**Finder Chart API v2.1**

URL: http://shadev1.ipac.caltech.edu/applications/finderchart/servlet/api?<parameter=value>…

Parameters Table

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Parameter** | **Values** | **Default** | **Description** | **Changes** |
| mode | ~~"cgi" or "prog"~~ prog | ~~cgi~~ prog | Specifies the format of the returned file: "cgi" for the HTML format and "prog" for the XML format. | “prog” is the only supported mode. |
| locstr | [(locstr examples)](http://irsa.ipac.caltech.edu/applications/FinderChart/docs/coordinate.html" \t "datalink) | NA | [The "locstr" is the only required parameter; if it is an object name, it is resolved into coordinates using NED and, if that fails, SIMBAD. When the "locstr" is a coordinate string such as "102.03730 +59.77120 ga", it should be URL encoded ~~as "102.03730++59.77120+ga". In this case each 'white space' is encoded as '+' (see example 3 )~~.](http://irsa.ipac.caltech.edu/applications/FinderChart/docs/finderProgramInterface.html#example) | Should follow standard URL encoding.  “102.03730 +59.77120 ga” encoded to “*102.03730+%2B59.77120+ga”* |
| subsetsize | a decimal number | 5 | Specifies the cutout size of the retrieved images in arcmin. It should be between 1.0 and ~~6.0 arcmin~~. | Range is between 0.1 to 60.0 arcmin. |
| survey | ~~SDSS, DSS, or 2MASS~~ | ~~all datasets retrieved~~ | [Specifies the survey dataset to be retrieved; each parameter pair "survey=value" (e.g. "survey=SDSS") specifies one dataset. To specify multiple datasets, simply add more parameter pairs to the query (e.g. "survey=sdss&survey=dss") as in Example 4. ~~When unspecified it defaults to retrieving all three datasets.~~](http://irsa.ipac.caltech.edu/applications/FinderChart/docs/finderProgramInterface.html#example) | Available datasets are DSS, SDSS, 2MASS, WISE, IRIS(IRAS data)  Default to DSS,SDSS,2MASS,IRIS,WISE. |
| orientation | right or left | left | Specifies whether to point the EAST axis to the left as specified in the FITS image or to flip the image so that EAST points to right while generating JPEG images; NORTH is up in all cases. |  |
| reproject | true or false | FALSE | Specifies whether to reproject and resample the images from different bands of a dataset to a uniform resolution while generating the JPEG images. When it is chosen, these resamples images can be used to make color images; however the option takes longer (3 minutes) to run. |  |
| grid | true or false | FALSE | Specifies whether a grid should be added to the PNG images. | This applies to both regular and shrunk PNG images |
| marker | true or false | FALSE | Specifies whether a location marker should be added to the output PNG images. | This applies to both regular and shrunk PNG images |
| ~~grid\_orig~~ | true or false | FALSE | Specifies whether a grid should be added to the JPEG images. | Deprecated as of v2.1 |
| ~~grid\_shrunk~~ | true or false | FALSE | Specifies whether a grid should be added to the shrunken JPEG images that appear on the returned HTML page. | Deprecated as of v2.1 |
| ~~markervis\_orig~~ | true or false | FALSE | Specifies whether a location marker should be added to the output JPEG images. | Deprecated as of v2.1 |
| ~~markervis\_shrunk~~ | true or false | TRUE | Specifies whether a location marker should be added to the shrunken JPEG images that appear on the returned HTML page. | Deprecated as of v2.1 |
| colorimage | true or false | FALSE | Refer to **colorimage** tag below for details. This will default to true if reproject is requested. | New for v2.1 |

XML Output

|  |  |  |
| --- | --- | --- |
| **Tag name** | **description** | **Changes** |
| **finderchart** | The top tag of the XML file which contains a variable "status" indicating whether the query is successful; "ok" for successful query and "error" otherwise. |  |
| **message** | The error message when the query status is "error". |  |
| **input** | A section tag which contains several input parameter sub-tags. |  |
| **locstr** | [Input objname or coordinate ( see examples).](http://irsa.ipac.caltech.edu/applications/FinderChart/docs/coordinate.html) |  |
| **surveys** | Surveys included in the query; currently available surveys are: SDSS, DSS, and 2MASS. |  |
| **subsetsize** | Image subset size in arcmin. |  |
| **orientation** | [The orientaion of the JPEG images as either "left" or "right", as explained in the "Input Parameters" section above.](http://irsa.ipac.caltech.edu/applications/FinderChart/docs/finderProgramInterface.html#inputParam) |  |
| **reproject** | A "true" or "false" value. |  |
| **grid** | A "true" or "false". |  |
| **marker** | A "true" or "false". |  |
| **~~shrunkgrid~~** | A "true" or "false". | Deprecated as of v2.1 |
| **~~shrunkmarker~~** | A "true" or "false" value. | Deprecated as of v2.1 |
| **result** | A section tag which contains sub-tags of all the results including the search coordinate (in equatorial, galactic, and ecliptic), an HTML file, and the URL links to the retrieved FITS images, the JPEG images, and the 2MASS glint and persistent artifact tables when the 2MASS survey is requested. |  |
| **datatag** | [The datatag contains the parameters of the query which allows the same query to be reproduced at a later time. Please consult the datatag instruction document on how to rerun the query.](http://irsa.ipac.caltech.edu/applications/DataTag/docs/instructions.html) |  |
| **equCoord** | The input location in the equatorial coordinate system and sexigesimal format. |  |
| **galCoord** | The input location in the galactic coordinate system. |  |
| **eclCoord** | The input location in the ecliptic coordinate system. |  |
| **totalimages** | The total number of images retrieved. |  |
| **htmlfile** | The URL of the HTML file that contains the finder chart. |  |
| **pdffile** | The URL of the PDF file that contains the finder chart. | New for v2.1 |
| **image** | This is a sub-tag of the "result" tag, but it is a section tag that contains the sub-tags of an image's information and URLs. |  |
| **colorimage** | This is a sub-tag of the "result" tag, but it is a section tag that contains the sub-tags of the color image's survey name and the URL to the JPEG image.  The color image of SDSS survey is made from "g", "r", and "i" bands with "g" band maps to blue pixels, "r" band to green pixels, and "i" band to red pixel. Similarly, DSS color image is made from "DSS2B", "DSS2R", and "DSS2IR" bands; WISE color image is made from band 3, 2, 1; and 2MASS color image is made from "J", "H", and "K's" bands. |  |
| **surveyname** | [The survey name of the retrieved image: SDSS, DSS, WISE, or 2MASS .](http://irsa.ipac.caltech.edu/applications/FinderChart/docs/coverage.html) |  |
| **band** | [The band name of the retrieved image.](http://irsa.ipac.caltech.edu/applications/FinderChart/docs/coverage.html) |  |
| **obsdate** | The observation date extracted from the retrieved FITS image. |  |
| **fitsurl** | The URL of the retrieved FITS image. |  |
| **jpgurl** | The URL of the JPEG image which is the same resulution as the FITS image. |  |
| **shrunkjpgurl** | The URL of the shrunken JPEG image used in the HTML page. |  |
| **glint** | The URL of the 2MASS glint artifact table. | No longer supported. See artifact tag. |
| **persistent** | The URL of the 2MASS persistent artifact table. | No longer supported. See artifact tag. |
| **artifact** | This is a sub-tag of the "result" tag. It contains all of the artifacts for that survey. The artifacts are zipped into a single file. |  |
| **arturl** | The URL of the artifact(s) zipped into a single file. | New for v2.1 |

Sample of colorimage:

*<colorimage>*

*<surveyname>2MASS</surveyname>*

*< imageurl >”link\_to\_download\_the\_color\_image</imageurl >*

*</ colorimage >*

*< colorimage >*

*<surveyname>WISE</surveyname>*

*<imageurl >”link\_to\_download\_the\_ color\_image </imageurl >*

*</ colorimage >*

Sample of artifacts:

*<artifact>*

*<surveyname>2MASS</surveyname>*

*<arturl>”link\_to\_download\_the\_artifact\_files</arturl>*

*</artifact>*

*<artifact>*

*<surveyname>WISE</surveyname>*

*<arturl>”link\_to\_download\_the\_artifact\_files</arturl>*

*</artifact>*