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6 May 1976 Friuli Earthquake – Re-evaluation of Macroseismic Data, a New Map and Comparison With Old Intensity Estimates

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Forty years after a devastating earthquake sequence, that has demanded almost 1000 lives and destroyed towns and villages in Friuli and adjacent regions, we have decided to take another look at the macroseismic data using the EMS-98 scale. Although four decades are not, historically speaking, a long period, and the quantity of existing data can be measured in hundred of kilograms of paper (questionnaires, damage analysis, newspapers, studies etc.) it was disturbing to find out that many of the original data are already missing and are probably lost forever. Effort was put into finding additional and yet unknown primary data, e.g. photographic material of damaged localities and eyewitness' reports.
The earthquake was felt in large part of Europe. For IDPs with only low intensity values (especially in Switzerland, Hungary, Czech Republic, Poland) it was decided that the data will be included into the joint dataset without the EMS re-evaluation. For IDPs with higher intensity (especially in the countries closer to the epicentral region like Austria, Croatia, Germany – ex West and East part separately, Slovenia) the re-evaluation was performed. A particular and more complicated case concerns Italian data: the two main current Italian catalogues record two different data sets, both in IDPs number and in intensity values. Due to the methodological differences in a number of cases the EMS intensities are different than the previous MSK or MCS ones.
The presentation will discuss the particular interesting cases of differences between old and new intensity estimates, as well as give detailed insight into the collected data.