Interaction of Mode-One Internal Solitary Waves of Opposite Polarity in Double Pycnocline Stratifications

MOVIE 1 Caption

Kevin G. Lamb[1]†,

[1]Department of Applied Mathematics, University of Waterloo, Waterloo, Ontario, Canada N2L 3G1

Caption for Movie 1: Animation showing the density field for Case C_5 (see Figures 10(a) and 11). Stratification S_2 with $(z_1, z_2) = (-0.15, -0.9)$ and $\Delta\rho_1 = 0.6$. The initial trailing wave at $x = 20$ is an ISW of depression (KdV polarity). The initial slower wave at $x = 60$ is a wave of elevation (negative KdV polarity). The two waves move to the right relative to the fluid. The animation is in a reference frame moving with the average velocity of the two initial ISWs.

† Email address for correspondence: kglamb@uwaterloo.ca