

Table S1. Administrative wards of Srinagar city

ID	Name	ID	Name	ID	Name
1	Nishat	24	Khonmoh	47	Palapora
2	Lal chowk	25	Islamyarbal	48	Ganpatyar
3	Baghat-i-barzulla	26	Harwan	49	Rajbagh
4	Rawalpora	27	Mehjoor nagar	50	Jawahar nagar
5	Allochi bagh	28	Natipora	51	Wazir bagh
6	Magarmal bagh	29	Chanapora	52	Bemina east
7	Zainakote	30	Sheikh dawood colony	53	Bemina west
8	Shaheed gunj	31	Batamaloo	54	Nawab bazar
9	Karan nagar	32	Nund resh colony	55	Aali kadal
10	Syed ali akbar	33	Chattabal	56	Hazratbal
11	Bana mohalla	34	Sathoo barbarshah	57	Lal bazar
12	Khankahi-moulla	35	Aqilmir khanyar	58	Locut dal
13	S.R gunj	36	Khawja bazar	59	Dalgate
14	Safa kadal	37	Tarabal	60	Bud dal
15	Iddgah	38	Jogi lankar	61	Lawaypora
16	Hasanabad	39	Zind shah sahib	62	Under cantonment board
17	Makhdoom sahib	40	Jamia masjid	63	Qamarwari
18	Buchpora	41	Kawdara	64	Soura
19	Tailbal	42	Zadibal	65	Zoonimar
20	New theed	43	Madin sahib	66	Nowshera
21	Alasteng	44	Umer colony	67	Humhama
22	Khumani chowk	45	Ahmad nagar	68	Maloor
23	Pantha chowk	46	Zakora	69	Parimpora

Table S2. Details of satellite data used

S.No	Date	Year	Landsat series	Sensor	Path/row
1	17th August	2017	Landsat 8	OLI/TIRS	149/36
2	27th August	2009	Landsat 5	TM	149/36
3	16th August	1999	Landsat 5	TM	149/36

Table S3. Characterisation of LULC classes

Class No.	Land use class	Description
1	Built-up dense	Areas having dense settlement with minimal open spaces
2	Built-up sparse	Areas having sparse settlement with open spaces
3	Fallow	Uncultivated land left for a period without being sown
4	Agriculture	Cultivated land
5	Forest	Areas majorly covered with trees and other vegetation
6	Hilly vegetation	Areas majorly vegetation above mountains
7	Open land	Open spaces found around other classes
8	Bare mountain	Open spaces found in and around mountains

9	Barren	Unutilized areas majorly in proximity to the agriculture class
10	Marshy vegetation	Vegetation found in and around water bodies
11	Wetland	Water bodies enclosed in a particular area
12	Sand	Areas majorly covering the river bed
13	River	Areas covered with water
14	Cloud	Areas with cloud cover

Table S4. Number of reference sites associated with each class generated by probability proportional to size (PPS) sampling technique

Land use class	Number of reference sites for each year		
	1999	2009	2017
Built-up dense	04	04	15
Built-up sparse	58	64	83
Fallow	209	120	169
Agriculture	233	239	219
Forest	207	262	222
Hilly vegetation	217	235	202
Open land	17	07	04
Bare mountain	83	86	65
Barren	37	35	46
Marshy vegetation	14	06	15
Wetland	07	10	07
Sand	07	06	10
River	04	06	06
Cloud	04	16	37

Figures (below)

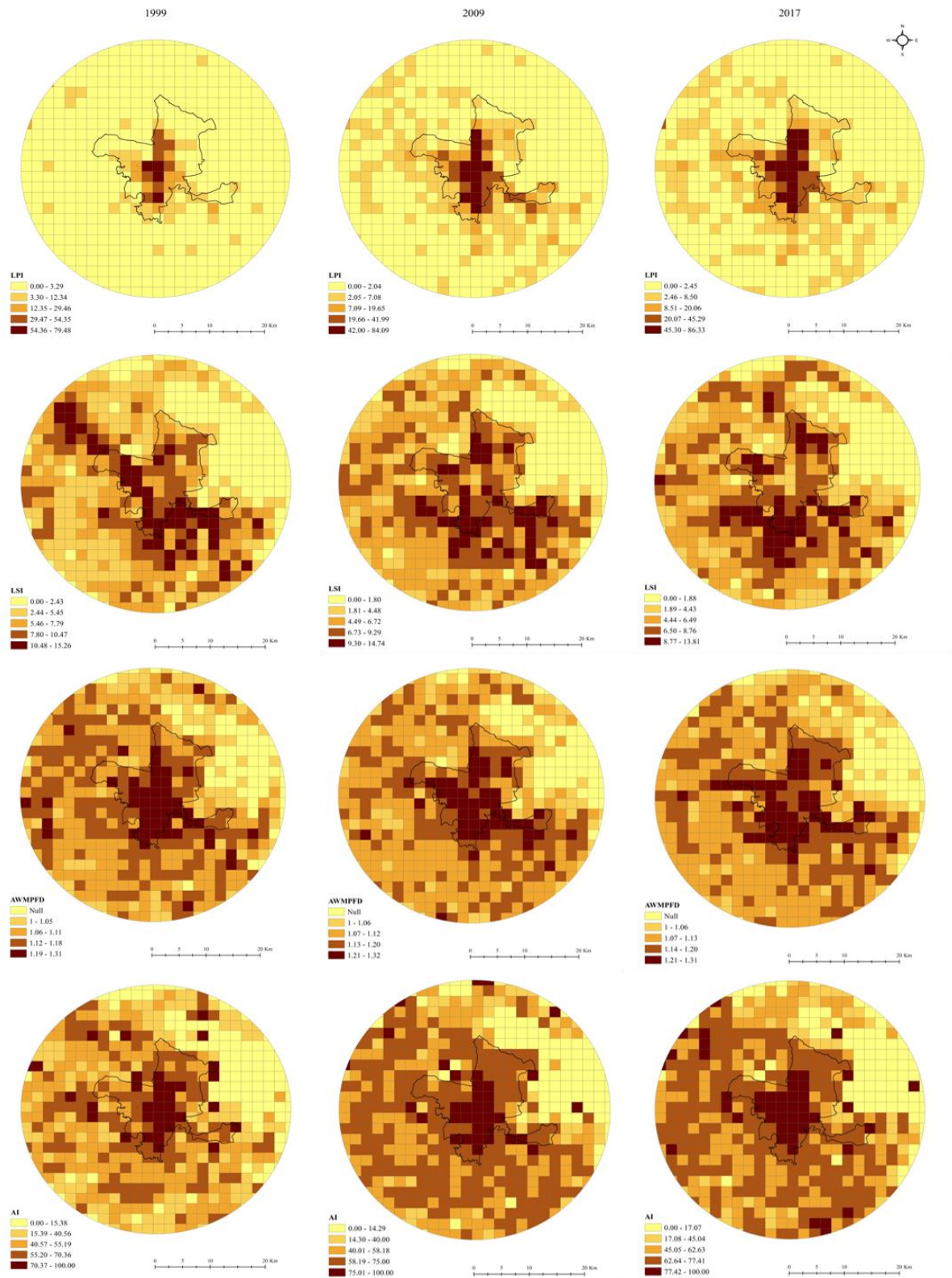


Figure S1 Landscape metrics (LPI, LSI, AWMPFD and AI) change at 2,000m cell size- year 1999, 2009 and 2017

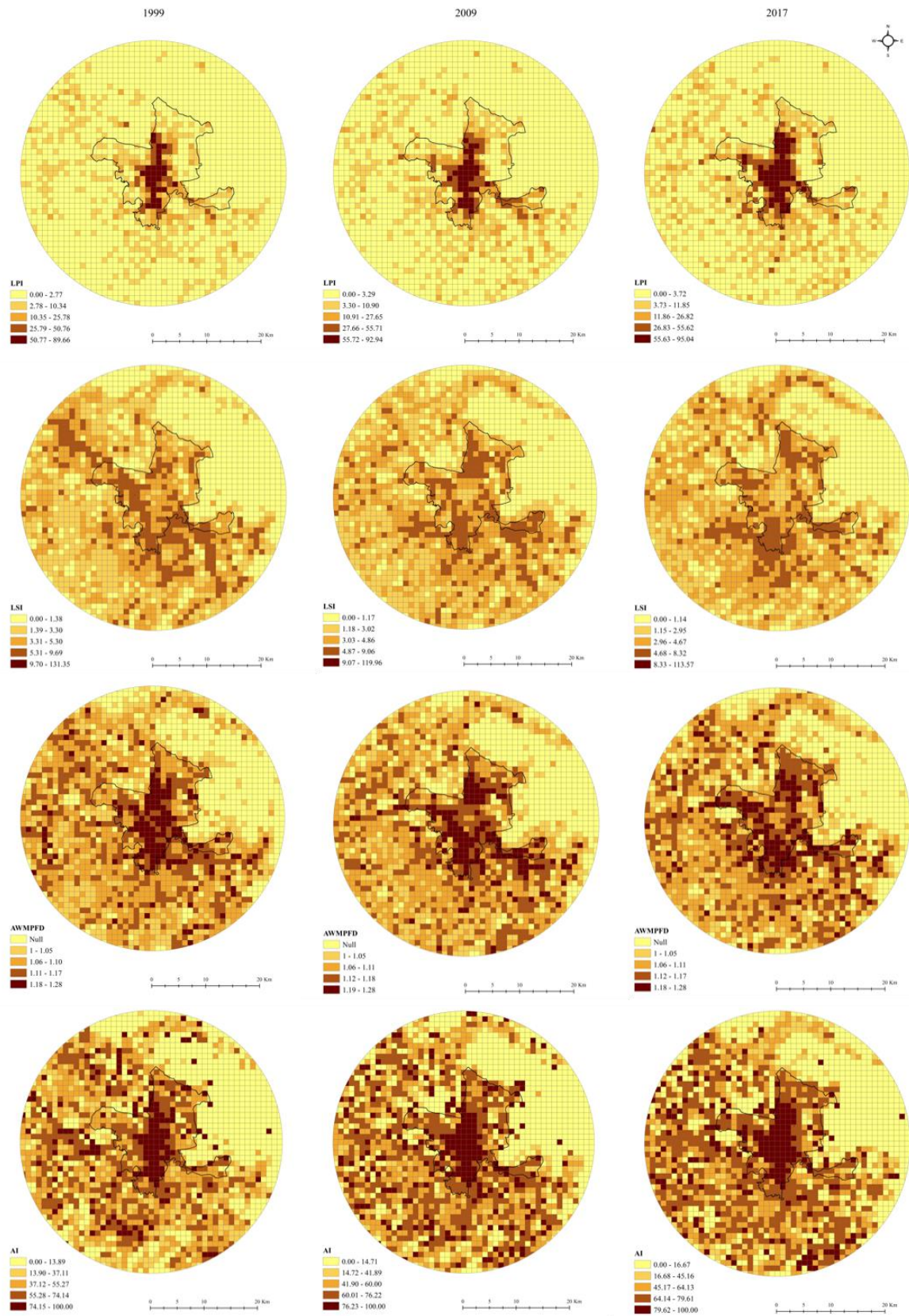


Figure S2 Landscape metrics (LPI, LSI, AWMPFD and AI) change at 1,000m cell size- year 1999, 2009 and 2017

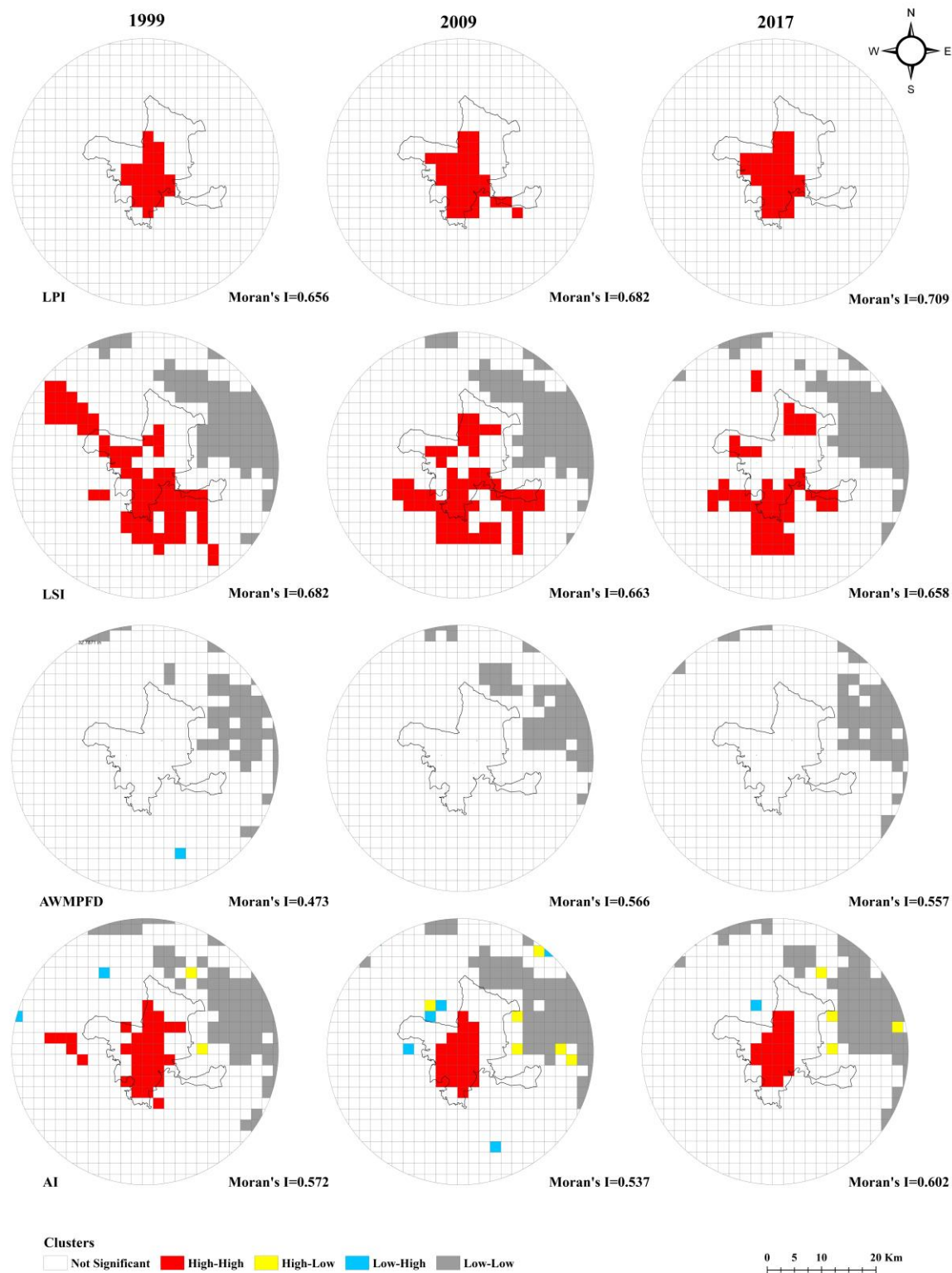


Figure S3. Spatial clusters of landscape metrics at 2,000 m cell-size in 1999, 2009 and 2017 identified through LISA along with their Global Moran's I value

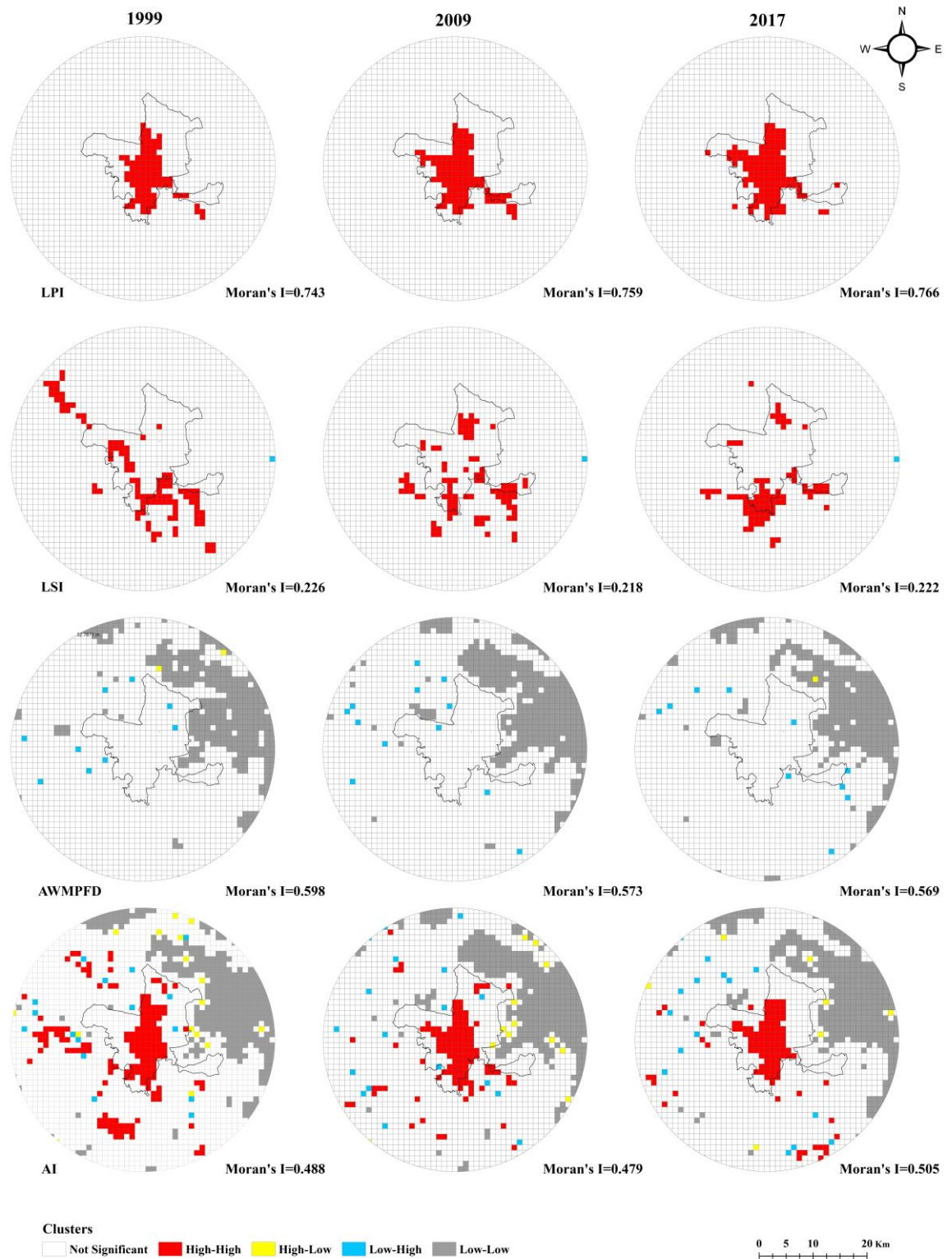


Figure S4. Spatial clusters of landscape metrics at 1,000 m cell-size in 1999, 2009 and 2017 identified through LISA along with their Global Moran's I value