

Documentation and Task Lists for 2004/2005

File description and task list for 2004-05 LTER Met Files:

o1=omit from level 1,

ok= no changes to get to level 1,

rclo= 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.
- 2) Move Upper Howard Glacier met station to Blood Falls.
- 3) Install IRT sensors at Howard and Canada glaciers

Filename: ben04501.dat
Station: Beacon Valley met station
Date of Establishment: November 27, 2000 by Susan Kaspari, Thomas Nylen and Adrian Green
Author of this report: Thomas Nylen
File Period: January 28, 2004 (28) @ 1415 to January 26, 2005 (26) @ 1230
Sampling Frequency: wind every 4 secs.; others: every 30 secs.
Averaging and Output Interval: every 15 min
Program Name: ben034v1 (Program 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) Adjusted clock back 52 seconds on January 26, 2005 (26) @ 1213
- 3) Check input values on January 26, 2005 (26) @ 1214, everything looked good
- 4) Check wind direction on January 26, 2005 (26) @ 1230, direction of monitor pointing north.
- 5) Swapped out Up-facing pyranometer (PY23271) with recalibrated probe (PY20567) at January 26, 2005 (26) @ 1223. Swapped out down-facing pyranometer (PY23277) with recalibrated probe (PY23275) at January

- 26, 2005 (26) @ 1218. Swapped out Quantum (Q30806) with recalibrated probe (Q17248) at January 26, 2005 (26) @ 1233. Swapped out RH probe with recalibrated probe at January 26, 2005 (26) @ 1237.
- 6) Swapped out wind monitor on January 26, 2005 (26) @ 1315.
 - 7) Swapped out old datalogger for recalibrated datalogger at January 26, 2005 (26) @ 1245. Powered down the datalogger to replace it, and load the new program from the storage module. The time was wrong initially, and the right time was set immediately after turning on the new datalogger.
 - 8) Replaced one SM4M storage modules for another on January 26, 2005 (26) @ 1241

Filename: boy04051.dat
Station: Lake Bonney met station
Date of Establishment: November 24, 1993 by Peter Doran
Author of this report: Thomas Nylen
File Period: January 24, 2004 (24) @ 1315 to November 23, 2004 (329) @ 1400
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: boy023v1 (signature: 51830)

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) – 29787F3
divide by 250; multiple by 256.41
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) – 31512F3
divide by 250; multiple by 283.29
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)
rclo
24. mean soil temperature @ 5 cm in soil (C)
rclo
25. mean soil temperature @ 10 cm in soil (C)
rclo
26. sample depth from sensor to surface (cm)
Measured depth (0.622) + Value) * 100
27. sample precipitation (mm)
ok
28. sample of battery voltage
ol

Note:

1. No Missing data
2. Adjusted time ahead by 4 minutes and 50 secs on November 23, 2004 @ 1401
3. Checked values at on November 23, 2004 @ 1401. Pyrgeometers values are questionable. Close inspection of both show the glass domes are gone due to high winds and blowing sediment during the winter.
4. Check wind alignment on November 23, 2004 @ 1404. No changes
5. Replaced modules 1 SM4M with 1 SM4M on November 23, 2004 @ 1415.
6. Loaded new program, Boy045v1, on November 23, 2004 @ 1415. Added if statement to the sonic measurement program sequence to not measure the sensor when the voltage is below 11.5 V.
7. Sonic height is 62.2 cm from the surface.
8. Up-facing pyrgeometer was damaged on 6/21/04 @ 1:30 and down-facing pyrgeometer was damaged on 8/25/04 5:00,
9. Other wind damage: back of solar panel is damaged, but the panel still appears to be working. The prop on the wind monitor is dinged, but is still working. Needs replacing.

Filename: boy04052dat
Station: Lake Bonney met station
Date of Establishment: November 24, 1993 by Peter Doran
Author of this report: Thomas Nylén
File Period: November 23, 2004 (329) @ 1415
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.
ol
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 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)
ol
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) – 29787F3
divide by 250; multiple by 256.41
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) – 31512F3
divide by 250; multiple by 283.29
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 ©
rclw
- 24. mean soil temperature @ 5 cm in soil ©
rclw
- 25. mean soil temperature @ 10 cm in soil ©
rclw
- 26. sample depth from sensor to surface (cm)
Measured depth (0.622) + Value) * 100
- 27. sample precipitation (mm)
ok
- 28. sample of battery voltage
ol

Note:

- 1. One line of data
- 2. Checked values at on November 23, 2004 @ 1401. Pyrgeometers values are questionable. Close inspection of both show the glass domes are gone due to high winds and blowing sediment during the winter.
- 3. Check wind alignment on November 23, 2004 @ 1404. No changes
- 4. Replaced modules 1 SM4M with 1 SM4M on November 23, 2004 @ 1415.
- 5. Loaded new program, Boy045v1, on November 23, 2004 @ 1415. Added if statement to the sonic measurement program sequence to not measure the sensor when the voltage is below 11.5 V.

Filename: boy04053.dat
Station: Lake Bonney met station
Date of Establishment: November 24, 1993 by Peter Doran
Author of this report: Thomas Nylen
File Period: November 23, 2004 (329) @ 1430 to December 29, 2004 (364) @ 1930
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)
before December 29, 2004 @ 1804 - 29787F3 - divide by 250; multiple by 256.41
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)
before December 29, 2004 @ 1752 – 31512F3 - divide by 250; multiple by 283.29
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)
rclo
24. mean soil temperature @ 5 cm in soil (C)
rclo
25. mean soil temperature @ 10 cm in soil (C)
rclo
26. sample depth from sensor to surface (cm)
Measured depth (0.622) + Value) * 100
27. sample precipitation (mm)
ok
28. sample of battery voltage
ol

Note:

1. No Missing data
2. Adjusted time ahead by 27 secs on December 29, 2004 @ 1736
3. Checked values at on December 29, 2004 @ 1734. Pyrgeometers values are questionable.
4. Check wind alignment on December 29, 2004 @ 1737. No changes
5. Replaced modules 1 SM4M with 1 SM4M on November 23, 2004 @ 1415.
6. Replaced upward (old # 18655, new # PY28170) on December 29, 2004 @ 1908 and downward pyranometer (old # PY20561, new # PY18395) on December 29, 2004 @ 1915
7. Replaced upward (old # 29787F3, new # 29786F3) on December 29, 2004 @ 1804 and downward pyrgeometer (old # 31512F3, new #32348F3) on December 29, 2004 @ 1752
8. Replaced wind monitor on December 29, 2004 @ 1815
9. Sonic height is 62.0 cm from the surface.

Filename: brh04051.dat
Station: Lake Brownworth met station
Date of Establishment: November 13, 1996 by Peter Doran and D.J. Osborne
Author of this report: Thomas Nylen
File Period: January 7, 2004 (7) @ 1630 to December 1, 2004 (336) @ 1300
Sampling Frequency: wind speed every 4 sec; sonic every 60 minutes; other every 30 sec
Averaging and Output Interval: every 15 min
Program Name: brh034v1 (program signature: 54401)

1. array I.D.
ol
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) – PY23275
ok
8. mean horizontal wind speed (m/s)
ok
9. resultant mean wind speed (m/s)
ol
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 226.18
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
ol

Notes:

1. No missing data
2. Adjusted clock ahead 1 minute and 50 seconds on December 1, 2004 (336) @ 1234
3. Check input values on December 1, 2004 (336) @ 1300, values look good.
4. Check wind alignment on December 1, 2004 (336) @ 1300, no changes

5. Swapped out module one (1) SM4M on December 1, 2004 (336) @ 1315 for another SM4M
6. Loaded new program, brh045v1, on December 1, 2004 (336) @ 1315.
7. The sonic depth is 58.6 cm from the surface.
8. Swapped out Up-facing pyranometer (PY28169) with recalibrated probe (PY33985) at December 1, 2004 (336) @ 1258. Swapped out down-facing pyranometer (PY23275) with recalibrated probe (PY23276) at December 1, 2004 (336) @ 1250. Swapped out Quantum (Q30803) with recalibrated probe (Q33906) at December 1, 2004 (336) @ 1308. Swapped out RH probe with recalibrated probe at December 1, 2004 (336) @ 1248. The RH was disconnected for a few minutes because the seal on the new RH probe was broken, and the seal from the old was used instead.
9. Swapped out old datalogger for recalibrated datalogger at December 1, 2004 (336) @ 1315. Powered down the datalogger to replace it, and load the new program from the storage module. The time was wrong initially, and the right time was set immediately after turning on the new datalogger.

Filename: brh04052.dat
Station: Lake Brownworth met station
Date of Establishment: November 13, 1996 by Peter Doran and D.J. Osborne
Author of this report: Thomas Nylen
File Period: December 1, 2004 (336) @ 1315
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.
ol
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)
ol
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
ol

Notes:

1. No missing data
2. Adjusted clock ahead 1 day and 8 seconds on January 15, 2005 (15) @ 1349
3. Check input values on January 15, 2005 (15) @ 1350, values look good.
4. Check wind alignment on January 15, 2005 (15) @ 1353, no changes.

5. Sonic sensor depth on January 15, 2005 (15) @ 1353 is 55.2 cm. There is snow below the sonic ranger
6. Swapped out module one (1) SM4M on January 15, 2005 (15) @ 1400 for another SM4M

Filename: brh04053.dat
Station: Lake Brownworth met station
Date of Establishment: November 13, 1996 by Peter Doran and D.J. Osborne
Author of this report: Thomas Nylen
File Period: December 1, 2004 (336) @ 1330 to January 15, 2005 (15) @ 1400
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.
ol
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)
ol
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
ol

Notes:

1. No missing data
2. Adjusted clock ahead 1 day and 8 seconds on January 15, 2005 (15) @ 1349
3. Check input values on January 15, 2005 (15) @ 1350, values look good.
4. Check wind alignment on January 15, 2005 (15) @ 1353, no changes.

5. Sonic sensor depth on January 15, 2005 (15) @ 1353 is 55.2 cm. There is snow below the sonic ranger
6. Swapped out module one (1) SM4M on January 15, 2005 (15) @ 1400 for another SM4M

Filename: bsn04051.dat
Station: Lake Bonney Snow Fence
Date of Establishment: January 2001 by Thomas Nylen
Author of this report: Thomas Nylen
File Period: January 24, 2004 (24) @ 1200 to November 15, 2004 (320) @ 1430
Sampling Frequency: sonic every 60 minutes, every 30 sec for all the others
Averaging and Output Interval: every 15 min
Program Name: bsn023v1v1.dld (Program Signature: 63043)

1. array I.D.
ol
2. day
ok
3. time
ok
4. mean soil P.A.R. +3.6 m (east) from snow fence (micromols/s/m²) – Q30801
divide by 200, multiply by 217.27
5. mean soil P.A.R. +1.8 m (east) from snow fence (micromols/s/m²) – Q30802
divide by 200, multiply by 222.23
6. mean Air P.A.R. @ 1.6 m (micromols/s/m²) – Q20266
divide by 200, multiply by 275.02
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
ol

Notes:

1. No data missing
2. CR10X time adjusted back 9 minutes and 17 seconds on November 15, 2004 (320) @ 1430
3. Checked input values on November 15, 2004 (320) @ 1430
4. Loaded new program, Bsn045v1 on November 15, 2004 (320) @ 1445.
5. Sonic sensor height, 111.9 cm.
6. Swapped Soil Quantum @ 1m from fence (Q30802) with recalibrated probe (Q23210) at November 15, 2004 (320) @ 1411. Swapped Soil Quantum @ 2m from fence (Q30801) with recalibrated probe (Q20526(8?)) at November 15, 2004 (320) @ 1416. Swapped Air Quantum (Q20268) with recalibrated probe (Q29775) at November 15, 2004 (320) @ 1425.
7. Swapped out one SM4M for another on December 1, 2004 (336) @ 1432.
8. Swapped out old datalogger for recalibrated datalogger at November 15, 2004 (320) @ 1445. Powered down the datalogger to replace it, and load the new program from the storage module. A if statement was added to the program which does not turn on the sonic ranger if the voltage drops below 11.5V.
9. Fence was damaged during the storm on August 25. The sonic was leaning over when visited in November.

Filename: bsn04052.dat
Station: Lake Bonney Snow Fence
Date of Establishment: January 2001 by Thomas Nylén
Author of this report: Thomas Nylén
File Period: November 15, 2004 (320) @ 1445
Sampling Frequency: sonic every 60 minutes, every 30 sec for all the others
Averaging and Output Interval: every 15 min
Program Name: bsn045v1v1.dld (Program Signature: 1133)

1. array I.D.
ol
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
ol

Notes:

1. No data missing

Filename: bsn04053.dat
Station: Lake Bonney Snow Fence
Date of Establishment: January 2001 by Thomas Nylen
Author of this report: Thomas Nylen
File Period: November 15, 2004 (320) @ 1445 to January 24, 2005 (24) @ 1515
Sampling Frequency: sonic every 60 minutes, every 30 sec for all the others
Averaging and Output Interval: every 15 min
Program Name: bsn045v1v1.dld (Program Signature: 1133)

1. array I.D.
ol
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
ol

Notes:

1. No data missing
2. First line a repeat of the one line of data for bsn04052.dat. Ignore first line of this file (bsn04053.dat).
3. CR10X time adjusted ahead 1 minutes and 23 seconds on January 24, 2005 (24) @ 1515
4. Checked input values on January 24, 2005 (24) @ 1515
5. Sonic sensor height, 109.4 cm.
6. Swapped out one SM4M for another on January 24, 2005 (24) @ 1523.

Filename: caa04051.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 Nylén
File Period: January 29, 2004 (29) @ 1500
Sampling Frequency: wind speed every 4 sec; all other every 30 sec
Averaging and Output Interval: every 15 minutes
Program name: caa023v1 (program signature: 3341)

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*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)
15. ice temperature – original depth was 100.0 cm from the surface (original depth, mV*0.01)
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. One line in file, which is duplicate of the last line in the previous file. Ignore.

Filename: caa04052.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 29, 2004 (29) @ 1515 to November 6, 2004 (311) @ 1215
Sampling Frequency: wind speed every 4 sec; all other every 30 sec
Averaging and Output Interval: every 15 minutes
Program name: caa023v1 (program signature: 7862)

1. array I.D.
ol
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)
ol
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*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)
15. ice temperature – original depth was 100.0 cm from the surface (original depth, mV*0.01)
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
ol

*Notes:

1. No missing data
2. Time on CR10X adjusted back 5 minutes and 45 seconds on November 6, 2004 @ 1217
3. Input values checked on November 6, 2004 @ 1217
4. Wind monitor checked on November 6, 2004 @ 1215, no changes
5. Stake Height measurements: 78.2, 78.3, 78.4, 78.4 + board
6. Replaced one SM4M with another on November 6, 2004 @ 1218

Filename: caa04053.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: November 6, 2004 (311) @ 1215 to November 10, 2004 (315) @ 1430
Sampling Frequency: wind speed every 4 sec; all other every 30 sec
Averaging and Output Interval: every 15 minutes
Program name: caa034v1 (program signature: 6346)

1. array I.D.
ol
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)
ol
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*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)
15. ice temperature – original depth was 100.0 cm from the surface (original depth, mV*0.01)
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
ol

*Notes:

1. No missing data
2. Time on CR10X adjusted ahead 11 seconds on November 10, 2004 @ 1520
3. Input values checked on November 10, 2004 @ 1520, values look good
4. New program, Caa045v1 installed on November 10, 2004 @ 1530. Powered down station to load new program from new storage module.
5. Installed multiplexer on November 10, 2004 @ 1530. Hooked up new ice probes, though they will not be installed into the ice until tomorrow.
6. Replaced batteries and solar panel (30W). Lost data on November 10, 2004 between 1530 and 1600.

Filename: caa04054.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: November 10, 2004 (315) @ 1445 to November 10, 2004 (315) @ 1515
Sampling Frequency: wind speed every 4 sec; all other every 30 sec
Averaging and Output Interval: every 15 minutes
Program name: caa034v1 (program signature: 6346)

1. array I.D.
ol
2. day
ok
3. time
ok
4. mean air temp. (C)
rclow
5. mean rh @ (%)
ok
6. mean solar flux coming down (W/m2) – PY20562
ok
7. mean solar flux going up (W/m2) – PY23269
ok
8. mean horizontal wind speed (m/s)
ok
9. resultant mean wind speed (m/s)
ol
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*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
15. ice temperature – original depth was 100.0 cm from the surface (original depth, mV*0.01)
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. IRT
bad
17. sample battery voltage
ol

*Notes:

1. No missing data
2. Time on CR10X adjusted ahead 11 seconds on November 10, 2004 @ 1520
3. Input values checked on November 10, 2004 @ 1520, values look good
4. Swapped out Up-facing pyranometer (PY20562) with recalibrated probe (PY41099) at November 10, 2004 @ ~1600. Swapped out down-facing pyranometer (PY23269) with recalibrated probe (PY40424) at November 10, 2004 @ ~1600. Swapped out RH probe with recalibrated probe at November 10, 2004 @ ~1610.

5. New program, Caa045v1 installed on November 10, 2004 @ 1530. Powered down station to load new program from new storage module. The program, Caa034v1 was mistakenly installed when the station was powered down. No IRT is hooked up.
6. Installed multiplexer on November 10, 2004 @ 1530. Hooked up new ice probes, though they will not be installed into the ice until tomorrow.
7. Replaced batteries and solar panel (30W). Lost data on on November 10, 2004 between 1530 and 1600.

Filename: caa04055.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 Nylén
File Period: November 10, 2004 (315) @ 1530
Sampling Frequency: wind speed every 4 sec; all other every 30 sec
Averaging and Output Interval: every 15 minutes
Program name: caa034v1 (program signature: 6346)

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) – PY20562
ok
7. mean solar flux going up (W/m2) – PY23269
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*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)
15. ice temperature – original depth was 100.0 cm from the surface (original depth, mV*0.01)
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. IRT
bad
17. sample battery voltage
o1

*Notes:

1. New program, Caa045v1 installed on November 10, 2004 @ 1530. Powered down station to load new program from new storage module. The program, Caa034v1 was mistakenly installed when the station was powered down. No IRT is hooked up.

Filename: caa04056.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: November 10, 2004 (315) @ 1530 to November 10, 2004 (315) @ 1545
Sampling Frequency: wind speed every 4 sec; all other every 30 sec
Averaging and Output Interval: every 15 minutes
Program name: caa045v1 (program signature: 19116)

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*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)
15. ice temperature – original depth was 100.0 cm from the surface (original depth, mV*0.01)
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*0.01)
17. ice temperature – original depth was 50.0 cm from the surface (mV*0.01)
18. ice temperature – original depth was 75.0 cm from the surface (mV*0.01)
19. ice temperature – original depth was 100.0 cm from the surface (mV*0.01)
20. sample battery voltage
o1

*Notes:

1. First line a repeat of the last line of the previous file. Ignore first line./

2. New ice probe at 50 cm below the surface does not have mylar.
3. Ice probes (old and new) are not working. Problem with the multiplexer

Filename: caa04057.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 Nylén
File Period: November 10, 2004 (315) @ 1600 to November 11, 2004 (316) @ 1715
Sampling Frequency: wind speed every 4 sec; all other every 30 sec
Averaging and Output Interval: every 15 minutes
Program name: caa045v1 (program signature: 19116)

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*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)
15. ice temperature – original depth was 100.0 cm from the surface (original depth, mV*0.01)
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*0.01)
bad
17. ice temperature – original depth was 50.0 cm from the surface (mV*0.01)
bad
18. ice temperature – original depth was 75.0 cm from the surface (mV*0.01)
bad
19. ice temperature – original depth was 100.0 cm from the surface (mV*0.01)
bad
20. sample battery voltage
o1

*Notes:

1. Ice probes (old and new) are not working. Problem with the multiplexer

Filename: caa04058.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 Nysten
File Period: November 11, 2004 (316) @ 1730
Sampling Frequency: wind speed every 4 sec; all other every 30 sec
Averaging and Output Interval: every 15 minutes
Program name: caa034v1 (program signature: 19116)

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*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)
15. ice temperature – original depth was 100.0 cm from the surface (original depth, mV*0.01)
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*0.01)
bad
17. ice temperature – original depth was 50.0 cm from the surface (mV*0.01)
bad
18. ice temperature – original depth was 75.0 cm from the surface (mV*0.01)
bad
19. ice temperature – original depth was 100.0 cm from the surface (mV*0.01)
bad
20. sample battery voltage
o1

*Notes:

1. Ice probes (old and new) are not working. Problem with the multiplexer

Filename: caa04059.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: November 11, 2004 (316) @ 1730 to November 28, 2004 (333) @ 1245
Sampling Frequency: wind speed every 4 sec; all other every 30 sec
Averaging and Output Interval: every 15 minutes
Program name: caa023v1 (program signature: 3341)

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*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)
15. ice temperature – original depth was 100.0 cm from the surface (original depth, mV*0.01)
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*0.01)
bad
17. ice temperature – original depth was 50.0 cm from the surface (mV*0.01)
bad
18. ice temperature – original depth was 75.0 cm from the surface (mV*0.01)
bad
19. ice temperature – original depth was 100.0 cm from the surface (mV*0.01)
bad
20. sample battery voltage
o1

*Notes:

1. Ice probes (old and new) are not working. Problem with the multiplexer

2. Switch power cables on November 28, 2004 @ 1246
3. New program loaded, Caa045v2.

Filename: caa040510.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: November 28, 2004 (333) @ 1245 to to November 29, 2004 (333) @ 1945
Sampling Frequency: wind speed every 4 sec; all other every 30 sec
Averaging and Output Interval: every 15 minutes
Program name: caa045v2 (program signature:)

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*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
15. ice temperature – original depth was 100.0 cm from the surface (original depth, mV*0.01)
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*0.01)
bad
17. ice temperature – original depth was 50.0 cm from the surface (mV*0.01)
bad
18. ice temperature – original depth was 75.0 cm from the surface (mV*0.01)
bad
19. ice temperature – original depth was 100.0 cm from the surface (mV*0.01)
bad
20. sample battery voltage
o1

*Notes:

1. Installed probes to multiplexer.

2. Loaded new program, caa045v3, on to November 28, 2004 (333) @ 2000. New program signature, 50316.

Filename: caa040511.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 Nylén
File Period: November 29, 2004 (333) @ 2000
Sampling Frequency: wind speed every 4 sec; all other every 30 sec
Averaging and Output Interval: every 15 minutes
Program name: caa045v3 (program signature: 50316)

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. sample battery voltage
o1

*Notes:

1. No missing data

Filename: caa040512.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: November 29, 2004 (333) @ 2000 to January 17, 2005 (17) @ 1745
Sampling Frequency: wind speed every 4 sec; all other every 30 sec
Averaging and Output Interval: every 15 minutes
Program name: caa045v3 (program signature: 50316)

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. sample battery voltage
o1

*Notes:

1. No missing data

Filename: caa040513.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 17, 2005 (17) @ 1800 to January 28, 2005 (28) @ 1230
Sampling Frequency: wind speed every 4 sec; all other every 30 sec
Averaging and Output Interval: every 15 minutes
Program name: caa045v3 (program signature: 50316)

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. sample battery voltage
o1

*Notes:

1. No missing data

2. Adjust CR10X ahead 39 seconds on January 27, 2005 (27) @ 1235
3. Checked input values on January 27, 2005 (27) @ 1235, everything looks good.
4. Checked wind monitor on January 27, 2005 (27) @ 1235. No changes
5. Replaced one (1) SM4M with one (1) SM4M on January 27, 2005 (27) @ 1240
6. Loaded new program, caa045v4, on January 27, 2005 (27) @ 1245 after installing new IRT probe. Turned off datalogger and turned back on to load new program. Add 2 batteries for IRT.
7. Stake height from top to snow surface with board is 80.5, 80.3, 80.4, 80.6 cm. No board used to measure surface.

Filename: coh04051.dat
Station: Commonwealth Glacier Station
Date of Establishment: Nov 22, 1993 by Peter Doran5
Author of this report: Thomas Nylen
File Period: January 19, 2004 (19) @ 1445 to November 9, 2004 (314)
Sampling Frequency: sonic every 60 minutes, wind every 4 secs.; other every 30 secs.
Averaging and Output Interval: every 15 minutes
Program name: coh034v1 (program signature: 31998)

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,n2=-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,n2=-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 1 minute and 26 seconds on November 9, 2004 (314) @ 1408
- 3. Checked input values on November 9, 2004 (314) @ 1408, everything looks good.
- 4. Checked wind monitor on November 9, 2004 (314) @ 1415. No changes
- 5. Replaced one (1) SM4M with one (1) SM4M on November 9, 2004 (314) @ 1430
- 6. Loaded new program, coh045v1, on November 9, 2004 @ 1430. Added if statement to the sonic measurement program sequence to not measure the sensor when the voltage is below 11.5 V. Lost about 30 seconds of data when new program was loaded.
- 7. Sonic sensor height was ???
- 8. Stake height from top to snow surface with board is 65.9, 65.8, 65.9, 66.0 cm. Surface is covered in snow.

Filename: coh04052.dat
Station: Commonwealth Glacier Station
Date of Establishment: Nov 22, 1993 by Peter Doran5
Author of this report: Thomas Nylen
File Period: November 9, 2004 (314) @ 1445 to January 11, 2005 (11) @ 1600
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,n2=-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,n2=-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
ol

*Notes:

1. No missing data
2. Adjust CR10X back 1 minute and 13 seconds on January 11, 2005 (11) @ 1554
3. Checked input values on January 11, 2005 (11) @ 1555, everything looks good.
4. Replaced one (1) SM4M with one (1) SM4M on January 11, 2005 (11) @ 1600
5. Sonic sensor height was 65.4
6. Stake height from top to snow surface without board 73.3, 73.5, 73.6, 73.3 cm. Surface is covered in snow.
7. Added 100 amp/hour battery to IRT

Filename: exe04051.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: Thomas Nylen
File Period: January 23, 2004 (23) @ 1000 to December 1, 2004 (336) @ 1530
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)
divide by 200, multiple by 289.45
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

notes:

1. Adjusted time on CR10X ahead by 2 minutes and 17 seconds on December 1, 2004 (336) @ 1540.
2. Checked input values on December 1, 2004 (336) @ 1541 everything working fine
3. Checked wind monitor on December 1, 2004 (336) @ 1543. No changes
4. Replaced one SM4M storage module on December 1, 2004 (336) @ 1541 with 1 SM4M
5. Soil probe @ 0cm was sitting on top of the soil. Repositioned probe just below the surface.

6. Wind damage: wind propeller needs replacing, back of solar panel abraded
7. Replace power cable

Filename: exe04052.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: Thomas Nylen
File Period: December 1, 2004 (336) @ 1545 to January 3, 2004 (3) @ 1345
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)
divide by 200, multiple by 289.45
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

notes:

1. Adjusted time on CR10X ahead by 37 seconds on January 3, 2005 (3) @ 1322.
2. Checked input values on January 3, 2005 (3) @ 1324 everything working fine
3. Checked wind monitor on January 3, 2005 (3) @ 1322. No changes.
4. Replaced Quantum sensor on January 3, 2005 (3) @ 1340, old serial # is Q17984 and the new is Q33674.

5. Replace power cable on January 3, 2005 (3) @ 1345. The station was powered down for a short while. The power was turned off again at 1355 to move the power to another location on the regulator.

Filename: exe04053.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: Thomas Nylen
File Period: January 3, 2004 (3) @ 1400 to January 3, 2004 @ 1430
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

notes:

1. Replaced wind monitor on January 3, 2005 (3) @ 1430
2. Replaced one SM4M storage module on January 3, 2005 (3) @ 1430 with 1 SM4M

Filename: frl04051.dat
Station: Lake Fryxell met station
Date of Establishment: Jan 6, 1994 by Peter Doran
Author of this report: Thomas Nylen
File Period: January 23, 2004 (23) @ 1115 to November 29, 2004 (334) @ 1630
Sampling Frequency: sonic every 60 minutes, wind every 4 sec; others: every 30 secs.
Averaging and Output Interval: every 15 minutes
Program name: frl023v1.dld (program signature: 49340)

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 +10 sec on November 29, 2004 (334) @ 1643
3. Checked input values on November 29, 2004 (334) @ 1645. Everything looks good.
4. Wind alignment checked on November 29, 2004 (334) @ 1649, no changes

5. Sonic height measured on November 29, 2004 (334) @ 1650 is 105.1 cm.
6. Module replaced with 1 SM4M on November 29, 2004 (334) @ 1645
7. New program loaded on November 29, 2004 (334) @ 1645. Instruction added to not turn on the sonic when then the battery voltage drops below 11.5V. New program signature is 9942.
8. Tighten guide wires on the main post and sonic ranger. Might have pulled the sonic down a bit.

Filename: frl04052dat
Station: Lake Fryxell met station
Date of Establishment: Jan 6, 1994 by Peter Doran
Author of this report: Thomas Nylén
File Period: November 29, 2004 (334) @ 1630
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

Filename: frl04053dat
Station: Lake Fryxell met station
Date of Establishment: Jan 6, 1994 by Peter Doran
Author of this report: Thomas Nylen
File Period: November 29, 2004 (334) @ 1630 to January 15, 2005 (15) @ 1500
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.
ol
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)
ol
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
ol

notes:

1. No missing data
2. Time adjusted +20 sec on January 15, 2005 (15) @ 1507
3. Checked input values on January 15, 2005 (15) @ 1503. Everything looks good.
4. Wind alignment checked on January 15, 2005 (15) @ 1512, no changes

5. Sonic height measured on January 15, 2005 (15) @ 1508 is 105.3 cm.
6. Module replaced with 1 SM4M on January 15, 2005 (15) @ 1510

Filename: fsn04051.dat
Station: Lake Fryxell Snow Fence
Date of Establishment: January 2001 by Thomas Nylen
Author of this report: Thomas Nylen
File Period: January 29, 2004 (29) @ 1015 to November 9, 2004 (314) @ 1630
Sampling Frequency: sonic every 60 minutes, every 30 sec for all the others
Averaging and Output Interval: every 15 min
Program Name: fs0231v1.dld (program signature: 5425)

1. array I.D.
ol
2. day
ok
3. time
ok
4. mean soil P.A.R. +3.8 m (east) from snow fence (micromols/s/m2) - Q30804
divide by 200, multiply by 223.73
5. mean soil P.A.R. +1.9 m (east) from snow fence (micromols/s/m2) - Q30800
divide by 200, multiply by 220.46
6. mean Air P.A.R. @ 1.6 m (micromols/s/m2) - Q30805
divide by 200, multiply by 228.68
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
ol

Notes:

1. No data missing
2. Adjusted datalogger time ahead +2 minutes and 40 seconds on November 9, 2004 (314) @ 1632
3. Sonic range height is 94.8
4. Swapped old datalogger for recalibrated CR10X on November 9, 2004 (314) @ 1645

Filename: fsn04052.dat
Station: Lake Fryxell Snow Fence
Date of Establishment: January 2001 by Thomas Nylen
Author of this report: Thomas Nylen
File Period: November 9, 2004 (314) @ 1645
Sampling Frequency: sonic every 60 minutes, every 30 sec for all the others
Averaging and Output Interval: every 15 min
Program Name: fs0231v1.dld (program signature: 5425)

1. array I.D.
ol
2. day
ok
3. time
ok
4. mean soil P.A.R. +3.8 m (east) from snow fence (micromols/s/m²) - Q30804
divide by 200, multiply by 223.73
5. mean soil P.A.R. +1.9 m (east) from snow fence (micromols/s/m²) - Q30800
divide by 200, multiply by 220.46
6. mean Air P.A.R. @ 1.6 m (micromols/s/m²) - Q30805
divide by 200, multiply by 228.68
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
ol

Notes:

1. One line of data
2. Swapped out SM4M for another on November 9, 2004 (314) @ 1645
3. Swapped old datalogger for recalibrated CR10X on November 9, 2004 (314) @ 1645
4. Loaded new program, Fs045v1 on November 9, 2004 (314) @ 1645. Added if statement to only turn on the sonic if the battery voltage is greater than 11.5V.

Filename: fsn04053.dat
Station: Lake Fryxell Snow Fence
Date of Establishment: January 2001 by Thomas Nylen
Author of this report: Thomas Nylen
File Period: November 9, 2004 (314) @ 1645 to January 3, 2005 (3) @ 1730
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.
ol
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
ol

Notes:

1. No data missing, but time is behind 16 hours, 58 minutes and 28 seconds. The clock was not reset when the new datalogger was swapped back in November. Added 20 hours to the data.
2. Swapped old datalogger for recalibrated CR10X on January 3, 2005 (3) @ 1736
3. Sonic height is 102.3 cm from the surface (no snow)
4. The Quantum sensors were replaced at the following times:
 - a. AirPar @ 1.6 m on January 3, 2005 (3) @ 1708. Old sensor # 30805, new sensor # 23199
 - b. soil P.A.R. +1.9 m on January 3, 2005 (3) @ 1715. Old sensor # 30800, new sensor # Q29773
 - c. soil P.A.R. +3.8 m on January 3, 2005 (3) @ 1720. Old sensor # 30804, new sensor # Q29766

Filename: hod04051.dat
Station: Howard Glacier Station
Date of Establishment: Nov 20, 1993 by Peter Doran
Author of this report: Thomas Nysten
File Period: January 16, 2003 (16) @ 1745 to November 8, 2004 (313) @ 1400
Sampling Frequency: wind every 4 sec others: every 30 sec
Averaging and Output Interval: every 15 minutes
Program name: hod034v1.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 (0.812) + Value) * 100
19. sample of battery voltage
o1

*Notes:

1. No data missing
2. Adjusted CR10X time ahead by 1 minute and 40 seconds on November 8, 2004 @ 1354.
3. Checked input values on November 8, 2004 @ 1354, everything looks good.
4. Check wind monitor on November 8, 2004 @ 1350, no changes.

5. Loaded new program, hod045v1.dld on November 8, 2004 @ 1400. Added instructions to program to only turn on the sonic when the voltage is above 11.5. Lost 30 seconds of next 15 minute interval.
6. Sonic depth measured on November 8, 2004 is 88.2
7. Stake height measured with board (1.2 cm) on November 8, 2004 is 81.8, 81.7, 81.6, 81.7.

Filename: hod04052.dat
Station: Howard Glacier Station
Date of Establishment: Nov 20, 1993 by Peter Doran
Author of this report: Thomas Nylen
File Period: November 8, 2004 (313) @ 1430 to January 17, 2005 (17) @ 1700
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 1 minute and 20 seconds on January 17, 2005 (17) @ 1541.
3. Checked input values on January 17, 2005 (17) @ 1542, everything looks good.
4. Check wind monitor on January 17, 2005 (17) @ 1545, no changes.

5. Sonic depth measured on January 17, 2005 (17) @ 1716 is 87.7
6. Stake height measured with board (1.2 cm) on January 17, 2005 (17) @ 1720 is 84.1, 84.2, 83.9, 83.9 cm.
7. Swapped out SM4M for another on January 17, 2005 (17) @ 1707
8. Installed a new 20 Watt solar panel. The 10 Watt is for the IRT.
9. Swap Incoming pyranometer, old # 30852F3 and new# 29762F3 (Calibration 8.09)
10. Swap outgoing pyranometer, old # 32058F3 and new# 29763F3 (Calibration 8.39)

Filename: hoe04051.dat
Station: Lake Hoare met station
Date of Establishment: Dec 1, 1993 by Peter Doran
Author of this report: Thomas Nylen
File Period: January 30, 2004 (30) @ 1230 to November 2, 2004 (307), 2004 @ 1500
Sampling Frequency: wind 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. Adjusted time +15 sec on November 2, 2004 (307), 2004 @ 1436
2. Check wind direction on November 2, 2004 (307), 2004 @ 1447, pointing north
3. Replaced 2 SM 4M storage modules with one SM4M on November 2, 2004 (307), 2004 @ 1500.

Filename: hoe04052.dat
Station: Lake Hoare met station
Date of Establishment: Dec 1, 1993 by Peter Doran
Author of this report: Thomas Nylen
File Period: November 2, 2004 (307) @ 1515 to January 28, 2005 (28) @ 1545
Sampling Frequency: wind 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. Adjusted time ahead one minute and 45 seconds on January 28, 2008 (28) @ 1555
2. Checked input values on January 28, 2008 (28) @ 1557, everything looks good.
3. Check wind direction on January 28, 2008 (28) @ 1603, pointing north
4. Replaced 1 SM 4M storage modules with two SM4M on January 28, 2008 (28) @ 1601.

Filename: lhp04051.dat
Station: Lake Hoare precipitation station
Date of Establishment: January 26, 2002 @ 1545 by Thomas Nylén
Author of this report: Thomas Nylén
File Period: January 30, 2004 (30) @ 1200
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

Filename: lhp04052.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 30, 2004 (30) @ 1215 to November 2, 2004 (307), 2004 @ 1500
Sampling Frequency: every 30 sec
Averaging and Output Interval: every 15 minutes
Program Name: lhp023v2.dld (Program signature: 47297)

1. array I.D.
ol
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
ol

*Notes:

1. No missing data
2. Adjusted time on CR10X back 7 minutes and 42 seconds on November 2, 2004 @ 1500.
3. Checked input values on November 2, 2004 @ 1500, everything looks good
4. Duplicate line at end of file (November 2, 2004 @1500) caused by adjusting the time back 7 minutes. Ignore last line.

Filename: lhp04053.dat
Station: Lake Hoare precipitation station
Date of Establishment: January 26, 2002 @ 1545 by Thomas Nylen
Author of this report: Thomas Nylen
File Period: November 2, 2004 (307), 2004 @ 1515 to January 28, 2005 (28) @ 1600
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 39 seconds on January 28, 2005 (28) @ 1559.
3. Checked input values on January 28, 2005 (28) @ 1600, everything looks good
4. Replaced 1 SM 4M storage modules with two SM4M on January 28, 2008 (28) @ 1602.

Filename: tar04501dat
Station: Taylor Glacier Station
Date of Establishment: 1994 by Peter Doran
Author of this report: Thomas Nylen
File Period: January 24, 2004 (24) @ 1130 to November 12, 2004 (317) @ 1615
Sampling Frequency: depth every 60 minutes, wind every 4 secs.; others: every 30 secs.
Averaging and Output Interval: every 15 minutes
Program name: tar034v1 (program signature: 42659)

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, though IRT stopped working properly in between June 6, 2004 and September 23, 2004 because of low battery voltage. Add another battery to IRT for next winter. Battery on datalogger also got below 11.5V in

the winter, which appears to have affected the ice temp measurements. Some erroneous measurements made on both ice temp probes.

2. Time adjusted -4 secs on November 12, 2004 (317) @ 1612.
3. Input values checked on November 12, 2004 (317) @ 1615, everything looked good.
4. Check wind alignment on November 12, 2004 (317) @ 1615, rotated 8° counterclockwise.
5. Sonic height is 98.1 cm from surface.
6. Ice stake height using board (1.2 cm) are cm.
7. Replaced (1) SM4M with another on November 12, 2004 (317) @ 1630.
8. Loaded new program, Tar045v1, on November 12, 2004 (317) @ 1630. Added instruction to not turn on the sonic when the voltage below 11.5V.
9. Installed 4 ice temp probes, @ 25, 50, 75, 100 cm from the surface.
10. Replaced RH probe @ 3m on November 12, 2004 (317) @ 1618.

Filename: tar04502dat
Station: Taylor Glacier Station
Date of Establishment: 1994 by Peter Doran
Author of this report: Thomas Nylén
File Period: November 12, 2004 (317) @ 1630
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:)

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

Filename: tar04503dat
Station: Taylor Glacier Station
Date of Establishment: 1994 by Peter Doran
Author of this report: Thomas Nylen
File Period: November 12, 2004 (317) @ 1630 to January 19, 2005 (19) @ 1145
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 59 seconds on January 19, 2005 (19) @ 1153.

3. Input values checked on January 19, 2005 (19) @ 1154, everything looked good.
4. Check wind alignment changed 10 degrees clockwise on January 19, 2005 (19) @ 1158
5. Sonic height is 106.3 cm from surface.
6. Ice stake height using board (1.2 cm) are 97.5, 97.8, 97.6, 97.7 cm.
7. Replaced (1) SM4M with another on January 19, 2005 (19) @ 1155.

Filename: uhd04051.dat
Station: Upper Howard Glacier Station
Date of Establishment: November 14, 2001 by Thomas Nylen
Author of this report: Thomas Nylen
File Period: January 16, 2004 (16) @ 1130 to November 8, 2004 (313) @ 945
Sampling Frequency: wind every 4 sec others: every 30 sec
Averaging and Output Interval: every 15 minutes
Program name: uhod012v1 (Prog Sign# 11892)

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)
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. mean snow temp @ 20cm (C)
rclow
15. mean snow temp @ 40cm (C)
rclow
16. sample of battery voltage
o1

*Notes:

1. Station was taken down and moved to Blood Falls
2. Snow temperature probes were both dangling above the surface in November.
3. Wind monitor was working, but there appeared to be some wear internally.

Filename: vaa04051.dat
Station: Lake Vanda met station
Date of Establishment: November 24, 1994 by Peter Doran, rebuilt
Author of this report: Thomas Nylen
File Period: January 26, 2004 (26) @ 1115 to December 1, 2004 (336) @ 1000
Sampling Frequency: wind every 4 secs.; sonic every 3600 secs.; other every 30 secs.
Averaging and Output Interval: every 15 min
Program Name: vaa034v1 (23474)

1. array I.D.
ol
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
divide by 200, multiply by 310.04
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
ol

notes:

1. Adjusted datalogger clock back by 1 minute and 22 seconds on December 1, 2004 (336) @ 1006
2. Checked wind monitor alignment on December 1, 2004 (336) @ 1006, pointing north
3. Checked input values, everything looks good.
4. Sonic sensor depth is 64.8 cm.

5. Swapped SM4m module for another on December 1, 2004 (336) @ 1015
6. Loaded new program, vaa045v1.dld on December 1, 2004 (336) @ 1015. Added instructions to not turn on sonic when battery voltage is below 11.5.
7. Replaced datalogger on December 1, 2004 (336) @ 1015. Turned off power, swapped the datalogger can, and plugged the power back in, loading the new program from the storage module. May have lost 30 seconds of data.

Filename: vaa04052.dat
Station: Lake Vanda met station
Date of Establishment: November 24, 1994 by Peter Doran, rebuilt
Author of this report: Thomas Nylen
File Period: December 1, 2004 (336) @ 1015 to January 15, 2005 (15) @ 1000
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.
ol
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
divide by 200, multiply by 310.04
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
ol

notes:

1. Missing line of data on December 1, 2004 (336) @ 1015
2. Adjusted datalogger clock ahead by 20 hours and 52 seconds on January 15, 2005 (15) @ 1002
3. Checked wind monitor alignment on January 15, 2005 (15) @ 1005, pointing north
4. Checked input values on January 15, 2005 (15) @ 1004, everything looks good.

5. Sonic sensor depth is 64.2 cm.
6. Swapped SM4m module for another on January 15, 2005 (15) @

Filename: via04051.dat
Station: Lake Vida met station
Date of Establishment: November 24, 1995 by Peter Doran
Author of this report: Thomas Nylen
File Period: January 26, 2004 (26) @ 1445 to December 1, 2004 (336) @ 1045
Sampling Frequency: wind every 4 secs.; ultrasonic every 3600 secs; others: every 30 secs.
Averaging and Output Interval: every 15 min
Program Name: via034v1 (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
divide by 200, multiply by 227.42
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 +4 minutes and 35 seconds on December 1, 2004 (336) @ 1050
3. Checked input values on December 1, 2004 (336) @ 1050, everything looks good.
4. Check wind alignment on to December 1, 2004 (336) @ 1045, pointing north.

5. Sonic sensor depth is 53.0. It appears there was some deflation of sediment during the winter.
6. Swapped out module with 1 SM4M on December 1, 2004 (336) @ 1055.
7. Loaded new program, via045v1.dld on December 1, 2004 (336) @ 1100. Added instructions to not turn on sonic when battery voltage is below 11.5.
8. Replaced datalogger on December 1, 2004 (336) @ 1100. Turned off power, swapped the datalogger can, and plugged the power back in, loading the new program from the storage module. The datalogger clock was three minutes behind when it was turned back on. The time was adjusted immediately. May have lost 30 seconds of data.
9. Put u-bolt in bottom of white box.

Filename: via04052.dat
Station: Lake Vida met station
Date of Establishment: November 24, 1995 by Peter Doran
Author of this report: Thomas Nylén
File Period: December 1, 2004 (336) @
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
divide by 200, multiply by 227.42
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

Filename: via04053.dat
Station: Lake Vida met station
Date of Establishment: November 24, 1995 by Peter Doran
Author of this report: Thomas Nylén
File Period: December 1, 2004 (336) @ 1100 to January 15, 2005 (15) @ 1230
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
divide by 200, multiply by 227.42
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. First line of data is a repeat of the last file. Ignore first line in this file (via0453.dat).
2. No missing date
3. Time adjusted +6 seconds on January 15, 2005 (15) @ 1234
4. Checked input values on January 15, 2005 (15) @ 1235, everything looks good.

5. Check wind alignment on to January 15, 2005 (15) @ 1238, pointing north.
6. Sonic sensor depth is 52.5.
7. Swapped out module with 1 SM4M on January 15, 2005 (15) @ 1237.