xmmtimeconv

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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 CALENDER 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