Package ‘plsmod’

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Title Model Wrappers for Projection Methods
Version 0.0.1
Description Bindings for additional regression models for use
with the ‘parsnip’ package, including ordinary and spare partial least
squares models for regression and classification (Rohart et al (2017)
<doi:10.1371/journal.pcbi.1005752>).
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multi_predict_mixopls

Model predictions across many sub-models

Description
Model predictions across many sub-models

Usage

```r
## S3 method for class \'mixopls\'
multi_predict(object, new_data, num_comp = NULL, type = NULL, ...)

## S3 method for class \'mixospls\'
multi_predict(object, new_data, num_comp = NULL, type = NULL, ...)

## S3 method for class \'mixoplsda\'
multi_predict(object, new_data, num_comp = NULL, type = NULL, ...)

## S3 method for class \'mixosplsda\'
multi_predict(object, new_data, num_comp = NULL, type = NULL, ...)
```

Arguments

- `object` An object of class `model_fit`
- `new_data` A rectangular data object, such as a data frame.
- `num_comp` An integer vector for the number of PLS terms to retain.
- `type` A single character value or `NULL`. Possible values are "numeric", "class", or "prob". When `NULL`, `predict()` will choose an appropriate value based on the model's mode.
- `...` Not currently used.

Examples

```r
data(meats, package = "modeldata")

mv_meats <-
  pls(num_comp = 20, num_terms = 10) %>%
  set_engine("mixOmics") %>%
  set_mode("regression") %>%
  fit_xy(x = meats[-(1:5), 1:100], y = meats[-(1:5), 101:103])

pred_vals <- multi_predict(mv_meats, meats[1:5, 1:100], num_comp = 1:10)
# Predictions over components nested within sample rows
pred_vals
```
# For first sample:
```r
pred_vals$.pred[[1]]
```
Details

The model can be created using the `fit()` function using the following engines:

- **R**: "mixOmics" (the default)

Engine Details

Engines may have pre-set default arguments when executing the model fit call. The possible model calls are shown in the Examples section below.

Examples

```r
tidy.mixo_pls

model <- pls(num_terms = 10)
model
update(model, num_terms = 1)
update(model, num_terms = 1, fresh = TRUE)
```
tidy.mixo_pls

Usage

## S3 method for class 'mixo_pls'
tidy(x, ...)

## S3 method for class 'mixo_spls'
tidy(x, ...)

Arguments

x                An object with class mixo_pls or mixo_spls.
...

Value

A tibble with columns terms (the predictor names), value (the loadings), type (either "predictors" or "outcomes"), and component (the component number).
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