

S Sea Serpent

Our Team: Oceans Inside



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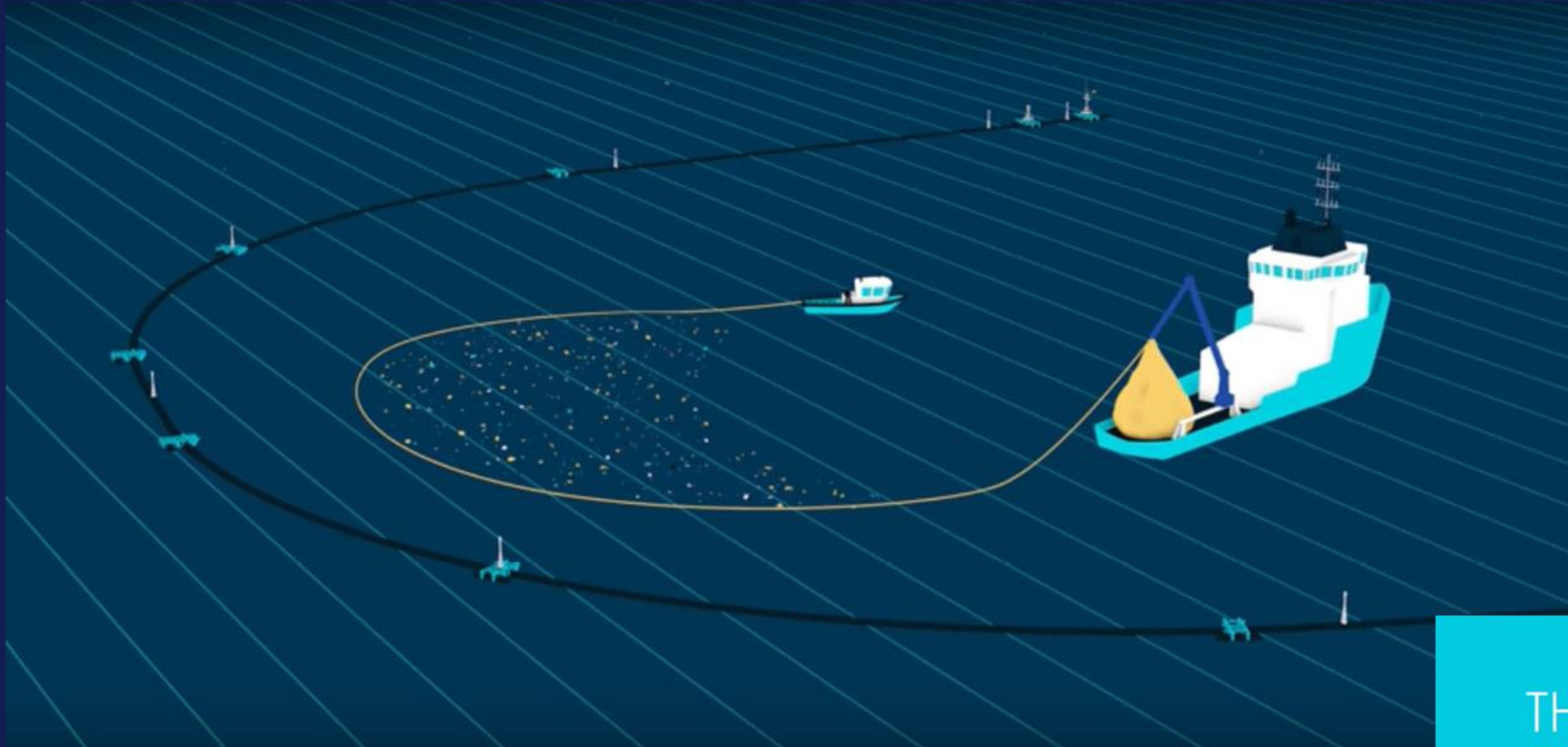
The issue we're tackling



Trash Cleanup Earth's Oceans

Removing plastics from the ocean is an urgent need before they degrade into smaller pieces that can be easily eaten by animals, affecting the whole food chain.

Reference technology

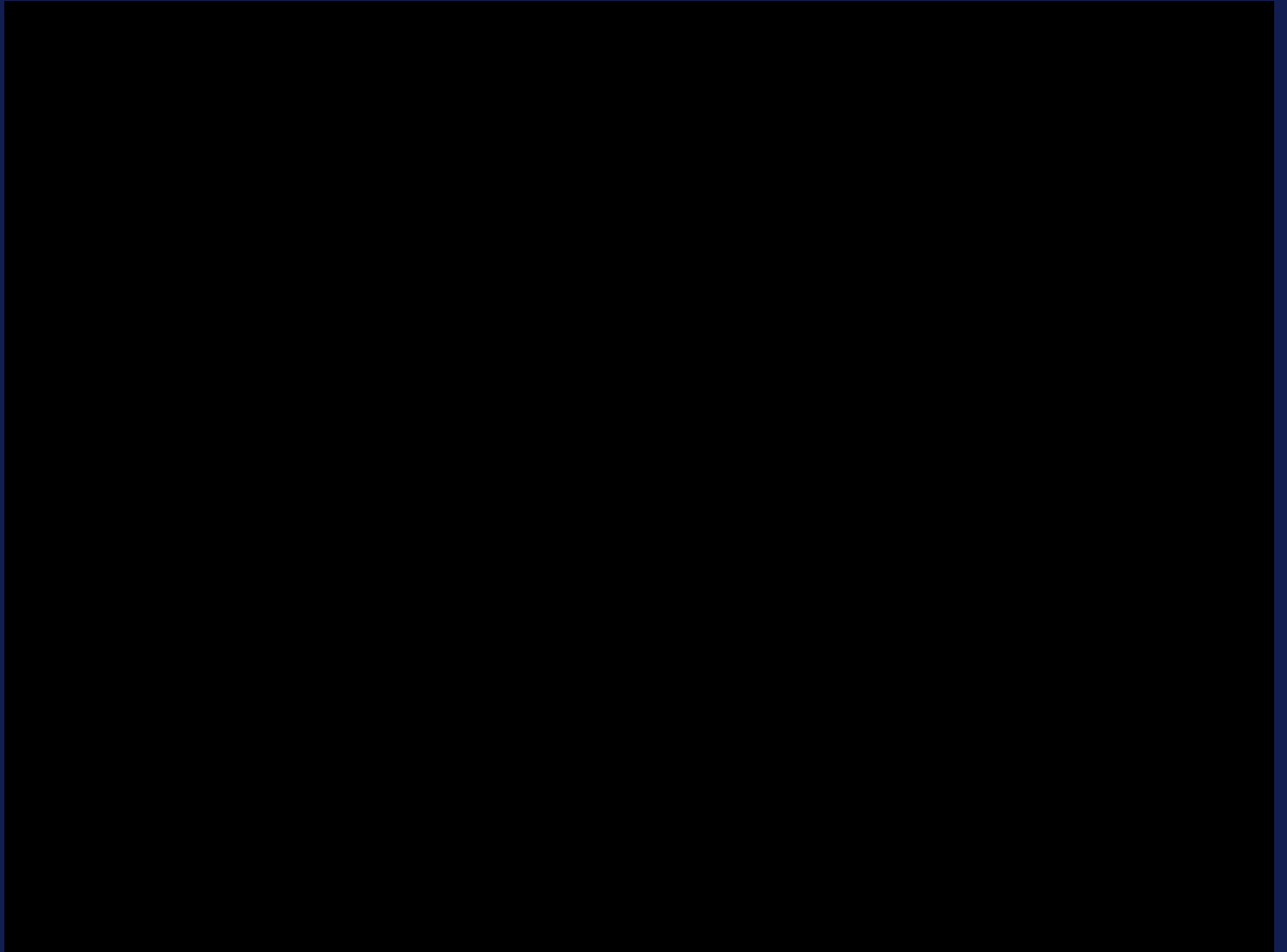


The barrier floats and accumulates the plastic inside due to sea movement and wind.

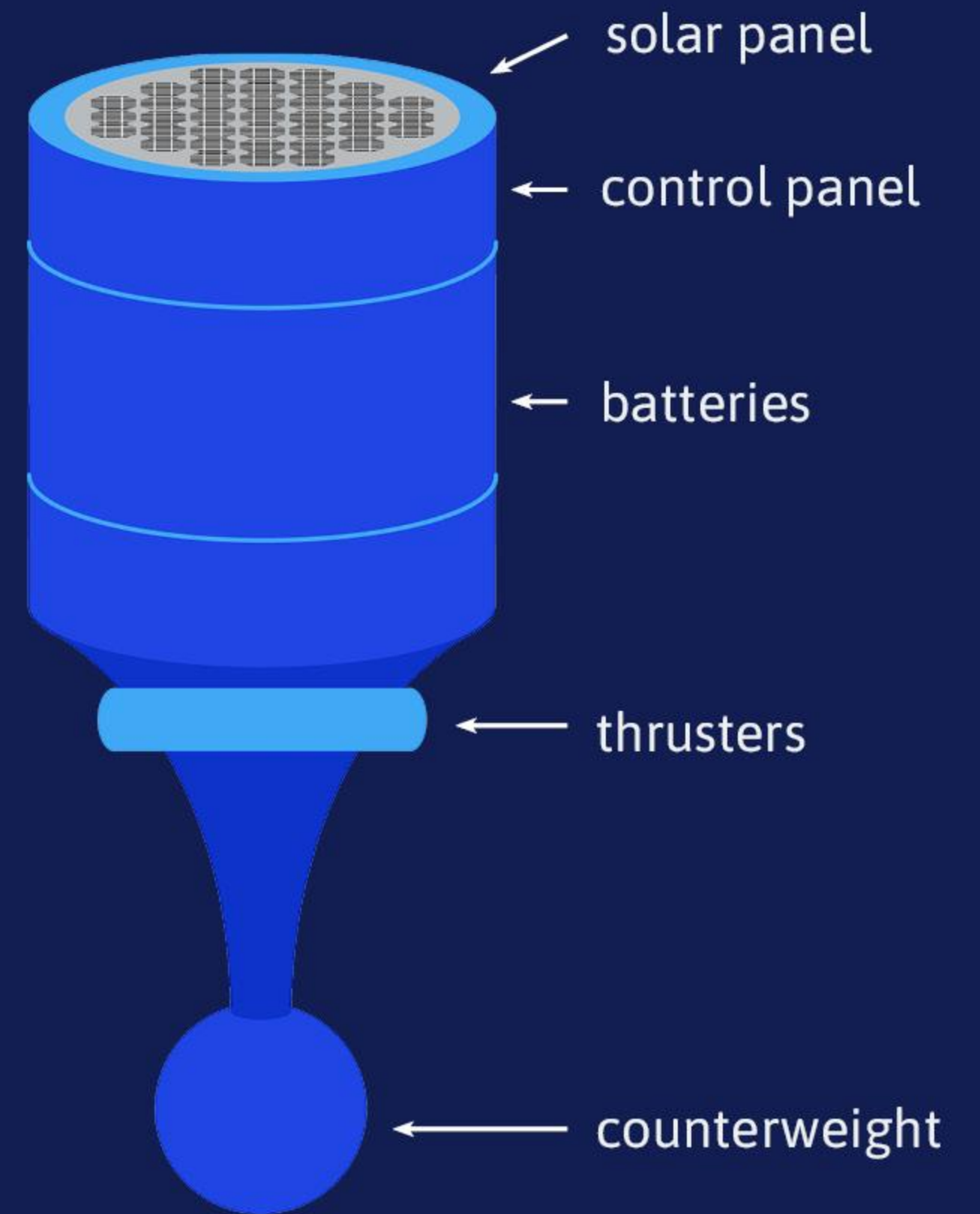
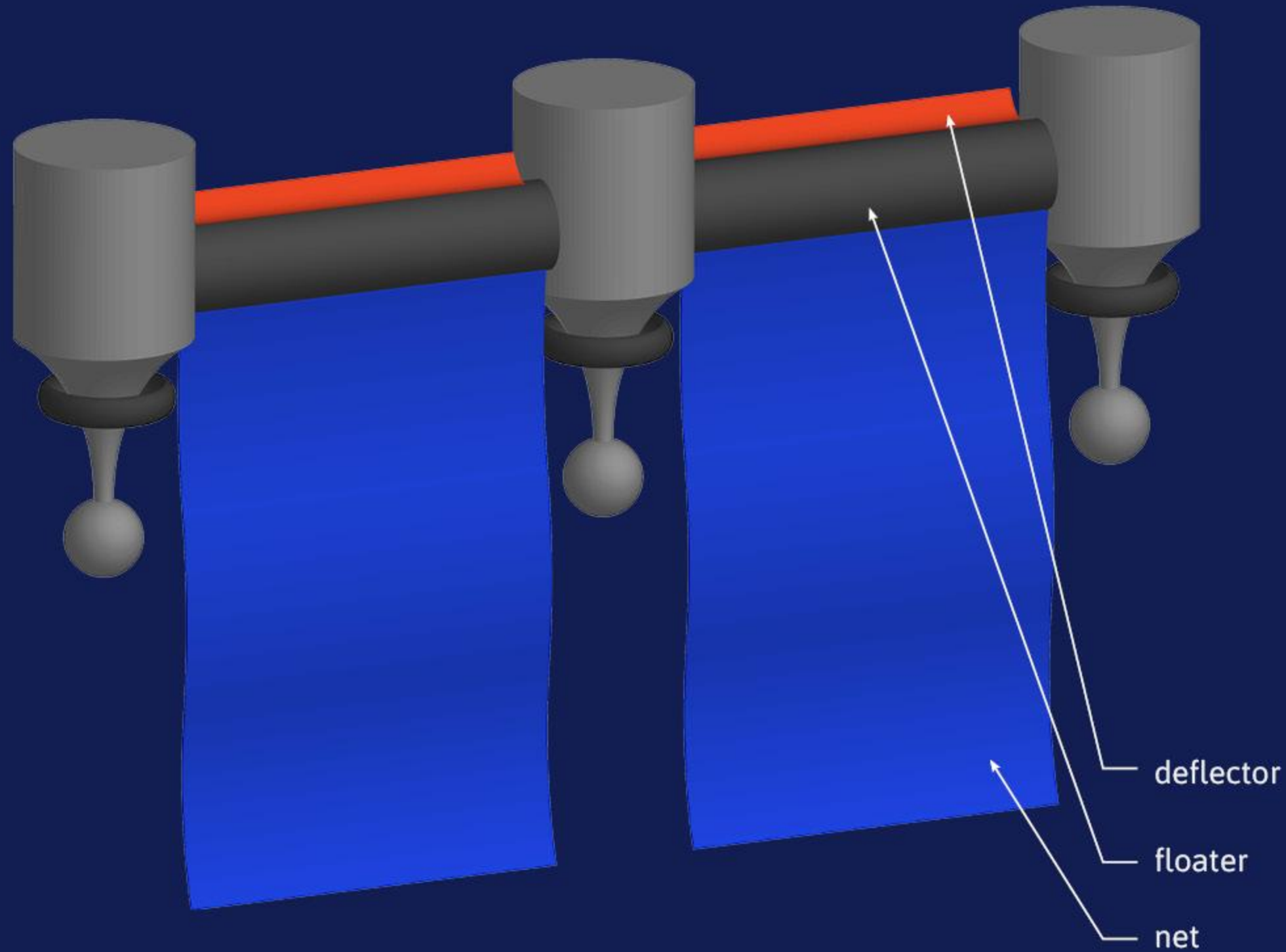
The barrier has leaks due to its own passive nature.

THE OCEAN[®]
CLEANUP

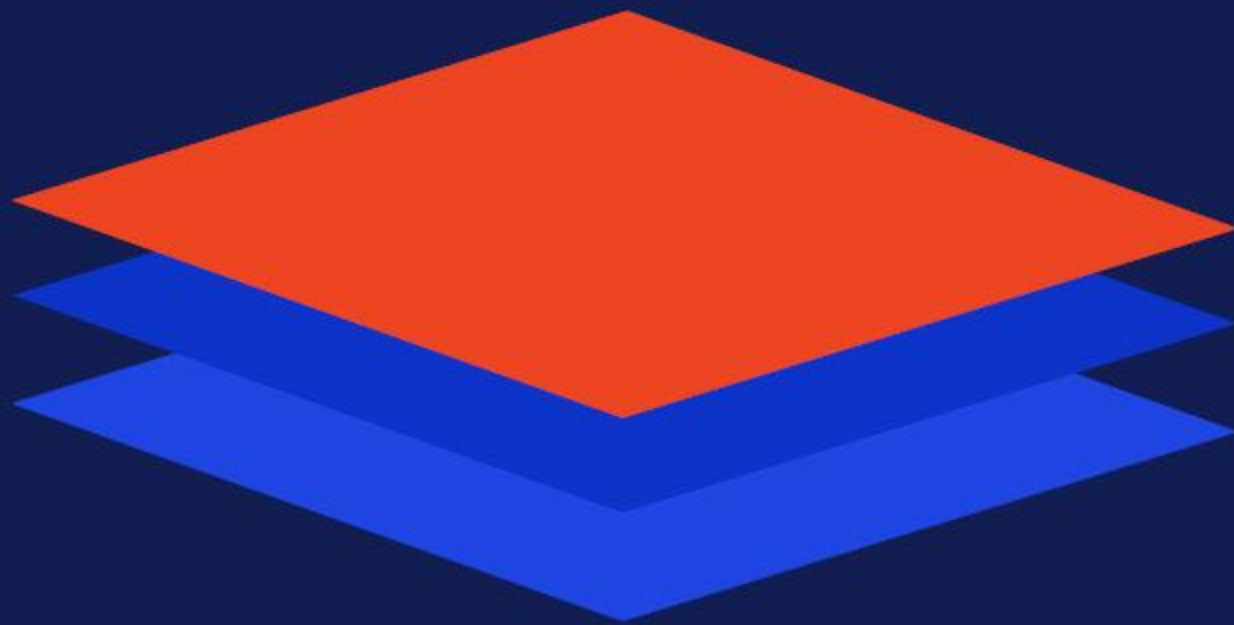
Our Solution



Technical Overview



The serpent's brain



Layers of information

AWS provides us with machine learning systems for plastic location, plastic position prediction, image analysis to determine the plastic concentration and path planning to recover the plastic optimizing energy usage and time.

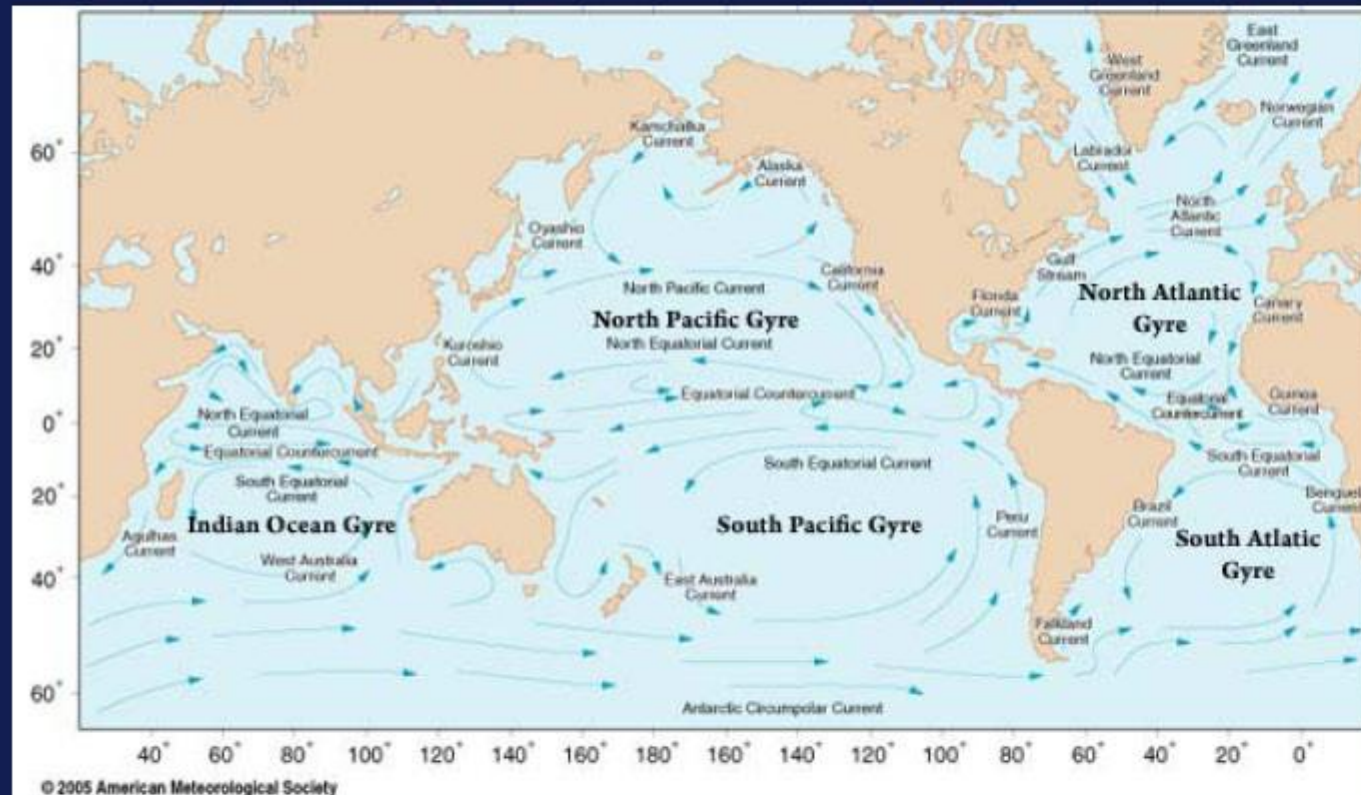
NASA ocean currents data

NASA satellite images from the deployment area

Airbus' Ocean Finder maritime traffic information

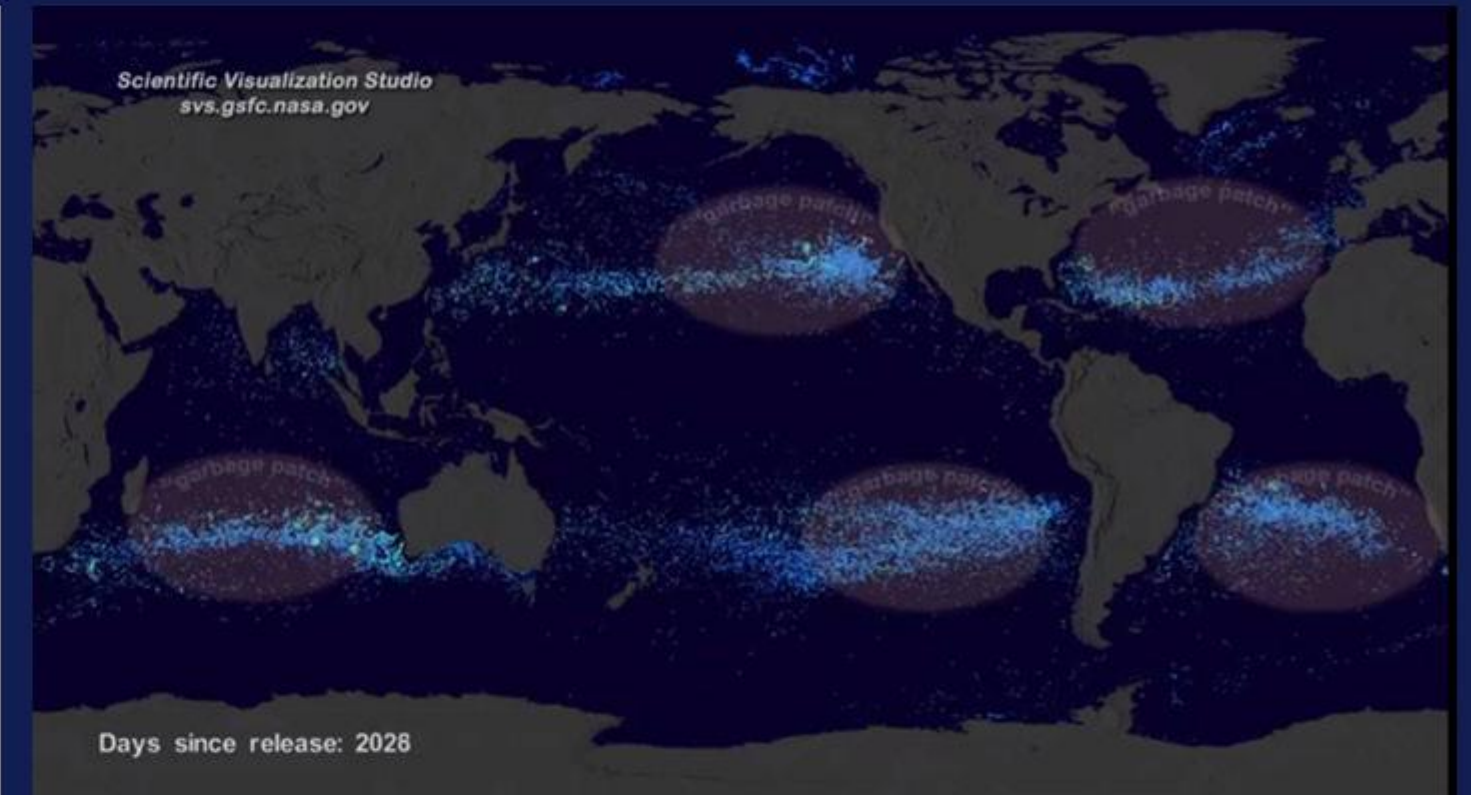
Amazon Machine Learning Systems

The deployment



ENVISAT / RA-2
METOP-A / AVHRR-3
NOAA-16 / AVHRR-3
NOAA-17 / AVHRR-3
NOAA-19 / AVHRR-3
JASON-1 / POSEIDON-2
JASON-1 / JASON-1 Microwave Radiometer
QUIKSCAT / SEAWINDS
TOPEX/POSEIDON / ALT (TOPEX)
TOPEX/POSEIDON / SSALT
TOPEX/POSEIDON / TMR
ERS-1 / ERS-1 ALTIMETER
ERS-2 / ERS-2 Altimeter
DMSP 5D-2/F10 / SSM/I
DMSP 5D-2/F13 / SSM/I
DMSP 5D-2/F11 / SSM/I
DMSP 5D-2/F14 / SSM/I
GFO / GFO Altimeter
NOAA-14 / AVHRR-2
NOAA-20 / AVHRR-3
OSTM/JASON-2 / POSEIDON-3
OSTM/JASON-2 / AMR
GRACE / GRACE-FO ACC
GRACE / GRACE SCA
GRACE / GRACE-FO KBR

Ocean Surface Current Analysis (OSCAR)



Satellite data from the Ocean Surfer Current Analysis project (OSCAR) will allow us to survey the ocean currents in order to visualize high-concentration areas of garbage.

The deployment



AIRBUS Ocean Finder software will allow for the geolocalization of our devices and maritime traffic control.

The background is a solid dark blue color, densely populated with a repeating pattern of small, light blue icons representing various types of plastic waste, including plastic bottles, plastic bags, and plastic containers.

Thank you for having us

A thick blue line forms an irregular oval shape in the center of the image. Along this blue line, there are seven solid orange circular dots. Two of these dots are positioned very close to each other on the left side of the oval, while the other five dots are spaced out along the top, right, and bottom curves.