

## Change Log for R-package **ic.infer**

Version 1.0-6 (19 September 2008)

- Bug fixes:
  - **orlm** and **or.relimp** did not work properly for linear models on data frames without column names.
  - bootstrapping did not work on models with factors because of an undocumented and unnecessary stopping condition in internal function **boot.orlm**.

Version 1.0-5 (16 August 2008)

- improved error message when using **orlm** or **or.relimp** with non-quadratic matrix
- added tests directory for standard automated code testing
- added examples for **summary.orest** to documentation
- Bug fixes:
  - Fixed typo that made **ic.test** use asymptotic instead of finite df test, when applied to linear model object
  - **or.relimp** did not work for covariance matrices without column names

Version 1.0-4 (14 August 2008)

- Namespace now exports summary function for class **orest** (erroneously yielded default summary before, although a special method had been added with version 0.8-2)
- Added helpful error message for **plot.orlm**, when applied to object that was generated based on covariance matrix and therefore without residuals

Version 1.0-1 to 1.0-3 (13 August 2008)

- Prohibit simultaneous occurrence of restriction on intercept and bootstrap (consequence of switching to covariance-matrix based calculation in bootstrap)
- Bug fix for internal function **orlm.forboot** (`index - 1` replaced by `index` in call)
- Bug fixes for **ic.weights** (even and odd sums were wrongly implemented and only worked for some numbers of restrictions)

Version 1.0 (12 August 2008)

- **ic.weights** saves additional time on weight calculation by exploiting that odd and even weights each sum to 0.5.
- **orlm** and **or.relimp** can now operate based on a covariance matrix only and do not necessarily require a linear model for input.
- **all.R2** now requests a covariance matrix instead of a linear model for input (it should not be necessary for users to directly call **all.R2**).
- Bootstrapping in **orlm** is now based on the covariance-matrix-based calculation for option **fixed=FALSE**. Thus, issues are avoided in making bootstrapping work with functions that indirectly call **lm**.
- The documentation has been updated and improved in some respects.

Version 0.8-3 (01 August 2008)

- Fixed issue in bootstrapping for R-devel (changes to functions **boot.orlm**, **orlm.forboot**, **orlm.forboot.fixed**, undocumented supplementary function eliminated; documentation adjusted to changes)

#### Version 0.8-2 (01 August 2008)

- Added further test problem type (TP 21 with equality restrictions in the alternative)
- Changed argument “algorithm” in **ic.weights** to “...”, because older versions of package **mvtnorm** do not have the current default algorithm **GenzBretz()**
- Reduced requirement regarding version of R ( $R \geq 2.5.0$ ).
- Added summary function for estimation objects of class **orest**
- improved display of p-values (4 digits only, “<0.0001” for very small p-values) in print and summary functions for objects of classes **ict** and **orlm**
- added option **brief** (if TRUE (default for **ict**, while FALSE is default for **orlm**), suppresses printing of restrictions) for summary functions for objects of classes **ict** and **orlm**
- shortened display of coefficients in case of no bootstrap intervals for **summary.orlm**
- slightly changed layout of printed output for **summary.ict** and **summary.orlm**
- Changed a fixed tolerance in **ic.test** to react to the **tol**-option
- Tidied all code
- Made a few changes to documentation
- Tried to fix issue in bootstrapping for R-devel (changes to functions **boot.orlm**, **orlm.forboot** and its undocumented supplementary function, **orlm.forboot.fixed**)

#### Version 0.8-1 (17 July 2008)

- Bug-fix:  $R^2$ -values for weighted linear models and for linear models without intercept have been corrected (function **orlm**). Note that active restrictions to intercept in models with intercept can nevertheless lead to inadequate  $R^2$ -values (warning has been added to manual).
- Added error message for models with factors or higher-order terms, which do not work with functions **all.R2** and **or.relimp**, and documented this limitation.

#### Version 0.8 (15 July 2008)

- Added function **all.R2** for calculation of  $R^2$ -values for all  $2^p$  sub models of an order restricted model with  $p$  regressors
- Added function **or.relimp** for averaging  $R^2$ -values over all orders of sub models
- Improved efficiency in calculation of weights (function **ic.weights**, most expensive weight calculated from the others, if possible)
- Prevented attempts at calculating weights for problems with more restrictions than manageable (functions **ic.weights**, **ic.test** and **summary.orlm**)

#### Version 0.7 (13 July 2008)

initial version on CRAN