

Bibliography

- ALLEN, J. R. L. 1984 *Sedimentary structures*. Elsevier.
- ANTIA, E. E. 1996a Rates and patterns of migration of shoreface-connected sandy ridges along the southern North Sea coast. *J. Coastal Res.* **12**, 38–46.
- ANTIA, E. E. 1996b Shoreface-connected ridges in German and US Mid-Atlantic bights: similarities and contrasts. *J. Coastal Res.* **12**, 141–146.
- BAGNOLD, R. A. 1956 The flow of cohesionless grains in fluids. *Phi. Trans. Roy. Soc. London. Ser. A* **249** (964), 235–297.
- BELDERSON, R. H. 1986 Offshore tidal and non-tidal sand ridges and sheets: differences in morphology and hydrodynamic setting. In *Shelf Sands and Sandstones*. (ed. R. J. Knight & J. R. McLean), pp. 293–301. Can. Soc. Petr. Geol., Memoir II.
- BLONDEAUX, P. 1990 Sand ripples under sea waves. Part 1. Ripple formation. *J. Fluid Mech.* **218**, 1–17.
- CALVETE, D., FALQUÉS, A., DE SWART, H. E. & DODD, N. 1999 Nonlinear modelling of shoreface-connected sand ridges. In *Proc. Coast. Sed. 1999*. A.S.C.E., in press.
- CANUTO, C., HUSSAINI, M. Y., QUARTERONI, A. & ZANG, T. A. 1988 *Spectral Methods in Fluid Dynamics*. New York: Springer-Verlag.
- CHASE, R. R. P. 1979 The coastal longshore pressure gradient: temporal variations and driving mechanisms. *J. Geophys. Res.* **84**, 4898–4904.
- COLOMBINI, M., SEMINARA, G. & TUBINO, M. 1987 Finite-amplitude alternate bars. *J. Fluid Mech.* **181**, 213–232.
- DE SWART, H. E., CALVETE, D. & FALQUÉS, A. 1999 A model for sand ridges on the shelf: effect of tidal and steady currents. *J. Geophys. Res.* Submitted.
- DE SWART, H. E. & HULSCHER, S. J. M. H. 1995 Dynamics of large-scale bedforms in coastal seas. In *Nonlinear dynamics and pattern formation in the natural environment* (ed. A. Doelman & A. van Harten), pp. 315–331. Longman, New York.
- DODD, N., BLONDEAUX, P., CALVETE, D., DE SWART, H. E., FALQUÉS, A., HULSCHER, S. J. M. H., RÓZYŃSKI, G. & VITTORI, G. 1999 The use of stability methods for understanding the morphodynamical behavior of coastal systems. *J. Coast. Res.* Submitted.
- DUANE, D. B., FIELD, M. E., MIESBERGER, E. P., SWIFT, D. J. P. & WILLIAMS, S. 1972 Linear shoals on the Atlantic continental shelf, Florida to Long Island. In *Shelf sediment transport: process and pattern* (ed. D. J. P. Swift, D. B. Duane & O. H. Pilkey), pp. 447–498. Stroudsburg, USA: Dowden, Hutchinson and Ross.
- DYER, K. 1986 *Coastal and estuarine sediment dynamics*. Chichester: John Wiley and Sons.
- EHLERS, J. 1988 *The morphodynamics of the Wadden Sea*. Rotterdam: Balkema.

- FALQUÉS, A., CALVETE, D. & DE SWART, H. E. 1999 Modelling the formation of shoreface-connected sand ridges: dynamical coupling between long term averaged topography and current. *J. Fluid Mechanics* Under revision.
- FALQUÉS, A., CALVETE, D. & MONTOTO, A. 1998 Bed-flow instabilities of coastal currents. In *Physics of Estuaries and Coastal Seas* (ed. J. Dronkers & M. B. A. M. Scheffers), pp. 417–424. Balkema, Rotterdam, ISBN 90 5410 965 3.
- FALQUÉS, A., MONTOTO, A. & IRANZO, V. 1996 Bed-flow instability of the longshore current. *Cont. Shelf Res.* **16** (15), 1927–1964.
- FIGUIEREDO, A. G., SANDERS, J. E. & SWIFT, D. J. P. 1982 Storm-graded layers on inner continental shelves: examples from Southern Brazil and the Atlantic coast of the Central United States. *Sedim. Geology* **31**, 171–190.
- FREDSOE, J. & DEIGAARD, R. 1993 *Mechanics of coastal sediment transport*. Singapore: World Scientific.
- GOTTLIEB, D. & ORSZAG, S. D. 1977 *Numerical Analysis of Spectral Methods: Theory and Applications*. Society for Industrial and Applied Mathematics.
- GUCKENHEIMER, J. & HOLMES, P. 1983 *Nonlinear oscillations, dynamical systems, and bifurcations of vector fields*. New York: Springer Verlag.
- HOLMAN, R. & BOWEN, A. 1982 Bars, bumps, and holes: models for the generation of complex beach topography. *J. Geophys. Res.* **87**, 457–468.
- HOMMA, M. & SONU, C. 1963 Rhythmic pattern of longshore bars related to sediment characteristics. In *Proc. 8th Int. Conf. Coast. Eng.*, pp. 248–278. A.S.C.E.
- HOOGENDOORN, E. L. & DALRYMPLE, R. W. 1986 Morphology, lateral migration and internal structures of shoreface-connected ridges, Sable Bank Island, Nova Scotia, Canada. *Geology* **14**, 400–403.
- HULSCHER, S. J. M. H., DE SWART, H. E. & DE VRIEND, H. J. 1993 The generation of offshore tidal sand banks and sand waves. *Cont. Shelf Res.* **13** (11), 1183–1204.
- HUNTLEY, D. A., HUTHNANCE, J. M., COLLINS, M. B., LIU, C. L., NICHOLLS, R. J. & HEWITSON, C. 1993 Hydrodynamics and sediment dynamics of North Sea sand waves and sand banks. *Proc. Roy. Soc. London A.* **343**, 461–474.
- HUTHNANCE, J. M. 1982 On one mechanism forming linear sand banks. *Est. Coastal Shelf Sci.* **14**, 79–99.
- KARNIADAKIS, G. E., ISRAELI, M. & ORSZAG, S. A. 1991 High-Order Splitting Methods for the incompressible Navier–Stokes Equations. *J. Comput. Phys.* **97**, 414–443.
- KOMAR, P. D. 1998 *Beach processes and sedimentation*, 2nd edn. Prentice Hall.
- KUENEN, P. H. 1948 The formation of beach cusps. *J. Geology* **56**, 34–40.
- MCBRIDE, R. A. & MOSLOW, T. F. 1991 Origin, evolution and distribution of shoreface sand ridges, Atlantic inner shelf, USA. *Mar. Geol.* **97**, 57–85.
- NIEDORODA, A. W. & SWIFT, D. J. P. 1981 Maintenance of the shoreface by wave orbital currents and mean flow: observations from the long island coast. *Geophys. Res. Lett.* **8**, 337–340.
- NIEDORODA, A. W. & SWIFT, D. J. P. 1991 Shoreface processes. In *Handbook of coastal and ocean engineering* (ed. J. B. Herbich), pp. 736–769. Gulf Publ. Co., Houston.
- NIEDORODA, A. W., SWIFT, D. J. P., HOPKINS, T. S. & MA, C. H. 1984 Shoreface morphodynamics on wave-dominated coasts. *Mar. Geol.* **60**, 331–354.

- OFF, T. 1963 Rhythmic, linear sandbodies caused by tidal currents. *Bull. Amer. Assoc. Petroleum Geologists* **47**, 324–341.
- PARKER, G., LANFREDI, N. W. & SWIFT, D. J. P. 1982 Seafloor response to flow in a Southern Hemisphere sand-ridge field: Argentina inner shelf. *Sedimentary Geology* **33**, 195–216.
- PARRA, M. 1999 Bancos de arena de gran escala conectados a la costa. modelado de los sistemas observados en la plataforma atlántica americana. Master's thesis, ETSECCPB. Universitat Politècnica de Catalunya.
- PATTIARATCHI, C. & COLLINS, M. 1987 Mechanisms for linear sandbank formation and maintenance in relation to dynamical oceanographical observations. *Progr. in Oceanogr.* **19**, 117–156.
- SCHIELEN, R., DOELMAN, A. & DE SWART, H. E. 1993 On the nonlinear dynamics of free bars in straight channels. *J. Fluid Mech.* **252**, 325–356.
- SCHUTTELAARS, H. M. 1997 Evolution and stability analysis of bottom patterns in tidal embayments. PhD thesis, Universiteit Utrecht, Faculteit Wiskunde en Informatica.
- SCHUTTELAARS, H. M. 1998 Nonlinear long term equilibrium profiles in a short tidal embayment. In *Physics of Estuaries and Coastal Seas* (ed. J. Dronkers & M. B. A. M. Scheffers), pp. 337–343. Balkema, Rotterdam, ISBN 90 5410 965 3.
- SCHUTTELAARS, H. M. & DE SWART, H. E. 1999 Initial formation of channels and shoals in a short tidal embayment. *J. Fluid Mech.* In press.
- SCOTT, J. T. & CSANADY, G. T. 1976 Nearshore currents off Long Island. *J. Geophys. Res.* **81**, 5401–5409.
- SINHA, B. & PINGREE, R. D. 1997 The principal lunar semidiurnal tide and its harmonics: baseline solutions for M_2 and M_4 constituents on the North West European continental shelf. *Cont. Shelf Res.* **17**, 1321–1365.
- SLEATH, J. F. A. 1984 *Sea Bed Mechanics*. Wiley.
- STRIDE, A. H. 1982 *Offshore tidal sands: processes and deposits*. Chapman & Hall.
- SWIFT, D. J. P. & FIELD, M. E. 1981 Evolution of a classic sand ridge field: Maryland sector, North American inner shelf. *Sedimentology* **28**, 461–482.
- SWIFT, D. J. P., HOLLIDAY, B., AVIGNONE, N. & SHIDELER, G. 1972 Anatomy of a shoreface ridge system, false cape, virginia. *Mar. Geol.* **12**, 59–84.
- SWIFT, D. J. P., NIEDORODA, A. W., VINCENT, C. E. & HOPKINS, T. S. 1985 Barrier island evolution, Middle Atlantic Shelf, U.S.A., part 1: shoreface dynamics. *Mar. Geol.* **63**, 331–361.
- SWIFT, D. J. P., PARKER, G., LANFREDI, N. W. & FIGGE, G. P. K. 1978 Shoreface-connected sand ridges on American and European Shelves: A Comparison. *Estuarine and Coastal Mar. Sci.* **7**, 257–273.
- THOMPSON, K. R. & SHENG, J. 1997 Subtidal circulation on the Scotian shelf: assessing the hindcast skill of a linear, barotropic model. *J. Geophys. Res.* **102**, 24987–25003.
- TROWBRIDGE, J. H. 1995 A mechanism for the formation and maintenance of shore-oblique sand ridges on storm-dominated shelves. *J. Geophys. Res.* **100** (C8), 16071–16086.
- VAN DE MEENE, J. W. H. 1994 The shoreface connected ridges along the central Dutch coast. PhD thesis, Netherlands Geographical Studies, 174.
- VAN DE MEENE, J. W. H., BOERSMA, J. R. & TERWINDT, J. H. J. 1996 Sediment structures of combined flow deposits from shoreface-connected ridges along the central Dutch coast. *Mar. Geol.* **131**, 151–175.

- VAN DER GIESSEN, A., DE RUIJTER, W. P. M. & BORST, J. C. 1990 Three-dimensional current structure in the Dutch coastal zone. *Neth. J. Sea Res.* **25**, 45–55.
- VAN RIJN, L. C. 1993 *Principles of sediment transport in rivers, estuaries and coastal seas*. Amsterdam: Aqua Publ.
- VITTORI, G. & BLONDEAUX, P. 1990 Sand ripples under sea waves. Part 2. Finite amplitude development. *J. Fluid Mech.* **218**, 19–39.
- VITTORI, G. & BLONDEAUX, P. 1992 Sand ripples under sea waves. Part 3. Brick pattern ripple formation. *J. Fluid Mech.* **239**, 23–45.
- VITTORI, G., DE SWART, H. E. & BLONDEAUX, P. 1999 Crescentic bedforms in the nearshore zone. *J. Fluid Mech.* **381**, 271–304.
- WALGREEN, M. 1999 Effect of density differences and nonuniform wave conditions on the formation of shoreface-connected sand ridges. *Tech. Rep. R99*. IMAU, Utrecht Univ.
- WERNER, T. M. & FINK, B. T. 1993 Beach cusps as self-organized patterns. *Science* **260**, 968–971.
- ZIMMERMAN, J. T. F. 1981 Dynamics, diffusion and geomorphological significance of tidal residual eddies. *Nature* **290**, 549–555.
- ZIMMERMAN, J. T. F. 1992 On the Lorentz linearization of a nonlinearly damped tidal Helmholtz oscillator. *Proc. Roy. Acad. Sci.* **95**, 127–145.