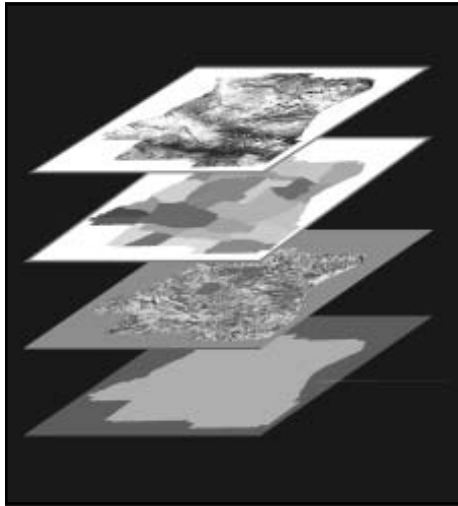


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# Geographic Information Systems (GIS)



A **Geographic Information System (GIS)** is a necessary tool for effective and efficient decision making, planning, and management of military training lands. GIS provides a spatial decision support framework for the collection, storage, manipulation, and output of multidisciplinary data.

CEMML offers GIS hardware and software technical support, hardcopy map production, design of customized applications and software interfaces, field data collection using GPS, and spatial data development. ArcInfo, ArcView, ERDAS Imagine, and GRASS are some of the GIS programs routinely used by Center staff.

**Spatial Databases** and **Cartographic Products** are created to assist with mission and installation planning, by depicting the condition of lands and restrictions placed on training lands. CEMML staff produce a wide range of map products, including updated "installation specials", air operations, cross-country movement, wetlands, vegetation communities, terrain analysis, endangered species habitat and sensitive areas, off-limits and restricted training areas, and cultural resources. Map products are deliverable in hard and soft copy.

GIS modeling and map products using **Remotely Sensed Data** are available from CEMML. The staff has extensive experience working with digital orthophotos, satellite imagery, and aerial photography. The Center can create plot allocations for the ITAM Land Condition-Trend Analysis program with user-defined objectives. Customized front-end applications using ArcView, Map Objects, and Graphical User Interface (GUI) programming in visual Basic are designed and developed to customer specifications.

**GIS Technical Support** covers a wide range of hardware and software issues, research applications, and remote sensing applications. Center staff can provide technical support remotely or on-site, to ensure data exchange and technical problems are solved efficiently. Basic and advanced **GIS Training** can be provided by CEMML staff. Training can be customized for an installation to incorporate its military mission objectives, address operational scheduling issues, and resolve natural or cultural resources management problems.

GIS is a remarkably dynamic and technical tool for land management. The Center maintains a knowledgeable staff with a commitment to product quality and customer service. Our knowledge and experience with a number of military programs makes our staff highly capable of providing effective and efficient GIS services and support.

