

Tutorial

DATA STATISTICS TOOL



Suggested citation:
PAZ-GARCIA, P. & COCA-CASTRO, A. (2014) Data statistics tool. Tutorial for the Terra-i project. Version 2.

Description

This tool allows the user to visualize and obtain statistical data on decrease detections from 2004 until the most recent data at different levels or target areas such as country, second and third administrative level, protected and indigenous areas or ecosystems. The information is expressed in line and bar graphs that show the time-series of habitat loss within each year as well as its accumulated value, respectively. In addition, the tool allows downloading of: (1) reports* that compile relevant information (rates of change, percentage of analyzed area, the most affected areas, the most affected years, among others); and (2) statistical tables of the target data (administrative levels, protected areas, indigenous areas or ecosystems) in .csv format.

Additionally, the “Download data” tab contains a brief description of the data, the sources, limitations, recommendations and references.

Note: * These reports are currently only available at the country level.

Management

1. Map

Select a country and then choose the target information to extract (national level, second or third administrative level, protected or indigenous areas, or ecosystems) (Figure 1).

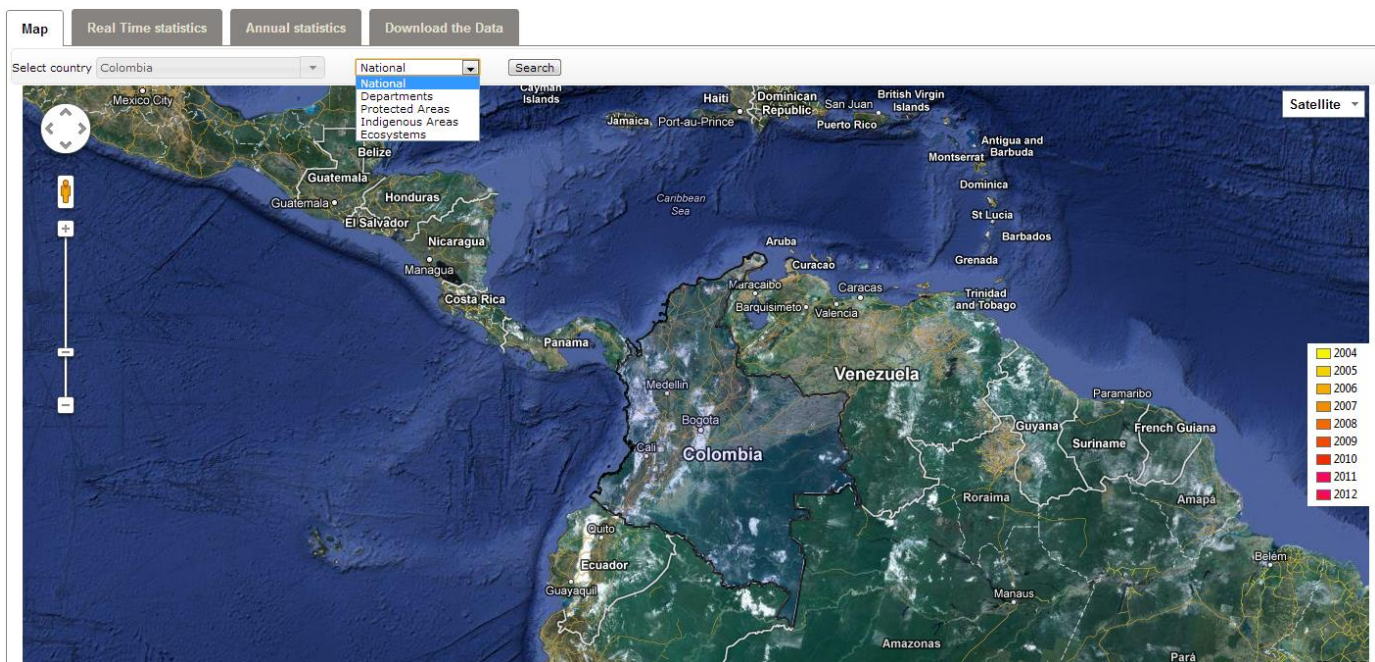


Figure 1. Initial interface to visualize the data. Selection of the target information to extract at the country level.

The viewing pane displays the Terra-i detections represented in a range of colors, from yellow to red, with yellow indicating the oldest detections and pink the most recent data analyzed. Figure 2 shows the habitat decrease detections for the Department of Caquetá, Colombia, in which colored dots (pixels) represent detections from 2004 to October 2012.

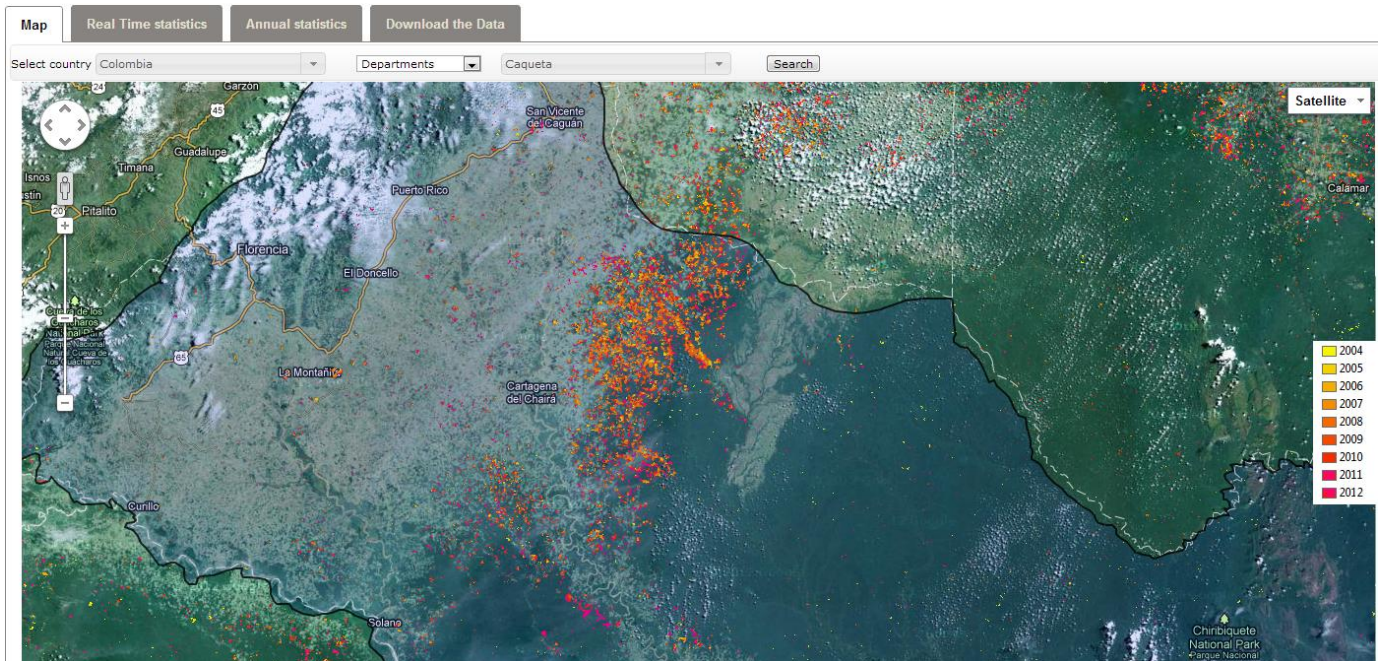


Figure 2. Decrease detections for the Department of Caquetá (Colombia), 2004 to October 2012.

2. Statistics in real time

In this section, line charts can be created comparing the area changed (hectares) per 16-Julian day interval per year, from the first date of detection (2004) until the latest update (October 2012). This graphic is helpful to indicate which date or range of dates (in Julian days) reported the largest area change in hectares per year. Figure 3 shows the line chart of decrease detections in real time for Colombia: For example, for the year 2010 Julian date 17 there was a change in area of 20,693.75 ha. In addition, Julian date and are of change values are displayed when the mouse cursor is placed over a point on the chart.

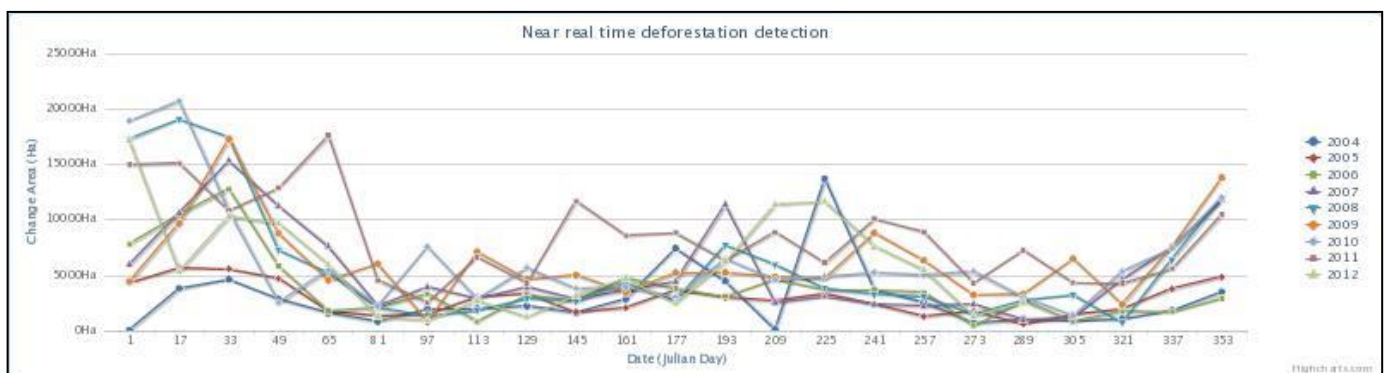


Figure 3. Near real time statistics of decrease detections per 16-day period per year for Colombia

Optionally, the chart has the capability of disabling or highlighting certain years. To do this, click on the year symbol in the legend to disable or reactivate. Figure 4 shows an example of a chart with only the dates 2011 and 2012 selected. The area of change for Julian day 65 of the year 2011 is 17,618.75 ha.

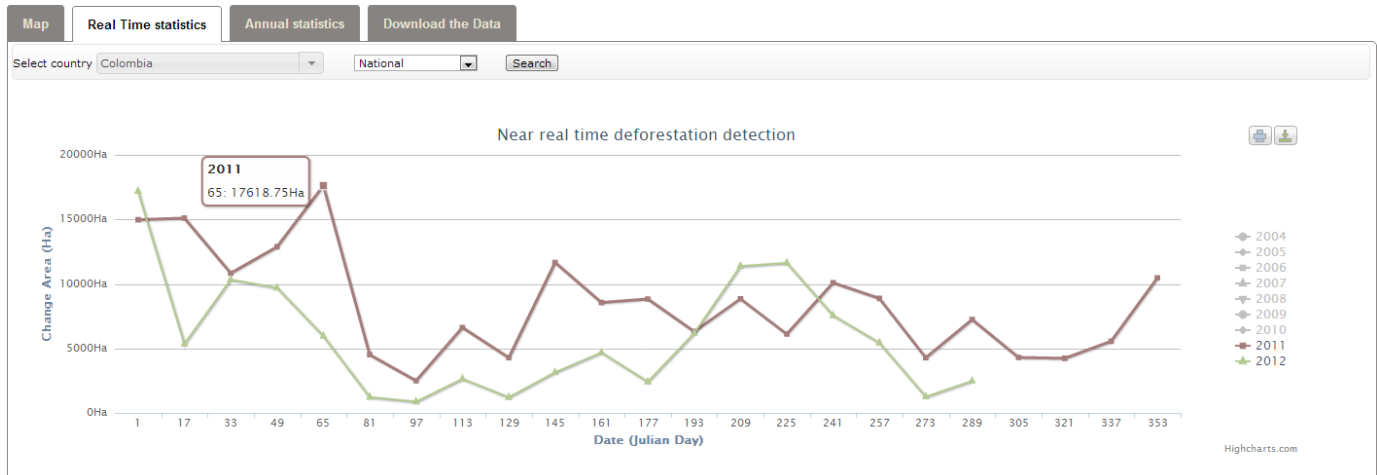


Figure 4. Comparison of two years using the Real Time Statistics tool

Note: The charts can be downloaded and/or printed in different image formats (PNG, JPEG, SVG) or as a document (.PDF).

3. Annual statistics

Under this tab, the annual rates of change (hectares per year) are displayed in bar charts from 2004 until the last update. This chart may indicate which year(s) were most affected by habitat loss, an analysis that can be done by different administrative levels or other areas of interest. Figure 5 shows an example of the annual deforestation rate for the Department of Amazonas, Colombia, noting that the highest rate of change (7,262.5 ha) was experienced in 2011 in comparison to the other years.

As with the line charts, detailed value information can be obtained placing the mouse cursor over a bar. Bar charts can also be downloaded and/or printed in different image formats (PNG, JPEG, SVG) or as a document (PDF).

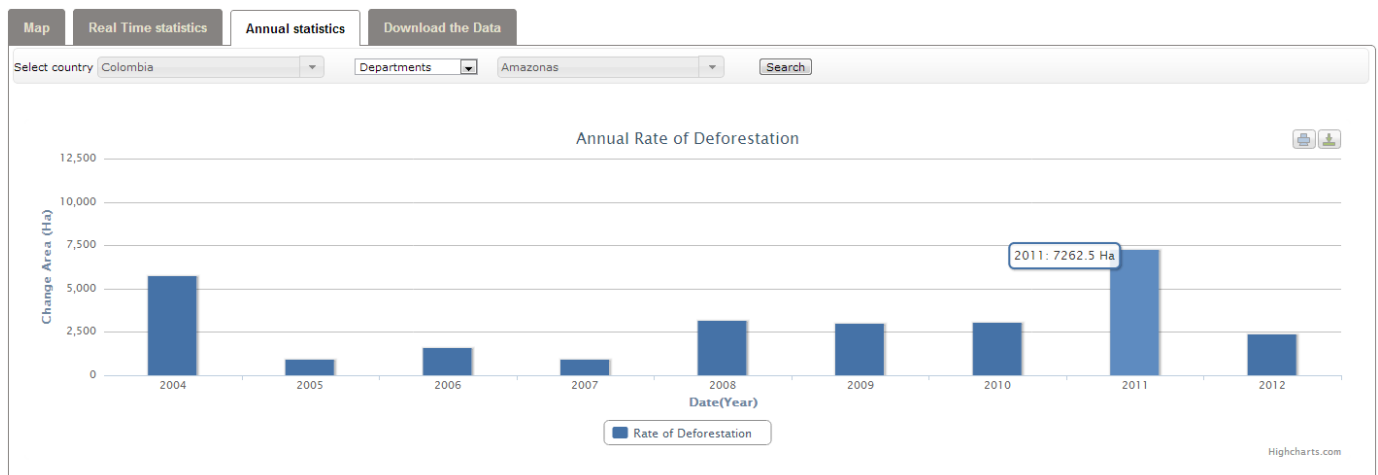


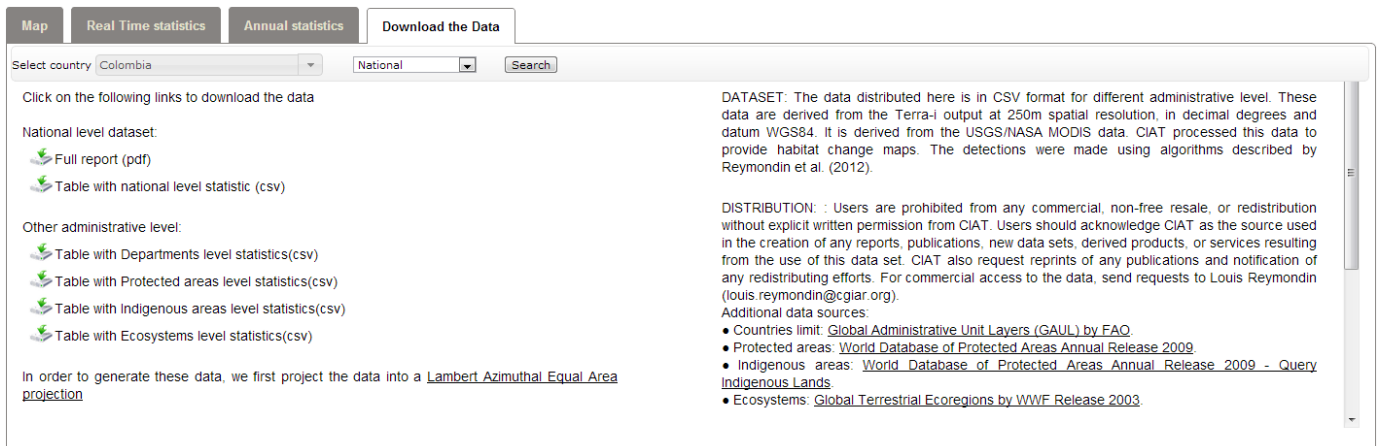
Figure 5. Annual statistics for the Department of Amazonas (Colombia).

4. Data download

This section allows detection data to be downloaded, including a full report (.pdf format). The report contains relevant information for posteriori analyses such as total decrease rates as well as the most affected years by country, second administrative level, ecosystems, and/or protected and indigenous areas. The main aim of these reports is to deliver to the user a synthesis of information extracted from the Terra-i tool.

In addition, the user can download tables in .csv format with information from different levels (national, second and third administrative level, ecosystems, protected and indigenous areas). Each table contains the area change (hectares) by Julian period within the years analyzed as well as the estimate of the annual decrease rate.

Finally, a short text on the distribution and reference sources of the data includes a description, limitations, and recommendations.



Map Real Time statistics Annual statistics **Download the Data**

Select country Colombia National Search

Click on the following links to download the data

National level dataset:

- Full report (pdf)
- Table with national level statistic (csv)

Other administrative level:

- Table with Departments level statistics(csv)
- Table with Protected areas level statistics(csv)
- Table with Indigenous areas level statistics(csv)
- Table with Ecosystems level statistics(csv)

In order to generate these data, we first project the data into a [Lambert Azimuthal Equal Area projection](#)

DATASET: The data distributed here is in CSV format for different administrative level. These data are derived from the Terra-i output at 250m spatial resolution, in decimal degrees and datum WGS84. It is derived from the USGS/NASA MODIS data. CIAT processed this data to provide habitat change maps. The detections were made using algorithms described by Reymondin et al. (2012).

DISTRIBUTION: : Users are prohibited from any commercial, non-free resale, or redistribution without explicit written permission from CIAT. Users should acknowledge CIAT as the source used in the creation of any reports, publications, new data sets, derived products, or services resulting from the use of this data set. CIAT also request reprints of any publications and notification of any redistributing efforts. For commercial access to the data, send requests to Louis Reymondin (louis.reymondin@cgiar.org).

Additional data sources:

- Countries limit: [Global Administrative Unit Layers \(GAUL\) by FAO](#)
- Protected areas: [World Database of Protected Areas Annual Release 2009](#)
- Indigenous areas: [World Database of Protected Areas Annual Release 2009 - Query Indigenous Lands](#)
- Ecosystems: [Global Terrestrial Ecoregions by WWF Release 2003](#)

Figure 6. Data download