Supplementary Material for Sensitivity of Codispersion to Noise and Error in Ecological and Environmental Data

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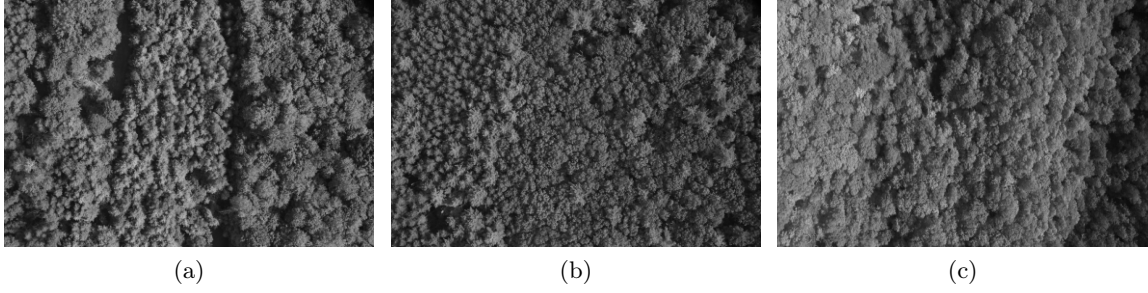‡Harvard Forest, Harvard University, Petersham, Massachusetts, USA

(a)　　　　　　　　　　(b)　　　　　　　　　　(c)

Figure S1: Images (a)-(c) represent other kind of textures that can be found in the forest stand in Massachusetts from aerial photographs.

(a)　　　　　　　　　　(b)　　　　　　　　　　(c)
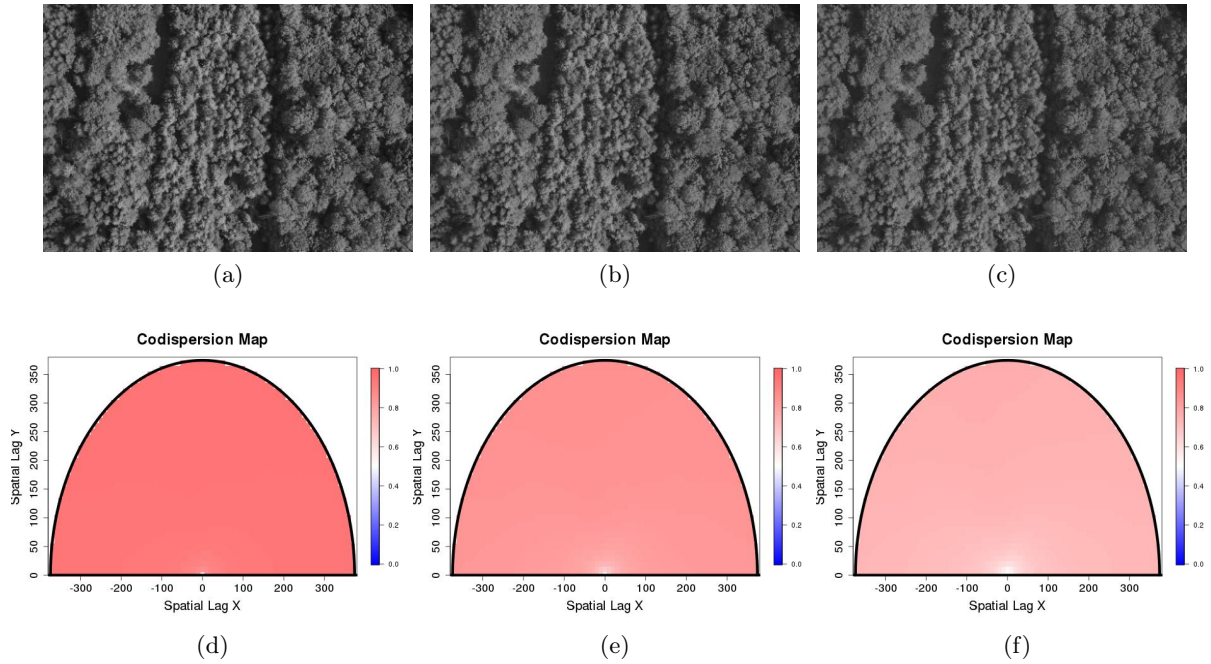
(d)　　　　　　　　　　(e)　　　　　　　　　　(f)

Figure S2: (a), (b) and (c) distorted images with salt and pepper noise. The percentages of contamination are 5%, 10%, and 25% respectively. (d), (e) and (f) are the codispersion maps between the original image S1(a) and images (5%, 15% and 25% respectively) contaminated with salt and pepper noise.
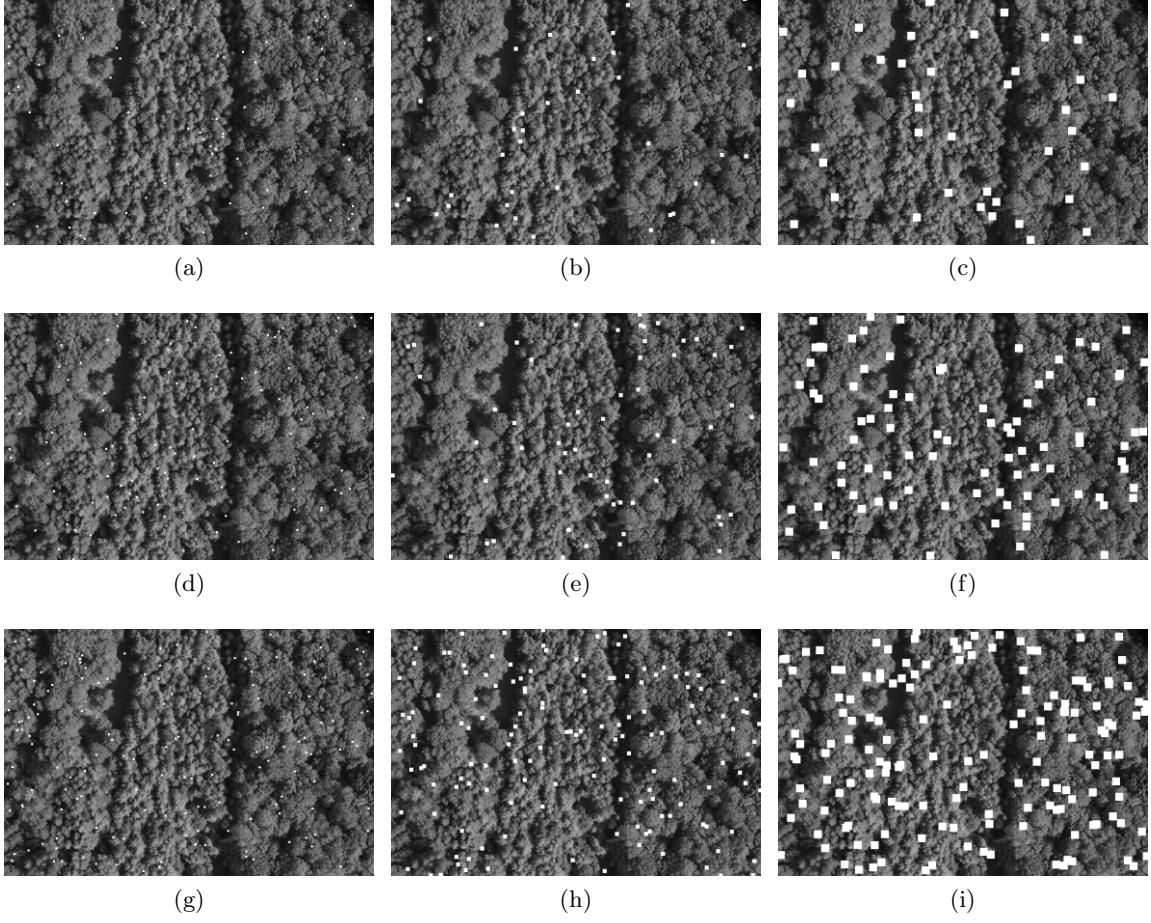
1

Figure S3: Contamination of the reference image shown in Figure S1(a) by salt and pepper at random locations. The missing blocks are of size 15×15, 30×30, and 60×60 respectively, shown in the different columns. (a)-(c): The proportion of missing blocks is 0.000002. (d)-(f): The proportion of missing blocks is 0.000004. (g)-(i): The proportion of missing blocks is 0.000008.
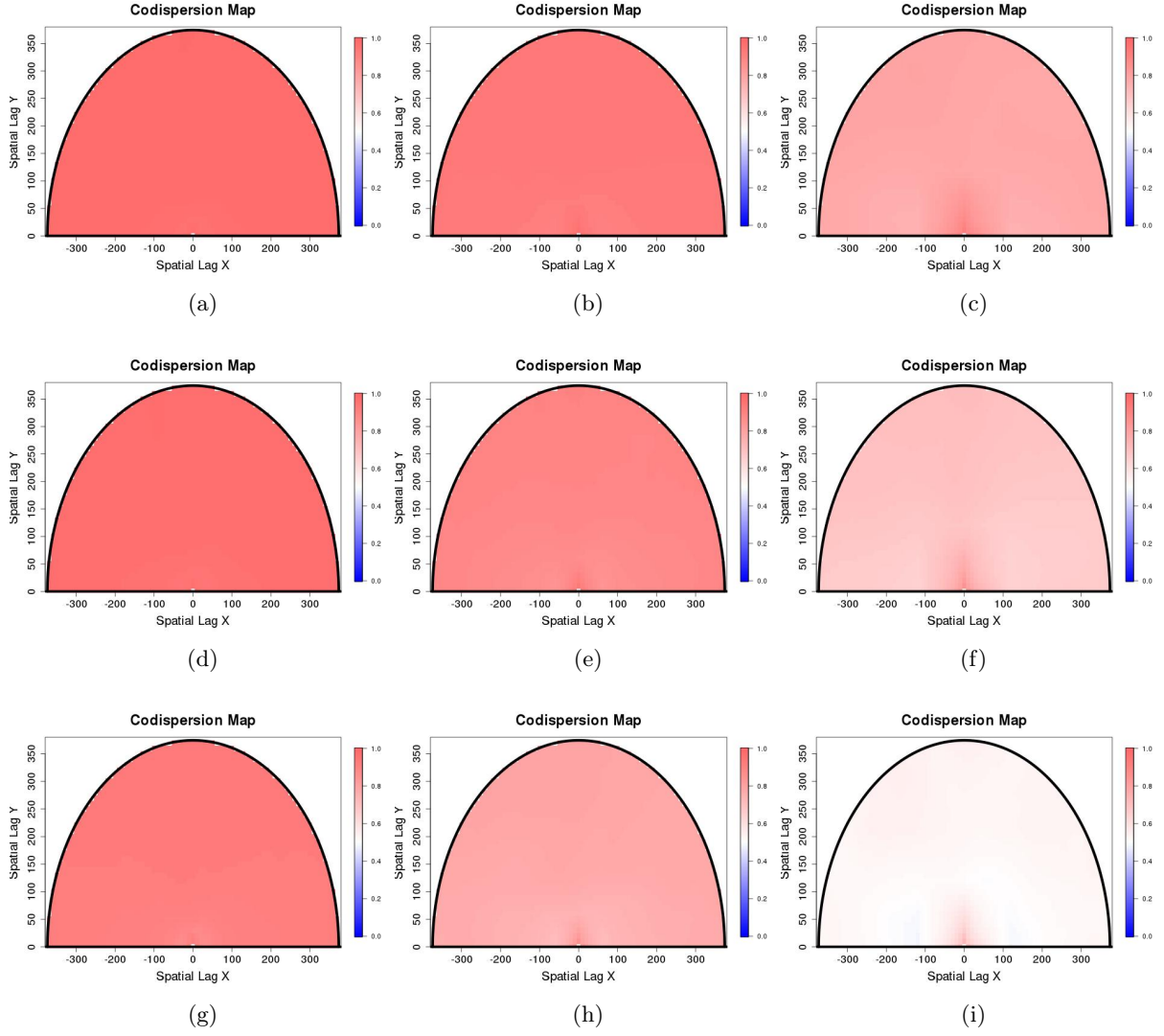
Figure S4: Codispersion map between the reference image S1(a) and the images contaminated with missing observation at random locations depicted in Figure S3(a-i).
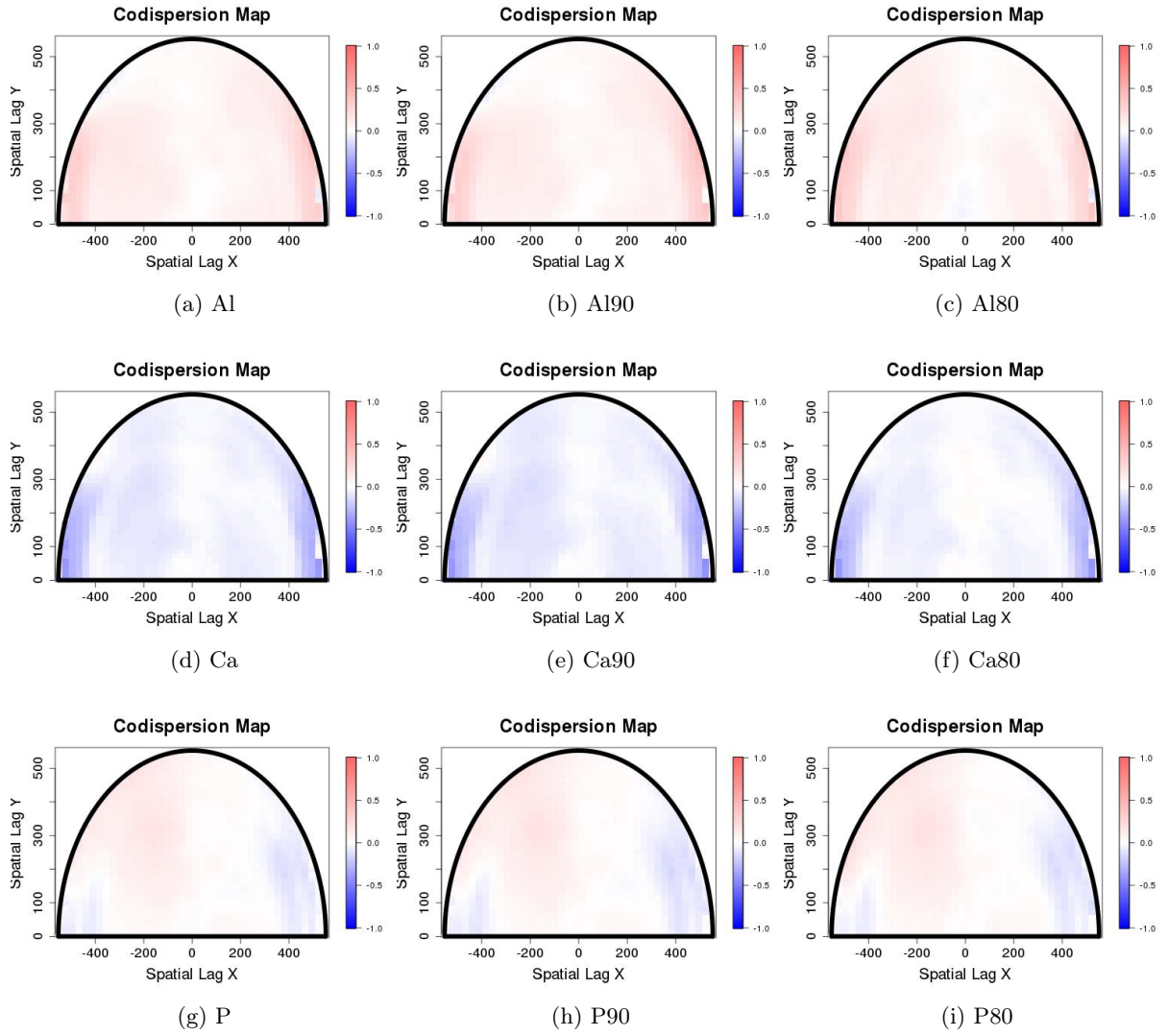
Figure S5: Codispersion between species *G. guidonia* and soil chemistry variables; (Al (a)-(c); Ca (d)-(f) and P (g)-(i)). Soils data were unthinned (a, d, g), thinned 10% (b, e, h), or thinned 20% (c, f, i).
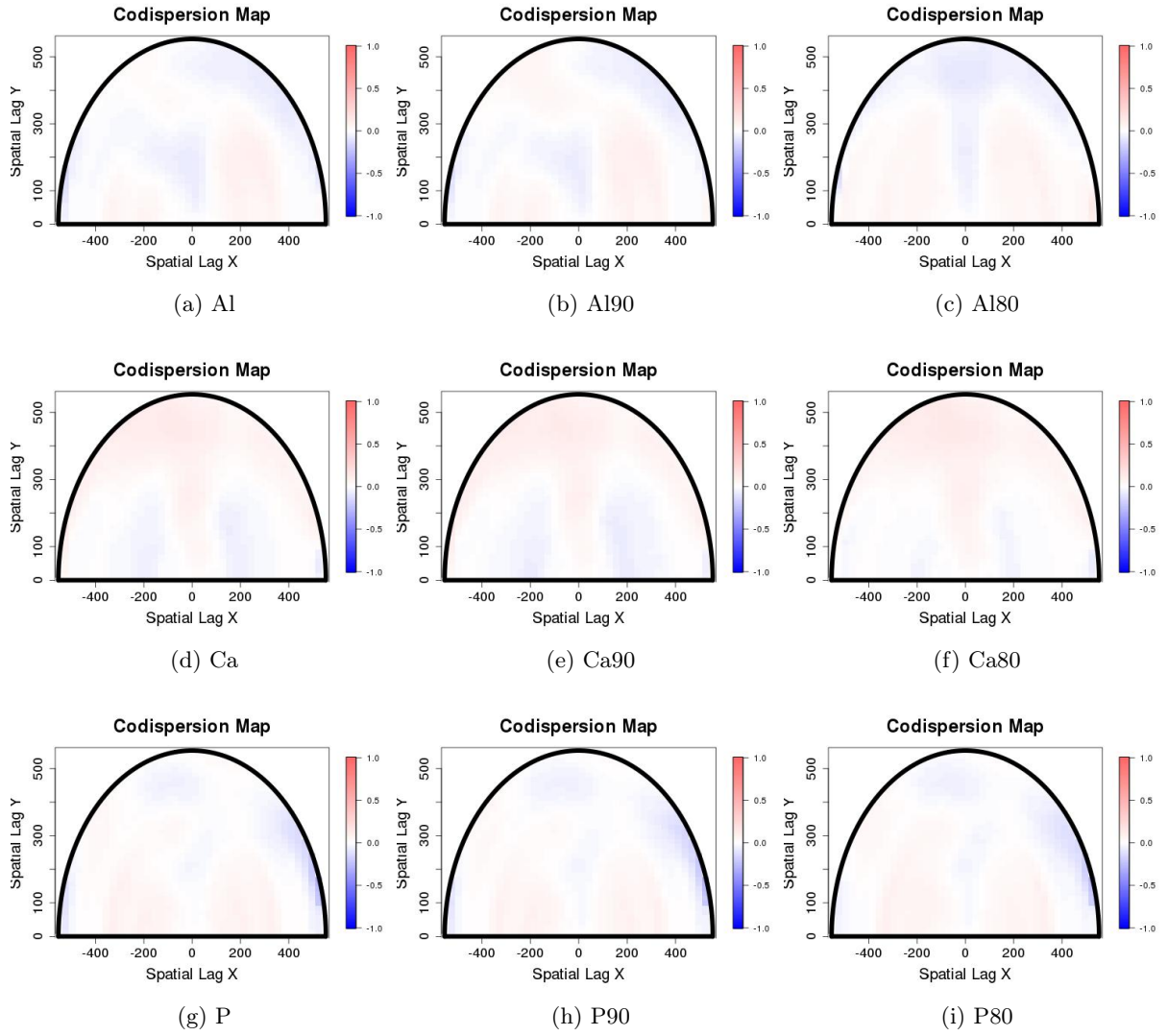
Figure S6: Codispersion between species *H. triandra* and soil chemistry variables; (Al (a)-(c); Ca (d)-(f) and P (g)-(i)). Soils data were unthinned (a, d, g), thinned 10% (b, e, h), or thinned 20% (c, f, i).