*Note: These instructions are most closely aligned with the web-based version of StraboSpot 1 – last accessed 4/9/21. A major new version of StraboSpot (2.0) is scheduled to be released in May 2021. I suspect that most of the below instructions will still apply, but there may be some differences. There will certainly be some differences in capabilities, and I mention them below where they are already known. For help using StraboSpot, contact your instructors and email inquiries at the developer level can be sent to* STRABOSPOT@GMAIL.COM

**Access StraboSpot**

Go to <https://www.strabospot.org/login> and create an account if you don’t already have one.

**Create a project**

Under the “Account” drop-down menu, select “My Data.” Click the small red plus sign next to My Projects to create a new project. The “Project Name” cell is the only one that needs to be filled, but you can fill the others as you want. **Do NOT make your project “Public”** – this option is good for sharing the contents of projects but it is not a feature that we want to use for this course. Make sure the small box next to the word “Public” in your project listing is shown in red; this means the public feature is turned off.

**Upload the provided shapefile**

Under the “Account” drop-down menu, select “Load Shapefile.” Select the project name that you just created, and navigate to the zipped shapefile. Click Submit. A series of column assignments will appear. Select the first column (Stations) as the “Spot Name.” Ignore the others. All 110 station locations (GG1-110) will load.

**Begin mapping in your new project.**

While still viewing “My Data”, select “View/Edit/Add Data” to begin mapping in your new project. A separate window with the Strabo field tool interface (called StraboSpot Web) will open with a display of your “Current Project Name” and a list of “Current Datasets”. This list includes a “default” dataset and the new list that you just created by loading the shapefile.

*Note, the below effect seems to work in the Strabo web-based version using Safari, but did not appear to work when I last tried it in late 2020 using the Strabo app on a 2018-ish iPad. I have not tested other browsers, etc.*

Use the plus sign to the right of “Datasets” to create a new dataset for each new day of mapping. Then under the drop-down menu for “Dataset for New Spots” (near the bottom of the page), select the new dataset that you just created. When you edit any of the existing spots from the loaded shapefile, they will be moved over to the newly created dataset. This will allow you to turn off the spot symbols for stations that you are not using by turning off the “GGstationlocations.shp” dataset.

If the above effect is not working, you can just work within the original dataset (from shapefile), and then toggle on/off station displays from the map view according to some of their characteristics. For example, once some stations have structure orientation data, you can turn off the display of all stations without orientation data.

**Create lithology tags and a shear zone tag**

From the StraboSpot Web interface, there are 4 tabs in the upper left:

“StraboSpot” takes you back to the main StraboSpot page where “My Projects” is displayed. There’s a good chance that this window is already open in the background so there is probably no reason you will need this option.

“Spots” shows you a list of all spots that are currently available from your datasets that are currently turned ON.

“Attributes” shows you listings of all Images, Samples, Relationships, or Tags that you currently have. At the beginning you won’t have any of these. However, below you will start by creating 4 tags for use in your mapping.

“Maps” shows you a map view of your dataset with several options for baselayers.

To create tags for the 3 lithologies that you will encounter in this project, click on “Attributes” and select “Tags”. The click the “+” sign to add a new tag. Give it a name – “Boulder Creek granodiorite” and select “Geologic Unit” for the type. Click “Show More Geologic Unit” to get more options for entering relevant information. Enter “Xbg” for the label and “Boulder Creek granodiorite” for the Unit name. You can also select a custom color for the unit by selecting from the color table displayed in the upper right. Select “Igneous” for the Rock Type and “plutonic” for the Igneous Rock Class. Select “granodiorite” for the Plutonic Rock Type. Select “Proterozoic” for the Geologic Age. Leave the rest unfilled. Strabo auto-saves your data a lot, but **if the words “Unsaved Changes” are displayed at the top, click them to Save your changes.**

Now create two more tags for

Coal Creek quartzite – Geologic Unit – Xcq – Coal Creek quartzite – metamorphic – quartzite – (leave metamorphic grade unselected) – Proterozoic.

Coal Creek schist – Geologic Unit – Xcs – Coal Creek schist – metamorphic – schist – (leave metamorphic grade unselected) – Proterozoic.

You can always come back here and create any number of additional tags that you think you may find useful. For example, anything that may be a searchable and filterable concept could be tagged. For example, some stations or measurements may have a mylonite descriptor, so you could create a tag for that. If you do, select “Concept” for the type and “Geological Structure” for the Concept Type. Another example is that some stations contain conglomeratic horizons in the quartzite; you could create a tag for that. Etc.

**Additional tips while mapping in Strabo:**

1. At the moment (4/9/21), the only spot type than can take advantage of the color-coded tags are polygons. When you encounter different lithologies at a station, or between stations, you can choose to create a new spot as a small polygon near the station(s) and assign it a lithology tag and a feature type such as “rock unit.” This will allow you to visually see the color-coded rock units, and you can choose to toggle their display on/off on the map with the “rock unit” property. The version 2.0 of StraboSpot (scheduled for May 2021 release) will allow additional spot types (point and line) to be color-coded based on tags.
2. When you think you might know where a contact is, create a new spot as a line and give it a name like “southern Xcq-Xcs contact” or “contact near GG11.” Turn on the “trace” feature and assign it a type as “contact” and a quality (e.g., such as “known”, “approximate”, etc.). This will allow you to toggle their display on/off on the map with the “contact” property. The “quality” descriptor allows different line symbols to be used (solid, dashed, dotted, etc.).
3. For each new day of mapping, create a separate dataset (e.g., “Day 1, Day 2, Day 3) and make the dataset for that day the active “Dataset for New Spots.” That way, you can keep your days separately organized and you can export “field notebooks” for separate days.