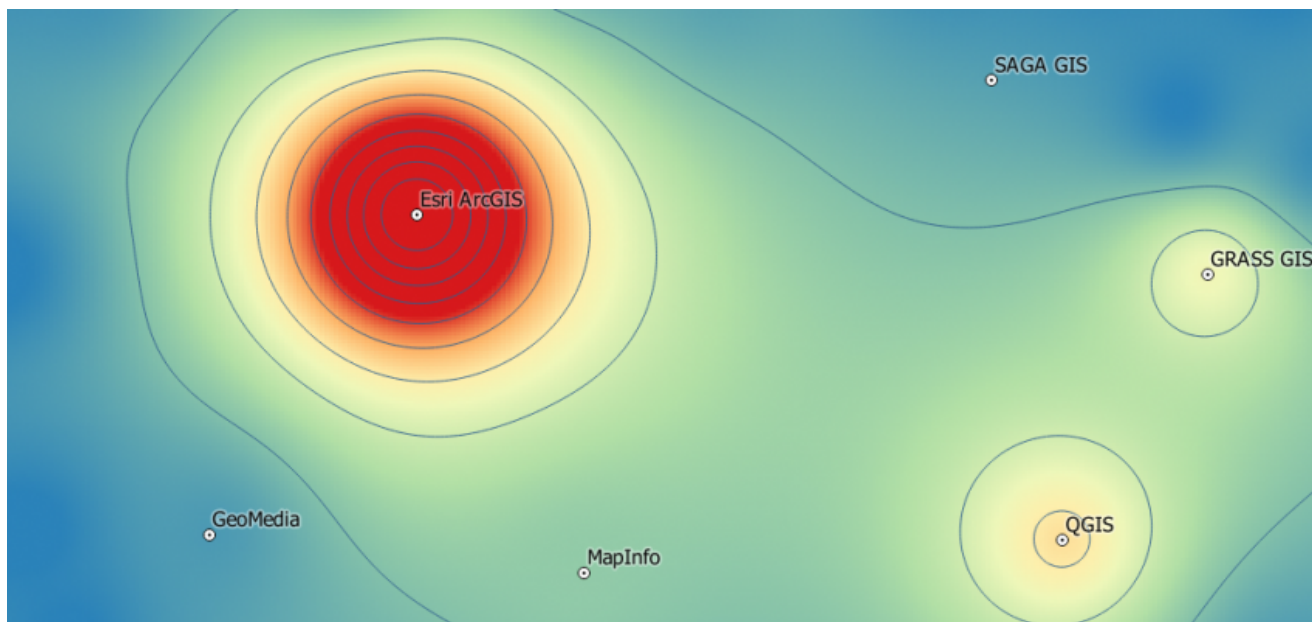


# 30 Best GIS Software Applications [Rankings]

gisgeography.com/best-gis-software

GISGeography

March 29, 2015



## Mapping Out the GIS Software Landscape

ArcGIS, QGIS, GRASS GIS, SuperGIS, SAGA GIS, JUMP GIS...

The GIS software options out there seem endless.

Don't worry. Because today, you get a sneak peek at the top GIS software packages the industry is adopting.

We've tested best to worst... And here they are:

**READ MORE:** [13 Free GIS Software Options: Map the World in Open Source](#)

## Ranking Criteria

We didn't rank GIS software with just one or two factors. Instead, we used a range of criteria by testing out each GIS software package. It considers the following:

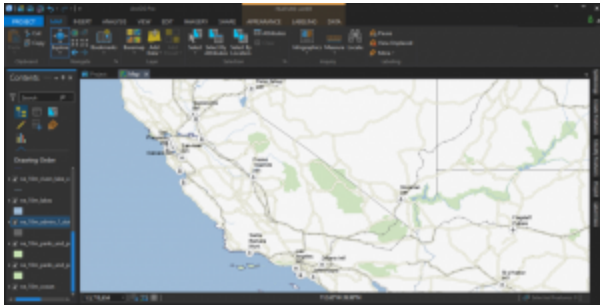
- **ANALYSIS:** Vector/raster tools, temporal, geostatistics, network analysis, and scripting.
- **CARTOGRAPHY:** Map types, coordinate systems, map layouts/elements, labeling/annotation, 3D capabilities, animation, map automation, and symbology.
- **EDITING:** Table manipulation, creating/modifying features, geocoding, topology fixing, conflation, interoperability, metadata editing, and catalog/browser.

- **IMAGERY:** Image classification, LiDAR integration, remote sensing tools, georeferencing, and photogrammetry.
- **INNOVATION:** Machine learning, AI, IoT, indoor mapping, web mapping integration, and data science capabilities.
- **SUPPORT:** Community/forums and documentation.

We also took into account the whole user interface, speed, and the number of errors we encountered when running the application.

## 1. ArcGIS Pro

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ArcGIS Pro modernizes GIS with a ribbon interface, 64-bit processing, and 3D integration. It's a massive overhaul. The focus is on quickness, ingenuity, and cartography. Even though ArcGIS Pro is a big machine with lots of moving parts, it earns the top spot.



4.9 stars

### PROS

- ✓ Unified 3D integration
- ✓ Crisp cartography and labeling
- ✓ True integration with ArcGIS Online
- ✓ Contextual smart ribbon interface
- ✓ 64-bit processing
- ✓ Improved and intuitive editing
- ✓ 1500+ geoprocessing tools (35 toolboxes)

### CONS

- ⊗ High license cost
- ⊗ Project files are bulky
- ⊗ MXD conversion misses all objects
- ⊗ License assignment through ArcGIS Pro
- ⊗ High learning curve

**#1 GIS software for analysis, cartography, and editing**

## REVIEW: 17 Reasons to Map Like a Pro with Esri ArcGIS Pro

### 2. QGIS 3

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Open source flows in the DNA of QGIS 3. It's been genetically tailored to break the mold of commercial GIS with equally superior cartography, editing, and analysis tools. It's not only a great choice because 3D is native as part of QGIS 3. But QGIS plugins still give you the power to analyze with almost endless capabilities.



4.8 stars

#### PROS

- ✓ Devoted volunteer community
- ✓ Slick 3D integration
- ✓ Inventive editing, analysis, and mapping tools
- ✓ Large user base and support
- ✓ QGIS plugins add functionality
- ✓ 64-bit processing
- ✓ 900+ tools in total (25 toolboxes)

#### CONS

- ✗ Missing highly specialized tools
- ✗ Needs more built-in symbology (QGIS Styles Repository should be default)
- ✗ Limited web mapping capabilities
- ✗ Lags behind in emerging technologies (machine learning, real-time analytics, big data)
- ✗ Image classification like OBIA

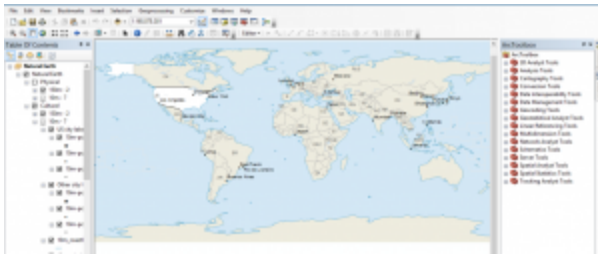
**#1 open source GIS software for all-around capabilities**

**REVIEW:** The Hidden Powers of QGIS 3

**COMPARISON:** 35 Differences Between ArcGIS Pro and QGIS 3

### 3. ArcGIS Desktop

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ArcGIS Desktop is cutting edge in GIS. It raises the bar to the next level by doing what other GIS software can't. Its success is that it's expandable. From field apps to modeling and scripting, ArcGIS Desktop is a powerhouse for all things GIS.



4.8 stars

## PROS

- ✓ Scalability for extra capability
- ✓ Solid geoprocessing framework
- ✓ Beautiful cartography symbology options
- ✓ Full set of editing and topology tools
- ✓ ArcGIS Online for web maps and apps

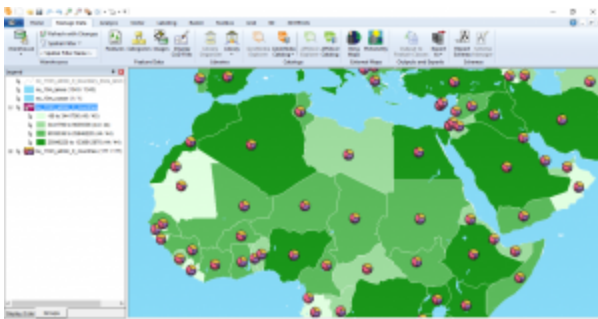
## CONS

- ✗ High cost for usage and maintenance
- ✗ License levels bring limited tools for basic
- ✗ Underachieves for interoperability
- ✗ Being phased out for ArcGIS Pro
- ✗ 32-bit application with ArcCatalog

## #1 non-ribbon commercial GIS software (support until March 2026)

**REVIEW:** ArcGIS Review: Is ArcMap the Best GIS Software?

## 4. Hexagon Geomedia



Hexagon GeoMedia has 40+ years of history. But lately, it's taken a bit of a slide. Nevertheless, Geomedia is still solid as GIS software. Especially, when you pair it up with ERDAS Imagine, you get arguably the best suite in remote sensing.





4.3 stars

## PROS

- ✓ Fast querying and analysis
- ✓ Strong cartography with smart labeling
- ✓ Remote sensing with ERDAS Imagine
- ✓ All-purpose mapping with multiple layouts
- ✓ Superior editing with smart snapping
- ✓ Mature software with 40+ years of history

## CONS

- ✗ Confusing license tiers
- ✗ Small user community for problem-solving
- ✗ Cannot drag-and-drop files into GeoMedia
- ✗ Poor interoperability with other GIS formats
- ✗ Database connectivity can be slow

## #1 GIS software with a powerful remote sensing suite of tools (from ERDAS Imagine)

**REVIEW:** [Hexagon Geomedia Review: 9 Powerful Features](#)



## 5. MapInfo Professional



At its core, MapInfo Professional is all about locational intelligence. And just like GeoMedia, it's been a tale of shrinking market share from its rivals. But don't get fooled. MapInfo Professional is still a well-rounded GIS software suite with more of a business decision-making focus.



4.2 stars

## PROS

- ✓Ease of use and 64-bit processing
- ✓Querying and improved table management
- ✓Powerful addressing and geocoding
- ✓Side-by-side mapping
- ✓Improved visualization integration
- ✓Smart ribbon-based navigation

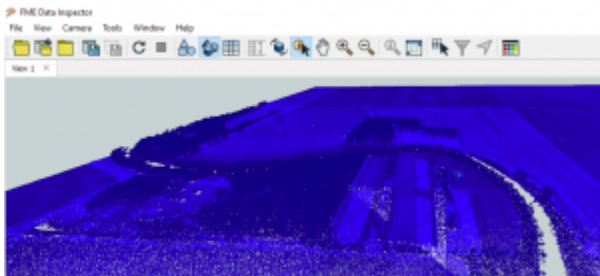
## CONS

- ✗Interoperability and poor format support
- ✗High cost of a license
- ✗Lacks cloud-based platform
- ✗Low functionality for online web maps
- ✗Poor support for remote sensing analysis

## #1 GIS software with a focus on business and location intelligence

**REVIEW:** [MapInfo Professional by Precisely](#)

## 6. FME® Feature Manipulation Engine



Feature Manipulation Engine (FME®) isn't a full-fledged GIS package. Instead, it wrangles and slays your data like a Jedi. It's extremely powerful and has a surprisingly active community. In fact, its yearly World Tour is a blast to attend. But just don't use FME® for making maps.



**4.1 stars**

## PROS

- ✓Powerful with endless transformers
- ✓It's a data interoperability specialist
- ✓Active user community
- ✓Thorough documentation
- ✓FME Server and FME Cloud
- ✓Ahead of the curve for emerging technologies

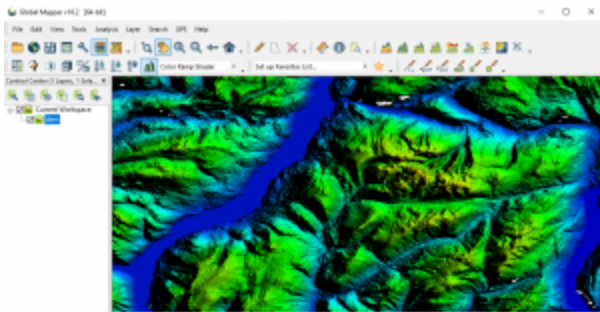
## CONS

- (⊗) Poor traditional cartographic display in FME Data Inspector
- (⊗) License levels and cost
- (⊗) No editing and snapping tools
- (⊗) Little functionality for web maps and apps
- (⊗) Remote sensing classification and analysis

**REVIEW:** FME Software – Feature Manipulation Engine

## 7. Global Mapper

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Global Mapper is like a “Swiss army knife” in GIS analysis. It’s straightforward to get started. But at the same time, Global Mapper has an incredible amount of flexibility. For example, it has a powerful display for LiDAR and elevation, all in a 64-bit application.



**4.0 stars**

## PROS

- (✓) Robust LiDAR display and processing
- (✓) Reads a large number of formats
- (✓) Advanced elevation manipulation tools
- (✓) 64-bit with a user-friendly interface
- (✓) Publish web maps through MangoMap

## CONS

- (⊗) Cost-effective but not open source
- (⊗) Poor symbolization and print layouts
- (⊗) Editing tools are not robust
- (⊗) Cannot build web maps and apps
- (⊗) Lack of emerging technology

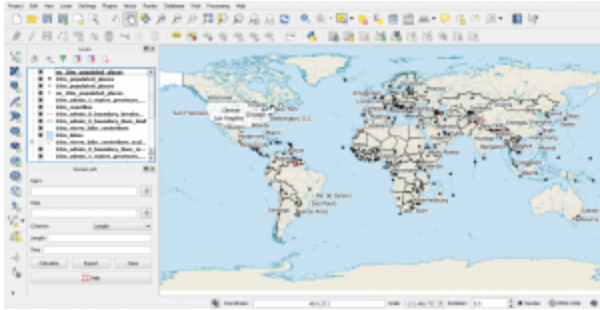
**#1 GIS software for terrain and elevation functionality**

**REVIEW:** Global Mapper Software by Blue Marble



## 8. QGIS 2

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QGIS 2 was one of the largest community efforts and open source progress in the history of GIS. And because it was community-driven, it became wildly innovative and inventive. Even though QGIS 2 is completely open source, it still rivals the best. But now, full support has shifted to QGIS 3.



4.0 stars

### PROS

- ✓ QGIS GPL license offers freedom
- ✓ Beautiful labeling options
- ✓ Wide range of GIS analysis tools
- ✓ Amazing data interoperability
- ✓ Plugins extend functionality
- ✓ Large user base and online support

### CONS

- ✗ Lack of 3D integration (only as a plugin)
- ✗ Graphical modeler is buggy
- ✗ Light on tools for topology errors
- ✗ Little on metadata standards
- ✗ LiDAR and remote sensing classification

**#1 open source GIS software (currently unsupported for QGIS 3)**

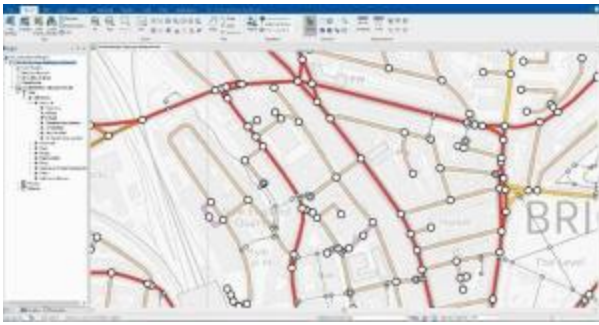
**REVIEW:** [QGIS 2 Review \(Quantum GIS\)](#).

## 9. Cadcorp

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Cadcorp integrates both GIS with CAD into a single application. In a near flawless way, it adds rich functionality for mapping and styling. It adds several features ribbon interface, interoperability, and developer tools. But when you combine it with server and cloud tools, the lesser-known Cadcorp shines on a couple of levels.





★  
★  
★  
★  
☆  
**4.0 stars**

#### PROS

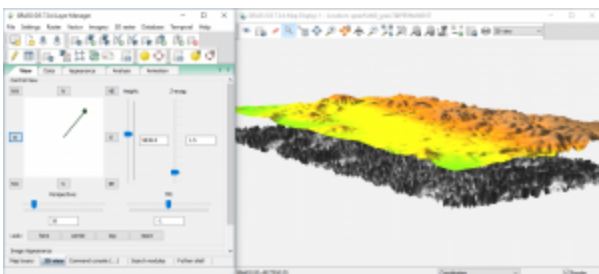
- ✓ Intuitive ribbon interface for Desktop GIS

- ✓ Build Cadcorp SIS web maps
- ✓ Host and serve data on the cloud
- ✓ Deploy web applications through server
- ✓ Developer tools available for customization
- ✓ Cadcorp SIS Express is read-only and free to use

#### CONS

- ✗ Lack of support community forum
- ✗ Little remote sensing tools
- ✗ New product without much background information
- ✗ A CAD/GIS specialist but lacks in other areas

## 10. GRASS GIS



GRASS GIS is one of those suits that let you geoprocess until the night falls. It's a loaded gun with sophisticated tools. It's so powerful that you can unleash GRASS GIS in QGIS as a separate toolbox. But its clunky interface and stubborn map projection rules hold it back.

★

★  
★  
★  
☆

**3.9 stars**

#### PROS

- ✓ Top-notch geoprocessing with 350+ modules
- ✓ LiDAR and network analysis
- ✓ Extensive documentation and tutorials
- ✓ Free and open source

- ✓ Sophisticated tools for satellite imagery
- ✓ 3D raster rendering and customization
- ✓ Well-documented
- ✓ Raster, vector, imagery, and temporal tools

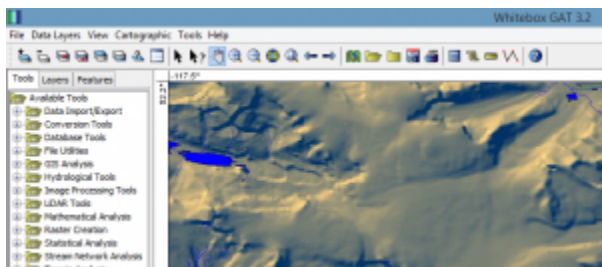
## CONS

- ✗ Clunky user interface and odd toolbar locations
- ✗ Defining projections on start-up
- ✗ Steep learning curve for getting started
- ✗ Unsuitable for cartography and mapping
- ✗ Command-line window running in the background
- ✗ Handles coordinate systems in separate locations

**#1 open source GIS software for innovative geoprocessing tools.**

**REVIEW:** GRASS GIS – Geographic Resources Analysis Support System

## 11. WhiteBox GAT



WhiteBox GAT is the diamond in the rough. If you need terrain and hydrological analysis, then it's a superb choice. The LiDAR support is out-of-this-world. But Whitebox GAT also has 360+ plugin tools. It deserves a higher ranking. But it's just not strong in mapping, editing, and data management.



**3.8 stars**

## PROS

- ✓ Top-notch hydrology, LiDAR, and terrain tools
- ✓ 450+ plugins and geospatial tools
- ✓ Fast speeds with parallel processing
- ✓ WhiteBox scripter for Python
- ✓ Extendable through ArcGIS, QGIS, and WhiteBox Tools

## CONS

- (⊗) Limited cartography, labeling, and symbolization
- (⊗) Web mapping services and base map integration
- (⊗) No classical editing toolbar
- (⊗) Absence of catalog for data management
- (⊗) Inability to write and edit metadata

**#1 open source GIS software for LiDAR, terrain, and hydrography analysis.**

**REVIEW:** WhiteBox GAT – Geospatial Analysis Toolbox

## 12. gvSIG

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If you eat, sleep and breathe GIS, gvSIG is free and open source GIS software. Its features may surprise you. For example, it has a field app, 3D capabilities and a desktop application. But it's light on documentation. Especially, anything in English.



**3.7 stars**

### PROS

- (✓) Simple GUI and well-documented
- (✓) Mobile application for the field
- (✓) Powerful CAD tools
- (✓) Intuitive interface and stable
- (✓) Open source software with support
- (✓) Exploring data with NavTable
- (✓) Exciting developments like gvNIX and IDE

### CONS

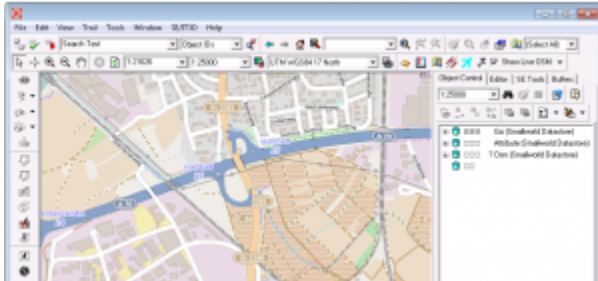
- (⊗) Smaller community support
- (⊗) Archaic cartography and symbology
- (⊗) Dated 3D rendering with NASA World Wind
- (⊗) Little on metadata standards
- (⊗) Not much support for LiDAR data
- (⊗) No multi-platform mobile data collection
- (⊗) Adding data without geometry icons

**#1 open source GIS software for integration of field apps, web mapping, and desktop capabilities.**

**REVIEW:** [gvSIG Software Review: Desktop, 3D and Mobile GIS](#)

## 13. GE Smallworld

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If you're in utilities, then [GE Smallworld](#) is for you. When GE acquired SmallWorld, it rose as the top GIS software for utility companies. The key is its robust data model which allows various geometry properties per object.



**3.6 stars**

### PROS

- ✓ Specialized software for utility/networks
- ✓ Versioning allows backups and archiving
- ✓ Objects as multiple types of geometry
- ✓ Successful track record in utilities
- ✓ Asset management design and lifecycle
- ✓ Comprehensive in-program help files

### CONS

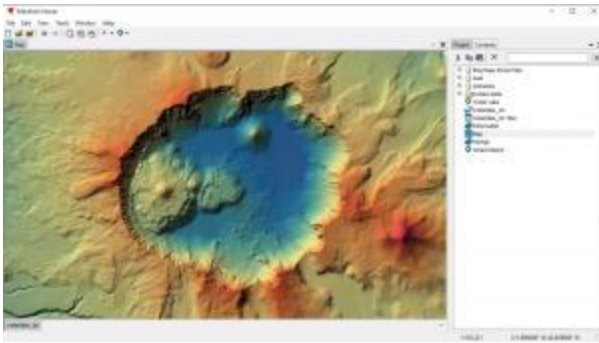
- ✗ Very high cost of license and maintenance
- ✗ Value-added for utility management
- ✗ Not too customizable
- ✗ Unfriendly user-interface
- ✗ Difficult file system access for exporting

**#1 GIS software for network asset management**

**REVIEW:** [Smallworld by General Electric \(GE\)](#)

## 14. Manifold GIS

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3.5 stars

## PROS

- ✓Processes and displays at the speed of light
- ✓CPU and GPU parallel processing
- ✓Stable and intuitive user interface
- ✓Natively 64-bit processing
- ✓Good product documentation and support

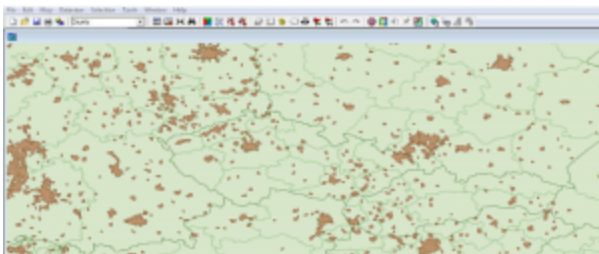
## CONS

- ✗Minimal cartographical tools for map design
- ✗Limited specialty tools
- ✗Lack of advanced web mapping
- ✗Light activity in the user community
- ✗Low price tag but still has a cost
- ✗Selecting file type when adding a data source

## #1 GIS software for speed

**REVIEW:** [Manifold GIS Systems: Software Review](#)

## 15. Maptitude



Manifold System is something you can just pick up and get accustomed to quickly. Its highlights are its intuitive interface, programmability, and 64-bit processing. [Manifold GIS](#) has a solid set of tools. But without the high price tag.



Maptitude stands out as one of the more affordable one-stop shop GIS platforms on the market. While it's true that [Maptitude](#) is a low-cost, professional GIS, you might want to look elsewhere for higher-level analysis.





3.5 stars

#### PROS

- ✓ Routing analysis to optimize delivery routes
- ✓ Good range of thematic mapping options
- ✓ Easy to learn and low learning curve
- ✓ TransModeler and TransCAD for transportation
- ✓ Good product documentation and support

#### CONS

- ✗ Lack of higher-level analysis
- ✗ Maptitude for the Web is rudimentary
- ✗ Range of geoprocessing (raster and vector)
- ✗ Lack of remote sensing, photogrammetry, and LiDAR tools

### #1 commercial GIS software for cost and business intelligence

**REVIEW:** [Maptitude From Caliper – GIS Software Review](#)

## 16. TatukGIS



TatukGIS is straightforward and well-rounded. Its leading features include its state-of-the-art editing, format support, and scripting environment. Fun fact: The origin of TatukGIS is based on Tatuk Lake in British Columbia, Canada.



3.5 stars

#### PROS

- ✓ Strong data editing tools
- ✓ Rich API for customizations
- ✓ High-quality map creation
- ✓ Straightforward and well-rounded

- ✓ Mobile web map development tools
- ✓ Free TatukGIS Viewer and Coordinate Calculator

## CONS

- ✗ Interface is outdated
- ✗ Affordable but still has a cost
- ✗ Light community support and involvement
- ✗ Not as rich in tools as other commercial GIS software
- ✗ Lack of emerging technology tools

## #1 commercial and cross-platform GIS on Windows, Linux, and macOS servers

### 17. AutoCAD Map 3D

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If you started using Autodesk products, then AutoCAD Map 3D has the same look to it so it makes you feel comfortable. Basically, AutoCAD Map bridges the gap between CAD and GIS. You get map layouts, data management, and editing capabilities. By linking CAD and GIS, you get the best of both worlds.



**3.4 stars**

## PROS

- ✓ Solid for editing, COGO, and topology
- ✓ Surface and LiDAR point cloud tools
- ✓ Ribbon interface with logical organization
- ✓ Fusion between CAD/GIS
- ✓ Generate thematic maps and mapbooks
- ✓ Good for those familiar with Autodesk

## CONS

- ✗ License cost and maintenance
- ✗ Limited specialized analysis tools
- ✗ Sparse for cartography and map types

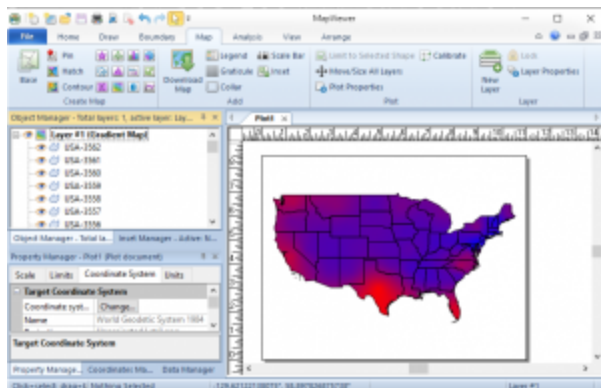


- (⊗)The look and feel of map layouts are clunky
- (⊗)High learning curve for those unfamiliar with Autodesk

## #1 commercial GIS software that integrates Autodesk capabilities

**REVIEW:** [AutoCAD Map 3D by Autodesk: GIS and CAD Fusion](#)

## 18. Golden Software Surfer



Surfer is part of the [Golden Software](#) suite. Alongside Strater, Voxler, and Grapher, you get a nice mix of 3D, analysis, and editing capabilities. But its key feature is how you can produce professional quality thematic maps.



**3.4 stars**

### PROS

- (✓)Focus is on data visualization
- (✓)Versatile in thematic map production
- (✓)User-friendly interface
- (✓)Data manipulation for XYZ points
- (✓)Census-based street data geocoding
- (✓)Short learning curve

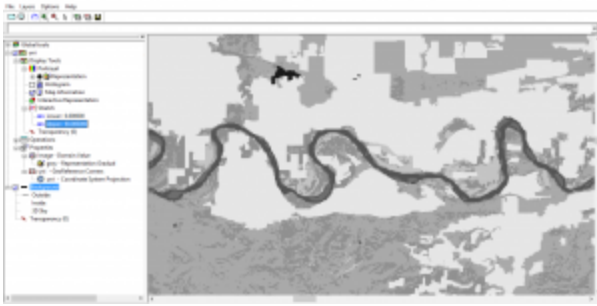
### CONS

- (⊗)License cost but more affordable
- (⊗)Specialized in specific domains
- (⊗)Narrow range of analysis tools
- (⊗)Lacks web map publishing capabilities
- (⊗)Sparse tools for advanced editing

## #1 commercial GIS software for 3D geotechnical analysis and mapping

**REVIEW:** [Surfer by Golden Software](#)

## 19. ILWIS



The 80s are making a comeback. As part of it, ILWIS is still embracing the era. But if you need remote sensing tools, it's a decent place to look. There are also 3D visualizations and stereo imaging. Despite its desperate need for a makeover, ILWIS is versatile in specific niches.



3.4 stars

## PROS

- ✓ Monitoring and modeling the Earth system
- ✓ Object-based image classification
- ✓ Land change modeling
- ✓ 2D and 3D visualization with time series
- ✓ Free and Open Source Software
- ✓ Image classification and remote sensing tools

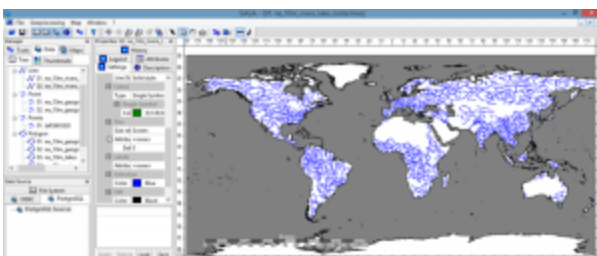
## CONS

- ✗ Light on documentation and tutorial information
- ✗ Lacks advanced mapping features and layout support
- ✗ Small community support and discussion forum
- ✗ Sparse tools for advanced editing

## #1 open source GIS software for diverse image processing tools

**REVIEW:** ILWIS – Integrated Land and Water Information Management

## 20. SAGA GIS



The name of the game for SAGA GIS is geoscience. If you go down this rabbit hole, you may get lost. Its documentation lacks so much that you don't even know the input and output. But it has some of the rarest tools you'll ever find in GIS software.





3.4 stars

## PROS

- ✓ Unique toolsets for geoscience
- ✓ Powerful for terrain and raster data
- ✓ Command-line interpreter
- ✓ 3D rendering and anaglyph tools
- ✓ Geostatistics tools like kriging
- ✓ GPL license offers freedom
- ✓ Decent interoperability
- ✓ User-friendly and robustness

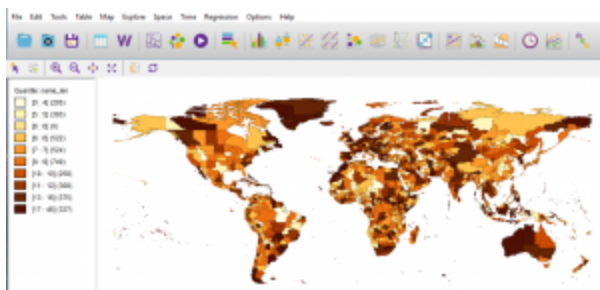
## CONS

- ✗ Missing core documentation for many geoscience tools
- ✗ Strange noise after running tool
- ✗ Lack of cartography features and templates
- ✗ Limited data editing and manipulation
- ✗ No automatic topology error fixing
- ✗ Lack of online web map publishing

## #1 open source GIS software for scientific and geotechnical analysis

**REVIEW:** [SAGA GIS \(System for Automated Geoscientific Analyses\)](#).

## 21. GeoDa



3.4 stars

GeoDa is a specialist in statistical tools and analysis. As you work in this open source GIS software, you explore spatial statistics. Through state-of-the-art geo-visualizations and geo-simulations, it's the ultimate tool for spatial modeling.



## PROS

- ✓ Modern interface and design
- ✓ Specialized in statistics
- ✓ Data exploration for understanding statistics
- ✓ Geosimulation with data display
- ✓ Free and open source
- ✓ State-of-the-art plots and charts

## CONS

- ✗ Missing traditional geoprocessing tools
- ✗ Not a full-fledged GIS software package
- ✗ Little for advanced feature editing and snapping
- ✗ Lacks a variety of GIS-related tools

## #1 statistical open source GIS software for spatial modeling and geovisualizations

**REVIEW:** GeoDa Software – Data Exploration at its Finest

## 22. Bentley Map



Bentley Map combines the power of CAD with the strengths of traditional GIS. For example, it offers robust inter-operability, overlay tools and high-quality cartographical output. It's not only for 2D. But you can perform GIS analysis in 3D too.



**3.2 stars**

## PROS

- ✓ CAD/GIS fusion
- ✓ 3D viewing, analysis, and support
- ✓ Fly-throughs, sunlight and shadow studies
- ✓ Decent interoperability

## CONS

- ✗ Limited GIS analysis tools

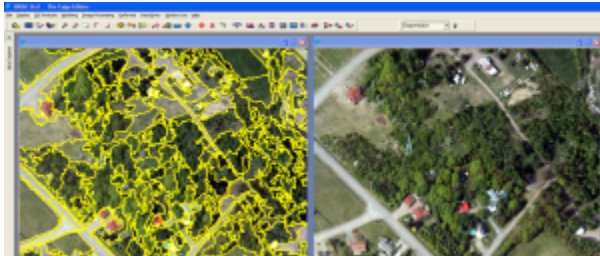
- (⊗) High cost for the license
- (⊗) Poor labeling and annotation
- (⊗) Lack of KMZ/KML support

## #1 CAD/GIS software with a focus on 2D/3D infrastructure

**REVIEW:** [Bentley Map by Bentley Systems](#)

## 23. IDRISI TerrSet

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IDRISI by Clark Labs is mostly for raster analysis and image processing. For example, it's equipped with 300+ analysis tools. But IDRISI also focuses on Earth modeling. For example, it has modules for land change, biodiversity modeling, and climate change.



3.1 stars

### PROS

- (✓) Monitoring and modeling the Earth system
- (✓) OBIA classification and land change modeling
- (✓) 2D and 3D visualization with time series
- (✓) 300+ analytical tools with a focus on raster-based tools

### CONS

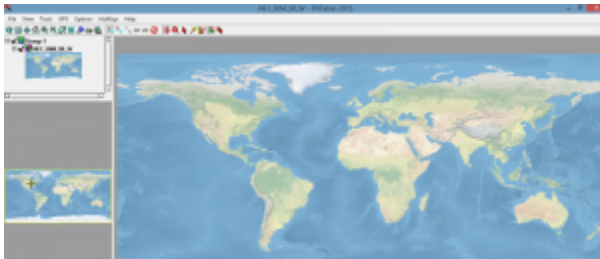
- (⊗) Low documentation and support for help topics
- (⊗) Inactive community and forum
- (⊗) Poor cartography options and map layout support
- (⊗) Limited scope and functionality

## #1 GIS software for Earth modeling and land change

**REVIEW:** [IDRISI TerrSet By Clark Laboratories](#)

## 24. TNT GIS

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TNTview, TNTedit, TNTmips, and TNTscript are part of the MicroImages GIS software family. At the basic level, TNTview is an open viewer. As you move up the license levels, each one adds extra capabilities. Overall, it's a decent option for all-around mapping, analysis, and editing.



2.6 stars

## PROS

- ✓ Terrain analysis and surface modeling
- ✓ Support for vector, geodatabase, CAD, LIDAR, and TIN
- ✓ Automated workflows and customization
- ✓ Image processing tools

## CONS

- ✗ Affordable but has an associated cost
- ✗ Dated user interface
- ✗ Little for updates and versions
- ✗ Lacks documentation and user support community

**#1 GIS software for basic GIS editing, mapping, and analysis**

## 25 MapWindow



MapWindow is an open source project. While it does about 90% of what GIS users need, it specializes in hydrology. It still struggles with some of the basics. But it's a decent volunteer effort.



2.6 stars

## PROS

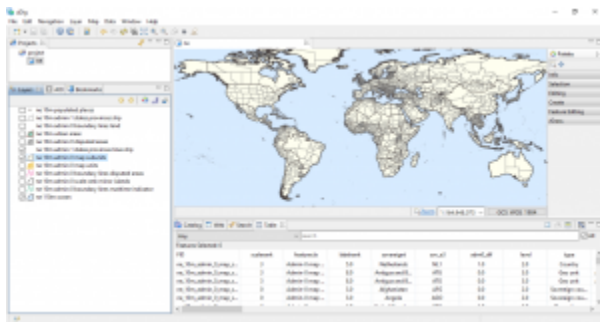
- ✓ Specializes in hydrology analysis
- ✓ Free and open source
- ✓ API and MW5 documentation
- ✓ Extensible plugin architecture

## CONS

- ⊗ Lack of community and users
- ⊗ Not as fully supported
- ⊗ Lacks in other areas of GIS and remote sensing

## #1 open source GIS software for hydrology analysis with HydroDesktop

### 26. uDig



Volunteers worldwide work on this open source desktop application. Most of the focus for uDig is on database viewing and editing. Even today, updates continue to roll in. But the interface really just needs a fresh coat of paint.



2.5 stars

## PROS

- ✓ Solid documentation
- ✓ Free and open source software
- ✓ Specializes in biodiversity and forest management

## CONS

- ⊗ Infrequent releases
- ⊗ Limited functionality for cartography and symbolization
- ⊗ Small and inactive user community

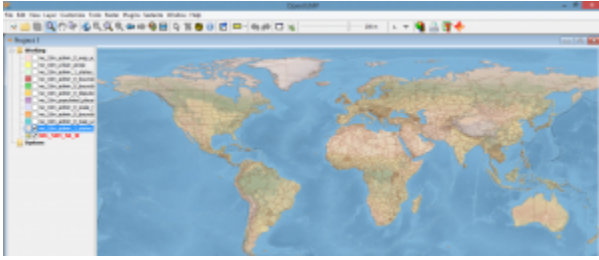
## #1 open source GIS software for specific biodiversity and forest management tools

**REVIEW:** [uDig GIS Software Review](#)



## 27. Jump GIS

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You've got two tickets to the [OpenJump](#) show. Would you go? In short, Jump GIS is good at doing the basics. It started as a tool for data conflation. Then, it grew into a modest size open source project. Despite its light functionality, developers still support the project.



**2.4 stars**

### PROS

- ✓ WMS and database connectivity
- ✓ Wiki documentation
- ✓ GPS support and compatibility
- ✓ Plugins like Sextante

### CONS

- ✗ Dated user interface
- ✗ Little-to-no raster functionality
- ✗ Sparse updates on its development
- ✗ Limited cartography options
- ✗ 3D visualization and support
- ✗ A small number of plugins

**#1 open source GIS software for assisting with conflation**

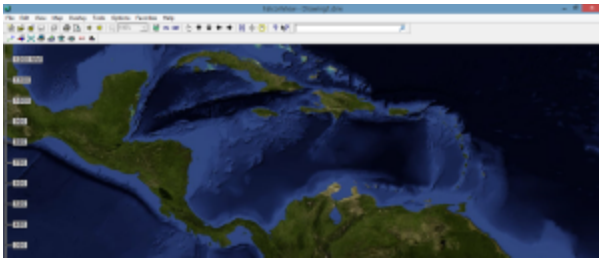
**REVIEW:** [OpenJUMP GIS Software Review](#)

## 28. FalconView

---

FalconView is a flight simulator so it's unfair to compare in this list of GIS software. If you want to do fly-throughs, Georgia Tech built it for this purpose. Otherwise, you can render features in 3D like LiDAR and elevation.





☆  
☆  
**2.1 stars**

#### PROS

- ✓ Interoperability and WMS capabilities
- ✓ Aviation and nautical charts support
- ✓ Flight simulator for fly-throughs
- ✓ Supports KMZ, MrSID, and LiDAR

#### CONS

- ✗ Primarily for flight missions
- ✗ Lacks sophisticated spatial analysis
- ✗ Limited mapping and cartography
- ✗ Poor data editing and management

**#1 open source GIS software for flight simulation and spatial data integration**

**REVIEW:** [FalconView by Georgia Tech](#)

## 29. OrbisGIS



OrbisGIS is still a work-in-progress. It's now released as a cross-platform open source GIS software package. Specifically, OrbisGIS is designed by and for research.

★  
★  
☆  
☆  
☆  
**1.9 stars**

#### PROS

- ✓ Used mainly for research
- ✓ 100% for Linux, Windows and Mac OS
- ✓ OGC compliant

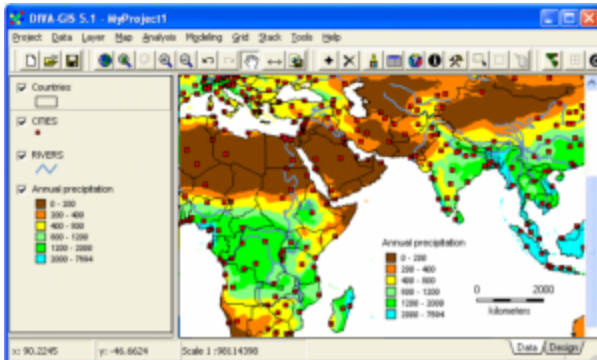
#### CONS

- ✗ Light on cartographic and analysis tools
- ✗ No open forum and community for discussion

## #1 open source GIS software as a newcomer

### 30. Diva GIS

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Diva GIS is an open source GIS software package that's simple and lightweight. Biologists use it for mapping biological richness and diversity distribution. It's functional. But there's not a lot here for mapping and functionality.



1.5 stars

#### PROS

- ☒ Specialty software for biology
- ☒ Data availability
- ☒ Lightweight and open source

#### CONS

- ☒ Dated user interface
- ☒ Not a lot available for mapping and functionality
- ☒ No Diva GIS community

## #1 open source GIS software for biology and data packaging

### Mapping out the GIS software landscape

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If you're in the geospatial industry, your choice in GIS software is critical.

We've mapped out the GIS software landscape for you.

You have 30 options to choose from. What did you pick?

We'd love to hear from you so please leave us a comment below.

### Changelog

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**2022/04/28** – Cadcorp jumped from #12 to #9. QGIS 2 fell from #4 to #8. gvSIG fell from #9 to #12.

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