Supplementary material for ***A Novel Model for Detecting Urban Fringe and Its Expanding Patterns: An Application in Harbin City, China***

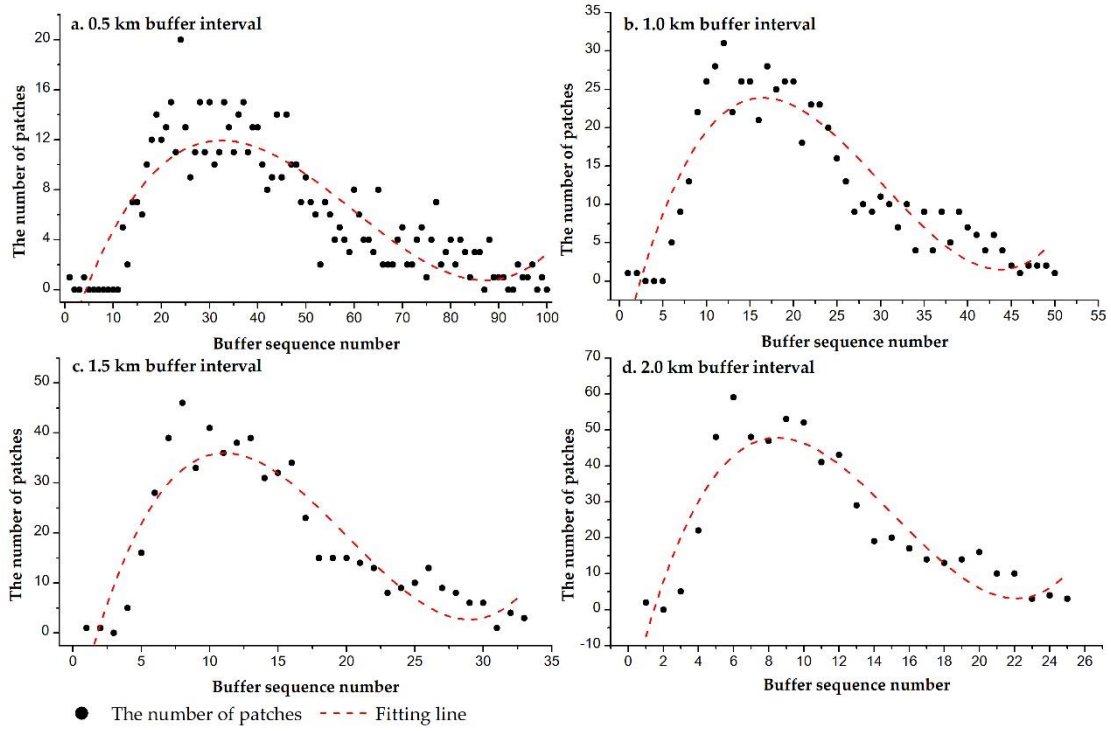

Figure S1. The distribution of the number of patches in 1991 with different buffer intervals.

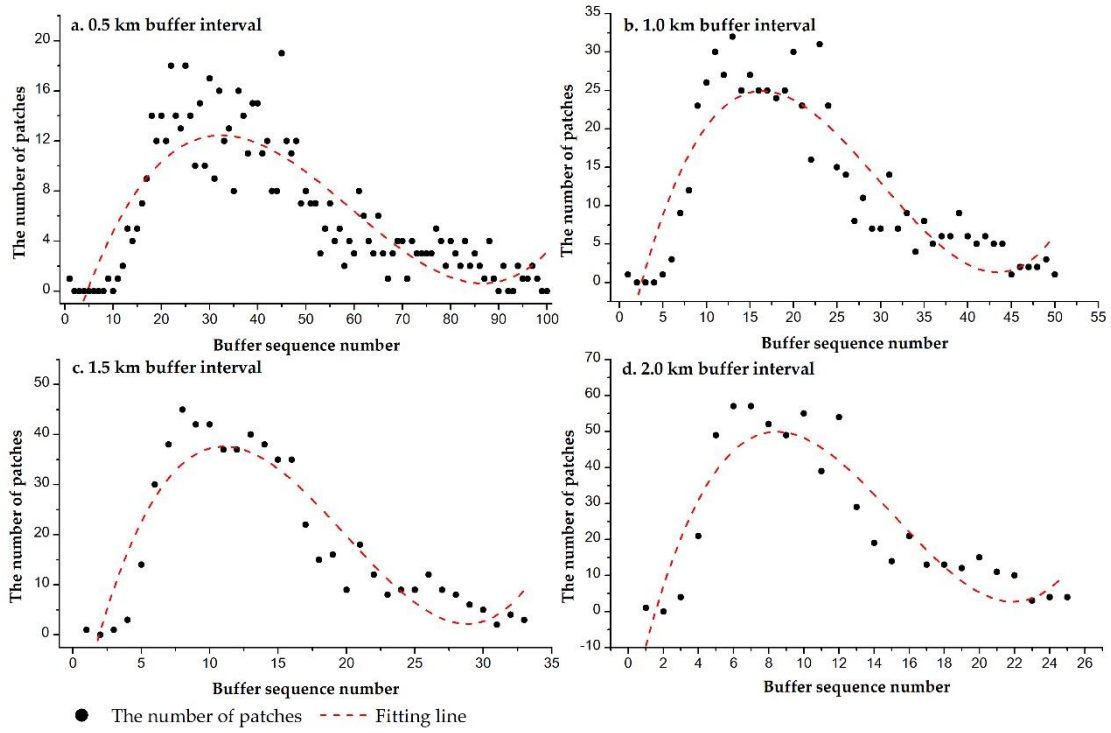

Figure S2. The distribution of the number of patches in 2000 with different buffer intervals.

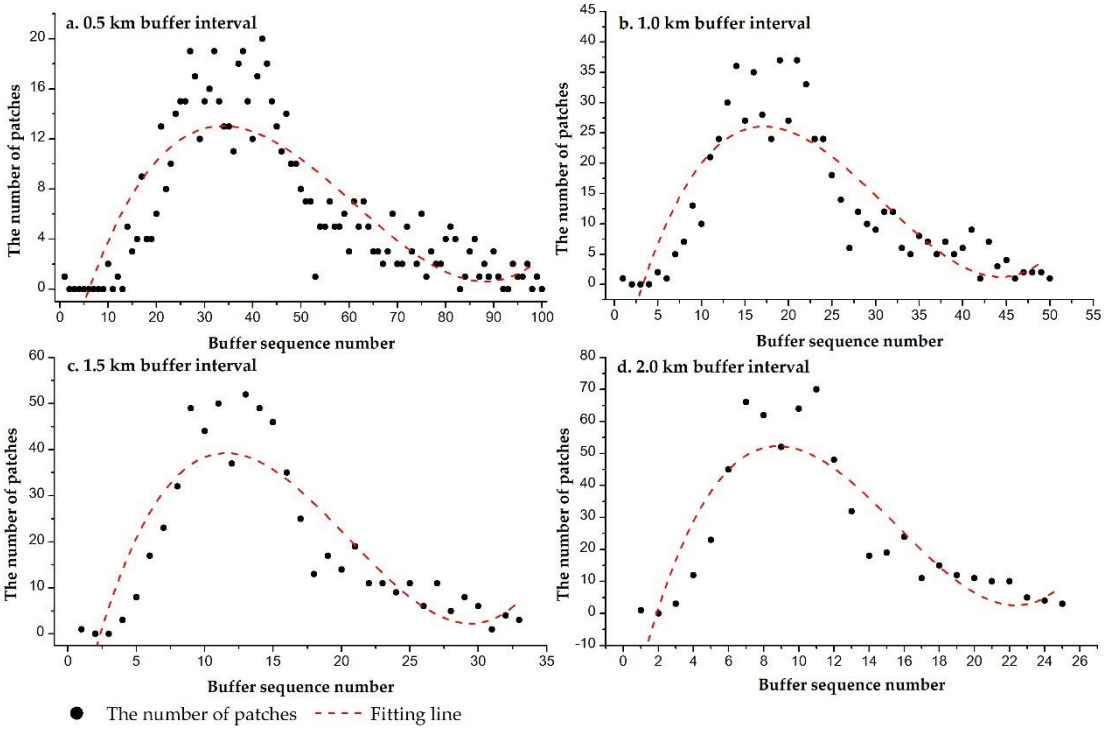

Figure S3. The distribution of the number of patches in 2010 with different buffer intervals.

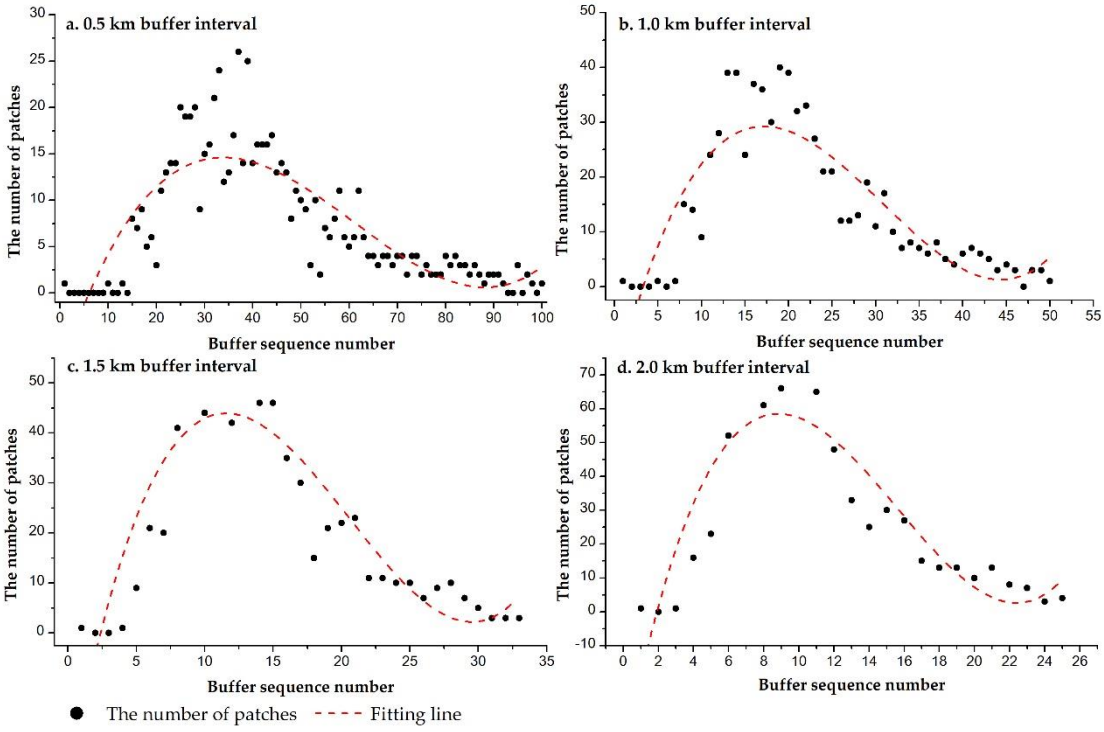

Figure S4. The distribution of the number of patches in 2015 with different buffer intervals.

Table S1. The fitting function and R^2 summary.

Year	Buffer interval	Fitting functions	R^2
1991	0.5 km	$y=0.00014x^3-0.02456x^2+1.1617x-4.5633$	0.741
	1.0 km	$y=0.00219x^3-0.19838x^2+4.7489x-10.298$	0.814
	1.5 km	$y=0.01158x^3-0.69595x^2+11.155x-17.908$	0.837
	2.0 km	$y=0.03546x^3-1.6258x^2+19.921x-25.804$	0.833
2000	0.5 km	$y=0.00016x^3-0.02771x^2+1.2875x-5.4555$	0.734
	1.0 km	$y=0.00264x^3-0.23072x^2+5.3809x-12.63$	0.793
	1.5 km	$y=0.0126x^3-0.75353x^2+12.031x-20.297$	0.835
	2.0 km	$y=0.0387x^3-1.7631x^2+21.511x-29.259$	0.818
2010	0.5 km	$y=0.00016x^3-0.02869x^2+1.3948x-7.3946$	0.718
	1.0 km	$y=0.00257x^3-0.23447x^2+5.749x-16.427$	0.749
	1.5 km	$y=0.01289x^3-0.79289x^2+13.153x-26.747$	0.783
	2.0 km	$y=0.04025x^3-1.8818x^2+23.8x-38.785$	0.780
2015	0.5 km	$y=0.00018x^3-0.03213x^2+1.5651x-8.3687$	0.701
	1.0 km	$y=0.0029x^3-0.2646x^2+6.49x-18.759$	0.763
	1.5 km	$y=0.01442x^3-0.88853x^2+14.766x-30.268$	0.772
	2.0 km	$y=0.04484x^3-2.1006x^2+26.616x-43.59$	0.797