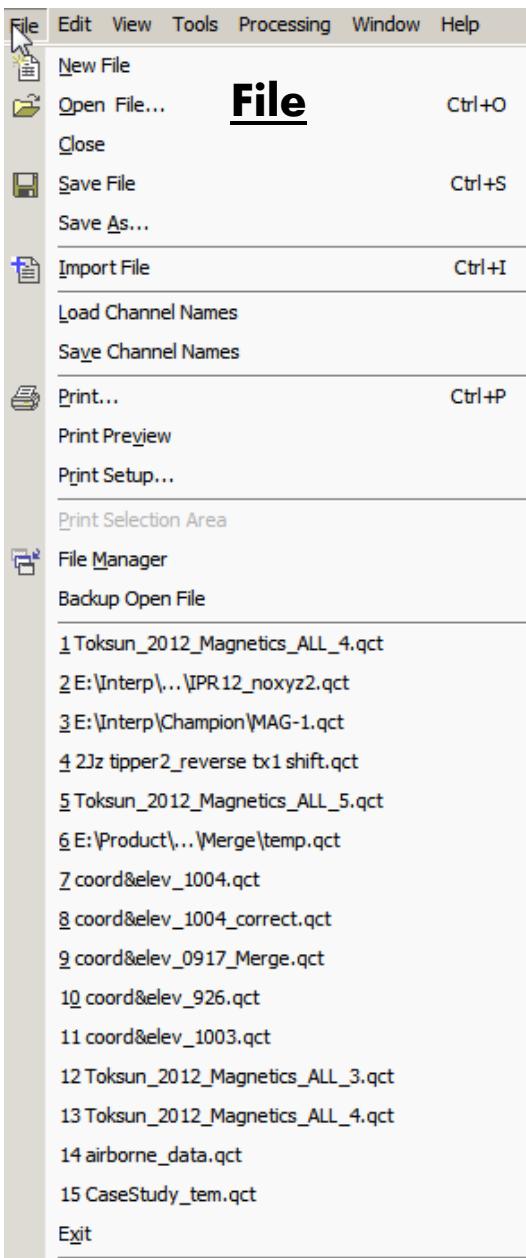
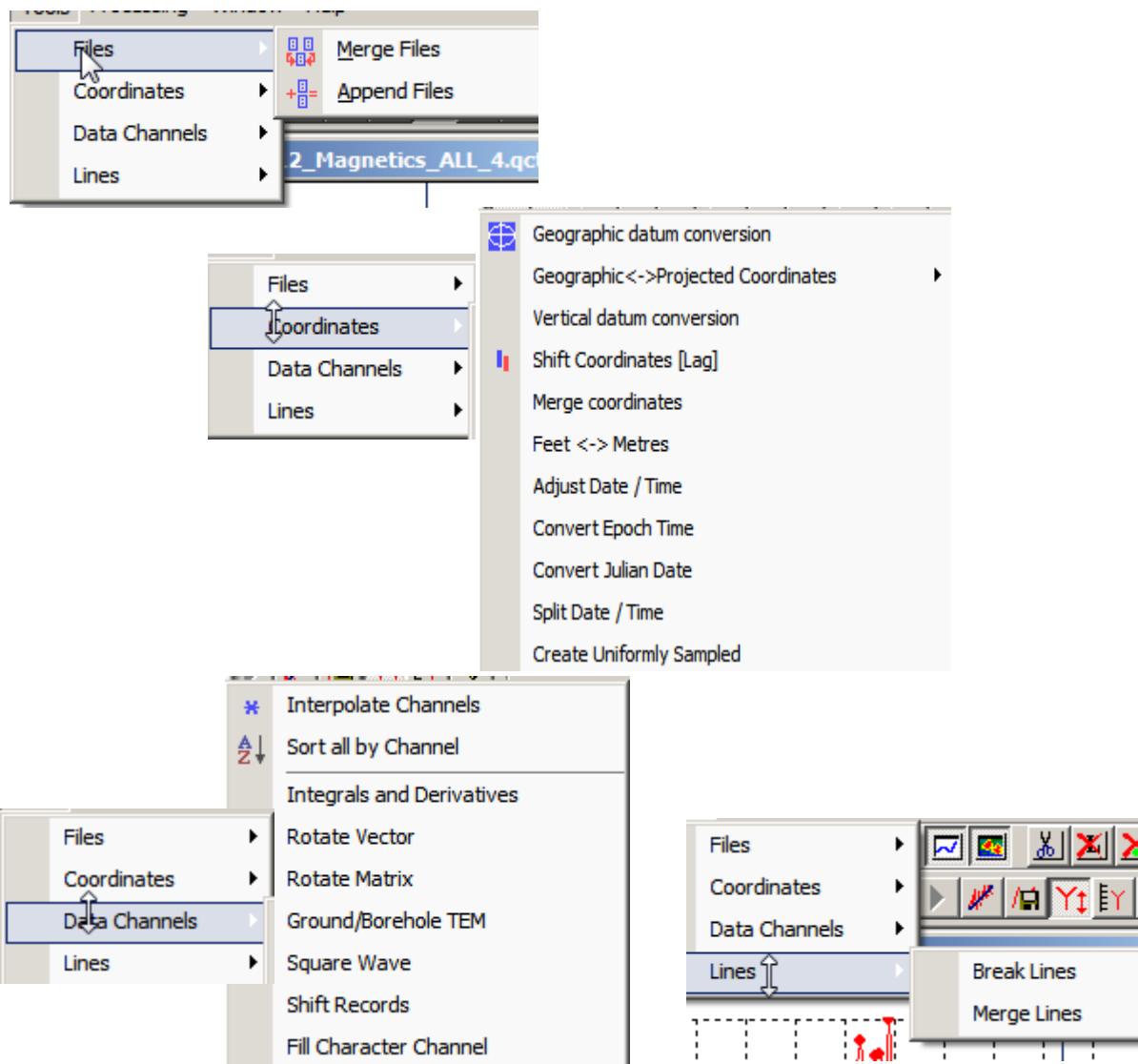


# QCTool Overview



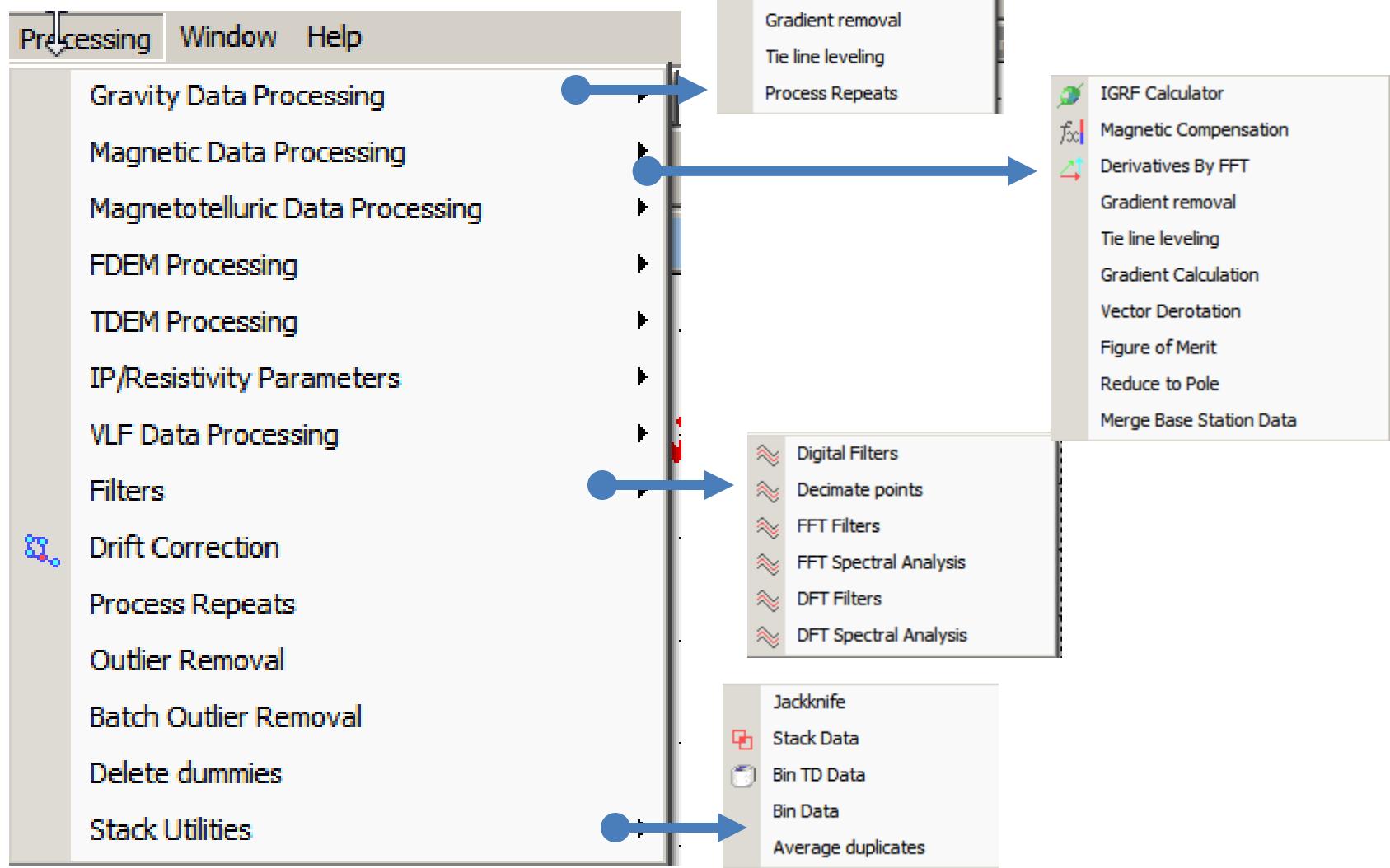
## Tools



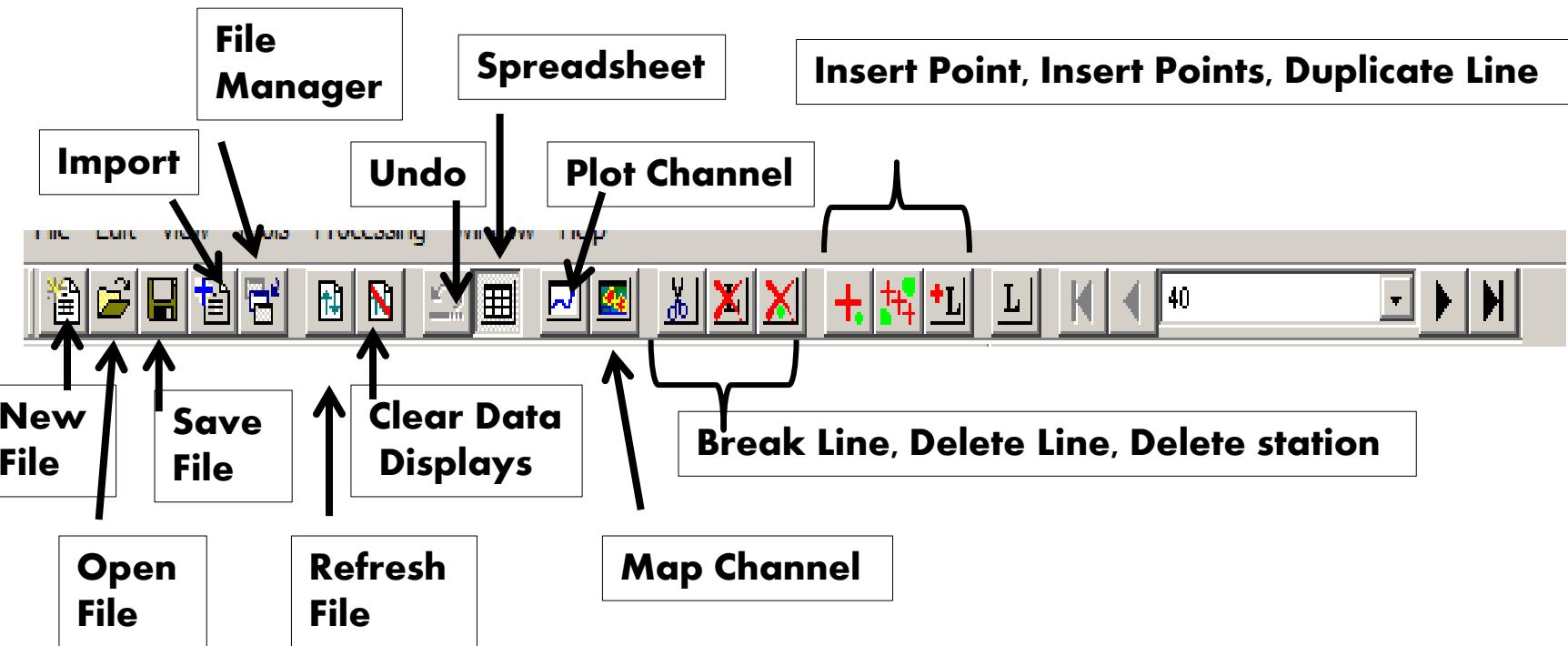
# QCTool Overview



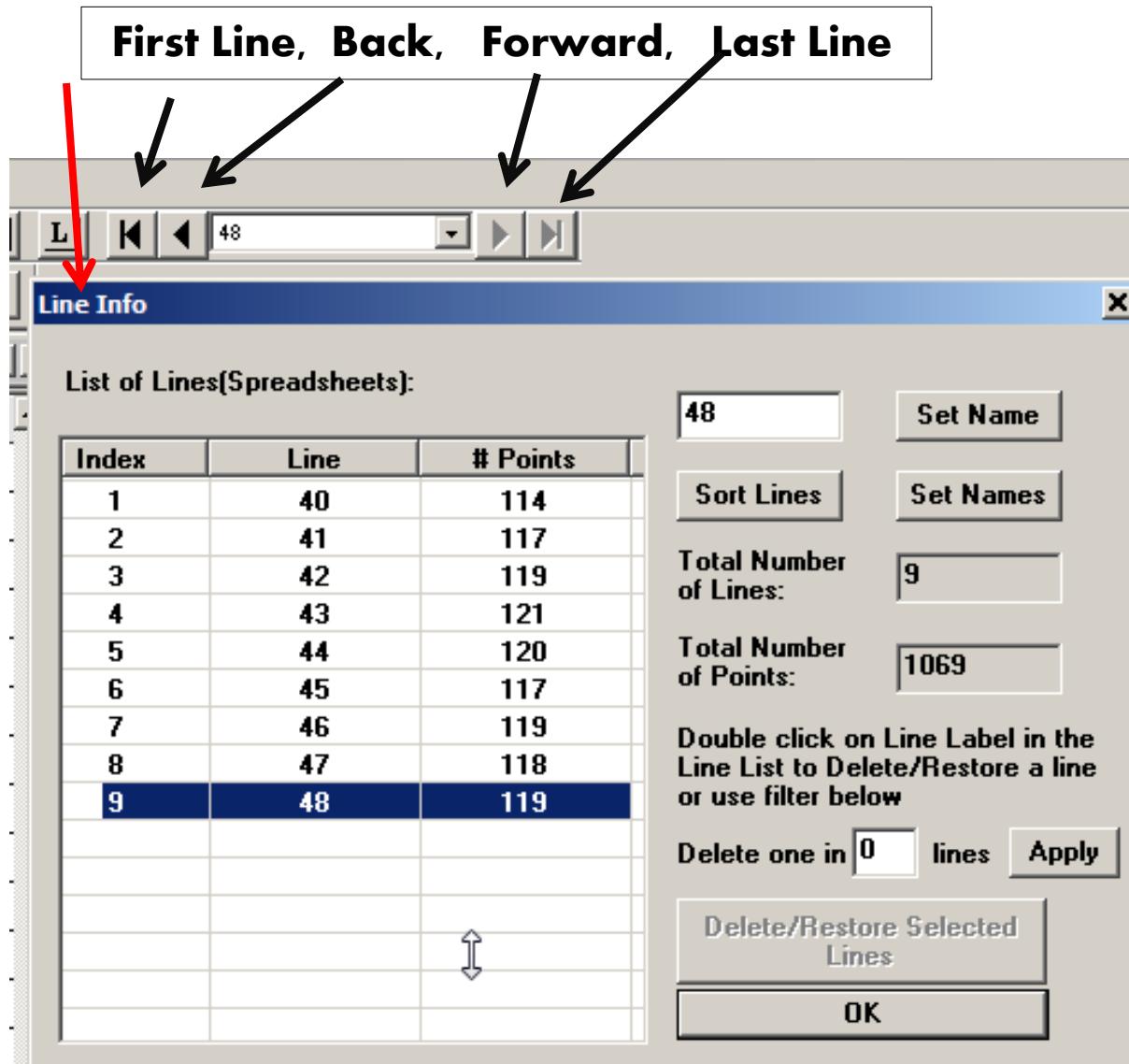
## Processing



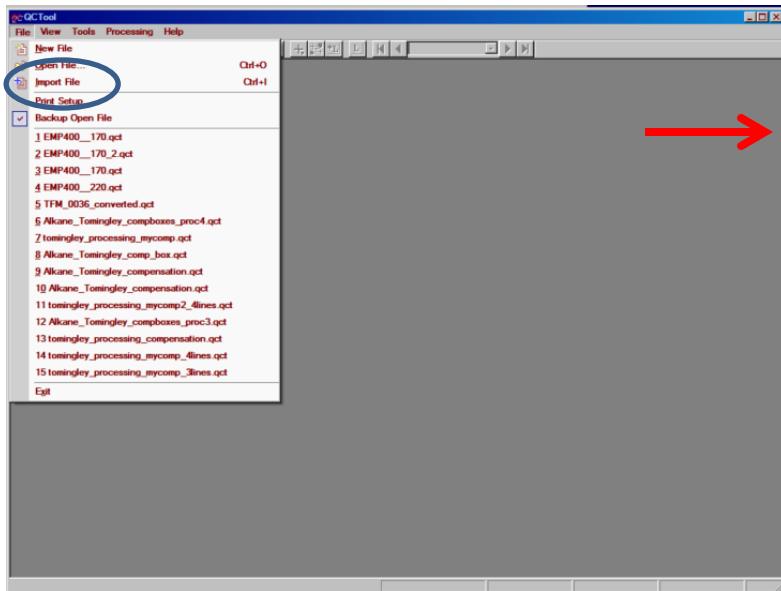
# QCTool Overview



# QCTool Overview



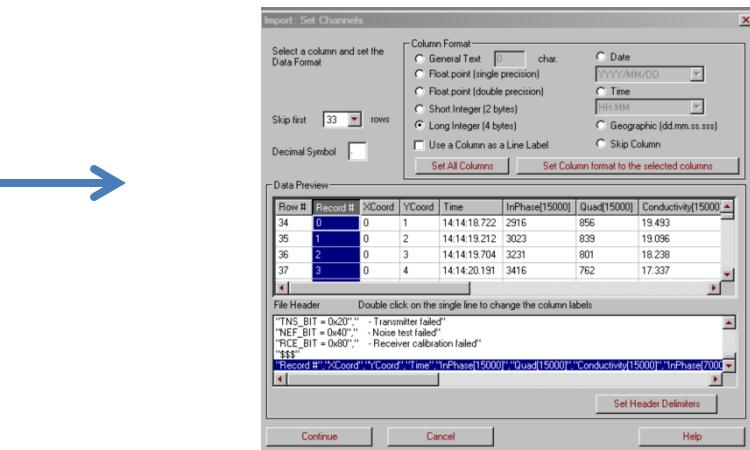
## IMPORT DATA



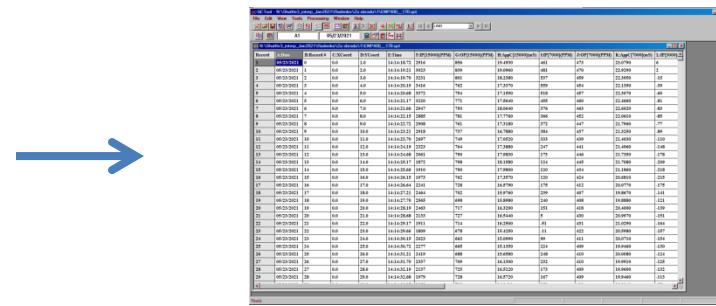
Import Formats

- ASCII XYZ
- Geometrics G-858/G-859(STN)
- Geometrics G-956(STN)
- Geometrics G-882
- Drone Geophysics MFAM
- Stratagem impedance file
- Zonge AVG (new format)
- Zonge AVG (legacy format)
- Zonge ZEN
- GEM ASCII
- GEM Triaxial System
- SeaSPY(Marine Magnetics)
- Geonics EM31 (ASC, M31)
- Geonics EM34 (G34)
- Geonics EM38 (G38)
- Geonics TEM
- Pico
- GDD IP
- GDD Current Logger (IFI)
- GSSI Profiler (EM)
- Geonics GDR

# Select Header Line and Channel Formats



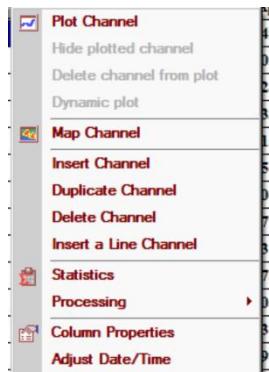
## Import data and produce .qct file



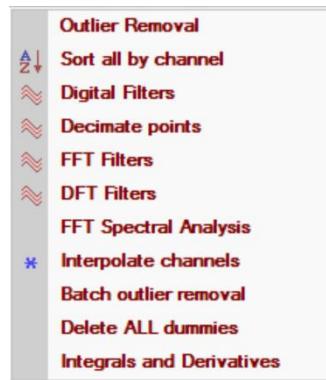
# General Tools

Record	A:Date	B:Record #	C:Scored	D:Yscored	E:Time	F:IP[1500]/PPM	G:OP[1500]/PPM	H:AppC[1500]/uS	I:IP[700]/PPM	J:OP[700]/PPM	K:AppC[700]/uS	L:IP[300]/PPM	M:OP[300]/PPM	N:AppC[300]/uS	O
1	05/23/2021	0	0.0	1.0	14:14:18.72	2916	856	19.030	461	473	23.070	6	229	26.090	
2	05/23/2021	1	0.0	2.0	14:14:19.21	3023	839	19.090	481	470	23.920	2	223	25.370	
3	05/23/2021	2	0.0	3.0	14:14:19.70	3231	801	18.230	537	459	23.390	-15	214	24.260	
4	05/23/2021	3	0.0	4.0	14:14:20.19	3416	742	17.337	559	454	22.130	-39	201	22.910	
5	05/23/2021	4	0.0	5.0	14:14:20.68	3372	754	17.150	518	457	22.3070	-60	197	22.460	
6	05/23/2021	5	0.0	6.0	14:14:21.17	3220	771	17.560	455	460	22.460	-81	198	22.560	
7	05/23/2021	6	0.0	7.0	14:14:21.66	2947	793	18.060	376	463	22.620	-83	200	22.810	
8	05/23/2021	7	0.0	8.0	14:14:22.15	2885	781	17.770	366	452	22.010	-85	198	22.570	
9	05/23/2021	8	0.0	9.0	14:14:22.72	2908	761	17.310	375	447	21.790	-77	191	21.790	
10	05/23/2021	9	0.0	10.0	14:14:23.21	2918	737	16.380	384	437	21.320	-89	187	21.380	
11	05/23/2021	10	0.0	11.0	14:14:23.70	2697	769	17.050	333	439	21.400	-110	188	21.490	
12	05/23/2021	11	0.0	12.0	14:14:24.19	2323	764	17.380	247	441	21.490	-148	195	22.220	
13	05/23/2021	12	0.0	13.0	14:14:24.68	2603	790	17.930	173	446	21.730	-178	198	22.570	
14	05/23/2021	13	0.0	14.0	14:14:25.17	3872	798	18.150	124	445	21.700	-209	196	22.300	
15	05/23/2021	14	0.0	15.0	14:14:25.66	1910	790	17.980	120	434	21.180	-218	186	21.040	
16	05/23/2021	15	0.0	16.0	14:14:26.15	1973	742	17.350	120	424	20.680	-215	176	19.950	
17	05/23/2021	16	0.0	17.0	14:14:26.64	2241	728	16.570	175	412	20.070	-215	169	19.220	
18	05/23/2021	17	0.0	18.0	14:14:27.21	1664	702	15.970	239	407	19.860	-141	171	19.480	
19	05/23/2021	18	0.0	19.0	14:14:27.70	2565	698	15.880	240	408	19.880	-121	175	19.950	
20	05/23/2021	19	0.0	20.0	14:14:28.19	2463	717	16.320	151	413	20.400	-139	178	20.360	

on right mouse



## Processing



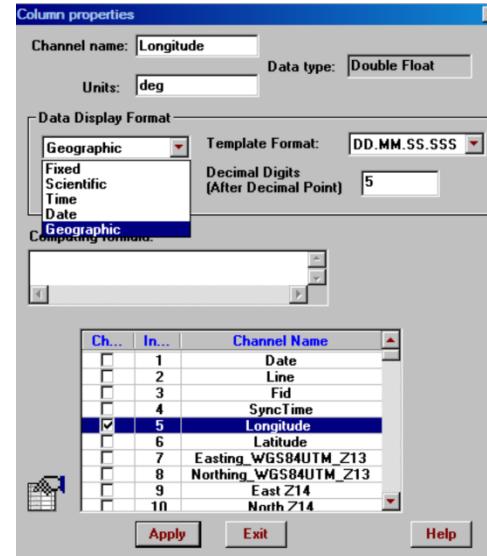
Selected Data Removal

Digital Filer Suite

Fill in data via interpolation

Calculate First and Second Derivatives or Integrate channels

## Change Name, Units and Format



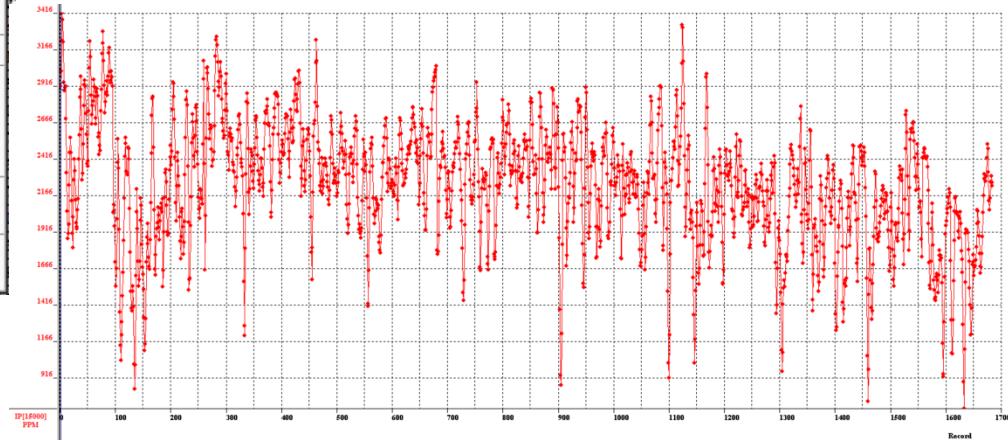
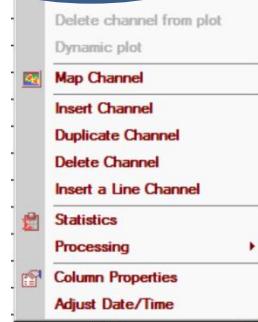
# PLOTTING DATA



N:\Shuttle3\_interp\_Jan2021\Radenko\Za obradu\1\EMP400\_170.qct

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)	O
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	455	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	2666	698	15.8980	240	408	19.8880	-121	175	19.9350	
20	05/23/2021	19	0.0	20.0	14	Plot Channel		16.3200	151	418	20.4000	-139	178	20.2640	

on right mouse

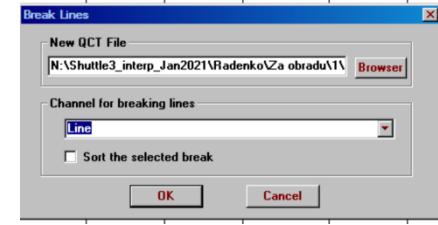
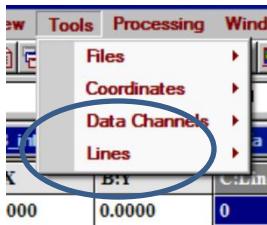


you can select multiple channels to plot

# Breaking Out Individual Lines to Their Own Spreadsheet

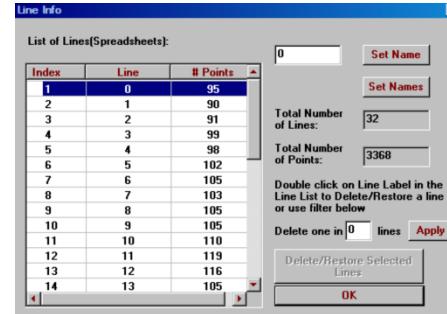
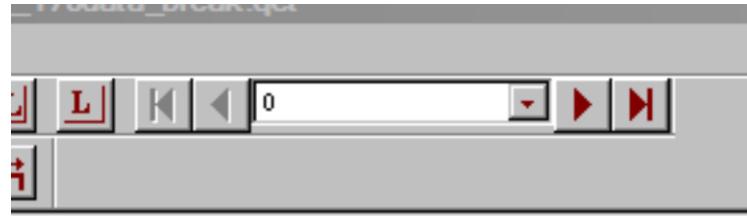
Record	A:X	B:Y	C:Line	D:Station	E:XCoord	F:YCoord	G:IP[15000]	H:OP[15000]	I:Cond[15000]	J:IP[7000]	K:OP[7000]	L:Cond[7000]	M:IP[3000]	N:OP[3000]	O:Cond[3000]	P:TIME	Q:DATE
1	0.0000	0.0000	0	0	0.0000	1.0000	2916.000000	856.0000	19.4930	461.0000	473.0000	23.0790	6.0000	229.0000	26.0900	14:14:18.72	05/23/21
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	14:14:20.61	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	22.5560	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	1.480	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	1.6920	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	14:14:24.65	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



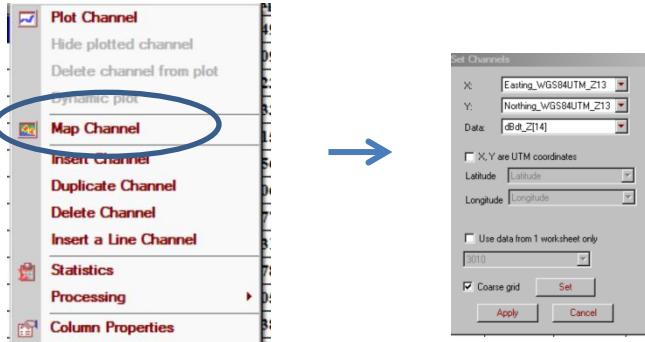
# Gridding, Contouring and Mapping Tools

select a channel to be mapped



Record	P:dBtr_Z[1]	Q:dBtr_Z[2]	R:dBtr_Z[3]	S:dBtr_Z[4]	T:dBtr_Z[5]	U:dBtr_Z[6]	V:dBtr_Z[7]	X:dBtr_Z[8]	Y:dBtr_Z[9]	Z:dBtr_Z[10]	AA:dBtr_Z[11]	AB:dBtr_Z[12]	AC:dBtr_Z[13]	AD:dBtr_Z[14]	AE:dBtr_Z[15]	AF:dBtr_Z[16]			
1	*	*	*	*	*	*	*	19.05104	16.63218	11.68573	12.95701	11.07564	9.51191	8.31142	6.81657	5.07518	3.72590	2.59248	1.73957
2	*	*	*	*	*	*	*	19.06537	16.63870	11.69355	12.96464	11.08408	9.51949	8.34927	6.82447	5.08150	3.73186	2.59587	1.74229
3	*	*	*	*	*	*	*	19.07858	16.64313	11.69983	12.97035	11.09339	9.52648	8.35647	6.83173	5.08762	3.73784	2.59915	1.74507
4	*	*	*	*	*	*	*	19.08744	16.64530	11.69983	12.97400	11.10074	9.53279	8.36293	6.83827	5.09347	3.74379	2.60231	1.74789
5	*	*	*	*	*	*	*	19.09279	16.64511	11.69726	12.97552	11.10693	9.53836	8.38681	6.84407	5.09990	3.74967	2.60532	1.75075
6	*	*	*	*	*	*	*	19.09443	16.64641	11.69813	12.97478	11.11194	9.54308	8.37342	6.84995	5.10424	3.75546	2.60818	1.75362
7	*	*	*	*	*	*	*	19.09217	16.63702	11.69708	12.97170	11.11589	9.54687	8.37731	6.85318	5.10994	3.76110	2.61087	1.75650
8	*	*	*	*	*	*	*	19.08877	16.62892	11.69736	12.96612	11.11775	9.54959	8.38015	6.85636	5.11337	3.76663	2.61338	1.75937
9	*	*	*	*	*	*	*	19.07487	16.61762	11.68972	12.95778	11.11817	9.55103	8.38177	6.85845	5.11710	3.77168	2.61565	1.76219
10	*	*	*	*	*	*	*	19.05913	16.60202	11.68927	12.94648	11.11663	9.55699	8.38202	6.85935	5.12014	3.77646	2.61767	1.76495
11	*	*	*	*	*	*	*	19.03853	16.58472	11.67780	12.93223	11.11312	9.54946	8.38089	6.85905	5.12246	3.78084	2.61943	1.76764
12	*	*	*	*	*	*	*	19.01310	16.56316	11.66355	12.91508	11.10764	9.54643	8.37839	6.85755	5.12404	3.78486	2.62094	1.77026
13	*	*	*	*	*	*	*	19.08258	16.53800	11.64623	12.89489	11.10001	9.54175	8.37439	6.84748	5.12481	3.78833	2.62224	1.77281
14	*	*	*	*	*	*	*	19.04675	16.50907	11.62566	12.87149	11.09900	9.55252	8.36877	6.85062	5.12466	3.79129	2.63325	1.77527
15	*	*	*	*	*	*	*	19.05063	16.47619	11.60183	12.84942	11.07774	9.55692	8.36152	6.84508	5.12358	3.79369	2.62400	1.77765
16	*	*	*	*	*	*	*	19.05930	16.43964	11.57477	12.81529	11.06312	9.51678	8.35267	6.83820	5.12156	3.79552	2.62452	1.77997
17	*	*	*	*	*	*	*	18.07063	16.39922	11.54432	12.78251	11.04606	9.50470	8.34213	6.82991	5.11855	3.79674	2.62481	1.78221
18	*	*	*	*	*	*	*	17.50446	16.35471	11.51027	12.74644	11.02637	9.49055	8.32979	6.82012	5.11446	3.77729	2.62487	1.78439
19	*	*	*	*	*	*	*	18.08778	16.30610	11.47258	12.70709	11.00400	9.47427	8.31560	6.80881	5.10926	3.79713	2.61469	1.78650
20	*	*	*	*	*	*	*	18.61959	16.25332	11.43108	12.66446	10.97890	9.45850	8.29953	6.79598	5.10292	3.79626	2.62431	1.78857
21	*	*	*	*	*	*	*	18.54593	16.19637	11.43858	12.61837	10.95102	9.45110	8.28156	6.78160	5.09543	3.79466	2.62374	1.79061
22	*	*	*	*	*	*	*	18.46717	16.13587	11.43706	12.56972	10.92026	9.41235	8.26183	6.76886	5.08682	3.79239	2.62304	1.79267
23	*	*	*	*	*	*	*	18.38390	16.07141	11.42851	12.51836	10.88784	9.38784	8.24062	6.74884	5.07736	3.78955	2.62233	1.79482
24	*	*	*	*	*	*	*	18.29664	16.00343	11.42068	12.46490	10.85319	9.31681	8.21814	6.73085	5.06705	3.78624	2.62169	1.79713
25	*	*	*	*	*	*	*	18.20568	15.93457	11.41736	12.40953	10.81669	9.23438	8.19450	6.71193	5.05899	3.78281	2.62118	1.79965
26	*	*	*	*	*	*	*	18.11117	15.86213	11.41398	12.38531	10.77835	9.20654	8.16969	6.69212	5.04420	3.77837	2.62083	1.80239
27	*	*	*	*	*	*	*	18.01327	15.78711	11.405186	12.29335	10.73820	9.27532	8.13475	6.67145	5.03171	3.77385	2.62067	1.80541
28	*	*	*	*	*	*	*	17.91242	15.70982	13.98757	12.23393	10.69644	9.24388	8.11683	6.65005	5.01862	3.76905	2.62078	1.80876
29	*	*	*	*	*	*	*	17.80935	15.63007	13.92164	12.17157	10.65348	9.21161	8.08926	6.62819	5.00514	3.76410	2.61218	1.81250

or on right mouse

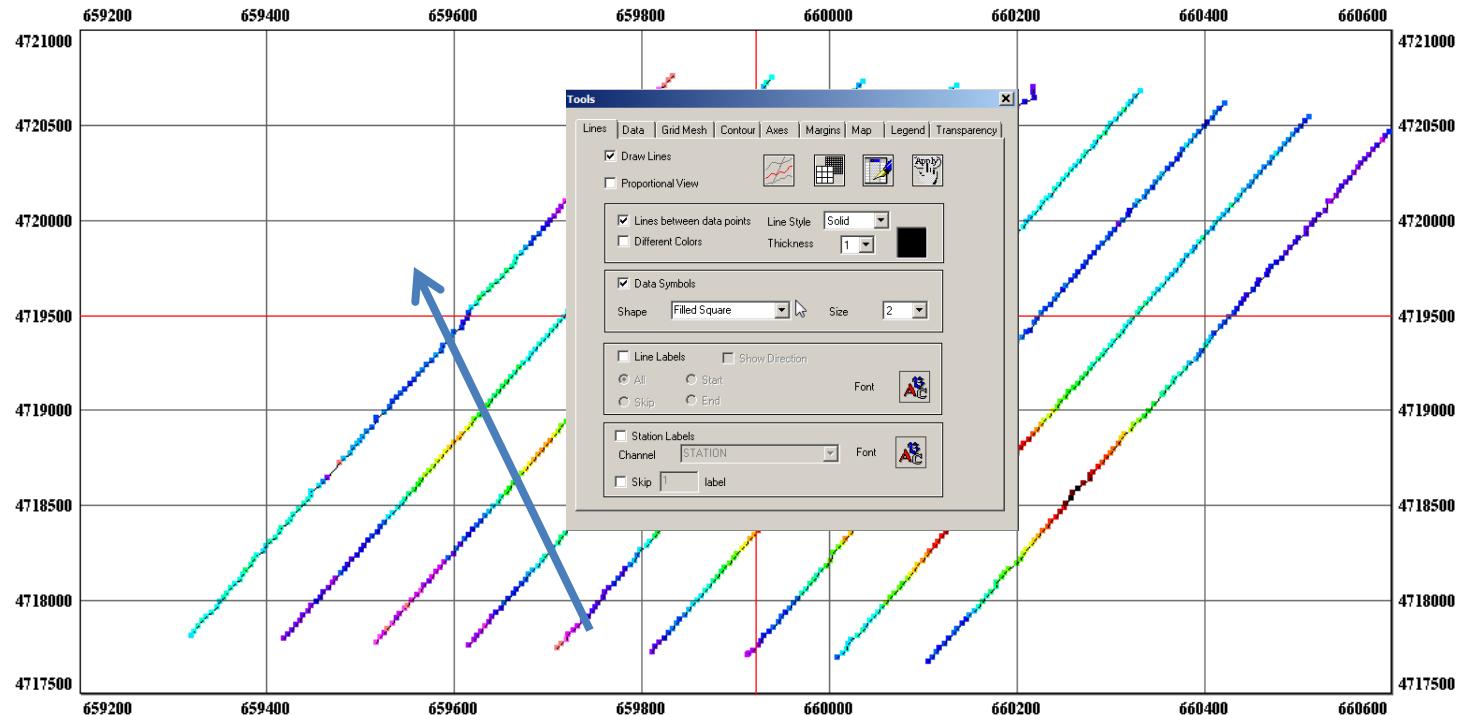


select reference channels for 2D plot

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

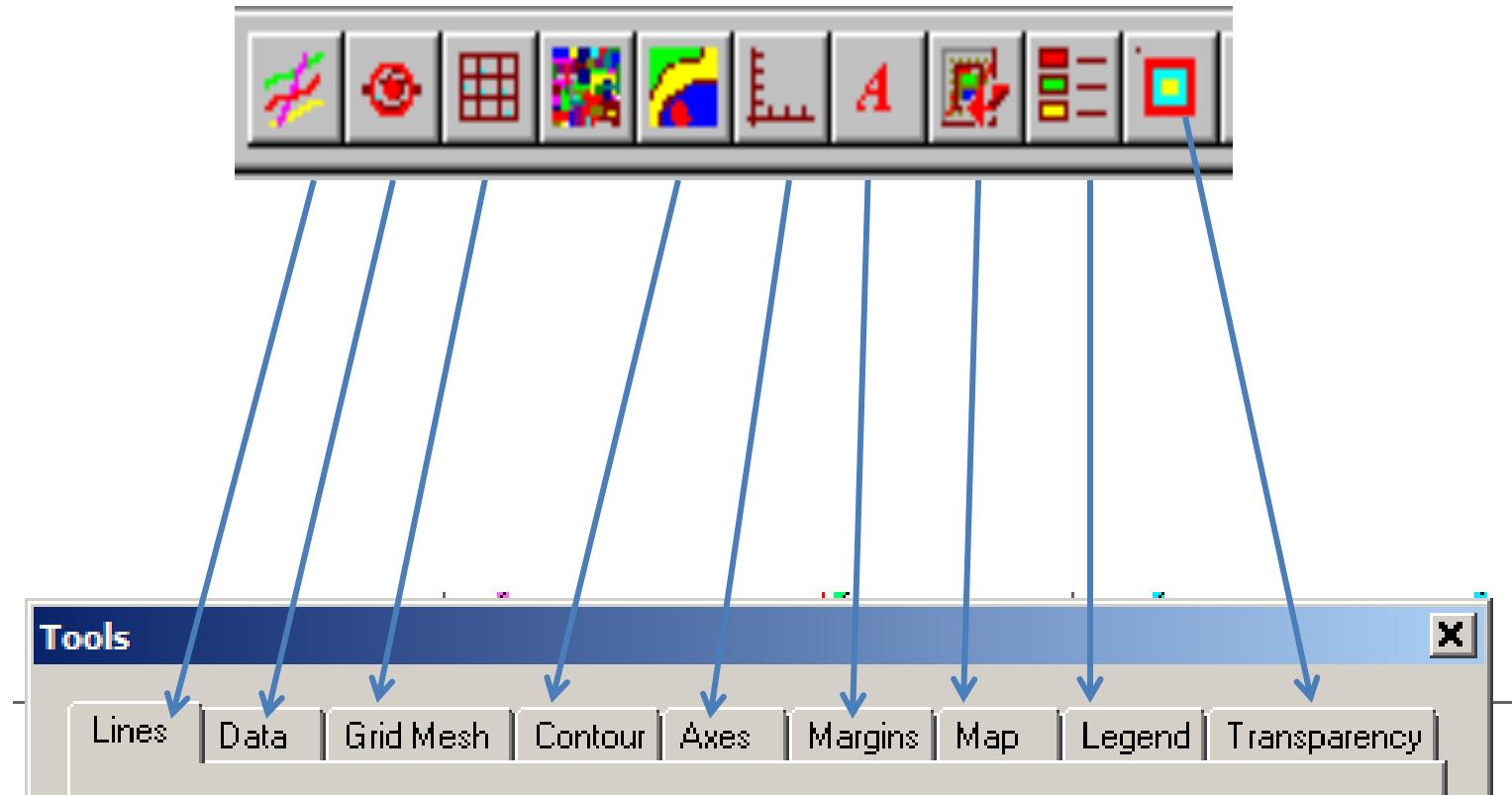


double left click in window  
for mapping controls



## Mapping Tools - Controls

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



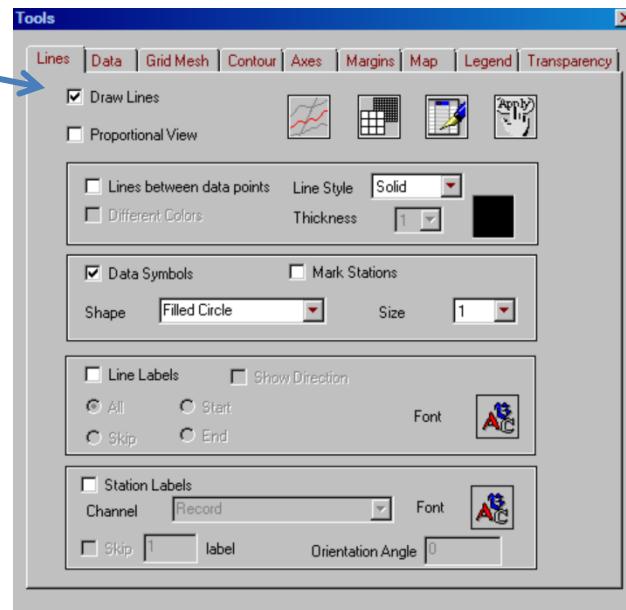
## Mapping Tools - Controls



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

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

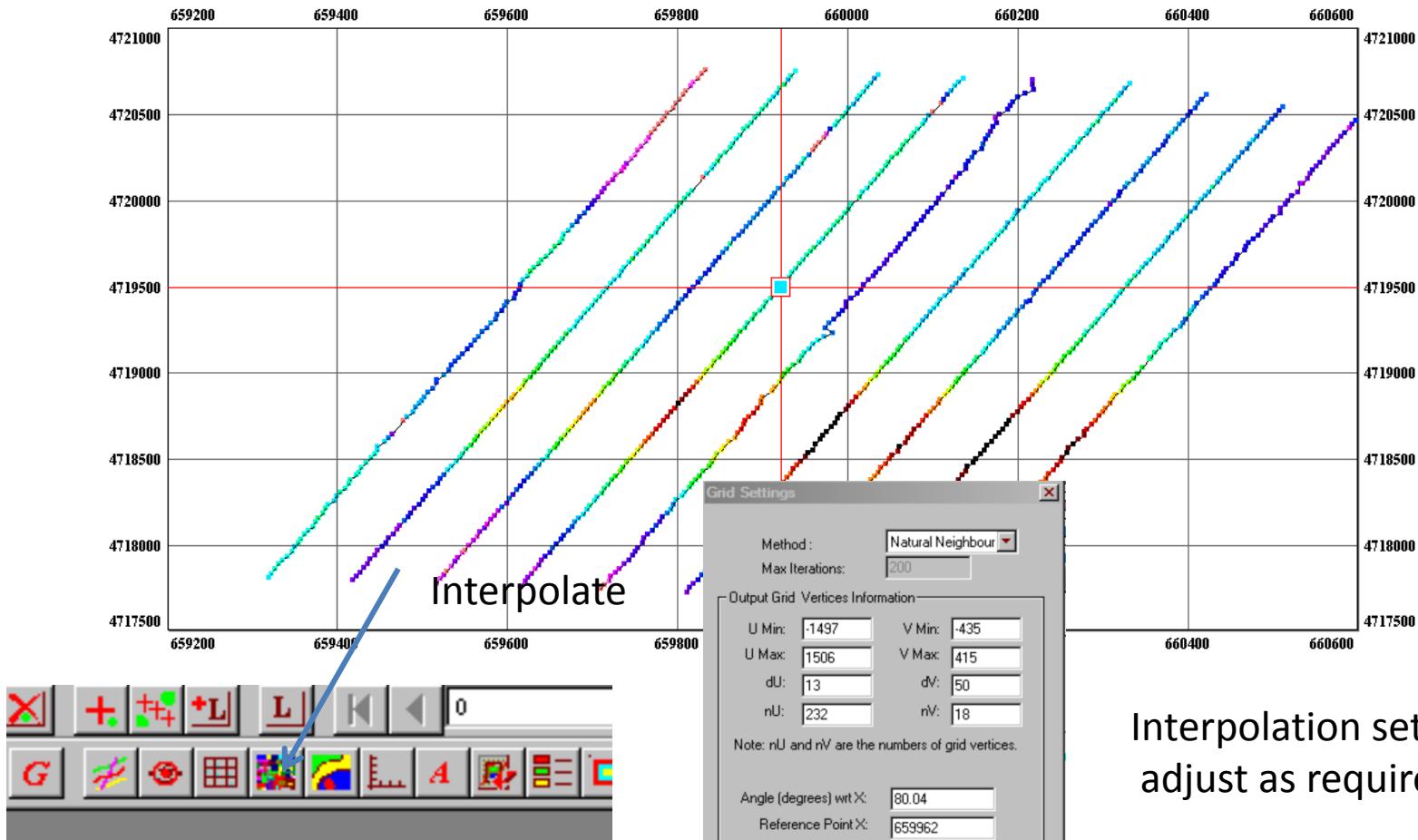
**Controls display of Station Labels**



**Controls graphic displays of Lines**

**Controls display of Line Labels**

## Mapping Tools – Interpolation onto a regular “rectilinear” grid



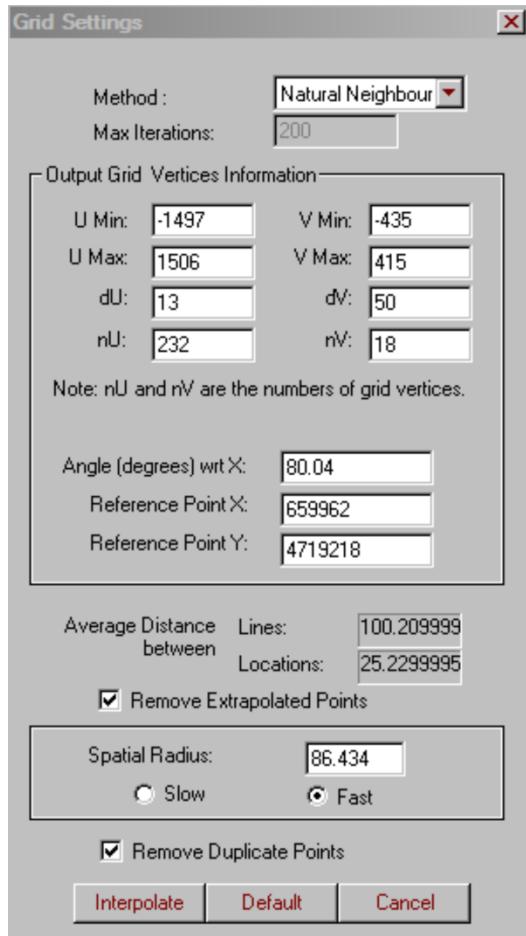
Interpolation settings  
adjust as required

### User Controls:

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

# Mapping Tools

## Interpolate



Interpolation settings  
adjust as required

Select Interpolation Algorithm

Define Grid Parameters  
- size and resolution

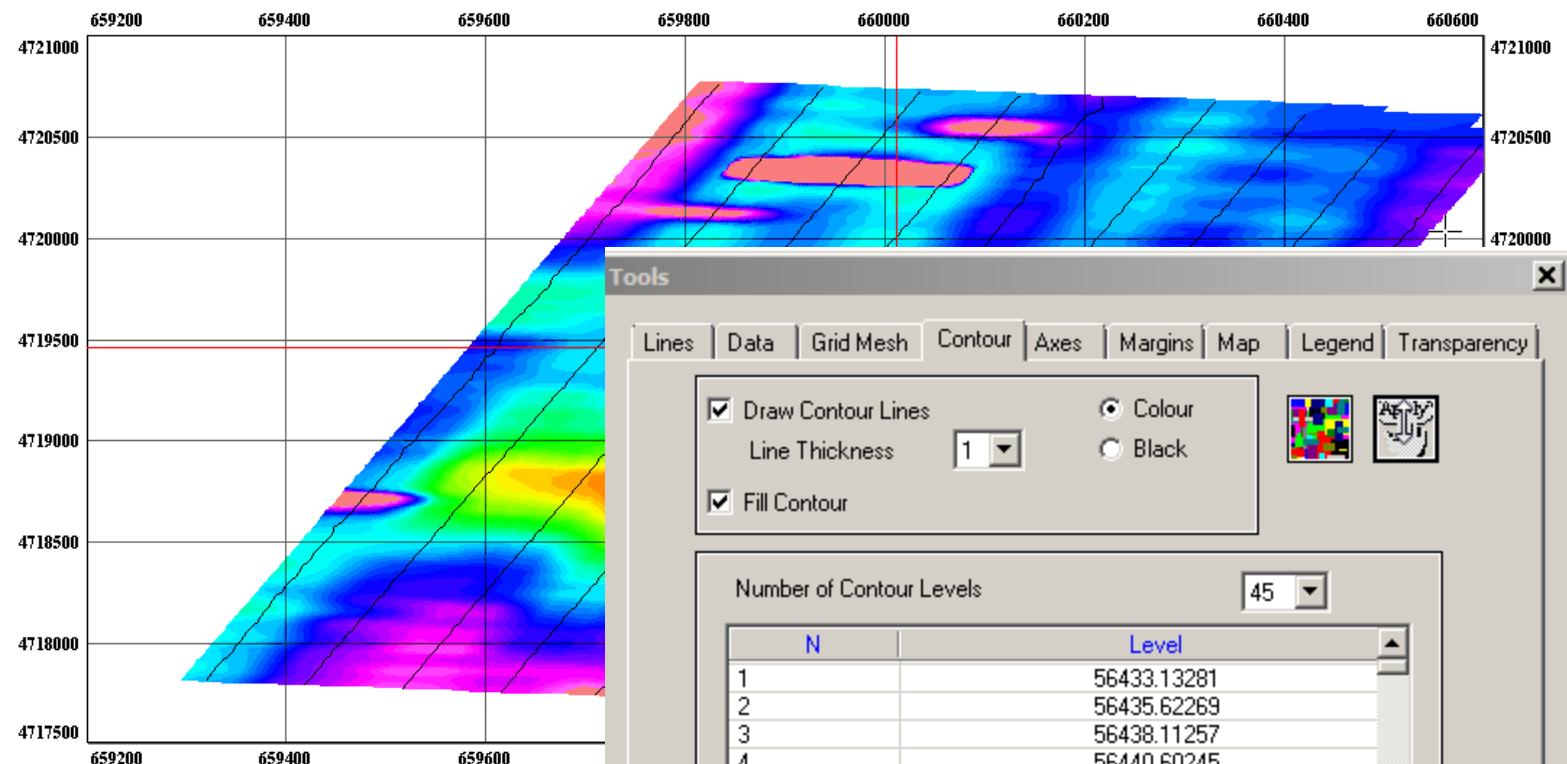
Grid Centre and Angle

Data Resolution parameters

Extrapolated Data Removal Settings

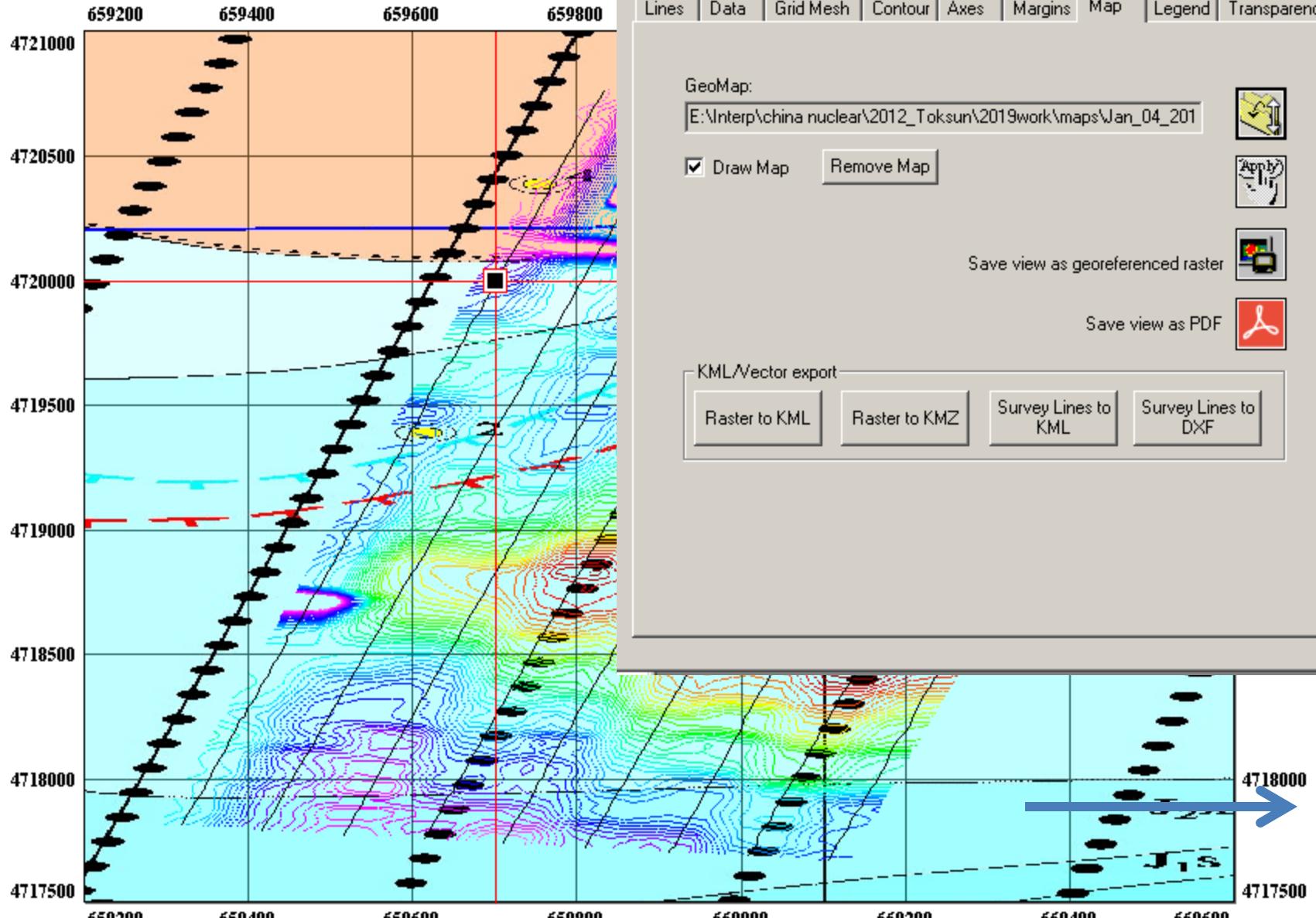
Duplicate Station handling

# Mapping Tools - Contouring



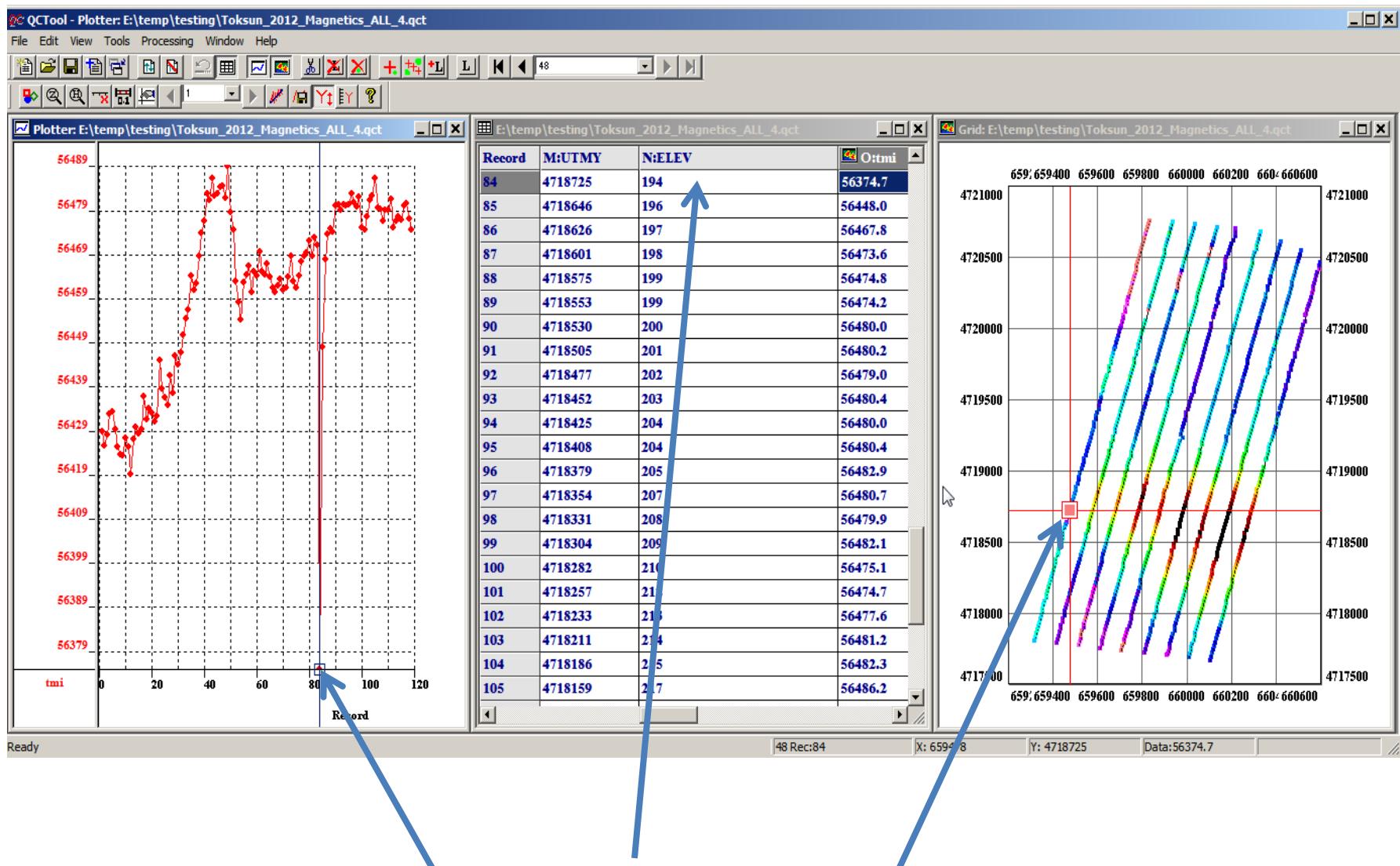
double left click in window  
for mapping controls  
- Contouring

## Mapping Tools – Underlays and Exports



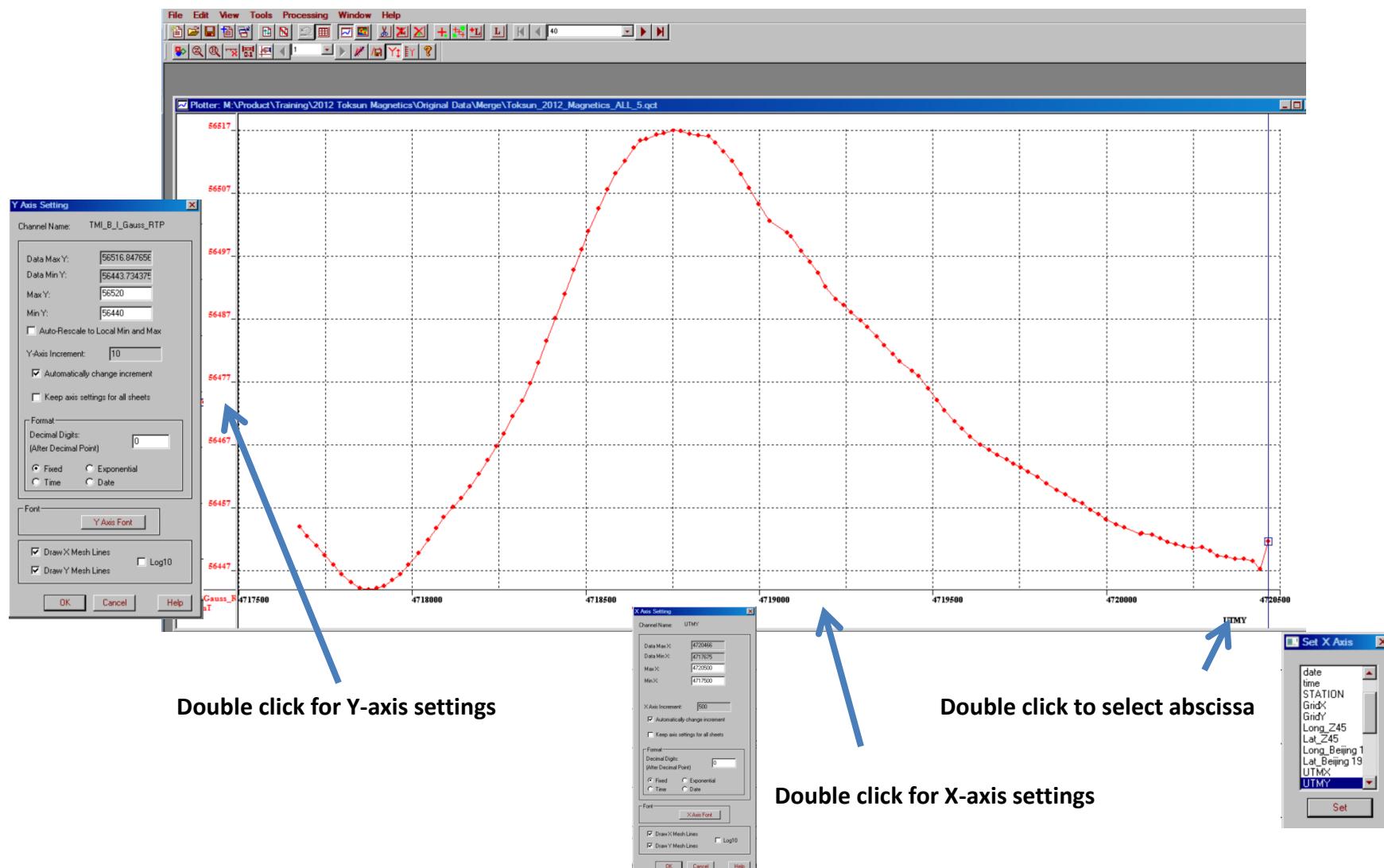
example underlay map

# Spreadsheets, Plotter, Grid Display linked in memory



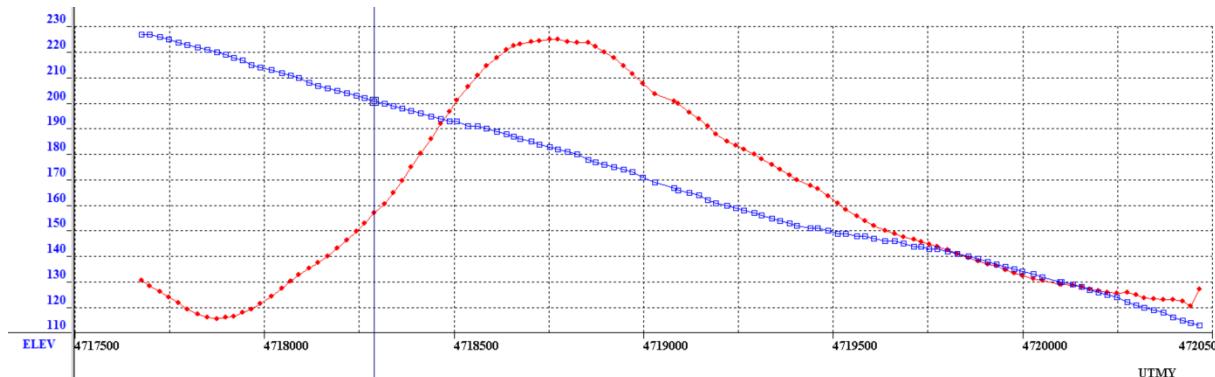
Select a location in any display application and point located in the other two

# Plotting Tools

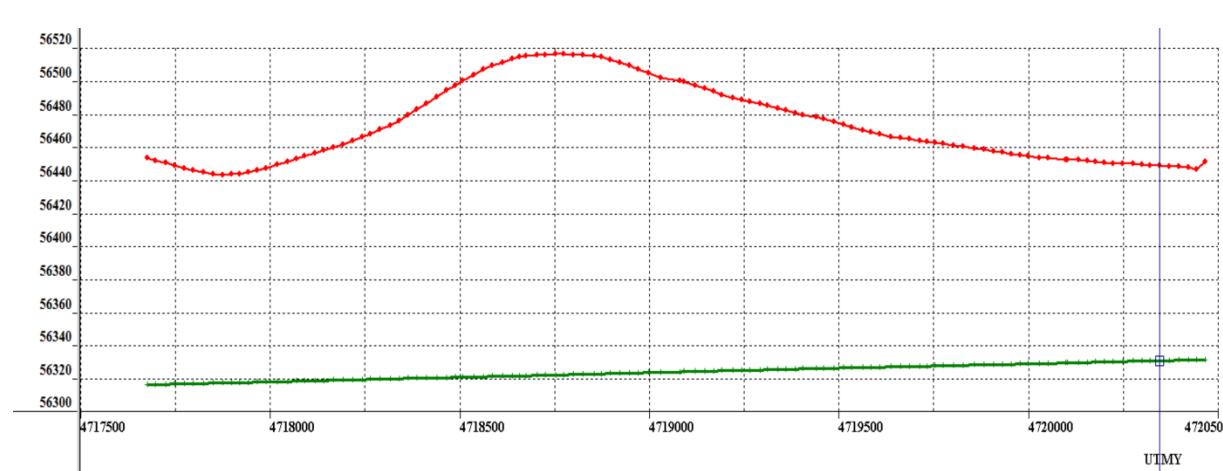


# Plotting Tools

Plot multiple channels each with its own Y-scale

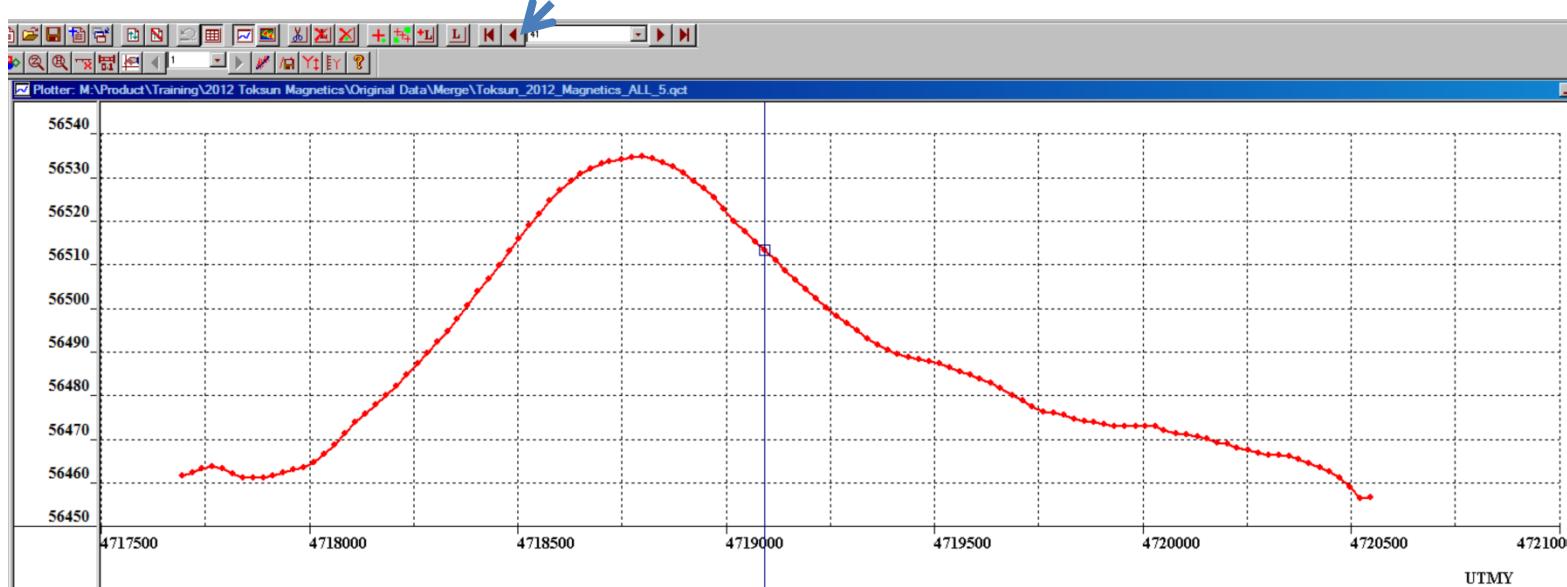


Plot multiple channels with one Y-scale



# Plotting Tools

## Step between Lines



## Step between Lines

