Access and display

When you deposit data interested researchers must be able to easily access them and then find the relevant data for their research among the whole set.

Accessing data

According to your practices

- You found data in a scientific article and want to access them;
- You use search engines to search directly for data;
- You monitor research data.

Example

- You can access data retrieved from an article via a unique link (persistent identifier);
- You can directly access data from the search engine of a data repository or catalogue;
- You can access data via a data paper.

Did you know?
Your data's accompanying **metadata** must **always** remain **accessible** even if your data are in restricted access. This contributes to compliance with the FAIR principles.

Visualising data to explore them

Facilitating access to data

Visualisation is a **more intuitive**, exploratory way of accessing data. It brings out certain salient details and can open up **new lines of research**. Visualisation may be necessary for very **large quantities of data** that are difficult to access using conventional research methods.

Examples

Certain files can be previewed directly in the interface of the multi-disciplinary Recherche Data Gouv repository without downloading them.

Using tools

Several visualisation tools are available including the CorTexT and Gargantext platforms and the Gephi, Kibana and Omeka S software.

Omeka S was used to create a digital library for the Centre Camille Julian's archaeological documentation which enables users to browse archaeological collections and resources.

For researchers depositing data

- **Properly describe your data** when they are deposited with sufficiently **complete**, accurate and appropriate **metadata**;
- **Use** repository data description schemas and **standards**;
- In published articles clearly indicate the **persistent identifier of the data** deposited in the repository;
- Ideally, publish a data paper to communicate about data availability.

For data repositories

- Provide a clear, ergonomic interface that is adapted to the type of data;

For example, some repositories use visualisation tools to enhance their search engine. This is particularly the case of repositories containing geolocalised data which often offer a cartographic access mode (e.g. Pangaea).

- Use recognised and clearly explained metadata standards.

For researchers looking for data

Find useful repositories by consulting repository directories (e.g. Re3data), catalogues (e.g. Cat OPIDoR) or meta-search engines (e.g. Google Dataset Search);
Identify the relevant data journals.

Visualising data to explore them

Visualisation is increasingly necessary for large quantities of complex data that are difficult to understand. The Recherche Data Gouv repository interface's **Data Explorer** tool can be used to explore tabulated data. It offers graphical or tabular representations for cross-analysis of the data in a file or a subset of that data. Such representations are obtained by selecting the variables to be taken into account. This tool can also be used to download the data or the subset you are studying.