ERRATUM

Erratum to: The all-source Green's function (ASGF) and its applications to storm surge modeling, part I: from the governing equations to the ASGF convolution

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Published online: 16 December 2015
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Erratum to: Ocean Dynamics (2015) 65:1743–1760
DOI 10.1007/s10236-015-0893-z

The original version of this article unfortunately contained a mistake. The phrase right below Eq. 47 should be corrected as follows:

Now, $\mathbf{G}_{eL}$ is a new convolution matrix, whose sizes are $L_G \times n$, where L_G is given in Eq. (29). The number of columns of $\mathbf{G}_{eL}$ is n , whereas the number of columns of $\mathbf{G}_e$ is N . For the surge model and MERRA model used in this study, $N=32$, 224,425, and $n=408,622$. $\mathbf{G}_{eL}$ has 408,622 columns, a reduction by 31, 968,881 from that of $\mathbf{G}_e$. This is a huge reduction, which helps greatly store the matrix and enhance the computational efficiency. Therefore, instead of Eq. (21), Eq. (45) should be used for storm surge simulations; its subscripts and the tilde sign may be dropped in the context where there is no ambiguity.

The online version of the original article can be found at <http://dx.doi.org/10.1007/s10236-015-0893-z>.

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