

1. Record Nr.	UNINA9911019277103321
Titolo	Mathematical Modelling of Estuarine Physics : Proceedings of an International Symposium Held at the German Hydrographic Institute Hamburg, August 24–26, 1978 / / edited by Jürgen Sündermann, K.-P. Holz
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 1980
ISBN	1-118-66907-X 3-642-46416-5
Edizione	[1st ed. 1980.]
Descrizione fisica	1 online resource (VIII, 269 p.)
Collana	Coastal and Estuarine Studies ; ; 1
Disciplina	551.4609
Soggetti	Ecology Geophysics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	1. Basic formulations and algorithms -- 1.1 Basic hydrodynamics and thermodynamics -- 1.2 Mathematical modelling of turbulence in estuaries -- 1.3 Fundamental principles for numerical modelling -- 1.4 Application of finite-difference methods to estuary problems -- 1.5 Finite elements, a flexible tool for modelling estuarine processes -- 1.6. Mathematical modelling of fluid flow using the boundary element method -- 1.7 Spectral method for the numerical solution of the three-dimensional hydrodynamic equations for tides and surges -- 1.8 On the formation of salt wedges in estuaries -- 2. Tides and storm surges -- 2.1 On currents in the German Bight -- 2.2 Tide-induced residual flow -- 2.3 Simulation of tidal river dynamics -- 2.4 Analysis of tide and current meter data for model verification -- 2.5 Mathematical modelling of tidal flats: a few remarks -- 2.6 On storm surge phenomena -- 2.7 Meteorological problems associated with numerical storm surge prediction -- 3. Baroclinic motions and transport processes -- 3.1 A coastal ocean numerical model -- 3.2 Modelling and verification of circulation in an arctic barrier island lagoon system — an ecosystem process study -- 3.3 Salinity intrusion models -- 3.4 A point of view: Physical processes on the continental shelf and their

implications for numerical circulation models -- 3.5 Observations of continental shelf circulations and their relation to model verification and application -- 3.6 Mathematical models of sediment transport in canalised estuaries -- 3.7 Numerical modelling of sediment transport in coastal waters.

Sommario/riassunto

In Honor of Prof. Walter Hansen on Occasion of his 70. Birthday.