

Interactive comment on “Shallow subsurface geology and seismic microzonation in a deep continental basin. The Avezzano Town, Fucino basin (central Italy)” by Paolo Boncio et al.

Anonymous Referee #2

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GENERAL COMMENTS

This paper has only applicative interest because it focuses on the Level 1 SM, which is a routine practice in Italy.

SPECIFIC COMMENTS

They write: "25 The Fucino basin is a Quaternary graben" but, strictly speaking, the section of figure 1b does not show a graben. Then, in Fig. 1b the trace of the section intersects 5 red faults, but the section below shows 6.

They write that "the SW-dipping Fucino fault system [...] borders the basin towards the east" and "the basin depocenter is localized towards the eastern margin". Rather, it

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borders the basin towards the NE, and they refer to the north-eastern margin.

"Pleistocene medium-to coarse-grained fluvial, alluvial fan, and slope-derived deposits are interfingering with lacustrine sediments (Fig. 1b)". Non visible in the figure.

"from 1400 and 2600 yrs" from 1400 to 2600 yrs (?). However, $33 \text{ kyrs}/9 = 3666 \text{ yrs}$. So, "from 1400 to 2600 yrs" does not work. Thus?

I think they used Lennartz 3D/5 sensors. Please mention the used instrumental chain also in this paper, to ensure the reader that detected frequencies $< 1 \text{ Hz}$ are reliable.

TECHNICAL CORRECTIONS

The Mt. Parasano and Mt. Serrone ridge and the Val Roveto are not shown in the figures.

Fig. 4 is mentioned before Figs. 2 and 3. Change their order.

"(silt and clay, Fig.1b)" are not shown in Fig. 1b.

Several cases of irregular spacing throughout the text.

The SDTM and the dynamic penetration test, shown in Fig. 3, are not mentioned in the text

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