# Lithology Maker for TimeScale Creator

Nag Varun Chunduru

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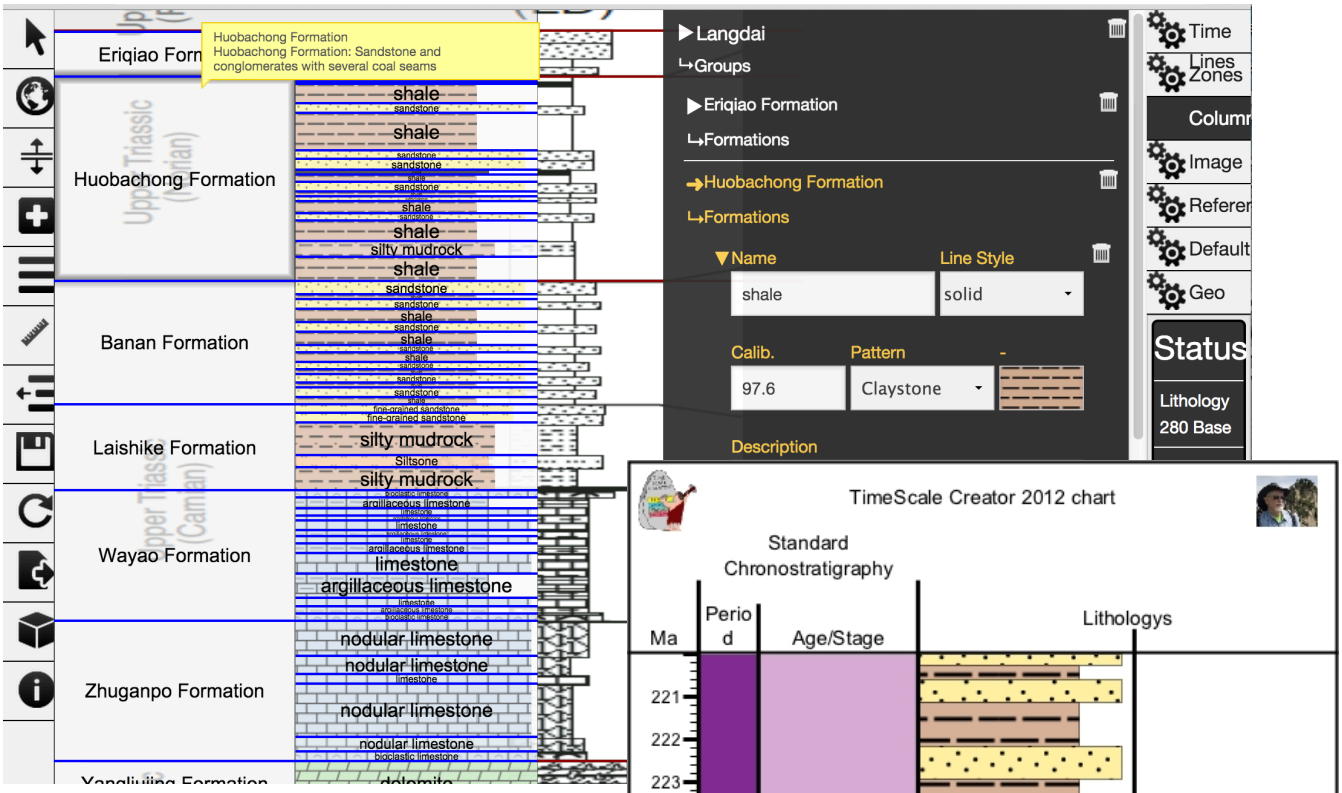
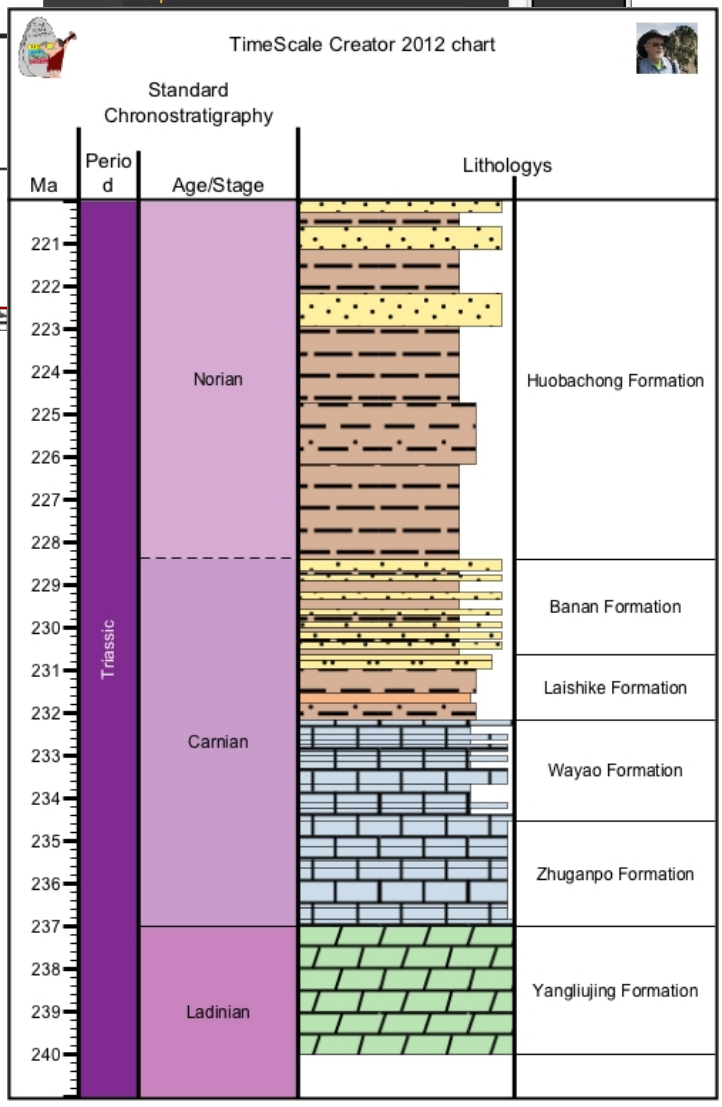
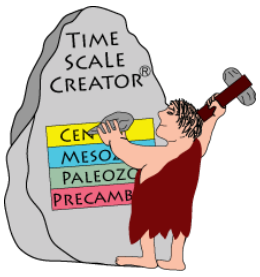
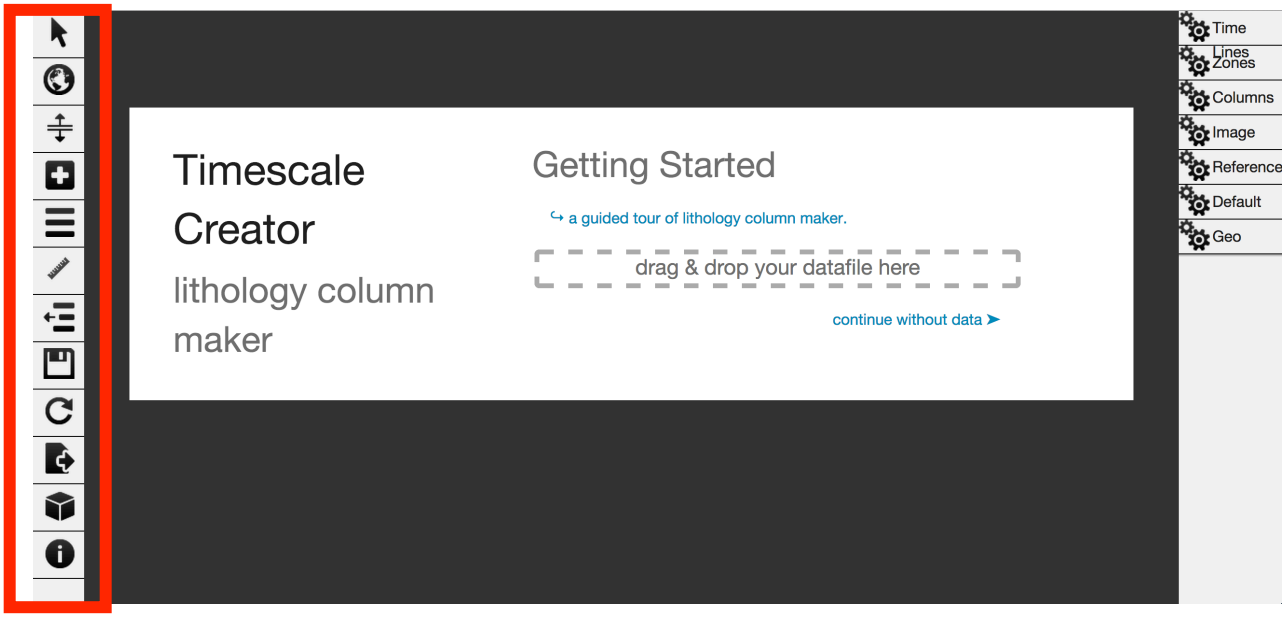


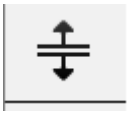
# Lithology Maker Overview

## Tools (left side of opening window)




**Pointer Tool -** Clicking the pointer tool will unselect any of the other tools that are active.

**Map View -** Displays a world map for your facies polygons.



**Add Timeline -** Select and **double clicks** on the canvas to add a timeline. The time line can be dragged with the mouse to its final position.

**Add new column -** Click and a new column is added to your canvas.

**Lithology Tool -** Select and double-click in the column area and then again a little apart from the first double-click. A box with a “Group” label will appear. Pull the blue lines to the correct location

**Ruler Tool –** Select and a ruler will be displayed on the left side of your canvas. Click the icon again and the ruler disappears.

**Reference Column –** Select and the reference column will be displayed. Click the icon again and the column disappears.

**Quick Save -** Not available yet.

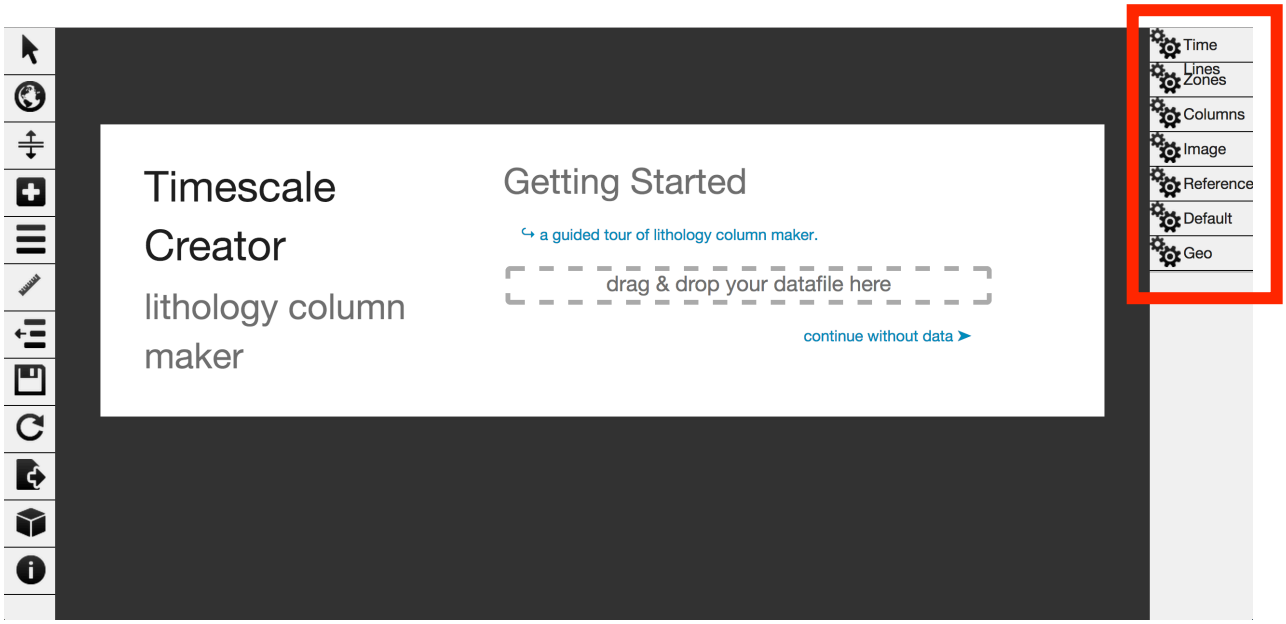
**Reload -** Not available yet.

**Export -** Select and you will get a view containing the tab-separated Timescale Creator format. You can choose between **table** or **text** view.

**Sandbox -** This application creates a sandboxed HTML5 file system on the client’s machine. Selecting this will open the view displaying directories in the user’s file system. You can save the current project or load any of the previous projects quickly into the maker as the files are stored permanently. The files can also be downloaded to the user’s machine.

However, it is recommended that you download to your computer all the files you want to keep, once you have finished a project. Then clear out all your saved files from the sandbox, otherwise the Lithology maker might become unresponsive during a future project.

# Input Panel (right side of opening window)





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


Add zone names and descriptions


Add name, latitude, longitudes to lithology column

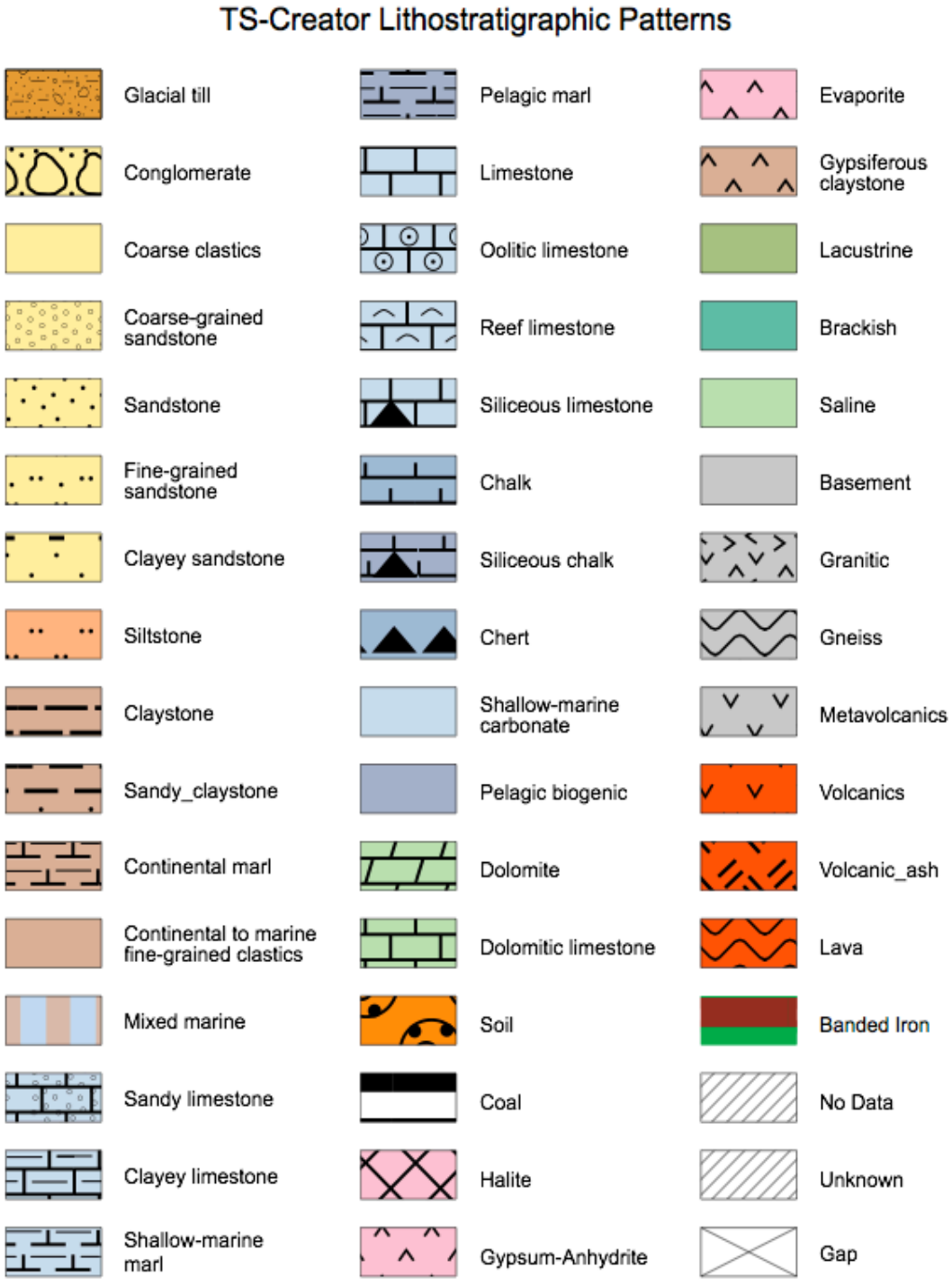

Drag and drop your image. Adjust size.


Choose reference time frame and what columns to use (periods, epochs, stages). You can also add a different previously generated reference column.


This is tab has no function yet.


Select your map and animation settings

# Available Lithostratigraphic Patterns



# Getting Started… A Step by Step Guide

## **Browser Requirements** : Google Chrome

**Step 1 -** On opening the URL the app will ask for your permission to create a space (sandbox) on your system. By accepting, you will have the ability to store projects in this sandbox and load them when required.

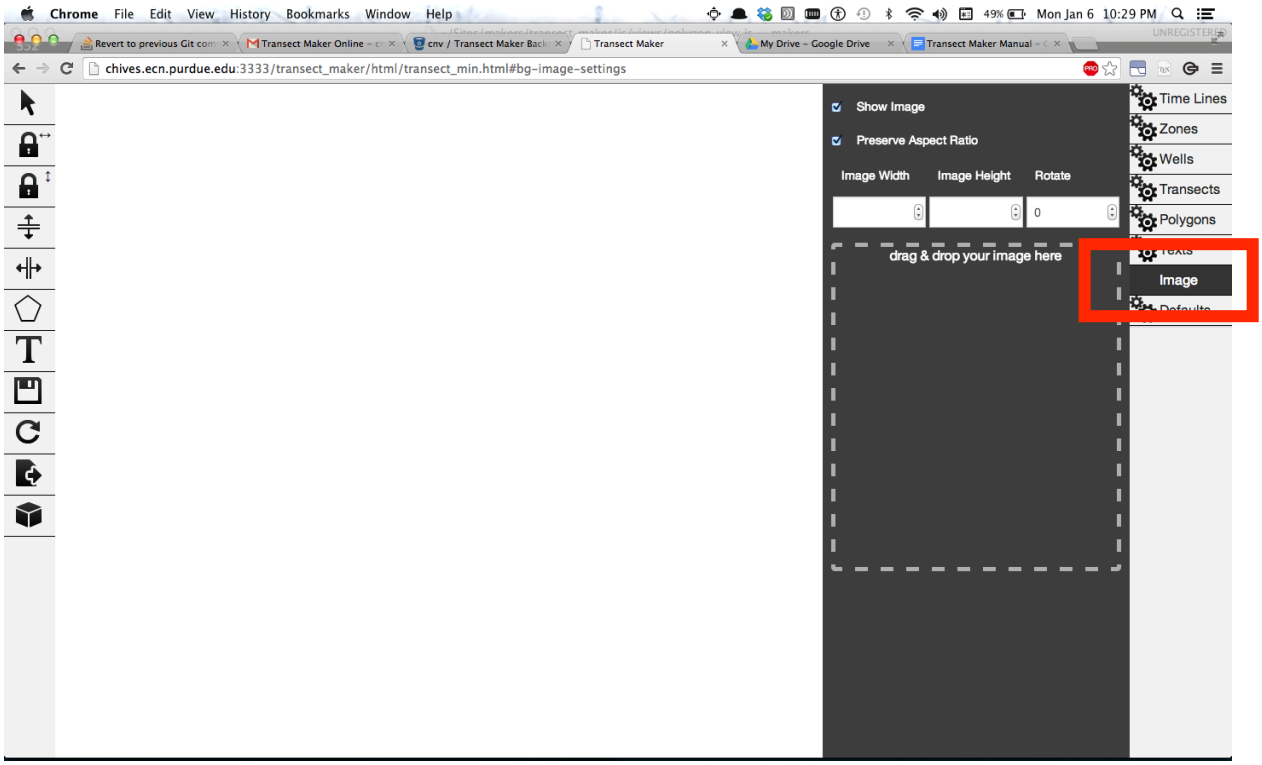

**Step 2 -** To start a new project just click “start new project” and an empty page will appear.

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

If you have a saved project in your sandbox, then just click the sandbox icon and load the **json** file from there.

# 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.

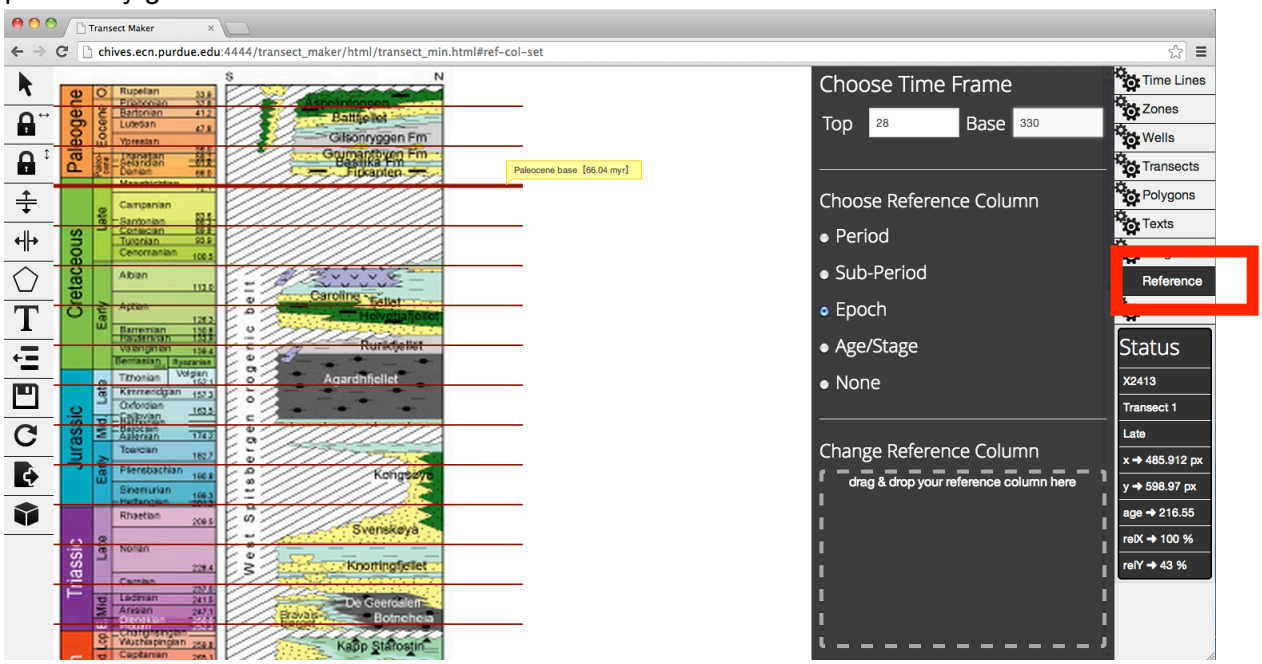
Later resizing does not keep the timelines in the same place.

## Adding or Editing information to lithology elements (Timelines / Zones / Columns)

Before starting to draw lithology columns you have to create **timelines**. Each of the properties of the lithology maker elements can be edited in the panels 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. If you don’t press enter, your information will not record. To close the Tabs completely just click the tab 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). You can also add a new previously generated reference column.

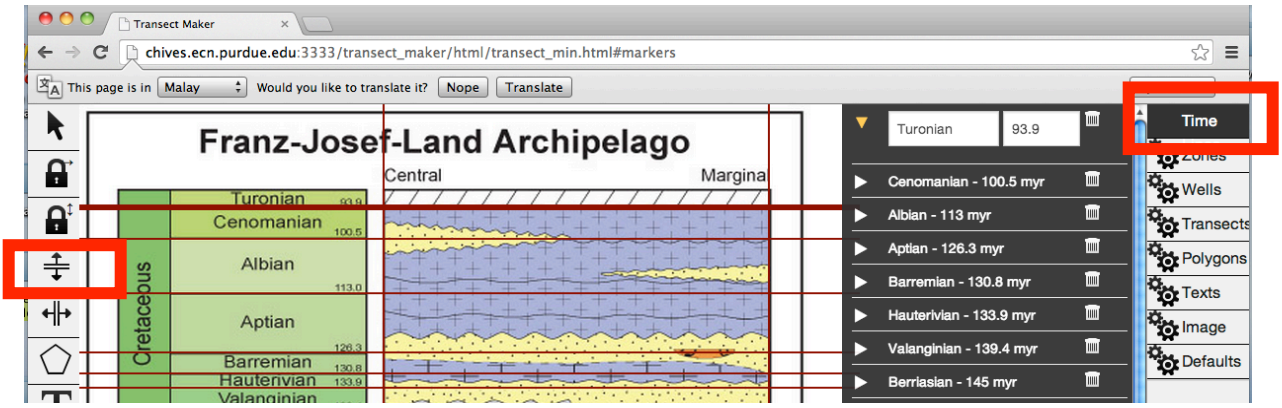



Once you hit **return** on the age selection, the timelines will appear evenly spaced on the screen. You can now drag them to the appropriate location (the timelines are labeled). When you have lots of timelines, they will be off the screen. Use the wheel on your mouse to scroll up and down through your image

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:

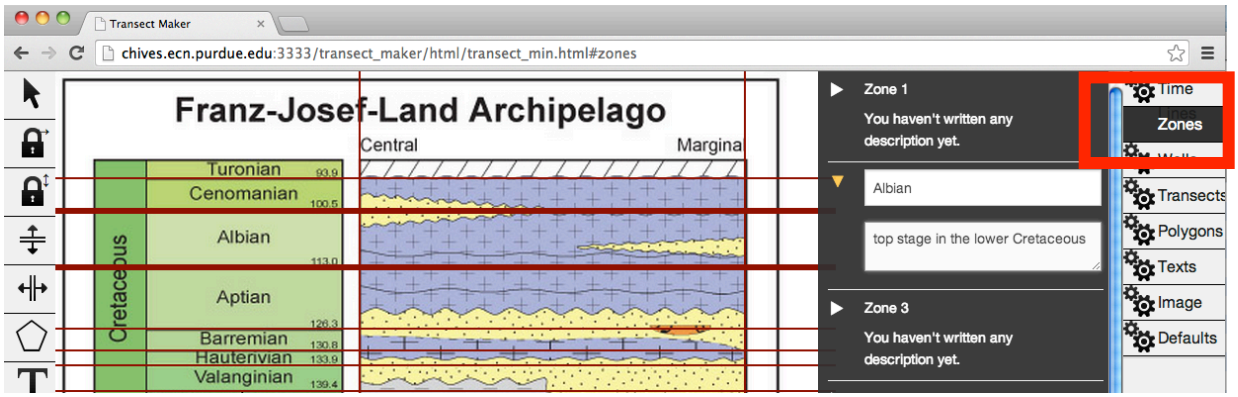
Open Time Tab on right hand side, this will give you the window where you add information for your timelines.
If you selected your timelines from the Reference Time Scale, then the appropriate names and ages for your timelines are already displayed. You can now add or delete other timelines or change the ages.




To add new timelines click **timeline** button on left tool bar  and double-click a zone or stage boundary on your image which you want to use as a timeline. On the right panel a new timeline is added, you can change the name and add the age in myr. 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 **hit return** (important, otherwise the name will not record), add a zone description.



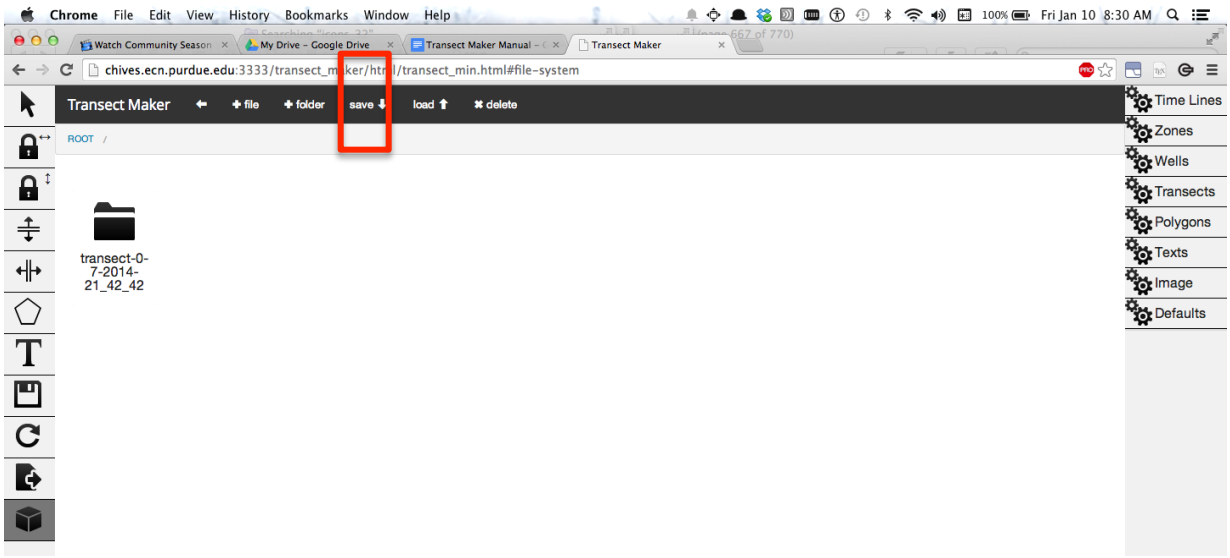

Save one copy into the Sandbox storage, so you don't have to redo the timelines and zones, if you mess up the lithology columns.

# How to save to the Sandbox:

## Sandbox

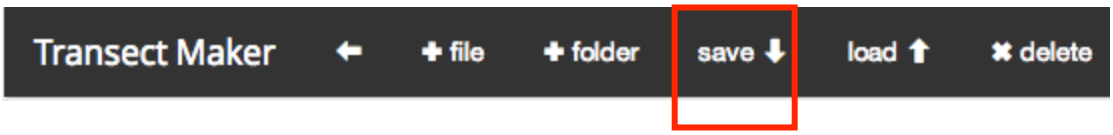
This application creates a sandbox file system on your system to store data permanently. When working on a project you can save your project or a version of the project in your sandbox and can later visit it again. In order to save the project click on  . This will open up your sandbox and display any directories or files previously saved or created.

### Sandbox View

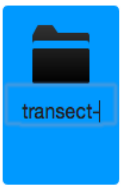



Save the project by simply clicking on **“save”** in the menu bar. This will create a new directory called “tlithology” attached with the time stamp.

### Sandbox Menubar




You can rename the directory by simply clicking on the text and edit it.



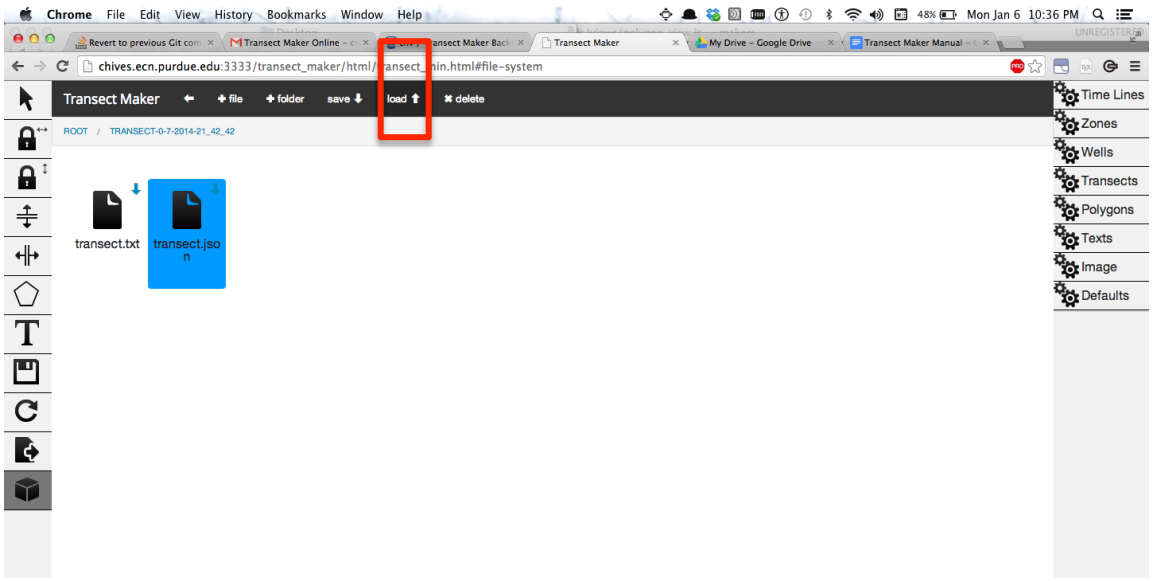

You can also navigate the directory by double clicking on it. This opens the folder to show 2 files called lithology.txt and lithology.json. You should rename them.

You can go to the parent directory by clicking "⬅" in the menu bar.

You can download the generated files by clicking on the ⬇ on the right top corner of the file.

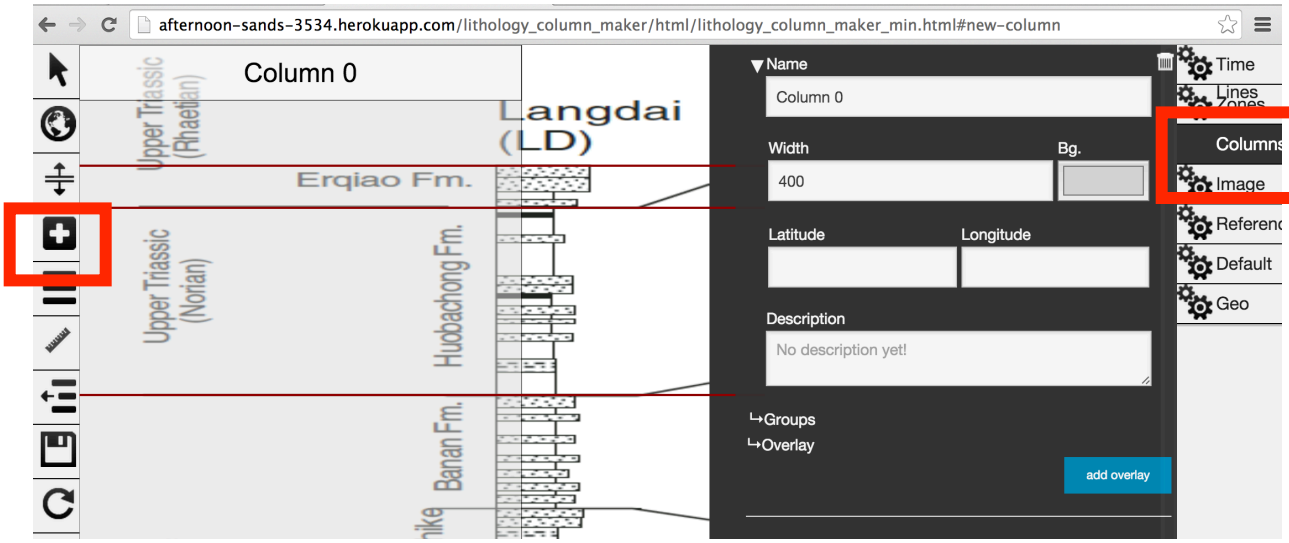
To delete a directory or a file - Select the directory/ file by clicking on it and click **"delete"** in the menu bar.

You can load the data from saved projects, by first selecting the correct folder and then loading the appropriate json file. Single click on the file selects it, then click **"load".**



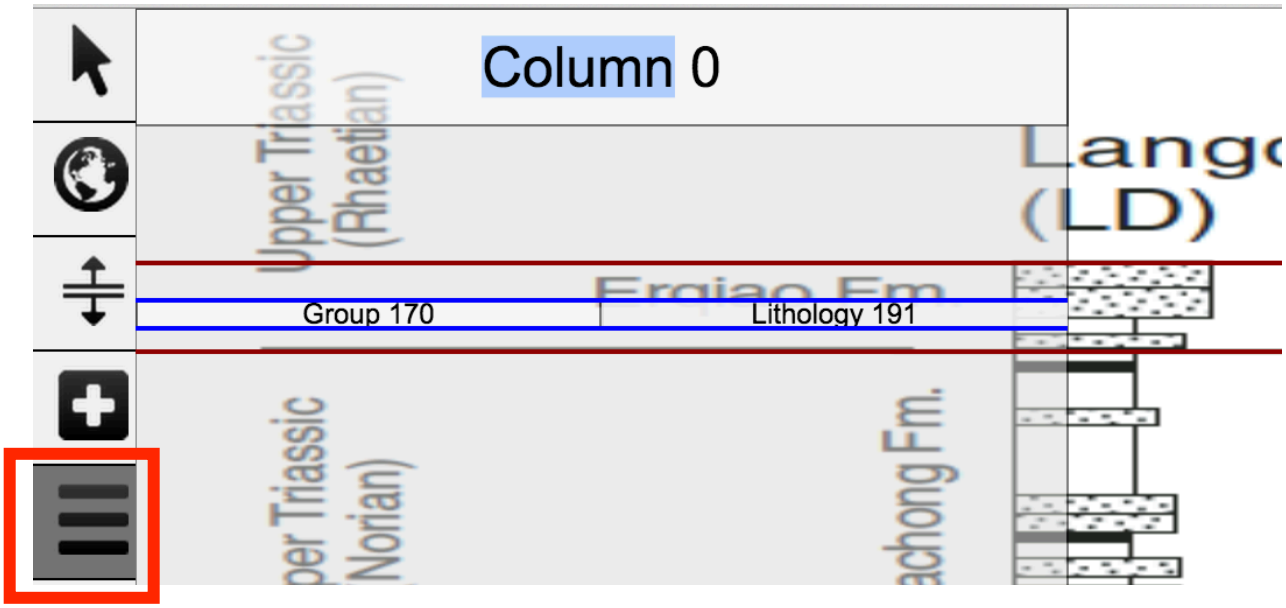
## Add Lithology columns:

Click the **add column** button  and then open Columns Tab on right hand side, this will give you the window where you add information for your columns (outcrop name and latitude and longitude, width of column etc.).

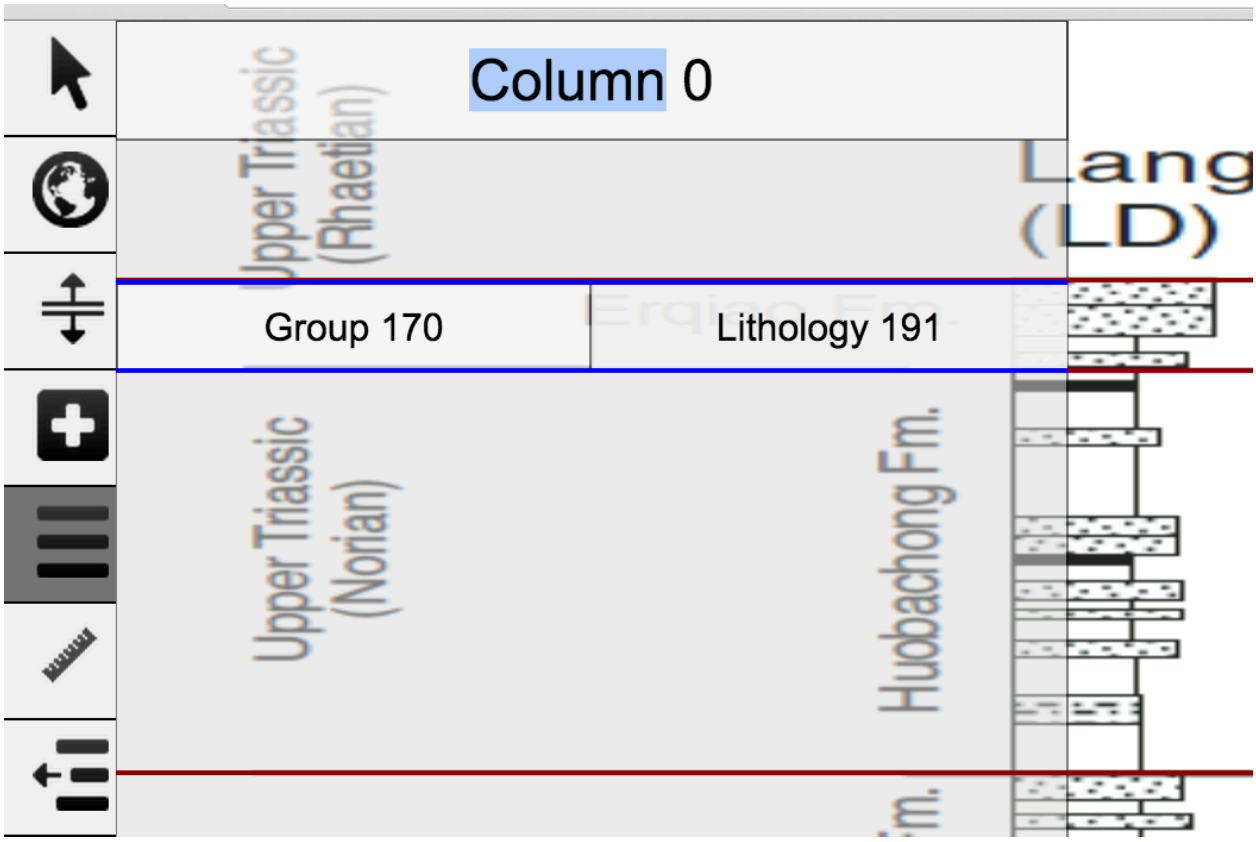



The latitude and longitude coordinates can later be saved separately for use in a mappack.

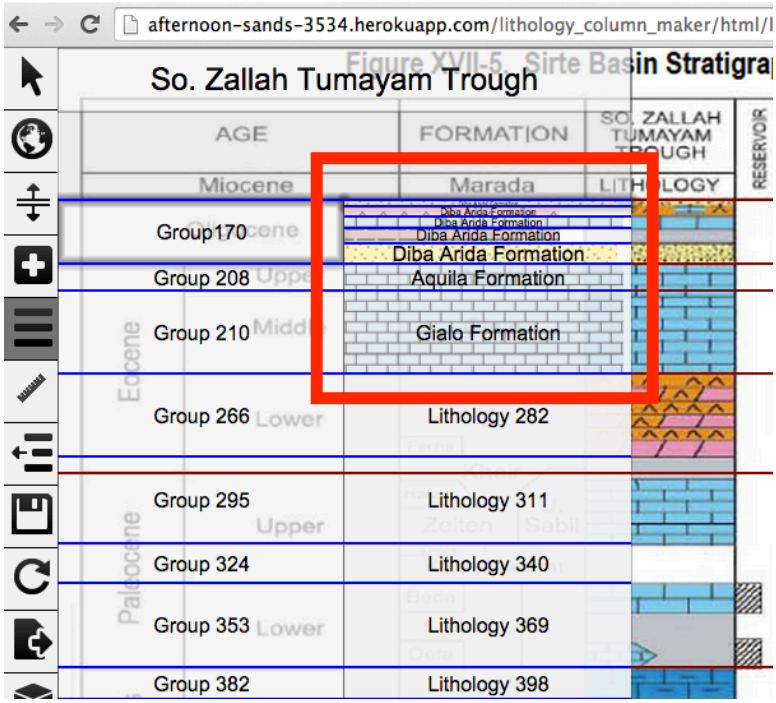
Select the **Lithology Tool**  and double-click in the column area and then again a little apart from the first double-click. A box with a “Group” and “Lithology” label will appear.



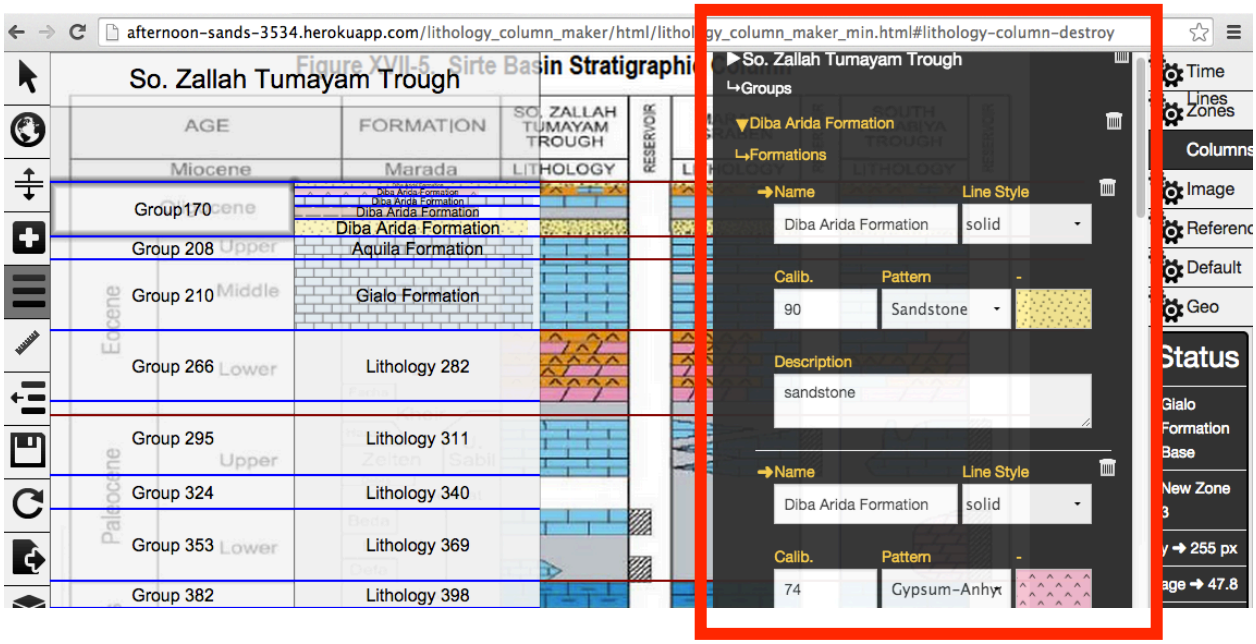
Drag the blue lines to the correct location for the “Group”.




With the **Lithology tool** selected, keep double-clicking in the “Lithology” section of your column for all your different lithologies.

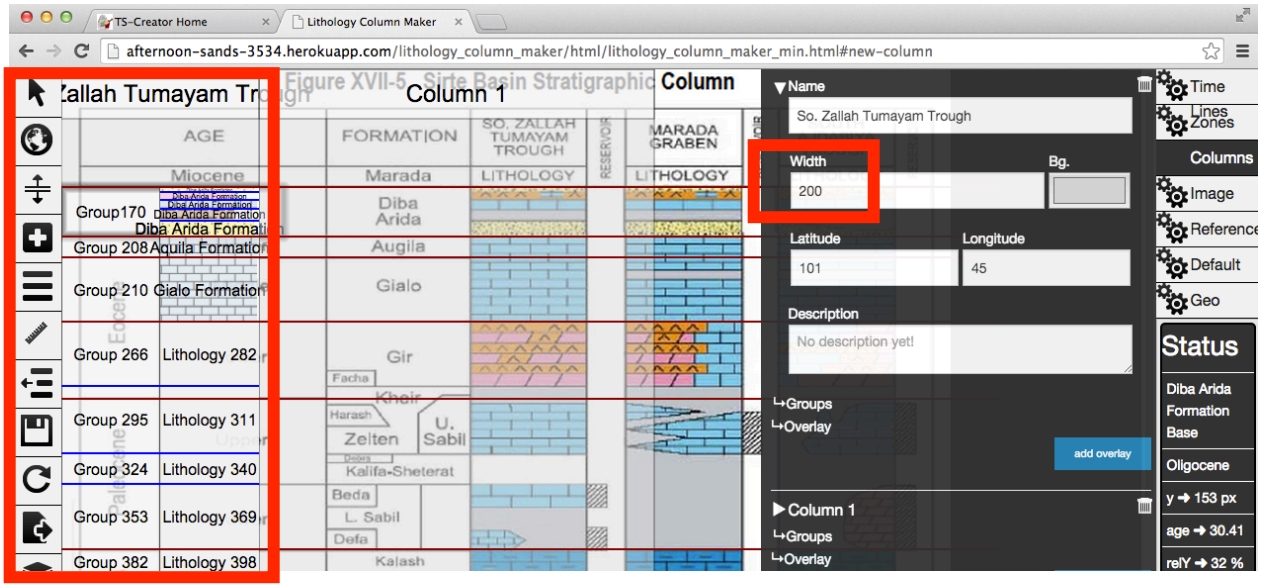


On the right hand side panel, open the **Group** label by clicking on the name, add group name and description, if desired. Next, open **Formation** Label and fill in your information. You need to choose a lithology pattern.  Don't forget to press enter after each input, otherwise the new name is not recorded.




To add a second lithostratigraphic column just click the **Add Column** button again and a new column will appear. Repeat the steps as done in the first column.

**Hint:** You can adjust the width of your columns in the columns menu. Often it is easier to reduce the size of the first column, while working on the second one.

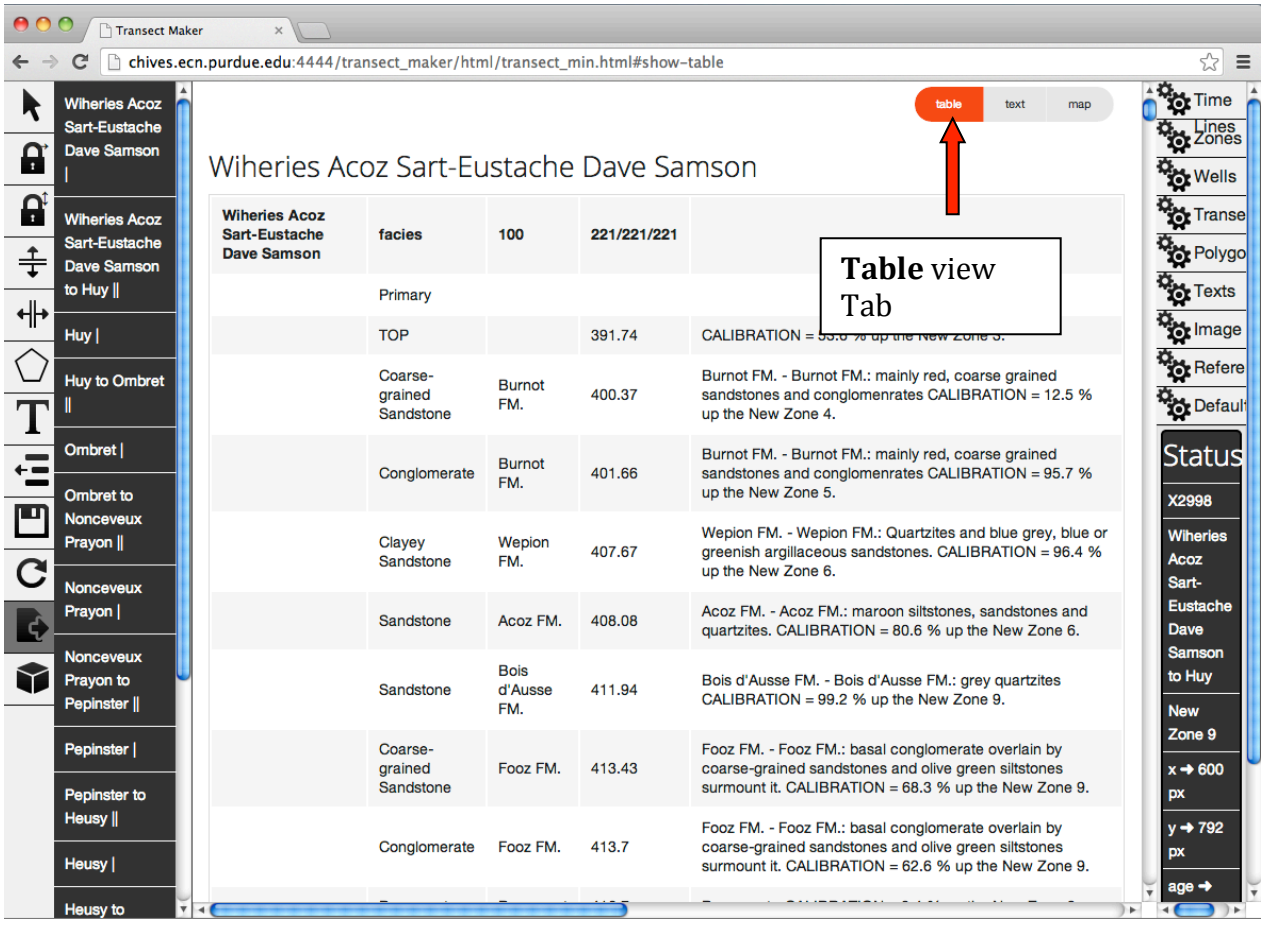


# Export Data

You can export the data in Timescale Creator format either by saving the project to sandbox and downloading the text file or by using **quick export**  . The **Export Tab** will open up the view containing the tab-separated Timescale Creator format. You can choose to view the **table** to quickly verify the output and use the **text** view to copy the output into a text editor or Excel. A **map** view gives you latitude and longitude for your wells, already formatted for making a mappack.

Make sure you closed 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** to **map** view

You can quickly swipe the whole text view and copy it into a text editor and save as .txt and then load the file into TSCreator.

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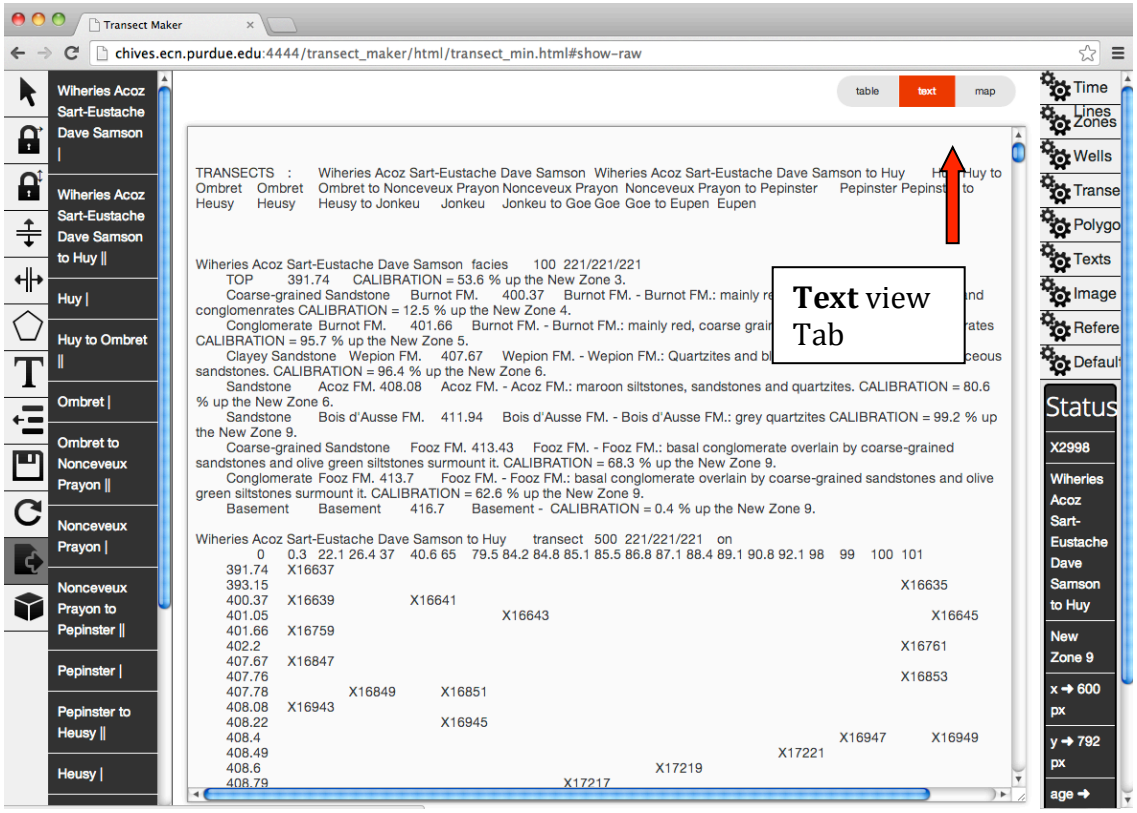
| | Coarse-grained Sandstone | Burnot FM. | 400.37 | Burnot FM. - Burnot FM.: mainly red, coarse grained sandstones and conglomenrates CALIBRATION = 12.5 % up the New Zone 4. |
| | Conglomerate | Burnot FM. | 401.66 | Burnot FM. - Burnot FM.: mainly red, coarse grained sandstones and conglomenrates CALIBRATION = 95.7 % up the New Zone 5. |
| | Clayey Sandstone | Wepion FM. | 407.67 | Wepion FM. - Wepion FM.: Quartzites and blue grey, blue or greenish argillaceous sandstones. CALIBRATION = 96.4 % up the New Zone 6. |
| | Sandstone | Acoz FM. | 408.08 | Acoz FM. - Acoz FM.: maroon siltstones, sandstones and quartzites. CALIBRATION = 80.6 % up the New Zone 6. |
| | Sandstone | Bois d'Ausse FM. | 411.94 | Bois d'Ausse FM. - Bois d'Ausse FM.: grey quartzites CALIBRATION = 99.2 % up the New Zone 9. |
| | Coarse-grained Sandstone | Fooz FM. | 413.43 | Fooz FM. - Fooz FM.: basal conglomerate overlain by coarse-grained sandstones and olive green siltstones surmount it. CALIBRATION = 68.3 % up the New Zone 9. |
| | Conglomerate | Fooz FM. | 413.7 | Fooz FM. - Fooz FM.: basal conglomerate overlain by coarse-grained sandstones and olive green siltstones surmount it. CALIBRATION = 62.6 % up the New Zone 9. |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sandstones. CALIBRATION = 96.4 % up the New Zone 6.
Sandstone Acoz FM. 408.08 Acoz FM. - Acoz FM.: maroon siltstones, sandstones and quartzites. CALIBRATION = 80.6 % up the New Zone 6.
Sandstone Bois d'Ausse FM. 411.94 Bois d'Ausse FM. - Bois d'Ausse FM.: grey quartzites CALIBRATION = 99.2 % up the New Zone 9.
Coarse-grained Sandstone Fooz FM. 413.43 Fooz FM. - Fooz FM.: basal conglomerate overlain by coarse-grained sandstones and olive green siltstones surmount it. CALIBRATION = 68.3 % up the New Zone 9.
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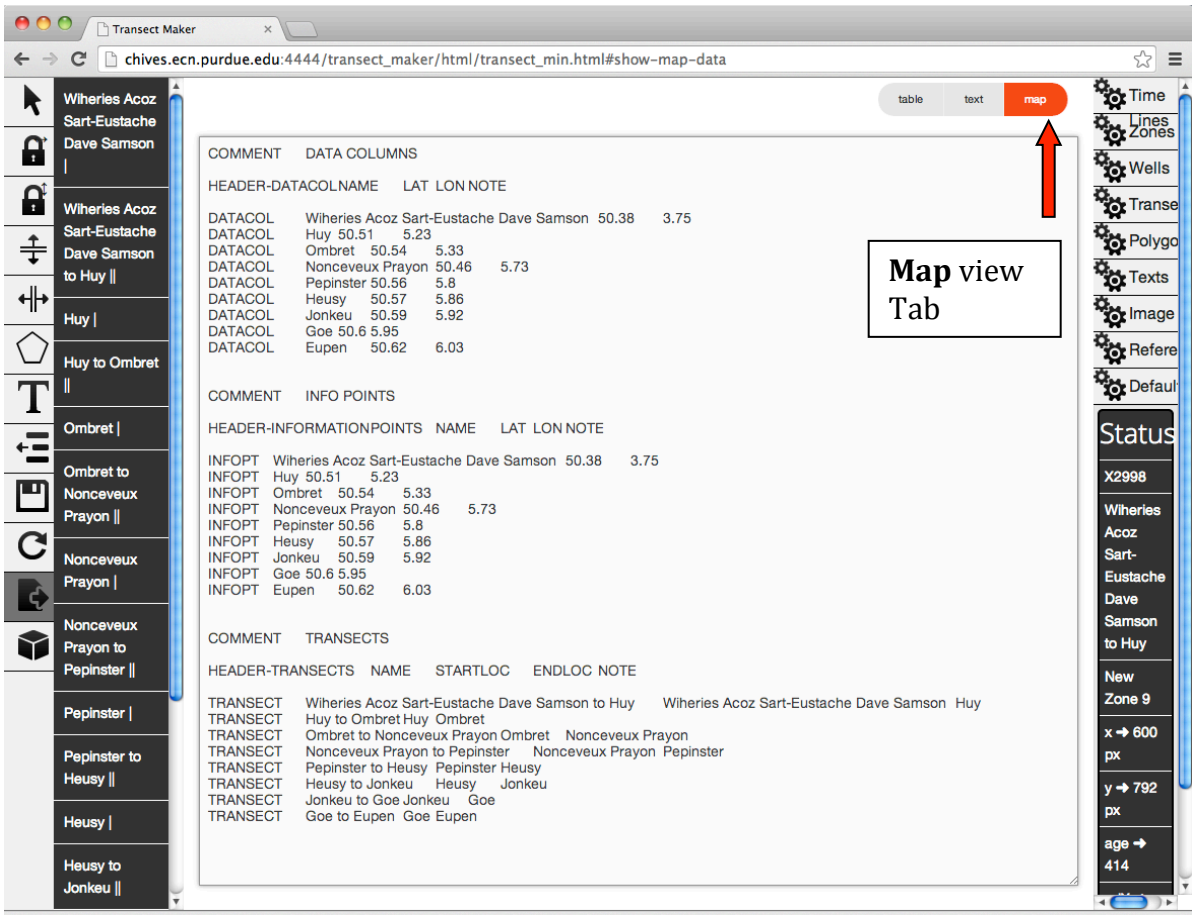
Transect Maker
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DATACOL Ombret 50.54 5.33
DATACOL Nonceveux Prayon 50.46 5.73
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DATACOL Jonkeu 50.59 5.92
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INFOPT Pepinster 50.56 5.8
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# Saving your file:

## Quick Save

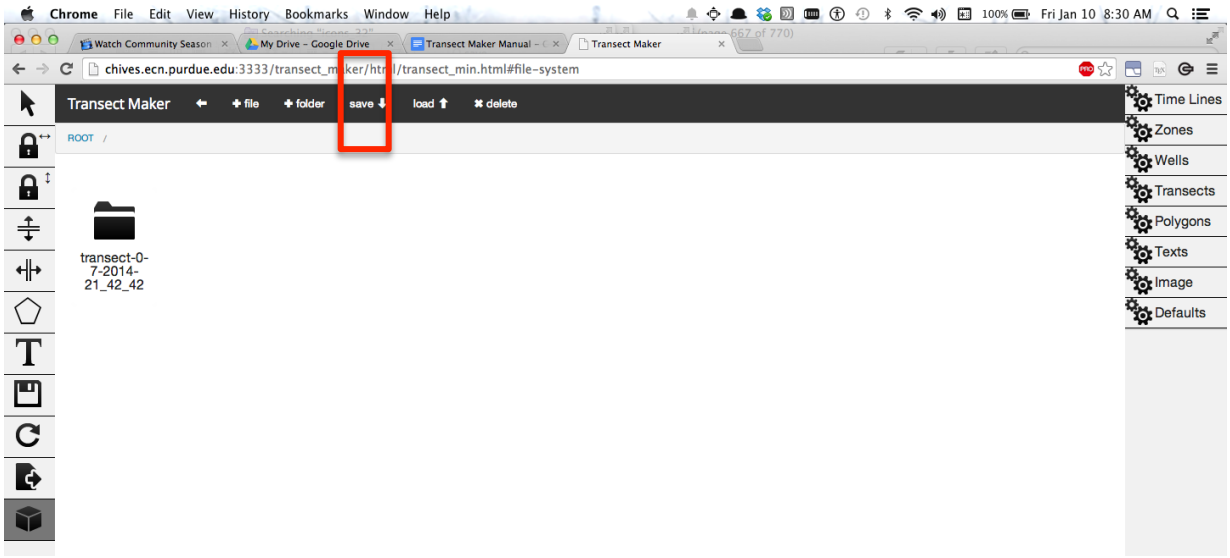
**Quick Save -** Clicking on this will save the changes to the local storage. While working on the projects user can **“Quickly Save”** his changes by clicking  icon. This will override any of the previously saved changes with the current change. This information is retained by the browser and when the user visits the app again he can reload the changes quickly.

Reload data from the local storage if data exists in the local storage by clicking on  .

## Sandbox

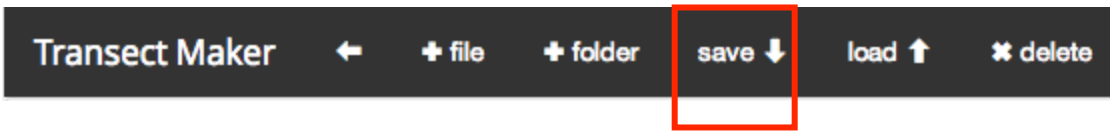
This application creates a sandbox file system on your system to store data permanently. When working on a project you can save your project or a version of the project in your sandbox and can later visit it again. In order to save the project click on  . This will open up your sandbox and display any directories or files previously saved or created.

### Sandbox View

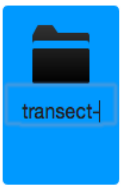



Save the project by simply clicking on **“save”** in the menu bar. This will create a new directory called “transect” attached with the time stamp.

### Sandbox Menubar




You can rename the directory by simply clicking on the text and edit it.



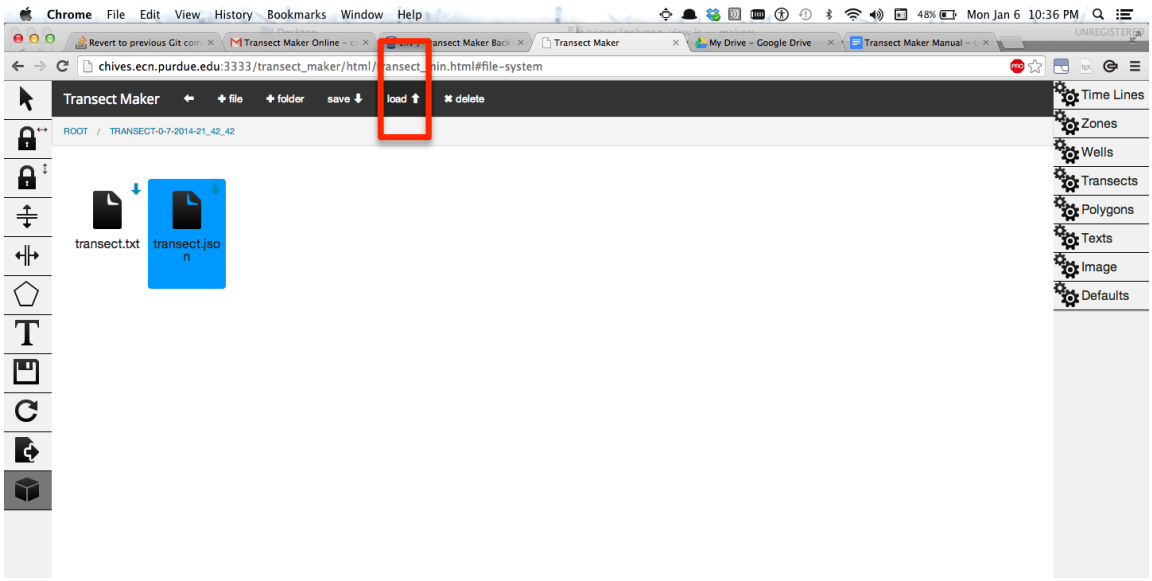

You can also navigate the directory by double clicking on it. This opens the folder to show 2 files called transect.txt and transect.json. You should rename them.

You can go to the parent directory by clicking "⬅" in the menubar.

You can download the generated files by clicking on the ⬇ on the right top corner of the file.

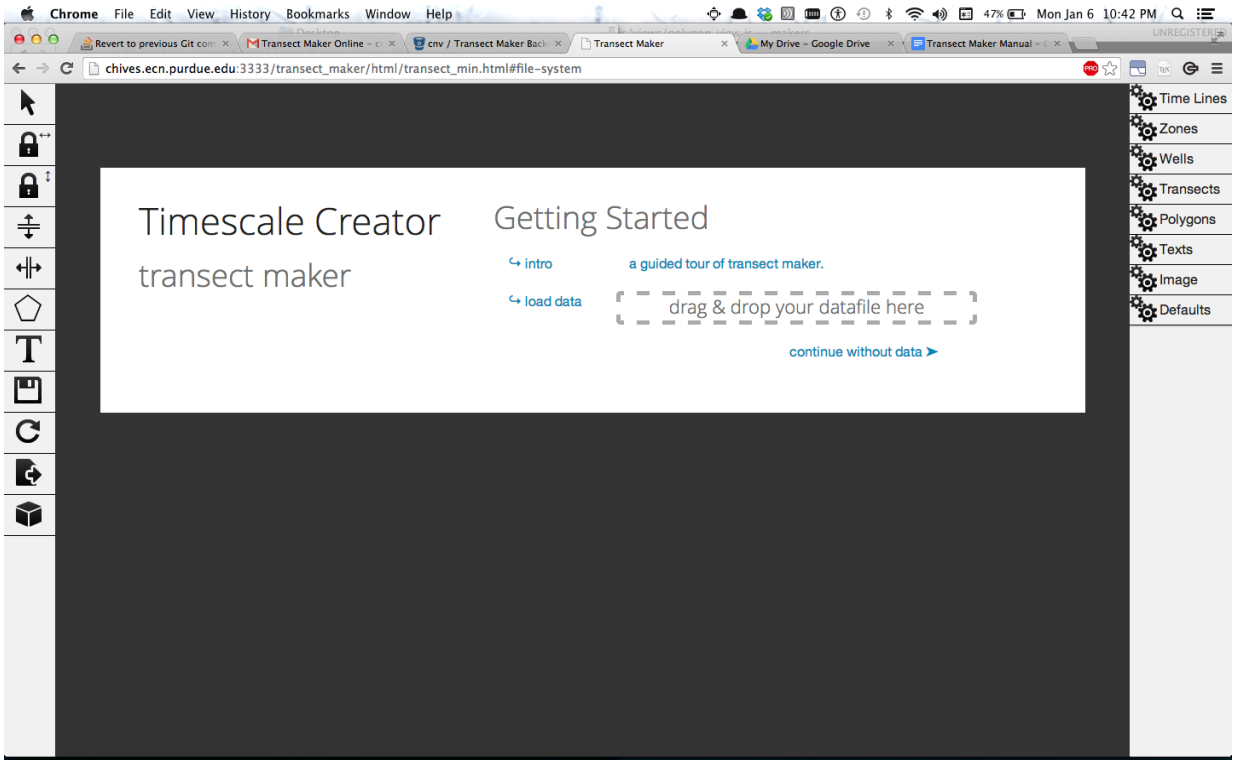
To delete a directory or a file - Select the directory/ file by clicking on it and click **"delete"** in the menu bar.

You can load the data from saved projects, by first selecting the correct folder and then loading the appropriate json file. Single click on the file selects it, then click **"load".**



# Drag & Drop

After you download the file, you can share it with other users and they can load the data by “drag and drop”  into the introductory screen.
You can drag and drop both file formats, json and txt directly. However only the json file will display your initial image.




Remember to download all the files you want to keep to your computer, once you have finished a project. Then clear out all your saved files from the sandbox, otherwise the Lithology maker might become unresponsive during a future project.

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