Commission on Education and Training

http://lazarus.elte.hu/cet/

May 2012 Newsletter

An occasional electronic newsletter from the Commission.

If you have any brief items of interest then please email them to david.fraser@rmit.edu.au. for eCET.

If you have more substantial articles please send them to Igor Drecki at i.drecki@auckland.ac.nz for the ICA newsletter.

Quote and Observation

"*The importance of maps and cartography is being detected more and more by decision makers and, for example, has been taken on board by the United Nations in their Global Geospatial Information Management Initiative.*" Georg Gartner | President | *ICA, 2011*
http://icaci.org/files/documents/newsletter/ica_news_57_2011_2_lq.pdf

In a so-called "positioning" exercise at the United Nations First High Level Forum on Global Geospatial Information Management (GGIM), the participants were asked to "name" themselves. "*The majority identified themselves as "cartographers", followed by "geographers" and "geoinformatics experts". Other terms like "mappematician", "geovisualizer" or "spatial technology communicator" were also mentioned.*"
http://icaci.org/files/documents/newsletter/ica_news_57_2011_2_lq.pdf (page 24)

ICA and Commission Items

Members who are also members of the ICA Executive Committee

László Zentai

I was interested in maps since my childhood, so my path into cartography was natural. Now I am Professor and Head of the Department of Cartography and Geoinformatics at the Eötvös Loránd University in Budapest. I specialise in teaching computer cartography, topographic maps and relief representation. I am a member and currently President of the Hungarian National Committee for ICA. My major international ICA activities included organization of three joint ICA Commissions' meetings in 1993, 2005 and 2011, and the Executive Committee meeting in Budapest in 2003. I am a member of the ICA Commission on Education and Training since 1999, a former Chair (2003-2007) and Vice Chair (2007-2011). I am an active orienteer and serve on the International Orienteering Federation's Council.

Sukendra Martha

ICA, as a professional and scientific international organization on cartography, is very interesting to me and worth being involved in. My studies, both in Indonesia and abroad, led me to completing degrees in Geography, Cartography and Remote Sensing. I am President of the Indonesian Cartographic Association (AKI) and Senior Researcher for Geography at the National Coordinating Agency for Surveys and Mapping (Bakosurtanal). I am also lecturing in the Postgraduate School of Geography at the Gadjah Mada University in Yogyakarta. My current Vice Presidency gives me the opportunity to engage myself in cartographic developments internationally by interacting with cartographers from all over the world and contributing my knowledge and experience to running and managing the ICA.

UN First High Level Forum on Global Geospatial Information Management

The United Nations First High Level Forum on Global Geospatial Information Management (GGIM) was held in Seoul, South Korea from 24 to 26 October 2011. The International Cartographic Association was well represented at the Forum by President Georg Gartner, Vice President Tim Trainor and Immediate Past President William Cartwright, in his position as Chair of the Joint Board of Geospatial Information Societies (JBGIS). Also at the meeting were ICA 'family' members, i.e. Professor Fraser Taylor, former President of ICA and current Chair of the International Steering Committee for Global Mapping and Professor Ferjan Ormeling, former ICA Secretary General and Treasurer and a member of the United Nations Group of Experts on Geographical Names (UNGEGN).

6th Cartographic Day in Olomouc, the Czech Republic – contribution from Vaclav Talhofer

Approximately 150 participants from the Czech Republic and also from Slovakia took part on the 6th Cartographic Day in Olomouc organized by Palacký University (Olomouc, the Czech Republic) under supervision of Prof. Vozenilek. The event was organised in the cooperation with the Cartographic Society of the Czech Republic on February, the 24th 2012. This year, the traditional event (free of charge) was focused on the modern concept of thematic mapping in landscape ecology. Beside five invited lectures, three scientific atlases were introduced and analysed.

Prof. Kozova and Dr. Pauditsova from Slovakia presented the main issues dealt with by the scientific world community in the field of landscape ecology. They discussed several topics concerned with thematic mapping, for example sustainable development, genetics of the landscape, the interaction of natural and social effects on the landscape and the implications for the risk of development and territorial planning.

Dr. Hrnčiarova, also from Slovakia, presented the Atlas of the landscape of the Slovak Republic, addressed in particular the visualizations of the landscape on the maps from various aspects. She showed the importance of the classification of landscapes, objects and phenomena, their methods of analysis, homogenization and resultant fusion, which is designed for the study of processes in the landscape. All her arguments were presented on the maps from the Atlas.

Similarly, Dr. Planka, Dr. Mackovcin and Dr. Kubicek introduced Atlas of the landscape of the Czech Republic. Relatively in details, they presented the problems that accompanied the beginning of work, in particular the creation of the concept of the Atlas, the creation of the basic research team, finding suitable staff and in particular to find an institution that will cover the entire project and pay. Some cartographical aspects were pointed out.

The last lecture was devoted to the issue of the Atlasof phenological conditions of Czechia, completed at university in Olomouc and presented by Eng. Hajkova, MSc. Vavra, and Dr. Vondrákova. They discussed both technological and non-technological issues of the Atlas and introduced new approaches for visualisation of phenological stages.

All atlases were presented in a paper form and were evaluated as good examples of modern atlas production. The audience, consisting of cartographers and landscape ecologists as well as of researchers, practitioners and students opened large discussion on wide scope of cartographical topics. The organisers confirmed their intention to continue in free cartographical days in Olomouc for next years.

More info: http://www.geoinformatics.upol.cz/eindex.php

Vaclav Talhofer, Commission for Education and Training, the Czech Republic

Discussion on the Atlas of the landscape of the Czech Republic (photo DoGI)

Participants of the 6th Cartographic Day (photo DoGI)

For information – contribution from Temenoujka BANDROVA

University of Architecture, Civil Engineering and Geodesy
Laboratory of Cartography
and

Delft University of Technology, **Section GIS Technology**

organize course on theme
3D Urban Visualisation
Open Web Technologies
01 – 05.10.2012
40 hours: lectures and exercises.
Lector: Assoc. Prof. Dr. Sisi Zlatanova.

The candidate could be students on geodesy and cartography. Students with skills in programming and English will have a privilege.
All students should be enthusiasts.

Questionnaire could be fill in at the Laboratory of cartography every day btw 10 am and 12 am в Лабораторията по Картография, всеки делничен ден от 10 до 12 часа.

Open Source GIS workshops at AGILE 2012

Workshop material is now available at http://kartoweb.itc.nl/kobben/AGILE-OSGEO-workshop/ for the benefit of the wider community.

Thanks to Barend Köbben and ITC for putting together the course materials (presentations, exercises, etc.) and for making all arrangements for making this a great success.

Best wishes,

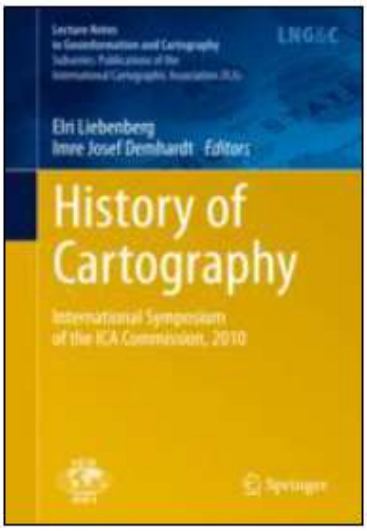
Suchith

Dr Suchith Anand
Nottingham Geospatial Institute
Nottingham Geospatial Building
University of Nottingham NG7 2 TU

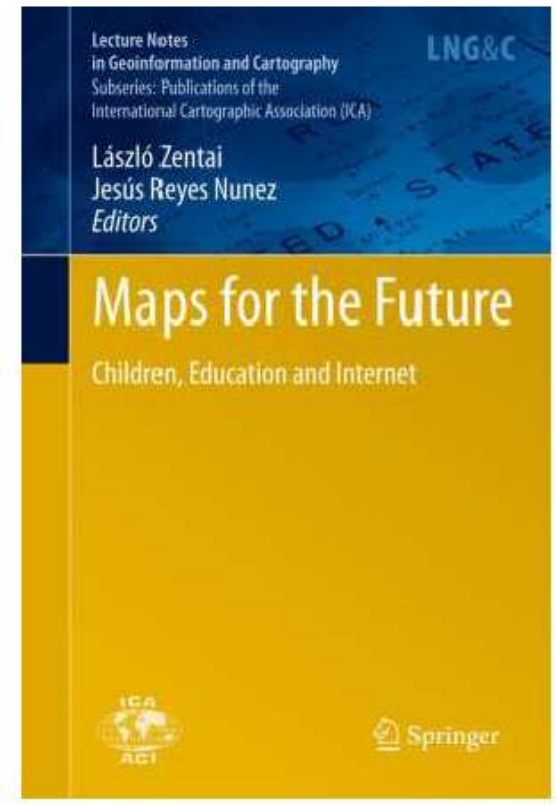
New book – Maps for the Future

History of Cartography

International Symposium of the ICA Commission, 2010
Series: Lecture Notes in Geoinformation and Cartography
Subseries: Publications of the International Cartographic Association (ICA)
Liebenberg, Elri; Demhardt, Imre Josef (Eds.)
2012, 2012, IX, 303 p. 120 illus., 3 in color.
Available Formats:
Hardcover
Information
ISBN 978-3-642-19087-2



1. "Maps for the Future: Children, Maps and Internet"



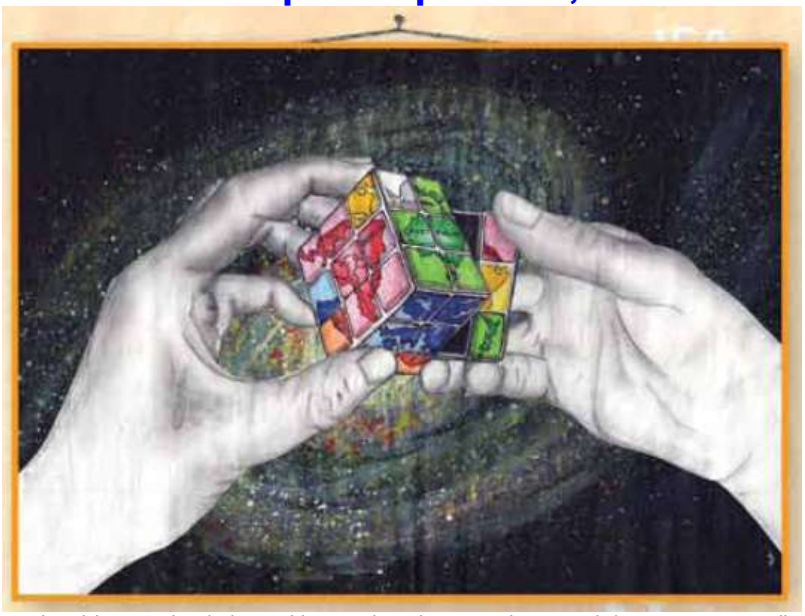
Finishing January the Springer-Verlag Editorial House published the book entitled "Maps for the Future: Children, Education and Internet", containing a selection of papers presented during the Joint ICA Symposium held at the University of Orleans on 30 June and 1 July of 2011. This event was organized by the Department of Geography of this university, counting with the participation of four ICA Commissions and a Working Group (Cartography and Children, Education and Training, Maps and Internet, Planetary Cartography and Cartography for Early Warning and Crisis Management).

The book includes a total of 24 works written by authors from Australia, Austria, Belgium, Brazil, Bulgaria, Hungary, Indonesia, Poland, The Netherlands and USA.

(Extracted from the May 2012 newsletter for the Commission on Cartography and Children. http://lazarus.elte.hu/ccc/ccc.htm)

More information at:
http://www.springer.com/earth+sciences+and
+geography/geographical+information+systems/book/978-3-642-19521-1

Children's Map Competition, 2011



Hayden Livingstone | 15 | *The World at My Fingertips - Remains a Puzzle* | Tauranga Boys College: Tauranga | *New Zealand*
http://icaci.org/files/documents/newsletter/ica_news_57_2011_2_lq.pdf (Page 36)

GeoInformation Research and Development Papers

Evacuation Trace Mini Challenge Award: Tool Integration Analysis of Movements with Geospatial Visual Analytics Toolkit

Natalia Andrienko, Gennady Andrienko
Fraunhofer Institute IAIS (Intelligent Analysis and Information Systems), Sankt Augustin, Germany

The Geospatial Visual Analytics Toolkit intended for exploratory analysis of spatial and spatio-temporal data has been recently enriched with specific visual and computational techniques supporting analysis of data about movement. We applied these and other techniques to the data and tasks of Mini Challenge 4, where it was necessary to analyze tracks of moving people.
http://vac.nist.gov/2008/summaries/205_206_andrienk.pdf
See also:
http://geoanalytics.net/and/papers/ivs08b.pdf

Visualizing Time Series Data Using Web Map Service Time Dimension and SVG Interactive Animation,

by Timothee Becker.
http://geoserver.itc.nl/TimeMapper/docs/Becker-MScGFM.pdf

The Gauss–Krueger Projection: Karney-Krueger equations

R. E. Deakin1, M. N. Hunter2 and C. F. F. Karney3

The Gauss-Krueger projection has two forms. One has the Karney-Krueger equations capable of micrometre accuracy anywhere within 30° of a central meridian of longitude. The other has equations limited to millimetre accuracy within 6° of a central meridian. These latter equations are complicated but are widely used. The former equations are simple, easily adapted to computers, but not in wide use. This paper gives a complete development of the Karney-Krueger equations.
http://icaci.org/files/documents/ICC_proceedings/ICC2011/Oral%20Presentations%20PDF/D1-Map%20projection/CO-300.pdf

Cartographic Enhanced Geoportals

TOOMANIAN A., HARRIE L., OLSSON P.O.
GIS Centre, Dept of Earth and Ecosystem Sciences, Lund University, LUND, SWEDEN

The demand for web based spatial data applications are increasing rapidly. A wide area of web based applications, initiated the requirement to disseminate spatial data to the end-users by the use of geoportals. They support searching, viewing and downloading spatial data.
http://icaci.org/files/documents/ICC_proceedings/ICC2011/Oral%20Presentations%20PDF/D2-Web%20services%20and%20cartographic%20issues%20for%20geoportals/CO-329.pdf

Restoring Blaeu's Globes by Modern Methods

MÁRTON M.(1), PLIHÁL K.(2), UNGVÁRI Z.(1)
(1) Eötvös Loránd University, BUDAPEST, HUNGARY ; (2) National Széchényi Library, BUDAPEST, HUNGARY

The famous Dutch Blaeu dynasty produced globes in the seventeenth century, which we can find all over Europe. In the Museum of the Zirc Abbey, there is a 68 cm diameter earth globe and its celestial pair too. These globes were in very poor state, so they had to be restored in 2008. After the restoration, we can see the globes in their original state in the Museum. Unfortunately, not every people can visit this museum. This is why the Department of Cartography and Geoinformatics at Eötvös Loránd University decided to take a photo series of the surface of the globes, and publish the globes on the Internet as virtual globes
(Virtual Globes Museum: *http://vgm.elte.hu*).

http://icaci.org/files/documents/ICC_proceedings/ICC2011/Poster%20Presentations%20PDF/POSTERS%20SESSION%203/P-172.pdf

Examples of Spatial Humanities Projects

Published: July 26, 2011

Historians, literary theorists, archeologists and other academics are using advanced technology to establish a novel field that they are tentatively calling “spatial humanities.” These scholars use software that can display and analyze information related to a physical location to re-examine real or fictional places in new ways.

http://www.nytimes.com/interactive/2011/07/27/arts/spatial-maps.html?ref=maps

3D Laser Scanning – United Arab Emirates

3D Laser Scanning by the RMIT team in UAE

A team of RMIT University researchers worked in the United Arab Emirates in January 2012 assisting the Fujairah Tourism and Antiquities Authority.

The researchers from the School of Mathematical and Geospatial Sciences spent more than two weeks undertaking 3D laser scanning of important cultural, historic and natural tourism sites in and around the city.

Associate Professor Colin Arrowsmith, Dr David Silcock, Lucas Holden and Mohamed Hassani were working with the authority to establish a three-dimensional baseline model.

Research by Mr Hassani, a PhD student, was showing that Fujairah had much to gain from tourism in terms of providing visitors with an authentic Arabic experience.

Associate Professor Arrowsmith said previous research had shown that visitors benefited greatly from having learnt something of the country they wish to visit beforehand.

“Climate change will impact upon Fujairah’s natural and cultural resources and the economic benefits that flow from tourism,” he said.

“This research is exploring how changing climatic conditions will impact upon each of these tourism resources.

“In addition, due to Fujairah’s geographic location, tectonic activity in the area puts its cultural and natural sites at risk.

“This project, in essence, will provide a baseline snapshot of the natural and cultural resources.”

David Silcock, Mohamed Al Hassani, Colin Arrowsmith and Lucas Holden at one of the historical sites in Fujairah

A 3D laser scan of an historic site.

Associate Professor Arrowsmith said that from this baseline, measurements could be taken overtime to enable changes, and the rates of those changes in features surveyed to be ascertained.

“From this project it is anticipated that further surveys of cultural and natural heritage sites can be undertaken,” he said.

During the trip they met with His Highness, the Fujairah Crown Prince, Mohamed Bin Hamad Al Sharqi to present their work on Fujairah Fort, Al Bidya Mosque and Bithna Fort.

His Highness welcomed and thanked the delegation, which was accompanied to the meeting by authority members Ahmad Al Shamsi and Saeed Al Samahi.

“His Highness welcomed the group back to continue their work with the authority in the near future,” Associate Professor Arrowsmith said.

The reconstruction of cultural, heritage or archaeological sites requires 3D documentation and was usually done using traditional surveying techniques, but the researchers in Fujairah used terrestrial 3D laser scanning.

Professor Arrowsmith said this would become the future standard tool for high-resolution 3D documentation of archaeological, cultural, heritage and natural sites.

The researchers thanked the authority for supporting their work and for their hospitality during their stay.

Ahmad Khalifa Al Shamsi, Chairman, Fujairah Tourism and Antiquities Authority; Dr David Silcock; His Highness the Fujairah Crown Prince, Mohamed Bin Hamad Al Sharqi; Associate Professor Colin Arrowsmith and Mohamed Al Hassani.

Cartography in the News

Map shows how country was formed

PAUL EASTON
26/04/2012

A project to map New Zealand's dramatic landscape in all its glory has been finished, after 18 years. "It's a view from the heavens of the beauty of New Zealand," GNS Science chief executive Alex Malahoff said.

NZ REVEALED: Mark Rattenbury, with a 6-metre long summary map of the new geological maps of New Zealand.

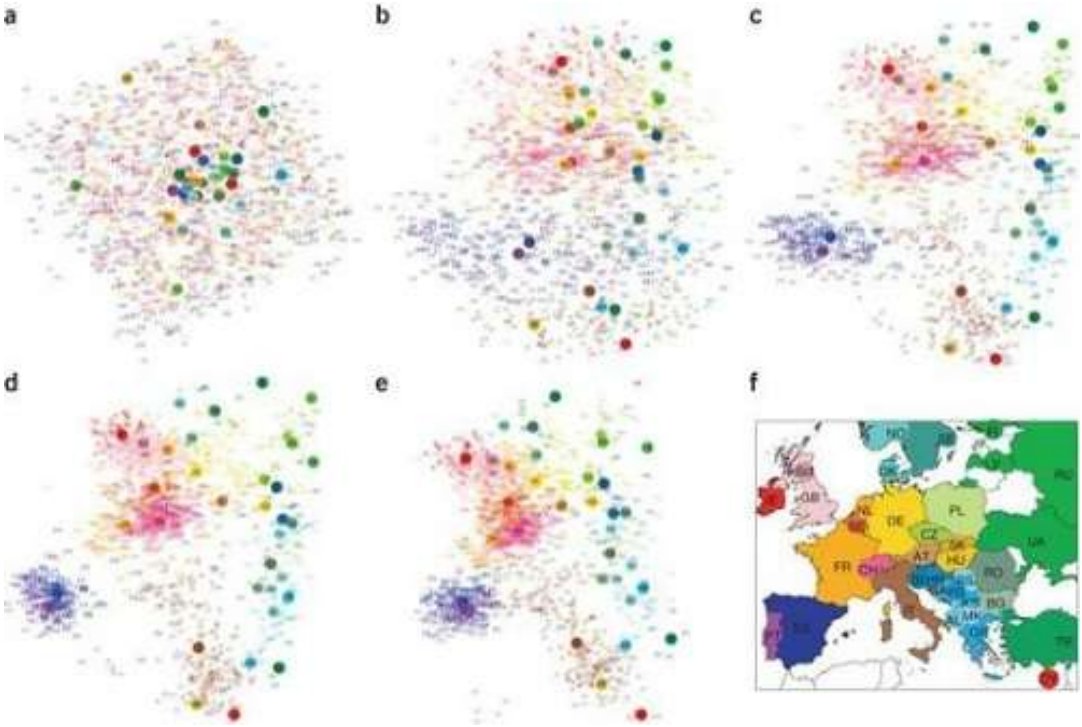
Lurking fault lines, old lahar fields spewing from volcanoes, and gravels spreading on to plains are all revealed by the mapping series.
But though the $25 million project has brought many improvements in accuracy and interpretation, they have been achieved by old-fashioned "hard yakka", rather than satellite technology.
http://www.stuff.co.nz/national/6807508/Map-shows-how-country-was-formed

Spatial genetic method can pinpoint an individual's geographic origin

Thu, May 24, 2012

Remarkably, an international team of scientists comprised of researchers from UCLA Henry Samueli School of Engineering and Applied Science, UCLA's Department of Ecology and Evolutionary Biology

and Israel's Tel Aviv University have successfully and quite accurately managed to pinpoint the geographical origin of an individual on the basis of their genetic information alone.



SPA Genetic Mapping: Model-based mapping convergence with random initialization. Colors represent the true country of origin of the individual (also represented by country internet code). (a–d) A map generated by SPA. Iteration 1 starts with random positioning of individuals (a). By iteration 4, the northern and southern populations are separated (b). By iteration 7, the positioning of individuals is close to convergence (c). In iteration 10, individuals have reached their final positions (d). (e) A map generated by PCA9. (f) Map of Europe.
http://www.zmescience.com/medicine/genetic/genetics-tells-geographic-origin-321943/

Sparse data challenges NOAA in mapping Arctic

Posted: May 23, 2012 - 12:01am

Sullivan, a former astronaut and the first woman to walk in space, is now deputy administrator and acting chief scientist for the National Oceanic and Atmospheric Administration.

Her agency, she said, faces a huge challenge in upgrading navigational data in the Arctic Ocean as summer sea ice continues to diminish and the region opens to more vessels.

"Much of the coastline and offshore waters here are comparatively poorly mapped, mapped in a sort of once-upon-a-time time frame, very early British Admiralty charts done with lead lines, are not uncommmonly the primary source of data for what's on the bottom and how deep," she said.

http://juneauempire.com/state/2012-05-23/sparse-data-challenges-noaa-mapping-arctic#.T78S2lL4L-I

Chinese mapping satellite in orbit after weekend launch

BY STEPHEN CLARK
SPACEFLIGHT NOW
Posted: May 6, 2012

A Long March rocket boosted a Chinese mapping satellite into orbit Sunday from the Jiuquan launching base in the Gobi desert, according to state media reports.

The Tianhui 1B satellite blasted off at 0710 GMT (3:10 a.m. EDT) Sunday aboard a Long March 2D rocket, which deployed the spacecraft into a near-polar orbit more than 300 miles in altitude.

Liftoff occurred at 3:10 p.m. Beijing time.
The payload was the second Tianhui 1 spacecraft - named Tianhui 1B - designed for scientific research, land resource surveys and mapping, according to the state-run Xinhua news agency.
http://www.spaceflightnow.com/news/n1205/06longmarch/

Map invasive species with your smartphone

by admin on May 7, 2012 •

Emerald ash borer, an invasive species on pace to exterminate North American ash trees
NYSDEC and the New York Natural Heritage Program (NYNHP) released a new Smartphone application to help citizens and conservation professionals quickly and easily report new invasive species sightings directly to NY's invasive species database from their phones.
……..
"We encourage citizen scientists to learn how to identify invasive species and contribute their observation data to the database for greater public awareness and engagement in New York's efforts to control the spread of invasive species," said D.J. Evans, New York Natural Heritage Program Director.
http://www.saugertiesx.com/2012/05/07/map-invasive-species-smartphone/

Nokia brings indoor mapping across 17 states in India

By Rahul Gupta, The Mobile Indian, New Delhi, May 08, 2012

Nokia's latest addition, indoor mapping, allows users to access and navigate inside popular places and malls and get an exhaustive navigation experience that is available to customers for the first time

Nokia has a new Navteq Destination Maps app for customers seeking indoor navigation solutions in India. The app features a unique set of interior map attributes (e.g. escalators and elevators) with detailed place data that allows users to easily navigate and explore indoor spaces of popular destinations and buildings.

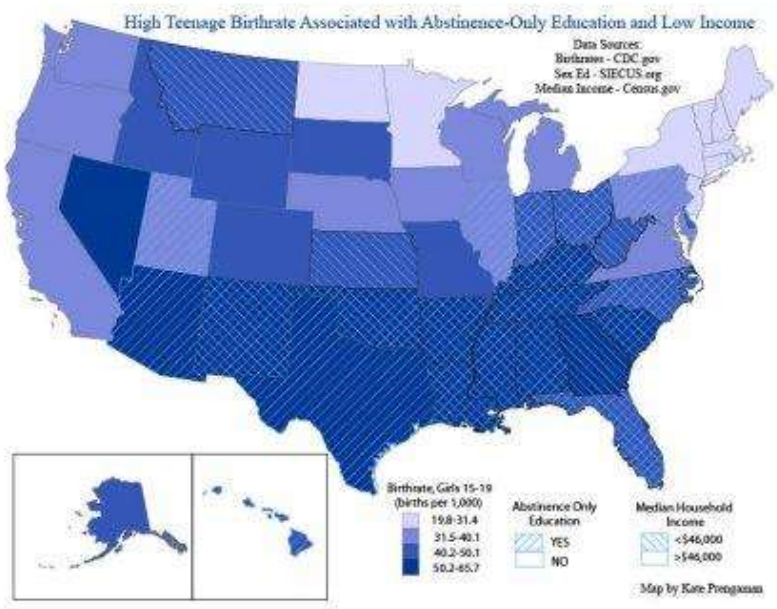
http://www.themobileindian.com/new-launches/1585_Nokia-brings-indoor-mapping-across-17-states-in-India

What Cartography Taught Me about Science Writing

By Kate Prengaman | May 7, 2012

Just like in journalism, the first thing one learns in a cartography class is that good maps tell stories. This semester, I'm taking cartography and journalism simultaneously, and I've realized that the constructions I've learned for how to think about making maps actually make me a better writer.

In cartography, they teach that maps gain their power through the process of abstraction. Abstraction is the process through which a geographic reality is turned into a representation, the map. In the process of making a map, cartographers have to decide what information to include and what to exclude, and this process creates an abstraction of reality that has more power and more functionality then the entire reality itself.



Think about if you made a perfect map. …….

http://blogs.scientificamerican.com/guest-blog/2012/05/07/what-cartography-taught-me-about-science-writing/

SeaSketch, the next generation of UCSB's MarineMap program, will aid marine spatial planning

May 7, 2012

SeaSketch allows users to find and incorporate map services from all over the world. Credit: UCSB
Since 2009, a free Web-based marine mapping and spatial planning program created by UC Santa Barbara scientists has proved to be an essential tool for fishermen and other stakeholders along the California coastline. Now, the next-generation tool is going global.

http://phys.org/news/2012-05-seasketch-ucsb-marinemap-aid-marine.html

NASA's Aqua Satellite, Built by Northrop Grumman, Celebrates 10th Year On-Orbit

May 8, 2012
REDONDO BEACH, Calif., May 7, 2012 (GLOBE NEWSWIRE) –
Built by Northrop Grumman Corporation (NYSE:NOC), NASA's Aqua satellite recently marked its 10th year on-orbit, delivering unprecedented data about the Earth's climate, water cycle and much more. Aqua launched from Vandenberg Air Force Base, Calif., on May 4, 2002.
One of the primary satellites in NASA's Earth Observing System (EOS), Aqua is designed to help scientists understand the Earth and make more accurate weather and climate predictions. In its decade on-orbit, Aqua has rendered detailed views of dramatic events such as hurricanes, wildfires, the continued retreat of sea ice in the Arctic, plumes from volcanoes in Chile and Iceland, and tropical cyclones and hurricanes.
Data from Aqua's six onboard instruments have given scientists high quality information needed to more accurately predict weather, advance climate studies, map sea surface temperatures and measure changes in the ozone layer.
http://www.avionics-intelligence.com/news/2012/05/08/nasa-s-aqua-satellite-built-by-northrop-grumman-celebrates-10th-year-on-orbit.html

Geostellar Teams with GeoEye to Map the Solar Power Potential of Every Rooftop in the United States

GeoEye Brings Data, Expertise and Funding to Fuel Geostellar's National Expansion

press release
April 19, 2012, 10:34 a.m. EDT
Geostellar has built a breakthrough analytics platform that automatically determines how quickly a given property owner can recoup an investment in solar energy. The company's platform models roof slope, shadows, weather patterns, local utility rates and solar energy subsidies to automate what has historically been a highly manual process.
http://www.marketwatch.com/story/geostellar-teams-with-geoeye-to-map-the-solar-power-potential-of-every-rooftop-in-the-united-states-2012-04-19

http://europe.chinadaily.com.cn/china/2012-05/04/content_15214859.htm

Volunteer cartographer sets Google Map record straight on Triangle

By J.N. Miller - jmiller@newsobserver.com
Matt Oliver was fed up with online maps that sent him in the wrong direction and tired of waiting for someone else to make them right. So when Google came out with a program that lets users edit details on an online map, the WakeMed police officer jumped at the chance to become an amateur cartographer. Using Map Maker, the 30-year-old Raleigh man spends his spare time correcting and updating North Carolina maps.
Oliver is among thousands of citizen cartographers who work as volunteers, according to Google.

Read more here: http://www.newsobserver.com/2012/05/06/2047283/volunteer-cartographer-sets-google.html#storylink=cpy

Create 3D maps of your surroundings in minutes with Matterport

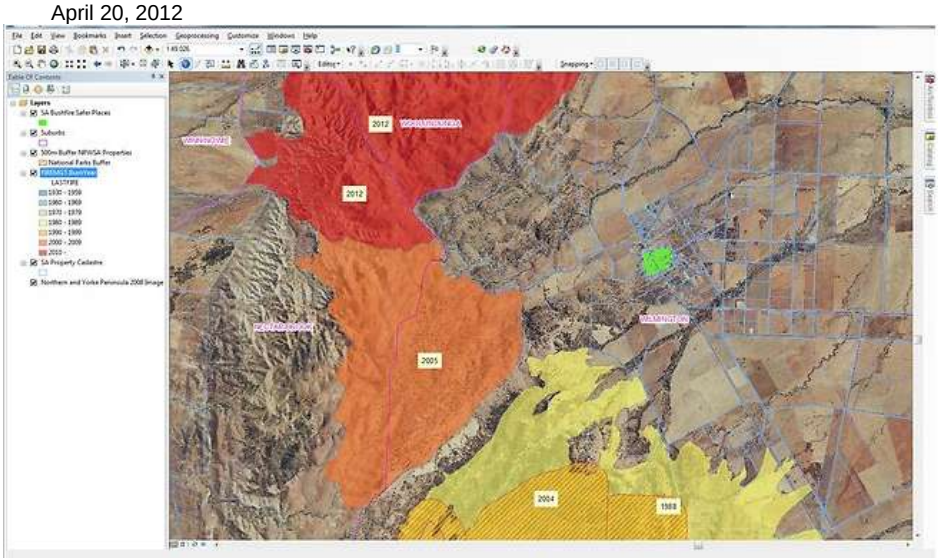
May. 4, 2012 (12:28 pm) **By:** Ray Walters

3D technology is certainly all the rage nowadays. Depicted in the video above is a new product from a company called Matterport, and depicts a handheld scanner that's capable of creating 3D models of objects or rooms in just a few minutes. All of you avid first-person-shooter fans who love creating realistic maps for your buddies to play on should sit up and take notice as this device could make your lives a lot easier.

http://www.geek.com/articles/gadgets/create-3d-maps-of-your-surroundings-in-minutes-with-matterport-2012054/

Hi-tech maps put CFS in the picture

by: *Science Reporter Clare Peddie*
From: *The Advertiser*
April 20, 2012



The CFS's Geographic Information System interface provides firefighters with access to valuable environmental and historical information during emergencies.

FIREFIGHTERS are updating their arsenal with sophisticated mapping technology used in the Queensland floods.
The Country Fire Service is working with location intelligence specialists Esri Australia on a Geographic Information System that contains layers of information - updated in real time.
CFS state operations planning officer Nick Cundell said GIS was "a huge advance on the old way of doing things".
"It is proving to be a bonus for people within the agency, to be able to see layers of information and it saves that process of having to produce hard- copy maps," he said.
"It's all up there visually - they can zoom and pan and look at it from their own perspective.
"Everyone has a different way of looking at things and an interactive mapping process is a great way of coping with everyone's needs, without having to do a lot of work and using a lot of paper maps."
http://www.adelaidenow.com.au/hi-tech-maps-put-cfs-in-the-picture/story-e6frea6u-1226334811195

121-megapixel photo the largest ever shot of Earth

Stan Schroeder
May 15, 2012 - 11:53AM

Taken by a Russian weather satellite, a zoomable version of this photograph is available online.

Need something to put things into perspective this morning? Suggestion: the largest single-shot photo of Earth ever taken.
Eclipsing NASA's updated "**Blue Marble**" shot, which is a composite of many satellite images, this image is a single-shot taken from 22,369 miles (36,000km) away by Russian weather satellite Elektro-L No.1.
The colours on the 121-megapixel photo are quite different from the ones on NASA's photos of Earth. To capture the image, the satellite combines visible and infrared wavelengths of light. Infrared light is used to see plants, which is why the parts of the Earth that would normally be green are seen as rusty brown.

Read more: http://www.theage.com.au/technology/sci-tech/121megapixel-photo-the-largest-ever-shot-of-earth-20120515-1ynms.html#ixzz1uvP8JRGw

The Trouble with Cartography

Kids Who Get Driven Everywhere Don't Know Where They're Going

Sarah Goodyear
May 07, 2012

Children who had a “windshield perspective” from being driven everywhere weren’t able to accurately draw how the streets in their community connected, whereas children who walked or biked to get around produced detailed and highly accurate maps of their neighborhood street network.
http://www.theatlanticcities.com/commute/2012/05/kids-who-get-driven-everywhere-dont-know-where-theyre-going/1943/

Iran Declares War On Google

May 7, 2012
By Paul Shea

Google Inc (NASDAQ:GOOG) is under attack from the Iranian government today as a row over its naming of the Persian Gulf heats up. On Google Maps the body of water between the Arabian Peninsula and the

eastern coast of Africa is nameless, a state of affairs the Iranian government views as a high form of contempt. The Persian Gulf title connotes with Persia and the Persian people. Persia is the ancient name for the region Iran now occupies and the country's people claim descent from the ancient Persians.
http://www.valuewalk.com/2012/05/iran-declares-war-on-google/

NSF grant to fund study of Israel/Palestine maps

Posted In: General Sciences
By Cornell University
Tuesday, May 1, 2012
Christine Leuenberger, senior lecturer in the Department of Science and Technology Studies, has been awarded more than $150,000 from the National Science Foundation's Division of Social and Economic Sciences. The award will fund a project to investigate the political use of maps in a conflict zone and how maps become part of territorial claims-making.
"This is especially important at a time when various governmental and nongovernmental organizations and interest groups increasingly produce maps in order to put forth particular geopolitical visions," Leuenberger wrote in her grant application.
New mapping technologies and software enable various groups to disseminate alternative maps. "In such an environment it is especially pertinent to focus scholarly attention on developing conceptual tools for understanding the rhetoric of mapping practices," Leuenberger wrote. "The Israeli-Palestinian dispute over mapping provides a rich context for theorizing about alternative mapping practices so as to emphasize the importance of constructing integrative maps that recover diverse geopolitical visions. Careful analyses of how and why different adversarial groups map the same territory differently may serve as a resource for reconciliation. …"
http://www.rdmag.com/News/Feeds/2012/05/general-sciences-nsf-grant-to-fund-study-of-israel-palestine-maps/

China to launch campaign against incorrect maps

Updated: 2012-05-04 22:39
(Xinhua)
BEIJING
China will launch a campaign this year to eliminate the publication of maps with information that could undermine sovereignty and state security, authorities said Friday.
The National Administration of Surveying, Mapping and Geoinformation (NASMG) said the campaign will focus on maps with incorrect national boundaries and missing territory in teaching materials, travel guides and imported publications.
Publications with incorrect maps will be recalled and destroyed if their flaws are serious, while websites that offer map services that are found to undermine sovereignty and state security will be punished or shut down entirely, the NASMG said.
The campaign will also strengthen supervision over the market for terrestrial globes to prevent unauthorized production.
The campaign, co-launched by 13 departments, including the NASMG, the Publicity Department of the Communist Party of China (CPC) Central Committee and the Foreign Ministry, will be formally launched in June and last until October.
An official from the NASMG said it will strengthen its protection and supervision over China's geoinformation, as the data is strategically important.
A network to safeguard geodata will be established through the joint efforts of several departments in order to prevent illegal mapping activity, the administration said.

Indo-China Border Maps

Minister of State for Planning, Science &Technology and Earth Sciences Dr Ashwani Kumar today stated in Rajya Sabha that Survey of India is the only authorized national mapping agency entrusted with the responsibility of preparation of official maps of India depicting international boundaries.

The Minister further added in a reply in Rajya Sabha that these maps are based on authenticated records available with Survey of India. Publication of maps by any Government or private agency showing international boundaries requires certification by Survey of India. Publication of Maps of India which are not in conformity with the maps of India as published by Survey of India, is a cognizable offence under the Criminal Law Amendment Act, 1961 (Act No.23 of 1961).

The Minister clarified that Occupation of some Indian territory by China is not related to publication of wrong maps by any agency.
http://pib.nic.in/newsite/erelease.aspx?relid=83210

Foreigner tops list of unlawful survey cases

By Zhao Qian (Global Times)
08:09, May 07, 2012
About 40 cases of illegal geographic surveying cases involving foreign individuals or organizations have been investigated since 2006, some of which involved stealing military information that could threaten national security, according to the country's surveying and mapping administration.

The administration over the weekend disclosed the top 10 unlawful surveying cases in 2011, with a case involving a US citizen ranking first. It is the third consecutive list made since cases involving foreigners were included in the top 10 list.
http://english.peopledaily.com.cn/90882/7809121.html

Apple Credits OpenStreetMap for iPhoto Map Data

By Scott Gilbertson

Google Maps vs Apple's custom maps. Note the increased road/path detail from OpenStreetMap visible in the Apple version of this map of Vienna, Austria.

Apple has finally acknowledged that its iPhoto application for the iPhone and iPad uses OpenStreetMap data.
Open up a map in iPhoto for iOS and one of the first things you'll notice is that the familiar beige and yellow Google Maps are nowhere to be found. Instead you'll see Apple's homegrown maps, the look of which is distinctly Apple's, but the data behind the maps comes from the open source mapping project OpenStreetMap.
Until now Apple did not provide any credit to OpenStreetMap. ……
http://www.webmonkey.com/2012/05/apple-credits-openstreetmap-for-iphoto-map-data/

Cartographic Theory Revision

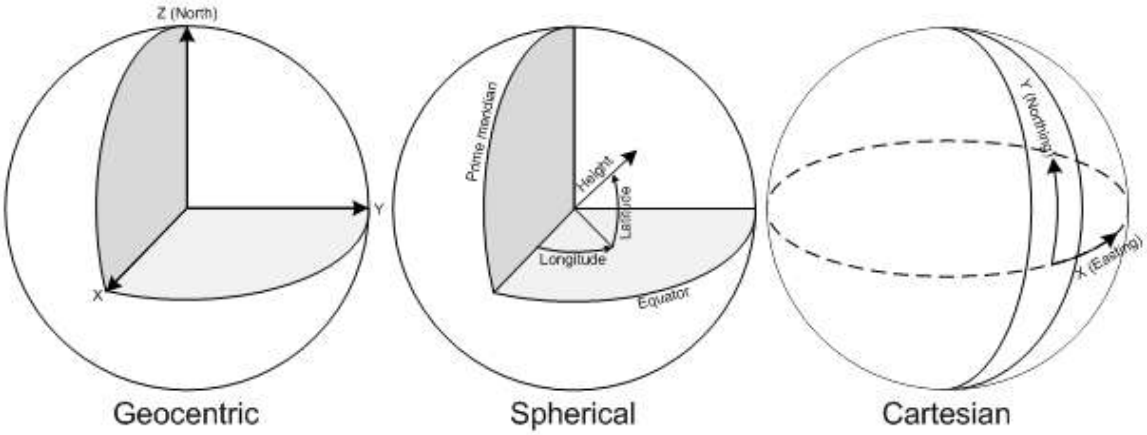
Spatial references, coordinate systems, projections, datums, ellipsoids – confusing?

by Morten 5. May 2007 21:44

People are often mixing the above as if they were one and the same, so here's a recap of them. One of the things you often find people saying is that "my data is in the WGS84 coordinate system". This doesn't really make sense, but I will get back to this later.
This is a very confusing subject, and I might have gotten a few things wrong myself, so please add a comment and I'll update it ASAP.

Coordinate systems

A coordinate system is ……..

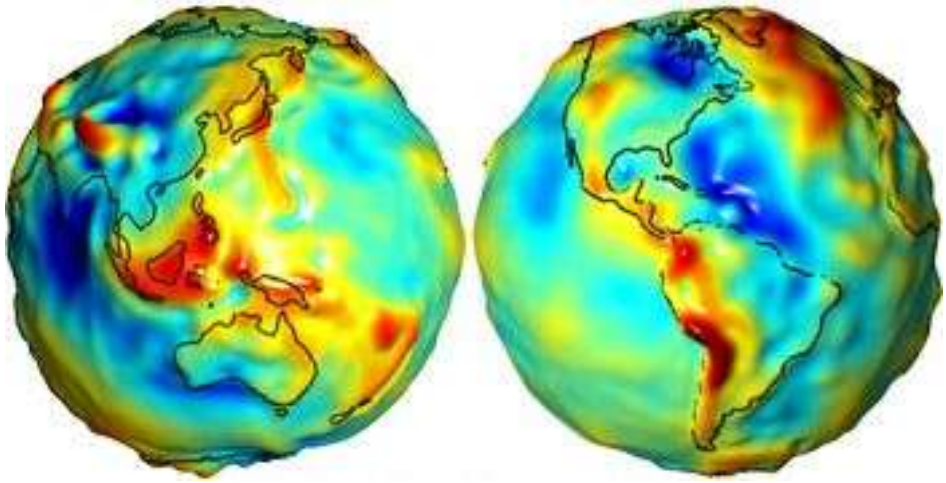


Datums and ellipsoids

Some of the common properties of the above coordinate systems are that they are all relative to the center of Earth and except the Geocentric coordinate system, uses a height system relative to the surface of the earth.
This poses two immediate problems:

- Where is the center of the earth
- What is the shape of the earth?

……..



Projections

The earth isn't flat, and there is no simple way of putting it down on a flat paper map (or these days onto a computer screen), so people have come up with all sorts of ingenious solutions ……..

Spatial reference

The spatial reference is a ……..

http://sharpgis.net/post/2007/05/05/Spatial-references2c-coordinate-systems2c-projections2c-datums2c-ellipsoids-e28093-confusing.aspx

Maps – Power, Plunder and Possession

Map expert Professor Jerry Brotton uncovers how maps aren't simply about getting from A to B, but are revealing snapshots of defining moments in history and tools of political power and persuasion

Episode guide

Mapping the World

3/3 How maps offer visions of distant lands, tempting explorers to plunder and conquer.

FIRST BROADCAST: 02 May 2010

CLIPS

Spirit of the Age

2/3 Jerry Brotton shows how maps can reveal the fears, obsessions and prejudices of their age.

FIRST BROADCAST: 25 Apr 2010

CLIPS

Windows on the World

1/3 How maps are both snapshots of defining moments in history and tools of political power.

FIRST BROADCAST: 18 Apr 2010

CLIPS

http://www.bbc.co.uk/programmes/b00s5m7w/episodes/guide

Mapping Technology

NRCS Texas Adopts GTS Technology for Photographing, Documenting and Mapping Natural Resources in the Field

Carlsbad, CA (PRWEB) May 01, 2012

In an effort to more effectively collect, document and share geo-referenced information in the field, NRCS recently acquired several Laser Range Finders and G700SE-M GPS-enabled field cameras from Geo Tactical Solutions, Inc. (GTS). Originally intended for Disaster Response and Damage Assessment applications, NRCS has recognized the potential of GTS's advanced GPS camera systems to bring value to a much wider range of applications such as natural resources surveying, biological surveying and investigations, support for soil and watershed assessments, and farm investigations to name a few.

The Laser Range Finders are used in the field for collecting distance and elevation data, while the G700SE-M GPS cameras are used to geo-tag photographs along with compass heading and detailed attribute data for each photograph using the camera's 'memo' feature. "Combined, these tools give NRCS field scientists and engineers the ability to capture rich photos that answer the critical Who, What, When, Where and Why questions," explained Todd Lushinsky, Business Development Manager at Geo Tactical Solutions.

http://www.prweb.com/releases/rugged-gps-cameras/photo-mapping-gis/prweb9371475.htm

NASA – International Space Station Imagery

NASA astronaut Douglas Wheelock who is currently aboard the International Space Station shares pictures of the Earth he snaps with the world through Twitter.

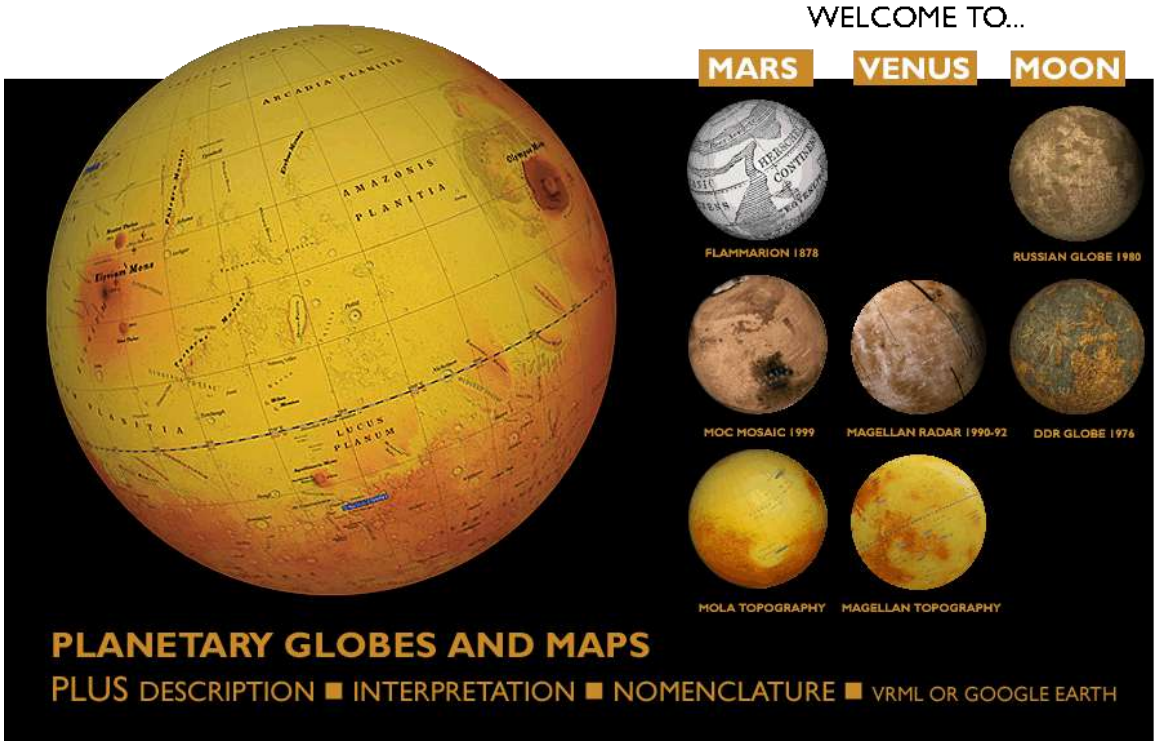
Known to his nearly 68,000 Twitter followers as Astro_Wheels <http://twitter.com/#%21/astro_wheels>; , Wheelock has been posting impressive photos of the Earth and some of his thoughts ever since he moved into the space station in June, five months after it got Internet access.

Clear starry night over the eastern Mediterranean . The ancient land with a thousand years of history stretching from Athens to Cairo . Historical land of fabulous and alluring island ... Athens - Crete - Rhodes - Izmir - Ankara - Cyprus - Damascus - Beirut - Haifa - Amman - Tel Aviv - Jerusalem - Cairo - all of them turned into tiny lights in this cool November night.

Astronaut Douglas Wheelock says: At a speed of 28,163 kilometers per hour (8 kilometers per second), we rotate the Earth's orbit, making one revolution every 90 minutes, and watch sunsets and sunrises every 45 minutes. So half of our journey is in darkness. For the work we use lights on our helmets.

Contribution from Keith Smith

Cartographic That's Out of This World

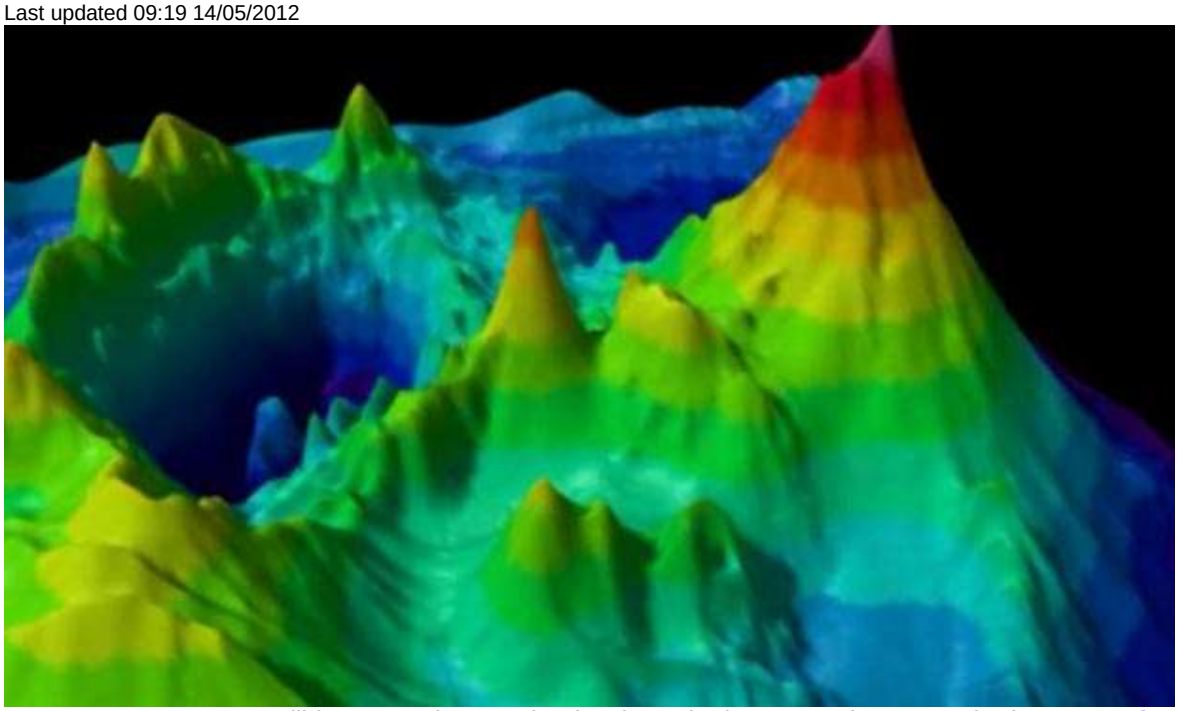


http://planetologia.elte.hu/globes/

Our Changing World

Volcano grows at astounding rate

Last updated 09:19 14/05/2012



AWESOME FORCES: A still from sonar images showing dramatic changes on the Monowai volcano. **Watch animation on BBC**

An astounding pulse of destruction and growth at an underwater volcano north of New Zealand has provided a new insight into the behaviour of submarine mountains.

The Monowai seamount, which lies at the intersection of the Pacific and Indo-Australian tectonic plates at the Tonga-Kermadec subduction zone, underwent one of the fastest episodes of volcano growth documented on Earth.

It added about 8.75 million cubic metres of rock to its summit - a volume equal to 3500 Olympic-size swimming pools - in just five days.

New lava flows raised that area by 79.1 metres, while part of the volcano's summit collapsed by as much as 18.8 metres. Most striking was the creation of an entirely new volcanic cone.

The changes were measured by crew aboard the research vessel Sonne who had set out on a routine mapping expedition in the South Pacific last autumn.

http://www.stuff.co.nz/science/6915463/Volcano-grows-at-astounding-rate

Boiling lake

Boiling lake in Dominica is actually a flooded fumarole (a crack through which gases from molten lava escape), filled with superheated bubbling water that is enveloped in a cloud of vapor. Since the lake is the second largest hot spring on Earth with the

water temperature of 82-91.5 Celsius (180-197 Fahrenheit) measured just at the edges, not only it would be uncomfortable to swim in, it would kill you if you even got near it. So far, scientists haven't measured the temperature in the center of the lake where the water actually boils.
Source: Wikipedia

Image source

Image source

http://badcontrol.net/top-10-most-dangerous-lakes-on-earth/

Moving Cartography

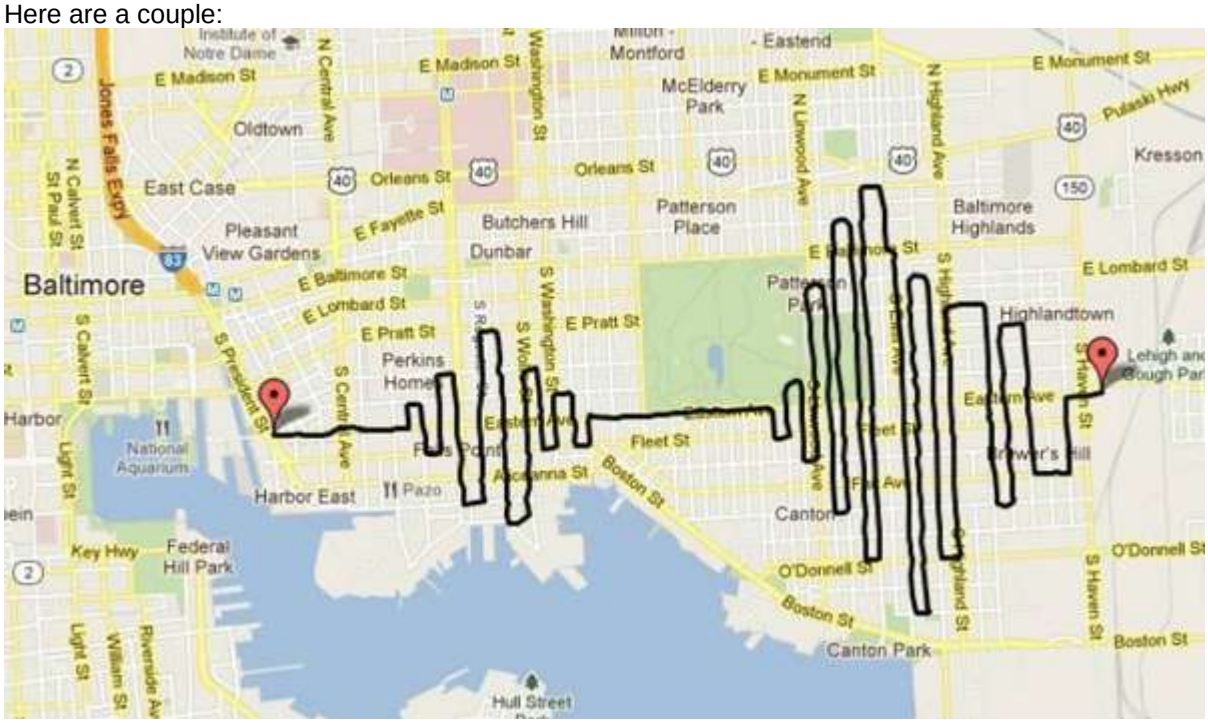
Bike as Paintbrush, City as Canvas

- Nate Berg
- May 07, 2012

Wallace has become an enthusiast of what he calls GPX – or using the Global Positioning System-tracking capability of his phone to record the path he takes on bike rides, which he pre-plans to outline massive geoglyphs and drawings. It's like a city-scaled and semi-crude Etch-a-Sketch drawing, and Wallace is the pinpoint drawing the line.

He must look almost lost zig-zagging through the city, retracing steps and abruptly turning, but it's all for the final product. His works have included a cowboy's boot, a boat pulling a waterskier, a guitar, a guy kicking a field goal and various monsters, bugs, and animals – all at least a few miles wide, and some lines more than 15 miles long. The geoglyphs have grown more elaborate with time, and some even take off on current events.

Here are a couple:



"Magnitude 5.8," 14.26 miles, 1 hour 40 minutes.

"Shots," 3.64 miles, 44 minutes.

http://www.theatlanticcities.com/arts-and-lifestyle/2012/05/bike-paintbrush-city-canvas/1941/

Google self-driving cars to be road-tested

08 May 2012

One accident reported so far on US roads - and not Google's fault, say engineers

Google has been given the go-ahead to test self-driving cars on American roads.

The Nevada Department of Motor Vehicles has become the first to approve the cars, which could eventually ferry passengers and even drive on their own.

The state approved the laws in February, but today issued the first licences following successful tests on the Las Vegas strip.

Google's self-driving vehicle technology works like auto-pilot to guide a car — in this case a modified Prius — with little or no intervention from a human operator.

Laser radar mounted on the roof and in the grill detects pedestrians, cyclists and other vehicles, creating a virtual buffer zone around the obstacles that the car then avoids. Google's existing mapping software is used to determine where the car should go.

http://www.thisislondon.co.uk/news/techandgadgets/google-selfdriving-cars-to-be-roadtested-7722024.html

Conferences

Cartography & Narratives Workshop
ETH Zurich, Switzerland, June 11-13
http://artcarto.wordpress.com/cartography-narratives/

4th International Conference on Cartography and GIS
18-22 June, 2012
Albena - summer resort on Black Sea, Bulgaria.
http://www.cartography-gis.com/4thConference/Index.html

4th International Symposium on the History of Cartography
June 28-29
Eötvös Loránd University, Budapest, Hungary,
http://lazarus.elte.hu/~zoltorok/2012_Budapest/

DCH2012 Interdisciplinary Conference on Digital Cultural Heritage
July 2-4
Saint-Dié-des-Vosges (France),
http://DCH2012.net

Brisbane International Geospatial Forum 2012
8 - 10 July
'Global Connections through Mapping'
Brisbane, Australia
Hosted by Mapping Sciences Institute, Australia, the Australian and New Zealand Map Society and the International Map Trade Association. A combined Conference and Trade Show.
Show. Further information:
(website) www.imtamaps.org ; (email) imtaaspac@chariot.net.au

Exploration and Mapping in Mining 2012
Data management and integration
17th – 19th July 201,Duxton Hotel,Perth

The United Nations/Vietnam Workshop on Space Technology Applications for Socio-Economic Benefits Workshop
10 to 14 October 2011
Hanoi, Vietnam,.
Office for Outer Space Affairs
United Nations Office at Vienna
Vienna International Centre
P.O. BOX 500
A-1400 Vienna, AUSTRIA
Phone: (+43 1) 26060- 4948
E-mail: unpsa@unvienna.org
http://www.oosa.unvienna.org/oosa/en/SAP/act2011/Vietnam/index.html

Interexpo

17-19 April 2012
Novosibirsk
Geo-Siberia-2012", the 8th international congress and specialized exhibition in the field of geodesy, cartography, geology, geophysics, land management, land and property cadastres, geoinformation, Earth remote sensing, forestry management, environmental monitoring, specialized instrument-making, which will be held on 17-19 April 2012 in Novosibirsk, Russian Federation. "Interexpo Geo-Siberia-2012" is the former "Geo-Siberia" in new format. From September 2011 the exhibition and scientific congress "Geo-Siberia" have been renamed as "Interexpo Geo-Siberia" that more exactly reveals the content and spirit of this forum.
http://geosiberia.ssga.ru

Interdisciplinary Conference on Digital Cultural Heritage

St. Dié, France, July 2-4
http://intercarto18.net/

Third Open Source GIS Summer School,

July 9-13th, 2012
Girona, Spain
Sponsored by The GIS and Remote Sensing Centre (University of Girona, Spain), Nottingham Geospatial Institute (University of Nottingham, UK) and OpenGeo
http://www.sigte.udg.edu/summerschool2012/

Mountain Cartography Workshop

1 and 5 September 2012
New Zealand near Taurewa,.
The theme of the Workshop is Mapping Mountain Dynamics
cfp, New Zealand, workshop

The Graphical Web& SVG Open 2012 Conference

The Graphical Web and SVG Open 2012 conference takes place from
September 11 to 14 2012 at ETH Zurich (Hoenggerberg campus), Zurich, Switzerland.
http://www.graphicalweb.org/

International Conference on National Atlases in the Formation of the Global Information Space

Kiev, Ukraine, September 13-14
http://www.ignau.org.ua/conference_eng.htm

19th AutoCarto 2012: International Symposium on Automated Cartography

Columbus, Ohio, USA, September 16-18
http://www.cartogis.org/autocarto.php

GeoVisual Analytics: Time to Focus on Time - Workshop at the GIScience 2012 Conference

Columbus, Ohio, USA, September 18
http://geoanalytics.net/GeoVA(t)2012/

CfP: LBS 2012 in Munich

9th International Symposium on Location-Based Services,
October 16 to 18, 2012.
Munich, Germany,
http://www.lbs2012.tum.de/

OGRS2012 Open Source Geospatial Research and Education Symposium

October 24 â€“ 26, 2012
Yverdon-les-Bains, Switzerland
Hosted by School of Business and Engineering Vaud (HEIG-VD)
Website: http://www.ogrs2012.org
Contact: cfp@ogrs2012.org

The 23rd International CODATA Conference-

Open Data and Information for a Changing Planet
Taipei 28th-31st October 2012.
http://www.codata2012.com/

The influence of SOA on Map Production and GeoBusiness

November, 19th to 23th 2012 in Vienna,
Austria.
http://www.cartography.at/icamapproduction/?Upcoming_Events

SOMAP 2012, the Symposium on Service-Oriented Mapping

Vienna from November 22-23, 2012.
The ICA Commission on Map Production and Geobusiness and our host, the Austrian Federal Office for Metrology and Surveying, is pleased to invite You to the International Symposium on Service-Oriented Mapping in Vienna from November 22nd to 23rd 2012.
http: //somap.cartography.at

9th International Conference of the African Association of Remote Sensing of the Environment (AARSE) – AARSE 2012

On
Earth Observation & Geo-information Sciences for Environment and Development in Africa: Global Vision and Local Action Synergy

The conference will be held in El Jadida, Morocco, at the Faculty of Science, Chouaib Douakkali University from October 29 to November 2, 2012
www.aarse2012.org

MIWAI 2012

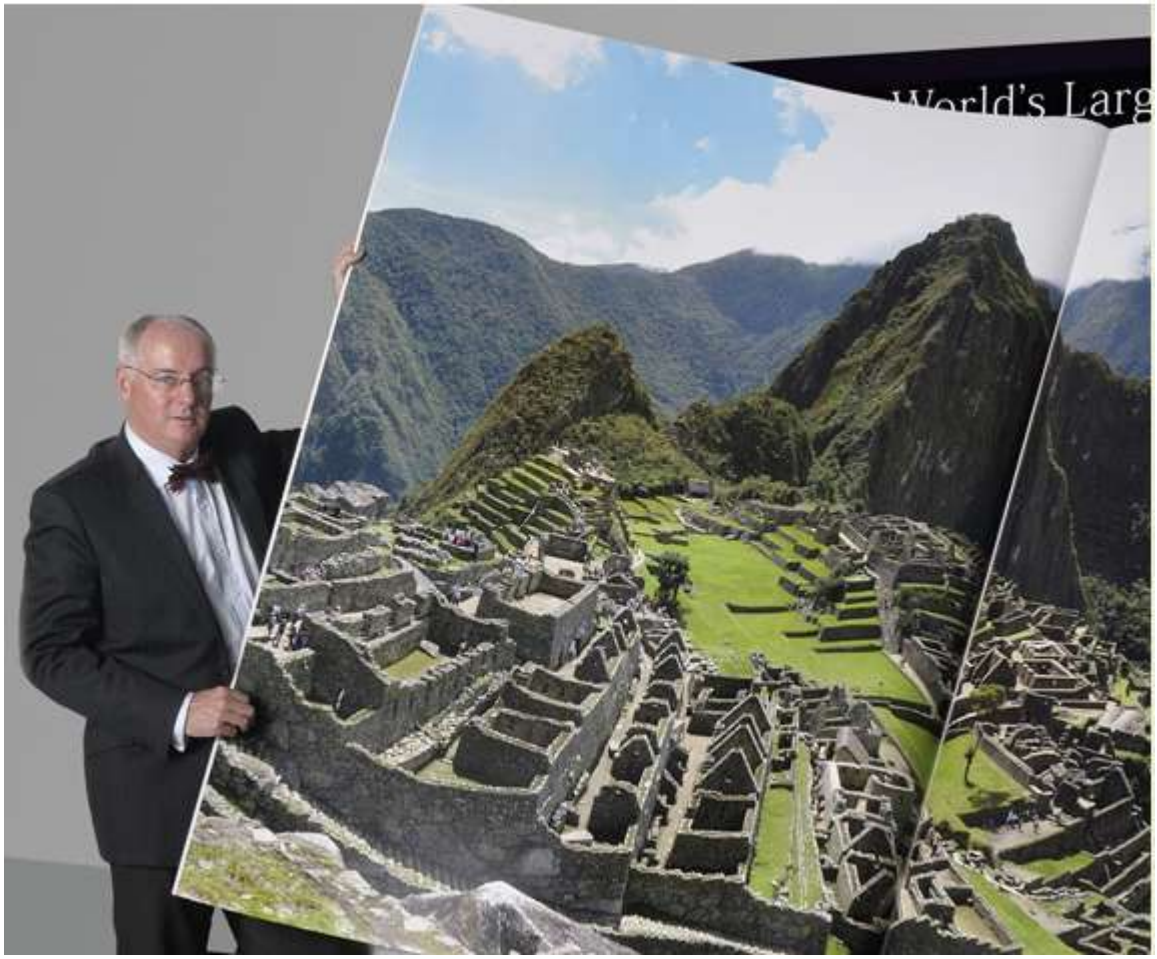
December 26-28, 2012
The 6th Multi-Disciplinary International Workshop on Artificial Intelligence (MIWAI 2012)
Ho Chi Minh City, Vietnam,.

The MIWAI-2012 invites papers on advances in AI techniques and related fields, e.g., GIS, neural networks, decision trees, genetic algorithms, fuzzy logic, etc., for climate change.
http://www.hcmuaf.edu.vn/

NOTE: If you are involved in a workshop, symposium or conference related to cartography please send me brief details for the newsletter.

EARTH Platinum

Millennium House is producing the World's largest atlas *Earth Platinum* to be launched on June 12th. *Earth Platinum* after 2 and a half years work by over 120 contributors, will be launched at National Center for Documentation & Research (NCDR) in Abu Dhabi.



For you information below is a link to an article on the book.
http://bookcollecting101.com/earth-platinum-largest-limited-edition-atlas-scheduled-to-release-in-may/

The photographic images that appear in *Earth Platinum* are some of the world's most amazing images. Paul Russell one of the *Earth Platinum* photographers has produced a 2 min video describing how the images are produced using the gigapan process.
http://vimeo.com/40820261

Making an Extremely High Resolution Gigapan Image for Earth Platinum

by **Paul Russell** PLUS 4 weeks 1 day ago

Here are twelve brief facts about Earth Platinum:

1. Earth Platinum is **6ft by 4.5 ft**
2. Earth Platinum weighs **330 pounds**
3. Earth Platinum retails for $100,000USA
4. Earth Platinum has 128 pages
5. Earth Platinum has detailed maps and full-color photo spreads
6. 24 Earth Platinum images are made from stitching together as many as 1,000 individual photos, the largest has 12,000 photos joined together
7. Earth Platinum took over four years to finish
8. 100 cartographers, geographers, and editors working on Earth Platinum
9. Only 31 copies of Earth Platinum will ever be published
10. Each of them is numbered
11. About half of them are still available for purchase
12. Earth Platinum delivers mid May

A Tweet Map

The Australian Financial Review
www.afr.com • Wednesday 23 May 2012

Map sheds light on Twittersphere

Patrick Durkin

Researchers at the Queensland University of Technology have created the first map of the Australian "Twittersphere" to chart the relationships between the country's 2 million Twitter users.

Despite resembling an unsightly yellow blob, the sophisticated algorithm charts the connections of Twitter users, the topics they follow and the inter-relationships of their networks.

The researchers claim the map can be used as the equivalent of television ratings or newspaper circulation figures.

The green dots represent topics or popular people, such as Prime Minister Julia Gillard. The yellow dots represent the strength of their following. The algorithm draws together subject matters that related users follow, such as news and politics, sport, investment and music.

"If you could imagine a rubber band between

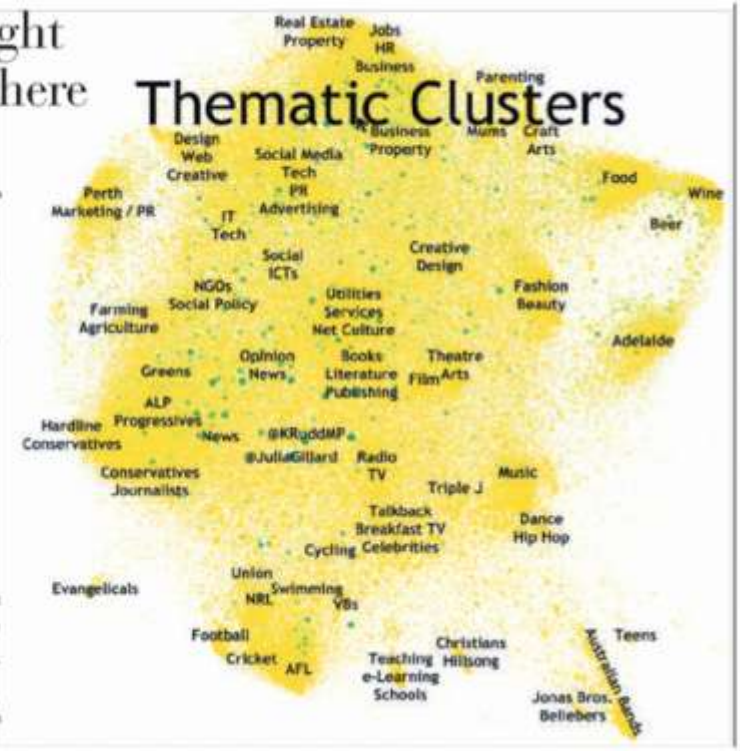
The researchers claim the map can be used as the equivalent of television ratings or newspaper circulation figures.

each connection," Associate Professor Axel Bruns said. "If I follow you, I am pulling you towards me and if you follow me, you are pulling me towards you. If I am not following someone else, I am essentially pushing them away."

For example, a strong connection of "hardline conservatives" on the outer left of the map is far removed from a strong connection of food, beer and wine on the upper right of the map.

"There are very few connections from them to the connections that have beer and wine in them. That doesn't mean they are not interested in alcohol but they are not formally linked on Australian Twitter," Professor Bruns said.

Other topics on the fringes of the map such as Justin Bieber, Evangelicals and Adelaide mean their followers are less connected to the rest of Australian Twitter.



Thanks to Adam Ladhams for this article.

Apple world httpwww.2leep.comnews85527