

Interactive comment on “Exploring Geomorphic Processes and Martian Gale Crater Topography on Mars using CTX and HiRISE Express Image Dataset” by Pavan Kumar et al.

Anonymous Referee #2

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Review report Journal: ESSD Title: Exploring Geomorphic Processes and Martian Gale Crater Topography on Mars using CTX and HiRISE Express Image Dataset Author(s): Pavan Kumar et al. MS No.: essd-2019-4 MS Type: Research article Special Issue: Linking landscape organisation and hydrological functioning: from hypotheses and observations to concepts, models and understanding (HESS/ESSD inter-journal SI)

This research try to utilize spatially referenced topographic dataset Context Camera images acquired from Mars reconnaissance orbiter for exploring the geomorphic processes and topography of Gale Crater. The method is not novel, but the data is new.

C1

Before publication in the journal of Earth System Science Data (ESSD), there are many part need to improve, I pointed out some doubts, questions and suggestions. I hope it can be useful by author. Finally, I give major revision of this paper.

Title: Too long

1. Introduction

The paper needs to clearly state what are the problems with the existing works (these types of approaches) and what problem(s) this particularly paper was going to address. Without this clearly problem statement readers would have difficulty to see the merit of this paper.

2. Methods The explanation about the data and methods should be improved, I did not find the novelty of the method.

3. Result This part should show some text about validation of your method

4. Discussion

The discussion section is a little poor. There is limited discussion concern the results, and no comparison with previous studies.

5. Conclusion Please give some suggestion and outlook of your research.

Other comment:

Figure: The resolution of figure should be improved.

Reference: The article should be update to the newest.

Language: I am not a native speaker, but I think the paper should be check by a native speaker.

Interactive comment on Earth Syst. Sci. Data Discuss., <https://doi.org/10.5194/essd-2019-4>, 2019.

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