1. As downsampling factor increase and exceeds the value of pi/W (W is the highest frequency of the discrete signal) aliasing starts to occur. As the result of this fact, starting from the higher frequencies, signal gets distorted. When we apply this effect on linear chirp with sufficiently high bandwidth (m) value, we can easily see that starting from higher frequencies, signal gets repeated due to aliasing. To decrease the effects of this distortion, LPF should be applied before downsampling the signal. As it can be seen in the figures of linear chirp cases, when LPF is applied beforehand (decimate function of MATLAB), repeated frequencies due to aliasing have lower magnitudes.
2. In order to use fractional downsampling factors, upsampling should be done first.
3. As the downsampling rate increase, signal becomes shorter and its speed gets multiplied by the downsampling factor.