File description and task list for 1996-97 LTER Met Files: o1=omit from level 1, ok= no changes to get to level 1, rclow= reverse temperatures to mV and apply clow subroutine to mV values using Steinhart-Hart equation, bad= normally would be included in level 1 but number is bogus, flag= reasonable number but needs a note attached concerning its collection:

No major changes were made from last season to the programs!!:

Array I.D. meaning:

First and Second Digit Third Digit 01 = HoareStations 1-14: program 02 = Fryxellversion # for season Station 15: 1 = time and const 03 = Bonney04 = Commonwealth2 = surface flux05 = Howard3 = met and energy06 = Taylor07 = Vanda08 = Brownsworth09 = Explorer's Cove 10 = Canada Gl. (without Eddy Sensors) 11 = Vida12 = Hoare Submerged 13 = Fryxell Submerged 14 = Bonney East Submerged 15 = Canada Gl. (with Eddy Sensors) 16 = Bonney West Submerged

Hardware Notes:

1) Continued service schedule.

Filename: boy97001.dat Station: Lake Bonney met station

Date of Establishment: November 24, 1993 by Peter Doran

Author of this report: Peter Doran

File Period: Jan 28/97 (28) @ 1115 to Aug 12/97 (224) @ 945 Sampling Frequency: wind speed every 1 sec, other every 30 secs.

Averaging and Output Interval: every 15 minutes

Program name: boy956-1

1. array I.D.

o1

2. day

ok

3. time

ok

4. mean air temp. @ 3 meters

rclow

5. mean R.H. (%)

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)

0

10. resultant mean wind direction (degrees from north)

ok

11. standard deviation of wind direction (degrees)

ماد

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 331.13

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 precipitation (mm)

ok

19. sample of battery voltage

01

Filename: boy97002.dat Station: Lake Bonney met station

Date of Establishment: November 24, 1993 by Peter Doran

Author of this report: Peter Doran

File Period: Aug 12/97 (224) @ 1000 to Nov 18/97 (322) @ 945 Sampling Frequency: wind speed every 1 sec, other every 30 secs.

Averaging and Output Interval: every 15 minutes

Program name: boy956-1

1. array I.D.

o1

2. day

ok

3. time

ok

4. mean air temp. @ 3 meters

rclow

5. mean R.H. (%)

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)

οk

9. resultant mean wind speed (m/s)

0

10. resultant mean wind direction (degrees from north)

ok

11. standard deviation of wind direction (degrees)

ماد

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 331.13

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 precipitation (mm)

ok

19. sample of battery voltage

o1

notes: 1. Station down for 1.5 hours at end of this file for servicing

2. New program (sig 50130) loaded that changes wind speed interval from 1 sec to 4 sec

Filename: boy97801.dat Station: Lake Bonney met station

Date of Establishment: November 24, 1993 by Peter Doran

Author of this report: Peter Doran

File Period: Nov 18/97 (322) @ 1115

Sampling Frequency: wind speed every 4 sec, other every 30 secs.

Averaging and Output Interval: every 15 minutes

Program name: boy956-1 with change from 1 to 4 sec wind sampling?

1. array I.D.

o1

2. day

ok

3. time

ok

4. mean air temp. @ 3 meters

rclow

5. mean R.H. (%)

ok

6. mean solar flux coming down (W/m2)

οk

7. mean solar flux going up (W/m2)

ok

8. mean horizontal wind speed (m/s)

οk

9. resultant mean wind speed (m/s)

0

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 306.03

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 precipitation (mm)

ok

19. sample of battery voltage

o1

notes: 1. Station down for 1.5 hours at beginning of this file for servicing.

- 2. New program (sig 50130) loaded that changes wind speed interval from 1 sec to 4 sec
- 3. Old upward pyro (PY23277) and quantum (Q19469) swapped for new (PY28347 and Q23201)

```
boy97802.dat
Filename:
Station: Lake Bonney met station
Date of Establishment: November 24, 1993 by Peter Doran
Author of this report: Peter Doran
                 Nov 18/97 (322) @ 1130 to Nov 18/97 (322) @ 1145
File Period:
Sampling Frequency: wind speed every 4 sec, other every 30 secs.
Averaging and Output Interval: every 15 minutes
Program name: boy956-1 with change from 1 to 4 sec wind sampling?
        1. array I.D.
                 o1
        2. day
                 ok
        3. time
                 ok
        4. mean air temp. @ 3 meters
                 rclow
        5. mean R.H. (%)
                 ok
        6. mean solar flux coming down (W/m2)
        7. mean solar flux going up (W/m2)
        8. mean horizontal wind speed (m/s)
        9. resultant mean wind speed (m/s)
        10. resultant mean wind direction (degrees from north)
        11. standard deviation of wind direction (degrees)
        12. maximum wind speed (m/s)
        13. minimum wind speed (m/s)
        14. mean P.A.R. (micromols/s/m2)
                 divide by 200, multiply by 306.03
        15. mean soil temperature @ 0 cm in soil (C)
        16. mean soil temperature @ 5 cm in soil (C)
                 rclow
```

17. mean soil temperature @ 10 cm in soil (C)

rclow
18. sample precipitation (mm)

o1

19. sample of battery voltage

Filename: boy97803.dat Station: Lake Bonney met station

Date of Establishment: November 24, 1993 by Peter Doran

Author of this report: Peter Doran

File Period: Nov 18/97 (322) @ 1200 to Nov 28/97 (332) @ 1300

Sampling Frequency: wind speed every 4 sec, other every 30 secs.

Averaging and Output Interval: every 15 minutes

Program name: boy956-1 with change from 1 to 4 sec wind sampling?

1. array I.D.

o1

2. day

ok

3. time

ok

4. mean air temp. @ 3 meters

rclow

5. mean R.H. (%)

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)

0]

10. resultant mean wind direction (degrees from north)

ok

11. standard deviation of wind direction (degrees)

ماد

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 306.03

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 precipitation (mm)

ok

19. sample of battery voltage

o1

notes: 1. Program change at end of this file

- 2. Station down for 1.5 hr servicing at end of file
- 3. last two arrays questionable
- 4. New RH chip at start of this file

Filename: boy97804.dat Station: Lake Bonney met station

Date of Establishment: November 24, 1993 by Peter Doran

Author of this report: Peter Doran

File Period: Nov 28/97 (332) @ 1430 to Jan 6/98 (6) @ 1700 Sampling Frequency: wind speed every 4 sec, other every 30 secs.

Averaging and Output Interval: every 15 minutes

Program name: boy978-1 or boy978-2

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 (C)

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)

οk

9. resultant mean wind speed (m/s)

0

10. resultant mean wind direction

ok

11. standard deviation of wind direction

o 1

12. maximum wind speed (m/s)

ok

13. minimum wind speed (m/s)

ok

14. mean up pyrgeo, rad. comp.(A-B) (W/m2)

bad

15. mean up pyrgeo hemisphere temp (F-G)

bad

16. mean up pyrgeo thermopile (A-C)

bad

17. mean up pyrgeo case temp (E-D)

bad

18. ??tir or soil t1

bad

19. ??soil t1 or soil t2

bad

20. ??soil t2 or dup max speed

bad

21. mean dTemp 1-3 meters (from t.c. wire)(C)

bad

22. mean down pyrgeo, rad. comp. (A-B) (W/m2)

bad

23 mean down pyrgeo hemisphere temp (F-G)

24 mean down pyrgeo thermopile (A-C)

bad

25 mean down pyrgeo case temp (E-D)

bad

26. sample battery voltage o1

1. First array questionable notes:

Filename: boy97805.dat Station: Lake Bonney met station

Date of Establishment: November 24, 1993 by Peter Doran

Author of this report: Peter Doran

File Period: Jan 6/98 (6) @ 1715 to Jan 15/98 (15) @900 Sampling Frequency: wind speed every 4 sec, other every 30 secs.

Averaging and Output Interval: every 15 minutes

Program name: boy978-1 or boy978-2

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 (C)
 - ok
- 6. mean solar flux coming down (~W/m2)
 - ok
- 7. mean solar flux going up (\sim W/m2)
 - ok
- 8. mean horizontal wind speed (m/s)
 - ok
- 9. resultant mean wind speed (m/s)
 - 0]
- 10. resultant mean wind direction
 - ok
- 11. standard deviation of wind direction
 - 01
- 12. maximum wind speed (m/s)
 - ok
- 13. minimum wind speed (m/s)
 - ok
- 14. mean up pyrgeo, rad. comp.(A-B) (W/m2)
 - bad
- 15. mean up pyrgeo hemisphere temp (F-G)
 - bad
- 16. mean up pyrgeo thermopile (A-C)
 - bad
- 17. mean up pyrgeo case temp (E-D)
 - bad
- 18. ??tir or soil t1
 - bad
- 19. ??soil t1 or soil t2
 - bad
- 20. ??soil t2 or dup max speed
 - bad
- 21. mean dTemp 1-3 meters (from t.c. wire)(C)
 - bac
- 22. mean down pyrgeo, rad. comp. (A-B) (W/m2)

bad
23 mean down pyrgeo hemisphere temp (F-G)
bad
24 mean down pyrgeo thermopile (A-C)
bad
25 mean down pyrgeo case temp (E-D)
bad
26. sample battery voltage
o1

notes: 1. New program loaded at end of this file that should fix all that ails this station including the addition of PAR 2. IR will be fixed once we know which serial numbers are which after getting the information from the field

```
Filename: brh97f01.prn
Station: Lake Brownworth met station
```

Date of Establishment: November 13, 1996 by Peter Doran and D.J. Osborne

Author of this report: Peter Doran

File Period: Jan 25/97 (25) @ 1030 to Aug 20/97 (232) @ 1000 Sampling Frequency: wind speed every 1 sec.; others: every 30 secs.

Averaging and Output Interval: every 15 min

Program Name: brh967-1

```
1. array I.D. o1
```

2. day

subtract 1

3. time

ok

4. mean air temp. @ 3 meters

rclow

5. mean R.H. @ 3 meters (%)

ok

6. mean solar flux coming down (W/m2)

ok

7. mean solar flux going up (W/m2)

ok

8. mean horizontal wind speed (m/s)

οk

9. resultant mean wind speed (m/s)

0]

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 342.07

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

Date of Establishment: November 13, 1996 by Peter Doran and D.J. Osborne Author of this report: Peter Doran Aug 20/97 (232) @ 1015 to Nov 26/97 (330) @ 945 File Period: Sampling Frequency: wind speed every 1 sec.; others: every 30 secs. Averaging and Output Interval: every 15 min Program Name: brh967-1 1. array I.D. o1 2. day subtract 1 3. time ok 4. mean air temp. @ 3 meters rclow 5. mean R.H. @ 3 meters (%) 6. mean solar flux coming down (W/m2) 7. mean solar flux going up (W/m2) 8. mean horizontal wind speed (m/s) 9. resultant mean wind speed (m/s) 10. resultant mean wind direction (degrees from north) 11. standard deviation of wind direction (degrees) 12. maximum wind speed (m/s) 13. minimum wind speed (m/s) 14. mean P.A.R. (micromols/s/m2) divide by 200, multiply by 342.07 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. Day is wrong. Actually 329 at end of file

brh97f02.prn

Station: Lake Brownworth met station

Filename:

```
Author of this report: Peter Doran
                 Nov 26/97 (329) @ 1045 to Jan 13/98 (13) @ 1100
File Period:
Sampling Frequency: wind speed every 1 sec.; others: every 30 secs.
Averaging and Output Interval: every 15 min
Program Name: brh967-1
        1. array I.D.
                 o1
        2. day
                 ok
        3. time
                 ok
        4. mean air temp. @ 3 meters
                 rclow
        5. mean R.H. @ 3 meters (%)
        6. mean solar flux coming down (W/m2)
        7. mean solar flux going up (W/m2)
        8. mean horizontal wind speed (m/s)
        9. resultant mean wind speed (m/s)
        10. resultant mean wind direction (degrees from north)
        11. standard deviation of wind direction (degrees)
        12. maximum wind speed (m/s)
        13. minimum wind speed (m/s)
        14. mean P.A.R. (micromols/s/m2)
                 divide by 200, multiply by 342.07
        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
```

brh97801.dat

Date of Establishment: November 13, 1996 by Peter Doran and D.J. Osborne

Station: Lake Brownworth met station

Filename:

Notes: 1. wind speed sampling changed from 1 sec to 4 sec at the end of this file

4. mean air temp. @ 2 meters (C)

convert to mV, then clow

5. mean rh @ 2 meters (%)

ok

6. mean solar flux coming down (W/m²)

ok

7. mean solar flux going up (W/m^2)

ok

8. mean horizontal wind speed (m/s)

οk

9. resultant mean wind speed (m/s)

0]

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)

bad

14. mean barometric pressure (mbar)

٥k

15. mean net radiation (W/m^2)

ok

16. mean surface temperature from IRT (C)

ماد

17. sample battery voltage

o1

- 1. Minimum windspeed wrong.
- 2. Running on local time.

Filename: caa97802.dat File Period: Jan 13/98 (13) @ 11:30 to JD 16/98 (16) 15:45 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: Karen Lewis Sampling Frequency: every 30 seconds Averaging and Output Interval: every 15 minutes Program name: caa978-2 1. array I.D. o1 2. day ok 3. time 4. mean air temp. @ 2 meters (C) convert to mV, then clow 5. mean rh @ 2 meters (%) ok 6. mean solar flux coming down (W/m²) 7. mean solar flux going up (W/m^2) 8. mean horizontal wind speed (m/s) 9. resultant mean wind speed (m/s) 10. * resultant mean wind direction (degrees from north) 11. standard deviation of wind direction (degrees) 12. maximum wind speed (m/s)

13. * minimum wind speed (m/s)

14. mean barometric pressure (mbar)

15. mean net radiation (W/m²)

16. mean surface temperature from IRT (C)

17. sample battery voltage

- 1. Wind sensor set to approx. north. Didn't have compass and wasn't at station at 2pm.
- 2. Minimum windspeed wrong.
- 3. Running on local time.

Filename: caa97803.dat

File Period: Jan 16/98 (16) @ 16:10 to JD 30/98 (30) 10:30

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: Karen Lewis Sampling Frequency: every 30 seconds

Averaging and Output Interval: every 10 minutes

Program name: caa978-2

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

convert to mV, then clow

- 5. mean rh @ 2 meters (%)
 - ok
- 6. mean solar flux coming down (W/m²)

ok

7. mean solar flux going up (W/m^2)

ok

8. mean horizontal wind speed (m/s)

οk

9. resultant mean wind speed (m/s)

01

10. * resultant mean wind direction (degrees from north)

ok

11. standard deviation of wind direction (degrees)

ماد

12. maximum wind speed (m/s)

οk

13. minimum wind speed (m/s)

ok

14. mean barometric pressure (mbar)

٥k

15. mean net radiation (W/m²)

ok

16. mean surface temperature from IRT (C)

ماد

17. sample battery voltage

ი1

- 1. Wind sensor set to approx. north. Didn't have compass and wasn't at station at 2pm.
- 2. Running on local time.

Filename: co774b~1.prn Station: Commonwealth Glacier Station Date of Establishment: Nov 22, 1993 by Peter Doran Author of this report: Peter Doran File Period: May 24/97 (144) @ 445 to Jun 19/97 (170) @ 1345 Sampling Frequency: wind every 1 secs.; others: every 30 secs. Averaging and Output Interval: every 15 minutes Program name: coh956-2 1. array I.D. o1 2. day ok 3. time ok 4. mean air temp. @ 3 meters rClow 5. mean R.H. @ 3 meters (%) 6. mean solar flux coming down (W/m2) divide by 100; multiply by 122.40 7. mean solar flux going up (W/m2) divide by 100; multiply by 119.62 8. mean horizontal wind speed (m/s) 9. resultant mean wind speed (m/s) 10. resultant mean wind direction (degrees from north) 11. standard deviation of wind direction (degrees) 12. maximum wind speed (m/s) ok 13. minimum wind speed (m/s) 14. mean incoming IR pyrgeometer output (pins A-B) (W/m2) divide by 250; multiply by 288.18 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 thermal infrared-skin temperature(C) bad 19. mean ice temp. @ 20 cm (C) flag; rclow 20. mean ice temp. @ 1 m (C) flag; rclow 21. mean dTemp 1-3 meters (from t.c. wire) (C) bad 22. mean outgoing IR pyrgeometer output (pins A-B)(W/m2) divide by 250; multiply by 249.38

- 23. mean outgoing IR hemisphere temp. (pins F-G) (mv)
 - **Eppley**
- 24. mean outgoing IR thermopile (pins A-C) (W/m2)
 - **Eppley**
- 25. mean outgoing IR case temp. (pins E-D) (mv)
 - Eppley
- 26. sample of battery voltage
 - o1

- 1. Exact depth position of ice thermistors unknown (#19 and #20).
- 2. Thermocouple not wired; ignore #21
- 3. Everest thermal infrared sensor not wired (FS #18).
- 4. Missing lots of data before and after this file. Reason unknown.

coh97802.dat Filename: Station: Commonwealth Glacier Station Date of Establishment: Nov 22, 1993 by Peter Doran Author of this report: Peter Doran File Period: Nov 25/97 (329) @ 1300 to Jan 16/98 (16) @ 945 Sampling Frequency: wind every 4 secs.; others: every 30 secs. Averaging and Output Interval: every 15 minutes Program name: coh978-1 1. array I.D. o1 2. day ok 3. time ok 4. mean air temp. @ 3 meters rClow 5. mean R.H. @ 3 meters (%) 6. mean solar flux coming down (W/m2) divide by 100; multiply by 122.40 7. mean solar flux going up (W/m2) divide by 100; multiply by 119.62 8. mean horizontal wind speed (m/s) 9. resultant mean wind speed (m/s) 10. resultant mean wind direction (degrees from north) 11. standard deviation of wind direction (degrees) 12. maximum wind speed (m/s) ok 13. minimum wind speed (m/s) 14. mean incoming IR pyrgeometer output (pins A-B) (W/m2) divide by 250; multiply by 288.18 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 thermal infrared-skin temperature(C) bad 19. mean ice temp. @ 20 cm (C) flag; rclow 20. mean ice temp. @ 1 m (C) flag; rclow 21. mean dTemp 1-3 meters (from t.c. wire) (C) bad

22. mean outgoing IR pyrgeometer output (pins A-B)(W/m2)

divide by 250; multiply by 249.38

23. mean outgoing IR hemisphere temp. (pins F-G) (mv)

Eppley

24. mean outgoing IR thermopile (pins A-C) (W/m2)

Eppley

25. mean outgoing IR case temp. (pins E-D) (mv)

Eppley

26. sample of battery voltage

o1

- 1. Exact depth position of ice thermistors unknown (#19 and #20).
- 2. Thermocouple not wired; ignore #21
- 3. Everest thermal infrared sensor not wired (FS #18).
- 4. Wind speed changed from 1 sec to 4 sec at start of this file
- 5. File coh97801.dat is only one line without a proper time stamp, so it will be ignored in processing

Filename: exe97801.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: Peter Doran File Period: Nov 21/97 (325) @ 1100

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

Averaging and Output Interval: every 15 minutes

Program name: exe978-1

Output Array Definition:

1. array I.D.

o1

2. day

. aay

3. time

ok

4. mean air temp. @ 3 meters (C)

rclow

5. mean RH @ 3 meters

ok

6. mean solar flux coming down (~W/m2)

οk

7. mean solar flux going up (\sim W/m2)

οk

8. mean horizontal wind speed (m/s)

οk

9. resultant mean wind speed (m/s)

0

10. resultant mean wind direction

ok

11. standard deviation of wind direction

o 1

12. maximum wind speed (m/s)

ok

13. minimum wind speed (m/s)

oĸ

14. mean P.A.R. (micromols/s/m2)

bad

15. mean soil temperature @ 0 cm (C)

rclow

16. mean soil temperature @ 5 cm (C)

bad

17. mean soil temperature @ 10 cm (C)

bad

18. sample precipitation (mm)

bad

19. sample battery voltage

0

notes: 1. New station with all new sensors mounted on Clow s old tripod

- 2. Precip gage trashed over winter, but still programmed into this new station.
- 3. Quantum and downward-pointing pyranometer serial numbers not recorded. Quantum can t be corrected for another year.

exe97802.dat Filename: Station: Explorer s Cove Station

Date of Establishment: Nov 21, 1997 by Peter Doran, D.J. Osborne and Keith Sauter

Author of this report: Peter Doran File Period: Nov 21/97 (325) @ 1130

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

Averaging and Output Interval: every 15 minutes

Program name: exe978-1

Output Array Definition:

1. array I.D.

o1

2. day

3. time

ok

4. mean air temp. @ 3 meters (C)

rclow

5. mean RH @ 3 meters

ok

6. mean solar flux coming down (~W/m2)

7. mean solar flux going up (\sim W/m2)

8. mean horizontal wind speed (m/s)

9. resultant mean wind speed (m/s)

10. resultant mean wind direction

11. standard deviation of wind direction

12. maximum wind speed (m/s)

13. minimum wind speed (m/s)

14. mean P.A.R. (micromols/s/m2)

bad

15. mean soil temperature @ 0 cm (C)

rclow

16. mean soil temperature @ 5 cm (C)

bad

17. mean soil temperature @ 10 cm (C)

18. sample precipitation (mm)

bad

19. sample battery voltage

1. New station with all new sensors mounted on Clow s old tripod notes:

- 2. Precip gage trashed over winter, but still programmed into this new station.
- 3. Quantum and downward-pointing pyranometer serial numbers not recorded. Quantum can t be corrected for another year.

exe97803.dat Filename: Station: Explorer s Cove Station

Date of Establishment: Nov 21, 1997 by Peter Doran, D.J. Osborne and Keith Sauter

Author of this report: Peter Doran

File Period: Nov 21/97 (325) @ 1145 to Jan 13/98 (13) @ 930 Sampling Frequency: wind every 4 secs.; others: every 30 secs.

Averaging and Output Interval: every 15 minutes

Program name: exe978-1

Output Array Definition:

1. array I.D.

o1

2. day

3. time

ok

4. mean air temp. @ 3 meters (C)

rclow

5. mean RH @ 3 meters

ok

6. mean solar flux coming down (~W/m2)

7. mean solar flux going up (\sim W/m2)

8. mean horizontal wind speed (m/s)

9. resultant mean wind speed (m/s)

10. resultant mean wind direction

11. standard deviation of wind direction

12. maximum wind speed (m/s)

13. minimum wind speed (m/s)

14. mean P.A.R. (micromols/s/m2)

bad

15. mean soil temperature @ 0 cm (C)

rclow

16. mean soil temperature @ 5 cm (C)

bad

17. mean soil temperature @ 10 cm (C)

18. sample precipitation (mm)

bad

19. sample battery voltage

1. New station with all new sensors mounted on Clow s old tripod notes:

- 2. Precip gage trashed over winter, but still programmed into this new station.
- 3. Quantum and downward-pointing pyranometer serial numbers not recorded. Quantum can t be corrected for another year.

```
frl97001.dat
Filename:
Station: Lake Fryxell met station
Date of Establishment: Jan 6, 1994 by Peter Doran
Author of this report: Peter Doran
                 Jan 28/97 (28) @ 1045 to Aug 23/97 (235) @ 1030
File Period:
Sampling Frequency: every 1 sec; others: every 30 secs.
Averaging and Output Interval: every 15 minutes
Program name: frl956-1
        1. array I.D.
                 o1
        2. day
                 ok
        3. time
                 ok
        4. mean air temp. @ 3 meters
        5. mean R.H. @ 3 meters (%)
        6. mean solar flux coming down (W/m2)
        7. mean solar flux going up (W/m2)
        8. mean horizontal wind speed (m/s)
        9. resultant mean wind speed (m/s)
        10. resultant mean wind direction (degrees from north)
        11. standard deviation of wind direction (degrees)
        12. maximum wind speed (m/s)
                 ok
        13. minimum wind speed (m/s)
        14. mean P.A.R. (micromols/s/m2)
                 divide by 200, multiply by 277.32
```

15. mean soil temperature @ 0 cm in soil (C)

16. mean soil temperature @ 5 cm in soil (C)

17. mean soil temperature @ 10 cm in soil (C)

rClow

rClow
18. sample of battery voltage

o1

```
frl97002.dat
Filename:
Station: Lake Fryxell met station
Date of Establishment: Jan 6, 1994 by Peter Doran
Author of this report: Peter Doran
                 Nov 17/97 (321) @ 1815 to Nov 17/97 (321) @ 1830
File Period:
Sampling Frequency: every 1 sec; others: every 30 secs.
Averaging and Output Interval: every 15 minutes
Program name: frl956-1
        1. array I.D.
                 o1
        2. day
                 ok
        3. time
                 ok
        4. mean air temp. @ 3 meters
        5. mean R.H. @ 3 meters (%)
        6. mean solar flux coming down (W/m2)
        7. mean solar flux going up (W/m2)
        8. mean horizontal wind speed (m/s)
        9. resultant mean wind speed (m/s)
        10. resultant mean wind direction (degrees from north)
        11. standard deviation of wind direction (degrees)
        12. maximum wind speed (m/s)
                 ok
        13. minimum wind speed (m/s)
        14. mean P.A.R. (micromols/s/m2)
                 divide by 200, multiply by 277.32
        15. mean soil temperature @ 0 cm in soil (C)
        16. mean soil temperature @ 5 cm in soil (C)
```

notes:

rClow

rClow
18. sample of battery voltage

o1

17. mean soil temperature @ 10 cm in soil (C)

```
frl97003.dat
Filename:
Station: Lake Fryxell met station
Date of Establishment: Jan 6, 1994 by Peter Doran
Author of this report: Peter Doran
                 Aug 23/97 (235) @ 1045 to Nov 18/97 (322) @ 1600
File Period:
Sampling Frequency: every 1 sec; others: every 30 secs.
Averaging and Output Interval: every 15 minutes
Program name: frl956-1
        1. array I.D.
                 o1
        2. day
                 ok
        3. time
                 ok
        4. mean air temp. @ 3 meters
        5. mean R.H. @ 3 meters (%)
        6. mean solar flux coming down (W/m2)
        7. mean solar flux going up (W/m2)
        8. mean horizontal wind speed (m/s)
        9. resultant mean wind speed (m/s)
        10. resultant mean wind direction (degrees from north)
        11. standard deviation of wind direction (degrees)
        12. maximum wind speed (m/s)
                 ok
        13. minimum wind speed (m/s)
        14. mean P.A.R. (micromols/s/m2)
                 divide by 200, multiply by 277.32
        15. mean soil temperature @ 0 cm in soil (C)
```

16. mean soil temperature @ 5 cm in soil (C)

17. mean soil temperature @ 10 cm in soil (C)

rClow

rClow
18. sample of battery voltage

o1

Filename: frl97802.dat Station: Lake Fryxell met station

Date of Establishment: Jan 6, 1994 by Peter Doran

Author of this report: Peter Doran

File Period: Nov 18/97 (322) @ 1715 to Nov 28/97 (332) @ 1445

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

Averaging and Output Interval: every 15 minutes

Program name: frl956-1

1. array I.D.

o1

2. day

ok

3. time

ok

4. mean air temp. @ 3 meters

rClow

5. mean R.H. @ 3 meters (%)

οk

6. mean solar flux coming down (W/m2)

οk

7. mean solar flux going up (W/m2)

ok

8. mean horizontal wind speed (m/s)

οk

9. resultant mean wind speed (m/s)

0

10. resultant mean wind direction (degrees from north)

ok

11. standard deviation of wind direction (degrees)

ماد

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 285.45

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. frl97801.dat is only 1 line long with an incorrect time stamp so it has been ignored.

2. new light sensors and RH chip at start of this file

```
frl97803.dat
Filename:
Station: Lake Fryxell met station
Date of Establishment: Jan 6, 1994 by Peter Doran
Author of this report: Peter Doran
                 Nov 28/97 (332) @ 1500 to Nov 28/97 (332) @ 1515
File Period:
Sampling Frequency: every 4 sec; others: every 30 secs.
Averaging and Output Interval: every 15 minutes
Program name: frl956-1
        1. array I.D.
                 o1
        2. day
                 ok
        3. time
                 ok
        4. mean air temp. @ 3 meters
        5. mean R.H. @ 3 meters (%)
        6. mean solar flux coming down (W/m2)
        7. mean solar flux going up (W/m2)
        8. mean horizontal wind speed (m/s)
        9. resultant mean wind speed (m/s)
        10. resultant mean wind direction (degrees from north)
        11. standard deviation of wind direction (degrees)
        12. maximum wind speed (m/s)
                 ok
        13. minimum wind speed (m/s)
        14. mean P.A.R. (micromols/s/m2)
                 divide by 200, multiply by 285.45
        15. mean soil temperature @ 0 cm in soil (C)
```

16. mean soil temperature @ 5 cm in soil (C)

17. mean soil temperature @ 10 cm in soil (C)

rClow

rClow
18. sample of battery voltage

o1

```
frl97804.dat
Filename:
Station: Lake Fryxell met station
Date of Establishment: Jan 6, 1994 by Peter Doran
Author of this report: Peter Doran
                 Nov 28/97 (332) @ 1530 to Jan 19/98 (19) @ 915
File Period:
Sampling Frequency: every 4 sec; others: every 30 secs.
Averaging and Output Interval: every 15 minutes
Program name: frl978-1
        1. array I.D.
                 o1
        2. day
                 ok
        3. time
                 ok
        4. mean air temp. @ 3 meters
        5. mean R.H. @ 3 meters (%)
        6. mean solar flux coming down (W/m2)
        7. mean solar flux going up (W/m2)
        8. mean horizontal wind speed (m/s)
        9. resultant mean wind speed (m/s)
        10. resultant mean wind direction (degrees from north)
        11. standard deviation of wind direction (degrees)
        12. maximum wind speed (m/s)
                 ok
        13. minimum wind speed (m/s)
        14. mean P.A.R. (micromols/s/m2)
                 divide by 200, multiply by 285.45
```

16. mean soil temperature @ 5 cm in soil (C)

15. mean soil temperature @ 0 cm in soil (C)

rClow

17. mean soil temperature @ 10 cm in soil (C)

rClow

18. sample of battery voltage

o1

```
frl97805.dat
Filename:
Station: Lake Fryxell met station
Date of Establishment: Jan 6, 1994 by Peter Doran
Author of this report: Peter Doran
                 Jan 19/98 (19) @ 930 to Jan 19/98 (19) @ 1015
File Period:
Sampling Frequency: every 4 sec; others: every 30 secs.
Averaging and Output Interval: every 15 minutes
Program name: frl978-1
        1. array I.D.
                 o1
        2. day
                 ok
        3. time
                 ok
        4. mean air temp. @ 3 meters
        5. mean R.H. @ 3 meters (%)
        6. mean solar flux coming down (W/m2)
        7. mean solar flux going up (W/m2)
        8. mean horizontal wind speed (m/s)
        9. resultant mean wind speed (m/s)
        10. resultant mean wind direction (degrees from north)
        11. standard deviation of wind direction (degrees)
        12. maximum wind speed (m/s)
                 ok
        13. minimum wind speed (m/s)
```

14. mean P.A.R. (micromols/s/m2)

rClow

rClow

o1

divide by 200, multiply by 285.45 15. mean soil temperature @ 0 cm in soil (C)

16. mean soil temperature @ 5 cm in soil (C)

17. mean soil temperature @ 10 cm in soil (C)

18. sample of battery voltage

```
Filename:
                 hod97f04.prn
Station: Howard Glacier Station
Date of Establishment: Nov 20, 1993 by Peter Doran
Author of this report: Peter Doran
                 Jan 27/97 (27) @ 1245 to Jan 27/97 (27) @ 1300
File Period:
Sampling Frequency: every 1 secs.; others: every 30 secs.
Averaging and Output Interval: every 15 minutes
Program name: hod956-2
        1. array I.D.
                 o1
        2. day
                 ok
        3. time
                 ok
        4. mean air temp. @ 3 meters
        5. mean R.H. @ 3 meters (%)
        6. mean solar flux coming down (W/m2)
                 divide by 100; multiply by 115.61
        7. mean solar flux going up (W/m2)
                 divide by 100; multiply by 116.41
        8. mean horizontal wind speed (m/s)
```

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. @ ~1 m (C)

flag; rclow

* 16. mean dTemp 1-3 meters (C)

bad

17. mean air temp @ 1 meter m (C)

convert to mV, then clow

18. mean rh @ 1 meter (c)

ok

19. sample of battery voltage

o1

- 1. Exact depth position of ice thermistors unknown (#14 & 15).
- 2. Thermocouple not installed, ignore #16

Filename: hod97f05.prn Station: Howard Glacier Station Date of Establishment: Nov 20, 1993 by Peter Doran Author of this report: Peter Doran Jan 27/97 (27) @ 1330 to Aug 11/97 (223) @ 15 File Period: Sampling Frequency: every 1 secs.; others: every 30 secs. Averaging and Output Interval: every 15 minutes Program name: hod956-2 1. array I.D. o1 2. day ok 3. time ok 4. mean air temp. @ 3 meters 5. mean R.H. @ 3 meters (%) 6. mean solar flux coming down (W/m2) divide by 100; multiply by 115.61 7. mean solar flux going up (W/m2) divide by 100; multiply by 116.41 8. mean horizontal wind speed (m/s) 9. resultant mean wind speed (m/s) 10. resultant mean wind direction (degrees from north) 11. standard deviation of wind direction (degrees) 12. maximum wind speed (m/s) ok 13. minimum wind speed (m/s) 14. mean ice temp. near surface (C) flag; rclow

15. mean ice temp. @ ~1 m (C)

flag; rclow

16. mean dTemp 1-3 meters (C) bad

> 17. mean air temp @ 1 meter m (C) convert to mV, then clow

18. mean rh @ 1 meter (c)

19. sample of battery voltage 01

- 1. Exact depth position of ice thermistors unknown (#14 & 15).
- 2. Thermocouple not installed, ignore #16

```
Filename:
                hod97f07.prn
Station: Howard Glacier Station
```

Date of Establishment: Nov 20, 1993 by Peter Doran

Author of this report: Peter Doran

Aug 11/97 (223) @ 30 to Nov 25/97 (329) @ 1330 File Period:

Sampling Frequency: every 1 secs.; others: every 30 secs.

Averaging and Output Interval: every 15 minutes

Program name: hod956-2

- 1. array I.D. o1
- 2. day

ok

3. time

ok

4. mean air temp. @ 3 meters

5. mean R.H. @ 3 meters (%)

6. mean solar flux coming down (W/m2)

divide by 100; multiply by ??

7. mean solar flux going up (W/m2)

divide by 100; multiply by ??

8. mean horizontal wind speed (m/s)

9. resultant mean wind speed (m/s)

10. resultant mean wind direction (degrees from north)

11. standard deviation of wind direction (degrees)

12. maximum wind speed (m/s)

ok

13. minimum wind speed (m/s)

14. mean ice temp. near surface (C)

flag; rclow

15. mean ice temp. @ ~1 m (C)

flag; rclow

16. mean dTemp 1-3 meters (C)

bad

17. mean air temp @ 1 meter m (C)

convert to mV, then clow

18. mean rh @ 1 meter (c)

19. sample of battery voltage

o1

- 1. file hod97f06.prn is nonsense, one line with a duplicate time stamp
- 1. Exact depth position of ice thermistors unknown (#14 & 15).
- 2. Thermocouple not installed, ignore #16

Filename: hod97801.dat Station: Howard Glacier Station

Date of Establishment: Nov 20, 1993 by Peter Doran

Author of this report: Peter Doran

File Period: Nov 25/97 (329) @ 1445 to Jan 10/98 (10) @ 1430

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

Averaging and Output Interval: every 15 minutes

Program name: hod978-1

1. array I.D.

o1

2. day

ok

3. time

ok

4. mean air temp. @ 3 meters

rclow

5. mean R.H. @ 3 meters (%)

οk

6. mean solar flux coming down (W/m2)

divide by 100; multiply by ??

7. mean solar flux going up (W/m2)

divide by 100; multiply by ??

8. mean horizontal wind speed (m/s)

ok

9. resultant mean wind speed (m/s)

0]

10. resultant mean wind direction (degrees from north)

ok

11. standard deviation of wind direction (degrees)

ماد

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) ~1 m (C)

flag; rclow

* 16. mean dTemp 1-3 meters (C)

bad

17. mean air temp @ 1 meter m (C)

convert to mV, then clow

18. mean rh @ 1 meter (c)

ok

19. sample of battery voltage

o1

- 1. New Eppleys at start of this file??
- 2. New wind monitor and RH at 1 & 3 m
- 3. Exact depth position of ice thermistors unknown (#14 & 15).
- 4. Thermocouple not installed, ignore #16

Filename: hoe97001.dat Station: Lake Hoare met station

Date of Establishment: Dec 1, 1993 by Peter Doran

Author of this report: Peter Doran

File Period: Jan 26/97 (26) @ 1445 to Aug 21/97 (233) @ 1030

Sampling Frequency: every 1 secs.; others: every 30 secs.

Averaging and Output Interval: every 15 minutes

Program Name: hoe956-1

1. array I.D.

o1

2. day

ok

3. time

ok

4. mean air temp. @ 3 meters

rclow

5. mean R.H. @ 3 meters (%)

ok

6. mean solar flux coming down (W/m2)

ok

7. mean solar flux going up (W/m2)

ok

8. mean horizontal wind speed (m/s)

οk

9. resultant mean wind speed (m/s)

0]

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 289.95

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

o1

Filename: hoe97002.dat Station: Lake Hoare met station

Date of Establishment: Dec 1, 1993 by Peter Doran

Author of this report: Peter Doran

File Period: Aug 21/97 (233) @ 1030 to Nov 14/97 (318) @ 1145

Sampling Frequency: every 1 secs.; others: every 30 secs.

Averaging and Output Interval: every 15 minutes

Program Name: hoe956-1

1. array I.D.

o1

2. day

ok

3. time

ok

4. mean air temp. @ 3 meters

rclow

5. mean R.H. @ 3 meters (%)

ok

6. mean solar flux coming down (W/m2)

ok

7. mean solar flux going up (W/m2)

ok

8. mean horizontal wind speed (m/s)

οk

9. resultant mean wind speed (m/s)

0

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 289.95

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

o1

Filename: hoe97801.dat Station: Lake Hoare met station

Date of Establishment: Dec 1, 1993 by Peter Doran

Author of this report: Peter Doran

File Period: Nov 14/97 (318) @ 1230 to Nov 14/97 (318) @ 1700

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

Averaging and Output Interval: every 15 minutes Program Name: hoe956-1 with change to 4 sec table 2

1. array I.D.

o1

2. day

ok

3. time

ok

4. mean air temp. @ 3 meters

rclow

5. mean R.H. @ 3 meters (%)

ok

6. mean solar flux coming down (W/m2)

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)

0]

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. 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

o1

- 1. Wind interval changed from 1 to 4 secs
- 2. replaced wind monitor
- 3. new rh chip
- 4. all new light sensors

Filename: hoe97802.dat Station: Lake Hoare met station

Date of Establishment: Dec 1, 1993 by Peter Doran

Author of this report: Peter Doran

File Period: Nov 14/97 (318) @ 1715

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

Averaging and Output Interval: every 15 minutes Program Name: hoe956-1 with change to 4 sec table 2

1. array I.D.

o1

2. day

ok

3. time

ok

4. mean air temp. @ 3 meters

rclow

5. mean R.H. @ 3 meters (%)

ok

6. mean solar flux coming down (W/m2)

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)

0]

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. 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

o1

Filename: hoe97803.dat Station: Lake Hoare met station

Date of Establishment: Dec 1, 1993 by Peter Doran

Author of this report: Peter Doran

File Period: Nov 14/97 (318) @ 1730 to Nov 20/97 (324) @ 1330

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

Averaging and Output Interval: every 15 minutes Program Name: hoe956-1 with change to 4 sec table 2

1. array I.D.

o1

2. day

ok

3. time

ok

4. mean air temp. @ 3 meters

rclow

5. mean R.H. @ 3 meters (%)

ok

6. mean solar flux coming down (W/m2)

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)

0

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. 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

o1

Filename: hoe97804.dat Station: Lake Hoare met station

Date of Establishment: Dec 1, 1993 by Peter Doran

Author of this report: Peter Doran

File Period: Nov 20/97 (324) @ 1445 to Jan 20/98 (20) @ 1100

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

Averaging and Output Interval: every 15 minutes Program Name: hoe956-1 with change to 4 sec table 2

1. array I.D.

o1

2. day

ok

3. time

ok

4. mean air temp. @ 3 meters

rclow

5. mean R.H. @ 3 meters (%)

ok

6. mean solar flux coming down (W/m2)

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)

0

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

o1

tar97001.dat Filename: Station: Taylor Glacier Station Date of Establishment: Nov 21, 1994 by Peter Doran Author of this report: Peter Doran File Period: Program name: tar956-3

Jan 28/97 (28) @ 1300 to Jul 2/97 (183) @ 1600

Sampling Frequency: every 1 secs.; others: every 30 secs.

Averaging and Output Interval: every 15 minutes

1. array I.D.

o1

2. day

ok

3. time

4. mean air temp. @ 3 meters

5. mean R.H. @ 3 meters (%)

6. mean solar flux coming down (W/m2)

divide by 100; multiply by 116.01

7. mean solar flux going up (W/m2)

divide by 100; multiply by 116.96

8. mean horizontal wind speed (m/s)

9. resultant mean wind speed (m/s)

10. resultant mean wind direction (degrees from north)

11. standard deviation of wind direction (degrees)

12. maximum wind speed (m/s)

13. minimum wind speed (m/s)

14. mean air temp. @ 1 m (C)

rclow

15. mean RH @ 1 m (%)

rclow

16. mean incoming IR pyrgeometer output (pins A-B) (W/m2)

divide by 250; multiply by 248.76

17. mean incoming IR hemisphere temp. (pins A-C) (mv)

Eppley

18. mean incoming IR thermopile output (pins F-G)(W/m2)

Eppley

19. mean incoming IR case temp. (pins E-D)(mv)

Eppley

20. mean thermal infrared-skin temperature(C)

bad

21. mean ice temp. @ 20 cm (C)

flag; rclow

* 22. mean ice temp. @ 1 m (C) flag; rclow

* 23. mean dTemp 1-3 meters (from t.c. wire) (C)

bad

24. sample of battery voltage

o1

- 1. Thermal Infrared not wired; ignore # 20
- 2. Exact depth position of ice thermistors unknown (#21 & 22).
- 3. Thermocouple not wired; ignore #23

tar97002.dat Filename: Station: Taylor Glacier Station Date of Establishment: Nov 21, 1994 by Peter Doran Author of this report: Peter Doran File Period: Jul 2/97 (183) @ 1600 to Nov 17/97 (321) @ 1145 Sampling Frequency: every 1 secs.; others: every 30 secs. Averaging and Output Interval: every 15 minutes Program name: tar956-3 1. array I.D. o1 2. day ok 3. time 4. mean air temp. @ 3 meters 5. mean R.H. @ 3 meters (%) 6. mean solar flux coming down (W/m2) divide by 100; multiply by 116.01 7. mean solar flux going up (W/m2) divide by 100; multiply by 116.96 8. mean horizontal wind speed (m/s) 9. resultant mean wind speed (m/s) 10. resultant mean wind direction (degrees from north) 11. standard deviation of wind direction (degrees) 12. maximum wind speed (m/s) 13. minimum wind speed (m/s) 14. mean air temp. @ 1 m (C) rclow 15. mean RH @ 1 m (%) rclow 16. mean incoming IR pyrgeometer output (pins A-B) (W/m2) divide by 250; multiply by 248.76 17. mean incoming IR hemisphere temp. (pins A-C) (mv) **Eppley** 18. mean incoming IR thermopile output (pins F-G)(W/m2) **Eppley** 19. mean incoming IR case temp. (pins E-D)(mv) **Eppley** 20. mean thermal infrared-skin temperature(C)

bad

21. mean ice temp. @ 20 cm (C) flag; rclow

* 22. mean ice temp. @ 1 m (C) flag; rclow

* 23. mean dTemp 1-3 meters (from t.c. wire) (C)

bad

24. sample of battery voltage

o1

- 1. Thermal Infrared not wired; ignore # 20
- 2. Exact depth position of ice thermistors unknown (#21 & 22).
- 3. Thermocouple not wired; ignore #23

tar97801.dat Filename: Station: Taylor Glacier Station Date of Establishment: Nov 21, 1994 by Peter Doran Author of this report: Peter Doran File Period:

Nov 17/97 (321) @ 1530 to Nov 28/97 (332) @ 1030

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

Averaging and Output Interval: every 15 minutes Program name: tar956-3 with a 4 sec wind interval

1. array I.D.

o1

2. day

ok

3. time

ok

4. mean air temp. @ 3 meters

rclow

5. mean R.H. @ 3 meters (%)

6. mean solar flux coming down (W/m2)

divide by 100; multiply by 116.01

7. mean solar flux going up (W/m2)

divide by 100; multiply by 116.96

8. mean horizontal wind speed (m/s)

9. resultant mean wind speed (m/s)

10. resultant mean wind direction (degrees from north)

11. standard deviation of wind direction (degrees)

12. maximum wind speed (m/s)

13. minimum wind speed (m/s)

14. mean air temp. @ 1 m (C)

rclow

15. mean RH @ 1 m (%)

rclow

16. mean incoming IR pyrgeometer output (pins A-B) (W/m2) divide by 250; multiply by 248.76

17. mean incoming IR hemisphere temp. (pins A-C) (mv) **Eppley**

18. mean incoming IR thermopile output (pins F-G)(W/m2) **Eppley**

19. mean incoming IR case temp. (pins E-D)(mv)

Eppley

20. mean thermal infrared-skin temperature(C)

bad

21. mean ice temp. @ 20 cm (C)

flag; rclow

22. mean ice temp. @ 1 m (C)

flag; rclow
23. mean dTemp 1-3 meters (from t.c. wire) (C)

bad

24. sample of battery voltage

o1

- 1.
- Thermal Infrared not wired; ignore # 20 Exact depth position of ice thermistors unknown (#21 & 22). 2.
- Thermocouple not wired; ignore #23 3.
- change to 4 sec wind from 1 sec 4.
- removed pyrgeometer 5.

Filename: tar97802.dat Station: Taylor Glacier Station

Date of Establishment: Nov 21, 1994 by Peter Doran

Author of this report: Peter Doran

File Period: Nov 28/97 (332) @ 1100 to Jan 12/98 (12) @ 1645

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

Averaging and Output Interval: every 15 minutes

Program name: tar978-1

1. array I.D.

o1

2. day

ok

3. time

ok

4. mean air temp. @ 3 meters

rclow

5. mean R.H. @ 3 meters (%)

ok

6. mean solar flux coming down (W/m2)

divide by 100; multiply by 116.01

7. mean solar flux going up (W/m2)

divide by 100; multiply by 116.96

8. mean horizontal wind speed (m/s)

ok

9. resultant mean wind speed (m/s)

0]

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. mean ice temp. @ 20 cm (C)

flag; rclow

* 15. mean ice temp. @ 1 m (C)

flag; rclow

* 16. mean dTemp 1-3 meters (from t.c. wire) (C)

bad

17. mean air temp. @ 1 m (C)

rclow

18. mean RH @ 1 m (%)

rclow

19. sample of battery voltage

01

- 1. Exact depth position of ice thermistors unknown (#14 & 15).
- 2. Thermocouple not wired; ignore #1

```
Filename:
                 vaa97f01.prn
Station: Lake Vanda met station
Date of Establishment: November 24, 1994 by Peter Doran
Author of this report: Peter Doran
                 Jan 28/97 (28) @ 1500 to Aug 23/97 (235) @ 1430
File Period:
Sampling Frequency: every 1 secs.; others: every 30 secs.
Averaging and Output Interval: every 15 min
Program Name: vaa956-1
        1. array I.D.
                 o1
        2. day
                 ok
        3. time
                 ok
        4. mean air temp. @ 3 meters
        5. mean R.H. @ 3 meters (%)
        6. mean solar flux coming down (W/m2)
                 bad after day 166
        7. mean solar flux going up (W/m2)
                 bad after day 166
        8. mean horizontal wind speed (m/s)
                 bad after day 166
        9. resultant mean wind speed (m/s)
                 bad after day 166
        10. resultant mean wind direction (degrees from north)
                 bad after day 166
        11. standard deviation of wind direction (degrees)
                 bad after day 166
        12. maximum wind speed (m/s)
                 bad after day 166
        13. minimum wind speed (m/s)
                 bad after day 166
        14. mean P.A.R. (micromols/s/m2)
                 divide by 200, multiply by 282.53
        15. mean soil temperature @ 0 cm in soil (C)
```

16. mean soil temperature @ 10 cm in soil (C) convert to mV, then clow17. mean Onyx River temperature (C)

rclow
18. sample of battery voltage

o1

notes:

1. wind storm damaged station. All wind and pyranometer data after day 166 is bad. Temperatures, RH, and PAR all appear ok

Filename: vaa97f02.prn Station: Lake Vanda met station

Date of Establishment: November 24, 1994 by Peter Doran

Author of this report: Peter Doran

File Period: Aug 23/97 (235) @ 1445 to Oct 29/97 (302) @ 1015

Sampling Frequency: every 1 secs.; others: every 30 secs.

Averaging and Output Interval: every 15 min

Program Name: vaa956-1

1. array I.D.

o1

2. day

ok

3. time

ok

4. mean air temp. @ 3 meters

rclow

5. mean R.H. @ 3 meters (%)

οk

* 6. mean solar flux coming down (W/m2)

bad after day 166

* 7. mean solar flux going up (W/m2)

bad after day 166

* 8. mean horizontal wind speed (m/s)

bad after day 166

* 9. resultant mean wind speed (m/s)

bad after day 166

* 10. resultant mean wind direction (degrees from north)

bad after day 166

* 11. standard deviation of wind direction (degrees)

bad after day 166

12. maximum wind speed (m/s)

bad after day 166

* 13. minimum wind speed (m/s)

bad after day 166

14. mean P.A.R. (micromols/s/m2)

divide by 200, multiply by 282.53

15. mean soil temperature @ 0 cm in soil (C)

rclow

16. mean soil temperature @ 10 cm in soil (C)

convert to mV, then clow

17. mean Onyx River temperature (C)

rclow

18. sample of battery voltage

01

- 2. All wind and pyranometer data is bad. Temperatures, RH, and PAR all appear ok
- 3. Missing data at end of this file

Filename: vaa97802.dat Station: Lake Vanda met station

Date of Establishment: November 24, 1994 by Peter Doran

Author of this report: Peter Doran

File Period: Nov 22/97 (326) @ 1315 to Jan 13/98 (13) @ 1320

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

Averaging and Output Interval: every 15 min

Program Name: vaa978-1

1. array I.D.

o1

2. day

ok

3. time

ok

4. mean air temp. @ 3 meters

rclow

5. mean R.H. @ 3 meters (%)

οk

6. mean solar flux coming down (W/m2)

bad after day 166

7. mean solar flux going up (W/m2)

bad after day 166

8. mean horizontal wind speed (m/s)

bad after day 166

9. resultant mean wind speed (m/s)

bad after day 166

10. resultant mean wind direction (degrees from north)

bad after day 166

11. standard deviation of wind direction (degrees)

bad after day 166

12. maximum wind speed (m/s)

bad after day 166

13. minimum wind speed (m/s)

bad after day 166

14. mean P.A.R. (micromols/s/m2)

divide by 200, multiply by

15. mean soil temperature @ 0 cm in soil (C)

rclow

16. mean soil temperature @ 10 cm in soil (C)

convert to mV, then clow

17. mean Onyx River temperature (C)

rclow

18. sample of battery voltage

o1

- 4. Data missing before this file
- 2. All new sensors except for soil and river thermistors
- 3. file vaa 978-1 is one line long with bad time stamp

```
via97f01.prn
Filename:
Station: Lake Vida met station
Author of this report: Peter Doran
File Period:
```

Date of Establishment: November 24, 1995 by Peter Doran

Jan 25/97 (25) @ 1315 to Aug 20/97 (232) @ 1300

Sampling Frequency: every 1 secs.; others: every 30 secs.

Averaging and Output Interval: every 15 min

Program Name: via956-1

- 1. array I.D. o1
- 2. day

ok

3. time

ok

4. mean air temp. @ 3 meters

5. mean R.H. @ 3 meters (%)

6. mean solar flux coming down (W/m2)

7. mean solar flux going up (W/m2)

8. mean horizontal wind speed (m/s)

9. resultant mean wind speed (m/s)

10. resultant mean wind direction (degrees from north)

11. standard deviation of wind direction (degrees)

12. maximum wind speed (m/s)

ok

13. minimum wind speed (m/s)

14. mean P.A.R. (micromols/s/m2)

divide by 200, multiply by 291.00

15. mean soil temperature @ 0 cm in soil (C)

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

```
via97f02.prn
Filename:
Station: Lake Vida met station
Author of this report: Peter Doran
```

Date of Establishment: November 24, 1995 by Peter Doran

Aug 20/97 (232) @ 1315 to Nov 24/97 (328) @ 945 File Period:

Sampling Frequency: every 1 secs.; others: every 30 secs.

Averaging and Output Interval: every 15 min

Program Name: via956-1

1. array I.D. o1

2. day

ok

3. time

ok

4. mean air temp. @ 3 meters

5. mean R.H. @ 3 meters (%)

6. mean solar flux coming down (W/m2)

7. mean solar flux going up (W/m2)

8. mean horizontal wind speed (m/s)

9. resultant mean wind speed (m/s)

10. resultant mean wind direction (degrees from north)

11. standard deviation of wind direction (degrees)

12. maximum wind speed (m/s)

ok

13. minimum wind speed (m/s)

14. mean P.A.R. (micromols/s/m2)

divide by 200, multiply by 291.00

15. mean soil temperature @ 0 cm in soil (C)

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

```
via97801.dat
Filename:
Station: Lake Vida met station
Date of Establishment: November 24, 1995 by Peter Doran
Author of this report: Peter Doran
File Period:
```

Nov 24/97 (328) @ 1000 to Nov 24/97 (328) @ 1015

Sampling Frequency: every 1 secs.; others: every 30 secs.

Averaging and Output Interval: every 15 min

Program Name: via956-1

1. array I.D. o1

2. day

ok

3. time

ok

4. mean air temp. @ 3 meters

5. mean R.H. @ 3 meters (%)

6. mean solar flux coming down (W/m2)

7. mean solar flux going up (W/m2)

8. mean horizontal wind speed (m/s)

9. resultant mean wind speed (m/s)

10. resultant mean wind direction (degrees from north)

11. standard deviation of wind direction (degrees)

12. maximum wind speed (m/s)

13. minimum wind speed (m/s)

14. mean P.A.R. (micromols/s/m2)

divide by 200, multiply by 291.00

15. mean soil temperature @ 0 cm in soil (C)

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

```
Filename: via97802.dat
Station: Lake Vida met station
```

Date of Establishment: November 24, 1995 by Peter Doran

Author of this report: Peter Doran

File Period: Nov 24/97 (328) @ 1130 to Jan 13/98 (13) @ 1200

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

Averaging and Output Interval: every 15 min

Program Name: via978-1

- 1. array I.D.
 - o1
- 2. day
 - ok
- 3. time
- ok
- 4. mean air temp. @ 3 meters
 - rclow
- 5. mean R.H. @ 3 meters (%)
 - οk
- 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)
 - 0
- 10. resultant mean wind direction (degrees from north)
 - ok
- 11. standard deviation of wind direction (degrees)
 - ماد
- 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 291.00
- 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

- 1. new rh chip
- 2. swapped light sensors but serial numbers not recorded.