



**EarthPress- enabling Artificial Intelligence
for real-time generation of News articles
related to disasters based on
Earth Observation (EO) data**

What is SnapEarth?

SnapEarth is an EU H2020-funded project that aims to facilitate the access to Earth Observation (EO) data both for EO service creators and for the general public. Today, Earth Observation (EO) data are freely available in large quantities. However, the main obstacle to their use by the general public is that these data are sometimes hard to access, as they are not currently highlighted by search engines and their retrieval is mainly addressed to experienced professionals. Also, EO service creators face difficulties in handling EO data, due to their vast amount, making thus necessary efficient computing and the use of highly flexible deployment environments.

Within **SnapEarth**, a platform is developed that operates in a cloud environment and is designed to address the huge volume of data issues, produced from EO satellite missions, to process them and extract useful information and make this data easily accessible. This platform supports the retrieval and processing of EO data by performing segmentation on EO images and providing semantic maps for land cover classification and features description, and enables also any service creator to take advantage of highly scalable cloud environments for the analysis, visualization and production of EO value-added services. SnapEarth focuses mainly to users who want to create their own solutions based on EO data, or use ready-made products derived from satellite data.

In the framework of SnapEarth project, the **EarthPress service** is implemented, aiming to facilitate journalists and editors to enrich the content of their publications.

EarthPress

The traditional synthesis of an article, based on analyzing and filtering large data sets for the purpose of creating or elevating a news story, has become nowadays more complicated and time consuming. With the rise of new deep learning and big data technologies, data from different modalities like EO images, articles, posts from Twitter can be used to provide new automatic tools for Media services and finally create new technological breakthroughs in journalism.

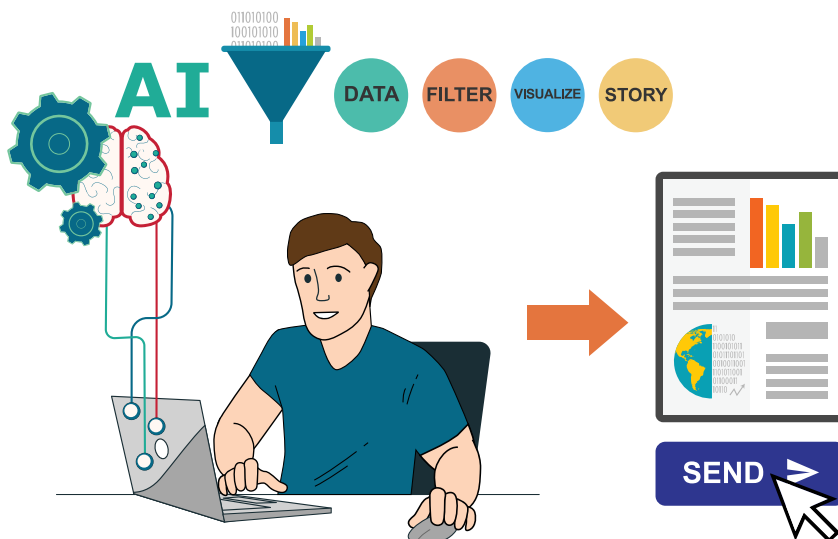
EarthPress is a web-based platform that targets the field of **journalism**. It aims to provide services to **editors and journalists**, allowing them to enrich the content of their publications and articles with EO data, by providing an almost ready to be published article.

The focus of EarthPress is **disasters' reporting** (e.g. floods, fires, drought, pest, earthquake, erosion/ sedimentation, avalanche). A report with the before/after depiction of a disaster is generated and accompanied by rough statistics on the impacted area (e.g. surface, type of land cover/ land use affected) and EO images depicting the affected areas. This report is enriched with data collected from citizens journalism posted on social networks, including textual information, multimedia and processed EO images and numerical data concerning the damage that has occurred due to a disaster, e.g., the damage (in percentage) occurred in a building after an earthquake.

EarthPress supports the **Media & Press Industry** with a set of valuable tools and services for Earth-related event reporting. It is a service that:

- provides access to multimedia data from multiples sources;
- detects automatically breaking news related to disasters;
- distinguishes real from fake news;
- extracts and present useful information and statistics from geospatial data;
- provides changes in land cover in the form of information layers;
- synthesizes ready to print AI generated article tailored to the user's profile;
- provides all the above in a single platform;
- reduces time needed for publishing news articles.

By providing an almost ready to be published article, **EarthPress** allows editors and journalists to spend their time on trimming and finalizing the generated article, therefore reducing the time spent on writing an article.





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