Appendix to regridding NCDCs meteorological data

1 PRECIPITATION

1.1 *cmb_prcp.dly*

Daily precipitation file downloaded directly from Earthinfo CDs. One year is on one line although you can not see this below, since the line appears wrapped.

```
30|2827|EUREKA RS
|Prcp|1|1960|in|||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||0.00|0.00|0.04|0.00|0.00|0.00|0.00|0.00|0.00|0.00|0.03|0.00|0.00|0.00|0.32|0.00|0.03|0.00|
0.00|0.00|0.02|0.00|0.00|0.00|0.00|0.00|0.00|0.00|0.00T|0.00|0.00|0.00|0.00|0.00|0.00|0.00|0.00|0.00|0.00|0.00|0.00|0.00|0.00|0.00|0.00|0.00|0.00|0.00|0.00|0.00|0.00|0.00|0.00|0.
00|0.00|0.00|0.00|0.00|0.00|0.00|0.00T|0.44|0.03|0.11|0.00T|0.00|0.00|0.00|0.00|0.00|0.00|0.00|0.00|0.00|0.00|0.00|0.00|0.00|0.00|0.00|0.00|0.00|0.09|0.07|0.16|0.00T|0.00T|0.08|
0.00|0.00|0.00|0.00|0.00|0.52|0.02|0.00|0.00|0.00|0.00|0.00|0.00|0.00|0.00|0.00|0.00|0.00|0.00|0.00|0.00|0.00|0.00|0.00T|0.00T|0.04|0.00|0.00|0.00|0.00|0.00|0.00|0.00|0.00|0.00|0
.00|0.00|0.04|0.06|0.00|0.00|0.06|0.00|0.00|0.00|0.00|0.00|0.00|0.00|0.00T|0.00|0.00|0.05|0.00|0.09|0.00|0.00|0.00|0.20|0.09|0.00|0.00|0.00|0.00|0.00|0.01|0.00|0.00|0.0
8|0.09|0.00T|0.08|0.02|0.00|0.10|0.00|0.09|0.08|0.44|0.04|0.00|0.04|0.25|0.03|0.00|0.00|0.00T|0.00|0.00|0.00|0.04|0.08|0.00|0.00|0.00|0.00|0.00|0.00|0.00|0.00T|0.00|0.02|0.00|0.
00|0.00|0.17|0.15|0.01|0.00|0.00|0.00|0.00|0.00|0.06|0.00|0.00|0.01|0.00|0.00T|0.00|---|---|---|---|---|-0.44|0.00|0.98|0.58|0.30|1.64|0.54|---|||||0.32|0.00|0.44|0.52|0.09|0.44|0.17||
30|2827|EUREKA RS
|Prcp|1|1961|in|0.03|0.00|0.00|0.00|0.05|0.10|0.11|0.11|0.00|0.00T|0.00|0.00|0.00|0.00|0.00|0.00|0.00|0.00|0.00|0.00|0.00|0.00|0.00|0.00|0.00|0.00|0.00|0.18|0.27|0.10|0.00|0.00|0.
00|0.00|0.00|0.00|0.00|0.00|0.20|0.72|0.13|0.00|0.11|0.00|0.00|0.12|0.00|0.00|0.00|0.09A|0.30|0.06|0.00|0.05|0.00|0.00|0.00|0.00||0.00|0.00|0.00|0
```

1.2 *cmb_prcp.sta*

Precipitation station file downloaded from Earthinfo CDs

```
MT|24|2827|EUREKA RS       Prcp|771.8|N48:54:00|W115:04:00|06/01/1960|12/31/1995|36|100|1|LINCOLN           |30|
MT|24|6986|REXFORD RS     |Prcp|717.0|N48:53:00|W115:12:00|04/01/1950|05/31/1960|11|93|1|                   |30|
MT|24|8395|TROY 18 N      |Prcp|827.5|N48:43:00|W115:53:00|06/01/1961|05/26/1994|34|92|1|LINCOLN           |30|
MT|24|8681|WARLAND RS     |Prcp|671.0|N48:30:00|W115:17:00|06/14/1963|08/31/1967|5|89|1|LINCOLN            |30|
MT|24|8683|WARLAND 12 N   |Prcp|680.0|N48:40:00|W115:19:00|08/22/1963|10/31/1966|4|82|1|LINCOLN            |30|
MT|24|9185|YAAK           |Prcp|924.0|N48:50:00|W115:42:00|05/16/1957|10/31/1960|4|97|1|                   |30|
```

1.3 *glakes_prcp.daily*

Precipitation data file after processing by preprocessing script. Although the line as it appears below is wrapped, the daily data for each year is on one line (366 fields for each year).

```
    23 ADDISON                1948
-99 -99 -99 -99 -99 -99 -99 -99 -99 -99 -99 -99 -99 -99 -99 -99 -99 -99 -99 -99 -99 -99
-99 -99 -99 -99 -99 -99 -99 -99 -99 -99 -99 -99 -99 -99 -99 -99 -99 -99 -99 -99 -99 -99
-99 -99 -99 -99 -99 -99 -99 -99 -99 -99 -99 -99 -99 -99 -99 -99 -99 -99 -99 -99 -99 -99
-99 -99 -99 -99 -99 -99 -99 -99 -99 -99 -99 -99 -99 -99 -99 -99 -99 -99 -99 -99 -99 -99
-99 -99 -99 -99 -99 -99 -99 -99 -99 -99 -99 -99 -99 -99 -99 -99 -99 -99 -99 -99 -99 -99
-99 -99 -99 -99 -99 -99 -99 -99 -99 -99 -99 0.04 0.00 0 0.00 0.30 0.14 0.07 0.20 0.00
0.07 0.06 0.00 0.20 0.17 0 0.00 0.33 0.12 0.10 0.00 0.55 0.03 0.12 0.48 0.00 0.00 0.00
0.00 0.20 0 0.00 0.00 0.00 0.00 0.00 0.40 0.02 0.40 0.52 0.05 0.07 0.00 0 0.28 0.00 0.00
0.00 0.00 0.00 0.18 0.00 0 0.00 0.17 0.14 0.50 0.10 0.00 0.00 0.25 0.40 0.21 0.00 0.00 0.00
0.00 0.35 0.08 0.16 0.00 0.00 0.00 0.00 0.00 0.30 0.65 0.00 0.00 0.00 0.00 0.00 0.00 0.00
3.35 0.00 0.67 0.00 0.00 0.18 0.25 0.00 0.00 0.52 0.00 0.00 0.00 0.00 0.25 1.35 0.00 -99
0.03 0.00 0.00 1.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0 0.00 0.00 0.00 0.00 0.00 0.12 0.00 0.00 0.00 0.00 0.00 0.15 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0.00 0.23 0.00 0.25 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.10 0.03
0.00 0.00 0.00 0.00 0.04 0 0.02 0.78 0.20 0.00 0.09 0 0.18 0 0.00 0.00 1.32 0 0.00 0 0.00
0 0 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.02 0.10 0 0.20 0 0.00 0.72 0.00 0.00 0.02 0.54
0.00 0 0 0.08 0.00 0.15 0.00 0.00 0.53 0 0.00 0.37 0 0.00 0.00 0.10 0.00 0.10 0.13 0 0.00
0.00 0.00 0.00 0.05 0.00 0.00 0.00 0 0.00 0.16 0.03 0.00 0.30 0.10 0.00 0.02 0.36
0.00 0 0.10 0.05 0.00 0 0.00 0.00 0 0.43 0.65 -99 -99 -99 -99 3.18 3.69 6.51 2.63 0.85
2.66 3.06 2.25 -99 -99 -99 -99 -99 0.55 0.52 3.35 1.35 0.25 1.32 0.72 0.65 -99
    23 ADDISON                1949
 0.20 0.20 0.05 0 0.30 0.20 0 0 0.00 0.00 0.00 0.00 0.00 0.00 0.05 0 0.10 0.06 0.08 0
0.00 0 0.00 0.15 0 0.05 0.53 0.30 0 0.10 0.00 -99 0.00 0.00 0.00 0 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 -99 0 -99 0.05 0.00 0.00 0.00 0.00 0.13 0.21 0.00 0.20 -99 0.00 0.05
-99 0.28 0.00 0.08 0.00 0.05 0.26 0.00 0.00 0.00 0.43 0.23 0.00 0.00 0.00 0.10 0.00 0.05
0 0.00 0.00 0.00 0
```

1.4 east_prcp.inf

First line is the total number of stations to follow.

```
2142
   41.3489   -73.0694     42.7 ANSONIA 1 NE          060128 Prcp CT 04/01/1966 12/31/1997 32  99  2 NEW HAVEN     9
   41.8417   -73.0103    182.1 BAKERSVILLE           060227 Prcp CT 06/02/1948 12/31/1997 36  68  1 LITCHFIELD    9
   41.9167   -72.9500    201.3 BARKHAMSTED           060299 Prcp CT 06/01/1948 12/31/1997 50  98  1 LITCHFIELD    9
   41.1667   -73.1333      3.0 BRIDGEPORT WSO ARPT    060806 Prcp CT 07/01/1948 12/31/1997 50 100  3 FAIRFIELD     9
   41.7833   -71.9500     73.2 BROOKLYN              060918 Prcp CT 05/01/1950 11/30/1983 33  93  2 WINDHAM       9
   41.6500   -73.4833     79.3 BULLS BRIDGE DAM       060961 Prcp CT 06/01/1948 12/31/1997 50  98  1 LITCHFIELD    9
```

1.5 cmb_prcp.fmt

Output from read_prec_dly, with one column for each station in the .inf file, and one row for each day.

```
12.70     .51  -9.00   2.79  -9.00   2.29   1.02     .00     .00  11.43
 .00   -9.00   2.54  11.68  -9.00  -9.00   1.78  14.22  11.68  -9.00
8.89    7.87     .00  17.27  -9.00  -9.00  -9.00  -9.00     .00  -9.00
 .00    7.62  -9.00  -9.00   7.62  -9.00  20.83  -9.00  -9.00  -9.00
 .00   -9.00  -9.00  -9.00  -9.00  -9.00  -9.00  -9.00     .51  -9.00   -
9.00   -9.00  -9.00  -9.00     .00  -9.00  -9.00   5.33  15.75  -9.00   -
```

1.6 cmb_prcp.grd

Output from regrid.f (ascii format). In this file there should be no void numbers (-9.0, -99.0, etc). Check this with grep. If so, you have to include a larger upper bound in the nearest neightbor input, though with an upper bound of 50 or 60 this should virtually never happen, unless there is some other problem. This file will be used together with the gridded temperature data to make the final, ready to run, vicinput files.

```
   0.94   1.15   0.25   0.23   0.03   1.07   0.59   0.14   0.03   0.94
   0.68   0.22   0.26   0.85   0.69   0.29   0.72   0.75
   0.94   1.15   0.25   0.14   0.00   1.07   0.59   0.00   0.00   0.94
   0.68   0.00   0.00   0.85   0.69   0.00   0.00   0.75
   0.94   1.15   0.25   0.14   0.00   1.07   0.59   0.00   0.00   0.94
   0.68   0.00   0.00   0.85   0.69   0.00   0.00   0.75
   1.01   1.15   0.32   1.00   2.16   1.07   0.59   1.01   1.68   0.94
   0.68   0.95   1.00   0.85   0.69   0.83   0.08   0.75
   2.66   1.51   3.97  12.04  26.27   1.67   2.62  13.75  20.78   1.93
   2.45  12.80  13.00   2.10   2.42  11.30   2.25   2.31
   0.98   1.15   0.29   0.83   1.16   1.07   0.59   0.94   0.85   0.94
   0.68   1.16   1.29   0.85   0.69   1.36   2.44   0.75
   0.94   1.15   0.25   0.81   0.43   1.07   0.59   0.99   1.16   0.94
```

1.7 monthly.jan

Upper corner of one of the monthly files created from the gridded VIC data.

```
ncols         200
nrows         224
xllcorner     -92
yllcorner     25
cellsize      0.125
NODATA_value  -9999
-9999.00 -9999.00 -9999.00 -9999.00 -9999.00
-9999.00 -9999.00    45.17   118.66 -9999.00
-9999.00 -9999.00    89.45 -9999.00 -9999.00
-9999.00 -9999.00 -9999.00 -9999.00 -9999.00
```

1.8   prism.jan

Portion of one of the 12 output files from get_prism.c (prism.jan)
This file will be used with monthly.jan to rescale the precipitation file.

```
ncols           200
nrows           224
xllcorner       -92
yllcorner       25
cellsize        0.125
NODATA_value  -9999
-9999.00 -9999.00 -9999.00 -9999.00 -9999.00
-9999.00 -9999.00    54.17   128.76 -9999.00
-9999.00 -9999.00    83.54 -9999.00 -9999.00
-9999.00 -9999.00 -9999.00 -9999.00 -9999.00
```