� Scale axis

Version 1.2.0, 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: (-∞, +∞)

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, +∞)

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: (-∞, +∞)

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

Tick size

Control type: Number spin box

Default value: 5

Range: [0, +∞)

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

Labels every

Control type: Number spin box

Default value: 2

Range: [1, +∞)

This parameter determines how many ticks are labelled.

Digits

Control type: Number spin box

Default value: 2

Range: [0, +∞)

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, +∞)

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.