



GLOBAL MAPPING NEWSLETTER 54

ISCGM Informal Meeting in the Netherlands

Yoshikazu Fukushima
Secretary General, ISCGM



The ISCGM informal meeting was held at World Trade Center Rotterdam on June 19 in conjunction with the 11th GSDI Conference. Eight persons attended the meeting.

Activities on Global Mapping were reported. The Global Map development was improved. Release of data in the first half of 2009 is increasing. Promotion activities of Global Map for users' community were appreciated very well by participants, for example, USGS activity for ESRI Users Conference, and an explanation plan to climate change people at the 7th Workshop on Greenhouse Gas Inventory in Asia.

The actions for Phase 3 (2009-2012) of Global Map were major discussion items, which consisted of revision of Global Map Specifications and draft actions for the implementation of Phase 3. The circulation of questionnaire on Specifications to National Mapping Organizations was reported.

The release of draft Global Map Specifications attracted interest of the participants. The Specifications workshop in Tsukuba, Japan in September and ISCGM meeting in Bangkok in October were introduced. Then the timetable for the revision was accepted. The importance of the compatibility of core specifications was raised by Mr. Jesús Olvera Ramírez. The GML format for Global Map was discussed. The possibility of involvement of industry side for the implementation of core specifications was also advised.

Mr. Chris Higgins reported the Data Standard for Global Map session in GSDI. The discussion items were well identified in the session. Mr. Edwin Hunt reported coordination activities in South America. Mr. Greg Scott introduced PCGIAP activities related to Global Map. Because the technical transfer and information exchange are increased recently, functions for carrying through Global Mapping Project is to be strengthened.

GSDI 11 in the Netherlands

Yoshikazu Fukushima
Secretary General, ISCGM

The 11th GSDI Conference was held in Rotterdam on 15th – 19th June 2009. Rotterdam is a famous port city by which world is connected through trading. The conference was held at nice World Trade Center. The conference was jointly held with “The 3rd INSPIRE Conference” and “a National Conference on Dutch SDI Results and Challenges.” The conference was opened by GSDI President, Prof. Bas Kok. He introduced the theme of the conference “building bridges” means that all the participants around the world can interact with each other. He reported the number of participants was 909 from 77 countries. Mr. Noud Hooyman, Ministry of Housing, Spatial Planning and the Environment reported current legislation of INSPIRE in each government. The 20% of EU citizens live within 50 km from a boarder. The 70% of fresh water bodies in Europe are trans-border rivers. He explained the

importance of integrated data on environment issues. Initiatives, experiences, data sharing and standards related to national/regional/global SDIs, including Global Map, were reported and discussed in plenary and sessions. It also had a Youth session which attracted interest of Netherlands’ students.



Data Standards for Global Map at the GSDI 11

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EDINA
Edinburgh University Data Library

INSPIRE (Infrastructure for Spatial Information in Europe) is the legal instrument underpinning the formation of the European Spatial Data Infrastructure (ESDI), and parallel session "Data Standards for Global Map" at the GSDI 11 conference in Rotterdam during June was a good place to be for those interested in the meeting of INSPIRE and the Global Map community. Organised under the umbrella of the EuroGeographics led ESDIN (ESDI Network) project, the session furthered the process of information exchange between best practice in the use of open interoperability standards in Europe with the ISCGM. Running up to 2011, ESDIN is a key vehicle in helping the European NMOs prepare for, and understand, the consequences of INSPIRE. The project needs user requirements fed in from the global geospatial community to ensure that the solutions arrived at, in terms of web services, harmonised data specifications, generalisation, etc., are interoperable at the global scale. As Global Map may be viewed as one of

very few core SDI datasets, produced in-country and with a commitment to update, where better to get seek real global scale user requirements? Hence the strong interest from the geospatial interoperability community in making sure the ISCGM gets actively involved in the discussion about how best to ensure that open standards get implemented in a way that benefits everyone, irrespective of where they happen to live on our globe.



North American Nations to Harmonize Global Map Data

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Participants in the North American Atlas annual meeting in Ottawa, Ontario, Canada, October 2008

In the autumn of 2004, representatives from national mapping organizations in Canada, Mexico, the United States of America and the trilateral Commission for Environmental Cooperation (CEC) agreed to jointly produce a collection of small-scale cartographic frameworks that would support the preparation of a North American Environmental Atlas. The potential for this continental atlas had been discussed earlier that year in bilateral meetings involving representatives from Instituto Nacional De Estadística Y Geografía (INEGI) in Mexico, the National Atlas of the United States (USGS), the Atlas of Canada (NRCan) and the trilateral Commission for Environmental Cooperation (CEC).

In less than one year, the result of this alliance was the public release of harmonized cartographic data covering all of North America at a scale of 1:10,000,000. Included were integrated digital map files of transportation, surface waters, glaciers and sea ice, populated places, and bathymetry. These were documented in English, Spanish, and French and were made available for download or for use as Web map services. A wall map was also printed and more than 10,000 copies of this were distributed at the International Users Conference of the Environmental Systems Research Institute. The CEC promoted the use of these mapping frameworks within its projects and moved quickly to integrate thematic data sets on such topics as ecoregions, industrial pollutants, and priority conservation areas that

could deepen the understanding of continental-scale environmental issues. The significance of our work has also been presented to audiences of professional conferences, including the International Geological Congress and the Global Mapping Forum.

As useful as these maps are, customers and potential contributors to the North American Environmental Atlas (<http://www.cec.org/naatlas/>) expressed interest in larger scale cartographic information that is harmonized across the continent. The United States produced its National Atlas at 1:2,000,000-scale. Mexico had been mapping at 1:1,000,000-scale for many years. The Atlas of Canada, which mapped that country at two million-scale for nearly 100 years, decided in the early part of this decade to recompile its frameworks at 1:1,000,000-scale. That left the United States without data at a comparable scale until 2007 when an effort began to produce new frameworks at the scale and resolution of the Global Map. Provisional data for the U.S. were delivered to the ISCGM Secretariat just prior to last year's Global Mapping Forum.

Several months later, the Atlas of Canada hosted an annual meeting of the North American Atlas principals. At that time, it was agreed that national mapping programs in Mexico, the United States, and Canada would collaborate to supplement the ten million-scale vector data frameworks with harmonized data at 1:1,000,000-scale. This should be welcome news for Global Map users since this effort and the ambitious Global Map of the Americas increase the likelihood of a Global Map for the Western Hemisphere.

In this meeting, the delegates from INEGI expressed reservations about using their existing 1:1,000,000-scale frameworks as these were collected fifteen years ago while those from the United States were produced recently. They generously offered to update the Mexico data before serious work began to integrate their base cartographic layers with those from the United States. This revision work is underway in

Aguascalientes. A technical working team from the three nations and the CEC meets monthly via teleconference. Their current efforts include the production of harmonized datasets of our shared borders; the creation of a common data dictionary built upon the Global Map specification; the integration of streams at the Canadian-U.S. border; and the identification of classification differences among the three Nations that make our work more challenging. A separate management team also meets monthly.

It may be two years or more before these harmonized cartographic frameworks are ready. They will be offered at no cost to the end user by the national mapping organizations; they will be contributed to the Global Map effort; and these data will be maintained according to a revision schedule yet to be determined.

From the inception of this project, the utility of harmonized cartographic information has been

demonstrated repeatedly. The wall map mentioned earlier has been used as the cartographic framework for maps by others, including a provisional map of North America's ecoregions and another that delineates Pacific marine protected areas. A map compiled by the three nations that illustrates continental hydrologic basins made its debut at the World Water Forum in Mexico City. Current efforts include a final map of North America's ecoregions and the first in a series of land cover maps designed to highlight land change over time.

Each of our maps bears a slogan that affirms a collective commitment: ***Three countries working together to map our shared environment.*** With this agreement to harmonize North American data to the resolution and specification of the Global Map, the potential applications at national, continental, and global levels increase dramatically.

The First Session of the Committee on Development Information, Science and Technology (CODIST-1)

Takayuki Ishizeki

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The First Session of the Committee on Development Information, Science and Technology (CODIST-I) took place in Addis Ababa, Ethiopia, from 29 April to 1 May 2009, and was preceded by pre-events on 27 and 28 April. The theme of the CODIST-I was "Scientific Development, Innovation and the Knowledge Economy." Geographical Survey Institute attended the CODIST-I as an observer.

The Committee on Development Information, Science and Technology (CODIST) is one of the seven subsidiary bodies of the Economic Commission for Africa (ECA). CODIST was born as a result of reorganization of the Committee on Development Information (CODI), which was established in 1999 and met five times up to 2007. There are three sub-committees: Information and Communications Technology (ICT), Science & Technology, and Geo-information. The meeting of Geo-information Sub-committee was attended by delegates from 24 states and also observers from a lot of organizations and institutions not only in Africa but also in Europe, U.S. and other regions including Japan.

In the sub-committee, two pre-CODIST events about HIV/AIDS and the African Geodetic

Reference Frame (AFREF) project took place. In the CODIST-I meeting, about 20 papers were presented, and resolutions of the sub-committee on the following fields were adopted.

- Spatial Data Infrastructure
- Partnership and Capacity Building
- Development of Regional Geodatabases
- Standards
- Enlisting National Mapping Agencies in the Fight Against HIV/AIDS
- African Geodetic Reference Frame (AFREF)
- Structure and Funding Mechanism of National Mapping Agencies



Geo-information Sub-committee Meeting

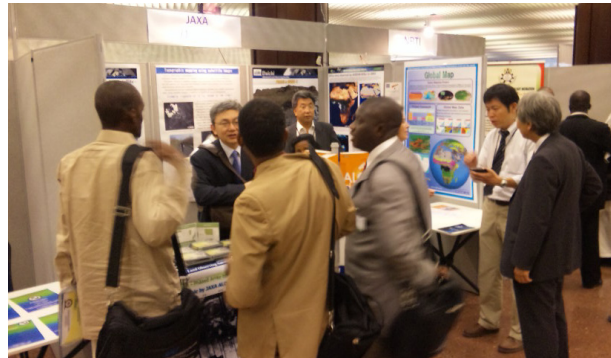
Japan Aerospace Exploration Agency (JAXA), Infrastructure Development Institute (IDI), and Geographical Survey Institute (GSI) organized a special workshop on the topic of "Topographic Mapping Focusing on Using Satellite Imagery." The session dealt with topographic mapping in Africa using satellite imagery, especially focusing on Japanese satellite "ALOS," and the following presentations were given.

- Japanese Experience of Topographic Mapping Projects in Africa through ODA (IDI)
- ALOS "Daichi" Overview, Data Acquisition and Provision for Topographic Mapping in Africa (JAXA)
- Use of ALOS Imagery for Production and Revision of 1:25,000 Scale Topographic Maps and Global Map (GSI)
- Use of ALOS Imagery in Regional Centre for Training in Aerospace Surveys (RECTAS)

At an exhibition booth, we presented panels of satellite imageries, samples of topographic maps and satellite imagery maps, Japanese experience of technical cooperation in Africa, and Global

Mapping project. Furthermore, CD-ROMs and brochures of Global Map and satellite imageries were distributed to the participants. There were many discussions on use of ALOS imageries and contents of Global Map, so these presentations gave a good opportunity to promote both ALOS and Global Map.

The next CODIST meeting will be held in Addis Ababa, Ethiopia, in spring 2011.



Poster Presentations at Exhibition Booth

International Workshop on the Revision of Specifications for Global Map Version 2

The International Workshop on the Revision of Specifications for Global Map Version 2 is organized by Geographical Survey Institute and ISCGM to create new draft specifications and new draft formats towards a more user-friendly Global Map. The details are as follows:

- Date: Tuesday, 8 September - Thursday, 10 September
- Venue: Geographical Survey Institute, Ministry of Land, Infrastructure, Transport and Tourism
1 Kitasato, Tsukuba-shi, Ibaraki-ken, Japan
- Program (provisional)
 - Tuesday, 8 September (open and admission free)
 - Opening
 - Lectures
 - Contents: Examples of application of Global Map in environmental, disaster prevention and other fields, direction of Global Map, and issues on the revision of Global Map Specifications, given by experts in and out of Japan
 - Wednesday, 9 September
 - Discussion on the revision of specifications
 - Thursday, 10 September
 - Discussion on the revision of specifications, and Conclusion
 - Closing



Venue: The Science Museum of Map and Survey, GSI

The details of the workshop will be carried on the ISCGM Web site (www.iscgm.org) as soon as determined. The Secretariat of ISCGM would welcome your inquiries.

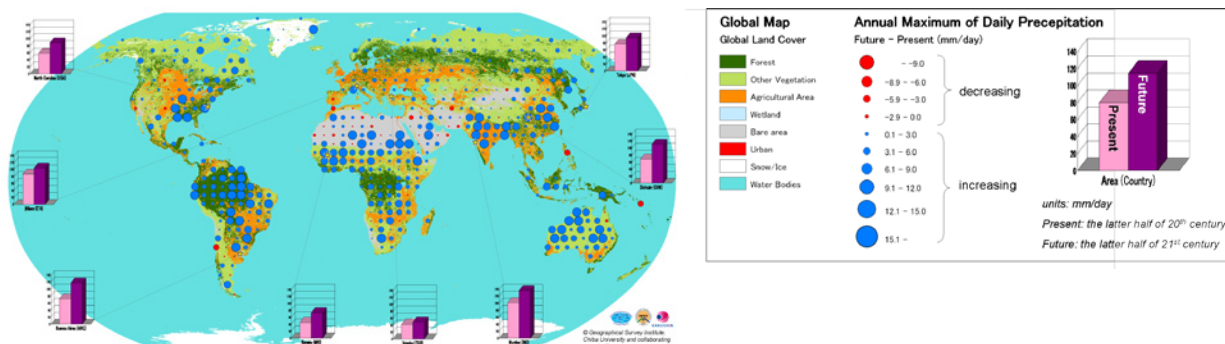
From the Secretariat

Release of KML Files

The KML files for browsing Global Map V. 1 (Global Version) with Google Earth were released from the ISCGM Web site on June 11, 2009. Please refer to the attached sheet for the details.

Exhibition at the 5th World Water Forum

The following figure shows the current land cover of the whole land of the globe (background) and the future change in the annual maximum of daily precipitation projected by the global warming simulation with a high-resolution climate model. This was created in collaboration between GSI and Meteorological Research Institute (MRI) and exhibited at the 5th World Water Forum in Istanbul from 16-22 March 2009.



Global Map Data Release and Participation in the Global Mapping Project

As of June 25, 2009, 164 countries/16 regions participate in the Global Mapping Project. Among them, data of 70 countries/4 regions have been released.

Global Map and Related Meetings

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

2009

- **12 - 16 July, England, United Kingdom**
CC: The Exchange
- **10 - 14 August, New York, USA**
UNRCC-Americas
- **8 - 10 September, Tsukuba, Japan**
International Workshop on the Revision of Specifications for Global Map Version 2
- **9 - 12 September, Beijing, China**
6th International Symposium on Digital Earth
- **12 October, Quebec, Canada**
ISO/TC211 29th Plenary
- **25 October, Bangkok, Thailand**
16th Meeting of ISCGM

- **26 - 30 October, Bangkok, Thailand**
18th UNRCC-AP/15th PCGIAP Meeting
- **26 - 29 October, Kampara, Uganda**
AfricaGIS 2009
- **15 - 21 November, Santiago, Chile**
XXIV International Cartography Conference
- **17 - 18 November, Washington D. C., USA**
GEO-VI

2010

- **11 - 16 April, Sydney, Australia**
XXIV FIG International Congress 2010
- **6 May, United Kingdom**
ISO/TC211 30th 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 of subscription and provision of relevant information will be very much appreciated.

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Release of KML Files for Browsing Global Map Ver. 1 (Global Version)

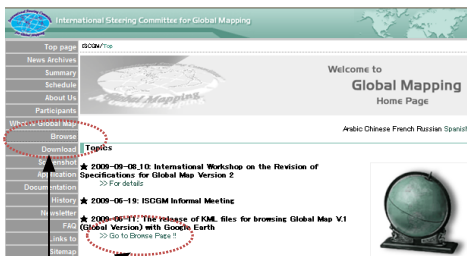
Shuhei Kojima
Secretariat of ISCGM

KML files for browsing Global Map Ver. 1 Global Version (Land Cover data and Percent Tree Cover data) with Google Earth were released from the ISCGM Web site on June 11, 2009. The KML files were prepared in 72 tiles of 30 degrees by 30 degrees. By clicking a tile shown on the Web site, Google Earth is up and then the image, legend and credit of Global Map are displayed. In order to attain smoother behavior, it was set to show a coarser image at a distance, in contrast, an image of higher pixels nearer to the ground. In doing so memory consumption is saved. Software such

as Google Earth needs to be installed prior to browsing Global Map data in this way.

The main purpose of the release of KML files is to enable Global Map data users to browse the data more easily. Therefore, in addition to the existing “Download” page, a “Browse” page only for browsing, which does not require user registration and log-in, was newly set up to release KML files. The release of KML files is hoped to enhance the use of Global Map data by a lot more people.

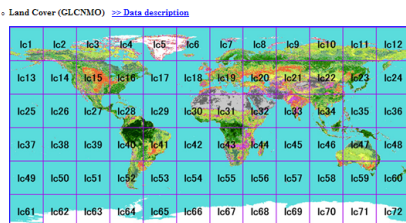
The steps for browsing Global Map with KML files



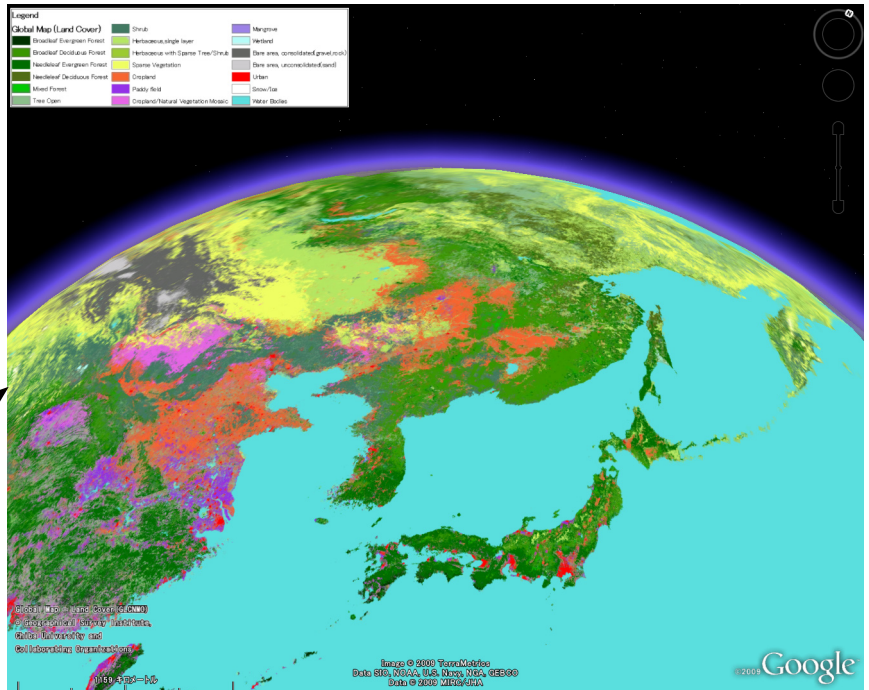
① Please click the hyperlink to “Browse” page.

2. KML (to browse the data with Google Earth)

(You will need software like Google Earth which enables KML files is installed on your computer in advance.)
 Please select click on the following figure for area of your interest, and then you can open or download the KML file. The data are divided into tiles of 30 degrees by 30 degrees as shown on the map below.
 * Each image is configured to disappear when a viewpoint nears the ground surface.



② Please click the area of your interest on the map of the Browse page.



③ Then, Google Earth is started and you can browse the Global Map.

(You will need software like Google Earth, which enables KML files, installed on your computer in advance.)