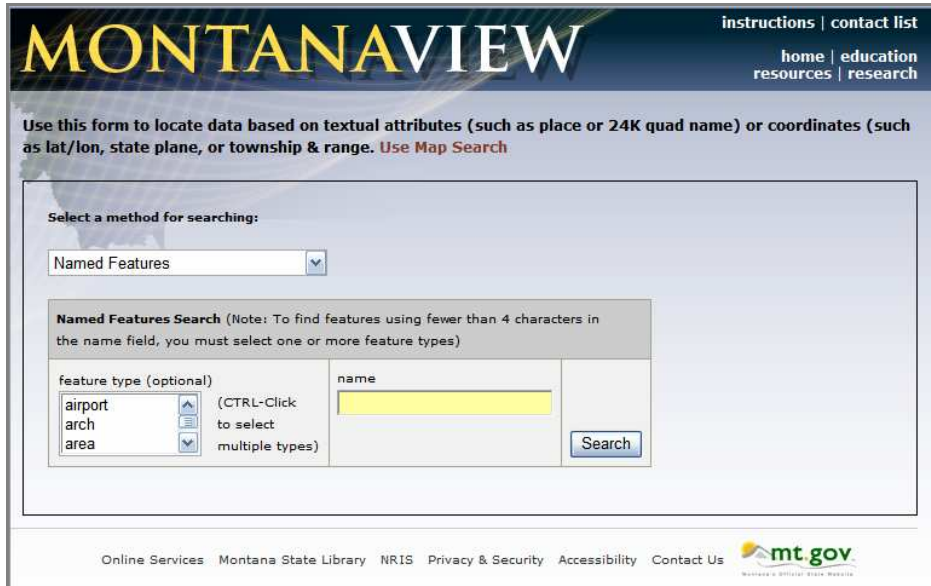


INSTRUCTIONS FOR DOWNLOADING DATA FROM MONTANAVIEW

Text or Coordinate Search

Click on the “text/coordinate search” link. This will direct you to a form to enter search criteria to assist in locating desired imagery. See Figure 1.



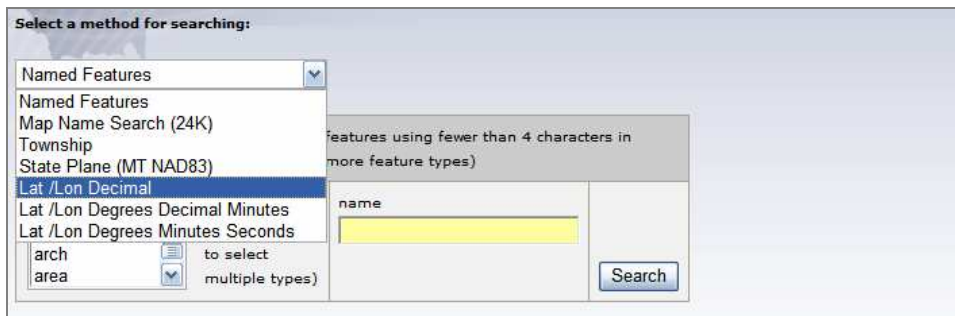
The screenshot shows the MontanaView search interface. At the top, the logo 'MONTANAVIEW' is displayed in large yellow and white letters. To the right, there are navigation links: 'instructions | contact list', 'home | education resources | research'. Below the logo, a text box instructs users: 'Use this form to locate data based on textual attributes (such as place or 24K quad name) or coordinates (such as lat/lon, state plane, or township & range. Use Map Search)'. The main search area is titled 'Select a method for searching:' and has a dropdown menu set to 'Named Features'. Below this, a section for 'Named Features Search' includes a note: '(Note: To find features using fewer than 4 characters in the name field, you must select one or more feature types)'. There is a table with two columns: 'feature type (optional)' and 'name'. The 'feature type' column has a list with 'airport', 'arch', and 'area', each with a dropdown arrow. A note says '(CTRL-Click to select multiple types)'. The 'name' column has a yellow text input field. A 'Search' button is located to the right of the input field. At the bottom of the page, there are links for 'Online Services', 'Montana State Library', 'NRIS', 'Privacy & Security', 'Accessibility', and 'Contact Us', along with the 'mt.gov' logo.

Figure 1. Text search form

Here, imagery can be located using: place names, features, or map coordinates. This is particularly helpful in areas where the location is split over multiple scenes. Search examples are provided below including instructions on how to download and extract imagery from a zipped folder.

Example coordinate search:

Coordinate searches are most useful when the geographic location and coordinates of the area of interest are already known. For this example, we will be interested in locating imagery for the Helena area. We'll search using latitude and longitude coordinates in decimal degrees, but as shown in Figure 2, you may choose other coordinates from the drop down menu.



This screenshot shows the same search form as Figure 1, but with the search method dropdown menu open. The menu lists several options: 'Named Features', 'Map Name Search (24K)', 'Township', 'State Plane (MT NAD83)', 'Lat /Lon Decimal' (which is highlighted in blue), 'Lat /Lon Degrees Decimal Minutes', and 'Lat /Lon Degrees Minutes Seconds'. The 'Named Features Search' section and the 'Search' button are also visible.

Figure 2. Coordinates search methods

Type the coordinates "latitude 46.58 and longitude 112.02" as shown in Figure 3 (the longitudinal value should be a negative 112, but in this case it is implied and not needed). Click on the "Locate" button to find imagery which corresponds to these coordinates.

Figure 3. Form for entering decimal degree coordinates

The search results include a long list of imagery from three different path/row combinations overlapping the Helena area coordinates chosen. From these results, one can select the path/row combination which provides the most coverage of the area of interest.

You have now completed the example coordinate search. If you wish to find imagery using the text search, continue to the next section for instructions on how to do so. If you'd like instructions for downloading and saving imagery, skip to page three of this document.

Example text search:

You are interested in using satellite imagery to examine lakes in Glacier National Park as part of a larger study examining the effects of climate change on national parks. Under "Select a method for searching," select the default, "Named Features". Type "glacier national park" and click the search button. The search results yield four items to select from. See Figure 4.

| Click on an item to find data... | | | | | |
|------------------------------------|--------------|----------|------------|------------|----------|
| feature name | feature type | latitude | longitude | elevation | county |
| Glacier National Park | park | 48.69611 | -113.80611 | 0.00000000 | Flathead |
| Glacier National Park Division | census | 48.64083 | -113.80056 | 0.00000000 | Flathead |
| Glacier National Park Division | census | 48.70528 | -113.63194 | 0.00000000 | Glacier |
| Glacier National Park Headquarters | locale | 48.50278 | -113.98444 | 0.00000000 | Flathead |

Figure 4. Returned search results


Select the first item on the list, "Glacier National Park;" feature type "park." The search resulted in one scene from July 07, 2001 (shown in Figure 5).

| thumbnail | image name | date | % cloud | sensor | metadata | download |
|---|-------------|------------|---------|--------|--|---|
|  | 4126_070701 | 2001-07-07 | -- | -- |  |  |

Figure 5. Glacier National Park search results

You have now completed the example text search. If you'd like to download the selected imagery, proceed to the next section with instructions for downloading and saving MontanaView imagery.

Downloading and Saving Selected Imagery

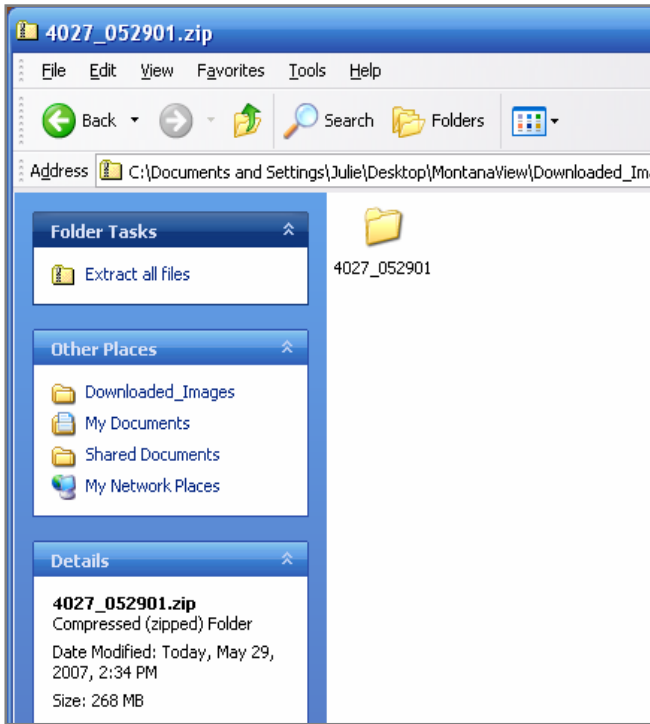
From this page, select the desired imagery to be downloaded. To do this, click on the arrow  located under the "download" heading.

The file download dialog box (Figure 6) will appear asking whether to Open or Save the file.



Please note the size of the zipped folder pictured in Figure 6. The average size of a zipped folder is approximately 300MB, and unzipped folders range from 500-550MB. This download will occupy and require a relatively large amount of computer memory. Please be sure this space is available on your computer prior to downloading.

Figure 6. File download dialog box



Click "Save" and choose a location on your computer where you will store your data. The download process will take a fair amount of time depending on the speed of your connection. When the download is complete, the folder will have to be "unzipped" or extracted from the compressed folder. If you have a licensed copy of WinZip, you can use it to open your folder. If not, Windows users can open the folder using the extract option from Windows Explorer. Double click on the zipped folder and select from the options on the left of the dialog box (see Figure 7), "Extract all files." Follow the extract wizard to select an appropriate location for your data.

Figure 7. Windows Explorer extract

Once the data has been extracted it can be viewed using various GIS and remote sensing software packages. For more information on how to use this imagery in relevant exercises and tutorials, visit the MontanaView resources page at <http://montanaview.org/resources.aspx> and click on the link for tutorials.