

Bibliography

- Ashton, A., A. B. Murray, and O. Arnault (2001), Formation of coastline features by large-scale instabilities induced by high-angle waves, *Nature*, *414*, 296–300.
- Ashton, A., A. B. Murray, and G. Ruessink (2003), Initial tests of a possible explanation for alongshore sandwaves along the Dutch coast, in *Proceedings 3rd IAHR symposium*, edited by T. Yanagi, pp. 265–285, Terra Scientific Publishing Company, Tokyo.
- Awaji, T., N. Imasato, and H. Kunishi (1980), Tidal exchange through a strait: A numerical experiment using a simple model basin, *Journal of Physical Oceanography*, *10*, 1499–1508.
- Bagnold, R. A. (1966), An approach to the sediment transport problem from general physics, *Geological Survey Professional Papers*, *422-I*.
- Bailard, J. (1981), An energetics total load sediment transport model for a plane sloping beach, *Journal of Geophysical Research C*, *86*, 10,938–10,954.
- Blanton, B. O., F. E. Werner, H. E. Seim, R. A. Luettich, D. R. Lynch, K. W. Smith, G. Voulgaris, F. M. Bingham, and F. Way (2004), Barotropic tides in the South Atlantic Bight, *Journal of Geophysical Research*, *109*, doi:10.1029/2004JC002455.
- Booij, N., R. C. Ris, and L. H. Holthuijsen (1999), A third-generation wave model for coastal regions 1. Model description and validation, *Journal of Geophysical Research C*, *104*, 7649–7666.
- Boyd, J. P. (2001), *Chebyshev and Fourier spectral methods*, Dover, New York, 688 pp.
- Calvete, D., M. Walgreen, H. E. de Swart, and A. Falqués (2001), A model for sand ridges on the shelf: effect of tidal and steady currents, *Journal of Geophysical Research C*, *106*, 9311–9338.
- Cayocca, F. (2001), Long-term morphological modelling of a tidal inlet: the Arcachon Basin, France, *Coastal Engineering*, *42*, 115–142.
- Chadwick, D. B., and J. L. Largier (1999), Tidal exchange at the bay-ocean boundary, *Journal of Geophysical Research C*, *104*, 29,901–29,924.
- Davis, R. A. (1997), Regional coastal morphodynamics along the United States Gulf of Mexico, *Journal of Coastal Research*, *13*, 594–604.

- Davis, R. A., and D. M. FitzGerald (2004), *Beaches and coasts*, Blackwell, 419 pp.
- de Vriend, H. J. (1996), Mathematical modelling of meso-tidal barrier island coasts. part I: Empirical and Semi-Empirical Models, in *Advances in coastal and ocean engineering*, edited by P. L. F. Liu, pp. 115–149, World Scientific.
- de Vriend, H. J., and J. S. Ribberink (1996), Mathematical modelling of meso-tidal barrier island coasts. part II: Process-Based Simulation Models, in *Advances in coastal and ocean engineering*, edited by P. L. F. Liu, pp. 151–197, World Scientific.
- Deigaard, R., N. Drønen, J. Fredsøe, J. J. Jensen, and M. P. Jørgensen (1999), A morphological stability analysis for a long straight barred coast, *Coastal Engineering*, 36, 171–195.
- Ehlers, J. (1988), *The morphodynamics of the Wadden Sea*, Balkema, Rotterdam, 397pp.
- Engelund, F., and E. Hansen (1967), A monograph on sediment transport in alluvial streams, *Tech. rep.*, Technical Press, Copenhagen.
- Falqués, A. (2003), On the diffusivity in coastline phisiscs, *Geophysical Research Letters*, 30(21), 2119, doi:10.1029/2003GL017760.
- Falqués, A. (2005), Wave driven alongshore sediment transport and stability of the Dutch coastline, *Coastal Engineering*, *in press*, doi:10.1016/j.coastaleng.2005.10.012.
- Falqués, A., and D. Calvete (2005), Large scale dynamics of sandy coastlines: Diffusivity and instability, *Journal of Geophysical Research*, 110, doi:10.1029/2004JC002587.
- Falqués, A., A. Montoto, and V. Iranzo (1996), Bed-flow instability of the longshore current, *Continental Shelf Research*, 16, 1927–1964.
- FitzGerald, D. M. (1996), Geomorphic variability and morphologic and sedimentlogic controls on tidal inlets, *Journal of Coastal Research*, 23, 47–71.
- FitzGerald, D. M., and D. Nummedal (1983), Response characteristics of an ebb-dominated tidal inlet channel, *Journal of Sedimentary Petrology*, 53, 833–845.
- Fredsøe, J. (1984), Turbulent boundary layer in wave-current interaction, *Journal of Hydraulic Engineering ASCE.*, 110, 1103–1120.
- Gibeaut, J. C., and R. A. Davis Jr. (1993), Statistical geomorphic classification of ebb-tidal deltas along the west-central Florida coast, *Journal of Coastal Research*, 18, 165–184.
- Glaesser, D. J. (1978), Global distribution of barrier islands in terms of tectonic setting, *Journal of Geology*, 86, 283–297.
- Grasmeijer, B. T., and M. G. Kleinhans (2004), Observed and predicted bed forms and their effect on suspended sand concentrations, *Coastal Engineering*, 51, 351–371.

- Hasselmann, K., T. P. Barnett, E. Bouws, H. Carlson, D. E. Cartwright, K. Enke, J. A. Ewing, H. Gienapp, D. E. H. P. Kruseman, A. Meerburg, P. M. D. J. Olbers, K. Richter, W. Sell, and H. Walden (1973), Measurements of wind-wave growth and swell decay during the Joint North Sea Wave Project, *Deutsche Hydrographische Zeitschrift*, 12, 95 pp.
- Hayes, M. O. (1975), Morphology of sand accumulations in estuaries, in *Estuarine Research*, vol. 2, edited by L. E. Cronin, pp. 3–22, Academic Press, New York.
- Hench, J. L., and A. Luettich (2003), Transient tidal circulation and momentum balances at a shallow inlet, *Journal of Physical Oceanography*, 33, 913–932.
- Hibma, A., H. M. Schuttelaars, and Z. B. Wang (2003), Comparison of longitudinal equilibrium profiles of estuaries in idealized and process-based model, *Ocean Dynamics*, 53, 252–269.
- Hicks, M. D., T. M. Hume, A. Swales, and M. O. Green (1999), Magnitudes, spatial extent, time scales and causes of shoreline changes adjacent to an ebb-tidal delta, Katikati Inlet, New Zealand, *Journal of Coastal Research*, 15, 220–240.
- Holthuijsen, L. H., N. Booij, and T. H. C. Herbers (1989), A prediction model for stationary, short crested waves in shallow water with ambient currents, *Coastal Engineering*, 13, 23–54.
- Hulscher, S. J. M. H., H. E. De Swart, and H. J. De Vriend (1993), The generation of offshore tidal sand banks and sand waves, *Continental Shelf Research*, 13(11), 1183–1204.
- Huthnance, J. M. (1982), On one mechanism forming linear sand banks, *Estuarine, Coastal and Shelf Science*, 14, 79–99.
- Israel, C., and D. W. Dunsbergen (1999), Cyclic morphological evolution of the Ameland Inlet., in *Proceedings of the IAHR*, edited by G. Seminara, pp. 151–197, World Scientific.
- Klein, M. D., and H. M. Schuttelaars (2005), Morphodynamic instabilities of planar beaches: Sensitivity to parameter values and process formulations, *Journal of Geophysical Research F*, 111, doi:10.1029/2004JF000213.
- Komar, P. D. (1998), *Beach processes and sedimentation*, Prentice Hall, Upper Saddle River, 544 pp.
- Lorentz, H. A. (1922), Ein Rechnungsansatz für den Widerstand bei Flüssigkeitsschwindungen, *De Ingenieur*, 37, 695.
- Luck, G. (1975), Der Einfluss der Schutzwerke der Ostfriesischen Inseln auf die morphologischen Vorgänge im Bereich der Seegaten und ihrer Einzugsgebiete, *Tech. Rep. Heft 47*, Technischen Univerisät Braunschweig.
- Manneville, P. (1990), *Dissipative structures and weak turbulence*, Academic Press, Boston, 485pp.

- Murray, A. B. (2004), Rip channel development on nonbarred beaches: The importance of a lag in suspended-sediment transport, *Journal of Geophysical Research C*, *109*, doi: 10.1029/2002JC001581.
- Oertel, G. F. (1972), Sediment transport on estuary entrance shoals and the formation of swash planforms, *Sedimentary Petrology*, *42*, 857–863.
- Oertel, G. F. (1975), Ebb-tidal deltas of Georgia estuaries, in *Estuarine Research*, edited by L. Cronin, pp. 267–276, Academic Press, New York.
- Oertel, G. F. (1988), Processes of sediment exchange between tidal inlets, ebb deltas and barrier islands., in *Hydrodynamics and sediment dynamics of tidal inlet, cecture cotes on coastal and estuarine studies* *29*, edited by D. Aubray and L. Weishar, pp. 297–318.
- Oost, A. P., and P. L. de Boer (1994), Sedimentology and development of barrier islands, ebb-tidal deltas, inlets and back-barrier areas of the Dutch Wadden Sea, *Senckenbergeriana Maritima*, *24*, 65–115.
- Pelnard-Considère, R. (1956), Essai de théorie de l'évolution des formes de rivages en plages de sable et de galets, in *4th Journées de l'Hydraulique, Les Energies de la Mer*, pp. 289–298, Soc. de Hydrotech. de France, Paris.
- Ranasinghe, R., and C. Pattiaratchi (2003), The seasonal closure of tidal inlets: causes and effects, *Coastal Engineering Journal*, *45*, 601–627.
- Ridderinkhof, H. (1989), Tidal and residual flows in the Western Dutch Wadden Sea, iii: Vorticity balances, *Netherlands Journal of Sea Research*, *24*, 9–26.
- Roelvink, J. A., and G. K. M. F. van Banning (1994), Design and development of DELFT3D and application to coastal morphodynamics, in *Proceedings of hydroinformatics conference*, edited by Babovic and Maksimovic, pp. 451–456, Balkema, Rotterdam.
- Roelvink, J. A., T. van der Kaaij, and B. G. Ruessink (2001), Calibration and verification of large-scale 2d/3d flow models phase 1. onl coast and sea studies, project 2: Hydrodynamics and morphology., *Tech. Rep. Z3029.10. 131 pp.*, WL—Delft Hydraulics.
- Roos, P. C., S. M. J. H. Hulscher, M. A. F. Knaapen, and R. M. J. van Damme (2004), The cross-sectional shape of tidal sandbanks: Modeling and observations, *Journal of Geophysical Research F*, *109*, doi:10.1029/2003JF000070.
- Ruessink, B., and M. C. L. Jeukens (2002), Dunefoot dynamics along the Dutch coast, *Earth Surface Processes and Landforms*, *27*, 1043–1056.
- Sanders, J. A., and F. Verhulst (1985), *Averaging methods in nonlinear dynamical systems*, Springer-Verlag, New York.
- Schramkowski, G. P., H. M. Schuttelaars, and H. E. de Swart (2004), Non-linear channel-shoal dynamics in long tidal embayments, *Ocean Dynamics*, *54*, 399–407, doi: 10.1007/s10236-003-0063-6.

- Schuttelaars, H. M., and H. E. de Swart (2000), Multiple morphodynamic equilibria in tidal embayments, *Journal of Geophysical Research C*, 105, 24,105–24,118.
- Schuttelaars, H. M., J. G. Bonekamp, and J. A. Roelvink (2003), Role of tides in generating downdrift-oriented channels on ebb-tidal deltas, in *Proceedings of Coastal Sediments*, pp. 3–22, Academic Press, New York.
- Sekine, M., and G. Parker (1992), Bed-load transport on transverse slope. i, *Journal of Hydraulic Engineering*, 118, 513–535.
- Seydel, R. (1994), *Practical bifurcation and stability analysis: From equilibrium to chaos*, Springer, New York.
- Sha, L. P. (1989a), Variation in ebb-delta morphologies along the West and East Frisian Islands, The Netherlands and Germany, *Marine Geology*, 89, 11–28.
- Sha, L. P. (1989b), Cyclic morphological changes of the ebb-tidal delta, Texel Inlet, The Netherlands, *Geologie en Mijnbouw*, 68, 35–49.
- Sha, L. P. (1990), Sedimentological studies of the ebb-tidal deltas along the West Frisian Islands, the Netherlands, Ph.D. thesis, Geologica Ultraiectina, 64, Utrecht University.
- Sha, L. P., and J. H. van den Berg (1993), Variation in ebb-tidal delta geometry along the coast of the Netherlands and the German Bight, *Journal of Coastal Research*, 9, 730–746.
- Siegle, E., D. A. Huntley, and M. A. Davidson (2004), Physical controls on the dynamics of inlet sandbar systems, *Ocean Dynamics*, 54, 360–373, doi:10.1007/s10236-003-0062-7.
- Soulsby, R. L. (1997), *Dynamics of marine sands*, Thomas Telford, London, 249pp.
- Soulsby, R. L., L. Hamm, G. K. D. Myrhaug, R. R. Simons, and G. P. Thomas (1993), Wave-current interaction within and outside the bottom boundary layer, *Coastal Engineering*, 21, 41–69.
- Stelling, G. S., and I. I. Leendertse (1992), Approximation of convective processes by cyclic ADI methods, in *Proceedings Estuarine and Coastal Modelling*, edited by M. L. Spaulding, pp. 771–782, ASCE, Tampa, FL.
- Stommel, H., and H. G. Farmer (1952), On the nature of estuarine circulation, *Tech. Rep. 52-88*, WHOI.
- Struiksma, N., K. W. Olesen, and C. F. H. J. De Vriend (1985), Bed deformation in curved alluvial channels, *Journal of Hydraulic Research*, 23(1), 57–79.
- van de Kreeke, J., and K. Robaczewska (1993), Tide-induced residual transport of coarse sediment; application to the Ems Estuary, *Netherlands Journal of Sea Research*, 31(3), 209–220.

- van der Molen, J. (2000), A 2DH numerical model for tidally induced sand transport in the southern North Sea, in *Interactions between estuaries, coastal seas and shelf seas*, edited by T. Yanagi, pp. 265–285, Terra Scientific, Tokyo.
- van der Vegt, M., H. M. Schuttelaars, and H. de Swart (2005), Modeling of equilibrium tide-dominated ebb-tidal deltas, *Accepted for publication in Journal of Geophysical Research F.*
- van Leeuwen, S. M., and H. E. de Swart (2002), Intermediate modelling of tidal inlet systems: Spatial asymmetries in flow and mean sediment transport, *Continental Shelf Research*, 57, 899–907.
- van Leeuwen, S. M., M. van der Vegt, and H. E. de Swart (2003), Morphodynamics of ebb-tidal deltas: A model approach, *Estuarine, Coastal and Shelf Science*, 22, 1795–1810.
- Walton, T. (2002), Tidal velocity asymmetry at inlets, *Tech. Rep. CHETN-IV-47*, US Army Corps of Engineers.
- Walton, T. L., and W. D. Adams (1976), Capacity of inlet outer bars to store sand, in *Proceedings of the 15th ICCE*, pp. 1919–1938, ASCE, New York.
- Wang, Z. B. (1991), A morphodynamic model for a tidal inlet, in *Computer modelling in ocean engineering '91- Proceedings of the second international conference*, edited by A.S. Arcilla & others, pp. 235–245, Balkema, Rotterdam.
- Wang, Z. B., T. Louters, and H. J. de Vriend (1995), Morphodynamic modelling for a tidal inlet in the Wadden Sea, *Marine Geology*, 126, 289–300.
- Wells, M. G., and G. F. Van Heyst (2003), A model of tidal flushing of an estuary by dipole formation, *Dynamics of Atmospheres and Oceans*, 37, 223–244.
- Zimmerman, J. T. F. (1981), Dynamics, diffusion and geomorphological significance of tidal residual eddies, *Nature*, 290, 549–555.
- Zimmerman, J. T. F. (1986), The tidal whirlpool: A review of horizontal dispersion by tidal and residual currents, *Netherlands Journal of Sea Research*, 20, 133–154.
- Zimmerman, J. T. F. (1992), On the Lorentz linearization of a nonlinearly damped tidal Helmholtz oscillator, *Proceedings Koninklijke Nederlandse Akademie van Wetenschappen*, pp. 127–145.