

Analog Map vs. Digital Map: Campbell, John. Map Use and Analysis. p.3

An expansive, adaptable definition of a map is any physical or conceptual depiction of the characteristics that take place on or near the earth's surface or other celestial bodies. Most kinds of maps, under the confines of this definition, fall into two classifications: (1) analog or real maps and (2) digital or virtual maps.

An analog map is any tangible map production that has a continuous appearance and may be viewed directly (generally called a hard copy). Traditional drawn or printed productions (ordinarily referred to as maps) fall into this classification, along with map-like aerial photographic productions or the end output of some other kind of remote sensing, also maps generated employing tools controlled by computers, block diagrams and related drawings, and relief models and globes built to portray some part or all of the surface of the earth.

Digital maps are associated to analog maps. They have properties that permit them to be transformed into analog maps. Digital maps involve images, which may be viewed directly but are not permanent. An example of this is a map image projected onto the screen of a computer monitor.

More and more, computer techniques are being applied in mapping and related fields. Computers are being used in the processing and analysis of remote-sensing data, in the construction of maps (known as CAC, computer-assisted cartography), and in the handling of GIS.

Computer methods are able to present several potential benefits, including faster, simpler, and more precise design and construction of maps. Other changes, like scale and projection changes and the statistical analysis of data, may be more readily completed utilizing computer methods as well. Enhanced punctuality is expected as well, since rectified information may be made instantaneously accessible to every user from a centralized database. As a whole, computer techniques should furnish the cartographer with the versatility to create resource-rich and practical maps. Some outcomes generated by computer techniques will be equivalent to conventional maps. Other outcomes, though, might be completely different, and some knowledge of the techniques by which they were generated will aid in comprehending and assessing them.