Documentation and Task Lists for 2005/2006

File description and task list for 2005-06 LTER Met 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 bogus,

flag= reasonable number but needs a note attached concerning its collection:

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)
    16 = Bonney West Submerged
    17 = Fryxell Snow Fence
    18 = Beacon Valley
    19 = Upper Howard Gl.

Hardware Notes:
        1)   Continued service schedule.

Filename:
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: January 15, 2005 (26) @ 1245 to January 15, 2005 (26) @ 1300
Sampling Frequency: wind every 4 secs.; others: every 30 secs.
Averaging and Output Interval: every 15 min
Program Name: ben034v1 (Progam Signature: 32732)

     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
     6. mean solar flux coming down (W/m2) – PY23271
         ok
     7. mean solar flux going up (W/m2) – PY 23277
         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) – Q30806
         divide by 200, multiply by 221.93
     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. Note only one line of data.

Filename:	ben05602.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:	January 15, 2005 (26) @ 1300 to December 16, 2005 (350) @ 1030
Sampling Frequency:	wind every 4 secs.; others: every 30 secs.
Averaging and Output Interval:	every 15 min
Program Name:	ben034v1 (Progam Signature: 32732)

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
6. mean solar flux coming down (W/m2) – PY23271
   ok
7. mean solar flux going up (W/m2) – PY 23277
   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) – Q30806
    divide by 200, multiply by 221.93
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. One line of duplicate data at December 16, 2005 (350) @ 1015 caused by time reset below.
2) Adjusted clock back 4 minutes 20 seconds on December 16, 2005 (350) @ 1014
3) Check input values on December 16, 2005 (350) @ 1015, everything looked good
4) Check wind direction on December 16, 2005 (350) @ 1023, direction of monitor pointing north.
5) Replaced one SM4M storage modules for another on December 16, 2005 (350) @ 1031

Filename: ben05603.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 16, 2005 (350) @ 1045 to February 01, 2006 (32) @ 1115
Sampling Frequency: wind every 4 secs.; others: every 30 secs.
Averaging and Output Interval: every 15 min
Program Name: ben034v1 (Progam Signature: 32732)

      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
      6. mean solar flux coming down (W/m2) – PY23271
          ok
      7. mean solar flux going up (W/m2) – PY 23277
          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) – Q30806
          divide by 200, multiply by 221.93
      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)   Clock time correct. No adjustment.
3)   Check input values to February 01, 2006 (32) @ 1119, everything appears in order.
4)   Check wind direction on to February 01, 2006 (32) @ 1122, correct orientation, no adjustment.
5)   Replaced one SM4M storage modules for another on to February 01, 2006 (32) @ 1123.

Filename: boy05601.dat
Station: Lake Bonney met station
Date of Establishment: November 24, 1993 by Peter Doran
Author of this report: Hassan Basagic
File Period: December 29, 2004 (364) @ 1930 to November 8, 2005 (313) @ ~ 1330
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 (signature: 35244)

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
6. mean solar flux coming up (W/m2) – PY18655
    ok
7. mean solar flux going down (W/m2) – PY20561
    ok
8. mean P.A.R. (micromols/s/m2) – Q23204
    divide by 200, multiply by 286.44
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)
    after December 29, 2004 @ 1804 – 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)
    after December 29, 2004 @ 1752 – 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 (0.622) + Value) * 100
27. sample precipitation (mm)
      ok
28. sample of battery voltage
      o1

Note:
1. Missing LAWN sheet.

Filename: boy05602.dat
Station: Lake Bonney met station
Date of Establishment: November 24, 1993 by Peter Doran
Author of this report: Hassan Basagic
File Period: November 8, 2005 (313) @ 1345 to January 04, 2006 (04) at 1700
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 (signature: 35244)

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
6. mean solar flux coming up (W/m2) – PY18655
   ok
7. mean solar flux going down (W/m2) – PY20561
   ok
8. mean P.A.R. (micromols/s/m2) –
   Q23204 Before January 04, 2006 @1730 - divide by 200, multiply by 286.44
   Q30801After January 04, 2006 @1730 - divide by 200, multiply by 358.36
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 (0.622) + Value) * 100
27. sample precipitation (mm)
   ok
28. sample of battery voltage
   o1

Note:
1. No Missing data
2. Adjusted time back by 3 mins 12 secs January 04, 2006 (04) @ 1704.
3. Checked values on January 04, 2006 (04) @ 1706. All appear fine.
4. Check wind alignment on January 04, 2006 (04) @ 1712. No changes
5. Sonic height is 61.5 cm from the surface.
6. Replaced RH sensor January 04, 2006 (04) @1717.
7. Replaced quantum (old #Q23204, new #Q30801) on January 04, 2006 (04) @ 1730.
8. Replaced modules 1 SM4M with 1 SM4M on January 04, 2006 (04) @ 1801.
9. There appears to be old data on the storage module after the above date and time. This data should be ignored and discarded.

Filename: brh05601.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 15, 2005 (15) @ 1415 to December 16, 2005 (350) @ 1530
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 (program signature: 25911)

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
6. mean solar flux coming down (W/m2) – PY33985
        ok
7. mean solar flux going up (W/m2) – PY23276
        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. No missing data
2. Adjusted datalogger clock back 45 seconds on December 16, 2005 (350) @ 1454
3. Check input values on January December 16, 2005 (350) @ 1455, values look good.
4. Check wind alignment on December 16, 2005 (350) @ 1500, appears correct.

5. Sonic sensor depth on December 16, 2005 (350) @ 1502 measured as 58.5 cm. There is bare ground below the sonic ranger.
6. Swapped out wind monitor for calibration maintenance on December 16, 2005 (350) @ 1504. Wind monitor off line through December 16, 2005 (350) @ 1532.
7. Swapped out module one (1) SM4M on December 16, 2005 (350) @ 1533 for another SM4M

Filename: brh05602.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: December 16, 2005 (350) @ 1545 to January 12, 2006 (12) @ 1015
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 (program signature: 25911)

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
6. mean solar flux coming down (W/m2) – PY33985
   ok
7. mean solar flux going up (W/m2) – PY23276
   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. No missing data.
2. Checked datalogger clock on January 12, 2006 (12) @ 1020. Correct time.
3. Check input values on January 12, 2006 (12) @ 1024, values look good.
4. Check wind alignment on January 12, 2006 (12) @ 1030, appears correct.

5. Sonic sensor depth on January 12, 2006 (12) @ 1020 measured as 58.3 cm. There is bare ground below the sonic ranger.
6. Swapped out module one (1) SM4M on January 12, 2006 (12) @ 1035 for (1) SM4M

Filename: bsn04501.dat
Station: Lake Bonney Snow Fence
Date of Establishment: January 2001 by Thomas Nylen
Author of this report: Thomas Nylen
File Period: January 24, 2005 (24) @ 1515 to November 14, 2005 @ 1615
Sampling Frequency: sonic every 60 minutes, every 30 sec for all the others
Averaging and Output Interval: every 15 min
Program Name: bsn045v1.dld (Program Signature: 1133)

1. array I.D.
   o1
2. day
   ok
3. time
   ok
4. mean soil P.A.R. +3.6 m (east) from snow fence (micromols/s/m2) – Q20520
   multiply by 1.51614
5. mean soil P.A.R. +1.8 m (east) from snow fence (micromols/s/m2) – Q23210
   multiply by 1.51614
6. mean Air P.A.R. @ 1.6 m (micromols/s/m2) – Q29775
   multiply by 1.21737
7. mean air temp. @ 1.5 m (C)
   rclow
8. mean soil temperature @ 0 cm in soil -1.9 m (west) of snow fence (C)
   rclow
9. mean soil temperature @ 0 cm in soil +0.9 m (east) of snow fence (C)
   rclow
10. mean soil temperature @ 0 cm in soil +1.8 m (east) of snow fence (C)
    rclow
11. mean soil temperature @ 0 cm in soil +3.6 m (east) of snow fence (C)
    rclow
12. sample depth from sensor to surface (cm)
    Measured depth (1.097) + Value) * 100
13. sample of battery voltage
    o1

Notes:
1. Winter damage to snow fence. The fence was loose which caused the +1.8m soil PAR sensor, - 1m and -1m soil temperature probes to be pulled out. **Data needs to be flagged**. The fence also pulled out nails. Everything was placed back into original order and fence reconnected. Need to repair fence in later visit.
2. No data missing
3. CR10X time adjusted back 4 minutes and 42 seconds on November 14, 2005 @ 1606
4. Input values not checked.
5. Sonic sensor height, 160.6 cm.
6. Swapped out one SM4M for another on November 14, 2005 @ 1616

Filename: bsn04502.dat
Station: Lake Bonney Snow Fence
Date of Establishment: January 2001 by Thomas Nylen
Author of this report: Thomas Nylen
File Period: November 14, 2005 (24) @ 1630 to January 4, 2006 @ 1400
Sampling Frequency: sonic every 60 minutes, every 30 sec for all the others
Averaging and Output Interval: every 15 min
Program Name: bsn045v1.dld (Program Signature: 1133)

1. array I.D.
        o1
2. day
        ok
3. time
        ok
4. mean soil P.A.R. +3.6 m (east) from snow fence (micromols/s/m2) – Q20520
        multiply by 1.51614
5. mean soil P.A.R. +1.8 m (east) from snow fence (micromols/s/m2) – Q23210
        multiply by 1.51614
6. mean Air P.A.R. @ 1.6 m (micromols/s/m2) – Q29775
        multiply by 1.21737
7. mean air temp. @ 1.5 m (C)
        rclow
8. mean soil temperature @ 0 cm in soil -1.9 m (west) of snow fence (C)
        rclow
9. mean soil temperature @ 0 cm in soil +0.9 m (east) of snow fence (C)
        rclow
10. mean soil temperature @ 0 cm in soil +1.8 m (east) of snow fence (C)
        rclow
11. mean soil temperature @ 0 cm in soil +3.6 m (east) of snow fence (C)
        rclow
12. sample depth from sensor to surface (cm)
        Measured depth (1.097) + Value) * 100
13. sample of battery voltage
        o1

Notes:
1. No data missing
2. CR10X time adjusted back 34 seconds on January 4, 2006 @ 1355
3. Checked input values January 4, 2006 @ 1357. Look good.
4. No snow at site.
5. Sonic sensor height, 109.6 cm.
6. South end of snow fence still in need of repair. Made temporary fix.
7. Swapped out one SM4M for another on January 4, 2006 @ 1400.

Filename: caa05601.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: Thomas Nylen
File Period: January 28, 2005 (28) @ 1245
Sampling Frequency: wind speed every 4 sec; all other every 30 sec
Averaging and Output Interval: every 15 minutes
Program name: caa045v4 (program signature: 14174)

1. array I.D.
      o1
2. day
      ok
3. time
      ok
4. mean air temp. (C)
      rclow
5. mean rh @ (%)
      ok
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 (n_0=-106.23,n_1=239.65,2=-512.50,n_3=693.49,n_4=-551.71,n_5=254.79,n_6=-63.07, n_7=6.492
15. ice temperature – original depth was 100.0 cm from the surface (mV)
      poly (n_0=-105.87,n_1=237.58,2=-507.11,n_3=686.25,n_4=-546.23,n_5=252.43,n_6=-62.53, n_7=6.442
16. ice temperature – original depth was 25.0 cm from the surface (mV)
      poly (n_0= -67.068, n_1 = 54.617, n_2 = -23.78, n_3 = 6.1854)
17. ice temperature – original depth was 50.0 cm from the surface (mV)
      poly (n_0= -67.26, n_1 = 54.847, n_2 = -23.941, n_3 = 6.2197)
18. ice temperature – original depth was 75.0 cm from the surface (mV)
      poly (n_0= -67.132, n_1 = 54.693, n_2 = -23.833, n_3 = 6.1967)
19. ice temperature – original depth was 100.0 cm from the surface (mV)
      poly (n_0= -67.205, n_1 = 54.781, n_2 = -23.985, n_3 = 6.2099)
20. mean ice surface temperature
      ok
21. sample battery voltage
      o1

*Notes:
1.   No missing data. Only one line of data.

Filename: caa05602.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: Thomas Nylen
File Period: January 28, 2005 (28) @ 1300 to October 31, 2005 (304) @ 1130
Sampling Frequency: wind speed every 4 sec; all other every 30 sec
Averaging and Output Interval: every 15 minutes
Program name: caa045v4 (program signature: 14174)

22. array I.D.
        o1
23. day
        ok
24. time
        ok
25. mean air temp. (C)
        rclow
26. mean rh @ (%)
        ok
27. mean solar flux coming down (W/m2)
        ok
28. mean solar flux going up (W/m2)
        ok
29. mean horizontal wind speed (m/s)
        ok
30. resultant mean wind speed (m/s)
        o1
31. resultant mean wind direction (degrees from north)
        ok
32. standard deviation of wind direction (degrees)
        ok
33. maximum wind speed (m/s)
        ok
34. minimum wind speed (m/s)
        ok
35. 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
36. 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
37. ice temperature – original depth was 25.0 cm from the surface (mV)
        poly (n0= -67.068, n1 = 54.617, n2 = -23.78, n3 = 6.1854)
38. ice temperature – original depth was 50.0 cm from the surface (mV)
        poly (n0= -67.26, n1 = 54.847, n2 = -23.941, n3 = 6.2197)
39. ice temperature – original depth was 75.0 cm from the surface (mV)
        poly (n0= -67.132, n1 = 54.693, n2 = -23.833, n3 = 6.1967)
40. ice temperature – original depth was 100.0 cm from the surface (mV)
         poly (n0= -67.205, n1 = 54.781, n2 = -23.985, n3 = 6.2099)
41. mean ice surface temperature
        ok
42. sample battery voltage
        o1

*Notes:
1. No missing data.
2. Adjust CR10X ahead 4 min 49 sec on October 31, 2005 (304) @ 1133
3. Replaced one (1) SM4M with one (1) SM4M October 31, 2005 (304) @ 1139
4. Ice temperature at 50 cm depth (item 17) has ambient reading of -9999.
5. Stake height from top to snow surface with board is 114.1, 114.1, 114.0, 114.0 cm. Board used to measure surface.

Filename: caa05603.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: October 31, 2005 (304) @ 1145 to December 3, 2005 (337) 1500
Sampling Frequency: wind speed every 4 sec; all other every 30 sec
Averaging and Output Interval: every 15 minutes
Program name: caa045v4 (program signature: 14174)

1. array I.D.
        o1
2. day
        ok
3. time
        ok
4. mean air temp. (C)
        rclow
5. mean rh @ (%)
        ok
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)
        poly (n0= -67.068, n1 = 54.617, n2 = -23.78, n3 = 6.1854)
17. ice temperature – original depth was 50.0 cm from the surface (mV)
        poly (n0= -67.26, n1 = 54.847, n2 = -23.941, n3 = 6.2197)
18. ice temperature – original depth was 75.0 cm from the surface (mV)
        poly (n0= -67.132, n1 = 54.693, n2 = -23.833, n3 = 6.1967)
19. ice temperature – original depth was 100.0 cm from the surface (mV)
        poly (n0= -67.205, n1 = 54.781, n2 = -23.985, n3 = 6.2099)
20. mean ice surface temperature
        ok
21. sample battery voltage
        o1

*Notes:

1. No missing data

2. Adjust CR10X ahead 12 sec on December 3, 2005 (337) @ 1455

3. Replaced one (1) SM4M with one (1) SM4M December 3, 2005 (337)@ 1511

4. Ice temperature at 50 cm depth (above item 17, channel 20) has ambient reading of -9999. Unknown malfunction.

5. Wiring appears to be in order.

6. IRT surface temperature reading -75. Black wire is broken which is connected to 6H. Need to replace cable.

7. Stake height from top to snow surface with board is 89.4, 89.5, 89.6, 89.6 cm. Board used to measure surface. Last surface measurements appear to measured incorrectly with upside down tape measure. Check next visit.

Filename: caa05604.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 3, 2005 (337) @ 1515 to December 8, 2005 (342) @ 1245
Sampling Frequency: wind speed every 4 sec; all other every 30 sec
Averaging and Output Interval: every 15 minutes
Program name: caa045v4 (program signature: 14174)

1. array I.D.
       o1
2. day
       ok
3. time
       ok
4. mean air temp. (C)
       rclow
5. mean rh @ (%)
       ok
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)
       poly (n0= -67.068, n1 = 54.617, n2 = -23.78, n3 = 6.1854)
17. ice temperature – original depth was 50.0 cm from the surface (mV)
       poly (n0= -67.26, n1 = 54.847, n2 = -23.941, n3 = 6.2197)
18. ice temperature – original depth was 75.0 cm from the surface (mV)
       poly (n0= -67.132, n1 = 54.693, n2 = -23.833, n3 = 6.1967)
19. ice temperature – original depth was 100.0 cm from the surface (mV)
       poly (n0= -67.205, n1 = 54.781, n2 = -23.985, n3 = 6.2099)
20. mean ice surface temperature
       ok
21. sample battery voltage
       o1

*Notes:

1. No missing data.
2. Adjust CR10X ahead 4 sec on December 8, 2005 (342) @ 1226
3. Replaced one (1) SM4M with one (1) SM4M December 8, 2005 (342) @ 1305.
4. Repaired IRT wire. Reading appear in good condition. Sensor offline from November 15, 2005 @ 6:30:00 AM to December 8, 2005 @ 1415.
5. Ice temperature at 50 cm depth (item 17) still appears to be malfunctioning..
6. Stake height from top to snow surface with board is 90.3,90.3,90.3, 90.4 cm. Board used to measure surface.

Filename: caa05605.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 8, 2005 (342) @ 1315 to January 07, 2006 (07) @ 1730
Sampling Frequency: wind speed every 4 sec; all other every 30 sec
Averaging and Output Interval: every 15 minutes
Program name: caa045v4 (program signature: 14174)

1. array I.D.
    o1
2. day
    ok
3. time
    ok
4. mean air temp. (C)
    rclow
5. mean rh @ (%)
    ok
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)
    poly (n0= -67.068, n1 = 54.617, n2 = -23.78, n3 = 6.1854)
17. ice temperature – original depth was 50.0 cm from the surface (mV)
    poly (n0= -67.26, n1 = 54.847, n2 = -23.941, n3 = 6.2197)
18. ice temperature – original depth was 75.0 cm from the surface (mV)
    poly (n0= -67.132, n1 = 54.693, n2 = -23.833, n3 = 6.1967)
19. ice temperature – original depth was 100.0 cm from the surface (mV)
    poly (n0= -67.205, n1 = 54.781, n2 = -23.985, n3 = 6.2099)
20. mean ice surface temperature
    ok
21. sample battery voltage
    o1

*Notes:

1. Missing one line of data @ December 8, 2005 (342) @ 1300.
2. Checked CR10X clock on December 8, 2005 (342) @ 1226. Clock is correct.
3. Replaced one (1) SM4M with one (1) SM4M January 07, 2006 (07) @ 1736.
4. Ice temperature at 50 cm depth (item 17) has malfunctioned.
5. Stake height from top to snow surface with board is 92.4, 92.6, 92.6, 92.5 cm. Board used to measure surface.

Filename: caa05606.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 07, 2006 (07) @ 1745 to January 13, 2006 (13) @ 1530
Sampling Frequency: wind speed every 4 sec; all other every 30 sec
Averaging and Output Interval: every 15 minutes
Program name: caa045v4 (program signature: 14174)

1. array I.D.
        o1
2. day
        ok
3. time
        ok
4. mean air temp. (C)
        rclow
5. mean rh @ (%)
        ok
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)
        poly (n0= -67.068, n1 = 54.617, n2 = -23.78, n3 = 6.1854)
17. ice temperature – original depth was 50.0 cm from the surface (mV)
        poly (n0= -67.26, n1 = 54.847, n2 = -23.941, n3 = 6.2197)
18. ice temperature – original depth was 75.0 cm from the surface (mV)
        poly (n0= -67.132, n1 = 54.693, n2 = -23.833, n3 = 6.1967)
19. ice temperature – original depth was 100.0 cm from the surface (mV)
        poly (n0= -67.205, n1 = 54.781, n2 = -23.985, n3 = 6.2099)
20. mean ice surface temperature
        ok
21. sample battery voltage
        o1

*Notes:
1. No missing data.
2. Adjust CR10X clock on back 10 seconds on January 13, 2006 (13) @ 1140.
3. Checked input values on January 13, 2006 (13) @ 1144. All appear correct except for ice temperature at 50 cm depth (item 17) still appears to be malfunctioning.
4. Checked wind alignment on January 13, 2006 (13) @ 1145, alignment is correct.
5. Performed maintenance on station legs on January 13, 2006 (13) @ 1130 to 1435. Old station legs were close to melting out. New legs were installed into ice and met station lower onto new legs. IRT offline at January 13, 2006 (13) @ 1152 through 1435. New height of IRT is 53.7 cm., temperature and relative humidity height is now 205 cm.
6. Rechecked channels after station maintenance on January 13, 2006 (13) @ 1525. All appear correct except for ice temperature at 50 cm depth (item 17) still appears to be malfunctioning.
7. Replaced one (1) SM4M with one (1) SM4M January 13, 2006 (13) @ 1137.
8. Stake height from top to snow surface with board 93.6, 93.2, 93.4, 93.4 cm. Board used to measure surface.

Filename: coh05601.dat
Station: Commonwealth Glacier Station
Date of Establishment: Nov 22, 1993 by Peter Doran
Author of this report: Thomas Nylen
File Period: January 11, 2005 (11) @ 1615 to November 04, 2005 @ 1430
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
6. mean solar flux coming down (W/m2) – 29776F3
        divide by 100; multiply by 116.14
7. mean solar flux going up (W/m2) – 29777F3
        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) – 32059F3
        divide by 250; multiply by 223.71
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) – 30831F3
        divide by 250; multiply by 271.00
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

27

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 ahead 2 minute and 01 seconds on November 04, 2005 @ 1424
3. Checked input values on November 04, 2005 @ 1429, everything looks good.
4. Replaced one (1) SM4M with one (1) SM4M on November 04, 2005 @ 1437
5. Sonic sensor height was 78.1 with board (1.2cm) on snow surface.
6. Stake height from top to snow surface without board 62.5, 62.3, 62.8, 63.0 cm.

Filename: coh05602.dat
Station: Commonwealth Glacier Station
Date of Establishment: Nov 22, 1993 by Peter Doran
Author of this report: Thomas Nylen
File Period: November 04, 2005 @ 1445 to January 19, 2006 (19) @ 1100
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
6. mean solar flux coming down (W/m2) – 29776F3
        divide by 100; multiply by 116.14
7. mean solar flux going up (W/m2) – 29777F3
        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)
        Before January 19, 2006 (19) @ 1030 (32059F3) divide by 250; multiply by 223.71
        After January 19, 2006 (19) @ 1030 (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) –
        Before January 19, 2006 (19) @ 1100 (30831F3) divide by 250; multiply by 271.00
        After January 19, 2006 (19) @ 1100 (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. One line of missing data caused by clock reset : January 19, 2006 (19) @ 0945.
2. Adjust CR10X ahead 1 minute and 28 seconds on January 19, 2006 (19) @ 0944.
3. Checked input values on January 19, 2006 (19) @ 0947, everything appears correct.
4. Wind alignment is correct, checked on January 19, 2006 (19) @ 0956.
5. Swapped upward (old # 32059F3; new # 34316F3) and downward (old # 30831F3; new # 32311F3) facing pyrgeometers January 19, 2006 (19) @ 1023 and 1055 respectively.
6. Power off on January 19, 2006 (19) @ 1100 to replace cr10x and one (1) SM4M with one (1) SM4M on January 19, 2006 (19) @ 1100.
7. Sonic sensor height was 79.3 without board.
8. Stake height from top to snow surface without board 75.8, 75.4, 76.3, 76.3 cm.

Filename: exe05601.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 3, 2004 @ 1445 to December 18, 2005 (352) @ 1315
Sampling Frequency: prec every 60 minutes, wind every 4 secs.; others: every 30 secs.
Averaging and Output Interval: every 15 minutes
Program name: exe023v1 (program signature: 61847)

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
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. File is missing large amounts of data. Very little usable data.
2. Upon arrival keypad read "88888".
3. Adjust CR10x ahead by 14 minutes on December 18, 2005 (352) @ 1204

4. Check channels on December 18, 2005 (352) @ 1205 indicate only RH working properly with all other values reading zero (0). Powered off datalogger on December 18, 2005 (352) @ 1214 to restart program. Post restart readings appear to be correct.
5. Swapped old upward facing pyranometer #PY2837? (last digit worn away) with recalibrated sensor #PY23271 December 18, 2005 (352) @ 1250. Swapped old downward facing pyranmometer #PY 283?? (last 2 digits worn away) with recalibrated sensor #PY18655 December 18, 2005 (352) @ 1302.
6. Swapped existing RH sensor for new recalibrated sensor on December 18, 2005 (352) @ 1227.
7. Power off datalogger to replaced CR10x datalogger and storage module for recalibrated datalogger and storage module on December 18, 2005 (352) @ 1315.\
8. Check battery power box. Positive (red) wire detached from regulator which connected to datalogger. Possible source of missing data and erratic data collection.
9. Off site on December 18, 2005 (352) @ 1325.

Filename: frl05601.dat
Station: Lake Fryxell met station
Date of Establishment: Jan 6, 1994 by Peter Doran
Author of this report: Thomas Nylen
File Period: January 15, 2005 (15) @ 1515 to November 02, 2005 (306) @ 1815
Sampling Frequency: sonic every 60 minutes, wind every 4 sec; others: every 30 secs.
Averaging and Output Interval: every 15 minutes
Program name: frl045v1.dld (program signature: 9942)

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
6. mean solar flux coming down (W/m2) – PY25307
        ok
7. mean solar flux going up (W/m2) – PY27929
        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) – Q23207
        divide by 200, multiply by 314.76
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 (1.051) + Value) * 100
19. sample of battery voltage
        o1

notes:
1. No missing data
2. Time adjusted -9 sec on November 02, 2005 (306) @ 1816
3. Checked input values on November 02, 2005 (306) @ 1818. Everything looks good.
4. Wind alignment checked on November 02, 2005 (306) @ 1820, no changes
5. Sonic height measured on November 02, 2005 (306) @ 1818 is 105.2 cm.
6. Module replaced with 1 SM4M on November 02, 2005 (306) @ 1819

Filename: frl05602.dat
Station: Lake Fryxell met station
Date of Establishment: Jan 6, 1994 by Peter Doran
Author of this report: Hassan Basagic
File Period: November 02, 2005 (306) @ 1815 to December 20, 2005 @ 1245
Sampling Frequency: sonic every 60 minutes, wind every 4 sec; others: every 30 secs.
Averaging and Output Interval: every 15 minutes
Program name: frl045v1.dld (program signature: 9942)

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
6. mean solar flux coming down (W/m2) – existing: PY25307; replacement: PY51355
        ok
7. mean solar flux going up (W/m2) – existing PY27929; replacement: 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)
        Q23207 - Before December 20, 2005 @ 1143 divide by 200, multiply by 314.76
        Q99253 - After December 20, 2005 @ 1143, divide by 200, multiply by 401.85
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 (1.051) + Value) * 100
19. sample of battery voltage
        o1

notes:
1. No missing data.
2. Time adjusted ahead 17 sec on December 20, 2005 @ 1052.
3. Checked input values on December 20, 2005 @ 1053. Everything looks good.
4. Wind alignment checked on December 20, 2005 @ 1058, no changes.

5. Sonic height measured on December 20, 2005 @ 1050 is 105.4 cm.
6. Swapped RH sensor for recalibrate sensor on December 20, 2005 @ 1105.
7. Swapped existing quantum PAR #Q23207 with recalibrated sensor #Q99253 on December 20, 2005 @ 1143. Replaced quantum housing plate as old plate screw was stripped.
8. Swapped sensors for required maintenance. Swapped old upward pyranometer #PY25307 with recalibrated sensor #PY51355 on December 20, 2005 @ 1201. Swapped old downward pyranometer #PY27929 with recalibrated sensor #PY51356 on December 20, 2005 @ 1227. Replaced old stripped lock bolt on downward facing pyranometer with new bolt.
9. Swapped existing wind sensor with recalibrated sensor on December 20, 2005 @ 1241.
10. Powered down datalogger on December 20, 2005 @ 1245 to replaced cr10x datalogger and 1 SM4M with recalibrated datalogger and new SM$M.
11. Quantum baseplate needs 2 screws.

Filename: frl05603.dat
Station: Lake Fryxell met station
Date of Establishment: Jan 6, 1994 by Peter Doran
Author of this report: Hassan Basagic
File Period: December 20, 2005 @ 1300 to January 09, 2006 (09) @ 0945
Sampling Frequency: sonic every 60 minutes, wind every 4 sec; others: every 30 secs.
Averaging and Output Interval: every 15 minutes
Program name: frl045v1.dld (program signature: 9942)

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
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 401.85
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 (1.051) + Value) * 100
19. sample of battery voltage
        o1

notes:
1. No missing data.
2. Time correct on CR10x on January 09, 2006 (09) @ 0948.
3. Checked input values on January 09, 2006 (09) @ 0945. RH values appear to be low (6.2). RH sensor
    repositioned on mounting. Post values were much higher (45, 52, 49). All other channels appear correct.
4. Wind alignment checked on January 09, 2006 (09) @ 0955, no changes.

5. Sonic height measured on January 09, 2006 (09) @ 0945 is 105.0 cm.
6. Added 2 screws to Quantum base plate.
7. Swapped 1 SM with another SM on January 09, 2006 (09) @ 0957.

Filename: frl05604.dat
Station: Lake Fryxell met station
Date of Establishment: Jan 6, 1994 by Peter Doran
Author of this report: Hassan Basagic
File Period: January 09, 2006 (09) @ 1000 to January 30, 2006 (30) @ 1015
Sampling Frequency: sonic every 60 minutes, wind every 4 sec; others: every 30 secs.
Averaging and Output Interval: every 15 minutes
Program name: frl045v1.dld (program signature: 9942)

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
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 401.85
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 (1.051) + Value) * 100
19. sample of battery voltage
        o1

notes:
1. No missing data.
2. Time correct on CR10x on January 30, 2006 (30) @ 1022.
3. Checked input values on January 30, 2006 (30) @ 1024. All channels appear correct.
4. Swapped 1 SM with another SM on January 30, 2006 (30) @ 1023.

Filename: fsn05601.dat
Station: Lake Fryxell Snow Fence
Date of Establishment: January 2001 by Thomas Nylen
Author of this report: Thomas Nylen
File Period: January 3, 2005 (3) @ 1745 to November 2, 2005 (306) at 1930
Sampling Frequency: sonic every 60 minutes, every 30 sec for all the others
Averaging and Output Interval: every 15 min
Program Name: fs045v1.dld (program signature: 65381)

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) - Q30804
    multiply by 1.12
5. mean soil P.A.R. +1.9 m (east) from snow fence (micromols/s/m2) - Q30800
    multiply by 1.10
6. mean Air P.A.R. @ 1.6 m (micromols/s/m2)
    Q30805 - multiply by 1.14 before January 3, 2005 @ 1708
    Q23199 - multiply by 1.49 after January 3, 2005 @ 1708
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. sample of battery voltage
    o1

Notes:
1. No data missing.
2. Adjusted time ahead by 53 seconds on November 2, 2005 (306) @ 1933
3. Swapped storage module SM4M on November 2, 2005 (306) @ 1935
4. Sonic height is 83.2 cm from the surface
5. P.A.R. at 3.8 m and 1.9 m appear to have zeroed over the winter. Will investigate on next site visit.

Filename: fsn05602.dat
Station: Lake Fryxell Snow Fence
Date of Establishment: January 2001 by Thomas Nylen
Author of this report: Hassan Basagic
File Period: November 2, 2005 (306) at 1945 to December 19, 2005 (353) @1530
Sampling Frequency: sonic every 60 minutes, every 30 sec for all the others
Averaging and Output Interval: every 15 min
Program Name: fs045v1.dld (program signature: 65381)

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) - Q30804
    multiply by 1.12
5. mean soil P.A.R. +1.9 m (east) from snow fence (micromols/s/m2) - Q30800
    multiply by 1.10
6. mean Air P.A.R. @ 1.6 m (micromols/s/m2)
    Q30805 - multiply by 1.14 before January 3, 2005 @ 1708
    Q23199 - multiply by 1.49 after January 3, 2005 @ 1708
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. sample of battery voltage
    o1

Notes:
1. No data missing.
2. Adjusted time ahead by 42 seconds on December 19, 2005 (353) @ 1527
3. Swapped storage module SM4M on December 19, 2005 (353) @ 1535.
4. Sonic height is 102.3 cm from the soil surface.
5. Snow fence is snow free except for small patch of snow (l = 40 cm, w = 10cm, d = 6cm) on west side of fence.
6. P.A.R. at 3.8 m and 1.9 m appear in fine order and have recovered from previous site visit. Zeroed numbers likely from snow cover.

Filename :   hod05601.dat
Station: Howard Glacier Station
Date of Establishment: Nov 20, 1993 by Peter Doran
Author of this report: Thomas Nylen
File Period: January 17, 2005 (17) @ 1715 to November 05 (309) @ 1345
Sampling Frequency: wind every 4 sec others: every 30 sec
Averaging and Output Interval: every 15 minutes
Program name: hod045v1.dld (program signature: 9224)

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
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
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. Adjusted CR10X time ahead by 2 minute and 20 seconds on November 05 (309) @ 1342.
3. Checked input values on November 05 (309) @ 1344, everything looks good.

4. Check wind monitor on November 05 (309) @ 1349, a 10 degree clockwise adjustment was made.

5. Sonic depth measured on November 05 (309) @ 1350 is 99.6.

6. Stake height measured with board (1.2 cm) on November 05 (309) @ 1352 is 95.5, 95.5, 95.6, 95.7 cm.

7. Swapped out SM4M for another on November 05 (309) @ 1355

Filename :	hod05602.dat
Station:	Howard Glacier Station
Date of Establishment:	Nov 20, 1993 by Peter Doran
Author of this report:	Thomas Nylen
File Period:	November 05 (309) @ 1400 to January 2, 2006 (02) @ 1100
Sampling Frequency:	wind every 4 sec others: every 30 sec
Averaging and Output Interval:	every 15 minutes
Program name:	hod045v1.dld (program signature: 9224)

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
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
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. Adjusted CR10X time back by 1 minute and 07 seconds on January 2, 2006 (02) @ 1038.
3. Checked input values on January 2, 2006 (02) @ 1040, everything looks good.

4. Check wind monitor on January 2, 2006 (02) @ 1041, appears correct.
5. Sonic depth measured January 2, 2006 (02) @ 1038is 104.5.
6. Swapped.RH sensor at 1M on January 2, 2006 (02) @ 1043. Swapped RH sensor at 3M on January 2, 2006 (02) @ 1049.
7. Stake height measured on January 2, 2006 (02) @ 1050 @ 1352 is 112.8, 112.7, 113.3, 112.8 cm without board.
8. Power off on January 2, 2006 (02) @ 1101 to swapped out CR10X and 1 SM4M for another.
9. Station legs are beginning to melt out and need replacement.

Filename :   hod05603.dat
Station: Howard Glacier Station
Date of Establishment: Nov 20, 1993 by Peter Doran
Author of this report: Thomas Nylen
File Period: January 2, 2006 (02) @ 1115 to January 11, 2006 (11) @ 1530
Sampling Frequency: wind every 4 sec others: every 30 sec
Averaging and Output Interval: every 15 minutes
Program name: hod045v1.dld (program signature: 9224)

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
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
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. Adjusted CR10X time back by 13 seconds on January 11, 2006 (11) @ 1043.
3. Checked input values on J January 11, 2006 (11) @ 1045, everything looks good.

4. Sonic depth measured January 2, 2006 (02) @ 1038 is 109.6 cm.
5. Performed maintenance on station legs on January 11, 2006 (11) between 1050 and 1530. New legs installed in ice and station relocated 1 meter to the northeast. Sonic ranger offline during maintenance.
6. New sensor heights following station maintenance: lower temperature and RH are at 70cm; upper temperature and RH are at 220 cm; shortwave radiation is located at 220 cm above the ice surface. New sonic height is approximately 84.3 cm above uneven ice surface.
7. Wind alignment checked on January 11, 2006 (11) @ 1528 and is correct.
8. Stake height measured on January 11, 2006 (11) @ 1535: 114.6, 113.7, 114.0, 114.5 cm without board.
9. Swapped out SM4M for another on January 11, 2006 (11) @ 1533.
10. Need extra cable length for sonic ranger.

Filename :   hod05604.dat
Station: Howard Glacier Station
Date of Establishment: Nov 20, 1993 by Peter Doran
Author of this report: Thomas Nylen
File Period: January 11, 2006 (11) @ 1545 to January 16, 2006 (16) @ 1515
Sampling Frequency: wind every 4 sec others: every 30 sec
Averaging and Output Interval: every 15 minutes
Program name: hod045v1.dld (program signature: 9224)

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
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
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. Checked CR10X time on January 16, 2006 (16) @ 1517. Time is correct.
3. Checked input values on January 16, 2006 (16) @ 1518, everything looks good.

4. Wind alignment checked on January 16, 2006 (16) @ 1520. Alignment is correct
5. Sonic depth measured on January 16, 2006 (16) @ 1517 is 84.0 cm.
6. Swapped out SM4M for another on January 16, 2006 (16) @ 1518.

Filename :   hod05605.dat
Station: Howard Glacier Station
Date of Establishment: Nov 20, 1993 by Peter Doran
Author of this report: Thomas Nylen
File Period: January 16, 2006 (16) @ 1530 to February 1, 2006 (32) @ 1030
Sampling Frequency: wind every 4 sec others: every 30 sec
Averaging and Output Interval: every 15 minutes
Program name: hod045v1.dld (program signature: 9224)

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
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
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. Checked CR10X time on February 1, 2006 (32) @ 1036. Time is correct.

3. Checked input values on February 1, 2006 (32) @ 1038. RH appears to be malfunctioning. All other sensors look good.
4. Wind alignment checked on February 1, 2006 (32) @ 1040. Alignment is correct
5. Swapped out SM4M for another on February 1, 2006 (32) @ 1040.

Filename: hoe05601.dat
Station: Lake Hoare met station
Date of Establishment: Dec 1, 1993 by Peter Doran
Author of this report: Hassan Basagic
File Period: January 28, 2005 (28) @ 1600 to October 29, 2005 (302) @ 2000
Sampling Frequency: wind speed every 4 sec; other every 30 sec
Averaging and Output Interval: every 15 minutes
Program Name: hoe023v1 (Program signature: 10675)

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
6. mean solar flux coming down (W/m2) – PY25306
     ok
7. mean solar flux going up (W/m2) – PY27937
     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
     divide by 200, multiply by 235.84
15. sample station barometric pressure (mbar)
     ok
16. mean temperature difference 1-3 m ©
     Multiply by -1
17. sample of battery voltage
     o1

*Notes:
1. No missing data.
2. Adjusted time ahead 50 seconds on October 29, 2005 (302) @ 1956
3. Check wind direction on October 29, 2005 (302) @ 1953, pointing north
4. Replaced 1 SM4M storage modules with 1 SM4M on October 29, 2005 (302) @ 2003

Filename: hoe05602.dat
Station: Lake Hoare met station
Date of Establishment: Dec 1, 1993 by Peter Doran
Author of this report: Hassan Basagic
File Period: October 29, 2005 (302) @ 2015 to December 02, 2005 (336) @ 1115
Sampling Frequency: wind speed every 4 sec; other every 30 sec
Averaging and Output Interval: every 15 minutes
Program Name: hoe023v1 (Program signature: 10675)

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
6. mean solar flux coming down (W/m2) – PY25306
        ok
7. mean solar flux going up (W/m2) – PY27937
        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
        Before December 02, 2005 (336) @ 1015 (Q28265) divide by 200, multiply by 235.84
        After December 02, 2005 (336) @ 1015 (Q20275) divide by 200, multiply by 277.79
15. sample station barometric pressure (mbar)
        ok
16. mean temperature difference 1-3 m ©
        Multiply by -1
17. sample of battery voltage
        o1

 *Notes:
1. Adjusted time ahead 37 seconds on December 02, 2005 (336) @ 0945
2. Check wind direction on December 02, 2005 (336) @ 0955, pointing north
3. Swap RH sensor at December 02, 2005 (336) @ 1002.
4. Swap incoming pyranometer, old # PY25306 with new # PY28370 at 1025
5. Swap outgoing pyranometer, old # PY27937 with new # PY40423 at 1033
6. Swap quantum, old # Q28265 with new # Q20275 at 1013
7. Replacement of wind monitor at 1055
8. Power off for replacement of 1 SM4M storage modules and CRX10 datalogger with 1 SM4M and CRX10 datalogger on December 02, 2005 (336) 1115

9. Program HOE023v1 signature mismatch, previous #10675, current # 44735

Filename: hoe05603.dat
Station: Lake Hoare met station
Date of Establishment: Dec 1, 1993 by Peter Doran
Author of this report: Hassan Basagic
File Period: December 02, 2005 (336) @ 1130 to December 29, 2005 (363) @ 1830
Sampling Frequency: wind speed every 4 sec; other every 30 sec
Averaging and Output Interval: every 15 minutes
Program Name: hoe023v1 (Program signature: 10675)

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
6. mean solar flux coming down (W/m2) – PY25306
   ok
7. mean solar flux going up (W/m2) – PY27937
   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
    Before December 02, 2005 (336) @ 1015 (Q28265) divide by 200, multiply by 235.84
    After December 02, 2005 (336) @ 1015 (Q20275) divide by 200, multiply by 277.79
15. sample station barometric pressure (mbar)
    ok
16. mean temperature difference 1-3 m ©
    Multiply by -1
17. sample of battery voltage
    o1

*Notes:
1. No missing data. File contains incorrect data lines 1 – 91. These data should be deleted.
2. Adjusted time back 10 seconds on December 29, 2005 (363) @ 1812.
3. Check input values on December 29, 2005 (363) @ 1813, all appear correct.
4. Check wind direction on December 29, 2005 (363) @ 1822, pointing north.
5. Swapped 1 SM4M storage modules with 1 SM4M on December 29, 2005 (363) @ 1830.

Filename: lhp05601.dat
Station: Lake Hoare precipitation station
Date of Establishment: January 26, 2002 @ 1545 by Thomas Nylen
Author of this report: Thomas Nylen
File Period: January 28, 2005 (28) @ 1615 to October 29, 2005 (302) @ 2000
Sampling Frequency: every 30 sec
Averaging and Output Interval: every 15 minutes
Program Name: lhp023v2.dld (Program signature: 47297)

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. Adjusted time on CR10X ahead 7 minutes on October 29, 2005 (302) @ 2003.
3. Checked input values on October 29, 2005 (302) @ 2004, everything looks good
4. Replaced 1 SM 4M storage modules with 1 SM4M on October 29, 2005 (302) @ 2006.

Filename: lhp05602.dat
Station: Lake Hoare precipitation station
Date of Establishment: January 26, 2002 @ 1545 by Thomas Nylen
Author of this report: Thomas Nylen
File Period: October 29, 2005 (302) @ 2015 to December 2, 2005 (336) @ 1115
Sampling Frequency: every 30 sec
Averaging and Output Interval: every 15 minutes
Program Name: lhp023v2.dld (Program signature: 47297)

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. Adjusted time on CR10X ahead 20 seconds on December 2, 2005 (336) @ 1114.
3. Checked input values on December 2, 2005 (336) @ 1115, everything looks good
4. Power off on December 2, 2005 (336) @ 1115 to swap CR10X and replaced 1 SM4M storage modules with another SM4M.

Filename: lhp05603.dat
Station: Lake Hoare precipitation station
Date of Establishment: January 26, 2002 @ 1545 by Thomas Nylen
Author of this report: Thomas Nylen
File Period: December 2, 2005 (336) @ 1130 to January 6, 2006 (06) @1430
Sampling Frequency: every 30 sec
Averaging and Output Interval: every 15 minutes
Program Name: lhp023v2.dld (Program signature: 47297)

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. Adjusted time on CR10X back 10 seconds on January 6, 2006 (06) @1442
3. Checked input values on January 6, 2006 (06) @1440, everything looks good
4. Replaced 1 SM 4M storage modules with 1 SM4M on January 6, 2006 (06) @1443

Filename: tar05601.dat
Station: Taylor Glacier Station
Date of Establishment: 1994 by Peter Doran
Author of this report: Thomas Nylen
File Period: January 19, 2005 (19) @ 1200 to November 7, 2005 (311) at 1330
Sampling Frequency: depth every 60 minutes, wind every 4 secs.; others: every 30 secs.
Averaging and Output Interval: every 15 minutes
Program name: tar045v1 (program signature: 26200)

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
6. mean solar flux coming down (W/m2) - 30884F3
    divide by 100; multiply by 118.76
7. mean solar flux going up (W/m2) - 32057F3
    divide by 100; multiply by 111.86
8. mean horizontal wind speed (m/s)
    ok
9. resultant mean wind speed (m/s)
    o1
10. resultant mean wind direction (degrees from north)
    flag
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=-106.57,n1=241.60,n2=-517.58,n3=700.30,n4=-556.87,n5=257.01,n6=-63.57, n7=6.54
16. mean air temp @ 1m (C) from 107 Temp. Probe
    rclow
17. mean RH at 1m (%) from Vaisala HMP45C Probe
    ok
18. surface temperature (C)
    ok
19. sample depth from sensor to surface (cm)
    Measured depth (0.899) + Value) * 100
20. sample of battery voltage
    o1

*Notes:
1. No missing data
2. Time adjusted ahead 1 minute 11 seconds on November 7, 2005 (311) at 1330
3. Input values checked on November 7, 2005 (311) at @ 1335, everything looked good.

4. Check wind alignment on November 7, 2005 (311) @ 1158, looks good.
5. Sonic height is 116.9 cm from surface.
6. Ice stake height using board (1.2 cm) are 108.9, 108.8, 108.5, 108.6 cm.
7. Replaced (1) SM4M with another on November 7, 2005 (311).
8. All 4 new ice temperatures stopped operating at different times over the winter. The older ice temperature @ 20cm is operating properly. Check wiring and voltages next site visit.

Filename: tar05602.dat
Station: Taylor Glacier Station
Date of Establishment: 1994 by Peter Doran
Author of this report: Thomas Nylen
File Period: November 7, 2005 (311) at 1345 to January 17, 2006 (17) @ 1530
Sampling Frequency: depth every 60 minutes, wind every 4 secs.; others: every 30 secs.
Averaging and Output Interval: every 15 minutes
Program name: tar045v1 (program signature: 26200)

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
6. mean solar flux coming down (W/m2) –
        Before January 17, 2006 (17) @ 1445 (30884F3) divide by 100; multiply by 118.76
        After January 17, 2006 (17) @ 1445 (33733F3) divide by 100; multiply by 117.23
7. mean solar flux going up (W/m2) - 32057F3
        Before January 17, 2006 (17) @ 1515 (32057F3) divide by 100; multiply by 111.86
        After January 17, 2006 (17) @ 1515 (31435F3) divide by 100; multiply by 126.58
8. mean horizontal wind speed (m/s)
        ok
9. resultant mean wind speed (m/s)
        o1
10. resultant mean wind direction (degrees from north)
        flag
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=-106.57,n1=241.60,n2=-517.58,n3=700.30,n4=-556.87,n5=257.01,n6=-63.57, n7=6.54
16. mean air temp @ 1m (C) from 107 Temp. Probe
        rclow
17. mean RH at 1m (%) from Vaisala HMP45C Probe
        ok
18. surface temperature (C)
        ok
19. sample depth from sensor to surface (cm)
        Measured depth (0.899) + Value) * 100
20. sample of battery voltage
        o1

*Notes:
1. No missing data

2. Time adjusted ahead 10 seconds on January 17, 2006 (17) at 1400
3. Input values checked on January 17, 2006 (17) at 1402, everything looked good.
4. Check wind alignment on January 17, 2006 (17) at 1408, looks correct.
5. Swapped RH sensor at 1m on January 17, 2006 (17) at 1414.
6. Swapped upfacing (old #30884F3; new #33733F3) and downfacing (old #32057F3; new #31435F3) pyranometers on @ 1442 and 1508 respectively.
7. Replaced (1) SM4M with another on January 17, 2006 (17) at 1530.
8. Station legs will require maintenance next season (2006/07).

Filename: vaa05601.dat
Station: Lake Vanda met station
Date of Establishment: November 24, 1994 by Peter Doran, rebuilt
Author of this report: Hassan Basagic
File Period: January 15, 2005 (15) @ 1015 to December 16, 2005 (350) @ 1200
Sampling Frequency: wind every 4 secs.; sonic every 3600 secs.; other every 30 secs.
Averaging and Output Interval: every 15 min
Program Name: vaa045v1 (3008)

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
6. mean solar flux coming down (W/m2) – PY18400
        ok
7. mean solar flux going up (W/m2) - PY18657
        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) – Q19469
        For data before December 16, 2005 (350) @ 1150, divide by 200, multiply by 310.04
        For data after December 16, 2005 (350) @ 1150, divide by 200, multiply by 433.31
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. surface height change (cm)
        Measured depth (0.648) + Value) * 100
19. sample of battery voltage
        o1

notes:
1. No missing data.
2. Adjusted datalogger clock back by 57 seconds on December 16, 2005 (350) @ 1124
3. Checked input values on December 16, 2005 (350) @ 1125, everything looks good.
4. Checked wind monitor alignment on December 16, 2005 (350) @ 1130, pointing north

5. Sonic sensor depth is 64.4 cm.
6. Swapped RH sensor on December 16, 2005 (350) @ 1136.
7. Swapped upward facing pyranometer on December 16, 2005 (350) @ 1207. Old sensor # PY18400 with new sensor #PY28169. The upward pyranometer needs new lock screw.
8. Swapped downward facing pyranometer on December 16, 2005 (350) @ 1215. Old sensor # PY18657 with new sensor #PY23277.
9. Swapped quantum PAR on December 16, 2005 (350) @ 1150. Old sensor #Q19469 with new sensor #Q29765.
10. Swapped SM4M module for another December 16, 2005 (350) @ 1201.

Filename: vaa05602.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, 2005 (350) @ 1215 to January 12, 2006 (12) @ 1200
Sampling Frequency: wind every 4 secs.; sonic every 3600 secs.; other every 30 secs.
Averaging and Output Interval: every 15 min
Program Name: vaa045v1 (3008)

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
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 433.31
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. surface height change (cm)
    Measured depth (0.648) + Value) * 100
19. sample of battery voltage
    o1

notes:
1. No missing data.
2. Adjusted datalogger clock ahead 15 seconds on January 12, 2006 (12) @1154
3. Checked input values on January 12, 2006 (12) @1155, everything looks good.
4. Checked wind monitor alignment on January 12, 2006 (12) @1157, pointing north.
5. Sonic sensor depth is 65.0 cm on January 12, 2006 (12) @1159.
6. Swapped SM4M module for another January 12, 2006 (12) @1203.

7. Replaced 1 missing bolt on quantum PAR sensor baseplate.

Filename: via05601.dat
Station: Lake Vida met station
Date of Establishment: November 24, 1995 by Peter Doran
Author of this report: Hassan Basagic
File Period: January 15, 2005 (15) @ 1245 to December 16, 2005 (350) @ 1415
Sampling Frequency: wind every 4 secs.; ultrasonic every 3600 secs; others: every 30 secs.
Averaging and Output Interval: every 15 min
Program Name: via045v1 (program signature: 1749)

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
6. mean solar flux coming down (W/m2) – PY18656
        ok
7. mean solar flux going up (W/m2) – PY28347
        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) - Q28259
        For values prior December 16, 2005 (350) @ 1334 divide by 200, multiply by 227.42
        For values after December 16, 2005 (350) @ 1334 divide by 200, multiply by 368.74
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. surface height change (cm)
        (measurement + 0.53 cm)*100
19. sample of battery voltage
        o1

notes:
1.   No missing date
2.   Time adjusted + 6 minutes and 30 seconds on December 16, 2005 (350) @ 1307
3.   Checked input values on December 16, 2005 (350) @ 1310, everything looks good.
4.   Checked wind alignment on December 16, 2005 (350) @ 1313, pointing north.

5. Checked sonic sensor depth = 52.7 cm.
6. Swapped old quantum P.A.R. #Q28259 for new sensor #Q30803 on December 16, 2005 (350) @ 1334.
7. Swapped upward facing pyranometer, old # PY18656 with new # PY23250 on December 16, 2005 (350) @ 1346. Swap of downward facing pyranometer, old # PY28347 with new # PY20561 on December 16, 2005 (350) @ 1354.
8. Swapped out wind sensor on December 16, 2005 (350) @ 1420.
9. Swapped out module with 1 SM4M on December 16, 2005 (350) @ 1430.
10. Program signature mismatch: old 1749, new 33701; same program name.

Filename:	via05602.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, 2005 (350) @ 1430 to January 12, 2006 (12) @ 1100
Sampling Frequency:	wind every 4 secs.; ultrasonic every 3600 secs; others: every 30 secs.
Averaging and Output Interval:	every 15 min
Program Name:	via045v1 (program signature: 33701)

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
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 368.74
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. surface height change (cm)
    (measurement + 0.53 cm)*100
19. sample of battery voltage
    o1

notes:
1. No missing date
2. Time on CR10x is correct on January 12, 2006 (12) @ 1056.
3. Checked input values on January 12, 2006 (12) @ 1058, everything looks good.
4. Checked wind alignment on January 12, 2006 (12) @ 1199, pointing north.
5. Checked sonic sensor depth = 52.0 cm..
6. Swapped out module with 1 SM4M on January 12, 2006 (12) @ 1101.