

Package ‘WINRPACK’

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Type Package

Title Read in WIN format data

Version 1.0-9

Date 2008-04-25

Depends RSEIS

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Description Reads in WIN pickfile and waveform file, prepares data for RSEIS

License GPL

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WINRPACK-package *Read and convert WIN format to R*

Description

Package reads in WIN format data from Japan and converts to R

Details

Package: WINRPACK
Type: Package
Version: 1.0-9
Date: 2008-04-25
License: GPL

Note

get1WINPICK Read one WIN pickfile
readwinch Read WIN channel file
XWINdataASK Extract win format to ASCII
XWINdata Extract WIN format
getjul Get Julian day
myscan1 Scan a character string
tojul Convert to Julian Day. Used for calculations.

Author(s)

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See Also

RSEIS, Rsac

Examples

```
## Not run:  
  
### this example will run in the inst/doc folder of this distribution  
  
### set the pick file  
winpick = "970723.235151.840"
```

```

### read in the pick file
zip = get1WINPICK(winpick)
  fn = zip$winID1
chans = readwinch(fn)

  m1 = match(zip$STA$name, chans$sta)

      zip$STA$lat = chans$lat[m1]
      zip$STA$lon = chans$lon[m1]
      zip$STA$z   = chans$z[m1]

## read in the waveform data
JH = XWINdata(fn, stasel=NULL, PLOT=FALSE)

require(RSEIS)

### prepare the structure for RSEIS
KH = prepSEIS(JH)
w1 = which(KH$COMPS=="V")

### plot in RSEIS
PICK.GEN(KH, sel = w1, SHOWONLY =TRUE )

## End(Not run)

```

get1WINPICK

Read one WIN pickfile

Description

Read one WIN pickfile

Usage

```
get1WINPICK(fn)
```

Arguments

fn	file name
----	-----------

Value

List:

PF	original pick file
AC	event card (a-card)
LOC	location
yr	year

jd	julian day
mo	month
dom	day or month
hr	hour
mi	minute
sec	sec
lat	lat
lon	lon
z	depth (km)
mag	magnitude
MC	focal mechanism card
REFT	Reference time for phase arrivals
yr	year
jd	julian day
mo	month
dom	day or month
hr	hour
mi	minute
sec	sec
STA	List of stations
tag	id tag for station
name	station name
comp	component
c3	other id tag
ppol	polarity
parr	p-arrival time relative to reference
pflg	flag
perr	p-error
pres	p-residual
sarr	s-arrival time relative to reference
sflg	flag
serr	s-error
sres	s-residual
LIP	error ellipse
E	simple error card
infile	input file name
winID1	WIN ID number
LEVEL	level
PICKER	name of picker

Author(s)

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getjul

Get Julian day

Description

Get Julian day

Usage

getjul(year, month, day)

Arguments

year	year
month	month
day	day of month

Value

Julian Day

Author(s)

Jonathan M. Lees<jonathan.lees.edu>

See Also

getmoday

Examples

getjul(2003, 11, 13)

myscan1

Scan a character string

Description

Scan a character string

Usage

```
myscan1(string, what = character(0), ...)
```

Arguments

<code>string</code>	character String
<code>what</code>	list to scan
<code>...</code>	other parameters

Details

Uses C-like functions for scanning

Value

list of objects

Author(s)

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See Also

scan, strsplit

Examples

```
h = "this is a joke"  
myscan1(h, what="")
```

readwinch *Read WIN channel file*

Description

Read WIN channel file

Usage

```
readwinch(fn, wigdir = "/home/lees/Site/Fuji/WIG")
```

Arguments

fn	file name
wigdir	name of directory where waveforms reside

Value

List:

code	code for id of event
sta	station name
comp	component
sense	sensitivity
lat	LAT
lon	LON
z	depth

Author(s)

Jonathan M. Lees<jonathan.lees@unc.edu>

tojul *Julian Day*

Description

Convert to Julian Day. Used for calculations.

Usage

```
tojul(year, month, day)
```

Arguments

year	year
month	month
day	day

Value

Julian Days

Author(s)

Jonathan M. Lees<jonathan.lees.edu>

Examples

```
tojul(1953, 3, 19)
```

XWINdata

Extract WIN format

Description

Extract WIN format

Usage

```
XWINdata(fn, stasel = stasel, PLOT = FALSE)
```

Arguments

fn	file name
stasel	selection of stations
PLOT	logical wheaterh to plot

Value

List of of seismic traces (time series with headers):

fn	original file name
sta	station name
comp	component
dt	delta t in seconds
DATTIM	time list
yr	year
jd	julian day

mo	month
dom	day of month
hr	hour
mi	minute
sec	sec
msec	milliseconds
dt	delta t in seconds
t1	time start of trace
t2	time end of trace
off	off-set
N	number of points in trace
units	units
amp	vector of trace values

Author(s)

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XWINdataASK

Extract win format to ASCII

Description

Extract win format to ASCII

Usage

```
XWINdataASK(fn, stasel = stasel, PLOT = FALSE)
```

Arguments

fn	file name
stasel	selection of stations
PLOT	logical wheaterh to plot

Value

List	stuff
fn	original file name
sta	station name
comp	compnent
dt	delta t in seconds
DATTIM	time list
yr	year
jd	julian day
mo	month
dom	day of month
hr	hour
mi	minute
sec	sec
msec	milliseconds
dt	delta t in seconds
t1	time start of trace
t2	time end of trace
off	off-set
N	number of points in trace
units	units
amp	vector of trace values

Author(s)

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