# Class 'Data'

An object for storing data for analysis using data-limited methods

# Slots

## Name

The name of the case-study

A vector of years that correspond to catch and relative abundance data

## Cat

Total annual catches

Ind

Relative abundance index

The number of years corresponding to AvC and Dt

Average catch over time t

Dt

Depletion over time t e.g. Bnow/Bthen

Mean length time series

Mort

Natural mortality rate

# FMSY\_M

An assumed ratio of FMSY to M

# BMSY\_B0

The most productive stock size relative to unfished

Length at 50 percent maturity

L95

Length at 95 percent maturity

# Lbar

Mean length of catches over Lc (modal length)

Lc Modal length

LFC

Length at first capture

LFS

smallest Length at full selection

CAA

Catch at Age data

Dep

Stock depletion Bnow/Bunfished (total stock)

An estimate of absolute current vulnerable abundance

# SpAbun

An estimate of absolute current spawning stock abundance

The von Bertalanffy growth coefficient

# vbLinf

Maximum length

# vbt0

Theoretical age at length zero

wla

Weight-Length parameter alpha

w1b

Weight-Length parameter beta

steep

Steepness of the Beverton Holt stock-recruitment relationship

CV\_Cat

Coefficient of variation in annual catches

CV\_Dt

Coefficient of variation in depletion over time t

CV\_AvC

Coefficient of variation in average catches over time t

CV\_Ind

Coefficient of variation in the relative abundance index

CV Mort

Coefficient of variation in natural mortality rate

CV\_FMSY\_M

Coefficient of variation in the ratio in FMSY/M

CV\_BMSY\_B0

Coefficient of variation in the position of the most productive stock size relative to unfished

CV\_Dep

Coefficient of variation in current stock depletion

CV\_Abur

Coefficient of variation in estimate of absolute current stock size

CV\_vbK

Coefficient of variation in the von Bert. k parameter

CV\_vbLinf

Coefficient of variation in maximum length

CV\_vbt0

Coefficient of variation in age at length zero

CV\_L50

Coefficient of variation in length at 50 per cent maturity

CV\_LF

Coefficient of variation in length at first capture

 $CV_LFS$ 

Coefficient of variation in length at full selection

CV\_wla

Coefficient of variation in weight-length parameter a

CV\_w1t

Coefficient of variation in weight-length parameter b

CV\_steep

Coefficient of variation in steepness

sigmaL

Assumed observaton error of the length composition data

MaxAge

Maximum age

Units

Units of the catch/absolute abundance estimates

Ref

A reference quota level

Ref\_type

Its type

Log

A log of events

params

A place to store estimated parameters

PosMPs

The methods that can be applied to these data