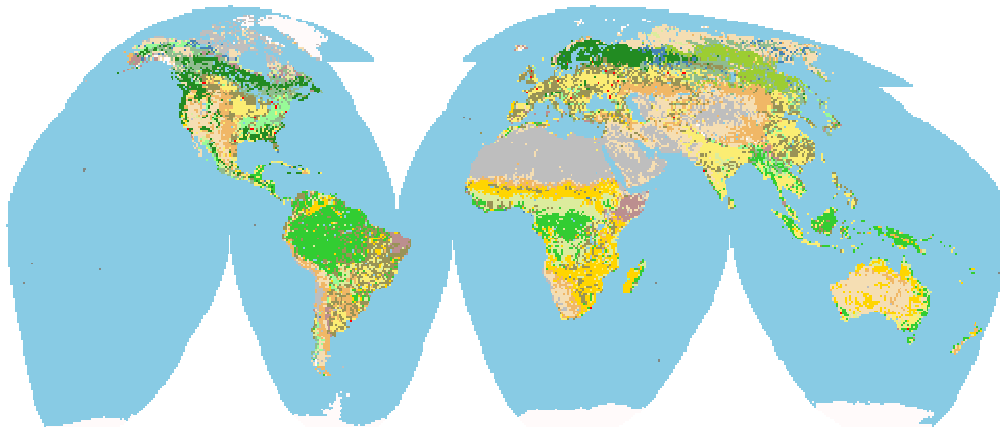




GLOBAL MAPPING NEWSLETTER 19

Land Use, Land Cover, and Vegetation for Global Map 2000



Land use, land cover, and vegetation data sets have been completed for Global Map 2000 by the U. S. Geological Survey's (USGS) Earth Resource Observation Systems (EROS) Data Center (EDC).

The EDC, in partnership with national and international agencies and universities, developed a global land cover characteristics (GLCC) database consisting of several land cover schemes.

The database was constructed through an unsupervised classification of continental-scale, time-series normalized difference vegetation index (NDVI) data derived from the advanced very high resolution radiometer (AVHRR) satellite sensor. The global database contains 957 distinct seasonal land cover regions (SLCR) that are translated into a number of more general, predefined classification schemes.

The data layer used for Global Map 2000 land cover is the classification scheme defined by the International Geosphere-Biosphere Programme Data and Information Systems (IGBP-DIS), called DISCover. This layer was created by a generalization of the 957 SLCR classes,

first into the Olson Global Ecosystem (OGE) scheme, consisting of 96 classes, then into the 17 DISCover classes. New translations were developed for the Global Map 2000 land use and vegetation layers.

The land use layer was derived from a generalization of the 17-category DISCover layer into nine land use classes. The vegetation layer involved a translation primarily from the OGE. However, many of the OGE classes translated into more than one vegetation class. For example, the OGE class corresponding to semi-desert trees and shrubs, could be generalized to either semi-desert in tropical zone or semi-desert in temperate zone, depending on the geographic location of the class. In these cases, the finer detailed SLCR regions were used to make delineations.

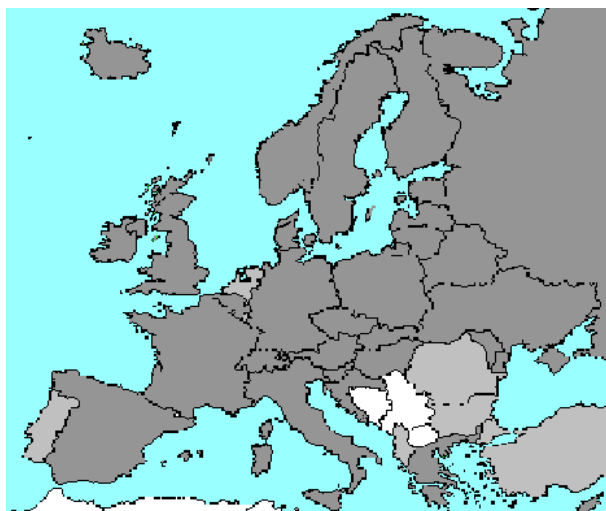
The base data used for these layers of Global Map 2000 were from version 2.0 of the GLCC, completed in August 2000 (<http://edcdaac.usgs.gov/glcc/glcc.html>). The land use, land cover, and vegetation data are 8-bit raster and in geographic coordinate units (lat/lon) as prescribed in the Global Map Specifications.

European Contribution to Global Mapping

Ms. Heli Ursin

National Land Survey of Finland

Attitude of the European NMAs towards the EuroGlobalMap



■ Willing to participate,
but may have reservations

■ Unknown position

□ Not member of CERCO

The Association of the European National Mapping Agencies (NMA) covers today some 36 countries. As a major building block of the European Regional Spatial Data Infrastructure (RSDI), it celebrates its 20th anniversary in 2000. The association's 20 years are marked by many concrete achievements, such as pan-European datasets and information services. RSDIs may offer an opportunity for further progress in developing the Global Map concept. Indeed, individual NMAs collaborate more comfortably with known neighbours than directly with a 'global' project, where representation is a difficult question. This has been the European approach, and the European NMAs have decided to build together their own regional component of Global Map, "the EuroGlobalMap".

MapBSR (Digital Map of the Baltic Sea Region) is a remarkable example of a spontaneous (i.e. non institutional) collaborative project. It is promoted and managed by the National Land Survey of Finland, and supported by European Union funding from the Interreg II C programme. Initially driven by the needs of environmental assessment in the Baltic Sea Re-

gion, it covers partly or in full 13 countries. The product is available on CD-ROM in November 2000 (<http://www.mapbsr.nls.fi>).

The success of this project and the actual increasing demand for such a seamless European dataset naturally led to considering the extension of the concept to the whole of Europe. The feasibility of this extension was addressed in a study that assessed the data availability, the technical issues involved, as well as the economical and financial implications of creating such a product. As seen from the map attached, most of the European NMAs see the benefit of creating a seamless database covering the entire Europe. The Project management is entrusted to the National Land Survey of Finland.

This project comes very timely for the Global Map. The Project Agreement with the new Association of the European National Mapping Agencies is aimed to be signed at the beginning of 2001. If implemented, this pan-European extension of the MapBSR concept would be a useful continental contribution to the Global Map.

"Everything is transient, and nothing is enduring" - Buddha

Following is a report by Mr. D. N. D. Hettiarachchi from Sri Lanka who participated in "Global Mapping" training course organized by Japan International Cooperation Agency (JICA) from May 15 - July 30, 2000.



The key components of the earth system have been changed or damaged due to human activities and rapid economic and population growth. As a result, global environmental problems, such as depletion of ozone layer, global warming, acid deposition, water and air pollution, deforestation, desertification, and coastal erosion have been transpired. As these problems have to be addressed mainly at the global level, present status of the key components of the earth system should be compiled in a Global Map in an accessible format. Such a dataset provides facility to the scientists as well as decision-makers to monitor and predict future changed in the global environment.

The Japan International Cooperation Agency (JICA) and Geographical Survey Institute of Japan (GSI) have organized Global Mapping Group Training Course, for supporting developing countries in preparing Global Map. Five participants are following the course this year. The training course consists of lectures, practices and observation tours. Course curriculum mainly covers relevant sections of Geographical Information Systems, Remote Sensing Technology, ISO Standardization, Global Warming, Global Meteorology, Acid Rain, En-

vironment and Law, Environment and Agriculture, and Digital Data Set Format for Global Map. Each participant has to prepare a sample Global Map using the latest technology. Computer systems with relevant software, Internet and other required facilities have been given to the participants to make the training course more momentous. In addition to normal training program, participants have been given opportunity to know about life style and culture of Japanese by communicating and interacting with the students of local schools, universities and the members of social groups. Observation tours were very much useful to know about research activities of the environmental problems as well as history and culture of Japanese.

Finally, it is necessary to thank JICA, GSI and all the Japanese people for giving us opportunity to get training on Global Mapping in this beautiful country.

Mr. D. N. D. Hettiarachchi
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Survey Department, P. O. Box 506
Colombo, Sri Lanka

Preparing for the Release of the Data of Global Map Version 1

ISCGM is now preparing to release the data of Global Map Version 1 taking the opportunity of "Global Mapping Forum 2000" to be held in commemoration of the completion of Global Map Version 1.

The data will be provided by downloading from Internet or in CD-ROM. Using the Internet, anyone in the world will be able to download the data once he/she enters necessary items. We have already obtained a domain exclusively for this use and are now preparing for the Web site for downloading the data. ISCGM will

provide necessary data in CD-ROM to users who cannot access the data on the Internet on request basis. The data downloaded or in CD-ROM can be used for any purpose except for commercial use.

We plan to start operating this system simultaneously with "Global Mapping Forum 2000." Details of the system will be carried on the 20th issue of our Newsletter published on December 25, 2000.

Status of Participation in Global Mapping

Status of participation in Global Mapping

Number of countries/regions participated in Global Mapping
Number of countries/regions considering the participation

As of September 25, 2000

80 countries/regions
35 countries/regions

Recent participation in Global Mapping

Name of organization	Country name	Date of participation
State Department of Land Survey and Registry	Macedonia	June 28th
Lands and Survey Department	Tuvalu	August 16th
Oficina Nacional de Hidrografia y Geodesia	Cuba	August 31st

Global Map and Related Meetings

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

2000

- **27-29 September, Ispra, Italy**
CEOS 2000 WGISS-11
- **26 November, Hiroshima, Japan**
PCGIAP Executive Board Meeting
- **28-30 November, Hiroshima, Japan**
Global Mapping Forum 2000

2001

- **22-26 January, New York, USA**
7th UN Regional Cartographic Conference for the Americas

- **8-9 March, Lisbon, Portugal**
12th Plenary Meeting of ISO/TC211
- **24-27 April, Tsukuba, Japan**
7th PCGIAP Meeting
- **22-24 May, Cartagena, Colombia**
5th GSDI Meeting
- **25 May, Cartagena, Colombia**
8th Meeting of ISCGM
- **24-28 June, Fredericton, Canada**
2nd International Symposium on Digital Earth
<http://www.digitalearth.ca>

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