

# TenView HWD Round-Up Version Tutorial

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## Introduction

TenView is a data processing program used for the National Airport Pavement Test Facility (NAPTF). The program can be used to review signal processing unit (SPU) data, save SPU data to excel files, and save plots of SPU data to word files.

## Program Operations

### Display SPU data

Step 1. Open the TenView file, '*TenViewFor Round Up\_12-07-2011.exe*'. The TenView interface will show up as the figure 1.

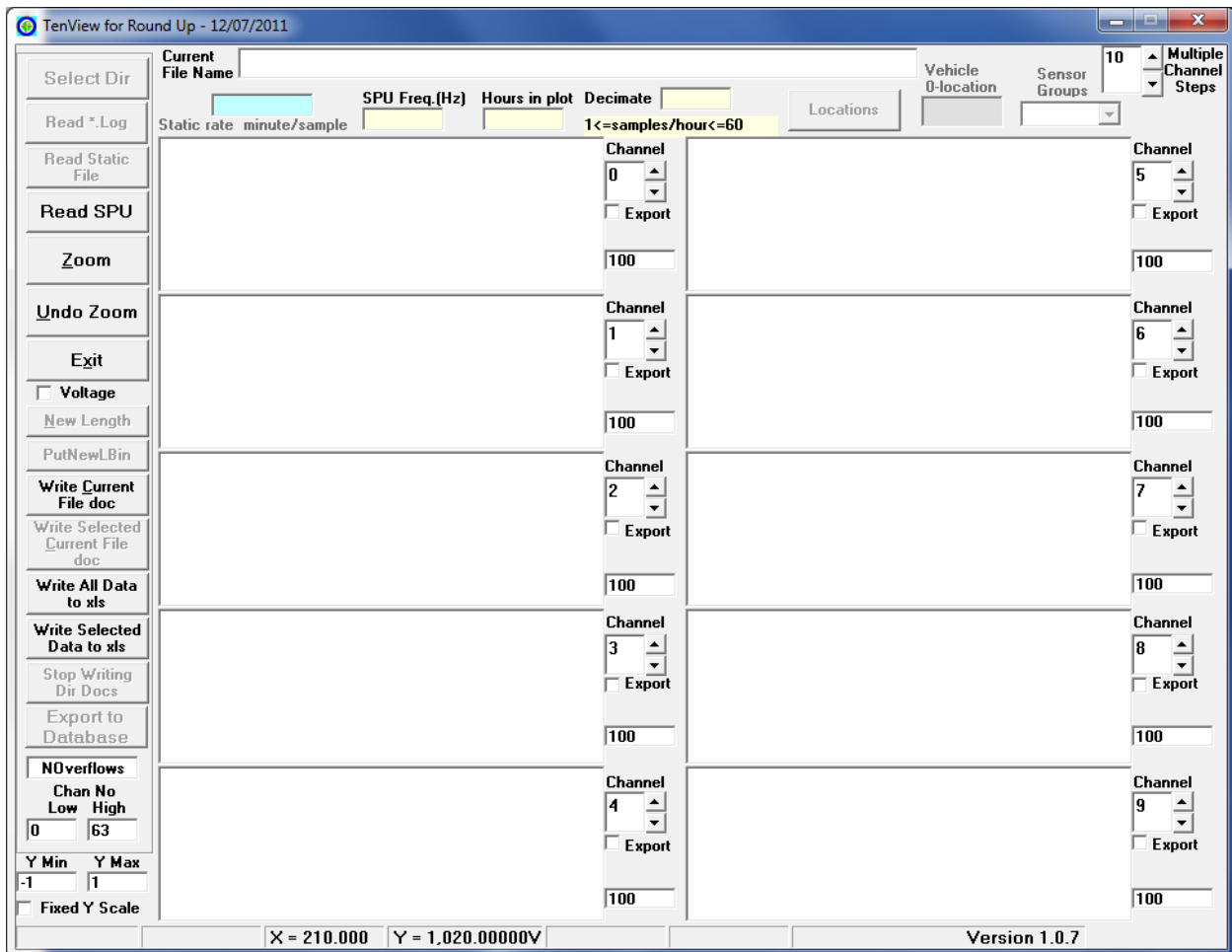


Figure 1. TenView interface

Step 2. See the red arrow in the figure 2. Click **Read SPU** button along the left side. An ‘Open’ dialogue box will come up as the figure 3.

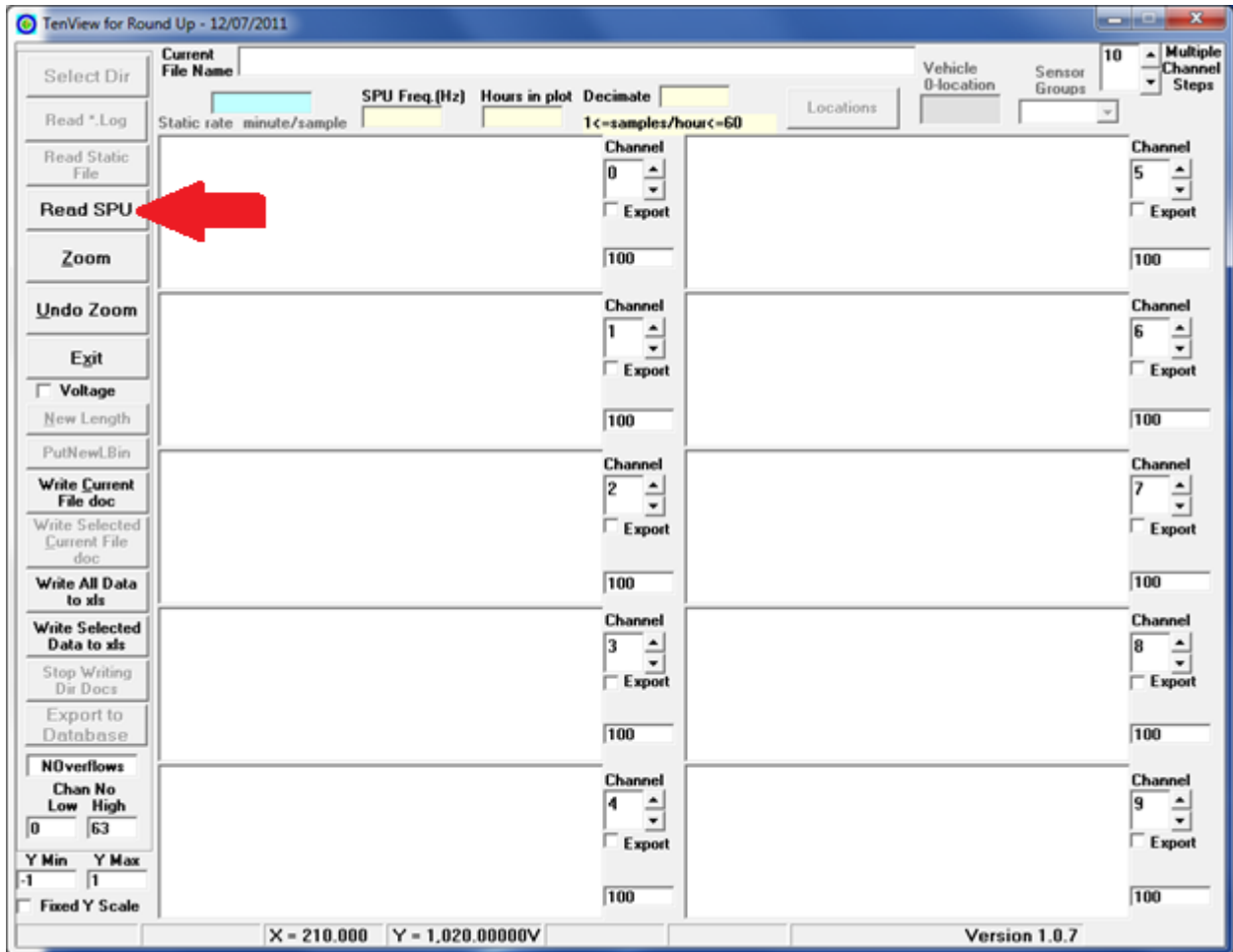


Figure 2. Read SPU File

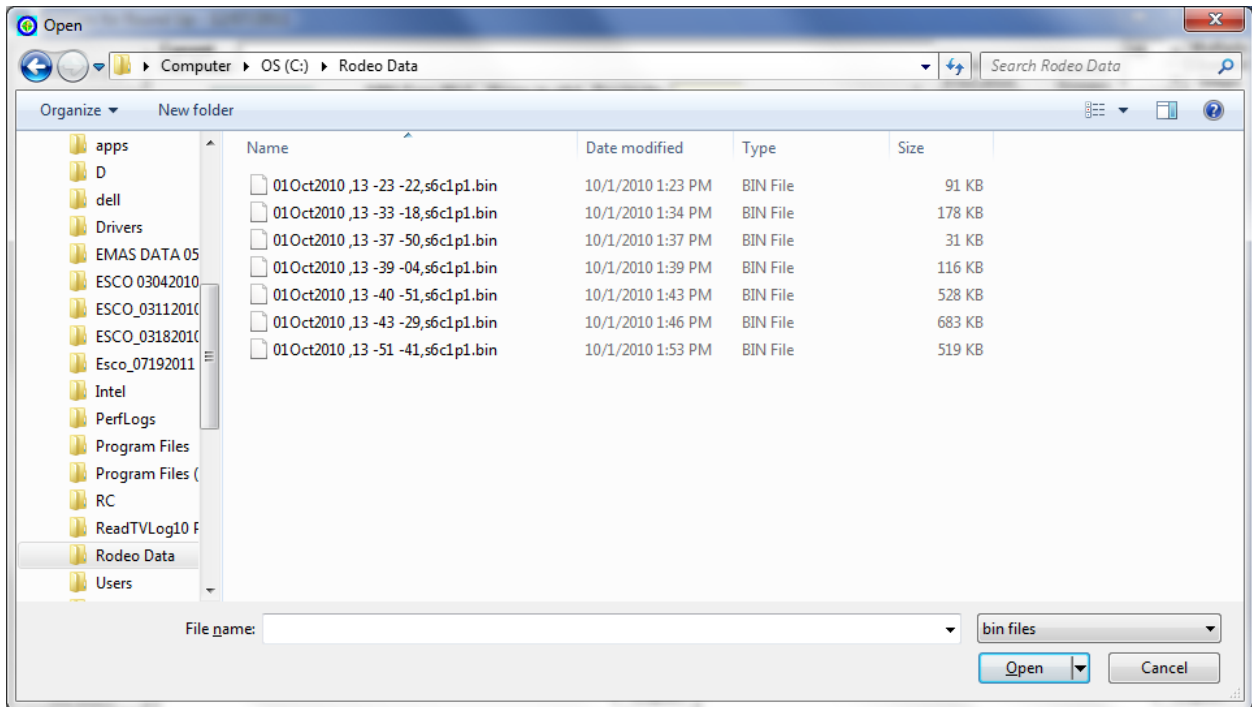


Figure 3. Open SPU file

Step 3. Select the SPU file (\*.bin or \*.txt) that you want to review, then click Open. The SPU file should be binary file (\*.bin) or text file (\*.txt). TenView will show ten plots from channel zero to channel nine. See figure 4. The SPU file name and file path will be shown in the top of TenView. Each plot will show the number of the channel, the sensor name and the sensor position, the highest and lowest value of the data with unit, and unit of X axis.

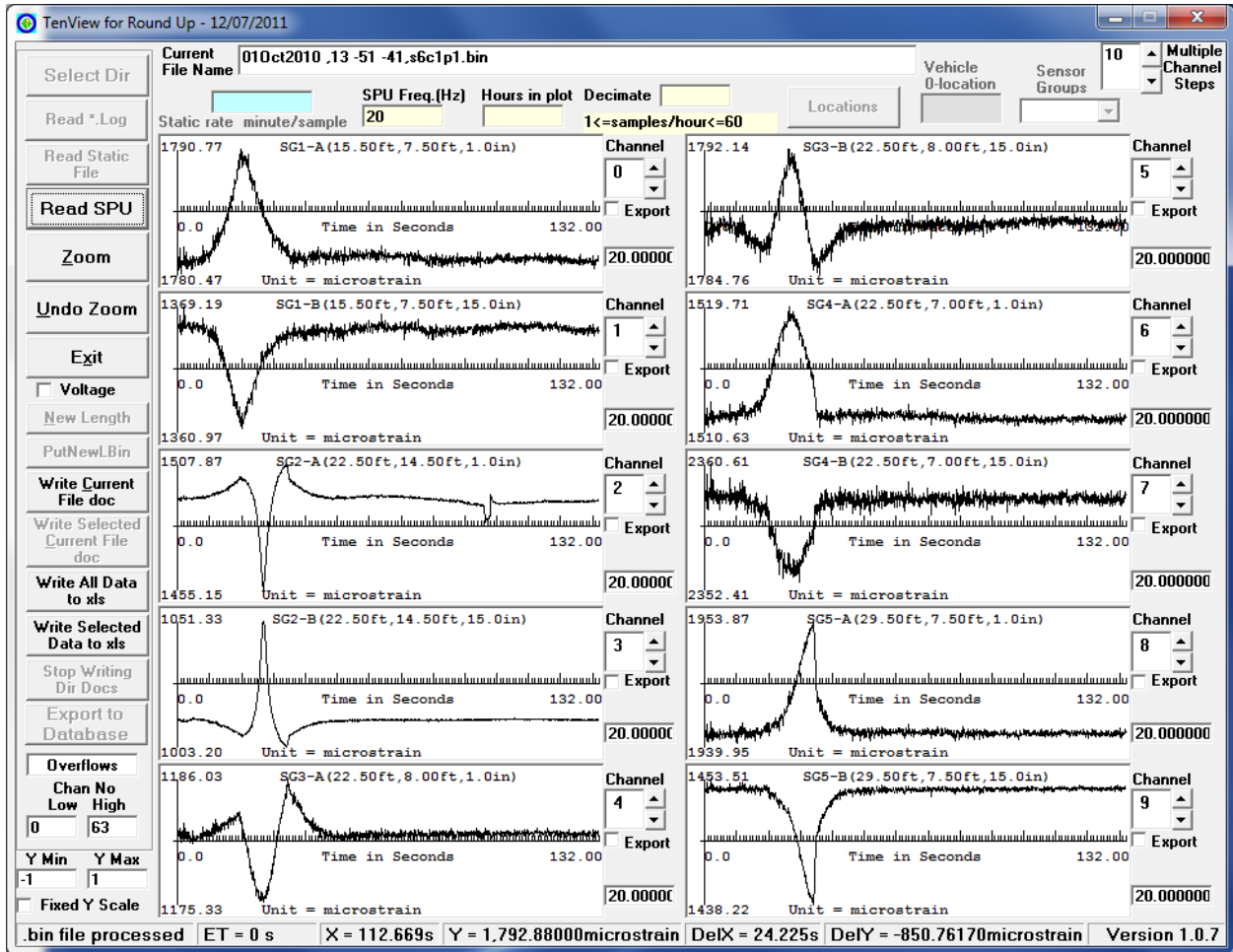


Figure 4. Display plots of the SPU file

### [Review SPU data](#)

Click **Multiple Channel Steps** button (up or down) to review next ten channels or previous ten channels. See figure 5. You can also review any channels (from Channel # 0 to Channel # 63) that you want simply by inputting in the channel numbers to a text box next to each viewing window, highlighted in yellow in figure 6.

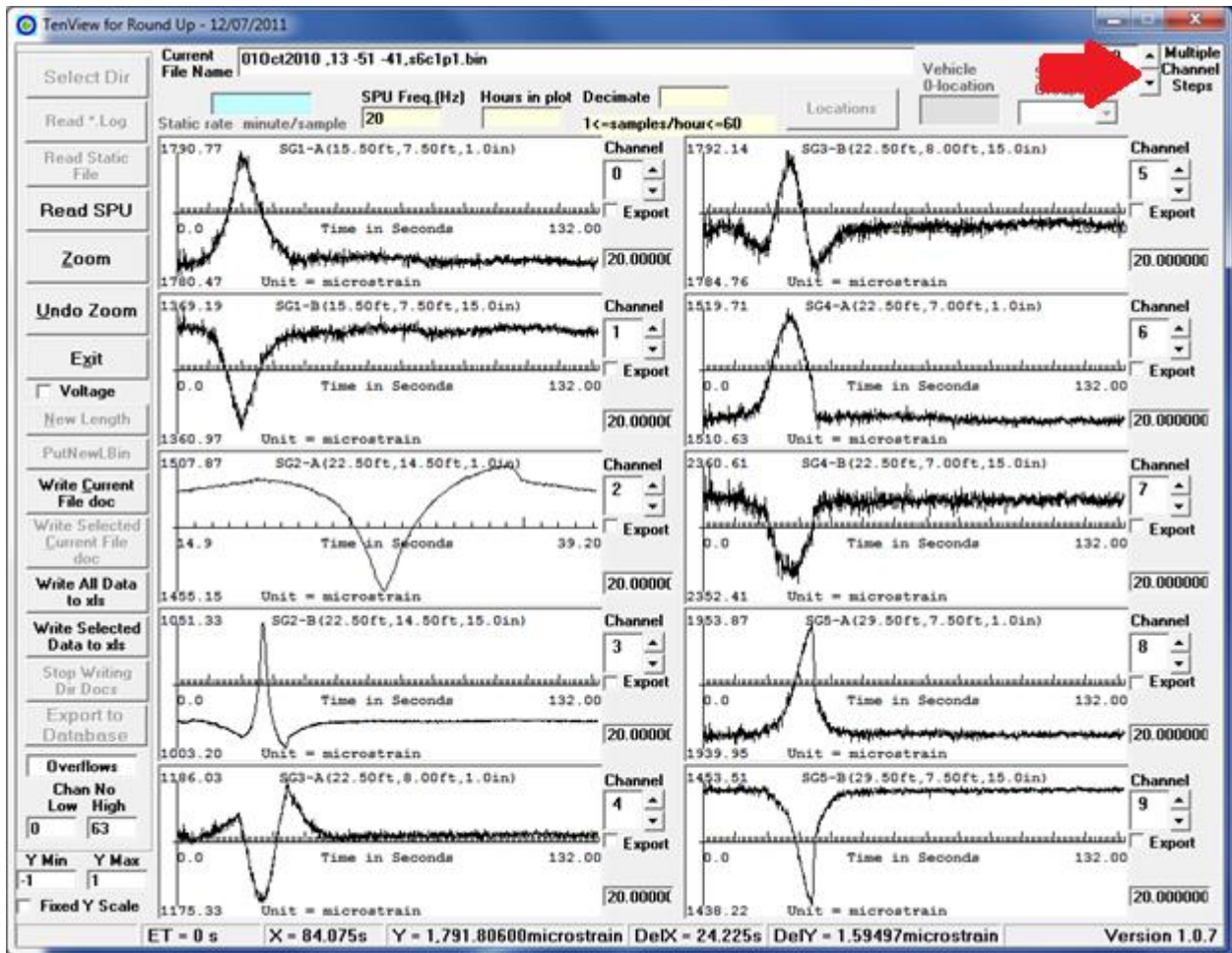


Figure 5. Next 10 channels



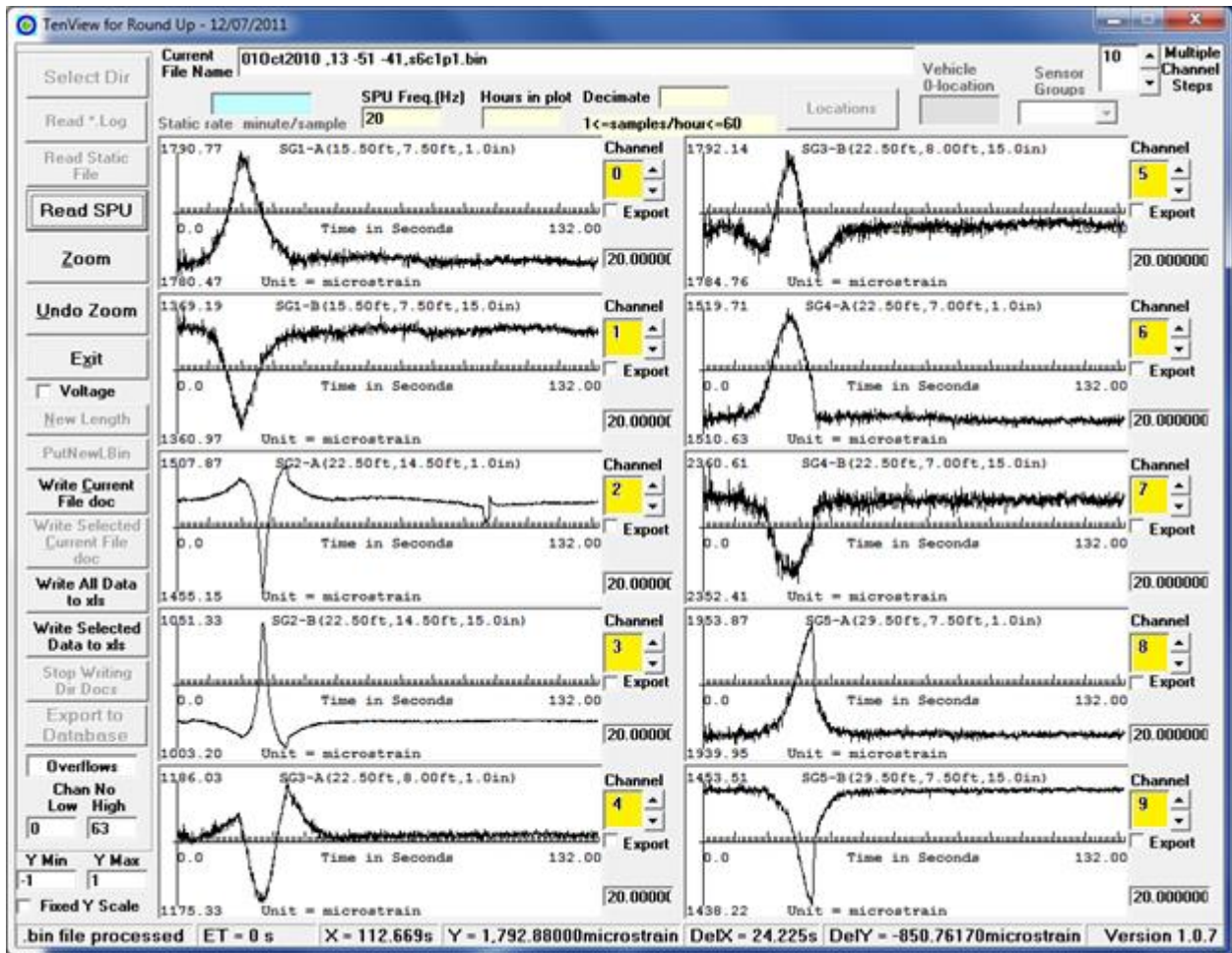


Figure 6. Selected channels

By clicking the **Zoom** button and any two points within a viewing window, the user can zoom in on data from one specific channel. Click **Undo Zoom** button, below the **Zoom** button, to undo the zoom in. See figure 7.

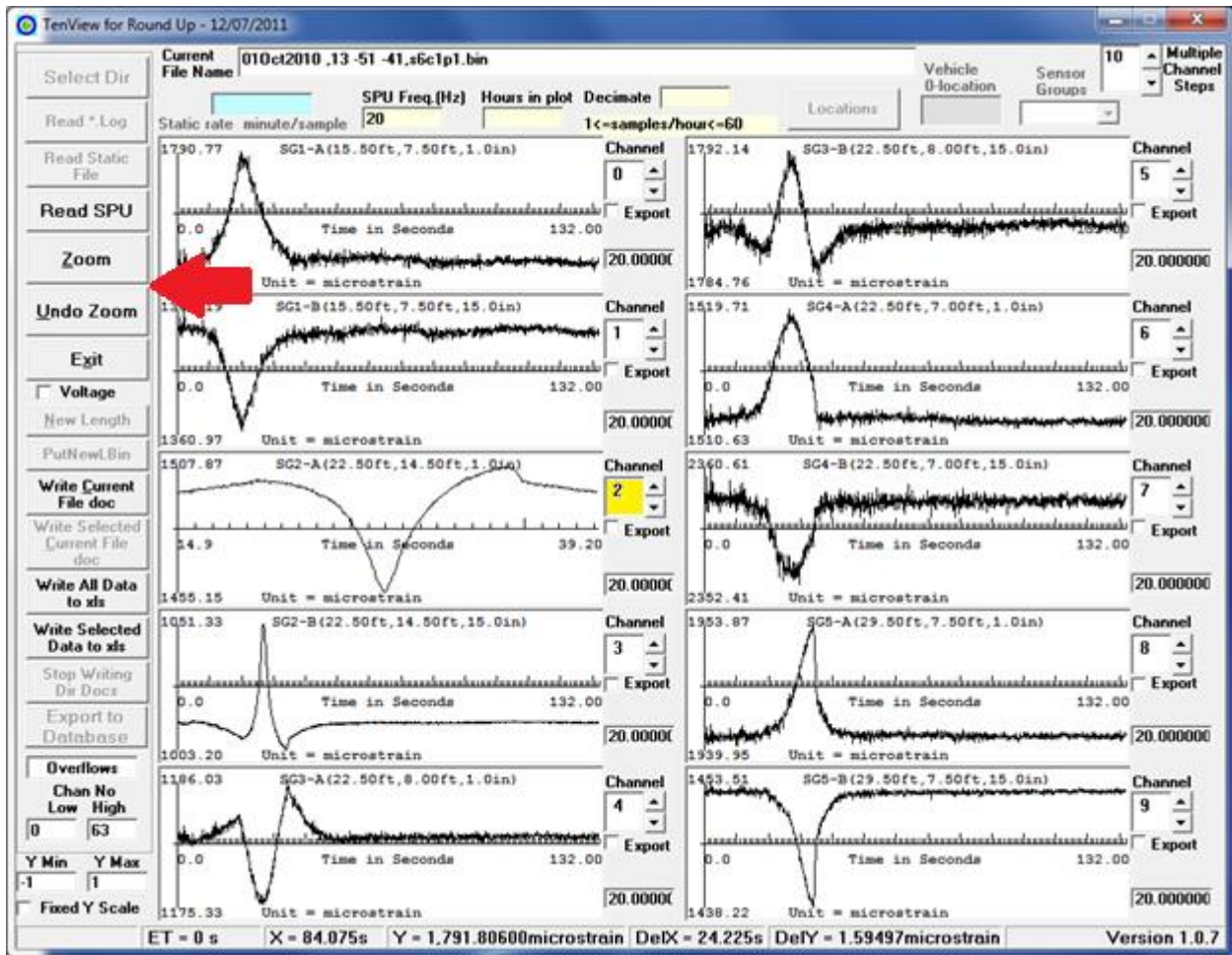


Figure 7. Zoom in one channel

[Save SPU data to excel file](#)

Shown on figure 8, click **Write All Data to xls** button to save the current SPU data, all channels with channel status is 1, to an excel file.

Click **Selected Data to xls** button to save the current SPU data, only the selected channels, to an excel file. To select the channels, click export check box next to each view window you wish to save to the excel document. The file name will include the name of the SPU file plus number of selected channels, for example, “01-Oct-2012, 13-51-41, S6C1, 0, 1, 2, 3.xlsx”. See figure 9.

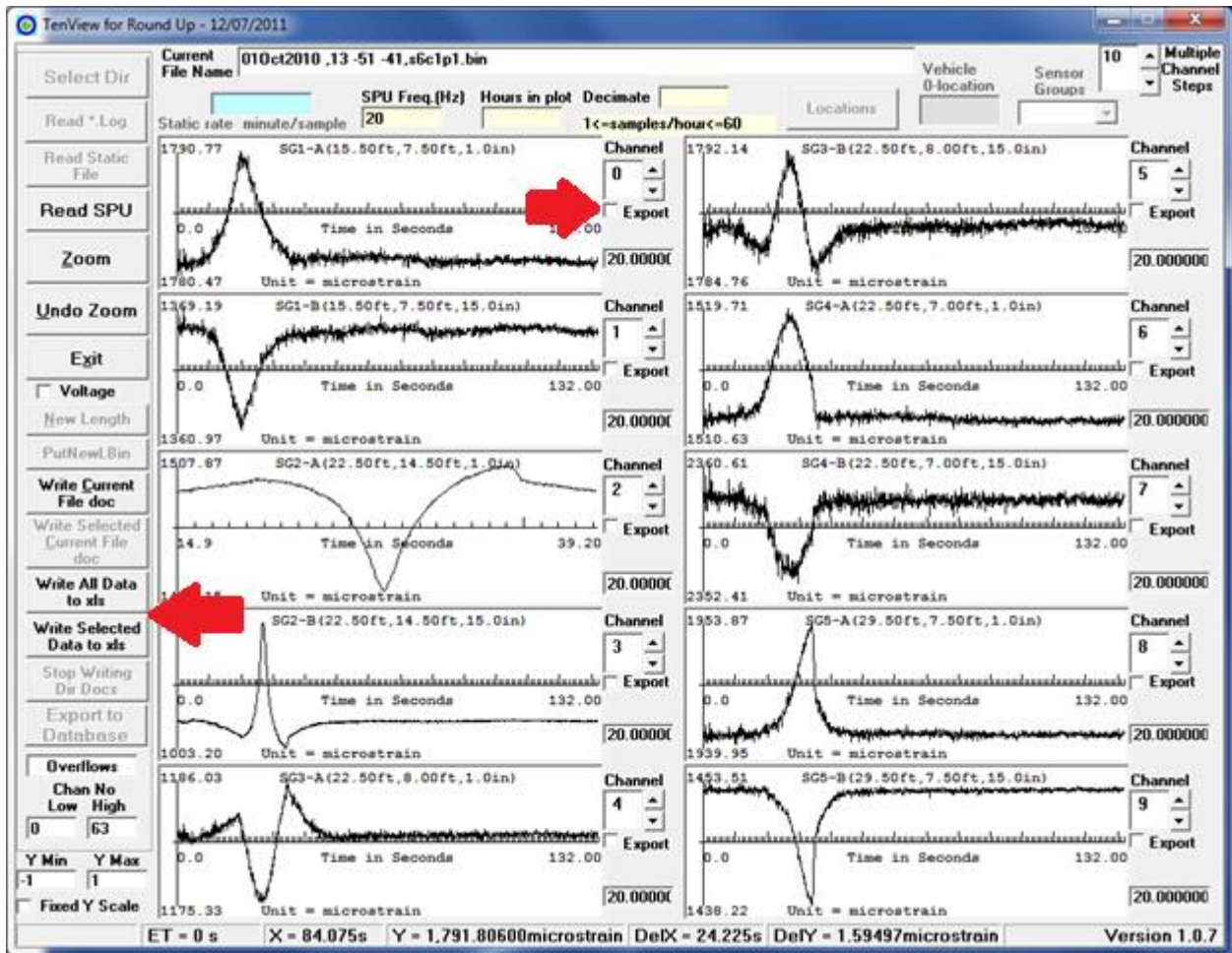


Figure 8. Save SPU data to excel file

	A	B	C	D	E	F	G
2032	10/1/2010 1:53:22 PM	1781.9602	1367.9281	1491.0966	1013.897		
2033	10/1/2010 1:53:22 PM	1781.7921	1367.9804	1491.1414	1013.9122		
2034	10/1/2010 1:53:22 PM	1781.5734	1367.9442	1491.2897	1013.9677		
2035	10/1/2010 1:53:22 PM	1781.624	1367.7244	1491.2417	1013.8166		
2036	10/1/2010 1:53:22 PM	1781.7921	1367.799	1491.2155	1013.8199		
2037	10/1/2010 1:53:22 PM	1782.0331	1368.0732	1491.5417	1014.0079		
2038	10/1/2010 1:53:22 PM	1781.8873	1368.0551	1491.3933	1013.9525		
2039	10/1/2010 1:53:22 PM	1781.5734	1367.7809	1491.2712	1013.9122		
2040	10/1/2010 1:53:22 PM	1781.7192	1367.8897	1491.3083	1013.9122		
2041	10/1/2010 1:53:22 PM	1781.8649	1368.0893	1491.2526	1013.9122		
2042	10/1/2010 1:53:22 PM	1781.8873	1367.8011	1491.5602	1013.9155		
2043	10/1/2010 1:53:22 PM	1781.8144	1367.8918	1491.5602	1013.9525		
2044	10/1/2010 1:53:22 PM	1781.7192	1367.9079	1491.2897	1014.0231		
2045	10/1/2010 1:53:23 PM	1781.5511	1367.7426	1491.0934	1013.8166		
2046	10/1/2010 1:53:23 PM	1781.6969	1367.67	1491.2232	1013.7242		
2047	10/1/2010 1:53:23 PM	1781.9378	1367.799	1491.2155	1013.8014		
2048	10/1/2010 1:53:23 PM	1782.1283	1368.3656	1491.4784	1014.0112		
2049	10/1/2010 1:53:23 PM	1781.4782	1367.67	1491.0007	1013.7981		
2050	10/1/2010 1:53:23 PM	1781.7921	1367.9986	1491.1414	1013.8753		
2051	10/1/2010 1:53:23 PM	1781.8873	1368.0732	1491.3377	1014.1003		
2052	10/1/2010 1:53:23 PM	1781.7415	1368.0732	1491.5602	1013.9155		
2053	10/1/2010 1:53:23 PM	1781.7921	1367.8535	1491.438	1013.9307		
2054	10/1/2010 1:53:23 PM	1782.0331	1367.9644	1491.5973	1014.0448		
2055	10/1/2010 1:53:23 PM	1781.7192	1367.9079	1491.5307	1013.746		
2056	10/1/2010 1:53:23 PM	1782.0331	1367.8011	1491.4675	1013.7677		

Figure 9. Selected Channels excel file

[Save SPU plots to word file](#)

As shown in the figure 10, click **Write Current File Doc** button to save all plots of all channels to a word file. File name will keep the same of SPU file with extension of ‘docx’.

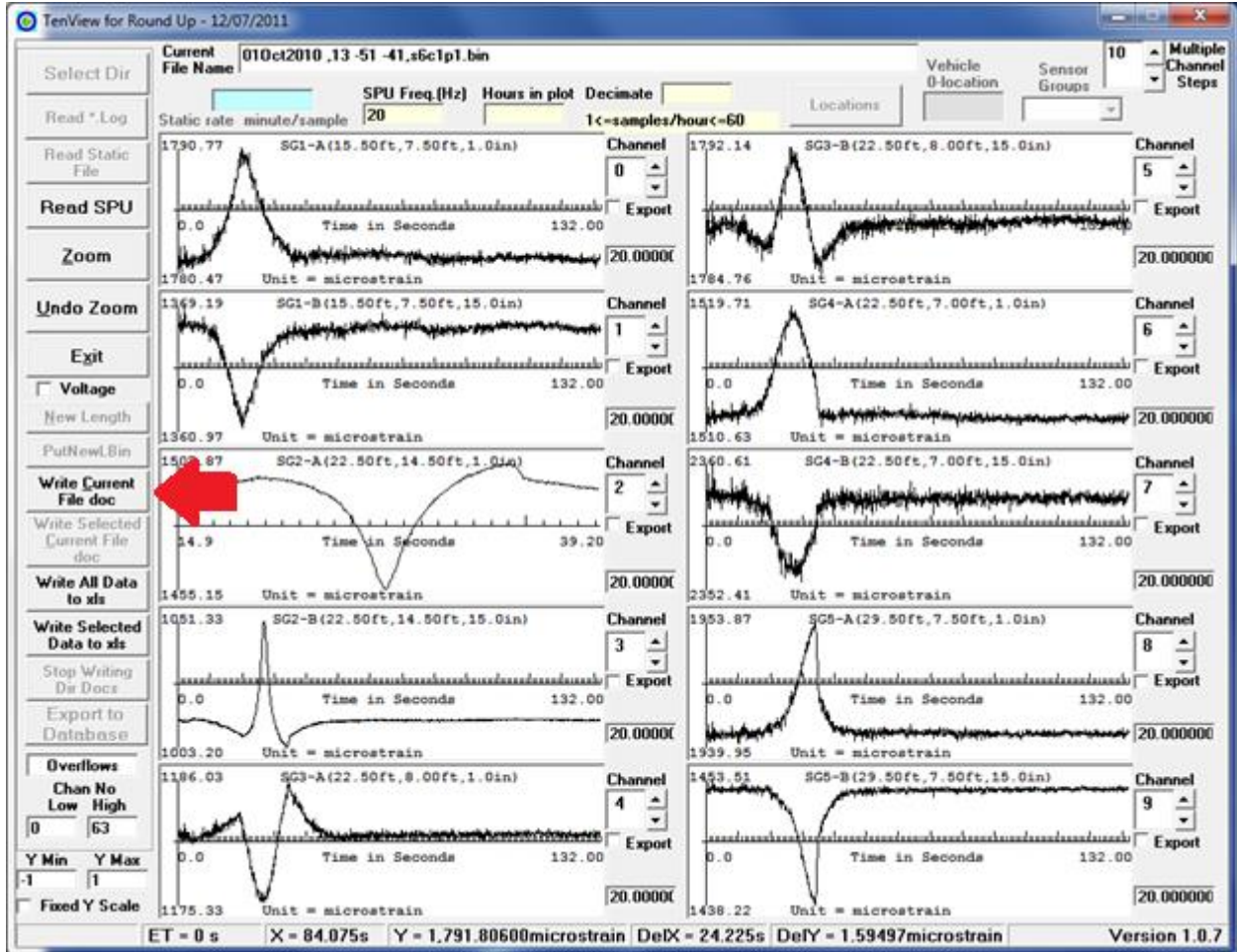


Figure 10. Save SPU plots to word file

The word files as demonstrated in the figure 11 will be saved at a subfolder, Doc, in the same folder as the SPU files.

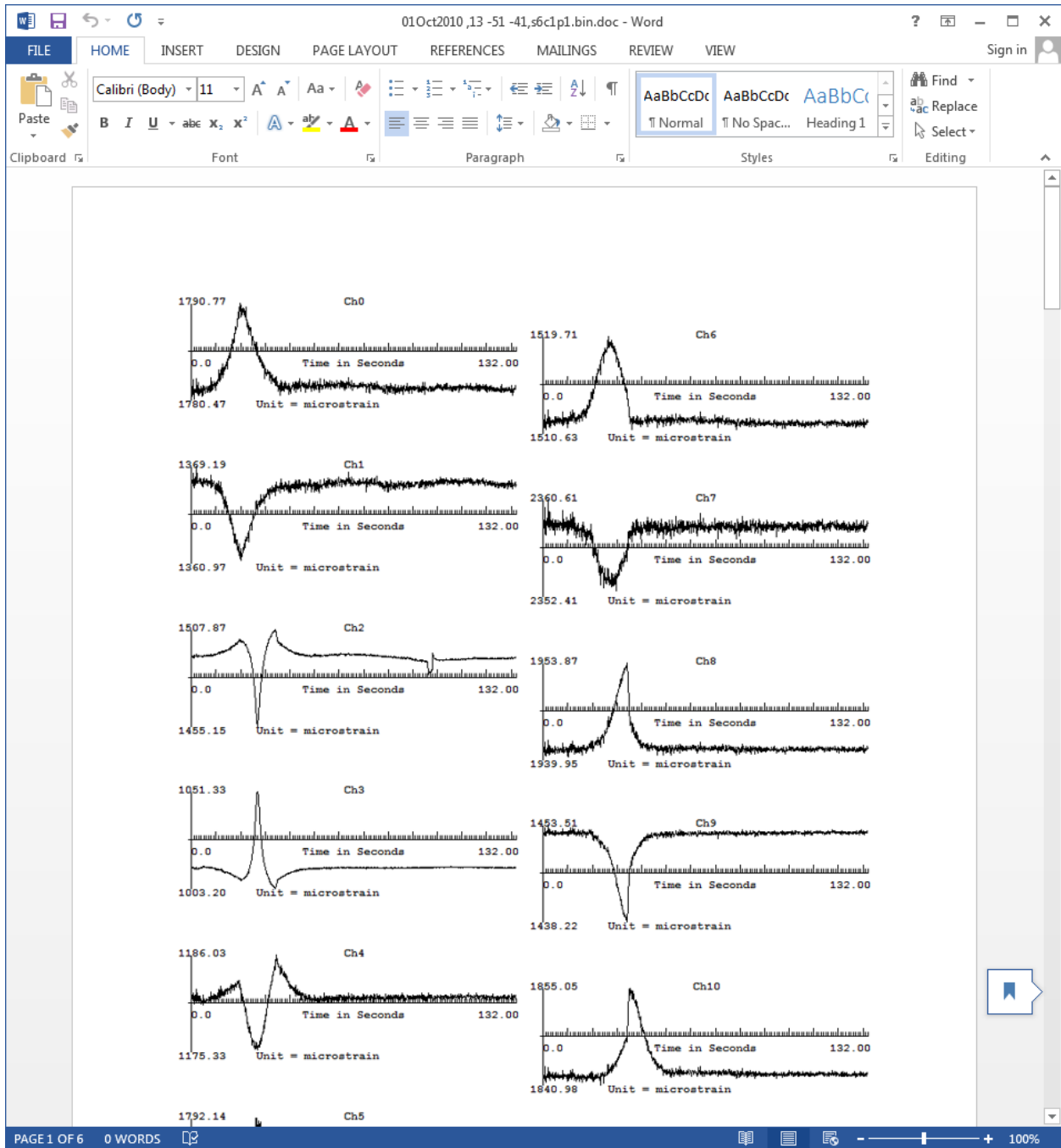


Figure 11. All channel plots word file