1.2 tmstools - Module

Table browsers and other utilities for TMS
include "tmstools.g"

Description
Currently the TMS tools package, *tmstools*, consists of a set of table browsers specifically tuned to the individual TMS tables. In addition to providing a detailed view of each TMS table the browsers provide facilities for manipulating the tables, incorporate links between tables and, in some cases, links to other Glish applications.
tmstools itself is a front-end to the actual tools. Including *tmstools.g* starts a simple GUI containing a number of named buttons. Pressing a button starts one of the specific table browsers. The *tmstools* application additionally acts as a server for the table browsers providing a channel through which the browsers can communicate.
The applications currently contained in the tmstools package are:

measurement browser for the TMS Measurement table.

resource browser for the TMS Resource table.

dataset browser for the TMS DataSet table.

obslog browser for the TMS ObsLog table.

logbook browser for the TMS LogBook table.

The tables accessed by these application have predefined names and are expected to reside in the directory specified by the environment variable *tms_tbl*. This environment variable needs to be defined before starting tmstools. It must be set to the directory containing the TMS tables.
The TMS table browsers have a similar layout consisting of main frame with a menu-bar at the top. Under this is a list box where single lines entries from the table are displayed, one table entry per row. Below the list box is a status bar. The status bar typically displays the last query performed on the table (accounting for the current contents of the list box) and how many matches were found.
Reflecting the similarity in physical layout, user interaction with the browsers typically follows a particular pattern. A TMS browser is opened by clicking on one of the buttons in the *tmstools* GUI. Each browser performs a default query on their respective table at startup and the result of that query is displayed in the browser's list box. In most cases the default query is to fetch all entries in the table which occurred within the last 2 days. However, it is possible to redefined the default query by adding an entry to your .aipsrc file (see documentation on specific browsers below for details). After the default query

the table can be re-queried via the query menu button to provide a variety of different views of the table.
The information displayed on each line in the browser list box is often a subset of the information contained in a particular row from the table. In such situations additional information about a particular entry is made available by double clicking on the entry with the left mouse button.
Many of the browsers offer a number of operations for modifying/updating the TMS tables. The details are specific to each browser and are described below.

1.2.1 measurement - Tool
Package nfra
Module tmstools

Browser for the TMS Measurement table

Description

The msbrowser opens an interface to the TMS Measurement table. With the Measurement browser it is possible to obtain a general overview of a number entries in the table or a detailed view of a specific entry. A general view is provided via user specifiable queries on the table. The table can be queried, for example, on observation date, i.e., a request can be made to return all measurements that occurred between two dates. All entries in the table which satisfy the request are return in the browser list box. Each entry in the list contains general information about that particular measurement, such as its sequence number, proposal name, source, etc. Additional detailed information about a specific entry is obtainable by double-clicking on an entry with the left mouse button.
The menu-bar has the following menus:

File From the file menu you can do the following:

- **Print** This will print the list of Measurements currently displayed in the browser list box.
- **Exit** Exit and destroy the Measurement browser.

Action Each item in the Action menu is an operation that is, in general, carried out on the current highlighted entry in the browser list box. The actions are:

- **Show details** Displays additional detail about the selected entry in a pop-up dialogue box. This is the default action which occurs when you double click on the list box entry.

DataSet browser Queries the DataSet browser (starting it if necessary) with the sequence numbers of the selected entries.

ObsLog browser Queries the Observation Log browser (starting it if necessary) withe the sequence numbers of the selected entries.

Select all All entries currently displayed in the list box are selected.

Deselect all All entries currently displayed in the list box are deselected.

Query Various queries can be performed on the Measurement table. The result of each query is displayed in the browser list box (replacing the previous contents). (If you would like additional table query options, please let us know.) The current queries are:

StartTime... Form a query on the StartTime column in the Measurement table. A StartTime query can be used to retrieve all entries which occurred between two specific dates or from a specific date to present.

SequenceNumber... Form a query on the SequenceNumber column. This can be used to retrieve a specific entry from the table of a range of entries between two sequence numbers.

Proposal... Query on the Proposal column. Enter a string to query the column on. Wild-cards (conforming to normal pattern matching rules) are permitted in the query string.

general... Form a non-specific query. You can form your own query string with this option. Convenient if none of the fixed queries are suitable.

Today Return all Measurements which occurred today.

Today - 1 Display all Measurements which occurred *since* yesterday.

Today -2 Retrieve all Measurements added over the last two days.

Today Retrieve all Measurements added during the last week.

Help Measurement browser Displays this document in your web browser.

Reference Manual Displays the AIPS++Reference Manual.

Report Bug... Creates an AIPS++Bug form which enables you to report any bugs found in this application.

About AIPS++ Pop-up which display information about the system on which you are currently running.

1.2.2 resource - Tool

Package nfra
Module tmstools

Browser for the TMS Resource table

Description

The menu-bar has the following menus:

File From the file menu you can do the following:

- **Exit** Exit and destroy the Measurement browser.

Action Each item in the Action menu is an operation that is carried out on the current highlighted entry in the browser list box. The actions are:

- **Show selected** Displays additional detail about the selected entry in a pop-up dialogue box. This is the default action which occurs when you double click on the list box entry. Resource classes. Retrieved all entries for the selected classes.
- **Print selected** Prints the selected entry.
- **Remove selected** Set Name to deleted.
- **LogBook query** Queries the LogBook for this resource. This starts the LogBook browser and displays all entries matching this resource name.

Query Various queries can be performed on the Resource table. The result of each query is displayed in the browser list box (replacing the previous contents). (If you would like additional table query options, please let us know.) The current queries are:

- **Class...** Form a query on a Resource class or a number of Resource classes. Retrieved all entries for the selected classes.
- **Name...** Form a query on the Resource Name column. The Name query can be a literal string or a pattern incorporation wild-cards.
- **Status...** Form a query on the Status column. Retrieves all entries matching the specified status category.

Help **Resource browser** Displays this document in your web browser.

- **Reference Manual** Displays the AIPS++Reference Manual.
- **Report Bug...** Creates an AIPS++Bug form which enables you to report any bugs found in this application.
- **About AIPS++** Pop-up which display information about the system on which you are currently running.

1.2.3 dataset - Tool

Package **nfra**
Module **tmstools**

Browser for the TMS DataSet table

Description

The menu-bar has the following menus:

File From the file menu you can do the following:

- **Print** This will print the list currently displayed in the browser list box.
- **Exit** Exit and destroy the DataSet browser.

Action Each item in the Action menu is an operation that is carried out on the currently highlighted entry in the browser list box. The actions are:

- **Inspect** Displays the selected item in *mstool*. This is also the default action when you double click on a list box entry.
- **Measurement** Show the selected entries in the Measurement browser.
- **Edit selected** Allows the editing of the archive status of the selected entries.
- **Remove selected** Sets the archive status of the selected entries to "deleted".
- **Set archived** Sets the archive flag on the selected entries to *archived*.
- **Copy selected** Invokes *TMSFlushMeasure seqnr location/name* on the selected entries.
- **Archive** Invokes *ExportData -a row_numbers* on the selected entries.
- **Export** Invokes *ExportData -e row_numbers* on the selected entries.
- **Select all** All entries currently displayed in the list box are selected.
- **Deselect all** All entries currently displayed in the list box are deselected.

Query Various queries can be performed on the Resource table. The result of each query is displayed in the browser list box (replacing the previous contents). (If you would like additional table query options, please let us know.) The current queries are:

- **Date...** Display all entries in the table which occurred between two dates or from a date to present.
- **Sequence Number...** Retrieve all entries within a sequence number range.
- **General...** The user can write their own query string which can be applied to any table column.
- **Today - 1 day** Retrieve all entries added since yesterday.

Today - 2 day Retrieve all entries added over the last 2 days.

Today - 1 week Retrieve all entries added over the last 7 days.

On disk... Queries on disk name, i.e., a query is formed where the Medium column is set to *Disk* and the Location column is the name you supply.

On volume... Perform a query on the *Location* column. Wild-cards (conforming to normal pattern matching rules) are permitted in the query string.

Category... Return all entries with a specific Category. One or more Categories can be specified. manual for a description of the regular expression syntax in Glish).

doArchive doArchive is a fixed query which returns all entries with the Archive field set to *doArchive*.

Help DataSet browser Displays this document in your web browser.

Reference Manual Displays the AIPS++Reference Manual.

Report Bug... Creates an AIPS++Bug form with which problems discovered in this application can be reported.

About AIPS++ Pop-up which displays information about the system on which you are currently running.

1.2.4 obslog - Tool

Package nfra
Module tmstools

Browser for the TMS ObsLog table

Description
The ObsLog browser is an interface into the TMS ObsLog Table. The browser displays all columns from the TMS ObsLog table, hence, all information contained in the table is available directly in the browser's list box. These columns are:

EventStamp Date entry entered into the ObsLog.

EventOrigin Person responsible for the entry.

SeqNr The observation Sequence Number.

Resource The resource to which the entry refers.

Band Band.

HARange HARange.

Category One of: *DeviceError DeviceModification DeviceConfiguration ProtocolError HumanMessage DeviceRepaired Comment CtrlAbort InitError TestCase unknown.*

Severity One of: *info warning error severe fatal unknown.*

Status One of: *issued confirmed handled obsolete falseAlarm unknown.*

Message Additional non-specific information.

The default query performed on the ObsLog table at application startup is to display the items entered *today.* However, this can be overridden by setting the Glish variable *obslog.ndays* to the number of days you would like to view at startup. This should be set in you *.glishrc* file. The following line placed in the *.glishrc* will display the last 6 days of entries in the ObsLog browser at startup.

```
obslog.ndays := 6
```

The menu-bar contains the following menus:

File From the file menu you can do the following:

- **Print...** This will print the list currently displayed in the browser list box.
- **Exit** Exit and destroy the ObsLog browser.

Action Action menu items operate on the currently highlighted entry (or entries) in the browser list box. The actions are:

- **Add...** Add a new entry.
- **Delete** Delete the currently selected entry. This operation is can only be performed by the *tmsmgr.*
- **Print selected...** Print the current selected entry.

Query Various queries can be performed on the ObsLog table. The result of each query is displayed in the browser list box (replacing the previous contents). (If you would like additional query options, please let us know.) The queries are:

- **Date...** Display all entries in the table which occurred between two dates or from a date to present (by leaving the *To* field empty).
- **Today - 1 day** Retrieve all entries added *since* yesterday.
- **Today - 2 day** Retrieve all entries added over the last 2 days.
- **Today - 1 week** Retrieve all entries added over the last 7 days.

Help ObsLog browser Display this document in your web browser.

Reference Manual Displays the AIPS++Reference Manual.

Report Bug... Creates an AIPS++Bug form which enables you to report any bugs found in the application.

About AIPS++ Pop-up which display information about the system on which you are currently running.

1.2.5 logbook - Tool

Package nfra
Module tmstools

Browser for the TMS LogBook table

Description
The LogBook browser is a special purpose browser for the TMS LogBook. The LogBook browser's GUI differs slightly from the other TMS table browsers by the addition of two text boxes below the browser list box. These boxes display the *Message* and *Feedback* fields of the currently selected entry in the browser's list box. All other columns from the LogBook table are displayed in the browser list box. These columns are:

EventStamp Date entry entered into the LogBook.

EventOrigin Person responsible for the entry.

DoneStamp Date entry "handled".

DoneOrigin Person responsible.

Category One of: *DeviceError DeviceModification DeviceConfiguration ProtocolError HumanMessage DeviceRepaired Comment CtrlAbort InitError TestCase unknown.*

Severity One of: *info warning error severe fatal unknown.*

Status One of: *issued confirmed handled obsolete falseAlarm unknown.*

Resource The resource to which the entry refers.

The default query performed on the LogBook table at application startup is to display the items entered *today*. However, this can be overridden by setting the Glish variable *logbook.ndays* to the number of days you would like to view at startup. This should be set in you *.glishrc* file. The following line placed in the *.glishrc* will display the last 6 days of entries in the LogBook browser at startup.

```
logbook.ndays := 6
```

The menu-bar contains the following menus:

File From the file menu you can do the following:

- **Print** This will print the list currently displayed in the browser list box.
- **Exit** Exit and destroy the LogBook browser.

Edit Operations which change the LogBook table in some way. Current edit operations are:

- **Add...** Add a new entry to the LogBook.
- **Update...** Change the *Feedback* field of the currently selected entry.
- **Delete** Delete the currently selected entry. This operation is can only be performed by the *tmsmgr*.
- **Confirm selected** Set Status field to *confirmed* on all selected items.
- **Select all** All entries currently displayed in the list box are selected.
- **Deselect all** All entries currently displayed in the list box are deselected.

Query Various queries can be performed on the LogBook table. The result of each query is displayed in the browser list box (replacing the previous contents). (If you would like additional query options, please let us know.) The current queries are:

- **Date...** Display all entries in the table which occurred between two dates or from a date to present.
- **Today - 1 day** Retrieve all entries added *since* yesterday.
- **Today - 2 day** Retrieve all entries added over the last 2 days.
- **Today - 1 week** Retrieve all entries added over the last 7 days.
- **Severity AND Status** allows the specification of a query formed on the logical conjunction of the Severity and Status columns.
- **All fatal** a fixed query returning all entries with Severity field set to *fatal* and Status set to *issued*.

Help **LogBook browser** Displays this document in your web browser.

- **Reference Manual** Displays the AIPS++Reference Manual.
- **Report Bug...** Creates an AIPS++Bug form which enables you to report any bugs found in the application.
- **About AIPS++** Pop-up which display information about the system on which you are currently running.