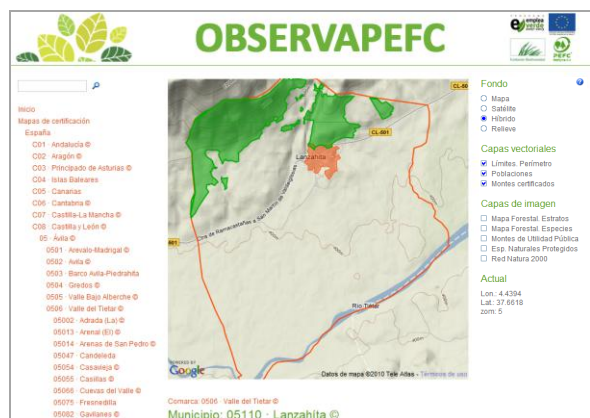
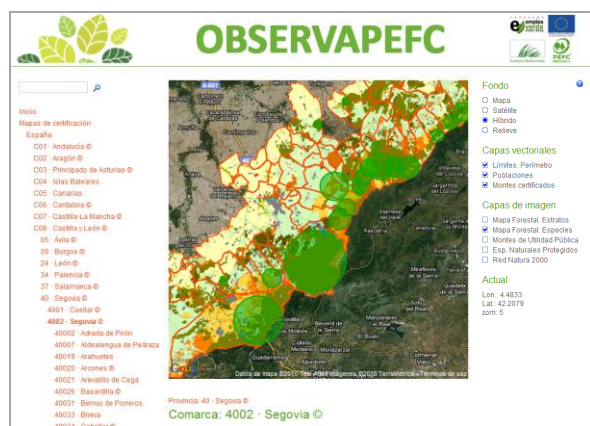


Computer application INGRID Environment for

Cartographic and administrative database to Forest certification of PEFC Spain and WEB publishing of PEFC observatory



Observatory Web Content

It has just been published the forest certification web <http://observapefc.es>, project for the PEFC international organization in the scope of certification in Spain.

The site offers the following information:

Geographic scope

- Areas of certified forests. **SFM certificates** (Sustainable Forest Management) with all data management and surface detail up to the municipal level in Spain. Accurate boundary information for each certified area is not accessible to all users and it's represented on the web with real green polygonal

On every page of the certificate, one has the amount of hectares certified in each of the spaces covered, and the relation with the stratus and species that it certifies

- **Administrative divisions** of the country, communities (19), provinces (52), counties (326), municipal (8194) and urban (18 577), that allow the navigation through the different levels of information in the map scale to 1: 25.000

On each page of spaces, at any level, it has all the information certified by company area and modality (Regional, Individual or Group), and amounts in each strata and each tree species.

- Spanish Forest Map 1:50.000. From Biodiversity Database Spanish Environment Ministry. Two coverages are processed: **Layers of soil and tree species** throughout all the territory. Only in these layers, two thousand millions of coordinates have been treated and cut down.

- **Protected Areas.** They have created several covers that collect data from municipal level to the data for Spain, and also the intersection with certified areas (in hectares and number ratio to total):

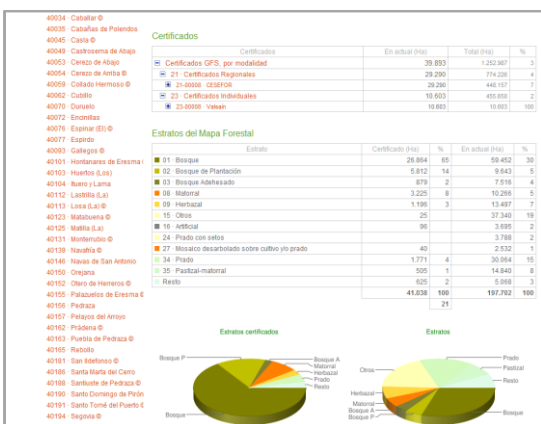
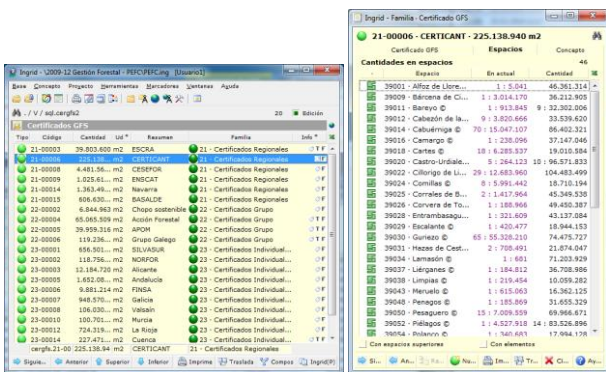
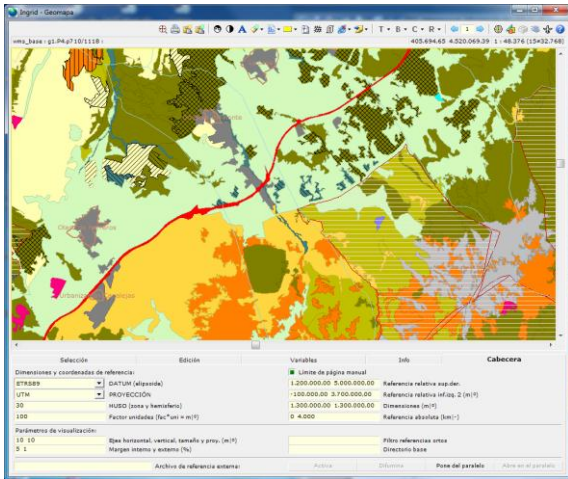
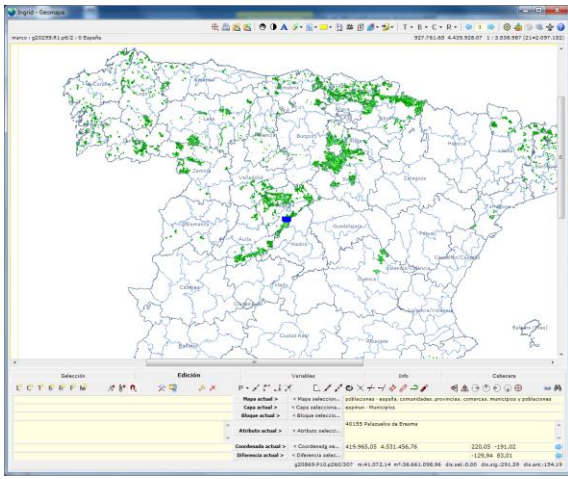
Protected Natural Areas. Includes all the figures as layers of protection MMA

Nature 2000 network (SAC & SPAs). Hectares in each area of each of the two layers, which is the information from the Ministry, and also shows geographically the intersection of both in dark green color.

Public Utility Forestry. The layers are a combination of data on non-private ownership (State, Regional Government, Local Authority, or Neighbourhood), if it's public utility or not —represented by the color layer—, and if it's a surface Consortium / Convention, or not, or undefined

Moreover, as restricted information on each of the 8.194 municipalities of the database, we included the number of **fires**, near misses and hectares of trees affected in the 1998-2008 decade.

- Published layers in **Google Maps** (Map, Satellite, Hybrid and Surface) on a sliding scale between 1:5.000 throughout all the territory and up to 1:1.000 at peri-urban zones...



Non-geographical scope

- COC certificates data (Chain of Custody). Each entity has its own list of certified products falling within categories established at international level, with the data one requires by category, and multiple images for entities and products.
- Certification and consulting entities, with contact details and characteristics.
- Documentation of several categories: policy, sector, made by others... most of it accessible only to registered users.

Ingrid Application

Ingrid 7 (<http://ingra.es>) is the platform of choice for PEFC Spain to manage its database with all geographic content and document management of certificates issued at the observatory, plus data management of the organization itself.

As one of its main tools, the application allows a semi-automatic **web publishing** of the content required, with a very fast assembly and publication of maps that is based on the standard Google backgrounds that is not need to be stored or maintained.

Based only on information from certified areas: geometric data (range of the certified areas) and management data (type of area, certification authority, date of issue and property review, international code of certification, etc.) and on the other hand, the administrative borders of the country, it can be mounted a database and web publishing with minimum time and cost.

Administrative management

All alphanumeric data processing and **geographic FM** and COC certification is performed in a single database, which also links this information with that of the internal character of administrative management of the organization to:

- Document management of received and issued invoices, and contracts generation for associated
- Developing the organization's annual budgets and reports of expense deviations
- COC facilities management, partners, contacts
- Maintenance of the product catalogue for web publishing and others, such as on paper
- Disclosure certificates management
- Documental registry of input / output
- Consultants planning maintaining (contact details, scope, last projects...)
- Acquisition of statistics of visits to the web and automatic data collection for the registration form directly to the DB