ICC 2019 TOKYO

INTERNATIONAL CARTOGRAPHIC EXHIBITION CATALOGUE

29th INTERNATIONAL CARTOGRAPHIC CONFERENCE
16 – 19 July, 2019 · Tokyo | JAPAN

http://www.icc2019.org
PREFACE

The International Cartographic Exhibition in Tokyo is organized as part of the 29th International Cartographic Conference (ICC). All exhibits are displayed at the Telecom Center Building from 16th to 19th July, 2019. Within the exhibition various kinds of cartographic products are presented such as Maps, Charts, Atlas, Digital Products, Digital Service, Educational Cartographic Products and Other Cartographic Products.

Descriptions of all exhibits were submitted to the local organizing committee of the ICC by the National Committees and ICA-affiliated members for the production of this Exhibition Catalogue. The exhibits are subdivided into seven categories:

I. Maps
II. Charts
III. Atlases
IV. Digital Products
V. Digital Service
VI. Educational Cartographic Products
VII. Other Cartographic Products (including globes and tactile maps)

Within each category the best products will be honored by an international ICA jury presided by Dr. Kenneth Field.

The Local Organizing Committee would like to thank all participating countries for contributing to this event displaying the international state-of-the-art in the world of cartography.

Atsushi Suzuki, Hidetoshi Ueda & Takashi Morita

Organizers of the International Cartographic Exhibition 2019
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## MAPS

### AUS-MP1  The Melbourne Map (black and white)
- **Type of material:** Paper
- **Scale:** Variable scale, but approximately 1:35,000
- **Dimensions (mm):** 950 x 695
- **Author(s):** Melinda Clarke, Lewis Brownlie & Deborah Young
- **Published by:** City Maps Illustrated Pty Ltd
- **Date published:** 2018
- **Language(s) of the legend:** English

This hand-drawn black-and-white map shows the rich life of the city of Melbourne, Australia. It was compiled through research that included a combination of printed maps, ground-level photos, aerial photos as well as direct observation.

### AUS-MP2  The Melbourne Map (colour)
- **Type of material:** Paper
- **Scale:** Variable scale, but approximately 1:35,000
- **Dimensions (mm):** 950 x 695
- **Author(s):** Melinda Clarke, Lewis Brownlie, Deborah Young & Sean Rodwell
- **Published by:** City Maps Illustrated Pty Ltd
- **Date published:** 2019
- **Language(s) of the legend:** English

This hand-drawn, digitally coloured map shows the rich life of the city of Melbourne, Australia. It was compiled through research that included a combination of printed maps, ground-level photos, aerial photos as well as direct observation.
Maps

**AUT-MP1**  Hiking and skiing map Hochschwab

- **Type of material**: paper
- **Scale**: 1:35,000
- **Dimensions (mm)**: 1090 x 720
- **Author(s)**: Nikolai Hafner, Bianca Nagl
- **Published by**: CARTO.AT
- **Date published**: 2017
- **Language(s) of the legend**: German

The map gives detailed information for hiking, biking and alpine skiing. The relief representation contains generalized contour lines (brown on covered areas, black on rock and scree) with an equidistance of 20m derived from a 10m DEM based on airborne laserscanning data. Scree and rock depictions are generated automatically. The filtered relief shading derived from a 50m DEM contains atmospheric perspective and hypsometric tinting. The back of the map features seven large format photographic panoramas with more than 150 labeled objects like peaks, lakes, huts, and cirques. The photographs provide an excellent insight into the natural scenery of Hochschwab.

**AUT-MP2**  0/16 Alpenvereinskarte Mount Kenya Nationalpark

- **Type of material**: paper
- **Scale**: national park 1:50,000 (front), summit area 1:25,000 (back)
- **Dimensions (mm)**: 880 x 760
- **Author(s)**: Ladner Martin, Beer Werner, Heller Armin
- **Published by**: Alpenvereinskartographie
- **Date published**: Oct., 2018
- **Language(s) of the legend**: English

This high-mountain topographic map was developed within an FFG project (Austrian Research Promotion Agency) in collaboration with the University of Innsbruck and the Austrian Alpine Club. The map is based on high resolution Pléiades Satellite data and high accurate differential GNSS data collected during extensive fieldworks. This trekking map of Mount Kenya National park also supports endogenous development and is completely designed in ArcGIS Pro software.

**AUT-MP3**  Mountain Ranges of the Alps (Europe)

- **Type of material**: paper
- **Scale**: 1:1,500,000
- **Dimensions (mm)**: 841 x 594
- **Author(s)**: Valentin Schalk
- **Published by**: Valentin Schalk
- **Date published**: Nov., 2018
- **Language(s) of the legend**: German

Overview of the european alps and their mountain ranges. Used Software was QGIS. The map contains a blend of a DEM (hillshade and color range) as base map. Water, towns, peaks and glaciers are based on OpenStreetMap data. The ocean data was taken from natural-earth.com. The mountain ranges were hand added and base on the Alpine Club classification of the Eastern Alps and SOIUSA.

**AUT-MP4**  Austrian Military Map 1:25.000, training area Seetaler Alpe

- **Type of material**: paper
- **Scale**: 1:25,000
- **Dimensions (mm)**: 605 x 744
- **Author(s)**: Institute of Military Geography (IMG)
- **Published by**: Austrian Federal Ministry of Defence
- **Date published**: Aug., 2018
- **Language(s) of the legend**: German, English

This map is based on own fieldwork and official data in origin scale 1 : 25 000 and pays attention to the higher requirements on topographic maps for military training areas for planning and executing education and training.
**AUT-MP5  National Parks of Poland**

Type of material: paper  
Scale: 1:2,500,000  
Dimensions (mm): 594 x 420  
Author(s): Agnieszka Mańk  
Published by: TU Wien  
Date published: Oct., 2018  
Language(s) of the legend: English

The map depicts all of the national parks in Poland. It informs the reader about the reasons for protecting these areas, and reveals what features make them attractive for tourists. In addition to national parks and forests, the presentation of topography depicts water bodies and urban areas, and all of them are placed on top of a relief depicted with hill-shading. Additionally, the map contains a few statistical facts about Polish National Parks, and two hand-drawn illustrations.

**AUT-MP6  Migrating Butterflies – Milkweed Butterflies in Taiwan**

Type of material: paper  
Dimensions (mm): 841 x 594  
Author(s): Peilun Yuan  
Published by: TU Wien  
Date published: June, 2018  
Language(s) of the legend: English, Chinese

The milkweed butterfly is the nickname of the butterfly tribe Danaini in taxonomy. There are 13 species of milkweed butterfly in Taiwan. Though they are tiny creatures, some of them show significant migratory movement. The butterflies in genus Euploea migrate seasonally across Taiwan island. One of the species in genus Parantica even migrate overseas to neighboring countries. The map shows the migratory patterns of these butterflies and introduces the Milkweed butterflies with images at actual size.

**AUT-MP7  Hexagonal World Map: Social Analogy of the World at a Glance**

Type of material: paper  
Dimensions (mm): 841 x 594  
Author(s): Mariana Vallejo Velázquez  
Published by: TU Wien  
Date published: June, 2018  
Language(s) of the legend: English

Multivariate hexagonal cartogram that depicts seven variables per country. This cartographic representation condenses statistical information, allowing a fast and systematic comparison of social characteristics between countries. Each country is represented by a hexagon, which size corresponds to the number of inhabitants. The other six variables are denoted in each edge of the hexagon. The numerical data was classified in five categorical classes in order to make them comparable among the six variables.

**AUT-MP8  Wiener Melange – Who lives where in Vienna? Residential mix by place of birth.**

Type of material: paper  
Dimensions (mm): 594 x 841  
Author(s): Ramon Bauer, Roman Seidl, Franz Trautinger, Tina Frank  
Published by: City of Vienna (Municipal Department 23 – Economic Affairs, Labour and Statistics)  
Date published: Niv., 2018  
Language(s) of the legend: English

In order to communicate data of Vienna and its population visually, the City of Vienna (Municipal Department 23 – Economic Affairs, Labour and Statistics) cooperates with University of Art and Design Linz (Department of Visual Communication). The ternary colour-coded maps shown in the poster are based on the tricolore colour scheme developed by Jonas Schöley and Ilya Kashnitsky. Tricolore maps visualise ternary compositions, in this case three categories of province/country of birth of the population of Vienna on 1 January 2018.

**AUT-MP9  Austrian Railway Network Map 2018**

Type of material: paper  
Scale: 1:500,000  
Dimensions (mm): 1250 x 960  
Author(s): GIS-Team ÖBB-Infrastruktur AG  
Published by: ÖBB-Infrastruktur AG  
Date published: Oct., 2017  
Language(s) of the legend: German

Topographic map with an overlay of all railway stations and stops in the network of ÖBB-Infrastruktur. It's the first edition of the map completely created with GIS software (ArcGIS Pro).
AUT-MP10 The 2017 Austrian General Election Result – mapped by municipality and resized by the number of eligible voters

Type of material: paper
Dimensions (mm): 841 x 594
Author(s): Christoph Fink, Ramon Bauer, Tina Frank
Published by: Christoph Fink, Ramon Bauer, Tina Frank
Date published: Nov., 2017
Language(s) of the legend: English

Austromorph is a project dedicated to putting the geography of Austria into the right perspective using anamorphic map display technique to re-size territories according to the variable being mapped. This poster shows the final results of the 2017 Austrian general elections. The map represents the actual size of each municipality’s electorate rather than the size of its territory. Therefore, the territories have been re-sized according to the spatial distribution of eligible voters across Austria.

AUT-MP11 Nightline Map

Type of material: paper
Dimensions (mm): 940 x 900
Author(s): Klaus Kern (Kempunkt Design)
Published by: Wiener Linien GmbH & Co KG
Date published: Sep., 2017
Language(s) of the legend: German

Schematic public transport map of Vienna’s night network showing underground railways, busses and hailed shared taxi service. It includes all lines, stations, transfer stations and shared taxi areas as well as color coded operating times. For orientation purposes all day lines are shown in the background in gray color. Major green and water areas provide a rudimental spatial structure. Two transfer hotspots are included as geographic surrounding maps.

AUT-MP12 Khalid’s Way – From Yemen to Austria

Type of material: paper
Dimensions (mm): 420 x 594
Author(s): Jakob Listabarth
Published by: TU Wien
Date published: Aug., 2017
Language(s) of the legend: English

This thematic map tells the story of Khalid’s journey from Yemen to Austria. It shows merely one personal refugee-story out of the countless other ones, which we normally only hear about through statistics, in newspapers, or from television. The map features the different stages of the journey and the means of transport Khalid and his family used on their way, as well as important incidents during the journey. Additionally migration flows from Yemen and to Austria are represented in the map.

ATLASES

AUT-AT1 Atlas Afghanistan

Number of pages: 76
Dimensions (mm): 195 x 255
Author(s): Cartography by Institute of Military Geography (IMG)
Published by: Austrian Federal Ministry of the Interior and Austrian Federal Ministry of Defence
Date published: July, 2018
Language(s) of the text: English

Comprehensive product with topographic and thematic maps of Afghanistan in order to support decision makers with geo-related information.
## DIGITAL PRODUCTS

### AUT-DP1 Politics of Remembrance. Explore Vienna’s Culture of Remembrance 1945 – 2015

<table>
<thead>
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<tr>
<td>File format</td>
<td>HTML</td>
</tr>
<tr>
<td>Author(s)</td>
<td>Christoph Fink, Ramon Bauer, Tina Frank</td>
</tr>
<tr>
<td>Published by</td>
<td>Walter Manoschek &amp; Peter Pirker, Department of Government, University of Vienna</td>
</tr>
<tr>
<td>Date published</td>
<td>Sep., 2017</td>
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<td>Video link</td>
<td><a href="https://vimeo.com/333161693/7a760020af">https://vimeo.com/333161693/7a760020af</a></td>
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The research project POREM (Politics of Remembrance and the Transition of Public Spaces: A Political and Social Analysis of Vienna) investigated the memorial landscape of Vienna, dealing with political violence by the Austrofascist regime (between 1934 and 1938) and the National Socialist regime (between 1938 and 1945) and identified temporal, topical, actor-related, and scale-related layers of memorialization that have shaped the whole cityscape and its public spaces since 1945. The interactive POREM map allows the user to define temporal, spatial, social, and thematic factors for drawing specific maps of remembrance and also maps of forgetting.

### AUT-DP2 STATatlas - Statistical Atlas of Austria

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<tr>
<td>Author(s)</td>
<td>Gernot Katzberger, Matthias Grünwald</td>
</tr>
<tr>
<td>Published by</td>
<td>Statistik Austria</td>
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<tr>
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STATatlas is the online atlas of Statistics Austria. It is the central collection of all online maps of Statistics Austria and provides a broad view across different statistical datasets. Over 60, mostly choropleth maps with nearly 3000 layers allow the exploration of a variety of topics such as population structure, labour market, education, tourism, public finance, taxes or enterprises. Time series are continually updated and new topics will be added regularly. STATatlas is also optimized for small devices.

### AUT-DP3 WebApp Historical Map and Development of the City of Vienna

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<tr>
<td>Author(s)</td>
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<tr>
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An interactive mapping application configured for a primary school in Vienna. All datasets used within the app were provided as Open Government Data by the City of Vienna as ready-to-use WebService. Maps from different times were then combined with Esri’s ArcGIS WebApp Builder and can now be overlayed with the most recent aerial imagery from basemap.at.

## EDUCATIONAL PRODUCTS

### AUT-EP1 Mission Impotable – SDG No.6, Clean Water and Sanitation

| Author(s)             | Jakob Listabarth               |
| Type                  | folder with a brochure and six maps |
| Dimensions (mm)       | 297 x 210                      |
| Published by          | TU Wien                        |
| Date published        | Sep., 2018                     |
| Language(s) of the product | English                        |

Six storymaps and an introductory brochure aim to illustrate the Subgoals of the Sustainable Development Goal 6, related to sustainable management of the resource water. They were created for educational purpose, to be used in classrooms of 17 years olds. Their overall goal is to engage and inform about the SDG No. 6 through meaningful stories and with this to contribute to a sense of place rather than space.
MAPS

**BEL-MP1 Carte topographique 1:250,000 – topo250 Belgique / Topographic Maps 1:250,000 – topo250 Belgium**

- **Type of material**: Carte papier (+index) / Paper Map (+index)
- **Scale**: 1:250,000
- **Dimensions (mm)**: Landscape format (recto-verso) – 2x (1,249 mm W x 531 mm H)
- **Author(s)**: Institut géographique national, Belgique / National Geographic Institute, Belgium
- **Published by**: Institut géographique national, Belgique / National Geographic Institute, Belgium
- **Date published**: April, 2019
- **Language(s) of the legend**: Français, néerlandais, allemand, anglais / French, Dutch, German, English

La carte topographique standard au 1:250 000 de l'IGN permet une représentation de la topographie de tout le territoire. Cette carte généralisée de la Belgique met principalement l'accent sur les voies de communication (réseau routier, réseau ferroviaire), l'hydrographie, les zones habitées et l'affectation du sol. En 2018, ce produit cartographique a bénéficié d'une révision complète, allant de la structure et de la mise à jour de la DB jusqu'à la définition d'une nouvelle symbolisation et d'un nouveau layout. Les lieux habités belges représentés sur la carte sont repris dans un livret d’index, vendu avec la carte. / The standard NGI topographic map at 1:250 000 makes it possible to represent the topography of the entire territory. This generalized map of Belgium mainly shows the networks (road network, railway network), the hydrography, the inhabited areas and the land use. In 2018, this cartographic product has been entirely reviewed, from the structure and the update of the DB up to the definition of a new symbolization and a new lay-out. The inhabited places mentioned in the map are listed in an index which is sold together with the map.

**BEL-MP2 Carte de promenades - Houffalize**

- **Type of material**: Carte papier / Paper Map
- **Scale**: 1:25,000
- **Dimensions (mm)**: Landscape format (recto-verso) - 2x (878 mm W x 458 mm H) 878 mm x 916 mm.
- **Author(s)**: Royal syndicat d'initiative Houffalize
- **Published by**: Royal syndicat d'initiative Houffalize + Institut géographique national, Belgique / Royal syndicat d’initiative Houffalize + National Geographic Institute, Belgium
- **Date published**: Nov., 2018
- **Language(s) of the legend**: Français, néerlandais / French, Dutch

Carte touristique rédigée par l’IGN, à la demande du syndicat d’initiative de Houffalize. Cette carte recto-verso reprend 14 itinéraires de promenades pédestres, représentées simultanément au recto dans une carte d'ensemble et représentées au verso individuellement ou par paire. Le fond de carte utilisé est un agrandissement au 1:25 000 de la carte topographique standard 1:50 000 de l’IGN. Ce fond de carte généralisé et agrandi permet une meilleure mise en évidence de la surcharge thématique. / Tourist map made by the NGI, at the request of the tourist office of Houffalize. This double-sided map shows the itineraries for 14 walks, represented simultaneously on the front on one single general map and separately or in-pairs on the back. The background map is an enlargement at scale 1:25 000 of the standard NGI topographic map at scale 1:50 000. This generalized and enlarged background map enhances the visibility of the thematic overprint.

ATLASES

**BEL-AT1 Quand la Wallonie était française. Plans par masses de cultures (1802-1808). Tome 2 – Province de Liège (Département de l’Ourthe – Département de la Meuse-Inférieure – Département de Sambre-et-Meuse).**

- **Number of pages**: Volume 1 (60 pages), Volume 2 (95 plans = 380 pages) TOTAL : 440 pages
- **Dimensions (mm)**: 305 x 425
- **Author(s)**: Pierre De Spiegeler et Philippe Gémis
- **Published by**: SPW/Editions (Service public de Wallonie)
- **Date published**: Feb., 2019
- **Language(s) of the text**: français

Publié par le Service public de Wallonie, le deuxième tome de la collection "Quand la Wallonie était française" est consacré à la Province de Liège. Il présente les « plans par masses de cultures » dressés entre 1802 et 1808, un relevé cadastral réalisé sur ordre de l’administration française pour la taxation des propriétaires fonciers. Chronologiquement, ils se situent entre les cartes de Ferraris (1770-1778) et les premiers plans cadastraux belges réalisés par Vandermaelen (1837-1847). Ces plans extrêmement précis (1/5000ème) cartographient les forêts, jardins, plans d’eau ou parties bâties du paysage rural d’une Wallonie à la veille de sa révolution industrielle.
BEL-AT2 The History of the Netherlands in 100 old maps/Original title: De geschiedenis van Nederland in 100 oude kaarten

Number of pages 400 pages
Dimensions (mm) 280 x 340
Author(s) Marieke van Delft & Reinder Storm in collaboration with Peter van der Krogt, Marleen Smit, Bram Vannieuwenhuyze, Huibert Crijns en Ronald Prud’homme van Reine
Published by Lannoo Publishers
Date published June, 2019
Language(s) of the text Dutch

This book shows the history of the Netherlands by means of hundred historical maps. From the oldest known Dutch map from 1307 about building a church to the first cycling maps from 1896 and a map of the storm surge in 1953. Of course the political revolutions and administrative developments are treated. But also extraordinary buildings and cities, the former parts overseas or the Netherlands’ eternal fight with the water will be addressed. There are maps treating transport, economy, education, religion, spare time or sports. From the intriguing story of herring fisheries in the seventeenth century to a map about children between the age of six and twelve who didn’t go to elementary school in the Netherlands in 1887. This book also treats the subject of cartography itself: famous map makers as Ortelius, Mercator and Blaeu will be mentioned, just as P.R. Bos, the spiritual father of the famous ‘Bosatlas’. They have been making maps for centuries in order to explore the world, to make it more clear and to understand the world better. Moreover, this book shows the great wealth of all kinds of maps: drawn by hand, printed on paper, parchment or textile, in colour or monochrome. There are topographical maps, news maps, opportunity maps, maps in atlases, wall maps and infographics. With their abundant decorations they are also a feast for the eye.

BEL-AT3 Atlas Van Deventer/Original title: Atlas Van Deventer

Number of pages 516 pages
Dimensions (mm) 280 mm x 340 mm
Author(s) Reinout Rutte, Bram Vannieuwenhuyze
Published by Lannoo Publishers and Thoth Publishers
Date published April, 2018
Language(s) of the text Dutch

Between 1,545 and 1,575 Jacob van Deventer mapped the cities of the Netherlands. The famous Dutch cartographer mapped 226 cities from the Netherlands, Belgium, France, Luxembourg and Germany. This monumental atlas portrays all 226 cities for the first time. Jacob van Deventer’s maps are art pieces and represent a priceless source about the cities in the Netherlands. The street maps are praised for their reliability and uniformity. In the first part of this book the cartographer’s life and work are discussed. The floor plans of the 226 cities are enriched with maps about urbanization. Almost every city originated along the waterside. Recent satellite photographs show how much the floor plans from Jacob van Deventer have changed. The book culminates in a comparison of the floor plans and an overview of the urbanization of the Netherlands. It makes suggestions for the contemporary designs in old cities, especially the approach of water issues.

EDUCATIONAL PRODUCTS

BEL-EP1 Atlas Junior (Belgique – Europe – Monde)

Author(s) Philippe De Maeyer, David Daenekint, Jacques Merchiers, Jef Paternoster, Georges Tibau
Type school atlas - atlas scolaire
Dimensions (mm) 255 x 340
Published by VAN IN – De Boeck
Date published Nov., 2018
Language(s) of the product French

Pensé et conçu à l’intention d’enfants à partir de 9 ans, l’Atlas Junior présente des cartes et des données de qualité, conformes aux programmes scolaires de l’enseignement francophone Wallonie-Bruxelles (Belgique) et a été agréé en tant que tel. En dehors des cartes scientifiquement étayées, les élèves y trouveront de nombreuses photos en lien avec les cartes, une légende claire, des portes d’entrée faciles (index toponymique, index cartographique, table des matières), une grande diversité de projections cartographiques ainsi que des schémas clairs et complets illustrant le système solaire, tous les drapeaux du monde,…”

Belgium
### BRA-MP1 Urban Maps for Statistical Purposes Dimensions of the sheet

**Type of material**: Glossy paper  
**Scale**: 6000  
**Dimensions (mm)**: 841 x 1189  
**Author(s)**: Levindo Cardoso Medeiros and Alcides Ferreira da Silva Junior  
**Published by**: Brazilian Institute of Geography and Statistics - IBGE / Geoscience Board - DGC / Coordination of Territorial Structures - CETE / State Unit of Goiás - UE-GO / Brazil  
**Date published**: Aug., 2018  
**Language(s) of the legend**: Portuguese  

The urban maps for statistical purposes are the result of cartographic bases elaborated by the IBGE, for the purpose of statistical surveys of localities, in census work. They are maps in varied cartographic scales elaborated from aerial orthophotographs and satellite images of high resolution, standardized in SIRGAS2000, on which the limits of the municipalities, the legal intramunicipal currencies and the limits of the urban census tracts were united, united in a mapping digital / analog, serving the statistical surveys and Demographic Census of Brazil. This product integrates the collection of semi-automated generated maps, with updates from various sources, with full integration and completeness of cartographic, alphanumeric, vector and matrix elements, elaborated from the junction of these sources in a production environment in geoprocessing - Quantum GIS, customized to the needs of research and census of IBGE - prjQGIS.  

**Keywords**: IBGE, Census Cartography, Geography, Territorial Structures, Fieldwork, Administrative Boundaries, Geoprocessing, Global Positioning System, SIRGAS2000, Map, Quantum GIS, prjQGIS.

### BRA-MP2 GONDWANA GEOLOGICAL MAP – PRE -1ST

**Type of material**: Paper  
**Scale**: 1:10,000,000  
**Dimensions (mm)**: 1800 x 1400  
**Author(s)**: Schmitt, R. S. ; Silva, E. A. ; Fragoso, R. A.; Benedek, M. R.; Richetti, P. C. ; Miller, W. ; Fernandes, G. L. F. ; Gomes, I. V. ; Pereira, M. M. ; Costa, R. L. ; Collins, A. ; Reeves, C.  
**Date published**: Aug., 2018  
**Language(s) of the legend**: English  

The geological maps of each gondwanic fragments was constructed through the acquisition, treatment, analysis of spatially referenced data and compiled in the Geographic Information Systems. Each fragment's map contains the following geological attributes: (a) age of the rock formation, on the igneous bodies the crystallization age, on the sedimentary rocks, the age of deposition and on the metamorphic units, the protolith's age; (b) the rock type; (c) the geochemical nature of the igneous rocks; (d) the metamorphic grade; (e) the age of the main tectonic event (Gondwana-related) that affected the following rock units; (f) crustal scale deformation structures with kinematic indicators.

### EDUCATIONAL PRODUCTS

#### BRA-EP1 To be announced

**Author(s)**: Barbara Gomes Flaire Jordão and Carla Cristina Reinaldo Gimenes de Sena  
**Type**: Globe  
**Dimensions (mm)**: 250 x 400  
**Published by**: Universidade Estadual Paulista Júlio de Mesquita Filho - UNESP  
**Date published**: July, 2011 (unpublished)  
**Language(s) of the product**: Portuguese  

As a field of research or as a school discipline, Geography is often linked to the perception in the visual field; therefore, people with visual impairment have major obstacles when studying this science. In this product we opted for the production of an adapted world globe for visually impairment students, which could encompass abstract subjects of Geography, such as the geographic coordinates. we use low cost and easy acquisition materials in our territory, this product being this evaluated by 94 students with low vision and blindness. It is intended that this research serves as an incentive to minimize the gap between today's school and the school that one wants to have in Brazil through the production of a material accessible to teachers, parents and people interested in teaching without restriction.
### MAPS

#### BGR-MP1 Municipality of Sozopol – Tourist Map
- **Type of material**: Paper
- **Scale**: 1:50,000 ; 1:15,000
- **Dimensions (mm)**: 1000 x 700
- **Author(s)**: International Trade and Cultural Center GEOPAN and KartGeo Ltd.
- **Published by**: KartGeo Ltd. and International Trade and Cultural Center GEOPAN
- **Date published**: June, 2018
- **Language(s) of the legend**: Bulgarian and English

The map represents the tourist infrastructure of the region, cultural and historical sights, as well as unique protected areas of Strandzha Mountain: 1 Nature Park, 3 Natural Reserves, 16 Protected Localities and 11 Natural Landmarks. The depicted area is an important part of the ancient Via Pontica, now known as the main migratory route of birds from Europe to Africa. A detailed map of the Town of Sozopol is presented on the reverse. The map received Certificate of Quality by Bulgarian Cartographic Association. It was awarded the first prize in the National Map Contest “Rediscover Bulgaria with GIS”, 2018.

#### BGR-MP2 The Thracian Lands (in the 2nd and early 1st millennium BC). The Odrysian Kingdom (5th - early 3rd century BC)
- **Type of material**: Paper
- **Scale**: 1:900,000
- **Dimensions (mm)**: 1000 x 1400
- **Author(s)**: Prof. Dilyana Boteva
- **Published by**: DataMap-Europa Ltd
- **Date published**: April, 2019
- **Language(s) of the legend**: Bulgarian

The Thracian Lands Contains: territory of Thrace, represented on shading relief; ancient and modern settlements with archaeological finds; fortified settlements; sanctuaries; dolmen; necropolises; archaeological finds of gold or silver vessels / jewelry, bronze sculptors, brass inots, bronze swords of Mycenae type, bronze nails, stone anchors; etc. The Odrysian Kingdom. Contains: territories of the Odrysian Kingdom with King Sitalkat 429 BC, King Kotytis I (circa 383-360 BC) and King Seuthes III (about 330-nd 294 year BC); Thracian settlements; Greek colonies; archaeological finds of gold or silver treasures, ruler burials; Thracian tombs; sites from the UNESCO World Heritage List.; etc.

#### BGR-MP3 Bulgaria during the Second World War (1939-1944)
- **Type of material**: Paper
- **Scale**: 1:600,000
- **Dimensions (mm)**: 1400 x 1000
- **Author(s)**: DataMap-Europa Ltd
- **Published by**: DataMap-Europa Ltd
- **Date published**: Sep., 2018
- **Language(s) of the legend**: Bulgarian

Contains: geographic gratitude; hydrography; the territory of Bulgaria; territory returned to Bulgaria according to the International Agreement; a territory administered by Bulgaria during the war; territories occupied by Bulgarian troops, etc.; area of concentration of German troops; country borders; military action by German troops; Anglo-American bombing; acts of partisan detachments; capitals and cities; headquarters of the Bulgarian army; hydrographic inscriptions, countries, etc; legend. The rescue of Bulgarian Jews is represented by a special symbol.

#### BGR-MP4 Ancient Rome, III century BC - II c.
- **Type of material**: Paper
- **Scale**: 1:4,000,000
- **Dimensions (mm)**: 1400 x 1000
- **Author(s)**: DataMap-Europa Ltd
- **Published by**: DataMap-Europa Ltd
- **Date published**: Sep., 2018
- **Language(s) of the legend**: Bulgarian

Contains: geographic gratitude; hydrography; the territory of the Roman Republic at 264 BC, the territorial expansions of the Roman Republic, the territorial expansion of the Roman Empire after 30 BC, territories dependent on the Roman Empire, regions of rebellion of the slaves and the conquered peoples represented through background coloring and hatching; the border of the Roman Empire at Trajan; main strands of Roman conquests; Roman border fortifications; capitals, administrative centers of provinces and cities; inscriptions of hydrography, historical-geographical areas, tribes, etc.; legend.
This paper presents an approach for generating 3D panoramic map - historical reconstruction of Izgrev district in Sofia, Bulgaria for the period 1927-1944. For the investigated period, a geodatabase was developed, which includes: relief, land cover, buildings, roads and infrastructure. Furthermore, 3D models of relief, buildings and land cover were developed using obtained GIS data. Finally, all acquired GIS datasets and 3D models were processed in Visual Nature Studio (VNS) – 3D GIS software for creating a photorealistic terrain visualization and animation. The high-resolution 3D panoramic map was created with great details of landscape using the rendering tools in VNS software.

The map is based on a true digital three-dimensional model of the Vratsa Mountain and the valley of the Iskar River. The digital model of the relief is made using digital photogrammetry. UAVs are used to capture and produce detailed and very accurate 3D models of natural landmarks and sites of historical heritage. Three-dimensional modeling has been used to represent areas with trees, shrubs, rocks, soil and plant cover. A network of parallels and meridians in WGS 84 coordinate system and projection - UTM 35N are implemented for the realization of a map projection on the three-dimensional map.

The Atlas is compiled on the new curriculum of the Ministry of Education (2016). It represents South America, North America, Asia, Australia and Oceania. For each continent, maps represent geographic location, explorers, nature, climate, waters, soils, plant and animal world, population, religion, countries and economy. The Earth’s oceans are represented on a map using an appropriately projection that allows easy comparison and analysis. The cartographic information is done on the basis of the latest statistical data using Geographic Information Systems. The pages are complemented by photos and realistic drawings that make the Atlas an informative, beautiful and interesting learning issue.

The Atlas is compiled on the new curriculum of the Ministry of Education and Science (2016). It contains 45 maps representing the medieval history of Europe and Bulgaria. The content is presented in 3 sections: Medieval Europe, V-XI Century. Bulgaria until the beginning of the XI century; The Medieval World, XII-XV Century. The Bulgarian state, XII-XIV century; Ottoman Empire and the Bulgarian Lands, XV-XVII Century. The maps have been designed on the basis of the latest historical research and data. The Atlases’ pages are complemented by more than 100 medieval miniatures, engravings and photos.
The Atlas contains maps representing the nature of the Earth, its natural resource potential, the political and socio-economic organization of society, population, settlements, economy, regions of the world and countries in 64 pages. The content is grouped into five parts: Planet Earth; Geography of nature; Geography of society; Geography of continents and countries; Contour maps. Maps are compiled on the latest statistical and geo-data using Geographic Information Systems. The pages are completed with charts, graphics, profiles, photos and text. At the end of the Atlas contour maps for exercise will be found.

EDUCATIONAL PRODUCTS

BGR-EP1 Atlas “Man and Society” for 3rd and 4th grades

The Atlas contributes to the studying and visualization of lessons in the subject Man and Society. It is structured in two parts - geographical and historical. The developed topics concern the world, the symbol systems, the map colors and other cartographic elements. Historical maps follow the logical and historical sequence of the subjects. They are related to the rich history of the Bulgarian state, with its glorious past. The design combines children's drawings, photos and illustrations of artists. The Atlas is designed after research of children understanding of maps and some maps and symbols are corrected according the scientific results.

BGR-EP2 Atlas “Geography and Economics” for 7th grade

The Atlas represents Europe, the Balkan Peninsula and Bulgaria in 40 pages. It provides rich information on nature, water and soils, climate, vegetation and animal life, population, economy, transport, trade and tourism, countries, state planning and other topics covering the full curriculum. Individual maps of some European countries - Sweden, Great Britain, France, Germany, Italy and Russia, as well as the Balkan Peninsula - Romania, Serbia, Greece and North Macedonia are also represented. Latest statistical data from Eurostat and the National Statistical Institute in Bulgaria were used.
The Atlas represents the Bulgarian history from the Renaissance to the 21st century. The 38 maps chronologically represent the struggles, the achievements and the development of the Bulgarians, the territorial changes of the country and others in 40 pages. The content is divided into four themes: Bulgarian Revival, XVIII-XIX Century; Bulgaria from the Liberation to the end of the Second World War; Bulgaria after the Second World War until 1989; Bulgaria since 1989. The Atlas ends with a chronology of the most important events of the period. Atlases' pages are complemented by more than 100 images, illustrating the historical events.
**Canada**

### MAPS

<table>
<thead>
<tr>
<th>CAN-MP1</th>
<th>Vernon GeopictorialTM Travelguide/Poster</th>
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<tbody>
<tr>
<td>Type of material</td>
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<td>Scale</td>
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<tr>
<td>Dimensions (mm)</td>
<td>680 x 457</td>
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<tr>
<td>Author(s)</td>
<td>Jean-Louis Rheault, Montreal, Quebec</td>
</tr>
<tr>
<td>Published by</td>
<td>Mountain Media, Kelowna, British Columbia, Canada</td>
</tr>
<tr>
<td>Date published</td>
<td>2017</td>
</tr>
<tr>
<td>Language(s) of the legend</td>
<td>English</td>
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</tbody>
</table>

The map artwork produced by artist Jean-Louis Rheault portrays approximately fifty business participants and community partners in the community of Vernon, British Columbia, and area. The map was the centerpiece for a free travel guide that was printed and distributed in the nearby communities. The artist likes to reference the artwork as a “family portrait of a community” showcasing the economic, social and environmental aspects of each community in the region.

<table>
<thead>
<tr>
<th>CAN-MP2</th>
<th>City of Canada Transit Map</th>
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<tr>
<td>Type of material</td>
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<td>Author(s)</td>
<td>Matthew Blackett</td>
</tr>
<tr>
<td>Published by</td>
<td>The Toronto Star</td>
</tr>
<tr>
<td>Date published</td>
<td>July, 2018</td>
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<tr>
<td>Language(s) of the legend</td>
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</table>

The “City of Canada Transit Map” reimagines Canada’s vast landscape as a condensed urban centre. In this fictitious region, real cities and towns have become stations, large provinces transformed into neighborhoods, and existing highways converted to dedicated transit routes. The map was published on Canada Day, 2018, in The Toronto Star, the nation’s largest daily newspaper.

<table>
<thead>
<tr>
<th>CAN-MP3</th>
<th>Last Frontier Heliskiing</th>
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<tbody>
<tr>
<td>Type of material</td>
<td>Paper</td>
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<tr>
<td>Scale</td>
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<td>Dimensions (mm)</td>
<td>750 x 960</td>
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<tr>
<td>Author(s)</td>
<td>Robert Plummer</td>
</tr>
<tr>
<td>Published by</td>
<td>Smart Map Services</td>
</tr>
<tr>
<td>Date published</td>
<td>Jan., 2019</td>
</tr>
<tr>
<td>Language(s) of the legend</td>
<td>English</td>
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</tbody>
</table>

Heliskiing began in the 1960s, and British Columbia delivers some of the best Heliskiing adventures in the world. The ski tenure of Last Frontier Heliskiing covers about 10,100 square kilometres, where skiers can access over 1,000 ski runs with an average vertical drop of 900 metres and runlengths of up to 15 kilometres. This map serves several purposes: to display the geographic extent of the terrain that is available for skiing; to depict the ski runs that guests may explore during their stay at Last Frontier Heliskiing; and to act as a static snapshot of the glaciers and icefields that currently cover the area.

<table>
<thead>
<tr>
<th>CAN-MP4</th>
<th>The Great Trail</th>
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<tr>
<td>Type of material</td>
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<tr>
<td>Author(s)</td>
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<tr>
<td>Published by</td>
<td>TransCanada Trail</td>
</tr>
<tr>
<td>Date published</td>
<td>Feb., 2019</td>
</tr>
<tr>
<td>Language(s) of the legend</td>
<td>English</td>
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</table>

Whether you are looking for a place to hike, cycle, paddle, ride, cross-country ski or snowmobile, you can find an experience that resonates with you. As the longest recreational trail in the world with more than 24,000 km, The Great Trail offers a wide range of activities through a variety of landscapes – urban, rural and wilderness, along greenways, waterways and roadways. True to its name, The Great Trail embodies the vastness of our terrain and the diversity of our people. Visit The Great Trail (https://thegreattrail.ca/) website to find more!
**CAN-MP5  Mineral Deposits and Prospective Areas of Alberta**

Type of material  Paper  
Scale  1:250,000  
Dimensions (mm)  915 x 1090  
Author(s)  G. Lopez, H. Budney, J. Weiss and J. Pawlowicz  
Published by  Alberta Energy Regulator / Alberta Geological Survey  
Date published  2019  
Language(s) of the legend  English  

This map intends to inform industry, government and the public of Alberta’s current mineral resources, and raise awareness of economic development opportunities. It highlights locations with past and current production as well as the location of mineral occurrences that currently have an elevated level of exploration and may have the potential to become economic in the future. Prospective areas were qualitatively defined using geological maps, 3D geological models, mineral occurrences, geochemical and other mineral related datasets, and government and industry reports. These areas are preliminary, and no attempt was made at this stage to quantify or rank mineral prospectivity, probability or potential.

**CAN-MP6  Lake Louise and Area**

Type of material  Paper  
Scale  1:50,000  
Dimensions (mm)  1110 x 1002  
Author(s)  Martin J. Shutt  
Published by  GoTrekkers Ltd.  
Date published  2019  
Language(s) of the legend  English  

This map illustrates hiking trails in the area around, and including, Banff, Alberta. The basemap includes labelled topographic detail symbolized by contours and enhanced by shaded relief. The map is intended to assist hikers in planning their trip by depicting not only the location and length of trails, but also the location of important facilities such as campsites, viewpoints, stores, parking, etc.

**CAN-MP7  Bowron Lakes, British Columbia**

Type of material  Paper  
Scale  1:50,000  
Dimensions (mm)  978 x 630  
Author(s)  Martin J. Shutt  
Published by  GoTrekkers Ltd.  
Date published  2019  
Language(s) of the legend  English  

This map illustrates canoeing routes in the Bowron Lakes area of British Columbia. The basemap includes detailed topographic detail symbolized by contours and enhanced with shaded relief. The map is intended to assist canoeists in planning their trip, and includes a variety of pertinent information including rapids, waterfalls, portages, trails, campsites, etc. Multiple text insets supply valuable information as well, particularly with regards to dangers such as wildlife, disease, and navigational hazards.

**CAN-MP8  Jerusalem and the Holy Land**

Type of material  Waterproof paper  
Scale  1:10,000 and 1:225,000  
Dimensions (mm)  980 x 680  
Author(s)  Lan Joyce, Editor-in-Chief  
Published by  International Travel Maps  
Date published  2019  
Language(s) of the legend  English  

This two-sided map of Jerusalem and the Holy Land provides detailed locational information to aid tourists in navigating the streets of these areas, and planning their visit. A grid-coded street index of Jerusalem in provided, along with text descriptions of the main attractions. Insets are included to illustrate the broader area surrounding the city, and a schematic railway map.

**CAN-MP9  Indigenous Languages of Canada**

Type of material  Paper  
Scale  1:22,000,000  
Dimensions (mm)  533 x 533  
Author(s)  Canadian Geographic Magazine  
Published by  Canadian Geographic Magazine  
Date published  Dec., 2017  
Language(s) of the legend  English  

This pull-out poster was included in Canadian Geographic’s November/December 2017 issue. It depicts the distribution and numbers of indigenous peoples speaking their indigenous languages at home, based on the 2016 Canadian Census. The languages are coloured according to the greater language groups, and the numbers of speakers of each language are represented by proportional circles.
**CAN-MP10 Iceland**

- **Type of material**: Waterproof paper
- **Scale**: 1:400,000
- **Dimensions (mm)**: 670 x 980
- **Author(s)**: Lan Joyce, Editor-in-Chief
- **Published by**: International Travel Maps
- **Date published**: 2019
- **Language(s) of the legend**: English

This two-sided map of Iceland depicts detailed locational information aimed at the travelling tourist. It includes a city map of Reykjavik at a scale of 1:10,000. The map highlights major attractions throughout the country with informative text insets and photographs. The hierarchical road network allows for easy route planning and vehicle navigation, while the city street map depicts a variety of services of interest to the visitor.

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**ATLASES**

**CAN-AT1 Indigenous Peoples Atlas of Canada, Vol. 1**

- **Number of pages**: 105
- **Dimensions (mm)**: 262 x 318
- **Author(s)**: Royal Canadian Geographical Society, in conjunction with National Centre for Truth and Reconciliation, Assembly of First Nations, Inuit Tapiriit Kanatami, Métis National Council, Indspire
- **Published by**: Royal Canadian Geographical Society
- **Date published**: 2018
- **Language(s) of the text**: English

This four volume Atlas was created as a collaboration by the six contributors to shed light on the history and present-day reality of Indigenous People in Canada. Through maps and a series of thematic written pieces, the Atlas revises Canada through the lens of the Indigenous People who inhabit this land.

**CAN-AT2 Japan Railway and Road Atlas**

- **Number of pages**: 119
- **Dimensions (mm)**: 60 x 110
- **Author(s)**: Lan Joyce, Editor-in-chief
- **Published by**: ITMB Publishing Ltd.
- **Date published**: 2018
- **Language(s) of the text**: English

This conveniently-sized travel atlas illustrates transportation routes throughout Japan at a scale of 1:670,000. In addition, larger scale city maps are included for Tokyo, Osaka, Kobe, Kyoto, Nara, and Sapporo. The location of tourist sights, such as museums, caves, beaches and temples, is also indicated.

**CAN-AT3 Historical Atlas of Early Railways**

- **Number of pages**: 320
- **Dimensions (mm)**: 250 x 330
- **Author(s)**: Derek Hayes
- **Published by**: Douglas & McIntyre Ltd.
- **Date published**: 2017
- **Language(s) of the text**: English

This historical atlas tracks the emergence of the modern railway in a unique, essentially geographical way, providing contemporary maps - many never before published - showing the locations and routes of the early railways. The book covers the earliest railways in Britain, France, Germany, the United States and Canada, among other countries, and includes fascinating histories of monorails and atmospheric, electric, underground and mountain railways.
EDUCATIONAL PRODUCTS

**CAN-EP1 Indigenous Peoples of Canada Giant Floor Map**

**Author(s)**
Royal Canadian Geographical Society, in conjunction with the National Centre for Truth and Reconciliation, Assembly of First nations, Inuit Tapiriit Kanatami, Métis National Council, Indspire

**Type**
Vinyl

**Dimensions (mm)**
7900 x 1067

**Published by**
Royal Canadian Geographical Society

**Date published**
2018

**Language(s) of the product**
English and French

This Giant Floor Map is an educational resource for Canadian students to learn about the history, and present-day geography of Indigenous Peoples across Canada. It is built from Canadian government data, including Treaty boundaries, reserve and settlement lands, outstanding land claim areas, historical residential school locations, and indigenous community and indigenous language distribution. It intentionally omits non-indigenous cartographic content, such as provincial boundaries and lake and river names.
### Maps

<table>
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<tr>
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<td>Peligros del volcán Tupungatito, Región Metropolitana de Santiago</td>
<td>Paper</td>
<td>Servicio Nacional de Geología y Minería</td>
<td>2018</td>
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Hazards of the Tupungatito Volcanoe, in the Santiago Metropolitan Region of Chile. Constitutes part of the Geological Map of Chile and published in the "Serie Geología Ambiental" journal, N° 32 on page 35 with ISSN Nº 0717-7283. Copyright registration Nº. 294.363.

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<td>Paper</td>
<td>Instituto Geográfico Militar de Chile</td>
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Map produced by the Military Geographic Institute of Chile (IGM), obtained through its procedures for accurate base cartography of Chilean territory. Details to be announced.

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Map produced by the Military Geographic Institute of Chile (IGM), obtained through its procedures for accurate base cartography of Chilean territory. Details to be announced.

### Charts

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### Atlases

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<tr>
<td>CHL-AT1</td>
<td>Geología de las áreas Guanta-Los Cuartitos y Paso de Vacas Heladas, Regiones de Atacama y Coquimbo</td>
<td>96</td>
<td>Servicio Nacional de Geología y Minería</td>
<td>2017</td>
<td>Spanish</td>
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Geology of the "Guanta" to Los Cuartitos" and the "Vacas Heladas" Pass areas, in the Atacama and Coquimbo Regions of Chile. Constitutes part of the Geological Map of Chile and published in the "Serie Geología Ambiental" journal, N° 192 - 193 with ISSN Nº 0717-7283. Includes 1:100,000 scale map. Copyright registration Nº. 285.798

### Digital Products

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<td><strong>CHL-EP1</strong> Enseñando y Aprendiendo el Espacio Geográfico por medio del Tacto: Orientaciones Metodológicas</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Author(s)</strong></td>
<td>Alejandra Coll E.; Teresa Barrientos; Victor Huentelemu</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Type</strong></td>
<td>Book, with tactile sheets included</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Published by</strong></td>
<td>Universidad Tecnológica Metropolitana (UTEM)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Date published</strong></td>
<td>Dec., 2017</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Language(s) of the product</strong></td>
<td>English and Spanish (bilingual)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>The book</strong></td>
<td>&quot;Teaching and learning about geographic space through touch: methodological guidance&quot; is intended for use by teachers and educational specialists who work with blind persons and train them in learning about geography and maps. The book provides methodological and conceptual guidance on the use of tactile maps and materials with such disabled persons. The book has been developed at the Tactile Cartography Centre, a special program attached to the Metropolitan Technological university of Chile (UTEM). the book and the research involved has been substantially supported by the Pan american Institute for Geography and History (PAIGH) and has also been sponsored by the ICA since its beginnings.</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

| **CHL-EP2** Geomatica Aplicada |
| **Author(s)** | Carlos Mena F.; Yony Ormazabal R.; Viviana Barrientos L.; (editors) |
| **Type** | Book |
| **Dimensions (mm)** | 250 x 307 |
| **Published by** | Servicio Aerofotogramétrico de la Fuerza Aérea de Chile (SAF) |
| **Date published** | April, 2018 |
| **Language(s) of the product** | Spanish |
| **The book** | Written by a team of experts in geo-informatics and remote sensing and drawing upon the experience of many institutions in various countries, including the ISPRS, it is an overview and introduction to techniques and technologies for capturing, classifying and handling geospatial information and for applying it to the key uses required by specialists of various fields. |

<table>
<thead>
<tr>
<th><strong>OTHER PRODUCTS</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CHL-OP1</strong> To be announced</td>
</tr>
<tr>
<td><strong>Material</strong></td>
</tr>
<tr>
<td><strong>Published by</strong></td>
</tr>
<tr>
<td><strong>Language(s) of the product</strong></td>
</tr>
<tr>
<td><strong>The Aero-Photogrammetric Service of the Air Force of Chile (SAF) is the primary state agency responsible for producing maps and cartography for aerial navigation and for producing maps and images of Chilean territory obtained by aerial photography, aerophotogrammetry, satellite sensors and remote sensing. The poster describes the production process.</strong></td>
</tr>
</tbody>
</table>
MAPS

**CHN-MP1  "Belt and Road" 3D Map**

Type of material: Plastic Grating  
Scale: 1:24,000,000  
Dimensions (mm): 780 x 1080  
Author(s): Harbin Cartographic Publishing House  
Published by: Harbin Cartographic Publishing House  
Date published: Feb., 2019  
Language(s) of the legend: Chinese  

The map is made with DEM data by using computer depth-of-field layered processing technology, printed on raster material with special printing technology. It vividly presents the stereoscopic visual effect of the geomorphology of "Belt and Road" economic area. The map, including the entire continent of Asia and Europe, and parts of Africa and Oceania, clearly displays the 21st Century Maritime Silk Road route, the ancient land Silk Road route and the six major economic corridor routes with highlight on the important node cities and famous natural and cultural landscapes along the routes.

**CHN-MP2  Maps of Karst Environmental Geology in Southern China and Southeast Asia**

Type of material: paper  
Scale: 1:5,000,000  
Dimensions (mm): 1245 x 1185  
Author(s): Institute of Karst Geology, Chinese Academy Geological Sciences (IKG, CAGS); Institute of Hydrogeology and Environmental Geology, Chinese Academy of Geological Sciences (IHEG, CAGS); International Research Centre on Karst (IRCK), UNESCO  
Published by: SinoMaps Press  
Date published: Oct., 2018  
Language(s) of the legend: Chinese  

This series consists of the Map of Karst Distribution in Southern China and Southeast Asia, the Map of Hydrogeology of Southern China and Southeast Asia, and Explanation on Serial Maps of Karst Environmental Geology in Southern China and Southeast Asia, which summarize the law of karst development, analyze the situation of karst geology and environmental geology, and reveal the main hydrogeological features, groundwater occurrence types, water abundance and water quality characteristics in the researched region. They provide scientific basis for the planning of karst water resources, protection and improvement of karst geology and environmental geology, and disaster prevention and reduction.

**CHN-MP3  Batik Map of Tea Horse Road (Section of Sichuan)**

Type of material: Batik Cloth  
Scale: 1:3,000,000  
Dimensions (mm): 850 x 420  
Author(s): Qingdao Surveying & Mapping Institute  
Published by: Qingdao Surveying & Mapping Institute  
Date published: Nov., 2018  
Language(s) of the legend: Chinese  

Drawing inspirations from the mapping method of ancient Chinese territorial map, the Tea Horse Road (Section of Sichuan) Art Map presents mountains and rivers, geographical features and layout of cities along the road in a visualized way. Efforts are made to integrate map-making with traditional handicrafts by coloring the map with the artistic style of batik, an intangible cultural heritage.

**CHN-MP4  Ecological Area Map of the Estuary Wetland of Dagu River**

Type of material: Xuan Paper; Mounted by Chinese Scrolls  
Scale: 1:23,000  
Dimensions (mm): 1650 x 700  
Author(s): Qingdao Surveying & Mapping Institute  
Published by: Qingdao Surveying & Mapping Institute  
Date published: Mar., 2019  
Language(s) of the legend: Chinese  

The map chooses the estuary of Dagu River, the mother river of Qingdao as the object and uses the artistic approach of aerial photos superimposed by thematic map and the expressive way of seeing the whole from a part to reflect the ecological status of Dagu River basin and the ecological green axis of Qingdao City based on the style of modern ink stroke with lighter black-and-white images as the background. The map is printed on Xuan paper and mounted by Chinese scrolls.
CHARTS

**CHN-CP1 “The Map of Northern sea area”**

Type of material: Plastic grating  
Scale if relevant: 1:725,000  
Dimensions (mm): 946 x 1360  
Author(s): Shi Jinbang, Bai Tingying, Zhang Yuting, Wang Shouguo, Yanglong  
Published by: Tianjin Hydrograph Centre, NGCN, MOT  
Date published: July, 2018  
Language(s) of the legend: Chinese

“The Map of the Northern Sea Area” is a naked eye 3D map that directly reflects the basic elements affecting the navigation of ships in the northern sea area and their geospatial position relations by means of grating technology. The basic elements in the map mainly include: submarine topography, water depth, ocean current, wind direction, mountains that can form a sheltered area, administrative boundaries, etc. Through the grating technology, the cartographer can reasonably organize the height information of the third dimension into the plane, and the map reader can also directly restore the height information and spatial range through their eyes. The visual effect is intuitive and natural, and the high degree of contrast is clear and accurate.

ATLASES

**CHN-AT1 Climatological Atlas of Tropical Cyclones over the Western North Pacific (1981-2010)**

Number of pages: 211  
Dimensions (mm): 260 x 370  
Author(s): Institute of Cartography, East China Normal University; Shanghai Typhoon Institute, China Meteorological Administration and Institute of Cartography; Xi’an Mapping & Printing Co. Ltd. of China National Administration of Coal Geology.  
Published by: Science Press (China)  
Date published: Nov., 2017  
Language(s) of the text: Bilingual (Chinese and English)

Tropical cyclones are the most destructive weather systems. This atlas provides comprehensive information on tropical cyclones activities over the Northwest Pacific and their impacts in China in a 30-year period. Divided into five chapters from a climatological perspective, the atlas emphasizes tropical cyclones climatological characteristics, genesis, development and decay, tracks and motions, as well as their affecting or landfalling. Its integrative design solution consists of various creative types of thematic maps, statistical infographics and images, thus to serve professional researchers, weather forecasters and potential non-experts, with its scientific and aesthetic reference style. It won the 2018 BCS John C. Bartholomew Award for Thematic Mapping, and the Highly Commended of Stanfords Award for Printed Mapping.

**CHN-AT2 The Historical Atlas of Shaanxi Province**

Number of pages: 220  
Dimensions (mm): 265 x 375  
Author(s): Shaanxi Provincial Cultural Heritage Administration  
Published by: Xi’an Map Press  
Date published: Dec., 2017  
Language(s) of the text: Chinese

Based on the national basic geographic information topographic map of 1:4 million and the Chinese Historical Atlas edited by Academician Tan Qixiang, The Historical Atlas of Shaanxi Province covers 23 historical periods in chronological order. Historical political maps (settlements or country maps, territorial maps), cultural relics distributions, map descriptions, and historical images are provided for each historical period. 49058 immovable cultural relics of all kinds in Shaanxi Province were presented on the map according to the era, for the convenience of scholars and readers.

**CHN-AT3 Atlas of the World**

Number of pages: 497  
Dimensions (mm): 300 x 450  
Author(s): SinoMaps Press  
Published by: SinoMaps Press  
Date published: July, 2018  
Language(s) of the text: Chinese

Being the first large format world atlas ever published in China, this comprehensive and detailed reference atlas consists of maps, texts and a gazetteer. Maps make up the main part of the atlas, reaching a total of 250 pages, including thematic world maps, continental maps, regional maps and city plans. Texts and photos provide additional basic information of the continents and countries. The gazetteer includes all the place names displayed on country maps, with about 130,000 entries in total. Emphases have been placed especially on global issues, as well as hotspot regions and countries in Asia, Africa and North America.
### CHN-DP1  Finer Resolution Observation and Monitoring of Global Land Cover-10m (FROMGLC10)

<table>
<thead>
<tr>
<th>Type</th>
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<tr>
<td>File format</td>
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<tr>
<td>Operating system</td>
<td>Windows, Mac OS X, UNIX</td>
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<tr>
<td>Author(s)</td>
<td>Peng Gong, Han Liu, Meina Zhang, Congcong Li, Jie Wang, Huabing Huang, Nicholas Clinton, Luyan Ji, Wenyu Li, Yuqi Bai, Bin Chen, Bing Xu, Zhiliang Zhu, Cui Yuan, Hoi Ping Suen, Jing Guo, Nan Xu, Weijia Li, Yuanruyan Zhao, Jun Yang, Chaoqing Yu, Xi Wang, Haoihuan Fu, Le Yu, Iryna Dronova, Fengming Hui, Xiao Cheng, Xueli Shi, Fengjin Xiao, Qifeng Liu, Lianchun Song</td>
</tr>
<tr>
<td>Published by</td>
<td>Tsinghua University</td>
</tr>
<tr>
<td>Date published</td>
<td>Mar., 2019</td>
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<td>Spatial resolution: 0.00025 degree</td>
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<tr>
<td>Language(s) of the presentation</td>
<td>English</td>
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</table>

Using the freely accessible data and the programming environment within Google Earth Engine, we obtained the 10 m resolution global land cover map based on Sentinel-2 data (Fig. 1), named FROM-GLC10, which contains 10 level-1 classes (10: cropland, 20: forest, 30: grassland, 40: shrubland, 50: wetland, 60: water body, 70: tundra, 80: impervious area, 90: bare land, 100: snow and ice). A random forest classifier was used with 200 trees, and the overall accuracy is 72.76%.

### CHN-DP2  Water Rhyme in Gusu—— MR Interactive Map with Modern Abstract Chinese Ink Brush Stroke

<table>
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<tr>
<th>Type</th>
<th>GIS product sample or screenshot</th>
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<td>Operating system</td>
<td>windows</td>
</tr>
<tr>
<td>Author(s)</td>
<td>Qingdao Surveying &amp; Mapping Institute</td>
</tr>
<tr>
<td>Published by</td>
<td>Qingdao Surveying &amp; Mapping Institute</td>
</tr>
<tr>
<td>Date published</td>
<td>Dec., 2018</td>
</tr>
<tr>
<td>Scale if relevant</td>
<td>1:100,000</td>
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<tr>
<td>Language(s) of the presentation</td>
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</table>

Assimilating inspirations from the painting style of Wu Guanzhong, a great art master, the Paper Map of Water Rhyme in Gusu draws the outline of the land-water network and historical features of the ancient city of Gusu with modern abstract Chinese ink brush stroke. By using Mixed Reality (MR) Technology, the user sees a blend of paper map and digital information in the holographic image world, which interprets the world-class cultural heritage of Suzhou through the terminal of smart glasses. The combination of digital technology and modern aesthetics presents the traditional culture in an innovative way.

### CHN-DP3  Geospatial Knowledge Service System

<table>
<thead>
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<tr>
<td>File format</td>
<td>JPG, Web service</td>
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<td>Operating system</td>
<td>Windows, Mac OS X, UNIX</td>
</tr>
<tr>
<td>Author(s)</td>
<td>National Geomatics Center of China (Jun Chen, Wanzeng Liu, Yong Zhao, Xi Zhai, Ran Li, Xiuli Zhu, Tingting Zhao, Chenchen Wu), Chuanyi Yin, Fanzhou Peng, Xing Wei, Feng Xu, Lan Zhang, Jun Zhou, Guoqing Li, Kai Li, Dongyang Hou, Jiaxin Ren</td>
</tr>
<tr>
<td>Published by</td>
<td>Chinese Academy of Engineering</td>
</tr>
<tr>
<td>Date published</td>
<td>April, 2019</td>
</tr>
<tr>
<td>Language(s) of the presentation</td>
<td>English</td>
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</tbody>
</table>

The geospatial knowledge service system integrates more than 4.6 million cross-domain data of 8 categories, to provide data services such as geographic information metadata query, geospatial data download, geographic base map interface. Based on this, it provides knowledge services such as global landcover knowledge, territory knowledge and expert relationship knowledge by data mining and analysis.
# EDUCATIONAL PRODUCTS

## CHN-EP1  The “Beautiful China” Children’s Hand-painted Atlas

<table>
<thead>
<tr>
<th>Author(s)</th>
<th>SinoMaps Press Co.,Ltd</th>
</tr>
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<tbody>
<tr>
<td>Type</td>
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<tr>
<td>Dimensions (mm)</td>
<td>215 x 255</td>
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<tr>
<td>Published by</td>
<td>SinoMaps Press Co.,Ltd</td>
</tr>
<tr>
<td>Date published</td>
<td>Aug., 2018</td>
</tr>
<tr>
<td>Language(s) of the product</td>
<td>Chinese</td>
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</table>

The “Beautiful China” Children's Hand-painted Atlas (Volume 1 & 2) is a series of popular science atlas for kids education. The atlas decorates the maps of various regions of China into a splendid stage with simple map outline and bright map colours. It uses hand-painted illustrations and information charts to visualise abstract map information and expands the ability of using maps to present knowledge and the educational function of maps. The books vividly convey the beauties of Chinese nature and humanity to children.

## CHN-EP2  Sinomaps E-Study App

<table>
<thead>
<tr>
<th>Author(s)</th>
<th>SinoMaps Press Co.,Ltd</th>
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<tbody>
<tr>
<td>Type</td>
<td>APP</td>
</tr>
<tr>
<td>Published by</td>
<td>SinoMaps Press Co.,Ltd</td>
</tr>
<tr>
<td>Date published</td>
<td>Mar., 2019</td>
</tr>
<tr>
<td>Language(s) of the product</td>
<td>Chinese</td>
</tr>
</tbody>
</table>

Based on AR technology, Sinomaps E-Study App seamlessly links multimedia teaching resources to paper textbooks of varied disciplines. Various forms of point-to-point supporting digital resources can be obtained by scanning related pictures or text in textbooks through mobile terminal lenses such as smartphones and tablets.

# OTHER PRODUCTS

## CHN-OP1  AR Interactive Map of Paper-carving of Ancient and Modern Xi'an

<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Qingdao Surveying &amp; Mapping Institute</th>
</tr>
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<tbody>
<tr>
<td>Material</td>
<td>Six-layer Paper Carvings</td>
</tr>
<tr>
<td>Published by</td>
<td>Qingdao Surveying &amp; Mapping Institute</td>
</tr>
<tr>
<td>Date published</td>
<td>Oct., 2018</td>
</tr>
<tr>
<td>Language(s) of the product</td>
<td>Chinese</td>
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</table>

The delicate and fine grained six-layer paper carvings show the "double-sided" city grid of ancient and modern Xi'an embellished by its historical and cultural stories and contemporary city landmarks. With the help of Augmented Reality (AR) technology, the geography, history and cultural customs of Xi'an can be interpreted profoundly by mobile phone scanning, thus creating a new digital experience of "map reading".

## CHN-OP2  Bone china Tea Set

<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Jinan Institute of Surveying and Mapping</th>
</tr>
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<td>Material</td>
<td>Bone china</td>
</tr>
<tr>
<td>Language(s) of the product</td>
<td>Chinese</td>
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</table>

Baotu Spring, Daming Lake and Qianfo Mountain, the three famous historical sites in Jinan, are the main theme of our bone china tea sets. The polished images of these places are baked on a customized bone china tea set, which normally includes a teapot, a fair cup, 4 or 6 cups, and a tray. The pattern is rich with a combination of cultural elements such as maps of scenic spots, poetry singing praise of ancient Jinan, portraits of ancient famous scholars and traditional physical images. The picture is simple and yet the artistic concept is far-reaching. Delicate and clean, with strong light transmission and as moisturizing as jade, bone china exudes an elegant, gentle, restrained and modest cultural temperament.
This globe uses the acrylic as the map carrier with a metal support, making the entire globe crystal clear. A cube that may print customized image on is put inside the globe.
### Maps

<table>
<thead>
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<th>Map Title</th>
<th>Type of material</th>
<th>Scale</th>
<th>Dimensions (mm)</th>
<th>Author(s)</th>
<th>Published by</th>
<th>Date published</th>
<th>Language(s) of the legend</th>
<th>Notes</th>
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<tr>
<td><strong>HKG-MP1</strong> 1:20 000 Topographic Map (Sheet 7)</td>
<td>Paper</td>
<td>1:20,000</td>
<td>980 x 685</td>
<td>The Survey and Mapping Office of the Lands Department, The Government of the Hong Kong Special Administrative Region</td>
<td>The Survey and Mapping Office of the Lands Department, The Government of the Hong Kong Special Administrative Region</td>
<td>Nov., 2017</td>
<td>Chinese and English</td>
<td>1:20 000 Topographic Map (HM20C Series) is a small scale map with 16 sheets covering the whole Hong Kong territory. It depicts topography with contours at 20m interval. This general purpose map series serves many uses such as planning, teaching and orienteering.</td>
</tr>
<tr>
<td><strong>HKG-MP2</strong> 1:20 000 Topographic Map (Sheet 8)</td>
<td>Paper</td>
<td>1:20,000</td>
<td>980 x 685</td>
<td>The Survey and Mapping Office of the Lands Department, The Government of the Hong Kong Special Administrative Region</td>
<td>The Survey and Mapping Office of the Lands Department, The Government of the Hong Kong Special Administrative Region</td>
<td>Nov., 2018</td>
<td>Chinese and English</td>
<td>1:20 000 Topographic Map (HM20C Series) is a small scale map with 16 sheets covering the whole Hong Kong territory. It depicts topography with contours at 20m interval. This general purpose map series serves many uses such as planning, teaching and orienteering.</td>
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<tr>
<td><strong>HKG-MP3</strong> Hong Kong and Pearl River Delta Satellite Image Map</td>
<td>Paper</td>
<td>1:250,000</td>
<td>1140 x 885</td>
<td>The Survey and Mapping Office of the Lands Department, The Government of the Hong Kong Special Administrative Region</td>
<td>The Survey and Mapping Office of the Lands Department, The Government of the Hong Kong Special Administrative Region</td>
<td>July, 2018</td>
<td>Chinese and English</td>
<td>The Hong Kong and Pearl River Delta Satellite Image Map Series is prepared by joining six Landsat 8 satellite images captured in September 2016 - February 2018. The map shows the name and location of administrative centres and settlements within the region.</td>
</tr>
<tr>
<td><strong>HKG-MP4</strong> Countryside Map - Lantau Island &amp; Neighbouring Islands</td>
<td>Water-proof environmental friendly synthetic paper</td>
<td>1:25,000</td>
<td>880 x 2 x 610 x 2</td>
<td>The Survey and Mapping Office of the Lands Department, The Government of the Hong Kong Special Administrative Region</td>
<td>The Survey and Mapping Office of the Lands Department, The Government of the Hong Kong Special Administrative Region</td>
<td>Chinese and English</td>
<td>Chinese and English</td>
<td>The Countryside Map shows detailed information of leisure amenities and footpaths. Photographs on the map face show beautiful countryside scenery and picnic spots. This map series helps hikers and nature lovers to explore rural areas and country parks. It is printed on water-proof environmental friendly synthetic paper on both sides and folded.</td>
</tr>
</tbody>
</table>
**ATLASES**

**HKG-AT1  Hong Kong Guide 2019**

| Number of pages | 432 |
| Dimensions (mm) | 188 x 271 |
| Author(s) | The Survey and Mapping Office of the Lands Department, The Government of the Hong Kong Special Administrative Region |
| Published by | The Survey and Mapping Office of the Lands Department, The Government of the Hong Kong Special Administrative Region |
| Date published | Jan., 2019 |
| Language(s) | Chinese and English |

Hong Kong Guide 2019 provides detailed maps of Hong Kong with indexes for streets, places and villages, estates and buildings, schools, public services, and leisure and cultural facilities, as well as information on public transportation. The streets and places and villages indexes also serve as gazetteers for names of streets and geographical places in Hong Kong. This year’s theme “Guide of Hearts” aims at promoting enhanced care for youths and social inclusion. It contains stories from two social enterprises devoted to organising local guided tours, who have also designed various tour routes through the territory’s streets and alleys.

**DIGITAL PRODUCTS**

**HKG-DP1  e-Hong Kong Guide**

| Type | e-book |
| File format | GeoPDF |
| Operating system | All |
| Author(s) | The Survey and Mapping Office of the Lands Department, The Government of the Hong Kong Special Administrative Region |
| Published by | The Survey and Mapping Office of the Lands Department, The Government of the Hong Kong Special Administrative Region |
| Date published | Jan., 2019 |
| Language(s) | Chinese and English |

The “e-HongKongGuide” is a collection of maps in GeoPDF format. It can also be read by different applications on desktop computers and mobile devices in an offline mode. By using free tools available on the web, users can read co-ordinates, track positions using a GPS device, search co-ordinates, search text and information, add personalised images and information, and share with friends.

**HKG-DP2  Hong Kong Guide 2019 Interactive Storytelling Map**

| Type | Web map |
| Operating system | All |
| Author(s) | The Survey and Mapping Office of the Lands Department, The Government of the Hong Kong Special Administrative Region |
| Published by | The Survey and Mapping Office of the Lands Department, The Government of the Hong Kong Special Administrative Region |
| Date published | Jan., 2019 |
| Language(s) | Chinese and English |

Hong Kong Guide 2019 Interactive Storytelling Map introduces the stories and the tour routes of two social enterprises devoted to organising local guided tours.
Croatia

MAPS

**HRV-MP1** Basic Geological Map of the Republic of Croatia at the scale of 1:50,000 National Park Kornati

- **Type of material**: Paper
- **Scale**: 1:50,000
- **Dimensions (mm)**: 900 x 700
- **Author(s)**: V. Brčić, T. Korbar, L. Fuček, D. Palenik, N. Belić, I. Mišur & L. Wacha
- **Published by**: Croatian Geological Survey
- **Date published**: Mar., 2019
- **Language(s) of the legend**: Croatian

The methodology is based on the recognition and separation of lithostratigraphic units and the definition of the stratigraphic and structural position of the successions. Geological mapping gives an insight into deposits distribution, tectonic deformations and structural-tectonic relationships. Project team of CGS, with the financial/logistical support of the NP Kornati performed the following activities: documentation preparation, prospection, geo-mapping, defining and sampling of stratigraphic sections/profiles, structural-tectonic research, sampling of speleo-objects, field input and graphical data display, reambulation, cabinet and laboratory research, and vector and raster files. Other objectives were protection of the area, speleo-objects geo-processing, education, branding, and publication of scientific papers.

CHARTS

**HRV-CP1** Nautical Chart Nr. 18 - Port of Rijeka

- **Type of material**: Paper
- **Scale if relevant**: 1:4,000
- **Dimensions (mm)**: 840 x 590
- **Author(s)**: Ivana Kordić and Pejo Bročić
- **Published by**: Hydrographic Institute of the Republic of Croatia
- **Date published**: Oct., 2017
- **Language(s) of the legend**: Croatian and English

Chart no. 18 Rijeka Harbour is the official chart produced for the purpose of safe navigation, i.e. safe berthing of ships in Rijeka Harbour. Considering its scale, it was made as a berthing plan and according to all specifications and recommendations of the International Hydrographic Organization. It is being continuously updated in order to fulfil this role and purpose as an official chart (berthing plan). The Hydrographic Institute of the Republic of Croatia produced and published an official electronic chart (ENC) of this chart, and data on it are published at the Institute's website (www.hhi.hr).

**HRV-CP2** Nautical Chart nr. 15 (INT 3474) - Rijeka

- **Type of material**: Paper
- **Scale if relevant**: 1:15,000
- **Dimensions (mm)**: 840 x 590
- **Author(s)**: Ivana Kordić and Pejo Bročić
- **Published by**: Hydrographic Institute of the Republic of Croatia
- **Date published**: Oct., 2017
- **Language(s) of the legend**: Croatian and English

Chart no. 15 (INT 3474) Rijeka is the official chart produced for the purpose of safe navigation when approaching the Rijeka Harbour. Considering its scale, it was made as a harbour plan and according to all specifications and recommendations of the International Hydrographic Organization. It is being continuously updated in order to fulfil this role and purpose as an official chart (harbour plan). The Hydrographic Institute of the Republic of Croatia produced and published an official electronic chart (ENC) of this chart, and data on it are published at the Institute's website (www.hhi.hr).
The State Geodetic Administration (SGA) is an organisation which performs tasks in the areas of geodesy, cartography, the cadastre and photogrammetry, and deals with the establishment of a national infrastructure of spatial information, the informatisation of the cadastre and geodetic-spatial system, official state cartography, geodetic documentation, statistical data on the real estate cadastre, spatial units, and tasks related to the state border. This monograph marks the 70th anniversary of the SGA in Croatia. After a foreword by the Director of the SGA, Dr. Damir Šantek, the monograph contains four basic chapters, and ends with a summary in Croatian and English.

By publishing papers on new cartographic and geoinformatic knowledge, both about the application of latest discoveries and modern technologies and historical research, the Cartography and Geoinformation journal aims to contribute to the development of cartography, its promotion and widespread use of geoinformation. In addition to scientific and professional papers, the journal publishes reviews, news and announcements which serve to popularize cartography and geoinformation. All papers are published in both English and Croatian. More details are available at www.kartografija.hr

The Cartography and Geoinformation journal publishes scientific and professional papers about cartography and other fields (geography, geodesy, geology, forestry, agronomy, history, architecture, pedagogy...) associated with cartography and geoinformation. At least two reviewers review scientific and professional papers and at least one of the reviewers must be from abroad. Reviewers are active experts, generally with a PhD, who work in the research field associated with the paper proposed for publishing.
**CZE-MP1**  Map of the Capital city of Prague  
Type of material  paper  
Scale  1:50,000  
Dimensions (mm)  750 (folded 250) x 700 (folded 175)  
Author(s) Czech Office for Surveying, Mapping and Cadastre  
Published by  Czech Office for Surveying, Mapping and Cadastre  
Date published  Dec., 2017  
Language(s) of the legend  Czech  

Base Map of the Czech Republic at 1: 50,000 is the basic state map series of medium scale and is conceived as a synoptic geographic map. It shows the entire territory of the Czech Republic in a contiguous map layout, the territory of the Czech Republic is shown on 211 map sheets. Dimensions and indexing of map sheets of map are derived from the map layout of the Base map of the Czech Republic at 1:100,000 divided into four sections. The name of a map sheet is the same as the name of the largest settlement (according to the number of inhabitants) shown on the respective map sheet. This topographic map of Prague presents the basic information about this city, showing parts of the city, main roads and streets.

**CZE-MP2**  Otava River – map for watermen  
Type of material  paper  
Scale  1:40,000  
Dimensions (mm)  950 (folded 105) x 650 (folded 165)  
Author(s)  SHOCart, spol. s r. o.  
Published by  SHOCart, spol. s r. o.  
Date published  Dec., 2017  
Language(s) of the legend  Czech, English, German  

Detailed touristic map of surroundings of favourite Otava River supplemented by information that are necessary for watermen: dangerous parts, location and pictures of weirs or start and end points. The map contains also information for general tourist public.

**CZE-MP3**  Touristic Map for Everyone – The Lednice-Valtice Area  
Type of material  paper  
Scale  1:25,000  
Dimensions (mm)  990 (folded 110) x 690 (folded 180)  
Author(s) Geodézie On Line, spol. s r. o.  
Published by  Geodézie On Line, spol. s r. o.  
Date published  Aug., 2017  
Language(s) of the legend  Czech, English, German  

This touristic map presents a very attractive area of so-called Garden of Europe, Lednice-Valtice area with magnificent chateaux. The map contains information for general tourist public. It is a winning map in the "Map of the Year" competition, organized by the Czech Cartographic Society.
**CZE-MP4  Hand painted map – Czechia for Children**

Type of material: paper  
Scale: without scale  
Dimensions (mm): 960 (folded 120) x 675 (folded 225)  
Author(s): CBS Nakladatelství, s. r. o.  
Published by: CBS Nakladatelství, s. r. o.  
Date published: Dec., 2018  
Language(s) of the legend: Czech  

Hand-painted maps are a very nice tool for the popularization of cartography. Thanks to modern techniques these maps are as accurate as possible. As a background painter uses a three-dimensional landscape model. Further, the painter uses classic maps and aerial images from a small height, which are photographed and specially generated for each map. The original image is scanned at high resolution and then cartographer adjusts hundreds of names, pictograms and marking hiking trails to the final version.

**CZE-MP5  Cyklotouristic Map of Transport Networks**

Type of material: paper  
Scale: 1:60,000  
Dimensions (mm): 945 (folded 105) x 660 (folded 165)  
Author(s): SHOCart, spol. s r. o.  
Published by: SHOCart, spol. s r. o.  
Date published: April, 2018  
Language(s) of the legend: Czech, English, German  

The detailed touristic map of South Moravia region additionally giving information about the transport (network, prices) in this area. The map contains information for general tourist public.

**CZE-MP6  Touristic Map for Everyone – Czech Forest, Region of Tachov**

Type of material: paper  
Scale: 1:25,000  
Dimensions (mm): 990 (folded 110) x 690 (folded 180)  
Author(s): Geodézie On Line, spol. s r. o.  
Published by: Geodézie On Line, spol. s r. o.  
Date published: Nov., 2018  
Language(s) of the legend: Czech, English, German  

The protected area of Czech Forest belongs to the places that are more and more visited nowadays. This map was made for presenting this beautiful part of west Czechia to tourists. The map contains information for general tourist public. It is a winning map in the “Map of the Year” competition, organized by the Czech Cartographic Society.
CZE-MP7  Edition of Czech Tourists Club – Banát

Type of material  paper
Scale  1:100,000
Dimensions (mm)  630 (folded 130) x 580 (folded 195)
Author(s)  Trasa, spol. s r. o.
Published by  Trasa, spol. s r. o.
Date published  May, 2017
Language(s) of the legend  Czech, English, German, French, Romanian

This touristic map originated to support Czech national minority living in Romanian region Banát. One of the purposes of this map is also a support of agrotourism in this area, that can help to the regional development. The topographic base map was provided by Romanian Army. It is a winning map in the “Map of the Year” competition, organized by the Czech Cartographic Society.

CZE-MP8  South Czechia – Waldviertel, Cyclotrack EuroVelo

Type of material  paper
Scale  1:60,000
Dimensions (mm)  960 (folded 120) x 680 (folded 230)
Author(s)  SHOCart, spol. s r. o.
Published by  SHOCart, spol. s r. o.
Date published  2018-12-31
Language(s) of the legend  Czech, German

EuroVelo is a network of 15 long distance cycle routes connecting and uniting the whole European continent. The routes can be used by cycle tourists as well as by local people making daily journeys. This touristic map shows the track EuroVelo 13 (so-called Iron Curtain Trail, that is about 10,400 km long ) in South Bohemia.

CZE-MP9  Czechoslovakia, 100 Years of Republic

Type of material  paper
Scale  1:950,000
Dimensions (mm)  960 (folded 120) x 680 (folded 230)
Author(s)  Kartografie PRAHA, a. s.
Published by  Kartografie PRAHA, a. s.
Date published  Dec., 2018
Language(s) of the legend  Czech

This special map was published on occasion of celebrating 100 years of the Czech-Republic, showing important events in the history of the state. It also gives various information about the situation in the Czech country during the century.
CZE-MP10 Jizera Mountains – Isergebirge
Type of material paper
Scale 1:25,000
Dimensions (mm) 680 (folded 110) x 980 (folded 180)
Author(s) Kartografie HP, s. r. o.
Published by Kartografie HP, s. r. o.
Date published 2018-12-31
Language(s) of the legend Czech, English, German, Polish
The first Czech-German touristic map of Jizera Mountains. The former German names of places are highlighted, Matouschek's maps from 1927 and 1938 were the main source of these names. The map contains detailed touristic and cyclotouristic information.

CZE-MP11 Jewish Sights in Czechia
Type of material paper
Scale 1:500,000
Dimensions (mm) 960 (folded 120) x 660 (folded 230)
Author(s) Kartografie PRAHA, a. s.
Published by Kartografie PRAHA, a. s.
Date published Dec., 2016
Language(s) of the legend Czech, English, German

CZE-MP12 Touristic Map – The Giant Mountains from West to East
Type of material paper
Scale 1:25,000
Dimensions (mm) 780 (folded 130) x 770 (folded 195)
Author(s) Nakladatelství ROSY, Rohlík a syn, Mělník
Published by Nakladatelství ROSY, Rohlík a syn, Mělník
Date published Dec., 2018
Language(s) of the legend Czech, English, German, Polish
The touristic map showing the highest mountains of the Czech Republic, The Giant Mountains. The author is a long-lasting admirer of this part of country and every year try hard to keep these maps actual. The map contains detailed information for general tourist public.
Mysterious Places of Czechia

Mysteries and unexplainable phenomena were ever so popular topics. This interesting map unfortunately doesn't show the location of treasure, but is perfect for getting to know more about mysterious places of Czechia such as haunted castles and chateaux, religious or natural mysteries, archeological localities and wonderful events and places of historical fights.

The Witcher's World

Based on the fantasy books The Whitcher Saga written by Andrzej Sapkowski, this map shows the world of witcher as it was described in that masterpiece. What is interesting is the fact that the map is produced like a regular map exactly like that one in Czech school atlases.

Postindustrial Landscapes in the Czech Republic

This thematic map poster presents in three maps the postindustrial landscapes in Czechia, divided into specific groups according to its origin (mining areas, glasswork areas, etc.). It is the outcome of long-lasting research under the supervision of prof. Jaromír Kolejka. The map was created and published at the Department of geoinformatics, Palacký University, Olomouc.

The South Moravia and Weinviertel – Trip Tips

Cyclotouristic maps composed to the paper calendar give good trip advises and tips. It doesn't show only the map with highlighted crucial track but also visualize the route elevation profiles, pictures of interesting places on the way and text with important information.
This set of 18 maps shows the development of Czech state as well as the development of Czech cartography in the history. Maps are smaller (paper size A3) than their originals but these are perfect to present these maps to the general public.

**ATLASES**

**CZE-AT1  Historical Population Atlas of the Czech Lands**

- **Number of pages**: 131
- **Dimensions (mm)**: 300 x 360
- **Author(s)**: Charles University
- **Published by**: Karolinum Press
- **Date published**: Dec., 2017
- **Language(s) of the text**: Czech, English

Historical Population Atlas of the Czech Lands is one of the first to use historical statistical data to evaluate spatial aspects of almost hundred years population development in Czechia. Its twelve chapters present various themes relating directly to population from a historical perspective, for instance migration, demographic, economic and cultural structure, social status, crime and elections. The atlas present time series of basic population statistical indicators from the beginnings of the independent Czechoslovak state up to the present time. The maps are based on the results of censuses from 1921 to 2011 including population registers from the post-war years.


- **Number of pages**: 115
- **Dimensions (mm)**: 420 x 297
- **Author(s)**: Alena Vondráková, Vít Voženílek, Jitka Rychtaříková
- **Published by**: Palacký University Olomouc
- **Date published**: Dec., 2017
- **Language(s) of the text**: Czech

The Atlas presents the state of university education in the Czech Republic in the time period 2001–2014. Its eight chapters present various themes relating directly to universities, students, and graduates, from a historical perspective. There are thematic maps presenting for instance migration to the school, specialization structure, and case studies focused on two Czech universities: Charles University and Palacký University Olomouc. The maps are based on the results of the research conducted by the team of experts under the leadership of the Ministry of Education, Youth and Sports. The Atlas is one of the outcomes of project KREDO.

**CZE-AT3  Map atlases**

- **Number of pages**: 214
- **Dimensions (mm)**: 149 x 210
- **Author(s)**: Kartografie HP, s. r. o.
- **Published by**: Kartografie HP, s. r. o.
- **Date published**: Dec., 2018
- **Language(s) of the text**: Czech (English, German Polish in a legend)

Common set of three atlases presenting touristic maps of three protected landscape areas in the Czech Republic. The map atlases are suitable for tourists. Its uniqueness lies primarily in the mapping of wooded areas, with no such accurate data yet available. These atlases provide detailed picture of landscape, giving necessary information to those who want to find a parking, restaurant, pubs and many others. Maps are supplemented by detailed grid.
### Digital Products

**CZE-DP1  Interaktivní Školní atlas světa / Interactive School World Atlas**

<table>
<thead>
<tr>
<th>Type</th>
<th>interactive book (Flexibooks)</th>
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</thead>
<tbody>
<tr>
<td>File format</td>
<td>interactive PDF</td>
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<tr>
<td>License</td>
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</tr>
<tr>
<td>Author(s)</td>
<td>Kartografie Praha, a. s.</td>
</tr>
<tr>
<td>Published by</td>
<td>Kartografie Praha, a. s.</td>
</tr>
<tr>
<td>Date published</td>
<td>Dec., 2018</td>
</tr>
<tr>
<td>Language(s) of the presentation</td>
<td>Czech/English</td>
</tr>
</tbody>
</table>

The best-selling Czech school atlas is now available in the digital form (Flexibooks). There are many thematic maps that deal with nature, the population, the economy or the environment in which people live on Earth. Parts on individual continents contain detailed, generally geographic maps, supplemented by expanding thematic maps. The geographic curriculum is also complemented by historical maps of the key stages of the development of the individual continents. Many maps are using multimedia and are interactive.

**CZE-DP2  Školní atlas dnešního světa / Today's World School Atlas**

<table>
<thead>
<tr>
<th>Type</th>
<th>interactive book</th>
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<tbody>
<tr>
<td>File format</td>
<td>DVD/PDF/online</td>
</tr>
<tr>
<td>License</td>
<td>Copyright</td>
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<tr>
<td>Author(s)</td>
<td>TERRA-KLUB, o.p.s.</td>
</tr>
<tr>
<td>Published by</td>
<td>TERRA-KLUB, o.p.s.</td>
</tr>
<tr>
<td>Date published</td>
<td>Mar., 2019</td>
</tr>
<tr>
<td>Language(s) of the presentation</td>
<td>Czech/English</td>
</tr>
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</table>

The Today's World School Atlas is a digital form of existing traditional printed atlas with the same title. The atlas allows to combine traditional printed versions and follow-up digital version with online support in online library Today's World. Today's World School Atlas uses many forms of thematic cartography, in digital forms including animations, expressing selected phenomena in their temporal and spatial development.

**CZE-DP3  Archeological map of the Czech Republic**

<table>
<thead>
<tr>
<th>Type</th>
<th>application</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating system</td>
<td>min. MS Win Vista, Unix/Linux, OS X</td>
</tr>
<tr>
<td>License</td>
<td>Copyright</td>
</tr>
<tr>
<td>Author(s)</td>
<td>Institute of Archaeology of the Czech Academy of Sciences, Prague</td>
</tr>
<tr>
<td>Published by</td>
<td>SmartGIS, s. r. o.</td>
</tr>
<tr>
<td>Date published</td>
<td>Dec., 2017</td>
</tr>
<tr>
<td>Language(s) of the presentation</td>
<td>Czech/English</td>
</tr>
</tbody>
</table>

The aim of the project was to create an interactive information management system for archaeological heritage in our country. In particular, the Archeological map of the Czech Republic brings (1) an online data collection and management system from authorized archaeological organizations; (2) revision of a substantial part of the known archaeological heritage of the Czech Republic; (3) a tool to capture disappearing information about archaeological heritage, especially with regard to older, untreated field research; (4) presenting the archaeological heritage to the wider public.

**CZE-DP4  Game The Land of a Little Wizard**

<table>
<thead>
<tr>
<th>Type</th>
<th>computer game</th>
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<tbody>
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<td>File format</td>
<td>application</td>
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<tr>
<td>Author(s)</td>
<td>Irena Košková a kol.</td>
</tr>
<tr>
<td>Published by</td>
<td>Liberecký kraj</td>
</tr>
<tr>
<td>Date published</td>
<td>Dec., 2017/12/31</td>
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<tr>
<td>Language(s) of the presentation</td>
<td>Czech/English</td>
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</table>

The Small Wizard’s Land Game is developed as a part of the Atlas of Liberec Region. The computer game was created based on the by the joint painting of children at the “Maps around us” event in October 2017 in Liberec. The Small Wizard’s Land Game has its GIS, its maps and even a map server. It is connected to the work of scientists and to the environmental issues.
EDUCATIONAL PRODUCTS

**CZE-EP1 Školní atlas světa / School World Atlas**

Author(s) Kartografie Praha, a. s.
Type Atlas
Dimensions (mm) 230 x 320
Published by Kartografie Praha, a. s.
Date published Dec., 2018
Language(s) of the product Czech

The best-selling Czech school atlas is a universal tool for teaching. The Atlas is divided into thematic chapters, which are also color-coded, making map orientation much easier. The introductory part deals with the latest astronomical knowledge of space and the solar system. There are many thematic maps that deal with nature, the population, the economy or the environment in which people live on Earth. Parts on individual continents contain detailed, generally geographic maps, supplemented by expanding thematic maps. The geographic curriculum is also complemented by historical maps of the key stages of the development of the individual continents.

**CZE-EP2 časopis Dnešní svět / Today’s World Journal**

Author(s) TERRA-KLUB, o.p.s.
Type journal
Dimensions (mm) 215 x 300
Published by TERRA-KLUB, o.p.s.
Date published Mar., 2019
Language(s) of the product Czech

Today's World is a modern comprehensive educational program aimed at supporting the teaching of traditional subjects Geography, History, Nature, Social Sciences, etc. The program outputs combine traditional printed versions and follow-up digital version with online support in online library Today's World. Today's World uses forms of thematic cartography, in digital forms including animations, expressing selected phenomena in their temporal and spatial development. The journal contains additional information and worksheets.

**CZE-EP3 TouchIt3D Tactile Maps**

Author(s) Radek Barvíř, Jan Brus, Alena Vondráková
Type multimedia 3D tactile map
Dimensions (mm) 250 x 350
Published by Palacký University Olomouc
Date published Mar., 2019
Language(s) of the product English

The TouchIt3D Tactile Maps are new prototypes of tactile-auditory maps created by 3D printing, linked to a tablet or other touch-screen mobile device using the TactileMapTalk software. The map allows to use multimedia elements and tools for effective teaching of people with severe visual impairments. The map “speaks” and is therefore more understandable and the user gains the skills to work with similar tools. This type of 3D map has not been created yet. The didactic kit also includes a set of teaching materials necessary for practicing work with this new generation of 3D tactile-auditory maps.

OTHER PRODUCTS

**CZE-OP1 Peregrinus Silva Bohemica**

Author(s) Jan Brus, Radek Barvíř, Alena Vondráková, Martina Kepka Vichrová, Radek Fiala a Pavel Hájek
Material paper/plastic 3D
Published by Palacký University Olomouc, University of West Bohemia
Date published Dec., 2019
Language(s) of the product English

3D map of cross-border historical roads and monuments in Sumava designed for pilgrims, tourists and anyone interested in history. The map shows in detail the Bavarian-Czech Baroque pilgrimage routes and by an innovative way displays objects of interest using full-colour models created by 3D LOM technology using paper. The map is complemented by 3D models of churches in a scale of 1: 250 and allows users to explore the cultural heritage along the roads in the “Silva Bohemica”.

### 3D model of Domnica cave

**Author(s)**: Jan Brus, Radek Barvíř, Michal Gallay, Jozef Supinsky, Jan Kanuk  
**Material**: paper/plastic 3D  
**Published by**: Palacký University Olomouc, Pavol Jozef Šafárik University in Košice  
**Date published**: Mar., 2019  
**Language(s)**: English

Domica Cave is the most known and longest cave of the Slovak Karst National Park. Except for important geomorphological features, it is interesting by precious archaeological findings, occurrence of flowstone shields and drums, as well as numerous bat species presence. The cave belongs in the world heritage site „The Caves of Slovak and Aggtelek Karst“. The presented 3D model shows the surrounding of the cave including the part of the cave itself printed from plastic and paper. This unique form of visualisation brings novel approaches to a spatial understanding of the area.

### Olomouc in Maps and Infographics

**Author(s)**: Martin Porteš  
**Material**: paper  
**Published by**: Palacký University Olomouc  
**Date published**: Sep., 2018  
**Language(s)**: Czech/English

The publication "Olomouc in Maps and Infographics" is the part of a winning work in the student category of the "Map of the Year" competition in Czechia. It is the main outcome of Master thesis "Statistical atlas of Olomouc city using infographics". The publication presents the Olomouc city in maps and modern infographics. It should be served as promotional material about the city.
**FIN-MP1** Sisällissodan kartta 1918

Type of material: paper  
Scale: 1:1,000,000  
Dimensions (mm): 700 x 1,000  
Published by: Karttakeskus  
Date published: Dec., 2018  
Language(s) of the legend: Finnish

Most important battles, attacks and withdraws, and battlefronts of the civil war in 1918. Labels present the crucial turning points of the war, and in the borders of the map 50 most important battles are described. This is presumably the first presentation of the civil war in a large map, making it easy to get the big picture of the phases of the war as well as the locations of the battles.

**FIN-MP2** Peruskartta

Type of material: paper  
Scale: 1:25,000  
Dimensions (mm): 995 x 685  
Published by: National Land Survey of Finland  
Date published: 2017  
Language(s) of the legend: Finnish, Swedish, English

Basic maps cover the whole Finland and show the cadastral division, roads, buildings, waterways, cultivated areas, other topographic features and contour lines. One map sheet covers an area of 12 x 24 km.

**FIN-MP3** Maastokartta

Type of material: paper  
Scale: 1:50,000  
Dimensions (mm): 995 x 685  
Published by: National Land Survey of Finland  
Date published: 2017  
Language(s) of the legend: Finnish, Swedish, English

1:50,000 topographic map gives a more general picture of the ground features than a basic map. It shows settlements, houses, roads, cultivated areas, waterways, cutting areas, mires, rock exposures, and relief. One map sheet covers an area of 30 x 40 km.
FIN-MP4 Suomi Finland
Type of material     plastic
Scale                   1:1,000,000
Dimensions (mm)     830 x 1,200
Published by         Karttakeskus
Date published       Nov., 2018
Language(s) of the legend      Finnish, Swedish
Fairly big wall map of Finland. Includes name catalog on the side. This map is available also as an enlargement.

CHARTS

FIN-CP1 Saaristomeri
Type of material     paper
Scale if relevant  1:250,000
Dimensions (mm)    1118 x 815
Author(s)          Hydrographic Office / Finnish Transport and Communications Agency Traficom
Published by       Finnish Transport and Communications Agency Traficom
Date published     June, 2018
Language(s) of the legend      Finnish, Swedish, English
General charts in scale 1 : 250,000 are intended for sea-going vessels and route planning. The general chart 953 covers the Archipelago Sea. The sea area located between the Åland islands and Turku has hundreds of islands and thousands of smaller islets creating a very complicated environment for navigation. Despite this, a significant amount of vessel traffic uses the shipping routes from Utö and Mariehamn to Turku and Naantali every day.

FIN-CP2 Jurmo - Vänö
Type of material     paper
Scale if relevant  1:50,000
Dimensions (mm)    1118 x 815
Author(s)          Hydrographic Office / Finnish Transport and Communications Agency Traficom
Published by       Finnish Transport and Communications Agency Traficom
Date published     June, 2018
Language(s) of the legend      Finnish, Swedish, English
Coastal charts in scale 1 : 50 000 are intended for archipelago and coastal navigation. The coastal charts are the main chart series of the Finnish Hydrographic Office and cover the Finnish coast in full. The coastal chart 24 covers the southern outskirts of Turku archipelago. The area lies mostly outside of major shipping lanes, but is a popular destination for sailing holidays.
**FIN-AT1**  Automatkailijan Suomi - matkaopas ja kartasto

Number of pages 336  
Dimensions (mm) 203 x 288  
Author(s) Minna Nuutinen (head of production)  
Published by Karttakeskus  
Date published 2018-01  
Language(s) of the text Finnish  

Car traveler’s Finland is a combination of a travel guide and a road map. It contains 17 routes from which a set of attractions, accomodations, and shops with their contact information. All routes and their attractions are marked both onto road maps (1:200 000 or 1:400 000) and, if necessary, also on city maps (1:20 000 and 1:40 000).

**FIN-AT2**  Merikarttasarja K Keitele ja Keiteleen kanava

Number of pages 40  
Dimensions (mm) 460 x 340  
Author(s) Hydrographic Office / Finnish Transport and Communications Agency Traficom  
Published by Finnish Transport and Communications Agency Traficom  
Date published April, 2018  
Language(s) of the text Finnish, Swedish, English  

Chart atlases in scales from 1:10,000 to 1:50,000 are primarily intended for boaters. However, in inland waters, like in the case of atlas K, they also serve commercial shipping. The chart atlases of the Finnish Hydrographic Office cover the Finnish coast in full and all major lakes in Finland. The chart atlas K covers the lake system of Keitele and the canal connecting it to the neighbouring lake Päijänne. Users of the atlas are nowadays mainly recreational boaters and tourism, since timber rafting in the areas ended in early 2000s.

**FIN-AT3**  Suomenlahden saaristo 1880- ja 2010-luvun merikartoin

Number of pages 124  
Dimensions (mm) 250 x 340  
Author(s) Jan Strang, Seppo Laurell, Juha Korhonen, Erkki-Sakari Harju  
Published by Karttakeskus  
Date published Nov., 2018  
Language(s) of the text Finnish  

In 1880-1886, Engineer Karl Gustaf Ekeblom draw and published a nautical chart series of southern coast of Finland. That 1:72,000 scale chart series was first national atlas of Finnish seas. This book shows those historical charts side by side with modern charts produced by Finnish Transport Agency. The charts are placed next to each other by so-called window layout with opening lapels.

**DIGITAL SERVICES**

**Espoo’s 3D city model**

Type of service 3D city model  
Format website  
Software platform https://kartat.espoo.fi/3d/index_en.html  
License CC BY 4.0  
Published by City of Espoo  
Date published Jan., 2019  
Language(s) of the presentation Finnish, English  

Espoo’s smart, rich, visual and up-to-date city information model serves everyone working in urban construction, planning and visualisation. The city information model (CIM) serves as an initial information model, enabling more efficient planning and decision-making that takes better account of the city’s current state. The interface service enables everyone to use the open, up-to-date city model, facilitating the creation of new innovations and solutions.
This book presents the very first version of a general map of Finland, produced in 1863-1873. Back then, general map was not published as a map, but instead it consisted of 30 separate chart sheets (app. 50*42 cm) in a scale of 1:400,000. In this facsimile Finland has been re-scaled to 1:247,000 to ease reading.
MAPS

FRA-MP1  Golfe du Morbihan
Type of material  Paper, laminated
Scale  1:180,000
Dimensions (mm)  928 (folded : 116) x 440 (folded : 220)
Author(s)  Michelin Travel Partner
Published by  Michelin Travel Partner
Date published  Mar., 2019
Language(s) of the legend  French

Folded paper map featuring on one side the detailed Michelin map of the area, and on the other side some ideas of sightseeing tours, plus a short description of the main points of interest by the authors of the Michelin Green Guide.

FRA-MP2  Road and tourist map of New Caledonia
Type of material  Tear and water-proof paper, plasticized poster
Scale  1:500,000
Dimensions (mm)  1200 x 900
Author(s)  Government of New Caledonia, DITTT
Published by  Government of New Caledonia, DITTT
Date published  2017
Language(s) of the legend  French, English, Japanese

This map is a long-awaited cartographic update on a national scale (1/500 000). Headed towards tourism, this map is a wealth of information for visitors. Main roads and topographic items reflect transportation and natural constraints. Localities and tribes, and also natural reserves and many tourist points of interest are highlighted. Map production includes extraction and generalization from New Caledonia topographic reference data (BDTOPO-NC) processed with GIS software (ArCGIS, ESRI). Design and CAD are performed with a vector graphics editor and mapping plugin as Illustrator (Adobe) and Map Publisher (Avenza Systems Inc). DITTT requested expertise of IGN (Institut Geographique National) to print 6000 copies of the map, marketed in New-Caledonia and France (IGN Rando & IGN Géoroom).

FRA-MP3  A digital map à la Cassini: reconstruction of the Carte générale & particulière de la France, 52th sheet (1759-1777, 2019)
Type of material  Paper
Scale  1 : 69,000
Dimensions (mm)  1189 x 841
Author(s)  Nathalie Abadie, Stéphane Baciocchi, Pierre Boivin, Julien Chadeyron, Pascal Cristofoli, Jean-Michel Delaveau, Bertrand Dumé lieu, Stéphane Gomis, Maurizio Gribaudi, Isabelle Langlois, Claude Motte, Julien Perret & Marie-Christine Vouloir
Published by  EHESS / IGN / UCA
Date published  2019
Language(s) of the legend  English / French

Vector geographic data extracted from the georeferenced 52nd sheet of the Carte de France is rendered under QGIS as a digital map mimicking the original style of the Cassini map. The original historical map has been georeferenced and its content manually extracted by the team GeoHistoricalData (EHESS / IGN / UCA) in 2016-2018.

CHARTS

FRA-CP1  7639 ( INT4636) - Abords et port de l’île Saint-Pierre
Type of material  paper
Scale if relevant  1:25,000
Dimensions (mm)  1189 x 841
Author(s)  Shom
Published by  Shom
Date published  July., 2018
Language(s) of the legend  French and English

This nautical chart is part of the IHO international (INT) series. It is part of a scheme of 3 charts covering the French overseas territory of Saint-Pierre-et-Miquelon, off the Atlantic coast of Canada. It is composed of 2 plans for the approaches of Saint-Pierre island at the scale 1:25,000 and depiction of the port of Saint-Pierre, main port of the archipelago, at the scale 1:7,500. Including recent hydrographic surveys, it replaces chart 982 which was first published in 1843!
### FRA-CP2 7459 - Tikehau

Type of material: paper  
Scale if relevant: 1:75,000  
Dimensions (mm): 841 x 1189  
Author(s): Shom  
Published by: Shom  
Date published: Jan., 2019  
Language(s) of the legend: French and English

Tikehau is an atoll of French Polynesia situated 340 km North of Tahiti. This nautical chart is a compilation of soundings from ‘classical’ hydrographic surveys, covering the only pass into the lagoon and the fairway to the Tuherahera port, and bathymetric information derived from satellite imagery. The shades of blue used give an indication of the depth to the mariner who must exercise extra caution as some shoals cannot be detected by remote sensing, and numerous pearl farms are present in the lagoon.

### FRA-CP3 7712 - Abords du port de Tan-Tan

Type of material: paper  
Scale if relevant: 1:20,000  
Dimensions (mm): 841 x 1189  
Author(s): Shom-DHOC  
Published by: Shom  
Date published: Jan., 2019  
Language(s) of the legend: French and English

Covering the port of Tan-Tan and its approaches on the West coast of Morocco, this nautical chart is part of an ongoing co-production between Shom and Morocco’s DHOC (the hydrographic, oceanographic and cartographic division of Morocco’s Royal Navy). Cartographers from DHOC have been trained by Shom to be able to produce charts completely on their own in the near future.

### DIGITAL PRODUCTS

**FRA-DP1 onTracks GuideWatches, First multi-use navigation-system**

Type: Intuitive GPS  
Operating system: Android  
Author(s): onTracks  
Published by: onTracks  
Date published: June, 2019  
Language(s) of the presentation: French / English

1. Connect your 2 GuideWatches: One on the left wrist, the other on the right wrist.  
2. Select on the app onTracks the tracks or path you want to perform.  
3. Put your phone in your pocket or your bag and GO! You are guided by vibrations to the left or right to know when to turn.

### OTHER PRODUCTS

**FRA-OP1 Mapzle - France**

Author(s): Maxime Salles  
Material: Medium - MDF  
Published by: Les Artisans Cartographes  
Date published: Dec., 2017  
Language(s) of the product: French

The MAPZLE of France is a cartographic puzzle that represents the division of the French territory. This beautiful object, which carefully details the French geography, is made of recomposed wood and shaped with a laser cutter. MAPZLE has been designed to be waste-free and uses recycled materials.
A fun approach to discover the sights of the City of Lights. 52 places selected to discover the city of Lyon. The hearts will take you to the restaurant. The spades will reveal the city's must-see monuments and museums. The diamonds will make you discover the local sights. And the clubs will take you from bar to bar.
MAPS

FRI-MP1  Le relief de la France
Type of material  Plastic
Scale  1 : 1,160,000
Dimensions (mm)  1020 x 920
Author(s)  IGN
Published by  IGN
Date published  April, 2019
Language(s) of the legend  Français
Ce poster cartographique représente le territoire métropolitain français en relief. Avec ses teintes hypsométriques et sa charte graphique simple, il a pour objectif d’être informatif et pédagogique.

FRI-MP2  Le vignoble luxembourgeois
Type of material  Poster
Scale  1 : 50,000
Dimensions (mm)  880 x 400
Author(s)  IGN
Published by  Administration du cadastre et de la topographie (ACT Luxembourg)
Date published  May, 2018
Language(s) of the legend  Français
Ce poster cartographique est une nouvelle édition de celui précédemment éditée en 1910. Il reprend une charte graphique proche de cette carte historique, mais bien-sûr avec des données actualisées de 3 pays différents et un processus fondé sur l’usage des SIG. Un point à noter est que l’orientation de cette carte est adaptée à la direction de la vallée.

DIGITAL PRODUCTS

FRI-DP1  MARMOT : Multiscale Augmented Reality Map Over Time
Type  Augmented reality
Operating system  Android
Author(s)  IGN
Published by  IGN
Date published  May, 2019
Language(s) of the presentation  French/English
To popularize augmented reality on maps, the MARMOT application allows to discover the possibilities of the augmented map to overlay different maps at different dates and scales and to explain the principles of distance measurements with triangulation on a specific poster.

DIGITAL SERVICES

macarte.ign.fr
Type of service  Web service
Software platform  Web service
Author(s)  IGN
Published by  IGN
Date published  2018
Language(s) of the presentation  French
Free web service to generate your own map using IGN cartographic maps and adding pictos, touristic tours, … It is also possible to produce statistical maps and narrative maps.
After the map sheets Solu Khumbu and Shorong Hinku of their Nepal map series published in recent years, the Consortium for comparative high mountain research in cooperation with the Faculty of Geoinformation of the Munich University of Applied Sciences has published a new edition of the Langtang Map on a scale of 1:50,000. The map shows the beautiful valley situation in a very detailed and vivid way and contains all important and helpful information for trekking tourists such as lodges, tea houses, viewpoints and sights.

TopPlusOpen – The Open Map

With the product TopPlusOpen, the Federal Agency for Cartography and Geodesy (BKG) has for the first time provided a freely accessible web map, which is based entirely on open or free data sources. For this purpose, the BKG processed and combined many different data sources in order to achieve the best possible map presentation. Among others, free official spatial data of the Federal Government and the Open Data states Berlin, Hamburg, North Rhine-Westphalia and Thuringia are presented in the product. Furthermore, Brandenburg, Mecklenburg-Western Pomerania and Rhineland-Palatinate provide their official spatial data for TopPlusOpen based on a cooperation agreement so that also these states are presented exclusively by official data. In addition to the map services in monitor resolution, map presentations were also produced in fixed scales from 1:5.000 to 1:250.000 and in high resolution (200 lines/cm, 508 dpi), which are very well suited for high-quality printouts. The services of the TopPlusOpen were released in September 2017. The product was very well received by the public, private and scientific sectors and is already used as a background map in many geportals. Here you can see a section of the map TopPlusOpen 1: 10.000 with an example of the cross-border presentation of official data in Germany (right) and crowd sourced data in the Netherlands (left). More information about TopPlusOpen in: Peter Kunz & Joachim Bobrich (2019) Multiscale cartographic visualization of harmonized datasets, International Journal of Cartography, DOI: 10.1080/23729333.2019.1610931
The map “The Race to the South Pole” is a device which tells the story of the race between the expeditions of the Norwegian Roald Amundsen and Briton Robert Scott to the South Pole. On the front side through interaction by the user position of expeditions at different moments, temperature and height parameters and events can be explored. The back side contains an overview map, where territories known at the time of the expeditions are shown as highlighted areas.
**GRC-MP1**  Two-sided map of Crete Region, Greece

Type of material  |  Paper
Scale  |  1:180,000
Dimensions (mm)  |  1485 x 841
Author(s)  |  Chrysoula Boutoura, Evangelos Voulgarakis, Angeliki Tsorlini
Published by  |  Laboratory of Cartography and Geographical Analysis - CartoGeoLab, School of Rural and Surveying Engineering, Aristotle University of Thessaloniki, Greece
Date published  |  Oct., 2017
Language(s) of the legend  |  Greek

The two-sided map of Crete Region, Greece in scale 1: 180,000 is designed to depict the topography of the island and to provide its readers thematic information concerning its special characteristics such as ancient places, protected areas and parks, touristic attractions and other places worth visiting. The front side of the map shows a map of general use with emphasis on the big number of settlements existing on the island and on its historical and religious monuments. The back side shows a geomorphological (hiking) map, focusing on natural elements such as gorges, caves, cataracts etc., as well as on the European pathway E4. The map was designed based on open geodata from different sources and on information extracted from other maps, following all the steps of the cartographic procedure.

**GRC-MP2**  The Thessaloniki of Manolis Anagnostakis - biographical and bibliographical references

Type of material  |  Paper
Scale  |  1:10,000 & 1:67,000 (inset map)
Dimensions (mm)  |  420 x 297
Author(s)  |  Alexandra Koussoulakou, Yiannis Mitzias, Konstantinos Dovas, Symeon Symeonidis
Published by  |  Laboratory of Cartography and Geographical Analysis - CartoGeoLab, Aristotle University of Thessaloniki, Greece
Date published  |  Sep., 2017
Language(s) of the legend  |  Greek

A literary map of the city of Thessaloniki, showing places appearing in poems of Manolis Anagnostakis and locations related to the poet’s life in his native city.

**GRC-MP3**  The Thessaloniki of Giorgos Ioannou - bibliographical references

Type of material  |  Paper
Scale  |  1:10,000 & 1:130,000 (inset map)
Dimensions (mm)  |  420 x 297
Author(s)  |  Alexandra Koussoulakou, Yiannis Mitzias, Konstantinos Dovas, Symeon Symeonidis
Published by  |  Laboratory of Cartography and Geographical Analysis - CartoGeoLab, Aristotle University of Thessaloniki, Greece
Date published  |  Sep., 2017
Language(s) of the legend  |  Greek

A literary map for the city of Thessaloniki, according to places’ references in the books of writer Giorgos Ioannou.

**GRC-MP4**  The Thessaloniki of Tolis Kazantzis - locations’ reference frequency

Type of material  |  Paper
Scale  |  1:20,000 & 1:230,000 (inset map)
Dimensions (mm)  |  420 x 297
Author(s)  |  Alexandra Koussoulakou, Yiannis Mitzias, Konstantinos Dovas, Symeon Symeonidis
Published by  |  Laboratory of Cartography and Geographical Analysis - CartoGeoLab, Aristotle University of Thessaloniki, Greece
Date published  |  Sep., 2017
Language(s) of the legend  |  Greek

A literary map for the city of Thessaloniki, depicting the frequency of references of various city locations in the works of writer Tolis Kazantzis; the places are represented with proportional point symbols, the size of which is analogous to the respective frequency of references.
**GRC-MP5  The Thessaloniki of Zoe Karelli - bibliographical references**

Type of material  Paper  
Scale  1:10,000  
Dimensions (mm)  420 x 297  
Author(s)  Alexandra Koussoulakou, Yiannis Mitzias, Konstantinos Dovas, Symeon Symeonidis  
Published by  Laboratory of Cartography and Geographical Analysis – CartoGeoLab, School of Rural and Surveying Engineering, Aristotle University of Thessaloniki, Greece  
Date published  Sep., 2017  
Language(s) of the legend  Greek  

A literary map for the city of Thessaloniki, depicting the places in the city that are referred in the works of poet and playwright Zoe Karelli.

**GRC-MP6  The Thessaloniki of Albertos Nar - bibliographical references**

Type of material  Paper  
Scale  1:10,000 & 1:230,000 (insaet map)  
Dimensions (mm)  420 x 297  
Author(s)  Alexandra Koussoulakou, Yiannis Mitzias, Konstantinos Dovas, Symeon Symeonidis  
Published by  Laboratory of Cartography and Geographical Analysis - CartoGeoLab, Aristotle University of Thessaloniki, Greece  
Date published  Sep., 2017  
Language(s) of the legend  Greek  

A literary map for the city of Thessaloniki, depicting the places in the city that are referred in the works of writer Albertos Nar.

**GRC-MP7  The Thessaloniki of Nikos Gavriil Pentzikis - bibliographical references**

Type of material  Paper  
Scale  1:10,000 & 1:260,000 (inset map)  
Dimensions (mm)  420 x 297  
Author(s)  Alexandra Koussoulakou, Yiannis Mitzias, Konstantinos Dovas, Symeon Symeonidis  
Published by  Laboratory of Cartography and Geographical Analysis - CartoGeoLab, Aristotle University of Thessaloniki, Greece  
Date published  Sep., 2017  
Language(s) of the legend  Greek  

A literary map for the city of Thessaloniki, depicting the places in the city that are referred in the works of writer Nikos Gavriil Pentzikis.

**GRC-MP8  The Thessaloniki of Dinos Christianopoulos - bibliographical references**

Type of material  Paper  
Scale  1:10,000 & 1:200,000 (inset map)  
Dimensions (mm)  420 x 297  
Author(s)  Alexandra Koussoulakou, Yiannis Mitzias, Konstantinos Dovas, Symeon Symeonidis  
Published by  Laboratory of Cartography and Geographical Analysis - CartoGeoLab, Aristotle University of Thessaloniki, Greece  
Date published  Sep., 2017  
Language(s) of the legend  Greek  

A literary map for the city of Thessaloniki, depicting the places in the city that appear in poets and writings of Dinos Christianopoulos.
The project “Strategic Assessments supporting the long term conservation of natural values of community interest as well as the national implementation of the EU Biodiversity Strategy to 2020” is led by the Ministry of Agriculture. In support of the development goals a multi-level National Ecosystem Map of Hungary was created. Fine thematic detail is represented in 57 third level classes reflecting land cover and habitat types. The Ecosystem Map was created with an iterative combination of national GIS layers supported by semi-automatic classification of remote sensing data. The applied methodology demonstrates a new concept in the use of geospatial data.

Geological walking maps with walking routes superimposed on geological and topographical information need to be carefully designed for use by non-specialists. This geological walking map was compiled at a scale of 1:30,000 for the area around the Headquarters of the Bakony-Balaton UNESCO Global Geopark in Csopak Village, Hungary. It is the most detailed commercial map of the Balaton Uplands with geological content depicting the results of a geosite assessment, a combined GIS and statistical process for selecting the most interesting geological phenomena to visit. It is planned to compile geological walking maps for other parts of the Geopark in this scale.

The map is a political map containing the administrative units represented with different colors, which can be also used as wallmap. All the names on the map can be found in Chinese. All the cities with a population larger than 1,000,000 inhabitants are represented on the map, as well as the international and domestic airports. The Pearl River Delta is included in more detail on a map at 1:1,000,000. The map can also be used as a wall map.

Representation of the Indian subcontinent using an impressive relief background. The map contains a detailed road and settlement network, as well as the national parks in the country. Many places and objects of interest for tourists are represented with symbols and shortly described in English. It includes an annex political map. On the backside, you can find an Index including not only reference based on letters and numbers, but the names of the states too. The map can also be used as a wall map.
HUN-MP5  Bócsa-Kaskantyú "Zöldhalom" (orienteering map)
Type of material: Paper
Scale: 1:10,000
Dimensions (mm): 290 x 220
Author(s): Zoltán DÉNES
Published by: Szegedi Vasutas SE
Date published: 2018
Language(s) of the legend: English
Map created to be used during the middle distance final in the Junior World Orienteering Championships, held in Kecskemét, Hungary on 13 July 2018.

ATLASES

HUN-AT1  National Atlas of Hungary - Natural Environment
Number of pages: 183
Dimensions (mm): 310 x 385
Author(s): Károly Kocsis, Gábor Gercsák, Gergely Horváth, Zoltán Keresztesi and Zsombor Nemerkényi (editors)
Published by: Hungarian Academy of Sciences, Research Centre for Astronomy and Earth Sciences, Geographical Institute
Date published: Oct., 2018
Language(s) of the text: English
The volumes of the new Hungarian National Atlas are headed by an introduction to Hungary's natural environment. On the one hand, this publication gives an overview of the state of the lithosphere, hydrosphere and atmosphere, as well as of the biosphere in Hungary. On the other hand, there are synthetic chapters and topics that analyse how the natural and human environments are interconnected and how they interact (e.g. landscapes, environment protection, nature conservation, and natural hazards).
MAPS

**ISR-MP1 TOURING MAP DEAD SEA AREA & MASADA**
Type of material: Paper, chromo coated  
Scale: 1:180,000  
Dimensions (mm): 330 x 980  
Author(s): ISRAEL NATURE AND PARKS AUTHORITY  
Published by: Blustein Maps & More (Mapot Veod), Israel  
Date published: May, 2018  
Language(s) of the legend: English  
Visiting the Lowest Spot on Earth Vibrant Nature Reserves and oasis, 4WD, AWD, canyon and desert trails, UNESCO World Heritage Sites. Topografic relief, main roads, hiking color trails, useful info, bathing beaches, camping sites.

**ISR-MP3 SHOMRON TOURISM AND TRAILS MAP**
Type of material: Paper, chromo coated  
Scale: 1:85,000  
Dimensions (mm): 980 x 680  
Author(s): SHOMRON REGIONAL COUNCIL  
Published by: Blustein Maps & More (Mapot Veod), Israel  
Date published: July, 2018  
Language(s) of the legend: English  
Jewish settlements, main roads, hiking trails, jeep trails, scenic sites and list of lookouts. Topographic relief and panoramic view from Peduel. Small area hiking maps with recommanded trail.

**ISR-MP4 FRIENDLY NEGEV DESERT**
Type of material: Paper, chromo coated  
Scale: 1:250,000 / 1:67,000  
Dimensions (mm): 680 x 480  
Author(s): HAR HANEGEV REGIONAL COUNCIL / MITSPE RAMON MUNICIPALITY  
Published by: Blustein Maps & More (Mapot Veod), Israel  
Date published: Aug., 2018  
Language(s) of the legend: English  
Central Negev, relief map, streams, mountain and main attraction; the craters, The insence & spice Nabatean rout, places of interest, pictograms, and unique places. Map of the of Mitzpe Ramon town, Ramon crater, attractions, restaurants and photos.
**ISR-MP5  Old City of Jerusalem**

Type of material  Paper, chromo coated  
Scale  1:2,000  
dimensions (mm)  1000 x 1000  
Author(s)  Amiel Metav  
Published by  AD-OR, Israel  
Date published  2018  
Language(s) of the legend  English  

It is very complicated to map a dense city with many religious institutions such as the Old City of Jerusalem. The only way is to walk all the streets and get to know every church, synagogue, mosque, hotel and hostel. It is not possible to make precise mapping only from an aerial photograph and few people in the world know the Old City of Jerusalem, the holiest city in the world.

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**ISR-MP6  Raised-relief map of the holy Land**

Type of material  Mat PVC 0.3 mm sheet  
Scale  1:900,000  
dimensions (mm)  95 x 138  
Author(s)  Alan E. Garazi, Touch-Israel ®  
Published by  Touch Israel ®, Israel  
Date published  2018  
Language(s) of the legend  English  

A raised-relief map of modern Israel (north only) with special mention of the places visited by Jesus and major Christian sites.

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**ISR-MP7  ISRAEL- 100 recommended sites**

Type of material  paper  
Scale  1:250,000  
dimensions (mm)  700 (folds to 125) x 1,000 (folds to 230)  
Author(s)  MAPA - Mapping and Publishing LTD  
Published by  MAPA - Mapping and Publishing LTD  
Date published  2018  
Language(s) of the legend  English  

Israel Touring Map in English contains 100 selected tour spots, pointed out uniquely, with all roads, cities and important sites such as nature reserves, national parks, attractions for children, historical sites, sacred places and sites you can't miss- all accompanied by an index.
**ISR-MP8**  
**Tel Aviv- Tourist Map & Guide of Tel Aviv-Yafo**

Type of material: paper  
Scale: 1:13,500  
Dimensions (mm): 700 (folds to 150) x 1,000 (folds to 250)  
Author(s): MAPA - Mapping and Publishing LTD  
Published by: MAPA - Mapping and Publishing LTD  
Date published: 2018  
Language(s) of the legend: English  

This easy-to-read and colorful folding map of Tel Aviv comes along with a detailed guide providing concise information on, cultural events, neighborhood, festivals, sightseeing, and more. A QR code on the back of the map leads to an interactive map with details on sites mentioned in the paper map.

**ISR-MP9**  
**Jerusalem- Tourist Map & Guide of Jerusalem**

Type of material: paper  
Scale: 1:13,500  
Dimensions (mm): 700 (folds to 125) x 1000 (folds to 230)  
Author(s): MAPA - Mapping and Publishing LTD  
Published by: MAPA - Mapping and Publishing LTD  
Date published: 2018  
Language(s) of the legend: English  

A clear and colorful folding map of Jerusalem, the capital of Israel and its largest city: where to go, what to do, how to get there. This easy-to-read and colorful folding map comes along with a detailed guide providing concise information on historical and religious sites, as well as hotels, restaurants, cultural events, festivals, shopping, and more.

**ISR-MP11**  
**Maktesh Crater Land- Israel**

Type of material: paper  
Scale: 1:125,000  
Dimensions (mm): 594 x 420  
Author(s): Oren Raz  
Published by: Oren Raz  
Date published: 2019  
Language(s) of the legend: English & Hebrew  

When experimenting different types of hillshades for basemap purposes, this Swiss hillshade effect caught my eye. Implementing it on a DEM layer gave it a lunar look and feel. It felt right, as this map shows a part of Israels’ Negev desert, near the southern tip of the Dead Sea (visible in the map). This bare, arid area holds a unique geological land form- Makhtesh. This is a special type of crater formed by erosion by a single stream each, and is found only in Israel and Sinai. There are seven makhtesh in all. Three of these craters are clearly visible thanks to this wonderful hillshade effect. This region is easily visited by car, 2 hours from Jerusalem or Tel Aviv. Come for a visit!

**ISR-MP12**  
**Childrens World Map**

Type of material: paper coated  
Scale: 1:45,000,000  
Dimensions (mm): 1000 x 700  
Author(s): Avidgor Orgad  
Published by: Orgad Maps  
Date published: 2018  
Language(s) of the legend: English
**ATLASES**

**ISR-AT1**  Gold Atlas- Road and Street Atlas of Israel

Number of pages  408  
Dimensions (mm)  220 x 300  
Author(s) MAVA - Mapping and Publishing LTD  
Published by MAVA - Mapping and Publishing LTD  
Date published  2018  
Language(s) of the text Hebrew  
Language(s) of the text Hebrew

The 2018 edition is the 12th edition of the Gold Atlas- the most detailed and extensive atlas of Israel and its cities. For Israel's 70th year of independence, the atlas includes a guide to 100 selected top touring spots. The Gold Atlas contains an atlas of Israel's roads full mapping of 340 cities and localities. In addition to street names, culture institutes, shopping malls, parking lots, road directionality and more, the atlas contain traffic lights and their codes and gas stations by operator. Scale of north and center road maps: 1:100,000. South maps: 1:150,000. City maps scale between 1:8,000- 1:17,500 and is marked on each map by a scale bar.

**OTHER PRODUCTS**

**ISR-OP1**  "Sweet Advisor" Chocolate Street Map of Tel-Aviv-Yafo

Author(s) Strauss-Group LTD  
Material Chocolate  
Published by Strauss-group  
Date published May, 2019  
Language(s) of the product English on boxing

This limited edition (only 2,000 pieces made) was prepared by "Strauss-Group LTD", the producer of "Para (cow) Chocolate" by "Elit"- a chocolate street map of Tel Aviv marked with POI's of interest to Eurovision tourists in the city. This edition was distributed to tourists visiting the Eurovision song contest that took place in Tel Aviv-Yafo in June 2019. "Strauss" is planning similar editions for large cities in the world such as London and New York. The dark chocolate mold itself was made by "Mamtik" with special spicing by a recipe of the Israeli chef Meir Adoni, and contains Middle Eastern spices such as cardamom, baharat, black coffee and sea salt. 10% of the revenue will be donated to charity.
**JPN-MP1**  2018 Calendar The World Map : AuthaGraph  
Type of material: Paper  
Dimensions (mm): 841 mm x 594 mm  
Author(s): Tokyo Cartographic Co., Ltd.  
Published by: Tokyo Cartographic Co., Ltd.  
Date published: Dec., 2017  
Language(s) of the legend: Japanese  

AuthaGraph is a relatively new projection developed by Hajime Narakawa (Associate professor, Keio University). This projection, which won the 2016 Good Design award, allows you to visually understand the new World view that the world is connected to all directions. This map is color-coded for each country to help children learn, and it has a stylish finish.

**JPN-MP2**  2019 Calendar The World Map : Age of Discovery  
Type of material: Paper  
Dimensions (mm): 841 mm x 594 mm  
Author(s): Tokyo Cartographic Co., Ltd.  
Published by: Tokyo Cartographic Co., Ltd.  
Date published: Dec., 2018  
Language(s) of the legend: Japanese  

The theme of the age of the voyage, we made the design full of classical and romantic. We created it with this thought, “I want you to look at the night sky thinking about the stars that our ancestors looked up to know their position. The iOS app “star atlas” has also been released. You can use the QR code printed on the calendar to access the website and install it for free, so enjoy a lot of graphical constellations and maps at your hands.

**JPN-MP3**  Tamagawa Josui Water Supply of Musashino Plateau  
Type of material: Paper  
Scale: 1:50,000  
Dimensions (mm): 841 mm x 1,189 mm  
Author(s): Kei Sakamoto  
Published by: Tokyo Map Research Inc.  
Date published: 1st. June, 2018  
Language(s) of the legend: English  

This map is a representation of Tamagawa Josui water supply from Hamura weir to Yotsuya-Okido and the water diversion network that has contributed to the development of the Musashino Plateau, together with a color-shaded relief map created with multiple light sources by three primary colors (CMY) synthesis that we devised.

**JPN-MP4**  GEO ART series  
Type of material: Paper  
Scale: non scale  
Dimensions (mm): 1,030 mm x 728 mm  
Author(s): Hokkaido-Chizu Co., Ltd.  
Published by: Hokkaido-Chizu Co., Ltd.  
Date published: April, 2019  
Language(s) of the legend: Japanese  

The GEO ART series, created as a bird’s eye view poster using digital elevation data, has opened up a new world of panoramic maps with accurate topographical representation and dynamic, delicate and beautiful picture creation. As of May 2019, the lineup of the series counts 60 figures and continues to introduce typical landscapes from all over Japan. With the evolution of production technology and CG technic, Geo Art creates a unique world view that can not be obtained by photography.
**JPN-MP5 Photomap of Minami-Torishima Island**

- **Type of material**: Paper
- **Scale**: 1:3,000
- **Dimensions (mm)**: 841 mm x 1,189 mm
- **Author(s)**: Geospatial Information Authority of Japan
- **Published by**: Geospatial Information Authority of Japan
- **Date published**: May, 2019
- **Language(s) of the legend**: English

English geographical names are overlaid on an orthophoto of Minami-Torishima Island in Ogasawara Village, Tokyo. The orthophoto was created using aerial photos taken in July 2018 with a fixed-wing UAV (Unmanned Aerial Vehicle) and SFM/MVS (Structure from Motion/Multi View Stereo) software.

**JPN-MP6 History of Nishinoshima Island seen from topographical maps**

- **Type of material**: Paper
- **Scale**: TBD
- **Dimensions (mm)**: 841 mm x 594 mm
- **Author(s)**: Geospatial Information Authority of Japan
- **Published by**: Geospatial Information Authority of Japan
- **Date published**: May, 2019
- **Language(s) of the legend**: English

Topographical maps of Nishinoshima Island in Ogasawara Village, Tokyo were created in 1992, 2017 and 2019 are displayed. The growth of the island and changes of its terrain by volcanic activities can be seen from those maps.

**JPN-MP7 Volcanic Base Map Data (Base map) Sakurajima Island III**

- **Type of material**: Paper
- **Scale**: 1:10,000 (output size reduced by 70%)
- **Dimensions (mm)**: 841 mm x 594 mm
- **Author(s)**: Geospatial Information Authority of Japan
- **Published by**: Geospatial Information Authority of Japan
- **Date published**: Mar. 2018
- **Language(s) of the legend**: Japanese

Geospatial Information Authority of Japan proceeds to develop Volcanic Base Map of active volcanos for the purpose of providing basic information for formulating various types of volcanic disaster prevention plans and volcano research. This map is a part of Sakurajima Island that was developed using airborne laser survey data etc. and released in 2018.

**JPN-MP8 Volcanic Base Map Data (Color shaded map) Sakurajima Island III**

- **Type of material**: Paper
- **Scale**: 1:10,000 (output size reduced by 70%)
- **Dimensions (mm)**: 841 mm x 594 mm
- **Author(s)**: Geospatial Information Authority of Japan
- **Published by**: Geospatial Information Authority of Japan
- **Date published**: Mar. 2018
- **Language(s) of the legend**: Japanese

Geospatial Information Authority of Japan proceeds to develop Volcanic Base Map of active volcanos for the purpose of providing basic information for formulating various types of volcanic disaster prevention plans and volcano research. This map is a part of Sakurajima Island that was developed using airborne laser survey data etc. and released in 2018.

**JPN-MP9 Volcanic Base Map Data (Photo map) Sakurajima Island III**

- **Type of material**: Paper
- **Scale**: 1:10,000 (output size reduced by 70%)
- **Dimensions (mm)**: 841 mm x 594 mm
- **Author(s)**: Geospatial Information Authority of Japan
- **Published by**: Geospatial Information Authority of Japan
- **Date published**: Mar. 2018
- **Language(s) of the legend**: Japanese

Geospatial Information Authority of Japan proceeds to develop Volcanic Base Map of active volcanos for the purpose of providing basic information for formulating various types of volcanic disaster prevention plans and volcano research. This map is a part of Sakurajima Island that was developed using airborne laser survey data etc. and released in 2018.
**JPN-MP10  Volcanic Base Map Data (Color shaded map) Nishinoshima Island**

Type of material: Paper  
Scale: 1:2,500 (output size reduced by 70%)  
Dimensions (mm): 841 mm x 594 mm  
Author(s): Geospatial Information Authority of Japan  
Published by: Geospatial Information Authority of Japan  
Date published: June 2017 (Revised on 9th Nov., 2018)  
Language(s) of the legend: Japanese

Geospatial Information Authority of Japan proceeds to develop Volcanic Base Map of active volcanos for the purpose of providing basic information for formulating various types of volcanic disaster prevention plans and volcano research. This map is a Color shaded map of Nishinoshima Island that was developed using aerial photograph data etc. and released in 2017.

**JPN-MP11 1:25,000 Active Fault Map “Kumamoto”: Futagawa-Hinagu Fault Zone and its vicinity**

Type of material: Paper  
Scale: 1:25,000 (output size reduced by 70%)  
Dimensions (mm): 841 mm x 594 mm  
Author(s): Geospatial Information Authority of Japan  
Published by: Geospatial Information Authority of Japan  
Date published: Oct., 2017  
Language(s) of the legend: Japanese

Responding to the occurrence of the 2016 Kumamoto earthquakes, GSI started a survey on the Futagawa-Hinagu fault zone that caused this quake. The survey was conducted by using photographic interpretation and DEM data analysis with reference of analysis result of SAR interferometry. The result was summarized as ’1:25,000 Active Fault Map' and released in October, 2017. This map shows several major features; One is many earthquake faults appeared with the earthquake on the ground surface along the Futagawa fault zone. Another is the newly confirmed active faults in Kumamoto City and Mashiki Town by this survey.

**JPN-MP12 Distribution Map of landslide caused by the 2018 Hokkaido Eastern Iburi Earthquake**

Type of material: Paper  
Scale: 1:65,800  
Dimensions (mm): 594 mm x 841 mm  
Author(s): Geospatial Information Authority of Japan  
Published by: Geospatial Information Authority of Japan  
Date published: Sep., 2018  
Language(s) of the legend: Japanese

Distribution Map of landslide made by air-photograph-interpretation. GSI take an air-photograph on September 6,8,11 in 2018.

**JPN-MP13 Provisional Inundation Depth Map around Mabicho Kurashik in the Heavy Rain Event of July 2018**

Type of material: Paper  
Scale: 1:21,500  
Dimensions (mm): 420 mm x 297 mm  
Author(s): Geospatial Information Authority of Japan  
Published by: Geospatial Information Authority of Japan  
Date published: July, 2018  
Language(s) of the legend: Japanese

- Analyzed distribution of flood area by photograph of SNS  
- Estimated level of flood surface used DEM  
- Calculated depth and draw Depth Map

**JPN-MP14 Distribution Map of landslide caused by the Heavy Rain Event of July 2018**

Type of material: Paper  
Scale: 1:28,800  
Dimensions (mm): 420 mm x 297 mm  
Author(s): Geospatial Information Authority of Japan  
Published by: Geospatial Information Authority of Japan  
Date published: Aug., 2018  
Language(s) of the legend: Japanese

Distribution Map of landslide made by air-photograph-interpretation. GSI take an air-photograph from July 9 to 18 in 2018.
### JPN-CP1  TOKYO WAN

Type of material | Paper  
--- | ---  
Scale if relevant | 1:100,000  
Dimensions (mm) | 841 mm x 1,189 mm  
Author(s) | Japan Coast Guard  
Published by | Japan Coast Guard  
Date published | 14th. Feb., 2019  
Language(s) of the legend | English  

Tokyo Wan is one of the most congested areas of ships traffic in the world. Maritime Traffic Safety Law was revised in January, 2018, and a great change was made for areas entry notification and sea areas where vessels should listen to information provided. At that time, vessel traffic control of Tokyo Wan was integrated from old Tokyo MARTIS in Kannon-Saki and other 4 harbour traffic offices into new Tokyo MARTIS in Yokohama. Furthermore, virtual-AIS were set up to the entrance of the bay on March 1st, 2019, in order to devide traffic areas of northward ships and southward ships.

### JPN-CP2  KEIHIN KO TOKYO

Type of material | Paper  
--- | ---  
Scale if relevant | 1:15,000  
Dimensions (mm) | 841 mm x 1,189 mm  
Author(s) | Japan Coast Guard  
Published by | Japan Coast Guard  
Date published | 7th. Mar., 2019  
Language(s) of the legend | English  

Keihin Ko Tokyo is located in the most interior of Tokyo Bay. Much of shorelines are used as wharfs. Tokyo International Airport (Haneda Airport) is lower-left of the chart, and areas of vessels height base level attached to the airport are also shown. National Museum of Emerging Science and Innovation, the venue of ICC2019, is in Aomi, upper-left centre of the chart. Moreover, the olympic village, IBC/MPC, and many competition cites of Tokyo Olympics in 2020 are covered.

### JPN-CP3  NISHI-NO-SHIMA

Type of material | Paper  
--- | ---  
Scale if relevant | 1:25,000  
Dimensions (mm) | 595 mm x 841 mm  
Author(s) | Japan Coast Guard  
Published by | Japan Coast Guard  
Date published | 23nd. May, 2019  
Language(s) of the legend | English  

Nishi-no-Shima, about 1000km south of Tokyo, is one of the volcano islands located on the west side of the boundary between Philippine Sea Plate and Pacific Plate. In November 2013, JCG confirmed volcanic eruption and the new borne island at sea near the old island "Nishi-no-Shima". Thereafter, active volcanic eruptions with lava flows have grown the new island swallowing the old island. The area of the new island is 10 times or more than that of the old island. After volcanic eruption bacame calm, JHOD surveyed the sea area around Nishi-no-Shima with the airborne laser and the multi beam echo sounder.

### JPN-CP4  Lake Chart "Shinjiko"

Type of material | Paper  
--- | ---  
Scale if relevant | 1:19,200  
Dimensions (mm) | 841 mm x 594 mm  
Author(s) | Geospatial Information Authority of Japan  
Published by | Geospatial Information Authority of Japan  
Date published | 2019  
Language(s) of the legend | Japanese  

Geospatial Information Authority of Japan publishes Lake Charts for the purpose of use of lakes, development, maintenance, environmental plan, management plan or fishery. This map is Lake Chart "Shinjiko"(released in 2019).
**ATLASES**

**JPN-AT1 DOOR: Illustrated Atlas to Understand 208 Countries and Regions (in five volumes; v.1 Asia, v.2 Europe, v.3 Africa, v.4 North America, v.5 South America and Oceania)**

- Number of pages: 496 (v.1 116 pages, v.2 104 pages, v.3 120 pages, v.4 76 pages, v.5 80 pages)
- Dimensions (mm): 216 x 258
- Author(s): Kazuo Nakamura, Nobuo Tsugiyama, Yumiko Takizawa et al.
- Published by: International Cartographic Information Center Teikoku-Shoin Co., Ltd.
- Date published: 2018-2019 (v.1 and v.2 March 2018; v.3 October 2018; v.4 and v.5 March 2019)
- Language(s) of the text: Japanese

Each country or region is introduced equally on a two-page map, no matter how small or large they are. Thousands of illustrations and easily understanding maps attract children to adults. We hope readers will open their doors to the world through this illustrated atlas.

**DIGITAL PRODUCTS**

**JPN-DP1 Hokkaido-Chizu VR bird’s-eye view video images**

- Type: other-specify
- File format: MP4
- License: Hokkaido-Chizu Co., Ltd.
- Author(s): Hokkaido-Chizu Co., Ltd.
- Published by: Hokkaido-Chizu Co., Ltd.
- Date published: 12nd May, 2018
- Scale if relevant: non-scale
- Language(s) of the presentation: Japanese

It is a video content that you can experience flying like this all over Japan using VR goggles. We applied the production technology of bird’s-eye view and bird’s-eye view images we have cultivated so far to VR. This video entertains people watching at events and exhibitions in various places.

**JPN-DP2 Hokkaido Museum 4th Special Exhibition Projection Mapping**

- Type: other-specify
- File format: MP4
- License: Hokkaido-Chizu Co., Ltd.
- Author(s): Hokkaido-Chizu Co., Ltd.
- Published by: Hokkaido Museum
- Date published: June, 2018
- Scale if relevant: non-scale
- Language(s) of the presentation: Japanese

It is a projection mapping exhibited at the special exhibition held in commemoration of Takeshiro Matsuura’s 200th birthday and 150 years of Hokkaido naming. The huge 4.8 x 3.6m shadow map of the whole of Hokkaido is laid on the floor, and the footprint where Takeshiro Matsuura walks the whole area of Hokkaido is projected on the map with four projectors from directly above the map. As it is an exhibition for children, it’s an animation and plain commentary that makes it easy to understand.

**JPN-DP3 Web map in English**

- Type: Web map
- File format: Vector Tile
- Author(s): Geospatial Information Authority of Japan
- Published by: Geospatial Information Authority of Japan
- Date published: May, 2019
- Language(s) of the presentation: English (posture only)

GSI developed a web map in English which are easier to read by foreign visitors toward the Olympic and Paralympic Games that are to take place in Tokyo in 2020 and to make environmental improvements to facilitate smooth travel and comfortable stay of rapidly increasing foreign visitors. In this web map, vector tile data are used and categories of geographical names and map symbols can be displayed. Also, it has voice reading function. These functions enable foreign visitors to understand map information easily.
DIGITAL SERVICES

3D viewing system of rock collection plan in Hijimagari in the foot of a mountain of the Mt. Chokaizan

Type of service web map
Format Raster Tile (png), GeoJSON
Software platform Cesum
Author(s) Hokkaido-Chizu Co., Ltd.
License Uza Machi, Yamagata Prefecture
Published by Uza Machi, Yamagata Prefecture
Date published 1st. Dec., 2018
Scale if relevant non-scale
Language(s) of the presentation Japanese

It is a 3D viewing system that allows you to easily see how big a quarrying plan is. - This system uses "Cesium" using WebGL. - It is based on "GISMAP Texture" which expressed vegetation and land use map. - In the planning area, we create a DEM from the 1 / 1000 current map and the plan map and backfilling map of Yusa Town holding, and we apply our 10m DEM data "GISMAP Terrain" except for the planning area and express in 3D. - You can switch the current map, plan map and backfill map on the web browser, and view the map from any angle.

EDUCATIONAL PRODUCTS

JPN-EP1 Trump that understands the world,Trump that understands the Japan.
Author(s) Tokyo Cartographic Co., Ltd.
Type Card for Games
Dimensions (mm) 185 x 116
Published by Tokyo Cartographic Co., Ltd.
Date published Mar., 2019
Language(s) of the product Japanese

This is a playing card that you can play in the original games. The card contains information about geography and maps, so children can learn through play, which is perfect for children's gifts. As a benefit, this product has been enclosed with a map poster, a paper printed QR code that can access the dedicated app.

JPN-EP2 HCC Craft Version 2
Author(s) Hokkaido-Chizu Co., Ltd.
Type Paper Craft
Dimensions (mm) 210 x 297
Published by Hokkaido-Chizu Co., Ltd.
Date published Aug., 2018
Language(s) of the product Japanese

We have upgraded our simple map model work-Paper Craft "HCC Craft" as a learning material. - The mechanism to learn while playing, the answer will be displayed when you lift the paper or pull - The mechanism to learn about the area by solving quizzes and crossword puzzles - The mechanism to learn map by assembling and putting seal Because it uses familiar paper for materials, it is easy for anyone to play, using hands and head, you can learn while having fun with parents and children.

OTHER PRODUCTS

JPN-OP1 Map Data Provision Products
Author(s) Tokyo Cartographic Co., Ltd.
Material Plastic
Date published Feb., 2019
Language(s) of the product English

It's products for which Tokyo Cartographic provided map data. ・Columbia × ATMOS LAB Sawtooth Jacket Black Map Print ・BE@RBRICK atmos × UBIQ 100% & 400% BE@RBRICK TM & © 2001-2018 EDICOM TOY CORPORATION. All rights reserved. ・ASICSTIGER × atmos GEL-LYTE III WORLD MAP

JPN-OP2 Projection Mapping for Mine-Akiyoshidai Karst Plateau Geopark
Author(s) Hokkaido-Chizu Co., Ltd.
Published by Mine-Akiyoshidai Karst Plateau Geopark
Date published April, 2019
Language(s) of the product Japanese

We have developed a projection mapping system that projects map images onto 3D terrain model. It is set up at the tourist base facility "Karster" in Mine-Akiyoshidai Karst Plateau Geopark, allowing visitors to learn the features and formation of the terrain. It is a highly flexible device that can switch images and add map content.
Korea, Republic of

MAPS

**KOR-MP1** Map of Korea
Type of material Paper
Scale 1:1,200,000
Dimensions (mm) 788 x 1090
Author(s) NGII
Published by NGII
Date published May, 2018
Language(s) of the legend English

Map of Korea is covered the entire territory of Korea as projected Transverse Mercator Projection. The map published in Korean and English represented location, topography, transportation networks, administrative boundaries, and major place names. The sources of this map is the National Base Map produced by NGII.

**KOR-MP2** World Map
Type of material Paper
Scale 1:33,000,000
Dimensions (mm) 1090 x 788
Author(s) NGII
Published by NGII
Date published May, 2018
Language(s) of the legend English

World Map with 1:33,000,000 scale was made using Robinson Projection. As four different world maps produced by different projections were placed together in the margins of the map, it is possible to understand how the world according to the projection changes. This map was made mainly by using the data provided by Natural Earth and represented countries, major cities, topography, and major transportation networks. In addition to Korean and English, it is also available in French, Spanish, Portuguese, and Arabic.

**KOR-MP3** Map of Korea and Vicinity
Type of material Paper
Scale 1:5,000,000
Dimensions (mm) 1090 x 788
Author(s) NGII
Published by NGII
Date published May, 2018
Language(s) of the legend English

Map of Korea and Vicinity with a 1:5,000,000 scale covers Northeast Asia including China, Japan, Mongolia, and the eastern part of Russia centered on Korea. The projection of this map is Lambert Azimuthal Equal-Area Projection, which represents major cities, borders, terrain, major roads and railroads. In addition to Korean and English, it is also available in French, Spanish, Portuguese, and Arabic.

**KOR-MP4** Tactile map- Location of the capitals of the neighboring countries
Type of material Paper
Scale 1:12,000,000
Dimensions (mm) 570 x 310
Author(s) NGII
Published by NGII
Date published Jan., 2018
Language(s) of the legend English

This map with a 1:12,000,000 scale is a tactile map expressing Korean Peninsula and neighboring countries and their capitals. This map was produced to help the blind understand the geographical position and shape of Northeast Asia accurately. It is made in English and Korean. In case of English map, Braille on the map is also engraved in English.
KOR-MP5  Tactile map of Namsan tracking course
Type of material  Paper
Scale  -
Dimensions (mm)  364 x 257
Author(s)  NGII
Published by  NGII
Date published  April, 2019
Language(s) of the legend  Korean

This is a tactile map showing Namsan tracking course. Based on the opinion of the blind, we selected the target area, decided what to display on the map, and verified the usability several times. Another feature of this map is that it is made with different scales on both sides.

KOR-MP6  Tactile map-Maritime territory of the Korea and its end point
Type of material  Paper
Scale  1:2,400,000
Dimensions (mm)  310 x 570
Author(s)  NGII
Published by  NGII
Date published  Jan., 2018
Language(s) of the legend  English

It is a tactile map expressing the four poles of the Korean territory. This map was made to help the blind understand more precisely the shape and territory of our country. Due to the nature of braille, it is difficult to include various information on one map. In order to enhance the readability of maps of people with low vision, the color difference between the Korean peninsula and neighboring countries is clearly expressed.

ATLASES

KOR-AT1  The national Atlas of Korea for children
Number of pages  106
Dimensions (mm)  257 x 364
Author(s)  NGII
Published by  NGII
Date published  Dec., 2017
Language(s) of the text  English

This is an atlas specialized for elementary school students. We used text and images according to the age of users and organized the atlas so that the contents can be used as educational material. It is designed to help the students recognize the value and importance of our country.
**KOR-AT2  The national Atlas of Korea-Comprehensive edition**

Number of pages 171  
Dimensions (mm) 297 x 420  
Author(s) NGII  
Published by NGII  
Date published Dec., 2017  
Language(s) of the text English

This is an atlas for middle school students designed to give them the desirable perspective of the Korean territory. This atlas was made considering the linkage between the representative items of the National Atlas and the curriculum. It is also includes samples of workbook so that it can be used easily in actual education. It is produced in Korean and English.

**KOR-AT3  The Artic circle atlas-Greenland**

Number of pages 332  
Dimensions (mm) 297 x 420  
Author(s) NGII  
Published by NGII  
Date published Dec., 2018  
Language(s) of the text Korean

NGII has produced digital maps, image maps, and digital elevation models of the Arctic from 2014 to 2018 using high resolution satellite imagery. By combining the results, we have published two the arctic circle atlases, Greenland and Svalbard and others.

**DIGITAL PRODUCTS**

**KOR-DP1  Indoor system**

Type Web map  
File format 3D Format(3ds)  
Author(s) Molit, NGII  
Published by Molit, NGII  
Date published 2013~2018  
Scale if relevant LOD3  
Language(s) of the presentation Korean

NGII is constructing indoor spatial information for airports, railway stations, and large-scale public facilities and opening them through an online and desktop service called V-World. The process of producing indoor space information is as follows; facility survey, reference point survey, digitalization, symbolization, and 3D modeling in 3ds and CityGML format.

**KOR-DP2  High definition road map**

Type Digital map  
File format shp, las, jpeg  
Operating system PADMS, CAD  
Author(s) NGII  
Published by NGII  
Date published Dec., 2018  
Scale if relevant ±25cm(RMSE)  
Language(s) of the presentation Korean

Making the high-definition road network map has been started to support the commercialization of autonomous vehicles. NGII has been built a database for 1,741km road networks by 2018 and plans to build DB for 6,074km highway networks in 2019. This map has constructed using Mobile Mapping System and contains very detailed information such as node-link and lane information.
KOR-OP1 Korean Braille Map book for people with visual handicap

Author(s) NGII  
Material Paper(Book)  
Published by NGII  
Date published Jan., 2018  
Language(s) of the product English

NGII produced Korean Braille Map Book for the blind, low vision, and ordinary people by updating Korean Braille Map Book published in 2014. This map book contains diverse geographical information as well as administrative boundaries, helping people with visual impairment to understand our country. This map contains not only the national map of Korea but also maps of administrative districts.

KOR-OP2 National territorial monitoring report

Author(s) NGII  
Material Book and Sample map  
Published by NGII  
Date published April, 2019  
Language(s) of the product Korean

This is a map that evaluates social overhead capital related to living based on indicators such as childcare and health facilities or cultural facilities. Based on the selected indicators, it is possible to observe and analyze changes in the land periodically, to evaluate whether policies and plans are being achieved as intended, and to find alternatives. In other words, it can be used as a data-based decision-making tool for national policy.
NZL-MP1  North America: Portrait of a Continent
Type of material  Paper
Dimensions (mm)  1500 x 1200
Author(s)  Anton Thomas
Published by  Anton Thomas
Date published  2019
Language(s) of the legend  English

An expansive, detailed illustrated map of North America, this project took almost five years for the author to complete. Hand-drawn with colour pencil and fine-liner pen, the map is intended to capture the interest of a wide audience regardless of their individual interest in geography and cartography. By broadly examining North America’s physical, natural and human geography, the diverse range of hand-drawn content attempts to capture a vivid sense of place, from the Arctic to Central America. Whether with skylines, fauna, flora, industry, culture or landscape, the map balances these creative illustrations with a steadfast commitment to geographic accuracy.

NZL-MP2  Westland Tai Poutini National Park
Type of material  Paper
Dimensions (mm)  1750 x 690
Author(s)  Roger Smith
Published by  Geographx
Date published  2018
Language(s) of the legend  English

An oblique, perspective view from out over the Tasman Sea looking southeast over the West Coast glaciers and high peaks of the New Zealand Southern Alps. The purpose of the map is to showcase an outstanding natural landscape and to inform viewers about Westland Tai Poutini National Park, its diverse range of landforms and its geomorphology. The target market is visitors to the area. Both the textured basemap and the terrain model it is draped over were developed inhouse.

NZL-MP3  What Lies Beneath – New Zealand’s Coastal Seafloor Revealed
Type of material  Paper
Scale  all posters are at different scales
Dimensions (mm)  3 @ 550mm x 430mm landscape x 1 @ 640mm x 600mm landscape
Author(s)  Kevin Mackay, Helen Neil, Erica Mackay, S. Wilcox (NIWA) Roger Smith (Geographx)
Published by  NIWA (National Institute of Water and Atmosphere)
Date published  2018
Language(s) of the legend  English

A selection of four map posters visualising high resolution bathymetric data collected around the New Zealand coastline using state of the art technologies. Produced to inform and help decision makers better understand the coastal environment and improve the quality of resource and coastal management planning. Also to facilitate the mapping of habitats and coastal eco-systems, to illustrate the potential for more detailed coastal charting, and to engage with the New Zealand public.

NZL-MP4  Kahurangi
Type of material  Paper
Scale  1:150,000
Dimensions (mm)  840 x 600
Author(s)  Geoff Aitken
Published by  NewTopo NZ Ltd
Date published  Oct., 2017
Language(s) of the legend  English

Kahurangi National Park is a large, complex geographical area which provides a very wide variety of tramping (hiking) experiences. The map is designed as a recreation planning wall map showing information useful to tourists, day walkers and trampers on a simplified topographic base. The author has a selection of larger scale maps with more focused coverage available for use in the field. Map detail was derived from LINZ’s NZTopo database and updated using publicly available information/
Māori place names often carry a wealth of historical, cultural and geographic meaning that English names may otherwise conceal. The map is designed to help improve geographic literacy and support wider use of Te Reo (the Māori language) in New Zealand. Several months of research went into ensuring that the spelling and correctness of names was as complete as possible.

A visitor information map showing walking tracks, visitor facilities and attractions. It includes an elevation profile of the Waikaremoana Great Walk, details of available accommodation along the track, and it identifies areas where hunting is prohibited and areas that are privately owned. A feature of the map is the widespread use of indigenous Māori place names, including some that are not officially gazetted. This followed a process of collaboration with the local iwi, Ngāi Tuhoe, to confirm the appropriate place names.
### Maps

#### NOR-MP1 Fimbulheimen in Dronning Maud Land, Antarctica - Satellite map
- **Type of material**: Paper
- **Scale**: 1:250,000
- **Dimensions (mm)**: 2600 x 870
- **Author(s)**: Anders Skoglund
- **Published by**: Norwegian Polar Institute
- **Date published**: Oct., 2017
- **Language(s) of the legend**: English

This satellite map cover an area called Fimbulheimen in Queen Maud Land in Antarctica. It consists of an elongated mountain area of approx. 600 km. Much of the Norwegian activity in Antarctica is concentrated in this area. As the starting point for the map, Landsat 8 images were used. Norwegian place names are applied. A digital version of the map in full resolution can be downloaded from the Polar Institute's website, https://www.npolar.no/produkt/fimbulheimen-satellitt/

#### NOR-MP2 Karlsøy tourist map (eastern part of map)
- **Type of material**: Paper
- **Scale**: 1:50,000
- **Dimensions (mm)**: 700 x 1000
- **Author(s)**: Tore Tønning, Mesterkart
- **Published by**: Ishavskysten Friluftsråd, Tromsø
- **Date published**: Nov., 2018
- **Language(s) of the legend**: Norwegian & English

The map Karlsøy was released in November 2018. The map has two-sided printing on moisture-resistant paper. The map basis is N50 Map Data from the Norwegian Mapping Authority. The themes are for outdoor activities, hiking and tourism. The software is ArcGIS Desktop with Spatial Analyst.

#### NOR-MP3 Romsdalstien hiking map
- **Type of material**: Paper
- **Scale**: 1:50,000
- **Dimensions (mm)**: 838 x 594
- **Author(s)**: eMap as
- **Published by**: Molde and Romsdal Turistforening
- **Date published**: Feb., 2019
- **Language(s) of the legend**: Norwegian

The map is produced by using high resolution laser data in combination with modern relief techniques and cartography inspired by Swiss mountain cartography. The area was chosen as it includes alpine mountains and is almost entirely covered with high resolution laser data. The map is produced by using Adobe Illustrator, Photoshop and InDesign.

#### NOR-MP4 Bedrock map of Vinje municipality
- **Type of material**: Paper
- **Scale**: 1:100,000
- **Dimensions (mm)**: 870 x 780
- **Author(s)**: The Geological Survey of Norway (NGU)
- **Published by**: The Geological Survey of Norway
- **Date published**: 2018
- **Language(s) of the legend**: Norwegian

Vinje municipality is the first municipality in Norway that is completely covered by detailed printed geological maps (10 maps) from The Geological Survey of Norway (NGU) in scale 1:50,000. This geological map in scale 1: 100,000 is compiled by the maps in scale 1:50,000. Vinje municipality in southern Norway has an area of 3106 km2. From the first geological survey started around 1900 until today, at least 20 years of total work has been carried out, of which 1500 days in the field, to bring out this map.
The map sheet Asker (1814-1) is one of 727 topographic map sheets included in the paper map series National Emergency Map Norway 1:50,000 / M711. Each year, the Norwegian Mapping Authority updates 60 maps on behalf of the Armed Forces and the Police. The map series was established in 1952, and has over the years been changed in appearance and content. At the year's production, a number of changes have been made. Most noticeable is the outgrowing transparent map content, outside the map frame. There is a new vignette map, Elevation Guide, describing the heights within the map sheet. Cartographic changes have been made on some topics and minor changes in the frame information. The contents of the map is obtained from N50 Map Data Base. Map data and the sea information are obtained from the main chart series Sea, and ENC (Electronic sea charts).

Mosaic and processed Sentinel 2 images over Svalbard in winter suit and sea ice, with selected place names and overview maps.

Orienteering map for ultra long orienteering distances

Orienteering map for most normal orienteering distances
**NOR-MP9  Tusenfryd Orienteering map (sprint)**

- **Type of material**: Paper
- **Scale**: 1:4,000
- **Dimensions (mm)**: 210 x 260
- **Author(s)**: Ås sport club
- **Published by**: Ås sport club
- **Date published**: Oct., 2017
- **Language(s) of the legend**: Norwegian
- **Orienteering map for sprint orienteering distances**

**CHARTS**

**NOR-CP1  Ulvesundet med Måløy hamn, Chart nr 490, Harbour Chart Series**

- **Type of material**: Paper, Print on Demand
- **Scale if relevant**: 1:10,000
- **Dimensions (mm)**: 610.9 / 612.9 x 1068
- **Author(s)**: Kartverket (The Norwegian Hydrographic Service)
- **Published by**: Kartverket (The Norwegian Hydrographic Service)
- **Date published**: June, 2018
- **Language(s) of the legend**: English

Chart 490 "Ulvesundet med Måløy havn" is a navigation chart in NHS Harbour Chart Series. It is meant for navigation and contain detailed information of depths and harbour conditions. Most of the area is resurveyed lately with multibeam echosounder. The Chart was issued as a New Edition June 2018.

**ATLASSES**

**NOR-AT1  Svalbard from above**

- **Number of pages**: 216
- **Dimensions (mm)**: 270 x 270
- **Author(s)**: Norwegian Polar Institute
- **Published by**: Norwegian Polar Institute
- **Date published**: Dec., 2017
- **Language(s) of the text**: Norwegian and English

Join us on a flight over Svalbard. Svalbard from the air is a photographic journey with a bird’s eye view over the archipelago from Bjørnøya in the south, northwards above Spitsbergen, Nordaustlandet and the other islands. Recent aerial photographs are supplemented by historical retrospective, and you will experience through text and images topics such as geology, glaciers, cultural heritage and wildlife. Have a nice journey!
**MAPS**

**POL-MP1**  Polish Topographic Map, sheet Krościenko n. Dunajcem (M-34-089-D-b-3)

- **Type of material**: paper
- **Scale**: 1:10 000
- **Dimensions (mm)**: 750 x 591
- **Author(s)**: OPGK, sp. z.o.o. Olsztyn, Poland
- **Published by**: Marshal’s Office Lesser Poland Voivodeship, Poland
- **Date published**: Oct., 2018
- **Language(s) of the legend**: Polish, English

The main data source for the creation of civil topographic map of scale 1 : 10 000 is the Database of Topographic Objects (BDOT10k) which level of detail is corresponding to these maps. The other data source is the State Register of Geographic Names (PRNG) and the Digital Terrain Model (DTM), acquired with the use of the laser scanning technology, of the accuracy of at least 4 points per 1 sq.m. Significant changes in the current maps include the unification of editorial principles and cartographic symbols along with classification criteria changes for some of the features (e.g. Roads).

**POL-MP2**  Polish Topographic Map, sheet Grodzisk Mazowiecki - wsch. (N-34-138-C-b-3)

- **Type of material**: paper
- **Scale**: 1:10 000
- **Dimensions (mm)**: 750 x 591
- **Author(s)**: Warszawskie Przedsiębiorstwo Geodezyjne S.A.
- **Published by**: Marshal’s Office Mazovia Voivodeship, Poland
- **Date published**: Oct., 2017
- **Language(s) of the legend**: Polish, English

The main data source for the creation of civil topographic map of scale 1 : 10 000 is the Database of Topographic Objects (BDOT10k) which level of detail is corresponding to these maps. The other data source is the State Register of Geographic Names (PRNG) and the Digital Terrain Model (DTM), acquired with the use of the laser scanning technology, of the accuracy of at least 4 points per 1 sq.m. Significant changes in the current maps include the unification of editorial principles and cartographic symbols along with classification criteria changes for some of the features (e.g. Roads).

**POL-MP3**  Thailand: map&guide

- **Type of material**: plastic
- **Scale**: 1:1,650,000
- **Dimensions (mm)**: 1000 x 480
- **Author(s)**: Express Map Editorial Team
- **Published by**: Express Map
- **Date published**: Oct., 2017
- **Language(s) of the legend**: English, German, French, Polish

Thailand: map & guide is a unique combination of a map and guide. On the map, apart from the standard tourist content, the most important attractions are marked, whose descriptions are on the other side of the sheet. The whole composition consists of several maps: the main map is Thailand (1: 1,650,000) which is supported by: Phuket (1: 700,000) and Ko Samui (1: 260,000), as well as Bangkok (1: 21,000) and Chiang Mai (1:27,000).
**POL-MP4 Australia**

Type of material: plastic  
Scale: 1:4,250,000  
Dimensions (mm): 1000 x 480  
Author(s): Express Map Editorial Team  
Published by: Express Map  
Date published: Jan., 2019  
Language(s) of the legend: English, German, French, Polish  

A double-sided laminated car and tourist map of Australia. The content of the map is twofold. It depicts tourist attractions, including UNESCO sites, national parks, protected areas, diving sites. The map shows also current condition of roads, their detailed categorization and numbering, distances in kilometers. The relief is shown with hill shade.

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**POL-MP5 Tatry Polskie**

Type of material: plastic  
Scale: 1:27,000  
Dimensions (mm): 1000 x 480  
Author(s): Express Map Editorial Team  
Published by: Express Map  
Date published: Jan., 2019  
Language(s) of the legend: English, German, French, Polish  

Double-sided laminated, comfortable to fold, tourist map of the Tatra Mountains (Poland). The publication was developed in cooperation with regionalists and is compatible with GPS (geographical coordinates in the WGS-84 system). The contents of the map consist of: topography, hiking trails and crossing times, ski slopes, mountain and youth hostels, campsites, parking lots, bus stops and so on. The elevation is depicted with contours and hill shade. In addition, there are insets with car map of the area (1: 250,000), the plan of Zakopane (1: 15,000) and a scheme of tourist routes (1: 81,000).

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**ATLASES**

**POL-AT1 Atlas of Poland’s Political Geography**

Number of pages: 248  
Dimensions (mm): 210 x 297  
Author(s): M. Solarz (ed.)  
Published by: Trzecia Strona, Poland  
Date published: Nov., 2018  
Language(s) of the text: Polish, English  

The Atlas of Poland’s Political Geography is a rich and versatile source of knowledge about modern and historical Poland. Half a thousand colorful maps build a comprehensive picture of the state and society on the 100 anniversary of independence. Atlas addresses topics related to internal and foreign policy, history, society, culture and economy. Thanks to the simultaneous Polish-English edition, Atlas also brings Poland closer to foreigners.
The atlas presents the development of Poland in relation to regional and local conditions, as well as the situation within the European Union and in the World. Economic, social and environmental topics and the territorial dimension presented in the publication are support for spatial analyses. The atlas consists 175 charts/graphs and 281 maps: maps of Poland (at the scale of 1:3,800,000 or 1:9,000,000), maps of Europe/EU (1:21,500,000), and world maps (1:200,000,000). Maps that are made by using quantitative cartographic presentation methods predominate in the atlas – choropleth and diagram methods are used most frequently (they are observed on 263 maps).

### EDUCATIONAL PRODUCTS

**POL-EP1 Statistical maps. Data elaboration and presentation**

- **Author(s)**: Marek Pieniążek, Maciej Zych
- **Type**: book
- **Dimensions (mm)**: 180 x 250
- **Published by**: Statistics Poland
- **Date published**: Oct., 2017
- **Language(s) of the product**: Polish

The handbook has been prepared for statisticians who perform cartographic visualization of data. Main objective of it was to present non-cartographers with the standards of cartographic presentation of statistical data. This publication improved knowledge on how to use statistical maps, what they can present and how to correctly elaborate such maps. It also gave theoretical background for correct preparation of maps for the purpose of statistical publications. The handbook is divided into seven chapters (with 190 illustrations, mainly maps), related to elements of statistical maps, base maps, GIS applications and elements of spatial analysis, methods of cartographic data presentation.

**POL-EP2 Atlas Vilnius – a Old Town plan for blind and visually impaired**

- **Author(s)**: J. Mendruń (ed), M. Olczyk (ed), M. Groszkowski, D. Koprowska, J. Koprowska, R. Nowacka-Pyrlik, M. Pryszcz, R. Sitarczuk
- **Type**: Convex screen print technology uses transparent UV coating
- **Dimensions (mm)**: 297 x 420
- **Published by**: Fundacja Polskich Niewidomych i Słabowidzących "Trakt" (The Foundation of the Polish Blind and Visually Impaired "Trakt")
- **Date published**: June, 2018
- **Language(s) of the product**: Polish

The Atlas includes 12 tactile maps of Vilnius. The first board shows a map of the whole city and small map with the location of Vilnius in Lithuania. The Atlas brings tourists closer to the most important places associated with cultural heritage while showing the history of Vilnius. The maps are simultaneously convex and coloured with enlarged lettering in high-contrast. Atlas has been developed enriched with historical and touristic description and released in book form in large print for the visually impaired. Publisher also includes a booklet with explanations in Braille ‘abbreviations’. For more, see – www.tyflomapy.pl.
The Atlas includes 13 tactile historical maps of Poland. The maps are simultaneously convex and coloured with enlarged lettering in high-contrast and are coherent graphically and substantively with the “Historical Atlas of Poland” awarded in 2017 (on the 28th ICC in Washington). Each topic has been developed enriched with historical description and released in book form in large print for the visually impaired. Publisher also includes a booklet with explanations in Braille ‘abbreviations’ have been used on the typhlomaps. For more, see – www.tyflomapy.pl.
Slovakia

MAPS

**SVK-MP1 Maľovaná cyklomapa Liptov deťom**
Type of material: paper  
Scale: hand-painted map  
Published by: CBS spol, s.r.o.  
Date published: 2018  
Language(s) of the legend: slovak  
The hand-painted map designed for children, shows everything that is beautiful and interesting in the Liptov region.

**SVK-MP2 TM 114 - Levočské vrchy**
Type of material: paper  
Scale: 1:50,000  
Dimensions (mm): 194 x 128  
Published by: CBS spol, s.r.o.  
Date published: 2018  
Language(s) of the legend: slovak  
The favorite tourist map from traditional Slovak publisher VKÚ Harmanec. The map has undergone a complete detailed update of each site by local investigation personally by VKÚ Harmanec, s.r.o. The hiking trails and the time data were updated in cooperation with the Slovak Tourist Club and the cycling trails were updated in cooperation with the Slovak Cycle Club. The map includes updated trails for winter tourist and important landmarks.

DIGITAL PRODUCTS

**SVK-DP1 Base map ZBGIS**
Type: app/web map  
File format: JPG image tile, transparency PNG image file  
Operating system: Windows Server 2012 R2  
License: Geodesy, Cartography and Cadastre Authority of Slovak Republic  
Author(s): Geodesy, Cartography and Cadastre Authority of Slovak Republic  
Published by: Geodesy, Cartography and Cadastre Authority of Slovak Republic  
Date published: 2017, last update at December 2018  
Language(s) of the presentation: english/slovak  
ZBGIS Map client has been developed to display and work with ZBGIS data. The application also allows to work with external data in the form of WMS, WMTS services and vector data in multiple formats. In addition to the usual map application functionalities, the application allows identification, advanced search, measurement, printing and order data, services and geodetic data directly from the application. Application is available on the page https://zbgis.skgeodesy.sk/mkzbgis/en/, help on the page https://zbgis.skgeodesy.sk/mkzbgis/Help/en/.
Slovenia

MAPS

SVN-MP1 Vojaška topografska karta Republike Slovenije 1 : 50 000, list Izola Military topographic map of the Republic of Slovenia 1 : 50,000, sheet Izola

Type of material: paper
Scale: 1:50,000
Dimensions (mm): 750 x 560
Author(s): Geodetic Institute of Slovenia, Kartografija d.o.o., DFG Consulting d.o.o.
Published by: Republic of Slovenia, the Ministry of Defence
Date published: 2018
Language(s) of the legend: Slovenian, English

New (bi-margin) design of the national military topographic map.

SVN-MP2 Vojaška topografska karta Republike Slovenije 1 : 50 000, list Krško Military topographic map of the Republic of Slovenia 1 : 50,000, sheet Krško

Type of material: paper
Scale: 1:50,000
Dimensions (mm): 750 x 560
Author(s): Geodetic Institute of Slovenia, Kartografija d.o.o., DFG Consulting d.o.o.
Published by: Republic of Slovenia, the Ministry of Defence
Date published: 2018
Language(s) of the legend: Slovenian, English

New (bi-margin) design of the national military topographic map.

SVN-MP3 Ortofoto karta Osrednjega vadišča Slovenske vojske Postojna Orthophoto map of the Slovenian Armed Forces Main Training Area Postojna

Type of material: paper
Scale: 1:10,000
Dimensions (mm): 980 x 670
Author(s): Geodetic Institute of Slovenia
Published by: Republic of Slovenia, the Ministry of Defence
Date published: 2017
Language(s) of the legend: Slovenian, English

SVN-MP4 Pregledna karta Republike Slovenije 1 : 180 000 General map of the Republic of Slovenia 1 : 180,000

Type of material: paper
Scale: 1:180,000
Dimensions (mm): 1590 x 1100
Author(s): Geodetic Institute of Slovenia
Published by: Geodetic Institute of Slovenia
Date published: 2019
Language(s) of the legend: Slovenian, English

SVN-MP5 Panoramska karta severnih pristopov na Triglav Panoramic map of the northern approaches to Triglav

Type of material: paper
Dimensions (mm): 480 x 347
Author(s): Primož Kete (Geodetic Institute of Slovenia)
Published by: Geodetic Institute of Slovenia
Date published: 2018
Language(s) of the legend: Slovenian, English
**SVN-MP6 Jezero**
- **Type of material**: Paper: offset print on the pretex paper
- **Scale**: 1:10,000
- **Dimensions (mm)**: 234 x 197
- **Author(s)**: Ivan Nagy, Mile Stevanović
- **Published by**: Lesovik, Ivan Nagy s.p.
- **Date published**: Feb., 2018
- **Language(s) of the legend**: Slovene

**SVN-MP7 Prelože**
- **Type of material**: Paper: offset print on the pretex paper
- **Scale**: 1:10,000
- **Dimensions (mm)**: 244 x 300
- **Author(s)**: Zdenek Sokolar, Mile Stevanović, Ivan Nagy
- **Published by**: Lesovik, Ivan Nagy s.p.
- **Date published**: Sep., 2017
- **Language(s) of the legend**: Slovene

**SVN-MP8 Hleviška planina**
- **Type of material**: Paper: digital laser print
- **Scale**: 1:10,000 / 1:2,000
- **Dimensions (mm)**: 310 x 277
- **Author(s)**: Matej Pirlo, Petr Matula, Jan Drbal
- **Published by**: OK Azimut
- **Date published**: Nov., 2018
- **Language(s) of the legend**: Slovene

**SVN-MP9 Blegoš - Črni vrh**
- **Type of material**: Paper: offset print on the pretex paper
- **Scale**: 1:10,000
- **Dimensions (mm)**: 427 x 277
- **Author(s)**: Daniel Lebar, Mile Stevanović
- **Published by**: OK Azimut
- **Date published**: May, 2018
- **Language(s) of the legend**: Slovene
The Council for Geoscience (CGS), as one of the National Science Councils of South Africa, published its first 1:1,000,000 Geological map in 1925 and subsequent releases include the 1955, 1970, 1984 and 1997 versions. The last edition appeared 22 years ago hence the decision to release an updated map. Geological information gathered during the 1:250,000-scale mapping programmes was audited for their suitability to be used in the compilation of the 2018 Edition. The old South African stratigraphic age nomenclature was also replaced with the new International Union of Geological Sciences (IUGS) classification names for Eons, Erathems and Periods.
### Spain

#### MAPS

<table>
<thead>
<tr>
<th>Map ID</th>
<th>Title</th>
<th>Scale</th>
<th>Dimensions (mm)</th>
<th>Author(s)</th>
<th>Published by</th>
<th>Date published</th>
<th>Language(s) of the legend</th>
<th>Military Topographic Raster Map description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESP-MP1</td>
<td>M682 Series 11-6 EZCARAY Edition 1</td>
<td>1:100,000</td>
<td>780 x 530</td>
<td>Spanish Army Geographic Centre. Centro Geográfico del Ejército. CEGET</td>
<td>Spanish Army Geographic Centre. Centro Geográfico del Ejército. CEGET</td>
<td>Dec., 2018</td>
<td>Spanish-English</td>
<td>1:100,000 scale edited from Spanish Harmonized Vector Database BTN100 (IGN-CEGET). The altimetric representation is a contour every 40 m. It's made according to M682 Series specification and Serie C symbology.</td>
</tr>
<tr>
<td>ESP-MP2</td>
<td>M7815 Series 29-12 HUESCA Edition 1</td>
<td>1:50,000</td>
<td>780 x 530</td>
<td>Spanish Army Geographic Centre. Centro Geográfico del Ejército. CEGET</td>
<td>Spanish Army Geographic Centre. Centro Geográfico del Ejército. CEGET</td>
<td>Aug., 2018</td>
<td>Spanish-English</td>
<td>1:50,000 scale edited from vector data. Vector data derived from stereophotogrammetric blocks. The altimetric representation is a contour every 20 m. It's made according to M7815 Series specification and Serie L symbology.</td>
</tr>
<tr>
<td>ESP-MP4</td>
<td>Low Flying Chart (LFC) Sheet 1</td>
<td>1:500,000</td>
<td>1020 x 720</td>
<td>Cartographic and Photographic Center of the Spanish Air Force. Centro Cartográfico y Fotográfico del Ejército del Aire (CECAF)</td>
<td>Cartographic and Photographic Center of the Spanish Air Force. Centro Cartográfico y Fotográfico del Ejército del Aire (CECAF)</td>
<td>Feb., 2019</td>
<td>Spanish / English</td>
<td>LFC is an aeronautical chart used for mission planning. The scale, the cartographic projection (Lambert Conform Conic) and the published geographical features are the required for a visual flight. Aeronautical information comes from both, AIP-Spain and CECAF. Altimetry has been generated by CECAF while planimetry and bathymetric come from different organisms like IGN, CEGET, IHM and CECAF. Elements that can be dangerous for low altitude navigation, obstacles higher than 62 meters high (200 feet), wind farms or power lines are highlighted. In the center of each grid of the map, there is a figure called Maximum Elevation Figure (MEF) indicating elevation in hundreds of feet. Above this altitude, the flight is considered safe from the point of view of obstacle clearance. There are nine sheets of LFC in paper format. The coverage of Sheet 1 is (43º30'N, 10º00'W) – (41º00'N, 04º30'W)</td>
</tr>
</tbody>
</table>
ESP-MP5  Low Flying Chart (LFC) Sheet 9
Type of material  Paper
Scale  1:500,000
Dimensions (mm)  1020 x 720
Author(s)  Cartographic and Photographic Center of the Spanish Air Force. Centro Cartográfico y Fotográfico del Ejercito del Aire (CECAF)
Published by  Cartographic and Photographic Center of the Spanish Air Force. Centro Cartográfico y Fotográfico del Ejercito del Aire (CECAF)
Date published  Feb., 2019
Language(s) of the legend  Spanish / English
LFC is an aeronautical chart used for mission planning. The scale, the cartographic projection (Lambert Conformal Conic) and the published geographical features are the required for a visual flight. Aeronautical information comes from both, AIP-Spain and CECAF. Altimetry has been generated by CECAF while planimetry and bathymetric come from different organisms like IGN, CEGET, IHM and CECAF. Elements that can be dangerous for low altitude navigation, obstacles higher than 62 meters high (200 feet), wind farms or power lines are highlighted. In the center of each grid of the map, there is a figure called Maximum Elevation Figure (MEF) indicating elevation in hundreds of feet. Above this altitude, the flight is considered safe from the point of view of obstacle clearance. There are nine sheets of LFC in paper format. The coverage of Sheet 9 is (30º00'N, 18º00'W) – (27º00'N, 13º30'W)

ESP-MP6  Low Flying Chart (LFC) Sheet 6
Type of material  Paper
Scale  1:500,000
Dimensions (mm)  1020 x 720
Author(s)  Cartographic and Photographic Center of the Spanish Air Force. Centro Cartográfico y Fotográfico del Ejercito del Aire (CECAF)
Published by  Cartographic and Photographic Center of the Spanish Air Force. Centro Cartográfico y Fotográfico del Ejercito del Aire (CECAF)
Date published  Feb., 2019
Language(s) of the legend  Spanish / English
LFC is an aeronautical chart used for mission planning. The scale, the cartographic projection (Lambert Conformal Conic) and the published geographical features are the required for a visual flight. Aeronautical information comes from both, AIP-Spain and CECAF. Altimetry has been generated by CECAF while planimetry and bathymetric come from different organisms like IGN, CEGET, IHM and CECAF. Elements that can be dangerous for low altitude navigation, obstacles higher than 62 meters high (200 feet), wind farms or power lines are highlighted. In the center of each grid of the map, there is a figure called Maximum Elevation Figure (MEF) indicating elevation in hundreds of feet. Above this altitude, the flight is considered safe from the point of view of obstacle clearance. There are nine sheets of LFC in paper format. The coverage of Sheet 6 is (41º00'N, 00º30'W) – (38º00'N, 04º30'E)

ESP-MP7 - MP8  Geological Map of Ordesa and Monte Perdido National Park
Type of material  Stone paper
Scale  1:25,000
Dimensions (mm)  1100 x 1000
Author(s)  Robador Moreno, A.; Samsó Escolà, J.M.; Belmonte Rivas, A.; Carcavilla Urquí, L.
Published by  IGME- Geoparque Sobrarbe- Pirineos
Date published  Dec., 2018
Language(s) of the legend  Spanish
This map is the first representative of the new GEONATUR series of geological maps of National Parks and other protected natural environments. These maps aimed to be a tool for disseminating the geological values of the Parks. With this objective in mind they incude, in addition of the detailed geological map, a complete information of the processes and geological representative features explained for a non-specified public in its back.

ESP-MP9  Way of Saint James on Iberian Peninsula
Type of material  Paper
Scale  1:1,250,000
Dimensions (mm)  1350 x 920
Author(s)  National Geographic Institute of Spain-Instituto Geográfico Nacional España
Published by  National Center of Geographic Information of Spain-Centro Nacional de Información Geográfica España
Date published  2019-02-21 00:00:00
Language(s) of the legend  Spanish
ESP-MP10  Geological Map of Spain. 1:50,000/1:25,000 MAGNA Series. Sheet: 328 Artesa de Segre

Type of material  Paper
Scale  1:50,000
Dimensions (mm)  950 x 700
Author(s) Saula i Briasó, E.; Samsó Escolá J.M.; Escuer Solé, J.; Casanovas Petanas, J.
Published by IGME
Date published Nov., 2017
Language(s) of the legend Spanish

The National Geological Map (MAGNA), made by the Geological and Mining Institute of Spain is distributed in sheets 1: 50,000 (1: 25,000 in the particular cases of the Canary Islands, Ibiza-Formentera, Menorca, Ceuta and Melilla). The Geological Map shows the nature of the materials (rocks and sediments) that appear on the earth’s surface, their spatial distribution and the geometric relationships between the different cartographic units.

ESP-MP11  Geomorphological Map of Spain. 1:50,000/1:25,000. MAGNA Series. Sheet: 328 Artesa de Segre

Type of material  Paper
Scale  1:50,000
Dimensions (mm)  900 x 700
Author(s) Escuer Solé, J.; Casanovas Petanas, J.
Published by IGME
Language(s) of the legend Spanish

The geomorphological map is a cartography based on the genetic interpretation of the recent landscape and oriented to the planning of the territory and environmental management. This map provides structured and accurate information on surface deposits and landforms.

CHARTS

ESP-CP1  Isla Decepción. Bahía Fumarolas (Base Gabriel de Castilla) y Fuelles de Neptuno. 7003

Type of material  Paper
Scale if relevant 1: 10,000 y 1:12,500
Dimensions (mm)  700 x 1050
Author(s) Spanish Hydrographic Office (Instituto Hidrográfico de la Marina (IHM))
Published by Spanish Hydrographic Office (Instituto Hidrográfico de la Marina (IHM))
Date published I Edition November 2018
Language(s) of the legend Spanish

ESP-CP2  Puerto de Cádiz. 4430

Type of material  Paper
Scale if relevant 1: 7,500 & 1:12,500
Dimensions (mm)  1086.6 x 799
Author(s) Spanish Hydrographic Office (Instituto Hidrográfico de la Marina (IHM))
Published by Spanish Hydrographic Office (Instituto Hidrográfico de la Marina (IHM))
Date published Dec., 2017
Language(s) of the legend Spanish
ESP-CP3  Desembocadura del río Guadiana y ría de Isla Cristina. 440A
Type of material  Paper
Scale if relevant  1:1,000,000
Dimensions (mm)  651 x 1054.8
Author(s)  Spanish Hydrographic Office (Instituto Hidrográfico de la Marina (IHM))
Published by  Spanish Hydrographic Office (Instituto Hidrográfico de la Marina (IHM))
Date published  II Edition September 2017
Language(s) of the legend  Spanish

ESP-CP4  Río Guadalquivir. De la Huerta del Rincón al puente de San Telmo. 4425
Type of material  Paper
Scale if relevant  1: 7,500 & 1:12,500
Dimensions (mm)  900 x 560
Author(s)  Spanish Hydrographic Office (Instituto Hidrográfico de la Marina (IHM))
Published by  Spanish Hydrographic Office (Instituto Hidrográfico de la Marina (IHM))
Date published  II Edition December 2017
Language(s) of the legend  Spanish

ESP-CP5  Carta del Globo Terráqueo
Type of material  Paper
Scale if relevant  1:5,000
Dimensions (mm)  1083 x 807
Author(s)  Spanish Hydrographic Office (Instituto Hidrográfico de la Marina (IHM))
Published by  Spanish Hydrographic Office (Instituto Hidrográfico de la Marina (IHM))
Date published  1857 Edition ( Published again in 2018)
Language(s) of the legend  Spanish

ESP-CP6  De Les Cases de Alcanar a Segur de Calafell. D48N
Type of material  Paper (14 sheets in paper book)
Scale if relevant  1:10,000
Dimensions (mm)  249 x 348
Author(s)  Spanish Hydrographic Office (Instituto Hidrográfico de la Marina (IHM))
Published by  Spanish Hydrographic Office (Instituto Hidrográfico de la Marina (IHM))
Date published  I Edition April 2018
Language(s) of the legend  Spanish

ESP-CP7  Carta de SETO-UCHI o Mar interior del JAPÓN
Type of material  Paper
Dimensions (mm)  1033 x 711
Author(s)  Spanish Hydrographic Office (Instituto Hidrográfico de la Marina (IHM))
Published by  Spanish Hydrographic Office (Instituto Hidrográfico de la Marina (IHM))
Date published  Especial Edition 2019 (First edition 1871)
Language(s) of the legend  Spanish

DIGITAL SERVICES

LiDAR Map of Spain
Type of service  Web Map service (WMS) and Web Map Tile Service (WMTS)
Format  WMTS
Author(s)  Instituto Geográfico Nacional
License  CCBY-4.0 scne.es
Published by  Centro Nacional de Información Geográfica
Date published  May, 2019
Scale if relevant  2.5 m
Language(s) of the presentation  English
Web Map Tiled Service of LiDAR coverage all over Spain. URL: http://wmts-mapa-lidar.idee.es/lidar
### ESI-MP1 National Topographic Map of Apiés (Sheet_248-III)

- **Type of material:** Paper
- **Scale:** 1:25,000
- **Dimensions (mm):** 766 x 520
- **Author(s):** National Geographic Institute of Spain-Instituto Geográfico Nacional España
- **Published by:** National Center of Geographic Information of Spain-Centro Nacional de Información Geográfica España
- **Date published:** 2018
- **Language(s) of the legend:** Spanish

### ESI-MP2 National Topographic Map of Valencia (Special Sheet)

- **Type of material:** Paper
- **Scale:** 1:25,000
- **Dimensions (mm):** 1000 x 1250
- **Author(s):** National Geographic Institute of Spain-Instituto Geográfico Nacional España
- **Published by:** National Center of Geographic Information of Spain-Centro Nacional de Información Geográfica España
- **Date published:** 2018
- **Language(s) of the legend:** Spanish

### ESI-MP3 National Topographic Map of Málaga (Sheet_1053-III)

- **Type of material:** Paper
- **Scale:** 1:25,000
- **Dimensions (mm):** 766 x 520
- **Author(s):** National Geographic Institute of Spain-Instituto Geográfico Nacional España
- **Published by:** National Center of Geographic Information of Spain-Centro Nacional de Información Geográfica España
- **Date published:** 2018
- **Language(s) of the legend:** Spanish

### ESI-MP4 National Topographic Map of Cartagena (Sheet_977)

- **Type of material:** Paper
- **Scale:** 1:50,000
- **Dimensions (mm):** 766 x 520
- **Author(s):** National Geographic Institute of Spain-Instituto Geográfico Nacional España
- **Published by:** National Center of Geographic Information of Spain-Centro Nacional de Información Geográfica España
- **Date published:** 2018
- **Language(s) of the legend:** Spanish

### ESI-MP5 National Topographic Map of Fuengirola (Special Sheet_1066/67)

- **Type of material:** Paper
- **Scale:** 1:50,000
- **Dimensions (mm):** 986 x 520
- **Author(s):** National Geographic Institute of Spain-Instituto Geográfico Nacional España
- **Published by:** National Center of Geographic Information of Spain-Centro Nacional de Información Geográfica España
- **Date published:** 2019
- **Language(s) of the legend:** Spanish
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<tr>
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<td>Author(s)</td>
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<tr>
<td>ESI-AT1</td>
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<td>Language(s) of the text</td>
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It is a compendium of maps, charts, reports, tables and photographs that aims to depict the detailed human and physical geography and history of Spain. This publication has been accomplished by the National Geographic Institute of Spain in cooperation with a working group that includes a wide range of scientific and academic organisations. Nearly 1200 graphic contents have been included along its over 600 pages, 800 of which are maps. This compendium comprises thematic maps considering several aspects of life and nature, maps showing how those aspects are changing over time, maps representing various geographic areas showing data for manifold administrative units, as well as charts, drawings, reports, tables and pictures. Data have been provided by over 120 national and international official organisations, primarily by the different departments, agencies and public bodies of the National Government of Spain.
DIGITAL PRODUCTS

**ESI-DP1  Saint Jame’s Way in Europe Map Viewer**

- **Type**: webpage
- **File format**: Web viewer
- **Operating system**: Windows, Mac OS X
- **License**: CCBY-4.0 ign.es
- **Author(s)**: Instituto Geográfico Nacional
- **Published by**: Centro Nacional de Información Geográfica
- **Date published**: Jan., 2018
- **Language(s)**: English

Web mapping geoportal of Saint Jame’s Way all over Europe. URL: https://nco.ign.es/CaminoSantiago/

**ESI-DP2  National Parks of Spain 3D Viewer**

- **Type**: webpage
- **File format**: Web viewer
- **Operating system**: Windows, Mac OS X
- **License**: CCBY-4.0 ign.es
- **Author(s)**: Centro Nacional de Información Geográfica
- **Published by**: Centro Nacional de Información Geográfica
- **Date published**: 2018
- **Language(s)**: English

Web mapping geoportal of National Parks of Spain 3D. URL: http://parquesnacionales.ign.es/picos_3D/

**ESI-DP3  Educational videos of geography and Earth sciences**

- **Type**: Video
- **File format**: mp4/YouTube
- **License**: CCBY 4.0
- **Author(s)**: Centro Nacional de Información Geográfica
- **Published by**: Centro Nacional de Información Geográfica
- **Date published**: 2019
- **Language(s)**: English

Series of 7 videos about geography, geodesy, cartography, Earth observation, earthquakes and volcanoes with educational purposes. URL: https://www.youtube.com/playlist?list=PLLemwiHg3TamcBrC3rdxyOmrTwPbV2lp

DIGITAL SERVICES

**National Atlas of Spain**

- **Type of service**: Geoportal
- **Format**: Web page
- **Software platform**: MediaWiki
- **Author(s)**: National Geographic Institute of Spain-Instituto Geográfico Nacional España
- **License**: CC BY 4.0 ign.es, 2019
- **Published by**: National Center of Geographic Information of Spain-Centro Nacional de Información Geográfica España
- **Date published**: April, 2019
- **Scale if relevant**: Maps of Spain on scales 1:3,000,000 – 1:13,500,000
  - Maps of Europe on scales 1:13,000,000 – 1:45,000,000
  - Maps of the World on scales 1:60,000,000 – 1:200,000,000
- **Language(s)**: Spanish / Español

Spanish geography and history may be consulted on this geoportal in a synthetic, integrated and deductive manner by means of visualising maps, graphs, drawings, pictures, charts and texts. Roughly 1300 graphic elements may be viewed and downloaded, 800 of which are maps showing different variables, several time sequences, manifolds geographic areas and various administrative units. Publications and contents related to other periods within the history of the National Atlas of Spain may also be accessed on this geoportal. URL: http://atlasnacional.ign.es/wane/P%C3%A1gina_principal
Spain (Catalunya)

MAPS

ESC-MP1 Soils Map of Catalonia
Type of material: Paper
Scale: 1:250,000
Dimensions (mm): 1285 x 1150
Author(s): Institut Cartogràfic i Geològic de Catalunya
Published by: Institut Cartogràfic i Geològic de Catalunya
Date published: April, 2019
Language(s) of the legend: Catalan

Synthesis of the edaphological data available in 2018. Overview of the edaphic structure and information on the distribution of soils, their morphology, and their physical, chemical and biological characteristics. Two versions of the same map are offered. One version follows the classification system Soil Taxonomy (SSS, 2014), the historically most used system in soils cartography in Catalonia. The other one follows the World Reference Base for Soil Resources (IUSS Working Group WRB, 2015), a system proposed for the interoperability of soils data in the specifications of the INSPIRE Directive. Printed both sides.

ESC-MP2 Urban Sustainability. Badalona
Type of material: Paper
Dimensions (mm): 1250 x 950
Author(s): Institut Cartogràfic i Geològic de Catalunya
Published by: Institut Cartogràfic i Geològic de Catalunya
Date published: June, 2019
Language(s) of the legend: Catalan, English

Urban sustainability indicators maps: Urban Heat Island (UHI); Rooftops thermal leaks; The thermal influence of motorway C-31; Emitted light source typology; Light emissions; Urban green vigour. ICGC has designed flight campaigns at a very high spatial and spectral resolution in visible, near infrared and long wave infrared regions (thermal bands), processed geospatial data and transformed geoinformation into thematic layers and indicators (products) over urban ecosystems. This approach is being applied in coordination with urban planning stakeholders in different municipalities. Printed both sides.

ESC-MP3 Topographic Map of Catalonia. Badalona and surroundings
Type of material: Paper
Scale: 1:15,000
Dimensions (mm): 1480 x 980
Author(s): Institut Cartogràfic i Geològic de Catalunya
Published by: Institut Cartogràfic i Geològic de Catalunya
Date published: June, 2019
Language(s) of the legend: Catalan, Spanish, English, French

Enlargement of the original at 1:25,000 scale. Topographic map enhanced with thematic information: footpaths and trails, tourist spots, services and accommodation (pictograms). Thematic information and country roads and paths classification (width and surface) have been prepared in collaboration with county councils and national and natural parks. The original TM 1:25,000 can also be downloaded (tiff files) with the application Catalunya Offline, a mobile App developed by ICGC for hiking and recording tracks and waypoints with GPS.
ATLASES

ESC-AT1 Placenames Gazetteer of Val d'Aran

Number of pages: 194
Dimensions (mm): 240 x 170
Author(s): Institut d'Estudis Aranesi, Institut Cartogràfic i Geològic de Catalunya
Published by: Institut d'Estudis Aranesi
Date published: June, 2019
Language(s) of the text: Aranese (Occitan)

Placenames Gazetteer of Val d'Aran (Occitan language land in Catalonia). Placenames from the Toponymic database 1:5,000 of the Institut Cartogràfic i Geològic de Catalunya; revision by the Institut d'Estudis Aranesi (Institute of Aranesian Studies-Aranese Academy of the Occitan Language). About 50 pages of cartography by the ICGC: map at 1:15,000. Toponymic index.

DIGITAL PRODUCTS

ESC-DP1 ContextMaps

Type: Web map application
File format: Html Vector tiles
Operating system: Web development
License: Attribution OpenMapTiles, OpenStreetMap, ICGC
Author(s): Institut Cartogràfic i Geològic de Catalunya
Published by: Institut Cartogràfic i Geològic de Catalunya
Date published: May, 2019
Language(s) of the presentation: English

Web tool based on Vector Tiles that allows the user to stylize ICGC and OSM maps (base ContextMaps), the printing of a specific area on scale with the own stylization and the retrieval of web links in order to use the map with the customized style either in a viewer, or as a geoservice vector tile that, at the same time, includes information on the base and the style. It may include information by the user.

ESC-DP2 Relief and hill shading

Type: Web Map application
File format: Html Normalmaps
Operating system: Web development
License: Attribution Mapzen, ICGC
Author(s): Institut Cartogràfic i Geològic de Catalunya
Published by: Institut Cartogràfic i Geològic de Catalunya
Date published: May, 2019
Language(s) of the presentation: English

Web tool that allows the user to determine, by painting in a spheremap, the areas that are facing a certain orientation, or with a certain slope. This tool allows the generation of complex shading that combine both aspects beyond the classic hill shading. The tool is based on Mapzen's Kinkade development, which works with a 2-meter digital model of the ICGC converted to NormalMap format, technology used to illuminate scenes in video games.

EDUCATIONAL PRODUCTS

ESC-EP1 The measurement of the Earth. From the plain to the blue marble

Author(s): Berenguer, Xavier (author); Benages, Toni (drawings)
Type: Other (comic book)
Dimensions (mm): 220 x 293
Published by: Institut Cartogràfic i Geològic de Catalunya
Date published: May, 2018
Language(s) of the product: Catalan

Comic book (52 pages). Paper version of the video with the same name (www.icgc.cat/mesura-terra). It is a very visual, fun and didactic tool that shows the evolution of the representation of the Earth over time: from antiquity, when the world was deeply mysterious, to the present, when cartography has been incorporated into everyday life. It is especially aimed at young people for the amount of information and knowledge synthetically exposed.
Web tool based on Vector Tiles. It allows the user to stylize the world map according to their criteria and needs, to play with colors and transparencies that have been grouped into 12 levels (buildings, hydrography, etc.), to search for place names, to generate random styles, to obtain information associated with each map element, to download the world map or part of it, and the defined style in order to reuse it. In game mode place names disappear and users can exercise their knowledge of geographic names, which are shown moving the cursor, in both Catalan and official versions.

**OTHER PRODUCTS**

**ESC-OP1 Recueil des plans du Roussillon, de Catalogne**

- **Author(s)**: Pennier [facsimile edition with introductory studies by E. d’Orgeix; C.Montaner; C.Sánchez and others]
- **Material**: Paper
- **Published by**: Institut Cartogràfic i Geològic de Catalunya
- **Date published**: Nov., 2017
- **Language(s) of the product**: Catalan, Spanish, French

Publication of the manuscript atlas of the early eighteenth century, unpublished and conserved in the Austrian State Archives (Vienna), which includes the maps of cities, towns and fortifications surveyed by the French Army during the War of the Spanish Succession and collected a few years later by Jacques Pennier. It is a testimony of landscapes of that time and at the same time a valuable cartographic heritage for the historical and geographical information they contain. This publication also contains three studies made by experts that analyze Pennier’s contribution to military cartography from the beginning of the eighteenth century.
**Sweden**

**MAPS**

**SWE-MP1** Lägesbild brandområde Gävleborg
- **Type of material**: Paper
- **Scale**: 1 : 50,000
- **Dimensions (mm)**: 1189 x 841
- **Published by**: Lantmäteriet/Swedish National Survey
- **Date published**: Oct., 2018
- **Language(s) of the legend**: Swedish

During a big forest fire in the middle of Sweden 600 maps were printed a day. The maps showed the fire range and distribution of fire forecasts for those who worked with fire fighting. One major challenge was the mapping of the fire area itself, which by its nature was dynamic.

**SWE-MP2** Självlysande karta: Välden, The World: Glow in the dark
- **Type of material**: Paper
- **Dimensions (mm)**: 840 x 590
- **Published by**: Norstedts Publishing
- **Date published**: 2018
- **Language(s) of the legend**: Swedish

In daylight it is a nice world map with light blue sea and silver colored countries. When the darkness falls, it turns into an exciting luminous element where national borders and cities form a well-known pattern of our world. When it is light, country borders, countries' names, capitals and a selection of larger cities are visible. The map has terrain shading to more clearly reproduce mountain ranges, which also gives a more vibrant and interesting map view. In daylight, the fluorescent layer is charged up and when the lamp goes out, country borders, larger cities and the names of the largest seas are visible in the dark room. In daylight it is a nice world map with light blue sea and silver colored countries. When the darkness falls, it turns into an exciting luminous element where national borders and cities form a well-known pattern of our world. When it is light, country borders, countries' names, capitals and a selection of larger cities are visible. The map has terrain shading to more clearly reproduce mountain ranges, which also gives a more vibrant and interesting map view. In daylight, the fluorescent layer is charged up and when the lamp goes out, country borders, larger cities and the names of the largest seas are visible in the dark room.

**SWE-MP3** Förslag till Göteborgs utvidgade innerstad (Proposal for Gothenburg's expanded inner city)
- **Type of material**: Paper
- **Dimensions (mm)**: 2003 x 1750
- **Author(s)**: Lukas Memborn
- **Published by**: City of Gothenburg.
- **Date published**: Mar., 2017
- **Language(s) of the legend**: Swedish

The Real Estate's property management committee and the City Planning Authority in the City of Gothenburg is currently conducting a study of all buildable land in the already dense urban environment using older, never actualized, urban plans. These plans were created before the introduction of the car as a common and central component of the city environment. Therefore, the study has a more holistic perspective, focusing on a continuous street network, which is optimal for navigating by bike, on foot or using public transportation. The ideas from the older urban plans have been combined with contemporary research and the city's strategic documents and reworked into a city plan with the precision of approximately one meter. This "proposal for Gothenburg's expanded inner city" is meant to be an inspiration for future urban plans. The study shows that the land that remains after the relatively sparse expansion of the 20th century will require major changes in how we plan and build our cities in the future.

**SWE-MP4** Högalpin karta: Abisko – Riksgränsen
- **Type of material**: Tyvec
- **Scale**: 1:25,000
- **Dimensions (mm)**: 1000 x 700
- **Author(s)**: Oskar Karlin
- **Published by**: Calazo Förlag
- **Date published**: Dec., 2017
- **Language(s) of the legend**: Swedish/English

This is a unique map with a detailed description that never before existed in the area around Abisko and Riksgränsen in Sweden. The terrain information in the map is based on airborne laser scanning. For the first time, steeps, larger stones, forests and watercourses appear with an accuracy that really corresponds to reality. The current distribution of the glaciers has been developed in collaboration with the Department of Natural Geography at Stockholm University. A scale of 1:25,000 provides good support for those who do top tours, glacier walks or otherwise leave the valleys marked trails and try new routes at higher altitudes.
Skridskokarta: Stockholm (Skating map: Stockholm)

Type of material: Tyvec
Scale: 1:30,000
Dimensions (mm): 1000 x 700
Author(s): Oskar Karlin
Published by: Calazo Förlag
Date published: Dec., 2018
Language(s) of the legend: Swedish/English

The skating map over Stockholm has the skater's needs in focus. The ice is at the center to facilitate the planning and execution of a skating trip. The ice is reproduced with colored and numbered zones after normal freezing order. Ice assessment is facilitated by markings for rash, current switches and other weak areas. The journey will be easier with recommended starting places, parking spaces and country passages. The skating map is developed in close collaboration with Mårten Ajne, one of Sweden's most experienced and knowledgeable skaters, who among other things is the author of the reference work Big Book on long-distance skating. More than fifty years of ice and weather data have been combined with the skating clubs' combined experience. The skating map over Stockholm has the skater's needs in focus. The ice is at the center to facilitate the planning and execution of a skating trip. The ice is reproduced with colored and numbered zones after normal freezing order. Ice assessment is facilitated by markings for rash, current switches and other weak areas. The journey will be easier with recommended starting places, parking spaces and country passages. The skating map is developed in close collaboration with Mårten Ajne, one of Sweden's most experienced and knowledgeable skaters, who among other things is the author of the reference work Big Book on long-distance skating. More than fifty years of ice and weather data have been combined with the skating clubs' combined experience.

Du är här (You are here)

Type of material: Paper
Scale: 1 : 4,500
Dimensions (mm): 1185 x 1750
Author(s): Stockholm town development
Published by: Stockholm town traffic planning
Date published: Jan., 2017

Hamnguiden 7 Landsort – Skanör

Number of pages: 414
Dimensions (mm): 210 x 300
Author(s): Ardebranth, Granath, Hotvedt, Sannel
Published by: Skagerrak förlag, Hydrographica
Date published: 2018
Language(s) of the text: Swedish

Here, well-known and lesser-known natural harbors are described, there are tips on joints and detailed reports are presented of all guest harbors along the coast between Landsort and Skanör in Sweden. Everything is described in detail with aerial photos, maps and words. In the first section of the book, Hydrographica's unique and appreciated port guide maps are available for all ports between Landsort and Påskallavik. Before the publication, each port has been seamed and checked on site in order for the information to be as up-to-date as possible. More than 250 natural harbors and some 40 guest ports are described in this section where Hydrographica's detailed mapping shows lots of useful facts about the port conditions both under water and on land. In the natural ports, the visitor is also guided in the words of Lars Granath, and in the guest parts by Torbjörn Ardebrant.
Our goal is to create precise thematic mountaineering maps for selected mountains of world touristic importance. The idea is to create a fusion between a guide book and the available map literature into a single, clear and handy map sheet, so to speak a map and "Guidebook" all rolled into one. Damavand is the highest mountain in Iran and the highest peak in the Middle East. On all sides of the even volcanic cone there are routes leading to the summit. The volcano can be climbed in summer as well as in winter (with ski's). It is a popular destination for both Iranians and European mountaineers. The map is printed on both sides and shows the topographic map 1:50,000 and various additional information. An overview map of the region, a map of the second highest mountain of the country, route sketches with the corresponding descriptions, as well as a 3D view of Tehran's local mountain, the Tochal, can be found on the back of the map. The map is available in 3 languages (German, English, Farsi). It also contains a kilometre grid and is GPS compatible.

The submitted map is an extract from the official 1:50'000 hiking map series, which consists of 59 individual map sheets which will cover the whole of Switzerland. The outstanding feature of this map series, which was launched in 2018 and will be available for the whole country by 2020, is its theme, which has not been simply placed over the topographic base map as in the past but has now been fully integrated into it. The well-known hiking trail categories (as shown in the legend) can be easily read and have been assigned the same colour as used in with the actual trail signs. In this way, information can be easily extracted from a map object without placing a heavy burden on the map image itself. For example, a road feature, can easily be associated with its width, surface type and difficulty of the route. Together from the detailed topographical information and the theme, a maximum of reliable information can be easily extracted from the map.

The map depicts the Thousand River Country; 千河国 (Pinyin: Qiān Hé Guó) in Chinese. Thousand River Country is a fictional country and the setting of a fanfiction story called Solitary Narcissus – an ongoing story written by GoldenAngelFeather on Asianfanfics.com. (Link to the story: https://www.asianfanfics.com/story/view/1273433/solitary-narcissus-action-crossover-mature- romance-romcom-time-travel-historical-exo-jin-yaongi-bts-suga- taehyung-bts-transmigration- spacetravel). Thus, the map was essentially created for the readers of the story with the aim to help them envision places mentioned in the story and their relation to each other. As the map is like another introduction to the story, it needed to be aesthetically adequate and fit the story's setting and atmosphere. The story plays in a fantasy world similar to ancient China, therefore, the map features a pictographic style and a bit of an Asian touch. To make this possible the map was created in Photoshop (mountains, vegetation, pagodas, ...) and Illustrator (coastline, rivers, ...) simultaneously using Smart Objects. This allowed to make changes on all elements even very late in the process. This was essential, as the map content developed along with the map itself and in close collaboration with the story's author, e.g. regarding names or the map's style. The latter, incl. some of the map elements were inspired by online content of ancient Chinese maps and by works presented in the following books: – Harley, J. B. and Woodward, David. Cartography in the Traditional East and Southeast Asian Societies. Chicago & London: The University of Chicago Press, 1994. 0-226-31637-8. – Xi (席), Huidong (会东). Cultural history of ancient Chinese cartography (中国古代地图文化史). Beijing (北京) : Chinese Map Publishing House (中国地图出版社), 2013. – Miller, Frederic P. Early Chinese cartography : Aesthetics, history of China, Chinese exploration, Zheng He, Chinese geography, history of cartography, cartography. Beau Bassin : Alphascript Publishing, 2010. 978-613-0-73597-5. Some content was also directly downloaded from the web: – The parchment paper image used for the background was done by maddagone on DeviantArt (https://www.deviantart.com/maddagone/art/Aged-Paper-Tea-pergament-3- 156597000, accessed: 03.07.2018). – The Photoshop Fantasy Map Brushes made by DaneStables (assumed) on Brushes8 (https://brushes8.com/52752.html, accessed: 03.07.2018) were used for the firs and grass. – The Photoshop Nature Brush Set for Cartography made by Tyrrannoninja on DeviantArt (https://www.deviantart.com/tyrannoninja/art/Nature-Brush-Set-for-Cartography- 522003858, accessed: 03.07.2018) was used for the palm trees and cacti.
These 23 maps, covering 10,000 km² capture for the very first time the area of the eastern Penan at an exact scale of 1:35,000 and thus provide a powerful mapping tool for the area. They serve to enforce the indigenous customary rights, to document Penan knowledge, to strengthen collective identity and as a foundation for sustainable and long-term development. In addition, an oral history has been documented. Between 2007 and 2017, data was collected, compiled and validated in cooperation between the Penan mapping team of the local organisation KERUAN and the Federal Ministry of Finance. State-of-the-art tools such as sketch maps, drone surveys, GPS mapping as well as GIS and RS analyses were used for both data collection and processing. The maps were then produced bilingually - in Penan and English - in collaboration with a linguist. Completion was celebrated at the end of 2017 during a three-day Penan ceremony and were first published in January 2018.

Public statistics represent a mirror of society, and when presented in the form of an atlas, the abstract numbers awaken to present an image in which the many facets of our society become apparent at a certain point in time. A little over 120 years ago, the FSO introduced a new form of publication in the field of visual communication with its Graphical Statistical Atlas of Switzerland. The original version from 1897 contained 22 coloured plates, of which 6 are thematic maps and 16 are diagrams. This type of visual representation has revealed important statistical results that reflected Swiss reality at the end of the 19th century. This atlas is remarkable from several points of view: it is distinguished by the choice of its components, as well as by its aesthetic and diversity in the use of different graphic representation methods. With this atlas, Switzerland joined the ranks of countries that published a national statistical atlas in the second half of the 19th century. The year 2018 saw the 120th edition of the Swiss Statistical Yearbook which was also the 120th anniversary of the 1897 atlas and a reason to celebrate. As in 2014 with its graphic-statistical atlas 1914-2014, the FSO decided to implement the new atlas according to the same concept. Part of the facsimile consists of all the visualizations from 1897, supplemented by other graphic plates from the 1891-99 yearbooks. In order to complete this original material, modern visualizations were brought in with the latest statistical data from comparable or analogous subjects, using the presentation methods and layout of 1897. The thematic structure has been maintained and the old and new visualizations are juxtaposed. This gives the reader an overview of 120 years of development of Swiss society. This atlas is more than a facsimile, it is an invitation to a journey through time and space. It combines the old with the new and allows the public to admire the masterpiece of our ancestors.
DIGITAL PRODUCTS

**CHE-DP1 Turbulence ahead - 3D Web-basierte Wetterinformationen für die Aviatik**

<table>
<thead>
<tr>
<th>Type</th>
<th>Digital map</th>
</tr>
</thead>
<tbody>
<tr>
<td>File format</td>
<td>Web application</td>
</tr>
<tr>
<td>Operating system</td>
<td>Independent of OS</td>
</tr>
<tr>
<td>License</td>
<td>Prototype, non commercial</td>
</tr>
<tr>
<td>Author(s)</td>
<td>Lisa Stähli</td>
</tr>
<tr>
<td>Published by</td>
<td>Lisa Stähli</td>
</tr>
<tr>
<td>Date published</td>
<td>2018</td>
</tr>
<tr>
<td>Language(s)</td>
<td>English</td>
</tr>
</tbody>
</table>

For this master thesis from the Institute of Cartography and Geoinformation at the ETH Zurich, a digital map product was created together with Swiss International Airlines, which allows pilots to retrieve weather information for an upcoming flight in 3D online and interactively and to compare it with the flight route. Today’s product, the so-called "2D Significant Weather Charts (SWC)", uses two-dimensional, black-and-white maps as PDFs to display the weather information. The addition of the third dimension and an intuitive colour scale and interaction has resulted in a significant improvement in the cognitive processing of weather information, user-friendliness and spatial perception of pilots. This was analysed and confirmed in a study with over 60 participating pilots in which the existing 2D SWCs were compared with the new interactive 3D pilot application. The improvements were achieved by, among other things, closely involving the users of the system in the development and design of the 3D map and its user interface.

OTHER PRODUCTS

**CHE-OP1 Matterhorn Papercraft Mountain**

<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Johann Dugge, Jürnjakob Dugge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material</td>
<td>Paper model</td>
</tr>
<tr>
<td>Published by</td>
<td>papercraftmountains.com</td>
</tr>
<tr>
<td>Date published</td>
<td>2018</td>
</tr>
<tr>
<td>Language(s) of the product</td>
<td>English</td>
</tr>
</tbody>
</table>

This sheet of paper can be used to build a true-to-scale model of the probably most famous Swiss mountain, the Matterhorn. With the model, the mountains topography can be explored and understood far easier and has a greater impression than when using a two-dimensional map; the construction process also involves a far more intensive examination of the terrain than would be the case with a prefabricated relief model. The sheet is accurately printed on both sides: on the front there is an orthophoto from swisstopo and on the reverse side the cut lines are printed. To create the model, digital terrain data was divided into 100 triangles using an algorithm developed by especially for this purpose. These are arranged in such a way that the model is both easy to build, and the terrain surface is reproduced as accurately as possible. The enclosed photos show the finished model in comparison with the original mountain.

**CHE-OP2 Relief-Möbel**

<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Tim Boin</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material</td>
<td>Furniture, Picture and/or video for exhibition</td>
</tr>
<tr>
<td>Published by</td>
<td>modulegno.ch</td>
</tr>
<tr>
<td>Date published</td>
<td>2018</td>
</tr>
</tbody>
</table>

Modulegno mills geographical profiles of a country or landscape, mainly in wood, and uses them to produce tables, displays and wall panels with a strong regional reference for exclusive interior design. Modulegno also mills in both MDF (Medium-density fibreboard) and plastic. In addition to relief furniture, we also produce customer-specific utility and presentation reliefs for various applications. www.modulegno.ch / www.modulegno.com www.behance.net/MODULEGNO
MAPS

**GBR-MP1 Arran Coastal Way**
- **Type of material**: paper
- **Scale**: 1:55,000
- **Dimensions (mm)**: 470 x 670
- **Author(s)**: Map created by Ashworth Maps and Interpretation Ltd, Glasgow
- **Published by**: Published in Arran Coastal Way guidebook by Jacquetta Megarry, published by Rucksack Readers, Edinburgh, UK
- **Date published**: 2018
- **Language(s) of the legend**: English

Map of the route of the Arran Coastal Way long distance footpath on the Island of Arran, Scotland. Original hand airbrushed hill-shading with contours, combined with Ordnance Survey UK OpenData. Details of the route and additional information provided by the author. Map divided into ten sections for the final publication.

**GBR-MP2 CORNWALL POCKET MAP: The perfect way to explore Cornwall**
- **Type of material**: paper
- **Scale**: 1:550,000
- **Dimensions (mm)**: 140 x 90
- **Author(s)**: Collins Maps
- **Published by**: Collins Reference
- **Date published**: Mar., 2019
- **Language(s) of the legend**: English

A handy little full colour map of Cornwall. Very detailed for its size. Essential for those planning a trip or who want an inexpensive and easy-to-use back up for a sat nav. Shows tourist routes so that the user can take in the most scenic areas of Cornwall, and includes places of tourist interest to make sure they can make the most of their journey.

**GBR-MP3 Discover the Isle of Skye**
- **Type of material**: Pretex 120gsm
- **Scale**: 1:110,000
- **Author(s)**: David Barbour, Steven Barrett, Patrick Blashill
- **Published by**: Footprint Maps
- **Date published**: Mar., 2019
- **Language(s) of the legend**: English

A waterproof visitor map showing the whole island on one side of the sheet, enhancing the visitor experience by placing opportunity and location into context. This map offers the user the ‘big picture’.
### GBR-MP4 Doha Bus Map

- **Type of material:** paper  
- **Scale:** not to scale  
- **Dimensions (mm):** 841 x 1188  
- **Author(s):** Clear Mapping  
- **Published by:** Mowasalat Transport Company  
- **Date published:** 2018  
- **Language(s) of the legend:** English

The brief was to create a concise bus route map from complex data. Data was cleaned and sorted in GIS then converted to Illustrator. The aim was to minimise the complexity of the routes displayed while keeping the map accurate. It was produced in 2 weeks.

### GBR-MP5 Dragons Back Race

- **Type of material:** Polyethylene  
- **Scale:** 1:40,000  
- **Dimensions (mm):** 1392 x 486  
- **Author(s):** Harvey Map Services  
- **Published by:** Harvey Map Services  
- **Date published:** May, 2017  
- **Language(s) of the legend:** English

The Dragon’s Back Race is a 5-day, 315km long race through the mountains of Wales. The race organiser required a detailed topographic map showing checkpoints and race route, along with information useful to the competitors. The map is intended for use by runners who are navigating along a set route whilst moving quickly over rough terrain. The map is printed on waterproof, tearproof material that is tough enough to withstand the rigours of the event. Base mapping compiled from original photogrammetric and field surveys. Map spec and layout produced with Adobe Illustrator.

### GBR-MP6 Europe

- **Type of material:** Printed on demand onto paper and finished with a durable gloss laminate  
- **Scale:** 1:5,000,000  
- **Dimensions (mm):** 1188 x 960  
- **Author(s):** Mary Spence MBE  
- **Published by:** Tiger Moon  
- **Date published:** Oct., 2018  
- **Language(s) of the legend:** English

A general reference wall map of Europe showing political detail in pastel colours and including motorways, major roads and airports with cities and towns classified by population. Information panels contain flags with areas and populations for countries plus major city population statistics and geographical comparisons.

### GBR-MP7 Inland Waterways of Great Britain

- **Type of material:** Printed on demand onto paper and finished with a durable gloss laminate  
- **Scale:** 1:750,000  
- **Dimensions (mm):** 841 x 1188  
- **Author(s):** Mary Spence MBE  
- **Published by:** Tiger Moon  
- **Date published:** Nov., 2018  
- **Language(s) of the legend:** English

A wall map of the inland waterways of Great Britain at A0 size, with relief layers background showing the navigable waterways classified by river, broad canal or narrow canal including waterways under restoration and proposed for restoration, highlighting tunnels, major lock flights and other canal features. Inset maps of the waterways of London, Birmingham and Manchester. Information panels include a history of inland waterway navigations with comparisons of lock flights, tunnels and aqueducts and a list of recently restored waterways.
**GBR-MP8** Jeppe’s Map of The Transvaal, 1899

Type of material: paper  
Scale: 1:476,000  
Dimensions (mm): 710 x 990  
Author(s): Christopher Board and Lindsay Braun  
Published by: The Transvaal Study Circle, London SE19 2NR  
Date published: Nov., 2018  
Language(s) of the legend: English

Publishes as a set of 6 sheets. Facsimile of an original edition from British War Office library. Compiled from surveys of land alienated by the South African Republic up to 1898. It records: boundaries, names of properties against topographic details of relief-shading, water courses and their names; settlements, railways, roads and tracks; post offices and agencies, telegraph offices, custom houses and postal routes. Cadastral detail on this map assists researchers to relate events just before and during the second South African War to modern topo-cadastral mapping at 1:250,000 or larger. Accompanied by a study of the map’s origins and employment.

**GBR-MP9** Land use of the Lower Rother Valley, West Sussex, UK, c.1840

Type of material: paper  
Scale: 1:25,000  
Dimensions (mm): 1189 x 841  
Author(s): Alastair W. Pearson, Philip J. Soar, Paul Carter  
Published by: Journal of Maps  
Date published: May, 2019  
Language(s) of the legend: English

This land use map was compiled from 43 tithe maps and apportionment schedules, the majority of which date from between 1837 and 1841. High resolution scans of the original maps were provided by West Sussex Record Office (WSRO) and digitized by students and staff of the Department of Geography, University of Portsmouth from 2012-18. The apportionment data was input by volunteers and joined to the digitized polygons prior to the final editing and design of the map. The resulting GIS contains over 24,500 individual agricultural fields. The colours and symbols for the map have been selected to associate as closely as possible to the land use that they portray whilst enabling differentiation between individual land use classes.

**GBR-MP10** Map of Tudor London

Type of material: paper  
Scale: 1:25,000  
Dimensions (mm): 1270 x 860  
Author(s): Giles Darakes, Caroline Barron, Martha Carlin, Vanessa Harding, Nick Holder  
Published by: The Historic Towns Trust  
Date published: May, 2018  
Language(s) of the legend: English

The Map of Tudor London is a complete revision of a map first published in 1989 by the Historic Towns Trust as part of a historical atlas of London up to the year 1520. The original map was smaller in scale, and covered a smaller geographical area. Moreover it was not geocorrected or georeferenced and north was not at the top of the map. The new edition is at the Historic Towns Trust’s standard scale of 1:2500 and the map sheet now has full coverage of the City of London and its suburbs, including Southwark. Every feature from the original map has been reviewed and updated, taking into account the large amount of historical and archaeological research that has been undertaken in the last 30 years, and the map is now in full colour allowing the classification of buildings into different types. This edition also includes the boundaries of the 100 or so church parishes in the city and a map of the civil wards on the reverse. The map reverse also includes a full index of all the streets and buildings that appear on the front sheet, along with explanatory essays and illustration.

**GBR-MP11** University Hospitals Bristol UK NHS Map

Type of material: paper  
Scale: not to scale  
Dimensions (mm): 700 x 500  
Author(s): Anneliese Faith Pritchard  
Published by: Anneliese Faith Pritchard  
Date published: April, 2019  
Language(s) of the legend: English

Quirky practical factual map appropriate for all ages, international user-friendly with dyslexic aiding font, encouraging the reader to further self educate, be inspired and motivated.
**GBR-MP12** Visitors’ map of Charnwood Forest Regional Park

- **Type of material:** Synplas – a weather resistant synthetic paper
- **Scale:** 1:25,000
- **Dimensions (mm):** 798 x 695
- **Author(s):** Mary Spence MBE
- **Published by:** Global Mapping Ltd
- **Date published:** Jan., 2019
- **Language(s) of the legend:** English

A second edition of the topographic map of Charnwood Forest Regional Park showing footpaths and bridleways, permissive routes and public access land and highlighting country parks and nature reserves with information on places to visit.

**ATLASES**

**GBR-AT1** EXPLORER’S ATLAS: For the incurably curious

- **Number of pages:** 144
- **Dimensions (mm):** 260 x 340
- **Author(s):** Piotr Wilkowiecki & Michał Gaszyński
- **Published by:** Collins Reference
- **Date published:** Oct., 2017
- **Language(s) of the text:** English

Brief abstract or additional comments (maximum 100 words in English): Feed your imagination and go on an adventure with this unusual atlas, illustrated with a wealth of quirky facts from around the world. Uncover hidden secrets on every page - from world cultures to history, the economy to nature, geography to sporting events, and follow the trails of great explorers. Be inspired by carefully selected and composed text, with icons, graphics and routes that will make you see the world through different eyes. Plan your next adventure, or revisit where you have been already - Explorer’s Atlas has been created for travellers, map lovers and adventurers of any age.

**GBR-AT2** Philip’s World Atlas

- **Number of pages:** 264
- **Dimensions (mm):** 230 x 310
- **Published by:** Philip’s
- **Date published:** Mar., 2019
- **Language(s) of the text:** English

An information-packed world atlas from Philip’s, published in association with the Royal Geographical Society. 96 pages of authoritative world maps: both physical and political. 70 city maps with full-page satellite images for nine of the cities. 32-page introductory section - 'The World in Focus' - covering key geographical themes such as the Earth’s position in the Solar System, the structure of the Earth, climate and weather, the environment, population, resources, economics and international organizations. 35,000 place name index.

**GBR-AT3** THE TIMES COMPREHENSIVE ATLAS OF THE WORLD 15th edition

- **Number of pages:** 528
- **Dimensions (mm):** 310 x 450
- **Author(s):** Times Atlases
- **Published by:** Collins Reference & Times Books
- **Date published:** Sep., 2018
- **Language(s) of the text:** English

Our world as it is today in one beautiful volume. Fully updated mapping with over 200,000 place names. New world topics include migration, health and resources. The 15th edition of The Times Comprehensive Atlas of the World has been beautifully redesigned. It is a benchmark of cartographic excellence, trusted by governments, media and international organisations as well as being a trusted reference source for households across the country.
DIGITAL PRODUCTS

**GBR-DP1 Caydence®**

Type: 3D geospatial data visualisation platform for point clouds, vectors and imagery
File format: Point cloud, Geospatial Vectors, rasterised terrain and imagery layers mostly relating to electricity utilities
Operating system: HTML
Author(s): NM Group
Published by: NM Group
Date published: 2019/03
Scale if relevant: variable
Language(s) of the presentation: English

NM Group’s Cadence® solution delivers an intelligent 3D representation of the electricity network. Details of every span, pole and tower are easily accessed, with any surrounding risks and their network position highlighted to users. This software is being rolled out across over 200,000 km of network worldwide, and is helping electricity utilities provide wider visibility to large, complex datasets.

**GBR-DP2 Regional geological visualisation models**

Type: Interactive three dimension geological model
File format: 3D-PDF
Operating system: Acrobat
Author(s): Calum Ritchie & Katie Whitbread
Published by: British Geological Survey
Date published: Feb., 2019
Scale if relevant: Derived from 1:625,000 scale DiGMap Data and 1:250,000 scale marine and topographic data
Language(s) of the presentation: English

British Geological Survey have produced a series of interactive, user-friendly tools to explore the UK’s geology in three dimensions. These geological visualisation models are designed for use on desktop/laptop computers and complement the existing range of free-of-charge digital data, maps and models that are published online by the BGS. The models elements can be controlled from tools around the model view, enabling the viewer to navigate around and change how the model is displayed, as well as breaking the model apart into the component parts. Further information on selected features can be accessed from the BGS online libraries.

EDUCATIONAL PRODUCTS

**GBR-EP1 Bedrock Geology of the United Kingdom and Ireland**

Author(s): Henry Holbrook, Mark Barron, Maarten Krabbendam, Mark Cooper, Helen Burke, Brian McConnell
Type: Wall map
Dimensions (mm): 841 x 1188
Published by: British Geological Survey
Date published: May, 2017
Language(s) of the product: English

The British Geology Survey (BGS), in close collaboration with the Geological Survey of Ireland (GSI) and the Geological Survey of Northern Ireland (GSNI), has published an educational map of the United Kingdom and Ireland. The map incorporates the latest geological and topographical data to provide an overview of the geology of England, Wales, Scotland, Ireland and Northern Ireland, and shows how geological units continue across seas and political borders. It demonstrates the important role that geology has played in shaping our landscapes and how it can be used to sustainably manage our natural resources in the future.

**GBR-EP2 Collins School Atlas**

Author(s): Collins Maps
Type: Atlas
Dimensions (mm): 224 x 300
Published by: Collins Reference
Date published: Feb., 2019
Language(s) of the product: English

An introductory atlas for secondary schools, perfectly designed to support and motivate Key Stage 3 students in geographical and mapping skills. The content adheres closely to the requirements of the National Curriculum and incorporates results of classroom testing. An introductory ‘map and atlas skills’ section is followed by clear, easy-to-read reference maps presented with locator maps, fact boxes and flags, descriptive text, detailed map keys and photos, and carefully selected focus country studies. The extended world section covers all the global issues required by the National Curriculum e.g. climate, population, biomes, earthquakes and volcanoes.
**GBR-EP3 Philip’s Essential School Atlas**

Type Atlas  
Dimensions (mm) 224 x 300  
Published by Philip’s  
Date published July, 2019  
Language(s) of the product English

A school atlas created for lower-secondary geography students (11-14 year olds). The maps have been designed so they are uncluttered and easy-to-read. A set of symbols and scale information accompanies each map and there is an introductory section covering basic atlas skills, including aerial photographs and satellite images. The atlas comprises a 16-page UK and Ireland section and a 42-page World section. The atlas is ideal for special project work, featuring an informative section of world thematic maps on the environment, climate change, quality of life, and energy. Latitude and longitude co-ordinates are included in the index, alongside figure-letter references.

**OTHER PRODUCTS**

**GBR-OP1 Bringing a brand and a wall to life**

Author(s) Clear Mapping  
Material Map covering a wall 7680 x 1810 mm  
Date published Oct., 2017  
Language(s) of the product English

When it comes to commissioning, developing or refreshing your brand, it can be a complex and sometimes difficult process to get exactly what you’re looking for. Salt, based at Holkham Hall are a new holiday cottage company. They commissioned Clear Mapping Co to follow their new brand identity guidelines and create an artisan, bespoke map for their new holiday cottage company office in a lovely converted barn on the Holkham Hall Estate. They wanted the illustrated map to have maximum impact across their 8m wall, highlighting all the North Norfolk attractions along the coastline.
United States of America

MAPS

**USA-MP1 Equal Earth Physical Map**
- **Type of material**: Paper
- **Scale**: 1:35,000,000
- **Dimensions (mm)**: 1400 x 770
- **Author(s)**: Tom Patterson
- **Published by**: Tom Patterson at equal-earth.com, free online download
- **Date published**: Feb., 2019
- **Language(s) of the legend**: English

A companion piece to Equal Earth: Countries of the World, this physical map focuses on topography and the natural environment. It features generalized shaded relief processed with neural network technology. The relief combines with Natural Earth 2 land cover depicting the potential natural vegetation and environments of Earth as if undisturbed by humans. The ocean floors are depicted softly with CleanTopo2 bathymetry cleansed of the artifacts that mar these data derived from varied sources. A smattering of cities and towns are shown for cultural reference. The map is in the public domain and available to download for free at equal-earth.com/physical/.

**USA-MP2 Equal Earth Political Map**
- **Type of material**: Paper
- **Scale**: 1:35,000,000
- **Dimensions (mm)**: 1400 x 770
- **Author(s)**: Tom Patterson
- **Published by**: Tom Patterson at equal-earth.com, free online download
- **Date published**: Oct., 2018
- **Language(s) of the legend**: English

This wall map introduces Equal Earth, a new equal-area pseudocylindrical world map projection. It was created to provide schools and organizations with a visually pleasing alternative to the Gall-Peters projection. In addition to being rigorously equal-area, other Equal Earth projection features include: an overall shape similar to that of the popular Robinson projection (that is not equal-area), curved lateral meridians suggesting the spherical form of Earth, and straight parallels that make it easy to compare how far north or south places are from the equator. The map is in the public domain and available to download for free at equal-earth.com.

**USA-MP3 Time Zones by Sovereignty**
- **Type of material**: Paper
- **Scale**: 1:50,000,000
- **Dimensions (mm)**: 813 x 432
- **Author(s)**: Tim Montenyohl
- **Published by**: Sovereign Limits
- **Date published**: Dec., 2018
- **Language(s) of the legend**: English

Traditional time zone maps rely heavily on the discretion of the cartographer. This map attempts to be more objective by dividing time zones by countries’ sovereign footprints. This approach is most noticeable in maritime space where sovereign rights are not as well known. Conventional time zone maps can be difficult to read, the goal of this map is to portray the complexities of time zones in an intuitive, yet visually striking manner.

**USA-MP5 How Birds Migrate**
- **Type of material**: Paper
- **Dimensions (mm)**: 790 x 510
- **Author(s)**: Fernando G. Baptista, Lauren E. James, Daisy Chung, Eve Conant, Irene Berman-Vaporis, Scott Zillmer, Matthew W. Chwastyk, Clare Trainor, Riley Champine
- **Published by**: National Geographic Magazine
- **Date published**: 2018
- **Language(s) of the legend**: English

Using the latest data from the Cornell Lab of Ornithology and Birdlife International, we mapped the migration schemes of five broad categories of birds. Symbology was developed to represent the time of migration, their conservation status, and flight technique with formation. Bird species are richly at their relative scale. Global coverage is achieved by featuring the Americas on one side of the poster, and the eastern hemisphere on the other. Examples of particular migrations allow cases studies of specific species migrations. Secondary illustrations illustrate wing design and the structure of feathers.
USA-MP6  San Pedro Parks Wilderness
Type of material Hop-Syn Plastic
Scale 1:24,000
Dimensions (mm) 914 x 914
Author(s) Michael Brown
Published by USDA Forest Service
Date published April, 2019
Language(s) of the legend English

We produced this map to aid users navigating the trail system of this wilderness located in the Santa Fe National Forest near Cuba, New Mexico. It is a 1:24,000 scale map with unique cartographic elements. Streams taper at their upper extremes, fading to nothing at their sources. High-resolution imagery is draped over a Lidar hill shade to produce a photorealistic map. GPS data, collected for high positional accuracy, provides trail alignments. Shapefiles from ARCMap, were manipulated with Adobe Illustrator and Avenza MAP Publisher. The document includes information on trailhead access as well as trail conditions and the availability of water.

USA-MP7  Surfing Saco Bay
Type of material Paper
Scale 40000
Dimensions (mm) 609.6 x 711.2
Author(s) Margot Dale Carpenter
Published by Margot Dale Carpenter
Date published April, 2019
Language(s) of the legend English

Surfing Saco Bay explores the connection between the surf breaks of this large embayment and the bathymetry that shapes the waves. Valleys that were created when sea levels were lower are now part of an underwater topography that influences wave direction and strength. As the waves approach the shore, the rocky headlands and sandy beaches further shape the waves. Targeting surfers and those who love the coast, this map describes the littoral zone using a combination of classic bathymetric shading, hints of isoline techniques seen in Siegfried's 1877 map of Bernina Pass, and a splash of modern cartographic style.

USA-MP8  Calypso Cartography
Type of material Paper
Scale 125,000 (Saint Vincent), 210,000 (Grenadines), and 50,000 (Kingstown, Saint Vincent)
Dimensions (mm) 431.8 x 279.4
Author(s) Alison DeGraff Ollivierre
Published by Tombolo Maps & Design
Date published Feb., 2019
Language(s) of the legend English

The calypso song “Nothing At All” by Vincentian Artist Fitzroy Joseph (aka Brother Ebony) is a clever, witty play-on-words using toponyms from across the country of Saint Vincent and the Grenadines in the Eastern Caribbean. This just-for-fun map charts each of the place names mentioned in the song (sing along at tinyurl.com/brotherebony) and was created in Adobe Illustrator CC and Avenza MAPublisher.

USA-MP9  Japan
Type of material Plastic
Scale 1:1,800,000
Dimensions (mm) 965 x 1372
Author(s) Benchmark Maps
Published by Benchmark Maps & Summit Terragraphics
Date published June, 2019
Language(s) of the legend English

A raised-relief map exhibiting Japan and the surrounding ocean environs. Cartography is by Benchmark Maps with guidance from consultants and editors. Modeling, printing, and thermo-forming by Summit Terragraphics. Drawing from a multitude of data sources and editors, this map portrays and labels the physical landscape and political backdrop of Japan in true 3D. It demonstrates the unique talents of several international geospatial companies by showcasing their abilities to create a map that displays the extraordinary built environment and physical terrain of The Land of the Rising Sun.
USA-MP10  The Teton Fault
Type of material  Paper
Scale  1:75,000
Dimensions (mm)  762 x 1067
Author(s)  Mark S. Zellman, Christopher B. DuRoss, Glenn D. Thackray; GIS and cartography by Richard B. Zeeb
Published by  Wyoming State Geological Survey
Date published  2019-04
Language(s) of the legend  English

The Teton Fault map depicts late Quaternary Teton fault scarps interpreted from field observations and surface topography from two light detection and ranging (LiDAR) datasets. We used LiDAR-derived digital elevation models (1-m cell size) to interpret and map fault scarps of likely late Quaternary age and discernible at a scale of 1:10,000 or finer. Fault scarps are symbolized according to whether they exhibit a clearly recognizable geomorphic expression, a subtle geomorphic expression, or an indistinct surface expression resulting from surface modification from stream erosion and/or deposition.

USA-MP11  What Corvallis, Oregon, Could Have Been!
Type of material  Paper encased in plastic
Scale  1:1,000
Dimensions (mm)  721 x 500
Author(s)  Denis White
Published by  Self published
Date published  May, 2019
Language(s) of the legend  English

This map portrays what could have been a different, more sustainable, settlement pattern when European-Americans started coming to Oregon. A digital elevation model in shaded relief is overlaid with the vegetation as it existed when non-indigenous settlement began in the 19th Century. On top of the vegetation are vector renditions of streams, a major river, settlement patterns, a community center, roads, bridges, and boat docks.

USA-MP12  Congressional Districts of the 116th Congress of the United States
Type of material  Paper
Scale  1:5,000,000
Dimensions (mm)  1130.3 x 838.2
Author(s)  U.S. Census Bureau
Published by  U.S. Census Bureau
Date published  Mar., 2019
Language(s) of the legend  English

This wall map (44.5 by 33 inches) depicts congressional district boundaries in effect for the 116th Congress of the United States. The map includes county names and boundaries for each state, the District of Columbia, Puerto Rico, American Samoa, Guam, the Commonwealth of the Northern Mariana Islands, and the U.S. Virgin Islands. The map also includes a listing of the names of all members of the 116th Congress, as of February 15, 2019.

USA-MP13  2020 Census Type of Enumeration Area
Type of material  Paper
Scale  1:5,000,000
Dimensions (mm)  1219.2 x 914.4
Author(s)  U.S. Census Bureau
Published by  U.S. Census Bureau
Date published  Feb., 2019
Language(s) of the legend  English

This map depicts the Type of Enumeration Area (TEA) boundaries and Area Census Office boundaries for the 2020 Census in the United States. The U.S. Census Bureau uses TEA as the approach to conducting the 2020 Census for housing units in a given geographic area. The TEA assignment is based on area characteristics to maximize respondent participation.

USA-MP14  Pennsylvania: 116th Congress of the United States
Type of material  Paper
Scale  1:715,000
Dimensions (mm)  1016 x 685.8
Author(s)  U.S. Census Bureau
Published by  U.S. Census Bureau
Date published  April, 2019
Language(s) of the legend  English

This map depicts congressional boundaries in effect for the 116th Congress of the United States for the state of Pennsylvania. The map includes county names and boundaries, selected place names, hydrography, and interstate highways. The map also includes a profile of the state that includes population, education, housing, and race and Hispanic origin data from the 2017 American Community Survey.
**USA-MP15  Pennsylvania, Congressional District 18: 116th Congress of the United States**

Type of material: Paper  
Scale: 1:70,000  
Dimensions (mm): 685.8 x 1016  
Author(s): U.S. Census Bureau  
Published by: U.S. Census Bureau  
Date published: April, 2019  
Language(s) of the legend: English

This map depicts congressional boundaries in effect for the 116th Congress of the United States for Pennsylvania's 18th congressional district. The map includes county names and boundaries, minor civil division names and boundaries, place names and boundaries, hydrography, and roads. The map also includes a profile of the district that includes population, housing, and race and Hispanic origin data from the 2017 American Community Survey.

**USA-MP16  Select Transportation Infrastructure of the United States**

Type of material: Paper  
Scale: 1:4,500,000  
Dimensions (mm): 1118 x 864  
Author(s): Kelsey Taylor, Cartographer Fellow, Office of Spatial Analysis and Visualization, Bureau of Transportation Statistics, U.S. Department of Transportation  
Published by: Bureau of Transportation Statistics, U.S. Department of Transportation  
Date published: Dec., 2018  
Language(s) of the legend: English

Select Transportation Infrastructure of the United States illustrates the extent of current highway, rail, maritime, air, and intermodal transportation infrastructure in the U.S. as of late 2018. Additionally, reference layers including national parks and forests, indigenous lands, urbanized areas, and populated places provide context to better understand the spatial distribution of transportation infrastructure across the 50 states, the District of Columbia, and Puerto Rico. The combination of natural and manmade features provides a holistic view of the role of transportation in connecting people and places.

**CHARTS**

**USA-CP1  NOAA Chart 11328 - Houston Ship Channel (Atkinson Island to Alexander Island), Edition 29**

Type of material: Paper  
Scale if relevant: 1:10,000  
Dimensions (mm): 1210 x 891  
Author(s): NOAA’s Office of Coast Survey  
Published by: NOAA  
Date published: 26th Feb., 2019 (Last Correction Date); April, 2016 (Edition Date)  
Language(s) of the legend: English

One of NOAA's primary directives is to create and maintain nautical charts that facilitate safe maritime navigation in all US waters. NOAA maintains thousands of unique chart products, in electronic and paper format, covering 95,000 miles of shoreline and 3.4 million square nautical miles of water. These charts beautifully map the unseen hazards beneath the ocean surface, display aids to navigation, landmarks, and other information critical to safe maritime navigation.

**USA-CP2  NOAA Chart 11459 - Port of Palm Beach and Approaches, Edition 2**

Type of material: Paper  
Scale if relevant: 1:15,000 (main panel); 1:5,000 (inset)  
Dimensions (mm): 1180 x 959  
Author(s): NOAA’s Office of Coast Survey  
Published by: NOAA  
Date published: 11th Dec., 2018 (Last Correction Date); Nov., 2018 (Edition Date)  
Language(s) of the legend: English

One of NOAA's primary directives is to create and maintain nautical charts that facilitate safe maritime navigation in all US waters. NOAA maintains thousands of unique chart products, in electronic and paper format, covering 95,000 miles of shoreline and 3.4 million square nautical miles of water. These charts beautifully map the unseen hazards beneath the ocean surface, display aids to navigation, landmarks, and other information critical to safe maritime navigation.
**USA-CP3**  
NOAA Chart 18476 - Puget Sound (Hood Canal and Dabob Bay), Edition 7  

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<td>NOAA</td>
</tr>
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<td>Date published</td>
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One of NOAA’s primary directives is to create and maintain nautical charts that facilitate safe maritime navigation in all US waters. NOAA maintains thousands of unique chart products, in electronic and paper format, covering 95,000 miles of shoreline and 3.4 million square nautical miles of water. These charts beautifully map the unseen hazards beneath the ocean surface, display aids to navigation, landmarks, and other information critical to safe maritime navigation.

**ATLASES**

**USA-AT1**  
Wild Migrations: Atlas of Wyoming’s Ungulates  

<table>
<thead>
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<tr>
<td>Author(s)</td>
<td>Matthew J. Kauffman, James E. Meacham, Hall Sawyer, Alethea Y. Steingiss, William J. Rudd, Emilene Ostlind</td>
</tr>
<tr>
<td>Published by</td>
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<tr>
<td>Date published</td>
<td>Aug., 2018</td>
</tr>
<tr>
<td>Language(s) of the text</td>
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</table>

Wild Migrations: Atlas of Wyoming’s Ungulates combines leading-edge animal movement science with the extensive use of maps and data graphics to tell the story of Wyoming’s big game migrations and the vast landscapes they depend upon. Facing pages in the Atlas cover more than 70 migration topics, ranging from history to ecology to conservation and management, illustrated with data-rich maps and graphics. The Atlas is a collaborative effort that draws upon research by wildlife biologists at the University of Wyoming’s Wyoming Migration Initiative, and the cartographic expertise at the University of Oregon Department of Geography’s InfoGraphics Lab.

**USA-AT2**  
El Yunque National Forest Atlas  

<table>
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<tbody>
<tr>
<td>Dimensions (mm)</td>
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<tr>
<td>Author(s)</td>
<td>Maya Quiñones, Isabel K. Pares, William A. Gould, Grizelle González, Kathleen McGinley, Pedro Ríos</td>
</tr>
<tr>
<td>Published by</td>
<td>USDA Forest Service</td>
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El Yunque National Forest Atlas was created through a collaboration between the USDA Forest Service International Institute of Tropical Forestry and El Yunque National Forest to help disseminate information gathered by decades of research to the public, administrators, researchers, and neighboring communities. The atlas was created as part of the Forest Management Plan. The bilingual (English and Spanish) book documents ecological, socioeconomic, and cultural conditions of the forest and surrounding landscape. The atlas serves as an important tool to visually communicate forest attributes to the public and has been used effectively in numerous community and planning meetings.

**USA-AT3**  
Ecological Atlas of the Bering, Chukchi, and Beaufort Seas  

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<th>Number of pages</th>
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<td>Dimensions (mm)</td>
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<tr>
<td>Author(s)</td>
<td>Melanie A. Smith, Max S. Goldman, Erika J. Knight, and Jon J. Warrenchuk</td>
</tr>
<tr>
<td>Published by</td>
<td>Audubon Alaska</td>
</tr>
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<td>Date published</td>
<td>Aug., 2017</td>
</tr>
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<td>Language(s) of the text</td>
<td>English</td>
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</table>

This comprehensive, trans-boundary atlas presents, for the first time, a nearly complete picture of our understanding of the ecology of the Bering, Chukchi, and Beaufort seas. Over 130 maps depict the combined scientific observations and analysis of dozens of experts. Carefully synthesizing data across three countries (The USA, Canada, and Russia), it aims to inform sustainable management of the Arctic’s natural resources and inspire an appreciation for this spectacular place.
Our map set out to show the journey of plastic, from trash generated on land to clogged waterways and finally to plastic in the open ocean. Representing land and river plastic data was fairly straightforward. Ocean data offered us two choices: we could show modeling of how much plastic scientists believe to be in the open ocean; or we could represent observed open ocean. We chose the observed data, as it allowed us to highlight an important part of the plastic story: there’s less plastic in the open ocean than the models would suggest, mostly because it breaks down and sinks in the water column.

Using the latest data from the Cornell Lab of Ornithology and Birdlife International, we mapped the migration schemes of five broad categories of birds. Symbology was developed to represent the time of migration, their conservation status, and flight technique with formation. Bird species are richly at their relative scale. Global coverage is achieved by featuring the Americas on one side of the poster, and the eastern hemisphere on the other. Examples of particular migrations allow cases studies of specific species migrations. Secondary illustrations illustrate wing design and the structure of feathers.

Using block level census data, we analyzed the predominance of each race or ethnicity and used color to represent each. To show historic trends in the nation as a whole, a full U.S. map leads with notable patterns explained. Interactive digital version allows the user to search for their local and see what racial and ethnic makeup is present.

This book was published as a wholly new edition of National Geographic’s Space Atlas. In it, we mapped every planet and sizable moon in our solar system to show the reader how well explored many are through remote sensing means. Each map is filled by the named features that each object has been give over the latest imagery and digital elevation data available. This atlas also features National Geographic’s first ever maps of Pluto and the dwarf planet Ceres. All were mapped in the Lambert Azimuthal Equal Area projection by hemispheres so that comparison can be made between plates.
USA-EP2  Atlas of World War II
Author(s)  Gregory Ugiansky (cartographer); Kenneth Rendell, Harris Andrews, Stephen Hyslop, Neil Kagan
Type  Book
Dimensions (mm)  265 x 350
Published by  National Geographic Books
Date published  Oct., 2018
Language(s) of the product  English

National Geographic’s new Atlas of World War II combines newly created and vintage wartime maps, rare photographs, and covert documents to trace battles, campaigns, causes, and consequences of the most significant struggle of all time. The atlas features 105 newly created maps that highlight key topics not covered by the historical maps. They consist of a spectrum of map styles, from campaign and battle to maps more thematic in nature. To portray accurate geography and thematic content for the time periods, these maps were carefully researched and compiled using current databases, as well as historical map and text sources.

USA-EP3  Curious City: In, Out, Above, Beyond Saint Paul
Author(s)  Elizabeth Abramson, JoJo Baldus, Henry Beimers, Doll Brown, Dio Cramer, Ceren Dolma, Julia Evelyn, Elizabeth Fugikawa, Katie Jolly, Anya Lindell Paulson, Alessandro Mauceri, Henry McCarthy, Maddy Murnane, Elston Tortuga, Stella Wang, Elliot Wareham and Ashley Nepp
Type  Book
Dimensions (mm)  304.8 x 228.6
Published by  Self-published
Date published  April, 2019
Language(s) of the product  English

What makes a place special? What does a place feel like? Sound like? These are the kinds of questions examined in a cultural atlas. Following the example of Infinite City: A San Francisco Atlas by Rebecca Solnit, and Portlandness: A Cultural Atlas by David Banis and Hunter Shobe, this spring Macalester College’s Cultural Atlas Production course created a cultural atlas of Saint Paul, MN in 13 weeks. The undergraduate class worked as a team to create a print atlas from start to finish; choosing topics, designing the layout of the atlas, gathering data, and finally working through the publishing process.

OTHER PRODUCTS

USA-OP1  The Great Divide Mountain Bike Route
Author(s)  Adventure Cycling Association
Material  Paper
Published by  Adventure Cycling Association
Date published  May, 2018
Language(s) of the product  English

The Great Divide Mountain Bike Route parallels the Canadian Great Divide and the U.S. Continental Divide for 3,084 miles from Jasper, Alberta, Canada to the Mexico border at Antelope Well, New Mexico. For the 20th anniversary of this iconic route, the maps were redesigned, and new miles of routing were added. The maps contain navigational features. Bicycling-specific services are noted with access information. After researching the route and services, the data is processed in a GIS. The features, base map layers and transportation network are imported into Adobe Illustrator and styled. Maps are then imported into InDesign for publication.
MAPS

**USU-MP1 Lake Tahoe**
- Type of material: Paper
- Scale: 1:40,500
- Dimensions (mm): 915 x 1220
- Author(s): Elaine Guidero
- Published by: U.S. Geological Survey
- Date published: Mar., 2019
- Language(s) of the legend: English

This topobathymetric map of Lake Tahoe was created for the Assistant Secretary of Fish, Wildlife, and Parks at the Department of the Interior in the U.S. federal government. This map draws on bathymetry created from a USGS multibeam survey of several lakes and bays along the West Coast and in the Sierra Nevada mountain range.

**USU-MP2 Tri-Cities, Washington, and Lewiston-Clarkston, Idaho**
- Type of material: Paper
- Scale: 1:150,000
- Dimensions (mm): 1829 x 1220
- Author(s): Elaine Guidero
- Published by: U.S. Geological Survey
- Date published: Nov., 2018
- Language(s) of the legend: English

This general reference map of western Washington and eastern Idaho was created as part of a series for U.S. Representative Mike Simpson of Idaho.

**USU-MP3 The Columbia River Basin**
- Type of material: Paper
- Scale: 1:1,000,000
- Dimensions (mm): 1829 x 1220
- Author(s): Elaine Guidero
- Published by: U.S. Geological Survey
- Date published: Nov., 2018
- Language(s) of the legend: English

This general reference map of the Columbia River Basin in the Pacific Northwest United States was created as part of a series for U.S. Representative Mike Simpson of Idaho.

**USU-MP4 Hawai‘i District 1**
- Type of material: Paper
- Scale: 1:64,000
- Dimensions (mm): 915 x 712
- Author(s): Elaine Guidero, Sara Boyer, Lindsay Decker, Bethany Walker
- Published by: U.S. Geological Survey
- Date published: April, 2019
- Language(s) of the legend: English

These three maps are part of a series created for incoming members of the U.S. House of Representatives after the 2018 election. They are general-purpose reference maps that provide an overview of the primary physical and political features within each Representative's district. Maps were produced automatically in Esri ArcGIS, and labels were edited by hand. Each map is designed to focus on a single district while masking details that fall outside it. This coastal district is an example of an urban, tropical area with high relief.
These three maps are part of a series created for incoming members of the U.S. House of Representatives after the 2018 election. They are general-purpose reference maps that provide an overview of the primary physical and political features within each Representative’s district. Maps were produced automatically in Esri ArcGIS, and labels were edited by hand. Each map is designed to focus on a single district while masking details that fall outside it. This landlocked district is predominantly rural, with heavy tree cover and moderate relief.

These three maps are part of a series created for incoming members of the U.S. House of Representatives after the 2018 election. They are general-purpose reference maps that provide an overview of the primary physical and political features within each Representative’s district. Maps were produced automatically in Esri ArcGIS, and labels were edited by hand. Each map is designed to focus on a single district while masking details that fall outside it. This district is entirely urban with very little woodland.
## MAPS

### USE-MP1  Rivers of Plastic

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<td>Dimensions (mm)</td>
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<tr>
<td>Author(s)</td>
<td>John Nelson</td>
</tr>
<tr>
<td>Published by</td>
<td>Esri, Inc.</td>
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<tr>
<td>Date published</td>
<td>Mar., 2019</td>
</tr>
<tr>
<td>Language(s) of the legend</td>
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</table>

Rivers of Plastic intends to attract the attention of map readers who may not otherwise pay note to environmental data. Presented as an 1,850s style comparative graphic, the vintage of the aesthetic is juxtaposed with the recency of the problem of plastic pollution. The use of an Asian Elephant as a unit of scale was a deliberate attempt to help map readers engage with the graphic and to provide a sense of physical context that would not be evident from something as abstract as a number.

### USE-MP2  Tornado Migration

<table>
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<tr>
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<td>Language(s) of the legend</td>
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</table>

Tornado migrations can be mapped like birds or wildebeests or commuters, having a seasonal circuit and an ebb and flow. This visualization attempts to portray that seasonal cycle. The layout shows the same data with distinctly different visual mechanisms, inviting more opportunities for engagement and understanding.

### USE-MP3  Tornado Tree Rings

<table>
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<td>April, 2018</td>
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<tr>
<td>Language(s) of the legend</td>
<td>English</td>
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</table>

This map’s symbology, while experimental and dense, challenges the reader to take a second closer look. It uses 12 concurrent graduated symbol rings per aggregated location, each colored to a month, the months progressing in color in a seasonal theme. The overall density of tornadoes is evident at a broad scale. The seasonal fluctuation at locations is also evident when looking closer.

### USE-MP4  Ten Most-Visited US National Parks

<table>
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<th>Type of material</th>
<th>Paper</th>
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<tbody>
<tr>
<td>Scale</td>
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<tr>
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<tr>
<td>Author(s)</td>
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<tr>
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<td>Esri, Inc.</td>
</tr>
<tr>
<td>Date published</td>
<td>Nov., 2018</td>
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<tr>
<td>Language(s) of the legend</td>
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</table>

This map presents the ten most-visited parks in the US national park system, as contextually removed isolated topographic representations, true to comparative scale. They make use of an Imhof-inspired presentation of relief as a combination of warm and cool hues and a painterly atmospheric perspective to reduce the saturation of low-lying areas and increase the sun-drenched clarity of higher elevations.
**USE-MP5  Mines of the Mojave Desert**

Type of material  Paper  
Scale  1:800,000  
Dimensions (mm)  203 x 559  
Author(s)  Heather Smith  
Published by  Esri, Inc.  
Date published  June, 2019  
Language(s) of the legend  English  

My primary goal with this map was to connect stories and points of interest from a local history text to their geography; to allow my map readers to explore the Mojave Desert (on paper or in person) from the perspective of its rich mining history. My secondary goal was to mimic the style of maps distributed by auto clubs and railway lines in the early twentieth century. To achieve this, I hand drew hachures, scanned them, and integrated them back into the otherwise digitally produced map.

**USE-MP6  Over the Edge: Death in Grand Canyon**

Type of material  Paper  
Scale  1:200,000  
Dimensions (mm)  1880 x 1067  
Author(s)  Kenneth Field  
Published by  Esri, Inc.  
Date published  Mar., 2019  
Language(s) of the legend  English  

Over 950 souls have perished in Grand Canyon from the first river exploration in 1869 to present day. This updated thematic map (with deaths to end-2018), illustrates the geography of deathly incidents. It has an updated background comprising a chromastereoscopic area of interest focus and firefly rendered imagery layer. The points of interest (deaths) have been redesigned using a combination of hex-binning and offsets. The colours are defined to allow the map to be viewed in normal two dimensional viewing but in 3D when viewed using chromastereoscopic glasses. There is print version (downloadable at esriurl.com/DeathInGrandCanyonPrint) and accompanying web map (esriurl.com/DeathInGrandCanyon).

**USE-MP7  Population Density of Japan in 2016**

Type of material  Paper  
Scale  1:1,600,000  
Dimensions (mm)  864 x 1118  
Author(s)  Charlie Frye  
Published by  Esri, Inc.  
Date published  Jan., 2019  
Language(s) of the legend  English  

Population Density of Japan in 2016 is an excerpt from Esri's World Population Estimate, a 150-m resolution global raster dataset. Esri produces this data in two stages. First a footprint of human population based on texture in Landsat8 panchromatic imagery, road intersections, and MDA's BaseVue classified land cover. Second, detailed population data from national statistics agencies and the United Nations Population Division are apportioned to the footprint such that each cell in the resulting raster has a modeled population and density. This depiction of population density applies the sequence of colors over the range of population density values in Japan.

**USE-MP8  London Underground Overground**

Type of material  Paper  
Scale  No applicable  
Dimensions (mm)  1270 x 812  
Author(s)  Ken Field  
Published by  Esri, Inc.  
Date published  April, 2019  
Language(s) of the legend  English  

In 1933 Henry Beck brought a new style of schematic map to London to show the underground rail network. It was revolutionary and became the standard that many metro maps around the world have followed. But in trying to remain faithful to Beck's ideas the current map of the massively expanded rail network in London is chaotic. Many attempts have been made to improve on the map. This is my effort. It simplifies lines and junctions, removes extraneous detail and brings a new graphic language to the map. It's clean and modern and updates Beck's ideas for London's current network.
### CHARTS

<table>
<thead>
<tr>
<th>USE-CP1</th>
<th>Puget Sound: Hood Canal and Dabob Bay</th>
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<tbody>
<tr>
<td>Type of material</td>
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<tr>
<td>Author(s)</td>
<td>NOAA; Esri, Inc.</td>
</tr>
<tr>
<td>Published by</td>
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</tr>
<tr>
<td>Date published</td>
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</tr>
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<td>Language(s) of the legend</td>
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One of NOAA's primary directives is to create and maintain nautical charts that facilitate safe maritime navigation in all US waters. NOAA maintains over 1000 unique charts, covering 95,000 miles of shoreline and 3.4 million square nautical miles of waters. These charts beautifully map the unseen hazards beneath the ocean surface, display aids to navigation, landmarks, and other information critical to safe maritime navigation.

### DIGITAL PRODUCTS

<table>
<thead>
<tr>
<th>USE-DP1</th>
<th>Smoking, Obesity, and Drinking</th>
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<tbody>
<tr>
<td>Type</td>
<td>Web app</td>
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<tr>
<td>File format</td>
<td>Javascript-based web app</td>
</tr>
<tr>
<td>Operating system</td>
<td>Cross-platform; browser-based web app</td>
</tr>
<tr>
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</tr>
<tr>
<td>Author(s)</td>
<td>John Nelson</td>
</tr>
<tr>
<td>Published by</td>
<td>Esri, Inc.</td>
</tr>
<tr>
<td>Date published</td>
<td>Nov., 2018</td>
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<tr>
<td>Scale if relevant</td>
<td>Varies</td>
</tr>
<tr>
<td>Language(s) of the presentation</td>
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Designed to provide comparative context around three preventable health risk factors, this series of multivariate maps investigates their relationships across the spatial context of United States counties. Multivariate maps, particularly CMYK-trivariate maps, are complex visual products that ask a lot of readers. This presentation walks slowly into these maps and guides the reader through the process to convey a health landscape and also encouraging them to be critical consumers of visual products.

<table>
<thead>
<tr>
<th>USE-DP2</th>
<th>Thematic Maps of the 2016 Presidential Election</th>
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<tbody>
<tr>
<td>Type</td>
<td>Web app</td>
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<tr>
<td>File format</td>
<td>Javascript-based web app</td>
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<tr>
<td>Operating system</td>
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<tr>
<td>Author(s)</td>
<td>Kenneth Field</td>
</tr>
<tr>
<td>Published by</td>
<td>Esri, Inc.</td>
</tr>
<tr>
<td>Date published</td>
<td>Aug., 2018</td>
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<td>Language(s) of the presentation</td>
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</table>

A gallery of thematic maps that showcase different ways to tell versions of the truth. Based on a single dataset of the 2016 United States Presidential election, it provides a baseline for understanding how maps differ and provides an accessible catalogue of design choices to use as a guide to mapping in different, interesting and compelling ways. Election data provide an extremely rich source to demonstrate how cartography plays a critical role in the different truths that can be told. Very few, if any, maps are ‘right or wrong’ but they all tell shades of a different truth.

<table>
<thead>
<tr>
<th>USE-DP3</th>
<th>The Human Reach</th>
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<tr>
<td>Type</td>
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<tr>
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<tr>
<td>Author(s)</td>
<td>Allen Carroll</td>
</tr>
<tr>
<td>Published by</td>
<td>Esri, Inc.</td>
</tr>
<tr>
<td>Date published</td>
<td>Oct., 2018</td>
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<td>Scale if relevant</td>
<td>Global</td>
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<tr>
<td>Language(s) of the presentation</td>
<td>English</td>
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</table>

If you compressed the entire history of the Earth into 24 hours, the first Homo sapiens would arrive with just a couple seconds remaining on the clock. In this brief time our species has had a profound impact on the planet—one that is unmatched by any other life form in the history of Earth. Our actions have pushed the planet into a new era: the Anthropocene, a time when human activity dominates the Earth. What does this mean for the Earth and all its other inhabitants?
**USE-DP4 Anthropocene Atlas**

Type: Web app  
File format: Javascript-based web app  
Operating system: Cross-platform; browser-based web app  
License: Esri Master License Agreement  
Author(s): David Asbury, Allen Carroll, Greyson Harris, Cooper Thomas, Hannah Wilber  
Published by: Esri, Inc.  
Date published: Oct., 2018  
Scale if relevant: Global  
Language(s) of the presentation: English  

The Anthropocene Atlas is part of a series of related stories examining the planet-wide impacts of humankind. Taking advantage of the Story Map Series layout, this interactive atlas provides a global-scale exploration of the human footprint. Thematic maps include population density, Earth at night, world roads, global shipping routes, underwater cables, airline routes, and more. Each dataset is visualized uniquely, from high-resolution satellite imagery and choropleth maps, to more complex additive line density and overlay of multiple layers using transparency.

**USE-DP5 Gap, Pass, Notch & Saddle**

Type: Web app  
File format: Javascript-based web app  
Operating system: Cross-platform; browser-based web app  
License: Esri Master License Agreement  
Author(s): John Nelson  
Published by: Esri, Inc.  
Date published: Nov., 2018  
Scale if relevant: Varies  
Language(s) of the presentation: English  

The names we assign geographic places have much to do with cultural settlement history, linguistics, and the mood of the explorer. This presentation looks at four names for the same sort of geographic feature, and explores the strong regionalism of the naming.

**DIGITAL SERVICES**

**Esri Maps for Public Policy**

Type of service: Any item type supported by ArcGIS Online: map services, web application, mobile application or story map. This includes tile services, vector tile services, feature layers, scene layers, map image services, elevation services, and services created from GeoRSS, KML, OGC, GeoJSON, and shapefiles.  
Format: Javascript-based web app  
Software platform: Cross-platform; browser-based web app  
Author(s): Esri, Inc.  
License: Esri Master License Agreement  
Published by: Esri, Inc.  
Date published: Nov., 2018  
Scale if relevant: Local to national  
Language(s) of the presentation: English  

Esri Maps for Public Policy is a free resource for policy makers and the public to use in community decision making. It provides hundreds of maps, apps, dashboards, story maps and other examples using trusted datasets on a wide variety of policy issues. Policy maps clearly show where communities have opportunities to intervene on the issue they face. Visitors can collect the maps they find useful, and easily share them as a collection, spreading awareness of issues and relevant data. Each map can be opened in ArcGIS for further use in analysis, mapping, apps and story maps. URL: https://livingatlas.arcgis.com/policy/overview/
**USE-EP1 Cartography.**

<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Ken Field</th>
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<tbody>
<tr>
<td>Type</td>
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<tr>
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<tr>
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<td>July, 2018</td>
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<td>Language(s) of the product</td>
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A lavishly illustrated reference guide, Cartography, is an inspiring and creative companion along the nonlinear journey toward making a great map. This sage compendium for contemporary mapmakers distills the essence of cartography into useful topics, organized for convenience in finding the specific idea or method you need. Unlike books targeted to deep scholarly discourse of cartographic theory, this book provides sound, visually compelling information that translates into practical and useful tools for modern mapmaking. At the intersection of science and art, this book serves as a guidepost for designing an accurate and effective map.