One of the advantages of time-frequency analysis over waveform-based analysis is that it is possible for humans to see which notes are being played at which times. In a waveform-based analysis it is impossible for people to know what is being played at any given time, however in a time-frequency analysis it is possible to see which notes are present. An example of this is with the song ‘Good God’ which I created a spectrogram for, in the spectrogram there are a variety of notes at different Hz visible, and we can see at what times the song includes vocals.