Interactive comment on “The influence of turbulent bursting on sediment resuspension under fluvial unidirectional currents” by Sarik Salim et al.

D.R Parsons (Editor)
d.parsons@hull.ac.uk

Received and published: 31 May 2017

The authors have done a good job at addressing the main points raised by the reviewers and have made some significant edits to the manuscript in response to the suggestions of the reviewers. There are however one or two areas where I would like the authors to go a little further. In the rebuttal the following sentence is put forward:

“The aim of the paper, rather than developing a better transport equation was to highlight the importance of instantaneous events on sediment re-suspension, that were not considered when using the classical shields diagram approach that uses a mean velocity concept.” and “We compliment these studies by using advanced instrumentation and high resolution laboratory data to document turbulence (‘bursting’) events and their relationship to sediment resuspension. As currently the turbulence events cannot be predicted it was not possible to develop a predictive framework from the experimental data.”

......the first part needs to be evolved into the introduction to delineate the study more fully for the readers....some of this is there, but I think it could be made clearer by some minor edits. Secondly, the final sentence is not actually true (i.e. DNS modelling) so this needs more careful language in the discussion of the paper - highlighting the importance and the direction of travel and how the work in this paper meshes with other approaches.

Subject to these amendments I recommend publication, Daniel R. Parsons