



eyes on plastic

GEOAWESOMENESS MEET-UP MUNICH | 29 Feb 2024

Stefan Mühlbauer, Constantin Sandu, Mostaan Nabi, Eva Haas



detect more.



SPACE SOLUTIONS

WHO IS EOMAP?



Private high-tech company



Focusing on satellite data analytics and software solutions



Specialised on aquatic environments



Serving engineering companies, governments, inter-governmental organizations and academia



International team of +45 employees from +10 countries



HQ in Germany with offices in USA, Australia, Dubai

Konferenz der Vereinten Nationen für ein internationales Plastikabkommen in Nairobi

Stand: 19.11.2023 18:28 Uhr

Konferenz der Vereinten Nationen für ein internationales Plastikabkommen in Nairobi



tagesschau24, 19.11.2023 15:00 Uhr

Plastikverschmutzung im Meer

»Unsichtbare Todesfallen« – Bundesregierung will Geisternetze bergen

Sie treiben ewig in den Ozeanen und sind für viele Meeresbewohner, die sich darin verstricken können, eine tödliche Gefahr: verlorene oder illegal entsorgte Netze der Fischerei. Die Politik gelobt, nun aufzuräumen.

13.11.2023, 07:18 Uhr

Artikel zum Hören • 3 Min



Bildtext Foto: Eine Meeresschildkröte hat sich in einem »Geisternetz« verheddert. Foto: dpa/Anwar M.

The New York Times

OPINION
GUEST ESSAY

Reducing Plastic Pollution in Our Oceans Is Simpler Than You Think

May 25, 2023

Plastikmüll in den Ozeanen



Süddeutsche Zeitung

Nanopartikel

Gefährlicher als Mikroplastik?

Winzige Rädertierchen zersetzen Mikroplastik in bisher kaum erahntem Umfang zu Nanopartikeln. Für die Umwelt und die Gesundheit von Menschen könnte das zum Problem werden.

16.11.2023 Von Sina Metz



Wie kleine Kügelchen zum großen Problem werden

Eine Rezension von Fritz Habekuß

Aktualisiert am 18. Januar 2024, 16:26 Uhr • 112 Kommentare



Stop all'inquinamento da plastica, al via il secondo vertice mondiale

di Cristina Nadotti

Il 29 maggio a Parigi si apre la nuova fase dei negoziati per rendere esecutiva la risoluzione Onu che indica il 2040 come termine ultimo per affrontare uno dei maggiori problemi ambientali. Come per le Cop, le divergenze tra Nord e Sud del mondo

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The Guardian

Plastics

January 2024



EU will force cosmetic companies to pay to reduce micropollutants

Draft rules follow the 'polluter pays principle' and will mean companies cover 50% of extra clean-up costs

29 Jan 2024



REDcycle's collapse and the hard truths on recycling soft plastics in Australia

29 Jan 2024



Key climate language poorly understood by majority in UK, poll finds

24 Jan 2024

The alternatives
It gets your stomach churning: the team wading through nappies to clean up Bali's waterways

17 Jan 2024

Seascapes: the state of our oceans
The nurdle hunters: is combing UK beaches for tiny bits of plastic a waste of time?

17 Jan 2024

Chennai Corporation removes 100 tonne of plastic waste from beaches, estuaries

Omjasvin M D / TNN / Dec 22, 2023, 14:45 IST

SHARE COMMENT AA FOLLOW US



THE TIMES OF INDIA

Envases plástico

ESTER PASANANDI GRAMMYS GUERRA GAZA ACTUALIDAD POLITICA UKRAINA CIS EL SALVADOR CHILE JUJICO ALVES BANCO SANTANDER BENDORN FEST TAYLOR SWIFT LAUSA

VERTIDO PELLETES

La crisis de los 'pe' pone en el punto de invasión planetaria plástico

EL PAÍS

EL PERIÓDICO GLOBAL

Kunststoffe

Scharfe Kante gegen Plastikmüll



Die Presse

01.02.2024 um 06:42

von Michael Lohmeyer

folgen

f t e a+

Speichern

Drucken

Vorlesen

EL PAÍS

Climate

ENVIRONMENT >

Objective: Putting a stop to plastic

By the end of 2024, the planet should have the first treaty to combat pollution from this material, which each year accounts for more than 20 million tons dumped into nature. But the big producers are not going to make it easy



Groundbreaking plastic pollution treaty moves closer after Paris talks, despite fractured reactions

After a week of intense negotiations, a mandate was given to the Intergovernmental Negotiating Committee to prepare a first draft text on cutting the world's plastic pollution before the end of the year.

By Stéphane Mandard

Published on June 3, 2023, at 5:38 pm (Paris) • 3 min. - Lire en français

Le Monde



Most of the **plastic litter** in oceans comes **from land**

Focus on rivers, estuaries and **coastal zones** to identify hot spots of plastic accumulation

UN resolution adopted to hold member nations legally accountable for their contributions to the global plastic pollution crisis – treaty planned for **2024**

Mapping and **monitoring** of (aquatic) plastic litter will be **mandatory**



PLASTIC IN SATELLITE IMAGERY



Planet Dove, 02.01.2024

Manila

PLASTIC IN SATELLITE IMAGERY

Planet Dove, 02.01.2024

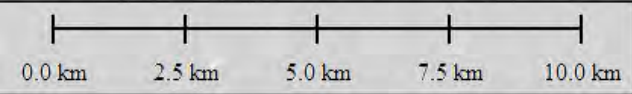


PLASTIC IN SATELLITE IMAGERY



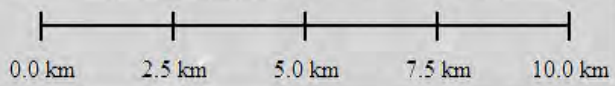
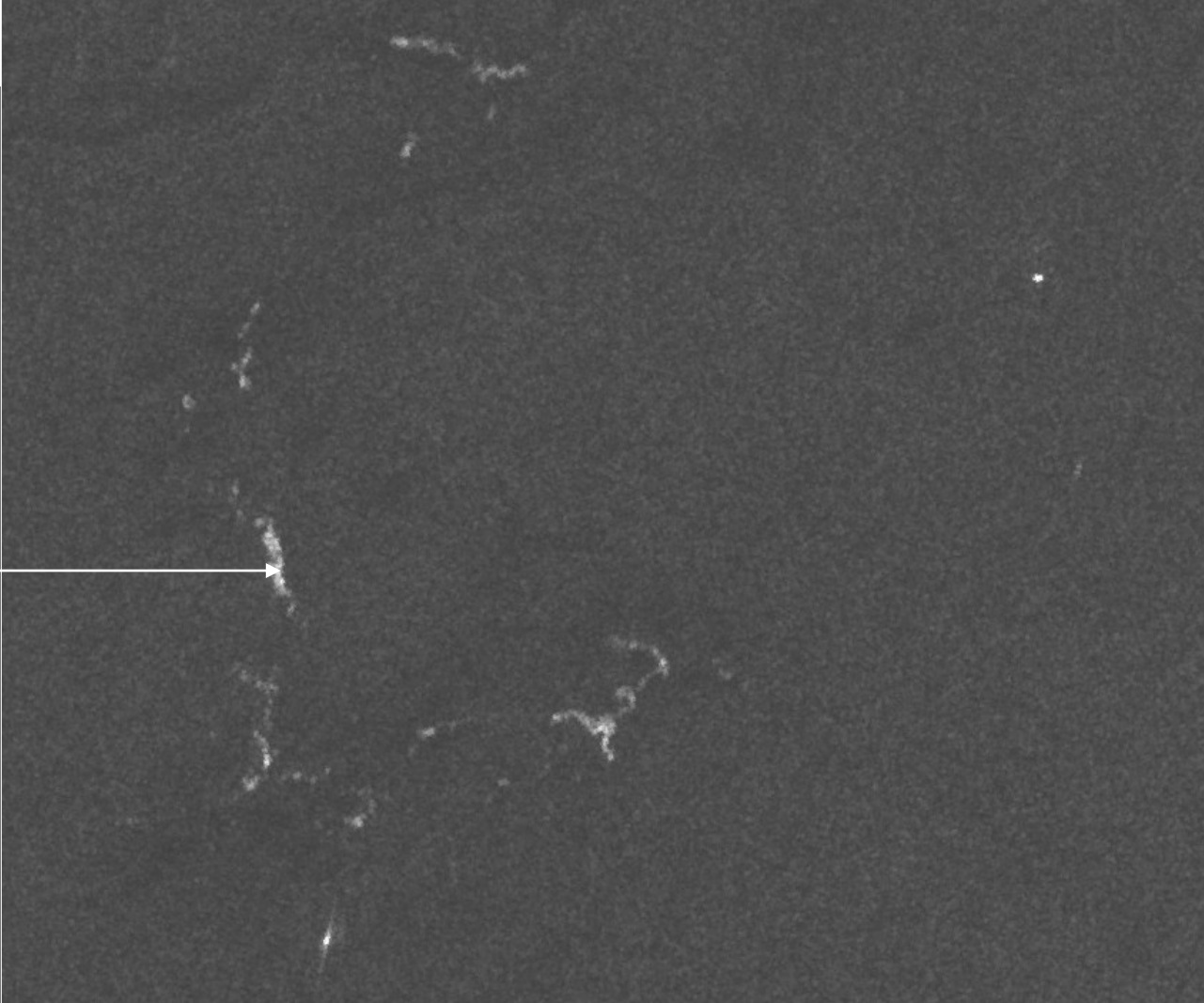
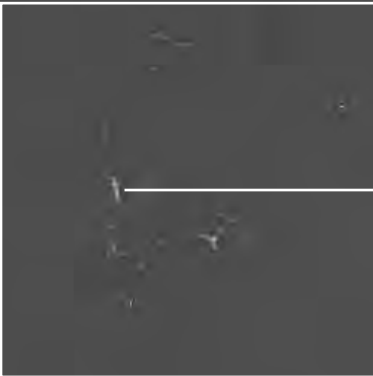
Sentinel-1, 08.10.2023

Manila



PLASTIC IN SATELLITE IMAGERY

Sentinel-1, 08.10.2023





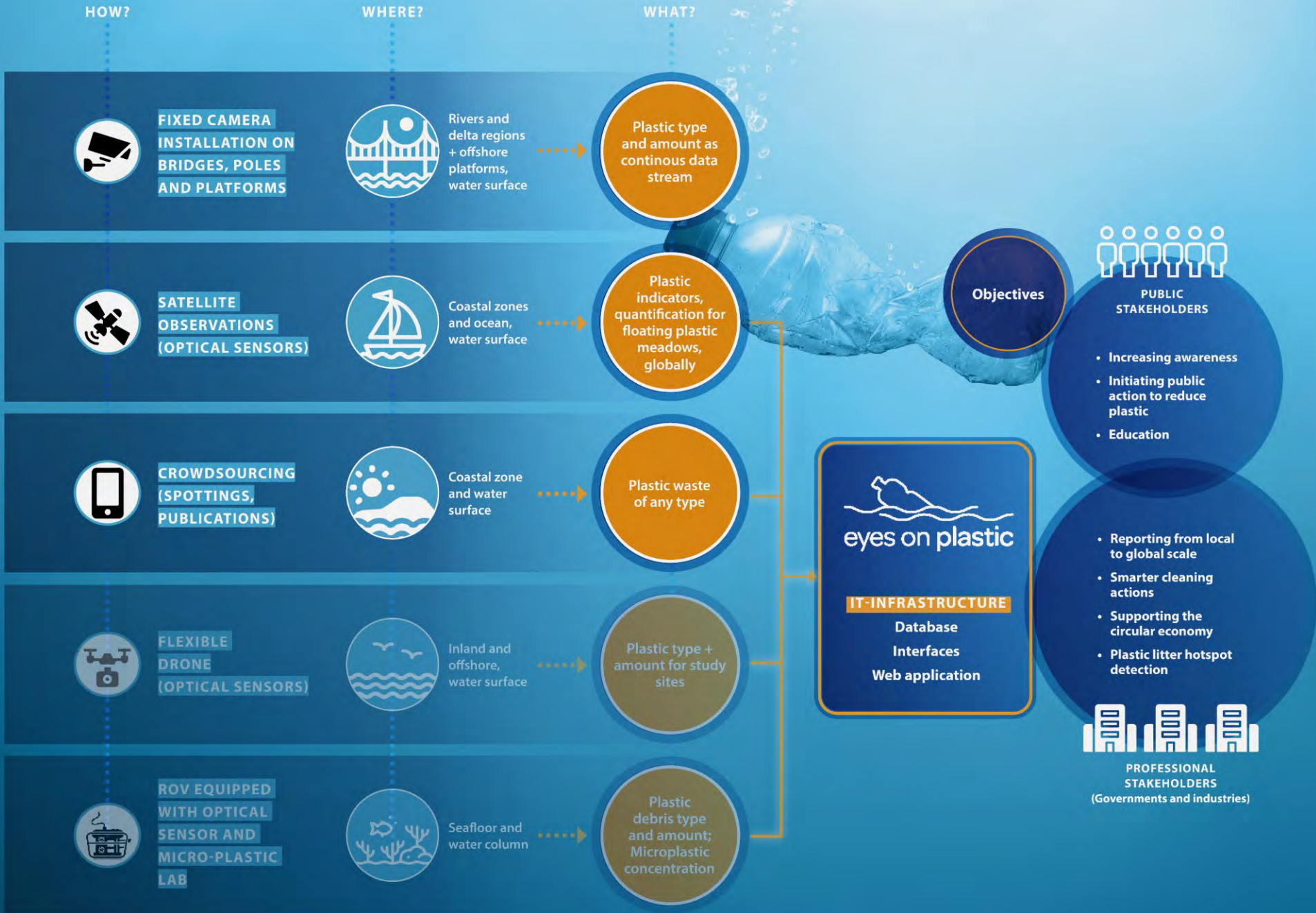
Rivers, coastal zones and ocean, water surface



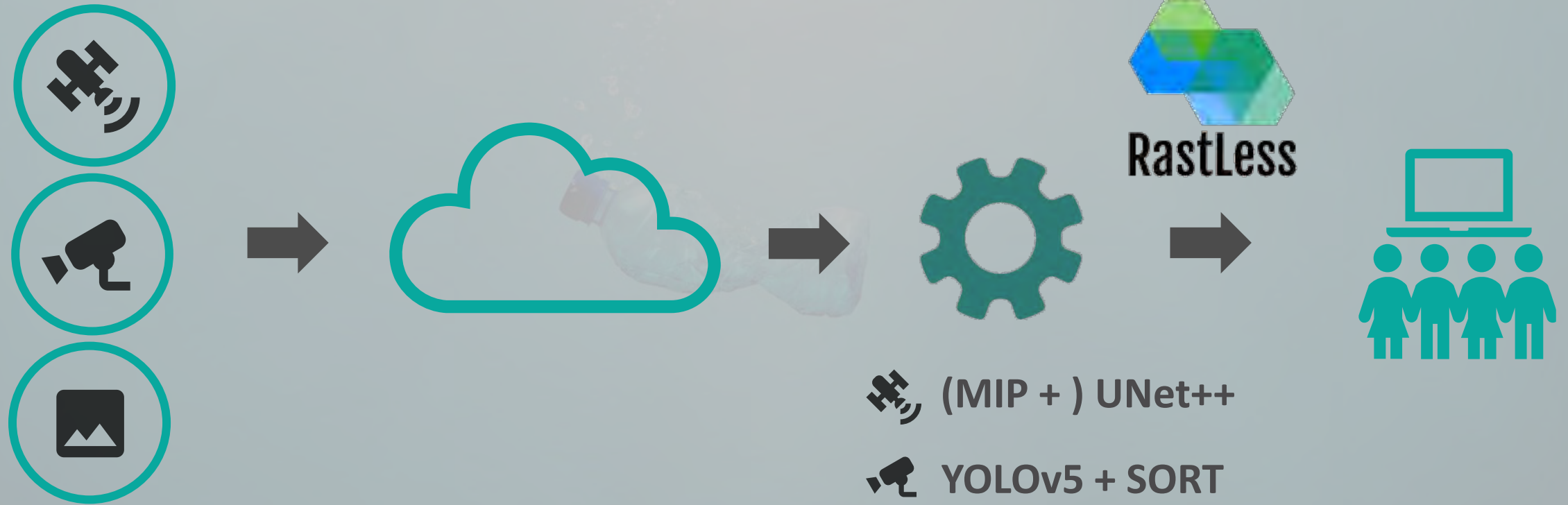
Increasing awareness
Initiating public action to reduce plastic
Education

Reporting from local to global scale
Smarter cleaning actions
Supporting the circular economy
plastic litter hotspot detection

Flying high, diving deep
Eyes on Plastic combines multiple technical components into a joint mapping and monitoring solution for plastic in the aquatic environment.



HOW IT WORKS





Photo

Recorded on: 2023-08-13

Coordinates: 40.0622, 19.7940

By: Stefan

Macro Plastic

Plastic litter close to a beautiful beach at an abandoned house



Publication

Coordinates: 14.1579, 100.5029

By: Stefan

Title:

Detection of River Plastic Using UAV Sensor Data and Deep Learning

Description:

Macro Plastic

Date of Publication:

Journal:

Remote Sensing

Link: [Link](#) Doi: [Doi](#)

Public media

Coordinates: 4.1766, 73.5095

By: Knut

Title:

Maldives Plastic Pollution – How Is it Affecting the Islands?

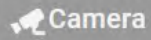
Doi:

[Link](#)

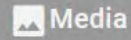
Jakarta, Indonesia

Overview

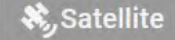
Data in this region



Detect macroplastic



Detect macroplastic

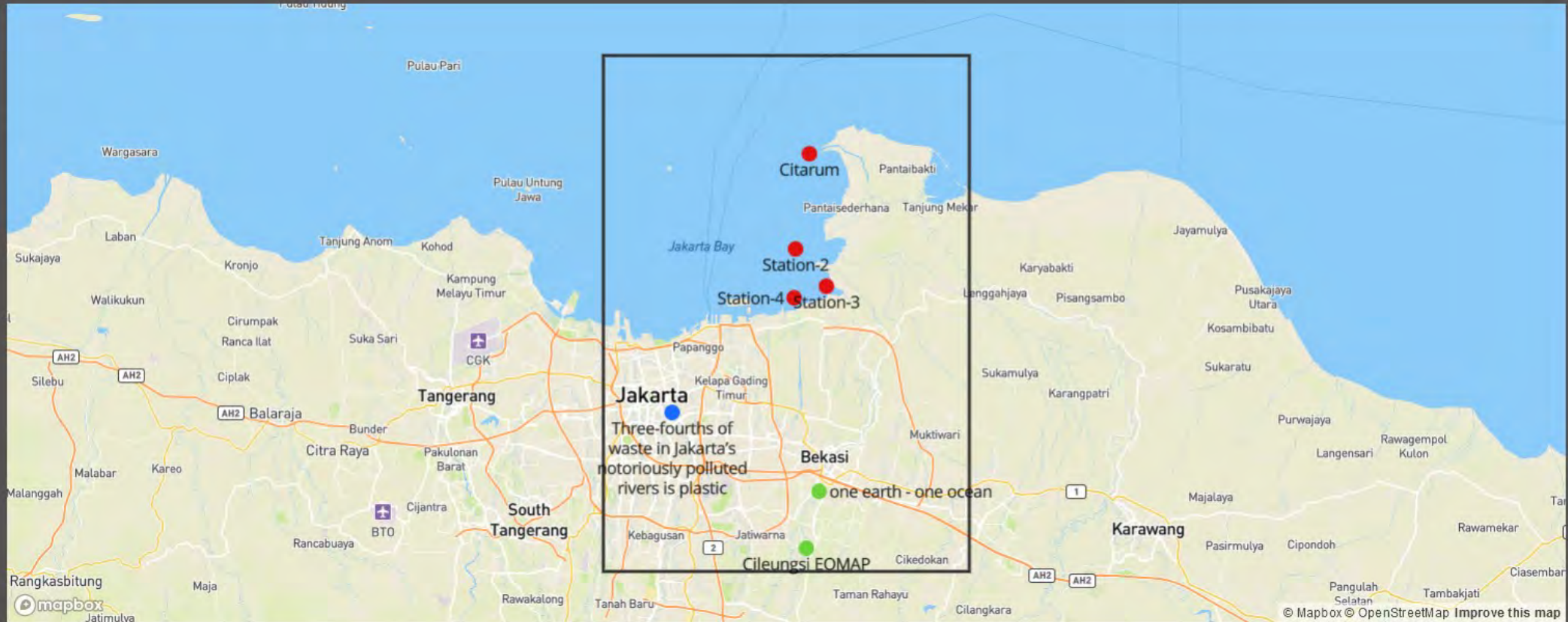


Satellite analysis

Camera stations

Media stations

Satellite stations



Jakarta, Indonesia

Overview

Data in this region

Camera

Detect macroplastic

Media

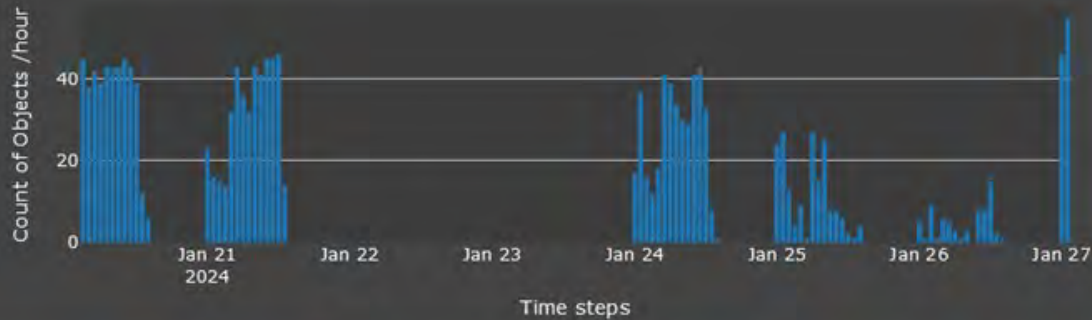
Detect macroplastic

Satellite

Satellite analysis

Detections: Cileungsi EOMAP

SHOW ALL DATA



0:00 / 14:02



PLASTIC DETECTION IN CAMERAS

CILEUNGSI RIVER, INDONESIA (Source: EOMAP)



CNN YOLOv5



SORT

Jakarta, Indonesia

Overview

Data in this region

Camera

Detect macroplastic

Media

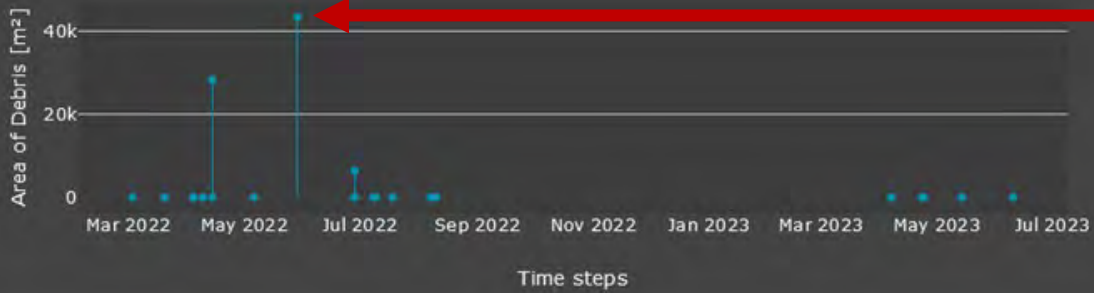
Detect macroplastic

Satellite

DEBRIS FLOWS

TURBIDITY

Detected debris flows



Current timestep

2022-05-29T03:19:47

Satellite image

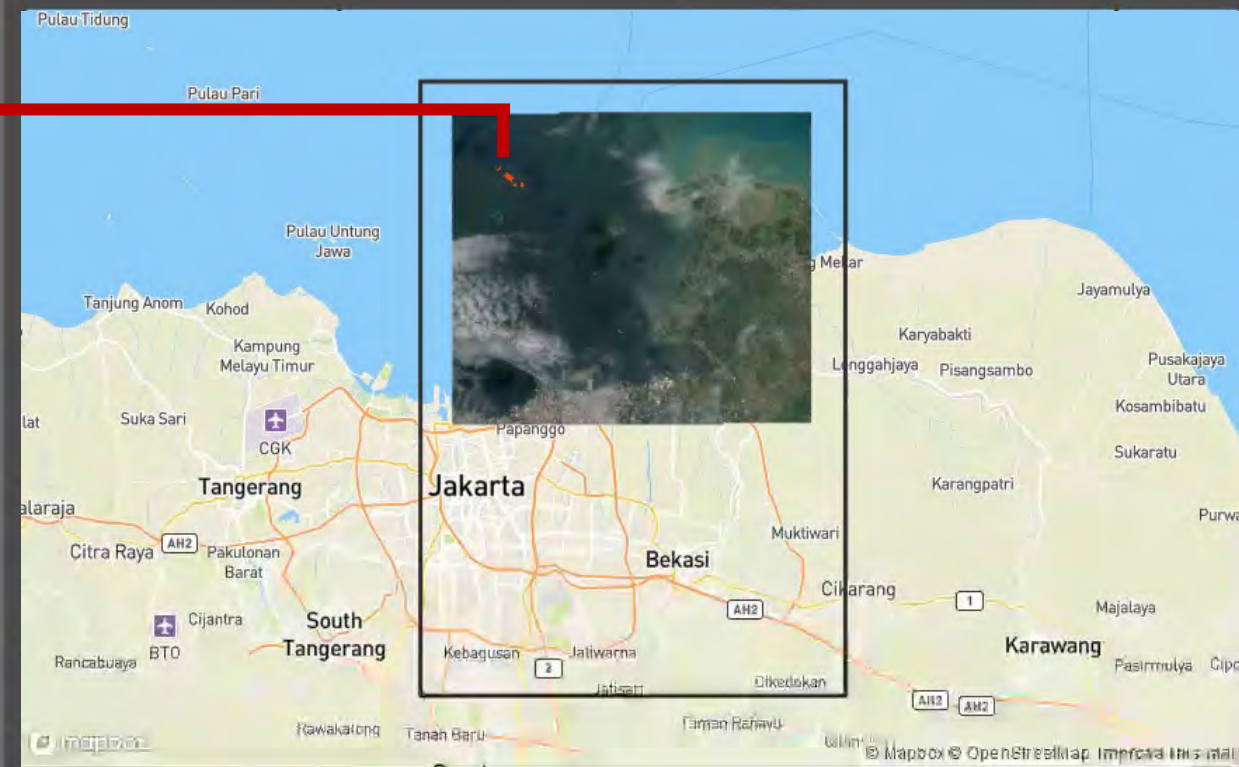
Sensor: SENT2

Resolution: 10

Detected Debris flows

Count: 4

Area: 43387.82m²



2022-05-29T03:19:47

KEY DRIVERS for Eyes on Plastic



UN environment assembly

#BEATPOLLUTION

TOWARDS A POLLUTION-FREE PLANET

UNEA RESOLUTION 5/14

3 GOOD HEALTH AND WELL-BEING

12 RESPONSIBLE CONSUMPTION AND PRODUCTION

14 LIFE BELOW WATER

Towards a plastic-less society

eyes on plastic

Growing circular economy

Proof of concepts

Regional cleaning activities

OUTREACH



Thank you for your interest in
new solutions for a plastic-less society!



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eomap.com

