

Review of “Effects of Rotation and Topography on Internal Solitary Waves Governed by the Rotating-Gardner Equation”

This is a very well written manuscript, which develops adiabatic theory for the rotating–Gardner equation and compares this with well chosen numerical simulations, which demonstrate that the combined effects of slowly varying depth, high order nonlinearity and rotation are significant for internal waves propagating in realistic oceanic conditions. Some minor comments on the manuscript follow:

- Some of the equations on p. 4 are missing punctuation.
- Line 86, Generally would not start line with an equation number. Would suggest changing that to “Equation (9)”.
- Label on Figure 1 should be X_{eG}/X_{e0} . Same mistake on lines 186 and 187.
- Line 211, Should omit “first” at the end of this line, as this appears to be the only model that is considered.
- Line 254–256. When discussing Figure 6(b) it would be helpful to note that the region of integration for calculating the adiabatic response only includes the leading solitary wave and not the secondary solitary wave which develops from the trailing radiation.