

CITIZEN SCIENCE
FOR THE AMAZON



AMAZON
WATERS

Citizen Science for the Amazon Project: ... from local community monitoring to citizen action through the Amazon Basin

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AMAZONIA

The Human Impact

People have lived in Amazonia for at least 13,000 years. About 34 million live there today. Human activity over the past century—mining, logging, cattle ranching, agriculture, oil and gas drilling—has put unsustainable pressures on its ecosystems. The good news: Protected areas are increasing, as are efforts to curb deforestation. Experts say the key to long-term success will be managing Amazonia as an integrated natural system. The health of the region—and the world's ability to cope with climate change—will depend on it.



RESOURCES

Minerals
Amazonia is rich in minerals, including gold, copper, and iron ore. Large mining areas are located, not in parcels of the region, many of them in the heart of the rain forest. They are protected with controversial laws in mining and deforestation.

Oil and Gas

With its abundant natural gas and oil, Amazonia is becoming a major energy source. Large oil and gas fields are located in the heart of the rain forest. They are protected with controversial laws in mining and deforestation.

Mineral Model
In production
Under exploration
Planned or potential

Oil and Gas Model
In production
Under exploration
Planned or potential



ALTERED LANDSCAPE

Fire
Fire is the largest threat to the rain forest. It is used to clear land for agriculture, cattle ranching, and logging. It is also used to create new land for agriculture, cattle ranching, and logging.

Deforestation

Human activity has altered more than 10 percent of Amazonia's rain forest. The largest areas of deforestation are in the heart of the rain forest. They are protected with controversial laws in mining and deforestation.

Deforestation Model
In production
Under exploration
Planned or potential

13,000
Archaeologists say that people have lived in Amazonia for at least 13,000 years. The earliest human occupation was in the heart of the rain forest. They are protected with controversial laws in mining and deforestation.

8+1
Amazonia spans eight South American countries—Brazils, Colombia, Ecuador, Guyana, Peru, Suriname, and Venezuela—and the English-speaking French Guiana. That makes oversight and coordination complicated at best.

87%
Most prime lands in the Amazon basin are still in the hands of indigenous peoples. They are protected with controversial laws in mining and deforestation.

164,000
There are an estimated 164,000 indigenous peoples in Amazonia. They are protected with controversial laws in mining and deforestation.

25%
Amazonia is a huge carbon sink. It is still a net carbon sink, but it is losing its ability to absorb carbon. It is protected with controversial laws in mining and deforestation.

223,000
There are an estimated 223,000 small farms in Amazonia. They are protected with controversial laws in mining and deforestation.

-70%
Small farms are the largest threat to the rain forest. They are protected with controversial laws in mining and deforestation.



Managed Areas
There are 715 protected natural areas in Amazonia. They cover 1 percent of the region's area. They are protected with controversial laws in mining and deforestation.

Managed Areas Model
In production
Under exploration
Planned or potential

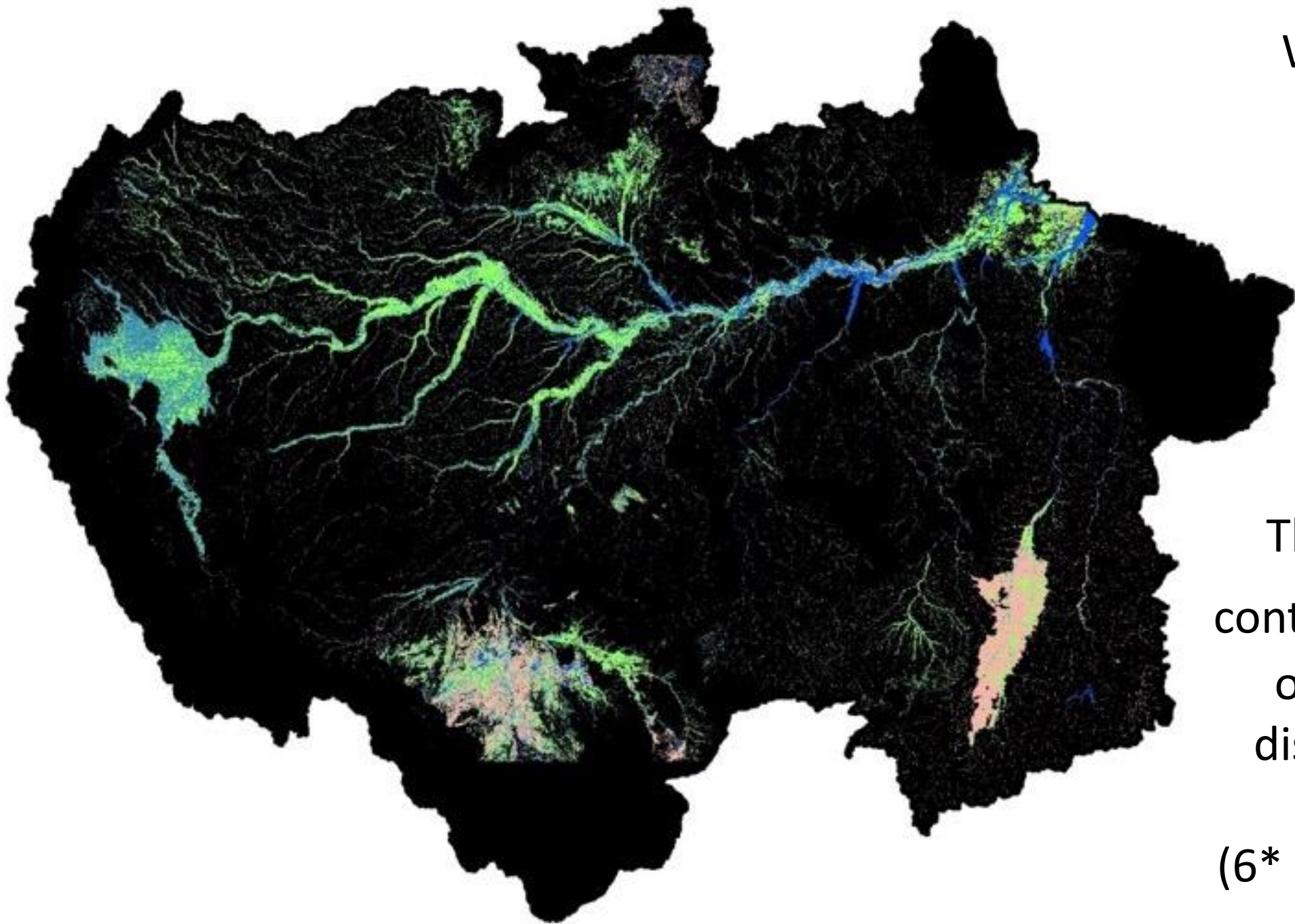
Map Key

LAND COVER
Low density forest
High density forest
Agriculture
Urban
Water
Barren

ROADS
Feeder
Main
Expressway
Interstate
Trans-Amazonian

BOUNDARY
Political
Ecological
Cultural
Linguistic
Religious
Economic
Social
Political
Ecological
Cultural
Linguistic
Religious
Economic
Social

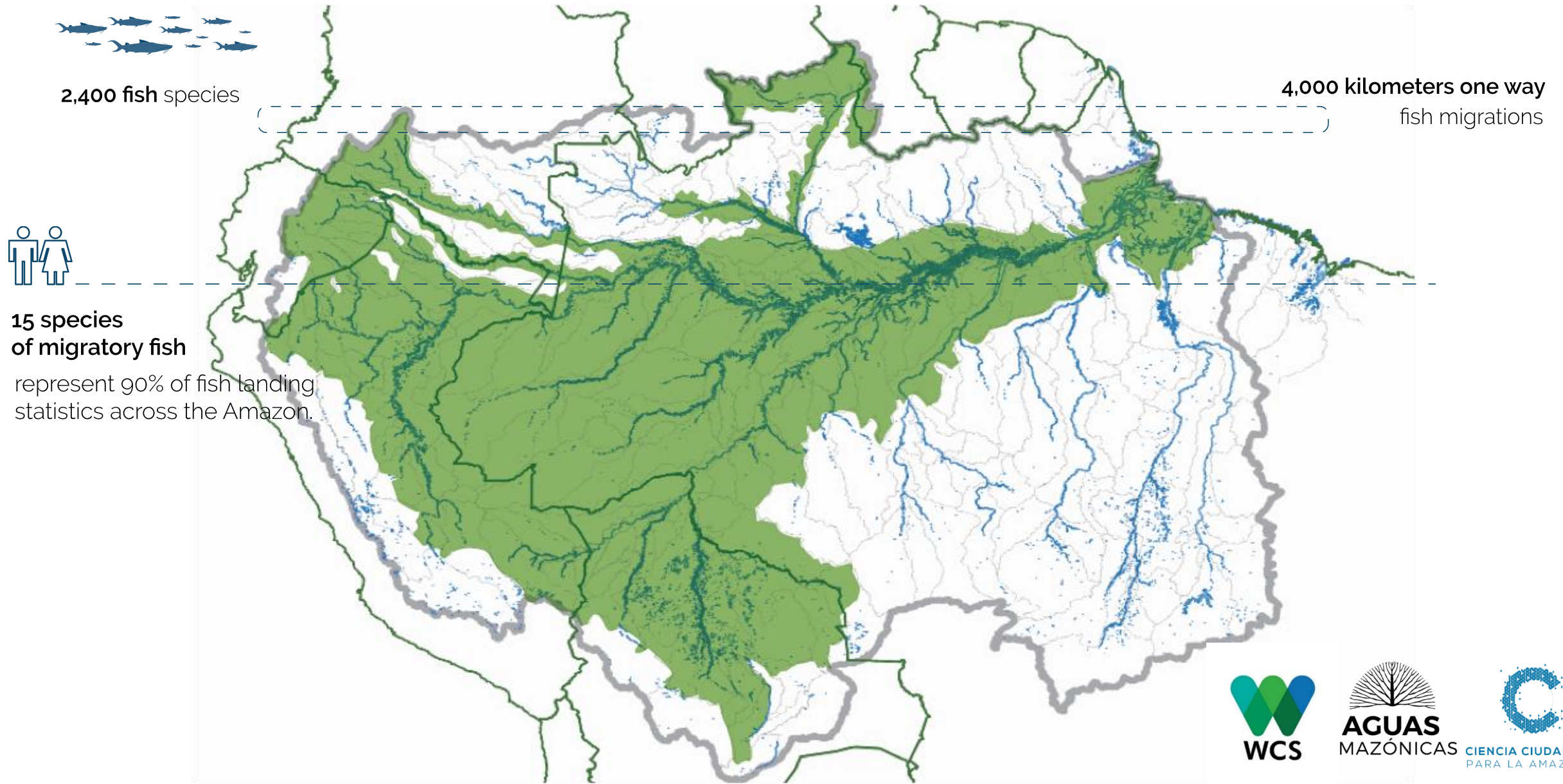
SCALE
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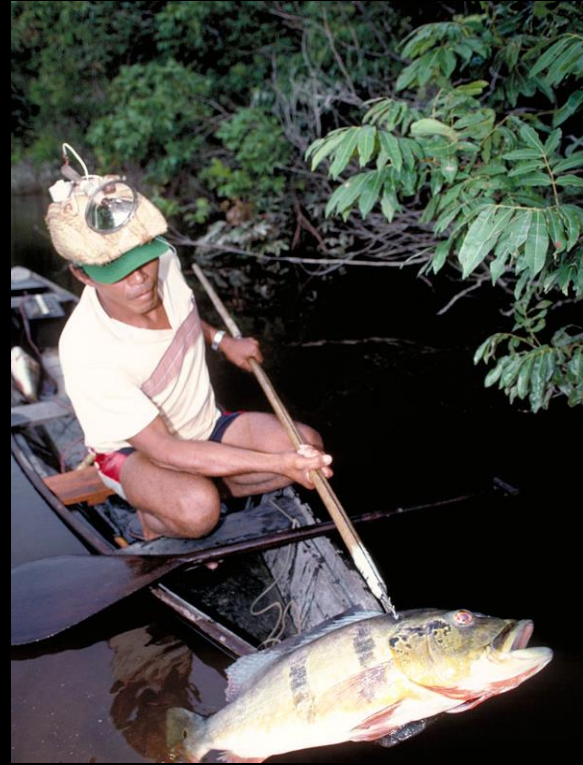
Wetlands cover
14% of the
Amazon Basin

The Amazon River
contributes with **15%**
of all freshwaters
discharged into the
oceans
(6* the second largest)

Migratory Fish: connecting ecosystems and people across the Amazon



Fisheries in the Amazon





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PURPOSE

To address critical
information gaps

To inform,
strengthen capacities
and empower citizens


To inform decisions for
Amazon conservation and
sustainable development

Framing question:

Where and when do fish migrate in the Amazon Basin and what environmental factors affect these migrations?



× Barbado Other names




Number 1654 Weight 22 kg

Required Total kg

Notes
Largest one I've seen in three months

Photos



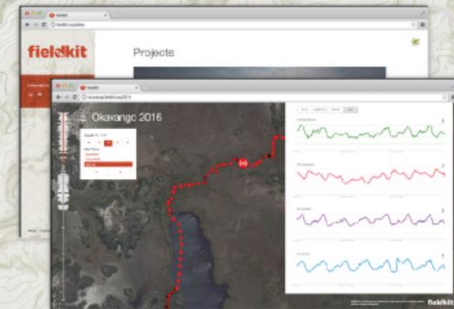
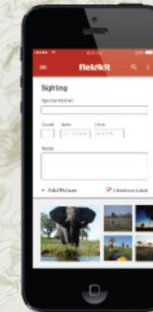
DONE

fieldkit.org

1. Modular
Hardware
Framework

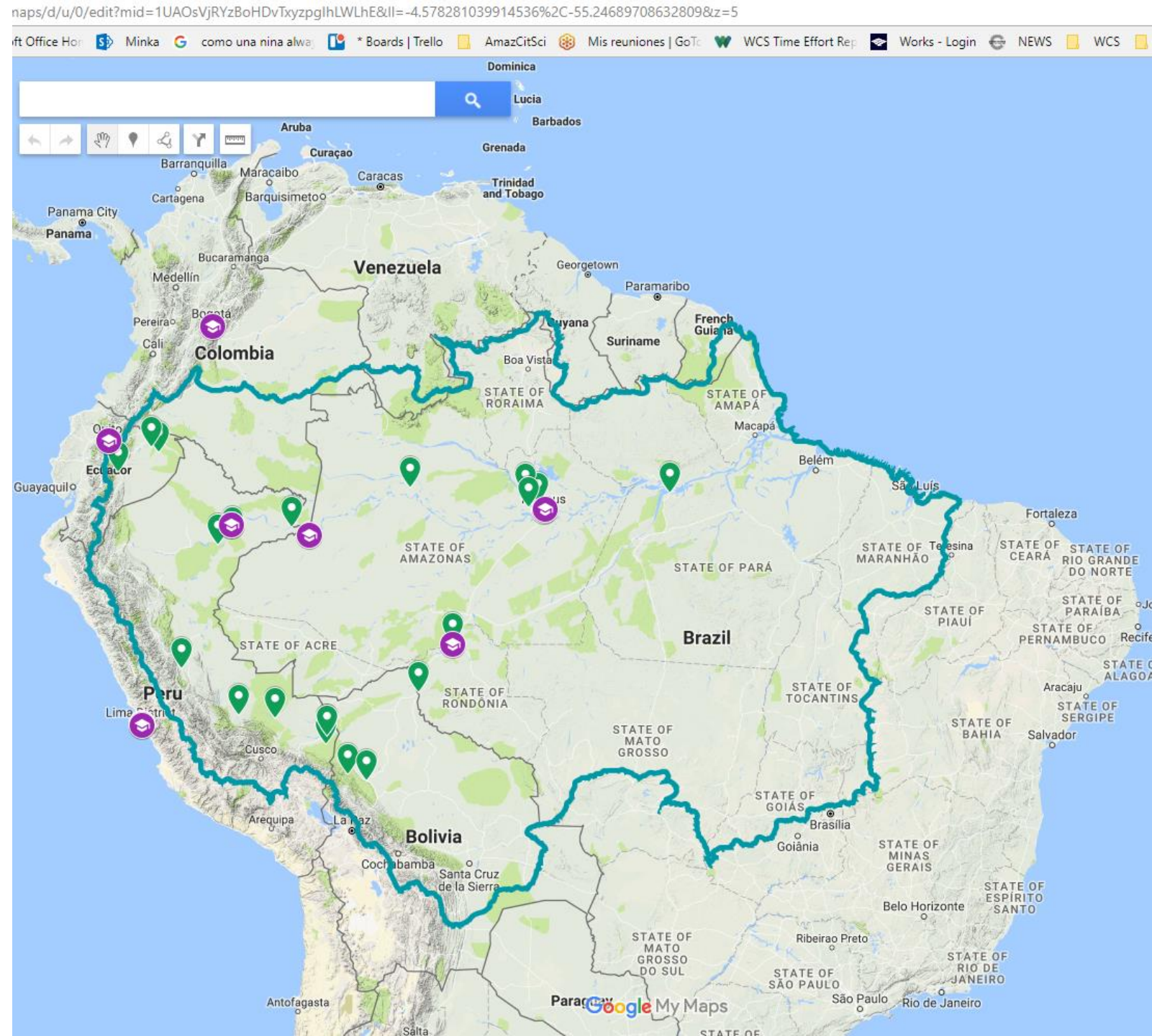
2. Field collection
& Sensor control
app

3. Data storage,
management
& sharing platform



We collaborate with:

- 16+ local organizations in 16 pilot sites
- 10+ universities or research centers
- 3 innovation technology labs
- 4 government agencies
- 8 countries
- 4 Amazon networks



THANK YOU!

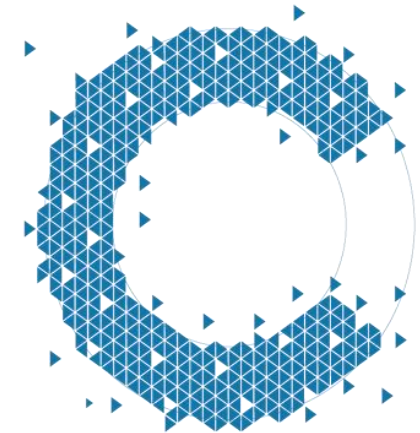
Partners



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In collaboration with:



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