Using ALOS images to support the protection of the Brazilian Amazonia and combat illegal deforestation

CSR/IBAMA

Tokyo

January 2011

INDICAR

Indicator of deforestation by radar images

- Project developed by CSR/IBAMA
- Uses radar images of ALOS PALSAR
- Detection of deforestation under cloud cover
- Complement to DETER system

Methodology

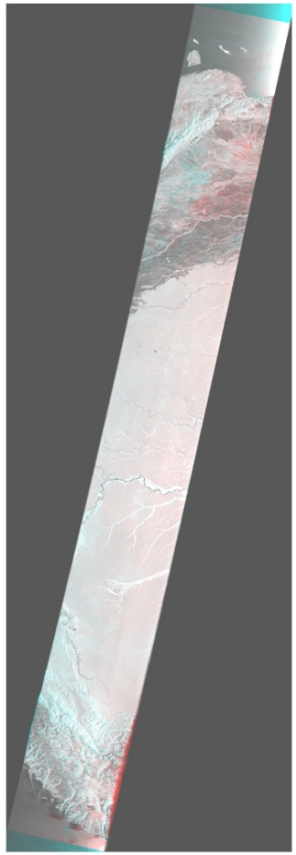
- Uses ScanSAR images with 100-m resolution
- Multitemporal compositions
- Mask previous PRODES & DETER polygons
- Polygons delineation and validation with optical images (and few field campaigns)

Use of ALOS images to support the protection of the Brazilian Amazon forest

IBAMA
MMA

+

=



Cycle 24
Path 439

Cycle 26
Path 439

Composition

Use of ALOS images to support the protection of the Brazilian Amazon forest

JAXA´s pre-processed ScanSAR images

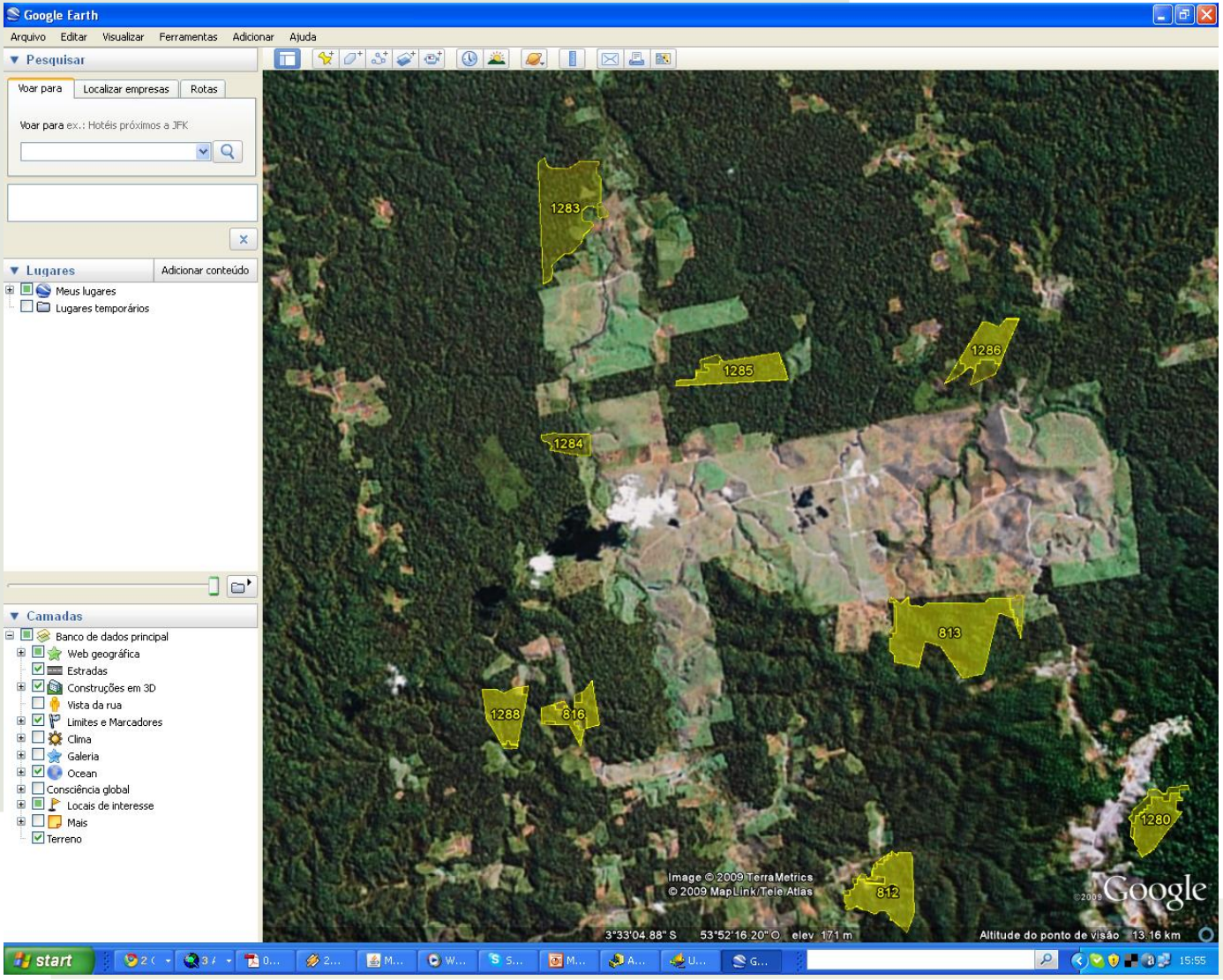
Mosaics of different cycles

Visual Interpretation (polygon extraction)

Products:
Indicatives
Kml
Logistic maps
GPs points

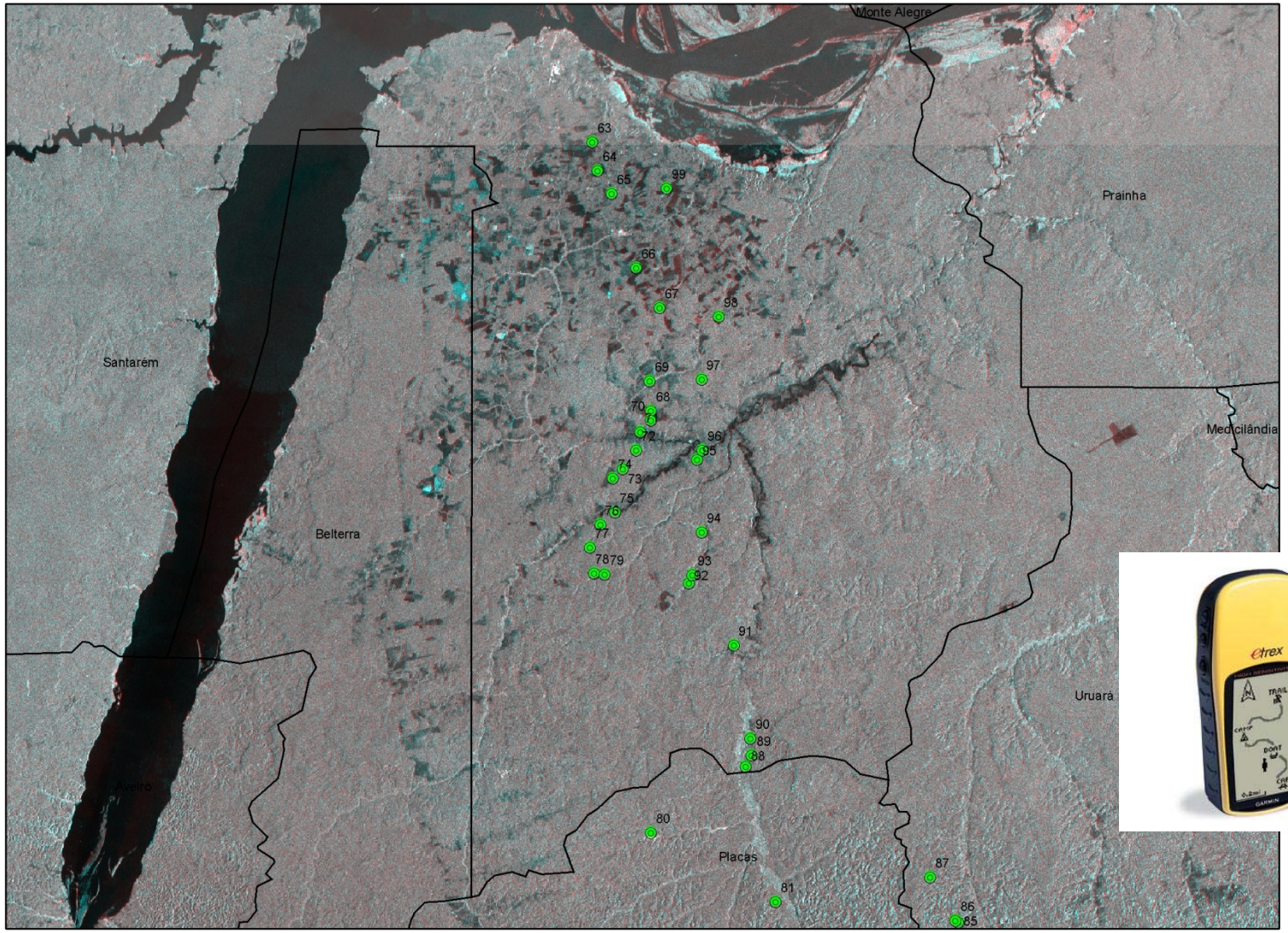
Use of ALOS images to support the protection of the Brazilian Amazon forest

kml



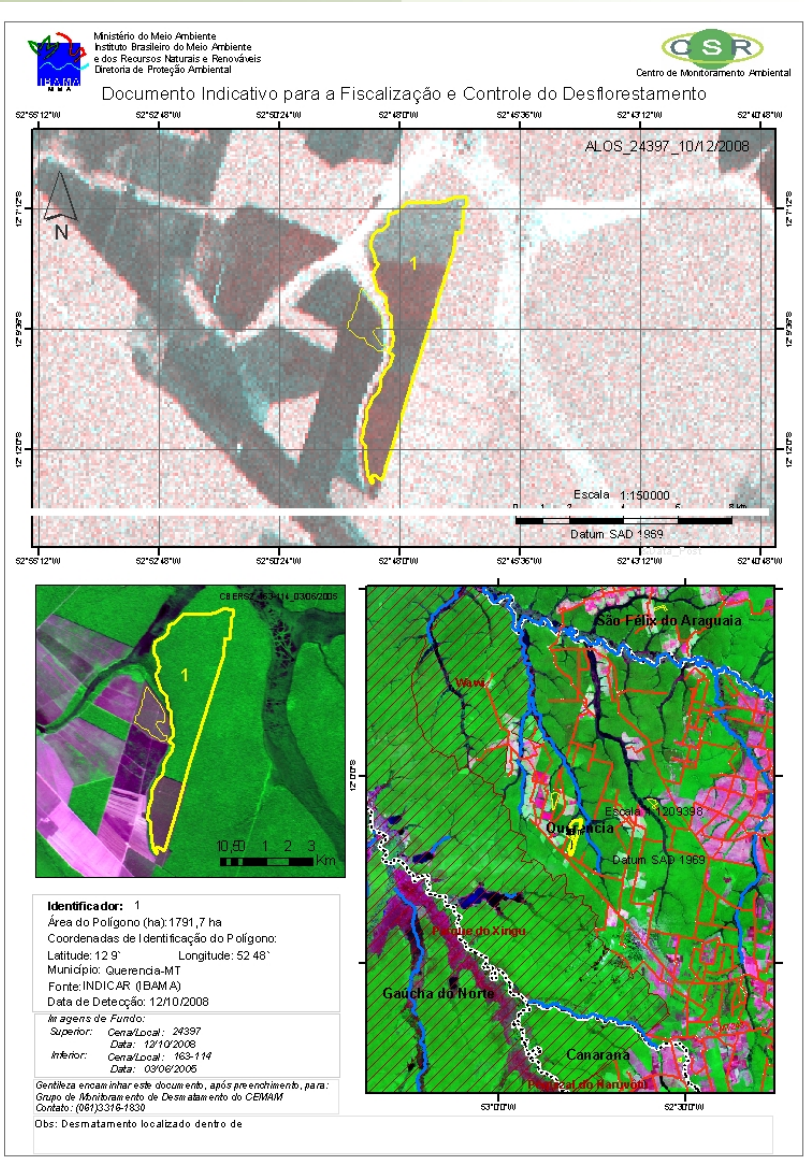
Use of ALOS images to support the protection of the Brazilian Amazon forest

GPS Points



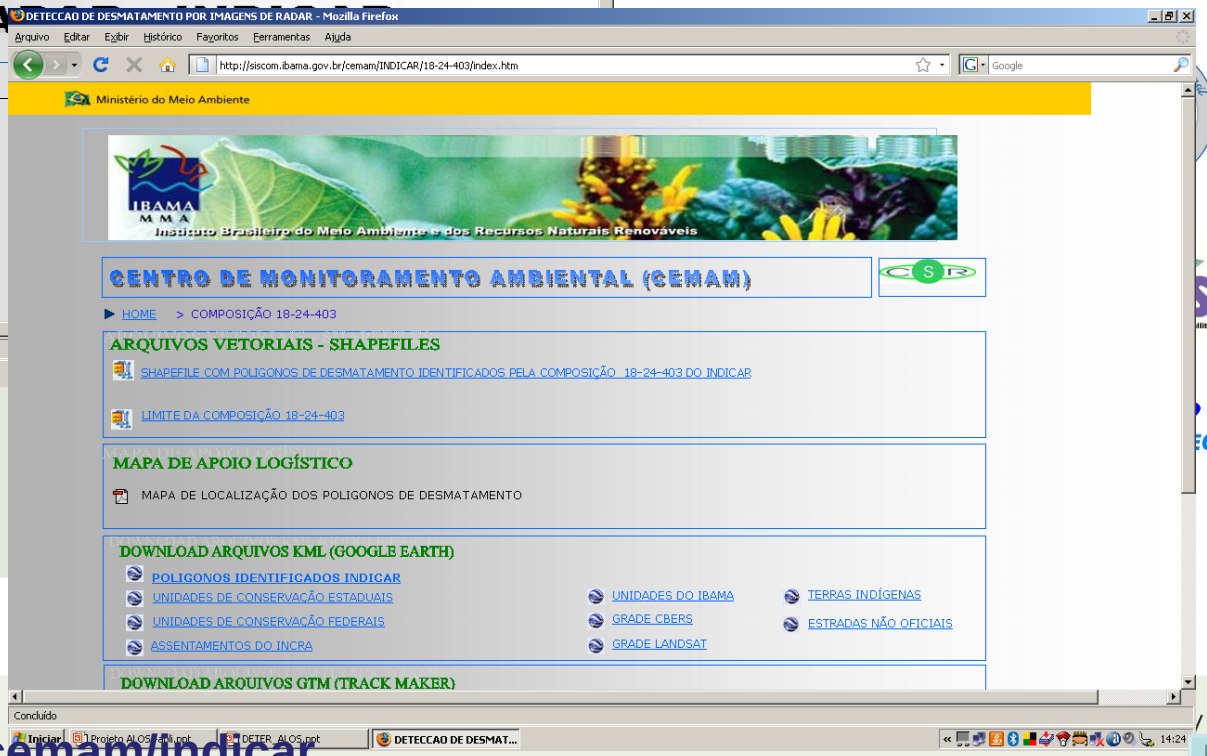
Use of ALOS images to support the protection of the Brazilian Amazon forest

Indicative document of deforestation by INDICAR



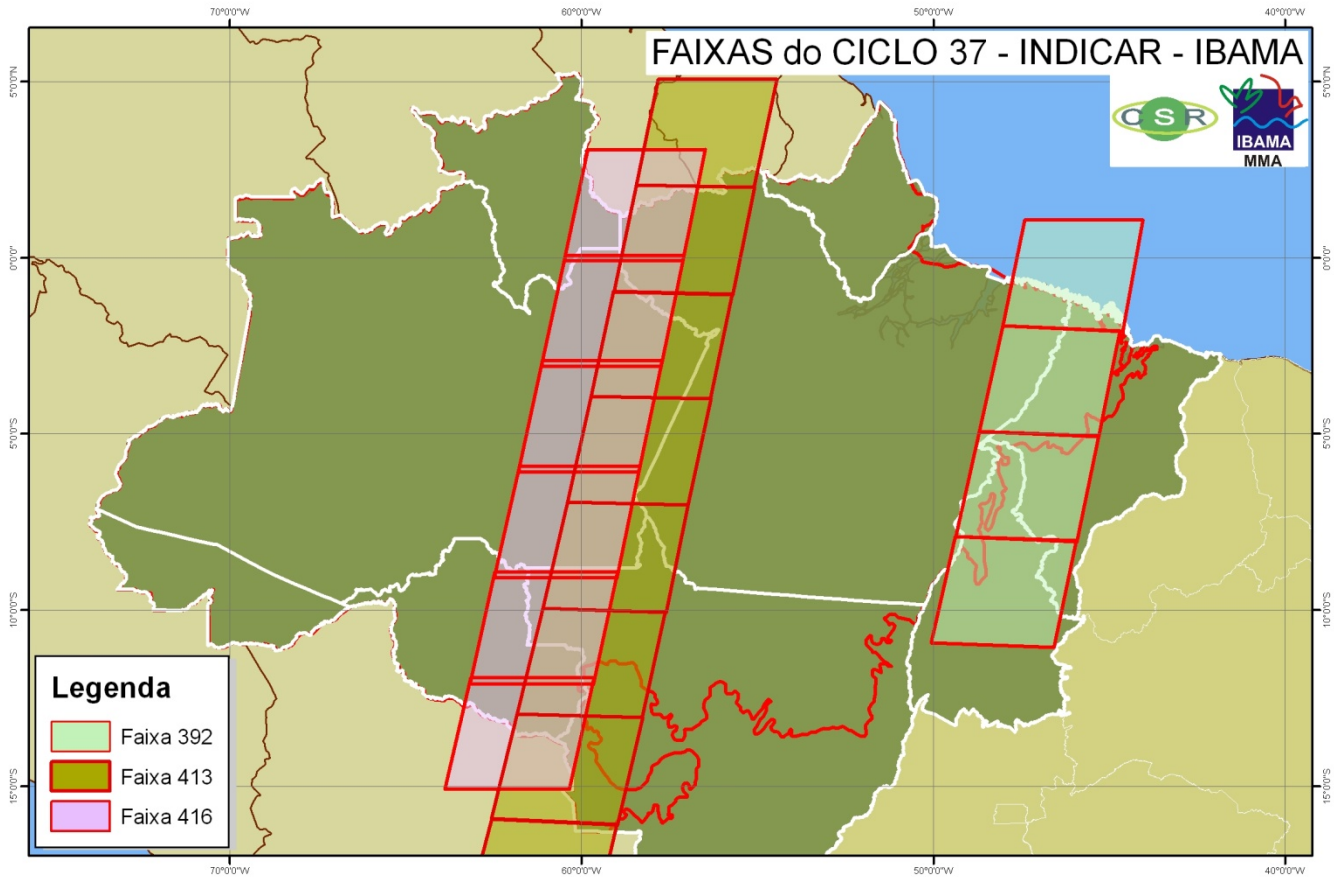
Use of ALOS images to support the protection of the Brazilian Amazon forest

INDICAR Web Page



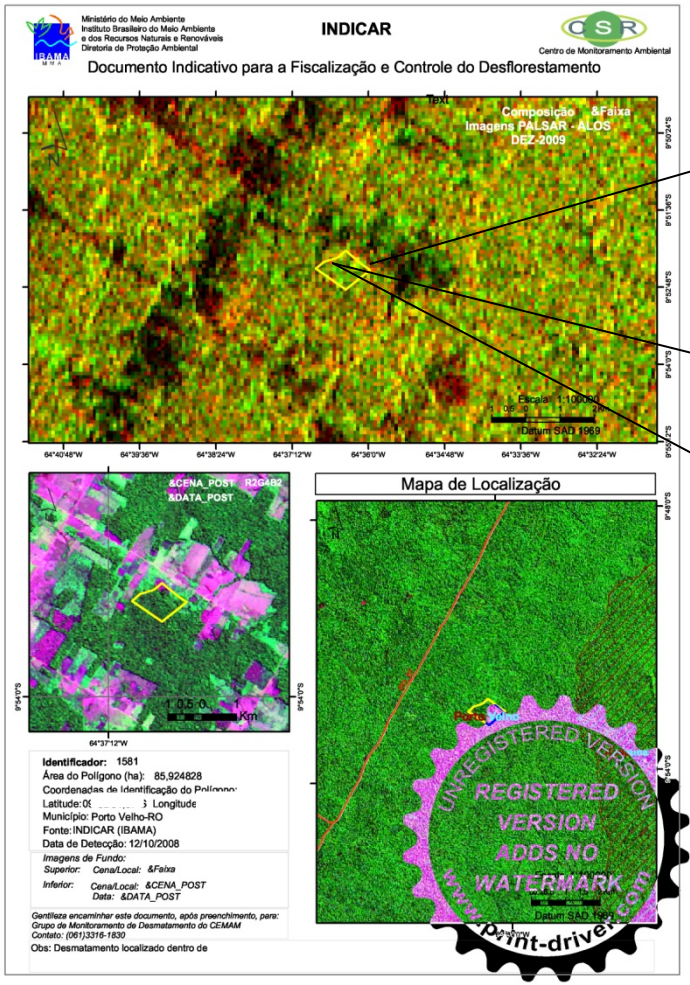
http://siscom.ibama.gov.br/cemam/indicar

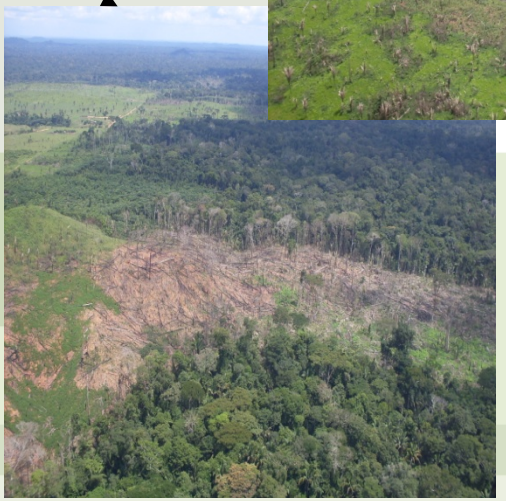
Results of INDICAR July 2010 (cycles 35-37)



Use of ALOS images to support the protection of the Brazilian Amazon forest

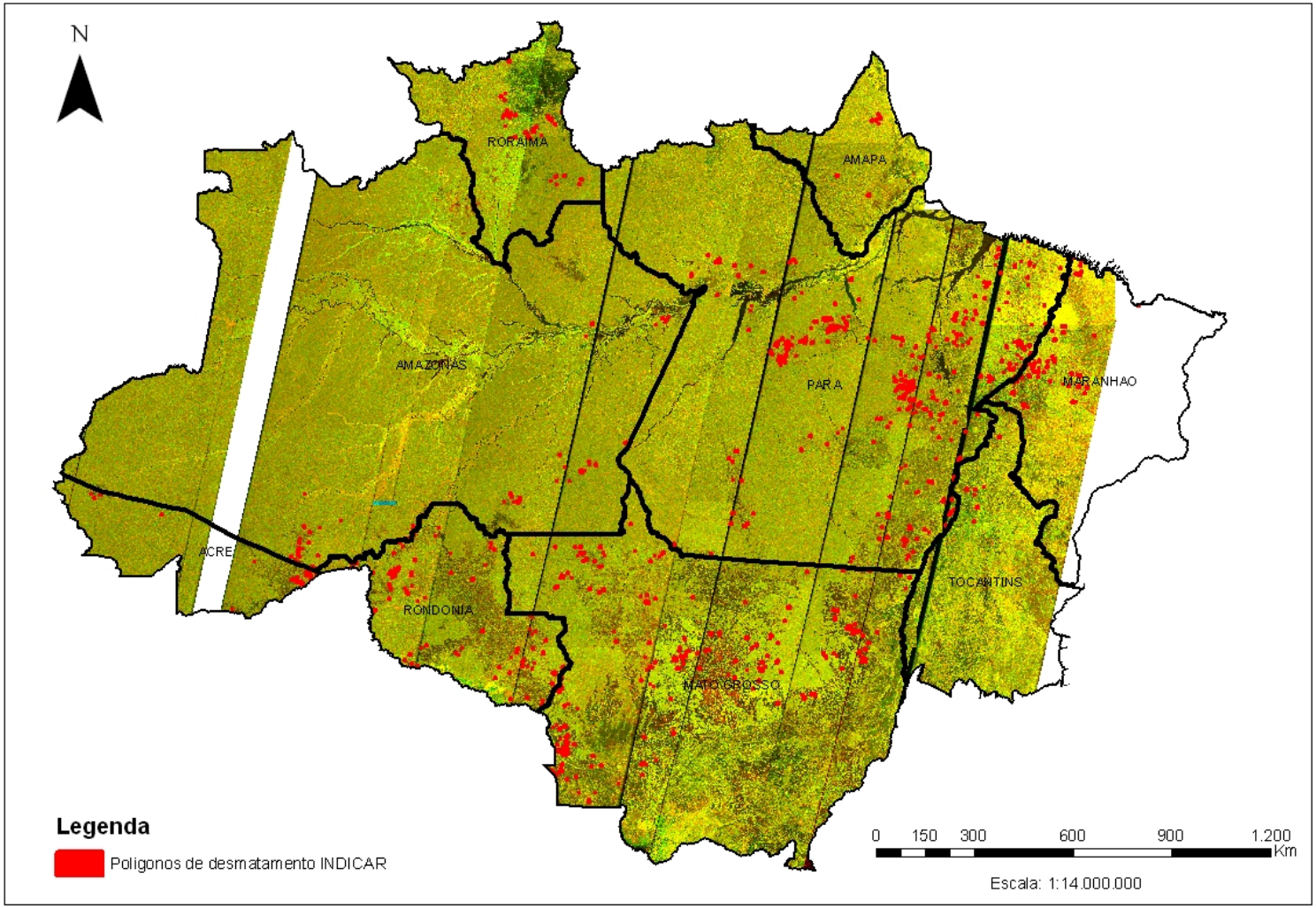
INDICAR field results





bsb -10/11/10

Updated INDICAR results



Use of ALOS images to support the protection of the Brazilian Amazon forest

- ✓ Now, with INDICAR system, Brazilian Amazon region can be monitored in all seasons of the year
- ✓ More than 2,000 polygons already detected by INDICAR

Forest deforestation prevention airplane and the pilot!!