TerraFly is the flagship project of the NASA Regional Applications Center (NASA RAC) at Florida International University (FIU) and the High Performance Database Research Center (HPDRC) at the School of Computing and Information Sciences (SCI).

TerraFly is a geospatial database system with many industrial applications. TerraFly users see aerial and satellite imagery, overlaid with precise street name overlays and various other overlays. Users virtually "fly" over imagery via a web browser without any software to install or plug in. TerraFly’s data mining tools then deliver an extensive amount of data related to user-specific geographic locations. This functionality suits the information needs of public users related to local geography, demographics, quality of life, economics and the environment. Users virtually "fly" or pan over imagery via a web browser without any software to install or plug in. Tools include user-friendly geospatial querying, data grid down and interfaces with real-time data suppliers, demographic analysis, annotation, route dissemination via autopilot, customizable applications, production of aerial atlases, time series animation and an application programming interface (API).