Documentation and Task Lists for 2007/2008

This document describes how raw LTER meteorological data files are post-processed along with notes from station visits. Station notes document datalogger time adjustments, sensor status, sensor maintenance, time of storage module changes, equipment and data problems, maintenance, and other observations. Files are listed alphabetically by file name.

File description and task list for files:

o1=omit from level 1
ok= no changes to get to level 1
rclow= reverse temperatures to mV and apply clow subroutine to mV values using Steinhart-Hart equation
bad= normally would be included in level 1 but number is suspect or know to be incorrect
flag= reasonable number but needs a note attached concerning its collection

Relative humidity correction note: All of the relative humidity (RH) values were corrected for a systematic error in the measurement created by an instrument manufacturer error. All RH data with air temperatures below freezing were corrected using the vapor pressure over ice (rather than over water which was used initially). The error became quite large for very cold temperatures (the correction could grow to around 30%). The polynomials used for the correction is based on Lowe (1977).

=[RH3m]*(6.107799961 + [AirT3m] * (0.4436518521 + [AirT3m] * (0.01428945805 + [AirT3m] * (0.0002650648471 + [AirT3m] *(0.000003031240396 + [AirT3m] * (0.00000002034080948 + 0.000000000006136820929 * [AirT3m])))))) / (6.109177956 + [AirT3m] * (0.503469897 + [AirT3m] * (0.01886013408 + [AirT3m] * (0.0004176223716 + [AirT3m] * (0.00000582472028 + [AirT3m] * (0.00000004838803174 + 0.000000001838826904 * [AirT3m])))))

Array I.D. key found at document end.

Stations

The following stations are included in this document (*click to advance*):

Lake Bonney

Lake Brownworth

Canada Glacier

Commonwealth Glacier

Explorers Cove

Lake Fryxell

Fryxell Snowfence

Howard Glacier

Lake Hoare

Lake Hoare Precipitation

Taylor Glacier

Lake Vanda

Lake Vida

Prepared by Hassan Basagic, last updated: 7/3/2008

Beacon Valley

Filename:	ben07801.dat
Station:	Beacon Valley met station
Date of Establishment:	November 27, 2000 by Susan Kaspari, Thomas Nylen and Adrian Green
Author of this report:	Hassan Basagic
File Period:	November 30, 2006 (334) @ 1415 to December 8, 2007 (342) @ 1045
Sampling Frequency:	wind every 4 secs.; others: every 30 secs.
Averaging and Output Interval:	every 15 min
Program Name:	ben034v1

1. array I.D.
   o1
2. day
   ok
3. time
   ok
4. mean air temp. @ 3 meters (C)
   rclow
5. corrected mean R.H. @ 3 meters (%)
   ok (see correction note on page 1)
7. mean solar flux going up (W/m2) – PY18400
   ok
8. mean horizontal wind speed (m/s)
   ok
9. resultant mean wind speed (m/s)
   o1
10. resultant mean wind direction (degrees from north)
    ok
11. standard deviation of wind direction (degrees)
    ok
12. maximum wind speed (m/s)
    ok
13. minimum wind speed (m/s)
    ok
14. mean P.A.R. (micromols/s/m2) – Q32567
    multiply by 1.38
15. mean soil temperature @ 0 cm in soil (C)
    rclow
16. mean soil temperature @ 5 cm in soil (C)
    rclow
17. mean soil temperature @ 10 cm in soil (C)
    rclow
18. sample of battery voltage
    o1

Notes:

1. No missing data.
2. Adjusted CR10x time back 40 seconds on December 8, 2007 @ 0925
3. Checked input values and wind direction on December 8, 2007 @ 0925, everything appears in order.
4. Swapped upward facing pyranometer (old#20567, new#45665) and baseplate on December 8, 2007 @ 0956.
5. Power off CR10x on December 8, 2007 from 1000 to 1023 to replace battery (100 A hr).
6. SM swapped on December 8, 2007 at 1045.

Filename:	ben07802.dat
Station:	Beacon Valley met station
Date of Establishment:	November 27, 2000 by Susan Kaspari, Thomas Nylen and Adrian Green
Author of this report:	Hassan Basagic
File Period:	December 8, 2007 (342) @ 1045 to January 29, 2008 (29) at 1500
Sampling Frequency:	wind every 4 secs.; others: every 30 secs.
Averaging and Output Interval:	every 15 min
Program Name:	ben034v1

1. array I.D.
   o1
2. day
   ok
3. time
   ok
4. mean air temp. @ 3 meters (C)
   rclow
5. corrected mean R.H. @ 3 meters (%)
   ok (see correction note on page 1)
6. mean solar flux coming down (W/m2) – PY45665
   ok
7. mean solar flux going up (W/m2) – PY18400
   ok
8. mean horizontal wind speed (m/s)
   ok
9. resultant mean wind speed (m/s)
   o1
10. resultant mean wind direction (degrees from north)
    ok
11. standard deviation of wind direction (degrees)
    ok
12. maximum wind speed (m/s)
    ok
13. minimum wind speed (m/s)
    ok
14. mean P.A.R. (micromols/s/m2) – Q32567
    multiply by 2.27
15. mean soil temperature @ 0 cm in soil (C)
    rclow
16. mean soil temperature @ 5 cm in soil (C)
    rclow
17. mean soil temperature @ 10 cm in soil (C)
    rclow
18. sample of battery voltage
    o1

Notes:

1. No missing data.
2. Adjusted CR10x time back by 9 min on January 29, 2008 (29) @ 1510.
3. Checked input values and wind direction on January 29, 2008 (29) at 1510, everything appears in order.
4. Tightened guy lines.
5. SM swapped on January 29, 2008 (29) at 1515. Loaded new program: BEN078v1, which removed the sonic ranger subroutine (not installed at this site).

Lake Bonney

Filename:	boy07801.dat
Station:	Lake Bonney met station
Date of Establishment:	November 24, 1993 by Peter Doran
Author of this report:	Hassan Basagic
File Period:	January 29, 2007 @ 1100 to October 31, 2007 at 1945
Sampling Frequency:	sonic and prec. every 60 minutes, wind speed every 4 sec, other every 30 sec
Averaging and Output Interval:	every 15 minutes
Program name:	boy045v1

1. array I.D.
   o1
2. day
   ok
3. time
   ok
4. mean air temp. @ 3 meters (C)
   rclow
5. corrected mean R.H. @ 3 meters (%)
   ok (see correction note on page 1)
6. mean solar flux coming up (W/m2) – PY28170
   ok
7. mean solar flux going down (W/m2) – PY18395
   ok
8. mean P.A.R. (micromols/s/m2) – Q30801
   divide by 200, multiply by 217.56
9. mean horizontal wind speed (m/s)
   ok
10. resultant mean wind speed (m/s)
    o1
11. resultant mean wind direction (degrees from north)
    ok
12. standard deviation of wind direction (degrees)
    ok
13. maximum wind speed (m/s)
    ok
14. minimum wind speed (m/s)
    ok
15. mean up-facing pyrgeometer, rad. comp. (W/m2)
    29786F3 - divide by 250; multiple by 271.74
16. mean up-facing pyrgeometer hemisphere temp
    Eppley
17. mean up-facing pyrgeometer thermopile (W/m2)
    Eppley
18. mean up-facing pyrgeometer case temp
    Eppley
19. mean down-facing pyrgeometer, rad. comp. (W/m2)
    32348F3 - divide by 250; multiple by 261.10
20. mean down-facing pyrgeometer hemisphere temp
    Eppley
21. mean down-facing pyrgeometer thermopile (W/m2)
    Eppley
22. mean down-facing pyrgeometer case temp
    Eppley
23. mean soil temperature @ 0 cm in soil (C)
    rclow

24. mean soil temperature @ 5 cm in soil (C)
    rclow
25. mean soil temperature @ 10 cm in soil (C)
    rclow
26. sample depth from sensor to surface (cm)
    Measured depth (0.412) + Value) * 100
27. sample precipitation (mm)
    ok
28. sample of battery voltage
    o1

Notes:

1. No power to station upon arrival. Missing data from October 31, 2007 at 1945 to present. Power failure caused by corrosion of power cable. Repaired cable and powered station on November 25, 2007 @ 930. Adjusted CR10x time which was 13 minutes slow.
2. Replaced Cr10x datalogger at 0943.
3. Checked input values and wind alignment on November 25, 2007 @ 942. All channels are working properly.
4. Swapped the following sensors: up-facing pyranometer (old# PY28170, new# PY41099) at 11:35. down-facing pyranometer (old# 18395, new# 40424) at 1145, up-facing pyrgeometer (old# PIR29786, new# PIR30831) at 1430, down-facing (old# 32348, new# 32059) at 1430.
5. Swapped storage module n November 25, 2007 @ 0942.

Filename:	boy07802.dat
Station:	Lake Bonney met station
Date of Establishment:	November 24, 1993 by Peter Doran
Author of this report:	Hassan Basagic
File Period:	November 25, 2007 at 945 to December 20, 2007 at 1000
Sampling Frequency:	sonic and prec. every 60 minutes, wind speed every 4 sec, other every 30 sec
Averaging and Output Interval:	every 15 minutes
Program name:	boy045v1

1. array I.D.
   o1
2. day
   ok
3. time
   ok
4. mean air temp. @ 3 meters (C)
   rclow
5. corrected mean R.H. @ 3 meters (%)
   ok (see correction note on page 1)
6. mean solar flux coming up (W/m2) – PY28170
   ok
7. mean solar flux going down (W/m2) – PY18395
   ok
8. mean P.A.R. (micromols/s/m2) – Q30801
   divide by 200, multiply by 217.56
9. mean horizontal wind speed (m/s)
   ok
10. resultant mean wind speed (m/s)
    o1
11. resultant mean wind direction (degrees from north)
    ok
12. standard deviation of wind direction (degrees)
    ok
13. maximum wind speed (m/s)
    ok
14. minimum wind speed (m/s)
    ok
15. mean up-facing pyrgeometer, rad. comp. (W/m2)
    30831F - divide by 250; multiple by 277.01
16. mean up-facing pyrgeometer hemisphere temp
    Eppley
17. mean up-facing pyrgeometer thermopile (W/m2)
    Eppley
18. mean up-facing pyrgeometer case temp
    Eppley
19. mean down-facing pyrgeometer, rad. comp. (W/m2)
    32059F3 - divide by 250; multiple by 227.79
20. mean down-facing pyrgeometer hemisphere temp
    Eppley
21. mean down-facing pyrgeometer thermopile (W/m2)
    Eppley
22. mean down-facing pyrgeometer case temp
    Eppley
23. mean soil temperature @ 0 cm in soil (C)
    rclow
24. mean soil temperature @ 5 cm in soil (C)
    rclow

25. mean soil temperature @ 10 cm in soil (C)
    rclow
26. sample depth from sensor to surface (cm)
    Measured depth (0.412) + Value) * 100
27. sample precipitation (mm)
    ok
28. sample of battery voltage
    o1

Notes:

1. Missing two lines of data on December 20, 2007 at 930 and 945.
2. Datalogger time correct on December 20, 2007 at 0919.
3. Checked input values and wind alignment on December 20, 2007 at 0919. All channels are working properly.
4. Maintenance: swapped out power cable between battery and datalogger.
5. Swapped storage module on December 20, 2007 at 1005.

Filename:	boy07803.dat
Station:	Lake Bonney met station
Date of Establishment:	November 24, 1993 by Peter Doran
Author of this report:	Hassan Basagic
File Period:	January 30, 2008 at 1400 to April 9, 2008 at 10:00
Sampling Frequency:	sonic and prec. every 60 minutes, wind speed every 4 sec, other every 30 sec
Averaging and Output Interval:	every 15 minutes
Program name:	boy045v1

1. array I.D.
   o1
2. day
   ok
3. time
   ok
4. mean air temp. @ 3 meters (C)
   rclow
5. corrected mean R.H. @ 3 meters (%)
   ok (see correction note on page 1)
6. mean solar flux coming up (W/m2) – PY28170
   ok
7. mean solar flux going down (W/m2) – PY18395
   ok
8. mean P.A.R. (micromols/s/m2) – Q30801
   divide by 200, multiply by 217.56
9. mean horizontal wind speed (m/s)
   ok
10. resultant mean wind speed (m/s)
    o1
11. resultant mean wind direction (degrees from north)
    ok
12. standard deviation of wind direction (degrees)
    ok
13. maximum wind speed (m/s)
    ok
14. minimum wind speed (m/s)
    ok
15. mean up-facing pyrgeometer, rad. comp. (W/m2)
    30831F - divide by 250; multiple by 277.01
16. mean up-facing pyrgeometer hemisphere temp
    Eppley
17. mean up-facing pyrgeometer thermopile (W/m2)
    Eppley
18. mean up-facing pyrgeometer case temp
    Eppley
19. mean down-facing pyrgeometer, rad. comp. (W/m2)
    32059F3 - divide by 250; multiple by 227.79
20. mean down-facing pyrgeometer hemisphere temp
    Eppley
21. mean down-facing pyrgeometer thermopile (W/m2)
    Eppley
22. mean down-facing pyrgeometer case temp
    Eppley
23. mean soil temperature @ 0 cm in soil (C)
    rclow
24. mean soil temperature @ 5 cm in soil (C)
    rclow

25. mean soil temperature @ 10 cm in soil (C)
    rclow
26. sample depth from sensor to surface (cm)
    Measured depth (0.412) + Value) * 100
27. sample precipitation (mm)
    ok
28. sample of battery voltage
    o1

Notes:

1. No missing data.
2. SM removed by John Priscu as part of extended season on April 9, 2008 between 1045 and returned at 1320.

Lake Brownworth

Filename: brh07801.dat
Station: Lake Brownworth met station
Date of Establishment: November 13, 1996 by Peter Doran and D.J. Osborne
Author of this report: Hassan Basagic
File Period: January 11, 2007 (11) @ 1330 to January 8, 2008 at 1145
Sampling Frequency: wind speed every 4 sec; sonic every 60 minutes; other every 30 sec
Averaging and Output Interval: every 15 min
Program Name: brh045v1

1. array I.D.
   o1
2. day
   ok
3. time
   ok
4. mean air temp. @ 3 meters (C)
   rclow
5. corrected mean R.H. @ 3 meters (%)
   ok (see correction note on page 1)
6. mean solar flux coming down (W/m2) – PY33985
   ok
7. mean solar flux going up (W/m2) – PY28167
   ok
8. mean horizontal wind speed (m/s)
   ok
9. resultant mean wind speed (m/s)
   o1
10. resultant mean wind direction (degrees from north)
    ok
11. standard deviation of wind direction (degrees)
    ok
12. maximum wind speed (m/s)
    ok
13. minimum wind speed (m/s)
    ok
14. mean P.A.R. (micromols/s/m2) – Q33906
    multiply by 1.47824
15. mean soil temperature @ 0 cm in soil (C)
    rclow
16. mean soil temperature @ 5 cm in soil (C)
    rclow
17. mean soil temperature @ 10 cm in soil (C)
    rclow
18. sample depth from sensor to surface (cm)
    Measured depth (0.589) + Value) * 100
19. sample of battery voltage
    o1

Notes:

1. Missing data from January 19, 2007 at 1630 to September 10, 2007 at 1015. Unknown cause.
2. Datalogger clock adjusted ahead 15 min 20 sec on January 8, 2008 at 1056.
3. Check input values and wind alignment on January 8, 2008 at 1100, all values look good. Ultrasonic ranger height was 58 cm (bare-ground).
4. Maintenance: swapped up-facing pyranometer (old#33985, new#25306) at 1110 and quantum PAR sensor (old#Q33906, new#Q28265) at 1110 on January 8, 2008. Swapped SM on January 8, 2008 at 1157 .

Filename:	brh07802.dat
Station:	Lake Brownworth met station
Date of Establishment:	November 13, 1996 by Peter Doran and D.J. Osborne
Author of this report:	Hassan Basagic
File Period:	January 11, 2007 (11) @ 1430 to January 8, 2008 at 1145
Sampling Frequency:	wind speed every 4 sec; sonic every 60 minutes; other every 30 sec
Averaging and Output Interval:	every 15 min
Program Name:	brh045v1

1. array I.D.
   o1
2. day
   ok
3. time
   ok
4. mean air temp. @ 3 meters (C)
   rclow
5. corrected mean R.H. @ 3 meters (%)
   ok (see correction note on page 1)
6. mean solar flux coming down (W/m2) – PY25306
   ok
7. mean solar flux going up (W/m2) – PY28167
   ok
8. mean horizontal wind speed (m/s)
   ok
9. resultant mean wind speed (m/s)
   o1
10. resultant mean wind direction (degrees from north)
    ok
11. standard deviation of wind direction (degrees)
    ok
12. maximum wind speed (m/s)
    ok
13. minimum wind speed (m/s)
    ok
14. mean P.A.R. (micromols/s/m2) – Q28265
    multiply by 1.1792
15. mean soil temperature @ 0 cm in soil (C)
    rclow
16. mean soil temperature @ 5 cm in soil (C)
    rclow
17. mean soil temperature @ 10 cm in soil (C)
    rclow
18. sample depth from sensor to surface (cm)
    Measured depth (0.589) + Value) * 100
19. sample of battery voltage
    o1

Notes:

1. One line of missing data on January 18, 2008 at 1545.
2. Datalogger clock correct on January 18, 2008 at 1526.
3. Check input values and wind alignment on January 18, 2008 at 1530, all values look good. Ultrasonic ranger height was 58.5 cm (bare-ground).
4. Maintenance: swapped battery and power cable on January 18, 2008 at 1550.
5. Swapped SM on January 18, 2008 at 1600 .

Canada Glacier

Filename:	caa07801.dat
Station:	Canada Glacier met station
Date of Establishment:	Nov 20, 1995 by Karen Lewis
Reinstalled on glacier:	Jan 13, 1998 by Karen Lewis
Author of this report:	Hassan Basagic
File Period:	January 27, 2007 at 1230 to June 26, 2007 1:15
Sampling Frequency:	wind speed every 4 sec; all other every 30 sec
Averaging and Output Interval:	every 15 minutes
Program name:	caa67v1

1. array I.D.
   o1
2. day
   ok
3. time
   ok
4. mean air temp. (C)
   rclow
5. corrected mean RH @ (%)
   ok (see correction note on page 1)
6. mean solar flux coming down (W/m2)
   ok
7. mean solar flux going up (W/m2)
   ok
8. mean horizontal wind speed (m/s)
   ok
9. resultant mean wind speed (m/s)
   o1
10. resultant mean wind direction (degrees from north)
    ok
11. standard deviation of wind direction (degrees)
    ok
12. maximum wind speed (m/s)
    ok
13. minimum wind speed (m/s)
    ok
14. ice temperature – original depth was 50.0 cm from the surface (mV)
    poly (n0=-106.23,n1=239.65,2=-512.50,n3=693.49,n4=-551.71,n5=254.79,n6=-63.07, n7=6.492
15. ice temperature – original depth was 100.0 cm from the surface (mV)
    poly (n0=-105.87,n1=237.58,2=-507.11,n3=686.25,n4=-546.23,n5=252.43,n6=-62.53, n7=6.442
16. ice temperature – original depth was 25.0 cm from the surface (mV)
    o1
17. ice temperature – original depth was 50.0 cm from the surface (mV)
    o1
18. ice temperature – original depth was 75.0 cm from the surface (mV)
    o1
19. ice temperature – original depth was 100.0 cm from the surface (mV)
    o1
20. saltation particle count
    ol
21. mean ice surface temperature
    ok
22. sample battery voltage
    o1

Notes:

1. Missing data beginning June 26, 2007 at 01:15 when station power failed. Power restored during station visit on November 9, 2007 at 14:56.
2. CR10X clock corrected 18 minutes ahead on November 9, 2007 (27) at 1501.
3. Checked input values and wind alignment, all appear in good condition except for ‘new ice temps’ which were not operating and omitted.
4. Sensit sensor height = 29.5 cm..
5. Replaced one (1) SM4M with one (1) SM4M) November 9, 2007 at 1504.

Filename:	caa07802.dat
Station:	Canada Glacier met station
Date of Establishment:	Nov 20, 1995 by Karen Lewis
Reinstalled on glacier:	Jan 13, 1998 by Karen Lewis
Author of this report:	Hassan Basagic
File Period:	November 9, 2007 15:15 to November 29, 2007 13:45
Sampling Frequency:	wind speed every 4 sec; all other every 30 sec
Averaging and Output Interval:	every 15 minutes
Program name:	caa67v1

1. array I.D.
   o1
2. day
   ok
3. time
   ok
4. mean air temp. (C)
   rclow
5. corrected mean RH @ (%)
   ok (see correction note on page 1)
6. mean solar flux coming down (W/m2)
   ok
7. mean solar flux going up (W/m2)
   ok
8. mean horizontal wind speed (m/s)
   ok
9. resultant mean wind speed (m/s)
   o1
10. resultant mean wind direction (degrees from north)
    ok
11. standard deviation of wind direction (degrees)
    ok
12. maximum wind speed (m/s)
    ok
13. minimum wind speed (m/s)
    ok
14. ice temperature – original depth was 50.0 cm from the surface (mV)
    poly (n0=-106.23,n1=239.65,2=-512.50,n3=693.49,n4=-551.71,n5=254.79,n6=-63.07, n7=6.492
15. ice temperature – original depth was 100.0 cm from the surface (mV)
    poly (n0=-105.87,n1=237.58,2=-507.11,n3=686.25,n4=-546.23,n5=252.43,n6=-62.53, n7=6.442
23. ice temperature – original depth was 25.0 cm from the surface (mV)
    o1
24. ice temperature – original depth was 50.0 cm from the surface (mV)
    o1
25. ice temperature – original depth was 75.0 cm from the surface (mV)
    o1
26. ice temperature – original depth was 100.0 cm from the surface (mV)
    o1
16. saltation particle count (counts in one minute)
    ol
17. mean ice surface temperature
    ok
18. sample battery voltage
    o1

Notes:

1. No missing data.
2. CR10X clock corrected 10 seconds back on November 29, 2007 (27) at 1317.
3. Checked input values and wind alignment, all appear in good condition.
4. Replaced one (1) SM4M with one (1) SM4M) November 29, 2007 at 1345. New program loaded (CAA078v2). This program eliminated “new ice temps” at 25, 50, 75, and 100 cm depth, which were no longer operating. Old ice temps at 50 and 100 cm are still included in program.

Filename:	caa07803.dat
Station:	Canada Glacier met station
Date of Establishment:	Nov 20, 1995 by Karen Lewis
Reinstalled on glacier:	Jan 13, 1998 by Karen Lewis
Author of this report:	Hassan Basagic
File Period:	November 29, 2007 1400 to December 15, 2007 at 1715
Sampling Frequency:	wind speed every 4 sec; all other every 30 sec
Averaging and Output Interval:	every 15 minutes
Program name:	caa078v2

1. array I.D.
   o1
2. day
   ok
3. time
   ok
4. mean air temp. (C)
   rclow
5. corrected mean relative humidity (%)
   ok (see correction note on page 1)
6. mean solar flux coming down (W/m2)
   ok
7. mean solar flux going up (W/m2)
   ok
8. mean horizontal wind speed (m/s)
   ok
9. resultant mean wind speed (m/s)
   o1
10. resultant mean wind direction (degrees from north)
    ok
11. standard deviation of wind direction (degrees)
    ok
12. maximum wind speed (m/s)
    ok
13. minimum wind speed (m/s)
    ok
14. ice temperature – original depth was 50.0 cm from the surface (mV)
    poly (n0=-106.23,n1=239.65,2=-512.50,n3=693.49,n4=-551.71,n5=254.79,n6=-63.07, n7=6.492
15. ice temperature – original depth was 100.0 cm from the surface (mV)
    poly (n0=-105.87,n1=237.58,2=-507.11,n3=686.25,n4=-546.23,n5=252.43,n6=-62.53, n7=6.442
16. mean ice surface temperature
    ol
17. sample battery voltage
    o1

Notes:

1. No missing data.
2. CR10X clock was correct on December 15, 2007 at 1644.
3. Checked input values and wind alignment, all appear in good condition.
4. Sensit sensor height = 32 cm.. Readjust to 20 cm.
5. Station offline on December 15, 2007 from 1649 to 1652 to replace datalogger. Swapped SMon December 15, 2007 at 1722

Filename:	caa07804.dat
Station:	Canada Glacier met station
Date of Establishment:	Nov 20, 1995 by Karen Lewis
Reinstalled on glacier:	Jan 13, 1998 by Karen Lewis
Author of this report:	Hassan Basagic
File Period:	December 15, 2007 at 1715 to January 15, 2008 at 1445
Sampling Frequency:	wind speed every 4 sec; all other every 30 sec
Averaging and Output Interval:	every 15 minutes
Program name:	caa078v2

1. array I.D.
   o1
2. day
   ok
3. time
   ok
4. mean air temp. (C)
   rclow
5. corrected mean relative humidity (%)
   ok (see correction note on page 1)
6. mean solar flux coming down (W/m2)
   ok
7. mean solar flux going up (W/m2)
   ok
8. mean horizontal wind speed (m/s)
   ok
9. resultant mean wind speed (m/s)
   o1
10. resultant mean wind direction (degrees from north)
    ok
11. standard deviation of wind direction (degrees)
    ok
12. maximum wind speed (m/s)
    ok
13. minimum wind speed (m/s)
    ok
14. ice temperature – original depth was 50.0 cm from the surface (mV)
    poly (n0=-106.23,n1=239.65,2=-512.50,n3=693.49,n4=-551.71,n5=254.79,n6=-63.07, n7=6.492
15. ice temperature – original depth was 100.0 cm from the surface (mV)
    poly (n0=-105.87,n1=237.58,2=-507.11,n3=686.25,n4=-546.23,n5=252.43,n6=-62.53, n7=6.442
16. mean ice surface temperature
    ol
17. sample battery voltage
    o1

Notes:

1. No missing data.
2. Datalogger time was adjusted ahead by 1 min 10 sec on January 15, 2008 at 1404.
3. Checked input values and wind alignment, all appear in good condition.
4. Maintenance: removed old Everest IRT and installed new IRT (Apogee sensor, serial number #1091). This sensor has been placed onto Canada datalogger#2 (CA2).
5. New program (caa078v3) uploaded and swapped SM on January 15, 2008 at 1448.

Filename:	caa07805.dat
Station:	Canada Glacier met station
Date of Establishment:	Nov 20, 1995 by Karen Lewis
Reinstalled on glacier:	Jan 13, 1998 by Karen Lewis
Author of this report:	Hassan Basagic
File Period:	January 15, 2008 at 1445 to January 26, 2008 at 1800
Sampling Frequency:	wind speed every 4 sec; all other every 30 sec
Averaging and Output Interval:	every 15 minutes
Program name:	caa078v3

1. array I.D.
   o1
2. day
   ok
3. time
   ok
4. mean air temp. (C)
   rclow
5. corrected mean relative humidity (%)
   ok (see correction note on page 1)
6. mean solar flux coming down (W/m2)
   ok
7. mean solar flux going up (W/m2)
   ok
8. mean horizontal wind speed (m/s)
   ok
9. resultant mean wind speed (m/s)
   o1
10. resultant mean wind direction (degrees from north)
    ok
11. standard deviation of wind direction (degrees)
    ok
12. maximum wind speed (m/s)
    ok
13. minimum wind speed (m/s)
    ok
14. ice temperature – original depth was 50.0 cm from the surface (mV)
    poly (n0=-106.23,n1=239.65,2=-512.50,n3=693.49,n4=-551.71,n5=254.79,n6=-63.07, n7=6.492
15. ice temperature – original depth was 100.0 cm from the surface (mV)
    poly (n0=-105.87,n1=237.58,2=-507.11,n3=686.25,n4=-546.23,n5=252.43,n6=-62.53, n7=6.442
16. sample battery voltage
    o1

Notes:
1. No missing data.
2. Datalogger time was adjusted ahead 30 sec on January 28, 2008 at 1750.
3. Checked input values and wind alignment, all appear in good condition.
4. Swapped SM on January 28, 2008 at 1800.

Commonwealth Glacier

Filename:	coh07801.dat
Station:	Commonwealth Glacier Station
Date of Establishment:	Nov 22, 1993 by Peter Doran
Author of this report:	Hassan Basagic
File Period:	January 18, 2007 (18) at 1130 to November 12, 2007 at 1515
Sampling Frequency:	sonic every 60 minutes, wind every 4 secs.; other every 30 secs.
Averaging and Output Interval:	every 15 minutes
Program name:	coh045v1 (program signature: 4080)

1. array I.D.
   o1
2. day
   ok
3. time
   ok
4. mean air temp. @ 3 meters (C)
   rClow
5. corrected mean R.H. @ 3 meters (%)
   ok (see correction note on page 1)
6. mean solar flux coming down (W/m2) – 30853F3
   divide by 100; multiply by 121.5
7. mean solar flux going up (W/m2) – 32058F3
   divide by 100; multiply by 116.82
8. mean horizontal wind speed (m/s)
   ok
9. resultant mean wind speed (m/s)
   o1
10. resultant mean wind direction (degrees from north)
    ok
11. standard deviation of wind direction (degrees)
    ok
12. maximum wind speed (m/s)
    ok
13. minimum wind speed (m/s)
    ok
14. mean incoming IR pyrgeometer output (pins A-B) (W/m2)
    (34316F3) divide by 250; multiply by 242.72
15. mean incoming IR hemisphere temp. (pins A-C) (mv)
    Eppley
16. mean incoming IR thermopile output (pins F-G)(W/m2)
    Eppley
17. mean incoming IR case temp. (pins E-D)(mv)
    Eppley
18. mean outgoing IR pyrgeometer output (pins A-B)(W/m2) –
    (32311F3) divide by 250; multiply by 222.72.
19. mean outgoing IR hemisphere temp. (pins F-G) (mv)
    Eppley
20. mean outgoing IR thermopile (pins A-C) (W/m2)
    Eppley
21. mean outgoing IR case temp. (pins E-D) (mv)
    Eppley
22. ice temperature @ 50cm (original depth, mV*0.01)
    poly (n0=-105.05,n1=232.89,2=-494.81,n3=669.70,n4=-533.67,n5=247.01,n6=-61.29, n7=6.325
23. ice temperature @ 100cm (original depth, mV*0.01)

poly (n0=-106.23,n1=239.65,2=-512.50,n3=693.49,n4=-551.71,n5=254.79,n6=-63.07, n7=6.492

24. Surface Temperature (C)
    ok
25. sample depth from sensor to surface (m)
    Measured depth (0.60) + Value) * 100
26. sample of battery voltage
    o1

Notes:

1. No missing data.
2. Adjust CR10X back by 1 minute and 15 seconds on November 12, 2007 at 1508.
3. Checked input values and wind alignment on November 12, 2007 at 1510, everything appears correct.
4. Swapped one (1) SM4M with one (1) SM4M on November 12, 2007 at 1516.
5. Sonic sensor height was 75.5 without board.
6. There is a large amount of snow drift at station.

Filename:	coh07802.dat
Station:	Commonwealth Glacier Station
Date of Establishment:	Nov 22, 1993 by Peter Doran
Author of this report:	Hassan Basagic
File Period:	November 12, 2007 at 1530 to November 19, 2007 at 1515
Sampling Frequency:	sonic every 60 minutes, wind every 4 secs.; other every 30 secs.
Averaging and Output Interval:	every 15 minutes
Program name:	coh045v1 (program signature: 4080)

1. array I.D.
   o1
2. day
   ok
3. time
   ok
4. mean air temp. @ 3 meters (C)
   rClow
5. mean R.H. @ 3 meters (%)
   ok (see correction note on page 1)
6. mean solar flux coming down (W/m2) – 30853F3
   divide by 100; multiply by 121.5
7. mean solar flux going up (W/m2) – 32058F3
   divide by 100; multiply by 116.82
8. mean horizontal wind speed (m/s)
   ok
9. resultant mean wind speed (m/s)
   o1
10. resultant mean wind direction (degrees from north)
    ok
11. standard deviation of wind direction (degrees)
    ok
12. maximum wind speed (m/s)
    ok
13. minimum wind speed (m/s)
    ok
14. mean incoming IR pyrgeometer output (pins A-B) (W/m2)
    (34316F3) divide by 250; multiply by 242.72
15. mean incoming IR hemisphere temp. (pins A-C) (mv)
    Eppley
16. mean incoming IR thermopile output (pins F-G)(W/m2)
    Eppley
17. mean incoming IR case temp. (pins E-D)(mv)
    Eppley
18. mean outgoing IR pyrgeometer output (pins A-B)(W/m2) –
    (32311F3) divide by 250; multiply by 222.72.
19. mean outgoing IR hemisphere temp. (pins F-G) (mv)
    Eppley
20. mean outgoing IR thermopile (pins A-C) (W/m2)
    Eppley
21. mean outgoing IR case temp. (pins E-D) (mv)
    Eppley
22. ice temperature @ 50cm (original depth, mV*0.01)
    poly (n0=-105.05,n1=232.89,2=-494.81,n3=669.70,n4=-533.67,n5=247.01,n6=-61.29, n7=6.325
23. ice temperature @ 100cm (original depth, mV*0.01)
    poly (n0=-106.23,n1=239.65,2=-512.50,n3=693.49,n4=-551.71,n5=254.79,n6=-63.07, n7=6.492
24. Surface Temperature (C)
    ok

25. sample depth from sensor to surface (m)
    Measured depth (0.60) + Value) * 100
26. sample of battery voltage
    o1

Notes:

1. No missing data.
2. Adjust CR10X back by 20 seconds on November 19, 2007 at 1401.
3. Checked input values and wind alignment on November 19, 2007 at 1403, everything appears correct.
4. Maintenance: swapped RH probe at 3m on November 19, 2007 at 1450, swapped upfacing pyranometer (old# 30853F3, new#31437F3) on November 19, 2007 at 1320, and wind sensor on November 19, 2007 at 1403.
5. Swapped one (1) SM4M with one (1) SM4M on November 19, 2007 at 1534.
6. Sonic sensor height was 76.0 without board.
7. There is a large amount of snow drift at station.

Filename:	coh07803.dat
Station:	Commonwealth Glacier Station
Date of Establishment:	Nov 22, 1993 by Peter Doran
Author of this report:	Hassan Basagic
File Period:	November 12, 2007 at 1530 to December 28, 2007 at 1200
Sampling Frequency:	sonic every 60 minutes, wind every 4 secs.; other every 30 secs.
Averaging and Output Interval:	every 15 minutes
Program name:	coh045v1

1. array I.D.
   o1
2. day
   ok
3. time
   ok
4. mean air temp. @ 3 meters (C)
   rClow
5. mean R.H. @ 3 meters (%)
   ok (see correction note on page 1)
6. mean solar flux coming down (W/m2) – 31437F3
   divide by 100; multiply by 124.7
7. mean solar flux going up (W/m2) – 32058F3
   divide by 100; multiply by 116.82
8. mean horizontal wind speed (m/s)
   ok
9. resultant mean wind speed (m/s)
   o1
10. resultant mean wind direction (degrees from north)
    ok
11. standard deviation of wind direction (degrees)
    ok
12. maximum wind speed (m/s)
    ok
13. minimum wind speed (m/s)
    ok
14. mean incoming IR pyrgeometer output (pins A-B) (W/m2)
    (34316F3) divide by 250; multiply by 242.72
15. mean incoming IR hemisphere temp. (pins A-C) (mv)
    Eppley
16. mean incoming IR thermopile output (pins F-G)(W/m2)
    Eppley
17. mean incoming IR case temp. (pins E-D)(mv)
    Eppley
18. mean outgoing IR pyrgeometer output (pins A-B)(W/m2) –
    (32311F3) divide by 250; multiply by 222.72.
19. mean outgoing IR hemisphere temp. (pins F-G) (mv)
    Eppley
20. mean outgoing IR thermopile (pins A-C) (W/m2)
    Eppley
21. mean outgoing IR case temp. (pins E-D) (mv)
    Eppley
22. ice temperature @ 50cm (original depth, mV*0.01)
    poly (n0=-105.05,n1=232.89,2=-494.81,n3=669.70,n4=-533.67,n5=247.01,n6=-61.29, n7=6.325
23. ice temperature @ 100cm (original depth, mV*0.01)
    poly (n0=-106.23,n1=239.65,2=-512.50,n3=693.49,n4=-551.71,n5=254.79,n6=-63.07, n7=6.492
24. Surface Temperature (C)
    ok

25. sample depth from sensor to surface (m)
    Measured depth (0.60) + Value) * 100
26. sample of battery voltage
    o1

Notes:

1. No missing data.
2. CR10X time is correct on December 28, 2007 at 0924.
3. Checked input values and wind alignment on December 28, 2007 at 0925, everything appears correct except for wind direction.
4. Swapped one (1) SM4M with one (1) SM4M on December 28, 2007 at 1201.
5. Sonic sensor height was 75.8 without board. Ice stake height was 76.6, 76.5, 76.5, 76.7 and snow heights of 6.6, 7.4, 4.6, 8.0 without board. Temp at 302 cm, RH at 294, and wind at 337 cm.

Filename:	coh07804.dat
Station:	Commonwealth Glacier Station
Date of Establishment:	Nov 22, 1993 by Peter Doran
Author of this report:	Hassan Basagic
File Period:	December 28, 2007 at 1200 to January 5, 2008 at 1515
Sampling Frequency:	sonic every 60 minutes, wind every 4 secs.; other every 30 secs.
Averaging and Output Interval:	every 15 minutes
Program name:	coh045v1

1. array I.D.
   o1
2. day
   ok
3. time
   ok
4. mean air temp. @ 3 meters (C)
   rClow
5. mean R.H. @ 3 meters (%)
   ok (see correction note on page 1)
6. mean solar flux coming down (W/m2) – 31437F3
   divide by 100; multiply by 124.7
7. mean solar flux going up (W/m2) – 32058F3
   divide by 100; multiply by 116.82
8. mean horizontal wind speed (m/s)
   ok
9. resultant mean wind speed (m/s)
   o1
10. resultant mean wind direction (degrees from north)
    ok
11. standard deviation of wind direction (degrees)
    ok
12. maximum wind speed (m/s)
    ok
13. minimum wind speed (m/s)
    ok
14. mean incoming IR pyrgeometer output (pins A-B) (W/m2)
    (34316F3) divide by 250; multiply by 242.72
15. mean incoming IR hemisphere temp. (pins A-C) (mv)
    Eppley
16. mean incoming IR thermopile output (pins F-G)(W/m2)
    Eppley
17. mean incoming IR case temp. (pins E-D)(mv)
    Eppley
18. mean outgoing IR pyrgeometer output (pins A-B)(W/m2) –
    (32311F3) divide by 250; multiply by 222.72.
19. mean outgoing IR hemisphere temp. (pins F-G) (mv)
    Eppley
20. mean outgoing IR thermopile (pins A-C) (W/m2)
    Eppley
21. mean outgoing IR case temp. (pins E-D) (mv)
    Eppley
22. ice temperature @ 50cm (original depth, mV*0.01)
    poly (n0=-105.05,n1=232.89,2=-494.81,n3=669.70,n4=-533.67,n5=247.01,n6=-61.29, n7=6.325
23. ice temperature @ 100cm (original depth, mV*0.01)
    poly (n0=-106.23,n1=239.65,2=-512.50,n3=693.49,n4=-551.71,n5=254.79,n6=-63.07, n7=6.492
24. Surface Temperature (C)
    ok

25. sample depth from sensor to surface (m)
    Measured depth (0.60) + Value) * 100
26. sample of battery voltage
    o1

Notes:

1. No missing data.
2. Adjusted CR10X time ahead 1 minute on January 5, 2008 at 1447.
3. Checked input values and wind alignment on December 28, 2007 at 0925, everything appears correct except for wind direction.
4. Maintenance: repaired wiring problem on wind direction. Replaced power cable between CR10x datalogger and battery, station offline on January 5, 2008 from 1455 to 1457.
5. Swapped one (1) SM4M with one (1) SM4M on January 5, 2008 at 1520.

Filename:	coh07805.dat
Station:	Commonwealth Glacier Station
Date of Establishment:	Nov 22, 1993 by Peter Doran
Author of this report:	Hassan Basagic
File Period:	January 5, 2008 at 1530 to January 19, 2008 at 1345.
Sampling Frequency:	sonic every 60 minutes, wind every 4 secs.; other every 30 secs.
Averaging and Output Interval:	every 15 minutes
Program name:	coh045v1

1. array I.D.
   o1
2. day
   ok
3. time
   ok
4. mean air temp. @ 3 meters (C)
   rClow
5. mean R.H. @ 3 meters (%)
   ok (see correction note on page 1)
6. mean solar flux coming down (W/m2) – 31437F3
   divide by 100; multiply by 124.7
7. mean solar flux going up (W/m2) – 32058F3
   divide by 100; multiply by 116.82
8. mean horizontal wind speed (m/s)
   ok
9. resultant mean wind speed (m/s)
   o1
10. resultant mean wind direction (degrees from north)
    ok
11. standard deviation of wind direction (degrees)
    ok
12. maximum wind speed (m/s)
    ok
13. minimum wind speed (m/s)
    ok
14. mean incoming IR pyrgeometer output (pins A-B) (W/m2)
    (34316F3) divide by 250; multiply by 242.72
15. mean incoming IR hemisphere temp. (pins A-C) (mv)
    Eppley
16. mean incoming IR thermopile output (pins F-G)(W/m2)
    Eppley
17. mean incoming IR case temp. (pins E-D)(mv)
    Eppley
18. mean outgoing IR pyrgeometer output (pins A-B)(W/m2) –
    (32311F3) divide by 250; multiply by 222.72.
19. mean outgoing IR hemisphere temp. (pins F-G) (mv)
    Eppley
20. mean outgoing IR thermopile (pins A-C) (W/m2)
    Eppley
21. mean outgoing IR case temp. (pins E-D) (mv)
    Eppley
22. ice temperature @ 50cm (original depth, mV*0.01)
    poly (n0=-105.05,n1=232.89,2=-494.81,n3=669.70,n4=-533.67,n5=247.01,n6=-61.29, n7=6.325
23. ice temperature @ 100cm (original depth, mV*0.01)
    poly (n0=-106.23,n1=239.65,2=-512.50,n3=693.49,n4=-551.71,n5=254.79,n6=-63.07, n7=6.492
24. Surface Temperature (C)
    ok

25. sample depth from sensor to surface (m)
    Measured depth (0.60) + Value) * 100
26. sample of battery voltage
    o1

Notes:

1. No missing data. LAWN datasheet missing.

Explorers Cove

Filename:	exe07801.dat
Station:	Explorer's Cove Station
Date of Establishment:	Nov 21, 1997 by Peter Doran, D.J. Osborne and Keith Sauter
Author of this report:	Hassan Basagic
File Period:	January 30, 2007 at 1115 to December 4, 2007 at 1100
Sampling Frequency:	prec every 60 minutes, wind every 4 secs.; others: every 30 secs.
Averaging and Output Interval:	every 15 minutes
Program name:	exe023v1

1. array I.D.
   o1
2. day
   ok
3. time
   ok
4. mean air temp. @ 3 meters (C)
   rclow
5. mean RH @ 3 meters
   ok (see correction note on page 1)
6. mean solar flux coming up (~W/m2)
   ok
7. mean solar flux going down (~W/m2)
   ok
8. mean horizontal wind speed (m/s)
   ok
9. resultant mean wind speed (m/s)
   o1
10. resultant mean wind direction (degrees from north)
    ok
11. standard deviation of wind direction (degrees)
    o1
12. maximum wind speed (m/s)
    ok
13. minimum wind speed (m/s)
    ok
14. mean P.A.R. (micromols/s/m2)
    multiple by 1.35264
15. mean soil temperature @ 0 cm (C)
    rclow
16. mean soil temperature @ 5 cm (C)
    rclow
17. mean soil temperature @ 10 cm (C)
    rclow
18. sample precipitation (mm)
    ok
19. sample battery voltage
    o1

Notes:

1. No missing data.
2. CR10x time corrected back 1 min 50 sec on December 4, 2007 at 0948.
3. Checked input values and wind alignment on December 4, 2007 at 0949, everything appears correct.
4. Maintenance: RH sensor was swapped on December 4, 2007 at 0955. Swapped upfacing (old# 23271, new#56386) and downfacing (old#18655, new#25307) pyranometers on December 4, 2008 at 1017. The quantum sensor was swapped (old# 33694, new#23207) on December 4, 2007 at 1027.

5. Datalogger power off on December 4, 2007 at 1105 to 1106 to upload new program:EXE078v1, designed to measure sensit (not yet installed). Swapped storage module while power off.

Filename:	exe07802.dat
Station:	Explorer's Cove Station
Date of Establishment:	Nov 21, 1997 by Peter Doran, D.J. Osborne and Keith Sauter
Author of this report:	Hassan Basagic
File Period:	December 4, 2007 at 1115 to January 5, 2008 at 1315
Sampling Frequency:	prec every 60 minutes, wind every 4 secs.; others: every 30 secs.
Averaging and Output Interval:	every 15 minutes
Program name:	exe078v1

1. array I.D.
   o1
2. day
   ok
3. time
   ok
4. mean air temp. @ 3 meters (C)
   rclow
5. mean RH @ 3 meters
   ok (see correction note on page 1)
6. mean solar flux coming up (~W/m2)
   ok
7. mean solar flux going down (~W/m2)
   ok
8. mean horizontal wind speed (m/s)
   ok
9. resultant mean wind speed (m/s)
   o1
10. resultant mean wind direction (degrees from north)
    ok
11. standard deviation of wind direction (degrees)
    o1
12. maximum wind speed (m/s)
    ok
13. minimum wind speed (m/s)
    ok
14. mean P.A.R. (micromols/s/m2) serial number: Q23207
    divide by 200, multiply by 319.00
15. mean soil temperature @ 0 cm (C)
    rclow
16. mean soil temperature @ 5 cm (C)
    rclow
17. mean soil temperature @ 10 cm (C)
    rclow
18. sample precipitation (mm)
    ok
19. sample battery voltage
    o1

Notes:

1. No missing data.
2. CR10x time was correct on January 5, 2008 at 1107.
3. Checked input values and wind alignment on January 5, 2008 at 1111, everything appears correct, except for wind speed minimum.
4. Maintenance: precip bucket was serviced, including removal of existing fluid and sediment, then replaced with new fluid. Pre-service was 529, post service was 164.89. Added sensit to station at 20cm height.
5. Swapped SM on January 5, 2008 at 1316.

Filename:	exe07803.dat
Station:	Explorer's Cove Station
Date of Establishment:	Nov 21, 1997 by Peter Doran, D.J. Osborne and Keith Sauter
Author of this report:	Hassan Basagic
File Period:	January 5, 2008 at 1330 to January 30, 2008 at 1230
Sampling Frequency:	prec every 60 minutes, wind every 4 secs.; others: every 30 secs.
Averaging and Output Interval:	every 15 minutes
Program name:	exe078v1

1. array I.D.
   o1
2. day
   ok
3. time
   ok
4. mean air temp. @ 3 meters (C)
   rclow
5. mean RH @ 3 meters
   ok (see correction note on page 1)
6. mean solar flux coming up (~W/m2)
   ok
7. mean solar flux going down (~W/m2)
   ok
8. mean horizontal wind speed (m/s)
   ok
9. resultant mean wind speed (m/s)
   o1
10. resultant mean wind direction (degrees from north)
    ok
11. standard deviation of wind direction (degrees)
    o1
12. maximum wind speed (m/s)
    ok
13. minimum wind speed (m/s)
    ok
14. mean P.A.R. (micromols/s/m2) serial number: Q23207
    divide by 200, multiply by 319.00
15. mean soil temperature @ 0 cm (C)
    rclow
16. mean soil temperature @ 5 cm (C)
    rclow
17. mean soil temperature @ 10 cm (C)
    rclow
18. sample precipitation (mm)
    ok
19. sample battery voltage
    o1

Notes:

1. No missing data.
2. CR10x time was correct on January 30, 2008 at 1226
3. Checked input values and wind alignment on January 30, 2008 at 1228, everything appears correct, except for wind speed minimum.
4. Maintenance: 60 ml added to precip bucket as calibration check.
5. New program loaded (exe078v2) which should remedy the min wind speed conflict. Swapped SM on January 30, 2008 at 1238.

Lake Fryxell

Filename:	frl07801.dat
Station:	Lake Fryxell met station
Date of Establishment:	Jan 6, 1994 by Peter Doran
Author of this report:	Hassan Basagic
File Period:	December 21, 2006 (355) @ 1345 to January 30, 2007 at 1000
Sampling Frequency:	sonic every 60 minutes, wind every 4 sec; others: every 30 secs.
Averaging and Output Interval:	every 15 minutes
Program name:	frl067v1.dld

1. array I.D.
   o1
2. day
   ok
3. time
   ok
4. mean air temp. @ 3 meters (C)
   rClow
5. mean R.H. @ 3 meters (%)
   ok (see correction note on page 1)
6. mean solar flux coming down (W/m2) – PY51355
   ok
7. mean solar flux going up (W/m2) – PY51356
   ok
8. mean horizontal wind speed (m/s)
   ok
9. resultant mean wind speed (m/s)
   o1
10. resultant mean wind direction (degrees from north)
    ok
11. standard deviation of wind direction (degrees)
    ok
12. maximum wind speed (m/s)
    ok
13. minimum wind speed (m/s)
    ok
14. mean P.A.R. (micromols/s/m2) – Q99253
    divide by 200, multiply by 242.41
15. mean soil temperature @ 0 cm in soil (C)
    rClow
16. mean soil temperature @ 5 cm in soil (C)
    rClow
17. mean soil temperature @ 10 cm in soil (C)
    rClow
18. sample depth from sensor to surface (m)
    Measured depth * (-1)
19. sample of battery voltage
    o1

Notes:

1. No missing data.
2. CR10x time was correct on January 30, 2007 at 1002.
3. Checked input values and wind alignment on January 30, 2007 at 1004. All channels appear correct.
4. Datalogger power off on January 30, 2007 at 1009 to 1010 to load new program (fry067v2). Wired Sensit sensor and loaded new program. New program (frl067v2) contains command to measure particle count (not

included in this file). Swapped 1 SM with another SM on January 30, 2007 at 1009, but this SM was not removed from site until the following season (2007/2008).

Filename:	frl07802.dat
Station:	Lake Fryxell met station
Date of Establishment:	Jan 6, 1994 by Peter Doran
Author of this report:	Hassan Basagic
File Period:	January 30, 2007 at 1015 to December 3, 2007 at 1200
Sampling Frequency:	sonic every 60 minutes, wind every 4 sec; others: every 30 secs.
Averaging and Output Interval:	every 15 minutes
Program name:	frl067v2.dld

1. array I.D.
   o1
2. day
   ok
3. time
   ok
4. mean air temp. @ 3 meters (C)
   rClow
5. mean R.H. @ 3 meters (%)
   ok (see correction note on page 1)
6. mean solar flux coming down (W/m2) – PY51355
   ok
7. mean solar flux going up (W/m2) – PY51356
   ok
8. mean horizontal wind speed (m/s)
   ok
9. resultant mean wind speed (m/s)
   o1
10. resultant mean wind direction (degrees from north)
    ok
11. standard deviation of wind direction (degrees)
    ok
12. maximum wind speed (m/s)
    ok
13. minimum wind speed (m/s)
    ok
14. mean P.A.R. (micromols/s/m2) – Q99253
    divide by 200, multiply by 242.41
15. mean soil temperature @ 0 cm in soil (C)
    rClow
16. mean soil temperature @ 5 cm in soil (C)
    rClow
17. mean soil temperature @ 10 cm in soil (C)
    rClow
18. sample depth from sensor to surface (m)
    Measured depth * (-1)
19. sample of battery voltage
    o1

Notes:

1. No missing data.
2. CR10x time was adjusted back 6 minutes on December 3, 2007 at 1148.
3. Checked input values and wind alignment on December 3, 2007 at 1150 . All channels appear correct.
4. Maintenance: swapped RH at 3m at 1236; upfacing pyranometer (old#51355, new#23276) at 1248; downfacing pyranometer (old#51356, new#20562) at 1300; quantum PAR (old#99253, new#23199) at 1311 on December 3, 2007.
5. Datalogger power off on December 3, 2007 at 1200 – 1216 to load new program (fry078v1), swap SM, and swap batteries. New program moves sensit into main table and cleans up program error.

Filename:	frl07803.dat
Station:	Lake Fryxell met station
Date of Establishment:	Jan 6, 1994 by Peter Doran
Author of this report:	Hassan Basagic
File Period:	December 3, 2007 at 1215 to January 30, 2008 at 1130
Sampling Frequency:	sonic every 60 minutes, wind every 4 sec; others: every 30 secs.
Averaging and Output Interval:	every 15 minutes
Program name:	frl078v1.dld

1. array I.D.
   o1
2. day
   ok
3. time
   ok
4. mean air temp. @ 3 meters (C)
   rClow
5. mean R.H. @ 3 meters (%)
   ok (see correction note on page 1)
6. mean solar flux coming down (W/m2) – PY23276
   ok
7. mean solar flux going up (W/m2) – PY20562
   ok
8. mean horizontal wind speed (m/s)
   ok
9. resultant mean wind speed (m/s)
   o1
10. resultant mean wind direction (degrees from north)
    ok
11. standard deviation of wind direction (degrees)
    ok
12. maximum wind speed (m/s)
    ok
13. minimum wind speed (m/s)
    ok
14. mean P.A.R. (micromols/s/m2) – Q23199
    divide by 200, multiply by 295.12
15. mean soil temperature @ 0 cm in soil (C)
    rClow
16. mean soil temperature @ 5 cm in soil (C)
    rClow
17. mean soil temperature @ 10 cm in soil (C)
    rClow
18. sample depth from sensor to surface (m)
    Measured depth * (-1)
19. particle count Sensit (1 min sample: hits per min)
    ol
20. sample of battery voltage
    o1

Notes:

1. No missing data. CR10x time was correct on January 30, 2008 at 1117.
2. Checked input values and wind alignment on January 30, 2008 at 1130. RH was not operating properly.
3. Maintenance: repaired RH on January 30, 2008 at 1122.
4. Ultrasonic height: 106.3 cm.
5. Swap SM on January 30, 2008 at 1139.

Filename:	frl07804.dat
Station:	Lake Fryxell met station
Date of Establishment:	Jan 6, 1994 by Peter Doran
Author of this report:	Hassan Basagic
File Period:	January 30, 2008 at 1145 to April 9, 2008 at 1130
Sampling Frequency:	sonic every 60 minutes, wind every 4 sec; others: every 30 secs.
Averaging and Output Interval:	every 15 minutes
Program name:	frl078v1.dld

1. array I.D.
   o1
2. day
   ok
3. time
   ok
4. mean air temp. @ 3 meters (C)
   rClow
5. mean R.H. @ 3 meters (%)
   ok (see correction note on page 1)
6. mean solar flux coming down (W/m2) – PY23276
   ok
7. mean solar flux going up (W/m2) – PY20562
   ok
8. mean horizontal wind speed (m/s)
   ok
9. resultant mean wind speed (m/s)
   o1
10. resultant mean wind direction (degrees from north)
    ok
11. standard deviation of wind direction (degrees)
    ok
12. maximum wind speed (m/s)
    ok
13. minimum wind speed (m/s)
    ok
14. mean P.A.R. (micromols/s/m2) – Q23199
    divide by 200, multiply by 295.12
15. mean soil temperature @ 0 cm in soil (C)
    rClow
16. mean soil temperature @ 5 cm in soil (C)
    rClow
17. mean soil temperature @ 10 cm in soil (C)
    rClow
18. sample depth from sensor to surface (m)
    Measured depth * (-1)
19. particle count Sensit (1 min sample: hits per min)
    ol
20. sample of battery voltage
    o1

Notes:

1. No missing data.
2. SM swapped by John Priscu as part of extended season on April 9, 2008.

Fryxell Snowfence

Filename:	fsn07801.dat
Station:	Lake Fryxell Snow Fence
Date of Establishment:	January 2001 by Thomas Nylen
Author of this report:	Hassan Basagic
File Period:	January 29, 2007 at 1315 to December 3, 2007 at 1545
Sampling Frequency:	sonic every 60 minutes, every 30 sec for all the others
Averaging and Output Interval:	every 15 min
Program Name:	fs067v2.dld

1. array I.D.
   o1
2. day
   ok
3. time
   ok
4. mean soil P.A.R. +3.8 m (east) from snow fence (micromols/s/m2) - Q29766
   multiply by 1.18
5. mean soil P.A.R. +1.9 m (east) from snow fence (micromols/s/m2) - Q29773
   multiply by 1.31
6. mean Air P.A.R. @ 1.6 m (micromols/s/m2)
   Q29764 - multiply by 1.18
7. mean air temp. @ 1.3 m (C)
   rclow
8. mean soil temperature @ 0 cm in soil -4.5 m (west) of snow fence (C)
   rclow
9. mean soil temperature @ 0 cm in soil +1.0 m (east) of snow fence (C)
   rclow
10. mean soil temperature @ 0 cm in soil +1.9 m (east) of snow fence (C)
    rclow
11. mean soil temperature @ 0 cm in soil +3.8 m (east) of snow fence (C)
    rclow
12. Sonic Ranger Depth (cm)
    Measured depth (1.01) + Value) * 100
13. mean wind speed
    o1
14. mean wind speed
    o1
15. mean wind direction
    o1
16. max wind speed
    o1
17. min wind speed
    o1
18. sample of battery voltage
    o1

Notes:

1. No data missing.
2. Datalogger time adjusted back 1 min 10 sec at 1547
3. Input values look good on December 3, 2007 at 1548.
4. Storage module swapped on December 3, 2007 at 1552.

Filename:	fsn07802.dat
Station:	Lake Fryxell Snow Fence
Date of Establishment:	January 2001 by Thomas Nylen
Author of this report:	Hassan Basagic
File Period:	December 3, 2007 at 1545 to January 12, 2008 at 1015
Sampling Frequency:	sonic every 60 minutes, every 30 sec for all the others
Averaging and Output Interval:	every 15 min
Program Name:	fs067v2.dld

1. array I.D.
   o1
2. day
   ok
3. time
   ok
4. mean soil P.A.R. +3.8 m (east) from snow fence (micromols/s/m2) – Q29766
   multiply by 1.18
5. mean soil P.A.R. +1.9 m (east) from snow fence (micromols/s/m2) – Q29773
   multiply by 1.31
6. mean Air P.A.R. @ 1.6 m (micromols/s/m2)
   Q29764 - multiply by 1.18
7. mean air temp. @ 1.3 m (C)
   rclow
8. mean soil temperature @ 0 cm in soil -4.5 m (west) of snow fence (C)
   rclow
9. mean soil temperature @ 0 cm in soil +1.0 m (east) of snow fence (C)
   rclow
10. mean soil temperature @ 0 cm in soil +1.9 m (east) of snow fence (C)
    rclow
11. mean soil temperature @ 0 cm in soil +3.8 m (east) of snow fence (C)
    rclow
12. Sonic Ranger Depth (cm)
    Measured depth (1.01) + Value) * 100
13. mean wind speed
    o1
14. mean wind speed
    o1
15. mean wind direction
    o1
16. max wind speed
    o1
17. min wind speed
    o1
18. sample of battery voltage
    o1

Notes:

1. No data missing.
2. Datalogger time adjusted back 30 sec at on January 12, 2008 at 0905.
3. Input values look good on January 12, 2008 at 0908.
4. Maintenance: swapped quantum PAR sensors at 3.6m (old#29766, new#28259) and at 1.8m (old#297773, new#20266) at 930.
5. Ultrasonic height measured at 100 cm.
6. Storage module swapped on January 12, 2008 at 1022.

Filename:	fsn07803.dat
Station:	Lake Fryxell Snow Fence
Date of Establishment:	January 2001 by Thomas Nylen
Author of this report:	Hassan Basagic
File Period:	January 12, 2008 at 1030 to January 29, 2008 at 1315.
Sampling Frequency:	sonic every 60 minutes, every 30 sec for all the others
Averaging and Output Interval:	every 15 min
Program Name:	fs067v2.dld

1. array I.D.
   o1
2. day
   ok
3. time
   ok
4. mean soil P.A.R. +3.8 m (east) from snow fence (micromols/s/m2) – Q28259
   multiply by 1.14
5. mean soil P.A.R. +1.9 m (east) from snow fence (micromols/s/m2) – Q20266
   multiply by 1.37
6. mean Air P.A.R. @ 1.6 m (micromols/s/m2)
   Q29764 - multiply by 1.18
7. mean air temp. @ 1.3 m (C)
   rclow
8. mean soil temperature @ 0 cm in soil -4.5 m (west) of snow fence (C)
   rclow
9. mean soil temperature @ 0 cm in soil +1.0 m (east) of snow fence (C)
   rclow
10. mean soil temperature @ 0 cm in soil +1.9 m (east) of snow fence (C)
    rclow
11. mean soil temperature @ 0 cm in soil +3.8 m (east) of snow fence (C)
    rclow
12. Sonic Ranger Depth (cm)
    Measured depth (1.01) + Value) * 100
13. mean wind speed
    o1
14. mean wind speed
    o1
15. mean wind direction
    o1
16. max wind speed
    o1
17. min wind speed
    o1
18. sample of battery voltage
    o1

Notes:

1. No data missing.

Howard Glacier

Filename :	hod07801.dat
Station:	Howard Glacier Station
Date of Establishment:	Nov 20, 1993 by Peter Doran
Author of this report:	Hassan Basagic
File Period:	January 19, 2007 at 1530 to November 13, 2007 at 1500
Sampling Frequency:	wind every 4 sec others: every 30 sec
Averaging and Output Interval:	every 15 minutes
Program name:	hod045v1.dld

1. array I.D.
   o1
2. day
   ok
3. time
   ok
4. mean air temp. @ 3 meters (C)
   rclow
5. mean R.H. @ 3 meters (%)
   ok (see correction note on page 1)
6. mean solar flux coming down (W/m2)
   divide by 100; multiply by 120.48 (30853F3)
7. mean solar flux going up (W/m2)
   divide by 100; multiply by 109.89 (32058F3)
8. mean horizontal wind speed (m/s)
   ok
9. resultant mean wind speed (m/s)
   o1
10. resultant mean wind direction (degrees from north)
    ok
11. standard deviation of wind direction (degrees)
    ok
12. maximum wind speed (m/s)
    ok
13. minimum wind speed (m/s)
    ok
14. ice temperature @ 50cm (original depth, mV*0.01)
    poly (n0=-105.87,n1=237.58,n2=-507.11,n3=686.25,n4=-546.23,n5=252.43,n6=-62.53, n7=6.44
15. ice temperature @ 100cm (original depth, mV*0.01)
    poly (n0=-105.87,n1=237.58,n2=-507.11,n3=686.25,n4=-546.23,n5=252.43,n6=-62.53, n7=6.44
16. mean air temp @ 1 meter m (C)
    rclow
17. mean rh @ 1 meter (%)
    ok (see correction note on page 1)
18. sample depth from sensor to surface (cm)
    Measured depth (1.01) + Value) * 100
19. sample of battery voltage
    o1

Notes:

1. No data missing. CR10X time corrected back 2 minutes 28 seconds on November 13, 2007 at 1504
2. Sonic height is 91.0 cm.
3. Swapped out SM on November 13, 2007 at 1505.

Filename :	hod07802.dat
Station:	Howard Glacier Station
Date of Establishment:	Nov 20, 1993 by Peter Doran
Author of this report:	Hassan Basagic
File Period:	November 13, 2007 at 1515 to January 7, 2008 at 1300
Sampling Frequency:	wind every 4 sec others: every 30 sec
Averaging and Output Interval:	every 15 minutes
Program name:	hod045v1.dld

1. array I.D.
   o1
2. day
   ok
3. time
   ok
4. mean air temp. @ 3 meters (C)
   rclow
5. mean R.H. @ 3 meters (%)
   ok (see correction note on page 1)
6. mean solar flux coming down (W/m2)
   divide by 100; multiply by 120.48 (30853F3)
7. mean solar flux going up (W/m2)
   divide by 100; multiply by 109.89 (32058F3)
8. mean horizontal wind speed (m/s)
   ok
9. resultant mean wind speed (m/s)
   o1
10. resultant mean wind direction (degrees from north)
    ok
11. standard deviation of wind direction (degrees)
    ok
12. maximum wind speed (m/s)
    ok
13. minimum wind speed (m/s)
    ok
14. ice temperature @ 50cm (original depth, mV*0.01)
    poly (n0=-105.87,n1=237.58,n2=-507.11,n3=686.25,n4=-546.23,n5=252.43,n6=-62.53, n7=6.44
15. ice temperature @ 100cm (original depth, mV*0.01)
    poly (n0=-105.87,n1=237.58,n2=-507.11,n3=686.25,n4=-546.23,n5=252.43,n6=-62.53, n7=6.44
16. mean air temp @ 1 meter m (C)
    rclow
17. mean rh @ 1 meter (%)
    ok (see correction note on page 1)
18. sample depth from sensor to surface (cm)
    Measured depth (1.01) + Value) * 100
19. sample of battery voltage
    o1

Notes:

1. One line of data missing on January 7, 2008 1030 to swap batteries.
2. CR10X time correct on January 7, 2008 at 0927.
3. Checked input values and wind alignment on January 7, 2008 at 0933, all appear good. Sonic height is 98.0 cm.
4. Maintenance: swapped wind monitor at 1007; swapped RH at 1051; up facing pyranometer (old#29762FY, new# 30884 FY) at 1200, down facing pyranometer (old#29763F3, new#32057F3) at 1240 on January 30, 2008.
5. Power off on January 7, 2008 at 1022 – 1038 to swap batteries and 1056 – 1058 to swap CR10x datalogger. Changed out power cable. .Swapped out SM at 1310.

Filename : hod07803.dat
Station: Howard Glacier Station
Date of Establishment: Nov 20, 1993 by Peter Doran
Author of this report: Hassan Basagic
File Period: January 7, 2008 at 1315 to January 22, 2008 at 1400
Sampling Frequency: wind every 4 sec others: every 30 sec
Averaging and Output Interval: every 15 minutes
Program name: hod045v1.dld

1. array I.D.
   o1
2. day
   ok
3. time
   ok
4. mean air temp. @ 3 meters (C)
   rclow
5. mean R.H. @ 3 meters (%)
   ok (see correction note on page 1)
6. mean solar flux coming down (W/m2)
   divide by 100; multiply by 120.77 (30884F3)
7. mean solar flux going up (W/m2)
   divide by 100; multiply by 114.29 (32057F3)
8. mean horizontal wind speed (m/s)
   ok
9. resultant mean wind speed (m/s)
   o1
10. resultant mean wind direction (degrees from north)
    ok
11. standard deviation of wind direction (degrees)
    ok
12. maximum wind speed (m/s)
    ok
13. minimum wind speed (m/s)
    ok
14. ice temperature @ 50cm (original depth, mV*0.01)
    poly (n0=-105.87,n1=237.58,n2=-507.11,n3=686.25,n4=-546.23,n5=252.43,n6=-62.53, n7=6.44
15. ice temperature @ 100cm (original depth, mV*0.01)
    poly (n0=-105.87,n1=237.58,n2=-507.11,n3=686.25,n4=-546.23,n5=252.43,n6=-62.53, n7=6.44
16. mean air temp @ 1 meter m (C)
    rclow
17. mean rh @ 1 meter (%)
    ok (see correction note on page 1)
18. sample depth from sensor to surface (cm)
    Measured depth (1.01) + Value) * 100
19. sample of battery voltage
    o1

Notes:
1. No data missing.
2. Missing worksheet.
3. Swapped out SM after 1400 on January 22, 2008.

Lake Hoare

Filename:	hoe070801.dat
Station:	Lake Hoare
Date of Establishment:	Dec 1, 1993 by Peter Doran
Author of this report:	Hassan Basagic
File Period:	January 29, 2007 (29) at 2030 to November 08, 2007 at 1200
Sampling Frequency:	wind speed every 4 sec; other every 30 sec
Averaging and Output Interval:	every 15 minutes
Program Name:	hoe067v2

1. array I.D.
   o1
2. day
   ok
3. time
   ok
4. mean air temp. @ 3 meters ©
   rclow
5. mean R.H. @ 3 meters (%)
   ok (see correction note on page 1)
1. mean solar flux coming down (W/m2) – PY28370
   ok
2. mean solar flux going up (W/m2) – PY40423
   ok
6. mean horizontal wind speed (m/s)
   ok
7. resultant mean wind speed (m/s)
   o1
8. resultant mean wind direction (degrees from north)
   ok
9. standard deviation of wind direction (degrees)
   ok
10. maximum wind speed (m/s)
    ok
11. minimum wind speed (m/s)
    ok
12. mean P.A.R. (micromols/s/m2) –
    Q20275 = divide by 200, multiply by 277.79
13. sample station barometric pressure (mbar)
    ok
14. mean temperature difference 1-3 m ©
    Multiply by -1
15. total particle count
    o1
16. sample of battery voltage
    o1

Notes:

1. No missing data. Duplicate data caused by clock change on Nov 08, 2007 at 1200, first line deleted.
2. Datalogger time corrected - 11 minutes on Nov 08, 2007 at 1155.
3. Check input values and wind alignment on Nov 08, 2007 at 1158., all appear correct.
4. Swapped RH sensor at 3m on Nov 08, 2007 at 1202.
5. Swapped SM at Nov 08, 2007 at 1205.

Filename: hoe070802.dat
Station: Lake Hoare
Date of Establishment: Dec 1, 1993 by Peter Doran
Author of this report: Hassan Basagic
File Period: November 08, 2007 at 1215 to November 21, 2007 at 1800
Sampling Frequency: wind speed every 4 sec; other every 30 sec
Averaging and Output Interval: every 15 minutes
Program Name: hoe067v2

3. array I.D.
   o1
4. day
   ok
5. time
   ok
6. mean air temp. @ 3 meters ©
   rclow
7. mean R.H. @ 3 meters (%)
   ok (see correction note on page 1)
8. mean solar flux coming down (W/m2) – PY28370
   ok
9. mean solar flux going up (W/m2) – PY40423
   ok
10. mean horizontal wind speed (m/s)
    ok
11. resultant mean wind speed (m/s)
    o1
12. resultant mean wind direction (degrees from north)
    ok
13. standard deviation of wind direction (degrees)
    ok
14. maximum wind speed (m/s)
    ok
15. minimum wind speed (m/s)
    ok
16. mean P.A.R. (micromols/s/m2) –
    Q20275 = divide by 200, multiply by 277.79
    Q23210 = divide by 200, multiply by 498.68
17. sample station barometric pressure (mbar)
    ok
18. mean temperature difference 1-3 m ©
    Multiply by -1
19. total particle count
    o1
20. sample of battery voltage
    o1

Notes:
1. No missing data.
2. Datalogger time correct on November 21, 2007 at 1645.
3. Check input values and wind alignment on November 21, 2007 at 1647., all appear correct.
4. Sensor maintenance: swapped up-facing pyranometer (old# 28370, new# 23275) on November 21, 2007 at 1729, down-facing pyranometer (old# 40423, new# 56364) at 1734, quantum sensor (old #20275, new# 23210) at 1715.
5. CR10x datalogger power off November 21, 2007 at 1802 to 1804. to replace CR10x and swapped SM.

Filename: hoe070803.dat

Station:	Lake Hoare
Date of Establishment:	Dec 1, 1993 by Peter Doran
Author of this report:	Hassan Basagic
File Period:	November 21, 2007 at 1815 to December 1, 2007 at 1430
Sampling Frequency:	wind speed every 4 sec; other every 30 sec
Averaging and Output Interval:	every 15 minutes
Program Name:	hoe067v2

1. array I.D.
   o1
2. day
   ok
3. time
   ok
4. mean air temp. @ 3 meters ©
   rclow
5. mean R.H. @ 3 meters (%)
   ok (see correction note on page 1)
1. mean solar flux coming down (W/m2) – PY23275
   ok
2. mean solar flux going up (W/m2) – PY56364
   ok
6. mean horizontal wind speed (m/s)
   ok
7. resultant mean wind speed (m/s)
   o1
8. resultant mean wind direction (degrees from north)
   ok
9. standard deviation of wind direction (degrees)
   ok
10. maximum wind speed (m/s)
    ok
11. minimum wind speed (m/s)
    ok
12. mean P.A.R. (micromols/s/m2) – Q23210
    divide by 200, multiply by 300.98
13. sample station barometric pressure (mbar)
    ok
14. mean temperature difference 1-3 m ©
    Multiply by -1
15. total particle count
    o1
16. sample of battery voltage
    o1

Notes:
1. One line of missing data on December 01, 2007 at 1415.
2. Datalogger time correct on December 01, 2007 at 1310.
3. Check input values and wind alignment on December 01, 2007 at 1310, all appear correct.
4. Sensor maintenance: swapped wind sensor on December 01, 2007 and offline 1330 to 1345.
5. CR10x datalogger power off December 01, 2007 from 1604 to 1616. New program loaded: hoe078v1. SM swapped on December 01, 2007 at 1432.

Filename:	hoe070804.dat
Station:	Lake Hoare
Date of Establishment:	Dec 1, 1993 by Peter Doran
Author of this report:	Hassan Basagic
File Period:	December 1, 2007 at 1445 to January 14, 2008 at 1030
Sampling Frequency:	wind speed every 4 sec; other every 30 sec
Averaging and Output Interval:	every 15 minutes
Program Name:	hoe078v1

1. array I.D.
   o1
2. day
   ok
3. time
   ok
4. mean air temp. @ 3 meters ©
   rclow
5. mean R.H. @ 3 meters (%)
   ok (see correction note on page 1)
3. mean solar flux coming down (W/m2) – PY23275
   ok
4. mean solar flux going up (W/m2) – PY56364
   ok
6. mean horizontal wind speed (m/s)
   ok
7. resultant mean wind speed (m/s)
   o1
8. resultant mean wind direction (degrees from north)
   ok
9. standard deviation of wind direction (degrees)
   ok
10. maximum wind speed (m/s)
    ok
11. minimum wind speed (m/s)
    ok
12. P.A.R. (micromols/s/m2) – Q23210
    dvide by 200, multiply by 300.98
13. sample station barometric pressure (mbar)
    ok
14. mean temperature difference 1-3 m ©
    Multiply by -1
15. total particle count
    o1
16. sample of battery voltage
    o1

Notes:
1. No missing data.
2. Datalogger time adjusted ahead 2 minutes 30 seconds on January 14, 2008 at 1034.
3. Check input values and wind alignment on January 14, 2008 at 1037, all appear correct.
4. SM swapped on January 14, 2008 at 1039.

Filename:	hoe070805.dat
Station:	Lake Hoare
Date of Establishment:	Dec 1, 1993 by Peter Doran
Author of this report:	Hassan Basagic
File Period:	January 14, 2008 at 1030 to January 28, 2008 at 1330
Sampling Frequency:	wind speed every 4 sec; other every 30 sec
Averaging and Output Interval:	every 15 minutes
Program Name:	hoe078v1

1. array I.D.
   o1
2. day
   ok
3. time
   ok
4. mean air temp. @ 3 meters ©
   rclow
5. mean R.H. @ 3 meters (%)
   ok (see correction note on page 1)
6. mean solar flux coming down (W/m2) – PY23275
   ok
7. mean solar flux going up (W/m2) – PY56364
   ok
8. mean horizontal wind speed (m/s)
   ok
9. resultant mean wind speed (m/s)
   o1
10. resultant mean wind direction (degrees from north)
    ok
11. standard deviation of wind direction (degrees)
    ok
12. maximum wind speed (m/s)
    ok
13. minimum wind speed (m/s)
    ok
14. P.A.R. (micromols/s/m2) – Q23210
    divide by 200, multiply by 300.98
15. sample station barometric pressure (mbar)
    ok
16. mean temperature difference 1-3 m ©
    Multiply by -1
17. total particle count
    o1
18. sample of battery voltage
    o1

Notes:

1. No missing data.
2. Datalogger time adjusted ahead 20 seconds on January 28, 2008 at 1154.
3. Check input values and wind alignment on January 28, 2008 at 1156, all appear correct, except for min wind speed which is reading zero.
4. Sensor maintenance: moved Sensit off met tower legs to ground rebar approximately 2 meters south from the station, same 20 cm height.
5. SM swapped on January 28, 2008 at 1344. New program loaded (HOE078v2) which corrects min wind speed conflict.

Filename:	hoe070806.dat
Station:	Lake Hoare
Date of Establishment:	Dec 1, 1993 by Peter Doran
Author of this report:	Hassan Basagic
File Period:	January 28, 2008 at 1330 to April 9, 2008 at 1115
Sampling Frequency:	wind speed every 4 sec; other every 30 sec
Averaging and Output Interval:	every 15 minutes
Program Name:	hoe078v2

1. array I.D.
   o1
2. day
   ok
3. time
   ok
4. mean air temp. @ 3 meters ©
   rclow
5. mean R.H. @ 3 meters (%)
   ok (see correction note on page 1)
6. mean solar flux coming down (W/m2) – PY23275
   ok
7. mean solar flux going up (W/m2) – PY56364
   ok
8. mean horizontal wind speed (m/s)
   ok
9. resultant mean wind speed (m/s)
   o1
10. resultant mean wind direction (degrees from north)
    ok
11. standard deviation of wind direction (degrees)
    ok
12. maximum wind speed (m/s)
    ok
13. minimum wind speed (m/s)
    ok
14. P.A.R. (micromols/s/m2) – Q23210
    divide by 200, multiply by 300.98
15. sample station barometric pressure (mbar)
    ok
16. mean temperature difference 1-3 m ©
    Multiply by -1
17. total particle count
    o1
18. sample of battery voltage
    o1

Notes:
1. No missing data
2. SM removed by John Priscu as part of extended season on April 9, 2008 between 1115 and returned at 1305.

Lake Hoare Precipitation

Filename: lhp07801.dat
Station: Lake Hoare precipitation station
Date of Establishment: January 26, 2002 @ 1545 by Thomas Nylen
Author of this report: Hassan Basagic
File Period: January 29, 2007 at 2100 to November 8, 2007 at 1200
Sampling Frequency: every 30 sec
Averaging and Output Interval: every 15 minutes
Program Name: lhp023v2.dld

1. array I.D.
   o1
2. day
   ok
3. time
   ok
4. total precipitation (mm)
   ok
5. mean soil temperature @ 0 cm in soil (C)
   rClow
6. mean soil temperature @ 5 cm in soil (C)
   rClow
7. mean soil temperature @ 10 cm in soil (C)
   rClow
8. sample of battery voltage
   o1

*Notes:

1. No missing data.
2. Datalogger time was adjusted back 8 min 20 sec on November 8, 2007 at 1155.
3. Checked input values on, everything looks good.
4. Maintenance: added water to upper reservoir in precip gage. Flagged data.
5. Swapped SM on November 8, 2007 at 1209.

Filename: lhp07802.dat
Station: Lake Hoare precipitation station
Date of Establishment: January 26, 2002 @ 1545 by Thomas Nylen
Author of this report: Hassan Basagic
File Period: November 8, 2007 at 1215 to December 1, 2007 at 1815
Sampling Frequency: every 30 sec
Averaging and Output Interval: every 15 minutes
Program Name: lhp023v2

1. array I.D.
   o1
2. day
   ok
3. time
   ok
4. total precipitation (mm)
   ok
5. mean soil temperature @ 0 cm in soil (C)
   rClow
6. mean soil temperature @ 5 cm in soil (C)
   rClow
7. mean soil temperature @ 10 cm in soil (C)
   rClow
8. sample of battery voltage
   o1

Notes:

1. No missing data, one line of duplicate data on November 8,2007 at 1200 caused by time adjustment. Delete second line of data.
2. Datalogger time was correct.
3. Checked input values on, everything looks good.
4. Station offline from 1652 – 1654 to install new batteries. Swapped SM on December 1, 2007 at 1801.
5. New program installed (lhp078v1) at 1804, which includes new air temperature and ultrasonic distance ranger.

Filename: lhp07803.dat
Station: Lake Hoare precipitation station
Date of Establishment: January 26, 2002 @ 1545 by Thomas Nylen
Author of this report: Hassan Basagic
File Period: December 1, 2007 at 1815 to January 14, at 1100
Sampling Frequency: every 30 sec
Averaging and Output Interval: every 15 minutes
Program Name: lhp078v1

1. array I.D.
   o1
2. day
   ok
3. time
   ok
4. total precipitation (mm)
   ok
5. mean soil temperature @ 0 cm in soil (C)
   rClow
6. mean soil temperature @ 5 cm in soil (C)
   rClow
7. mean soil temperature @ 10 cm in soil (C)
   rClow
8. distance to surface (m)
   ok
9. sample of battery voltage
   o1

Notes:

1. No missing data.
2. Datalogger time adjusted ahead 1 min 10 sec on January, 14, 2008 at 1042. Ultrasonic ranger height is 49 cm.
3. Checked input values on, everything looks good.
4. Maintenance: replaced datalogger at 1047.
5. Swapped SM on January 14, 2008 at 1105.

Filename: lhp07804.dat
Station: Lake Hoare precipitation station
Date of Establishment: January 26, 2002 @ 1545 by Thomas Nylen
Author of this report: Hassan Basagic
File Period: January 14, at 1115 to January 28, 2008 at 1415
Sampling Frequency: every 30 sec
Averaging and Output Interval: every 15 minutes
Program Name: l lhp078v1

1. array I.D.
   o1
2. day
   ok
3. time
   ok
4. total precipitation (mm)
   ok
5. mean soil temperature @ 0 cm in soil (C)
   rClow
6. mean soil temperature @ 5 cm in soil (C)
   rClow
7. mean soil temperature @ 10 cm in soil (C)
   rClow
8. distance to surface (m)
   ok
9. sample of battery voltage
   o1

Notes:

1. No missing data.
2. Datalogger time correct on January 28, 2008 at 1415.
3. Checked input values on, everything looks good.
4. Swapped SM on January 28, 2008 at 1417.

Filename: lhp07805.dat
Station: Lake Hoare precipitation station
Date of Establishment: January 26, 2002 @ 1545 by Thomas Nylen
Author of this report: Hassan Basagic
File Period: January 28, 2008 at 1430 to April 9, 2008 at 1115
Sampling Frequency: every 30 sec
Averaging and Output Interval: every 15 minutes
Program Name: l lhp078v1

1. array I.D.
   o1
2. day
   ok
3. time
   ok
4. total precipitation (mm)
   ok
5. mean soil temperature @ 0 cm in soil (C)
   rClow
6. mean soil temperature @ 5 cm in soil (C)
   rClow
7. mean soil temperature @ 10 cm in soil (C)
   rClow
8. distance to surface (m)
   ok
9. sample of battery voltage
   o1

Notes:
1. No missing data.
2. SM removed by John Priscu as part of extended season on April 9, 2008 between 1115 and returned at 1305.

Taylor Glacier

Filename:	tar06701.dat
Station:	Taylor Glacier Station
Date of Establishment:	1994 by Peter Doran
Author of this report:	Hassan Basagic
File Period:	January 20, 2007 (20) at 1300 to November 14, 2007 at 1245
Sampling Frequency:	depth every 60 minutes, wind every 4 secs.; others: every 30 secs.
Averaging and Output Interval:	every 15 minutes
Program name:	tar045v1

1. array I.D.
   o1
2. day
   ok
3. time
   ok
4. mean air temp. @ 3 meters (C)
   rclow
5. mean R.H. @ 3 meters (%)
   ok (see correction note on page 1)
6. mean air temp @ 1m (C) from 107 Temp. Probe
   rclow
7. mean RH at 1m (%) from Vaisala HMP45C Probe
   ok (see correction note on page 1)
8. mean solar flux coming down (W/m2) – (33733F3)
   divide by 100; multiply by 117.23
9. mean solar flux going up (W/m2) - (31435F3)
   divide by 100; multiply by 126.58
10. mean horizontal wind speed (m/s)
    ok
11. resultant mean wind speed (m/s)
    o1
12. resultant mean wind direction (degrees from north)
    flag
13. standard deviation of wind direction (degrees)
    ok
14. maximum wind speed (m/s)
    ok
15. minimum wind speed (m/s)
    ok
16. ice temperature @ 50cm (original depth, mV*0.01)
    poly (n0=-105.87,n1=237.58,n2=-507.11,n3=686.25,n4=-546.23,n5=252.43,n6=-62.53, n7=6.44
17. ice temperature @ 100cm (original depth, mV*0.01)
    poly (n0=-106.57,n1=241.60,n2=-517.58,n3=700.30,n4=-556.87,n5=257.01,n6=-63.57, n7=6.54
18. surface temperature (C)
    ok
19. sample depth from sensor to surface (cm)
    ok
20. sample of battery voltage
    o1

Notes:

1. No missing data. Datalogger time is correct November 14, 2007 at 1242.
2. Input values and wind alignment appear correct November 14, 2007 at 1243 except for all ice temperatures and surface temperature. Sonic ranger height is 44.5 cm.
3. Replace (1) SM4M with another on November 14, 2007 at 1247.

Filename:	tar06702.dat
Station:	Taylor Glacier Station
Date of Establishment:	1994 by Peter Doran
Author of this report:	Hassan Basagic
File Period:	November 14, 2007 at 1245 to November 23, 2007 at 14:45
Sampling Frequency:	depth every 60 minutes, wind every 4 secs.; others: every 30 secs.
Averaging and Output Interval:	every 15 minutes
Program name:	tar045v1

1. array I.D.
   o1
2. day
   ok
3. time
   ok
4. mean air temp. @ 3 meters (C)
   rclow
5. mean R.H. @ 3 meters (%)
   ok (see correction note on page 1)
6. mean air temp @ 1m (C) from 107 Temp. Probe
   rclow
7. mean RH at 1m (%) from Vaisala HMP45C Probe
   ok (see correction note on page 1)
8. mean solar flux coming down (W/m2) – (33733F3)
   divide by 100; multiply by 117.23
9. mean solar flux going up (W/m2) - (31435F3)
   divide by 100; multiply by 126.58
10. mean horizontal wind speed (m/s)
    ok
11. resultant mean wind speed (m/s)
    o1
12. resultant mean wind direction (degrees from north)
    flag
13. standard deviation of wind direction (degrees)
    ok
14. maximum wind speed (m/s)
    ok
15. minimum wind speed (m/s)
    ok
16. ice temperature @ 50cm (original depth, mV*0.01)
    poly (n0=-105.87,n1=237.58,n2=-507.11,n3=686.25,n4=-546.23,n5=252.43,n6=-62.53, n7=6.44
17. ice temperature @ 100cm (original depth, mV*0.01)
    poly (n0=-106.57,n1=241.60,n2=-517.58,n3=700.30,n4=-556.87,n5=257.01,n6=-63.57, n7=6.54
18. surface temperature (C)
    ok
19. sample depth from sensor to surface (cm)
    ok
20. sample of battery voltage
    o1

Notes:

1. No missing data.
2. Datalogger time is correct November 23, 2007 at 14:19.
3. Input values appear correct November 23, 2007 at 14:22, except for all ice temperatures and surface temperature.
4. Sonic ranger height is 45 cm.
5. Maintenance: replaced RH sensor at 1m on November 23, 2007 at 14:28.
6. Datalogger power off on November 23, 2007 at 14:57 to 1458 to load new program (TAR078v2) and replace (1) SM with another. New program eliminated all non functioning ice temps (6) and adds new Apogee IRT (#1089).

Filename: tar06703.dat
Station: Taylor Glacier Station
Date of Establishment: 1994 by Peter Doran
Author of this report: Hassan Basagic
File Period: November 23, 2007 at 1500 to December 19, 2007 at 1200
Sampling Frequency: depth every 60 minutes, wind every 4 secs.; others: every 30 secs.
Averaging and Output Interval: every 15 minutes
Program name: tar078v2

1. array I.D.
   o1
2. day
   ok
3. time
   ok
4. mean air temp. @ 3 meters (C)
   rclow
5. mean R.H. @ 3 meters (%)
   ok (see correction note on page 1)
6. mean air temp @ 1m (C) from 107 Temp. Probe
   rclow
7. mean RH at 1m (%) from Vaisala HMP45C Probe
   ok (see correction note on page 1)
8. mean solar flux coming down (W/m2) – (33733F3)
   divide by 100; multiply by 117.23
9. mean solar flux going up (W/m2) - (31435F3)
   divide by 100; multiply by 126.58
10. mean horizontal wind speed (m/s)
    ok
11. resultant mean wind speed (m/s)
    o1
12. resultant mean wind direction (degrees from north)
    flag
13. standard deviation of wind direction (degrees)
    ok
14. maximum wind speed (m/s)
    ok
15. minimum wind speed (m/s)
    ok
16. surface temperature internal thermister output (mV)
    o1
17. surface temperature (mV)
    o1
18. surface temperature (C)
    ok
19. sample depth from sensor to surface (cm)
    ok
20. sample of battery voltage
    o1

Notes:

1. No missing data.
2. Datalogger time corrected back 30 seconds on December 19, 2007 at 1103.
3. Input values and wind alignment appear correct December 19, 2007 at 1105.
4. Sonic ranger height is 49 cm.
5. Maintenance: replaced RH sensor at 3m on December 19, 2007 at 11:26.
6. Datalogger power off on December 19, 2007 at 1213 to load new program (TAR078v3) and replace (1) SM with another. New program returns IceTemp to location 16.

Filename:	tar06704.dat
Station:	Taylor Glacier Station
Date of Establishment:	1994 by Peter Doran
Author of this report:	Hassan Basagic
File Period:	December 19, 2007 at 1215 to January 23, 2008 at 1230
Sampling Frequency:	depth every 60 minutes, wind every 4 secs.; others: every 30 secs.
Averaging and Output Interval:	every 15 minutes
Program name:	tar078v3

1. array I.D.
   o1
2. day
   ok
3. time
   ok
4. mean air temp. @ 3 meters (C)
   rclow
5. mean R.H. @ 3 meters (%)
   ok (see correction note on page 1)
6. mean air temp @ 1m (C) from 107 Temp. Probe
   rclow
7. mean RH at 1m (%) from Vaisala HMP45C Probe
   ok (see correction note on page 1)
8. mean solar flux coming down (W/m2) – (33733F3)
   divide by 100; multiply by 117.23
9. mean solar flux going up (W/m2) - (31435F3)
   divide by 100; multiply by 126.58
10. mean horizontal wind speed (m/s)
    ok
11. resultant mean wind speed (m/s)
    o1
12. resultant mean wind direction (degrees from north)
    flag
13. standard deviation of wind direction (degrees)
    ok
14. maximum wind speed (m/s)
    ok
15. minimum wind speed (m/s)
    ok
16. ice temp
    o1
17. surface temperature internal thermister output (mV)
    o1
18. surface temperature (mV)
    o1
19. surface temperature (C)
    ok
20. sample depth from sensor to surface (cm)
    ok
21. sample of battery voltage
    o1

Notes:

1. No missing data. Datalogger time correct on January 23, 2008 at 1206.
2. Input values and wind alignment appear correct January 23, 2008 at 1212. Ice temp does not appear correct.
3. Sonic ranger height is 50 cm.
4. Replace (1) SM with another on January 23, 2008 at 1230.

Lake Vanda

Filename:	vaa07801.dat
Station:	Lake Vanda met station
Date of Establishment:	November 24, 1994 by Peter Doran, rebuilt
Author of this report:	Hassan Basagic
File Period:	December 16, 2006 at 1000 to December 8, 2007 at 1300
Sampling Frequency:	wind every 4 secs.; sonic every 3600 secs.; other every 30 secs.
Averaging and Output Interval:	every 15 min
Program Name:	vaa045v1

1. array I.D.
   o1
2. day
   ok
3. time
   ok
4. mean air temp. @ 3 meters (C)
   rclow
5. mean R.H. @ 3 meters (%)
   ok (see correction note on page 1)
6. mean solar flux coming down (W/m2) – PY28169
   ok
7. mean solar flux going up (W/m2) - PY23277
   ok
8. mean horizontal wind speed (m/s)
   ok
9. resultant mean wind speed (m/s)
   ok
10. resultant mean wind direction (degrees from north)
    ok
11. standard deviation of wind direction (degrees)
    ok
12. maximum wind speed (m/s)
    ok
13. minimum wind speed (m/s)
    ok
14. mean P.A.R. (micromols/s/m2) – Q29765
    divide by 200, multiply by 263.64
15. mean soil temperature @ 0 cm in soil (C)
    rclow
16. mean soil temperature @ 5 cm in soil (C)
    rclow
17. mean soil temperature @ 10 cm in soil (C)
    rclow
18. distance to surface (m)
    ok
19. sample of battery voltage
    o1

Notes:

1. No missing data. Two multiple lines on December 8, 2007 at 1200 and 1215, these were duplicate and were removed.
2. Adjusted datalogger clock ahead 5 minute and 52 seconds on December 8, 2007 at 1150.
3. Checked input values and wind alignment on December 8, 2007 at 1150, all appear correct except sonic ranger which is offline.

4. Maintenance: Swapped upfacing pyranometer (old#28169, new#41090) at 1205; swapped quantum PAR (old#29765, new#Q17248) at 1212; and RH sensor at 3m at 1215 on December 8, 2007. Repaired Ultrasonic distance ranger by replacing sensor (transducer had failed) at 1224.
5. Sonic sensor depth is 65.6 cm on December 8, 2007 after replacing the sensor.
6. Swapped SM on December 8, 2007 at 1305.

Filename: vaa07802.dat
Station: Lake Vanda met station
Date of Establishment: November 24, 1994 by Peter Doran, rebuilt
Author of this report: Hassan Basagic
File Period: December 8, 2007 at 1315 to January 18, 2008 at 1245
Sampling Frequency: wind every 4 secs.; sonic every 3600 secs.; other every 30 secs.
Averaging and Output Interval: every 15 min
Program Name: vaa045v1

1. array I.D.
   o1
2. day
   ok
3. time
   ok
4. mean air temp. @ 3 meters (C)
   rclow
5. mean R.H. @ 3 meters (%)
   ok (see correction note on page 1)
6. mean solar flux coming down (W/m2) – PY41090
   ok
7. mean solar flux going up (W/m2) - PY23277
   ok
8. mean horizontal wind speed (m/s)
   ok
9. resultant mean wind speed (m/s)
   ok
10. resultant mean wind direction (degrees from north)
    ok
11. standard deviation of wind direction (degrees)
    ok
12. maximum wind speed (m/s)
    ok
13. minimum wind speed (m/s)
    ok
14. mean P.A.R. (micromols/s/m2) – Q17248
    divide by 200, multiply by 313.57
15. mean soil temperature @ 0 cm in soil (C)
    rclow
16. mean soil temperature @ 5 cm in soil (C)
    rclow
17. mean soil temperature @ 10 cm in soil (C)
    rclow
18. distance to surface (m)
    ok
19. sample of battery voltage
    o1

Notes:

1. No missing data. Adjusted datalogger back 10 seconds on January 18, 2008 at 1232.
2. Checked input values and wind alignment on January 18, 2008 at 1233, all appear correct.
3. Sonic sensor depth is 65.3 cm on January 18, 2008 at 1235.
4. Swapped SM on January 18, 2008 at 1248.

Lake Vida

Filename:	via07801.dat
Station:	Lake Vida met station
Date of Establishment:	November 24, 1995 by Peter Doran
Author of this report:	Hassan Basagic
File Period:	December 16, 2006 at 1100 to January 8, 2008 at 1530
Sampling Frequency:	wind every 4 secs.; ultrasonic every 3600 secs; others: every 30 secs.
Averaging and Output Interval:	every 15 min
Program Name:	via045v1

1. array I.D.
   o1
2. day
   ok
3. time
   ok
4. mean air temp. @ 3 meters (C)
   rclow
5. mean R.H. @ 3 meters (%)
   ok (see correction note on page 1)
6. mean solar flux coming down (W/m2) – PY23250
   ok
7. mean solar flux going up (W/m2) – PY20561
   ok
8. mean horizontal wind speed (m/s)
   ok
9. resultant mean wind speed (m/s)
   o1
10. resultant mean wind direction (degrees from north)
    ok
11. standard deviation of wind direction (degrees)
    ok
12. maximum wind speed (m/s)
    ok
13. minimum wind speed (m/s)
    ok
14. mean P.A.R. (micromols/s/m2) - Q30803
    divide by 200, multiply by 222.83
15. mean soil temperature @ 0 cm in soil (C)
    rclow
16. mean soil temperature @ 5 cm in soil (C)
    rclow
17. mean soil temperature @ 10 cm in soil (C)
    rclow
18. distance to surface (m)
    ok
19. sample of battery voltage
    o1

Notes:

1. One line missing on January 8, 2008 at 1530.
2. Time adjusted back 3 minutes and 50 seconds on January 8, 2008 at 1351.
3. Checked input values and wind alignment on January 8, 2008 at 1358, everything looks good.
4. Sonic sensor depth = 51.5 cm.

5. Maintenance: replaced down facing pyranometer (old#20561, new#45668) at 1426; quantum PAR sensor (old#Q30803, new#Q23204) at 1410; and RH at 3m at 1408 on January 8, 2008 .
6. Station offline from 1442 – 1444 to swap datalogger and 1453 – 1503 to swap battery (new 100 Ahr). SM swapped out at 1540.
7. Soil temperatures are now 1.2 m from lake edge. It appears the soil is saturated.

Filename:	via07802.dat
Station:	Lake Vida met station
Date of Establishment:	November 24, 1995 by Peter Doran
Author of this report:	Hassan Basagic
File Period:	January 8, 2008 at 1530 to January 18, 2008 at 1445
Sampling Frequency:	wind every 4 secs.; ultrasonic every 3600 secs; others: every 30 secs.
Averaging and Output Interval:	every 15 min
Program Name:	via045v1

1. array I.D.
   o1
2. day
   ok
3. time
   ok
4. mean air temp. @ 3 meters (C)
   rclow
5. mean R.H. @ 3 meters (%)
   ok (see correction note on page 1)
6. mean solar flux coming down (W/m2) – PY23250
   ok
7. mean solar flux going up (W/m2) – PY45668
   ok
8. mean horizontal wind speed (m/s)
   ok
9. resultant mean wind speed (m/s)
   o1
10. resultant mean wind direction (degrees from north)
    ok
11. standard deviation of wind direction (degrees)
    ok
12. maximum wind speed (m/s)
    ok
13. minimum wind speed (m/s)
    ok
14. mean P.A.R. (micromols/s/m2) - Q23204
    divide by 200, multiply by 237.54
15. mean soil temperature @ 0 cm in soil (C)
    rclow
16. mean soil temperature @ 5 cm in soil (C)
    rclow
17. mean soil temperature @ 10 cm in soil (C)
    rclow
18. distance to surface (m)
    ok
19. sample of battery voltage
    o1

Notes:

1. No missing data. Time adjusted back 10 seconds on January 18, 2008 at 1425.
2. Checked input values and wind alignment on January 8, 2008 at 1428, everything looks good.
3. Sonic sensor depth = 51 cm.
4. Maintenance: replaced wind sensor at 1442.
5. Swapped SM at 1146.

Array I.D. meaning:

First and Second Digit

01 = Hoare
02 = Fryxell
03 = Bonney
04 = Commonwealth
05 = Howard
06 = Taylor
07 = Vanda
08 = Brownsworth
09 = Explorer's Cove
10 = Canada Gl. (without Eddy Sensors)
11 = Vida
12 = Hoare Submerged
13 = Fryxell Submerged
14 = Bonney East Submerged
15 = Canada Gl. (with Eddy Sensors- not in use)
16 = Bonney West Submerged
17 = Fryxell Snow Fence
18 = Beacon Valley