

Music Analysis Report

Generated using Music Processing Suite (MPS)

June 6, 2021

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Chapter 1

Overview

1.1 Analyzed Files Overview

ID	File	Measures	Voices	Keys	Time	Notes
1	wtc1f01.xml	27	6	C	4/4	740

Table 1.1: List of Analyzed Files

1.2 Overview Plot

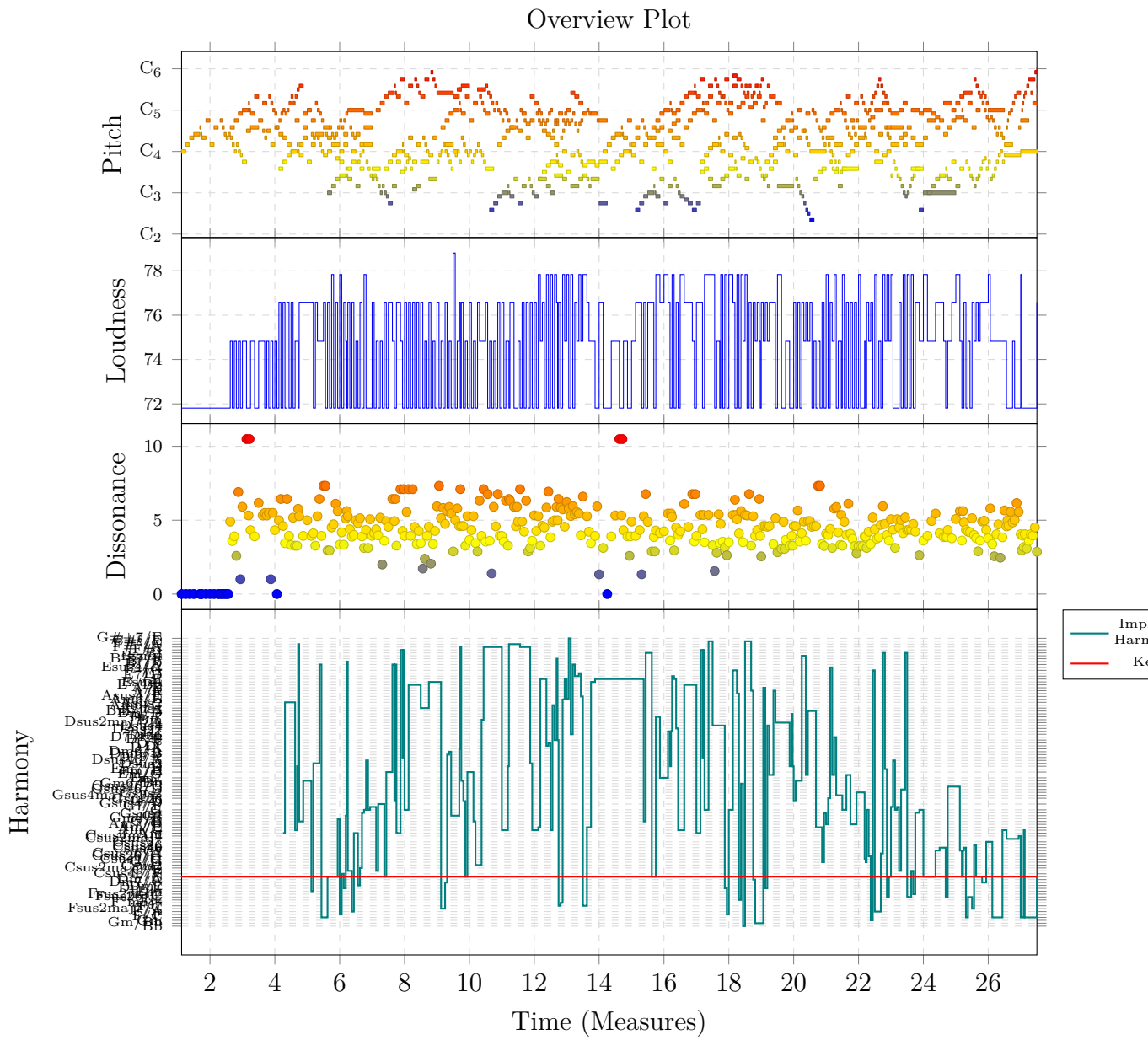


Figure 1.1: Overview Plot

Chapter 2

Global Analysis Results

2.1 Note Duration Distribution

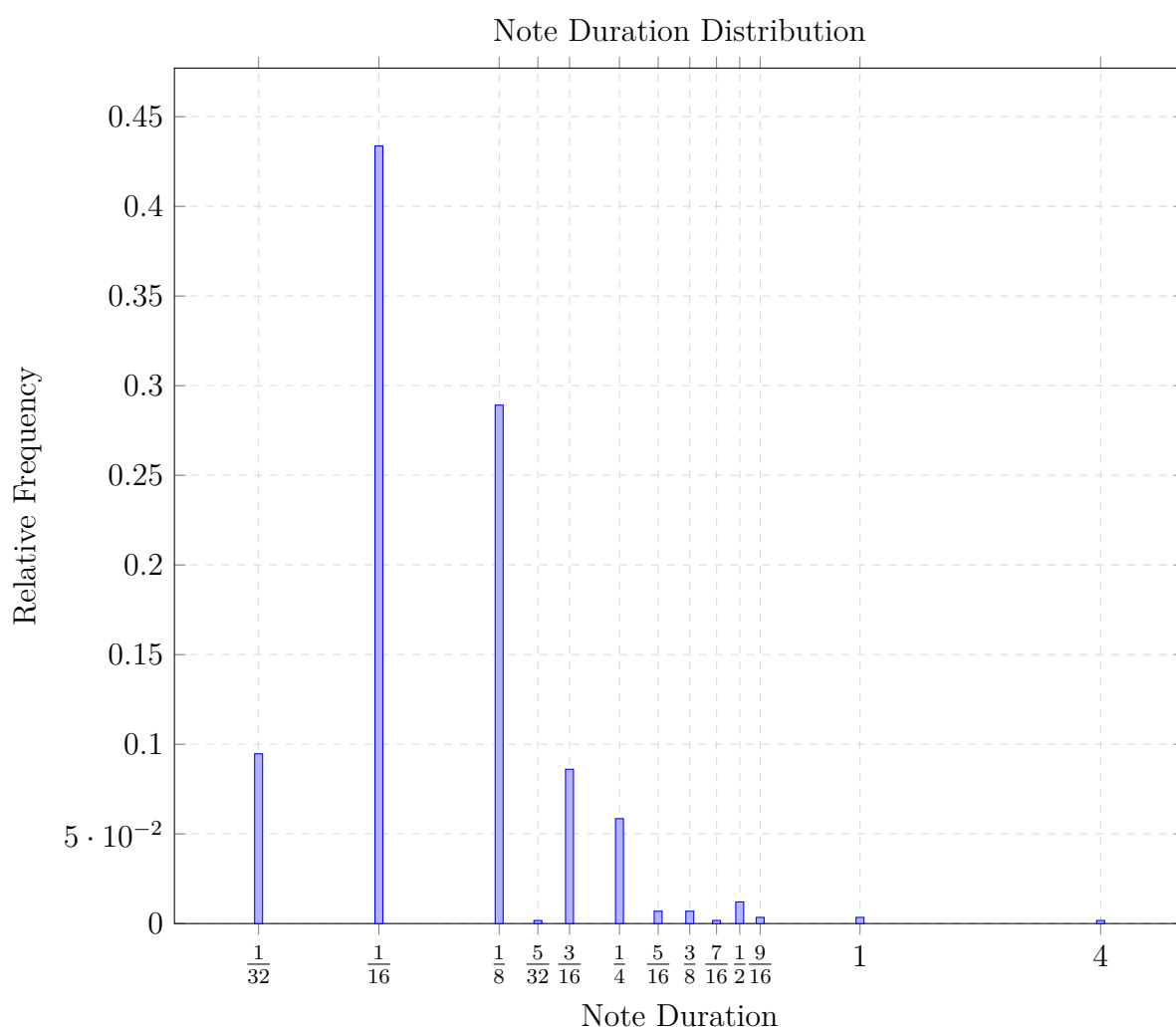


Figure 2.1: Global Analysis: Note Duration Distribution

2.2 Rest Duration Distribution

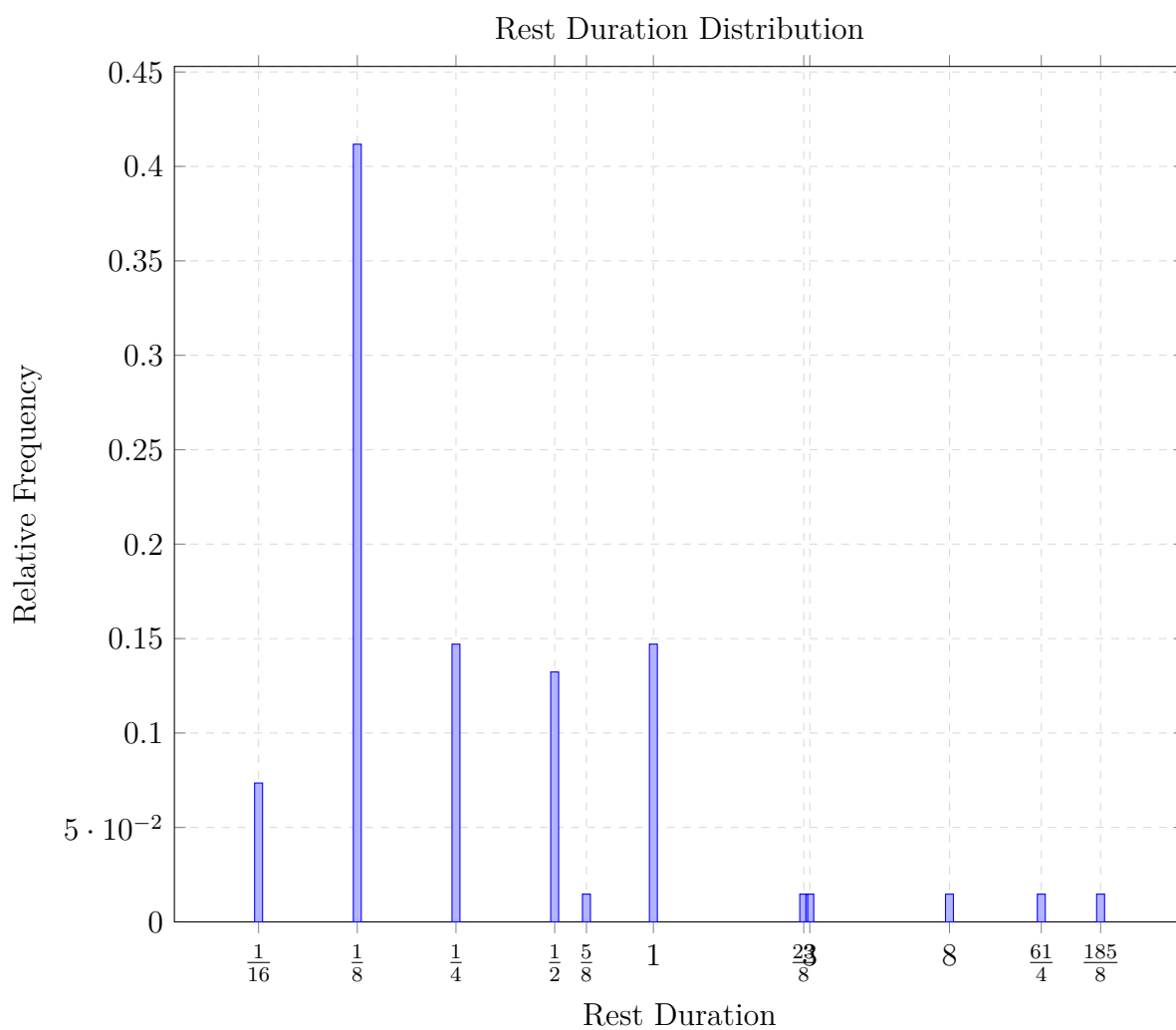


Figure 2.2: Global Analysis: Rest Duration Distribution

2.3 Note Duration per Beat Distributions

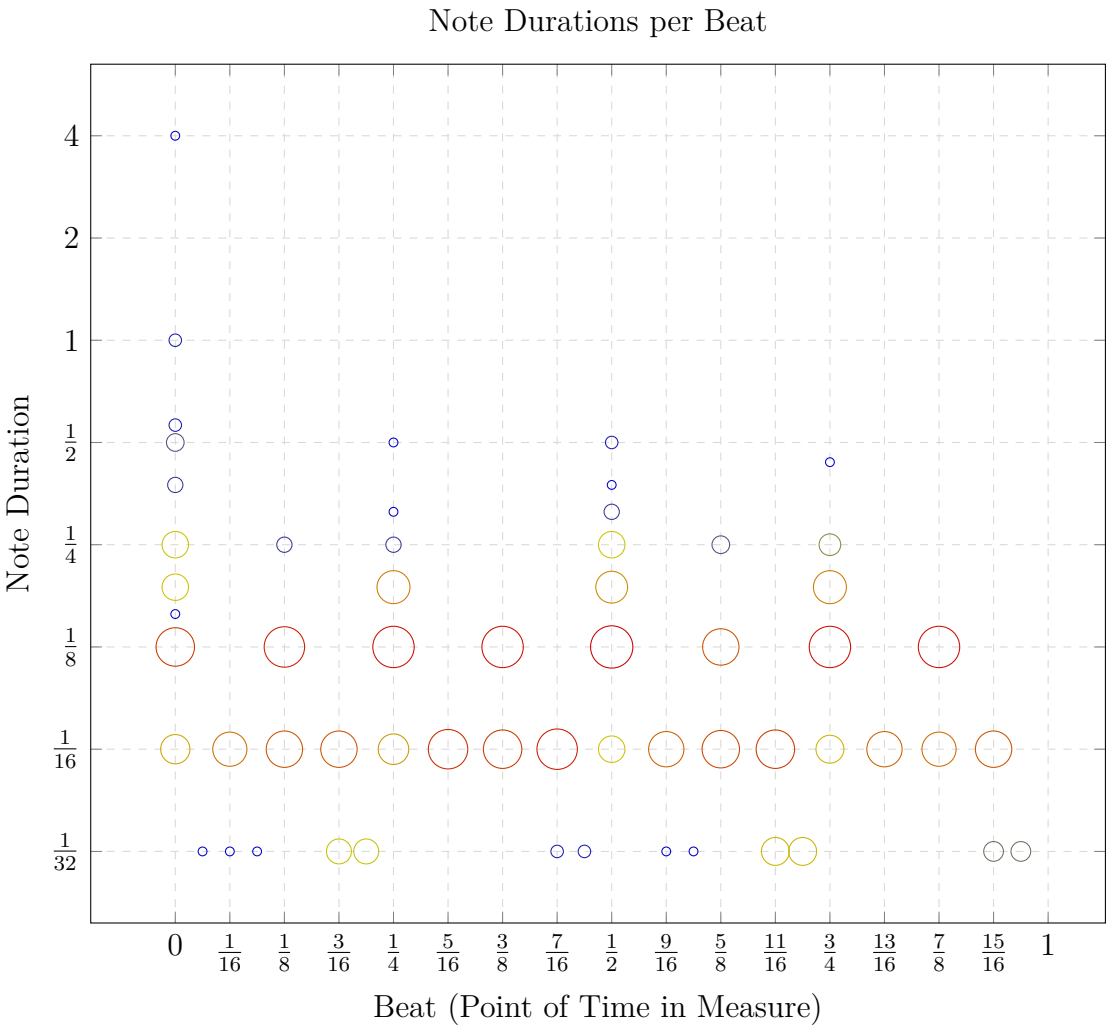


Figure 2.3: Global Analysis: Note Duration per Beat Distributions

2.4 Beat Distribution

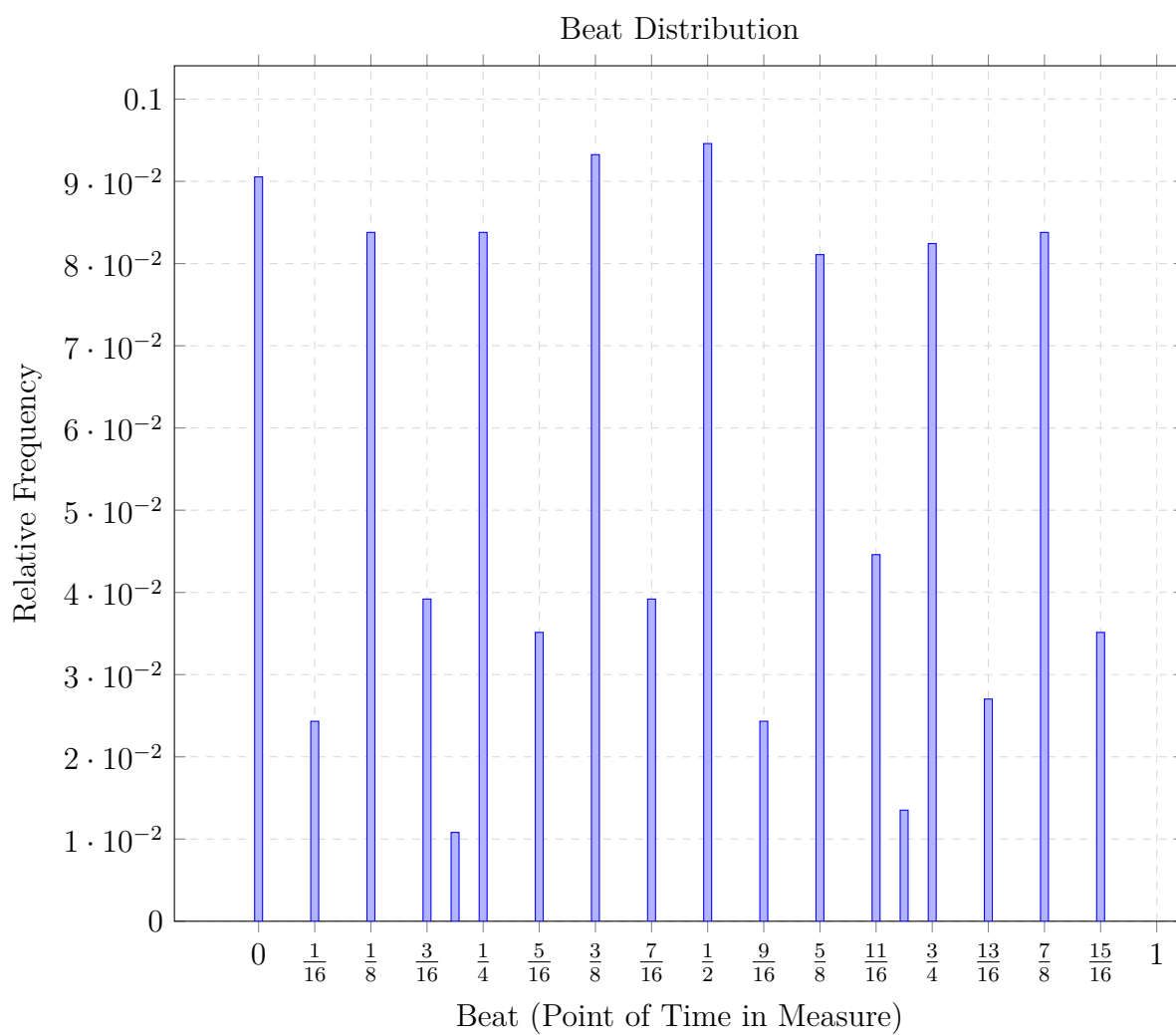


Figure 2.4: Global Analysis: Beat Distribution

2.5 Time Signature Distribution

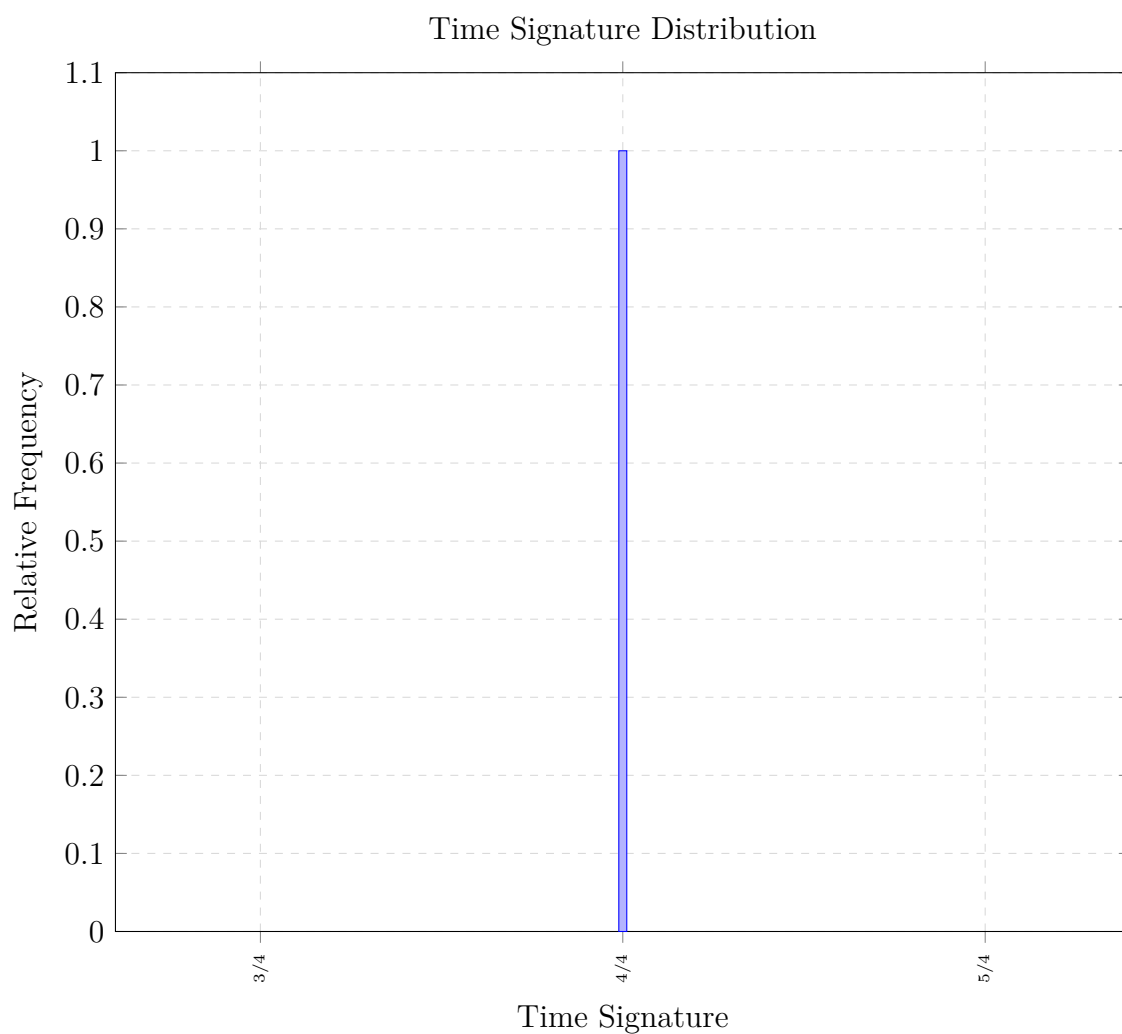


Figure 2.5: Global Analysis: Time Signature Distribution

2.6 Loudness over Time

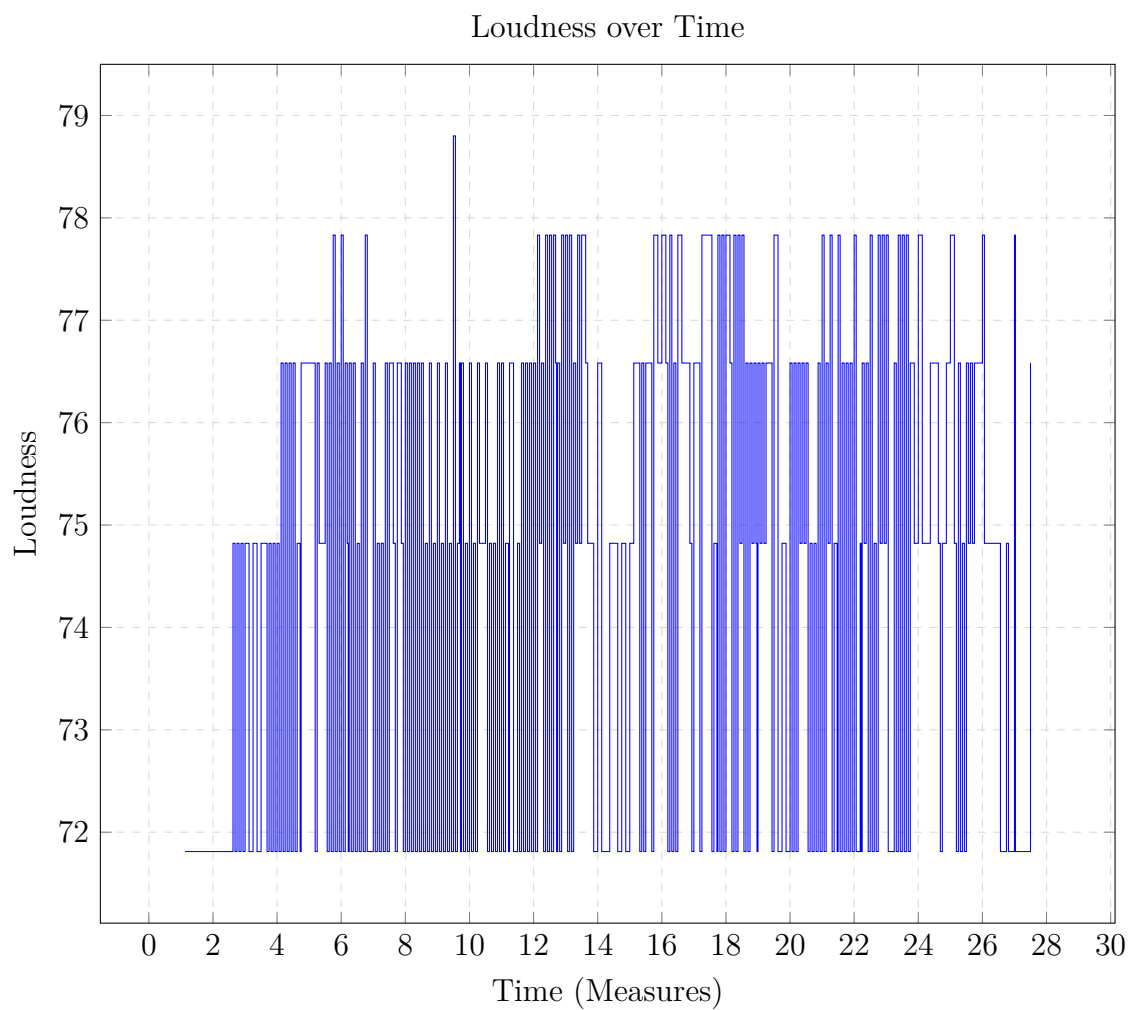


Figure 2.6: Global Analysis: Loudness over Time

2.7 Loudness Distribution

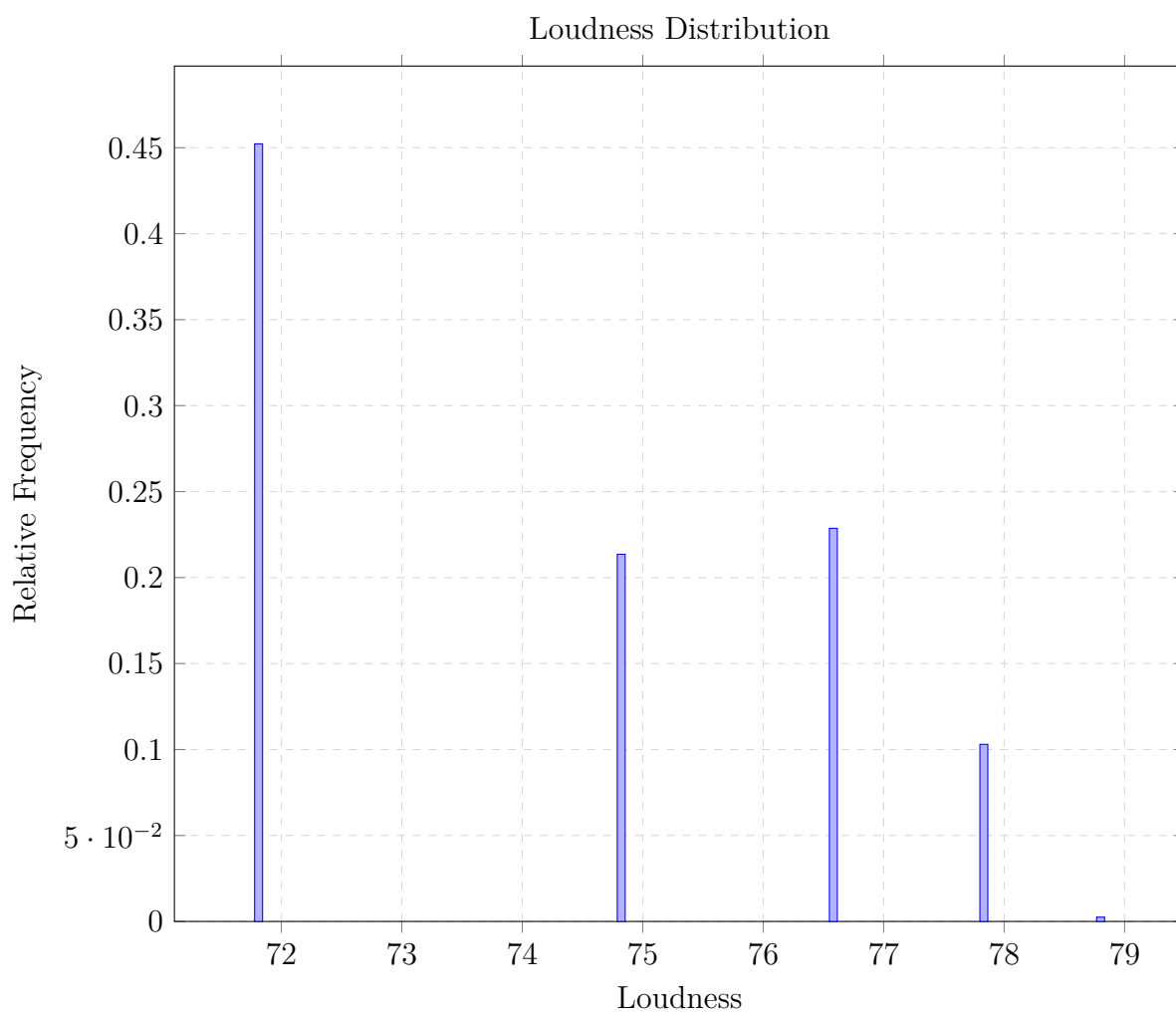


Figure 2.7: Global Analysis: Loudness Distribution

2.8 Piano Roll Representation

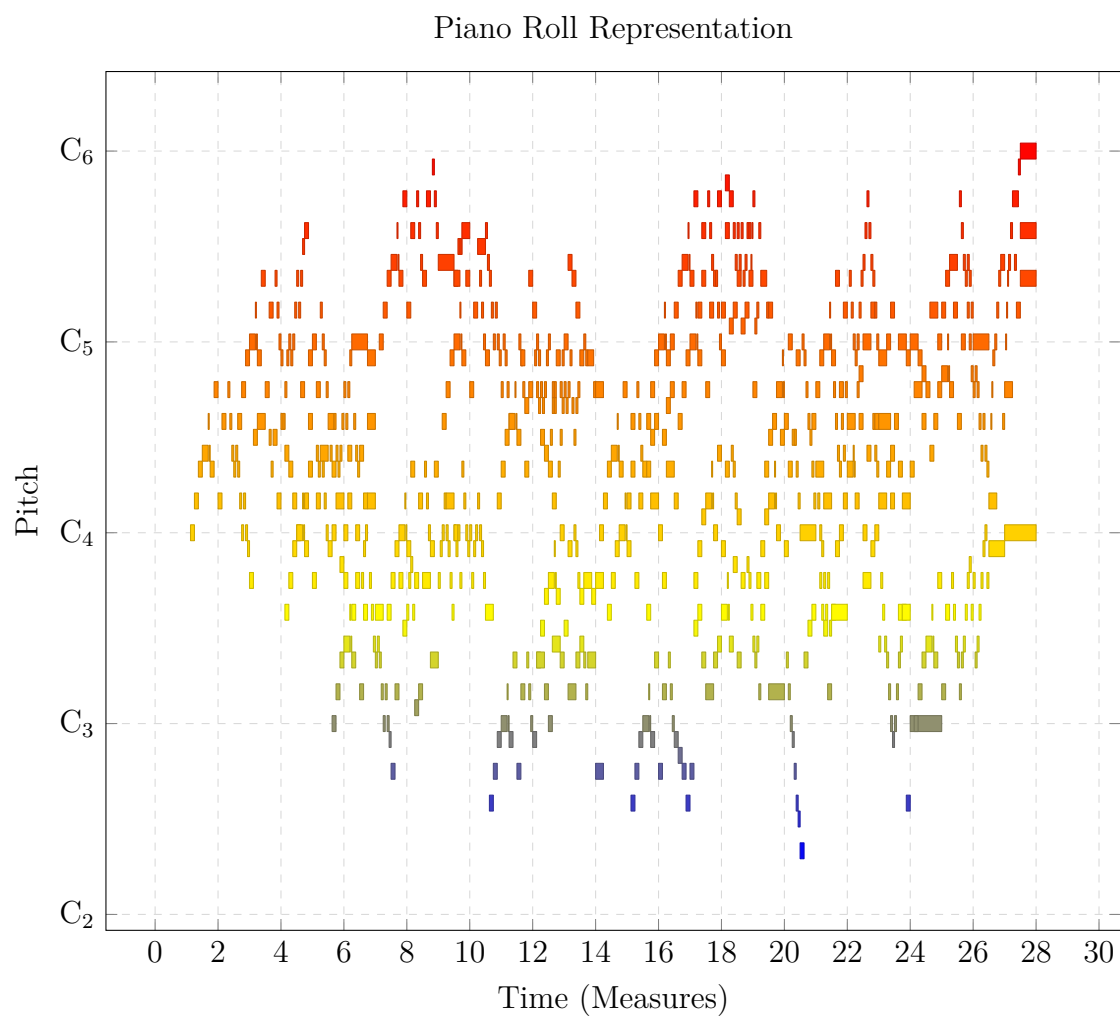


Figure 2.8: Global Analysis: Piano Roll Representation

2.9 Minimum and Maximum Pitches over Time

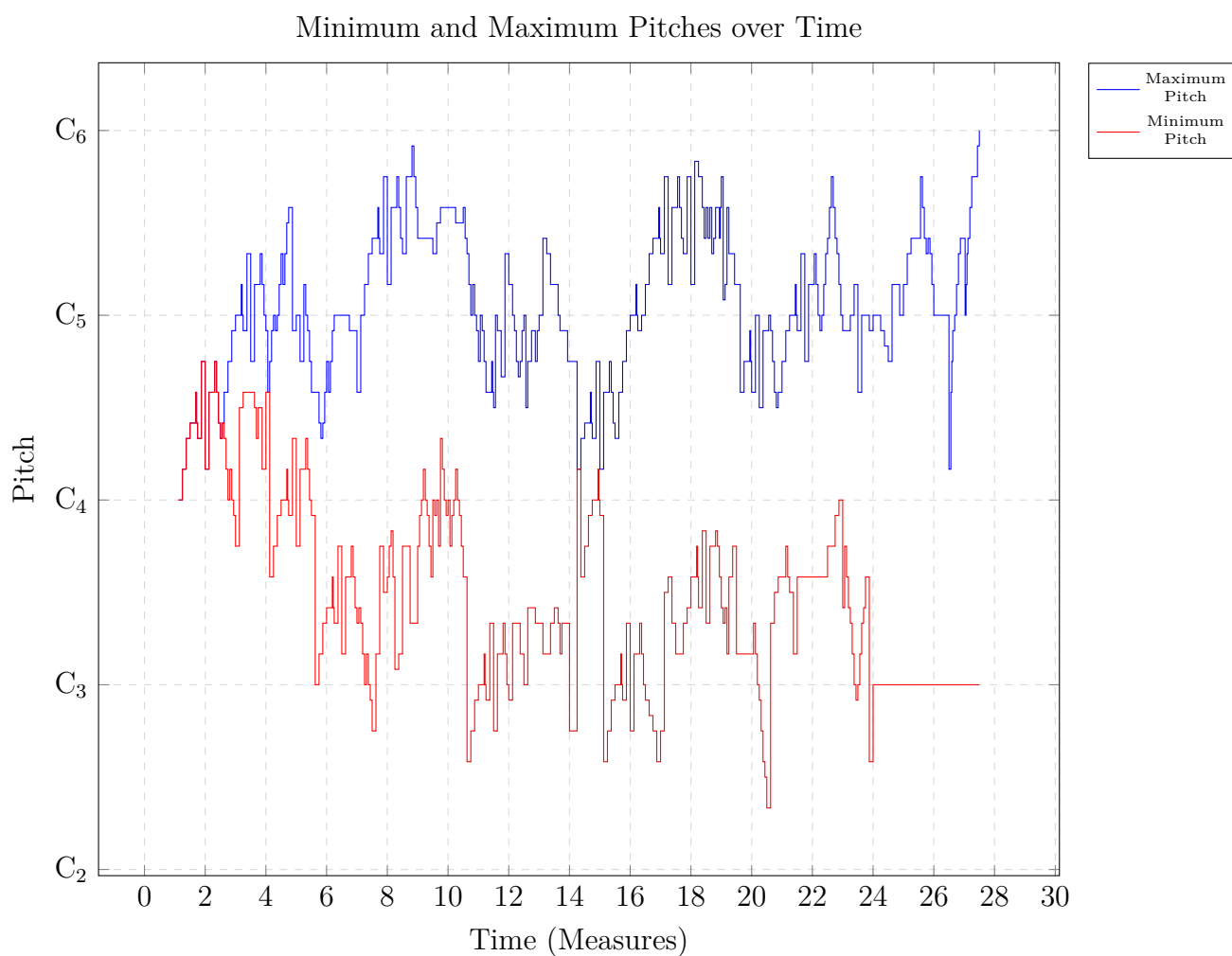


Figure 2.9: Global Analysis: Minimum and Maximum Pitches over Time

2.10 Pitch Distribution

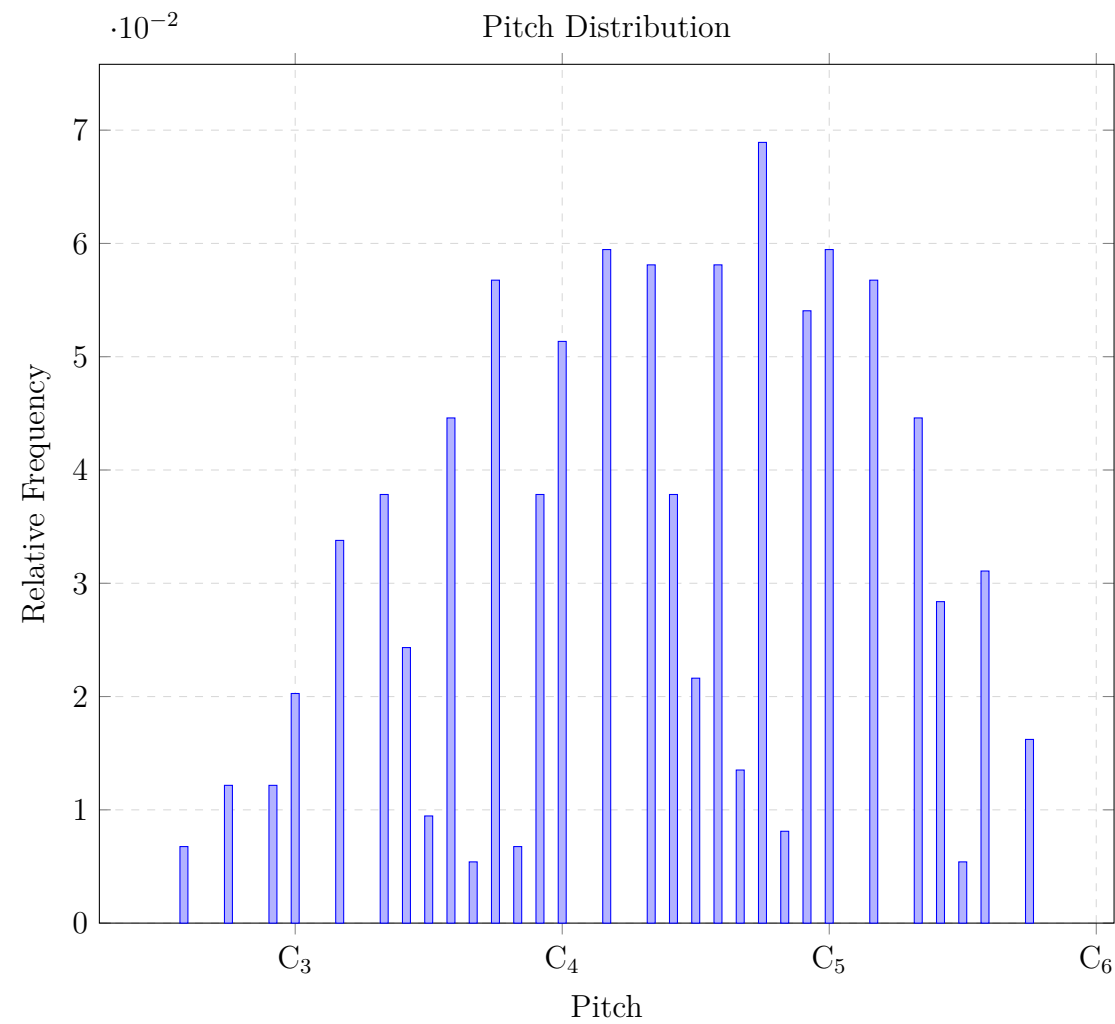


Figure 2.10: Global Analysis: Pitch Distribution

2.11 Interval Leaps over Time

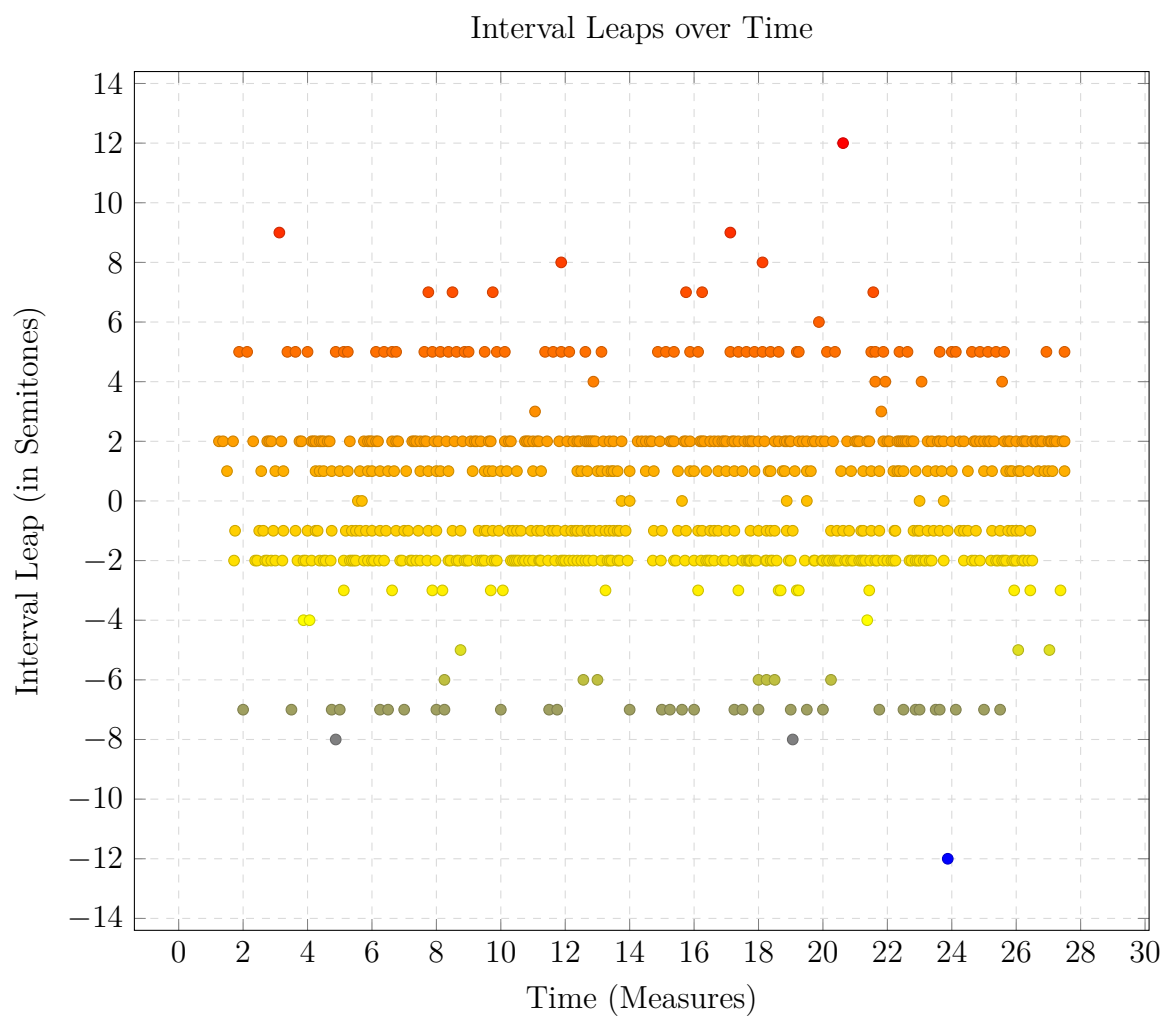


Figure 2.11: Global Analysis: Interval Leaps over Time

2.12 Interval Leap Distribution

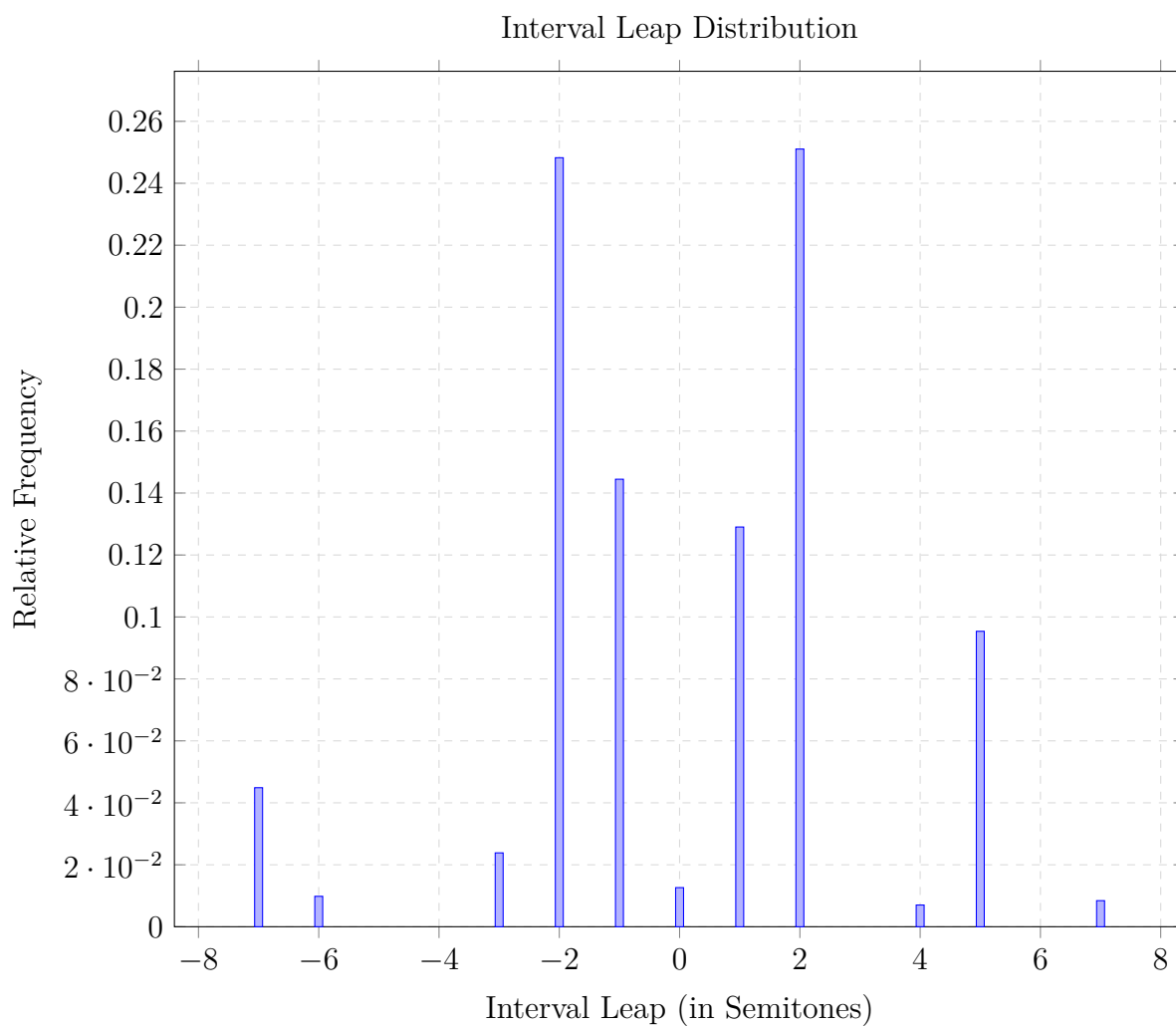


Figure 2.12: Global Analysis: Interval Leap Distribution

2.13 Interval Leap per Beat Distribution

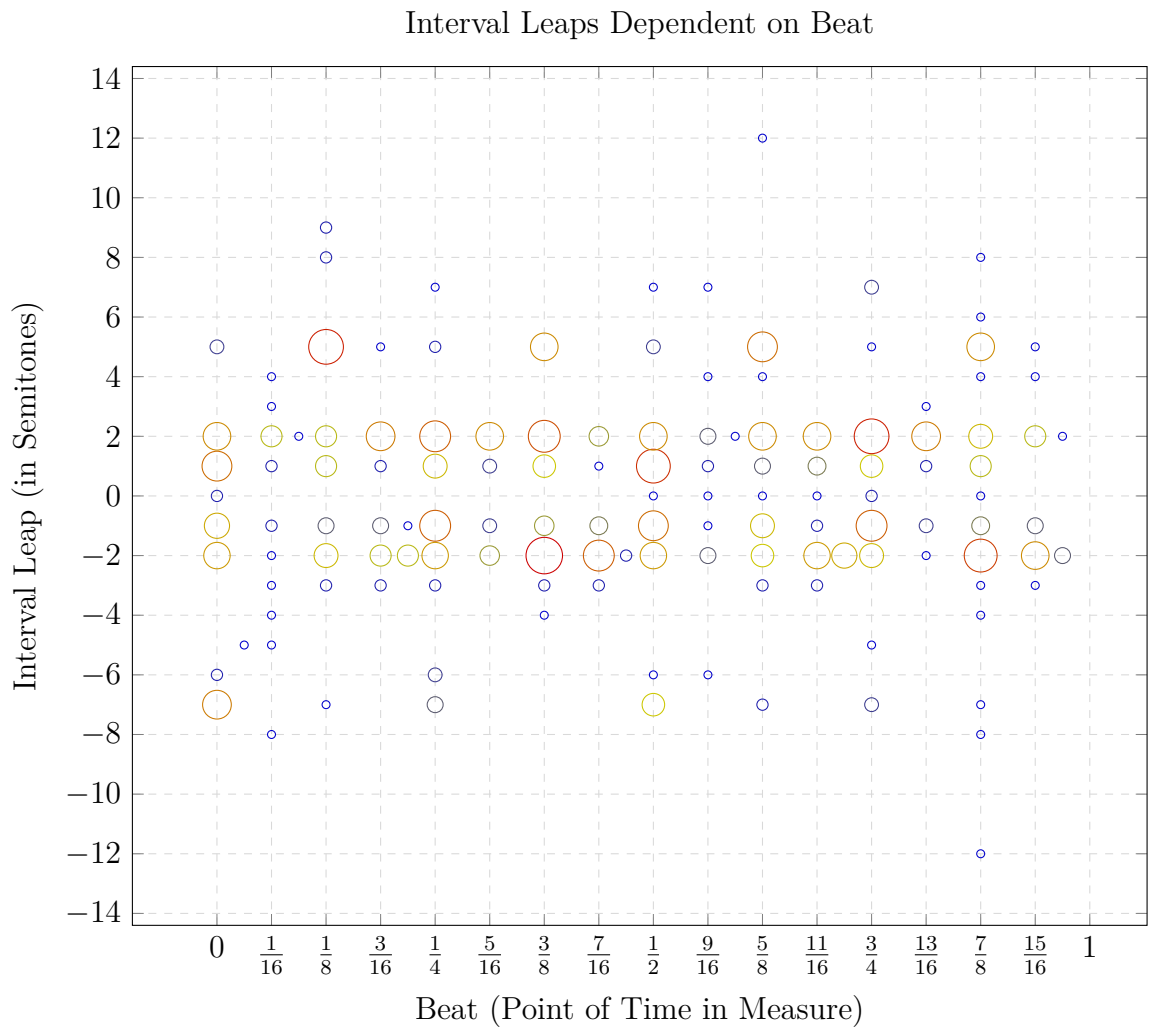


Figure 2.13: Global Analysis: Interval Leap per Beat Distribution

2.14 Dissonance over Time

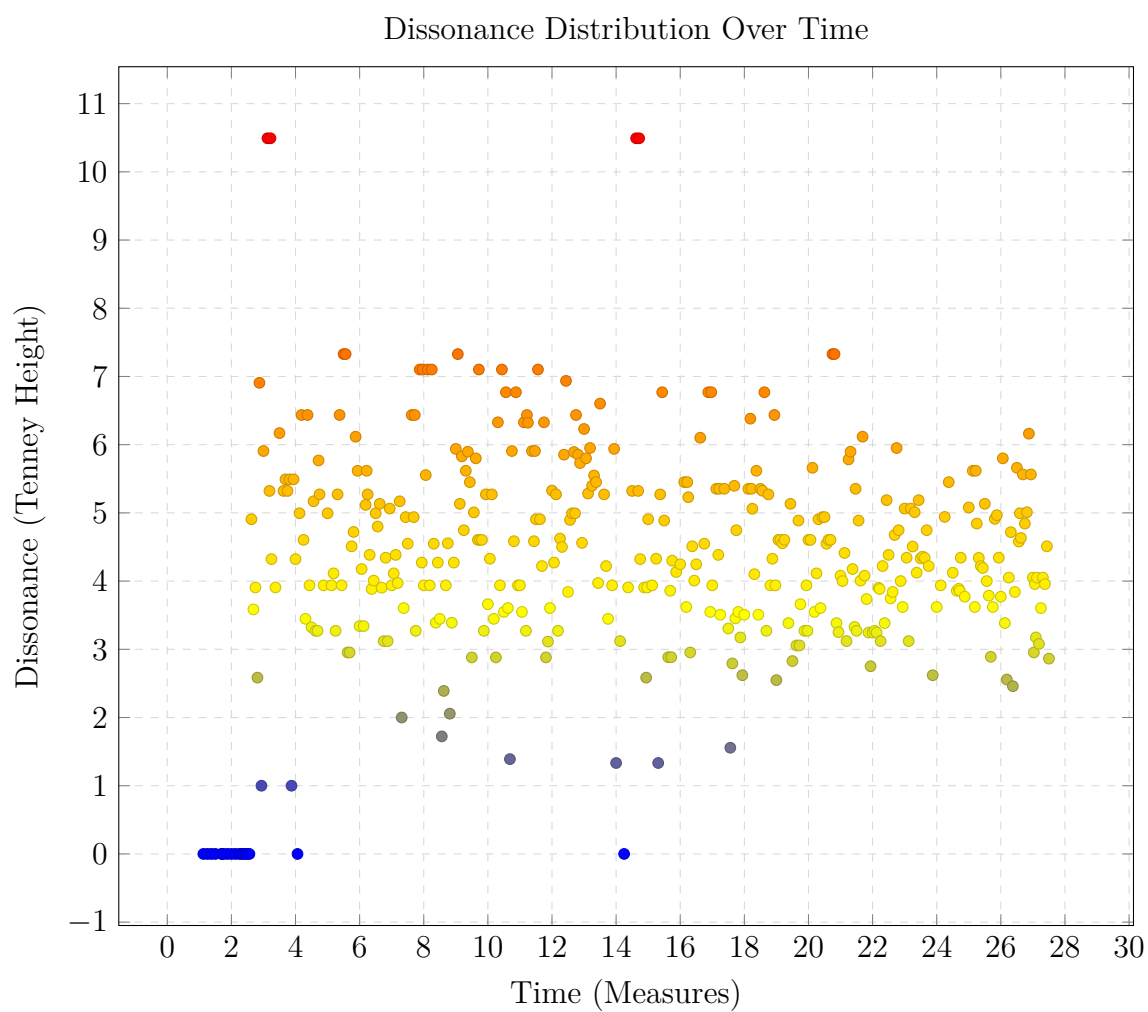


Figure 2.14: Global Analysis: Dissonance over Time

2.15 Dissonance Distribution

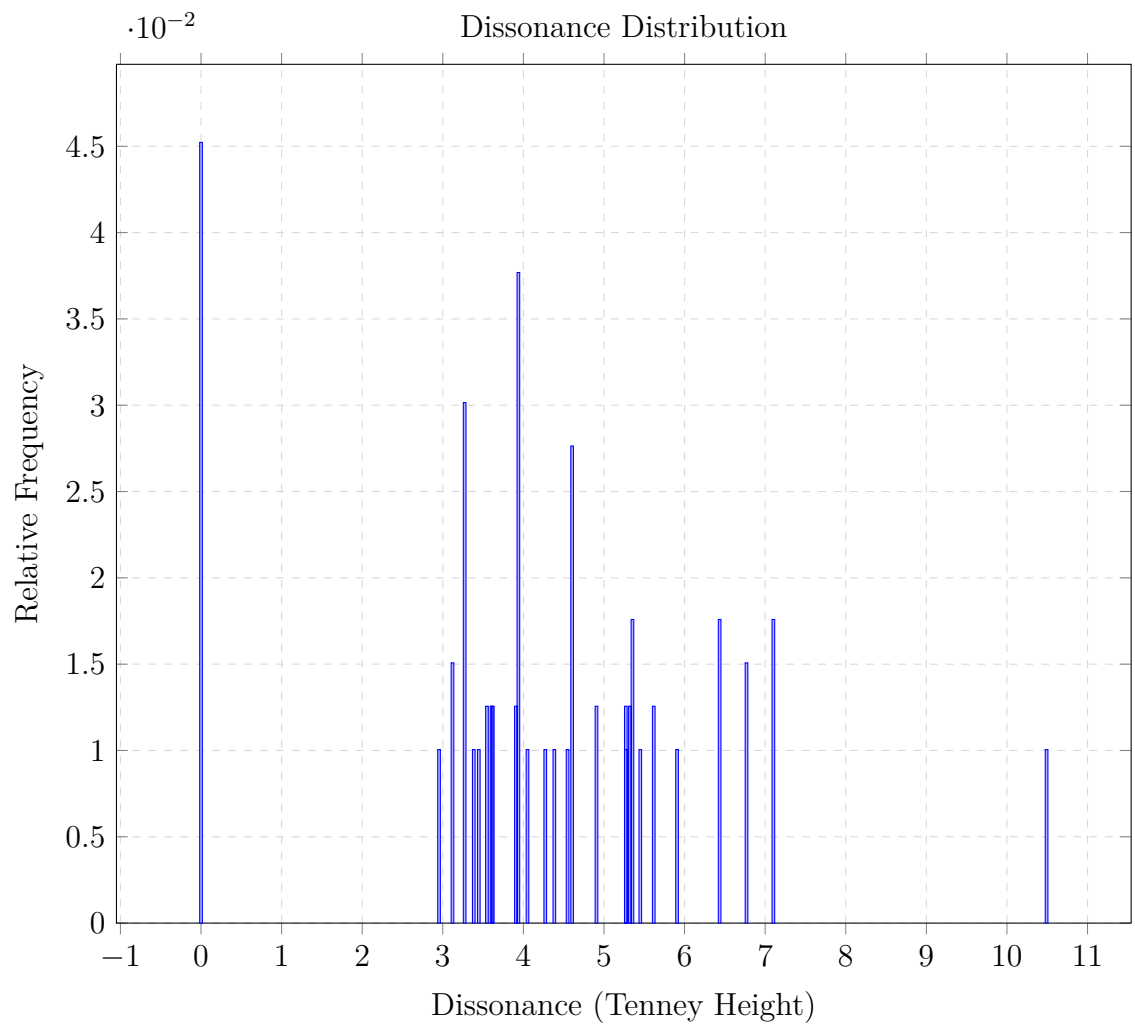


Figure 2.15: Global Analysis: Dissonance Distribution

2.16 Dissonance per Beat Distributions

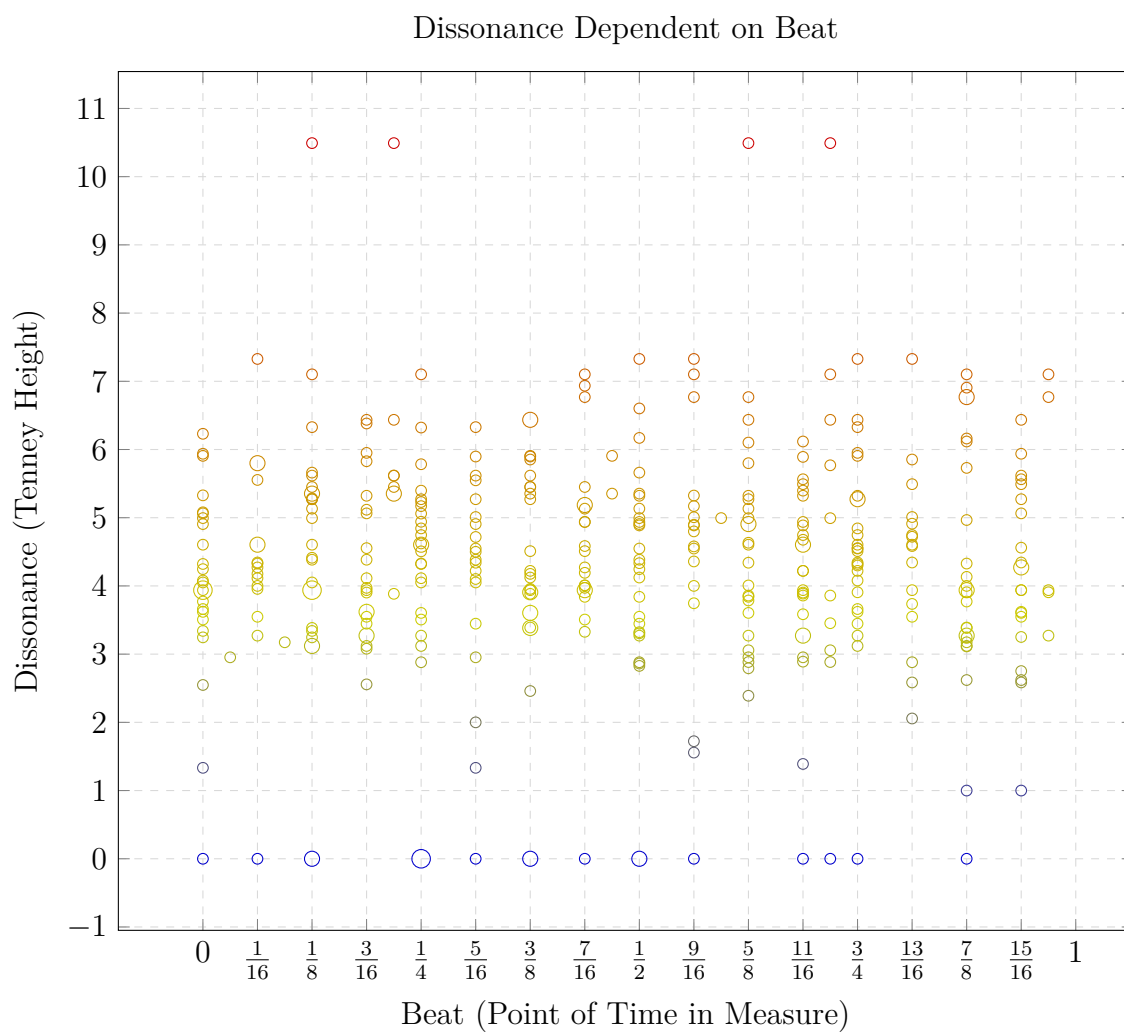


Figure 2.16: Global Analysis: Dissonance per Beat Distributions

2.17 Simultaneously Audible Interval Distribution

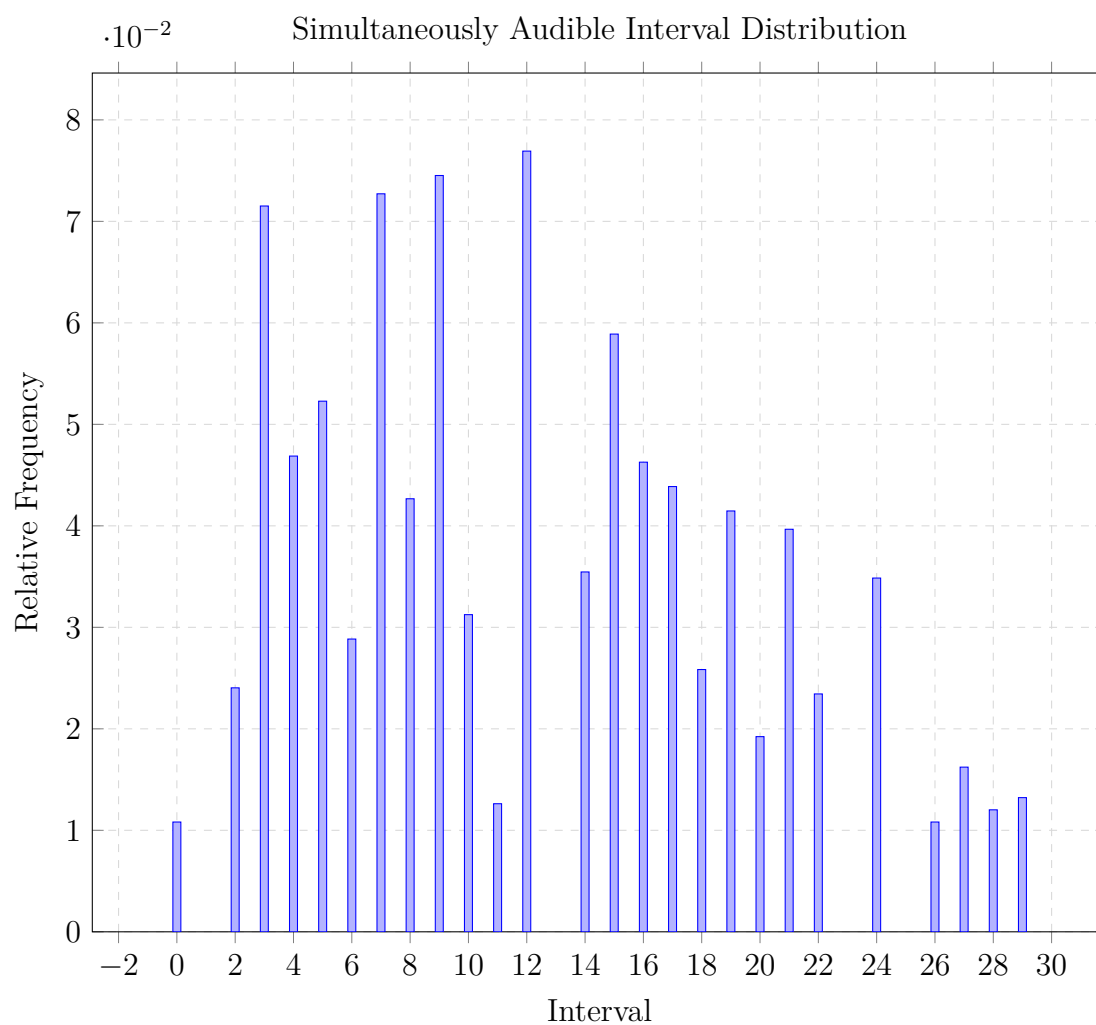


Figure 2.17: Global Analysis: Simultaneously Audible Interval Distribution

2.18 Simultaneously Audible Interval per Beat Distributions

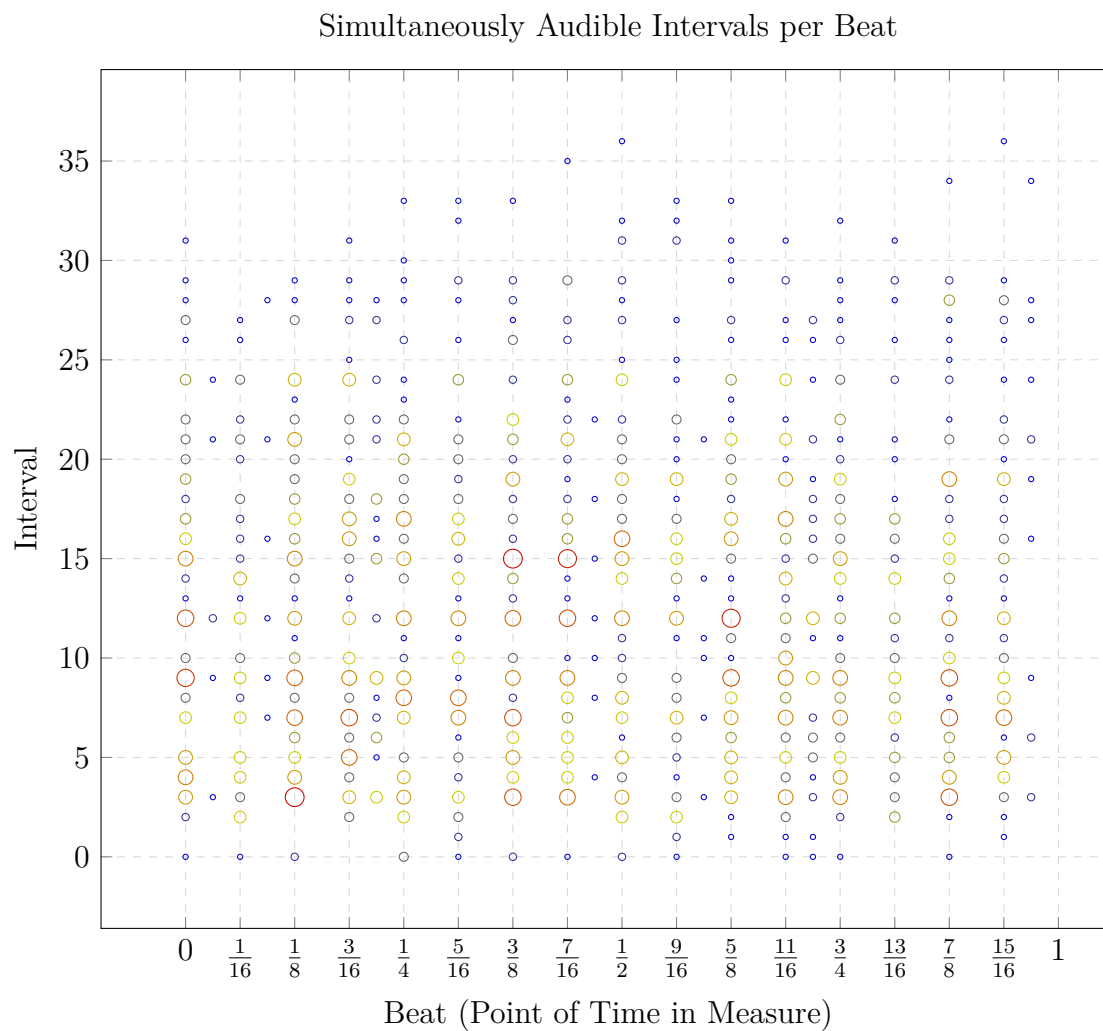


Figure 2.18: Global Analysis: Simultaneously Audible Interval per Beat Distributions

2.19 Key Distribution

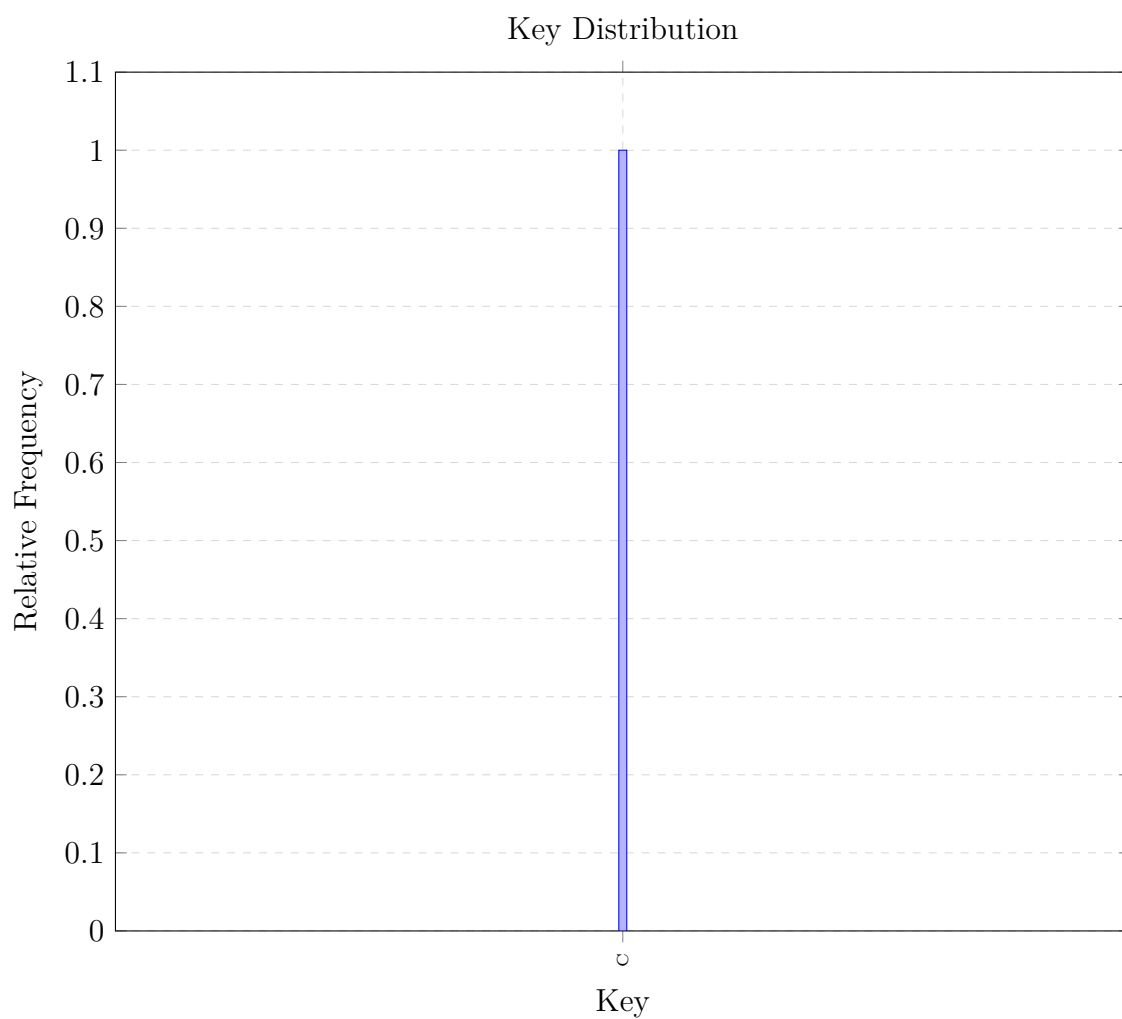


Figure 2.19: Global Analysis: Key Distribution

Figure 2.20: Global Analysis: Implicit Harmonies over Time

2.21 Implicit Harmony Distribution

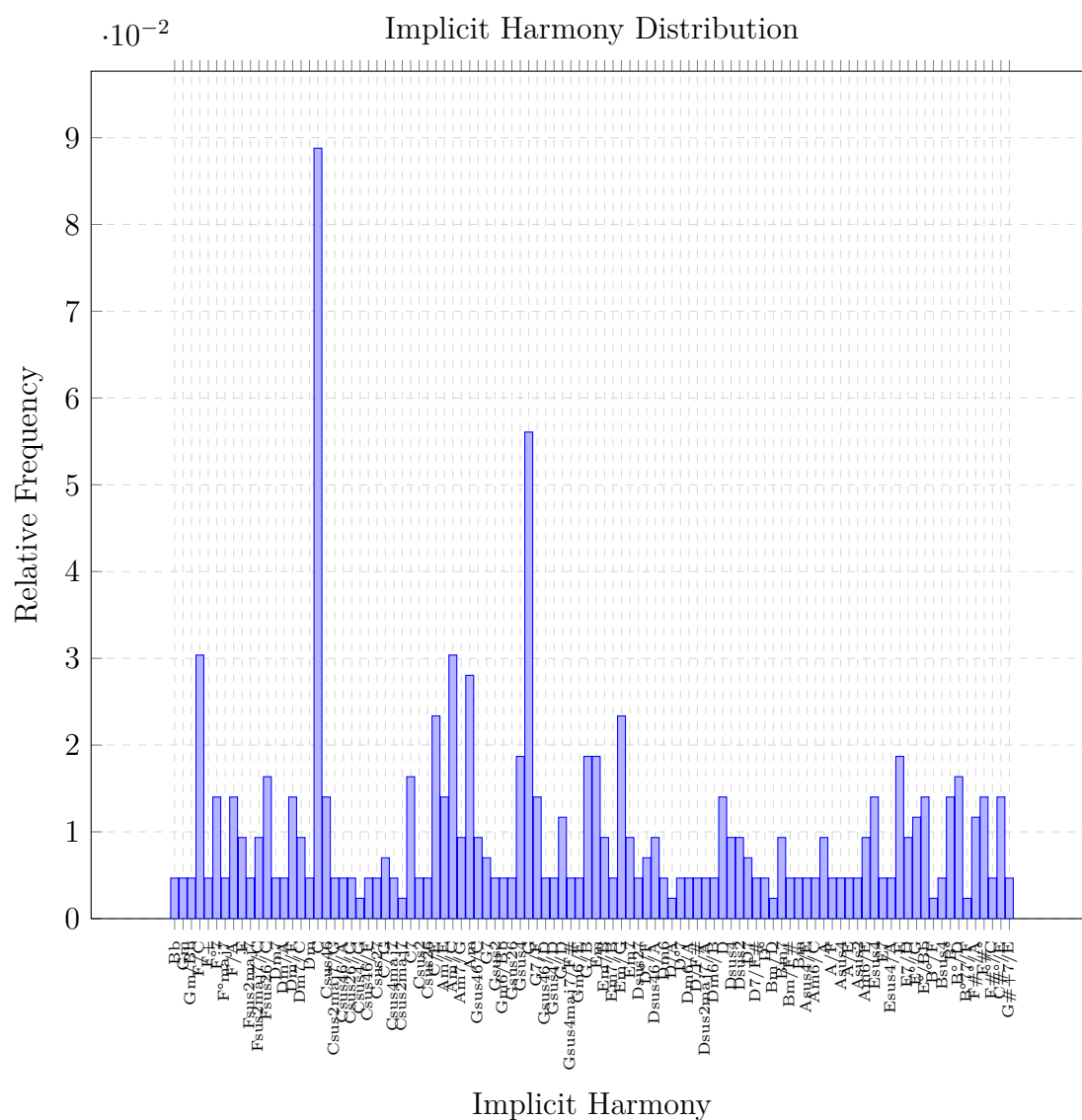


Figure 2.21: Global Analysis: Implicit Harmony Distribution

2.22 Circle of Fifths Distance Distribution for Implicit Harmonies

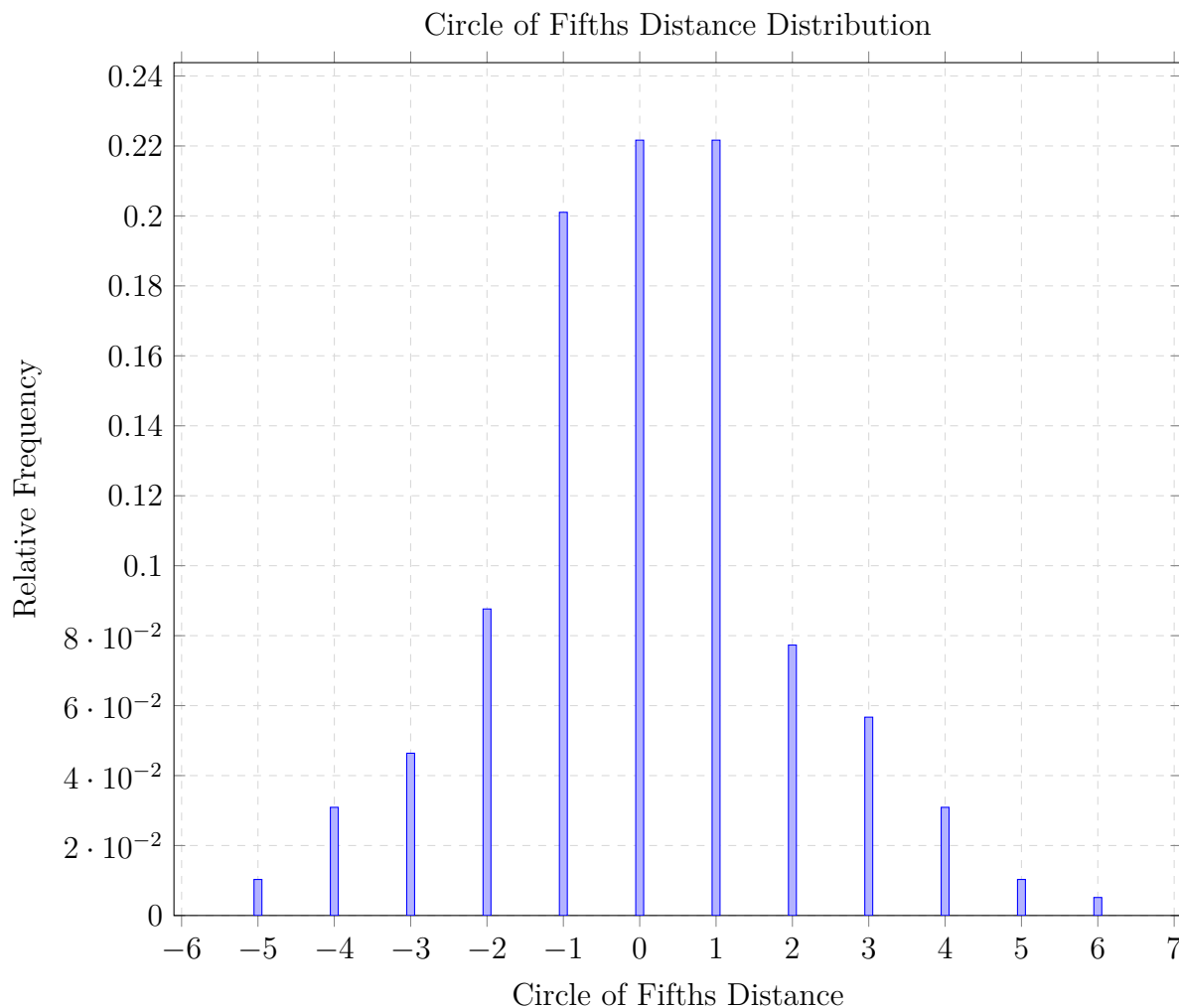


Figure 2.22: Global Analysis: Circle of Fifths Distance Distribution for Implicit Harmonies

2.23 Statistical Features

Feature	Value
Total Number of Notes	740
Total Number of Rests	68
Note Duration Average	0.1210197934595525
Note Duration Standard Deviation	0.1882451436762324
Note Density	0.48828125
Interval Leap Average	0.12482468443197756
Interval Leap Standard Deviation	3.0429120277812234
Dissonance Average	4.3629178656435155
Dissonance Standard Deviation	1.618761153934313
Chord Compliance	0.41486486486486485
Root Note Compliance	0.13243243243243244
Bass Note Compliance	0.13243243243243244
Scale Compliance Relative to Key	0.9162162162162162
Scale Compliance Relative to Harmony	0.9162162162162162

Table 2.1: Global Analysis: Statistical Features and Values

2.24 Pitch Combination Distribution (Absolute)

Pitch Combination	Absolute Quantity
[G4]	5
[F4]	4
[D4]	3
[E4]	3
[C3, C4, A4, F5]	2
[C3, G3, Bb4, E5]	2
[C3, G3, C5, E5]	2
[G3, E4, G4, D5]	2
[E3, C#4, E5, G5]	2
[D3, A3, F#4, C5]	2
[G3, E4, G5, Bb5]	2
[F#3, A3, C5, A5]	2
[A4]	2
[A3, C4, E4, C5]	1
[C3, E4, A4, C5]	1
[C3, D3, Bb4, D5]	1
[C3, E3, Bb4, C5]	1
[C3, C4, A4, E5]	1
[A3, C4, F4, C5]	1
[B3, D4, A4, F5]	1
[A3, D4, B4, F5]	1

Table 2.2: Global Analysis: Pitch Combination Distribution (Absolute)

[D3, E4, A4, C5]	1
[C3, A3, D5, F5]	1
[C3, C4, A4, G5]	1
[G3, D4, A4, C5]	1
[C3, G3, Bb4, D5]	1
[C3, C4, F4, C5]	1
[D3, D4, A4, G5]	1
[G3, D4, A4, D5]	1
[G3, C4, D4, C5]	1
[C3, D4, F4, D5]	1
[C3, E3, C5, G5]	1
[C3, F3, C5, F5]	1
[G3, D4, B4, F5]	1
[D3, E4, G4, C5]	1
[C3, F3, D5, F5]	1
[E3, E4, G4, C5]	1
[C3, G3, D5, F5]	1
[G3, D4, F4, D5]	1
[G3, E4, G4, C5]	1
[G3, F4, G4, C5]	1
[G3, E4, G4, E5]	1
[F#3, C4, F#4]	1
[D4, D5, F#5]	1
[C4, E5, F#5]	1
[B2, D4, F#4, A4]	1
[C3, A3, E4, F#4]	1
[A3, F4, C5, A5]	1
[C3, C4, D5, A5]	1
[F3, E4, C#5, A5]	1
[C3, Bb3, C5, E5]	1
[C3, C4, D5, B5]	1
[B3, C4, C5, E5]	1
[F3, F4, C#5, A5]	1
[A3, C4, C5, F5]	1
[C3, C4, F5, A5]	1
[C4, D4, A4, F5]	1
[A3, C4, C5, G5]	1
[F3, F4, C5, A5]	1
[E3, C#4, E5, F5]	1
[E3, C4, D5, E5]	1
[F3, F4, D5, A5]	1
[A3, F4, C5, G5]	1
[D3, D4, D5, F5]	1
[B3, F4, D5, F5]	1

Table 2.2: Global Analysis: Pitch Combination Distribution (Absolute)

[B3, G4, D5, E5]	1
[C4, E4, G4, C5]	1
[D3, D4, D5, G5]	1
[D3, E4, D5, F5]	1
[G3, G4, Bb4, D5]	1
[G3, G4, Bb4, E5]	1
[C4, F4, G4, D5]	1
[C4, E4, G4, F5]	1
[D4, E4, G4, F5]	1
[F#3, A3, D4, C5]	1
[E3, C4, F#4, A4]	1
[E3, F#3, A4, C5]	1
[D3, A3, F#4, D5]	1
[D3, G#3, F4, A4]	1
[D3, F#3, D4, C5]	1
[D3, G#3, F4, B4]	1
[F3, G#3, D4, B4]	1
[D3, F#3, D4, D5]	1
[F3, G#3, E4, B4]	1
[A3, E4, G5, Bb5]	1
[F#3, G3, D4, C5]	1
[Bb3, D4, D5, F5]	1
[Bb3, E4, D5, G5]	1
[F#3, A3, D5, A5]	1
[E3, C4, G#4, B4]	1
[D3, B3, G#4, E5]	1
[E3, B3, G#4, D5]	1
[D3, E4, G#4, B4]	1
[D3, C4, F#4, E5]	1
[F3, G#3, B4, D5]	1
[E3, E4, G#4, B4]	1
[D3, D4, F#4, D5]	1
[E3, F#3, F#4, A4]	1
[C4]	1
[E3, F#3, G#4, C5]	1
(skipped 243 more rows)	

Table 2.2: Global Analysis: Pitch Combination Distribution (Absolute)

Chapter 3

Stream-specific Analysis Results

3.1 Stream 1

3.1.1 Rhythm Progression Graph

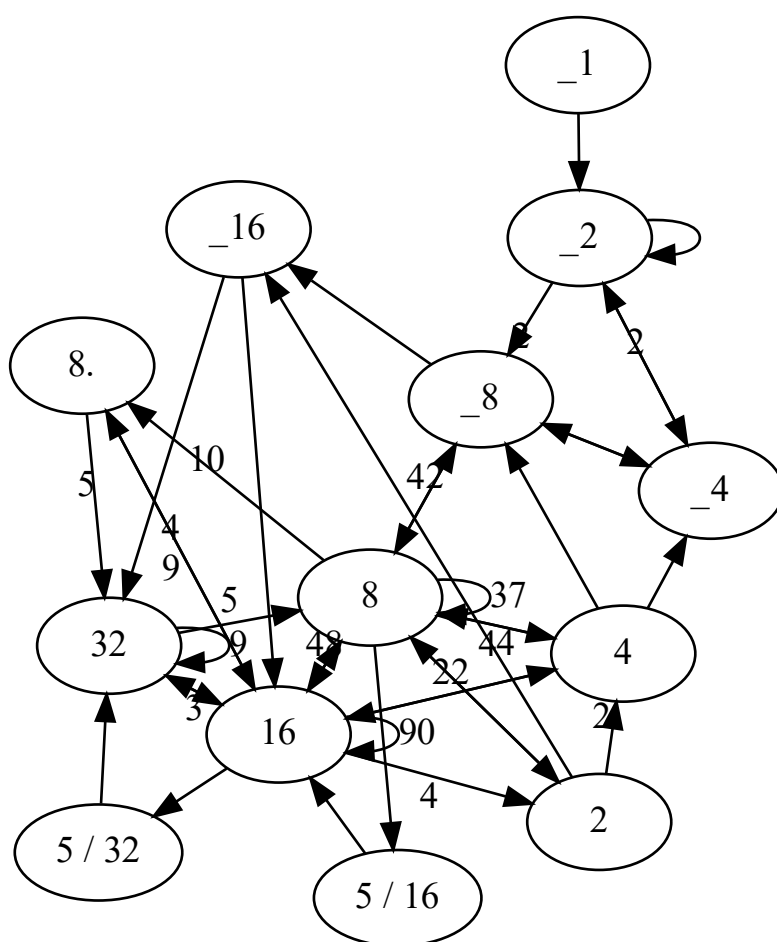


Figure 3.1: Stream 1: Rhythm Progression Graph

3.1.2 Pitch Progression Graph

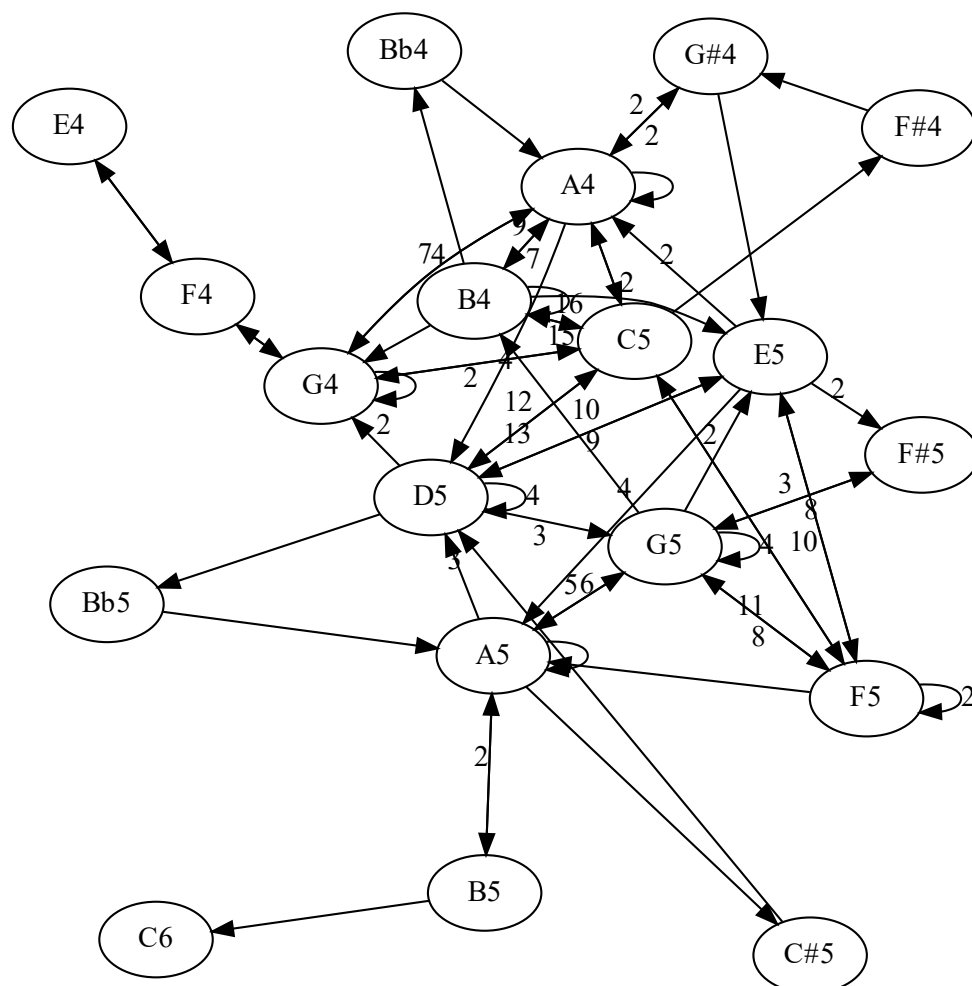


Figure 3.2: Stream 1: Pitch Progression Graph

3.2 Stream 2

3.2.1 Rhythm Progression Graph

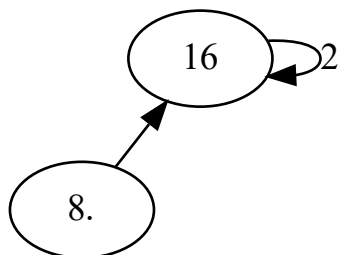


Figure 3.3: Stream 2: Rhythm Progression Graph

3.2.2 Pitch Progression Graph

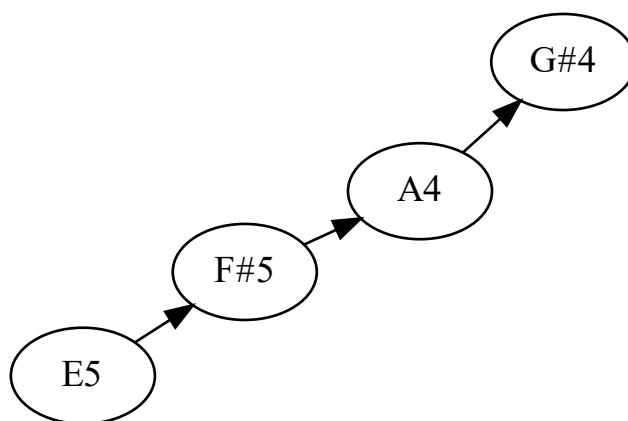


Figure 3.4: Stream 2: Pitch Progression Graph

3.3 Stream 3

3.3.1 Rhythm Progression Graph

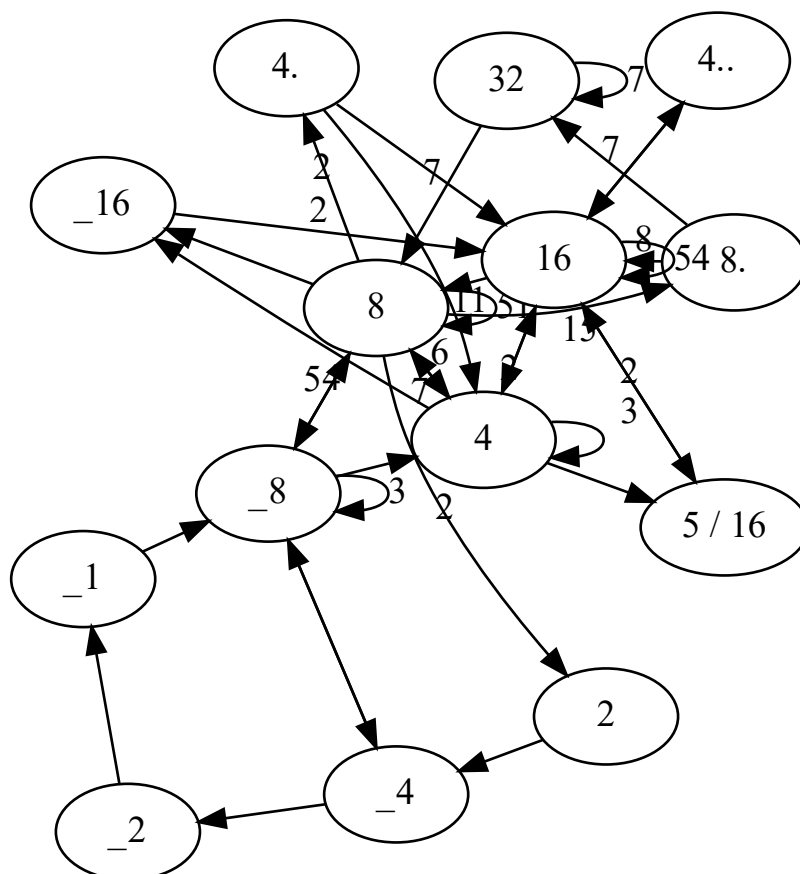


Figure 3.5: Stream 3: Rhythm Progression Graph

3.3.2 Pitch Progression Graph

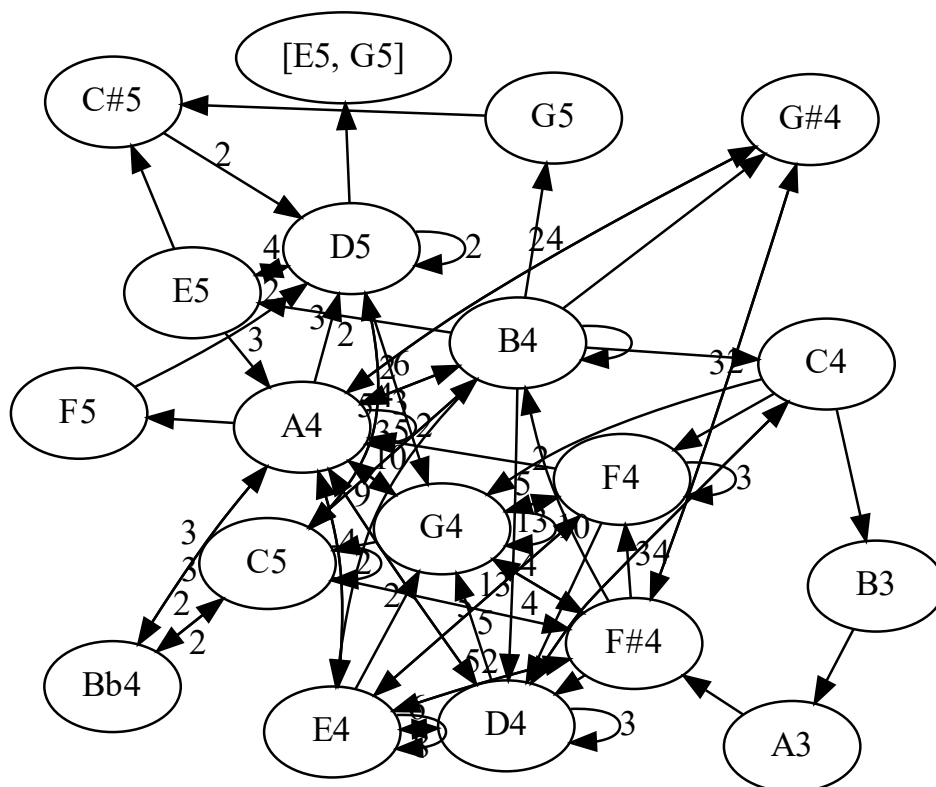


Figure 3.6: Stream 3: Pitch Progression Graph

3.4 Stream 4

3.4.1 Pitch Progression Graph

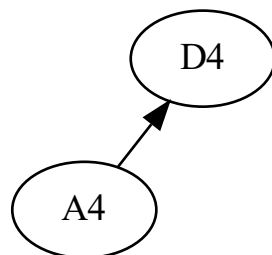


Figure 3.7: Stream 4: Pitch Progression Graph

3.5 Stream 5

3.5.1 Rhythm Progression Graph

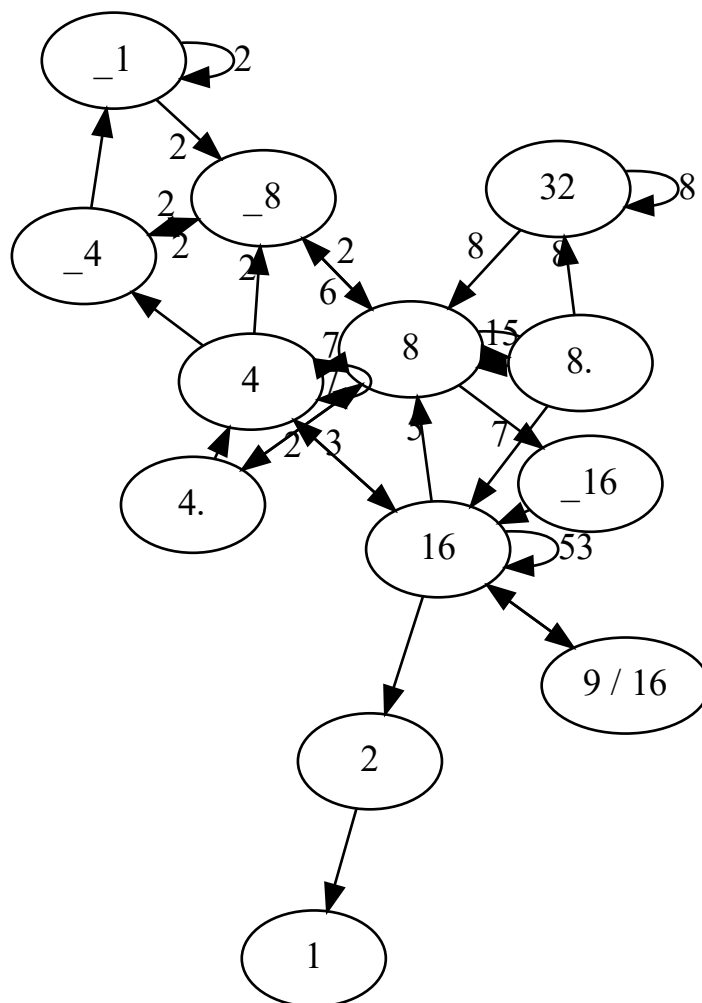


Figure 3.8: Stream 5: Rhythm Progression Graph

3.5.2 Pitch Progression Graph

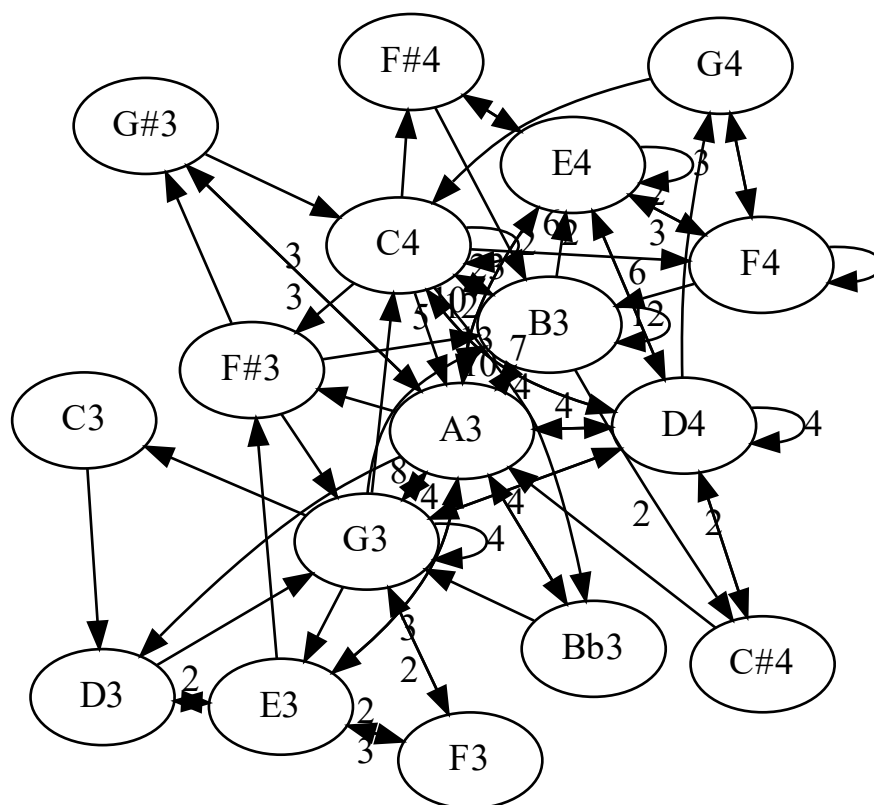


Figure 3.9: Stream 5: Pitch Progression Graph

3.6 Stream 6

3.6.1 Rhythm Progression Graph

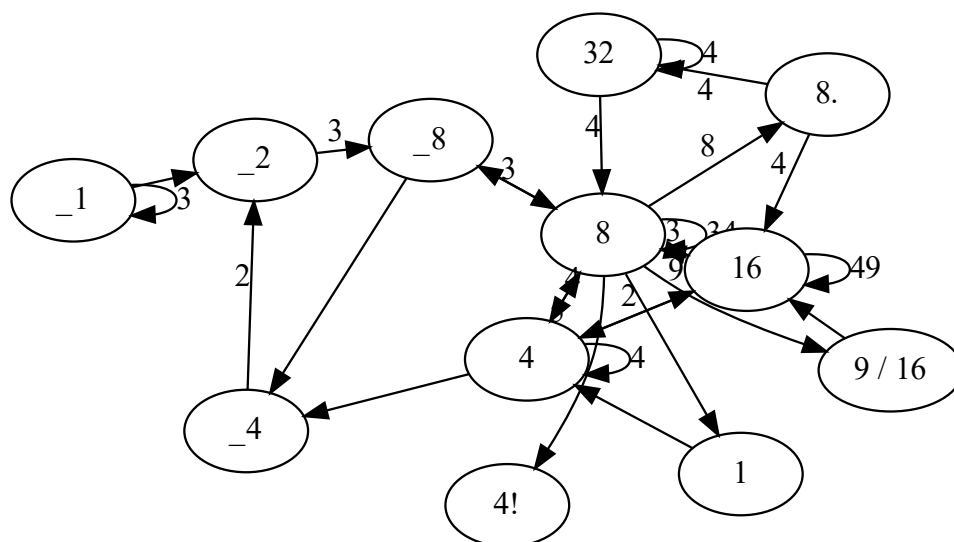


Figure 3.10: Stream 6: Rhythm Progression Graph

3.6.2 Pitch Progression Graph

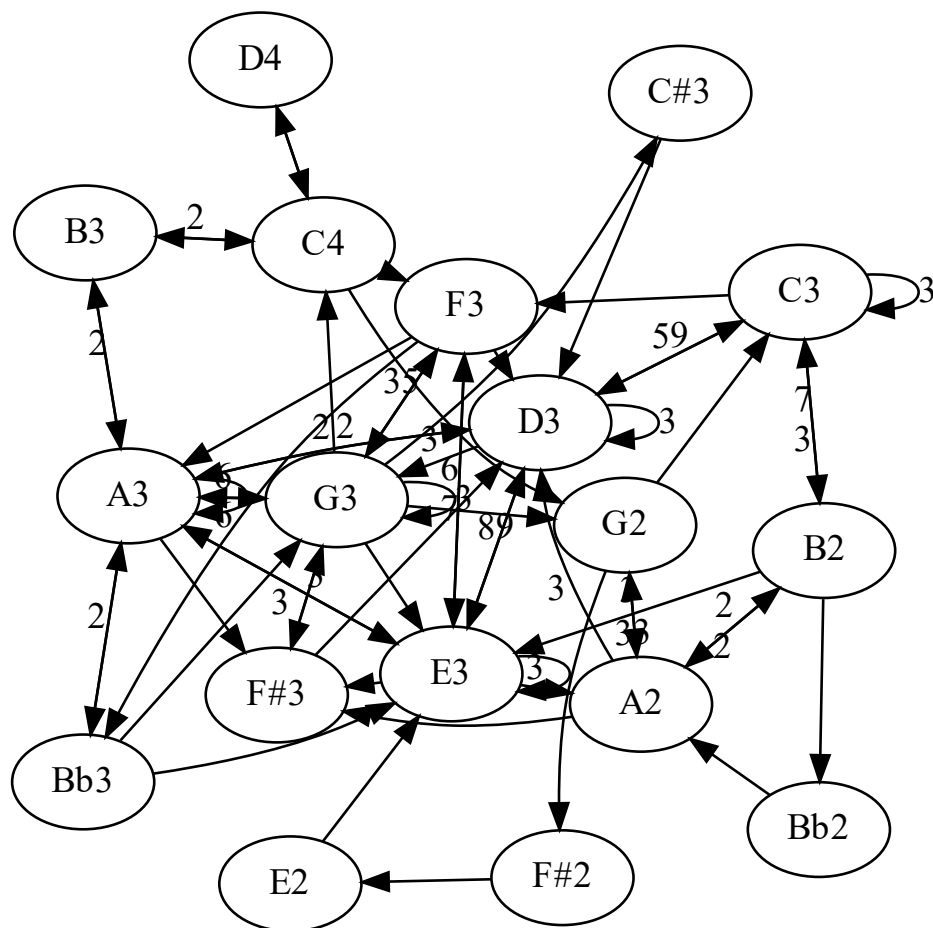


Figure 3.11: Stream 6: Pitch Progression Graph