



Why is Bluewater Supermap Different?

Yes there is a difference between Bluewater Supermap and many online “SST Providers”. To really understand the difference you have to understand the tech that drives these systems.

Bluewater Supermap is a spatially-enabled internet application that excels at rendering spatial data (maps, images, and vector data) for the web.

What is GIS?

http://en.wikipedia.org/wiki/Geographic_information_system

You already know of another GIS system....Google Maps. Bluewater Supermap is based on the same sort of technology. It is server side software that was originally developed by NASA for the display and interpretation of Satellite Data. NASA to this day still uses a version of this to display and interpret their data.

The difference between GIS and other technologies in the world is as simple as a flat sheet of paper. When you stand on the beach and look at Ocean on a clear day....how far can you see? 10 miles maybe? Why only 10 miles? Because the earth is round. That my friend is the difference between Bluewater Supermap and just about every other “SST” service you have ever seen. The earth is round. GIS takes this fact into account just like your GPS does. It is called map datum. “A datum is a mathematical model of the Earth which approximates the shape of the Earth, and enables calculations such as position and area to be carried out in a consistent and accurate manner.” * GIS understands that the earth is round.

When I set out to create Supermap, I spent a lot of time looking at different technologies. The first one I looked at is called Image Mapping or HTML Image mapping. I was already familiar with this technology. I use it on the ReefCast forecasting maps that we use. It is fast to load, it has scrollable values and is easy to create. You take an image and georeference the top left and bottom right corners of the image. Then call some code to count pixels and bingo you have an image that can show Lat and Lon based on the number of pixels between top left and bottom right. (Google JavaScript Image Map) This same technology can be used to show values along with Lat and Lon. You take some code and tell it to call every blue pixel 70 degrees, every green pixel 70.1, every yellow pixel 70.2 degrees etc. Now when the mouse rolls over a green pixel....it shows the value

70.1. When it rolls over a blue pixel it shows 70 degrees. This works for any value be it Degrees or PPM or whatever. The problem with all of this is that it is flat. It is impossible for this set up to take into account that the earth is round. It will be close to accurate at the edges but in the center of the image. It is plain and simple inaccurate. You can always tell when you are looking at this type of system because the values change as you scroll the mouse across the screen. The only way it can do that in real time is a blue pixel = 70 degrees and the only way for it to tell you the lat and lon is by counting pixels. I call this process "Fuzzy Nutting". It is close....but no cigar. GIS on the other hand goes about things in an entirely different way. When we pull the satellite data in we take that data and store it in a database. (Think an Excel work sheet lat, lon, value) We then create an image pixel by pixel of that data to display to the end user. When you "Look" at a SST shot in Supermap this is what you are seeing. The difference is that the system has no idea that you are looking at an image and it does not care. All it cares about is the location of the curser on a mathematical model of the Earth. When you stop that curser Supermap goes to the database and asks....what is the value at this location. In the case of an SST shot it says...what is the temp at this Lat and Lon. The database responses with 70.1 degrees. That is why when you are looking at Supermap you have to stop the mouse before you can see the value. There is no database and no connection that is fast enough to pull the data from the database in real time. It has to pause for a moment, find out what date and time you selected, what product you selected and then go to the database and get the value for that specific location from the database to display. GIS wins hands down. It is not looking at colors for your temperature value, it is not "Fuzzy Nutting" your location. It is taking your location from a mathematical model of the Earth and your temperature is coming directly from the satellite data for that location at that point in time.

I had a very "Interesting" conversation with someone that was a principle with the MODIS team at NASA right as we were releasing Supermap last year. One of my admins had posted something about Supermap on a Florida site. He replied with a lot of what I told you in the paragraph above and called Bullshit. A fairly long conversation ensued. I opened up Supermap and showed him what we were doing and how we were doing it. At the end of the conversation he congratulated us on getting it right and that we were doing something for the fishing community that had never been before AND we were doing it for FREE. That entire thread has now been removed...not doubt due to one of the current sponsors of that site. I still feel very comfortable telling you about this because I know what I have done. I have created a better mouse trap and I am giving to the world for free.

Now I have told you about the good part of Supermap. Let me also tell you about the bad part. We are moving a mass of data with this program. If you have a slow internet connection, Supermap may be too slow for you. Supermap is FREE and is supported through advertising. Currently we have a LOT of users and not many advertisers. That is a load of pressure on the array of servers that host Supermap. Can I make it faster? Yes. What we need is support from the community to do so. If you are into Offshore Fishing, you made your money in business so it is no surprise to you that Advertisers pay for eyeballs. Support Bluewater Supermap by posting in our forums, sharing fishing reports and uploading photos. This is what the advertisers want to see. More advertisers = Faster Servers = Faster Supermap.

Those of you that do not know me, my name is Captain Dave Tilley. I run the headboat Continental Shelf (<http://www.continentalshelf.com/>) based in Morehead City, NC. I have been offshore fishing in North Carolina for the last 20 years.

Bluewater Supermap is available FREE of charge on the East Coast and Gulf of Mexico at SST-Offshore.Com or here in Texas at Texas-Offshore.Com

Sincerely,

Captain Dave Tilley

1. <http://www8.garmin.com/support/faqs/faq.jsp?faq=17>