



Coca Assessment Team



# Illegal Coca Plantation Detection

● For prevention and global security

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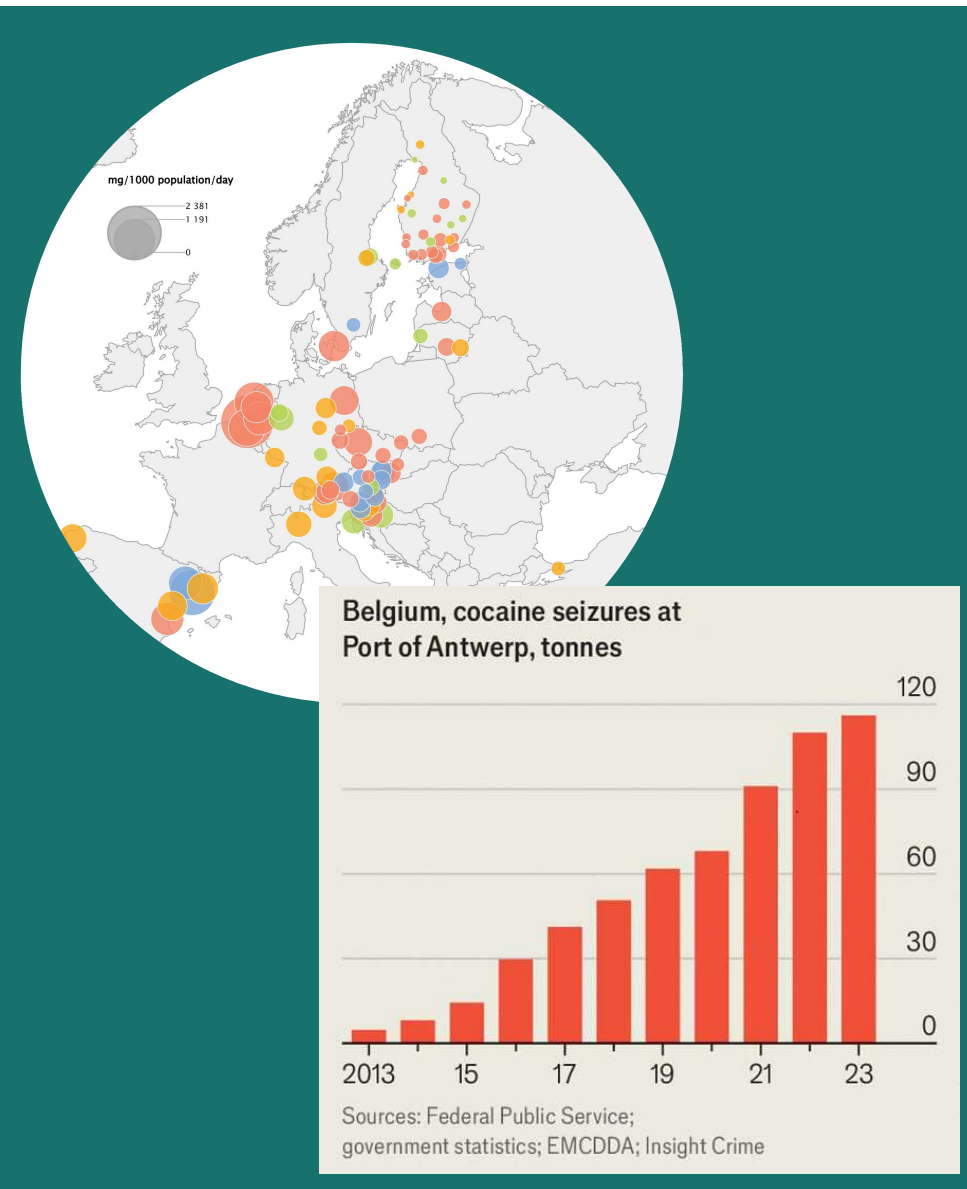
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CASSINI  
 EU SPACE

# The European Issue

- Rising cocaine residue in wastewater across major European cities<sup>[1]</sup>
- Increased drug-related gang violence<sup>[2]</sup>
- Increased strain on welfare and healthcare systems<sup>[3]</sup>



# The Brussels Times MAGAZINE

## How drug gangs took over Antwerp's port

Europe's cocaine trade is booming and the drug's gateway of choice is now the port of Antwerp. As the market has grown, so too have the drug gangs who find ever more ingenious ways to smuggle it in, often confounding the stretched Belgian authorities.

Wednesday 21 February 2024



Flowers laid at the location of where an 11-year-old girl was killed in Merksem, Antwerp in January 2023

# The European Issue

BBC

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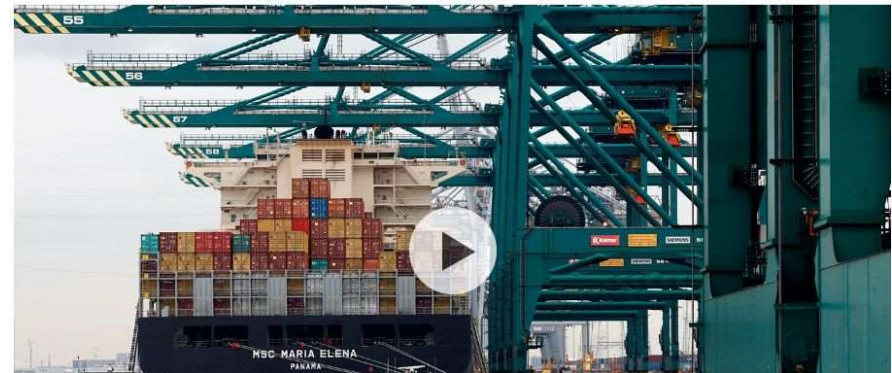
## Antwerp drugs: Record seizures at Europe's 'cocaine capital' port

17 January 2024

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Nick Beake

BBC Europe correspondent in Brussels



# Distant Source

- Coca production in Colombia alone is estimated to have increased by 53 % in 2023<sup>[4]</sup>
- 60 % of global supply of cocaine comes from Columbia alone<sup>[5]</sup>
- €10 Billion Illegal Industry<sup>[6]</sup>

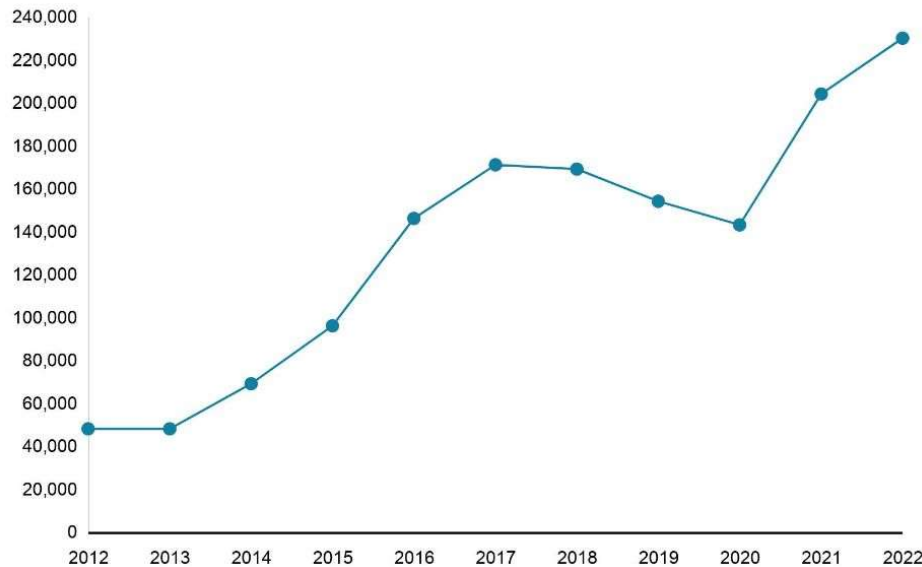




# Distant Source

## Coca cultivation in Colombia

● Coca cultivation in hectares



[7]



Office on Drugs and Crime

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### PRESS RELEASE

## Colombia: Potential cocaine production increased by 53 per cent in 2023, according to new UNODC survey

Bogotá, 18 October 2024

Cultivation of coca bush in Colombia increased by 10 per cent in 2023 to 253,000 hectares, while potential cocaine production reached 2,664 metric tons, according to a new survey released by the UN Office on Drugs and Crime (UNODC) today.

This represents a potential 53 per cent increase in cocaine production over 2022 and marks the 10th consecutive year (since 2013) that estimates of potential cocaine production have risen in the country.

BBC

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## Colombia cocaine: Coca cultivation reaches record high

12 September 2023

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Vanessa Buschschlüter  
BBC News



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## Colombian coca leaf farming hit two-decade high in 2023, UN says

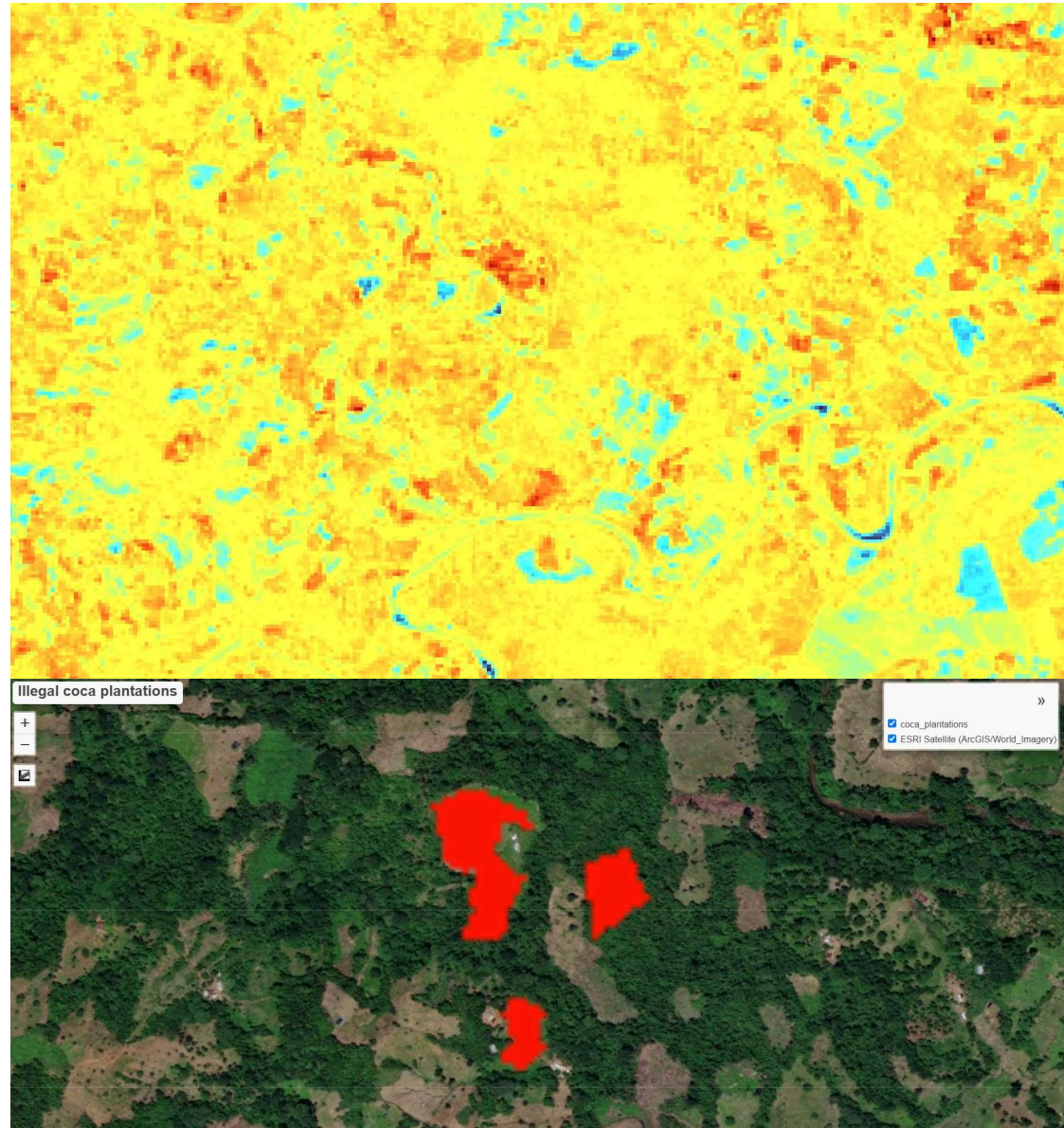
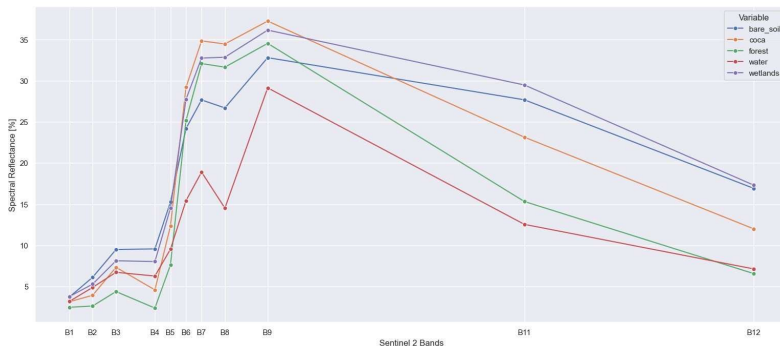
By Luis Jaime Acosta

October 19, 2024 1:29 AM GMT+2 · Updated a month ago

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# Our Solution

- In-Time coca plantation detection with Sentinel-2 data
- Spectral index tweaked for the unique properties of the coca plant
- Time-series based prediction for modeling coca growing patterns using LLMs



# CocaMonitor

## Our Product

- Platform for early detection of illegal coca plantations
- In-time monitoring
- Verification of international treaties
- Recultivation consulting



## BRIEFING



### EU cooperation with Latin America: Combating drug trafficking in the Andean region

#### SUMMARY

The global supply of cocaine is at record levels: in just six years (from 2014 to 2020), cocaine production doubled and led to a 416 % increase in the European cocaine market. Almost all cocaine produced comes from the Andean region: With 61 % of total production, Colombia remains the world's biggest cultivator of coca, followed by Peru (26 %) and Bolivia (13 %).

Political instability experienced in Andean countries in recent years goes hand in hand with a worsening public security situation and rising cocaine supplies. There has been a dramatic security deterioration, particularly in Ecuador, where the homicide rate rose from 13.7 per 100 000 people in 2021 to about 45 in 2023, placing Ecuador among the top three most violent countries in Latin America.

Illicit drug trafficking is also affecting the EU as never before. In 2021, EU Member State authorities seized 303 tonnes of cocaine – the highest ever amount of cocaine confiscated in Europe. Today, the drug trade orchestrated by organised crime poses one of the most serious security threats to the EU. Almost 40 % of the criminal networks active in the EU are involved in the illegal drugs trade. Some 50 % of all homicides in Europe are connected to drug trafficking.



# CocaMonitor

- Facilitation of international cooperation
- Improves efficiency of foreign funds allocation
- Addressing the root cause
- Reduces resource expenditure in affected countries

## Our Partners





# Team



**JÁCHYM ČERNÍK**

GIS



**MATYÁŠ THÉR**

Software  
Development



**KRISTÝNA ANTOŠOVÁ**

Remote Sensing



**FRANTIŠEK MACEK**

Spatial Data



**ELIŠKA POSPĚCHOVÁ**

Research



**VÍT KADLEC**

Finance



# Sources

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2. Cocaine and crack cocaine: a growing public health issue | [www.euda.europa.eu: https://www.euda.europa.eu/html.cfm/index44746EN.html\\_en](https://www.euda.europa.eu/html.cfm/index44746EN.html_en) (24. 11. 2024).
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# THANK YOU

● **FOR YOUR ATTENTION**

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