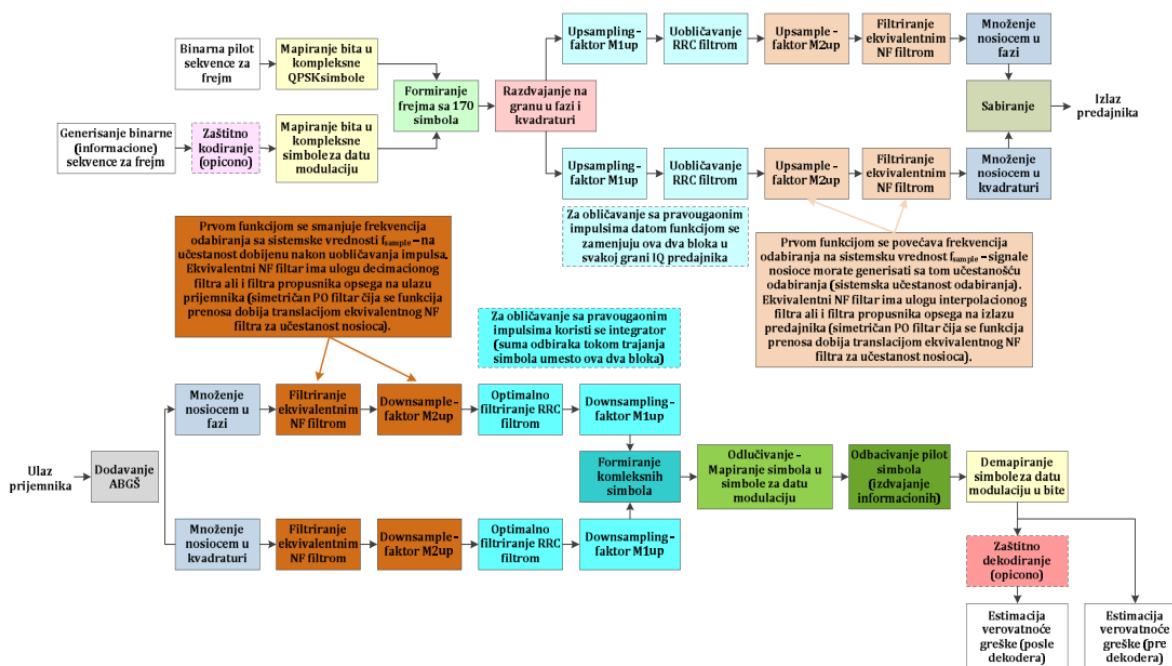


Dimitrije Jovanović

QPSK modulacija



Za koeficijent zaobljenja 0.25 se dobija razlika teorijske i izracunate verovatnoce greske, zato sto u formulu ne ulazi koeficijent zaobljenja. Kada je on jednak 1, krive se poklapaju.

U slucaju neidealne sinhronizacije faze, ocekivano, to ne utice na promenu verovatnoce greske, sto se vidi sa kasnijih grafika.

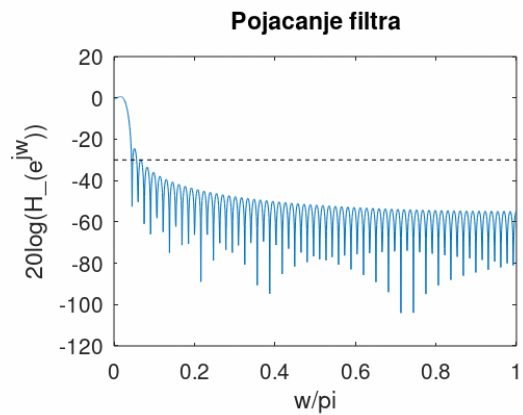
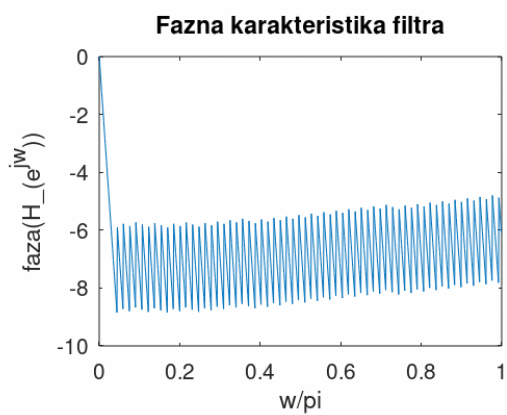
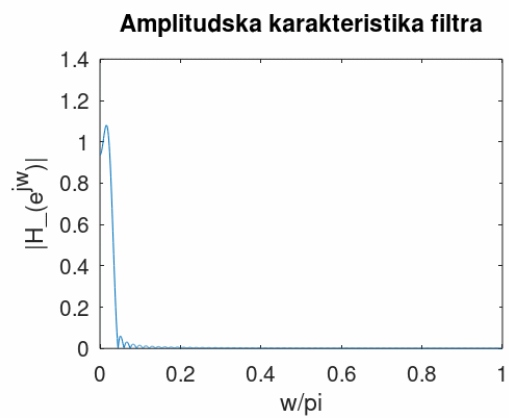
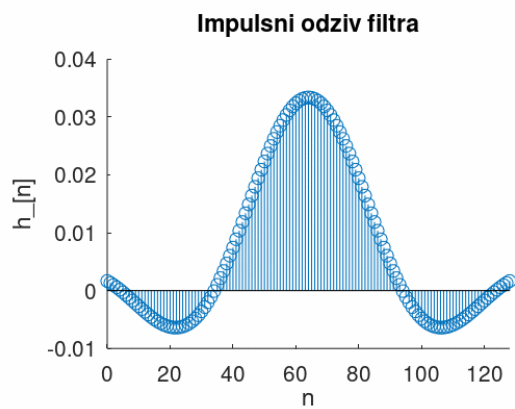
Radjeni su slucajevi za duzinu impulsnog odziva RRC filtra kad je jednaka 4 i 8 perioda signaliziranja. Za 8 se dobija tacno zahtevano minimalno slabljenje od 30 dB.

NF filtar je projektovan metodom prozora, Hanovom prozorskom funkcijom, cije je minimalno slabljenje u nepropusnom delu 44 dB.

Procena SGSS ima jednu izrazenu komponentu.

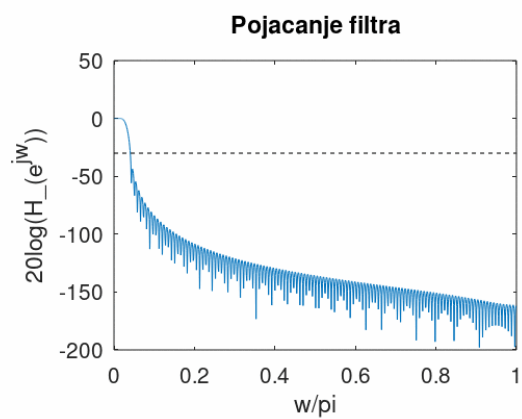
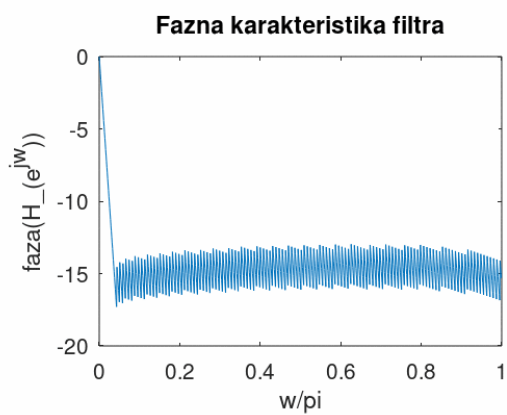
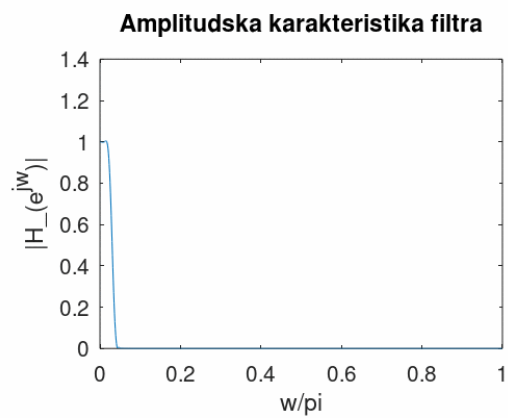
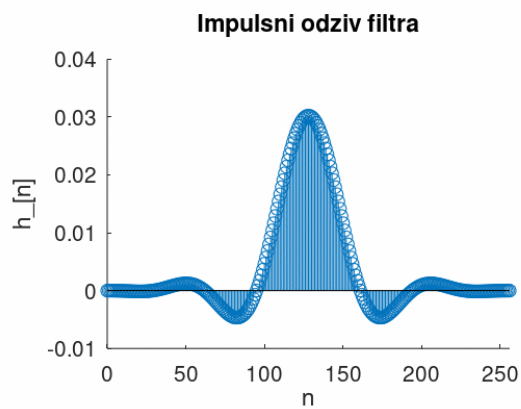
1. $\alpha = 0.25$, $\text{trajanje_RRC} = 4$

RRC filter:



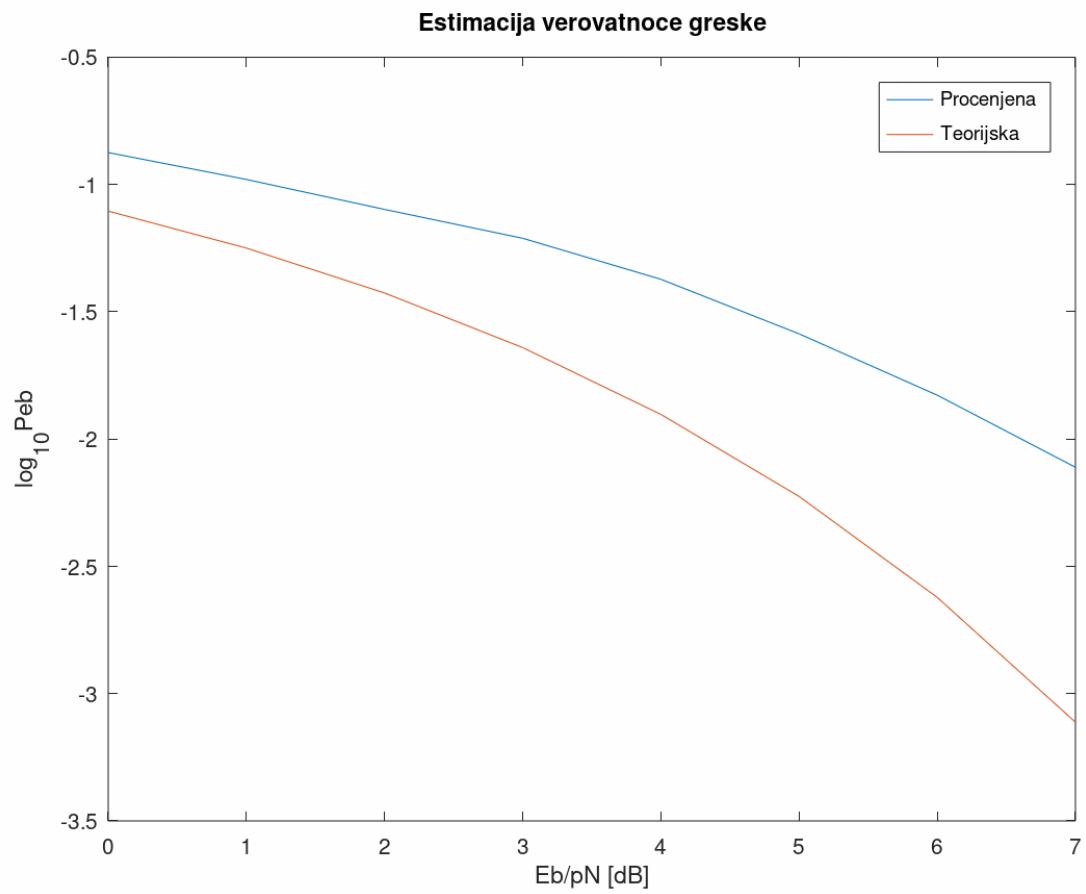
1. $\alpha = 0.25$, $\text{trajanje_RRC} = 4$

NF filter:



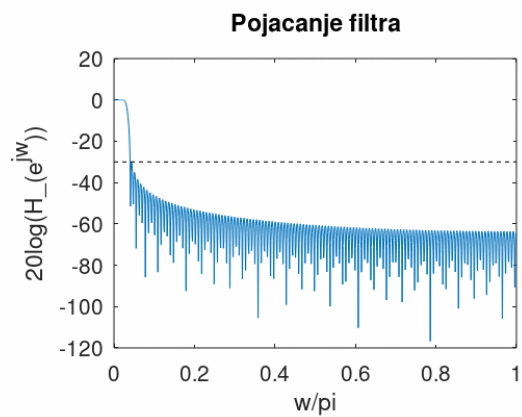
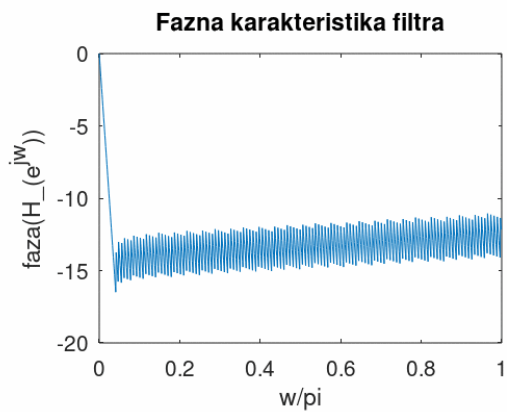
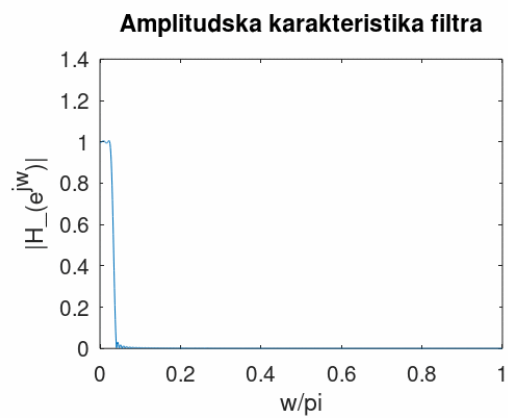
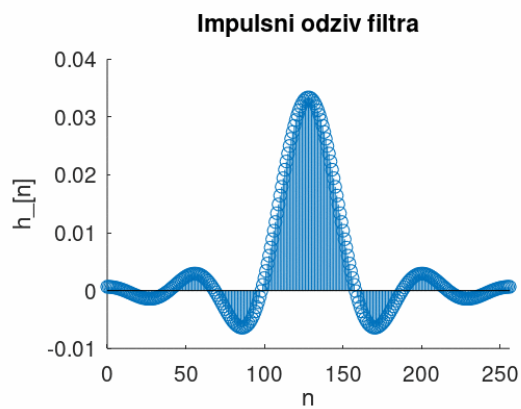
1. $\rho = 0.25$, trajanje_RRC = 4

ver greske:



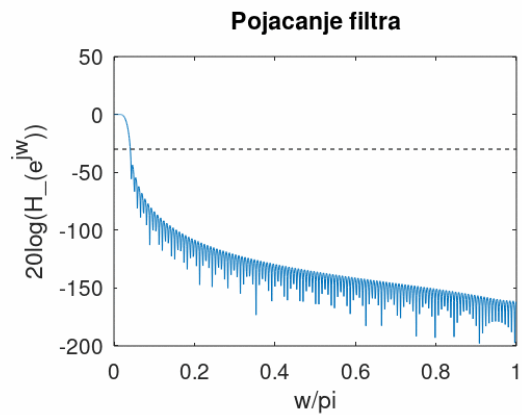
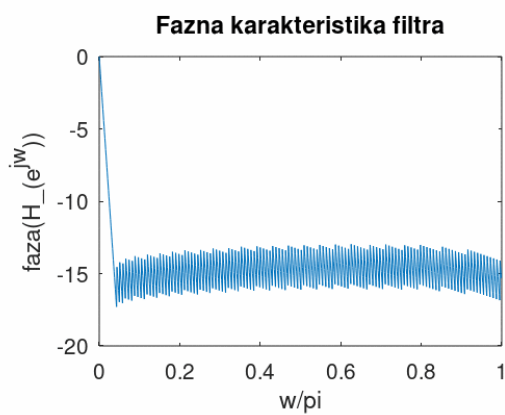
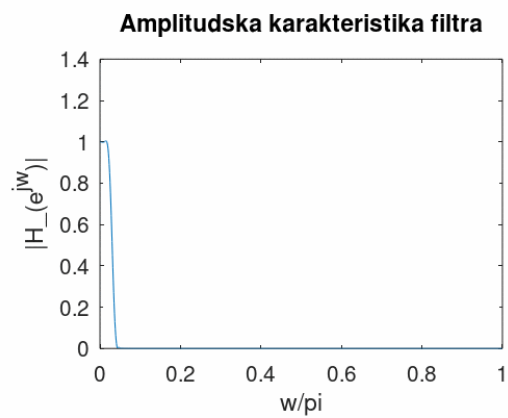
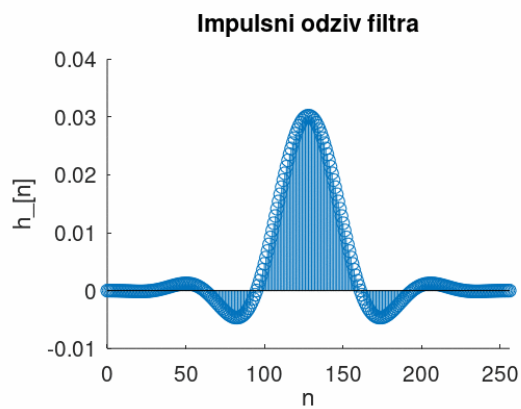
2. $\alpha = 0.25$, $\text{trajanje_RRC} = 8$

RRC filter:



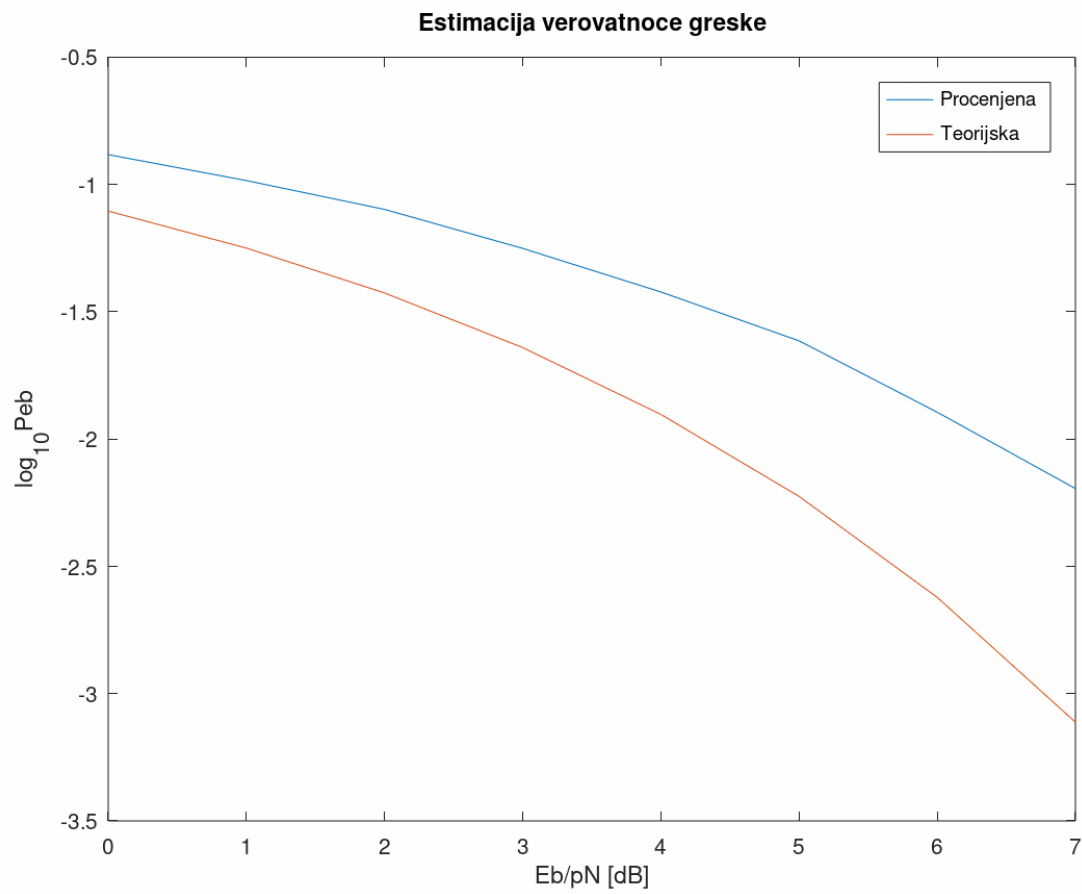
2. $\alpha = 0.25$, trajanje_RRC = 8

NF filter:



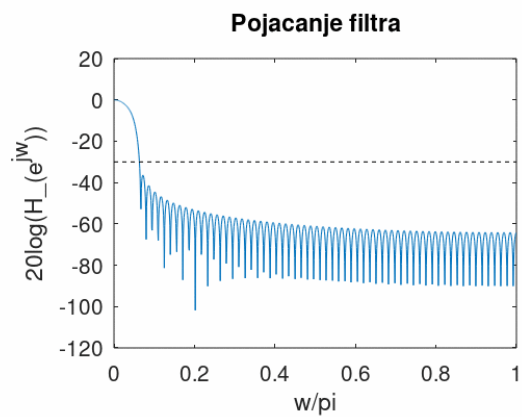
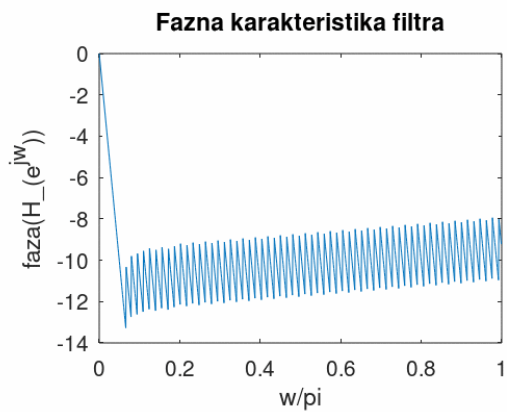
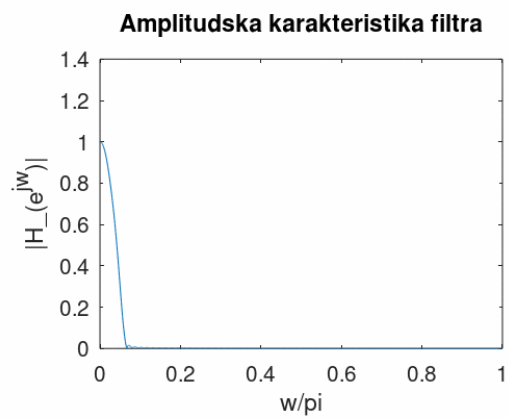
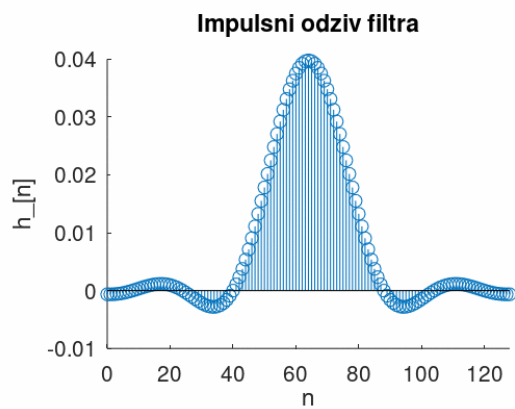
2. $\rho = 0.25$, trajanje_RRC = 8

ver greske:



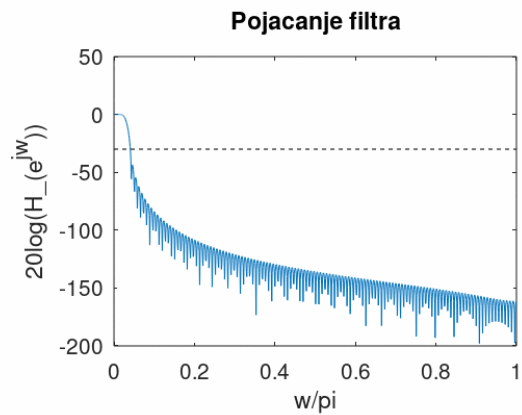
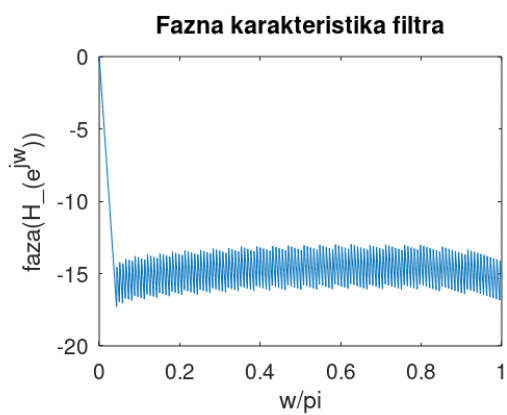
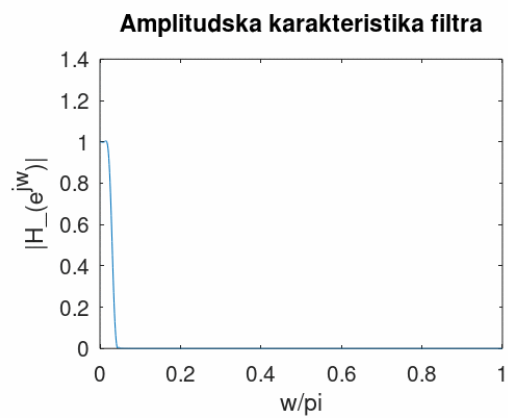
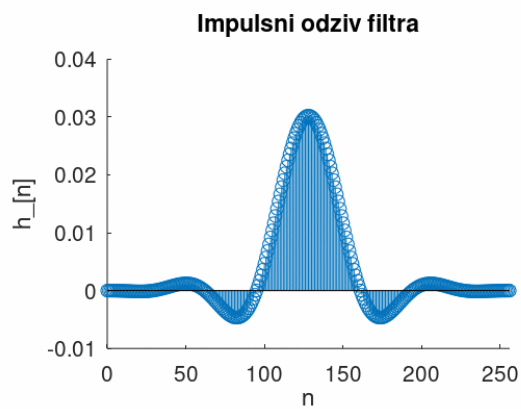
3. $\alpha = 1, \text{trajanje_RRC} = 4$

RRC filter:



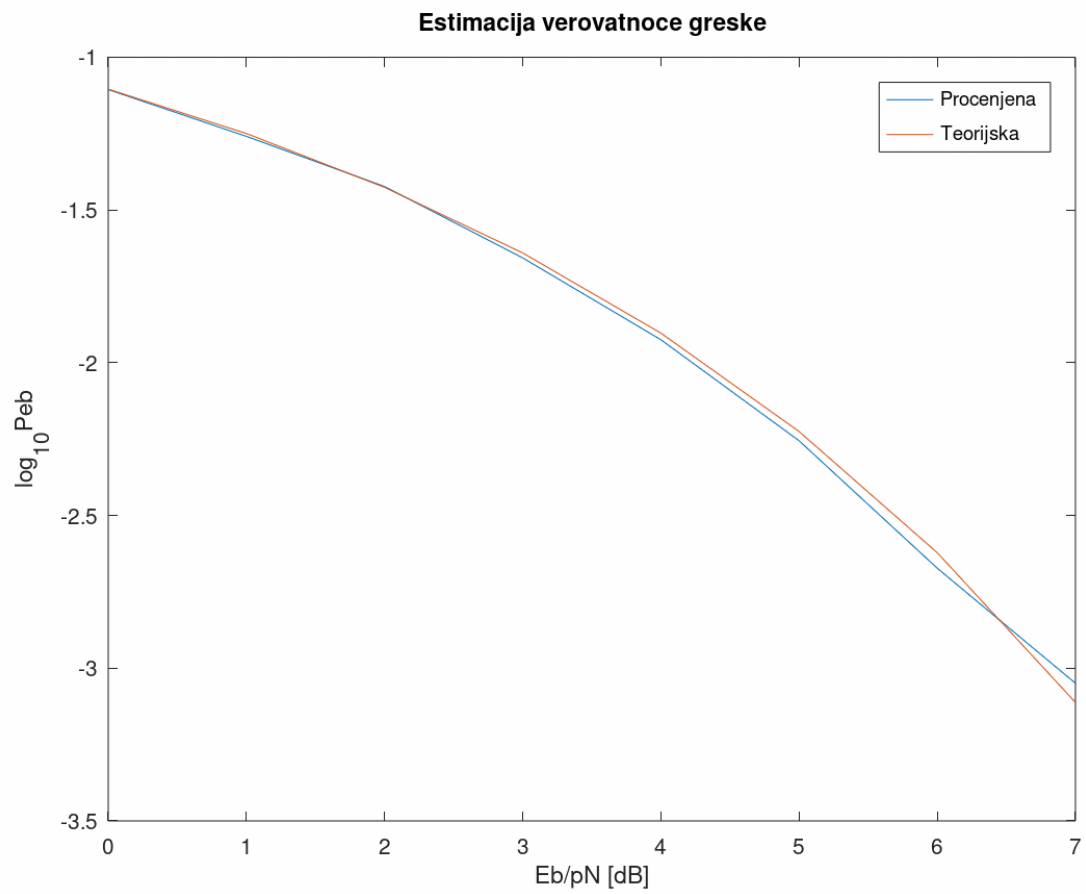
3. $\text{ro} = 1, \text{trajanje_RRC} = 4$

NF filter:



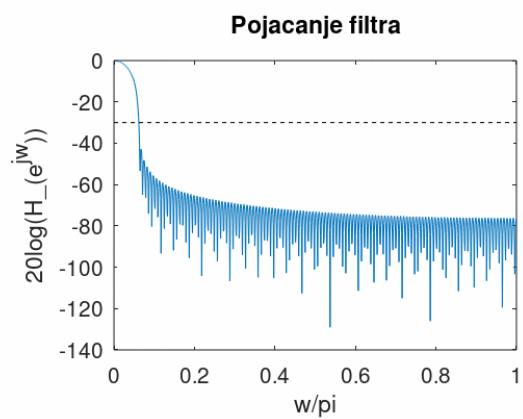
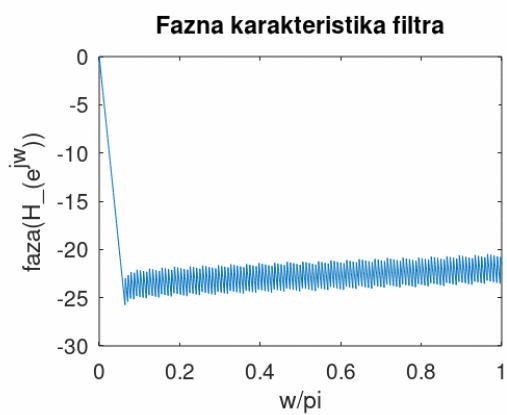
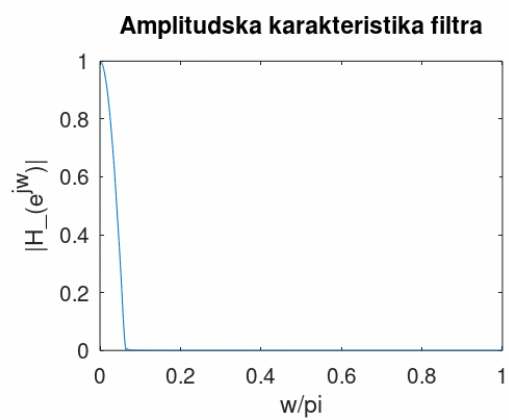
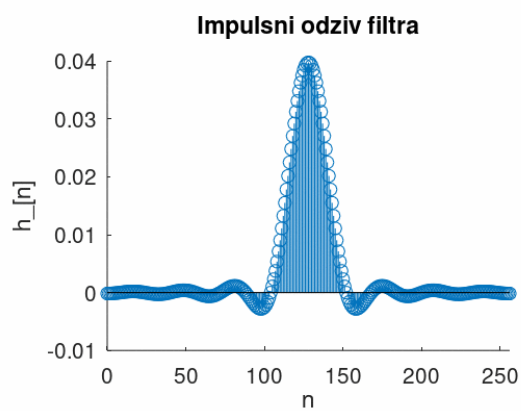
3. $r_o = 1$, trajanje_RRC = 4

ver greske:



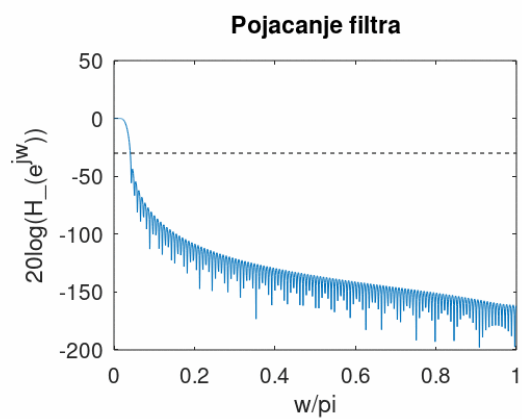
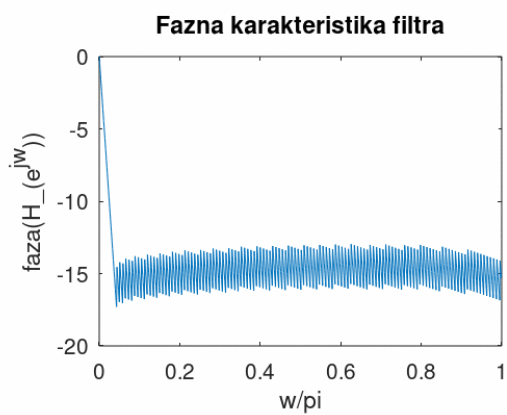
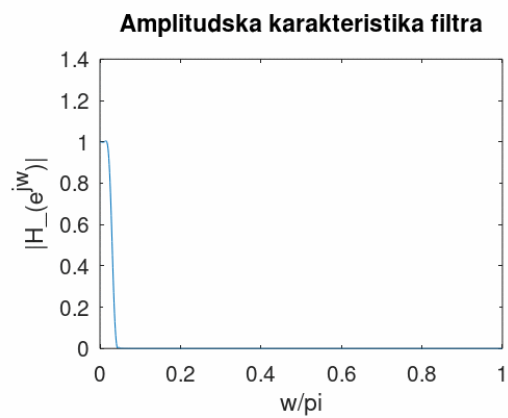
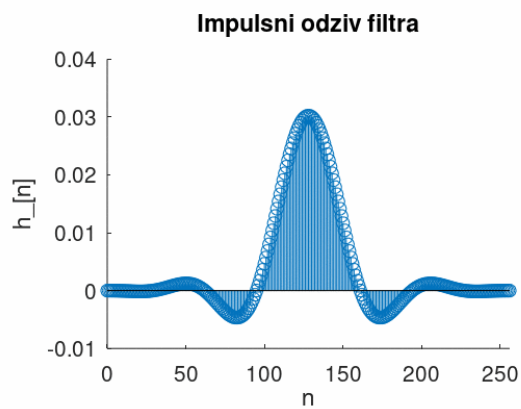
4. $\alpha = 1$, $\text{trajanje_RRC} = 8$

RRC filter:



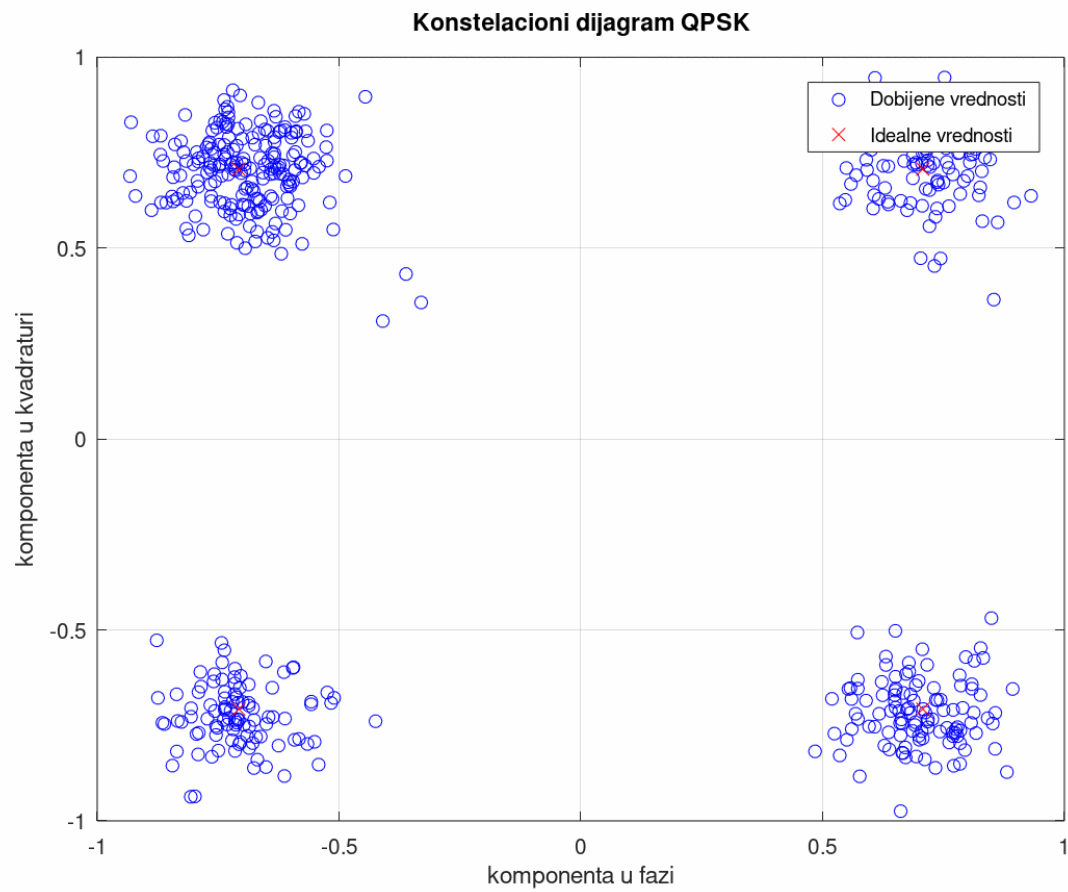
4. $\alpha = 1$, $\text{trajanje_RRC} = 8$

NF filter:



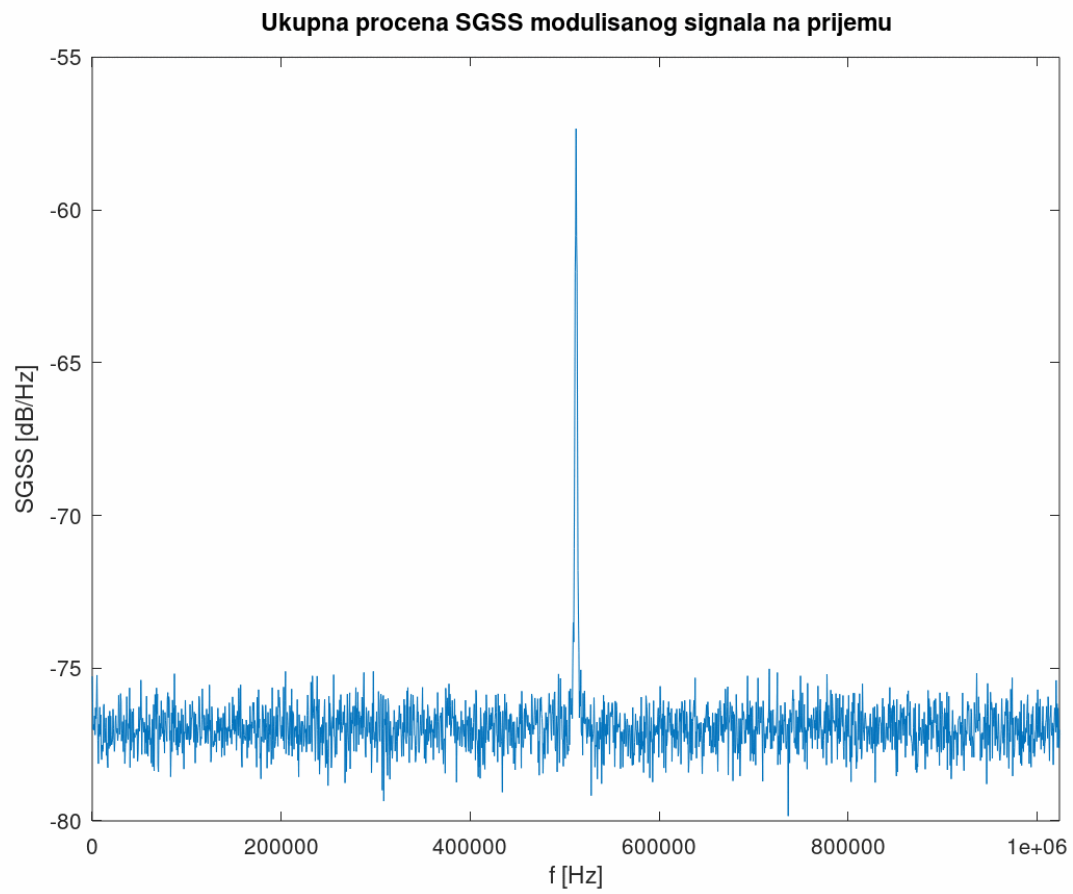
4. $\text{ro} = 1, \text{trajanje_RRC} = 8$

Konstelacija:



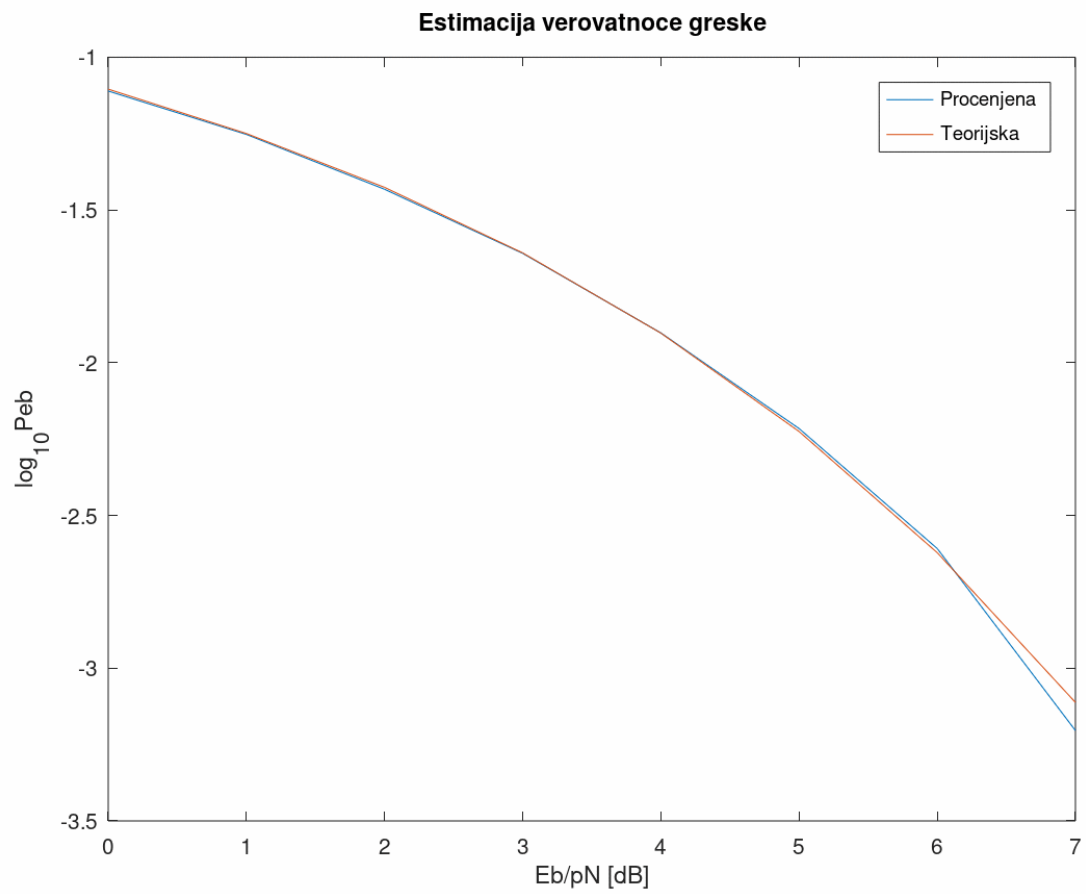
4. $\rho = 1$, $\text{trajanje_RRC} = 8$

SGSS procena:



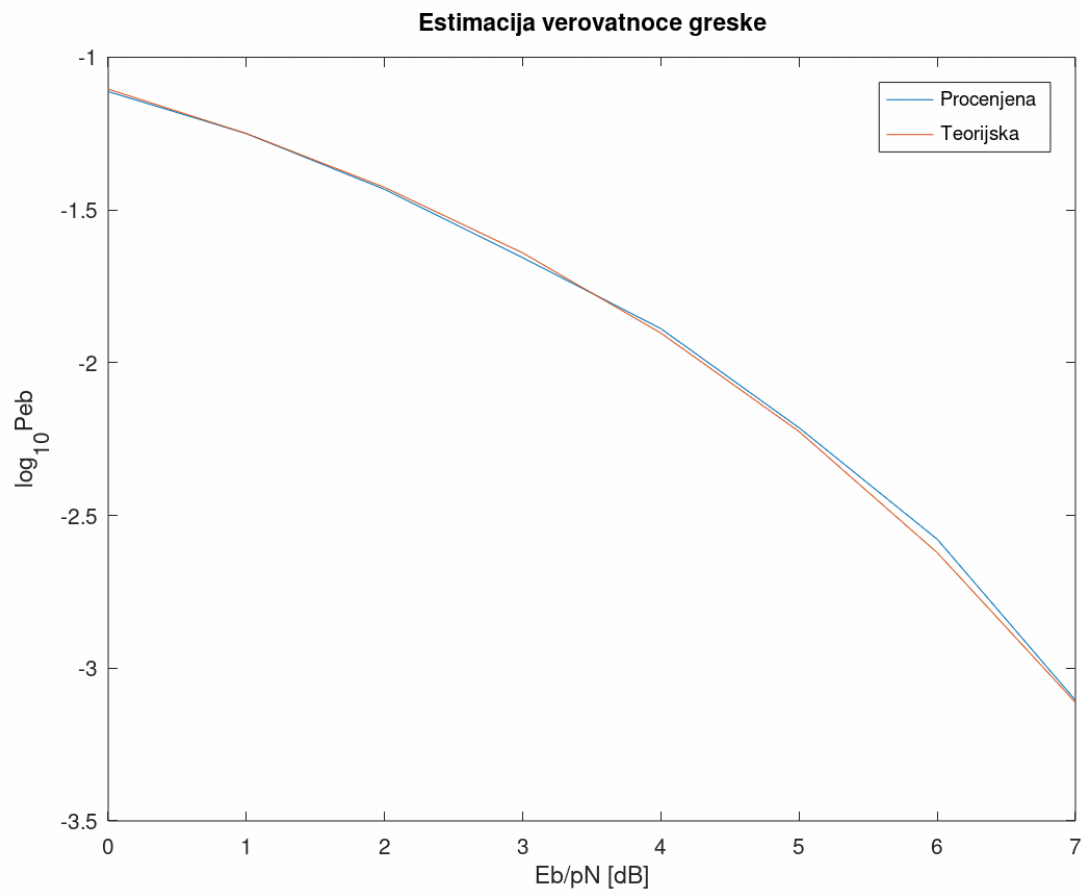
4. $r_o = 1$, trajanje_RRC = 8

ver greske:



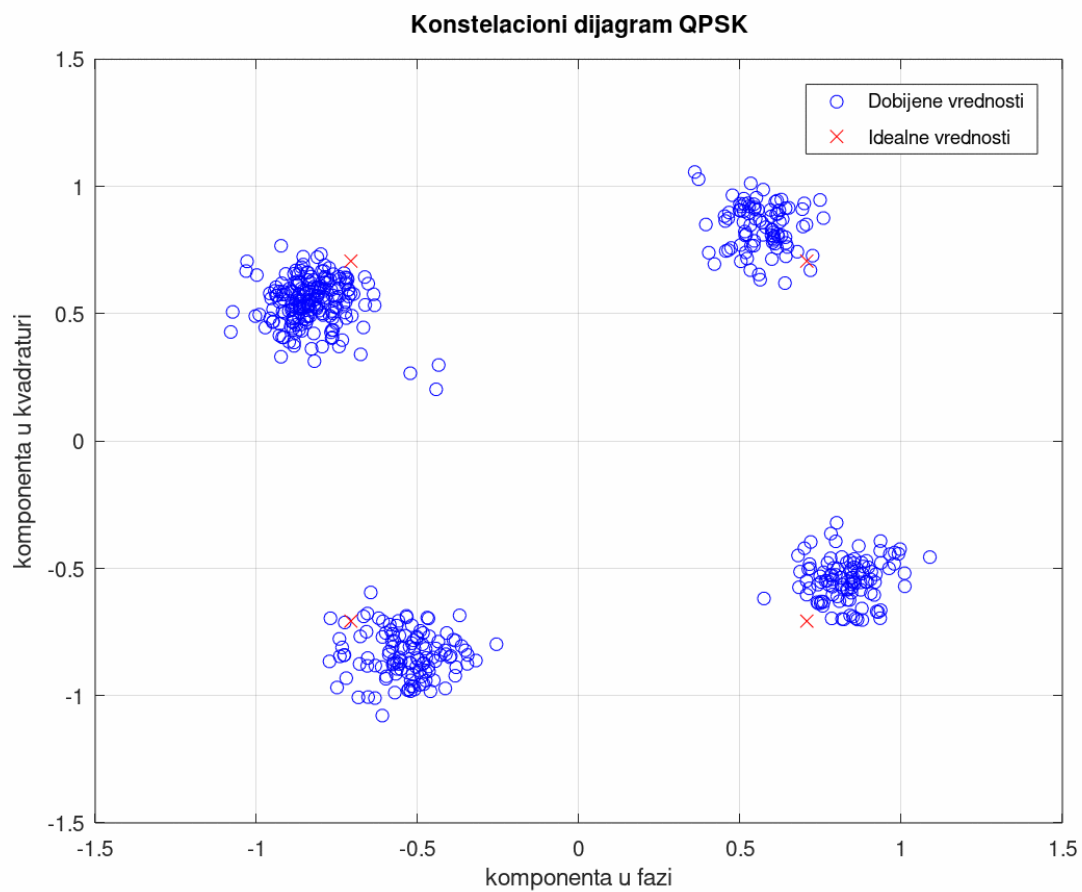
5. 50% siri NF filter, $r_o = 1$, $N = 8$

ver greske:



6. Neidealna sinhronizacija: $\phi_0 = \pi/16$, $\rho = 1$, $N = 8$

Konstelacija:



6. Neidealna sinhronizacija: $\phi_0 = \pi/16$, $\rho = 1$, $N = 8$

ver greske:

