



Plenary  
9-11 May 2023

# Global Mangrove Watch

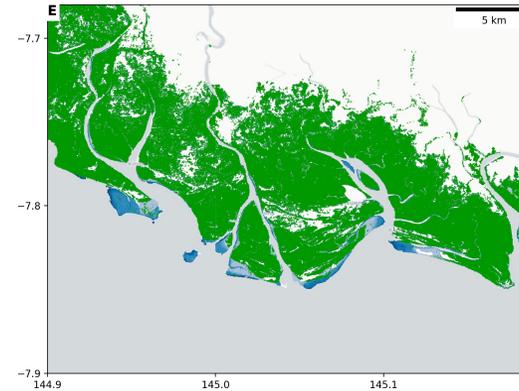
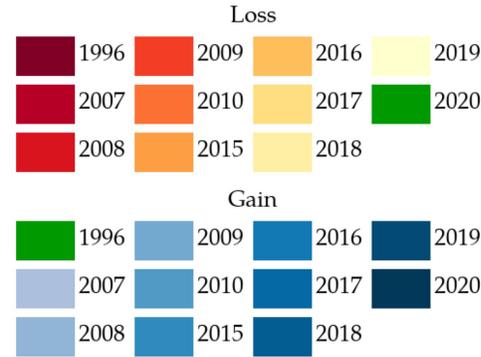
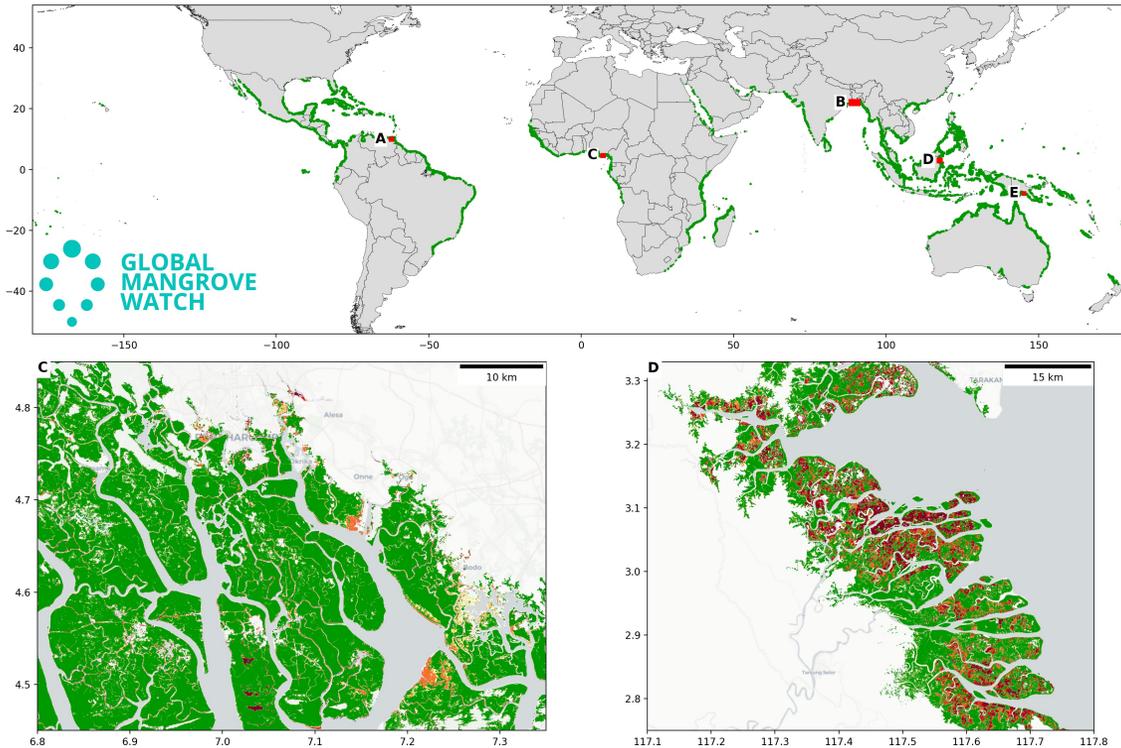
## GMW Mangrove Loss Alerts

Ake Rosenqvist (JAXA/soloEO)  
[ake.rosenqvist@soloEO.com](mailto:ake.rosenqvist@soloEO.com)



# GMW Mangrove Alerts

## – based on GMW baseline maps



## GMW baseline maps (proxy Activity Data)

- Global mangrove extent at 25 m.
- Generated from ALOS PALSAR L-band SAR and Landsat optical satellite data.
- Change maps, derived from JERS-1, ALOS and ALOS-2 SAR data are generated annually:
  - GMW v3: Annual Net changes
  - GMW v4: Annual Gains and Losses provided separately (release 2023)
- Est. overall accuracy of 87.4% (95th conf. int.: 86.2–88.6%)
- Public open access:
  - UNEP-WCMC (.shp)
  - JAXA EORC: (GeoTiff)
- Analysis tools and other mangrove datasets on GMW online Platform.

GMW Platform: [www.globalmangrovetwatch.org](http://www.globalmangrovetwatch.org)



# GMW Mangrove Alerts – monthly loss alerts

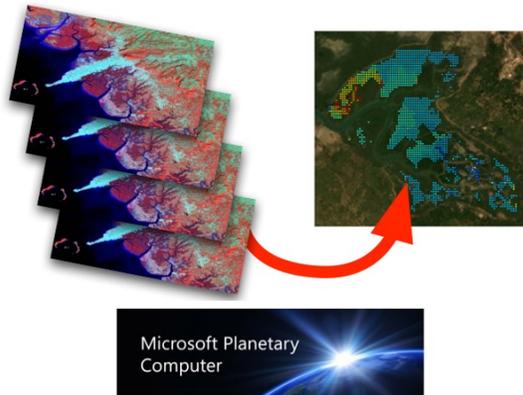
- Dedicated Alert System for Mangroves.
- Loss Alerts published online monthly.
- Current coverage: African continent + selected countries in Asia & Pacific, and C & S America
- Global coverage of Mangrove Alerts in 2024
- Est. overall accuracy of 92.1%, with the alert commission 10.4% and omission 20.6%
- Public open access at the GMW Portal ([www.globalmangrovetwatch.org](http://www.globalmangrovetwatch.org))

Global Mangrove Watch v3.0 2018 baseline.  
Derived from ALOS-2 & Landsat

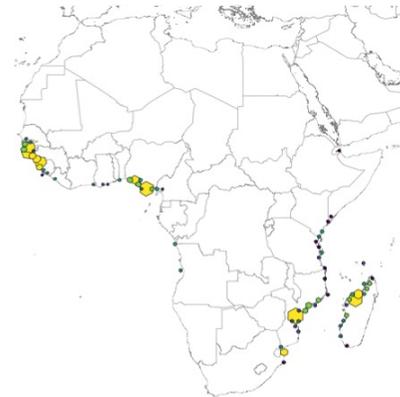


Mask refinement

Time-series analysis of monthly Sentinel-2 data to identify losses



Mangrove Loss Alerts 2019-2022  
(2023: Africa + $\alpha$ ; 2024: Global)



Updates published monthly on the GMW Portal

