

Supplementary Materials

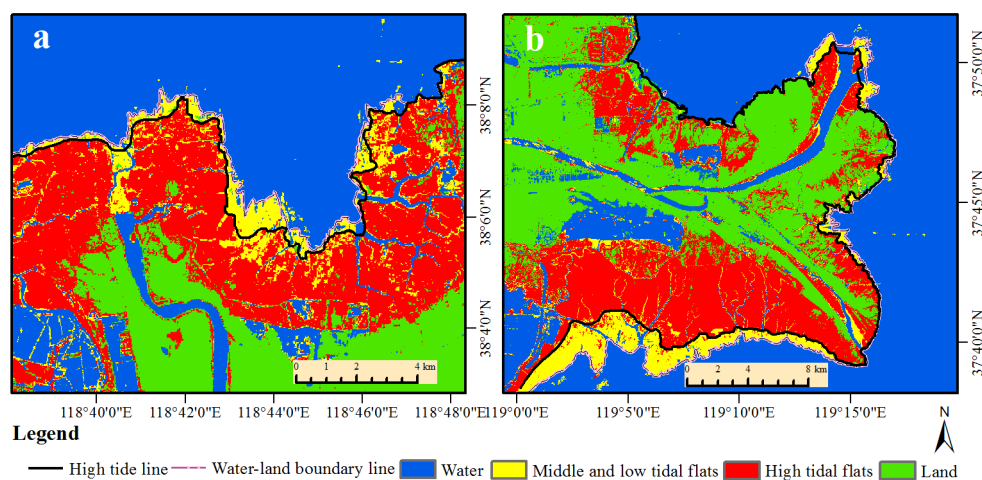


Figure S1. Extraction of the high tide line and water-land boundary line from the remote sensing classification for 2013.

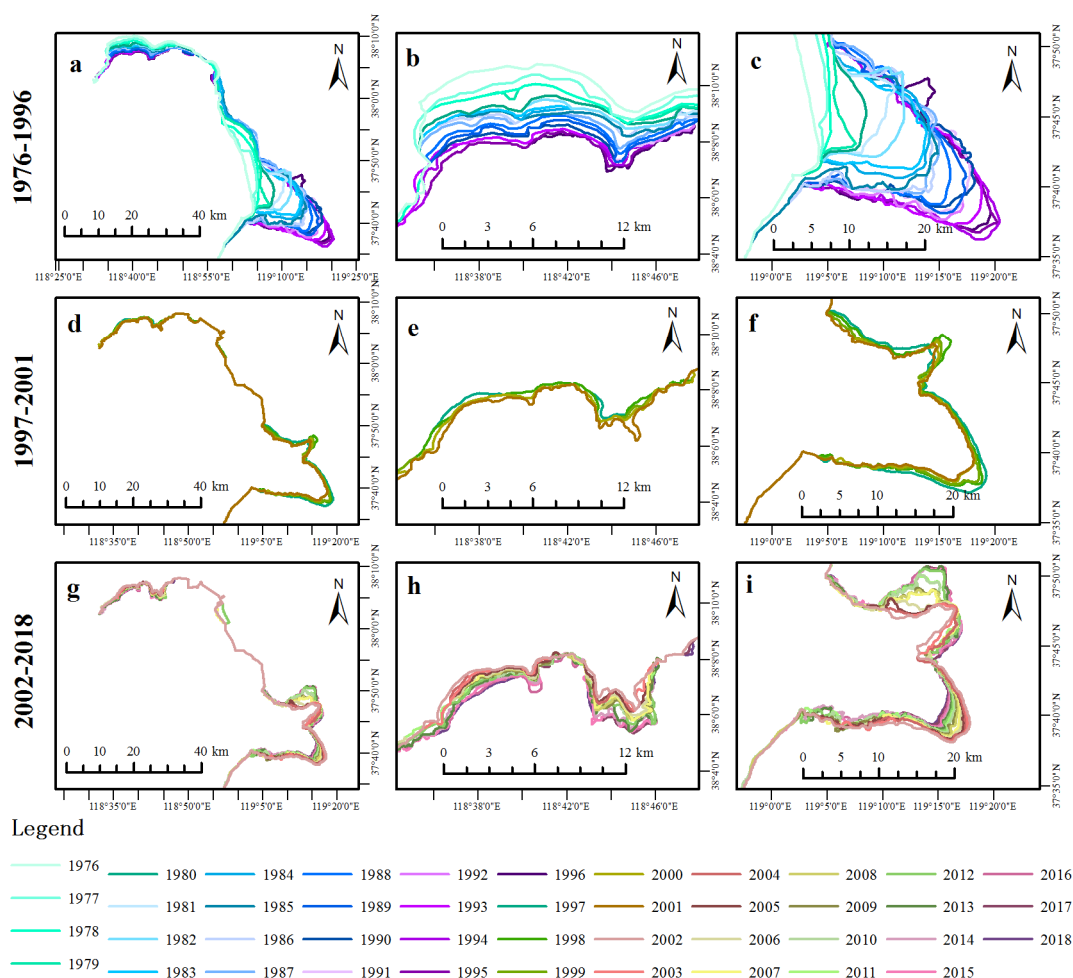


Figure S2. Spatiotemporal dynamic distributions of the coastline in the whole YRD (a,d,g), the northern coast (b,e,h) and the Yellow River Estuary (c,f,i) from 1976 to 2018.