

Interactive comment on “Effects of water discharge and sediment load on evolution of modern Yellow River Delta, China, over the period from 1976 to 2009” by J. B. Yu et al.

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General comments

This paper gives comparatively comprehensive and detailed discussions about the influences of runoff and sediment load and the human being activities on the extension of shoreline length and area of modern Yellow River delta in the recent decades using GIS technique and the collected data. The structure of the paper was clear and the sentences were fluent. The related questions were well analyzed.

R: Thanks a lot.

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Special comments

Q1: It would be better if the authors could give some perspective analysis or predictions especially according to the trend of human activities in the recent decade to attract more attentions on the topic of this paper.

R: Thanks for suggestion. we estimate that the decrease in climate change (precipitation) is responsible for 15%-16% of the decrease in runoff and sediment load at estuary of the Yellow River Delta from 1986-2009, the remaining 84%-85% is for human activities in the river basin. The net negative increases of land area occurred in 1997, 2000, 2001 and 2009 because of decrease of runoff and sediment load discharged into sea. The results indicate that the rapid stretch of Yellow River Delta has been past and the net negative increases of land area should be appeared frequently within future decade because of heavy human being activities in river basin. The prediction has been added in text of section 3.2.

Q2: P4115, Line 15, Change “off” to “of”.

R: Thanks. It has bee revised.

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