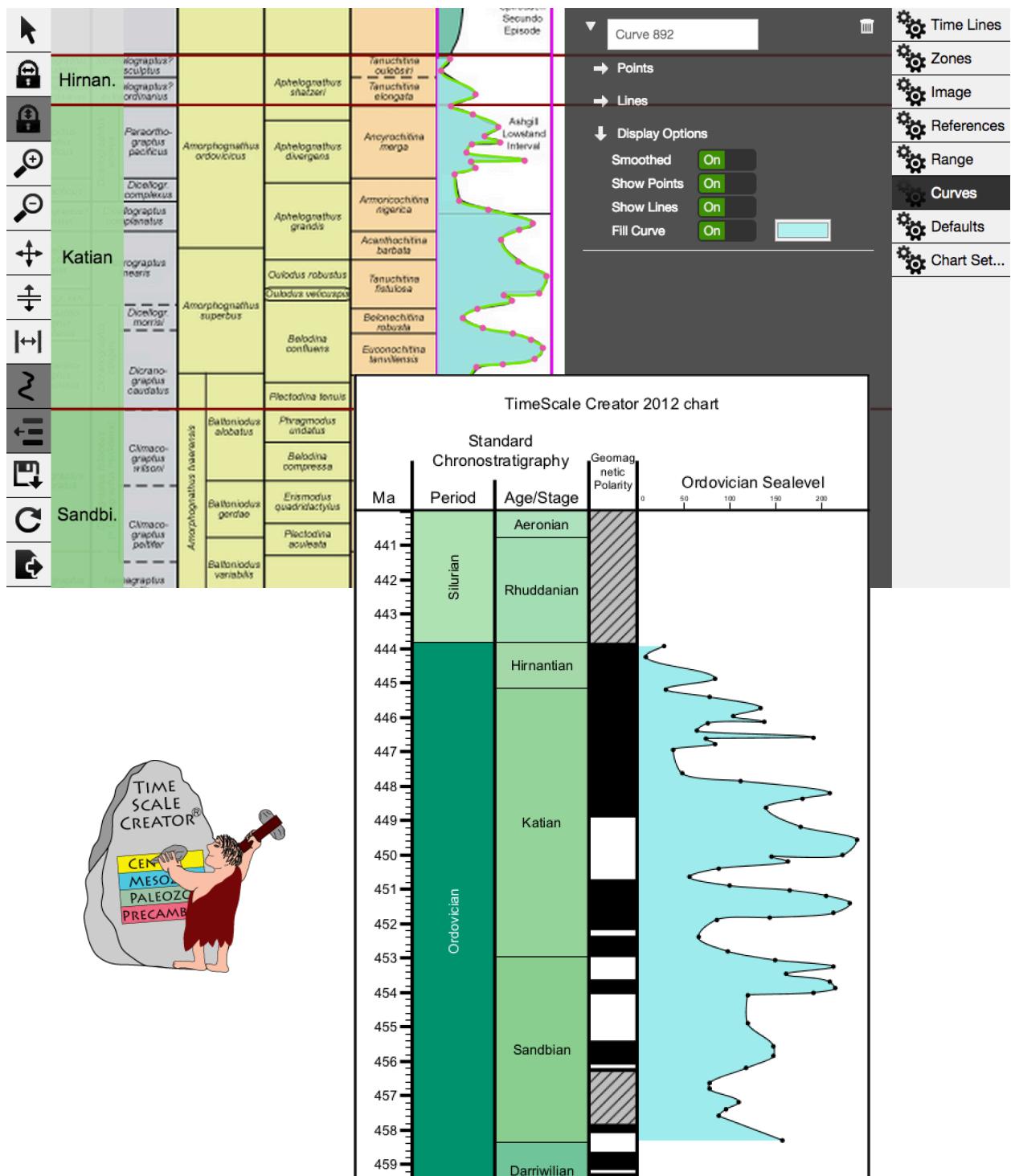


Curve Maker for TimeScale Creator

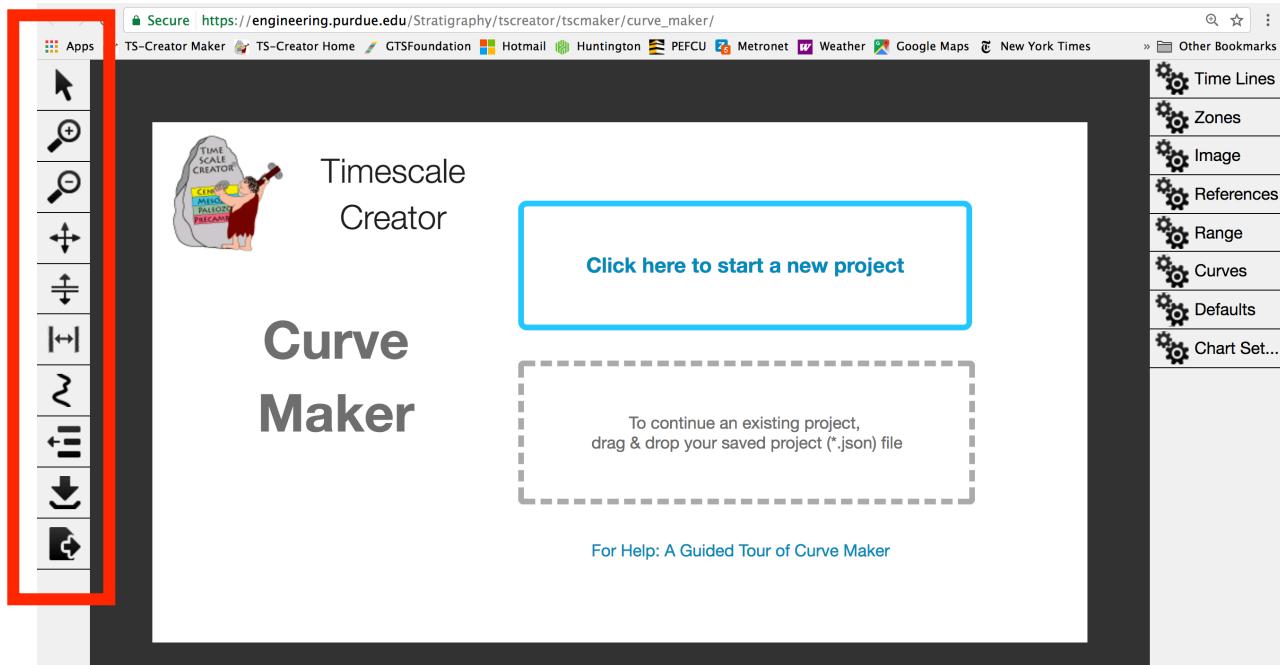
Keehwan Park

October 2017



Curve Maker Overview

Tools (left side of opening window)



Pointer Tool - Doesn't really do anything. Clicking the pointer tool will unselect any of the other tools that are active.



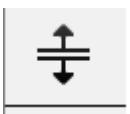
Zoom in - Click on the magnifying glass as often as you need to zoom in.



Zoom out - Click on the magnifying glass as often as you need to zoom out.



Panning - Click the panning option to move your image up or down or left and right. To leave the panning option, click it again or click the pointer tool.



Add Timeline - Select and then **double-click** on the canvas to add a timeline.



Range Tool - Select and **double-click** where you want your left and right border of your curve.



Curve Tool - Select and **double-click** on the first point on your curve. Continue double-clicking new points until your curve is finished. Deselect the curve tool to end the curve.



Reference Column -Select this icon to see the reference column displayed. Click the icon again and the column disappears. Works only if you used the Reference Time Scale for your timelines.

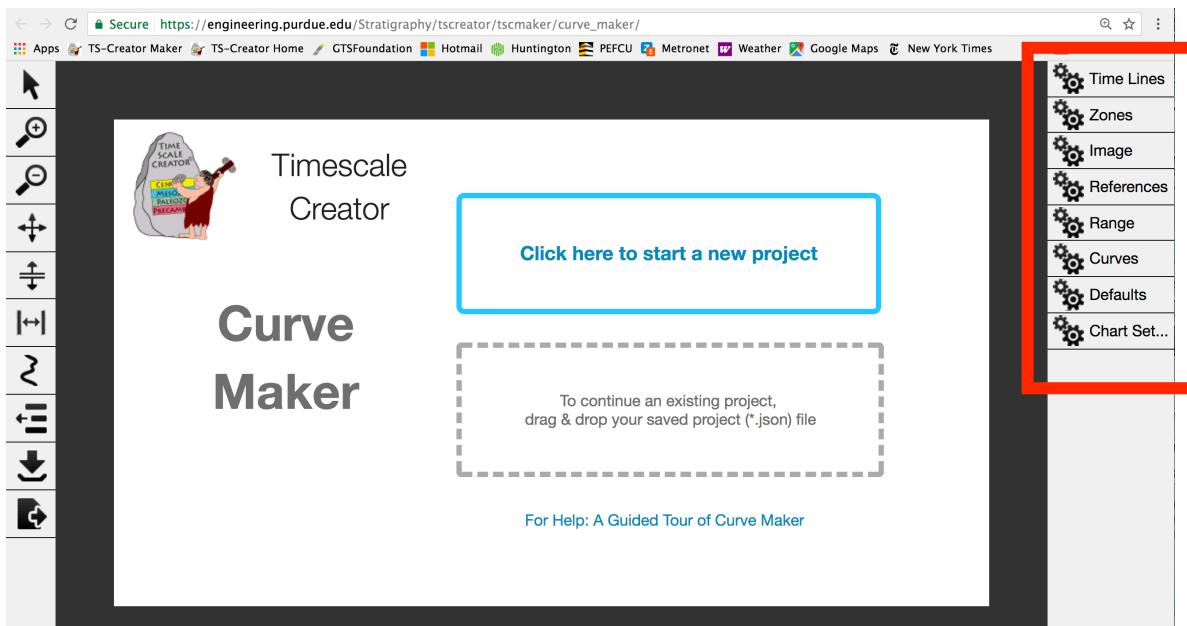


Zip Download – This allows you to download a zipped file which includes the json and txt file. You can load the zip file directly into TSCreator and it will display correctly.



Export - Select and you will get a view containing the tab-separated Timescale Creator format. You can choose between **table** or **text** view. The **Export Tab** will download a “txt” file called “test_output.txt” to your computer.

Input Panel (right side of opening window)



Time Lines Add ages and label timelines. Hit return after the entries to record your changes.

Zones Add zone descriptions

Image Drag and drop your image. Adjust size.

Reference Choose reference time frame and what columns to use (periods, epochs, stages).

Range Set left and right range limit of your curve

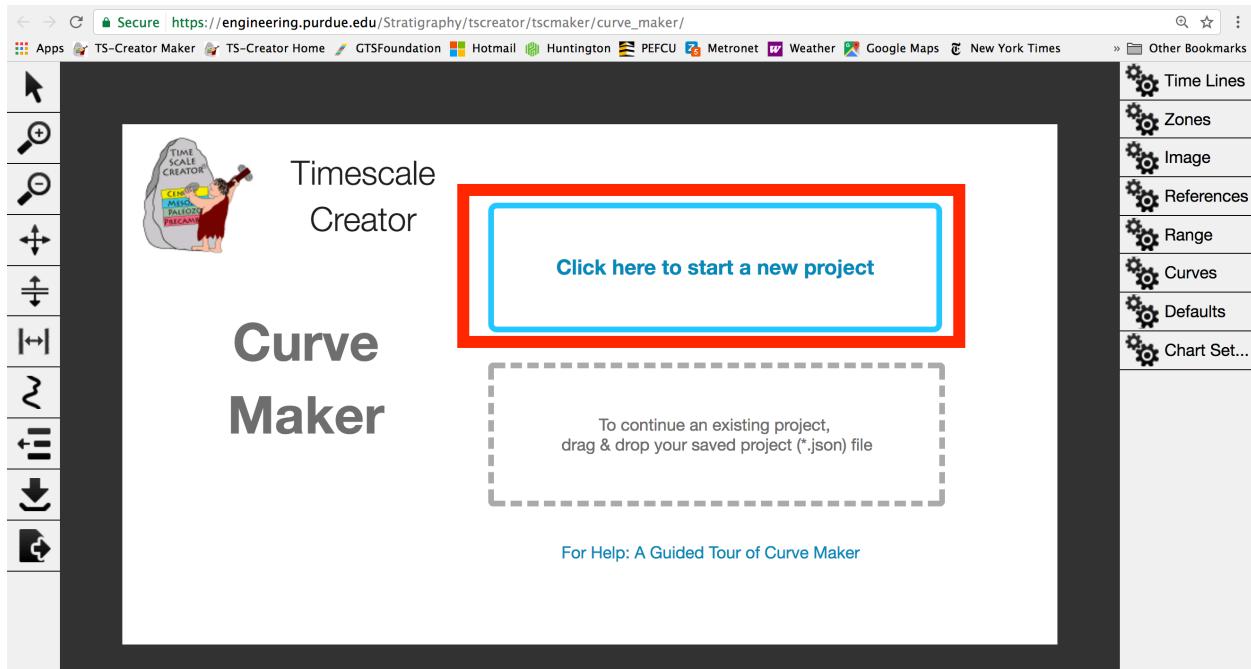
Curves Choose options for curves

Defaults This is tab has no function yet.

Chart Set... This is tab has no function yet.

Getting Started... A Step by Step Guide

Browser Requirements : Google Chrome



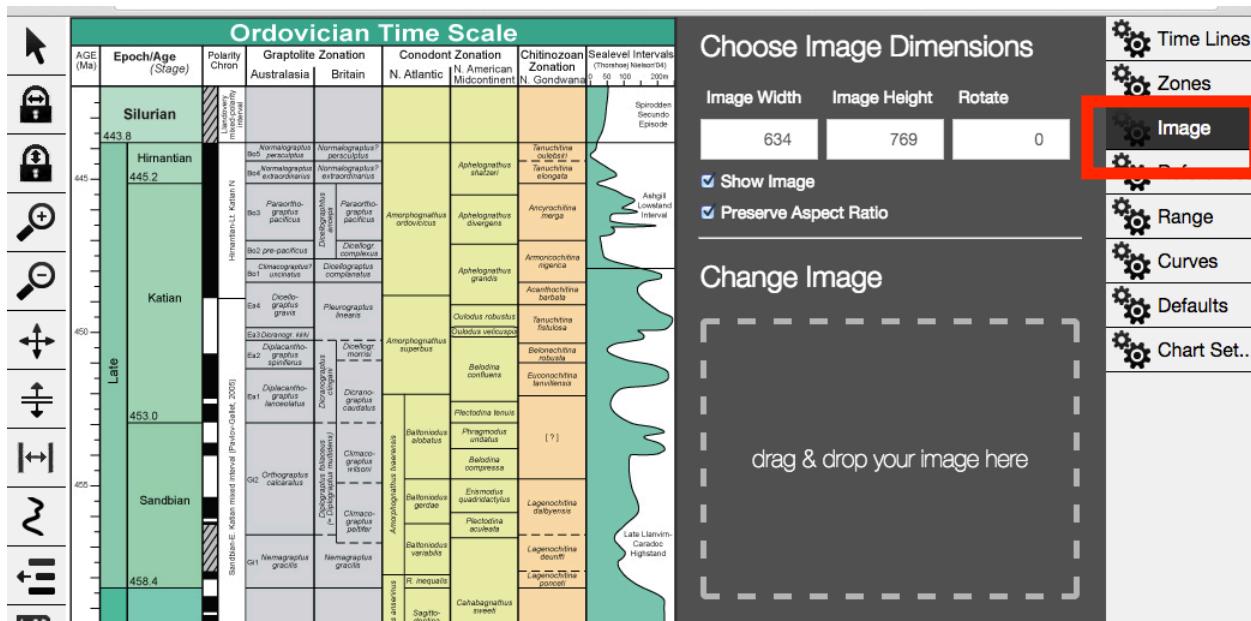
Step 1 - To start a new project just click “start new project” and an empty page will appear.

Hint: If you have already a **json** file from a previous project you can just drag it into the “drag and drop” box. It will automatically load.

Start new project

Click “start new project” on the intro view. This will take you to an empty page.

Add an image by selecting the **Image** Tab on the right hand setting panel and then drag and drop an image. Image can be of any format (**png/gif/jpeg**) except pdf. You can resize the image or rotate it according to your needs.



Resize your image before you put in timelines and range lines.

Later resizing does not keep the timelines and range lines in the same place.

To move your image use the panning tool . Click on the panning tool, a crosshair appears and you can move your image around.

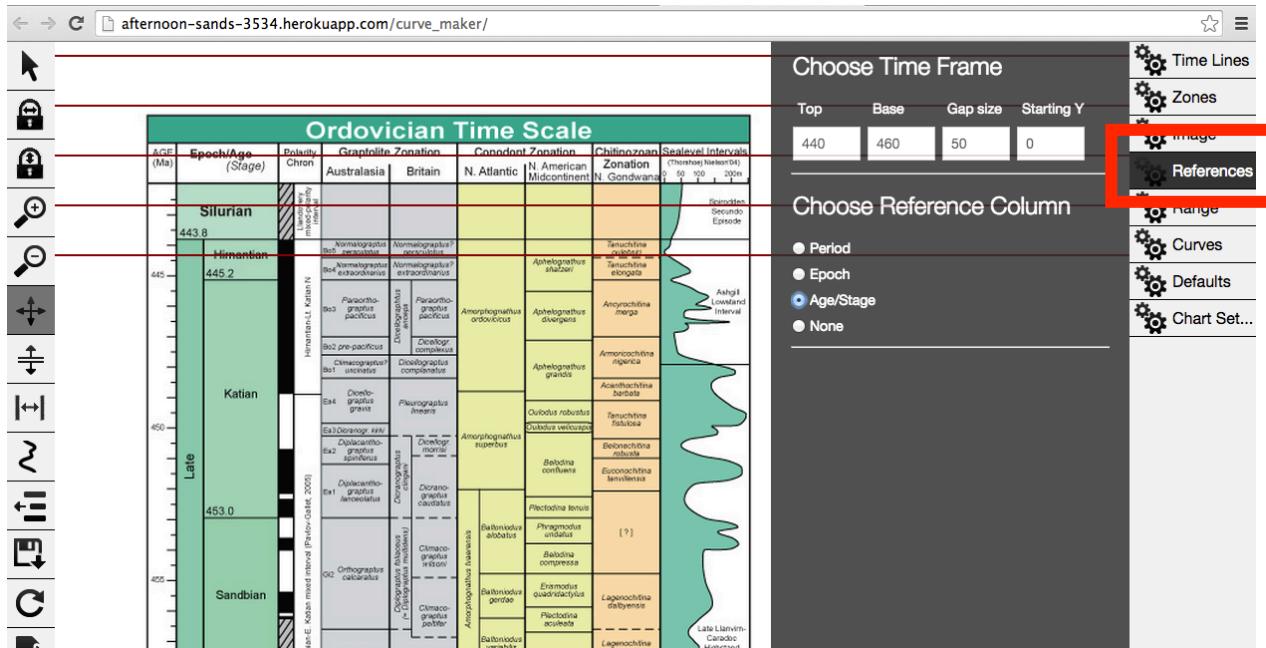
To exit the panning mode click on the panning tool again or the pointer tool .

Adding or Editing information to curve maker elements (Timelines / Zones / Range lines / Curves /)

Before starting to draw a curve you have to create **timelines** and **range lines**. Each of the properties of the curve elements can be edited in the settings list on the right hand side. Start editing the field by clicking on the corresponding name. In order to close the input fields after the information is updated - press enter or esc key. This will update the info to the appropriate element. To close the Tab completely just click it again.

Add Timelines from the reference Time Scale (GTS2012):

Open **Reference** Tab on right hand side. This gives you a window where you can choose your time frame and what columns to use (periods, epochs, stages).



Choose your top and base age, then choose your reference column and the timelines will appear evenly spaced at the top of the screen.

Select the timeline tool on the left side and drag them to the appropriate location. When you have lots of timelines, they will be off the screen. Use the panning tool to move down or up and you will find them.

If you want to change your top or base age, you must click none for reference column before clicking the reference column, if you want to generate new timelines. (This will be fixed in the future).

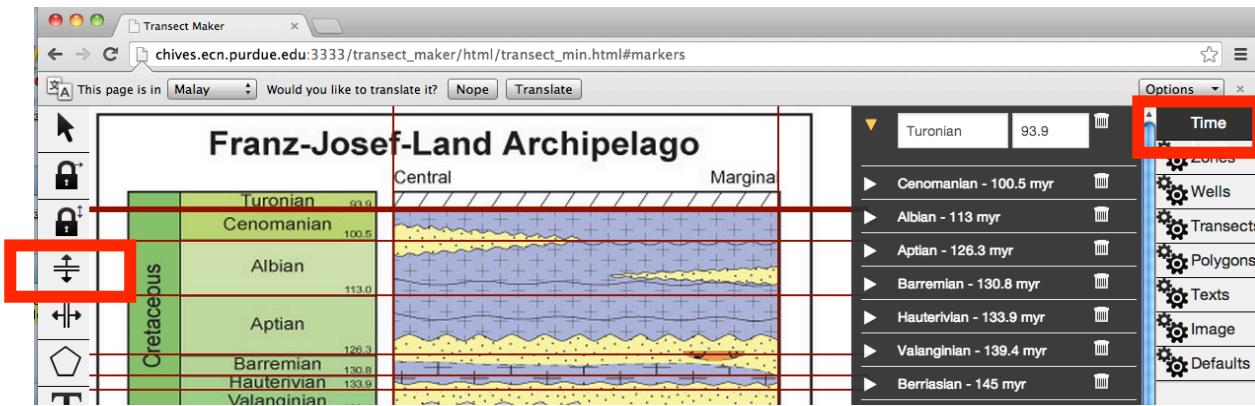
Hint: For large images zoom out to make it easier to position the time lines.

If you select your timelines from the Reference Time Scale, then the Zone descriptions are already filled in. However, you can still edit or delete them under the **Zones** tab.

Add Timelines:

Open **Time** Tab on right hand side, here you can add information for your timelines.

If you selected your timelines from the Reference Time Scale, then the appropriate names and ages for your timelines are already displayed. You can now add or delete other timelines or change the ages.



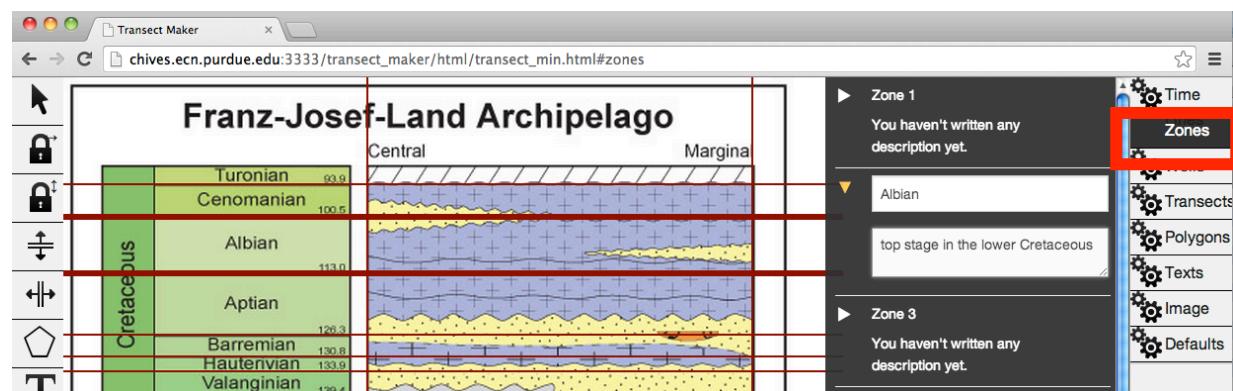
To add new timelines click **timeline** button on left tool bar  and double-click the base of a zone or stage on your image, which you want to use as a timeline. On the right side panel a new timeline is added, you can change the name and add the age in Ma. Hit **enter** after each entry. Continue until all your timelines are done.

Add Zones:

Open **Zones** Tab on right hand side, here you can add information for your zones, which is the interval between two of your timelines. If you hover the cursor over the zone, the corresponding two timelines will appear bold. Type in zone name and description. (this will show up in the pop-ups in the program)

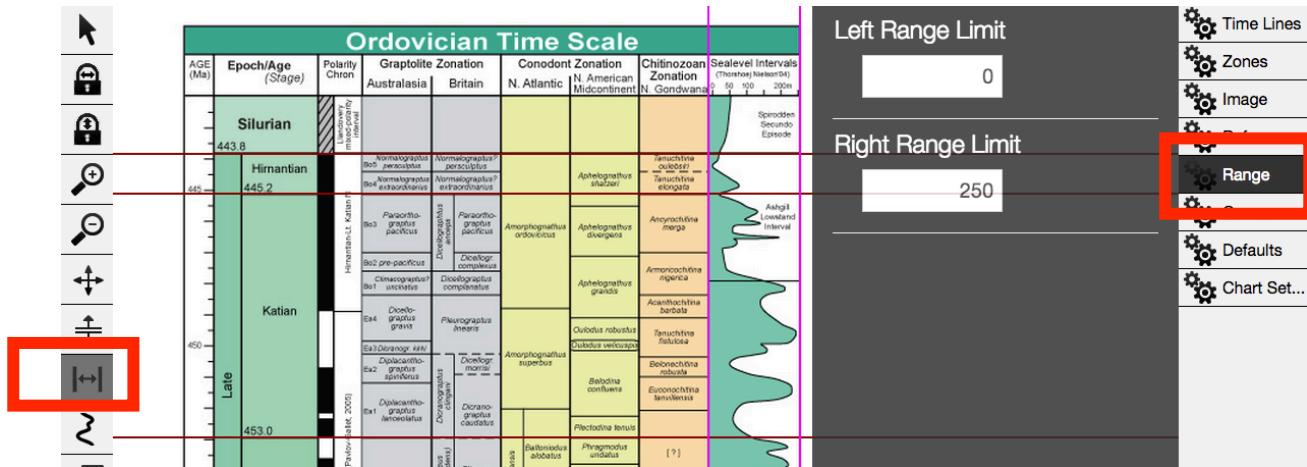
If you selected your timelines from the Reference Time Scale, then the Zone descriptions are already filled in. However, you can still edit or delete them.

To edit existing zone information, just click on the white arrow and it will open the text box.



Add Range Lines:

Open **Range** Tab on right hand side,. Once you have placed your range lines you can decide on a scale.



Next click **range** button  and double-click where you want your right and left borders.

Save a zip file



Click **save zip file** and a window will open and asks you for your file name. Save the file to your computer. The zip file contains the json and the txt files. You can load the zip file directly into TS-Creator and it will load correctly.

Depending on your settings in Google Chrome the download will be automatic or you have the possibility to choose a file name.

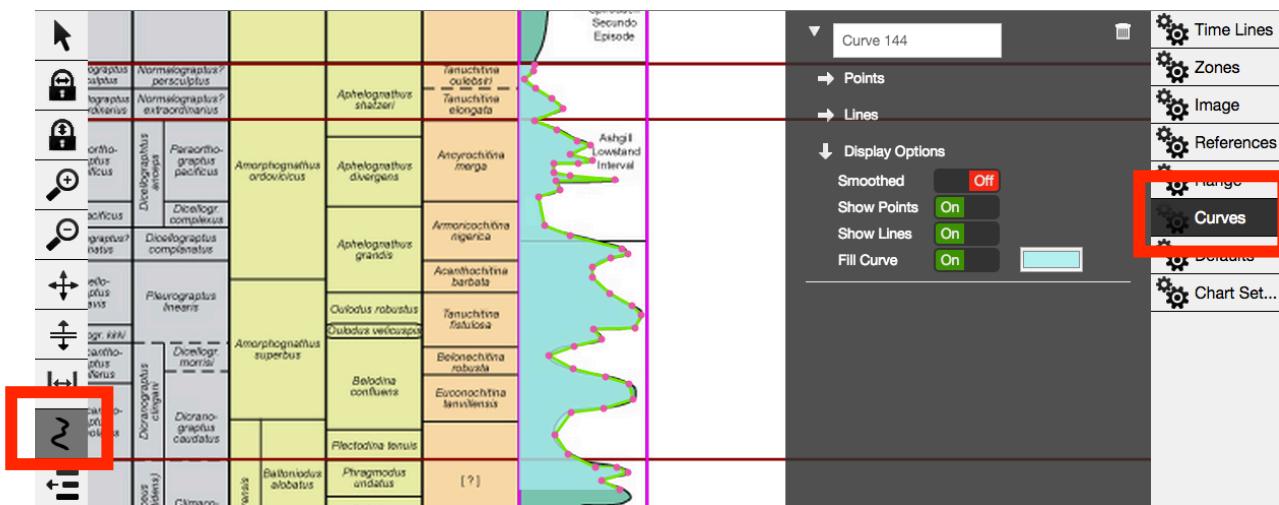
Reload this json file via the opening screen by dragging it into the drop box.

How to draw a Curve:



Open **Curve** Tab on right hand side and click on curve tool  on the left side.

Start your curve by double-clicking points on a curve. Once your curve is done, click on the curve tool again or double-click a second time on your last point. Your points will now appear in black. You can label your curve and choose some options in the curve panel, just click on the "on" and "off" buttons.



You can re-activate your curve to continue drawing or adjusting points by selecting the curve tool again and double-clicking any of the points.

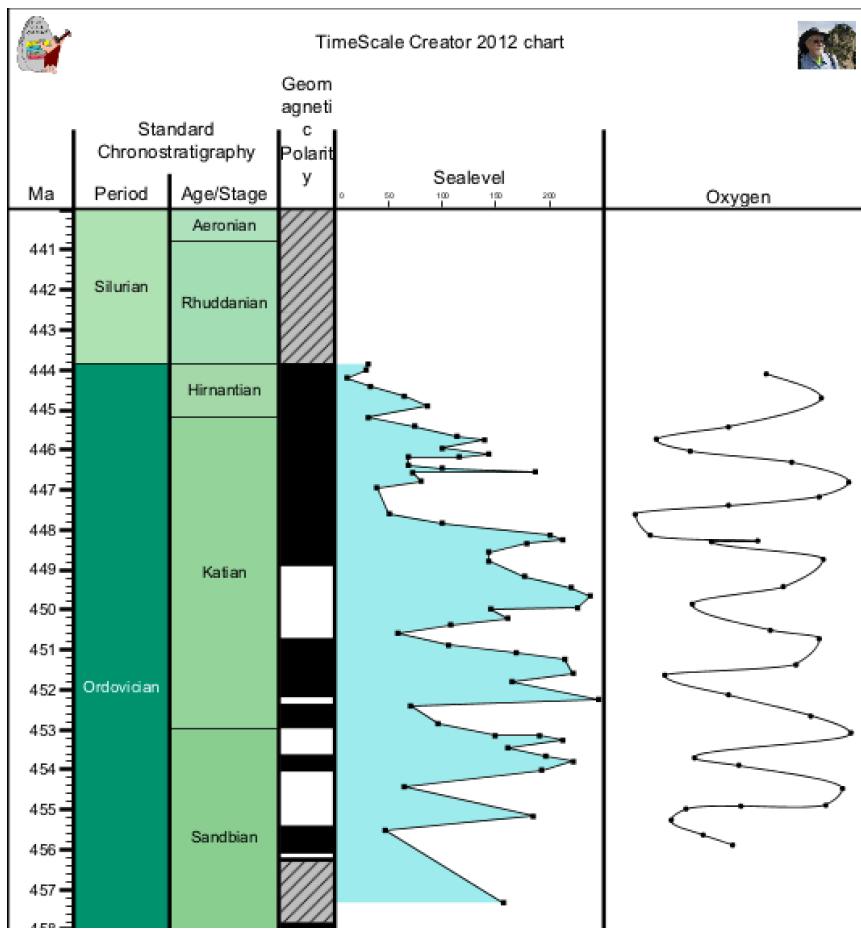
All points can be adjusted, by selecting and dragging them with your mouse. However, the vertical movement is constraint by the adjacent points.

Adding a second curve:

You can add a second curve by just repeating the same process, however, the first curve needs to have **no fill color** while drawing the second curve. Once you have drawn your second curve you can fill the first curve again.



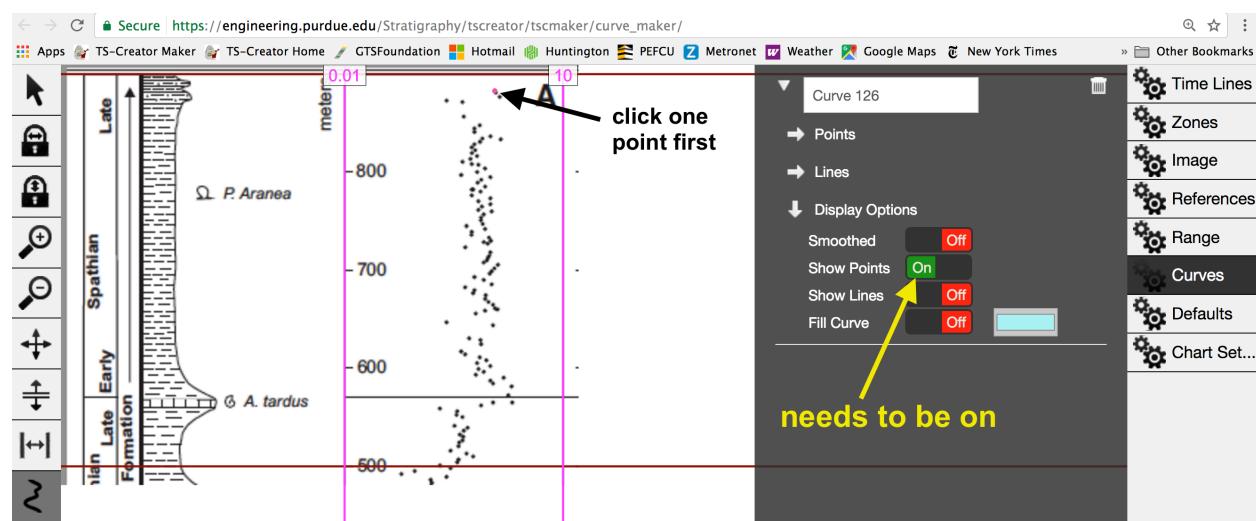
Both curves will be displayed in separate columns once they are loaded into the TSCreator Program.



Digitizing points instead of a curve:

Open **Curve** Tab on right hand side and click on curve tool  on the left side.

Double-click the first point. A new Curve will appear in the Curve Window . Open it and then make sure that all the options are turned off except for the “Show Points”.



Continue to double-click all your points until you are finished.

Save your work.

Saving Data

Save a zip file



Click **save zip file** and a window will open and asks you for your file name. Save the file to your computer. The zip file contains the json and the txt files. You can load the zip file directly into TS-Creator and it will load correctly.

Depending on your settings in Google Chrome the download will be automatic or you have the possibility to choose a file name.

Reload the json file via the opening screen by dragging it into the drop box.

Saving a txt file:

You can download the data in Timescale Creator format with **Export** . The **Export Tool** will open up the view containing the tab-separated Timescale Creator format. You can choose to view the **table** to quickly verify the output or use the **text** view.

The **Export Tab** will download a “txt” file called “test_output.txt” to your computer.

Depending on your settings in Google Chrome the download will be automatic or you have the possibility to choose different file name.

Hint: Make sure you close the right hand side tabs by again clicking on the tab, otherwise you won't see the full screen and the button to switch from **table** to **text** view.

The screenshot shows the Sealevel software interface. On the left, there is a vertical toolbar with icons for cursor, lock, search, magnifying glass, crosshair, and up/down arrows. The main window has a title bar "Export Tab". Below it is a table with data. At the top right, there is a button bar with "table" (highlighted in red) and "text". To the right of the table, a vertical sidebar lists "Time Lines", "Zones", "Image", "References", "Range", "Curves", "Defaults", and "Chart Set...". A red arrow points from the "table" button in the title bar to the "Table view Tab" label. Another red arrow points from the "text" button in the title bar to the "Text view Tab" label.

Sealevel	point	200	255/255/255
circle	line	160/238/238	0 250 nc
443.8544	30.1588	CALIBRATION = 98.17% up Hirnantian	
444.0005	28.1748	CALIBRATION = 87.18% up Hirnantian	
444.1954	10.3175	CALIBRATION = 72.53% up Hirnantian	
444.4146	32.1443	CALIBRATION = 56.04% up Hirnantian	
444.6582	63.889	CALIBRATION = 37.73% up Hirnantian	

Export Tab

format version: 1.4
date: 9/18/2014
age units: Ma

Sealevel point 200 255/255/255
circle line 160/238/238 0 250 notsmoothed
443.8544 30.1588 CALIBRATION = 98.17% up Hirnantian
444.0005 28.1748 CALIBRATION = 87.18% up Hirnantian
444.1954 10.3175 CALIBRATION = 72.53% up Hirnantian
444.4146 32.143 CALIBRATION = 56.04% up Hirnantian
444.6582 63.889 CALIBRATION = 37.73% up Hirnantian
444.9018 85.7143 CALIBRATION = 19.41% up Hirnantian
445.1927 30.1588 CALIBRATION = 99.58% up Katian
445.4028 73.8095 CALIBRATION = 96.89% up Katian
445.6595 113.492 CALIBRATION = 93.60% up Katian
445.7529 139.2858 CALIBRATION = 92.41% up Katian
445.9629 99.6033 CALIBRATION = 89.72% up Katian
446.103 143.254 CALIBRATION = 87.93% up Katian
446.173 115.4763 CALIBRATION = 87.03% up Katian
446.173 67.8573 CALIBRATION = 87.03% up Katian
446.3831 67.8573 CALIBRATION = 84.34% up Katian
446.4531 99.6033 CALIBRATION = 83.44% up Katian
446.5465 186.9048 CALIBRATION = 82.25% up Katian
446.5698 71.8255 CALIBRATION = 81.95% up Katian
446.7799 79.762 CALIBRATION = 79.26% up Katian
446.9433 38.0953 CALIBRATION = 77.17% up Katian
447.5968 50 CALIBRATION = 68.80% up Katian
447.8302 99.6033 CALIBRATION = 65.81% up Katian
448.1337 200.7938 CALIBRATION = 61.92% up Katian
448.2504 212.6985 CALIBRATION = 60.43% up Katian
448.3438 178.9682 CALIBRATION = 59.23% up Katian
448.5538 143.254 CALIBRATION = 56.55% up Katian
448.7872 143.254 CALIBRATION = 53.56% up Katian
449.1607 176.9843 CAI IRRATION = 48.77% up Katian

Text view Tab

table text

- Time Lines
- Zones
- Image
- References
- Range
- Curves
- Defaults
- Chart Set...

The finished **txt** file can now be loaded into the TSCreator Pro program.

