

# The **milDate** Package

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## 1 Introduction

The **milDate** Package provides commands for displaying the date and time in NATO format.

The format is used to standardize the communication of dates. A Date-Time-Group consists of a sequence of eight digits and four letters. The first two digits describe the day, the following four digits the time in 24-hour format, followed by a letter indicating the time zone. After the time zone the month is indicated by a uniform abbreviation consisting of three letters and at the end optionally follows the indication of the year in the form of two digits.

For example the moon landing on July 21th 1969 at 02:56 is represented in the date time group as

21 02 56 Z jul 69

21 jul 69 indicates the date, July 21th 1969

02 56 indicates the time 02:56 with

Z as the corresponding timezone Zulu

The date alone

21 jul 69

respectively the time

02 56 Z

## 2 Options

The **milDate** package can be customized by global options.

```
\usepackage[lang=english,timezone=Z,kern=1pt,lowercase]{milDate}
```

lang	The <b>milDate</b> package identifies the language used in the document and sets the month names accordingly. The behavior can be overridden by setting the <code>lang</code> option. Currently german and english are available.
uppercase	The NATO standard specifies that the names of the months should be written in lower case. This can be changed by using the boolean <code>uppercase</code> and <code>lowercase</code> options.
timezone	The <code>timezone</code> option sets the default time zone that will be used globally if no time zone is specified in the date time information. For the possible time zones, see the <code>timezone</code> table. Zulu time is used by default.
kern	The individual blocks of the date-time group are set with a small space between them. By default, the <b>milDate</b> package uses 1pt. This spacing can be changed with the <code>kern</code> option if needed. A <i>kern</i> is a typographic term for a nonbreakable space between two elements.
dtg symbol	The boolean option <code>dtg_symbol</code> can be used to manage the display of symbols at odd offsets to the date-time-group.

## 3 Commands

milTime	<p>The <b>milTime</b> command sets the time in 24 hour format hhmm without delimiter. The time zone is optional.</p> <pre>\milTime{12:30}[S]    1230S \milTime{0238}        0238 \milTime{0238}        0238 \milTime{0417}[TRT]   0417C</pre>
timezone	<p>Time zones are indicated with letters A to I and K to Z. To avoid confusion, J is skipped. Starting from the prime meridian at Greenwich (UTC-0, Greenwich Mean Time <i>GMT</i>, Zulu time), counting is eastward from A to M and westward from N to Y.</p>

UTC		Example	UTC		Example
-12	Y	Fiji	+1	A	<i>Vienna</i> , France
-11	X	Samoa	+2	B	<i>Athens</i> , Greece
-10	W	Honolulu	+3	C	Iraq, Kuwait, Qatar
-9	V	Juneau	+4	D	<i>Moscow</i> , Russia
-8	U	<i>Los Angeles</i>	+5	E	Pakistan, Kazakhstan
-7	T	<i>Denver</i>	+6	F	Bangladesh
-6	S	<i>Dallas</i>	+7	G	Thailand
-5	R	<i>New York</i>	+8	H	<i>Beijing</i> , China
-4	Q	<i>Halifax</i>	+9	I	<i>Tokyo</i> , Japan
-3	P	<i>Buenos Aires</i>	+10	K	<i>Brisbane</i> , Australia
-2	O	Greenland	+11	L	<i>Sydney</i> , Australia
-1	N	Azores	+12	M	<i>Wellington</i> , New Zealand

Furthermore, the time zones can be specified as an offset from UTC (e.g. UTC+03:00) or in abbreviated time zones (e.g. CEST). For time zones that differ by 30 minutes from the whole hour, the time zone closer to the prime meridian is used and an asterisk (\*) is added. For a distance of 45 minutes, a lozenge (◆) is added. Examples are Newfoundland in time zone P\* (UTC-03:30), Afghanistan in time zone D\* (UTC+04:30) or Nepal in time zone E◆ (UTC+05:45). Exceptions are the M time zones, which are more than 12 hours apart from UTC and are therefore west of the International Date Line. With a deviation of whole hours they are marked with M<sup>†</sup>, with a difference of 30 minutes as M\* and with 45 minutes as M◆. Examples are Line Islands with M<sup>†</sup> (UTC+14:00) and Chatham Island with M◆ (UTC+12:45). With the global option `dtg_symbol=false`, the display of the symbols can be disabled.

milToday  
milDate

The **milToday** command sets the current date in NATO format

The **milDate** command sets the date consisting of day, month, year. It can be specified in the format *dd-mm-yyyy* or in the ISO format *yyyy-mm-dd*. For clear distinction, years should be specified with four digits. All non-numeric characters can be used as delimiter. For the current day the macro `\today` can be used. The date is run through a simple validity check, where days range from 1 to 31 and months from 01 to 12.

```
\milDate{08.12.1980} 08dec80
\uilDate{10/05/1994} 10mai94
\uilDate{4-7-97}      04jul97
\uilDate{2008.11.4}   04nov08
\uilDate{\today}      27feb23
```

milDatetime

The **milDatetime** command allows to set date together with time. For the current day the macro `\today` can be used. The date and time are run through simple validity checks, where days range from 1 to 31, months from 1 to 12, hours from 0 to 23 and minutes from 0 to 59.

\milDatetime{02.09.1966}{01:00}	020100Zsep66
\milDatetime{26/4/1986}{01:24}	260124Zapr86
\milDatetime{1972-06-17}[R]{01:47}	170147Rjun72
\milDatetime{1963/8/8}{03:15}	080315Zaug63
\milDatetime{\today}{05:00}	270500Zfeb23