

Once data have been processed into a vulnerability assessment, it is important to organise them into tools for vulnerability analysis and representation. Tools must be able to transmit information and communicate about the vulnerability profile of a territorial area, becoming supports for decision making processes. Which instruments for the data visualisation can be found in the ENSURE documents?

We mainly make reference to data tables, graphs, diagrams, maps and to other, more recent, simulation and 3D images. Of course, apart from the visualisation tools, the quality of information depends on the quality of data sources and on the processes by which indicators are selected and elaborated for knowledge making.

The main source of information is in file F22 in module 2, where you can find methodological elements for a better understanding of visualisation tools, which are summarised as follows.

Information visualization: graphs and maps, whether static or dynamic that provides some means to see what lies within, determine the answer to a question, find relations, and perhaps apprehend things which could not be seen so readily in other forms. The term information visualization is generally applied to the visual representation of information.

Scientific visualization: This area is primarily concerned with the visualization of 3-D+ phenomena (architectural, meteorological, medical, biological, etc.), where the emphasis is on realistic renderings of volumes, surfaces, illumination sources, and so forth, perhaps with a dynamic (time) component.

Data visualization: The science of visual representation of "data", defined as information which has been abstracted in some schematic form, including attributes or variables for the units of information. This topic could be taken to subsume the two main foci: statistical graphics, and thematic cartography. Both of these are concerned with the visual representation of quantitative and categorical data, but driven by different representational goals. Cartographic visualization is primarily concerned with representation constrained to a spatial domain; statistical graphics applies to any domain in which graphical methods are employed in the service of statistical analysis. In addition, cartography and statistical graphics share the common goals of visual representation for exploration and discovery. These range from the simple mapping of locations (urban settlements, rivers, etc.), to spatial distributions of geographic characteristics (species, diseases, ecosystems), to the wide variety of graphic methods used to portray patterns, trends, and indications.

You can also see files F40 and F41 in module 4 with some case studies for vulnerability in time and space, paying attention to the use of data, indicators and representation/visualisation tools.

Of course you can find many examples in the ENSURE's final case studies in module 4.