

StatsErlangCDF

Fourth	The critical q' value
Fifth	0 if the conclusion is to reject H_0 or 1 to accept H_0
Sixth	The P-value

V_flag will be set to -1 for any error and to zero otherwise.

See Also

Chapter III-12, **Statistics** for a function and operation overview; **StatsTukeyTest**, **StatsANOVA1Test**, **StatsScheffeTest**, and **StatsNPMCTest**.

StatsErlangCDF

StatsErlangCDF(x, b, c)

The StatsErlangCDF function returns the Erlang cumulative distribution function

$$F(x;b,c) = 1 - \frac{\Gamma\left(c, \frac{x}{b}\right)}{\Gamma(c)}.$$

where $b > 0$ (also as $\lambda=1/b$) is the scale parameter, $c > 0$ the shape parameter, $\Gamma(x)$ the **gamma** function, and $\Gamma(a,x)$ the incomplete gamma function **gammaInc**.

See Also

Chapter III-12, **Statistics** for a function and operation overview; **StatsErlangPDF**.

StatsErlangPDF

StatsErlangPDF(x, b, c)

The StatsErlangPDF function returns the Erlang probability distribution function

$$f(x;b,c) = \frac{\left(\frac{x}{b}\right)^{c-1} \exp\left(-\frac{x}{b}\right)}{b(c-1)!}.$$

where $b > 0$ (also as $\lambda=1/b$) is the scale parameter and $c > 0$ the shape parameter.

See Also

Chapter III-12, **Statistics** for a function and operation overview; **StatsErlangCDF**.

StatsErrorPDF

StatsErrorPDF(x, a, b, c)

The StatsErrorPDF function returns the error probability distribution function or the exponential power distribution

$$f(x;a,b,c) = \frac{\exp\left[-\frac{1}{2}\left(\frac{|x-a|}{b}\right)^{\frac{2}{c}}\right]}{b2^{\frac{c}{2}+1} \Gamma\left(1+\frac{c}{2}\right)}.$$

where a is the location parameter, $b > 0$ is the scale parameter, $c > 0$ is the shape parameter, and $\Gamma(x)$ is the **gamma** function.