The Digital Divide and Global Spatial Data and Users

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SUMMARY

The digital divide is defined as the gap between the haves and have-nots of the technological age, and includes not just the technology, but the requisite infrastructure, such as electrical power and communication lines. It also includes the education required to utilize the Internet effectively. It is argued here that a digital divide exists within the global geospatial data community as well; with those with easy access and the education to productively utilize global environmental data sets on one end of the digital divide spectrum and those with little or no access or education, making use nearly impossible, on the other end of the spectrum.

A review of the users of several data sets (Global Map Versions 0 and 1 from GSI Japan, Global Map Australia from GeoSciences Australia, the Global Land Cover Characteristics Data from EROS Data Center USA, and UNEP/GRID Arendal and Geneva) was conducted. In addition to summary statistics, the self-organizing map algorithm and ordinary least squares techniques were used to analyze the user data.

Based upon these techniques, one point becomes clear: All data are local. Users are more interested in locating and utilizing data that reference geographical locations near them. In addition, several other issues are raised:

- Education is a necessary prerequisite for the appropriate use of global environmental data sets.
- Identification of current non-user communities that may benefit from use of these data should be done.
- Electrical and communications infrastructure are necessary for accessing and utilizing the data, and are not necessarily well established every where yet.
- Data provision should be made in other languages besides English.