



PEARL

Decadal link between longitudinal morphological changes in branching channels of Yangtze estuary and movement of the offshore depo-center

Zhu, Boyuan; Yue, Yao; Borthwick, Alistair G.L.; Yu, Wenjun; Liang, Enhang; Tang, Jinwu; Chai, Yuanfang; Li, Yitian

Published in:

Earth Surface Processes and Landforms

DOI:

[10.1002/esp.4923](https://doi.org/10.1002/esp.4923)

Publication date:

2020

Document version:

Other version

Link:

[Link to publication in PEARL](#)

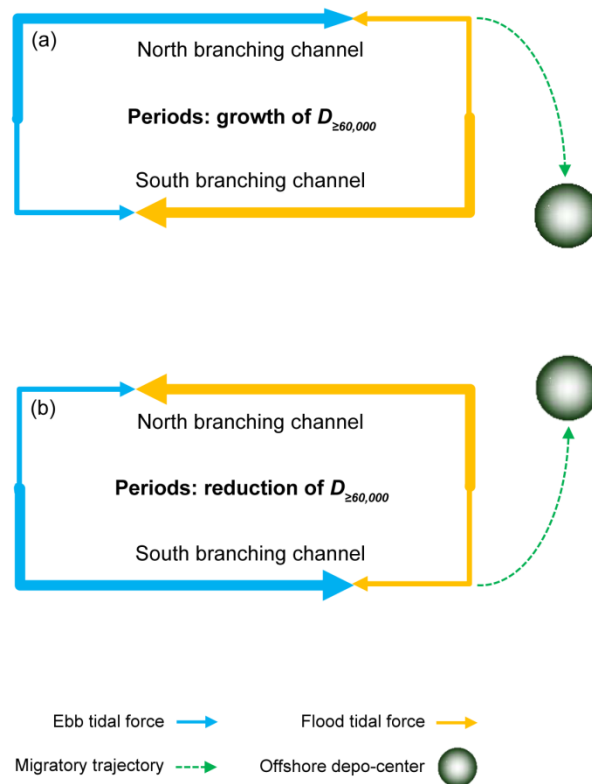
Citation for published version (APA):

Zhu, B., Yue, Y., Borthwick, A. G. L., Yu, W., Liang, E., Tang, J., Chai, Y., & Li, Y. (2020). Decadal link between longitudinal morphological changes in branching channels of Yangtze estuary and movement of the offshore depo-center. *Earth Surface Processes and Landforms*, 45(11), 2689-2705. <https://doi.org/10.1002/esp.4923>

All content in PEARL is protected by copyright law. Author manuscripts are made available in accordance with publisher policies. Wherever possible please cite the published version using the details provided on the item record or document. In the absence of an open licence (e.g. Creative Commons), permissions for further reuse of content should be sought from the publisher or author.

Decadal link between longitudinal morphological changes in branching channels of Yangtze Estuary and movement of the offshore depo-center

Boyuan Zhu*, Yao Yue, Alistair G.L. Borthwick, Wenjun Yu, Enhang Liang, Jinwu Tang, Yuanfang Chai and Yitian Li



a. As runoff rises/falls, deposition within inland north and south branching channels usually occurred in lower/upper and upper/lower sub-reaches, with the offshore depo-center moving southward (southeastward)/northward.

b. Major estuarine engineering projects disturbed longitudinal morphological changes and caused variations in ebb partition ratios for certain inland branching channels.

c. Under dam-induced runoff flattening, major depositional areas within inland north and south branching channels and the depo-center in the offshore area have generally experienced historical trends of upstream, downstream, and northward movement, which are likely to be maintained in the future.