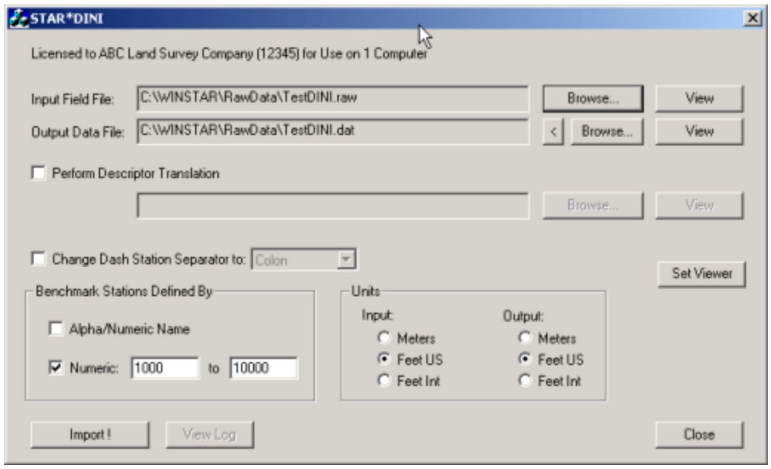
STAR*NET CONVERSION UTILTIES

STAR*DINI CONVERSION UTILITY

STAR*DiNi converts Trimble DiNi leveling collector files to STAR*NET input data format.



Running the program is easy. First browse for the input raw field file to convert, then browse for an output data file (a new or existing file), set desired options and press the “Import” button. If errors or warnings are found, they are listed in a Log file - review by pressing “View Log” button. When errors are found, data will not be written to the output file. In this case, review the errors listed in the Log File, edit the raw file to make necessary corrections and re-import. The Log file also shows a complete detail of all field BS/FS records used to construct the final data file when the conversion is successful.

When browsing for the output file, you can press one of two buttons. The standard “Browse” button opens the output file dialog in the same directory as the raw field file and offers the same file name as the raw field file, but with a “DAT” extension. Of course you can modify the offered name and path to whatever you wish. The smaller “<” button opens the output file dialog in the same directory already shown in the field to the left – useful when you’ve stored output in a different directory during the previous run, and you want to output to that directory again.

A “View” button, next to each of the input and output file fields, brings up an editor. So besides viewing a file, you can also edit it. By default, the editor assigned is Windows “Notepad”. But just as in the STAR*NET program, you can set an editor of your choice by pressing the “Set Viewer” button and browsing for the editor program you prefer.

Setting Options

- Perform Descriptor Translation – You can optionally set up a descriptor library that will be used to translate codes in your raw data (codes from 1 to 5 characters long) into longer descriptors. The program by default assumes a descriptor library will have a “DES” extension. If you want translation performed, check the check box and then browse for a library you wish to use. Note that you can have several libraries and select a specific one for a conversion. See details about creating a descriptor library later in this manual.
- Change Dash Station Separator to – By default, the dash (i.e. 121-122) is used as station name separators. If some of your station names already contain dashes and you wish to keep them, this option allows you to change the separator to some other character.
- Units – The “Input” units setting allows you to set a default units for the raw data input. The raw data may be in a form called “REC-500” format (a fairly compressed format) or in a form called “M5” format (an expanded format containing more information). Every observation in the longer M5 format data contains its own units indicator, the shorter REC-500 does not. Also, one or both the formats may contain a single raw data line that also defines the units being used (Example: “Measurement units m”). Therefore the “Input” units setting on the dialog is only a default setting that is used when the raw data itself does not include some form of units definition.

The Output “Units” setting is your preference for how the output data is to be created. For example, if the input is in feet and you want the output to be in meters, the program will do the conversion for you.

- Benchmark Stations Defined By – The converter utility must be told which points in the raw data are the benchmarks. The utility program “adds up” elevation differences and distances through all turning points between the benchmarks (or junctions).

You can tell the program to consider as a benchmark any station with an Alpha/Numeric name (i.e. BM135, HYDE, etc.), or any station with a purely numeric name within some range of values such as 1,000 to 10,000 as illustrated in the dialog. Or you can set both criteria by checking both boxes (i.e. JOHN and 1234 would both be considered benchmarks). All other station names found in a survey line not fitting the “benchmark naming” criteria will be considered turning points.

Note that the first and last stations of a “survey line” are always taken as benchmarks even if their names may not fit the naming criteria. Sideshots (called “Intermediates” in DiNi manual documentation) are always included in the converted data no matter what their names are.

Sometimes when observations are taken in the field, no consideration is given to “naming” of benchmark stations with specific numeric ranges (or alphabetic names) such that they can be specified in the “Benchmark Stations Defined By” menu. In such cases, a “.POINT” inline option can be edited into the raw field file to define each benchmark junction. See details later in this manual.

Other General Notes

The program assumes that raw field files have a “RAW” extension. If you have a field file with a different extension, choose “All Files (*.*)” from the “File of type” field in the file selection dialog and then select the file you wish to convert from the complete list.

Since many surveyors use the windows-supplied Hyper-Terminal utility to download a field file from the DiNi to the computer, we recommend that you create it with a “RAW” extension. We also recommend that if you have previously used “DAT” extensions for your raw field files, you rename these files using a “RAW” extension to eliminate possible confusion. (By default the “DAT” extension is used for STAR*NET data files.)

As mentioned earlier, DINI raw files may exist in two formats, both of which the StarDINI utility automatically supports. Below are short sections of data from each to illustrate their appearance:

The M5 format (longer and often preferred as it contains more detail):

```
For M5|Adr    1|TO  Start-Line        BF    10|                    |                                |
For M5|Adr    2|KD1    BM757    1          10|                    |                  Z         850.47 ft  |
For M5|Adr    3|KD1    BM757    1        2  10|Rb          0.50 ft  |HD        234.42 ft               |
For M5|Adr    4|KD1        1    0        2  10|Rf         12.10 ft  |HD        239.40 ft               |
For M5|Adr    5|KD1        1    0           10|                    |                  Z         838.87 ft  |
For M5|Adr    6|KD1        1    0        2  10|Rb          2.11 ft  |HD        143.77 ft               |
For M5|Adr    7|KD1    AT360    1        2  10|Rf          7.51 ft  |HD        128.48 ft               |
```

The REC-500 format (more compressed):

```
  5 Start-Line         BF    BH
  6     1000             BH                                  Z  100.0000
  7     1000      01:38:392  BH Rb      1.6998 HD       23.803
  8        1      01:43:302  BH Rf      1.0804 HD       30.183
  9        1      01:43:30   BH                                  Z  100.6194
 10        1      01:43:482  BH Rb      1.0805 HD       30.214
 11        2      01:45:332  BH Rf      1.3975 HD        7.399
```

The output data file created by this routine can be moved (using Windows Explorer) into your project directory, if it is not already there, for use by the STAR*NET program. The entire data file can be added to the project using the “Input Data Files” dialog (see the STAR*NET manual), or by using a text editor, you can copy and paste parts of the file contents into a data file that already exists as part of your STAR*NET project.

All fields and option settings shown on the StarDINI program dialog are stored in the registry when you close the program and are restored the next time you run the program.

The “Log File” is an important file that is created during a run. It lists any errors and warnings produced during the run, and when a conversion run is successful, it contains a summary of all observations used to create the resulting data file. This file has the same name as the input field file but with a “log” extension, and it is always created in the same directory as the input file. Review it by pressing the “View Log” button. When errors are reported, data will not be created in the output data file and you should review the LOG file so you can correct errors and rerun. When only warnings are reported, an output data file is created but it is still important to review the messages in the LOG file to determine the reason the warnings were posted.

How the Program Works

The STAR*DINI conversion program adds up elevation differences and distances through all turning points between benchmarks or junctions, and creates a single “L” line for each of these sections. (A junction is simply a station where another line intersects, where you want an elevation held, or a where you want an elevation computed.) Benchmarks and junctions are both referred to as just “benchmarks” in this manual. After you successfully run this conversion program, all that is required to prepare the resulting data file for STAR*NET-LEV is to edit in one or more “E” lines to define elevations you wish to be held.

As previously discussed, the program recognizes which stations are benchmarks based on how your options are set. Benchmarks may be denoted by the range of their station numbers or by the presence of alpha/numeric station names or by both methods. Some DiNi models allow only numeric station numbers to be entered; other models allow numeric and alpha/numeric names.

Note that when denoting benchmark stations based on the range of station number, you must number all benchmarks stations with values within the predetermined range and the intermediate turning points “not” within the range. If you have the “Station Incrementing” option on in the DiNi collector, the turning point station numbers are automatically incremented at each new instrument setup. Therefore, be sure to choose benchmark station numbers large enough so that the turning points never increment into the range defining the benchmark station numbers. Alternately, you could consider turning the station incrementing mode off so that all intermediate turning point stations always remain at the value of 1. (See your DiNi collector manual.)

(As indicated, a “.POINT” inline option may be edited into the field file when there was not a “naming scheme” used in the field that can be defined in the “Benchmarks Stations Defined By” option menu. See details of this option on page 8.)

In the raw file, the “Code” item in an observation record may contain a number, or in the case of some DiNi collectors, alpha/numeric characters. (See your DiNi collector manual.) A zero means that no “Code” was entered. Any non-zero “Code” value existing in the raw data will be output as a descriptor in the resulting STAR*NET data file.

Raw Data is Processed One “Survey Line” at a Time

When the StarDINI utility reads through a raw field file, all lines in the file are ignored until the “Start-Line” data line is found – this represents the beginning of a survey line. Data lines are then continuously processed until an “End-Line” data line is found. At that point, if more data is present, the program continues looking for another “Start-Line” to see if another survey line exists. Sometimes a “Cont-Line” is seen in the raw data. This means that the previous survey line will be continued from the last occurrence of an “End-Line” statement.

If the utility successfully processes all raw data, the converted data is written to the STAR*NET data file. However, if the program finds an error, the run is terminated and no data is written. Check the “LOG” file for one or more error messages describing the problem. Edit your raw data file to correct the problem, and then reprocess. Note that any “Measurement repeated” or “Station repeated” records in the raw file are handled by the program automatically - it is not necessary to edit the raw file to remove these records.

Example Input File (Using the “Benchmark Stations Defined By”) Options Dialog

This TestDINI.raw file was included with your package. Use this field file as input to test the STAR*DINI program using options as shown in the example setup on the first page. The field data contains 4 benchmarks and two sideshots. Note that the “incrementing mode” of the data collector was off since all turning point stations are numbered “1”. As indicated by the options, all numeric stations between 1,000 and 10,000 will be considered as benchmarks by this utility.

```
 64 Curva  ON/Refract  ON
 65 Start-Line       BFFB   101
 66     5090    0           101                                  Z  2174.002
 67     5090    0           101 Rb       2.384 HD        23.21
 68        1    0           101 Rf       1.126 HD        28.01
 69        1    0           101 Rf       1.127 HD        28.00
 70     5090    0           101 Rb       2.385 HD        23.27
 71        1    0           101                                  Z  2175.260
 72        1    0           101 Rb       2.086 HD        58.92
 73        1    0           101 Rf       1.498 HD        57.62
 74        1    0           101 Rf       1.498 HD        57.51
 75        1    0           101 Rb       2.087 HD        58.98
 76        1    0           101                                  Z  2175.848
 83        1    0           101 Rb       1.300 HD        11.07
 84     4990    0           101 Rf       1.272 HD        13.06
 85     4990    0           101 Rf       1.272 HD        13.07
 86        1    0           101 Rb       1.301 HD        11.06
 87     4990    0           101                                  Z  2175.877
 88     4990    0           101 Rb       1.234 HD        30.46
 89        1    0           101 Rf       2.257 HD        29.57
 90        1    0           101 Rf       2.258 HD        29.54
 91     4990    0           101 Rb       1.234 HD        30.50
 92        1    0           101                                  Z  2174.853
 93        1    0           101 Rb       0.605 HD        38.01
 94        1    0           101 Rf       3.248 HD        40.21
 95        1    0           101 Rf       3.248 HD        40.16
 96        1    0           101 Rb       0.605 HD        37.95
 97        1    0           101                                  Z  2172.210
 98        1    0           101 Rb       0.215 HD        30.59
 99     4985  109           101 Rf       2.595 HD        29.68
100     4985  109           101 Rf       2.595 HD        29.69
101        1    0           101 Rb       0.215 HD        30.61
102     4985  109           101                                  Z  2169.830
103     4985  109           101 Rb       0.387 HD        23.60
104        1    0           101 Rf       2.276 HD        26.94
105        1    0           101 Rf       2.276 HD        26.93
106     4985  109           101 Rb       0.387 HD        23.56
107        1    0           101                                  Z  2167.941
108        1    0           101 Rb       0.248 HD        43.66
109        1    0           101 Rf       3.023 HD        62.48
110        1    0           101 Rf       3.022 HD        62.69
111        1    0           101 Rb       0.248 HD        43.66
112        1    0           101                                  Z  2165.167
113 Intermediate sight.      101
114     4960    0           101 Rz       2.642 HD        22.80 Z  2165.547
115     4965    0           101 Rz       1.584 HD        24.52 Z  2166.605
116 End of interm. sight.    101
118        1    0           101 Rb       2.402 HD        71.48
119        1    0           101 Rf       1.847 HD        65.26
120        1    0           101 Rf       1.847 HD        65.32
121        1    0           101 Rb       2.403 HD        71.52
122        1    0           101                                  Z  2165.723
123        1    0           101 Rb       1.732 HD        15.05
124     5080    0           101 Rf       1.186 HD        18.43
125     5080    0           101 Rf       1.186 HD        18.42
126        1    0           101 Rb       1.732 HD        15.05
127     5080    0           101                                  Z  2166.269
128     5080    0  26       101 Sr     1138.71 Sv      1148.46 Z  2166.269
129 End-Line                 101
```

Example Output Files

This is a printout of the resulting “TestDINI.dat” file created by the example STAR*DINI run.

```
# STAR*Dini Version 7.2.2
# Copyright 2012 MicroSurvey Software Inc.

# Input Field File : C:\RawData\TestDINI.raw
# Date Processed   : 03-14-2007 16:25:09

.Units  FeetUS
.Sep    -
.3D

#  Elevation Difference Records
#  Stations                          Diff    Dist  Descriptor
L  5090-4990                       1.87500   192
L  4990-4985                      -6.04650   198 '109
L  4985-4960                      -4.28300   117
L  4985-4965                      -3.22500   119
L  4985-5080                      -3.56200   327
```

To complete the preparation of this file for use by the STAR*NET program, you must edit in any fixed benchmark elevations as “E” records. For example, if stations 5090 and 5080 are to be benchmarks with fixed elevations, the file after editing might look like the following.

```
# STAR*Dini Version 7.2.2
# Copyright 2012 MicroSurvey Software Inc.

# Input Field File : C:\RawData\TestDINI.raw
# Date Processed   : 03-14-2007 16:25:09

.Units  FeetUS
.Sep    -
.3D

E 5090  354.5662  !
E 5080  346.8440  !

#  Elevation Difference Records
#  Stations                          Diff    Dist  Descriptor
L  5090-4990                       1.87500   192
L  4990-4985                      -6.04650   198 '109
L  4985-4960                      -4.28300   117
L  4985-4965                      -3.22500   119
L  4985-5080                      -3.56200   327
```

This is a printout of the log file created by the example run. It can be reviewed to see all the observations and how the data file was created. If the STAR*DINI program stopped because an error was found in the raw data, this file should be reviewed to determine the reason. The last line of the log file will usually indicate what the problem was.

```
STAR*Dini Version 7.2.2
Copyright 2012 MicroSurvey Software Inc.

Input Field File : C:\RawData\TestDINI.raw
Output Data File : C:\RawData\TestDINI.dat
Date Processed   : 03-14-2007 16:25:09


Point                ID       E           D         Sum E      Sum D Desc
5090               5090 B1  2.38400    23.210    0.00000      0.000
                      1 F1  1.12600    28.010
                      1 F2  1.12700    28.000    1.25800     51.245
                   5090 B2  2.38500    23.270
                      1 B1  2.08600    58.920
                      1 F1  1.49800    57.620
                      1 F2  1.49800    57.510    1.84650    167.760
                      1 B2  2.08700    58.980
                      1 B1  1.30000    11.070
                   4990 F1  1.27200    13.060
4990               4990 F2  1.27200    13.070    1.87500    191.890
                      1 B2  1.30100    11.060

Point                ID       E           D         Sum E      Sum D Desc
4990               4990 B1  1.23400    30.460    0.00000      0.000
                      1 F1  2.25700    29.570
                      1 F2  2.25800    29.540   -1.02350     60.035
                   4990 B2  1.23400    30.500
                      1 B1  0.60500    38.010
                      1 F1  3.24800    40.210
```

```
                        1 F2  3.24800    40.160   -3.66650    138.200
                        1 B2  0.60500    37.950
                        1 B1  0.21500    30.590
                     4985 F1  2.59500    29.680                        109
4985                 4985 F2  2.59500    29.690   -6.04650    198.485 109
                        1 B2  0.21500    30.610

Point                  ID       E           D        Sum E      Sum D Desc
4985                 4985 B1  0.38700    23.600    0.00000      0.000 109
                        1 F1  2.27600    26.940
                        1 F2  2.27600    26.930   -1.88900     50.515
                     4985 B2  0.38700    23.560                        109
                        1 B1  0.24800    43.660
                        1 F1  3.02300    62.480
                        1 F2  3.02200    62.690   -4.66350    156.760
                        1 B2  0.24800    43.660
4960                 4960 S   2.64200    22.800   -4.28300    116.975
4965                 4965 S   1.58400    24.520   -3.22500    118.695
                        1 B1  2.40200    71.480
                        1 F1  1.84700    65.260
                        1 F2  1.84700    65.320   -4.10800    293.550
                        1 B2  2.40300    71.520
                        1 B1  1.73200    15.050
                     5080 F1  1.18600    18.430
5080                 5080 F2  1.18600    18.420   -3.56200    327.025
                        1 B2  1.73200    15.050

Process completed with 0 errors and 0 warnings.
```

Using the ".POINT" Inline Option

The ".POINT" inline allows you to assign a point name to a station and force it to be handled as a benchmark station (rather than as a turning point). Therefore, you can use the ".POINT" inline in conjunction with a naming scheme set on the program dialog, or as the sole method for defining which points are to be considered level line benchmark stations. When used in conjunction with the naming scheme defined in the "Benchmark Stations Defined By" dialog, the inline option always takes precedent over the scheme defined in the dialog for a particular station.

The ".POINT" inline can also be used to simply "rename" a sideshot name.

The Inline Option format is: ".POINT Name" where Name is the point name you want assigned to the benchmark (or sideshot). The name must conform to the general naming conventions used in the STAR*NET program. Like all inline options, the Point inline begins with a "." character and can be abbreviated to as little as one character (i.e. ".P") as long as it can be differentiated from other inline options available within the program.

The ".POINT" inline option can be inserted before or after a "Set" of observations. A "Set" is the sequence of backsights and foresights taken at an instrument setup. Normal mode sets contain BF sequences; "double-run" mode sets contain four observations such as BFFB sequences.

When this inline appears before a set, the backsight point in the set will be handled as level line station. And when the inline appears after a set, the foresight point in the set will be handled as a level line station. Therefore, if this single inline option appears between two sets, the foresight of the first set and the backsight of the next set will be handled as the same level line station.

Example locations of ".POINT" inlines in BF and BFFB mode sequences:

```
.POINT  BF BF BF BF BF  .POINT  BF BF BF BF  .POINT  etc.

.POINT  BFFB BFFB BFFB BFFB  .POINT  BFFB BFFB BFFB  .POINT  etc.
```

The ".POINT" inline option can also be used to "rename" sideshots in a field file. To assign a new point name to a sideshot, edit in the inline option directly after a sideshot observation line in the field file. For example, the following sequence illustrates the location of sideshot observations indicated by "S" characters and the ".POINT" inlines that affect them:

```
... BFFB BFFB BFFB S .POINT S .POINT  BFFB BFFB etc.
```

Again, the ".POINT" inline when used for sideshots, is only to change the sideshot name.

See examples of renaming two sideshot points in the example on the next page.

Example Input File (Using the ".POINT" inline option)

The TestDINI-2.raw file was also included to illustrate the use of the ".POINT" inline option.

This is the same RAW file as the first example but with the first few lines deleted so as to easily fit on this page. This example illustrates the ".POINT" inline option used to define which points are to be considered benchmarks. When this inline is entered, the new point name is used and that point becomes a benchmark. This inline can be entered before the "first" and/or after the "last" point in a survey leveling sequence, and "between" sequences of shots defining the foresight and backsight shots to the same point. In the sequence below, for example, the ".P 33002" inline is the target of the foresights in the set above and the backsights in the set below.

The ".POINT" inline option can be used in a field file to entirely define which points are the bench points or used along with the "Benchmark Stations Defined By" options dialog.

```
     64 Curva  ON/Refract  ON
     65 Start-Line       BFFB   101
.P 33001
     87     4990    0           101                                  Z  2175.877
     88     4990    0           101 Rb       1.234 HD        30.46
     89        1    0           101 Rf       2.257 HD        29.57
     90        1    0           101 Rf       2.258 HD        29.54
     91     4990    0           101 Rb       1.234 HD        30.50
     92        1    0           101                                  Z  2174.853
     93        1    0           101 Rb       0.605 HD        38.01
     94        1    0           101 Rf       3.248 HD        40.21
     95        1    0           101 Rf       3.248 HD        40.16
     96        1    0           101 Rb       0.605 HD        37.95
     97        1    0           101                                  Z  2172.210
     98        1    0           101 Rb       0.215 HD        30.59
     99     4985  109           101 Rf       2.595 HD        29.68
    100     4985  109           101 Rf       2.595 HD        29.69
    101        1    0           101 Rb       0.215 HD        30.61
.P 33002
    102     4985  109           101                                  Z  2169.830
    103     4985  109           101 Rb       0.387 HD        23.60
    104        1    0           101 Rf       2.276 HD        26.94
    105        1    0           101 Rf       2.276 HD        26.93
    106     4985  109           101 Rb       0.387 HD        23.56
    107        1    0           101                                  Z  2167.941
    108        1    0           101 Rb       0.248 HD        43.66
    109        1    0           101 Rf       3.023 HD        62.48
    110        1    0           101 Rf       3.022 HD        62.69
    111        1    0           101 Rb       0.248 HD        43.66
    112        1    0           101                                  Z  2165.167
    113 Intermediate sight.      101
    114     4960    0           101 Rz       2.642 HD        22.80 Z  2165.547
.P ABC06
    115     4965    0           101 Rz       1.584 HD        24.52 Z  2166.605
.P 33007
    116 End of interm. sight.    101
    118        1    0           101 Rb       2.402 HD        71.48
    119        1    0           101 Rf       1.847 HD        65.26
    120        1    0           101 Rf       1.847 HD        65.32
    121        1    0           101 Rb       2.403 HD        71.52
    122        1    0           101                                  Z  2165.723
    123        1    0           101 Rb       1.732 HD        15.05
    124     5080    0           101 Rf       1.186 HD        18.43
    125     5080    0           101 Rf       1.186 HD        18.42
    126        1    0           101 Rb       1.732 HD        15.05
    127     5080    0           101                                  Z  2166.269
    128     5080    0  26       101 Sr     1138.71 Sv      1148.46 Z  2166.269
.P 34005
    129 End-Line                 101
```

Example Output Files (Resulting from using the ".POINT" inline option)

Here is the resulting "TestDINI-2.dat" file created by the example STAR*DINI run.

```
# STAR*Dini Version 7.2.2
# Copyright 2011 MicroSurvey Software Inc.

# Input Field File : C:\RawData\TestDINI.raw
# Date Processed   : 03-14-2007 16:25:09

.Units  FeetUS
.Sep    -
.3D

#  Elevation Difference Records
#  Stations                          Diff    Dist  Descriptor
L  33001-33002                    -6.04650   198 '109
L  33002-ABC06                    -4.28300   117
L  33002-33007                    -3.22500   119
```

```
L  33002-34005                        -3.56200   327
```

And the resulting log file created by this example STAR*DINI run.

```
STAR*Dini Version 7.2.2
Copyright 2011 MicroSurvey Software Inc.

Input Field File : C:\RawData\TestDINI.raw
Output Data File : C:\RawData\TestDINI-2.dat
Date Processed   : 03-14-2007 16:25:09

Point                 ID       E           D        Sum E      Sum D Desc
33001               4990 B1  1.23400    30.460    0.00000      0.000
                       1 F1  2.25700    29.570
                       1 F2  2.25800    29.540   -1.02350     60.035
                    4990 B2  1.23400    30.500
                       1 B1  0.60500    38.010
                       1 F1  3.24800    40.210
                       1 F2  3.24800    40.160   -3.66650    138.200
                       1 B2  0.60500    37.950
                       1 B1  0.21500    30.590
                    4985 F1  2.59500    29.680                        109
33002               4985 F2  2.59500    29.690   -6.04650    198.485 109
                       1 B2  0.21500    30.610

Point                 ID       E           D        Sum E      Sum D Desc
33002               4985 B1  0.38700    23.600    0.00000      0.000 109
                       1 F1  2.27600    26.940
                       1 F2  2.27600    26.930   -1.88900     50.515
                    4985 B2  0.38700    23.560                        109
                       1 B1  0.24800    43.660
                       1 F1  3.02300    62.480
                       1 F2  3.02200    62.690   -4.66350    156.760
                       1 B2  0.24800    43.660
ABC06               4960 S   2.64200    22.800   -4.28300    116.975
33007               4965 S   1.58400    24.520   -3.22500    118.695
                       1 B1  2.40200    71.480
                       1 F1  1.84700    65.260
                       1 F2  1.84700    65.320   -4.10800    293.550
                       1 B2  2.40300    71.520
                       1 B1  1.73200    15.050
                    5080 F1  1.18600    18.430
34005               5080 F2  1.18600    18.420   -3.56200    327.025
                       1 B2  1.73200    15.050

Process completed with 0 errors and 0 warnings.
```

Setting Up a Descriptor Library (Optional)

If you use descriptor codes in your collected field file, these short codes are automatically used as descriptors in the data created for STAR*NET by the STAR*DINI program. However if you create an optional “Descriptor Library” file, any of these short descriptor codes found in the library will be translated into expanded text descriptors. Here's how to do this.

To create a descriptor translation file, use a text editor to create a file with a “DES” extension. This file may be located in any directory you feel convenient. Edit a list of your own descriptors into this file. Each line should contain a code followed by the text you want used as the expanded descriptor. The code may be from 1 to 5 characters long, and may be a number or text. The descriptor text may be up to 45 characters long. Separate the code from the descriptor by one or more spaces or tabs. Blank lines in the file as well as lines beginning with a # character will be ignored. Here's how a short descriptor library file might look:

```
#File John.des with John’s Special Descriptors

101Benchmark
102Edge of Pavement
103Fire Hydrant
104Wood Stake
WSWood Stake
201Oak 12” Diameter
205Big Pine Tree
etc...
```

You may create one of more of these descriptor translation files.