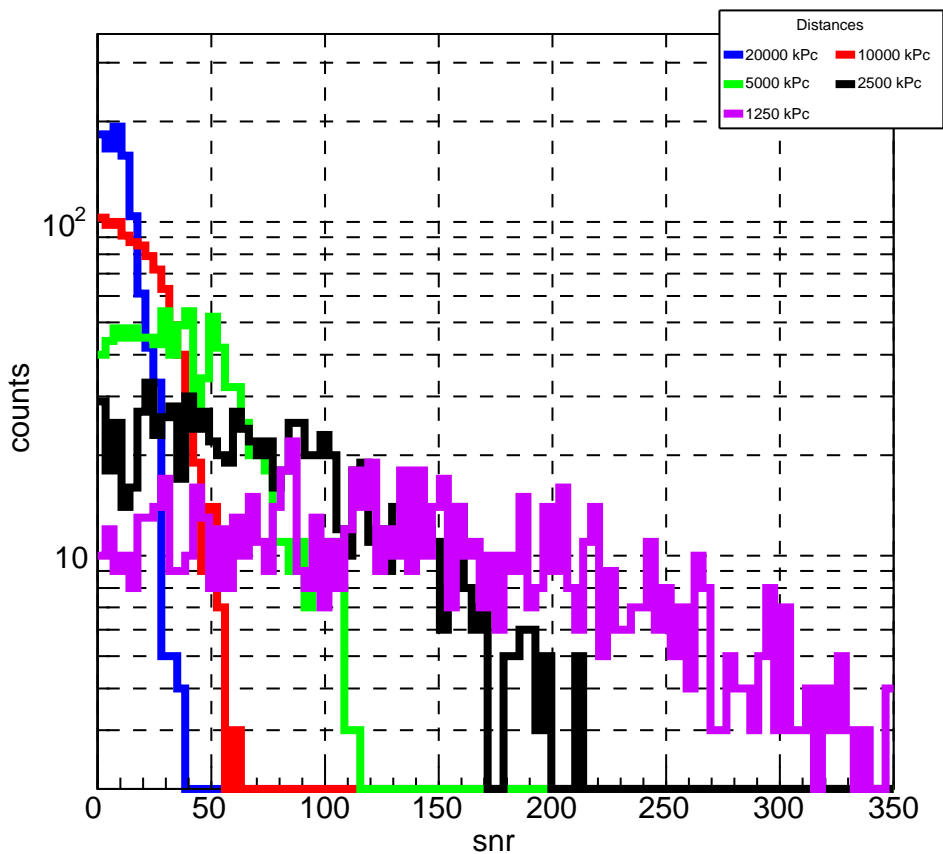


simulation snr



simulation hrss

