

OPTIONS XL Gram-Charlier: Matrix of Skewness vs Kurtosis

Input:	<u>Gram-Charlier</u>	<u>Black-Scholes</u>	<u>Gram-Charlier</u>
Model	1	1	1
Type of Option	1	1	1
Function	1	1	1
Underlying Price	30	30	30
Exercise Price	30	30	30
Time to Expiration	7	7	7
Volatility	50.00%	50.00%	50.00%
Interest Rate	2.90%	2.90%	2.90%
Yield Rate	1.00%	1.00%	1.00%
Skewness	-1.000	0.000	1.000
Kurtosis	0.000	0.000	0.000
Output:			
Theoretical Value	9.6838	14.6943	17.9163

Sensitivity Matrix

		Skewness				
		-1.0	-0.5	0.0	0.5	1.0
Kurtosis	0.0	9.6838	12.6775	14.6943	16.3069	17.9163
	1.0	11.4701	13.7548	15.4979	17.1630	19.0452
	2.0	12.7361	14.6357	16.3603	18.2647	20.5379
	3.0	13.7189	15.5145	17.4324	19.7172	22.4517
	4.0	14.6291	16.5582	18.8348	21.5927	24.8104

Validity Test

PDF Negativity	PDF Negativity	Use GC	PDF Negativity	PDF Negativity
PDF Negativity	Use GC	Use GC	Use GC	PDF Negativity
Use GC	Use GC	Use GC	Use GC	Use GC
PDF Negativity	Use GC	Use GC	Use GC	PDF Negativity
PDF Negativity	PDF Negativity	Use GC	PDF Negativity	PDF Negativity

