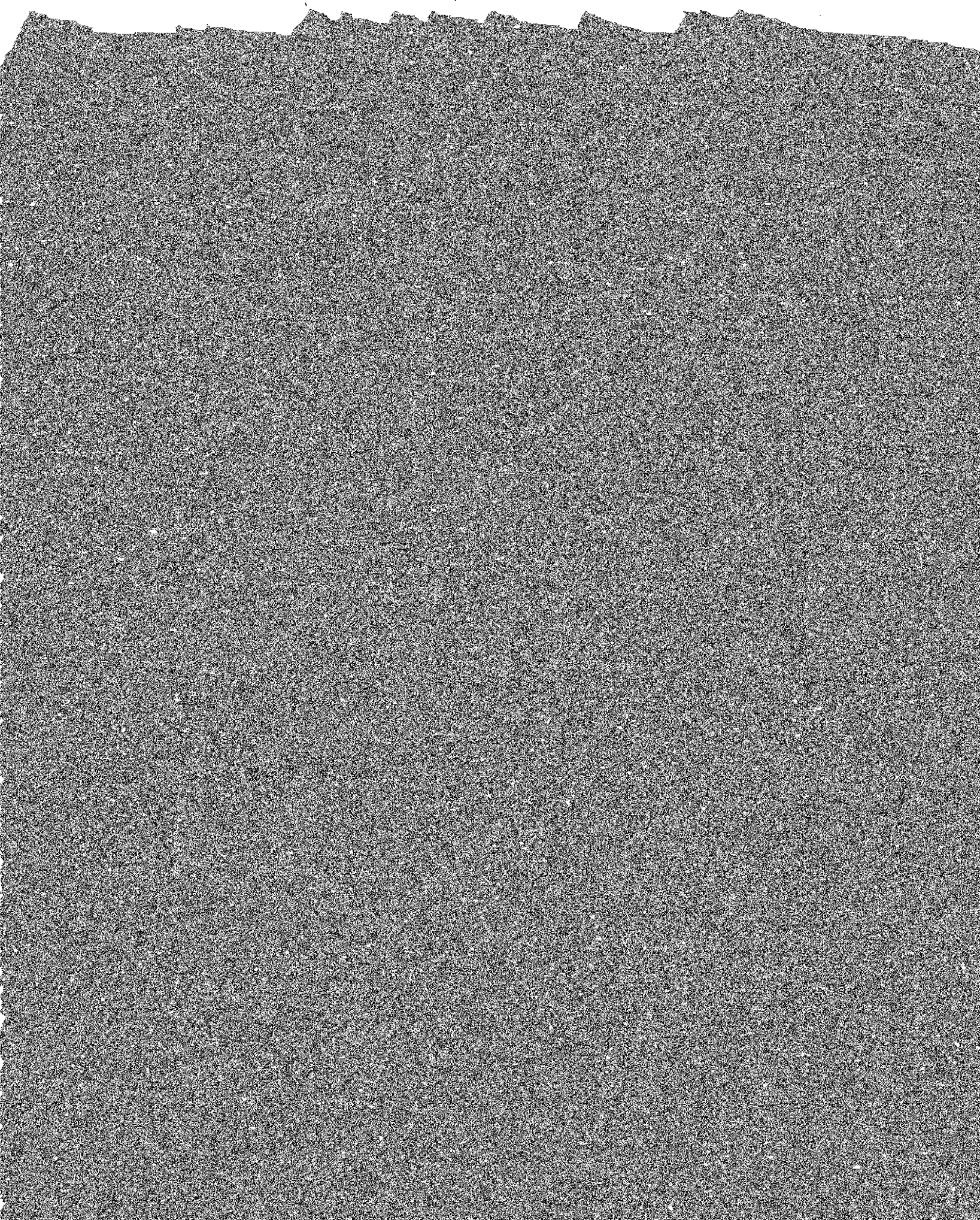
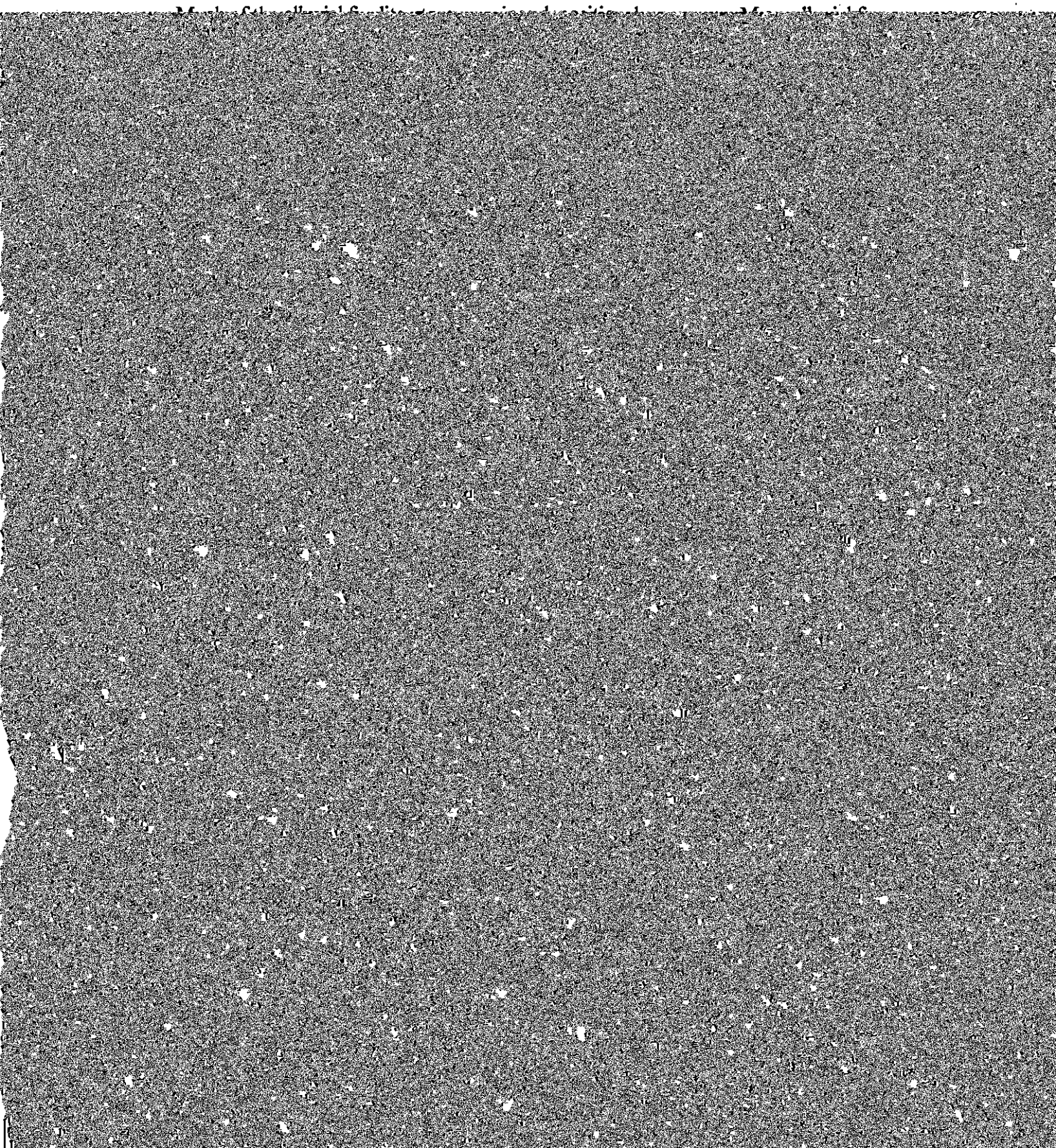


Rohrer (1979) used laboratory models of alluvial fan development explicitly stating that the scaling relationships to large fans are unknown.



5.3 Topographic surveying

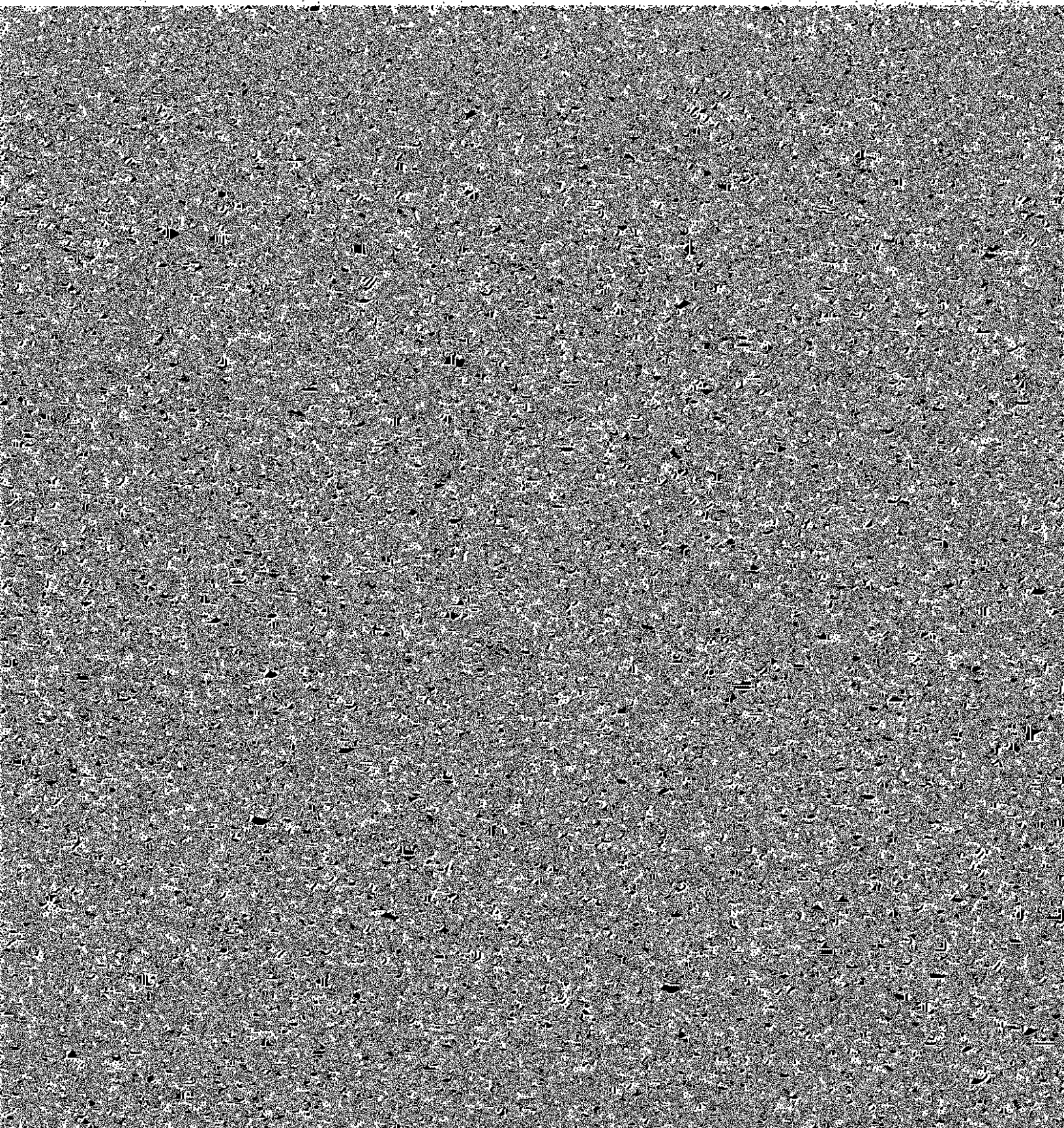
I will make precise maps (1 cm resolution) of 18 subplots ($2500m^2$) on the Iron Mountain sediment apron. To quantitate small-scale features of the sediment apron, I will map

- all drainages in six control plots in undisturbed areas
- all drainages in six plots influenced by human foot traffic on walkways
- all drainages in six plots influenced by vehicle traffic on roads within the camp

The data will be input to ArcView to characterize depths, orientations, and widths (a proxy for drainage area) of each channel. I will also use ArcView to calculate drainage densities and to calculate probability density functions for channel depths. The probability density function of

5.5.3 *Transport time across the sediment apron*

I will use two methods to calculate average sediment transport times across the sediment apron. First, I will consider isotope accumulation as a function of distance down apron (Figure 3).



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