



Consortio de Instituciones de Investigación Marina  
del Golfo de México y del Caribe

Consortio de Instituciones de Investigación  
Marina del Golfo de México y del Caribe  
CiiMAR-GoMC



**MEXICO - U.S.A**  
MISSION TO GULF STATES

Alabama, Campeche, Florida, Louisiana, Mississippi, Tabasco, Tamaulipas, Texas, Yucatan and Veracruz

January 24-27, 2017 - San Francisco de Campeche

**Dr. José Manuel Piña Gutiérrez**  
**Rector Universidad Juárez Autónoma de Tabasco**  
**Presidente del CiiMAR-GoMC**

**Dr. Porfirio Alvarez Torres**  
**Secretario Ejecutivo**  
**Consortio de Instituciones de Investigación**  
**Marina del Golfo de México y del Caribe**  
**CIIMAR-GoMC**

**25 ENERO 2017**



Consorcio de Instituciones de Investigación Marina  
del Golfo de México y del Caribe





LOUISIANA

25 square miles of coastal wetlands lost per year

Lower Mississippi River Basin



Heavy Industry



Coastal Communities

Nursery Habitat



Hypoxia Zone

Loop Current Eddy



Harmful Algal Blooms



Gulf Estuaries



Sustainable Fisheries



Coral Reefs



Oil & Gas Platforms



Oil & LNG Tankers



Ocean Observations

LOOP CURRENT

GULF OF MEXICO



Sea Turtles

HURRICANES





# 23-27 January, 2017 CAMPECHE Panel Mission to Gulf States (GOMSA)

## XIII Session CiiMAR-GoMC & Joint Session with GOMURC, 24 February, 2017.

## Gulf Summit and All Hands Meeting, Houston, TX. March 2017

7th UAT & CICATA  
Tampico



2nd UV, Veracruz



9th Veracruz  
SEMAR



3rd UNACAR  
Cd Carmen



4th CINVESTAV UADY  
Merida



5th UAC EPOMEX  
Campeche



6th  
U Qroo U Riviera  
Playa Carmen



1st, 3rd, 11th Tabasco



13th Session  
CiiMAR-GoMC  
EPOMEX UAC

12th Session  
CiiMAR-GoMC  
UJAT



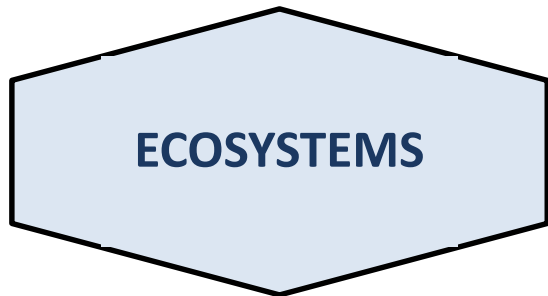
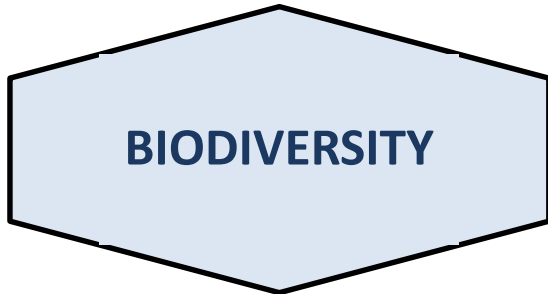
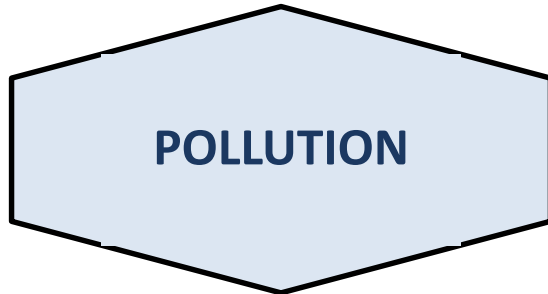
8th Mexico City  
Ministry Foreign Affairs



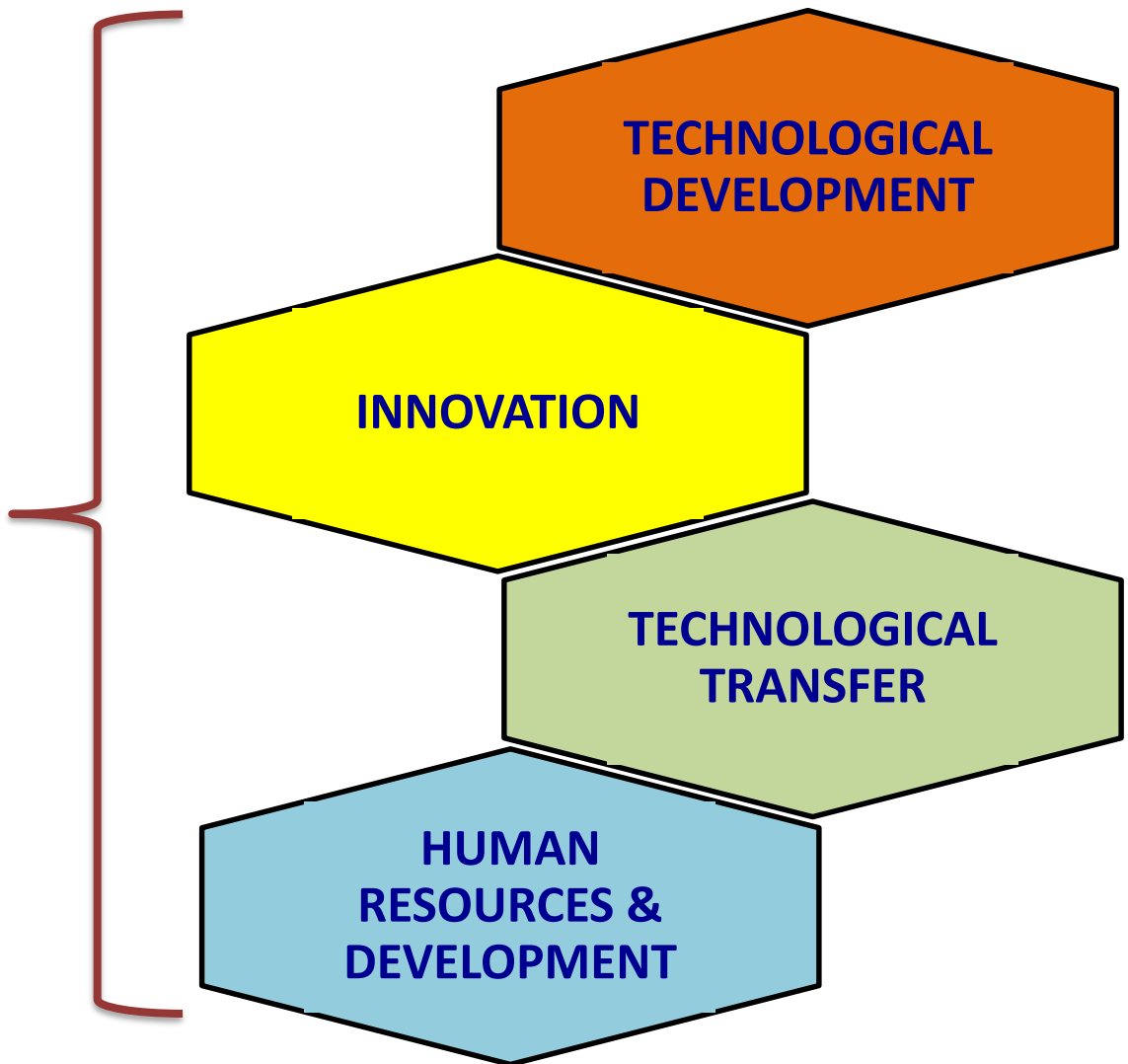
10th Queretaro  
IMT-SCT



**INTEGRATED SERVICES  
IN THE FIELD OF:**



**STRATEGIC COMPONENTS**



# CiiMAR-GoMC impulsa la colaboración e integración regional basada en el enfoque ecosistémico

## *Temas prioritarios*

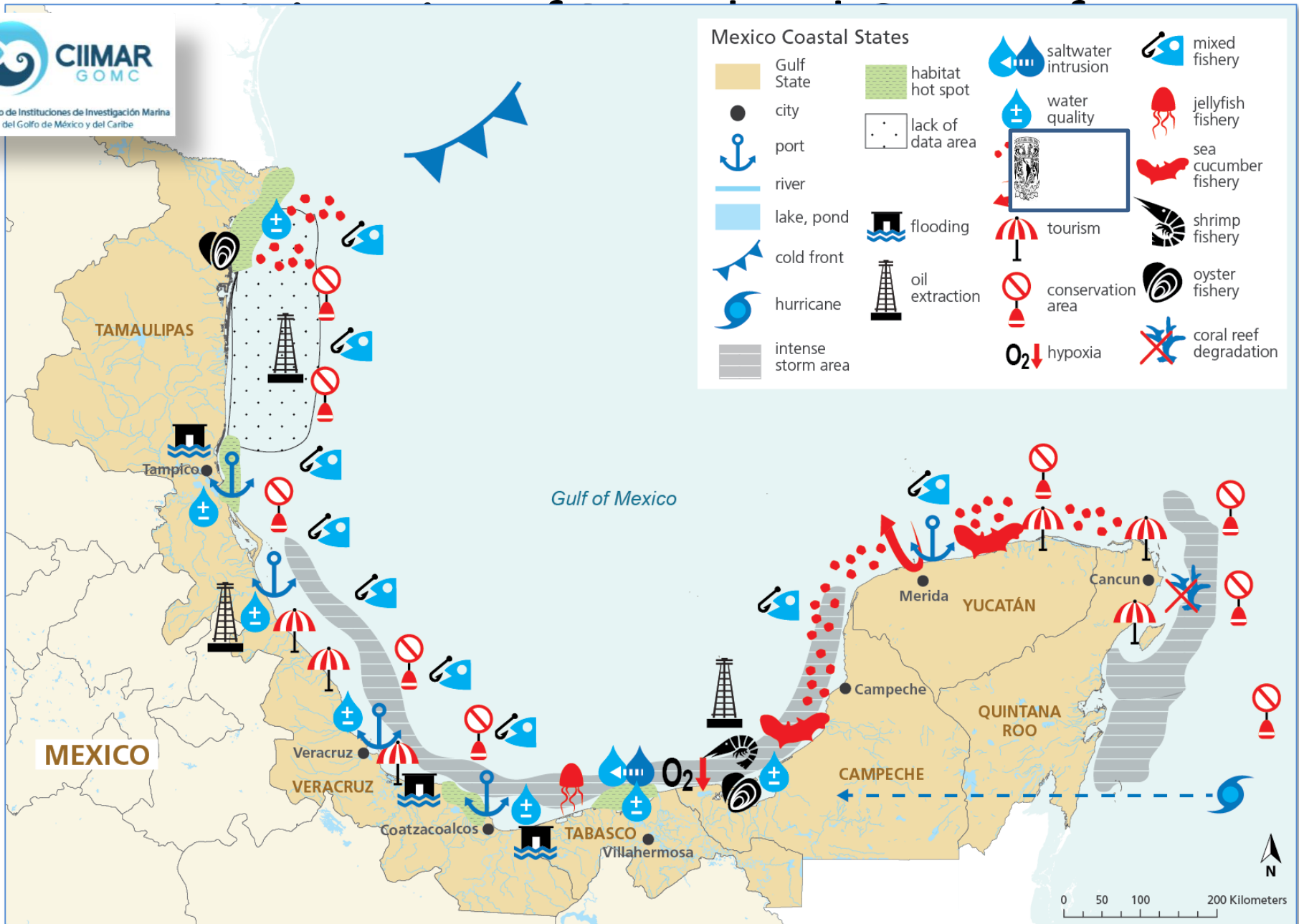
**Desarrollo económico basado en ciencia robusta,  
tecnología y sustentabilidad ambiental**



# Southern Gulf of Mexico Report Card



Consortio de Instituciones de Investigación Marina del Golfo de México y del Caribe





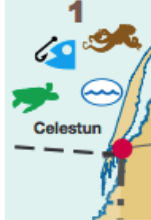
# Yucatan coast divided into four regions

This map presents the locations of the most important resources and drivers in the coastal areas of Yucatan State. Based on an initial assessment, the coastal zone was divided into four main regions. Each region will be assessed independently using the same indicators and measures.

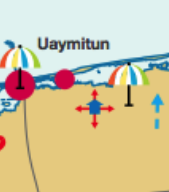
0 25 50 km



## REGION 1



## REGION 2



## REGION 3



## REGION 4



STATE OF YUCATAN

**Yucatan State**

Yucatan State	port activity	octopus	hurricane
city	mangroves	sea turtle	water pollution
biodiversity	ecotourism	industrial plant	habitat loss
fisheries	salt extraction	urbanization	
freshwater spring	red tide	animal farming	
ground water flow	coastal erosion		

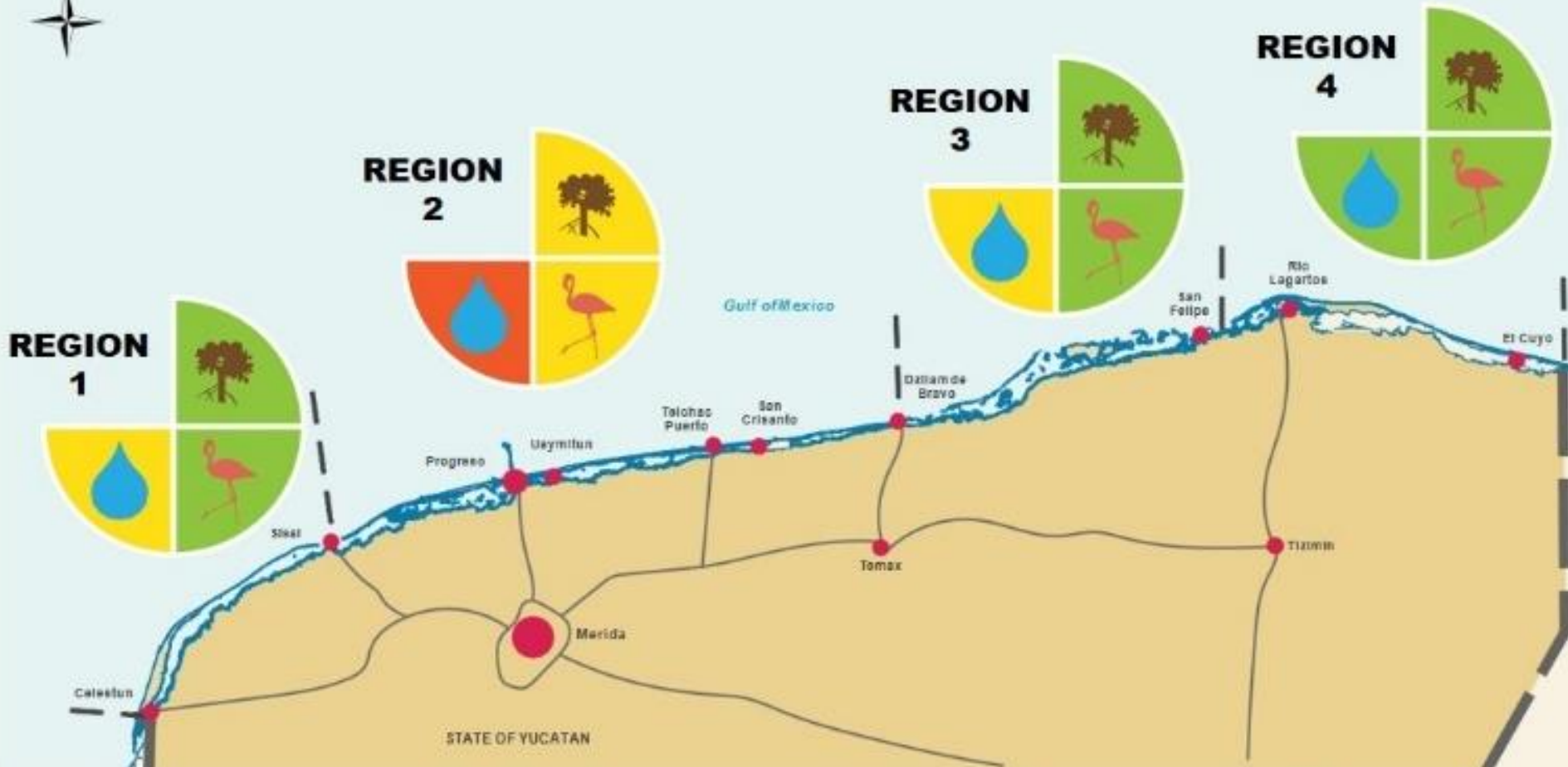
# The Yucatan Coast Conceptual Diagram

The Yucatan coast presents large areas of mangrove (🌿) and wetlands (🌿) which are important habitats for bird nesting grounds (🐦) and hatcheries for future stock in fisheries (🐟) which in turn contribute to tourism (🏖️). This ecosystem can be seriously disturbed by the devastation of mangrove areas (🌿) and construction of legal and illegal coastal structures (🏠). Another important threat is the lack of control of garbage dumps (🗑️) and septic tanks (🚽) in urban areas, and coastal communities (🏠) producing sewage runoff (🚰) contaminating the underground fresh water supply. Livestock areas (🐖) contribute to nutrient pollution (N-P), which might contribute to red tide events (🔴). Finally, the geographical situation of the coast makes it vulnerable to hurricanes (🌀).





# A Preliminary Qualitative Assessment of Ecosystem Health of the Yucatan Coast



# THE LONG TERM VISION OF THE GULF LME REGION

**Regional  
Effort**

**Ecosystem  
Approach**

**R**educe Pollution

**R**estore Marine Habitat and Ecosystems

**R**ecover Living Marine Resources

**I**mprove Regional Governance

**I**mprove People's Living Conditions

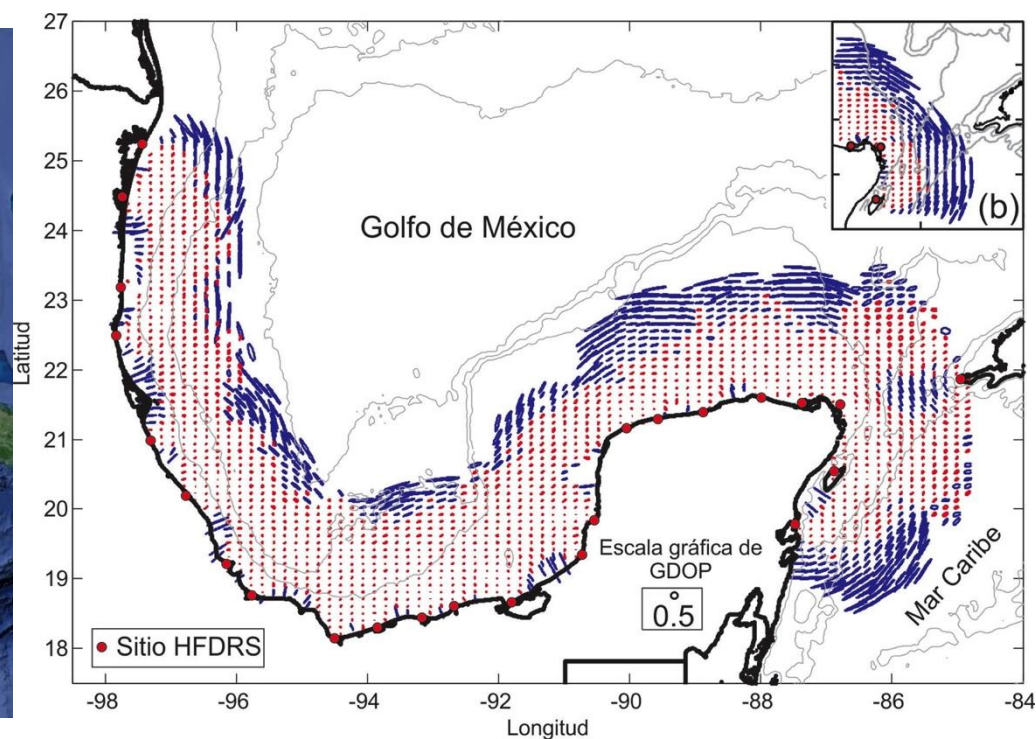
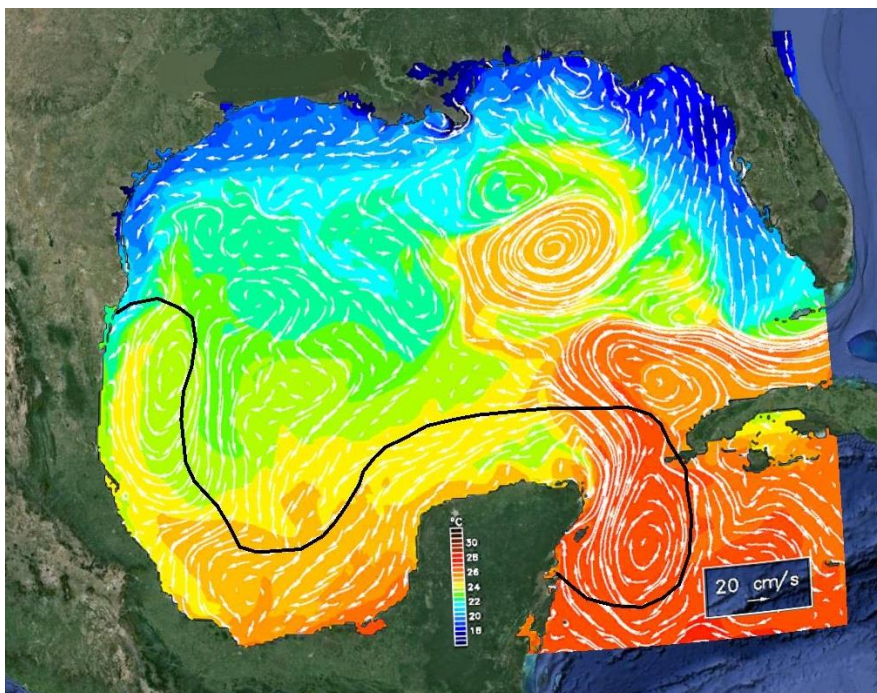
**Ecosystem Based Management  
of the GoM LME**

b

# MexICOOS

**M**exican **I**ntegrated **C**oastal  
and **O**cean **O**bserving **S**ystem

# Monitoreo de las corrientes oceánicas usando Sistema de Radares de Alta Frecuencia (HFR) en el Golfo de México y Mar Caribe



**GOVS. FEDERAL STATE MEX - US**

**GOMSA Gulf States Accord**

**ALIANZA ESTADOS MEX - US**



**SCI RESEARCH CONSORTIA CIIMAR in MEX GOMURC in US**



**SOCIEDAD CIVIL MEX - US**

**Water Resources Reduce Pollution**

**Education & Research**

**Ocean and Coastal Observing Systems**

**Economic and Productive Sectors**

**Climate Change Coastal Resilience, disaster relief and Human Health**

**Ecosystems and Marine Resources**

An ideal regional bilateral integrated approach that includes existing organizations and programs based on Federal, State and Local gov's, Science & Education Consortia, Entrepreneurs & Civil Society

# CREACIÓN OBSERVATORIO MARINO, COSTERO Y DEL AGUA (OMCA) DEL GOLFO DE MÉXICO Y EL CARIBE

A ubicarse en el Parque Científico y Tecnológico de Yucatán  
y formación de Alianza entre el PCT-YUC y la Ciudad Universitaria del Conocimiento de Tabasco



# CINCO CENTROS DE EXCELENCIA EN EL GOLFO NORTE

## Trabajan coordinados con GOMURC



### 1605. CENTERS OF EXCELLENCE RESEARCH GRANTS



- Centers of Excellence should focus on Gulf science, technology, and monitoring in at least 1 of the following:
  - Coastal and deltaic sustainability, restoration and protection, including solutions and technology that allow citizens to live in a safe and sustainable manner in a coastal delta in the Gulf Coast region
  - Coastal fisheries and wildlife ecosystem research and monitoring in the Gulf Coast Region
  - Offshore energy development, including research and technology to improve the sustainable and safe development of energy resources in the GoM
  - Sustainable and resilient growth, economic and commercial development in the Gulf Coast Region
  - Comprehensive observation, monitoring, and mapping of the GoM

# ¿Porque crear el Observatorio Marino, Costero y del Agua (OMCA) del Golfo de México y el Caribe como un Centro de Excelencia sumando a los cinco existentes en el Golfo Norte?



Se cuenta con el apoyo de:

- ✓ Los socios de CiiMAR-GoMC en EEUU
- ✓ Grupo más importante de investigación sobre océanos de los Estados Unidos, el “US Ocean Leadership”
- ✓ Consorcio GOMURC en las costas del Golfo
- ✓ Los 5 centros de excelencia existentes en el Golfo Norte
- ✓ Otros centros de investigación y académicos expertos en ciencias marinas de EEUU, ASIA, EUROPA y MEXICO







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# ¿Porque crear el Observatorio Marino, Costero y del Agua (OMCA) del Golfo de México y el Caribe como un Centro de Excelencia sumando a los cinco existentes en el Golfo Norte?



## PARA:

- ✓ MANTENER UNA VISION REGIONAL Y DE TRANSFRONTERA
- ✓ FORTALECER ACCIONES BINACIONALES
- ✓ CREAR SISTEMA COLECTIVO DE OBSERVACION
- ✓ COMBATIR DE MANERA CONJUNTA LOS RETOS DEL FUTURO
- ✓ APOYAR LA TOMA DE DECISIONES BASADA EN CIENCIA ROBUSTA
- ✓ FORTALER LA GOBERNANZA REGIONAL





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***Mtra. Rosa Martha Padrón López***  
***Directora de la División Académica de Ciencias Biológicas (UJAT)***