

Strategy for Environmental Open Data publication in Spain

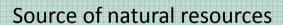
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Essential services providers

Strategic importance as a natural carbon sink



BACKGROUND: THE GREAT VALUE OF PUBLIC FOREST DATA

Forests subject to risks and threats:

- Effects of climate change
- Anthropic pressure



Measures to promote protection and management

Quality data that reflect the conditions and evolution of the stands









Spain has high quality forestry data but complex access and exploitation!





Main objective of Crossforest:

"facilitate and increase the use of available forest databases by publishing the data in Linked Open Data format (LOD) "



Allow a coherent exploitation of existing data sources and boost the development of useful tools for all agents involved in the field of forest management and research





LEGAL FRAMEWORK

There is a boost at European level on open data and the re-use of information from the public sector (Directives 2019/1024/UE, 2013/37/UE).

And its **transpositions in Spain**: <u>Law 18/2015</u>, of <u>July 9</u>, amending Law 37/2007 of November 16, about the re-use of information from the public sector.

SOME DEFINITIONS:

Open data: data in an open format that can be freely used, re-used and shared by anyone for any purpose with the only limit, if applicable, of the requirement of attribution of its source or recognition of its authorship.

Open format: means a file format that is platform-independent and made available to the public without any restriction that impedes the re-use of documents

Formal open standard: means a standard which has been laid down in written form, detailing specifications for the requirements on how to ensure software interoperability;



PUBLICATION PROCESS in LOD

Used of standards

"Species check list" (Listas patrón)

Cross-walks (Pasarelas)

Ontologies

geoSPARQL

Standardise

We refer to entities in the same way as other people or Administrations URI / ID

Publish

Disseminate the work done:

Data.europa.eu

Datos.gob.es

Dados.gov.pt











SG FOREST POLICY AND THE TO COMBAT DESERTIFICATION (MITERD) IN CROSSFOREST

The Subdirectorate-General of Forest Policy and to Combat Desertification (MITERD) is responsible, among others functions, for the collection, digitization and preparation of forestry information to maintain and update Spanish forestry databases

Role of MITERD in CrossForest : data provider, expert advice and advice on the design of the models

Forest Inventory and Statistics Department

Timber and biodiversity data: source **NFI**

Vegetation cartography: source **SFM**

Land use: source SFM "Quick review"

Forest Actions and Combat Desertification Department

Soil erosion: source **NISE**

Defence against forest fires Department

Forest fires: source **GFFS**







Available in Crossforest: **IFN3**

SPANISH FOREST DATA IN CROSSFOREST

NFI

BIOTOPE STATUS

DENDROMETRY

SPECIES

FOREST MENSURATION

AGES DISTRIBUTION

FORESTRY USE

BIOMASS AND CARBON SECUESTRATION

SHRUB RICHNESS

FUEL MODEL

BIODIVERSITY

DEAD WOOD







SPANISH FOREST DATA IN CROSSFOREST

Available in Crossforest: **MFE50**

SFM

FOREST TYPE

FOREST SUB-TYPES

SHRUB TYPES

TREE CANOPY

HERBACEOUS CANOPY

SHRUB CANOPY

SPECIES

FUEL MODEL

STAND STATE

BIOGEOGRAPHICAL REGION







SPANISH FOREST DATA IN CROSSFOREST

Available in Crossforest:

NISE: 3 types of erosion

NISE

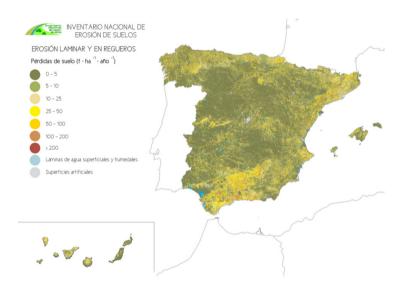
RILL AND INTERILL EROSION

GULLY EROSION

MASS MOVEMENTS
HAZARDS

STREAM-BED EROSION

WIND EROSION









DATE

SPANISH FOREST DATA IN CROSSFOREST

GFFS: Information available between 1983-2015, except position (coordinates) 2005-2015



MOTIVATION

BIG FIRES







CONCLUSIONS: PUBLICATION IN LOD

- LOD technology allows building an open, public and quality **information** infrastructure in a **modular and interconnected** way
- allows Public Administrations to comply with their transparency obligations, optimize resources and keep a statistical control of the use of the information
- It facilitates the access and exploitation of the large amount of data produced to all the agents involved in forest management
- It allows any user with the appropriate profile to launch queries and develop tools adapted to their needs, for management and decision support
- But, "consume open data" is not easy intermediate links and multidisciplinary teams

