



# addattribute

June 2, 2019

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



(eg. attributename= ‘ “name1” “EXTENT02:name2” ..’).

<b>attributetype</b>	yes	string		r—real—i—integer—s—string—b—boolean
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A list of the attribute types, one for each attribute name.

(eg. attributetype= ‘ “string” “real” “string” ..’).

<b>attributecomment</b>	no	string		
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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.

<b>attributeunit</b>	no	string		
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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.

<b>realvalue</b>	no	real		
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A list of values, one for each real attribute

<b>integervalue</b>	no	integer		
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A list of values, one for an integer attribute

<b>stringvalue</b>	no	string		
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A list of values, one for a string attribute

<b>booleanvalue</b>	no	boolean		
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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 dataset
```

```
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