



Figure 4: a) Velocity model and material properties for two horizontal low-velocity fault zone models at 10 km depth. Receivers (black inverted triangles) depict the distance range of model stations used. Fault zone (1) is a 200 m thick flat layer. Fault zone (2) is a 1 km thick flat layer. Six modeled sources at the depths given are summed into each migration. Below, migrated synthetics are on the left, and migrated resampled noise estimates are on the right. b) Migrated depth section (dip filtered) for the 200-m fault zone (1). c) Resampled migrated section (dip filtered) for the 200-m fault zone (1). d) Migrated depth section (dip filtered) for the 1-km fault zone (2). e) Resampled migrated section (dip filtered) for the 1-km fault zone (2). The white dashed line depicts the 10 km depth level where the upper interface of both fault zones is located. White ellipses show pieces of the imaged fault zones (b, d) and artifacts (c, e), whereas black ellipses show multiples (b, d) and artifacts (c, e).