

DEVELOPMENT OF WORLD MAP DATA AND ELECTRONIC GLOBE

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The origin of the map dates back to around 2000BC in Babylonia and China. The oldest map now in existence is said to be made in Babylonia around 700BC.

Since then, the Earth has been believed to be flat until Greek philosophers Pythagoras and Aristotle theoretically explained otherwise.

In the medieval age, there was a long period of vacancy in noteworthy developments in the map as the influence of religions was very strong. However, there emerged maps as a navigational chart from the trading requirement, and the outline of continents became clearer in the course of the Grand Navigation Era, which was stimulated by the appearance of those charts, and the World maps have become gradually more accurate.

Until recently, all maps have been compiled as a drawing (analog data). However, the major trend of cartography now is toward digital maps making full use of advanced survey technologies. Private companies are actively trying to develop map business, of which digital maps from Rand McNally in the U.S. and Bertelsmann in Germany are typical examples. Needless to say, the advantage of digital maps is that the required information could be instantly displayed by retrieving data stored as separate data of points, lines, surfaces and their attributes (characters, digital information).

We have been providing map-related information and various maps compiled from such information. This time, we have developed, as part of our business, the World map data and the "Electronic Globe", which stores data in the PC and controls the physical terrestrial globe. We will describe it here for your reference.

The World map data developed is conceived as a platform of all applications by classifying various information with allocating latitudes and longitudes as a keyword. Those map data are arranged into information that corresponds to display scale of 1/12,500,000 to 1/25,000,000, considering the interaction with the electronic globe.

The electronic globe is devised to help identifying the information on a real globe, in order to avoid a disproportionate emphasis of the people on virtual world, possibly caused by the widespread diffusion of the map database.

In the future, after evaluating the outcome of the present development, we will try to enrich data with the addition of attributes of map data, pictures and videos and would like to add detailed map data of World's major cities and to improve the electronic globe for the convenience of users.

(Proposed field: 27)

