Episode definition



Description and brief background of the EPISODES Platform's episode.



BACKGROUND

Thematic Core Service Anthropogenic Hazards (TCS AH) aims to integrate distributed research infrastructures (RI) to facilitate and stimulate research in the area of anthropogenic hazards (AH), especially those associated with the exploration and exploitation of geo-resources. To fully describe anthropogenic phenomena, one cannot focus on one type of data only. TCS AH requires sets of data coming out of several sources. Thus, by necessity those are provided for the user as a whole and grouped within so called episode.

SHORT DESCRIPTION

Episode comprehensively describe a geophysical process; induced or triggered by human technological activity, which could pose a hazard for populations, infrastructure, and the environment.

COMPREHENSIVE DESCRIPTION

Episode is a comprehensive data description of a geophysical (e.g. deformation) process, induced or triggered by technological activity, which under certain circumstances can become hazardous for people, infrastructure and the environment. The episode consists of a time-correlated encapsulated collection of geophysical data representing the geophysical process, technological data representing the technological activity, which is the cause of this process and all other relevant geo-data describing the environment, in which the technological activity and its result or by-product, the geophysical process take place. Episodes are enriched by services, uniquely designed for the analysis of correlations between technology, geophysical response and resulting hazard. Bind together within an IT environment enables for easy access to the episodes' data, analysis via integrated software and advanced visualization of data and their products (Figure 1).

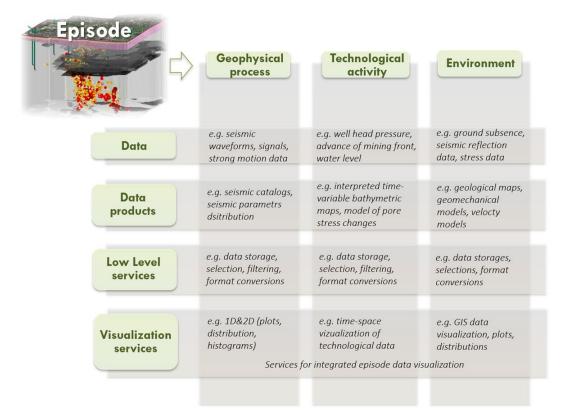


Figure 1. Data, data products and services describing episode.

Each episode is assigned to one or more of the following Impacting Factors:

CO₂ Sequestration

EPOS Thematic Core Service Anthropogenic Hazards

- Conventional hydrocarbon extraction
- Geothermal energy production
- Reservoir impoundment
- Unconventional hydrocarbon extraction
- Underground gas storage
- Underground mining
- Wastewater injection

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