Description

logit(X) returns the log of the odds ratio of the elements of X, \( \ln\left(\frac{x}{1-x}\right) \).

invlogit(X) returns the inverse of the logit() of the elements of X, \( \frac{\exp(x)}{1 + \exp(x)} \).

cloglog(X) returns the complementary log-log of the elements of X, \( \ln\left(-\ln(1-x)\right) \).

invcloglog(X) returns the elementwise inverse of cloglog() of the elements of X, \( 1 - \exp\left(-\exp(x)\right) \).

Syntax

real matrix logit(real matrix X)

real matrix invlogit(real matrix X)

real matrix cloglog(real matrix X)

real matrix invcloglog(real matrix X)

Conformability

All functions return a matrix of the same dimension as input containing element-by-element calculated results.

Diagnostics

logit(X) and cloglog(X) return missing when \( x \leq 0 \) or \( x \geq 1 \).

Also see

[M-4] Statistical — Statistical functions