1.5 bimatester - Module

Module for testing filling, calibration, and imaging of BIMA data
include "bimatester.g"

Description

The `bimatester` module provides functions for testing various aspects of AIPS++ on BIMA data.
The facilities of the `bimatester` module are made available in Glish by issuing the following command:

```
- include 'bimatester.g'
T
```

where a hyphen precedes user input. The Glish response is indicated without the prompt.
To run all the tests, simply run the `bimatest` global function

```
- bimatest()
```

Tools

bimatester	Testing of BIMA data

Functions

bimatest	A quick way to run tests.

1.5.1 bimatester - Tool

Package bima
Module bimatester

Testing of BIMA data

Description

A `bimatester` tool provides all the functionality required for testing BIMA data. The tools tests data by running various functions for filling, calibrating, and imaging BIMA data. It compares the results with fiducial datasets located in the AIPS++ Data Repository. The fiducial datasets were created using a Linux installation using the GNU compiler. The filling and calibration tests can be performed on other architectures, but because the results of imaging differ significantly from Linux to Solaris, this tool will only do image tests if run on a Linux installation.

Constructors

bimatester	Construct a bimatester tool

Functions

runtests	Run various tests
summary	Summarize the test results

bimatester - Constructor

Package	**bima**
Module	**bimatester**
Tool	**bimatester**

Construct a bimatester tool

Synopsis
bimatester(verbose)

Description
Create a `bimatester` tool.

Arguments

verbose	Controls the level of output. 0 means run silently, higher values produce more messages Allowed:Int Default: 1

Returns
bimatester tool

Example

```
# create a bimatester tool, and specify you want a lot of output
- bt := bimatester(2)
```

---

bimatester.runtests - Function

Package	**bima**
Module	**bimatester**
Tool	**bimatester**

Run various tests

Synopsis
runtests(fill, calibrate, image, image)

Description

Run various tests on BIMA data. The user can specify which tests to run. However, imaging and cleaning tests will only be run on Linux installations because the fiducial images were created using such and installation and there are significant differences between imaging on Linux and Solaris.

Arguments

fill	Fill data and run filler tests? Allowed:Boolean Default: T
calibrate	Calibrate data and run calibration tests? Allowed:Boolean Default: T
image	Image data and run imaging tests? Allowed:Boolean Default: T
image	Clean the image and run deconvolution tests? Allowed:Boolean Default: T

Returns
T if all specified tests pass, F otherwise

Example

```
- bt := bimatester(2);
# Run all available tests
```

```
+ bt.runtests();
Lots of messages
T
```

---

bimatester.summary - Function

Package	**bima**
Module	**bimatester**
Tool	**bimatester**

Summarize the test results

Synopsis
summary(verbose)

Description

This function summarizes the test results by returning a record containing the results and optionally printing a summary to the log. A value of `T` associated with a test means that it passed, `F` if it failed.

Arguments

verbose	Print results to the log? Allowed:Boolean Default: T

Returns
record of test results

Example

```
- bt := bimatester(2);
# Run all available tests
+ bt.runtests();
Lots of messages
T
- results := bt.summary()
```

```
NORMAL: BIMATESTER.FILLER: T
NORMAL: BIMATESTER.CALIBRATION: T
NORMAL: BIMATESTER.IMAGING: T
NORMAL: BIMATESTER.CLEANING: T
- print results;
[FILLER=T, CALIBRATION=T, IMAGING=T, CLEANING=T]
```

1.5.2 bimatest - Function

Package bima

Module bimatester

A quick way to run tests.

Synopsis

bimatest(verbose, summarize, fill, calibrate, image, image)

Description

This global function runs user-specified tests on BIMA data by creating a `bimatester` tool, running the tests, and optionally prining a summary.

Arguments

verbose	Controls the level of output. 0 means run silently, higher values produce more messages Allowed:Int Default: 1
summarize	Summarize the results? Allowed:Boolean Default: T
fill	Fill data and run filler tests? Allowed:Boolean Default: T
calibrate	Calibrate data and run calibration tests? Allowed:Boolean Default: T
image	Image data and run imaging tests? Allowed:Boolean Default: T
image	Clean the image and run deconvolution tests? Allowed:Boolean Default: T

Returns
T if all tests passed, F otherwise

Example

```
- include 'bimatester.g';
- bimatest();
<Lots of messages>
T
```