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## A WARNING ABOUT AN INDEPENDENCE PROPERTY RELATED TO RANDOM BROWNIAN SCALING

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Abstract: In this note, which develops a part of our paper [2], we consider independence properties between Brownian motion, after Brownian scaling on a random interval (a, b), and the length (b - a) of the interval. We indicate three examples for which the Brownian scaled process is independent of the corresponding length. On the other hand, we discuss a case where this independence property does not hold and investigate further results for that example.

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**Key words and phrases:** Standard Brownian motion, Brownian scaling, excursion, last zero, first zero, Brownian meander, Bessel processes.

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