



# ***FLEGT Watch***

## ***Training material***

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Serge RIAZANOFF  
*Director*

[serge.riazanoff@visioterra.fr](mailto:serge.riazanoff@visioterra.fr)  
<http://www.visioterra.fr>

[serge.riazanoff@u-pem.fr](mailto:serge.riazanoff@u-pem.fr)  
<http://www-igm.univ-mlv.fr/~riazano/>



## Summary - Agenda



### ➤ Administration

- ☐ Project organization
- ☐ User's management  
→ Registration of participants
- ☐ Monitored areas management

### ➤ Photo-interpretation

- ☐ Browsing events in a monitored area
- ☐ Checking an event from a base map
- ☐ Checking an event from a optical image
- ☐ Checking an event from previous precipitations

### ➤ Field mission

- ☐ Mission preparation
- ☐ Mission performance
- ☐ Returning from a mission and sharing resources

2 <sup>nd</sup> FLEGT Watch Programme Outline - Ghana						
Day	Date	Time	Session	Activity	Responsibility	
Day 0	7th April 2019	3.00 pm	Arrival		TBG/ NDF	
Day 1	8th April 2019	9.00am	Session 1	Welcome Address	TBG/ NDF	
		10.00am		Promotional Activity Video	VisioTerra	
		1.00pm	Break/ Lunch			
		2.00pm	Session 2	Photo-interpretation of the events received on Sui, Tano-Suhen, Krokosua, Suhuma	VisioTerra	
		3.00pm				
		4.00pm				
Day 2	9th April	8.00am	Session 3	Photo-interpretation of the events received on XXX (near Kumasi)	VisioTerra	
		1.00pm	Break/ Lunch			
			Session 4	Preparation of the field mission	VisioTerra	
Day 3	10th April	8.00am	Session 5	Field Visit - Location?	TBG/ NDF	
Day 4	11th April	8.00am	Session 6	Report of the field mission	VisioTerra	
				Discussion of future upgrades of FLEGT Watch	VisioTerra	
				Training Evaluation	TBG/ NDF	
		12.00pm	End/ Lunch & Departure			



# Project organisation

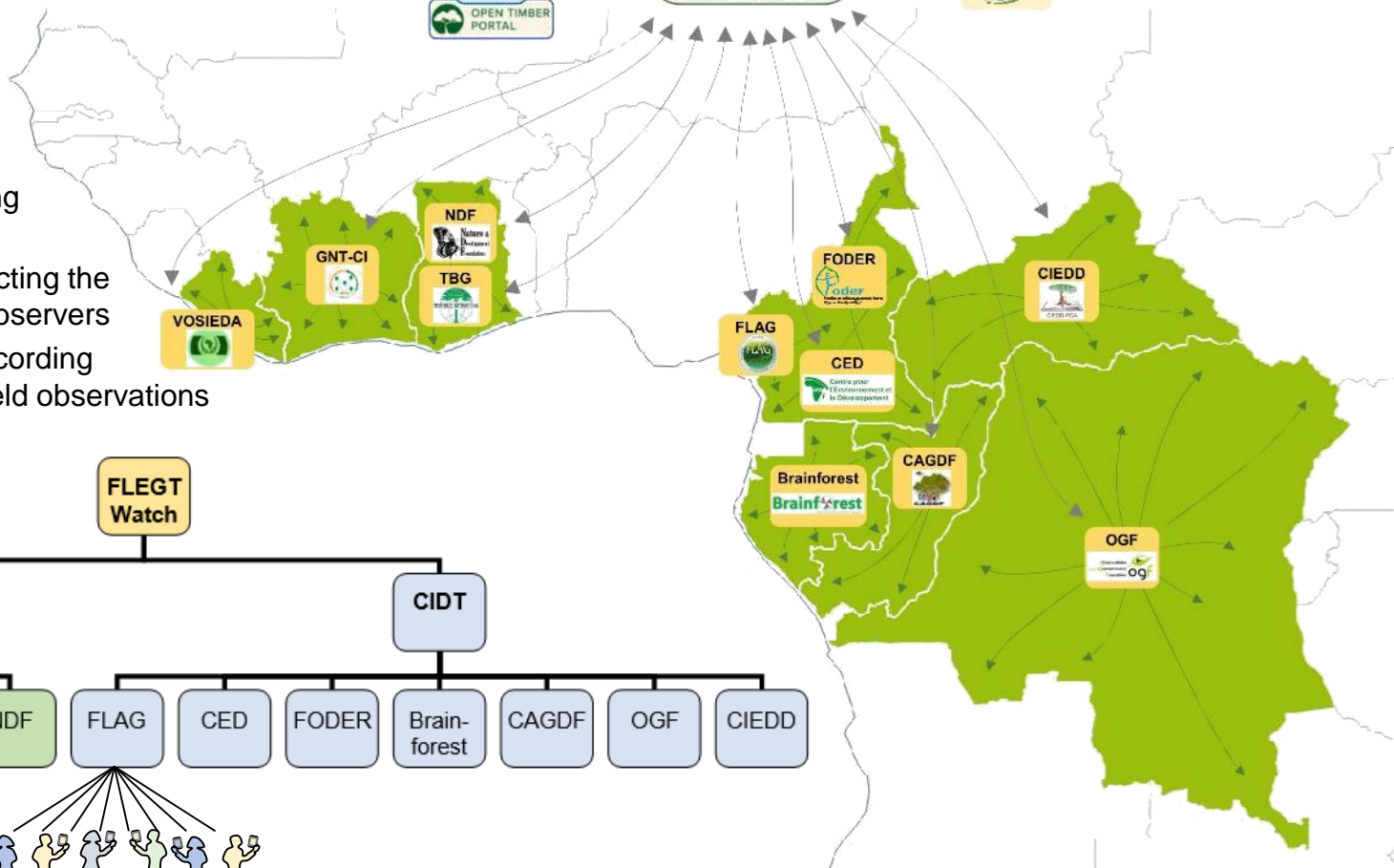
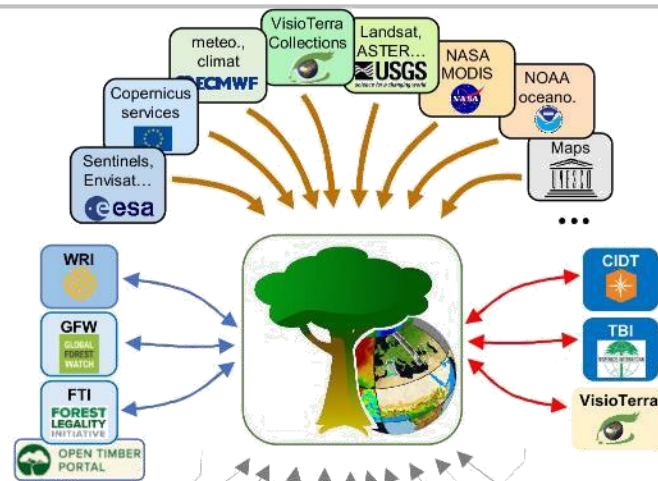
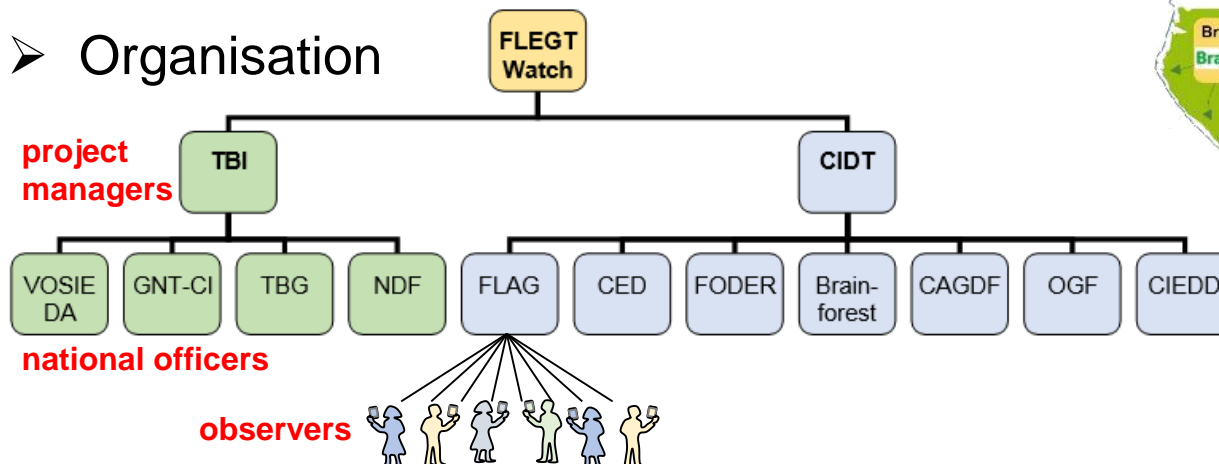
- “FLEGT Watch” provides with the same services to the two groups:

- ❑ West Africa – Liberia, Ivory Coast, Ghana
- ❑ Central Africa – Cameroon, Gabon, CAR, Congo, DRC

- “FLEGT Watch” objectives:

- ❑ efficiency – using new technology
- ❑ security – protecting the community of observers
- ❑ traceability – recording satellites and field observations

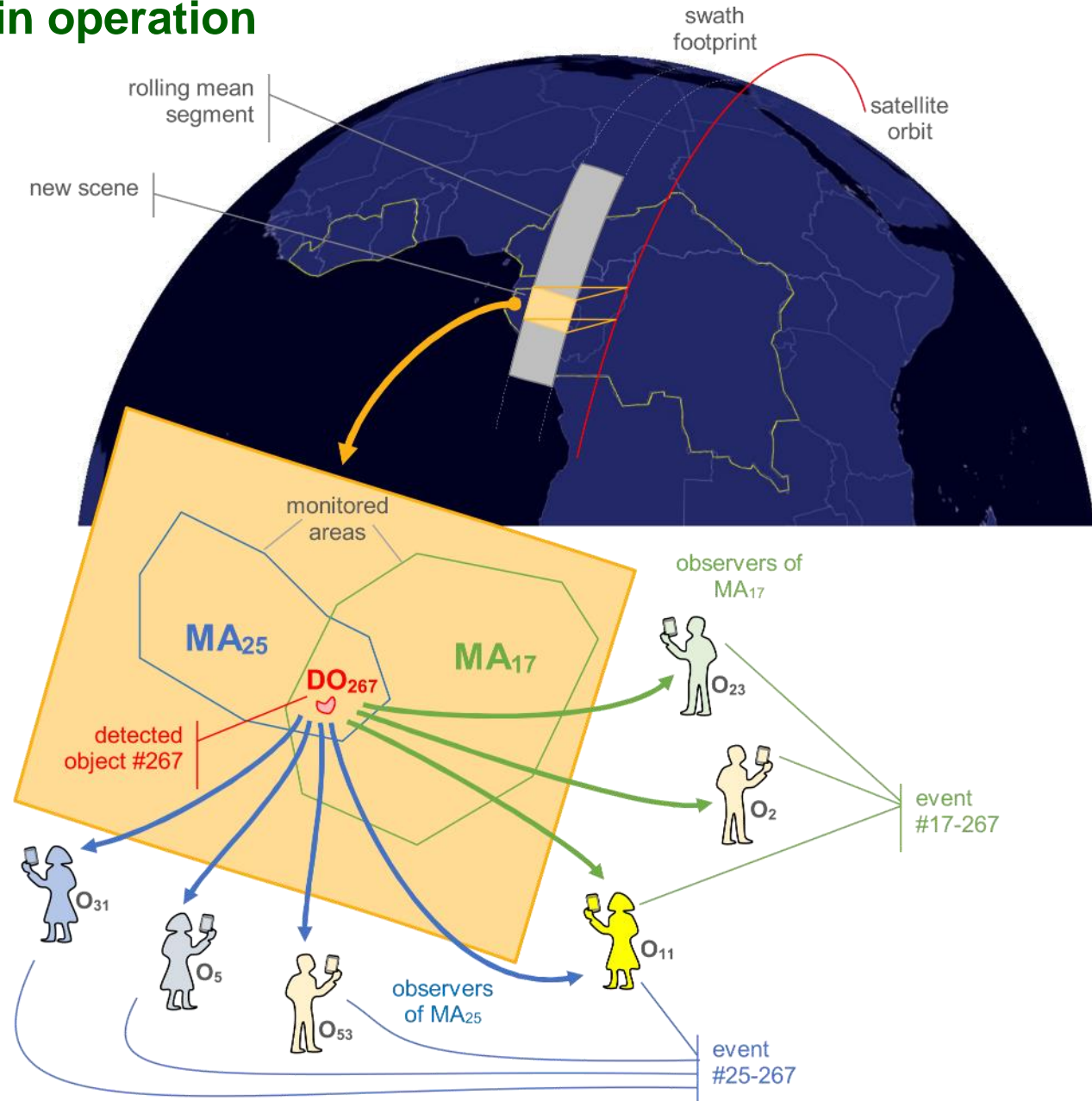
- Organisation





# FLEGT Watch in operation

- Satellite observation each 6 days using S1A and S1B
- Automatic detection using algorithms being improved
- Detected objects have a confidence index
- Dispatch of events in the monitored areas
- Observers evaluate the event from the Web
- Observers may check the event on the field
- Field observations may be collected during the field mission
- Observations are shared across the community
- One may produce a field mission report





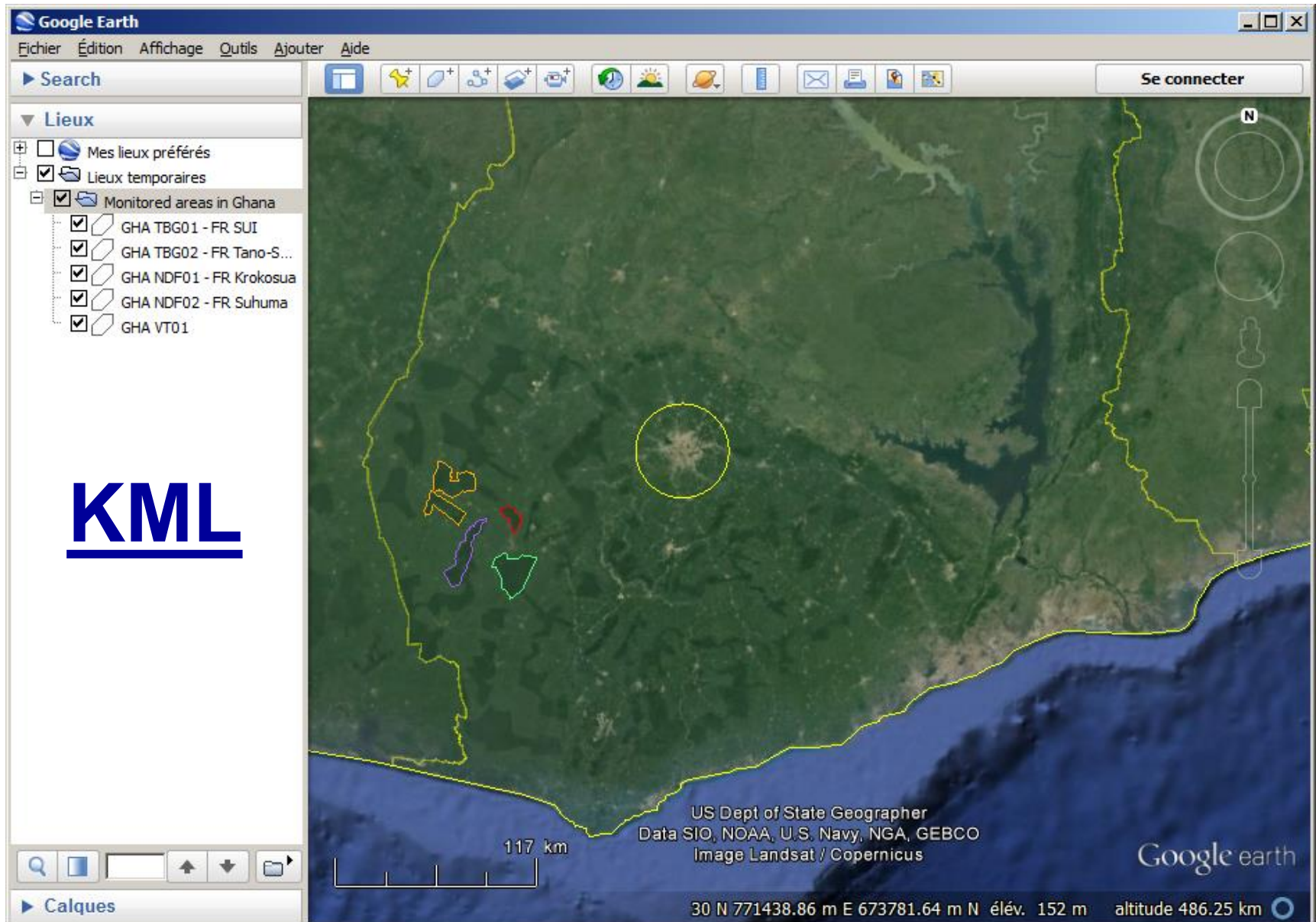
## Observers in Ghana (list collected on 6-7 December 2018)

First name	FAMILY NAME	Orga.	e-mail address
Project Manager			
Henk	HOEFSLOOT		<a href="mailto:henk.hoefsloot@tropenbos.org">henk.hoefsloot@tropenbos.org</a>
National officer			
Daniel Kofi	ABU	TBG	<a href="mailto:dannyrock51@yahoo.com">dannyrock51@yahoo.com</a>
Abena	WOODE	NDF	<a href="mailto:awoode@ndfwestafrica.org">awoode@ndfwestafrica.org</a>
Observers			
Douglas	ADU HAYFORD	NDF	<a href="mailto:aduhayforddouglas@gmail.com">aduhayforddouglas@gmail.com</a>
Ishmael	ARKOH	NDF	<a href="mailto:arkohishmael36@gmail.com">arkohishmael36@gmail.com</a>
Sampson	MENSAH	NDF	<a href="mailto:mensahsampson198@gmail.com">mensahsampson198@gmail.com</a>
Elliot	MENSAH STEVEN	NDF	<a href="mailto:elliotmensahsteven@gmail.com">elliotmensahsteven@gmail.com</a>
Raymond	NKUAH ENNIN	NDF	<a href="mailto:raymondennin@yahoo.com">raymondennin@yahoo.com</a>
Yaw Fuseini	ABUBAKARI	TBG	<a href="mailto:fuseiniyaw1@gmail.com">fuseiniyaw1@gmail.com</a>
Moses	ADAYENG	TBG	<a href="mailto:mosesadayeng@gmail.com">mosesadayeng@gmail.com</a>
Joseph	ASANTE	TBG	<a href="mailto:kotokoa94@yahoo.com">kotokoa94@yahoo.com</a>
Doreen	ASUMANG-YEBOAH	TBG	<a href="mailto:doreenayeboah@gmail.com">doreenayeboah@gmail.com</a>
Kwame	SEKYERE	TBG	<a href="mailto:sekyere05@yahoo.com">sekyere05@yahoo.com</a>
Boakye	TWUMASI-ANKRA	TBG	<a href="mailto:twumank@yahoo.co.uk">twumank@yahoo.co.uk</a>
Abraham	YELLEY	TBG	<a href="mailto:yelleyabraham1@gmail.com">yelleyabraham1@gmail.com</a>





## Monitored areas in Ghana





## Some interesting data

### ➤ Hyperlook document

- ❑ [HYP-072-Sentinels](#) – FLEGT Watch in Ghana, Ivory Coast and Cameroon

### ➤ Layer stacks – A photo-interpretation work of Elisée TCHANA

1. <https://visioterra.org/FlegtWatch/hyperlook/9dad2acef95b4bbb909fd13477b99df9>
2. <https://visioterra.org/FlegtWatch/hyperlook/f1bad3e30a604305ae2da851641f1363>
3. <https://visioterra.org/FlegtWatch/hyperlook/d99be89aa3d746bc99c942162d8fcad2>
4. <https://visioterra.org/FlegtWatch/hyperlook/e3ccf94a1ffb4ee59cd750547e43ab22>
5. <https://visioterra.org/FlegtWatch/hyperlook/8280812c35444739a8d957dc304f09ae>
6. <https://visioterra.org/FlegtWatch/hyperlook/c024ff96e4bd4bfba096970f47840662>
7. <https://visioterra.org/FlegtWatch/hyperlook/2593e91bd22e4d5d8fb6ccb86d65b28e>
8. <https://visioterra.org/FlegtWatch/hyperlook/66cc918cdd6d41d98d2bd961e6990c2e>

*“From my observation this image surely shows an old forest unit or an old wood processing area”*

### ➤ Layer stacks – A photo-interpretation work of Zhour NAJOUÏ (09.04.2019)

1. <https://visioterra.org/FlegtWatch/hyperlook/21b4b3b52c064dcda5d5c3c438676362>
2. <https://visioterra.org/FlegtWatch/hyperlook/16f1291133c848329a14da4d4d9638de>
3. <https://visioterra.org/FlegtWatch/hyperlook/fa9e7fab242b4469b76551b8581dd5d1>
4. <https://visioterra.org/FlegtWatch/hyperlook/f6c838678ef14092af7012d08f3a6207>



# FLEGT Watch documentation

## ➤ Brochures

- ❑ [VT-P281-BKL-001-E-01-06](#) – Introduction to FLEGT Watch
- ❑ [VT-P281-BKL-001-F-01-06](#) – Introduction à FLEGT Watch (français)
- ❑ [VT-P281-BKL-002-E-01-00](#) – FLEGT Watch in operation
- ❑ [VT-P281-BKL-002-F-01-00](#) – FLEGT Watch en operation (français)

## ➤ User's manual

- ❑ [VT-P281-SUM-005-E-01-01](#) – FLEGT Watch user's manual
- ❑ [VT-P281-SUM-005-F-01-01](#) – Manuel utilisateur de FLEGT Watch (français)

## ➤ Video

- ❑ [VT-A003-VID-010-E-01-01](#) – Application for field observations
- ❑ [VT-A003-VID-010-F-01-01](#) – Application d'observations de terrain (français)

## ➤ FLEGT Watch App

- ❑ <http://visioterra.fr/flegtwatch/app.apk>

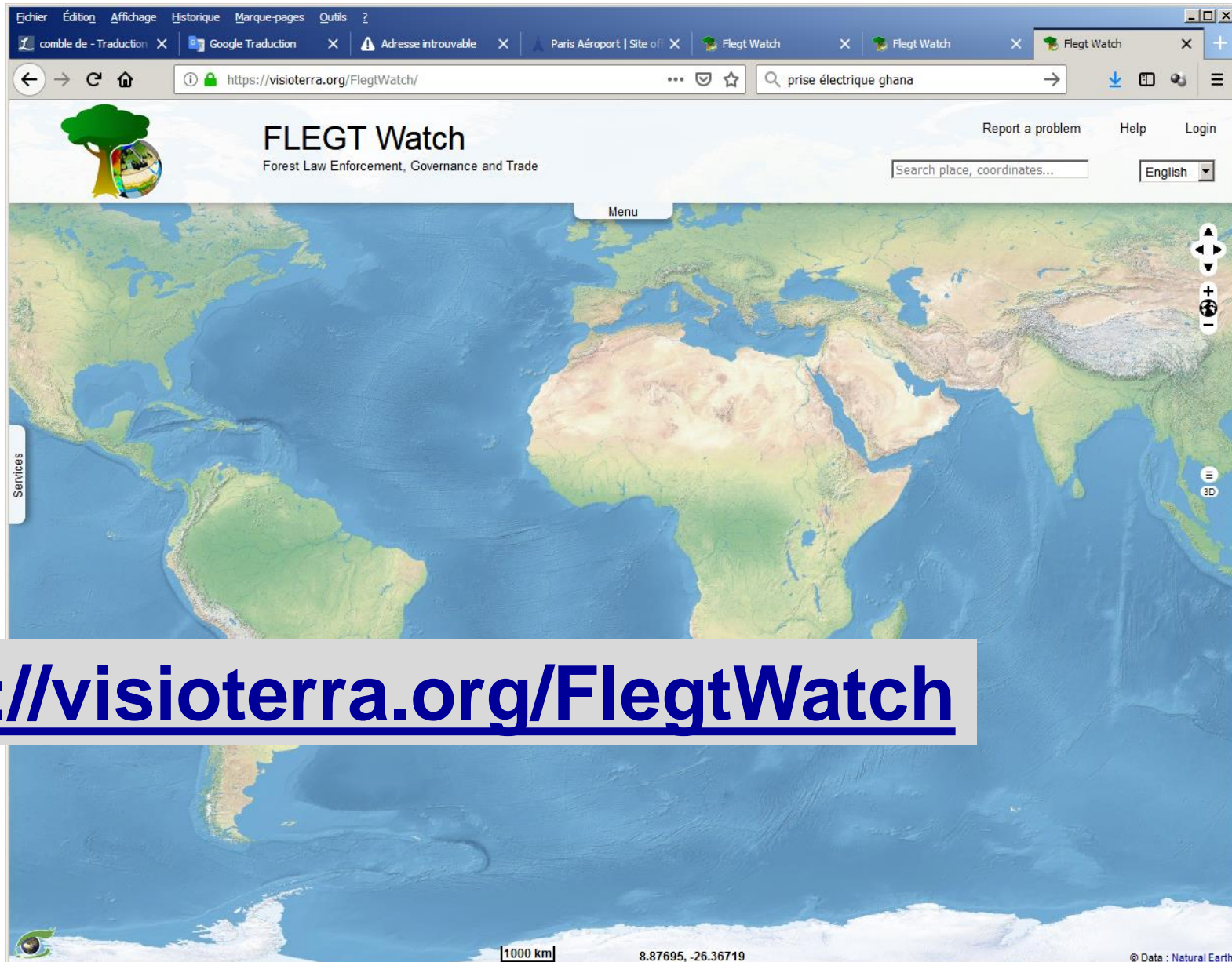
## ➤ Support

- ❑ [flegtwatch@visioterra.fr](mailto:flegtwatch@visioterra.fr)





## Launch FLEGT Watch (Web)



**<https://visioterra.org/FlegtWatch>**



## Enter your e-mail and password

FLEGT Watch  
Forest Law Enforcement, Governance and Trade

Report a problem Help Login

Search place, coordinates... English

Menu

Services

Authentication

Not logged in

Login (email) : myadress@myserver.xx

Password : .....

Login Logout Edit profil Close

1000 km 13.09570, 28.12500 © Data : Natural Earth

default value of password  
for observers is “fw”



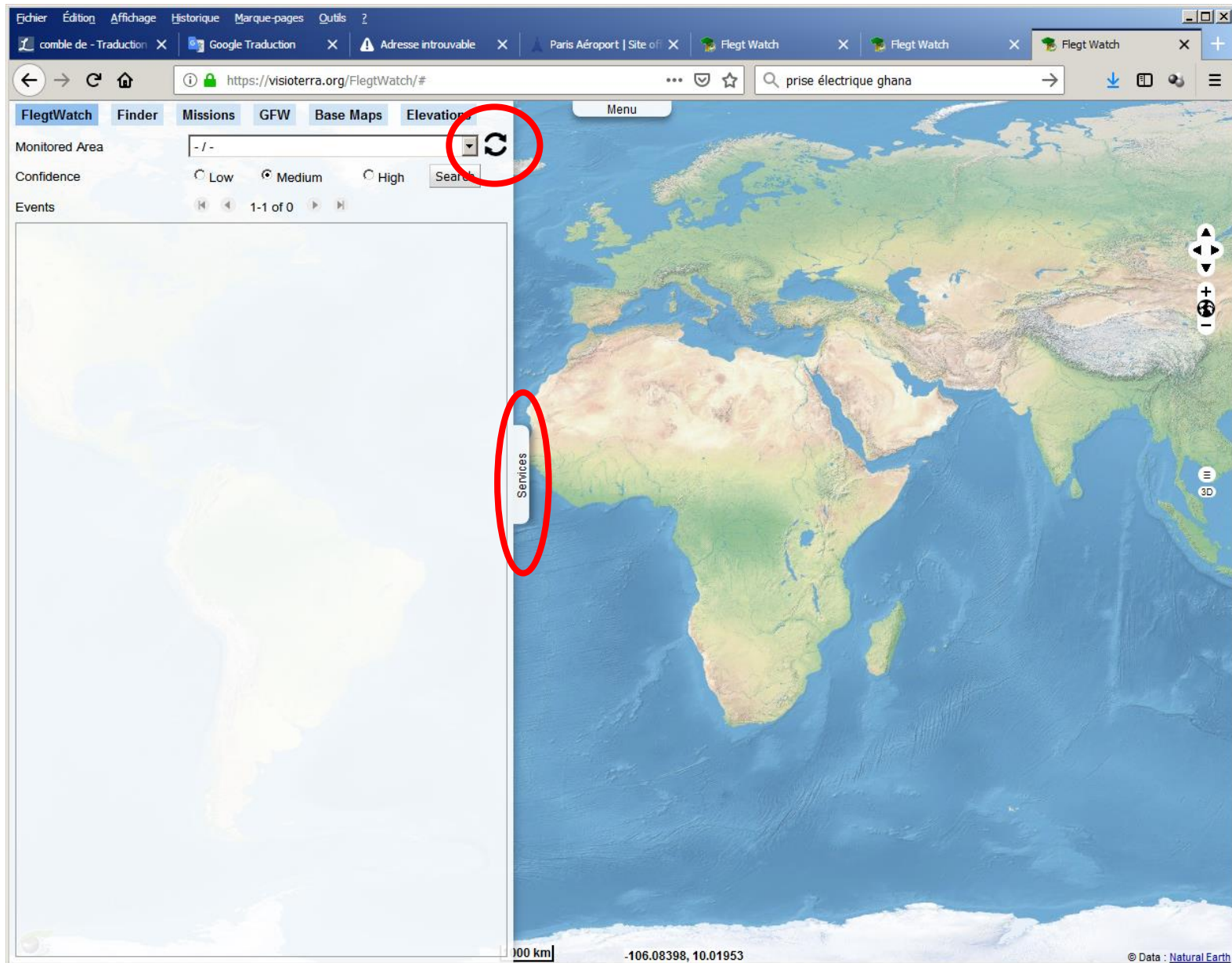


# Check that you login has been accepted

The screenshot displays the FLEGT Watch web application interface. At the top, there is a navigation bar with the FLEGT Watch logo (a stylized tree with a globe) and the text "FLEGT Watch Forest Law Enforcement, Governance and Trade". To the right of the logo, there are links for "Manage monitored areas" and "Manage u...". A green notification box in the top right corner displays a checkmark and the text "Login successfully". Below the notification box, there is a search bar with the placeholder text "Search place, coordinates..." and a language dropdown menu set to "English". The main content area features a world map with a "Menu" button above it. The map shows the continents of North America, South America, Africa, and Asia. A scale bar at the bottom left indicates "1000 km". The bottom right corner of the map area shows the coordinates "-22.76367, -13.53516" and the text "© Data : Natural Earth". The browser's address bar shows the URL "https://visioterra.org/FlegtWatch/#" and the search bar contains the text "prise électrique ghana".



## Open the “Services” panel and actualise the “Monitored areas”







## Select one of you monitored areas

Monitored Area

Confidence

Events

- CMR FODER01 - Dep. Haut Nyong / angeline.modjo@gmail.com
- CMR FODER02 - Arr. Ngambé Tikar / angeline.modjo@gmail.com
- CMR FODER03 - Dep. Ocean / angeline.modjo@gmail.com
- CMR FODER04 - Dep. Sanaga Maritime / angeline.modjo@gmail.com
- CMR FODER05 - Arr. Yoko / angeline.modjo@gmail.com
- Cameroon / flegtwatch@visioterra.fr
- Central Africa / flegtwatch@visioterra.fr
- Central African Republic / flegtwatch@visioterra.fr
- Congo / flegtwatch@visioterra.fr
- Democratic Republic of the Congo / flegtwatch@visioterra.fr
- GHA NDF01 - FR Krokosua / awoode@ndfwestafrica.org
- GHA NDF02 - FR Suhuma / awoode@ndfwestafrica.org
- GHA TBG01 - FR Sui / dannyrock51@yahoo.com
- GHA TBG02 - FR Tano-Suhen / dannyrock51@yahoo.com
- GHA VT01 - Kumasi / flegtwatch@visioterra.fr**
- Gabon / flegtwatch@visioterra.fr
- Ghana / flegtwatch@visioterra.fr
- Ivory Coast / flegtwatch@visioterra.fr
- Liberia / flegtwatch@visioterra.fr
- West Africa / flegtwatch@visioterra.fr

100 km

-106.08398, 10.01953

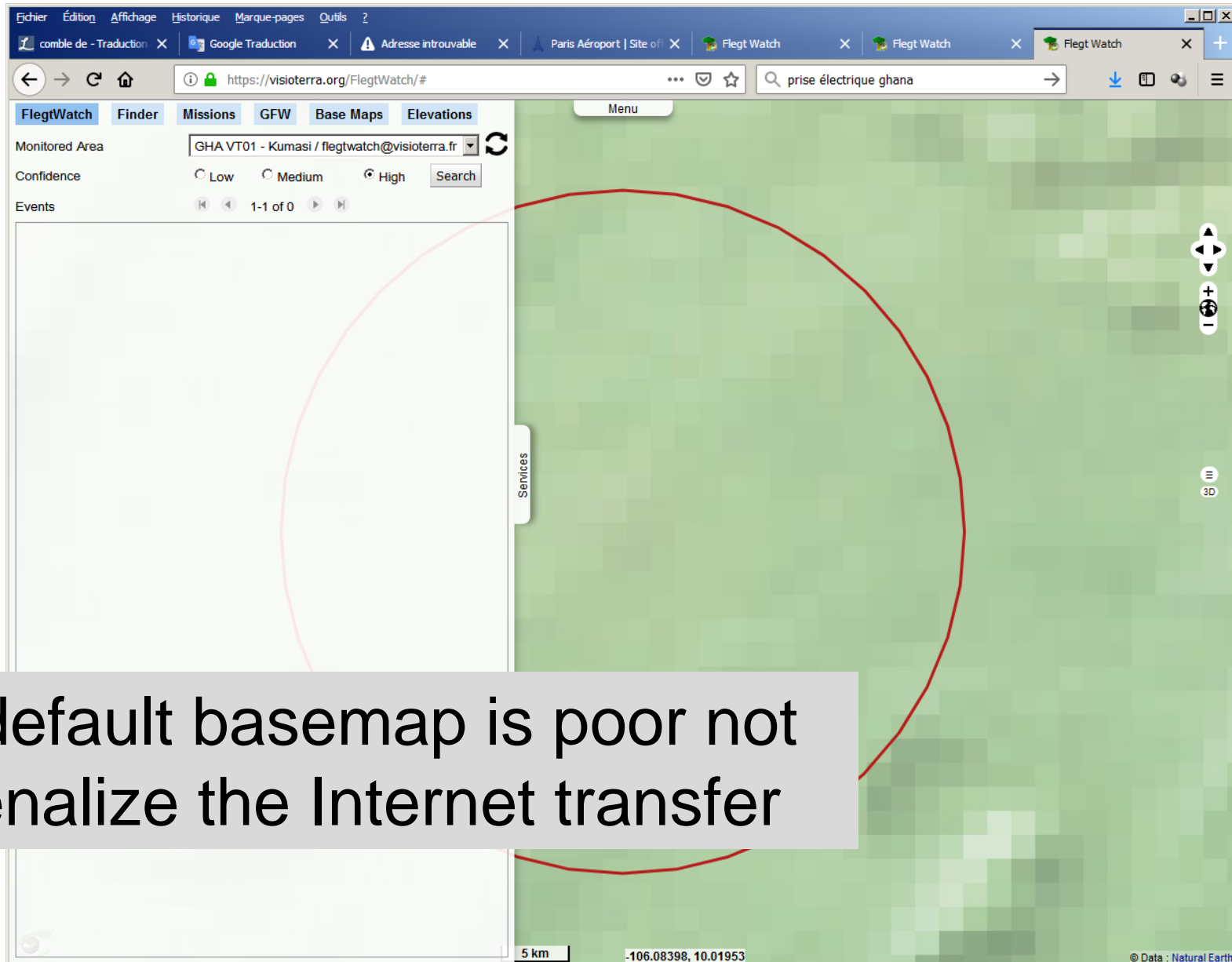
© Data : Natural Earth

Here, I am super-user and this is why I see all the monitored areas





## You see the polygon of your monitored area



The default basemap is poor not to penalize the Internet transfer



## Get the list of events – Medium confidence index

**Flegt Watch** | **Finder** | **Missions** | **GFW** | **Base Maps** | **Elevations**

Monitored Area:

Confidence: ☐ Low ☒ Medium ☐ High

Events: 1 of 11

Event #	Description	Timestamp	Location
#49980	Forest cover change	2019/03/17 18:17:40	GHA VT01 - Kumasi
#46432	Forest cover change	2019/02/27 18:18:24	GHA VT01 - Kumasi
#46328	Forest cover change	2019/02/21 18:17:40	GHA VT01 - Kumasi
#46308	Forest cover change	2019/02/21 18:17:40	GHA VT01 - Kumasi
#46305	Forest cover change	2019/02/21 18:17:40	GHA VT01 - Kumasi
#45775	Forest cover change	2019/01/16 18:17:41	GHA VT01 - Kumasi
#45438	Forest cover change	2018/12/23 18:17:42	GHA VT01 - Kumasi
#45262	Forest cover change	2018/12/11 18:17:42	GHA VT01 - Kumasi
#45158	Forest cover change	2018/10/18 18:18:27	GHA VT01 - Kumasi
#45157	Forest cover change	2018/10/18 18:18:27	GHA VT01 - Kumasi
#45037	Forest cover change	2018/09/30 18:17:43	GHA VT01 - Kumasi

Map coordinates: -106.08398, 10.01953

© Data : Natural Earth



## Get the list of events – Low confidence index

Screenshot of the Flegt Watch web application interface. The browser address bar shows <https://visioterra.org/FlegtWatch/#>. The search bar contains "prise électrique ghana". The "Monitored Area" dropdown is set to "GHA VT01 - Kumasi / flegtwatch@visioterra.fr". The "Confidence" filter is set to "Low". The "Events" list shows 25 of 2,322 events, all labeled "Forest cover change - 2019/04/04 18:18:24". The map displays a satellite view of a forested area with a red circular boundary. The bottom status bar shows coordinates -106.08398, 10.01953 and a scale of 5 km.

**Monitored Area:** GHA VT01 - Kumasi / flegtwatch@visioterra.fr

**Confidence:** Low Medium High

**Events:** 25 of 2,322

Event ID	Description	Date/Time
#51333	Forest cover change	2019/04/04 18:18:24
#51332	Forest cover change	2019/04/04 18:18:24
#51331	Forest cover change	2019/04/04 18:18:24
#51330	Forest cover change	2019/04/04 18:18:24
#51329	Forest cover change	2019/04/04 18:18:24
#51328	Forest cover change	2019/04/04 18:18:24
#51327	Forest cover change	2019/04/04 18:18:24
#51326	Forest cover change	2019/04/04 18:18:24
#51325	Forest cover change	2019/04/04 18:18:24
#51324	Forest cover change	2019/04/04 18:18:24
#51323	Forest cover change	2019/04/04 18:18:24
#51322	Forest cover change	2019/04/04 18:18:24
#51321	Forest cover change	2019/04/04 18:18:24
#51320	Forest cover change	2019/04/04 18:18:24
#51319	Forest cover change	2019/04/04 18:18:24
#51318	Forest cover change	2019/04/04 18:18:24





Select one event → GHA VT01 / #50900

**Radar Sentinel-1B  
observed on  
29.03.2019  
18:17:42 CET**

The screenshot displays the Flegt Watch web application interface. The top navigation bar includes tabs for 'FlegtWatch', 'Finder', 'Missions', 'GFW', 'Base Maps', and 'Elevations'. The 'Finder' tab is active, showing a search bar with 'GHA VT01 - Kumasi' and a 'Search' button. Below the search bar, there are radio buttons for 'Confidence' (Low, Medium, High) and a 'Search' button. The 'Events' section shows a list of events, with the first two events (#50915 and #50914) highlighted in red. The main map area displays a satellite image of a forested area, with a yellow lightning bolt icon indicating a specific event. A 'Services' sidebar is visible on the left. At the bottom, a table lists events, with event #50900 highlighted in blue. A pop-up window for event #50900 shows the date '2019/03/29 18:17 - Now'.

Event	Description	Date	Time
#50915	GHA VT01 - Kumasi	2019/03/29	18:17:40
#50914	GHA VT01 - Kumasi	2019/03/29	18:17:40
#50904	GHA VT01 - Kumasi	2019/03/29	18:17:40
#50903	GHA VT01 - Kumasi	2019/03/29	18:17:40
#50902	GHA VT01 - Kumasi	2019/03/29	18:17:40
#50901	GHA VT01 - Kumasi	2019/03/29	18:17:40
#50900	GHA VT01 - Kumasi	2019/03/29	18:17:40
#50899	GHA VT01 - Kumasi	2019/03/29	18:17:40





# Check the difference with the previous acquisitions (mean of 4)

Screenshot of the Flegt Watch web application interface. The browser address bar shows <https://visioterra.org/FlegtWatch/#>. The search bar contains "prise électrique ghana". The interface includes tabs for "FlegtWatch", "Finder", "Missions", "GFW", "Base Maps", and "Elevations". The "Monitored Area" is set to "GHA VT01 - Kumasi / flegtwatch@visioterra.fr". The "Confidence" level is set to "Low". The "Events" list shows a range of 101-125 of 2,322 events. The list includes event numbers, descriptions, and timestamps. The event #50900 is highlighted in blue. The main map area displays a satellite image of a forested area with a yellow outline indicating a specific location. A "Services" sidebar is visible on the left. A "Menu" button is at the top right. A "3D" button is at the bottom right. A "Data - Natural Earth" attribution is at the bottom right. A "00 m" scale bar is at the bottom left. The coordinates  $-1.49721, 6.73694$  are displayed at the bottom center. A "Event #50900 - Forest cover change" pop-up window is open, showing the date "2019/03/29 18:17 - Before" and navigation buttons (left and right arrows) circled in red.

Event	Description	Timestamp
#50915	GHA VT01 - Kumasi	
Event #50914	Forest cover change - 2019/03/29 18:17:40	
GHA VT01 - Kumasi		
Event #50913	Forest cover change - 2019/03/29 18:17:40	
GHA VT01 - Kumasi		
Event #50912	Forest cover change - 2019/03/29 18:17:40	
GHA VT01 - Kumasi		
Event #50911	Forest cover change - 2019/03/29 18:17:40	
GHA VT01 - Kumasi		
Event #50910	Forest cover change - 2019/03/29 18:17:40	
GHA VT01 - Kumasi		
Event #50909	Forest cover change - 2019/03/29 18:17:40	
GHA VT01 - Kumasi		
Event #50908	Forest cover change - 2019/03/29 18:17:40	
GHA VT01 - Kumasi		
Event #50907	Forest cover change - 2019/03/29 18:17:40	
GHA VT01 - Kumasi		
Event #50906	Forest cover change - 2019/03/29 18:17:40	
GHA VT01 - Kumasi		
Event #50905	Forest cover change - 2019/03/29 18:17:40	
GHA VT01 - Kumasi		
Event #50904	Forest cover change - 2019/03/29 18:17:40	
GHA VT01 - Kumasi		
Event #50903	Forest cover change - 2019/03/29 18:17:40	
GHA VT01 - Kumasi		
Event #50902	Forest cover change - 2019/03/29 18:17:40	
GHA VT01 - Kumasi		
Event #50901	Forest cover change - 2019/03/29 18:17:40	
GHA VT01 - Kumasi		
Event #50900	Forest cover change - 2019/03/29 18:17:40	
GHA VT01 - Kumasi		
Event #50899	Forest cover change - 2019/03/29 18:17:40	
GHA VT01 - Kumasi		





## You may use the layer stack

Screenshot of the VisioTerra web application interface showing the Flegt Watch monitoring area for GHV VT01 - Kumasi. The interface includes a sidebar with a list of events, a main map view, and a layer stack panel on the right.

**Events List:**

Event ID	Event Description	Timestamp
#50915	GHV VT01 - Kumasi	
Event #50914	Forest cover change - 2019/03/29 18:17:40	
GHV VT01 - Kumasi		
Event #50913	Forest cover change - 2019/03/29 18:17:40	
GHV VT01 - Kumasi		
Event #50912	Forest cover change - 2019/03/29 18:17:40	
GHV VT01 - Kumasi		
Event #50911	Forest cover change - 2019/03/29 18:17:40	
GHV VT01 - Kumasi		
Event #50910	Forest cover change - 2019/03/29 18:17:40	
GHV VT01 - Kumasi		
Event #50909	Forest cover change - 2019/03/29 18:17:40	
GHV VT01 - Kumasi		
Event #50908	Forest cover change - 2019/03/29 18:17:40	
GHV VT01 - Kumasi		
Event #50907	Forest cover change - 2019/03/29 18:17:40	
GHV VT01 - Kumasi		
Event #50906	Forest cover change - 2019/03/29 18:17:40	
GHV VT01 - Kumasi		
Event #50905	Forest cover change - 2019/03/29 18:17:40	
GHV VT01 - Kumasi		
Event #50904	Forest cover change - 2019/03/29 18:17:40	
GHV VT01 - Kumasi		
Event #50903	Forest cover change - 2019/03/29 18:17:40	
GHV VT01 - Kumasi		
Event #50902	Forest cover change - 2019/03/29 18:17:40	
GHV VT01 - Kumasi		
Event #50901	Forest cover change - 2019/03/29 18:17:40	
GHV VT01 - Kumasi		
Event #50900	Forest cover change - 2019/03/29 18:17:40	
GHV VT01 - Kumasi		
Event #50899	Forest cover change - 2019/03/29 18:17:40	
GHV VT01 - Kumasi		

**Layer Stack Panel:**

- Temporary display
  - GHV VT01 - Kumasi
- Layer stack
  - Event #50900
- Base display
  - Natural Earth From VisioTerra
  - GEBCO Bathymetry

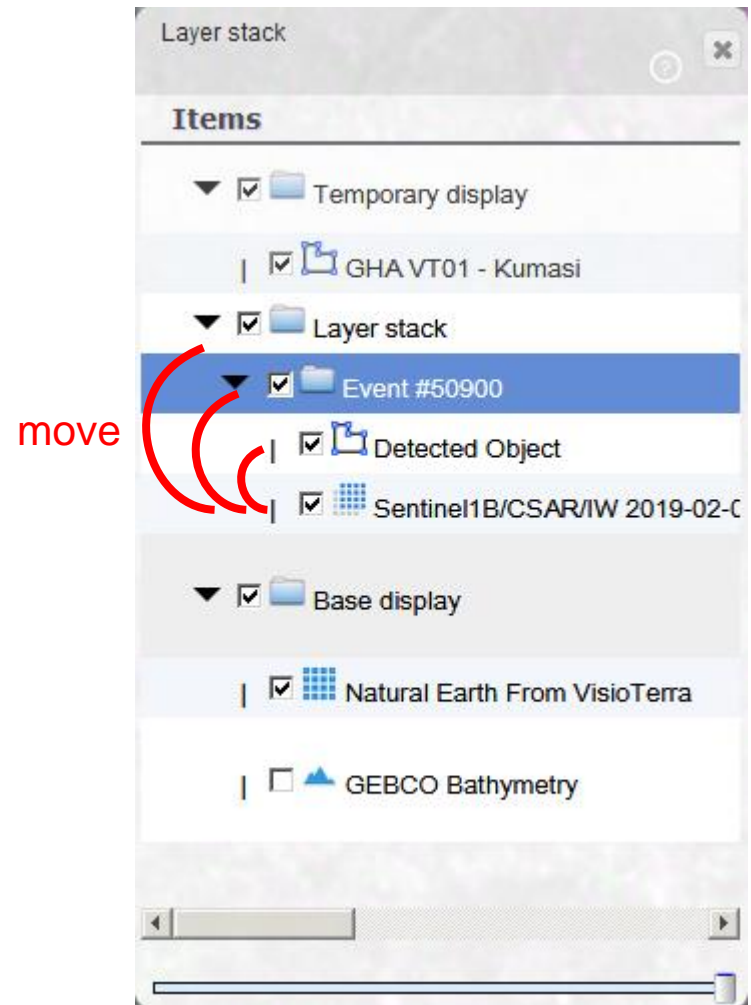
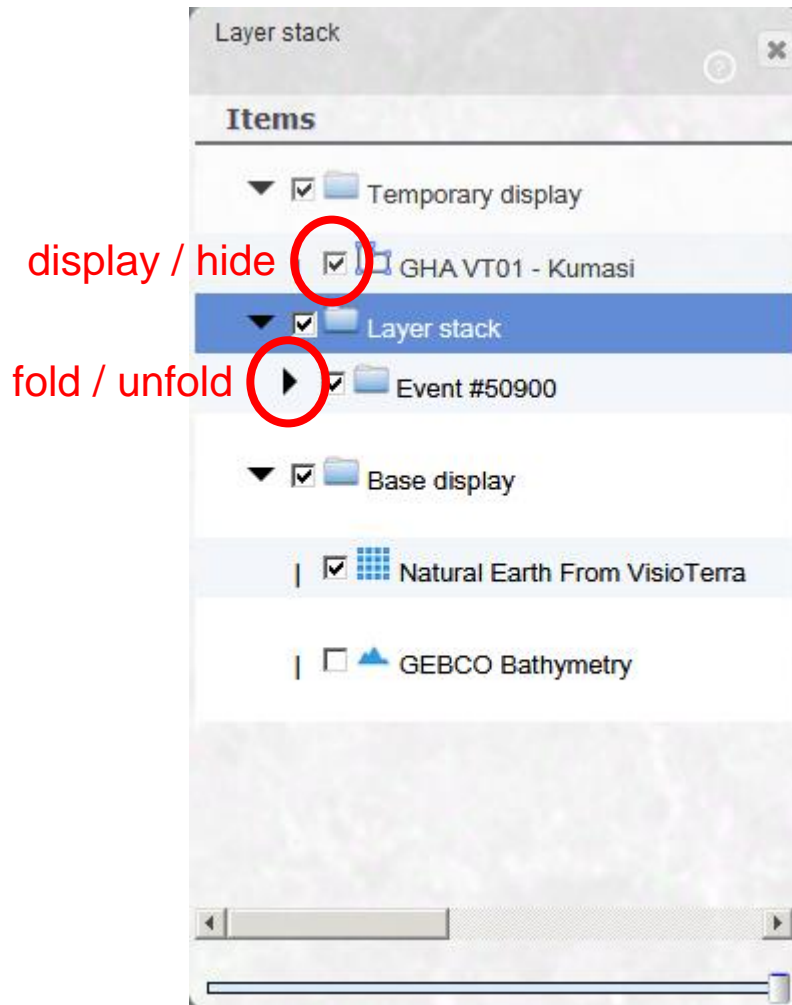
**Event #50900 - Forest cover change**

2019/03/29 18:17 - Before

The screenshot also shows a red box highlighting the 3D button in the top right corner of the map view, and another red box highlighting the 3D button in the layer stack panel.



## Handle items in a layer stack





The screenshot shows the 'Layer stack' window with a list of items. A context menu is open over a folder named 'Event #50000\_0040\_00\_00'. The menu items are: 'Add to new folder', 'Edit label and description', 'Duplicate', 'Delete from layer stack', 'Share hyperlook', 'Animate', 'Create folder', 'Delete content', and 'Export'. Red arrows point from text labels to specific menu items: 'Add to new folder' points to 'Add to new folder'; 'Edit label and description' points to 'Edit label and description'; 'Duplicate' points to 'Duplicate'; 'Delete from layer stack' points to 'Delete from layer stack'; 'Share hyperlook' points to 'Share hyperlook'; 'Animate' points to 'Animate'; 'Create folder' points to 'Create folder'; and 'Delete content' points to 'Delete content'.

Menu Item	Action Label
Add to new folder	Add to new folder
Edit label and description	Edit label and description
Duplicate	Duplicate
Delete from layer stack	Delete from layer stack
Share hyperlook	Share hyperlook
Animate	Animate
Create folder	Create folder
Delete content	Delete content





# Change basemap - OpenStreetMap

The screenshot displays the Flegt Watch web application interface. The browser address bar shows the URL <https://visiorterra.org/FlegtWatch/#>. The application has a top navigation bar with tabs: FlegtWatch, Finder, Missions, GFW, Base Maps, and Elevations. The 'Base Maps' tab is active.

On the left side, under the 'Background Maps' section, there is a grid of map thumbnails. The 'OpenStreetMap' thumbnail is highlighted with a red rectangle. Other visible thumbnails include VMap0 (OSGeo), Blue Marble (NASA), Landsat-7 (NASA), OpenStreetMap (Terrestris), OSM Humanitarian, Bing Map (Microsoft), and Bing Map Road (Microsoft). Below this grid is an 'Overlay Maps' section and a 'Custom WMS source' button.

The main map area shows a street map of a city. A yellow outline of a building is visible. On the right side, a 'Layer stack' panel is open, listing various layers. The 'Base display' section is expanded, showing 'OpenStreetMap' as the selected basemap. Other layers include 'Temporary display', 'GHA VT01 - Kumasi', 'Event #50900', 'Detected Object', and 'Sentinel1B/CSAR/IW 2019-02-0...'. A 'Services' panel is also visible on the right.

At the bottom of the map, there is a scale bar (00 m) and coordinates (-1.51382, 6.75037). A data source attribution at the bottom right reads '© Data : OpenStreetMap'.



## Change basemap (2) – Bing map

Browser window showing the FlegtWatch application interface. The main map displays a satellite view of a forested area with a yellow lightning bolt icon indicating a detected object. The interface includes a menu bar at the top with options like 'Fichier', 'Édition', 'Affichage', 'Historique', 'Marque-pages', and 'Outils'. The browser address bar shows the URL <https://visiorterra.org/FlegtWatch/#> and the search bar contains 'prise électrique ghana'.

The application has several tabs: 'FlegtWatch', 'Finder', 'Missions', 'GFW', 'Base Maps', and 'Elevations'. The 'Base Maps' tab is active, showing a list of background maps:

- Background Maps
  - VMap0 (OSGeo)
  - Blue Marble (NASA)
  - Landsat-7 (NASA)
  - OpenStreetMap (Terrestris)
  - OpenStreetMap
  - OSM Humanitarian
  - Bing Map (Microsoft)** (highlighted with a red box)
  - Bing Map Road (Microsoft)
- Overlay Maps
- Custom WMS source

The 'Layer stack' panel on the right lists the following layers:

- Temporary display
  - GHA VT01 - Kumasi
- Layer stack
  - Event #50900
    - Detected Object
    - Sentinel1B/CSAR/IW 2019-02-0
- Base display
  - Bing Map (Microsoft)
  - GEBCO Bathymetry

The 'Event #50900 - Forest cover change' panel at the bottom shows a timeline with a date selector set to '2019/03/29 18:17 - Before'.





# Characterise the land cover

degraded forest  
or agroforestry ?





# Getting other data – 1. Define your area of interest

The screenshot displays the Flegt Watch web application interface. The 'Finder' tab is active, showing search parameters for an Area of Interest (AOI). The 'Area of interest (AOI)' checkbox is checked. The search parameters include:

- Minimum overlay (%): ☐
- Date start: 2019-02-01 00:00:00
- Date stop: 2019-04-07 23:59:59
- Status: Ready
- Dataset: S2A\_MSI ; S2A\_MSI\_L2A ; S2B\_MSI ;
- Cloud Cover: 25
- Limit: 100

The search results table is empty, with the message 'Search cancelled' displayed. A toolbar with four icons (globe, up arrow, hamburger menu, and diagonal arrow) is shown. Red arrows point from the following text labels to these icons:

- From screen extents (points to the globe icon)
- From layer stack (points to the up arrow icon)
- From external file (points to the hamburger menu icon)
- From the map (points to the diagonal arrow icon)

A 'Select a layerstack item' dialog box is open, showing 'GHA VT01 - Kumasi' as the selected item. The dialog box has 'Cancel' and 'Validate' buttons.





## Getting other data – 2. Define (possibly) a date or a date interval

The screenshot shows the Flegt Watch web application interface. The 'Finder' tab is active, displaying search filters. The 'Date start' checkbox is checked and highlighted with a red box. The date range is set from 2019-02-01 to 2019-04-07. A large yellow circle on the map indicates the search area, and a smaller yellow rectangle highlights a specific location. The interface includes a menu, search bar, and various map controls.

Search filters:

- ☒ Area of interest (AOI)
- ☐ Minimum overlay (%)
- ☒ Date start
- ☐ Date stop
- ☐ Status
- Dataset
- ☐ Cloud Cover
- Limit

Search results table:

S	Dataset	Date	Properties
Search cancelled			

Map controls: 5 km scale bar, coordinates -1.59971, 6.77169, Data: Bing Maps.





## Getting other data – 3. Define dataset(s)

The screenshot shows the VisioTerra FlegtWatch web application. The 'Dataset' field in the 'Finder' tab is highlighted with a red box. The dropdown menu is open, showing the following options:

- ☒ ESA
  - ☐ Sentinel1A
  - ☐ Sentinel1B
  - ☒ Sentinel2A
    - ☒ MSI
    - ☐ MSIL2A
  - ☒ Sentinel2B
    - ☒ MSI
    - ☐ MSIL2A
  - ☐ Sentinel3A
- ☐ NASA
  - ☐ GPM
- ☐ VisioTerra
  - ☐ DEM
  - ☐ LULC

The background map shows a satellite view of a forested area with a yellow circle and a small yellow square. The interface includes various tabs like 'Missions', 'GFW', 'Base Maps', and 'Elevations'. The 'Dataset' field is highlighted with a red box.

Select  
Sentinel-2  
optical  
data





## Getting other data – 4. Launch “Search” and get result number

1. Adjust the max results
2. Launch “Search”
3. Press “Continue” or “Cancel”

The screenshot displays the Flegt Watch web application interface. The main window shows a satellite map of a forested area with a yellow circle indicating the search area. A search result dialog box is open, showing 'Found 7 result(s) for Sentinel2A/MSI' and 'Found 7 result(s) for Sentinel2B/MSI'. The 'Continue' button is highlighted with a red circle and the number 3.

A detailed inset shows the search settings panel on the left. The 'Finder' tab is active. The 'Area of interest (AOI)' is set to 'Temporary Geomet'. The 'Date start' is '2019-02-01' and 'Date stop' is '2019-04-07'. The 'Dataset' is 'S2A\_MSI ; S2B\_MSI'. The 'Limit' is set to '100' (highlighted with a red circle and the number 1). The 'Search' button is highlighted with a red circle and the number 2.

The bottom of the interface shows a status bar with '5 km' scale, coordinates '-1.59971, 6.77169', and a copyright notice '© Data : Bing Maps'.





## Getting other data – 5. Watch results (product footprint)

Screenshot of the Flegt Watch web application interface showing search results and a map view.

**Search Parameters:**

- Area of interest (AOI): ☒ Temporary Geomet
- Minimum overlay (%):
- Date start: 2019-02-01 00:00:00
- Date stop: 2019-04-07 23:59:59
- Status: Ready
- Dataset: S2A\_MSI ; S2B\_MSI
- Cloud Cover: 25
- Limit: 100

**Search Results Table:**

S	Dataset	Date	Properties
	S2B_MSI	2019-02-01 10:22:49	CCN=083%
✓	S2A_MSI	2019-02-06 10:22:11	CCN=021%
✓	S2B_MSI	2019-02-11 10:21:49	CCN=000%
	S2A_MSI	2019-02-16 10:21:11	CCN=006%
	S2B_MSI	2019-02-21 10:20:39	CCN=020%
✓	S2A_MSI	2019-02-26 10:20:21	CCN=000%
	S2B_MSI	2019-03-03 10:20:19	CCN=010%
	S2A_MSI	2019-03-08 10:20:21	CCN=048%
✓	S2B_MSI	2019-03-13 10:20:19	CCN=002%
✓	S2A_MSI	2019-03-18 10:20:21	CCN=045%
✓	S2B_MSI	2019-03-23 10:20:29	CCN=063%
✓	S2A_MSI	2019-03-28 10:20:21	CCN=078%
✓	S2B_MSI	2019-04-02 10:20:29	CCN=002%
	S2A_MSI	2019-04-07 10:20:21	CCN=077%

**Map View:** A satellite map showing a large yellow rectangular area of interest. A blue double-headed arrow below the rectangle indicates a width of 100 km. A yellow circle is centered within the rectangle, and a small yellow square is located within the circle. The map includes a scale bar (20 km) and coordinates (-1.56950, 6.39060).



## Getting other data – 5. Watch results (product information)

The screenshot shows the Flegt Watch web application interface. A list of datasets is displayed on the left, with a context menu open over the 'S2A\_MSI' entry. The context menu options are: 'Add to layer stack', 'Get information', 'Focus on product', and 'Prepare data'. A red arrow points from the 'Get information' option to the 'Get information' button in the 'Missions' tab. The 'Missions' tab is active, showing a table of missions. A detailed product information panel is open, displaying the following data:

Granule Id	S2B_MSIL1C_20190201T102249_N0207_R065_T30NXN_20190201T123206
Dataset Id	Sentinel2B/MSI
Date start	2019/02/01 10:22:49
Date stop	2019/02/01 10:22:49
Cloud cover	CCN=083%
Insertion date	2019/02/01 16:39:02
Processing status	Unprocessed
DHuS Ingestion date	2019/02/01 15:44:14
DHuS product link	<a href="https://scihub.copernicus.eu/dhus/odata/v1/Products('afcd0df5-7c5f-48bc-bccc-7200086df0cb')">\$value</a>
DHuS download link	<a href="https://scihub.copernicus.eu/dhus/odata/v1/Products('afcd0df5-7c5f-48bc-bccc-7200086df0cb')/\$value">https://scihub.copernicus.eu/dhus/odata/v1/Products('afcd0df5-7c5f-48bc-bccc-7200086df0cb')/\$value</a>

The background shows a satellite map of a coastal area with a yellow circle highlighting a specific location. The bottom of the interface includes links for 'Settings', 'Clear temporary display', and 'Help', along with a scale bar (20 km) and coordinates (-0.98722, 6.96464).





## Getting other data – 5. Watch results (quick-look)

1. Activate “Settings”
2. In “Show thumbnail” select “In a window”
3. Select a product to display its thumbnail (quick-look) in the window

The screenshot shows the Flegt Watch web application interface. The browser address bar displays <https://visiotterra.org/FlegtWatch/#>. The search bar contains the text "prise électrique ghana". The interface is divided into a left sidebar with navigation tabs (FlegtWatch, Finder, Missions, GFW, Base Maps, Elevations) and a main map area.

**Left Sidebar (Finder):**

- ☒ Area of interest (AOI)
- ☐ Minimum overlay (%)
- ☒ Date start: 2019-02-01 00:00:00
- ☐ Date stop: 2019-04-07 23:59:59
- ☐ Status: Ready
- Dataset: S2A\_MSI ; S2B\_MSI
- ☐ Cloud Cover: 25
- Limit: 100
- Search button

**Product List Table:**

S	Dataset	Date	Properties
	S2B_MSI	2019-02-01 10:22:49	CCN=083%
✓	S2A_MSI	2019-02-06 10:22:11	CCN=021%
✓	S2B_MSI	2019-02-11 10:21:49	CCN=000%
	S2A_MSI	2019-02-16 10:21:11	CCN=006%
	S2B_MSI	2019-02-21 10:20:39	CCN=020%
✓	S2A_MSI	2019-02-26 10:20:21	CCN=000%
	S2B_MSI	2019-03-03 10:20:19	CCN=010%
	S2A_MSI	2019-03-08 10:20:21	CCN=048%
✓	S2B_MSI	2019-03-13 10:20:19	CCN=002%
✓	S2A_MSI	2019-03-18 10:20:21	CCN=045%
✓	S2B_MSI	2019-03-23 10:20:29	CCN=063%
✓	S2A_MSI	2019-03-28 10:20:21	CCN=078%
✓	S2B_MSI	2019-04-02 10:20:29	CCN=002%
	S2A_MSI	2019-04-07 10:20:21	CCN=077%

**Map Area:**

- A yellow rectangle highlights a specific area on the map.
- A yellow circle highlights a specific product thumbnail within the rectangle.
- A red box highlights the "Show thumbnail" dropdown menu, which is set to "In a window".
- A red circle highlights the "Thumbnail" button in the top right corner.

**Bottom Left:**

- A red box highlights the "Settings" link.



Merci de votre attention.  
*Thank you for your attention.*

Questions ?



**VisioTerra**

Serge RIAZANOFF

Director

[serge.riazanoff@visioterra.fr](mailto:serge.riazanoff@visioterra.fr)

[www.visioterra.fr](http://www.visioterra.fr)