

IoT Traffic Generator

1

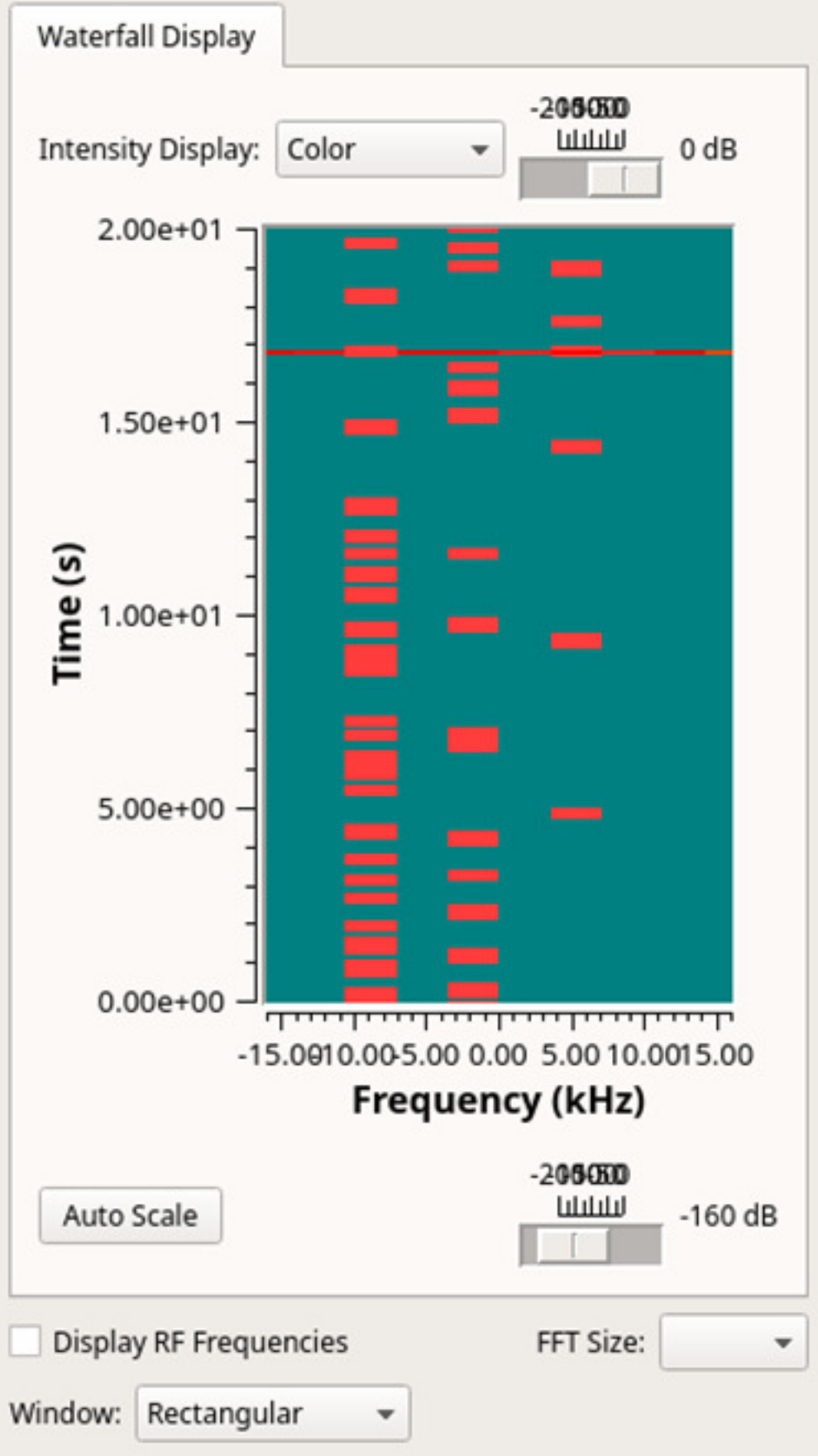
Random occupation in active channels
Demo for ICT 2018
By Lilian Besson and Remi Bonnefoi



CentraleSupélec

Active channels: '#2, #4, #6, #8'
Occupancy rates: '50%, 30%, 10%, 2%'

Enable IoT traffic
Number of messages by second: 4



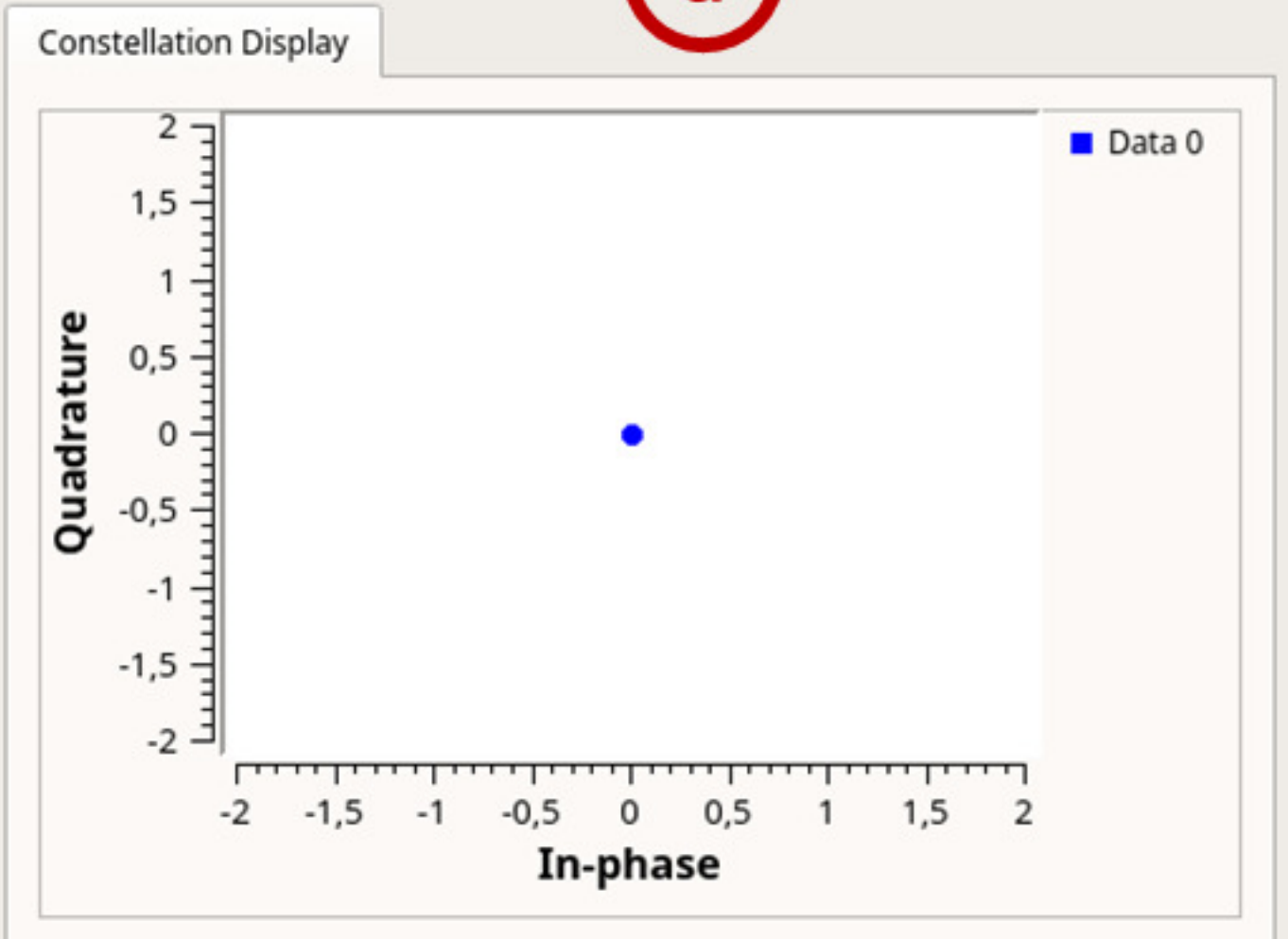
Intelligent Dynamic User

Demo for ICT 2018
By Lilian Besson and Remi Bonnefoi

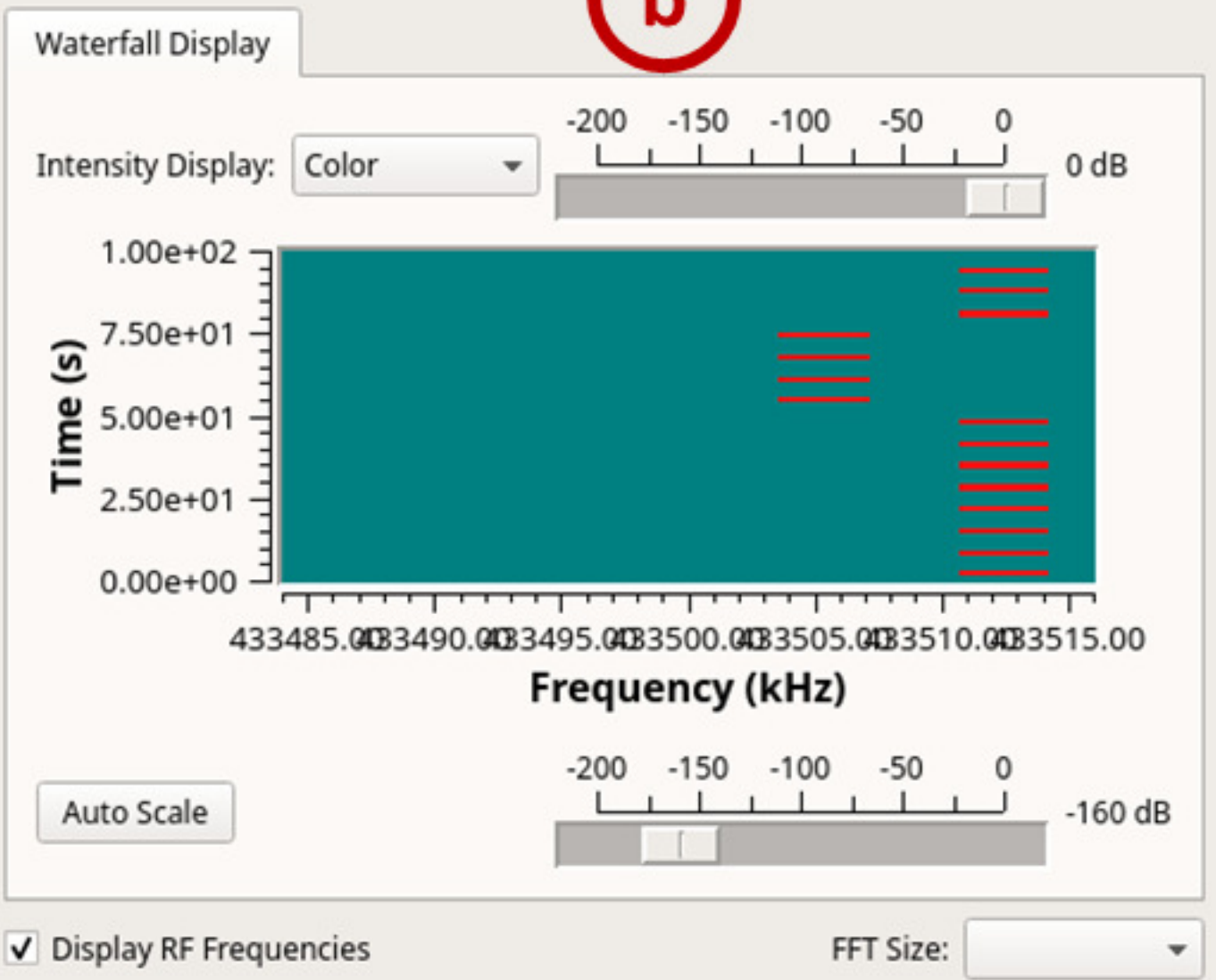
using AI for channel selection:
Active channels: '#2, #4, #6, #8'

Enable transmission

a



Display RF Frequencies
Window: Rectangular
FFT Size: [dropdown]

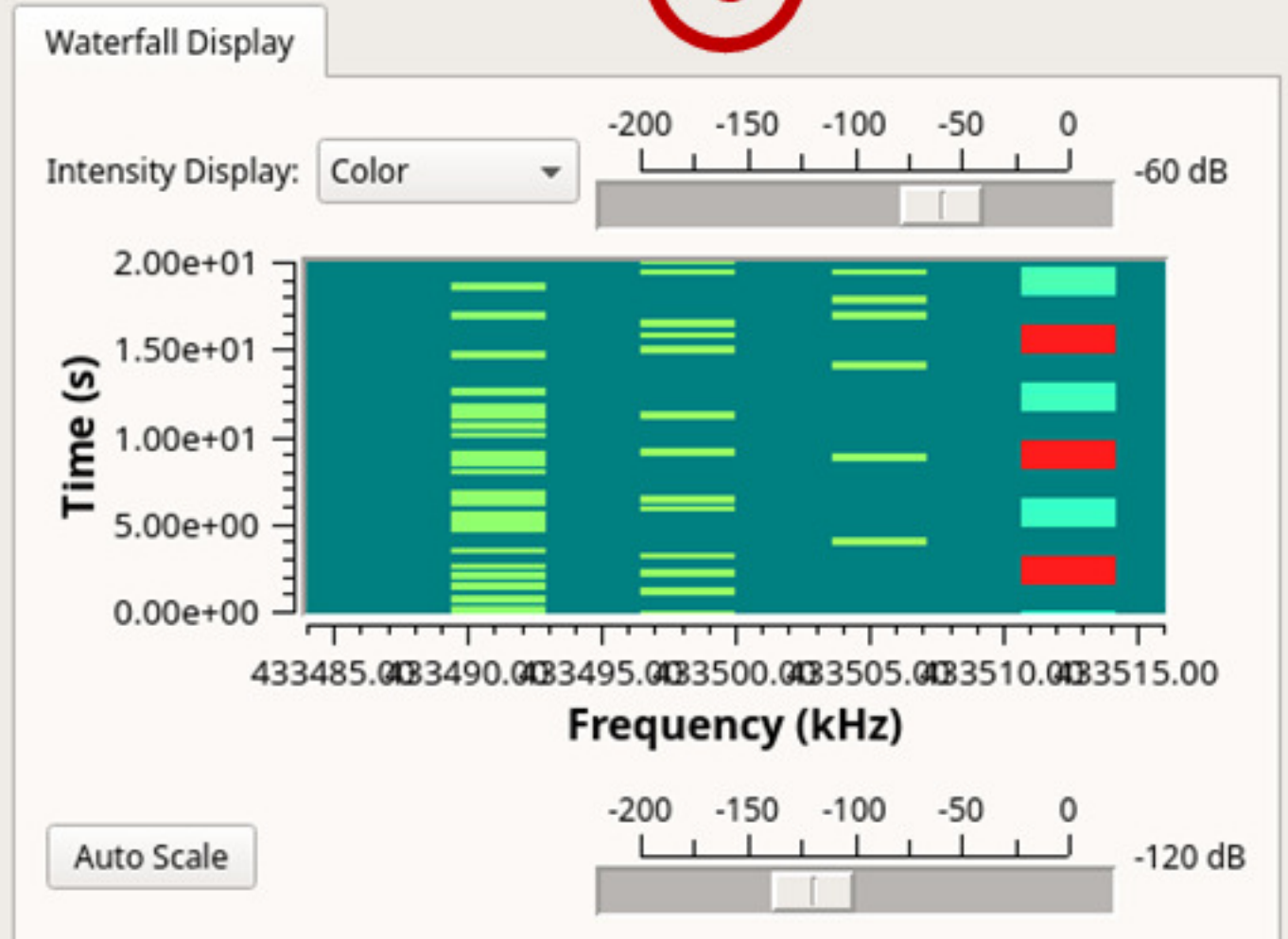


b

Algorithm: UCB and symbols -1 + -1j

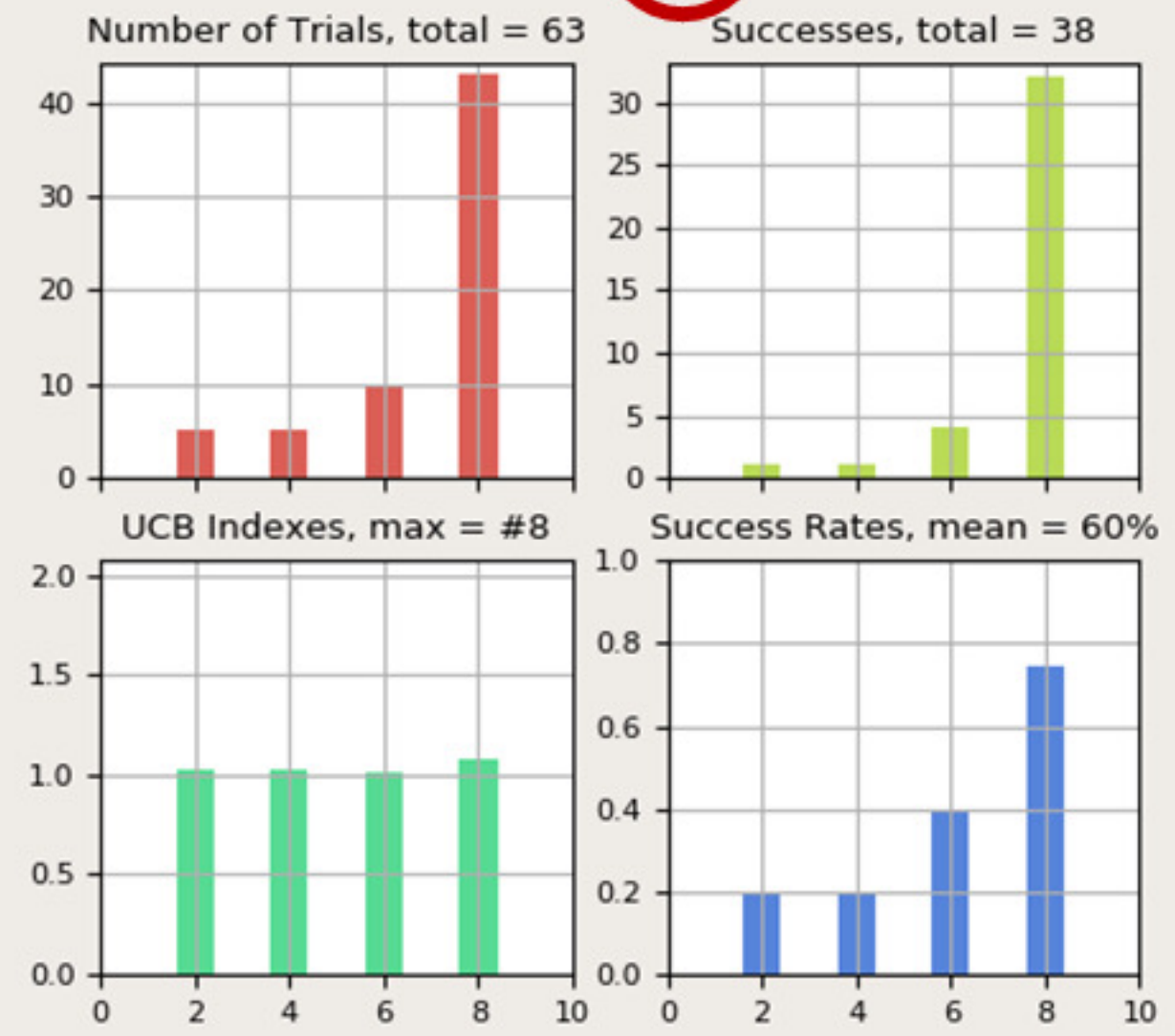
Speed: Packet of 1 second, every 3 seconds

c



Display RF Frequencies
Window: Rectangular
FFT Size: [dropdown]

IoT Object #1



d

IoT Gateway

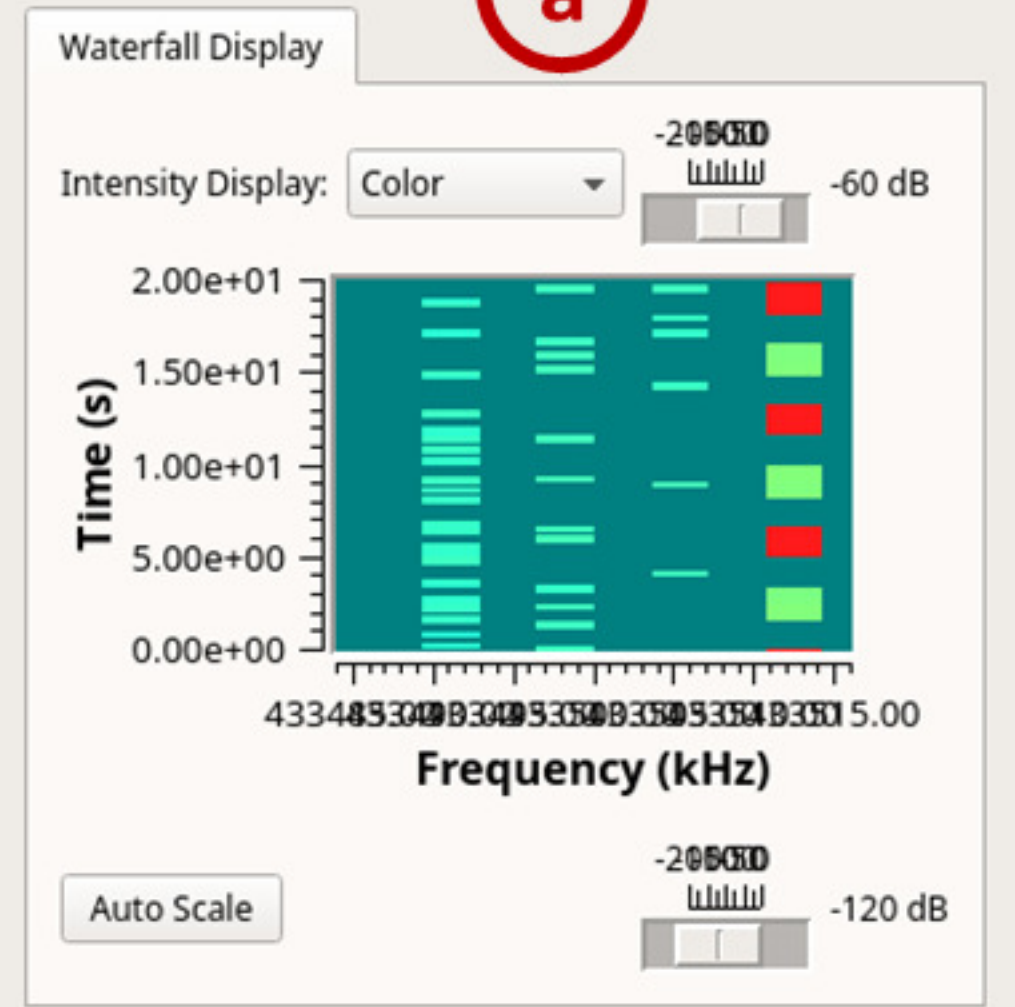
3

listen to our objects and reply with Acks
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Active channels: '#2, #4, #6, #8'

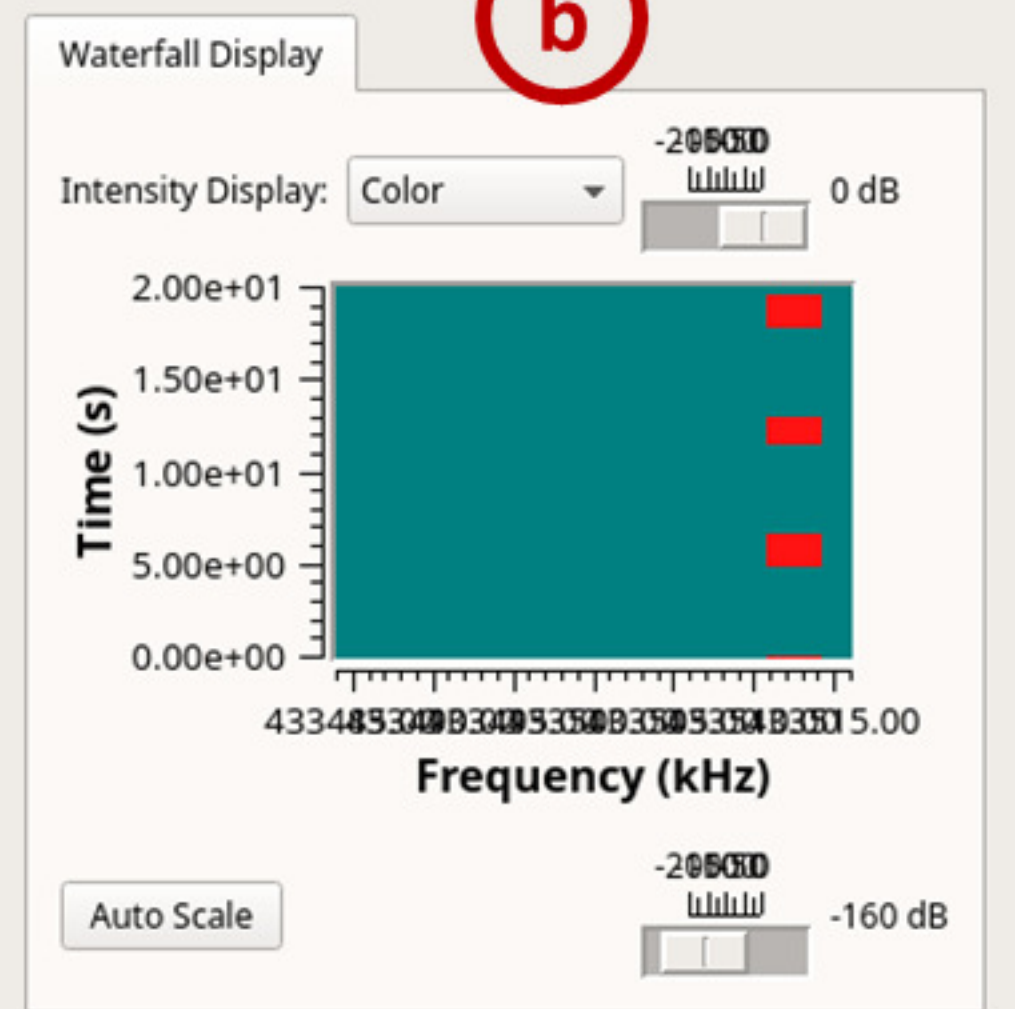
Speed: Packet of 1 second, 1 second before ack

a



Display RF Frequencies
Window: Rectangular
FFT Size: [dropdown]

b



Display RF Frequencies
Window: Rectangular
FFT Size: [dropdown]