



**Figure S4** Simulation results for Model B in Figure 2 and sample size 112. Blue, red, green and black dots represent, respectively,  $M_1$ ,  $M_2$ ,  $M_3$  and  $M_4$  calls. Yellow dots (CIT plot only) represent  $M_i$  calls. Grey dots show the “no calls”. Results were computed using significance level 0.05. For this model, blue dots represent true positives. Red, green and black dots represent false positives for the AIC, BIC and CMST methods. Red and yellow dots represent false positives for the CIT.