

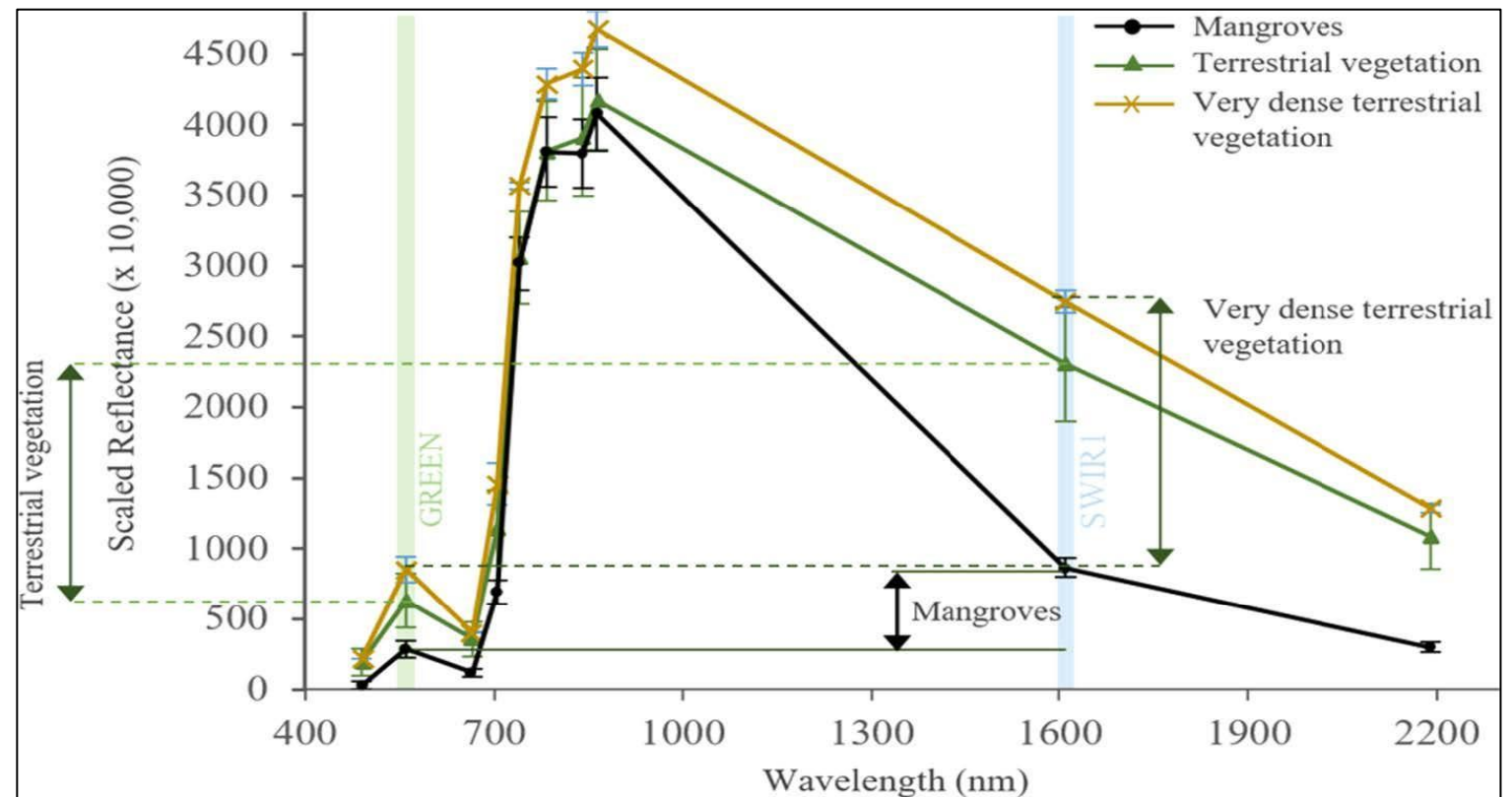
Analisis Data & Interpretasi Hasil

Pengolahan Data Mangrove

Analisis Persebaran Vegetasi Mangrove

Mangrove Vegetation Index (MVI)

- MVI merupakan metode di kembang kan oleh Alvin B. Baloloy, dkk pada tahun 2020
- MVI digunakan untuk mengidentifikasi sebaran vegetasi mangrove dengan komposit 3 band yaitu Green, NIR dan SWIR 1



Mangrove Vegetation Index (MVI)

- Algoritma yang digunakan dalam identifikasi sebaran mangrove mengikuti persamaan berikut :

$$MVI = (NIR - Green)/(SWIR1 - Green)$$

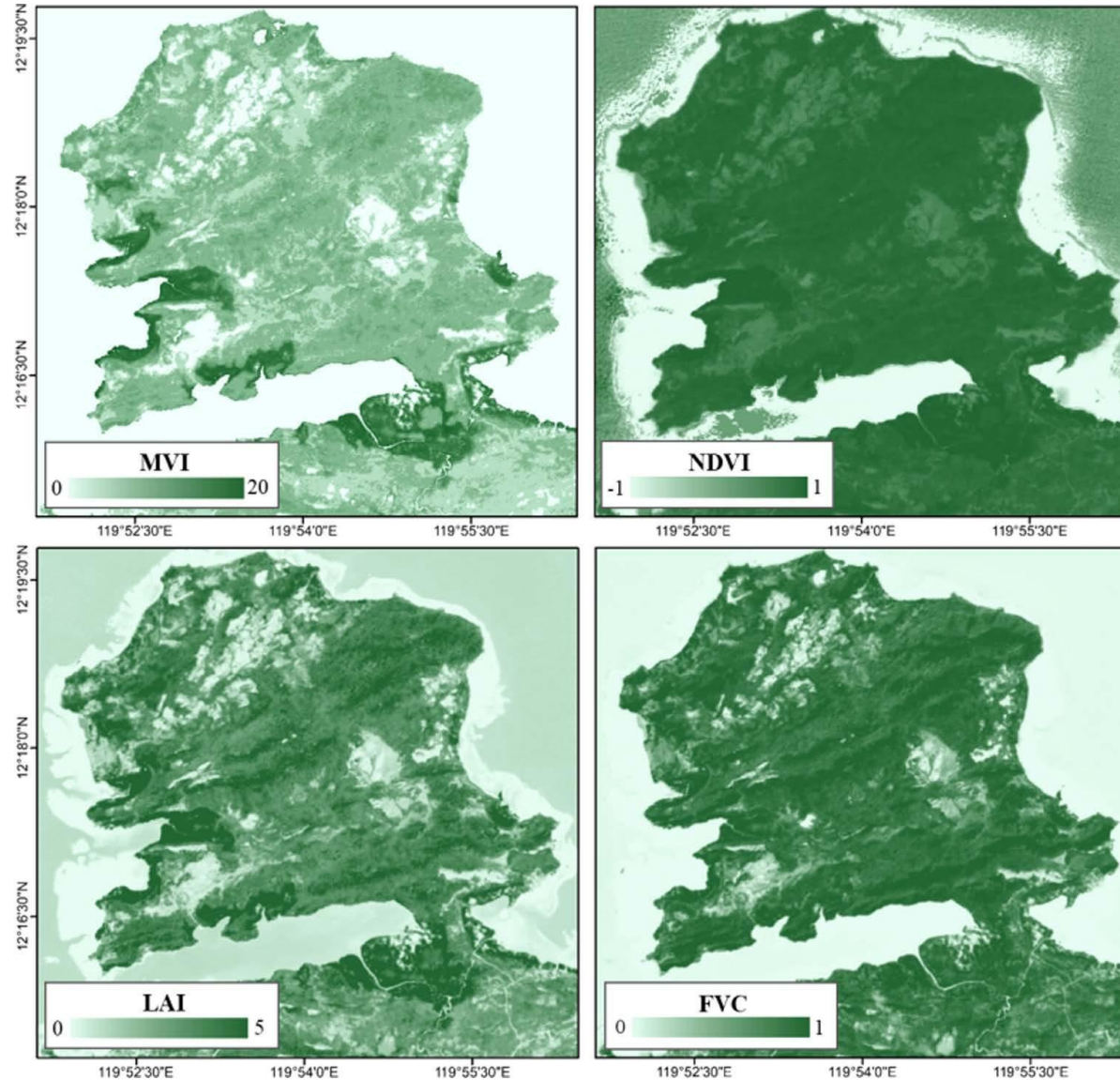
- Nilai MVI piksel yang diidentifikasi sebagai mangrove, vegetasi terrestrial (hutan dan non-hutan), tanah gundul, terbangun, air dan awan. Penentuan mangrove dilakukan dengan *reclassify* berdasarkan threshold vegetasi mangrove 4.0 – 20.0 atau berdasarkan tempat tertentu :

Table 7

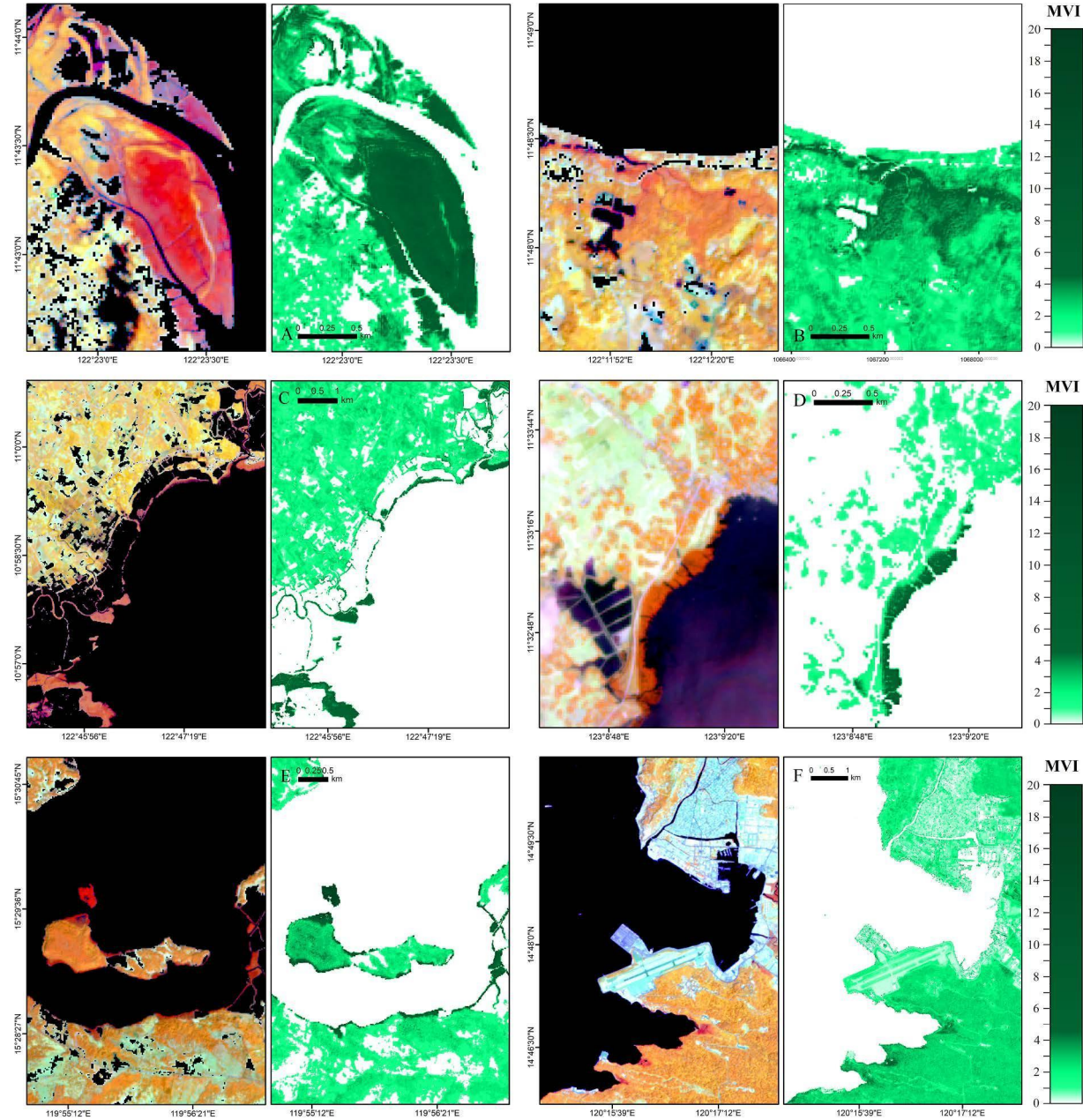
The selected mangrove forest sites in Southeast Asia, South America, Africa and Australia, and their respective geographical locations, dominant mangrove typology, and the lower minimum threshold utilized to map the mangroves.

Region	Mangrove Site	Latitude	Longitude	Mangrove Type	MVI Threshold
Southeast Asia	Philippines (countrywide mean threshold)	12°52'47" N	121°46'26.5" E	Fringe	3.5
	Can Gio Mangrove Forest, Vietnam	10°33'39.3" N	106°52'08.6" E	Delta	3.5
	West Kalimantan, Indonesia	0°39'59.0" S	109°31'00.6" E	Delta	3.5
	Prey Nob, Cambodia	10°40'43.9" N	103°52'54.1" E	Fringe	3
	Mueang Trat District, Trat, Thailand	12°08'59.1" N	102°29'39.7" E	Fringe/Estuary	3
South America	Baia do Arraial, Amazon Coast, Brazil	2°39'32.3" S	44°09'49.2" W	Delta	3
Africa	Mabokweni, Tazania	5°02'13.3" S	39°04'27.1" E	Estuary	3
Australia	Prince Regent National Park, Western Australia	15°16'49.9"S	125°08'04.8"E	Estuary	3

Mangrove Vegetation Index (MVI)

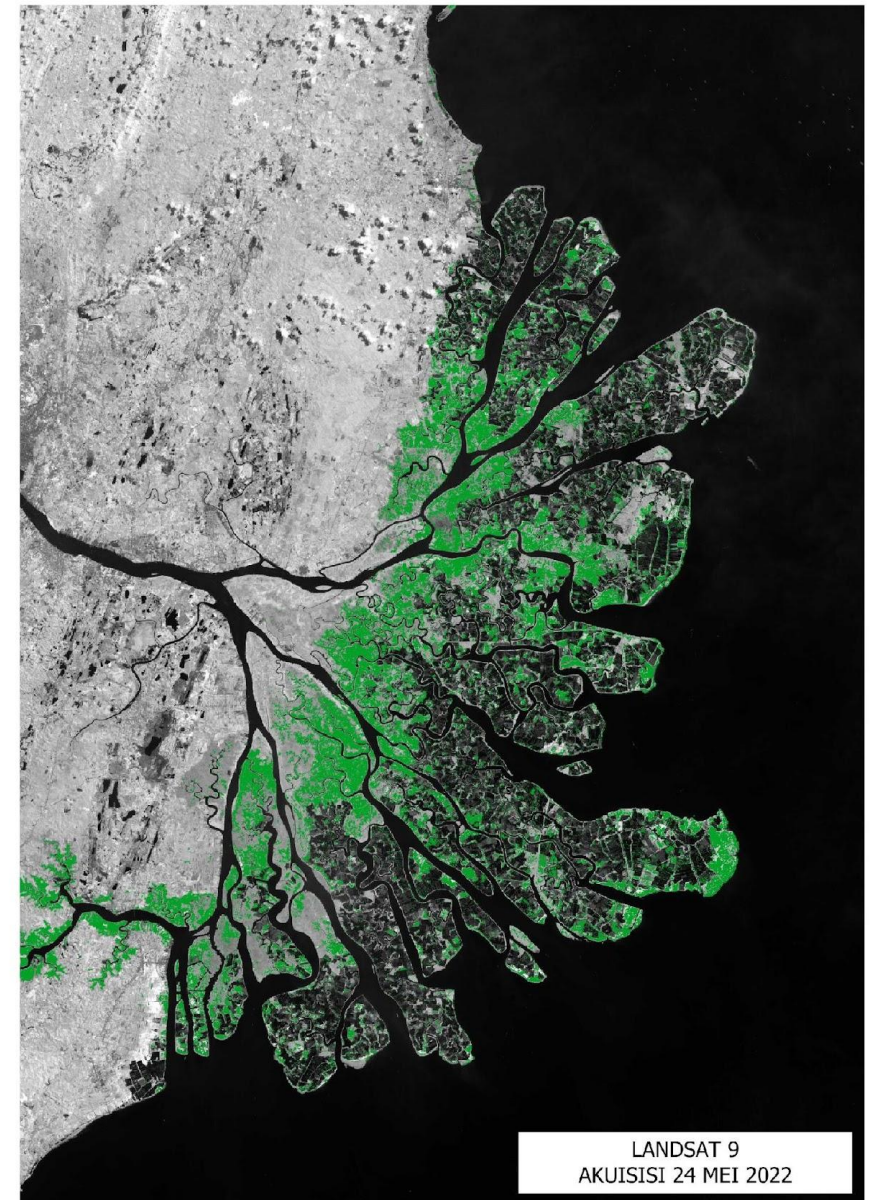
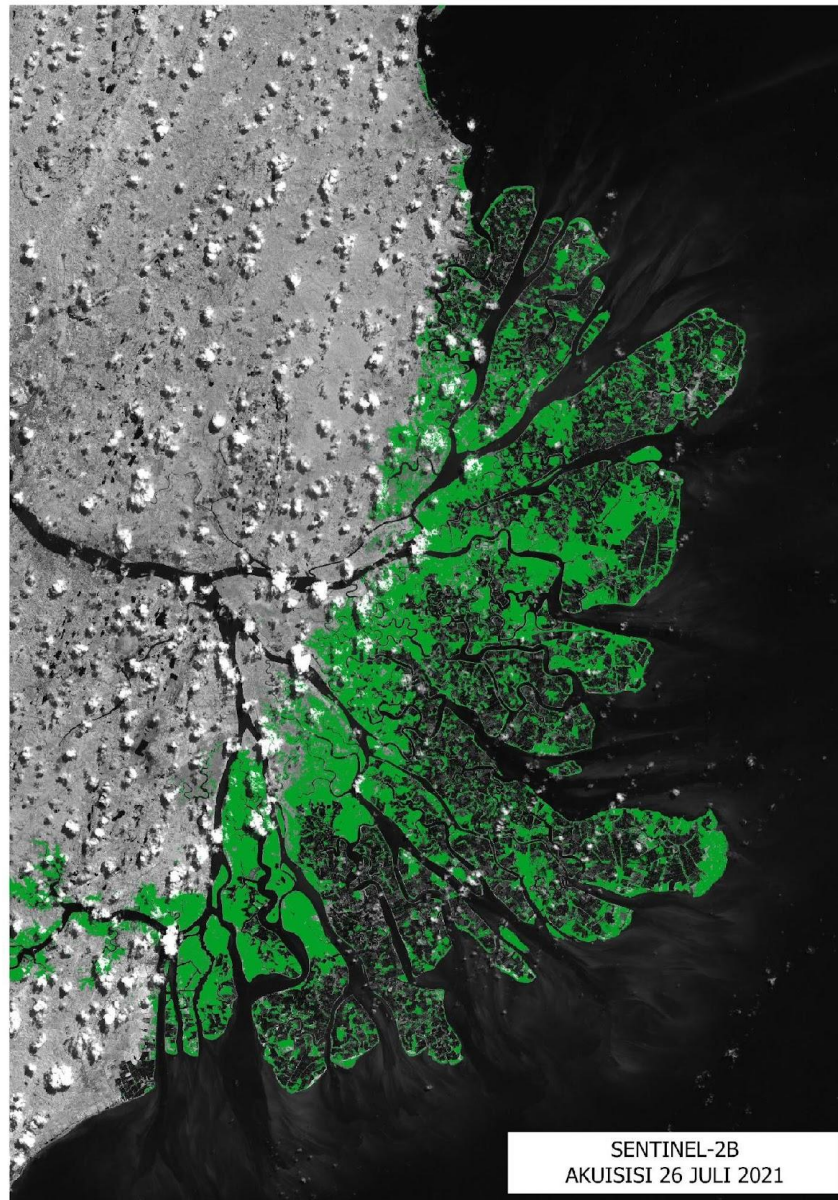


Mangrove Vegetation Index (MVI)



Studi Kasus Delta Mahakam

(green, NIR,
SWIR₁)



Terima Kasih