

Brief note

2012 CALENDAR

<http://www.icc.cat/cat/Home-ICC/Inici/Cartografia/Catalog-i-informacio/Material-promocional-i-recursos>

Since 1987, the Institute has been distributing a historic map from the Map Library of Catalonia collection as the focal point for its annual calendar. For 2012, the year of the ICC's 30th anniversary, the Institute decided to distribute one of its first satellite cartography productions.

Specifically, the 2012 plate is a reproduction of a map sheet from the first 1:100 000 satellite image series produced in false colour between 1985 and 1987, and made from the combination of colours 5, 4 and 1 from the Landsat-5 satellite. The series is made up of 27 serial-cut and 5 special-cut sheets. The plate selected for the calendar is of the Ebro Delta, and was taken from a special-cut sheet. Its actual measurements are: 85 x 60 cm.

In keeping with the precedent set in 2011, the 2012 Calendar is not being distributed on paper. The Calendar has been posted on our website for downloads in pdf and jpg formats.

The paper format can be chosen from among the following options:

- actual size of the Calendar: 44,5 cm x 68,5 cm,
- DIN A-3: 29,7 x 42,0 cm,
- DIN A-4: 21,0 x 29,7 cm.

This plate corresponds to the Map Library of Catalonia registry number CTCRM13761. This and the rest of the mapsheets of the series can be viewed and downloaded from the Map Library of Catalonia:

<http://cartotecadigital.icc.cat>

This newsletter is a free publication available in Catalan, Spanish and English.

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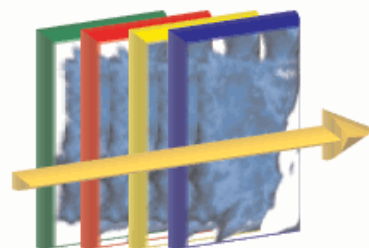
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2nd Iberian Conference on Spatial Data Infrastructures (JIIDE)

<http://www.jiide2011.org/jiide2011/es/index.html>

The 2nd Iberian Conference on Spatial Data Infrastructures (JIIDE) was held in Barcelona on November 9-11 under the theme: "Interadministrative interoperability in the INSPIRE framework". It was organized by the Instituto Geográfico Nacional, the ICC, the Consejo Superior Geográfico, and the SDI's of Catalonia, Spain, Andorra and Portugal.



366 PARTICIPANTS REGISTERED FOR THE CONFERENCE

This running offered an opportunity for all of the SDI communities of Portugal, Spain and Andorra to share their experience, practices, problems and methodologies, etc. Several meetings of the GT IDEE work groups, and other additional activities were held. It all contributed to creating an atmosphere that allowed participants to get the most out of the Conference.

In addition to the introductory workshops, round table discussions, work meetings and keynote speeches, a total of 76 papers were presented, grouped into the following areas:

- SDI harmonization among regions (3 papers).
- Extension of SDI's into other realms: images, sensors, applications, etc. (7).

- INSPIRE data modelling applied to local themes (2).
- Evolution of regional/local SDI's (11).
- Practical applications based on SDI resources (data, geoservices, etc.) (25).
- New technologies for interoperability (10).
- Examples of INSPIRE Addendum I data implementation (4).
- Impact of the Geoweb and voluntary geographic information in SDI applications (4).
- Use of SDI resources: monitoring, economic impact, success stories (4).
- Other countries' SDI experiences (6).



Newsletter 43

Completion of v1 of the 1:25 000 cartographic database of Catalonia / Papers presented for the 2nd History of Cartography Seminar / First flight within the HUMID project / Road atlas of Catalonia (3rd ed.) / Photogrammetry terminological dictionary / 2nd Iberian Conference on Spatial Data Infrastructures (JIIDE) / 2012 Calendar

Completion of v1 of the 1:25 000 cartographic database of Catalonia

Version 1 (v1) of the *Base topogràfica de Catalunya 1:25 000* (BT-25M) was completed in December 2011.

THE BT-25M V1 HAS BEEN CREATED BY APPLYING GENERALIZATION TO THE BT-5M

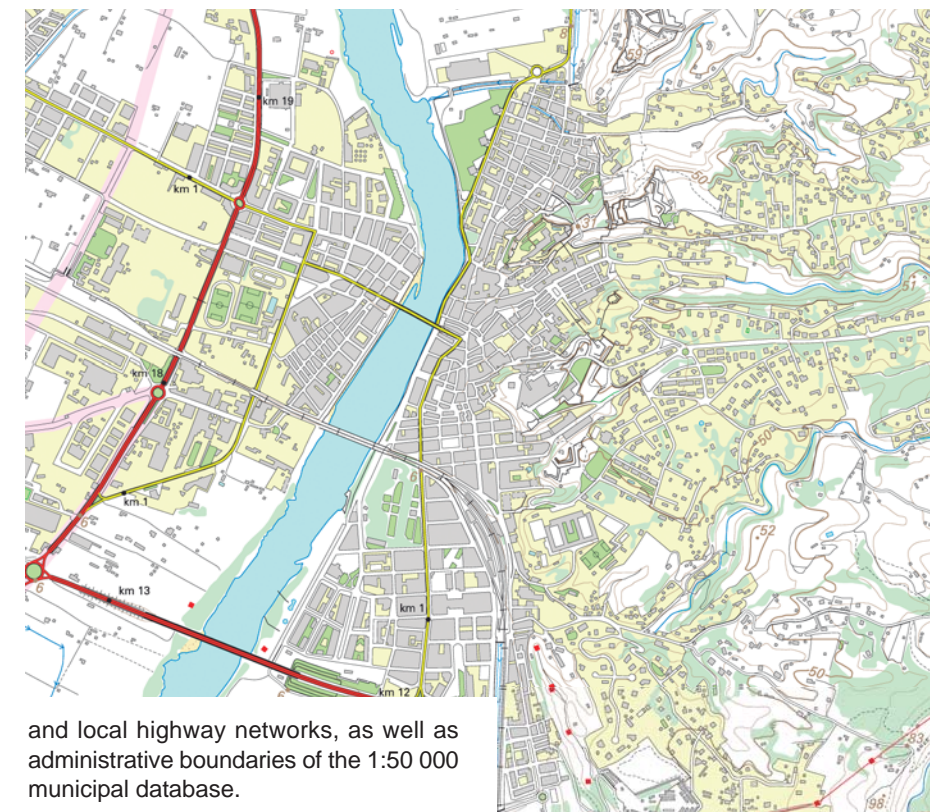
V1 of the BT-25M has been created by applying generalization processes to the BT-5M (v2), and updating the information with recent photogrammetric flights. With this method, the resulting database was produced much faster than would have been the case if all of the information had been compiled with photogrammetry.

The BT-25M is a 2,5D vectorial database, featuring the hydrographic and communications networks. Attributes associated with roadways and railways have also been added. Hydrographic, population and land cover structures from the BT-5M have been maintained, and adapted to the 1:25 000 scale.

Automatic generalization processes have been applied to select information, simplify linear elements and buildings, add street axes, collapse areas to symbols, or select and scale the toponymy.

Certain concepts have gone from being represented at scale to being shown as symbols, such as small isolated buildings or covered tanks. Others have been grouped, such as groups of trees or woods.

The map is obtained by automatically symbolizing the database. It also includes the kilometre points of the basic, county



and local highway networks, as well as administrative boundaries of the 1:50 000 municipal database.

1:25 000 Topographic database of Catalonia. Characteristics v1, 1a ed.

Characteristics	
v1, 1a ed.: 2003-2011	<ul style="list-style-type: none">- Comprised of 305 mapsheets.- Obtained from the generalization of the BT-5M v.2.- Updated directly with photogrammetric data capture.- It is a 2,5 D database.- The 1:25 000 scale map (MTC-25M) is derived from the BT-25M.- The data are distributed by sheets in DGN, Shape, MMZ DXF, MrSID on the site: http://www.icc.cat/vissir3. At the customer service center is possible to have, also, in GeoTiff format.- In addition, the customer service center offers the information in a zone of mesure A-1 or A-2 chosen by the client in GeoTiff, PDF formats or paper.

Papers presented for the 2nd History of Cartography Seminar

<http://www.icc.cat/cat/Home-ICC/Inici/Cartoteca/Publicacions-de-la-Cartoteca>

The papers presented for the 2nd History of Cartography Seminar, with the theme of *Cartografia i agrimensura a Catalunya i Balears al segle XIX*, have been published in a book, now available free of charge on the ICC website. The seminar, held on October 20-21, 2010, was organized by the ICC and the Cartographic History Study Group (GEHC).

THE SECOND SEMINAR FOCUSED ON ADVANCEMENTS IN THE STUDY OF SURVEYING IN THE 19th CENTURY

The field of historic cartography evolved markedly in the five years between the first and second Seminars. A thorough, municipality-to-municipality search made it possible to catalogue some 250 maps. This metric cartography provided a wealth of information on the territory, occupation of the land and plotting, and was a source of first-hand information on a long-vanished landscape. Further study has also been dedicated to analysing the techniques used, and the geometicians and surveyors who used them, with additional insight into their professional training.



The ICC has always shown its commitment to the recovery, conservation and dissemination of cartographic heritage. This is the spirit behind the publication: the existing maps must first be known and catalogued. Later, the necessary steps are taken to hand them down to future generations.

This does not only involve conserving the maps that make up the ICC Map Library collection, which are already digitalized and available for downloading from our website:

<http://cartotecadigital.icc.cat/>,

it also means working to protect maps that are in more vulnerable circumstances.

The possibilities that new technologies offer for dissemination cannot be overlooked. Georeferencing is clearly the new challenge for old cartography. Geographic

information systems have become a powerful tool for recovery and reinforcement of an entire body of cartographic material which, until recently, was lying dormant in archives and offices.

Through this book, the ICC aims to make yet another contribution to projects that make it possible to delve further into the technical knowledge of old cartography, and enrich its documentary value by doing so.

First flight within the HUMID project

At the end of March 2011, the first demonstration flight for the HUMID project was made. HUMID is based on the determination of the humidity in soil by merging data in the thermal, visible-near infrared and radiometric ranges (in the L-band) in airborne sensors.

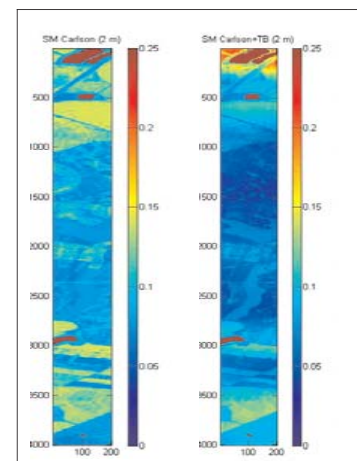
The Institute performed:

- The flight over the Gimenells agricultural transmitter poles, where the irrigation ponds afforded good calibration points for the sensors.
- The field work centred on seven points deemed representative of the type of crops and land occupation in the flight area, later measuring them with humidity and temperature probes provided by the Remote Sensing Laboratory of the Technical University of Catalonia (RSLAB-UPC).
- The comparison of the field work results and the data obtained from soil humidity recovery based on the brightness temperature of the radiometer developed by the RSLAB-UPC.
- The integration in internally-developed models for disaggregation and merging of thermal (TASI) and visible near-infrared (CASI) data to reduce the radiometer's spatial resolution.

Once the images from the flight over Gimenells were processed and treated in mid-April, it was found that merging data from the radiometer, the TASI and the CASI data, humidity was recovered through internally developed algorithms down to resolutions of a few meters (to the spatial resolution given by CASI and TASI in the diverse flight configurations).

Work is now being done on the definition of a validation flight, as a follow-up to this initial technological demonstration flight.

Recovery of humidity in one of the flight zones, where 2 m of spatial resolution is reached.

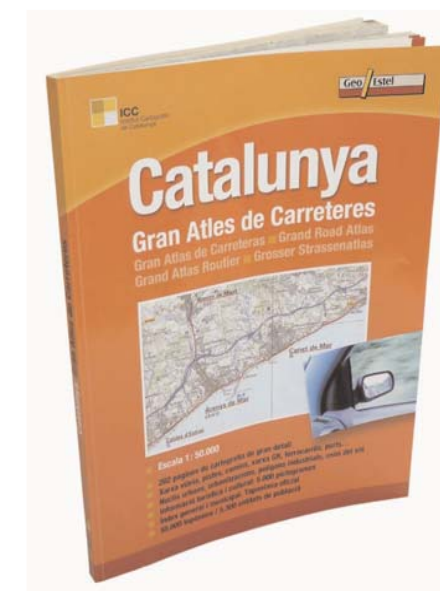


Road atlas of Catalonia (3rd ed.)

The *Catalunya: Gran Atles de Carreteres* was presented to the media on December 15, 2011 at the Palau Robert in Barcelona. This publication, the third edition of the Atlas, is the result of special collaboration between Enciclopèdia Catalana, through GeoEstel, and the ICC.

IN ADDITION TO DETAILING THE COMMUNICATIONS NETWORK OF CATALONIA, THE ATLAS ALSO PROVIDES TOURISM AND CULTURAL INFORMATION

The Atlas cartography offers thorough and reliable information on the communications network of Catalonia (road network, tracks, roads, railways and ports),



its urban centres and industrial parks. It also contains additional tourism and cultural information, with over 5 000 pictograms. The official toponymy of Catalonia is used. Two indices have also been included: a general index and a municipal index.

The cartography shown originated from the 1:50 000 topographic database, with information updated to 2011. This database is the source for three types of commercial products: regional maps, topographic atlases and road atlases. It is also the basis for all the thematic production that the ICC creates on this scale.

In conclusion, it must be considered a cartographic supplement to the information in digital navigators, thanks to the inclusion of minor details such as tracks and roads.

Photogrammetry terminological dictionary

The ICC published its second terminological dictionary, dedicated to photogrammetry, in September 2011.

As announced on publication of the first dictionary, on cartography (March 2011), these works comprise a series of Terminological Dictionaries, made up of four volumes: cartography, photogrammetry, geographic information systems and remote sensing. They are being developed together with the TERMCAT terminology centre, and the Enciclopèdia Catalana.

THIS IS THE FIRST PHOTOGRAMMETRY DICTIONARY EVER PUBLISHED IN THE CATALAN LANGUAGE

The author of this volume on photogrammetry is the Doctor of Geography, Urbano Fra Paleo, university lecturer at the University of Extremadura, now on secondment at the University of Santiago de Compostela.

From the author's initial selection of entries, 2 337 terms were eventually chosen for the dictionary, all of them with their Spanish and English versions.

The entries include descriptions of the term, and feature notes whenever deemed necessary to improve comprehension. The dictionary also features a final section in which the technical symbols used throughout the work are explained for the reader to have the resources necessary to interpret all of the definitions.

The collection has been conceived as an effective tool for professionals, educators and students from all of these fields, and makes up our contribution to enhancing their knowledge of this discipline.

