Interactive comment on “New developments in ambient noise analysis to characterise the seismic response of landslide prone slopes” by V. Del Gaudio et al.

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With regard to Referee #1 comments, his main objection concerns the scarcity of information on the study site geology, topography, structural and slope stability characteristics. Preliminarily, we underline that the main focus of this study is on the use of seismic noise analysis to characterise the slope dynamic response to seismic shaking as possible factor favouring the triggering of mass movements, rather than on the characteristics of the expected mass movements. Thus a kinematic analysis of slope evolution is beyond the scope of the present work. However, in our revision (uploaded on 22 June, 2013) that followed the Referee #2 comments, we had already provided some integration about aspects of local geology, particularly those related to the hydrogeological setting, considering its possible influence on slope dynamic response. Now we provided some additional integration, including a representative geological cross-section of the slope where the main noise recording sites are located. In any case, we also made reference to our previous papers where the study site geology is described in more detail (with some other geological cross sections).

As far as other observations are concerned, we complied with Referee requests. With regard to the request of a justification for the statement on the limitation of analysis of microseismic signal to frequencies above 0.3 Hz (P.1323 L.8), actually the explanation is provided in the previous section while discussing the possible bias in directivity analysis deriving from the existence of oceanic sources of polarised noise propagating for thousands of kilometres. However we added a sentence to recall this argument in the commented phrase.

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Fig. 1.