addattribute

February 1, 2016

Abstract

Add attributes to datasets.

1   Instruments/Modes

Instrument	Mode
All	All

2   Use

pipeline processing	yes
interactive analysis	no

3   Description

This task adds attributes to one or more dataset. Attributes may be added to the primary header and extensions. Optional comments and units may also be supplied.

4   Parameters

This section documents the parameters recognized by this task (if any).

Parameter	Mand	Type	Default	Constraints
set	yes	set		

List of dataset names to receive attributes. Adding a suffix changes the default extension (primary header) for that dataset. (eg. set=' "dataset1" "dataset2:EXTENT01" ..').

attributename	yes	string		

A list of attribute names. The names may be prefixed with an extension to overrides the default.

(eg. attributename=' "name1" "EXTENT02:name2" ..').

attributetype	yes	string		r—real—i—integer—s—string—b—boolean

A list of the attribute types, one for each attribute name.

(eg. attributetype=' "string" "real" "string" ..').

attributecomment	no	string		

Comments to be added to attributes, one for each attribute name.

(eg. attributecomment=' "comment1" "comment2" ').

† Be careful with this switch when used with a list of attributes. If one has a comment then they must all have a comment specified even if the others are empty.

attributeunit	no	string		

Units to be added to attributes, one for each attribute name.

(eg. attributeunit=' "unit1" "unit2" ').

† Be careful with this switch when used with a list of attributes. If one has units then they must all have units specified even if the others are empty.

realvalue	no	real		

A list of values, one for each real attribute

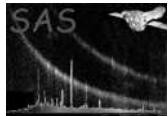| **integervalue**	no	integer		

A list of values, one for an integer attribute

stringvalue	no	string		

A list of values, one for a string attribute

booleanvalue	no	boolean		

A list of value, one for a boolean attribute

5 Errors

This section documents warnings and errors generated by this task (if any). Note that warnings and errors can also be generated in the SAS infrastructure libraries, in which case they would not be documented here. Refer to the index of all errors and warnings available in the HTML version of the SAS documentation.

NameValueMismatch *(error)*
> Mismatch between number of attribute names and values.

InsufficientString *(error)*
> Insufficient string values to satisfy demand.

InsufficientReal *(error)*
> Insufficient real values to satisfy demand.

InsufficientInteger *(error)*
> Insufficient integer values to satisfy demand.

InsufficientBoolean *(error)*
> Insufficient boolean values to satisfy demand.

6 Input Files

1. Input datasets (modified in-situ)

7 Output Files

1. Modified input datasets.

8 Algorithm

```
   subroutine addattribute

Foreach dataset

Set default extension
Open datset

Foreach attributename

Determine actual extension

Add or Replace attribute with appropriate type, value, comment and units.

End Foreach
Close dataset
```

```
End Foreach
   end subroutine  addattribute
```

9   Comments

- This task will be used in the pipeline to add AMS keywords to FITS files.

10   Future developments

The test harness needs updating and improving.

References