Correction to “Experimental evidence for statistical scaling and intermittency in sediment transport rates”
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[1] In the paper “Experimental evidence for statistical scaling and intermittency in sediment transport rates” by A. Singh et al. (Journal of Geophysical Research, 114, F01025, doi:10.1029/2007JF000963, 2009), we performed a multiscale analysis of bed load sediment transport series collected in a large-scale experimental flume at the St. Anthony Falls Laboratory at the University of Minnesota and quantified a systematic dependence of the statistics of sediment transport rates on the time scale (sampling interval). We characterized this timescale dependence mathematically via the multiscaling formalism and provided a physical interpretation. We also pointed out that our results are consistent with the more limited field observations of Bunte and Abt [2005] in that in both cases the mean bed load sediment transport rate was found to decrease with sampling time at low transport conditions and to increase with sampling time at high transport conditions.

[2] The results of our analysis and the comparison between laboratory and field observations remain intact. However, we would like to report two small corrections: one related to the method of sampling of Bunte and Abt (they used bed load traps and not Helley-Smith samplers) and also in the cause of their large transport events (as associated with the passage of several large particles and not with an increased rate resulting from the crests of bedforms). We thank K. Bunte and S. Abt for their careful reading of our paper and for communicating these corrections to us. The following two sentences should be replaced to reflect these corrections:

[3] 1. Original version: A similar trend was discovered by Bunte and Abt [2005], who studied the effects of sampling interval on bed load transport rates using Helley-Smith samplers deployed in a mixed gravel-cobble bed stream of a size comparable to ours experiments.
[4] Corrected version: A similar trend was discovered by Bunte and Abt [2005], who studied the effects of sampling interval on bed load transport rates using bed load traps deployed in a mixed gravel-cobble bed stream.

[5] 2. Original version: Bunte and Abt [2005] attribute the higher-discharge trend to the effect of large but infrequent transport events associated with the crests of bed forms:
[6] Corrected version: Bunte and Abt [2005] attribute the higher-discharge trend to the effect of large but infrequent transport events associated with the passage of several large particles:

Reference