Supporting Information

Parameters	Description
Туре	quadcopter
Weight	1842 g (aircraft with battery)
Working frequency	2.400-2.483 GHz
Power	a 15.2V, 5350 mAh battery
Endurance	28 min
Imaging sensor	RGB camera
Camera lens	FOV 94°20 mm (35 mm format equivalent) f/2.8 focus at
	infinity
Photo resolution	4000 * 3000

Table S1. Parameters of unmanned aerial vehicle (UAV) and built-in camera



Figure S1. The image digitalization of all identified isolated Spartina alterniflora patches (> 0.5

m in diameter) from 2014 to 2017.



Figure S2. Typical UAV imagery of isolated *Spartina alterniflora* patches (Jul. 14th, 2017) at (a) low, (b) median, and (c) high elevations.



Figure S3. Example illustration of cumulative distribution curve of all LiDAR point elevation values within an isolated *Spartina alterniflora* patch, with a horizontal dashed line indicating the threshold used for calculating mean surface elevation of the patch.



Figure S4. RTK-GPS surface elevation survey and sediment sampling of isolated Spartina

alterniflora patches over the intertidal wetland in Zhangjiang estuary, Fujian, China.



Figure S5. Inundation duration of each isolated Spartina alterniflora patches over the intertidal

wetland in Zhangjiang estuary, Fujian, China.