ITT

Leveraging your Investment

Integration of Imagery Analysis and GIS

Bernard Lawes

Regional Sales Engineer

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Engineered for life

Agenda

- Integration of Imagery Analysis and GIS
- DEMOS
- Summary of Integration in 4.7

Strategic partnership

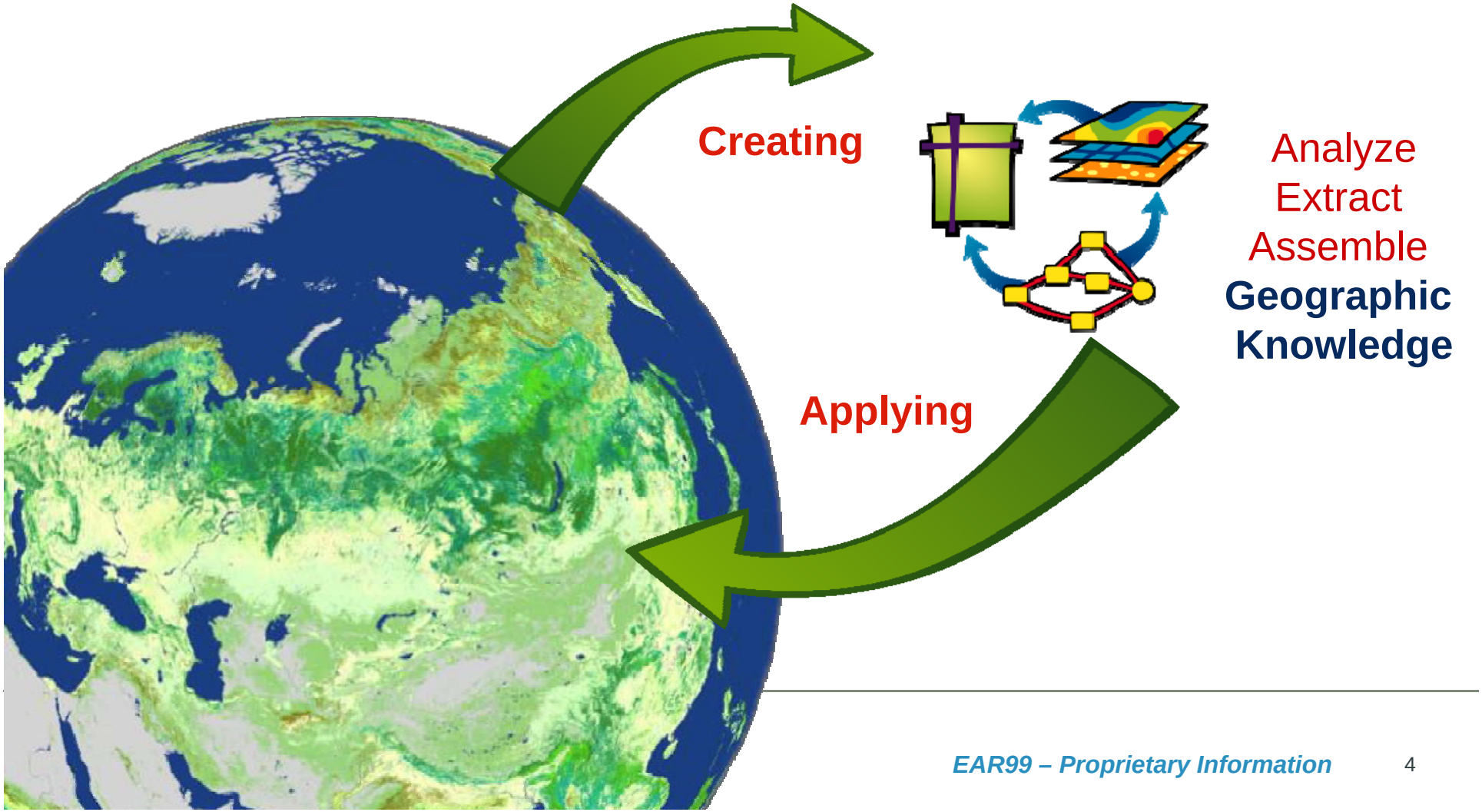
Our relationship and commitment to the market is now locked tight!

San Diego July 14, 2009



Imagery's Role in GIS:

A Framework for Understanding and Managing Our Earth

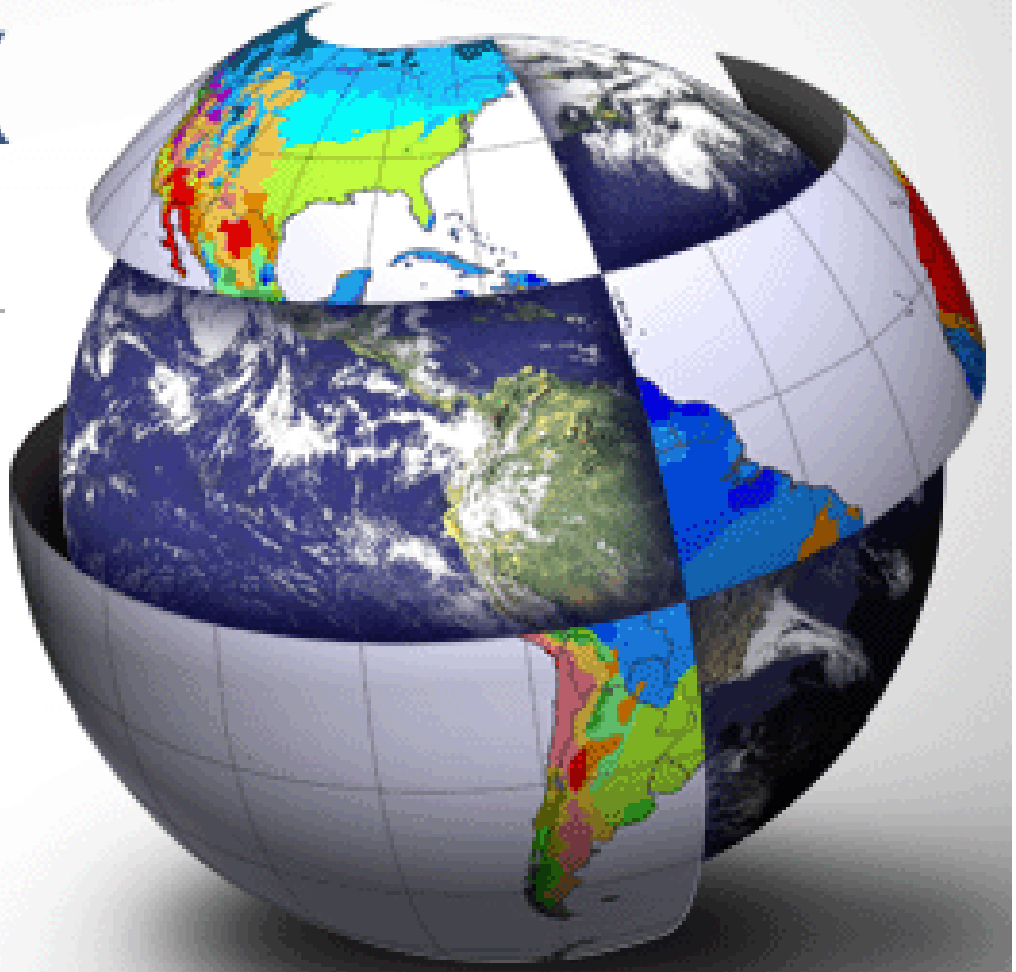


Traditionally

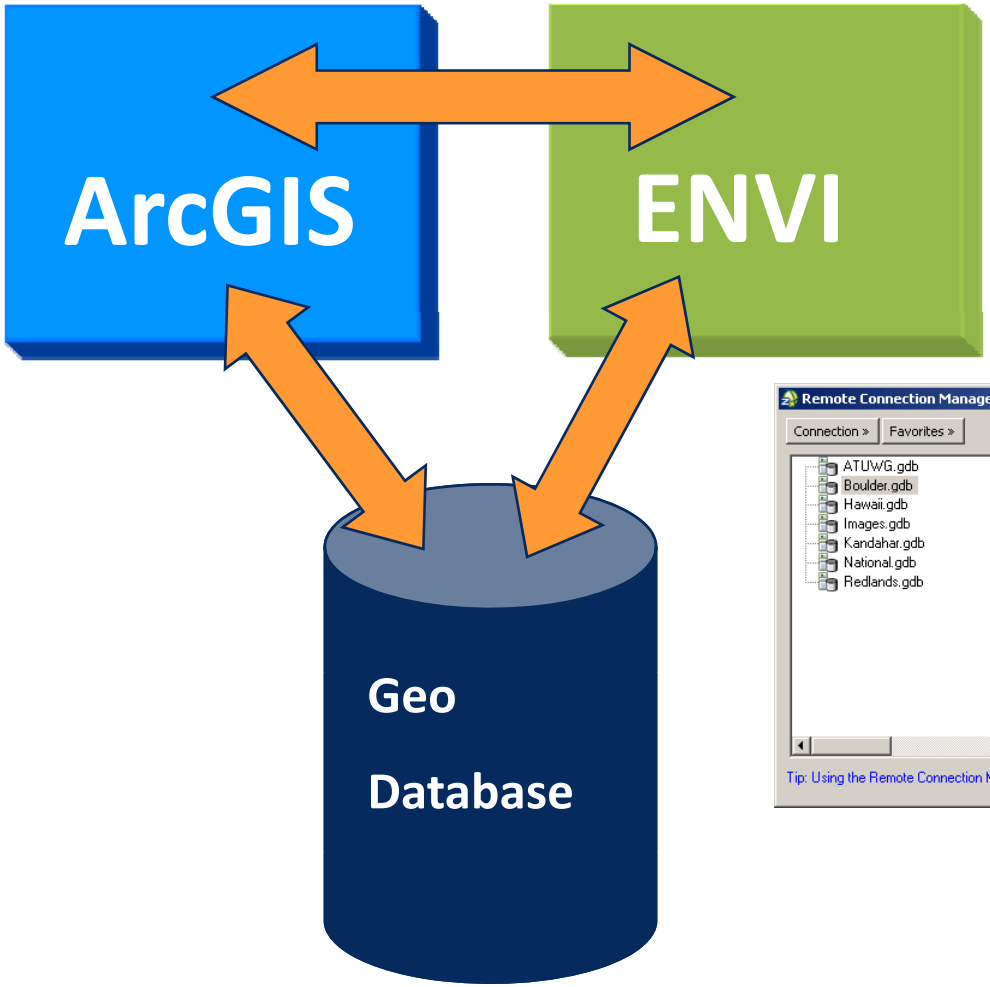
Imagery Analysis & GIS operated on separate platforms

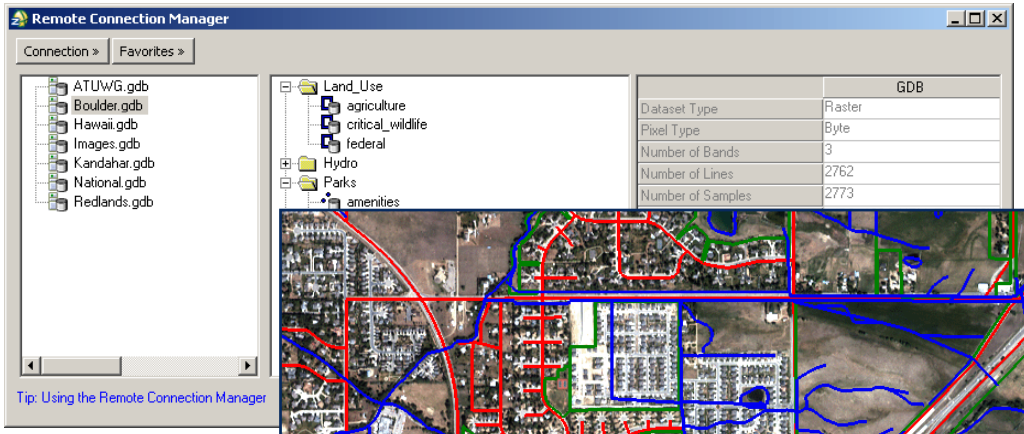
ENVI EX

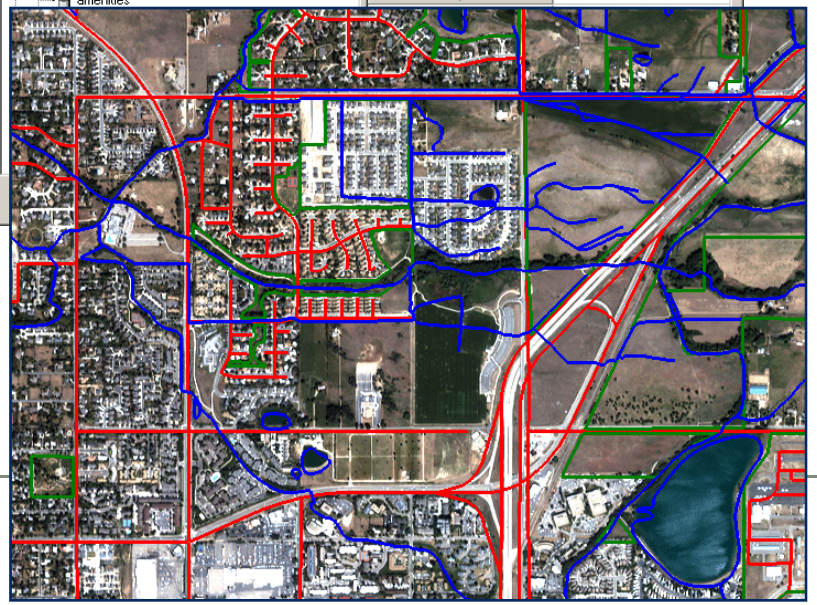
Unlock the information in your imagery quickly and easily.



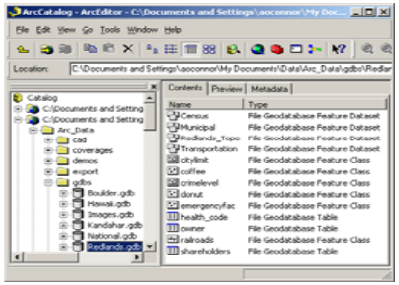
ENVI 4.7 – ArcGIS Interoperability



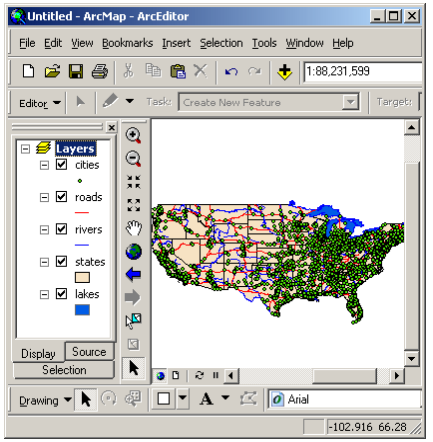




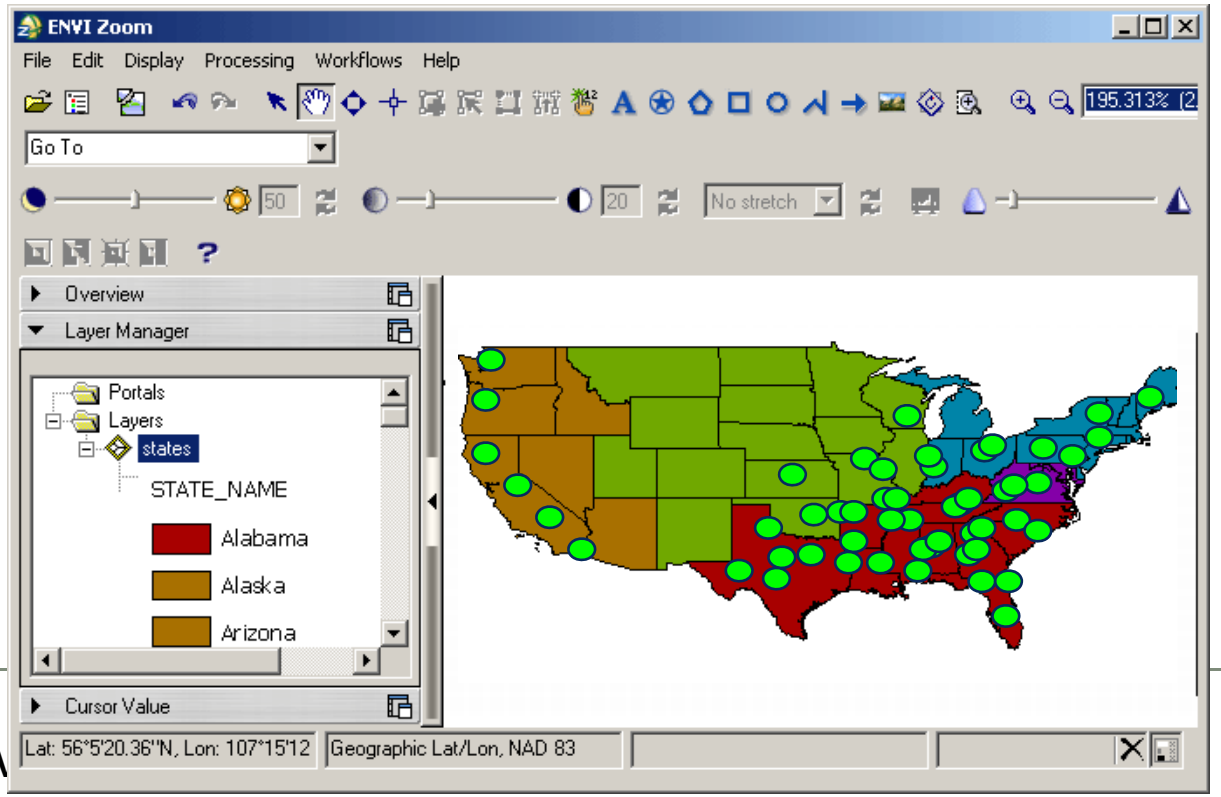
Drag-and-Drop Support



ArcCatalog

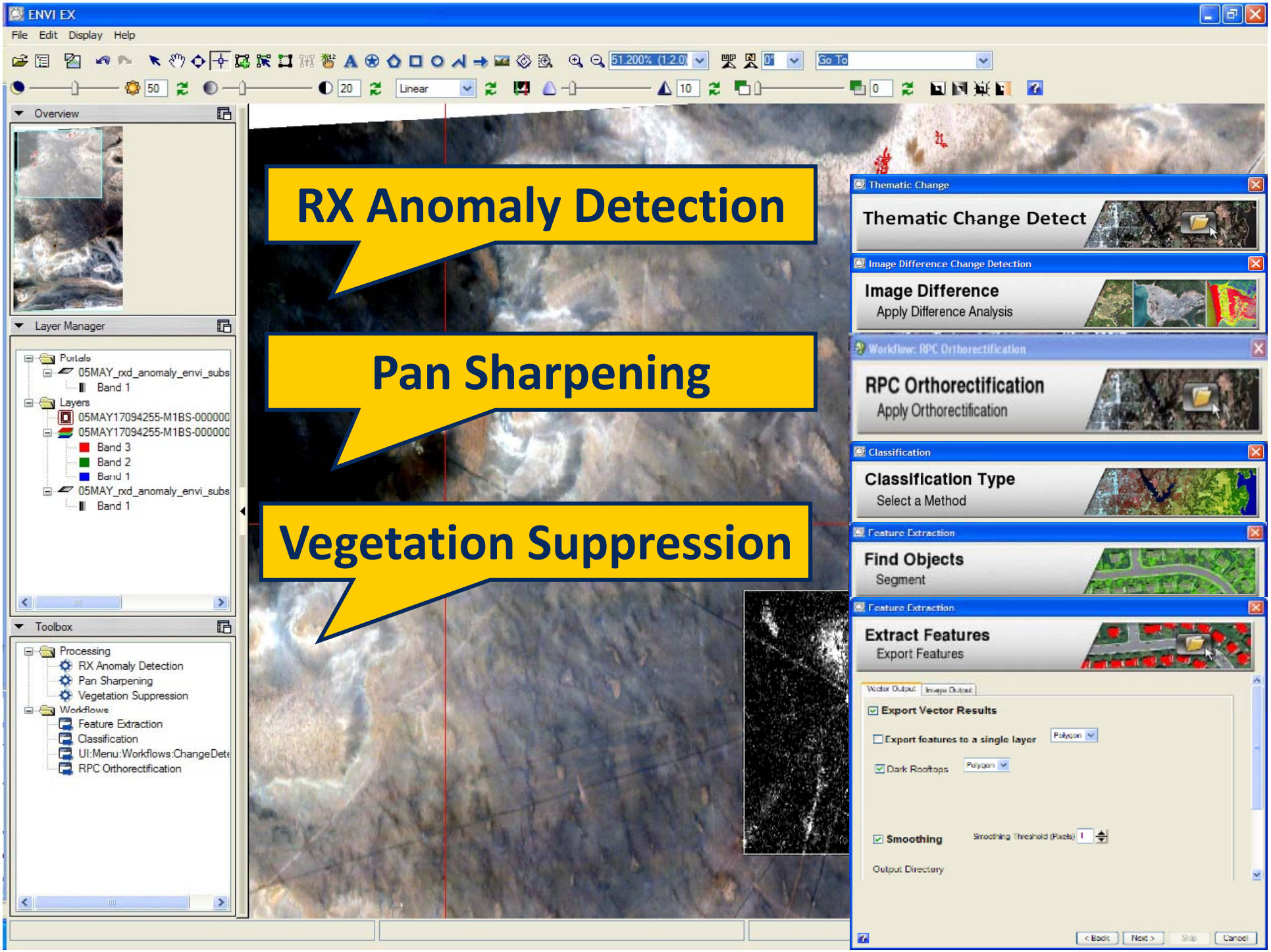


ArcMap

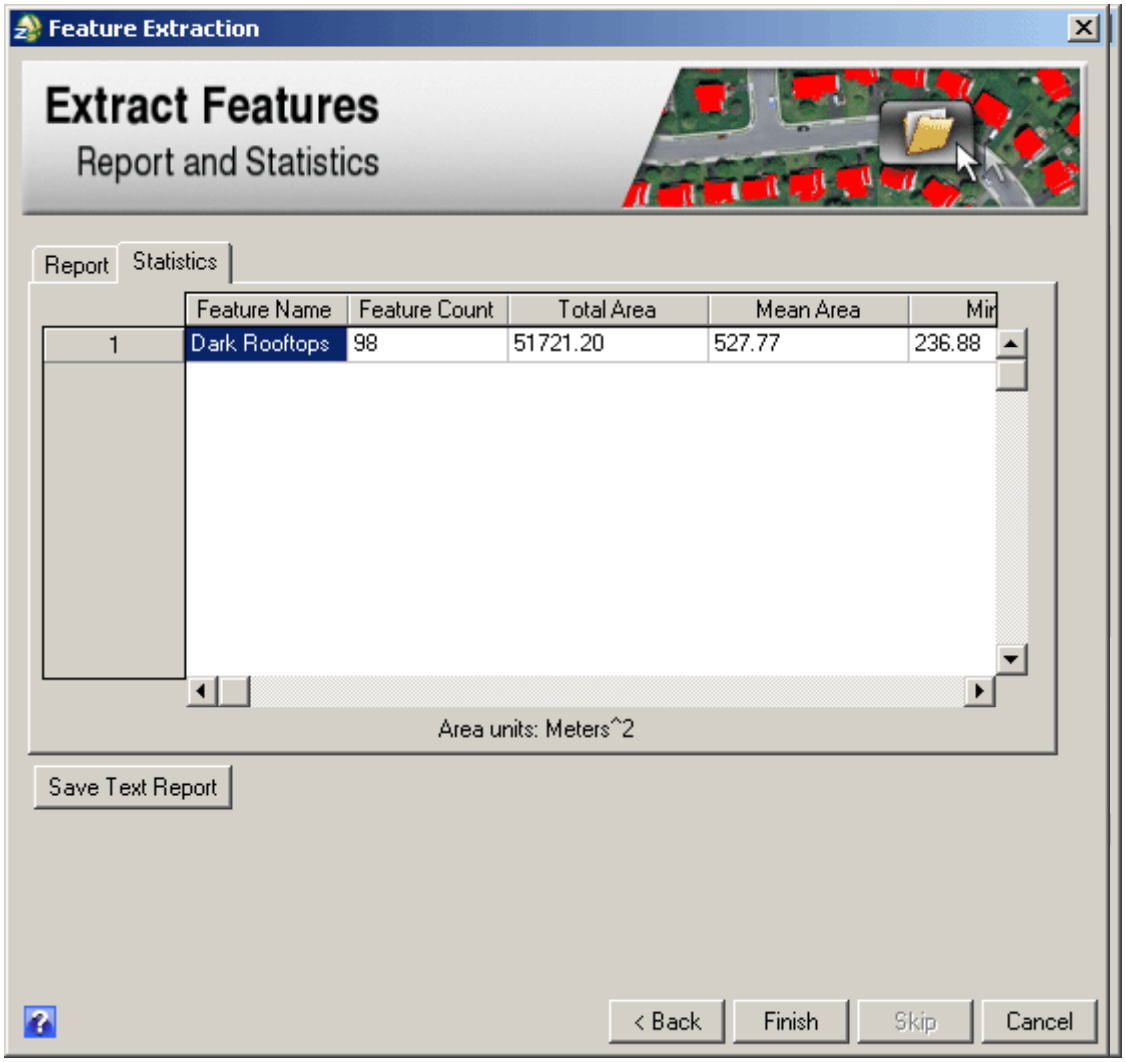


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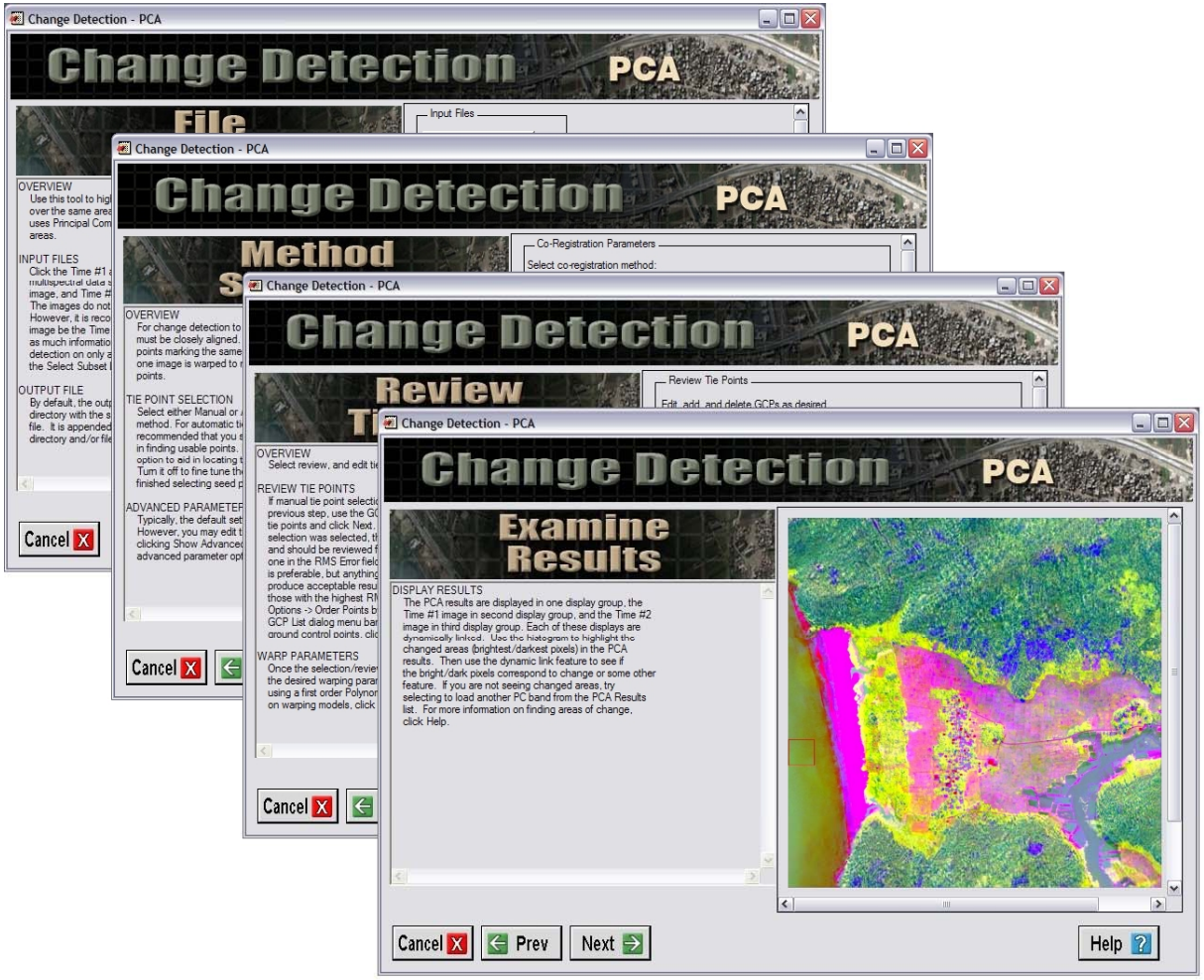

ENVI EX
File Edit Display Help
Overview
Layer Manager
Portals
05MAY_rxd_anomaly_envi_subs
Band 1
Layers
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05MAY17094255-M1BS-000000
Band 3
Band 2
Band 1
05MAY_rxd_anomaly_envi_subs
Band 1
Toolbox
Processing
RX Anomaly Detection
Pan Sharpening
Vegetation Suppression
Workflows
Feature Extraction
Classification
UI:Menu:Workflows:ChangeDete
RPC Orthorectification
RX Anomaly Detection
Pan Sharpening
Vegetation Suppression
Thematic Change
Thematic Change Detect
Image Difference Change Detection
Image Difference
Apply Difference Analysis
Workflow: RPC Orthorectification
RPC Orthorectification
Apply Orthorectification
Classification
Classification Type
Select a Method
Feature Extraction
Find Objects
Segment
Feature Extraction
Extract Features
Export Features
Export Vector Results
Export features to a single layer
Dark Rooftops
Smoothing
Output Directory
< Back
Next >
Cancel

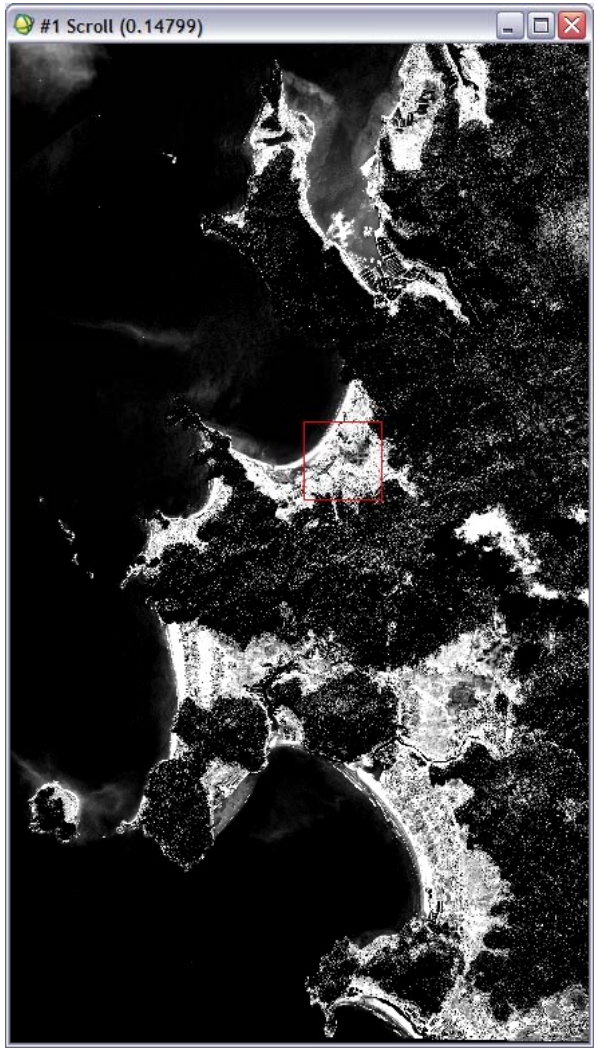
Feature Extraction with Intuitive Workflows

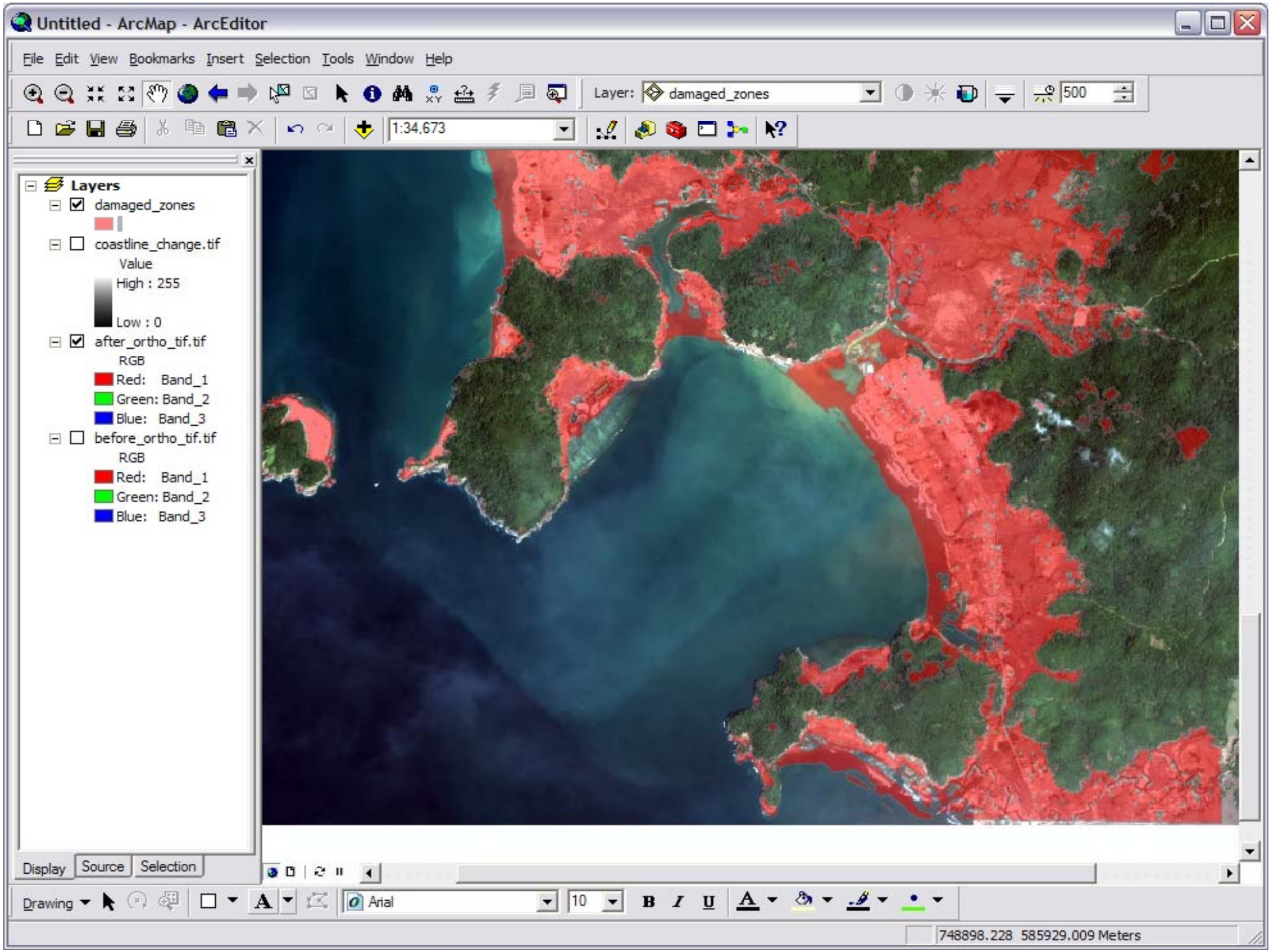


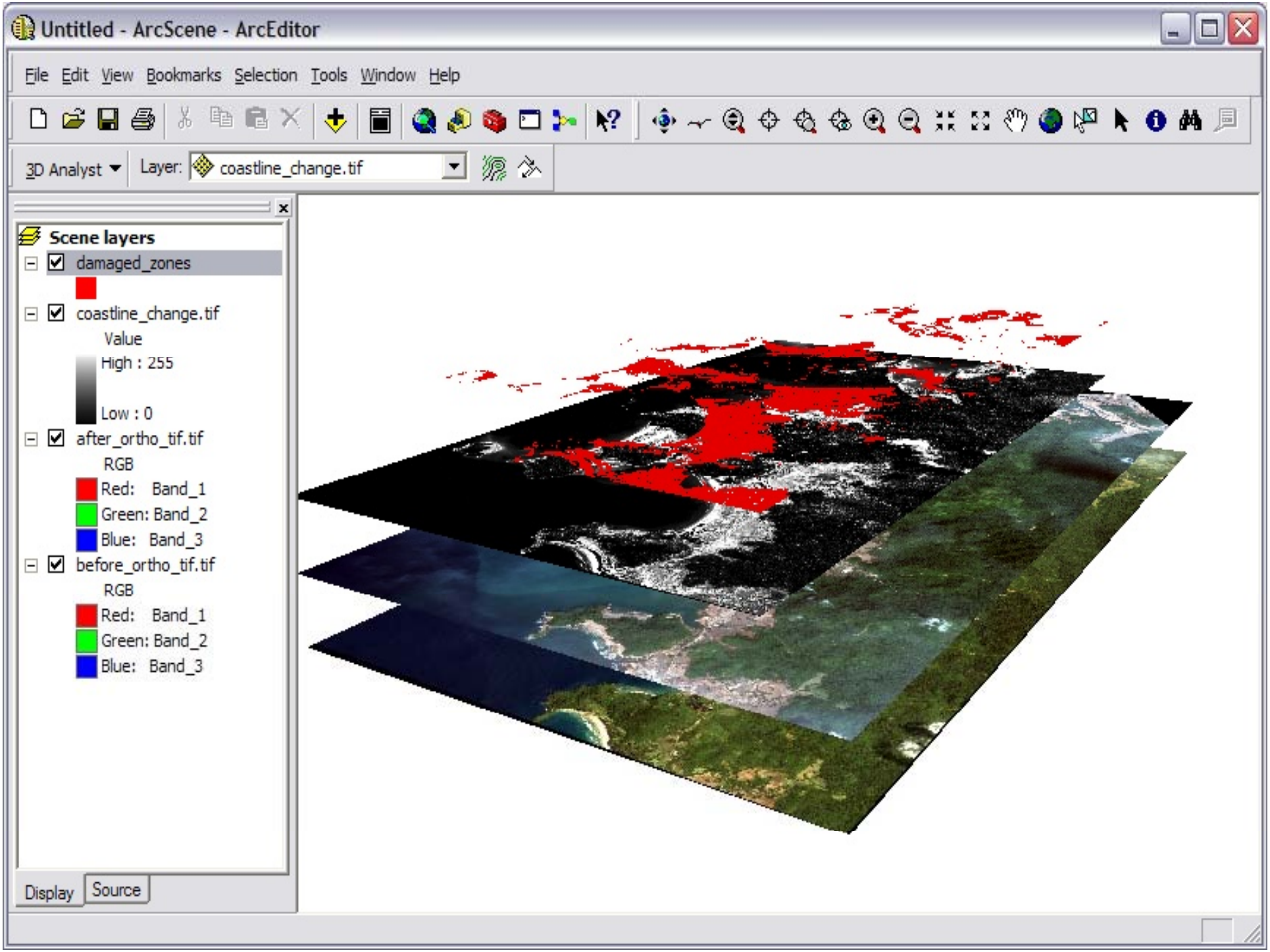


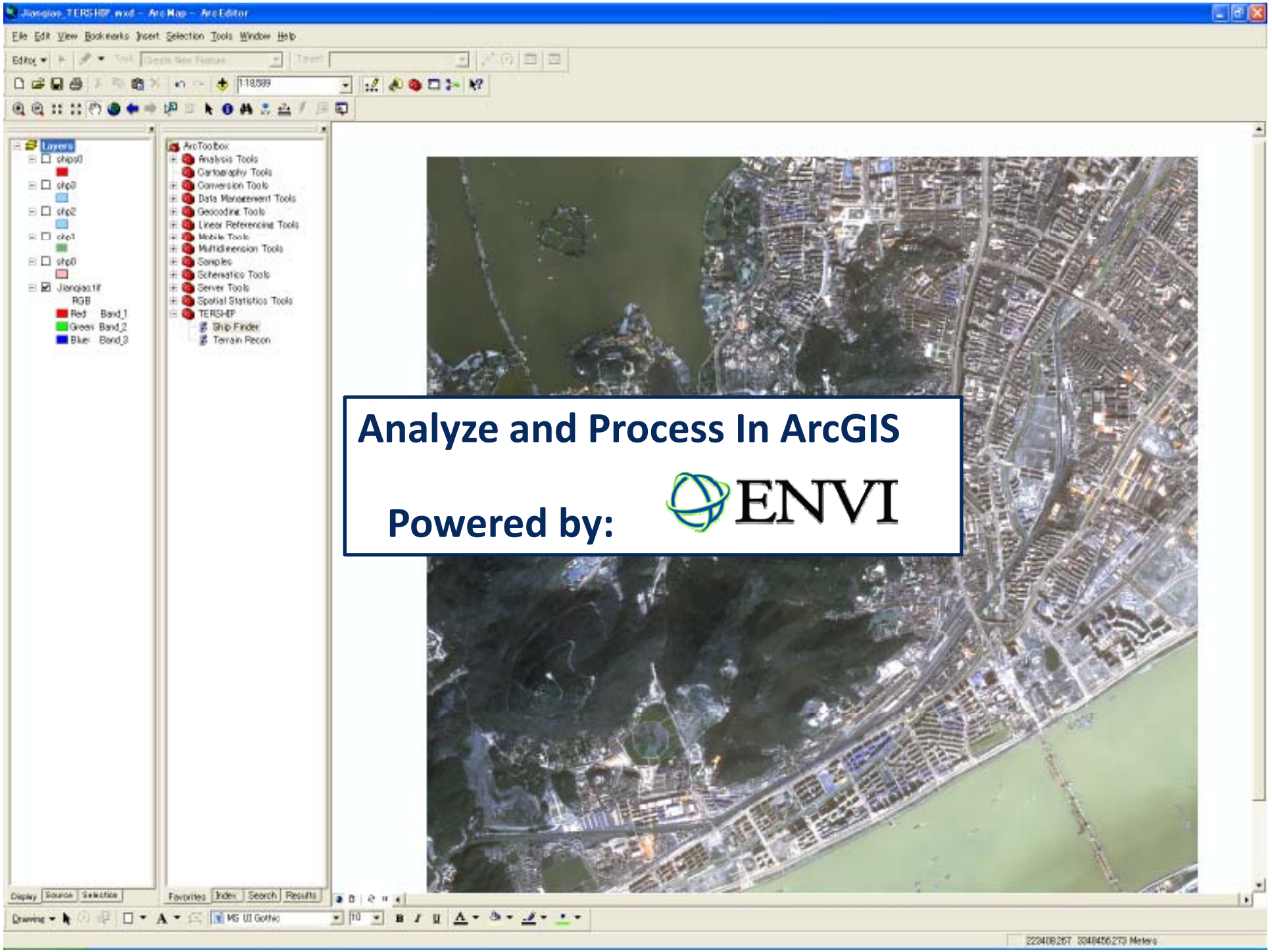
Real World Example – Tsunami Change Detection



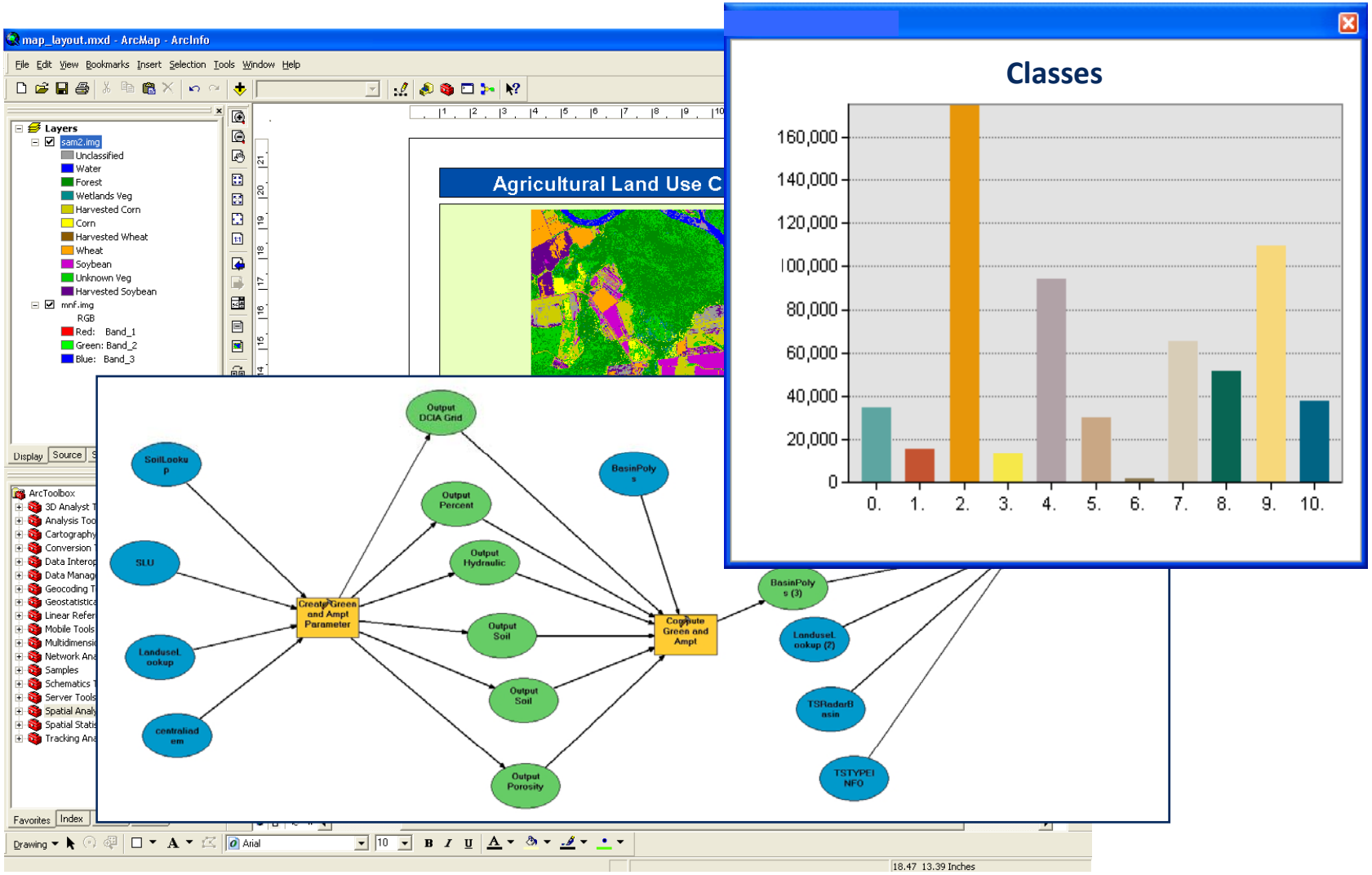



Untitled - ArcMap - ArcEditor
File Edit View Bookmarks Insert Selection Tools Window Help
Layer: damaged_zones
500
1:34,673
Layers
damaged_zones
coastline_change.tif
Value
High : 255
Low : 0
after_ortho_tif.tif
RGB
Red: Band_1
Green: Band_2
Blue: Band_3
before_ortho_tif.tif
RGB
Red: Band_1
Green: Band_2
Blue: Band_3
Display
Source
Selection
Drawing
Arial
10
748898.228 585929.009 Meters


Untitled - ArcScene - ArcEditor
File Edit View Bookmarks Selection Tools Window Help
3D Analyst
Layer: coastline_change.tif
Scene layers
damaged_zones
coastline_change.tif
Value
High : 255
Low : 0
after_ortho_tif.tif
RGB
Red: Band_1
Green: Band_2
Blue: Band_3
before_ortho_tif.tif
RGB
Red: Band_1
Green: Band_2
Blue: Band_3
Display
Source


Analyze and Process In ArcGIS
Powered by:
ENVI

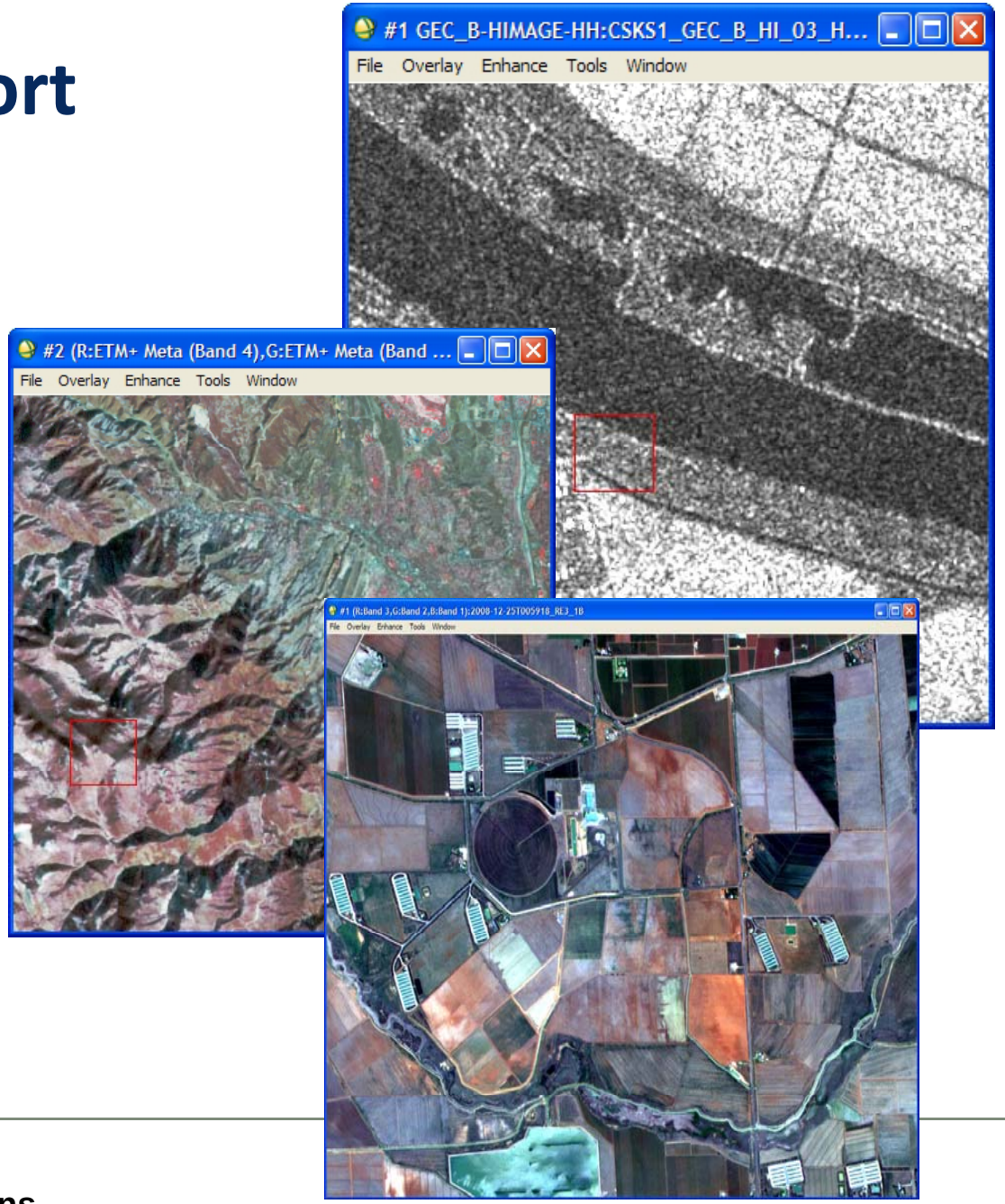
Extend / Customize / & Automate



File Format Support

Landsat GeoTIFF with Metadata
USGS Earth Explorer
RapidEye

COSMO-SkyMed
MrSID version 3
ERDAS Imagine



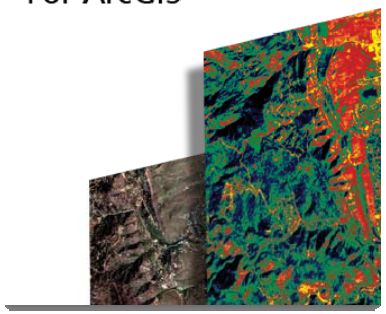
Integration Summary

- **ESRI ArcGIS Integration**
  - Geodatabase Direct
  - ESRI Layers
  - Layout Tools

- **Drag and drop**
  - Windows Explorer
  - Desktop,
  - Search Results
  - ArcGIS

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Image Processing
For ArcGIS

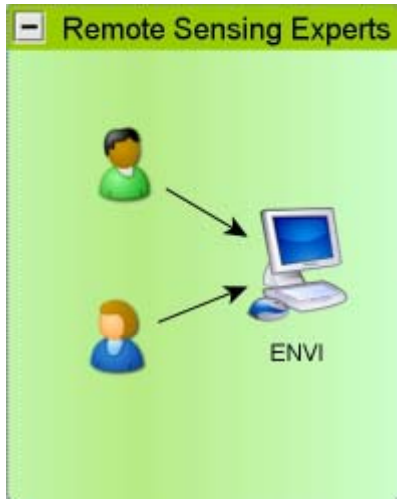


- **Leverage ArcGIS' :**
  - Vector Map Layers
  - Catalogs
  - Database
  - Publish
  - Share
  - Consume

Progressively Richer Geographic Context

Deployment

ENVI



Scientists

Developers

Calibration

Raw Data

Deep Analysis

+

ArcGIS Users

GIS Specialists

Publishers

GeoTIFF

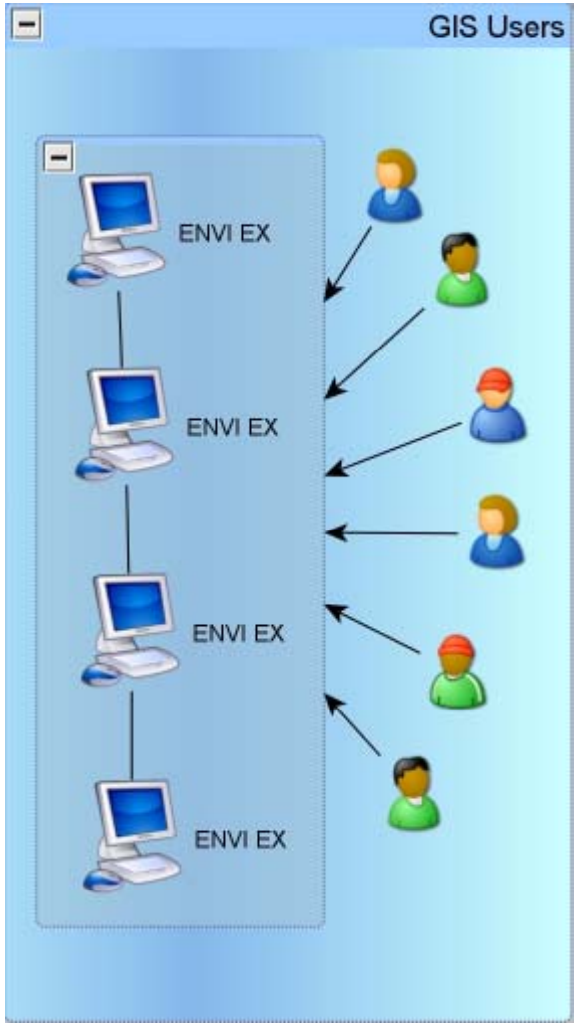
Image Analysts

Change Detect

Classification

Feature Extraction

ENVI EX



Thank You!

- Feedback is always welcome!
  - sales_ap@ittvis.co.jp