

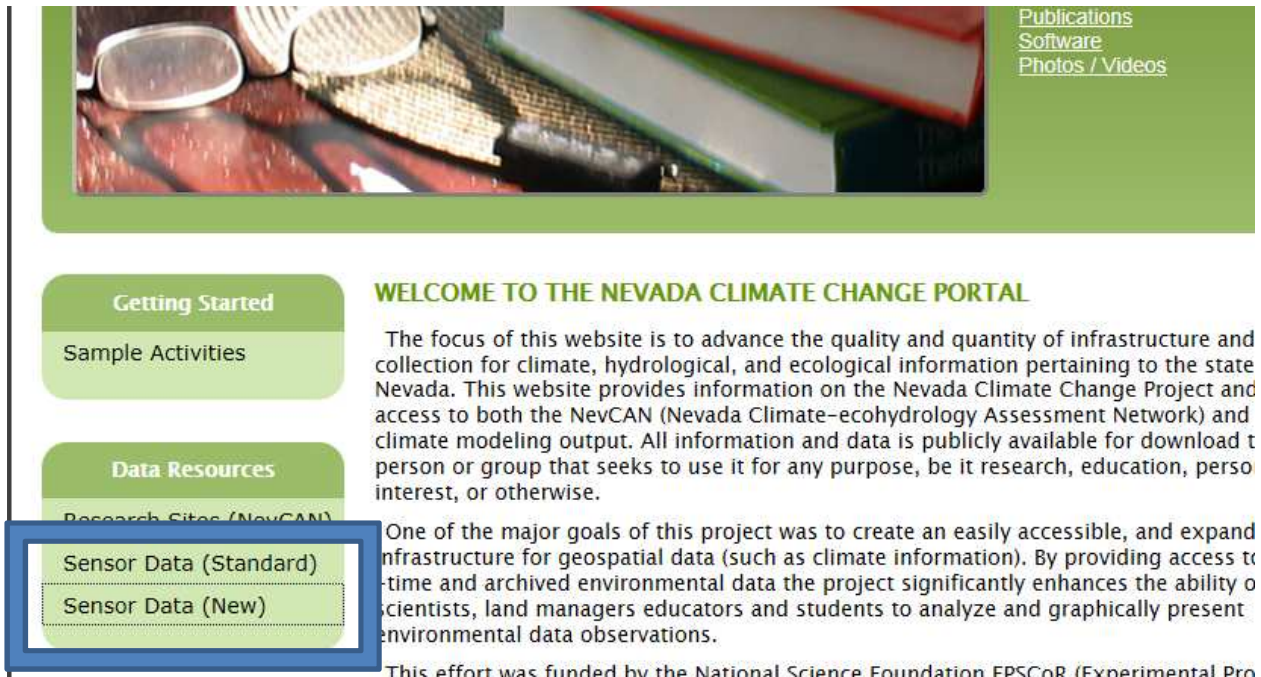


SAMPLE PORTAL ACTIVITIES

Welcome to the Nevada Climate Change Portal! To help guide your exploration of the web site, we have created a list of activities that demonstrate some of the features of the portal.

Get to the Search Interface

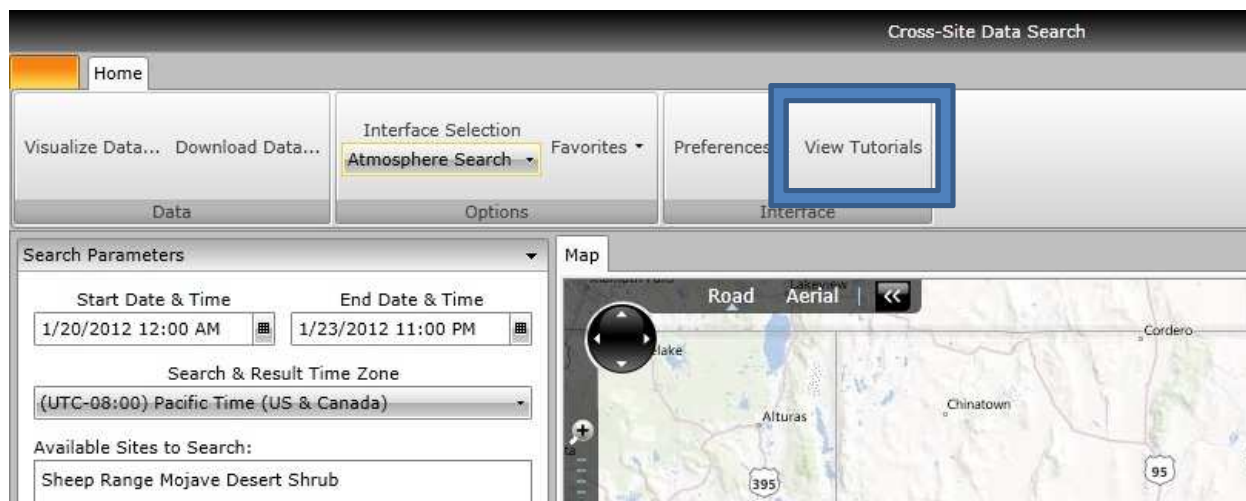
1. Navigate to <http://sensor.nevada.edu>.
2. On the left-hand side, click on the link entitled *Sensor Data (New)*, as shown:



3. If necessary, install the Silverlight runtime.
4. You may optionally enter your e-mail address and institution information, or simply press *OK* – it is not required at this time.

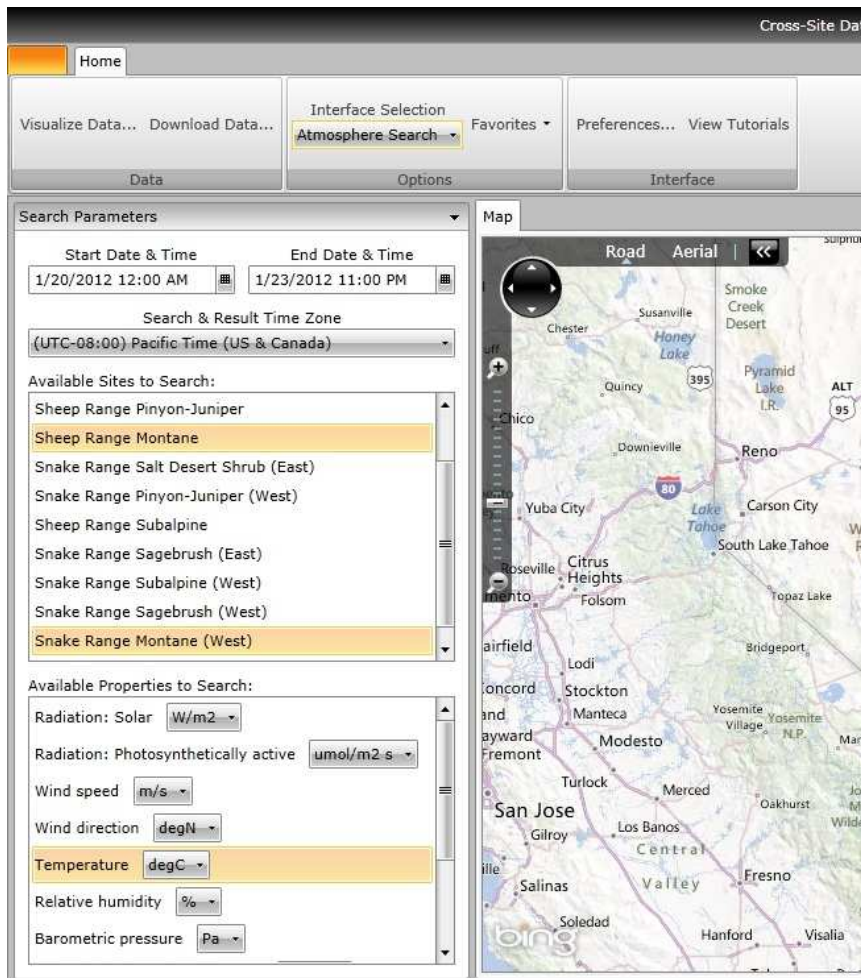
View Tutorials

1. Look to the top of the interface on the right-hand side of the main menu.
2. Click on the *View Tutorial* button, illustrated below.
3. Look at the list of tutorials – these may be helpful outside the workshop.



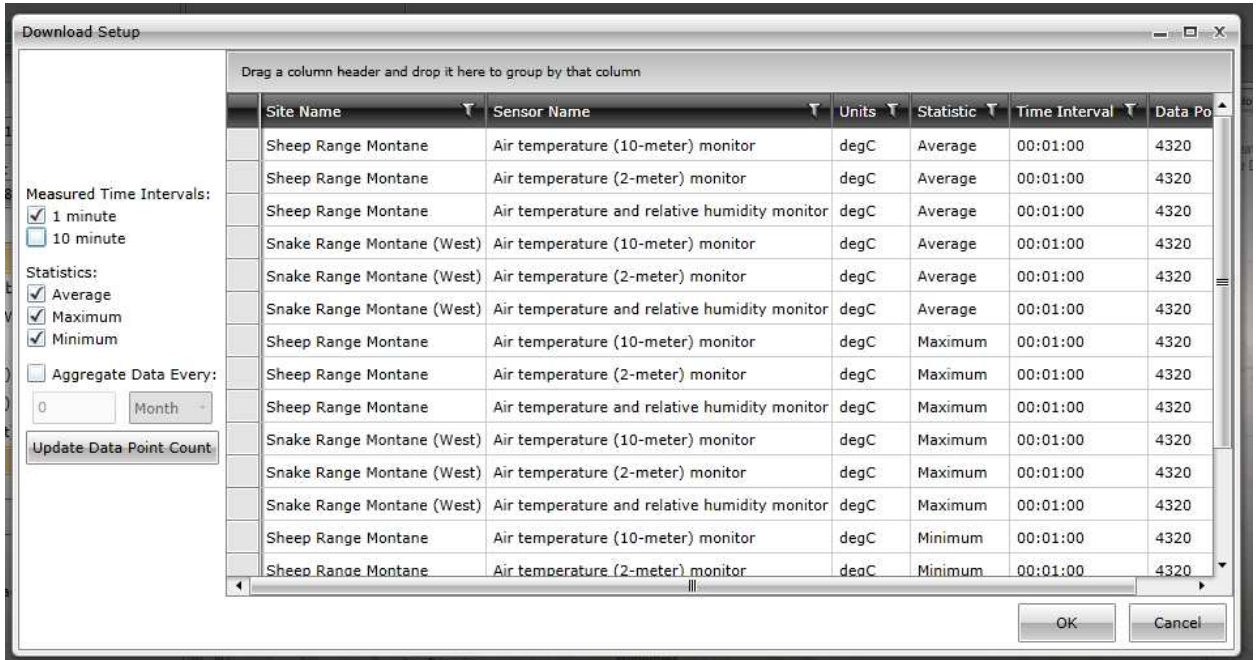
Get Temperature Data Using the Atmospheric Map View

1. On the left-hand side, select the following sites by clicking on them:
 - a. Sheep Range Montane
 - b. Snake Range Montane (West)
2. Under *Start Date & Time*, select January 20, 2012, 12:00 AM.
3. Under *End Date & Time*, select January 23, 2012, 11:00 PM.
4. On the left-hand side again, click on the *Temperature* entry to select it.
5. You may optionally change the units reported for the temperature.
6. Your screen should look similar to this:

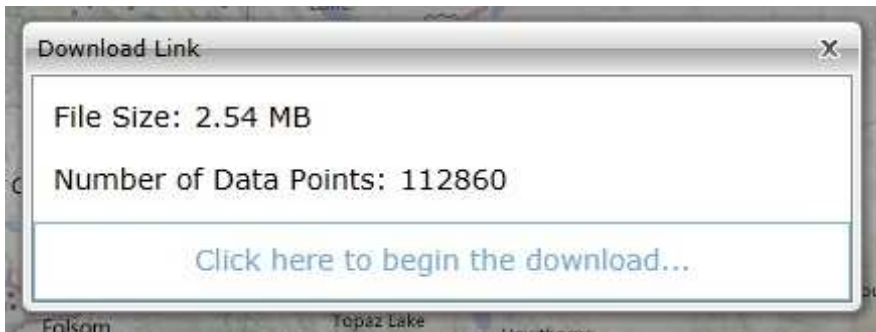


7. On the upper-left corner of the display, click *Download Data...*
8. You will see a summary of the data that will be downloaded.

9. Under *Measured Time Intervals* on the left, remove the check in the box next to *10 minute* to remove the 10-minute data from the download selection.
10. Your screen should look similar to this:



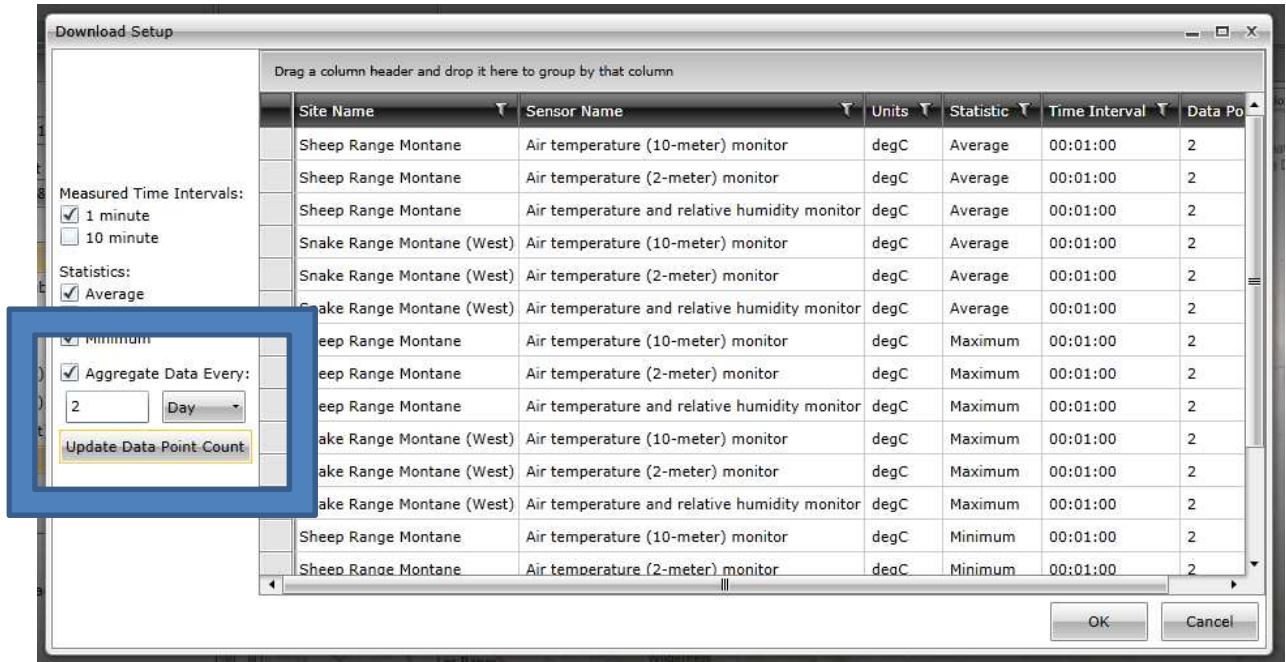
11. Press the *OK* button.
12. Your file will be generated. You can download it when you see a screen similar to this:



13. Note that some browsers attempt to automatically open the downloaded file, which may cause the file to appear not to download.
14. Close the dialog with the download link.
15. Open the file in Excel or any other text editor.

Aggregate Temperature Data

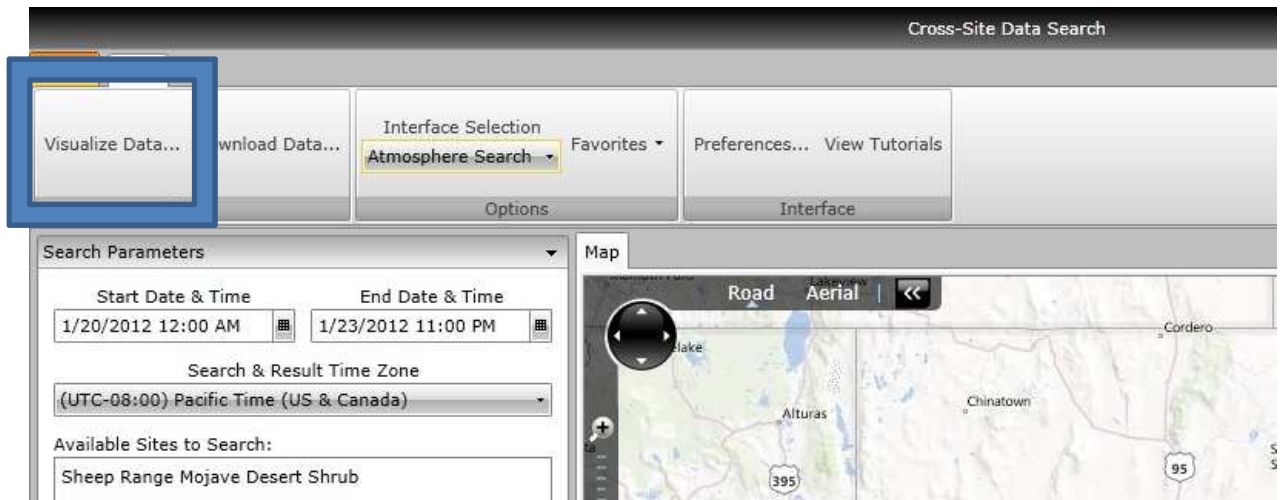
1. Follow steps 1 – 6 from the “Get Temperature Data Using the Atmospheric Map View” exercise. This exercise focuses upon the highlighted area:



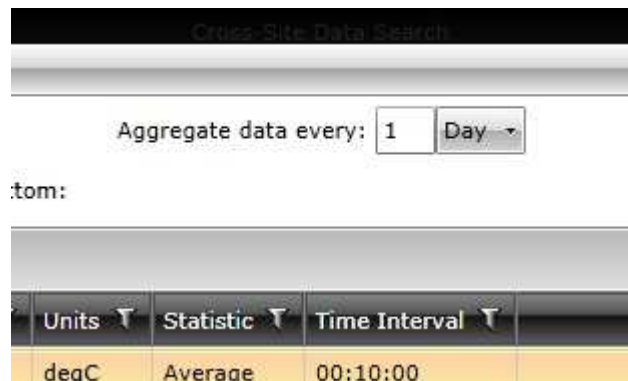
2. Place a check in the box next to *Aggregate Data Every*.
3. In the textbox, enter the value 2.
4. In the list next to the textbox, select *Day*.
5. Click *Update Data Point Count* to see how this will affect the number of points downloaded. You will notice a significant decrease in the number of points.
6. Press the *OK* button.
7. Your file will be generated, at which point you can download it.
8. Note that some browsers attempt to automatically open the downloaded file, which may cause the file to appear not to download.
9. Close the dialog with the download link.
10. Open the file in Excel or any other text editor.

Visualize Temperature Data

1. Follow steps 1 – 6 from the “Get Temperature Data Using the Atmospheric Map View” exercise. Please note that you can use this tutorial for any of the interfaces listed in the *Interface Selection* drop-down menu.
2. In the top-left portion of the screen, click the *Visualize Data...* button.



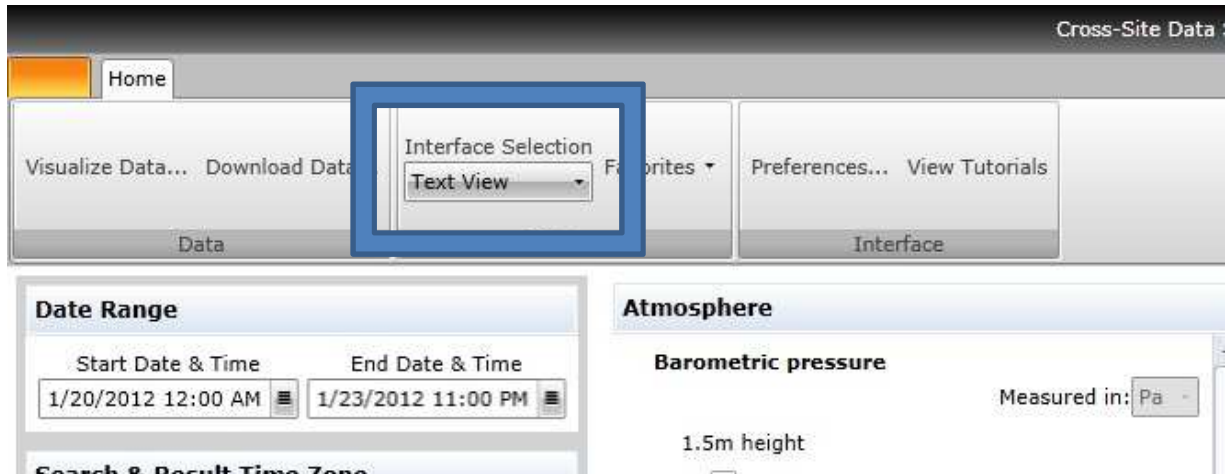
3. On this new screen, start by inputting an aggregate interval of 1 Day.



4. Now, select the sensors you wish to visualize in the chart by clicking them. You may click a sensor a second time to unselect it.
5. Finally, click *View Chart* to see the chart of the sensor data you have selected.
6. Investigate the graph.

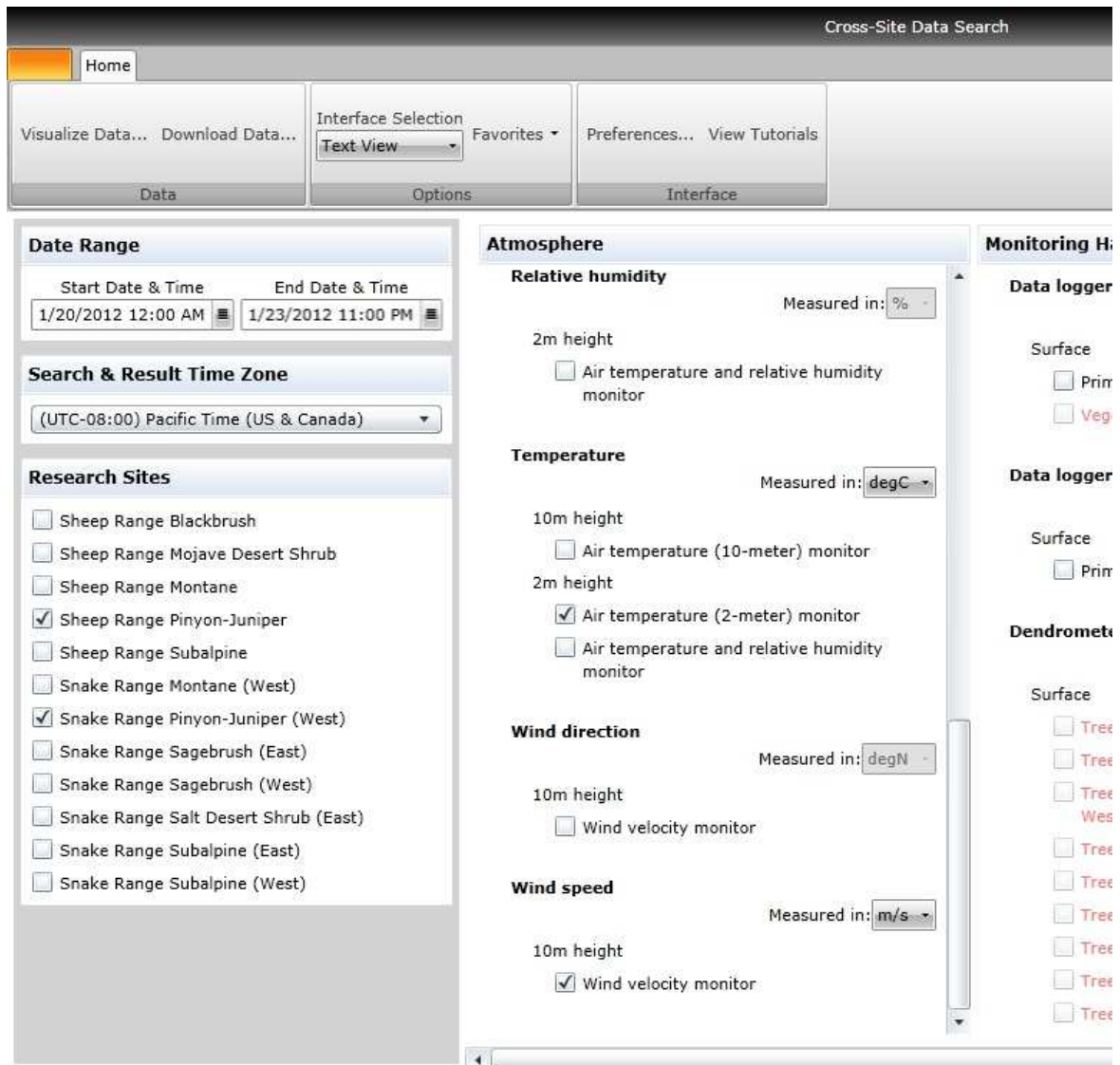
Use the Text Interface to Download Data

1. At the top of the main screen, under *Interface Selection*, select *Text View*.



2. Select the following sites from the list on the left:
 - a. Sheep Range Pinyon-Juniper
 - b. Snake Range Pinyon-Juniper (West)
3. Under *Start Date & Time*, select January 20, 2012, 12:00 AM.
4. Under *End Data & Time*, select January 23, 2012, 11:00 PM.
5. Notice that, as you select additional sites, sensors that are not present at all the selected sites are no longer available for selection.
6. Sensors here are organized hierarchically. Check the boxes next to each of these entries, selecting any appropriate unit of measurement:
 - a. *Atmosphere* → *Wind Speed* → *Wind Velocity*.
 - b. *Atmposphere* → *Temperature* → *2m height* → *Air temperature (2-meter monitor)*.
 - c. *Atmposphere* → *Radiation: Photosynthetically active* → *2m height* → *Quantum photosynthetic...*
 - d. *Precipitation* → *Combined* → *0.5m height* → *Liquid precipitation*.
7. Feel free to select any additional values in which you have interest.

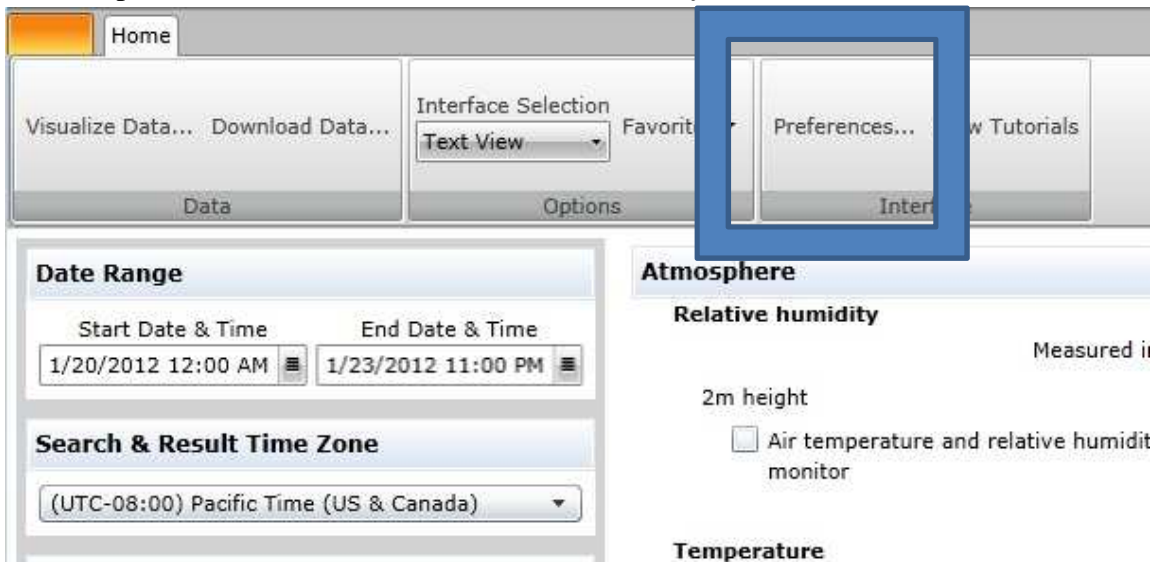
8. Your screen should look similar to this, having more selections:



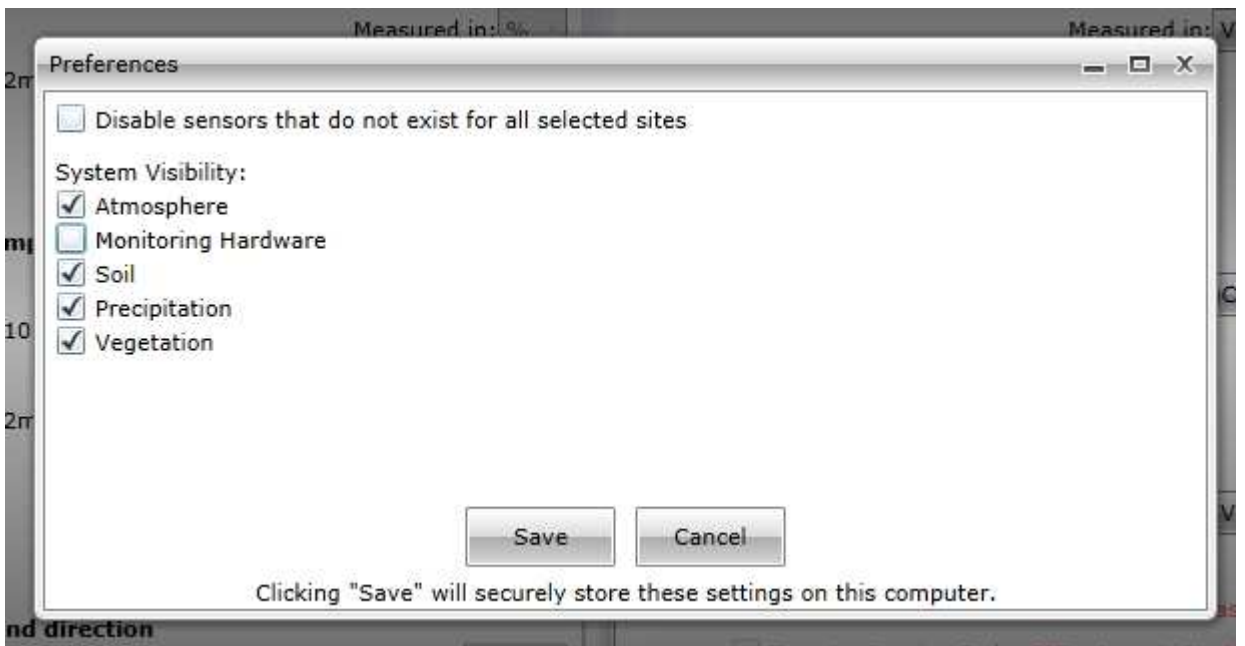
9. Follow steps 7 – 12 from the “Get Temperature Data Using the Atmospheric Map View” exercise.

Change Preferences

1. Follow steps 1 – 6 from the “Use the Text Interface to Download Data” exercise.
2. At the top of the window, click the button labeled *Preferences*, as shown:



3. Remove the check in the box labeled *Disable sensors that do not exist for all selected sites*. This will enable all sensor selections, making the selection of sites act more like a union than the default intersection.
4. Remove the check in the box labeled *Monitoring Hardware*. This will remove the listing of sensors related to monitoring hardware from all interfaces.
5. Your screen should look like this:



6. Click *OK*.
7. Select several sensors and appropriate units from the screen.

8. Follow steps 7 – 12 from the “Get Temperature Data Using the Atmospheric Map View” exercise.
9. Note that in the summary screen, no data points may be listed, since you have elected to have the interface list sensors that may not be present.

View Current Site Conditions

1. Navigate to <http://sensor.nevada.edu>.
2. On the left-hand side, click the link entitled *Current Conditions*, as shown:

The screenshot shows the Nevada Climate Change Portal website. On the left-hand side, there is a navigation menu with several categories: 'Getting Started', 'Data Resources', 'NevCAN', and 'EPSCoR'. Under 'NevCAN', the 'Current Conditions' link is highlighted with a blue box. The main content area features a 'WELCOME TO THE NEVADA CLIMATE CHANGE PORTAL' section with introductory text and a 'The Project Participants' section listing various institutions. On the right, there is a 'News' section with recent updates dated May 2012. At the top right of the page, there are navigation arrows.

3. The screen that appears will show the most recently-reported conditions from each of the sites, changing them periodically.
4. This display also shows the most recently-collected images from each site – a feature which will be explored in the next exercise.
5. You may manually advance or reverse the site displayed using the arrows at the bottom-right side of the screen.

View Live Camera Streams

1. Navigate to <http://sensor.nevada.edu>.
2. On the left-hand side, click the link entitled *Web Cameras*, as shown:

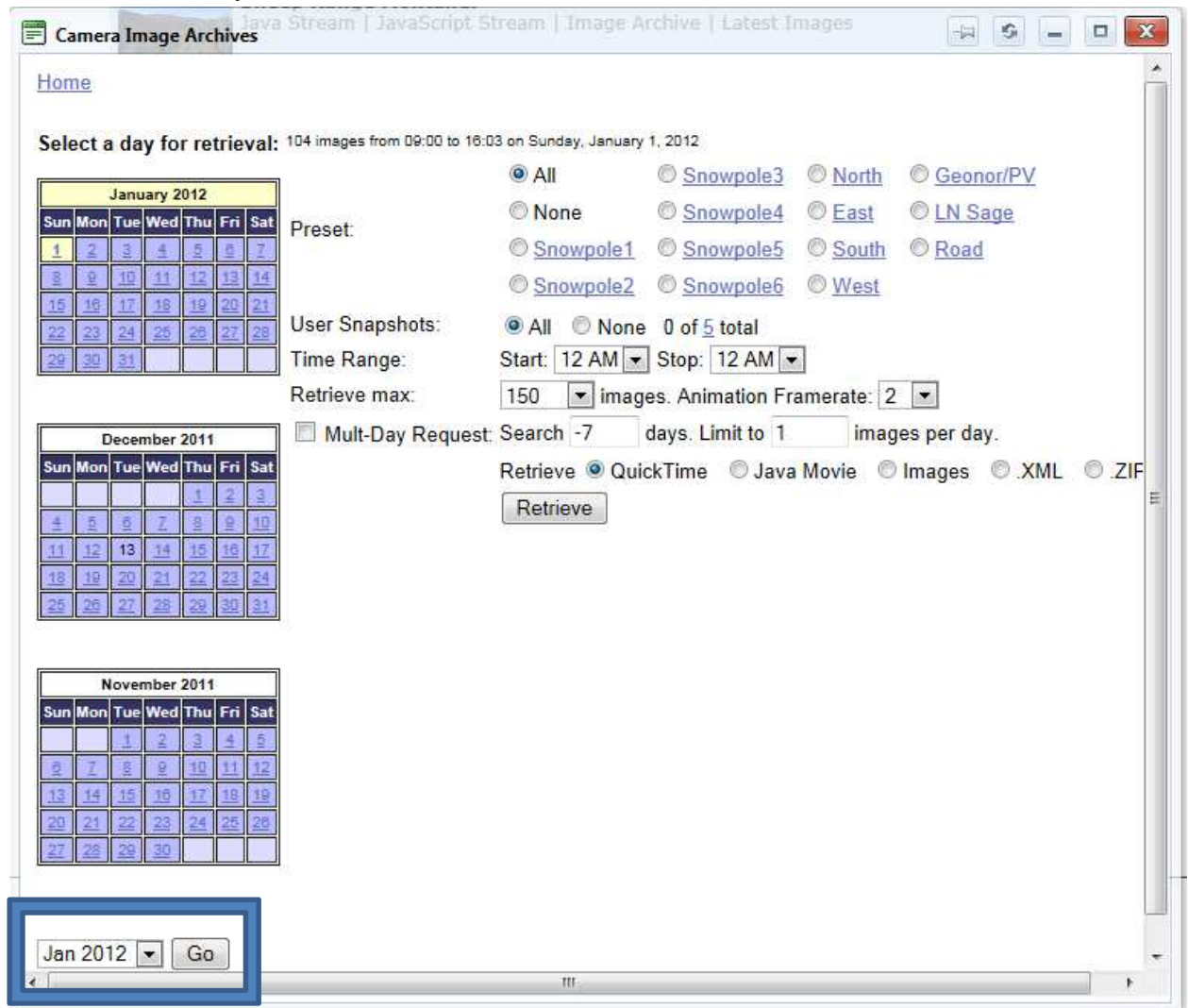
The screenshot shows the Nevada Climate Change Portal website. On the left sidebar, the 'Web Cameras' link is highlighted with a blue box. The main content area features a 'WELCOME TO THE NEVADA CLIMATE CHANGE PORTAL' section with a detailed description of the project's focus on climate, hydrological, and ecological information. Below this, there is a section titled 'The Project Participants' which lists several institutions: Nevada System of Higher Education, Great Basin College, NRI Desert Research Institute, and Nevada State College. On the right side, there is a 'News' section with three entries dated May 10, 2012, and May 9, 2012, detailing sensor measurements and updates to vegetation logger systems.

3. You will see a list of sites in the middle of the screen. To view live camera streams, scroll to each of the following sites and click the link *Java Stream*:
 - a. Sheep Range Creosotebush
 - b. Snake Range Sagebrush: West
 - c. Snake Range Pinyon-Juniper: West
 - d. Snake Range Subalpine: East

View Camera Image Archives

1. Follow steps 1 & 2 from the “View Live Camera Streams” exercise.
2. For the site named *Snake Range Montane: West*, click on the link *View Image Archives*.

3. In the window that appears, look to the bottom-left of the screen and change the month selection to January 2012, as shown here:



4. Click on the *January* calendar, on the date of the 20th.
5. Click the *Retrieve* button to view the images. If you cannot view the images or encounter an error, try changing the selection just above the *Retrieve* button to *Java Movie* or *Images* and click *Retrieve* again.
6. Click on the *January* calendar, on the date of the 21st.
7. Click the *Retrieve* button to view the images.
8. Close this window.
9. For the site named *Sheep Range Montane*, click on the link *View Image Archives*.
10. Repeat steps 3 – 8 for the dates of January 22, 2012 and January 23, 2012, looking specifically at images taken around noon.
11. Note that if you wish to download the files, you can elect to save the images in a ZIP file.

Thank you for your participation and collaboration with the Nevada Climate Change Portal!