



## xmmtimeconv

February 1, 2016

### Abstract

Convert an input time into many formats

## 1 Instruments/Modes

| Instrument | Mode |
|------------|------|
| n/a        | n/a  |

## 2 Use

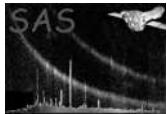
|                      |     |
|----------------------|-----|
| pipeline processing  | no  |
| interactive analysis | yes |

## 3 Description

XMMTIMECONV converts an input time into other formats. The input may be in any of the following formats:

- FITS: 2009-06-18T07:10:53
- MJD: 55000.0 (modified Julian date)
- JD: 2455000.5 (Julian date)
- CALENDAR: Thu Jun 18 07:10:53 2009
- MRT: 361670466.184 (mission reference time)
- DYN: 2009.4602739726 (decimal year number)

The output contains all of these formats. eg.



```
> xmmtimeconv time='55000.0' format=MJD  
  
Converting using the input format MJD  
FITS time: 2009-06-18T00:00:00.000  
Fractional year: 2009.4602739726  
Julian day: 2455000.5  
MJD: 55000  
Mission ref. time (MRT; secs since 1997-12-31T23:58:56.816): 361670466.184  
Calendar: Thu Jun 18 00:00:00 2009
```

Times are in UTC.

## 4 Parameters

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

| Parameter | Mand | Type | Default | Constraints |
|-----------|------|------|---------|-------------|
|-----------|------|------|---------|-------------|

|      |     |        |  |  |
|------|-----|--------|--|--|
| time | yes | string |  |  |
|------|-----|--------|--|--|

Input time, e.g. 1998-11-25T17:21:00 or 54000.16

|        |    |        |     |                |
|--------|----|--------|-----|----------------|
| format | no | string | MJD | MJD—JD—DYN—MRT |
|--------|----|--------|-----|----------------|

The format of the input time if given as a decimal. Options are: modified julian date (MJD), julian date (JD), decimal year number (DYN) or mission reference time (MRT). An input time entered in FITS or CALENDAR format is detected automatically.

## 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.

### InvalidInputTime (*error*)

The input time is not understood or is too early to be processed



## 6 Input Files

## 7 Output Files

## 8 Algorithm

Read the input time into an STime object.

Use the STime methods to convert to all known formats  
and output as text.

## 9 Comments

## 10 Future developments

## References