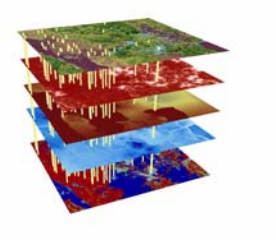

GeoSpatial Advisor™

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In This Issue

Calendar of Events: April-May 2006

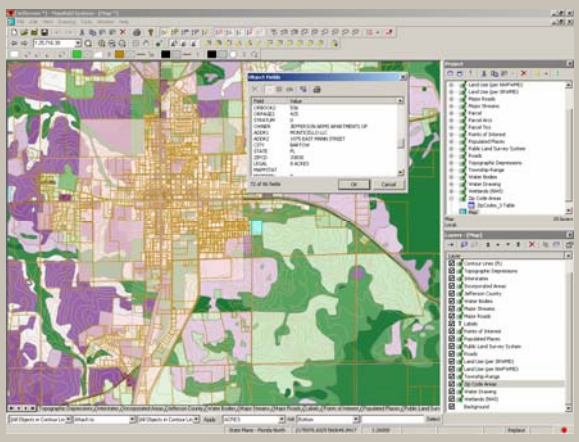
April 20: Wekiva Springs Working Group Meeting, Wekiva Spring State Park (Alex Wood to present to the group)

April 23-26: Geospatial Information & Technology Association (GITA) Annual Conference and Exhibition, Tampa, FL

May 8-10: AWRA Spring Specialty Conference: Geographic Information Systems (GIS) and Water Resources IV, Houston, TX (Alex Wood will present in the Groundwater Vulnerability Concurrent Session)

Manifold GIS – Our First Pass

We have maintained Manifold GIS licenses since our company's inception in 2004. We used it intermittently, for miscellaneous tasks, but the bulk of our time and effort went into completing our work with other GIS software.



Recently, we upgraded to the Manifold 6.5 version now available. Though our use of the software package has been rather limited to date, the price was right: $245 for the basic package or $545 for the Enterprise Edition, and the reviews were very good. Plus, Manifold was a good fit for a small company like us as it comes complete with its own Internet Map Server (IMS) capability without requiring separate software components. And, we had identified a need to rapidly distribute GIS data to clients and provide them with an alternative for viewing datasets developed in house at AGI without them having to maintain their own GIS.

Some of the real advantages we have discovered include the Manifold users who comprise a well-informed group with an excellent email list in which Manifold developers regularly participate. The program loads and runs quickly (with the exception of some very large datasets). It has superior projection capabilities, and the projects it creates are by default self-contained which makes moving and packaging them very easy. The IMS is very simple to use and to create. Its database capabilities are very robust and it works well with other servers and software.

Some of the drawbacks are we have not been able to deal efficiently with some very large datasets, particularly if they are in raster format. The learning curve for the software is rather high, especially if one is accustomed to ESRI or other GIS programs – some functions require the user to literally 'relearn' how to do GIS.

Overall we give the software very high ratings, and plan to incorporate it into many of our projects in the future. Further, we are very excited to begin development of our IMS capabilities making highly useful datasets available to for our clients and help them reduce their GIS costs.

Your input and feedback is very important to us: if you would like to write an article or letter to be included in the GeoSpatial Advisor, email your piece to Alex Wood at awood@adgeo.net for consideration.

(AGI reserves the right to excerpt, condense and/or grammatically edit your document to fit our newsletter format.)

Category of Links

NOAA Satellites Help Keep Competitive Sailors Safe:
http://www.noaanews.noaa.gov/stories2005/s2550.htm

National Geographic's Genographic project:
https://www3.nationalgeographic.com/genographic/

See our ad on the Tallahassee chamber's website:
http://www.talchamber.com/memberNews_fullArticle.asp?EntryIdentifier=I8177L176ZBQ93I8177L176ZBQ93I8

Contact Us

Website:

http://www.adgeo.net

email:

awood@adgeo.net

2441 Monticello Drive

Suite 600

Tallahassee, FL 32303

850/580-4GIS

Tips and Tricks: Using WMS

The Open Geospatial Consortium, Inc. (OGC), a non-profit, voluntary organization that leads in the development of standards for geospatial and location based services, defines a Web Mapping Service or WMS as a server that produces an image of maps that are spatially referenced and dynamically linked to geographic information. A WMS provides users with the capability of creating or adding images from different GIS data sources to their own maps, without having to store or add the actual data to the project. This is particularly useful for data one wishes to use as base or background display.

WMS servers are made available in .png, .gif or .jpg formats and are actually images of GIS data. A WMS is not a GIS; it is a web interface for viewing geographically referenced data. It differs from an Internet Map Server (IMS) because an IMS is a true GIS and allows manipulation and management of geographic information. A couple of good WMS resources are NOAA, USGS (or geography network explorer), and a free commercial site from Skylab Mobilesystems.

Use of a WMS server might benefit a user who has a series of surface water sampling sites and needs to sample following a rain event. Use of a WMS server from the CustomWeather WMS (right click and choose "Copy Shortcut" to use as explained below) would allow one to find out which sampling stations were affected by the weather event.

To access the WMS in an ESRI GIS project, simply visit a site hosting links to the available services and right click the service to copy the shortcut. In ArcCatalog, navigate to "GIS Services," expand the catalog tree and select "Add WMS Server". Paste the shortcut into the URL box, click OK, and the WMS image can now be used in your ArcMap projects. (Manifold is capable of creating WMS servers, which we are in the process of developing and hope to have available by the next newsletter.)

Miscellaneous: AGI upgrades GPS capabilities

We are excited to announce the acquisition of a new piece of equipment which has greatly expanded our company's capabilities. AGI recently purchased a CSI SERES sub-meter GPS unit to enhance our field data collection. We purchased the unit through Landmark Systems and its performance has extended beyond our expectations already.

We tested this unit in the field prior to purchase and also had the opportunity to compare its performance to a competing brand's comparable unit. While a lot of factors can contribute to a unit's ability to gather accurate coordinates quickly, we noticed the CSI was able to instantly get a location where the competing unit was unable to gather coordinates – at all – in the identical location.

We have used the CSI in tree canopy with great success. And, we have even had success gathering coordinates in thick low-growth underbrush. Overall, we are very pleased with its accuracy, speed and ease of use, and are benefiting greatly from this unit.