52	7.85	331	7	309.6	334.0	311.1
789.2	2134	16.4	5.6	49	7.29	335	7	309.8	332.5	311.2
761.4	2438	14.4	-0.1	37	5.02	345	7	310.9	326.9	311.8
758.0	2476	14.2	-0.8	36	4.78	344	7	311.0	326.3	311.9
734.1	2743	11.8	-1.6	39	4.66	340	4	311.2	326.1	312.1
700.0	3140	8.2	-2.8	46	4.47	335	7	311.5	325.9	312.4
689.0	3270	7.0	-3.0	49	4.47	329	8	311.6	325.9	312.4
657.1	3658	4.4	-8.6	38	3.06	310	10	313.0	323.0	313.6
647.0	3784	3.6	-10.4	35	2.69	305	10	313.4	322.3	313.9
626.0	4051	1.2	-7.8	51	3.41	294	11	313.6	324.8	314.3
613.0	4219	0.6	-8.4	51	3.33	287	12	314.8	325.8	315.5
609.4	4267	0.6	-13.2	35	2.27	285	12	315.4	323.0	315.8
607.0	4298	0.6	-16.4	27	1.76	286	12	315.7	321.7	316.1
591.0	4512	-1.1	-19.1	24	1.44	293	13	316.2	321.1	316.4
577.0	4702	-2.5	-14.5	39	2.17	299	13	316.7	324.1	317.1
564.3	4877	-3.8	-15.4	40	2.06	305	14	317.2	324.2	317.6
519.0	5532	-8.7	-18.7	44	1.69	291	17	318.9	324.8	319.3
509.0	5683	-10.1	-18.1	52	1.82	288	18	319.0	325.3	319.4
505.0	5743	-10.3	-17.3	57	1.96	287	19	319.5	326.3	319.9
500.0	5820	-10.7	-17.7	56	1.91	285	19	319.9	326.6	320.3
494.0	5913	-11.1	-18.1	56	1.87	283	18	320.6	327.1	320.9
482.3	6096	-12.2	-22.1	44	1.36	280	17	321.4	326.3	321.7
466.0	6358	-13.7	-27.7	30	0.85	277	19	322.7	325.8	322.9
450.0	6622	-15.9	-24.9	46	1.13	274	21	323.2	327.3	323.4
435.0	6877	-16.9	-28.9	35	0.81	272	23	325.1	328.1	325.2
409.0	7336	-20.9	-32.9	33	0.59	267	27	325.7	327.9	325.8
400.0	7500	-20.9	-44.9	10	0.18	265	28	327.7	328.4	327.8
395.0	7593	-20.7	-54.7	3	0.06	269	26	329.2	329.4	329.2
393.5	7620	-20.9	-54.7	3	0.06	270	26	329.2	329.5	329.2
324.0	9023	-33.3	-53.3	12	0.08	256	30	331.0	331.3	331.0
318.4	9144	-34.2	-54.8	11	0.07	255	30	331.4	331.7	331.4
300.0	9560	-37.1	-60.1	7	0.04	255	33	333.0	333.1	333.0
269.0	10307	-42.9	-64.9	7	0.02	252	39	335.1	335.2	335.1
250.0	10800	-45.5	-68.5	6	0.02	250	43	338.3	338.4	338.3
241.0	11043	-47.1	-68.1	7	0.02	250	45	339.4	339.5	339.4
215.0	11792	-50.3	-71.3	7	0.01	250	50	345.7	345.8	345.7
203.0	12164	-53.1	-73.1	7	0.01	250	53	347.0	347.1	347.0
200.0	12260	-53.1	-73.1	7	0.01	250	54	348.5	348.6	348.5
197.0	12358	-52.7	-73.7	6	0.01	250	56	350.7	350.7	350.7
192.8	12497	-53.5	-76.1	5	0.01	250	59	351.5	351.5	351.5
189.0	12625	-54.3	-78.3	4	0.00	250	58	352.3	352.3	352.3
178.0	13010	-53.9	-81.9	2	0.00	248	56	359.0	359.0	359.0
163.0	13572	-56.3	-84.3	2	0.00	247	53	364.1	364.1	364.1
150.0	14100	-56.9	-86.9	1	0.00	245	50	371.8	371.9	371.8

145.0	14314	-56.9	-87.9	1	0.00	241	49	375.5	375.5	375.5
137.9	14630	-58.3	-88.5	1	0.00	235	47	378.4	378.4	378.4
136.0	14717	-58.7	-88.7	1	0.00	236	48	379.2	379.2	379.2
132.0	14904	-58.5	-89.5	1	0.00	237	50	382.8	382.8	382.8
125.0	15240	-60.8	-90.5	1	0.00	240	54	384.6	384.6	384.6
119.0	15545	-63.0	-91.4	1	0.00	250	58	386.1	386.1	386.1
117.0	15651	-63.7	-91.7	1	0.00	254	56	386.6	386.6	386.6
112.0	15918	-63.7	-91.7	1	0.00	264	50	391.5	391.5	391.5
109.0	16083	-64.7	-91.7	1	0.00	270	46	392.7	392.7	392.7
106.0	16253	-64.5	-92.5	1	0.00	268	43	396.2	396.2	396.2
105.0	16311	-62.7	-90.7	1	0.00	268	43	400.7	400.7	400.7
100.0	16610	-63.9	-91.9	1	0.00	265	38	404.0	404.0	404.0
98.5	16703	-61.7	-90.7	1	0.00	265	36	410.0	410.0	410.0
91.4	17168	-59.7	-90.7	1	0.00	263	24	422.8	422.8	422.8
87.5	17444	-54.5	-87.5	1	0.00	262	18	438.6	438.6	438.6
82.1	17852	-53.1	-86.1	1	0.00	260	8	449.5	449.5	449.5
80.4	17983	-53.6	-86.5	1	0.00	260	5	451.1	451.1	451.1
76.7	18288	-54.7	-87.3	1	0.00	175	18	454.9	455.0	454.9
70.0	18870	-56.9	-88.9	1	0.00	270	3	462.3	462.3	462.3
66.4	19202	-56.6	-88.6	1	0.00	0	0	470.0	470.0	470.0
63.8	19459	-56.3	-88.3	1	0.00	26	4	476.0	476.1	476.0
57.5	20126	-52.1	-85.1	1	0.00	91	13	499.9	499.9	499.9
54.9	20422	-52.4	-85.4	1	0.00	120	17	505.7	505.8	505.7
50.0	21030	-53.1	-86.1	1	0.00	145	6	517.9	517.9	517.9
48.4	21239	-53.3	-86.3	1	0.00	111	8	522.3	522.3	522.3
47.7	21336	-52.4	-85.7	1	0.01	95	9	526.5	526.6	526.6
45.5	21640	-49.7	-83.7	1	0.01	70	6	540.3	540.3	540.3
43.4	21946	-49.4	-83.4	1	0.01	45	3	548.3	548.4	548.3
41.6	22227	-49.1	-83.1	1	0.01	63	5	555.8	555.9	555.8
37.8	22860	-50.9	-84.2	1	0.01	105	11	567.0	567.0	567.0
36.0	23165	-51.7	-84.8	1	0.01	110	11	572.4	572.5	572.4
35.6	23242	-51.9	-84.9	1	0.01	110	11	573.8	573.9	573.8
30.5	24251	-48.5	-82.5	1	0.01	110	17	608.9	609.1	608.9
30.0	24360	-48.5	-82.5	1	0.01	110	18	611.8	612.0	611.8
29.9	24384	-48.5	-82.5	1	0.01	110	18	612.5	612.7	612.5
27.8	24862	-47.7	-82.7	1	0.02	118	14	627.5	627.6	627.5
27.2	24994	-48.2	-82.8	1	0.02	120	13	629.6	629.7	629.6
26.6	25153	-48.9	-82.9	1	0.02	110	12	632.1	632.2	632.1
26.0	25298	-48.4	-82.6	1	0.02	100	11	637.4	637.6	637.4
24.9	25603	-47.4	-82.0	1	0.02	80	21	648.8	648.9	648.8
21.6	26535	-44.3	-80.3	1	0.03	109	17	684.6	684.9	684.6
21.6	26518	-44.4	-80.3	1	0.03	110	17	683.9	684.2	683.9
20.7	26822	-44.6	-80.1	1	0.03	95	16	692.0	692.3	692.0
20.0	27050	-44.9	-79.9	1	0.03	100	16	698.0	698.3	698.0
19.2	27323	-45.3	-80.3	1	0.03	100	17	704.9	705.3	704.9
18.9	27432	-44.8	-80.0	1	0.04	100	17	709.8	710.2	709.8
18.1	27737	-43.3	-79.2	1	0.04	70	14	723.6	724.1	723.6
17.8	27831	-42.9	-78.9	1	0.04	75	17	727.9	728.4	727.9
16.5	28346	-44.0	-80.0	1	0.04	105	31	740.4	740.8	740.4
16.2	28464	-44.3	-80.3	1	0.04	111	28	743.2	743.7	743.2
15.8	28651	-43.4	-79.7	1	0.04	120	23	752.1	752.6	752.1
15.1	28956	-41.9	-78.7	1	0.06	95	17	766.8	767.5	766.8
14.7	29120	-41.1	-78.1	1	0.06	90	16	774.8	775.5	774.9
13.2	29870	-40.8	-77.8	1	0.07	70	12	800.7	801.5	800.7
12.0	30480	-40.5	-77.5	1	0.08	65	24	822.3	823.3	822.4
11.1	31033	-40.3	-77.3	1	0.09	63	26	842.5	843.6	842.5
10.0	31750	-36.7	-74.7	1	0.15	60	28	881.4	883.3	881.5
9.1	32407	-33.5	-72.5	1	0.23	66	33	917.7	920.8	917.9
7.8	33528	-32.7	-71.7	1	0.31	75	42	963.8	968.0	964.0
7.5	33767	-32.5	-71.5	1	0.33			973.9	978.4	974.1

Station information and sounding indices

Station identifier: BIS
Station number: 72764
Observation time: 150726/0000
Station latitude: 46.76
Station longitude: -100.75
Station elevation: 506.0
Showalter index: -1.68
Lifted index: -3.16
LIFT computed using virtual temperature: -3.55
SWEAT index: 190.58
K index: 30.30
Cross totals index: 19.50
Vertical totals index: 32.50
Totals totals index: 52.00
Convective Available Potential Energy: 551.29
CAPE using virtual temperature: 648.98
Convective Inhibition: -102.78
CINS using virtual temperature: -59.61
Equilibrium Level: 256.49
Equilibrium Level using virtual temperature: 256.14
Level of Free Convection: 657.33
LFCT using virtual temperature: 691.76
Bulk Richardson Number: 34.97
Bulk Richardson Number using CAPV: 41.17
Temp [K] of the Lifted Condensation Level: 281.81
Pres [hPa] of the Lifted Condensation Level: 729.08
Mean mixed layer potential temperature: 308.44
Mean mixed layer mixing ratio: 9.77
1000 hPa to 500 hPa thickness: 5759.00
Precipitable water [mm] for entire sounding: 25.68

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)
