

Lonestar Data Export using the Advanced Matrix Viewer

Issue/Version	Date	Author	Details				
001	07 Dec 2015	Aditya Malkar	The Original				

The following document outlines the process for exporting DF matrix data using the Advanced Matrix Viewer into Microsoft Excel for further processing.

<u>Step 1</u>

Open the DF matrix file using the Advanced Matrix Viewer.



Step 2

Export the DF matrix file using File>Export File. This will save the DF matrix file as a .txt file at a selected destination.



Step 3

To open the exported .txt file, click File>Open in Microsoft Excel. Navigate to the destination folder where the exported DF matrix file was saved. Select the desired .txt file and click "Open"

N.B. Ensure "All Files" under the file types dropdown menu is selected.



Step 4

Select "Delimited" button in the subsequent dialogue box which appears. Click "Next".

Text Import Wizard - Step 1 of 3
The Text Wizard has determined that your data is Delimited.
If this is correct, choose Next, or choose the data type that best describes your data.
Original data type
Choose the file type that best describes your data:
<u>Delimited</u> - Characters such as commas or tabs separate each field.
Fixed width - Fields are aligned in columns with spaces between each field.
Start import at row: 1 File origin: 1251 : Cyrillic (Windows)
Preview of file C:\Users\aditya.malkar\Desktop\Advanced Matrix Viewer E\export_matrix_0004.txt.
1 File - C:) Tenester Besults Maus (151102,004 Steel in Mersners 5 mm) (Die
2 Start of File = 10:26:5903/11/2015 UTC
3 Start of Export = 10:26:5903/11/2015 UTC
4 End of Export = 10:26:5903/11/2015 UTC
Cancel <back next=""> Einish</back>

Step 5

Select "Tab" as the delimiter in the next dialogue box. Click "Finish" to complete the import into Excel.

Text Import Wizard - Step 2 of 3	8	X
This screen lets you set the delimiters your data contains. You can see how your text is affected in t below.	he prev	iew
Detritor		
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Comma Text gualifier:		
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Start of Export = 10:26:59 End of Export = 10:26:59		
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Cancel < Back Next >	Eini	sh

<u>Step 6</u>

The resultant Excel file should have the data for CV values, plus Positive Ion Current and Negative Ion Current along with the metadata for the DF matrix file.

The CV values can be found in the "//CV Measurements" section of the Excel file (as shown below, in this case on row 39).

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21	А	В	С	D	E	F	G	Н	1	J	
37	25	25									
38			_								
39	// CV mea	surements									
40	-6	-5.97653	-5.95306	-5.92959	-5.90613	-5.88266	-5.85919	-5.83572 -5.81225		-5.78878	-:
41											
42	// Process	Updates p	Record ev	ery Nth sw	eep						
43	1	2.15E+09	1								
44	// Positive	e model pa	rameters:								
45	// Trained	ion currer	it								
46	// Weighti	ing Factor	endpoint p	ositions							
47	// Weighti	ing Factors									
48	// Amber	Red Thres	hold								
49	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
50	-6.00E+00	0.00E+00	6.00E+00								
51	1.00E+00	1.00E+00	1.00E+00								
52	0	0									

Scrolling past the metadata, the ion current at the corresponding DF values can be found. Each row corresponds to a different DF value, with column corresponding to the CV value.

In this example, data corresponds to 0-100 % DF in 51 Steps i.e. 0, 2, 4 %.. till 100%.

Row 117 is 0%, line 118 is 2%, line 119 is 4% etc.

In this example, there is an ion current of -4.09E-03 at a DF of 0% and a CV of -5.95306 V.

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	1	Α	В	С	D	E	F	G	Н	1	J	К	L	М	
	112	10:29:49	*****	710.2	96	0.00E+00	0.00E+00	0	0		45.4	101.2	60.6	60.2	
	113	10:29:52	****	713.8	98	0.00E+00	0.00E+00	0	0		45.3	101.3	60.5	60.3	
	114	10:29:56	****	717.3	100	0.00E+00	0.00E+00	0	0		45.3	101.3	60.5	60.3	
	115														
	116	// Positive	lon Curre	nt		C	V								
	117	-1.11E-02	2.46E-02	-2.87E-03	-4.09E-03	2.01E-03	-2.73E-02	3.13E-02	-9.89E-03	6.90E-03	2.62E-03	-2.45E-02	1.21E-02	7.93E-04	
	118	-5.11E-03	-1.15E-02	2.82E-03	1.78E-02	1.38E-02	7.63E-05	6.87E-04	-4.50E-03	9.23E-03	-8.39E-04	-1.85E-02	6.79E-03	1.23E-02	
	119	-7.87E-03	4.64E-03	8.00E-03	5.86E-03	-1.46E-02	-4.21E-03	2.63E-02	-2.08E-03	1.75E-02	2.20E-03	-2.16E-02	5.55E-03	3.42E-03	
	L20	1.43E-02	1.73E-02	-1.16E-02	1.22E-02	-1.41E-02	-4.93E-03	1.43E-02	-6.45E-03	-4.62E-03	1.31E-02	-1.07E-02	-5.84E-03	5.45E-03	
	121	4.26E-03	-6.26E-04	-1.07E-02	7.00E-03	1.34E-02	-1.44E-02	9.14E-03	1.51E-03	-1.68E-02	5.78E-03	1.68E-02	-1.25E-02	9.45E-03	
	122	1.47E-02	-2.40E-02	-1.03E-02	1.66E-02	1.01E-03	5.58E-03	-7.54E-03	-5.40E-03	-4.18E-03	-2.14E-04	-6.32E-03	1.02E-02	9.16E-05	
	L23	-1.89E-03	-7.69E-03	-3.72E-03	-8.61E-03	3.29E-02	-3.42E-03	2.44E-04	4.52E-03	7.57E-03	-9.77E-04	-1.89E-03	1.12E-02	-2.33E-02	
	124	-6.10E-05	5.49E-04	1.52E-02	-1.35E-02	-4.33E-03	-1.32E-02	-2.60E-02	2.13E-02	-4.03E-03	2.38E-03	2.08E-03	-1.78E-02	5.74E-03	
1	125	-4.78E-03	8.65E-03	7.17E-04	3.16E-03	-1.42E-03	-9.66E-03	-2.95E-03	-5.69E-03	-5.69E-03	9.87E-03	-1.52E-02	1.08E-02	-1.42E-02	
	126	-1.21E-03	-1.82E-03	-6.70E-03	1.85E-03	2.66E-02	-9.14E-03	4.90E-03	3.98E-03	-1.62E-02	2.17E-02	-1.19E-02	-1.01E-02	5.20E-03	
	127	-5.13E-03	-1.52E-02	1.50E-02	-8.79E-03	-2.08E-03	-7.57E-03	-1.37E-02	3.82E-02	-1.67E-02	7.39E-03	1.53E-02	-2.08E-03	1.81E-02	
	128	-9.00E-04	1.77E-02	1.04E-02	-3.65E-03	-1.04E-02	-1.46E-02	-4.56E-03	-8.53E-03	-1.31E-02	1.34E-02	-2.93E-02	-1.82E-03	1.95E-02	
	129	-4.41E-03	1.54E-02	4.44E-03	5.66E-03	-2.58E-03	-1.14E-02	2.91E-03	3.83E-03	-7.48E-04	1.33E-02	-1.63E-02	8.10E-03	-1.20E-02	
	L30	7.46E-03	4.10E-03	2.88E-03	1.20E-02	-1.12E-02	5.33E-03	-1.76E-02	-4.75E-03	4.72E-03	-8.71E-03	1.54E-02	1.14E-02	-8.10E-03	
	131	1.96E-02	-1.50E-03	-3.63E-03	-8.82E-03	-9.74E-03	1.50E-02	-1.03E-02	2.17E-03	2.08E-02	3.39E-03	1.28E-02	9.46E-04	-1.10E-02	
	132	-6.12E-03	1.37E-02	1.68E-02	-1.77E-02	-1.07E-02	3.04E-03	-7.95E-03	1.65E-02	3.65E-03	7.92E-03	1.82E-03	-1.54E-03	4.56E-03	
	133	1.08E-03	5.66E-03	1.82E-02	-5.63E-03	-1.23E-02	1.94E-02	-1.69E-02	8.10E-03	1.30E-02	-3.19E-03	-6.24E-03	7.19E-03	-2.24E-02	
	L34	1.18E-02	2.32E-03	-3.78E-03	2.32E-03	-2.26E-03	1.67E-02	-2.26E-03	-3.17E-03	1.15E-02	-8.36E-03	-2.56E-03	-4.39E-03	-1.65E-03	
	135	-5.74E-03	-2.38E-03	-6.35E-03	-6.35E-03	6.16E-03	5.25E-03	-3.91E-03	5.86E-03	-1.15E-02	1.23E-02	-6.65E-03	8.00E-03	-5.74E-03	
	136	1.41E-02	-6.93E-03	1.60E-02	-4.49E-03	1.92E-03	9.16E-05	-8.15E-03	1.05E-02	8.33E-03	5.58E-03	3.75E-03	-2.04E-03	-1.74E-03	
	137	1.83E-02	6.65E-03	-8.00E-03	6.96E-03	-6.78E-03	4.52E-03	-1.29E-02	-6.71E-04	7.87E-03	-1.07E-02	-3.12E-02	1.67E-02	-6.10E-05	
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This data can be copied into a suitable layout and CV versus ion current plotted for a particular DF.