

Total number of libraries: 5

1) **alphahull**

Generalization of the convex hull of a sample of points in the plane. This package computes the alpha-shape and alpha-convex hull of a given sample of points in the plane. The concepts of alpha-shape and alpha-convex hull generalize the definition of the convex hull of a finite set of points. The programming is based on the duality between the Voronoi diagram and Delaunay triangulation. The package also includes a function that returns the Delaunay mesh of a given sample of points and its dual Voronoi diagram in one single object.

Package source: [alphahull_0.2-1.tar.gz](#)
MacOS X binary: [alphahull_0.2-1.tgz](#)
Windows binary: [alphahull_0.2-1.zip](#)
Reference manual: [alphahull.pdf](#)
Vignettes: [Generalizing the Convex Hull of a Sample: The R Package](#)
[alphahull](#)

2) **alphashape3d**

Implementation of the 3D alpha-shape for the reconstruction of 3D sets from a point cloud. The package `alphashape3d` presents the implementation in R of the alpha-shape of a finite set of points in the three-dimensional space. This geometric structure generalizes the convex hull and allows to recover the shape of non-convex and even non-connected sets in 3D, given a random sample of points taken into it. Besides the computation of the alpha-shape, the package `alphashape3d` provides users with functions to compute the volume of the alpha-shape, identify the connected components and facilitate the three-dimensional graphical visualization of the estimated set.

Package source: [alphashape3d_0.2.tar.gz](#)
MacOS X binary: [alphashape3d_0.2.tgz](#)
Windows binary: [alphashape3d_0.2.zip](#)
Reference manual: [alphashape3d.pdf](#)

3) **fda.usc**

Functional Data Analysis and Utilities for Statistical Computing (fda.usc).

The new R package [fda.usc](#) includes methods for:

1. Functional Data Representation
2. Exploratory Functional Data Analysis
3. Functional Outlier Detection
4. Functional Regression with Scalar Response
5. Functional Supervised and Non-Supervised Classification
6. Functional ANOVA

The purpose of this package is to integrate own developments in Functional Data Analysis with those from other authors: [fda](#) package and/or group [STAPH](#)

The package [fda.usc](#) is available through [CRAN](#) and further documentation are available:

Package source: [fda.usc_1.2.0.tar.gz](#)
Windows binary: [fda.usc_1.2.0.zip](#)
Example R scripts: [script.zip](#)
Reference manual: [fda.usc.pdf](#)
News/ChangeLog: [NEWS](#)

4) **DTDA: Doubly truncated data analysis**

This package implements different algorithms for analyzing randomly truncated data, one-sided and two-sided (i.e. doubly) truncated data. Two real data sets are included. It incorporates the iterative methods introduced by Efron and Petrosian (1999) and Shen (2008). Estimation of the lifetime distribution function and truncation times distributions is possible, together with the corresponding pointwise confidence limits based on bootstrap methods. Plots of cumulative distributions and survival functions are provided. Two real data sets are included: right-truncated AIDS data and doubly truncated data on quasar luminosities. Package source:

[DTDA_2.1-1.tar.gz](#)

MacOS X binary: [DTDA_2.1-1.tgz](#)
Windows binary: [DTDA_2.1-1.zip](#)
Reference manual: [DTDA.pdf](#)

5) Package NPCirc: Nonparametric Circular Methods

This package implements nonparametric kernel methods for density and regression estimation for circular data. Specifically, a circular kernel density estimation procedure is provided, jointly with different alternatives for choosing the smoothing parameter. In the regression setting, nonparametric estimation for circular-linear, circular-circular and linear-circular data is also possible via the adaptation of the classical Nadaraya-Watson and local linear estimators. In order to assess the significance of the features observed in the smooth curves, both for density and regression with a circular covariate and a linear response, a SiZer technique is developed for circular data, namely CircSiZer. Some real data examples are also included in the package.

6)
Librería DCL para R
DCL: Claims Reserving under the Double Chain Ladder Model.
Statistical modelling and forecasting in claims reserving in non-life insurance under the Double Chain Ladder (DCL) framework by Martinez-Miranda, Nielsen and Verrall (2012). The package implements the basic DCL model and several subsequent extensions.

Depends: [lattice](#) , [latticeExtra](#)
Published: 2013-10-25
Author: Maria Dolores Martinez-Miranda, Jens Perch Nielsen and Richard Verrall
Maintainer: Maria Dolores Martinez-Miranda <mmiranda at ugr.es>
License: [GPL-2](#)
NeedsCompilation: no
CRAN checks: [DCL results](#)

Downloads:

Reference manual: [DCL.pdf](#)
Package source: [DCL_0.1.0.tar.gz](#)
Windows binaries: r-devel: [DCL_0.1.0.zip](#) , r-release: [DC](#)
[L_0.1.0.zip](#)
[DCL_0.1.0.zip](#)
OS X Snow Leopard binaries: r-devel: [DCL_0.1.0.tgz](#) , r-oldrel: [DC](#)
[L_0.1.0.tgz](#)
OS X Mavericks binaries:r-release: [DCL_0.1.0.tgz](#)

7) Librería DValidation para R

DOvalidation: Local Linear Hazard Estimation with Do-Validated and Cross-Validated Bandwidths. Local linear estimator for the univariate hazard (hazard rate) and bandwidth parameter selection using the do-validation method and the standard least squares cross-validation method. Version: 0.1.0

Published: 2014-11-09
Author: M.L. Gamiz, E. Mammen, M.D. Martinez-Miranda and J.P. Nielsen
Maintainer: Maria Dolores Martinez-Miranda <mmiranda at ugr.es>
License: [GPL-2](#)
NeedsCompilation: no
CRAN checks: [DOvalidation results](#)

Downloads:

Reference manual: [DOvalidation.pdf](#)
Package source: [DOvalidation_0.1.0.tar.gz](#)
Windows binaries: r-devel: [DOvalidation_0.1.0.zip](#) , r-release:
[DOvalidation_0.1.0.zip](#)
[DOvalidation_0.1.0.zip](#)

OS X Snow Leopard binaries:r-release: [DOvalidation_0.1.0.tgz](#) , r-oldrel:
[DOvalidation_0.1.0.tgz](#)

OS X Mavericks binaries:r-release: [DOvalidation_0.1.0.tgz](#)