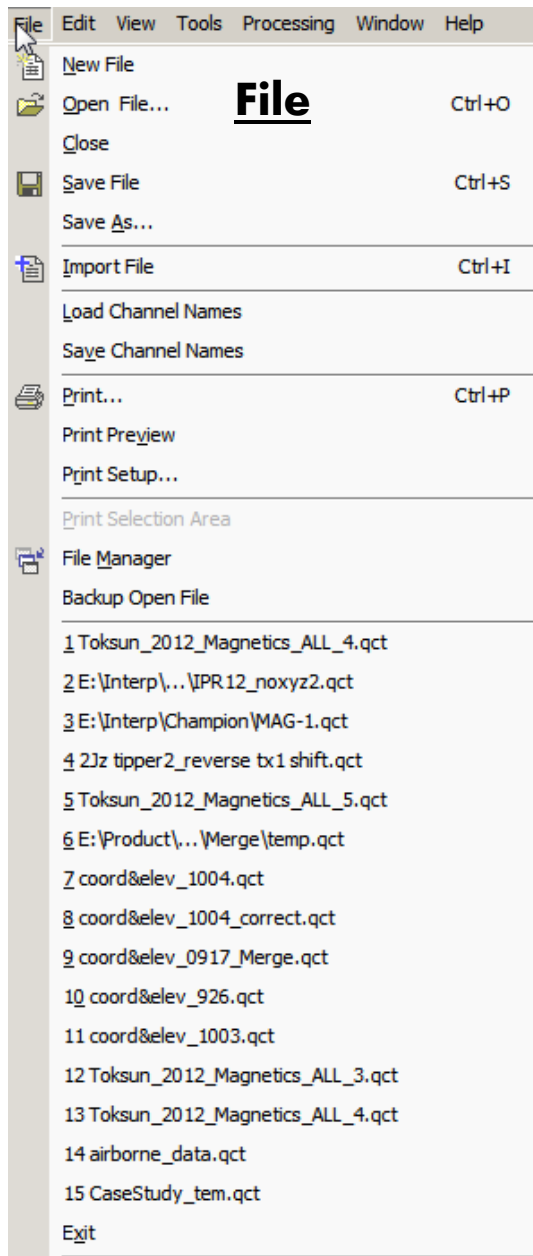
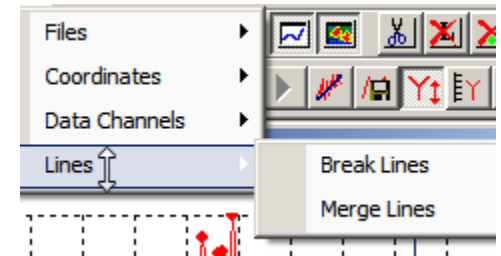
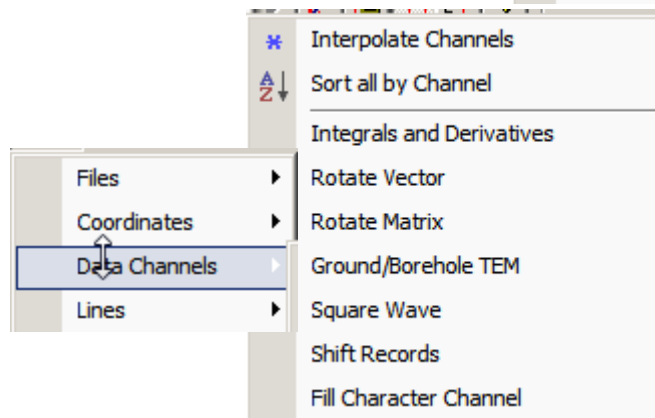
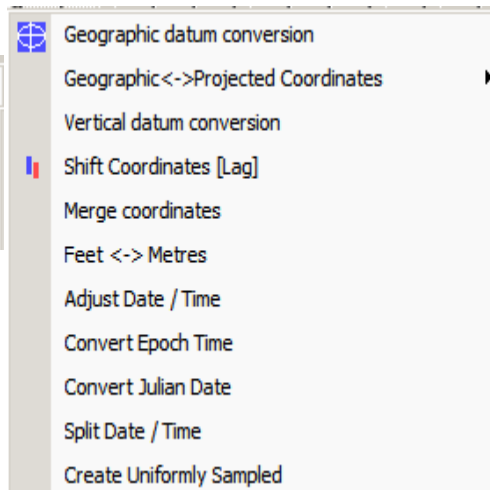
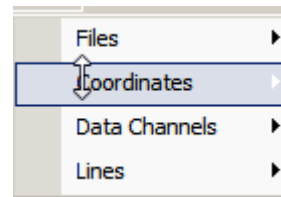
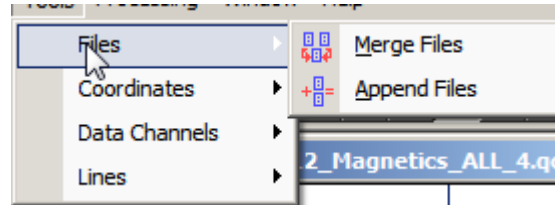


QCTool Overview



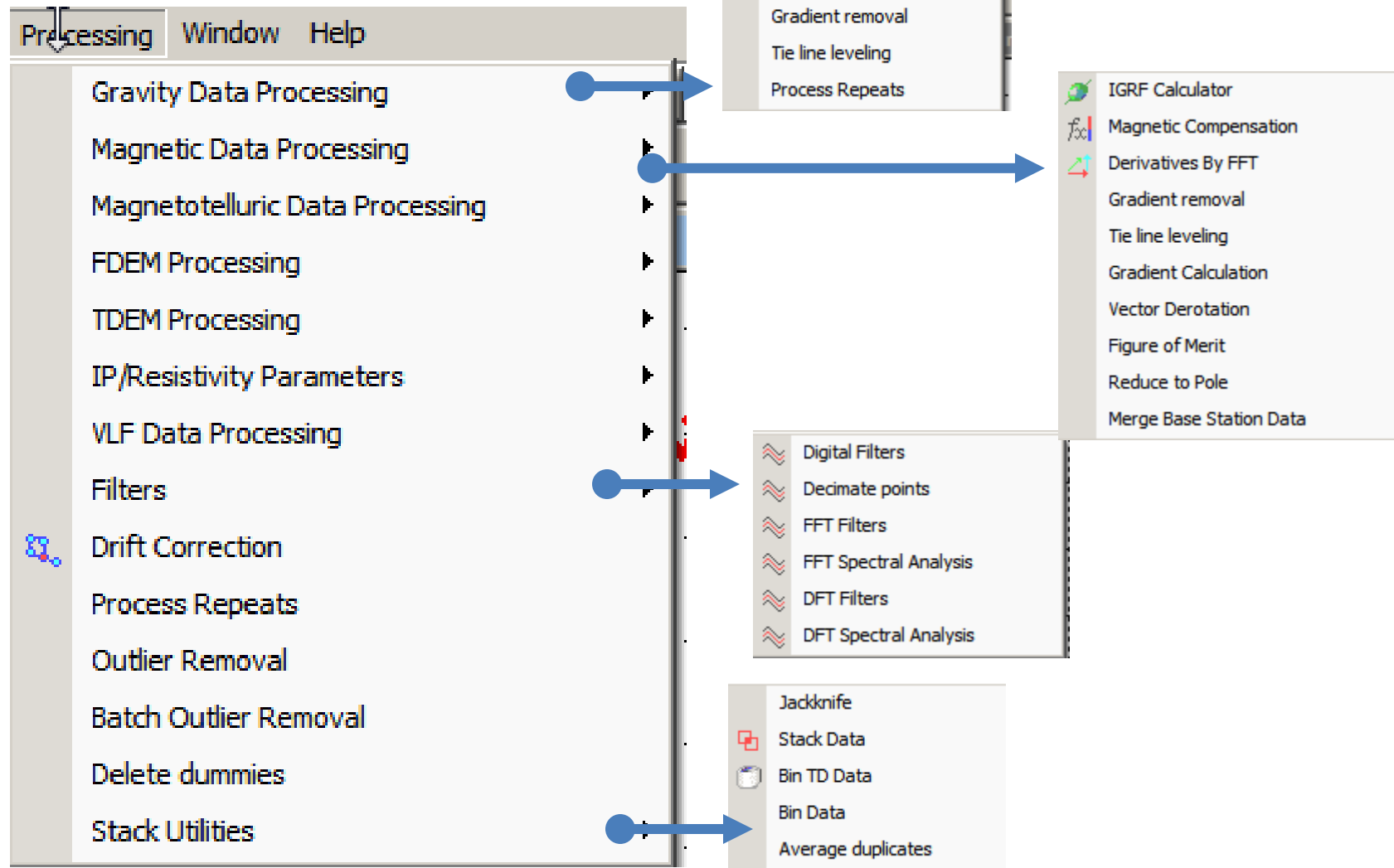
Tools



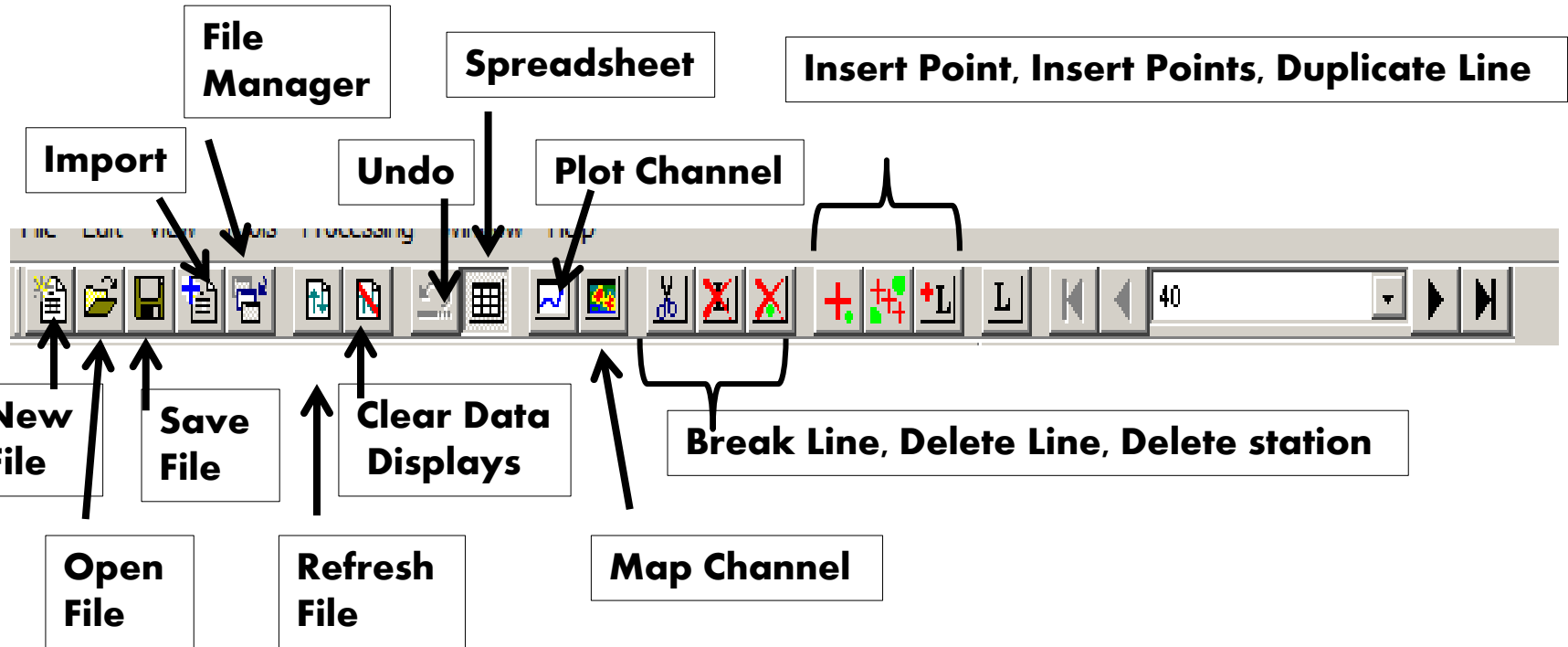
QCTool Overview



Processing



QCTool Overview



QCTool Overview

First Line, Back, Forward, Last Line

Line Info

List of Lines(Spreadsheets):

Index	Line	# Points
1	40	114
2	41	117
3	42	119
4	43	121
5	44	120
6	45	117
7	46	119
8	47	118
9	48	119

48 Set Name

Sort Lines Set Names

Total Number of Lines: 9

Total Number of Points: 1069

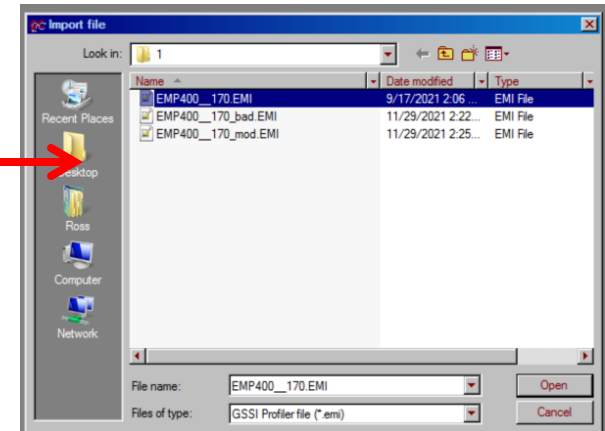
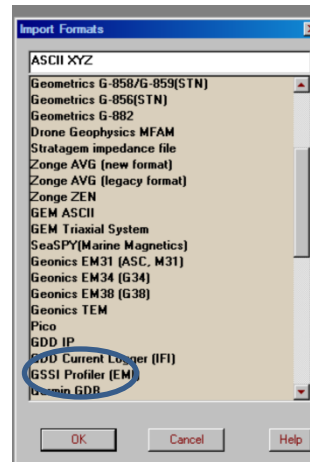
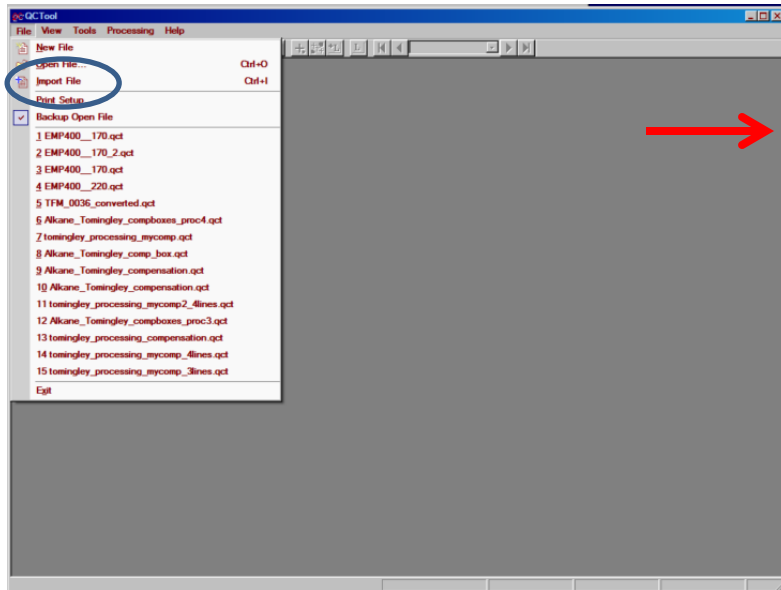
Double click on Line Label in the Line List to Delete/Restore a line or use filter below

Delete one in 0 lines Apply

Delete/Restore Selected Lines

OK

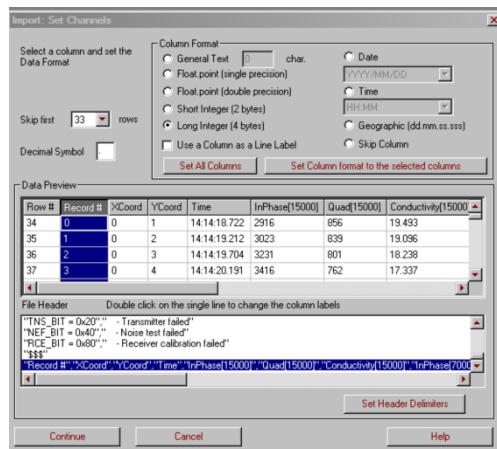
IMPORT DATA



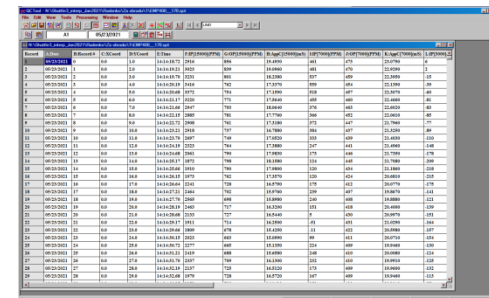
Select Data Format

Browse for file

Select Header Line and Channel Formats



Import data and produce .qct file



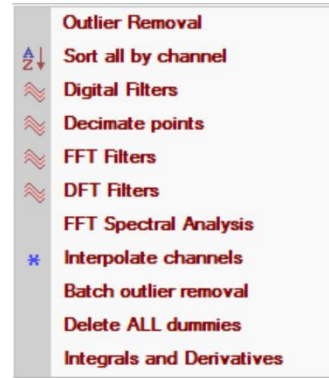
General Tools

W:\Grafic\interp_Jan2021\Radex\10a.shm\1\EXP000_1701.xls														
Record	A:Date	B:Record #	C:Channel	D:Time	F:OP1(5000)/PPM	G:OP2(5000)/PPM	H:AppC(15000)/us	I:OP1(7000)/PPM	J:OP2(7000)/PPM	K:AppC(7000)/us	L:OP3(3000)/PPM	M:OP2(3000)/PPM	N:AppC(3000)/us	
1	05/25/2021	0	0.0	1.0	141418.72	2016	856	18.4950	481	473	23.0790	6	229	24.0900
2	05/25/2021	1	0.0	2.0	141419.21	3023	859	18.0960	481	470	22.9590	2	223	23.3710
3	05/25/2021	2	0.0	3.0	141419.70	3231	861	18.2380	537	489	22.9350	-15	213	24.2660
4	05/25/2021	3	0.0	4.0	141420.19	3416	762	17.3370	559	484	22.1390	-39	201	22.9110
5	05/25/2021	4	0.0	5.0	141420.68	3372	754	17.1590	518	487	22.3070	40	197	22.4690
6	05/25/2021	5	0.0	6.0	141421.17	3220	771	17.5640	485	460	22.4660	41	198	22.5660
7	05/25/2021	6	0.0	7.0	141421.66	2947	785	18.0640	376	463	22.6120	43	200	22.8170
8	05/25/2021	7	0.0	8.0	141422.15	2885	781	17.7760	366	452	22.0610	45	198	22.5720
9	05/25/2021	8	0.0	9.0	141422.72	2908	761	17.3180	372	447	21.7960	-77	191	21.7970
10	05/25/2021	9	0.0	10.0	141423.21	2918	737	16.7880	384	437	21.3250	49	187	21.2880
11	05/25/2021	10	0.0	11.0	141423.70	2697	749	17.0520	333	439	21.4030	-110	188	21.4490
12	05/25/2021	11	0.0	12.0	141424.19	3253	764	17.3880	247	441	21.4960	-148	195	22.2270
13	05/25/2021	12	0.0	13.0	141424.68	2661	790	17.9830	173	446	21.7350	-178	196	22.5780
14	05/25/2021	13	0.0	14.0	141425.17	1872	798	18.1580	124	445	21.7080	-209	196	22.3080
15	05/25/2021	14	0.0	15.0	141425.66	1910	790	17.9800	120	434	21.1860	-218	185	21.0490
16	05/25/2021	15	0.0	16.0	141426.15	1973	762	17.3570	120	424	20.6810	-215	176	19.9850
17	05/25/2021	16	0.0	17.0	141426.64	2241	728	16.5790	175	412	20.0770	-175	169	19.2210
18	05/25/2021	17	0.0	18.0	141427.21	2464	702	15.9760	239	407	19.8670	-141	171	19.4890
19	05/25/2021	18	0.0	19.0	141427.70	2565	498	15.8990	240	408	19.8880	-121	175	19.9350
20	05/25/2021	19	0.0	20.0	141428.19	2463	717	16.3200	151	418	20.4100	-139	178	20.2640

on right mouse



Processing



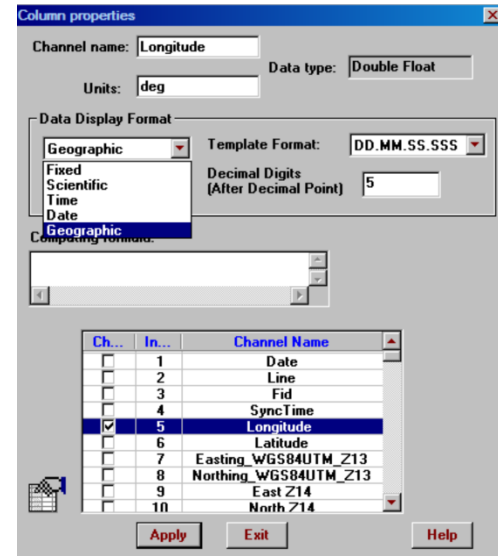
Selected Data Removal

Digital Filter Suite

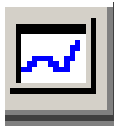
Fill in data via interpolation

Calculate First and Second Derivatives
or Integrate channels

Change Name, Units and Format

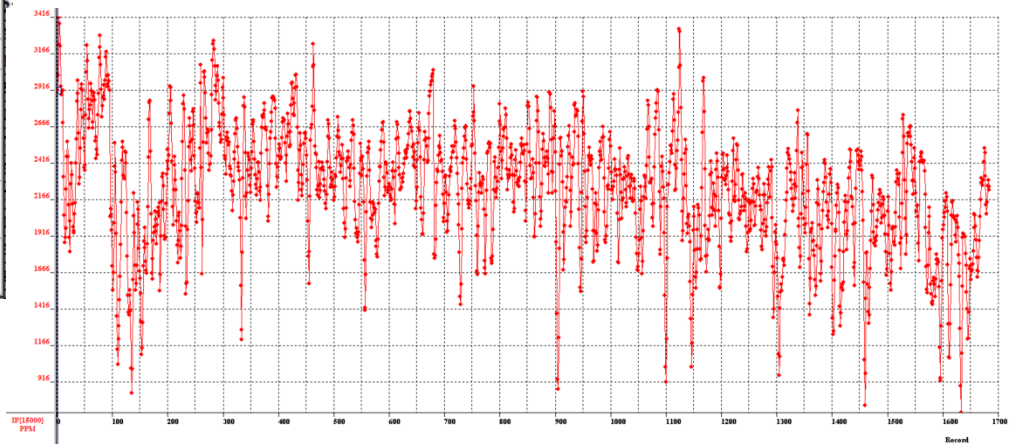
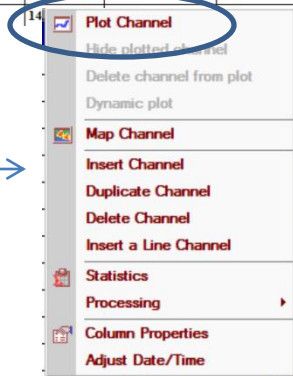


PLOTTING DATA



Record	A:Date	B:Record #	C:XCoord	D:YCoord	E:Time	F:IP[15000](PPM)	G:OP[15000](PPM)	H:AppC[15000](mS)	I:IP[7000](PPM)	J:OP[7000](PPM)	K:AppC[7000](mS)	L:IP[3000](PPM)	M:OP[3000](PPM)	N:AppC[3000](mS)	C
1	05/23/2021	0	0.0	1.0	14:14:18.72	2916	856	19.4930	461	473	23.0790	6	229	26.0900	
2	05/23/2021	1	0.0	2.0	14:14:19.21	3023	839	19.0960	481	470	22.9290	2	223	25.3710	
3	05/23/2021	2	0.0	3.0	14:14:19.70	3231	801	18.2380	537	459	22.3950	-15	213	24.2660	
4	05/23/2021	3	0.0	4.0	14:14:20.19	3416	762	17.3370	559	454	22.1390	-39	201	22.9110	
5	05/23/2021	4	0.0	5.0	14:14:20.68	3372	754	17.1590	518	457	22.3070	-60	197	22.4690	
6	05/23/2021	5	0.0	6.0	14:14:21.17	3220	771	17.5640	485	460	22.4660	-81	198	22.5660	
7	05/23/2021	6	0.0	7.0	14:14:21.66	2947	793	18.0640	376	463	22.6020	-83	200	22.8170	
8	05/23/2021	7	0.0	8.0	14:14:22.15	2885	781	17.7760	366	452	22.0610	-85	198	22.5720	
9	05/23/2021	8	0.0	9.0	14:14:22.72	2908	761	17.3180	372	447	21.7960	-77	191	21.7970	
10	05/23/2021	9	0.0	10.0	14:14:23.21	2918	737	16.7880	384	437	21.3250	-89	187	21.2880	
11	05/23/2021	10	0.0	11.0	14:14:23.70	2697	749	17.0520	333	439	21.4030	-110	188	21.4490	
12	05/23/2021	11	0.0	12.0	14:14:24.19	2323	764	17.3880	247	441	21.4960	-148	195	22.2270	
13	05/23/2021	12	0.0	13.0	14:14:24.68	2061	790	17.9830	173	446	21.7350	-178	198	22.5780	
14	05/23/2021	13	0.0	14.0	14:14:25.17	1872	798	18.1580	124	445	21.7080	-209	196	22.3080	
15	05/23/2021	14	0.0	15.0	14:14:25.66	1910	790	17.9800	120	434	21.1860	-218	185	21.0490	
16	05/23/2021	15	0.0	16.0	14:14:26.15	1973	762	17.3570	120	424	20.6810	-215	176	19.9850	
17	05/23/2021	16	0.0	17.0	14:14:26.64	2241	728	16.5790	175	412	20.0770	-175	169	19.2210	
18	05/23/2021	17	0.0	18.0	14:14:27.21	2464	702	15.9760	239	407	19.8670	-141	171	19.4800	
19	05/23/2021	18	0.0	19.0	14:14:27.70	2802	698	15.8980	240	408	19.8880	-121	175	19.9350	
20	05/23/2021	19	0.0	20.0	14:14:28.19	2916	63200	151	418	20.4000	-139	178	20.2640		

on right mouse

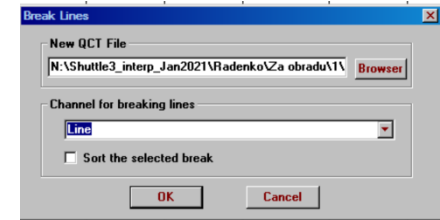
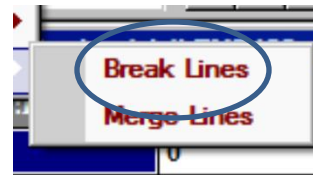
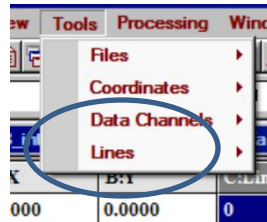


you can select multiple channels to plot

Breaking Out Individual Lines to Their Own Spreadsheet

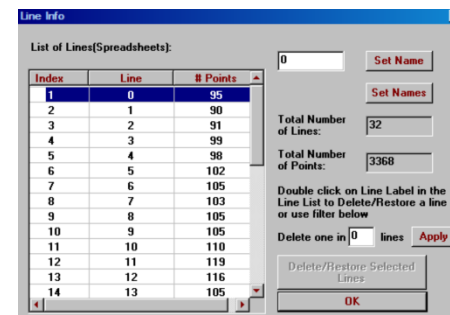
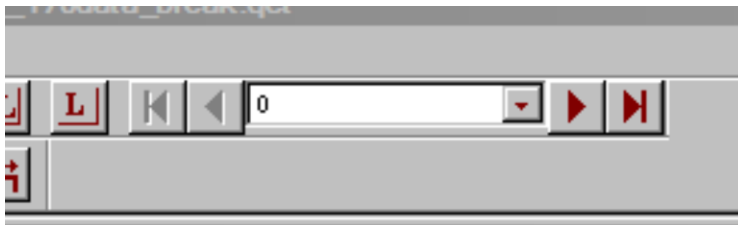
Record	A:X	B:Y	C:Line	D:Station	E:XCoord	F:YCoord	G:IP[15000]	H:OP[15000]	I:Cond[15000]	J:IP[7000]	K:OP[7000]	L:Cond[7000]	M:IP[3000]	N:OP[3000]	O:Cond[3000]	P:TIME	Q:DATE
1	0.0000	0.0000	0	0	0.0000	1.0000	2916.000000	856.0000	19.4930	461.0000	473.0000	23.0790	6.0000	229.0000	26.0900	14:14:18.72	05/23/21
2	0.0000	0.2130	0	1	0.0000	2.0000	3023.000000	839.0000	19.0960	481.0000	470.0000	22.9290	2.0000	223.0000	25.3710	14:14:19.21	05/23/21
3	0.0000	0.4260	0	2	0.0000	3.0000	3231.000000	801.0000	18.2380	537.0000	459.0000	22.3950	-15.0000	213.0000	24.2660	14:14:19.70	05/23/21
4	0.0000	0.6380	0	3	0.0000	4.0000	3416.000000	762.0000	17.3370	559.0000	454.0000	22.1390	-39.0000	201.0000	22.9110	14:14:20.19	05/23/21
5	0.0000	0.8510	0	4	0.0000	5.0000	3372.000000	754.0000	17.1590	518.0000	457.0000	22.3070	-60.0000	197.0000	22.4690	14:14:20.68	05/23/21
6	0.0000	1.0640	0	5	0.0000	6.0000	3220.000000	771.0000	17.5640	455.0000	460.0000	22.4660	-81.0000	198.0000	22.5660	14:14:21.17	05/23/21
7	0.0000	1.2770	0	6	0.0000	7.0000	2947.000000	793.0000	18.0640	376.0000	463.0000	22.6020	-83.0000	200.0000	22.8170	14:14:21.66	05/23/21
8	0.0000	1.4900	0	7	0.0000	8.0000	2885.000000	781.0000	17.7760	366.0000	452.0000	22.0610	-85.0000	198.0000	22.5720	14:14:22.15	05/23/21
9	0.0000	1.7020	0	8	0.0000	9.0000	2908.000000	761.0000	17.3180	372.0000	447.0000	21.7960	-77.0000	191.0000	21.7970	14:14:22.72	05/23/21
10	0.0000	1.9150	0	9	0.0000	10.0000	2918.000000	737.0000	16.7880	384.0000	437.0000	21.3250	-89.0000	187.0000	21.2880	14:14:23.21	05/23/21
11	0.0000	2.1280	0	10	0.0000	11.0000	2697.000000	749.0000	17.0520	333.0000	439.0000	21.4030	-110.0000	188.0000	21.4490	14:14:23.70	05/23/21
12	0.0000	2.3400	0	11	0.0000	12.0000	2323.000000	764.0000	17.3880	247.0000	441.0000	21.4960	-148.0000	195.0000	22.2270	14:14:24.19	05/23/21
13	0.0000	2.5530	0	12	0.0000	13.0000	2061.000000	790.0000	17.9830	173.0000	446.0000	21.7350	-178.0000	198.0000	22.5780	14:14:24.68	05/23/21
14	0.0000	2.7660	0	13	0.0000	14.0000	1872.000000	798.0000	18.1580	124.0000	445.0000	21.7080	-209.0000	196.0000	22.3080	14:14:25.17	05/23/21
15	0.0000	2.9790	0	14	0.0000	15.0000	1910.000000	790.0000	17.9800	120.0000	434.0000	21.1860	-218.0000	185.0000	21.0490	14:14:25.66	05/23/21
16	0.0000	3.1910	0	15	0.0000	16.0000	1973.000000	762.0000	17.3570	120.0000	424.0000	20.6810	-215.0000	176.0000	19.9850	14:14:26.15	05/23/21
17	0.0000	3.4040	0	16	0.0000	17.0000	2241.000000	728.0000	16.5790	175.0000	412.0000	20.0770	-175.0000	169.0000	19.2210	14:14:26.64	05/23/21
18	0.0000	3.6170	0	17	0.0000	18.0000	2464.000000	702.0000	15.9760	239.0000	407.0000	19.8670	-141.0000	171.0000	19.4800	14:14:27.21	05/23/21
19	0.0000	3.8300	0	18	0.0000	19.0000	2565.000000	698.0000	15.8980	240.0000	408.0000	19.8880	-121.0000	175.0000	19.9350	14:14:27.70	05/23/21
20	0.0000	4.0430	0	19	0.0000	20.0000	2463.000000	717.0000	16.3200	151.0000	418.0000	20.4000	-139.0000	178.0000	20.2640	14:14:28.19	05/23/21

select line channel



1 Line -1 spreadsheet

many Lines - many spreadsheets



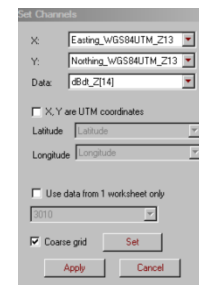
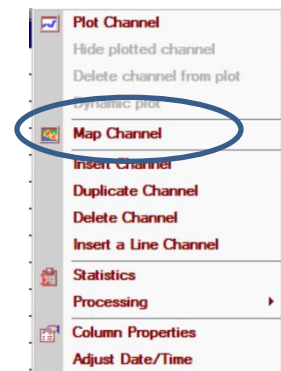
Gridding, Contouring and Mapping Tools

select a channel to be mapped



Record	Pa-dBc_Z[1]	Q-dBc_Z[2]	R-dBc_Z[3]	S-dBc_Z[4]	T-dBc_Z[5]	U-dBc_Z[6]	V-dBc_Z[7]	W-dBc_Z[8]	X-dBc_Z[9]	Y-dBc_Z[10]	Z-dBc_Z[11]	AA-dBc_Z[12]	AB-dBc_Z[13]	AC-dBc_Z[14]	AD-dBc_Z[15]	AE-dBc_Z[16]	AF-dBc_Z[17]
1	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
6	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
7	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
8	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
9	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
11	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
12	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
14	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
15	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
16	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
17	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
18	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
19	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
20	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
21	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
22	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
23	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
24	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
25	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
26	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
27	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
28	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
29	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*

or on right mouse

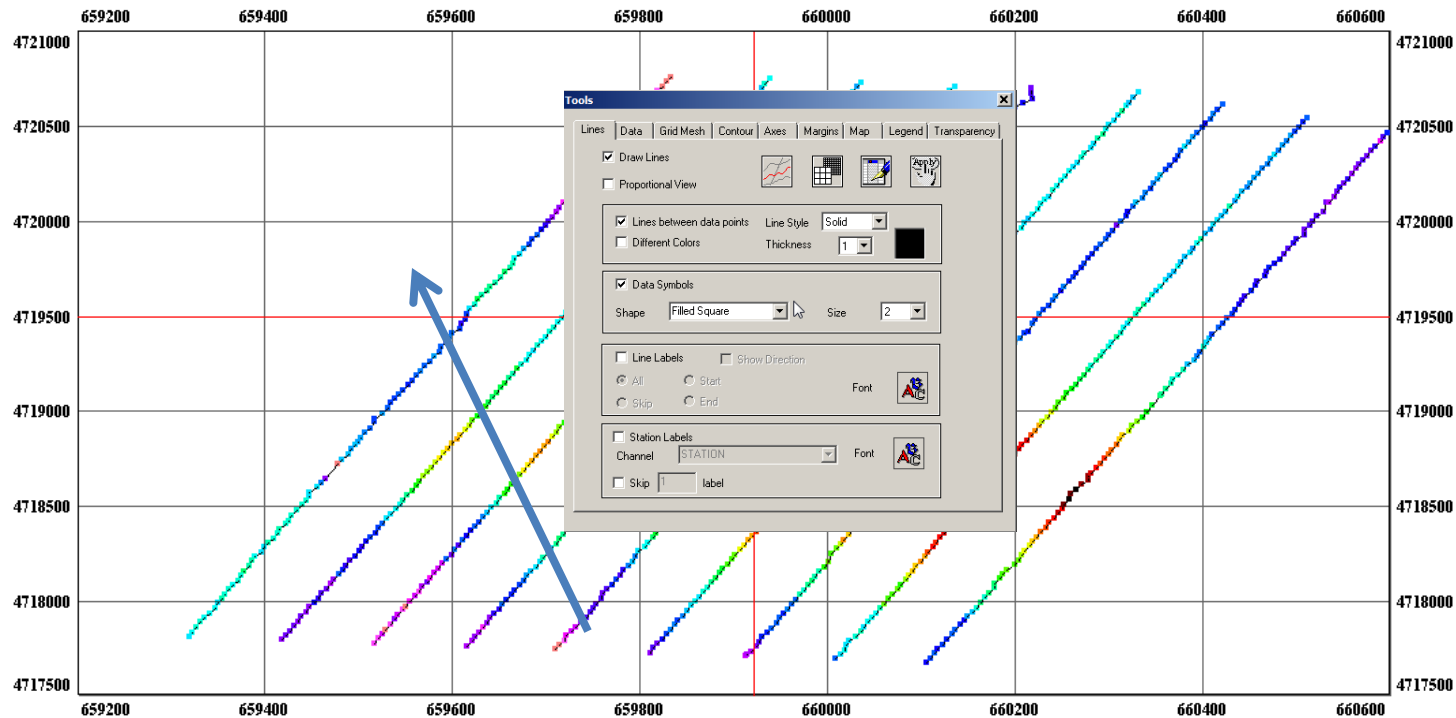


select reference channels for 2D plot

next page

Note: The process maps all data points unless the user chooses a coarse grid when datasets have an extremely large set of data points

Mapping Tools - Controls

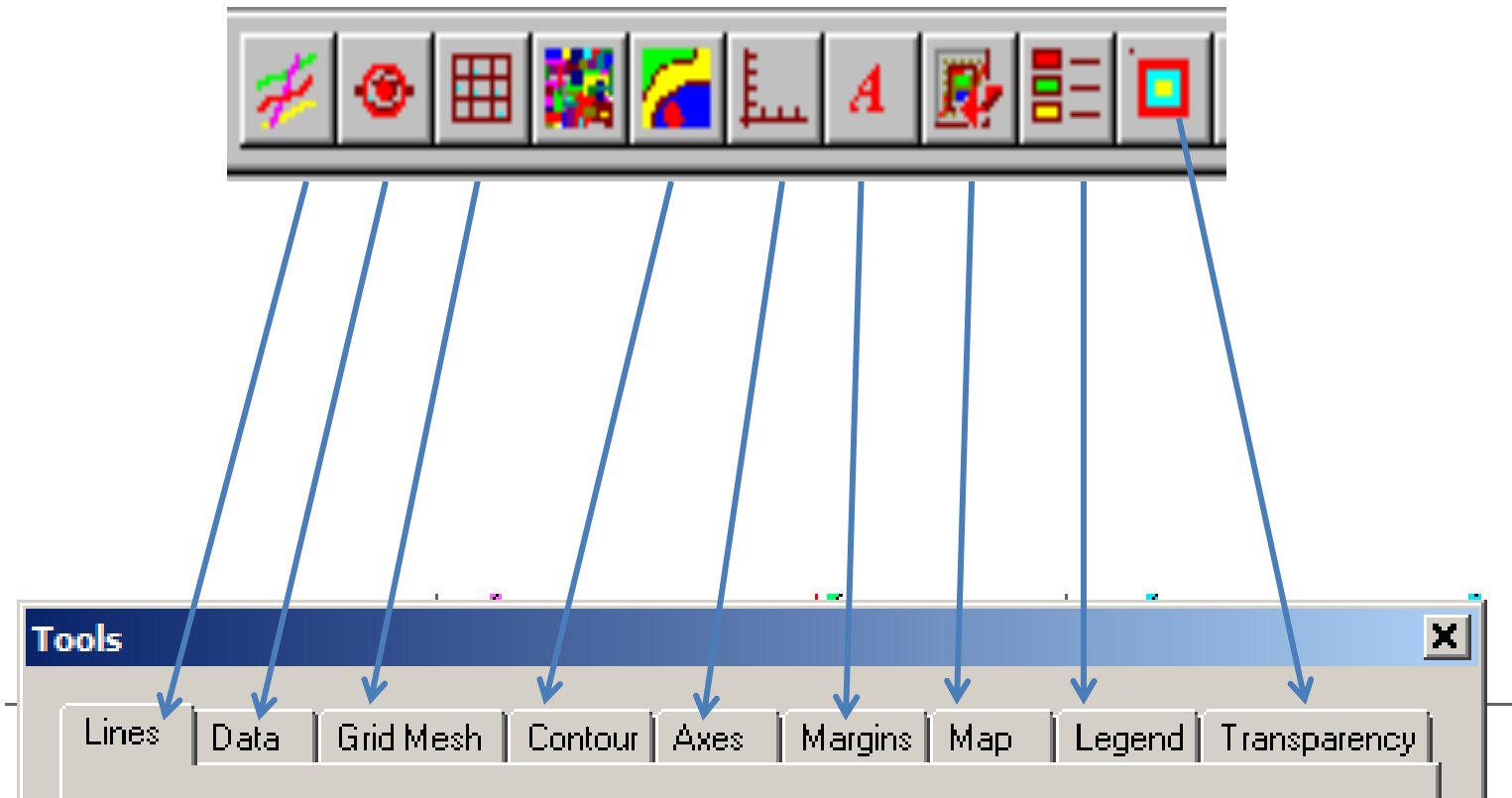


double left click in window
for mapping controls

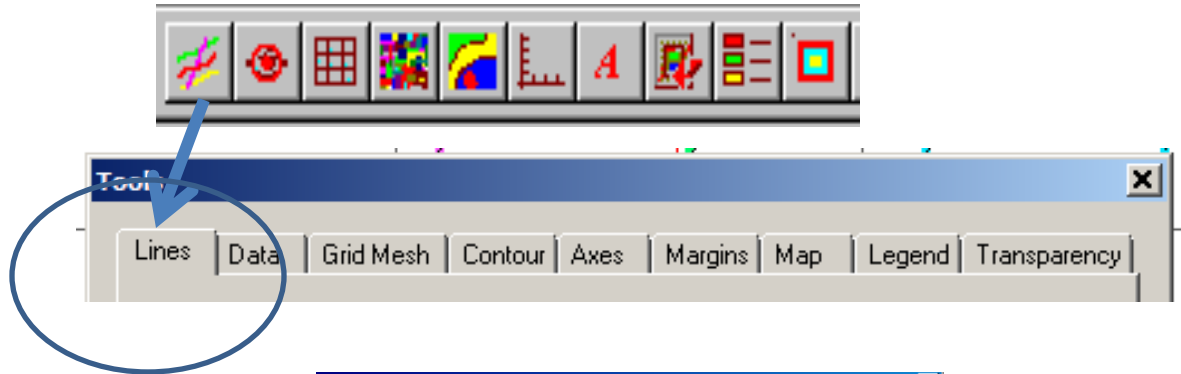


Mapping Tools - Controls

On the bottom toolbar, there is a set of icons which open the Tools dialogue to different tabs.



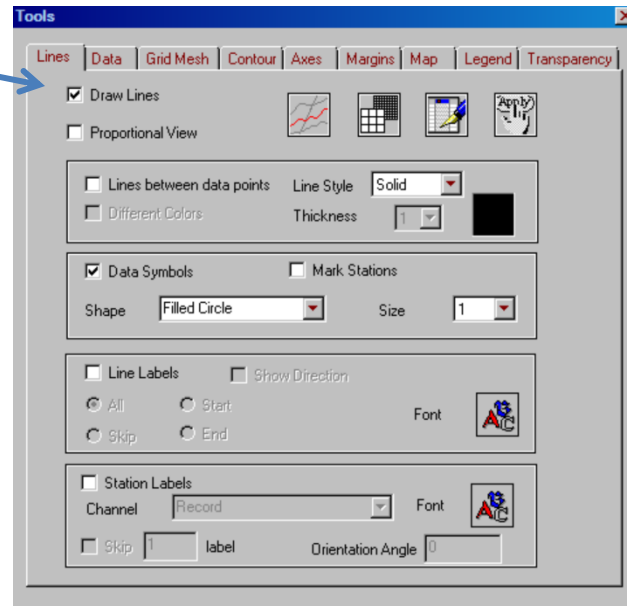
Mapping Tools - Controls



**Enables/Disables
all functions
associated with Lines**

**Controls graphic displays of data
points and values**

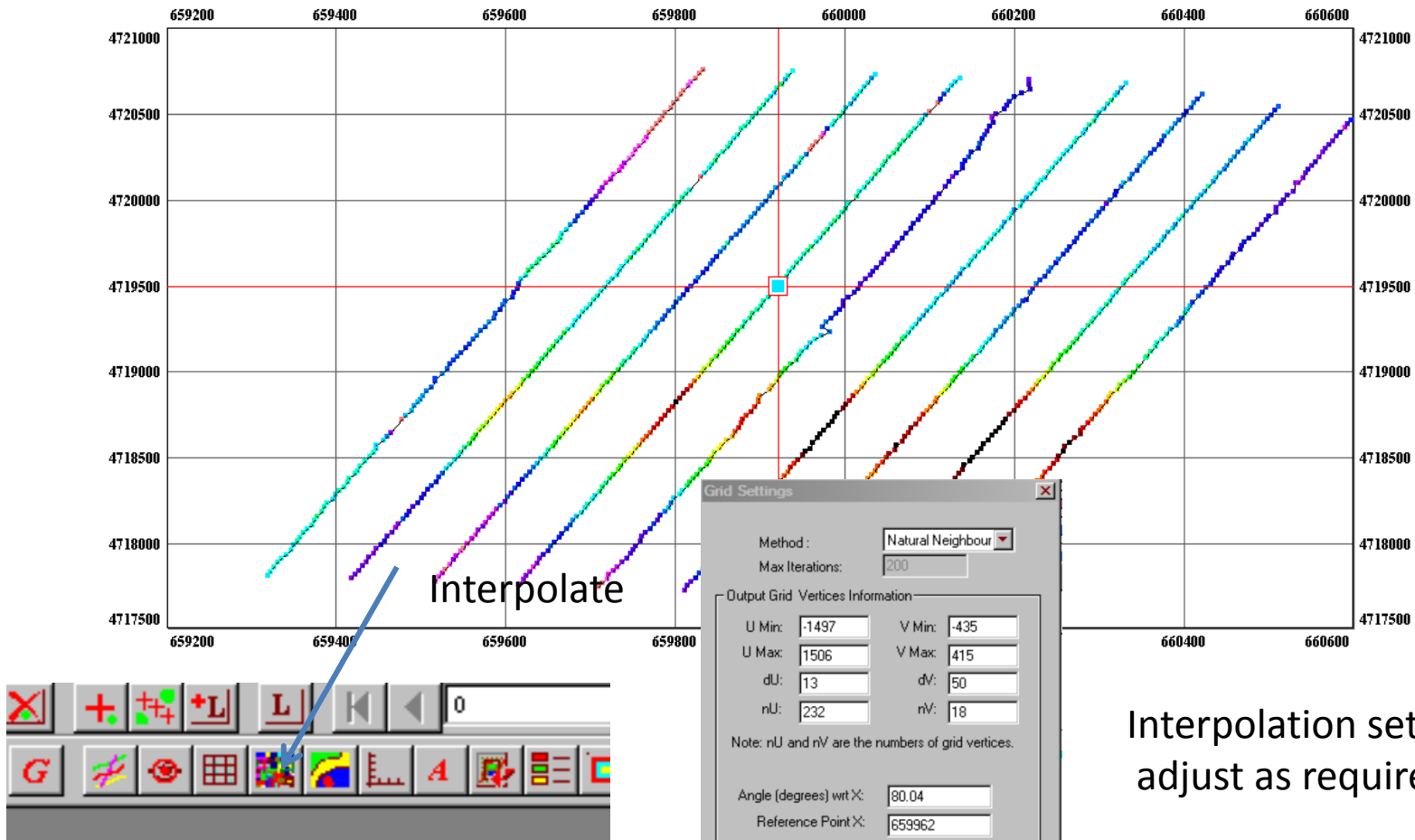
Controls display of Station Labels



Controls graphic displays of Lines

Controls display of Line Labels

Mapping Tools – Interpolation onto a regular “rectilinear” grid



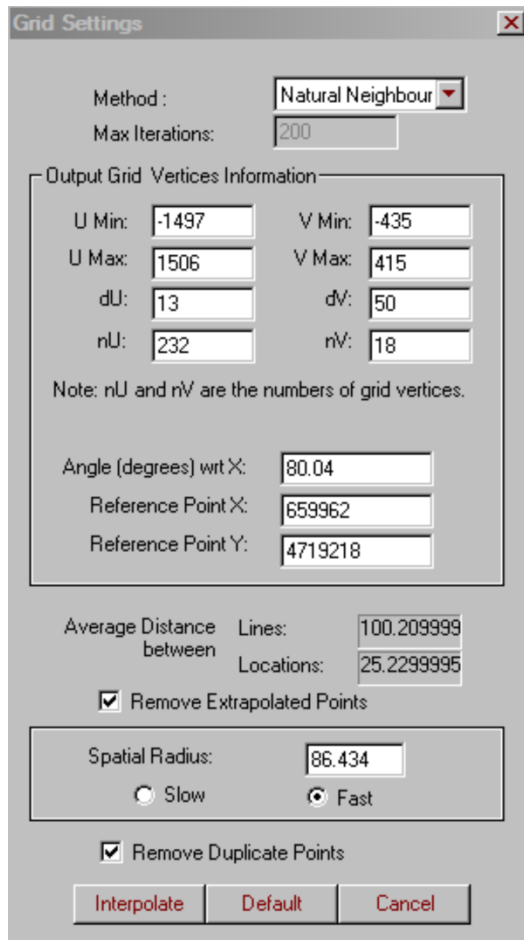
Interpolation settings
adjust as required

User Controls:

- cells dimensions dx & dy
- grid azimuth and centre
- grid size
- extrapolation removal
- interpolation algorithm

Mapping Tools

Interpolate



The image shows a 'Grid Settings' dialog box with the following fields and options:

- Method: Natural Neighbour (dropdown)
- Max Iterations: 200 (text box)
- Output Grid Vertices Information section:
 - U Min: -1497, V Min: -435
 - U Max: 1506, V Max: 415
 - dU: 13, dV: 50
 - nU: 232, nV: 18
 - Note: nU and nV are the numbers of grid vertices.
- Angle (degrees) wrt X: 80.04
- Reference Point X: 659962
- Reference Point Y: 4719218
- Average Distance between:
 - Lines: 100.209999
 - Locations: 25.2299995
- ☒ Remove Extrapolated Points
- Spatial Radius: 86.434
 - ☐ Slow
 - ☒ Fast
- ☒ Remove Duplicate Points
- Buttons: Interpolate, Default, Cancel

Interpolation settings
adjust as required

Select Interpolation Algorithm

Define Grid Parameters
- size and resolution

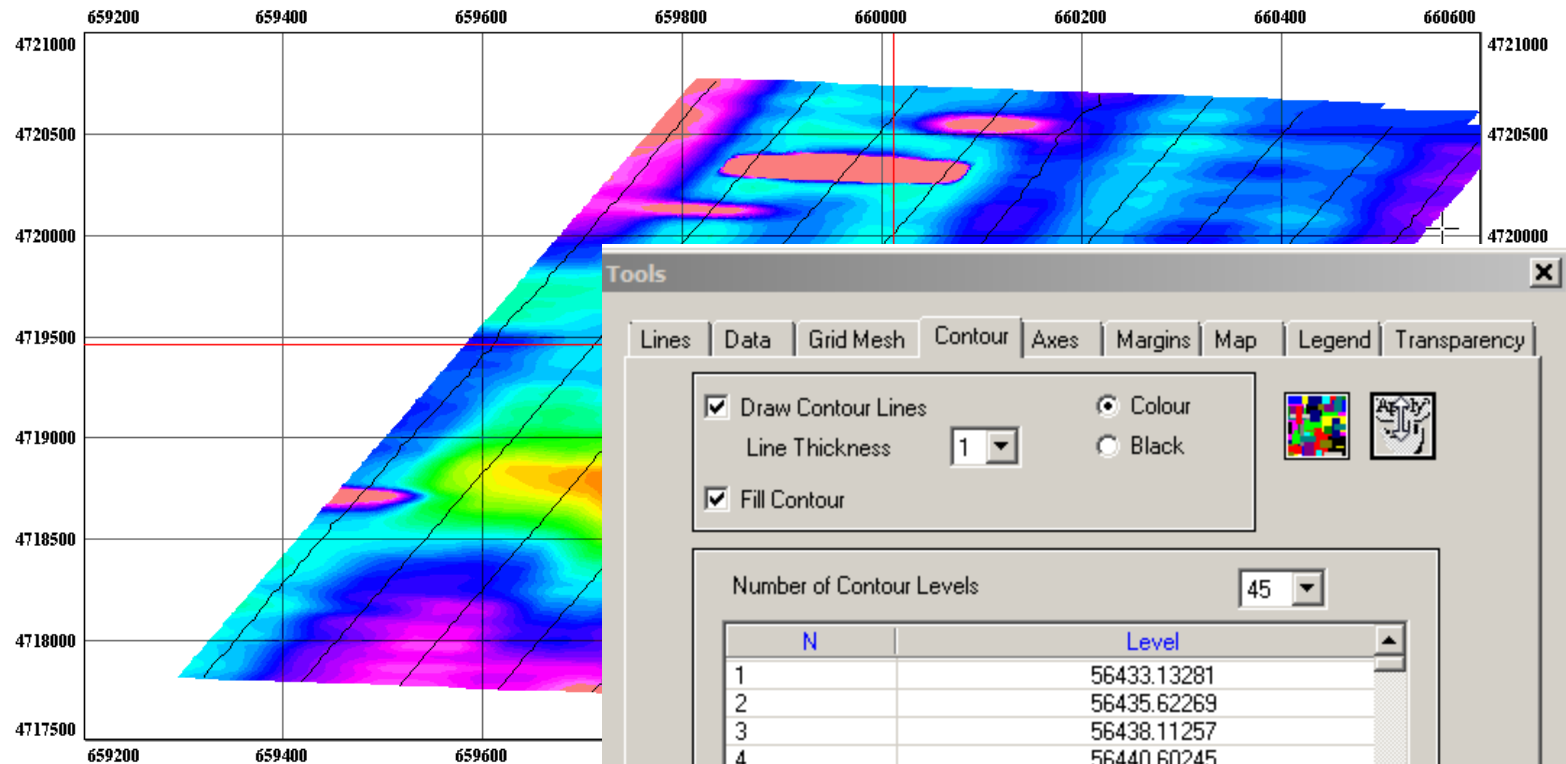
Grid Centre and Angle

Data Resolution parameters

Extrapolated Data Removal Settings

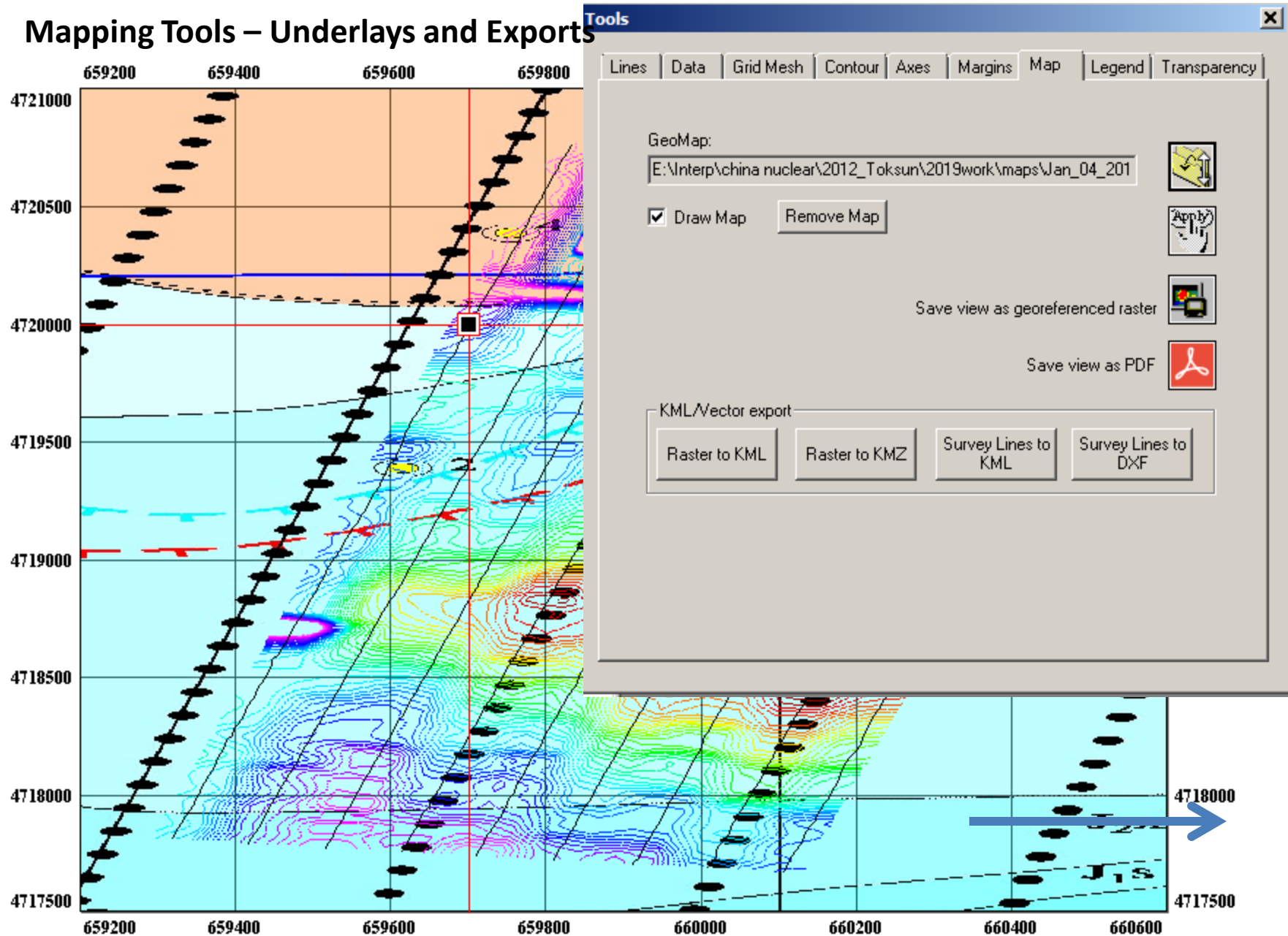
Duplicate Station handling

Mapping Tools - Contouring



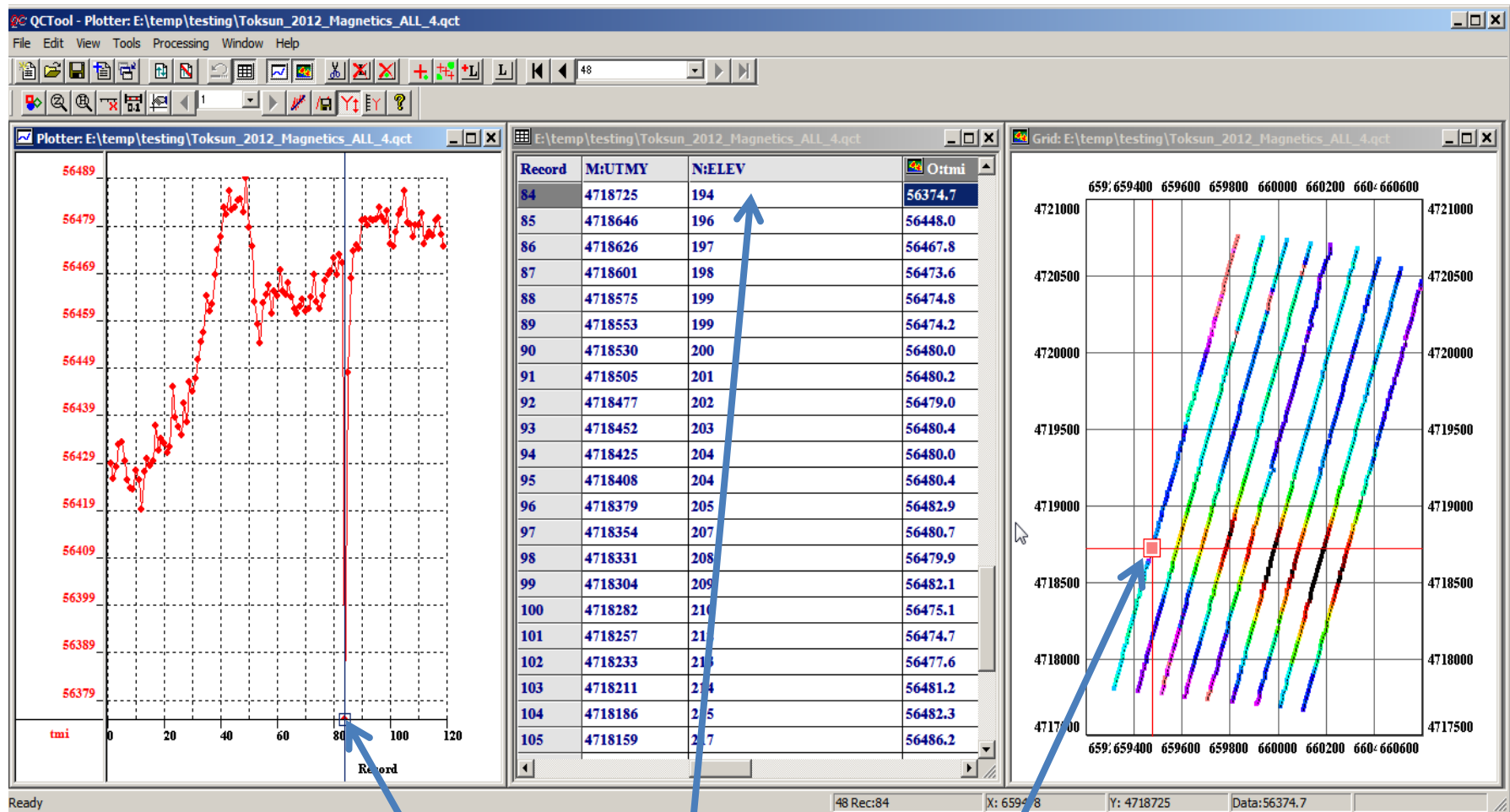
double left click in window
for mapping controls
- Contouring

Mapping Tools – Underlays and Exports



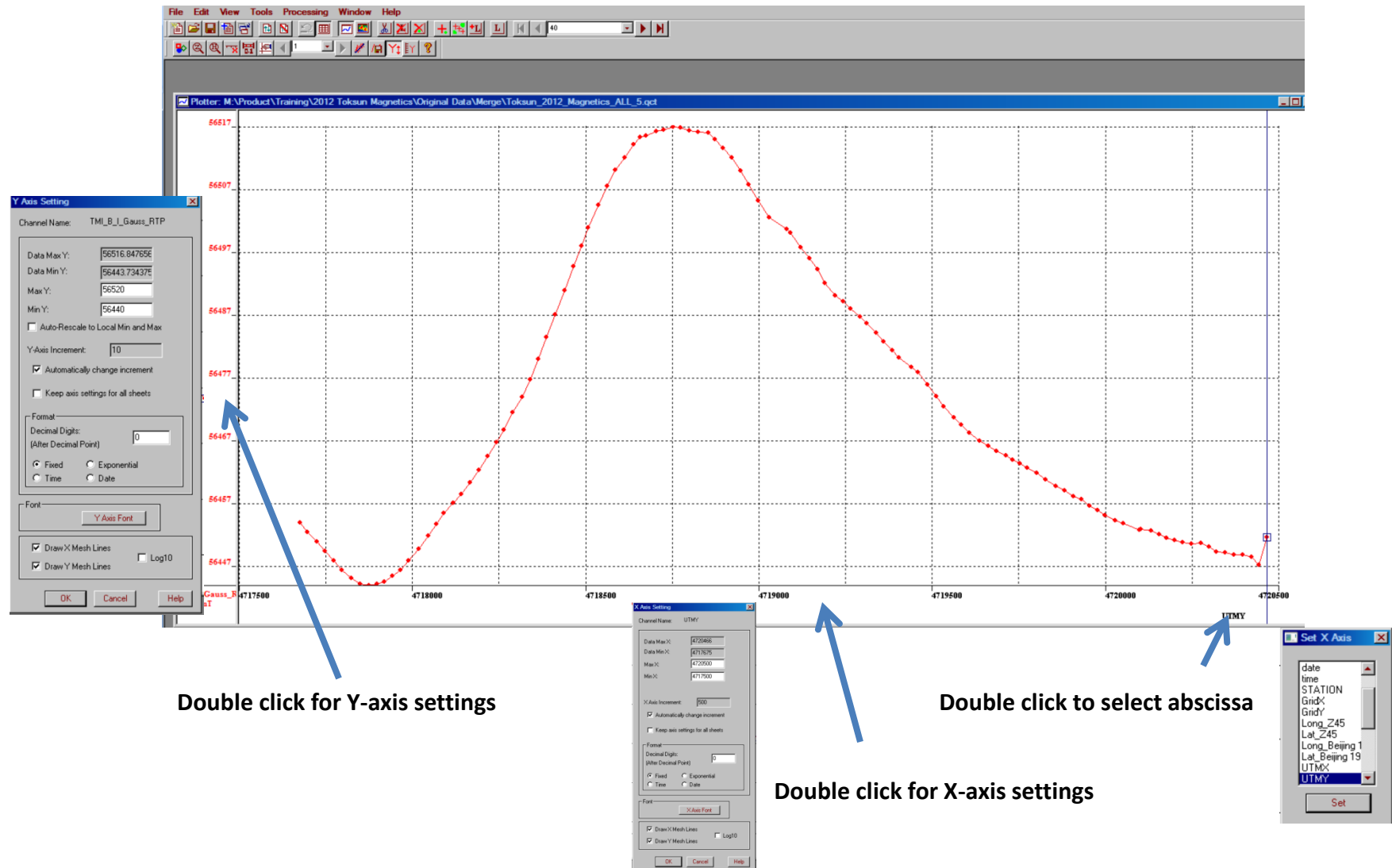
example underlay map

Spreadsheets, Plotter, Grid Display linked in memory



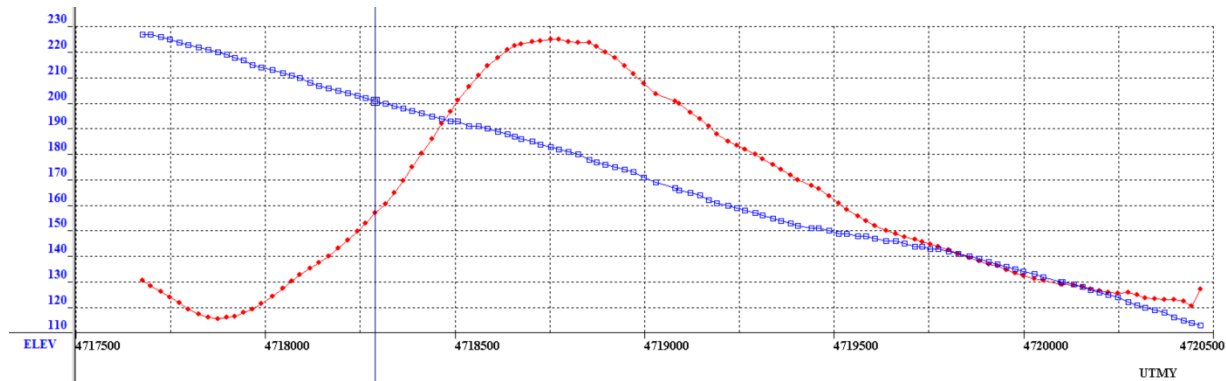
Select a location in any display application and point located in the other two

Plotting Tools

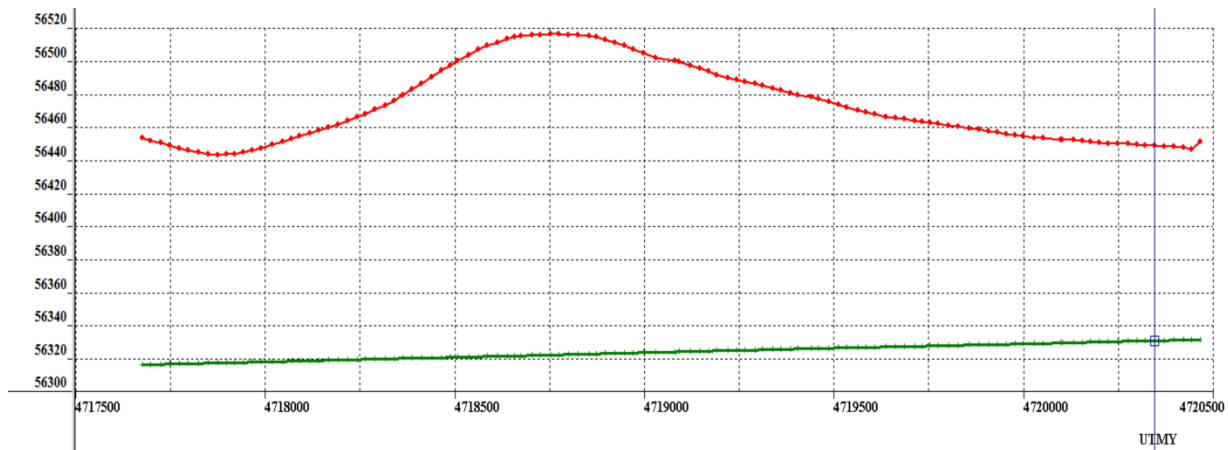


Plotting Tools

Plot multiple channels each with its own Y-scale



Plot multiple channels with one Y-scale



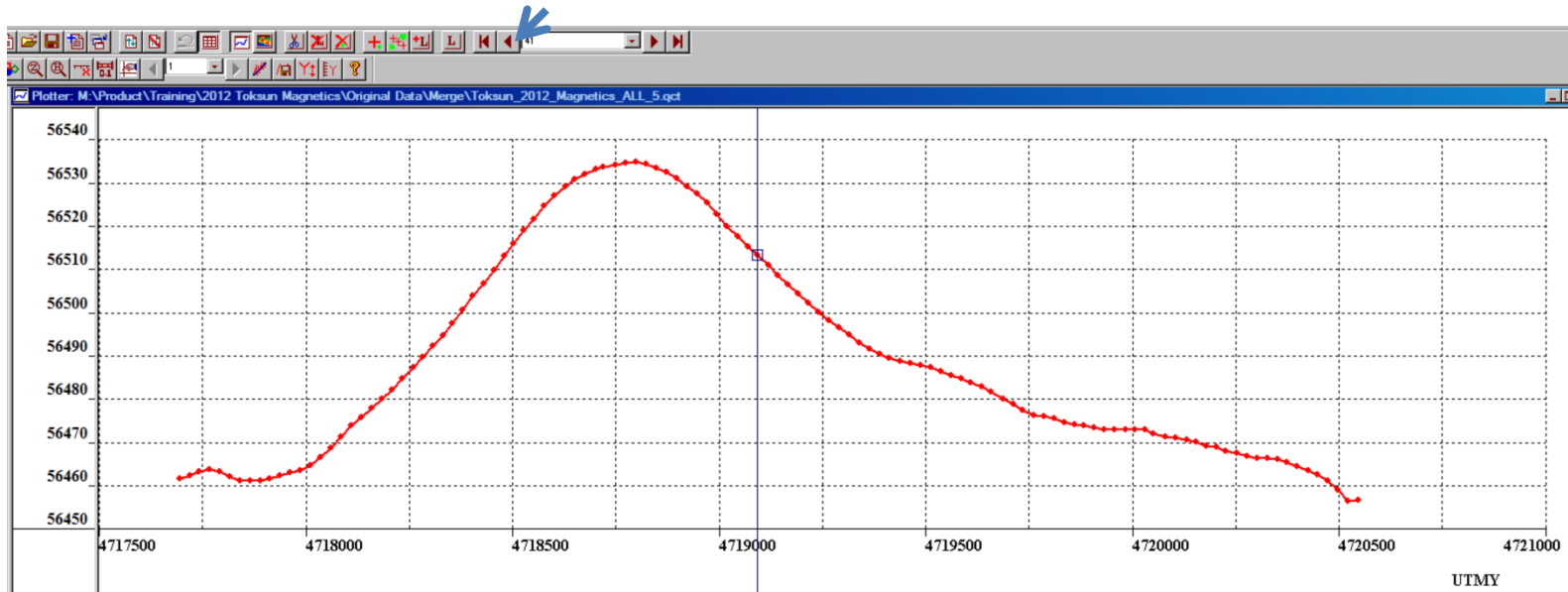
Panel Settings

- ☒ Same Scale for All Channels
- ☐ Display Data by Segments
- Total Number of Segments:
- ☐ Draw Dummy Data

OK Cancel Help

Plotting Tools

Step between Lines



Step between Lines

