SPECIALIZED PLANETARY CARTOGRAPHY DATA BASE

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ABSTRACT:

The existing DBs are not enough universal from planetary cartography point of view . It is useful to develop a Solar System bodies DB with a map-oriented data access. Our Planetary Cartography laboratory is occupied on realization this idea now. The main role will play thematic maps characterizing such aspects as morphology, gravity anomalies, hypsometry, colorimetric and polarimetric properties, climate parameters etc. of celestial bodies. There are some typical region areas there too. The DB structure will have various levels of information for different groups of users. These levels will depend on the map scale you need and on accuracy level and concentration of some cartographic information. We suppose to use the international Series of Multilingual Maps of Planets and their Moons as base maps for DB. This series includes the Moon, Mars, Venus and Mercury maps for today and will be continue in the next future. The topological editor for digital maps (GeoGraph for Windows) is chosen for DB saturation. This editor is an instrument for creating digital maps of high quality. It takes in to account the demands of leading world GIS, and allows to transform existing digital maps in other GIS (ARC/INFO, MapInfo et all) without additional operations. Beside the means of special data connection with attributive data base there are powerful means for digital map transformations in this editor. Its means allow to transform more than 40 kinds of cartographic projections. Wide possibilities for DB saturation will be opened by using GeoGraph.