



## **Geolokit FOSS: a new Free Open Source, Cross-Platform Software for geological data visualization in Google Earth environment**

Antoine Triantafyllou (1), Arnaud Watlet (2), Thomas Lecocq (2), and Christophe Bastin (3)

(1) Laboratory of Planetology and Geodynamics, University of Nantes, Nantes, France (antoine.triantafyllou@univ-nantes.fr), (2) Seismology-Gravimetry, Royal Observatory of Belgium, Brussels, Belgium, (3) Department of Fundamental and Applied Geology – Mining Geology, Université de Mons, Belgium

GIS software are today's essential tools to gather and visualise geological data, to apply spatial and temporal analyses and in fine, to create and share interactive maps for further geosciences investigations. Several GIS software solutions exist, being a must have in teaching geosciences but might seem too complex to apprehend for young undergraduate students.

For that purpose, we developed Geolokit ([www.geolokit.org](http://www.geolokit.org)): a free and lightweight software that allows geoscientists – and every scientist working with spatial data – to import their data (e.g., sample collections, structural geology, cross-sections, field pictures, georeferenced maps), to handle and to transcribe them to Keyhole Markup Language (KML) files. KML files are then automatically opened in the Google Earth virtual globe and the spatial data accessed and shared. It consists of a user-friendly toolbox accessible through a graphical user interface, designed to run in parallel with Google Earth, with no need of any third party software, except Google Earth itself. Geolokit 1.0 is increasingly used, especially in classrooms for teaching purposes. However, such software needs to be fully opened to ensure its sustainability. This is why we present today a new outgrowth of this project with the Free/Libre and Open-Source Software (FOSS) version of Geolokit available on Gitlab. This is addressed to geosciences students with programming skills who want to go further than what Geolokit 1.0 proposes but above all, to geosciences teachers who want to adapt the Geolokit capabilities to their education program.

We are looking for you to discover all the functionalities of the new FOSS version of Geolokit. As this project is still under development, we are definitely looking to discussions of your proper needs and ideas, especially for a better integration for teaching purposes and maybe, you would be interested in joining the Geolokit project!