



# Correction to: A Regular Integral Equation Formalism for Solving the Standard Boussinesq's Equations for Variable Water Depth

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The author would like to correct an error in calculation of the Eq. (A.2.8) in Appendix A.2 of the original article.

The correct equation is as follows:

$$\begin{aligned} U_{xt}^{(4)}(b)(x, t) &= \frac{\partial^2}{\partial x \partial t} U^{(4)}(b)(x, t) = \frac{\partial}{\partial t} \{U_x^{(4)}(b)\} \\ &= \frac{1}{\pi} \frac{\partial}{\partial t} \int_0^\infty \int_0^t \int_{-\infty}^\infty \frac{k}{1 + h_0^2 k^2 / 3} \cdot \cos [\omega_B(t - \tau)] \cdot \sin [k(\xi - x)] \cdot b(\xi, \tau) d\xi d\tau dk \\ &= \frac{1}{\pi} \int_0^\infty \int_0^t \int_{-\infty}^\infty \frac{k}{1 + h_0^2 k^2 / 3} \cdot \frac{\partial}{\partial t} \cos [\omega_B(t - \tau)] \cdot \sin [k(\xi - x)] \cdot b(\xi, \tau) d\xi d\tau dk \\ &\quad + \frac{1}{\pi} \int_0^\infty \left[ \left\{ \int_{-\infty}^\infty \frac{k}{1 + h_0^2 k^2 / 3} \cdot \cos [\omega_B(t - t)] \cdot \sin [k(\xi - x)] \cdot b(\xi, \tau = t) d\xi \right\} \frac{dt}{dt} \right] dk \\ &= -\frac{1}{\pi} \int_0^\infty \int_0^t \int_{-\infty}^\infty \frac{k \omega_B}{1 + h_0^2 k^2 / 3} \cdot \sin [\omega_B(t - \tau)] \cdot \sin [k(\xi - x)] \cdot b(\xi, \tau) d\xi dk d\tau \\ &\quad + \frac{1}{\pi} \int_0^\infty \int_{-\infty}^\infty \frac{k}{1 + h_0^2 k^2 / 3} \cdot \sin [k(\xi - x)] \cdot b(\xi, t) d\xi dk. \end{aligned} \tag{A.2.8}$$

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