

Dear Editor:

In the proofreading process of my paper "Reciprocal Green's Functions and the Quick Forecast of Submarine Landslide Tsunamis (nhess-2019-124)," I found a few typos in the manuscript. Besides, some modification can make the manuscript more consistent in mathematics. The followings are the point I want to modify. My explanations are in blue.

A. In eq. (7), \mathbf{G}^T should read \mathbf{G}_η^T and eq. (7) should read

$$\frac{\partial}{\partial t} \mathbf{G}_\eta^T = -\mathbf{O} \mathbf{G}_\eta^T + \boldsymbol{\delta}_\eta^T. \quad (7)$$

On line 3 of Pg. 3, a vector \mathbf{G}_η has been defined. To be consistent with the previous notation, a subscript η should be added to the \mathbf{G}^T , and both \mathbf{G}_η^T and $\boldsymbol{\delta}_\eta^T$ should be bold italic because they are vectors.

B. Eq. (12) should be modified to

$$\begin{aligned} \mathbf{Z} &= \mathbf{G}_\eta * \mathbf{f}^T \\ &= \int_0^t \iint_{\Omega_s} \mathbf{G}_\eta(\mathbf{r}_s, \tau; \mathbf{r}) \cdot \mathbf{f}^T(\mathbf{r}_s, t - \tau) d\Omega_s d\tau \end{aligned}$$

or

$$\eta = \int_0^t \iint_{\Omega_s} -\frac{\partial d}{\partial t}(\mathbf{r}_s, t - \tau) \boldsymbol{\eta} \boldsymbol{\eta}(\mathbf{r}_s, \tau; \mathbf{r}) d\Omega_s d\tau \quad (12)$$

1. Eq. (12) is split into two equations because " \mathbf{Z} " is a vector and hence should have three components, while the integral is just the first component η . Therefore, a new line with just one word "or" is added.
2. The first line is not a simple multiplication and hence a "*" should be used, instead of a dot.
3. On the last line of the equation, a variable " $\boldsymbol{\eta} \boldsymbol{\eta}$ " is missing.
4. line 3 of Pg. 3, a vector \mathbf{G}_η has been defined. To be consistent

with the previous notation, a subscript η should be added to the ,
and both \mathbf{G}_η and \mathbf{f}^T on the first two lines should be bold italic
because they are vectors.

5. The arguments “ \mathbf{r} ” and “ \mathbf{r}_s ” of \mathbf{G}_η on the second line of the
equation should be exchanged because it is the reciprocal Green’s
function and the source and receiver locations should be
exchanged.
6. The arguments “ \mathbf{r} ” and “ \mathbf{r}_s ” of $\eta\eta$ on the last line of the
equation should be exchanged because it is the reciprocal Green’s
function and the source and receiver locations should be
exchanged.
7. The equation number is shifted downward. The last line is the
new eq. (12).