



GLOBAL MAPPING NEWSLETTER 42

Brazil in Global Map: a Continental Data Development

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Ms. Estevão

Brazilian Institute of Geography and Statistics joined Global Mapping Project in 1999 and since then is doing all efforts to release data. Brazil Global Map vector data is a subset – with particular specifications – that comes from the Cartographic Integrated Digital Database of Brazil at one per million scale (bCIMd). IBGE bCIMd Project, from 2000 to 2003 (first release), converted from paper to raster, and then to vector, data from 46 paper sheets in 1:1,000,000, which resulted on 52 digital sheets due to the enclosed maps, made it topologically structured and added attributes to the cartographic elements from all over the country. From December 2003 to October 2004, IBGE prepared Brazil Global Map database and send it to ISCGM, which asked for some validation procedures to adjust data to Global Map specifications. The work was finished during last training course offered by ISCGM – JICA – GSI, Japan, from June to October in 2005. Brazil Global Map integrated database has about 300MB in shape file format. The slicing process, in 5° x 5° degrees, as well as the conversion to VPF format still have to be done

in order to make data available for download, through ISCGM home page.

Considering Brazil's continental size and financial-technological limitations, additional knowledge was acquired during that period and we would like to share the difficulties faced and the solutions adopted.

- For the very irregular coast line of Brazil, with an extension of more than 7,000 kilometers, it was very welcomed the tentative line solution presented by ISCGM to “close” the borderline with the shoreline.

- It was difficult to classify Geographical names in automatic process, due to the particularities of the language and culture. Names have to be identified and classified one by one. The same difficulty also occurred with population centers classification.

- Homogeneity on the quantity of elements was also identified as a problem among sheets. The stream lines selection criteria, during compilation process (paper sheets composition), was not very well applied, and after sheets integration this kind of trouble was easier identified, but not yet solved.

Since bCIMd first version was released it started a Permanent Program of Updating bCIMd. Partnership cooperation with bureaus, agencies and other Brazilians institutes and organisms which produce relevant sector information (transportation, mining, electricity, and others) will be increased to supply and support this

update. This Program includes: sharing data; using remote sensing images and bigger scales data to update bCIMd; institutional cooperation to update thematic data; and inclusion of historic data. This year, IBGE will release a new bCIMd version and then a new subset of data will be prepared to Global Map.

Nowadays bCIMd can be downloaded in www.ibge.gov.br by sheets of 6° x 4° degrees (International Chart of World standard). It can be accessed and viewed through the link “map server”, in Portuguese language.

IBGE is acquiring ground truth data to supply Raster Layer composition with Land Cover thematic information. Land cover images will be produced by ISCGM Working Group in accordance to IBGE, using acquired ground truth data. To complete the whole land area of globe by 2007 is ISCGM’s aim, expressed in 2005 Cairo Meeting.

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Global Mapping Representatives: Anna Lúcia Barreto de Freitas and Renata Curi de Moura Estevão.



GM Integrated Databasde Example

Starting the Global Map Application Project

Hiroshi Ota, Ph.D.

KEIO Futsubu School



Dr. Ota

Global Map School Organizing Committee (chair: author) was founded in March 2006. Global Map School is a project aimed at encouraging the children of the world to get to know each other’s countries/territories and interact with one other. Using a Global Map created with collaboration from all over the world, the project proposes a new method of study.

The project’s first undertaking, tentatively scheduled for fall 2006, will see students in Japan and the Philippines, use Global Map to introduce their home territories and interact with each other via the Internet and TV conferences. It is hoped the Global Map School project will give students an increased awareness of

environmental issues, deepen mutual understanding between countries, and ultimately contribute to creating a better future for the world.

The details of this program will be reported on the subsequent issues of the newsletter.



Image of the Global Map School

Workshop "Use of Geo-Information for Mitigating Large Scale Disaster and Attaining Sustainable Development"

Hikomichi Maruyama
Secretary General of ISCGM

ISCGM is planning to hold a workshop on "Use of geo-information for mitigating large scale disaster and attaining sustainable development" during coming 17th UNRCC-AP jointly with International Cartographic Association (ICA) and Permanent Committee on GIS Infrastructure for Asia and the Pacific (PCGIAP). This is a part of 17th UNRCC-AP which will be held in Bangkok, Thailand from 18- 22 September 2006.

The objective of the workshop is to enhance the importance of geo-information for both disaster and sustainable development and to clarify the role of National Mapping Organizations on these issues. From ISCGM perspective, it is expected that the use of Global Map is promoted and its sustainability will be consolidated through this workshop.

The workshop will consist of three parts. The first part will be keynote speeches on disaster mitigation and sustainable development. The second part will be general presentations focusing on the use of geo-information including Global Map for disaster mitigation and sustainable development. The last part, based on the precedent presentations, will be panel discussion on the role of National Mapping Organizations for disaster mitigation and sustainable development.

It is expected that many people come to attend this workshop. Your help on disseminating the workshop is very much appreciated. For more information on this workshop, please contact the secretariat of ISCGM at sec@iscgm.org

Announcement from the Secretariat of ISCGM

- As featured in the above article by the Secretary General of ISCGM, the 17th United Nations Regional Cartographic Conference for Asia and the Pacific will be held in Bangkok, Thailand from 18 – 22 September, 2006. A workshop "Use of geoinformation for mitigating large scale disaster and attaining sustainable development " is scheduled for 20 September as a part of the conference jointly organized by ICA, ISCGM and PCGIAP
- The 13th ISCGM Meeting is scheduled for November 11, 2006, at IGM building, Santiago, Chile. Preceding this meeting, a Global Mapping Session organized by the secretariat of ISCGM will be held from 11:00 – 12:30 on November 8 as a part of GSDI 9 Conference. Paper presentations from the secretariat of ISCGM and countries in Americas are scheduled.
- Global Mapping project currently has 162 countries/regions. The newly participated organizations and the date of their participations are: Geography Department, Ministry of Land Management, Urban Planning and Construction of Cambodia on March 17; National Mapping Bureau of Papua New Guinea on March 20; Service de Géodesie et de Cartographie d'Haïti on April 7; and Office de la Topographie et de la Cartographie of Tunisia on May 23.

From the Secretariat

● *Technical Note for Global Map*

Fourth Round : Composition and Characteristics of Population Center Rayer

Population center is an optional layer. So it is not compulsory to obtain it. On the other hand, it is very important to know population distribution to treat environmental problems. It is strongly recommended to include population layer. All Global Map data which have been released to date have population layer.

<Composition of Population Center Layer>

Population center layer is composed of “built up area” and “settlement.” Definition of each item is as follows:

Built up area: An area containing a concentration of building and other structures

Settlement: A concentration of small dwellings

Discrimination between built up area and settlement and a standard for acquisition are difficult matters. Practically, people who work to create data of each country set up their standard. Data of better quality can be produced by making a devise not to leave blank areas on the map.

<Acquisition of Built Up Area>

Built up area is made up of polygon and point. Which to be used is determined by the area. An area of 1km² or larger is delineated by polygon and an area smaller than that is obtained as a point. It is not correct to obtain one built up area into both polygon and point. Duplication should be avoided. (Figure 1-1 and 1-2).

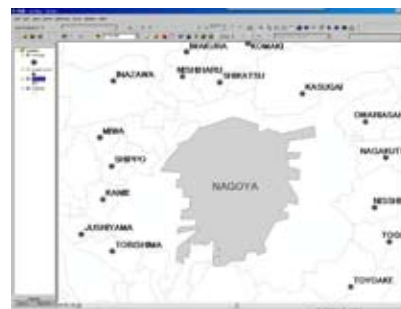


Figure 1-1 Correct

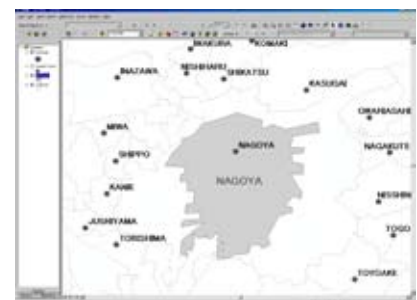


Figure 1-2 Not correct

Global Map and Related Meetings

Followings are Global Map and related meetings. Information on related meetings will be highly appreciated.

2006

- **23 - 27 August, Jakarta, Indonesia**
The First Indonesian Geospatial Technology Exhibition
- **29 August - 1 September, Bangkok, Thailand**
Map Asia 2006
- **18 - 22 September, Bangkok, Thailand**
17th UNRCC-AP
- **6 - 10 November, Santiago, Chile**
GSDI 9th Conference

- **11 November, Santiago, Chile**
13th Meeting of ISCGM
- **14 - 15 November, Riyadh, Saudi Arabia**
ISO/TC 211 23rd Plenary

2007

- **15 - 20 July, Cambridge, England**
Cambridge Conference

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