

Accepted Manuscript

Computational Modeling for Large Wood Dynamics with Root Wad and Anisotropic Bed Friction in Shallow Flows

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PII: S0309-1708(18)30560-8
DOI: <https://doi.org/10.1016/j.advwatres.2018.09.006>
Reference: ADWR 3197



To appear in: *Advances in Water Resources*

Received date: 28 June 2018
Revised date: 8 September 2018
Accepted date: 11 September 2018

Please cite this article as: T. Kang , I. Kimura , Computational Modeling for Large Wood Dynamics with Root Wad and Anisotropic Bed Friction in Shallow Flows, *Advances in Water Resources* (2018), doi: <https://doi.org/10.1016/j.advwatres.2018.09.006>

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Highlights

- We developed a computational model for motion of large wood (LW) in shallow flows.
- Lagrange type LW motion model was coupled with Euler type shallow flow model.
- The laboratory tests were performed with different flow discharge and channel slope.
- Rolling, sliding and depositing motions of LW were simulated accurately.
- The root wad of wood piece reduced the velocity of wood motion in shallow flows.

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