R packages

Main packages:

sp	A package that provides classes and methods for spatial data. The classes document where the spatial location information resides, for 2D or 3D data. Utility functions are provided, e.g. for plotting data as maps, spatial selection, as well as methods for retrieving coordinates, for subsetting, print, summary, etc.
sf	A package that provides access to geometry simple features, a standardized way to encode spatial vector data.
geoR	Geostatistical analysis including traditional, likelihood-based and Bayesian methods
gstat	Variogram modelling; simple, ordinary and universal kriging, simulation; variogram and variogram map plotting
spatstat	A package for analysing spatial data, mainly Spatial Point Patterns, including marked points and spatial covariates, in any two-dimensional spatial region.
stpp	A package for analysing, simulating and displaying space-time point patterns.
spacetime	Classes and methods for the analysis of spatio-temporal data.
mapview	Interactive viewing of spatial objects in R

Supplementary packages:

RColorBrewer	The package provides palettes for drawing nice maps shaded according to a variable.
lattice	A framework for data visualization
maptools	Set of tools for manipulating and reading geographic data
maps	The package to display geographical maps.
RandomFields	Simulation of Gaussian and extreme value random fields; conditional simulation; kriging
lubridate	Tools to manipulate with dates.