

Spatiotemporal Analysis of Aboveground and Belowground Mangrove Carbon in Coastal Area of Belitung Regency, Bangka Belitung Province, Indonesia

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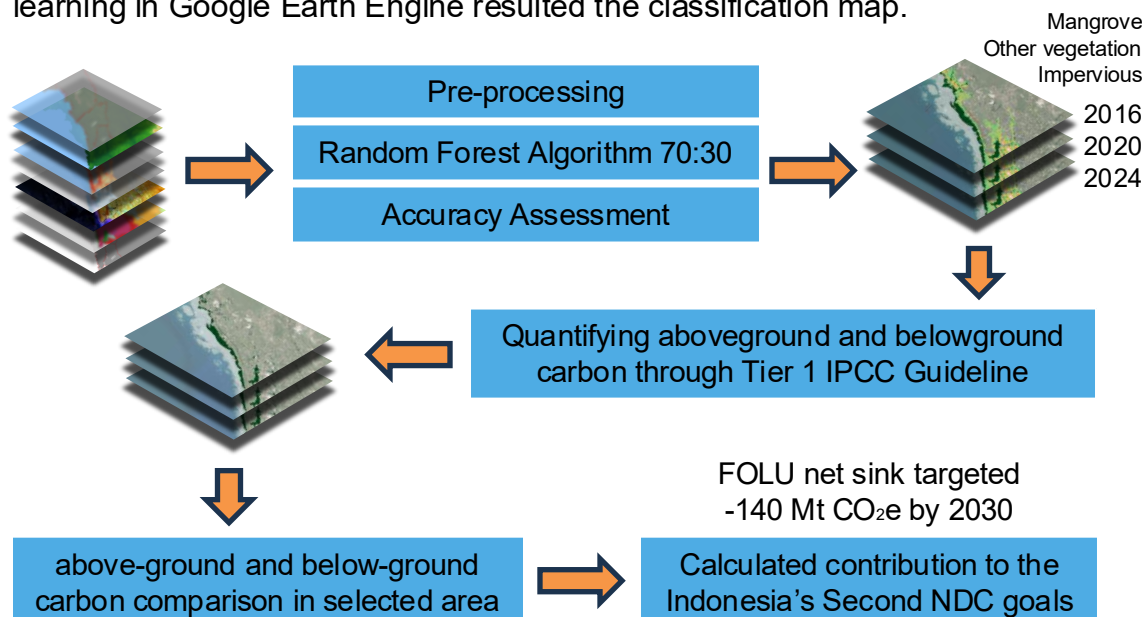
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Background

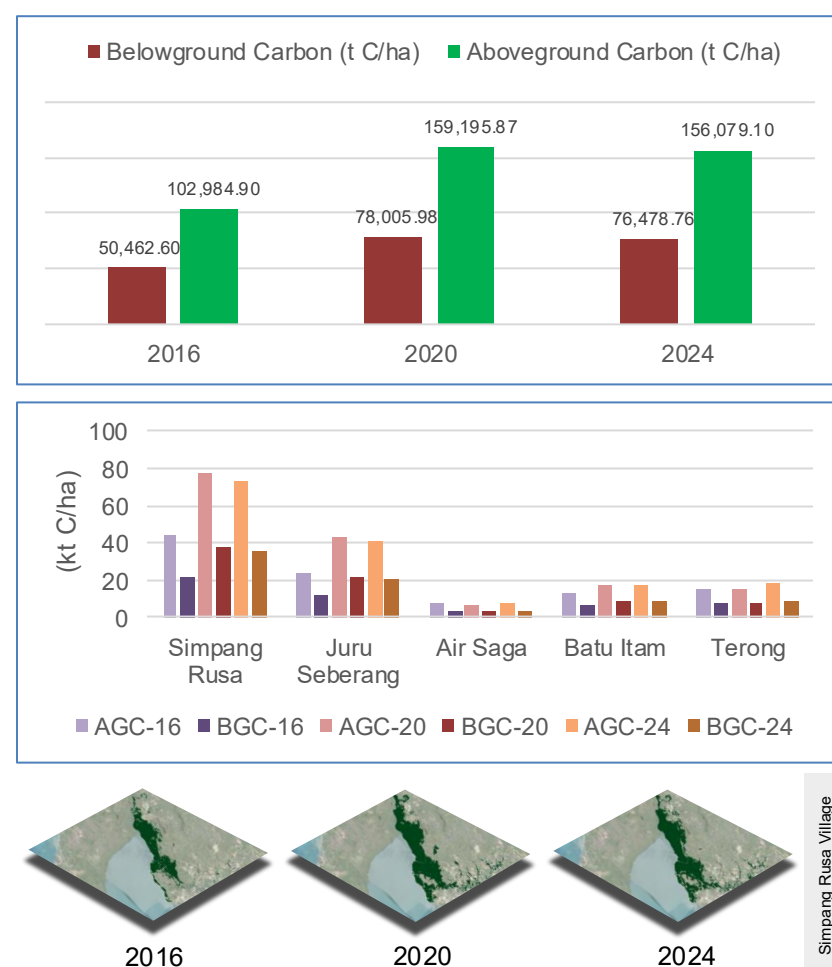
Mangrove including as Forest and Other Land-Use (FOLU) sector, which take role to achieve Indonesia's Second Nationally Determined Contribution (SNDC) goal, which reduce greenhouse gases (GHGs) emissions and adapt to climate change impacts. Quantifying the area and changes of carbon pool inside of mangrove forest could help to measure their contribution to the NDCs.

Methodology

Through preparing datasets including training samples data and machine learning in Google Earth Engine resulted the classification map.



Results



Discussion

Although the aboveground and belowground carbon decreased in few recent year, it still shows the annual positive trend in average (+25,966.97 t C/ha). Recent mangrove in Belitung area stored carbon 232,557.86 t C/ha or 0.17% to the FOLU net sink target, it projected reach 388,359.67 t C/ha (0.28%). The Simpang Rusa village take a great domestic contribution on mangrove carbon pool in Belitung area than the other villages, 45.89% in average.