

Data

- The type of the graphic is adapted to the nature of data (curve, bars, pie, histogram, cloud...);
- Approximations/interpolation make sense;
- Curves are defined by a sufficient number of points;
- The building method of the curve is clear : interpolation (linear, polynomial, regression...);
- Confidence intervals are visualized (or given separately);
- Steps of histograms are adequate;
- Histograms visualize probabilities (from 0 to 1).

Graphical objects

- Graphical objects are readable on screen, on printed version (B/W), on video...;
- Graphic range is standard, without too similar colors, without green (video);
- Graphical axis are well identified and labelled;
- Scales and units are explicit;
- Curves cross without ambiguity;
- Grids help the reader.

Annotations

- Axis are labelled by quantities;
- Labels of the axis are clear, and self contained;
- Units are indicated on the axis;
- Axes are oriented from the left to the right and from the bottom to the top;
- Origin is $(0, 0)$, if not it should be clearly justified;
- No hole on the axes.

Annotations (2)

- For bar graphs/histograms order of bars is based on classical ordering (alphabetical, temporal, from the best to the worse) are better than a random order;
- Each curve has a legend;
- Each bar has a legend;

Information

- Curves are on the same scale;
- The number of curves on a same graph is small (less than 6);
- Compare curves on a same graphic;
- A curve cannot be removed without reducing the information;
- The graphic gives a relevant information to the reader;
- If the vertical axis shows averages, it should indicate error bars;
- It is not possible to remove any object without modifying the readability of the graphic.

Context

- All the symbols are defined and referenced in the text;
- The graphic produces more information than any other representation (choice of the variable);
- The graphic has a title;
- The title is sufficiently self contained to partially understand the graphic;
- The graphic is referenced in the text;
- The text comment the figure.

Enfin : The graphical representation should be elegant