## Geo-INQUIRE training event:

## "Generating earthquake slip on complex geological faults: combining EFSM20 and k223d/ANTI-FASc"

(Nov 4th, 2024 9:00-12:00 am CET)

The training will be divided into three parts:

- 1. provide an overview of mapping geological faults, the European Database of Seismogenic Faults (EFSM20), and how to use it
- stochastic slip distributions and how to generate individual kinematic slips using the EFSM20 database
- 3. Application of stochastic slip ensembles for tsunami modeling, with a focus on the Tohoku earthquake along the Japan Trench.

Each section will run for 50mins with a 10min questions and break between sections. The aim will be to mix some theory with demonstrations in each section. For all three sections there will be the possibility of hands on interaction at the same time as we are demonstrating the software. If you wish to avail of this opportunity please download the following software:

- The free and opensource software **QGIS**, this will be used for the EFSM20 demo in the first part of the training event (https://www.qgis.org/); the long-term version (3.34 LTR) is recommended.
- For the second part, **K223d** Training Container has been created and can be found at: https://hub.docker.com/repository/docker/shanemurphy190/k223d/general, on the website instructions are provided as to how install the container. If you have difficulty installing it you can e-mail shane.murphy@ifremer.fr for help.
- For the third part, the software pyANTI-FASc will be used, it is available at:
   https://github.com/antonioscalaunina/pyANTI-FASc. Installation instructions for various operating systems can be found in the README.md file. If any issues are encountered, assistance can be sought by sending an email to antonio.scala@unina.it or by opening an issue on the repository.

We will also be available 15min before the start of the class to help with installations as well (i.e. from 8:45 CET)

Looking forward to seeing you on Monday!

All the best.

Roberto, Andre, Antonio, Rita, Shane