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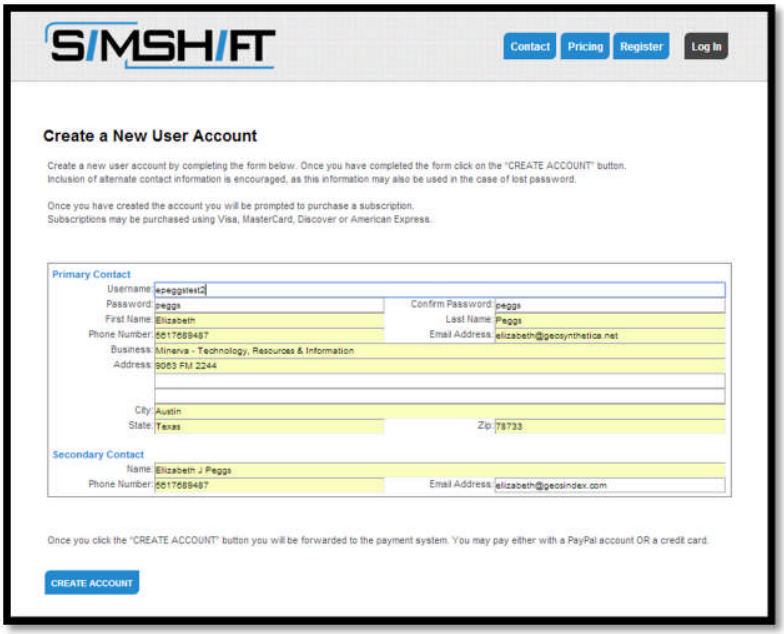
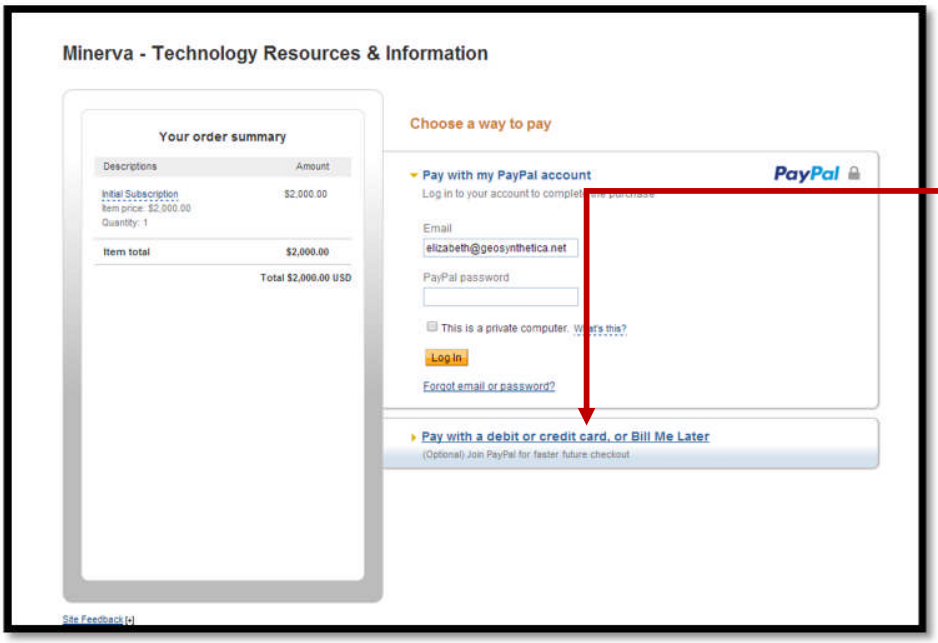
Register & Purchase

1. Click on the "**Register**" button at the top right of the screen.
2. Complete the form. We advise including a secondary contact & email address for security and password retrieval purposes.
3. The password must be a minimum of 7 characters long and must contain at least one non-alpha-numeric character.
4. Once you have completed the form click on the "**CREATE ACCOUNT**" button.
5. Once you have created the account you will be prompted to purchase a subscription.



6. Subscriptions may be purchased using Visa, MasterCard, Discover or American Express.
7. **Record your Username & Password for future use!**
8. Select your payment method. You may pay either with a PayPal Account OR a Credit Card

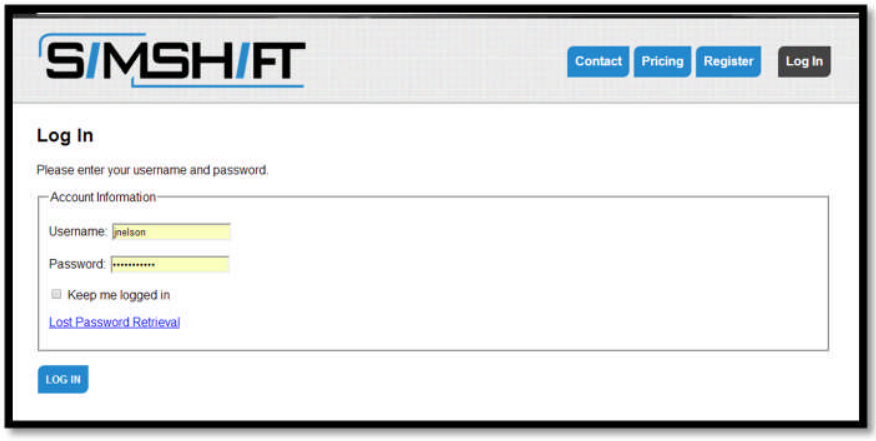


9. Once you have completed your payment, your account is created! You should be redirected to www.SIMShift.com. If not, you may manually return to the site.

Log In & Begin Using SIM*Shift*

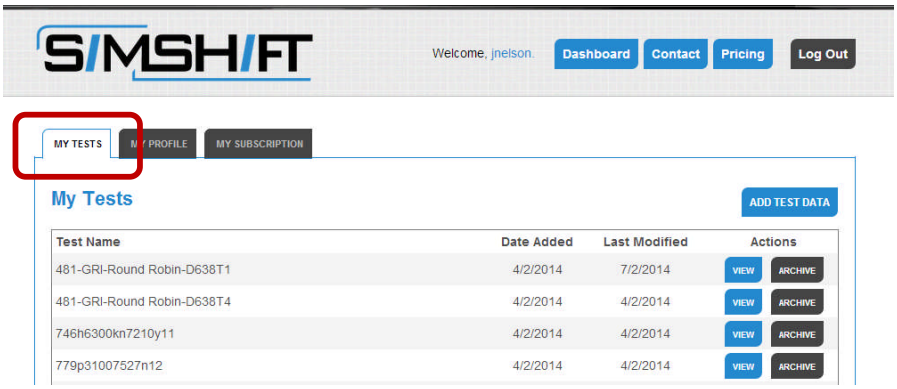
1. Go to www.SIMShift.com and choose "**Log-In**" from the top right of the page.

2. Log In using the Username and Password established during the registration process.



Create a Test & Add Test Data

1. Once you have successfully logged in you will be presented with the dashboard. By default, this should be on the "**My Tests**" tab. If it is not, navigate to the "**My Tests**" tab on the left of the screen to create a test and load data.



2. Prepare your CSV Data File. In order to add test data to SIMShift you must create a CSV file using excel or similar spreadsheet program.
   Add data to the CSV in consecutive columns in EXACTLY this order:
   Temperature | Time | Strain | Stress

   The resulting CSV spreadsheet should look something like this where, Column A is Temperature, Column B is Time, Column C is Strain and Column D is Stress data for One Step.

	A	B	C	D
1	22.955246	0.26	0	4.6006625
2	22.952242	0.56	0.00048449	4.6006625
3	22.976147	1.06	-0.0022286	4.6006625
4	22.983031	1.56	-0.0003876	4.6006625
5	22.985034	2.06	-0.0002907	4.6006625
6	22.998927	2.56	-0.0001938	4.6006625
7	22.992418	3.06	-0.0027131	4.6006625
8	22.992293	3.56	-0.000969	4.6006625
9	22.988663	4.06	0.00106587	4.6006625
10	22.985409	4.56	0.00174415	4.6006625
11	22.977524	5.06	-9.69E-05	4.6006625
12	22.954244	5.56	0.00125967	4.6006625
13	22.972518	6.08	0.0038759	4.6006625
14	22.972893	6.56	0.00232554	4.6006625

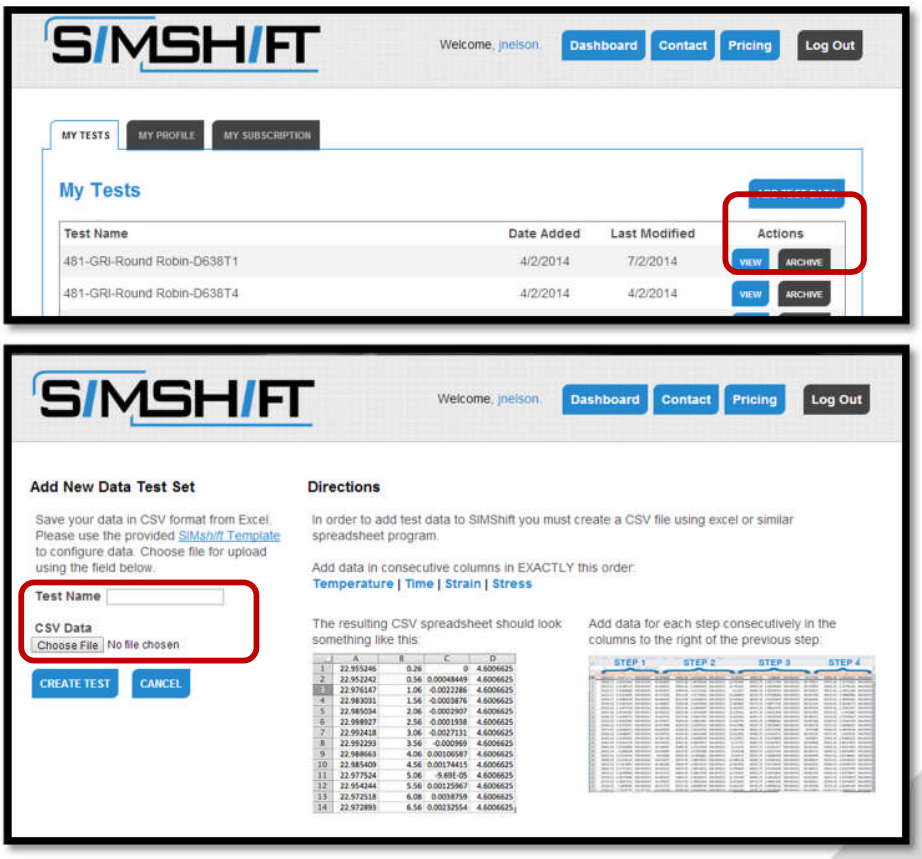
3. Add data for each step consecutively in the columns to the right of the previous step:

Once this data is formatted, you are ready to create the test.

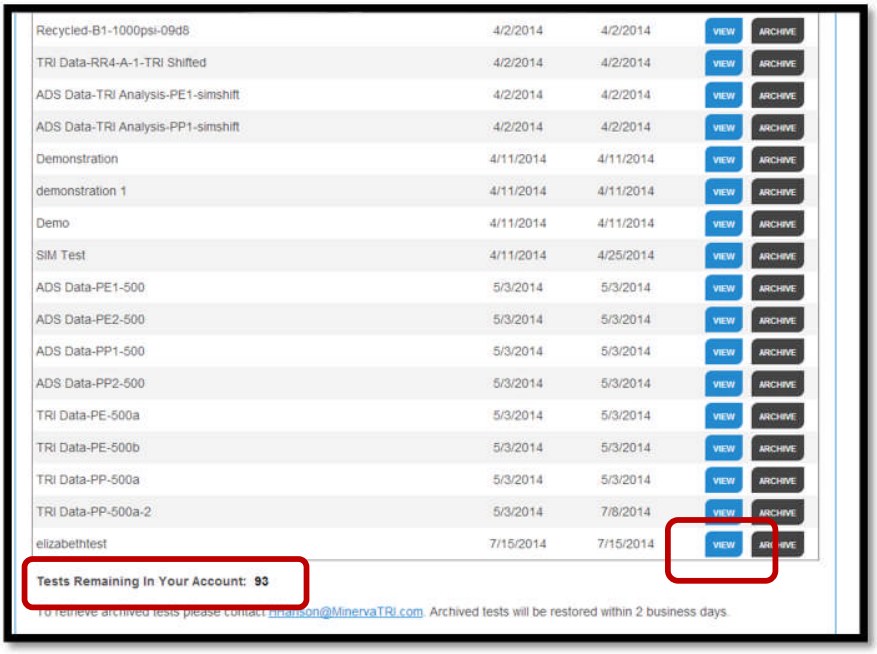
4. Click on the "**Add Test Data**" button on the right side of your screen

5. Type the name of this test into the "**Test Name Field**" this is how you will see the test listed in your dashboard, it's a good idea to establish a naming convention which will help you identify the test later.

6. Select the CSV file from your computer by clicking on the "**Choose File**" button. Once you see the file name to the right of the "**Choose File**" button, click on "**Create Test**". *If you have chosen the wrong file you can click on "Cancel" to restart the process.*



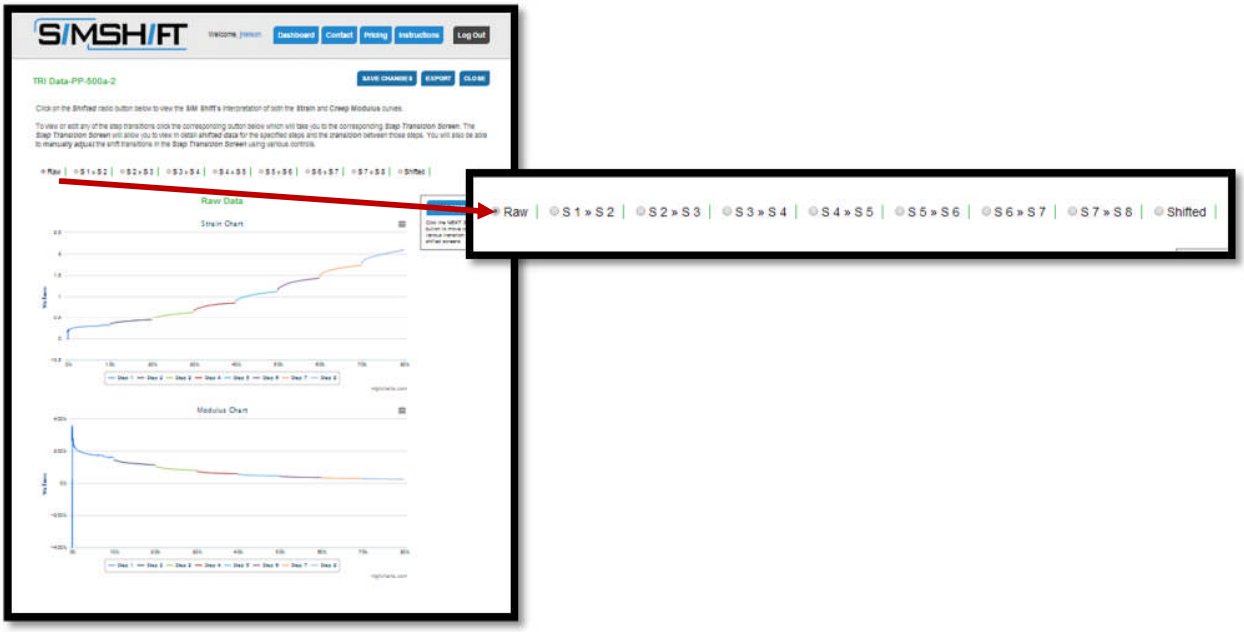
7. Once the data has loaded you will be delivered to your account dashboard. The new test will load at the bottom of the page. *NOTE: you can also see the number of tests remaining in your subscription at the bottom of the page.*



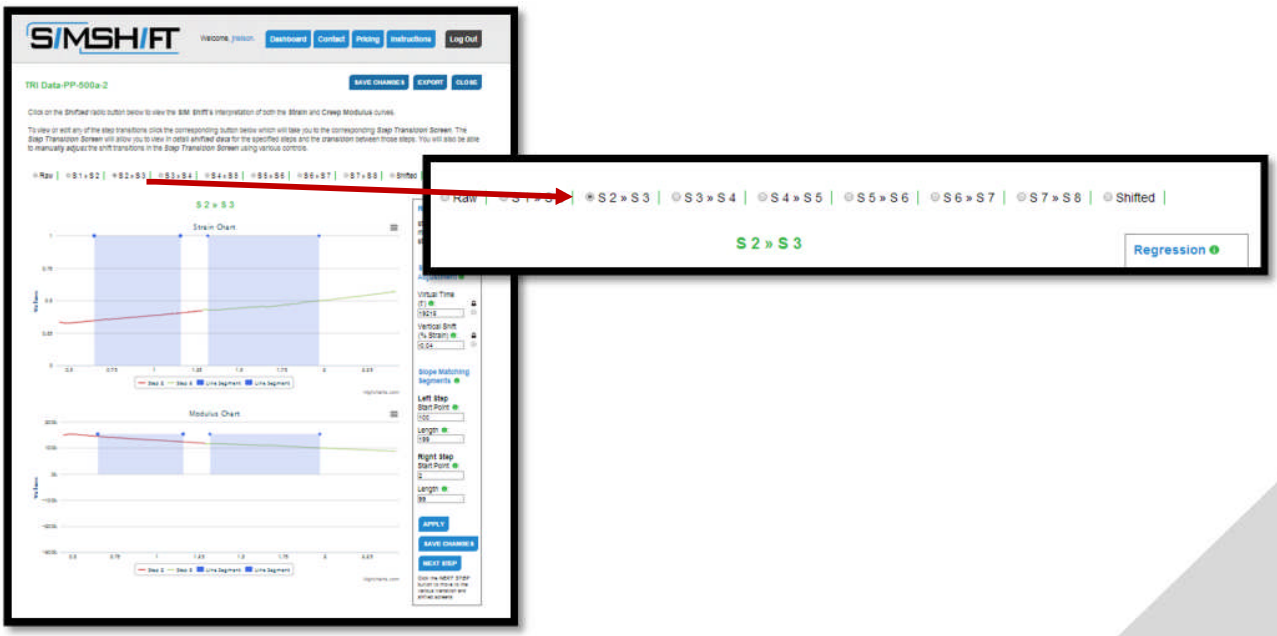
8. To view the data, click on the "**View**" button to the right of the appropriate test name.

View & Edit Step Transitions

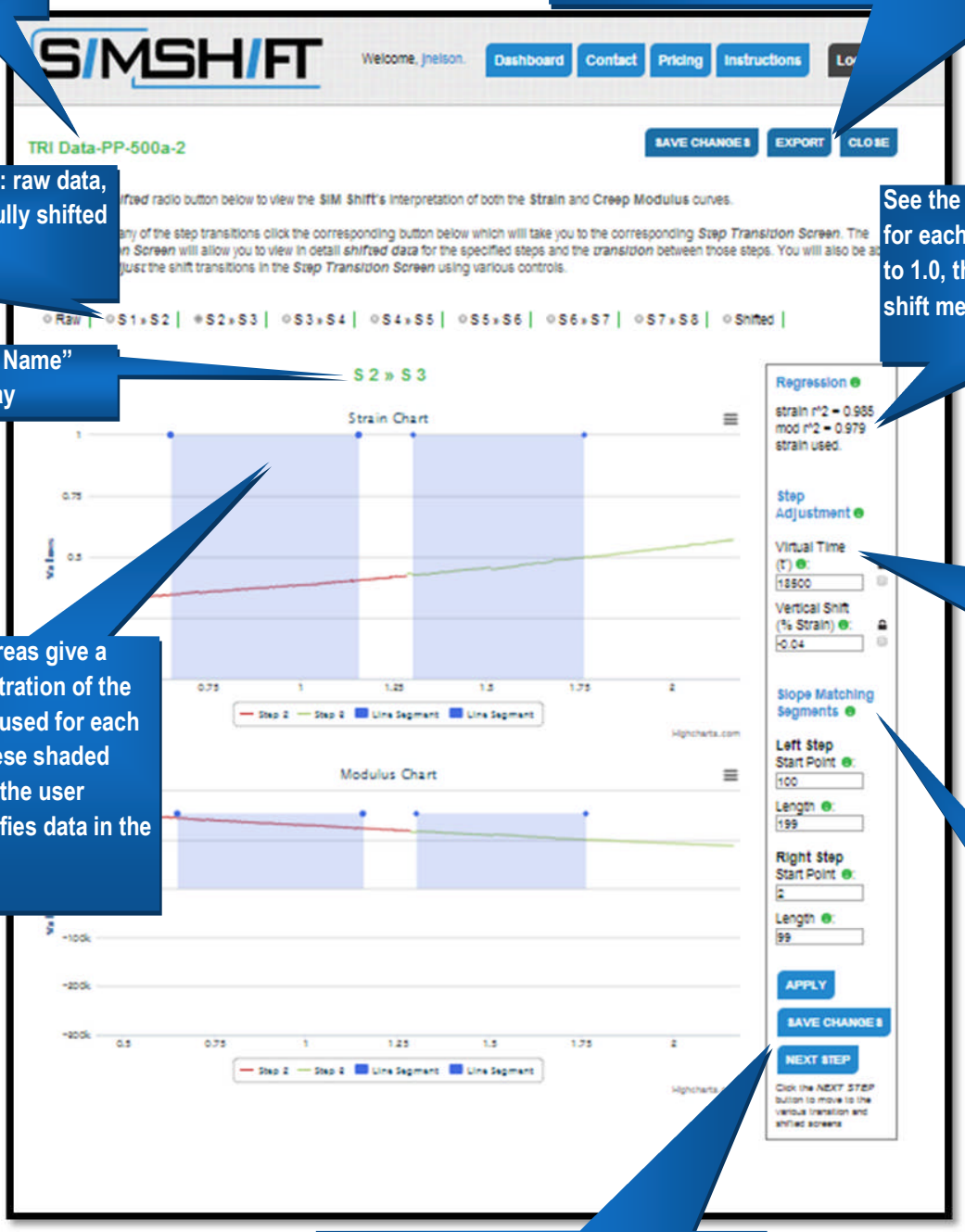
1. The initial screen will show RAW data as imported into the test. You may go directly to the shifted data by clicking on the "Shifted" button or you may inspect each of the steps and the corresponding transitions by using the buttons above the graphs.



Select any button to the left of a step combination to view and edit the two specified steps and the corresponding transition.



Step Transition Screen Attributes



"Test Name" Display

Master Test Controls allow users to save changes, export data and close the test from any Step Transition Screen.

Easily navigate: raw data, all steps and fully shifted data

See the regression accuracy for each graph. The closer to 1.0, the more accurate the shift method.

"Transition Name" Display

Manually adjust both Virtual Time and Vertical Shift to fine tune step transitions

Blue shaded areas give a visual demonstration of the line segments used for each transition. These shaded areas adjust if the user manually modifies data in the control panel.

Manually fine-tune which segments of each step are used to create the slope

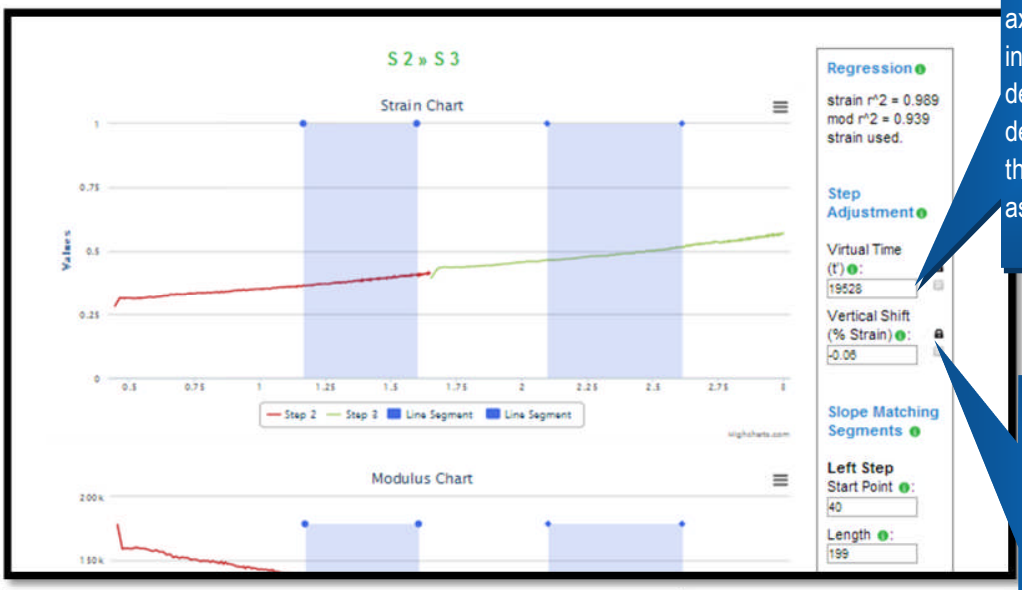
Additional Test Controls allow users to apply and view changes with or without saving changes and move to the next step transition.

Transition & Step Adjustments

Virtual Time Adjustment

1. Adjust the Virtual Time of the right step by modifying the number in the "**Virtual Time.**"
2. There is no need to click on "Apply." This change will happen automatically. Occasionally (particularly in Chrome), this may be slow; to speed the process, you may click your cursor into a different field.
3. If you would like to keep the value while making other adjustments to the step, check the "**Lock**" field to the right of the "**Virtual Time**" field.
4. If you would like to permanently modify the record, you must click on the "**Save Changes**" button before exiting the step.

Vertical Shift Adjustment



The Vertical Shift adjustment allows the user to adjust the vertical alignment of the step so that it is higher or lower on the Y axis. Increase the number to increase the vertical positioning, decrease the number to decrease the position. Note that the % Strain is often expressed as a negative number.

The Lock Button allows you to adjust the Virtual Time and retain that change while adjusting other settings. **Those changes are not saved to the database UNLESS the "Save Changes" button at the bottom of the control panel has been clicked.**

5. Adjust the vertical positioning of the right step by modifying the number in the "**Vertical Shift**" field.
6. There is no need to apply this change; it will happen automatically. Occasionally (particularly in Chrome), this may be slow. To speed the process, you may click your cursor into a different field
7. If you would like to keep the value while making other adjustments to the step check the 🔒 "**Lock**" field to the right of the "**Vertical Shift**" field.
8. If you would like to permanently modify the record, you must click on the "**Save Changes**" button before exiting the step.
9. To revert to the original values at any point, ***before*** clicking "**Save Changes"** you may re-click the relevant **Step Transition Button** at the top of the chart.

Slope Matching Segment - Adjustments

Slope Matching Segments are the blue shaded areas on each of the steps. These are the areas which are used to match the two steps, trimming the middle un-shaded areas from each step to account for the transition in temperature and strain.

You may adjust the segments used by modifying the values in the "Slope Matching Segments" portion of the tool bar. The first "Left Step" field pertains to the left-most step in the chart. In this case, Step 2. The "Right Step" field pertains to the right-most step in the chart, in this case, Step 3. Modification of these values will result in adjustments to both the Strain and Modulus Charts.

Left Step

- The Start Point value refers to the number of data points to the left of the end of that step at which the segment begins.
- Length is the number of data points, counting left from the Start Point contained in the segment.

Right Step

- The Start Point value refers to the number of data points to the right of the beginning of that step at which the segment begins.

- Length is the number of data points, counting right from the Start Point contained in the segment.

Modify the values in these fields and click **Apply Changes** to see the result. Changes will not be permanently saved to the record unless the **Save Changes** button has been clicked. To revert to the original values at any point, ***before*** clicking **Save Changes** you may re-click the relevant **Step Transition Button** at the top of the chart.

View and Print Shifted Data

View Shifted Data

Click on the "**Shifted**" button on the right end of the transition bar to view all of the steps shifted into both the Strain and the Modulus. This may be done at the beginning of the session to view the SIM*Shift* interpretation of the data or at any time while you are adjusting the data.

Download Data

To download the data in spreadsheet format, click on the "**Export**" button near the top right of the page. Save the file to your computer.

Download Shifted Charts

To download either chart select the ☰ icon on the top right of the relevant chart to view the download options. Charts may be downloaded in a variety of file formats including PNG, JPG, PDF or SVG.