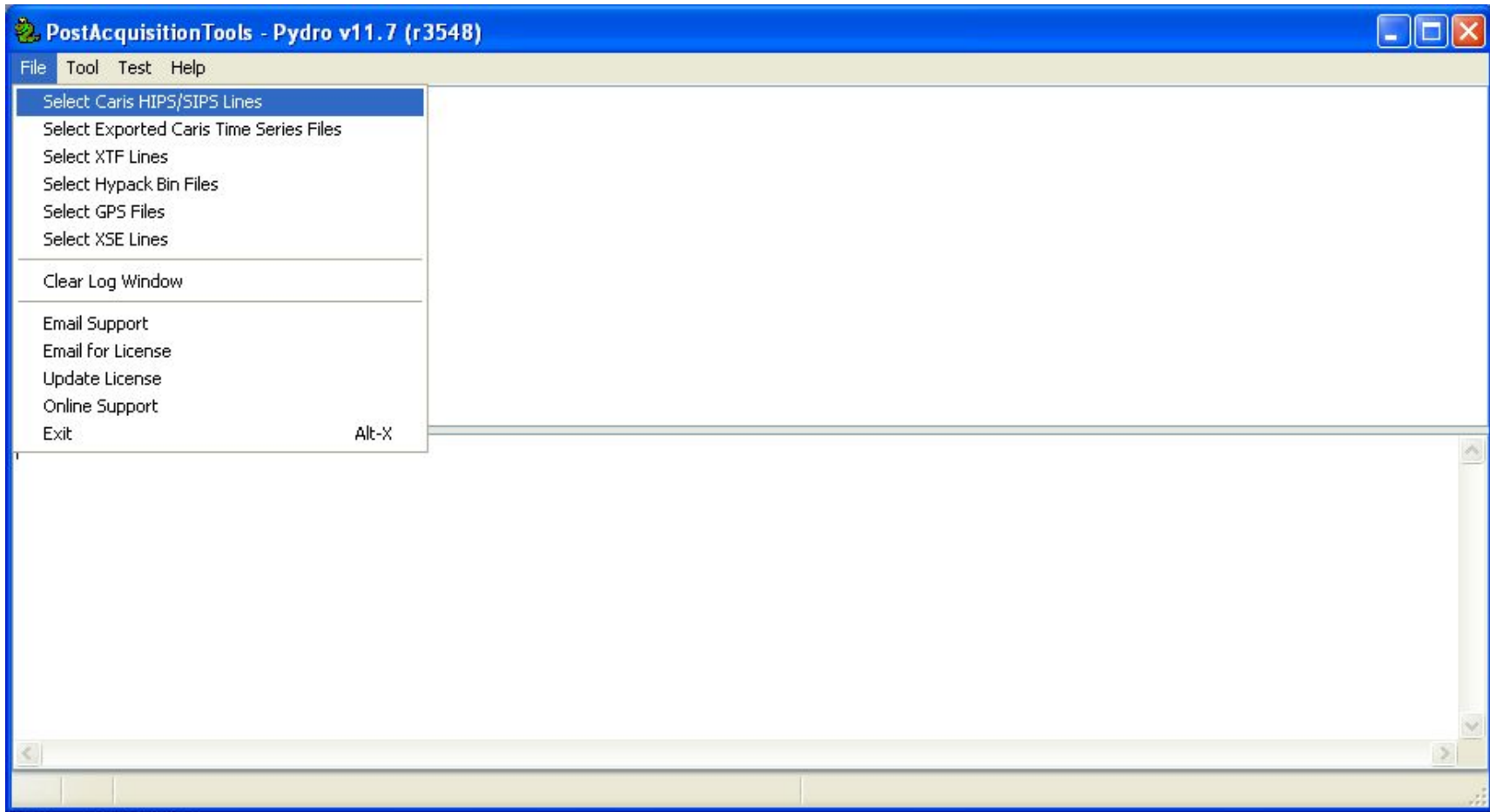


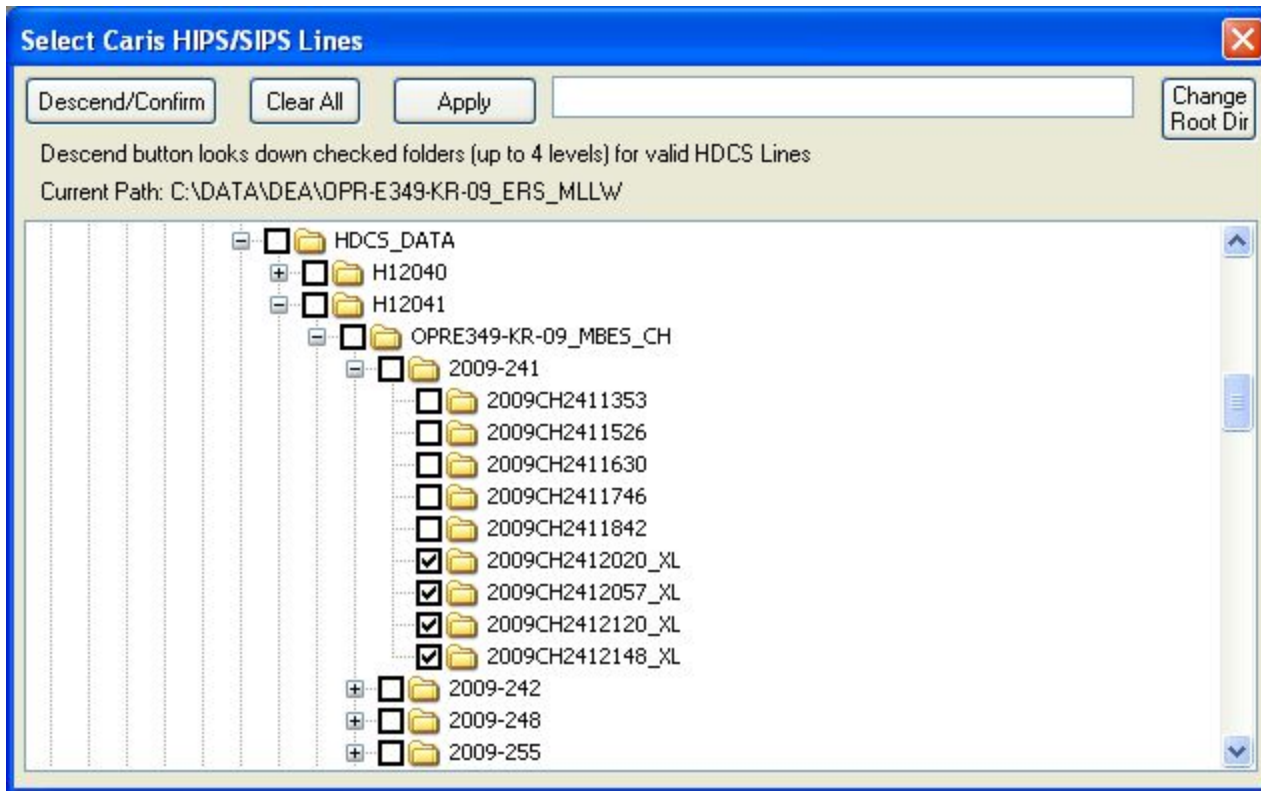
PostAcquisitionTools Export/Compare Exported Time Series Data

First, you must export export CARIS HDCS time series data as follows:

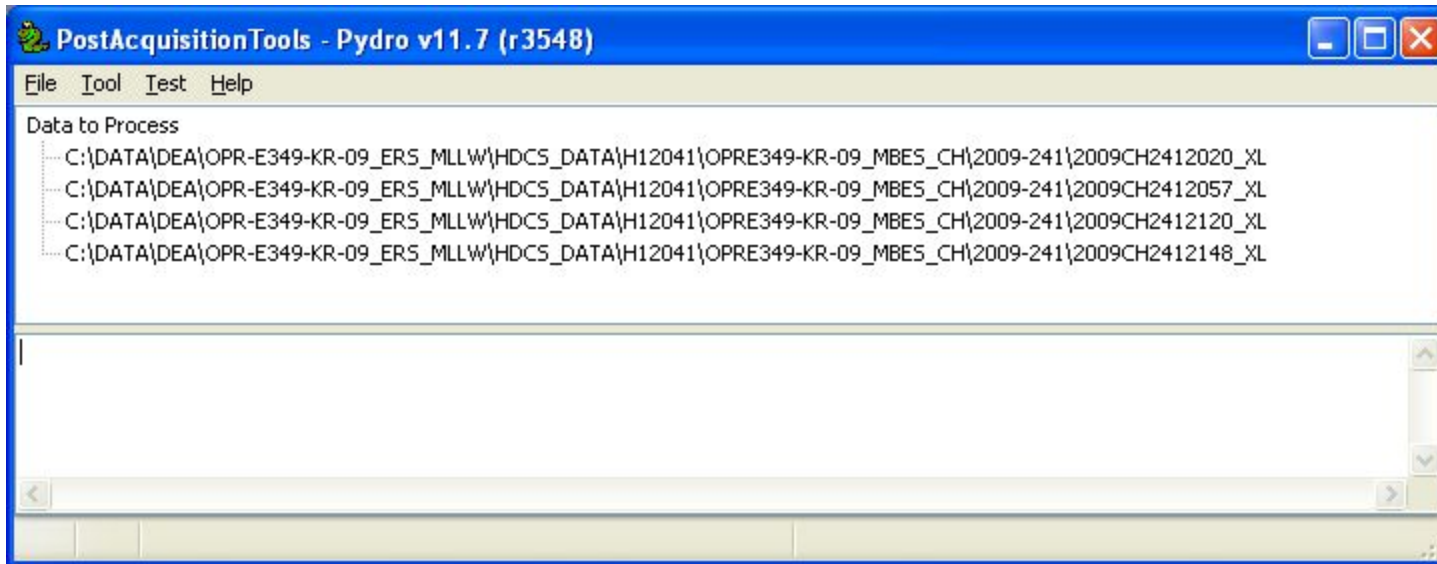
- 1) File -> 'Select Caris HIPS/SIPS Lines'



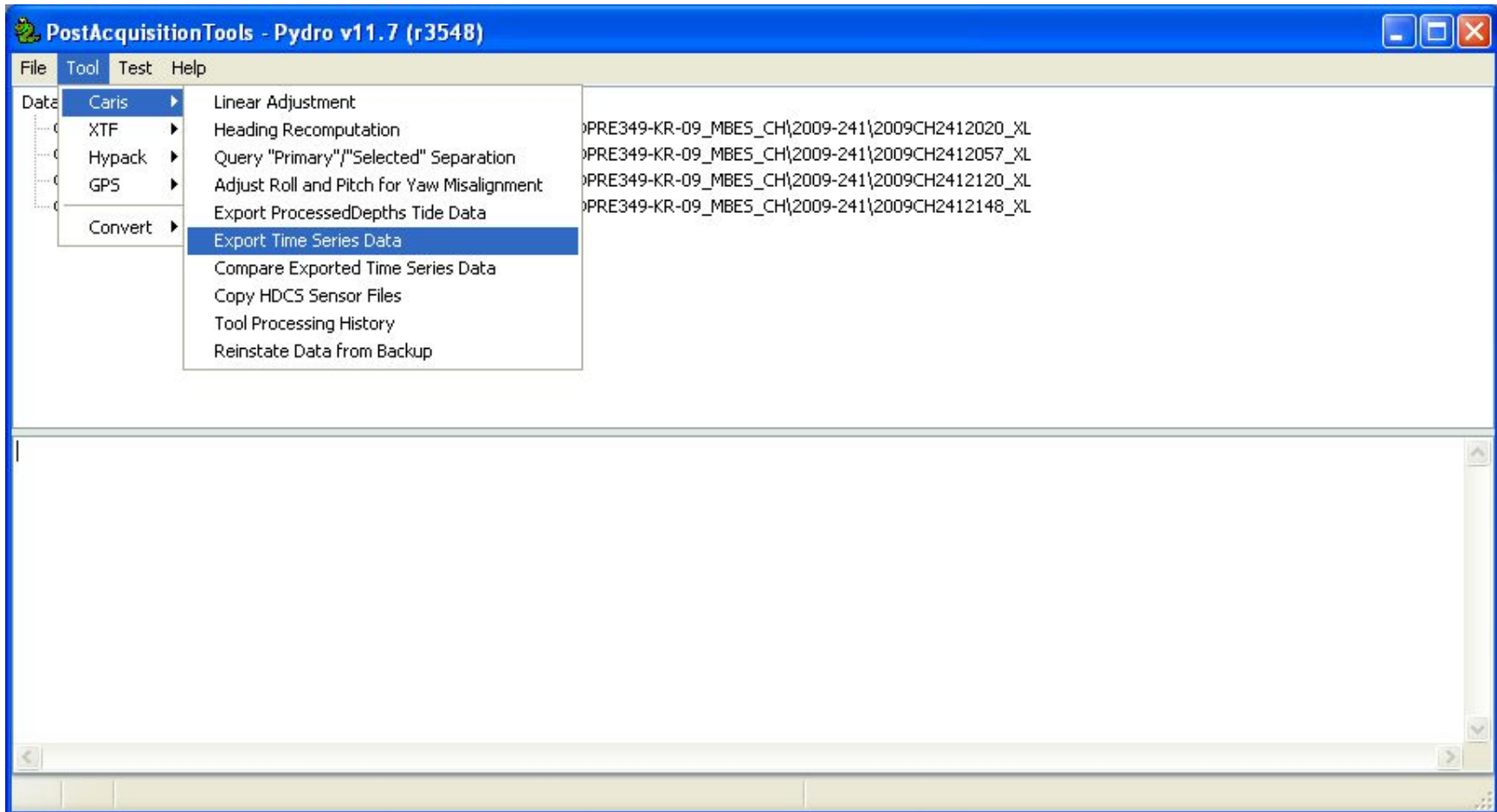
2) Check, Descend/Confirm, & Apply to select all the HDCS lines



NOTE: You will see your list of lines in the 'Data to Process' section. If you want to remove line(s) from this list, select via clicks +Ctrl key for random select, and +Shift to range-select; then press your <Delete> key.



3) Use Tool -> Caris -> 'Export Time Series Data', followed by...



3) (con't) ...a selection of the desired HDCS "sensors" on the next dialog. E.g., if you want to compare processed depth data between (say) non-ERS and ERS data, select the 'MiddlePD' sensor. The prefix 'Middle' means that the beam number half-way through the swath is extracted. The intention is that all beams are affected equally across the swath for depth-based sensor data, so any particular beam number works; PostAcquisitionTools uses the middle one.



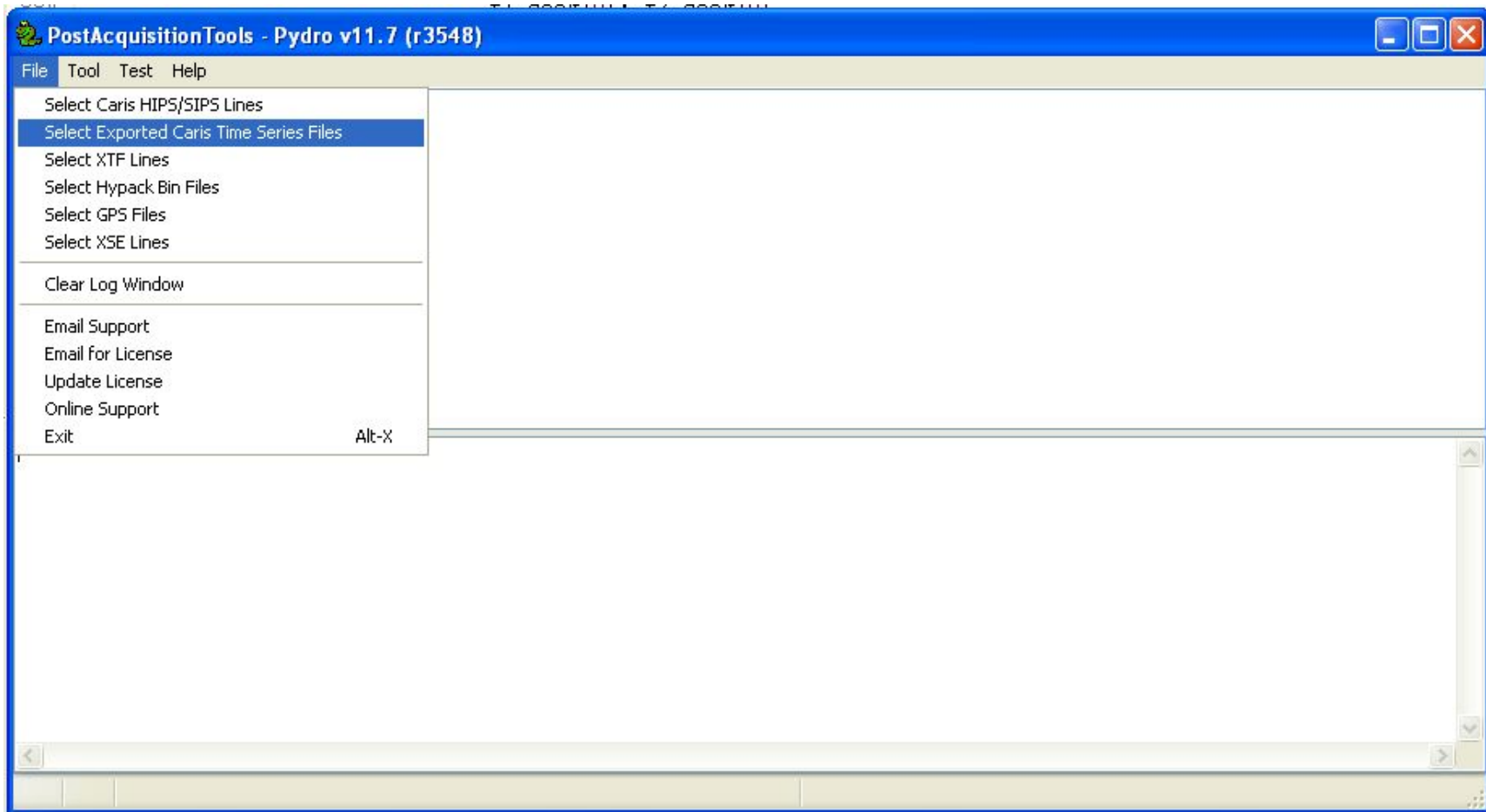
3) (con't) Next, choose the output data file location and naming base/prefix. Tool -> Caris -> 'Export Time Series' outputs data to files organized by vessel-sensor, named according to the following convention:

<your prefix>_<HVF name>_<HDCS Sensor>.txt

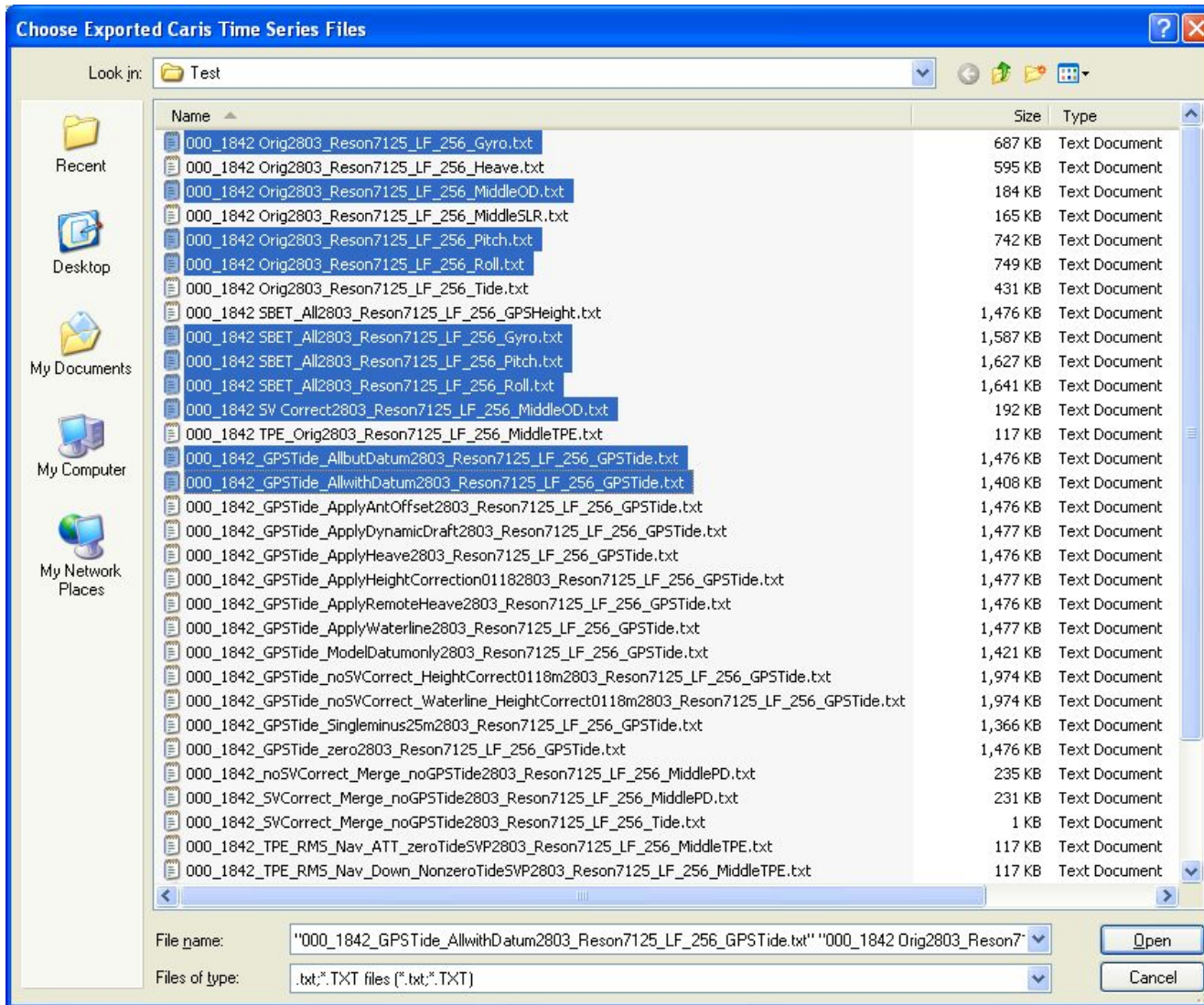
NOTE: It is important to leave at least the *_<HDCS Sensor>.txt naming intact, for the Tool-> Caris-> 'Compare Exported Time Series Data' makes use of this naming convention to organize statistics.

Compare the HDCS time series data exported previously, per above, as follows:

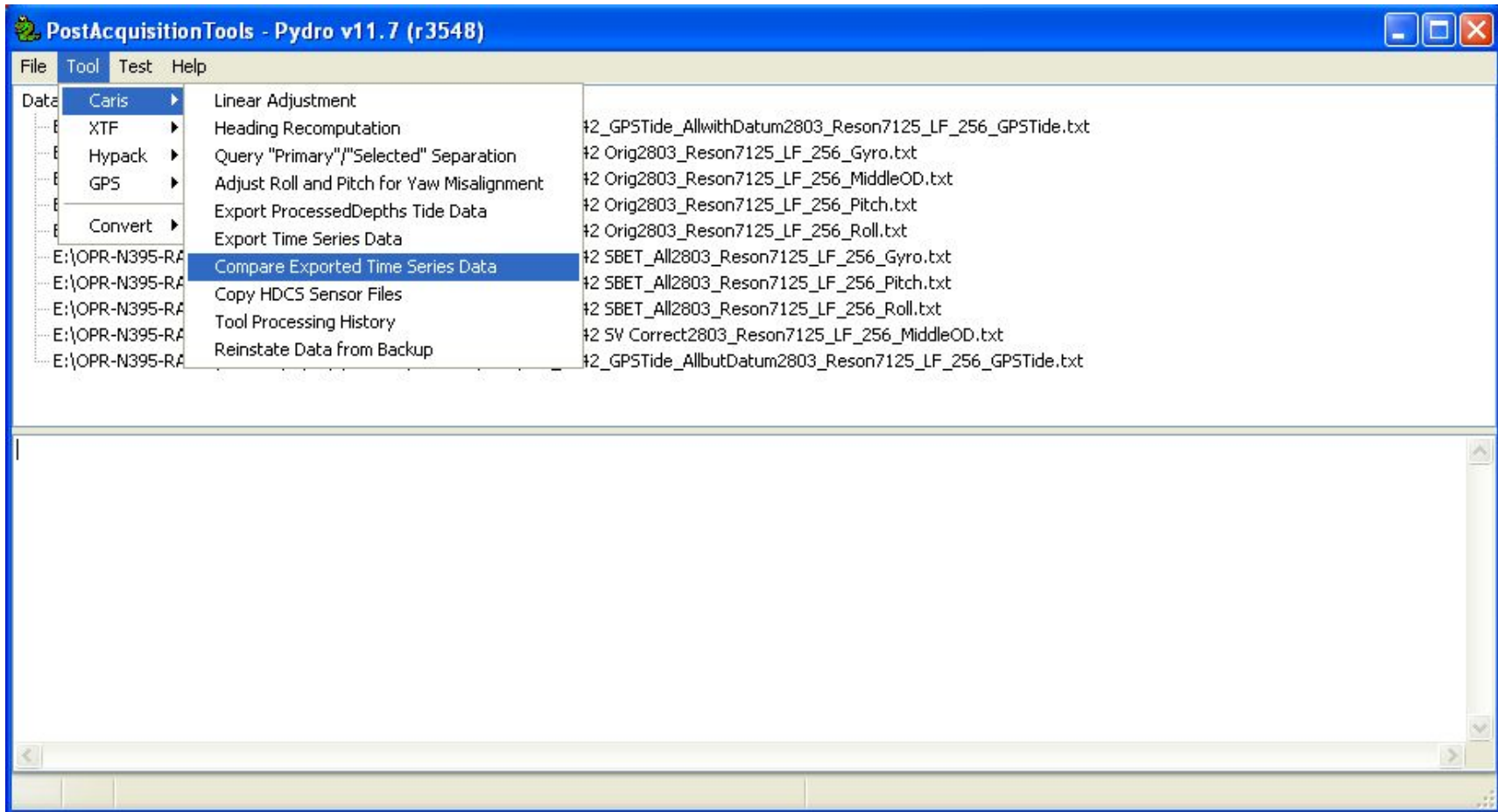
1) Tool-> Caris-> 'Compare Exported Time Series Data'



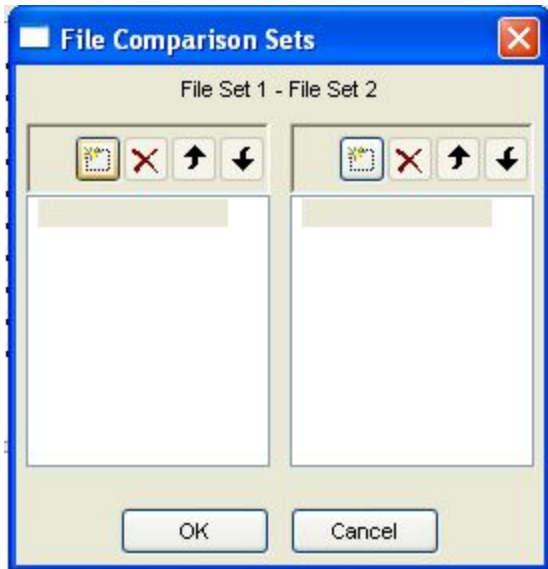
1) (con't) Select the complete set of lines to be involved in the comparison; later, you will separate this list of files into two sets for 1:1 comparison.



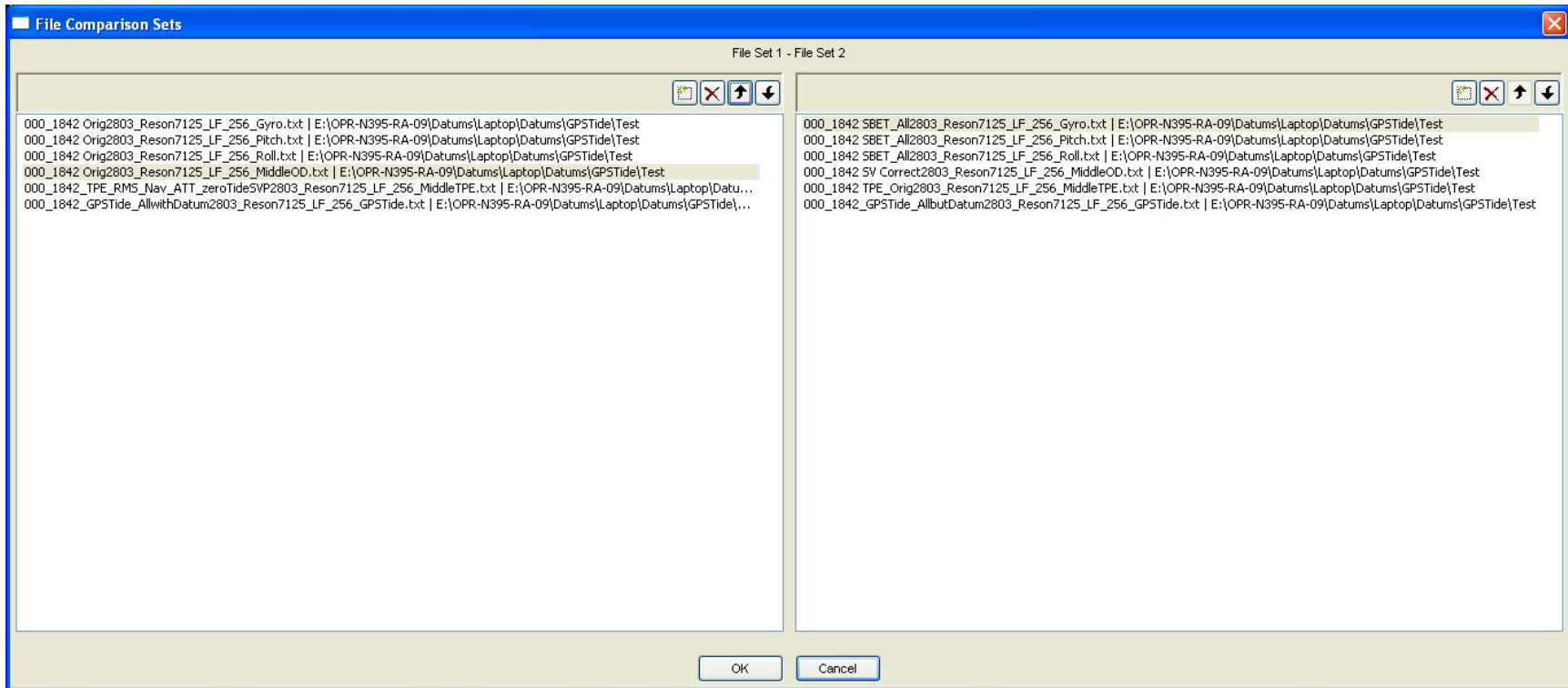
2) Tool -> Caris -> 'Compare Exported Time Series Data'



2) (a) Use the left-most button (tooltip 'Pick from Processing List') on the File Set 1 & 2 EditableListBox controls in the dialog following to set up which files will compare to which. Use the Up/Down Arrow buttons to sort each file set list such that you have a 1:1 correspondence with the appropriate comparison: File Set 1 - (minus) File Set 2



3) Once your comparison ordering is established, press the 'OK' button to perform the statistical comparison.



Statistics are output to the LogWindow--on the lower half of the PostAcquisitionTools window frame.
For example, here are some examples:

EXAMPLE 1:

Invalid Comparisons

```
000_1842 Orig2803_Reson7125_LF_256_Gyro.txt | E:\OPR-N395-RA-09\Datums\Laptop\Datums\GPSTide\Test
- (minus)
000_1842 SBET_All2803_Reson7125_LF_256_Gyro.txt | E:\OPR-N395-RA-09\Datums\Laptop\Datums\GPSTide\Test

000_1842 Orig2803_Reson7125_LF_256_Pitch.txt | E:\OPR-N395-RA-09\Datums\Laptop\Datums\GPSTide\Test
- (minus)
000_1842 SBET_All2803_Reson7125_LF_256_Pitch.txt | E:\OPR-N395-RA-09\Datums\Laptop\Datums\GPSTide\Test

000_1842 Orig2803_Reson7125_LF_256_Roll.txt | E:\OPR-N395-RA-09\Datums\Laptop\Datums\GPSTide\Test
- (minus)
000_1842 SBET_All2803_Reson7125_LF_256_Roll.txt | E:\OPR-N395-RA-09\Datums\Laptop\Datums\GPSTide\Test
```

File-wise Statistics

```
000_1842 Orig2803_Reson7125_LF_256_MiddleOD.txt | E:\OPR-N395-RA-09\Datums\Laptop\Datums\GPSTide\Test
- (minus)
000_1842 SV Correct2803_Reson7125_LF_256_MiddleOD.txt | E:\OPR-N395-RA-09\Datums\Laptop\Datums\GPSTide\Test
=====
N,mean,stdev = 3771,-0.535,0.040

000_1842_GPSTide_AllwithDatum2803_Reson7125_LF_256_GPSTide.txt | E:\OPR-N395-RA-09\Datums\Laptop\Datums\GPSTide\Test
- (minus)
000_1842_GPSTide_AllbutDatum2803_Reson7125_LF_256_GPSTide.txt | E:\OPR-N395-RA-09\Datums\Laptop\Datums\GPSTide\Test
=====
N,mean,stdev = 56627,23.998,0.045
```

Sensor-wise Statistics

```
MiddleOD: N,mean,stdev = 3771,-0.535,0.040
GPSTide: N,mean,stdev = 56627,23.998,0.045
```

EXAMPLE 2:

Invalid Comparisons

<None>

File-wise Statistics

OPR-E349-KR-10_OPRE349-KR-10_MBES_CH_MiddlePD.txt | E:\OPR-E349-KR-10_CentralChesBayMD\VDatumCheck

- (minus)

OPR-E349-KR-10_OPRE349-KR-10_MBES_CH_Zoned_MiddlePD.txt | E:\OPR-E349-KR-10_CentralChesBayMD\VDatumCheck

=====

N,mean,stdev = 61565,0.019,0.023

Sensor-wise Statistics

MiddlePD: N,mean,stdev = 61565,0.019,0.023

EXAMPLE 3:

Invalid Comparisons

<None>

File-wise Statistics

OPR-N395-RA-09tcari1predtides1101_Reson8125_Tide.txt | E:\ERS

- (minus)

OPR-N395-RA-09tcari2predtides1101_Reson8125_Tide.txt | E:\ERS

=====

N,mean,stdev = 382,-0.008,0.104

OPR-N395-RA-09tcari1predtides1103_Singlebeam_HVF_Tide.txt | E:\ERS

- (minus)

OPR-N395-RA-09tcari2predtides1103_Singlebeam_HVF_Tide.txt | E:\ERS

=====

N,mean,stdev = 243,-0.063,0.043

OPR-N395-RA-09tcari1predtides2801_Reson7125_LF_256_Tide.txt | E:\ERS

- (minus)

OPR-N395-RA-09tcari2predtides2801_Reson7125_LF_256_Tide.txt | E:\ERS

=====

N,mean,stdev = 685,-0.014,0.107

OPR-N395-RA-09tcari1predtides2802_Reson7125_HF_512_Tide.txt | E:\ERS

- (minus)

OPR-N395-RA-09tcari2predtides2802_Reson7125_HF_512_Tide.txt | E:\ERS

=====

N,mean,stdev = 343,-0.102,0.085

OPR-N395-RA-09tcari1predtides2802_Reson7125_LF_256_Tide.txt | E:\ERS

- (minus)

OPR-N395-RA-09tcari2predtides2802_Reson7125_LF_256_Tide.txt | E:\ERS

=====

N,mean,stdev = 228,0.100,0.042

OPR-N395-RA-09tcari1predtides2803_Reson7125_HF_512_Tide.txt | E:\ERS

- (minus)

OPR-N395-RA-09tcari2predtides2803_Reson7125_HF_512_Tide.txt | E:\ERS

=====

N,mean,stdev = 516,0.043,0.064

OPR-N395-RA-09tcari1predtides2803_Reson7125_LF_256_Tide.txt | E:\ERS
- (minus)
OPR-N395-RA-09tcari2predtides2803_Reson7125_LF_256_Tide.txt | E:\ERS
=====
N,mean,stdev = 1288,-0.088,0.076

OPR-N395-RA-09tcari1predtides2804_Reson7125_HF_512_Tide.txt | E:\ERS
- (minus)
OPR-N395-RA-09tcari2predtides2804_Reson7125_HF_512_Tide.txt | E:\ERS
=====
N,mean,stdev = 563,-0.003,0.075

OPR-N395-RA-09tcari1predtides2804_Reson7125_LF_256_Tide.txt | E:\ERS
- (minus)
OPR-N395-RA-09tcari2predtides2804_Reson7125_LF_256_Tide.txt | E:\ERS
=====
N,mean,stdev = 1954,-0.030,0.110

OPR-N395-RA-09tcari1verifiedtides1101_Reson8125_Tide.txt | E:\ERS
- (minus)
OPR-N395-RA-09tcari2verifiedtides1101_Reson8125_Tide.txt | E:\ERS
=====
N,mean,stdev = 382,-0.008,0.104

OPR-N395-RA-09tcari1verifiedtides1103_Singlebeam_HVF_Tide.txt | E:\ERS
- (minus)
OPR-N395-RA-09tcari2verifiedtides1103_Singlebeam_HVF_Tide.txt | E:\ERS
=====
N,mean,stdev = 243,-0.063,0.043

OPR-N395-RA-09tcari1verifiedtides2801_Reson7125_LF_256_Tide.txt | E:\ERS
- (minus)
OPR-N395-RA-09tcari2verifiedtides2801_Reson7125_LF_256_Tide.txt | E:\ERS
=====
N,mean,stdev = 685,-0.014,0.107

OPR-N395-RA-09tcari1verifiedtides2802_Reson7125_HF_512_Tide.txt | E:\ERS
- (minus)
OPR-N395-RA-09tcari2verifiedtides2802_Reson7125_HF_512_Tide.txt | E:\ERS
=====
N,mean,stdev = 343,-0.102,0.085

OPR-N395-RA-09tcari1verifiedtides2802_Reson7125_LF_256_Tide.txt | E:\ERS
- (minus)
OPR-N395-RA-09tcari2verifiedtides2802_Reson7125_LF_256_Tide.txt | E:\ERS
=====
N,mean,stdev = 228,0.100,0.042

OPR-N395-RA-09tcari1verifiedtides2803_Reson7125_HF_512_Tide.txt | E:\ERS
- (minus)
OPR-N395-RA-09tcari2verifiedtides2803_Reson7125_HF_512_Tide.txt | E:\ERS
=====
N,mean,stdev = 516,0.043,0.064

OPR-N395-RA-09tcari1verifiedtides2803_Reson7125_LF_256_Tide.txt | E:\ERS
- (minus)
OPR-N395-RA-09tcari2verifiedtides2803_Reson7125_LF_256_Tide.txt | E:\ERS
=====
N,mean,stdev = 1288,-0.088,0.076

OPR-N395-RA-09tcari1verifiedtides2804_Reson7125_HF_512_Tide.txt | E:\ERS
- (minus)
OPR-N395-RA-09tcari2verifiedtides2804_Reson7125_HF_512_Tide.txt | E:\ERS
=====
N,mean,stdev = 563,-0.003,0.075

OPR-N395-RA-09tcari1verifiedtides2804_Reson7125_LF_256_Tide.txt | E:\ERS
- (minus)
OPR-N395-RA-09tcari2verifiedtides2804_Reson7125_LF_256_Tide.txt | E:\ERS
=====
N,mean,stdev = 1954,-0.030,0.110

Sensor-wise Statistics

Tide: N,mean,stdev = 12404,-0.031,0.103