Table S1. Spatial classification system of PLES in Dongting Lake Basin

Space types	Corresponding land use types	
	First class land	**Second class land**
Production space	Arable land	Paddy field, dry land
Living space	Construction land	Urban land, rural residential land and other construction land
Ecological space	Woodland	Wooded land, shrubland, open woodland, other woodland
	Grassland	High-cover grassland, medium-cover grassland, low-cover grassland
	Waters	Rivers and canals, lakes, reservoir ponds, mudflats, marshes
	Unused land	Bare ground and bare rocky gravel land

Table S2. Test results for global Moran's I

Year	$Moran's\ I$	$E(I)$	$mean$	sd	Z-value	P-value
2000	0.1191	-0.0000	0.0001	0.0021	57.1980	0.0010
2005	0.1015	-0.0000	0.0001	0.0021	47.5564	0.0010
2010	0.1080	-0.0000	0.0001	0.0020	52.7476	0.0010
2010	0.0099	-0.0000	0.0001	0.0021	4.6296	0.0010
2018	0.1364	-0.0000	0.0001	0.0022	62.6632	0.0010

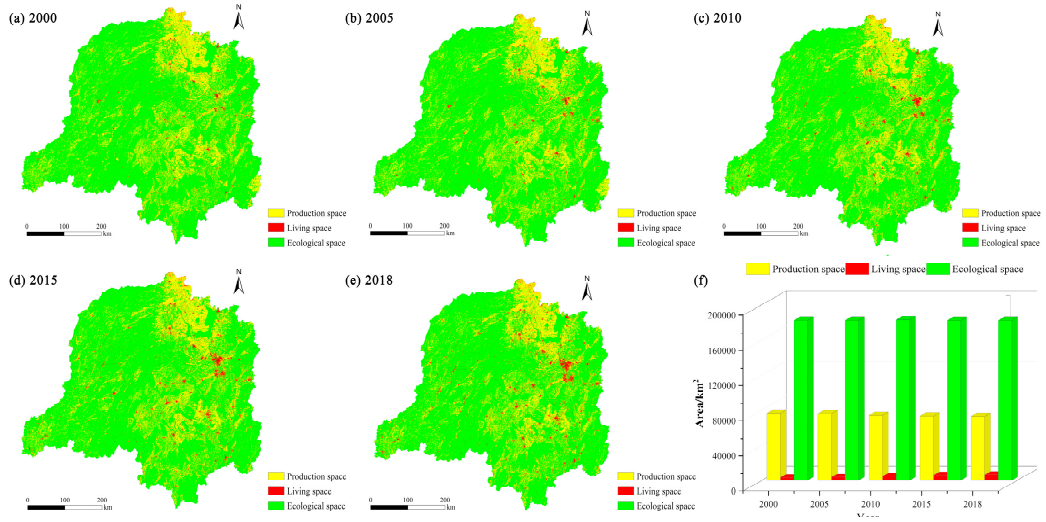

Figure S1. Spatial distribution of PLES in Dongting Lake Basin from 2000 to 2018. (**a**–**e**) Spatial distribution, and (**f**) The area proportion statistics.

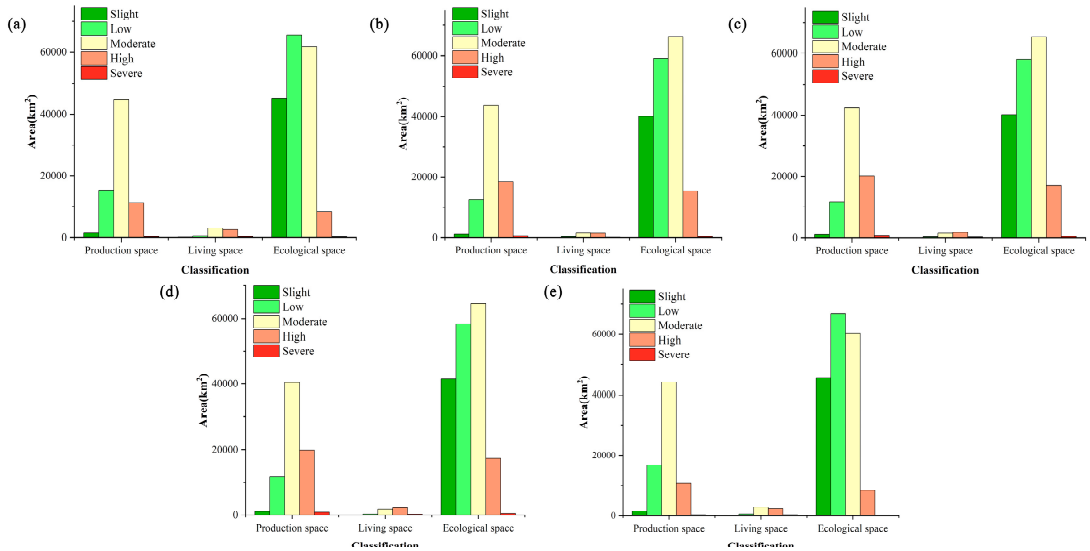

Figure S2. The area of each conflict level in the PLES from 2000 to 2018.

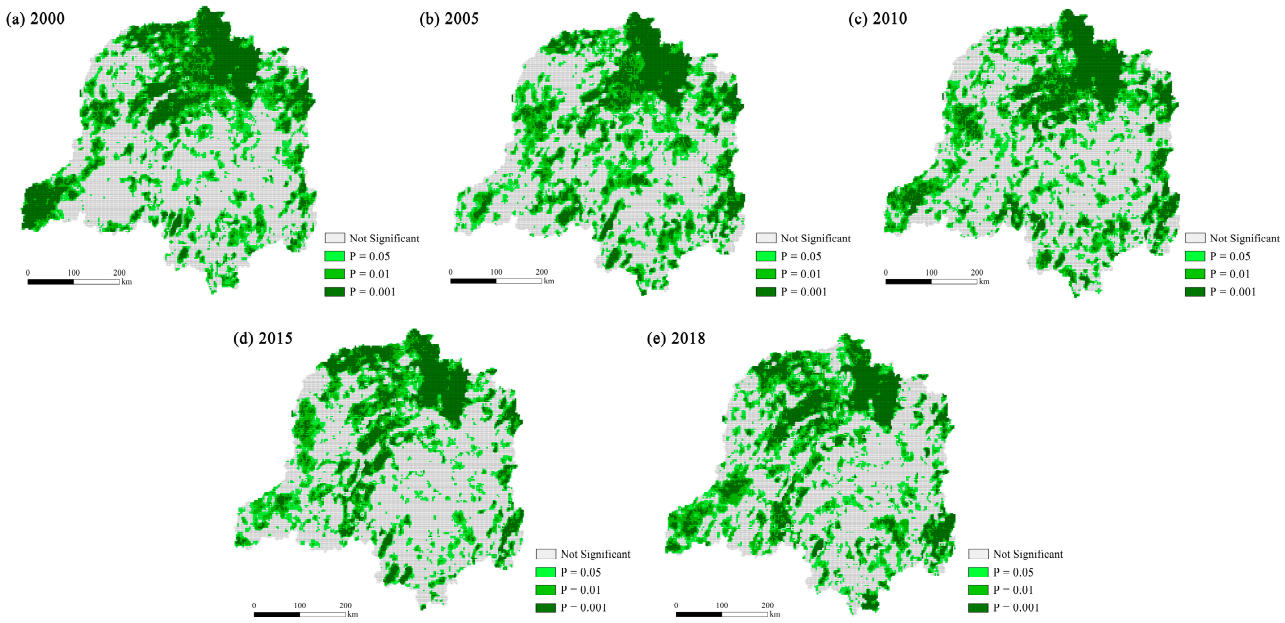

Figure S3. Significance distribution of local spatial autocorrelation between spatial conflict and soil erosion in the Dongting Lake Basin from 2000 to 2018

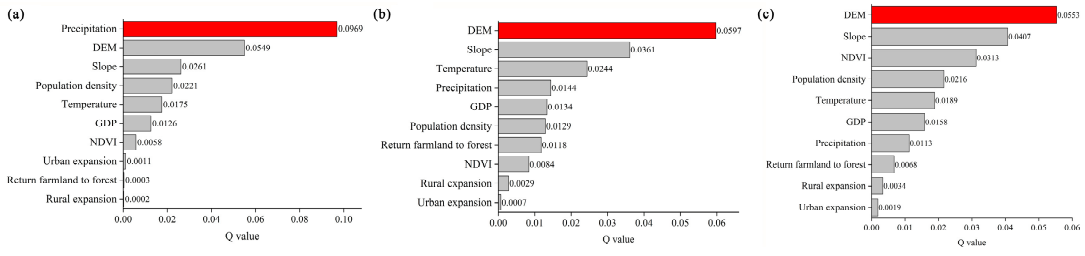

Figure S4. Overall factor detection results from 2010 to 2015.