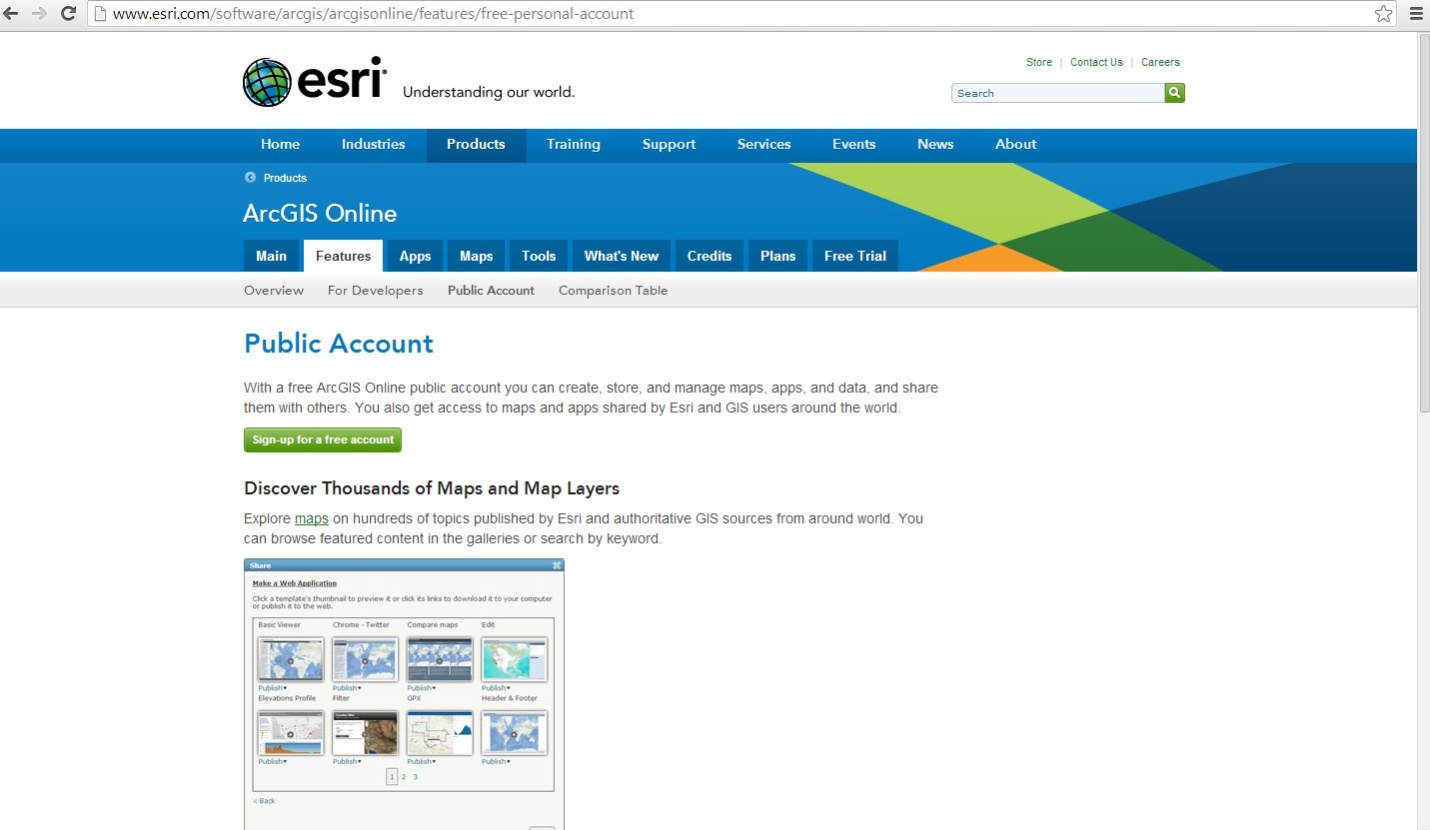
**GIS Assignment**

**GLOBE Surface Temperature Data Mapping Assignment**

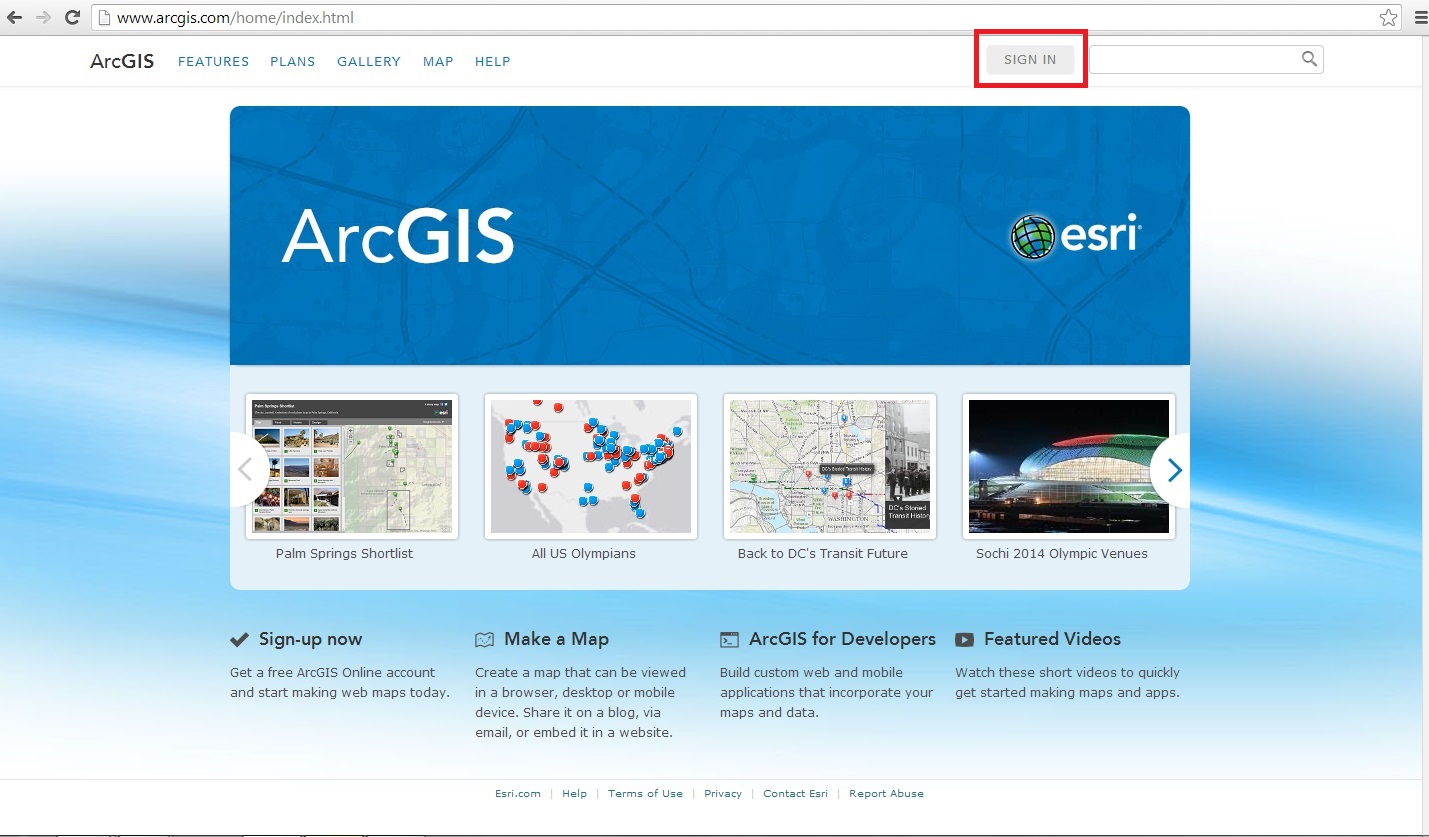
**Using ArcGIS Online and GPS**

1. **Go to** [**www.arcgis.com**](http://www.arcgis.com) **- You will need to set up an “ESRI Global Account”**
2. **Next, go to this link to set up a Public Account for ArcGIS Online -** [**http://www.esri.com/software/arcgis/arcgisonline/features/free-personal-account**](http://www.esri.com/software/arcgis/arcgisonline/features/free-personal-account)

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1. **After setting up a Public Account for ArcGIS Online – Sign In at**

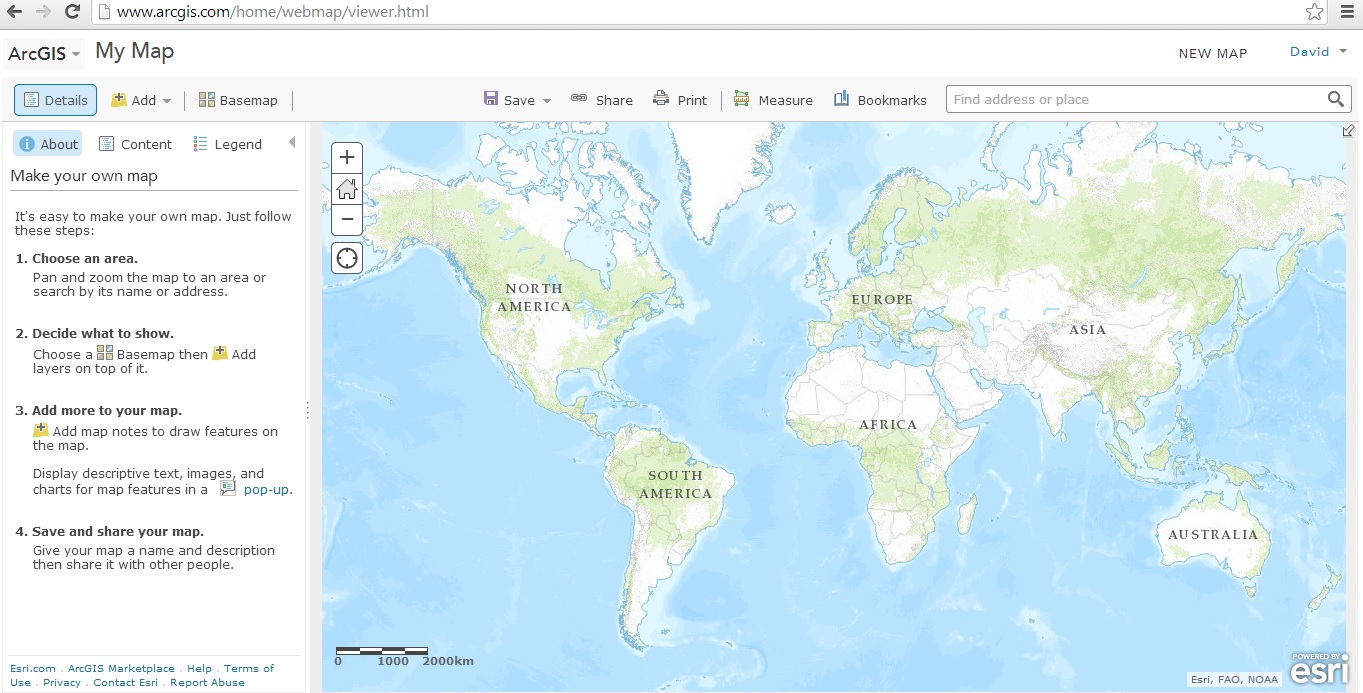
[**http://www.arcgis.com/home/index.html**](http://www.arcgis.com/home/index.html)

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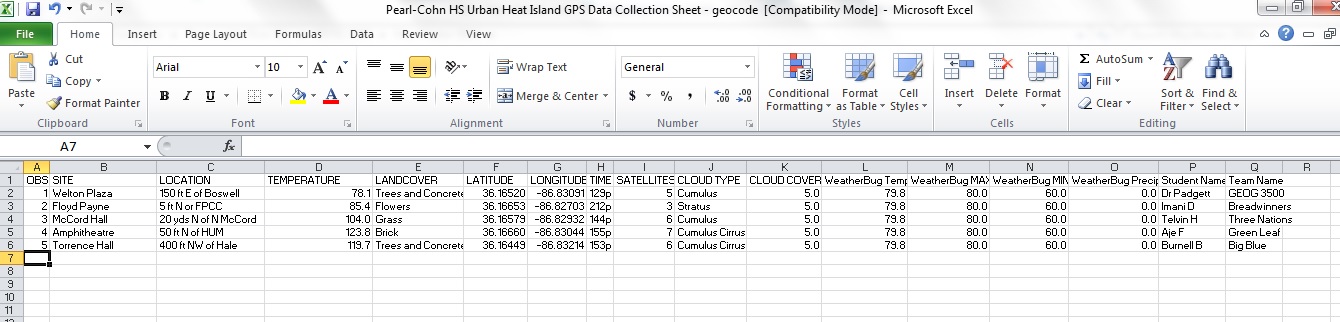
1. **After Signing in, click on “Map”**

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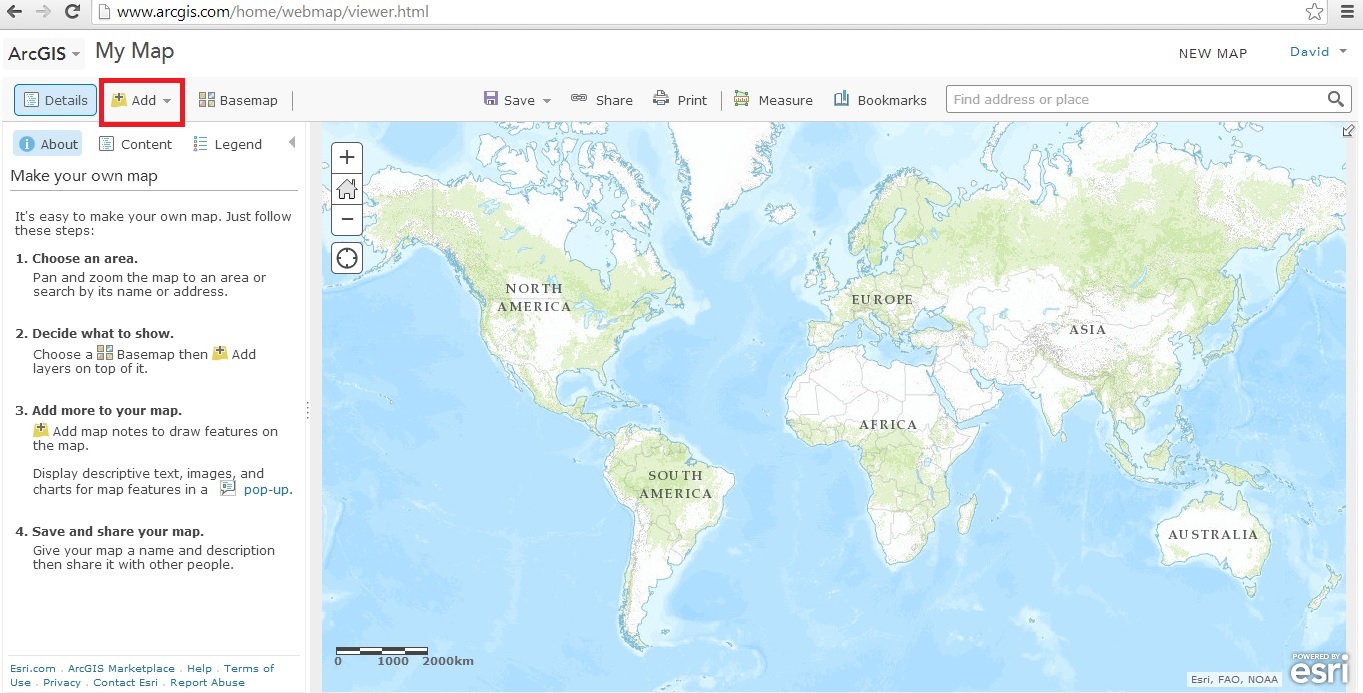
1. **After clicking on “Map” you will be taken to the “My Map” page.**

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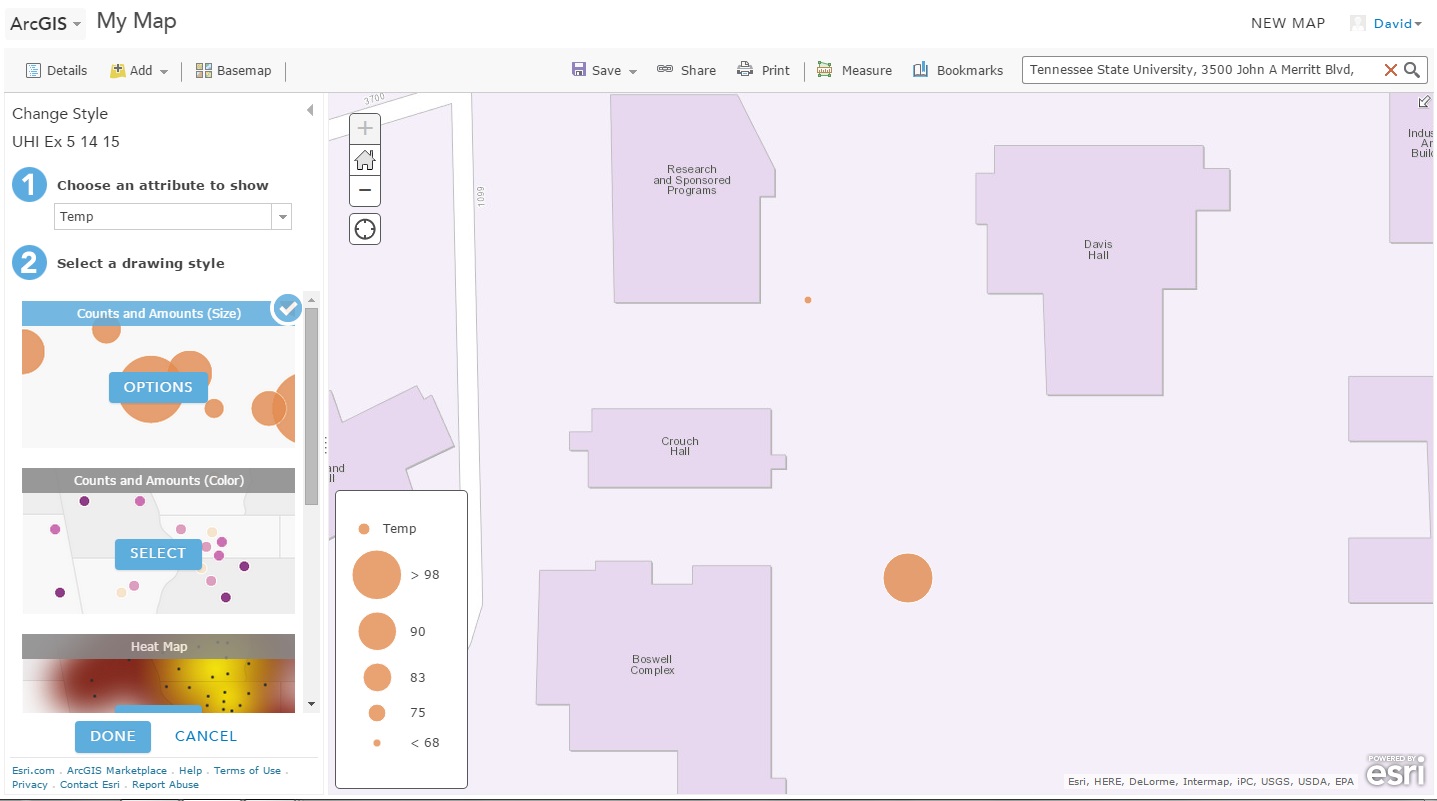
1. **Obtain the Surface Temperature GPS Data Collection Work Sheets you completed outside on the campus grounds.**
2. **Get the “Current Temperature” data for April 17, 2018 from the Charlotte Avenue Weather Station, the closest weather station to TSU -** [**https://www.wunderground.com/personal-weather-station/dashboard?ID=KTNNASHV202&cm\_ven=localwx\_pwsdash#history/s20180417/e20180417/mdaily**](https://www.wunderground.com/personal-weather-station/dashboard?ID=KTNNASHV202&cm_ven=localwx_pwsdash#history/s20180417/e20180417/mdaily) **You must match the Current Temperatures with the times you collected the Surface Temperatures with the Infrared Thermometer as closely as you can. Please view this brief demonstration video -** [**https://youtu.be/5wqQKBtWTVs**](https://youtu.be/5wqQKBtWTVs)
3. **Enter the data into an Excel spreadsheet per the example below. A blank spreadsheet including the required fields is provided at Content. Note that the “Team Name” field will have your team name only. IMPORTANT: Be sure your latitude and longitude fields are formatted as “Number” with at least five places behind the decimal. After saving your Excel spreadsheet, also save it as a CSV (comma delimited) file. When you save to CSV file format, you must first select (i.e. highlight) your data. Note: You must convert the surface temperature data from °F to °C.**

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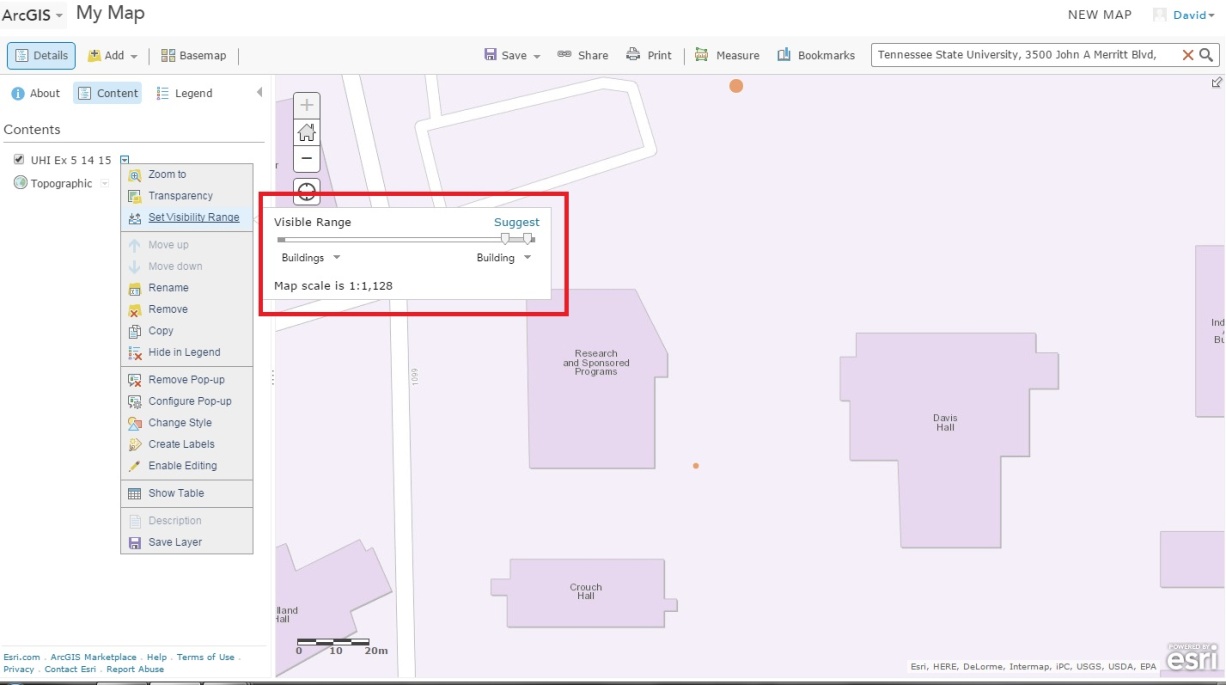
1. **At the ArcGIS Online My Map page, click on the “Add” button. From the dropdown menu, click on “Add Layer from File.” Upload the CSV file you created – Click on “Import Layer.”**

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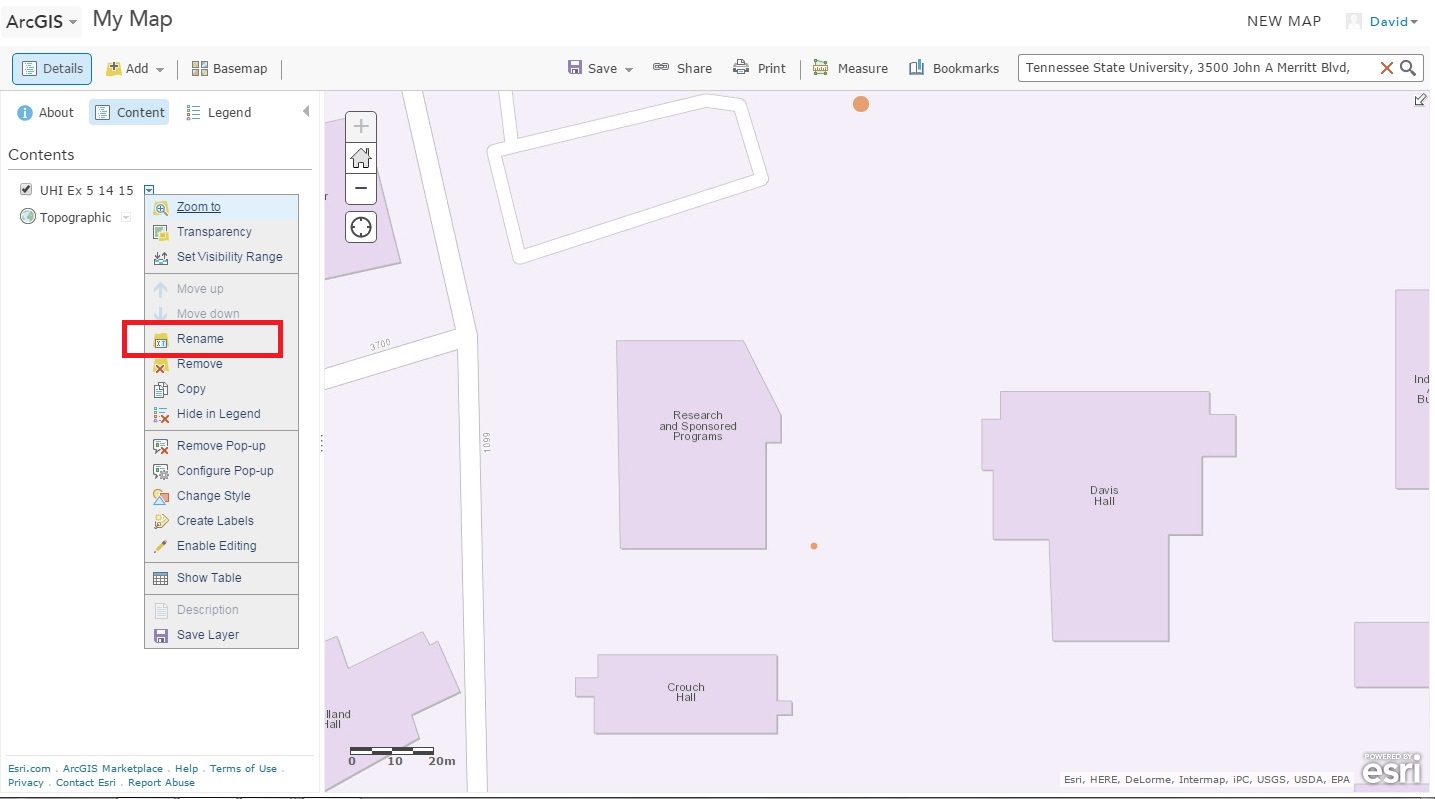
1. **After clicking on “Import Layer” the points should be visible on the basemap including features on TSU’s campus (see sample map below). Note that the “attribute” should be set to show the “Temperature” field as depicted below. Click done when you have the correct symbols visible.**

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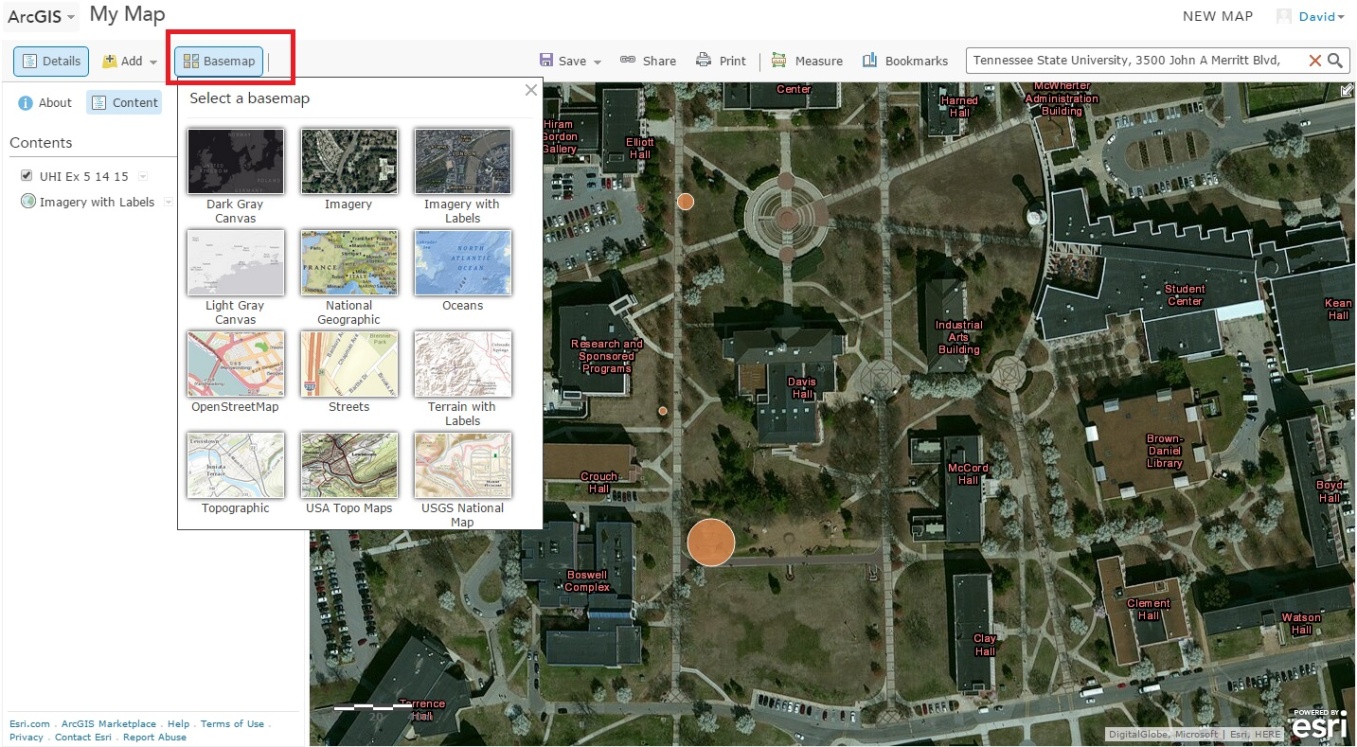
1. **If some of your points do not appear on the map, you may have to set the visibility range. Go to “Content” and then click the small arrow next to your point layer. A dialog box will open. Click on “Set Visibility Range.” Work with the setting until you see your points.**

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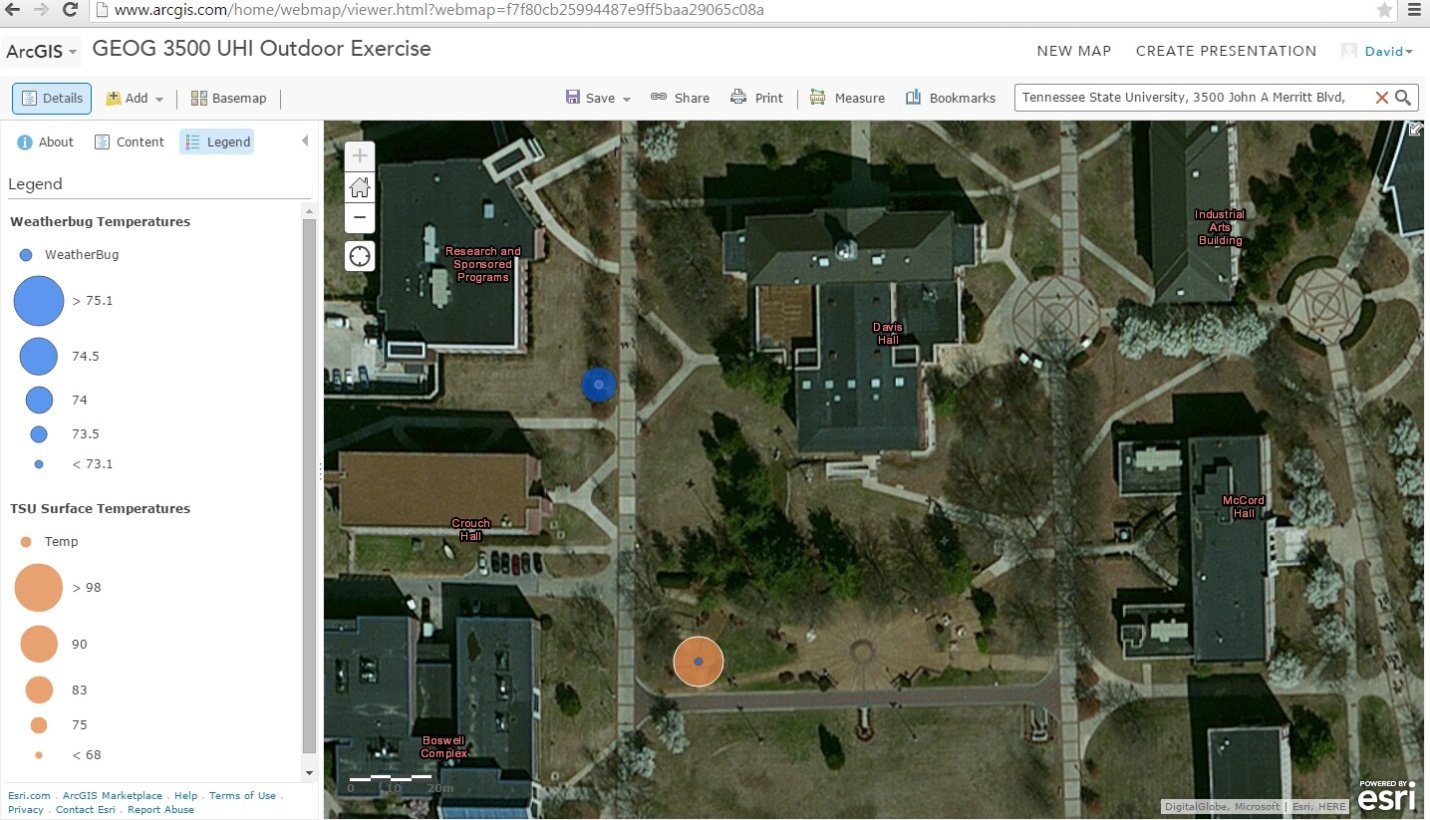
1. **Rename your point layer to something that better explains what it represents on the map (i.e. GLOBE Surface Temperatures). Click on the arrow beside the layer name. In the dialog box click on “Rename.” Type in a new name for the layer.**

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1. **You should change the basemap. Click on “Basemap” and choose a new basemap layer (see below)**

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1. **Next, add the GLOBE Current Temperature data (alcohol thermometer data) as a second layer. Add the same CSV data file to the map again. At “Choose an Attribute Layer” select the “Current Temperature” field. Open the layer dialog box to adjust the visibility range and transparency. Make sure that the transparency setting allows for you to see the GLOBE Surface Temperature data symbols and the GLOBE Current Temperature data symbols (see example below).**

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1. **Next, SAVE your map and give it a title appropriate for the data you mapped. After saving your map, click on “Share” and make your map “Public.”**

**SAMPLE MAP -** [**https://arcg.is/CnTi1**](https://arcg.is/CnTi1)

**Copy and paste your map link in the space below.**

**Upload this sheet, your land cover photos, and your Excel and CSV data sheets to the designated dropbox at eLearn.**