

L^AT_EX style file for drawing horizontal timelines

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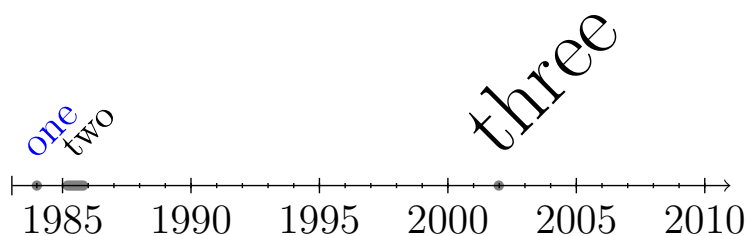
Contents

1	User documentation	2
1.1	Example 1	2
1.2	Example 2	2
1.3	Example 3	3
2	Package macros	4
2.1	Standard package loading	4
2.2	Defining counters and lengths	4
2.3	Defining TikZ styles for labels and events	4

1 User documentation

1.1 Example 1

This output:

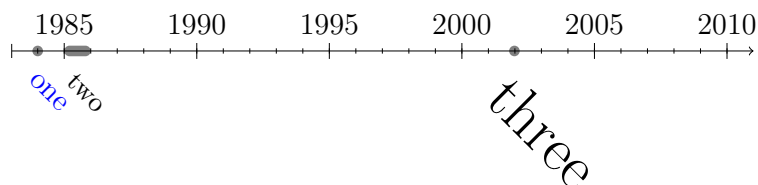


is produced by this input:

```
\begin{chronology}[5]{1983}{2010}{10cm}[7cm]
  \event{1984}{\color{blue}{one}}
  \event[1985]{1986}{\small{two}}
  \event{\decimaldate{25}{12}{2001}}{\huge{three}}
\end{chronology}
```

1.2 Example 2

Similarly, this output:



Is produced by this input:

```
\begin{chronology}*[5]{1983}{2010}{10cm}
```

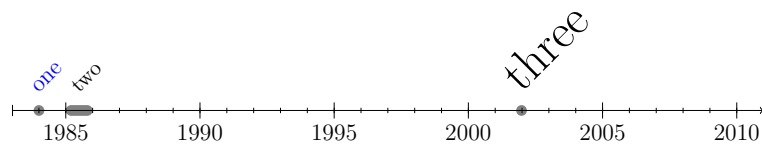
```

\event{1984}{\color{blue}{one}}
\event[1985]{1986}{\small{two}}
\event{\decimaldate{25}{12}{2001}}{\huge{three}}
\end{chronology}

```

1.3 Example 3

And finally, this output:



is produced by this input:

```

\begin{chronology}[5]{1983}{2010}{10cm}[13cm]
\event{1984}{\color{blue}{one}}
\event[1985]{1986}{\small{two}}
\event{\decimaldate{25}{12}{2001}}{\huge{three}}
\end{chronology}

```

2 Package macros

2.1 Standard package loading

```
1 \NeedsTeXFormat{LaTeX2e}%
2 \ProvidesPackage{chronology}[2015/03/27 v1.1.1 Horizontal timeline]%
3 \RequirePackage{calc}%
4 \RequirePackage{tikz}%
5 \RequirePackage{xparse}%
```

2.2 Defining counters and lengths

```
6 \newcounter{step}\newcounter{stepstart}\newcounter{stepstop}%
7 \newcounter{yearstart}\newcounter{yearstop}\newcounter{deltayears}%
8 \newlength{\xstart}\newlength{\xstop}%
9 \newlength{\unit}\newlength{\timelinewidth}%
10 \newsavebox{\timelinebox}%
```

2.3 Defining TikZ styles for labels and events

```
11 \tikzset{%
12 ,chronevent/.style={fill=black,draw=none,opacity=0.5}
13 ,chronlabel/.style={opacity=1}
14 ,chrontickslabel/.style={chronlabel}
15 ,chroneventlabel/.style={chronlabel}
16 ,eventlabel/.style={chroneventlabel,anchor=south
17 west,yshift=.2\unit,rotate=45}
18 ,flippedeventlabel/.style={chroneventlabel,anchor=north
19 west,yshift=-.2\unit,rotate=-45}
20 }
```

For compatibility with babel. Handling of active characters in TikZ.

```
21 \tikzset{
22 handle active characters in code,
23 handle active characters in nodes
24 }
25 \newif\ifchronology@star%
26 \newenvironment{chronology}{%
27 \@ifstar{\chronology@startrue\chronology@i*}{\chronology@starfalse\chronology@i*}%
28 }{%
29 \end{tikzpicture}%
30 \end{lrbox}%
```

```

31 \raisebox{2ex}{\resizebox{\timelinewidth}{!}{\usebox{\timelinebox}}}%
32 }%
33 \def\chronology@i*{%
34 \@ifnextchar[{\chronology@ii*}{\chronology@ii*[{5}]}%
35 }%
36 \def\chronology@ii*[#1]#2#3#4{%
37 \@ifnextchar[{\chronology@iii*[{#1}]{#2}{#3}{#4}]{\chronology@iii*[{#1}]{#2}{#3}{#4}[
38 ]}%
39 \def\chronology@iii*[#1]#2#3#4[#5]{%
40 \newif\ifflipped%
41 \ifchronology@star%
42 \flippedtrue%
43 \else%
44 \flippedfalse%
45 \fi%
46 \setcounter{step}{#1}%
47 \setcounter{yearstart}{#2}\setcounter{yearstop}{#3}%
48 \setcounter{deltayears}{\theyearstop-\theyearstart}%
49 \setlength{\unit}{#5/\thedeltayears}%
50 \setlength{\timelinewidth}{#4}%
51 \pgfmathsetcounter{stepstart}{\theyearstart+\thestep-mod(\theyearstart,\thestep)}%
52 \pgfmathsetcounter{stepstop}{\theyearstop-mod(\theyearstop,\thestep)}%
53 \addtocounter{step}{\thestepstart}%
54 \begin{lrbox}{\timelinebox}%
55 \begin{tikzpicture}[baseline={(current bounding box.north)}]%
56 \draw [|->] (0,0) -- (\thedeltayears*\unit+\unit, 0);%
57 \foreach \x in {1,...,\thedeltayears}%
58 \draw[xshift=\x*\unit] (0,-.1\unit) -- (0,.1\unit);%
59 \addtocounter{deltayears}{1}%
60 \foreach \x in {\thestepstart,\thestep,...,\thestepstop}{%
61 \pgfmathsetlength\xstop{(\x-\theyearstart)*\unit}%
62 \draw[xshift=\xstop] (0,-.3\unit) -- (0,.3\unit);%
63 \ifflipped%
64 \node[chrontickslabel] at (\xstop,0) [above=.2\unit] {\x};%
65 \else%
66 \node[chrontickslabel] at (\xstop,0) [below=.2\unit] {\x};%
67 \fi%
68 }%
69 }%
70 \DeclareDocumentCommand \event {o m m}{%

```

```

71 \pgfmathsetlength\xstop{(#2-\theyearstart)*\unit}%
72 \IfNoValueTF {#1} {%
73 \ifflipped%
74 \draw[chronevent]%
75 (\xstop, 0) circle (.2\unit)%
76 node[flippedeventlabel] {#3};%
77 \else%
78 \draw[chronevent]%
79 (\xstop, 0) circle (.2\unit)%
80 node[eventlabel] {#3};%
81 \fi%
82 }{%
83 \pgfmathsetlength\xstart{(#1-\theyearstart)*\unit}%
84 \ifflipped%
85 \draw[chronevent,rounded corners=.2\unit]%
86 (\xstart,-.2\unit) rectangle%
87 node[flippedeventlabel] {#3} (\xstop,.2\unit);%
88 \else%
89 \draw[chronevent,rounded corners=.2\unit]%
90 (\xstart,-.2\unit) rectangle%
91 node[eventlabel] {#3} (\xstop,.2\unit);%
92 \fi%
93 }%
94 }
95 \newcommand{\decimaldate}[3]{(#1-1)/31/12+(#2-1)/12+#3}%

```

Index

Numbers written in *italic* refer to the page where the corresponding entry is described; numbers underlined refer to the code line of the definition; numbers in *roman* refer to the code lines where the entry is used.

Symbols	<code>\flippedfalse</code> 44	S
<code>\@ifnextchar</code> . 34, 37	<code>\flippedtrue</code> 42	<code>\setcounter</code> 46, 47, 48
<code>\@ifstar</code> 27	<code>\foreach</code> 57, 60	<code>\setlength</code> . . . 49, 50
A	I	T
<code>\addtocounter</code> . 53, 59	<code>\ifchronology@star</code> 25, 41	<code>\thedeltayears</code> 49, 56, 57
B	<code>\ifflipped</code>	<code>\thestep</code> . . . 51, 52, 60
<code>\begin</code> 54, 55	. . . 40, 63, 73, 84	<code>\thestepstart</code> . 53, 60
C	<code>\IfNoValueTF</code> 72	<code>\thestepstop</code> . . . 60
<code>\chronology@i</code> . 27, 33	N	<code>\theyearstart</code> 48, 51, 61, 71, 83
<code>\chronology@ii</code> 34, 36	<code>\NeedsTeXFormat</code> . . . 1	<code>\theyearstop</code> . 48, 52
<code>\chronology@iii</code> 37, 39	<code>\newcommand</code> 95	<code>\tikzset</code> 11, 21
<code>\chronology@starfalse</code> 27	<code>\newcounter</code> 6, 7	<code>\timelinebox</code> 10, 31, 54
<code>\chronology@startrue</code> 27	<code>\newenvironment</code> . . 26	<code>\timelinewidth</code> 9, 31, 50
D	<code>\newif</code> 25, 40	U
<code>\decimaldate</code> 95	<code>\newlength</code> 8, 9	<code>\unit</code> 9, 17, 19, 49, 56, 58, 61, 62, 64, 66, 71, 75, 79, 83, 85, 86, 87, 89, 90, 91
<code>\DeclareDocumentCommand</code> 70	<code>\newsavebox</code> 10	<code>\usebox</code> 31
<code>\def</code> 33, 36, 39	<code>\node</code> 64, 66	X
<code>\draw</code> 56, 58, 62, 74, 78, 85, 89	P	<code>\x</code> 57, 58, 60, 61, 64, 66
E	<code>\pgfmathsetcounter</code> 51, 52	<code>\xstart</code> . . 8, 83, 86, 90
<code>\else</code> . . . 43, 65, 77, 88	<code>\pgfmathsetlength</code> 61, 71, 83	<code>\xstop</code> 8, 61, 62, 64, 66, 71, 75, 79, 87, 91
<code>\end</code> 29, 30	<code>\ProvidesPackage</code> . . 2	
<code>\event</code> 70	R	
F	<code>\raisebox</code> 31	
<code>\fi</code> 45, 67, 81, 92	<code>\RequirePackage</code> 3, 4, 5	
	<code>\resizebox</code> 31	