

Contents

Part I Sediment Fluxes Changes Link to Climatic Change During Holocene

- 1 **The “*Turritella* Layer”: A Potential Proxy of a Drastic Holocene Environmental Change on the North–East Atlantic Coast** 3
Agnès Baltzer, Zohra Mokeddem, Evelyne Goubert, Franck Lartaud, Nathalie Labourdette, Jérôme Fournier, and Jean-François Bourillet
- 2 **The Influence of Recent Deglaciation and Associated Sediment Flux on the Functioning of Polar Coastal Zone – Northern Petuniabukta, Svalbard** 23
Mateusz Czesław Strzelecki, Jakub Małecki, and Piotr Zagórski
- 3 **Geomorphic Changes in the Rhône Delta During the LIA: Input from the Analysis of Ancient Maps** 47
Mireille Provansal, Georges Pichard, and Edward J. Anthony

Part II Studies Case About Sediment Fluxes in Three Different Climatic Zones (Wet Tropical, Semi-Arid, Temperate) During Anthropocene

- 4 **Mud Banks, Sand Flux and Beach Morphodynamics: Montjoly Lagoon Beach, French Guiana** 75
Edward J. Anthony, Antoine Gardel, Franck Dolique, Guillaume Brunier, and Christina Péron
- 5 **The Coastal Sediment Provenance and Their Distribution in the Mediterranean Beaches of NW Morocco** 91
Abdelmounim El Mrini, Driss Nachite, Giorgio Anfuso, Mohamed Maanan, Giuseppe Cultrone, Carmela Vaccaro, and Elena Marrocchino

6 The Hydro-sedimentary System of the Upper-Normandy Coast: Synthesis 121
 Stéphane Costa, Pauline Letortu, and Benoit Laignel

Part III The Use of Modelling Approaches of Sediment Fluxes at a Higher Spatial and Temporal Scale

7 Tidal Prism Variation in Venice Lagoon and Inlet Response over the Last 70 Years 151
 Georg Umgiesser, Rachel Helsby, Carl L. Amos, and Christian Ferrarin

8 Tidal Inlet Dynamics and Relocation in Response to Artificial Breaching 167
 Bendahhou Zourarah, César Andrade, Mohamed Maanan, Maria da Conceição Freitas, Asmae Mhamdi Alaoui, Rui Taborda, Khalid Mehdi, and Marc Robin

9 Sediment Transport Formulae for Coastal Morphodynamic Simulation: Calculated Sediment Flux Against In Situ Data 191
 Philippe Larroudé, Mehdi Daou, Adrien Cartier, and Arnaud Hequette

Part IV Extremes Events and Sediment Fluxes: The Case of Tsunamis

10 Tsunami Deposits and Their Morphological Effects: A Regional Scale Approach 209
 Hervé Regnaud and Giuseppe Mastronuzzi



<http://www.springer.com/978-94-017-9259-2>

Sediment Fluxes in Coastal Areas

Maanan, M.; Robin, M. (Eds.)

2015, XVII, 227 p. 98 illus., 59 illus. in color., Hardcover

ISBN: 978-94-017-9259-2