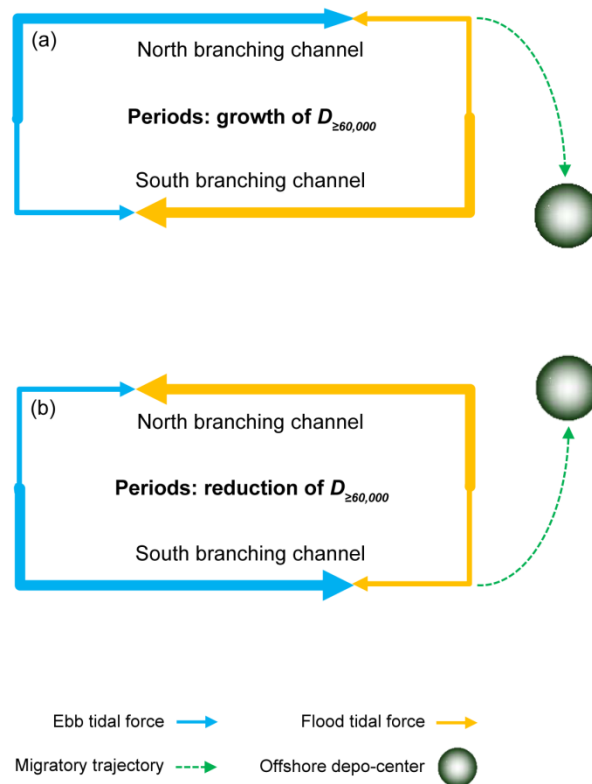


Decadal link between longitudinal morphological changes in branching channels of Yangtze Estuary and movement of the offshore depo-center

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.