

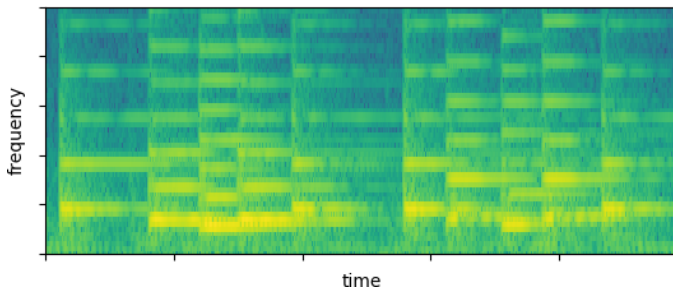
Spectrogram Matching

Each pair of spectrograms below was computed using the same piece of music, but with at most one change in parameters. Which of the following best describes the change from Spectrogram 1 to 2:

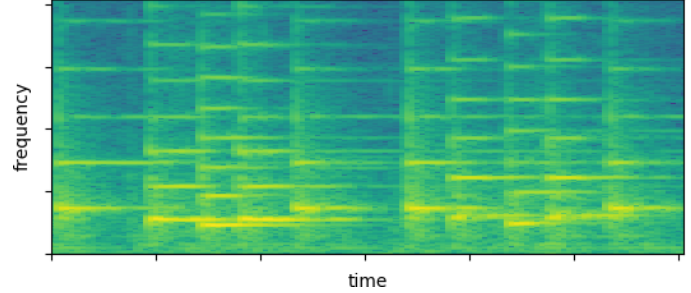
- no change was made
- the window size N was increased
- the window size N was decreased
- the step size s was increased
- the step size s was decreased
- the window function was changed from rectangular to Hann
- the window function was changed from Hann to rectangular

Part a.

Spectrogram 1



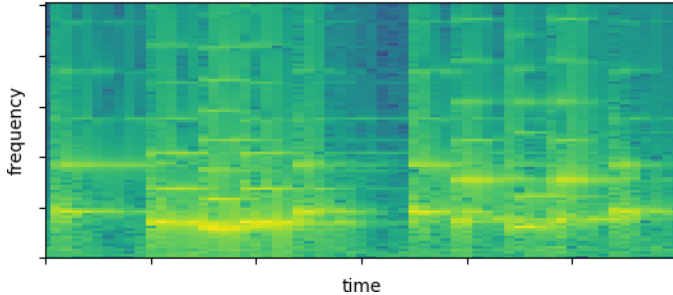
Spectrogram 2



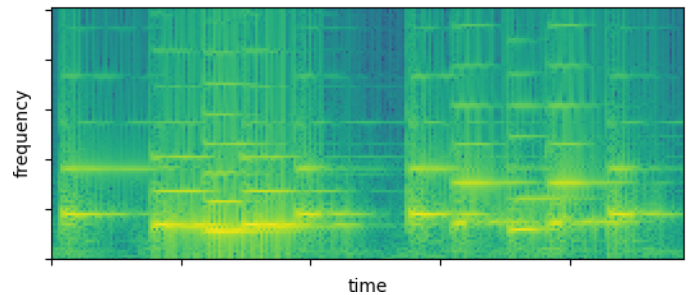
the window size N was increased

Part b.

Spectrogram 1



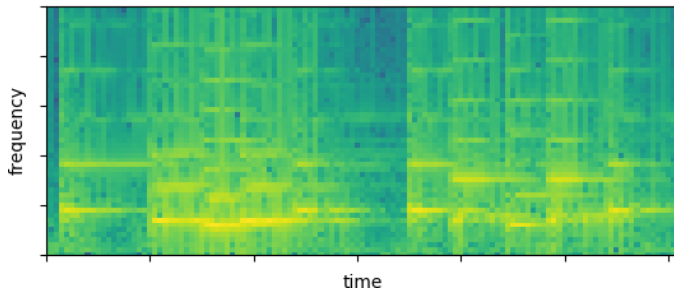
Spectrogram 2



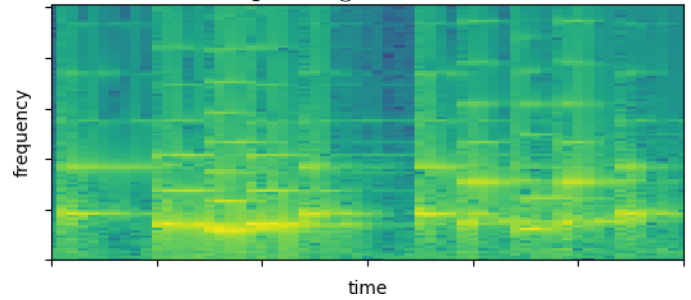
the step size s was decreased

Part c.

Spectrogram 1



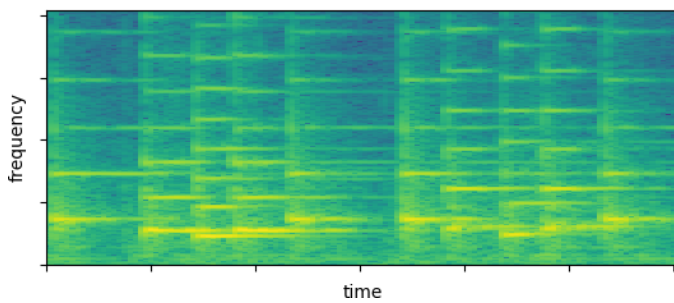
Spectrogram 2



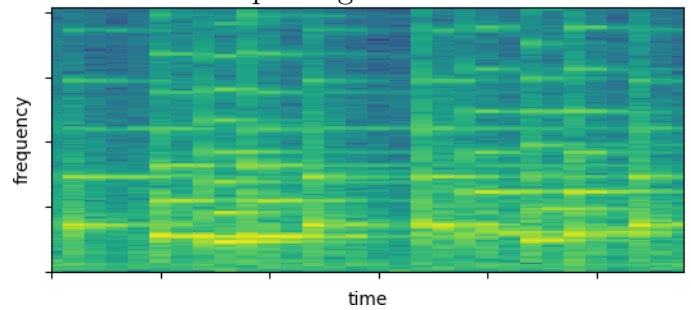
the window size N was increased

Part d.

Spectrogram 1



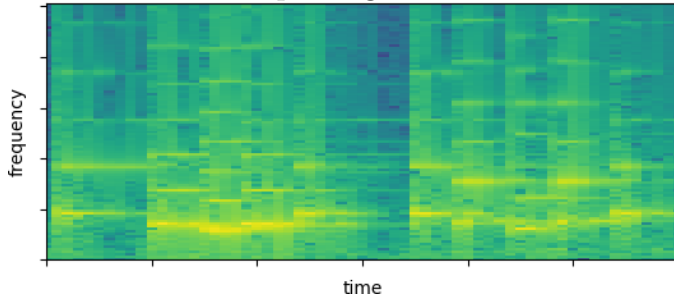
Spectrogram 2



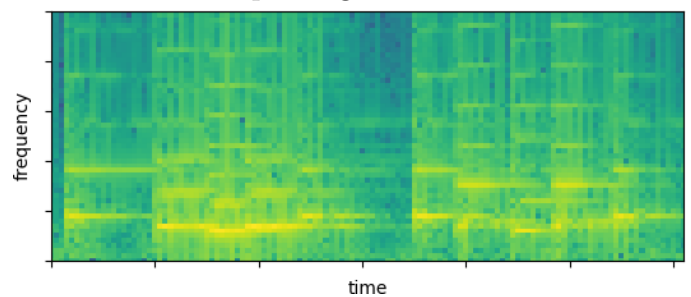
the step size s was increased

Part e.

Spectrogram 1



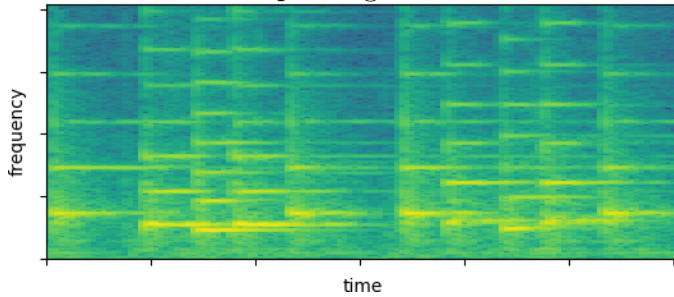
Spectrogram 2



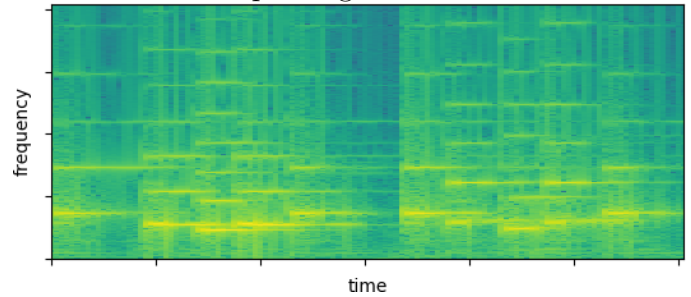
the window size N was decreased

Part f.

Spectrogram 1



Spectrogram 2



the window function was changed from Hann to rectangular