

**Figure SM4 :** Example of two giant clam configurations that demonstrates that Ia is more stable than Moran’s Index for low densities. The only difference between the upper panel and the lower panel is density: density is higher in the upper panel than in the lower panel. Ia remains stable (high in both cases) because it is calculated on the area available for placing clams (represented in grey). By contrast Moran’s Index is unstable (high in the upper panel but low in the lower panel) because it is calculated on the actual location of clams, inherently influenced by density.