Natural Hazards
and Earth System
Sciences

Discussions

EGU

Interactive comment on "Big data managing in a
landslide Early Warning System: experience from
a ground-based interferometric radar application"
by Emanuele Intrieri et al.

Anonymous Referee #2

Received and published: 21 August 2017

The authors submitted a work to present the role of GB-InSAR on an integrated system
for landslide monitoring. In particular, the early warning system architecture and the
data management are treated. The work is referred to the LEWIS project and it is
focused on a critical infrastructure in southern Italy (A16 highways).

Although the technology here presented is now well-known, the integration with other
monitoring technique and the development of EWS are interesting topics.

The objectives of the manuscript are clear and the paper covers an area of interest to
the journal's readership.

In order to improve the manuscript, I recommend authors to summarize the section with

irrelevant details for readers (eg. GB-InSAR features..) focusing on data analysis and
interpretation, also by adding some displacement time series. In addition, it is really
important to improve the conclusions, also by focusing on data integration for EWS.

Following, some specific comments and minor points to improve the text:

- Page 2, row 56: please replace "aerial" with "spatial"

- Page 2, rows 56-57: please replace "The installation was in an area where the only
internet connection available 57 was 3G" with "the monitoring area was covered by a
3G mobile telecommunication networks"

- Page 2, rows 61-83: these lines are very specific and of little interest to readers.
Please consider deleting these lines or inserting them in Section 3.3.

- Page 2, row 76: please change "where" with "were"

- Page 3, row 86: please change "ground-based interferometric synthetic aperture
radar" with "Ground-Based Interferometric Synthetic Aperture Radar (GB-InSAR)"

- Section 3.1: this section appears too long. Please consider reducing sentences and
adding a table with the technical specifications of equipment used (eg. Frequency,
Bandwidth, Range and Cross-range resolution, etc.).

- Section 4: please add more geological information (eg. materials involved) to better
frame the area under study.

- Page 8, row 250: please add space before "These"

- Fig. 1: please improve the quality of figure

- Fig. 3: please increase the font size

- Fig. 8: please insert the location of GB-InSAR instrument installed.

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

2017-178, 2017.

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