Figures 1, 2, and 3 replace figures 9, 11, and 12, respectively, in Choi (2022).

## REFERENCES

CHOI, W. 2022 High-order strongly nonlinear long wave approximation and solitary wave solution, J. Fluid Mech. 945, A15.



FIGURE 1. Numerical solution of the second-order system (6.1) initialized with a solitary wave of a/h = 0.4, or  $a_s/h \simeq 0.443$ . The initial condition for  $\zeta$  is given by the second-order solitary wave solution (4.11) while that for v is found by solving numerically (6.16). (a) Time evolution of the surface elevation  $\zeta$  is shown for  $0 \leq t(g/h)^{1/2} \leq 200$  in a frame of reference moving with the solitary wave speed  $c = c_0 + c_2$  with  $c_0$  and  $c_2$  defined by (4.10) and (4.18), respectively. (b) Truncated total energy E versus time t. (c) Comparison between the numerical solution (solid line) for  $\zeta$  at  $t(g/h)^{1/2} = 200$  and the initial condition (circles).



FIGURE 2. Numerical solution of the second-order system (6.1) for the head-on collision of two solitary waves. The system is initialized with two second-order solitary wave solutions (4.11). The right-going wave of  $a_s/h = 0.4$  ( $a/h \simeq 0.366$ ) is located at x/h = -8.23 while the left-going wave of  $a_s/h = 0.39$  ( $a/h \simeq 0.356$ ) is located at x/h = 8.15.



FIGURE 3. Comparison of numerical solutions (solid: second-order; dashed: first-order; dot-dahsed: SG/GN) with the experimental data (symbols) of Chen & Yeh (2014) (a)  $(t - t_c)(g/h)^{1/2} = -7.42$ ; (b) -2.69; (c) -0.64; (d) 0; (e) 1.02; (f) 1.79; (g) 6.14; (h) 10.10. Here,  $t_c$  is the time when the maximum peak is observed during the collision. The red dotted lines represent the numerical solutions presented in Choi (2022).