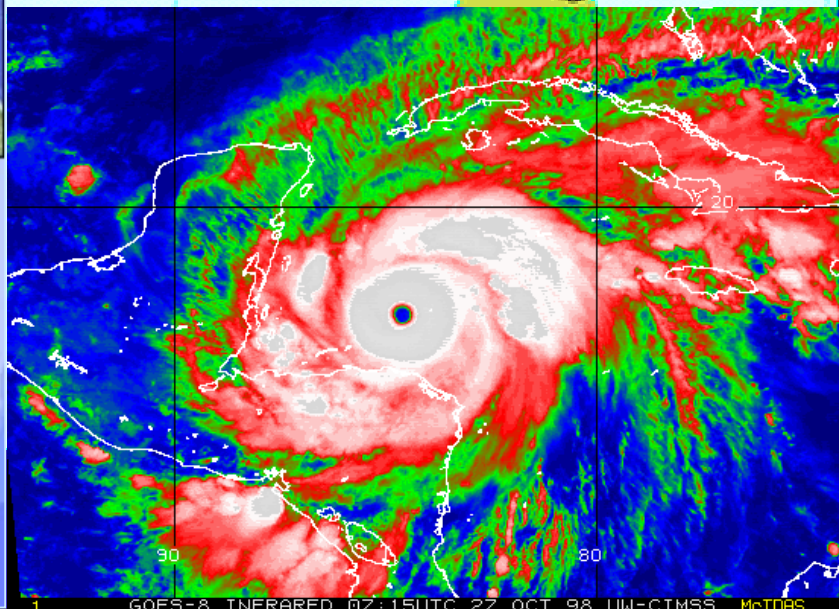


Hurricane Mitch

~10,000 deceased
~\$8 Billion in damages

Hurricane Pathway





MAIN COMPONENTS

- **Hydrological Monitoring (Automatic Stations).**
- **Data Integration Network (CIGEO-Clearinghouse).**
- **National Geographic Information Systems.**
- **Municipal Geographic Information Systems.**
- **Threat and Risk Maps.**
- **Study of the Biological Component (Mangroves and coral reefs).**



USGS HURRICANE MITCH PROGRAM - STUDY AREAS

- 
- A map of a coastal region, likely in Central America, showing various study areas. The map is overlaid with a grid of colored shapes and symbols. A legend in the bottom-left corner identifies these symbols: blue triangles for stream gage locations, green rectangles for landslide risk mapping sites, purple rectangles for volcano risk mapping sites, red rectangles for biological assessment areas, and yellow rectangles for municipal GIS sites. The map shows a large body of water to the west and south, and a landmass to the east. The landmass is divided into several regions, with the study areas concentrated in the central and southern parts. The symbols are distributed across the landmass, with a higher density in the central and southern regions. The map is a grayscale image with colored overlays.
- ▲ STREAM GAGE LOCATIONS
 - ▭ LANDSLIDE RISK MAPPING SITES
 - ▭ VOLCANO RISK MAPPING SITES
 - ▭ BIOLOGICAL ASSESSMENT AREAS
 - ▭ MUNICIPAL GIS SITES

ACTIVE STATIONS IN CENTRAL AMERICA

4 en Guatemala

15 en Honduras

6 en El Salvador

5 en Nicaragua



MONITORING

ArcView GIS Version 3.1

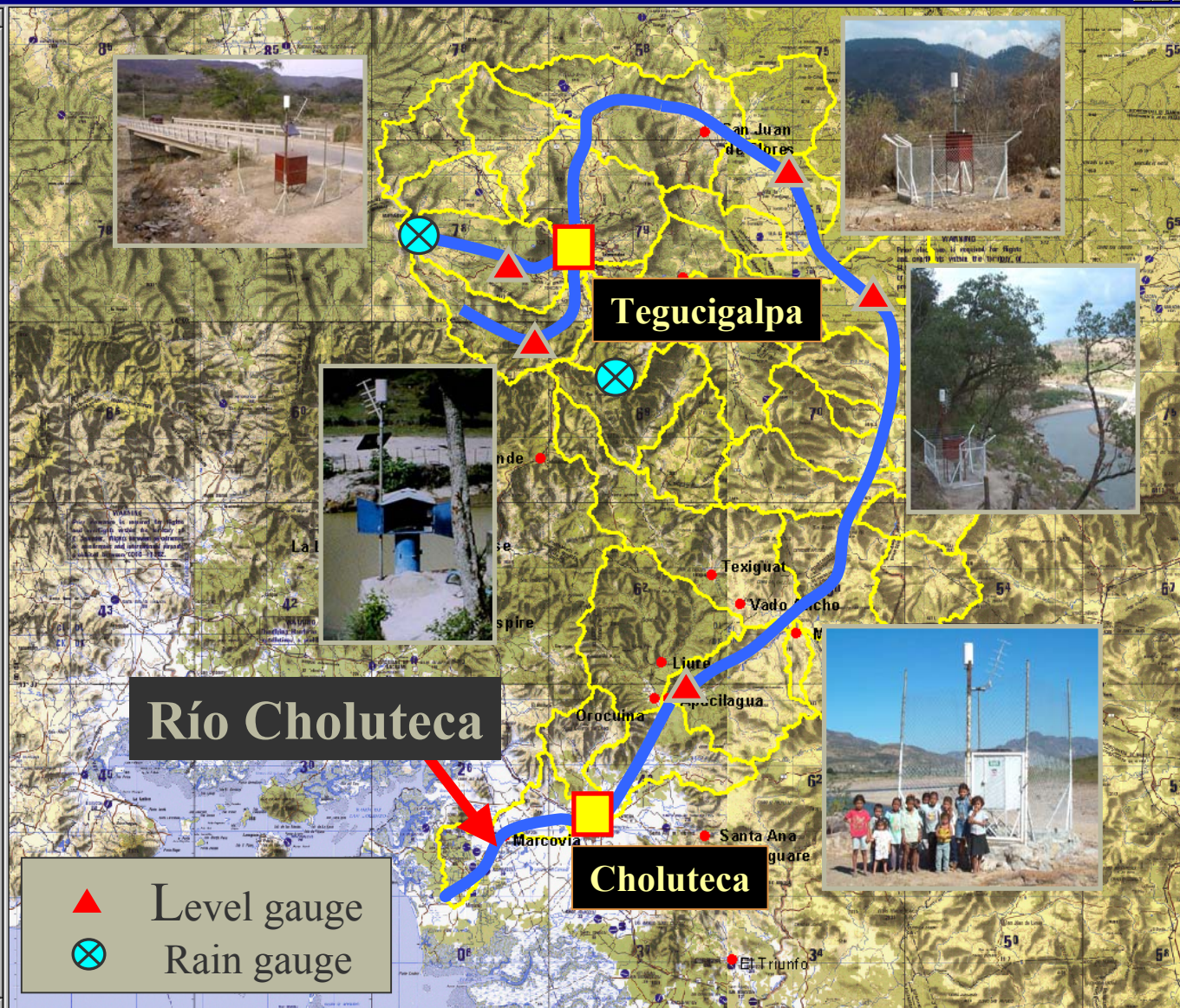
File Edit



View1

- ✓ Cities.shp
- ✓ Choluteca.shp
- ✓ Honduras250k.sid

DATA FLOW AT THE CHOLUTECA RIVER, HONDURAS



Start

Exploring - watersheds

ArcView GIS Version ...

Microsoft PowerPoint - [ch...

2:53 PM

ILLUSTRATION OF ACTIVE STATIONS



Río Siquia, Nicaragua



Río Choluteca, Honduras



Río Coyolate, Guatemala

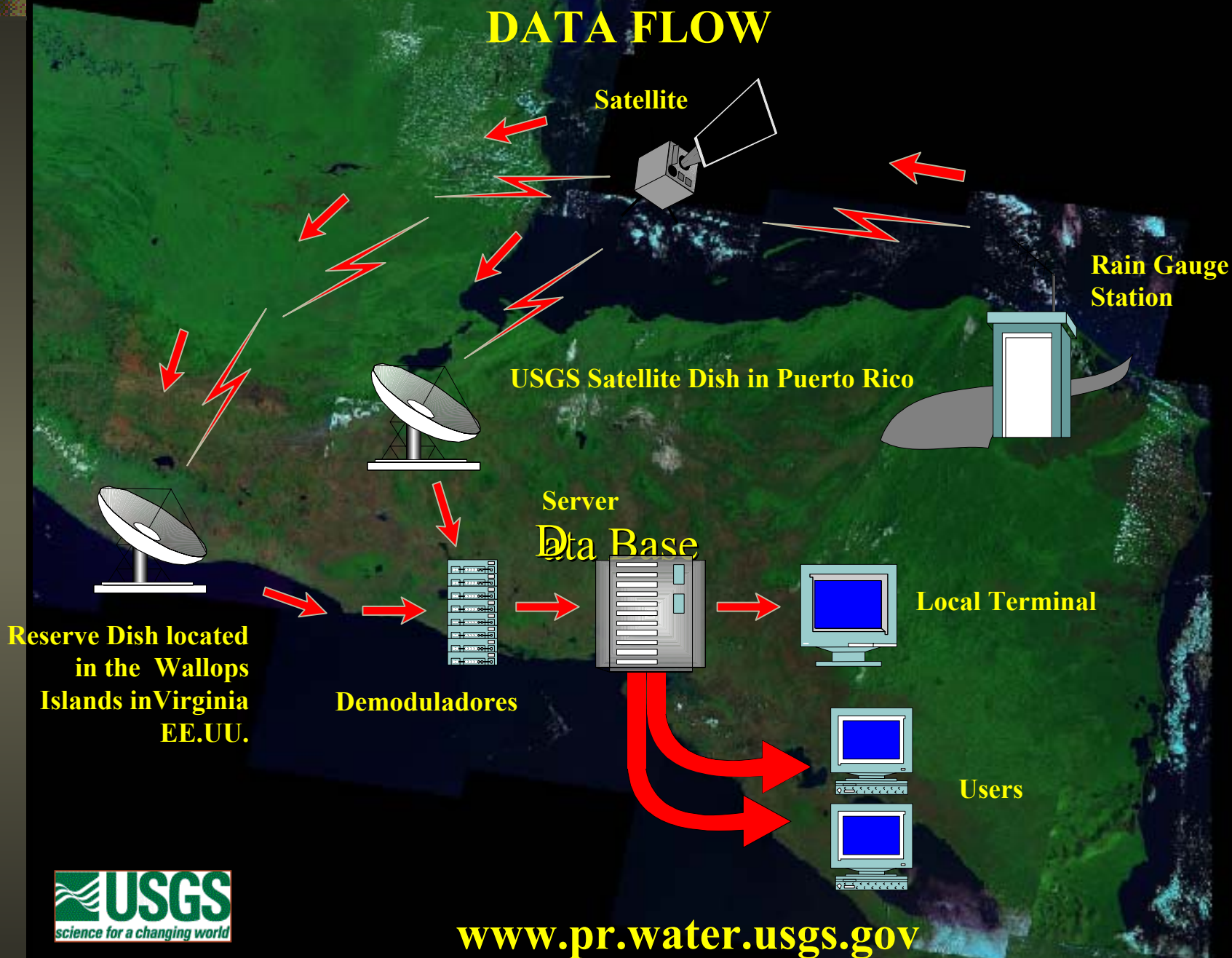
2/17/2000

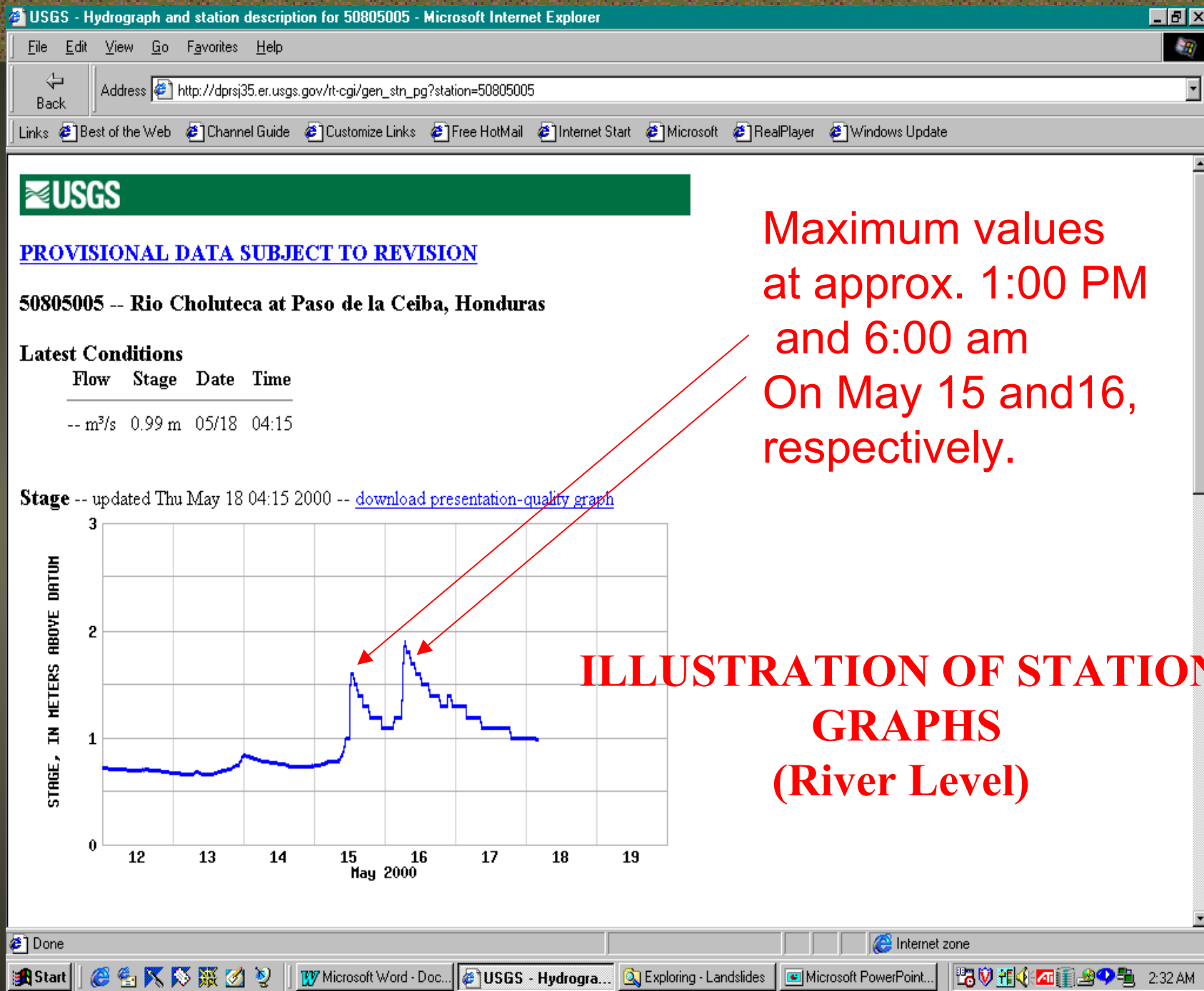


Río Lempa, El Salvador

8/31/2000

MONITORING



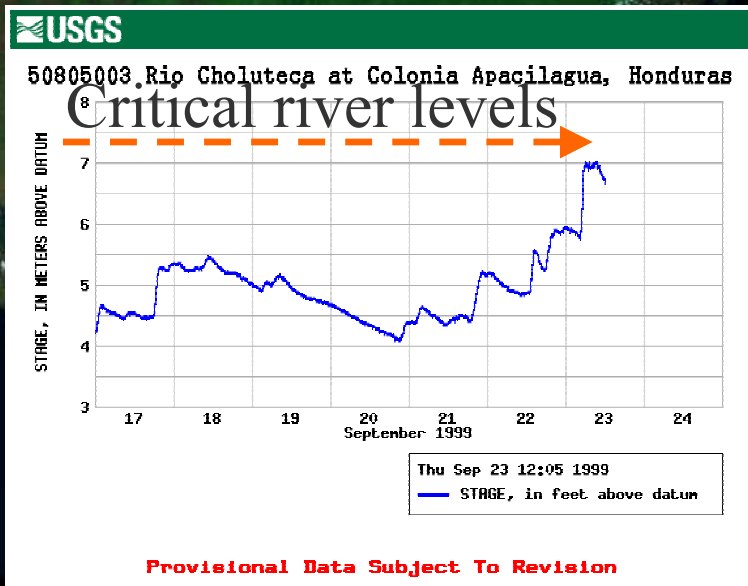


Real Time Intrenet Data Used by the Mayor of Choluteca In September, 1999

*Flooded areas in
Choluteca, Honduras
September-October 1999*



Internet
graphs



D
A
T
A

N
E
T
W
O
R
K

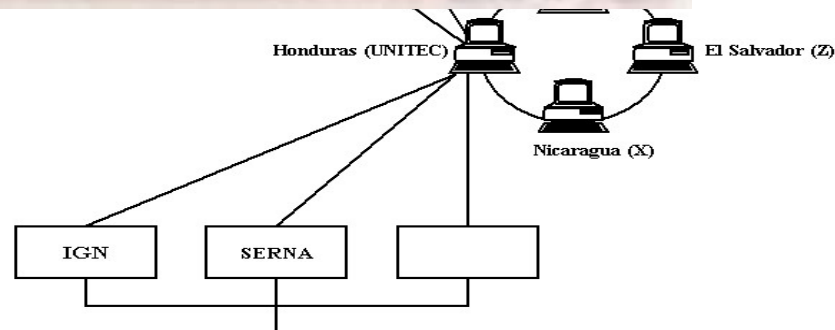
DATA INTEGRATION NETWORK

MITCH
CLEARINGHOUSE
FOR
CENTRAL
AMERICA

★ GATEWAY
★ NODE

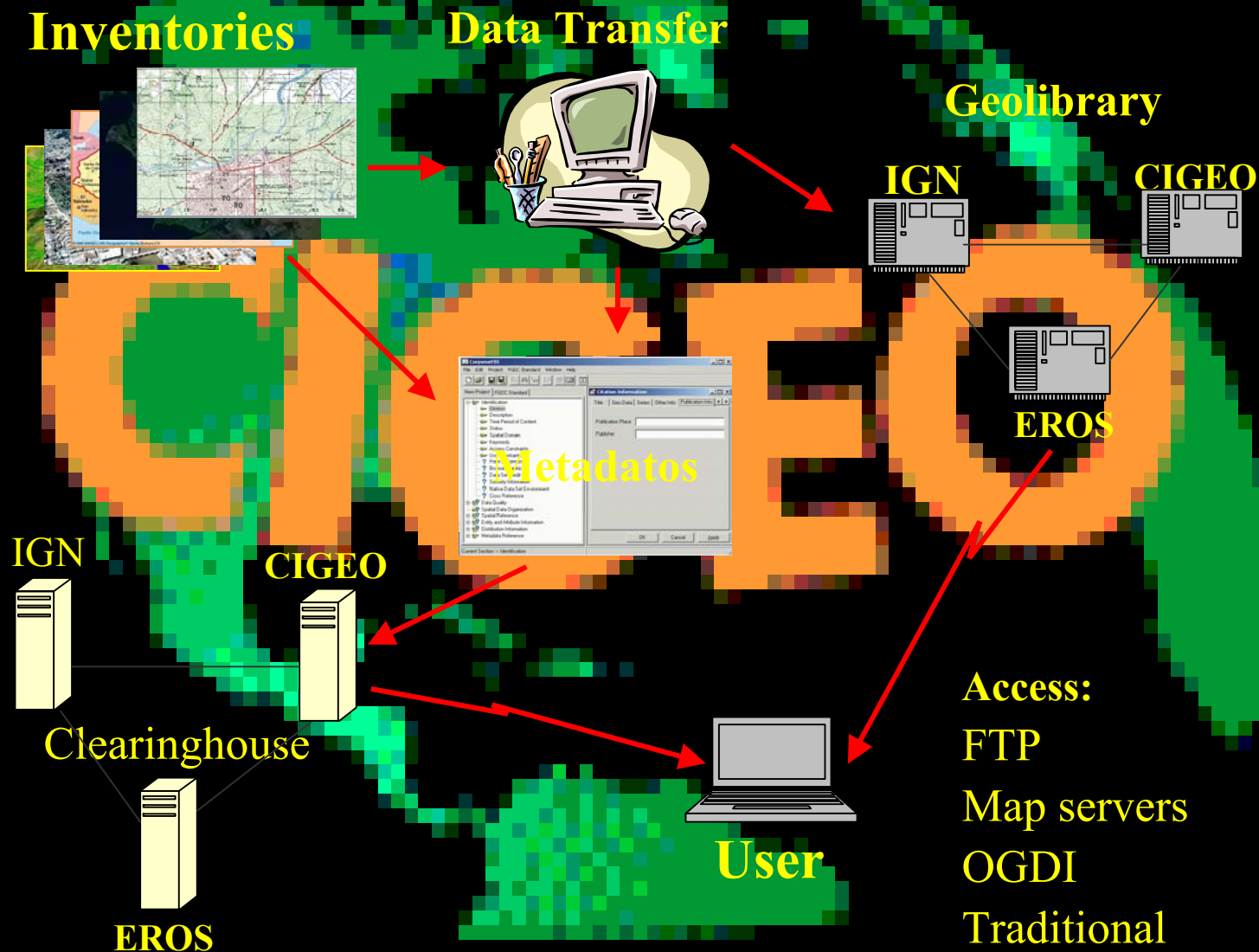
UNITEC

CIGEO



Government Agencies (Country and Regional)

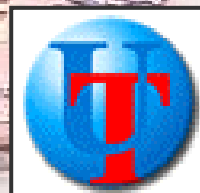
DATA INTEGRATION NETWORK



TECHNICAL TRAINING AND SUPPORT

D
A
T
A

N
E
T
W
O
R
K





LOCATION OF MUNICIPALITIES

>30 in Honduras

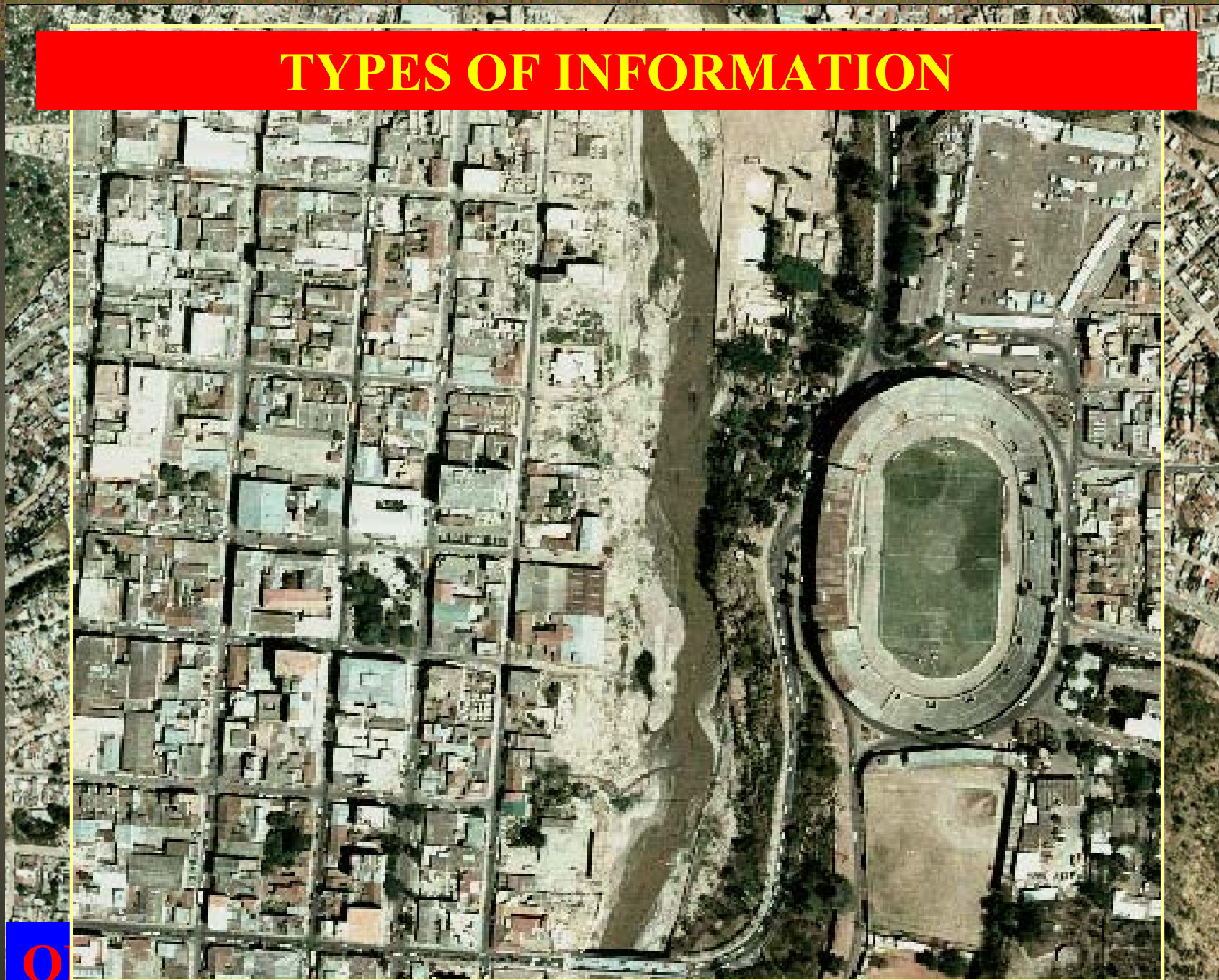
10 in Guatemala



TYPES OF INFORMATION

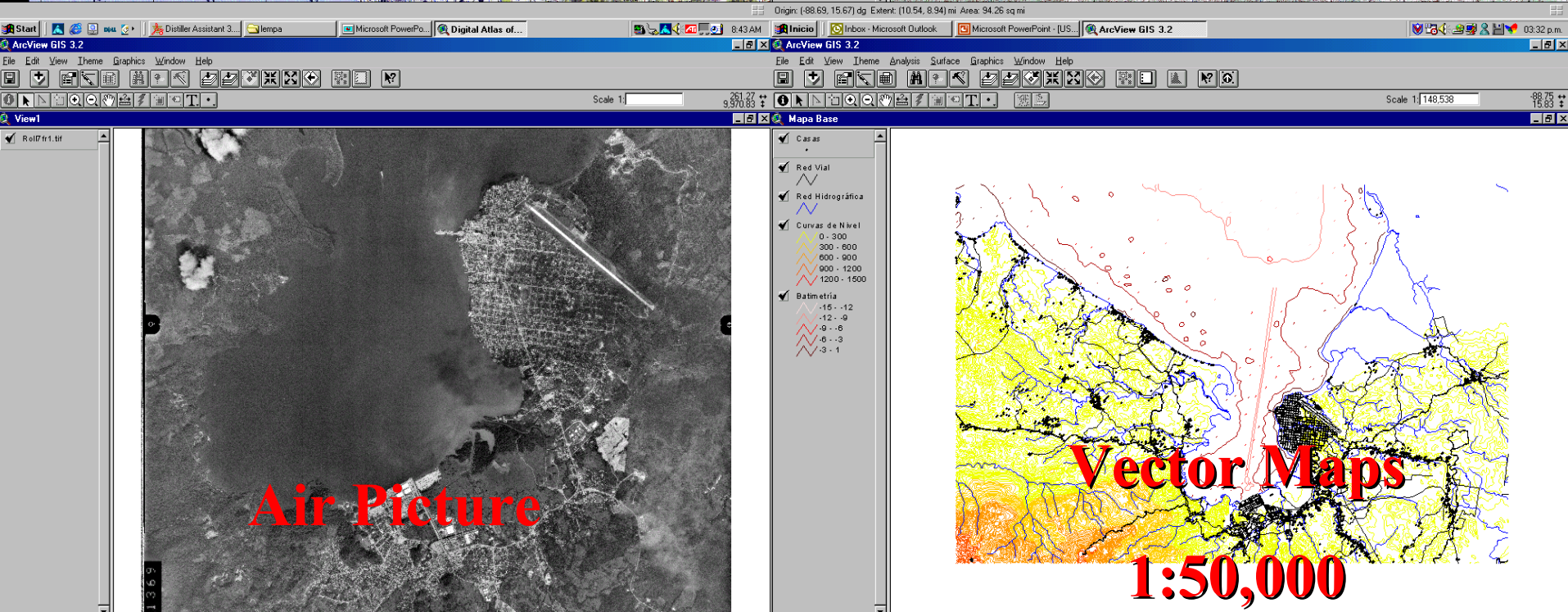
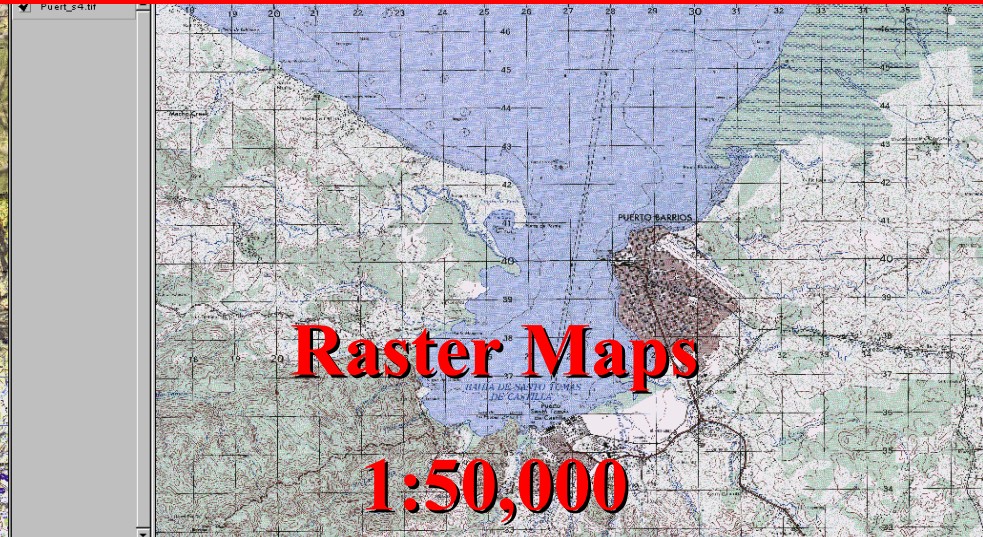
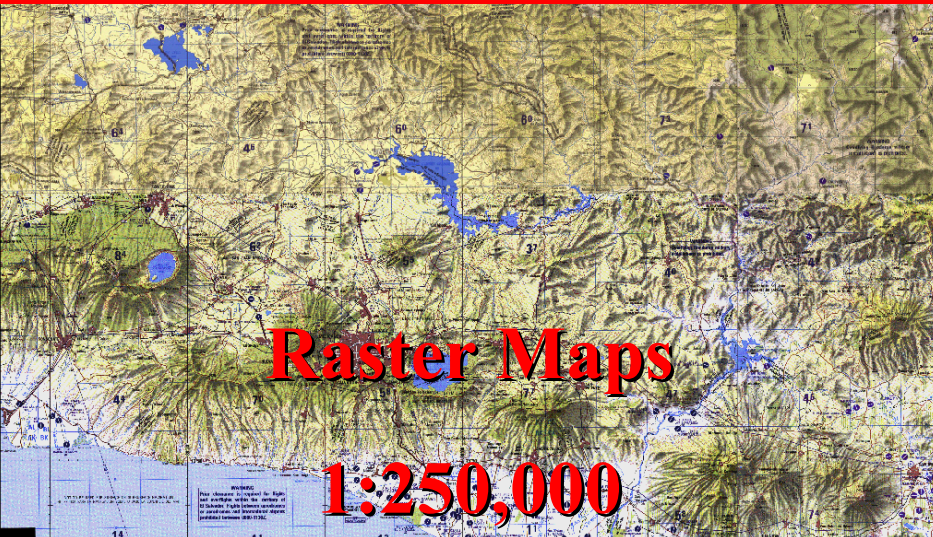
M
U
N
I
C
I
P
A
L

G
I
S



O

TYPES OF INFORMATION



PRELIMINARY OUTCOMES

MUNICIPAL GIS

