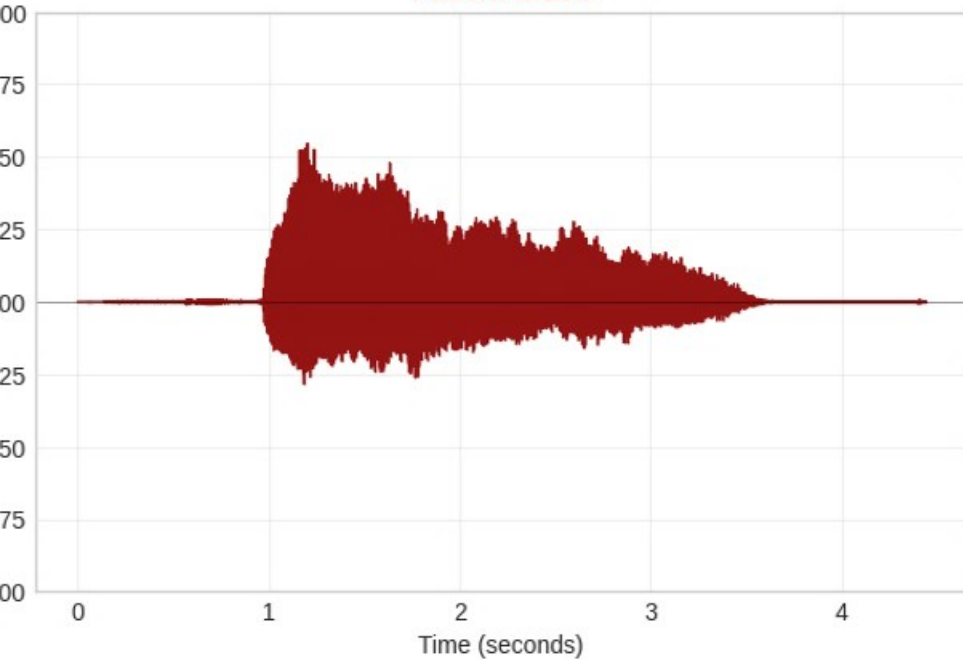
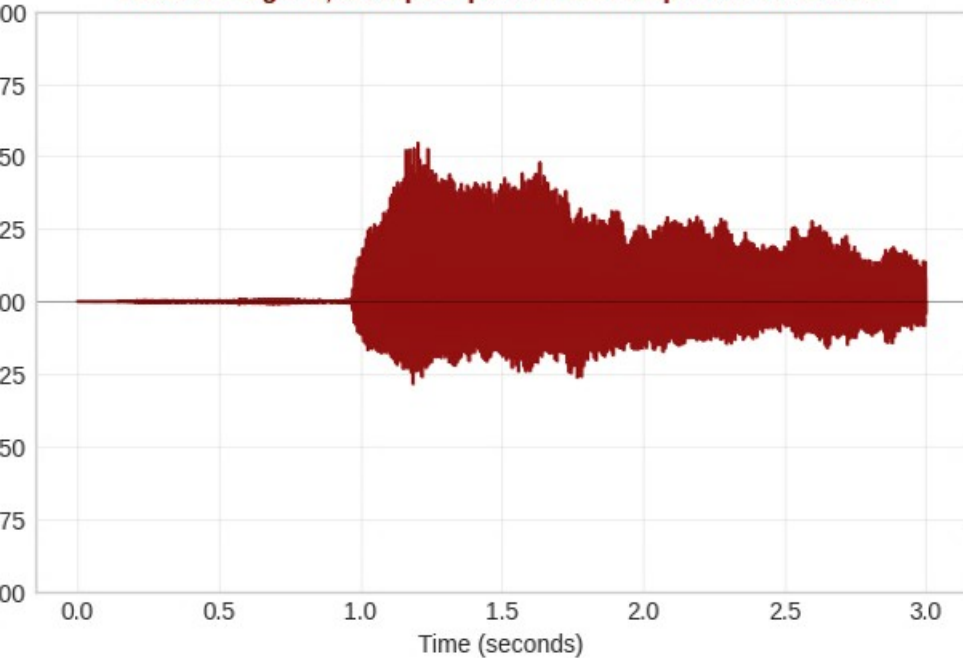


Detailed Comparison: Severe Dysarthria vs Healthy
Vowel /a/ Phonation - Top: Full Duration | Bottom: Zoomed (First 3 seconds)

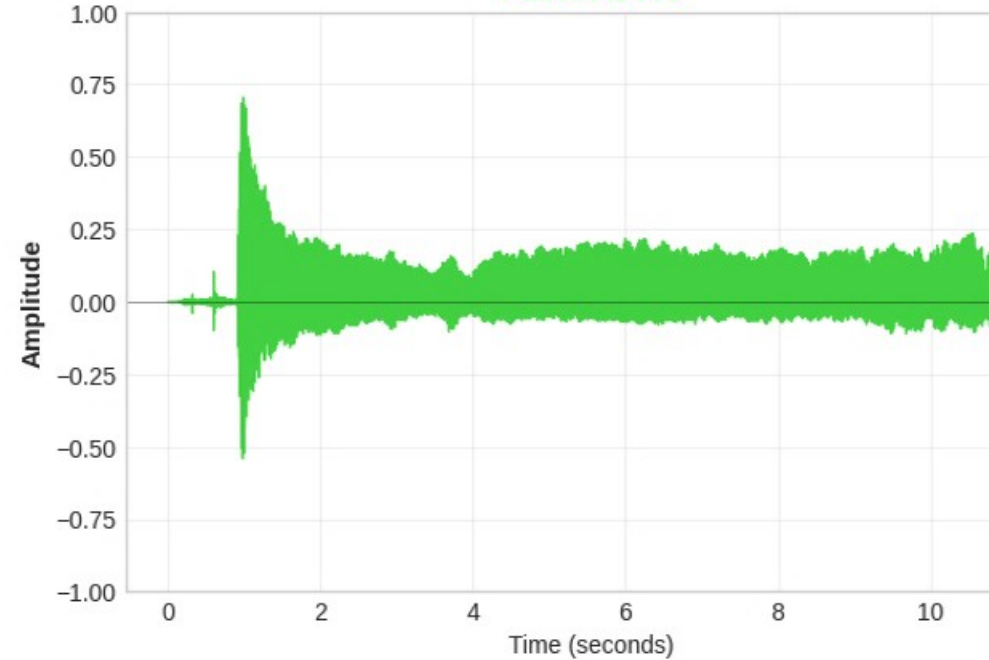
Class 1: Severe Dysarthria (Full Duration: 4.44s)
Patient ID261



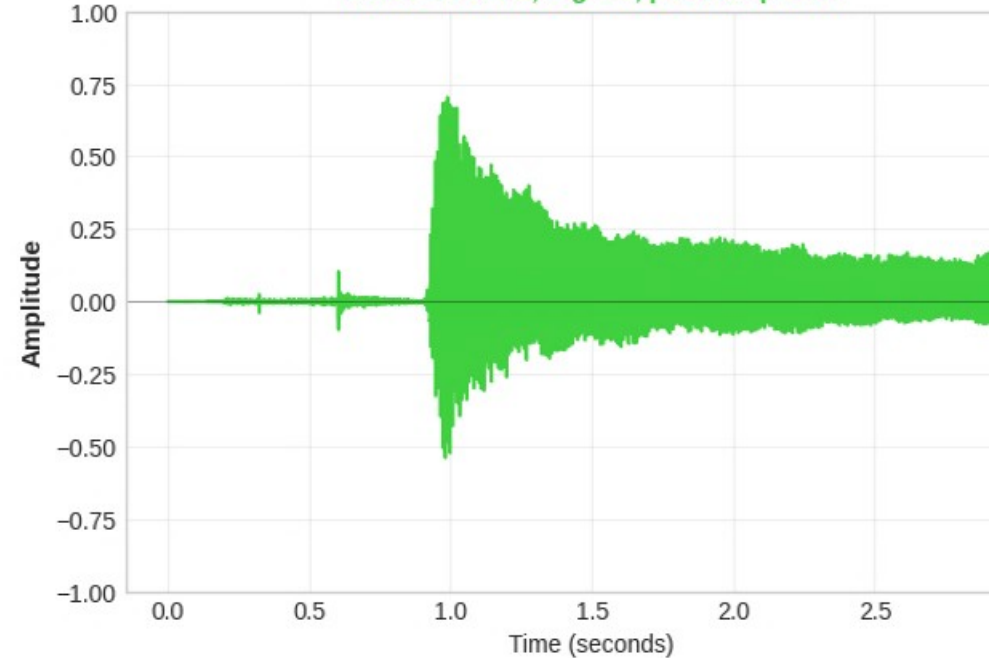
Severe: Zoomed (First 3 seconds)
Notice: Irregular, disrupted pattern with amplitude variations



Class 5: Healthy Control (Full Duration: 11.12s)
Patient ID068



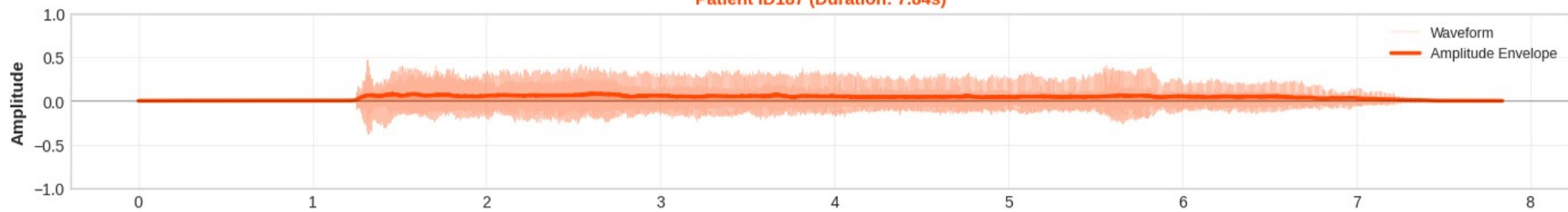
Healthy: Zoomed (First 3 seconds)
Notice: Smooth, regular, periodic pattern



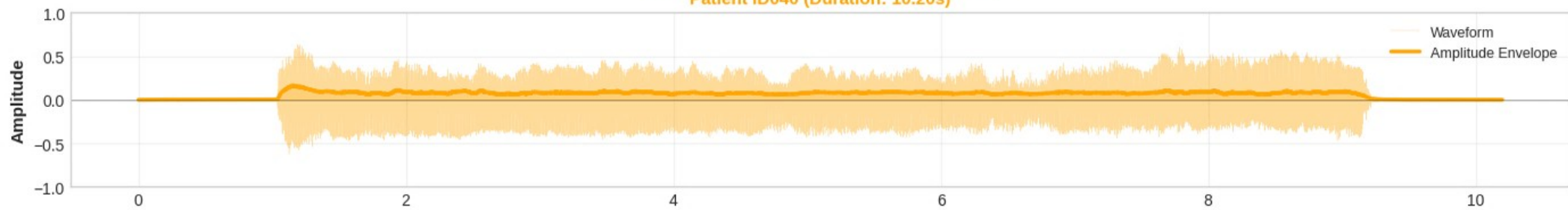
Class 1: Severe Dysarthria - Envelope Analysis
Patient ID261 (Duration: 4.44s)



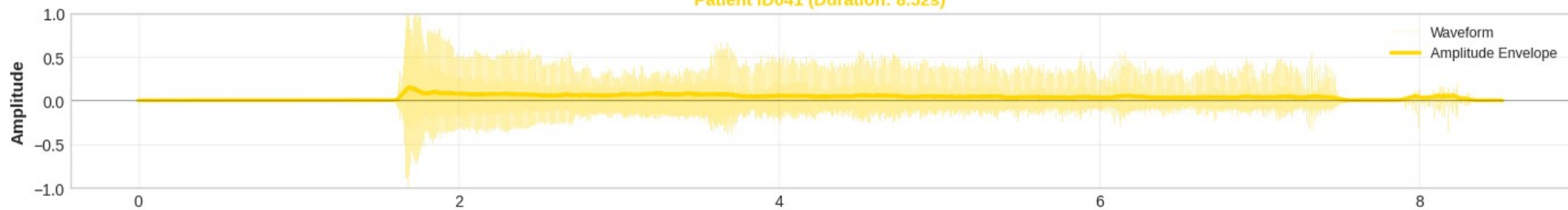
Class 2: Moderate Dysarthria - Envelope Analysis
Patient ID187 (Duration: 7.84s)



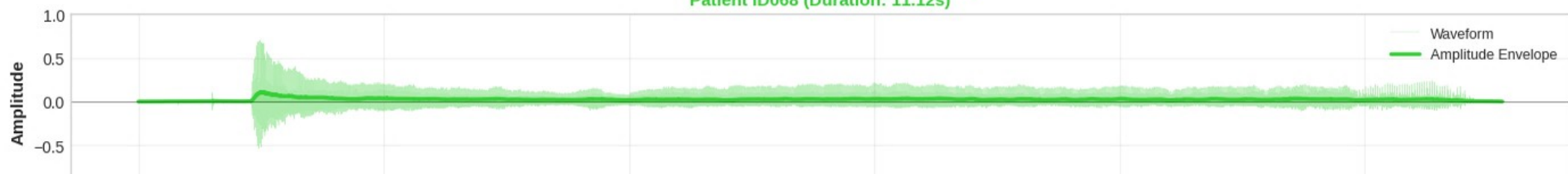
Class 3: Mild Dysarthria - Envelope Analysis
Patient ID040 (Duration: 10.20s)



Class 4: ALS - No Dysarthria - Envelope Analysis
Patient ID041 (Duration: 8.52s)



Class 5: Healthy Control - Envelope Analysis
Patient ID068 (Duration: 11.12s)



All 8 Recording Tasks: Healthy Patient ID068

Top Row (Red): 5 Vowel Phonations (/a/, /e/, /i/, /o/, /u/) | Bottom Row (Teal): 3 Syllable Rhythms (/pa/, /ta/, /ka/)

