If you have any brief items of interest, suitable for the eCET newsletter, then please email them to david.fraser@rmit.edu.au
If you have more substantial articles please send them to Igor Drecki at i.drecki@auckland.ac.nz for the ICA newsletter.

“Inevitably, we see the whole through the lens of the particular.”

Conferences

2010 ESRI Asia-Pacific User Conference
March 3-5, 2010
Australia

ISPRS Commission VI Cross-Border Education for Global Geo-Information,
June 2-4, 2010.
Mid-Term Symposium
Enschede, Netherlands

BCS Symposium 2010 - Call for papers
June 9 – 11, 2010
British Cartographic Society Symposium “Talking With Maps”.
Village Hotel and Conference Centre in Nottingham
http://www.cartography.org.uk/default.asp?contentID=933

3rd International Conference on cartography and GIS
June 15-20, 2010
Nessebar, Black Sea, BULGARIA
www.cartography-gis.com

GI_Forum 2010
July 6-9
Symposium and Exhibit
Applied Geoinformatics
Salzburg
Learning with Geoinformation
**Special Focus: Spatial Citizenship**
Symposium & Vocational Training
Within the framework of GI_Forum 2010
July 7-9, 2010 – Salzburg, Austria
[www.gi-forum.org/learning](http://www.gi-forum.org/learning)

**ESRI Business GIS Summit**
July 11-12, 2010
San Diego, California
Will bring business professionals and industry leaders together to discuss the key advantages of a geoenabled organization.

**Seventh European GIS Education Seminar**
September 9-12, 2010
Serres, Greece
A specialist meeting on GIS education in Europe
[www.eugises.eu](http://www.eugises.eu)

**AutoCarto 2010**
November 15-18, 2010
Orlando, Florida
Sponsored by the Cartography and Geographic Information Society (CaGIS), The 18th in the series, this international research symposium on computer-based cartography and GIScience will be held in conjunction with the American Society for Photogrammetry and Remote Sensing (ASPRS). The International Cartographic Association and the International Society for Photogrammetry and Remote Sensing (ISPRS) Technical Commission IV: Geodatabases and Digital Mapping will also hold a number of commission meetings at AutoCarto 2010.
The focus of this joint meeting is Geospatial Data and Geovisualization for the Environments, Security, and Society.
[http://www.cartogis.org/autocarto](http://www.cartogis.org/autocarto)

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**GeoCart'2010**
ICA Symposium on Cartography for Australasia and Oceania
The fifth National Cartographic Conference GeoCart’2010 and the first ICA Symposium on Cartography for Australasia and Oceania will convene in Auckland, 1-4 September 2010. It will be held at the outstanding facilities of The University of Auckland in the City of Sails - Auckland, New Zealand.
The Conference is endorsed by the International Cartographic Association (ICA).
Keynote Speakers include:
- Cynthia Brewer, Pennsylvania State University, USA
- Manfred Buchroithner, TU Dresden, Germany
- David Crossman, Royal New Zealand Navy, New Zealand
- Phil Allen, GeoSmart, New Zealand
- Colin MacDonald, LINZ, New Zealand
- with one further keynote to be announced

Special Presentation by
- William Cartwright, President of the ICA, Australia
There will be a book associated with the conference, collating the best papers as reviewed by an international scientific programme committee and published in Springer’s Lecture Notes in Geoinformation and Cartography series.
Dynamic Maps Aid Epidemiological Investigations
ScienceDaily (Jan. 21, 2010)
A team of researchers has developed a dynamic mapping tool to gain a more nuanced view of the links between diseases and environmental exposures.
"Dynamic mapping creates a visual representation of data over time, allowing us to detect relationships between disease and environmental factors that cannot be deciphered from static maps. It enables us to pose new hypotheses about the origins of an outbreak, patterns of disease spread, peak timing of seasonal outbreaks, and clustering of diseases," said senior author Elena Naumova, PhD, professor of public health and community medicine at Tufts University School of Medicine.

Go to link >

Google cyclists put Yorkshire on digital map
Driffield Post
Published Date: 21 January 2010
Some of the most historic locations in Yorkshire can now be explored with the click of a mouse on Google’s Street View mapping.
English Heritage's most famous sites, will be available for people to explore on the site from Thursday.

Over 20 historic locations across the UK - including castles, landscapes and country houses - have been scanned using a panoramic camera, bolted to the back of a tricycle, and added to Google's online mapping service.

Users can now take a 360-degree, ground-level tour of sites in the Yorkshire, including Fountains Abbey and Studley Royal in Ripon, North Yorkshire and Malham Tarn Estate, Waterhouses, Settle in North Yorkshire.

Go to link >

A Big Map That Shrunk the World
By EDWARD ROTHSTEIN
Published: January 19, 2010
The New York Times
WASHINGTON — When a map of overwhelming dimensions and detail is presented to the ruler of a land, the homage, surely, is a kind of deference. The map is partly meant to be an illustration of the ruler’s powers, the extent of his realm, the range of learning he commands. And yes, one of the remarkable aspects of the world map on display at the Library of Congress through April 10, is that along with its imposing scale (it is 12.5 feet long and 5.5 feet high) and grand ambitions (it encompasses the known world of the early 17th century), at its very center stands the “Middle Kingdom,” as China called itself, its mountains and rivers commanding attention with dense annotation, all of which is in Chinese.
Created by a visiting Italian-born Jesuit priest, Matteo Ricci, and apparently commissioned by the court of Emperor Wanli in 1602 — the year after Ricci became the first Westerner admitted to Peking and then the Forbidden City — this map is indeed partly a tribute to the land in which Ricci had lived since 1582, and in which he would die in 1610.
The Matteo Ricci World Map from 1602 on display at the Library of Congress, USA.

It was made to stand on six folding screens and is covered in Chinese annotations that both honour the emperor and affirm Europe's and Christianity's greatness.

Go to link >
http://www.nytimes.com/2010/01/20/arts/design/20map.html?hp&ex=&ei=&partner=

Wondering whether crime has hit your neighborhood? Grand Rapids Police unveil crime-mapping tool
By Nate Reens | The Grand Rapids Press
January 21, 2010, 9:30AM

The Grand Rapids Police Department will unveil an online crime-mapping system today that will inform residents about incidents in their neighborhoods. The Internet-based system will allow people to see the type of crimes happening across the city, narrowing the scope by offenses, date and geographic areas. Data comes directly from force complaints and will be updated twice daily, said Officer Phil Porter, who works in the department's crime analysis unit. Porter said Grand Rapids is the first agency in the state to provide the up-to-date information for general public access.
"We hope it will bring greater awareness to people on what's occurring where they live," he said. "In the past, we've had to work with others to disseminate that information and that takes time.

Go to link >

Scientists hunt for Victoria's hot spots
January 19, 2010 - 1:59PM
2010 AAP
The Age news
The scorching summer sky may get all the attention but Melbourne scientists are more interested on how hot it gets underfoot.
Geologists will begin mapping a "geothermal atlas" in Victoria this week in an effort to locate underground hot spots for potential energy development.
The mapping project, funded by the Victorian government, will start in Colac in the state's southwest and take about a year to complete.
A completed map will help authorities understand the best locations to invest in geothermal energy, which uses naturally occurring underground heat to generate electricity.

Go to link >

Google, Dreaming lead to ancient crater
DEBORAH SMITH
December 28, 2009
The Age electronic news

AN ABORIGINAL Dreaming story about a star crashing to earth with a noise like thunder has led to the discovery of an ancient meteorite crater in central Australia.
A Sydney astronomer, Duane Hamacher, found the bowl-shaped crater in Palm Valley, about 130 kilometres south-west of Alice Springs, by searching on Google Earth.
He was inspired to look there after learning of traditional stories told by the local Arrernte people about a star that had fallen into a waterhole called Puka in the valley.
Mr Hamacher, a PhD candidate at Macquarie University, said that reality matching the Dreaming story could be a case of pure chance. "But if so, it's an incredible coincidence," he said.
He is part of a team led by CSIRO astronomer Ray Norris that is exploring the possibility that Aborigines were the world's first astronomers.

Go to link >
GPS tool to warn speeding drivers
CLAY LUCAS
January 14, 2010
The Age

DRIVERS who install a global positioning system in their cars will soon be able to see what the speed limit is on every road they travel, thanks to a $2.3 million information project. From the end of this month, speed limits will be listed for every road in the state on new or updated GPS units, thanks to the Transport Accident Commission. About 60 repeat speed-offenders will be asked to volunteer to be part of a group of 560 drivers in a three-month trial of a new GPS tool that sounds an alarm every time the driver exceeds the speed limit.

Go to link >

Flinders’ maps
January 6, 2010
AAP – The Sydney Morning Herald, Thursday, January 7th, 2010)

Rare copies of Matthew Flinders’ maps of the Australian coast, published as the great explorer lay dying, have been sold at auction. The maps are among books valued at 15,000 English pounds ($AUD26,311) put up for sale in Edinburgh. The British government commissioned Flinders in 1801 to chart the Australian coast. The project took him three years but it was another 11 years before his books were published.

Go to link >
**Satellites reveal the Amazon’s lost city**
*Guardian News & Media - Rory Carroll*  
The Sydney Morning Herald, Thursday, January 7th, 2010

New satellite imagery and overflights have revealed more than 200 huge geometric earthworks carved in the upper Amazon basin near Brazil’s border with Bolivia. Spanning 250 kilometres, the circles, squares and other geometric shapes form a network of avenues, ditches and enclosures built long before Christopher Columbus set foot in the new world. Some date to as early as 20 AD, others to 1283. Scientists who have mapped the earthworks believe there may be another 2000 structures beneath the jungle canopy, vestiges of vanished societies.

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**Google launches global mapping competition**
*abs-cbnNEWS.com | 12/17/2009 5:25 PM*

MANILA, Philippines - Google Inc. launched Friday its first ever Google Map Maker Global Competition to encourage young people to use technology for community development. The contest invites interested participants around the world, including the Philippines, to map the universities, schools, hospitals, and medical clinics in their home countries on Google Map Maker to help humanitarian organizations such as UNICEF do their jobs better.

Google Map Maker ([www.google.com/mapmaker](http://www.google.com/mapmaker)) enables users to become "citizen cartographers" and contribute their knowledge of their hometowns with the online community. Users can add familiar points of interests, draw roads and buildings, and generally create maps of places with just a few clicks of a mouse.

Additional information about the Map Maker Global Competition can be found on  
Go to link >  

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**US launches space-mapping satellite WISE**
*The Age newspaper  
December 15, 2009 © 2009 AFP*

NASA on Monday launched its Wide-field Infrared Survey Explorer (WISE) satellite on a mission to orbit Earth and scan the sky in infrared light to photograph the glow of hundreds of millions of objects.

Go to link >  

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**The Green Map Network**
*Havana Times  
January 14, 2009*

Based on a methodology created in 1992 by Wendy E. Brawer, founder of the U.S. eco-design firm Modern World Design, the Green Map System encourages communities to engage in mapping out their area’s cultural, social and green resources to create a “portrait” that is used as a comprehensive inventory for decision-making and as a practical guide for local residents and tourists. Since the system went global in 1995, Green Maps have spread to 500 cities, towns and neighborhoods in 54 countries, developing from a network of regional nodes and local projects, which operate according to the needs of each place and independently from the main initiative.
Ozone hole's changing size and shape

11 Dec

The Age newspaper

These images, supplied from NASA's Earth Observatory, display the size and shape of the ozone hole since 1979. Purple and dark blue areas are part of the ozone hole while red and orange represent the areas of highest ozone concentration.
**Changing global temperatures**

11 Dec  
*The Age newspaper*
These maps, supplied from NASA's Goddard Institute for Space Studies, display the progression of changing global surface temperatures from 1880 to 2008. Dark red indicates areas of greatest warming; dark blue indicates areas of greatest cooling.

Go to link >  

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**Changes in Arctic ice cover**

21 Dec  
*The Age newspaper*
These images, supplied from NASA's Goddard Institute for Space Studies, display the changes in Arctic ice cover since 1979. The white area indicates the minimum sea ice cover for each year.

Go to link >  
Ordnance Survey 3D map of Bournemouth 'is most detailed ever'
By Matthew Moore
Published: 5:03PM BST 12 Oct 2009
Telegraph.co.uk

The seaside town of Bournemouth has been recreated in extraordinary three-dimensional detail by Ordnance Survey, as part of a pilot scheme for a new generation of maps. The national agency used state-of-the-art laser technology and aerial imagery to create what it claims is one of the most accurate maps ever produced. Bournemouth's attractions – including the pier, seafront and conference centre – are portrayed in lifelike detail in a video posted on YouTube showcasing the new technique.

Go to link >

Haiti Earthquake – Mapping

Technology comes to the aid of Haiti
CHRI$ LEFKOW
January 16, 2010
© 2010 AFP

Online maps, mobile phone donations, wikis and a slew of websites are being deployed as telecoms firms, technology giants and startups set aside their rivalries and put the latest tools to work to help earthquake-ravaged Haiti.

"We collect data like imagery from satellites and information on Twitter or Flickr then distribute it to NGOs who can remix it to fit their own needs," said Sean Gorman, founder of FortiusOne, one of the participants.

Satellite images, for example, can help aid groups trucking in supplies avoid blocked roads or locate victims.

Another online tool, Ushahidi, which was developed to monitor post-election violence in Kenya in 2008 and means "testimony" in Swahili, is also being used to map the destruction in Haiti.

Ushahidi collects information through mobile phone, email or Web services such as Twitter or Flickr and uses Google Maps to create an interactive map and timeline.
New Web-based relief tools emerging to help Haiti

FRANK BAJAK
January 20, 2010 - 8:35AM
Theage.com.au

Hundreds of tech volunteers spurred to action by Haiti’s killer quake are adding a new dimension to disaster relief, developing new tools and services for first responders and the public in an unprecedented effort.............

......In another collaborative effort, the OpenStreetMap “crisis mapping” project, volunteers layer up-to-the-minute data (such as the location of new field hospitals and downed bridges) onto post-quake satellite imagery that companies including GeoEye and DigitalGlobe have made freely available. The digital cartography _ informed by everything from Twitter feeds to eyewitness reports _ has helped aid workers speed food, water and medicine to where it's needed most.

One Colombian rescue team leader uploaded the maps to his crew's portable GPS units before the team arrived on the scene last week, developers said. Another volunteer, Talbot Brooks of Delta State University in Cleveland, Miss., converts the maps into letter-sized documents that aid workers have been printing out before traveling to the quake zone.

Go to link >
More science from the Haiti earthquake

By Physics Today on January 20, 2010 11:33 AM

Simulation of coseismic ground motion based on the finite fault model of USGS/NEIC (shows on the surface projection of the rupture, which dips 70 degrees to the south). Black arrows show expected displacements at GPS sites, background color shows interferometric fringes (ASAR IS2 ascending, 2.82 cm range change between fringes).

Go to link >

Emerging Field of Crisis Mapping Brings Order to Chaos

Thursday, January 21, 2010

When a crisis strikes, like what’s happening in Haiti, countless people and organizations mobilize to help. Despite the good intentions of these non profits and NGO’s, there can often be chaos and a lack of good communication. It’s Jen Ziemke’s job to help make order out of that chaos. Her tools include a computer and a modem. She’s the co-founder of a group known as the International Network of Crisis Mappers.

Go to audio link >
http://www.wcpn.org/WCPN/news/29410/

GeoEye-1 Satellite Sensor Captured Devastating Earthquake in Haiti

GeoEye-1 satellite sensor captured a high resolution satellite image of the most devastating earthquake of the century that hit Port-au-Prince, Haiti on Tuesday January 12th.
IKONOS (0.8 m) Satellite Image – President’s Palace (2008)
Before earthquake – Port-au-Prince, Haiti

GeoEye-1 Satellite Image – President’s Palace (2010)
After earthquake – Port-au-Prince, Haiti

Go to link >
http://news.satimagingcorp.com/2010/01/satellite_image_captures_disasterous_earthquake_in_haiti.html
Scholarly articles

Students Improve Cognitive Learning Skills with GIS
By Dr. Yan Liu, Nanyang Technological University, Singapore
Go to link >

Using mobile phones and citizen scientists to map invasive species and track weed spread over time
Brigham, Christy, Eric Graham, Sanank Reddy, Eric Yuen, Cameron Ketcham and Keith Mayoral
Go to link >

Maps On Virtual Globes For Geographic Education: Approaches And Implementation In The “Swiss World Atlas Interactive”
Philipp Marty, Juliane Cron, Hans Rudolf Bär, Christian Häberling, Lorenz Hurni

Teachers and students at the secondary school level have need of maps on virtual globes as there are several advantages in comparison to planar 2D maps. It is important that these maps complement the curriculum of geographic education. However, existing globe applications (e.g. Google Earth) are not exactly suited for teaching purposes. This paper dwells on the reasons and discusses how to close the gap by creating thematic and topographic maps for a virtual globe application which are most appropriate for education and follow the necessary cartographic principles. Besides the preparation and display of the map tiles, the focus lies on an appropriate placement of map labels that considers the dynamic projection of virtual globes. The presented ideas originated from the ongoing development of a new digital school atlas, the “SWISS WORLD ATLAS interactive”.
Go to link >

Profiling Cartographic Education in GIS Certificate Programs
Author: Wayne, Chris
Source: Cartography and Geographic Information Science, Volume 30, Number 2, April 2003 , pp. 181-184(4)
Publisher: Cartography and Geographic Information Society

In North America there are currently between 50 and 100 widely advertised GIS certificate programs and possibly many more regional programs. The course content of these programs varies widely and includes topics as diverse as cartography, database design, programming, and graphics. This report assesses the cartographic education offered in forty-six programs and suggests issues for a more thorough study of certificate programs. A list of selected GIS certificate programs in the U.S. and Canada is also provided. The cursory survey of programs for this report indicates that cartography is being taught to a degree in nearly all programs, but few programs require courses specifically in cartography.
Go to link >
http://www.ingentaconnect.com/content/acsm/cagis/2003/00000030/00000002/art00011

Standardization of Cartographic Curriculum in Indonesia
Author: Tuty Handayani
Association Cartography of Indonesia (AKI)
Cartographic Laboratory, Department of Geography, Indonesia University
Email: ppgt@indonet.com
Go to link >
http://www.docstoc.com/docs/14063080/Since-early-this-century-mapping-in-Indonesia-was-beginning
Mapping is an inherent and important aspect of the geosciences. However, few geoscientists, other than geographers, ever receive formal cartographic training. This page is dedicated to providing cartographic information and hints for geoscientists, and other interested persons, to help them achieve a higher standard of excellence in mapping.

How to map out a new role for yourself as a cartographer

If you like geography, are good on detail and have ace computer skills, you should consider a career as a cartographer

By Caroline Roberts
Thursday, 30 July 2009
The Independent

You might be forgiven for thinking that most of the world has been mapped by now. But, because of the constantly changing landscape and the growing amount of information about the earth available through technological advances, there's still a need for skilled cartographers to sift the data and turn it into something meaningful for the rest of us. "Cartography involves assessing and amalgamating bits of geographic information and presenting them in a map form that's relevant for a particular user," says Mick Ashworth, a former editor of The Times Atlas Of The World who now runs his own company, Ashworth Maps and Interpretation. This can mean producing anything from maps to keep ramblers on track to surveys for oil and gas exploration.

But will internet mapping sites such as Google Earth lessen the need for cartographers? No, says Ashworth, adding: "Those things have raised people's awareness of maps, and made them question what a good map is. There will always be a need for cartographers to show them."

Junghuhn

It's difficult to put a label on Junghuhn. He's a botanist, but also a lithograph artist. He's a cartographer, but also a photographer. Set all the labels aside, the German-Dutch was a man thirsty for adventure in nature.

"Junghuhn was a lone adventurer at heart. His social life was full of controversy, but his aim in life seemed to be to explore nature. And Java was his playground," Goethe Institute director Franz Xaver Augustin said prior to an exhibition.

After years of exploration, Junghuhn contributed his part in enriching the then-limited documentation available about Java, through his research papers on botany and his meticulously detailed map of the island.
Underrated cartographer: Foreshadowed by Raffles, Junghuhn’s detailed map of Java (1855) is less known despite it being richer in visual information that serves as the basis for modern cartography of the island.

Coming back from his expedition in 1840 where he spent most of his time tormented by dysentery and infections, Junghuhn submitted the “General Map of Central Sumatra” which was far from being just general. Accompanying the map were several lithographs of the landscape he came across.

Junghuhn was also able to capture the landscape of the area through lithography works.

Despite his flaws and controversies, Junghuhn’s contribution to documenting and mapping Java as well as Sumatra is undeniable.

Go to link >
Did you know?

GPS
Because GPS includes a very accurate time reference, the system is also widely used for timekeeping. GPS receivers can display time accurate to within 150 billionths of a second.

Go to link >
http://www.nasm.si.edu/exhibitions/gps/mapping.html

Moon revolution

The moon revolves around the Earth in
a) 28 days and 10 hours
b) 27 days and 8 hours
c) 26 days and 15 hours
(Answer at end of newsletter)

cartocacoethes (What?)

A collection of accidental geographies. The phenomenon is known as "cartocacoethes," and may explain why some old maps are not maps at all.

Go to link >

Examples:

The Land of the Long White Cloud
Michelle Holshue sent in this picture, which she took in Costa Rica some years ago. The cloud formation over the ocean reminded her of New Zealand
Technical

**GEORSS**
As RSS and Atom become more prevalent as a way to publish and share information, it becomes increasingly important that location is described in an interoperable manner so that applications can request, aggregate, share and map geographically tagged feeds. GeoRSS was designed as a lightweight, community driven way to extend existing feeds with geographic information.

There are currently two encodings of GeoRSS, Simple and GML:
**GeoRSS-Simple** is meant as a very lightweight format that developers and users can quickly and easily add to their existing feeds with little effort. It supports basic geometries (point, line, box, polygon) and covers the typical use cases when encoding locations.
**GeoRSS GML** is a formal GML Application Profile, and supports a greater range of features, notably coordinate reference systems other than WGS-84 latitude/longitude.

Go to link >
www.georss.org

**Programmable Web**
Keeping you up to date with APIs, mashups and the Web as platform
Go to link >
http://www.programmableweb.com/

**QOOxDOO**
qooxdoo is a comprehensive and innovative framework for creating rich internet applications (RIAs). Leveraging object-oriented JavaScript allows developers to build impressive cross-browser applications. No HTML, CSS nor DOM knowledge is needed.
Go to link >
http://qooxdoo.org/
Disney open-sources 3D code

Author: Gareth Halfacree
Published: 21st January 2010

The cause of open-source 3D rendering just got a shot in the arm from a somewhat surprising source - the Disney corporation.

As announced over on Monophyl.com - via Slashdot - the corporation's animation arm, Walt Disney Animation Studios, has released its Ptex 3D texture mapping code under a BSD open-source licence.

The Ptex source code is available now from the official website,

Go to link >

ProFantasy – Map Making for Gamers

ProFantasy Software brings you everything you need to create great maps for your games. We offer art and tools for overland maps from all ages, buildings, floor plans, fantasy and science fiction. We help you create beautiful and useful maps, more quickly, than any comparable software.

Go to link >
http://www.profantasy.com/
ONE to ONE  Scale Mapping

ANALOGUE
And then came the grandest idea of all! We actually made a map of the country, on the scale of a mile to the mile!"

"Have you used it much?" I enquired.

"It has never been spread out, yet," said Mein Herr: "the farmers objected: they said it would cover the whole country, and shut out the sunlight! So we now use the country itself, as its own map, and I assure you it does nearly as well.

-- Lewis Carroll, *Sylvie and Bruno Concluded* (1893).
Go to link > http://3stages.org/c/gq.cgi?first=QAMAP

DIGITAL
Cambridge, UK. An old dream of cartographers has finally been realized through flat-panel displays and small, portable computational devices. For centuries, cartographers have dreamed of full-scale maps, that is, a map with a scale of 1:1, so that 1 Km. of the map would represent 1 Km. of the world. Implementation difficulties made such a map impractical. But now, scientists at Cambridge University have been able to display the full-scale map on a flat-panel screen, scrolling the map as necessary to cover the territory.

The new technique has already revealed important results: errors in the existing geographical databases. These errors were revealed when geographers in Cambridge compared the full scale map with the terrain and discovered that they didn't fit precisely: Several structures, including a college building and several roads were determined to be in the incorrect location. "Rather interesting," said Lewis Carroll, spokesperson for the university, "several college buildings are quite off their correct location." Unfortunately, initial estimates for moving the buildings and roads to correct these discrepancies are too expensive, so, as Carroll puts it, "we will have to put up with these problems, but we will annotate the map to show where these placement errors occur."

An unexpected positive finding is that the map serves both types of map-users well: those who like to orient the maps so that North is always up, regardless of their direction of travel, and those who like to orient the map so that it corresponds to the positions of objects in the world. Now, either type of map user can be accommodated, something which was not possible when full-scale maps were implemented only on paper.

When asked what new developments might be expected from the college, Mr. Carroll stated that they were working on full-scale biographies, providing a much more realistic depiction of a person's life. This would allow a biography, for example, to take place in the same time-scale as the person's life, increasing the realism dramatically. Full scale renditions of other phenomena are in the works, but Carroll said that confidentiality restrictions prevented discussion until they were fully realized.

Don Norman, "Cartography dream realized", *Risks Digest*, Saturday 1 April 2006.
Go to link > http://catless.ncl.ac.uk/Risks/24.22.html#subj4
Feature maps

**Frequency of Lightning Strikes**

Colors show number of strikes per square kilometer per year:

- Go to link >

**Tropical Cyclones, 1945–2006**

Saffir-Simpson Hurricane Scale:

- Go to link >
Tsunami, 2006

Go to link >
http://images.google.com/imgres?imgurl=http://www.radicalcartography.net/fisk/fisk03_sm.jpg&imgrefurl=http://myconey.wordpress.com/category/too-personal/&usg=__nzVVu_oup5INu2qNTmaYV3MLVh0=&h=775&w=550&sz=177&hl=en&start=6&um=1&tbnid=eQKmWyZWspVKmM:&tbnh=142&tbnw=101&prev=/images?q=bazaar%2Bcartography%26hl%3Den%26rls%3Dcom.microsoft:en-au:IE-SearchBox%26rlz%3D1I7GGLD%26sa%3DN%26um%3D1
Contributions welcomed

http://cartography.tuwien.ac.at/content07en/index.php?CartoActive:CartoTalks

*The moon revolves around the Earth in 27 days and 8 hours.*