Nat. Hazards Earth Syst. Sci. Discuss.,
https://doi.org/10.5194/nhess-2018-208-RC2, 2018

Natural Hazards and Earth System Sciences
Discussions
Open Access
EGU

Interactive comment on "Analysis of Land surface Temperature change based on MODIS data, Case study: Inner Delta of Niger" *by* Abdramane Dembélé et al.

Anonymous Referee #2

Received and published: 14 November 2018

In this manuscript, the authors present an analysis on the temporal dataset of MODIS satellite imagery with a particular emphasis on "Land Surface Temperature (LST)". Although the authors provide several results showing changes in the LST over the time period of 2000 to 2017, the work does not seem to meet the criteria to be published in Natural Hazards and Earth System Sciences. One of the major issues is the ambiguity of the objective of this study: although the authors describe their aim is to analyze the temporal changes in LST as explicitly shown in the manuscript title, it is unclear why the surface temperature is examined and what are the factors affecting the temperature changes. The authors only present the results from the LST or MODIS data, without proposing any other data sources such as land cover, lithology, landforms, and climate.

Printer-friendly version

Discussion paper

No figure regarding these potential factors is presented, while the authors describe in the text that there are some correlations with water bodies or volcanic activities. These descriptions are quite vague and hardly be validated, which is not the science. The reviewer should say that this research must be redesigned in a scientific context by adding further geospatial analyses using different datasets (land cover, meteorological observations, etc.). Also, the authors should aim the assessments of disasters (in this case, drought or volcanic activities?) rather than only showing the LST changes. Otherwise, the work does not fit the scope of this scientific journal. There are also more issues to be solved: e.g., English grammatical errors, terminologies (what are morphology? modelling? evolution?), incomplete citation formats, figure components (legends, captions, etc.), analysis methods (for instance, the "equal interval method" is not a novel analysis but just a quite general, basic classification method).

Interactive comment on Nat. Hazards Earth Syst. Sci. Discuss., https://doi.org/10.5194/nhess-2018-208, 2018.