

Status of Global Mapping Project

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1. Outline of Global Map

The Global Map is a digital geographic dataset for the whole land area of the earth at the ground resolution of one kilometer, or equivalent to a scale of 1:1,000,000 conventional paper maps. It consists of eight layers of geographical data, such as transportation, boundaries, drainage, population centers, elevation, vegetation, land cover and land use. It is produced under the cooperation of national mapping organizations of the world.

The need of the Global Map for addressing global environmental problems has been well confirmed at the United Nations. The "Draft Decision on Information for Decision-making and Participation" adopted at the 9th Session of United Nations Commission on Sustainable Development (CSD9), 16-27 April 2001, includes;

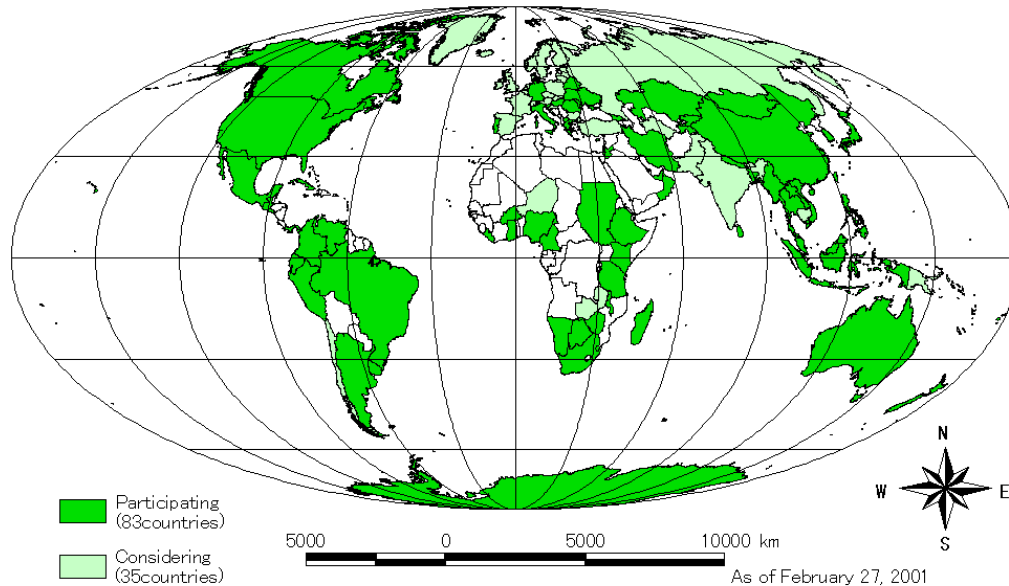
"the Commission ... calls for promoting the development and wider use by developing countries of innovative technologies such as global mapping, ..."

2. Implementation of Global Mapping Project

International Steering Committee for Global Mapping (ISCGM) was established in February 1996 to realize and enhance Global Mapping Project. Currently it has 18 members and 7 advisors. The Members are the heads of National Mapping Organizations (NMOs) of Australia, Bangladesh, Canada, China, France, Iran, Japan, Kenya, Republic of Korea, Malaysia, New Zealand, Niger, South Africa, United Kingdom and U.S.A. and representatives from the Scientific Committee on Antarctic Research (SCAR) and EuroGeographics. The Advisors are representatives from international organizations and academic institutions. Geographical Survey Institute of Japan has taken secretarial role of ISCGM since its establishment.

The Global Mapping initiative is a voluntarily based international collaborative activity, therefore, complete coverage of the Global Map will only be realized by the participation of all the NMOs of the world. To this end, in November 1998, the UN sent heads of NMOs of respective countries and regions a letter from Prof. Estes, Chairperson of ISCGM with a recommendatory letter of UN Statistics Division inviting them to Global Mapping Project. Currently, 83 countries and regions have participated in the project and 35 are now positively considering. The area covered by participated countries and regions exceeds 60% of the whole land mass and more than 80% are covered by including that of considering countries and regions. Member organizations participated in the project are responsible for the production of Global Map of their own territories. Besides, SCAR has participated in the project and is developing Global Map of the Antarctic.

Current Participation in Global Mapping Project



3. Meetings and a Forum

(1) ISCGM Meetings

Seventh Meeting of ISCGM was held in Cape Town, South Africa, on 16 March 2000 in conjunction with the Fourth GSDI Conference. Twelve ISCGM Members from 10 countries and an international organization, an advisor and 42 observers from 28 countries and regions were in attendance. At the Seventh Meeting, ISCGM adopted a number of findings and a resolution. (ANNEX-1).

Eighth Meeting will be held on 25 May 2001 here in Cartagena in conjunction with this conference, focusing on the outlining of the target, strategy and action plan for the Phase 2 of the Global Mapping Project and data policy for commercial users.

(2) Global Mapping Forum

Global Mapping Forum 2000 was held at International Conference Center Hiroshima, Japan from 28 - 30 November, 2000 getting together 250 specialists of geographic information and environmental science from 33 countries.

During the Forum, release of Global Map Version 1.0 was declared. At the same time, WWW server of the ISCGM became operative and provision of the Global Map data was officially started. Data started to be provided on the Internet at the time of the declaration were the Global Map Version 1.0 of five countries: Japan, Lao P. D. R., Nepal, Sri Lanka and Thailand. They are the data that have been completed by this time and ISCGM Secretariat got agreements on the conditions of provision. (Philippines was added in December 2000.) Global Map Version 0 data, which had been converted from existing global geographic information (GTOPO30, GLCC) according to Global Map Specifications, were also released. Non-commercial users, such as governmental institutions, research organizations as well as private researchers can download these data free of charge via Internet. In addition, more than 10 countries are nearly to complete their data for the Global Map Version 1.0. More than 1,400 users have registered with the download page of ISCGM and data have been downloaded more than 9,200 times since its release. Global Map Homepage is at <http://www.iscgm.org/>

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At Concluding Session held at the end of the Forum, "Hiroshima Statement for Global Map" was adopted unanimously. Mentioned in the Statement are: 1) to celebrate the release of Version 1.0 of the Global Map, 2) to thank 81 countries who have participated in the Global Mapping Project, 3) to encourage those countries not yet committed to join the Global Map to join, 4) that challenge is to maintain and enhance the Global Map, and to implement policies that result in the widest possible access and use of the product; and 5) to appreciate the hospitality of the citizens of Hiroshima and that more sustainable and truly peaceful world through the Global Map is encouraged by tireless pursuit for peace of the citizens of Hiroshima. (ANNEX-2)

4. Cooperation with other international activities

The Global Mapping Project has originally been started to provide necessary geographic information for addressing global environmental issues. However, because of its nature that it is a set of base geographic data, it can be used not only for global environmental purposes, but also for all applications that include geographic contexts. Owing to the release of Global Map Version 1.0, it has come to attract attention from various global initiatives such as Global Spatial Data Infrastructure (GSDI), UN Geographic Information Working Group (UNGIWG), Global Information and Early Warning System (GIEWS) by Food and Agriculture Organization, Digital Earth Initiative etc. as one of the most realistic projects that provides substantial global framework dataset.

As an example, the Fourth GSDI Conference held in March 2000 at Cape Town, South Africa, resolved *"the GSDI resolves to strengthen relationships to with activities such as Digital Earth and the International Steering Committee on Global Map (ISCGM). Wherever possible, written statements of cooperation will be established to clearly delineate the partnerships necessary to advance the use SDI's as a core of critical decision-making at the local, national, regional and global levels"*.

5. Future Plan

Global Map will be updated and upgraded in the next phase. One of the advantages of Global Mapping initiative is the big number of its participating organizations. This advantage makes it possible to assure reliability of the final product through proper verification implemented by each NMO in the world.

Besides, recent progress in space technology gives us opportunity to revise global scale geographic datasets in more consistent way. MODIS sensor borne on TERRA satellite launched by NASA in December 1999 makes us possible to update GLCC dataset in 250m resolution. GLI sensor borne on ADEOS-2 satellite of National Space Development Agency of Japan (NASDA) planned to be launched soon is also expected to be used for GLCC update. SAR interferometry data obtained in SRTM conducted in February 2000 can be used to update GTOPO30 in higher resolution.

6. Continuation of Global Mapping

The founding chairperson of ISCGM Dr. John E. Estes, Professor of the University of California, Santa Barbara, passed away on 9 March, 2001. The Vice Chairperson Mr. Peter Holland, General Manager of the Australian Surveying and Land Information Group, has been filling the role of acting chairperson until the determination of the new chairperson. Despite the loss of the great leader of Global Mapping, ISCGM will continue actions to accomplish its objectives and realize its principles with international cooperation and collaboration.

ANNEX-1

Main Points of Findings for the Seventh Meeting of the ISCGM

FINDINGS

1. An increase in the number of countries participating in Global Map Project continues, but there is still a need to continue to extend opportunities to participate to nations not now involved in the project.

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2. Phase 1 of the Global Map Project is drawing to a close. Phase I will essentially end with production of GM Version 1.0 which will be formally released at Global Mapping Forum 2000 in Hiroshima, Japan in November 2000.
3. Working Group 3 (Data Policy) should move quickly to review and finalize their recommendations for a data policy for the Global Map Project.
4. Working Group 2 (Specifications) should be reconstituted as an expert group.
5. Formation of a small industry group is encouraged to serve both ISCGM and the Global Map Project in an advisory capacity and to seek ISCGM - industry cooperation.
6. ISCGM should keep in close contact with the appropriate United Nations (UN) agencies/organizations concerning the development of a UN Geographic Database.
7. ISCGM should extend and strengthen its ties to other sectors of the geospatial and remote sensing community such as CEOS, NASA with respect to MODIS, SRTM and SPOT-4 through the European Commission (EC)'s Joint Research Centre (JRC).
8. ISCGM and Global Map Project Member nations are encouraged to work with their donor agencies to help broaden participation in both ISCGM and the Global Map Project.
9. Continued efforts by all ISCGM members should be directed toward the development of promotional materials encouraging Global Map.
10. More effort concerning overall communication and strategy can still be done by the Secretariat such as:
 - Production of progress reports at regular intervals;
 - Taking a more active role in promoting coordination and collaboration between Level A and Level C countries;
 - Provision of information concerning the delivery of Global Map compiled national level data sets to Level A and Level B countries;
 - Development of draft procedures for validation, refinement and distribution of Global Map Version 1.0;
 - Assistance with the Phase 2 planning effort and assistance in the development of a draft Phase 2 plan for Working Group I;
 - Development of mechanisms to track the use and confirm the value of Version 1.0 data.
11. All members and nations are encouraged to participate in Global Mapping Forum in Hiroshima, 28-30 November 2000 as a means of promoting the availability of Global Map Version 1.0.

RESOLUTION:

The funding of and promotion of relevant geospatial education, training, capacity building and appropriate technology transfer activities are encouraged. ISCGM members will continue the collection, preparation, and distribution of geospatial data at local, national, regional and global levels, and the work to improve the quality of these products.

ANNEX-2

HIROSHIMA STATEMENT FOR GLOBAL MAP

We, the participants at the Global Mapping Forum 2000, being held in Hiroshima, Japan, adopt this statement, the Hiroshima Statement for Global Map, during the closing session of the Forum on 30 November 2000, to celebrate the release of Version 1.0 of the Global Map. This tangible product will enable nations of the world to join together in a common understanding of the actions needed to care for our fragile earth.

Recalling that in 1992, the nations of the world committed to the vision of globally sustainable development and a plan of action – Agenda 21.

Recalling also that in 1994, soon after the Rio Summit, the concept of the International Steering Committee for Global Mapping was formulated in Izumo, Japan, to create, through technical cooperation, a digital map of the world, a Global Map, by the year 2000, to support the achievement of Agenda 21.

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We acknowledge the achievement and success of the ISCGM and note the significance of this statement being made in the beautiful city of Hiroshima, a symbol of peace and harmony to the people of the world.

We thank the 81 countries who have committed to validate and maintain their component of the Global Map.

We encourage those countries not yet committed to join the Global Map community. Your participation is crucial to the achievement of the global sustainable development vision.

The challenge for us now is to maintain and enhance the Global Map; to implement policies that result in the widest possible access and use of the product; and to continue to work together with individuals and groups dedicated to the cause of improved Global Map products.

We greatly appreciate the hospitality of the citizens of Hiroshima. Their tireless pursuit for peace reminded us of the importance of local actions for global issues, and the ISCGM Chairperson proposed that the school children of Hiroshima plant trees to spread their message to the whole world. Their commitment to harmonious global existence also encouraged us as we re-commit to the vision of a better, more sustainable, and truly peaceful world through cooperation in global mapping for the new millennium.