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Joshua Zahl* (josh@caltech.edu). *On the expected height of t -ary trees under random edge compression.* Preliminary report.

Let $T(n)$ be a complete t -ary tree of height n . We will consider the process of taking a random restricted minor with edge compression probability p . We will consider the expected collapse (E_c) of each level of the tree, and from this, we will determine the expected collapse of an entire tree of height n . We will denote this expected collapse by $E_c(n)$. Tight lower and upper bounds are provided under a variety of conditions on p . (Received September 12, 2006)