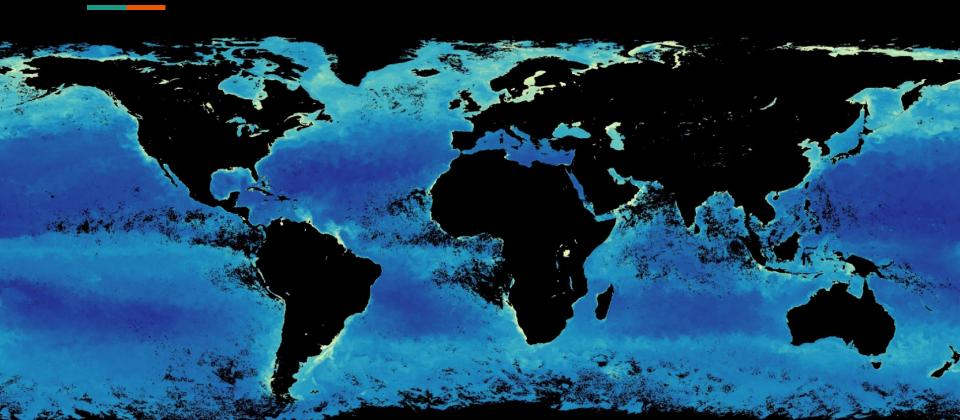
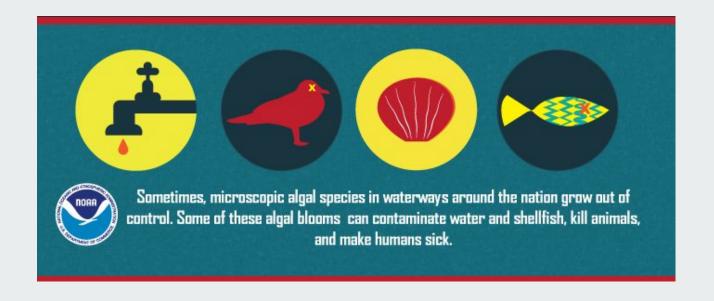
To Bloom or Not to Bloom



Introduction



 The fishing industry loses as much as \$34 million a year in USA.

 Cost \$37 to \$47 million in lost tourism revenue over two years In Ohio.

 Resulted in \$0.5 to \$4 million in hospital emergency department costs in Sarasota County.



Causes:

- Presence of nutrients (such as phosphorus, nitrogen, and carbon).
- Extreme events, such as floods, hurricanes, and droughts.
- Warmer than usual water temperatures.
- Sluggish water circulation.
- Wind and water currents.



Data measure





AEROSOL OPTICAL THICKNESS AEROSOL PARTICLE RADIUS BATHYMETRY

CHLOROPHYLL

CLOUD FRACTION
CLOUD PARTICLE RADIUS
CLOUD OPTICAL THICKNESS
CLOUD WATER CONTENT
NITROGEN DIOXIDE
SEA SURFACE TEMPERATURE
WATER VAPOR

Nowadays, all this data is misused!

It is possible to predict? YES

| | NAO | SIM | Total |
|-------|--------|------|--------|
| NAO | 165965 | 3509 | 169474 |
| SIM | 379 | 5137 | 5516 |
| Total | 166344 | 8646 | 174990 |



Sensibility: 88%

How spread the information?



| Localiza | | | | | |
|-----------|--|----------|-----------------------|-------------------------------|----|
| Latitude | | RORAIMA | AMAPA | | [3 |
| -23,4983 | | | | Fortaleza | |
| Longitude | | AMAZONAS | | | |
| -46,3347 | | | Brasil | | |
| Localizar | | | nent purposes only NS | For development purposes only | |
| Localizat | | Bolívia | GOIAS Brasilia | | |
| | | | MINAS DO SUL | | |

Impact

Economic loss

Social

Environment

Prevented cost:

\$34mi per year

Public Health System prevent management







Which Market?

- People living in continental areas

- Fishing Industry

- NGOs and government

Next steps...

- Improve the precision satellite.
- Measure human action.
- Include fresh water sources.



ALGAritmos

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Mayk Leandro

Naomy Duarte

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