

Environmental Monitoring of the Gulf of Mexico 2010 – 2017

Due the Potential Effects of Deepwater Horizon Oil Spill

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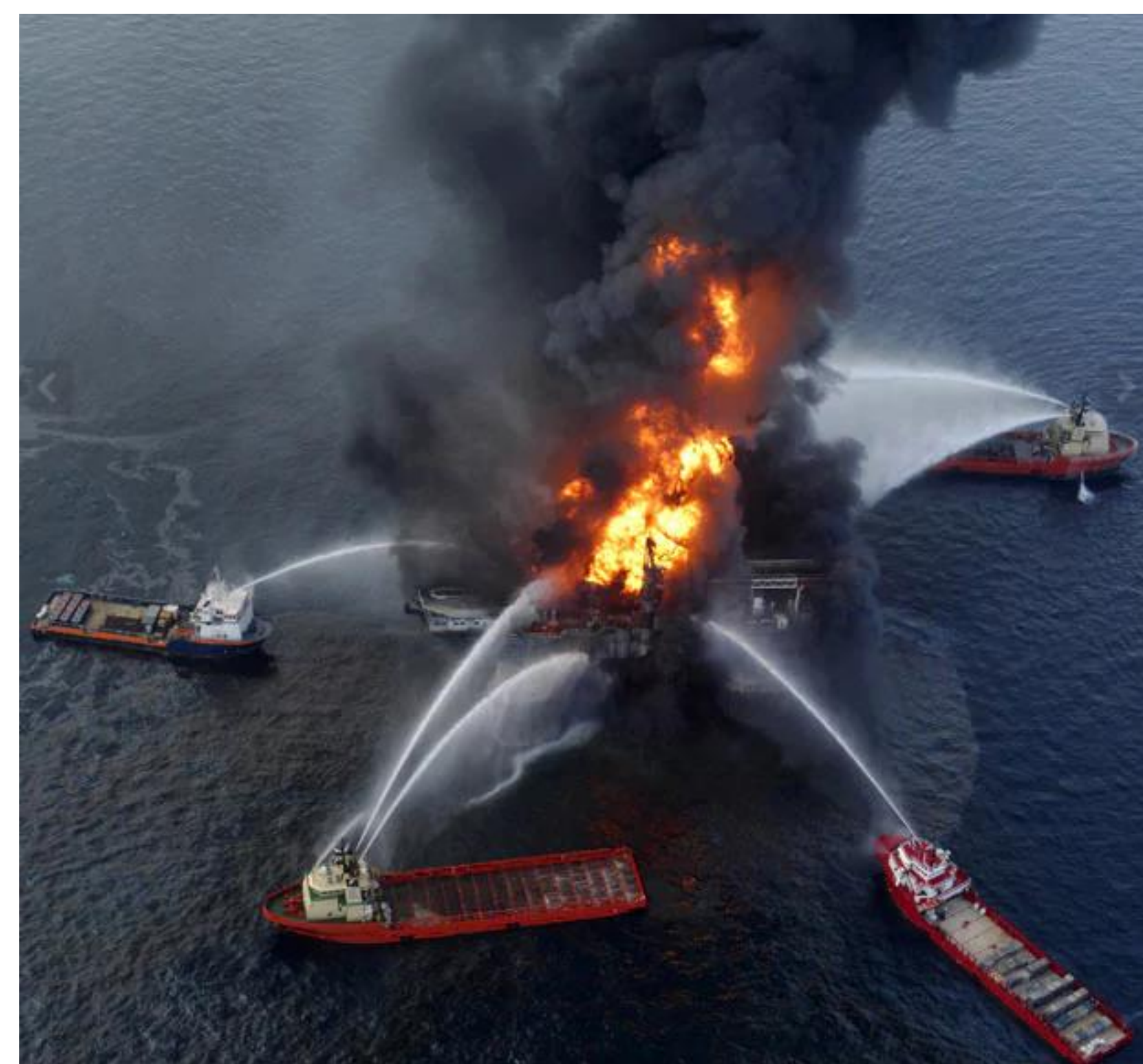
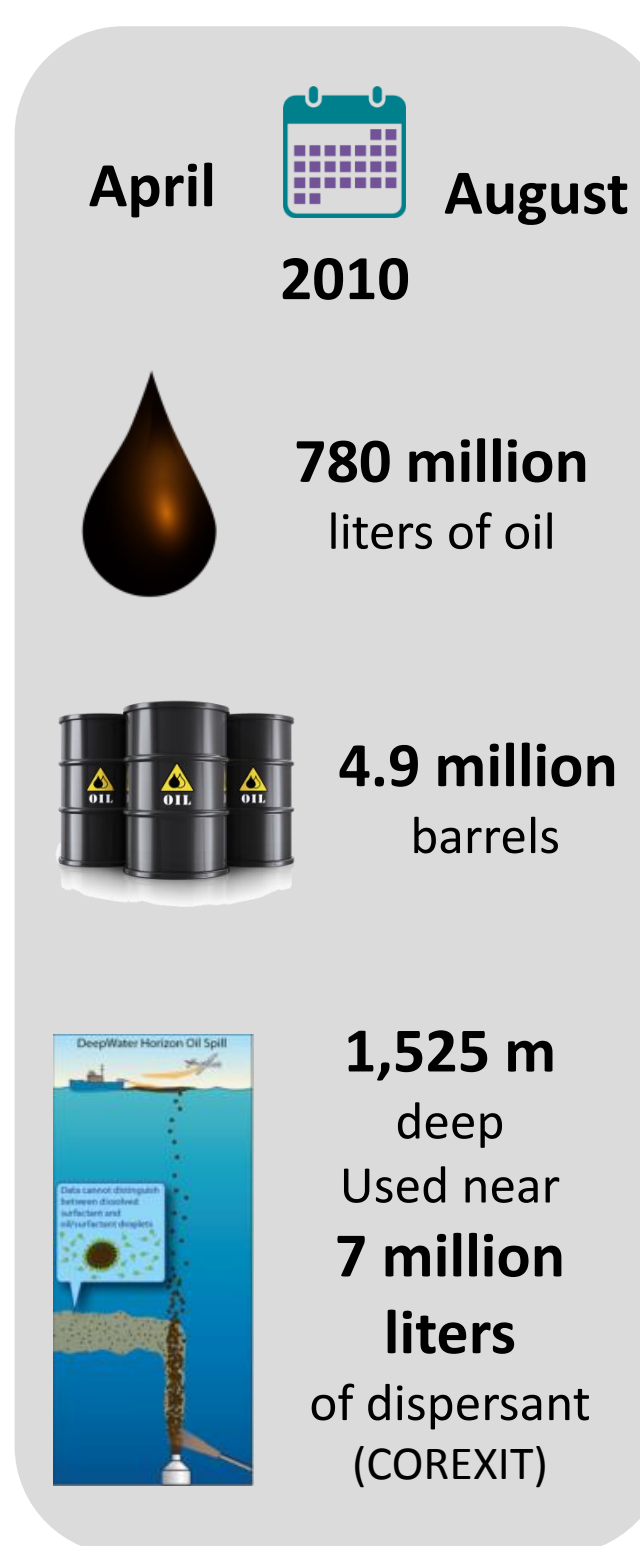
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Background

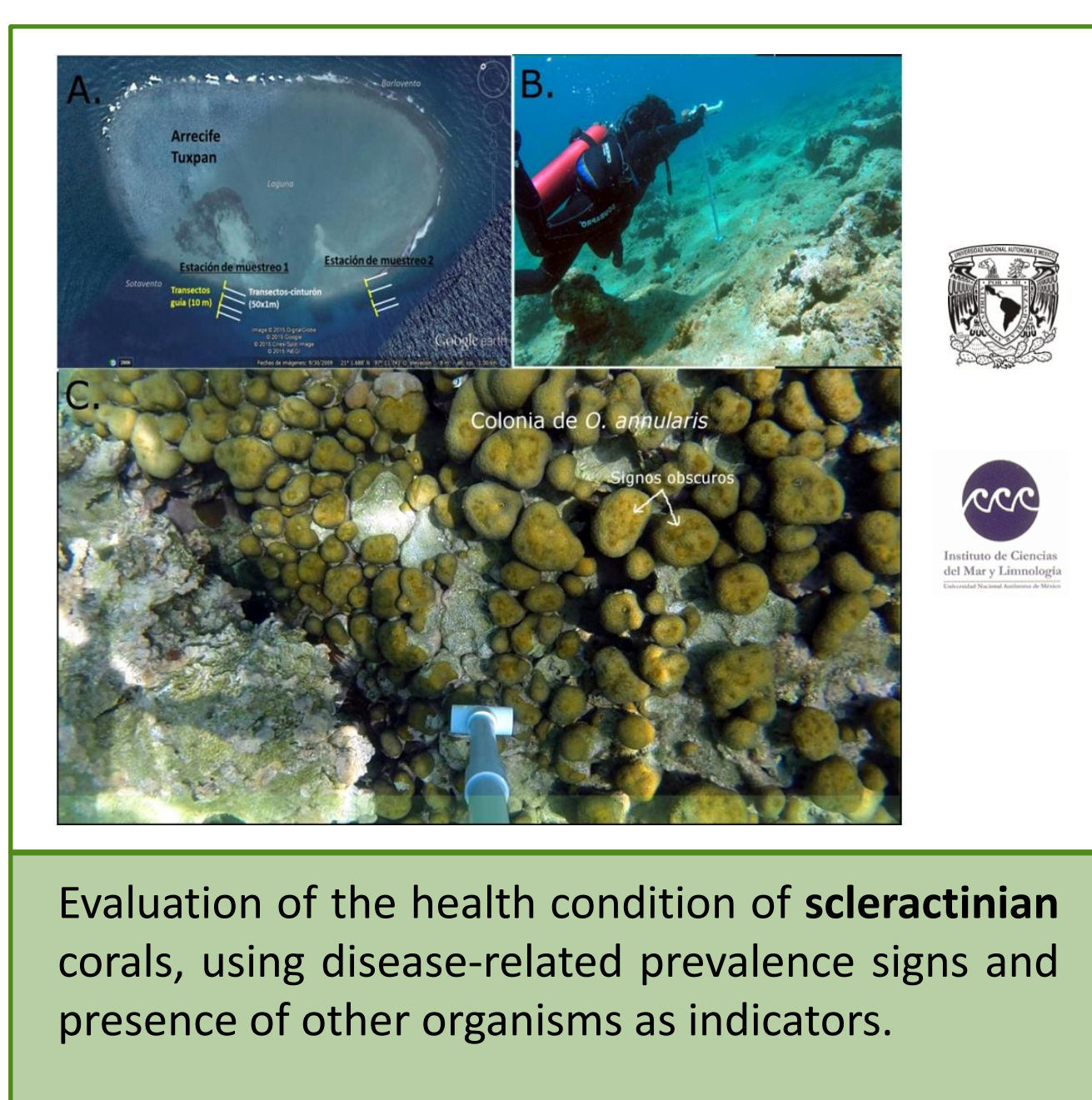
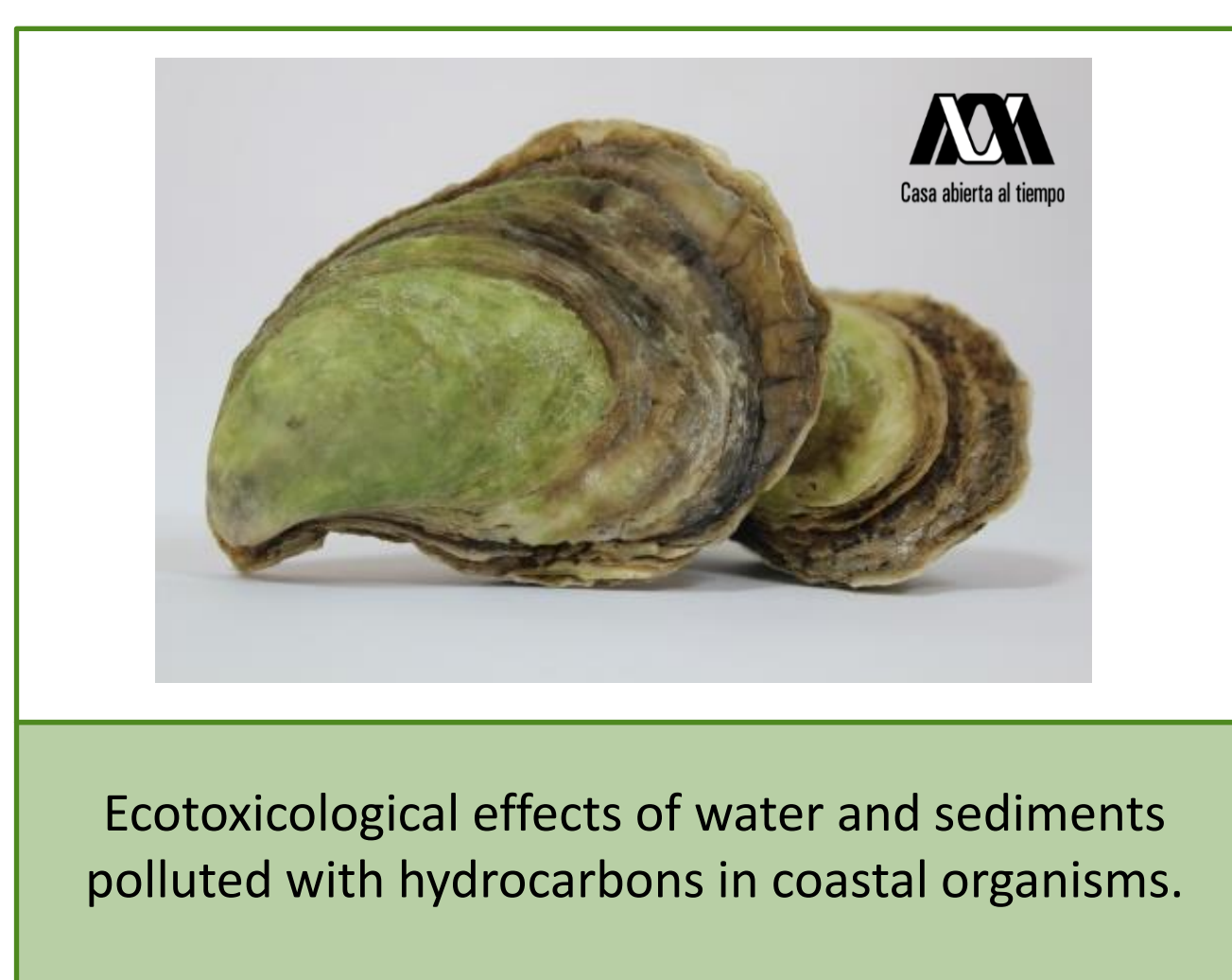
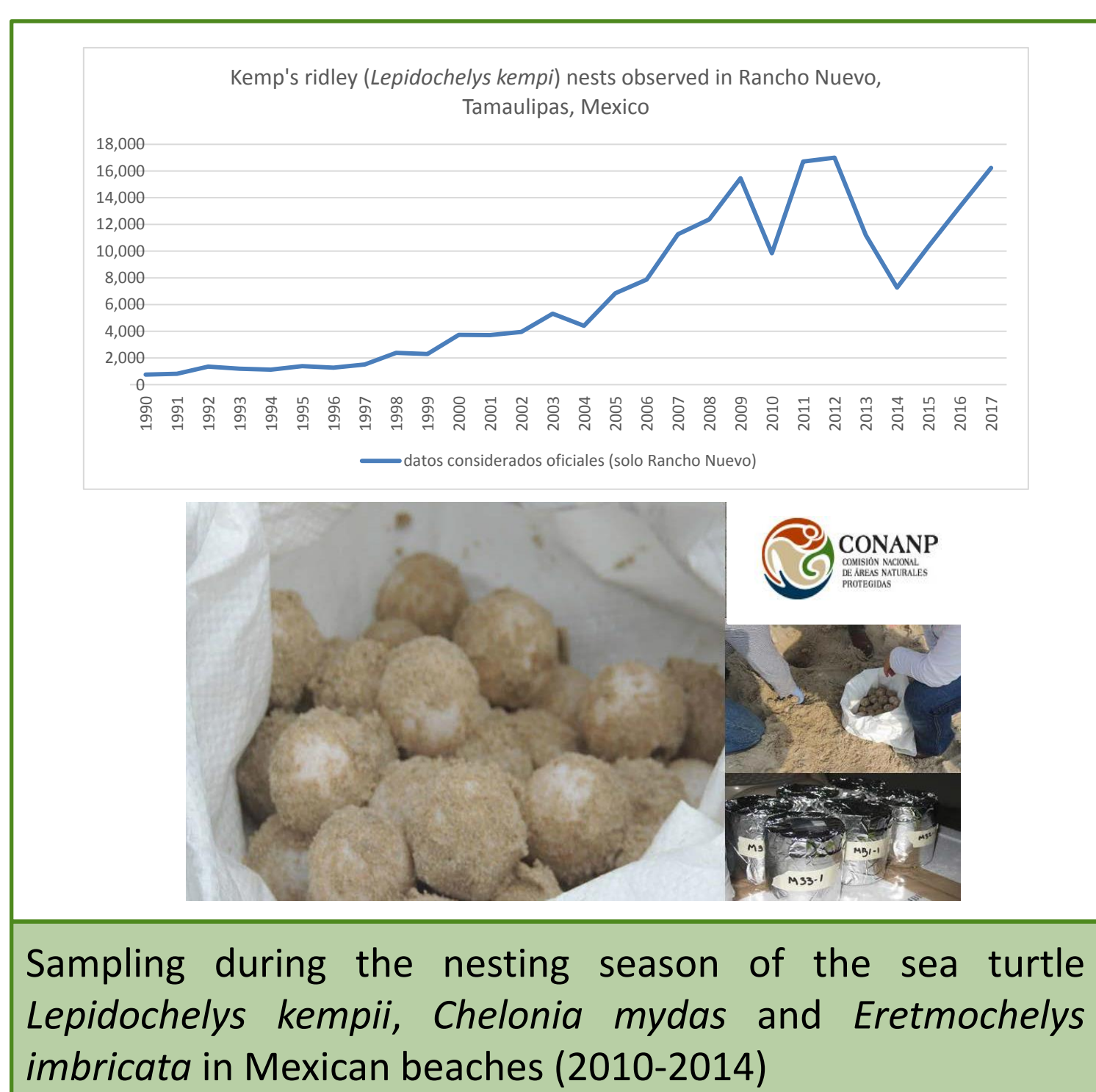
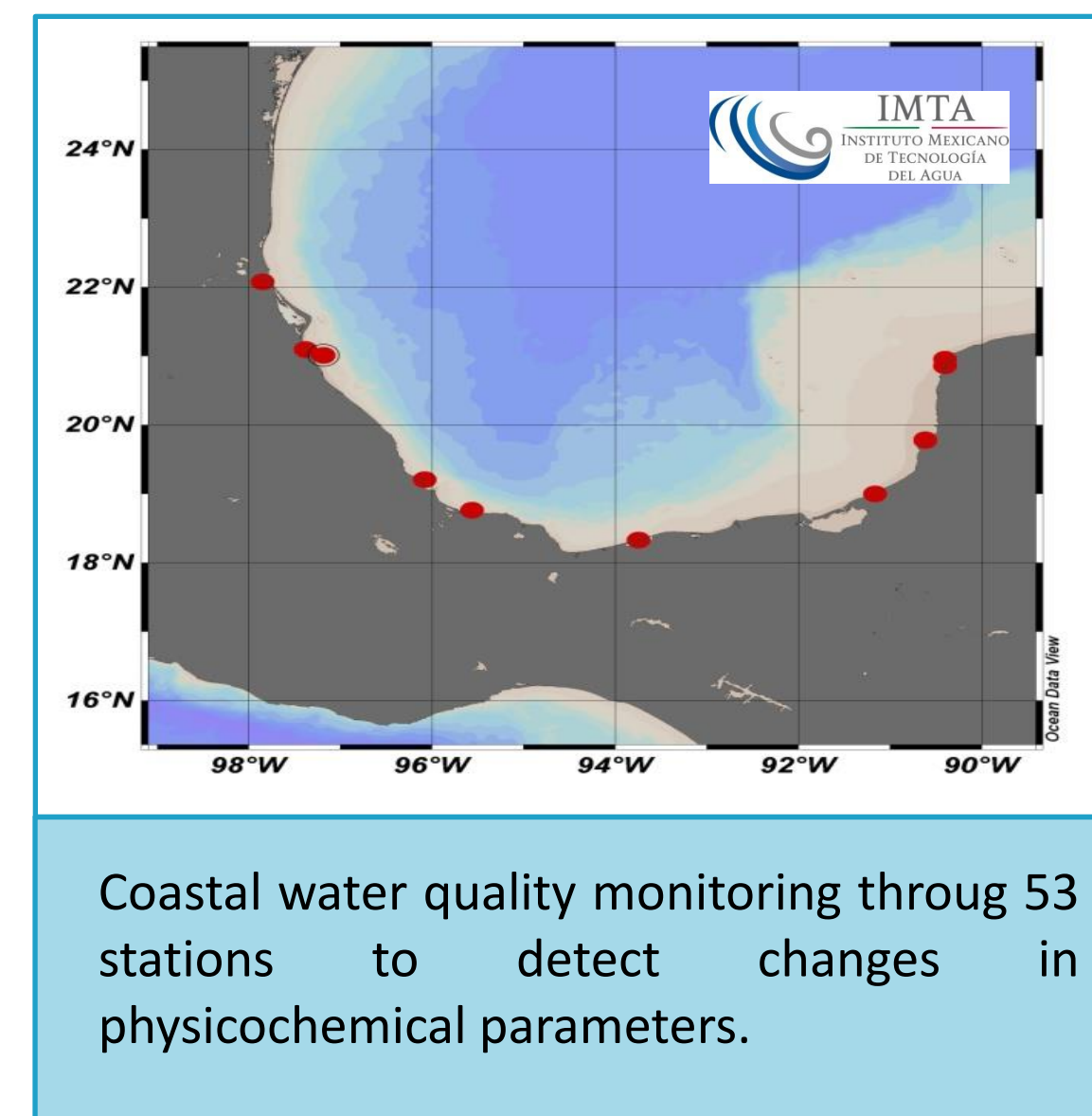
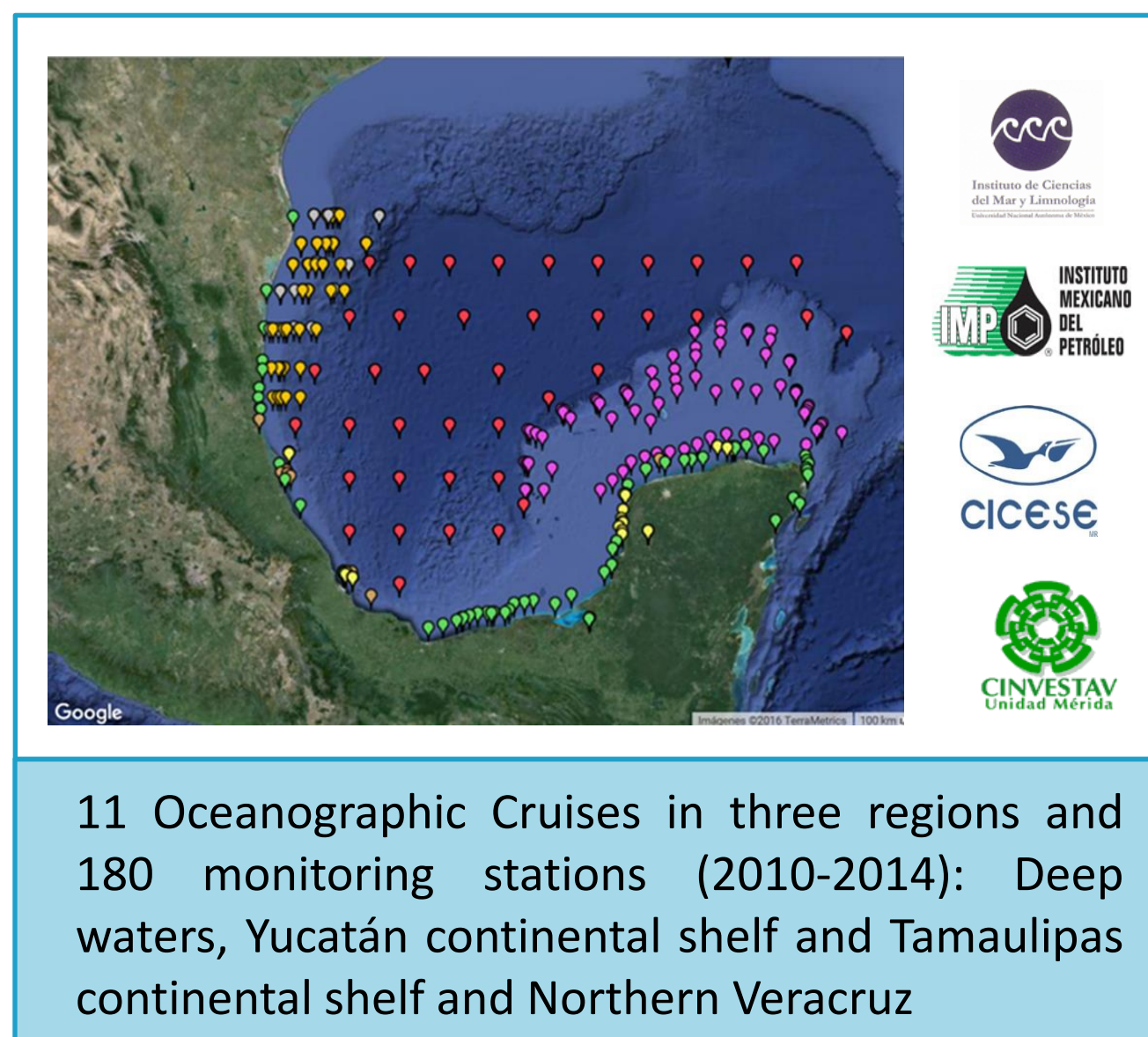
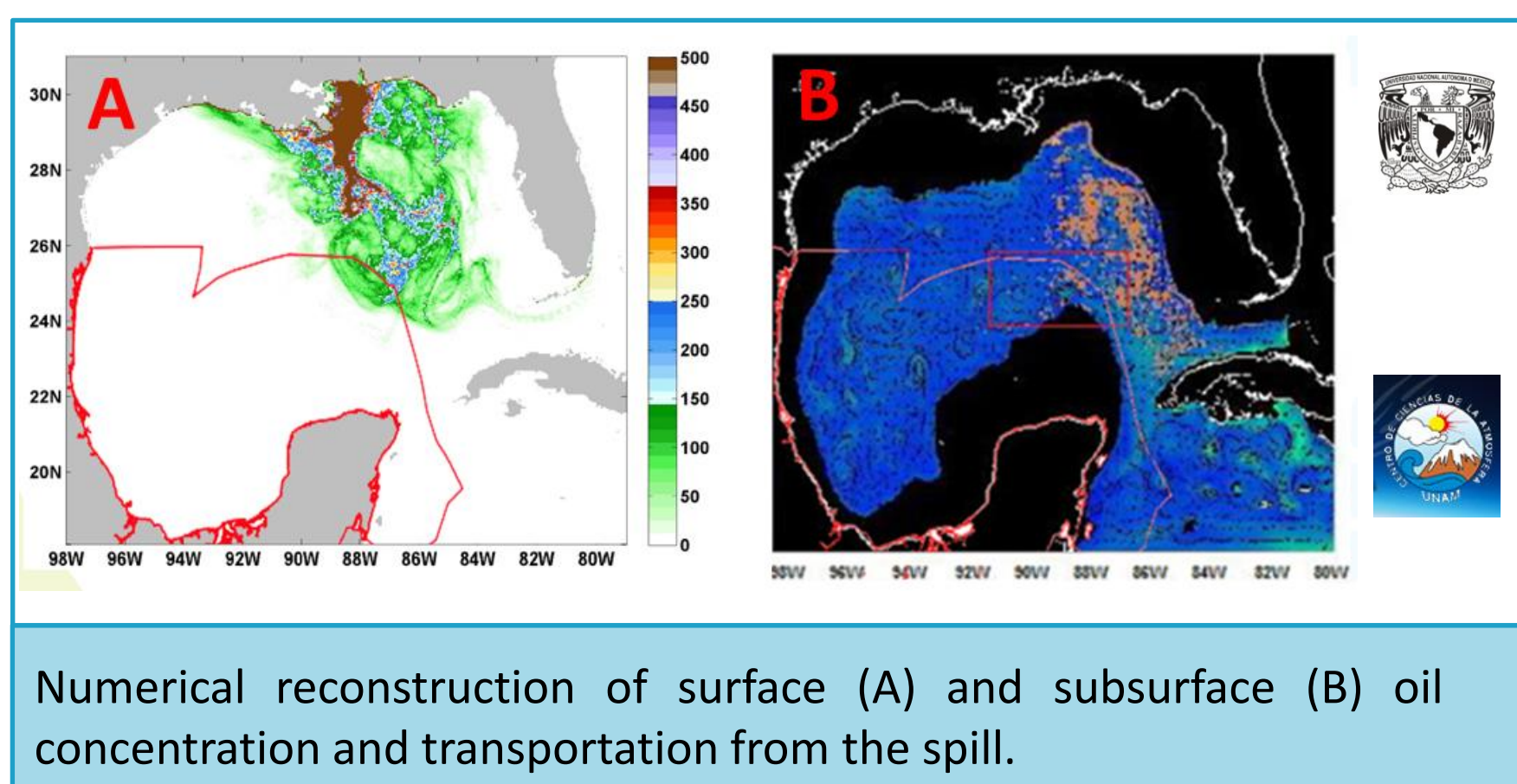
On April 22nd 2010, the *Deepwater Horizon (DWH)* rig exploded and sank in the northern portion of the Gulf of Mexico (GoMex) while drilling the Macondo well for the multinational British Petroleum company (BP), provoking the largest spill in the oil industry in a marine environment.

In the wake of the DWH incident, the Mexican Federal Government through the Environmental Sector developed an Action Plan to assess, address and prevent environmental impacts in the Mexican Exclusive Economic Zone (EEZ) and its coasts.

The INECC coordinated the efforts of several environmental agencies and academic institutions to perform a Long-Term Environmental Monitoring, whose main objective was to develop a marine and coastal characterization of the Gulf of Mexico in order evaluate the possible effects of the oil spill in the Mexican portion of the Gulf.



Main studies carried out:



Conclusions

- The Environmental Monitoring project has generated a large amount of systematized data. This represents a step forward towards understanding GoMex environmental conditions and regional interdependence of ecological processes.
- Abnormal values of hydrocarbons and heavy metals were found in water and sediments, especially vanadium and nickel.
- The Kemp's Ridley sea turtle may have been seriously affected, however, other factors may have contributed to the decrease in populations, such as the presence of hydrometeorological events while the spill occurred. The full extent of the damage will be determined in the long term since it is a species with a long life cycle.
- The Gulf of Mexico is a highly interconnected ecosystem; due to the magnitude of the catastrophe and the physical connectivity, it is very likely that the effects will last for a very long time.
- The Gulf of Mexico's complexity and the potential long-term effects of pollutants require additional monitoring efforts.