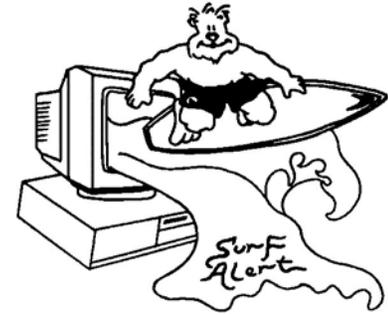


# December 2003 Surf Alert

Please Send Surf Alert topic and/or site suggestions to [RMRS\\_Library@fs.fed.us](mailto:RMRS_Library@fs.fed.us)



## **GeoMAC (Geospatial Multi-Agency Coordination) Wildland Fire Support**

<http://geomac.gov/>

"The Geospatial Multi-Agency Coordination Group or GeoMAC, is an internet-based mapping tool designed for fire managers to access online maps of current fire locations and perimeters in the conterminous 48 States and Alaska. Using a standard web browser, fire personnel can download this information to pinpoint the affected areas. In order to give fire managers near real-time information, fire perimeter data is updated daily based upon input from incident intelligence sources, GPS data, infrared (IR) imagery from fixed wing and satellite platforms. The GeoMAC web site allows users in remote locations to manipulate map information displays, zoom in and out to display fire information at various scales and detail, including downloading desired information and printing hard copy for use in fire information and media briefings, dispatch offices and coordination centers. The fire maps also have relational databases in which the user can display information on individual fires such as name of the fire, current acreage and other fire status information. Additional data layers like fuel status information, fuel types, aircraft hazard maps, links to remote weather station data and other critical fire analysis information are currently being added to the GeoMAC application." GeoMAC is a multi-agency group with technical and subject matter experts from the Department of Interior's fire management agencies - the Bureau of Land Management, National Park Service, U.S. Fish and Wildlife Service, and the Bureau of Indian Affairs, and the United States Forest Service of the Department of Agriculture. As the sole science agency for the Department of the Interior, the U.S. Geological Survey also plays a pivotal role by hosting and maintaining the GeoMAC website. Other partners include the National Interagency Fire Center, U.S. Department of the Interior - Office of Wildland Fire Coordination, U.S. Department of Agriculture, and the National Oceanic & Atmospheric Administration. Private corporations including ESRI, ERDAS, Sun Microsystems, and IBM provided mapping software applications, computer hardware and technical expertise to the GeoMAC effort.

## **OGC-Open GIS Consortium**

<http://www.opengis.org/>

"The Open GIS Consortium, Inc. (OGC) is a member-driven, non-profit international trade association that is leading the development of geoprocessing interoperability computing standards. OGC works with government, private industry, and academia to create open and extensible software application programming interfaces for geographic information systems (GIS) and other mainstream technologies." Their mission is to "deliver spatial interface specifications that are openly available for global use."

## **EnVision – Environmental Visualization System, a product of the USDA Forest Service, Pacific Northwest Research Station**

<http://forsys.cfr.washington.edu/envision.html>

"EnVision is designed to be a full featured rendering system for stand- and landscape-scale images. Applicable projects range from a few to several thousand acres. The system is built upon many of the original concepts used to develop the Vantage Point visualization system. However, EnVision does not attempt to model changes to the landscape over time. Basic components of an EnVision project include a digital terrain model to define the ground surface, color and texture maps to define ground surface characteristics, and groups of objects or "actors". Scene definitions include background imagery used to add clouds and distant landscape features, model components (e.g. terrain model(s) and polygon overlays), viewpoint and camera characteristics, and foreground imagery used to provide high detail in the image foreground. EnVision models individual light sources including a simulated sun position and atmospheric effects such as fog and haze. EnVision renders images using a geometrically correct camera model making it possible to match real photographs taken from known viewpoints to simulated scenes. An EnVision model includes the following components: digital terrain model; ground texture and color maps used to describe ground surface characteristics; polygon, line, and point data used to locate ground surface textures or object sets; object sets used to represent populations of trees or individual objects such as buildings."

### **Virtual Terrain Project (VTP)**

<http://vterrain.org/index.html>

"The goal of VTP is to foster the creation of tools for easily constructing any part of the real world in interactive, 3D digital form. This goal will require a synergetic convergence of the fields of CAD, GIS, visual simulation, surveying and remote sensing. VTP gathers information and tracks progress in areas such as procedural scene construction, feature extraction, and rendering algorithms." This site contains extensive list of links to articles and reasearch, information about technology and applications, and how to use the technology effectively. The links are grouped by category, including: elevation; ground detail; rendering; data sources and formats; culture; plants; and modelled areas. The section "Making use of GIS software"

<http://vterrain.org/GIS/index.html> presents information and reviews on some GIS software, data formats, and data model standards.

### **American Society for Photogrammetry and Remote Sensing (ASPRS) – "The Imaging & Geospatial Information Society"**

<http://www.asprs.org/>

Founded in 1934, the American Society for Photogrammetry and Remote Sensing (ASPRS) is a scientific association serving over 7,000 professional members around the world. Their mission is to advance knowledge and improve understanding of mapping sciences to promote the responsible applications of photogrammetry, remote sensing, geographic information systems (GIS), and supporting technologies. The site includes links to abstracts of articles published in the soceity's journal "Photogrammetric Engineering & Remote Sensing". Users must set up an account, which does not require membership, in order to access the ASPRS On-line store.

### **American Congress on Surveying and Mapping (ACSM)**

<http://www.pfc.cfs.nrcan.gc.ca/diseases/hforest/diagnose/diaintro%5Fe.html>

"Originally named the National Congress on Surveying and Mapping when it was founded in June 1941, the society sought to better coordinate the nation's surveying and mapping activities. Later the name was changed to the American Congress on Surveying and Mapping to encompass members from Canada and South America. Today, although the majority continue to come from the United States, the members of ACSM's Member Organizations include more than 7,000 surveyors, cartographers, geodesists, and other spatial data information professionals working in both public and private sectors throughout the world. ACSM is incorporated as a non-profit educational organization. The society is made up of four member organizations, which serve as special interest groups. Together they cover a full range of disciplines in the spatial data information field. The member organizations include: The American Association for Geodetic Surveying – AAGS ([www.aagsmo.org](http://www.aagsmo.org)); The Cartography and Geographic Information Society – CAGIS ([www.cartogis.org](http://www.cartogis.org)); The Geographic and Land Information Society – GLIS ([www.glismo.org](http://www.glismo.org)); and The National Society of Professional Surveyors, Inc. – NSPS ([www.nspsmo.org](http://www.nspsmo.org))."

### **Geodata**

<http://www.geodata.gov/gos>

"The geodata.gov portal, also known as the Geospatial One-Stop, serves as a public gateway for improving access to geospatial information and data under the Geospatial One-Stop e-government initiative. The geodata.gov portal is designed to facilitate communication and sharing of geographic data and resources to enhance government efficiency and improve citizen services. Geospatial One-Stop is one of 24 e-government initiatives sponsored by the Federal Office of Management and Budget (OMB) to enhance government efficiency and to improve citizen services. This portal will make it easier, faster and less expensive for all levels of government and the public to access geospatial information."

### **The National Map**

<http://nationalmap.usgs.gov>

"The National Map is a consistent framework for geographic knowledge needed by the Nation. It provides public access to high-quality, geospatial data and information from multiple partners to help inform decisionmaking by resource managers and the public. The National Map is the product of a consortium of Federal, State, and local partners who provide geospatial data to enhance America's ability to access, integrate, and apply geospatial data at global, national, and local scales. The U.S. Geological Survey (USGS) is committed to meeting the Nation's needs for current base geographic data and maps. Our vision is that, by working with partners, we will ensure that the Nation has access to current, accurate, and nationally consistent digital data and topographic maps derived from those data."