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

Eqn Pn = wtodbm(dbmtow(spec_power(dBm(fs(RX_in[::,::,1],,,,,"Kaiser")),-4e5,-3e5)) + dbmtow(spec_power(dBm(fs(RX_in[::,::,1],,,,,"Kaiser")),3e5,4e5))) - WindowGain

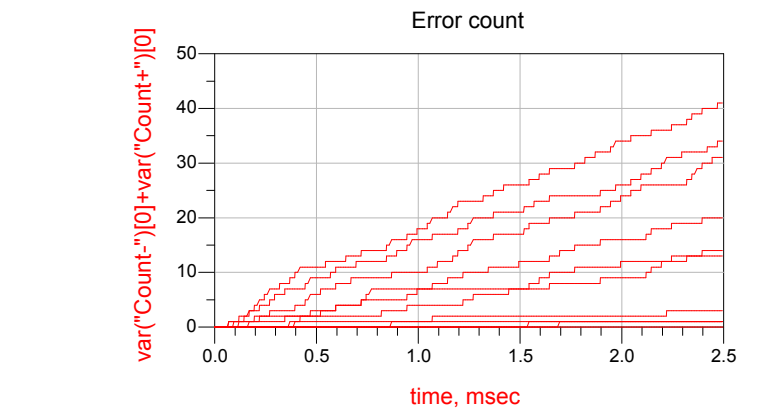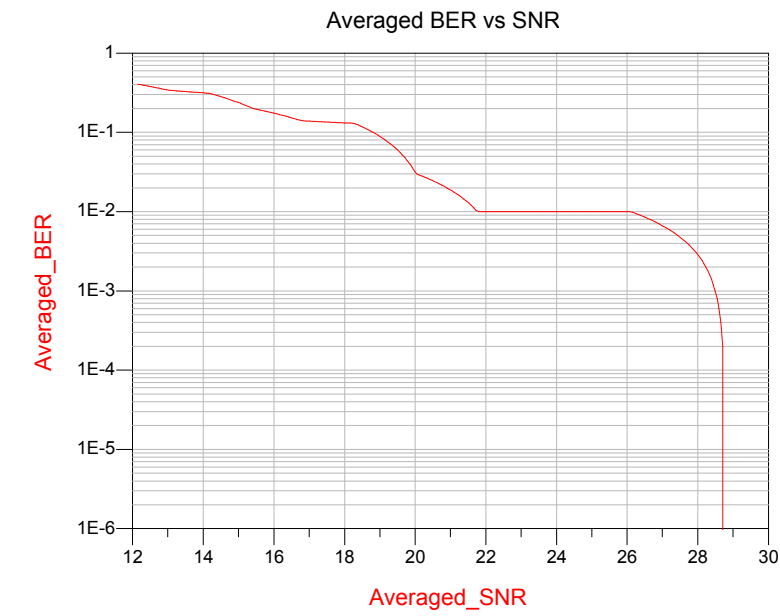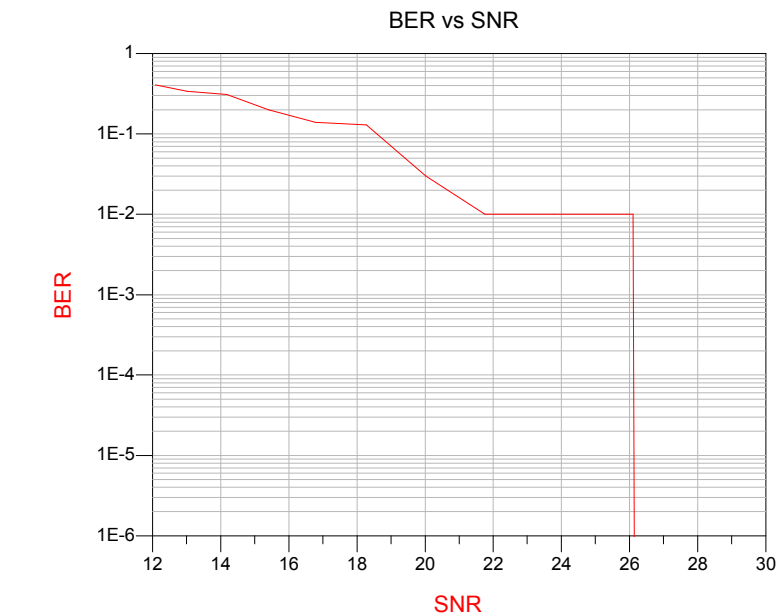**Eqn** KaiserNENBW = 1.653   **Eqn** WindowGain = 10*log10(KaiserNENBW)

Eqn MeanPn = mean(Pn)

Eqn SNR = Ps - MeanPn

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

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

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

BER vs SNR

Averaged BER vs SNR

Error count

Link budget simulation results

R	Ps	Pn	BER	SNR	MeanPn
300.000000	-89.107948	-117.448496	0.000000	28.756725	-117.864673
350.000000	-91.762315	-117.591526	0.010000	26.102358	
400.000000	-94.086186	-117.847053	0.010000	23.778487	
450.000000	-96.106904	-118.552089	0.010000	21.757769	
500.000000	-97.844183	-118.261894	0.030000	20.020490	
550.000000	-99.585926	-118.096291	0.130000	18.278747	
600.000000	-101.075927	-117.878927	0.140000	16.788746	
650.000000	-102.449854	-117.979654	0.200000	15.414819	
700.000000	-103.682133	-117.405690	0.310000	14.182540	
750.000000	-104.848463	-117.715290	0.340000	13.016210	
800.000000	-105.777512	-117.734494	0.410000	12.087161	