


REPÚBLICA DE COLOMBIA
 MINISTERIO DE AMBIENTE, VIVIENDA Y DESARROLLO TERRITORIAL

INSTITUTO DE HIDROLOGÍA, METEOROLOGÍA Y ESTUDIOS AMBIENTALES
 - IDEAM -

Global Spatial Information for Forest Resources Assessment


Expert Consultation on Global Forest Resources Assessment: towards FRA 2010

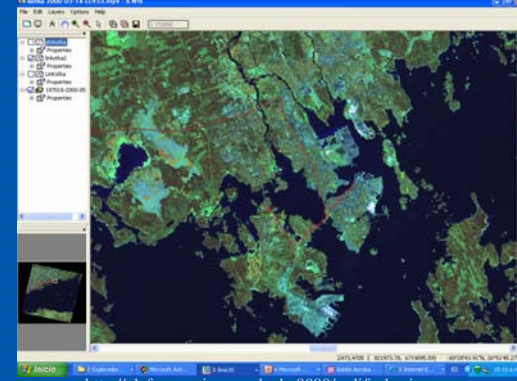
Kotka, Finland, June 12-16, 2006
Fernando Salazar Holguín
www.ideam.gov.co


Global Spatial Information for Forest Resources Assessment


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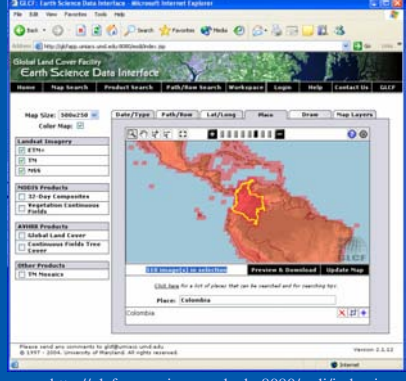
- **LANDSAT Imagery**
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University of Maryland's Global Land Cover Facility - Earth Science Data Interface




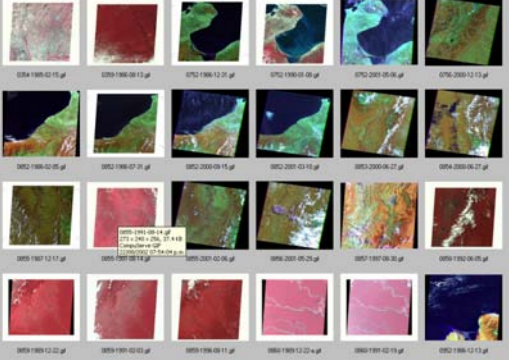
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University of Maryland Global Land Cover Facility - Earth Science Data Interface



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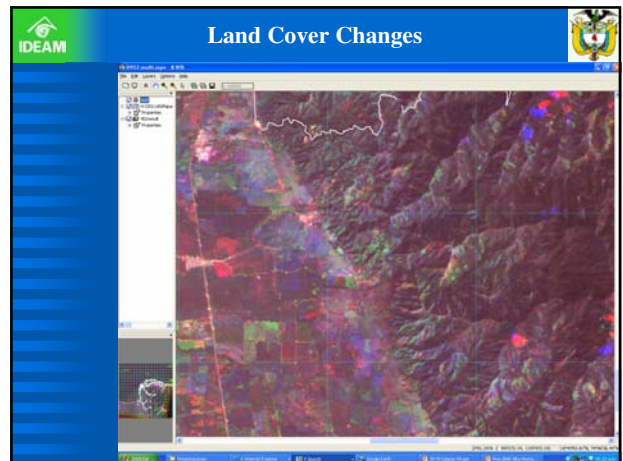
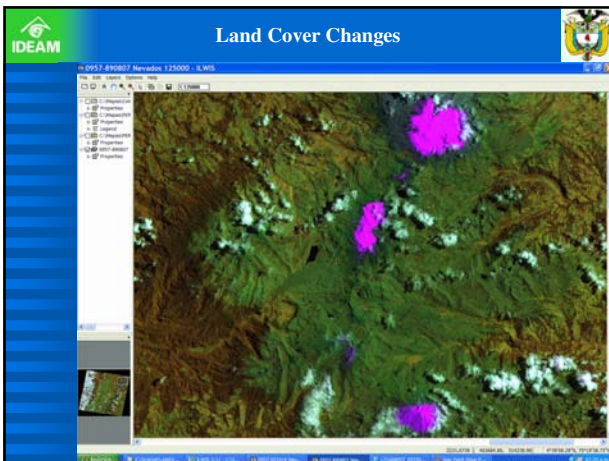


<http://glcfapp.umiacs.umd.edu:8080/esdi/index.jsp>


Land Cover Changes



<http://glcfapp.umiacs.umd.edu:8080/esdi/index.jsp>



SRTM

The Shuttle Radar Topography Mission (SRTM) obtained elevation data on a near-global scale to generate the most complete high-resolution digital topographic database of Earth. SRTM consisted of a specially modified radar system that flew onboard the Space Shuttle Endeavour during an 11-day mission in February of 2000.

SRTM is an international project spearheaded by the National Geospatial-Intelligence Agency (NGA) and the National Aeronautics and Space Administration (NASA)

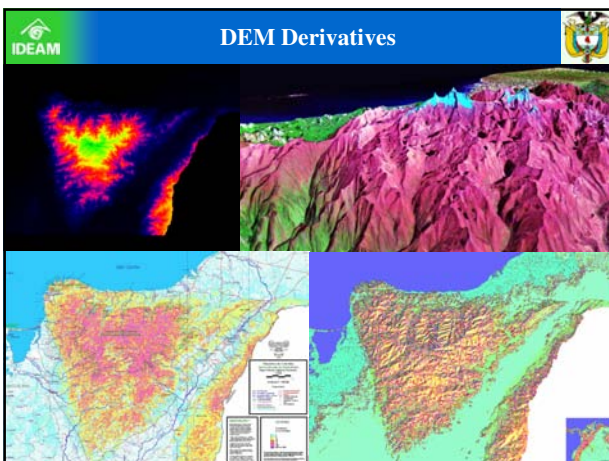
<http://www2.jpl.nasa.gov>

A Global Assessment of the SRTM Accuracy

“As part of the SRTM mission, an extensive ground campaign was conducted by NGA and NASA to collect ground-truth which would allow for the global validation of this unique data set. The table below summarizes the SRTM performance observed by comparing against the available ground-truth. All quantities represent 90% errors in meters”

Continent	Africa	Australia	Australia	Islands	N. America	S. America
Horizontal Accuracy	11.9	7.2	8.8	9.0	12.6	9.0
Absolute Vertical	5.6	6.0	6.2	8.0	9.0	6.2
Relative Vertical	9.8	4.7	8.7	6.2	7.0	5.5
Long Wavelength	3.1	6.0	2.6	3.7	4.0	4.9

Rodriguez, E. (2005): A Global Assessment of the SRTM Accuracy.
http://edc.usgs.gov/conferences/SRTM/presentations/abstract04_rodriguez.pdf



HydroSHEDS

(Hydrological data and maps based on Shuttle Elevation Derivatives at multiple Scales)

HydroSHEDS is a mapping product that provides hydrographic information for regional and global-scale applications in a consistent format.

<http://hydrosheds.cr.usgs.gov/#>

Protected Areas

2005 World Database on Protected Areas

Data Contents

WOPA 2005 contains a special version of the World Database on Protected Areas. This version is a snapshot of the central database maintained at UNEP - World Conservation Monitoring Center that has been modified for facilitating its use with the tools provided or with general purpose GIS systems. With the exception of one protected area - layer (see "WOPA Data Layers" section and note on the regional polygon dataset) all information in the central database can be found in this CD-ROM. The changes to the data structure (explained in the section on Metadata and Data Preparation) have for objective to optimize the database space requirements and to ease access to all the data available for each protected area.

About data quality

This version of the database represents a substantial advance over prior versions: there have been improvements in both data quality and completeness. The database has been cleaned to avoid duplication of records and a substantial number of new records has been integrated. Nevertheless, we also are aware of the current limitations of this dataset. These limitations can be linked to data gaps, inaccuracies either of the geographic or attribute data, access to the database, and limitations in being able to track a larger body of information and knowledge continuously updated over time. This is a work in progress and it will require further attention, cooperation and

THE WORLD'S LAST INTACT FOREST LANDSCAPES

<http://www.intactforests.org/>

Google Earth

Vulnerabilidad de los Ecosistemas de Alta Montaña: Cambios de Coberturas

Main References

- Lehner, B., Verdin, K., Jarvis, A. (2006): **HydroSHEDS Technical Documentation**. World Wildlife Fund US, Washington, DC. <http://hydrosheds.or.usgs.gov>
- Rodríguez, E. (2005): **A Global Assessment of the SRTM Accuracy**. http://edc.usgs.gov/conferences/SRTM/presentations/abstract04_rodriguez.pdf
- Salazar, F. **SRTM Models as Tools to Build a Spatial Data Infrastructure for Colombia**. http://edc.usgs.gov/conferences/SRTM/presentations/Slides37_Salazar.pdf
- United States Geological Survey (USGS), (2004): **The National Map - Seamless Data Distribution System Viewer**. <http://seamless.usgs.gov/index.htm>
- University of Maryland, Global Land Cover Facility (2005): **Earth Science Data Interface**. Version 2.1.17. <http://glcfapp.umd.edu:8080/esdi/index.jsp>

Software Used

- ILWIS 3.3 Academic, <http://www.itc.nl/ilwis/default.asp>
- ArcPad version 6.03, <http://www.esri.com/software/arcgis/arcpad/index.html>
- Google Earth, <http://earth.google.com/>; Global Mapper, <http://www.globalmapper.com/>; Window XP Professional, Microsoft Office Professional; PROMAP.

Vulnerabilidad de los Ecosistemas de Alta Montaña: Cambios de Coberturas

Thank you for your attention!