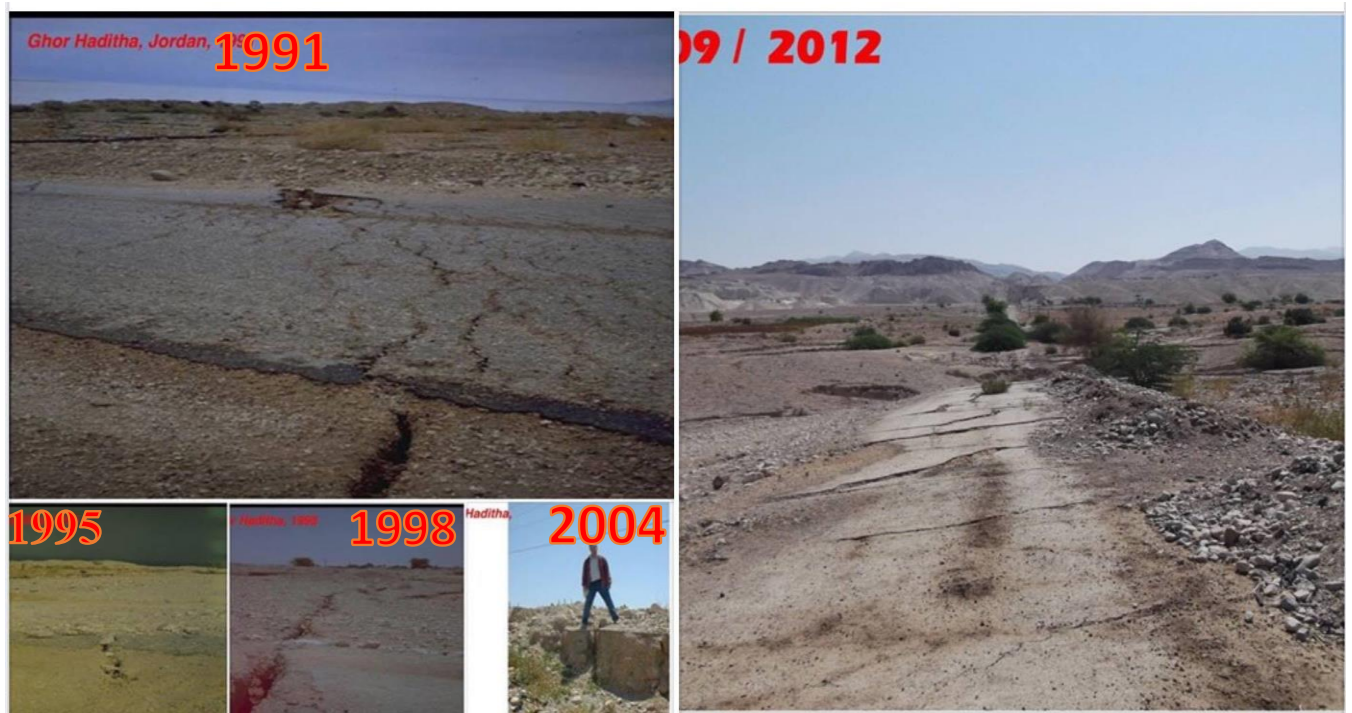


AC2 to RC2

Thank you for your valuable comments that will substantially improve our work. Your specific comments and suggestions will be fully taken into account in the final version of manuscript, as they were very useful and appropriate.

Our work is focussing on the Jordanian side of the Dead Sea (DS), and in particular in exposed areas showing increasing geomorphological and geological instabilities caused by the lowering of the DS water level started half a century ago. In these areas field studies were very few compared to the well supported western side of the DS. The title of the paper will be modified in the final version as we fully agree with the necessity of putting less emphasis on the vulnerability: the word “Vulnerability“ is replace by “Exposition“ in the title and the entire text will be fully adapted accordingly.

The number of self-citations will also be reduced, although the rather high number is justified by the fact that we have been working in this area since 1982. Specifically, our efforts focussed on the monitoring of subsidence and sinkholes issues since 1991 up to now, with the hope that the results of this extensive multidisciplinary/multicultural team work will be useful to fill the gap of information that is present in this part of the DS in respect to the western side.



Evolution in a road in Ghor Haditha 1991-2012

*Effects of the recent lethal accidents Oct. 25 2018 ( Which took place after the online appearance of the original submission of this paper Oct. 10, 2018)).*

We believe that this work in this particular time is an important factor to boost the interest of the planners and the decision makers in charge of the touristic infrastructures development of the zone up to the point of taking their responsibilities in a more effective way. Since The 10th of October 2018, the start of this discussion version of the paper appearing on this site, major accidents took place in the area shown on (figure 9 of the paper), 22 people most of them children lost their lives

19:53 Jeu. 25 oct. 84 %

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28 sur 30

Hydrol. Earth Syst. Sci. Discuss., <https://doi.org/10.5194/hess-2018-479>  
Manuscript under review for journal Hydrol. Earth Syst. Sci.  
Discussion started: 10 October 2018  
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[FIGURE 9]



*Figure 9: Example of a bridge along the Dead Sea motorway damaged by progressive erosion of the sediments. Similarly to Figure 8 A-B, all bridges along the coast are affected by the rapid incision of the river bed. Each year, the available energy released during erosion process is more important (square function)*

5



A partially damaged bridge which lost one of its pillars in Oct. 2017 leading to its partial closer. It totally collapsed on the 25th of Oct. 2018.

04/2018



Total Collapse 25-10-2018





Almost a month later on Nov. 18th a landslide swept part of an ongoing Dead Sea Beach 32 M\$ project with an estimated damage of about 350,000 \$.





The paper will be adapted according to most of your valuable suggestions and other reviewers' suggestions. Hoping that this will offer more valuable data to the international community and further enhance the awareness of the DS subsidence and sinkholes related hazards. Thank you all from all our team.