

Supplementary materials

We present necessary materials to accompany the paper "*What Makes a Data-GIF Understandable?*".

- This document describes all the supplementary materials and provides the analysis on the effects of duration to complement the discussion in Section 6.2.
- The "GIFs" folder contains 20 data-GIFs used in both qualitative and quantitative study, 11 of which are named in correspondence to figures in the paper.
- The "overview.xlsx" presents an overview list of these 20 GIFs & metadata.
- The "online-study.pdf" describes the procedure and the questionnaires used in the online study.
- The "stimuli.html" presents 20 evaluated GIFs and their associated metadata, including the titles, the sources, how they were encoded in our proposed design space, and the comprehension questions & answers posed to the participants.

In addition, all materials including the entire GIF corpus, labeled design space, and these supplementary materials for interviews and online studies are available online: <https://data-gifs.github.io/Data-GIFs>.

Analysis on the effect of duration

The scatter plot below is created to show the relation between the duration and comprehension of these 20 evaluated GIFs. From the figure, the duration of a GIF can affect the comprehension, and we can roughly see that GIFs with relatively long duration are likely to have a high accuracy. Future studies can investigate the impacts of duration on comprehension of GIFs deeply.

