NHESS- Questions

1. Does the paper address relevant scientific and/or technical questions within the scope of NHESS?

Soil erosion is not a natural hazard. The paper states that there is a link between soil erosion and natural hazards, but it fails to highlight this link. The GIS methods introduced in the paper are fairly interesting for the common reader of NHESS

2. Does the paper present new data and/or novel concepts, ideas, tools, methods or results?

The introduced model is often used and therefore not new. There are no new methods of validation and interpretation of the data, only older methods used on the new map. And there have been maps of soil erosion for Europe before. The paper shows some important but more or less minor revision in the USLE. The climate ensemble seems new and appropriate for the main goal.

- 3. Are these up to international standards? The few new methods are quite good and up to international standards.
- 4. Are the scientific methods and assumptions valid and outlined clearly? The model is introduced correctly and at the state of the art. The comparison between physical and empirical models (1.1) is fine, but does not help the reader in understanding the main issue of the article. The outline of the input data and modeling architecture is good.
- 5. Are the results sufficient to support the interpretations and the conclusions? The interpretation section is rather short, but the results support them quite well.
- 6. Does the author reach substantial conclusions?

The conclusion section is rather short and more or less a second abstract. The drawn conclusions are general applicable for small-scale maps. The focus should be more on the new GIS-techniques.

7. Is the description of the data used, the methods used, the experiments and calculations made, and the results obtained sufficiently complete and accurate to allow their reproduction by fellow scientists (traceability of results)?

Some references are not available. For example the C-factor calculation is non-reproducible, because of the lack of proper already published references. The main part of the chapter better describes the methods quite well.

- 8. Does the title clearly and unambiguously reflect the contents of the paper? It is ok. The focus could be more on the new part of the method. Harmonization is grand goal. There are none but a few hints to achieve this goal in the paper.
- 9. Does the abstract provide a concise, complete and unambiguous summary of the work done and the results obtained?

The summary is good and well readable for a wider audience.

10. Are the title and the abstract pertinent, and easy to understand to a wide and diversified audience?

Yes, all well.

11. Are mathematical formulae, symbols, abbreviations and units correctly defined and used? If the formulae, symbols or abbreviations are numerous, are there tables or appendixes listing them?

There are now formula flaws in the paper.

12. Is the size, quality and readability of each figure adequate to the type and quantity of data presented?

There are too few figure and maps in the article to show the results. The figures are quite small and partly hard to read.

13. Does the author give proper credit to previous and/or related work, and does he/she indicate clearly his/her own contribution?

Many authors are quoted.

14. Are the number and quality of the references appropriate?

All known and available references are used in the paper.

15. Are the references accessible by fellow scientists?

There are a few references which are not yet published. So it is hard to review parts of this article properly.

16. Is the overall presentation well structured, clear and easy to understand by a wide and general audience?

The structure of the article is quite good and appropriate. The wide and general audience will most likely not read the article. It is too specific. The main process soil erosion and the results of the map, which are interesting for a wider audience, are not the focus of the paper.

17. Is the length of the paper adequate, too long or too short? The overall length is excellent.

18. Is there any part of the paper (title, abstract, main text, formulae, symbols, figures and their captions, tables, list of references, appendixes) that needs to be clarified, reduced, added, combined, or eliminated?

As described before, there are parts (Chapter 1.1) which are not necessary in the article. Other parts could be described better. For example the results of the map are not shown

- 19. Is the technical language precise and understandable by fellow scientists? The language is precises.
- 20. Is the English language of good quality, fluent, simple and easy to read and understand by a wide and diversified audience?

The language is good understandable for a non-native speaker. There might be some technical terms which are only understandable for soil erosion scientists.

21. Is the amount and quality of supplementary material (if any) appropriate? To few. There could be more tables, maps and figures in the supplementary to show the results of the map and the quality of the validation.