Hydrol. Earth Syst. Sci. Discuss., 11, C4409–C4410, 2014 www.hydrol-earth-syst-sci-discuss.net/11/C4409/2014/

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11, C4409-C4410, 2014

Interactive Comment

Interactive comment on "Prediction of direct runoff hydrographs utilizing stochastic network models: a case study in South Korea" by Y. Seo and S.-Y. Park

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The ms seems to throw away its potential strength by replacing an actual measured width function with synthetic networks. Since the network width distribution is a major determinant of both peak flow and delay to peak, any model that shows comparable fit with a synthetic function cannot be representing other aspects of the hydrology well. The other key control of the hydrological response, for a catchment of this size, is the fraction of rainfall that runs off and, particularly for the later stages of the hydrograph response, the shape of the hillslope hydrograph generated on the forested slopes. I suggest that a major re-think is required to squeeze a more insightful analysis out of

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the data.

There are also some presentation problems, particularly with notation. 3 examples:-Beta is critical to the discussion and should at least be defined. Figure 2 requires scales and units to be defined on the diagram or in the caption. I can't read the labels in figure 11, so it needs to be enlarged, and or a fuller caption.

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., 11, 11247, 2014.

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