

# Package ‘zTree’

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**Type** Package

**Title** Functions to Import Data from 'z-Tree' into R

**Version** 1.0.7

**Date** 2021-11-03

**Author** Oliver Kirchkamp

**Maintainer** Oliver Kirchkamp <oliver@kirchkamp.de>

**Description** Read '.xls' and '.sbj' files which are written by the Microsoft Windows program 'z-Tree'. The latter is a software for developing and carrying out economic experiments (see <<http://www.ztree.uzh.ch/>> for more information).

**License** GPL-3 | file LICENSE

**Depends** R (>= 3.1.0)

**Imports** plyr (>= 1.0)

**NeedsCompilation** no

**Repository** CRAN

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zTree-package

*Functions to Import Data from 'z-Tree' into R***Description**

Read '.xls' and '.sbj' files which are written by the Microsoft Windows program 'z-Tree'. The latter is a software for developing and carrying out economic experiments (see <http://www.ztree.uzh.ch/> for more information).

**Details**

The DESCRIPTION file:

```
Package:      zTree
Type:        Package
Title:       Functions to Import Data from 'z-Tree' into R
Version:     1.0.7
Date:       2021-11-03
Author:      Oliver Kirchkamp
Maintainer:  Oliver Kirchkamp <oliver@kirchkamp.de>
Description: Read '.xls' and '.sbj' files which are written by the Microsoft Windows program 'z-Tree'. The latter is a software
License:     GPL-3 | file LICENSE
Depends:    R (>= 3.1.0)
Imports:    plyr (>= 1.0)
```

Index of help topics:

toLongDate	Converts short (old) 'z-Tree' dates into long (new) 'z-Tree' dates.
zTree-package	Functions to Import Data from 'z-Tree' into R
zTreeSbj	Read '.sbj' files generated by 'z-Tree' into R
zTreeTables	Read '.xls' files generated by 'z-Tree' into R

**Author(s)**

Oliver Kirchkamp Maintainer: Oliver Kirchkamp <oliver@kirchkamp.de>

**References**

Urs Fischbacher. "z-Tree: Zurich Toolbox for Ready-made Economic Experiments." *Experimental Economics* (2) 171-178, 2007.

Oliver Kirchkamp. "Importing z-Tree data into R." *Journal of Behavioral and Experimental Finance* (22), 1-2, 2019.

**Examples**

```
## Not run:  
zTT <- zTreeTables(c("080712_1412.xls", "080712_1818.xls"))  
  
## End(Not run)
```

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toLongDate	<i>Converts short (old) 'z-Tree' dates into long (new) 'z-Tree' dates.</i>
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**Description**

Old versions of 'z-Tree' stored dates as, e.g. 050613JN (the first six being year-month-date, the last two characters are the time). Newer versions use strings like 091112\_1600 (time is now in the last four characters). This function converts the old format into the new format

**Usage**

```
toLongDate(shortDate)
```

**Arguments**

shortDate	This should be a vector of strings, each of length 8 characters. The first six characters of each element of shortDate are year, month, date. The last two characters encode the time of the experiment.
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**Value**

A vector of the same length as shortDate. The first six characters of each element are unchanged. The last five characters are now the time translated.

**Author(s)**

Oliver Kirchkamp

**References**

Urs Fischbacher. "z-Tree Manual 2.1 Experimenter's Manual". Zurich. 2002.

**Examples**

```
toLongDate("091112JN")
```

---

zTreeSbj

*Read '.sbj' files generated by 'z-Tree' into R*


---

### Description

Read '.sbj' files which are written by the Microsoft Windows program 'z-Tree'. The latter is a software for developing and carrying out economic experiments (see <http://www.ztree.uzh.ch/> for more information).

### Usage

```
zTreeSbj(files, sep = "\t", zTree.silent=getOption("zTree.silent"),
zTree.encoding=getOption("zTree.encoding"), ignore.errors=FALSE)
```

### Arguments

files	A vector of 'z-Tree' .sbj filenames
sep	'z-Tree' uses "\t" as a separator. If you have a manipulated file, you might need to change the separator.
zTree.silent	If TRUE, generates less verbose output.
zTree.encoding	zTree writes text files and seems to use latin1 (windows-1252) encoding for these files.
ignore.errors	Usually, zTreeSbj stops with an error when it detects a wrong encoding. With ignore.errors=TRUE it only generates a warning.

### Value

A data frame with one entry for each subject.

### Author(s)

Oliver Kirchkamp

### References

Urs Fischbacher. "z-Tree: Zurich Toolbox for Ready-made Economic Experiments." *Experimental Economics* (2) 171-178, 2007.

### See Also

See also zTreeTables

## Examples

```
## Not run:
files <- list.files(pattern = "*.sbj$",recursive=TRUE)
fname <- sub(".*/", "", files)
sbj <- zTreeSbj(aggregate(files,list(fname),function(x) x[1])$x)

## End(Not run)
```

---

zTreeTables

*Read '.xls' files generated by 'z-Tree' into R*

---

## Description

Read '.xls' files which are written by the Microsoft Windows program 'z-Tree'. The latter is a software for developing and carrying out economic experiments (see <http://www.ztree.uzh.ch/> for more information).

## Usage

```
zTreeTables(files, tables = c("globals", "subjects"), sep = "\t",
zTree.silent=getOption("zTree.silent"),
zTree.encoding=getOption("zTree.encoding"), ignore.errors=FALSE)
```

## Arguments

files	a vector of 'z-Tree' (xls-) filenames.
tables	a vector of table names. If you leave this empty, globals and subjects will be read. If you set tables=NULL, all tables will be read.
sep	Field separator. 'z-Tree' uses "\t" as a separator. If you have a manipulated file, you might need to change the separator.
zTree.silent	If TRUE, generates less verbose output.
zTree.encoding	zTree writes text files and seems to use latin1 (windows-1252) encoding for these files.
ignore.errors	Usually, zTreeTables stops with an error when it detects a wrong encoding or a manipulated file. With ignore.errors=TRUE it only generates a warning.

## Value

A list of all tables (e.g. "globals", "subjects", etc.)

## Author(s)

Oliver Kirchkamp

**References**

Urs Fischbacher. "z-Tree: Zurich Toolbox for Ready-made Economic Experiments." *Experimental Economics* (2) 171-178, 2007.

**See Also**

See also `zTreeSbj`

**Examples**

```
## Not run:  
zTT <- zTreeTables(c("080712_1412.xls", "080712_1818.xls"))  
with(zTT$subjects, table(Treatment, Period))  
To read all tables from all sessions in directories below the current one:  
sessions<-list.files(".", "[0-9]{6}_[0-9]{4}.xls", recursive=TRUE)  
zTT<-zTreeTables(sessions, tables=NULL)  
  
## End(Not run)
```

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