



Twenty-Year Anniversary of ISCGM: Celebrating Many Achievements of the Global Mapping Project

Akira Sasagawa Environmental Geography Div., Geographic Dept.,GSI Secretariat of ISCGM

Twenty years have passed since the time International Steering Committee for Global Mapping (ISCGM) was established in February 1996. This paper looks back the activities of the Global Mapping Project preceding the 23rd meeting of ISCGM scheduled in August.

Establishment of the Project

The action plan "Agenda 21" adopted at "Earth Summit" held in Rio de Janeiro, Brazil in June 1992 mentions in many parts that various information including geospatial information is important for decision making to appropriately cope with environmental problems. In response to this, Ministry of Construction of Japan (current Ministry of Land, Infrastructure, Transport and Tourism-MLIT) advocated "Global Mapping Concept," which was the start of the Global Mapping Project.

After that, questionnaire survey was conducted to National Geospatial Information Authorities (NGIAs) of respective countries. At the same time, Global Mapping Concept was introduced at related international academic conferences and international conferences. As a result of these efforts, supports for the Global Mapping Concept and resolutions related to the concept were made at the 13th Asian Conference on Remote Sensing in October 1992, the Fifth United Nations Regional Cartographic Conference for the Americas in January 1993 and the 13th United Nations Regional Cartographic Conference for Asia and the Pacific in 1994, thus agreement to the Global Mapping Concept was formulated by many countries. Through these processes, ISCGM was established at the Second Workshop on Global Mapping in February 1996.

The Global Mapping Project was launched with Dr. John E. Estes as ISCGM chair. He was a professor at the University of California, Santa Barbara and an authority on Remote Sensing and GIS researches. At the start of the project, main focus was placed on the activities for the development of



Photo 1:International Workshop on Global Mapping in Izumo, Japan

an implementation environment of the project. In the meetings, promotion of the project and development of specifications of Global Map data were mainly discussed, while group training courses on Global Map by Japan International Cooperation Agency (JICA) on capacity building were carried out from 1994 to 2012. A total of 112 participants from 60 countries have participated in the course.



Photo 2: late Prof. John E. Estes

In May 1997, necessity of global mapping was referred to in the document of "Programme for the further implementation of Agenda 21," the outcome document of 19th Special Session of UN General Assembly. In November 1998, the United Nations sent an official letter of recommendation to NGIAs of Member Nations and encouraged them to participate in the Global Mapping Project. The UN recommendation led to the increase in the number of participating countries and regions of the project, from 12 by 1998 to a sudden increase to 59 nations and regions in 1999, only for a year. At the 5th meeting of ISCGM held in November 1998, the first version of Global Map Specifications was adopted and since then the

development of the Global Map was carried out based on the specifications. In November 2000, first release of Global Map data of five countries: Japan, Laos, Nepal, Sri Lanka and Thailand were declared at the Global Map Forum held in Hiroshima, Japan.

Promotion of Data Development

Just after the first Global Map data was released, a sad news was brought in March 2001 informing Professor John E. Estes who had been leading the project as chair passed away. However, his strong will was taken over by every member country, and Dr. D. R. Fraser Taylor, then professor at Carleton University, Canada, assumed the chairpersonship of ISCGM in 2002.



Photo 3: The 9th meeting of ISCGM in2002 (Prof. D. R. Fraser Taylor at the center)

Thanks to his strong leadership, the Global Mapping Project was further accelerated. In August 2002, "Implementation Plan" adopted at World Summit on Sustainable Development (Johannesburg Summit) held in Johannesburg, South Africa addressed the importance of global mapping and appraised ISCGM's activities in those days. In the same month, that is August 2002, the First Global Mapping Seminar was held in Nairobi, Kenya under the joint auspices of ISCGM, MLIT and Regional Center for Mapping of Resources for Development (RCMRD). Since then, a total of six Global Mapping Seminars were held in Kenya and Senegal between 2002 and 2008. This contributed



Photo 4: 3rd Global Mapping Seminar

to the increase in the Global Mapping participating countries and releasing of Global Map data in African Region. Between 2002 and 2008, 26 countries and regions joined the project and 18 countries and regions released their data.



Fig. 1: Participation status map as of September 2002



Fig. 2: Participation status map as of June 2008 Comparison between Figure 1 and Figure 2 makes you understand the increase of the participation in African Region.

The middle of the 2000s witnessed technological innovation which dramatically changed the types and the number of users of digital geospatial information. In response to these trends, discussions on revision of Global Map Specifications were started for providing more user-friendly Global Map data. From February 2007 to July 2009, surveys including needs survey were carried out to NGIAs, liaison organizations of ISCGM and Global Map data users. Also, "International Workshop on the Revision of Specifications for Global Map Version 2" was held in September 2009 and a final draft of the specifications that came from the discussions of the workshop was submitted to the 16th meeting of ISCGM and adopted as Global Map Specifications Version 2. Started by the release of Global Map Japan Version 2 in May 2011, Global Map data were developed and released based on the new specifications.

In 2008, Global Map Global Version was released by WG4 as the main contributor. These data were produced by remote sensing technology using satellite imageries and utilized for global environmental simulation and other purposes. After this, Version 2 and Version 3 were produced in 2013 and 2016, respectively.



Fig. 3: Land Cover (GLCNMO) - Global version

Promotion of Utilization of Geospatial Information

United Nations Committee of Experts on Global Geospatial Information Management (UNCE-GGIM) was established under the United Nations Economic and Social Council in July 2011. ISCGM had actively participated in the discussions from the time of its preparation meetings and proposed Global Map for Sustainable Development (GM4SD) based on its experiences in developing Global Maps in collaboration with NGIAs of respective countries. Also, the importance of global mapping was mentioned in the outcome document of the United Nations Conference on Sustainable Development (Rio+20) held in June 2012.

In July 2013, Professor D. R. Fraser Taylor who had served as chair of ISCGM for more than 10 years stepped down and Dr. Paul Cheung, Professor of National University of Singapore and ex-Director of UN Statistics Division assumed the chairpersonship. Under the leadership of Professor Cheung, ISCGM invited many people from various fields and provided a forum where frank and open discussions were held on the importance and usefulness of geospatial information including Global Map.



Photo 5: Prof. Cheung, Chair of ISCGM giving a lecture at a Global Map symposium in WCDRR in Sendai, Japan in 2015

At the Third United Nations World Conference on Disaster Risk Reduction (WCDRR) held in Sendai, Japan in March 2015, ISCGM appealed at a session and a side-event symposium that effective utilization of geospatial information is crucial for enhancing resilience of nations against natural disasters and shared its recognition with the audiences. As a result, "Sendai Framework for Disaster Risk Reduction 2015-2030" adopted at the plenary session clearly specified the importance of utilization of geospatial information. ISCGM had been contributing to the field of disaster risk prevention by providing maps of disaster-struck areas and their surroundings to UNOCHA. After WCDRR, ISCGM has further enhanced the existing Hazard Maps Portal site by releasing hazard map information of many countries and good practices of hazard maps.



Fig. 4: Global Map released at UNOCHA web site http://reliefweb.int/

Conclusion

Under a firm philosophy of geospatial information by the three chair

persons and with a support of concerted efforts of 184 countries and regions, ISCGM has been promoting development of Global Map and application of global geospatial information. As a result, Global Map data developed by 122 countries/regions, Global Map Global Version data and Hazard Maps Portal site have been developed and released. At the same time, ISCGM contributed to capacity building of many countries through Global Map training courses and Global Mapping seminars.

We, ISCGM, would like to express our deep gratitude to the organizations and people that participated in and cooperated with the Global Mapping Project.

See you in New York in August.

Global Mapping Project 1992-2005

| Year | Month | Related event | Venue |
|------|-----------|---|-------------------------------|
| 1992 | June | Earth Summit/Adoption of Agenda 21 | Rio de Janeiro, |
| | June | Japanese Government advocated Global Mapping Concept. | Brazil |
| 1994 | October | JICA Group Training "Environmental Mapping Seminar" started (until 2012). | Tsukuba, Japan |
| | | International Workshop on Global Mapping | Izumo, Japan |
| 1996 | February | The 2nd Workshop on Global Mapping/ISCGM was decided to be established. | Tsukuba, Japan |
| | | ISCGM 1/Project started chaired by Prof. John E. Estes | Tsukuba, Japan |
| | November | Interregional Seminar on Global Mapping for the Implementation of Multinational Environmental Agreements/Executive Summary was submitted to UN. | Santa Barbara, USA |
| | November | ISCGM2 | Santa Barbara, USA |
| 1997 | March | Mini Forum | Tsukuba, Japan |
| | June | 19th Special Session of UN General Assembly/"Programme for the further implementation of Agenda 21" | New York, USA |
| | November | Global Mapping Forum '97 | Gifu, Japan |
| | November | ISCGM3 | Gifu, Japan |
| | June | Global Mapping Forum '98 | Sioux Falls, USA |
| | June | ISCGM4 | Sioux Falls, USA |
| 1998 | November | Invitation letter was sent from UN to Member States to encourage them to participate in the Global Mapping Project. | _ |
| | November | ISCGM5/Adoption of Global Map Specifications | Canberra, Australia |
| | December | Liaison with ISO/TC211was established. | _ |
| | March | Global Mapping Mini-Forum | Tsukuba, Japan |
| 1999 | March | Meeting of the Global Map Development in Asia | Tsukuba, Japan |
| | July | ISCGM6 | Cambridge, U.K. |
| 2000 | March | ISCGM7 | Cape Town, South Africa |
| 2000 | | Global Map Forum/Respective countries' Global Map version 1 was released. | Hiroshima, Japan |
| 2001 | May | GSDI5 | Cartagena, Colombia |
| 2001 | May | ISCGM8 | Cartagena, Colombia |
| | August | 1st Global Mapping Seminar | Nairobi, Kenya |
| 2002 | August | "World Summit on Sustainable Development (Johannesburg Summit)"/ Global mapping was included in "Implementation Plan." | Johannesburg, South Africa |
| 2002 | September | ISCGM9/Prof. D. R. Fraser Taylor assumed chair. EuroGeographics decided to participate in the Project. Grant programs started. | Budapest, Hungary |
| | July | ISCGM10 | Ginowan, Japan |
| 2003 | July | Global Mapping Forum 2003/Global Map Okinawa Declaration | Ginowan, Japan |
| | August | 2nd Global Mapping Seminar | Nairobi, Kenya |
| | | ISCGM11 | Bangalore, India |
| 2001 | February | Global Mapping Lecture Meeting | Tokyo, Japan |
| 2004 | | Geo4 Side Event/ "Contribution of Global Map to Earth Observation" | Tokyo, Japan |
| | | 3rd Global Mapping Seminar | Nairobi, Kenya |
| 2005 | Δnril | ISCGM12 INTERGRAPH's grant program started. | Cairo, Egypt |
| | November | 1st Global Mapping Seminar in Dakar | Dakar, Senegal |

Global Mapping Project 2006-2016

| Year | Month | Related event | Venue |
|------|-----------|--|------------------------------------|
| 2006 | September | Global Mapping Workshop | Bangkok, Thailand |
| | November | ISCGM13 | Santiago, Chile |
| | December | 2nd Global Mapping Seminar in Dakar | Dakar, Senegal |
| 2007 | July | ISCGM14 | Cambridge, U.K. |
| 2008 | January | 3rd Global Mapping Seminar in Dakar | Dakar, Senegal |
| | February | Global Map Roundtable Conference (ISCGM informal meeting) | Port of Spain, Trinidad and Tobago |
| | March | Global Map Symposium | Tokyo, Japan |
| | March | ISCGM15 | Tokyo, Japan |
| | June | Global Mapping Forum 2008/Global Map Tokyo Declaration | Tokyo, Japan |
| | June | "Global Map Global Version" ver. l was released. | _ |
| 2009 | March | Workshop on the application of Global Map | Tokyo, Japan |
| | June | GSDI11/ ISCGM Informal Meeting | Rotterdam, Netherlands |
| | September | International Workshop on the Revision of Specifications for Global Map Version 2 | Tsukuba, Japan |
| | October | ISCGM16/Global Map Specifications (ver.2) was adopted. | Bangkok, Thailand |
| 2010 | October | ISCGM17 | Singapore |
| | May | Respective countries' Global Map version 2 was released. | _ |
| 2011 | June | ISCGM18 | Winchester, U.K. |
| 2011 | October | 1st session of UNCE-GGIM and High Level Forum | Seoul, Republic of Korea |
| 2012 | June | UN Conference on Sustainable Development (Rio+20)/importance of global mapping was inserted in outcome document. Rio+20 Side Event/Global Mapping Seminar | Rio de Janeiro, Brazil |
| | August | ISCGM19 | New York, USA |
| | August | 2nd session of UNCE-GGIM/GM4SD WG was established. | New York, USA |
| | February | 2nd GGIM High Level Forum/Doha Declaration GM4SD WG's effort was presented. | Doha, Qatar |
| | July | "Global Map Global Version ver.2" was released. | _ |
| 2013 | July | ISCGM20 / Professor Taylor stepped down from Chair and Professor Paul Cheung assumed new Chair. | Cambridge, U.K. |
| | July | 3rd session of UNCE-GGIM | Cambridge, U.K. |
| | November | Geospatial Information International Seminar | Tokyo, Japan |
| | January | 10th plenary session of GEO/Global Map continued to be registered as a part of GEO task. | Geneva, Switzerland |
| 2014 | August | ISCGM21 | New York, USA |
| | August | Hazard Maps Portal site and Catalogue Service started to be released. | _ |
| | August | 4th session of UNCE-GGIM | New York, USA |
| 2015 | March | WCDRR/"Sendai Framework for Disaster Risk Reduction 2015-2030" | Sendai, Japan |
| | March | Symposium on "Application of Geospatial Information Technology in Urban Disaster Management" | Sendai, Japan |
| | August | ISCGM22 | New York, USA |
| 2016 | August | ISCGM23 (final meeting) | New York, USA |

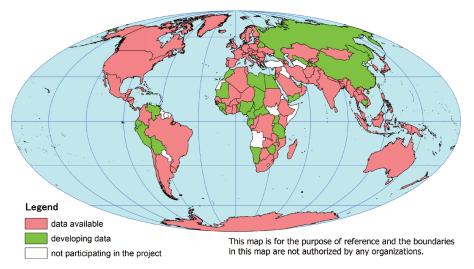
From the Secretariat

Release of GLCNMO (Global Land Cover by National Mapping Organizations) ver.3

On July 12, 2016, ISCGM WG4 (Prof. Tateishi and Dr. Kobayashi of Center for Environmental Remote Sensing, Chiba University) and the secretariat of ISCGM have developed and released GLCNMO (Global Land Cover by National Mapping Organizations) with the cooperation of National Geospatial Information Authorities of respective countries. The version 3 data were created by using Terra/Aqua MODIS imageries in 2013. The data have 500m resolution which is same as Version 2. Firstly, data of a prototype version were validated by National Geospatial Information Authorities of respective countries. Then, the official version which reflected the validation results were released.

Global Map Data Release and Participation in the Global Mapping Project

Since the last issue of the newsletter on December 25, 2015, Albania participated in the Global Mapping Project on June 30, 2016. Also, Global Map of Madagascar, Albania and Cote d'Ivoire were newly released. In addition, Global Map of the following 13 countries were updated: Nepal, Kyrgyz, Cuba, South Africa, Algeria, Swaziland, Nicaragua, Saint Vincent and the Grenadines, India, Republic of Congo, Papua New Guinea, Vietnam and Bhutan.Currently 168 countries/16 regions participate in the Project. Among them, data of 114 countries/8 regions have been released (Version 2 data are for 90 countries/4 regions).



Newsletter Distribution by E-mail and Other Arrangement

If you would like to receive or stop receiving Global Mapping Newsletter by e-mail, please inform the secretariat (sec@iscgm.org) of your name, address and e-mail address.

Global Map and Related Meetings

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

2016

- August, New York, USA 23rd Meeting of ISCGM
- August, New York, USA Sixth Session of UNCE-GGIM
- October, Kuala Lumpur, Malaysia
 Fifth UN-GGIM-AP Plenary Meeting

2017

- May 29-June2, Helsinki, Finland FIG Working Week 2017
- July 2-6, Oxford, U.K.
 Cambridge Conference 2017



The Newsletter is distributed as information paper on Global Mapping to more than 1,200 people of NGIAs, 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@iscgm.org