

Phase 1 - DCAT Adverse Scenarios Before Management/Regulatory Actions

- For all adverse scenarios involving fitting of a probability distribution, please provide statistical and graphical evidence of the goodness of fit, both overall and with a particular focus in the adverse tail of the distribution, at least out to the 99.5th percentile.

Weekly Indemnity Severity	Pearson6	LogLogistic	Lognorm	Pareto	Triang	Uniform	Expon	Levy	InvGauss
Rankings By Fit Statistic [9 Valid Fits]									
Akaike (AIC)	#1	#2	#3	#4	#8	#9	#7	#6	#5
Bayesian (BIC)	#2	#1	#3	#4	#8	#9	#7	#6	#5
Chi-Sq Statistic	#1	#2	#3	#4	#8	#9	#7	#6	#5
K-S Statistic	#1	#2	#3	#4	#8	#9	#7	#5	#6
A-D Statistic	#1	#2	#3	#4	#5	#6			
Information Criteria									
Akaike (AIC)	153795.3963	153798.671	153947.5343	154865.3831	196525.4224	205966.377	164753.8259	160762.3664	160637.5541
Bayesian (BIC)	153815.985	153812.3973	153961.2607	154879.1095	196539.1488	205973.2405	164760.6894	160769.2299	160651.2805
Chi-Squared Test									
Chi-Sq Statistic	108.6224	117.316	317.0304	1115.1161	233165.7594	305028.8698	10300.0673	4066.0775	3851.5122
Anderson-Darling Test									
A-D Statistic	2.2497	3.0915	17.6352	211.8117	21380.094	26108.2522	---	---	---
Kolmogorov-Smirnov Test									
K-S Statistic	0.0132	0.0142	0.0372	0.1253	0.8307	0.876	0.399	0.3165	0.3234

ABO-Indexed Severity	Lognorm	LogLogistic	Pearson6	Pareto	Triang	Uniform	Expon	Levy	InvGauss
Rankings By Fit Statistic [9 Valid Fits]									
Akaike (AIC)	#3	#1	#2	#4	#8	#9	#7	#6	#5
Bayesian (BIC)	#3	#1	#2	#4	#8	#9	#7	#6	#5
Chi-Sq Statistic	#1	#2	#3	#4	#8	#9	#7	#6	#5
K-S Statistic	#2	#1	#3	#4	#8	#9	#5	#6	#7
A-D Statistic	#1	#2	#3	#4	#5	#6			
Information Criteria									
Akaike (AIC)	191539.0993	191484.8241	191502.5531	191603.3781	277273.0346	290412.4393	212835.996	209011.7941	208965.4825
Bayesian (BIC)	191553.4412	191499.1661	191524.0654	191617.72	277287.3766	290419.6105	212843.1672	209018.9653	208979.8244
Chi-Squared Test									
Chi-Sq Statistic	599.4688	626.9083	672.7572	677.0825	547074.2362	619678.9738	22716.3744	13173.5443	13011.5632
Anderson-Darling Test									
A-D Statistic	5.8499	6.3552	7.9823	39.0669	42872.0334	49457.3458	---	---	---
Kolmogorov-Smirnov Test									
K-S Statistic	0.0238	0.0216	0.0244	0.0452	0.9246	0.9474	0.4405	0.4632	0.4658

ABO-NonIndexed Severity	Pearson6	LogLogistic	Lognorm	Weibull	Expon	Pareto	InvGauss	Levy	Triang	Uniform
Rankings By Fit Statistic [10 Valid Fits]										
Akaike (AIC)	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10
Bayesian (BIC)	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10
Chi-Sq Statistic	#2	#3	#1	#4	#5	#6	#7	#8	#9	#10
K-S Statistic	#1	#2	#3	#4	#5	#6	#8	#7	#9	#10
A-D Statistic	#1	#2	#3	#4	#5	#6	#8	#7	#9	#10
Information Criteria										
Akaike (AIC)	138356.5003	138512.1664	138668.0057	138868.1502	140479.4118	141287.2319	144228.1567	144654.6617	163496.0015	171892.6529
Bayesian (BIC)	138376.7891	138525.6929	138681.5323	138881.6768	140486.1754	141300.7585	144241.6832	144661.4252	163509.5281	171899.4164
Chi-Squared Test										
Chi-Sq Statistic	1329.5699	1369.0694	1173.7224	1804.5126	2562.4798	3954.7822	4395.0491	5361.7493	71223.9589	135011.7983
Anderson-Darling Test										
A-D Statistic	3.3318	14.142	25.9049	42.8018	387.9937	501.3312	1127.7495	891.4567	12495.9011	16676.3649
Kolmogorov-Smirnov Test										
K-S Statistic	0.0218	0.0363	0.0512	0.0519	0.1681	0.2053	0.3102	0.2865	0.7747	0.8456

Public Liability Severity	Pearson6	Weibull	LogLogistic	Lognorm	Expon	Pareto	Levy	InvGauss
Rankings By Fit Statistic [7 Valid Fits]								
Akaike (AIC)	#2	#1	#3	#4	#5	#6	#8	#7
Bayesian (BIC)	#2	#1	#3	#4	#5	#6	#8	#7
Chi-Sq Statistic	#1	#2	#3	#4	#5	#6	#8	#7
K-S Statistic	#1	#2	#3	#4	#5	#6	#7	#8
A-D Statistic	#1	#2	#3	#4	#5	#6	#7	#8
Information Criteria								
Akaike (AIC)	23830.7454	23824.4293	23898.0276	23938.4899	23994.7979	24411.566	27108.244	27101.998
Bayesian (BIC)	23845.6435	23834.3651	23907.9634	23948.4257	23999.7677	24421.5018	27113.2138	27111.9339
Chi-Squared Test								
Chi-Sq Statistic	36.2135	45.5955	81.2697	82.6742	231.2135	553.3483	3453.2921	3270.2584
Anderson-Darling Test								
A-D Statistic	1.4326	2.1241	3.4372	5.6373	49.131	89.771	939.2611	981.5903
Kolmogorov-Smirnov Test								
K-S Statistic	0.025	0.032	0.042	0.0568	0.1351	0.1967	0.6163	0.6212

Public Liability Severity (>\$200,000)	Weibull	Expon	Pareto	LogLogistic	Lognorm	Levy	InvGauss
Rankings By Fit Statistic [7 Valid Fits]							
Akaike (AIC)	#2	#1	#3	#4	#5	#7	#6
Bayesian (BIC)	#2	#1	#3	#4	#5	#7	#6
Chi-Sq Statistic	#2	#3	#1	#4	#5	#7	#6
K-S Statistic	#1	#2	#4	#3	#5	#6	#7
A-D Statistic	#1	#2	#3	#4	#5	#6	#7
Information Criteria							
Akaike (AIC)	1846.9701	1844.8657	1849.9344	1860.0649	1862.5227	1916.3995	1905.3791
Bayesian (BIC)	1851.5235	1847.1698	1854.4878	1864.6183	1867.0762	1918.7036	1909.9326
Chi-Squared Test							
Chi-Sq Statistic	4.8205	5.0769	4.8205	6.359	10.9744	57.3846	40.9744
Anderson-Darling Test							
A-D Statistic	0.1988	0.2022	0.5023	1.0013	1.4322	6.8961	10.37
Kolmogorov-Smirnov Test							
K-S Statistic	0.0507	0.0519	0.0747	0.0745	0.1101	0.2323	0.2827

Collision Severity	Pearson6	Weibull	LogLogistic	Lognorm	Expon	Pareto	Levy	InvGauss
Rankings By Fit Statistic [8 Valid Fits]								
Akaike (AIC)	#1	#2	#4	#5	#3	#6	#8	#7
Bayesian (BIC)	#1	#2	#4	#5	#3	#6	#8	#7
Chi-Sq Statistic	#1	#2	#4	#5	#3	#6	#8	#7
K-S Statistic	#1	#2	#3	#4	#5	#6	#7	#8
A-D Statistic	#1	#2	#3	#4	#5	#6		
Information Criteria								
Akaike (AIC)	5.20E+06	5.20E+06	5.22E+06	5.23E+06	5.21E+06	5.25E+06	5.79E+06	5.78E+06
Bayesian (BIC)	5.20E+06	5.20E+06	5.22E+06	5.23E+06	5.21E+06	5.25E+06	5.79E+06	5.78E+06
Chi-Squared Test								
Chi-Sq Statistic	704.4938	4809.4406	16389.1915	26542.0713	16303.6468	39421.6328	462240.6337	437897.1854
Anderson-Darling Test								
A-D Statistic	15.8117	403.018	976.7475	1933.7088	2615.8064	7665.3642	---	---
Kolmogorov-Smirnov Test								
K-S Statistic	0.0058	0.0245	0.0314	0.0539	0.0627	0.1088	0.4509	0.4688

Property Damage Severity	Pearson6	LogLogistic	Lognorm	Pareto	Weibull	InvGauss	Levy	Expon	Triang	Uniform
Rankings By Fit Statistic [10 Valid Fits]										
Akaike (AIC)	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10
Bayesian (BIC)	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10
Chi-Sq Statistic	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10
K-S Statistic	#2	#1	#3	#4	#5	#7	#6	#8	#9	#10
A-D Statistic	#1	#2	#3	#4	#5	#7	#6		#8	#9
Information Criteria										
Akaike (AIC)	317584.2634	317637.515	317652.3537	317713.8685	320038.6054	328094.2905	329105.3945	331949.9814	430361.6058	455448.2634
Bayesian (BIC)	317607.7402	317653.1664	317668.005	317729.5199	320054.2567	328109.9419	329113.2203	331957.8072	430377.2572	455456.0892
Chi-Squared Test										
Chi-Sq Statistic	448.6403	532.9798	644.5737	712.1397	2173.7098	6146.4538	7306.738	11467.7781	667678.8332	1.02E+06
Anderson-Darling Test										
A-D Statistic	3.9297	4.7527	12.1065	39.3573	214.3634	1914.8264	1537.4347	---	56374.9664	68917.7729
Kolmogorov-Smirnov Test										
K-S Statistic	0.0134	0.0131	0.0228	0.0338	0.0683	0.2325	0.2131	0.2663	0.8516	0.8991

Comprehensive (Non-Hail) Severity	Pearson6	LogLogistic	Weibull	Pareto	Lognorm	Expon	InvGauss	Levy	Triang	Uniform
Rankings By Fit Statistic [10 Valid Fits]										
Akaike (AIC)	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10
Bayesian (BIC)	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10
Chi-Sq Statistic	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10
K-S Statistic	#1	#2	#3	#5	#4	#6	#8	#7	#9	#10
A-D Statistic	#1	#2	#3	#5	#4				#6	#7
Information Criteria										
Akaike (AIC)	557324.4627	558524.5776	558994.3377	559268.0717	559588.2693	563308.7219	610001.833	611262.8279	703725.5614	746129.6341
Bayesian (BIC)	557349.5417	558541.2971	559011.0572	559284.7912	559604.9888	563317.0817	610018.5525	611271.1877	703742.2808	746137.9939
Chi-Squared Test										
Chi-Sq Statistic	225.427	1270.7899	1657.2456	1968.8023	1974.3942	5029.4762	36577.9343	39091.7092	488877.0739	964034.1243
Anderson-Darling Test										
A-D Statistic	4.6051	82.0269	138.6432	365.8507	170.444	---	---	---	72283.8118	93385.6855
Kolmogorov-Smirnov Test										
K-S Statistic	0.0088	0.0259	0.044	0.0754	0.0527	0.1073	0.4198	0.4019	0.8177	0.8778

Hail Severity	Weibull	Gamma	Expon	LogLogistic	Lognorm	Pareto	InvGauss	Levy	Triang	Uniform
Rankings By Fit Statistic [10 Valid Fits]										
Akaike (AIC)	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10
Bayesian (BIC)	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10
Chi-Sq Statistic	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10
K-S Statistic	#1	#2	#4	#3	#5	#6	#8	#7	#9	#10
A-D Statistic	#1	#2	#3	#4	#5	#6			#7	#8
Information Criteria										
Akaike (AIC)	493269.4562	493416.1287	494173.1241	497468.2746	500202.4556	504585.0357	531410.7703	535558.8978	565955.6045	601874.3758
Bayesian (BIC)	493285.9554	493432.6278	494181.3738	497484.7738	500218.9548	504601.5349	531427.2695	535567.1475	565972.1037	601882.6255
Chi-Squared Test										
Chi-Sq Statistic	493.9861	647.839	1374.1768	3932.7155	5271.0124	10756.6655	26130.9954	33047.3132	96544.9451	211859.8527
Anderson-Darling Test										
A-D Statistic	10.2412	27.2946	226.7856	253.3433	500.2287	1853.5125	---	---	32815.0715	50378.609
Kolmogorov-Smirnov Test										
K-S Statistic	0.0164	0.0256	0.0616	0.0548	0.0904	0.1753	0.3453	0.2978	0.6817	0.8048

Weekly Indemnity Frequency	ExtValue	Logistic	Normal	Laplace	Triang	Weibull	Gamma	InvGauss	Lognorm	LogLogistic	Uniform	Expon	ExtValueMin	BetaGenera
Rankings By Fit Statistic [14 Valid Fits]														
Akaike (AIC)	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	
Bayesian (BIC)	#1	#2	#3	#5	#4	#6	#7	#8	#9	#10	#11	#12	#13	
Chi-Sq Statistic	#7	#1 (Tie)	#1 (Tie)	#9 (Tie)	#8	#1 (Tie)	#1 (Tie)	#1 (Tie)	#1 (Tie)	#9 (Tie)	#12 (Tie)	#11	#12 (Tie)	#14
K-S Statistic	#3	#2	#10	#7	#9	#8	#6	#5	#4	#1	#14	#12	#11	#13
A-D Statistic	#4	#7	#9	#8		#6	#5	#3	#2	#1	#11	#12	#10	
Information Criteria														
Akaike (AIC)	169.271	170.3404	170.4333	171.5071	171.8695	172.1879	172.3901	172.4337	172.4541	172.7809	173.1514	174.1198	174.8726	---
Bayesian (BIC)	169.4582	170.5276	170.6205	171.6943	171.3866	171.705	171.9073	171.9509	171.9712	172.2981	173.3386	174.3071	175.0598	---
Chi-Squared Test														
Chi-Sq Statistic	0.5714	0.1429	0.1429	1	0.6429	0.1429	0.1429	0.1429	0.1429	1	2.7143	2.7143	2.7143	10.5
Anderson-Darling Test														
A-D Statistic	0.1742	0.2276	0.2852	0.2586	---	0.2005	0.1757	0.1722	0.171	0.1653	1.1571	1.3419	0.6979	---
Kolmogorov-Smirnov Test														
K-S Statistic	0.1263	0.1236	0.1732	0.1342	0.1652	0.1414	0.1326	0.1309	0.1299	0.1167	0.327	0.2779	0.236	0.3018

ABO-Indexed Frequency	ExtValue	Normal	Logistic	Triang	Laplace	Uniform	Weibull	Gamma	ExtValueMin	LogLogistic	Expon	BetaGenera
Rankings By Fit Statistic [12 Valid Fits]												
Akaike (AIC)	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	
Bayesian (BIC)	#1	#2	#3	#4	#6	#7	#5	#8	#10	#9	#11	
Chi-Sq Statistic	#1 (Tie)	#1 (Tie)	#1 (Tie)	#10	#1 (Tie)	#11	#1 (Tie)	#1 (Tie)	#1 (Tie)	#1 (Tie)	#9	#12
K-S Statistic	#3	#4	#5	#9	#8	#10	#1	#2	#7	#6	#11	#12
A-D Statistic	#4	#5	#6		#7	#9	#2	#1	#8	#3	#10	
Information Criteria												
Akaike (AIC)	220.958	221.3118	221.796	222.5293	222.8703	223.0717	223.4092	223.8649	224.6237	224.6621	225.1677	---
Bayesian (BIC)	221.1452	221.499	221.9832	222.0465	223.0575	223.2589	222.9264	223.382	224.8109	224.1793	225.3549	---
Chi-Squared Test												
Chi-Sq Statistic	0.1429	0.1429	0.1429	1.9286	0.1429	2.7143	0.1429	0.1429	0.1429	0.1429	1	10.5
Anderson-Darling Test												
A-D Statistic	0.1963	0.2059	0.2138	---	0.3367	0.8485	0.1867	0.1808	0.4638	0.1874	1.2451	---
Kolmogorov-Smirnov Test												
K-S Statistic	0.1146	0.1161	0.1168	0.1859	0.1706	0.244	0.106	0.1122	0.1645	0.1196	0.2837	0.2917

ABO-NonIndexed Frequency	Uniform	Normal	Logistic	Laplace	ExtValue	Triang	ExtValueMin	Weibull	Expon	Levy	BetaGenera
Rankings By Fit Statistic [11 Valid Fits]											
Akaike (AIC)	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	
Bayesian (BIC)	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	
Chi-Sq Statistic	#8	#1 (Tie)	#1 (Tie)	#5 (Tie)	#5 (Tie)	#1 (Tie)	#1 (Tie)	#5 (Tie)	#9	#11	#10
K-S Statistic	#8	#2	#3	#6	#7	#1	#5	#4	#10	#11	#9
A-D Statistic	#8	#2	#1	#6	#4	#5	#7	#3	#9	#10	
Information Criteria											
Akaike (AIC)	173.8132	174.0548	174.5544	174.7961	175.0028	175.7895	176.1052	176.8944	180.5472	193.107	--
Bayesian (BIC)	174.0004	174.242	174.7416	174.9833	175.19	175.3066	176.2924	176.4115	180.7344	193.2942	--
Chi-Squared Test											
Chi-Sq Statistic	3.5714	0.1429	0.1429	0.5714	0.5714	0.1429	0.1429	0.5714	4	13.8571	7.0714
Anderson-Darling Test											
A-D Statistic	0.4796	0.2286	0.2234	0.432	0.2977	0.3327	0.4737	0.2403	1.5775	2.2618	--
Kolmogorov-Smirnov Test											
K-S Statistic	0.1852	0.1298	0.1426	0.1678	0.1803	0.1216	0.1599	0.1484	0.301	0.3996	0.2726

Public Liability Frequency	IntUniform	NegBin	Geomet	Poisson
Rankings By Fit Statistic [4 Valid Fits]				
Akaike (AIC)	#1	#2	#3	#4
Bayesian (BIC)	#1	#2	#3	#4
Chi-Sq Statistic	#2	#1	#4	#3
Information Criteria				
Akaike (AIC)	126.7175	133.5337	159.6357	168.337
Bayesian (BIC)	126.9047	133.7209	159.9414	168.6428
Chi-Squared Test				
Chi-Sq Statistic	2.2629	0.9758	6.6831	3.9112

Collision Frequency	Normal	Logistic	ExtValueMin	ExtValue	Uniform	Laplace	Gamma	Expon	Triang	BetaGenera
Rankings By Fit Statistic [10 Valid Fits]										
Akaike (AIC)	#4	#5	#3	#6	#1	#7	#9	#8	#2	
Bayesian (BIC)	#4	#5	#3	#6	#1	#7	#9	#8	#2	
Chi-Sq Statistic	#2 (Tie)	#2 (Tie)	#2 (Tie)	#1	#2 (Tie)	#2 (Tie)	#2 (Tie)	#2 (Tie)	#2 (Tie)	#10
K-S Statistic	#6	#5	#2	#4	#7	#8	#9	#10	#1	#3
A-D Statistic	#1	#2	#3	#4	#5	#6	#7	#8		
Information Criteria										
Akaike (AIC)	282.6191	283.8784	281.8851	284.6176	277.3727	286.0944	289.2863	287.9079	278.1999	---
Bayesian (BIC)	282.8063	284.0656	282.0723	284.8048	277.5599	286.2816	288.8034	288.0951	277.717	---
Chi-Squared Test										
Chi-Sq Statistic	1	1	1	0.5714	1	1	1	1	1	4.5
Anderson-Darling Test										
A-D Statistic	0.4408	0.4679	0.5123	0.5425	0.6339	0.6691	1.1683	1.406	---	---
Kolmogorov-Smirnov Test										
K-S Statistic	0.2014	0.1989	0.1883	0.1982	0.2205	0.252	0.255	0.2966	0.1816	0.1949

Property Damage Frequency	Uniform	ExtValueMin	Normal	Logistic	Weibull	Laplace	ExtValue	Gamma	Expon	Levy	Triang	BetaGenera
Rankings By Fit Statistic [12 Valid Fits]												
Akaike (AIC)	#1	#3	#4	#5	#8	#9	#6	#10	#7	#11	#2	
Bayesian (BIC)	#1	#3	#4	#5	#8	#9	#6	#10	#7	#11	#2	
Chi-Sq Statistic	#2 (Tie)	#5 (Tie)	#5 (Tie)	#5 (Tie)	#5 (Tie)	#5 (Tie)	#2 (Tie)	#2 (Tie)	#10	#12	#1	#11
K-S Statistic	#1	#3	#2	#4	#5	#7	#9	#10	#11	#12	#8	#6
A-D Statistic	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10		
Information Criteria												
Akaike (AIC)	241.1643	246.5226	246.9859	248.3714	249.606	250.4208	248.5064	251.148	248.7968	259.7074	244.4657	---
Bayesian (BIC)	241.3515	246.7098	247.1731	248.5586	249.1232	250.608	248.6936	250.6652	248.984	259.8947	243.9829	---
Chi-Squared Test												
Chi-Sq Statistic	0.5714	1	1	1	1	1	0.5714	0.5714	1.8571	7	0.1429	2.3571
Anderson-Darling Test												
A-D Statistic	0.2588	0.3772	0.4119	0.4354	0.4589	0.5185	0.5838	0.7104	1.0644	1.4031	---	---
Kolmogorov-Smirnov Test												
K-S Statistic	0.1348	0.1472	0.144	0.1532	0.1586	0.1605	0.1734	0.2058	0.2811	0.33	0.1681	0.1603

Comprehensive (Non-Hail) Frequency	Uniform	Triang	ExtValue	Normal	Logistic	Weibull	Expon	ExtValueMin	Gamma	Laplace	InvGauss	Lognorm	LogLogistic	BetaGenera
Rankings By Fit Statistic [14 Valid Fits]														
Akaike (AIC)	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	
Bayesian (BIC)	#2	#1	#3	#4	#6	#5	#8	#11	#7	#12	#9	#10	#13	
Chi-Sq Statistic	#10 (Tie)	#13	#3 (Tie)	#1 (Tie)	#1 (Tie)	#3 (Tie)	#12	#10 (Tie)	#3 (Tie)	#3 (Tie)	#3 (Tie)	#3 (Tie)	#3 (Tie)	#14
K-S Statistic	#11	#9	#1	#8	#7	#3	#13	#12	#6	#10	#2	#4	#5	#14
A-D Statistic	#10		#4	#6	#8	#2	#12	#9	#5	#11	#1	#3	#7	
Information Criteria														
Akaike (AIC)	273.2872	273.5771	273.8972	274.2041	275.2313	275.8876	276.0396	276.4778	276.6263	276.6386	276.8901	276.9752	278.0841	---
Bayesian (BIC)	273.4744	273.0943	274.0844	274.3913	275.4185	275.4047	276.2268	276.665	276.1435	276.8258	276.4073	276.4923	277.6013	---
Chi-Squared Test														
Chi-Sq Statistic	0.5714	1.0714	0.5714	0.1429	0.1429	0.5714	1	0.5714	0.5714	0.5714	0.5714	0.5714	0.5714	14.3571
Anderson-Darling Test														
A-D Statistic	0.5607	---	0.2839	0.2884	0.3286	0.2812	0.9392	0.4346	0.2841	0.6958	0.2803	0.282	0.2952	---
Kolmogorov-Smirnov Test														
K-S Statistic	0.2027	0.1793	0.1222	0.1764	0.1693	0.1249	0.2674	0.2102	0.1346	0.1917	0.1247	0.1319	0.1325	0.2895

Hail (March) Frequency	Geomet	NegBin	IntUniform	Poisson
Rankings By Fit Statistic [4 Valid Fits]				
Akaike (AIC)	#1	#2	#3	#4
Bayesian (BIC)	#1	#2	#3	#4
Chi-Sq Statistic	#1	#2	#4	#3
Information Criteria				
Akaike (AIC)	118.9115	121.3677	130.4874	179.0384
Bayesian (BIC)	119.7455	122.79	131.9098	179.8724
Chi-Squared Test				
Chi-Sq Statistic	2.2617	2.2617	10.4286	3.6364

Hail (April) Frequency	Geomet	NegBin	IntUniform	Poisson
Rankings By Fit Statistic [4 Valid Fits]				
Akaike (AIC)	#1	#2	#3	#4
Bayesian (BIC)	#1	#2	#3	#4
Chi-Sq Statistic	#1	#2	#4	#3
Information Criteria				
Akaike (AIC)	150.7575	153.2136	181.886	392.233
Bayesian (BIC)	151.5914	154.636	183.3084	393.067
Chi-Squared Test				
Chi-Sq Statistic	2.4073	2.4073	32.9952	21.8878

Hail (May) Frequency	InvGauss	Pearson5	Lognorm	Levy	Laplace	Logistic	ExtValue	Normal	ExtValueMin	Expon	Uniform	Pareto	Gamma	Triang
Rankings By Fit Statistic [14 Valid Fits]														
Akaike (AIC)	#3	#4	#2	#1	#7	#9	#8	#11	#13	#6	#12	#5		#10
Bayesian (BIC)	#3	#4	#2	#1	#7	#9	#8	#11	#13	#6	#12	#5		#10
Chi-Sq Statistic	#3 (Tie)	#1	#2	#3 (Tie)	#7	#9	#10	#12 (Tie)	#12 (Tie)	#8	#14	#6	#5	#11
K-S Statistic	#2	#1	#3	#4	#10	#7	#8	#11	#9	#12	#13	#5	#6	#14
A-D Statistic	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11			
Information Criteria														
Akaike (AIC)	238.3306	239.0172	237.6599	237.2087	292.7341	307.4684	294.1984	325.6882	346.1286	268.2125	335.0013	240.1131	---	314.0978
Bayesian (BIC)	240.0524	240.739	239.3817	238.6311	294.1565	308.8908	295.6208	327.1106	347.5509	269.6349	336.4237	241.5355	---	315.8196
Chi-Squared Test														
Chi-Sq Statistic	2.4286	0.9048	1.6667	2.4286	13.0952	21.0952	25.2857	41.6667	41.6667	15	48.1429	12.619	2.7143	37
Anderson-Darling Test														
A-D Statistic	0.2232	0.2274	0.2541	0.3303	3.8138	3.9388	4.0625	5.2073	5.7387	6.5755	28.2325	---	---	---
Kolmogorov-Smirnov Test														
K-S Statistic	0.1212	0.1027	0.1407	0.1533	0.4261	0.3683	0.4029	0.4302	0.4248	0.4422	0.7768	0.2412	0.308	0.7852

Hail (June - August) Frequency	Lognorm	InvGauss	Pearson5	Levy	Pareto	Expon
Rankings By Fit Statistic [6 Valid Fits]						
Akaike (AIC)	#1	#2	#3	#4	#5	#6
Bayesian (BIC)	#1	#2	#3	#4	#5	#6
Chi-Sq Statistic	#1	#2	#3	#4	#6	#5
K-S Statistic	#1	#2	#3	#4	#5	#6
A-D Statistic	#1	#2	#3	#4		#5
Information Criteria						
Akaike (AIC)	1050.1097	1052.7421	1056.228	1059.478	1083.2314	1094.3565
Bayesian (BIC)	1056.1323	1058.7647	1062.2507	1063.5643	1087.3177	1098.4427
Chi-Squared Test						
Chi-Sq Statistic	3.1429	3.7143	7.7143	12	37	24.8571
Anderson-Darling Test						
A-D Statistic	0.1757	0.2739	0.392	1.0158	---	9.662
Kolmogorov-Smirnov Test						
K-S Statistic	0.0655	0.0722	0.0862	0.1172	0.2579	0.2721

Hail (September - October) Frequency	Lognorm	InvGauss	Pearson5	Levy	Expon
Rankings By Fit Statistic [5 Valid Fits]					
Akaike (AIC)	#1	#2	#3	#4	#5
Bayesian (BIC)	#1	#2	#4	#3	#5
Chi-Sq Statistic	#1	#2	#4	#3	#5
K-S Statistic	#3	#2	#1	#4	#5
A-D Statistic	#3	#2	#1	#4	#5
Information Criteria					
Akaike (AIC)	434.496	437.4079	438.8955	439.8251	477.9382
Bayesian (BIC)	439.0774	441.9893	443.4769	442.9927	481.1058
Chi-Squared Test					
Chi-Sq Statistic	4.8571	6	8.2857	6.7619	23.1429
Anderson-Darling Test					
A-D Statistic	0.5093	0.3104	0.2983	0.7675	9.6257
Kolmogorov-Smirnov Test					
K-S Statistic	0.1053	0.0906	0.0885	0.1212	0.322

Hail (November - February) Frequency	Geomet	NegBin	Poisson	IntUniform
Rankings By Fit Statistic [4 Valid Fits]				
Akaike (AIC)	#1	#2	#3	#4
Bayesian (BIC)	#1	#2	#3	#4
Chi-Sq Statistic	#1 (Tie)	#1 (Tie)	#3	#4
Information Criteria				
Akaike (AIC)	269.7488	271.8481	370.3458	469.9431
Bayesian (BIC)	272.1308	276.5616	372.7278	474.6565
Chi-Squared Test				
Chi-Sq Statistic	17.3864	17.3864	63.9862	296.9524

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Interest Rate Movement (1-Year)	Laplace	Logistic	LogLogistic	Normal	Weibull	ExtValue	ExtValueMin	Triang	Uniform	Expon
Rankings By Fit Statistic [10 Valid Fits]										
Akaike (AIC)	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10
Bayesian (BIC)	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10
Chi-Sq Statistic	#2	#1	#3	#4	#5	#6	#7	#8	#9	#10
K-S Statistic	#3	#2	#1	#4	#5	#6	#7	#8	#9	#10
A-D Statistic	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10
Information Criteria										
Akaike (AIC)	-4389.237	-4372.024	-4370.02	-4285.442	-4218.153	-4053.039	-4026.904	-3915.303	-3272.085	-2898.363
Bayesian (BIC)	-4380.186	-4362.974	-4356.454	-4276.392	-4204.587	-4043.989	-4017.854	-3901.736	-3263.035	-2889.313
Chi-Squared Test										
Chi-Sq Statistic	28.7151	28.6424	28.9331	67.3052	119.1948	239.907	274.936	491.1424	1375.445	2070.14
Anderson-Darling Test										
A-D Statistic	0.8532	1.4641	1.4647	7.8297	15.3205	32.568	34.9683	63.6848	128.5163	193.0618
Kolmogorov-Smirnov Test										
K-S Statistic	0.0391	0.0348	0.0347	0.0724	0.0986	0.137	0.1387	0.2033	0.3015	0.4319

Interest Rate Movement (2-Year)	Laplace	LogLogistic	Logistic	Normal	Weibull	ExtValue	ExtValueMin	Triang	Uniform	Expon
Rankings By Fit Statistic [10 Valid Fits]										
Akaike (AIC)	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10
Bayesian (BIC)	#1	#1	#2	#4	#5	#6	#7	#8	#9	#10
Chi-Sq Statistic	#3	#1	#2	#4	#5	#6	#7	#8	#9	#10
K-S Statistic	#1	#3	#2	#4	#5	#6	#7	#8	#9	#10
A-D Statistic	#1	#3	#2	#4	#5	#6	#7	#8	#9	#10
Information Criteria										
Akaike (AIC)	-3849.154	-3832.932	-3832.853	-3750.168	-3679.103	-3612.233	-3422.592	-3369.733	-2731.769	-2479.051
Bayesian (BIC)	-3840.14	-3819.419	-3823.839	-3741.153	-3665.59	-3603.219	-3413.577	-3356.22	-2722.755	-2470.037
Chi-Squared Test										
Chi-Sq Statistic	50.6272	42.787	44.7101	93.3047	148.4083	205.8047	339.8284	530.4349	1379.547	1856.396
Anderson-Darling Test										
A-D Statistic	0.8002	1.858	1.7701	7.8135	15.8494	23.6511	41.4533	68.5285	134.8307	182.4702
Kolmogorov-Smirnov Test										
K-S Statistic	0.033	0.0472	0.0464	0.0819	0.1019	0.1295	0.1501	0.2468	0.3576	0.415

Interest Rate Movement (3-Year)	Laplace	LogLogistic	Logistic	Normal	ExtValue	Weibull	Triang	ExtValueMin	Uniform	Expon
Rankings By Fit Statistic [10 Valid Fits]										
Akaike (AIC)	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10
Bayesian (BIC)	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10
Chi-Sq Statistic	#1	#3	#2	#4	#6	#5	#8	#7	#10	#9
K-S Statistic	#1	#2	#3	#4	#6	#5	#8	#7	#10	#9
A-D Statistic	#1	#2	#3	#4	#6	#5	#8	#7	#10	#9
Information Criteria										
Akaike (AIC)	-3532.353	-3516.013	-3502.418	-3430.052	-3410.513	-3408.176	-3198.321	-3094.526	-2635.629	-2623.439
Bayesian (BIC)	-3523.374	-3502.555	-3493.439	-3421.074	-3401.535	-3394.717	-3184.862	-3085.548	-2626.651	-2614.461
Chi-Squared Test										
Chi-Sq Statistic	39.3886	63.4849	56.1054	99.1777	147.0693	135.9247	379.3735	352.7169	1138.184	1120.111
Anderson-Darling Test										
A-D Statistic	0.9631	2.3462	2.8214	8.9827	13.9985	12.7925	66.6685	42.2408	147.1148	137.2991
Kolmogorov-Smirnov Test										
K-S Statistic	0.0328	0.0454	0.0487	0.0897	0.1103	0.1035	0.2546	0.1545	0.3897	0.3637

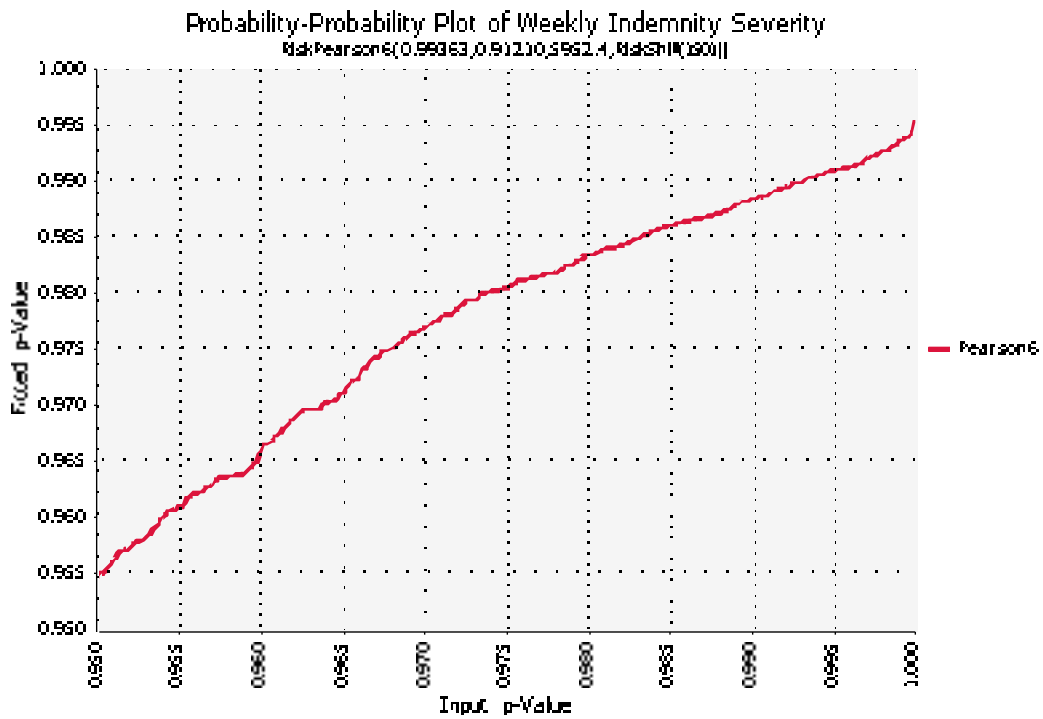
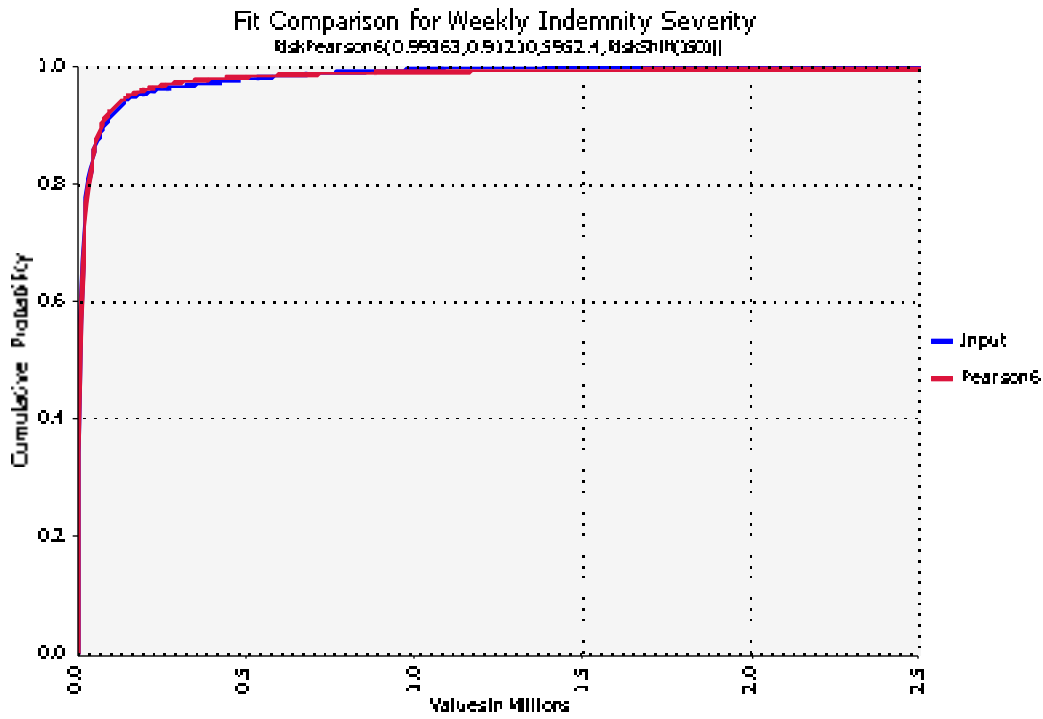
Interest Rate Movement (4-Year)	LogLogistic	Logistic	Laplace	Normal	Weibull	ExtValue	Triang	ExtValueMin	Uniform	Expon
Rankings By Fit Statistic [10 Valid Fits]										
Akaike (AIC)	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10
Bayesian (BIC)	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10
Chi-Sq Statistic	#1	#2	#4	#3	#5	#6	#8	#7	#9	#10
K-S Statistic	#1	#2	#3	#4	#5	#6	#8	#7	#9	#10
A-D Statistic	#1	#2	#3	#4	#5	#6	#8	#7	#9	#10
Information Criteria										
Akaike (AIC)	-3249.816	-3243.872	-3213.005	-3189.311	-3145.875	-3105.024	-2951.897	-2906.09	-2402.204	-2234.373
Bayesian (BIC)	-3236.413	-3234.931	-3204.063	-3180.37	-3132.472	-3096.083	-2938.494	-2897.148	-2393.262	-2225.431
Chi-Squared Test										
Chi-Sq Statistic	62.2638	72.3098	127.7546	100.6074	135.7301	156.2822	352.8313	315.3313	1025.761	1260.04
Anderson-Darling Test										
A-D Statistic	2.0833	2.5664	4.9794	5.9593	10.5755	14.7767	46.7966	33.1417	118.9975	149.1785
Kolmogorov-Smirnov Test										
K-S Statistic	0.0495	0.0543	0.0628	0.0738	0.1049	0.1135	0.2078	0.1563	0.3504	0.4

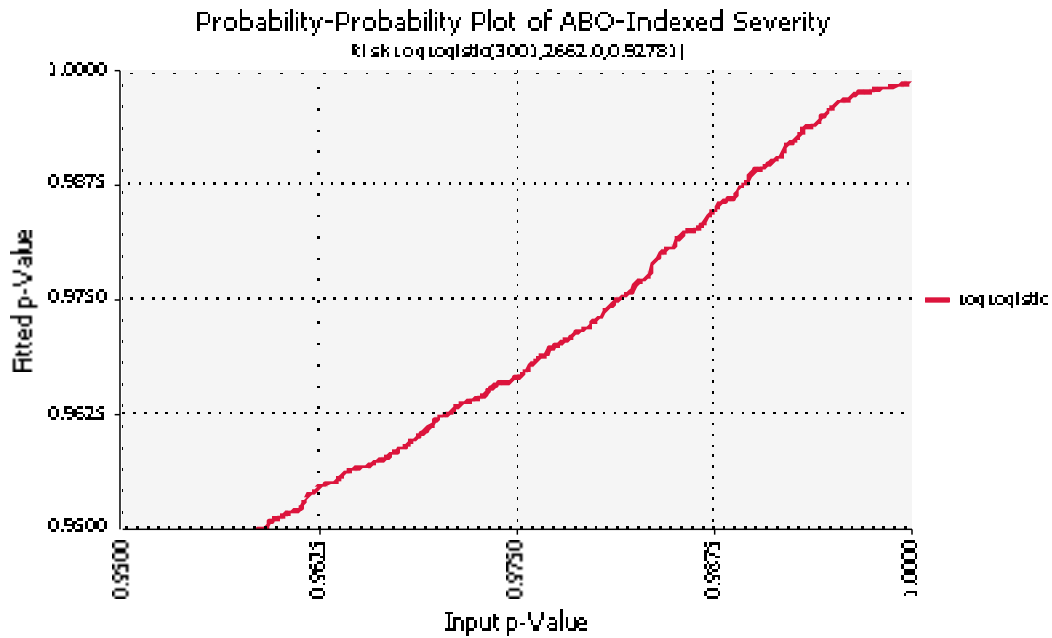
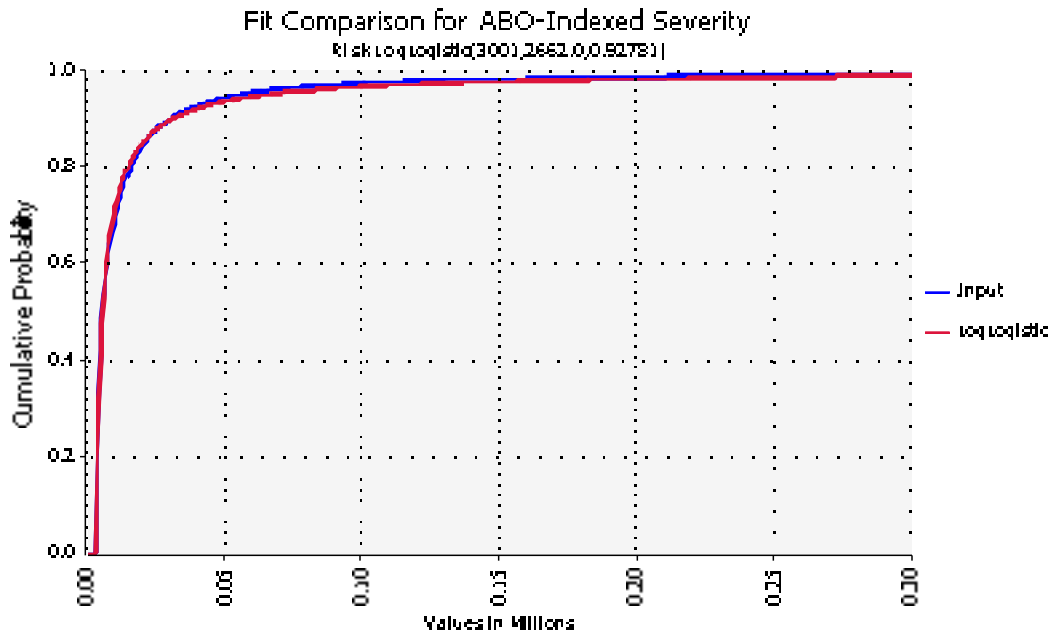
Equity Returns (1-Year)	Logistic	LogLogistic	Normal	Weibull	Laplace	ExtValue	ExtValueMin	Triang	Uniform	Expon	Levy
Rankings By Fit Statistic [11 Valid Fits]											
Akaike (AIC)	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11
Bayesian (BIC)	#1	#3	#2	#4	#5	#6	#7	#8	#9	#10	#11
Chi-Sq Statistic	#3	#1	#2	#4	#5	#6	#7	#8	#9	#10	#11
K-S Statistic	#2	#3	#1	#4	#5	#6	#7	#8	#10	#9	#11
A-D Statistic	#2	#3	#1	#4	#5	#6	#7	#8	#9	#10	#11
Information Criteria											
Akaike (AIC)	-395.8082	-394.2616	-392.6133	-381.8713	-346.3853	-303.6321	-196.5363	-187.5648	327.0298	421.4271	1038.245
Bayesian (BIC)	-386.7582	-380.6953	-383.5632	-368.305	-337.3353	-294.5821	-187.4862	-173.9985	336.0799	430.4771	1047.296
Chi-Squared Test											
Chi-Sq Statistic	22.1744	17.9593	20.2849	23.1192	64.907	86.7093	112.7994	199.8634	712.436	859.3837	1703.424
Anderson-Darling Test											
A-D Statistic	0.5072	0.5681	0.4558	1.3362	3.4892	8.8924	14.9363	37.1704	118.3052	127.3875	190.3556
Kolmogorov-Smirnov Test											
K-S Statistic	0.0219	0.0237	0.021	0.0292	0.0628	0.0731	0.0948	0.1884	0.3428	0.3292	0.4784

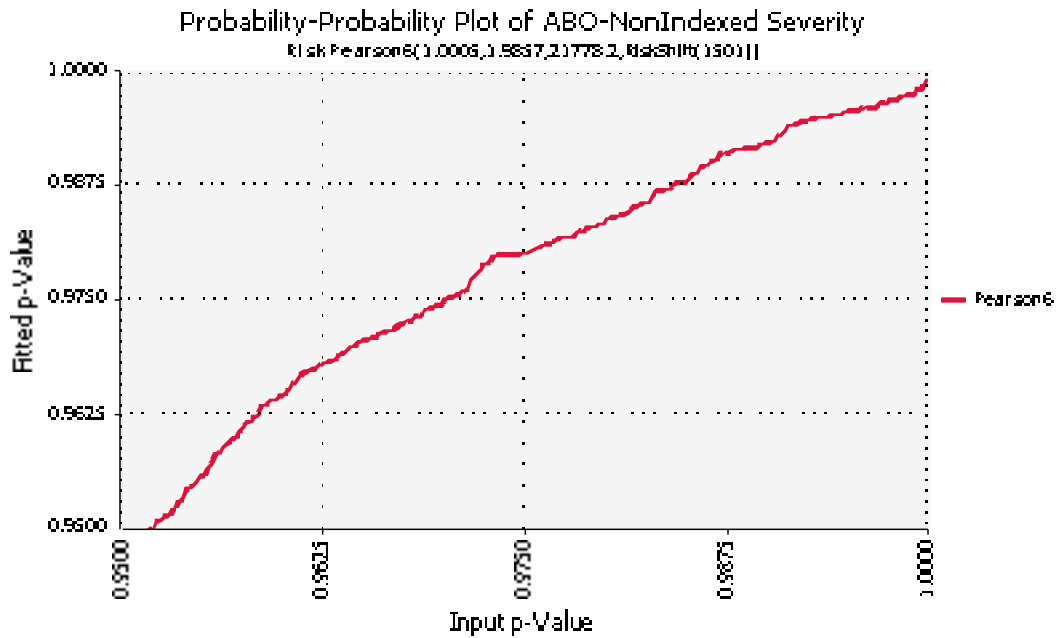
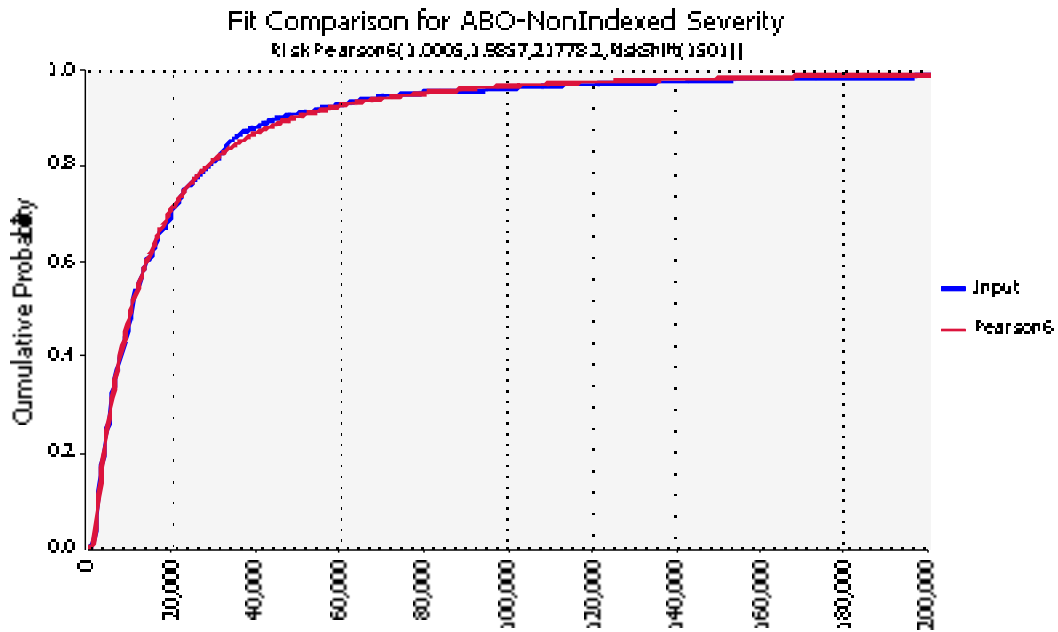
Equity Returns (2-Year)	LogLogistic	Gamma	Logistic	Weibull	ExtValue	Normal	Laplace	Triang	ExtValueMin	Expon	Uniform	Levy
Rankings By Fit Statistic [12 Valid Fits]												
Akaike (AIC)	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12
Bayesian (BIC)	#1	#2	#3	#5	#4	#6	#7	#8	#9	#10	#11	#12
Chi-Sq Statistic	#3	#1	#4	#5	#6	#2	#7	#9	#8	#10	#11	#12
K-S Statistic	#2	#1	#3	#4	#5	#6	#7	#9	#8	#10	#11	#12
A-D Statistic	#1	#2	#3	#4	#6	#5	#7	#9	#8	#10	#11	#12
Information Criteria												
Akaike (AIC)	30.1523	33.3175	49.5514	55.5093	56.6924	68.0821	83.5803	258.4992	348.2689	692.5762	790.073	1286.434
Bayesian (BIC)	43.6652	46.8304	58.5659	69.0222	65.707	77.0966	92.5948	272.012	357.2835	701.5908	799.0876	1295.448
Chi-Squared Test												
Chi-Sq Statistic	33.2456	26.8846	37.0917	38.7189	50.1095	32.6538	71.4852	216.8994	216.4556	682.9497	789.5325	1391.234
Anderson-Darling Test												
A-D Statistic	0.6429	0.8672	1.7927	2.7186	3.1696	3.0269	5.1808	52.2325	26.5963	109.3707	156.3602	176.8692
Kolmogorov-Smirnov Test												
K-S Statistic	0.0319	0.0286	0.0398	0.0416	0.0479	0.0613	0.0739	0.2261	0.1287	0.3132	0.3942	0.4522

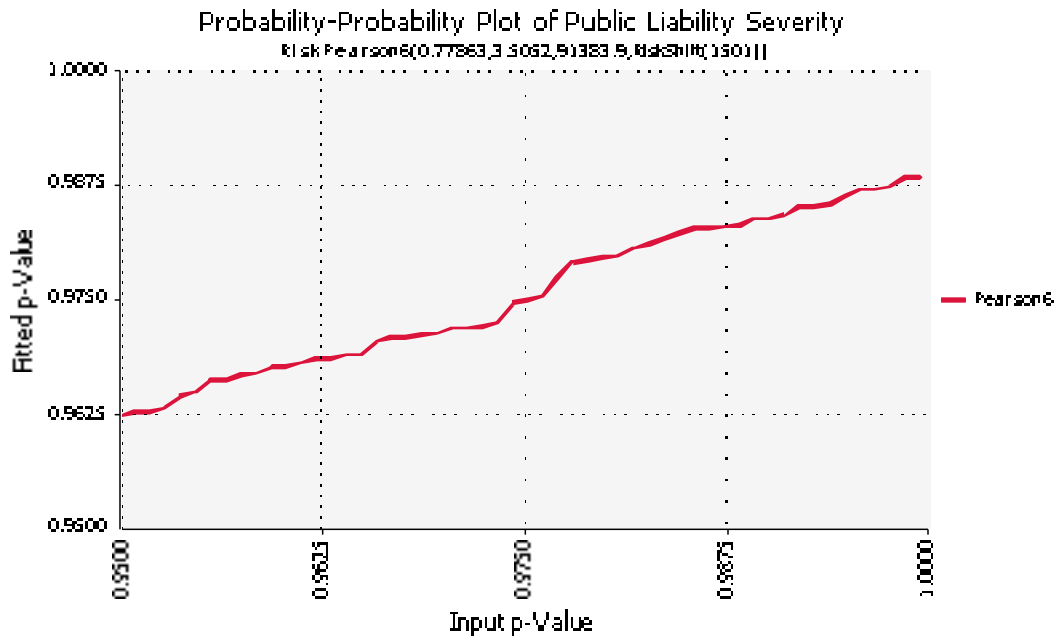
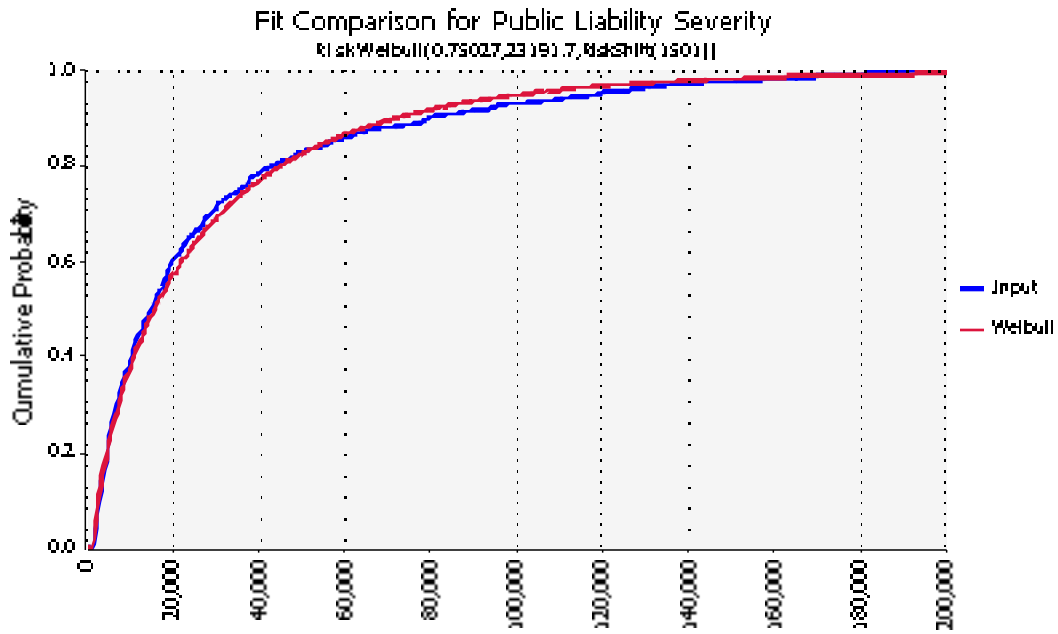
Equity Returns (3-Year)	LogLogistic	ExtValue	Pearson5	Lognorm	InvGauss	Gamma	Weibull	Logistic	Laplace	Normal	Triang	ExtValueMin	Expon	Uniform	Levy
Rankings By Fit Statistic [15 Valid Fits]															
Akaike (AIC)	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	#14	#15
Bayesian (BIC)	#2	#1	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	#14	#15
Chi-Sq Statistic	#5	#4	#1	#2	#3	#6	#8	#7	#10	#9	#11	#12	#13	#14	#15
K-S Statistic	#1	#3	#2	#4	#5	#6	#9	#7	#8	#10	#12	#11	#13	#14	#15
A-D Statistic	#1	#4	#2	#3	#5	#6	#9	#7	#8	#10	#12	#11	#13	#14	#15
Information Criteria															
Akaike (AIC)	257.5925	261.34	262.5393	264.4843	266.7733	271.1385	305.077	319.3416	336.6831	376.0748	451.1107	731.1136	739.0457	927.564	1317.431
Bayesian (BIC)	271.051	270.3185	275.9978	277.9428	280.2318	284.597	318.5355	328.32	345.6615	385.0532	464.5692	740.092	748.0241	936.5424	1326.409
Chi-Squared Test															
Chi-Sq Statistic	41.0452	38.0331	31.7078	34.8705	36.9036	42.0994	61.753	58.5151	93.5301	79.3735	210.6988	343.5301	500.3825	727.1145	1147.371
Anderson-Darling Test															
A-D Statistic	0.7085	1.3154	1.0798	1.205	1.3608	1.6417	4.9219	3.483	4.045	8.7854	48.4428	41.952	84.8529	168.2823	153.5862
Kolmogorov-Smirnov Test															
K-S Statistic	0.0304	0.0385	0.038	0.0405	0.0433	0.0474	0.0685	0.055	0.0614	0.0881	0.2221	0.1781	0.2626	0.3933	0.4159

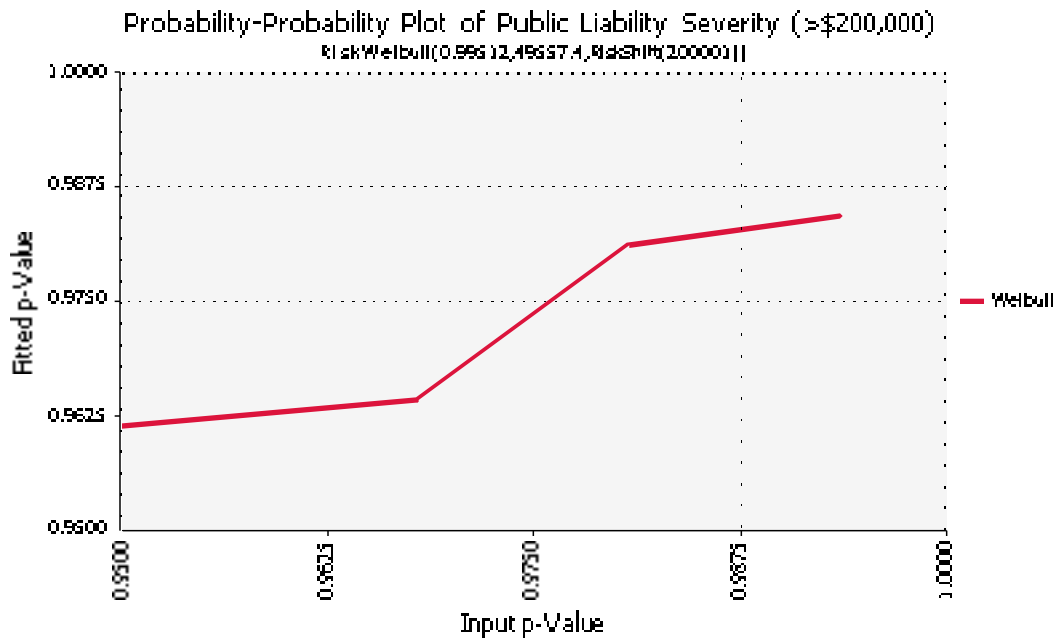
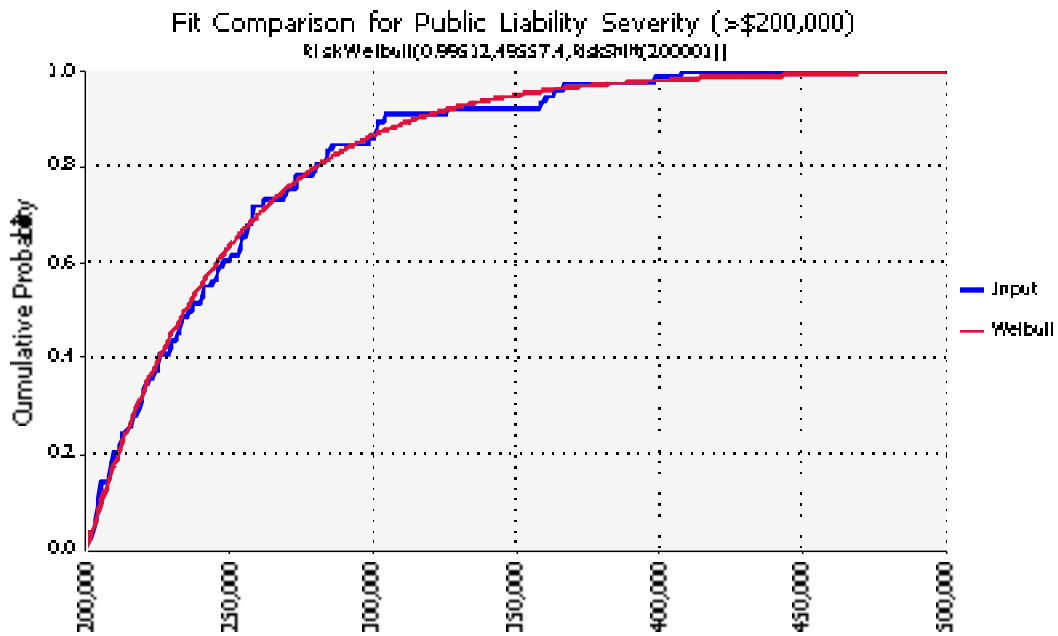
Equity Returns (4-Year)	InvGauss	Gamma	Lognorm	Pearson5	ExtValue	Weibull	LogLogistic	Logistic	Normal	Laplace	Triang	Expon	ExtValueMin	Uniform	Levy
Rankings By Fit Statistic [15 Valid Fits]															
Akaike (AIC)	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	#14	#15
Bayesian (BIC)	#1	#2	#3	#5	#4	#6	#7	#8	#9	#10	#11	#12	#13	#14	#15
Chi-Sq Statistic	#1	#2	#3	#4	#6	#5	#7	#8	#9	#10	#11	#12	#13	#14	#15
K-S Statistic	#2	#1	#3	#4	#5	#7	#6	#8	#10	#9	#12	#13	#11	#15	#14
A-D Statistic	#2	#1	#3	#4	#5	#7	#6	#8	#9	#10	#12	#13	#11	#15	#14
Information Criteria															
Akaike (AIC)	443.8277	444.4659	445.7226	448.5735	450.8851	466.3456	467.6186	560.2283	583.211	595.6551	619.0536	806.3697	890.484	1124.619	1319.308
Bayesian (BIC)	457.2308	457.869	459.1257	461.9766	459.8267	479.7487	481.0217	569.1699	592.1526	604.5967	632.4567	815.3113	899.4256	1133.561	1328.25
Chi-Squared Test															
Chi-Sq Statistic	26.5276	29.135	30.8988	31.6656	42.862	38.5675	47.9233	112.2638	118.1687	153.9049	179.8252	314.8712	340.7147	665.1012	777.6779
Anderson-Darling Test															
A-D Statistic	0.4497	0.407	0.5563	0.7115	1.0317	1.9153	1.4889	6.3935	9.4303	10.5333	49.6547	62.7596	33.7654	198.0619	136.0976
Kolmogorov-Smirnov Test															
K-S Statistic	0.0292	0.0239	0.0318	0.0346	0.0369	0.043	0.0418	0.0707	0.0908	0.0902	0.2126	0.2268	0.174	0.4132	0.3937

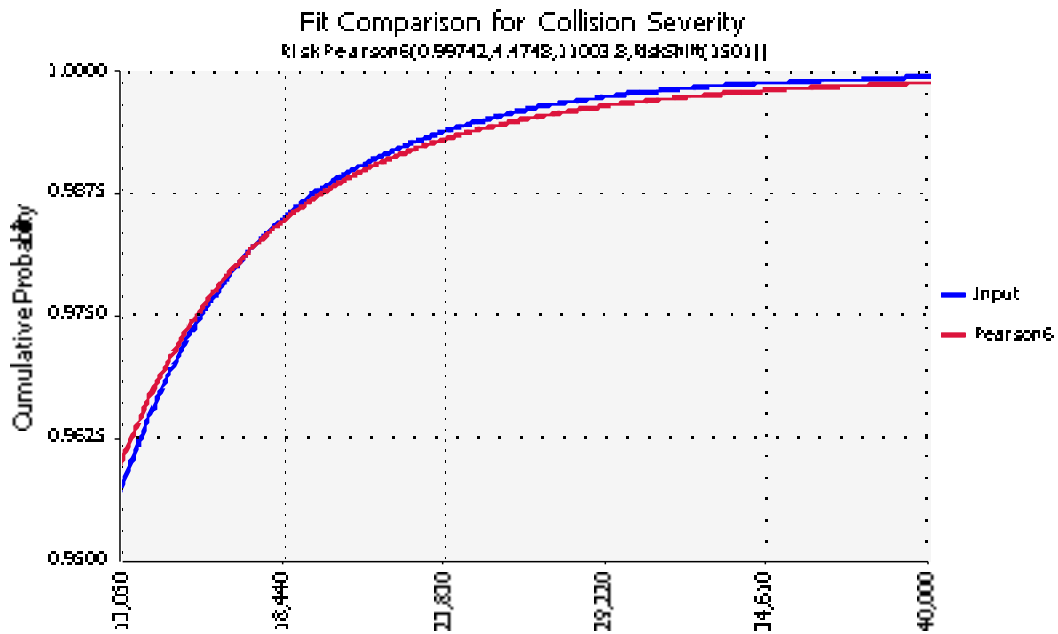
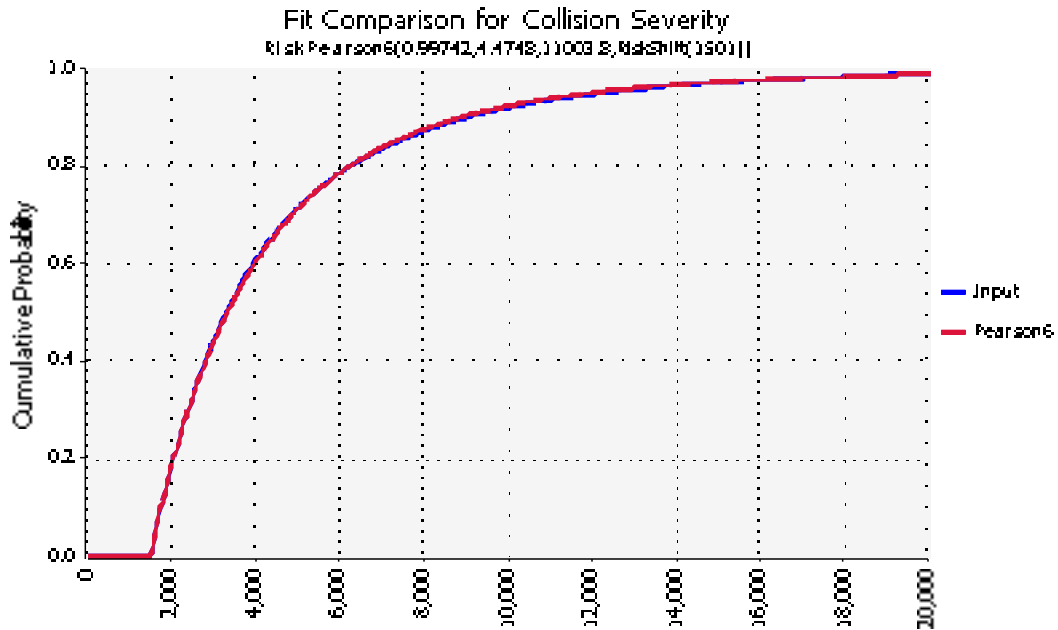


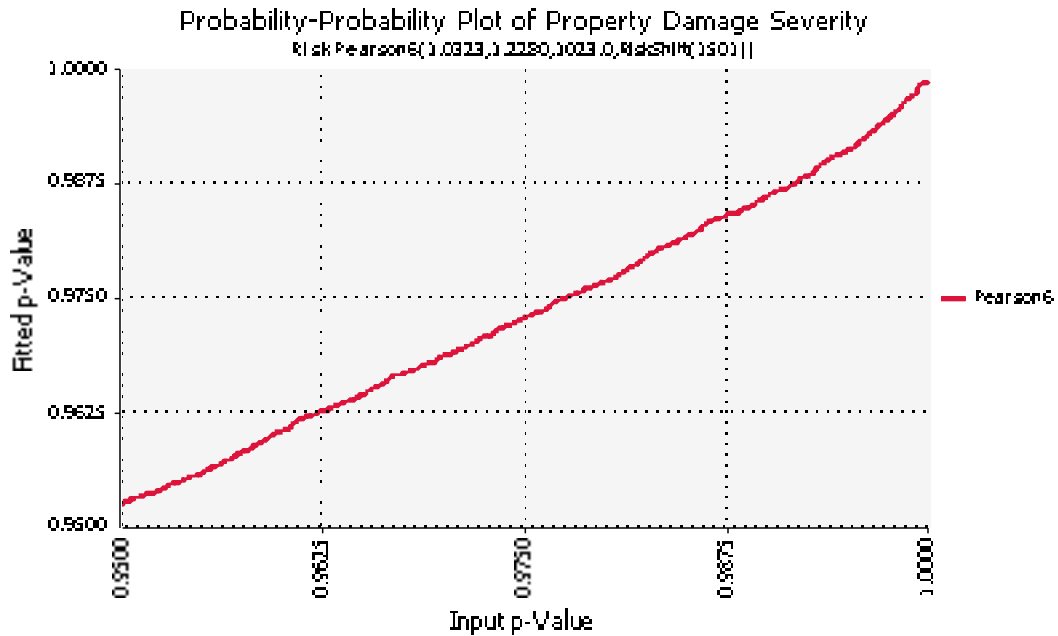
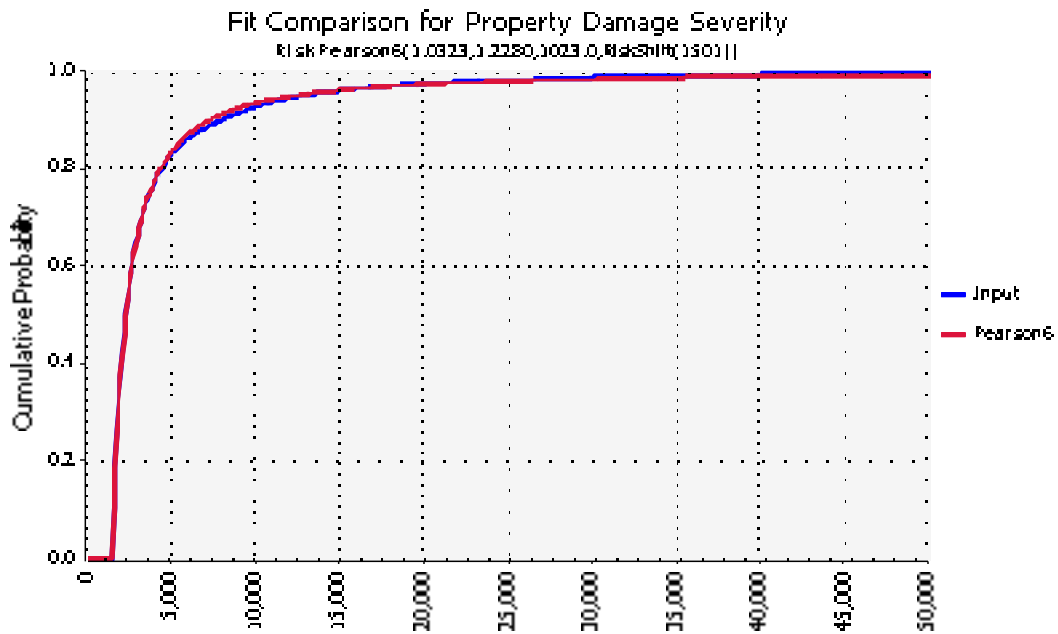


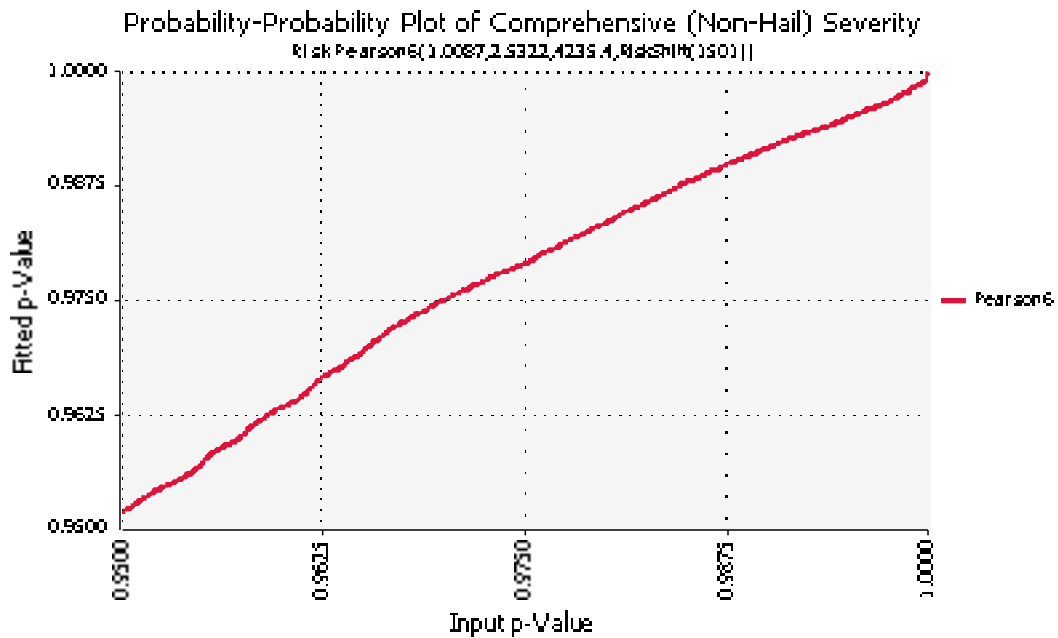
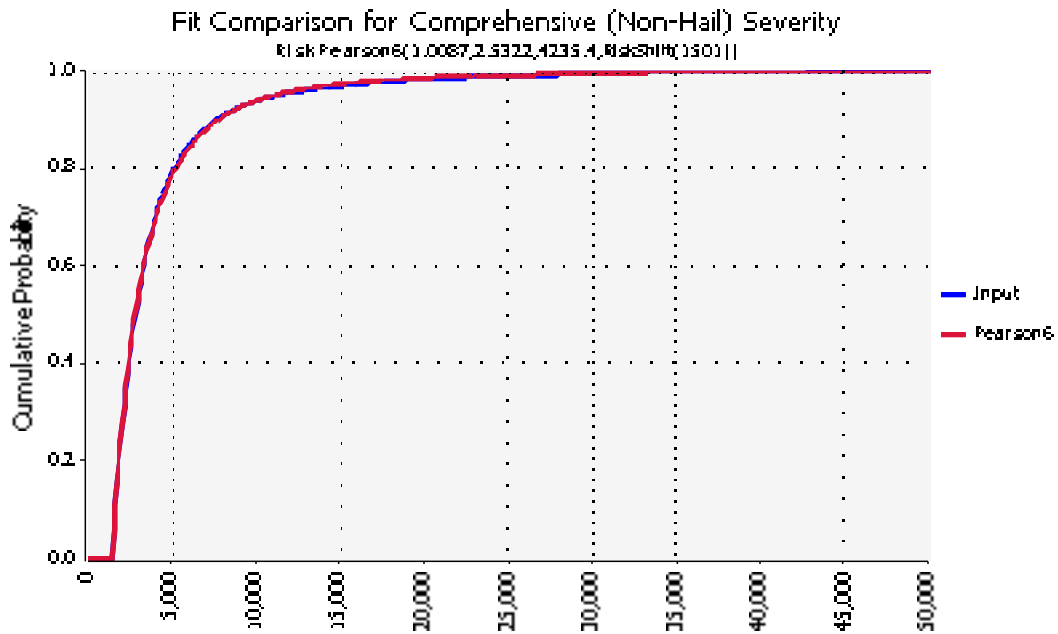


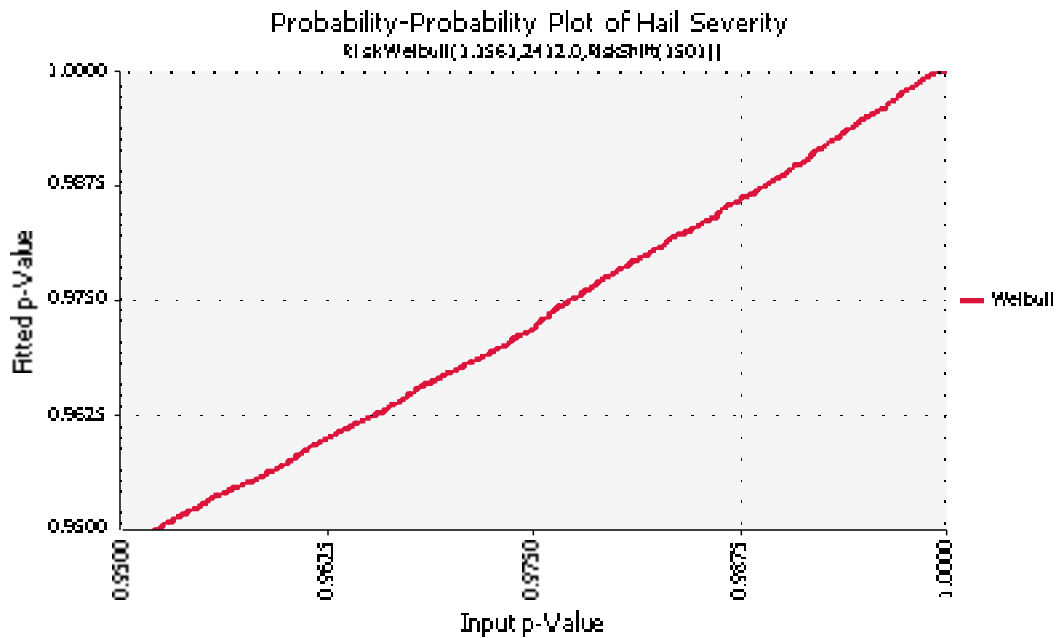
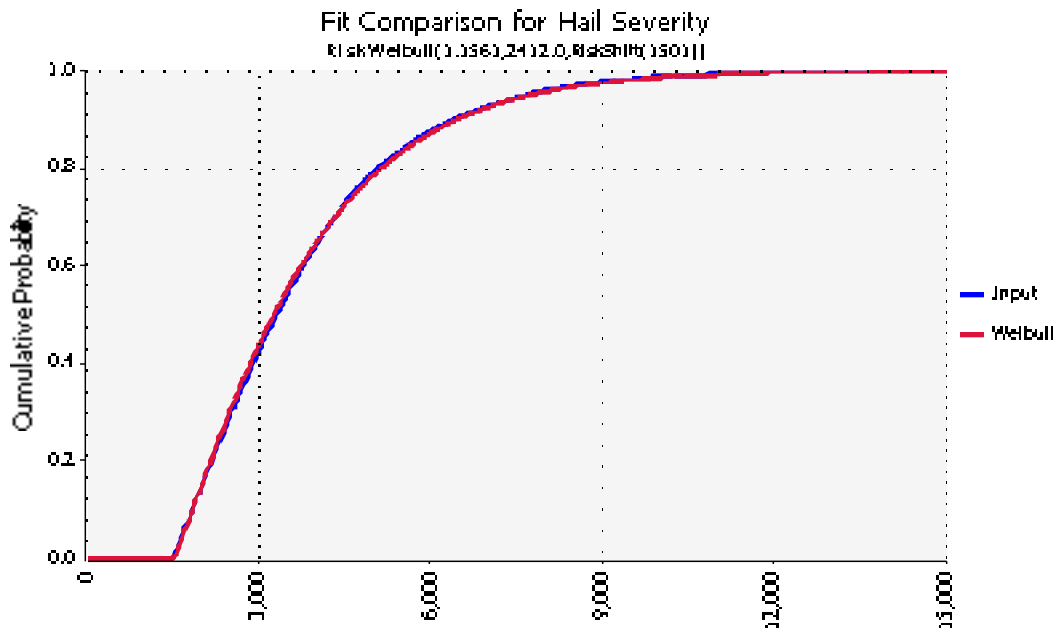


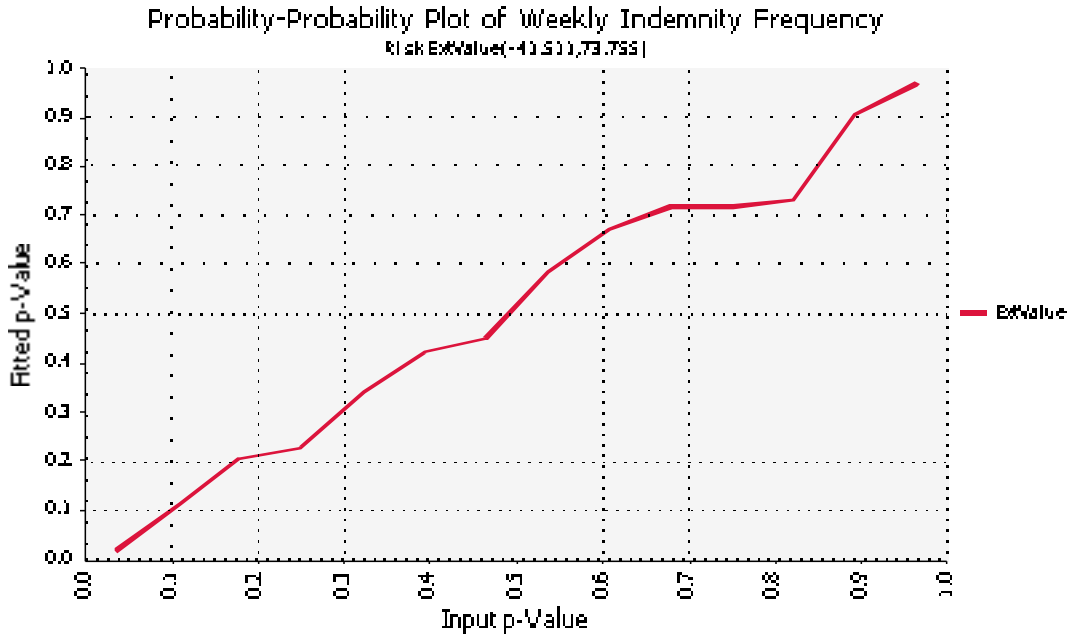
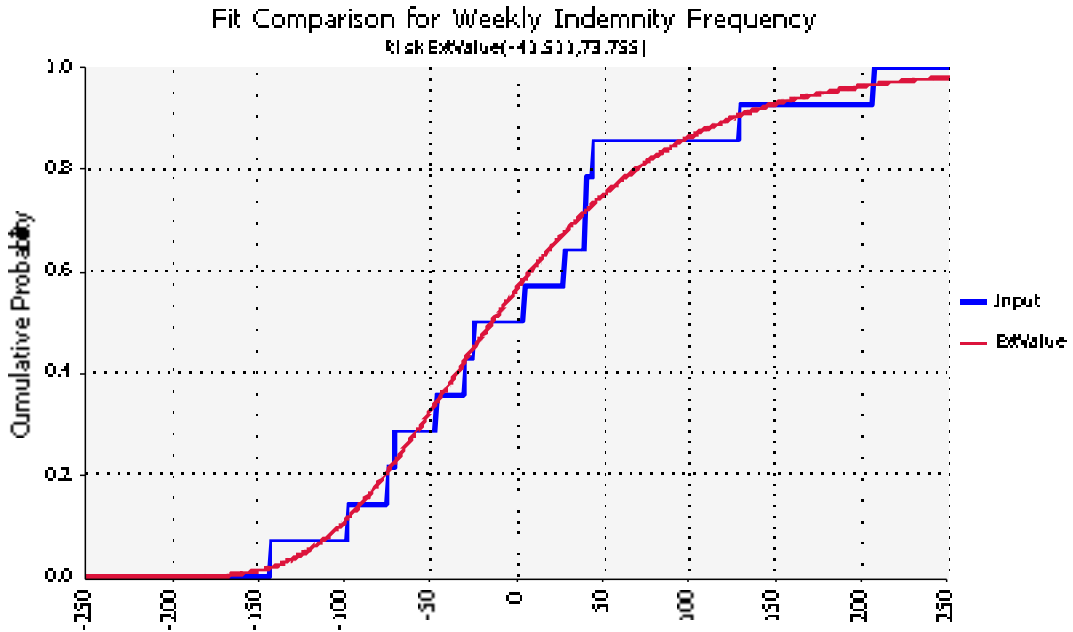


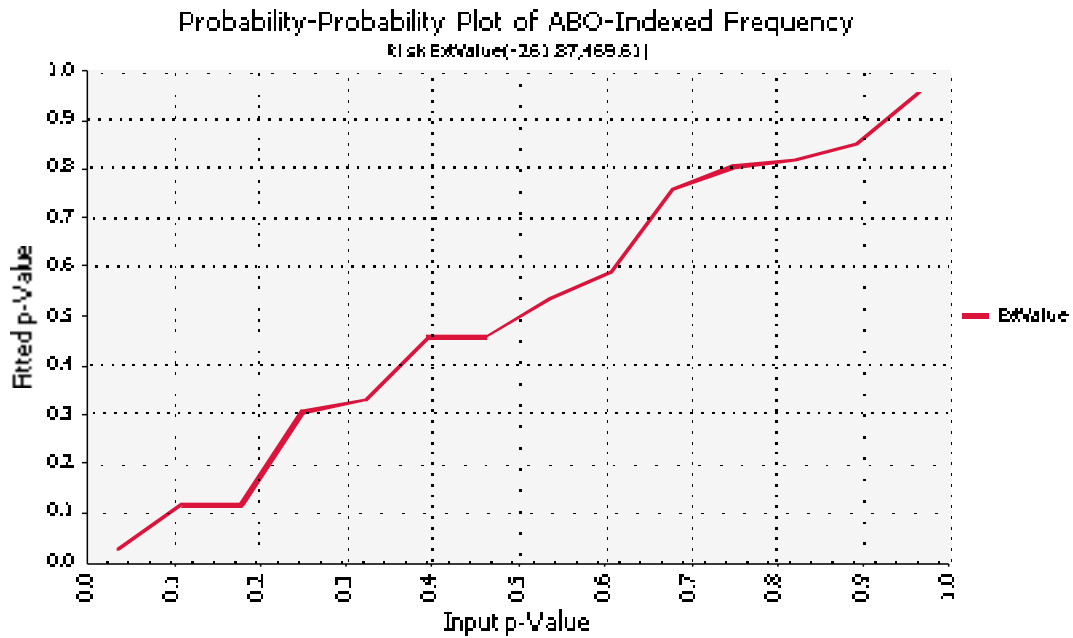
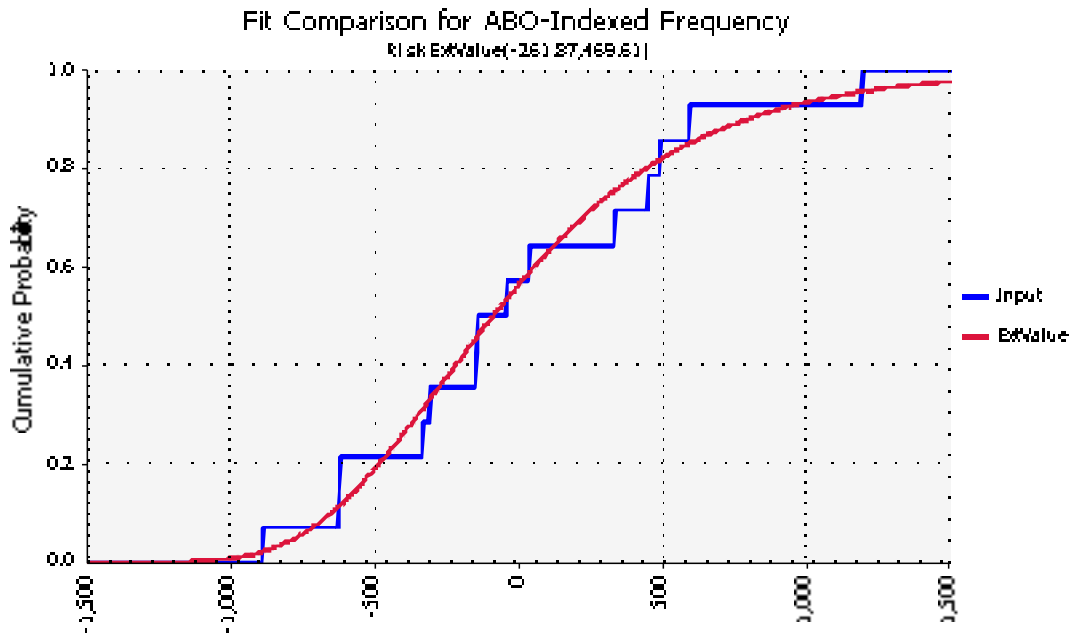


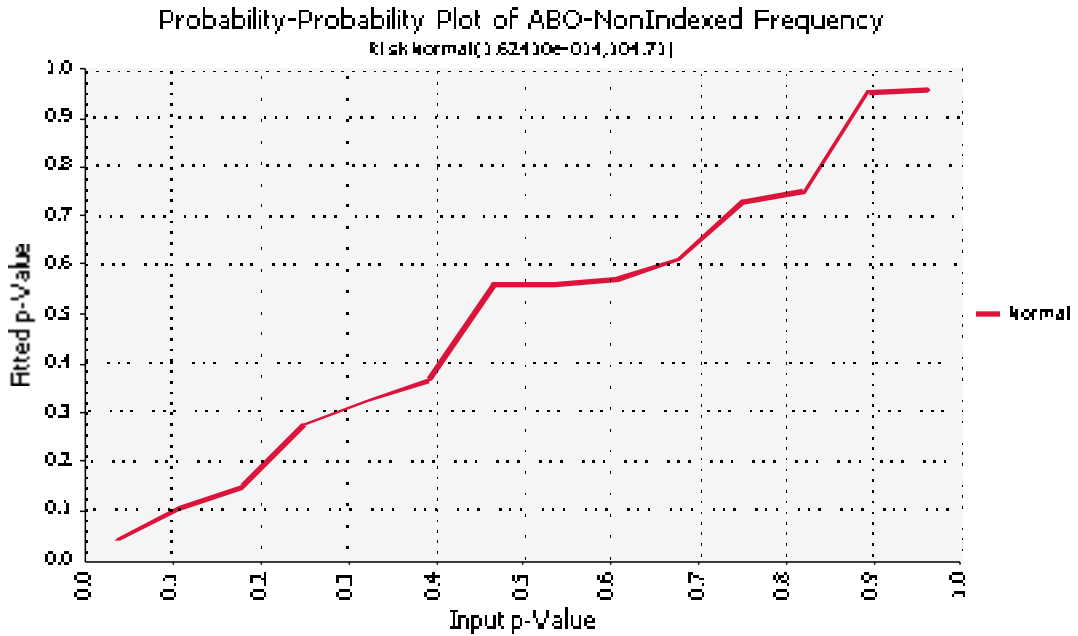
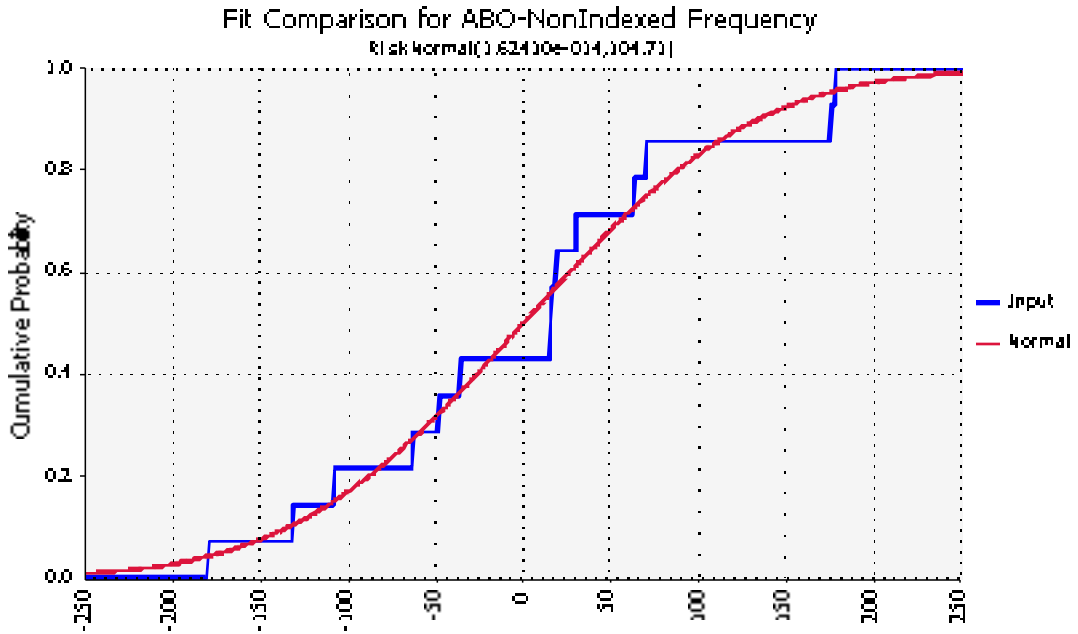


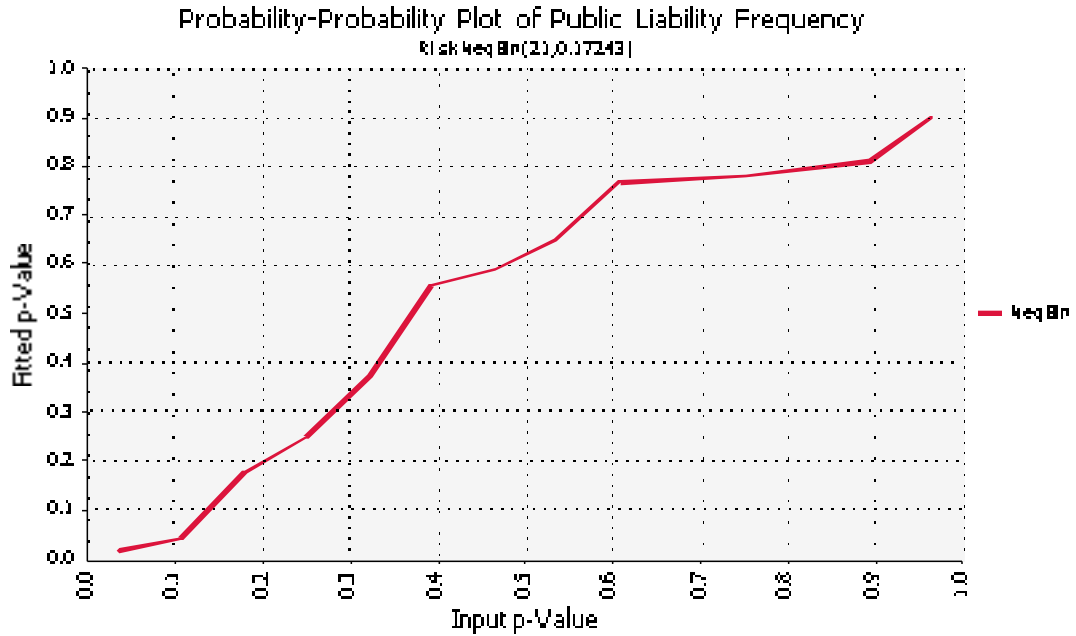
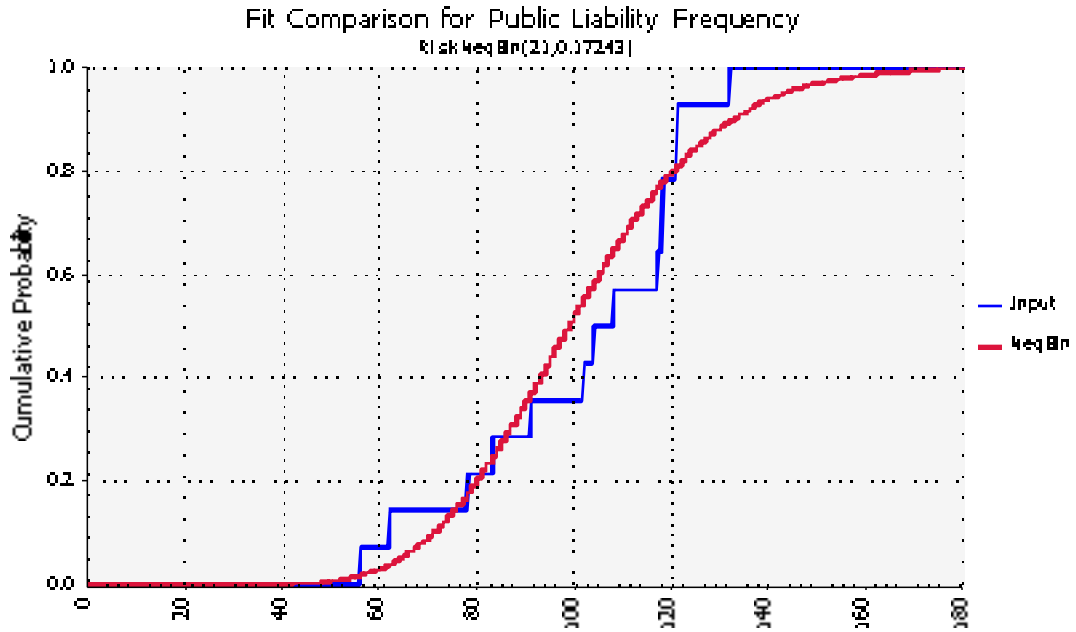


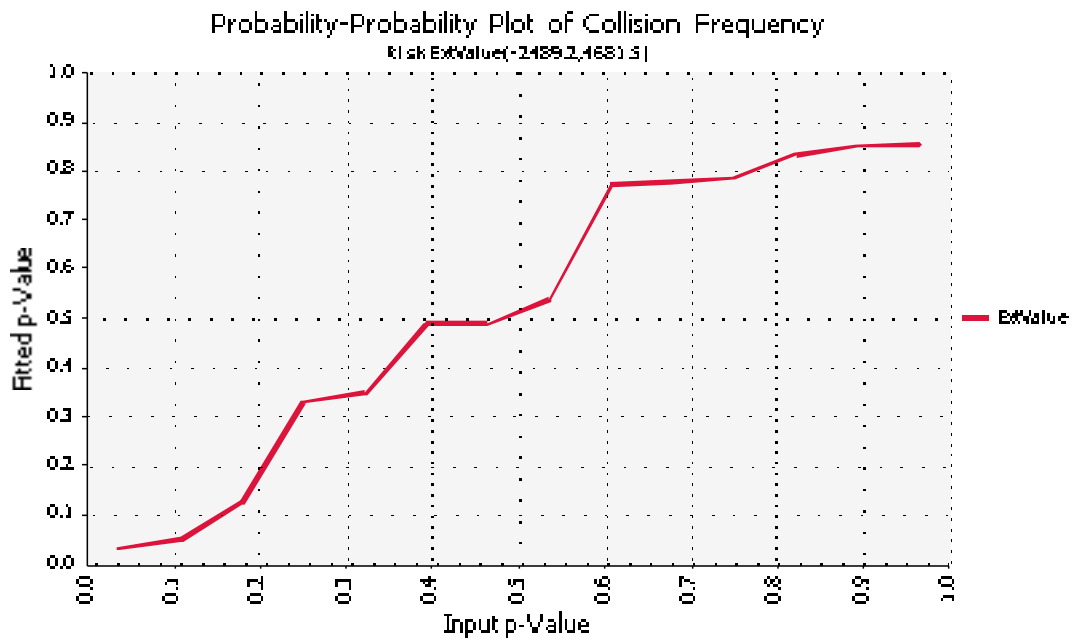
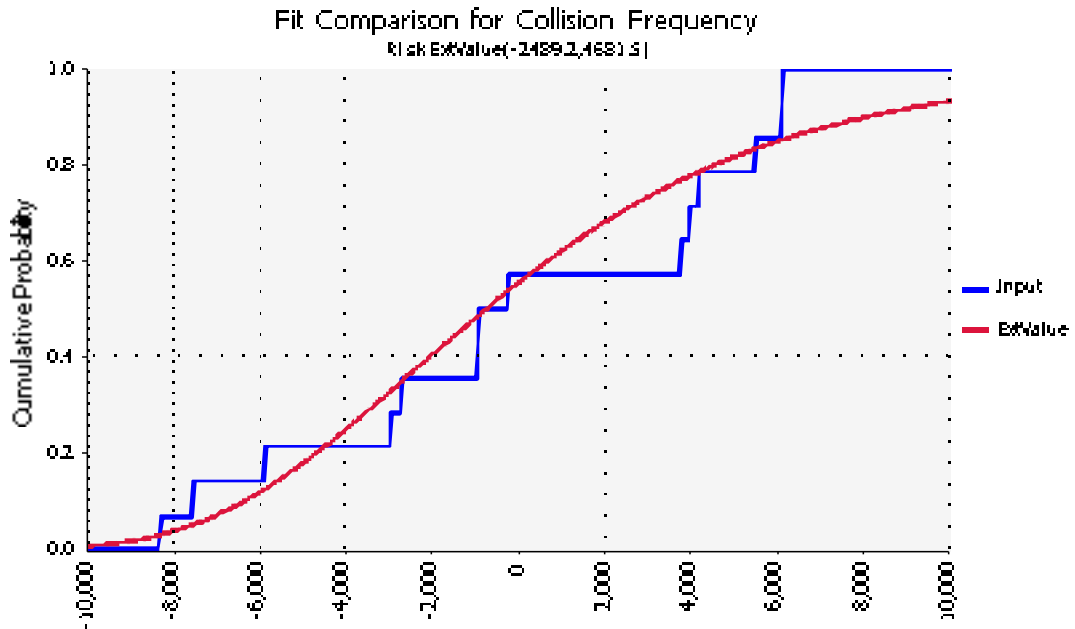


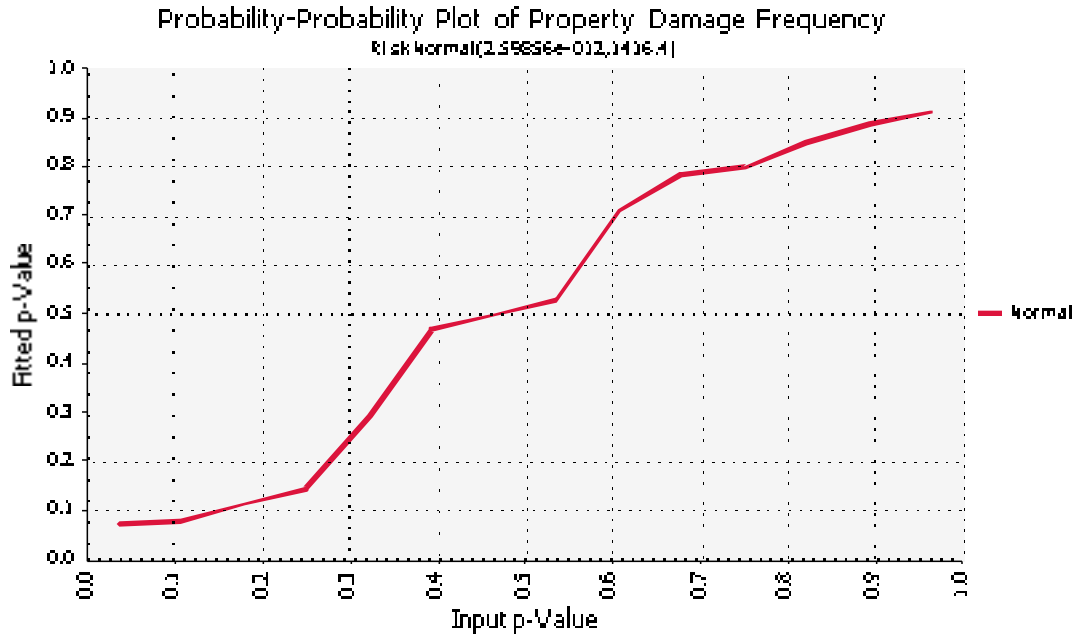
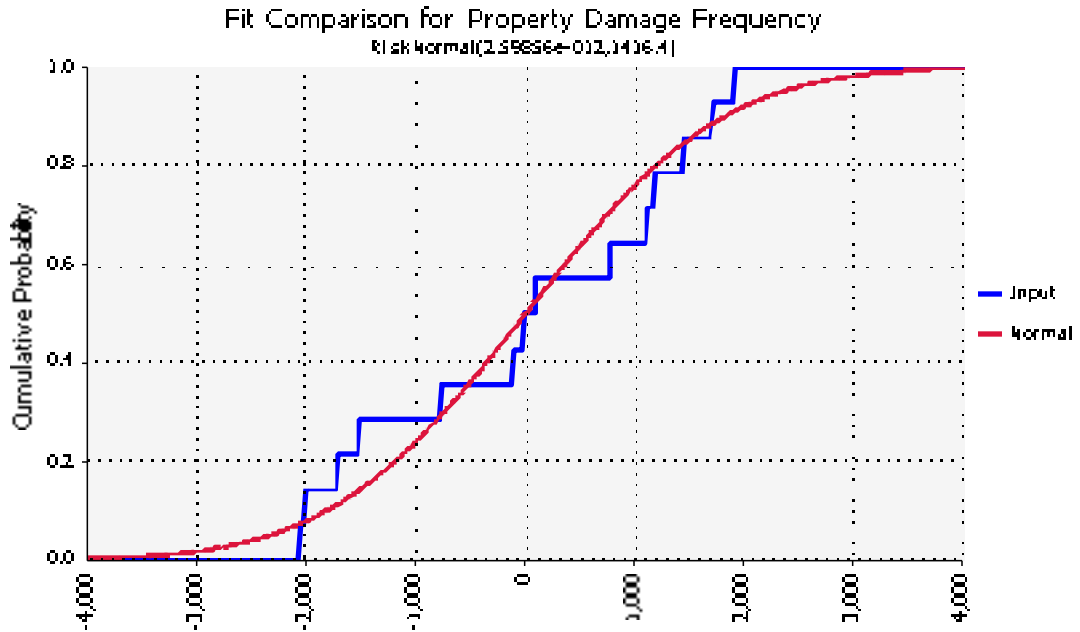


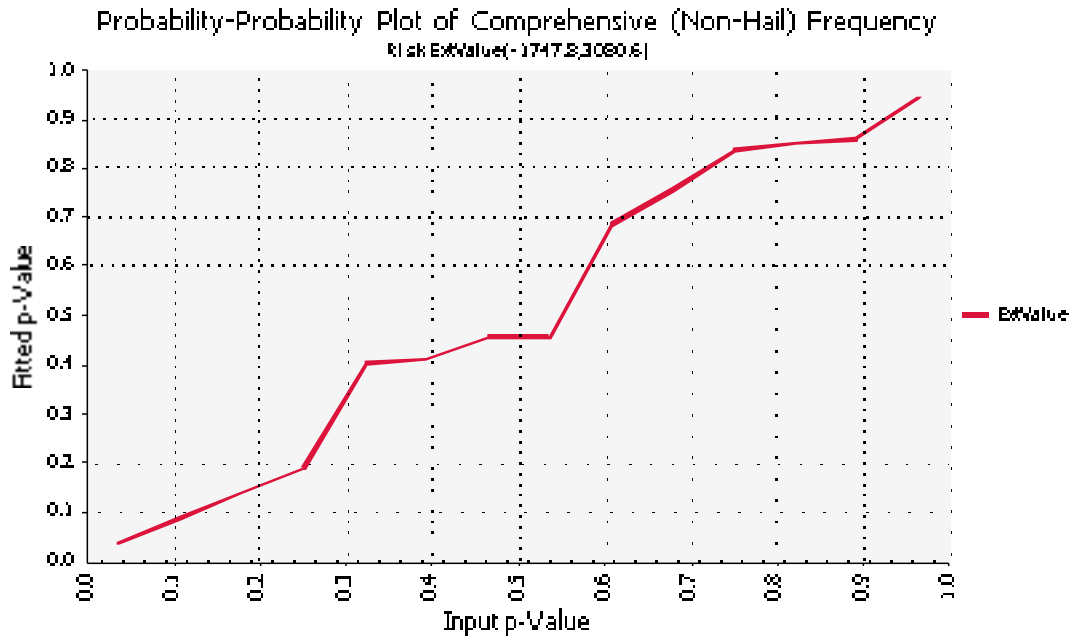
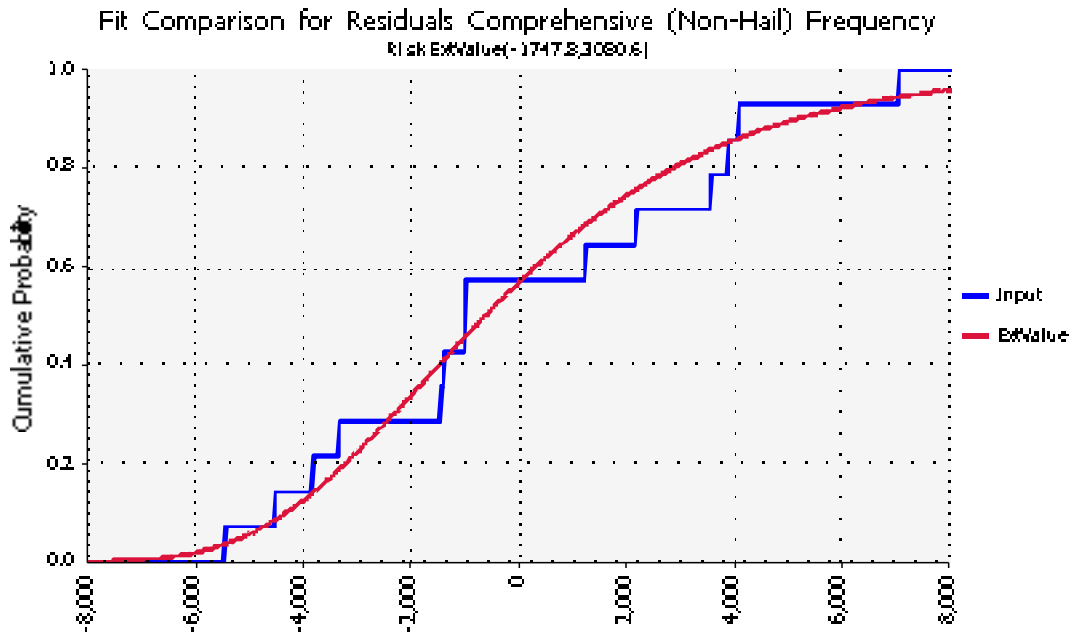


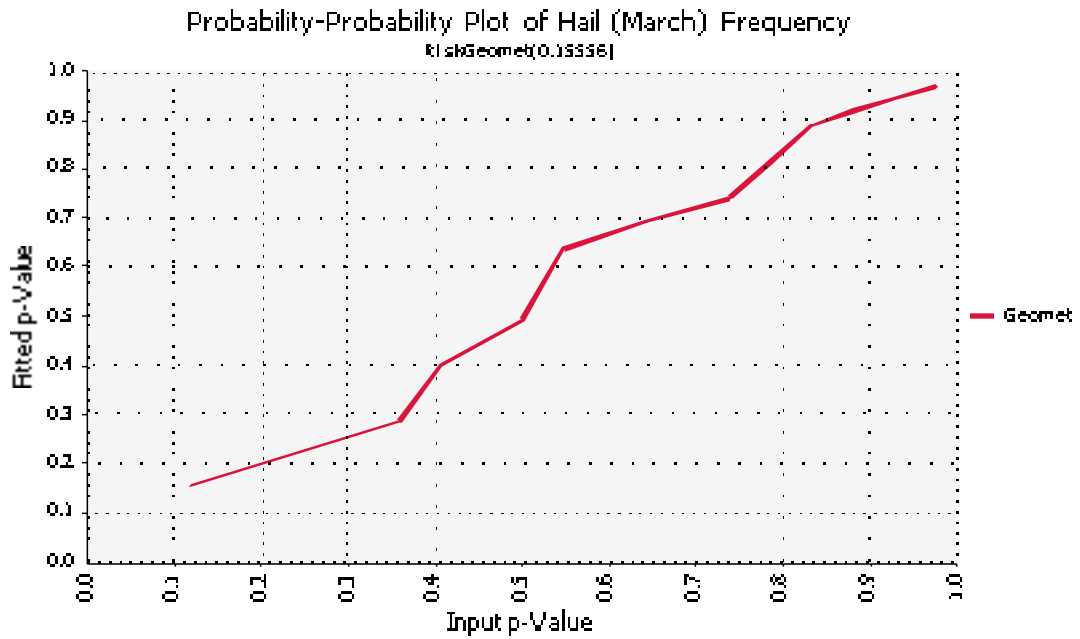
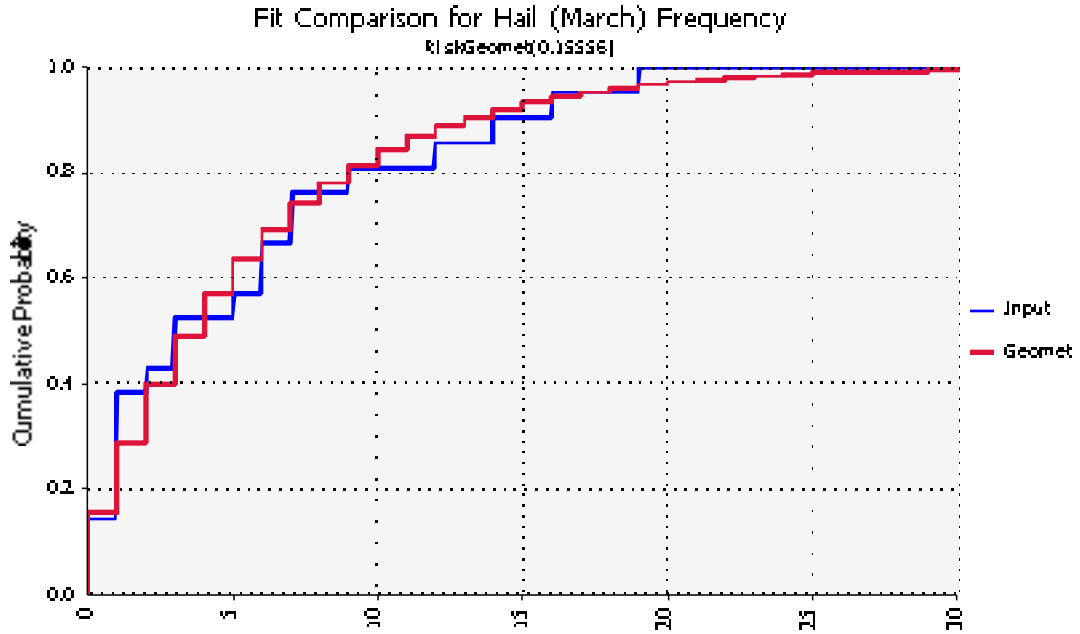


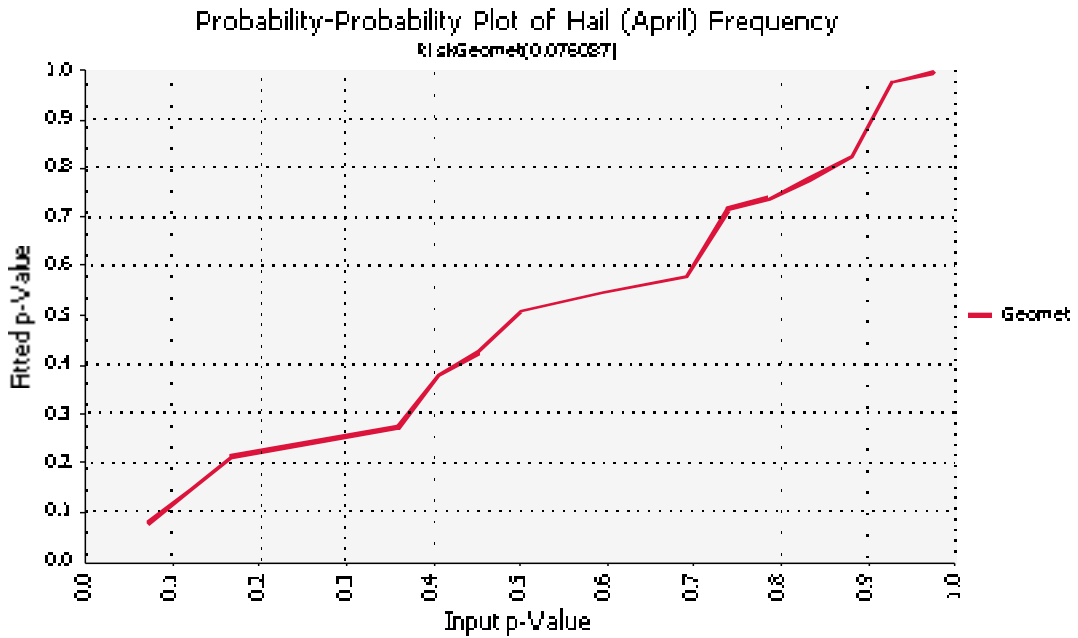
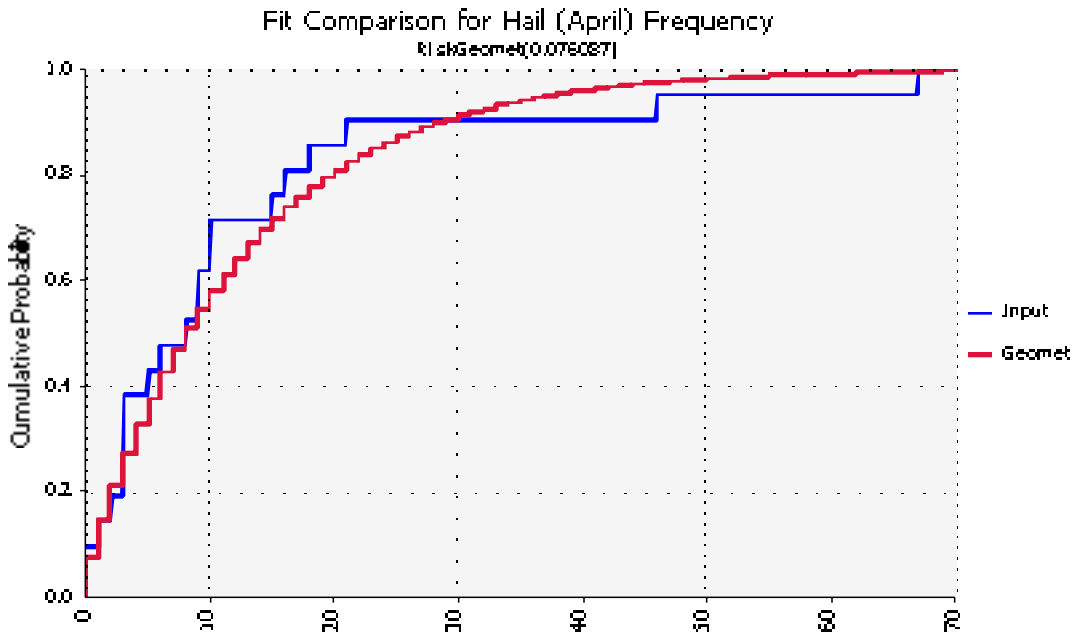


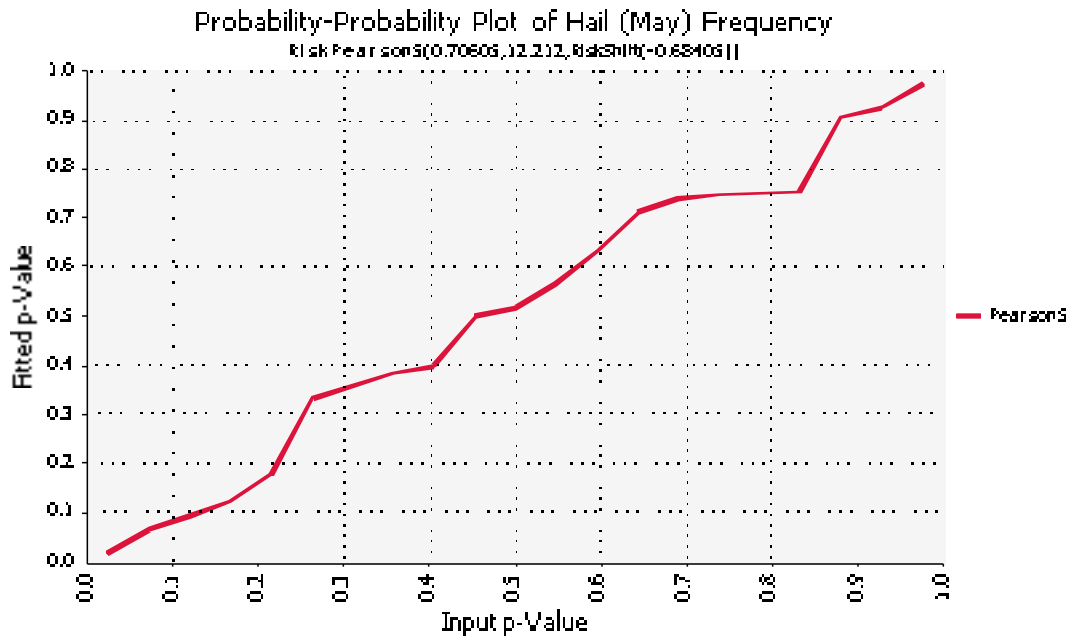
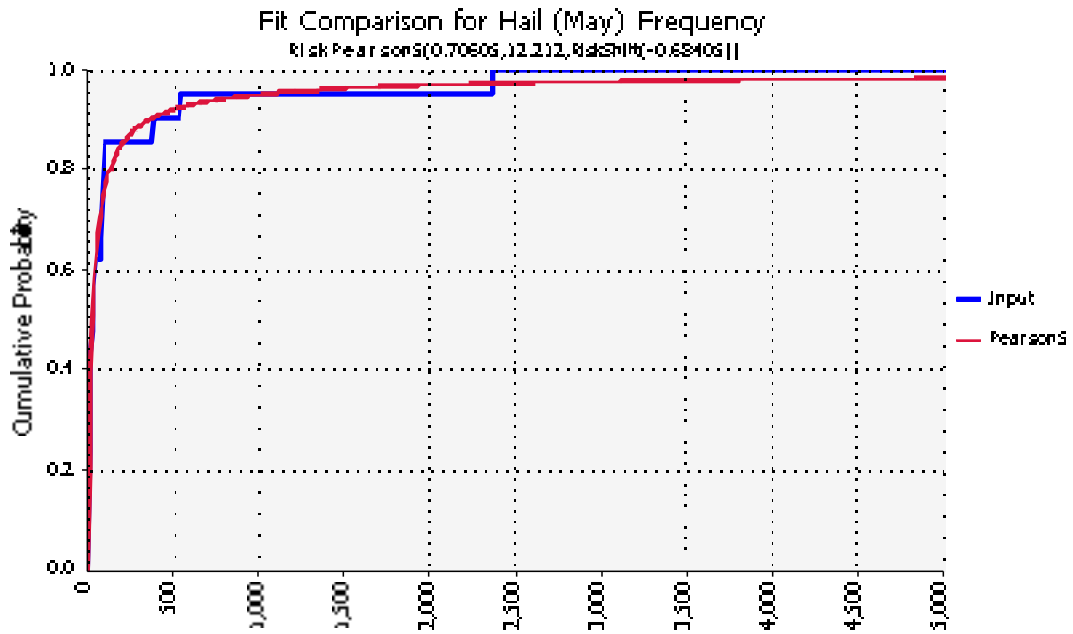


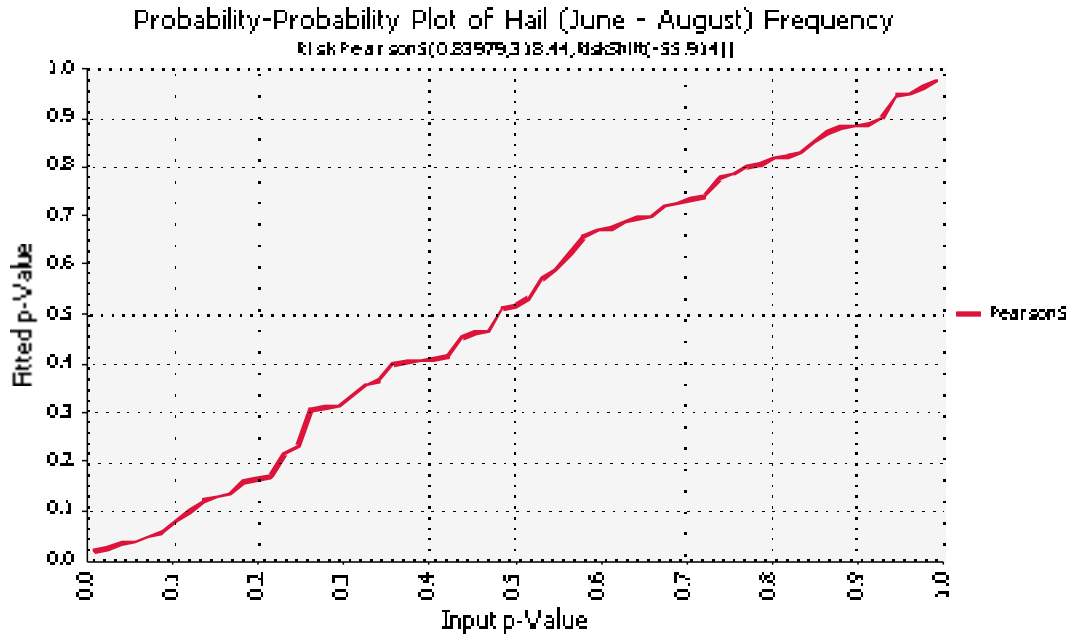
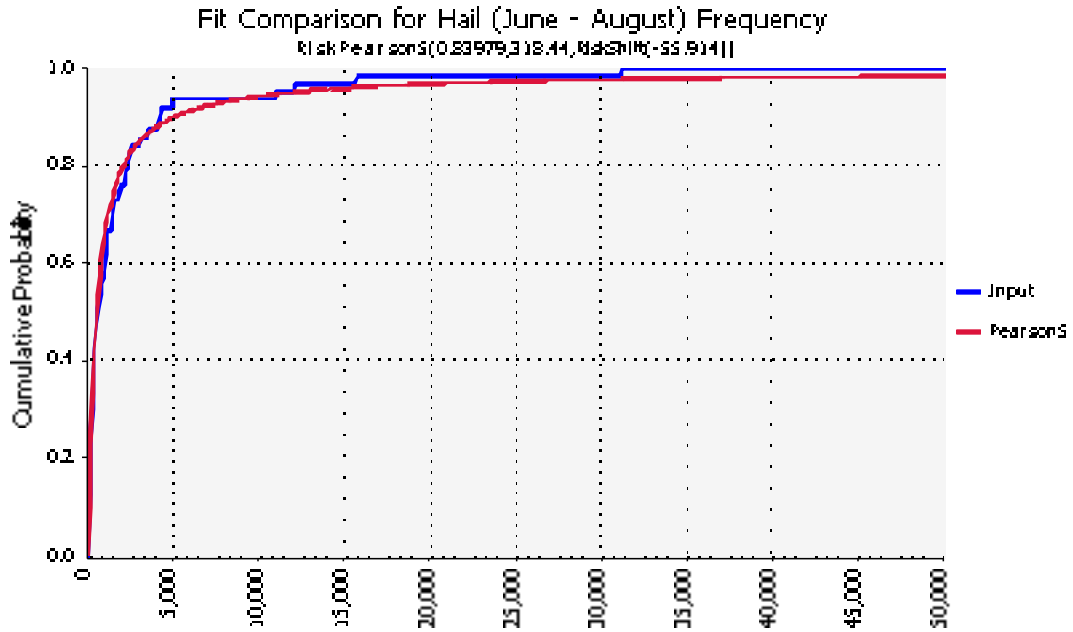


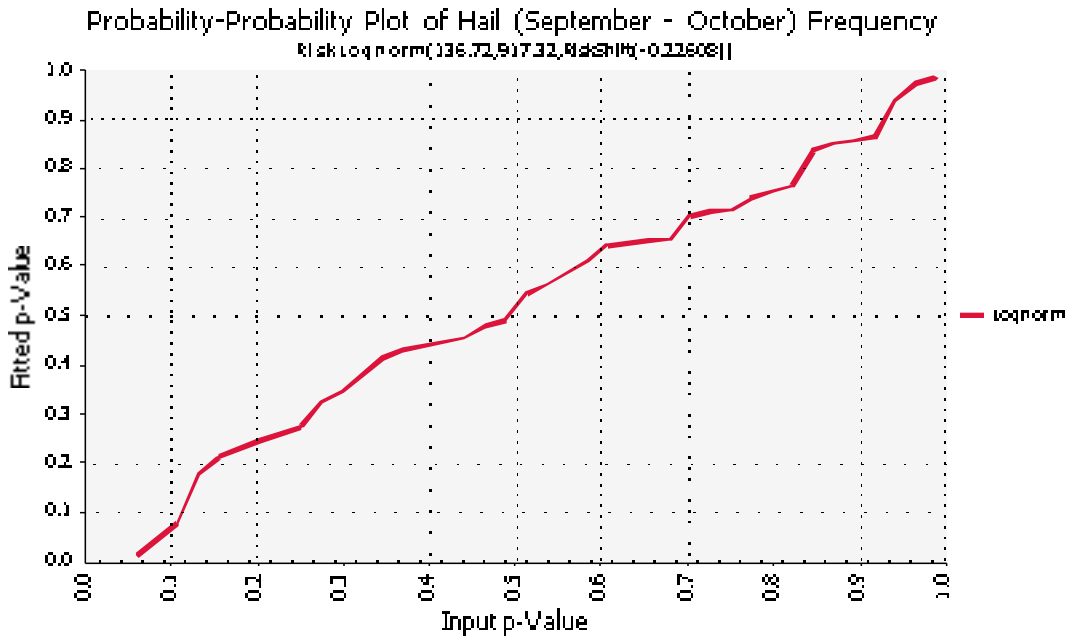
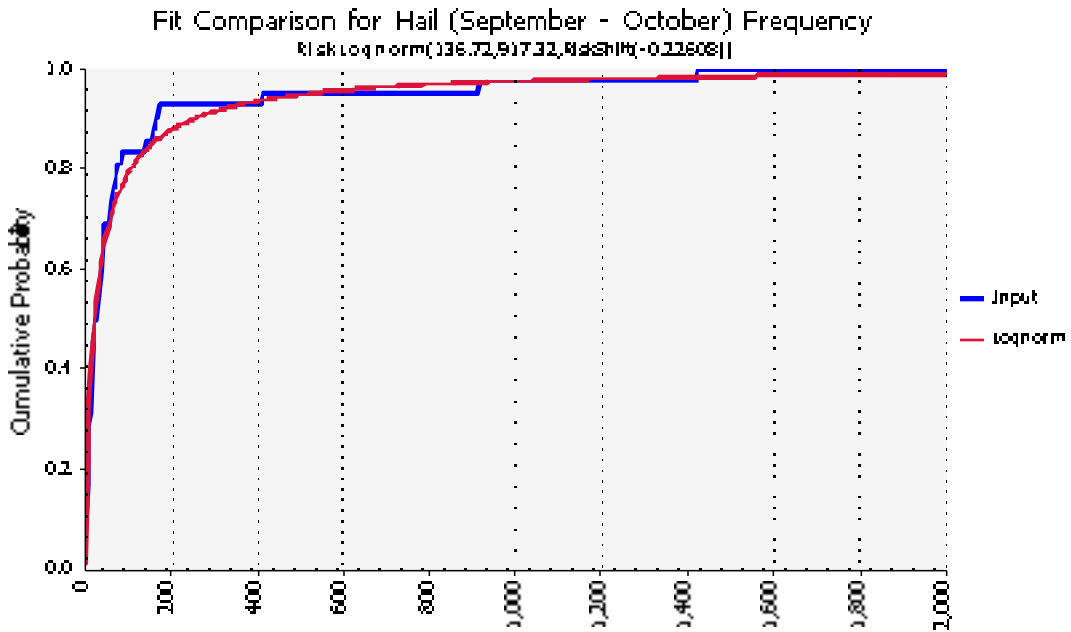


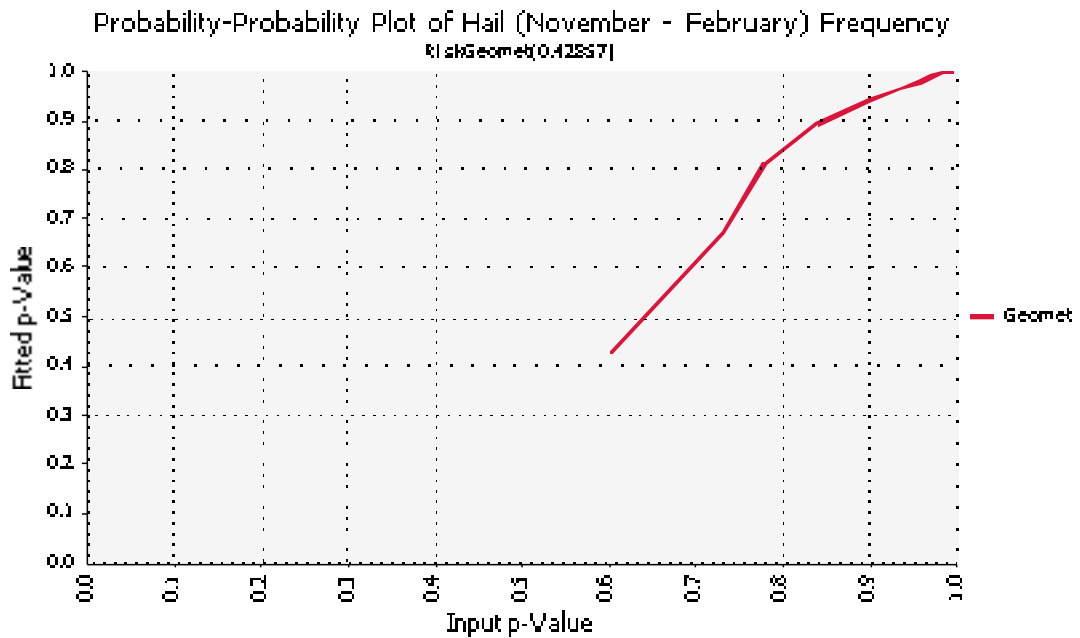
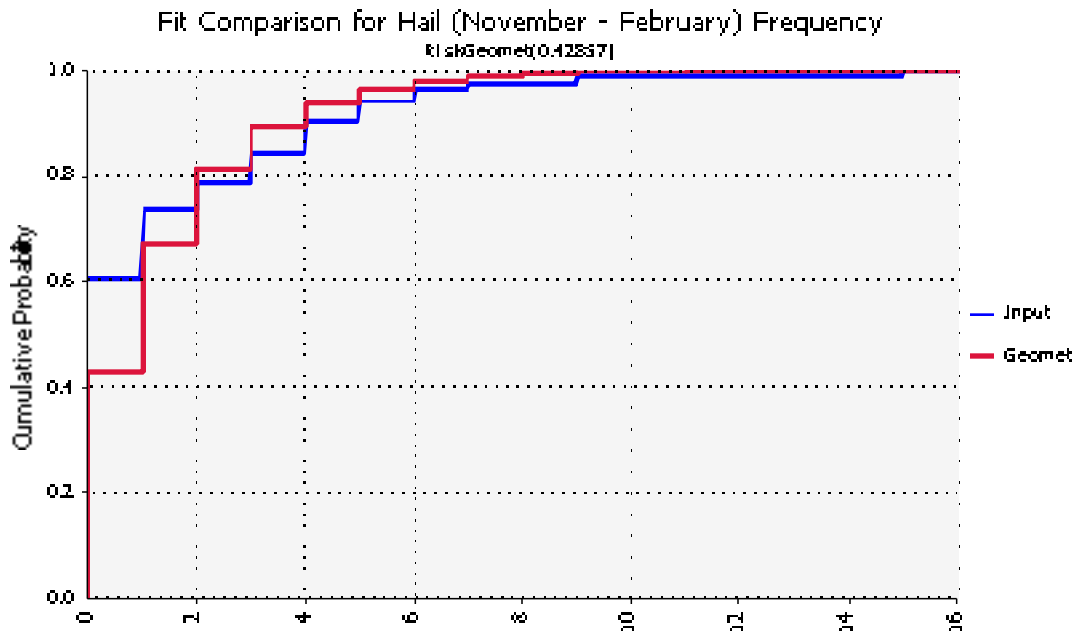


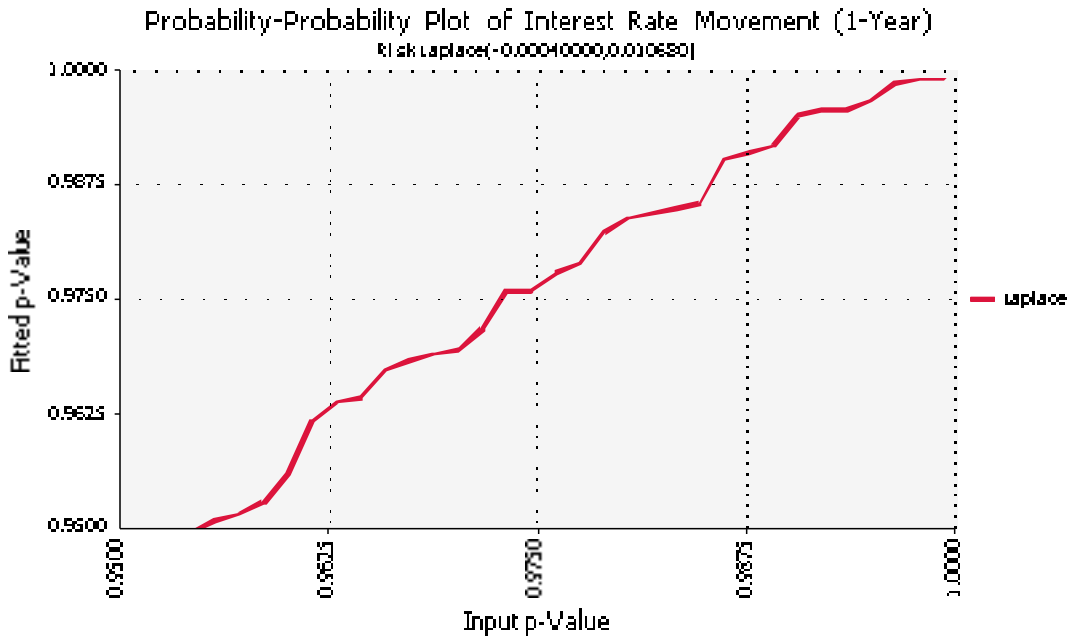
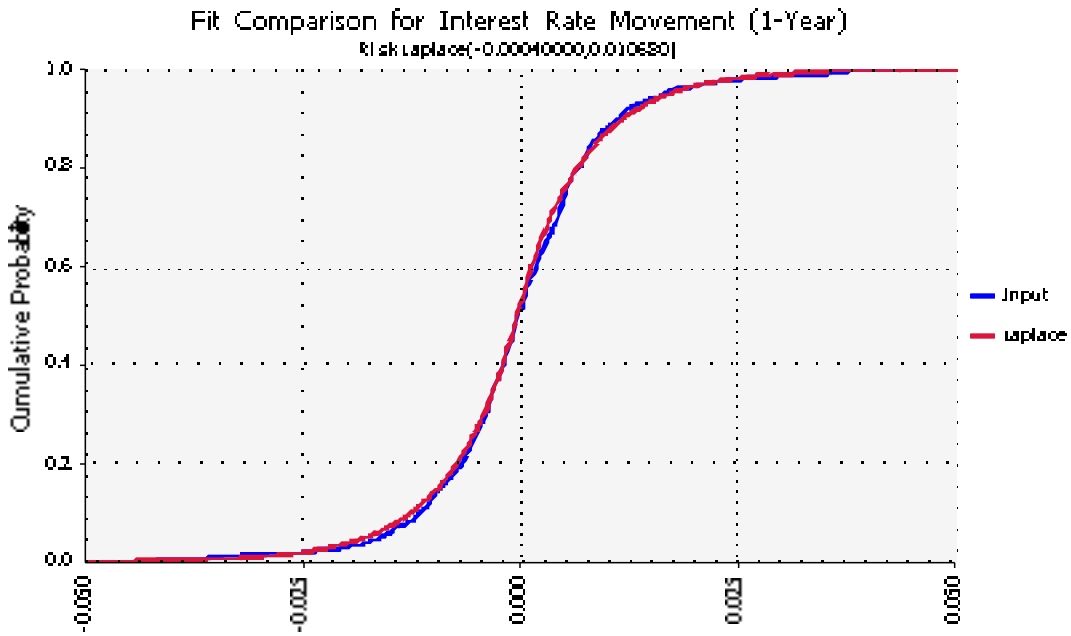












November 12, 2014

