Interactive comment on “Geohazard risk assessment using high resolution SAR interferometric techniques: a case study of Larissa National Airport Central Greece” by F. Fakhri and R. Kalliola

Anonymous Referee #2
Received and published: 3 October 2014

Authors are trying to use InSAR and time-series InSAR analysis techniques to measure the ground deformation near the Larissa airport. The test site is important and may interest local people. However, I’m afraid that the authors have very limited knowledge or experience of InSAR image processing. Their results showed very little information about the deformation pattern. I can not accept this paper since the results are basically no support for their conclusion. I highly suggest authors co-operate with some InSAR expert and try to get a more reliable result since they have a very nice groundwater temporal and spatial distribution data. There are several general suggestions from my side, hope they will be help.

1. Page 4747 Line 23. Here, why did you cite this paper? You are talking about standard differential InSAR technique, not PS-InSAR right? And why did you cite the conference paper of Ferretti et al, 1999? They have many journal papers.

2. Page 4748 Line 5-15 It is a bit confusing for the readers that you are using Persistent Scatterers techniques with “Permanent Scatterers”. I strongly suggest the authors rewrite this paragraph and make it clear which techniques you are going to use.

3. what do you mean “normalized deformation rate”? the unit is mm or mm/a?

4. Page 4749, Line 10, what do you mean “the perpendicular baseline was too small for a precise analysis”? On the contrary, the baseline condition is very good for a precise analysis.

5. The images used are not high-resolution data.

Interactive comment on Nat. Hazards Earth Syst. Sci. Discuss., 2, 4743, 2014.