## Supplementary Information:

**Table S1.** The confusion matrix of 2010 image classification and accuracy.

	Class types determined from reference source													**
Class types determined from classified map	Samples	Woodland	Green land	River	Lake	Reservoir	Farmland	Residential land	Commercial land	Industrial land	Transportation land	Public land	Totals	- User's Accuracy
	Woodland	97	4	0	0	0	1	0	0	0	0	0	102	95%
	Green land	2	85	0	0	0	2	0	0	0	0	0	89	96%
	River	0	0	55	0	0	0	0	0	0	0	0	55	100%
	Lake	0	0	0	35	0	0	0	0	0	0	0	35	100%
	Reservoir	0	0	0	0	20	0	0	0	0	0	0	20	100%
	Farmland	0	3	0	0	0	84	0	0	0	0	0	87	97%
	Residential land	0	0	0	0	0	0	122	6	1	0	1	130	94%
	Commercial land	0	0	0	0	0	0	2	92	5	0	2	101	91%
	Industrial land	0	0	0	0	0	0	0	3	82	3	2	90	91%
	Transportation land	0	0	0	0	0	0	0	0	0	73	1	74	99%
	Public land	0	0	0	0	0	0	0	1	1	0	83	85	98%
	Totals	99	92	55	35	20	87	124	102	89	76	89	868	
Producer's Accuracy		98%	92%	100%	100%	100%	97%	98%	90%	92%	96%	93%		95%

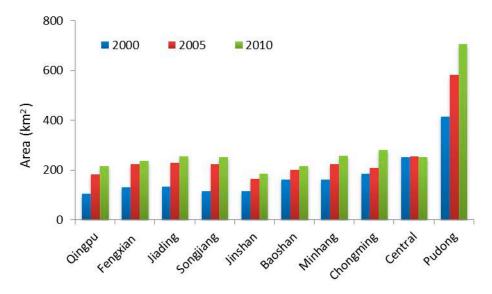
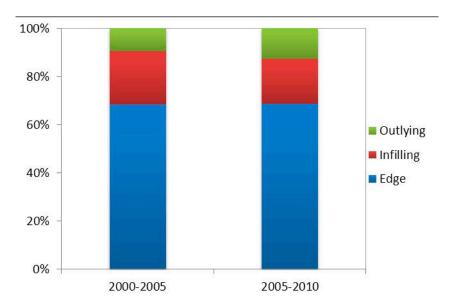


Figure S1. Urban expansion (km²) in 10 census sub-areas of Shanghai in 2000, 2005 and 2010.



**Figure S2.** Nature of urban expansion (outfilling, infilling, edge) in Shanghai in the sub-periods 2000-2005 and 2005-2010.