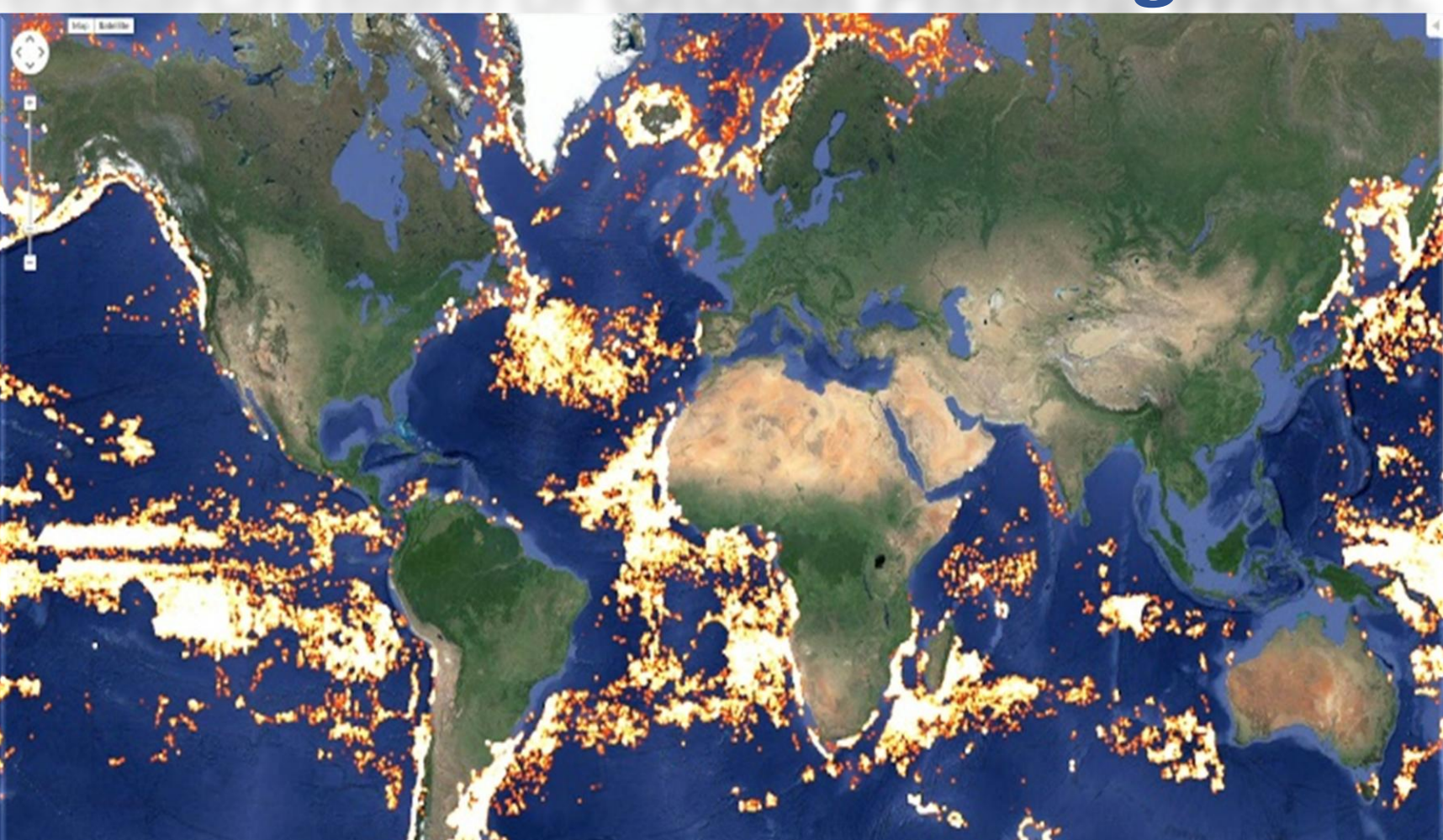


Predictive AI saves our planet

How AI can stop illegal overfishing?

*'It's estimated that illegal or unregulated fishing is as much as **20%** of what's caught globally' says David Kroodsma, head of research team of **Global Fishing Watch**.*



National Geographic map of overfishing

How will satellite imagery be used to predict overfishing before it occurs?

By utilizing PAI with historic **satellite imagery data** (image identified illegal vessels due to: boat size, net size and time of fishing etc.) - this project will develop a system capable of **predicting** and **detecting** illegal fishing activities **before** they occur.

Scan this QR code for a more detailed information on our project...



Scan this QR code for our project video!



How is Predictive AI going to stop illegal fishing?

This project aims to use the power of **Predictive AI (PAI)** to combat **illegal fishing**, a growing global issue that threatens marine ecosystems and sustainable fisheries. We believe PAI has the potential to **monitor**, **predict** and **prevent** all illegal fishing in the world with minimal human input.

Illegal Fishing Prediction System
Enter search criteria (leave blank if not applicable):
Enter vessel ID:
Enter Longitude:
Enter Latitude:
Enter Timestamp (YYYY-MM-DD HH:MM:SS):

Result:				Our PAI model	
vid		timestamp	...	distance	
8	20	2020-03-09 11:01:00	...	...	0.56804
13	26	2024-09-15 06:40:00	...	24	0.60104
14	61	2020-06-01 06:40:00	...	35	0.57441
16	65	2024-01-30 10:49:00	...	29	0.60131
22	86	2021-01-17 03:56:00	...	...	...
...	...	...	...	...	...
989	18	2023-01-05 02:56:00	...	77	0.59230
990	5	2020-06-05 07:59:00	...	20	0.58899
993	12	2023-02-25 11:25:00	...	42	0.55646
994	75	2024-05-24 05:37:00	...	73	0.56585
997	48	2021-05-08 03:47:00	...	14	0.55749

[226 rows x 7 columns]

We created a mock data set where we didn't know if boats were illegal or not and our AI generator (**random forest generator**) gave us a prediction of 226/1000 being illegal, based off the training data target features. With the ability to analyze large amounts of data, the AI system will inform authorities (**Coast guards, Sea Shepards**), when the PAI recognizes a **pattern** or **trend** in the past satellite data. This means there'll be increasingly efficient fishing **regulation** and ultimately our idea can **preserve marine biodiversity** for future generations.

Overall, our idea of PAI running through satellite data in the fishing industry has great potential and could change the way we regulate our oceans, preserving the only world we have and the beautiful life within it.