

# Tourism

# Background Research

- 14.000 Tons of toxic sunscreen end up in the ocean every year
- 82.000 different chemicals can be found in the oceans, which can be traced back to sunscreen
- 40% of the 8 million tons of the plastic the ends up in the ocean is single use
- Tourists use a lot of single use plastic (straws, bottles etc.)
- Tourism offers a lot of possibility to make people aware of their impact

# Background Research

- Tourism developments such as hotels and resorts often destroy the nature near the coast
- The destroyed Mangrove forests and coral reefs acted as a natural erosion protection
- Therefore the tourism developments often accelerate erosion

# Background Research

- Coral bleaching occurs when the water temperature rises over 30,5° Celsius
- The coral does not immediately die but is very weak and subject to mortality
- Tourists oftentimes damage the already weak corals contributing to their decay
- Bays and coral reefs are especially vulnerable to overtourism
- Countries that are economically dependent on tourism oftentimes do not protect natural sites enough

# Interview with Dr. Mia Bennett (HKU)

- Contribution by tourists could be increase with a tax or levy
- Deterrence measures (e.g. taxes) need to be put in place to prevent overtourism
- Marine Protected Areas could help to enhance marine ecosystems
- Stricter guidelines and regulations for tourism operators could be put in place but would be dependent on the ability of the governments to enforce those rules
- Customers need to be made more aware of their impact on the oceans, a positive example could be the Seafood Watch program by the Monterey Bay Aquarium

# Maya Bay, Thailand



This is what a busy day  
at Maya Bay looks like.

Image taken 4 March 2017

Satellite image ©2019 DigitalGlobe, a Maxar company

# Maya Bay, Thailand

In **2008**, there were about  
171 people visiting Maya Bay daily.

● = 10 people



Image taken 4 March 2017

Satellite image ©2019 DigitalGlobe, a Maxar company

# Maya Bay, Thailand

By **2017**, that number jumped to 3,520.

● = 10 people

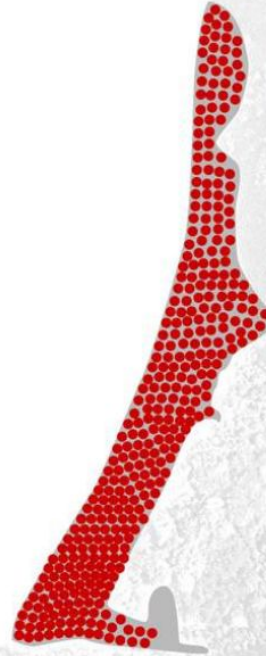


Image taken 4 March 2017

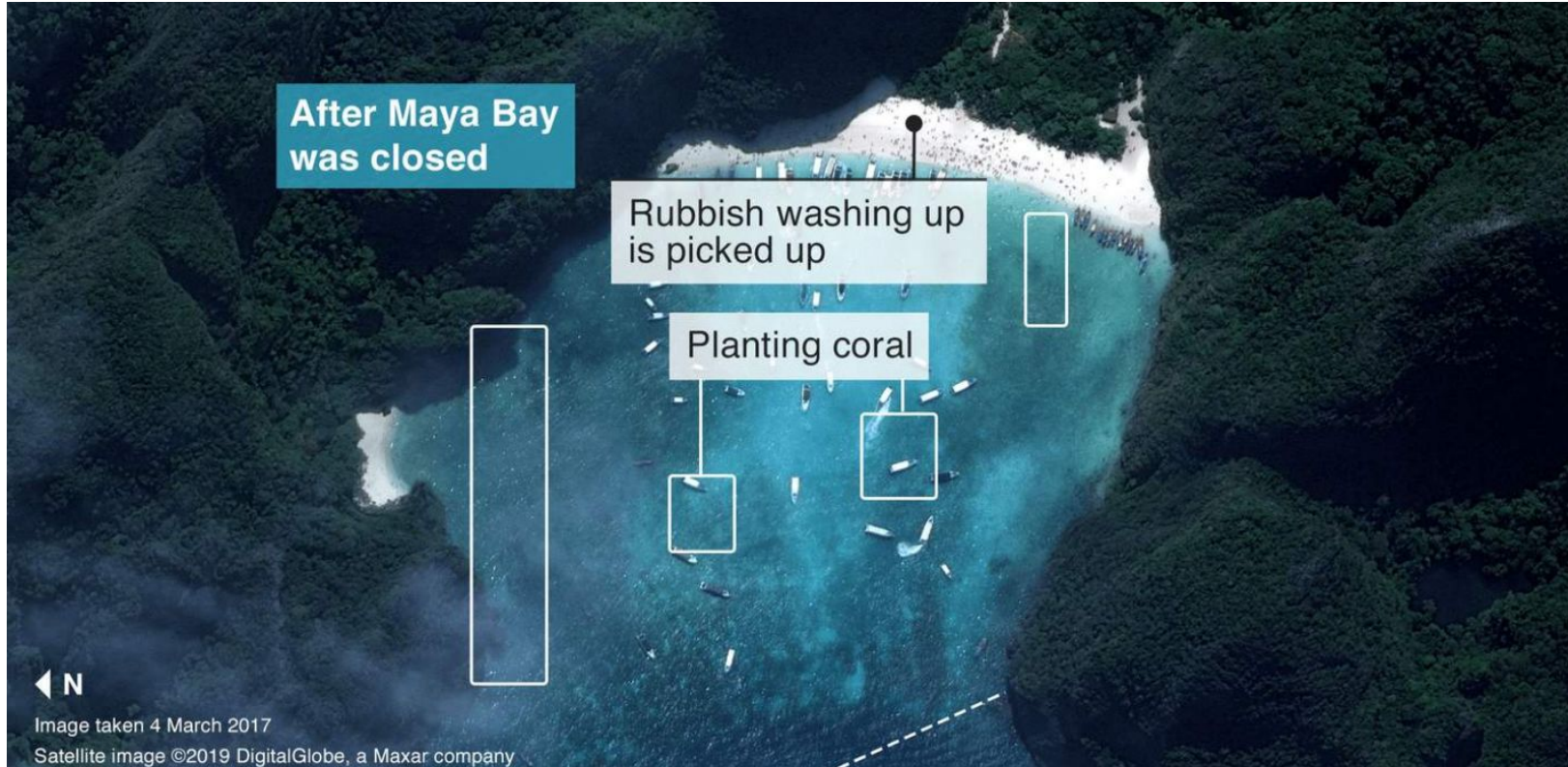
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# Maya Bay, Thailand

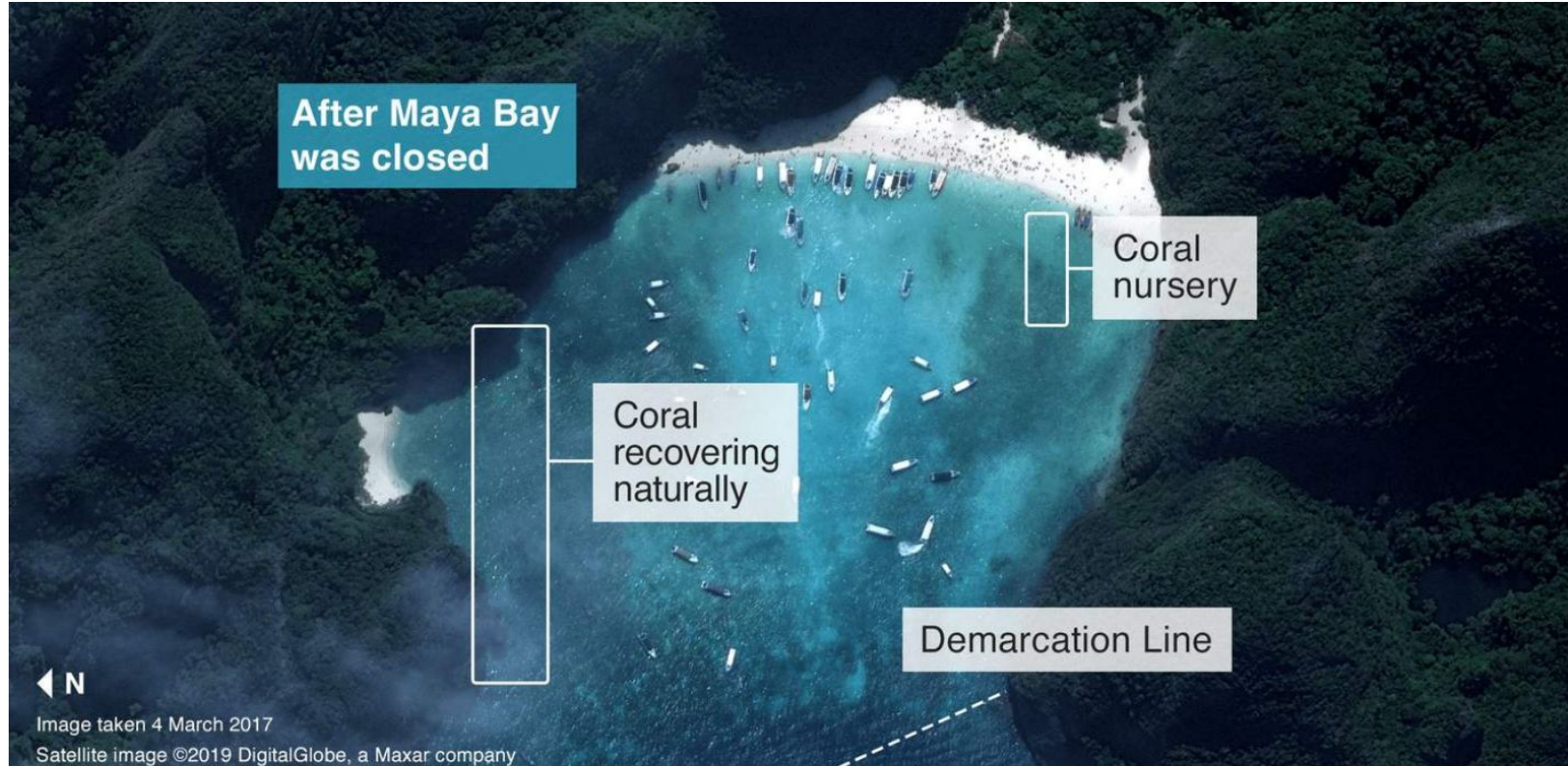


# Maya Bay, Thailand



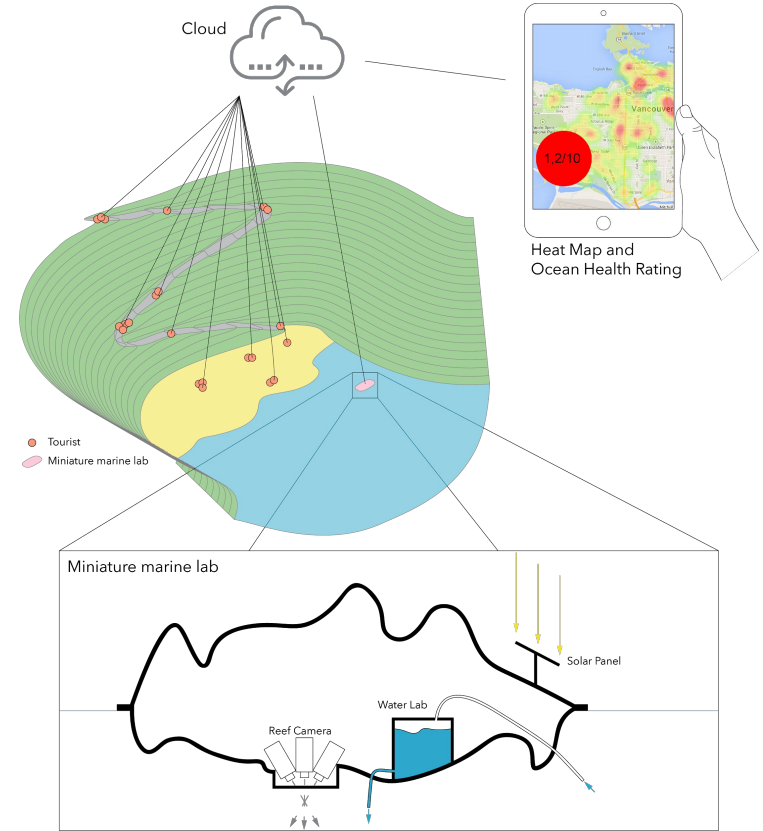


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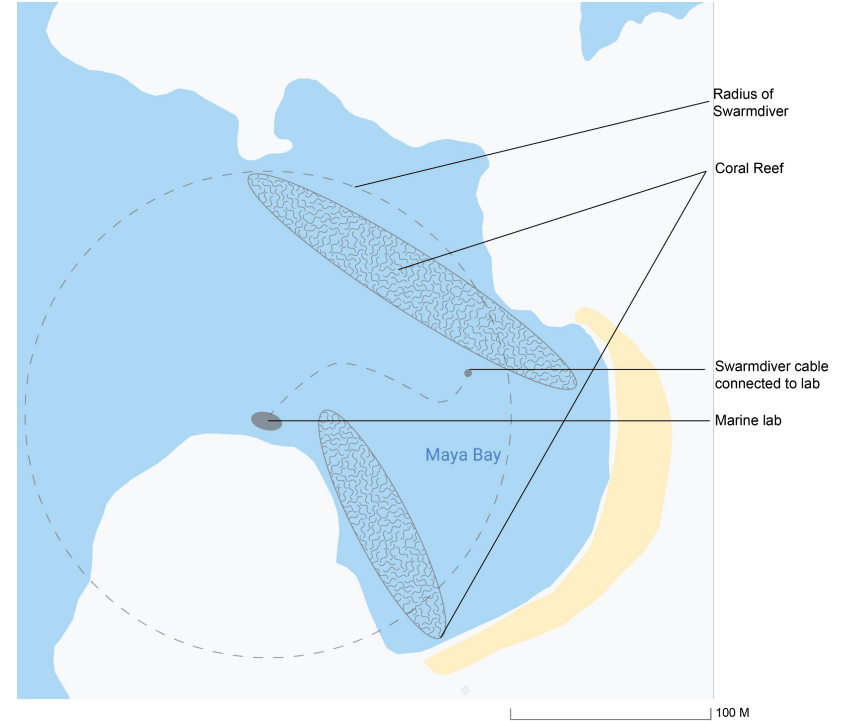
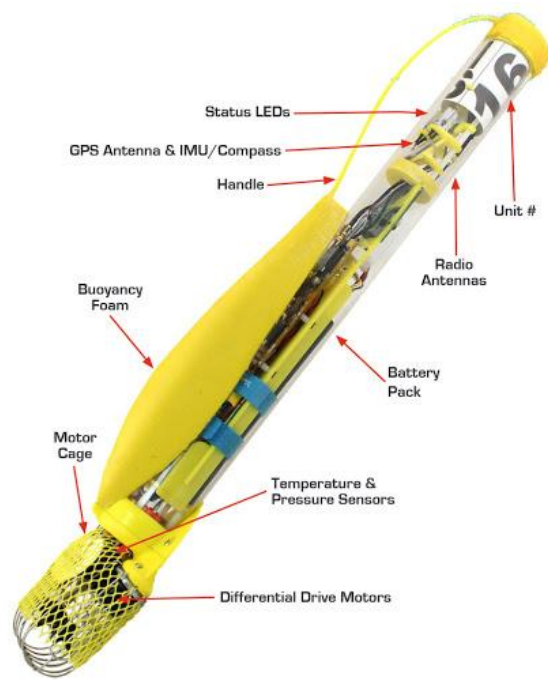
# The design concept

- Use data to analyze and monitor the number of visitors
- Monitor the noise, water quality, plastic pollution and marine life health via the ocean lab boy
- Compare both data sets to determine the bearable amount of tourists



# The concept site

## Swarmdiver



# Detailed Section

