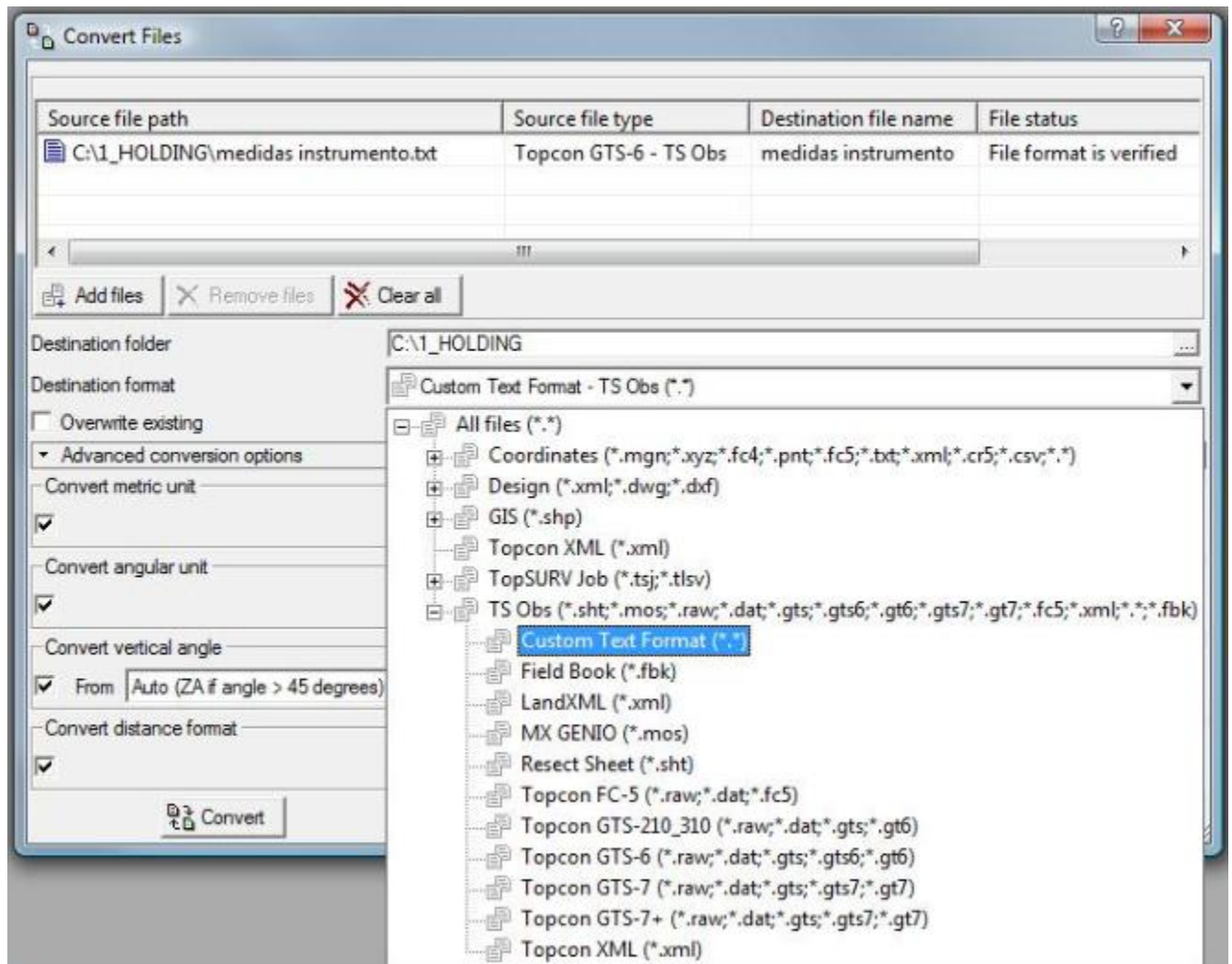


## Suggested Method Of Importing Topcon Conventional Data Into The DCO Editor

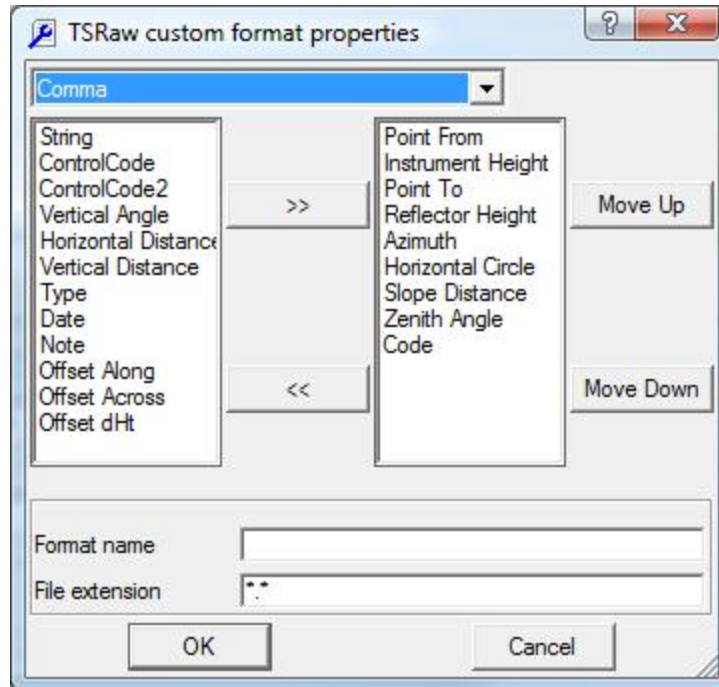
The data import routine for Topcon data relies on a file that is created using the Topcon Link software. The Topcon Link program converts the total station data file to a comma delimited format as described later in this document. The Topcon Link software is a free utility available from the Topcon secure web site:

[http://www.topconsupport.com/secure\\_site/main.php](http://www.topconsupport.com/secure_site/main.php)

If you are not registered, you must do so before downloading the Topcon Link software. Once it is downloaded and installed, you can start it and choose 'Convert Files' from the File menu. Once you do, you will see a dialog as below:



Press the 'Add Files' button and select the file obtained from the total station. Select the Custom Text Format for the output. Make sure the angular unit is set to 'DMS' before the conversion. The columns of the Custom Text Format will default to that shown below:



The column definitions are:

- 1 - The current setup point
- 2 - The HI of the setup point
- 3 - The point being shot
- 4 - The HR of the point being shot
- 5 - [blank]
- 6 - Angle turned
- 7 - Slope distance
- 8 - Zenith Angle
- 9 - Code (name of station)

Here are a couple of records of a file that has been created in this format:

```
2,1.485,1,1.493,,232.03550,419.418,89.02520,A23
2,1.485,1,1.493,,52.04070,419.420,270.56570,A23
```



**Topcon (GTS)**

- You can use the DCO editor to import such a file by using the 'Topcon (GTS)' item from the Import menu. QuikCon will correctly import such a file but relies on the following:

- 1) The current instrument point is defined by the number in the first column. This means each time this value changes, the following records are associated with this new setup number until the number changes again.
- 2) The point being shot is defined by the number in the third column.
- 3) There is at least one back sight record in a setup group and it is the first record in the group.
- 4) There is at least one turn point record in a setup group and it is the last record in the group.

Below is a file that will be imported correctly. Blank lines have been added for clarity. Text in red are comments that do not exist in the file:

```
2,1.485,1,1.493,,232.03550,419.418,89.02520,A23 Note - column 3 indicates '1' as the backsight point
2,1.485,1,1.493,,52.04070,419.420,270.56570,A23 Note - column 3 indicates '1' as the backsight point
```

2,1.485,4,1.493,,232.23350,101.589,92.49190,2135420  
2,1.485,5,1.493,,232.15490,101.704,92.44260,R420+0 Note - column 3 indicates '5' as the foresight point  
2,1.485,5,1.493,,52.15510,101.706,267.15270,R420+0 Note - column 3 indicates '5' as the foresight point

5,1.485,2,1.493,,52.15480,101.708,87.12180,A22 Note - column 3 indicates '2' as the backsight point  
5,1.485,2,1.493,,232.15510,101.707,272.47390,A22 Note - column 3 indicates '2' as the backsight point  
5,1.485,9,1.493,,89.58330,50.152,89.09000,2135421  
5,1.485,12,1.493,,89.58180,67.040,90.22520,R422+33 Note - column 3 indicates '12' as the foresight point  
5,1.485,12,1.493,,269.58160,67.039,269.37080,R422+33 Note - column 3 indicates '12' as the foresight point

12,1.413,5,1.493,,269.58190,67.007,89.28150,R420+0 Note - column 3 indicates '5' as the backsight point  
12,1.413,5,1.493,,89.58080,67.007,270.31250,R422+33 Note - column 3 indicates '5' as the backsight point  
12,1.413,15,1.493,,89.59220,48.142,93.52000,R423+25 Note - column 3 indicates '15' as the foresight point  
12,1.413,15,1.493,,269.59210,48.142,266.08030,R423+25 Note - column 3 indicates '15' as the foresight point  
15,1.487,12,1.493,,269.59210,48.116,86.02310,R422+33 Note - column 3 indicates '12' as the backsight point

15,1.487,12,1.493,,89.59250,48.115,273.57280,R422+32 Note - column 3 indicates '12' as the backsight point  
15,1.487,18,1.493,,270.11320,14.842,88.19190,2135422  
15,1.487,19,1.493,,90.09590,35.648,83.23530,2135423  
15,1.487,20,1.493,,90.18400,85.717,82.08170,2135423  
15,1.487,21,1.493,,90.22430,104.123,82.35040,R425+31 Note - column 3 indicates '21' as the foresight point  
15,1.487,21,1.493,,270.22430,104.123,277.25060,R425+31 Note - column 3 indicates '21' as the foresight point

21,1.435,15,1.493,,270.22430,104.083,97.23110,R425+31, Note - column 3 indicates '15' as the backsight point  
21,1.435,15,1.493,,90.22500,104.084,262.36510,R423+35 Note - column 3 indicates '15' as the backsight point  
21,1.435,26,1.493,,88.47000,33.184,75.54020,2135425  
21,1.435,27,1.493,,89.24370,35.373,76.34500,R426+47 Note - column 3 indicates '27' as the foresight point  
21,1.435,27,1.493,,269.24270,35.373,283.25080,R426+47 Note - column 3 indicates '27' as the foresight point

The file as imported appears below:

	QC	PtID	PCOD	Horz	Zenith	Dist Slope	HiHr	SetupID	Bsld	Code	C
1	<input type="checkbox"/>	1	BS	232.03550	89.02520	419.418	1.493	2	1	A23	
2	<input type="checkbox"/>	1	BS	52.04070	270.56570	419.42	1.493	2	1	A23	
3	<input type="checkbox"/>	2	TO	000.0000	090.0000	0	1.485	2	1	2	
4	<input type="checkbox"/>	4	RP	232.23350	92.49190	101.589	1.493	2	1	2135420	
5	<input type="checkbox"/>	5	FS	232.15490	92.44260	101.704	1.493	2	1	R420+0	
6	<input type="checkbox"/>	5	FS	52.15510	267.15270	101.706	1.493	2	1	R420+0	
7	<input type="checkbox"/>	2	BS	52.15480	87.12180	101.708	1.493	5	2	A22	
8	<input type="checkbox"/>	2	BS	232.15510	272.47390	101.707	1.493	5	2	A22	
9	<input type="checkbox"/>	5	IP	000.0000	090.0000	0	1.485	5	2	5	
10	<input type="checkbox"/>	9	RP	89.58330	89.09000	50.152	1.493	5	2	2135421	
11	<input type="checkbox"/>	12	FS	89.58180	90.22520	67.04	1.493	5	2	R422+33	
12	<input type="checkbox"/>	12	FS	269.58160	269.37080	67.039	1.493	5	2	R422+33	
13	<input type="checkbox"/>	5	BS	269.58190	89.28150	67.007	1.493	12	5	R420+0	
14	<input type="checkbox"/>	5	BS	89.58080	270.31250	67.007	1.493	12	5	R422+33	
15	<input type="checkbox"/>	12	IP	000.0000	090.0000	0	1.413	12	5	12	
16	<input type="checkbox"/>	15	FS	89.59220	93.52000	48.142	1.493	12	5	R423+25	
17	<input type="checkbox"/>	15	FS	269.59210	266.08030	48.142	1.493	12	5	R423+25	
18	<input type="checkbox"/>	12	BS	269.59210	86.02310	48.116	1.493	15	12	R422+33	
19	<input type="checkbox"/>	12	BS	89.59250	273.57280	48.115	1.493	15	12	R422+32	
20	<input type="checkbox"/>	15	IP	000.0000	090.0000	0	1.487	15	12	15	
21	<input type="checkbox"/>	18	RP	270.11320	88.19190	14.842	1.493	15	12	2135422	
22	<input type="checkbox"/>	19	RP	90.09590	83.23530	35.648	1.493	15	12	2135423	
23	<input type="checkbox"/>	20	RP	90.18400	82.08170	85.717	1.493	15	12	2135423	
24	<input type="checkbox"/>	21	FS	90.22430	82.35040	104.123	1.493	15	12	R425+31	
25	<input type="checkbox"/>	21	FS	270.22430	277.25060	104.123	1.493	15	12	R425+31	
26	<input type="checkbox"/>	15	BS	270.22430	97.23110	104.083	1.493	21	15	R425+31	
27	<input type="checkbox"/>	15	BS	90.22500	262.36510	104.084	1.493	21	15	R423+35	
28	<input type="checkbox"/>	21	IP	000.0000	090.0000	0	1.435	21	15	21	
29	<input type="checkbox"/>	26	RP	88.47000	75.54020	33.184	1.493	21	15	2135425	
30	<input type="checkbox"/>	27	FS	89.24370	76.34500	35.373	1.493	21	15	R426+47	
31	<input type="checkbox"/>	27	FS	269.24270	283.25080	35.373	1.493	21	15	R426+47	

You will note that the trailing 'Code' represents the station names so the option to use the code for station name must be set before making the QCN file:

use code for station name and not Point ID when making QCN and SEG