

Supplementary Material

Fire propensity in Amazon savannas and rainforest and effects under future climate change

Mariana Martins Medeiros de Santana^{A,}, Rodrigo Nogueira de Vasconcelos^B and Eduardo Mariano-Neto^C*

^AEngenharia Florestal, Universidade do Estado do Amapá (UEAP), Av. Pres. Vargas, 650 - Central, 68900-070, Macapá (Amapá), Brazil

^BModelagem em Ciências da Terra e do Ambiente, Universidade Estadual de Feira de Santana (UEFS), Av. Transnordestina, 44036-900, Feira de Santana (Bahia), Brazil

^CInstituto de Biologia, Universidade Federal da Bahia (UFBA), Rua Barão de Jeremoabo, s/n, Ondina, 40170-115, Salvador (Bahia), Brazil

*Correspondence to: Email: mariana.medeiros@ueap.edu.br; eng.marimedeiros@gmail.com

Table S1. Relative contributions and jackknife AUC results of predictor variables for baseline MaxEnt fire model. Variables ranked by percent contribution.

Variable	Percent contribution (%)	Permutation importance	AUC with only	AUC without
Dist_Farming	55.4	27.4	0.7612	0.8124
PPTseason	16.8	35.3	0.7604	0.809
Elevation	10.4	17.9	0.6852	0.8106
PPT	6	3.4	0.659	0.8157
ΔT_{annual}	4.1	5.6	0.5637	0.8142
LULC	4	3.3	0.5651	0.8172
PPT _{war}	2.2	3.4	0.6172	0.8151
Dist_road	1.1	3.6	0.5993	0.8158

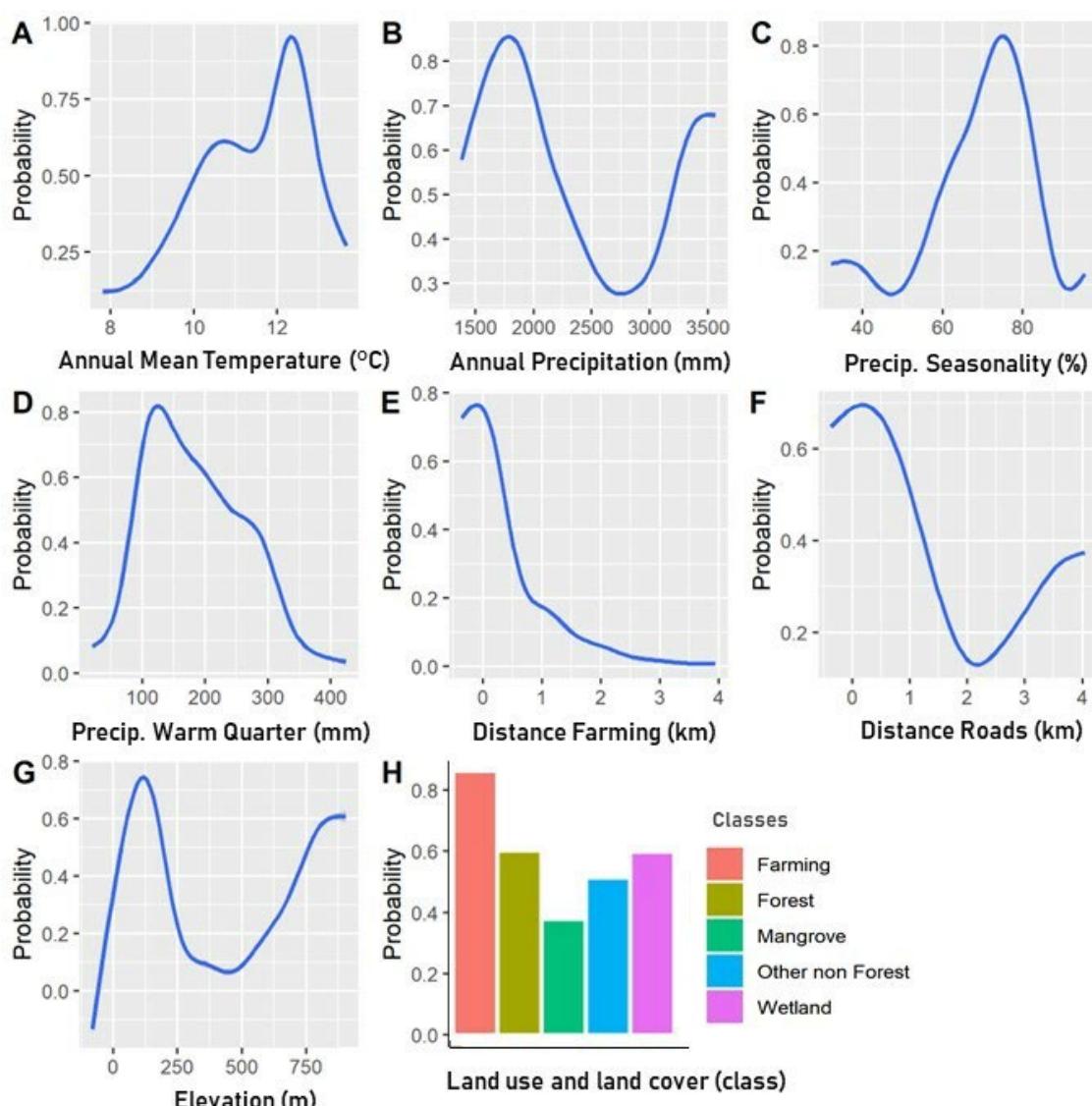


Fig. S1. Partial dependence plots showing the marginal response of each predictor (and using constant values of the other variables) to the ignitions, with variable importance below each graph. The y-axes indicate cloglog output.

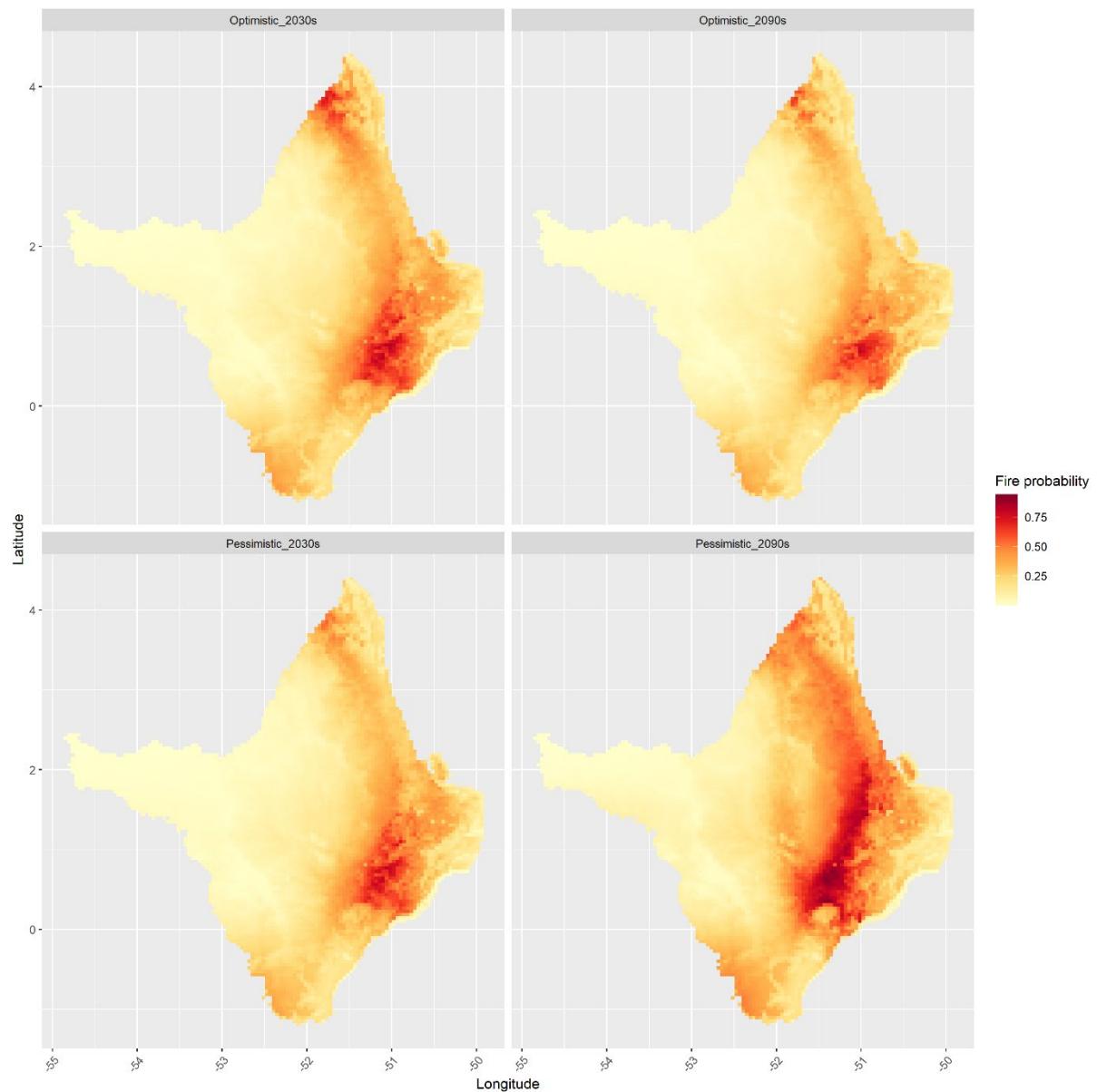


Fig. S2. The modelled distribution of fire occurrence under the optimistic (SSP 1-2.6) and pessimistic (SSP 5-8.5) emissions scenarios for 2030s (2021–2040) and 2090s (2071–2100), showing cloglog output values from MaxEnt, from yellow (low) through red (high).

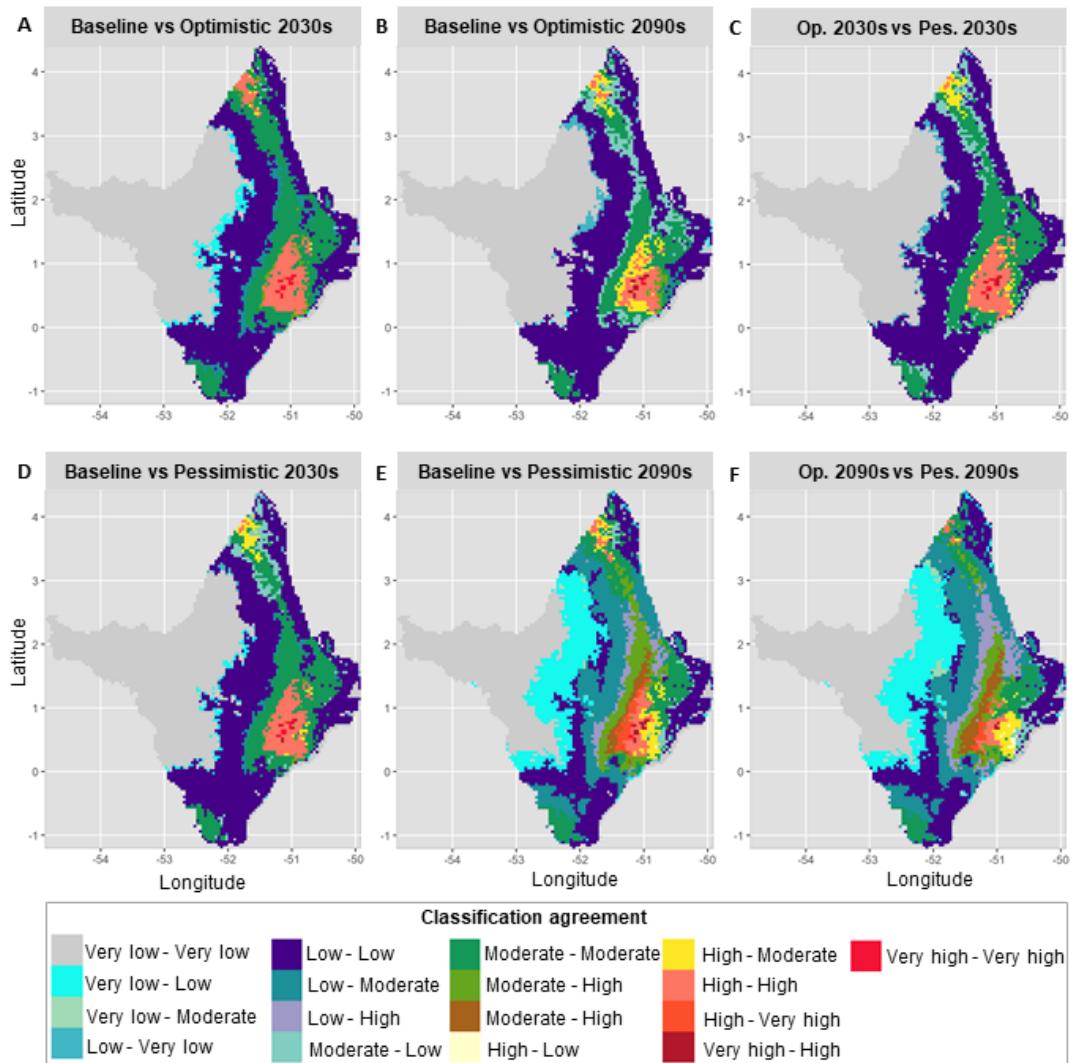


Fig. S3. Pixel-by-pixel agreement maps between fire models created for optimistic (SSP 1-2.6) and pessimistic (SSP 5-8.5) emission scenarios for 2030s (2021–2040) and 2090s (2071–2100).