

Figure 1: Fractional cluster masses $\mu_{\Delta}^i = M_{\Delta}^i/N$ as a function of time when they have been formed in a model with $\rho = 10^{-3}$, $N = 10^4$. Each point corresponds to a single cluster. The horizontal lines at the lower part of the figure are formed by a multitude of clusters of mass $M = 2$ (lowest line), $M = 3$ (second line), *etc.* The point $(0, 10^{-4})$ refers to $N = 10^4$ balls, each of which forms a cluster of unit mass at $t = 0$. Notice the dramatic change in the cluster mass distribution at the moment $t_c \approx 510$ depicted by blue vertical line. Three vertical lines correspond to the three cluster size distributions in Fig.2. After Gabrielov *et al.*, (2008).

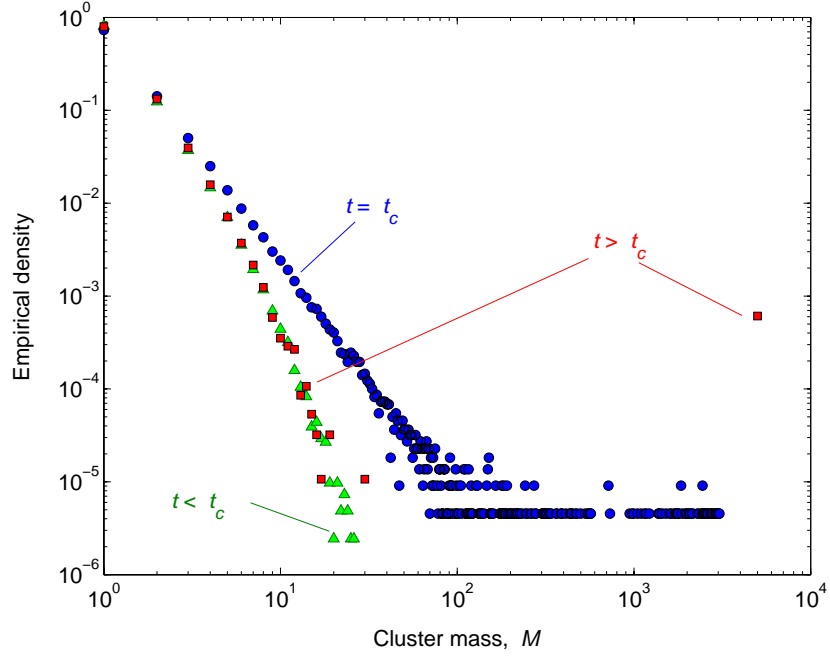


Figure 2: Cluster size distribution at three instants depicted by vertical lines in Fig. 1. At $t < t_c$ (green triangles) distribution can be approximated by a power law with exponential taper at the tail; at $t \approx t_c$ (blue balls) it is a pure power law; at $t > t_c$ (red squares) it is a tapered power law plus a δ function at the largest cluster. To produce this figure we used 50 independent realizations of the model with $\rho = 10^{-3}$, $N = 10^4$. After Gabrielov *et al.*, (2008).

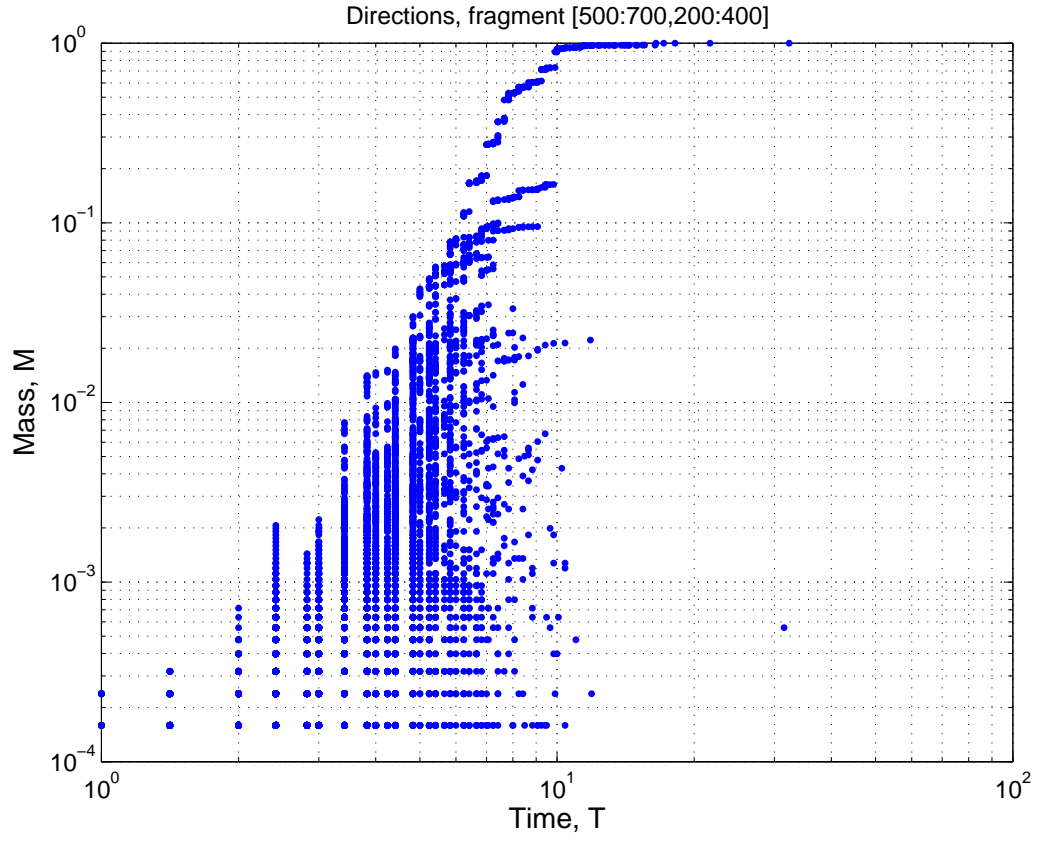


Figure 3: Cluster mass M as a function of time T for a tree based on directions data.

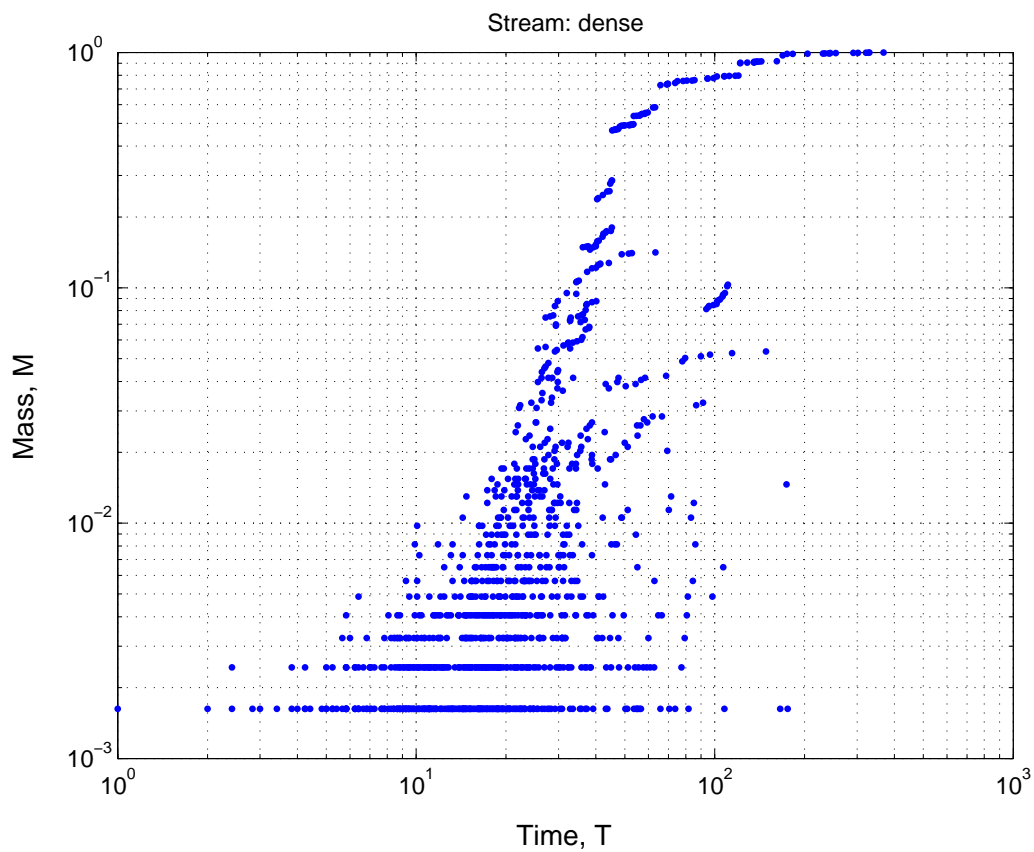


Figure 4: Cluster mass M as a function of time T for a stream tree; 2461 leaves.

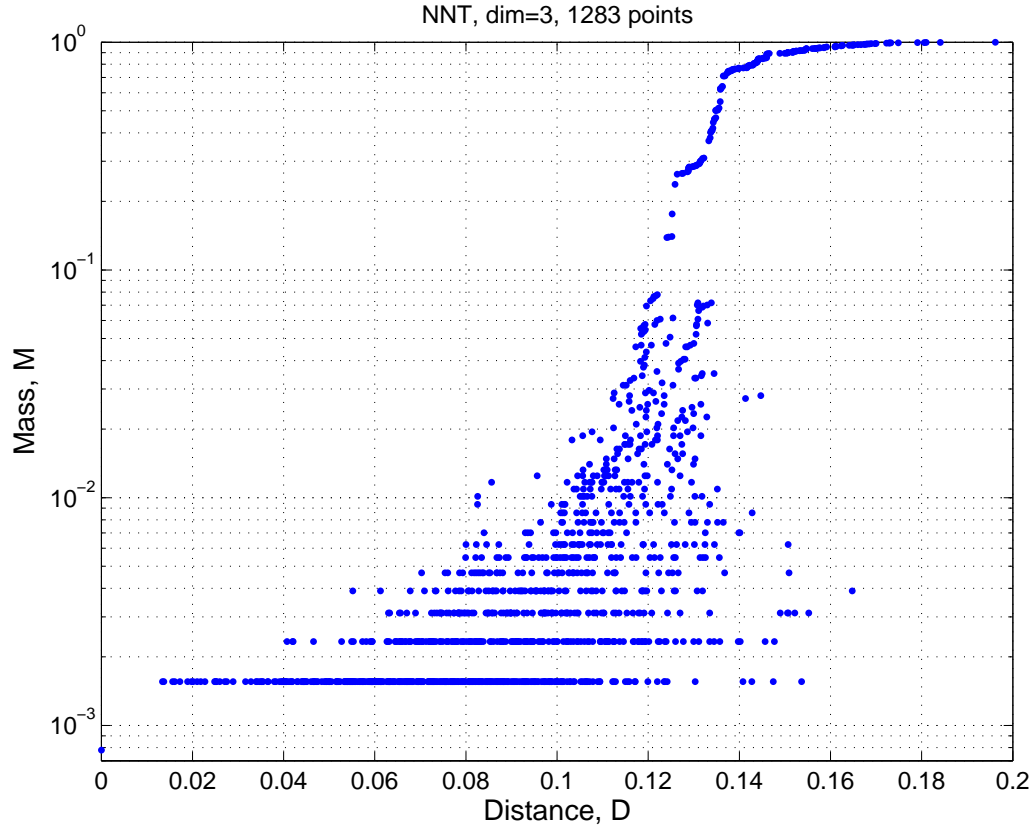


Figure 5: Cluster mass M as a function of time T for a nearest-neighbor spanning tree for points uniformly distributed within a 2 dimensional circle; 1993 points.

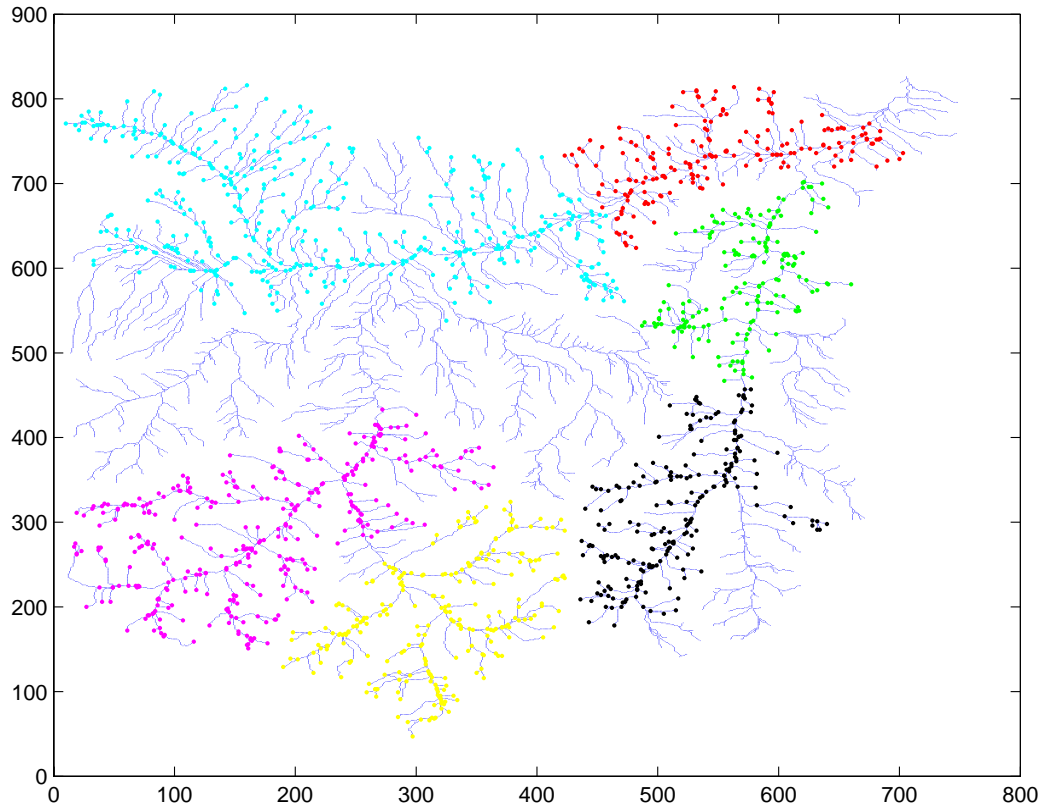


Figure 6: The stream used to produce Fig. 4. Points of different color show six clusters of Horton-Strahle rank 5 (the entire stream has rank 6).