

## Supplementary material for

### PeatFire: an agent-based model to simulate fire ignition and spreading in a tropical peatland ecosystem

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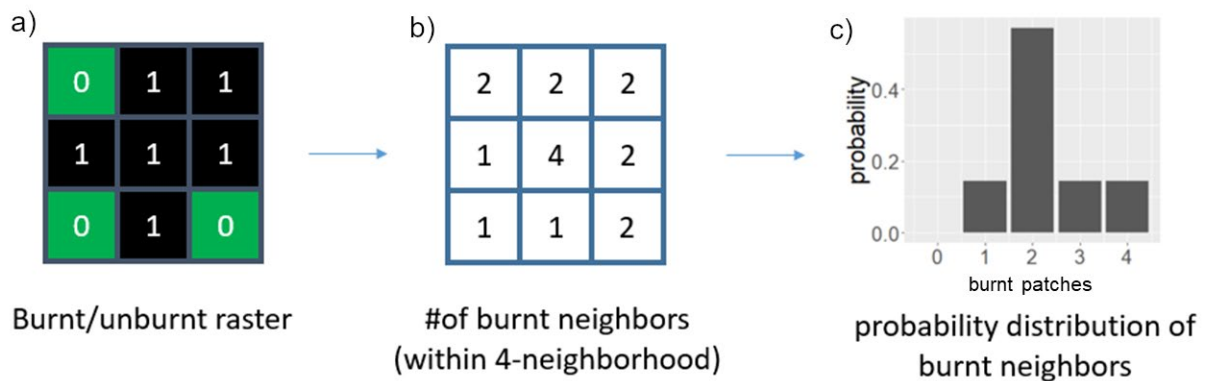
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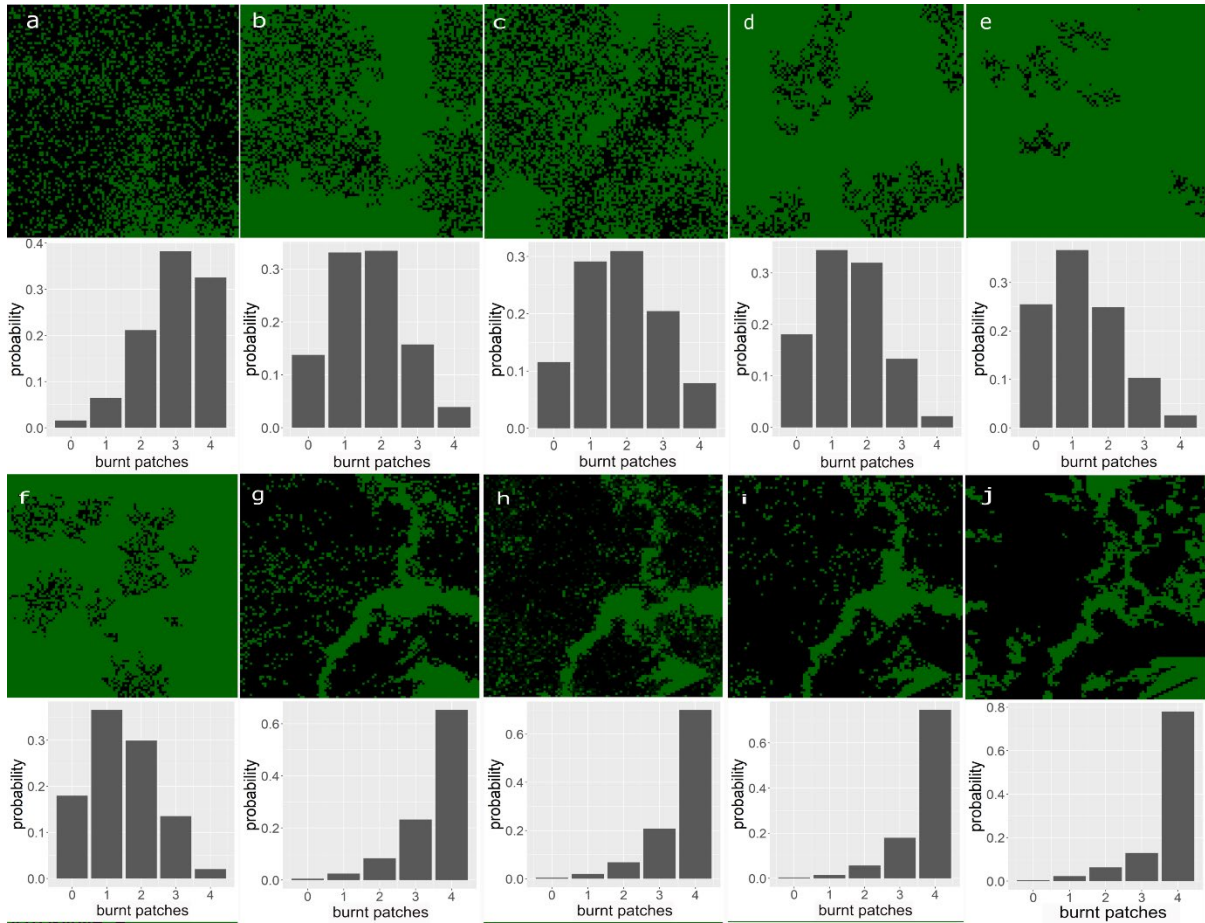
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**Fig S1.** An example showing the calculation of burnt neighbours probability distribution. (a) The raster of burnt (1) and unburnt (0) patches. (b) For each cell, the number of burnt neighbouring patch (within 4- cell neighbourhood system) is counted. (c) The histogram showing the probability distribution of a cell in the matrix having 0–4 burnt neighbours.



**Fig S2.** Spatial pattern of the selected result of simulation with the full factorial combination of parameters *wtd*, *ddb*, and *pdi*. Histogram below the raster map shows probability distribution for each patch in the area to have 0–4 burnt neighbours. Simulation results were ranked based on the similarity in the number of burnt patches with the observation and the highest kappa score. Figure (a–i) are the model outputs ordered by their similarity to the observed pattern (j).