

Satellite Data for Conservation: The Protected Area Archive



IABIN Meeting
June 2005
Panama City

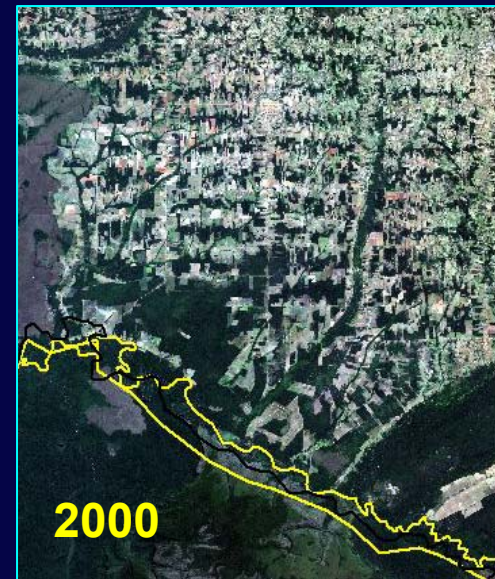
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Edgemont
National Park
New Zealand



Overview

- ❑ Examples of uses for satellite data
- ❑ Obstacles to access
- ❑ Introduce “Protected Area Archive” (work in progress)



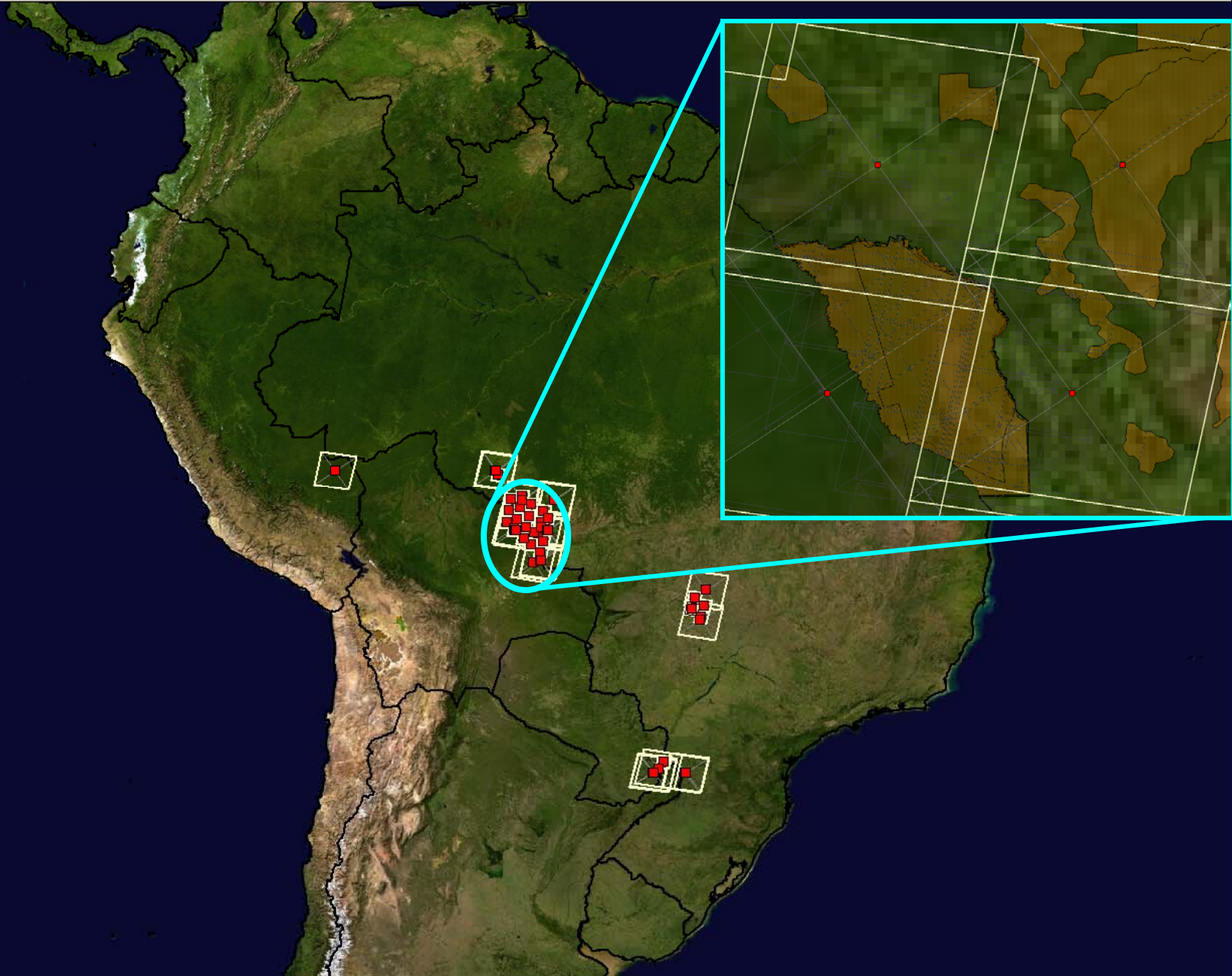
Satellite Images and Conservation

How can satellite images help conservation practitioners?

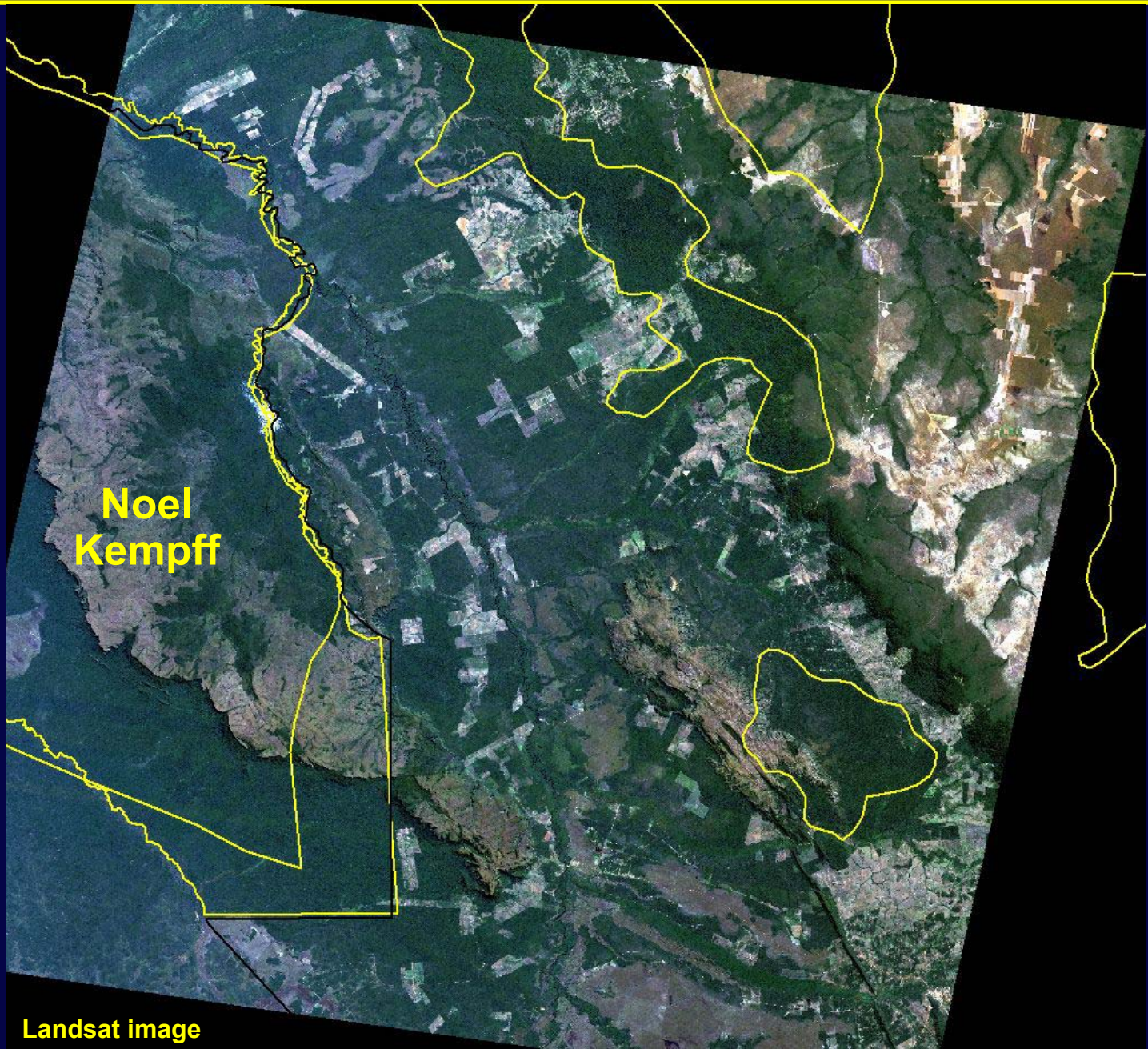
- ❑ **Observe:** land cover, boundaries, threats, damage, topography...
- ❑ **Measure:** areas and distances
- ❑ **Classify:** into vegetation and land use categories
- ❑ **Monitor change:** in forest cover, range condition, land use, reforestation...

Examples

Noel Kempff Mercado NP & WHS, Bolivia



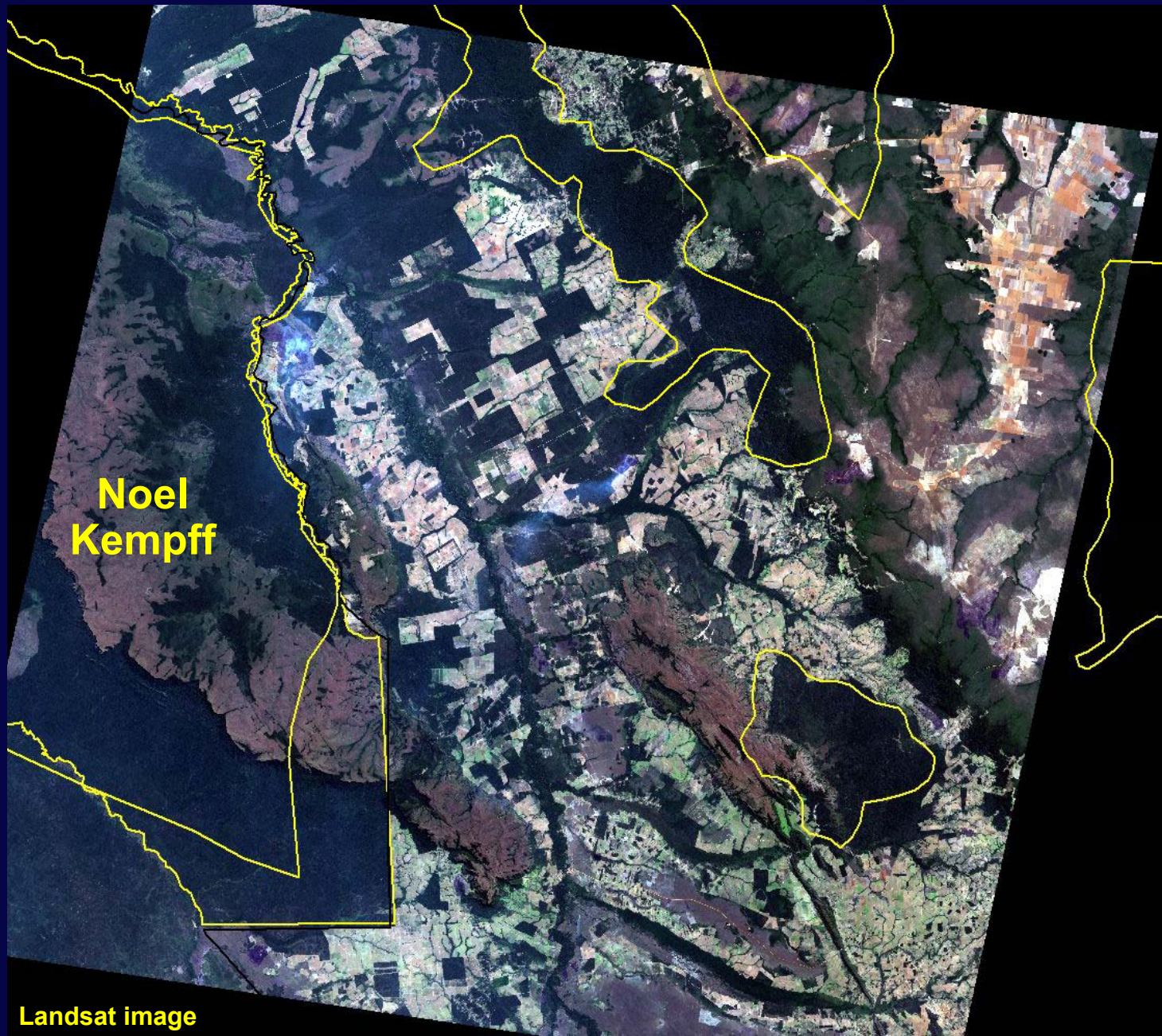
1988



Noel
Kempff

Landsat image

2000



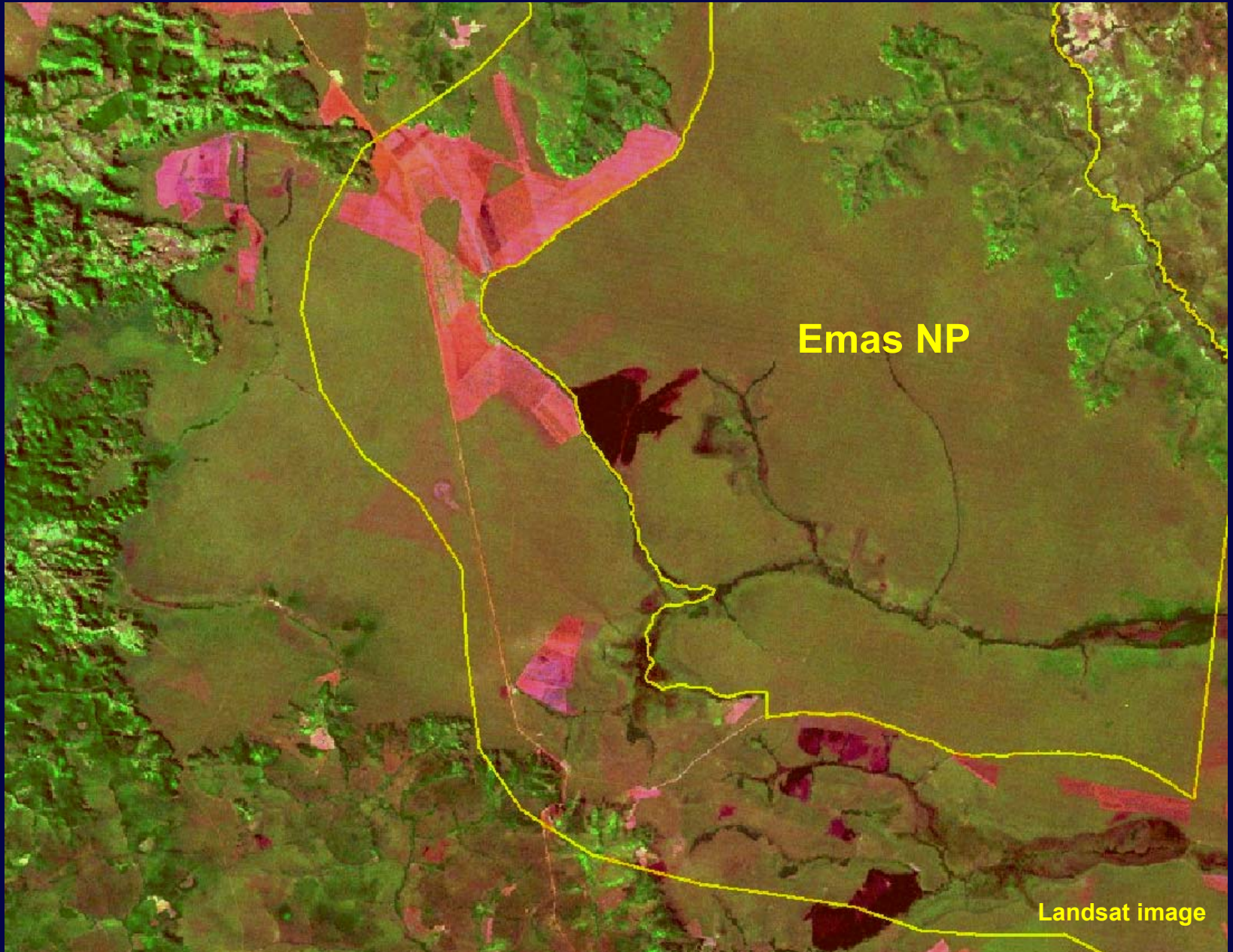
Noel
Kempff

Landsat image

Emas NP, Brazil

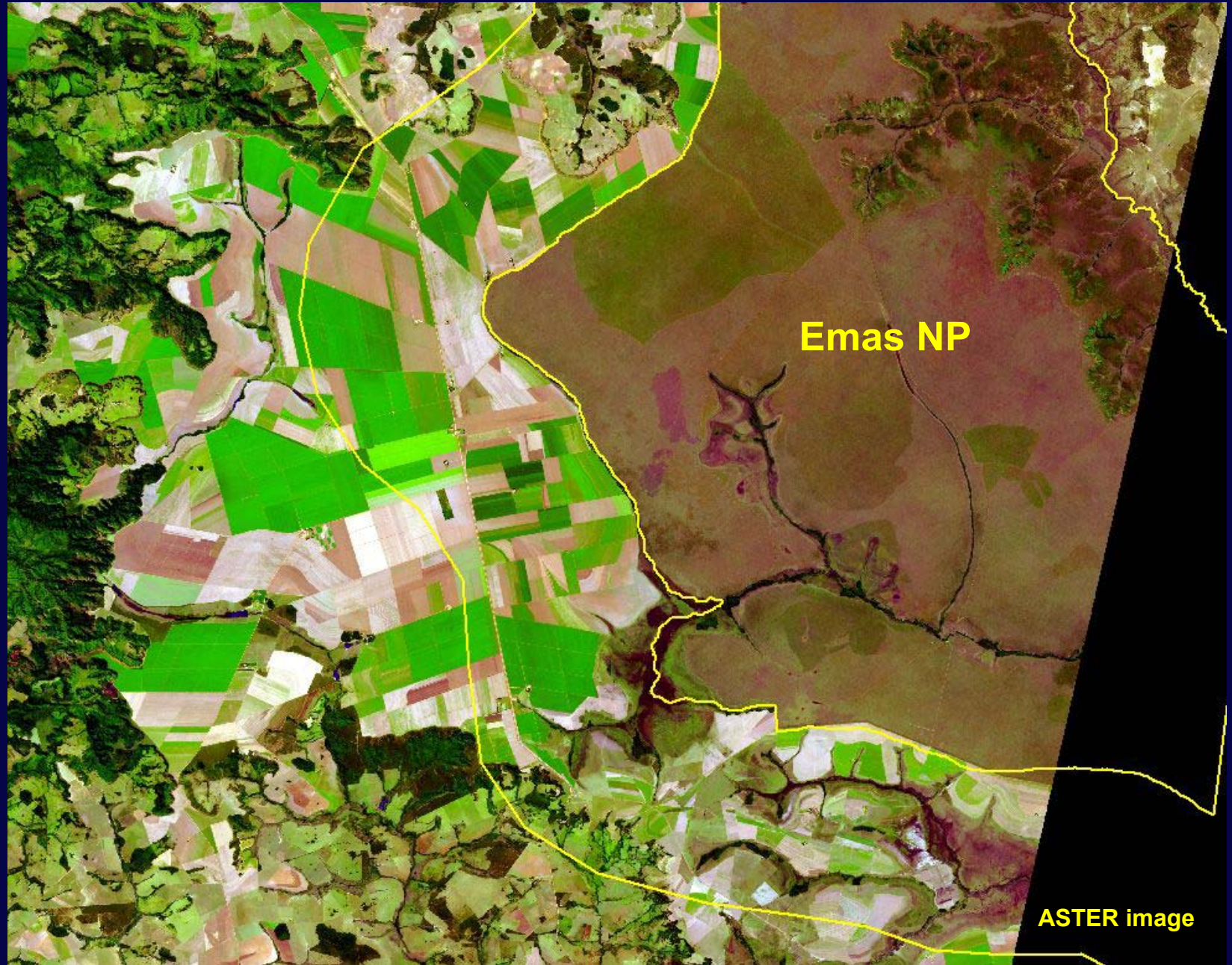


1976—Minimal Agriculture



Landsat image

2002--Surrounded



But, There Are Obstacles...

- ❑ Searching for and ordering data
- ❑ Using data

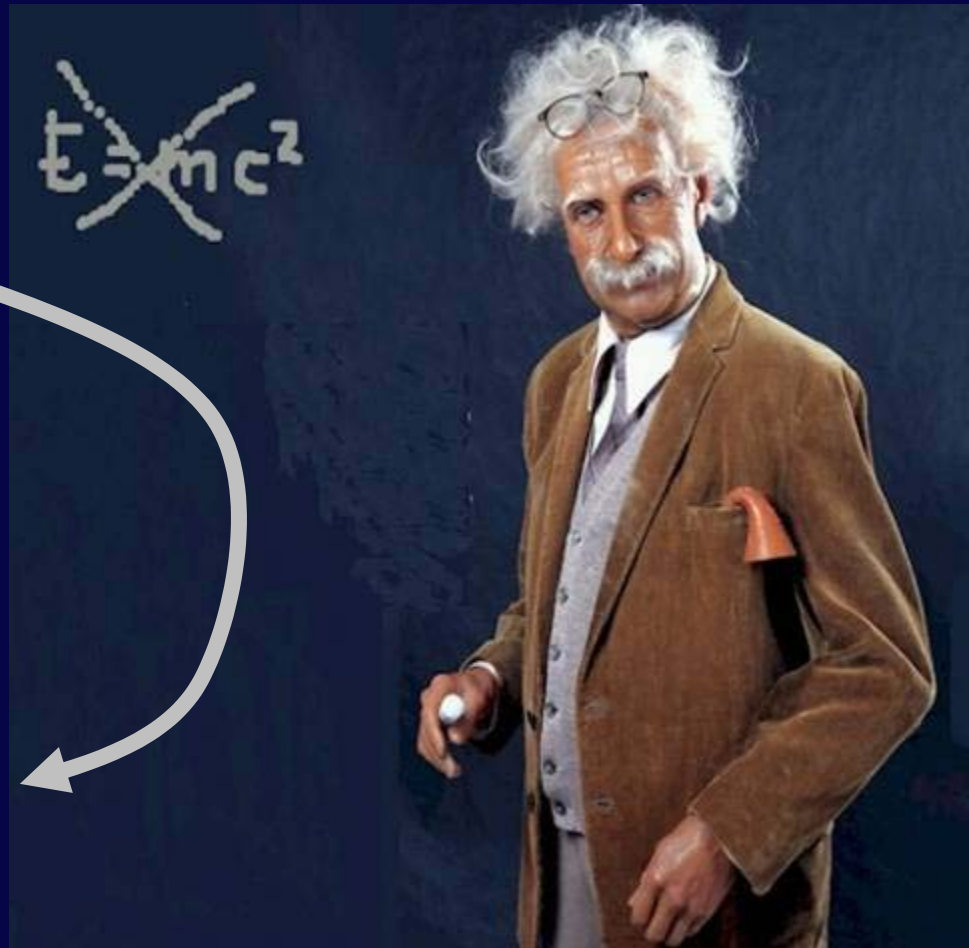


Solutions

Two solutions are possible:

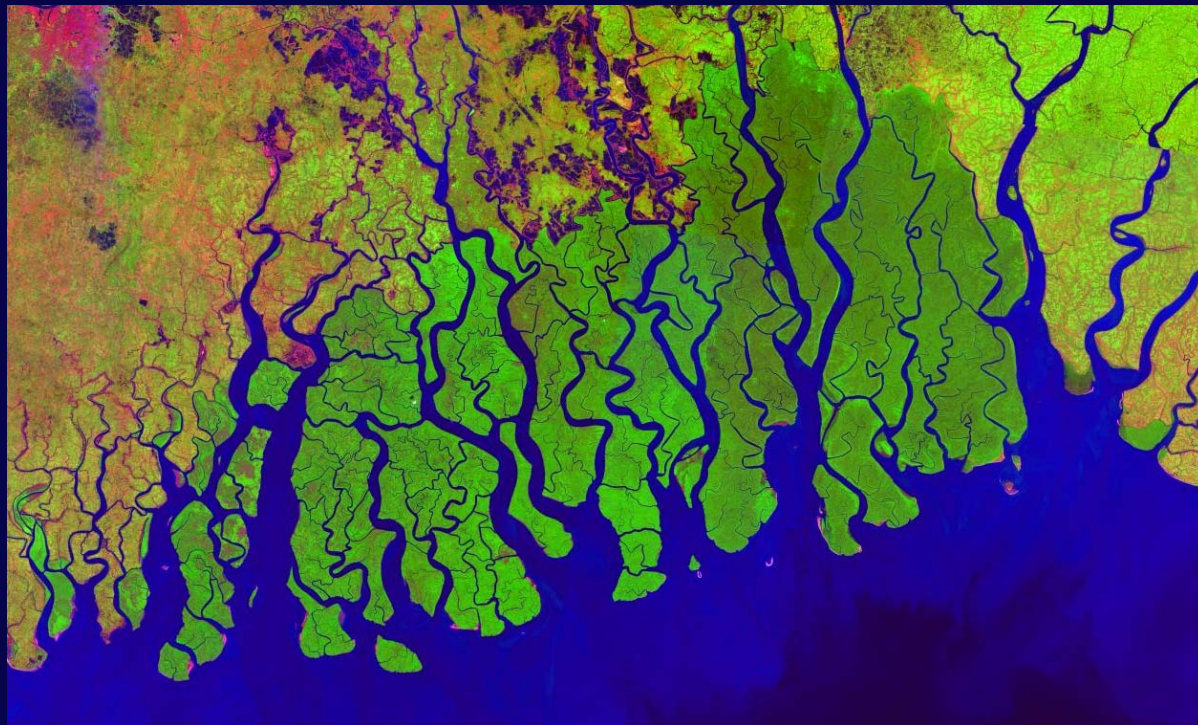
1. Training
2. Make satellite data easier to
 - Obtain
 - Use

Protected Area
Archive



What Is Protected Area Archive?

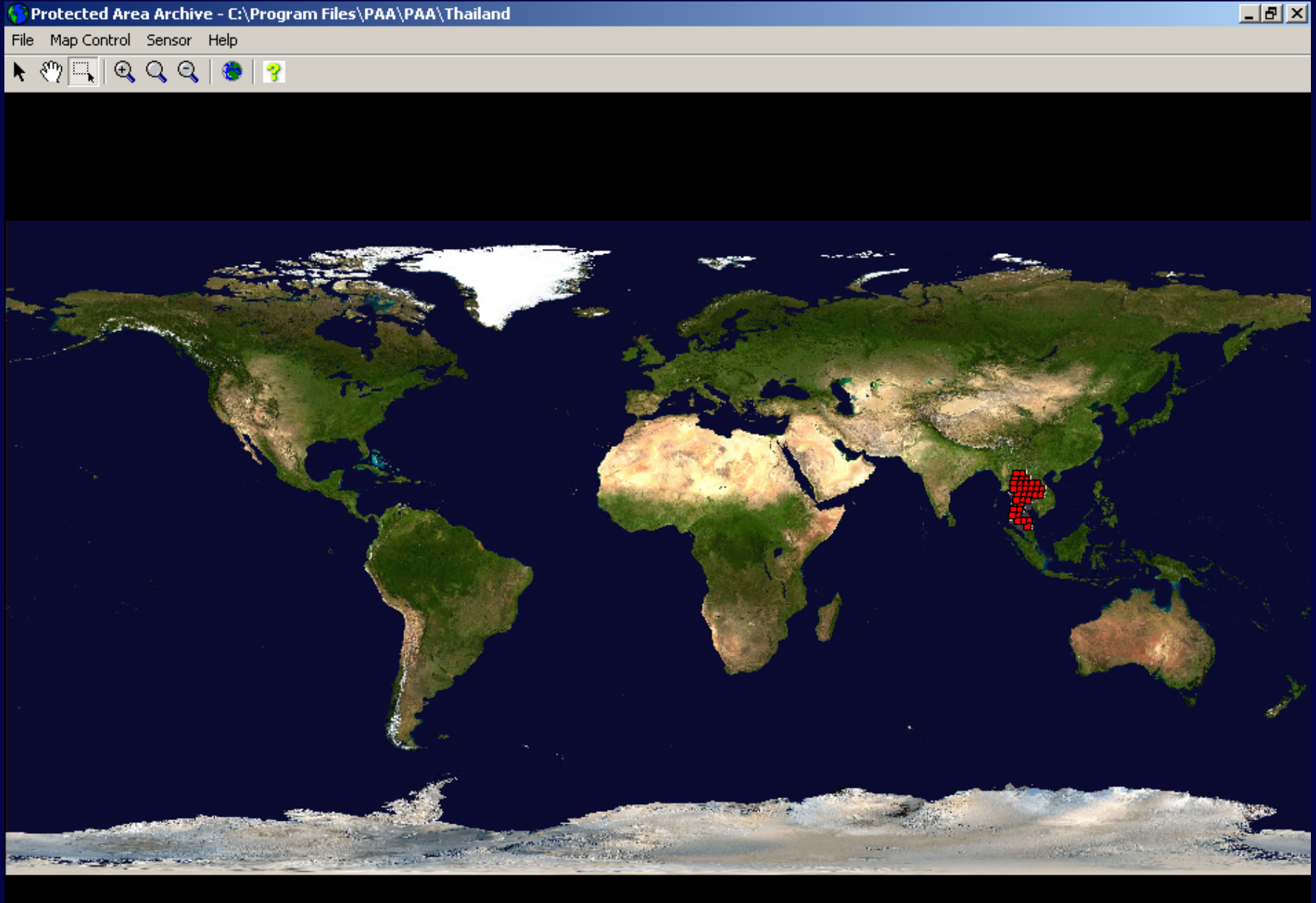
- * 1. Collections of images on a particular theme...
 - 2. Packaged with simple tools to use them
- Requirements: No Internet or computer skills needed



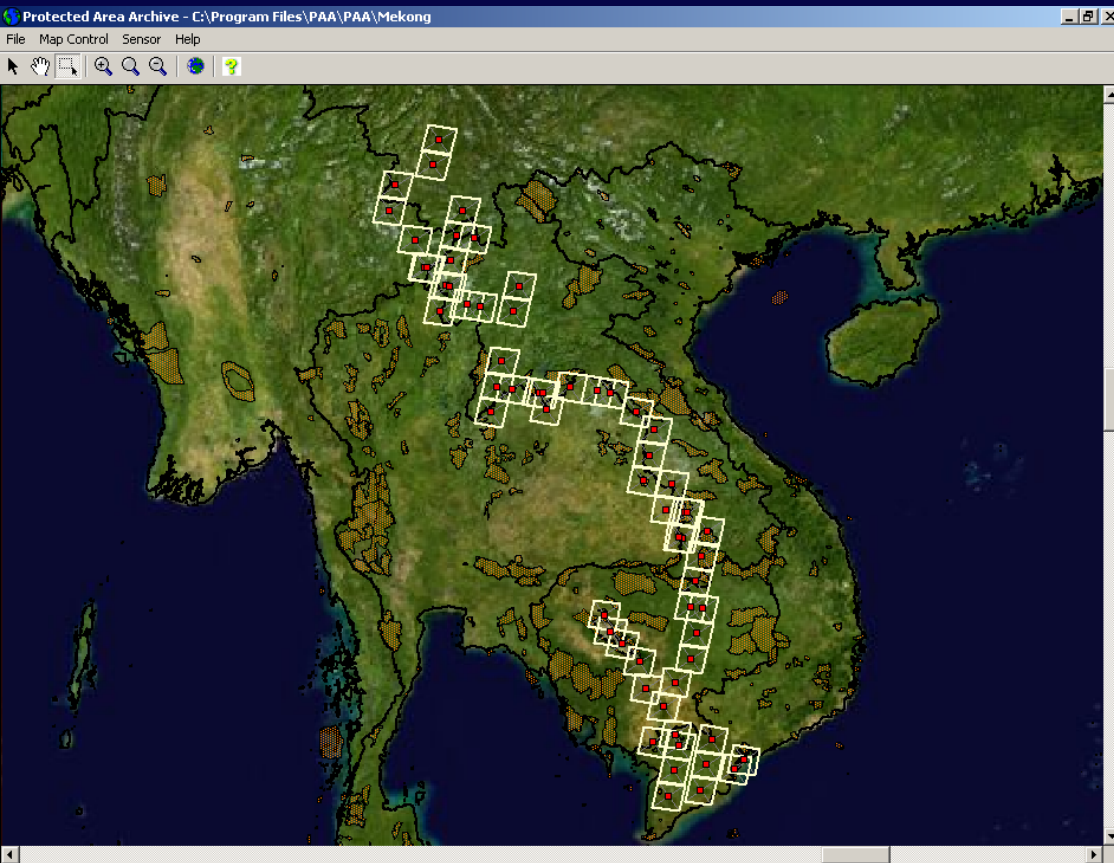
*Sunderbans
India and Bangladesh*

Demonstration

Locator Map



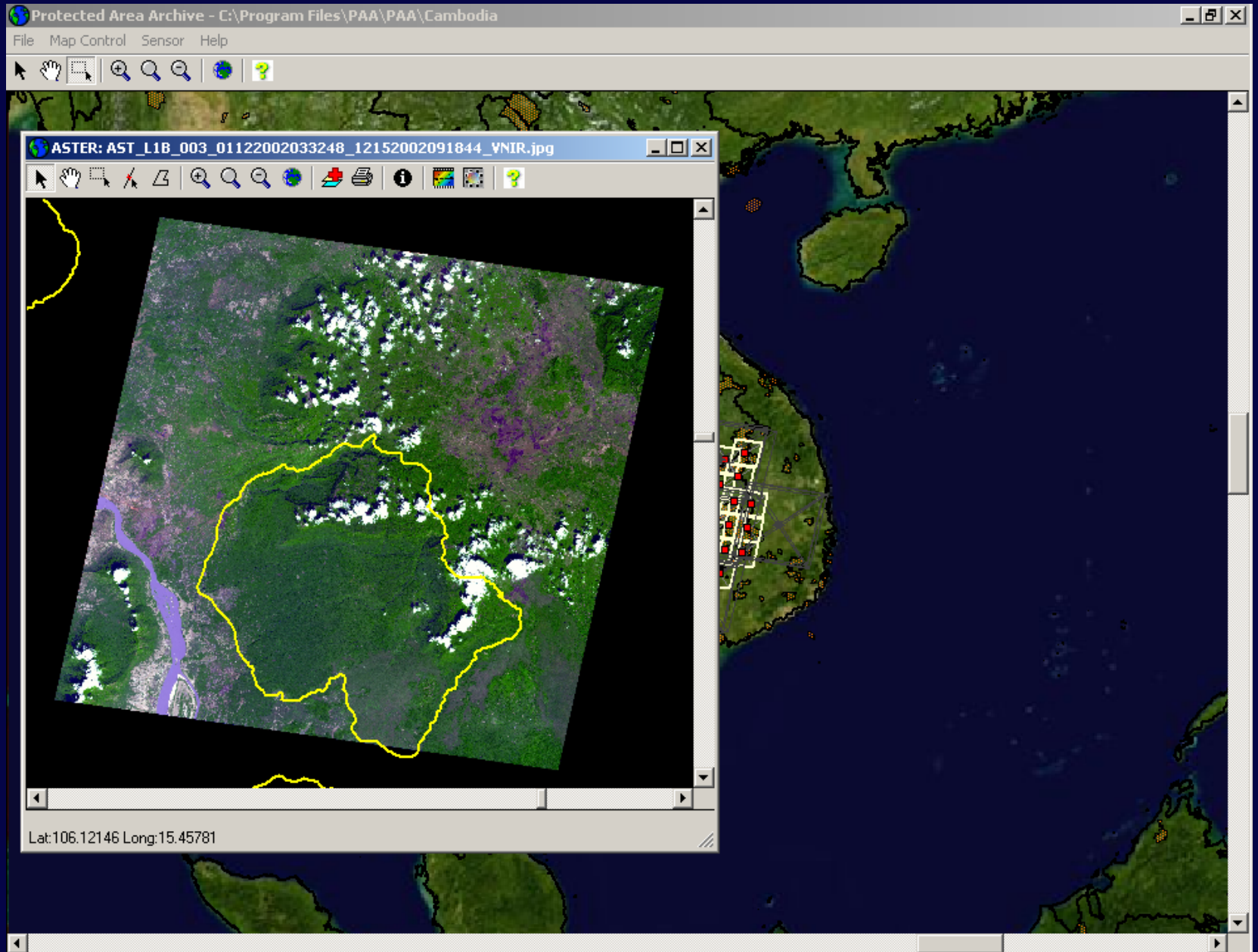
Collections



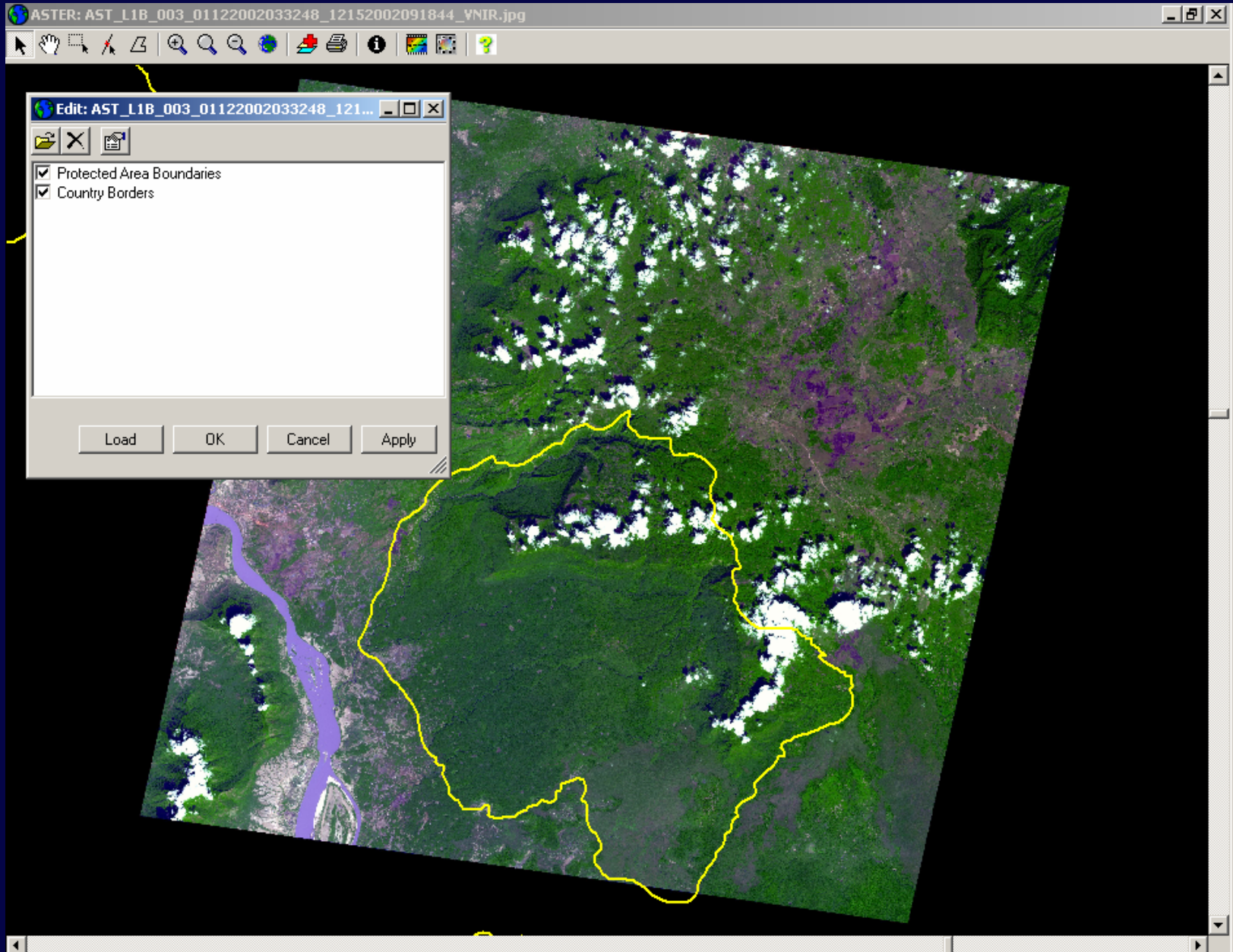
Zoom to Area of Interest



Scene Displays



Overlay Manager



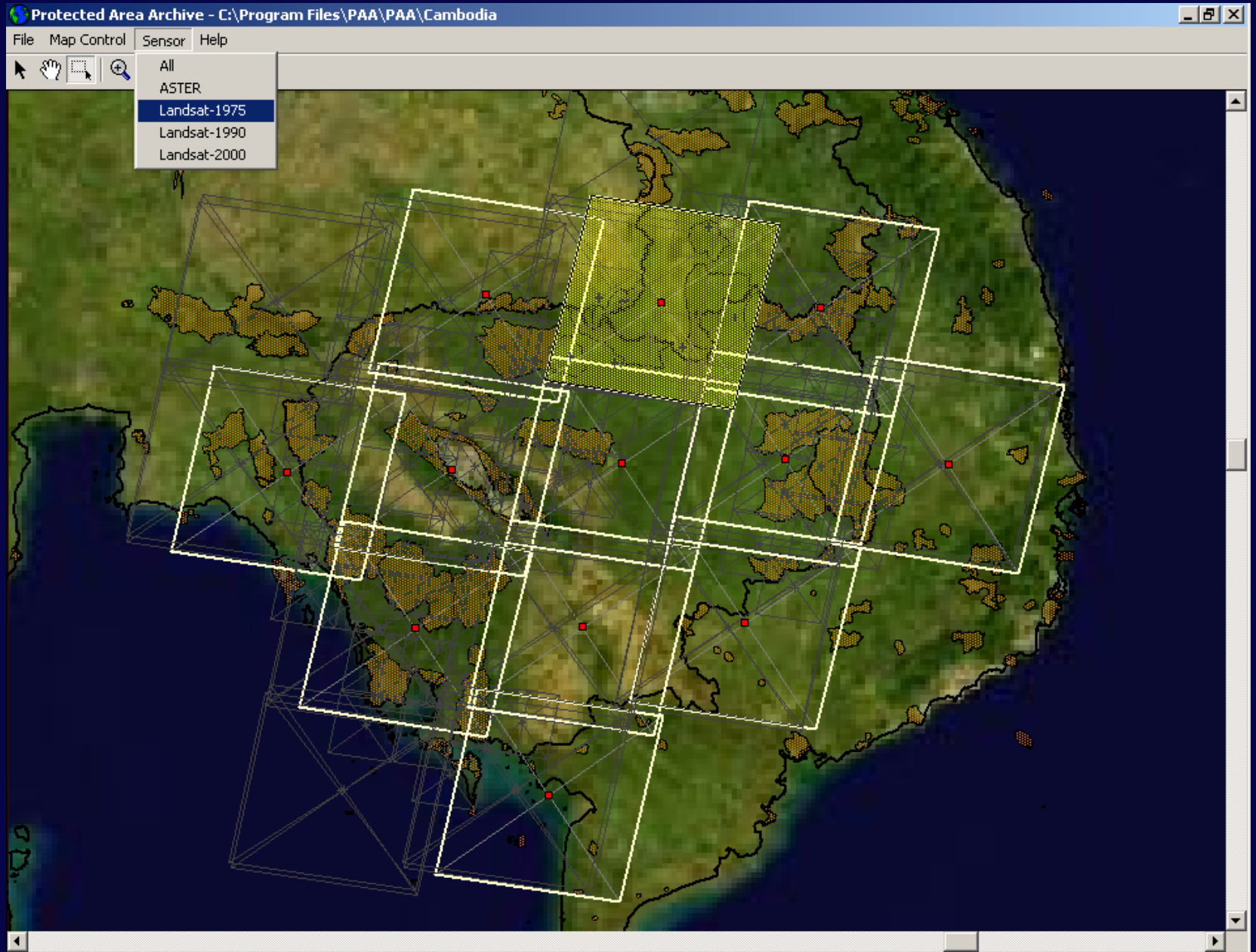
Measurement of Area and Distance



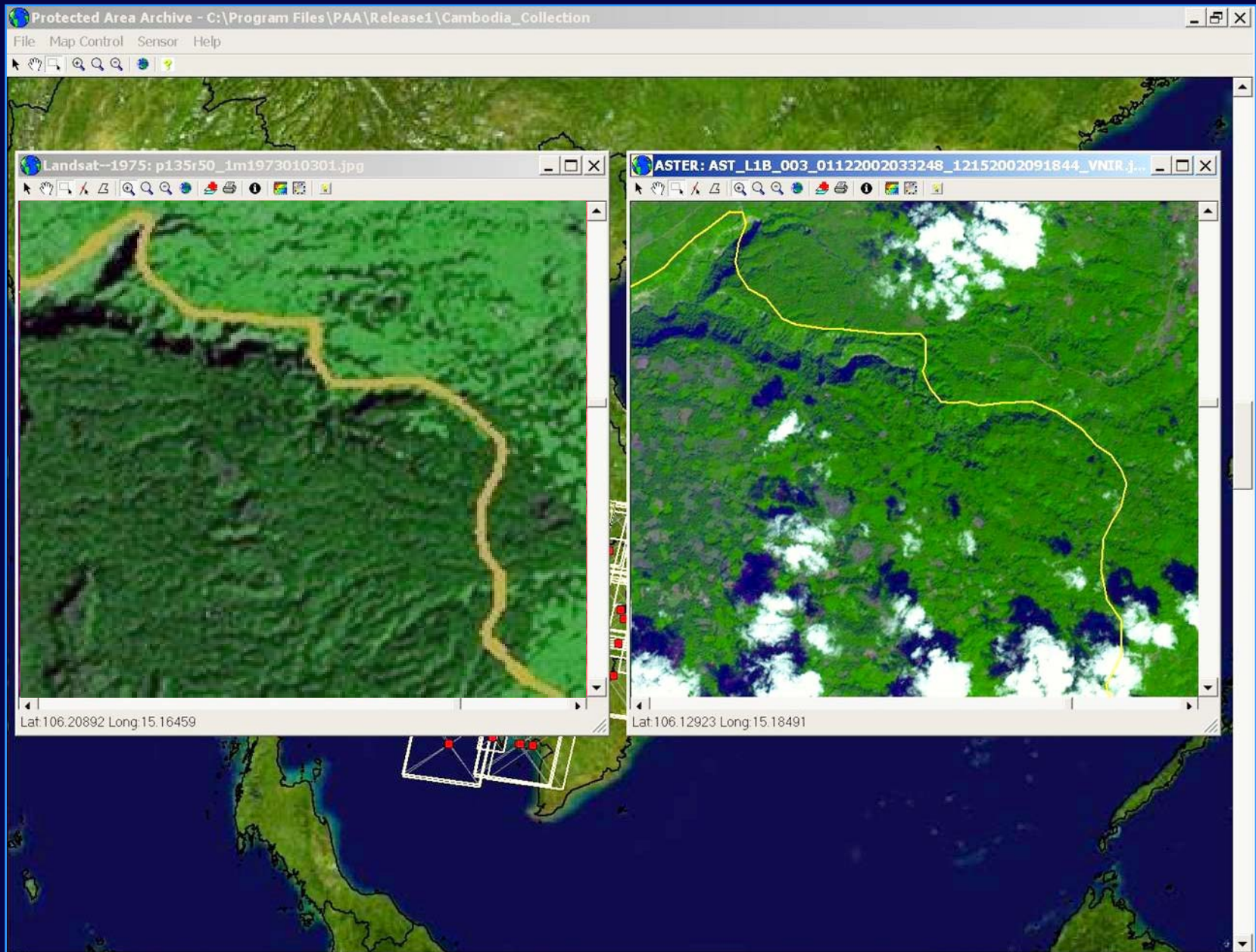
Draw a polygon
using the mouse...

Get the area of
the polygon

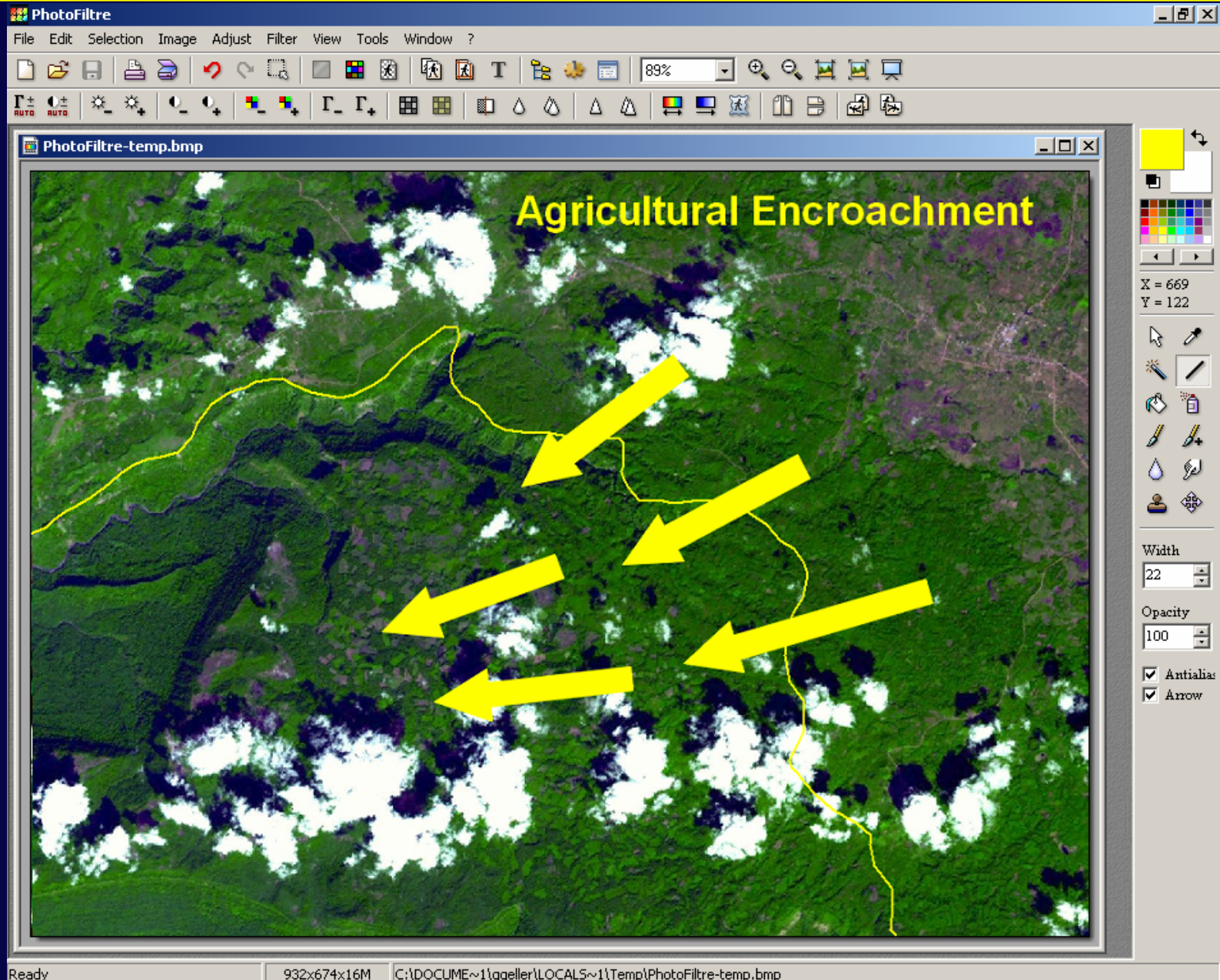
Select Another Image Layer



Change Analysis



Annotate Image: Communication



Plans

- ❑ **Now creating an Open Source version of the Viewer/Toolkit**
- ❑ **Formalized operations: sometime next year**
 - **Allows users to create their own collections based on their specific needs**



*Garamba National
Park, DRC*

More on PAA

More information and downloads at

<http://asterweb.jpl.nasa.gov/paa>