

## File description and task list for 2001-02 LTER Met Files

o1=omit from level 1,

ok= no changes to get to level 1,

rclo= reverse temperatures to mV and apply c1ow 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) The remaining CR10s were swapped out with new CR10x
- 3) A station at Upper Howard Gl. was constructed and installed
- 4) Lake Fryxell station blew over in April, re-established in November

Filename: ben0121.dat  
Station: Beacon Valley met station  
Date of Establishment: November 27, 2000 by Susan Kaspari, Thomas Nysten and Adrian Green  
Author of this report: Thomas Nysten  
File Period: January 15, 2001 (15) @ 1400  
Sampling Frequency: wind every 4 secs.; others: every 30 secs.  
Averaging and Output Interval: every 30 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) Adjusted regulator.
- 2) Array ID for Beacon is 11, same as Vida. Change in program in Nov 2001

Filename: ben0122.dat

Station: Beacon Valley met station

Date of Establishment: November 27, 2000 by Susan Kaspari, Thomas Nylén and Adrian Green

Author of this report: Thomas Nylén

File Period: January 15, 2001 (15) @ 1415 to November 23, 2001 (327) @ 1230

Sampling Frequency: wind every 4 secs.; others: every 30 secs.

Averaging and Output Interval: every 30 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/m<sup>2</sup>)  
ok
7. mean solar flux going up (W/m<sup>2</sup>)  
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/m<sup>2</sup>)  
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) Array ID for Beacon is 11, same as Vida. Change in program in Nov 2001
- 2) Adjusted clock <00:00:50>
- 3) Check wind alignment, no changes
- 4) Replaced storage modules on November 23, 2001 (327) @ 1245

Filename: ben0123.dat

Station: Beacon Valley met station

Date of Establishment: November 27, 2000 by Susan Kaspari, Thomas Nysten and Adrian Green

Author of this report: Thomas Nysten

File Period: November 23, 2001 (327) @ 1245 to January 18, 2002 (18) @ 1030

Sampling Frequency: wind every 4 secs.; others: every 30 secs.

Averaging and Output Interval: every 30 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 next November
- 3) Adjusted clock <+00:00:16> on January 18, 2002 (18) @ 1025
- 4) Sensor numbers: SwRadIn: 18395, SwRadOut: 18400, PAR: Q23199

- 5) Check wind alignment on January 18, 2002 (18) @ 1035, no changes. Just before this the cross-arm was removed to tighten top middle post, which temporarily moved the wind vane and pyranometers. Check next file.
- 6) Replaced storage modules (1 x SM4M) on January 18, 2002 (18) @ 1039

Filename: boy01021.dat  
Station: Lake Bonney met station  
Date of Establishment: November 24, 1993 by Peter Doran  
Author of this report: Thomas Nylen  
File Period: January 15, 2000 (15) @ 1300 to November 20, 2001 (324) @ 1015  
Sampling Frequency: wind speed every 4 sec, other every 30 sec  
Averaging and Output Interval: every 15 minutes  
Program name: boy990v1 (signature: 59641)

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 276.86
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 229.36
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. LwRadIn is too low when compared to the corrected value calculated (LwRadIn2). Not sure what is wrong, check next year.
- 2. Replaced Quantum @ November 20, 2001 (324) @ 1015  
Old Quantum: Q20266 New Quantum: Q19469
- 3. Replaced modules @ November 20, 2001 (324) @ 1035
- 4. Adjusted time by +00:01:00
- 5. Check wind alignment, no changes
- 6. Readjusted prec gage, maybe some changes on next data file

Filename: boy01022.dat  
Station: Lake Bonney met station  
Date of Establishment: November 24, 1993 by Peter Doran  
Author of this report: Thomas Nylen  
File Period: November 20, 2001 (324) @ 1030 to January 9, 2002 (9) @ 0915  
Sampling Frequency: wind speed every 4 sec, other every 30 sec  
Averaging and Output Interval: every 15 minutes  
Program name: boy990v1 (signature: 59641)

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 274.57
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 229.36
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 precipitation (mm)  
ok
- 27. sample of battery voltage  
ol

Note:

- 1. Replaced wind monitor between 0800 - 0815
- 2. LwRadIn is too low when compared to the corrected value calculated (LwRadIn2). Replaced LwRadIn with new sensor. The reason for the previous errors in the old sensor was the battery, which was still installed. I removed the battery in the new sensor, though I cannot tell if it works. Will have to wait I download the storage module to know for sure. The old sensor number was 32311F3 and the new is 29787F3. Replaced between 0815 to 0845
- 3. Replaced modules January 9, 2002 (9) @ 0845
- 4. Check wind alignment, no changes
- 5. Air temp stopped working around 0830, not sure why. Pulled sensor off and changed program to measure air temperature, using the Vaisala HMP45C Temp/RH probe. Data was flagged as bad

Filename: boy01023.dat  
Station: Lake Bonney met station  
Date of Establishment: November 24, 1993 by Peter Doran  
Author of this report: Thomas Nylen  
File Period: January 9, 2002 (9) @ 0930 to January 9, 2002 (9) @ 1030  
Sampling Frequency: wind speed every 4 sec, other every 30 sec  
Averaging and Output Interval: every 15 minutes  
Program name: boy012v1 (signature: 59641)

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 274.57
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)  
rclo
- 24. mean soil temperature @ 5 cm in soil (C)  
rclo
- 25. mean soil temperature @ 10 cm in soil (C)  
rclo
- 26. sample precipitation (mm)  
ok
- 27. sample of battery voltage  
o1

Note:

- 1. Replaced modules
- 2. Check wind alignment,
- 3. Air temp stopped working around 0830, not sure why. Pulled sensor off and changed program (boy012v1.dld) to measure air temperature, using the Vaisala HMP45C Temp/RH probe. Temperature bad during this interval. Flagged as bad.
- 4. LwRadIn is working now

Filename: boy01024.dat  
Station: Lake Bonney met station  
Date of Establishment: November 24, 1993 by Peter Doran  
Author of this report: Thomas Nylen  
File Period: January 9, 2002 (9) @ 1100 to January 24, 2002 (24) @ 1200  
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 274.57
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  
ol

Note:

- 1. Check wind alignment on January 24, 2002 @ 1126. No changes
- 2. Swapped out PAR sensor (old: Q19469, new: Q29766) at 1145
- 3. Loaded new (old) program (boy990v1) at 1200 for the purpose of switching back to the 107 air temp probe, but 107 air temp was not working. Went back to using the Vaisala temp probe instead and it was working by 1219. Additionally the key pad became stuck when loading the new program. Once it was stuck the new program would not load and it took awhile to figure out that it was in fact a stuck keypad. Disconnected power several times through this process to load new program. Check values between January 24, 2002 @ 1200 and 1230
- 4. Replaced modules (1 x SM4M) on January 24, 2002 @ 1200

Filename: brh01021.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: January 16, 2001 (16) @ 1230 to December 4, 2001 (338) @ 1015  
Sampling Frequency: wind speed every 4 sec; other every 30 sec  
Averaging and Output Interval: every 15 min  
Program Name: brh001v1

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/m<sup>2</sup>)  
ok
7. mean solar flux going up (W/m<sup>2</sup>)  
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/m<sup>2</sup>)  
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 lines
2. CR10 time was +00:02:03 on December 4, 2001 @ 1015

Filename: brh01022.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: December 4, 2001 (337, should be 338) @ 1030 to December 4, 2001 (337) @ 1130  
Sampling Frequency: wind speed every 4 sec; other every 30 sec  
Averaging and Output Interval: every 15 min  
Program Name: brh001v1

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/m<sup>2</sup>)  
ok
7. mean solar flux going up (W/m<sup>2</sup>)  
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/m<sup>2</sup>)  
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. Powered off old CR10 on December 4, 2001 (338) @ 1030, and hooked up new CR10X
2. AirT3m was hooked up on December 4, 2001 @ 1035
3. RH3m was hooked up on December 4, 2001 @ 1035
4. SoilT0cm was hooked up on December 4, 2001 @ 1039
5. Wind was hooked up on December 4, 2001 @ 1045
6. Upward pyranometer was hooked up on December 4, 2001 @ 1053
7. Downward pyranometer was hooked up on December 4, 2001 @ 1055

8. Quantum was hooked up on December 4, 2001 @ 1058
9. SoilT5cm was hooked up on December 4, 2001 @ 1104
10. SoilT10cm was hooked up on December 4, 2001 @ 1108
11. Swapped out module on December 4, 2001 @ 1130
12. Check wind alignment, no changes

Filename: brh01023.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: December 4, 2001 (337, should be 338) @ 1145 to January 18, 2002 (17, should be 18) @ 1300  
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/m<sup>2</sup>)  
ok
7. mean solar flux going up (W/m<sup>2</sup>)  
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/m<sup>2</sup>)  
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 <+00:00:21> on January 18, 2002 (18) @ 1302, day adjust ahead by +1
3. Check wind alignment on January 18, 2002 (18) @ 1312, no changes
4. Sensor numbers: SwRadIn: 27937, SwRadOut: 27929, PAR: 28265
5. Swapped out module (installed 2 SM716) on January 18, 2002 (18) @ 1305

Filename: caa01201.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 18, 2001 (18) @ 1530 to September 23, 2001 (266) @ 2230  
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 (C)  
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. Data missing between February 13, 2001 (44) @ 0000 to February 13, 2001 (44) @ 0815 and June 27, 2001 (178) 0045 to June 27, 2001 (178) 0900. There is no explanation why the datalogger stopped recording. Battery voltage was not low nor were the temperatures very low.

Filename: caa01202.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 23, 2001 (266) @ 2230 to November 10, 2001 (314) @ 1445  
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 (C)  
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. Adjusted time back 00:03:00 on November 10, 2001 (314) @ 1445
2. Check wind direction on November 10, 2001 (314) @ 1445. No changes made to the orientation of the wind monitor

Filename: caa01023.dat  
Station: Canada Glacier met station  
Date of Establishment: Nov 20, 1995 by Karen Lewis  
Reinstalled on glacier: Jan 13, 1998 by Karen Lewis  
Author of this report: Thomas Nylén  
File Period: November 10, 2001 (314) @ 1500 to December 3, 2001 (337) @ 1330  
Sampling Frequency: wind speed every 4 sec; other every 30 sec  
Averaging and Output Interval: every 15 minutes  
Program name: caa001v1 (program signature: 16484)

- 15. array I.D.
  - o1
- 15. day
  - ok
- 15. time
  - ok
- 15. mean air temp. @ 2 meters ©
  - rclow
- 15. mean rh @ 2 meters (%)
  - ok
- 15. mean solar flux coming down (W/m2)
  - ok
- 15. mean solar flux going up (W/m2)
  - ok
- 15. 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
- 15. maximum wind speed (m/s)
  - ok
- 15. minimum wind speed (m/s)
  - ok
- 15. mean barometric pressure (mbar)
  - ok
- 15. sample battery voltage
  - o1

\*Notes:

- 1. No missing data

Filename: caa01024.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: December 3, 2001 (337) @ 1345  
Sampling Frequency: wind speed every 4 sec; other every 30 sec  
Averaging and Output Interval: every 15 minutes  
Program name: caa001v1 (program signature: 16484)

- 16. array I.D.
  - o1
- 16. day
  - ok
- 16. time
  - ok
- 16. mean air temp. @ 2 meters ©
  - rclow
- 16. mean rh @ 2 meters (%)
  - ok
- 16. mean solar flux coming down (W/m2)
  - ok
- 16. mean solar flux going up (W/m2)
  - ok
- 16. 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
- 16. maximum wind speed (m/s)
  - ok
- 16. minimum wind speed (m/s)
  - ok
- 16. mean barometric pressure (mbar)
  - ok
- 15. sample battery voltage
  - o1

\*Notes:

- 1. No missing data

Filename: caa01025.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: December 3, 2001 (337) @ 1400 to January 10, 2002 (10) @ 1600  
Sampling Frequency: wind speed every 4 sec; other every 30 sec  
Averaging and Output Interval: every 15 minutes  
Program name: caa001v1 (program signature: 16484)

- 17. array I.D.
  - o1
- 17. day
  - ok
- 17. time
  - ok
- 17. mean air temp. @ 2 meters ©
  - rclow
- 17. mean rh @ 2 meters (%)
  - ok
- 17. mean solar flux coming down (W/m2)
  - ok
- 17. mean solar flux going up (W/m2)
  - ok
- 17. 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
- 17. maximum wind speed (m/s)
  - ok
- 17. minimum wind speed (m/s)
  - ok
- 17. mean barometric pressure (mbar)
  - ok
- 15. sample battery voltage
  - o1

\*Notes:

- 1. No missing data

Filename: caa01026.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 10, 2002 (10) @ 1600 to January 10, 2002 (10) @ 1645  
Sampling Frequency: wind speed every 4 sec; other every 30 sec  
Averaging and Output Interval: every 15 minutes  
Program name: caa001v1 (program signature: 16484)

- 18. array I.D.
  - o1
- 18. day
  - ok
- 18. time
  - ok
- 18. mean air temp. @ 2 meters ©
  - rclow
- 18. mean rh @ 2 meters (%)
  - ok
- 18. mean solar flux coming down (W/m<sup>2</sup>)
  - ok
- 18. mean solar flux going up (W/m<sup>2</sup>)
  - ok
- 18. 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
- 18. maximum wind speed (m/s)
  - ok
- 18. minimum wind speed (m/s)
  - ok
- 18. mean barometric pressure (mbar)
  - ok
- 15. sample battery voltage
  - o1

\*Notes:

- 1. No missing data

Filename: caa01027.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 10, 2002 (10) @ 1700 to January 16, 2002 (10) @ 1315  
Sampling Frequency: wind speed every 4 sec; other every 30 sec  
Averaging and Output Interval: every 15 minutes  
Program name: caa001v1 (program signature: 16484)

- 19. array I.D.
  - o1
- 19. day
  - ok
- 19. time
  - ok
- 19. mean air temp. @ 2 meters ©
  - rclow
- 19. mean rh @ 2 meters (%)
  - ok
- 19. mean solar flux coming down (W/m<sup>2</sup>)
  - ok
- 19. mean solar flux going up (W/m<sup>2</sup>)
  - ok
- 19. 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
- 19. maximum wind speed (m/s)
  - ok
- 19. minimum wind speed (m/s)
  - ok
- 19. mean barometric pressure (mbar)
  - ok
- 15. sample battery voltage
  - o1

\*Notes:

- 1. No missing data
- 2. Time adjusted -00:00:06 sec on Jan 16, 2002 @ 13:07
- 3. Input values checked Jan 16, 2002 @ 13:08, values ok
- 4. Wind vane alignment checked on Jan 16, 2002 @ 13:15, no changes
- 5. no sensors replaced
- 6. 2 modules swapped for 2 SM716 modules on Jan 16, 2002 @ 13:17

Filename: coh0121.dat  
Station: Commonwealth Glacier Station  
Date of Establishment: Nov 22, 1993 by Peter Doran  
Author of this report: Thomas Nylen  
File Period: January 23, 2001 (23) @ 1600 to November 13, 2001 (317) @ 1245  
Sampling Frequency: wind every 4 secs.; other every 30 secs.  
Averaging and Output Interval: every 15 minutes  
Program name: coh990v1 (program signature: 64113)

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. Wind vane direction is good
3. No data lines missing

Filename: coh0122.dat  
Station: Commonwealth Glacier Station  
Date of Establishment: Nov 22, 1993 by Peter Doran  
Author of this report: Thomas Nylen  
File Period: November 13, 2001 (317) @ 1300 to November 27, 2001 (331) @ 1530  
Sampling Frequency: wind every 4 secs.; other every 30 secs.  
Averaging and Output Interval: every 15 minutes  
Program name: coh990v1 (program signature: 64113)

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. Wind vane direction checked on November 27, 2001, no changes
3. On November 27, 2001 @ 1530 switch off old CR10 and started hooking up new CR10X. Check values after this time

Filename: coh0123.dat  
Station: Commonwealth Glacier Station  
Date of Establishment: Nov 22, 1993 by Peter Doran  
Author of this report: Thomas Nylen  
File Period: November 27, 2001 (331) @ 1545 to January 28, 2002 (28) @ 1630  
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. Wind vane direction checked on January 28, 2002 @ 1640, no changes
3. On November 27, 2001 @ 1530 switch off old CR10 and started hooking up new CR10X. Checked values and marked those that were missing or bad.

Filename: exe01021.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 Nylén  
File Period: January 13, 2001 (13) @ 1130 to December 4, 2001 (338) @ 0930  
Sampling Frequency: wind every 4 secs.; others: every 30 secs.  
Averaging and Output Interval: every 15 minutes  
Program name: exe990v1 (program signature: 35828)

Output Array Definition:

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/m<sup>2</sup>)  
ok
7. mean solar flux going down (~W/m<sup>2</sup>)  
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/m<sup>2</sup>)  
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. No missing lines of data.
2. CR10X time adjusted +00:01:00 on December 4, 2001 (338) @ 0930
3. Replaced RH sensor on December 4, 2001 (338) @ 0935

Filename: exe01022.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 Nylén  
File Period: December 4, 2001 (338) @ 0945 to January 29, 2002 @ 1300  
Sampling Frequency: wind every 4 secs.; others: every 30 secs.  
Averaging and Output Interval: every 15 minutes  
Program name: exe990v1 (program signature: 35828)

Output Array Definition:

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/m<sup>2</sup>)  
ok
7. mean solar flux going down (~W/m<sup>2</sup>)  
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/m<sup>2</sup>)  
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. Replaced RH sensor on December 4, 2001 (338) @ 0935, value low at first, but slowly came up as the new sensor adjusted to a new level. Flag first 15 minutes as bad.
2. Did not adjust the time. GPS not working
3. Checked wind alignment on January 30, 2002 @ 10:05, adjust clockwise 5 degrees
4. Replaced Upward Pyranometer on January 30, 2002 @ 10:17, old sensor number: PY23269, new sensor number: PY49090

5. Replaced Downward Pyranometer on January 30, 2002 @ 10:10, old sensor number: PY20562, new sensor number: PY40423
6. Replaced storage module with SM4M on January 30, 2002 @ 10:30
7. Top center bar on station is loose. Tighten next season

Filename: frl0121.dat  
Station: Lake Fryxell met station  
Date of Establishment: Jan 6, 1994 by Peter Doran  
Author of this report: Thomas Nylen  
File Period: January 13, 2001 (12) @ 1100 to November 12, 2001 (315) @ 0900  
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 289.09
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. The CR10 is a day behind, change next time.
2. On June 25, 2001 @ 0230 the station mast broke and blew over, breaking the wind monitor. Station was taken apart on November 16, 2001, with the sensors except wind temporarily set up on what was left of the station. On November 27, 2001 the station was reconstructed and was made operational again. Mark all values from June to November as bad or questionable except the soil temperatures
3. CR10X time adjusted -00:00:14

Filename: frl0122.dat  
Station: Lake Fryxell met station  
Date of Establishment: Jan 6, 1994 by Peter Doran  
Author of this report: Thomas Nylen  
File Period: November 12, 2001 (315) @ 0915 to January 22, 2002 (22) @ 1615  
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 289.09
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. On June 25, 2001 @ 0230 the station mast broke and blew over, breaking the wind monitor. Station was taken apart on November 16, 2001, with the sensors except wind temporarily set up on what was left of the station. On November 27, 2001 the station was reconstructed and was made operational again. Mark all values from June to November as bad or questionable except the soil temperatures
2. Time adjusted +00:00:04 sec
3. Wind alignment checked on January 22, 2002 @ 1540, no changes
4. Quantum sensor replaced January 22, 2002 @ 1600, old sensor number is Q17984, new sensor number is Q29773

5. RH sensor was unhooked by accident sometime between January 22, 2002 @ 1600 and 1616, marked value as bad and check next years data
6. Module replaced with 1 @ SM4M on January 22, 2002 @ 1615

Filename: hod0121.dat  
Station: Howard Glacier Station  
Date of Establishment: Nov 20, 1993 by Peter Doran  
Author of this report: Thomas Nylén  
File Period: January 20, 2001 (20) @ 1730 to August 15, 2001 (227) @ 1400  
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/m<sup>2</sup>)  
divide by 100; multiply by 123.61 (32053F3)
7. mean solar flux going up (W/m<sup>2</sup>)  
divide by 100; multiply by 121.65 (30858F3)
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).

Filename: hod0122.dat  
Station: Howard Glacier Station  
Date of Establishment: Nov 20, 1993 by Peter Doran  
Author of this report: Thomas Nylén  
File Period: August 15, 2001 (227) @ 1415 to November 16, 2001 (320) @ 1545  
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/m<sup>2</sup>)  
divide by 100; multiply by 123.61 (32053F3)
7. mean solar flux going up (W/m<sup>2</sup>)  
divide by 100; multiply by 121.65 (30858F3)
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 -00:10:00
4. No changes to wind monitor direction
5. Between November 16, 2001 (320) @ 1600 and 1645 replaced upward pyranometers, 31435F3, with 30853F3 and downward pyranometer, 31437F3, with 32058F3

Filename: hod0123.dat  
Station: Howard Glacier Station  
Date of Establishment: Nov 20, 1993 by Peter Doran  
Author of this report: Thomas Nysten  
File Period: November 16, 2001 (320) @ 1600 to January 22, 2002 (22) @ 1215  
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 +00:00:16 on January 22, 2002 @ 1137
4. No changes to wind monitor direction on January 22, 2002 @ 1141
5. Replaced RH1m with new sensor head on January 22, 2001 @ 1143. New values were low until sensor equilibrated.

6. Replaced RH3m with new sensor head on January 22, 2001 @ 1150. Might be errors in data because old sensor pulled out by mistake. Check data. New values once the sensor was installed were low until sensor equilibrated.
7. Temp/RH @ 1m is approx. 1.6 meters above the ice surface. Moved RH3m down 6cm to make it approximately 3 m above the ice surface. Lots of ablation has occurred underneath the station this season
8. Ice was on top of upper pyranometer. Values were initial low, but returned to reasonable values after it was cleared off.
9. Replaced storage modules with 1 @ SM4M on January 22, 2002 @ 1215

Filename: hoe01021.dat  
Station: Lake Hoare met station  
Date of Establishment: Dec 1, 1993 by Peter Doran  
Author of this report: Thomas Nylén  
File Period: January 25, 2001 (25) @ 1800 to December 2, 2001 (336) @ 1400  
Sampling Frequency: wind every 4 sec; other every 30 sec  
Averaging and Output Interval: every 15 minutes  
Program Name: hoe990v1 (48553)

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/m<sup>2</sup>)  
ok
7. mean solar flux going up (W/m<sup>2</sup>)  
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/m<sup>2</sup>)  
divide by 200, multiply by 336.51
15. sample precipitation (mm)  
not hooked up
16. sample station barometric pressure (mbar)  
ok
17. mean temperature difference 1-3 m (C)  
Multiply by -1
18. sample of battery voltage  
o1

\*Notes:

1. Precipitation gage not working
2. No missing data lines
3. Replace RH sensor on December 2, 2001 (336) @ 1300
4. Replaced downward pyranometer, PY18656 with PY28370 on December 2, 2001 (336) @ 1315, received error message for this time interval
5. Replaced upward pyranometer, PY18657 with PY25307 on December 2, 2001 (336) @ 1330

6. Replaced wind monitor on December 2, 2001 (336) @ 1345, no adjustment to direction
7. Swapped out modules and loaded new program, hoe012v1.dld on December 2, 2001 (336) @ 1407
8. Time adjusted -00:04:45

Filename: hoe01022.dat  
Station: Lake Hoare met station  
Date of Establishment: Dec 1, 1993 by Peter Doran  
Author of this report: Thomas Nylén  
File Period: December 2, 2001 (336) @ 1400 to December 29, 2001 (363) 0915  
Sampling Frequency: wind every 4 sec; other every 30 sec  
Averaging and Output Interval: every 15 minutes  
Program Name: hoe012v1 ()

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)  
missing
14. mean P.A.R. (micromols/s/m2)  
divide by 200, multiply by 336.51
15. sample precipitation (mm)  
not hooked up
16. sample station barometric pressure (mbar)  
ok
17. mean temperature difference 1-3 m (C)  
Multiply by -1
18. sample of battery voltage  
o1

\*Notes:

1. No missing data lines
2. Precipitation gage installed on, but not working as of December 29, 2001 @ 915
3. Replaced wind monitor on December 2, 2001 (336) @ 1345, no adjustment to direction, WSpdMin values are zero, not sure why because there was no change in the program
4. Swapped out modules and loaded new program, hoe012v1.dld on December 2, 2001 (336) @ 1407. The new program has the instructions for the new precipitation gage.

Filename: hoe01023.dat  
Station: Lake Hoare met station  
Date of Establishment: Dec 1, 1993 by Peter Doran  
Author of this report: Thomas Nylén  
File Period: December 29, 2001 (363) @ 0930 to January 13, 2002 (13) @ 1400  
Sampling Frequency: wind every 4 sec; other every 30 sec  
Averaging and Output Interval: every 15 minutes  
Program Name: hoe012v1 ()

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/m<sup>2</sup>)  
ok
7. mean solar flux going up (W/m<sup>2</sup>)  
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)  
missing
14. mean P.A.R. (micromols/s/m<sup>2</sup>)  
divide by 200, multiply by 336.51
15. sample precipitation (mm)  
not hooked up
16. sample station barometric pressure (mbar)  
ok
17. mean temperature difference 1-3 m (C)  
Multiply by -1
18. sample of battery voltage  
o1

\*Notes:

1. No missing data lines
2. Precipitation gage installed, but not working
3. Replaced wind monitor on December 2, 2001 (336) @ 1345, no adjustment to direction, WSpdMin values are zero, not sure why because there was no change in the program
4. Attempted to load new program, hoe012v2.dld (changed from CR10 to CR10X, but input locations were wrong.

Filename: hoe01024.dat  
Station: Lake Hoare met station  
Date of Establishment: Dec 1, 1993 by Peter Doran  
Author of this report: Thomas Nylén  
File Period: January 13, 2002 (13) @ 1400  
Sampling Frequency: wind every 4 sec; other every 30 sec  
Averaging and Output Interval: every 15 minutes  
Program Name: hoe012v1

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/m<sup>2</sup>)  
ok
7. mean solar flux going up (W/m<sup>2</sup>)  
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)  
missing
14. mean P.A.R. (micromols/s/m<sup>2</sup>)  
divide by 200, multiply by 336.51
15. sample precipitation (mm)  
hooked up, but not working
16. sample station barometric pressure (mbar)  
ok
17. mean temperature difference 1-3 m (C)  
Multiply by -1
18. sample of battery voltage  
o1

\*Notes:

1. No missing data lines
2. Precipitation gage installed but not working
3. Replaced wind monitor on December 2, 2001 (336) @ 1345, no adjustment to direction, WSpdMin values are zero, not sure why because there was no change in the program
4. Swapped out modules and loaded new program, hoe012v1.dld on December 2, 2001 (336) @ 1407
5. Time adjusted -00:04:45

Filename: hoe01025.dat  
Station: Lake Hoare met station  
Date of Establishment: Dec 1, 1993 by Peter Doran  
Author of this report: Thomas Nysten  
File Period: January 13, 2002 (13) @ 1415 to January 13, 2002 (13) @ 1515  
Sampling Frequency: wind every 4 sec; other every 30 sec  
Averaging and Output Interval: every 15 minutes  
Program Name: hoe012v1

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)  
missing
14. mean P.A.R. (micromols/s/m2)  
divide by 200, multiply by 336.51
15. sample precipitation (mm)  
hooked up, but not working
16. sample station barometric pressure (mbar)  
ok
17. mean temperature difference 1-3 m (C)  
Multiply by -1
18. sample of battery voltage  
o1

\*Notes:

1. No missing data lines
2. Precipitation gage not working. The pulse channel #2 on the CRO10X apparently is not working properly, because the gage is working with another CR10. Hooked up gage to the temporary CR10. Will try to hook up the gage to the control port
3. Unhooked PAR (Q22174) from mount and waited to January 13, 2001 (13) @ 15:15 to install new PAR (Q29775).

4. Replaced wind monitor on December 2, 2001 (336) @ 1345, no adjustment to direction, WSpdMin values are zero, not sure why because there was no change in the program.
5. The top center pole, holding the cross-arm, is loose. It does appear the arm has rotated because the direction of the monitor is correct
6. Swapped out modules and loaded new program, hoe012v2.dld on January 13, 2002 (13) @ 1515
7. Time adjusted +00:00:15

Filename: hoe01026.dat  
Station: Lake Hoare met station  
Date of Establishment: Dec 1, 1993 by Peter Doran  
Author of this report: Thomas Nylén  
File Period: January 13, 2002 (13) @ 1530 to January 14, 2002 (14) @ 1500  
Sampling Frequency: wind every 4 sec; other every 30 sec  
Averaging and Output Interval: every 15 minutes  
Program Name: hoe012v2 (Signature: 18579)

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/m<sup>2</sup>)  
ok
7. mean solar flux going up (W/m<sup>2</sup>)  
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)  
missing
14. mean P.A.R. (micromols/s/m<sup>2</sup>)  
divide by 200, multiply by 243.47
15. sample precipitation (mm)  
hooked up, but not working
16. sample station barometric pressure (mbar)  
ok
17. mean temperature difference 1-3 m (C)  
Multiply by -1
18. sample of battery voltage  
o1

\*Notes:

1. No missing data lines
2. Loaded new program, hoe012v3.dld, at January 14, 2002 @ 15:02 but wind speed minimum or prec gage not working properly, switched back to old program, hoe012v2.dld
3. The top center pole tighten and wind monitor align between January 14, 2002 @ 14:34 and January 14, 2002 @ 1456
4. Time adjusted +00:00:06

Filename: hoe01027.dat  
Station: Lake Hoare met station  
Date of Establishment: Dec 1, 1993 by Peter Doran  
Author of this report: Thomas Nysten  
File Period: January 14, 2002 (14) @ 1515 to January 15, 2002 (14) @ 0815  
Sampling Frequency: wind every 4 sec; other every 30 sec  
Averaging and Output Interval: every 15 minutes  
Program Name: hoe012v2 (Signature: 61173)

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)  
missing
14. mean P.A.R. (micromols/s/m2)  
divide by 200, multiply by 243.47
15. sample precipitation (mm)  
hooked up, but not working
16. sample station barometric pressure (mbar)  
ok
17. mean temperature difference 1-3 m (C)  
Multiply by -1
18. sample of battery voltage  
o1

\*Notes:

1. No missing data lines
2. Loaded new program, hoe012v3.dld (signature 45232), at January 15, 2002 @ 08:27 but wind speed minimum or prec gage not working properly.
3. Wind speed minimum is working, and tipping bucket is working, but not totalling every 15-minutes.

Filename: hoe01029.dat  
Station: Lake Hoare met station  
Date of Establishment: Dec 1, 1993 by Peter Doran  
Author of this report: Thomas Nylén  
File Period: January 15, 2002 (14) @ 0830 to January 15, 2002 (14) @ 1100  
Sampling Frequency: wind every 4 sec; other every 30 sec  
Averaging and Output Interval: every 15 minutes  
Program Name: hoe012v3 (Signature: 45232)

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/m<sup>2</sup>)  
ok
7. mean solar flux going up (W/m<sup>2</sup>)  
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/m<sup>2</sup>)  
divide by 200, multiply by 243.47
15. sample precipitation (mm)  
hooked up, but not working
16. sample station barometric pressure (mbar)  
ok
17. mean temperature difference 1-3 m (C)  
Multiply by -1
18. sample of battery voltage  
o1

\*Notes:

1. No missing data lines
2. Loaded new program, hoe012v4.dld (signature ??), at January 15, 2002 @ 11:15 but prec gage not working properly.

Filename: hoe01029.dat  
Station: Lake Hoare met station  
Date of Establishment: Dec 1, 1993 by Peter Doran  
Author of this report: Thomas Nylén  
File Period: January 15, 2002 (14) @ 0830 to January 15, 2002 (14) @ 1100  
Sampling Frequency: wind every 4 sec; other every 30 sec  
Averaging and Output Interval: every 15 minutes  
Program Name: hoe012v4

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/m<sup>2</sup>)  
ok
7. mean solar flux going up (W/m<sup>2</sup>)  
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/m<sup>2</sup>)  
divide by 200, multiply by 243.47
15. sample precipitation (mm)  
hooked up, but not working
16. sample station barometric pressure (mbar)  
ok
17. mean temperature difference 1-3 m (C)  
Multiply by -1
18. sample of battery voltage  
o1

\*Notes:

1. No missing data lines
2. Loaded new program, hoe012v5.dld (signature 45232), at January 15, 2002 @ 11:15 but prec gage not working properly.

Filename: hoe010210.dat  
Station: Lake Hoare met station  
Date of Establishment: Dec 1, 1993 by Peter Doran  
Author of this report: Thomas Nylén  
File Period: January 15, 2002 (14) @ 1115  
Sampling Frequency: wind every 4 sec; other every 30 sec  
Averaging and Output Interval: every 15 minutes  
Program Name: hoe012v5

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/m<sup>2</sup>)  
ok
7. mean solar flux going up (W/m<sup>2</sup>)  
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/m<sup>2</sup>)  
divide by 200, multiply by 243.47
15. sample precipitation (mm)  
hooked up, but not working
16. sample station barometric pressure (mbar)  
ok
17. mean temperature difference 1-3 m (C)  
Multiply by -1
18. sample of battery voltage  
o1

\*Notes:

1. No missing data lines
2. Prec gage not working properly.

Filename: hoe010211.dat  
Station: Lake Hoare met station  
Date of Establishment: Dec 1, 1993 by Peter Doran  
Author of this report: Thomas Nysten  
File Period: January 15, 2002 (14) @ 1130 to January 15, 2002 (14) @ 1300  
Sampling Frequency: wind every 4 sec; other every 30 sec  
Averaging and Output Interval: every 15 minutes  
Program Name: hoe012v5

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
15. sample precipitation (mm)  
hooked up, but not working
16. sample station barometric pressure (mbar)  
ok
17. mean temperature difference 1-3 m (C)  
Multiply by -1
18. sample of battery voltage  
o1

\*Notes:

1. No missing data lines
2. Prec gage not working properly.

Filename: hoe010212.dat  
Station: Lake Hoare met station  
Date of Establishment: Dec 1, 1993 by Peter Doran  
Author of this report: Thomas Nysten  
File Period: January 15, 2002 (14) @ 1330 to January 26, 2002 (26) @ 1515  
Sampling Frequency: wind every 4 sec; other every 30 sec  
Averaging and Output Interval: every 15 minutes  
Program Name: hoe012v6 (Program signature: 38573)

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
15. sample precipitation (mm)  
hooked up, but not working
16. sample station barometric pressure (mbar)  
ok
17. mean temperature difference 1-3 m (C)  
Multiply by -1
18. sample of battery voltage  
o1

\*Notes:

1. Loaded new program, hoe012v6 on January 26, 2002 @ 15:15
2. Missing line of data at January 26, 2002 @ 1515 and between 1/18/02 1800 and 1/19/02 0045
3. Prec gage not working properly, hooked up to new CR10. Gage now working
4. Swapped out module for SM4M on January 26, 2002 @ 15:15

Filename: tar0122.dat  
Station: Taylor Glacier Station  
Date of Establishment: 1994 by Peter Doran  
Author of this report: Thomas Nylen  
File Period: January 19, 2001 (19) @ 0945 to November 17, 2001 (321) @ 1600  
Sampling Frequency: wind every 4 secs.; others: every 30 secs.  
Averaging and Output Interval: every 15 minutes  
Program name: tar001v1 (program signature - 56521)

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.
2. tar0121 contains data from previous season, which was collected already
3. No data lines are missing
4. Replaced 207 air temperature/RH sensor @ 3m with new 107 air temperature sensor after loading new program (~January 19, 2000 @ 1000). Error message received during this period
5. Time changed by +00:02:00 on the datalogger on November 17, 2001 (321) @ 1600
6. Wind alignment good, check on November 17, 2001 (321) @ 1600

Filename: tar0123.dat  
Station: Taylor Glacier Station  
Date of Establishment: 1994 by Peter Doran  
Author of this report: Thomas Nylen  
File Period: November 17, 2001 (321) @ 1615 to November 28, 2001 (332) @ 1800  
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. Turned power off on old CR10 on November 28, 2001 @ 18:00, and reconnected to the power to a new CR10X.  
Started switching wires over to new datalogger
2. Replaced wind monitor on November 28, 2001 between 18:00 and 20:00
3. Replaced HMP45C @ 1m on November 28, 2001 between 18:00 and 20:00
4. Check values in the next file

Filename: tar0124.dat  
Station: Taylor Glacier Station  
Date of Establishment: 1994 by Peter Doran  
Author of this report: Thomas Nylen  
File Period: November 28, 2001 (332) @ 1815 to January 23, 2002 (23) @ 1245  
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. Drilled new post and repositioned station on new post. Temp and RH @ 1m repositioned to be approx. 1m above the ice. AirT3m and RH3m are 2.8 meters off the ice
2. Adjusted time +00:00:10 on January 23, 2002 @ 1230
3. Check wind alignment January 23, 2002 @ 1235, no changes
4. Replaced storage module with SM4M January 23, 2002 @ 1250

Filename: uhod0121.dat  
Station: Upper Howard Glacier Station  
Date of Establishment: November 14, 2001 by Thomas Nylen  
Author of this report: Thomas Nylen  
File Period: November 14, 2001 @ 1315 to January 29, 2002 @ 1000  
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. Set up station on top of the ridge on the upper Howard on January 29, 2002 @ 1000
2. SwRadOut not working, 5L wire broke. Hooked up new sensor on
3. Data missing between January 16, 2002 00:45 and January 16, 2002 @ 0830
4. Check wind alignment on January 29, 2002 @ 1000, rotated 5 clockwise

Filename: vaa0121.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 16, 2001 (16) @ 1330 to August 11, 2001 (223) @ 1030  
Sampling Frequency: wind every 4 secs.; other every 30 secs.  
Averaging and Output Interval: every 15 min  
Program Name: vaa990v1 (23034)

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. Data lines missing on April 3, 2001 between 1245 and 1930

Filename: vaa0122.dat  
Station: Lake Vanda met station  
Date of Establishment: November 24, 1994 by Peter Doran, rebuilt  
Author of this report: Thomas Nylén  
File Period: August 11, 2001 (223) @ 1030 to November 23, 2001 (327) @ 1430  
Sampling Frequency: wind every 4 secs.; other every 30 secs.  
Averaging and Output Interval: every 15 min  
Program Name: vaa990v1 (23034)

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/m<sup>2</sup>)  
ok
7. mean solar flux going up (W/m<sup>2</sup>)  
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/m<sup>2</sup>)  
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. Old CR10 clock behind by 00:03:52. Not adjusted
2. 2 blades on the wind monitor were broken
3. RH3m probe was disconnected on November 23, 2001 @ 1404
4. Wind monitor was disconnected on November 23, 2001 @ 1409
5. Upward and downward pyranometer was disconnected on November 23, 2001 @ 1415
6. Quantum was hooked up on November 23, 2001 @ 1417

7. OnxyT was disconnected on November 23, 2001 @ 1421
8. All temperature was disconnected on November 23, 2001 @ 1421
9. Powered off old CR10 on November 23, 2001 (338) @ 1430, and hooked up new CR10X. All sensors should be working
10. Wind disconnected on November 23, 2001 (338) between ~1515-1530
11. Check wind alignment, rotated 10° counterclockwise

Filename: vaa0124.dat (skipped vaa0123.dat)  
Station: Lake Vanda met station  
Date of Establishment: November 24, 1994 by Peter Doran, rebuilt  
Author of this report: Thomas Nylén  
File Period: November 23, 2001 (327) @ 1445 to January 18, 2002 (18) @ 1130  
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/m<sup>2</sup>)  
ok
7. mean solar flux going up (W/m<sup>2</sup>)  
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/m<sup>2</sup>)  
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. Upward and downward pyranometer was disconnected between 1415 and 1445 on November 23, 2001. First two values of file are bad
2. Wind disconnected on November 23, 2001 (337) between ~1515-1530, values flagged as bad between this interval. Minimum wind speed flagged as bad the first 3 of 4 values.
3. Time adjust +00:00:22 on January 18, 2002 @ 11:12
4. Check wind alignment on January 18, 2002 @ 1148, adjusted 5 degrees clockwise

5. Existing sensor numbers – SwRadIn: PY31675, SwRadOut: PY40424, PAR: Q17248
6. Storage Modules replaced with 1 @ SM4M on January 18, 2002 @ 1134
7. Between 1115 and 1130 on January 18, 2002, swapped out Quantum (PAR). New sensor number: Q17248

Filename: via01021.dat  
Station: Lake Vida met station  
Date of Establishment: November 24, 1995 by Peter Doran  
Author of this report: Thomas Nysten  
File Period: January 16, 2001 (16) @ 1415 to November 23, 2001 (338) @ 1445  
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 303.15
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:

Filename: via01022.dat  
Station: Lake Vida met station  
Date of Establishment: November 24, 1995 by Peter Doran  
Author of this report: Thomas Nylén  
File Period: November 23, 2001 (338) @ 1445 (recorded as 337 @ 2000)  
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/m<sup>2</sup>)  
ok
7. mean solar flux going up (W/m<sup>2</sup>)  
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/m<sup>2</sup>)  
divide by 200, multiply by 303.15
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. Powered off old CR10 on November 23, 2001 (338) @ 1445, and hooked up new CR10X
2. Reset clock on new CR10X, was 18 hours behind

Filename: via01023.dat

Station: Lake Vida met station

Date of Establishment: November 24, 1995 by Peter Doran

Author of this report: Thomas Nylén

File Period: November 23, 2001 (338) @ 1515 to November 23, 2001 (338) @ 1600

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/m<sup>2</sup>)  
ok
7. mean solar flux going up (W/m<sup>2</sup>)  
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/m<sup>2</sup>)  
divide by 200, multiply by 303.15 (Q9916)
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. Powered off old CR10 on November 23, 2001 (338) @ 1445, and hooked up new CR10X
2. AirT3m was hooked up on November 23, 2001 @ 1515
3. New RH3m probe was hooked up on November 23, 2001 @ 1525
4. SoilT0cm was hooked up on November 23, 2001 @ 1528
5. New wind monitor was hooked up on November 23, 2001 @ 1530
6. New Upward pyranometer (PY28167) was hooked up on November 23, 2001 @ 1545

7. Downward pyranometer (PY23250) was hooked up on November 23, 2001 @ 1545
8. Quantum was hooked up on November 23, 2001 @ 1545
9. SoilT5cm was hooked up on November 23, 2001 @ 1528
10. SoilT10cm was hooked up on November 23, 2001 @ 1532
11. Swapped out module on November 23, 2001 @ 1600
12. Check wind alignment, no changes

Filename: via01024.dat  
Station: Lake Vida met station  
Date of Establishment: November 24, 1995 by Peter Doran  
Author of this report: Thomas Nylén  
File Period: November 23, 2001 (338) @ 1615 to January 18, 2002 (18) @ 1230  
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 303.15 (Q9916)
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 +00:00:10 on January 18, 2002 @ 12:11
3. Check wind alignment on January 18, 2002 @ 12:26, no changes
4. Existing sensor numbers - SwRadIn: 20167, SwRadOut: 23250, PAR: Q9916
5. Quantum sensor was replaced on January 18, 2002 @ 1230. New sensor number is Q29765. Last two data points were bad during replacement.

6. Swapped out module with 2 SM716 on January 18, 2002 @ 1233