Making better figures for publication, a thread, in no particular order

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Use serif-free typefaces, like Arial or Helvetica. If you are fancy, use Myriad. Stick with one typeface. Never use Comic Sans. Avoid typefaces that don't resize well. I'm looking at you Gill Sans!

Apropos nothing, Calibri is flabby.

Attempt to use the same font size for all text. Leave out unnecessary notations and text in the graphic. Save them for the main text or caption.

If you are thinking about colored text, here is an excellent idea. Try black. And only black. There must be an exceptional reason to use colored text.

Remember that journals prefer tall figures over wide figures, because only a few of the pages in an article can handle a wide (two column) figure.

Use the same font size, consistently. A certain popular plotting package violates this rule. Use it with care.

The font size you select should be large enough. Here is the rule: if you make a graphic, resize it by a factor of 1/4. Can you still read the text? If you cannot, start over. Excessively large text is also ugly, but at least it is legible.

Did I remember to say use uniformly sized, black, serif-free fonts? Wait, do not use bold typefaces. They decrease legibility. Is the text size large enough?

The same popular plotting package employs a horrible set of default colors: primary red, blue, green, and yellow. Avoid primaries, avoid red and green (color blindness peeps!) and yellow is never visible.

Perhaps avoid a certain popular plotting package altogether. In any case, you very likely are using a pirated version. Shame on you!

Do you really need six panels? Does the journal tell you to limit the number of figures?

The axes are all the same? No need to keep repeating the same tick and axes labels.

It's a semilog or log scale. The axis label should not say "log(value)". If you don't understand this, think!

Redundant coding peeps!

The panels in a figure: they would be (a), (b), etc. Not A, B, etc. Nor a, b, etc.

The panels labels: (a), (b), should be in the same location within every panel.

Subplots should be the same size and aligned properly. A popular plotting program does a poor job of this.

Insets should not suffer smaller text sizes in the axis and tick labels. Do you really need that inset?

The number of major and minor ticks should be appropriate, and not excessive. A popular plotting package violates this rule. Why IS the package popular?

Squares are good.

A good graphic should be portable; equally usable in pptx, a report, a proposal, a publication...

Square (that means I'm done).