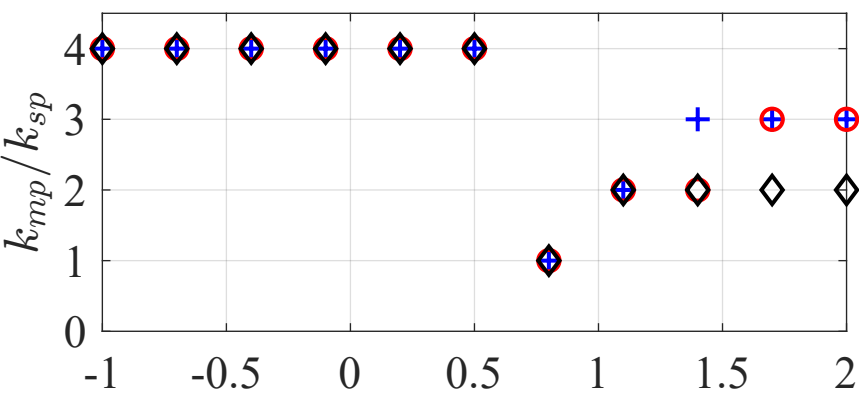
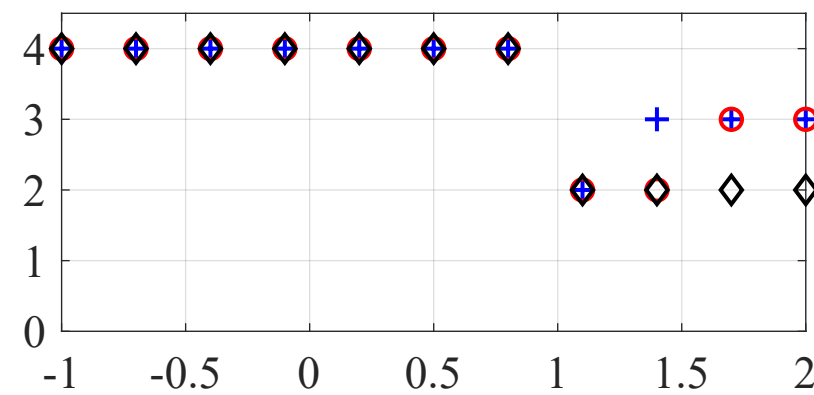
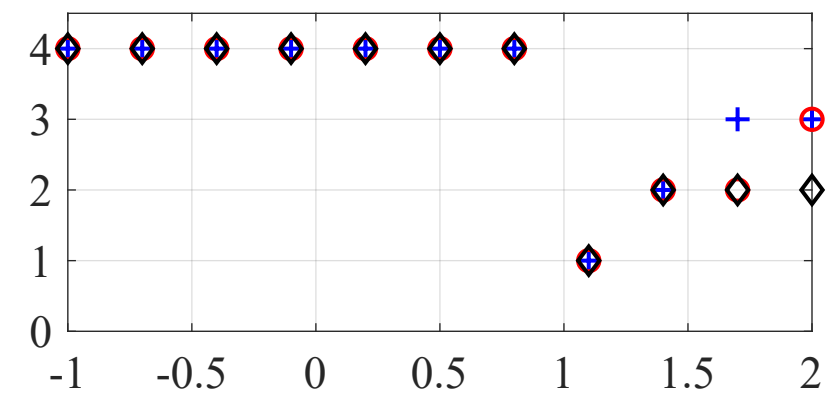
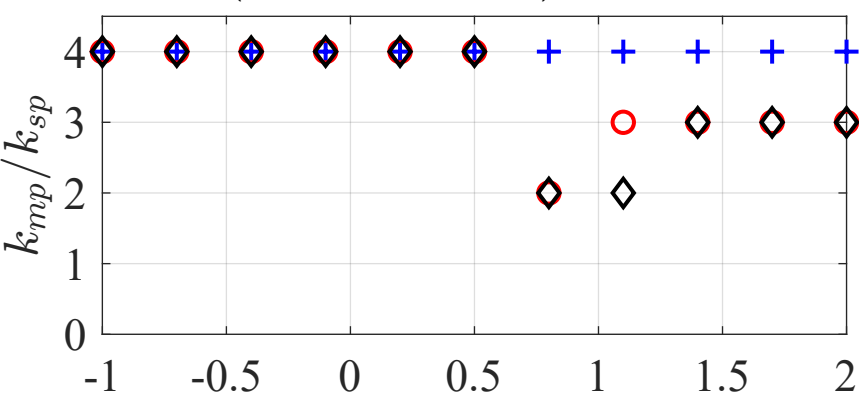
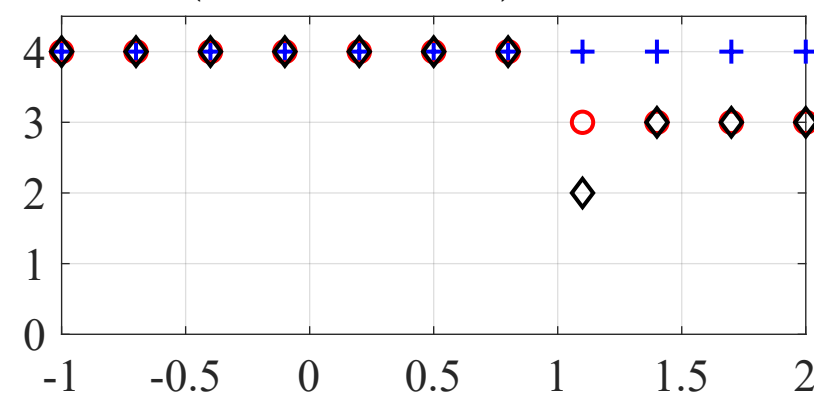
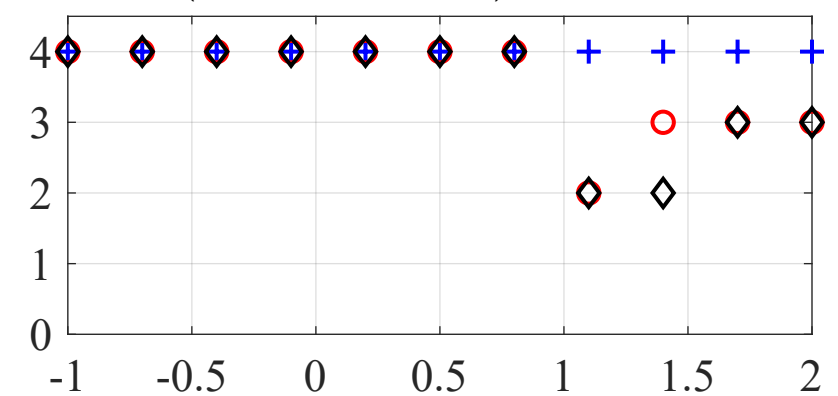
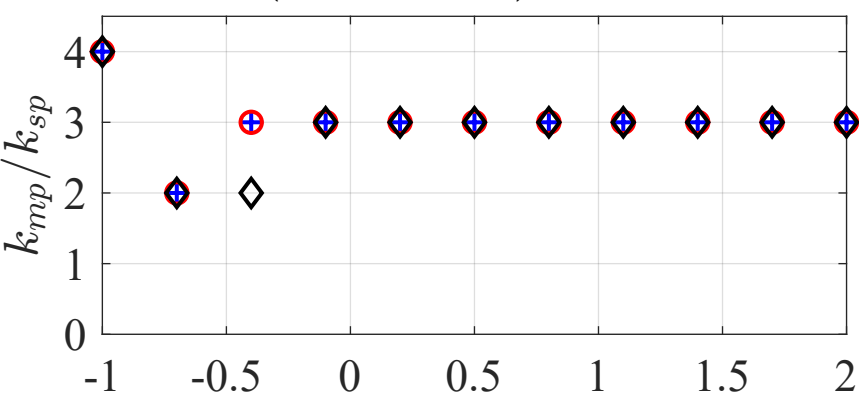
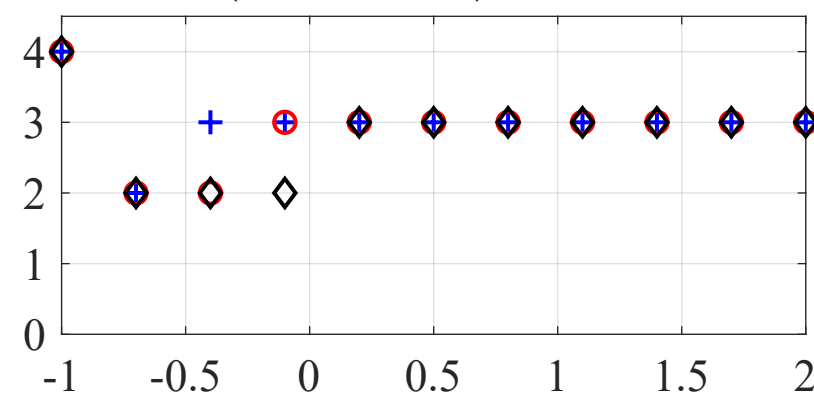
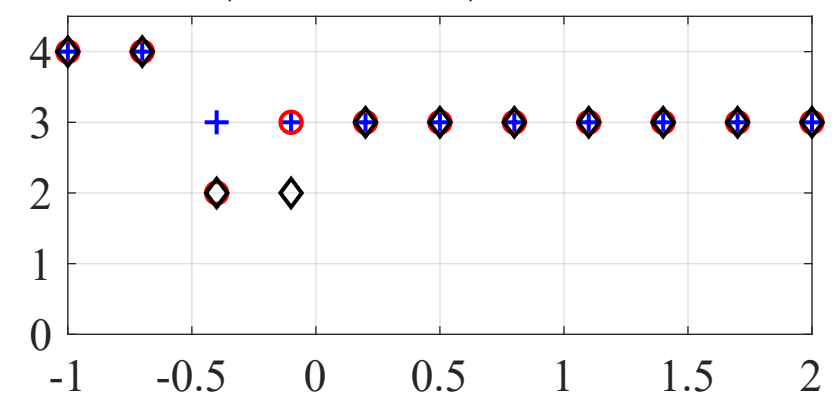


$\rho = 0$ (bubbles in water), $\phi = 1\%$, $u_r = 1$  $\rho = 0$ (bubbles in water), $\phi = 5\%$, $u_r = 1$  $\rho = 0$ (bubbles in water), $\phi = 20\%$, $u_r = 1$  $\rho = 2.56$ (sand in water), $\phi = 1\%$, $u_r = 1$  $\rho = 2.56$ (sand in water), $\phi = 5\%$, $u_r = 1$  $\rho = 2.56$ (sand in water), $\phi = 20\%$, $u_r = 1$  $\rho = 1000$ (drop in air), $\phi = 1\%$, $u_r = 1$  $\rho = 1000$ (drop in air), $\phi = 5\%$, $u_r = 1$  $\rho = 1000$ (drop in air), $\phi = 20\%$, $u_r = 1$  $\log_{10}(D/\eta_{sp})$ $\log_{10}(D/\eta_{sp})$ $\log_{10}(D/\eta_{sp})$