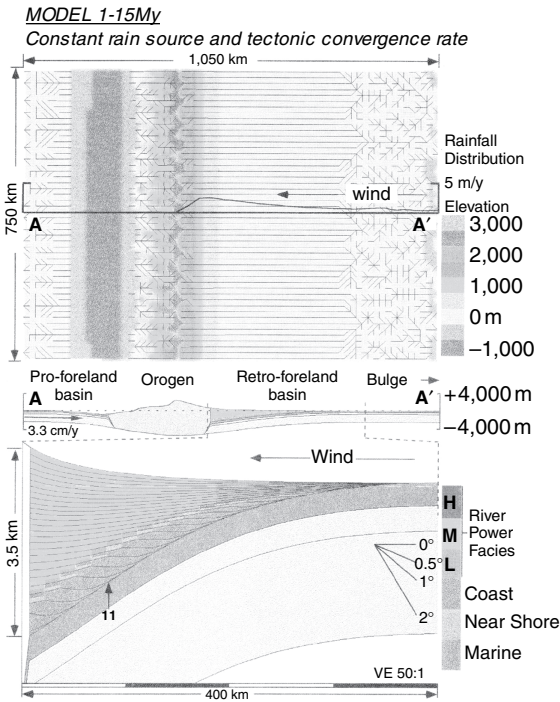


A



B

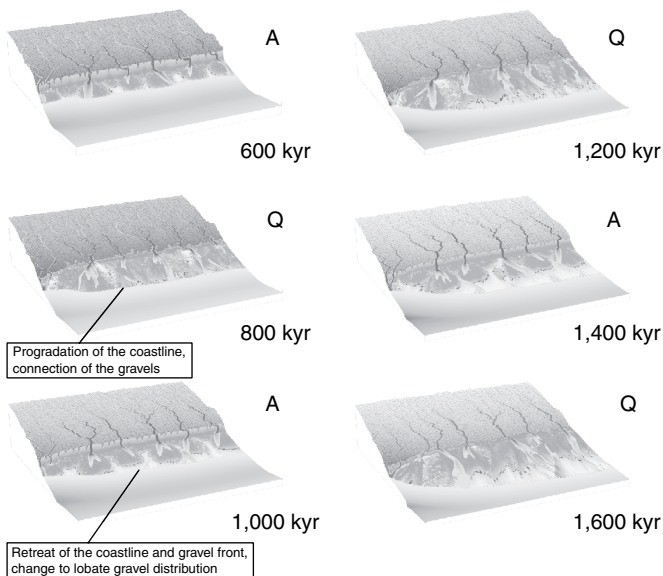


FIGURE 20.11. (A) A three-dimensional (3D) compressional basin model with surface processes (Johnson and Beaumont, 1995). (B) A 3D compressional basin model with surface processes and grain-size sorting (Clevis *et al.*, 2003). Perspective views of successive stages of landscape subjected to tectonic pulsations. Phases of tectonic activity (A) reflected by retreat of the coastline and gravel front. Quiescent periods (Q) associated with progradation of the coastline and gravel front. (C) A 3D compressional basin model with surface processes and grain-size sorting (Clevis *et al.*, 2003). Cross sections (c)–(d) show the distribution of gravel during tectonic pulsation (of 200,000-year period). Gravel progrades during tectonic quiescence. Sinusoidal sea-level fluctuation (period 100,000 years, amplitude 20 m) superimposed on tectonic pulsation is shown in (e).