



Caribbean Marine Atlas



Adán Zúñiga Ríos



Purpose

- To identify, collect and organize available geo-spatial datasets into an atlas of environmental themes for the Caribbean region.
- Include data from national and regional projects and programmes, related to the sustainable development and integrated management of marine and coastal areas in the region.

For resource managers, planners and decision-makers from various administrative institutions and specialized agencies in the Caribbean

Sponsors

Intergovernmental Oceanographic Commission's (IOC), International Oceanographic Data and Information Exchange (IODE) and Integrated Coastal Area Management (ICAM) Programmes.

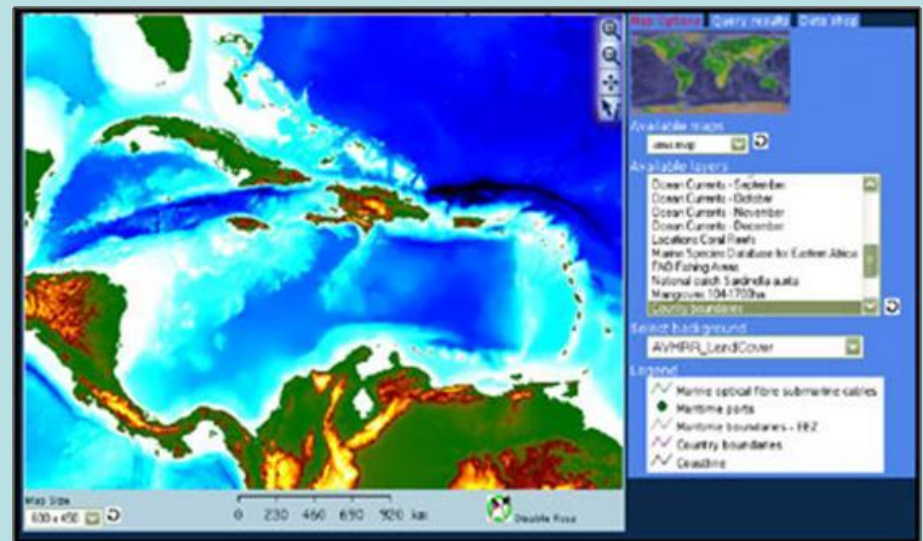


From October/2008 there is a prototype version of the CMA prepared by eight participating countries (Barbados, Cuba, Dominica, Guyana, Jamaica, St Lucia, Trinidad & Tobago and Turks & Caicos).

CMA team

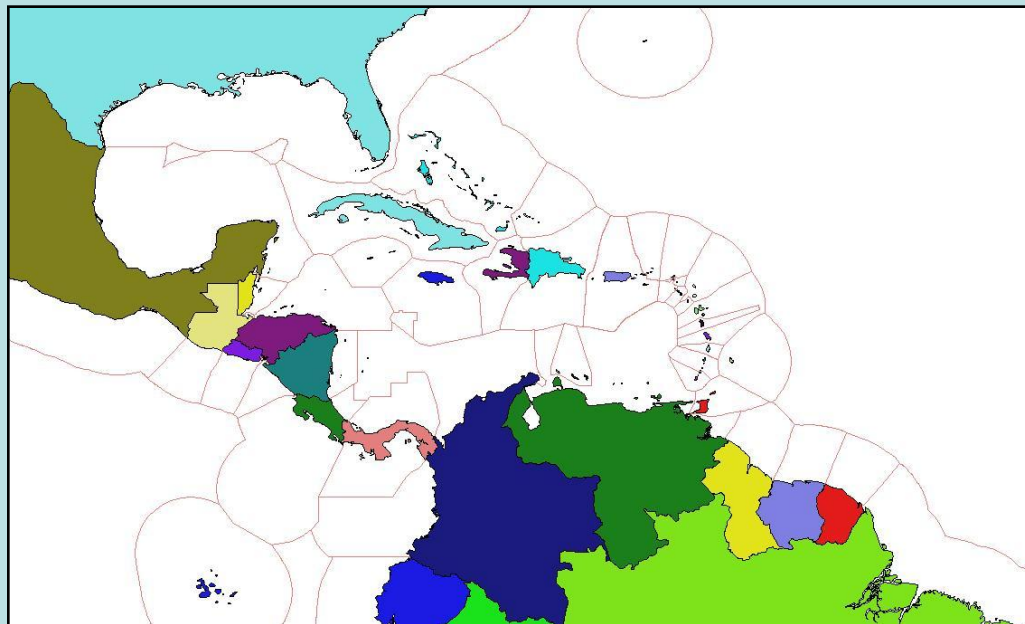


CMA prototype





CMA Domain



2009, it is planned to extend the Atlas to include other countries in the region. Environmental datasets from organizations in the contributing countries will be collected for presentation in the Atlas.



Data and Information Distribution System

- Interactive, online mapping tool
 - Collection of GIS data layers (vector and raster)
 - User defined data frame within AOI
 - Geographic features (scales, grids, coordinates)
- Advanced data control
 - Layer list (one layer, multiple)
 - Feature selection
 - Results tables
 - Metadata viewing
 - Links to websites, documents, auxiliary data
- Data download
 - Shapefiles
 - Attached metadata
 - Documents, images



Atlas Themes Structure (> 200 layers)

- Geosphere
 - Natural hazards
 - Soil types
 - Land use
- Hydrosphere
 - Bathymetry
 - Physical oceanography
 - Chemical oceanography
- Biosphere
 - Habitats
 - Marine flora and fauna
 - Protected areas
- Atmosphere
 - Climate
 - Weather
- Human Environment
 - Settlements
 - Infrastructure
 - Tourism

Data layers

- Regional Scale Data Layers
- National/Local Scale Data Layers
- Virtual Data Layers



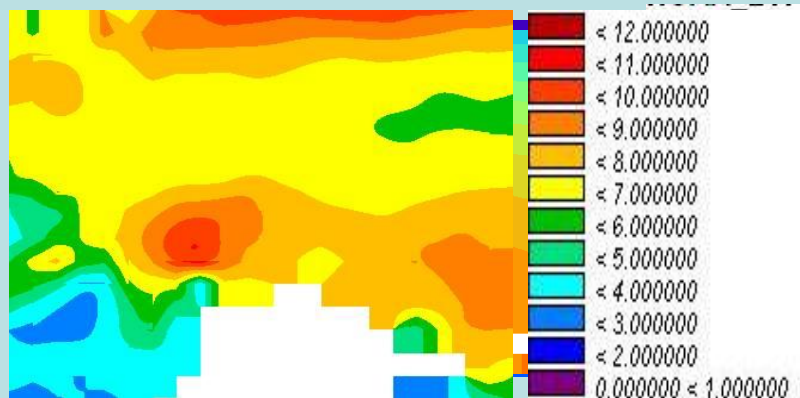
Example: CLIMATE Parameters

Two ways resampling grids

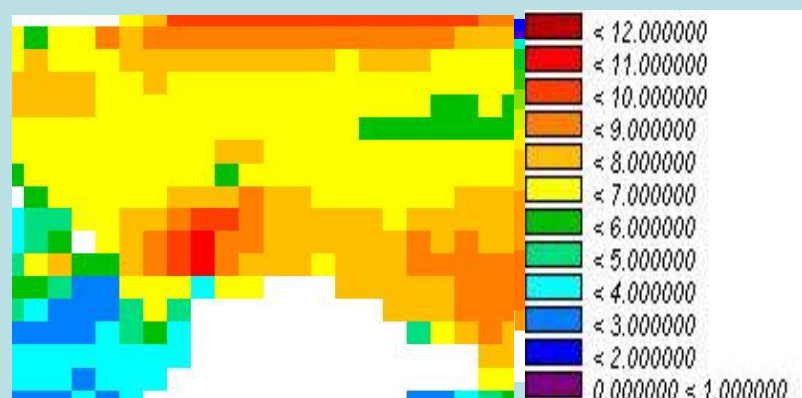
- Spline Interpolation more pretty.
- Nearest Neighbor more real.
- Scientific Tiff image products

Parameter	Source	Unit	Resolution
Precipitation	NOAA_LT	mm/day	2.5 deg
Air Temperature	COADS- LT	°C	2 deg
Wind Speed	COADS- LT	m/s	2 deg
Pressure	Nothing yet, is not a identified priority.		

24 grid maps, two by month with type (NOAA LT) and type (NOAA LT) (mm/day)



COADS_LT_Air_Temp_Avg_Spline.tif
COADS_LT_Wind_Speed_Feb_01 interpolation.tif



COADS_LT_Air_Temp_Avg_NearestNeighbor.tif
COADS_LT_Wind_Speed_Feb_01 NearestNeighbor.tif



Importance of CMA

Local and Regional Data Management for Policy Making

- Integrated Coastal Area Management (ICAM)
 - Data required for planning, implementation, monitoring, evaluation
 - Regional scale information availability
 - Communication with policy makers
- Inter and intradepartmental data sharing
 - Local CMA equivalent
 - Provide easy access to restricted data
 - Data quality and metadata standards
 - Improved data sharing
 - Data and information warehousing
- Communication with public
 - CMA and local equivalent
 - Central access point for marine data
 - Enhance data and data product delivery
 - Reduce product delivery overhead



[www. caribbeanmarineatlas.net](http://www.caribbeanmarineatlas.net)

Contact

Peter Pissierssens, IODE Project Office for IOC (of UNESCO)
email: p.pissierssens@unesco.org

Thank you...