

Documentation and Task Lists for 2002/2003

File description and task list for 2002-03 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) Install 2 ice thermistors at each station
- 3) Installed sonic sensors at 4 stations

Filename: ben0231.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 18, 2002 (18) @ 1045 to 12/4/02 15:15 (338)
Sampling Frequency: wind every 4 secs.; others: every 30 secs.
Averaging and Output Interval: every 15 min
Program Name: ben001v1 (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)
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 P.A.R. (micromols/s/m2)
divide by 200, multiply by 299.93
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) Array ID for Beacon is 11, same as Vida. New array id on program on the existing module, but the program was not loaded on to the CR10X. Do in January
- 3) Adjusted clock <-00:00:58> on December 4, 2002 (338) @ 1438
- 4) Check input values on December 4, 2002 (338) @ 1438, everything looks fine, except voltage is a bit high

- 5) Old Solar Sensor numbers: SwRadIn: 18395, SwRadOut: 18400, PAR: Q23199. Replaced pyranometers between 1500 and 1515. New numbers: Upward Pyranometers: PY23271; Downward Pyranometers: PY23277. Tried replacing Quantum, but wires near resistor was broken. Need to check before going in the field. Replace Quantum in January.
- 6) Check wind alignment on December 4, 2002 (338) @ 1445, rotated 5 degrees counterclockwise. Just before this the cross-arm was removed to tighten top middle post, which temporarily moved the wind vane and pyranometers. Check next file.
- 7) Replaced storage modules (1 x SM4M) on December 4, 2002 (338) @ 1528

Filename: ben0232.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: December 4, 2002 (338) @ 15:30 to January 29, 2003 (29) @ 1100
Sampling Frequency: wind every 4 secs.; others: every 30 secs.
Averaging and Output Interval: every 15 min
Program Name: ben001v1 (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)
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 P.A.R. (micromols/s/m2)
divide by 200, multiply by 299.93
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) Array ID for Beacon is 11, same as Vida. New array id on program on the existing module, but the program was not loaded on to the CR10X. Do in January
- 3) Adjusted clock +16 seconds on January 29, 2003 (29) @ 1033
- 4) Check input values on January 29, 2003 (29) @ 1100, wind looks wrong. Check and found it was point the wrong way. Rotated it 180, but still reading backwards from north (20 degrees, read 340 degrees). All of the

wind direction data back to the start of the station were adjusted by rotating the direction 180 degrees and then mirroring that result using the north-south axis. So, a value of 160 would be rotated to 340, and the mirror of that would be +20 degrees.

- 5) Replaced Quantum on January 29, 2003 (29) between 1045 and 1100. Old number Q23199 and new numbers is Q30806.
- 6) Replaced storage modules (1 x SM4M) on January 29, 2003 (29) @ 1110

Filename: boy0231.dat
Station: Lake Bonney met station
Date of Establishment: November 24, 1993 by Peter Doran
Author of this report: Thomas Nylén
File Period: January 24, 2002 (24) @ 1215
Sampling Frequency: wind speed every 4 sec, other every 30 sec
Averaging and Output Interval: every 15 minutes
Program name: boy012v1 (signature: 22398)

1. array I.D.
o1
2. day
ok
3. time
ok
4. mean air temp. @ 3 meters (C)
ok
5. mean R.H. @ 3 meters (%)
ok
6. mean solar flux coming up (W/m²)
ok
7. mean solar flux going down (W/m²)
ok
8. mean P.A.R. (micromols/s/m²)
divide by 200, multiply by 235.51
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)
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)
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)
rclw
- 24. mean soil temperature @ 5 cm in soil (C)
rclw
- 25. mean soil temperature @ 10 cm in soil (C)
rclw
- 26. sample precipitation (mm)
ok
- 27. sample of battery voltage
o1

Note:

- 1. One line of data

Filename: boy0232.dat
Station: Lake Bonney met station
Date of Establishment: November 24, 1993 by Peter Doran
Author of this report: Thomas Nylén
File Period: January 24, 2002 (24) @ 1230 to 12/17/2002 (351) 1245
Sampling Frequency: Prec. every 60 minutes, wind speed every 4 sec, other every 30 sec
Averaging and Output Interval: every 15 minutes
Program name: boy012v1 (signature: 22398)

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)
ok
7. mean solar flux going down (W/m2)
ok
8. mean P.A.R. (micromols/s/m2)
divide by 200, multiply by 235.51
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)
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)
divide by 250; multiple by 261.10
20. mean down-facing pyrgeometer hemisphere temp
Eppley
21. mean down-facing pyrgeometer thermopile (W/m2)
Eppley
22. mean down-facing pyrgeometer case temp
Eppley

23. mean soil temperature @ 0 cm in soil (C)
rclow
24. mean soil temperature @ 5 cm in soil (C)
rclow
25. mean soil temperature @ 10 cm in soil (C)
rclow
26. sample depth from sensor to surface (cm)
ok
27. sample precipitation (mm)
ok
28. sample of battery voltage
ol

Note:

1. Check wind alignment on December, 17 2002 @ 1400. No changes
2. Checked values at on December, 17 2002 @ 12:37. Values look good.
3. No Missing data

Filename: boy0233.dat
Station: Lake Bonney met station
Date of Establishment: November 24, 1993 by Peter Doran
Author of this report: Thomas Nylén
File Period: 12/17/2002 (351) 13:00 to 12/17/2002 (351) 13:15
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: 46760)

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)
ok
7. mean solar flux going down (W/m2)
ok
8. mean P.A.R. (micromols/s/m2)
divide by 200, multiply by 235.51
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)
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)
divide by 250; multiple by 261.10
20. mean down-facing pyrgeometer hemisphere temp
Eppley
21. mean down-facing pyrgeometer thermopile (W/m2)
Eppley
22. mean down-facing pyrgeometer case temp
Eppley

23. mean soil temperature @ 0 cm in soil (C)
rclow
24. mean soil temperature @ 5 cm in soil (C)
rclow
25. mean soil temperature @ 10 cm in soil (C)
rclow
26. sample depth from sensor to surface (cm)
ok
27. sample precipitation (mm)
ok
28. sample of battery voltage
ol

Note:

1. Two lines of data
2. Installed CSI Sonic Ranger at 1300
3. Installed 2 new batteries between December, 17 2002 @1300 and 1330. Swapped power to temporary battery. Did not appear to lose any data.
4. Installed new program, Boy023v1.dld December, 17 2002 @ 1300. Did not appear to lose data except temp probe. Switched back to old 107 temp probe from Vaisala temp probe. Flag data
5. Air temperature data in winter did not go below -38.5 C. Does not appear that the air temp probe goes below this level. Flag data at this temp.
6. Swapped out Up (old:, new:) and down (old:, new:) pyranometers sensor at December, 17 2002 @1300 and 1330
7. Strapped down Belford precipitation gage December, 17 2002 @1345 and 1400. Check data and flag.
8. Replaced modules (2 x SM716) on December, 17 2002 @1300.
9. Wind monitor recording 0 wind speed. Flag data on December, 17 2002 @1300 and 1330

Filename: boy0234.dat
Station: Lake Bonney met station
Date of Establishment: November 24, 1993 by Peter Doran
Author of this report: Thomas Nylen
File Period: December 17, 2002 (351) @ 13:30 to January 24, 2003 (24) @ 1600
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: 46760)

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)
ok
7. mean solar flux going down (W/m2)
ok
8. mean P.A.R. (micromols/s/m2)
divide by 200, multiply by 235.51
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)
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)
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)
rclw
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)
ok
27. sample precipitation (mm)
ok
28. sample of battery voltage
ol

Note:

1. Missing data between 1/6/03 6:30 and 1/6/03 11:00
2. Checked values at on January, 24 2002 @ 1612. Values look good.
3. Check wind alignment on January, 24 2002 @ 1622. No changes
4. Loaded new program (same name as last) on January, 24 2002 @ 1615. Changed one line of the program.
Use multiplier to correct depth. New Program signature is 28114
5. Replaced modules (2 x SM716) with 1 SM4M on January, 24 2002 @ 1615.
6. Tighten down the depth sensor, it might have moved a bit, check data
7. Attached guide wires to station

Filename: brh0231.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 18, 2002 (18) @ 1300 to August 13, 2002 (225) @ 1030
Sampling Frequency: wind speed every 4 sec; other every 30 sec
Averaging and Output Interval: every 15 min
Program Name: brh001v1 (program signature: 29453)

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 P.A.R. (micromols/s/m2)
divide by 200, multiply by 235.17
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

Filename: brh0232.dat
Station: Lake Brownworth met station
Date of Establishment: November 13, 1996 by Peter Doran and D.J. Osborne
Author of this report: Thomas Nylén
File Period: August 13, 2002 (225) @ 1030 to 11/12/02 16:00 (316)
Sampling Frequency: wind speed every 4 sec; other every 30 sec
Averaging and Output Interval: every 15 min
Program Name: brh001v1 (program signature: 29453)

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 P.A.R. (micromols/s/m²)
divide by 200, multiply by 235.17
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 minus 1 minute and 41 seconds on November 12, 2002 (316) @ 1539.
3. Input value checked on November 12, 2002 (316) @ 1541, everything looks good
4. Check wind alignment on January 18, 2002 (18) @ 1312, no changes
5. Swapped upward and downward pyranometers and quantum on November 12, 2002 @ 1559, 1552 and 1608.
Sensor numbers: SwRadIn: Old: 27937 New 28169, SwRadOut: Old: 27929, New PY23275, PAR: old 28265 and new Q30803

6. Swapped out Temp/RH probe on on November 12, 2002 (316) @ 1545
7. Swapped out module (installed 2 SM716) on January 18, 2002 (18) @ 1305

Filename: brh0233.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: November, 12, 2002 (316) @ 1615 to January, 27, 2003 (27) @ 1445
Sampling Frequency: wind speed every 4 sec; other every 30 sec
Averaging and Output Interval: every 15 min
Program Name: brh001v1 (program signature: 29453)

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 P.A.R. (micromols/s/m2)
divide by 200, multiply by
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 minus 30 seconds on January 27, 2003 (27) @ 1446
3. Check wind alignment on January 27, 2003 (27) @ 1448, no changes
4. Swapped out module one (1) SM4M on January 27, 2003 (27) @ 1451 for another SM4M

Filename: bsn0231.dat
Station: Lake Bonney Snow Fence
Date of Establishment: January 2001 by Thomas Nylen
Author of this report: Thomas Nylen
File Period: January 24, 2002 (24) @ 1500 to Nov 7, 2002 (311) @ 0430
Sampling Frequency: sonic every 60 minutes, every 30 sec for all the others
Averaging and Output Interval: every 15 min
Program Name: bsn001v1.dld

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)
divide by 200, multiply by 301.57
5. mean soil P.A.R. +1.8 m (east) from snow fence (micromols/s/m2)
divide by 200, multiply by 319.62
6. mean Air P.A.R. @ 1.6 m (micromols/s/m2)
divide by 200, multiply by 228.05
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. Sonic Ranger Depth (cm)
bad
13. sample of battery voltage
ol

Notes:

1. Sonic Sensor not working.
2. Missing data between June 3, 2002 @ 1015 and June 3, 2002 @ 1945
3. Missing data between October 17, 2002 @ 600 and October 17, 2002 @ 1530

Filename: bsn0232.dat
Station: Lake Bonney Snow Fence
Date of Establishment: January 2001 by Thomas Nylen
Author of this report: Thomas Nylen
File Period: Nov 7, 2002 (311) @ 0445 to Nov 16, 2002 (320) @ 1445
Sampling Frequency: sonic every 60 minutes, every 30 sec for all the others
Averaging and Output Interval: every 15 min
Program Name: bsn001v1.dld

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)
divide by 200, multiply by 301.57
5. mean soil P.A.R. +1.8 m (east) from snow fence (micromols/s/m²)
divide by 200, multiply by 319.62
6. mean Air P.A.R. @ 1.6 m (micromols/s/m²)
divide by 200, multiply by 228.05
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. Sonic Ranger Depth (cm)
bad
13. sample of battery voltage
ol

Notes:

1. Sonic Sensor not working.

Filename: bsn0233.dat
Station: Lake Bonney Snow Fence
Date of Establishment: January 2001 by Thomas Nylen
Author of this report: Thomas Nylen
File Period: Nov 16, 2002 (320) @ 1445 to Dec 17, 2002 (351) @ 1830
Sampling Frequency: sonic every 60 minutes, every 30 sec for all the others
Averaging and Output Interval: every 15 min
Program Name: bsn001v1.dld

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)
divide by 200, multiply by 301.57
5. mean soil P.A.R. +1.8 m (east) from snow fence (micromols/s/m2)
divide by 200, multiply by 319.62
6. mean Air P.A.R. @ 1.5 m (micromols/s/m2)
divide by 200, multiply by 228.05
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. Sonic Ranger Depth (cm)
bad
13. sample of battery voltage
ol

Notes:

1. Sonic Sensor not working, everything else appears to be working fine.
2. Replace PAR Sensors between 12/17/02 @ 1815 and 12/17/02 @ 18:45.
Air PAR – Old: Q28259 and New: Q20266
Soil PAR +3.6m – Old: Q23210 and New Q30801
Soil PAR +1.8m – Old: Q23207 and New Q30802
3. Repositioned soil temperature probes next to PAR sensors
4. Loaded new program, BS023v1.dld on 12/17/02 @ 1845

Filename: bsn0234.dat
Station: Lake Bonney Snow Fence
Date of Establishment: January 2001 by Thomas Nylen
Author of this report: Thomas Nylen
File Period: Dec 17, 2002 (351) @ 1845
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: 51528)

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)
divide by 200, multiply by 217.27
5. mean soil P.A.R. +1.8 m (east) from snow fence (micromols/s/m2)
divide by 200, multiply by 222.23
6. mean Air P.A.R. @ 1.6 m (micromols/s/m2)
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)
bad
13. sample of battery voltage
ol

Notes:

1. Replace PAR Sensors between 12/17/02 @ 1815 and 12/17/02 @ 18:45.
Air PAR – Old: Q28259 and New: Q20266
Soil PAR +3.6m – Old: Q23210 and New Q30801
Soil PAR +1.8m – Old: Q23207 and New Q30802
2. Repositioned soil temperature probes next to PAR sensors
3. Loaded new program, BS023v1.dld on 12/17/02 @ 1845
4. Only one line of data

Filename: bsn0235.dat
Station: Lake Bonney Snow Fence
Date of Establishment: January 2001 by Thomas Nylen
Author of this report: Thomas Nylen
File Period: Dec 17, 2002 (351) @ 1845 to January 24, 2003 (24) @ 1400
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: 51528)

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)
divide by 200, multiply by 217.27
5. mean soil P.A.R. +1.8 m (east) from snow fence (micromols/s/m2)
divide by 200, multiply by 222.23
6. mean Air P.A.R. @ 1.6 m (micromols/s/m2)
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)
bad
13. sample of battery voltage
ol

Notes:

1. Loaded new program, BS023v1.dld on January 24, 2003 @ 1415. Same name as old. Just changed on line of the program to use the multiplier to calculate the sonic depth.
2. Duplicate line at beginning of file with previous data file. Use line of data from previous file.
3. First value for depth sensor is bad, flag
4. Tired tighten down the middle vertical post, which contains all the sensors, but it is frozen in and cannot straighten completely. Did managed to get it close, so the depth will change. Old sonic depth is 110.4, new is 112.1.

Filename: caa02031.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 16, 2002 (10) @ 1330 to September 21, 2002 (264) @ 2015
Sampling Frequency: wind speed every 4 sec; other every 30 sec
Averaging and Output Interval: every 15 minutes
Program name: caa001v1 (program signature: 16484)

1. array I.D.
o1
2. day
ok
3. time
ok
4. mean air temp. @ 2 meters ©
rclow
5. mean rh @ 2 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 barometric pressure (mbar)
ok
15. sample battery voltage
o1

*Notes:

1. No missing data

Filename: caa02032.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: September 21, 2002 (264) @ 2030 to November 13, 2002 (317) @ 1715
Sampling Frequency: wind speed every 4 sec; other every 30 sec
Averaging and Output Interval: every 15 minutes
Program name: caa001v1 (program signature: 16484)

1. array I.D.
ol
2. day
ok
3. time
ok
4. mean air temp. @ 2 meters ©
rclow
5. mean rh @ 2 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)
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 barometric pressure (mbar)
ok
15. sample battery voltage
ol

*Notes:

1. No missing data
2. Time adjusted -2 min and 59 sec on November 13, 2002 (317) @ 1722
3. Input values checked November 13, 2002 (317) @ 1725, values ok
4. Wind vane alignment checked on November 13, 2002 (317) @ 1715, no changes
5. no sensors replaced
6. 2 modules swapped for 2 SM716 modules on November 13, 2002 (317) @ 1715

Filename: caa02033.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 13, 2002 (317) @ 1730 to January 2, 2003 (2) @ 1530
Sampling Frequency: wind speed every 4 sec; pressure every 15 minutes, other every 30 sec
Averaging and Output Interval: every 15 minutes
Program name: caa001v1 (program signature: 16484)

1. array I.D.
ol
2. day
ok
3. time
ok
4. mean air temp. @ 2 meters ©
rclow
5. mean rh @ 2 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)
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 barometric pressure (mbar)
ok
15. sample battery voltage
ol

*Notes:

1. Missing data between December 2, 2002 @ 315 and 1115.
2. Time adjusted -8 sec on November 13, 2002 (317) @ 1722
3. Input values checked January 2, 2003 (2) @ 1348, values ok
4. Wind vane alignment checked on January 2, 2003 (2) @ 1351, no changes
5. Between January 2, 2003 @ 1445 and 1505 upward (Old# PY28348 and New# PY20562) and downward (Old# PY28371 and New# PY23269) pyranometers replaced. A wire for Upward pyranometer was pulled out by accident on January 2, 2003 @ 1430. Mark value as bad.
6. On January 2, 2003 @ 1447 RH head was replaced with a new one.
7. Wind monitor was replaced on January 2, 2003 between 14:04 and 14:40. Put the old one on the middle post, while installed the new. No errors.
8. Installed guide wires for the station

9. 2 SM716 modules swapped for 2 SM716 modules on January 2, 2003 (2) @ 1535

Filename: caa02034.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 2, 2003 (2) @ 1545 to January 11, 2003 (11) 1530
Sampling Frequency: wind speed every 4 sec; pressure every 15 minutes, other every 30 sec
Averaging and Output Interval: every 15 minutes
Program name: caa001v1 (program signature: 16484)

1. array I.D.
o1
2. day
ok
3. time
ok
4. mean air temp. @ 2 meters ©
rclow
5. mean rh @ 2 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 barometric pressure (mbar)
ok
15. sample battery voltage
o1

*Notes:

1. No missing data.

Filename: caa02035.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 11, 2003 (11) 1545
Sampling Frequency: wind speed every 4 sec; pressure every 15 minutes, other every 30 sec
Averaging and Output Interval: every 15 minutes
Program name: caa001v1 (program signature: 16484)

1. array I.D.
ol
2. day
ok
3. time
ok
4. mean air temp. @ 2 meters ©
rclow
5. mean rh @ 2 meters (%)
ok
6. mean solar flux coming down (PY20562, W/m²)
ok
7. mean solar flux going up (PY23269, 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. mean barometric pressure (mbar)
ok
15. sample battery voltage
ol

*Notes:

1. No missing data, one line of data.
2. Time adjusted +1 sec on January 11, 2002 (11) @ 1533
3. Input values checked January 11, 2003 (11) @ 1534, values ok
4. Wind vane alignment checked on January 11, 2003 (11) @ 1537, no changes
5. New ice temperature thermistors were installed on January 11, 2003 (11) @ 1545. They are installed at 50 and 100 cm from the surface, drill at a 45 degree angle (72.5 and 145 cm from the surface) on a flat surface. Wires were attached to stake, which was drilled a little less than 2 m vertically in the ice. 4 measurements on the stake board to top of the stake) are 65.1, 65.2, 65.2 and 65.0 cm and the board is 1.2 cm.
6. Pressure transducer removed on January 11, 2003 (11) @ 1545
7. 1 SM4M modules swapped for 2 SM716 modules on January 11, 2003 (2) @ 1545

Filename: caa02036.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 11, 2003 (11) 1545 to January 19, 2003 (19) @ 1700
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. @ 2.55 meters (C)
rclow
5. mean rh @ 2.55 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. ice temperature between 50.0 and 49.8 cm (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 between 100 and 99.8 cm (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. No missing data.
2. Time adjusted +1 sec on January 19, 2002 (19) @ 1701
3. Input values checked January 19, 2003 (19) @ 1701, values ok
4. Wind vane alignment checked on January 19, 2003 (19) @ 1702, no changes
5. 1 SM4M modules swapped for 1 SM4M modules on January 19, 2003 (19) @ 1706
6. Ice stake measurements made on January 19, 2003 (19) @ 1708 are 65.3, 65.4, 65.3, 65.2. Change in ice height since last visit is 0.2 cm with a std. dev of 0.1.
7. Temp/RH probe 255 cm from ice surface, cross arm holding wind and solar is 289 m.

Filename: caa02037.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 19, 2003 (19) @ 1715 to January 22, 2003 (22) @ 1030
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. @ 2.55 meters (C)
rclow
5. mean rh @ 2.55 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. ice temperature between 50.0 and 49.8 cm (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 between 100 and 99.8 cm (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. No missing data.

Filename: caa02038.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 22, 2003 (22) @ 1045 to January 28, 2003 (28) @ 1000
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.
ol
2. day
ok
3. time
ok
4. mean air temp. @ 2.55 meters (C)
rclow
5. mean rh @ 2.55 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)
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 between 50.0 and 49.8 cm (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 between 100 and 99.8 cm (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. Check time on January 28, 2003 (28) @ 1000, no changes
3. Check wind on January 28, 2003 (28) @ 1002, pointing north
4. Swapped out two SM716 for one SM4M on January 28, 2003 (28) @ 1004
5. Thermister stake height without the board: 65.6, 66, 66, 66. Snow depth: 4.5, 4.1, 3.5, 2.8

Filename: coh0231.dat
Station: Commonwealth Glacier Station
Date of Establishment: Nov 22, 1993 by Peter Doran
Author of this report: Thomas Nylen
File Period: January 28, 2002 (28) @ 1630 to November 27, 2002 (331) @ 1545
Sampling Frequency: wind every 4 secs.; other every 30 secs.
Averaging and Output Interval: every 15 minutes
Program name: coh990v1 (program signature: 39692)

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 117.10
7. mean solar flux going up (W/m2)
divide by 100; multiply by 123.00
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)
divide by 250; multiply by 289.02
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)
divide by 250; multiply by 253.81
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. mean ice temp. @ 20 cm (C)
flag; rclow

- * 23. mean ice temp. @ 1 m (C)
flag; rclow
- 24. sample of battery voltage
o1

*Notes:

1. Exact depth position of ice thermistors unknown (#19 and #20).
2. On November 27, 2002 @ 1545 unplugged old battery and hooked up temporary battery while installing new batteries. Plugged in new batteries on November 27, 2002 @ 1630.
3. Replaced SM4M storage module with 1@ SW4M module on November 27, 2002 @ 1545

Filename: coh0232.dat
Station: Commonwealth Glacier Station
Date of Establishment: Nov 22, 1993 by Peter Doran
Author of this report: Thomas Nylén
File Period: November 27, 2002 (331) @ 1600
Sampling Frequency: sonic every 60 minutes, wind every 4 secs.; other every 30 secs.
Averaging and Output Interval: every 15 minutes
Program name: coh023v1 (program signature: 31206)

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 117.10
7. mean solar flux going up (W/m²)
divide by 100; multiply by 123.00
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)
divide by 250; multiply by 289.02
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)
divide by 250; multiply by 253.81
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. mean ice temp. @ 20 cm (C)
flag; rclow

23. mean ice temp. @ 1 m (C)
flag; rclow
24. sample depth from sensor to surface (cm)
ok
25. sample of battery voltage
o1

*Notes:

1. No missing data
2. Exact depth position of ice thermistors unknown (#19 and #20).
3. Wind vane direction checked on November 27, 2002 @ 1600, no changes
4. On November 27, 2002 @ 1545 unplugged old battery and hooked up temporary battery while installing new batteries. Plugged in new batteries on November 27, 2002 @ 1630.

Filename: coh0233.dat
Station: Commonwealth Glacier Station
Date of Establishment: Nov 22, 1993 by Peter Doran
Author of this report: Thomas Nylen
File Period: 11/27/2002 (331) @ 1615 (1530) to 11/27/2002 (331) @ 1630 (1545)
Sampling Frequency: sonic every 60 minutes, wind every 4 secs.; other every 30 secs.
Averaging and Output Interval: every 15 minutes
Program name: coh023v1 (program signature: 31206)

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 117.10
7. mean solar flux going up (W/m2)
divide by 100; multiply by 123.00
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)
divide by 250; multiply by 289.02
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)
divide by 250; multiply by 253.81
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. mean ice temp. @ 20 cm (C)
flag; rclow

23. mean ice temp. @ 1 m (C)
flag; rclow
24. sample depth from sensor to surface (cm)
ok
25. sample of battery voltage
o1

*Notes:

1. No missing data
2. Exact depth position of ice thermistors unknown (#19 and #20).
3. On November 27, 2002 @ 1545 unplugged old battery and hooked up temporary battery while installing new batteries. Plugged in new batteries on November 27, 2002 @ 1630.
4. On November 27, 2002 @ 1630 loaded new program, Coh023v1 by turning off CR10X. When CR10X powered back on the time was off by 30 minutes. Readjusted the time back to correct time.
5. On November 27, 2002 @ 1630, hooked up sonic sensor. Original depth of sonic is 106.0 cm from the surface. Matches well with the measured depth from the sonic
6. Time reset back a bit and 2 lines were 45 minutes behind real time.

Filename: coh0234.dat
Station: Commonwealth Glacier Station
Date of Establishment: Nov 22, 1993 by Peter Doran
Author of this report: Thomas Nylén
File Period: 11/27/2002 (331) @ 1645 to 1/13/2003 (13) @ 1600
Sampling Frequency: sonic every 60 minutes, wind every 4 secs.; other every 30 secs.
Averaging and Output Interval: every 15 minutes
Program name: coh023v1 (program signature: 31206)

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 117.10
7. mean solar flux going up (W/m2)
divide by 100; multiply by 123.00
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)
divide by 250; multiply by 289.02
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)
divide by 250; multiply by 253.81
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. mean ice temp. @ 20 cm (C)
flag; rclow

23. mean ice temp. @ 1 m (C)
flag; rclow
24. sample depth from sensor to surface (cm)
ok
25. sample of battery voltage
o1

*Notes:

1. No missing data
2. Exact depth position of ice thermistors unknown (#19 and #20).
3. New posts were drilled on January 13, 2003 @ 1500 and the station was lower about 70cm cm.
4. Sonic sensor moved when station was lowered, but moved to low, so it was raised back up, new height is approx 58.4 cm. Values between January 13, 2003 @ 1500 and January 13, 2003 @ 1600 flagged as bad. Need to construct different joint for depth sensor bar. The existing one is not cutting it.
5. New wind monitor was installed on January 13, 2003 @ 1600.
6. New program, Coh023v2.dld was loaded on January 13, 2003 @ 1615, new program signature is 57035
7. New ice temperature thermistors were installed on January 13, 2003 (11) @ 1615. They are installed at 50 and 100 cm from the surface, drill at a 45 degree angle (72.5 and 145 cm from the surface) on a flat surface. Wires were attached to stake, which was drilled a little less than 2 m vertically in the ice. 4 measurements on the stake board to top of the stake) are 64.6, 64.3, 64.1 and 64.3 cm and the board is 1.2 cm.

Filename: coh0235.dat
Station: Commonwealth Glacier Station
Date of Establishment: Nov 22, 1993 by Peter Doran
Author of this report: Thomas Nylen
File Period: January 13, 2003 (13) @ 1615 to January 23, 2003 (23) @ 1615
Sampling Frequency: sonic every 60 minutes, wind every 4 secs.; other every 30 secs.
Averaging and Output Interval: every 15 minutes
Program name: coh023v2 (program signature: 57035)

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 117.10
7. mean solar flux going up (W/m2)
divide by 100; multiply by 123.00
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)
divide by 250; multiply by 289.02
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)
divide by 250; multiply by 253.81
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,n2=-512.50,n3=693.49,n4=-551.71,n5=254.79,n6=-63.07, n7=6.492)
24. sample depth from sensor to surface (m)
Depth at start of file minus value multiplied by -100 to convert to cm
25. sample of battery voltage
o1

*Notes:

1. No missing data
2. Time adjusted +7 sec on January 23, 2003 @ 16:03
3. Installed new holder for sonic bar, might be some changes in the height. Secured the back end of the bar to the station. New sonic depth is 47.5 cm.
4. Wind alignment check on January 23, 2003 @ 16:00, no changes
5. New program, Coh023v2.dld was loaded on January 23, 2003 @ 16:15, new program signature is 60409. Changed only one line in program. Added line to use multiplier in sonic ranger
6. 4 measurements on the stake board to top of the stake) are 48.8, 48.6, 48.6 and 48.8 cm and the board is 1.2 cm.
7. Replaced one (1) SM4M with one (1) SM4M on January 23, 2003 @ 16:15

Filename: exe0231.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 29, 2002 (29) @ 1315 to December 13, 2002 (347) @ 1245
Sampling Frequency: prec every 60 minutes, wind every 4 secs.; others: every 30 secs.
Averaging and Output Interval: every 15 minutes
Program name: exe990v1 (program signature: 35828)

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 288.44
15. mean soil temperature @ 0 cm (C)
rclow
16. mean dTemp 1-3 meters (from t.c. wire) (C)
Multiple by -1
17. sample precipitation (mm)
ok
18. sample battery voltage

notes:

1. Adjusted time +11 sec on December 13, 2002 @ 11:23
2. Checked input values on December 13, 2002 @ 11:24 and December 13, 2002 @ 12:45, everything working fine
3. Checked wind December 13, 2002 @ 11:30, pointing north.
4. Swapped out wind monitor on December 13, 2002 between 11:45 and 1200
5. Upward Pyranometer sensor number: PY49090, Downward Pyranometer sensor number: PY40423
6. Replace old PAR, Q20275 with Q17984 December 13, 2002 @ 12:15, flagged data because it looked low on December 13, 2002 @ 12:00

7. Replaced storage module with SM716 December 13, 2002 @ 12:45
8. Wire to AirT3m pulled out, and was unhooked between 12:15 and 12:45. Values flag as bad in input data and flagged in output data
9. Top center bar on station is loose.

Filename: exe0232.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 Nysten
File Period: December 13, 2002 (347) @ 1300 to January 29, 2003 (29) @ 1400
Sampling Frequency: prec every 60 minutes, wind every 4 secs.; others: every 30 secs.
Averaging and Output Interval: every 15 minutes
Program name: exe990v1 (program signature: 35828)

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 291.91
15. mean soil temperature @ 0 cm (C)
rclow
16. mean dTemp 1-3 meters (from t.c. wire) (C)
Multiple by -1
17. sample precipitation (mm)
ok
18. sample battery voltage

notes:

1. Missing data between January 3, 2003 @ 1600 to January 3, 2003 @ 2245 and January 12, 2003 @ 1515 to January 12, 2003 @ 2200.
2. Adjusted time +12 sec on January 29, 2003 (29) @ 1311
3. Checked input values on January 29, 2003 (29) @ 1312 everything working fine
4. Checked wind January 29, 2003 (29) @ 1316, pointing north.
5. Placed cargo strap around Belfort precipitation gage
6. Replaced two SM716 storage module on January 29, 2003 (29) @ 1400 with 1 SM4M

7. Unhooked temperature thermal couple and Installed 2 107 soil temperature probes at 5 and 10 cm depths on January 29, 2003 (29) @ 1400.
8. Loaded new program, Exe023v1.dld on January 29, 2003 (29) @ 1400, new program signature is 65455
9. Top center bar on station is loose.

Filename: frl0231.dat
Station: Lake Fryxell met station
Date of Establishment: Jan 6, 1994 by Peter Doran
Author of this report: Thomas Nylén
File Period: January 22, 2002 (22) @ 1630 to 11/11/02 10:00
Sampling Frequency: wind every 4 sec; others: every 30 secs.
Averaging and Output Interval: every 15 minutes
Program name: frl990v1 (program signature: 21921)

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 P.A.R. (micromols/s/m²)
divide by 200, multiply by 261.14
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. Time adjusted +00:02:05 sec on November 11, 2002 @ 940
3. Wind alignment checked on November 11, 2002 @ 955, changed 15 degrees clockwise
4. Module replaced with 1 SM4M @ November 11, 2002 @ 1000

Filename: frl0232.dat
Station: Lake Fryxell met station
Date of Establishment: Jan 6, 1994 by Peter Doran
Author of this report: Thomas Nylén
File Period: November 11, 2002 (315) @ 10:15 to November 11, 2002 (315) @ 10:30
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:)

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 P.A.R. (micromols/s/m2)
divide by 200, multiply by 261.14
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)
ok
19. sample of battery voltage
o1

notes:

1. Load new program Frl023v1 @1045, new program signature is 41662
2. Unplugged batteries and hooked up temp battery on 11/11/02 @ 10:45

Filename: frl0233.dat
Station: Lake Fryxell met station
Date of Establishment: Jan 6, 1994 by Peter Doran
Author of this report: Thomas Nylen
File Period: November 11, 2002 (315) @ 10:30 to November 11, 2002 (315) @ 11:15
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: 41662)

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 P.A.R. (micromols/s/m2)
divide by 200, multiply by 261.14
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)
ok
19. sample of battery voltage
o1

notes:

1. No missing data, three lines of data
2. Time adjusted +00:02:05 sec on November 11, 2002 @ 940
3. Wind alignment checked on November 11, 2002 @ 955, changed 15 degrees clockwise
4. Swapped batteries and hooked up new set on 11/11/02 @ 1115

5. Installed sonic sensor on November 11, 2002 @ 1115, sensor height is ~111.0 cm from the surface. Flag sensor data for the first few lines until it was hooked up.

Filename: frl0234.dat
Station: Lake Fryxell met station
Date of Establishment: Jan 6, 1994 by Peter Doran
Author of this report: Thomas Nylen
File Period: November 11, 2002 (315) @ 11:15 to January 22, 2003 (22) @ 1330
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: 41662)

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 P.A.R. (micromols/s/m2)
divide by 200, multiply by 261.14
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)
ok
19. sample of battery voltage
o1

notes:

1. No missing data, first line overlaps with previous file. Use line from previous file
2. Time adjusted -00:01:35 sec on January 22, 2003 (22) @ 1340
3. Wind alignment checked on January 22, 2003 (22) @ 1350, changed 10 degrees counter clockwise
4. Loaded new program, same name as before. Just changed on line of data, which uses multiplier to adjust sonic value. New program signature is 49340

5. Sensor height is ~111.0 cm from the surface.
6. Module replaced with 1 SM4M @ January 22, 2003 (22) @ 1345

Filename: fsn0231.dat
Station: Lake Fryxell Snow Fence
Date of Establishment: January 2001 by Thomas Nylen
Author of this report: Thomas Nylen
File Period: January 30, 2002 (24) @ 1115 to Nov 11, 2002 (315) @ 1215
Sampling Frequency: every 30 sec
Averaging and Output Interval: every 15 min
Program Name: fsn001v1.dld (Program Signature: 34653)

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)
divide by 200, multiply by 294.60
5. mean soil P.A.R. +1.9 m (east) from snow fence (micromols/s/m2)
divide by 200, multiply by 300.48
6. mean Air P.A.R. @ 1.6 m (micromols/s/m2)
divide by 200, multiply by 291.48
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. sample of battery voltage
ol

Notes:

1. Missing data in file, most of which is in the fsn0232.dat, except between July 6, 2002 (187) @ 0945 and July 6, 2002 @ 2000
2. CR10X Time adjusted back 2 minutes and 04 secs on November 11, 2002 (315) @ 1221
3. Soil PAR and temp probes are under snow on November 11, 2002 (315).

Filename: fsn0232.dat
Station: Lake Fryxell Snow Fence
Date of Establishment: January 2001 by Thomas Nylen
Author of this report: Thomas Nylen
File Period: Various lines of data not in fsn021.dat between April 22, 2002 (112) @ 0400 and October 29, 2002 @ 615
Sampling Frequency: every 30 sec for all the others
Averaging and Output Interval: every 15 min
Program Name: fsn001v1.dld (Program Signature: 34653)

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)
divide by 200, multiply by 294.60
5. mean soil P.A.R. +1.9 m (east) from snow fence (micromols/s/m2)
divide by 200, multiply by 300.48
6. mean Air P.A.R. @ 1.6 m (micromols/s/m2)
divide by 200, multiply by 291.48
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. sample of battery voltage
ol

Notes:

1. 144 lines of data that is missing from fsn0231.dat

Filename: fsn0233.dat
Station: Lake Fryxell Snow Fence
Date of Establishment: January 2001 by Thomas Nylen
Author of this report: Thomas Nylen
File Period: Nov 11, 2002 (315) @ 1230 to December 13, 2002 (347) @ 1645
Sampling Frequency: every 30 sec for all the others
Averaging and Output Interval: every 15 min
Program Name: fsn001v1.dld (Program Signature: 34653)

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)
divide by 200, multiply by 294.60
5. mean soil P.A.R. +1.9 m (east) from snow fence (micromols/s/m2)
divide by 200, multiply by 300.48
6. mean Air P.A.R. @ 1.6 m (micromols/s/m2)
divide by 200, multiply by 291.48
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. sample of battery voltage
ol

Notes:

1. No missing data
2. Time adjusted back 11 seconds on December 13, 2002 @ 1652
3. Soil PAR and temp probes are under snow on December 13, 2002.

Filename: fsn0234.dat
Station: Lake Fryxell Snow Fence
Date of Establishment: January 2001 by Thomas Nylen
Author of this report: Thomas Nylen
File Period: December 13, 2002 (347) @ 1700
Sampling Frequency: sonic every 60 minutes, every 30 sec for all the others
Averaging and Output Interval: every 15 min
Program Name: fsn001v1.dld (Program Signature: 34653)

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)
divide by 200, multiply by 294.60
5. mean soil P.A.R. +1.9 m (east) from snow fence (micromols/s/m2)
divide by 200, multiply by 300.48
6. mean Air P.A.R. @ 1.6 m (micromols/s/m2)
divide by 200, multiply by 291.48
7. mean air temp. @ 1.3 m (C)
rclo
8. mean soil temperature @ 0 cm in soil -4.5 m (west) of snow fence (C)
rclo
9. mean soil temperature @ 0 cm in soil +1.0 m (east) of snow fence (C)
rclo
10. mean soil temperature @ 0 cm in soil +1.9 m (east) of snow fence (C)
rclo
11. mean soil temperature @ 0 cm in soil +3.8 m (east) of snow fence (C)
rclo
12. sample of battery voltage
ol

Notes:

1. Installed new sonic ranger on December 13, 2002 @ 1700. Initial height from snow is 74.0.
2. Loaded new program, fs023v1, on December 13, 2002 @ 1700. New program signature is 17958.
3. Installed new 20W solar panel on December 13, 2002 @ 1830
4. Soil PAR and temp probes are under snow on December 13, 2002.

Filename: fsn0235.dat
Station: Lake Fryxell Snow Fence
Date of Establishment: January 2001 by Thomas Nylen
Author of this report: Thomas Nylen
File Period: December 13, 2002 (347) @ 1700 to January 22, 2003 (22) @ 1615
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: 17958)

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)
divide by 200, multiply by 294.60
5. mean soil P.A.R. +1.9 m (east) from snow fence (micromols/s/m2)
divide by 200, multiply by 300.48
6. mean Air P.A.R. @ 1.6 m (micromols/s/m2)
divide by 200, multiply by 291.48
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)
bad
1. sample of battery voltage
ol

Notes:

1. Time adjusted ahead 7 seconds on January 22, 2003 (22) @ 1516
2. Loaded new program, same name as last, on January 22, 2003 (22) @ 1615. Added on program instruction which adjusts the distance measured to the ground by a multiplier.
3. Swapped out Air Quantum (old: Q23204, new: Q30805) on January 22, 2003 (22) @ 1535
4. Swapped out Soil Quantum @ +3.8 m (old: Q20526, new: Q30804) on January 22, 2003 (22) @ 1552
5. Swapped out Soil Quantum @ +1.9 m (old: Q23201, new: Q30800) on January 22, 2003 (22) @ 1559
6. Swapped out two SM716 for two SM716 on January 22, 2003 (22) @ 1615
7. Sonic sensor depth to ground is 104.5

Filename: hod0231.dat
Station: Howard Glacier Station
Date of Establishment: Nov 20, 1993 by Peter Doran
Author of this report: Thomas Nylén
File Period: January 22, 2002 (22) @ 1230 to November 25, 2002 (329) @ 1200
Sampling Frequency: wind every 4 sec others: every 30 sec
Averaging and Output Interval: every 15 minutes
Program name: hod990v1 (15272)

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. mean ice temp. near surface (C)
flag; rclow
15. mean ice temp. @ ~1 m (C)
flag; rclow
16. mean air temp @ 1 meter m (C)
rclow
17. mean rh @ 1 meter (%)
ok
18. sample of battery voltage
o1

*Notes:

1. No data missing
2. Exact depth position of ice thermistors unknown (#14 & 15).
3. Time adjusted +00:02:18 on November 25, 2002 @ 12:04
4. Checked input values on November 25, 2002 @ 12:05
5. No changes to wind monitor direction on November 25, 2002 @ 12:10
6. Replaced storage modules with 1 @ SM4M on November 25, 2002 @ 12:12

Filename: hod0232.dat
Station: Howard Glacier Station
Date of Establishment: Nov 20, 1993 by Peter Doran
Author of this report: Thomas Nysten
File Period: November 25, 2002 (329) @ 1215 to November 25, 2002 (329) @ 1245
Sampling Frequency: wind every 4 sec others: every 30 sec
Averaging and Output Interval: every 15 minutes
Program name: hod990v1 (15272)

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. mean ice temp. near surface (C)
flag; rclow
15. mean ice temp. @ ~1 m (C)
flag; rclow
16. mean air temp @ 1 meter m (C)
rclow
17. mean rh @ 1 meter (%)
ok
18. sample of battery voltage
o1

*Notes:

1. No data missing
2. Exact depth position of ice thermistors unknown (#14 & 15).
3. Replaced batteries on November 25, 2002 @ 1245
4. Replaced wind monitor November 25, 2002 between 1245 and 1315, check values next data

Filename: hod0233.dat
Station: Howard Glacier Station
Date of Establishment: Nov 20, 1993 by Peter Doran
Author of this report: Thomas Nylén
File Period: November 25, 2002 (329) @ 1245 to January 16, 2003 (16) @ 1600
Sampling Frequency: wind every 4 sec others: every 30 sec
Averaging and Output Interval: every 15 minutes
Program name: hod990v1 (15272)

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. mean ice temp. near surface (C)
flag; rclow
15. mean ice temp. @ ~1 m (C)
flag; rclow
16. mean air temp @ 1 meter m (C)
rclow
17. mean rh @ 1 meter (%)
ok
18. sample of battery voltage
o1

*Notes:

1. No data missing
2. Overlapping line of data with the previous file at the start. I will use the last line of the last data file for the November 25, 2002 (329) @ 1245 value.
3. Exact depth position of ice thermistors unknown (#14 & 15).
4. Replaced wind monitor November 25, 2002 between 1245 and 1315, check values next data
5. Adjusted time +12 sec on January 16, 2003 (16) @ 1551

6. Checked input values on January 16, 2003 (16) @ 1553, everything looked good.
7. Check wind direction, no adjustments.
8. Installed new program, hod023v1 on January 16, 2003 (16) @ 1600. New program signature is 26628.
9. New ice temperature thermistors were installed on January 16, 2003 (16) @ 1600. They are installed at 50 and 100 cm from the surface, drill at a 45 degree angle (72.5 and 145 cm from the surface) on a flat surface. Wires were attached to stake, which was drilled a little less than 2 m vertically in the ice. 4 measurements on the stake board to top of the stake) are 82.1, 82.0, 82.3 and 82.4 cm and the board is 1.2 cm.

Filename: hoe0231.dat
Station: Lake Hoare met station
Date of Establishment: Dec 1, 1993 by Peter Doran
Author of this report: Thomas Nysten
File Period: January 26, 2002 (26) @ 1530 to 12/16/02 12:45 (350)
Sampling Frequency: wind every 4 sec; other every 30 sec
Averaging and Output Interval: every 15 minutes
Program Name: hoe012v6 (Program signature: 51032)

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 P.A.R. (micromols/s/m2)
divide by 200, multiply by 243.47 (Q29775)
15. sample station barometric pressure (mbar)
ok
16. mean temperature difference 1-3 m (C)
Multiply by -1
17. sample of battery voltage
o1

*Notes:

1. No missing lines of data
2. Checked values at 12/16/02 12:51 (350), everything looks good
3. Checked wind alignment, pointed north, no adjustment
4. Swapped out SM4M for two SM716 on 12/16/02 13:00 (350).

Filename: hoe0232.dat
Station: Lake Hoare met station
Date of Establishment: Dec 1, 1993 by Peter Doran
Author of this report: Thomas Nylén
File Period: December 16, 2002 (350) @ 1300 to December, 20, 2002 (354) @ 1600
Sampling Frequency: wind every 4 sec; other every 30 sec
Averaging and Output Interval: every 15 minutes
Program Name: hoe012v6 (Program signature: 51032)

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 P.A.R. (micromols/s/m2)
divide by 200, multiply by 243.47 (Q29775)
15. sample station barometric pressure (mbar)
ok
16. mean temperature difference 1-3 m (C)
Multiply by -1
17. sample of battery voltage
o1

*Notes:

1. No missing lines of data
2. Adjusted time -4 minutes and 53 seconds at 12/16/02 13:00 (350)
3. Checked values at 12/16/02 13:01 (350), everything looks good
4. Checked values at 12/20/02 15:58 (350), everything looks good
5. Installed guide wires to strengthen the station

Filename: hoe0233.dat
Station: Lake Hoare met station
Date of Establishment: Dec 1, 1993 by Peter Doran
Author of this report: Thomas Nylén
File Period: December, 20, 2002 (354) @ 1600 to December, 20, 2002 (354) @ 1615
Sampling Frequency: wind every 4 sec; other every 30 sec
Averaging and Output Interval: every 15 minutes
Program Name: hoe023v1 (Program signature: 51032)

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 P.A.R. (micromols/s/m2)
divide by 200, multiply by 243.47 (Q29775)
15. sample station barometric pressure (mbar)
ok
16. mean temperature difference 1-3 m (C)
Multiply by -1
17. sample of battery voltage
o1

*Notes:

1. No missing lines of data
2. Turned off the datalogger to replace battery right after 12/20/2002 16:00 (354) and plugged in temporary battery. First line of this raw data file, 12/20/2002 16:00 (354) is bogus. Ignore.

Filename: hoe0234.dat
Station: Lake Hoare met station
Date of Establishment: Dec 1, 1993 by Peter Doran
Author of this report: Thomas Nylen
File Period: December 20, 2002 (354) 1615 to December 20, 2002 (354) 1630
Sampling Frequency: wind every 4 sec; other every 30 sec
Averaging and Output Interval: every 15 minutes
Program Name: hoe023v1 (Program signature: 51032)

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 P.A.R. (micromols/s/m2)
divide by 200, multiply by 243.47 (Q29775)
15. sample station barometric pressure (mbar)
ok
16. mean temperature difference 1-3 m (C)
Multiply by -1
17. sample of battery voltage
o1

*Notes:

1. No missing lines of data
2. Turned off the datalogger to replace battery right after 12/20/2002 16:00 (354) and plugged in new battery. First line of this raw data file, 12/20/2002 16:15 (354) is bogus. Ignore.
3. Checked wind alignment at 12/20/02 16:42 (354), pointing north, no adjustment
4. Replaced upward pyranometer (old: PY25307 and new: PY20222) at 12/20/2002 16:22 (354)

Filename: hoe0235.dat
Station: Lake Hoare met station
Date of Establishment: Dec 1, 1993 by Peter Doran
Author of this report: Thomas Nylen
File Period: December 20, 2002 (354) @ 1645 to January 29, 2003 (29) @ 1800
Sampling Frequency: wind every 4 sec; other every 30 sec
Averaging and Output Interval: every 15 minutes
Program Name: hoe023v1 (Program signature: 51032)

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 P.A.R. (micromols/s/m2)
divide by 200, multiply by 243.47 (Q29775)
15. sample station barometric pressure (mbar)
ok
16. mean temperature difference 1-3 m (C)
Multiply by -1
17. sample of battery voltage
o1

*Notes:

1. No missing lines of data
2. Adjusted clock +4 secs on January 29, 2003 @ 1758
3. Check wind on January 29, 2003 @ 1802, pointing north.
4. Replaced 2 SM 716 storage modules with one SM4M on January 29, 2003 @ 1800

Filename: hoep231.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 26, 2002 (26) @ 1545 to December 16, 2002 (350) @ 1300
Sampling Frequency: every 30 sec
Averaging and Output Interval: every 15 minutes
Program Name: hoeprec.dld (Program signature:)

1. array I.D.
ol
2. day
ok
3. time
ok
4. total precipitation (mm)
ok
5. sample of battery voltage
ol

*Notes:

1. Missing data between September 27, 2002 @ 915 and September 28, 2002 @ 1000
2. Adjusted time +00:02:34 on December 16, 2002 @1300

Filename: hoep232.dat
Station: Lake Hoare precipitation station
Date of Establishment: January 26, 2002 @ 1545 by Thomas Nylén
Author of this report: Thomas Nylén
File Period: December 16, 2002 (350) @ 1315 to December, 20, 2002 (354) @ 1645
Sampling Frequency: every 30 sec
Averaging and Output Interval: every 15 minutes
Program Name: hoeprec.dld (Program signature:)

1. array I.D.
ol
2. day
ok
3. time
ok
4. total precipitation (mm)
ok
5. sample of battery voltage
ol

*Notes:

Filename: hoep233.dat
Station: Lake Hoare precipitation station
Date of Establishment: January 26, 2002 @ 1545 by Thomas Nylén
Author of this report: Thomas Nylén
File Period: December 20, 2002 (354) @ 1700 to December, 20, 2002 (354) @ 1715
Sampling Frequency: every 30 sec
Averaging and Output Interval: every 15 minutes
Program Name: hoeprec.dld (Program signature:)

1. array I.D.
ol
2. day
ok
3. time
ok
4. total precipitation (mm)
ok
5. sample of battery voltage
ol

*Notes:

1. Hooked up 3 soil probes, buried 0cm , 5cm and 10cm below the surface, to datalogger.
2. Loaded new program, lhp023v1.dld on December 20, 2002 @ 1715.
3. Values checked on December 20, 2002 @ 1715 after new program was loaded, everything looks good.

Filename: hoep234.dat
Station: Lake Hoare precipitation station
Date of Establishment: January 26, 2002 @ 1545 by Thomas Nylén
Author of this report: Thomas Nylén
File Period: December, 20, 2002 (354) @ 1730 to January 29, 2003 (29) @ 1800
Sampling Frequency: every 30 sec
Averaging and Output Interval: every 15 minutes
Program Name: lhp023v1.dld (Program signature: 48224)

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. Adjusted time +23 seconds on January 29. 2003 (29) @ 1806
2. Replaced one SM716 storage module with two SM716 on January 29. 2003 (29) @ 1808

Filename: tar0231.dat
Station: Taylor Glacier Station
Date of Establishment: 1994 by Peter Doran
Author of this report: Thomas Nylen
File Period: January 23, 2002 (23) @ 1300 to November 16, 2002 (320) @ 0930
Sampling Frequency: wind every 4 secs.; others: every 30 secs.
Averaging and Output Interval: every 15 minutes
Program name: tar001v1 (program signature - 306)

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 116.82 (29777F3)
7. mean solar flux going up (W/m2)
divide by 100; multiply by 116.41 (29776F3)
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 (C)
Depth of probe not known
15. ice temperature (C)
Depth of probe not known
16. mean air temp @ 1m (C) from 107 Temp. Probe
rclow
17. mean RH at 1m (%) from Vaisala HMP45C Probe
ok
18. sample of battery voltage
o1

*Notes:

1. No data missing
2. Adjusted time -00:00:05 on November, 16 2002 @ 0925
3. Checked input values on November, 16 2002 @ 0930, everything looks fine
4. Check wind alignment November, 16 2002 @ 0930, no changes
5. Replaced storage module with SM4M November, 16 2002 @ 0931

Filename: tar0232.dat
Station: Taylor Glacier Station
Date of Establishment: 1994 by Peter Doran
Author of this report: Thomas Nylen
File Period: November 16, 2002 (320) @ 0945 to November 26, 2002 (330) @ 1200
Sampling Frequency: wind every 4 secs.; others: every 30 secs.
Averaging and Output Interval: every 15 minutes
Program name: tar001v1 (program signature - 306)

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 116.82 (29777F3)
7. mean solar flux going up (W/m2)
divide by 100; multiply by 116.41 (29776F3)
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 (C)
Depth of probe not known
15. ice temperature (C)
Depth of probe not known
16. mean air temp @ 1m (C) from 107 Temp. Probe
rclow
17. mean RH at 1m (%) from Vaisala HMP45C Probe
ok
18. sample of battery voltage
o1

*Notes:

1. Station blew over in katabatic event on November 17, 2002 @ 330, flag data as bad after it blew over. The wind monitor and solar panel were damaged.
2. Took station apart and temporarily hooked up temp/rh probes. Everything else except ice probes were removed until next visit.
3. Loaded new program, Tar023v1.dld on November, 26 2002 @ 1245. New program signature is 20232.
4. Replaced storage module with SM4M on November, 26 2002 @ 1245

5. Disconnected old batteries and hooked up temporary battery on November, 26 2002 @ 1215. Hooked up new batteries on November, 26 2002 @ 1245.

Filename: tar0233.dat
Station: Taylor Glacier Station
Date of Establishment: 1994 by Peter Doran
Author of this report: Thomas Nylen
File Period: November 26, 2002 (330) @ 1215 to November 26, 2002 (330) @ 1230
Sampling Frequency: depth every 60 minutes, wind every 4 secs.; others: every 30 secs.
Averaging and Output Interval: every 15 minutes
Program name: tar023v1 (program signature: 20232)

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)
bad
7. mean solar flux going up (W/m2)
bad
8. mean horizontal wind speed (m/s)
bad
9. resultant mean wind speed (m/s)
bad
10. resultant mean wind direction (degrees from north)
bad
11. standard deviation of wind direction (degrees)
bad
12. maximum wind speed (m/s)
bad
13. minimum wind speed (m/s)
bad
14. ice temperature (C)
Depth of probe not known
15. ice temperature (C)
Depth of probe not known
16. mean air temp @ 1m (C) from 107 Temp. Probe
rclow
17. mean RH at 1m (%) from Vaisala HMP45C Probe
ok
18. sample depth from sensor to surface (cm)
bad
19. sample of battery voltage
ol

*Notes:

1. Station blew over in katabatic event on November 17, 2002 @ 330, flag data as bad after it blew over. The wind monitor and solar panel were damaged.

Filename: tar0234.dat
Station: Taylor Glacier Station
Date of Establishment: 1994 by Peter Doran
Author of this report: Thomas Nylén
File Period: November 26, 2002 (330) @ 1245
Sampling Frequency: depth every 60 minutes, wind every 4 secs.; others: every 30 secs.
Averaging and Output Interval: every 15 minutes
Program name: tar023v1 (program signature: 20232)

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)
bad
7. mean solar flux going up (W/m²)
bad
8. mean horizontal wind speed (m/s)
bad
9. resultant mean wind speed (m/s)
bad
10. resultant mean wind direction (degrees from north)
bad
11. standard deviation of wind direction (degrees)
bad
12. maximum wind speed (m/s)
bad
13. minimum wind speed (m/s)
bad
14. ice temperature (C)
Depth of probe not known
15. ice temperature (C)
Depth of probe not known
16. mean air temp @ 1m (C) from 107 Temp. Probe
rclow
17. mean RH at 1m (%) from Vaisala HMP45C Probe
ok
18. sample depth from sensor to surface (cm)
bad
19. sample of battery voltage
ol

*Notes:

1. Station blew over in katabatic event on November 17, 2002 @ 330, flag data as bad after it blew over. The wind monitor and solar panel were damaged.

Filename: tar0235.dat
Station: Taylor Glacier Station
Date of Establishment: 1994 by Peter Doran
Author of this report: Thomas Nylén
File Period: November 26, 2002 (330) @ 1300 to December 17, 2002 (351) @ 1030
Sampling Frequency: depth every 60 minutes, wind every 4 secs.; others: every 30 secs.
Averaging and Output Interval: every 15 minutes
Program name: tar023v1 (program signature: 20232)

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 118.76 (30884F3)
7. mean solar flux going up (W/m²)
divide by 100; multiply by 111.86 (32057F3)
8. mean horizontal wind speed (m/s)
ok
9. resultant mean wind speed (m/s)
o1
10. resultant mean wind direction (degrees from north)
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 (C)
Depth of probe not known
15. ice temperature (C)
Depth of probe not known
16. mean air temp @ 1m (C) from 107 Temp. Probe
rclow
17. mean RH at 1m (%) from Vaisala HMP45C Probe
ok
18. sample depth from sensor to surface (cm)
bad
19. sample of battery voltage
o1

*Notes:

1. Reconstructed station on December 4, 2002 during a mild katabatic event.
2. Hooked up new upward (30884F3) and downward (32057F3) pyranometer on December 4, 2002 (338) @ 1315.
3. Hooked up new wind monitor on December 4, 2002 (338) @ 1245

4. Hooked up new 20W solar panel.
5. Forgot cable for sonic depth sensor, not hooked up yet.

Filename: tar0236.dat
Station: Taylor Glacier Station
Date of Establishment: 1994 by Peter Doran
Author of this report: Thomas Nylen
File Period: December 17, 2002 (351) @ 1045 to January 17, 2003 (17) @ 1015
Sampling Frequency: depth every 60 minutes, wind every 4 secs.; others: every 30 secs.
Averaging and Output Interval: every 15 minutes
Program name: tar023v1 (program signature: 20232)

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 118.76 (30884F3)
7. mean solar flux going up (W/m2)
divide by 100; multiply by 111.86 (32057F3)
8. mean horizontal wind speed (m/s)
ok
9. resultant mean wind speed (m/s)
o1
10. resultant mean wind direction (degrees from north)
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 (C)
Depth of probe not known
15. ice temperature (C)
Depth of probe not known
16. mean air temp @ 1m (C) from 107 Temp. Probe
rclow
17. mean RH at 1m (%) from Vaisala HMP45C Probe
ok
18. sample depth from sensor to surface (cm)
bad
19. sample of battery voltage
o1

*Notes:

1. No missing data
2. Time not check
3. Input values checked on January 17, 2003, (17) @ 1025, everything looked good except error for depth sensor. Checked wiring of sensor, and it started working at January 17, 2003, (17) @ 1100.

4. Check wind alignment, no adjustment
5. Loaded new program, tar023v2 on January 17, 2003, (17) @ 1030, new signature is 33460
6. New ice temperature thermistors were installed on January 17, 2003 (16) @ 1030. They are installed at 50 and 100 cm from the surface, drill at a 45 degree angle (72.5 and 145 cm from the surface) on a flat surface. Wires were attached to stake, which was drilled a little less than 2 m vertically in the ice. 4 measurements on the stake board to top of the stake) are 61.7, 61.8, 61.4 and 61.5 cm and the board is 1.2 cm.
7. Installed guide wires on the main mast and the sonic sensor. Sonic was jostled during this period and was leveled after the wires were installed.
8. Height to sensors are the following: pyranometers ~ 3 m, Wind ~3m, Temperature/RH ~ 2.79 and 1.03

Filename: uhod0231.dat
Station: Upper Howard Glacier Station
Date of Establishment: November 14, 2001 by Thomas Nylen
Author of this report: Thomas Nylen
File Period: January 29, 2002 @ 1015 to June 13, 2002 (164) @ 1030
Sampling Frequency: wind every 4 sec others: every 30 sec
Averaging and Output Interval: every 15 minutes
Program name: uhod012v1

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.

Filename: uhod0232.dat
Station: Upper Howard Glacier Station
Date of Establishment: November 14, 2001 by Thomas Nylén
Author of this report: Thomas Nylén
File Period: ??????
Sampling Frequency: wind every 4 sec others: every 30 sec
Averaging and Output Interval: every 15 minutes
Program name: uhod012v1

Garbage

*Notes:

1. CR10 stopped functioning properly

Filename: uhod0233.dat
Station: Upper Howard Glacier Station
Date of Establishment: November 14, 2001 by Thomas Nylén
Author of this report: Thomas Nylén
File Period: ??????
Sampling Frequency: wind every 4 sec others: every 30 sec
Averaging and Output Interval: every 15 minutes
Program name: uhod012v1

Garbage

*Notes:

1. CR10 stopped functioning properly

Filename: uhod0234.dat
Station: Upper Howard Glacier Station
Date of Establishment: November 14, 2001 by Thomas Nylén
Author of this report: Thomas Nylén
File Period: ??????
Sampling Frequency: wind every 4 sec others: every 30 sec
Averaging and Output Interval: every 15 minutes
Program name: uhod012v1

Garbage

*Notes:

1. CR10 stopped functioning properly

Filename: vaa0231.dat
Station: Lake Vanda met station
Date of Establishment: November 24, 1994 by Peter Doran, rebuilt
Author of this report: Thomas Nysten
File Period: January 18, 2002 (18) @ 1145 to November 11, 2002 (315) @ 1030
Sampling Frequency: wind every 4 secs.; other every 30 secs.
Averaging and Output Interval: every 15 min
Program Name: vaa990v1 (4472)

1. array I.D.
ol
2. day
ok
3. time
ok
6. mean air temp. @ 3 meters (C)
rclow
7. mean R.H. @ 3 meters (%)
ok
8. mean solar flux coming down (W/m2)
ok
9. mean solar flux going up (W/m2)
ok
10. mean horizontal wind speed (m/s)
ok
11. resultant mean wind speed (m/s)
ok
12. resultant mean wind direction (degrees from north)
ok
13. standard deviation of wind direction (degrees)
ok
14. maximum wind speed (m/s)
ok
15. minimum wind speed (m/s)
ok
16. mean P.A.R. (micromols/s/m2)
divide by 200, multiply by 316.62
17. mean soil temperature @ 0 cm in soil (C)
rclow
18. mean soil temperature @ 10 cm in soil (C)
rclow
19. mean Onyx River temperature (C)
rclow
20. sample of battery voltage
ol

notes:

1. No missing data
2. Adjust time -00:01:25 on November 12, 2002 @ 10:40
3. Checked input values on November 12, 2002 @ 10:39 and 10:45. Everything looked good
4. Check wind alignment on on November 12, 2002 @ 10:43. Pointed north
5. Replaced SM4M with another SM4M on November 12, 2002 @ 10:44

Filename: vaa0232.dat
Station: Lake Vanda met station
Date of Establishment: November 24, 1994 by Peter Doran, rebuilt
Author of this report: Thomas Nylen
File Period: November 11, 2002 (315) @ 1045 to January 27, 2003 (27) @ 1045
Sampling Frequency: wind every 4 secs.; other every 30 secs.
Averaging and Output Interval: every 15 min
Program Name: vaa990v1 (4472)

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)
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)
divide by 200, multiply by 316.62
15. mean soil temperature @ 0 cm in soil (C)
rclow
16. mean soil temperature @ 10 cm in soil (C)
rclow
17. mean Onyx River temperature (C)
rclow
18. sample of battery voltage
o1

notes:

1. No missing data
2. Adjust time +22 seconds on January 27, 2003 @ 1047
3. Checked input values on January 27, 2003 @ 1048. Everything looked good
4. Check wind alignment on January 27, 2003 @ 1050. Pointed north
5. Replaced SM4M with another SM4M on January 27, 2003 @ 1053

Filename: via0231.dat
Station: Lake Vida met station
Date of Establishment: November 24, 1995 by Peter Doran
Author of this report: Thomas Nylén
File Period: January 18, 2002 (18) @ 1245 to August 13, 2002 (225) @ 1000
Sampling Frequency: wind every 4 secs.; others: every 30 secs.
Averaging and Output Interval: every 15 min
Program Name: via990v1 (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)
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 P.A.R. (micromols/s/m2)
divide by 200, multiply by 263.64 (Q29765)
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. Missing data between May 15, 2002 @ 10:15 and May 15, 2002 @ 1700 and June 26, 2002 @ 9:15 and June 26, 2002 @ 1600

Filename: via0232.dat
Station: Lake Vida met station
Date of Establishment: November 24, 1995 by Peter Doran
Author of this report: Thomas Nylén
File Period: August 13, 2002 (225) @ 1015 to November 12, 2002 (316) @ 1130
Sampling Frequency: wind every 4 secs.; others: every 30 secs.
Averaging and Output Interval: every 15 min
Program Name: via990v1 (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)
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 P.A.R. (micromols/s/m2)
divide by 200, multiply by 263.64 (Q29765)
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 date
2. Time adjusted <00:04:45> on November 12, 2002 @ 11:17
3. Check wind alignment on November 12, 2002 @ 11:30, it was pointing north
4. Replace upward pyranometer on November 12, 2002 @ 11:37. Old sensor was PY28167 and new is PY20523
5. Swapped out module with 1 SM4M on November 12, 2002 @ 11:45

6. SwRadIn and PAR was flagged as bad between March 25, 2002 @ 0930 and October 22, 2002 @ 2100. It appears that snow covered the sensors during this period. SwRadIn values were less than SwRadOut during this period. PAR appeared low also.

Filename: via0233.dat
Station: Lake Vida met station
Date of Establishment: November 24, 1995 by Peter Doran
Author of this report: Thomas Nylén
File Period: November 12, 2002 (316) @ 1145 to January 27, 2003 (27) @ 1130
Sampling Frequency: wind every 4 secs.; others: every 30 secs.
Averaging and Output Interval: every 15 min
Program Name: via990v1 (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)
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 P.A.R. (micromols/s/m2)
divide by 200, multiply by 263.64 (Q29765)
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 date
2. Time adjusted minus 4 seconds to January 27, 2003 (27) @ 1125
3. Check wind alignment on to January 27, 2003 (27) @ 1127, it was rotated 10 degrees counterclockwise. Also tighten the upper center post. It was pretty loose.
4. Swapped out module with 1 SM4M on January 27, 2003 (27) @ 1145