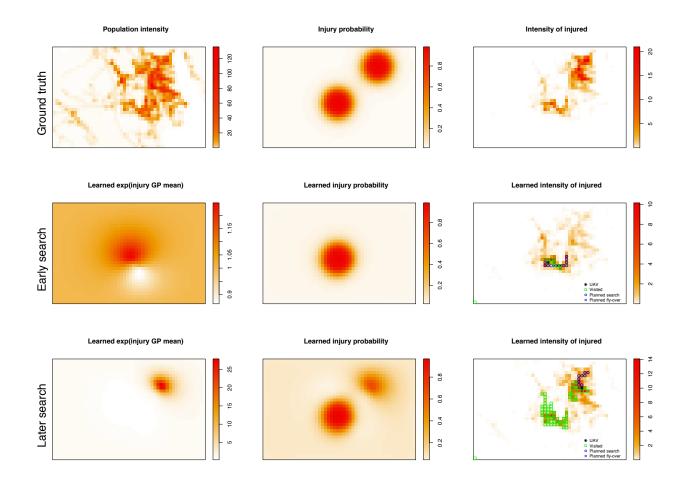# Supplementary Material

Figure 4: True and inferred population and injury maps for scenario 6. All intensity plots are based on detectable persons only. The first row displays the ground truth used for simulating the data, showing the expected number of persons per cell, the probability of being injured in each cell, and the expected number of injured in each cell. The second row shows $\exp(E(\xi_q))$, $E(q)$, and $E(\lambda r q)$, with expectations with respect to the posterior after 14 search iterations. The third row is equivalent to the second row, but after 91 iterations of search.
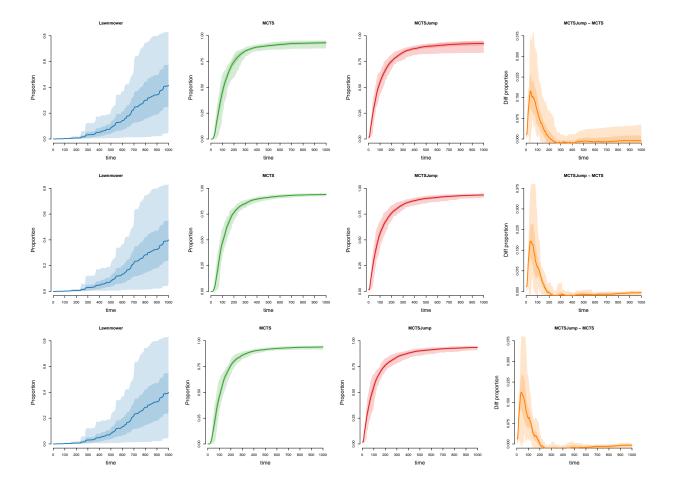
Figure 5: Sensitivity analysis for Scenario B. The first row displays the results for the prior used in the paper and is the same as the second row of Figure 3. The second row changes the prior mean for β on buildings and roads in the population intensity to be two standard deviations larger than the baseline prior. The third row changes the prior mean for β on buildings in the injury probability to be two standard deviations larger than the baseline prior.