

# Font Behavior

## Aspect Ratio

It should not be possible to change the aspect ratio of text, or to distort the font in any way (eg, by any combination of resizes and rotations).

## What sets the font size?

- Font sizes are proportional to (Width + Height) of the TLV<sup>1</sup>. Resizing a window will change the font size (not the aspect ratio), but resizing a plot within a window will not.
- Font sizes are defined assuming the TLV has been printed or displayed at a *reference page size*<sup>2</sup> which is set in the configuration dialog. So, if a TLV is displayed or printed at the reference page size, then the font size will be as requested. If the TLV is displayed or printed smaller/larger than the reference page size, then the fonts will be smaller/larger than requested.
- The default reference page size will be selected from a pull down list, with typical sizes, including Letter, A4, and Single Col Publication, as well as Custom, with an entry.
- Font sizes will be listed in double precision DTP points.
- Changing the *reference page size* in the configuration dialog will cause all fonts in kst to change.
- There will be a *minimum font size*, defined in physical points defined in the configuration dialogs. Fonts smaller than this will be enlarged to this size. The default should be 5 points. The goal of this is to preserve readability, even if the window is resized to tiny dimensions.
- The *minimum font size* and *reference page size* are sticky between settings, and are also stored in the kst file.

## What sets the font and object sizes?

- Fonts are selected on a per-item basis, but default to the default font defined in the configuration dialog, which defaults to the Desktop default font. The default size is set in the configuration dialog. Objects like arrows can chose their default size from the default font size.

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<sup>1</sup> In 1.4, font sizes were proportional to the W+H of the parent, so larger plots had larger fonts. We are changing this behavior for 2.0.

<sup>2</sup> In 1.4, this was set by hard coded magic numbers whose origin are now shrouded in mystery and legend.