# Package 'term'

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Title Create, Manipulate and Query Parameter Terms
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<b>Description</b> Creates, manipulates, queries and repairs vectors of parameter terms. Parameter terms are the labels used to reference values in vectors, matrices and arrays. They represent the names in coefficient tables and the column names in 'mcmc' and 'mcmc.list' objects.
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as\_term

Coerce to a Term Vector

# Description

Coerces an R object to a term-vector().

# Usage

```
as_term(x, ...)
as.term(x, ...)
## S3 method for class 'character'
as_term(x, repair = FALSE, normalize = repair, ...)
```

as\_term\_rcrd 3

```
## S3 method for class 'numeric'
as_term(x, name = "par", ...)
```

# Arguments

x The object.
... Unused.

repair A flag specifying whether to repair terms.

normalize A flag specifying whether to normalize terms.

name A string specifying the name of the parameter.

#### **Details**

as.term has been **Soft-deprecated** for as\_term.

## Methods (by class)

- character: Coerce character vector to term vector
- numeric: Coerce numeric object to term vector

#### See Also

```
term-vector() and repair_terms()
```

# Examples

```
as_term(matrix(1:4, 2))
as_term(c("parm3[10]", "parm3[2]", "parm[2,2]", "parm[1,1]"))
```

as\_term\_rcrd

Coerce to a Term Record

# Description

Coerces an R object to a term\_rcrd.

## Usage

```
as_term_rcrd(x, ...)
## S3 method for class 'character'
as_term_rcrd(x, repair = FALSE, ...)
## S3 method for class 'numeric'
as_term_rcrd(x, name = "par", ...)
## S3 method for class 'term'
as_term_rcrd(x, repair = FALSE, ...)
```

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#### **Arguments**

x The object.
... Unused.

repair A flag specifying whether to repair terms.

A string specifying the name of the parameter.

## Methods (by class)

 $\bullet$  character: Coerce character vector to term\_rcrd

• numeric: Coerce numeric vector to term\_rcrd

• term: Coerce term vector to term\_rcrd

#### See Also

```
repair_terms()
```

## **Examples**

```
as_term(matrix(1:4, 2))
as_term(c("parm3[10]", "parm3[2]", "parm[2,2]", "parm[1,1]"))
```

chk\_term

Check Term or Term Record

## **Description**

Checks if term using vld\_term() or vld\_term\_rcrd().

## Usage

```
chk_term(x, validate = "complete", x_name = NULL)
chk_term_rcrd(x, validate = "complete", x_name = NULL)
```

## **Arguments**

x The object.

validate A string specifying the level of the validation. The possible values in order of

increasing strictness are 'class', 'valid', 'consistent' and 'complete'.

x\_name A string of the name of object x or NULL.

## Value

NULL, invisibly. Called for the side effect of throwing an error if the condition is not met.

#### **Functions**

• chk\_term\_rcrd: Check Term Record

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## **Examples**

```
# chk_term
x <- term("x[2]", "x[1]")
chk_term(x)
x <- c("x[2]", "x[1]")
try(chk_term(x, validate = "sorted"))

# chk_term_rcrd
x <- term_rcrd("x[2]", "x[1]")
chk_term_rcrd(x)
x <- c("x[2]", "x[1]")
try(chk_term_rcrd(x, validate = "sorted"))</pre>
```

complete\_terms

Complete Terms

# Description

Completes an object's terms.

## Usage

```
complete_terms(x, ...)
## S3 method for class 'term'
complete_terms(x, ...)
## S3 method for class 'term_rcrd'
complete_terms(x, ...)
```

# Arguments

```
x The object. . . . Unused.
```

#### **Details**

It must not have any invalid or missing (NA) values.

# Methods (by class)

- term: Complete Terms for a term Vector
- term\_rcrd: Complete Terms for a term\_rcrd vector

# See Also

```
term-vector(), repair_terms() and is_incomplete_terms().
```

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## **Examples**

```
complete_terms(term("b[3]", "b[1]", "b[2]"))
complete_terms(term("z[2,2]", "z[1,1]"))
## Not run:
complete_terms(term_rcrd("b[3]", "b[1]", "b[2]"))
complete_terms(term_rcrd("z[2,2]", "z[1,1]"))
## End(Not run)
```

consistent\_term

Consistent Terms

## **Description**

Test whether the number of dimensions of terms in the same parameter are consistent.

# Usage

```
consistent_term(x)
```

#### **Arguments**

Х

The object.

## Value

A logical vector indicating whether the number of dimensions is consistent.

# See Also

```
term-vector() and npdims()
```

# **Examples**

```
consistent\_term(term("alpha[1]", "alpha[3]", "beta[1,1]", "beta[2,1]")) \\ consistent\_term(term("alpha[1]", NA\_term\_, "beta[1,1]", "beta[2]")) \\
```

dims.term

Dimensions

# Description

Gets the dimensions of an object.

# Usage

```
## S3 method for class 'term' dims(x, ...)
```

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## **Arguments**

x An object.

. . . Other arguments passed to methods.

## **Details**

Unlike base::dim(), dims returns the length of an atomic vector.

## Value

An integer vector of the dimensions.

#### See Also

```
base::dim()
Other dimensions: ndims(), npdims(), pdims()
```

## **Examples**

```
dims(term("beta[1,1]"))
dims(term("beta[1,1]", "beta[1,2]"))
```

dims.term\_rcrd

**Dimensions** 

# Description

Gets the dimensions of an object.

## Usage

```
## S3 method for class 'term_rcrd'
dims(x, ...)
```

# Arguments

x An object.

... Other arguments passed to methods.

## **Details**

Unlike base::dim(), dims returns the length of an atomic vector.

#### Value

An integer vector of the dimensions.

## See Also

```
base::dim()
Other dimensions: ndims(), npdims(), pdims()
```

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## **Examples**

```
dims(term_rcrd("beta[1,1]"))
dims(term_rcrd("beta[1,1]", "beta[1,2]"))
```

## **Description**

Tests whether a term vector has absent elements. The vector should not require repairing.

# Usage

```
is_incomplete_terms(x, ...)
```

## **Arguments**

```
x The object. ... Unused.
```

#### Value

A logical scalar indicating whether the object's terms are incomplete.

## See Also

```
term-vector() and complete_terms()
```

## **Examples**

```
is_incomplete_terms(term("b[2]"))
is_incomplete_terms(term("b[2]", "b[1]"))
is_incomplete_terms(term("b[2]", "b[1]", "b[1]"))
```

```
is_inconsistent_terms Is Inconsistent Terms
```

## **Description**

Tests whether a term vector has inconsistent elements. Returns TRUE if includes missing or invalid terms.

# Usage

```
is_inconsistent_terms(x, ...)
```

## **Arguments**

```
x The object. ... Unused.
```

is\_term 9

#### Value

A logical scalar indicating whether the object's terms are inconsistent.

#### See Also

```
term-vector() and consistent_term()
```

# **Examples**

```
is_inconsistent_terms(term("b[2]"))
is_inconsistent_terms(term("b[2]", "b[1]"))
is_inconsistent_terms(term("b[2]", "b[1,1]"))
```

is\_term

Is Term

# Description

Tests whether an R object inherits from S3 class term.

# Usage

```
is_term(x)
```

## Arguments

Χ

The object.

#### **Details**

It does not test the validity of consistency of the term elements.

# Value

A flag indicating whether the test was positive.

# See Also

```
term-vector(), vld_term(), valid_term() and consistent_term()
```

```
is_term(c("parameter[2]", "parameter[10]"))
is_term(term("parameter[2]", "parameter[10]"))
```

NA\_term\_

is\_term\_rcrd

Is Term Record

# Description

Tests whether an R object inherits from S3 class term\_rcrd.

## Usage

```
is_term_rcrd(x)
```

# **Arguments**

Χ

The object.

#### **Details**

It does not test the validity of consistency of the term elements.

# Value

A flag indicating whether the test was positive.

## See Also

```
valid_term() and consistent_term()
```

# **Examples**

```
is_term_rcrd(new_term_rcrd())
```

NA\_term\_

Missing Term

# **Description**

A missing term element.

# Usage

NA\_term\_

# **Format**

An object of class term (inherits from vctrs\_vctr) of length 1.

# See Also

```
term-vector()
```

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## **Examples**

```
is_term(NA_term_)
is.na(NA_term_)
```

NA\_term\_rcrd\_

Missing Term

# Description

A missing term element of term\_rcrd type.

## Usage

```
NA_term_rcrd_
```

## **Format**

An object of class term\_rcrd (inherits from vctrs\_rcrd, vctrs\_vctr) of length 1.

## See Also

```
term-vector()
```

# **Examples**

```
is_term_rcrd(NA_term_)
is.na(NA_term_)
```

new\_term

Construct a new term object

## **Description**

Use this function to quickly construct a term object from a character vector, without checking the input. Use term() to repair the input.

## Usage

```
new\_term(x = character())
```

## **Arguments**

Х

A character vector.

```
new_term()
new_term(c("a", "b[1]", "b[2]"))

# Terms are not checked for validity:
new_term("r[")
repair_terms(new_term("r["))
```

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new\_term\_rcrd

Construct a new term\_rcrd object

## **Description**

Use this function to quickly construct a term\_rcrd object.

### Usage

```
new_term_rcrd(
   x = data.frame(par = character(), dim = I(list()), stringsAsFactors = FALSE)
)
```

# Arguments

Х

A data frame with columns par and dim.

# **Examples**

```
new_term_rcrd()
## Not run:
new_term_rcrd(data.frame(
  par = c("x", "x", "y"), dim = I(list(1, 2, c(2,2))),
  stringsAsFactors = FALSE
))
## End(Not run)
```

normalize\_terms

Normalize Terms

# Description

Normalizes a term vector.

# Usage

```
normalize_terms(x)
```

## **Arguments**

Х

The object.

# **Details**

If a parameter such as b is a scalar then b[1] is replaced by b but if higher indices are included such as b[2] then b is replaced by b[1].

# Value

The normalized term vector.

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#### See Also

```
term-vector() and repair_terms()
```

# **Examples**

```
normalize_terms(new_term(c("b", "b[3]")))
normalize_terms(new_term(c("b[1]", "a[3]")))
```

npars.term

Number of Parameters

## **Description**

Gets the number of parameters of an object.

The default methods returns the length of pars() if none are NA, otherwise it returns NA.

## Usage

```
## S3 method for class 'term'
npars(x, scalar = NULL, ...)
```

#### **Arguments**

x An object.

scalar A flag specifying whether to by default return all parameters (NULL), or only

scalar parameters (TRUE) or only non-scalar parameters (FALSE).

... Other arguments passed to methods.

#### Value

An integer scalar of the number of parameters.

#### See Also

```
pars()
```

```
Other MCMC dimensions: nchains(), niters(), nsams(), nsims(), nterms()
Other parameters: pars(), set_pars()
```

```
npars(term("sigma", "alpha[1]", "alpha[2]", "beta[1,1]", "beta[2,1]"))
```

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npdims.term

Number of Dimensions of each Parameter

## **Description**

The terms argument is **Defunct** 

# Usage

```
## S3 method for class 'term'
npdims(x, terms = FALSE, ...)
```

#### **Arguments**

x An object.

terms A flag specifying whether to get the number of dimensions for each term ele-

ment.

... Other arguments passed to methods.

#### Value

A named integer vector of the number of dimensions of each parameter.

## See Also

```
Other dimensions: dims(), ndims(), pdims()
```

# **Examples**

```
npdims(term("alpha[1]", "alpha[3]", "beta[1,1]", "beta[2,1]"))
```

nterms.default

Number of Terms

# Description

Gets the number of terms of an object.

## Usage

```
## Default S3 method:
nterms(x, ...)
```

## **Arguments**

x An object.

... Other arguments passed to methods.

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#### Value

A integer scalar of the number of terms.

#### See Also

```
Other MCMC dimensions: nchains(), niters(), npars(), nsams(), nsims()
```

# **Examples**

```
nterms(term("alpha[1]", "alpha[2]", "beta[1,1]", "beta[2,1]"))
nterms(term("alpha[1]", "alpha[1]", "beta[1,1]", "beta[1,1]"))
```

nterms.term

Number of Terms of a term

# Description

Gets the number of terms of an MCMC object.

#### Usage

```
## S3 method for class 'term'
nterms(x, ...)
```

## **Arguments**

x An object.

... Other arguments passed to methods.

## Value

A integer scalar of the number of terms.

#### See Also

```
Other MCMC dimensions: nchains(), niters(), npars(), nsams(), nsims()
```

```
nterms(term("alpha[1]", "alpha[2]", "beta[1,1]", "beta[2,1]"))
nterms(term("alpha[1]", "alpha[1]", "beta[1,1]", "beta[1,1]"))
```

pars.character

nterms.term\_rcrd

Number of Terms of a term\_rcrd

## **Description**

Gets the number of terms of an MCMC object.

#### Usage

```
## S3 method for class 'term_rcrd'
nterms(x, ...)
```

#### **Arguments**

x An object.

... Other arguments passed to methods.

#### Value

A integer scalar of the number of terms.

## See Also

```
Other MCMC dimensions: nchains(), niters(), npars(), nsams(), nsims()
```

# **Examples**

```
nterms(as\_term\_rcrd(term("alpha[1]", "alpha[2]", "beta[1,1]", "beta[2,1]"))) \\ nterms(as\_term\_rcrd(term("alpha[1]", "alpha[1]", "beta[1,1]", "beta[1,1]")))
```

pars.character

Parameter Names

# Description

Gets the parameter names.

# Usage

```
## S3 method for class 'character'
pars(x, scalar = NULL, ...)
```

## **Arguments**

x An object.

scalar A flag specifying whether to by default return all parameters (NULL), or only

scalar parameters (TRUE) or only non-scalar parameters (FALSE).

... Other arguments passed to methods.

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#### Value

A character vector of the names of the parameters.

#### See Also

```
Other parameters: npars(), set_pars()
```

## **Examples**

```
pars(c("a", "b[1]", "a[3]"))
```

pars.default

Parameter Names

# Description

Gets the parameter names.

# Usage

```
## Default S3 method:
pars(x, scalar = NULL, ...)
```

# **Arguments**

x An object.

scalar A flag specifying whether to by default return all parameters (NULL), or only

scalar parameters (TRUE) or only non-scalar parameters (FALSE).

... Other arguments passed to methods.

# Value

A character vector of the names of the parameters.

## See Also

```
Other parameters: npars(), set_pars()
```

```
pars(matrix(1:4, nrow = 2))
```

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pars.term

Parameter Names

#### **Description**

Gets the parameter names.

#### Usage

```
## S3 method for class 'term'
pars(x, scalar = NULL, terms = FALSE, ...)
```

## Arguments

x An object.

scalar A flag specifying whether to by default return all parameters (NULL), or only scalar parameters (TRUE) or only non-scalar parameters (FALSE).

terms A flag specifying whether to return the parameter name for each term element.

... Other arguments passed to methods.

## Value

A character vector of the names of the parameters.

## See Also

```
Other parameters: pars.term_rcrd(), pars_terms()
```

# **Examples**

```
term <- term(
   "alpha[1]", "alpha[2]", "beta[1,1]", "beta[2,1]",
   "beta[1,2]", "beta[2,2]", "sigma", NA
)
pars(term)
pars(term, scalar = TRUE)
pars(term, scalar = FALSE)</pre>
```

pars.term\_rcrd

Parameter Names

# Description

Gets the parameter names.

# Usage

```
## S3 method for class 'term_rcrd'
pars(x, scalar = NULL, ...)
```

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## **Arguments**

x An object.

scalar A flag specifying whether to by default return all parameters (NULL), or only

scalar parameters (TRUE) or only non-scalar parameters (FALSE).

... Other arguments passed to methods.

#### Value

A character vector of the names of the parameters.

## See Also

```
Other parameters: pars.term(), pars_terms()
```

## **Examples**

```
term <- term(
   "alpha[1]", "alpha[2]", "beta[1,1]", "beta[2,1]",
   "beta[1,2]", "beta[2,2]", "sigma", NA
)
pars(term)
pars(term, scalar = TRUE)
pars(term, scalar = FALSE)</pre>
```

pars\_terms

Term Parameters

# Description

Gets the name of each parameter for each term.

# Usage

```
pars_terms(x, scalar = NULL, ...)
```

# Arguments

x A term vector.

scalar A flag specifying whether to by default return all parameters (NULL), or only

scalar parameters (TRUE) or only non-scalar parameters (FALSE).

... Unused.

## **Details**

The scalar argument is **Defunct** 

# Value

A character vector of the term parameter names.

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#### See Also

```
Other parameters: pars.term_rcrd(), pars.term()
```

## **Examples**

```
term <- term(
  "alpha[1]", "alpha[2]", "beta[1,1]", "beta[2,1]",
  "beta[1,2]", "beta[2,2]", "sigma", NA
)
pars_terms(term)</pre>
```

pdims.term

Parameter Dimensions

# **Description**

Gets the dimensions of each parameter of an object.

## Usage

```
## S3 method for class 'term'
pdims(x, ...)
```

# **Arguments**

x An object.

. . . Other arguments passed to methods.

## **Details**

Errors if the parameter dimensions are invalid or inconsistent.

A named list of the dimensions of each parameter can be converted into the equivalent term-vector() using term().

# Value

A named list of integer vectors of the dimensions of each parameter.

#### See Also

```
Other dimensions: dims(), ndims(), npdims()
```

```
pdims(term("alpha[1]", "alpha[3]", "beta[1,1]", "beta[2,1]"))
```

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pdims.term\_rcrd

Parameter Dimensions

# Description

Gets the dimensions of each parameter of an object.

## Usage

```
## S3 method for class 'term_rcrd'
pdims(x, ...)
```

## **Arguments**

x An object.

. . . Other arguments passed to methods.

## **Details**

Errors if the parameter dimensions are inconsistent.

#### Value

A named list of integer vectors of the dimensions of each parameter.

#### See Also

```
Other dimensions: dims(), ndims(), npdims()
```

## **Examples**

```
pdims(as_term_rcrd(term("alpha[1]", "alpha[3]", "beta[1,1]", "beta[2,1]")))
```

repair\_terms

Repair Terms

# Description

Repairs a terms vector.

# Usage

```
repair_terms(x, normalize = TRUE)
```

## **Arguments**

x The object.

normalize A flag specifying whether to normalize terms.

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#### **Details**

Invalid elements are replaced by missing values and spaces removed.

#### Value

The repaired term vector.

# See Also

```
term-vector(), valid_term() and normalize_terms()
```

# **Examples**

```
repair_terms(new_term(c("b[3]", "b")))
repair_terms(new_term(c("a[3]", "b[1]")))
repair_terms(new_term(c("a [3]", " b [ 1 ] ")))
repair_terms(new_term(c("a", NA)))
```

scalar\_term

Scalar Term

# Description

Test whether each term is a scalar.

# Usage

```
scalar_term(x)
```

## **Arguments**

Χ

The object.

# Value

A logical vector indicating whether the term is a scalar.

```
scalar_term(term("alpha[1]", "alpha[3]", "beta[1]", "sigma[3]"))
scalar_term(term("alpha[1]", NA_term_, "beta[1]", "beta[3]"))
```

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set\_pars.term

Set Parameter Names

## **Description**

Sets an object's parameter names.

The assignment version pars<-() forwards to set\_pars().

## Usage

```
## S3 method for class 'term'
set_pars(x, value, ...)
```

# Arguments

An object.

value A character vector of the new parameter names.

... Other arguments passed to methods.

## **Details**

value must be a unique character vector of the same length as the object's parameters.

#### Value

The modified object.

## See Also

```
Other parameters: npars(), pars()
```

## **Examples**

```
term <- as_term(c("b[2]", "a[1]", "b[3,3]"))
set_pars(term, c("x", "y"))</pre>
```

subset.term

Subset Term Vector

# Description

Subsets a term vector.

# Usage

```
## S3 method for class 'term'
subset(x, pars = NULL, select = NULL, ...)
```

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## **Arguments**

x The object.

pars A character vector of parameter names.

select A character vector of the names of the parameters to include in the subsetted

object.

... Unused.

## **Details**

The select argument is **Defunct**.

#### Value

The modified term vector.

#### See Also

```
term-vector()
```

# **Examples**

```
term <- term(
   "alpha[1]", "alpha[2]", "beta[1,1]", "beta[2,1]",
   "beta[1,2]", "beta[2,2]", "sigma"
)
subset(term, "beta")
subset(term, c("alpha", "sigma"))</pre>
```

subset.term\_rcrd

Subset Term Record

# Description

Subsets a term\_rcrd.

# Usage

```
## S3 method for class 'term_rcrd'
subset(x, pars = NULL, ...)
```

# Arguments

x The object.

pars A character vector of parameter names.

... Unused.

## Value

The modified term vector.

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#### See Also

```
term_rcrd_object()
```

#### **Examples**

```
term_rcrd <- term_rcrd(
   "alpha[1]", "alpha[2]", "beta[1,1]", "beta[2,1]",
   "beta[1,2]", "beta[2,2]", "sigma"
)
## Not run:
subset(term_rcrd, "beta")
subset(term_rcrd, c("alpha", "sigma"))
## End(Not run)</pre>
```

term

Term Vector

## **Description**

Creates a term vector from values. A term vector is an S3 vector of parameter terms of the form p, q[#] or r[#,#] where # are positive integers. This function checks that all terms are valid but does not require stronger levels of consistency, see chk\_valid() for details.

## Usage

```
term(...)
```

# Arguments

... Unnamed values are term values, named values describe the parameter in the name and the dimensionality in the value.

## Value

A term vector.

#### See Also

```
dims() and pdims()
```

```
term()
term("p", "q[1]", "q[2]", "q[3]")
term("q[1]", "q[2]", "q[3]")
combined <- term(par = 2:4, "alpha")
pdims(combined)
term(!!!pdims(combined))

# Invalid terms are rejected:
try(term("r["))

# Valid terms are repaired
term("r [ 1 ,2 ]")</pre>
```

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term\_rcrd

Term Record

# Description

Creates a term\_rcrd from values. This function checks that all terms are valid but does not require stronger levels of consistency, see chk\_valid() for details.

# Usage

```
term_rcrd(...)
```

## **Arguments**

... Unnamed values are term values, named values describe the parameter in the name and the dimensionality in the value.

# Value

A term\_rcrd vector.

#### See Also

```
dims() and pdims()
```

## **Examples**

```
term_rcrd()
## Not run:
term_rcrd("p", "q[1]", "q[2]", "q[3]")
term_rcrd("q[1]", "q[2]", "q[3]")
## End(Not run)
```

tindex

Term Index

# Description

Gets the index for each term of an term or term\_rcrd object.

# Usage

```
tindex(x)
```

## **Arguments**

Х

The object.

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#### **Details**

For example the index of beta[2,1] is c(2L,1L) while the index for sigma is 1L. It is useful for extracting the values of individual terms.

## Value

A named list of integer vectors of the index for each term.

# **Examples**

```
tindex(term("alpha", "alpha[2]", "beta[1,1]", "beta[2 ,1 ]"))
```

valid\_term

Valid Terms

# Description

Test whether each element in a term or term\_rcrd object is valid.

#### Usage

```
valid_term(x)
```

# Arguments

Χ

The object.

#### **Details**

Repairing a term vector replaces invalid terms with missing values.

#### Value

A logical vector indicating whether each term is valid.

## See Also

```
term-vector() and repair_terms()
```

```
# valid term elements
valid_term(term("a", "a [3]", " b [ 1 ] ", "c[1,300,10]"))
# invalid term elements
valid_term(new_term(c("a b", "a[1]b", "a[0]", "b[1,]", "c[]", "d[1][2]")))
```

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vld\_term

Validate Term or Term Record

## **Description**

Validates the elements of a term or term\_rcrd vector. Use chk\_s3\_class() to check if an object is a term or term\_rcrd.

## Usage

```
vld_term(x, validate = "complete")
vld_term_rcrd(x, validate = "complete")
```

#### **Arguments**

x The object.

validate

A string specifying the level of the validation. The possible values in order of increasing strictness are 'class', 'valid', 'consistent' and 'complete'.

## **Details**

Internal validity of a term can be checked on three levels:

- "valid" checks that all terms are of the form x, x[#], x[#,#] etc. where x is an identifier and # are positive integers.
- "consistent" checks that all terms are addressed with the same dimensionality; the terms x[1] and x[2,3] are inconsistent.
- "complete" checks that the values span all possible values across all dimensions; if x[3,4] exist, the vector must contain at least 11 more terms to be consistent (x[1,1] to x[1,4], x[2,1] to x[2,4] and x[3,1] to x[3,3]).

Missing values are ignored as are duplicates and order.

## Value

A flag indicating whether the condition was met.

## **Functions**

• vld\_term\_rcrd: Validate Term Record

#### See Also

```
chk_term()
```

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```
# vld_term
vld_term(c("x[2]", "x[1]"))
vld_term(term("x[2]", "x[1]"))

# vld_term_rcrd
vld_term_rcrd(c("x[2]", "x[1]"))
vld_term_rcrd(term_rcrd("x[2]", "x[1]"))
```

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