Confusion Matrix

ground truth \ prediction	Low Veg. (0)	Imp. Surface (1)	Vehicle (2)	Urban Furn. (3)	Roof (4)	Facade (5)	Shrub (6)	Tree (7)	Soil / Gravel (8)	Vertical (9)	Chimney (10)	recall
Low Veg. (0) 12,424,143 / 19.9%	90.4%	3.2%	0.0% 4,196	1.1%	0.0% 4,768	0.3% 39,672	2.7%	1.2%	0.2% 28,433	0.7% 87,166	0.0% 21	90.4%
Imp. Surface (1) 5,162,004 / 8.3%	6.9%	88.3%	0.5% 24,978	1.7% 87,154	0.1% 5,823	1.1% 55,482	0.4% 19,307	0.1% 4,893	0.1% 5,384	0.8% 43,003	0.0% 11	88.3%
Vehicle (2) 503,873 / 0.8%	0.0% 227	0.3% 1,672	93.6%	5.4% 27,217	0.0% 0	0.0% 49	0.1% 634	0.3% 1,535	0.1% 662	0.0% 82	0.0% 0	93.6%
Urban Furn. (3) 2,006,076 / 3.2%	2.2% 43,470	1.1% 22,689	1.2% 23,908	76.6%	0.3% 6,212	1.0% 20,547	15.4%	1.5% 29,932	0.0% 149	0.6% 12,957	0.0% 66	76.6%
Roof (4) 4,024,510 / 6.4%	1.2% 47,509	0.6% 23,787	0.3% 11,437	7.6%	87.2%	1.0% 40,253	0.5% 20,590	0.9% 34,895	0.5% 18,853	0.0% 1,323	0.3% 10,444	87.2%
Facade (5) 2,686,270 / 4.3%	0.7% 18,165	1.4% 38,260	0.1% 3,138	18.9%	1.3% 34,272	73.9%	1.9% 49,881	0.4% 11,430	0.0% 221	1.3% 36,185	0.0% 1,225	73.9%
Shrub (6) 2,671,277 / 4.3%	4.4%	0.1% 2,484	0.1% 1,395	4.5%	0.0% 1,081	0.1% 2,728	76.4%	14.1%	0.0% 70	0.4% 11,720	0.0% 44	76.4%
Tree (7) 26,570,263 / 42.6%	0.7%	0.0% 459	0.1% 14,656	0.3% 71,524	0.0% 4,640	0.0% 3,245	1.6%	97.3%	0.0% 5,088	0.0% 12,647	0.0% 1,757	97.3%
Soil / Gravel (8) 4,151,903 / 6.6%	30.0%	3.8%	0.1% 5,660	0.3% 10,476	0.0% 114	0.0% 522	0.3% 11,192	0.1% 5,103	65.3%	0.0% 1,117	0.0% 0	65.3%
Vertical (9) 2,207,180 / 3.5%	1.8% 38,665	0.4% 8,848	0.0% 457	1.0% 22,845	0.0% 49	0.9% 19,604	3.4% 76,095	3.5% 76,184	0.0% 33	89.0%	0.0% 0	89.0%
Chimney (10) 33,519 / 0.1%	0.0% 0	0.0% 0	0.0% 13	0.1% 43	3.5% 1,176	2.5% 843	0.7% 241	0.7% 250	0.0% 0	0.0% 1	92.3% 30,952	92.3% 30,952
precision	84.6%	87.4%	84.0%	54.4%	98.4%	91.6%	62.3%	97.4%	97.9%	90.5%	69.5% 30,952	89.5%
F1 μ=83.2%	87.4%	87.8%	88.6%	63.6%	92.4%	81.8%	68.6%	97.4%	78.4%	89.7%	79.3%	

Column totals (prediction): Low Veg. (0) 13,286,205 / 21.3%; Imp. Surface (1) 5,216,812 / 8.4%; Vehicle (2) 561,633 / 0.9%; Urban Furn. (3) 2,826,631 / 4.5%; Roof (4) 3,565,762 / 5.7%; Facade (5) 2,167,977 / 3.5%; Shrub (6) 3,275,741 / 5.2%; Tree (7) 26,553,292 / 42.5%; Soil / Gravel (8) 2,771,844 / 4.4%; Vertical (9) 2,170,601 / 3.5%; Chimney (10) 44,520 / 0.1%