ECDL-GIS NEWSLETTER

CINQUE

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USEFUL RESOURCES

Benvenuti su MapOSMatic!

MapOSMatic!

MapOSMatic è un servizio web basato su software libero che ti permette di generare mappe cittadine usando i dati di OpenStreetMap. Le mappe generate sono disponibili nei formati PNG, PDF e SVG e pronte per essere stampate.

Dal momento che i dati per generare le mappe vengono da OpenStreetMap, potete liberamente riutilizzare, vendere o modificare le mappe generate, secondo i termini della licenza OpenStreetMap.

Geography of Hate – Geotagged Hateful Tweets in the United States

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<th>Homophobic</th>
<th>Racist</th>
<th>Disability</th>
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![Geography of Hate Map](image-url)
Wheelmap.org

Wheelmap.org ist eine Online-Karte zum Suchen, Finden und Markieren rollstuhlgerechter Orte. Mach mit und markiere öffentlich zugängliche Orte wie Cafés, Behörden oder Geschäfte

Introducing OpenLayers 3

OL3 – Next Generation Web Mapping
MongoDB

MongoDB (from "humongous"), written in C++, is an open-source document database, and the leading NoSQL database.

Importing OpenStreetMap data into MongoDB

FIREBIRD – True universal open source database

Gearscape

Gearscape is GIS focused on geoprocessing that provides a language called GGL (Gearscape Geoprocessing Language). While the first version was based on SQL, the last one (GGL2) is a completely new language that takes ideas from different well known languages (SQL, XPath, imperative languages, etc.) to make geoprocessing easy and reliable.
NonprofitGIS.org - GIS technology in nonprofit sector

Nonprofit GIS is a new site established to further the adoption of GIS technology in the nonprofit sector. It is an independent resource developed to fill the gap in good, reliable information on the use, implementation and optimization of GIS tools in typical nonprofit organizations.

Imaging the Earth (Learning from satellites)

Map Projections

3D WebGL – OSM + 3D

I dati di OSM visualizzati in WebGL con vista 3D (se disponibile il dato e se il browser supporta WebGL)...
NCP - InVEST: Integrated Valuation of Environmental Services and Tradeoffs

InVEST is a family of tools to map and value the goods and services from nature which are essential for sustaining and fulfilling human life.

If properly managed, ecosystems yield a flow of services that are vital to humanity, including the production of goods (e.g., food), life support processes (e.g., water purification), and life fulfilling conditions (e.g., beauty, recreation opportunities), and the conservation of options (e.g., genetic diversity for future use).

NCP - Resource Investment Optimization System (RIOS)

RIOS is a free and open source software tool that supports the design of cost-effective investments in watershed services.

RIOS provides a standardized, science-based approach to watershed management in contexts throughout the world. It combines biophysical, social, and economic data to help users identify the best locations for protection and restoration activities in order to maximize the ecological return on investment, within the bounds of what is socially and politically feasible.

EBM - Protected Area Tools (PAT) for ArcGIS 9.3

The Nature Conservancy (TNC) has a vested interest in helping countries develop science-based Protected area networks and has pledged support through the development of country-driven National Implementation Support Programs (NISPs). One way to help overcome the technical challenges of the daunting process of evaluating and filling protected area gaps is the development and use of GIS-based user-friendly tools that support the protected area gap process. The development of a Protected Area Gap
Decision Support System (DSS) was conceived as part of an ongoing process to help fill the technical void that exists in many countries.

**EBM - Fishery Analyst for ArcGIS 9.x**

Fishery Analyst is an ArcGIS 9.x extension developed to effectively analyze and visualize temporal and spatial patterns of fishery dynamics. The main functions are quantitative estimation and visualization of catch and effort and their variation in space and time, analysis of fishing vessel utilization, data quality control, and deriving information on the location of important economic and threatened species.

**EBM - Tools**

Tools include methods and software/web tools that can help improve coastal-marine spatial planning and management decision making.

**EUMETCast - GEONETCast**

The GEONETCast Toolbox, developed as a plug-in as of the ILWIS version 3.7 and higher, is offering a set of utilities that facilitate easy import of various satellite and environmental data/products that are disseminated via GEONETCast, into a common GIS environment.
GISCOLLECTIVE (GISC) Resources

We can’t document everything! This page will be a repository of as many useful resources for GIS/Cartography/Web-Mapping as we can find. If there are any resources that we haven’t listed, please email us at giscollective@gmail.com and share the knowledge!

GISCOLLECTIVE (GISC) GIS Techniques

There’s a lot you can do with your GIS software. Learning it all at once is impractical. These helpful tutorials go through, step-by-step, specific techniques and technologies related to the software. These will focus on ArcMap and QGIS specifically in efforts to cover the private and open-source GIS world.

CIMMYT - Geographic Information Systems Module

A series of GIS / visualization tools have been created in order to provide access to spatial data being used or generated by the DTMA project. Links to these tools and a brief description are provided here. Additional tools and direct access to spatial data are planned in the near future.

Rivers Network – WEB links…
USGS - Earthquake Hazards Program
Custom Mapping and Analysis Tools

USGS - Earth Resources Observation and Science (EROS) Center
Shuttle Radar Topography Mission (SRTM) - "Finished"

USGS – Earth Explorer
PIGWAD – Planetary Interactive GIS on the Web Analyzable Database

The objectives of this project are three-fold: (1) Produce a web-based, user-friendly interface aimed at the planetary research community that will support Geographic Information Systems (GIS) graphical, statistical, and spatial tools for analyses of planetary data, including the distribution of planetary GIS tutorials, tools, programs, and information; (2) Create planetary GIS databases consisting of peer-reviewed digital geologic maps, feature maps, topography, and remote-sensing data under the scientific oversight of the NASA Geologic Mapping Subcommittee (GEMS); and (3) Support and encourage the use of GIS in planetary research including geospatial open standards.

JQVMAP – JQuery plugin

JQVMAP is a jQuery plugin that renders Vector Maps. It uses resizable Scalable Vector Graphics (SVG) for modern browsers like Firefox, Safari, Chrome, Opera and Internet Explorer 9. Legacy support for older versions of Internet Explorer 6-8 is provided via VML.

GeoSprotect - Toward an Ideal Geoportal

A Geoportal Identity Crisis - A city wants to open its geodata for public use. An NGO wants to spark a transparency initiative. A regional planning commission wants to stop emailing zipped shapefiles when pestered. They want to deliver two contrasting products - raw data and parsed themes - to as many as a dozen different audiences: policymakers, technical service providers, the press, professional curmudgeons, etc.
Czech National Geoportal

[Sextante Plugin] An R script for Neighborhood Detection

[Plugin Sextante] Un script R pour détecter les voisinages : Cet article explique comment réaliser un petit script R via le plugin Sextante pour QGIS afin d'établir des relations de voisinage entre objets en fonction de la distance qui les sépare. Il comporte une petite introduction sur l'écosystème QGIS, sur R aussi. Et puis bien sûr, des détails sur l'écriture d'un script R pour le plugin Sextante GIS Plugin.

Datacatalog.org – Open data catalogs

A comprehensive list of open data catalogs curated by experts from around the world

FAO aquastat - Spatial data, tables and maps

The links below provide a selection of downloadable maps and datasets related to water and agriculture:

- **Spatial data** - Downloadable datasets related to the field of water resources and irrigation

- **Tables and maps** - Tables on population and geography, water resources, water withdrawal and irrigation by continent, region and sub-region, and key maps on water resources, water withdrawal, irrigation, countries, hydrological basins and rivers

- **Atlas of water resources and irrigation in Africa** - Information regarding water resources and agricultural water use by river basin
- Water resources and the MDG water indicator by country - Information regarding water resources by country and by inhabitant and percentage of renewable water resources withdrawn (Water Indicator of the Millennium Development Goals) by country.

DataPlace – Housing and demographic data

DataPlace is your free online source for housing and demographic data about your community, your region, and the nation.

EuroGeoInfo - Your source of official European mapping information

From roads to rivers, property ownership to land use, Europe’s National Mapping and Cadastral Agencies collect and maintain a wealth of geographical information.

EuroGeoInfo is here to inform you about and help you obtain both pan-European geographic reference data and detailed geographic information from across Europe.

HealthyCity

information + action for social change
Healthy City, California's information + action resource for service referrals and social change

Healthy City provides data and mapping tools to help you build a better community. The Healthy City team also partners directly with organizations to develop research strategies and web tools that fuel social change.

InfoAlamedaCounty – Reports, maps and charts

This site features detailed reports, powerful maps and charts and our new interactive mapping platform where you can create your own maps, charts with an incredible array of data for Alameda County and its communities.

Free GIS Data – A categorized list

This page contains a categorised list of links to over 300 sites providing freely available geographic datasets - all ready for loading into a Geographic Information System.

We have links to everything from arctic permafrost maps to gridded population data - simply scroll through the list, or use the dropdown menus above to jump to a specific section of interest. See the FAQ for more information on the what, who, how and why of the list.

Beware: The data linked below may be inaccurate, incomplete, or just plain wrong. As always, critically examine the data you are using, look at what organisation produced it and what agenda they may have, and beware that there are disputes over some of the data (particularly country boundaries).

This list was last updated on 18 April 2013.

Open San Diego – Flashlight

Mapping and GIS tools (Open San Diego)

- Mapping and GIS Tools: Top Links
- Politecnico e Università di Torino - Laboratorio di Analisi e Rappresentazioni Territoriali ed Urbane [LARTU] - www.lartu.polito.it - Castello del Valentino (Manica Chevalley) - Viale Mattioli, 39 - 10125 Torino
- Tel. (+39)0110907464 – (+39)0110907478 - Fax. +390115647451
- Test Center ECDL-GIS - www.ecdlgis.polito.it - ecdl-gis@polito.it
• Mapping and GIS Tools: All the Links

**UN data: A world of information**

**UNEP – Environmental Data Explorer**

The Environmental Data Explorer is the authoritative source for data sets used by UNEP and its partners in the Global Environment Outlook (GEO) report and other integrated environment assessments. Its online database holds more than 500 different variables, as national, subregional, regional and global statistics or as geospatial data sets (maps), covering themes like Freshwater, Population, Forests, Emissions, Climate, Disasters, Health and GDP. Display them on-the-fly as maps, graphs, data tables or download the data in different formats.

**FAO - Find Interactive Maps, GIS datasets, Satellite Imagery and Related Applications**

**GeoNetwork**’s purpose is:

- To improve access to and integrated use of spatial data and information
- To support decision making
- To promote multidisciplinary approaches to sustainable development
- To enhance understanding of the benefits of geographic information
The United Nations initiative on Global Geospatial Information Management (UN-GGIM)

The United Nations initiative on Global Geospatial Information Management (UN-GGIM) aims at playing a leading role in setting the agenda for the development of global geospatial information and to promote its use to address key global challenges. It provides a forum to liaise and coordinate among Member States, and between Member States and international organizations.

Geographic information systems (GIS)

Computer software that allows geospatially referenced data to be linked to geographic features.
**TauDEM v.5 - Terrain Analysis Using Digital Elevation Models [Utah State University]**

TauDEM (Terrain Analysis Using Digital Elevation Models) is a suite of Digital Elevation Model (DEM) tools for the extraction and analysis of hydrologic information from topography as represented by a DEM. **TauDEM** provides the following capability:

- Development of hydrologically correct (pit removed) DEMs using the flooding approach
- Calculates flow paths (directions) and slopes
- Calculates contributing area using single and multiple flow direction methods
- Multiple methods for the delineation of stream networks including topographic form-based methods sensitive to spatially variable drainage density
- Objective methods for determination of the channel network delineation threshold based on stream drops
- Delineation of watersheds and subwatersheds draining to each stream segment and association between watershed and segment attributes for setting up hydrologic models
- Specialized functions for terrain analysis, including:
  - Calculates the slope/area ratio that is the basis for the topographic wetness index
  - Calculates both the distance up to ridges and down to streams in horizontal, vertical, along slope and direct variants
  - Maps locations upslope where activities have an effect on a downslope location
  - Evaluates upslope contribution subject to decay or attenuation
  - Calculates accumulation where the uptake is subject to concentration limitations
  - Calculates accumulation where the uptake is subject to transport limitations
  - Evaluates reverse accumulation
  - Evaluates potential avalanche runout areas

**SAMT - Spatial Analysis and Modeling Tool**

SAMT was developed to close the gap between simulation tools such as Matlab and GIS programmes such as ARCGIS. **SAMT** is able to read ASCII grid data from ARCGIS and to apply different types of models, including dynamic process models, fuzzy models and neural networks. SAMT is a grid-based simulation toolbox that stores all its data in the main memory, ensuring quick and large simulations, depending on memory capacity.

SAMT is an open source software programme (GPL) implemented in C++ using Nokia’s Qt toolkit (http://qt.nokia.com/products/). In addition, SAMT uses other open source software, such as GSL, FFTW, HDF5, VTK. Alternatively to the graphical user interface in Qt, SAMT can be used in combination with the programming language Python for the batch processing of large data sets.
A Decision Support System (DSS) can be defined in many ways. The working definition the Upper Midwest Environmental Sciences Center (UMESC) uses is, "A spatially based computer application or data that assists a researcher or manager in making decisions." This is quite a broad definition and it needs to be, as the possibilities for types of DSS are limited only by the user group and the developer's imagination. There is no one DSS; they are as diverse as the problems they help solve. This diversity requires that DSSs are built in a variety of ways using the most appropriate methods and tools for the individual application. The skills of potential DSS users vary widely as well, further necessitating multiple approaches to DSS development. Some small, highly trained user groups may want a powerful modeling tool with extensive functionality at the expense of ease of use. Other user groups less familiar with geographic information system (GIS) and spatial data may want an extremely easy to use application for a wide public or otherwise nontechnical audience. The UMESC DSS developers offer our partners a wide variety of technical skills and development options, ranging from the most simple Web page or small application to complex modeling application development.

Alpine Region GIS data

For the sake of the ECALP project, a number of common GIS layers covering the alpine region are made available in ESRI shapefile or GRID format. These data have been compiled from sources which are freely available for use.

The shapefiles are in the INSPIRE recommended ETRS89 Lambert Azimuthal Equal Area (ETRS_LAEA) coordinate system. The 1k and 10k grids are aligned with the Alpine Region Reference Grids.
ISPRA databases

This section of ISPRA's website aims to facilitate the access to databases created and managed by the Institute, in the light of the INSPIRE Directive and in accordance with the provisions of the current legislation on public access to environmental information, in particular with Legislative Decree No. 195 of 19 August 2005, in the implementation of Directive 2003/4/EC, which states the obligation of "dissemination of environmental information" held by public authorities. Currently, there are 53 databases.

Sistemi informativi ambientali ISPRA

Istituto Geografico Militare (IGM) – Quadri di unione in formato Shapefile

GeoNames (geographical database)

The GeoNames geographical database covers all countries and contains over eight million placenames that are available for download free of charge.

GeoNames geographical database

The GeoNames geographical database covers all countries and contains over eight million placenames that are available for download free of charge.
Consortium for Spatial Information (CGIAR-CSI)

The CGIAR is a global partnership of research organizations dedicated to reducing poverty and hunger, improving human health and nutrition, and enhancing ecosystem resilience through agricultural research. Consortium for Spatial Information (CGIAR-CSI) is spatial science community that facilitates CGIAR’s international agricultural development research using spatial analysis, GIS, and remote sensing.
RTB Maps (Root, Tubers and Bananas)
Root, Tubers and Bananas (RTB) Maps contains geographic information on crop distribution, area and yields, crop-specific agroecological zones and biophysical maps related to each RTB crop.

SURFIT-TINITALY
A new digital elevation model of the whole Italian territory, named TINITALY/01, was presented in 2007 (Tarquini et al. 2007*). This DEM was the final achievement of the DIGITALIA project supported by the Italian Ministero dell’Ambiente e della Tutela del Territorio in the framework of a general agreement involving the Istituto Nazionale di Geofisica e Vulcanologia. The whole DEM database as a 10 m-cell size grid, in the UTM WGS 84 zone 32 projection system, is available upon motivated request to (see the link download).

European Soil Portal – Soil Data and Information Systems
The European Soil Portal contains currently many soil data and information; most of the offered data are at European scale, while, when possible, links to national or global datasets are provided. With the term "Soil Dataset", we refer to all digital resources grouped in data, maps and application/services.

The following resources are available:

- **Data**: presents an inventory of and access to the soil data that the JRC is currently holding. Some of the data found through the catalogue can also be found in other sections of the Soil Portal.
- **Maps**: presents a library of scanned maps and a collection of prepared maps derived from the existing soil databases at JRC
- **Applications/services**: offers the user the possibility to interact on-line with many of the data held in soil related databases at JRC

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**OSM @ GEOFABRIK - Geographic Regions – Download OSM data**

Data on the download server is organised by region. The /openstreetmap directory contains files that have a whole continent's data in them, and for some continents there are subdirectories in which you find individual files for various countries. Some countries again have their own subdirectories with data for administrative subdivisions. For Germany, all "Bundesländer" are available as separate files, and for England we have many individual counties. For France, we have all Departements. The file for Germany's Baden-Württemberg region is, for example, at

http://download.geofabrik.de/europe/germany/baden-wuerttemberg-latest.osm.pbf

Please let us know if you are interested in other regional excerpts that we do not offer right now – we might be able to add them with little effort.

**License**

All OpenStreetMap derived data on the download server is licensed under the Open Database License 1.0. You may use the data for any purpose, but you have to acknowledge OpenStreetMap as the data source. Derived databases have to retain the same license.

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**Virtual Terrain Project – Tools for 3D**

The goal of VTP is to foster the creation of tools for easily constructing any part of the real world in interactive, 3D digital form.

This goal will require a synergetic convergence of the fields of CAD, GIS, visual simulation, surveying and remote sensing. VTP gathers information and tracks progress in areas such as procedural scene construction, feature extraction, and realtime rendering algorithms. VTP writes and supports a set of software tools, including an interactive runtime environment (VTP Enviro). The tools and their source code are freely shared to help accelerate the adoption and development of the necessary technologies.
Biosphere3D - Real-Time Open Source Landscape Visualization

We added support for a new Level of Detail method to Biosphere3D, as presented in our paper “Image-Error-Based Level of Detail for Landscape Visualization”, presented on the VMV 2010 conference in Siegen. Check out the source code revision 1964 for the implementation presented in the paper. We are currently working on an improved version, so later revisions may contain unexpected and undocumented deviations.

CloudMade downloads - Download maps from different places around the world

Welcome to the CloudMade downloads site. This is where you can find extracts of maps from different places around the world. From here you can download:

- OSM XML extracts by country
- Garmin Map Files (OSM.err edition)
- Osmosis country bounding polygon
- Shapefile extracts by country
- Navit maps by country
- GPX POI by country
- TomTom POI by country
- OSM XML feature extracts by country
- Adobe Illustrator files by country
Openmtbmap.org – Mountainbike and Hiking Maps (based on Openstreetmap)

About the Maps – Please Read

Maps are available Worldwide. They are usually updated every Friday.

All map tiles are compiled with mkgmap using map data from openstreetmap.org & Contributors. You can use and edit the map data by visiting openstreetmap.org.

Thanks to Geofabrik for providing the map data snapshots which I use to create the maps. Thanks to http://viewfinderpanoramas.org for the best DEM (contourlines) available on the net.

For Copyrights please see the Installer or if you unextract the installer see the file copyright.txt.

Natural Earth - Free vector and raster map data at 1:10m, 1:50m, and 1:110m scales

Natural Earth is a public domain map dataset available at 1:10m, 1:50m, and 1:110 million scales. Featuring tightly integrated vector and raster data, with Natural Earth you can make a variety of visually pleasing, well-crafted maps with cartography or GIS software.

GIS for International Development and Humanitarian Relief

HERMES GIS
Hotspot Ecosystems Research on the Margins of European Seas Project
HERMES GIS - Hotspot Ecosystems Research on the Margins of European Seas Project

HERMES is an International project in the Europe's deep-ocean margin to investigate its biodiversity, structure, function and dynamics of its ecosystems.

HERMES GIS has been created due to the necessity to show all HERMES data to enable scientists visualize all the datasets from Geology, Biology, Oceanography and Socio-economics for each study site creating a WebGIS for each one.

Mainly HERMES GIS site has been created in two levels of data integration, one for general information as European scale and other with more detailed information at Regional scale. To connect to the European GIS site you should click on the image, but you should avoid clicking on the red areas, otherwise you will link with the Regional GIS site.

ViaClaudia Augusta MAPS

Mit ViaClaudia Augusta MAPS können Sie Ihre Radreise oder Fernwanderung planen, sehen, was Sie auf Ihrer Postkutschenreise erwartet und wo die historische Via Claudia Augusta verlief oder erfahren, bei welchen Gastgebern römische Gerichte serviert werden.

USHAIDI

Products for democratizing information, increasing transparency and lowering barriers to sharing stories.
GISCORPS URISA - Free and Open Source GIS Software

GeoMapApp – Explore our planet

GeoMapApp is an earth science exploration and visualization application that is continually being expanded as part of the Marine Geoscience Data System (MGDS) at the Lamont-Doherty Earth Observatory of Columbia University. The application provides direct access to the Global Multi-Resolution Topography (GMRT) compilation that hosts high resolution (~100 m node spacing) bathymetry from multibeam data for ocean areas and ASTER (Advanced Spaceborne Thermal Emission and Reflection Radiometer) and NED (National Elevation Dataset) topography datasets for the global land masses.

Virtual Ocean

Virtual Ocean integrates the GeoMapApp tool suite with the NASA World Wind 3-D earth browser to create a powerful new platform for interdisciplinary research and education.
Health Map - Global Health, Local Knowledge

Welcome to the Mapping Globalization Project!

The Mapping Globalization website is intended for everyone interested in globalization. The main goal of the website is to make empirical work on globalization as widely accessible as possible.

The website offers an expanding set of resources for students, instructors, and researchers, and provides a forum for empirical research on globalization. We are especially interested in raw data and in the visualization of such data, including maps and animations.

We have adopted a comprehensive definition of globalization that is simply based on geographically expanding networks of transactions, where transactions may be of any type, and may have occurred at any time. This naturally supports a strongly historical perspective that includes trade, migration, transportation, communication, empires, and so on.

OpenSHA (Seismic Hazard Analysis)

OpenSHA is an open-source, Java-based platform for conducting Seismic Hazard Analysis (SHA).
MapGuide 2.5 released

Maps for your apps

Bringing you all the best maps available for your applications and websites. High levels of detail for every community on the planet.

TileMill - Make beautiful interactive maps

Whether you're a journalist, web designer, researcher, or seasoned cartographer, TileMill is the design studio you need to create stunning interactive maps.

The World Bank – Poverty

This page contains a collection of resources on poverty mapping that may be used for reference and research purposes. The articles, reports, manuals and other literature are organized into the categories displayed in the highlight box to the right.
MapBox - Design custom maps

Easily add fast beautiful maps to your sites and apps.

We help people spot local bars on foursquare, choose hotels on Hipmunk, and organize their lives with Evernote. Maps are the context and canvas for everything mobile and social, and we are the platform for making them tailored to fit your product.

World Health Organization – GeoNetwork

GeoNetwork’s purpose is:

- To improve access to and integrated use of spatial data and information
- To support decision making
- To promote multidisciplinary approaches to sustainable development
- To enhance understanding of the benefits of geographic information

GeoNetwork opensource allows to easily share geographically referenced thematic information between different organizations.

For more information or assistance on the WHO GeoNetwork platform, please contact the WHO GIS unit.
cartONG – Improve data gathering and analysis for emergency relief

Founded in 2007, CartONG is a French non-governmental organisation committed to further the use of geographic information systems (GIS) to improve data gathering and analysis for emergency relief and development programmes around the world.

New technologies including smart phones, GPS locator systems and specific software can be used to bring together vital information about people's needs as never before. From determining the locations and health of people trapped under buildings after an earthquake, to tracking the number of petty crimes in an urban slum, up-to-date and geographically specific information helps save lives and improves the lives of people in the community. To find out more about how GIS is used around the world to improve people's lives, see this list of CartONG projects and services.

SharpMap – Geospatial Applications Framework for the CLR

SharpMap is an easy-to-use mapping library for use in web and desktop applications. It provides access to many types of GIS data, enables spatial querying of that data, and renders beautiful maps. The engine is written in C# and based on the .Net 4.0 framework. SharpMap is released under GNU Lesser General Public License.

FRAGSTATS: Spatial Pattern Analysis Program for Categorical Maps

FRAGSTATS is a computer software program designed to compute a wide variety of landscape metrics for categorical map patterns. The original software (version 2) was released in the public domain during 1995 in association with the publication of a USDA Forest Service General Technical Report (McGarigal and Marks 1995).

PASSaGE - Spatial analysis and statistics on biological and other data
PASSaGE is a free, integrated, easy-to-use software package for performing spatial analysis and statistics on biological and other data.

CARTODB – Create map visualizations

Create map visualizations with ease. Maps dynamically change. Build location aware applications.

MapChat – Open source tool for integrating maps with discussions

MapChat is an open source tool for integrating maps with real-time (as well as asynchronous) discussions between multiple users. Expression of local knowledge is enabled through text-based, threaded chat conversations, which can be implicitly and/or explicitly integrated with references to map-based geographic locations or features. MapChat is currently in its third version of development. Its purpose is to take the proof of concept embodied by the first version, and implement it more effectively by building on the experience and insight that has been gained through the course of its development.

SkyToEarth - Free GIS, Mapping and Remote Sensing News and Articles

ArcGIS Projection With Google Earth (Correction)
CIPA – Open Source for Cultural Heritage communication processes

Researches on Cultural Heritage at a territorial scale involve several stages, according to the different methodologies applied in each case. They can be structured into three main groups of tasks: documentation, analysis, and management and dissemination processes.

Libre Map Project

The purpose of the Libre Map Project is to aggregate and make digital maps and related GIS data available for Free.

Flightradar24 – Live air traffic

Live air traffic

MapCrunch - Random Google Street View

Load and display a random Google Street View Image

Marine Traffic.com

Marine traffic
Simplifying a map layer using PostGIS topology

Following a recent research about how to simplify a multipolygon layer while keeping topological relationships intact, here’s my take on that, using the PostGIS topological support.

Topology cleaning with PostGIS

An early tester of the new PostGIS Topology submitted an interesting dataset which kept me busy for a couple of weeks fixing a bunch of bugs related to numerical stability/robustness.

A tutorial introduction to network analysis in python

Derek Greene recently presented a tutorial at the Web Science Summer School in Galway, Ireland. I find that his slides and supporting material not only give a nice introduction to network analysis, but also to my favorite software library for network analysis, NetworkX.
SUTD / MIT - Urban Network Analysis: A Toolbox for ArcGIS 10 / 10.1

The City Form Lab has released a state-of-the-art toolbox for urban network analysis. As the first of its kind, this ArcGIS toolbox can be used to compute five types of graph analysis measures on spatial networks: Reach; Gravity; Betweenness; Closeness; and Straightness.

The tools incorporate **three important features** that make them particularly suited for spatial analysis on urban street networks. **First**, they can account for both geometry and topology in the input networks, using either metric distance (e.g. Meters) or topological distance (e.g. Turns) as impedance factors in the analysis. **Second**, unlike previous software tools that operate with two network elements (nodes and edges), the UNA tools include a third network element - buildings - which are used as the spatial units of analysis for all measures. Two neighboring buildings on the same street segments can therefore obtain different accessibility results. And **third**, the UNA tools optionally allow buildings to be weighted according to their particular characteristics - more voluminous, more populated, or otherwise more important buildings can be specified to have a proportionately stronger effect on the analysis outcomes, yielding more accurate and reliable results to any of the specified measures.

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Circuitscape Project - open-source program to predict patterns of movement, gene flow, and genetic differentiation

Circuitscape is a free, open-source program which borrows algorithms from electronic circuit theory to predict patterns of movement, gene flow, and genetic differentiation among plant and animal populations in heterogeneous landscapes. Circuit theory complements least-cost path approaches because it considers effects of all possible pathways across a landscape simultaneously. We are developing Circuitscape for Mac OS X, Windows, and Linux.

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Corridor Design - GIS tools for connectivity, corridor, or habitat modeling

Our goal is to transfer everything we've learned about designing wildlife corridors to the general public to facilitate better conservation, science, and dialogue.
Linkage Mapper

Linkage Mapper is a GIS tool designed to support regional wildlife habitat connectivity analyses. It consists of several Python scripts, packaged as an ArcGIS toolbox, that automate mapping of wildlife habitat corridors. We developed Linkage Mapper for the Washington Wildlife Habitat Connectivity Working Group’s (WHCWG) 2010 statewide connectivity analysis, and are making them public for use in other wildlife connectivity assessments.

Functional Connectivity Model (FunConn)

The FunConn ArcGIS toolbox consists of two primary toolsets: Habitat Modeling and Landscape Networks. The Habitat Modeling toolset is optimal for those who want to generate a terrestrial habitat quality raster, functional patches, and a landscape network geodatabase from the ground up. Besides land cover, no existing sampling data is required. The Landscape Network toolset is designed for those interested in generating a landscape network geodatabase based on existing data. It contains three sub-toolsets: Processing, Analysis, and Export. The Processing toolset generates the landscape network based on points, polygons, or polylines. The Analysis toolset allows for network-type analyses to be executed on landscape networks. These tools include calculating minimum spanning trees based on a user-defined weight values, calculating node and edge interactions based on used-defined fields and equation strings, and finding the shortest paths from each node to every other node in the network. The Export to spatial weights matrix toolset exports the Landscape Network to an NxN matrix based on user-defined weight values.

Conefor - decision-making support in landscape planning and habitat conservation

Conefor is a software package that allows quantifying the importance of habitat areas and links for the maintenance or improvement of landscape connectivity. It is conceived as a tool for decision-making support in landscape planning and habitat conservation, through the identification and prioritization of critical sites for ecological connectivity. Previous versions of Conefor were known as Conefor Sensinode.
CAT – Connectivity Analysis Toolkit

The Connectivity Analysis Toolkit (CAT) combines several new connectivity analysis and linkage mapping methods in an accessible user interface. The CAT software especially facilitates calculation of 'centrality' metrics. Centrality metrics evaluate paths between all possible pairwise combinations of sites on a landscape to rank the contribution of each site to facilitating ecological flows across the network of sites. Computational advances now allow application of centrality metrics to landscapes represented as continuous gradients of habitat quality. This avoids the binary classification of landscapes into patch and matrix required by patch-based analyses of connectivity. It also allows one to avoid the focus on delineating paths between individual pairs of core areas characteristic of most corridor- or linkage-mapping methods of connectivity analysis. However, you can use the CAT for such patch-to-patch linkage mapping as well.

PATHMATRIX - Compute matrices of effective geographic distances

PATHMATRIX is a tool to compute matrices of effective geographic distances among samples, based on a least-cost path algorithm. Punctual locations (points) or zones encompassing sample data points (polygons) are used in conjunction with a species-specific friction map representing the cost of movement through the landscape. Three different types of distances can be computed. 1) least-cost distance, 2) length of the least-cost path, 3) Euclidean distance. Matrices of effective distances can then be exported to other software to test, for example, for isolation by distance. The use of effective distances allows to investigate the role of the environment on the spatial genetic structuring of populations. Especially for habitat specialists, least-cost distances may give a more realistic measure of spatial isolation (or its inverse, connectivity) than standard Euclidean distance (e.g. Chardon et al. 2003; Coulon et al. 2004)

PATHMATRIX is an extension to the Geographical Information System (GIS) software ARCVIEW 3.x, and is written in the language Avenue. It needs to be used in conjunction with the ARCVIEW module Spatial Analyst.
The 15 minutes “Tools for DEM” Tutorial (PDF)

USGS - Genetic Landscapes GIS Toolbox
Tools to create genetic divergence and diversity landscapes in ArcGIS

USGS - GIS Tools, Scripts, Image Viewer and Utilities…
...and Tutorials

openModeller – An ecological niche modelling library

openModeller is an ecological niche modelling library, providing a uniform method to model species distribution patterns with a variety of algorithms.

openModeller aims to provide a flexible, user friendly, cross-platform environment where the entire process of conducting a fundamental niche modeling experiment can be carried out. The software includes facilities for reading species occurrence and environmental data, selection of environmental layers on which the model should be based, creating a fundamental niche model and projecting the model into an
environmental scenario. A number of algorithms are provided as plugins, including GARP, Climate Space Model, Bioclimatic Envelopes, Support Vector Machines and others.

**Biomapper - GIS-toolkit to model ecological niche and habitat suitability**

A GIS-toolkit to model ecological niche and habitat suitability

**DesktopGarp (biodiversity and ecologic research)**

DesktopGarp is a software package for biodiversity and ecologic research that allows the user to predict and analyze wild species distributions. This website contains a link to download the DesktopGarp software package and instructions for installing and using the package.

**Marxan is freely available conservation planning software**

It provides decision support to a range of conservation planning problems, including:

- the design of new reserve systems
- reporting on the performance of existing reserve systems
- developing multiple-use zoning plans for natural resource management
USGS - ArcGIS Tools for Conservation Planning

LINK is a set of Environmental Systems Research Institute (ESRI) ArcGIS tools designed to analyze habitat patterns across a landscape. LINK is the latest product from a series of Decision Support Systems (DSS) that uses species habitat matrices to model potential species habitat and habitat diversity. What sets LINK apart from its predecessors is that it uses raster data sources. Raster data sources allow LINK to model habitat over a much larger area than its vector based ancestors.

CGA ArcGIS Extensions & Tools

NOAA GIS Scripts and Extensions

CUGIR - GIS Tools: Freeware and Shareware

UMM - Tool, Tips & Tricks
UCL - The Bartlett Center for Advanced Spatial Analysis

CrimeStat® III
A Spatial Statistics Program for the Analysis of Crime Incident Locations.

Ned Levine & Associates
Houston, TX

The National Institute of Justice
Washington, DC
July 2010

CRIMESTAT III
CrimeStat III is made possible through the combined efforts of the National Institute of Justice (NIJ), Ned Levine & Associates, Mapping and Analysis for Public Safety Program (MAPS), and the National Archive of Criminal Justice Data (NACJD) at the Inter-university Consortium for Political and Social Research (ICPSR).

Police.uk - Get street-level maps and data about policing
Welcome to your local crime, policing and criminal justice website for England, Wales and Northern Ireland. Enter your postcode, town or street name to get street-level maps and data about policing, and details of your local policing team and beat meetings.

Data

As well as being able to find out about crime, anti-social behaviour and outcomes in your area via our mapping tool, you can access and developers can make good use of it.
Please note: Police.uk only shows crimes and outcomes at a limited number of 'points of interest', where it is possible to do so without impacting the privacy of individual victims of crime. Find out more about how the map points are created.

the raw data. We’ve made it available in a standard format, so that communities, local services

Data updates for April 2013

London Datastore

The London Datastore has been created by the Greater London Authority (GLA) as an innovation towards freeing London’s data. We want citizens to be able access the data that the GLA and other public sector organisations hold, and to use that data however they see fit – free of charge. The GLA is committed to influencing and cajoling other public sector organisations into releasing their data here too.

ASU - GeoDa Center & Affiliated Software

This page contains a list of software programs developed by the GeoDa Center and affiliates (R-Geo). Please contact us at geodacenter@asu.edu if you have any questions about these free programs.

List of geographic information systems software

GIS software encompasses a broad range of applications, all of which involve the use of some combination of digital maps and georeferenced data. GIS software can be sorted into different categories. Below is a list of notable GIS software applications. Please update the listing of software below with respect to the different categories.
SANET – Spatial Analysis along Networks

SANET is a toolbox for analyzing events that occur on networks or alongside networks e.g., car crashes on roads and beauty parlors in downtown streets, respectively. Networks may be roads, rivers, pipe-lines, cables, etc.

The user is supposed to use SANET for academic and educational purposes only.

Croizat

A Software Package for Quantitative Analysis in Panbiogeography

Croizat - Software Package for Quantitative Analysis in Panbiogeography

A Software Package for Quantitative Analysis in Panbiogeography

BAIDU MAPS

EPSG -> Spatial Reference List

Spatial Reference List and code EPSG
Benvenuti su the Data Hub!

**The Data Hub**

Cerca, Condividi & Collabora

**OpenDataHub Italia**

Ricerca tra 5250 Dataset

**World Countries - GIS Data**

This section houses data and links for either individual countries other than the United States or for worldwide coverages.

**World Countries - GIS Data**

This section houses data and links for either individual countries other than the United States or for worldwide coverages.
GIS Data [GIS@UNIVERSITY OF CHICAGO]

Some of these data sites are more specific by subject or by region than others. However, it is suggested to first try the links under the “National and International Data” heading before going to more specific sites. The National and International sites are more generic in some instances and may have the data that you are trying to locate.

LOGIS - OPEN (italian) DATA
Dati GIS nazionali...

Global Land Cover Facility
The GLCF is a center for land cover science with a focus on research using remotely sensed satellite data and products to access land cover change for local to global systems.

GRIPWEB’s Data & Informational Portal
Welcome to GRIPWEB’s Data & Informational Portal! It is a place where can share or find data and information on disasters and risks at all levels, i.e. National, Regional, and Global. Currently, this portal is featured with 5 groups of information – Risk-related Information by country, disaster databases, early warning systems, global datasets, DRA training courses ...

Welcome to the EDENext Data Portal
EDENext, Biology and control of vector-borne infections in Europe, is a research project bringing together 46 international teams dedicated to investigating the biological, ecological and epidemiological components of vector-borne disease introduction, emergence and spread, and the creation of new tools to control them. For more details on the EDENext project itself visit the project website www.edenext.eu
USGS NASA – GLOBAL DATA EXPLORER

Philippine GIS Data Clearinghouse
Free GIS Data

ncONEmap
NC OneMap is a public service providing comprehensive discovery and access to North Carolina's geospatial data resources. NC OneMap, the State's Clearinghouse for geospatial information, relies on data sharing and partnerships.

European Environment Agency (EEA) - Data and maps
Sharing European environmental datasets, maps, charts and applications.
Mountain GeoPortal

Welcome to Mountain GeoPortal’s Download Services. Here, you can download all the available GIS datasets, value-added data, softwares, papers, books and publications developed and prepared by MENRIS-ICIMOD. If you are having problems in downloading due to limited bandwidth in the HKH region, you can also request us to send them to you in CD copies. For this service, please email your request with your contact details at infomenris@icimod.org

HEGIS Data Sources [University of Minnesota]

HEGIS relies on a large array of data. This page offers links to spatial data gateways and collections. There are also links to GIS and human-environment research.

Quick links:

- **GIS sites**: links to general information on GIS and GIS at UMN
- **Human-environment research**: Human-environment research links
- **Spatial data geoportals**: emphasis on environmental, human-environmental, and global change
- **Spatial data collections**: data collections organized by agency or topic
Canadian GIS Data
“great resources available that offer free open Canadian data that you can use with your geomatics projects to generate geospatial products.”

FREE GIS DATA [This list was last updated on 18 April 2013]

This page contains a categorised list of links to over 300 sites providing freely available geographic datasets - all ready for loading into a Geographic Information System.

Discover and learn about protected areas

Search the protected areas of our planet

YOU ARE IN GIS (@ BUNCOMBE COUNTY - NORTH CAROLINA)
GIS in India

GISinIndia.com
GISinIndia.com is a crowd-sourced GIS directory for India. The goal of this site is to help GIS students, professionals and users with free information about the GIS industry in India.

Global datasets

GrassWiki.osgeo.org – Geodata – Global DataSet

(Free) GIS data index

(Free) GIS data index
MAIN TABLE (international level), SPECIFIC SITES (by geographic area), OTHER INTERESTING and USEFUL SITES
Installing PostGIS 2.0 on UBUNTU

Step By Step Ubuntu 12.04 (Precise) LAMP Server Setup

In around 15 minutes, the time it takes to install Ubuntu Server Edition, you can have a LAMP (Linux, Apache, MySQL and PHP) server up and ready to go...

gvSIG 2.0: the improvements we never talk about

gvSIG 2.0 is full of attractive improvements for the users, some of them originaly released and some others released in the last weeks: OSM, NetCDF, WMTS, Thematic maps, Symbols importer and libraries as OSM, Google, Forestry...

gvSIG World – From Desktop to Mobile, from Mini to SDI...

- Desktop GIS:
  - gvSIG Desktop
  - Sextante
- Mobile GIS:
  - gvSIG Mobile
  - gvSIG Mini
- Web GIS/Spatial Data Infrastructures.
  - Free software powered SDI
A workflow for creating beautiful relief shaded dems using GDAL

[ The SEXTANTE framework ]

SEXTANTE is a spatial data processing framework that brings advanced analysis capabilities to QGIS.

It allows to run a large number of analysis algorithms from the QGIS interface, and integrates seamlessly with the basic QGIS capabilities for data I/O and rendering.

Apart from native algorithms, it support external application such as GRASS, SAGA or Orfeo Toolbox, making it very easy to use them from QGIS and integrating them under a common and homogeneous framework.

QGIS-SEXTANTE cookbook

A collection of simples recipes for not-so-simple spatial problems.
So how’s QGIS 1.9 / 2.0 coming along?

GISoftware - Note su programmazione scientifica, GIS e geologia con Python, R e GFOSS

Tra il materiale esposto: “A Quantum GIS plug-in for the determination of plane topographic traces”, “Calculating the intersections between planes and DEM: a Python implementation”, “Intersezioni tra DEM e superfici planari, un tema di interesse in geologia”, eccetera...

Introducing Quantum GIS

Tim Sutton

QGIS Release Manager and Developer

Introducing Quantum GIS (PDF)
Sextante R Script – Un esempio per cominciare con QuantumGIS

QGIS User Guide
Release 1.8.0

QGIS User guide – Release 1.8.0 – Manuale d’uso in italiano (PDF)

QGIS Cloud

QGIS Cloud hosting

Publish your own maps directly from the desktop! It’s free to get started and sign up is instant. Publish your first map within minutes.

The Spatial Blog - GIS Tips – How Do I do that in QGIS

Quantum GIS Plugin Repository

214 records found on 2013/06/11

Quantum GIS (QGIS) Tutorials

Beginner to Advanced level Quantum GIS tutorials and tips with screenshots
Quantum GIS (QGIS) Tutorials

Beginner to Advanced level Quantum GIS tutorials and tips with screenshots

Introduzione ai GIS GRASS e QGIS (dati supportati e funzionalità)

Workshop QGIS

Contenuti:

- Installazione Macchina Virtuale
  - VirtualBox
  - QGIS da sorgente
- Workshop
  - Introduzione - Tools
  - 1° Parte - Utilizzare Python in QGIS
  - 2° Parte - Creare Plugin Python
  - 3° Parte - Paradigma ad eventi / Debugging / Repository dei Plugin
  - 4° Parte - Form personalizzate
  - 5° Parte - Sviluppare e pubblicare
  - Note sul workshop

Guides

These pages provide basic guidance on a range of tasks associated with georeferencing maps, boundaries, and data, and creating a variety of outputs including customised maps for particular purposes.
The guides cover how to georeference maps, how to draw features (such as lines, points or polygons), and how to present the results online (QGIS and ArcGIS)

Map Builder: Edinburg

Map Builder is a customised open source mashup framework for working with maps and data. As well as working with historic maps you can analyse details such as distance, area and altitude as well as generating elevation profiles.

The following example is centred on Edinburgh and incorporates many of the map and data layers developed as part of the VUG project. For information on customising and saving Map Builder for your own purposes see the Customise section.
OSSIM – Powerful suite of geospatial libraries

OSSIM is a powerful suite of geospatial libraries and applications used to process imagery, maps, terrain, and vector data. The software has been under active development since 1996 and is deployed across a number of private, federal and civilian agencies.

Welcome To Opticks

Opticks - remote sensing and imagery analysis

Opticks is an expandable remote sensing and imagery analysis software platform that is free and open source. If you are interested you can learn about the history of Opticks.

Formation gratuite à Quantum GIS 1.8

L’école nationale des techniciens de l’environnement d’Aix en Provence vient de mettre à disposition sur sa plateforme de formation à distance une eformation en libre service pour la version 1.8 de QGIS.

InaSAFE - Realistic natural hazard impact scenarios for better planning

InaSAFE is a plugin for QGIS software. It aims to produce realistic natural hazard impact scenarios for better planning, preparedness and response activities, using hazard and exposure geographic data. A user’s manual developed by Ole Moeller Nielsen and Tim Sutton complements this short training material. During this training, you will explore the different components of InaSAFE plugin and their usage for an easy-to-use risk and impact scenarios assessments. A data sample will be provided with the present material to give you the
ability to learn how to manipulate data in InaSAFE, what the requirements of the data are and what kind of results you can expect out of the data.

InaSAFE Tutorial

SUPSI – GEOMATICA

- **GIS e Cartografia**
  - Acquisizione altezze edifici con Grass
  - Calcolo curve livello in Grass da punti xyz
  - Classificazione d’immagini con Grass
  - Conversione dati con FWTools
  - Geoindicatori
  - Image Mosaic per Geoserver
  - Network Analysis
  - WMS Service

- **Idrologia e Idraulica**
  - imbriferi
  - GIS Idro-geologia

- **Geo-Rilievi**
  - Rilievo architettonico
  - Rilievo d'alveo torrente
  - Rilievo topografico per progetto costruzione
  - Tracciamento edificio

Open Source GIS in Rural Townships

Affordable GIS and WEB maps for townships, villages and NGOs

Open Source GIS in Rural Townships

Affordable GIS and WEB maps for townships, villages and NGOs
**QGIS Directional Slope**

The slope of a topographic surface is usually calculated as the maximum gradient of a surface at a given point. In other cases, we could be interested in the slope along a constant orientation in space, i.e., *directional slope*. It is typically used to highlight structures perpendicular to the direction of analysis. A generalization of this concept is the *slope along directions that vary in space*, based on external parameters, such as the flows of wind or ice.

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**Whitebox Geospatial Analysis Tools - Whitebox GAT 3.0 'Iguazu' is here!**

Welcome to the Whitebox GAT project. Whitebox GAT is an exciting open-source GIS project. Whitebox is both easy-to-use and very powerful. This makes it ideal for teaching GIS or remote sensing classes, and also for research and industry applications. Whitebox is as much a philosophical approach to geomatics as it is a GIS/Remote Sensing package. This philosophy of transparency (i.e. open-access rather than simply open-source), from which Whitebox derives its name, has led to the development of some rather unique and innovative features in the software. To learn more about this philosophy of transparent GIS/RS, please follow this [link](#).

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**Photovoltaic Geographical Information System (PVGIS)**

*Geographical Assessment of Solar Resource and Performance of Photovoltaic Technology*
Photovoltaic Geographical Information System (PVGIS)
Geographical Assessment of Solar Resource and Performance of Photovoltaic Technology:
- Interactive access to solar resource and photovoltaic potential
- Posters and maps of solar resource and photovoltaic electricity potential

Cartaro
Cartaro is the web mapping platform that brings the power of the best open source geospatial components into a content management system. With Cartaro you are able to set-up and run your own geo-enabled and OGC standards-compliant website with not more than a few clicks. The geospatial components used in Cartaro are PostGIS, GeoServer, GeoWebCache and OpenLayers. All those are managed from within the powerful CMS Drupal.

Cartaro is for organisations and individuals that need to run a light-weight spatial data infrastructure (SDI) without the need for extensive configurations and much individual programming.

MANGO MAP
Transform your geospatial data into compelling interactive web maps. It's easy and it's free!
Welcome to OpenBuildingModels!

OpenBuildingModels is an open, free-to-use repository for architectural 3D building models on the web! It is strongly related but not limited to the OpenStreetMap project. You can link your 3D model to an OSM building and view the result in OpenStreetMap-3D, but you can also contribute or download models for any other purpose.

Welcome to the Port-au-Prince Youth Mapping Project

This project explores tools to help youth in Port-au-Prince build impactful, communicative digital maps using mobile and web technologies. A phone application allows youth to produce a realtime portrait of their community through geo-located photos and videos, organized in thematic maps.

The Maps:

- Social Infrastructures: assembly points, schools, small markets, orphanages, churches, children's aid centers, etc.
- Sanitary Facilities: water points, latrines, public showers, etc.
- Sanitary Problems: trash, defective latrines, stagnant water, animals, etc.
- Medical Facilities: pharmacies, clinics, hospitals, etc.

AQUEDUCT

The Aqueduct Water Risk Atlas combines twelve water risk indicators to create overall maps of where and how water risk may be relevant.
MICRODEM

MICRODEM is a scientific and educational program for:

- Digital Elevation Models & GIS & Remote sensing & Computer Mapping & Cartography
- Geomorphometry.
- Geology and GIS.
- Physical Geography
- Historical cartography
- Oceanography/marine mapping
- Lidar point clouds
- MGT version introducing plate tectonics.
- Geowall data prep
- Statistics/data analysis

MICRODEM is a microcomputer mapping program written by Professor Peter Guth of the Naval Academy. The program requires a 32 bit version of Windows such as XP and will run on 64 bit Windows in 32 bit mode.
OSM-3D MAP

Integration of OpenStreetMap and Digital Elevation Model and their use by means of interoperable GI-Web Services.

In the context of the research project Geodata Infrastructure 3D the open geodata of OpenStreetMap (OSM) and the elevation data of the Shuttle Radar Topography Mission (SRTM) were used for the development of a 3D Geodata Infrastructure (GDI-3D) for entire World based on open web service standards of the Open Geospatial Consortium (OGC). A Web 3D Service (W3DS) is providing the processed data as a 3D scene graph to the client. The visualization of the OpenStreetMap data in 3D takes place in a 3D Viewer (XNavigator), which was developed for displaying the data provided by the W3DS. In contrast to server side rendered maps (if 3D or 2D as in typical Web Map Services (WMS) like www.osm-wms.de) a completely free client side interaction and navigation is possible. As all data is passed to the client computer, where it is rendered, a good internet connection and recent computer with its own graphic card are needed. Therefore this method is also especially suitable for intranets.

Kort – An OpenStreetMap Game

Kort trägt dazu bei, die OpenStreetMap-Daten zu verbessern. Auf einer Karte werden Aufträge angezeigt, die zu erledigen sind.
Mapnik
Mapnik is a Free Toolkit for developing mapping applications. Above all Mapnik is about making beautiful maps. It is easily extensible and suitable for both desktop and web development.

Welcome to GeoMOOSE
GeoMOOSE is a Web Client JavaScript Framework for displaying distributed cartographic data. GeoMOOSE has a number of strengths including modularity, configurability, and delivers a number of core functionalities in its packages. GeoMOOSE is also very lightweight for servers making it easy to handle a large number of users, with a large number of layers, and a large number of services without stressing a server.

An Open-Source JavaScript Library for Mobile-Friendly Interactive Maps
Leaflet is a modern open-source JavaScript library for mobile-friendly interactive maps. It is developed by Vladimir Agafonkin with a team of dedicated contributors. Weighing just about 28 KB of JS code, it has all the features most developers ever need for online maps.

Leaflet is designed with simplicity, performance and usability in mind. It works efficiently across all major desktop and mobile platforms out of the box, taking advantage of HTML5 and CSS3 on modern browsers while still being accessible on older ones. It can be extended with many plugins, has a beautiful, easy to use and well-documented API and a simple, readable source code that is a joy to contribute to.

Welcome to OSGeo-Live 7.0 alpha1
OSGeo-Live is a self-contained bootable DVD, USB thumb drive or Virtual Machine based on Xubuntu, that allows you to try a wide variety of open source geospatial software without installing anything. It is composed entirely of free software, allowing it to be freely distributed, duplicated and passed around.

It provides pre-configured applications for a range of geospatial use cases, including storage, publishing, viewing, analysis and manipulation of data. It also contains sample datasets and documentation.
MapServer on Debian GNU/Linux

GeoNode - Open Source Geospatial Content Management System

GeoNode is a web-based application and platform for developing geospatial information systems (GIS) and for deploying spatial data infrastructures (SDI).

It is designed to be extended and modified, and can be integrated into existing platforms.

Peak Finder

Peak Finder
Installing MapServer on a LAMP server

How To Install MapServer on Windows

Geographic Information Processing
This site houses a collection of resources that facilitate the understanding and use of standards that apply to geospatial information processing on the web

GPS to GIS

GPS to GIS
Cesium - JavaScript library for 3D globes and 2D maps in a browser

Cesium is a JavaScript library for creating 3D globes and 2D maps in a web browser without a plugin. It uses WebGL for hardware-accelerated graphics, and is cross-platform, cross-browser, and tuned for dynamic-data visualization. Cesium is open source under the Apache 2.0 license. It is free for commercial and non-commercial use.

OpenWebGlobe

OpenWebGlobe consists of a high-performance 3d geobrowser and it also encompasses the software for processing very large volumes of geospatial data in highly parallel and scalable computing environments. The WebGL Version runs in the browser without plugin.
GPS Visualizer's Address Locator

To use this free utility, simply enter addresses in the box to the left, one per line, and click "Start geocoding" to find their latitude and longitude. If your data is in a tabular format with a descriptive header at the top of each column, choose "tabular" for type of data (and make sure the headers make sense!). If you have a raw jumble of address data, that's okay too; choose "raw list mode," but be aware that everything should at least look like an address, and any non-address data such as names, descriptions, or other fields might confuse things.

QLandkarte GT

QLandkarte GT is a powerful Open Source GIS application to display your GPS data on a variety of maps. It's target is the less the scientific user but the private outdoor aficionado with a crush on hightech equipment. It's easy to plan, evaluate and archive your trips into the wild green by QLandkarte. Have a look at this » little story to find out what it can do for you.

Making maps from OpenStreetMap for Garmin devices

The mkgmap program takes OpenStreetMap data and generates a map in the Garmin .img file format so that it can be loaded onto compatible GPS units.

If you are not already familiar with Open Street Map (OSM) then you why not head over to the OSM website and maybe get involved. The idea is create an editable map of the whole world. OSM map data is the only format that is well supported by mkgmap.
Viewfinder Panoramas

Panoramas Downloadable computer drawn panoramas from viewpoints. More than 200 panoramas from selected viewpoints can be downloaded from here. Last update 24 December 2011 with addition of new summits in far north of Scotland. See also a gallery of samples alongside photographs from the same viewpoints.

DIGITAL ELEVATION DATA

The whole world is now on this site at 3 and 15 arc second resolutions.

Mirone

Mirone is a MATLAB-based framework tool that allows the display and manipulation of a large number of grid/images formats through its interface with the GDAL library. Its main purpose is to provide users with an easy-to-use graphical interface to manipulate GMT grids. In addition it offers a wide range of tools dedicated to topics in the earth sciences, including tools for multibeam mission planning, elastic deformation studies, tsunami propagation modeling, earth magnetic field computations and magnetic Parker inversions, Euler rotations and poles computations, plate tectonic reconstructions, and seismicity and focal mechanism plotting. The high quality mapping and cartographic capabilities for which GMT is renowned is guaranteed through Mirone’s ability to automatically generate GMT cshell scripts and dos batch files.

The New York Times

Immigration Explorer

Select a foreign-born group to see how they settled across the United States.
US Immigration Explorer

Select a foreign-born group to see how they settled across the United States.

How many people live near a nuclear power plant in Germany?

Twelve nuclear power plants are currently operable in Germany. After radioactive material escaped from Japan's Fukushima power plant, everyone within 30 kilometres of the plant was evacuated. Our map shows how many people live close to German nuclear power plants who would have to be evacuated in a similar situation. We have also included nine foreign nuclear power plants that border on Germany.

How many people live near a nuclear power plant in the USA?

Radioactive fall-out from the Chernobyl accident.jpg

Radioactive fall-out from the Chernobyl accident

Every death on every road in Great Britain 1999-2010
Every death on every road in Great Britain 1999-2010
The image below (look at the WEB page) shows the location of 2,396,750 road crashes in Great Britain from 1999 to 2010. Each light point is an individual collision which resulted in a casualty. The intensity of brightness shows where collisions are more frequent.

Where are migrants coming from? Where have migrants left?

Data Pointed
Data Pointed is the home of artist and scientist Stephen Von Worley's data visualization research; a journal of interesting information imagery and news from around the world; and a place where you can spend a few minutes, have a laugh or two, and discover something new.
Distance To McDonald’s
A McDistance Map Of The Contiguous U.S.

Thematic Maps Blog

ILWIS, THE FREE USER-FRIENDLY RASTER AND VECTOR GIS
Unique in the Crowd: The privacy bounds of human mobility

We study fifteen months of human mobility data for one and a half million individuals and find that human mobility traces are highly unique. (...).

GIS basic functionalities: managing reference and coordinate systems

Photovoltaic Solar Electricity Potential in European Countries

http://re.jrc.ec.europa.eu/pvgis/
Photovoltaic Solar Electricity Potenzial in European Countries

World Map of the Köppen-Geiger climate classification updated

The most frequently used climate classification map is that of Wladimir Köppen, presented in its latest version 1961 by Rudolf Geiger. A huge number of climate studies and subsequent publications adopted this or a former release of the Köppen-Geiger map. While the climate classification concept has been widely applied to a broad range of topics in climate and climate change research as well as in physical geography, hydrology, agriculture, biology and educational aspects, a well-documented update of the world climate classification map is still missing. Based on recent data sets from the Climatic Research Unit (CRU) of the University of East Anglia and the Global Precipitation Climatology Centre (GPCC) at the German Weather Service, we present here a new digital Köppen-Geiger world map on climate classification for the second half of the 20th century.
Cartastrophe: mistakes were made

Hi there. Perhaps one of your maps has appeared on my blog and you are understandably wondering why I would do such a terrible thing to you.

You made — *in my opinion* — a less than stellar map. It doesn’t mean that you’re a bad person, or that you are untalented, or have no future in cartography. I don’t think that, and I hope that my readers are wise enough to realize the same. Most anyone who’s made a map has birthed a disaster from time to time, either because we’re just starting out, we’re on a tight deadline, or because our clients ordered us to act against our better judgment. We laugh at the result, we critique, and we grow our skills from the experience. Make no mistake: I’m proud of those terrible maps I have made. I hope you are still proud of your work, too.

Your map was amusing and has served, hopefully, an educational role here. My advice is to roll with it, laugh, and keep making better and better maps.

OpenEI – OPEN ENERGY INFO

Free download of Solar Radiation Maps

The maps of some solar radiation parameters of various countries and regions are available free to download. SolarGIS database is the source of solar data represented on the maps. The maps represent long-term yearly average sum of the relevant parameter.

Presently, two bundles of free maps are available:

- Global horizontal irradiation
- Direct normal irradiation

Please, before downloading and using the maps read the terms of use and copyright notes, presented on the download pages.
GIS RESOURCES from INDIANA GEOGRAPHIC INFORMATION COUNCIL

Below are links to a number of local and national GIS resources. If there are others you think should be included, or you find any broken links, please contact us.

List of GIS Data Sources [The Evergreen State College]

Here you will find a list of sources to get GIS data. The list categorizes the sources by location of interest.

GeoLISTA - Universidade Federal Fluminense
Links – Resources

External links to gazetteers, reference tables, look-up services, maps, and software.

Seafloor Mapping | Software/Utilities

Google Earth Blog

This blog is not officially affiliated with Google. Google Earth Blog is dedicated to sharing the best news, interesting sights, technology, and happenings for Google Earth. You will find the most amazing and interesting Google Earth news stories and content you can download right off the site. Learn how to take data from your GPS, map it into Google Earth, and share it with friends or the world. Learn when new releases of Google Earth come out, hear about new technologies and features, or check out the links to dozens of other Google Earth web sites.
GAPMINDER for a fact-based world view

Explore the world

Gapminder World shows the World’s most important trends

› Wealth & Health of Nations
› CO₂ emissions since 1800
› Africa is not a country!
› Is child mortality falling?
› Where is HIV decreasing?

The GIS Jobs Clearinghouse Map

UTM Grid Zones of the World
Ville Vivante: the dynamic dimension of Geneva (vimeo video)

During one day in Geneva, two million of mobile calls (SWISSCOM)...)
BioMapping
Bio Mapping is revolutionary methodology and tool for visualising people's reactions to the external world.

USGS – OSW HYDROACUSTICS – Velocity Mapping Toolbox (VMT) for MatLab

VMT is a Matlab-based software for processing and visualizing ADCP data collected along transects in rivers or other bodies of water. VMT allows rapid processing, visualization, and analysis of a range of ADCP datasets and includes utilities to export ADCP data to files compatible with ArcGIS, Tecplot, and Google Earth.

Conservation Assessment Tools (CAT)

The Conservation Assessment Tools (CAT) is an extension to ArcView 3.3 that provides a suite of tools designed to produce rapid conservation assessments.
Punti fiduciali delle Provincie Italiane