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Synopsis

Defines available calendars and timescales for Chandra Proposal Tools

Description

The default timescale types in DATES are:

| Timescale | Timescale Type |
|-----------|------------------|
| TT | Terrestrial Time |
| UTC | Civil Time |
| TDB | Dynamical Time |
| TAI | Atomic Time |
| UT1 | UT1 Time |
| GMST | Sidereal Time |

with additional timescales defined as offsets to UTC:

| Timescale | Timescale Name | Type | Zone Par | Zone |
|-----------|------------------------|------------|----------|-------|
| MST | Moscow Summer Time | Civil Time | 14400 | +0400 |
| DMV | Moscow Decree Time | Civil Time | 10800 | +0300 |
| BST | British Summer Time | Civil Time | 3600 | +0100 |
| GMT | Greenwich Mean Time | Civil Time | 0 | +0000 |
| EDT | Eastern Daylight Time | Civil Time | -14400 | -0400 |
| EST | Eastern Standard Time | Civil Time | -18000 | -0500 |
| CDT | Central Daylight Time | Civil Time | -18000 | -0500 |
| CST | Central Standard Time | Civil Time | -21600 | -0600 |
| MDT | Mountain Daylight Time | Civil Time | -21600 | -0600 |
| MST | Mountain Standard Time | Civil Time | -25200 | -0700 |
| PDT | Pacific Daylight Time | Civil Time | -25200 | -0700 |
| PST | Pacific Standard Time | Civil Time | -28800 | -0800 |

The supported calendar types are:

| Calendar | Calendar Name | Type |
|----------|---------------------|--------------------|
| GREG | Gregorian date | Gregorian Calendar |
| JD | Julian Day | Julian Day Number |
| MJD | Modified Julian Day | Julian Day Number |

Ahelp: prop-time – CIAO 3.4

| | | |
|-------|-------------------------|--------------------------|
| DAYS | JD - 2450814.5 | Julian Day Number |
| DATE | Date | Gregorian Calendar |
| PACK | Packed date | Gregorian Calendar |
| DOY | Day of year | Gregorian Calendar |
| OS | Julian Calendar | Julian Calendar |
| ROMAN | Roman calendar | Roman Calendar |
| RF | French Rev. Calendar | French Revolutionary Cal |
| GSD | Greenwich Sidereal Date | Greenwich Sidereal Date |
| GST | Greenwich Sidereal Time | Greenwich Sidereal Date |
| TIME | TIME(JD 2450814.5) | Elapsed Seconds |

- **JD/MJD/DAYS:** For the JD, MJD and days calendars, enter a numeric value. Only Julian days between -2×10^9 and 2×10^9 are supported.
- **GREG:** There are a variety of formats for the GREG calendar. The standard is the words AD or BC followed by the year, month name, day, time of day. For example: AD 1993 Jun 30 23:59:50.234. The BC is mandatory, AD may be left off. Day 0 is the last day of the preceding month. Month numbers may be used instead of names. Colons may be omitted, replaced by spaces, or the letters h, m, s. Trailing information may be omitted, in such case, the earliest date is assumed. Further forms of imprecise and uncertain dates are supported: example: 1993 Jun 30 23:59? or 1990s?. Day of Year format is supported also: 1997 Day 104 14:20:32.
- **DOY:** Last three digits of the integral part is the day of the year, earlier digits are assumed to be the year.
- **PACK:** Last four digits are MM and DD, earlier digits assumed to be the year, if less than 100, 1900 automatically added.
- **TIME:** Elapsed time calendar, gives seconds since the zero point defined by the zero command. The default is Chandra time: the time tag on events in the Chandra data files, measured in seconds since 1998 Jan 1 00:00:0.0.
- **GSD/GST:** GSD is essentially JD(GMST). Calendar GSD outputs the result as JD and fraction of day. GST outputs the result as an integer day number and hh:mm:ss.sss of sidereal time.

See Also

proposaltools

[colden](#), [dates](#), [obsvis](#), [pimms](#), [precess](#), [prop-coords](#), [prop-tools](#)

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URL:
<http://cxc.harvard.edu/ciao3.4/prop-time.html>
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