

StatsLinearCorrelationTest, **StatsCircularCorrelationTest**, **StatsKendallTauTest**, **StatsSpearmanRhoCDF**, and **StatsInvSpearmanCDF**.

StatsRayleighCDF

StatsRayleighCDF(**x** [, **s** [, **m**]])

The StatsRayleighCDF function returns the Rayleigh cumulative distribution function

$$F(x; \sigma, \mu) = 1 - \exp\left(-\frac{(x - \mu)^2}{2\sigma^2}\right), \quad \sigma > 0, x > \mu.$$

with defaults $s=1$ and $m=0$. It returns NaN for $s \leq 0$ and zero for $x \leq m$.

See Also

Chapter III-12, **Statistics** for a function and operation overview; the **StatsRayleighPDF** and **StatsInvRayleighCDF** functions.

StatsRayleighPDF

StatsRayleighPDF(**x** [, **s** [, **m**]])

The StatsRayleighPDF function returns the Rayleigh probability distribution function

$$f(x; \sigma, \mu) = \frac{x - \mu}{\sigma^2} \exp\left(-\frac{(x - \mu)^2}{2\sigma^2}\right), \quad \sigma > 0, x > \mu.$$

with defaults $s=1$ and $m=0$. It returns NaN for $s \leq 0$ and zero for $x \leq m$.

See Also

Chapter III-12, **Statistics** for a function and operation overview; the **StatsRayleighCDF** and **StatsInvRayleighCDF** functions.

StatsRectangularCDF

StatsRectangularCDF(**x**, **a**, **b**)

The StatsRectangularCDF function returns the rectangular (uniform) cumulative distribution function

$$F(x, a, b) = \begin{cases} 0 & x \leq a \\ \frac{x - a}{b - a} & a \leq x \leq b \\ 1 & x \geq b \end{cases}$$

where $a < b$.

See Also

Chapter III-12, **Statistics** for a function and operation overview; the **StatsRectangularPDF** and **StatsInvRectangularCDF** functions.

StatsRectangularPDF

StatsRectangularPDF(**x**, **a**, **b**)

The StatsRectangularPDF function returns the rectangular (uniform) probability distribution function

$$f(x; a, b) = \begin{cases} \frac{1}{b - a} & a \leq x \leq b \\ 0 & \text{otherwise} \end{cases}$$