

## ***Interactive comment on “Numerical study of hydrodynamic and salinity transport process in Pink Beach wetlands of Liao River Estuary, China” by Huiting Qiao et al.***

### **Anonymous Referee #1**

Received and published: 23 February 2018

Manuscript Number: OS-D-2017-102 Title: Numerical study of hydrodynamic and salinity transport process in Pink Beach wetlands of Liao River Estuary, China This study uses MIKE 21 hydrodynamic and salinity model to simulate the hydrodynamic characteristics and salinity transport process in Pink Beach wetlands of Liao River estuary, the effect of wetland plant on tidal flow is considered there. The remote sensing techniques is adopted to acquire vegetation distribution is based on Landsat TM satellites in this study. This study of manuscript is very interesting, it is well written on the whole and provides researchers with useful information and knowledge about wetland hydrodynamics. There are very few typographical and figures errors in this manuscript. In general, I believe that with major revisions this paper would be of interest to readers

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of OS. I recommend this manuscript to publish in this Journal with a minor revision, the revisions are listed below: 1. Please indicate the location of Gaizhou Shoal in figure 3. 2. Page 8, what's the meaning of us and vs? 3. What does a blank area represent in Figure 7? Please state. 4. In Figure 13, the five stations of G1, G2, P1, P3 and P5 are not clear, please edit it. 5. As can be seen from Figure 14, there is an asymmetric feature of the flood and ebb tide in the vegetation area. Please give a discussion. 6. In figure 19, it should be m<sup>3</sup>/s. 7. In addition, authors should carry out a sensitivity analysis for comparison of the velocities over plant with different plant density and different Cd in wetland water. 8. Page 4, line 14: 'Based on the laboratory experimental data of flow velocities. . . . .' should be 'Based on the experimental data of flow velocities. . . . .'

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