



FIGURE 13.42. Large-scale inclined strata in ground-penetrating-radar (GPR) profiles through braided and meandering river deposits. Profiles are oriented across-channel. (A) Sagavanirktok River, Alaska, showing a compound-bar deposit with large-scale inclined strata dipping to the west and passing into a channel fill. Variable inclination of large-scale strata is associated with deposition on unit bars. Lower in the profile, a confluence fill is bounded on both sides by side (point) bars. The large-scale strata within the side bars increase in inclination, and their basal erosion surfaces become deeper, towards the confluence scour. (B) South Esk River, Scotland, showing point-bar deposits with large-scale inclined strata dipping to the left. The basal erosion surface of point-bar deposits is about 3 m below the land surface. Discordance in inclination of large-scale strata is marked by d. Upper-bar deposits have more laterally continuous radar reflections than do lower-bar deposits. (C) A trench showing lower-bar deposits (medium-scale trough cross-stratified sand) overlain by upper-bar deposits (small-scale cross-stratified and burrowed sand interbedded with dark layers of vegetation-rich silt). The dark layers are low-flow deposits, and define the upper parts of large-scale inclined strata. From Bridge (2006).