Dear Editor.

I am pleased to resubmit for publication the revised version of ‘’ Experimental investigation of solitary breaking waves in the swash zone’’, which no has change title to ‘’Experimental and computational investigation of solitary breaking waves in the swash zone’’. I appreciate the editors and the reviewers comments and suggestions, and I will address and answer the reviewers concerns and questions in the following .

First of all I would like to point out the main concern

Reviewer #1:

1.The figure with the measured surface elevation (FIG 3, and FIG 4) have been nondimentiolized by the water depth. Also the runup height and the shoreline postitions figures FIG 5 and 6 is scaled with the waterdepth. The figures that shows boundary layers are not dimensional, due to non scaled behaveior layer.

2.The number of repetitions is three (N=3). This number is chosen due to practical reasons. Between each of the run, the water needs settle, which takes about a approximately 45 minitues depending on wave charecteristics. Our goal in this strudy were not to examine the the turbulent structures, but to investigate how the velocitites profiles changes due to different wave height and at different location on the beach.

3. The gradient magnitude images tell us where you have sharp edges in the images, and in our case this will responds to the interphase between water and air. The camera is a bit tiled so at the top in the beginning of the swash zone the roughness of the surface.

4. The maximim runup height for the breaking waves for the BIM model were not defined, since the model breaks down long before maximum runup. Figure 5 is a observed shoreline from the wavetank. The maximum runup height was defined as the highest impingement of water on the beach for both the BIM and the experimental study.

5.

6. An appendix regardin

7. The figures are so unsmooth due to the relatice small size of the swash

8.

Reviewer #2

1.The cross sectional variation of the runup shoreline was approximately 1.5m in the larges case, which made it hard to capture the entire shoreline whitin the field of view installed. The average runup is therefor not calculated since it would not represent the real runup.

2.

Yours sincerely Lisa Smith