

Cushman-Roisin (1994): "Linear Barotropic Waves"

Figure 6-1 Upwelling and downwelling Kelvin waves. In the Northern Hemisphere, both waves travel with the coast on their right, but the accompanying currents differ.



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Figure 6-3 Recapitulation of the dispersion relation of Kelvin and Poincaré waves on the *f*-plane and on a flat bottom.





Figure 6-2 Cotidal lines (dashed) with time in lunar hours for the tide in the English channel showing the eastward progression of the tide from the North Atlantic Ocean. Lines of equal tidal range (solid, with values in meters) reveal larger amplitudes along the French coast, namely to the right of the wave progression in accordance with Kelvin waves. (From Proudman, 1953, as adapted by Gill, 1982.)