StatsFCDF

StatsFCDF(*x*, *n1*, *n2*)

The StatsFCDF function returns the cumulative distribution function for the F distribution with shape parameters *n1* and *n2*

$$F(x; n_1, n_2) = 1 - Betai\left(\frac{n_2}{2}, \frac{n_1}{2}, \frac{n_2}{n_2 + n_1 x}\right),$$

where *Betai* is the incomplete beta function.

See Also

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

StatsFPDF

StatsFPDF(*x*, *n1*, *n2*)

The StatsFPDF function returns the probability distribution function for the F distribution with shape parameters *n1* and *n2*

$$f(x; n_1, n_2) = \frac{\Gamma\left(\frac{n_1 + n_2}{2}\right)\left(\frac{n_1}{n_2}\right)^{\frac{n_1}{2}} x^{\frac{n_1}{2} - 1}}{\Gamma\left(\frac{n_1}{2}\right)\Gamma\left(\frac{n_2}{2}\right)\left(1 + \frac{n_1 x}{n_2}\right)^{\frac{n_1 + n_2}{2}}}.$$

See Also

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

StatsFriedmanCDF

StatsFriedmanCDF(*x*, *n*, *m*, *method*, *useTable*)

The StatsFriedmanCDF function returns the cumulative probability distribution of the Friedman distribution with *m* rows and *n* columns. The exact Friedman distribution is computationally intensive, taking on the order of $(n!)^m$ iterations. You may be able to use a range of precomputed exact values by passing a nonzero value for *useTable*, which will use *method* only if the value is not in the table. For large *m*, consider using the Chi-squared or the Monte-Carlo approximations. To abort execution, press the **User Abort Key Combinations**.

method	What It Does
0	Exact computation.
1	Chi-square approximation.
2	Monte-Carlo approximation.
3	Use built-table only and return NaN if not in table.

See Also

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