

Editor comments and author responses

Thank you for your comments on our manuscript. Please find comments below.

5 On a final read through, we have made some very minor adjustments to the text to improve the flow and clarity. We hope these very minor changes are acceptable. These are (changes in italics):

- amended one line of the second paragraph of the introduction (line 31) from “by characterising the subsurface” to “(i.e., *characterisation of the subsurface*)”.
- changed “conceptual model creation” to “*conceptual site model*” in the first line (line 108) of Section 2.1.1 (Geological knowledge).
- added an instance of a reference (Whiteley et al., 2021) which was already in the reference list, to paragraph 1 of Section 2.2.2 (Data interpretation) (line 154).
- Split the long sentence at line 212 which read “Additionally, the work undertaken at natural observatory sites, such as the Hollin Hill Landslide Observatory (HHLO) while having taken many years of research to establish proof-of-concept geophysics-supported slope-scale early warning (Fig. 3), provide a blueprint for similar developments more rapidly at future sites, streamlining the application of geophysics for LoLEWS (e.g., Holmes et al., 2020).” This now reads “*Additionally, the work undertaken at natural observatory sites, such as the Hollin Hill Landslide Observatory (HHLO) while having taken many years of research to establish proof-of-concept geophysics-supported slope-scale early warning (Fig. 3). This provides a blueprint for establishing similar monitoring approaches more rapidly at future sites, streamlining the application of geophysics for LoLEWS (e.g., Holmes et al., 2020).*”

Editor comment

EC3-1 is the term "ground moisture" an appropriate term (i.e. does not get confused with soil moisture)? Perhaps you may use groundwater, but I am not sure that this is you intention. I am ok if you leave "ground moisture", but please make a check

25 AC3-1 We prefer the term “ground moisture”, as it doesn’t distinguish between water held in soil or rock environments, although we acknowledge that “soil moisture” is a more common term. We have added one short sentence in the introduction (line 20) to clarify this to the reader, and amended two instance of “soil moisture” later in the manuscript to “ground moisture” to be consistent (lines 182 and 183) . We avoid the term “groundwater” as there is a strong association between this term and

30 water beneath the water table, which is not the only source of water we aim to monitor.

EC3-2 in figure 1 add space between 'with' and 'thresholds' (FORECASTING)

AC3-2 Amended.