

AstroPlanetarium

User Manual

V1.1

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Introduction

What AstroPlanetarium does

AstroPlanetarium is a stand-alone application that allows the user to read observing plans made using the AstroPlanner application and export them in a format suitable for use by the Planetarium PDA application. It also allows observations made by the user using Planetarium to be imported back into the AstroPlanner plan document.

What AstroPlanetarium doesn't do

AstroPlanetarium does nothing other than prepare plans generated by AstroPlanner and add observations. It is not a planetarium application, and the output is compatible only with the current version of the Planetarium Palm PDA app.

Computer and PDA requirements

The application assumes you already have AstroPlanner installed and running on your computer. It also assumes that you have a Palm PDA running the Planetarium application and a method of synching the PDA with the computer.

The installation and operation instructions here are for Mac OS X. Other platforms will be similar.

Installation

Copy the AstroPlanetarium application into the same folder/directory as AstroPlanner, or into a sub-folder/directory of that folder/directory. AstroPlanetarium will not work properly if installed elsewhere.

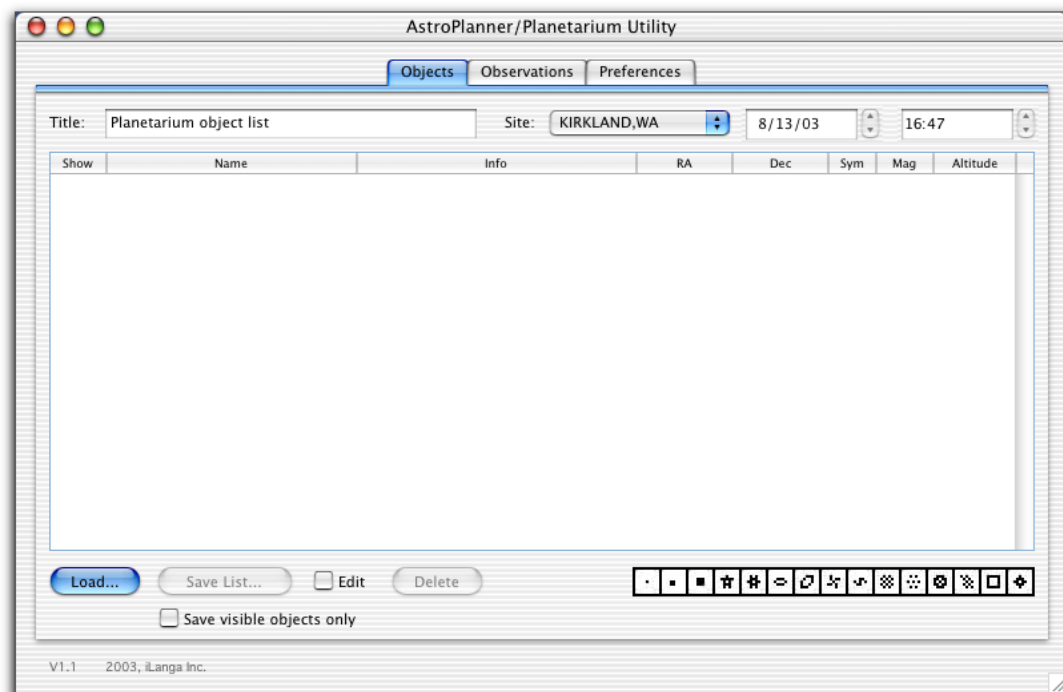
Tutorial

Note that AstroPlanetarium is a very simple application. There are no menu items. All operations are performed by clicking and selecting controls in the main window.

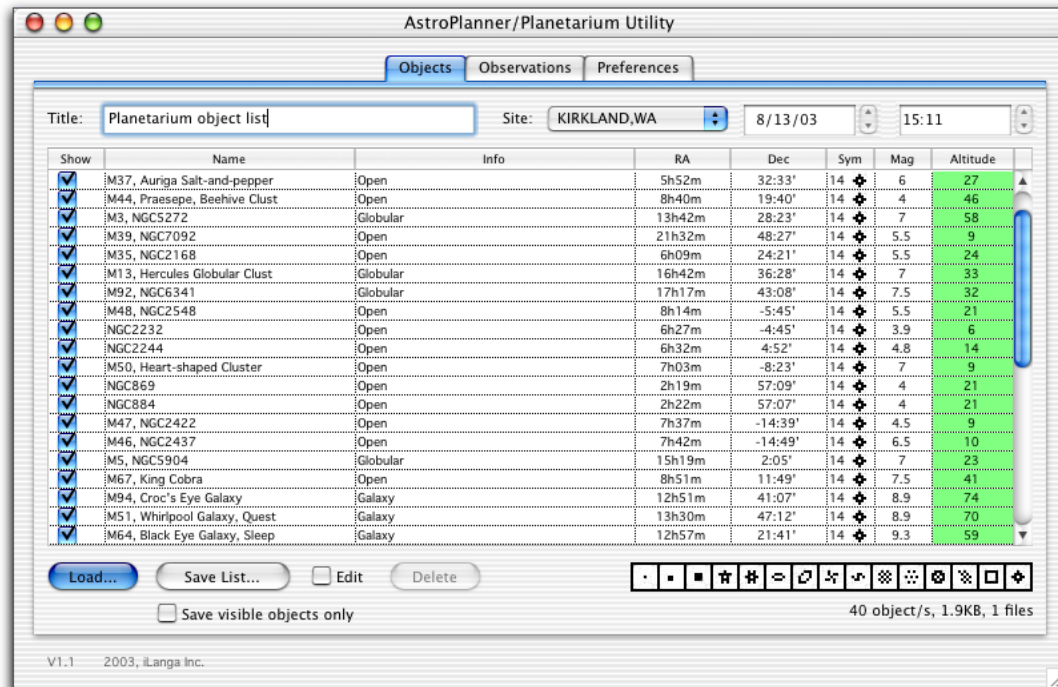
Creating and opening a plan document

First you need to create a plan document using AstroPlanner, or have an existing one ready for use.

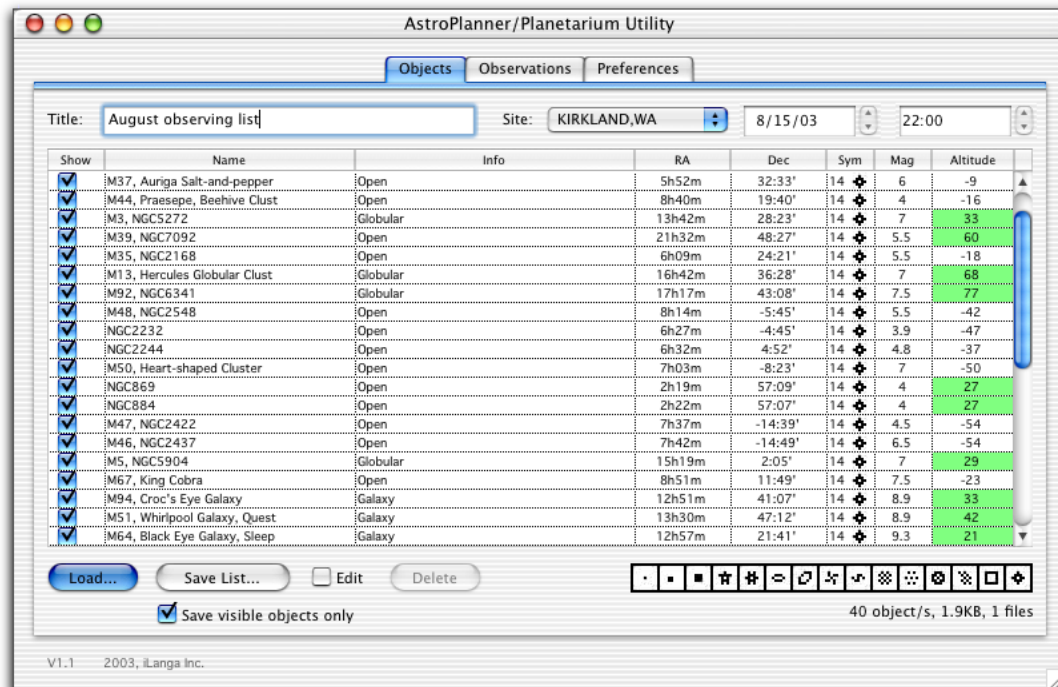
When you first run AstroPlanetarium it displays an empty window (i.e. no objects displayed)



Click the **Load...** button and select the AstroPlanner plan file you created. The objects defined in that plan file will be loaded into the AstroPlanetarium window and displayed as a list.



You might wish to export only objects visible on your scheduled observing night. In this case we changed the date and time to August 15, 2003 at 10pm at our site in Kirkland, WA. Note that objects that are above the horizon at that time are displayed in green in the **Altitude** column.



The title has been modified and the **Save visible objects only** checkbox set.

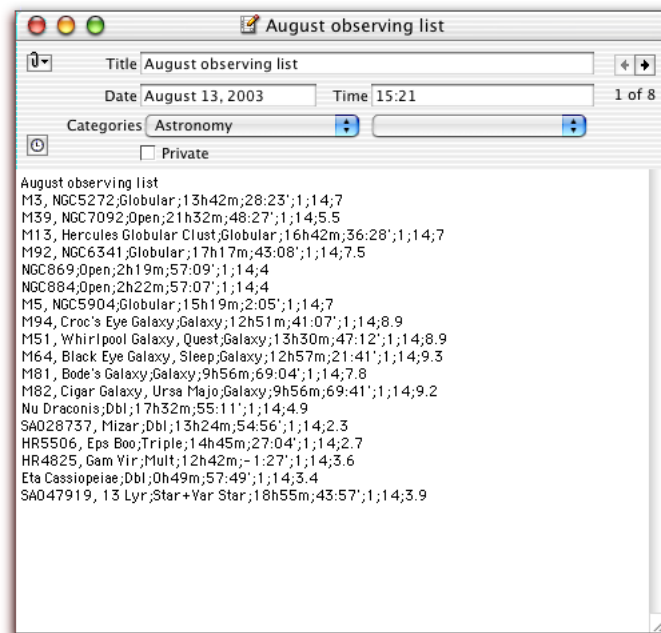
Exporting the plan to Planetarium

Click the **Save List...** button. You are prompted for a text file name to save the object list to. The file will contain something like this:

```
August observing list
M3, NGC5272;Globular;13h42m;28:23';1;14;7
M39, NGC7092;Open;21h32m;48:27';1;14;5.5
M13, Hercules Globular Clust;Globular;16h42m;36:28';1;14;7
M92, NGC6341;Globular;17h17m;43:08';1;14;7.5
NGC869;Open;2h19m;57:09';1;14;4
NGC884;Open;2h22m;57:07';1;14;4
M5, NGC5904;Globular;15h19m;2:05';1;14;7
M94, Croc's Eye Galaxy;Galaxy;12h51m;41:07';1;14;8.9
M51, Whirlpool Galaxy, Quest;Galaxy;13h30m;47:12';1;14;8.9
M64, Black Eye Galaxy, Sleep;Galaxy;12h57m;21:41';1;14;9.3
M81, Bode's Galaxy;Galaxy;9h56m;69:04';1;14;7.8
M82, Cigar Galaxy, Ursa Major;Galaxy;9h56m;69:41';1;14;9.2
Nu Draconis;Dbl;17h32m;55:11';1;14;4.9
SAO28737, Mizar;Dbl;13h24m;54:56';1;14;2.3
HR5506, Eps Boo;Triple;14h45m;27:04';1;14;2.7
HR4825, Gam Vir;Mult;12h42m;-1:27';1;14;3.6
Eta Cassiopeiae;Dbl;0h49m;57:49';1;14;3.4
SAO47919, 13 Lyr;Star+Var Star;18h55m;43:57';1;14;3.9
```

Some of the text might be truncated due to restrictions in Planetarium.

In order to get this data to the Planetarium application on the Palm PDA, you must get it into the form of a Palm Memo. Open the Palm Desktop application on your computer and use **New Memo** to create a new memo item. Paste the saved text into the memo (for your convenience the text was also copied to the clipboard when you saved the text file). Give the memo a suitable title.



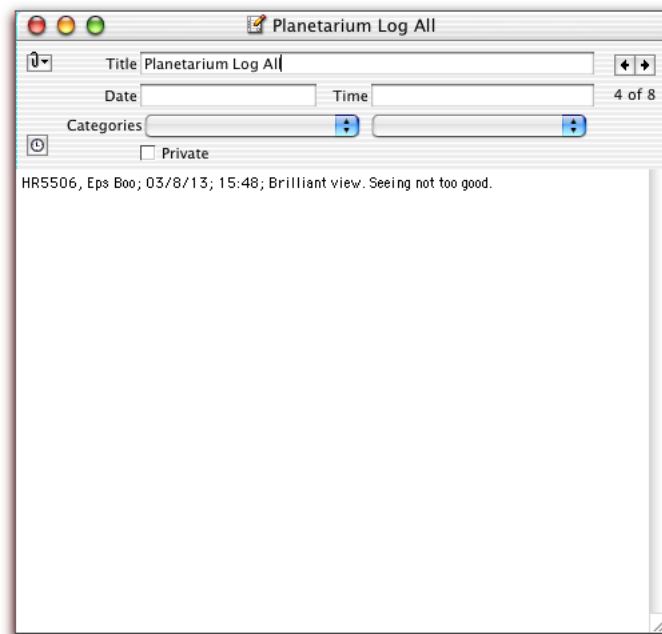
Now perform a sync operation between your computer and Palm PDA. This will transfer the new memo across to the PDA.

Now, on the PDA, run Planetarium. From the **Options** menu, select **Objects**. From the **Database** menu, select **Import from Memo**. Select the memo you transferred and click **Import**. The objects will be imported and can now be displayed in Planetarium.

You make observations in Planetarium by clicking on an object and then going to the Observation log and clicking the **New** button. In order to allow re-importing of observations, make sure you do not change the object name.

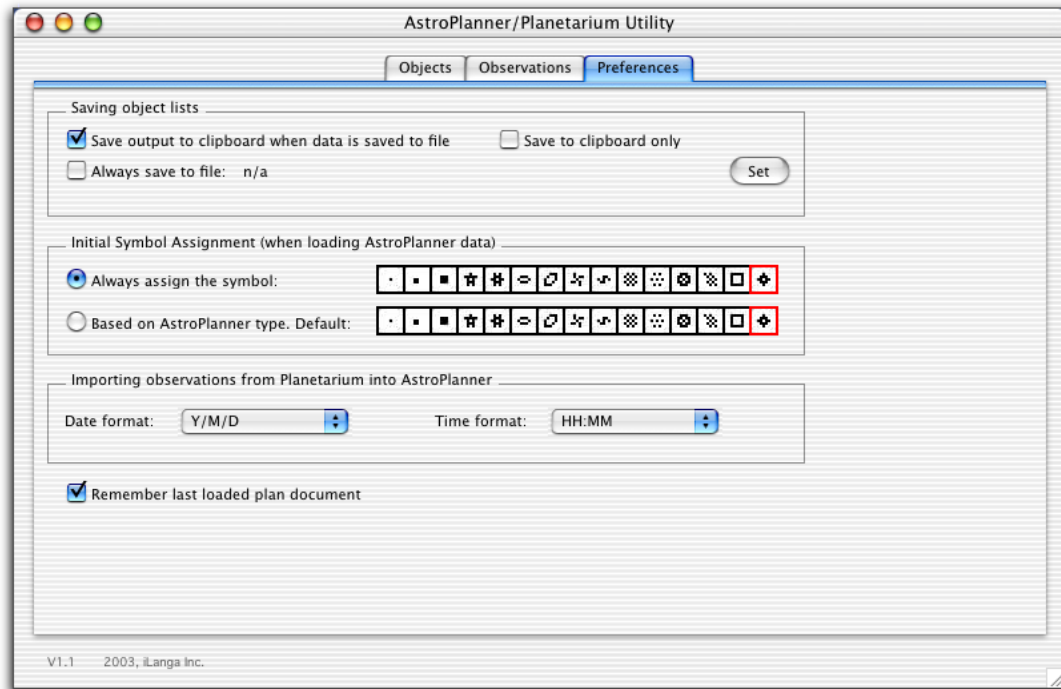
Importing observations from Planetarium

From within the Planetarium application, open the Observation log. From the **Log** menu, select **Export to Memo**. A memo with a name such as “Planetarium Log All” is created.

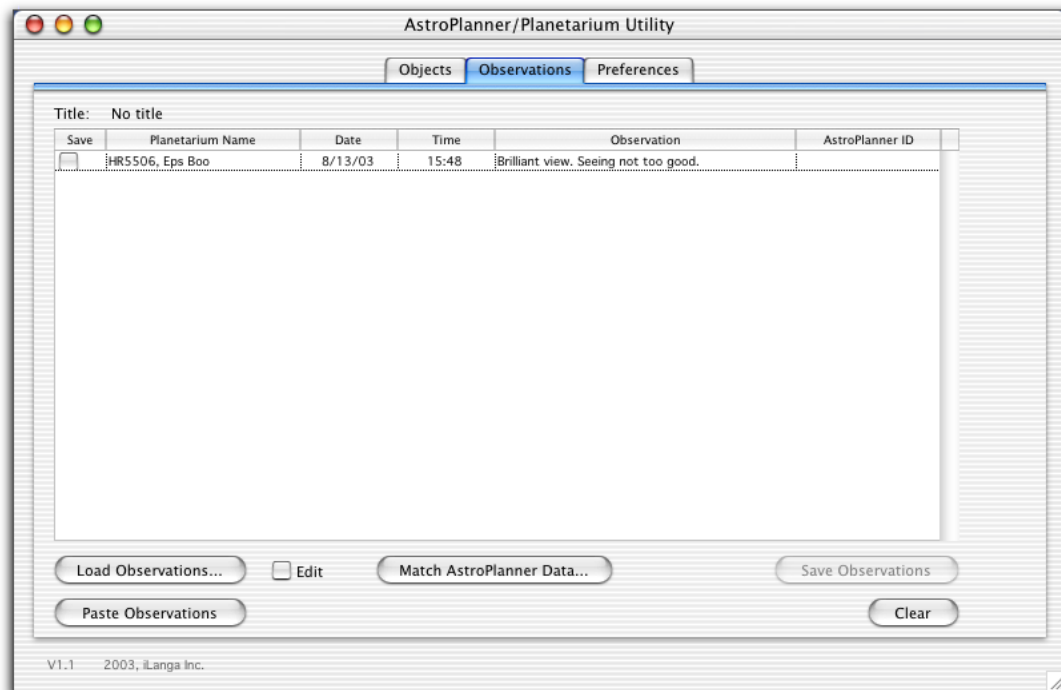


Copy the text to the clipboard (using Edit->Copy).

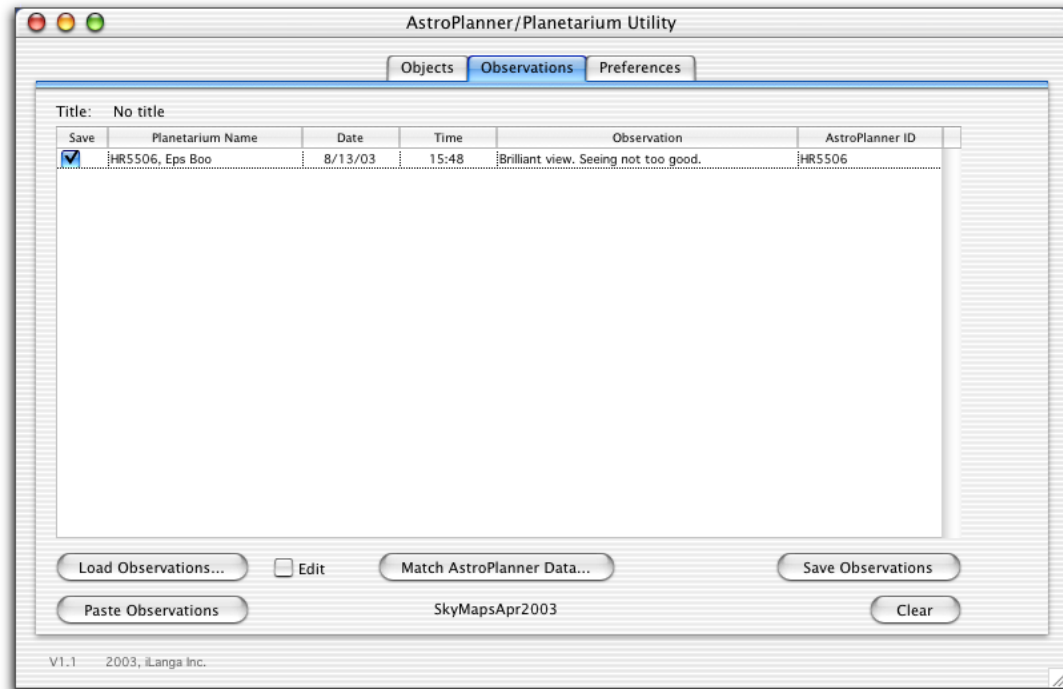
Now reopen AstroPlanetarium on your computer. Before continuing (if this is the first time you have done this) select the **Preferences** tab and make sure the **Date format** and **Time format** are compatible with your observations.



Select the **Observations** tab on the main window. Click the **Paste Observations** button to add the observations to the list.



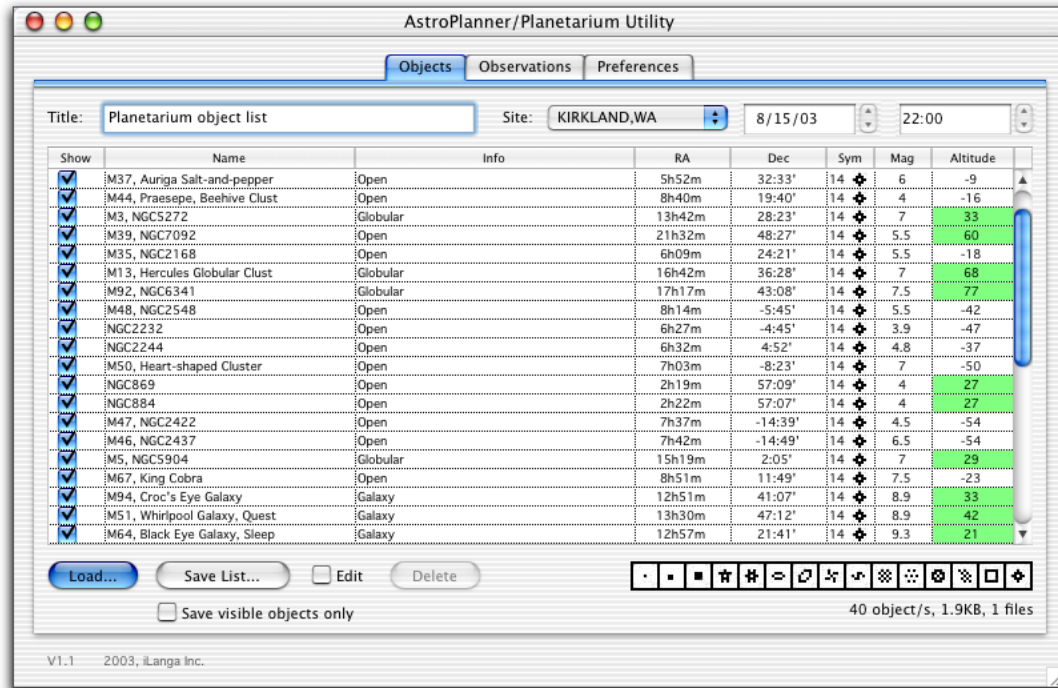
Now click the **Match AstroPlanner Data...** button and select the original plan document. All observations that match up with objects will have an ID in the **AstroPlanner ID** column.



Clicking the **Save Observations** button will save the observation data (checked in the **Save** column) back into the AstroPlanner plan document.

Reference

Objects tab



Title

This title is part of the data that is passed across to Planetarium. Put whatever you like here.

Site/Date/Time

The Site popup has a list of the sites you have defined in your AstroPlanner Resources. In particular, the location and GMT offset of those sites are used to determine the altitude of each object at the specified date and time. That altitude (elevation above horizon) is reported in the Altitude column of the object list.

Object list

The object list has a line for each object in the AstroPlanner plan file. The Save column specifies which objects will be saved (initially checked). The Name, Info, RA, Dec and Mag columns are derived from the AstroPlanner data. Note that some Name data might be truncated.

The Sym column contains the symbol to be used in Planetarium to display the object. This can be changed using the Object type palette (see below).

The Altitude column shows the altitude in degrees (elevation above the “theoretical” horizon), based on the Site/Date/Time settings.

Load...

Load an AstroPlanner plan file and replace all data currently in the object list.

Save List...

Save the list as a Planetarium-formatted text file and/or copy the data to the clipboard (depending on Preferences tab settings).

Edit

When this checkbox is set, you can change data fields in the object list. **Warning:** changing the Name data might render imported observations incapable of being matched to their original objects. This only affects the list, not the original AstroPlanner plan document.

Delete

Delete the selected line or lines. This only affects the list, not the original AstroPlanner plan document.

Save visible objects only

If this is set when you save the list, only those objects which are visible (Altitude greater than 0°) will be saved. If it is not set, then all objects are saved, regardless of visibility.

Object type palette



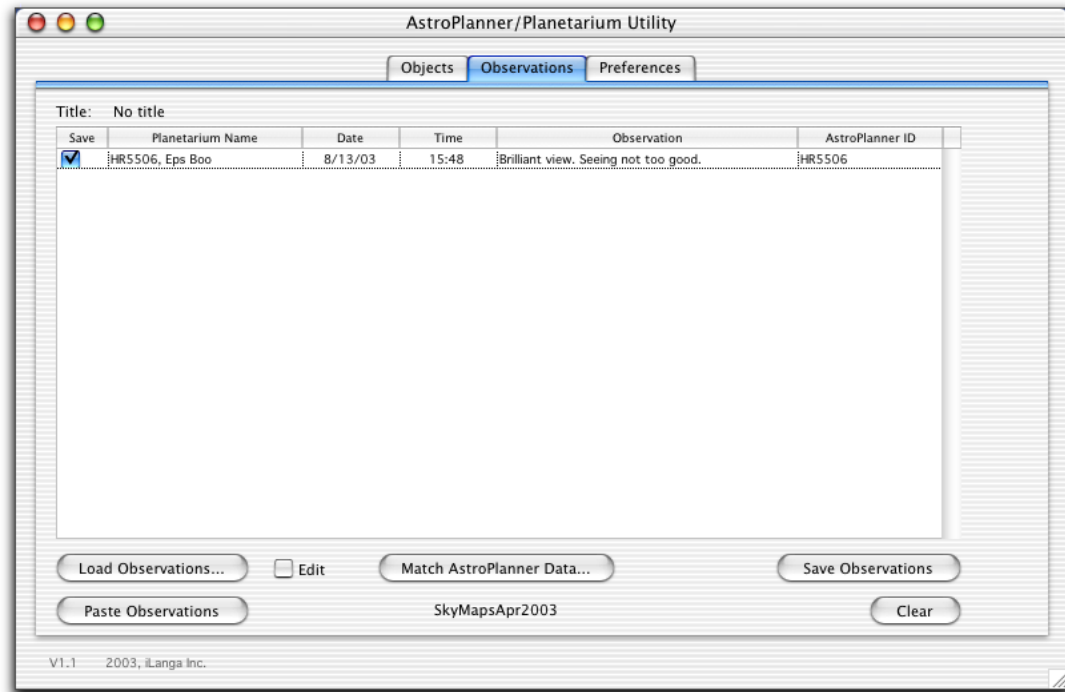
The object type palette is used to change the symbol assigned to an object currently selected in the object list. The current value is outlined in red.

Output file information

40 object/s, 1.9KB, 1 files

Since memos are limited to a maximum size, the object list might be too large for one memo. In this case it will be saved as multiple files. The file information at the bottom right specifies how large the resulting data file will be and whether it will need more than one file.

Observations tab



Observations list

This list has one line for each observation made using the Planetarium app. The Planetarium Name, Date, Time and Observation columns represent the incoming data. Once the incoming data has been matched against the original AstroPlanner plan document, the AstroPlanner ID field is completed and the Save checkbox allows you to choose which observations will be transferred back to the AstroPlanner plan.

Load Observations...

If the observations are in the form of a text file, then Load Observations allows you to choose that text file to add to the list.

Paste Observations

If the observations are in the form of text in the clipboard, then Paste Observations allows you to paste that data to the list.

Edit

When the Edit checkbox is on, you can manually edit data in the list.

Match AstroPlanner Data...

This function opens an AstroPlanner plan document and matches the objects therein against the observations in the list. If there is a match, the AstroPlanner ID field is completed and that observation is then capable of being added to the AstroPlanner plan file.

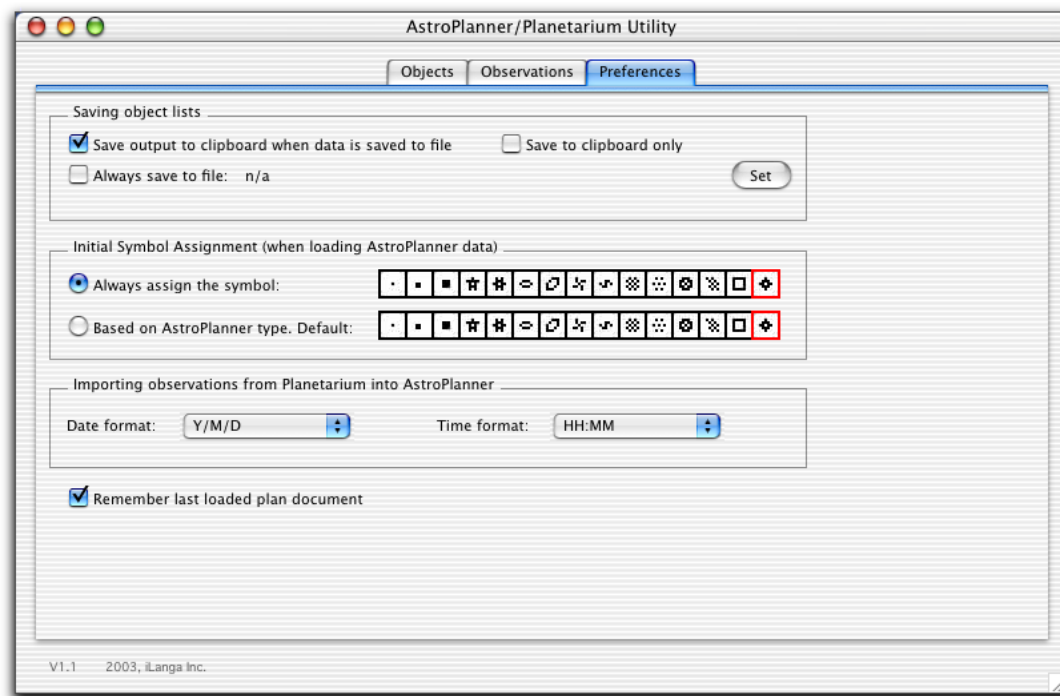
Save Observations

Save all matched observations (with the Save checkbox set) back into the AstroPlanner plan document.

Clear

Clear the list.

Preferences tab



Saving object lists

Save output to clipboard when data is saved to file

When this is set and you save the object list, the data will also be copied to the clipboard. Note that if the data is too big for one file, only the first file's information will be copied to the clipboard.

Save to clipboard only

If this is set then data will not be saved to a file, but only to the clipboard (saving a step in most instances).

Always save to file

If you always want to save the object data to the same text file, use this setting. The **Set** button selects the name and location of the text file.

Initial Symbol Assignment**Always assign the symbol**

When a plan document is opened, initially set every object to have the symbol specified here.

Based on AstroPlanner type

When a plan document is opened, initially set every object to have a symbol determined by its AstroPlanner type. If the type isn't defined, use the symbol specified here.

Importing observations from Planetarium into AstroPlanner

These settings specify the Date and Time formats of the observation data from the Planetarium application. Make sure these settings match the data, otherwise incorrect dates and/or times may result.

Remember last loaded plan document

If this is set, AstroPlanetarium will remember the last opened plan document next time it is executed, and reload the objects.