

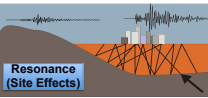
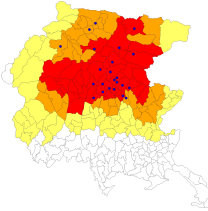
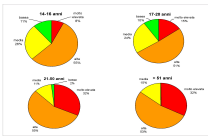


# PRESS40: a project for involving students in active seismic risk mitigation

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## OVERVIEW



### THE INVESTIGATED SCHOOLS

- Ampezzo, Scuola Secondaria I grado
- Artegna, Scuola Secondaria I grado
- Buigi, Scuola Secondaria I grado
- Forgaria nel Friuli, Scuola Secondaria I grado
- Gemona del Friuli - Piovega, Scuola Primaria
- Gemona del Friuli - Cappelletto, Scuola Primaria
- Magnano in Riviera, Scuola Primaria
- Majano, Scuola Secondaria I grado
- Moggio Udinese, Scuola Secondaria I grado
- Montebelluna, Scuola dell'infanzia
- Nimis, Scuola Secondaria I grado
- Coppo, Scuola Secondaria I grado
- Paluzza, Scuola Secondaria I grado
- Ponterebba, Scuola Secondaria I grado
- Rainald del Regino, Scuola Secondaria I grado
- San Daniele del Friuli, Scuola Secondaria I grado
- Sutrio, Scuola Primaria
- Tarvisio, Scuola Secondaria I grado
- Tolmezzo, Scuola Secondaria I grado
- Trisaghis - Alzico, Scuola Secondaria I grado
- Treppo Grande, Scuola Primaria
- Tricesimo, Scuola Secondaria I grado
- Venezia, Scuola Secondaria I grado

To memorialize the anniversary of the 1976 Friuli earthquake the Istituto Statale di Istruzione Superiore "Magrini Marchetti" in Gemona del Friuli, with the collaboration of OGS, has promoted the PRESS40 Project (Seismic PREvention at School 40 years after the Friuli earthquake)

The project has developed in the 2015-2016 school-year to disseminate historical memory, seismic culture and awareness in the young generations, too often unconscious of past experiences, as recent seismic hazard perception test have demonstrated

The senior classes (75 students) have been involved, under the supervision of their teachers and seismologists, in experimental activities to be active part of seismic mitigation process

Lectures by seismologists and specific laboratory activity allowed the classes to exploit different aspects of the physics of the earthquake and particularly of the site effect and methods to detect it

They applied the passive method (ambient noise recordings) to define the site response of significant sites, the school area of their hometown

23 municipalities have been investigated; they represent the wide area affected by 1976 Friuli earthquake. At least, 127 measurements of ambient noise have been acquired

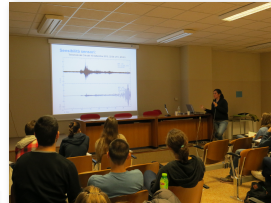
The OGS supported the students in the field work and data processing, providing instrumentation and software

The results of the geophysical survey will be presented by the students to the younger ones of the monitored schools

## HOW TO MAKE A GEOPHYSICAL SURVEY AT SCHOOL

**Step 1: Getting started**

- Improve knowledge on earthquake phenomena
- Understand the existence and importance of the site effects
- Get familiar with seismological instruments



**Step 2: Field work**

- 23 municipalities investigated
- Data acquisition in selected sites (SCHOOL BUILDINGS)
- Report on each site



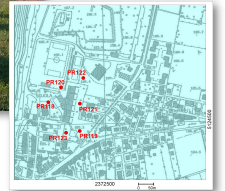
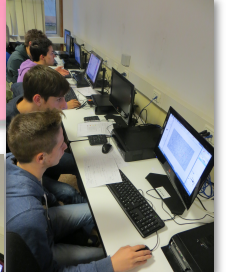
**Step 3: Data processing**

- Become familiar with software that reads and computes the analysis
- Understand the meaning of the processing
- Increase the quality of the results



**Step 4: Results**

- Plot the results
- Interpretation of the results to define the site amplification



**...in progress!**

- The interpretation step needs more geological information
- Students are presenting their experience to younger students (those in studied sites)
- In occasion of events to commemorate the 40<sup>th</sup> anniversary of the Friuli earthquake (May 2016), the students will present the results to the citizens

## THANKS TO

- All the students that joined and enjoyed this activity.
- The school manager, all the teachers and not, who supported this project.
- Everyone who in various capacities has been involved in this activity.
- Angela Sarab and Laura Peruzza for keeping spirit high...



**Last Minutes!**  
The students presented the Project at national Selection for the **European Union Contest for Young Scientists**, held in Milan on 9-11 April, 2016.

