

Peer Review Report

Review Report on SPATIO-TEMPORAL DYNAMICS OF SEDIMENT TRANSPORT PATHWAYS: SAND APRON BARS AND ISLANDS OF TOKELAU AND KIRIBATI, CENTRAL PACIFIC

Original Research, Earth Sci. Syst. Soc.

Reviewer: Hazel Beaumont

Submitted on: 09 May 2023

Article DOI: 10.3389/esss.2023.10077

EVALUATION

Q 1 Please summarize the main findings of the study.

Please see Q5

Q 2 Please highlight the limitations and strengths.

Please see Q5

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.

Please see Q5

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)

Yes.

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

Yes.

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)

Yes.

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

Yes.

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

Yes.

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

Review of: Spatio-temporal dynamics of sediment transport pathways: sand apron bars and islands of Tokelau and Kiribati, Central Pacific

The paper presents new data covering the growth and retreat of sand apron bars through the use of spectral imagery and field data. Here are some pointers to consider when reviewing your paper:

- Very well thought though methods section including a critical review of these methods
- Very well written there are not much in the way of suggested corrections within the main text. I have edited the PDF attached. The Geological Society of London is a UK Publication therefore I feel English UK language is needed – again see PDF for further comments.
- Why were the months of February and July chosen? For Figure 3 and 13?
- Figures 1 and 2 are labelled interchangeably through the main document and this needs to be addressed Figures (this relates to the images themselves – figure caption text has been addressed in the attached PDF):
- Add the island names to Figure 1
- Figure 2C: where is the date range for these blue arrows? The date range needs adding on the x-axis of this graph. Currently this figures makes no sense
- Figure 3: Rose diagram colours the blues are very similar so they are hard to distinguish
- Figure 4: Considering adding outlines for key lobate sand aprons as highlighted in main text
- Figure 5: What are the yellow arrows for? They need defining in the caption. North arrows needed on A–G. Scale bars on B, C, E, F and G are not readable.
- Figure 6: North arrows are needed
- Figure 7: What is the black arrow in A? North arrow needed. F – he islands on the right have many more outlines that are not defined in the key
- Figure 8: Add a box for where 7 is. A, B, C are missing from this figure. North arrow needed. Scale bar on 2020–8–14 needs shifting to the left
- Figure 10: B–G need a scale
- Figure 11: the mapped island overlies need to be off the aerial photo as it is quite difficult to see all the colours on the coloured aerial photo
- Figure 13: Rose diagram colours the blues are very similar so they are hard to distinguish
- Figure 14: A – needs a scale and a north arrow, consider adding a box to highlight where images B and C are.
- Figure 16: On A add stars (or something) for the locations field photos E & F. All parts of the figure need scale bars and A–D need north arrows
- Figure 18: The orange on B cannot be seen; on E the line visible is the blue one
- Overall: Why does your style of scale bar change between images? Red on coloured images (blues and greens) are not visible for people who are colour blind

Dr Hazel Beaumont

QUALITY ASSESSMENT

Q 6 Originality	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Q 7 Rigor	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Q 8 Significance to the field	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Q 9 Interest to a general audience	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Q 10 Quality of the writing	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Q 11 Overall quality of the study	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>