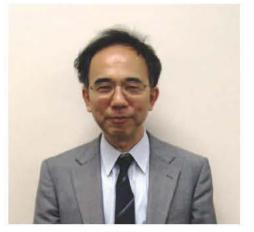


Use of Global Map Data as a Teaching Material on GIS

Dr. Yoshitsuyu Asami Professor, Faculty of Economics, Kurume University



Author

Kurume University gives a lecture on "Geographic Information System" as a joint effort of the Faculty of Economics, Faculty of Literature and Graduate School (two credits each for the first and the second semester, for a total of four credits), which is studied annually by about 50 students who are interested in geography and local economics. As the university deals in humanities, the contents of the lecture mainly include mapping, display of local statistics, and local analyses using these materials.

The University's Education Center for Computing and Networking introduced 50 classroom licenses of ArcView (currently known as ArcGIS for Desktop) as its software. Furthermore, free software such as MANDARA is used. The problem is map data. Buying map data according to the number of the licenses is costly. Thus we have been positively introducing free software as much as possible since this lecture began. Fortunately, free access to map data and statistical data through the Internet has been promoted with the Japanese Government's full-fledged effort on GIS especially after the year 2000. Notably, Fundamental Geospatial Data of the Geospatial Information Authority of Japan; National Land Numerical Information of National and Regional Policy Bureau, Ministry of Land, Infrastructure, Transport and Tourism; Statistical GIS by e-Stat mainly by Statistics Bureau, Ministry of Internal Affairs and Communication are among them. However, most of them deal with large scale maps such as 1:25,000 scale and it is difficult to find free and user-friendly map data in a small scale such as 1:1,000,000. Consequently, "Global Map Japan" came into focus. When we started to use it, there was a homepage "Global Map Application Portal Site," from which we could get map data on administrative boundary area, drainage, transportation, population centers and sea area (in Shapefile) without cost.

In this lecture, "Global Map Japan" is used as a teaching material in the first step of drawing maps using ArcGIS. These data enable us to draw the outline of local to prefectural levels of Japan at a 1:1,000,000 scale. Furthermore, the map data file of "Global Map Japan" includes detailed attribute data, which can be used to draw a variety of maps.

These maps are used as base maps to draw thematic maps such as a statistical map. This is because by superimposing drainage and transportation maps on these maps can more clearly express the local characteristics shown on the statistical maps. It is also expected that Global Map will be used similarly to draw foreign countries.

Periodical updates, long-term maintenance of Global Map, and an increase of project-participating countries are expected.

Global Map of the Philippines

Dr. Peter N. Tiangco, CESO I Administrator, National Mapping and Resource Information Authority

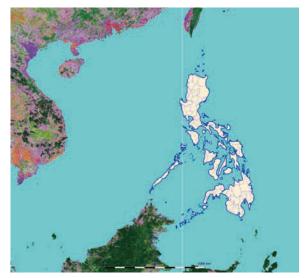


Author

Utilization of geospatial information is rapidly increasing and being used in all sectors for social, economic and environmental development. There is now increased demand for free and open access to geospatial data as essential public good, according to UN Committee of Experts on Global Geospatial Information Management (UN-GGIM). Such widespread use and access to geospatial data will shape new roles for National Mapping Organizations (NMOs). NMOs will shift from national to international concerns in which urgent global issues such as climate change can be more effectively addressed.

The Global Mapping Project highlighted the growing need by the international community to address concerns such as environmental hazards, global warming and land cover monitoring, among others, using geospatial information from NMOs in each country. It facilitated free data sharing and has proven its use in providing worldwide glimpse of vegetation, populated areas, river system and major road networks. The geospatial data published by the Global Mapping Project are reliable and authoritative. Using these data will provide countries with valuable information about its neighbours. The National Mapping and Resource Information Authority (NAMRIA), being the central mapping agency of the Philippines strongly supports the Global Mapping Project in the production of one global map. NAMRIA is pro-active in ensuring the quality of geospatial data and in making these accessible to other countries. In February 2013, the International Steering Committee for Global Map (ISCGM) released the Philippine Administrative Boundaries after careful evaluation by the ISCGM Secretariat. To date, NAMRIA is still in the process of evaluating the road networks, river systems and populated areas. These fundamental datasets are already being used in national and regional planning to facilitate better governance. The Global Map data will not only address immediate national concern of the country. It can also be used by the international community in dealing with worldwide issues that may have long term consequences.

Global Map Version 2 of the Philippines



The political boundaries dataset is GM Version 2 while the land cover is GM Version 1. The dataset was released last February 2013.

Release of Global Map Romania, Version 2

Gabriela Dragan

Counsellor - GIS Department, National Agency for Cadastre and Land Registration



Global Map team

National Agency for Cadastre and Land Registration (ANCPI) represents the sole authority in the fields of mapping, cadastre an real estate publicity and is setting the policy in its field of activity, along with the strategy and regulations regarding the development and harmonization of specific data.

The organisation's activity is internationally recognised by EuroGeographics and World Bank experts.

National Agency for Cadastre and Land Registration is an active partner in a range of pan-European projects which have as outcome the harmonization with European standards in the field, (e.g.EuroBoundaryMap, EuroRegionalMap, EuroGlobalMap, EuroDEM, INTERREG).

The Romanian Position Determination System (ROMPOS) represents at the moment the most efficient and modern method used for determining the objects' position on Earth surface, and is part of EUPOS (European Position Determination System).

ANCPI is holding also the presidency of INIS Council (National Infrastructure for Spatial Information), a component through which Romania contributes at the implementation of INSPIRE Directive, on the setting up of spatial data infrastructure in the European Community. In this respect, ANCPI has developed the national geo-portal which is connected with the European Community INSPIRE geo-portal; through it, metadata, datasets and services regarding spatial information held by public authorities in Romania can be discovered.

In its capacity of main spatial data producer, ANCPI is providing technical support for the INSPIRE Directive's implementation.

Since year 2000 ANCPI collaborates with International Steering Committee for Global Mapping (ISCGM). The first version of Global Map Romania was published in February 2008 and was containing 4 themes; its second version was published 2013. Global Map Romania second release contains 4 themes in vector format, namely: Transportation, Boundaries, Drainage and Population Centre. Compared to the previous release, spatial information have been updated, according to Global Mapping Specifications and effort has been made in improving data quality. Metadata have been achieved using the Global Map Metadata Editor, and validation of vector data has been carried using Global Map Data Check software, both instruments being provided by ISCGM.

Various data sources have been used for accomplishing the Global Map. Thus, spatial data for Transportation have been obtained by generalization of data at scale 1:50 000. The data source for Drainage was vector data at scale 1:500 000. In Population Centre there have been included all population centres comprising more than 1000 inhabitants and residences of administrative territorial units. Boundaries have been updated by involving the local public authorities in RELUAT (Electronic Register of Administrative Territorial Units) project.

Through its participation in this project ANCPI is proving that it holds the needed capacity to partake in international programs, having the occasion to become part of the geospatial information administrators community, at a global level.

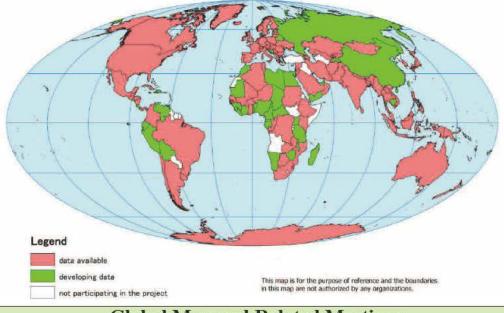
From the Secretariat

Global Map Data Release and Participation in the Global Mapping Project

Since the last issue of the newsletter on March 25, 2013, Global Map Version 2 data for the following countries have been released. We thank them for their data creation and submission.

Data release in April 2013: Romania, EuroGeographics member countries, Sri Lanka and Mongolia in May 2013: Canada

Currently 166 countries/16 regions participate in the Project. Among them, data of 109 countries/8 regions have been released (Version 2 data are for 68 countries/4 regions.).



Global Map and Related Meetings

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

2013

- July 20, Cambridge, U.K. The 20th Meeting of ISCGM
- July 21, Cambridge, U.K. The 1st Meeting of Global Map for Sustainable Development Working Group (GM4SD)
- July 21-24, Cambridge, U.K. Cambridge Conference 2013
- July 24-26, Cambridge, U.K. UNCE-GGIM Third Session

- August 25-30, Dresden, Germany ICC 2013
- October 28-30, Tehran, Iran Second Meeting of UN-GGIM-AP
- November 4-8, Addis Ababa, Ethiopia GSDI 14
- November 14-15, California, USA ISO/TC211 37th Plenary

The Newsletter is distributed as information paper on Global Mapping to more than 1,200 people of NMOs, Global Map data users and other interested people of the world. Your contribution of articles, requests for subscription and provision of relevant information will be very much appreciated. Articles published on this newsletter are not edited and reflect the view of the authors. Published by : The Secretariat of the International Steering Committee for Global Mapping (ISCGM) c/o Geospatial Information Authority of Japan (GSI) 1 Kitasato, Tsukuba-shi, Ibaraki-ken, 305-0811 Japan Phone : +81-29-864-6910 Fax : +81-29-864-8087 Homepage : http://www.iscgm.org/ E-mail : sec@iscqm.org