

Shapefiles, KML, GPX



Shapefile

A shapefile is a simple format for storing information of geographic features. Geographic features in a shapefile can be represented by points, lines, or polygons (areas).

Topography the configuration of a surface including its relief and the position of its natural and man-made features



KML

Keyhole Markup Language

The KML file specifies a set of features (place marks, images, polygons, 3D models, textual descriptions, etc.) that can be displayed on maps in [geospatial software](#) implementing the KML encoding.

Each place always has a [longitude](#) and a [latitude](#). Other data can make the view more specific, such as tilt, heading, altitude, which together define a "camera view" along with a timestamp or timespan.

KML files are very often distributed in **KMZ** files, which are [zipped](#) KML files with a .kmz extension.



GPX

GPS Exchange Format

GPX, or **GPS Exchange Format**, is an [XML schema](#) designed as a common [GPS](#) data format for software applications. It can be used to describe [waypoints](#), [tracks](#), and routes.

The format is open and can be used without the need to pay license fees.

Location data (and optionally elevation, time, and other information) is stored in tags and can be interchanged between GPS devices and software.

Common software applications for the data include viewing tracks projected onto various map sources, annotating maps, and [geotagging photographs](#) based on the time they were taken.