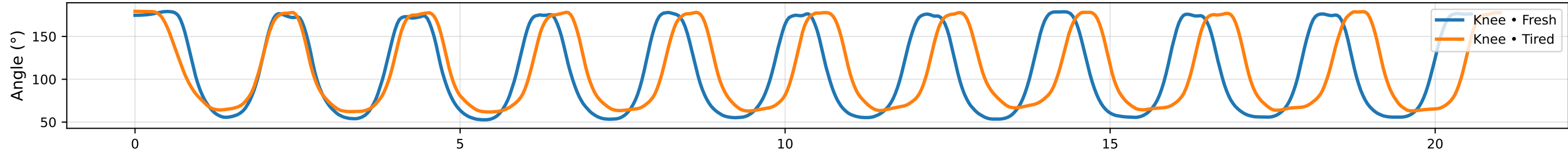


STS Performance Report for P03\_TAN SWEE AUN

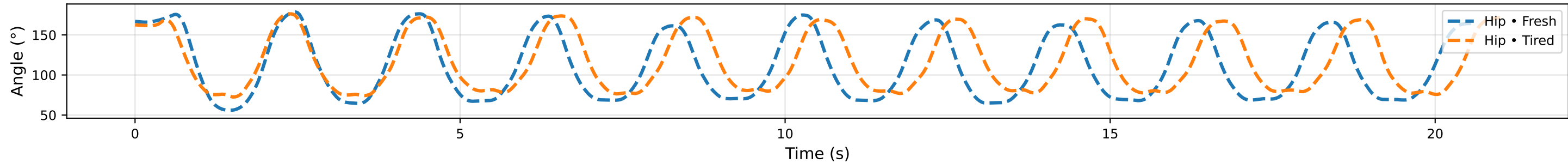
Age: 56 • Gender: MALE • Side: LEFT • Exercise: Badminton • Duration of Exercise: 1 hour

Fresh: 618 frames @~30.0 fps • Tired: 631 frames @~30.0 fps

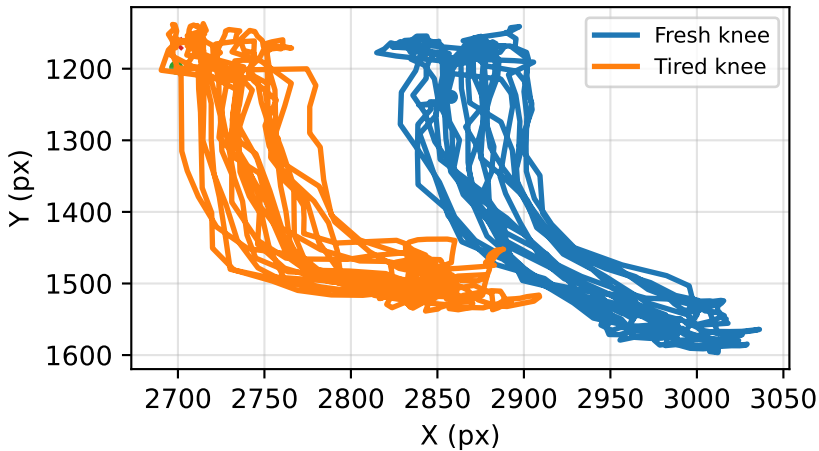
Knee Angle over Time



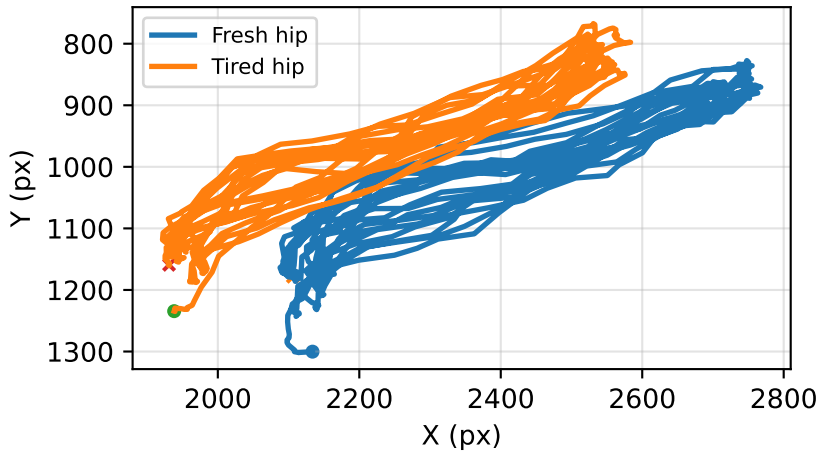
Hip Angle over Time



Knee trajectory (Fresh vs Tired)



Hip trajectory (Fresh vs Tired)



Verdict: Fatigue

DTW — Knee angle: 1464.0 • Hip angle: 1636.0 • Knee XY: 5848.6

Knee ROM ↓ 8.9° • Ascent time ↑ 21%

Knee Angle Summary (Time-series)

Session	Mean (°)	SD	Min (°)	Max (°)	Range (°)	Frames
Fresh	109.04	48.69	52.70	179.16	126.46	618.00
Tired	110.82	44.96	61.75	179.33	117.58	631.00

Per-Rep & Trajectory Metrics (Fresh vs Tired)

Metric	Fresh	Tired	Δ (%)
Knee ROM (°)	66.36	89.06	34.20
Hip ROM (°)	51.46	71.79	39.50
Ascent time (s)	0.92	1.11	21.20
Peak knee ang. vel (°/s)	335.50	332.84	-0.80
Knee path length (px)	10299.66	10170.24	-1.30
Knee mean speed (px/s)	501.08	484.30	-3.30
Knee jerk RMS	92586.16	99821.02	7.80