SUMMARY HEADER FORMAT Y2000

```
Start      Fortran
Col.  Len. Format Data      (* indicates a new/revised field )


1     4    I4     Year. *
5     8    4I2    Month, day, hour and minute.
13    4    F4.2   Origin time seconds.
17    2    F2.0   Latitude (deg). First character must not be blank.
19    1    A1     S for south, blank otherwise.
20    4    F4.2   Latitude (min).
24    3    F3.0   Longitude (deg).
27    1    A1     E for east, blank otherwise.
28    4    F4.2   Longitude (min).
32    5    F5.2   Depth (km).
37    3    F3.2   Magnitude from maximum S amplitude from NCSN stations *
40    3    I3     Number of P & S times with final weights greater than 0.1.
43    3    I3     Maximum azimuthal gap, degrees.
46    3    F3.0   Distance to nearest station (km).
49    4    F4.2   RMS travel time residual.
53    3    F3.0   Azimuth of largest principal error (deg E of N).
56    2    F2.0   Dip of largest principal error (deg).
58    4    F4.2   Size of largest principal error (km).
62    3    F3.0   Azimuth of intermediate principal error.
65    2    F2.0   Dip of intermediate principal error.
67    4    F4.2   Size of intermediate principal error (km).
71    3    F3.2   Coda duration magnitude from NCSN stations. *
74    3    A3     Event location remark. (See table 7 below).
77    4    F4.2   Size of smallest principal error (km).
81    2    2A1    Auxiliary remarks (See note below).
83    3    I3     Number of S times with weights greater than 0.1.
86    4    F4.2   Horizontal error (km).
90    4    F4.2   Vertical error (km).
94    3    I3     Number of P first motions. *
97    4    F4.1   Total of NCSN S-amplitude mag weights ~number of readings.*
101   4    F4.1   Total of NCSN duration mag weights ~number of readings. *
105   3    F3.2   Median-absolute-difference of NCSN S-amp magnitudes.
108   3    F3.2   Median-absolute-difference of NCSN duration magnitudes.
111   3    A3     3-letter code of crust and delay model. (See table 8 below).
114   1    A1     Last authority for earthquake N=NCSC (USGS), B=UC Berkeley.
                  (A T in this column is meaningless)
```

```
115   1    A1     Most common P & S data source code. (See table 1 below).
116   1    A1     Most common duration data source code. (See cols. 71-73)
117   1    A1     Most common amplitude data source code.
118   1    A1     Coda duration magnitude type code
119   3    I3      Number of valid P & S readings (assigned weight > 0).
122   1    A1     S-amplitude magnitude type code
123   1    A1     "External" magnitude label or type code. Typically L for ML
                  or W for MW. This information is not computed by Hypoinverse,
                  but passed along, as computed by UCB.
124   3    F3.2   "External" magnitude.
127   3    F3.1   Total of "external" magnitude weights (~ number of readings).
130   1    A1     Alternate amplitude magnitude label or type code (i.e. L for
                  ML calculated by Hypoinverse from Wood Anderson amplitudes).
131   3    F3.2   Alternate amplitude magnitude.
134   3    F3.1   Total of the alternate amplitude mag weights ~no. of
                  readings.
137  10    I10    Event identification number
147   1    A1     Preferred magnitude label code chosen from those available.
148   3    F3.2   Preferred magnitude, chosen by the Hypoinverse PRE command.
151   4    F4.1   Total of the preferred mag weights (~ number of readings). *
155   1    A1     Alternate coda duration magnitude label or type code (i.e.
                  Z).
156   3    F3.2   Alternate coda duration magnitude.
159   4    F4.1   Total of the alternate coda duration magnitude weights. *
163   1    A1     QDDS version number of information. Starts at 0 for quick
                  look reports. Incremented by one each time new information is
                  added or revised: from quick location, final earthworm
                  location with MD, ML added, etc.
164   1    A1     "Origin instance" version number, distinguishes between
                  different origins (hypocenters).  It starts with 'a' ('0' for
                  quick-look reports) and runs through the alphabet.  When
                  Berkeley has a final magnitude for each origin, the character
                  is promoted to upper-case.
```

SUMMARY SHADOW FORMAT

Most of these fields hold CUSP related data. If the event was only on the RTP or earthworm and CUSP did not digitize the event, all fields up to col. 80, except the "$1" identifier are blank. This format did not change with the Y2000 revision. Any data beyond column 80 is erroneous.

```
Cols   Len.  Format        Data


1-2    2     '$1'          Designates Shadow Summary Card
3-6    4     I4            Reference time: year
7-10   4     2I2           Reference time: month, day
11-14  4     2I2           Reference time: hour, minute
15-20  6     F6.3          Reference time: seconds


             First Arkive Tape:
21-23  3     A3            Network Identifier (e.g. CAL, CIT, HVO)
24     1     1X            blank
25-34  10    I10           Arkive tape number
35-44  10    I10           Arkive event id number
45-50  6     I6            File number on Arkive tape


             Second Arkive Tape (rare):
51-53  3     A3            Network Identifier
54     1     1X            blank
```