

2005-2015: Ten Years with Google Maps

In February 2005, Google Maps was launched as a desktop web mapping service. A few months later, in June 2005, Google Earth was released for personal computers. Since then, people around the globe have been using maps as never before and have a different view of the earth, the country, and the neighborhood they live in. They now have access to discover new places on earth, at the bottom of the oceans, and beyond to the moon and deep space. Users may also paint on this incredible “global canvas” and share their views with others, using a desktop or mobile device.

It is just amazing how these products have changed people’s perception of earth and the way people travel and navigate in space. And all that in just 10 years! Of course, the contribution in this transformation by other companies, such as Apple, Microsoft, Esri, and Nokia, cannot be ignored.

This week also marks the 10th anniversary of Hurricane Katrina. Katrina happened just 2 months after Google Earth became public and it showed so clearly how useful this mapping tool could be for crisis response efforts. Since then, Google Earth and similar mapping tools have made the planet a far more connected place.

But the real success of these mapping tools is in their ability to engage groups as diverse as elementary school students, rescue workers, and NASA scientists. As for Google, this diversity has largely been supported by Google Maps API which allows both content and functionality to be embedded on third-party websites. Also released in June 2005, Google Maps API empowers web developers to build map mashups and web applications for specific groups of users which are tailored to their needs. The creation of background maps has always been the barrier for scientists and professionals in developing products and applications with mapping content. Map APIs provide an up-to-date background map in various forms (road map, satellite, hybrid, etc.) to web developers. Then, web developers can readily build a map mashup or a geospatial web application on top of that background by acquiring and processing only application specific data. Google has also released the Google Maps API Web Services to further support web developers. These growing services currently consist of eight APIs and can support geocoding, geolocation, and navigation among others.

It is hard for younger people to imagine and for older to remember a world without web maps, in the same way it is a world without mobile phones (that stopped them to worry about arranging to meet at a certain place and time). At the same time, it is harder to predict the “digital mirror” of our world in the next decade. Google celebrated the 10th anniversary of Google Earth by releasing Voyager, a new layer that help users better see places from around and above the globe. With over 2 billion downloads by people in nearly every country in the world, Google has made its intention clear to improve the quality of Google Maps (currently the resolution ranges from 15cm to 15 meters), continue to update (satellite imagery is currently not more than 3 years old), and extend its coverage to restricted places (recently N. Korea was included), indoor places (airports, train stations, shopping centres), places where vehicles, trolleys and trikes cannot reach (with backpack for hikers, camera-equipped snowmobile, underwater cameras). Future products will depend on and guide the advances in geomatics technology. No doubt that the next 10 years will be fascinating.