

# GADM file formats

The **"geopackage"** [format](#) is a very good general spatial data file format (for vector data). It is based on the [Spatialite](#) format, and can be read by software using [GDAL/OGR](#), including [R](#) (with the 'sf' package), [QGIS](#) and ArcGIS.

A **"shapefile"** consist of at least four actual files (.shp, .shx, .dbf, .prj). This is an obsolete, but still commonly used format that can be directly used in a lot of software such as ArcGIS and [DIVA-GIS](#), and many other programs.

A **"R sp" (.rds)** file has a "SpatialPolygonsDataFrame" object as defined in the **sp** package. It can be used in [R](#). To use it, first load the **sp** package using **library(sp)** and then use **readRDS("filename.rds")** (replacing "filename.rds" with the actual filename). See <http://www.rspatial.org/> to learn about using spatial data in R.

A **"R sf" (.rds)** file has a "sf" object as defined in the **sf** package. It can be used in [R](#). To use it, first load the **sp** package using **library(sp)** and then use **readRDS("filename.rds")** (replacing "filename.rds" with the actual filename). See <http://www.rspatial.org/> to learn about using spatial data in R.

A **"Google Earth .kmz"** file can be opened in [Google Earth](#).

## No longer supported file formats

An **"ESRI file geodatabase"** is the standard format used by [ArcGIS](#).

An **"ESRI personal geodatabase"** is a MS Access file that can be opened in [ArcGIS](#). One of its advantages, compared to a shapefile, is that it can store non-latin characters (e.g. Cyrillic and Chinese characters). You can also query the (attribute) data in Access or via ODBC.

Some files have been compressed and grouped in ZIP files. You can use programs such as [7-zip](#) to decompress and ungroup these files.