

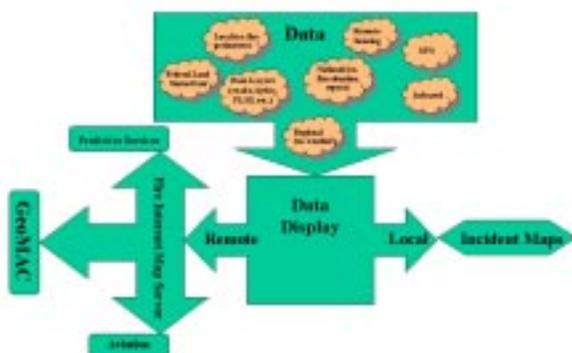
The Mystery Solved: Fire Internet Map Server Technology and GeoMAC

Uh-oh, GeoMAC is not what you think – or maybe it is. Follow me for a moment, and I think we can clear up some common misunderstandings related to fire internet mapping, fire incident mapping, and GeoMAC. Here we go...

Data Collection

Before maps and information can be displayed, data must be collected and organized. This is where “geospatial technology applications” come in. These programs collect, extract, store, and distribute geospatial data referenced to a precise location on the Earth’s surface. Geospatial technology includes infrared mapping, remote sensing, satellite positioning systems such as Global Positioning System (GPS), and geographic information systems (GIS) which assemble, store, manipulate and display data. Data can be obtained from local sources, such as the fire perimeter on an incident, regional sources, such as weather stations, and national sources, such as national fire situation report.

Displaying Data



Once information is collected, organized and stored, it can be displayed and used locally, or, through the use of internet map server technology, displayed and used remotely.

Remote Output/Display

Internet-Based Mapping

Internet Map Server (IMS) technology offers internet-based, interactive, geospatial information. When this technology is used to support fire with fire-related applications, we call it a Fire Internet Map Server (FIMS). Through FIMS, users can output or display information according to their needs.

GeoMAC

Now let’s talk GeoMAC.

GeoMAC is a prototype application, a test if you will, of IMS technology in support of fire. GeoMAC is one of many applications that can serve up maps on the internet. GeoMAC was developed as a proof-of-concept for IMS technology as a tool for fire managers. GeoMAC was built during the 2000 wildland fire season to help national, regional and geographic area managers make decisions on where to assign firefighters, equipment and aircraft. *It was not designed to display the level of detail needed by an incident to plan strategies and tactics.*

Fire Weather Prediction

Another potential application of IMS for fire support is to provide a method for integrating predictive service products with fire informa-

Geospatial technology such as GPS units and ArcView software *collect and organize* data; internet mapping server technology *displays* and can *distribute* data.

tion, fire weather/danger, and other spatial data. Computer and geographic information specialists are currently working with weather specialists to explore the feasibility of using IMS to support fire weather predictive services.

Local Output/Display

Incident Mapping

Now you know what the GeoMAC application of FIMS technology does; let's talk for a minute about what it does not do. GeoMAC does not *generate* incident-related information such as acres burned or a fire perimeter, and the current FIMS application of GeoMAC cannot provide the level of detail required by an incident. Though geospatial information can be downloaded from the internet, generally, the incident stores and manipulates all of the information it uses to develop fire management strategies and tactics locally. This information is not available to remote users/viewers and the incident has limited ability to access remote data.

Think of it this way: incident mapping helps managers develop a battle plan for their particular battle field; GeoMAC, a fire internet map server application, displays the locations of the battlefields but not the details of the battle.