Nat. Hazards Earth Syst. Sci. Discuss.,
doi:10.5194/nhess-2017-24-RC1, 2017

Natural Hazards and Earth System Sciences
Discussions

Interactive comment on "Performance evaluation of the national Norwegian early warning system for weather induced landslides" *by* Luca Piciullo et al.

Anonymous Referee #1

Received and published: 13 February 2017

General comment / remark:

The early warning system (EWS) in Norway described in this paper is based on real-time observation of hydro-meteorological condition, landslide occurrence, pre-defined hazard threshold levels, landslide inventory and susceptibility maps. The system provides daily regional alerts and warnings on landslide throughout the country to the public through website (http://www.varsom.no/en/). Its performance during the operation period from 2013 to 2014 was evaluated and the results indicated that the performance was generally good with high rate of correct prediction and low rate of false alarm or missed events. Room for improvement in operation has also been identified and proposed. This EWS can be a good reference/example for other parts of the world

where rainfall-induced landslide warning system is needed and respective datasets, viz. real-time rainfall and landslide observation, susceptibility maps, landslide inventory are present.

Specific comments:

1. Some figures are unclear and difficult to read. Please improve the legibility of the figures as far as possible.

2. Currently, the warning levels are updated twice per day. Given that heavy rainstorms can develop rapidly, suggest to update at shorter time interval in some situation such that appropriate warning levels can be issued in time before landslide occurrence.

3. Some tables and figures are incorrectly referred in the text (e.g. "Table 2" in line 427 should read Table 4). Suggest the author to review all table and figure numbers.

4. "R" in lines 168 and 173 should read "Red".

5. "Tab." and "Fig." through the manuscript should read "Table" and "Figure".

6. The "Probability of serious mistakes" as one of the performance indicators in Table 4 has not been evaluated in subsequent sessions.

Interactive comment on Nat. Hazards Earth Syst. Sci. Discuss., doi:10.5194/nhess-2017-24, 2017.