

# JEEG guideline for display items

Experiences show display items (figures, illustrations, tables, *etc.*) have the most impression on the reviewers' decision; also, many readers look only at your display items to decide whether to read the main text of your manuscript. **Therefore, in every aspect, all display items MUST have a high-quality and professional appearance; otherwise, we can NOT let the manuscript undergo a review process.** Please ensure all display items follow the JEEG guideline for display items.

**NOTICE:** **Bolded and underlined texts** are the most common issues in manuscripts that lead to technical check fail and returning manuscripts to authors for resolving them, which consequently causes a delay in initiating reviewing process.

a) JEEG categorizes all display items into two main categories: figures and tables

- Figures include but are not limited to, *e.g.*, images like the magnetic field, maps, schematics, *etc.*, or line art such as graphs, data plots, *etc.*
- All figures and tables must have an individual caption.
- A figure can contain only one or a combination of several items presented side-by-side or stacked.; they are technically called a single figure and a multipanel figure, respectively. **JEEG and this guideline refer to a single or multipanel figure as a "figure" unless specifically mentioned only one.**
- Figure file formats of PostScript (PS), Encapsulated PostScript (.EPS), Tagged Image File Format (.TIFF), and Portable Document Format (.PDF) are now unacceptable. **Only use JPEG or Portable Network Graphics (.PNG) formats** (.JPEG is the best).

b) Figure size: consider an imaginary frame that surrounds a single/multipanel figure; the following MUST be its final size

- **Width: can NOT be wider than 88 mm (3.54 in) or 181 mm (7.16 in) for single/multipanel figures that are supposed to fit in a single column or a page wide, respectively.**
- **Height: A single/multipanel figure PLUS its caption can NOT be higher than 216 mm (8.5 in).**
- **The maximum size of a single/multipanel figure PLUS its caption MUST be 181 x 216 mm (7.16 x 8.5 in); therefore, when creating a single/multipanel figure, you MUST consider the space needed for its caption.**
- **A figure can NOT violate the aforementioned maximum size under no circumstance; therefore, it is authors' duty to modify a figure in a way (*e.g.*, dividing a figure into several figures, *etc.*) that the maximum size of all single/multipanel figures PLUS their caption is equal or less than 181 x 216 mm (7.16 x 8.5 in).**
- **For the reviewer-friendly manuscript, single/multipanel figures, tables, and captions MUST be embedded in the main text.** They should be placed closest to the first mention in the text.
- **A single/multipanel figure, table, and caption MUST be on the same page for the reviewer-friendly manuscript. They can NOT separate in pages.**

## c) Resolution (DPI) of figures:

- **containing images (e.g., the magnetic field, maps, schematics, etc.) It MUST be at least 300 dots per inch (DPI).**
- **with line art (e.g., graphs, data plots, etc.) It MUST be at least 600 DPI** (1200 DPI is preferred).
- **If a multipanel figure includes a combination of images and art line panels, the figure should meet the stricter guidelines. Thus, the resolution of all panels MUST be at least 600 DPI** (1200 DPI is preferred).

## d) Font size and font weight:

- All labels (e.g., axes' numbers and labels, bars' numbers and labels, map legends, etc.) MUST be in **the same eight-point font with normal (regular) font weight** (sans serif font such as Arial or Helvetica is preferred).
- **Lettering within single/multipanel figures (e.g., contour labels, annotations, locations' names, etc.) MUST be legible, not too large or too small in the same font with normal (regular) font weight** (six-point sans serif fonts such as Arial or Helvetica are preferred).

## e) Labels

- **Each axis, column of a table, or bar (e.g., color bar) MUST have a label.**
- **The first letter of labels MUST be capitalized.**
- **If a label has a unit, the unit must be declared in parenthesis immediately after the label with one space between them and the same font size and weight of the label.**
  - For example, Time (s)

## f) Legend

- **If a single figure or a panel of a multipanel figure has several items (e.g., two lines with different colors, symbols, etc.), a legend MUST be added to the figure or panel.**
- If more than one panel of a multipanel figure holds similar items, instead of a legend for each panel, one legend for all panels can be used, but it should be in a place that is obvious it belongs to all panels, not one.

**g) All units (e.g., units of axes and bars labels, legends units, etc.) MUST be declared within parentheses and consistent with the main text.**

**h) The figure's style, font, size, and format MUST be consistent with those in other figures.**

*j)* For multipanel figures:

- **Each panel must be labeled alphabetically with this format: a letter followed by a right parenthesis (no space between them) in the same eight-point font with boldface font weight.**
  - For example, **a)** or **b)**
- Label consecutively left to right and top to bottom.
- **Each panel label MUST be placed in the upper-left corner of a panel or upper-left corner of an image.**
- **A panel label can NOT be inside (within) a plot, image, map, etc.**
- **A multipanel figure MUST be displayed and submitted as one file (e.g., each panel cannot be displayed or submitted as an individual file).**
- **Each panel MUST be addressed in the figure's caption based on this format: first mention the panel label in parentheses (e.g., (a), (b)), then its corresponding explanation.**
  - **Figure 5.** The synthetic data (a) with random and (b) coherent noise.
- **Each panel MUST be referred to in the main text. If you cannot refer each panel in the main text, it means that panel is redundant, and it should be removed.**

*j)* Maps

- **All maps MUST contain 1) latitude and longitude coordinates' axes and 2) scale bars.**
- Latitude and longitude coordinates MUST be in one of these formats: 1) Degrees Minutes Seconds (D° M' S"), 2) Decimal Minutes (D° M.M'), or Decimal Degrees (D.D°).
- An indication of the hemisphere MUST follow latitude/Longitude. N and S indicate the Northern and Southern Hemispheres (North and South of the equator,) respectively. W and E indicate an area in the West and East of the Prime Meridian, respectively.
- Using a reference coordinate system other than the World Geodetic System 1984 (WGS84) MUST be mentioned in the figure caption.
- **Essential items (e.g., survey lines, symbols, etc.) MUST be labeled and MUST defined in the legend.**

*k)* Figure/Table Caption

- All figures and tables MUST have appropriate and sufficient **12-point Times New Roman font captions.**
- **Captions MUST be self-explaining and make readers understand the significance of the figures/tables at first glance without referring to the related text in the manuscript.**

- The captions **MUST** be brief and provide a comprehensive explanation to help interpret the meaning of the underlying results.
- **Because captions MUST be self-explaining; therefore, all abbreviations in captions MUST be spelled out in first use in captions, even if they appear in the main text or abbreviations list.**
- Captions **MUST** be written in a complete sentence, starting with conventional capitalization.
- **Captions MUST be placed under the figure and are left justified; however, for tables, captions MUST be placed above the table and aligned to the left.**
- **Captions MUST start with the word Figure/Table followed by figure/table number and end with a period, all boldface, followed by the explanations with a normal (regular) font weight.**
  - **Table 4.** Comparison of estimated and known target parameters.
- **For multipanel figures, each panel MUST be addressed in the figure's caption based on this format: first mention the panel label in parentheses (e.g., (a), (b)), then its corresponding explanation.**
  - **Figure 5.** The synthetic data (a) with random and (b) coherent noise.
- The data sourced from other publications **MUST** be cited within captions as appropriate.

**I) Referencing figures/tables within the main text**

- When referencing a table within the main text, **MUST** be used the word "Table" followed by the table(s) number(s).
  - ... Table 5 and 6 show ...
  - Table 3 shows ...
- **When referencing a figure or more than one figure, MUST use the abbreviations "Fig." or "Figs." followed by the figure(s) number(s), respectively.**
  - ... model in Fig. 12 shows ...
  - ... models in Figs. 12 and 13 show ...
- **For referencing a panel or more than one panel in multipanel figures, MUST be used the abbreviation "Fig." or "Figs." followed by the figure(s) number(s) and each panel label in parentheses, respectively.**
  - ... Fig. 1(a) shows ...
  - ... Figs. 1(b) and 1(c) ...
  - ... Figs. 2(d) and 3(d) ...
  - ... Figs. 4(a)-(d) ... (**exception**)
- **Always at the beginning of a sentence, MUST spell out the word "Figure" or "Figures" followed by the figure(s) number(s) for referencing a figure or more than one figure, respectively.**
  - Figure 4(d) shows ...
  - Figures 2-5 show ...

**In the end, all in all, do all figures in the manuscript have a high-quality and professional appearance? If the answer is no, unfortunately, we cannot even let the manuscript undergo a reviewing process.**