Example

```
myfq:= freqselmanager();
freqsel1:= myfq.channel(nchan=64, start=4, step=1);
mysm:= selectionmanager();
item1:= mysm.selection(freqsel=freqsel1, fieldnames=['3C84','3C273'],
   spwids=[1,2], msselect="ANTENNA1==4");
```

Create a selection data item item1 representing: i) frequency channel selection of 64 channels, starting at channel 4 and stepping by 1 channel; ii) for the field names '3C273' and '3C84'; iii) for spectral window id.'s 1 and 2; and iv) for all data for which the first antenna on the baseline is antenna 4. All spectral window and antenna id.'s are 1-relative, as are all MS indices in the msselect parameter.

1.6.4 modelmanager - Tool

Package synthesis
Module map

Data manager for model data items
include "modelmanager.g"

Constructors

modelmanager	Create a model data manager

Functions

catalog	Create a model data item from a catalog
fluxdensity	Create a model data item comprising a point source
image	Create a model data item from images and a component list

Overview of modelmanager tool functions

A model data item is a data item representing different forms of source models. The model data manager allows the creation of model data items of the following types:

- image - a model data item created from a specified set of images, and a component list.

- fluxdensity - a model data item consisting of a point component at the field center of a specified flux density.
- catalog - a model data item created from a source model as enumerated in an external catalog.

modelmanager - Constructor

Package	synthesis
Module	map
Tool	modelmanager

Create a model data manager

Synopsis
modelmanager()

Arguments

Returns
modelmanager tool
or fail

Description

Constructs a model data manager, which can be used to create model data items of the enumerated types. The default model data manager is called dmm, and is created when the the file modelmanager.g is included.

Example

```
mymm := modelmanager()
```

This creates a model manager called mymm.

---

modelmanager.image - Function

Package	synthesis
Module	map
Tool	modelmanager

Create a model data item from images and a component list

Synopsis
image(images, complist)

Arguments

images	Names of images Allowed Vector of strings Default unset	
complist	Name of component list Allowed String Default unset	

Returns
model data item
or fail

Description

This function creates a model data item from a list of images and an associated component list.

Example

```
mymm:= modelmanager();
item1:= mymm.image(images=['field1.im', 'field2.im'], complist='model.cl');
```

Create a model data item item1 from the images field1.im and field2.im, and a component list model.cl.

---

modelmanager.fluxdensity - Function

Package	synthesis
Module	map
Tool	modelmanager

Create a model data item comprising a point source

Synopsis
fluxdensity(iquv)

Arguments

iquv	Flux density (I,Q,U,V)	
	Allowed:	Vector of doubles
	Default:	(1,0,0,0)

Returns
model data item
or fail

Description

This function creates a model data item comprising a point source at the field center with the specified flux density, expressed as Stokes (I,Q,U,V).

Example

```
mymm:= modelmanager();
item2 := mymm.fluxdensity(iquv=[1.0, 0.5, 0.1, 0]);
```

Create a model data item item2 comprising a point source at the field center with Stokes flux density
$(I = 1.0,\ Q = 0.5,\ U = 0.1,\ V = 0.0)$.

---

modelmanager.catalog - Function

Package	synthesis
Module	map
Tool	modelmanager

Create a model data item from a catalog

Synopsis
catalog(catalogname)