Ocean and Coastal Observing System: An initiative from the Mexican academic-scientific sector for implementation of the Global Ocean Observing System, Chapter Mexico (GOOSMEX)
Antecedents

- Historical attempts from the scientific community for:
  
  Common data bases

  Multi institutional projects

  Sharing information among academic, social, public and private sectors

- More sea than land....

- Only a few institutional long data series (tide gauge stations, fisheries, navy ship subsurface data, meteorological records...)

- More usuaries of data from different sectors (tourism, energy industry, transport, scientific research)
Antecedents

- Participation in international monitoring efforts (sea level, IOCARIIBE, PAM, LOICZ, LME, SOLAS…) National govern programs (HAB, Clean Beaches)

Meeting May 2004. 30 scientist and directives from 12 academic institutions decided to impulse together GOOS Mexico

http://goosmx.cicese.mx
WHY GOOS?

GOOS IS A SUSTAINED, COORDINATED INTERNATIONAL SYSTEM FOR:

- GATHERING AND PROCESSING DATA ABOUT THE OCEANS AND SEAS
- GENERATING USEFUL PRODUCTS AND SERVICES INCLUDING ACCURATE DESCRIPTIONS OF PRESENT CONDITIONS AND FORECASTS OF FUTURE CONDITIONS
- CREATING LONG TERM DATA SETS
- PRE-OPERATIONAL RESEARCH AND DEVELOPMENT FOR NEW AND IMPROVED PRODUCTS AND SERVICES
GLOBAL OCEAN OBSERVING SYSTEM (GOOS)
A Country Commitment
MEETING THE NEEDS OF CONVENTIONS

- CLIMATE CHANGE
- BIODIVERSITY
- LAW OF THE SEA
- PROTECT FROM LAND BASED POLLUTION
- AGENDA 21
- LONDON DUMPING CONVENTION
- HIGHLY MIGRATORY & STRADDLING STOCKS
- REGIONAL SEAS
It coincides with those that we already do...

GOOS OPERATIONAL ACTIVITIES

- DATA COLLECTING
- DATA AND INFORMATION MANAGEMENT
- DATA ANALYSIS, PREPARATION AND DISSEMINATION OF PRODUCTS
- NUMERICAL MODELLING AND FORECASTING
- TRAINING, TECHNICAL ASSISTANCE AND TECHNOLOGY TRANSFER
- ENABLING RESEARCH
Present conditions
Status of the buoy network in August 2003

DBCP status, August 2003 (data buoys reporting on GTS)

- UNKNOWN
- AUSTRALIA
- BRAZIL
- CANADA
- FRANCE
- GERMANY
- INDIA
- IRELAND
- JAPAN
- MALAYSIA
- NETHERLANDS
- NEW ZEALAND
- NORWAY
- SOUTH AFRICA
- UNITED KINGDOM
- USA
- BRAZIL-FRANCE-USA
- MOORINGS
Status of the Argo network in August 2003

Argo Network, as of August 2003 (869 Floats)

- AUSTRALIA (21)
- CANADA (70)
- CHINA (13)
- DENMARK (2)
- EUROPEAN UNION (68)
- FRANCE (40)
- GERMANY (37)
- INDIA (24)
- JAPAN (147)
- KOREA (Rep. of) (21)
- MAURITIUS (1)
- NEW ZEALAND (3)
- NORWAY (8)
- RUSSIAN FEDERATION (3)
- UNITED KINGDOM (50)
- UNITED STATES (361)
Status of the global sea level network in October 2002

GLOSS Status, October 2002

- **Category 1**: "Operational" stations for which the latest data is 1998 or later.
- **Category 2**: "Probably operational" stations for which the latest data is within the period 1988-1997.
- **Category 3**: "Historical" stations for which the latest data is earlier than 1988.
- **Category 4**: Stations for which no PSMSL data exist.
ECAC I to V
Sea water filtered to obtain:

- DMSPp
- Chlorophyll
- DMSPd
- DMSw

Field measurements and sampling of meteorological, oceanographic and biological variables

Laboratory analysis: GC, fluorometry, satellite images
Potentialities and Perspectives

Networks that should be part of GOOSMEX:

- Sismological, Tsunamis, Sea level
- Meteorological (Coastal and buoys)
- Waves, Extreme Events
- Drifting and Moored buoys (Coastal currents SST, SSS, surface and subsurface)
- HAB´s, Bacteriological Monitoring in Beaches
- Coral reefs observation network
- Carbon fluxes (pCO2, sources and sinks)
- More collaboration with international programs for deep ocean