Documentation and Task Lists for 2000/2001

o1=omit from level 1,
ok= no changes to get to level 1,
rclow= reverse temperatures to mV and apply clow subroutine to mV values using Steinhart-Hart equation,
bad= normally would be included in level 1 but number is bogus,

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

Array I.D. meaning:

First and Second Digit

- 01 = Hoare
- 02 = Fryxell
- 03 = Bonney
- 04 = Commonwealth
- 05 = Howard
- 06 = Taylor
- 07 = Vanda
- 08 = Brownsworth
- 09 = Explorer's Cove
- 10 = Canada Gl. (without Eddy Sensors)
- 11 = Vida
- 12 = Hoare Submerged
- 13 = Fryxell Submerged
- 14 = Bonney East Submerged
- 15 =Canada Gl. (with Eddy Sensors)
- 16 = Bonney West Submerged
- 17 = Fryxell Snow Fence
- 18 = Beacon Valley

Hardware Notes: Continued service schedule. Half the CR10s were swapped out with new CR10x A station at Beacon Valley was constructed and installed Filename:ben00011.datStation:Lake Vida met stationDate of Establishment:November 27, 2000 by Susan Kaspari, Thomas Nylen and Adrian GreenAuthor of this report:Thomas NylenFile Period:November 27, 2000 (332) @ 1400 to January 15, 2001 (15) @ 1345Sampling Frequency:wind every 4 secs.; others: every 30 secs.Averaging and Output Interval:every 30 minProgram Name:ben001v1

1. array I.D. 01 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) 01 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 (a) 0 cm in soil (C) rclow 16. mean soil temperature @ 5 cm in soil (C) rclow 17. mean soil temperature (a) 10 cm in soil (C) rclow 18. sample of battery voltage

01

notes:

- 1. Station was constructed at Lake Hoare and partially dismantled and flown to Beacon Valley. The station was reconstructed and made operational.
- 2. Wind direction looked questionable. Did not have time to adjust, but check again when there in January. Wind rotated 180 degrees on January 15, 2001 @ 1400. Data was corrected in this file. Need to check the next file.
- 3. First 11 lines is data collected while station was at Lake Hoare, so ignore.

- Adjusted regulator.
 GPS Coordinates: S 77 49.681 E 160 38.422
 Array ID for Beacon is 11, same as Vida. Change in program in Nov 2001

Filename:boy00011.datStation:Lake Bonney met stationDate of Establishment:November 24, 1993 by Peter DoranAuthor of this report:Thomas NylenFile Period:January 25, 2000 (25) @ 1615 to June 11, 2000 (163) @ 815Sampling Frequency:wind speed every 4 sec, other every 30 secAveraging and Output Interval:every 15 minutesProgram name:boy990v1

1. array I.D. 01 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) 01 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 243.31 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 248.76 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:

Filename:boy00012.datStation:Lake Bonney met stationDate of Establishment:November 24, 1993 by Peter DoranAuthor of this report:Thomas NylenFile Period:June 11, 2000 (163) @ 830 to October 27, 2000 (301) @ 1315Sampling Frequency:wind speed every 4 sec, other every 30 secAveraging and Output Interval:every 15 minutesProgram name:boy990v1

1. array I.D. 01 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) 01 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 243.31 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 248.76 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:

Storage modules and CR10 were removed on 11/17/2000 and replaced with a new CR10X. I think I lost the data that was on the old CR10 when I turned the power off. I had to reload the program from the new storage module on to the old CR10, since I was switching the power to the new CR10X. It does not appear the data was on the old CR10, so the data from October 27, 2000 to November 17, 2000 is gone, unless it got loaded on the new storage module, which I used to load the program back on the old CR10. By 11/17/2000 @ 11:45 all the wires were switched to the new CR10.

Replaced upwarad and downward pyrgeometers. Old and new sensor numbers are the following:

Old Up Pyrgeometer:32054F3New Up Pyrgeometer:32311F3Old Down Pyrgeometer:30831F3New Down Pyrgeometer:29786F3

Filename:boy00013.datStation:Lake Bonney met stationDate of Establishment:November 24, 1993 by Peter DoranAuthor of this report:Thomas NylenFile Period:November 17, 2000 (322) @ 1100 to January 15, 2000 (15) @ 1300Sampling Frequency:wind speed every 4 sec, other every 30 secAveraging and Output Interval:every 15 minutesProgram name:boy990v1

1. array I.D. 01 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) 01 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:

Storage modules and CR10 were removed on 11/17/2000 and replaced with a new CR10X. I think I lost the data that was on the old CR10 when I turned the power off. I had to reload the program from the new storage module on to the old CR10, since I was switching the power to the new CR10X. It does not appear the data was on the old CR10, so the data from October 27, 2000 to November 17, 2000 is gone, unless it got loaded on the new storage module, which I used to load the program back on the old CR10. By 11/17/2000 @ 11:45 all the wires were switched to the new CR10.

LwRadIn is too low when compared to the corrected value calculated (LwRadIn2). Not sure what is wrong, check next year.

Filename:brh00011.datStation:Lake Brownworth met stationDate of Establishment:November 13, 1996 by Peter Doran and D.J. OsborneAuthor of this report:Thomas NylenFile Period:January 26, 2000 (26) @ 1600Sampling Frequency:wind speed every 4 sec; other every 30 secAveraging and Output Interval:every 15 minProgram Name:brh967-1

1. array I.D. 01 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) 01 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 328.50 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 01

Notes:

Filename:brh00012.datStation:Lake Brownworth met stationDate of Establishment:November 13, 1996 by Peter Doran and D.J. OsborneAuthor of this report:Thomas NylenFile Period:January 26, 2000 (26) @ 1615 to August 20, 2000 (233) @ 1530Sampling Frequency:wind speed every 4 sec; other every 30 secAveraging and Output Interval:every 15 minProgram Name:brh967-1

1. array I.D. 01 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) 01 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 328.50 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 01

Notes:

Filename:brh00013.datStation:Lake Brownworth met stationDate of Establishment:November 13, 1996 by Peter Doran and D.J. OsborneAuthor of this report:Thomas NylenFile Period:August 20, 2000 (233) @ 1545 to November 10, 2000 (315) @ 1500Sampling Frequency:wind speed every 4 sec; other every 30 secAveraging and Output Interval:every 15 minProgram Name:brh967-1

1. array I.D. 01 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) 01 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 328.50 15. mean soil temperature (a) 0 cm in soil (C) rclow 16. mean soil temperature @ 5 cm in soil (C) rclow 17. mean soil temperature (a) 10 cm in soil (C) rclow 18. sample of battery voltage 01 Notes: Installed new 107 temp probe on November 10, 2000 (315) @ 1449 to replace the 207 temp/rh probe Installed new upward and downward pyranometers at 14:35. Old Up Pyrgeometer: PY18655 New Up Pyrgeometer: PY27937 Old Down Pyrgeometer: PY20568 New Down Pyrgeometer: PY27929 Installed new Quantum sensor at 14:58.

O19469

New Quantum:

Q28265

Old Quantum:

New program, Brh001v1, was loaded November 10, 2000 (315) @ 1500 and compiled The HMP45C RH probe was installed November 10, 2000 (315) @ 1500 Filename:brh00014.datStation:Lake Brownworth met stationDate of Establishment:November 13, 1996 by Peter Doran and D.J. OsborneAuthor of this report:Thomas NylenFile Period:November 10, 2000 (315) @ 1515 to November 10, 2000 (315) @ 1530Sampling Frequency:wind speed every 4 sec; other every 30 secAveraging and Output Interval:every 15 minProgram Name:brh001v1

1. array I.D. 01 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) 01 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 (a) 0 cm in soil (C) rclow 16. mean soil temperature @ 5 cm in soil (C) rclow 17. mean soil temperature (a) 10 cm in soil (C) rclow 18. sample of battery voltage 01

Notes:

There are two November 10, 2000 (315) @ 1530, one in this set of data and one in Brh00015. The set from Brh00015 was used in the final dataset.

Filename:brh00015.datStation:Lake Brownworth met stationDate of Establishment:November 13, 1996 by Peter Doran and D.J. OsborneAuthor of this report:Thomas NylenFile Period:November 10, 2000 (315) @ 1545 to January 16, 2001 (16) @ 1215Sampling Frequency:wind speed every 4 sec; other every 30 secAveraging and Output Interval:every 15 minProgram Name:brh001v1

1. array I.D. 01 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) 01 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 (a) 0 cm in soil (C) rclow 16. mean soil temperature @ 5 cm in soil (C) rclow 17. mean soil temperature (a) 10 cm in soil (C) rclow 18. sample of battery voltage

Notes:

There are two November 10, 2000 (315) (a) 1530, one in this set of data and one in Brh00015. The set from Brh00015 was used in the final dataset.

(1) SM4M module installed to replace the two (2) 716 modules.

01

Filename:caa00011.datStation:Canada Glacier met stationDate of Establishment:Nov 20, 1995 by Karen LewisReinstalled on glacier:Jan 13, 1998 by Karen LewisAuthor of this report:Thomas NylenFile Period:January 16, 2000 (16) @ 1615 to August 22, 2000 (235) @ 1830Sampling Frequency:wind speed every 4 sec; other every 30 secAveraging and Output Interval:every 15 minutesProgram name:caa989-1

1. array I.D. 01 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) 01 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. mean net radiation (W/m2) bad 16. mean surface temperature from IRT (C) bad 17. sample battery voltage 01

*Notes:

Missing data between May 11, 2000 (132) @ 1900 to May 12, 2000 (133) @ 0215 Missing data between July 20, 2000 (202) @ 0045 to July 20, 2000 (202) @ 0800 Filename:caa00012.datStation:Canada Glacier met stationDate of Establishment:Nov 20, 1995 by Karen LewisReinstalled on glacier:Jan 13, 1998 by Karen LewisAuthor of this report:Thomas NylenFile Period:August 22, 2000 (235) @ 1845 to November 12, 2000 (317) @ 1245Sampling Frequency:wind speed every 4 sec; other every 30 secAveraging and Output Interval:every 15 minutesProgram name:caa989-1

1. array I.D. 01 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) 01 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. mean net radiation (W/m2) bad 16. mean surface temperature from IRT (C) bad 17. sample battery voltage 01



Filename:caa00013.datStation:Canada Glacier met stationDate of Establishment:Nov 20, 1995 by Karen LewisReinstalled on glacier:Jan 13, 1998 by Karen LewisAuthor of this report:Thomas NylenFile Period:November 12, 2000 (317) @ 1245 to November 30, 2000 (335) @ 1030Sampling Frequency:wind speed every 4 sec; other every 30 secAveraging and Output Interval:every 15 minutesProgram name:caa989-1

1. array I.D. 01 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) 01 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. mean net radiation (W/m2) bad 16. mean surface temperature from IRT (C) bad 17. sample battery voltage 01



Filename:caa00014.datStation:Canada Glacier met stationDate of Establishment:Nov 20, 1995 by Karen LewisReinstalled on glacier:Jan 13, 1998 by Karen LewisAuthor of this report:Thomas NylenFile Period:November 30, 2000 (335) @ 1030 to November 30, 2000 (335) 1200Sampling Frequency:wind speed every 4 sec; other every 30 secAveraging and Output Interval:every 15 minutesProgram name:caa989-1

1. array I.D. 01 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) 01 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. mean net radiation (W/m2) bad 16. mean surface temperature from IRT (C) bad 17. sample battery voltage 01 *Notes: Installed new upward and downward pyranometers. Old Up Pyrgeometer: PY31686 New Up Pyrgeometer:

Old Up Pyrgeometer:PY31686New Up Pyrgeometer:PY28348Old Down Pyrgeometer:PY31675New Down Pyrgeometer:PY28371Installed new 107 temp probe to replace the 207Installed new HMP45C RH probe to replace the 207 RH probe on November 30, 2000 @ 1200

Installed new program Caa001v1 after November 30, 2000 @ 1215

The net radiometer was removed and brought back to camp.

New post were inserted in 2 metered drilled holes and the station was moved. The legs of the station was

repositioned so the wind and pyranometers are at 3m from the ice surface and the air temperature and RH probes are at 2m above the ice surface. The wind was repositioned when the station was moved to the new posts.

Wind direction is bad between November 30, 2000 @ 1030 and 1400 because station was temporarily moved. Check values on next data set.

Filename: caa00015.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 30, 2000 (335) 1215 Sampling Frequency: wind speed every 4 sec; other every 30 sec Averaging and Output Interval: every 15 minutes Program name: caa001v1

1. array I.D. 01 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) 01 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 01

*Notes:

Only one line of data. It is data from the same time as the first line of the next file. This file is used for the database and the first line is skipped, except for temp and RH.

Filename: caa00016.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 30, 2000 (335) 1215 to December 18, 2000 (353) @ 1815
Sampling Frequency: wind speed every 4 sec; other every 30 sec
Averaging and Output Interval: every 15 minutes
Program name: caa001v1

1. array I.D. 01 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) 01 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 01

*Notes:

Only one line of data. It is data from the same time as the first line of the following file. This previous file is used for the database and the first line of this file is skipped, except for temp and RH.

Filename: caa00017.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 18, 2000 (353) @ 1815 to January 18, 2001 (18) @ 1530 Sampling Frequency: wind speed every 4 sec; other every 30 sec Averaging and Output Interval: every 15 minutes Program name: caa001v1

1. array I.D. 01 2. day ok 3. time ok 4. mean air temp. @ 2 meters (C) rclow 5. mean rh (a) 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) 01 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 01

*Notes:

Filename:coh00011.datStation:Commonwealth Glacier StationDate of Establishment:Nov 22, 1993 by Peter DoranAuthor of this report:Thomas NylenFile Period:January 22, 2000 (22) @ 1530 to June 25, 2000 (177)Sampling Frequency:wind every 4 secs.; other every 30 secs.Averaging and Output Interval:every 15 minutesProgram name:coh990v1

1. array I.D. 01 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 108.70 7. mean solar flux going up (W/m2) divide by 100; multiply by 109.29 8. mean horizontal wind speed (m/s) ok 9. resultant mean wind speed (m/s) 01 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. (a) 20 cm (C)

flag; rclow 23. mean ice temp. @ 1 m (C) flag; rclow 24. sample of battery voltage * 01

*Notes:

Exact depth position of ice thermistors unknown (#19 and #20).

Filename:coh00012.datStation:Commonwealth Glacier StationDate of Establishment:Nov 22, 1993 by Peter DoranAuthor of this report:Thomas NylenFile Period:June 25, 2000 (177) to November 11, 2000 (316) 1045Sampling Frequency:wind every 4 secs.; other every 30 secs.Averaging and Output Interval:every 15 minutesProgram name:coh990v1

1. array I.D. 01 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 108.70 7. mean solar flux going up (W/m2) divide by 100; multiply by 109.29 8. mean horizontal wind speed (m/s) ok 9. resultant mean wind speed (m/s) 01 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. (a) 20 cm (C)

flag; rclow 23. mean ice temp. @ 1 m (C) flag; rclow 24. sample of battery voltage * 01

*Notes:

Exact depth position of ice thermistors unknown (#19 and #20).

Filename: coh00013.dat Station: Commonwealth Glacier Station Date of Establishment: Nov 22, 1993 by Peter Doran Author of this report: Thomas Nylen File Period: November 11, 2000 (316) @ 1100 to January 23, 2001 (23) @ 15:45 Sampling Frequency: wind every 4 secs.; other every 30 secs. Averaging and Output Interval: every 15 minutes Program name: coh990v1 (64113)

1. array I.D. 01 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 108.70 between 11/11/2000 @ 1100 to 11/21/00 @ 1230 divide by 100; multiply by 117.10 after 11/21/00 @ 1315 7. mean solar flux going up (W/m2)divide by 100; multiply by 109.29 between 11/11/2000 @ 1100 to 11/21/00 @ 1230 divide by 100; multiply by 123.00 after 11/21/00 @ 1315 8. mean horizontal wind speed (m/s) ok 9. resultant mean wind speed (m/s) 01 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
 - 01

*Notes:

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Exact depth position of ice thermistors unknown (#19 and #20).

Upward and downward pyranometer replaced on November 21, 2000 @ 1230. Took about 45 minutes to switch out to recalibrated pyranometers. New upward pyranometer serial number is 29763F3 and the downward pyranometer is 29762F3.

No missing data Time adjusted by + 45 secs Wind vane direction is good Filename: exe00011.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 25, 2000 (25) @ 1200 to August 19, 2000 (232) @ 0530 Sampling Frequency: wind every 4 secs.; others: every 30 secs. Averaging and Output Interval: every 15 minutes Program name: exe990v1

Output Array Definition: 1. array I.D. 01 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 (\sim W/m2) ok 7. mean solar flux going down (\sim W/m2) ok 8. mean horizontal wind speed (m/s) ok 9. resultant mean wind speed (m/s) 01 10. resultant mean wind direction (degrees from north) ok 11. standard deviation of wind direction (degrees) 01 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 (a) 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: No missing data Filename:exe00012.datStation:Explorer's Cove StationDate of Establishment:Nov 21, 1997 by Peter Doran, D.J. Osborne and Keith SauterAuthor of this report:Thomas NylenFile Period:August 19, 2000 (232) @ 0545 to November 11, 2000 (316) @ 1545Sampling Frequency:wind every 4 secs.; others:every 30 secs.Averaging and Output Interval:every 15 minutesProgram name:exe990v1

Output Array Definition: 1. array I.D. 01 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 (\sim W/m2) ok 7. mean solar flux going down (\sim W/m2) ok 8. mean horizontal wind speed (m/s) ok 9. resultant mean wind speed (m/s) 01 10. resultant mean wind direction (degrees from north) ok 11. standard deviation of wind direction (degrees) 01 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 (a) 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: No missing data Filename: exe00013.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: November 11, 2000 (316) @ 1545 to November 28, 2000 (333) @ 1115 Sampling Frequency: wind every 4 secs.; others: every 30 secs. Averaging and Output Interval: every 15 minutes Program name: exe990v1

Output Array Definition: 1. array I.D. ol 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) ol
- 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 (a) 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: No missing data Filename: exe00014.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: November 28, 2000 (333) @ 1130 to November 28, 2000 (333) @ 1145 Sampling Frequency: wind every 4 secs.; others: every 30 secs. Averaging and Output Interval: every 15 minutes Program name: exe990v1

Output Array Definition: 1. array I.D. 01

 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) ol
- 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:

Turned off CR10 on November 28, 2000 (333) @ 1145. Replaced with new CR10X and turned on @ 1150. Downward pyranometer reinstalled at 1154 Quatum reinstalled at 1156 DTEmp reinstalled at 1158 Soil0cm reinstalled at 1202 AirT3m reinstalled at 1206 RH reinstalled at 1208 Upper pyranometer reinstalled at 1211 Wind reinstalled at 1215 Precipitation reinstalled at 1230 No missing data Check values on next data set Filename: exe00015.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: November 28, 2000 (333) @ 1145 to January 13, 2001 (13) @ 1115 Sampling Frequency: wind every 4 secs.; others: every 30 secs. Averaging and Output Interval: every 15 minutes Program name: exe990v1

Output Array Definition: 1. array I.D. ol 2. day ok 3. time ok

- 4. mean air temp. @ 3 meters (C) relow
 5. mean RH @ 3 meters
 - ok
- 6. mean solar flux coming up (\sim 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) ol
- 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 (a) 0 cm (C)
 - relow
- 16. mean dTemp 1-3 meters (from t.c. wire) (C)
- Multiple by -1 17. sample precipitation (mm)
 - ok
- 18. sample battery voltage

notes:

Bad values at the beginning of the file occurred during the switching of wires between the old and new CR10. No missing lines of data.

Filename:frl00011.datStation:Lake Fryxell met stationDate of Establishment:Jan 6, 1994 by Peter DoranAuthor of this report:Thomas NylenFile Period:January 25, 2000 (25) @ 1330 to ?????Sampling Frequency:wind every 4 sec; others: every 30 secs.Averaging and Output Interval:every 15 minutesProgram name:frl990v1

1. array I.D. 01 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) 01 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 (a) 0 cm in soil (C) rClow 16. mean soil temperature @ 5 cm in soil (C) rClow 17. mean soil temperature (a) 10 cm in soil (C) rClow 18. sample of battery voltage

notes:

01

Missing data between February 2, 2000 (33) @ 0900 to February 2, 2000 (33) @ 1545.

Datalogger started going haywire on April 9, 2000. The first signs were errant ID and dates. Eventually the station stopped recording coherent data. Could not tell when the file ended. The cause of the malfunction is probably the CR10. The battery was probably old and could not withstand the cold temperatures. Data between April 18, 2000 @ 0945 and July 23, 2000 (204) @ 2400 is not worth keeping, since many of the lines are missing data and I would not trust the data. I checked the data between April 9, 2000 to April 17, 2000 @ 2400 and deleted questionable data.

Filename:fr100012.datStation:Lake Fryxell met stationDate of Establishment:Jan 6, 1994 by Peter DoranAuthor of this report:Thomas NylenFile Period:?????? to August 19, 2000 (232) @ 1045Sampling Frequency:wind every 4 sec; others: every 30 secs.Averaging and Output Interval:every 15 minutesProgram name:frl990v1

1. array I.D. 01 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) 01 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 01

notes:

Filename:frl00013.datStation:Lake Fryxell met stationDate of Establishment:Jan 6, 1994 by Peter DoranAuthor of this report:Thomas NylenFile Period:August 19, 2000 (232) @ 1100 to November 14, 2000 (319) @ 1530Sampling Frequency:wind every 4 sec; others: every 30 secs.Averaging and Output Interval:every 15 minutesProgram name:frl990v1

1. array I.D. 01 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) 01 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 (a) 10 cm in soil (C) rClow 18. sample of battery voltage 01



Filename:frl00014.datStation:Lake Fryxell met stationDate of Establishment:Jan 6, 1994 by Peter DoranAuthor of this report:Thomas NylenFile Period:November 14, 2000 (319) @ 1545 to November 28, 2000 (333) @ 1400Sampling Frequency:wind every 4 sec; others: every 30 secs.Averaging and Output Interval:every 15 minutesProgram name:frl990v1

1. array I.D. 01 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) 01 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 01

notes:

Filename:frl00014.datStation:Lake Fryxell met stationDate of Establishment:Jan 6, 1994 by Peter DoranAuthor of this report:Thomas NylenFile Period:November 14, 2000 (319) @ 1545 to November 28, 2000 (333) @ 1400Sampling Frequency:wind every 4 sec; others: every 30 secs.Averaging and Output Interval:every 15 minutesProgram name:frl990v1

1. array I.D. 01 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) 01 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 (a) 0 cm in soil (C) rClow 16. mean soil temperature @ 5 cm in soil (C) rClow 17. mean soil temperature (a) 10 cm in soil (C) rClow 18. sample of battery voltage 01

notes:

Old Cr10 was turned off and the new CR10X was turned on and the sensor wires were transferred over.

Filename:frl00015.datStation:Lake Fryxell met stationDate of Establishment:Jan 6, 1994 by Peter DoranAuthor of this report:Thomas NylenFile Period:November 28, 2000 (332) @ 1400 to January 13, 2001 (12) @ 1045Sampling Frequency:wind every 4 sec; others: every 30 secs.Averaging and Output Interval:every 15 minutesProgram name:frl990v1

1. array I.D. 01 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) 01 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 (a) 0 cm in soil (C) rClow 16. mean soil temperature @ 5 cm in soil (C) rClow 17. mean soil temperature (a) 10 cm in soil (C) rClow 18. sample of battery voltage 01

notes:

Old Cr10 was turned off and the new CR10X was turned on and the sensor wires were transferred over. The CR10 is a day behind, change next season.

Some values at the beginning we changed to "B" because of obvious errors due to swapping out the CR10s

Filename:hod00011datStation:Howard Glacier StationDate of Establishment:Nov 20, 1993 by Peter DoranAuthor of this report:Thomas NylenFile Period:January 21, 2000 (21) @ 1715 to August 15, 2000 (228) @ 1345Sampling Frequency:wind every 4 sec others:every 30 secAveraging and Output Interval:every 15 minutesProgram name:hod990v1

1. array I.D. 01 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 123.61 7. mean solar flux going up (W/m2)divide by 100; multiply by 121.65 8. mean horizontal wind speed (m/s) ok 9. resultant mean wind speed (m/s) 01 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. $(a) \sim 1 \text{ m}(C)$ flag; rclow 16. mean air temp (a) 1 meter m (C) convert to mV, then clow 17. mean rh @ 1 meter (%) ok 18. sample of battery voltage 01

*Notes:

Exact depth position of ice thermistors unknown (#14 & 15).

Missing data between May 26, 2000 @ 1415 to May 26, 2000 @ 2100 and July 18, 2000 @ 2000 and July 19, 2000 @ 245

Filename:hod00012datStation:Howard Glacier StationDate of Establishment:Nov 20, 1993 by Peter DoranAuthor of this report:Thomas NylenFile Period:August 15, 2000 (228) @ 1345 to November 14, 2000 (319) @ 1100Sampling Frequency:wind every 4 sec others:every 30 secAveraging and Output Interval:every 15 minutesProgram name:hod990v1

1. array I.D. 01 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 123.61 7. mean solar flux going up (W/m2)divide by 100; multiply by 121.65 8. mean horizontal wind speed (m/s) ok 9. resultant mean wind speed (m/s) 01 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. $(a) \sim 1 \text{ m}(C)$ flag; rclow 16. mean air temp (a) 1 meter m (C) convert to mV, then clow 17. mean rh @ 1 meter (%) ok 18. sample of battery voltage 01

*Notes: Exact depth position of ice thermistors unknown (#14 & 15). Filename:hod00013datStation:Howard Glacier StationDate of Establishment:Nov 20, 1993 by Peter DoranAuthor of this report:Thomas NylenFile Period:November 14, 2000 (319) @ 1100 to November 29, 2000 (334) @ 1445Sampling Frequency:wind every 4 sec others:every 30 secAveraging and Output Interval:every 15 minutesProgram name:hod990v1

1. array I.D. 01 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 123.61 7. mean solar flux going up (W/m2) divide by 100; multiply by 121.65 8. mean horizontal wind speed (m/s) ok 9. resultant mean wind speed (m/s) 01 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. $@ \sim 1 \text{ m}(\text{C})$ flag; rclow 16. mean air temp (a) 1 meter m (C) convert to mV, then clow 17. mean rh @ 1 meter (%) ok 18. sample of battery voltage 01

*Notes:

Exact depth position of ice thermistors unknown (#14 & 15). On November 29, 2000 (334) @ 1445, turned off power to old CR10, for the purpose of replacing it with a new CR10X. RH probe at 1m height was disconnected for a bit.

Check data in next file period.

Post were redrilled and the station was moved to new posts.

Filename:hod00014.datStation:Howard Glacier StationDate of Establishment:Nov 20, 1993 by Peter DoranAuthor of this report:Thomas NylenFile Period:November 29, 2000 (334) @ 1500 to November 29, 2000 (334) @ 1515Sampling Frequency:wind every 4 sec others:every 30 secAveraging and Output Interval:every 15 minutesProgram name:hod990v1 (15272)

1. array I.D. 01 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 123.61 7. mean solar flux going up (W/m2)divide by 100; multiply by 121.65 8. mean horizontal wind speed (m/s) ok 9. resultant mean wind speed (m/s) 01 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. $(a) \sim 1 \text{ m}(C)$ flag; rclow 16. mean air temp (a) 1 meter m (C) convert to mV, then clow 17. mean rh @ 1 meter (%) ok 18. sample of battery voltage 01

*Notes: No data missing Exact depth position of ice thermistors unknown (#14 & 15). Data missing because of changing out CR10s RH probe at 1m height was disconnected for a bit. Data checked and flagged Filename:hod00015.datStation:Howard Glacier StationDate of Establishment:Nov 20, 1993 by Peter DoranAuthor of this report:Thomas NylenFile Period:November 29, 2000 (334) @ 1530 to January 20, 2001 (20) @ 1715Sampling Frequency:wind every 4 sec others:everaging and Output Interval:every 15 minutesProgram name:hod990v1 (15272)

1. array I.D. 01 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 123.61 7. mean solar flux going up (W/m2)divide by 100; multiply by 121.65 8. mean horizontal wind speed (m/s) ok 9. resultant mean wind speed (m/s) 01 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. $(a) \sim 1 \text{ m}(C)$ flag; rclow 16. mean air temp (a) 1 meter m (C) convert to mV, then clow 17. mean rh @ 1 meter (%) ok 18. sample of battery voltage 01

*Notes:

No data missing

Exact depth position of ice thermistors unknown (#14 & 15).

RH probe at 1m height was disconnected for a bit at beginning of file. Data checked and flagged Time adjusted + 5 secs.

Wind vane rotated 7 degrees counterclockwise, after tighten the top center pole.

Filename:hoe00011.datStation:Lake Hoare met stationDate of Establishment:Dec 1, 1993 by Peter DoranAuthor of this report:Thomas NylenFile Period:January 24, 2000 (24) @ 1445 to August 20, 2000 (231) @ 0745Sampling Frequency:wind every 4 sec; other every 30 secAveraging and Output Interval:every 15 minutesProgram Name:hoe990v1 (50895)

1. array I.D. 01 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) 01 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 294.07 15. sample precipitation (mm) ok 16. sample station barometric pressure (mbar) ok 17. mean temperature difference 1-3 m (C) Multiply by -1 18. sample of battery voltage 01

*Notes:

Repositioned precipitation gage. After carefully inspection on 11/18/00, saw the gage was broken Between August 15, 2000 @ 13:45 and 21:00 there was no data in between. Cannot figure out why data was missing. Filename: hoe00012.dat Station: Lake Hoare met station Date of Establishment: Dec 1, 1993 by Peter Doran Author of this report: Thomas Nylen File Period: August 20, 2000 (231) @ 0800 to November 9, 2000 (314) @ 1345 Sampling Frequency: wind every 4 secs.; other every 30 secs. Averaging and Output Interval: every 15 minutes Program Name: hoe990v1 (50895)

1. array I.D. 01 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) 01 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 294.07 15. sample precipitation (mm) ok 16. sample station barometric pressure (mbar) ok 17. mean temperature difference 1-3 m (C) Multiply by -1 18. sample of battery voltage 01

*Notes:

Filename:hoe00013.datStation:Lake Hoare met stationDate of Establishment:Dec 1, 1993 by Peter DoranAuthor of this report:Thomas NylenFile Period:November 9, 2000 (314) @ 1400 to November 9, 2000 (314) @ 1345Sampling Frequency:wind every 4 sec; other every 30 secAveraging and Output Interval:every 15 minutesProgram Name:hoe990v1 (50895)

1. array I.D. 01 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) 01 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 294.07 (Except last three data values, multiplier not known) 15. sample precipitation (mm) ok 16. sample station barometric pressure (mbar) ok 17. mean temperature difference 1-3 m (C) Multiply by -1 18. sample of battery voltage 01

*Notes:

Repositioned precipitation gage. After carefully inspection on 11/18/00, saw the gage was broken

Filename:hoe00014.datStation:Lake Hoare met stationDate of Establishment:Dec 1, 1993 by Peter DoranAuthor of this report:Thomas NylenFile Period:November 9, 2000 (314) @ 1445 to November 18, 2000 (323) @ 1315Sampling Frequency:wind every 4 sec; other every 30 secAveraging and Output Interval:every 15 minutesProgram Name:hoe990v1 (50895)

1. array I.D.

01 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) 01 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 294.07 15. sample precipitation (mm) ok 16. sample station barometric pressure (mbar) ok 17. mean temperature difference 1-3 m (C) Multiply by -1 18. sample of battery voltage 01

*Notes:

Filename:hoe00015.datStation:Lake Hoare met stationDate of Establishment:Dec 1, 1993 by Peter DoranAuthor of this report:Thomas NylenFile Period:November 18, 2000 (323) @ 1330 to November 18, 2000 (323) @ 1345Sampling Frequency:wind every 4 sec; other every 30 secAveraging and Output Interval:every 15 minutesProgram Name:hoe990v1 (50895)

1. array I.D. 01 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) 01 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 294.07 15. sample precipitation (mm) ok 16. sample station barometric pressure (mbar) ok 17. mean temperature difference 1-3 m (C) Multiply by -1 18. sample of battery voltage 01

*Notes:

On November 18, 2000 (323) @ 1400 unplugged CR10 in order to swap it out with a new CR10X. Loaded the same program on the new CR10X and started switching over the wires. Before 1415, hooked up SwRadOut, PAR and dTEmp. Before 1430 got AirTemp, SwRadIn, and RH. At 1426, lost power, but hooked it back up. By 1500, everything is hooked up.

Filename:hoe00016.datStation:Lake Hoare met stationDate of Establishment:Dec 1, 1993 by Peter DoranAuthor of this report:Thomas NylenFile Period:November 18, 2000 (323) @ 1400 to January 9, 2001 (9) @ 1515Sampling Frequency:wind every 4 sec; other every 30 secAveraging and Output Interval:every 15 minutesProgram Name:hoe990v1 (42813)

1. array I.D. 01 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) 01 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 294.07 15. sample precipitation (mm) ok 16. sample station barometric pressure (mbar) ok 17. mean temperature difference 1-3 m (C) Multiply by -1 18. sample of battery voltage 01

*Notes:

Filename:hoe00017.datStation:Lake Hoare met stationDate of Establishment:Dec 1, 1993 by Peter DoranAuthor of this report:Thomas NylenFile Period:January 9, 2001 (9) @ 1530 to January 25, 2001 (25) @ 1800Sampling Frequency:wind every 4 sec; other every 30 secAveraging and Output Interval:every 15 minutesProgram Name:hoe990v1 (42813)

1. array I.D. 01 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) 01 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 294.07 15. sample precipitation (mm) ok 16. sample station barometric pressure (mbar) ok 17. mean temperature difference 1-3 m (C) Multiply by -1 18. sample of battery voltage 01

*Notes: No missing data Precipitation gage not working Filename:tar00011.datStation:Taylor Glacier StationDate of Establishment:1994 by Peter DoranAuthor of this report:Thomas NylenFile Period:January 18, 2000 @ 1615 to August 1, 2000 (214) @ 1530Sampling Frequency:wind every 4 secs.; others: every 30 secs.Averaging and Output Interval:every 15 minutesProgram name:tar990v1

1. array I.D. 01 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 7. mean solar flux going up (W/m2)divide by 100; multiply by 116.41 8. mean horizontal wind speed (m/s) ok 9. resultant mean wind speed (m/s) 01 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 Vaisala HMP45C Probe 01 17. mean air temp @ 1m (C) from 107 Temp. Probe rclow 18. mean RH at 1m (%) from Vaisala HMP45C Probe ok 19. sample of battery voltage 01

*Notes:

Missing data between April 8, 2000 @ 1300 to April 8, 2000 @ 1930 and May 19, 2000 @ 930 to May 19, 2000 @ 1545

Filename:tar00012.datStation:Taylor Glacier StationDate of Establishment:1994 by Peter DoranAuthor of this report:Thomas NylenFile Period:August 1, 2000 (214) @ 1545 to November 16, 2000 (321) @ 1300Sampling Frequency:wind every 4 secs.; others: every 30 secs.Averaging and Output Interval:every 15 minutesProgram name:tar990v1

1. array I.D. 01 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 7. mean solar flux going up (W/m2)divide by 100; multiply by 116.41 8. mean horizontal wind speed (m/s) ok 9. resultant mean wind speed (m/s) 01 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 Vaisala HMP45C Probe 01 17. mean air temp @ 1m (C) from 107 Temp. Probe rclow 18. mean RH at 1m (%) from Vaisala HMP45C Probe ok 19. sample of battery voltage 01

*Notes:

Filename:tar00013.datStation:Taylor Glacier StationDate of Establishment:1994 by Peter DoranAuthor of this report:Thomas NylenFile Period:November 16, 2000 (321) @ 1315 to January 10, 2001 (10) @ 1345Sampling Frequency:wind every 4 secs.; others: every 30 secs.Averaging and Output Interval:every 15 minutesProgram name:tar990v1

1. array I.D. 01 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 7. mean solar flux going up (W/m2)divide by 100; multiply by 116.41 8. mean horizontal wind speed (m/s) ok 9. resultant mean wind speed (m/s) 01 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 Vaisala HMP45C Probe 01 17. mean air temp @ 1m (C) from 107 Temp. Probe rclow 18. mean RH at 1m (%) from Vaisala HMP45C Probe ok 19. sample of battery voltage 01

*Notes:

Filename:tar00014.datStation:Taylor Glacier StationDate of Establishment:1994 by Peter DoranAuthor of this report:Thomas NylenFile Period:January 10, 2001 (10) @ 1400Sampling Frequency:wind every 4 secs.; others:everaging and Output Interval:every 15 minutesProgram name:tar001v1

1. array I.D. 01 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 7. mean solar flux going up (W/m2)divide by 100; multiply by 116.41 8. mean horizontal wind speed (m/s) ok 9. resultant mean wind speed (m/s) 01 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 Vaisala HMP45C Probe 01 17. mean air temp @ 1m (C) from 107 Temp. Probe rclow 18. sample of battery voltage

*Notes:

01

Installed new HMP45C RH probe @ 3m and program, Tar001v1.dld, but probe was not working. Tried trouble shooting, but could not figure out what was wrong.

Filename:tar00015.datStation:Taylor Glacier StationDate of Establishment:1994 by Peter DoranAuthor of this report:Thomas NylenFile Period:January 10, 2001 (10) @ 1415Sampling Frequency:wind every 4 secs.; others:everaging and Output Interval:every 15 minutesProgram name:tar001v1

1. array I.D. 01 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 7. mean solar flux going up (W/m2)divide by 100; multiply by 116.41 8. mean horizontal wind speed (m/s) ok 9. resultant mean wind speed (m/s) 01 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

*Notes:

01

HMP45C @ 3m not working, so I hooked up the old 207 RH probe and loaded the old program. Will try another sensor next time.

Filename: tar00016.dat Station: Taylor Glacier Station Date of Establishment: 1994 by Peter Doran Author of this report: Thomas Nylen File Period: January 10, 2001 (10) @ 1415 to January 12, 2001 (12) @ 1945 Sampling Frequency: wind every 4 secs.; others: every 30 secs. Averaging and Output Interval: every 15 minutes Program name: tar001v1 (47701)

1. array I.D. 01 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 7. mean solar flux going up (W/m2)divide by 100; multiply by 116.41 8. mean horizontal wind speed (m/s) ok 9. resultant mean wind speed (m/s) 01 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 Vaisala HMP45C Probe 01 17. mean air temp @ 1m (C) from 107 Temp. Probe rclow 18. mean RH at 1m (%) from Vaisala HMP45C Probe ok 19. sample of battery voltage 01

*Notes:

Missing data between January 12, 2001 (12) @ 0630 to January 12, 2001 (12) @ 1630

Filename:tar00017.datStation:Taylor Glacier StationDate of Establishment:1994 by Peter DoranAuthor of this report:Thomas NylenFile Period:January 12, 2001 (12) @ 1645 to January 12, 2001 (12) @ 1945Sampling Frequency:wind every 4 secs.; others: every 30 secs.Averaging and Output Interval:every 15 minutesProgram name:tar001v1 (program signature - 47701)

1. array I.D. 01 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) 01 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 Vaisala HMP45C Probe 01 17. mean air temp @ 1m (C) from 107 Temp. Probe rclow 18. mean RH at 1m (%) from Vaisala HMP45C Probe ok 19. sample of battery voltage

*Notes:

01

File is a repeat of the last 14 lines of the previous file. I did not leave a module at the station on January 10, since I thought the CR10 would store values until I returned with the storage module. Values between January 12, 2001 (12) @ 2000 and January 19, 2001 are lost

Replaced Vaisala HMP45C Probe @ 3m with new sensor and loaded and compiled new program, tar001v1.dld on January 19, 2000 @ 0945. The new RH sensor is working. Replaced 207 air temperature/RH sensor @ 3m with new 107 air temperature sensor after loading new program (~January 19, 2000 @ 1000). Time changed by 7 sec on the datalogger Wind alignment good Checked values in the field appear satisfactory Filename:vaa00011.datStation:Lake Vanda met stationDate of Establishment:November 24, 1994 by Peter Doran, rebuiltAuthor of this report:Thomas NylenFile Period:January 26, 2000 (26) @ 1130 to August 20, 2000 (233) @ 830Sampling Frequency:wind every 4 secs.; other every 30 secs.Averaging and Output Interval:every 15 minProgram Name:vaa990v1 (23034)

1. array I.D. 01 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 (a) 10 cm in soil (C) rclow 17. mean Onyx River temperature (C) bad 18. sample of battery voltage 01

notes:

No data mssing

The wind monitor was replaced, since it appears the direction component of the monitor was not working. Flag all wind direction and WdirStd as bad. The new sensor appears to be working. Check next time visit station.

Filename:vaa00012.datStation:Lake Vanda met stationDate of Establishment:November 24, 1994 by Peter Doran, rebuiltAuthor of this report:Thomas NylenFile Period:August 20, 2000 (233) @ 845 to November 10, 2000 (315) @ 1000Sampling Frequency:wind every 4 secs.; other every 30 secs.Averaging and Output Interval:every 15 minProgram Name:vaa990v1 (23034)

1. array I.D. 01 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 (a) 10 cm in soil (C) rclow 17. mean Onyx River temperature (C) bad 18. sample of battery voltage 01

notes:

No data missing

Installed 107 shield. Moved 107 temp probe out of 207 shield into the new 107 shield.

The wind monitor was replaced, since it appears the direction component of the monitor was not working. Flag all wind direction and WdirStd as bad. The new sensor appears to be working. Check next time visit station. Replaced downward pyranometer. Old sensor number is PY28167 and the new number is PY28170.

Filename:vaa00013.datStation:Lake Vanda met stationDate of Establishment:November 24, 1994 by Peter Doran, rebuiltAuthor of this report:Thomas NylenFile Period:November 10, 2000 (315) @ 1015 to January 16, 2001 (16) @ 1315Sampling Frequency:wind every 4 secs.; other every 30 secs.Averaging and Output Interval:every 15 minProgram Name:vaa990v1 (23034)

1. array I.D. 01 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 (a) 10 cm in soil (C) rclow 17. mean Onyx River temperature (C) bad 18. sample of battery voltage 01

notes: Wind monitor seems to be working now. Filename:via00011.datStation:Lake Vida met stationDate of Establishment:November 24, 1995 by Peter DoranAuthor of this report:Thomas NylenFile Period:January 26, 2000 (26) @ 1445 to January 26, 2000 (26) @ 1515Sampling Frequency:wind every 4 secs.; others: every 30 secs.Averaging and Output Interval:every 15 minProgram Name:via990v1

1. array I.D. 01 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) 01 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 01

notes: No missing data Filename:via00012.datStation:Lake Vida met stationDate of Establishment:November 24, 1995 by Peter DoranAuthor of this report:Thomas NylenFile Period:January 26, 2000 (26) @ 1515 to August 20, 2000 (233) @ 1145Sampling Frequency:wind every 4 secs.; others: every 30 secs.Averaging and Output Interval:every 15 minProgram Name:via990v1

1. array I.D. 01 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) 01 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 01

notes:

Filename:via00013.datStation:Lake Vida met stationDate of Establishment:November 24, 1995 by Peter DoranAuthor of this report:Thomas NylenFile Period:August 20, 2000 (233) @ 1145 to November 10, 2000 (315) @ 1200Sampling Frequency:wind every 4 secs.; others: every 30 secs.Averaging and Output Interval:every 15 minProgram Name:via990v1

1. array I.D. 01 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) 01 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 01

notes:

Filename:via00014.datStation:Lake Vida met stationDate of Establishment:November 24, 1995 by Peter DoranAuthor of this report:Thomas NylenFile Period:November 10, 2000 (315) @ 1215 to November 10, 2000 (315) @ 1230Sampling Frequency:wind every 4 secs.; others: every 30 secs.Averaging and Output Interval:every 15 minProgram Name:via990v1

1. array I.D. 01 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) 01 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 (a) 0 cm in soil (C) rclow 16. mean soil temperature @ 5 cm in soil (C) rclow 17. mean soil temperature (a) 10 cm in soil (C) rclow 18. sample of battery voltage 01

notes:

Installed 107 shield. Moved 107 temp probe out of 207 shield into the new 107 shield. Moved box housing CR10 higher on the pole. Wind monitor moved 10° clockwise on November 10, 2000 @ 12:49 Filename:via00015.datStation:Lake Vida met stationDate of Establishment:November 24, 1995 by Peter DoranAuthor of this report:Thomas NylenFile Period:November 10, 2000 (315) @ 1230 to January 16, 2001 (16) @ 1400Sampling Frequency:wind every 4 secs.; others: every 30 secs.Averaging and Output Interval:every 15 minProgram Name:via990v1

1. array I.D. 01 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) 01 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 01

notes: