



Scale axis

Version 1.2.1, by Giorgio Bianchini

Description: Draws a scale axis.

Module type: Plotting

Module ID: aeacf625-90cf-41a5-8d10-c37c75aaa2b1

This module is used to draw a scale axis on the tree plot. The module can only be used when *Rectangular* or *Circular* coordinates are enabled.

For the default values of the parameters that follow, let t be the total length of the tree from the root node to the farthest tip.

Parameters

Top axis

Control type: Check box

Default value: Checked

This check box determines whether the axis is shown above the tree.

Bottom axis

Control type: Check box

Default value: Checked

This check box determines whether the axis is shown below the tree.

Reverse axes

Control type: Check box

Default value: Checked

If this check box is checked, the units of the axes are reversed, i.e. the tips of the tree will start at an age of 0. Otherwise, the age of 0 will correspond to the root node.

Negative ages

Control type: Check box

Default value: Unchecked

If this check box is checked, the units of the axes will be negative.

Spacing


Control type: Number spin box

Default value: 10

Range: $(-\infty, +\infty)$

Axis colour

Control type: Colour

Default value:  #000000 (opacity: 100%)

This parameter determines the colour used to draw the axis and the labels.

Line thickness

Control type: Number spin box

Default value: 1

Range: $[0, +\infty)$

This parameter determines the thickness of line used to draw the axis.

Units

Control type: Text box

This parameter is used to determine the measurement units of the scale axis (e.g. Mya or Gya).

Unit position

Control type: Drop-down list

Default value: Both

Possible values:

- Root
- Both
- Tips

This parameter is used to determine the position of the measurement unit.

Offset

Control type: Number spin box

Default value: 0

Range: $(-\infty, +\infty)$

This parameter defines a value that is added to the ages shown on the scale axis. This is useful, e.g., if you have a date for the most recent tip on the tree.

Tick spacing

Control type: Number spin box

Default value: $0.05 \cdot t$

Range: $[0, +\infty)$

This parameter determines the spacing between ticks on the axis (in tree age units).

Start

Control type: Number spin box

Default value: 0

Range: $(-\infty, +\infty)$

This parameter determines the start of the axis (in tree age units).

End

Control type: Number spin box

Default value: t

Range: ($-\infty$, $+\infty$)

This parameter determines the end of the axis (in tree age units).

Tick size

Control type: Number spin box

Default value: 5

Range: [0, $+\infty$)

This parameter determines the size of the ticks on the axis.

Labels every

Control type: Number spin box

Default value: 2

Range: [1, $+\infty$)

This parameter determines how many ticks are labelled.

Digits

Control type: Number spin box

Default value: 2

Range: [0, $+\infty$)

This parameter determines the number of decimal digits to show for the age labels.

Font

Control type: Font

Default value: Helvetica 10pt

This parameter determines the font used to draw the labels.

Label spacing

Control type: Number spin box

Default value: 10

Range: [0, $+\infty$)

This parameter determines the amount of space between the labels and the axis.

Grid type

Control type: Drop-down list

Default value: Shading


Possible values:

- None
- Lines
- Shading

This parameter determines which kind of grid (if any) is drawn. If the value is `None`, no grid is shown. If the value is `Lines`, lines are drawn corresponding to every tick in the axis. If the value is `Shading`, alternating shaded and un-shaded areas are drawn.

Grid colour


Control type: Colour

Default value:  #000000 (opacity: 4%)

This parameter determines the colour of the grid lines or shading.

Grid dash

Control type: Line dash

Default value: 

- *Units on:* 0
- *Units off:* 0
- *Phase:* 0

If the [Grid type](#) is `Lines`, this parameter determines the dashing style used to draw the grid lines.