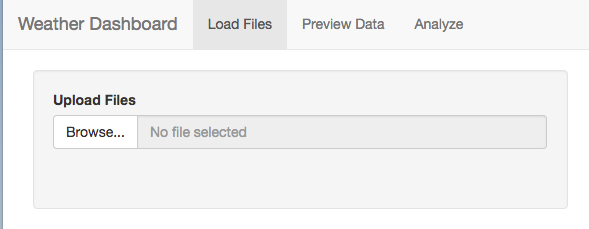
Weather Dashboard User Guide  
August 2018

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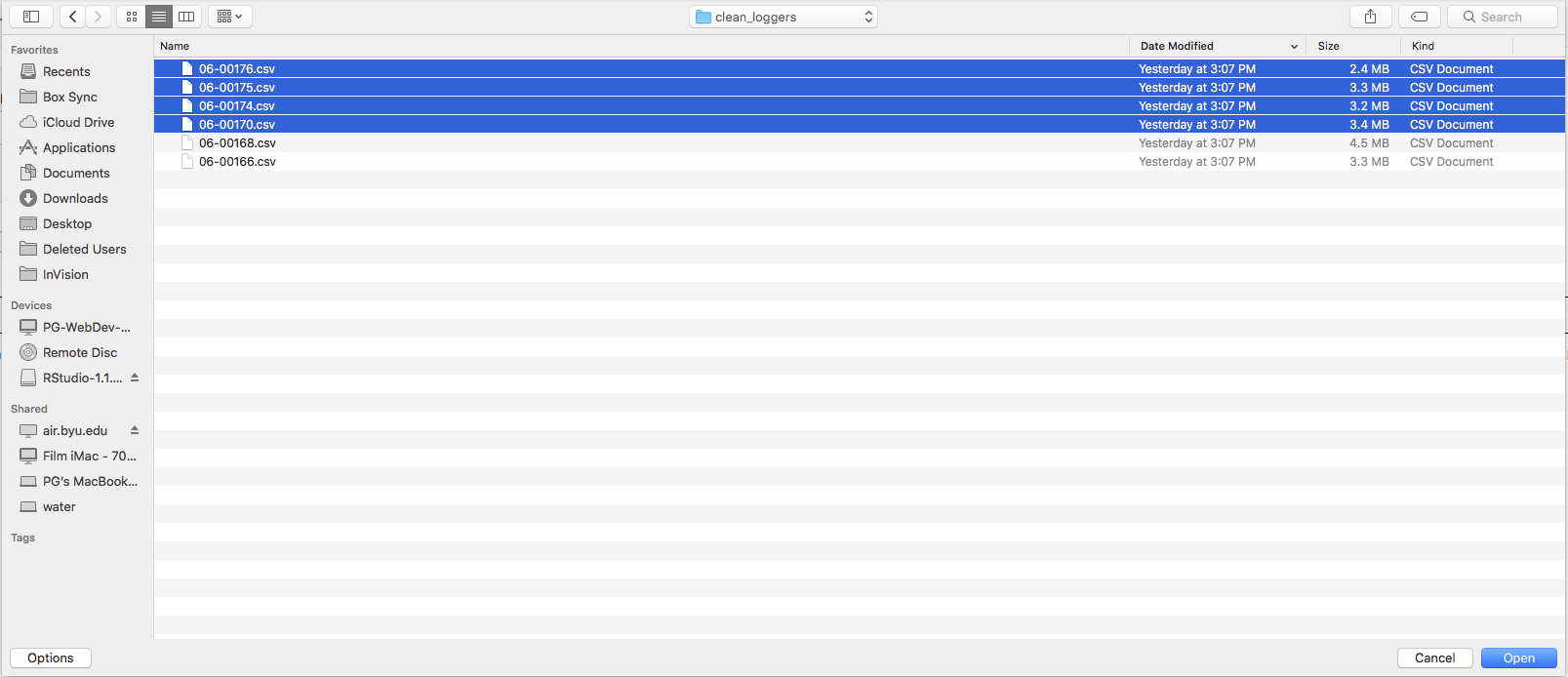
**Loading Files**

To load files first be sure you are on the Load Files tab.

Next to select the files to upload, click on the Browse button.



You should now have a popup with access to your file system. Select the files you wish to upload then click Open in the bottom left. Note: currently only CSV (comma separated values) file format is supported.



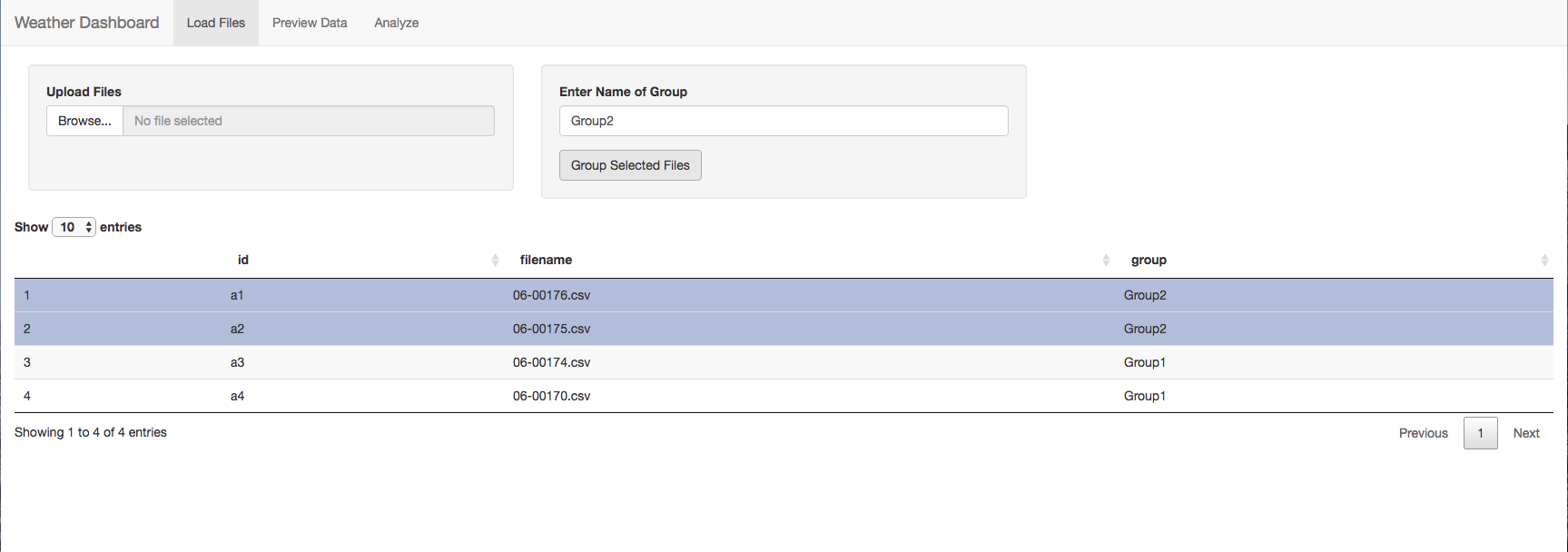
Your files will now begin uploading. This could take several minutes depending on the size of the files. The uploading process will remove all non-alpha numeric character from column names. Once uploaded the file names should appear in the dataset display table at the bottom of the screen.

More files can be uploaded at any time by the same process.

**Assigning Groups**

By default, when files are uploaded they are assigned to Group1. To change one or more files’ group:

1. Select the file(s) by clicking on them in the dataset display table. A selected file will be highlighted in a pale blue color.
2. Enter a new group name in the text area labeled “Enter Name of Group”.
3. Click “Group Selected Files” to change the group of the selected files to the previously entered name.

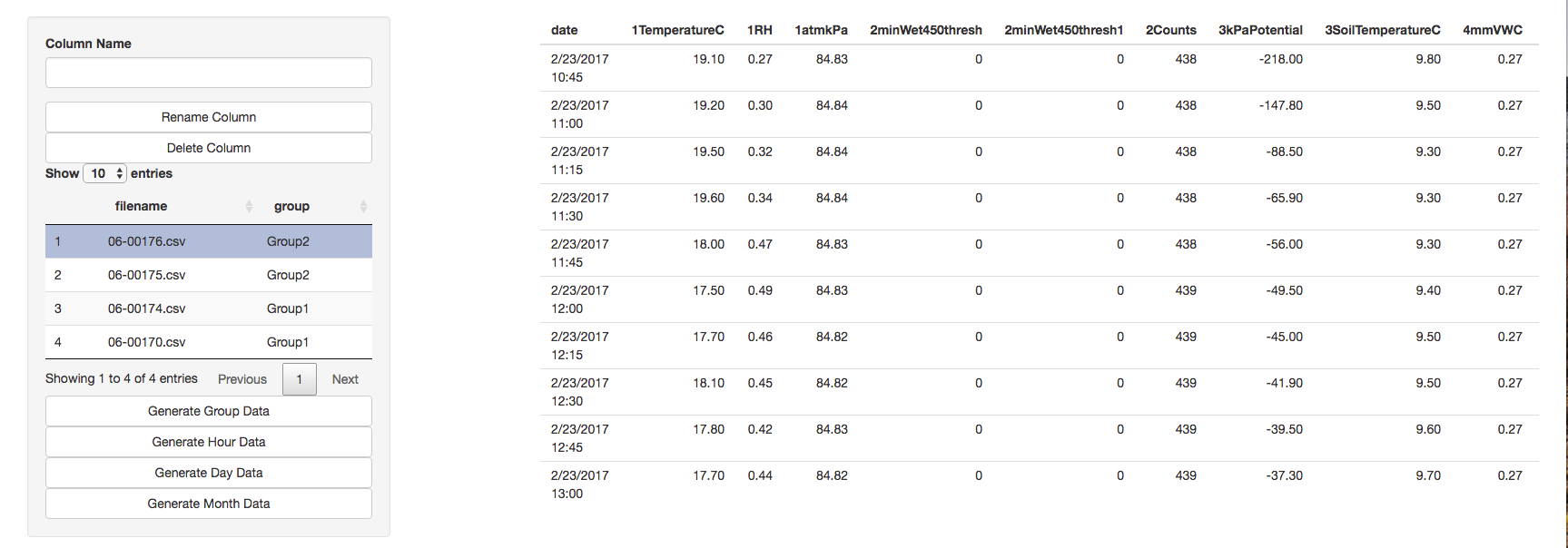


You may create as many groups as you choose.

**Data Previewing**

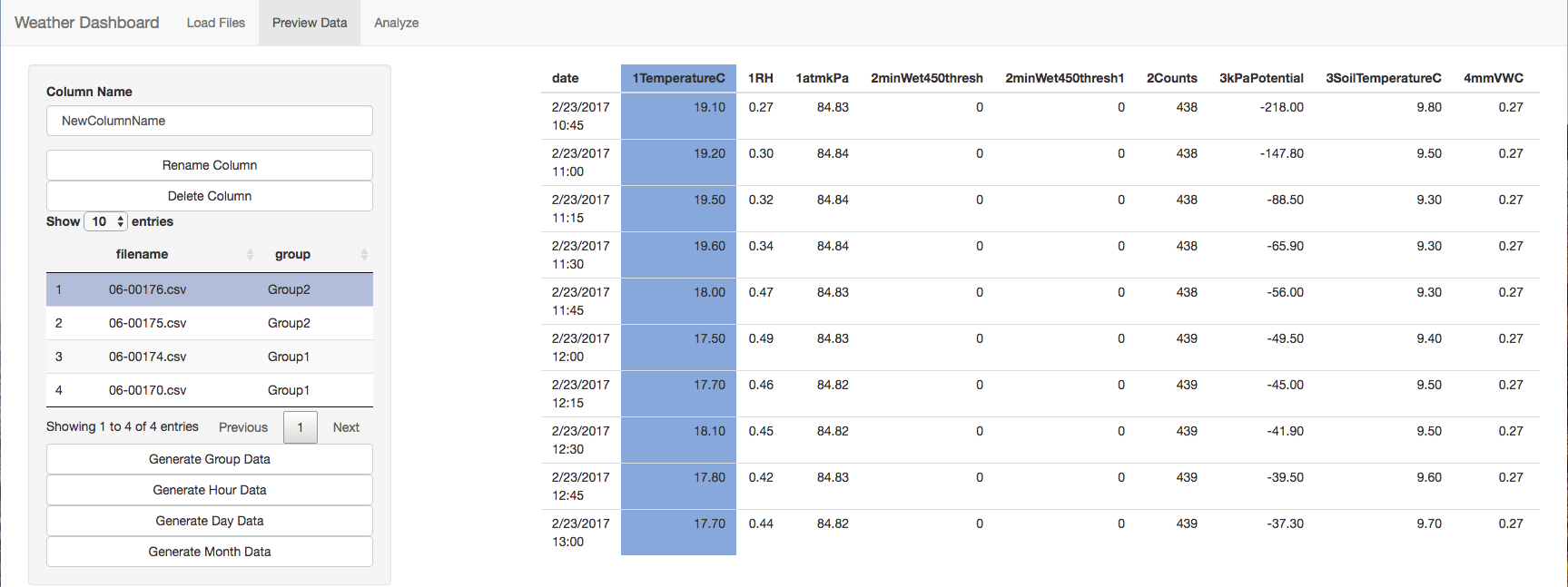
In order for the application to recognize columns of data from various files as the same information, the column names **must be identical**. The Preview Data tab provides an opportunity for you to see the first 10 rows of any dataset and rename columns if needed. Input files often have small inconsistencies in column names. It important to double check the data you are interested in has consistent columns name across all sets. Names that are not common across sets cannot be analyzed against other sets.

To preview a dataset simply click to select it from the dataset display table on the right-hand side.



**Rename a column**

1. Selected the desired column from the preview area on the right
2. Type the new column name into the text area label “Column Name” in the top left corner of the screen. Note: Use only alpha numeric characters in column names, no spaces or special characters (such as % # ° etc...)
3. Click “Rename Column”



**The date column**

Absolutely crucial for analysis and combining groups is the date column. The column containing the date and time information **must be named “date”.**

**Generating Additional Data Sets**

At the bottom of the side bar on the left are four buttons. “Generate Group Data”, “Generate Hour Data”, “Generate Day Data” and “Generate Month Data”.

*Generate Group Data*: This will aggregate all datasets of the same group into one dataset. The various sets will be merged on the “date” column and will only include the columns present in all datasets. (This is why the date column and matching column names are so important).

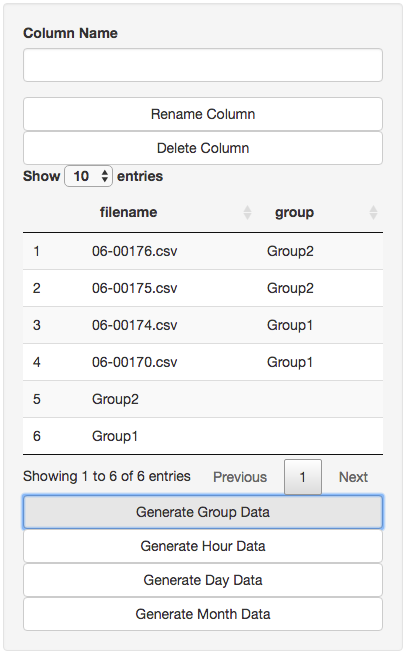
*Generate Hour Data*: All datasets will be condensed down into hourly data. Three output datasets will be created for each individual dataset and group set, one of mean, maximum and minimum values for each hour.

*Generate Day Data*: All datasets will be condensed down into daily data. Three output datasets will be created for each individual dataset and group set, one of mean, maximum and minimum values for each day.

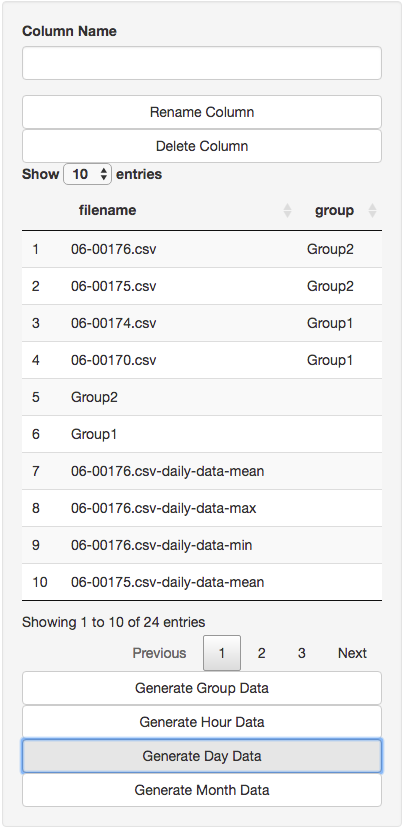
*Generate Month Data*: All datasets will be condensed down into monthly data. Three output datasets will be created for each individual dataset and group set, one of mean, maximum and minimum values for each month.

**Note**: Generating the additional datasets can take several minutes depending on the size of the data sets.

After clicking the “Generate Group Data” button you will see new datasets in the dataset display table bearing the names of their respective groups. See below for example.



Similarly, after clicking the Generate Time Data buttons you will see three new datasets for each previously existing set appear in the dataset display table. The new data sets will be named according to their original dataset and the type of aggregated data they contain. For example, the mean hourly data for a dataset named “dataset1.csv” would be called “dataset1.csv-hourly-data-mean”. See below for an example of daily datasets.



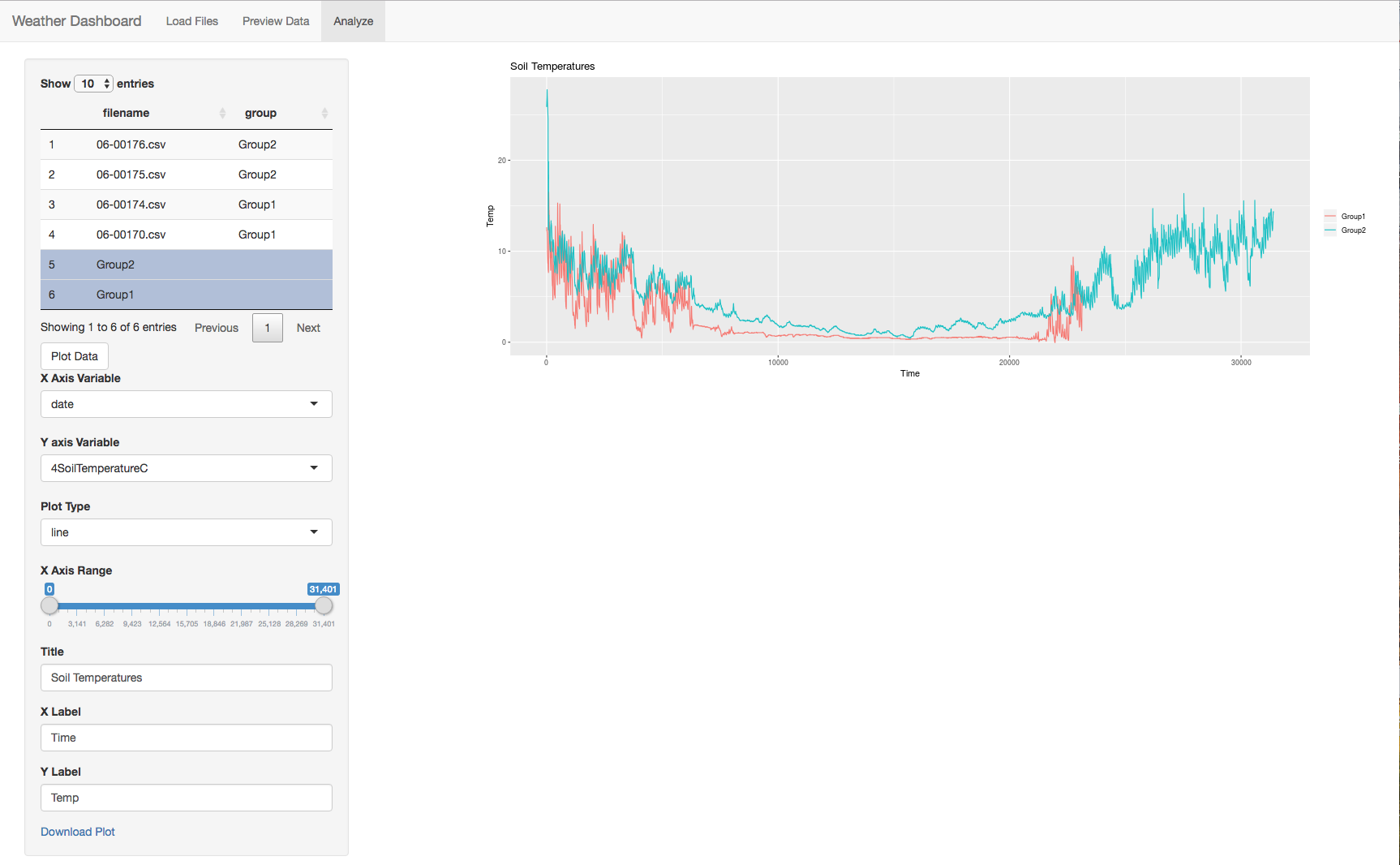
**Analyze**

In the dataset preview table within the Analyze tab you will see all the same datasets you uploaded, edited and created in the other portions of the app.

**Plotting Data**

To plot data,

1. Select the dataset(s) you would like to work with from the dataset preview area
2. Choose the variables for the x and y axis from the drop-down menus
3. Choose a plot type (Point, Line or Point & Line)
4. If you are using date as the x axis you can also use the X axis range selector to narrow the amount of data displayed
5. Click “Plot Data”



At the bottom of the side bar you will also find text areas for adding labels to the plot. You can add a title, x axis and y axis label.

You may also download the plot by clicking “Download Plot” at the very bottom left of the screen.