



## plotKML tutorial <sup>[1]</sup>

Submitted by admin on Tue, 03/06/2012 - 23:50

**Location:** *EM room*

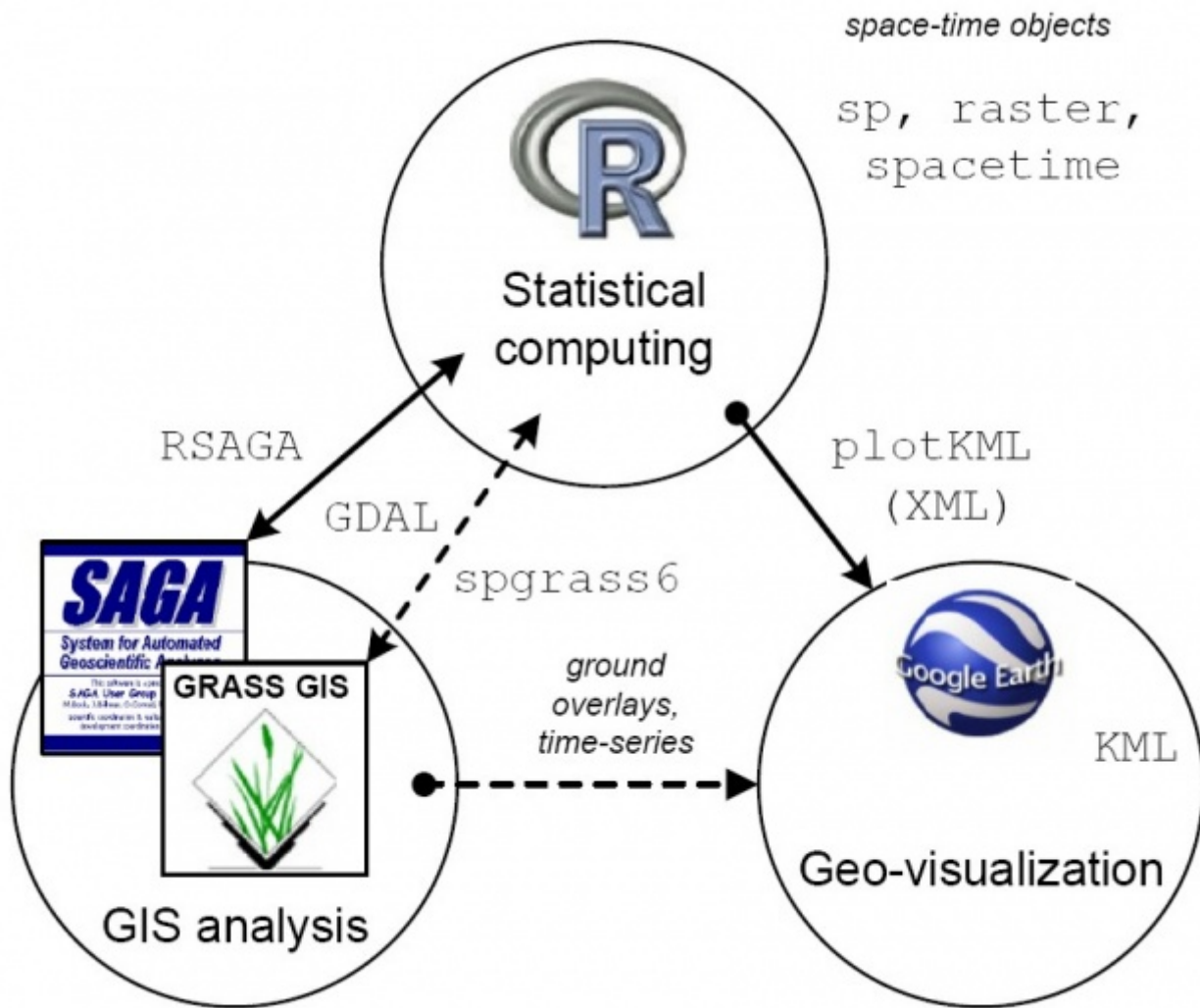
**Watch video** <sup>[2]</sup>

**Objective:** Review spatial aggregation and disaggregation methods

**General description:** plotKML <sup>[3]</sup> (R package) is a platform for scientific visualization of spatio-temporal data and models. It allows fast parsing of spatial, spatio-temporal and profile objects in R to KML and allows users to quickly visualize results of spatial analysis from R to Google Earth. The tutorial contains a number of examples and self-study exercises all based in R. Upon completing the tutorial, each participant will be able to install and run plotKML on his/her machine and import and visualize various point (profile), polygon and gridded type of data, common for environmental applications. This tutorial is intended for anyone interested in exporting data to KML (XML) and in using Google Earth to visualize data directly from R.

**Required back-ground knowledge:** sp and spacetime classes in R; XML basics;

**Software / R packages required:** plotKML, sp, raster, rgdal, gstat, aqp, XML, spacetime;



### **Software installation instructions:**

First install **plotKML** [4] and **GSIF** [5] packages.

### **Provisional programme:**

**12:30?14:00** Lunch break

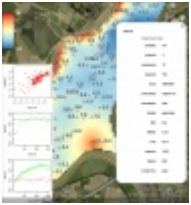
**14:00?15:30** Installation of the package and general functionality; understanding XML and KML (visualization templates; 1.5 hrs)

**16:00?17:30** Importing and visualizing profile data, polygon maps and gridded maps; making visualizations with your own datasets (1.5 hrs)

*Slides:*

### **Literature:**

- Hengl et al. 2012: **plotKML tutorial** [6].
- Yau, N. 2011. **Visualize this: The FlowingData Guide to Design, Visualization, and Statistics** [7]. Wiley
- Wernecke, J. 2010: **The KML handbook: geographic visualization for the Web** [8].



[9]

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**Source URL:** <http://geostat-course.org/content/plotkml-tutorial>

### Links

- [1] <http://geostat-course.org/content/plotkml-tutorial>
- [2] <http://archive.org/details/GeostatPlotkmlTutorial>
- [3] <http://plotkml.r-forge.r-project.org/>
- [4] <http://cran.r-project.org/web/packages/plotKML/>
- [5] <http://gsif.r-forge.r-project.org/>
- [6] <http://plotkml.r-forge.r-project.org/tutorial.php>
- [7] <http://book.flowingdata.com>
- [8] <http://books.google.nl/books?id=V50sAQAAMAAJ>
- [9] <http://geostat-course.org/node/807>