

Supplementary Material

Table S1. Confusion Matrix of RF x OBIA model [pre-wildfire 2022].

RF x OBIA	0	1	2	3	4	5	Precision
0	1109	3	0	0	13	0	0.9858
1	0	338	0	0	4	0	0.9883
2	6	1	1130	0	2	0	0.9921
3	0	0	4	2597	2	0	0.9977
4	18	16	1	13	749	0	0.9398
5	0	0	0	0	0	72	1
Recall	0.9788	0.9441	0.9956	0.995	0.9727	1	

Table S2. Confusion Matrix of RF x OBIA model [post-wildfire 2022].

RF x OBIA	0	1	2	3	4	5	Precision
0	1141	0	0	0	11	0	0.9905
1	0	208	0	1	22	0	0.9004
2	0	0	2586	0	0	0	1
3	0	0	5	1014	1	0	0.9941
4	2	11	4	3	284	0	0.9342
5	0	0	0	0	0	49	1
Recall	0.9983	0.9498	0.9965	0.9961	0.8931	1	

Table S3. Confusion Matrix of RF x OBIA model [summer 2023].

RF x OBIA	0	1	2	3	4	5	Precision
0	1225	0	0	0	2	0	0.9984
1	1	185	0	0	20	0	0.8981
2	0	2	2299	0	0	0	0.9991
3	0	0	0	2282	2	0	0.9991
4	6	11	0	2	475	0	0.9615
5	0	0	0	0	0	97	1

Recall	0.9943	0.9343	1	0.9991	0.9519	1
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Table S4. RF metric results for OBIA and PBIA approach [pre-wildfire 2022].

Dataset	Class	F1 Score	Precision	Recall
RF x OBIA	0	0.9823	0.9858	0.9788
	1	0.9657	0.9883	0.9441
	2	0.9938	0.9921	0.9956
	3	0.9964	0.9977	0.995
	4	0.956	0.9398	0.9727
	5			
RF x PBIA	0	0.8283	0.8045	0.8535
	1	0.8996	0.8929	0.9063
	2	0.9262	0.9599	0.8948
	3	0.9477	0.9788	0.9184
	4	0.7668	0.6871	0.8673
	5			

Table S5. RF metric results for OBIA and PBIA approach [post-wildfire 2022].

Dataset	Class	F1 Score	Precision	Recall
RF x OBIA	0	0.9943	0.9905	0.9983
	1	0.9244	0.9004	0.9498
	2			
	3	0.9951	0.9941	0.9961
	4	0.9132	0.9342	0.8931
	5			
RF x PBIA	0	0.8812	0.9064	0.8574
	1	0.9716	0.9823	0.961

	2			
	3	0.9332	0.9393	0.9272
	4	0.6375	0.5461	0.7656
	5			

Table S6. RF metric results for OBIA and PBIA approach [summer 2023].

Dataset	Class	F1 Score	Precision	Recall
RF x OBIA	0	0.9963	0.9984	0.9943
	1	0.9158	0.8981	0.9343
	2			
	3	0.9991	0.9991	0.9991
	4	0.9567	0.9615	0.9519
	5			
RF x PBIA	0	0.8621	0.8835	0.8418
	1	0.7949	0.6889	0.9394
	2			
	3	0.9758	0.9846	0.9672
	4	0.7393	0.672	0.8215
	5			

Table S7. SVM metric results for OBIA and PBIA approach [pre-wildfire 2022].

Dataset	Class	F1 Score	Precision	Recall
SVM x OBIA	0	0.6015	0.8089	0.4787
	1			
	2	0.8585	0.8973	0.8229
	3	0.7616	0.6266	0.9708
	4	0.6916	0.7089	0.675

	5			
SVM x PBIA	0	0.6151	0.6206	0.6097
	1			
	2	0.8627	0.903	0.8259
	3	0.9045	0.9258	0.8843
	4	0.6027	0.515	0.7264
	5			

Table S8. SVM metric results for OBIA and PBIA approach [post-wildfire 2022].

Dataset	Class	F1 Score	Precision	Recall
SVM x OBIA	0	0.8466	0.8741	0.8207
	1	0.844	0.8312	0.8571
	2			
	3	0.8988	0.8755	0.9235
	4	0.5577	0.5329	0.5848
	5			
SVM x PBIA	0	0.6706	0.6973	0.6459
	1	0.9241	0.9241	0.9241
	2			
	3	0.7904	0.8144	0.7679
	4	0.3374	0.2602	0.4798
	5			

Table S9. SVM metric results for OBIA and PBIA approach [summer 2023].

Dataset	Class	F1 Score	Precision	Recall
SVM x OBIA	0	0.9555	0.9527	0.9582
	1	0.8565	0.8981	0.8186

	2			
	3	0.9825	0.9733	0.992
	4	0.8854	0.915	0.8577
	5			
SVM x PBIA	0	0.7452	0.7763	0.7165
	1	0.7793	0.7378	0.8259
	2			
	3	0.9253	0.9029	0.9488
	4	0.634	0.622	0.6466
	5			