

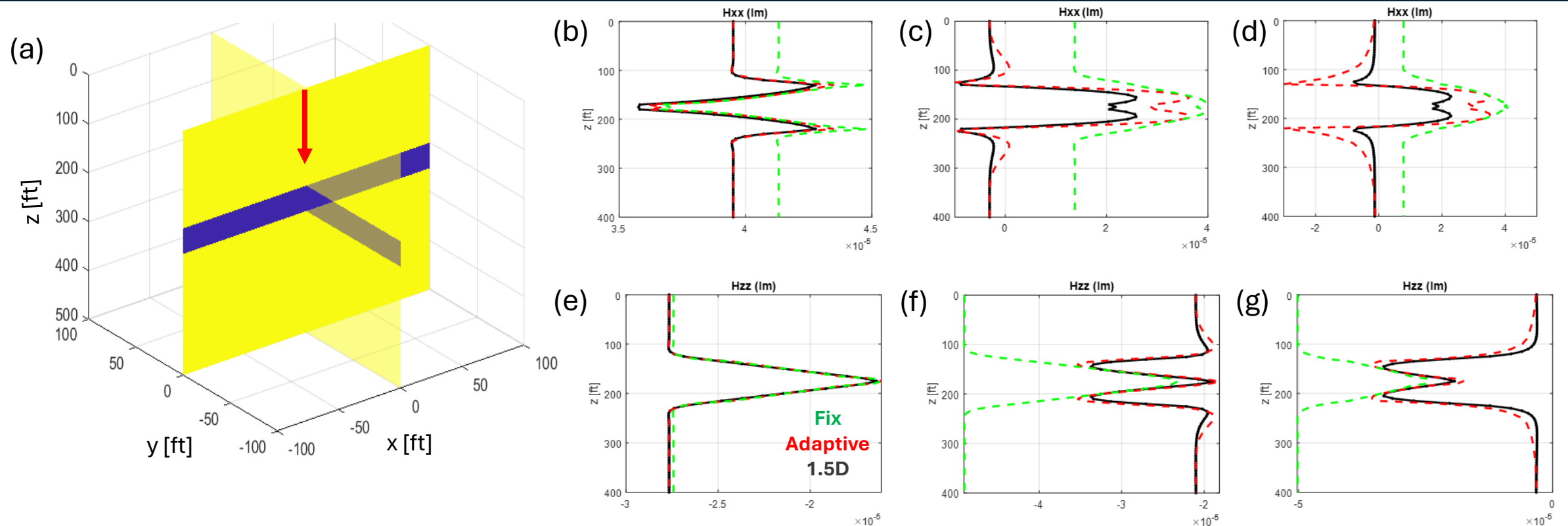


Figure 1. (a) Vertical well test across three horizontally layered media. The conductivity in the blue zone is 1/2 S/m, while the conductivity in the yellow zone is 1/3 S/m, 1/30 S/m, and 1/300 S/m in the first (b,e), second (c,f), and third (d,g) columns, respectively. The imaginary part of H_{xx} are shown in the top row (b–d), and the imaginary part of H_{zz} are shown in the bottom row (e–g). Red, green, and black lines identify the adaptive Born approximation, Born approximation with a fixed background conductivity (arithmetic average), and 1.5D solution, respectively.

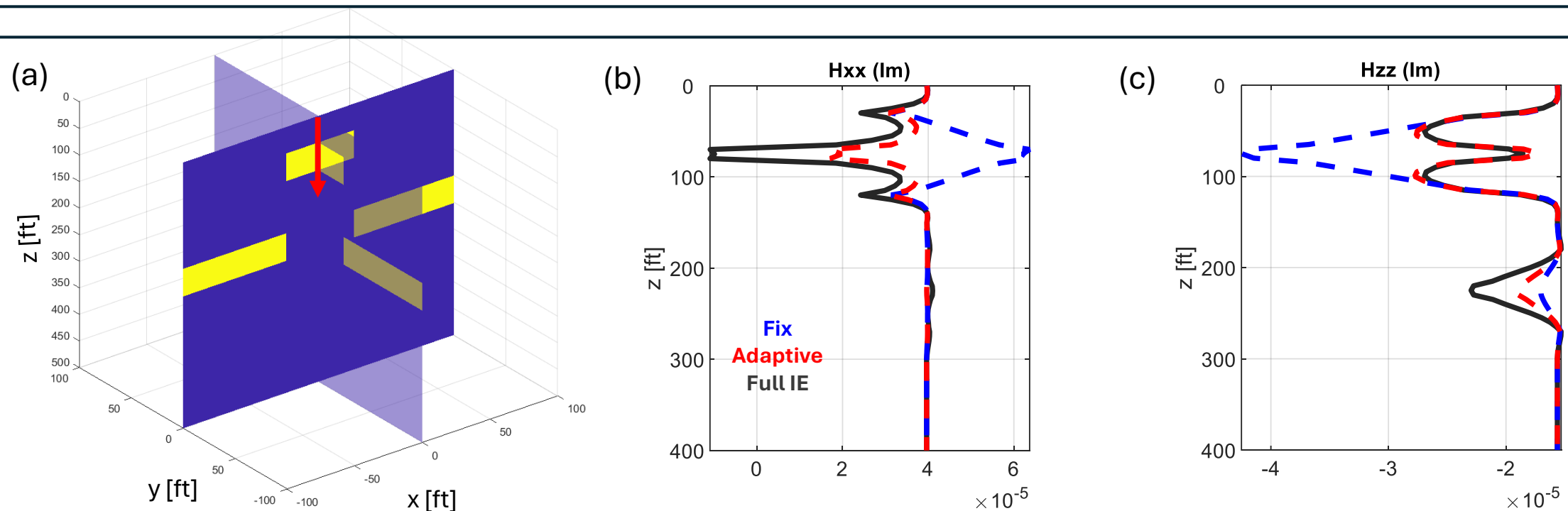


Figure 2. (a) Vertical well test across a faulted, three-layered medium. The conductivity is 1/2 S/m in the blue zone and 1/30 S/m in the yellow zone. (b) Imaginary part of the H_{xx} component and (c) imaginary part of the H_{zz} component. Red and blue lines denote the fields computed using the Born approximation with adaptive and fixed backgrounds (equal to 1/2 S/m), respectively. Black lines denote the magnetic fields obtained from the full 3D integral equation (IE) solution computed with an iterative solver.