

Eqn Ps = spec_power(dBm(fs(RX_in[1],..., "Kaiser")),-1e5,1e5)

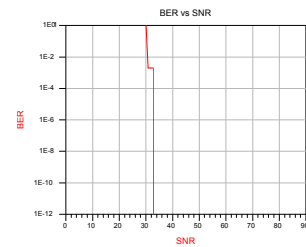
Eqn Pn = wtdbm(dbmtow(spec_power(dBm(fs(RX_in[1],..., "Kaiser")),-4e5,-3e5)) + dbmtow(spec_power(dBm(fs(RX_in[1],..., "Kaiser")),-3e5,4e5))) - 10*log10(KaiserGain)

Eqn KaiserGain = 1.653

Eqn MeanPn = mean(Pn)

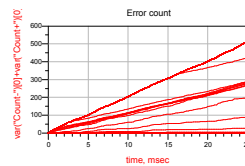
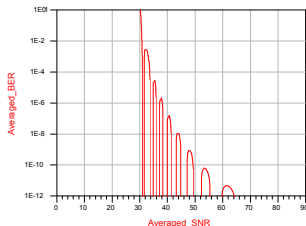
Eqn SNR = Ps - MeanPn

Eqn BER = real((max(var("Count")[0])+max(var("Count")[0]) / Bits[0])



Eqn Averaged_BER = interpolate("spline",BER,1,[min(R):1:max(R)])

Eqn Averaged_SNR = interpolate("spline",SNR,1,[min(R):1:max(R)])



Link budget simulation results					
R	Ps	Pn	BER	SNR	MeanPn
20.000000	-27.027743	-99.907847	0.000000	86.603871	-113.631614
45.000000	-41.119323	-111.030979	0.000000	72.916591	
70.000000	-48.790554	-113.167930	0.000000	64.841060	
95.000000	-54.095464	-113.649793	0.000000	59.538150	
120.000000	-58.157330	-113.613563	0.000000	55.477894	
145.000000	-61.441378	-113.745412	0.000000	52.190236	
170.000000	-64.204275	-113.844788	0.000000	49.427339	
195.000000	-66.586815	-113.686741	0.000000	47.044799	
220.000000	-68.685446	-113.852458	0.000000	44.948168	
245.000000	-70.552477	-113.806613	0.000000	43.079136	
270.000000	-72.242888	-113.755517	0.000000	41.388746	
295.000000	-73.778477	-114.001739	0.000000	39.853136	
320.000000	-75.191633	-114.055397	0.000000	38.439991	
345.000000	-76.500610	-113.722826	0.000000	37.131004	
370.000000	-77.715688	-113.771475	0.000000	35.915916	
395.000000	-78.847337	-113.881511	0.000000	34.784277	
420.000000	-79.912210	-113.970246	0.000000	33.719404	
445.000000	-80.915760	-113.954911	0.000000	32.715834	
470.000000	-81.867465	-113.862621	0.000000	31.764148	
495.000000	-82.776967	-113.990703	0.000000	30.855547	
520.000000	-83.622139	-113.691807	2.004000	30.009475	
545.000000	-84.434144	-113.789818	14.012000	28.191470	
570.000000	-85.194170	-113.812586	43.045000	26.437444	
595.000000	-85.956243	-113.785779	98.097000	27.675371	
620.000000	-86.655091	-113.888161	146.134000	29.873523	
645.000000	-87.357934	-113.652830	153.134000	26.273680	
670.000000	-88.000565	-113.805202	138.141000	25.622049	
695.000000	-88.651092	-113.745684	128.149000	24.980522	
720.000000	-89.256306	-114.020755	126.141000	24.375308	
745.000000	-89.818601	-113.929293	142.147000	23.813012	
770.000000	-90.415462	-113.738349	256.256000	23.216152	
795.000000	-90.972910	-113.838216	256.256000	22.658804	
820.000000	-91.484509	-113.982152	256.256000	22.147105	
845.000000	-92.026362	-113.795274	256.013000	21.652222	
870.000000	-92.528814	-113.894381	256.256000	21.101800	
895.000000	-92.989148	-113.836578	256.256000	20.642466	
920.000000	-93.434704	-113.864017	256.256000	20.196910	
945.000000	-93.899599	-113.879279	256.256000	19.732014	
970.000000	-94.386125	-113.831769	256.256000	19.266489	
995.000000	-94.804837	-113.811315	256.256000	18.826777	
1020.000000	-95.251889	-113.885149	256.256000	18.379728	
1045.000000	-95.647847	-113.870329	256.256000	17.983767	
1070.000000	-96.029194	-114.102211	256.256000	17.650420	
1095.000000	-96.423259	-113.507430	256.256000	17.208355	
1120.000000	-96.819137	-113.866889	256.256000	16.812477	
1145.000000	-97.108655	-113.767710	256.256000	16.522959	
1170.000000	-97.548561	-113.659144	256.256000	16.083052	
1195.000000	-97.941390	-113.884864	256.256000	15.690223	
1220.000000	-98.258490	-113.829921	256.256000	15.373123	
1245.000000	-98.573957	-113.885675	256.256000	15.027657	
1270.000000	-98.930096	-114.060919	256.256000	14.701518	
1295.000000	-99.244687	-113.986897	256.256000	14.388927	
1320.000000	-99.560880	-113.862072	256.256000	14.070733	
1345.000000	-99.817808	-113.805673	256.256000	13.813805	
1370.000000	-100.139488	-113.823981	256.256000	13.495126	
1395.000000	-100.434017	-113.695288	256.256000	13.197596	
1420.000000	-100.744108	-113.855806	256.256000	12.887505	
1445.000000	-100.947104	-113.873111	256.256000	12.694510	
1470.000000	-101.269478	-113.949152	256.256000	12.362136	
1495.000000	-101.427295	-113.883099	256.256000	12.204318	
1520.000000	-101.762534	-113.840569	256.256000	11.890880	
1545.000000	-102.093776	-113.949460	256.256000	11.537837	
1570.000000	-102.310070	-113.713036	256.256000	11.320644	
1595.000000	-102.500230	-113.860584	256.256000	11.131384	
1620.000000	-102.835979	-114.044777	256.256000	10.795934	
1645.000000	-102.994055	-113.846251	256.256000	10.647559	
1670.000000	-103.142312	-113.989184	256.256000	10.489302	
1695.000000	-103.475289	-113.965391	256.256000	10.156325	
1720.000000	-103.682734	-113.620168	256.256000	9.948880	
1745.000000	-103.868806	-113.824525	256.256000	9.752828	
1770.000000	-104.043953	-113.941411	256.256000	9.587711	
1795.000000	-104.228683	-113.837557	256.256000	9.402031	
1820.000000	-104.478328	-113.881148	256.256000	9.152286	
1845.000000	-104.892262	-113.909516	256.256000	8.939352	
1870.000000	-104.940736	-113.731493	256.256000	8.690878	
1895.000000	-105.017200	-113.865270	256.256000	8.614414	
1920.000000	-105.085605	-114.019368	256.256000	8.535109	
1945.000000	-105.328948	-113.847630	256.256000	8.302665	
1970.000000	-105.582730	-113.973266	256.256000	8.048894	
1995.000000	-105.763096	-113.767037	256.256000	7.868518	
2000.000000	-105.869421	-113.819174	256.256000	7.762193	