

Package ‘CQ2’

April 25, 2024

Type Package

Title Objective Calibration of Quick-Slow CQ Models

Version 0.1.0

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Description This R package fits C-Q models with slow and quick flow components. The parameters of the Eckhardt (2005) baseflow filter are objectively calibrated to partition streamflow into these components while fitting the quick-slow C-Q model.

License What license is it under?

Encoding UTF-8

LazyData true

RoxygenNote 7.3.1

R topics documented:

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Chat1	<i>Runs simple C-Q model</i>
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Description

Chat1 run simple CQ model CQ model: $(C=aQ^b)$

Usage

Chat1(params, flow)

Arguments

params	are two values for setting parameters a and b . The parameters can be a single value or a vector. The calibration procedure runs the model in vector form, calling Chat1 with a vector of guesses for each parameter. The bounds and initial guess are set using getBounds Note: $(a = 10^{params[1]})$ and $(b = params[2])$
flow	streamflow dataframe. Vector or array with duplicates in each column for model calibration

Details

Chat1 runs the simple CQ model: $C=aQ^b$. This predicts in-stream concentration C based on observed streamflow Q data.

The input requires observed streamflow data on a daily timescale and two parameters, a and b .

Value

A $Pred$ data frame with predicted concentrations for each time-step. If called in calibration mode, array returned with predictions in each column.

hello	<i>Hello, World!</i>
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Description

Prints 'Hello, world!'.

Usage

hello()

Examples

hello()

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