

Documentation and Task Lists for 2006/2007

File description and task list for 2006-07 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: ben06701.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: February 01, 2006 (32) @ 1115 to November 30, 2006 (334) @ 1400
Sampling Frequency: wind every 4 secs.; others: every 30 secs.
Averaging and Output Interval: every 15 min
Program Name: ben034v1 (Program Signature: 56883)

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 CR10x time back by 4 mins 22 secs November 30, 2006 (334) @ 1407
3. Check input values to November 30, 2006 (334) @ 1315, everything appears in order.
4. Check wind direction on to November 30, 2006 (334) @ 1317, correct orientation, no adjustment.
5. Swapped downward facing pyranometers (old #PY23275; new #PY18400) November 30, 2006 (334) @ 1351.
6. Unable to swap upward facing pyranometer as locknut was stripped. Need to bring full baseplate to swap sensor.
7. Replaced RH sensor on November 30, 2006 (334) @ 1348
8. Swapped quantum PAR (old #Q17248, new#Q32567) on November 30, 2006 (334) @ 1357.

9. Swapped wind sensor on November 30, 2006 (334) @ 1335.
10. Power off CR10x on November 30, 2006 (334) @ 1407 to replace CR10x and one SM4M storage modules for another. Power on CR10x November 30, 2006 (334) @ 1408

Filename: boy06701.dat
 Station: Lake Bonney met station
 Date of Establishment: November 24, 1993 by Peter Doran
 Author of this report: Hassan Basagic
 File Period: January 04, 2006 (04) @ 1700 to December 14, 2006 (348) @ 1615
 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
Q30801 After 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)
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
o1

Notes:

1. No Missing data.
2. Adjusted time back by 9 mins 16 secs on December 14, 2006 (348) @ 1614.
3. Checked values on December 14, 2006 (348) @ 1614. All appear fine.
4. Check wind alignment on December 14, 2006 (348) @ 1615. No changes
5. Sonic height is 61.3 cm from the surface.
6. Replaced storage module: 1 SM4M with 1 SM4M on December 14, 2006 (348) @ 1615.

Filename: boy06702.dat
 Station: Lake Bonney met station
 Date of Establishment: November 24, 1993 by Peter Doran
 Author of this report: Hassan Basagic
 File Period: December 14, 2006 (348) @ 1615 to January 24, 2007 (24) @ 1800
 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) – Q30801
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)

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

Notes:

1. No Missing data. Two duplicate line on January 24, 2007 (24) @ 1600, caused by time adjustment. Removed first value and third 1600 values.
2. Time adjusted time back by 10 secs on January 24, 2007 (24) @ 1008.
3. Checked values on January 24, 2007 (24) @ 1009. RH and Sonic ranger are not working properly.
3. RH had faulty connection and sensor was replaced on January 24, 2007 (24) @ 2138.
4. Check wind alignment on January 24, 2007 (24) @ 1010. No changes
5. Sonic height is 61.3 cm from the surface. Area is snow free.
6. Station moved due to rising lake levels. Station moved approximately 10 meters upslope from Lake Bonney. Station moved on January 24, 2007 (24) @ between 1100 and 1230. Power was kept on during station move. New location: $-77^{\circ} 42.881$; $162^{\circ} 27.865$
7. New sensor height for RH and temp is at 240 cm, wind sensor is at 235cm, solar sensors are at 230 cm.
8. Precipitation measuring bucket moved with station and off-line between on January 24, 2007 (24) between 1100 and 1700. Antifreeze is bucket was emptied, cleaned, and refilled to new weight of 410.5. Antifreeze level adjusted again @ 1800 to 416.5. No precipitation occurred during this maintenance interval.
9. Sonic ranger was previously offline. New sonic ranger installed at height of 41.0 cm at January 24, 2007 (24) @ 1600.
10. Soil temperature probes were removed from the ground on January 24, 2007 (24) @ 1801 and were replaced to the same depths @
11. Wind sensor off-line on January 24, 2007 (24) @ 1100 for station move. Wind sensor was swapped for new sensor and orientated @ 1802.
12. Replaced storage module: 1 SM4M with 1 SM4M on January 24, 2007 (24) @ 1801..

Filename: boy06703.dat
Station: Lake Bonney met station
Date of Establishment: November 24, 1993 by Peter Doran
Author of this report: Hassan Basagic
File Period: January 24, 2007 (24) @ 1815 to January 29, 2007 @ 1100
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) – Q30801
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)
rclw
25. mean soil temperature @ 10 cm in soil (C)
rclw
26. sample depth from sensor to surface (cm)
Measured depth (0.412) + Value) * 100
27. sample precipitation (mm)
ok
28. sample of battery voltage
o1

Notes:

1. There is missing data on January 25, 2007 (25) @ 1600 to January 25, 2007 (25) @ 1330. There is also missing data on January 28, 2007 (29) @ 1945 to January 29, 2007 (29) @ 1030. Probable cause for data loss is low battery.
2. Time checked on January 29, 2007 (29) @ 1003. Time is correct.
3. Checked values on January 29, 2007 (29) @ 1007. All channels are working properly.
4. Check wind alignment on January 29, 2007 (29) @ 1010. No changes
5. Reconfigured power at met station. Added additional battery power.
6. Replaced storage module: 1 SM4M with 1 SM4M on January 29, 2007 (29) @ 1102..

Filename: brh06701.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 12, 2006 (12) @ 1015 to December 16, 2006 (350) @1200
 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. Missing data between January 12, 2006 (12) @ 1015 and May 29, 2006 (149) at 0000; and between June 8, 2006 (159) at 1330 and June 9, 2006 (160) at 0000.
2. Checked datalogger clock on. December 16, 2006 (350) @1103. Correct time.
3. Check input values on December 16, 2006 (350) @1105, values look good.
4. Check wind alignment on December 16, 2006 (350) @1108, appears correct.
5. Sonic sensor depth on December 16, 2006 (350) @1110 measured as 58.4 cm. There is bare ground below the sonic ranger.

6. Swapped downward facing pyranometer (old #PY23276, new #PY28167) on December 16, 2006 (350) at 1138. Replacement upward pyranometer did not operate when swapped December 16, 2006 (350) at 1152, so existing upward pyranometer was reinstalled.
7. Swapped RH sensor for maintenance on December 16, 2006 (350) at 1256.
8. Power off on December 16, 2006 (350) @ 1202. Swap CR10X datalogger and swap out module one (1) SM4M on for (1) SM4M. Power on at 1203.

Filename: brh06702.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, 2006 (350) @ 1215 to January 11, 2007 (11) @ 1330
 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) – PY28167
ok
8. mean horizontal wind speed (m/s)
ok
9. resultant mean wind speed (m/s)
o1
10. resultant mean wind direction (degrees from north)
ok
11. standard deviation of wind direction (degrees)
ok
12. maximum wind speed (m/s)
ok
13. minimum wind speed (m/s)
ok
14. mean P.A.R. (micromols/s/m2) – Q33906
multiply by 1.47824
15. mean soil temperature @ 0 cm in soil (C)
rclow
16. mean soil temperature @ 5 cm in soil (C)
rclow
17. mean soil temperature @ 10 cm in soil (C)
rclow
18. sample depth from sensor to surface (cm)
 $\text{Measured depth (0.589) + Value} * 100$
19. sample of battery voltage
o1

Notes:

1. No missing data.
2. Adjusted datalogger clock back 10 seconds on January 11, 2007 (11) @ 1334.
3. Check input values on to January 11, 2007 (11) @ 1335, all values look good.
4. Check wind alignment on to January 11, 2007 (11) @ 1420, appears correct.
5. Sonic sensor depth measured as 58.4 cm on January 11, 2007 (11) @ 1424. The surface is bare ground below the sensor.

6. Datalogger power off on January 11, 2007 (11) @ 1350 to replace batteries. One battery was found to have cracked and was leaking from the bottom. Removed diode wiring system. Installed two 32 amp hour batteries. Swap out module one SM4M for one SM4M. Power up on January 11, 2007 (11) at 1420.

Filename: caa06701.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 13, 2006 (13) @ 1545 to November 6, 2006 (310) at 1615
 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 8 minutes 36 seconds on November 6, 2006 (310) at 15:54.
3. Checked input values on November 6, 2006 (310) at 15:57. All appear in good condition except for ice temperature sensors. Ice temperature at 50 cm depth (item 14) and NewIceT25cm (item 16) appears to have recorded values slightly above zero degrees Celcius, values drop below zero on January 19, 2006 (19). NewIceT50cm (item 17) is not operating properly.
4. Checked wind alignment on November 6, 2006 (310) at 1610, alignment is correct.
5. Replaced one (1) SM4M with one (1) SM4M November 6, 2006 (310) at 1615.

Filename: caa06702.dat
Station: Canada Glacier met station
Date of Establishment: Nov 20, 1995 by Karen Lewis
Reinstalled on glacier: Jan 13, 1998 by Karen Lewis
Author of this report: Hassan Basagic
File Period: November 6, 2006 (310) at 1630 to November 13, 2006 (317) at 1330
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. CR10X clock correct on November 13, 2006 (317) at 1221.

3. Checked input values on November 13, 2006 (317) at 1225. All appear in good condition except for ice temperature sensors. See notes from caa06701.dat.
4. Checked wind alignment on November 13, 2006 (317) 1236, alignment is correct.
5. Swapped upward pyranometer (old #PY41099, new #PY18656) and downward pyranometer (old#PY40424, new #27937) for maintenance.
6. Swapped wind sensor on November 13, 2006 (317) at 1403 for maintenance.
7. Power off CR10x on November 13, 2006 (317) at 1330 to replaced existing program “caa045v4” with new program “caa067v1”. The new program has been modified to include a Sensit particle counter. Output located as item 20. No change in processed output file. Replaced one (1) SM4M with one (1) SM4M) November 13, 2006 (317) at 1330. Datalogger power up on November 13, 2006 (317) at 1332.

Filename: caa06703.dat
 Station: Canada Glacier met station
 Date of Establishment: Nov 20, 1995 by Karen Lewis
 Reinstalled on glacier: Jan 13, 1998 by Karen Lewis
 Author of this report: Hassan Basagic
 File Period: November 13, 2006 (317) at 1330 to November 17, 2006 (321) at 1445
 Sampling Frequency: wind speed every 4 sec; all other every 30 sec
 Averaging and Output Interval: every 15 minutes
 Program name: caa67v1 (program signature: 2888.0)

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. saltation particle count
data removed from output processing
21. mean ice surface temperature
ok
22. sample battery voltage
o1

Notes:

1. No missing data.
2. CR10X clock correct on November 17, 2006 (321) at 1446.
3. Checked input values on November 17, 2006 (321) at 1448. All appear in good condition.
4. Checked wind alignment on November 17, 2006 (321) at 1449, alignment is correct.
5. Replaced one (1) SM4M with one (1) SM4M November 17, 2006 (321) at 1455.

Filename: caa06704.dat
 Station: Canada Glacier met station
 Date of Establishment: Nov 20, 1995 by Karen Lewis
 Reinstalled on glacier: Jan 13, 1998 by Karen Lewis
 Author of this report: Hassan Basagic
 File Period: November 17, 2006 (321) at 1500 to January 15, 2007 (15) at 1515
 Sampling Frequency: wind speed every 4 sec; all other every 30 sec
 Averaging and Output Interval: every 15 minutes
 Program name: caa67v1 (program signature: 2888.0)

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. saltation particle count
data separated from output processing
21. mean ice surface temperature
ok
22. sample battery voltage
o1

Notes:

1. No missing data.

2. Corrected CR10X clock back 15 seconds on January 15, 2007 (15) at 1446.
3. Checked input values on January 15, 2007 (15) at 1446.. All appear in good condition except.
4. Checked wind alignment on January 15, 2007 (15) at 1454, alignment is correct.
5. Sensit sensor height = 32.5 cm, reset height to 20 cm on January 15, 2007 (15) at 1518.
6. NewIceTemp at 25 cm has melted out from the ice. Ice temp (old) at 50 cm is almost melted out.
7. Replaced one (1) SM4M with one (1) SM4M January 15, 2007 (15) at 1515.

Filename: caa06705.dat
 Station: Canada Glacier met station
 Date of Establishment: Nov 20, 1995 by Karen Lewis
 Reinstalled on glacier: Jan 13, 1998 by Karen Lewis
 Author of this report: Hassan Basagic
 File Period: January 15, 2007 (15) at 1530 to January 27, 2007 (27) at 1230
 Sampling Frequency: wind speed every 4 sec; all other every 30 sec
 Averaging and Output Interval: every 15 minutes
 Program name: caa67v1 (program signature: 2888.0)

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. saltation particle count
data separated from output processing
21. mean ice surface temperature
ok
22. sample battery voltage
o1

Notes:

1. No missing data.
2. CR10X clock is correct on January 27, 2007 (27) at 1213.
3. Checked input values on January 27, 2007 (27) at 1214. All appear in good condition except.
4. Checked wind alignment on January 27, 2007 (27) at 1215, alignment is correct.
5. Sensit sensor height = 22.5 cm..
6. Replaced one (1) SM4M with one (1) SM4M January 27, 2007 (27) at 1232.

Filename: coh06701.dat
 Station: Commonwealth Glacier Station
 Date of Establishment: Nov 22, 1993 by Peter Doran
 Author of this report: Thomas Nysten
 File Period: January 19, 2006 (19) at 1115 to November 8, 2006 (312) at 1400
 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.
 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) –
 (29776F3) Before November 8, 2006 (312) at 1145 divide by 100; multiply by 116.14
 (30853F3) After November 8, 2006 (312) at 1145 divide by 100; multiply by 121.5
7. mean solar flux going up (W/m²) –
 (29777F3) Before November 8, 2006 (312) at 1245 divide by 100; multiply by 116.82
 (32058F3) After November 8, 2006 (312) at 1245 divide by 100; multiply by 116.82
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 incoming IR pyrgeometer output (pins A-B) (W/m²)
 (34316F3) divide by 250; multiply by 242.72
15. mean incoming IR hemisphere temp. (pins A-C) (mv)
 Eppley
16. mean incoming IR thermopile output (pins F-G)(W/m²)
 Eppley
17. mean incoming IR case temp. (pins E-D)(mv)
 Eppley
18. mean outgoing IR pyrgeometer output (pins A-B)(W/m²) –
 (32311F3) divide by 250; multiply by 222.72.
19. mean outgoing IR hemisphere temp. (pins F-G) (mv)
 Eppley
20. mean outgoing IR thermopile (pins A-C) (W/m²)
 Eppley
21. mean outgoing IR case temp. (pins E-D) (mv)
 Eppley
22. ice temperature @ 50cm (original depth, mV*0.01)
 poly (n0=-105.05,n1=232.89,2=-494.81,n3=669.70,n4=-533.67,n5=247.01,n6=-61.29, n7=6.325
23. ice temperature @ 100cm (original depth, mV*0.01)

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

24. Surface Temperature (C)

ok

25. sample depth from sensor to surface (m)

Measured depth (0.60) + Value) * 100

26. sample of battery voltage

o1

Notes:

1. No missing data. One line of duplicate data caused by time reset on November 8, 2006 (312) at 1030. Delete second line of data at 1030.
2. One line of missing data caused by clock reset on November 8, 2006 (312) at 1025.
3. Adjust CR10X back 9 minutes and 45 seconds on November 8, 2006 (312) at 1025.
4. Checked input values on November 8, 2006 (312) at 1025, everything appears correct.
5. Wind alignment is correct, checked on November 8, 2006 (312) at 1035.
6. Swapped upward (old # 29776F3; new #30853F3) and downward (old # 29777F3; new # 32058F3) facing pyranometers November 8, 2006 (312) at 1145 and 1235, respectively.
7. Replaced existing RH sensor with calibrated sensor on November 8, 2006 (312) at 1052.
8. Replaced existing wind sensor with calibrated sensor on November 8, 2006 (312) at 1345.
9. Power off on November 8, 2006 (312) at 1400 to 1402 to replace CR10x and one (1) SM4M with one (1) SM4M.
10. Sonic sensor height was 64.0 without board.
11. Stake height from top to snow surface without board 70.9, 71.0, 71.2, 70.8 cm..
12. Needs new battery cases.

Filename: coh06702.dat
 Station: Commonwealth Glacier Station
 Date of Establishment: Nov 22, 1993 by Peter Doran
 Author of this report: Thomas Nylen
 File Period: November 8, 2006 (312) at 1415 to January 18, 2007 (18) at 1115
 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) – 30853F3
divide by 100; multiply by 121.5
7. mean solar flux going up (W/m2) – 32058F3
divide by 100; multiply by 116.82
8. mean horizontal wind speed (m/s)
ok
9. resultant mean wind speed (m/s)
o1
10. resultant mean wind direction (degrees from north)
ok
11. standard deviation of wind direction (degrees)
ok
12. maximum wind speed (m/s)
ok
13. minimum wind speed (m/s)
ok
14. mean incoming IR pyrometer output (pins A-B) (W/m2)
(34316F3) divide by 250; multiply by 242.72
15. mean incoming IR hemisphere temp. (pins A-C) (mv)
Eppley
16. mean incoming IR thermopile output (pins F-G)(W/m2)
Eppley
17. mean incoming IR case temp. (pins E-D)(mv)
Eppley
18. mean outgoing IR pyrometer output (pins A-B)(W/m2) –
(32311F3) divide by 250; multiply by 222.72.
19. mean outgoing IR hemisphere temp. (pins F-G) (mv)
Eppley
20. mean outgoing IR thermopile (pins A-C) (W/m2)
Eppley
21. mean outgoing IR case temp. (pins E-D) (mv)
Eppley
22. ice temperature @ 50cm (original depth, mV*0.01)
poly (n0=-105.05,n1=232.89,2=-494.81,n3=669.70,n4=-533.67,n5=247.01,n6=-61.29, n7=6.325
23. ice temperature @ 100cm (original depth, mV*0.01)
poly (n0=-106.23,n1=239.65,2=-512.50,n3=693.49,n4=-551.71,n5=254.79,n6=-63.07, n7=6.492
24. Surface Temperature (C)

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

Notes:

1. No missing data.
2. Adjust CR10X ahead by 15 seconds on January 18, 2007 (18) at 1022.
3. Checked input values on January 18, 2007 (18) at 1023, everything appears correct.
4. Wind alignment is correct, checked on January 18, 2007 (18) at 1026..
5. Swapped one (1) SM4M with one (1) SM4M on January 18, 2007 (18) at 1116.
6. Sonic sensor height was 68.1 without board.
7. Stake height from top to snow surface without board 78.4, 78.2, 78.3, 78.5 cm. There is a large amount of snow drift at station.

Filename: exe06703.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: November 27, 2006 (331) at 1430 to December 6, 2006 (340) at 1330
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. No missing data. First complete file since station failure (January 2005).
2. Adjust CR10x back 20 sec on December 6, 2006 (340) at 1333.
3. Checked input values on December 6, 2006 (340) at 1334, everything appears correct, except for soil temperature sensors which are currently offline (-9999).
4. Swapped storage module on December 6, 2006 (340) at 1338.

Filename: exe06704.dat
Station: Explorer's Cove Station
Date of Establishment: Nov 21, 1997 by Peter Doran, D.J. Osborne and Keith Sauter
Author of this report: Hassan Basagic
File Period: December 6, 2006 (340) at 1345 to January 11, 2007 (11) 1245
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. One line of missing data on January 11, 2007 (11) at 1200, caused by maintenance.
2. CR10x time is correct on January 11, 2007 (11) @ 1128.
3. Checked input values on January 11, 2007 (11) @ 1130, everything appears correct, except for soil temperature sensors which are currently offline (-9999).
4. Wind alignment is correct on January 11, 2007 (11) @ 1130.
5. Datalogger power off on January 11, 2007 (11) between 1130 and 1206 to reconfigure batteries. Reconnected soil temperature probes on January 11, 2007 (11) @ 1246.
6. Swapped storage module on January 11, 2007 (11) @ 1250.

Filename: exe06705.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 11, 2007 (11) 1300 to January 30, 2007 (30) at 1100
Sampling Frequency: prec every 60 minutes, wind every 4 secs.; others: every 30 secs.
Averaging and Output Interval: every 15 minutes
Program name: exe023v1 (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. No missing data.
2. CR10x time is correct on January 30, 2007 (30) at 1100.
3. Checked input values on January 30, 2007 (30) at 1102, everything appears correct.
4. Wind alignment is correct on January 30, 2007 (30) at 1105.
5. Swapped storage module on January 30, 2007 (30) at 1108.

Filename: fri06701.dat

Station:	Lake Fryxell met station
Date of Establishment:	Jan 6, 1994 by Peter Doran
Author of this report:	Hassan Basagic
File Period:	January 30, 2006 (30) @ 1015 to November 28, 2006 (28) @ 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. One line of duplicate data on November 28, 2006 (28) @ 1015 caused by clock reset, remove second row.
2. CR10x time corrected back 8 minutes and 16 seconds on November 28, 2006 (28) @ 1009.
3. Checked input values and wind alignment on November 28, 2006 (28) @ 1010. All channels appear correct.
4. Sensit sensor installed but not wired and no program loaded.
5. Swapped 1 SM with another SM on November 28, 2006 (28) @ 1016.
6. Low power (below 11.5v) on 2 occasions (7/4/2006 @ 2:00 to 7/7/2006 @ 19:45; and 7/20/2006 05:00 to 7/31/2006 at 00:00) prevented sonic ranger from operating. Data flagged as bad (B).

Filename: frl06702.dat
Station: Lake Fryxell met station
Date of Establishment: Jan 6, 1994 by Peter Doran
Author of this report: Hassan Basagic
File Period: November 28, 2006 (28) @ 1030 to December 21, 2006 (355) @ 1330
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. CR10x time corrected back 15 seconds on December 21, 2006 (355) @ 1322.
3. Checked input values and wind alignment on December 21, 2006 (355) @ 1324. All channels appear correct.
4. Datalogger power off on December 21, 2006 (355) @ 1338 to 1340. Wired Sensit sensor and loaded new program. New program (frl067v1) contains command to measure particle count (not included in this file). Swapped 1 SM with another SM on December 21, 2006 (355) @ 1339.

Filename: fsn06701.dat
Station: Lake Fryxell Snow Fence
Date of Establishment: January 2001 by Thomas Nylen
Author of this report: Hassan Basagic
File Period: December 19, 2005 (353) @1530 to November 27, 2006 (331) @ 1715
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. @ 1.5 m (micromols/s/m²)
Q23199 - multiply by 1.49
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 time ahead by 30 seconds on November 27, 2006 (331) @ 1645.
3. Swapped storage module SM4M on November 27, 2006 (331) @ 1715.
4. Sonic height is 44.4 cm to the snow surface.
5. Much snow at fence with depths greater than 1 meter in several places.

Filename: fsn06702.dat
Station: Lake Fryxell Snow Fence
Date of Establishment: January 2001 by Thomas Nylen
Author of this report: Hassan Basagic
File Period: November 27, 2006 (331) @ 1730 to December 21, 2006 (355) @ 1615
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. @ 1.5 m (micromols/s/m²)
 Q23199 - multiply by 1.49 before December 21, 2006 @ 1620
 Q29764 - multiply by 1.18 after December 21, 2006 @ 1620
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 time ahead by 15 seconds on December 21, 2006 (355) @ 1541.
3. Sonic height is 71.0 cm to the snow surface.
4. Install sensit instrument and wind sensor. Swapped existing quantum sensor (Q23199) with new sensor (Q29764) on December 21, 2006 (355) @ 1620. Note new calibration multiplier.
5. Swapped storage module SM4M on December 21, 2006 (355) @ 1615 and installed new program FS067v1 at 1635.

Filename: fsn06703.dat
Station: Lake Fryxell Snow Fence
Date of Establishment: January 2001 by Thomas Nylen
Author of this report: Hassan Basagic
File Period: December 21, 2006 (355) @ 1630 to January 17, 2007 (17) @ 1815
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)
 Q29764 - multiply by 1.18
7. mean air temp. @ 1.3 m (C)
 rclow
8. mean soil temperature @ 0 cm in soil -4.5 m (west) of snow fence (C)
 rclow
9. mean soil temperature @ 0 cm in soil +1.0 m (east) of snow fence (C)
 rclow
10. mean soil temperature @ 0 cm in soil +1.9 m (east) of snow fence (C)
 rclow
11. mean soil temperature @ 0 cm in soil +3.8 m (east) of snow fence (C)
 rclow
12. Sonic Ranger Depth (cm)
 Measured depth (1.01 + Value) * 100
13. sample of battery voltage
 ol

Notes:

1. No data missing.
2. Storage module swapped on January 17, 2007 (17) @ 1820. No time adjustments or additional measurements taken.

Filename : hod06701.dat
 Station: Howard Glacier Station
 Date of Establishment: Nov 20, 1993 by Peter Doran
 Author of this report: Thomas Nysten
 File Period: February 1, 2006 (32) @ 1045 to November 9, 2006 (313) at 1615
 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. CR10X time adjusted back 3 minutes 18 seconds on November 9, 2006 (313) at 1617.
3. Checked input values and wind alignment on November 9, 2006 (313) at 1619. RH appears to be malfunctioning, no troubleshooting worked, replace sensor. All other sensors look good.
4. Swapped out SM4M for another on November 9, 2006 (313) at 1626.

Filename : hod06702.dat

Station: Howard Glacier Station
 Date of Establishment: Nov 20, 1993 by Peter Doran
 Author of this report: Thomas Nylén
 File Period: November 9, 2006 (313) at 1630 to January 19, 2007 (19) at 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. CR10X time correct on January 19, 2007 (19) at 1515
2. Checked input values and wind alignment on January 19, 2007 (19) at 1515. RH offline, all else look good.
3. Repaired RH on January 19, 2007 (19) at 1532.
4. Sonic height is 90.1 cm.
5. Swapped out SM4M for another on January 19, 2007 (19) at 1526.

Filename: hoe060701.dat
 Station: Lake Hoare met station

Date of Establishment: Dec 1, 1993 by Peter Doran
Author of this report: Hassan Basagic
File Period: December 29, 2005 (363) @ 1845 to November 05, 2006 (309) at 1445
Sampling Frequency: wind speed every 4 sec; other every 30 sec
Averaging and Output Interval: every 15 minutes
Program Name: hoe023v1 (Program signature: 48868)

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) – 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.
2. Adjusted CR10x datalogger back by 10 min 44 sec on November 05, 2006 @ 14:09.
3. Check input values and wind alignment on November 05, 2006 @ 14:10, all appear correct.
4. Swapped 1 SM4M storage modules with 1 SM4M on November 05, 2006 @ 14:45.

Filename: hoe060702.dat
Station: Lake Hoare met station
Date of Establishment: Dec 1, 1993 by Peter Doran
Author of this report: Hassan Basagic
File Period: November 05, 2006 (309) at 1500 to November 25, 2006 (329) at 2045
Sampling Frequency: wind speed every 4 sec; other every 30 sec
Averaging and Output Interval: every 15 minutes
Program Name: hoe023v1 (Program signature: 48868)

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) – 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.
2. CR10x datalogger time correct November 25, 2006 (329) at 2044
3. Check input values and wind alignment on November 25, 2006 (329) at 2048, all appear correct.
4. Installed sensit at 20 cm height and new program (hoe067v1) on November 25, 2006 (329) at 2057. New output file contains item #17 = particle count. Data omitted during post processing. Swapped 1 SM4M storage modules with 1 SM4M..

Filename: hoe060703.dat
Station: Lake Hoare met station
Date of Establishment: Dec 1, 1993 by Peter Doran
Author of this report: Hassan Basagic
File Period: November 25, 2006 (329) at 2100 to December 1, 2006 (335) at 1500
Sampling Frequency: wind speed every 4 sec; other every 30 sec
Averaging and Output Interval: every 15 minutes
Program Name: hoe067v1 (Program signature: 48868)

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) – 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. total saltation particle count (25 cm height)
o1
18. sample of battery voltage
o1

*Notes:

1. No missing data.
2. CR10x datalogger time corrected 45 seconds back on December 1, 2006 (335) at 1500
3. Check input values and wind alignment on December 1, 2006 (335) at 1452, all appear correct.
4. Swapped 1 SM4M storage modules with 1 SM4M on December 1, 2006 (335) at 1500.

Filename: hoe060704.dat
Station: Lake Hoare met station
Date of Establishment: Dec 1, 1993 by Peter Doran
Author of this report: Hassan Basagic
File Period: December 1, 2006 (335) at 1515 to January 9, 2007 (9) at 1645
Sampling Frequency: wind speed every 4 sec; other every 30 sec
Averaging and Output Interval: every 15 minutes
Program Name: hoe067v1 (Program signature: 48868)

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) – 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. total saltation particle count (25 cm height)
o1
18. sample of battery voltage
o1

Notes:

1. No missing data.
2. CR10x datalogger time corrected 30 seconds back on January 9, 2007 (9) at 1641.
3. Check input values and wind alignment on January 9, 2007 (9) at 1643., all appear correct.
4. Swapped 1 SM4M storage modules with 1 SM4M on January 9, 2007 (9) at 1645.

Filename: hoe060705.dat
 Station: Lake Hoare met station
 Date of Establishment: Dec 1, 1993 by Peter Doran
 Author of this report: Hassan Basagic
 File Period: January 9, 2007 (9) at 1700 to January 29, 2007 (29) at 2015
 Sampling Frequency: wind speed every 4 sec; other every 30 sec
 Averaging and Output Interval: every 15 minutes
 Program Name: hoe067v1 (Program signature: 48868)

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) – 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. total saltation particle count (25 cm height)
o1
18. sample of battery voltage
o1

Notes:

1. No missing data.
2. Datalogger time corrected 30 seconds back on January 29, 2007 (29) at 2022.
3. Check input values and wind alignment on January 29, 2007 (29) at 2023., all appear correct.
4. Datalogger power off to load new program (hoe067v2) and swapped 1 SM4M storage modules with 1 SM4M on January 29, 2007 (29) between 2026 and 2040. New program changes sensit to run for 1 minute every 15 minutes if wind is greater than 7 ms^{-1} . Swapped batteries.

Filename: lhp06701.dat
Station: Lake Hoare precipitation station
Date of Establishment: January 26, 2002 @ 1545 by Thomas Nylén
Author of this report: Hassan Basagic
File Period: January 6, 2006 (06) @1445 to November 14, 2006 (318) at 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. Duplicate line of data at 1115 caused by time adjustment. Remove duplicate line of data..
2. Adjust datalogger clock back 8 minutes on November 14, 2006 at 1111.
3. Checked input values on November 14, 2006 at 1112, everything looks good.
4. Solar panel has a severed wire. Panel removed for repairs.
5. Swapped storage module on November 14, 2006 (318) at 1113.

Filename: lhp06702.dat
Station: Lake Hoare precipitation station
Date of Establishment: January 26, 2002 @ 1545 by Thomas Nylen
Author of this report: Hassan Basagic
File Period: November 14, 2006 (318) at 1130 to November 14, 2006 (318) at 1400
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. Short file.
2. Reinstalled solar panel.
3. Datalogger power off on November 14, 2006 (318) between 1405 and 1406, swapped storage module.

Filename: lhp06703.dat
Station: Lake Hoare precipitation station
Date of Establishment: January 26, 2002 @ 1545 by Thomas Nylen
Author of this report: Hassan Basagic
File Period: November 14, 2006 (318) at 1400 to November 15, 2006 (319) at 1515
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. Datalogger time is correct on November 15, 2006 (319) at 1522..
3. Checked input values on November 15, 2006 (319) at 1522, everything looks good.
4. Precip offline on November 15, 2006 (319) between 1400 and 1530 for maintenance (swapped antifreeze fluid). No precipitation occurred during maintenance. Zeroed all values during this period. Replaced 1 SM 4M storage module with 1 SM4M on November 15, 2006 at 1528.

Filename: lhp06704.dat
Station: Lake Hoare precipitation station
Date of Establishment: January 26, 2002 @ 1545 by Thomas Nylén
Author of this report: Hassan Basagic
File Period: November 15, 2006 (319) at 1530 to January 29, 2007 (29) at 2045
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. Datalogger time is correct on January 29, 2007 (29) at 2043
3. Checked input values on January 29, 2007 (29) at 2044, everything looks good.
4. Replaced 1 SM 4M storage modules with 1 SM4M on January 29, 2007 (29) at 2046.

Filename: tar06701.dat
Station: Taylor Glacier Station
Date of Establishment: 1994 by Peter Doran
Author of this report: Hassan Basagic
File Period: January 17, 2006 (17) @ 1545 to November 10, 2006 (314) 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) – (33733F3)
divide by 100; multiply by 117.23
7. mean solar flux going up (W/m2) - (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. Datalogger time adjusted back 1 minute and 19 seconds on November 10, 2006 (314) at 1319.
3. Input values and wind alignment checked on November 10, 2006 (314) at 1322, everything looked good.
4. Replaced (1) SM4M with another on November 10, 2006 (314) at 1330.

Filename: tar06702.dat
 Station: Taylor Glacier Station
 Date of Establishment: 1994 by Peter Doran
 Author of this report: Hassan Basagic
 File Period: November 10, 2006 (314) at 1345 to December 2, 2006 (336) at 1645
 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) – (33733F3)
divide by 100; multiply by 117.23
7. mean solar flux going up (W/m2) - (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. Datalogger time correct on December 2, 2006 (336) at 1250.
3. Input values and wind alignment checked on December 2, 2006 (336) at 1645, everything looked good.
4. Station maintenance for leg replacement between 1302 and 1650.
5. Swapped wind sensor for maintenance.

6. Power off to replace (1) SM4M with another on December 2, 2006 (336) at 1645. Upon returning power, all parameters have gone bad. Unable to troubleshoot. Station offline except for wind direction and speed.

Filename: tar06703.dat
 Station: Taylor Glacier Station
 Date of Establishment: 1994 by Peter Doran
 Author of this report: Hassan Basagic
 File Period: December 2, 2006 (336) at 1700 to December 14, 2006 (348) at 1215
 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) – (33733F3)
divide by 100; multiply by 117.23
7. mean solar flux going up (W/m2) - (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. Datalogger time corrected 20 seconds ahead on December 14, 2006 (348) at 1158.
3. Wind not in alignment.

4. Station is still offline. Power off on December 14, 2006 (348) between 1203 and 1425. Still unknown cause. Replaced wiring board and wiring of batteries but no improvement. Replace (1) SM4M with another on December 14, 2006 (348) at 1415.

Filename: tar06704.dat
 Station: Taylor Glacier Station
 Date of Establishment: 1994 by Peter Doran
 Author of this report: Hassan Basagic
 File Period: December 14, 2006 (348) at 1430 to January 13, 2007 (13) at 1300
 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) – (33733F3)
divide by 100; multiply by 117.23
7. mean solar flux going up (W/m2) - (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. Two lines of missing line of data on January 13, 2007 (13) at 1000 and 1015.
2. Datalogger time corrected back 14 seconds on January 13, 2007 (13) at 927.
3. Input values appeared to be ok upon arrival on January 13, 2007 (13) at 930, everything looked good. Isolated problem to IRT. After removing IRT from system all returned to normal.
4. Wind sensor is not in alignment since station move. Wind sensor aligned on January 13, 2007 (13) at 1238.

5. Reburied IceTemp@1m to 20 cm depth on January 13, 2007 (13) at 1337 – unknown if still working properly.
6. Replace (1) SM4M with another on January 13, 2007 (13) at 1330. Station back on-line.

Filename: tar06705.dat
 Station: Taylor Glacier Station
 Date of Establishment: 1994 by Peter Doran
 Author of this report: Hassan Basagic
 File Period: January 13, 2007 (13) at 1315 to January 20, 2007 (20) at 1300
 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) – (33733F3)
divide by 100; multiply by 117.23
7. mean solar flux going up (W/m2) - (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. Datalogger time is correct on January 20, 2007 (20) at 1250.
2. Input values appear correct on January 20, 2007 (20) at 1255.
3. Wind sensor in alignment on January 20, 2007 (20) at 1258.
4. Sonic ranger height is 30.8 cm.
5. Replace (1) SM4M with another January 20, 2007 (20) at 1301. Station back on-line.

Filename: vaa06701.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 12, 2006 (12) @ 1215 to December 16, 2006 (350) at 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.
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 1 minute and 55 seconds on December 16, 2006 (350) at 930.
3. Checked input values on December 16, 2006 (350) at 1000. Sonic ranger is down, all else appears to be good.
4. Wind monitor is in alignment on December 16, 2006 (350) at 937. Swapped old sensor for new sensor at 957.
5. Sonic sensor depth is 64.7 cm on December 16, 2006 (350) at 1000.
6. Datalogger power off on December 16, 2006 (350) between 1001 and 1007 to swap batteries and storage module for another.

Filename: via06701.dat
Station: Lake Vida met station
Date of Establishment: November 24, 1995 by Peter Doran
Author of this report: Hassan Basagic
File Period: January 12, 2006 (12) @ 1115 to December 16, 2006 (350) at 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: 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 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 back 6 minutes and 30 seconds on December 16, 2006 (350) @ 1244
3. Checked input values on December 16, 2006 (350) @ 1248, everything looks good.
4. Checked wind alignment on December 16, 2006 (350) @ 1249, pointing north.
5. Checked sonic sensor depth = 34.3 cm. Small snow patch below snow depth sensor. Much of the area around the station has snow around it.
6. Swapped out module with 1 SM4M on December 16, 2006 (350) @ 1250.