File description and task list for 1998-99 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 = Hoare   Stations 1-14: program
    02 = Fryxell   version # for season
    03 = Bonney   Station 15: 1 = time and const
    04 = Commonwealth   2 = surface flux
    05 = Howard   3 = met and energy
    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

Hardware Notes:
        1) Continued service schedule.

Filename: boy98001.dat
Station: Lake Bonney met station
Date of Establishment: November 24, 1993 by Peter Doran
Author of this report: Paul Langevin
File Period: Jan 15/98(15) @ 0915
Sampling Frequency: wind speed every 4 sec, other every 30 sec
Averaging and Output Interval: every 15 minutes
Program name: boy978-1 or boy978-2

1. array I.D.
           o1
2. day
           ok
3. time
           ok
4. mean air temp. @ 3 meters (C)
           rclow
5. mean R.H. @ 3 meters (%)
           ok
6. mean solar flux coming up (W/m2)
           ok, but switched with down
7. mean solar flux going down (W/m2)
           ok
8. mean P.A.R. (micromols/s/m2)
           divide by 200, multiply by 306.03
9. mean horizontal wind speed (m/s)
           ok
10. resultant mean wind speed (m/s)
           o1
11. resultant mean wind direction (degrees from north)
           ok
12. standard deviation of wind direction (degrees)
           ok
13. maximum wind speed (m/s)
           ok
14. minimum wind speed (m/s)
           ok
15. mean up-facing pyrgeometer, rad. comp. (W/m2)
           divide by 250; multiple by 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, ok, but switched with 5 cm
24. mean soil temperature @ 5 cm in soil (C)
  rclow
25. mean soil temperature @ 10 cm in soil (C)
  rclow
26. sample of battery voltage
  o1

Note: 1. soil temps @ 0 and 5 are reversed (Corrected in processed data)
        2. thermopiles (fields 17 and 21) frequently giving error values (-6999). Flagged "M"

Filename: boy98002.dat
Station: Lake Bonney met station
Date of Establishment: November 24, 1993 by Peter Doran
Author of this report: Paul Langevin
File Period: Jan15/98 (15) @ 0930 to Jan15/98 (15) @ 1000
Sampling Frequency: wind speed every 4 sec, other every 30 sec
Averaging and Output Interval: every 15 minutes
Program name: boy978-3

1. array I.D.
   o1
2. day
   ok
3. time
   ok
4. mean air temp. @ 3 meters (C)
   rclow
5. mean R.H. @ 3 meters (%)
   ok
6. mean solar flux coming up (W/m2)
   ok, but switched with down
7. mean solar flux going down (W/m2)
   ok
8. mean P.A.R. (micromols/s/m2)
   divide by 200, multiply by 306.03
9. mean horizontal wind speed (m/s)
   ok
10. resultant mean wind speed (m/s)
   o1
11. resultant mean wind direction (degrees from north)
   ok
12. standard deviation of wind direction (degrees)
   ok
13. maximum wind speed (m/s)
   ok
14. minimum wind speed (m/s)
   ok
15. mean up-facing pyrgeometer, rad. comp. (W/m2)
   divide by 250; multiple by 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, ok, but switched with 5 cm
24. mean soil temperature @ 5 cm in soil (C)
   rclow
25. mean soil temperature @ 10 cm in soil (C)
   rclow
26. sample of battery voltage
   o1
27. sample precipitation (mm)
   ok

Note: 1. soil temps @ 0 and 5 are reversed (Corrected in processed data)
       2. thermopiles (fields 17 and 21) frequently giving error values (-6999) Flagged "M"

Filename: boy98003.dat
Station: Lake Bonney met station
Date of Establishment: November 24, 1993 by Peter Doran
Author of this report: Paul Langevin
File Period: Jan 15/98 (15) @ 1030 to Feb 20/98 (51) @ 0800
Sampling Frequency: wind speed every 4 sec, other every 30 sec
Averaging and Output Interval: every 15 minutes
Program name: boy978-3

    1. array I.D.
        o1
    2. day
        ok
    3. time
        ok
    4. mean air temp. @ 3 meters (C)
        rclow
    5. mean R.H. @ 3 meters (%)
        ok
    6. mean solar flux coming up (W/m2)
        ok, but switched with down
    7. mean solar flux going down (W/m2)
        ok
    8. mean P.A.R. (micromols/s/m2)
        divide by 200, multiply by 306.03
    9. mean horizontal wind speed (m/s)
        ok
    10. resultant mean wind speed (m/s)
        o1
    11. resultant mean wind direction (degrees from north)
        ok
    12. standard deviation of wind direction (degrees)
        ok
    13. maximum wind speed (m/s)
        ok
    14. minimum wind speed (m/s)
        ok
    15. mean up-facing pyrgeometer, rad. comp. (W/m2)
        divide by 250; multiple by 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, ok, but switched with 5 cm
24. mean soil temperature @ 5 cm in soil (C)
    rclow
25. mean soil temperature @ 10 cm in soil (C)
    rclow
26. sample of battery voltage
    o1
27. sample precipitation (mm)
    ok

Note: 1. soil temps @ 0 and 5 are reversed (Corrected in processed data)
        2. thermopiles (fields 17 and 21) frequently giving error values (-6999) Flagged "M"

Filename: boy98004.dat
Station: Lake Bonney met station
Date of Establishment: November 24, 1993 by Peter Doran
Author of this report: Paul Langevin
File Period: Feb 20/98 (51) @ 0815 to July 8/98 (189) @ 1300
Sampling Frequency: wind speed every 4 sec, other every 30 sec
Averaging and Output Interval: every 15 minutes
Program name: boy978-3

      1. array I.D.
           o1
      2. day
           ok
      3. time
           ok
      4. mean air temp. @ 3 meters (C)
           rclow
      5. mean R.H. @ 3 meters (%)
           ok
      6. mean solar flux coming up (W/m2)
           ok, but switched with down
      7. mean solar flux going down (W/m2)
           ok
      8. mean P.A.R. (micromols/s/m2)
           divide by 200, multiply by 306.03
      9. mean horizontal wind speed (m/s)
           ok
      10. resultant mean wind speed (m/s)
           o1
      11. resultant mean wind direction (degrees from north)
           ok
      12. standard deviation of wind direction (degrees)
           ok
      13. maximum wind speed (m/s)
           ok
      14. minimum wind speed (m/s)
           ok
      15. mean up-facing pyrgeometer, rad. comp. (W/m2)
           divide by 250; multiple by 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, ok, but switched with 5 cm
24. mean soil temperature @ 5 cm in soil (C)
        rclow
25. mean soil temperature @ 10 cm in soil (C)
        rclow
26. sample of battery voltage
        o1
27. sample precipitation (mm)
        ok

Note: 1. soil temps @ 0 and 5 are reversed (Corrected in processed data)
        2. thermopiles (fields 17 and 21) frequently giving error values (-6999) Flagged "M"
        3. Missing data from July 8/98 (189) @ 1300 to Nov 12/98 (316) @ 1130

Filename: boy98005.dat
Station: Lake Bonney met station
Date of Establishment: November 24, 1993 by Peter Doran
Author of this report: Paul Langevin
File Period: Nov 12/98 (316) @ 1130 to Nov 29/98 (333) @ 1430
Sampling Frequency: wind speed every 4 sec, other every 30 sec
Averaging and Output Interval: every 15 minutes
Program name: boy978-3

     1. array I.D.
          o1
     2. day
          ok
     3. time
          ok
     4. mean air temp. @ 3 meters (C)
          rclow
     5. mean R.H. @ 3 meters (%)
          ok
     6. mean solar flux coming up (W/m2)
          ok, but switched with down
     7. mean solar flux going down (W/m2)
          ok
     8. mean P.A.R. (micromols/s/m2)
          divide by 200, multiply by 306.03
     9. mean horizontal wind speed (m/s)
          ok
     10. resultant mean wind speed (m/s)
          o1
     11. resultant mean wind direction (degrees from north)
          ok
     12. standard deviation of wind direction (degrees)
          ok
     13. maximum wind speed (m/s)
          ok
     14. minimum wind speed (m/s)
          ok
     15. mean up-facing pyrgeometer, rad. comp. (W/m2)
          divide by 250; multiple by 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, ok, but switched with 5 cm
24. mean soil temperature @ 5 cm in soil (C)
    rclow
25. mean soil temperature @ 10 cm in soil (C)
    rclow
26. sample of battery voltage
    o1
27. sample precipitation (mm)
    ok

Note: 1. soil temps @ 0 and 5 are reversed (Corrected in processed data)
         2. thermopiles (fields 17 and 21) frequently giving error values (-6999) Flagged "M"
         3. portion of first line of file is missing (Nov 12/98 (316) @ 1130)

Filename: boy98901.dat
Station: Lake Bonney met station
Date of Establishment: November 24, 1993 by Peter Doran
Author of this report: Paul Langevin
File Period: Nov 29/98 (333) @ 1445 to Jan 18/99 (18) @ 1600
Sampling Frequency: wind speed every 4 sec, other every 30 sec
Averaging and Output Interval: every 15 minutes
Program name: boy978-3

    1. array I.D.
        o1
    2. day
        ok
    3. time
        ok
    4. mean air temp. @ 3 meters (C)
        rclow
    5. mean R.H. @ 3 meters (%)
        ok
    6. mean solar flux coming up (W/m2)
        ok, but switched with down
    7. mean solar flux going down (W/m2)
        ok
    8. mean P.A.R. (micromols/s/m2)
        divide by 200, multiply by
    9. mean horizontal wind speed (m/s)
        ok
    10. resultant mean wind speed (m/s)
        o1
    11. resultant mean wind direction (degrees from north)
        ok
    12. standard deviation of wind direction (degrees)
        ok
    13. maximum wind speed (m/s)
        ok
    14. minimum wind speed (m/s)
        ok
    15. mean up-facing pyrgeometer, rad. comp. (W/m2)
        divide by 250; multiple by 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, ok, but switched with 5 cm
24. mean soil temperature @ 5 cm in soil (C)
      rclow
25. mean soil temperature @ 10 cm in soil (C)
      rclow
26. sample of battery voltage
      o1
27. sample precipitation (mm)
      ok

Note: 1. soil temps @ 0 and 5 are reversed (Corrected in processed data)
        2. thermopiles (fields 17 and 21) frequently giving error values (-6999) Flagged "M"
        3. up and down licor wiring switched Jan 18, 1999 (PD, PJL)
        4. down licor pyrometer swapped out Jan 18, 1999 (PD, PJL)
              old down pyro   PY20561
              new down pyro   PY23277
        5. wind monitor switched Jan 18, 1999 (PD, PJL)
              new wind monitor 17648
              old wind monitor 17401
        6. wind monitor rotated 10 degrees clockwise Jan 26, 1999 (PD) – Flag data from Jan 18/99 (18) @ 1600 to Jan 26, 1999?

Filename: brh98001.dat
Station: Lake station
Date of Establishment: November 13, 1996 by Peter Doran and D.J. Osborne
Author of this report: Paul Langevin
File Period: Jan 13/98 (13) @ 1130 to Aug 8/98 (220) @ 300
Sampling Frequency: wind speed every 4 sec; other every 30 sec
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 (C)
        rclow
     5. mean R.H. @ 3 meters (%)
        ok
     6. mean solar flux coming down (W/m2)
        ok
     7. mean solar flux going up (W/m2)
        ok
     8. mean horizontal wind speed (m/s)
        ok
     9. resultant mean wind speed (m/s)
        o1
     10. resultant mean wind direction (degrees from north)
        ok
     11. standard deviation of wind direction (degrees)
        ok
     12. maximum wind speed (m/s)
        ok
     13. minimum wind speed (m/s)
        ok
     14. mean P.A.R. (micromols/s/m2)
        divide by 200, multiply by 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: screws tightened

Filename: brh98002.dat
Station: Lake Brownworth met station
Date of Establishment: November 13, 1996 by Peter Doran and D.J. Osborne
Author of this report: Paul Langevin
File Period: Aug 8/98 (220) @ 315 to Nov 20/98 (324) @ 1230
Sampling Frequency: wind speed every 4 sec; other every 30 sec
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 (C)
          rclow
     5. mean R.H. @ 3 meters (%)
          ok
     6. mean solar flux coming down (W/m2)
          ok
     7. mean solar flux going up (W/m2)
          ok
     8. mean horizontal wind speed (m/s)
          ok
     9. resultant mean wind speed (m/s)
          o1
     10. resultant mean wind direction (degrees from north)
          ok
     11. standard deviation of wind direction (degrees)
          ok
     12. maximum wind speed (m/s)
          ok
     13. minimum wind speed (m/s)
          ok
     14. mean P.A.R. (micromols/s/m2)
          divide by 200, multiply by 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: Wind monitor rotated 37 degree counterclockwise on Nov.27/98 at approx 11:15am. Flag from Nov. 20 to 27 or all of the winter data?

Filename: brh98901.dat
Station: Lake Brownworth met station
Date of Establishment: November 13, 1996 by Peter Doran and D.J. Osborne
Author of this report: Paul Langevin
File Period: Nov 20/98 (324) @ 1245 to Jan 21/99 (21) @ 1315
Sampling Frequency: wind speed every 4 sec; other every 30 sec
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 (C)
            rclow
       5. mean R.H. @ 3 meters (%)
            ok
       6. mean solar flux coming down (W/m2)
            ok
       7. mean solar flux going up (W/m2)
            ok
       8. mean horizontal wind speed (m/s)
            ok
       9. resultant mean wind speed (m/s)
            o1
       10. resultant mean wind direction (degrees from north)
            ok
       11. standard deviation of wind direction (degrees)
            ok
       12. maximum wind speed (m/s)
            ok
       13. minimum wind speed (m/s)
            ok
       14. mean P.A.R. (micromols/s/m2)
            divide by 200, multiply by 342.07
     see note below- PAR should be positive number

       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. Screw needed for PAR
2. Downward pyran showing a negative number. Switched black and red wires at
      wiring panel and numbers went to positive.
3. Serial numbers Old   New

up Pyrano		py25306	py18655
down pyrano		py25307	py20568
quantum	q22174	q19469	

Filename: caa98001.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: Karen Lewis
File Period: Jan 30/98 (30) @ 11:00 to Dec 5/98 (339) @ 15:45
Sampling Frequency: every 30 seconds
Averaging and Output Interval: every 15 minutes
Program name: caa98-1

  1. array I.D.
        o1
  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/m2)
        ok
  8. mean horizontal wind speed (m/s)
        ok
  9. resultant mean wind speed (m/s)
        o1
  10. resultant mean wind direction (degrees from north)
        ok
  11. standard deviation of wind direction (degrees)
        ok
  12. maximum wind speed (m/s)
        ok
  13. minimum wind speed (m/s)
        ok
  14. mean barometric pressure (mbar)
        ok
  15. mean net radiation (W/m2)
        ok
  16. sample battery voltage
        o1

*Notes:
1. From JD 334 1615 to the end of the file incoming and outgoing shortwave
    radiation and net radiation are overrange values. Sensors were in
    camp being calibrated. Flagged "M"
2. RH values occasionally exceed 100. Flagged "R"
3. SwRadOut exceeds limits occasionally. Flagged "R"

Filename: caa98901.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: Karen Lewis
File Period: Dec 5/98 (339) @ 16:00 to Jan 27/99 (27) @ 11:30
Sampling Frequency: every 30 seconds
Averaging and Output Interval: every 15 minutes
Program name: caa989-1

    1. array I.D.
          o1
    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/m2)
          ok
    8. mean horizontal wind speed (m/s)
          ok
    9. resultant mean wind speed (m/s)
          o1
    10. resultant mean wind direction (degrees from north)
          ok
    11. standard deviation of wind direction (degrees)
          ok
    12. maximum wind speed (m/s)
          ok
    13. minimum wind speed (m/s)
          ok
    14. mean barometric pressure (mbar)
          ok
    15. mean net radiation (W/m2)
          ok
    16. mean surface temperature from IRT (C)
          convert to mV, then clow
    17. sample battery voltage
          o1

*Notes:
1. The first 4 timesteps of the file incoming and outgoing shortwave
     radiation and net radiation are overrange values. Sensors were
     being reinstalled. Flagged "M"
2. Surface temperature is not available for the entire time. Data is
     bad until JD 351 1045 and again after JD 16 1400. Bad values

are NOT overrange values - they're values between -9 and -12 C which do not fluctuate significantly during the course of the day. Flagged "B"

3. RH values occasionally exceed 100. Flagged "R"
4. SwRadOut exceeds limits occasionally. Flagged "R"

Filename: coh98001.dat
Station: Commonwealth Glacier Station
Date of Establishment: Nov 22, 1993 by Peter Doran
Author of this report: Paul Langevin
File Period: Jan 16/98 (16) @ 1000 June 8/98 (159) @1400
Sampling Frequency: wind every 4 sec; other every 30 sec
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 (C)
        rClow
5. mean R.H. @ 3 meters (%)
        ok
6. mean solar flux coming down (W/m2)
        divide by 100; multiply 108.70
7. mean solar flux going up (W/m2)
        divide by 100; multiply 109.29
8. mean horizontal wind speed (m/s)
        ok
9. resultant mean wind speed (m/s)
        o1
10. resultant mean wind direction (degrees from north)
        ok
11. standard deviation of wind direction (degrees)
        ok
12. maximum wind speed (m/s)
        ok
13. minimum wind speed (m/s)
        ok
14. mean incoming IR pyrgeometer output (pins A-B) (W/m2)
        divide by 250; multiply by   288.18
15. mean incoming IR hemisphere temp. (pins A-C) (mv)
        Eppley
16. mean incoming IR thermopile output (pins F-G)(W/m2)
        bad
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)
    bad
24. mean outgoing IR thermopile (pins A-C) (W/m2)
    Eppley
25. mean outgoing IR case temp. (pins E-D) (mv)
    bad
26. sample of battery voltage
    o1

*Notes:
1.   Exact depth position of ice thermistors unknown (#19 and #20). Needs Flag
2   Thermocouple not wired; ignore #21
3   Everest thermal infrared sensor not wired (FS #18).
4   Missing data between 25 1000 and 25 1515.
5   LwRadIn2 and LwRadout2 are returning negative values. The values for incoming and outgoing IR thrmopile
        is returning large negative values. Looking at the data, this changes drastically in between the end of one file to
        the next from 978 to 989. Comparing the data from the previous year end of file (16, 945) to the first file of last
        year (16, 1000) I notice the value outgoing IR thermophile (pins A-C) changed drastically from -.001763 to -
        3.825. The value for the thermohile remained high for all the records. Comparing the data for the incoming IR
        pyrgeometer the hemisphere and case temp values do a funny jump. They go from 0.028880 and 0.028360 to
        72.6 and 71.0. Flagged "B"

Filename: coh98002.dat
Station: Commonwealth Glacier Station
Date of Establishment: Nov 22, 1993 by Peter Doran
Author of this report: Paul Langevin
File Period: June 8/98 (159) @1415 to Oct 30/98 (303) @245
Sampling Frequency: wind every 4 sec; other every 30 sec
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 (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)
            o1
        10. resultant mean wind direction (degrees from north)
            ok
        11. standard deviation of wind direction (degrees)
            ok
        12. maximum wind speed (m/s)
            ok
        13. minimum wind speed (m/s)
            ok
        14. mean incoming IR pyrgeometer output (pins A-B) (W/m2)
            divide by 250; multiply by   288.18
        15. mean incoming IR hemisphere temp. (pins A-C) (mv)
            Eppley
        16. mean incoming IR thermopile output (pins F-G)(W/m2)
            bad
        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)
　　　bad
24. mean outgoing IR thermopile (pins A-C) (W/m2)
　　　Eppley
25. mean outgoing IR case temp. (pins E-D) (mv)
　　　bad
26. sample of battery voltage
　　　o1

*Notes:
1.　　Exact depth position of ice thermistors unknown (#19 and #20). Needs Flag
2.　　Thermocouple not wired; ignore #21
3.　　Everest thermal infrared sensor not wired (FS #18).
4.　　LwRadIn2 and LwRadout2 are returning negative values. Flagged "B"

Filename: coh98901.dat
Station: Commonwealth Glacier Station
Date of Establishment: Nov 22, 1993 by Peter Doran
Author of this report: Paul Langevin
File Period: Nov 8/98 (315) @230 to Jan 20/99 (20) @1100
Sampling Frequency: wind every 4 secs.; other 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 (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)
           o1
       10. resultant mean wind direction (degrees from north)
           ok
       11. standard deviation of wind direction (degrees)
           ok
       12. maximum wind speed (m/s)
           ok
       13. minimum wind speed (m/s)
           ok
       14. mean incoming IR pyrgeometer output (pins A-B) (W/m2)
           divide by 250; multiply by   288.18
       15. mean incoming IR hemisphere temp. (pins A-C) (mv)
           Eppley
       16. mean incoming IR thermopile output (pins F-G)(W/m2)
           bad
       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)
   bad
24. mean outgoing IR thermopile (pins A-C) (W/m2)
   Eppley
25. mean outgoing IR case temp. (pins E-D) (mv)
   bad
26. sample of battery voltage
   o1

*Notes:
1. Exact depth position of ice thermistors unknown (#19 and #20). Needs Flag
2. Thermocouple not wired; ignore #21
3. Everest thermal infrared sensor not wired (FS #18).
4. LwRadIn2 and LwRadout2 are returning negative values. Flagged "B"
5. Data missing between days 303 and 315. No reason known.
6. First line of this file look like they contain values from previous output.
7. Occasionally SwRadIn value is missing. Flagged "M"

Filename: coh98902.dat
Station: Commonwealth Glacier Station
Date of Establishment: Nov 22, 1993 by Peter Doran
Author of this report: Paul Langevin
File Period: Jan 20/99 (20) @1115 to Jan 20/99 (20) @1230
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 (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)
        o1
10. resultant mean wind direction (degrees from north)
        ok
11. standard deviation of wind direction (degrees)
        ok
12. maximum wind speed (m/s)
        ok
13. minimum wind speed (m/s)
        ok
14. mean incoming IR pyrgeometer output (pins A-B) (W/m2)
        divide by 250; multiply by 288.18
15. mean incoming IR hemisphere temp. (pins A-C) (mv)
        Eppley
16. mean incoming IR thermopile output (pins F-G)(W/m2)
        bad
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)
   bad
24. mean outgoing IR thermopile (pins A-C) (W/m2)
   Eppley
25. mean outgoing IR case temp. (pins E-D) (mv)
   bad
26. sample of battery voltage
   o1

*Notes:
1.   Exact depth position of ice thermistors unknown (#19 and #20). Needs Flag
2.   Thermocouple not wired; ignore #21
3.   Everest thermal infrared sensor not wired (FS #18).
4.   LwRadIn2 and LwRadout2 are returning negative values. Flagged "B"
5.   Sensors switched old   new   new   calibration
             Up pyrgeo   pir31512F3   pir32311F3   4.36x10-6
             Dwn pyrgeo   pir29786F3   pir32348F3   3.94x10-6
             wind   27724   17647

Filename: coh98903.dat
Station: Commonwealth Glacier Station
Date of Establishment: Nov 22, 1993 by Peter Doran
Author of this report: Paul Langevin
File Period: Jan 20/99 (20) @1245 to Jan 22 /99 (22) @1015
Sampling Frequency: wind every 4 secs.; other 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 (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)
            o1
        10. resultant mean wind direction (degrees from north)
            ok
        11. standard deviation of wind direction (degrees)
            ok
        12. maximum wind speed (m/s)
            ok
        13. minimum wind speed (m/s)
            ok
        14. mean incoming IR pyrgeometer output (pins A-B) (W/m2)
            divide by 250; multiply by 229.36
        15. mean incoming IR hemisphere temp. (pins A-C) (mv)
            Eppley
        16. mean incoming IR thermopile output (pins F-G)(W/m2)
            bad
        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 253.61
23. mean outgoing IR hemisphere temp. (pins F-G) (mv)
   bad
24. mean outgoing IR thermopile (pins A-C) (W/m2)
   Eppley
25. mean outgoing IR case temp. (pins E-D) (mv)
   bad
26. sample of battery voltage
   o1

*Notes:
1.   Exact depth position of ice thermistors unknown (#19 and #20). Needs Flag
2.   Thermocouple not wired; ignore #21
3.   Everest thermal infrared sensor not wired (FS #18).
4.   LwRadIn2 and LwRadout2 are returning negative values. Flagged "B"

Filename: exe98001.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: Paul Langevin
File Period: Jan 13/98 (13) @ 945 to Jan 13/98 @ 945
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
         ok
3. time
         ok
4. mean air temp. @ 3 meters (C)
         rclow
5. mean RH @ 3 meters (%)
         ok
6. mean solar flux coming up (~W/m2)
         ok
7. mean solar flux going down (~W/m2)
         ok
8. mean horizontal wind speed (m/s)
         ok
9. resultant mean wind speed (m/s)
         o1
10. resultant mean wind direction (degrees from north)
         ok
11. standard deviation of wind direction (degrees)
         o1
12. maximum wind speed (m/s)
         ok
13. minimum wind speed (m/s)
         ok
14. mean P.A.R. (micromols/s/m2)
         divide by 200, multiple by 324.0
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. mean dTemp 1-3 meters (from t.c. wire) (C)
         rclow
19. sample precipitation (mm)
         bad
20. sample battery voltage
         o1

notes:

1.   Only one interval on this file.
2.   Up and down pyranos are switched. (Changed in processed data)
3.   Soil temp probe at 5 and 10 cm not working properly. Soil temp @ 5 cm does not change much. Values much too in winter. Soil @ 10 cm does not record any temperature. Flagged "B"

4.   Filename: exe98002.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: Paul Langevin
File Period: Jan 13/98 (13)@ 1000 to Jan 19/98 (19)@ 915
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
        ok
3. time
        ok
4. mean air temp. @ 3 meters (C)
        rclow
5. mean RH @ 3 meters (%)
        ok
6. mean solar flux coming up (~W/m2)
        ok
7. mean solar flux going down (~W/m2)
        ok
8. mean horizontal wind speed (m/s)
        ok
9. resultant mean wind speed (m/s)
        o1
10. resultant mean wind direction (degrees from north)
        ok
11. standard deviation of wind direction (degrees)
        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, multiple by 324.0
15. mean soil temperature @ 0 cm (C)
        rclow
16. mean dTemp 1-3 meters (from t.c. wire) (C)
        rclow
17. sample precipitation (mm)
        bad
18. sample battery voltage
        o1

notes:
1.   Missing data between 17 1745 and 18 115.
2.   Up and down pyranos are switched. . (Changed in processed data)

Filename: exe98003.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: Paul Langevin
File Period: Jan 19/98 (19) @ 930 to Aug7/98 (219) @ 1815
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
         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)
         partly ok
7. mean solar flux going down (~W/m2)
         partly ok
8. mean horizontal wind speed (m/s)
         ok
9. resultant mean wind speed (m/s)
         o1
10. resultant mean wind direction (degrees from north)
         ok
11. standard deviation of wind direction
         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 324.0
15. mean soil temperature @ 0 cm (C)
         rclow
16. 16. mean dTemp 1-3 meters (from t.c. wire) (C)
         rclow
17. sample precipitation (mm)
         bad
18. sample battery voltage
         o1

notes:
1.   The pyranometers stopped for part of this file. (?)
2.   Missing data between 64 1230 and 64 1230
3.   Missing data between 111 230 and 111 1000
4.   Up and down pyranos are switched. . (Changed in processed data)

Filename: exe98004.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: Paul Langevin
File Period: Aug 7/98 (219) @ 1830 to Nov 20/98 (324) @ 1045
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
          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)
          partly ok
7. mean solar flux going down (~W/m2)
          partly ok
8. mean horizontal wind speed (m/s)
          ok
9. resultant mean wind speed (m/s)
          o1
10. resultant mean wind direction (degrees from north)
          ok
11. standard deviation of wind direction (degrees)
          o1
12. maximum wind speed (m/s)
          ok
13. minimum wind speed (m/s)
          ok
14. mean P.A.R. (micromols/s/m2)
          divide by 200, multiple by 324.0
15. mean soil temperature @ 0 cm (C)
          rclow
16. mean dTemp 1-3 meters (from t.c. wire) (C)
          rclow
17. sample precipitation (mm)
          bad
18. sample battery voltage

notes:
1.   The pyranometers stopped for part of this file. (?)
2.   Up and down pyranos are switched. . (Changed in processed data)

Filename: exe98901.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: Paul Langevin
File Period: Nov 20/98 (324) @ 1100 to Jan 22/99 (22) @ 1015
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
          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 but switched with up
7. mean solar flux going down (~W/m2)
           ok
8. mean horizontal wind speed (m/s)
          ok
9. resultant mean wind speed (m/s)
          o1
10. resultant mean wind direction (degrees from north)
          ok
11. standard deviation of wind direction (degrees)
          o1
12. maximum wind speed (m/s)
          ok
13. minimum wind speed (m/s)
          ok
14. mean P.A.R. (micromols/s/m2)
          divide by 200, multiple by 324.0
15. mean soil temperature @ 0 cm (C)
          rclow
16. mean dTemp 1-3 meters (from t.c. wire) (C)
          rclow
17. sample precipitation (mm)
          bad
18. sample battery voltage

notes:
1.   Up and down pyranos are switched. . (Changed in processed data)

Filename: frl98001.dat
Station: Lake Fryxell met station
Date of Establishment: Jan 6, 1994 by Peter Doran
Author of this report: Paul Langevin
 File Period: Jan 19/98 (19) @ 945 to Aug 14/98 (226) @ 930
Sampling Frequency: wind 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 (C)
                rClow
        5. mean R.H. @ 3 meters (%)
                ok
        6. mean solar flux coming down (W/m2)
                ok
        7. mean solar flux going up (W/m2)
                ok
        8. mean horizontal wind speed (m/s)
                ok
        9. resultant mean wind speed (m/s)
                o1
        10. resultant mean wind direction (degrees from north)
                ok
        11. standard deviation of wind direction (degrees)
                ok
        12. maximum wind speed (m/s)
                ok
        13. minimum wind speed (m/s)
                ok
        14. mean P.A.R. (micromols/s/m2)
                divide by 200, multiply by 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:

Filename: frl98002.dat
Station: Lake Fryxell met station
Date of Establishment: Jan 6, 1994 by Peter Doran
Author of this report: Paul Langevin
 File Period: Aug 14/98 (226) @ 930 to Nov 20/98 (324) @ 1000
Sampling Frequency: wind 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 (C)
                rClow
        5. mean R.H. @ 3 meters (%)
                ok
        6. mean solar flux coming down (W/m2)
                ok
        7. mean solar flux going up (W/m2)
                ok
        8. mean horizontal wind speed (m/s)
                ok
        9. resultant mean wind speed (m/s)
                o1
        10. resultant mean wind direction (degrees from north)
                ok
        11. standard deviation of wind direction (degrees)
                ok
        12. maximum wind speed (m/s)
                ok
        13. minimum wind speed (m/s)
                ok
        14. mean P.A.R. (micromols/s/m2)
                divide by 200, multiply by 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:

Filename: frl98901.dat
Station: Lake Fryxell met station
Date of Establishment: Jan 6, 1994 by Peter Doran
Author of this report: Paul Langevin
File Period: Nov 20/98 (324) @ 1000 to Jan 22/98 (22) @ 930
Sampling Frequency: wind 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 (C)
          rClow
  5. mean R.H. @ 3 meters (%)
          ok
  6. mean solar flux coming down (W/m2)
          ok
  7. mean solar flux going up (W/m2)
          ok
  8. mean horizontal wind speed (m/s)
          ok
  9. resultant mean wind speed (m/s)
          o1
  10. resultant mean wind direction (degrees from north)
          ok
  11. standard deviation of wind direction (degrees)
          ok
  12. maximum wind speed (m/s)
          ok
  13. minimum wind speed (m/s)
          ok
  14. mean P.A.R. (micromols/s/m2)
          divide by 200, multiply by 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:

Filename: hod98001.dat
Station: Howard Glacier Station
Date of Establishment: Nov 20, 1993 by Peter Doran
Author of this report: Paul Langevin
File Period: Jan 10/98 (10) @ 1445
Sampling Frequency: wind every 4 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 (C)
          rclow
       5. mean R.H. @ 3 meters (%)
          ok
       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)
          ok
       9. resultant mean wind speed (m/s)
          o1
       10. resultant mean wind direction (degrees from north)
          ok
       11. standard deviation of wind direction (degrees)
          ok
       12. maximum wind speed (m/s)
          ok
       13. minimum wind speed (m/s)
          ok
*   14. mean ice temp. near surface (C)
          flag; rclow
*   15. mean ice temp. @ ~1 m (C)
          flag; rclow
*   16. mean dTemp 1-3 meters (C)
          bad
       17. mean air temp @ 1 meter m (C)
          convert to mV, then clow
       18. mean rh @ 1 meter (%)
          ok
       19. sample of battery voltage
          o1

*Notes:
1. Exact depth position of ice thermistors unknown (#14 & 15). Needs Flag
2. Thermocouple not installed, ignore #16

Filename: hod98002.dat
Station: Howard Glacier Station
Date of Establishment: Nov 20, 1993 by Peter Doran
Author of this report: Paul Langevin
File Period: Jan 10/98 (10) @ 1500 to July 25/98 (206) @ 1615
Sampling Frequency: wind every 4 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 (C)
            rclow
        5. mean R.H. @ 3 meters (%)
            ok
        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)
            ok
        9. resultant mean wind speed (m/s)
            o1
        10. resultant mean wind direction (degrees from north)
            ok
        11. standard deviation of wind direction (degrees)
            ok
        12. maximum wind speed (m/s)
            ok
        13. minimum wind speed (m/s)
            ok
*   14. mean ice temp. near surface (C)
            flag; rclow
*   15. mean ice temp. @ ~1 m (C)
            flag; rclow
*   16. mean dTemp 1-3 meters (C)
            bad
        17. mean air temp @ 1 meter m (C)
            convert to mV, then clow
        18. mean rh @ 1 meter (%)
            ok
        19. sample of battery voltage
            o1

*Notes:

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

3. SwRadOut occasionally exceeds range value. Flagged "R"
4. SwRadIn occasionally missing. Flagged "M"

Filename: hod98003.dat
Station: Howard Glacier Station
Date of Establishment: Nov 20, 1993 by Peter Doran
Author of this report: Paul Langevin
File Period: July 25/98 (206) @ 1630 to Nov 10/98 (314) @ 1345
Sampling Frequency: wind every 4 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 (C)
          rclow
       5. mean R.H. @ 3 meters (%)
          ok
       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)
          ok
       9. resultant mean wind speed (m/s)
          o1
       10. resultant mean wind direction (degrees from north)
          ok
       11. standard deviation of wind direction (degrees)
          ok
       12. maximum wind speed (m/s)
          ok
       13. minimum wind speed (m/s)
          ok
*   14. mean ice temp. near surface (C)
          flag; rclow
*   15. mean ice temp. @ ~1 m (C)
          flag; rclow
*   16. mean dTemp 1-3 meters (C)
          bad
       17. mean air temp @ 1 meter m (C)
          convert to mV, then clow
       18. mean rh @ 1 meter (%)
          ok
       19. sample of battery voltage
          o1

*Notes:
1. Exact depth position of ice thermistors unknown (#14 & 15). Needs Falg
2. Thermocouple not installed, ignore #16

Filename: hod98901.dat
Station: Howard Glacier Station
Date of Establishment: Nov 20, 1993 by Peter Doran
Author of this report: Paul Langevin
File Period: Nov 10/98 (314) @1400 to Jan 21/99 (1415) @ 1415
Sampling Frequency: wind every 4 sec others: every 30 sec
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 (C)
           rclow
       5. mean R.H. @ 3 meters (%)
           ok
       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)
           ok
       9. resultant mean wind speed (m/s)
           o1
       10. resultant mean wind direction (degrees from north)
           ok
       11. standard deviation of wind direction (degrees)
           ok
       12. maximum wind speed (m/s)
           ok
       13. minimum wind speed (m/s)
           ok
*   14. mean ice temp. near surface (C)
           flag; rclow
*   15. mean ice temp. @ ~1 m (C)
           flag; rclow
*   16. mean dTemp 1-3 meters (C)
           bad
       17. mean air temp @ 1 meter m (C)
           convert to mV, then clow
       18. mean rh @ 1 meter (%)
           ok
       19. sample of battery voltage
           o1

*Notes:
1. New Eppleys on Jan 21.

Old Down: 29777F3, cal 8.59
        New Down: 31437F3, cal 8.22
        Old Up: 29776F3, cal 8.65
        New Up: 31435F3, cal 8.09
2. New wind monitor on Jan 27.
        New wind s/n: 17809
        Old wind: s/n   27761
3. Exact depth position of ice thermistors unknown (#14 & 15). Needs Flag
4. Thermocouple not installed, ignore #16

Filename: hoe98001.dat
Station: Lake Hoare met station
Date of Establishment: Dec 1, 1993 by Peter Doran
Author of this report: Paul Langevin
File Period: Jan 20/98 (20) @ 1115 to Jan 20/98 (20) @ 1815
Sampling Frequency: wind every 4 sec; other every 30 sec
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 (C)
          rclow
     5. mean R.H. @ 3 meters (%)
          ok
     6. mean solar flux coming down (W/m2)
          ok
     7. mean solar flux going up (W/m2)
          ok
     8. mean horizontal wind speed (m/s)
          ok
     9. resultant mean wind speed (m/s)
          o1
     10. resultant mean wind direction (degrees from north)
          ok
     11. standard deviation of wind direction (degrees)
          ok
     12. maximum wind speed (m/s)
          ok
     13. minimum wind speed (m/s)
          ok
     14. mean P.A.R. (micromols/s/m2)
          divide by 200, multiply by 294.02
     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

*Notes: none

Filename: hoe98002.dat
Station:Lake Hoare met station
Date of Establishment: Dec 1, 1993 by Peter Doran
Author of this report: Paul Langevin
File Period: Jan 20/98 (20) @ 1830 to Aug 15/98 (227) @ 0645
Sampling Frequency: wind every 4 secs.; other 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 (C)
                rclow
5. mean R.H. @ 3 meters (%)
                ok
6. mean solar flux coming down (W/m2)
                ok
7. mean solar flux going up (W/m2)
                ok
8. mean horizontal wind speed (m/s)
                ok
9. resultant mean wind speed (m/s)
                o1
10. resultant mean wind direction (degrees from north)
                ok
11. standard deviation of wind direction (degrees)
                ok
12. maximum wind speed (m/s)
                ok
13. minimum wind speed (m/s)
                ok
14. mean P.A.R. (micromols/s/m2)
                divide by 200, multiply by 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

  *Notes:
1.   4527 line   File:98002 – Missing data between 67 2200 and 68 530

Filename: hoe98003.dat
Station: Lake Hoare met station
Date of Establishment: Dec 1, 1993 by Peter Doran
Author of this report: Paul Langevin
File Period: Aug 15/98 (227) @ 0700 to Nov 7/98 (311) @ 1700
Sampling Frequency: wind every 4 secs.; other 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 (C)
                rclow
        5. mean R.H. @ 3 meters (%)
                ok
        6. mean solar flux coming down (W/m2)
                ok
        7. mean solar flux going up (W/m2)
                ok
        8. mean horizontal wind speed (m/s)
                ok
        9. resultant mean wind speed (m/s)
                o1
        10. resultant mean wind direction (degrees from north)
                ok
        11. standard deviation of wind direction (degrees)
                ok
        12. maximum wind speed (m/s)
                ok
        13. minimum wind speed (m/s)
                ok
        14. mean P.A.R. (micromols/s/m2)
                divide by 200, multiply by 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

*Notes: none

Filename: hoe98004.dat
Station: Lake Hoare met station
Date of Establishment: Dec 1, 1993 by Peter Doran
Author of this report: Paul Langevin
File Period: Nov 7/98 (311) @ 1715
Sampling Frequency: wind every 4 secs.; other 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 (C)
        rclow
5. mean R.H. @ 3 meters (%)
        ok
6. mean solar flux coming down (W/m2)
        ok
7. mean solar flux going up (W/m2)
        ok
8. mean horizontal wind speed (m/s)
        ok
9. resultant mean wind speed (m/s)
        o1
10. resultant mean wind direction (degrees from north)
        ok
11. standard deviation of wind direction (degrees)
        ok
12. maximum wind speed (m/s)
        ok
13. minimum wind speed (m/s)
        ok
14. mean P.A.R. (micromols/s/m2)
        divide by 200, multiply by 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

*Notes: none

Filename: hoe98005.dat
Station: Lake Hoare met station
Date of Establishment: Dec 1, 1993 by Peter Doran
Author of this report: Paul Langevin
File Period: Nov 7/98 (311) @ 1730 to Nov 7/98 (311) @ 2100
Sampling Frequency: wind every 4 secs.; other 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 (C)
               rclow
        5. mean R.H. @ 3 meters (%)
               ok
        6. mean solar flux coming down (W/m2)
               ok
        7. mean solar flux going up (W/m2)
               ok
        8. mean horizontal wind speed (m/s)
               ok
        9. resultant mean wind speed (m/s)
               o1
        10. resultant mean wind direction (degrees from north)
               ok
        11. standard deviation of wind direction (degrees)
               ok
        12. maximum wind speed (m/s)
               ok
        13. minimum wind speed (m/s)
               ok
        14. mean P.A.R. (micromols/s/m2)
               divide by 200, multiply by 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

 *Notes:
1.   14 line   File:98005 – Most of the line is missing

Filename: hoe98901.dat
Station: Lake Hoare met station
Date of Establishment: Dec 1, 1993 by Peter Doran
Author of this report: Paul Langevin
File Period: Nov 7/978 (311) @ 2115 to Nov 24/98 (328) @ 2000
Sampling Frequency: wind every 4 secs.; other 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)
                ok
        9. resultant mean wind speed (m/s)
                o1
        10. resultant mean wind direction (degrees from north)
                ok
        11. standard deviation of wind direction (degrees)
                ok
        12. maximum wind speed (m/s)
                ok
        13. minimum wind speed (m/s)
                ok
        14. mean P.A.R. (micromols/s/m2)
                divide by 200, multiply by 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

 *Notes:
1.   line 0   File:98901 – Beginning of line is missing

Filename: hoe98902.dat
Station: Lake Hoare met station
Date of Establishment: Dec 1, 1993 by Peter Doran
Author of this report: Paul Langevin
File Period: Nov 24/98 (328) @ 2015 to Jan 20/99 (20) @ 1745
Sampling Frequency: wind every 4 secs.; other 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)
           ok
      9. resultant mean wind speed (m/s)
           o1
      10. resultant mean wind direction (degrees from north)
           ok
      11. standard deviation of wind direction (degrees)
           ok
      12. maximum wind speed (m/s)
           ok
      13. minimum wind speed (m/s)
           ok
      14. mean P.A.R. (micromols/s/m2)
           divide by 200, multiply by 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

*Notes: none

Filename: tar98001.dat
Station: Taylor Glacier Station
Date of Establishment: Nov 21, 1994 by Peter Doran
Author of this report: Paul Langevin
File Period: Jan 12/98 (12) @ 1700 to Jul 27/98 (208) @ 1830
Sampling Frequency: wind every 4 secs.; other every 30 secs.
Averaging and Output Interval: every 15 minutes
Program name: tar956-3

     1. array I.D.
          o1
     2. day
          ok
     3. time
          ok
     4. mean air temp. @ 3 meters (C)
          rclow
     5. mean R.H. @ 3 meters (%)
          ok
     6. mean solar flux coming down (W/m2)
          divide by 100; multiply by 116.01
     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)
          o1
     10. resultant mean wind direction (degrees from north)
          ok
     11. standard deviation of wind direction (degrees)
          ok
     12. maximum wind speed (m/s)
          ok
     13. minimum wind speed (m/s)
          ok
     14. ice temperature (C)
          don?t know depth - has melted out
     15. ice temperature (C)
          don?t know depth - has melted out
     16. ????
     17. mean air temp @1m (C)
          rclow
     18. RH at 1m (%)
          ok
     19. sample of battery voltage
          o1

*Notes:
1.   field 16 is -6999 - unwired IRT?
2.   Exact depth position of ice thermistors unknown (#14 & 15). Needs Flag

Filename: tar98002.dat
   Station: Taylor Glacier Station
   Date of Establishment: Nov 21, 1994 by Peter Doran
   Author of this report: Paul Langevin
   File Period: Jul 27/98 (208) @ 1845 to Nov 13/98 (317) @ 1100
   Sampling Frequency: wind every 4 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
            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 116.01
        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)
            o1
        10. resultant mean wind direction (degrees from north)
            ok
        11. standard deviation of wind direction (degrees)
            ok
        12. maximum wind speed (m/s)
            ok
        13. minimum wind speed (m/s)
            ok
        14. ice temperature (C)
            don?t know depth - has melted out
        15. ice temperature (C)
            don?t know depth - has melted out
        16. ????
        17. mean air temp @1m (C)
            rclow
        18. RH at 1m (%)
            ok
        19. sample of battery voltage
            o1
  *Notes:
1.   field 16 is -6999 - unwired IRT?
2.   Exact depth position of ice thermistors unknown (#14 & 15). Needs Flag

Filename: tar98901.dat
Station: Taylor Glacier Station
Date of Establishment: Nov 21, 1994 by Peter Doran
Author of this report: Paul Langevin
File Period: Nov 13/98 (317) @ 1530 to Nov 20/98 (324) @ 1500
Sampling Frequency: wind every 4 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
          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 116.01
     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)
          o1
     10. resultant mean wind direction (degrees from north)
          ok
     11. standard deviation of wind direction (degrees)
          ok
     12. maximum wind speed (m/s)
          ok
     13. minimum wind speed (m/s)
          ok
     14. ice temperature (C)
          don?t know depth - has melted out
     15. ice temperature (C)
          don?t know depth - has melted out
     16. ????
     17.mean air temp @1m (C)
          rclow
     18. RH at 1m (%)
          ok
     19. sample of battery voltage
          o1
*Notes:
1. Field 16 is -6999 - unwired IRT?
2. Exact depth position of ice thermistors unknown (#14 & 15). Needs Flag

Filename: tar98902.dat
Station: Taylor Glacier Station
Date of Establishment: 1994 by Peter Doran
Author of this report: Paul Langevin
File Period: Nov 20/98 (324) @1515 to Jan 18/99 (18) @ 1245
Sampling Frequency: wind 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 (C)
                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)
                o1
        10. resultant mean wind direction (degrees from north)
                ok
        11. standard deviation of wind direction (degrees)
                ok
        12. maximum wind speed (m/s)
                ok
        13. minimum wind speed (m/s)
                ok
        14. ice temperature (C)
                don?t know depth - has melted out
        15. ice temperature (C)
                don?t know depth - has melted out
        16. ????
        17. mean air temp @1m (C)
                rclow
        18. RH at 1m (%)
                ok
        19. sample of battery voltage
                o1

    Notes:
1.   new wind monitor installed Jan 18. New s/n 15249
2.   new RH chip installed Jan 18
3.   Station put on new posts, all instruments realigned.

4. Field 16 is -6999 - unwired IRT?
5. Exact depth position of ice thermistors unknown (#14 & 15). Needs Flag

Filename: tar98903.dat
Station: Taylor Glacier Station
Date of Establishment: 1994 by Peter Doran
Author of this report: Paul Langevin
File Period: Jan 18/99 (18) @ 1300 to Jan 18/99 (18) at 1315
Sampling Frequency: wind 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 (C)
            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)
            o1
   10. resultant mean wind direction (degrees from north)
            flag
   11. standard deviation of wind direction (degrees)
            ok
   12. maximum wind speed (m/s)
            ok
   13. minimum wind speed (m/s)
            ok
   14. ice temperature (C)
            don?t know depth - has melted out
   15. ice temperature (C)
            don?t know depth - has melted out
   16. ????
   17. mean air temp @1m (C)
            rclow
   18. RH at 1m (%)
            ok
   19. sample of battery voltage
            o1
*Notes:
   1.   Field 16 is -6999 - unwired IRT?
   2.   Exact depth position of ice thermistors unknown (#14 & 15). Needs Flag

Filename: tar98904.dat
Station: Taylor Glacier Station
Date of Establishment: 1994 by Peter Doran
Author of this report: Paul Langevin
File Period: Jan 18/99 (18) @ 1330 to Jan 25/99 (25) @ 945
Sampling Frequency: wind 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 (C)
          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)
          o1
      10. resultant mean wind direction (degrees from north)
          flag
      11. standard deviation of wind direction (degrees)
          ok
      12. maximum wind speed (m/s)
          ok
      13. minimum wind speed (m/s)
          ok
      14. ice temperature (C)
          don?t know depth - has melted out
      15. ice temperature (C)
          don?t know depth - has melted out
      16. ????
      17. mean air temp @1m (C)
          rclow
      18. RH at 1m (%)
          ok
      19. sample of battery voltage
          o1
*Notes:
1.   Field 16 is -6999 - unwired IRT?
2.   Exact depth position of ice thermistors unknown (#14 & 15). Needs Flag

Filename: vaa98001.dat
Station: Lake Vanda met station
Date of Establishment: November 24, 1994 by Peter Doran, rebuilt
Author of this report: Paul Langevin
File Period: Jan 13/98 (13) @ 1245 to Apr 27/98 (117)@ 300
Sampling Frequency: wind every 4 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 (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 309.46
        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)
            bad
        18. sample of battery voltage
            o1

notes:
1. Date in raw data for 1998 103 400 is wrong, it reads 4199 400, changed 4199 to 103
2. Onyx temperature #17, Flagged "B"

Filename: vaa98002.dat
Station: Lake Vanda met station
Date of Establishment: November 24, 1994 by Peter Doran, rebuilt
A uthor of this report: Paul Langevin
File Period: Apr 27/98 (117)@ 315 to Aug 8/98 (220) @ 430
Sampling Frequency: wind every 4 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 (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 309.46
    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)
        bad
    18. sample of battery voltage
        o1

notes:
1. Onyx temperature #17 not working. Flagged "B"

Filename: vaa98003.dat
Station: Lake Vanda met station
Date of Establishment: November 24, 1994 by Peter Doran, rebuilt
Author of this report: Paul Langevin
File Period: Aug 8 (220) @ 445 to Nov 20/98 (324)@ 1400
Sampling Frequency: wind every 4 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 (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 309.46
        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)
                bad
        18. sample of battery voltage
                o1

 notes:
1. Onyx temperature #17 not working. Flagged "B"

Filename: vaa98901.dat
Station: Lake Vanda met station
Date of Establishment: November 24, 1994 by Peter Doran, rebuilt
Author of this report: Paul Langevin
File Period: Nov 20/98 (324) @ 1415 to Jan 21/99 (21)@ 1130
Sampling Frequency: wind every 4 secs.; other 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 (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 309.46
     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)
         bad
     18. sample of battery voltage
         o1

notes:
  1. Onyx temperature #17 not working. Flagged "B"

Filename: via98001.dat
Station: Lake Vida met station
Date of Establishment: November 24, 1995 by Peter Doran
Author of this report: Paul Langevin
File Period: Jan 13/98 (13)@ 1230 to Nov 20/98 (324) @ 1230
Sampling Frequency: every 4 secs.; others: every 30 secs.
Averaging and Output Interval: every 30 min
Program Name: via956-1

      1. array I.D.
          o1
      2. day
          ok
      3. time
          ok
      4. mean air temp. @ 3 meters (C)
          rclow
      5. mean R.H. @ 3 meters (%)
          ok
      6. mean solar flux coming down (W/m2)
          ok
      7. mean solar flux going up (W/m2)
          ok
      8. mean horizontal wind speed (m/s)
          ok
      9. resultant mean wind speed (m/s)
          o1
      10. resultant mean wind direction (degrees from north)
          ok
      11. standard deviation of wind direction (degrees)
          ok
      12. maximum wind speed (m/s)
          ok
      13. minimum wind speed (m/s)
          ok
      14. mean P.A.R. (micromols/s/m2)
          divide by 200, multiply by 298.85
      15. mean soil temperature @ 0 cm in soil (C)
          rclow
      16. mean soil temperature @ 5 cm in soil (C)
          rclow
      17. mean soil temperature @ 10 cm in soil (C)
          rclow
      18. sample of battery voltage
          o1

notes:

Filename: via98901.dat
Station: Lake Vida met station
Date of Establishment: November 24, 1995 by Peter Doran
Author of this report: Paul Langevin
File Period: Nov 20/98 (324) @ 1300 to Jan 21/99 (21) @ 1600
Sampling Frequency: wind every 4 secs.; others: every 30 secs.
Averaging and Output Interval: every 30 min
Program Name: via956-1

1. array I.D.
        o1
2. day
        ok
3. time
        ok
4. mean air temp. @ 3 meters (C)
        rclow
5. mean R.H. @ 3 meters (%)
        ok
6. mean solar flux coming down (W/m2)
        ok
7. mean solar flux going up (W/m2)
        ok
8. mean horizontal wind speed (m/s)
        ok
9. resultant mean wind speed (m/s)
        o1
10. resultant mean wind direction (degrees from north)
        ok
11. standard deviation of wind direction (degrees)
        ok
12. maximum wind speed (m/s)
        ok
13. minimum wind speed (m/s)
        ok
14. mean P.A.R. (micromols/s/m2)
        divide by 200, multiply by 298.85
15. mean soil temperature @ 0 cm in soil (C)
        rclow
16. mean soil temperature @ 5 cm in soil (C)
        rclow
17. mean soil temperature @ 10 cm in soil (C)
        rclow
18. sample of battery voltage
        o1

notes: