

# The "All about Google Earth" E-Guide

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[Download-Earth.org](http://Download-Earth.org)

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## **STEP #1:**

### **Download Google Earth**

To get Google Earth you just [visit this web page](#) and then click on the big button or text link that says

*"Make your PC more useful. Get the free Google Pack."*

Google Earth is part of Google's new free download called the "Google Pack" You must download this to get Google Earth.

After you follow the directions on the screen to download and install the software you should continue reading below. If you have any problems during the installation then you can skip ahead to the chapter below on installing Google Earth.

# *The "How To Download & Use Google Earth" E-Guide*

## **CHAPTER 1. *Introduction to Google Earth*** (download Google Earth [here](#))

**Google Earth** is a free-of-charge, downloadable program that allows you to view the entire Earth from orbit with amazing clarity. It maps the entire earth as a 3d Globe by pasting together images obtained from satellite imagery and aerial photography.

The Google Earth Program comes as part of Google's free "Software Pack". It's a quick and easy download that you can get for free. It comes with these great free titles:

### **What is Google Pack & Why Do You Need It?**

Google Pack is a great FREE download that contains the Google Earth Program. The best thing about Google Pack is that you also get all this for FREE! It comes free with antispyware, antivirus program, the new award winning Internet Browser "FireFox", free photo editing & sharing software and much more. The complete list is below.

### **What if I only want Google Earth & not this other free stuff?**

You can choose which tools you want to download and install. You don't have to install them all. You can still just get Google Earth for free. Just follow this link and when you have the option choose "add or remove software" and you can change which programs you get.

### **More about Google Pack and why you want it:**

#### **Google Pack is:**

- **Essential:** Enjoy safe, useful software for your computer
- **Simple:** Download and install everything in just a few clicks
- **Customizable:** Choose only the software you want
- **Up to date:** Get updates & new software via

#### **System Requirements**

- Windows XP
- Firefox 1.0+ or Internet Explorer 6.0+

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### Google Pack Contains The Following:



#### Google Earth - 3D Earth browser

- Zoom from space to street level – tour the world
- Find maps, driving directions, hotels, restaurants, and more

 <p><b>Norton Antivirus 2005 Special Edition -</b> Antivirus utility Symantec</p> <ul style="list-style-type: none"> <li>• Protect your PC from viruses, worms and Trojan horses</li> <li>• Includes 6-month subscription to protection updates</li> </ul>	 <p><b>Ad-Aware SE Personal</b> Antispyware utility Lavasoft</p> <ul style="list-style-type: none"> <li>• Safely detect and remove spyware</li> </ul>
 <p><b>Picasa</b> Photo organizer</p> <ul style="list-style-type: none"> <li>• Find, edit, and share your photos in seconds</li> <li>• Easily remove red eye and fix photos</li> </ul>	 <p><b>Mozilla Firefox with Google Toolbar</b> Web browser Mozilla Corporation</p> <ul style="list-style-type: none"> <li>• Browse the web quickly and securely</li> <li>• Switch between pages quickly with tabbed browsing</li> </ul>
 <p><b>Google Desktop</b> Desktop companion</p> <ul style="list-style-type: none"> <li>• Find all your email, files, web history, and more</li> <li>• Get all your personalized info in one place with Sidebar</li> </ul>	 <p><b>Google Pack Screensaver</b> Photo screensaver</p> <ul style="list-style-type: none"> <li>• Enjoy photos from your personal collection</li> <li>• View pictures full screen or as a collage</li> </ul>
 <p><b>Google Talk</b> Voice and IM application</p> <ul style="list-style-type: none"> <li>• Call or send instant messages to your friends for free</li> <li>• Get a free account using your mobile phone</li> </ul>	 <p><b>Google Toolbar for Internet Explorer</b> Search toolbar</p> <ul style="list-style-type: none"> <li>• Search from any web page and autofill forms</li> <li>• Block annoying pop-ups</li> </ul>
 <p><b>Google Video Player</b> Video player</p> <ul style="list-style-type: none"> <li>• Play videos purchased and downloaded through the Google Video website</li> </ul>	 <p><b>RealPlayer</b> Media player</p> <ul style="list-style-type: none"> <li>• Play popular media formats, organize music and videos</li> <li>• Transfer music to iPod and other portable media players</li> </ul>
 <p><b>Adobe Reader 7</b> PDF reader Adobe Systems</p> <ul style="list-style-type: none"> <li>• View, print, and search PDF files</li> <li>• Launches up to 50% faster than Reader 6.0</li> </ul>	 <p><b>GalleryPlayer HD Images</b> Images</p> <ul style="list-style-type: none"> <li>• High-quality artwork and photos</li> <li>• Perfect for your screensaver or desktop</li> </ul>

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### **CHAPTER 2. *What is Google Earth?***

*(download Google Earth [here](#))*

Formerly known as **Earth Viewer**, Google Earth was developed by Keyhole, Inc. [Google](#) acquired that company in 2004. The product was renamed Google Earth in 2005 and is currently available for use on personal computers running Mac OS X 10.3.9 and above, and Microsoft Windows 2000 or XP. A Linux version has been announced for 2006. In addition to releasing an updated Keyhole based client Google also added the satellite imagery from the Earth database to their web based mapping software.

Many large cities are available in high enough resolution to see individual buildings, houses, and even cars. The degree of resolution available is based somewhat on the points of interest, but most places are available at at least 15 meters of resolution. Google Earth allows users to search for addresses (for the USA, Canada, and UK only), enter coordinates, or simply use the mouse to browse to a location.

Google Earth also has digital terrain model data collected by NASA's Shuttle Radar Topography Mission. This means one can view the Grand Canyon or Mount Everest in three dimensions, instead of 2D like other map programs/sites. In addition, Google has provided a layer allowing one to see 3D buildings for some of the major cities in the US.

Many people using the applications are adding their own data and making them available through various sources such as the BBS or blogs mentioned in the link section below.

Google Earth is available in a free version, and in licensed versions for commercial use. It is currently officially available on Windows XP and Mac OS X . The Linux version, which was expected to be released in 2005, has been announced to be released in mid 2006. A leaked version of working non-public beta of Google Earth for Mac OS X started to appear on the Internet on December 8, 2005.

When started up, Google Earth's view is centered on Lawrence, Kansas. The director of engineering for Google Earth is Brian McClendon, whose online biography says he is a 1986 graduate of the University of Kansas.

## The "How To Download & Use Google Earth" E-Guide

### CHAPTER 3. *Step by step download and installation* (download Google Earth [here](#))

The first step is to [click here](#) to go to <http://Download-Earth.org/free-download/>

You will see a button that looks like this:



Click this button to go directly to the download page. Which will look like this:

**Google Pack** BETA      A free collection of essential software      [Help](#)

**Download Google Pack**

[Add or remove software](#)

Already have some of this software?  
It will only be updated if a newer version is available.

**Google Pack is:**

- **Essential:** Enjoy safe, useful software for your computer
- **Simple:** Download and install everything in just a few clicks
- **Customizable:** Choose only the software you want
- **Up to date:** Get updates & new software via [Google Updater](#)
- [Learn more](#) - [Discuss with others](#)

**System Requirements**

- Windows XP with Administrator privileges ([What's this?](#))
- Firefox 1.0+ or Internet Explorer 6.0+

**Google Software Included**

 **Google Earth** - 3D Earth browser

- Zoom from space to street level — tour the world
- Find maps, driving directions, hotels, restaurants, and more

[Learn more](#) - [Remove](#)

 **Google Desktop** - Desktop companion

- Find all your email, files, web history, and more
- Get all your personalized info in one place with Sidebar

[Learn more](#) - [Remove](#)

Once on the download page, lick the "Download Google Pack" button. The next step is to accept Googles terms and conditions by clicking on the "Agree and Download" button. If you disagree, the installation will stop and you cannot download Google Earth.

## The "How To Download & Use Google Earth" E-Guide

A popup window should open that will start your installation. If it does not open, click the link that says "A download window should appear. If it doesn't, please click here to open it".

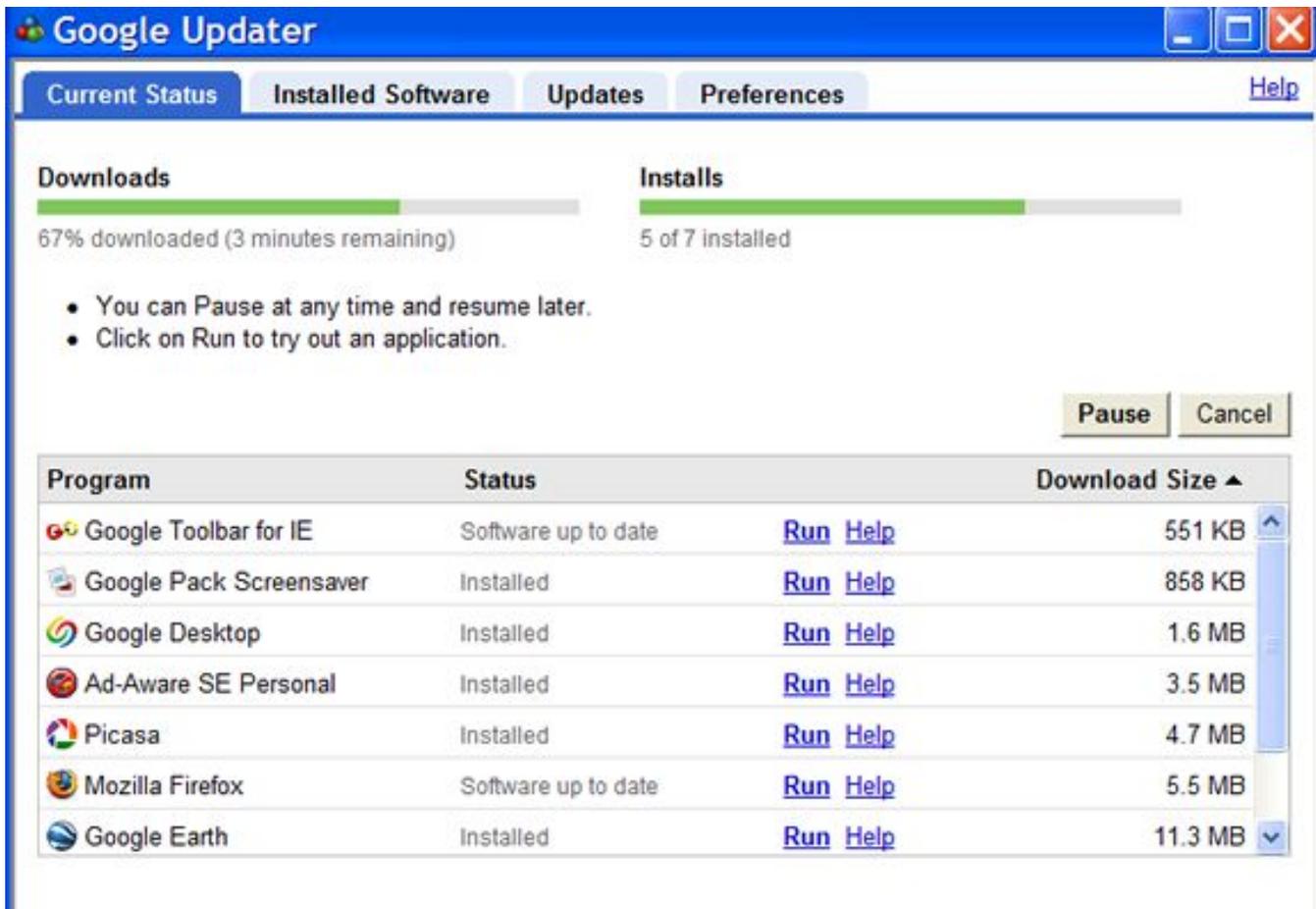


Now a pop-up window will prompt you whether you want to *open*, *save* or *cancel* the download. Choose *Save* and then double-click the desktop icon to store the installation file on your hard drive. You can also choose *Open* if you don't want to keep this installation kit on your computer. After the download completed, double-click on the *Google Earth* icon on your desktop if you opted to save the file or simply wait for the installation to start automatically if you selected the *Open*

command.

The rest of the installation will be explained step by step, below the appropriate screenshots.

## The "How To Download & Use Google Earth" E-Guide



After you begin the installation you will have a few minutes to wait while google downloads and installs the programs automatically. This will occur when you see the page that looks like the one above.

At this point, you are ready to let Google do its business. The program will now automatically download and install the Google Earth software and the rest of the Google Pack.

## *The "How To Download & Use Google Earth" E-Guide*

### **CHAPTER 4. *Setting up Google Earth*** *(download Google Earth [here](#))*

Some common problems during installation:

**I can't contact the Google Earth servers.**

From:

<http://earth.google.com/support/bin/answer.py?answer=20717>

Most likely, a personal firewall program, aggressive anti-virus software, or adware is preventing Google Earth from freely accessing the internet via TCP/IP (port 80). If you receive any error messages containing the text c000000c or c000000b, this is also related to the software

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or programs listed above that could be causing the difficulties accessing Google Earth. Please check your router/firewall settings to set GoogleEarth.exe as an exception.

I

**I'm getting a "DirectX" error. How do I install Direct X?**

From:

<http://earth.google.com/support/bin/answer.py?answer=21468>

To use DirectX mode, it is necessary to install DirectX 8.1 or higher from the Microsoft Download Center.

Even though we use OpenGL for 3D rendering, some OpenGL drivers wrap DirectX internally.

Microsoft currently recommends DX9.0c, but DX8.1 and beyond will work. To install DirectX9.0c please visit:

<http://www.microsoft.com/downloads/details.aspx?FamilyID=0a9b6820-bfbb-4799-9908-d418cdeac197&displaylang=en>

Also please set DirectX as your default renderer. To do so, please follow these steps:

1. Click the "Start" button.
2. Choose "Programs."
3. Hover over your version of Google Earth.
4. Select "Set Google Earth rendering to DirectX" and restart Google Earth.

For a complete listing of troubleshooting questions and great support from Google Directly, please visit:

<http://earth.google.com/support>

**CHAPTER 5. *The features of Google Earth***  
(download Google Earth [here](#))

## **“Features” Contents:**

- [2 3D Buildings](#)
- [3 Specifications](#)
- [4 Mac OS X Version](#)
- [5 Accuracy](#)
- [6 Google Earth Community](#)
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## **3D Buildings**

A feature implemented by Google after its acquisition of Keyhole is a 3D dataset for (as of December 2005) 39 cities. This data is provided by Sanborn Citysets. This feature is limited to displaying grey overlaying "blocky" buildings. On March 14, 2006, Google acquired @Last Software, makers of SketchUp, who had created a plugin for 3d renderings in Google Earth.

The cities currently included are: New York City (Manhattan below Central Park and West Brooklyn), Chicago (the Loop, near Magnificent Mile, and residential areas north, south, and just west of those areas along the lake), Los Angeles (downtown, areas along the Miracle Mile, Wilshire Blvd), Honolulu (downtown and along the beach), San Francisco (the northeastern quadrant), Philadelphia (downtown and residential areas to the south and west), Houston (downtown), Washington, Boston, Dallas, Minneapolis, Saint Paul, Miami, Atlanta, Denver, Seattle, Detroit (downtown), Arlington, Baltimore, St. Louis (downtown), Pittsburgh, Cleveland, San Diego, Long Beach, Sacramento, Cincinnati, Tampa, Fort Lauderdale, New Orleans, Kansas City, Buffalo, Portland, Las Vegas, Jersey City (along the Hudson River), Newark, Memphis, Phoenix, and St. Petersburg, Florida, USA.

However, 3D buildings are available for certain buildings around the world using programs from other websites.

## **Specifications**

Google Earth comes with atmosphere effects, seabed and a simplified planetarium

- Resolutions
  - U.S.: 15 m

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- Global: Generally 15 m (some areas such as certain oceanic islands are in extremely low resolution, e.g. [\[2\]](#))
- Typical high resolutions
  - U.S.: 1 m, 0.6 m, 0.3 m, 0.15 m (extremely rare; e.g. Cambridge, Ma. and Google Campus)
  - Global:
- Altitude resolution:
  - Surface:
  - Seabed: Not applicable (the seabed is "printed" on the spherical surface).
- Age: Usually less than 3 years old.

Google Earth is unlikely to operate on older hardware configurations. The most recent downloads available document these minimum configurations:

- Windows 2000, or XP
- Pentium III, 500 MHz
- 128 MB RAM
- 400 MB disk space
- Network speed: 128 Kbits/sec
- 3D-capable video card with 16 Mbytes of RAM
- 1024x768, "16-bit High Color" screen

The most likely mode of failure is insufficient video RAM: the software is designed to declare failure if 16 MB of video RAM is not available. The next most likely mode of failure is Internet access speed. Except for the very patient, broadband Internet (Cable, DSL, T1, etc.) is required. Again, resolution is not uniform, some towns such as St Petersburg are only partially available in high-resolution.

- [Maps and aerial photos](#)
  - Street map from [MapQuest](#) or [Google Local](#)
  - Topographic map from [TopoZone](#)
  - Aerial image or topographic map from [TerraServer-USA](#)
  - Satellite image from [Google Local](#) or [Microsoft Virtual Earth](#)

In this case, the TerraServer-USA data can identify individual trees but its data is structured in cumbersome tiles. As with much GIS data, the utility of the data is application-dependent for the purpose of determining if resolution is sufficient. Also note that from a usability point of view, TerraServer loses its center point when one zooms in and out where Google Earth browsing is smooth; a clear benefit, but at the price of the somewhat demanding requirements imposed upon the video card.

## **Mac OS X Version**

Google Earth (Mac OS X)

A version for Mac OS X was released on January 10, 2006, and is available for download from the Google Earth website. With a few exceptions noted below, the Mac version appears to be stable and complete, with virtually all the same functionality as the original Windows version.

Screenshots and an actual binary of the Mac version had been leaked to the Internet a month previously, on December 8, 2005. The leaked version was significantly incomplete. Among other things, neither the

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Help menu nor its "Display License" feature worked, a pretty sure sign that the version was intended for Google's internal use only. Google released no statement regarding the leak.

Currently, the Mac version runs only under Mac OS X versions 10.4 and 10.3.9. There are no "Plus" or "Pro" versions. There is no embedded browser and no direct interface to Gmail. Fullscreen mode does not work. There are a few bugs concerning the menu bar when switching between applications. There are a few bugs concerning annotation balloons and printing.

### **Accuracy**

The west side of Gibraltar, tilted view showing the sea rising up Gibraltar Rock - claimed height of the sea just off the beach at Elliots Memorial, 252 m.

Most land areas are covered in satellite imagery with a resolution of about 15 m per pixel, and some population centers are also covered in airplane imagery of several pixels per meter. Oceans are covered in much lower resolution.

Due to the limited spatial resolution of the altitude map, altitudes are often inaccurate, especially the altitude of small features, like mountain tops; e.g. Mount Everest's height is short by 253 m, and the sea near Gibraltar is shown with an altitude of 252 m.

Unlike the satellite images, the plane images have a perspective from close to the surface, leading to distortions when used in a mosaic. Tall buildings sometimes appear to be leaning towards each other (conspicuous in e.g. Chicago at South Clark Street, in the middle of downtown; or near the Empire State building in New York City). The Fatih Sultan Mehmet Bridge on the Bosphorus may be another example of this effect.

An inaccuracy of the current edition (version 3.0.0762, build date November 17, 2005) was that the territory of Nunavut in Canada - an area comparable in size to Western Europe - was notably absent. Google Earth's map boundaries of Northern Canada showed only the Northwest Territories, not the division of Nunavut created on April 1, 1999. This inaccuracy has however been corrected since then, probably in one of the data updates during the first months of 2006.

The Space Needle in Seattle is particularly distorted, bearing no resemblance whatsoever to the actual Space Needle.

Place name and road detail vary greatly from place to place, and are most accurate in the USA and Europe, though misplaced name tags have been found there too, e.g. the name tags for Newcastle upon Tyne and Gateshead are both about 2 km north of their correct positions. Also, the North and South Poles are marked as 89°59'60" N and 89°59'60" S respectively, rather than the correct 90°00'00" N and 90°00'00" S.

The images are not all taken at the same time, but are generally current to within three years. Image sets are sometimes not correctly stitched together.

### **Google Earth Community**

An [online forum](#) is dedicated to produce placemarks of interesting or educational perspectives. It may be found on the Google Earth webpage or under the Help section on the program itself. After downloading a placemark, it will automatically run Google Earth (if not opened), and fly to the area specified by the

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person who placed it. Once there, you can add it to your "My Places" by right clicking on the icon and selecting "Save to My Places". Additionally, anyone can post a placemark for anyone to download.

CHAPTER 6. *How To Use Google Earth*  
(download Google Earth [here](#))

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There are many features of Google Earth. I'll cover a few of them below. There are also different versions of Google Earth and I'll go over these as well.

### **Google Earth Plus**

Google Earth Plus is an individual-oriented paid upgrade to Google Earth and adds the following features:

- GPS integration – read tracks and waypoints from a GPS device. 3rd party applications have been created which provide this functionality using the basic version of Google Earth by generating KML files based on user-specified waypoints [13]. However, these tools only work with specific GPS devices whereas Google Earth Plus provides support for the Magellan and Garmin product lines, who together hold a large share of the GPS market.
- Higher resolution printing.
- Customer support via email.
- Annotation – adds draw/sketch tools for richer annotations (can be shared as KML).
- Data importer – read address points from CSV files.

### **Google Earth Pro**

Google Earth Pro is a business-oriented paid upgrade to Google Earth that has more features than the "Plus" version. The Pro version is capable of running additional add-on software.

### **External links**

#### **Community and placemarks**

- [Google Earth Community](#) - A place for sharing placemarks
- [Google Earth Blog](#) - Dedicated to Google Earth news, features, tips, and technology
- [Google Sightseeing](#) Showcase site of interesting views
- [GoogleEarthHacks](#) - Information and large collection of Google Earth downloads
- [Google Earth Explorer](#) - Large collection of Google Earth placemarks, see also [The Earth Explorer](#)
- [Google Earth Discussion](#) - forum about Google Earth
- [Google Earth Cool Places](#) - A place for sharing placemarks
- [Aliensview](#) Database for GoogleEarth placemarks
- [Thai placemarks on Earth](#)
- [ThaiEarth.com: Thai Google Earth User Community](#)
- [Google Earth Imagery](#)
- [The Best German Google Earth Community](#)
- [German Google Earth Community](#)
- [The GISuser Maphacks.net resource](#)
- [Discuss Google Earth](#) - Forums for discussing Google Earth and other technology
- [Over 100 file KMZ or FLY TO for Google Earth with preview.](#)

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- [Geonames in GoogleEarth](#) Over 142.000 cities from [www.geonames.org](http://www.geonames.org) (with geotags for wikipedia)
- [earthplacemarks.com](http://earthplacemarks.com) - A large collection of placemarks for Google Earth

### **Unofficial guides and tips**

- [Google Earth Blog](#) - Featuring Google Earth news, features, tips, and technology
- [Ogle Earth](#) - A blog about Google Earth
- [Google's Earth](#) - Covering Google's Earth technology
- [How Google Earth Works](#)
- [GISuser offers numerous Google Earth articles, tools, and news items](#)

### **Addons**

- [Google Earth Hacks](#) Many placemarks, image overlays, etc.
- [A file with coordinates from more than 30000 Wikipedia articles.](#)
- [LiveLookup](#) find accommodation in Norway from within Google Earth, shows distance and direction relative to screen center. Live data is provided by: [Reiselivsbasen](#)
- [Panoramio](#) photos of the world posted by the community
- [Gisuser's Google Earth/Maps tools](#) Free Google Earth and Google Map add ons from GISuser
- [Google Earth Connectivity Add-on](#) for [ArchiCAD 9](#)
- [Adventure Company](#) find Adventure Holidays using Google Earth

### **Games**

- [Google Earth Game](#) An online game via armchair travel
- [adidas +10 Playoffs](#) Flash game that plays within Google Earth's embedded web browser
- [GEwar: Strategic, Visual, financial and very popular wargame/community using Google Earth](#)
- [Global Earth Games](#) A collection of games utilizing the Network Link system.
- [Traceroute on Earth](#)
- [Hunter](#) A mixed-reality treasure hunt involving Google Earth

### **Tools**

- [IP locator on Earth](#)
- [Google Earth Tools](#) Google Earth Developer Tools and References
- [Google Earth World Gazetteer](#) Searchable world gazetteer, direct Google Earth links to each place.
- [Batch Geocoder](#) Generate a KML file from an address list, works with any tabular data source.
- [Placeopedia](#) - A website that provides a way to link wikipedia articles with place points in Google Earth
- [Marrying maps to data for a new web service](#) by [John Markoff](#) (Free NY Times registration required)
- [csv2map](#) csv to Google Earth and Google Maps api batch server converter by Pivari.com (shareware)
- [RoboGEO](#) Display geocoded photos and GPS tracklogs in Google Earth

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- [ESRI ArcGIS 9 Extension KMLer](#) ESRI ArcGIS 9 Extension to create intricate Google Earth KML files from ArcGIS content
- [ESRI ArcGIS 9 Extension TypeConvert](#) ESRI ArcGIS 9 Extension to create intricate Google Earth KML files from ArcGIS feature classes

**CHAPTER 6. *Conclusion***  
(download Google Earth [here](#))

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Please keep in mind that this e-book was free to you, as Mozilla Google Earth is free software for everyone to enjoy. Nevertheless, it is undeniably amongst the elite browsers if not the best. It is fast, safe, customizable and flexible.

If you want to download and try Google Earth, read updated news and information about the browser and about how to safely surf the internet or learn about new features and updates for Google Earth just click [here](#). To visit:

<http://Download-Earth.org>

### ***Tell Your Friends about Google Earth!***

*Who do you know that needs to download Google Earth?*

*Everyone can use faster, safer and more secure Internet browsing.*

Click [here](#) to refer a friend or family member and give them their own **free** copy of the  
*"All about Google Earth" E-Guide*

Or go to:

<http://Download-Earth.org/refer/>

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