

The CNIG Download Centre. Free and open use of Spain's geospatial data

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Abstract:

The National Centre for Geographic Information of Spain (CNIG) presents its revamped Download Centre (<https://centrodedescargas.cnig.es>). The purpose of the Centre is to offer an enhanced user experience by accessing more than 150 TB of official geospatial data produced by the National Geographic Institute (IGN) and the National Mapping Agency of Spain, as well as data co-produced with other Spanish governmental organizations. This public service creates lasting benefits of general interest.

In accordance with open data principles, which include availability, accessibility, interoperability, and the responsible use of data, the Download Centre operates in favour of transparency, governance, and innovation. The CNIG's data policy promotes free and open use of geospatial data while ensuring proper attribution and compliance with intellectual property laws.



Figure 1. Download Centre home page.

This is the third version of the Download Centre in 15 years of its existence, and its main goals are:

- Improving dataset interrogation: With more than 100 products grouped in 9 categories (see Figure 2), the new website facilitates the download of massive data by allowing users to navigate its catalogue or do a text search or spatial one using a [map viewer](#).

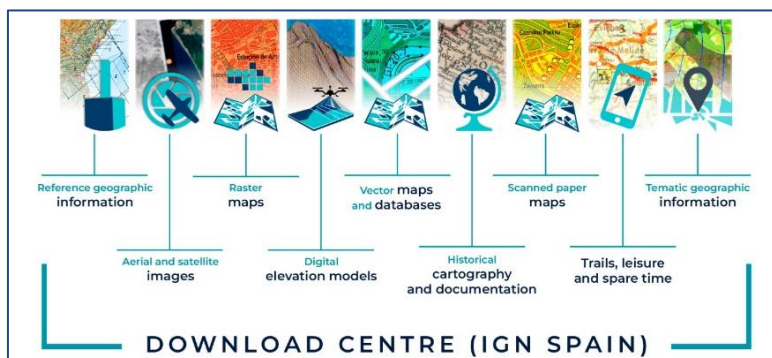


Figure 2. Data categories.

- Enhancing user experience: Users can register to join the Download Centre community and thus obtain benefits such as unlimited downloads, access to download history, receive notifications of new data available and rate them...

Additionally, three key lessons have been learned:

- We provide a publication service to twenty-one work teams responsible for data production. This situation, combined with the diversity of the data, has led to two major challenges:
 - o Data updating: The solution has been the implementation of a standardized protocol.
 - o Web functionality development: A minimum common set of features has been established, and we are still working on the adoption of several proposals submitted by the data producers.
- The large volume of data requires careful analysis to determine the most suitable formats for distribution and the establishment of clear guidelines for producers to prevent duplication.
- Understanding user needs is a top priority; therefore, website registration and satisfaction surveys are essential to delivering an optimal service.

Among the 15 000 000 files downloaded annually, imagery datasets are the ones that stand out. The most recent orthophoto is ranked top.

The CNIG Aerial Photography Archive provides a web platform (<https://fototeca.cnig.es>) that gives access to digitized aerial photos in CNIG's custody. There are more than 1 500 000 images from 1930 to the present days, that, as the rest of the geospatial information available in the Download Centre, are free for society to reuse as open data.

This aerial photography web platform, allows the users to:

- Locate and visualize aerial photographs and orthophotos.
- Consult additional information and download aerial photographs.
- Print a specific aerial photograph area and request the certification of its date.
- Seek information from not digitized photogrammetric flights which are kept in the archive.

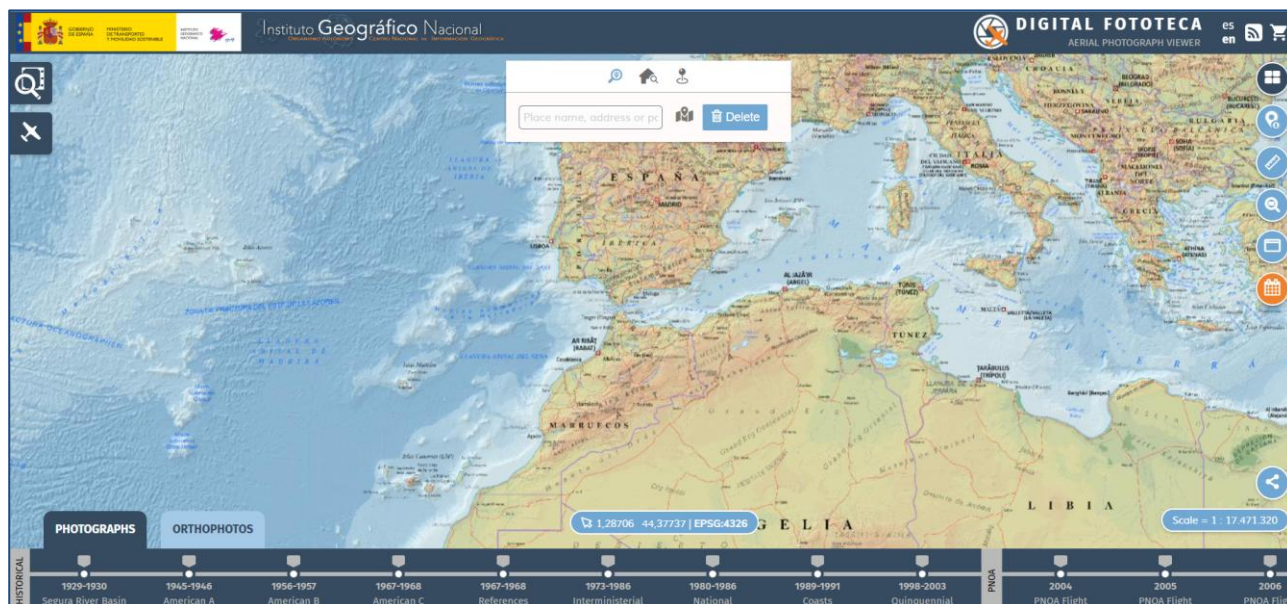


Figure 3. Aerial Photography web platform.