Search a List of Targets

It is possible to search MAST for multiple targets at once, by first uploading list of target names and coordinates.

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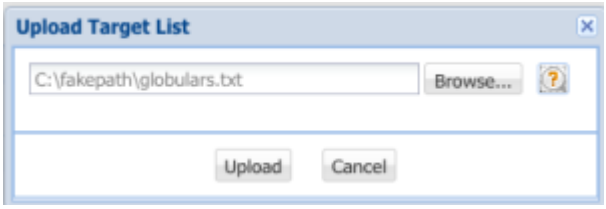
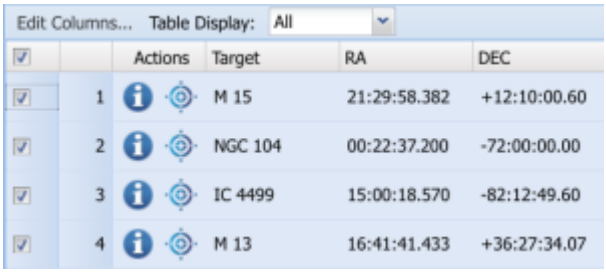
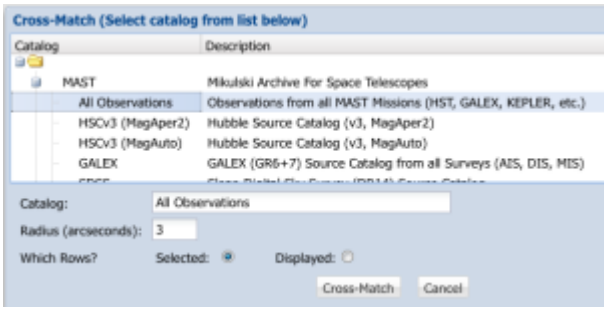
Here are he steps for uploading a list of targets to the Portal:

	Introduction	Notes
1	Prepare a list of targets on your local machine, following the formatting rules below. This minimal example file (*right*) uses a list of names and coordinates of 4 Galactic globular clusters. Your target list may include other columns of information, such as source magnitudes.	globulars.txt
2	Click the **Upload Target List** button.	
3	Enter the location of your target list in the upload dialog box, and click "Upload"	
4	Select one or more of your targets in the results table.	
5	Click the cross-match button.	
6	Select a MAST collection against which to cross-match the coordinates of you targets. Also select a search radius about the targets. Then click the **Cross Match** button.	

It is possible to perform other actions with user tables beyond cross-matching with an uploaded table, such as creating new table columns or plots of column values.

Uploading a large list of targets, and then cross-matching against a large catalog such as *All Observations*, may take a long time to execute, and may return an unwieldy list of matches.

Formatting Rules for Uploads

The **Upload** tool can import custom tables in two file formats: VOTABLE and CSV. See the description of VOTable file format. A CSV-formatted table should be prepared with the following in mind:

- A line is a comment if it begins with a #. An exception to this is that before the header line you may specify a column datatype line with `#@`, then a comma-separated list of types.
- Allowed types are: `int`, `float`, `string`, `ra` and `dec`, with the latter two being interpreted from either decimal or sexagesimal coordinates. If no datatypes are specified, the software will attempt to determine them.
- The first un-commented line defines the headers for the columns.
- Right ascension should be titled as: `RA` or `RAJ2000`.
- Declination should be titled as: `DEC` or `DECJ2000`.
- Footprints should be titled as: `s_region` or `regionSTCS`.
- Any number of subsequent rows may be defined, although one should exercise caution with trying to load large numbers of rows.