



## A Cumulative Bibliography of Rip Current Related References (last updated March, 2004)

Aagaard, T., Greenwood, B., and Nielsen, J. 1977. Mean currents and sediment transport in a rip channel. *Journal of Marine Geology*, 140: 25-45.

Allen, J. R., and N. P. Psuty. 1987. Morphodynamics of a single-barred beach with a rip channel, Fire Island, New York. *Proceedings Coastal Sediments '87*, ASCE, pp. 1964-1975.

Allen, J. S., P. A. Newberger, and R. A. Holman. 1996. Nonlinear shear instabilities of alongshore currents on plane beaches. *Journal of Fluid Mechanics*, 310: 181-213.

Arthur, R. S. 1950. Refraction of shallow water waves: the combined effect of currents and underwater topography. *EOS Transactions AGU*, 31: 549-552.

Arthur, R. S. 1962. A note on the dynamics of rip currents. *Journal of Geophysical Research*, 67(7): 2778-2779.

Ashton, A., A. B. Murray, and O. Arnoult. 2001. Formation of coastline features by large-scale instabilities induced by high-angle waves. *Nature*, 414: 296-300.

Basco, D. R. 1982. Surf Zone Currents. U.S. Army Corps of Engineers, Coastal Engineering Research Center, Misc. Report 82-7.

Basco, D. R. 1983. Surf zone currents. *Coastal Engineering*, 7:331-355.

Battjes, J. A. 1975. Modelling of turbulence in the surfzone. In *Proceedings of the Symposium on Modelling Techniques*, ASCE, pp. 1050-1061.

Beach, R. A., and R. W. Sternberg. 1992. Suspended sediment transport in the surf zone - Response to incident wave and longshore current interaction. *Marine Geology*, 108: 275-294.

Birkemeier, W. A. and R. A. Dalrymple. 1975. Nearshore currents induced by wind and waves. *Proceedings Symposium on Modelling Techniques*, American Society Civil Engineers, San Francisco, 1062-1080.

- Bowen, A. J. 1969a. The generation of longshore currents on a plane beach. *Journal of Marine Research*, 27: 206-215.
- Bowen, A. J. 1969b. Rip currents, 1: Theoretical investigations. *Journal of Geophysical Research*, 74:5468-5478.
- Bowen, A. J. and D. L. Inman. 1969. Rip currents, 2: Laboratory and field observations. *Journal of Geophysical Research*, 74: 5479-5490.
- Bowen, A. J. and R. T. Guza. 1978. Edge waves and surf beats. *Journal of Geophysical Research*, 83: 1913-1920.
- Bowman, D., D. Arad, D. S. Rosen, E. Kit, R. Goldbery, and A. Slavicz. 1988. Flow characteristics along the rip current system under low-energy conditions. *Marine Geology*, 82: 149-167.
- Bowman, D., D. S. Rosen, E. Kit, D. Arad, and A. Slavicz. 1988. Flow characteristics at the rip current neck under low energy conditions. *Marine Geology*, 79: 41-54.
- Bowman, D., H. Birkenfeld, and D. S. Rosen. 1992. The longshore flow component in low-energy rip channels: The Mediterranean, Israel. *Marine Geology*, 108: 259-274.
- Brander, R. W. 1997. Field observations on the morphodynamics of rip currents. Unpublished Ph.D. thesis, Department of Geography, University of Sydney, 240 pp.
- Brander, R. W. 1999. Field observations on the morphodynamic evolution of a low-energy rip current system. *Marine Geology*, 157(3-4): 199-217.
- Brander, R. W. 2000. Measurements of flow velocity and sediment transport in a rip current. *Proceedings of the 27<sup>th</sup> Coastal Engineering Conference*, ASCE, pp. 3395-3408.
- Brander, R. W. and A. D. Short. 2000. Morphodynamics of a large-scale rip current system at Muriwai Beach, New Zealand. *Marine Geology*, 165: 27-39.
- Brander, R. W. and A. D. Short. 2001. Flow kinematics of low-energy rip current systems. *Journal of Coastal Research*, 17 (2): 468-481.
- Brant, I. 1925. The "Undertow." *Science*, 62: 30-31.
- Briand, M. G. and J. SW. Kamphuis. 1993. Waves and currents on natural beaches: A quasi 3-D numerical model. *Coastal Engineering*, 20: 101-134.
- CERC. 1984. Shore Protection Manual. Coastal Engineering Research Center, U. S. Army

Corps of Engineers, Washington, D.C., U.S. Government Printing Office.

- Chandramohan, P., V. S. Kumar, and B. K. Jena. 1997. Rip current zones along beaches in Goa west coast of India. *Journal of Waterway, Port, Coastal and Ocean Engineering*, 123: 322-328.
- Chen, Q., R. A. Dalrymple, J. T. Kirby, A. Kennedy, and M. C. Haller. 1999. Boussinesq modelling of a rip current system. *Journal Geophysical Research*, 104(C9): 20,617-20,638.
- Chen, W., J. T. Kirby, R. A. Dalrymple, A. B. Kennedy, E. Thorton, and F. Shi. 2000. Boussinesq modeling of waves and longshore currents under field conditions. In *Proceedings 27<sup>th</sup> Coastal Engineering Conference*, ASCE, Sydney.
- Cook, D. O. 1970. The occurrence and geological work of rip currents off southern California. *Marine Geology*, 9: 173-186.
- Craig, W. 1925. The “Undertow.” *Science*, 62: 30.
- Dally, W. R. and R. G. Dean. 1984. Suspended sediment transport and beach profile evaluation. *Journal of Waterway, Port, Coastal and Ocean Engineering*, 110: 15-33.
- Dalrymple, R. A. 1975. A mechanism for rip current generation on an open coast. *Journal of Geophysical Research*, 80: 3485-3487.
- Dalrymple, R. A. 1978. Rip currents and their causes. *Proceedings 16<sup>th</sup> International Conference Coastal Engineering*, American Society of Civil Engineers, Hamburg, 1414-1427.
- Dalrymple, R. A. and G. A. Lanan. 1976. Beach cusps formed by intersecting waves. *Bulletin Geological Society of America*, 87: 57-60.
- Dalrymple, R. A. and C. J. Lozano. 1978. Wave-current interaction models for rip currents. *Journal of Geophysical Research*, 83: 6063-6071.
- Davis, W. M. 1925a. The undertow myth. *Science*, 61: 206-208.
- Davis, W. M. 1925b. The “Undertow.” *Science*, 62: 33.
- De Vriend, H. J. and M. J. F. Stive. 1987. Quasi-3D modelling of nearshore currents. *Coastal Engineering*, 11: 565-601.
- Dean, R. G. and R. A. Dalrymple. 1984. *Water Wave Mechanics for Engineers and Scientists*.

Prentice-Hall, New Jersey.

Dean, R. G. and R. A. Dalrymple. 2002. Coastal Processes with Engineering Applications. New York, NY, Cambridge University Press.

Deigaard, R. 1990. The formation of rip channels on a barred coast. Technical Report 72, Technical University of Denmark.

Deigaard, R., N. Dronen, J. Fredsoe, J. H. Jensen, and M. P. Jorgensen. 1999. A morphological stability analysis for a long straight coast. *Coastal Engineering*, 36: 171-195.

Dette, H.-H., K. Peters, and F. Spignat. 1995. About rip currents at a mesotidal coast. In *Coastal Dynamics '95*, ASCE, pp. 477-488, Gdansk.

Dodd, N. 1994. On the destabilization of a longshore current on a plane beach: bottom shear stress, critical conditions and onset of instabilities. *Journal Geophysical Research*, 99: 811-824.

Dronen, N. H. Karunarathna, J. Fredsoe, B. M. Sumer, and R. Deigaard. 1999. The circulation over a longshore bar with rip channels. In *Coastal Sediments*, pp. 576-587.

Dyhr-Nielsen, M. and T. Sorensen. 1970. Same sand transport phenomena on coasts with bars. In Proceedings 12<sup>th</sup> Coastal Engineering Conference, ASCE, pp. 855-866.

Ebersole, B. A., and R. A. Dalrymple. 1980. Numerical modeling of nearshore circulation. In Proceedings 17<sup>th</sup> Coastal Engineering Conference, ASCE, pp. 2710-2725.

Elgar, S., E. L. Gallagher, and R. T. Guza. 2001. Nearshore sandbar migration. *Journal Geophysical Research*, 106: 11623-11627.

Eliot, I. 1973. The persistence of rip current patterns on sandy beaches. *Proceedings of the First Australian Conference on Coastal Engineering*, pp. 29-34.

Engle, J., J. MacMahan, R. J. Thieke, D. M. Hanes, R. G. Dean. 2002. Formulation of a rip current predictive index using rescue data. *Proceedings National Conference on Beach Preservation Technology*, Florida Shore and Beach Preservation Association, Biloxi, MS.

Evans, O.F. 1938. The undertow. *Science*, 88: 279-281.

Falques, A., A. Montoto, and D. Vila. 1999. A note on hydrodynamic instabilities and horizontal circulation in the surf zone. *Journal of Geophysical Research*, 104 (20): 615.

Fowler, R. E. and R. A. Dalrymple. 1990. Wave group forced nearshore circulation. *Proceedings 22<sup>nd</sup> International Conference Coastal Engineering*, American Society of

Civil Engineers, 729-742.

- Garcez Faria, A. F., E. B. Thornton, and T. P. Stanton. 1995. A quasi-3D model of longshore currents. In Coastal Dynamics '95, ASCE, pp. 389-400, Gdansk.
- Giger, M., T. Dracos, and G. H. Jirka. 1991. Entrainment and mixing in plane turbulent jets in shallow water. *Journal of Hydraulic Research*, 29: 615-641.
- Greenwood, B. and P. D. Osborne. 1990. Vertical and horizontal structure in cross-shore flows: An example of undertow and wave set-up on a barred beach. *Coastal Engineering*, 14: 543-580.
- Guza, R. T. and D. L. Inman. 1975. Edge waves and beach cusps. *Journal of Geophysical Research*, 80: 2998-3012.
- Guza, R. T. and E. B. Thornton. 1985. Velocity moments in the nearshore. *Journal of Waterway, Port, Coastal and Ocean Engineering*, 111: 235-256.
- Guza, R. T. and E. B. Thornton. 1985. Observations of surf beat. *Journal of Geophysical Research*, 90: 3161-3171.
- Haas, K. A., and I. A. Svendsen. 2000. Three-dimensional modeling of rip current systems. Research Report CACR-00-06, Center for Applied Coastal Research, University of Delaware.
- Haas, K. A., and I. A. Svendsen. 2002. Laboratory measurements of the vertical structure of rip currents. *Journal Geophysical Research*, 107 (C5): 10.1029/2001JC000911, pp. 15-1 - 15-20.
- Haas, K. A., I. A. Svendsen, and M. Haller. 1998. Numerical modeling of nearshore circulation on a barred beach with rip channels. In Proceedings 26<sup>th</sup> Coastal Engineering Conference, ASCE, 1: 801-814, Copenhagen.
- Haas, K. A., I. A. Svendsen, and Q. Zhao. 2000. 3D modeling of rip currents. Proceedings 27<sup>th</sup> Coastal Engineering Conference, American Society Civil Engineers, Sydney, Australia. Vol 2, pp. 1113-1126.
- Haas, K. A. and I. A. Svendsen, R. W. Brander, and P. Nielsen. 2002. Modeling of a rip current system on Moreton Island, Australia. Proceedings of the 28<sup>th</sup> International Conference on Coastal Engineering, Coastal Engineering Research Council, American Society Civil Engineers, Cardiff, Wales.
- Haas, K. A., I. A. Svendsen, M. C. Haller, and Q. Zhao. 2003. Quasi-three-dimensional modeling of rip current systems. *Journal Geophysical Research*, 108 (C7): 10-1 - 10-21.

- Haines, J. W. 1984. Steady flows in the nearshore zone. Proceedings of the 19<sup>th</sup> Coastal Engineering Conference, American Society of Civil Engineers, pp. 2280-2292.
- Haller, M. C. and R. A. Dalrymple. 1999. Rip current dynamics and nearshore circulation. Research Report CACR-99-05, Center for Applied Coastal Research, University of Delaware.
- Haller, M. C. and R. A. Dalrymple. 2001. Rip current instabilities. Journal Fluid Mechanics, 433: 161-192.
- Haller, M. C., R. A. Dalrymple, and I. A. Svendsen. 1997a. Rip channels and nearshore circulation: Experiments. In Proceedings of the 3<sup>rd</sup> International Symposium on Ocean Wave Measurement and Analysis, ASCE, pp. 750-764.
- Haller, M. C., R. A. Dalrymple, and I. A. Svendsen. 1997b. Experiments on rip currents and nearshore circulation: Data report. Technical Report CACR-00-04, Center for Applied Coastal Research, University of Delaware, Newark.
- Haller, M. C., R. A. Dalrymple, and I. A. Svendsen. 2002. Experimental study of nearshore dynamics on a barred beach with rip channels. Journal Geophysical Research, 107 (C6), 3061, doi: 10.1029/2001JC000955.
- Haller, M. C. and H. T. Özkan-Haller. 2002. Wave breaking and rip current circulation, Coastal Engineering 2002: Proceedings of the 28<sup>th</sup> International Conference on Coastal Engineering, American Society Civil Engineers, Cardiff, Wales, pp.705—717.
- Haller, M. C. and D. R. Lyzenga. 2003. Comparison of radar and video observations of shallow water breaking waves, IEEE Transactions on Geoscience and Remote Sensing, Vol. 41, pp.832-844.
- Hamm, L. 1992. Directional nearshore wave propagation over a rip channel: an experiment. In Proceedings 23<sup>rd</sup> Coastal Engineering Conference, ASCE, 1: 226-239, Venice.
- Hammack, J., N. Scheffner, and S. H. Scheffner. 1991. A note on the generation and narrowness of periodic rip currents. Journal of Geophysical Research, 96: 4909-4914.
- Hansen, J. B. and I. A. Svendsen. 1986. Experimental investigation of the wave and current motion over a longshore bar. Proceedings 20<sup>th</sup> International Conference Coastal Engineering, American Society Civil Engineers.
- Hansen, J. B. 1990. Periodic waves in the surf zone: analysis of experimental data. Coastal Engineering, 14: 19-41.

- Harrison, E. and W. C. Krumbein. 1964. Interactions of the Beach - Ocean - Atmosphere system at Virginia Beach, Virginia. U.S. Army Coastal Engineering Research Center, Technical Memo 7.
- Herbers, T. H. C., S. Elgar, and R. T. Guza. 1995. Generation and propagation of infragravity waves. *Journal of Geophysical Research*, 100: 24863-24872.
- Hino, M. 1974. Theory on formation of rip currents and cuspidal coast. *Proceedings of the 14<sup>th</sup> Coastal Engineering Conference*, American Society of Civil Engineers, pp. 901-919.
- Hite, M. P. 1925. The Undertow. *Science*, 62: 31-33.
- Holland, K. T., R.A. Holman, T. C. Lippmann, J. Stanley, and N. Plant. 1997. Practical use of video imagery in nearshore oceanographic field studies. *Journal Oceanic Engineering*, 22(1): 81-92.
- Holman, R. A. 1981. Infragravity energy in the surfzone. *Journal of Geophysical Research*, 86: 6442-6450.
- Holman, R. A. and A. J. Bowen. 1982. Bars, bumps and holes: Models for the generation of complex beach topography. *Journal Geophysical Research*, 87(C1): 457-468.
- Howd, P. A., J. Oltman-Shay, and R. A. Holman. 1991. Wave variance partitioning in the trough of a barred beach. *Journal of Geophysical Research*, 96: 12,781-12,796.
- Huntley, D. A. and A. D. Short. 1992. On the spacing between observed rip currents. *Coastal Engineering*, 17: 211-225.
- Huntley, D. A., R. T. Guza and E. B. Thornton. 1981. Field observations of surf beat, Part I: Progressive edge waves. *Journal of Geophysical Research*, 86: 6451-6466.
- Huntley, D. A., M. D. Hendry, J. Haines, and B. Greenridge. 1988. Waves and rip currents on a Caribbean pocket beach, Jamaica. *Journal of Coastal Research*, 4: 69-79.
- Iwata, N. 1970. A note on the wave set-up, longshore current and the undertow. *Journal Oceanographical Society of Japan*, 26: 233-236.
- Iwata, N. 1976. Rip currents. *Journal Oceanographic Society of Japan*, 32: 1-10.
- Jones, W. C. 1925. The undertow myth. *Science*, 61: 444.
- Keeley, J. R. 1977. Nearshore currents and beach topography, Martinique Beach, Nova Scotia. *Canadian Journal of Earth Sciences*, 14: 1906-1915.

- Kemp, P. and R. R. Simons. 1982. The interaction between waves and a turbulent current: Waves propagating against the current. *Journal Fluid Mechanics*, 130: 73-89.
- Kirby, J. and R. A. Dalrymple. 1983. A parabolic equation for the combined refraction-diffraction of stokes waves by mildly varying topography. *Journal of Fluid Mechanics*, 136: 453-466.
- Kirby, J. and R. A. Dalrymple. 1994. Combined refraction/diffration model REF/DIF 1, version 2.5. Report No. CACR-94-22, Center for Applied Coastal Research, University of Delaware.
- Komar, P. D. 1971. Nearshore cell circulation and the formation of giant cusps. *Geological Society of America Bulletin*, 82: 2643-2650.
- Komar, P. D. 1975. Nearshore currents: Generation by oblique incident waves and longshore variations in breaker heights. In *Nearshore Sediment Dynamics and Sedimentation*, J. Hails and A. Carr (editors), pp. 18-45, London, England, Wiley.
- Komar, Paul D. 1976. Beach Processes and Sedimentation. Englewood Cliffs, NJ: Prentice-Hall, Inc.
- Komar, P. D. and J. Oltman-Shay. 1990. Nearshore currents. In *Handbook on Coastal and Ocean Engineering*. J. B. Herbich (editor). Vol. 2, Chapter 10, pp. 651-680, Houston, TX: Gulf Publishing Co.
- Komar, Paul D. 1998. Beach Processes and Sedimentation. (Second Edition). Englewood Cliffs, NJ: Prentice-Hall, Inc.
- Kraus, N. C., and L. Nakashima. 1987. Field measurement in a rip current: fluid and sediment movement. *EOS* 68: 1311-1312.
- Lascody, R. L. 1998. East Central Florida rip current program. *National Weather Digest*, 22(2): 25-30.
- LeBlond, P. H. and C. L. Tang. 1974. On energy coupling between waves and rip currents. *Journal of Geophysical Research*, 79: 811-816.
- Lippman, T. C. and R. A. Holman. 1989. Quantification of sand bar morphology: a video technique based on wave dissipation. *Journal of Geophysical Research*, 95: 995-1011.
- Lippmann, T. C. and R. A. Holman. 1990. The spatial and temporal variability of sand bar morphology. *Journal Geophysical Research*, 95: 11,575-11,590.
- Lippman, T. C., A. H. Brookins, and E. B. Thornton. Wave energy transformation on natural

profiles. *Coastal Engineering*, 27: 1-20.

Liu, P. L.-F. and C. C. Mei. 1976. Water motion on a beach in the presence of a Breakwater, I and II. *Journal Geophysical Research*, 81: 3079-3094.

Liu, P. L.-F. and R. A. Dalrymple. 1978. Bottom frictional stresses and longshore currents due to waves with large angles of incidence. *Journal of Marine Research*, 36: 357-375.

Longuet-Higgins, M. S. 1956. The mechanics of the boundary-layer near the bottom in a progressive wave. In *Proceedings 6<sup>th</sup> Coastal Engineering Conference*, ASCE, 1: 184-193, Miami.

Longuet-Higgins, M. S. 1970a. Longshore currents generated by obliquely incident sea waves, 1. *Journal Geophysical Research*, 75: 6778-6789.

Longuet-Higgins, M. S. 1970b. Longshore currents generated by obliquely incident sea waves, 2. *Journal Geophysical Research*, 75: 6790-6801.

Longuet-Higgins, M. S. 1983. Wave set-up, percolation and undertow in the surf zone. *Proceedings of the Royal Society of London, Series A*, 390: 283-291.

Longuet-Higgins, M. S. and R. W. Stewart. 1964. Radiation stress in water waves: A physical discussion with applications. *Deep Sea Research*, 11(4): 529-563.

Lushine, J. B. 1991. A study of rip current drownings and related weather factors. *National Weather Digest*, 16: 13-19.

Lushine, J. B. 1991. Rip currents: human impact and forecastability. *Proceedings Coastal Zone '91*, ASCE, pp. 3558-3569.

MacMahan, J. H. 2001. Hydrographic surveying from a personal watercraft. *Journal Surveying, Engineering*. 127 (1).

MacMahan, J. H. 2003. Field observations of rip currents. Ph.D. dissertation, University of Florida, Gainesville, Florida.

MacMahan, J. and R. J. Thieke. 2000. Cross-shore sediment transport indices. 27<sup>th</sup> International Conference on Coastal Engineering, ASCE, Sydney, Australia.

MacMahan, J., T. Stanton, E. B. Thornton, and A. J. H. M. Reniers. 2003b. RIPEX-Rip currents on a shore-connected shoal beach. to be submitted to *Marine Geology*.

MacMahan, J., A. J. H. M. Reniers, E. B. Thornton, and T. Stanton. 2004. Infragravity rip current pulsations. *Journal of Geophysical Research*. 109 (C01033) doi:

10.1029/2003JC002068.

Madsen, P.A., O. R. Sorensen, and H. A. Schaffer. 1997a. Surf zone dynamics simulated by a Boussinesq type model. Part I: Model description and cross-shore motion of regular waves. *Coastal Engineering*, 32: 255-287.

Madsen, P.A., O. R. Sorensen, and H. A. Schaffer. 1997b. Surf zone dynamics simulated by a Boussinesq type model. Part II: Surf beat and swash oscillations for wave groups and irregular waves. *Coastal Engineering*, 32: 289-319.

McKenzie, R. 1958. Rip current systems. *Journal of Geology*, 66: 103-113.

Meadows, G.A. 1976. Time Dependent Fluctuations in Longshore Currents, ASCE, Proceedings 15th Coastal Engineering Conf, Honolulu.

Mei, C. C. and D. Angelides. 1977. Longshore circulation around a conical island. *Coastal Engineering*, 1: 31-42.

Mei, C. C. and P. L.-F. Liu. 1977. Effects of topography on the circulation in and near the surf zone - linear theory. *Journal of Estuary Coastal Marine Sciences*, 5: 25-37.

Miller, C. and A. Barcilon. 1978. Hydrodynamic instability on the surf zone as a mechanism for the formation of horizontal gyres. *Journal of Geophysical Research*, 83: 4107-4116.

Mizuguchi, M. 1976. Eigenvalue problems for rip current spacing. *Transactions of the American Society of Civil Engineers*, 148: 83-88.

Murray, A. B. 2002. Rip channel development on non-barred beaches: the importance of a lag in suspended sediment transport. *Journal of Geophysical Research*, submitted.

Murray, A. B. and G. Reydellet. 1999. Rip currents in the absence of bathymetric forcing. International Association for Hydraulic Research Symposium on River, Coastal and Estuarine Morphodynamics, Vol 1, Genova, pp. 404-414.

Murray, A. B. and G. Reydellet. 2001. A rip-current model based on a hypothesized wave/current interaction. *Journal of Coastal Research*, 17: 517-530.

Murray, A. B., M. LeBars, and C. Guillon. 2003. Tests of a new hypothesis for non-bathymetrically driven rip currents. *Journal of Coastal Research*, 19 (2): 269-277.

Nadaoka, K. and T. Kondoh. 1982. Laboratory measurements of velocity field structure in the surfzone by LDV. *Coastal Engineering in Japan*, 25: 125-145.

- Noda, E. K. 1974. Wave-induced nearshore circulation. *Journal of Geophysical Research*, 79(27): 4098-4106.
- Noda, E. K., C. J. Sonu, V. C. Rupert, and J. I. Collins. 1974. Nearshore circulation under sea breeze conditions and wave-current interaction in the surf zone. TETRA-72-149-4, Tetra Tech, Inc., 216 p.
- Oh, T. M. and R. G. Dean. 1996. Three-dimensional hydrodynamics on a barred beach. *Proceedings of the 25<sup>th</sup> International Conference on Coastal Engineering*, ASCE, pp. 3680-3693.
- Okaysu, A., T. Shibayama, and N. Nimura. 1986. Velocity field under plunging waves. In *Proceedings 20<sup>th</sup> Coastal Engineering Conference*, pages 660-674, Taipei.
- Okaysu, A., T. Shibayama, and N. Nimura. 1988. Vertical variation of undertow in the surf zone. In *Proceedings 21<sup>st</sup> Coastal Engineering Conference*, pages 478-491, Malaga.
- Oltman-Shay, J., P. A. Howd, and W. A. Birkemeier. 1989. Shear instabilities of the mean longshore current, 2, Field observations. *Journal Geophysical Research*, 94: 18,031-18,042.
- Ozkan-Haller, H. T., and J. T. Kirby. 1999. Nonlinear evolution of shear instabilities of the longshore current: A comparison of observations and computations. *Journal Geophysical Research*, 104: 25,953-25,984.
- Pechon, P., F. Rivero, H. Johnson, T. Chesher, B. O'Conner, J.-M. Tanguy, T. Karambas, M. Mory, and L. Hamm. 1997. Intercomparison of wave-driven current models. *Coastal Engineering*, 31: 199-215.
- Peregrine, D. H. 1998. Large-scale vorticity generation by breakers in shallow and deep water. In *IUTAM Symposium on Three-dimensional air-sea interactions*, Nice.
- Peregrine, D. H. 1999. Surf zone currents. *Theoretical and Computational Fluid Dynamics*, 10: 295-309.
- Peregrine, D. H. and O. Bokhove. 1998. Vorticity and surf zone currents. In *Proceedings 26<sup>th</sup> Coastal Engineering Conference*, Copenhagen, ASCE.
- Putrevu, U. and I. A. Svendsen. 1991. Wave induced nearshore currents: a study of the forcing, mixing and stability characteristics. (Ph.D. Dissertation), Research Report CACR-91-11, Center for Applied Coastal Research, University of Delaware, Newark.
- Putrevu, U. and I. A. Svendsen. 1993. Vertical structure of undertow outside the surf-zone. *Journal Geophysical Research*, 98: 707-716.

- Putrevu, U., J. Oltman-Shay, and I. A. Svendsen. 1995. Effect of alongshore nonuniformities on longshore current predictions. *Journal Geophysical Research*, 100: 16,119-16,130.
- Quirke, T. T. 1925. The undertow. *Science*, 61: 468.
- Ranasinghe, R., G. Symonds, K. Black, and R. Holman. 2002. Processes governing rip spacing persistence, and strength in swell dominated, microtidal environment. *Proceedings 27<sup>th</sup> International Conference on Coastal Engineering*, ASCE, pp. 493-499.
- Rattanapitikon, W. and T. Shibayama. 2000. Simple model for undertow profile. *Coastal Engineering Journal*, 32: 1-30.
- Russell, P. E., and D. A. Huntley. 1999. A cross-shore transport “shape function” for high energy beaches. *Journal Coastal Research*, 15 (1): 198-205.
- Sanchez-Arcilla, A., F. Collado, M. Lemos, and F. Rivero. 1990. Another quasi-3D model for surf zone flows. In *Proceedings 22<sup>nd</sup> Coastal Engineering Conference*, pages 316-329.
- Sanchez-Arcilla, A., F. Collado, and A. Rodriguez. 1992. Vertically varying velocity field in Q-3D nearshore circulation. In *Proceedings 23<sup>rd</sup> Coastal Engineering Conference*, pages 2811-2824.
- Sancho, F. and I. A. Svendsen. 1997. Unsteady nearshore currents on longshore varying topographies. (Ph.D. Dissertation), Research Report CACR-97-10, Center for Applied Coastal Research, University of Delaware, Newark.
- Sancho, F. E., I. A. Svendsen, A. R. Van Dongeren, and U. Putrevu. 1995. Longshore nonuniformities of nearshore currents. *Coastal Dynamics '95*, pages 425-436.
- Sasaki, T. 1975. Simulation of shoreline and nearshore current. *Proceedings of Civil Engineering in the Oceans*, III, American Society of Civil Engineers, Univ. of Delaware, pp. 179-196.
- Sasaki, T. 1985. Velocity profiles in nearshore circulation current. *Coastal Engineering in Japan*, 28: 125-136.
- Sasaki, T. and T. Horikawa. 1975. Nearshore current system on a gently sloping bottom. *Coastal Engineering in Japan*, 18: 123-142.
- Sasaki, T. and K. Horikawa. 1978. Observation of nearshore current and edge waves. *Proceedings of the 16<sup>th</sup> Conference on Coastal Engineering*, ASCE, Hamburg, pp. 791-809.

- Saville, T. Jr., 1950. Model study of sand transport along an infinitely long, straight beach. *Transactions American Geophysical Union*, 31: 555-565.
- Schmidt, W. E., B. T. Woodward, K. S. Millikan, and R. T. Guza. 2003. A GPS-tracked surf zone drifter. *Journal of Atmospheric and Oceanic Technology*, 20: 1069-1075.
- Shepard, F. P. 1936. Undertow, rip tide or rip current. *Science*, 84:181-182.
- Shepard, F. P. and E. C. LaFond. 1939. Undertow. *Science*, 89: 1-2.
- Shepard, F. P., K. O. Emery, and E. C. Lafond. 1941. Rip currents: A process of geological importance. *Journal of Geology*, 49: 338-369.
- Shepard, F. P. and D. L. Inman. 1950a. Nearshore circulation. *Proceedings of the 1<sup>st</sup> Conference on Coastal Engineering*, Council on Wave Research, Berkeley, CA. pp. 50-59.
- Shepard, F. P. and D. L. Inman. 1950b. Nearshore circulation related to bottom topography and wave refraction. *Transactions American Geophysical Union*, 31(4): 196-213.
- Sherman, D. J., A. D. Short, and I Takeda. 1993. Sediment mixing-depth and bedform migration in rip channels. *Journal Coastal Research*, 3 (3): 387-395.
- Short, A. D. 1985. Rip current type, spacing and persistence, Narrabeen Beach, Australia. *Marine Geology*, 65: 47-71.
- Short, A. D. 1993. Beaches of the New South Wales coast: A guide to their nature, characteristics, surf and safety. Australian Beach Safety and Management Program, Sydney, pp. 254.
- Short, A. D., and C. L. Hogan. 1994. Rip currents and beach hazards: Their impact on public safety and implications for coastal management. *Journal Coastal Research*, Special Issue No. 12: 197-209.
- Short, A. D., and R. W. Brander. 1999. Regional variations in rip density. *Journal Coastal Research*, 15 (3): 813-822.
- Slinn, D. N., J. S. Allen, P. A. Newberger, and R. A. Holman. 1998. Nonlinear shear instabilities of alongshore currents over barred beaches. *Journal Geophysical Research*, 103: 18,357-18,379.
- Slinn, D. N., J. S. Allen, and R. A. Holman. 2000. Alongshore currents over variable beach topography. *Journal Geophysical Research*, 105: 16971-16988.

- Smith, J. A. and J. L. Largier. 1995. Observations of nearshore circulation: rip currents. *Journal Geophysical Research*, 100: 10967-10975.
- Sonu, C. J. 1972. Field observations of nearshore circulation and meandering currents. *Journal Geophysical Research*, 77: 3232-3247.
- Sorensen, O. R., H. A. Schaffer, P. A. Madsen, and R. Deigaard. 1994. Wave breaking and induced nearshore circulations. In *Proceedings 24<sup>th</sup> Coastal Engineering Conference*, pages 2583-2594.
- Sorensen, O. R., H. A. Schaffer, and P. A. Madsen. 1998. Surf zone dynamics simulated by a Boussinesq type model. Part III. Wave-induced horizontal nearshore circulation. *Coastal Engineering*, 33: 155-176.
- Svendsen, I. A. 1984a. Wave heights and set-up in a surf zone. *Coastal Engineering*, 8: 303-329.
- Svendsen, I. A. 1984b. Mass flux and undertow in a surf zone. *Coastal Engineering*, 8: 347-365.
- Svendsen, I. A. 1987. Analysis of surf zone turbulence. *Journal Geophysical Research*, 92 (C5): 5115-5124.
- Svendsen, I. A. and K. A. Haas. 1999. Interaction of undertow and rip currents. In *Proceedings Vth COPEDEC 99*, volume I, pages 218-229, Cape Town.
- Svendsen, I. A. and J. B. Hansen. 1986. The interaction of waves and currents over a longshore bar. In *Proceedings 20<sup>th</sup> Coastal Engineering Conference*, pages 1580-1594.
- Svendsen, I. A. and J. B. Hansen. 1988. Cross-shore currents in surf-zone modelling. *Coastal Engineering*, 12: 23-42.
- Svendsen, I. A. and R. S. Lorenz. 1989. Velocities in combined undertow and longshore currents. *Coastal Engineering*, 13: 55-79.
- Svendsen, I. A. and U. Putrevu. 1990. Nearshore circulation with 3-D profiles. In *Proceedings 22<sup>nd</sup> Coastal Engineering Conference*, ASCE, volume 1, pages 241-254, Delft.
- Svendsen, I. A., H. A. Schaffer, and J. B. Hansen. 1987. The interaction between the undertow and boundary layer flow on a beach. *Journal Geophysical Research*, 92: 11845-11856.
- Svendsen, I. A., K. A. Haas, and Q. Zhao. 2000. Analysis of rip current systems. In *Proceedings 27<sup>th</sup> Coastal Engineering Conference*, ASCE, Sydney, pp. 1127-1140.

- Symonds, G. and D. A. Huntley. 1980. Waves and currents over nearshore bar systems. Proceedings of the Canadian Coastal Conference, National Research Council, Canada. pp. 64-78.
- Symonds, G., R. A. Holman, and B. Bruno. 1997. Rip currents. Coastal Dynamics '97, pages 584-593.
- Tait, R. J. 1970. Edge wave modes and rip current spacing. Ph.D. Dissertation, Scripps Institution of Oceanography, 123 pp.
- Tam, C. K. 1973. Dynamics of rip currents. Journal Geophysical Research, 78(12): 1937-1943.
- Tanaka, H. and A. Wada. 1984. Reproduction of nearshore currents by a mathematical model. Coastal Engineering in Japan, 27: 151-163.
- Tang, E. and R. A. Dalrymple. 1989. Rip currents, nearshore circulation, and wave groups. In Nearshore Sediment Transport, R. J. Seymour, editor, New York, NY, Plenum Press, pp. 205-230.
- Thornton, E. B. 1970. Variation of longshore current across the surf zone. In Proceedings 12<sup>th</sup> Coastal Engineering Conference, pages 291-308.
- Thornton, E. B. and R. T. Guza. 1983. Surf zone longshore currents and random waves: field data and models. Journal Physical Oceanography, 16: 1165-1178.
- Thornton, E. B. and C. S. Kim. 1993. Longshore current and wave height modulation at tidal frequency inside the surf zone. Journal of Geophysical Research, 98: 9499-9508.
- Thornton, E. B., J. L. Swayne, and J. R. Dingler. 1998. Small-scale morphology related to waves and currents across the surf zone. Marine Geology, 145: 173-196.
- Vagle, S., D. M. Farmer, and G. B. Deane. 2001. Bubble transport in rip currents. Journal Geophysical Research, 106: 11677-11689.
- Van Dongeren, A., F. Sancho, I. A. Svendsen, and U. Putrevu. 1994. SHORECIRC: A quasi 3-D nearshore model In Proceedings 24<sup>th</sup> Coastal Engineering Conference, pages 2741-2754.
- Vos, R. G. 1976. Observations on the formation and location of transient rip currents. Sedimentary Geology, 16: 15-19.
- Wind, H. G., and C. B. Vreugdenhil. 1986. Rip-current generation near structures. Journal Fluid Mechanics, 171: 459-476.

- Wood, W.L. and G. A. Meadows. 1975. Unsteadiness in Longshore Currents, Geophysical Research Letters, Vol 2, No 11.
- Wright, L. D. and A. D. Short. 1984. Morphodynamic variability of surf zones and beaches: A synthesis. *Marine Geology*, 56: 93-118.
- Wright, L. D., R. T. Guza, and A. D. Short. 1982. Dynamics of a high energy dissipative surf zone. *Journal of Marine Geology*, 45: 41-62.
- Wright, L. D., P. Nielsen, N. C. Shi, and J. H. List. 1986. Morpho-dynamics of a bar-trough surf zone. *Marine Geology*, 50: 97-128.
- You, Z.-J. 1994. A simple model for current velocity profiles in combined wave-current flows. *Coastal Engineering*, 23: 289-304.
- Yu, J. and D. N. Slinn. 2003. Effects of wave-current interaction on rip currents. *Journal of Geophysical Research*, 108, C3, 3088, doi: 10.1029/2001JC001105.
- Zyberman, J., J. Fredsoe, and R. Deigaard. 1990. Prediction of the dimensions of a rip current system on a coast with bars. *Proceedings 22<sup>nd</sup> International Conference Coastal Engineering*, American Society Civil Engineers, Delft, pages 959-972.