

TERRAFLY

TERRAFLY is a Web-enabled system designed to aid in the visualization of spatial and remote sensed imagery. This system allows one to "fly" over the Earth's surface and explore spatial data such as aerial photography, satellite imagery, street maps and locale information.

Internet capability allows the system to access numerous data sets without the installation of any specialized GIS programs. Designed for users of all levels and unlike other geographic systems, TerraFly runs via standard Web browsers, with no need to download software or data. TerraFly can be delivered as a standalone application or Web-based. Our technology of streaming incremental tiles to a Java applet allows the user to "fly" even via modem connections. As remote sensed data becomes commonplace in industry, so does the need for applications such as TerraFly to provide easy access to the data.

Our goal of building and delivering products for remote sensing and GIS needs is enhanced by our partnerships with major data providers: Space Imaging, Kodak, and OrbImage. In addition, the United States Geological Survey (USGS) has delivered to us 16 terabytes of high resolution aerial photography over the United States and will deliver additional multi-terabyte satellite data for the U.S. and the world. As a result, TerraFly has become an online service with the world's largest repository of imagery. TerraFly will leverage this position and continue to consolidate other spatial datasets in order to develop the largest GIS and remotely sensed data marketplace on the Internet.

The new TerraFly website has recently been released at www.terrafly.com. The project has received wide attention from the press, and has been featured on television news programs, in print in *Science*, the *Miami Herald*, and others, as well as on web sites in various languages including the *Nature* journal and Yahoo's Weekly Picks. The usage of the TerraFly web site has grown to over 10,000 unique users per day since its release.

TERRAFLY FOR REALTORS®

TerraFly for Realtors® is a subscription based service that has been tailored to the Real Estate industry. For Realtor® subscribers, TerraFly delivers all the MLS Listings, listed under the member association. The geographic information delivered to a member association may contain, MLS listings, Parcel overlays, direct access








Clicking on an icon on TerraFly brings up the information page which shows all MLS listings in this area (with the closest property to the point-clicked, listed first). Clicking on a property address on the information page brings up all the MLS listing details concerning this property. Clicking on the folio number on the MLS details page, brings up the details of the property from the local property appraisers office, including taxes, purchase price, etc.

through TerraFly to the local property appraiser's office (including property information and taxes), a street layer showing the names of the streets over the aerial photography, detailed school information and much more.

The MLSfly tool enables a buyer's agent to take clients for a virtual "fly over" of a neighborhood, see prices and square footage (acquired from the Multiple Listing) on rooftops; clicking on a house will show its brochure. Agents can quickly show a preview of properties before taking to the road with a client; thus saving time and money for the agent and the client.

LAYERS ON TERRAFLY

The layers tab allows the user to select or deselect one or many layers for viewing. The layers included in TerraFly for Realtors® may include MLS Listings. These can be shown as icons overlaid on the active properties themselves. The different property types can be identified with different icons.

-  : Single Family Residential
-  : Condo/Co-op/Villa/Townhouses
-  : Residential Rental
-  : Residential income
-  : Residential land/boat docks

At start-up, TerraFly has pre-selected (turned ON) several layers. These may be deselected at will. Turning a property type layer off, will also remove that overlay from the imagery. Clicking on the icon brings up the information page with details of only those property types that are selected on the Layers Tab.



If a Realtor's® specialty is selling residential properties, they may consider turning off all of the property layers except for the residential property layer. They may then focus on those listings that are relevant to their work. Additional layers may be added to TerraFly to serve the user's needs.

INFORMATION ON THE POINT CLICKED

Clicking anywhere on the image or on an icon brings up information about the point clicked. The Information Page also contains detailed information about all the MLS listings, for the area being viewed on TerraFly. Several reports and information, necessary for Realtors® to assess the vicinity, are included in the Information Page.



Some of the reports available are: US Census Maps showing detailed street maps, wealth and density maps; FEMA maps showing flood zones and hazard maps; EPA reports showing waste maps, water and air reports, and polluters reports; TerraFly reports showing demographics, life quality, schools; Census information by block, census tract, zip code, county, metro area and state; and other information such as nearby restaurants, businesses, hotels and places.

ABOUT US

TerraFly is currently a project of the High-Performance Database Research Center (HPDRC) at Florida International University (FIU). The HPDRC and its constituent FIU-NASA Regional Applications Center (RAC) comprised of researchers working under the direction of Naphtali Rische. The U.S. government and industry have funded the Center's work on database technology, the Internet, and data visualization at \$30 million.



Naphtali David Rische, Ph.D.
Director

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Florida International University
11200 SW 8th Street, ECS 354
Miami, Florida 33199
www.terrafly.com

terrafly@fiu.edu

(305) 348-1706