Mock 4bit IF sampling. rms inputVoltage vs Decimation

Clock = 160 MHz
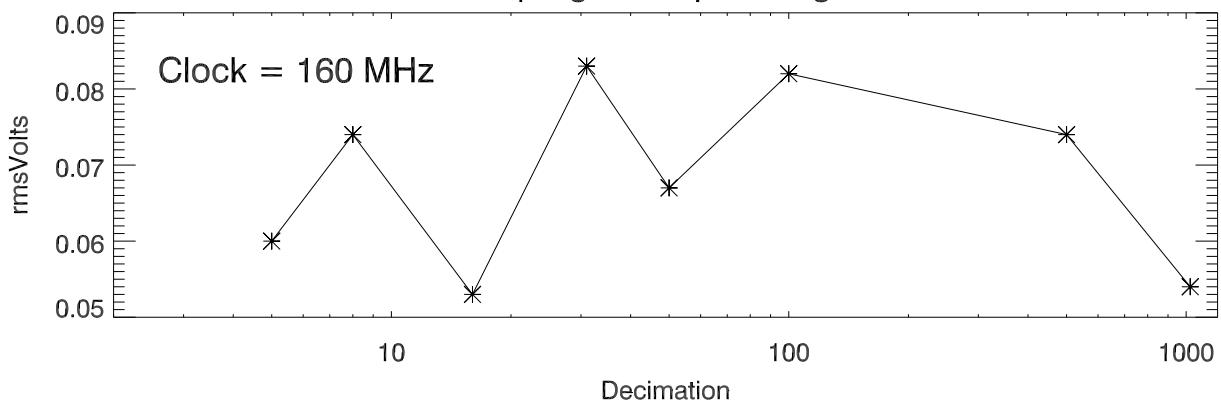
4bit rms in counts vs Decimation

Optimum 4bit rms   Measured rms

Simulated rms. lineLossdb:1.1, presmo:3
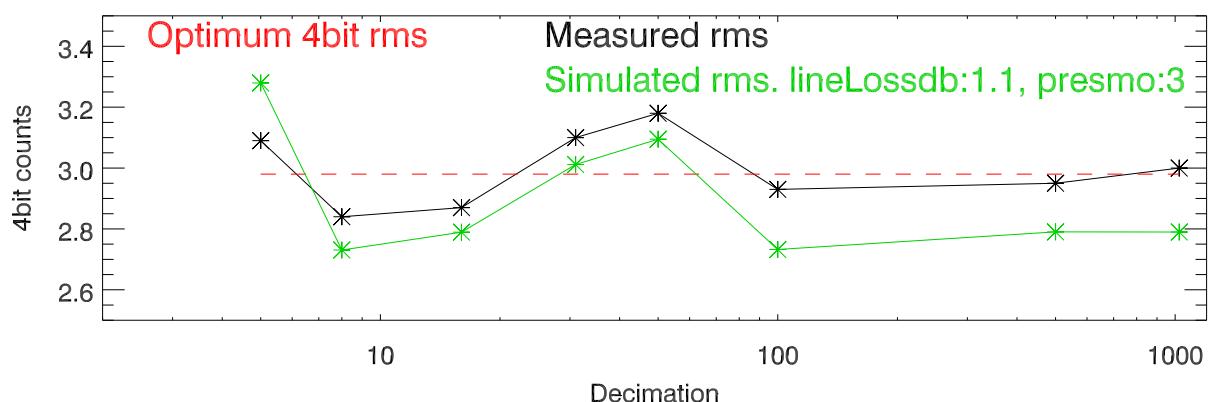
upshift used vs Decimation
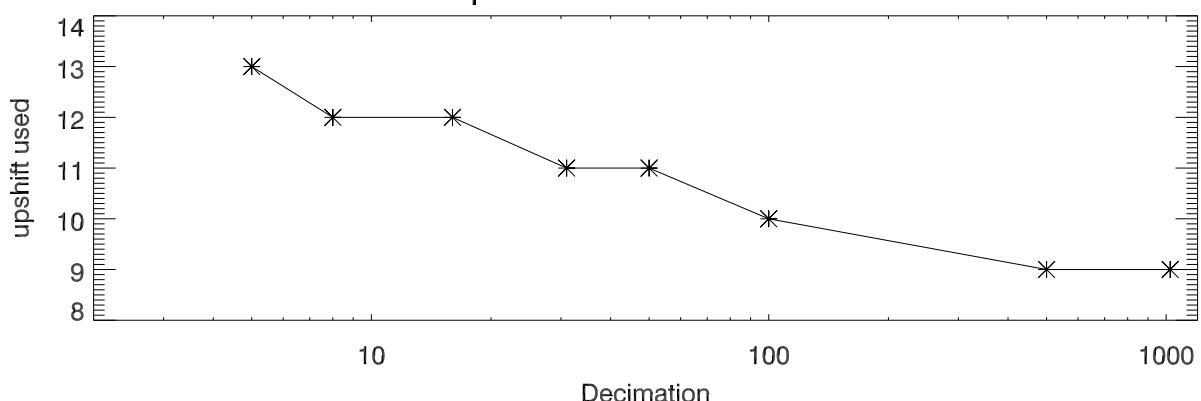
Input rmsVolts needed for optimum sigma

histogram of 4bit data

Counts

4bit value

dec: 5
dec: 8
dec: 16
dec: 31
dec: 50
dec: 100
dec: 500
dec:1024
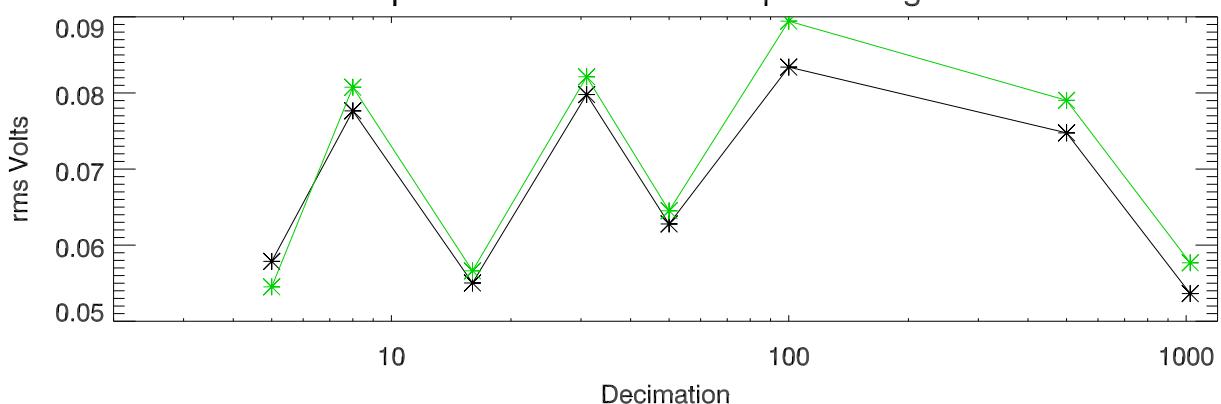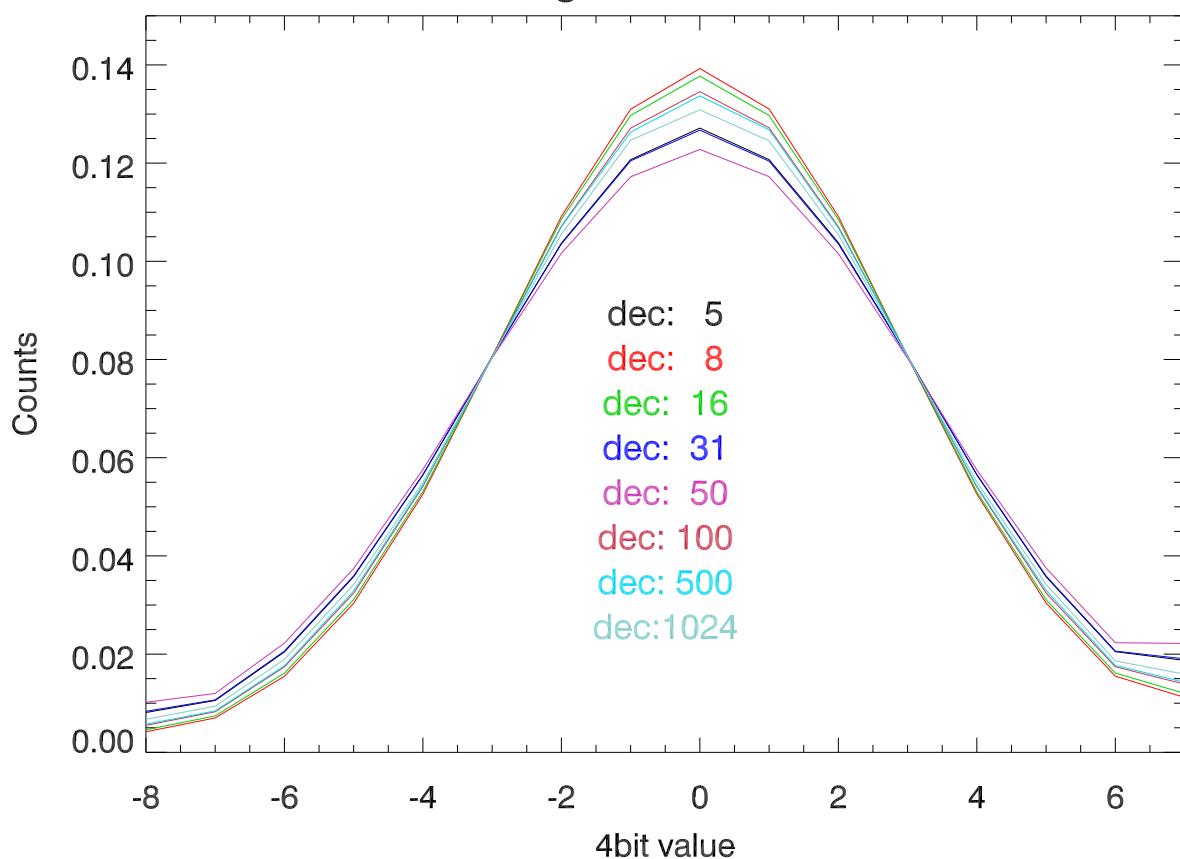
Average 4bit spectra. bandwidth: 32.000 Mhz
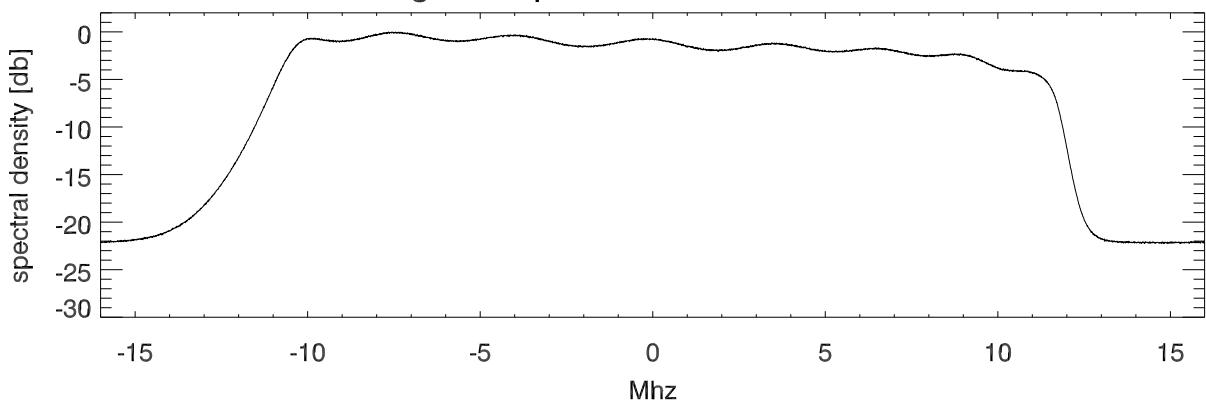
Average 4bit spectra. bandwidth: 20.000 Mhz
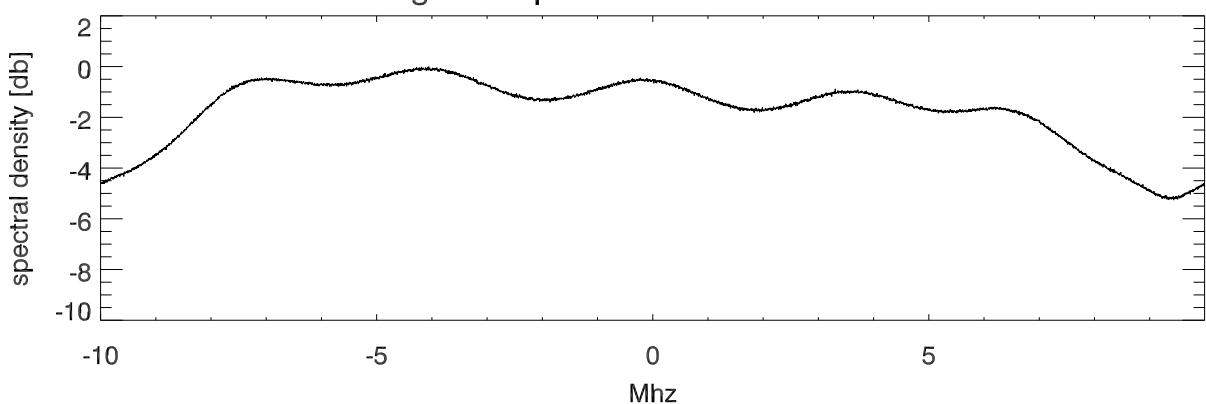
Average 4bit spectra. bandwidth: 10.000 Mhz
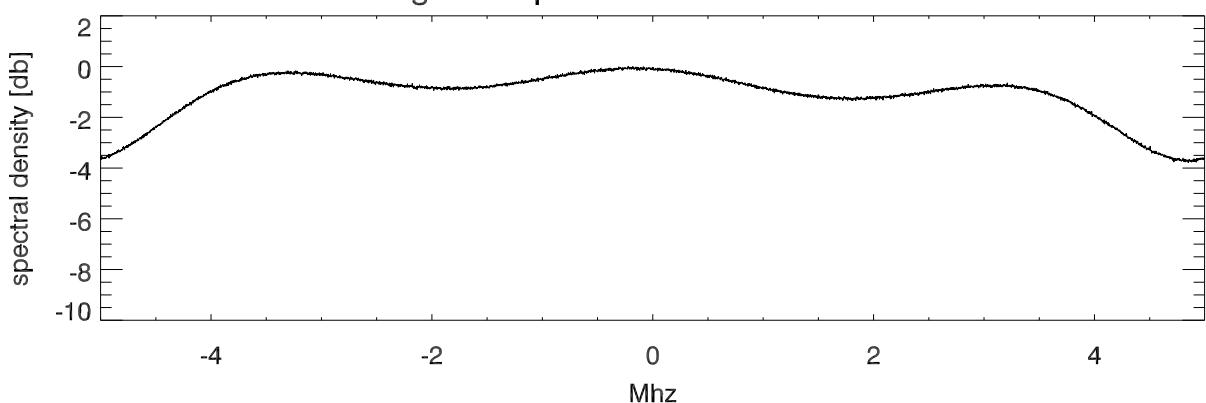
Average 4bit spectra. bandwidth: 5.161 Mhz
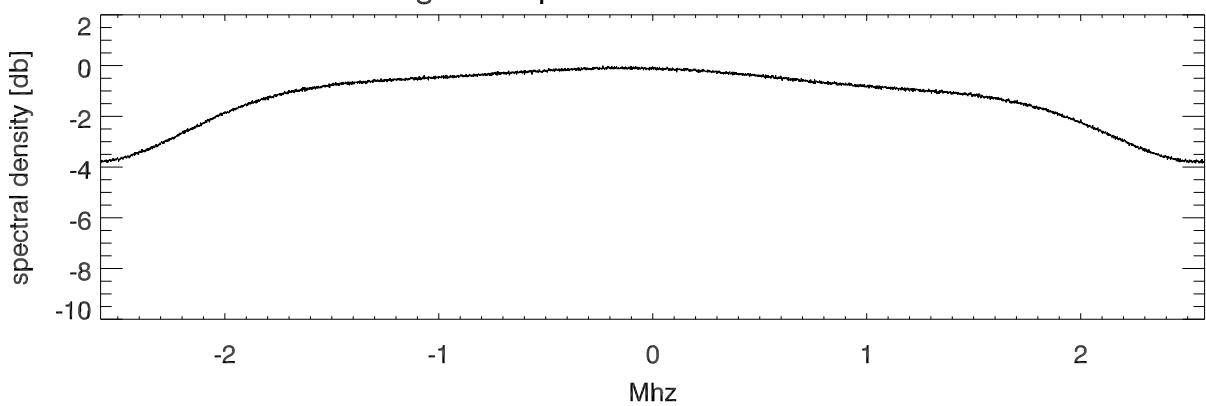
Average 4bit spectra. bandwidth: 3.200 Mhz
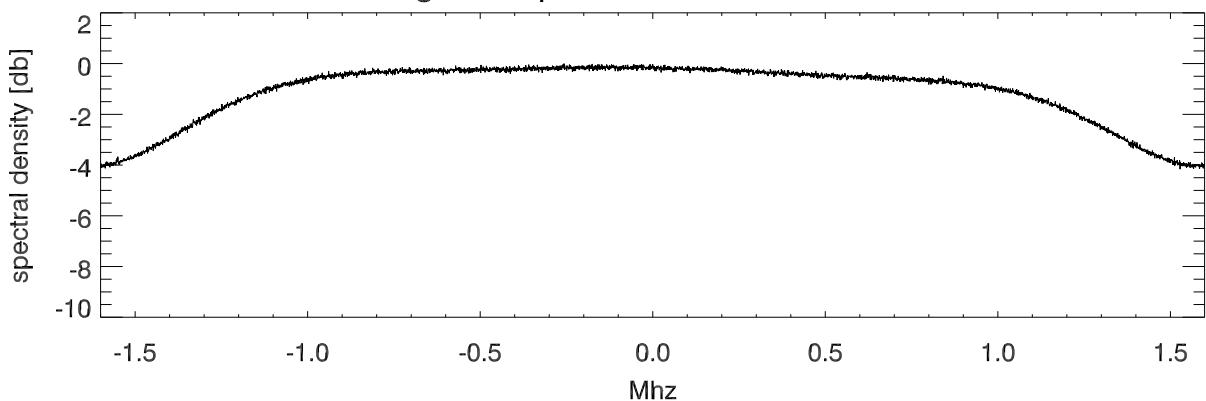
Average 4bit spectra. bandwidth: 1.600 Mhz
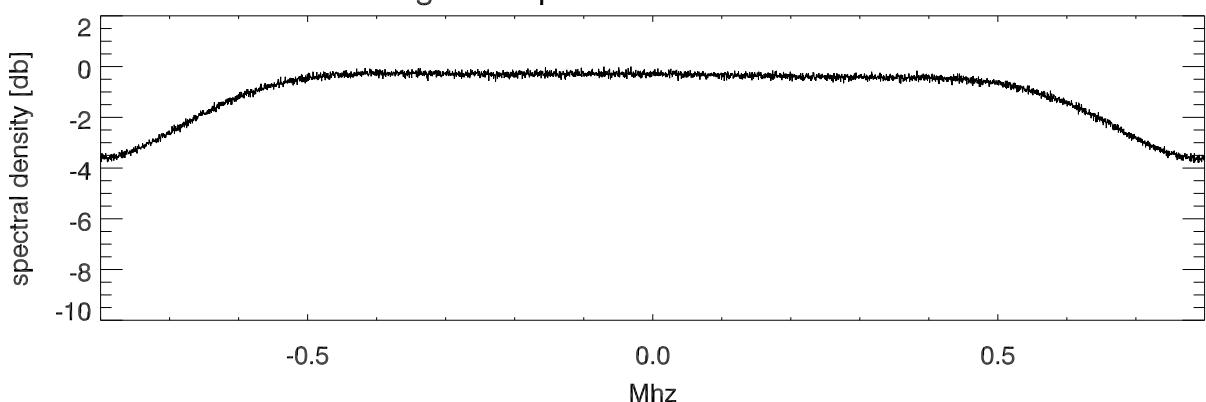
Average 4bit spectra. bandwidth: 0.320 Mhz
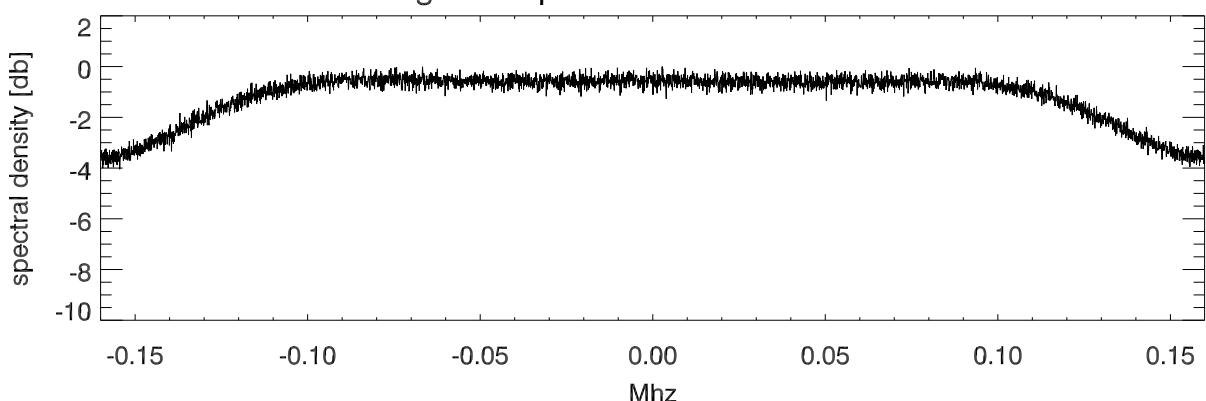
Average 4bit spectra. bandwidth: 0.156 Mhz