## Peer Review Report

# Review Report on Suyyas's Flood: Numerical Models of Kashmir's Medieval Megaflood and ancient Lake Kerewa drainage events

Original Research, Earth Sci. Syst. Soc.

Reviewer: Simon Cook Submitted on: 13 Apr 2021

Article DOI: 10.3389/esss.2021.10040

#### **EVALUATION**

## Q 1 Please summarize the main findings of the study.

The authors have reconstructed the characteristics of a flood that occurred in Kashmir during the 9th Century. Historical accounts provide the basis for the investigation, and the authors use some well-used methods to reconstruct the nature of that flood (discharge, water depth, flow velocity).

## Q 2 Please highlight the limitations and strengths.

As you will see from my appended review, the main limitations in my opinion centre around the rather thin presentation of the methodology. Many of these issues can be resolved easily by presenting calculations or by citing some relevant references to back up the approach and choice of modelling parameters used, but in other cases it may be good to see some sensitivity testing of the modelling framework.

The strengths of the paper are that it is interesting to see this historical account brought to life through the modelling effort - I think it's a neat paper. This looks to me to be well-written and well-presented.

Q 3 Please comment on the methods, results and data interpretation. If there are any objective errors, or if the conclusions are not supported, you should detail your concerns.

Limitations in the presentation of the methods are my main criticism and I direct you to my detailed appended comments.

#### Q 4 Check List

- Is the English language of sufficient quality? Yes.
- Is the quality of the figures and tables satisfactory? Yes.

Does the reference list cover the relevant literature adequately and in an unbiased manner?

Yes.

Are the statistical methods valid and correctly applied? (e.g. sample size, choice of test)

Not Applicable.

If relevant, are the methods sufficiently documented to allow replication studies?

Are the data underlying the study available in either the article, supplement, or deposited in a repository? (Sequence/expression data, protein/molecule characterizations, annotations, and taxonomy data are required to be deposited in public repositories prior to publication)

No.

Does the study adhere to ethical standards including ethics committee approval and consent procedure?

Not Applicable.

If relevant, have standard biosecurity and institutional safety procedures been adhered to?

Not Applicable.

Q 5 Please provide your detailed review report to the editor and authors (including any comments on the Q4 Check List):

No answer given.

QUALITY ASSESSMENT	
Q 6 Originality	
Q 7 Rigor	
Q 8 Significance to the field	
Q 9 Interest to a general audience	
Q 10 Quality of the writing	
Q 11 Overall quality of the study	

#### **REVISION LEVEL**

Q 12 What is the level of revision required based on your comments:

Moderate revisions.