

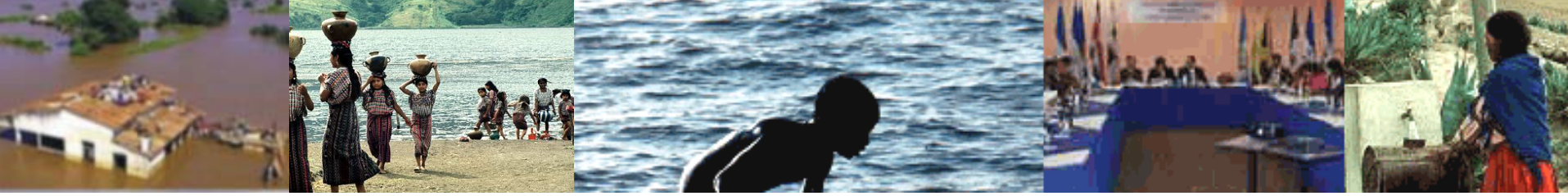
Water Center for the Humid Tropics of Latin America and the Caribbean CATHALAC

REGIONAL VISUALIZATION AND MONITORING SYSTEM FOR MESOAMERICA

IGWCO Meeting. Tokyo, Japan. March 2, 2005

Emilio Sempris
Director





Regional and International Centers under UNESCO-IHP

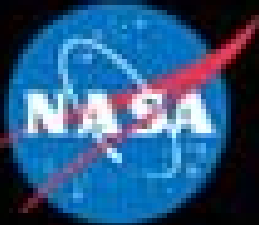


CATHALAC is a regional center of excellence dedicated to enhance scientific understanding of the water cycle and to promote HSD through IWRM and Environmental Management.



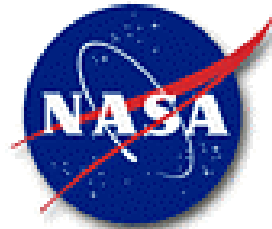
SERVIR MESOAMERICA

A 21ST Century System
For Informed Environmental
Decision Making in Mesoamerica



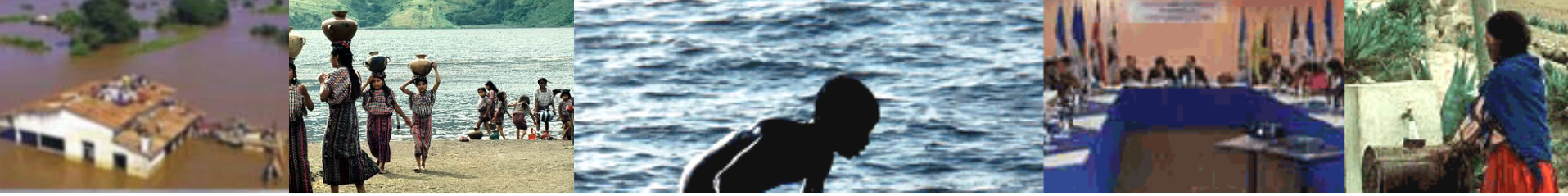


Regional Visualization and Monitoring System (Political background)



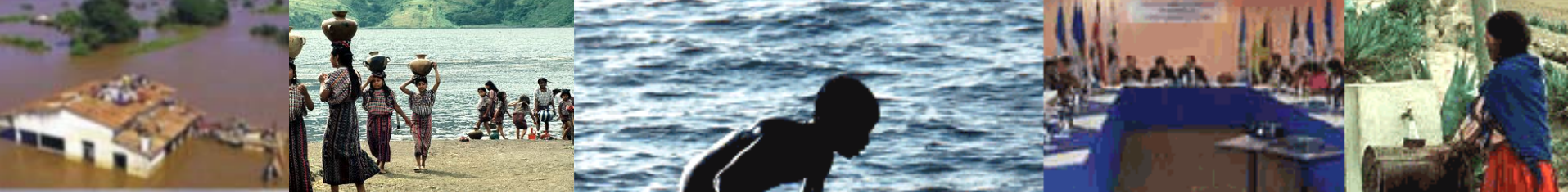
- **The Presidents of Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, Panama, and the US, and the Prime Minister of Belize met in March 2002 to announce the continuation of the CONCAUSA Plan of Action, including:**
 - **Increase regional market competitiveness and integration;**
 - **Strengthen the regional capacity to address adaptation to climate change, risk and disaster management, and mitigate GHG emissions;**





SERVIR, Inaugurated on Feb 3, 2005





- LULCC Planning
- Red Tide
- Forest Fires
- FLOODS
- IWRM
- ICZM

NASA's MSFC
Test Bed Facility

- Energy and Water Balance
- Carbon Cycle
- EWS and DSS
- Weather
- Climate Change

CATHALAC
Regional Node

- GUATEMALA
- BELIZE
- EL SALVADOR
- HONDURAS
- NICARAGUA
- COSTA RICA
- PANAMA
- MEXICO

SERVIR *The Mesoamerican Monitoring and Visualization System*

TUES, MAR. 1, 2005

- Español
- English



[Mesoamerican Data](#) | [Interactive Maps](#) | [Decision Support](#) | [Visualizations](#)

- Home
- About SERVIR
- What's New
- Workshops
- Library
- Related Links
- Directory
- Internal (Restricted)
- Forums
- Gallery
- User Comments
- Contact Us

MesoStor *Tool for Regional Data, Dynamic Maps, Decision Support, and Interactive Visualizations*

Now Online MesoStor, Interactive

Mesoamerica Today, Tuesday, Mar. 1, 2005

Latest GOES images. [Click here](#) for more GOES images.

Satellite and Ground Data Sets

<http://servir.nsstc.nasa.gov>
<http://servir.nasa.cathalac.org>

What's New!
Click here to visit the "What's New" page to read SERVIR news articles, and to see new products and features being added to this Web site.

SERVIR Movies
Time Lapse of Fires (MPEG 17.89 MB). Click image to view movie.



Fade from Day to Night (20 KB). Click image to view movie.

NASA Earth Science Applications

SERVIR *The Mesoamerican Monitoring and Visualization System*

TUES, MAR. 1, 2005

- Español
- English



[Mesoamerican Data](#) | [Interactive Maps](#) | [Decision Support](#) | [Visualizations](#)

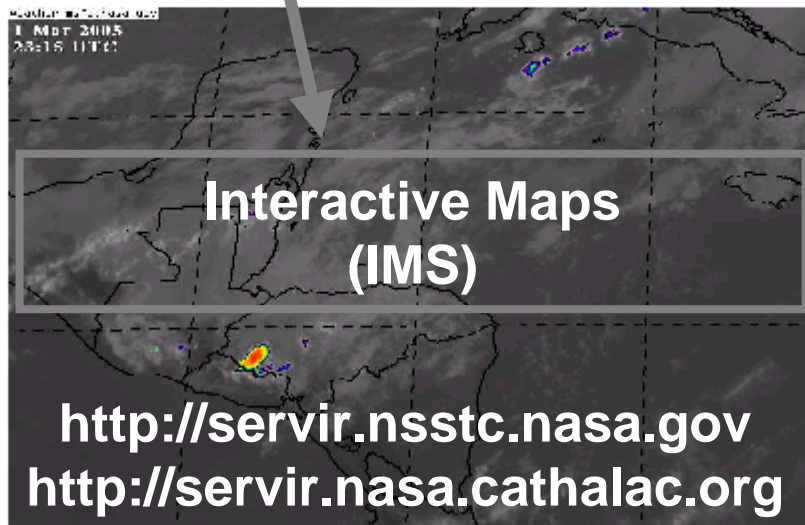
- Home
- About SERVIR
- What's New
- Workshops
- Library
- Related Links
- Directory
- Internal (Restricted)
- Forums
- Gallery
- User Comments
- Contact Us

Your "One Stop Shop" for Regional Data, Dynamic Maps, Decision Support, and Interactive Visualizations

Now Online MesoStor, Interactive I

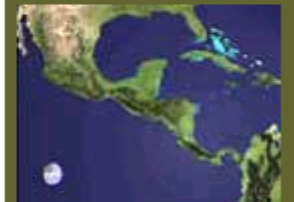
Mesoamerica Today, Tuesday, Mar. 1, 2005

Latest GOES image. [Click here](#) for more GOES images.



What's New!
Click [here](#) to visit the "What's New" page to read SERVIR news articles, and to see new products and features being added to this Web site.

SERVIR Movies
Time Lapse of Fires (MPEG 17.89 MB).
Click image to view movie.



Fade from Day to Night (20 KB). Click image to view movie.

NASA Earth Science Applications

SERVIR *The Mesoamerican Monitoring and Visualization System*

TUES, MAR. 1, 2005

- Español
- English



[Mesoamerican Data](#) | [Interactive Maps](#) | [Decision Support](#) | [Visualizations](#)

- Home
- About SERVIR
- What's New
- Workshops
- Library
- Related Links
- Directory
- Internal (Restricted)
- Forums
- Gallery
- User Comments
- Contact Us

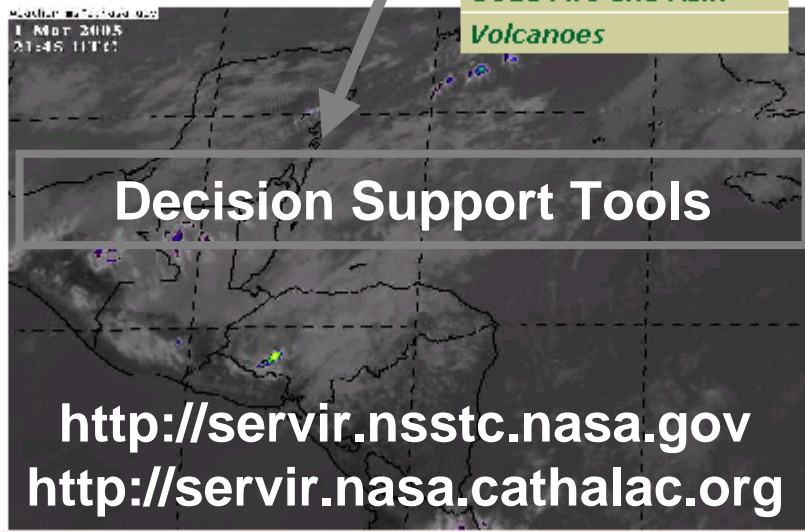
Your "One Stop Shop" for Regional Decision Support, and Interactive Visualizations

Now Online MesoStore

Mesoamerica Today, Tuesday, March 1, 2005

Latest GOES image. [Click here](#) for more

- Fires
- Red Tides
- Hurricanes
- Floods
- Food Security EWS
- Earthquakes
- Climate Change
- GOES Fire and Rain
- Volcanoes



Decision Support Tools

<http://servir.nsstc.nasa.gov>
<http://servir.nasa.cathalac.org>

What's New!

Click [here](#) to visit the "What's New" page to read SERVIR news articles, and to see new products and features being added to this Web site.

SERVIR Movies

Time Lapse of Fires (MPEG 17.89 MB). Click image to view movie.



Fade from Day to Night (20 KB). Click image to view movie.

NASA Earth Science Applications

SERVIR *The Mesoamerican Monitoring and Visualization System*

TUES, MAR. 1, 2005
Español
English



[Mesoamerican Data](#) | [Interactive Maps](#) | [Decision Support](#) | [Visualizations](#)

- Home
- About SERVIR
- What's New
- Workshops
- Library
- Related Links
- Directory
- Internal (Restricted)
- Forums
- Gallery
- User Comments
- Contact Us

Your "One Stop Shop" for Regional Data, Dynamic Maps, Decision Support, and Interactive Visualizations

Now Online MesoStor, Interactive |

Mesoamerica Today, Tuesday, Mar. 1, 2005

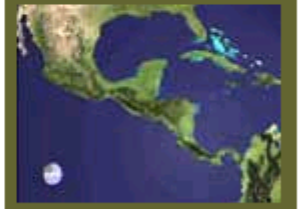
Latest GOES image. [Click here](#) for more GOES images.

Decision Support Tools

<http://servir.nsstc.nasa.gov>
<http://servir.nasa.cathalac.org>

What's New!
Click [here](#) to visit the "What's New" page to read SERVIR news articles, and to see new products and features being added to this Web site.

SERVIR Movies
Time Lapse of Fires (MPEG 17.89 MB).
Click image to view movie.

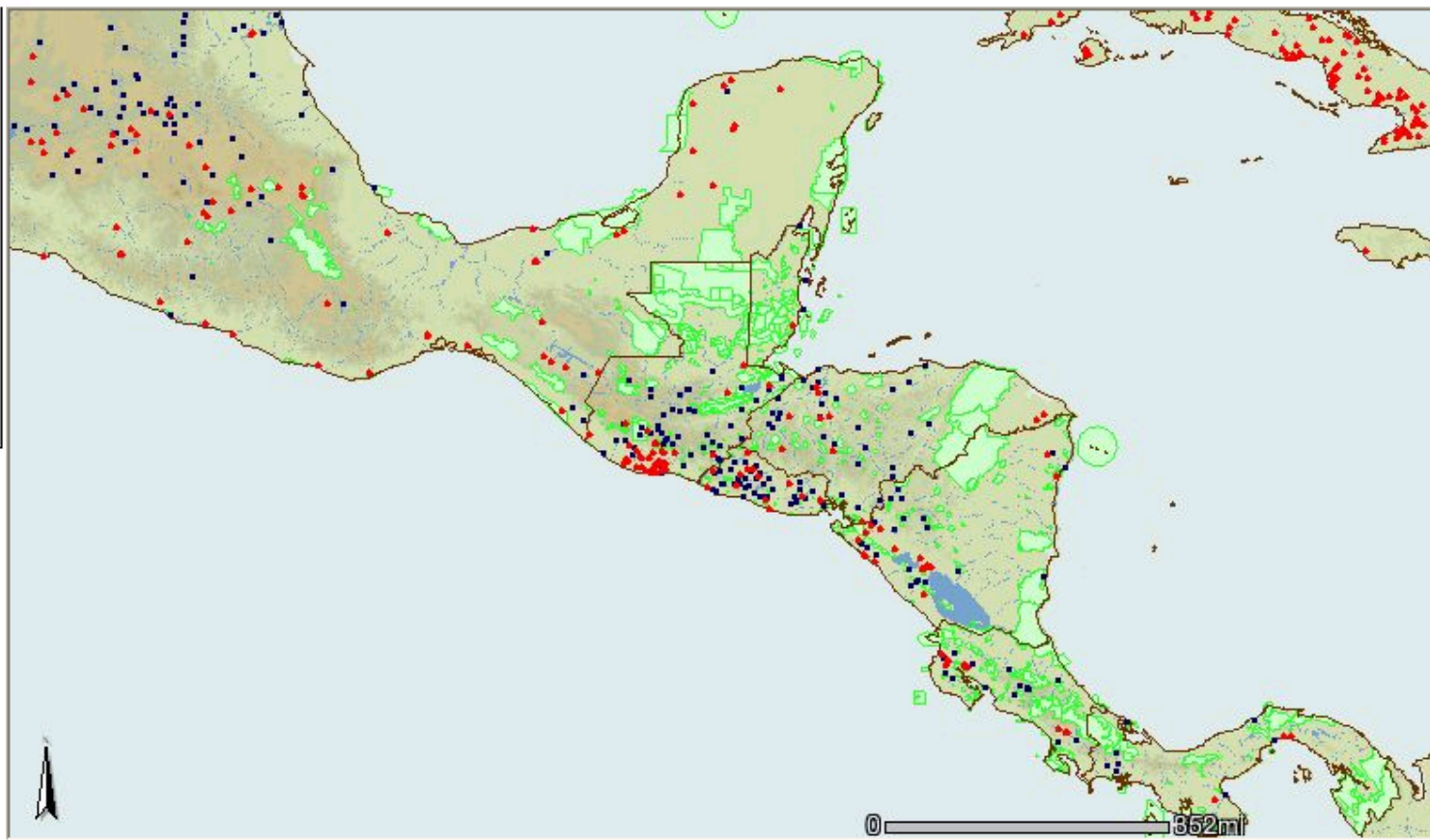


Fade from Day to Night (20 KB). Click image to view movie.

NASA Earth Science Applications



Web Fire Maps: CENTRAL AMERICA



Layers

Visible Active

- Fires Last 7 Days
- Fires Last 48Hrs
- MODIS Active Fire Detections
- Cities
- Countries (outline)
- Protected Areas
- Administrative Boundaries
- MODIS Surface Reflectance composite Image
- Elevation and Rivers
- Countries

Refresh Map

Legend/Layer

Date Query [Help](#)

Enter the dates in YYYY-MM-DD format.

Start Date

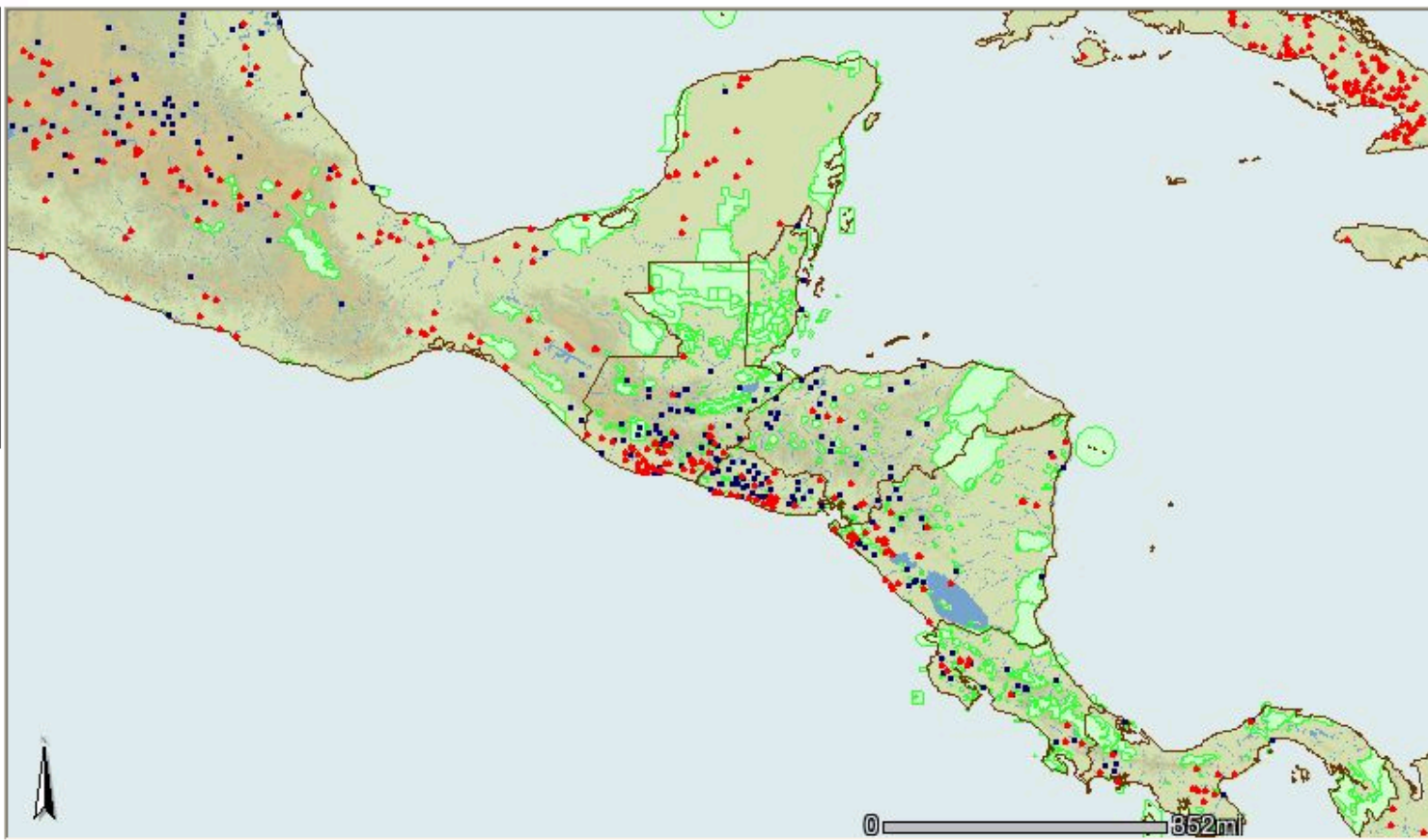
End Date

Zoom Out

NOTE: MODIS Fire detections are NOT available for the following dates: 6/16/2001 to 7/3/2001, 3/20/2002 to 3/28/2002, 4/15/2002.



Web Fire Maps: CENTRAL AMERICA



Layers

Visible Active

- Fires Last 7 Days
- Fires Last 48Hrs
- MODIS Active Fire Detections
- Cities
- Countries (outline)
- Protected Areas
- Administrative Boundaries
- MODIS Surface Reflectance composite Image
- Elevation and Rivers
- Countries

Refresh Map

Legend/Layer

Date Query [Help](#)

Enter the dates in YYYY-MM-DD format.

Start Date

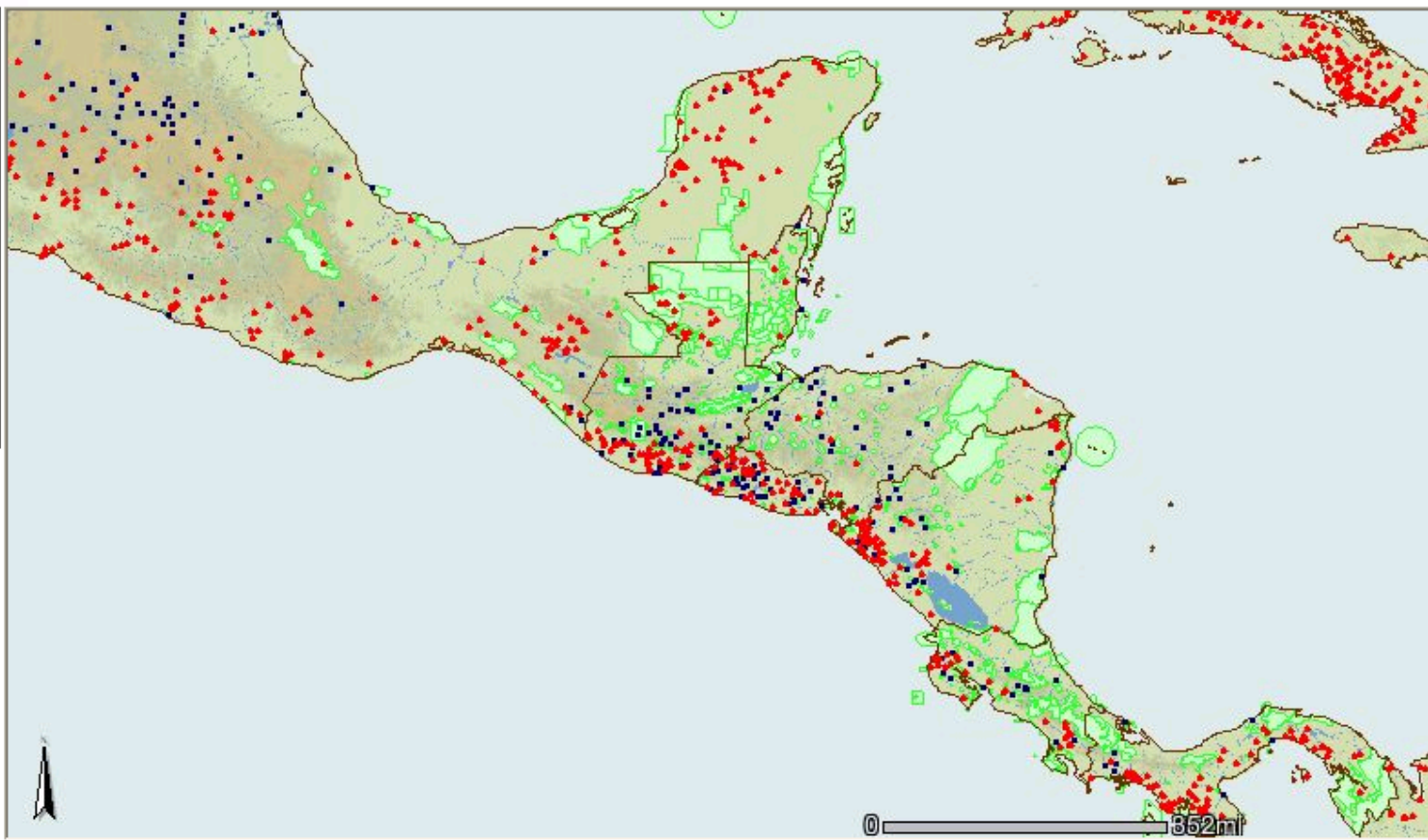
End Date

Zoom Out

NOTE: MODIS Fire detections are NOT available for the following dates: 6/16/2001 to 7/3/2001, 3/20/2002 to 3/28/2002, 4/15/2002.



Web Fire Maps: CENTRAL AMERICA



Layers

Visible Active

- Fires Last 7 Days
- Fires Last 48Hrs
- MODIS Active Fire Detections
- Cities
- Countries (outline)
- Protected Areas
- Administrative Boundaries
- MODIS Surface Reflectance composite Image
- Elevation and Rivers
- Countries

Refresh Map

Legend/Layer

Date Query [Help](#)

Enter the dates in YYYY-MM-DD format.

Start Date

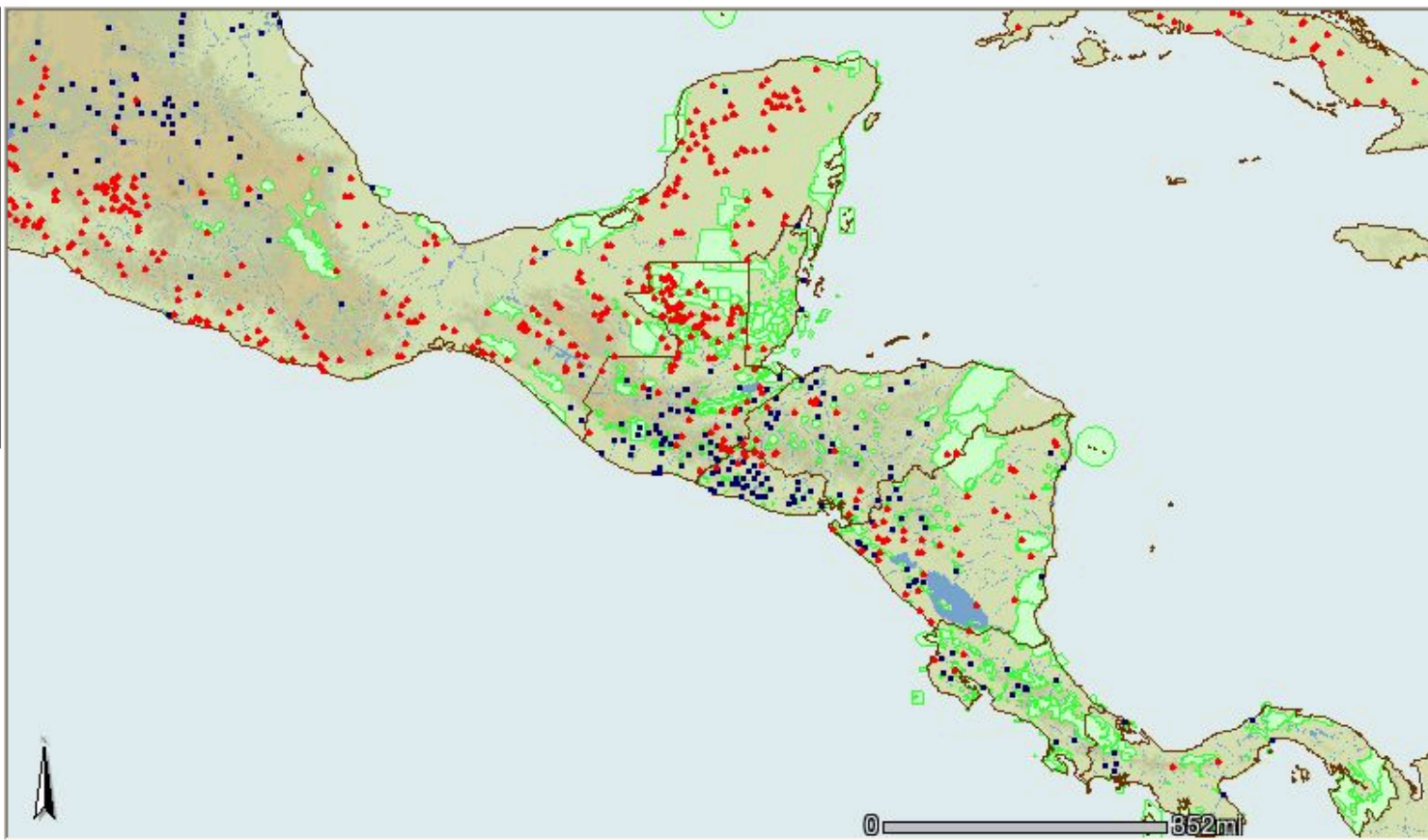
End Date

Zoom Out

NOTE: MODIS Fire detections are NOT available for the following dates: 6/16/2001 to 7/3/2001, 3/20/2002 to 3/28/2002, 4/15/2002.



Web Fire Maps: CENTRAL AMERICA



Layers

Visible Active

- Fires Last 7 Days
- Fires Last 48Hrs
- MODIS Active Fire Detections
- Cities
- Countries (outline)
- Protected Areas
- Administrative Boundaries
- MODIS Surface Reflectance composite Image
- Elevation and Rivers
- Countries

Refresh Map

Legend/Layer

Date Query [Help](#)

Enter the dates in YYYY-MM-DD format.

Start Date

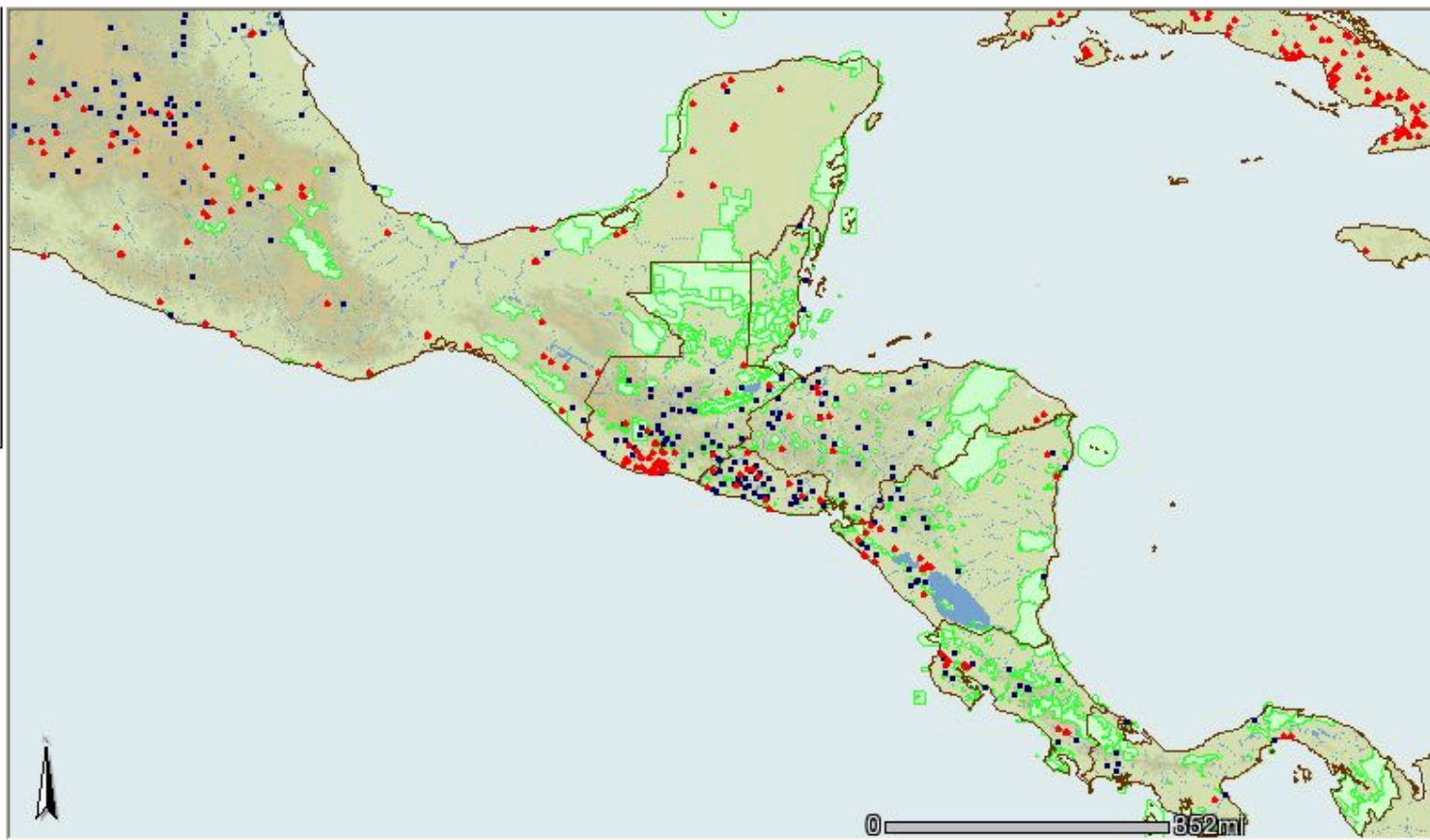
End Date

Zoom Out

NOTE: MODIS Fire detections are NOT available for the following dates: 6/16/2001 to 7/3/2001, 3/20/2002 to 3/28/2002, 4/15/2002.



Web Fire Maps: CENTRAL AMERICA



Layers

Visible Active

- Fires Last 7 Days
- Fires Last 48Hrs
- MODIS Active Fire Detections
- Cities
- Countries (outline)
- Protected Areas
- Administrative Boundaries
- MODIS Surface Reflectance composite Image
- Elevation and Rivers
- Countries

Refresh Map

Legend/Layer

Date Query [Help](#)

Enter the dates in YYYY-MM-DD format.

Start Date

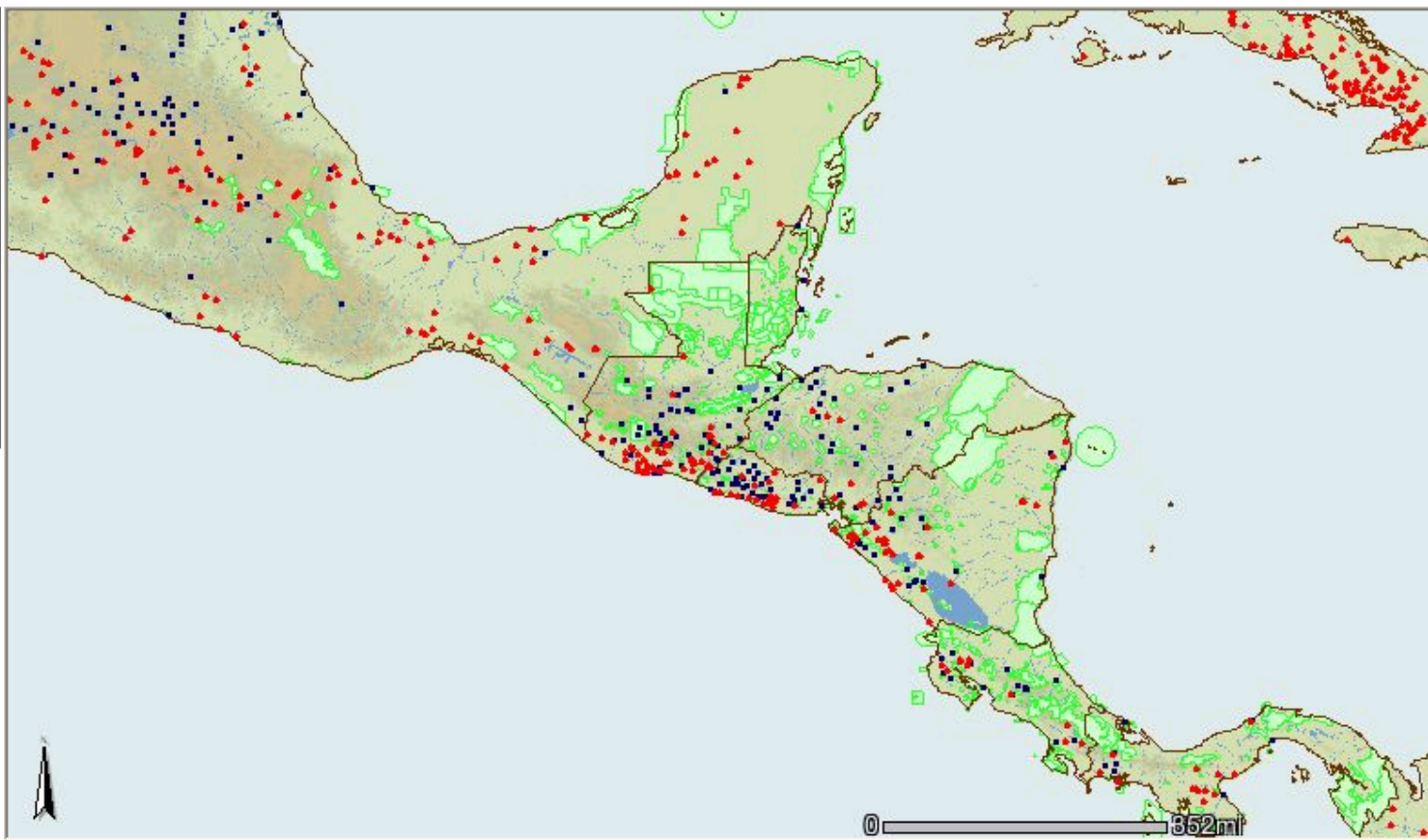
End Date

Zoom Out

NOTE: MODIS Fire detections are NOT available for the following dates: 6/16/2001 to 7/3/2001, 3/20/2002 to 3/28/2002, 4/15/2002.



Web Fire Maps: CENTRAL AMERICA



Layers

Visible Active

- Fires Last 7 Days
- Fires Last 48Hrs
- MODIS Active Fire Detections
- Cities
- Countries (outline)
- Protected Areas
- Administrative Boundaries
- MODIS Surface Reflectance composite Image
- Elevation and Rivers
- Countries

Refresh Map

Legend/Layer

Date Query [Help](#)

Enter the dates in YYYY-MM-DD format.

Start Date

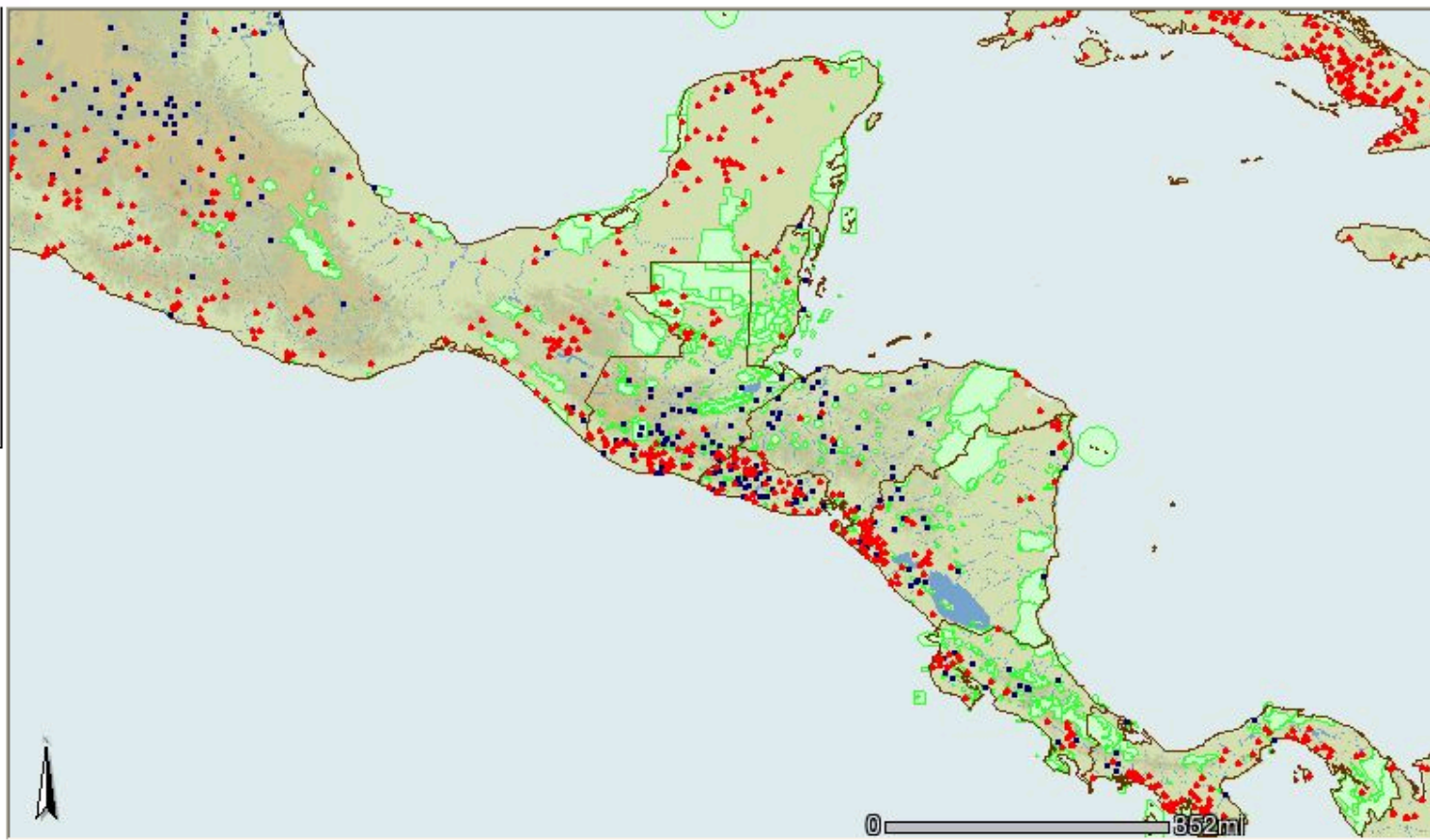
End Date

Zoom Out

NOTE: MODIS Fire detections are NOT available for the following dates: 6/16/2001 to 7/3/2001, 3/20/2002 to 3/28/2002, 4/15/2002.



Web Fire Maps: CENTRAL AMERICA



Layers

Visible Active

- Fires Last 7 Days
- Fires Last 48Hrs
- MODIS Active Fire Detections
- Cities
- Countries (outline)
- Protected Areas
- Administrative Boundaries
- MODIS Surface Reflectance composite Image
- Elevation and Rivers
- Countries

Refresh Map

Legend/Layer

Date Query [Help](#)

Enter the dates in YYYY-MM-DD format.

Start Date

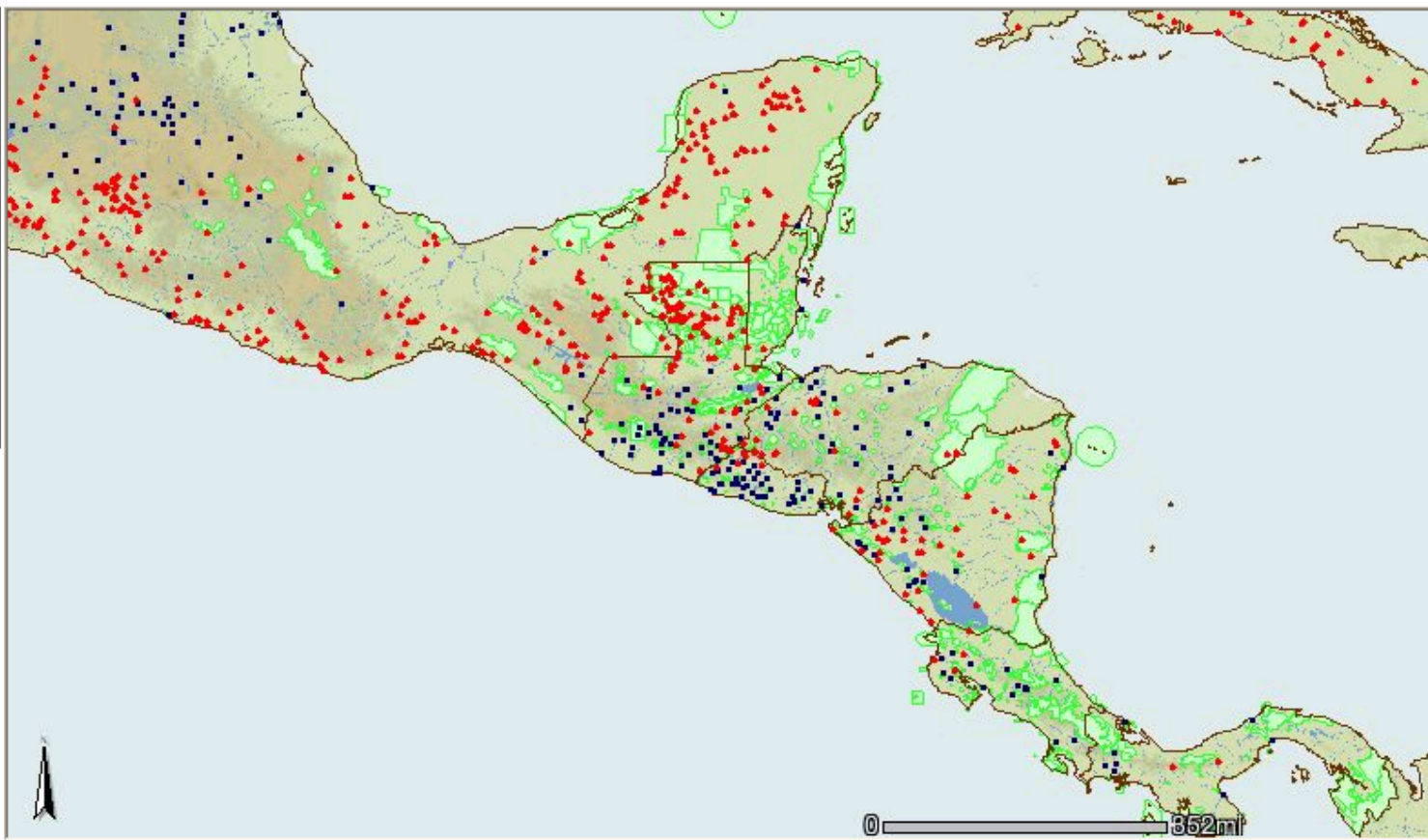
End Date

Zoom Out

NOTE: MODIS Fire detections are NOT available for the following dates: 6/16/2001 to 7/3/2001, 3/20/2002 to 3/28/2002, 4/15/2002.



Web Fire Maps: CENTRAL AMERICA



Layers

Visible Active

- Fires Last 7 Days
- Fires Last 48Hrs
- MODIS Active Fire Detections
- Cities
- Countries (outline)
- Protected Areas
- Administrative Boundaries
- MODIS Surface Reflectance composite Image
- Elevation and Rivers
- Countries

Refresh Map

Legend/Layer

Date Query [Help](#)

Enter the dates in YYYY-MM-DD format.

Start Date

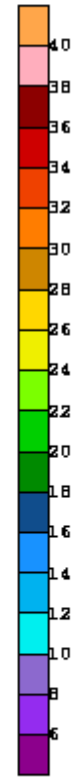
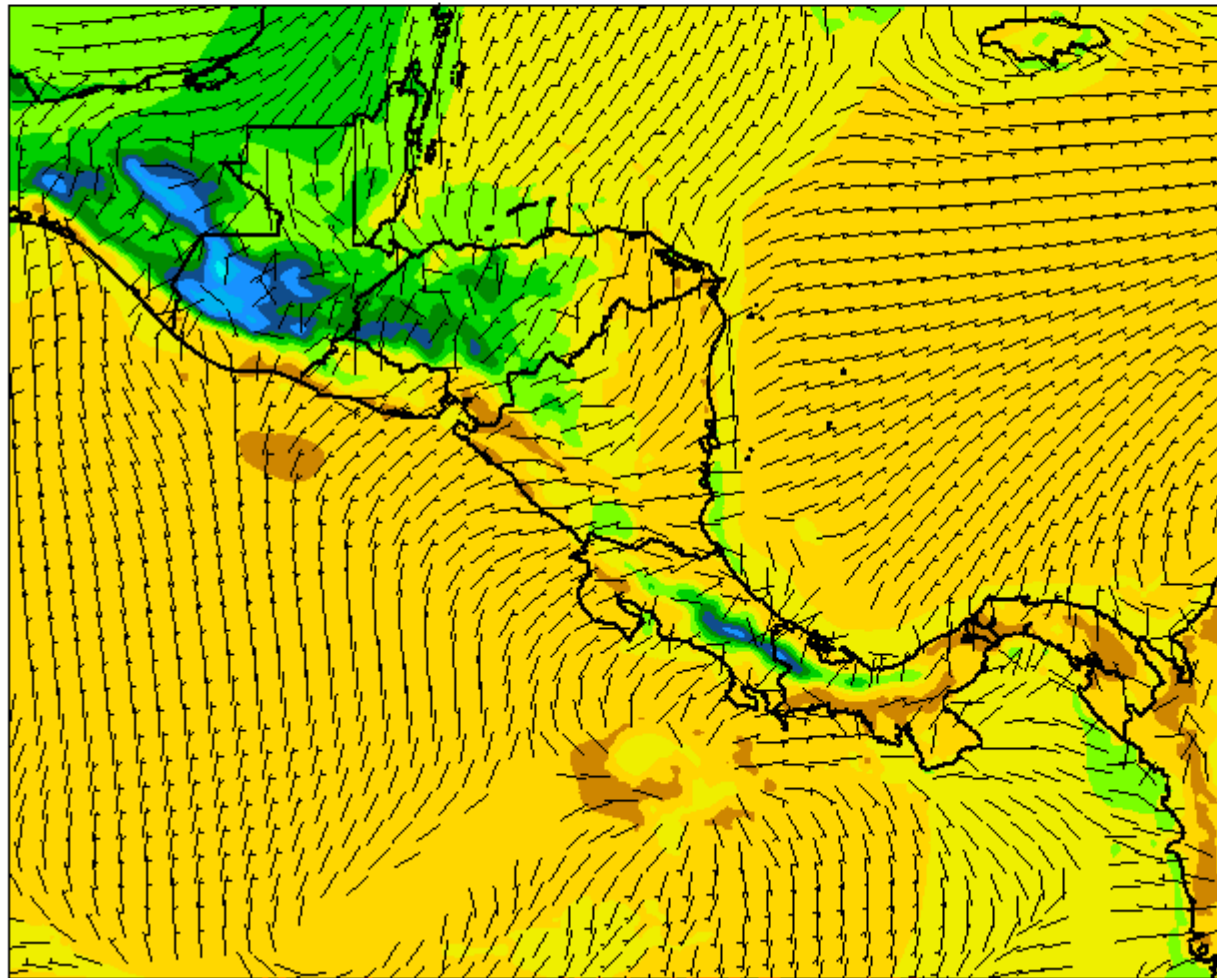
End Date

Zoom Out

NOTE: MODIS Fire detections are NOT available for the following dates: 6/16/2001 to 7/3/2001, 3/20/2002 to 3/28/2002, 4/15/2002.

over Default Faster < Stop Play >
■■■■■■■■

Model initialized at 12 UTC Tue 01 Mar 2005
03 Hour forecast valid 15 UTC Tue 01 Mar 2005
9 Meter Temp (C) and Wind (m/s)

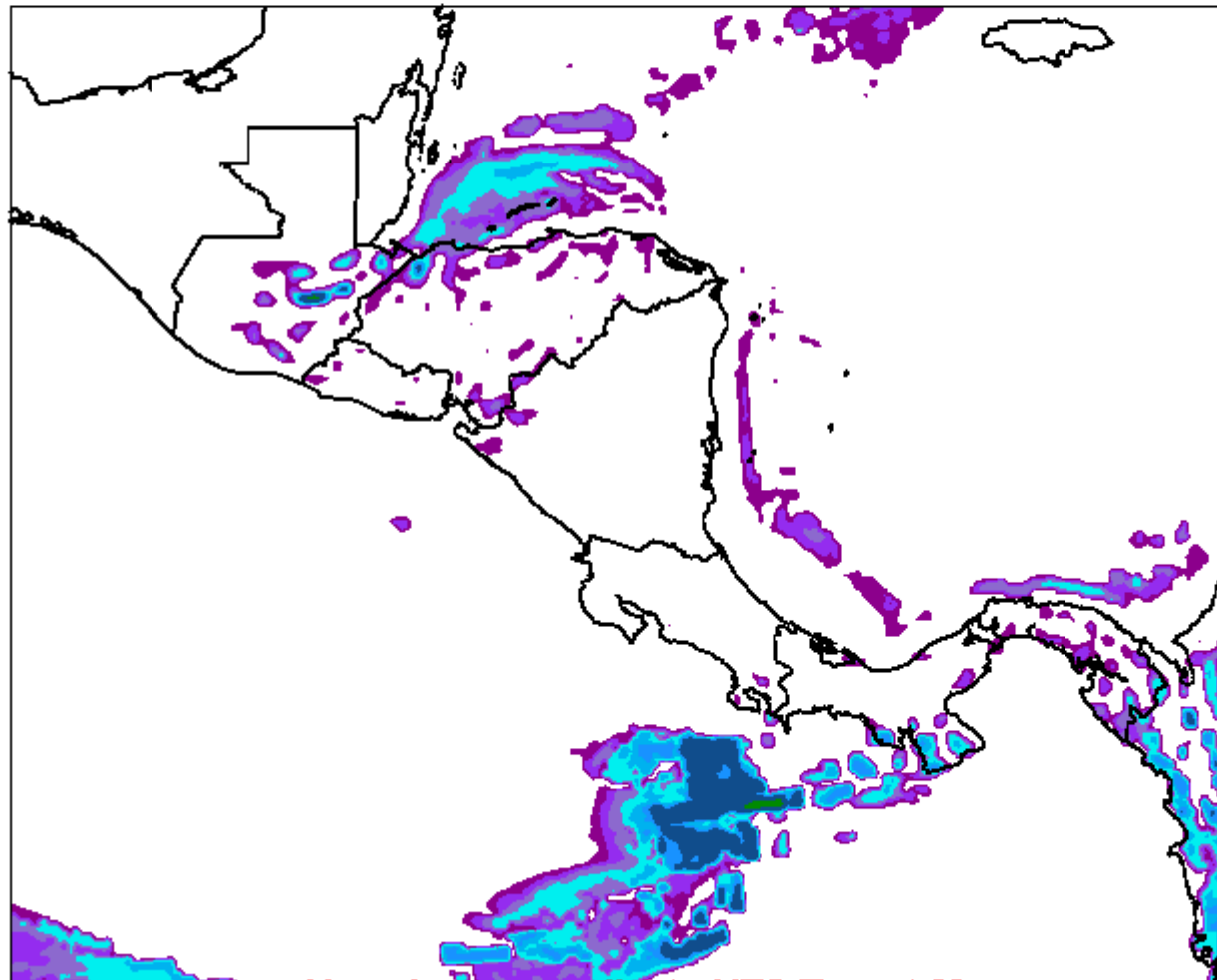


03 Hour forecast valid 15 UTC Tue 01 Mar 2005

over Default Faster < Stop Play >



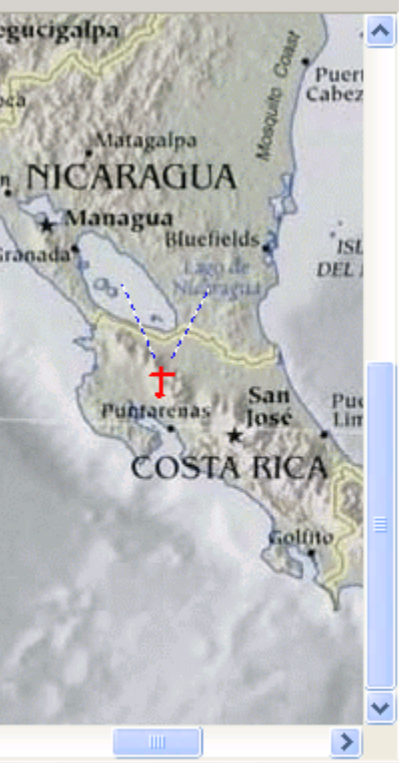
Model initialized at 12 UTC Tue 01 Mar 2005
06 Hour forecast valid 18 UTC Tue 01 Mar 2005
Accumulated precipitation (mm)



06 Hour forecast valid 18 UTC Tue 01 Mar

- Information
- Central America Vector Layers
 - Global View of Western Hemisphere
 - Central America - Regional View
 - Belize
 - Belize - Lighthouse Atoll
 - Belize - Sibun
 - Belize - North Central
 - Belize - Barrier Reef
 - Costa Rica
 - Costa Rica - Tilaran
 - El Salvador
 - El Salvador - Las Colinas

Regional Map



3D



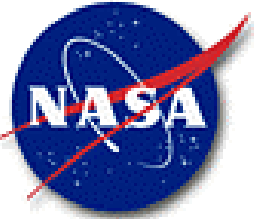
Display Quality ■■■■■■ 0.0 Kbps

FLIGHT PANEL

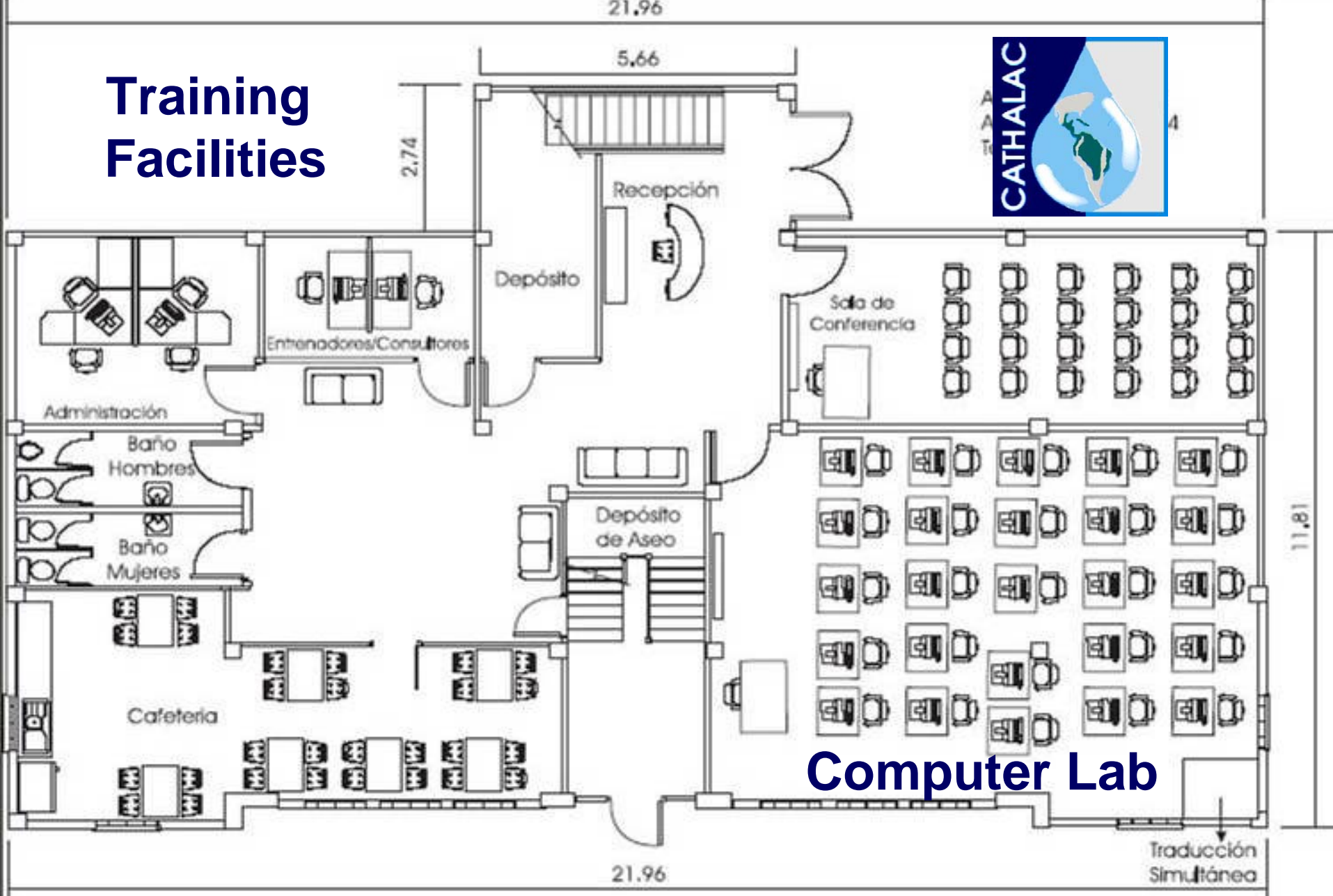


CB Activities 2004-2009

- Regional Climate Modeling
- Regional Carbon Modeling
- Mesostor (data warehouse) Management
- LULCC
- GIS, IMS, and Metadata Development
- Visualization with Terra Builder-Skyline
- IWRM and ICZM
- SIAM & IABIN



Training Facilities



Computer Lab

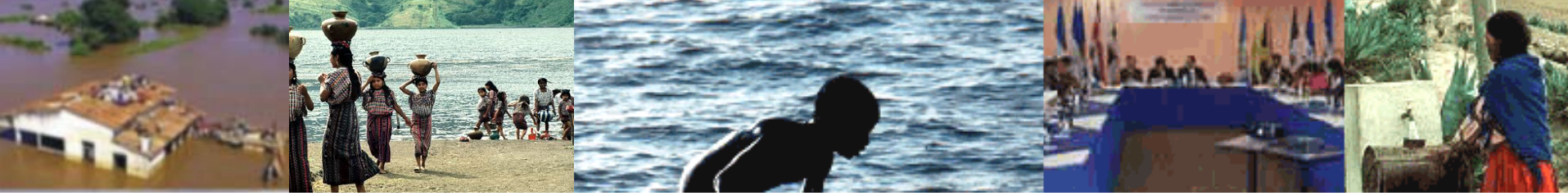




Capacity Building for Stage II Adaptation to Climate Change in Central America, Mexico and Cuba

- **Participating Countries:** Mexico, Guatemala, Honduras, El Salvador, Nicaragua, Costa Rica, and Panama;
- **GEF Funding + Swiss Gov:** 3.2 M USD, (UNFCCC-NAI eligibility for Enabling Activities)
- **Duration:** 3 years
- **Implementing Agency:** UNDP
- **Systems addressed:** Agriculture, Water Resources, Human Health and Coastal Zones.

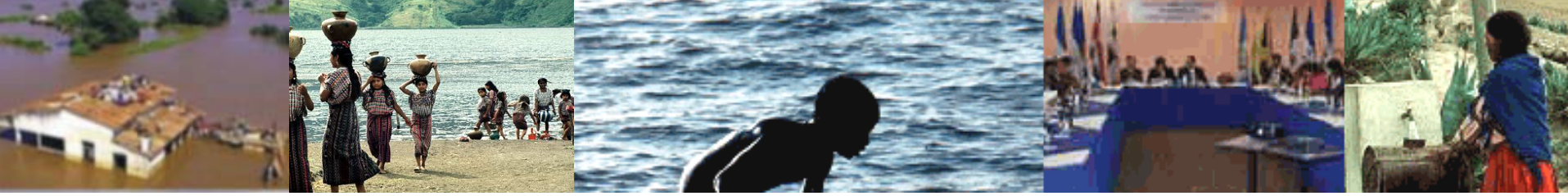




Development Objective

- The project aims to strengthen the adaptive capacity of human systems to reduce vulnerability to the impacts of climate change, including climate variability, risks and extreme events for priority systems throughout the Central America, Mexico and Cuba Region.





Water Center for the Humid Tropics of Latin America and the Caribbean CATHALAC

REGIONAL VISUALIZATION AND MONITORING SYSTEM FOR MESOAMERICA

IGWCO Meeting. Tokyo, Japan. March 2, 2005

Emilio Sempris
Director

