



# Penginderaan Jauh Kehutanan

Masita Dwi Mandini Manessa

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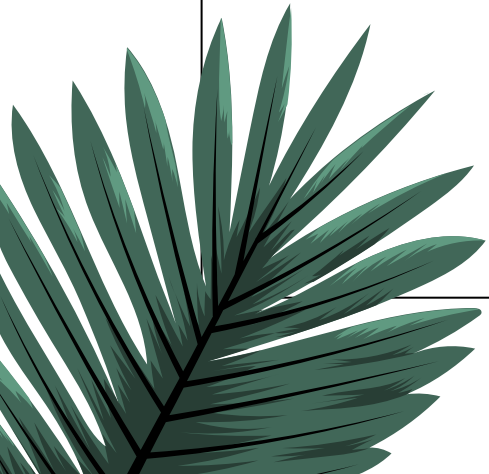
PJ Kehutanan

**03.**    **Data**

Data PJ  
Kehutanan

**04.**    **Metodologi**

Metode untuk data  
PJ Kehutanan



# 1966-2022



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	Document title	Authors	Year	Source	Cited by
<input type="checkbox"/> 1	Uses of multiband remote sensing in forest and range inventory	Carneggie, D.M., Lauer, D.T.	1966	Photogrammetria 21(4), pp. 115-141	11

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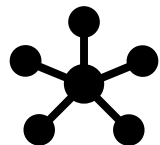
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	Document title	Authors	Year	Source	Cited by
<input type="checkbox"/> 1	Remote sensing of soil moisture for vegetation/forests with large VWC using NMM3D full wave simulations	Huang, H., Tsang, L., Colliander, A., Yueh, S.	2019	International Geoscience and Remote Sensing Symposium (IGARSS) 2019-July, 8900643, pp. 6979-6982	0

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# Topik



## Pemetaan

Peta Hutan – Non  
Hutan



## Monitoring

Timeseries  
perubahan / Forest  
loss



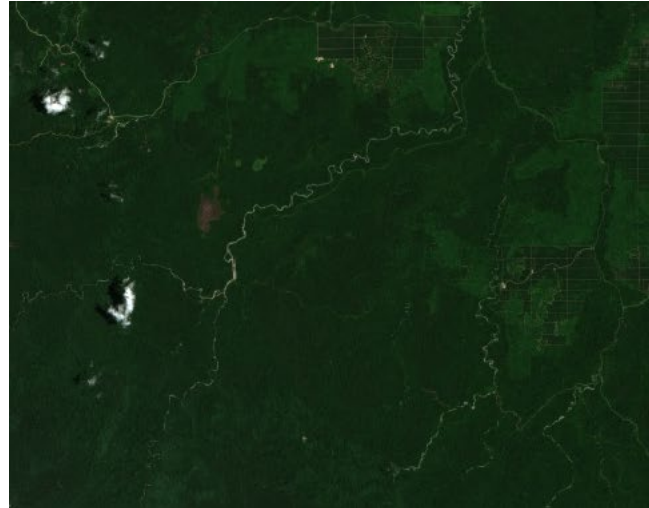
## Carbon / Biomassa

Pemodelan  
empirical

# Data

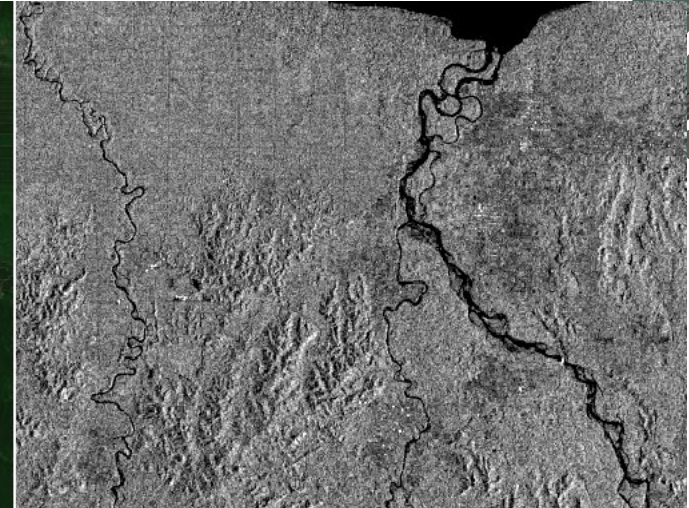
Monitoring

Waktu  
Perekaman  
yang rutin



**Multispektral**

Berbasis informasi dari panjang gelombang optik atau sinar tampak



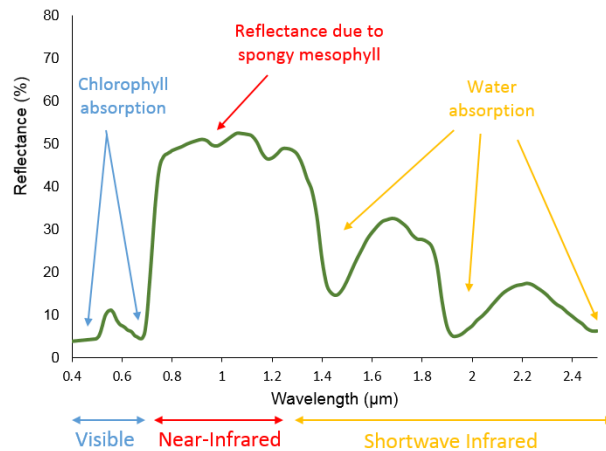
**Synthetic Aperture Radar (SAR)**

Berbasis informasi pantulan balik dari energi radar



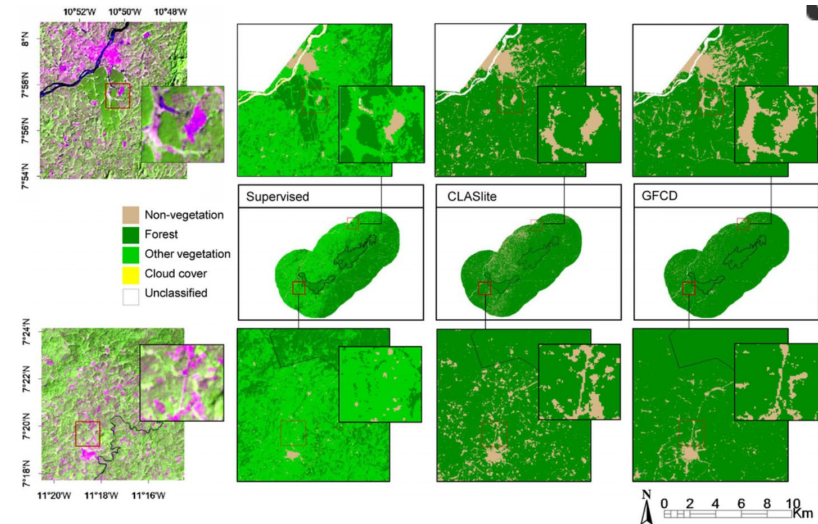
# Metodelogi

Teknis identifikasi area hutan:



## Index Vegetasi

Tranformasi nilai band menjadi rasio/index yang merepresentasikan kondisi vegetasi

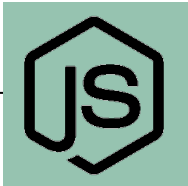


## Klasifikasi

Machine Learning atau Deep Learning



# GEE untuk Kehutanan



## Module 1

Dasar Code  
JavaScript



## Module 2

Dasar Code di  
Google Earth  
Engine



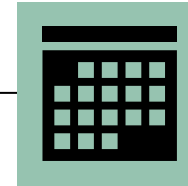
## Module 3

Identifikasi  
vegetasi dan  
non vegetasi  
berbasis Index  
Vegetasi  
multispectral  
dan SAR



## Module 4

Klasifikasi  
hutan dan non-  
hutan dengan  
metode  
machine  
learning



## Module 5

Timeseries  
analysis untuk  
monitoring  
hutan



## Module 6

Aplikasi  
monitoring  
hutan