• How can I find and load data from astronomical servers?

Aladin V10 provides a global method to load images, cubes, catalogs, based on the "Data Discovery Tree". In the new left panel, Aladin V10 displays all data collections that you can load as a tree (more than 20,000 collections). This tree aggregates all collections provided by data centers, institutes, and other projects compatible with Virtual Observatory technology, notably CDS collections (Simbad and VizieR catalogs) and HiPS surveys. Explore this tree by opening branches, and click on a collection name to get the "access form" window associated to this collection. This small form shows all available methods to access this collection (by cone, by criteria, by region,...) and possible derived products (coverage map, density map,...).

Additionnally, Aladin V10 provides a powerful filter mechanisms to hide temporary non relevant collections (by keywords or other coverage constraints).

Note that the "Server Selector" form previously used in earlier versions is still available (menu File -> Open server selector... Ctrl+L)).

• There are too many collections in the Data Discovery Tree!

It is true! And the filter function will be your friend to avoid the collection avalanche ("select" field under the tree panel). Do not hesitate to type keywords, ID, or any other constraints that you need to filter this long list of collections.

In addition, do not hesitate to explore the advanced filter mechanisms (menu File -> Filter on data collections..."). You will discover that you filter this list by a lot of advanced contraints (spatial, temporal, energy). Note that these advanced filters can be saved to be reused later. They appear in the filter selector just under the "select" field.

• In the Data Discovery Tree, some branches appear in green others in orange. Why?

In the data tree provided by Aladin V10 for accessing any data collection, the leaves written in green color will have results inside the current view. At the opposite, the leaves in orange will have no data in the current view. If the collection does not provide its coverage (MOC), Aladin will display it in white color (no coverage knowledge)

• I do not understand what does the "scan" function make?

Under the Data Discovery Tree, you have a "scan" icon. It can be activated for collections which do not provide their spatial coverage (MOC) in the VO registry. In this case Aladin is not able to know in advance if there will be results in the current field or not.

To solve this issue, you can "scan" these collections (those you have selected in the tree). Aladin will explore these collections in order to produce a "temporary" and "local" -in the displayed field-coverage map for each of them. After this process, Aladin will be able to indicate if these collections will have results (green color) or not (orange results) in the field.

Note: Take care that this scan process can be long and quite "heavy" for the collection servers. So try to convince the data providers to generate their MOC and register them in the VO registry. It's definitively a better solution.

• Can I come back to previous targets?

Yes you can, since release 10! Have a look on the right bottom panel. Aladin provides you the history of the targets that you visited. Click on the small triangle to open a popup menu and choose a dedicated target.

Note that you can append manually the reticle position as a new target by pressing the "location" icon at the left side of this triangle.

• Can I do a X-match between two catalogs?

Yes, you can! You have two methods: locally or remotely.

• Local X-match

A local X-match allows you to cross-correlate 2 catalogs already loaded in the Aladin stack. You access to the dedicated form thanks to the menu Catalog -> Cross match objects..., or directly via the "cross" button in the tool bar. This x-match can be based on common column values, or made by position, with (or without) a systematic error or an error ellipse. Note that this correlation engine is limited by the RAM of your machine.

• Remote X-match

The release 10 of Aladin also allows you to use the remote CDS X-match server in order to correlate one of your local table/catalog with a remote one hosted at CDS. This new feature is available directly in the "access window" under the checkbox "by CDS Xmatch" appearing when you select a data collection from the Data Discovery Tree. In this case, the table currently selected in the stack will be sent to CDS X-match server. This server will do the Xmatch with the designated table/catalog, and the result will be provided as a new catalog plane, incorporating all columns from your previous table and the x-correlated one. In this case there is no RAM limitation except the size of your own table.