TRack Your ATmosphere: Open Learning Materials for Vocational Education and Training

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Within the framework of the ERASMUS+ program Key Action “Cooperation for innovation and the exchange of good practices” with an Action Type “Strategic Partnerships for vocational education and training”, our project TRack Your ATmosphere (TRYAT) was approved in August 2017 and is co-funded by the European Union. The project’s total duration is 35 months and the participants are teachers, researchers, and students from three vocational schools and Research/University Institutes in France, Germany, and Italy.

The research objective of TRYAT is a combination of the processing and analysis of Global Navigation Satellite Systems (GNSS) data and monitoring of environmental parameters for Vocational Education and Training (VET). Permanent high-precision GNSS stations currently operate for geodetic purposes, e.g., earthquake and volcano monitoring. We want to capitalize and highly disseminate the fact that they also offer a reliable tool for remote sensing of atmospheric water vapour.

Our project includes the acquisition of both meteorological and GNSS data so that students can participate in the scientific high-precision measurement campaign. In parallel, they also build their own low-cost GNSS receivers and evaluate and interpret the collected data. The project aims thus at building bridges from forefront research to practice-oriented learning and from scientific measurement and analysis to open knowledge citizen science. This may include developing research questions, designing methods, gathering and analysing data, and communicating results.

In this work, we will present the actual state of the project and the achievements in the previous year. We will show what has been done for each Intellectual Output (IO) proposed within TRYAT project. In particular, we describe the installation and the preliminary data from the three GNSS stations on the roof of the Lycée Saint Cricq (Pau, France), Lise-Meitner-Schule (Berlin, Germany) and Istituto Leonardo da Vinci (Naples, Italy) buildings respectively. Moreover, we present the web-based Learning Platform (IO1), Starter Kit (IO2), Learning Material (IO3 and IO4) and Educational Videos (IO5). Finally, we will report on the dissemination activities carried out hitherto.