

Derivation of the series expansion of Kajiura filter, Green's function of a tsunami

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Here we explicitly show the derivation of the series expansion of Kajiura filter, Green's function of a tsunami analytically derived in Kajiura (1963). The series expansion expression is extensively used in the numerical evaluation and we think it beneficial for tsunami researchers to show the whole derivation process in detail.

Reference: T. Kusakabe, N. Kame, S. Watada, Derivation of Series Expansion of Kajiura Filter, Green's Function of Tsunami, Zisin(2), vol. 71, 117-119, 2018, DOI: 10.4294/zisin.2017-16

Fig. 1 Plot of Kajiura filter $G(r/h)$, the initial surface displacement due to a spatiotemporal impulsive point displacement at the bottom.

Reference:

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