## Table of result comparison for energy level estimation

Note: The Optimized\_Block\_Motion\_Analysis is moved out since it is taking an average of 30mins per short video!

Result for Enhanced_Multi_Feature_Method	Result for Hybrid_Optical_Flow method
Final Timing Analysis:	Final Timing Analysis:
Start time: 2025-02-15 19:03:35 End time: 2025-02-15 19:19:58 Total processing time: 16.39 minutes Total videos processed: 68 Average time per video: 14.46 seconds	Start time: 2025-02-15 22:08:52 End time: 2025-02-15 22:25:32 Total processing time: 16.66 minutes Total videos processed: 68 Average time per video: 14.70 seconds
	Energy Level Summary:
Results of the Analysis:	LOW: 4 videos (5.9%)
Accuracy: 0.632 (63.2%)	MEDIUM: 11 videos (16.2%) HIGH: 53 videos (77.9%)
Confusion Matrix: [[ 4 3 8] # True Column 1 [ 0 5 13] # True Column 2 [ 0 1 34]] # True Column 3	Results of the Analysis:
Detailed Analysis: Total samples: 68 Correct predictions: 43 Incorrect predictions: 25	Confusion Matrix: [[ 2 4 9] [ 3 0 15] [ 0 7 28]]
Per-Class Metrics: Column 1: - Accuracy: 0.838 (83.8%) - True instances: 15 - Predicted instances: 4	Detailed Analysis: Total samples: 68 Correct predictions: 30 Incorrect predictions: 38
Column 2: - Accuracy: 0.750 (75.0%) - True instances: 18	Column 1: Accuracy: 0.765 True instances: 15 Predicted instances: 5
- Predicted instances: 9  Column 3: - Accuracy: 0.676 (67.6%) - True instances: 35 - Predicted instances: 55	Column 2: Accuracy: 0.574 True instances: 18 Predicted instances: 11  Column 3: Accuracy: 0.544 True instances: 35 Predicted instances: 52