



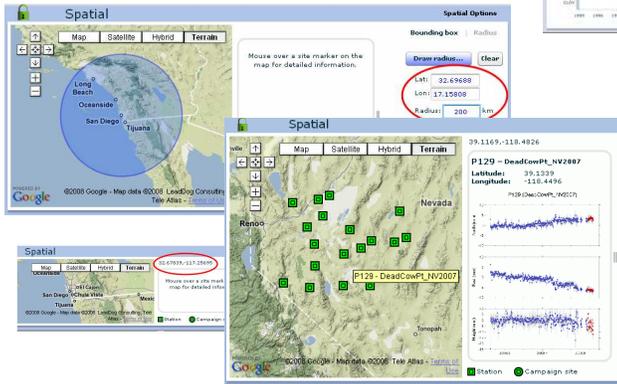
UNAVCO Data Archive Interface Version 2 (DAIv2) Web GUI

<http://www.unavco.org/data/gps-gnss/data-access-methods/dai2/dai2.html>

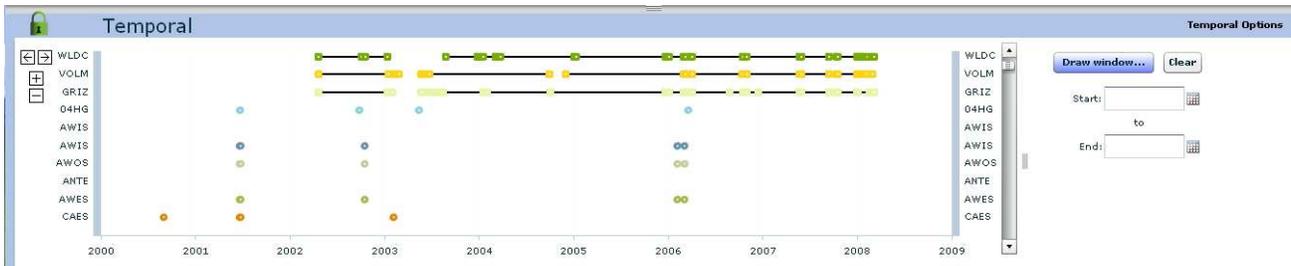
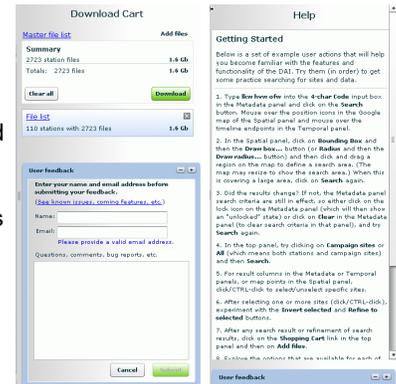
DAIv2 Web GUI. Our next-generation web application provides powerful, flexible access to the UNAVCO Archive of GPS data and metadata. Use it for discovery and visualization of our holdings. Use the integrated download manager to download just the files you need. Use it for comprehensive searches such as combined campaign and permanent station searches. Get a graphical view of data availability through time.



Three interacting input/ output panels. (Shown at left) The GUI takes text and/or graphical filter inputs and shows the query result both textually and visually. You can easily resize the metadata, spatial or temporal panels to emphasize the focus of your search. A side panel (shown below) is a container for Help, Options, Download Cart, and our Feedback Widget.



Spatial Features. We use the GoogleMaps API and base maps for monument/site position display. We have added features such as our bounding box or radial search capability and a lat/lon readout that follows the mouse. The Info Box to right of map shows time series GIF for PBO sites. We will be adding the option to show site photos.

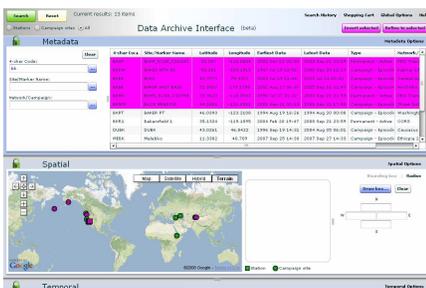


Temporal Features. We use a temporal display to visually show you the history of data availability that clearly shows when data gaps exist. The UI is similar to GoogleMaps for panning and zooming. You can draw a time window and restrict your returned results to only those having data at UNAVCO within the time window desired. As in the view above, you can readily distinguish campaign (episodic) sites from permanent station sites.

Selection and Refining Results. Typical UI selection mechanisms (click, ctrl-click) select or deselect among previously returned results. Selection can be done in any of the three panels and is global across all three panels. Invert Selected and Refine to Selected buttons above the metadata panel allow winnowing of unwanted results.



Search, Reset, Lock, Unlock and Append. The top left corner of the application contains the all-important Search button. When you use this button, you replace the current result set with a new set using your latest filter settings *in any locked panel*. Toggle the lock icon for any of the three panels to include/exclude that panel's filters in the next click of the search button. Using the shift key with the search button allows you to append to existing results.

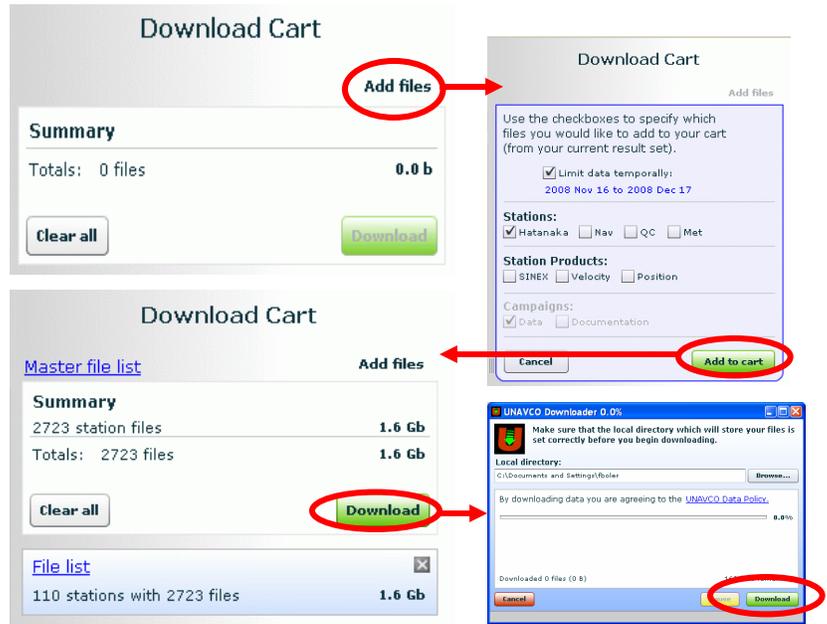


Scope. Set the scope of your search to include campaign sites only, permanent stations only, or all (both). This option is located just below the search button.



Over for more...

Ready to Download Data? There's no way around it - this is a multi-step process: (1) After setting up your search, and narrowing to the set of monuments of interest and possibly a time window, open up the Download Cart in the side panel; (2) Click Add Files; (3) Select the type of files of interest; (4) Click the Add to Cart Button. The application runs a query to assemble a list of files associated with the monuments in your set. Once the query completes, you can see the list by clicking on the file list link. If you'd like, you can copy this list of file ftp URLs and take it from there with your own ftp mechanism such as wget. Another alternative is UNAVCO's download manager accessed with the Download button. You will have to agree to install the downloader and Adobe AIR the first time you use this. Note that if you have campaign data in your result set, you will be presented with a list of campaigns to choose from. If using UNAVCO download manager, (5) Select a directory on your system and click the Download button. You can go back to the web application while your files download.



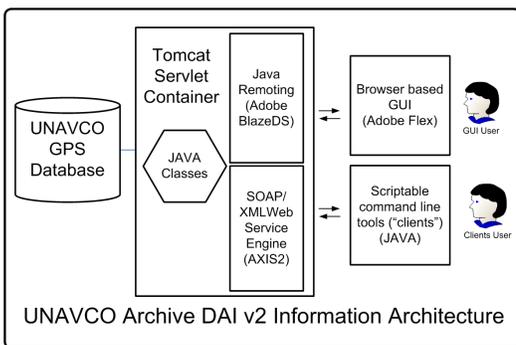
UNAVCO Data Archive Interface Version 2 (DAIv2) Java Command Line Clients

<http://facility.unavco.org/data/dai2/clients/unavcoClients.zip>

Java Clients. In conjunction with the Web GUI we have created Java-based tools that run from a shell/command line and can be used standalone or within user developed scripts. These clients are intended for "power users" who need to track metadata or files with sophisticated queries. Usage examples include detecting when files on our FTP server have been updated, detecting when a new station has been installed, and tracking metadata changes at a station.

There are currently four clients:

- unavcoMetadata.jar- Get metadata records through time for a site or for a particular date
 - unavcoMonuments.jar- Do spatial, temporal or metadata searches for monuments
 - unavcoFiles.jar- Get a list of URLs to files that match site information and temporal limits
 - unavcoGrouping.jar- Returns the "Grouping" names used by UNAVCO for identifying Campaign, Network or similar collections that may simplify searches with the other clients
- Output is text (CSV) or XML*



Information Architecture. The web GUI and the command line clients make requests to the same web services and Java classes that we host. The web services connect to UNAVCO's Oracle database and other data sources.

```

C:\cygdrive\ff\unavcoClients
fboler@fbolerd3 ~
$ cd f:\unavcoClients
fboler@fbolerd3 /cygdrive/ff/unavcoClients
$ java -jar unavcoMonuments.jar -hcharEqu AU04 -xml
<xml-Fragment xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
  <MaxDate>2008-12-08T23:59:00.000Z</MaxDate>
  <MinDate>2004-09-08T23:44:00.000Z</MinDate>
  <Monuments>
    <Monument>
      <MonumentID>18438</MonumentID>
      <StationID>720</StationID>
      <MonumentName>AU04RUGST_RK2004</MonumentName>
      <MonumentType>Permanent</MonumentType>
      <FourCharCode>AU04</FourCharCode>
      <Grouping>PBO Magmatic, PBO, PBO Alaska Region</Grouping>
      <Latitude>59.3626</Latitude>
      <Longitude>-153.4447</Longitude>
      <StartTime>2004-09-08T23:44:00.000Z</StartTime>
      <EndTime>2008-12-08T23:59:00.000Z</EndTime>
      <Operational>Active</Operational>
      <ArchiveStart>2004-10-12T00:00:00.000Z</ArchiveStart>
      <DataPublic>Anonymous</DataPublic>
    </Monument>
  </Monuments>
</xml-Fragment>
fboler@fbolerd3 /cygdrive/ff/unavcoClients
$

```

Need more documentation? See our DAIv2 summary page: <http://facility.unavco.org/data/dai2/dai2.html>.

Let us know what you think. E-mail archive@unavco.org or use the User Feedback widget within the application side panel.