The icomp Package

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Type Package

Title ICOMP criterion

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Description Calculates the ICOMP criterion and its variations

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URL http://taper-linux.msu.montana.edu/

R topics documented:

`ICOMP` *ICOMP*

Description

Function for calculating the ICOMP criterion for one lm object or several objects in a list. Returns ICOMP, ICOMPr and ICOMPcv values.

Usage

```
ICOMP(model.list)
```

Arguments

model.list	A list of models or else a single lm model

Details

A smaller ICOMP value corresponds to a better model.

Values are not comparable across criterion.

Value

If a model object is provided, ICOMP returns 3 values with labels given below. If a list is provided, ICOMP returns a data frame with each models ICOMP values listed. Order of model outputs is the same as the list input.

ICOMP	numeric value of ICOMP
ICOMPr	numeric value of ICOMPr
ICOMPcv	numeric value of ICOMPcv

Author(s)

Jake Ferguson

References

Bozdogan, H. Haughton, D.M.A (1998). Information complexity criteria for regression models. Computation Statistics & Data Analysis 28: 51-76

ICOMP.lm *ICOMP*

Description

Calculates the ICOMP criterion value for a linear model.

Usage

```
ICOMP.lm(lm.model)
```

Arguments

lm.model	a linear model of class 'lm'

Value

Returns the ICOMP value

Author(s)

Jake Ferguson

References

Bozdogan, H. Haughton, D.M.A (1998). Information complexity criteria for regression models. Computation Statistics & Data Analysis 28: 51-76

`ICOMPcv.lm` *ICOMPcv*

Description

Calculates the ICOMPcv criterion for a linear model. ICOMPcv is similar to ICOMP but operates on the coefficient of variation matrix.

Usage

```
ICOMPcv.lm(lm.model)
```

Arguments

`lm.model`	a linear model of class 'lm'

Value

Returns the ICOMPcv value

Author(s)

Jake Ferguson

References

Ferguson et al (unpublished) ICOMP: An Information Criterion new to Ecology

ICOMPr.lm *ICOMPr*

Description

Calculates the ICOMPr criterion value. ICOMPr is similar to ICOMP but operates on the correlation matrix.

Usage

```
ICOMPr.lm(lm.model)
```

Arguments

lm.model	a linear model of class 'lm'

Value

returns the ICOMPr criterion value.

Author(s)

Jake Ferguson

References

Bozdogan, H. Haughton, D.M.A (1998). Information complexity criteria for regression models. Computation Statistics & Data Analysis 28: 51-76

icomps-package *Calculates the ICOMP criterion for a linear model.*

Description

This package calculates the ICOMP criterion value for linear models as well as the ICOMP variations, ICOMPr and ICOMPcv.

Details

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The function ICOMP calls ICOMP.lm, ICOMPr.lm and ICOMPcv.lm to calculate each criterions value and then presents the output in a data frame.

Author(s)

Jake Ferguson

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References

Bozdogan, H. Haughton, D.M.A (1998). Information complexity criteria for regression models. Computation Statistics & Data Analysis 28: 51-76

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