Figure 1s: **CCSE plots of randomised controls.** The results of the topology (tree) based method are shown in purple as in the main text. (eg: Figure 3a). Fully shuffled matches are plotted in blue and matches shuffled only within a family are plotted in green. The latter preserve the identity of singleton families and doubletons with 50% chance, etc. Note that 1pkm, which included a split domain and has many singletons still scores well and that for 3ctz, the purple lines run higher than expected because of the longer predicted links between domains 1 and 3. (See Figure 8).