



Multiscale Physical Processes of Fine Sediment in an Estuary (Paperback)

By Yuanyang Wan

Taylor Francis Ltd, United Kingdom, 2015. Paperback. Book Condition: New. 240 x 170 mm. Language: English . Brand New Book. Estuaries are natural highly dynamic and rapidly changing systems, comprising a complex combination of physical processes on many different time- and space- scales. The research conducted a systematic study on the topic of fine sediment physical processes in a meso-tidal convergent alluvial estuary. By means of multi-approaches (field survey, laboratory experiment and numerical modeling) and from multi-angles (data-driven analysis and process-based modeling) we highlight that multiscale (including micro- and macro- scale) physical processes jointly characterize the current and sediment regime in a fine sediment estuarine system. The study presented in this book investigates micro- and macro- scale physical processes of a large-scale fine sediment estuarine system with a moderate tidal range as well as a highly seasonal-varying freshwater inflow. Based on a series of measured, experimented and modelled data, the research highlights that (i) along-channel fresh-salt gradient near an estuarine turbidity maximum zone is a key parameter controlling local density stratification and sedimentation in the channel; (ii) the salinity-induced baroclinic pressure gradient forces are a major factor impacting internal velocity and suspended sediment concentration (SSC) structures; (iii) vertical profiles of...



READ ONLINE
[4.59 MB]

Reviews

Merely no words to spell out. I am quite late in start reading this one, but better then never. I am happy to explain how this is actually the very best publication we have go through within my personal daily life and can be he best ebook for at any time.

-- **Althea Christiansen**

Certainly, this is actually the best function by any article writer. It is actually writter in straightforward words and never confusing. Your life period is going to be convert once you total looking over this ebook.

-- **Mrs. Yolanda Reilly V**