

McMurdo Station Daily Observation Worksheet

Date: 01

Time	Winds		3 hr Temp		Visibility (hrs)			Wx and Duration (Note 2)					Pcpn Amt	Max Wind (Note 3)			Max Gust (Note 3)			Avg Sky Cover	Low-est CIG	Ceiling (hrs)			Alt (in)		
	Zulu	Dir	Spd	Temp	Max	Min	<1600	<4800	<9999	sn/sg/ic	hrs	fg/br		hrs	bs	hrs	Spd	Dir	Time			Spd	Dir	Time		<500	<1000
12-15Z				-11.4	-12.6	-12.6										2	70	1448	3	130	1440				3		
15-18Z			0	-11.4	-11.4	-12.9				SN	6					0.01	3	90	1733	5	110	1647	8	20		3	29.39
18-21Z					-10.5	-11.4										6	100	2043	7	100	2049				3		
21-24Z		0	4	-8.3	-8.3	-10.6				SN	5					T	6	80	2323	8	90	2323	3			2	29.38
12 hr Max/Min					-8.3	-12.9																					
00-03Z					-4.9	-8.1										4	80	249	5	70	248						
03-06Z	60		8	-9.6	-5.7	-9.8										10	70	550	13	70	549	3				29.37	
06-09Z					-9.7	-11.3										11	90	740	14	90	735						
09-12Z		80	5	-12.1	-11.2	-14.0										9	80	1027	11	80	1037	5	70			29.37	
12 hr Max/Min					-4.9	-14.0																					
Avg Wind		Max	Min	Avg	Visibility (hrs)			Min Wind Chill		WX and Duration			Pcpn	Max Wind			Max Gust			Avg Sky Cover	Low-est CIG	Ceiling (hrs)					
Dir	Spd	Temp	Temp	Temp	Time	<1600	<4800	<9999	C	F	sn/sg/ic	fg/br	bs	Total	Dir	Spd	Time	Dir	Spd			Time	Time	<500	<1000	<3000	
53	4	-4.9	-14.0	-9.5	00-06L	0	0	0	-22.0	-8.0	11	0	0	0.01	90	11	740	90	14	735		00-06L	0	0	6		
															Altimeter			Total Obs Taken	Daily Pres Diff	Daily Temp Diff							
															Max	Min	Avg										
															29.39	29.37	29.38	3	0.02	9.1							
																		5	20	06-12L	0	0	5				
																				12-18L	0	0	0				
																				18-24L	0	0	0				

Note 1: Color coding. Green headings indicate blocks the Weather Observer must complete. The remainder are calculated/completed by MS Excel.

Note 2: When inputting WX and Duration entries, be sure to precede each wx type by a "/", ie. /sn. Duration should be a whole number, not fractions of an hour.

Note 3: To facilitate MS Excel, the order of entry for Max Wind and Max Gust is changed from conventional. The order is: Spd, Dir, and Time.

McMurdo Station Daily Observation Worksheet

Date: 02

Time	Winds			3 hr Temp		Visibility (hrs)			Wx and Duration (Note 2)					Pcpn Amt	Max Wind (Note 3)			Max Gust (Note 3)			Avg Sky Cover	Low-est CIG	Ceiling (hrs)			Alt (in)
	Dir	Spd	Temp	Max	Min	<1600	<4800	<9999	sn/sg/ic	hrs	fg/br	hrs	bs		hrs	Spd	Dir	Time	Spd	Dir			Time	<500	<1000	
12-15Z				-12.5	-15.3										12	80	1248	14	90	1234						
15-18Z	100	9	-15.1	-13.1	-18.7										12	80	1701	13	100	1750	7	150			29.38	
18-21Z				-11.4	-15.1										12	100	1807	15	110	2047						
21-24Z	60	10	-14.9	-12.6	-14.9										12	60	2345	17	50	2344	7	150			29.42	
12 hr Max/Min				-11.4	-18.7																					
00-03Z				-13.7	-15.7										12	50	212	17	50	244						
03-06Z	60	8	-15.3	-14.5	-16.2				sn	1				T	12	50	531	16	30	449	8	40			29.42	
06-09Z				-15.2	-17.3				sn	1					12	50	615	17	50	621						
09-12Z	50	12	-18.0	-15.1	-18.8									T	15	50	1147	19	40	1147	7	40			29.42	
12 hr Max/Min				-13.7	-18.8																					
Avg Wind		Max	Min	Avg	Visibility (hrs)			Min Wind Chill		WX and Duration			Pcpn	Max Wind			Max Gust			Avg	Low-est	Ceiling (hrs)				
Dir	Spd	Temp	Temp	Temp	Time	<1600	<4800	<9999	C	F	sn/sg/ic	fg/br	bs	Total	Dir	Spd	Time	Dir	Spd	Time	Sky Cover	CIG	Time	<500	<1000	<3000
66	10	-11.4	-18.8	-15.1	00-06L	0	0	0	-37.0	-35.0		2	0	0.00	50	15	1147	40	19	1147	7	40	00-06L	0	0	0
					06-12L	0	0	0						Altimeter			Total	Daily	Daily							
					12-18L	0	0	0						Max	Min	Avg	Obs	Pres	Temp							
					18-24L	0	0	0						29.42	29.38	29.41	Taken	Diff	Diff							
																4	0.04	7.4								

Note 1: Color coding. Green headings indicate blocks the Weather Observer must complete. The remainder are calculated/completed by MS Excel.

Note 2: When inputting WX and Duration entries, be sure to precede each wx type by a "/", ie. /sn. Duration should be a whole number, not fractions of an hour.

Note 3: To facilitate MS Excel, the order of entry for Max Wind and Max Gust is changed from conventional. The order is: Spd, Dir, and Time.



McMurdo Station Daily Observation Worksheet

Date: 03

Time	Winds			3 hr Temp		Visibility (hrs)			Wx and Duration (Note 2)					Pcpn Amt	Max Wind (Note 3)			Max Gust (Note 3)			Avg Sky Cover	Low-est CIG	Ceiling (hrs)			Alt (in)
	Dir	Spd	Temp	Max	Min	<1600	<4800	<9999	sn/sg/ic	hrs	fg/br	hrs	bs		hrs	Spd	Dir	Time	Spd	Dir			Time	<500	<1000	
12-15Z				-18.5	-19.9										17	50	1201	22	50	1200						
15-18Z	60	11	-19.9	-19.4	-20.3				sn	5				0.04	16	50	1720	22	50	1626	7	50				29.40
18-21Z			-18.1	-20.7											16	40	1807	21	50	1816						
21-24Z		0	-26.2	-16.1	-19.0				sn	6				T	7	50	2146	10	80	2141	8	8		1	4	29.36
12 hr Max/Min				-16.1	-20.3																					
00-03Z			-15.1	-19.3											10	100	242	13	110	241						
03-06Z	0	3	-14.0	-13.8	-18.8										7	90	257	8	80	257	8	8		6		29.25
06-09Z			-14.1	-18.1											7	90	618	9	90	618						
09-12Z		0	-15.3	-14.5	-17.4										4	80	914	5	80	908	8	8		6		29.18
12 hr Max/Min				-13.8	-19.3																					
Avg Wind	Max	Min	Avg	Visibility (hrs)			Min Wind Chill		WX and Duration			Pcpn	Max Wind			Max Gust			Avg	Low-	Ceiling (hrs)					
Dir	Spd	Temp	Temp	Temp	Time	<1600	<4800	<9999	C	F	sn/sg/ic	fg/br	bs	Total	Dir	Spd	Time	Dir	Spd	Time	Sky Cover	est CIG	Time	<500	<1000	<3000
48	4	-13.8	-20.3	-17.1	00-06L	0	0	0	-41.0	-42.0	11	0	0	0.04	50	17	1201	50	22	1200	8	8	00-06L	0	0	0
					06-12L	0	0	0						Altimeter			Total	Daily	Daily							
					12-18L	0	0	0									Obs	Pres	Temp							
					18-24L	0	0	0									Taken	Diff	Diff							
														29.40	29.18	29.30	2	0.22	6.5							

Note 1: Color coding. Green headings indicate blocks the Weather Observer must complete. The remainder are calculated/completed by MS Excel.

Note 2: When inputting WX and Duration entries, be sure to precede each wx type by a "/", ie. /sn. Duration should be a whole number, not fractions of an hour.

Note 3: To facilitate MS Excel, the order of entry for Max Wind and Max Gust is changed from conventional. The order is: Spd, Dir, and Time.



McMurdo Station Daily Observation Worksheet

Date: 04

Time	Winds			3 hr Temp		Visibility (hrs)			Wx and Duration (Note 2)					Pcpn Amt	Max Wind (Note 3)			Max Gust (Note 3)			Avg Sky Cover	Low-est CIG	Ceiling (hrs)			Alt (in)
	Dir	Spd	Temp	Max	Min	<1600	<4800	<9999	sn/sg/ic	hrs	fg/br	hrs	bs		hrs	Spd	Dir	Time	Spd	Dir			Time	<500	<1000	
12-15Z				-14.6	-15.6										4	90	1327	5	90	1326						
15-18Z	90	5	-16.7	-14.6	-16.7									5	90	1746	6	100	1744	8	8		6	29.09		
18-21Z			-15.0	-17.8										8	80	1950	9	80	1949							
21-24Z	100	10	-16.8	-15.6	-17.5				sn	2				T	10	100	2350	12	100	2347	8	6		6	29.06	
12 hr Max/Min				-14.6	-17.8																					
00-03Z			-16.1	-17.8											13	100	247	17	100	229						
03-06Z	110	15	-19.2	-16.5	-19.8				2		br	2			16	100	547	19	100	547	8	5		2	29.02	
06-09Z			-19.3	-20.3											17	80	834	21	70	841						
09-12Z	70	12	-19.4	-18.6	-20.2																					
12 hr Max/Min				-16.1	-20.3																					

Note 1: Color coding. Green headings indicate blocks the Weather Observer must complete. The remainder are calculated/completed by MS Excel.

Note 2: When inputting WX and Duration entries, be sure to precede each wx type by a "/", ie. /sn. Duration should be a whole number, not fractions of an hour.

Note 3: To facilitate MS Excel, the order of entry for Max Wind and Max Gust is changed from conventional. The order is: Spd, Dir, and Time.

Avg Wind Dir	Max Spd	Min Temp	Avg Temp	Visibility (hrs)			Min Wind Chill		WX and Duration			Pcpn Total	Max Wind			Max Gust			Avg Sky Cover	Low-est CIG	Ceiling (hrs)				
				Time	<1600	<4800	<9999	C	F	sn/sg/ic	fg/br		bs	Dir	Spd	Time	Dir	Spd			Time	Time	<500	<1000	<3000
94	11	-14.6	-20.3	00-06L	0	0	0			2	2	0	0.00	80	17	834	70	21	841	8	5	00-06L	0	6	0
				06-12L	0	0	0				Altimeter			Total Obs Taken	Daily Pres Diff	Daily Temp Diff				06-12L	0	6	0		
				12-18L	0	0	2				Max	Min	Avg	29.09	29.02	29.06				12-18L	2	0	0		
				18-24L	0	0	0							4	0.07	5.7				18-24L	0	0	0		



McMurdo Station Daily Observation Worksheet

Date: 05

Time	Winds			3 hr Temp		Visibility (hrs)			Wx and Duration (Note 2)					Pcpn Amt	Max Wind (Note 3)			Max Gust (Note 3)			Avg Sky Cover	Low-est CIG	Ceiling (hrs)			Alt (in)
	Dir	Spd	Temp	Max	Min	<1600	<4800	<9999	sn/sg/ic	hrs	fg/br	hrs	bs		hrs	Spd	Dir	Time	Spd	Dir			Time	<500	<1000	
12-15Z				-18.7	-19.7										16	60	1421	21	50	1437						
15-18Z	70	19	-20.4	-17.6	-20.4										19	70	1750	23	70	1742	5	80			29.04	
18-21Z				-19.5	-20.9										21	70	1804	25	60	2023						
21-24Z	60	17	20.2	-19.0	-20.3										21	60	2220	25	70	2142	5	120			29.08	
12 hr Max/Min				-17.6	-20.9																					
00-03Z				-18.8	-20.4										19	70	118	23	70	118						
03-06Z	80	15	-20.4	-19.8	-21.1										17	80	540	21	90	336	6	200			29.11	
06-09Z				-19.4	-20.8										16	50	736	20	40	736						
09-12Z	90	8	-20.5	-19.4	-23.1										17	80	1050	21	80	1050	4				29.15	
12 hr Max/Min				-18.8	-23.1																					

Avg Wind Dir	Max Spd	Min Temp	Avg Temp	Visibility (hrs)			Min Wind Chill		WX and Duration			Pcpn Total	Max Wind			Max Gust			Avg Sky Cover	Low-est CIG	Ceiling (hrs)				
				Time	<1600	<4800	<9999	C	F	sn/sg/ic	fg/br		bs	Dir	Spd	Time	Dir	Spd			Time	Time	<500	<1000	<3000
72	15	-17.6	-23.1	00-06L	0	0	0	-44.0	-47.0	0	0	0	0.00	70	21	1804	60	25	2023	5	80	00-06L	0	0	0
				06-12L	0	0	0							Altimeter			Total Obs	Daily Pres	Daily Temp			06-12L	0	0	0
				12-18L	0	0	0							Max	Min	Avg	4	0.11	5.5			12-18L	0	0	0
				18-24L	0	0	0							29.15	29.04	29.10						18-24L	0	0	0

Note 1: Color coding. Green headings indicate blocks the Weather Observer must complete. The remainder are calculated/completed by MS Excel.

Note 2: When inputting WX and Duration entries, be sure to precede each wx type by a "/", ie. /sn. Duration should be a whole number, not fractions of an hour.

Note 3: To facilitate MS Excel, the order of entry for Max Wind and Max Gust is changed from conventional. The order is: Spd, Dir, and Time.



McMurdo Station Daily Observation Worksheet

Date: 06

Time	Winds			3 hr Temp		Visibility (hrs)			Wx and Duration (Note 2)					Pcpn Amt	Max Wind (Note 3)			Max Gust (Note 3)			Avg Sky Cover	Low-est CIG	Ceiling (hrs)			Alt (in)
	Dir	Spd	Temp	Max	Min	<1600	<4800	<9999	sn/sg/ic	hrs	fg/br	hrs	bs		hrs	Spd	Dir	Time	Spd	Dir			Time	<500	<1000	
12-15Z				-20.5	-23.3										11	80	1324	15	100	1225						
15-18Z		0	-18.4	-17.6	-21.5										11	60	1715	15	60	1715	6	200			29.19	
18-21Z				-16.1	-18.7										13	60	1850	16	60	1836						
21-24Z	80	6	-15.6	-14.4	-17.7										9	80	2319	11	80	2319	6	150			29.23	
12 hr Max/Min				-14.4	-23.3																					
00-03Z				-14.3	-21.7										11	30	245	13	30	245						
03-06Z	40	7	-15.9	-15.5	-16.3										12	30	257	14	30	313	8	150			29.27	
06-09Z				-15.9	-17.5										12	40	630	14	40	629						
09-12Z		0	-17.5	-17.2	-17.9										2	160	1109	2	320	1128	8	80			29.31	
12 hr Max/Min				-14.3	-21.7																					

Note 1: Color coding. Green headings indicate blocks the Weather Observer must complete. The remainder are calculated/completed by MS Excel.

Note 2: When inputting WX and Duration entries, be sure to precede each wx type by a "/", ie. /sn. Duration should be a whole number, not fractions of an hour.

Note 3: To facilitate MS Excel, the order of entry for Max Wind and Max Gust is changed from conventional. The order is: Spd, Dir, and Time.

Avg Wind Dir	Max Spd	Min Temp	Avg Temp	Visibility (hrs)			Min Wind Chill		WX and Duration			Pcpn Total	Max Wind			Max Gust			Avg Sky Cover	Low-est CIG	Ceiling (hrs)					
				Time	<1600	<4800	<9999	C	F	sn/sg/ic	fg/br		bs	Dir	Spd	Time	Dir	Spd			Time	Time	<500	<1000	<3000	
58	3	-14.3	-23.3	-18.8	00-06L	0	0	0	-29.0	-20.0	0	0	0	0.00	60	13	1850	60	16	1836	7	80	00-06L	0	0	0
					06-12L	0	0	0							Altimeter								06-12L	0	0	0
					12-18L	0	0	0							Max	Min	Avg	Total Obs Taken	Daily Pres Diff	Daily Temp Diff			12-18L	0	0	0
					18-24L	0	0	0							29.31	29.19	29.25	2	0.12	9.0			18-24L	0	0	0



McMurdo Station Daily Observation Worksheet

Date: 07

Time	Winds			3 hr Temp		Visibility (hrs)			Wx and Duration (Note 2)					Pcpn Amt	Max Wind (Note 3)			Max Gust (Note 3)			Avg Sky Cover	Low-est CIG	Ceiling (hrs)			Alt (in)
	Dir	Spd	Temp	Max	Min	<1600	<4800	<9999	sn/sg/ic	hrs	fg/br	hrs	bs		hrs	Spd	Dir	Time	Spd	Dir			Time	<500	<1000	
12-15Z				-16.7	-19.5										3	330	1442	4	310	1442						
15-18Z		0	-20.8	-17.8	-22.4										4	310	1623	6	320	1545	7	80			29.29	
18-21Z				-15.6	-21.0										2	180	2022	3	180	2021						
21-24Z		0	-14.6	-14.4	-15.6				sn	3				T	7	30	2250	8	40	2249	7	30			2 29.26	
12 hr Max/Min				-14.4	-22.4																					
00-03Z				-14.6	-16.8										8	30	249	10	30	248						
03-06Z	40	8	-15.4	-11.6	-15.5				sn	6				0.01	10	30	543	12	40	510	7	30			6 29.22	
06-09Z				-15.0	-15.4										10	30	609	12	40	609						
09-12Z		0	-15.2	-14.5	-15.6				sn	6				0.01	8	30	949	9	30	1016	8	30			6 29.22	
12 hr Max/Min				-11.6	-16.8																					
Avg Wind		Max	Min	Avg	Visibility (hrs)			Min Wind Chill		WX and Duration			Pcpn	Max Wind			Max Gust			Avg	Low-	Ceiling (hrs)				
Dir	Spd	Temp	Temp	Temp	Time	<1600	<4800	<9999	C	F	sn/sg/ic	fg/br	bs	Total	Dir	Spd	Time	Dir	Spd	Time	Sky Cover	est CIG	Time	<500	<1000	<3000
40	2	-11.6	-22.4	-17.0	00-06L	0	0	0	-28.0	-18.0	15	0	0	0.02	30	10	543	40	12	510	7	30	00-06L	0	0	0
					06-12L	0	0	0						Altimeter			Total	Daily	Daily							
					12-18L	0	0	0									Obs	Pres	Temp							
					18-24L	0	0	0									Taken	Diff	Diff							
														29.29	29.22	29.25	1	0.07	10.8							

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Note 2: When inputting WX and Duration entries, be sure to precede each wx type by a "/", ie. /sn. Duration should be a whole number, not fractions of an hour.

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McMurdo Station Daily Observation Worksheet

Date: 08

Time	Winds			3 hr Temp		Visibility (hrs)			Wx and Duration (Note 2)					Pcpn Amt	Max Wind (Note 3)			Max Gust (Note 3)			Avg Sky Cover	Low-est CIG	Ceiling (hrs)			Alt (in)
	Zulu	Dir	Spd	Temp	Max	Min	<1600	<4800	<9999	sn/sg/ic	hrs	fg/br	hrs		bs	hrs	Spd	Dir	Time	Spd			Dir	Time	<500	
12-15Z					-15.4	-19.8									15	80	1430	17	80	1429						
15-18Z	90	16	-19.8	-18.1	-19.8										18	90	1745	21	90	1743	8	30			2	29.23
18-21Z				-18.1	-19.7										16	70	2050	20	70	2034					1	
21-24Z	70	16	-20.2	-18.5	-20.4										17	70	2345	22	70	2327	8	50				29.19
12 hr Max/Min				-15.4	-20.4																					
00-03Z				-16.9	-19.5										16	60	26	22	70	2358						
03-06Z	50	9	-17.1	-17.1	-18.9										15	70	316	17	60	424	6	70				29.17
06-09Z				-15.8	-19.3										10	50	713	12	50	712						
09-12Z	110	3	-17.5	-17.1	-19.2										7	80	1008	7	80	1011	7	40				29.15
12 hr Max/Min				-15.8	-19.5																					
Avg Wind		Max	Min	Avg	Visibility (hrs)			Min Wind Chill		WX and Duration			Pcpn	Max Wind			Max Gust			Avg	Low-est	Ceiling (hrs)				
Dir	Spd	Temp	Temp	Temp	Time	<1600	<4800	<9999	C	F	sn/sg/ic	fg/br	bs	Total	Dir	Spd	Time	Dir	Spd	Time	Sky Cover	CIG	Time	<500	<1000	<3000
76	11	-15.4	-20.4	-17.9	00-06L	0	0	0	-41.0	-42.0	0	0	0	0.00	90	18	1745	70	22	2327	7	30	00-06L	0	0	2
					06-12L	0	0	0						Altimeter			Total	Daily	Daily							
					12-18L	0	0	0									Obs	Pres	Temp							
					18-24L	0	0	0									Taken	Diff	Diff							
																	4	0.08	5.0							

Note 1: Color coding. Green headings indicate blocks the Weather Observer must complete. The remainder are calculated/completed by MS Excel.

Note 2: When inputting WX and Duration entries, be sure to precede each wx type by a "/", ie. /sn. Duration should be a whole number, not fractions of an hour.

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McMurdo Station Daily Observation Worksheet

Date: 09

Time	Winds			3 hr Temp		Visibility (hrs)			Wx and Duration (Note 2)					Pcpn Amt	Max Wind (Note 3)			Max Gust (Note 3)			Avg Sky Cover	Low-est CIG	Ceiling (hrs)			Alt (in)	
	Dir	Spd	Temp	Max	Min	<1600	<4800	<9999	sn/sg/ic	hrs	fg/br	hrs	bs		hrs	Spd	Dir	Time	Spd	Dir			Time	<500	<1000		<3000
12-15Z				-17.7	-19.4										7	90	1419	9	90	1435							
15-18Z	40	8	-19.9	-18.7	-20.0										9	40	1745	10	40	1744	5	150			29.10		
18-21Z				-18.0	-21.4										8	80	1933	9	80	1932							
21-24Z		0	-16.7	-15.3	-18.1										4	310	2307	5	310	2321	4				29.04		
12 hr Max/Min				-15.3	-21.4																						
00-03Z				-15.2	-18.9										4	190	21	5	200	21							
03-06Z		0	-16.8	-13.5	-18.5										3	190	515	9	320	311	6	150			28.96		
06-09Z				-16.6	-18.1										3	190	619	3	220	714							
09-12Z		0	-17.8	-17.6	-18.6										4	10	1150	6	10	1149	8	70			28.91		
12 hr Max/Min				-13.5	-18.9																						
Avg Wind	Max	Min	Avg	Visibility (hrs)			Min Wind Chill		WX and Duration			Pcpn	Max Wind			Max Gust			Avg	Low-	Ceiling (hrs)						
Dir	Spd	Temp	Temp	Temp	Time	<1600	<4800	<9999	C	F	sn/sg/ic	fg/br	bs	Total	Dir	Spd	Time	Dir	Spd	Time	Sky Cover	est CIG	Time	<500	<1000	<3000	
40	2	-13.5	-21.4	-17.5	00-06L	0	0	0			0	0	0	0.00	40	9	1745	40	10	1744	6	70	00-06L	0	0	0	
					06-12L	0	0	0											Altimeter								
					12-18L	0	0	0											Max	Min	Avg	Total	Daily	Daily			
					18-24L	0	0	0											29.10	28.91	29.00	Obs	Pres	Temp			
																		1	0.19	7.9							

Note 1: Color coding. Green headings indicate blocks the Weather Observer must complete. The remainder are calculated/completed by MS Excel.

Note 2: When inputting WX and Duration entries, be sure to precede each wx type by a "/", ie. /sn. Duration should be a whole number, not fractions of an hour.

Note 3: To facilitate MS Excel, the order of entry for Max Wind and Max Gust is changed from conventional. The order is: Spd, Dir, and Time.



McMurdo Station Daily Observation Worksheet

Date: 10

Time	Winds			3 hr Temp		Visibility (hrs)			Wx and Duration (Note 2)					Pcpn Amt	Max Wind (Note 3)			Max Gust (Note 3)			Avg Sky Cover	Low-est CIG	Ceiling (hrs)			Alt (in)
	Dir	Spd	Temp	Max	Min	<1600	<4800	<9999	sn/sg/ic	hrs	fg/br	hrs	bs		hrs	Spd	Dir	Time	Spd	Dir			Time	<500	<1000	
12-15Z				-17.8	-19.0										7	40	1350	9	60	1358						
15-18Z	70	6	-18.9	-18.6	-19.6										8	70	1727	9	60	1732	4				28.89	
18-21Z				-17.7	-19.2										9	50	1912	11	50	1911						
21-24Z	100	4	-18.6	-18.3	-23.2										10	90	2247	12	90	2246	6	70			28.88	
12 hr Max/Min				-17.7	-23.2																					
00-03Z				-15.9	-19.9										8	30	143	10	30	142						
03-06Z		0	-15.8	-14.7	-16.6										4	180	450	6	180	449	4				28.84	
06-09Z				-16.2	-25.8										9	320	714	12	330	640						
09-12Z		0	-23.7	-22.2	-24.8										6	310	904	7	290	918	1				28.80	
12 hr Max/Min				-14.7	-25.8																					

Avg Wind Dir	Max Spd	Min Temp	Avg Temp	Visibility (hrs)			Min Wind Chill		WX and Duration			Pcpn Total	Max Wind			Max Gust			Avg Sky Cover	Low-est CIG	Ceiling (hrs)					
				Time	<1600	<4800	<9999	C	F	sn/sg/ic	fg/br		bs	Dir	Spd	Time	Dir	Spd			Time	Time	<500	<1000	<3000	
82	3	-14.7	-25.8	-20.3	00-06L	0	0	0	-33.0	-27.0	0	0	0	0.00	90	10	2247	90	12	2246	4	70	00-06L	0	0	0
					06-12L	0	0	0							Altimeter			Total Obs	Daily Pres	Daily Temp			06-12L	0	0	0
					12-18L	0	0	0							Max	Min	Avg	28.89	28.80	28.85			12-18L	0	0	0
					18-24L	0	0	0										2	0.09	11.1			18-24L	0	0	0

Note 1: Color coding. Green headings indicate blocks the Weather Observer must complete. The remainder are calculated/completed by MS Excel.

Note 2: When inputting WX and Duration entries, be sure to precede each wx type by a "/", ie. /sn. Duration should be a whole number, not fractions of an hour.

Note 3: To facilitate MS Excel, the order of entry for Max Wind and Max Gust is changed from conventional. The order is: Spd, Dir, and Time.



McMurdo Station Daily Observation Worksheet

Date: 11

Time	Winds			3 hr Temp		Visibility (hrs)			Wx and Duration (Note 2)					Pcpn Amt	Max Wind (Note 3)			Max Gust (Note 3)			Avg Sky Cover	Low-est CIG	Ceiling (hrs)			Alt (in)
	Dir	Spd	Temp	Max	Min	<1600	<4800	<9999	sn/sg/ic	hrs	fg/br	hrs	bs		hrs	Spd	Dir	Time	Spd	Dir			Time	<500	<1000	
12-15Z				-23.3	-24.8										2	40	1450	3	40	1432						
15-18Z		0	-23.3	-22.3	-23.4										2	40	1544	2	60	1606	1				28.76	
18-21Z				-20.8	-23.5										3	110	1918	3	100	1919						
21-24Z		0	-18.0	-17.0	-22.4										2	170	2336	2	170	2342	1				28.76	
12 hr Max/Min				-17.0	-24.8																					
00-03Z				-14.3	-18.8										4	110	209	6	100	208						
03-06Z	70	10	-20.1	-16.9	-20.3										11	70	543	14	70	543	1				28.76	
06-09Z				-20.0	20.6										12	70	611	16	70	610						
09-12Z		0	-25.2	-20.0	25.6										8	30	905	10	30	902					28.77	
12 hr Max/Min				-16.9	-20.3																					
Avg Wind		Max	Min	Avg	Visibility (hrs)			Min Wind Chill		WX and Duration			Pcpn	Max Wind			Max Gust			Avg	Low-est	Ceiling (hrs)				
Dir	Spd	Temp	Temp	Temp	Time	<1600	<4800	<9999	C	F	sn/sg/ic	fg/br	bs	Total	Dir	Spd	Time	Dir	Spd	Time	Sky Cover	CIG	Time	<500	<1000	<3000
53	3	-16.9	-24.8	-20.9	00-06L	0	0	0	-37.0	-35.0	0	0	0	0.00	70	12	611	70	16	610	1		00-06L	0	0	0
					06-12L	0	0	0						Altimeter			Total	Daily	Daily							
					12-18L	0	0	0									Obs	Pres	Temp							
					18-24L	0	0	0									Taken	Diff	Diff							
																	1	0.01	7.9							

Note 1: Color coding. Green headings indicate blocks the Weather Observer must complete. The remainder are calculated/completed by MS Excel.

Note 2: When inputting WX and Duration entries, be sure to precede each wx type by a "/", ie. /sn. Duration should be a whole number, not fractions of an hour.

Note 3: To facilitate MS Excel, the order of entry for Max Wind and Max Gust is changed from conventional. The order is: Spd, Dir, and Time.



McMurdo Station Daily Observation Worksheet

Date: 12

Time	Winds			3 hr Temp		Visibility (hrs)			Wx and Duration (Note 2)					Pcpn Amt	Max Wind (Note 3)			Max Gust (Note 3)			Avg Sky Cover	Low-est CIG	Ceiling (hrs)			Alt (in)
	Dir	Spd	Temp	Max	Min	<1600	<4800	<9999	sn/sg/ic	hrs	fg/br	hrs	bs		hrs	Spd	Dir	Time	Spd	Dir			Time	<500	<1000	
12-15Z				-21.5	-24.3										5	70	1420	8	100	1412						
15-18Z		0	-23.3	-21.6	-23.7										3	30	1635	4	340	1557	2				28.76	
18-21Z				-19.4	-22.9										2	170	2020	3	160	2000						
21-24Z	40	9	-17.6	-17.5	-19.4										10	30	2240	12	40	2240	6	35			28.77	
12 hr Max/Min				-17.5	-24.3																					
00-03Z				-17.4	-17.9										12	50	42	14	60	41						
03-06Z	100	11	-21.5	-17.4	-24.7										15	90	508	18	100	508	7	35			28.81	
06-09Z				-21.0	-23.5										14	90	846	18	100	846						
09-12Z	110	9	-21.2	-21.0	-23.1										15	100	908	17	100	1001	7	35			28.87	
12 hr Max/Min				-17.4	-24.7																					

Note 1: Color coding. Green headings indicate blocks the Weather Observer must complete. The remainder are calculated/completed by MS Excel.

Note 2: When inputting WX and Duration entries, be sure to precede each wx type by a "/", ie. /sn. Duration should be a whole number, not fractions of an hour.

Note 3: To facilitate MS Excel, the order of entry for Max Wind and Max Gust is changed from conventional. The order is: Spd, Dir, and Time.

Avg Wind Dir	Max Spd	Min Temp	Avg Temp	Visibility (hrs)			Min Wind Chill		WX and Duration			Pcpn Total	Max Wind			Max Gust			Avg Sky Cover	Low-est CIG	Ceiling (hrs)					
				Time	<1600	<4800	<9999	C	F	sn/sg/ic	fg/br		bs	Dir	Spd	Time	Dir	Spd			Time	Time	<500	<1000	<3000	
86	7	-17.4	-24.7	-21.1	00-06L	0	0	0	-42.0	-44.0	0	0	0	0.00	90	15	508	100	18	508	6	35	00-06L	0	0	0
				06-12L	0	0	0						Altimeter			Total Obs	Daily Pres	Daily Temp								
				12-18L	0	0	0						Max	Min	Avg	3	0.11	7.3								
				18-24L	0	0	0						28.87	28.76	28.80											



McMurdo Station Daily Observation Worksheet

Date: 13

Time	Winds		3 hr Temp		Visibility (hrs)			Wx and Duration (Note 2)					Pcpn Amt	Max Wind (Note 3)			Max Gust (Note 3)			Avg Sky Cover	Low-est CIG	Ceiling (hrs)			Alt (in)
	Dir	Spd	Temp	Max	Min	<1600	<4800	<9999	sn/sg/ic	hrs	fg/br	hrs		bs	hrs	Spd	Dir	Time	Spd			Dir	Time	<500	
12-15Z				-20.0	-22.3										14	100	1232	17	100	1221					
15-18Z	90	9	-21.7	-20.6	-22.1										12	80	1711	17	100	1622	4				28.96
18-21Z				-19.0	-22.3										10	80	1807	11	100	2006					
21-24Z		3	-19.5	-17.3	-21.5										9	90	2257	11	90	2240	3				29.04
12 hr Max/Min				-17.3	-22.3																				
00-03Z				-15.8	-23.1										9	170	108	13	160	131					
03-06Z	100	8	-19.2	-18.2	-21.8										11	90	514	13	90	518	6				29.08
06-09Z				-18.2	-20.2										11	80	743	14	90	742					
09-12Z		0	-19.9	-18.3	-20.1										7	50	913	10	50	912	6				3 29.10
12 hr Max/Min				-15.8	-23.1																				
Avg Wind		Max	Min	Avg		Visibility (hrs)			Min Wind Chill		WX and Duration			Pcpn	Max Wind			Max Gust			Avg Sky Cover	Low-est CIG	Ceiling (hrs)		
Dir	Spd	Temp	Temp	Temp	Time	<1600	<4800	<9999	C	F	sn/sg/ic	fg/br	bs	Total	Dir	Spd	Time	Dir	Spd	Time			Time	<500	<1000
95	5	-15.8	-23.1	-19.5	00-06L	0	0	0	-39.0	-38.0	0	0	0	0.00	100	14	1232	100	17	1221	5	06-06L	0	0	0
					06-12L	0	0	0						Altimeter			Total	Daily	Daily						
					12-18L	0	0	0						Max	Min	Avg	Obs	Pres	Temp						
					18-24L	0	0	0						29.10	28.96	29.05	Taken	Diff	Diff						
																2	0.14	7.3							

Note 1: Color coding. Green headings indicate blocks the Weather Observer must complete. The remainder are calculated/completed by MS Excel.

Note 2: When inputting WX and Duration entries, be sure to precede each wx type by a "/", ie. /sn. Duration should be a whole number, not fractions of an hour.

Note 3: To facilitate MS Excel, the order of entry for Max Wind and Max Gust is changed from conventional. The order is: Spd, Dir, and Time.



McMurdo Station Daily Observation Worksheet

Date: 14

Time	Winds		3 hr Temp		Visibility (hrs)			Wx and Duration (Note 2)					Pcpn Amt	Max Wind (Note 3)			Max Gust (Note 3)			Avg Sky Cover	Low-est CIG	Ceiling (hrs)			Alt (in)
	Dir	Spd	Temp	Max	Min	<1600	<4800	<9999	sn/sg/ic	hrs	fg/br	hrs		bs	hrs	Spd	Dir	Time	Spd			Dir	Time	<500	
12-15Z				-20.0	-21.9										14	50	1449	17	50	1448					
15-18Z	60	12	-21.9	-20.9	-22.3				SN	1				T	17	50	1711	22	50	1547	8	30		6	29.10
18-21Z				-21.6	-23.2										16	80	2047	20	70	2046					
21-24Z	80	13	-23.2	-22.7	-23.5				4 SN	6				0.01	16	90	2305	19	80	2332	8	30		6	29.13
12 hr Max/Min				-20.0	-23.5																				
00-03Z																									
03-06Z	110	14	-24.8						1 SN	1				T							8	30		6	29.15
06-09Z																									
09-12Z	60	10	-21.9																		6	30		6	29.16
12 hr Max/Min				-21.9	-24.8																				

Note 1: Color coding. Green headings indicate blocks the Weather Observer must complete. The remainder are calculated/completed by MS Excel.

Note 2: When inputting WX and Duration entries, be sure to precede each wx type by a "/", ie. /sn. Duration should be a whole number, not fractions of an hour.

Note 3: To facilitate MS Excel, the order of entry for Max Wind and Max Gust is changed from conventional. The order is: Spd, Dir, and Time.

Avg Wind	Dir	Spd	Max Temp	Min Temp	Avg Temp	Visibility (hrs)			Min Wind Chill		WX and Duration			Pcpn Total	Max Wind			Max Gust			Avg Sky Cover	Low-est CIG	Ceiling (hrs)					
						Time	<1600	<4800	<9999	C	F	sn/sg/ic	fg/br		bs	Dir	Spd	Time	Dir	Spd			Time	Time	<500	<1000	<3000	
79		12	-20.0	-24.8	-22.4	00-06L	0	0	0	-47.0	-53.0	8	0	0	0.01	50	17	1711	50	22	1547	8	30	00-06L	0	0	6	
						06-12L	0	0	4							Altimeter						06-12L	0	0	6			
						12-18L	0	0	1							Max	Min	Avg	Total Obs Taken	Daily Pres Diff	Daily Temp Diff				12-18L	0	0	6
						18-24L	0	0	0							29.16	29.10	29.14	4	0.06	4.8				18-24L	0	0	6



McMurdo Station Daily Observation Worksheet

Date: 15

Time	Winds		3 hr Temp		Visibility (hrs)			Wx and Duration (Note 2)					Pcpn Amt	Max Wind (Note 3)			Max Gust (Note 3)			Avg Sky Cover	Low-est CIG	Ceiling (hrs)			Alt (in)			
	Dir	Spd	Temp	Max	Min	<1600	<4800	<9999	sn/sg/ic	hrs	fg/br	hrs		bs	hrs	Spd	Dir	Time	Spd			Dir	Time	<500		<1000	<3000	
12-15Z																												
15-18Z	60	9	-23.1																						7	30	6	29.18
18-21Z																												
21-24Z	40	13	-22.0						SN	3				T										7	50	3	29.20	
12 hr Max/Min			-22.0	-23.1																								
00-03Z			-21.8	-22.6											14	30	6	16	30	245								
03-06Z	30	9	-21.6	-21.1	-22.2				SN	6				T	12	30	326	15	30	322				8	50		29.18	
06-09Z			-21.1	-22.8											13	30	649	15	40	657								
09-12Z	80	4	-22.7	-21.2	-23.3				SN	6				T	4	80	1137	5	80	1136				6	50		29.17	
12 hr Max/Min			-21.1	-23.3																								

Note 1: Color coding. Green headings indicate blocks the Weather Observer must complete. The remainder are calculated/completed by MS Excel.

Note 2: When inputting WX and Duration entries, be sure to precede each wx type by a "/", ie. /sn. Duration should be a whole number, not fractions of an hour.

Note 3: To facilitate MS Excel, the order of entry for Max Wind and Max Gust is changed from conventional. The order is: Spd, Dir, and Time.

Avg Wind	Dir	Spd	Max Temp	Min Temp	Avg Temp	Visibility (hrs)			Min Wind Chill		WX and Duration			Pcpn Total	Max Wind			Max Gust			Avg Sky Cover	Low-est CIG	Ceiling (hrs)				
						Time	<1600	<4800	<9999	C	F	sn/sg/ic	fg/br		bs	Dir	Spd	Time	Dir	Spd			Time	Dir	Spd	Time	Time
47		9	-21.1	-23.3	-22.2	00-06L	0	0	0	-42.0	-44.0	15	0	0	0.00	30	14	6	30	16	245	7	30	00-06L	0	0	6
						06-12L	0	0	0							Altimeter						06-12L	0	0	3		
						12-18L	0	0	0							Max			Total Obs Taken	Daily Pres Diff	Daily Temp Diff	12-18L	0	0	0		
						18-24L	0	0	0							29.20	29.17	29.18				4	0.03	2.2	18-24L	0	0



McMurdo Station Daily Observation Worksheet

Date: 16

Time	Winds		3 hr Temp		Visibility (hrs)			Wx and Duration (Note 2)					Pcpn Amt	Max Wind (Note 3)			Max Gust (Note 3)			Avg Sky Cover	Low-est CIG	Ceiling (hrs)			Alt (in)
	Dir	Spd	Temp	Max	Min	<1600	<4800	<9999	sn/sg/ic	hrs	fg/br	hrs		bs	hrs	Spd	Dir	Time	Spd			Dir	Time	<500	
12-15Z				-22.8	-24.6										3	40	1205	3	30	1206					
15-18Z		0	-27.3	-24.3	-27.8				sn		3			T	2	170	1608	3	330	1724	1			29.12	
18-21Z				-26.5	-28.5										3	310	1957	4	290	1957					
21-24Z		0	-22.0	-21.1	-26.5										2	190	2334	3	230	2132	1			29.10	
12 hr Max/Min				-21.1	-28.5																				
00-03Z				-18.3	-21.4										3	190	221	3	170	223					
03-06Z		0	-18.9	-18.2	-19.5										2	210	339	3	230	335	1			29.10	
06-09Z				-19.2	-23.2										3	60	848	4	30	747					
09-12Z	70	6	-22.5	-22.2	-23.4										7	70	1150	9	70	1150	0			29.18	
12 hr Max/Min				-18.2	-23.4																				

Note 1: Color coding. Green headings indicate blocks the Weather Observer must complete. The remainder are calculated/completed by MS Excel.

Note 2: When inputting WX and Duration entries, be sure to precede each wx type by a "/", ie. /sn. Duration should be a whole number, not fractions of an hour.

Note 3: To facilitate MS Excel, the order of entry for Max Wind and Max Gust is changed from conventional. The order is: Spd, Dir, and Time.

Avg Wind	Dir	Spd	Max Temp	Min Temp	Avg Temp	Visibility (hrs)			Min Wind Chill		WX and Duration			Pcpn Total	Max Wind			Max Gust			Avg Sky Cover	Low-est CIG	Ceiling (hrs)				
						Time	<1600	<4800	<9999	C	F	sn/sg/ic	fg/br		bs	Dir	Spd	Time	Dir	Spd			Time	Time	<500	<1000	<3000
70		2	-18.2	-28.5	-23.4	00-06L	0	0	0	-33.0	-27.0	3	0	0	0.00	70	7	1150	70	9	1150	1		00-06L	0	0	0
						06-12L	0	0	0							Altimeter						1		06-12L	0	0	0
						12-18L	0	0	0							Max	Min	Avg	Total Obs Taken	Daily Pres Diff	Daily Temp Diff			12-18L	0	0	0
						18-24L	0	0	0							29.18	29.10	29.13						18-24L	0	0	0
															1	0.08	10.3										



McMurdo Station Daily Observation Worksheet

Date: 17

Time	Winds		3 hr Temp		Visibility (hrs)			Wx and Duration (Note 2)					Pcpn Amt	Max Wind (Note 3)			Max Gust (Note 3)			Avg Sky Cover	Low-est CIG	Ceiling (hrs)			Alt (in)		
	Dir	Spd	Temp	Max	Min	<1600	<4800	<9999	sn/sg/ic	hrs	fg/br	hrs		bs	hrs	Spd	Dir	Time	Spd			Dir	Time	<500		<1000	<3000
12-15Z				-22.3	-26.3										11	100	1430	13	90	1449							
15-18Z	100	8	-26.6	-25.0	-29.5				SN		1				T	14	90	1643	17	90	1642	5	80			29.29	
18-21Z				-26.1	-27.8										16	60	1950	19	60	2045							
21-24Z		6	-24.6	-21.9	-26.1				SN		4			0.01	13	80	2245	19	50	2145	6	40				29.38	
12 hr Max/Min				-21.9	-29.5																						
00-03Z				-24.2	-26.5										18	50	225	23	50	224							
03-06Z	60	11	-24.9	-24.4	-26.1		2		SN		5			0.01	19	130	448	29	130	447	8	40				29.47	
06-09Z				-24.1	-25.0										15	120	836	24	100	836							
09-12Z	120	15	-25.2	-24.5	-25.4		6		SN		6		BS	4	0.01	22	110	1113	32	90	1113	8	40				29.53
12 hr Max/Min				-24.1	-26.5																						

Avg Wind	Dir	Spd	Max Temp	Min Temp	Avg Temp	Visibility (hrs)			Min Wind Chill		WX and Duration			Pcpn Total	Max Wind			Max Gust			Avg Sky Cover	Low-est CIG	Ceiling (hrs)					
						Time	<1600	<4800	<9999	C	F	sn/sg/ic	fg/br		bs	Dir	Spd	Time	Dir	Spd			Time	Dir	Spd	Time	Time	<500
96		10	-21.9	-29.5	-25.7	00-06L	0	0	0	-53.0	-63.0	16	0	4	0.03	110	22	1113	90	32	1113	7	40	00-06L	0	0	0	
						06-12L	0	0	0							Altimeter						06-12L	0	0	0			
						12-18L	0	2	0							Max	Min	Avg	Total Obs Taken	Daily Pres Diff	Daily Temp Diff				12-18L	0	0	0
						18-24L	0	6	0							29.53	29.29	29.42	3	0.24	7.6				18-24L	0	0	0

Note 1: Color coding. Green headings indicate blocks the Weather Observer must complete. The remainder are calculated/completed by MS Excel.

Note 2: When inputting WX and Duration entries, be sure to precede each wx type by a "/", ie. /sn. Duration should be a whole number, not fractions of an hour.

Note 3: To facilitate MS Excel, the order of entry for Max Wind and Max Gust is changed from conventional. The order is: Spd, Dir, and Time.



McMurdo Station Daily Observation Worksheet

Date: 18

Time	Winds		3 hr Temp		Visibility (hrs)			Wx and Duration (Note 2)					Pcpn Amt	Max Wind (Note 3)			Max Gust (Note 3)			Avg Sky Cover	Low-est CIG	Ceiling (hrs)			Alt (in)
	Dir	Spd	Temp	Max	Min	<1600	<4800	<9999	sn/sg/ic	hrs	fg/br	hrs		bs	hrs	Spd	Dir	Time	Spd			Dir	Time	<500	
12-15Z				-23.0	-25.0									18	110	1211	30	90	1216						
15-18Z	100	8	-22.1	-22.0	-23.1				sn	4				0.01	18	130	1511	27	120	1510				29.52	
18-21Z				-21.0	-22.1										11	120	1948	16	90	1821					
21-24Z		0	-20.6	-18.0	-21.7										10	110	2105	15	120	2108				29.42	
12 hr Max/Min				-18.0	-25.0																				
00-03Z				-15.3	-18.8										2	200	234	3	310	121					
03-06Z		0	-19.5	-16.7	-20.5										7	80	311	10	90	310				29.31	
06-09Z				-18.3	-22.5										4	80	642	5	110	750					
09-12Z		0	-20.9	-20.3	-23.6										4	350	1138	5	330	1138				29.21	
12 hr Max/Min				-15.3	-23.6																				

Note 1: Color coding. Green headings indicate blocks the Weather Observer must complete. The remainder are calculated/completed by MS Excel.

Note 2: When inputting WX and Duration entries, be sure to precede each wx type by a "/", ie. /sn. Duration should be a whole number, not fractions of an hour.

Note 3: To facilitate MS Excel, the order of entry for Max Wind and Max Gust is changed from conventional. The order is: Spd, Dir, and Time.

Avg Wind	Dir	Spd	Max Temp	Min Temp	Avg Temp	Visibility (hrs)			Min Wind Chill		WX and Duration			Pcpn Total	Max Wind			Max Gust			Avg Sky Cover	Low-est CIG	Ceiling (hrs)				
						Time	<1600	<4800	<9999	C	F	sn/sg/ic	fg/br		bs	Dir	Spd	Time	Dir	Spd			Time	Time	<500	<1000	<3000
100		2	-15.3	-25.0	-20.2	00-06L	0	0	0	-47.0	-53.0	4	0	0	0.01	110	18	1211	90	30	1216	1		00-06L	0	0	0
						06-12L	0	0	0							Altimeter						1		06-12L	0	0	0
						12-18L	0	0	0							Max	Min	Avg	Total Obs Taken	Daily Pres Diff	Daily Temp Diff			12-18L	0	0	0
						18-24L	0	0	0							29.52	29.21	29.37	1	0.31	9.7			18-24L	0	0	0



McMurdo Station Daily Observation Worksheet

Date: 19

Time	Winds		3 hr Temp		Visibility (hrs)			Wx and Duration (Note 2)					Pcpn Amt	Max Wind (Note 3)			Max Gust (Note 3)			Avg Sky Cover	Low-est CIG	Ceiling (hrs)			Alt (in)
	Dir	Spd	Temp	Max	Min	<1600	<4800	<9999	sn/sg/ic	hrs	fg/br	hrs		bs	hrs	Spd	Dir	Time	Spd			Dir	Time	<500	
12-15Z				-21.7	-23.6									4	70	1445	5	80	1443						
15-18Z	80	4	-21.2	-20.5	-22.0									6	70	1747	7	80	1745	1				29.13	
18-21Z				-20.0	-23.0									9	80	1921	10	80	1921						
21-24Z		0	-18.9	-18.1	-22.8									12	80	2217	13	90	2225	0				29.07	
12 hr Max/Min				-18.1	-23.6																				
00-03Z				-16.4	-19.5									2	240	208	3	230	159						
03-06Z		0	-21.4	-16.5	-21.6									3	190	318	4	190	317	1				28.98	
06-09Z				-20.0	-27.4									6	320	833	8	300	847						
09-12Z		5	-21.0	-19.5	-23.7									9	320	943	12	320	942	1				28.92	
12 hr Max/Min				-16.4	-27.4																				

Avg Wind	Dir	Spd	Max Temp	Min Temp	Avg Temp	Visibility (hrs)			Min Wind Chill		WX and Duration			Pcpn Total	Max Wind			Max Gust			Avg Sky Cover	Low-est CIG	Ceiling (hrs)				
						Time	<1600	<4800	<9999	C	F	sn/sg/ic	fg/br		bs	Dir	Spd	Time	Dir	Spd			Time	Time	<500	<1000	<3000
80		2	-16.4	-27.4	-21.9	00-06L	0	0	0	-36.0	-33.0	0	0	0	0.00	80	12	2217	90	13	2225	1		00-06L	0	0	0
						06-12L	0	0	0							Altimeter						1		06-12L	0	0	0
						12-18L	0	0	0							Max	Min	Avg	Total Obs Taken	Daily Pres Diff	Daily Temp Diff			12-18L	0	0	0
						18-24L	0	0	0							29.13	28.92	29.03						18-24L	0	0	0
																			1	0.21	11.0						

Note 1: Color coding. Green headings indicate blocks the Weather Observer must complete. The remainder are calculated/completed by MS Excel.

Note 2: When inputting WX and Duration entries, be sure to precede each wx type by a "/", ie. /sn. Duration should be a whole number, not fractions of an hour.

Note 3: To facilitate MS Excel, the order of entry for Max Wind and Max Gust is changed from conventional. The order is: Spd, Dir, and Time.



McMurdo Station Daily Observation Worksheet

Date: 20

Time	Winds		3 hr Temp		Visibility (hrs)			Wx and Duration (Note 2)					Pcpn Amt	Max Wind (Note 3)			Max Gust (Note 3)			Avg Sky Cover	Low-est CIG	Ceiling (hrs)			Alt (in)
	Dir	Spd	Temp	Max	Min	<1600	<4800	<9999	sn/sg/ic	hrs	fg/br	hrs		bs	hrs	Spd	Dir	Time	Spd			Dir	Time	<500	
12-15Z				-20.2	-24.0									6	280	1221	8	280	1212						
15-18Z	310	6	-19.2	-19.2	-21.4									6	330	1747	12	320	1740	6	50			28.93	
18-21Z				-19.1	-21.3									8	320	1806	12	320	1806						
21-24Z		0	-15.9	-14.8	-21.8									5	30	2150	6	30	2150	6	150			28.98	
12 hr Max/Min				-14.8	-24.0																				
00-03Z				-12.7	-14.9									19	140	157	24	140	147						
03-06Z		5	-16.7	-13.6	-19.4									11	150	258	15	150	257	8	30			3 29.01	
06-09Z				-13.5	-17.1									7	290	748	10	340	832						
09-12Z		4	-11.7	-11.7	-13.5									7	350	922	10	340	922	8	100			3 29.04	
12 hr Max/Min				-11.7	-19.4																				

Note 1: Color coding. Green headings indicate blocks the Weather Observer must complete. The remainder are calculated/completed by MS Excel.

Note 2: When inputting WX and Duration entries, be sure to precede each wx type by a "/", ie. /sn. Duration should be a whole number, not fractions of an hour.

Note 3: To facilitate MS Excel, the order of entry for Max Wind and Max Gust is changed from conventional. The order is: Spd, Dir, and Time.

Avg Wind	Dir	Spd	Max Temp	Min Temp	Avg Temp	Visibility (hrs)			Min Wind Chill		WX and Duration			Pcpn Total	Max Wind			Max Gust			Avg Sky Cover	Low-est CIG	Ceiling (hrs)				
						Time	<1600	<4800	<9999	C	F	sn/sg/ic	fg/br		bs	Dir	Spd	Time	Dir	Spd			Time	Time	<500	<1000	<3000
310		4	-11.7	-24.0	-17.9	00-06L	0	0	0	-38.0	-36.0	0	0	0	0.00	140	19	157	140	24	147	7	30	00-06L	0	0	0
						06-12L	0	0	0							Altimeter								06-12L	0	0	0
						12-18L	0	0	0							Max	Min	Avg	Total Obs Taken	Daily Pres Diff	Daily Temp Diff			12-18L	0	0	3
						18-24L	0	0	0							29.04	28.93	28.99	1	0.11	12.3			18-24L	0	0	3



McMurdo Station Daily Observation Worksheet

Date: 21

Time	Winds		3 hr Temp		Visibility (hrs)			Wx and Duration (Note 2)					Pcpn Amt	Max Wind (Note 3)			Max Gust (Note 3)			Avg Sky Cover	Low-est CIG	Ceiling (hrs)			Alt (in)
	Dir	Spd	Temp	Max	Min	<1600	<4800	<9999	sn/sg/ic	hrs	fg/br	hrs		bs	hrs	Spd	Dir	Time	Spd			Dir	Time	<500	
12-15Z				-11.9	-12.7									11	340	1434	17	320	1434						
15-18Z	340	14	-11.1	-9.6	-13.6									17	340	1724	22	340	1728	3				29.03	
18-21Z				-10.6	-18.9									14	340	1828	21	340	1803						
21-24Z	60	16	-15.1	-13.9	-17.2									19	60	2343	26	50	2343	6	200			29.16	
12 hr Max/Min				-9.6	-18.9																				
00-03Z				-9.8	-15.4									18	60	4	23	60	3						
03-06Z	90	3	-11.1	-9.1	-11.3									10	60	427	12	80	510	7	200			29.34	
06-09Z				-11.1	-14.4									7	100	620	10	110	611						
09-12Z	60	3	-13.3	-11.1	-14.4									9	140	1004	12	140	1003	7	200			29.46	
12 hr Max/Min				-9.1	-15.4																				

Note 1: Color coding. Green headings indicate blocks the Weather Observer must complete. The remainder are calculated/completed by MS Excel.

Note 2: When inputting WX and Duration entries, be sure to precede each wx type by a "/", ie. /sn. Duration should be a whole number, not fractions of an hour.

Note 3: To facilitate MS Excel, the order of entry for Max Wind and Max Gust is changed from conventional. The order is: Spd, Dir, and Time.

Avg Wind	Dir	Spd	Max Temp	Min Temp	Avg Temp	Visibility (hrs)			Min Wind Chill		WX and Duration			Pcpn Total	Max Wind			Max Gust			Avg Sky Cover	Low-est CIG	Ceiling (hrs)				
						Time	<1600	<4800	<9999	C	F	sn/sg/ic	fg/br		bs	Dir	Spd	Time	Dir	Spd			Time	Time	<500	<1000	<3000
33		9	-9.1	-18.9	-14.0	00-06L	0	0	0	-36.0	-33.0	0	0	0	0.00	60	19	2343	50	26	2343	6	200	00-06L	0	0	0
						06-12L	0	0	0							Altimeter								06-12L	0	0	0
						12-18L	0	0	0							Max	Min	Avg	Total Obs Taken	Daily Pres Diff	Daily Temp Diff			12-18L	0	0	0
						18-24L	0	0	0							29.46	29.03	29.25	4	0.43	9.8			18-24L	0	0	0



McMurdo Station Daily Observation Worksheet

Date: 22

Time	Winds		3 hr Temp		Visibility (hrs)			Wx and Duration (Note 2)					Pcpn Amt	Max Wind (Note 3)			Max Gust (Note 3)			Avg Sky Cover	Low-est CIG	Ceiling (hrs)			Alt (in)
	Dir	Spd	Temp	Max	Min	<1600	<4800	<9999	sn/sg/ic	hrs	fg/br	hrs		bs	hrs	Spd	Dir	Time	Spd			Dir	Time	<500	
12-15Z				-13.4	-14.2										7	70	1213	80	90	1237					
15-18Z	350	3	-13.4	-13.4	-15.7									5	350	1748	8	340	1748	7	80			29.48	
18-21Z				-12.5	-15.0									7	350	2050	10	330	2048						
21-24Z		3	-11.8	-11.4	-12.7									9	350	2216	13	330	2130	7	50			29.46	
12 hr Max/Min				-11.4	-15.7																				
00-03Z				-11.9	-19.3									11	80	142	13	90	141						
03-06Z	80	3	-16.3	-16.0	-20.6				sn	2				T	10	90	346	11	80	350	7	30		2	29.45
06-09Z				-15.2	-19.1										11	90	850	16	90	841					
09-12Z	70	8	-18.2	-15.2	-19.1				SN	3				T	14	80	941	16	80	941	8	30		6	29.53
12 hr Max/Min				-11.9	-20.6																				

Note 1: Color coding. Green headings indicate blocks the Weather Observer must complete. The remainder are calculated/completed by MS Excel.

Note 2: When inputting WX and Duration entries, be sure to precede each wx type by a "/", ie. /sn. Duration should be a whole number, not fractions of an hour.

Note 3: To facilitate MS Excel, the order of entry for Max Wind and Max Gust is changed from conventional. The order is: Spd, Dir, and Time.

Avg Wind	Dir	Spd	Max Temp	Min Temp	Avg Temp	Visibility (hrs)			Min Wind Chill		WX and Duration			Pcpn Total	Max Wind			Max Gust			Avg Sky Cover	Low-est CIG	Ceiling (hrs)				
						Time	<1600	<4800	<9999	C	F	sn/sg/ic	fg/br		bs	Dir	Spd	Time	Dir	Spd			Time	Time	<500	<1000	<3000
58		4	-11.4	-20.6	-16.0	00-06L	0	0	0	-36.0	-33.0	5	0	0	0.00	80	14	941	90	80	1237	7	30	00-06L	0	0	0
						06-12L	0	0	0							Altimeter								06-12L	0	0	0
						12-18L	0	0	0							Max	Min	Avg	Total Obs Taken	Daily Pres Diff	Daily Temp Diff			12-18L	0	0	2
						18-24L	0	0	0							29.53	29.45	29.48	3	0.08	9.2			18-24L	0	0	6



McMurdo Station Daily Observation Worksheet

Date: 23

Time	Winds			3 hr Temp		Visibility (hrs)			Wx and Duration (Note 2)					Pcpn Amt	Max Wind (Note 3)			Max Gust (Note 3)			Avg Sky Cover	Low-est CIG	Ceiling (hrs)			Alt (in)	
	Dir	Spd	Temp	Max	Min	<1600	<4800	<9999	sn/sg/ic	hrs	fg/br	hrs	bs		hrs	Spd	Dir	Time	Spd	Dir			Time	<500	<1000		<3000
12-15Z				-17.8	-20.8										19	50	1349	23	50	1350							
15-18Z	60	17	-22.9	-20.4	-22.9				SN		4				T	21	60	1738	27	90	1508	8	30			6	29.66
18-21Z				-22.0	-23.0											23	50	1902	28	50	2005						
21-24Z	60	11	-20.7	-20.6	-22.5				SN		5				T	17	50	2109	21	50	2348	8	30			6	29.74
12 hr Max/Min				-17.8	-23.0																						
00-03Z				-20.5	-22.4											18	70	109	22	70	108						
03-06Z	50	13	-20.3	-20.7	-21.5				SN		6				T	16	50	531	21	50	547	8	30			6	29.78
06-09Z				-19.7	-21.1											17	50	615	21	50	607						
09-12Z	60	7	-19.0	-18.6	-20.2				SN		6				T	15	50	938	18	50	938	7	30			6	29.79
12 hr Max/Min				-18.6	-22.4																						

Note 1: Color coding. Green headings indicate blocks the Weather Observer must complete. The remainder are calculated/completed by MS Excel.

Note 2: When inputting WX and Duration entries, be sure to precede each wx type by a "/", ie. /sn. Duration should be a whole number, not fractions of an hour.

Note 3: To facilitate MS Excel, the order of entry for Max Wind and Max Gust is changed from conventional. The order is: Spd, Dir, and Time.

Avg Wind	Max	Min	Avg	Visibility (hrs)			Min Wind Chill		WX and Duration			Pcpn Total	Max Wind			Max Gust			Avg Sky Cover	Low-est CIG	Ceiling (hrs)					
				Dir	Spd	Temp	Temp	Temp	Time	<1600	<4800		<9999	C	F	sn/sg/ic	fg/br	bs			Dir	Spd	Time	Dir	Spd	Time
57	12	-17.8	-23.0	-20.4	00-06L	0	0	0	-49.0	-56.0	21	0	0	0.00	50	23	1902	50	28	2005	8	30	00-06L	0	0	6
					06-12L	0	0	0							Altimeter								06-12L	0	0	6
					12-18L	0	0	0							Max	Min	Avg	Total Obs Taken	Daily Pres Diff	Daily Temp Diff			12-18L	0	0	6
					18-24L	0	0	0							29.79	29.66	29.74	4	0.13	5.2			18-24L	0	0	6



McMurdo Station Daily Observation Worksheet

Date: 24

Time	Winds		3 hr Temp		Visibility (hrs)			Wx and Duration (Note 2)					Pcpn Amt	Max Wind (Note 3)			Max Gust (Note 3)			Avg Sky Cover	Low-est CIG	Ceiling (hrs)			Alt (in)	
	Dir	Spd	Temp	Max	Min	<1600	<4800	<9999	sn/sg/ic	hrs	fg/br	hrs		bs	hrs	Spd	Dir	Time	Spd			Dir	Time	<500		<1000
12-15Z				-18.9	-19.2									8	90	1412	11	80	1311							
15-18Z	120	11	-20.1	-19.1	-20.1				SN		6			T	11	110	1750	18	100	1708	7	30		6	29.80	
18-21Z				-19.9	-21.1									15	50	2040	18	50	2039							
21-24Z	50	16	-22.2	-19.9	-22.2				SN		4			0.01	17	50	2327	21	50	2348	6	140		3	29.77	
12 hr Max/Min				-18.9	-22.2																					
00-03Z				-21.7	-23.3																					
03-06Z	60	18	-23.5	-22.7	-23.5																					
06-09Z				-22.9	-23.7																					
09-12Z	70	12	-24.1	-23.0	-24.3																					
12 hr Max/Min				-21.7	-24.3																					
Avg Wind		Max	Min	Avg	Visibility (hrs)			Min Wind Chill		WX and Duration			Pcpn	Max Wind			Max Gust			Avg Sky	Low-est	Ceiling (hrs)				
Dir	Spd	Temp	Temp	Temp	Time	<1600	<4800	<9999	C	F	sn/sg/ic	fg/br	bs	Total	Dir	Spd	Time	Dir	Spd	Time	Cover	CIG	Time	<500	<1000	<3000
70	14	-18.9	-24.3	-21.6	00-06L	0	0	0	-49.0	-56.0	10	0	0	0.01	60	21	605	60	25	616	7	30	00-06L	0	0	6
					06-12L	0	0	0						Altimeter			Total	Daily	Daily							
					12-18L	0	0	0						Obs	Pres	Temp										
					18-24L	0	0	0						29.80	29.66	29.74	Taken	Diff	Diff							
																4	0.14	5.4								

Note 1: Color coding. Green headings indicate blocks the Weather Observer must complete. The remainder are calculated/completed by MS Excel.

Note 2: When inputting WX and Duration entries, be sure to precede each wx type by a "/", ie. /sn. Duration should be a whole number, not fractions of an hour.

Note 3: To facilitate MS Excel, the order of entry for Max Wind and Max Gust is changed from conventional. The order is: Spd, Dir, and Time.



McMurdo Station Daily Observation Worksheet

Date: 25

Time	Winds		3 hr Temp		Visibility (hrs)			Wx and Duration (Note 2)					Pcpn Amt	Max Wind (Note 3)			Max Gust (Note 3)			Avg Sky Cover	Low-est CIG	Ceiling (hrs)			Alt (in)	
	Dir	Spd	Temp	Max	Min	<1600	<4800	<9999	sn/sg/ic	hrs	fg/br	hrs		bs	hrs	Spd	Dir	Time	Spd			Dir	Time	<500		<1000
12-15Z				-23.7	-25.0										20	90	1229	26	70	1403						
15-18Z	70	19	-25.6	-25.0	-26.6									21	60	1747	28	50	1634	7	70			29.56		
18-21Z				-25.4	-26.4									23	70	1812	30	70	1814							
21-24Z	60	18	-25.8	-25.2	-26.5				4 sn		4		bs	4 T	25	60	2304	33	60	2303	8	70			29.51	
12 hr Max/Min				-23.7	-26.6																					
00-03Z				-24.9	-26.3										24	70	125	29	80	219						
03-06Z	60	20	-25.5	-25.4	-26.3	3			SN		6		BS	6	0.05	25	60	502	32	70	432	8	70		29.47	
06-09Z				-25.3	-25.8										24	60	708	30	70	820						
09-12Z	60	19	-26.1	-25.1	-26.2	6			SN		6		BS	6	0.05	25	60	1048	30	60	941	8	70		29.44	
12 hr Max/Min				-24.9	-26.3																					
Avg Wind		Max	Min	Avg	Visibility (hrs)			Min Wind Chill		WX and Duration			Pcpn	Max Wind			Max Gust			Avg Sky Cover	Low-est CIG	Ceiling (hrs)				
Dir	Spd	Temp	Temp	Temp	Time	<1600	<4800	<9999	C	F	sn/sg/ic	fg/br	bs	Total	Dir	Spd	Time	Dir	Spd			Time	Time	<500	<1000	<3000
62	19	-23.7	-26.6	-25.2	00-06L	0	0	0	-56.0	-69.0	16	0	16	0.10	60	25	2304	60	33	2303	8	70	00-06L	0	0	0
					06-12L	0	0	4						Altimeter			Total Obs	Daily Pres	Daily Temp							
					12-18L	3	0	0						Max	Min	Avg	Taken	Diff	Diff							
					18-24L	6	0	0						29.56	29.44	29.50	4	0.12	2.9							

Note 1: Color coding. Green headings indicate blocks the Weather Observer must complete. The remainder are calculated/completed by MS Excel.

Note 2: When inputting WX and Duration entries, be sure to precede each wx type by a "/", ie. /sn. Duration should be a whole number, not fractions of an hour.

Note 3: To facilitate MS Excel, the order of entry for Max Wind and Max Gust is changed from conventional. The order is: Spd, Dir, and Time.



McMurdo Station Daily Observation Worksheet

Date: 26

Time	Winds		3 hr Temp		Visibility (hrs)			Wx and Duration (Note 2)					Pcpn Amt	Max Wind (Note 3)			Max Gust (Note 3)			Avg Sky Cover	Low-est CIG	Ceiling (hrs)			Alt (in)				
	Dir	Spd	Temp	Max	Min	<1600	<4800	<9999	sn/sg/ic	hrs	fg/br	hrs		bs	hrs	Spd	Dir	Time	Spd			Dir	Time	<500		<1000	<3000		
12-15Z				-25.7	-26.2										25	60	1443	31	50	1443									
15-18Z	70	18	-26.8	-26.0	-26.9	6			sn	6			bs	6	0.05	25	60	1546	31	50	1503	8	70				29.37		
18-21Z				-26.7	-28.0										21	70	1802	26	70	2019									
21-24Z	60	15	-27.2	-24.3	-27.3	6			sn	6			bs	6	0.05	20	60	2312	28	50	2303	8	70				29.33		
12 hr Max/Min				-24.3	-28.0																								
00-03Z				-27.1	-27.6										20	50	220	26	50	219									
03-06Z	70	15	-27.5	-27.4	-27.8	6			sn	6			bs	6	0.05	19	70	508	27	50	400	8	70				29.33		
06-09Z				-27.1	-28.6										22	80	837	26	80	850									
09-12Z	80	18	-28.9			4	2		sn	4			bs	6	T	23	90	920	26	90	1049	5	70				29.34		
12 hr Max/Min				-27.1	-28.6																								
Avg Wind		Max	Min	Avg	Visibility (hrs)			Min Wind Chill		WX and Duration			Pcpn	Max Wind			Max Gust			Avg Sky Cover	Low-est CIG	Ceiling (hrs)							
Dir	Spd	Temp	Temp	Temp	Time	<1600	<4800	<9999	C	F	sn/sg/ic	fg/br	bs	Total	Dir	Spd	Time	Dir	Spd			Time	Time	<500	<1000	<3000			
70	17	-24.3	-28.6	-26.5	00-06L	6	0	0	-60.0	-76.0	22	0	24	0.15	60	25	1443	50	31	1443	7	70	00-06L	0	0	0			
					06-12L	6	0	0						Altimeter			Total Obs Taken	Daily Pres Diff	Daily Temp Diff										
					12-18L	6	0	0						29.37	29.33	29.34	4	0.04	4.3				06-12L	0	0	0			
					18-24L	4	2	0															12-18L	0	0	0			
																										18-24L	0	0	0

Note 1: Color coding. Green headings indicate blocks the Weather Observer must complete. The remainder are calculated/completed by MS Excel.

Note 2: When inputting WX and Duration entries, be sure to precede each wx type by a "/", ie. /sn. Duration should be a whole number, not fractions of an hour.

Note 3: To facilitate MS Excel, the order of entry for Max Wind and Max Gust is changed from conventional. The order is: Spd, Dir, and Time.



McMurdo Station Daily Observation Worksheet

Date: 27

Time	Winds		3 hr Temp		Visibility (hrs)			Wx and Duration (Note 2)					Pcpn Amt	Max Wind (Note 3)			Max Gust (Note 3)			Avg Sky Cover	Low-est CIG	Ceiling (hrs)			Alt (in)
	Dir	Spd	Temp	Max	Min	<1600	<4800	<9999	sn/sg/ic	hrs	fg/br	hrs		bs	hrs	Spd	Dir	Time	Spd			Dir	Time	<500	
12-15Z				-26.9	-29.1									23	80	1335	26	80	1338						
15-18Z	70	16	-25.7	-25.5	-29.3		1							19	60	1550	23	70	1611	1				29.35	
18-21Z				-24.2	-28.2									16	60	1822	20	70	1823						
21-24Z	190	3	-25.8	-23.2	-28.4									10	80	2110	11	90	2110	5	200			29.39	
12 hr Max/Min				-23.2	-29.3																				
00-03Z				-24.5	-28.1									5	300	228	7	300	219						
03-06Z		0	-23.7	-23.5	-28.8									7	180	319	9	170	316	6	200			29.38	
06-09Z				-23.5	-25.7									4	80	716	4	100	723						
09-12Z	80	3	-24.2	-23.5	-25.5									5	90	1140	6	90	1140	1				29.41	
12 hr Max/Min				-23.5	-28.8																				

Note 1: Color coding. Green headings indicate blocks the Weather Observer must complete. The remainder are calculated/completed by MS Excel.

Note 2: When inputting WX and Duration entries, be sure to precede each wx type by a "/", ie. /sn. Duration should be a whole number, not fractions of an hour.

Note 3: To facilitate MS Excel, the order of entry for Max Wind and Max Gust is changed from conventional. The order is: Spd, Dir, and Time.

Avg Wind	Max	Min	Avg	Visibility (hrs)			Min Wind Chill		WX and Duration			Pcpn Total	Max Wind			Max Gust			Avg Sky Cover	Low-est CIG	Ceiling (hrs)											
				Dir	Spd	Temp	Temp	Temp	Time	<1600	<4800		<9999	C	F	sn/sg/ic	fg/br	bs			Dir	Spd	Time	Dir	Spd	Time	Time	<500	<1000	<3000		
80	6	-23.2	-29.3	-26.3	00-06L	0	1	0	-57.0	-71.0	0	0	1	0.00	80	23	1335	80	26	1338	3	200	00-06L	0	0	0						
Altimeter																																
												Max	Min	Avg	Total Obs Taken	Daily Pres Diff	Daily Temp Diff															
												29.41	29.35	29.38	3	0.06	6.1	06-12L	0	0	0	12-18L	0	0	0	18-24L	0	0	0			



McMurdo Station Daily Observation Worksheet

Date: 28

Time	Winds		3 hr Temp		Visibility (hrs)			Wx and Duration (Note 2)					Pcpn Amt	Max Wind (Note 3)			Max Gust (Note 3)			Avg Sky Cover	Low-est CIG	Ceiling (hrs)			Alt (in)
	Dir	Spd	Temp	Max	Min	<1600	<4800	<9999	sn/sg/ic	hrs	fg/br	hrs		bs	hrs	Spd	Dir	Time	Spd			Dir	Time	<500	
12-15Z				-23.5	-25.1										6	80	1415	6	80	1424					
15-18Z		0	-28.0	-21.4	-28.1										5	210	1724	7	300	1659	1				29.49
18-21Z				-22.6	-28.6										5	60	2041	6	50	2040					
21-24Z	80	5	-20.6	-19.8	-23.5										7	90	2334	8	80	2333	0				29.61
12 hr Max/Min				-19.8	-28.6																				
00-03Z				-17.7	-21.4										13	100	209	16	100	210					
03-06Z	60	20	-24.8	-20.7	-25.5										25	60	505	30	50	549	0				29.75
06-09Z				-24.3	-25.8										24	50	805	31	50	705					
09-12Z	50	14	-24.6	-23.8	-25.6										22	60	1005	28	50	913	2				29.80
12 hr Max/Min				-17.7	-25.8																				

Note 1: Color coding. Green headings indicate blocks the Weather Observer must complete. The remainder are calculated/completed by MS Excel.

Note 2: When inputting WX and Duration entries, be sure to precede each wx type by a "/", ie. /sn. Duration should be a whole number, not fractions of an hour.

Note 3: To facilitate MS Excel, the order of entry for Max Wind and Max Gust is changed from conventional. The order is: Spd, Dir, and Time.

Avg Wind	Max	Min	Avg	Visibility (hrs)			Min Wind Chill		WX and Duration			Pcpn Total	Max Wind			Max Gust			Avg Sky Cover	Low-est CIG	Ceiling (hrs)					
				Dir	Spd	Temp	Temp	Temp	Time	<1600	<4800		<9999	C	F	sn/sg/ic	fg/br	bs			Dir	Spd	Time	Dir	Spd	Time
59	10	-17.7	-28.6	-23.2	00-06L	0	0	0	-55.0	-67.0	0	0	0	0.00	60	25	505	50	31	705	1		00-06L	0	0	0
					06-12L	0	0	0							Altimeter						1		06-12L	0	0	0
					12-18L	0	0	0							Max	Min	Avg	Total Obs Taken	Daily Pres Diff	Daily Temp Diff			12-18L	0	0	0
					18-24L	0	0	0							29.80	29.49	29.66	3	0.31	10.9			18-24L	0	0	0



McMurdo Station Daily Observation Worksheet

Date: 29

Time	Winds		3 hr Temp		Visibility (hrs)			Wx and Duration (Note 2)					Pcpn Amt	Max Wind (Note 3)			Max Gust (Note 3)			Avg Sky Cover	Low-est CIG	Ceiling (hrs)			Alt (in)
	Dir	Spd	Temp	Max	Min	<1600	<4800	<9999	sn/sg/ic	hrs	fg/br	hrs		bs	hrs	Spd	Dir	Time	Spd			Dir	Time	<500	
12-15Z				-22.5	-24.8										16	40	1301	19	30	1300					
15-18Z	70	4	-24.5	-23.7	-25.4									6	80	1545	8	80	1543	6	25			3	29.77
18-21Z				-22.2	-24.4									3	70	1826	4	80	1825						
21-24Z	80	7	-21.5	-21.3	-22.9									9	70	2348	11	80	2342	8	20			6	29.71
12 hr Max/Min				-21.3	-25.4																				
00-03Z				-21.7	-24.8										14	90	230	18	90	244					
03-06Z	90	16	-23.8	-23.6	-27.2									21	90	526	25	100	526	8	30			6	29.66
06-09Z				-22.2	-26.2									30	80	845	34	80	845						
09-12Z	90	25	-27.3	-26.3	-27.5									29	80	858	34	90	902	8	40			3	29.53
12 hr Max/Min				-21.7	-27.5																				

Avg Wind	Max	Min	Avg	Visibility (hrs)			Min Wind Chill		WX and Duration			Pcpn Total	Max Wind			Max Gust			Avg Sky Cover	Low-est CIG	Ceiling (hrs)					
				Dir	Spd	Temp	Temp	Temp	Time	<1600	<4800		<9999	C	F	sn/sg/ic	fg/br	bs			Dir	Spd	Time	Dir	Spd	Time
87	13	-21.3	-27.5	-24.4	00-06L	0	0	0	-58.0	-72.0	0	0	0	0.00	80	30	845	80	34	845	8	20	00-06L	0	0	3
				06-12L	0	0	0					Altimeter			Total Obs Taken	Daily Pres Diff	Daily Temp Diff				06-12L	0	0	6		
				12-18L	0	0	0					29.77	29.53	29.67	4	0.24	6.2				12-18L	0	0	6		
				18-24L	0	0	0														18-24L	0	0	3		

Note 1: Color coding. Green headings indicate blocks the Weather Observer must complete. The remainder are calculated/completed by MS Excel.

Note 2: When inputting WX and Duration entries, be sure to precede each wx type by a "/", ie. /sn. Duration should be a whole number, not fractions of an hour.

Note 3: To facilitate MS Excel, the order of entry for Max Wind and Max Gust is changed from conventional. The order is: Spd, Dir, and Time.



McMurdo Station Daily Observation Worksheet

Date: 31

Time	Winds		3 hr Temp		Visibility (hrs)			Wx and Duration (Note 2)					Pcpn Amt	Max Wind (Note 3)			Max Gust (Note 3)			Avg Sky Cover	Low-est CIG	Ceiling (hrs)			Alt (in)	
	Dir	Spd	Temp	Max	Min	<1600	<4800	<9999	sn/sg/ic	hrs	fg/br	hrs		bs	hrs	Spd	Dir	Time	Spd			Dir	Time	<500		<1000
12-15Z				-26.2	-27.9										29	70	1231	24	70	1231						
15-18Z	50	13	-25.8	-25.3	-26.7										18	50	1537	21	50	1639	2				29.20	
18-21Z				-25.5	-26.7										15	60	1845	20	50	1813						
21-24Z	50	7	-24.6	-24.2	-25.7										12	30	2122	14	40	2124	6	90			29.15	
12 hr Max/Min				-24.2	-27.9																					
00-03Z				-24.7	-25.8										12	40	213	16	40	146						
03-06Z	50	10	-27.4	-25.9	-27.6				SN		4				T	14	70	441	18	60	422	7	30		3	29.08
06-09Z				-25.8	-27.1											13	50	623	17	60	622					
09-12Z		0	-28.3	-25.7	-28.5				SN		6				T	9	40	920	11	40	919	7	30		6	29.00
12 hr Max/Min				-24.7	-28.5																					
Avg Wind	Max	Min	Avg	Visibility (hrs)			Min Wind Chill		WX and Duration			Pcpn Total	Max Wind			Max Gust			Avg Sky Cover	Low-est CIG	Ceiling (hrs)					
Dir	Spd	Temp	Temp	Temp	Time	<1600	<4800	<9999	C	F	sn/sg/ic		fg/br	bs	Dir	Spd	Time	Dir			Spd	Time	Time	<500	<1000	<3000
50	8	-24.2	-28.5	-26.4	00-06L	0	0	0	-52.0	-62.0	10	0	0	0.00	70	29	1231	70	24	1231	6	30	00-06L	0	0	0
					06-12L	0	0	0							Altimeter			Total Obs	Daily Pres	Daily Temp			06-12L	0	0	0
					12-18L	0	0	0							Max	Min	Avg	Taken	Diff	Diff			12-18L	0	0	3
					18-24L	0	0	0							29.20	29.00	29.11						18-24L	0	0	6
																		3	0.20	4.3						

Note 1: Color coding. Green headings indicate blocks the Weather Observer must complete. The remainder are calculated/completed by MS Excel.

Note 2: When inputting WX and Duration entries, be sure to precede each wx type by a "/", ie. /sn. Duration should be a whole number, not fractions of an hour.

Note 3: To facilitate MS Excel, the order of entry for Max Wind and Max Gust is changed from conventional. The order is: Spd, Dir, and Time.



McMurdo Station Daily Observation Worksheet

Date: 30

Time	Winds			3 hr Temp		Visibility (hrs)			Wx and Duration (Note 2)					Pcpn Amt	Max Wind (Note 3)			Max Gust (Note 3)			Avg Sky Cover	Low-est CIG	Ceiling (hrs)			Alt (in)	
	Dir	Spd	Temp	Max	Min	<1600	<4800	<9999	sn/sg/ic	hrs	fg/br	hrs	bs		hrs	Spd	Dir	Time	Spd	Dir			Time	<500	<1000		<3000
12-15Z				-27.3	-28.5										29	90	1206	34	90	1219							
15-18Z	60	16	-26.7	-26.7	-27.2										23	50	1515	27	50	1719	8	20				6	29.47
18-21Z			-25.7	-25.7	-26.9										20	50	1814	23	40	2032							
21-24Z	50	18	-27.4	-26.4	-27.9	3			sn	5		bs	3	0.01	24	50	2345	30	50	2344	8	20				6	29.44
12 hr Max/Min				-25.7	-28.5																						
00-03Z			-26.6	-26.6	-27.4										22	50	2359	31	60	2357							
03-06Z	90	12	-27.9	-26.6	-28.0	4			sn	6		bs	4	0.01	90	40	410	24	90	418	7	40				4	29.39
06-09Z			-27.6	-27.6	-28.2										25	50	845	28	50	845							
09-12Z	60	16	-27.9	-27.3	-28.4				sn	1				T	23	50	1011	28	50	1012	2						29.29
12 hr Max/Min				-26.6	-28.4																						

Avg Wind	Dir	Spd	Max Temp	Min Temp	Avg Temp	Visibility (hrs)			Min Wind Chill		WX and Duration			Pcpn Total	Max Wind			Max Gust			Avg Sky Cover	Low-est CIG	Ceiling (hrs)			
						Time	<1600	<4800	<9999	C	F	sn/sg/ic	fg/br		bs	Dir	Spd	Time	Dir	Spd			Time	Dir	Spd	Time
63	16	-25.7	-28.5	-27.1	00-06L	0	0	0	-60.0	-76.0	12	0	7	0.02	40	90	410	90	34	1219	6	20	00-06L	0	0	6
						06-12L	3	0	0							Altimeter						06-12L	0	0	6	
						12-18L	4	0	0							Max	Min	Avg	Total Obs Taken	Daily Pres Diff	Daily Temp Diff	12-18L	0	0	4	
						18-24L	0	0	0							29.47	29.29	29.40	4	0.18	2.8	18-24L	0	0	0	

Note 1: Color coding. Green headings indicate blocks the Weather Observer must complete. The remainder are calculated/completed by MS Excel.

Note 2: When inputting WX and Duration entries, be sure to precede each wx type by a "/", ie. /sn. Duration should be a whole number, not fractions of an hour.

Note 3: To facilitate MS Excel, the order of entry for Max Wind and Max Gust is changed from conventional. The order is: Spd, Dir, and Time.



	Day 1		Day 2		Day 3		Day 4		Day 5		Day 6		Day 7		Day 8		Day 9		Day 10		Day 11		Day 12		Day 13		Day 14		Day 15		
12-15Z																															
15-18Z		0	100	9	60	11	90	5	70	19		0		0	90	16	40	8	70	6		0		0	90	9	60	12	60	9	
18-21Z																															
21-24Z	0	4	60	10		0	100	10	60	17	80	6		0	70	16		0	100	4		0	40	9		3	80	13	40	13	
00-03Z																						70	10								
03-06Z	60	8	60	8	0	3	110	15	80	15	40	7	40	8	50	9		0		0	#####	#####	100	11	100	8	110	14	30	9	
06-09Z																															
09-12Z	80	5	50	12		0	70	12	90	8		0		0	110	3		0		0		0	110	9		0	60	10	80	4	
X*u / X*v			8.863	-1.56	9.526	5.5	5 3E-16	17.85	6.498						16 1E-15	5.142	6.128	5.638	2.052						9 6E-16	10.39	6	7.794	4.5		
X*u / X*v																															
X*u / X*v	0	4	8.66	5			9.848	-1.74	14.72	8.5	5.909	1.042			15.04	5.472			3.939	-0.69				5.785	6.894		12.8	2.257	8.356	9.959	
X*u / X*v																						9.397	3.42								
X*u / X*v	6.928	4	6.928	4	0	3	14.1	-5.13	14.77	2.605	4.5	5.362	5.142	6.128	6.894	5.785					#####	#####	10.83	-1.91	7.878	-1.39	13.16	-4.79	4.5	7.794	
X*u / X*v																															
X*u / X*v	4.924	0.868	9.193	7.713			11.28	4.104	8 5E-16						2.819	-1.03								8.457	-3.08		8.66	5	3.939	0.695	
Sum u/Sum v	11.85	8.868	33.64	15.15	9.526	8.5	40.22	-2.76	55.35	17.6	10.41	6.404	5.142	6.128	40.75	10.23	5.142	6.128	9.577	1.358	#####	#####	25.08	1.906	16.88	-1.39	45.01	8.469	24.59	22.95	
Arctan	53.19		65.76		48.26		93.93		72.36		58.4		40		75.91		40		81.93		#####		85.65		94.71		79.34		46.98		
Direction	53.19		65.76		48.26		93.93		72.36		58.4		40		75.91		40		81.93		#####		85.65		94.71		79.34		46.98		
Magnitude	4.25		10		4		11		15		3		2		11		2		3		12:00		7		5		12		9		

Avg Wind

		sin	cos
1	X*u / X*v	3.403	2.546
2	X*u / X*v	8.890	4.003
3	X*u / X*v	2.612	2.330
4	X*u / X*v	10.475	-0.720
5	X*u / X*v	14.056	4.470
6	X*u / X*v	2.768	1.703
7	X*u / X*v	1.286	1.532
8	X*u / X*v	10.669	2.679
9	X*u / X*v	1.286	1.532
10	X*u / X*v	2.475	0.351
11	X*u / X*v	2.002	1.498
12	X*u / X*v	7.229	0.550
13	X*u / X*v	4.983	-0.410
14	X*u / X*v	12.039	2.265
15	X*u / X*v	6.397	5.970
16	X*u / X*v	1.410	0.513
17	X*u / X*v	9.938	-1.108
18	X*u / X*v	1.970	-0.347
19	X*u / X*v	2.216	0.391
20	X*u / X*v	-2.873	2.410
21	X*u / X*v	4.891	7.555
22	X*u / X*v	3.605	2.250
23	X*u / X*v	10.098	6.484
24	X*u / X*v	13.374	4.918
25	X*u / X*v	16.852	8.775
26	X*u / X*v	15.549	5.520
27	X*u / X*v	5.419	0.943
28	X*u / X*v	8.351	5.032
29	X*u / X*v	12.984	0.649
30	X*u / X*v	13.778	7.100
31	X*u / X*v	5.745	4.821
	Sum u/Sum v	213.877	86.206
	Arctan	68.048	
	Direction	68.0	
	Magnitude	7.903226	

Station:
NZCM

Monthly Climatology / Page 2

Month:
MAR 2004

Date	Avg Sky Cover	Low-est CIG	Ceiling (hrs)															Altimeter (in)			Total Obs Taken	Daily Pres Diff	Daily Temp Diff	Min Wind Chill	Remarks	
			< 500					< 1000					< 3000					Max	Min	Avg						
			00-06L	06-12L	12-18L	18-24L	Total	00-06L	06-12L	12-18L	18-24L	Total	00-06L	06-12L	12-18L	18-24L	Total									
1	5	20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.00	5.00	0.00	0.00	11.00	29.39	29.37	29.38	3	0.02	9.1	-22.0	
2	7	40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.42	29.38	29.41	4	0.04	7.4	-37.0	
3	8	8	0.00	0.00	0.00	0.00	0.00	0.00	1.00	6.00	6.00	13.00	0.00	4.00	0.00	0.00	4.00	29.40	29.18	29.30	2	0.22	6.5	-41.0		
4	8	5	0.00	0.00	2.00	0.00	2.00	6.00	6.00	0.00	0.00	12.00	0.00	0.00	0.00	0.00	0.00	29.09	29.02	29.06	4	0.07	5.7			
5	5	80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.15	29.04	29.10	4	0.11	5.5	-44.0		
6	7	80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.31	29.19	29.25	2	0.12	9.0	-29.0		
7	7	30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00	6.00	6.00	14.00	29.29	29.22	29.25	1	0.07	10.8	-28.0		
8	7	30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00	1.00	0.00	0.00	3.00	29.23	29.15	29.19	4	0.08	5.0	-41.0		
9	6	70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.10	28.91	29.00	1	0.19	7.9			
10	4	70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	28.89	28.80	28.85	2	0.09	11.1	-33.0		
11	1		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	28.77	28.76	28.76	1	0.01	7.9	-37.0		
12	6	35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	28.87	28.76	28.80	3	0.11	7.3	-42.0		
13	5		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.00	3.00	29.10	28.96	29.05	2	0.14	7.3	-39.0		
14	8	30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.00	6.00	6.00	6.00	24.00	29.16	29.10	29.14	4	0.06	4.8	-47.0		
15	7	30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.00	3.00	0.00	0.00	9.00	29.20	29.17	29.18	4	0.03	2.2	-42.0		
16	1		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.18	29.10	29.13	1	0.08	10.3	-33.0		
17	7	40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.53	29.29	29.42	3	0.24	7.6	-53.0		
18	1		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.52	29.21	29.37	1	0.31	9.7	-47.0		
19	1		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.13	28.92	29.03	1	0.21	11.0	-36.0		
20	7	30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.00	3.00	29.04	28.93	28.99	1	0.11	12.3	-38.0		
21	6	200	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.46	29.03	29.25	4	0.43	9.8	-36.0		
22	7	30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00	6.00	8.00	29.53	29.45	29.48	3	0.08	9.2	-36.0	
23	8	30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.00	6.00	6.00	6.00	24.00	29.79	29.66	29.74	4	0.13	5.2	-49.0		
24	7	30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.00	3.00	0.00	0.00	9.00	29.80	29.66	29.74	4	0.14	5.4	-49.0		
25	8	70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.56	29.44	29.50	4	0.12	2.9	-56.0		
26	7	70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.37	29.33	29.34	4	0.04	4.3	-60.0		
27	3	200	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.41	29.35	29.38	3	0.06	6.1	-57.0		
28	1		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.80	29.49	29.66	3	0.31	10.9	-55.0		
29	8	20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.00	6.00	6.00	3.00	18.00	29.77	29.53	29.67	4	0.24	6.2	-58.0		
30	6	20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.00	6.00	4.00	0.00	16.00	29.47	29.29	29.40	4	0.18	2.8	-60.0		
31	6	30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.00	6.00	9.00	29.20	29.00	29.11	3	0.20	4.3	-52.0	

Monthly Statistics

Avg Sky Cover	Ceiling (hrs)															Total Obs Taken	Min Wind Chill			
	< 500					< 1000					< 3000							Altimeter		
	00-06L	06-12L	12-18L	18-24L	Total	00-06L	06-12L	12-18L	18-24L	Total	00-06L	06-12L	12-18L	18-24L	Total			Max	Min	Avg
6	0.0	0.0	2.0	0.0	6.0	7.0	6.0	6.0	41.0	42.0	36.0	39.0	29.80	28.76	29.25	88	-60.0			
Total Hrs =or< 500: 2.0					Total Hrs =or< 1000: 25.0					Total Hrs =or< 3000: 158.0					Total Days					
Total Days =or< 500: 1					Total Days =or< 1000: 2					Total Days =or< 3000: 14					31					
% Hrs =or< 500: 0.0					% Hrs =or< 1000: 0.0					% Hrs =or< 3000: 0.2										
% Days =or< 500: 0.0					% Days =or< 1000: 0.1					% Days =or< 3000: 0.5										