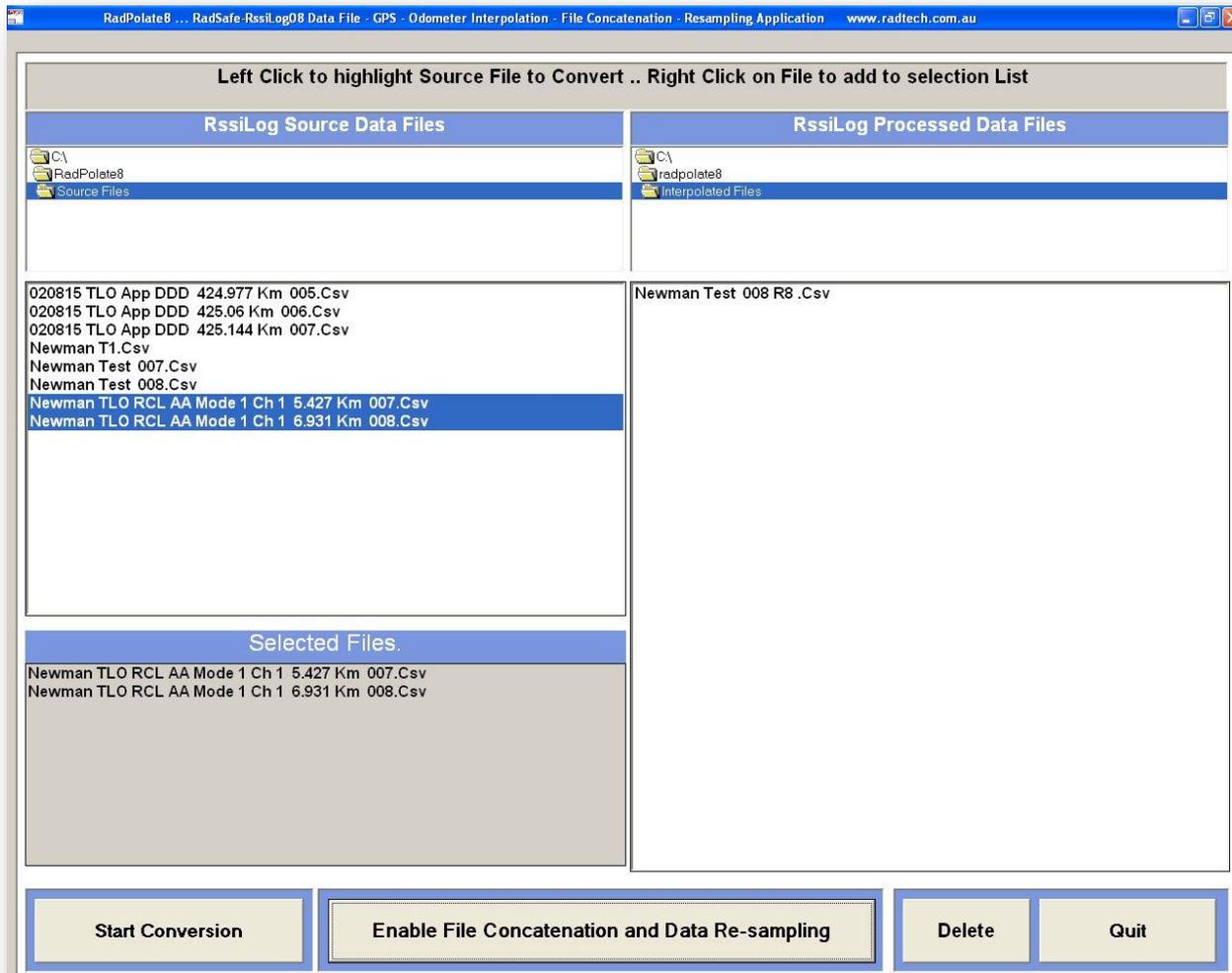




## RadPolate8. RssiLog Data processing software.



This application is used to interpolate RssiLog08 Data at GPS positions between GPS fixes.

As GPS position data and odometer Km are updated once per second and RssiLog08 can generate data at up to around 100 samples per second (*depending on PC used*), it is necessary to assign each data record its own discrete position to achieve a meaningful high resolution display of actual Rssi levels over a route or area.

**RadPolate8** achieves this by reading data files, calculating the position of each data record then writing a new file using the calculated and assigned positions.

This application also has the facility to concatenate a number of data files and to re-sample the recorded data if required.

The original data files are preserved as well.

**RssiLog** systems do NOT perform any averaging etc of the recorded RF levels as experience has shown that this significantly degrades the accuracy of the recorded levels; generally causing the level to be recorded at a higher level than is actually extant at that location.

**RadPolate8** generates new files containing only data relevant to a plot or Spreadsheet graphic. All recorded original data fields are available in the "Source" Files.

## Using RadPolate8

### Selecting Files for processing.

1. Copy the files to interpolate into the "Source File" directory.
2. Select the first file to process by left-clicking on the file in the "Source File" directory.
3. Copy the selected file to the "Remaining Files" display by right-clicking on the selected file.
4. The selected file name is displayed in the "Remaining Files" display.
5. Repeat from (2) until all the required files are listed in the "Remaining Files" display.
6. If Concatenation and/or re-sampling is required, press the Enable button.
7. Enter an appropriate filename for the concatenated file.
8. Enter the required re-sampling rate.
9. Press "Start Conversion" button to commence processing.
10. Progress is shown in the status bar.
11. File names of processed data files are shown in the "Processed Files" display.
12. Files remaining to be processed are shown in the "Remaining Files" display.
13. When processing is completed, no file names are shown in the "remaining Files" display.

**NOTE:-** Radpolate8 processes selected files in the order in which they have been selected, i.e. from top to bottom as shown in the list of Remaining Files. If the user intends to concatenate files, it is vital that the files are listed in the required order, from top to bottom in the Remaining Files list or the concatenated data files may not be contiguous and be un-useable.

### Concatenation and Re-Sampling.

The concatenation process causes the data files being processed to re-written as a single, user named, data file and the suffix "Pol8 CC " is appended to the user file name.

Re-Sampling causes the concatenated data file to be generated using only the user selected rate. i.e. Re-Sampling rate 5 causes every fifth data record to be added to the concatenated file while a re-sampling rate of 0 causes every data record to be added to the concatenated file.

All processed file names are shown in the "Processed Data Files" display/directory. All processed data files have the suffix "Pol8" appended to the filename.

RadPolate8 is designed to concatenate up to 10 data files of 20000 records per file but 5 "Source" files per concatenated file is recommended.

Re-Sampling reduces the concatenated file size by the selected re-sampling rate. I.e. re-sampling rate of 5 will reduce files size by 80% of "Source Files", with minimum loss of effective resolution. If maximum resolution is desired, such can be obtained by using the processed, un-concatenated and un-re-sampled "Pol8" data files shown in the "processed Files" folder/display.

### De-select a selected file.

Left Click on the file name in the "Selected Files" list to move it to "Source Files" list.

### Delete.

To delete a file, select it using the left mouse button, then press the Delete button.