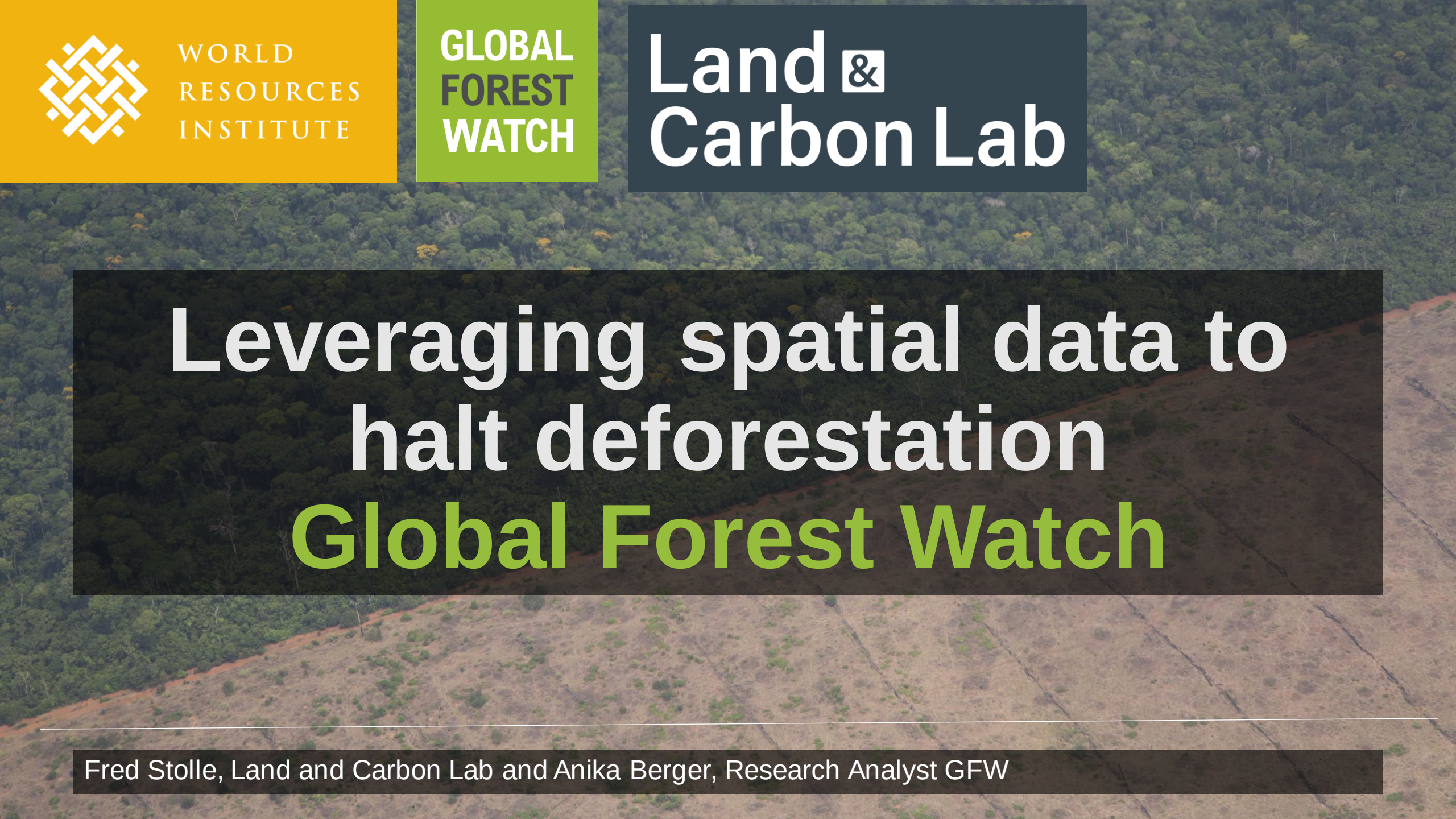

Leveraging spatial data to halt deforestation

Global Forest Watch

Fred Stolle, Land and Carbon Lab and Anika Berger, Research Analyst GFW

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- New developments GFW
- Alerts general
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  - RADD alerts - Sentinel -1
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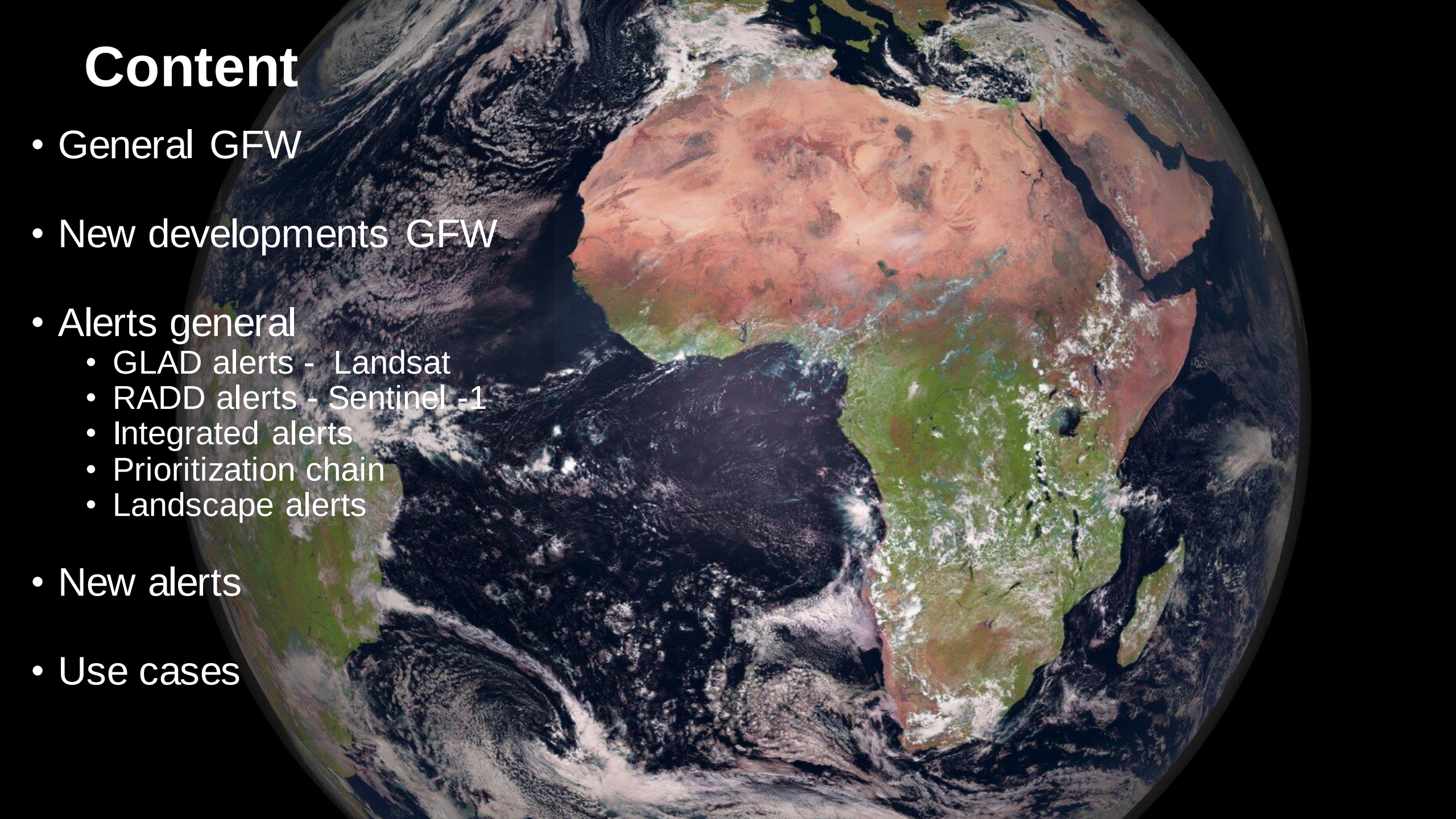

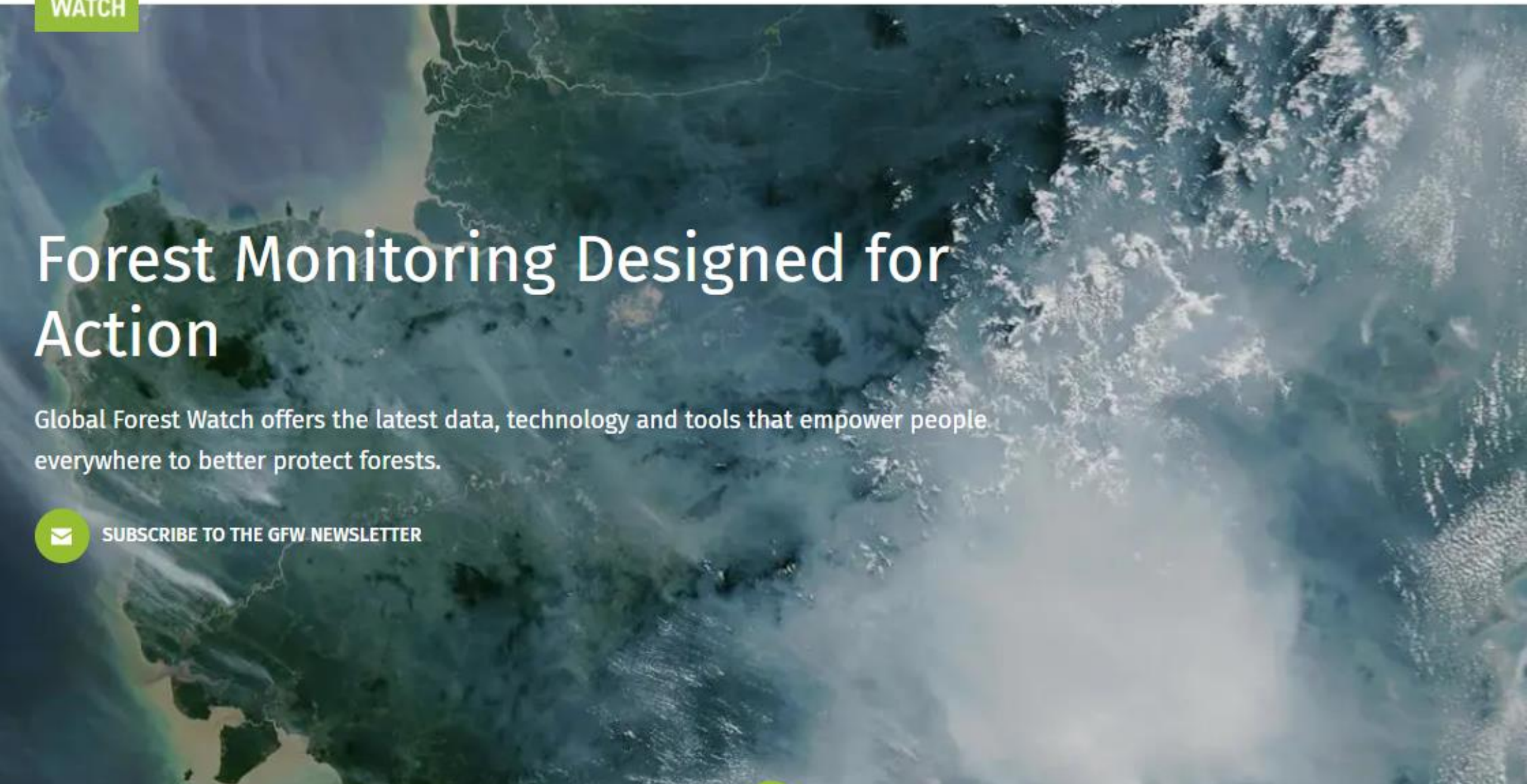

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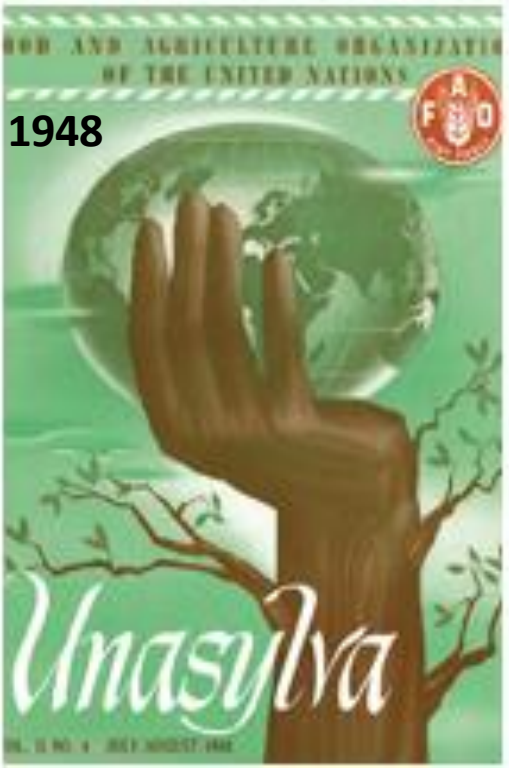
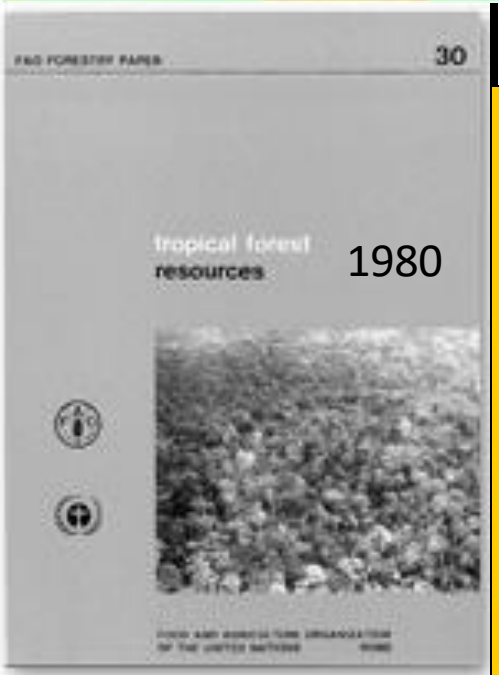
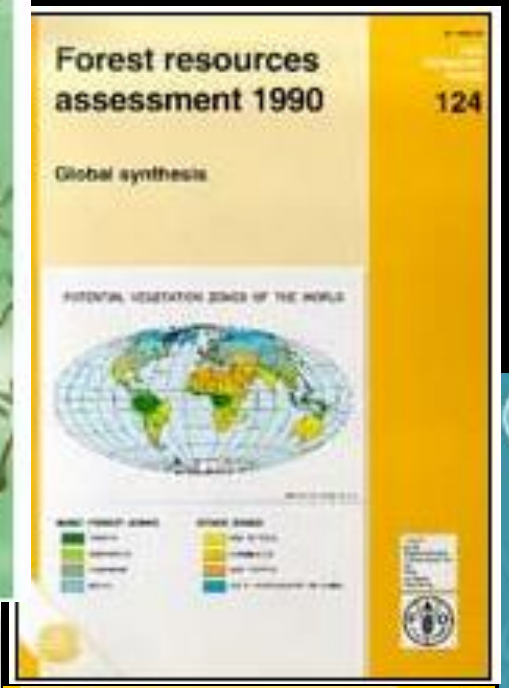
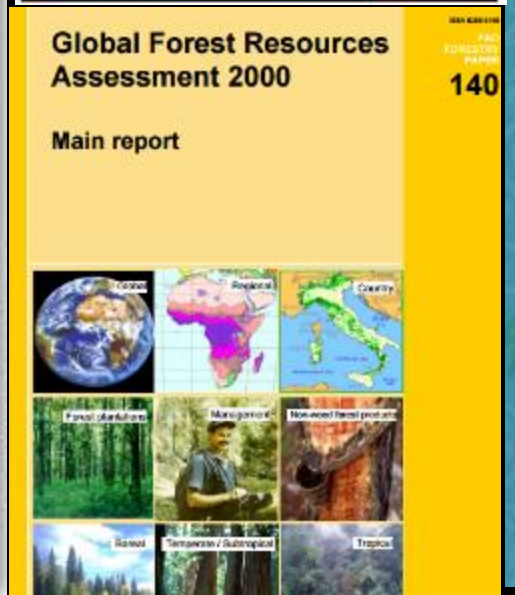
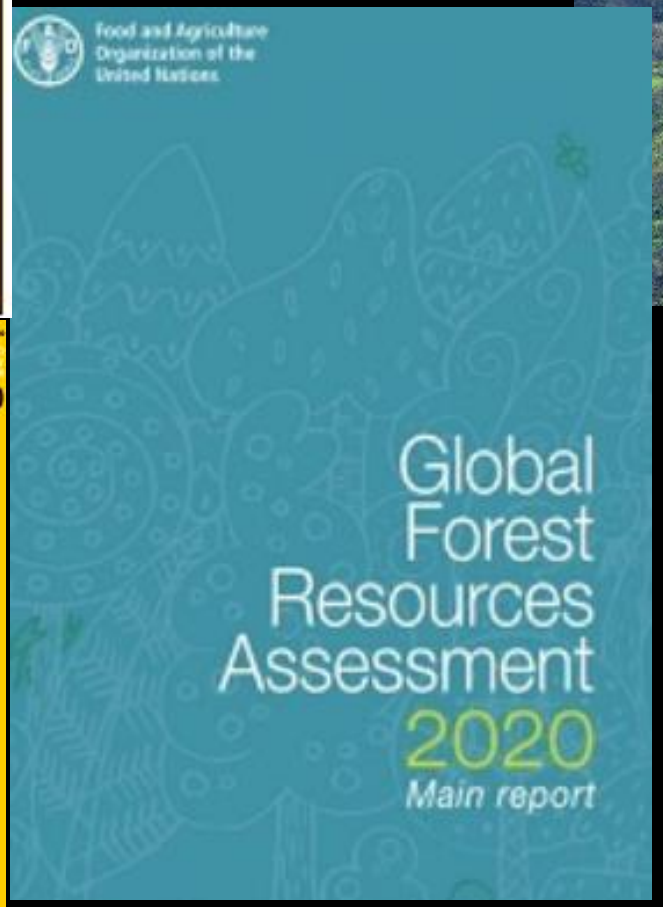
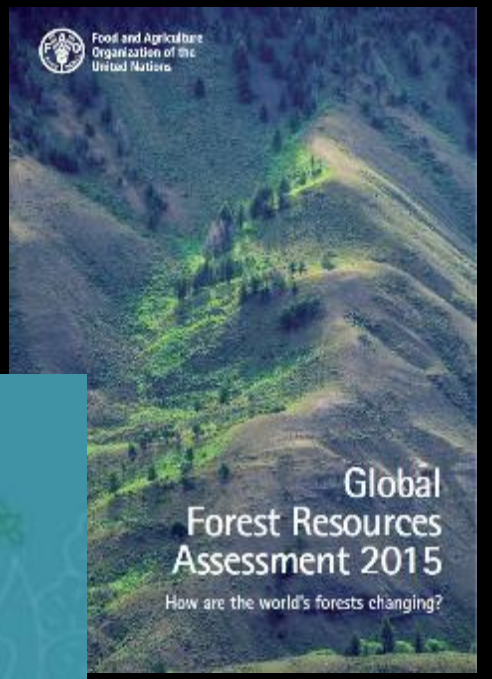


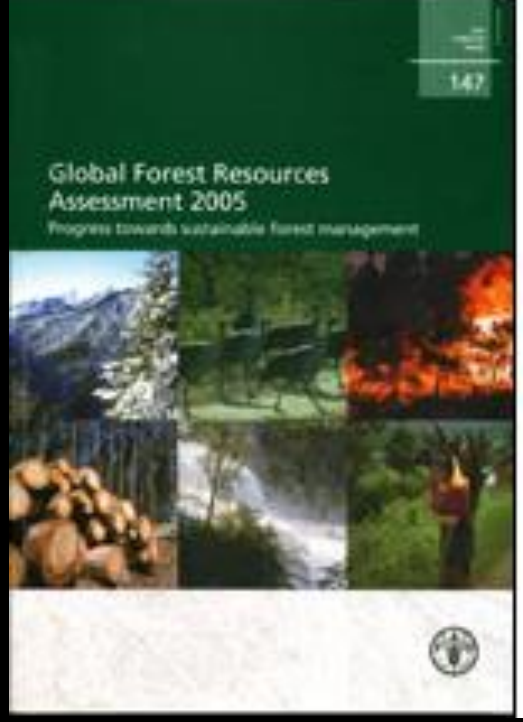


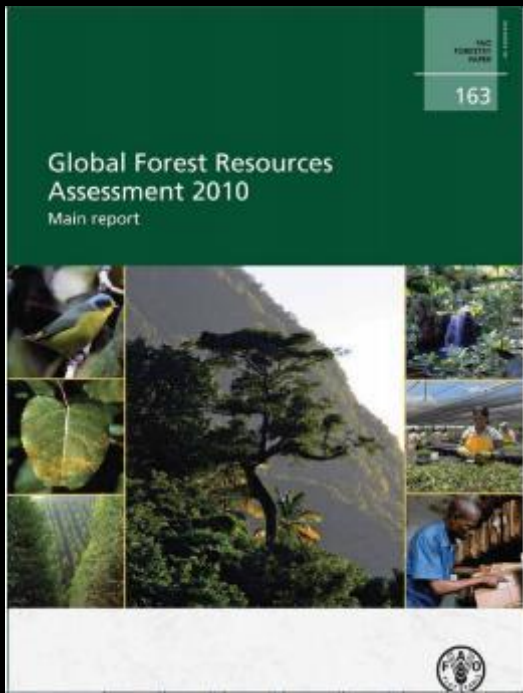










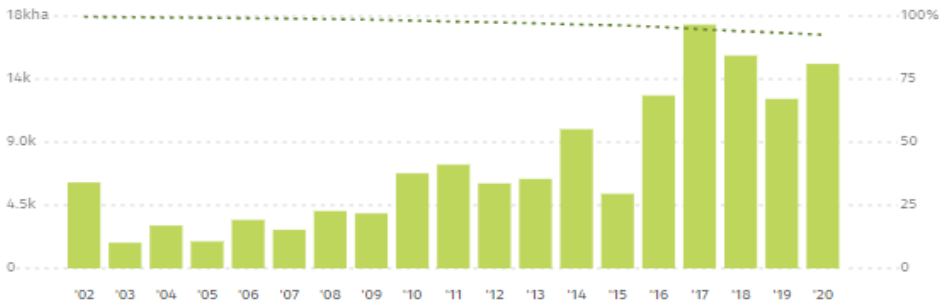


FRA 2020

Country/territory	Forest area (1 000 ha)				Net annual change					
	1990	2000	2010	2020	1990–2000		2000–2010		2010–2020	
					1 000 ha/yr	%	1 000 ha/yr	%	1 000 ha/yr	%
Niger	1 945	1 328	1 204	1 080	-61.7	-3.74	-12.4	-0.98	-12.4	-1.08
Nigeria	26 526	24 893	23 260	21 627	-163.3	-0.63	-163.3	-0.68	-163.3	-0.73
Burundi	276	194	194	280	-8.3	-3.48	0.0	0.00	8.6	3.73
Cabo Verde	15	40	43	46	2.4	9.95	0.3	0.73	0.3	0.68
Cambodia	11 005	10 781	10 589	8 068	-22.4	-0.21	-19.2	-0.18	-252.1	-2.68
Cameroon	22 500	21 597	20 900	20 340	-90.3	-0.41	-69.7	-0.33	-56.0	-0.27
Canada	348 273	347 802	347 322	346 928	-47.1	-0.01	-48.0	-0.01	-39.4	-0.01
Cayman Islands	13	13	13	13	n.s.	-0.15	n.s.	-0.16	0.0	0.00
Central African Republic	23 203	22 903	22 603	22 303	-30.0	-0.13	-30.0	-0.13	-30.0	-0.13
Chad	6 730	6 353	5 530	4 313	-37.7	-0.57	-82.3	-1.38	-121.7	-2.45
Chile	15 246	15 817	16 725	18 211	57.1	0.37	90.8	0.56	148.5	0.85
China	157 141	177 001	200 610	219 978	1 986.0	1.20	2 361.0	1.26	1 936.8	0.93
Colombia	64 958	62 736	60 808	59 142	-222.3	-0.35	-192.8	-0.31	-166.6	-0.28
Comoros	46	42	37	33	-0.4	-0.99	-0.4	-1.10	-0.4	-1.24
Congo	22 315	22 195	22 075	21 946	-12.0	-0.05	-12.0	-0.05	-12.9	-0.06
Cook Islands	15	16	16	16	0.1	0.43	n.s.	0.01	0.0	0.00
Costa Rica	2 907	2 857	2 871	3 035	-5.0	-0.17	1.4	0.05	16.4	0.56
Côte d'Ivoire	7 851	5 094	3 966	2 837	-275.6	-4.23	-112.9	-2.47	-112.9	-3.29
Croatia	1 850	1 885	1 920	1 939	3.5	0.19	3.5	0.18	1.9	0.10
Cuba	2 058	2 435	2 932	3 242	37.7	1.70	49.7	1.87	31.0	1.01
Curaçao	n.s.	n.s.	n.s.	n.s.	0.0	0.00	0.0	0.00	0.0	0.00
Cyprus	161	172	173	173	1.1	0.63	0.1	0.07	n.s.	-0.02
Czechia	2 629	2 637	2 657	2 677	0.8	0.03	2.0	0.08	2.0	0.07
Democratic People's Republic of Korea	6 912	6 455	6 242	6 030	-45.7	-0.68	-21.2	-0.33	-21.2	-0.35
Democratic Republic of the Congo	150 629	143 899	137 169	126 155	-673.0	-0.46	-673.0	-0.48	-1 101.4	-0.83

PRIMARY FOREST LOSS IN NIGERIA

From **2002** to **2020**, **Nigeria lost 141kha of humid primary forest**, making up **14%** of its total tree cover loss in the same time period. **Total area of humid primary forest in Nigeria decreased by 7.4%** in this time period.



The methods behind this data have changed over time. Be cautious comparing old and new data, especially before/after 2015. Read more here.

2001 primary forest extent remaining | >30% tree canopy

PRIMARY FOREST LOSS IN REPUBLIC OF CONGO

From **2002** to **2020**, **Republic of Cong[illegible]kha of humid primary f[illegible]** making up **42%** of its total tree cover loss in the same time period. **Total area of humid primary forest in Republic of Congo decreased by 1.7%** in this time period.

The methods behind this data have changed over time. Be cautious comparing old and new data, especially before/after 2015. Read more here.

2001 primary forest extent remaining | >30% tree canopy

PRIMARY FOREST LOSS IN DEMOCRATIC REPUBLIC OF THE CONGO

From **2002** to **2020**, **Democratic Republic of[illegible] Congo lost 5.32Mha of humid primary forest**, making up [illegible]% of its total tree cover loss in the same time period. **Total area of h[illegible]d primary forest in Democratic Republic of the Congo de[illegible]ease[illegible] by 5.1%** in this time period.

The methods behind this data have changed over time. Be cautious comparing old and new data, especially before/after 2015. Read more here.

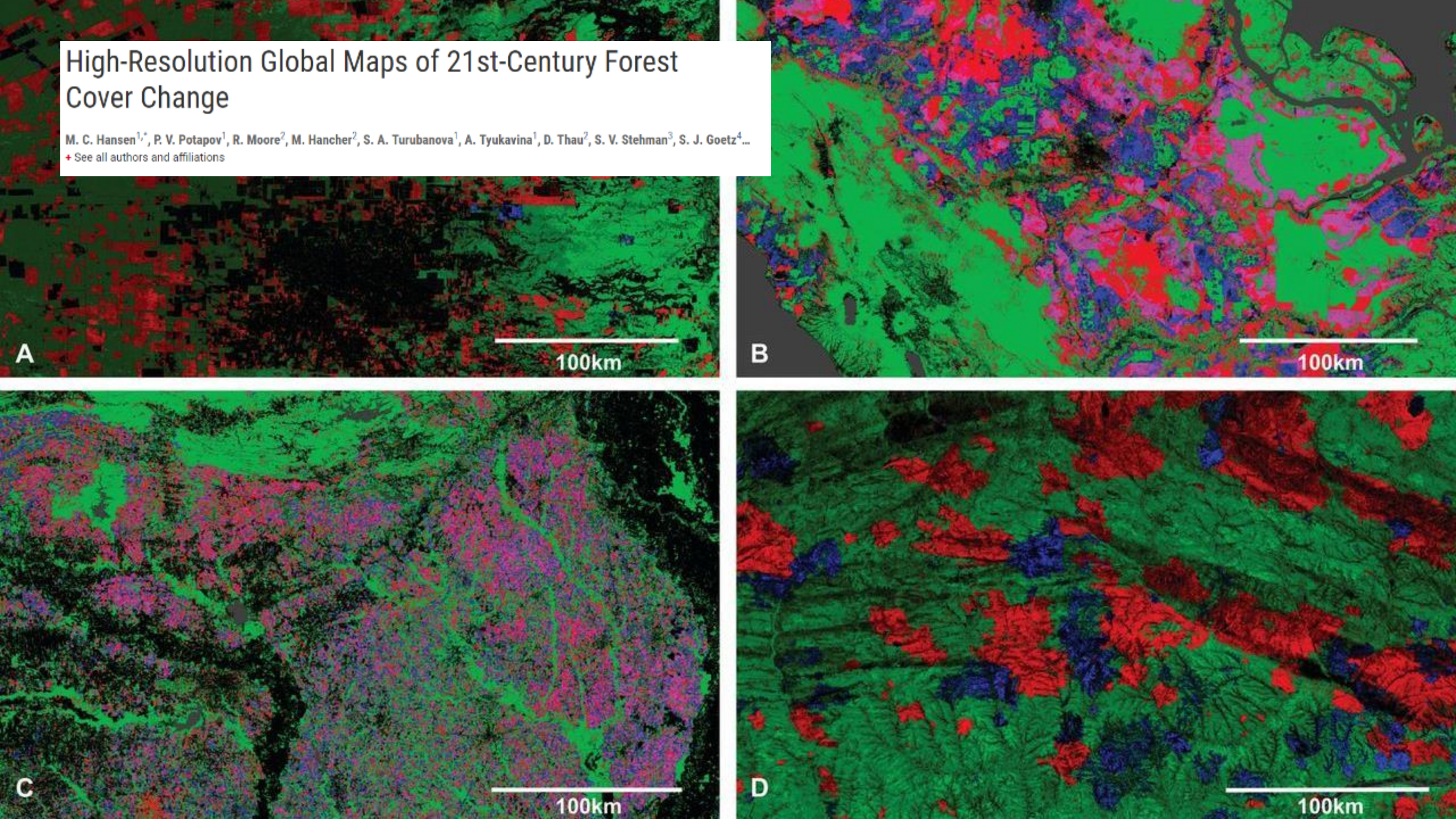
2001 primary forest extent remaining | >30% tree canopy

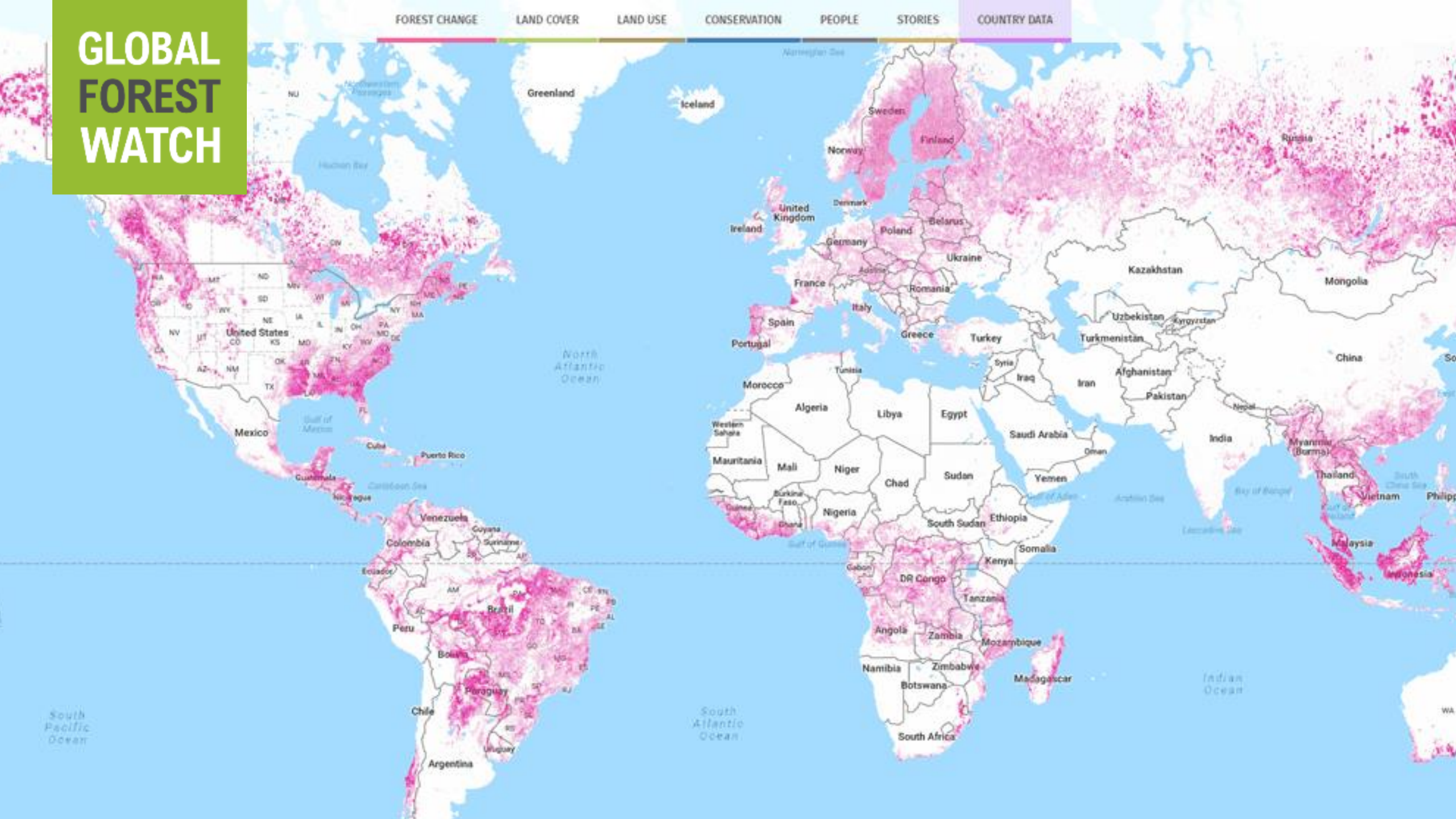
Land changes are Time and spatial explicit

Information → Action
Transparency → Accountability

High-Resolution Global Maps of 21st-Century Forest Cover Change

M. C. Hansen[1,*], P. V. Potapov[1], R. Moore[2], M. Hancher[2], S. A. Turubanova[1], A. Tyukavina[1], D. Thau[2], S. V. Stehman[3], S. J. Goetz[4]...
+ See all authors and affiliations

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FOREST CHANGE
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PEOPLE
STORIES
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Iceland
Sweden
Finland
Norway
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Mali
Niger
Chad
Sudan
Yemen
Oman
Western Sahara
Burkina Faso
Nigeria
Ethiopia
South Sudan
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Kenya
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Indonesia
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Brazil
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Paraguay
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Argentina
Uruguay
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South Atlantic Ocean
South Pacific Ocean
Indian Ocean
Gulf of Mexico
Caribbean Sea
Hudson Bay
Gulf of Guinea
Arabian Sea
Bay of Bengal
Gulf of Aden
Andaman Sea
South China Sea

Putting forest change in context

GLOBAL FOREST WATCH

Customizable information

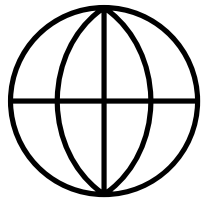
Analysis Tools

Data Dashboards

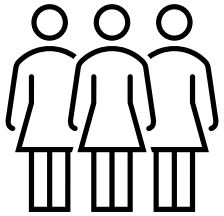
Alert Subscriptions

GLOBAL FOREST WATCH

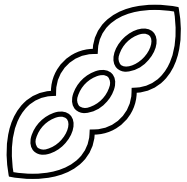
Four main strategies



Enhance global accountability



Empower forest defenders



Enable responsible supply chains

Strengthen national monitoring


citibank
FMO
Finance for Development
IDB
Inter-American Development Bank
Descartes Labs
Walmart
RED LIST
Woods Hole Research Center
OSINFOR
vizzuality.
DigitalGlobe
planet.
GREENPEACE
FOREST R L DEVELOPMENT ACCOUNT
MAPBIOMAS
Mondelēz International
agrosatélite
applied geotechnology
GLOBAL FOREST WATCH
MARS
Santander
RESOLVE
Transparent World
WORLD RESOURCES INSTITUTE
Cargill
Orbital Insight
Carrefour
Ministry of Foreign Affairs of the Netherlands
Unilever
MONGABAY
DFID Department for International Development
the Jane Goodall Institute
NORWEGIAN MINISTRY OF THE ENVIRONMENT
USAID
FROM THE AMERICAN PEOPLE
Imazon
UNIVERSITY OF MARYLAND
Google
esri
gef
UNEP
Center for Global Development

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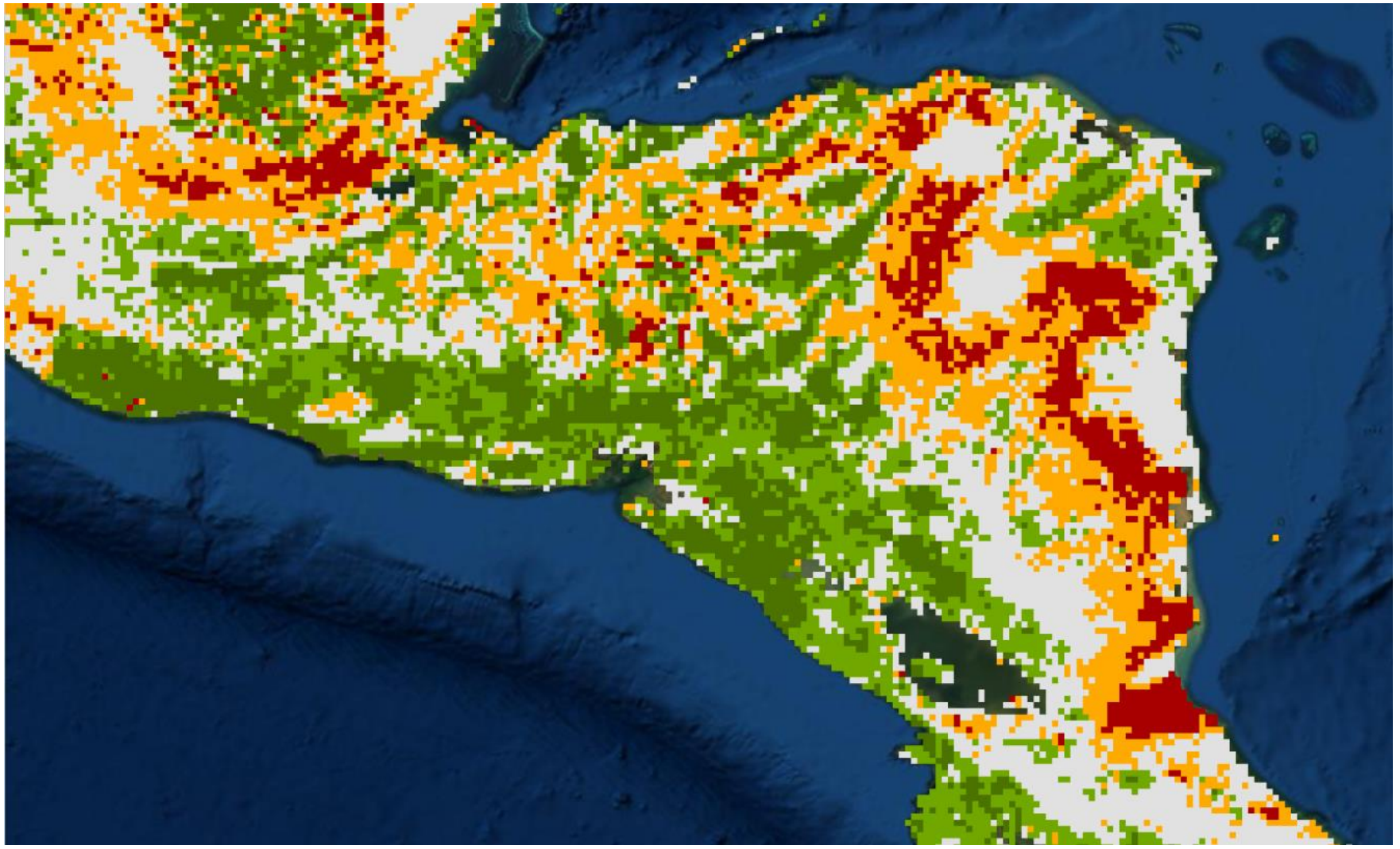
Net change % in tree cover area under a 5km * 5km grid (“landscape”)




CREDIT: Peter Irungu/WRI

TREES OUTSIDE FOREST COVER 10 M

Image WRI

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Tropical near real-time deforestation alerts

Buffer Zone of Cordillera Azul National Park, Peru

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Non-Forest

1.76Mha

2	Wouleu-Ntem	3.74Mha
3	Ngounié	3.69Mha
4	Ogooué-Lolo	2.89Mha
5	Haut-Ogooué	2.56Mha

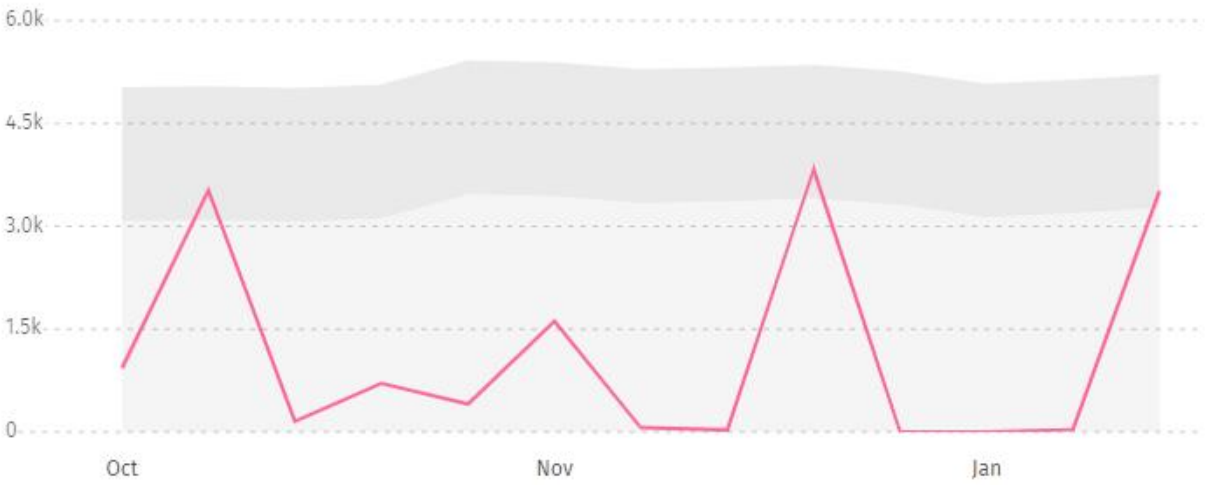
GLAD alerts Weekly

2000 tree cover extent | >30% tree canopy

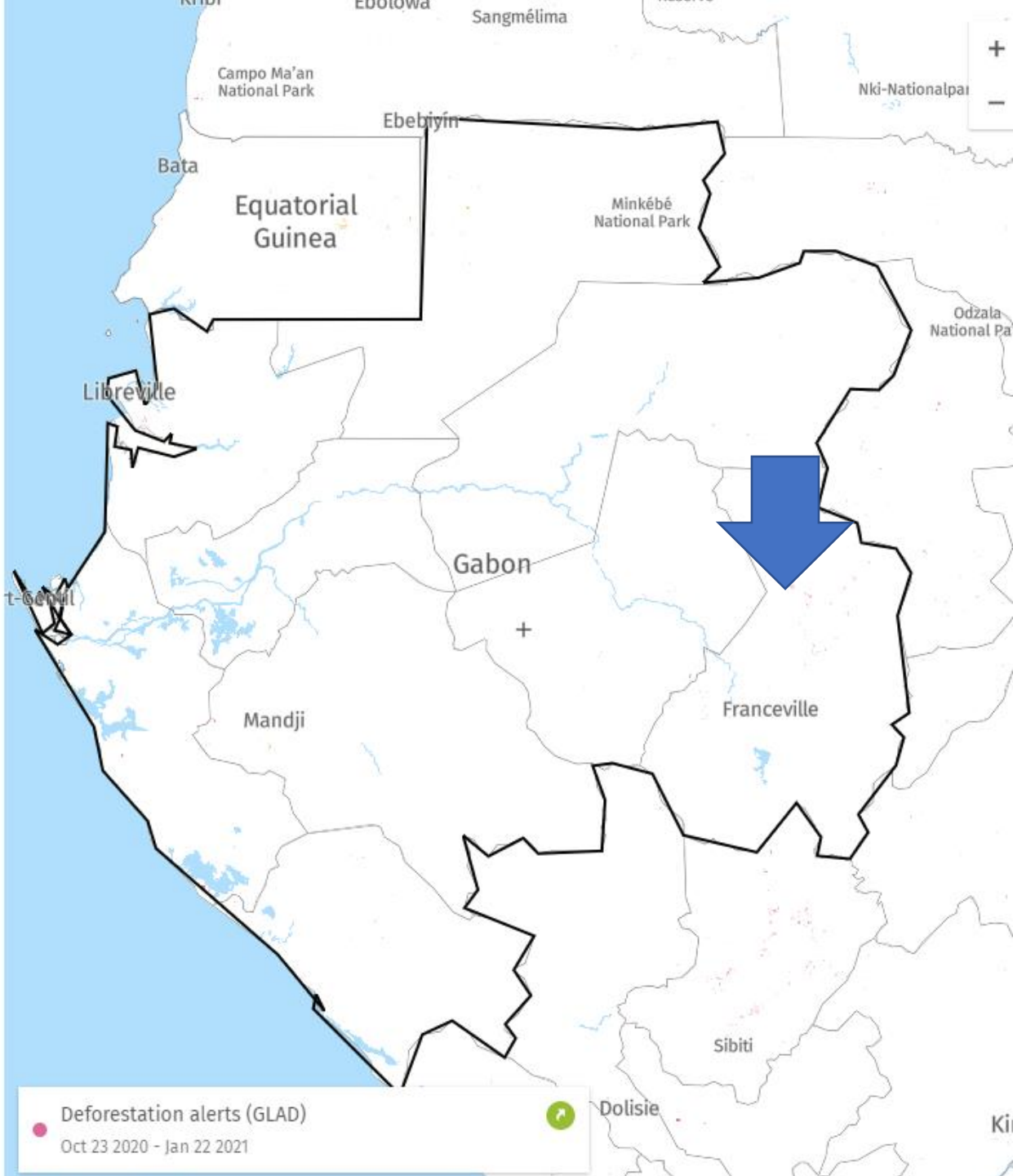
2010 tree cover extent | >30% tree canopy

DEFORESTATION ALERTS IN GABON

There were **3,516** GLAD alerts reported in the week of the **18th of January 2021**. This was **high** compared to the same week in previous years.



Caution: GLAD alerts from the last six months are preliminary. Revisions are made as unconfirmed alerts are removed from the data and alert totals are finalized six months after posting.

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Radar Alerts for Detecting Deforestation RADD consortium

- Partnership between **Bunge, Cargill, Golden Agri-Resources (GAR), Mondelēz International, Musim Mas, Nestlé, Pepsico, Sime Darby Plantation, Unilever** and **Wilmar**
- RADD gives the opportunity to quickly mobilize follow-up actions on the ground and work to improve the sustainability of commodity supply chains.
- The RADD system is currently being developed for Indonesia and Malaysia.

GLOBAL FOREST WATCH

Reiche J, Mullissa A, Slagter B, Gou Y, Tsendbazar N-E, Odongo-Braun C, Vollrath A, Weisse MJ, Stolle F, Pickens A, Donchyts G, Clinton N, Gorelick N, and Herold M (2021). https://doi.org/10.1088/1748-9326/abd0a8

Radar satellite imagery from the European Space Agency's Sentinel-1 mission is used to map new disturbances in primary humid tropical forest at 10 m spatial scale and in near real-time. Sentinel-1's cloud-penetrating radar provides gap-free observations for the tropics consistently every 6 to 12 days. This enables the rapid detection of small-scale forest disturbances, such as subsistence agriculture and selective logging. A new forest disturbance alert is triggered based on a single observation from the latest Sentinel-1 image. Subsequent observations are used to increase confidence and confirm or reject the alert. RADD (Radar for Detecting Deforestation) alerts are operational for 25 African countries, and are available at the Global Forest Watch platform.

Global Forest Watch: https://www.globalforestwatch.org

Website and data access: http://radd-alert.wur.nl

Alert date enabled at fine zoom

2019-01-01 2021-01-16

Alert confidence

Confirmed high confidence

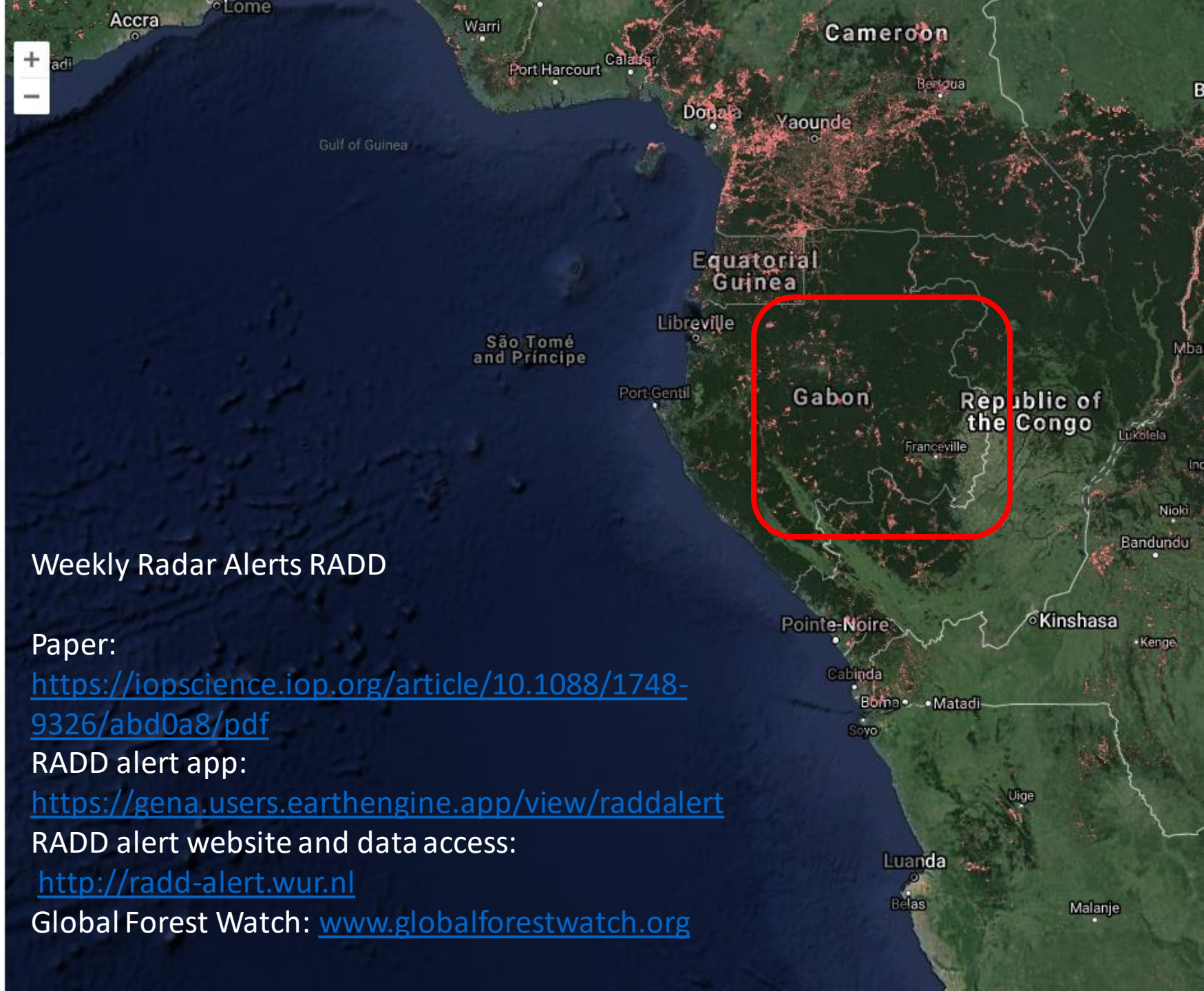
Unconfirmed low confidence

Primary humid tropical forest (2018)

Primary humid tropical forest mask from Turubanova et al (2018) with 2001-2018 forest loss (Hansen et al 2013) and mangroves (Bunting et al 2018) removed.

Zoom to example location

Click on alert for details enabled at fine zoom



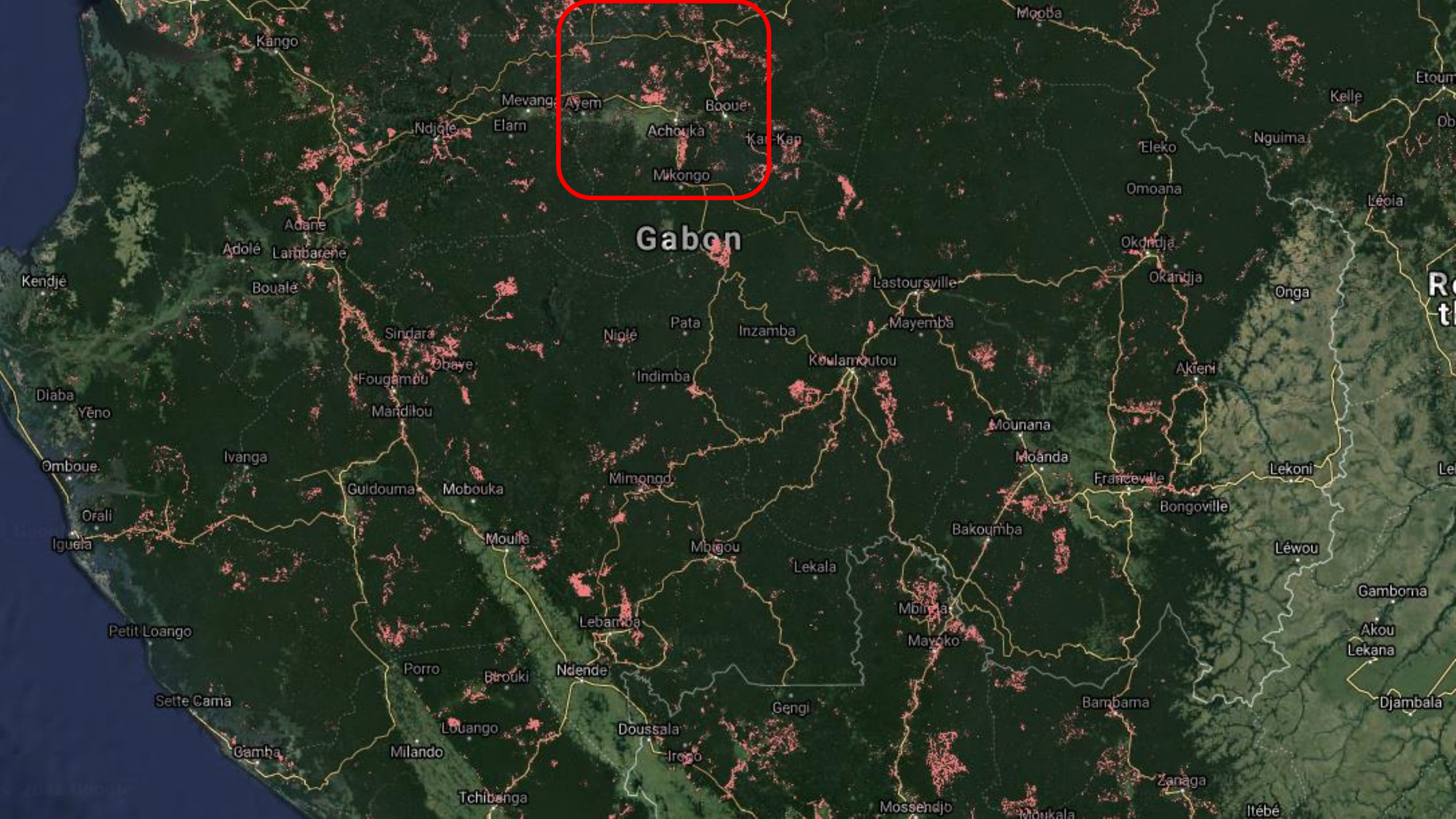
Weekly Radar Alerts RADD

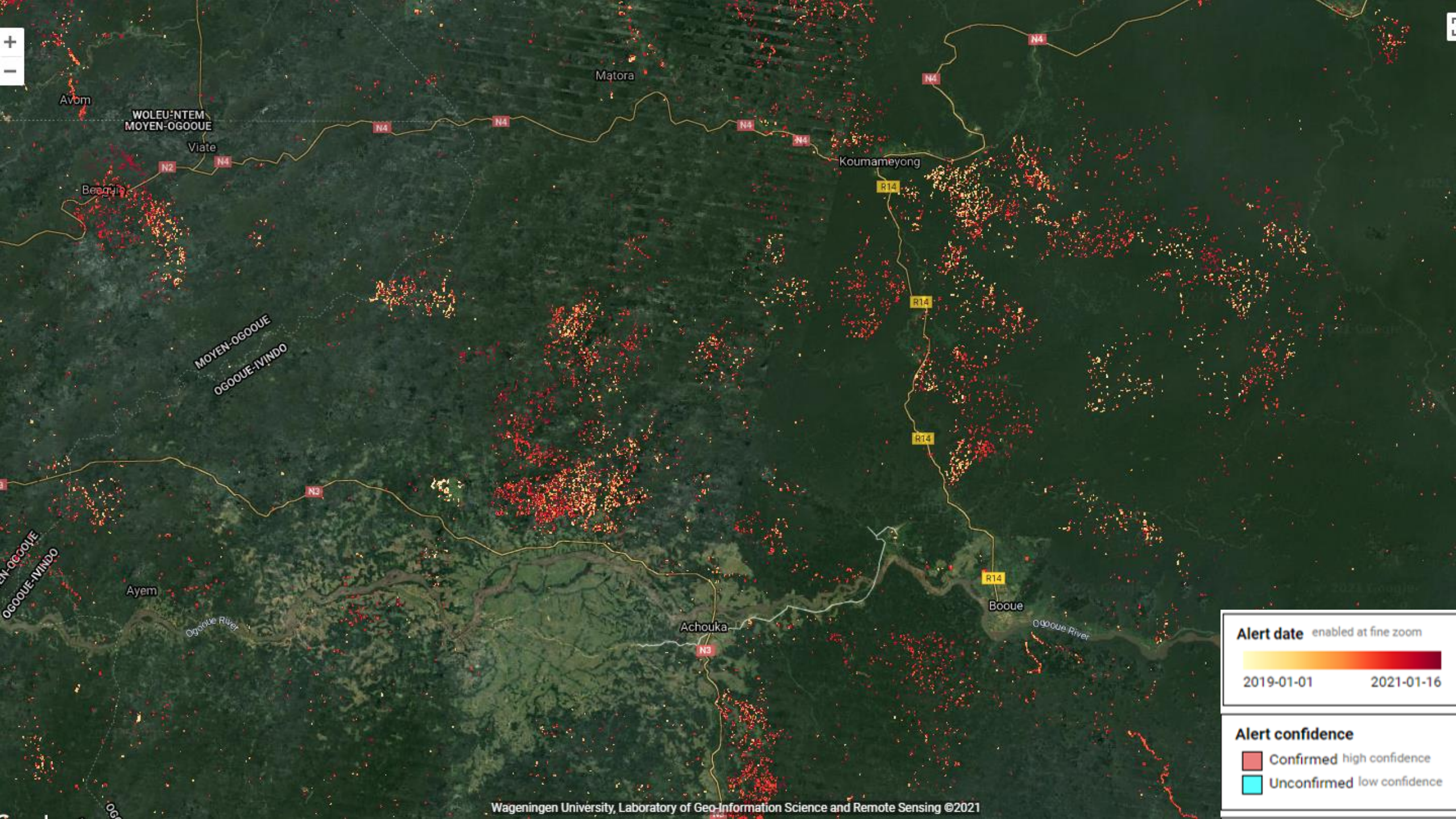
Paper: https://iopscience.iop.org/article/10.1088/1748-9326/abd0a8/pdf

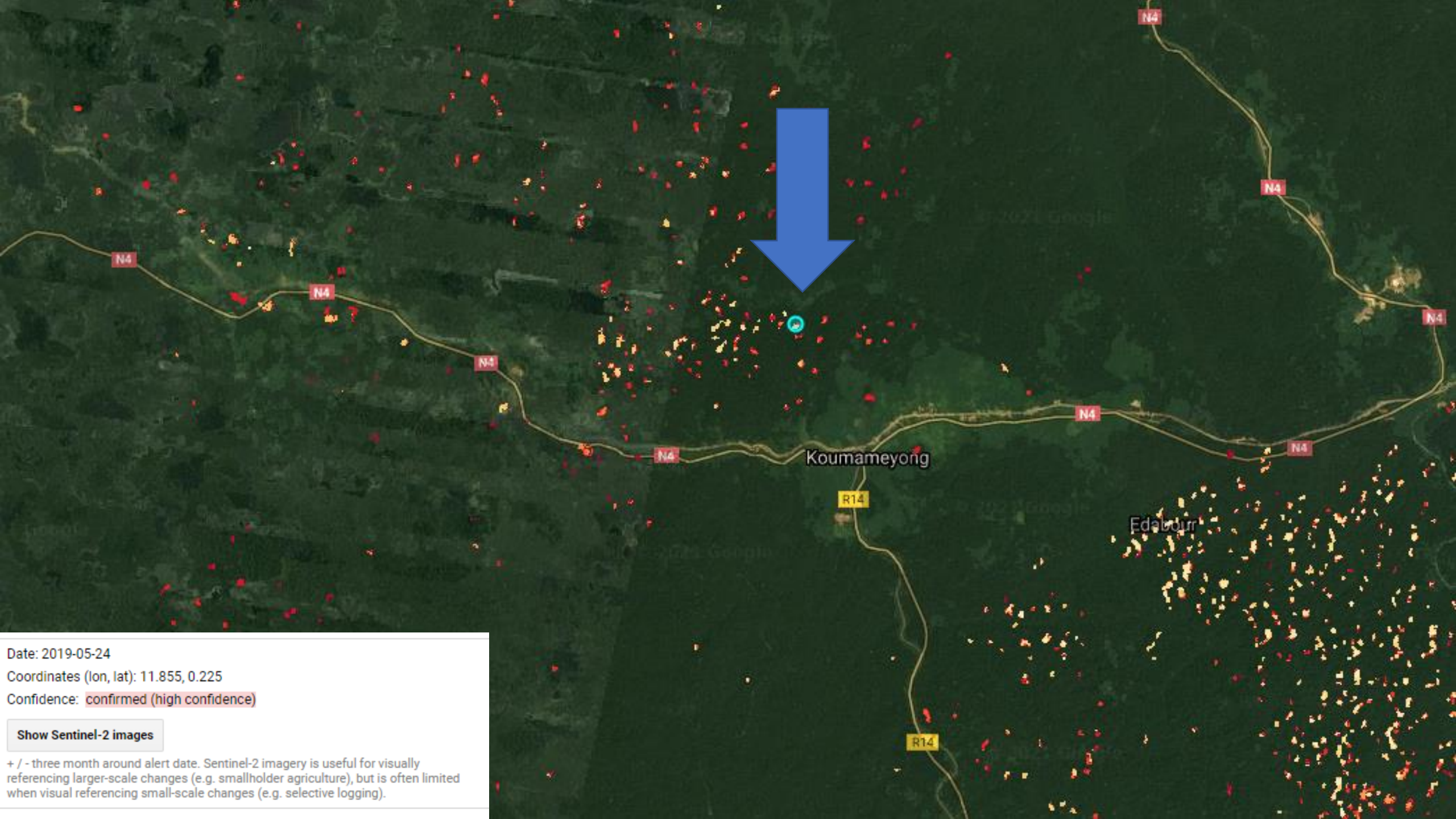
RADD alert app: https://gena.users.earthengine.app/view/raddalert

RADD alert website and data access: http://radd-alert.wur.nl

Global Forest Watch: www.globalforestwatch.org


Gabon
Kango
Mevang
Ayem
Booue
Ndjole
Elarn
Achouka
Mikongo
Mooba
Kelle
Nguima
Eleko
Omoana
Léoia
Adane
Adolé
Lambaréné
Kendjé
Bouálé
Okondja
Okandja
Onga
Lastoursville
Sindara
Pata
Inzamba
Mayemba
Niglé
Koulamoutou
Obaye
Fougamou
Indimba
Akieni
Diaba
Yéno
Mandilou
Mounana
Ivanga
Moanda
Omboue
Mimongo
Franceville
Lekoni
Guidouma
Mobouka
Bongoville
Orali
Iguela
Moulé
Mbigou
Bakoumba
Lekala
Léwou
Gamboma
Lebamba
Mbinda
Petit Loango
Mayoko
Akou
Lekana
Porro
Ndende
Sette Cama
Gengi
Bambama
Djambala
Louango
Doussala
Gamba
Milando
Zanaga
Tchibanga
Mossendjo
Itébé


Matora
Avom
WOLEU-NTEM
MOYEN-OGOOUE
Viate
Koumameyong
MOYEN-OGOOUE
OGOOUE-IVINDO
Ayem
Ogooue River
Achouka
Booue
Ogooue River
N4
N2
N3
R14
Alert date
enabled at fine zoom
2019-01-01
2021-01-16
Alert confidence
Confirmed
high confidence
Unconfirmed
low confidence
Wageningen University, Laboratory of Geo-Information Science and Remote Sensing ©2021



Date: 2019-05-24

Coordinates (lon, lat): 11.855, 0.225

Confidence: confirmed (high confidence)

Show Sentinel-2 images

+ / - three month around alert date. Sentinel-2 imagery is useful for visually referencing larger-scale changes (e.g. smallholder agriculture), but is often limited when visual referencing small-scale changes (e.g. selective logging).

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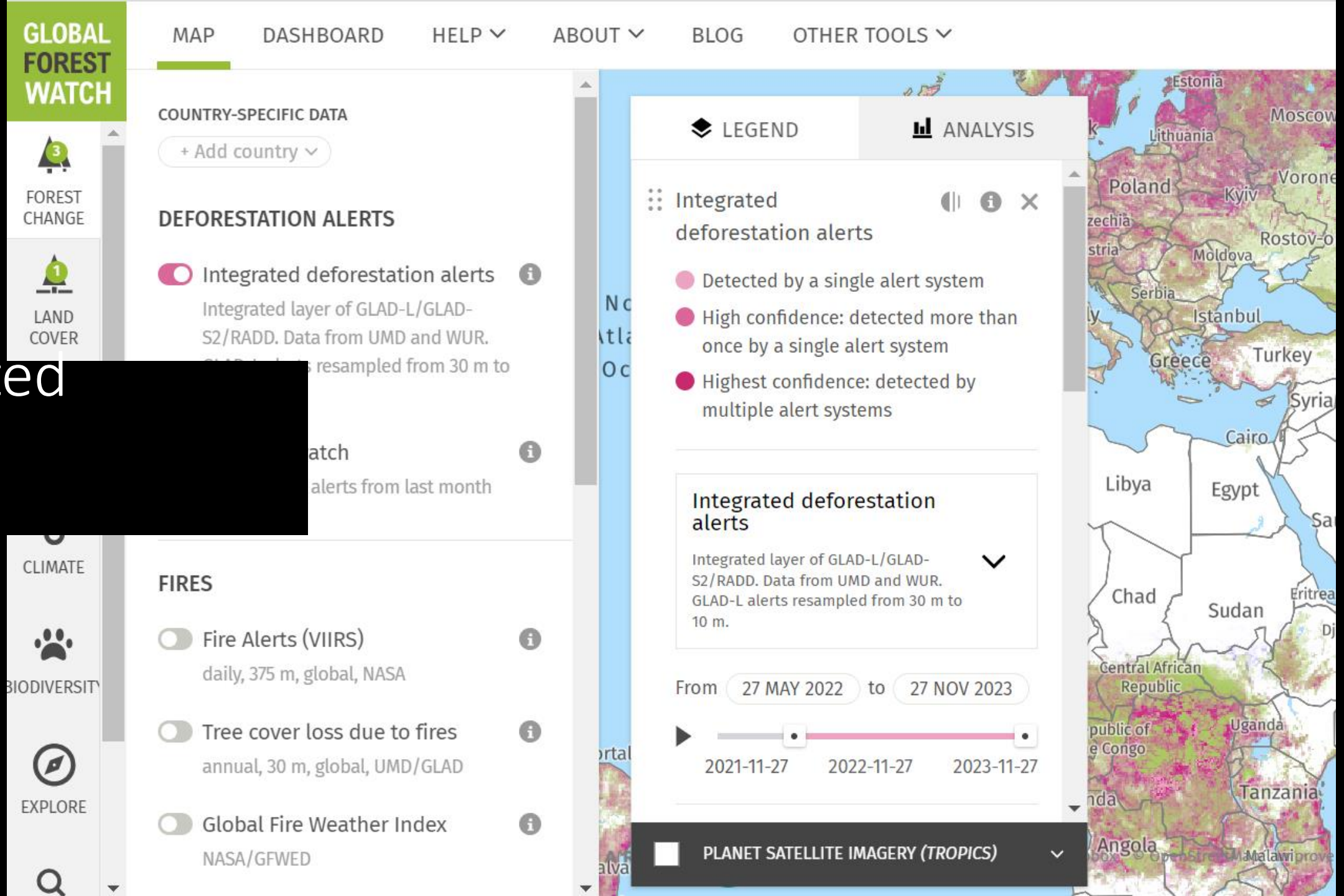
Integrated alert



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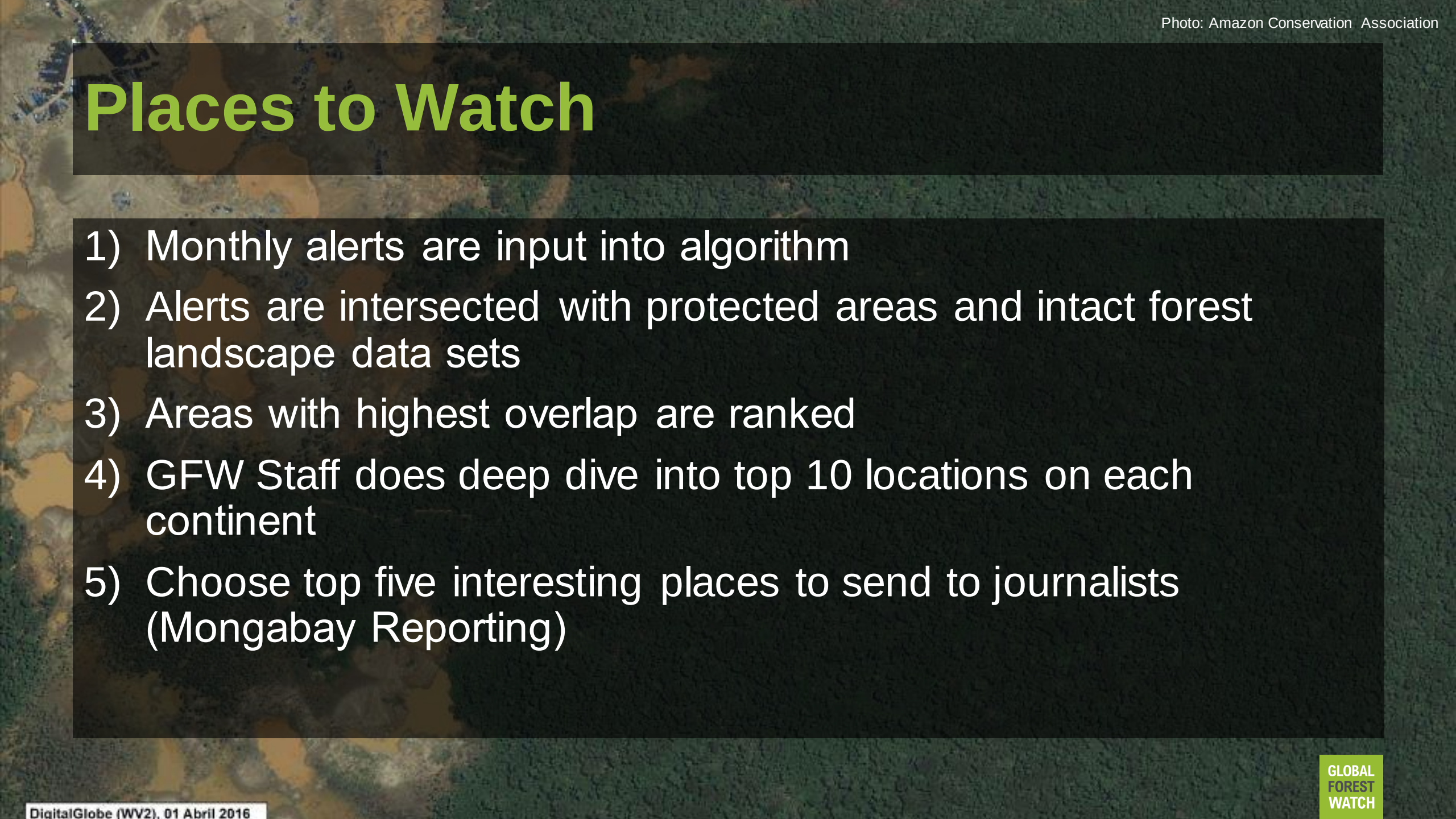
Alert Prioritization

What Happens When an Alert is Triggered?

GLOBAL FOREST WATCH

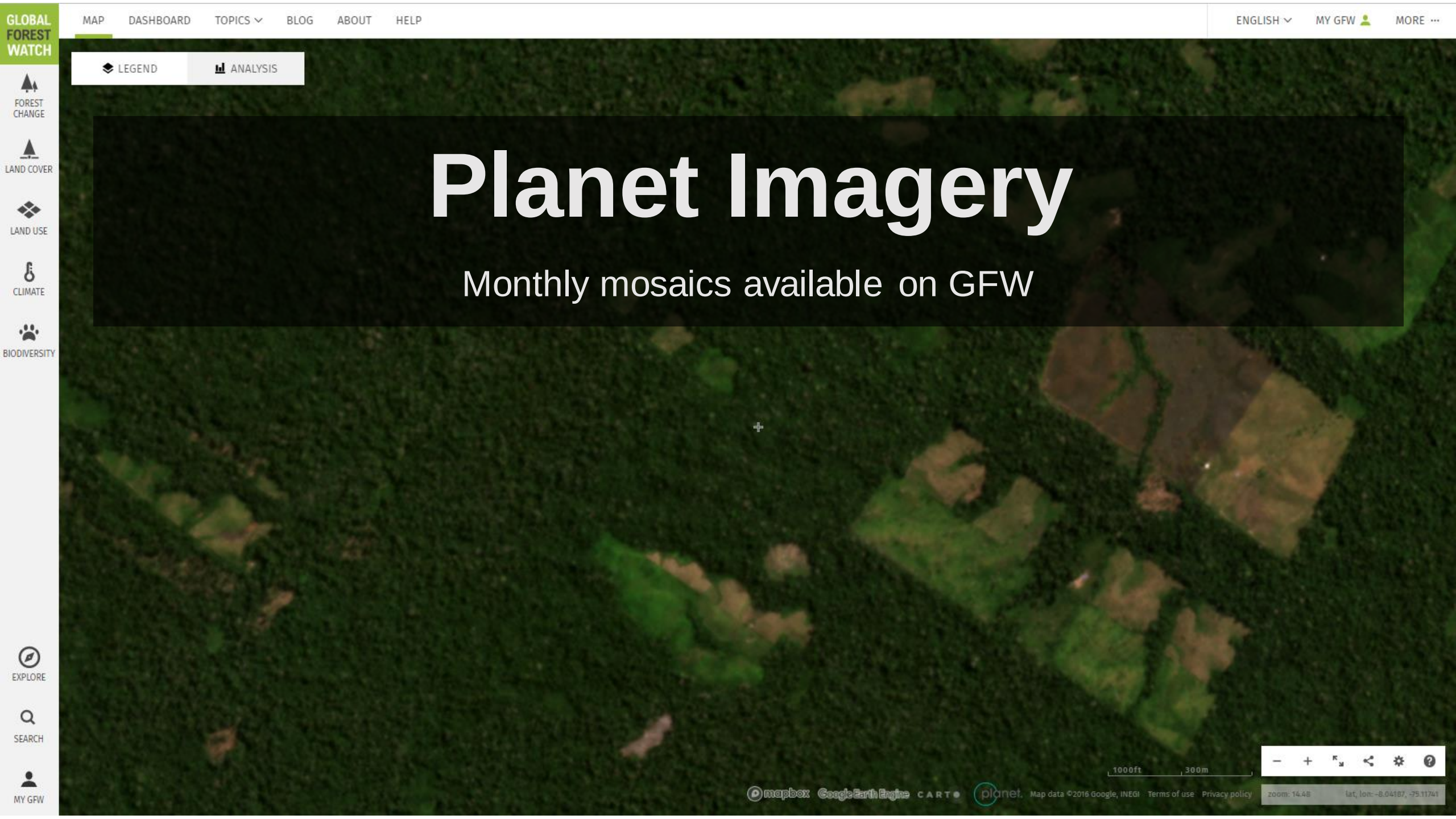


Places to Watch

1) Monthly alerts are input into algorithm
2) Alerts are intersected with protected areas and intact forest landscape data sets
3) Areas with highest overlap are ranked
4) GFW Staff does deep dive into top 10 locations on each continent
5) Choose top five interesting places to send to journalists (Mongabay Reporting)

DigitalGlobe (WV2), 01 Abril 2016

GLOBAL FOREST WATCH


GLOBAL FOREST WATCH
MAP
DASHBOARD
TOPICS
BLOG
ABOUT
HELP
ENGLISH
MY GFW
MORE
LEGEND
ANALYSIS
FOREST CHANGE
LAND COVER
LAND USE
CLIMATE
BIODIVERSITY
EXPLORE
SEARCH
MY GFW
Planet Imagery
Monthly mosaics available on GFW
1000ft
300m
mapbox
Google Earth Engine
CARTO
planet.
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GLOBAL FOREST WATCH
MAP
DASHBOARD
TOPICS
BLOG
ABOUT
HELP
ENGLISH
MY GFW
MORE
LEGEND
ANALYSIS
Integrated deforestation alerts
Detected by a single alert system
High confidence: detected more than once by a single alert system
Highest confidence: detected by multiple alert systems
Integrated deforestation alerts
Integrated layer of GLAD-L/GLAD-S2/RADD. Data from UMD and WUR. GLAD-L alerts resampled from 30m to 10m.
From 29 JUN 2020 to 29 JUN 2022
2020-06-29
2021-06-29
2022-06-29
Show only high and highest confidence alerts
Geographic coverage
PLANET SATELLITE IMAGERY (TROPICS)
GFW Interactive Map
FOREST CHANGE
LAND COVER
LAND USE
CLIMATE
BIODIVERSITY
EXPLORE
SEARCH
MY GFW
North Atlantic Ocean
South Atlantic Ocean
Indian Ocean
Canada
Quebec
Toronto
Boston
Chicago
New York
Atlanta
Miami
Cuba
Caracas
Colombia
Ecuador
Peru
Brazil
Fortaleza
Salvador
Belo Horizonte
Rio de Janeiro
Bolivia
Paraguay
Chile
Santiago
Uruguay
Argentina
Falkland Islands (Islas Malvinas)
United Kingdom
Denmark
Poland
France
Spain
Barcelona
Italy
Portugal
Algiers
Rabat
Morocco
Tunisia
Algeria
Libya
Egypt
Western Sahara
Mali
Niger
Chad
Sudan
Senegal
Guinea
Burkina Faso
Ivory Coast
Abidjan
Kano
Ibadan
Douala
Central African Republic
Republic of the Congo
Uganda
Eritrea
Djibouti
Somalia
Yemen
Saudi Arabia
Oman
Dubai
Kuwait
Basra
Iran
Cairo
Syria
Turkey
Greece
Istanbul
Serbia
Moldova
Rostov-on-Don
Voronezh
Samara
Kazakhstan
Omsk
Novosibirsk
Mongolia
Kyrgyzstan
Tehran
Afghanistan
Pakistan
Karachi
Delhi
India
Bangladesh
Bhutan
China
Beijing
North Korea
South Korea
Japan
Shanghai
Chongqing
Taipei
Taiwan
Laos
Vietnam
Philippines
Manila
Malaysia
Brunei
Indonesia
Jakarta
Papua New Guinea
Australia
Brisbane
Perth
Adelaide
Canberra
Melbourne
New Zealand
Sri Lanka
Maldives
Bengaluru
Victoria
Tanzania
Angola
Luanda
Malawi
Zimbabwe
Namibia
Johannesburg
South Africa
Cape Town
Antananarivo
Mauritius
1000mi
1000km
mapbox
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CARTO
planet.
Map data ©2016 Google, INEGI
Terms of use
Privacy policy
zoom: 2.00
lat, lon: -9.23069, 14.22333
GLOBAL FOREST WATCH

Content

- General GFW
- New developments GFW
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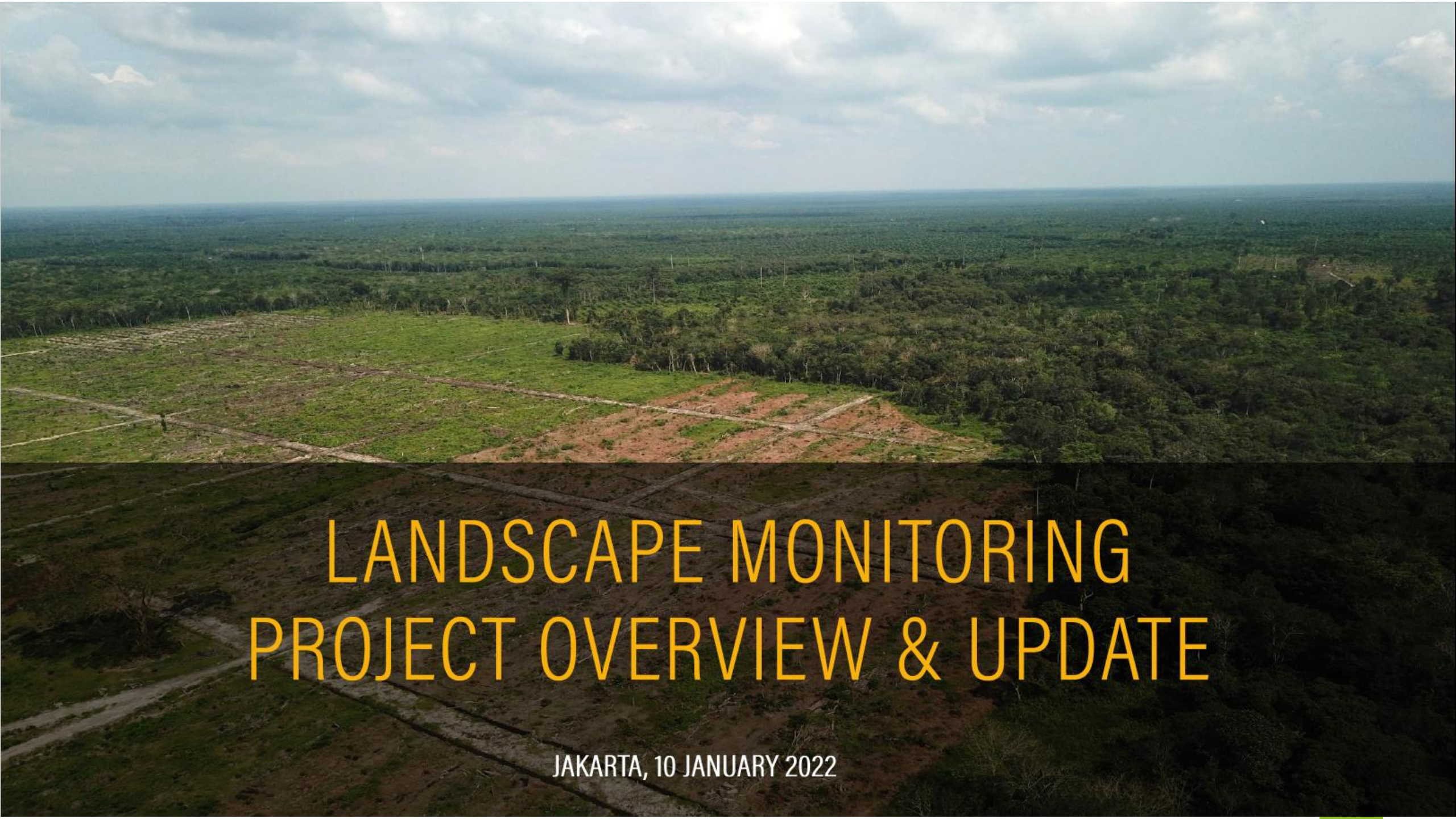
  - GLAD alerts -Landsat
  - RADD alerts –Sentinel -1
  - Prioritization chain
  - Landscape alerts
- New alerts
- Use cases



LANDSCAPE MONITORING PROJECT OVERVIEW & UPDATE

JAKARTA, 10 JANUARY 2022

Landscape Monitoring Background

Places to Watch

Filters the millions of GLAD alerts detected monthly to identify the most concerning instances of recent clearing for storytelling and activism.

Places to Watch Commodities

Phase I

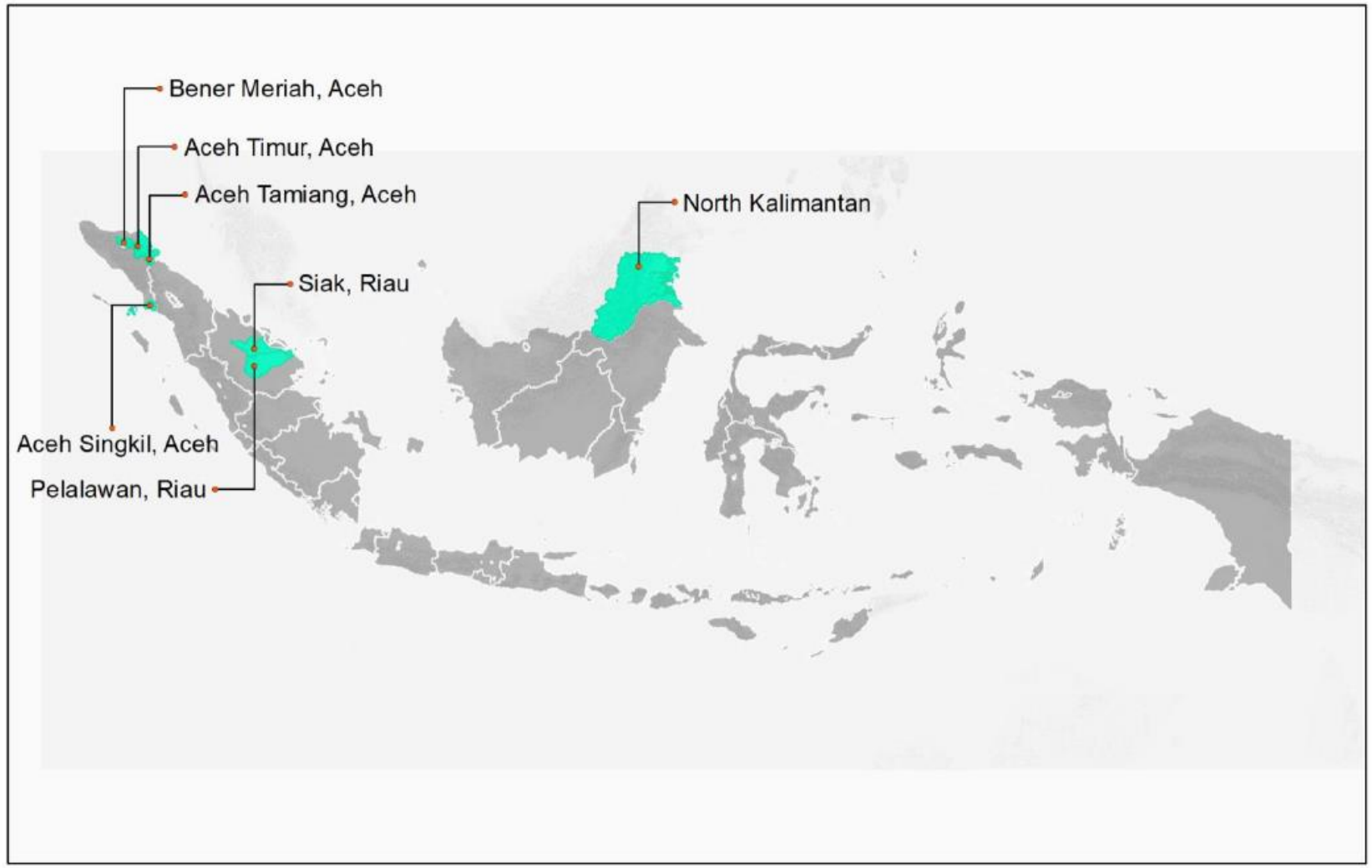
Filtering method and delivery system for filtering near-real time GLAD alerts in order to prioritize important places that are likely in non-compliance with companies' no deforestation commitments.

Phase II

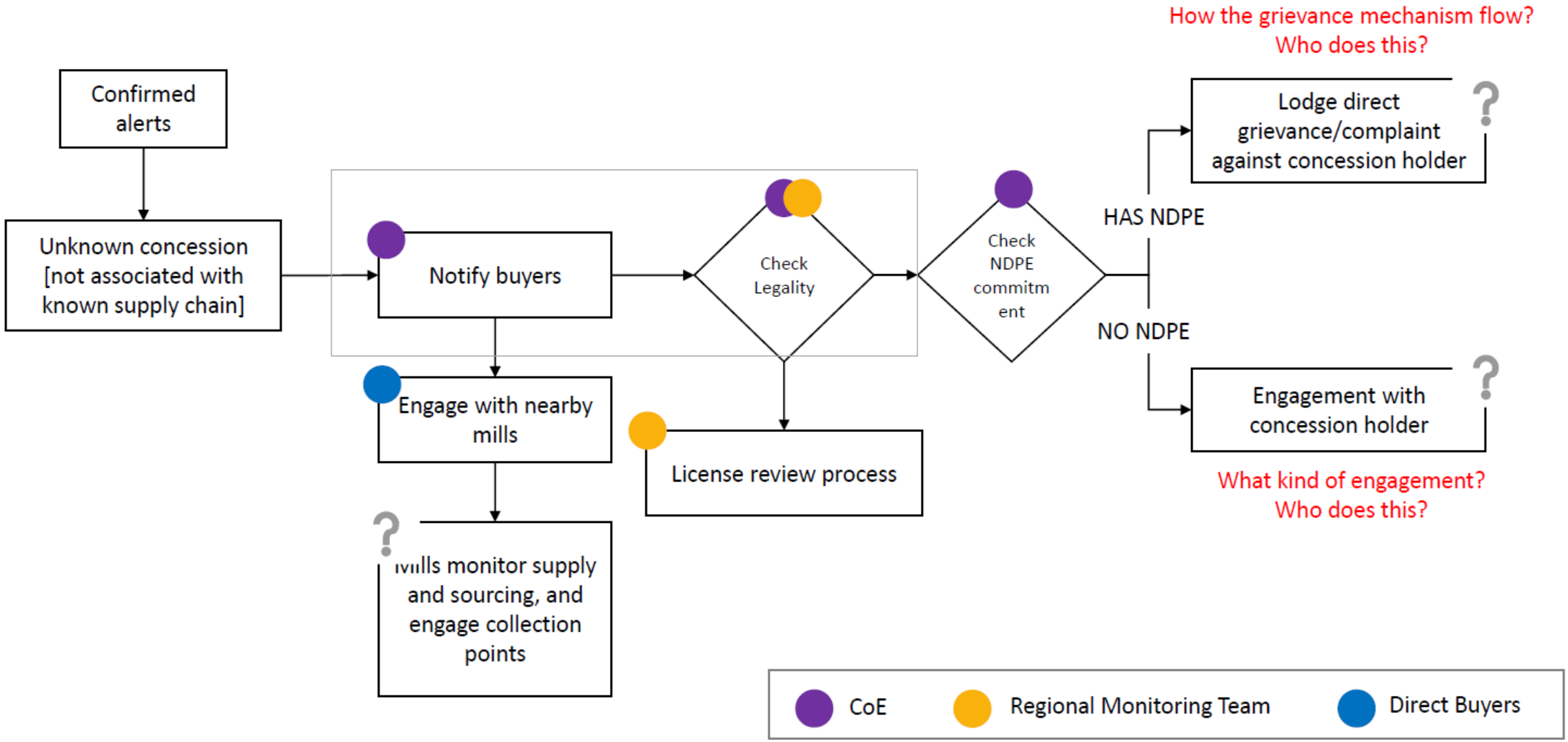
Implementing (result from phase I) to palm oil in Indonesia and soy in Brazil through a project termed the **Landscape Monitoring and Response Initiative.**

Landscape Monitoring and Response Initiative: Prioritizing deforestation monitoring efforts and collaborative response at the landscape/district level. The first jurisdiction identified as a pilot for the Landscape Monitoring Program was Siak district in Riau Province, Indonesia.

Landscape Monitoring Pilot Districts



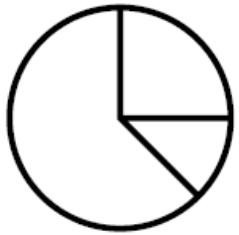
RESPONSE PROTOCOL CGF SCENARIO 2 (INDEPENDENT/UNKNOWN CONCESSION)



Regional monitoring team is established under SK Bupati, consist of several agencies and lead by Plantation Agency

WRI INDONESIA

Siak

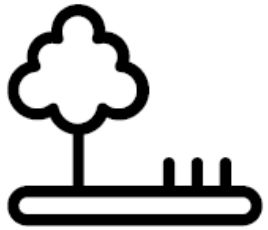


Before RADD (2019)

75% deforestation (verified); **15%** false positive (verified); 10% unverified due to field challenges

After combining RADD (2020 onwards)

80% deforestation (verified); **10%** false positive (verified); 10% unverified due to field challenges



83% of deforestation caused by **plantation activity**, with average size of the clearance is **below 5 hectares per month**

64% of verified alert's location has **Palm Oil as a dominant vegetation**, followed by 10% Bush and 9% Rubber

In 5 km radius of verified alert's locations

The existence of smallholder's palm oil plantation can be found in **90%** of locations

WRI INDONESIA

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UMD's Disturbance Alert from Harmonized Landsat Sentinel –2 (HLS, 30 m) data & LCL / GFW

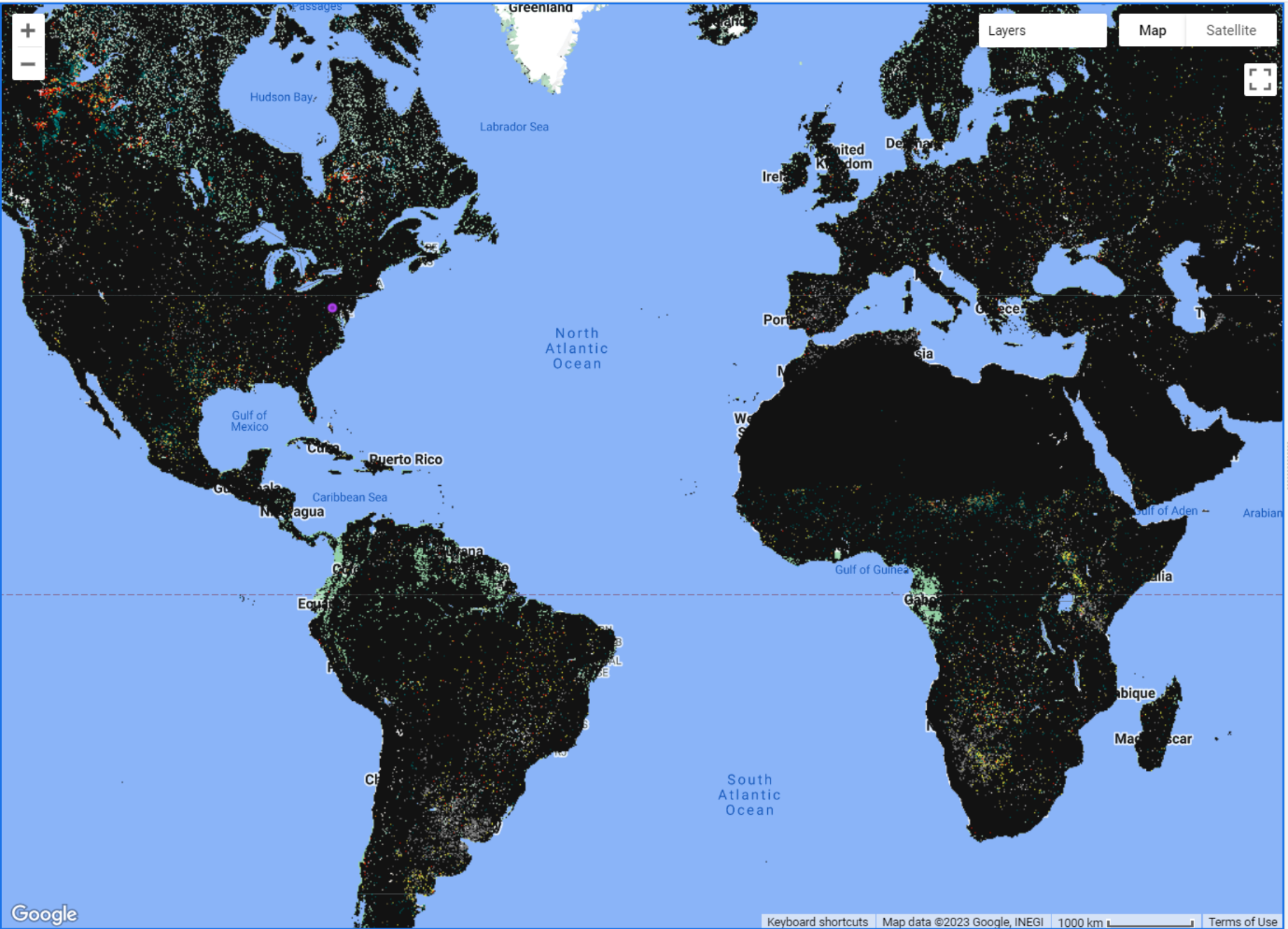
OPERA

Land & Carbon Lab

Amy Pickens, Matt Hansen, Zhen Song, Peter Potapov, Alexandra Tyukavina, Andrew Poulson (UMD)

OPERA

- Global
- 2-4 day temporal resolution
- Current since 2023 – with potential for longer history
- Operationally maintained
- All vegetation types
- No other comparable products we are aware of



DIST-ALERT: near-real time disturbance alert

Global Land Analysis and Discovery lab as part of the Observational Products for End-Users from Remote Sensing Analysis (OPERA).

https://glad.umd.edu/dataset

The land disturbance product (DIST-ALERT) maps vegetation loss as well as any spectral variation outside a historical norm using Harmonized Landsat Sentinel-2 (HLS) scenes. Vegetation disturbance is defined as loss of vegetation percent cover relative to the minimum of the baseline, and is reported as the total reduction in vegetation percent cover. Generic disturbance is measured by the distance of the spectral reflectance of an observation from the baseline distribution. Both methods use a baseline of all cloud-free observations from the previous three years within a 31-day window.

Data download

Display layer:

Vegetation disturbance status

Summary of vegetation disturbance status

- No disturbance
- <50% loss, low confidence, ongoing
- <50% loss, high confidence, ongoing
- ≥50% loss, low confidence, ongoing
- ≥50% loss, high confidence, ongoing
- <50% loss, only most recent observation
- ≥50% loss, only most recent observation
- <50% loss, high confidence, finished
- ≥50% loss, high confidence, finished

Background image:

Date disturbance detected

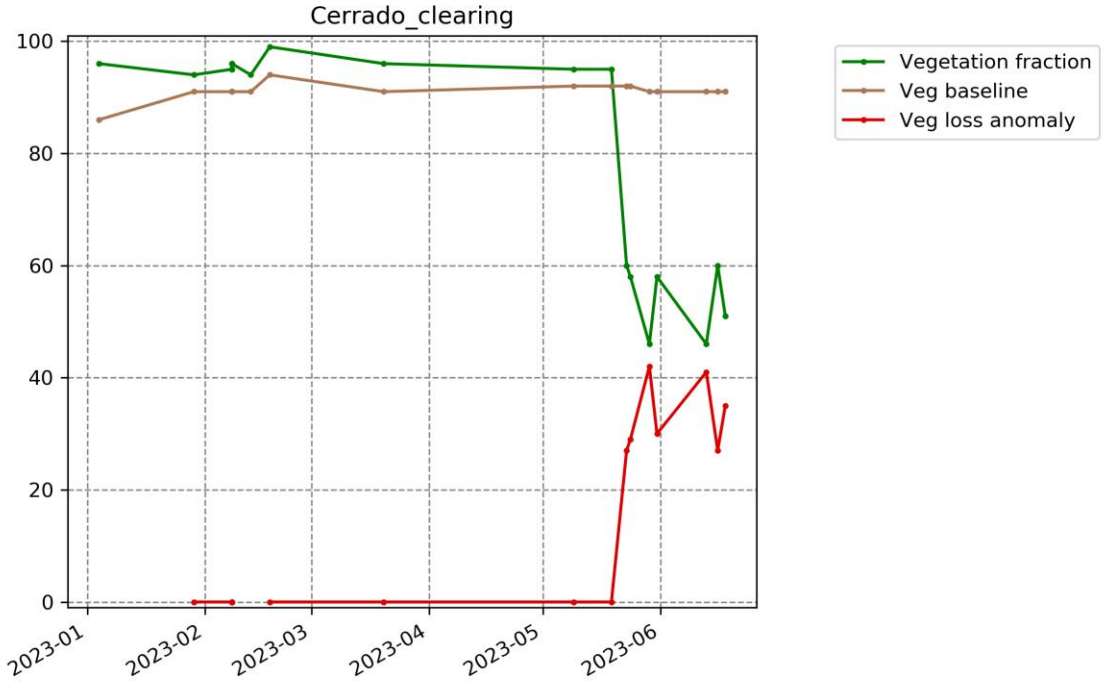
Click on a disturbance event to see the imagery associated with the date of initial detection.

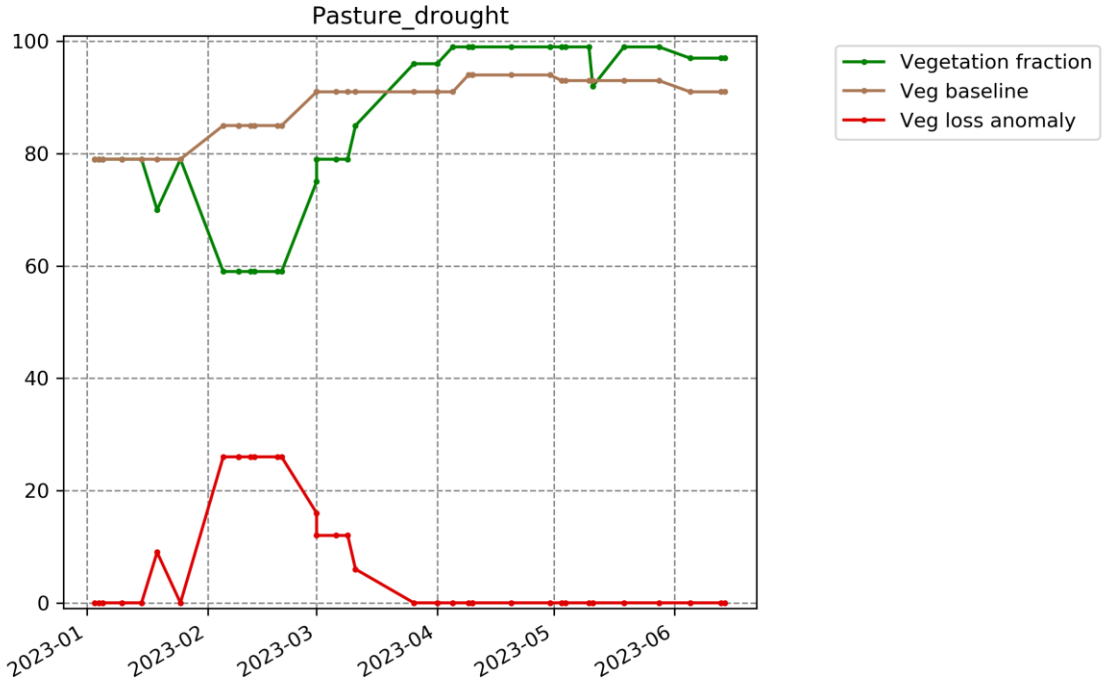
Technical details: Identifying a vegetation anomaly

- Each new vegetation fraction estimate is compared to a seasonal baseline
  - The baseline is the *minimum* of the *three previous years* of HLS-based vegetation cover within a seasonal window of *±15 days*

- Disturbance is monitored by tracking low vegetation fraction anomalies through time

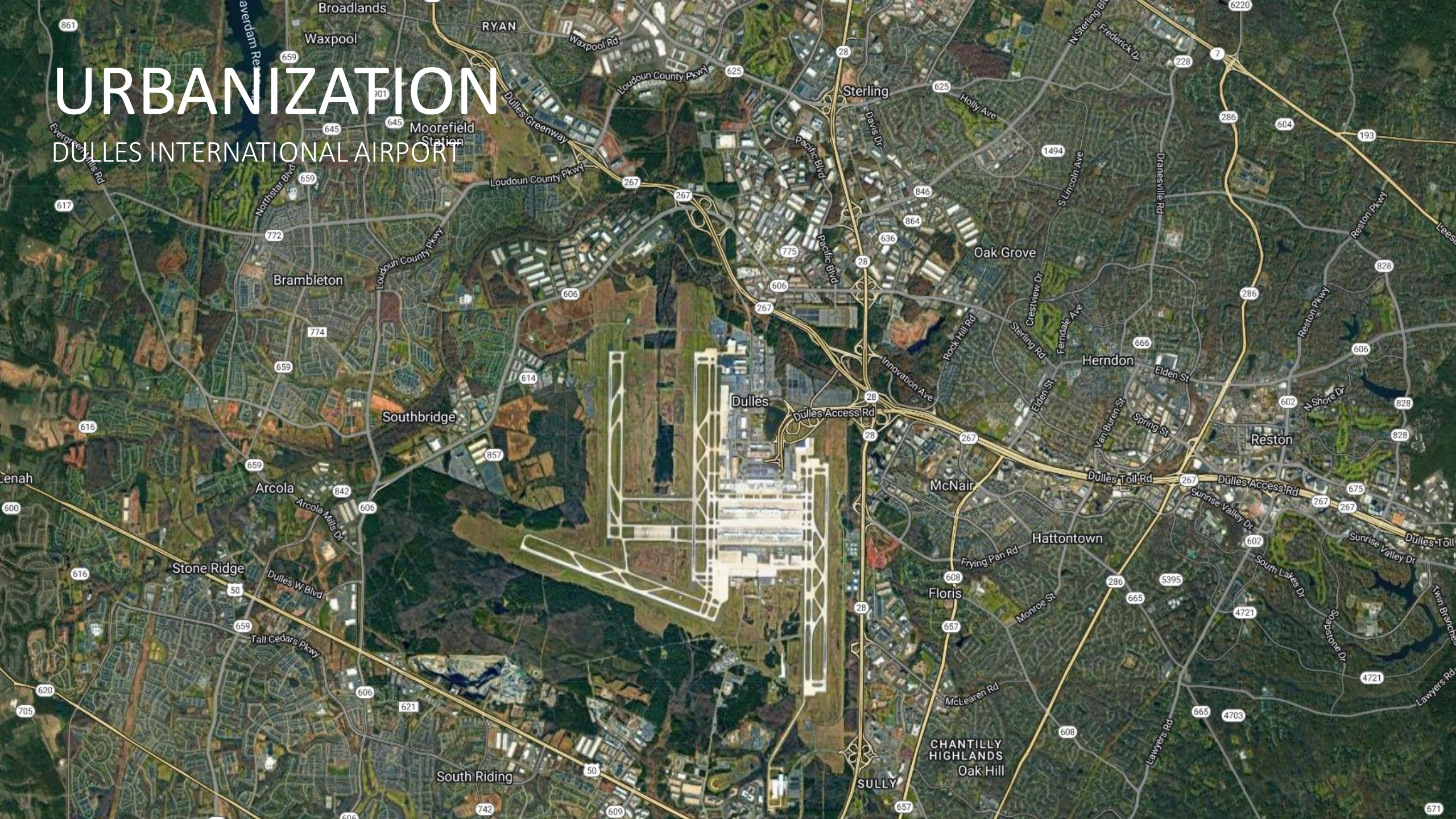
- Confidence is a function of the magnitude of loss and the number of anomaly





URBANIZATION

DULLES INTERNATIONAL AIRPORT



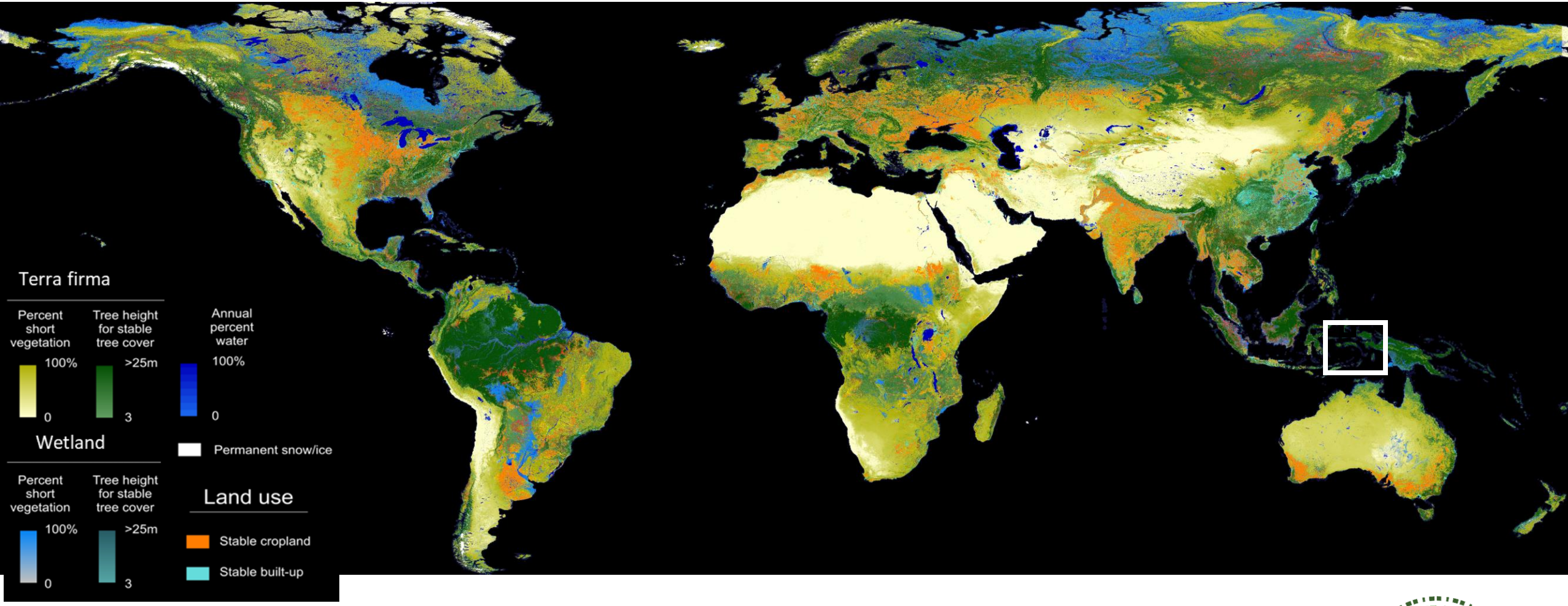
URBANIZATION

DULLES INTERNATIONAL AIRPORT

URBANIZATION

DULLES INTERNATIONAL AIRPORT

Global deforestation alerts



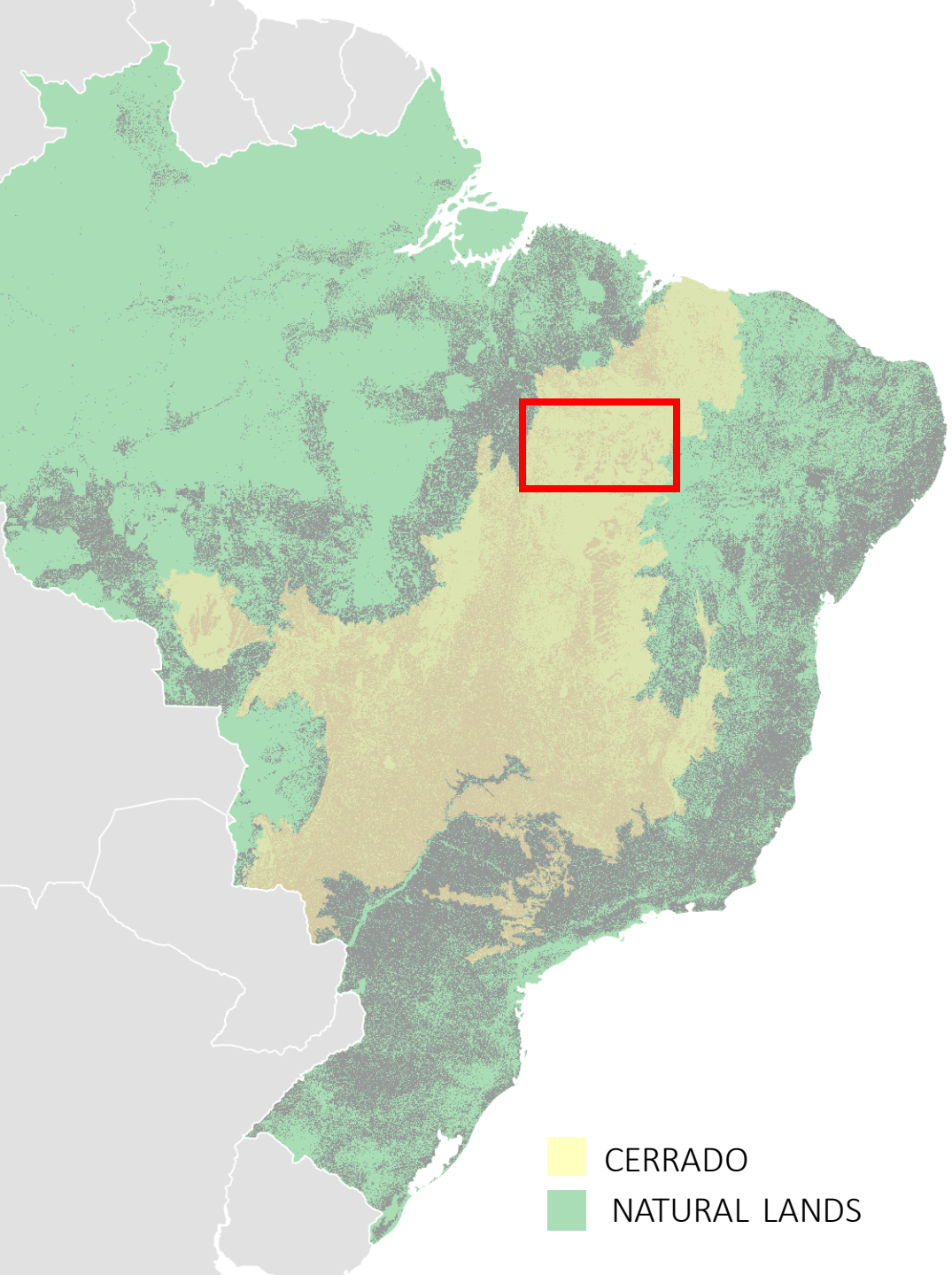
GLAD Global land cover and land use change 2000-2020

Potapov, Peter, Matthew C. Hansen, Amy Pickens, Andres Hernandez-Serna, Alexandra Tyukavina, Svetlana Turubanova, Viviana Zalles, et al. 2022. "The Global 2000-2020 Land Cover and Land Use Change Dataset Derived From the Landsat Archive: First Results." *Frontiers in Remote Sensing* 3. https://www.frontiersin.org/articles/10.3389/frsen.2022.856903. 1.


2023-01-05

D


Vegetation Disturbance Status
No Disturbance
Provisional, veg loss < 50%
Confirmed, veg loss < 50%
Provisional, veg loss ≥ 50%
Confirmed, veg loss ≥ 50%



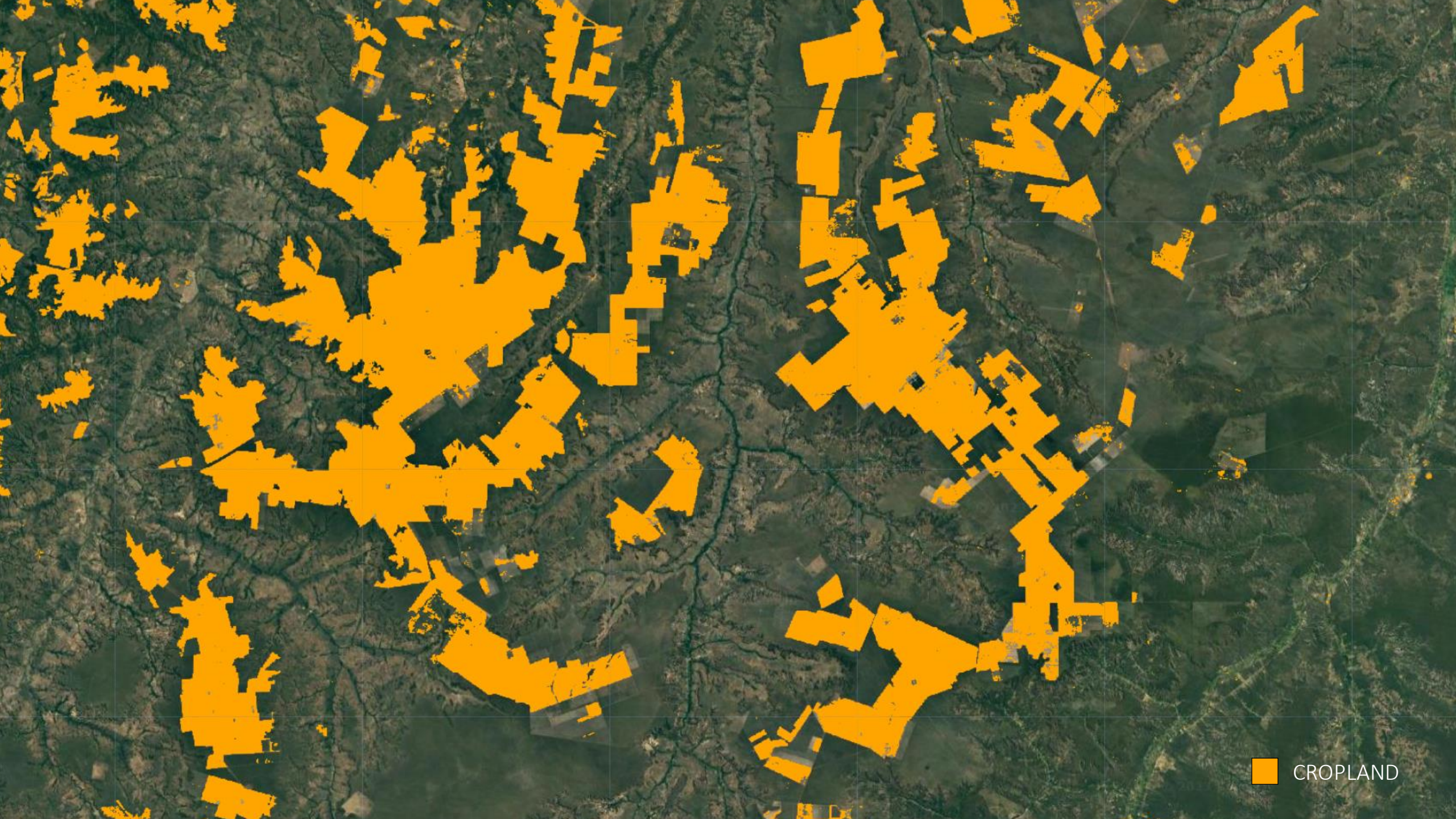
BRAZILIAN CERRADO

TROPICAL SAVANNA

Most biodiverse savanna in the world—contains 5% of the planet's animals and plants

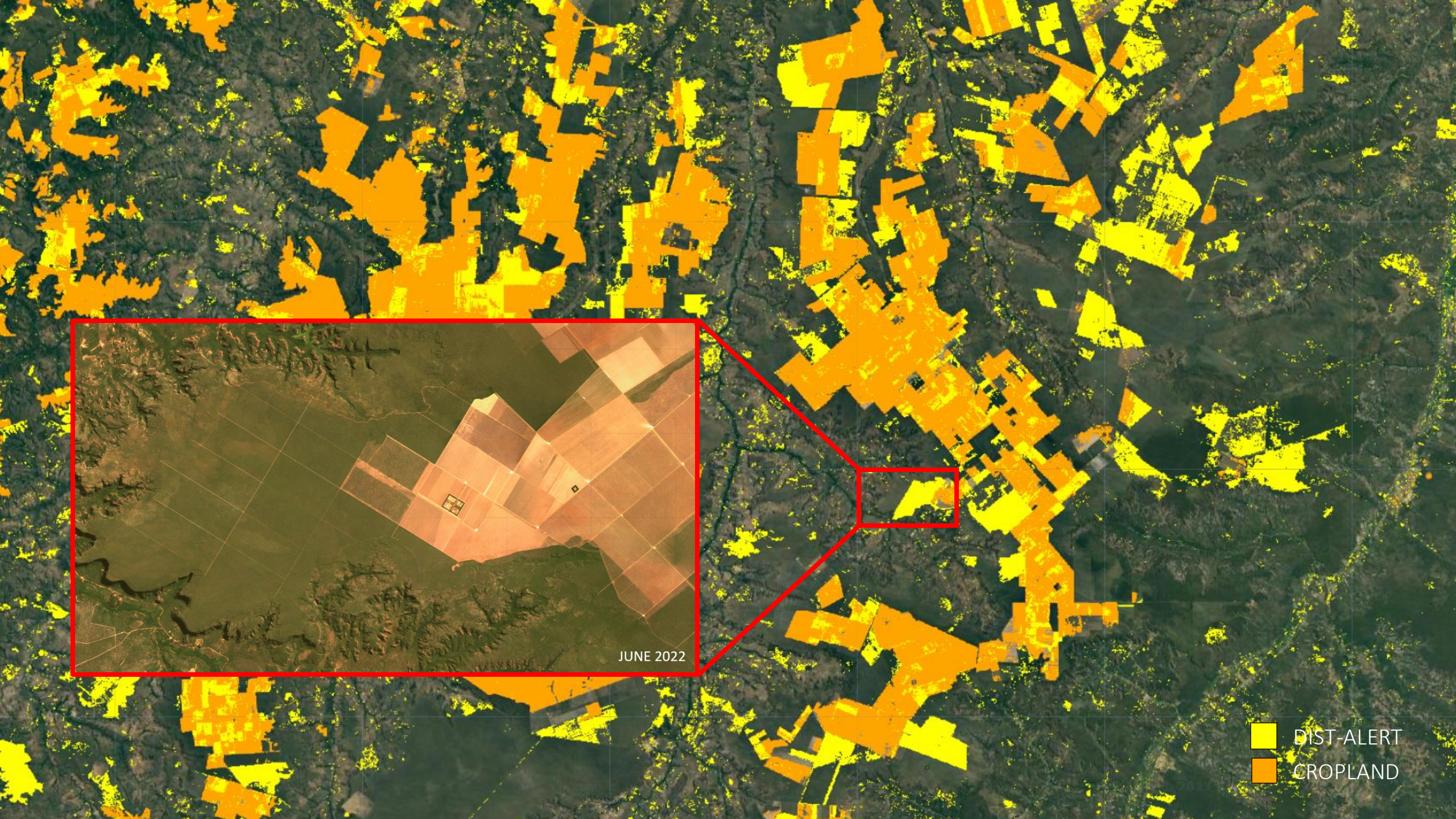
Rapid expansion of soy and cattle production in recent years

Less than 50% of the natural vegetation remains


CROPLAND


DIST-ALERT
CROPLAND


DIST-ALERT
CROPLAND


JUNE 2022
DIST-ALERT
CROPLAND

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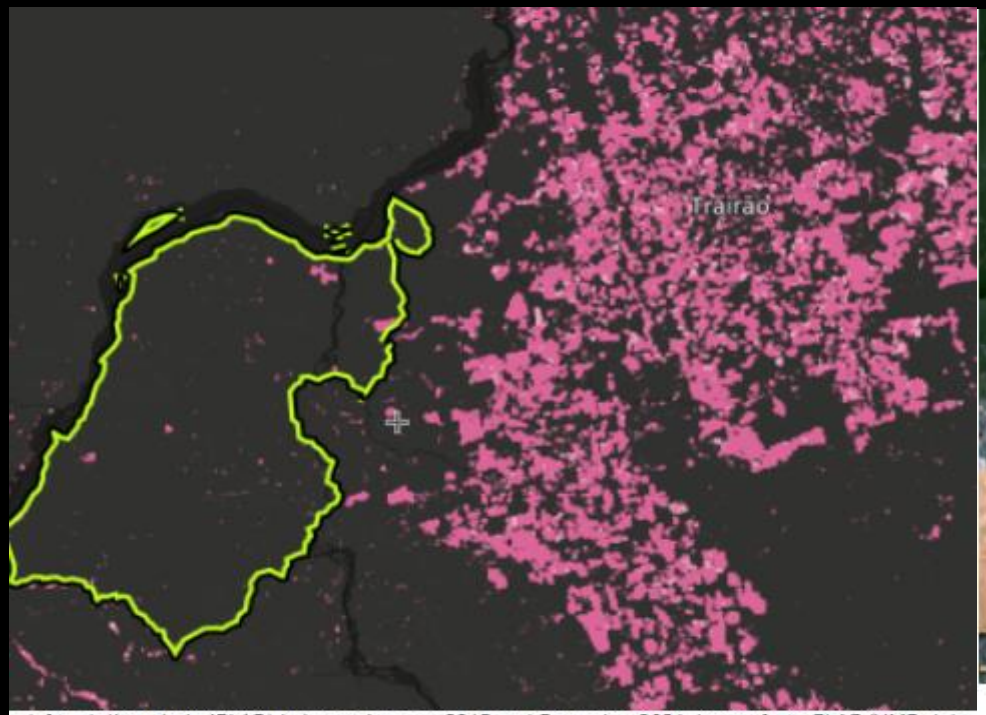
Repórter Brasil



deforestation alerts (GLAD) between January 2015 and December 2021. Image from GLAD/UMD data accessed via Global Forest Watch.

Each brown block represents an area where an application to mine has been submitted to the National Mining Agency. Almost the whole of the Sawré Muybu Indigenous Territory is subject to these claims. Image from GLAD/UMD data accessed via Global Forest Watch.

MONGABAY
NEWS & INSPIRATION FROM NATURE'S FRONTLINE

RAINFORESTS OCEANS ANIMALS ENVIRONMENT BUSINESS SOLUTIONS FOR KIDS DONATE IMPACT MORE

To search, type and hit enter.

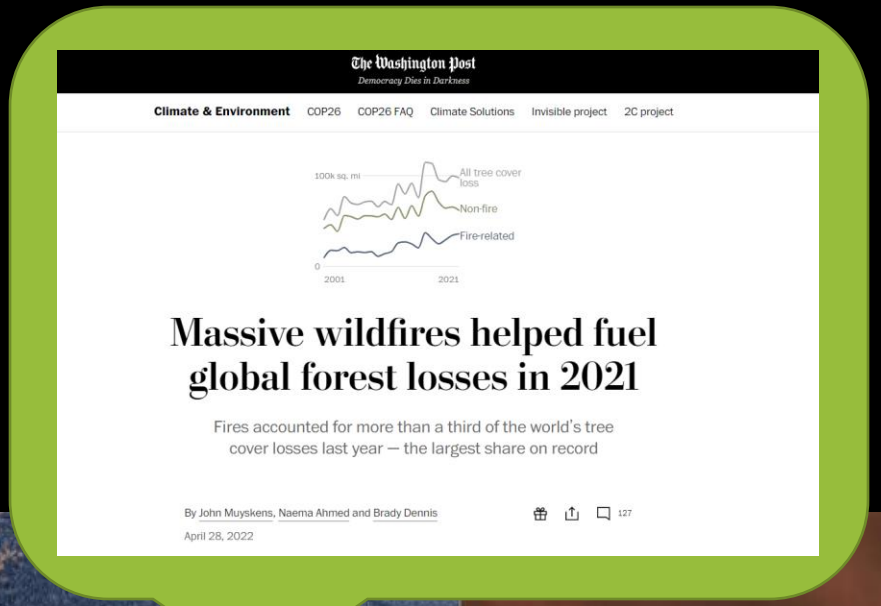
Mongabay Series: Amazon Conservation, Amazon Illegal Deforestation, Indigenous Peoples and Conservation, Indigenous-led conservation

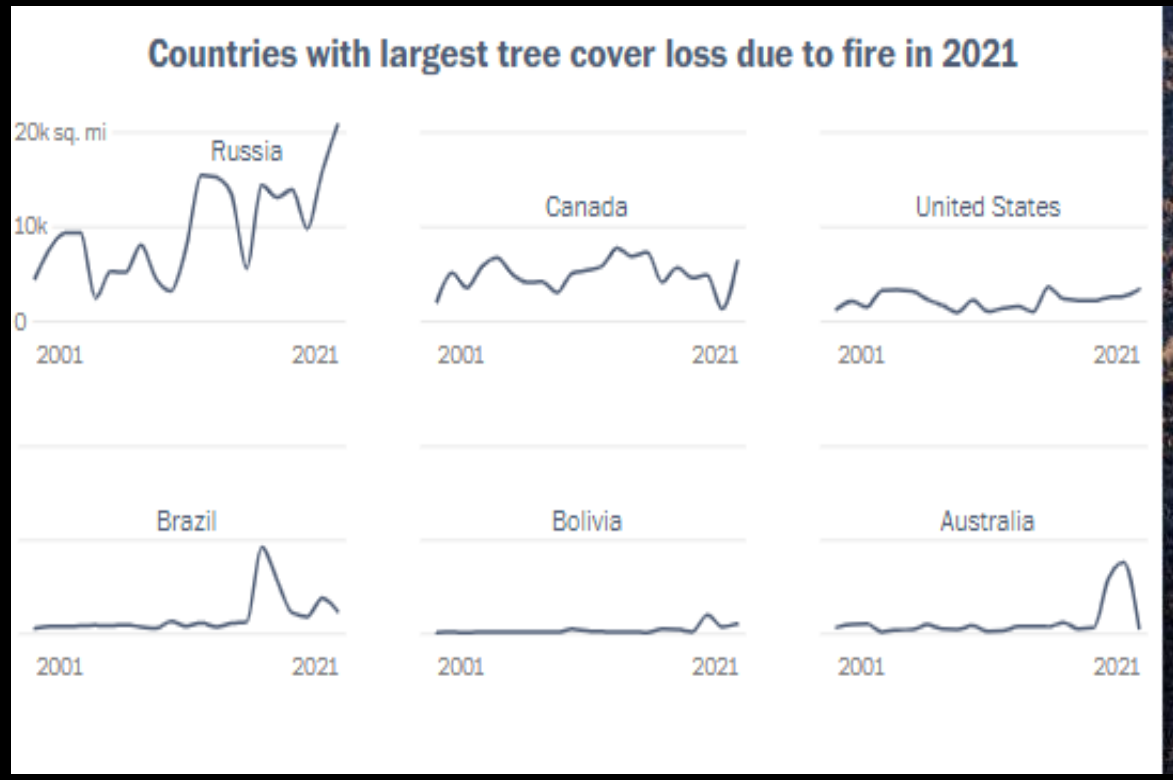
To fight invaders, Munduruku women wield drone cameras and cellphones

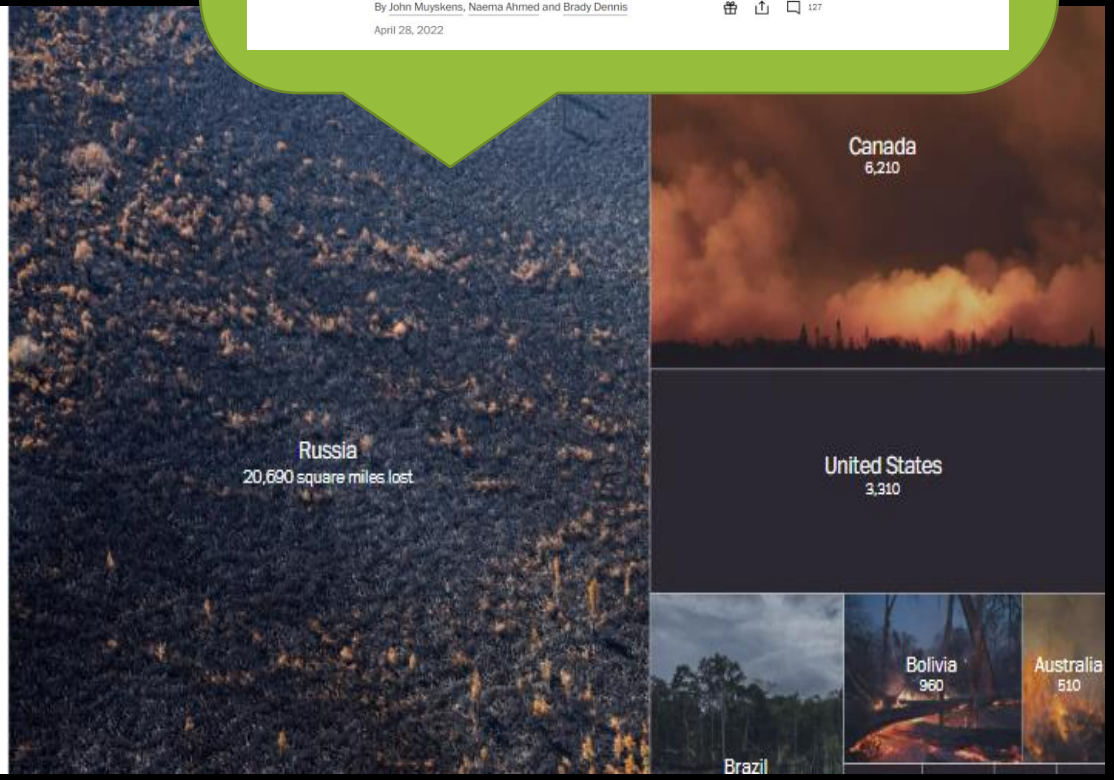
by **Joana Moncau and Elpida Nikou from Repórter Brasil** on 15 March 2022

GLOBAL FOREST WATCH

Washington Post







GLOBAL FOREST WATCH


MAPA DE ALERTAS TEMPRANAS DE DEFORESTACION - GLAD
SITIOS DE MONITOREO, MEDICION, REPORTE Y VERIFICACION COMUNITARIO INDIGENA DE ALERTAS TEMPRANAS DE DEFORESTACION Y DEGRADACION DEL BOSQUE
COMUNIDADES NATIVAS DE NUEVO SAPOSOA Y PATRIA NUEVA DE MEDIACION CALLERIA
PARQUE NACIONAL SIERRA DEL DIVISOR

"The satellites allow us to make decisions in real time and deliver this information to State institutions for them to take immediate action."

-Jorge Perez, President of AIDESEP, representing over 1800 indigenous communities in the Peruvian Amazon

Photo: RFUS

"Planet imagery is important for law enforcement activities so we can keep monitoring deforestation every month and find a way from the roads to the location of deforestation."

-Muhammad Fadhil Ayyasy, GIS staff at HAkA

Photo: HaKA

Dzanga-Sangha National Park, Central African Republic (Photo: WCS)

Technology, data and information transparency leads to action, responsibility and change

Home › Transformational Change for People and the Planet › Chapter

Measuring the Impact of Monitoring: How We Know Transparent Near-Real-Time Data Can Help Save the Forests

Katherine Shea

Chapter | Open Access | First Online: 13 January 2022

6381 Accesses | 6 Altmetric

Part of the Sustainable Development Goals Series book series (SDGS)

Abstract

Global Forest Watch (GFW) is an online platform that distills satellite imagery into near-real-time forest change information that anyone can access and act on. Like other open-data platforms, GFW is based on the idea that transparent, publicly available data can support the greater good—in this case, reducing deforestation. By its very nature, the use of freely available data can be difficult to track and its impact difficult to measure. This chapter explores

In Africa, the evaluation found that subscriptions to GLAD alerts decreased the likelihood of deforestation by 18%. This impact increased when a lag time of 1 year was added between the subscription and the forest-cover measurement, suggesting that as users learn and apply the tools, they become more effective at intervening in the causes of deforestation..

GLOBAL FOREST WATCH