

# User 56

## XO-SOLE Data

### Gait Analysis

#### User Information

User Height	User Age	User Sex	User Shoe Size	User Weight
167.64 cm	25	Female	7.0 US Men's	55.34 kg

#### Insole Information

	Mac Address	Size
Left	e62d851549c0	S
Right	e3b55a458fdc	S

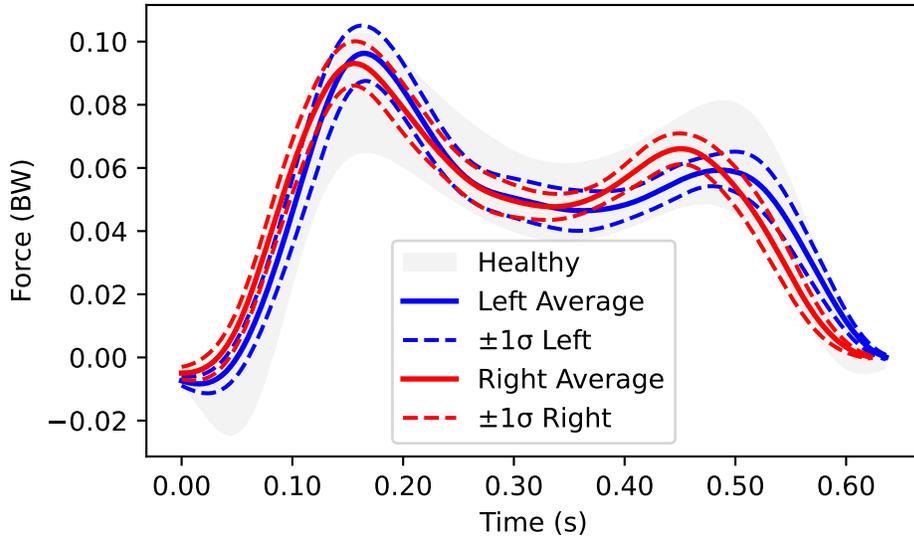
#### Test Summary

	Walking Stances	Running Stances	Total Stances	Jumps
Left	144	43	187	3
Right	146	44	190	4

Start Time	End Time	Total Duration	Walking Cadence	Running Cadence
11:34:30 AM	11:38:00 AM	00:03:30	117 spm	165 spm

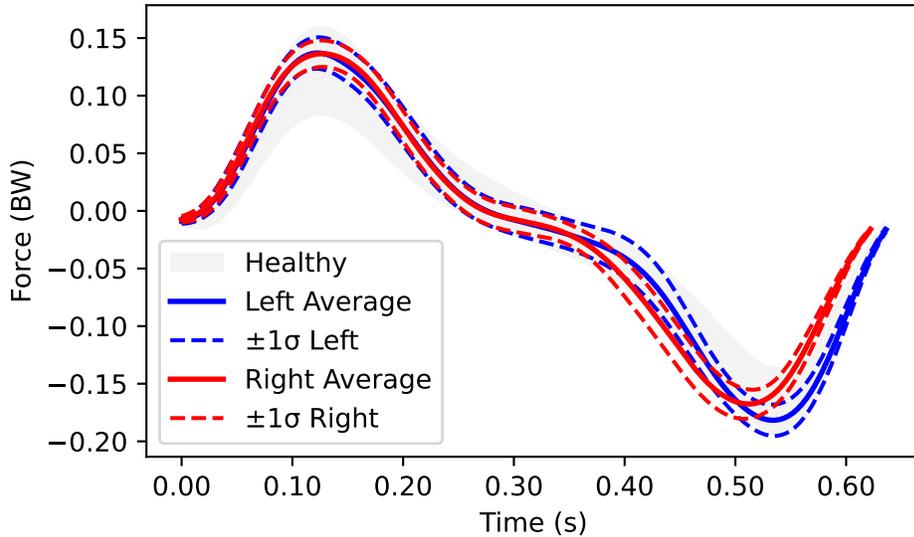
# Walking Information

## Lateral Force



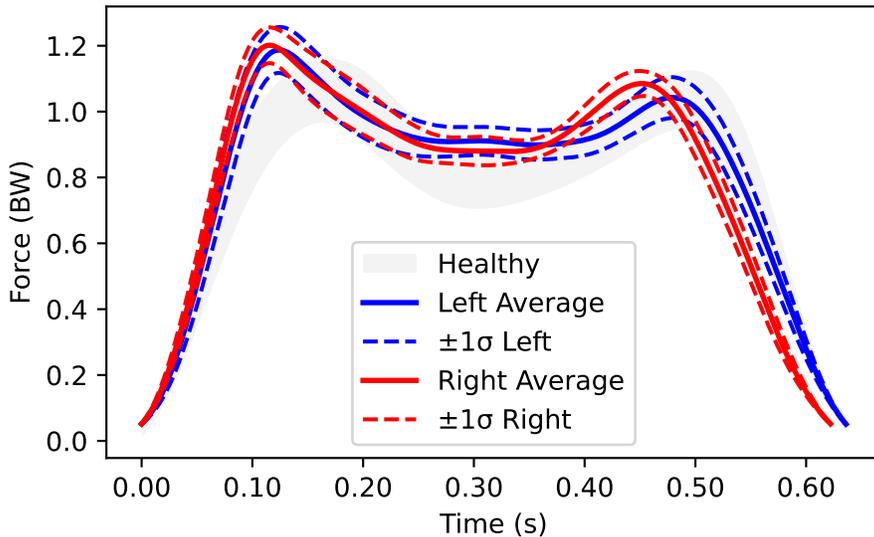
	Left Median	Right Median
<b>Max Force (BW)</b>	0.0978	0.0947
<b>Impulse (BW-s)</b>	0.0297	0.0304

## Anterior Force



	Left Median	Right Median
<b>Peak Brake (BW)</b>	0.140	0.139
<b>Impulse Brake (BW-s)</b>	0.0194	0.0194
<b>Peak Propulsion (BW)</b>	0.181	0.168
<b>Impulse Propulsion (BW-s)</b>	0.0299	0.0281
<b>Total Impulse (BW-s)</b>	0.0105	0.00870

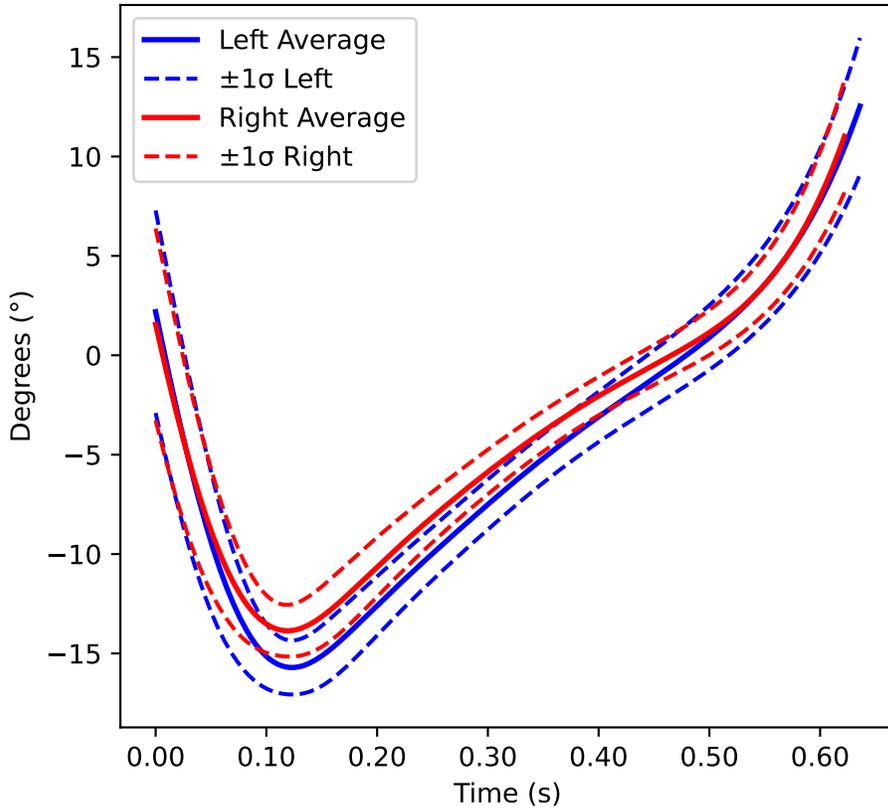
## Vertical Force



	Left Median	Right Median
<b>Peak 1 (BW)</b>	1.19	1.21
<b>Peak 2 (BW)</b>	1.04	1.09
<b>Valley (BW)</b>	0.861	0.858
<b>Impulse (BW-s)</b>	0.520	0.510
<b>Loading Rate (BW/s)</b>	12.1	12.9
<b>Unloading Rate (BW/s)</b>	-7.85	-7.58

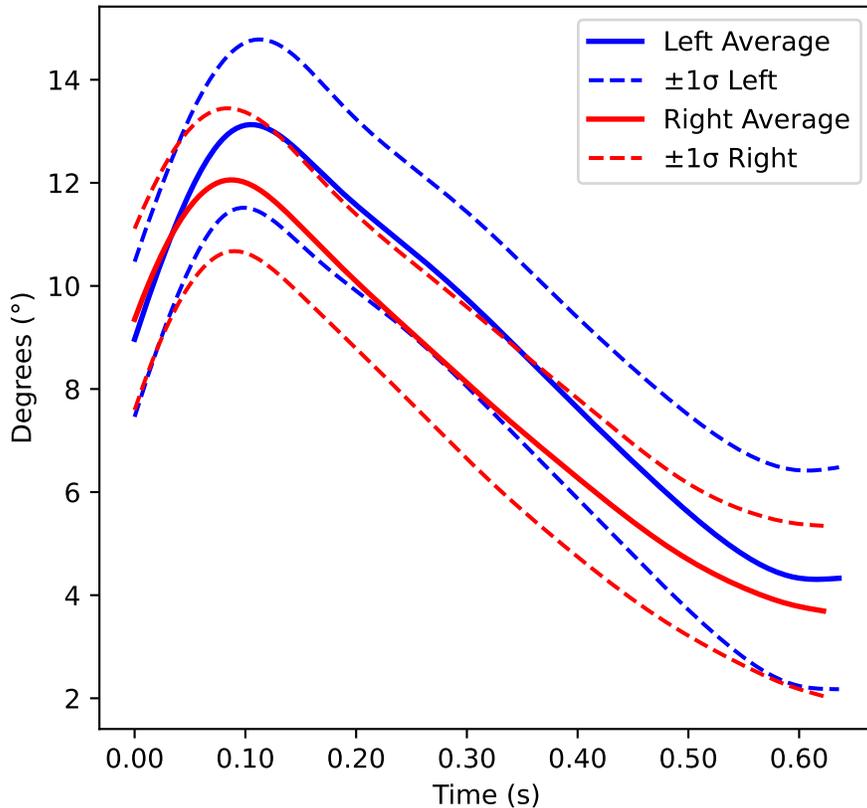
# Walking Kinematic Information

## Dorsiflexion



	Left Median	Right Median
Foot Strike (Deg)	2.24	1.56

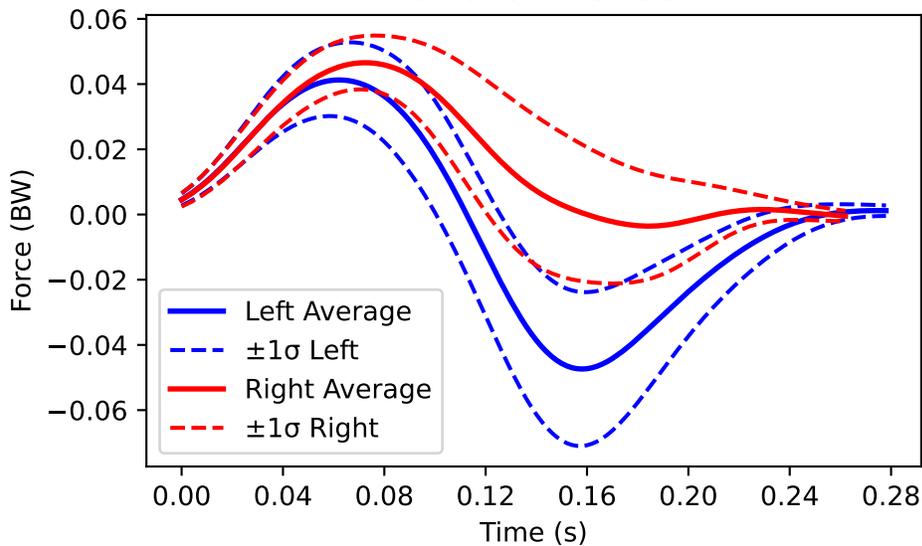
## Inversion



	Left Median	Right Median
Foot Strike (Deg)	8.92	9.58

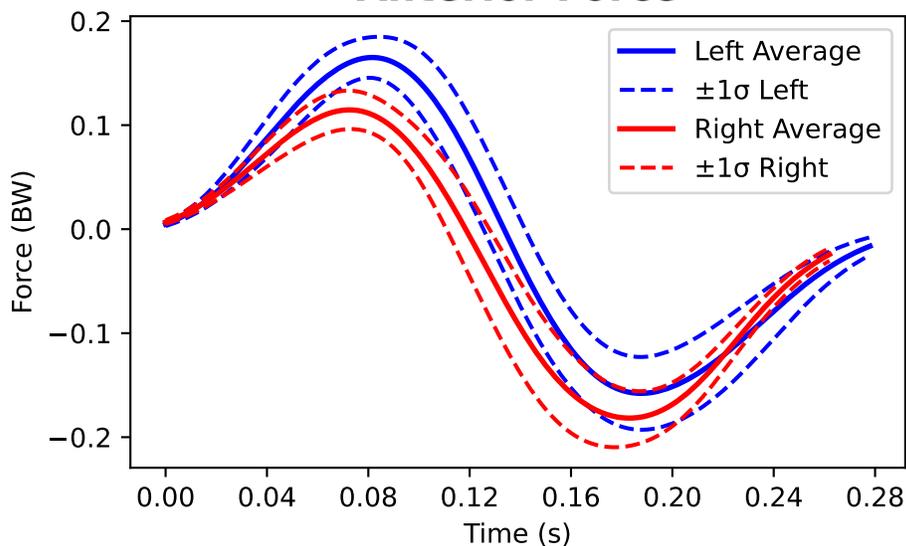
# Running Information

## Lateral Force



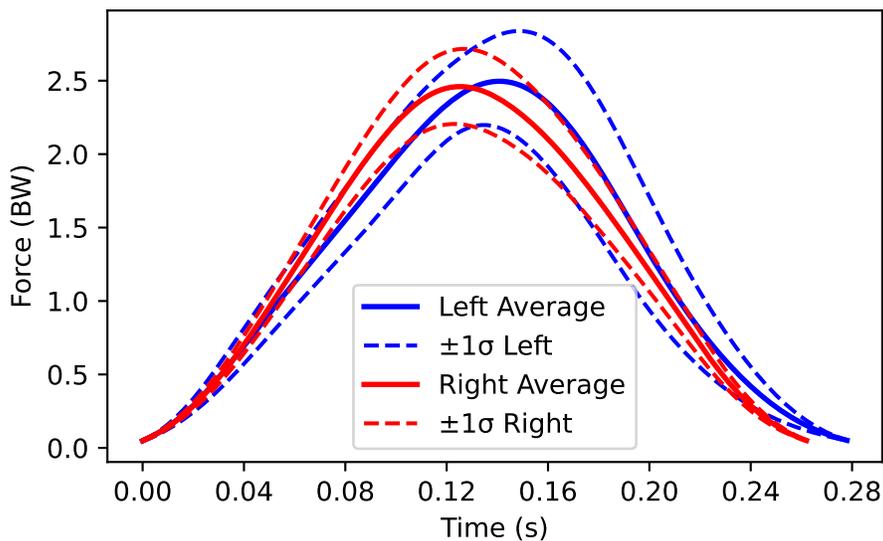
	Left Median	Right Median
<b>Max Force (BW)</b>	0.0440	0.0490
<b>Impulse (BW-s)</b>	-0.000198	0.00395

## Anterior Force



	Left Median	Right Median
<b>Peak Brake (BW)</b>	0.170	0.117
<b>Impulse Brake (BW-s)</b>	0.0130	0.00831
<b>Peak Propulsion (BW)</b>	0.164	0.186
<b>Impulse Propulsion (BW-s)</b>	0.0138	0.0166
<b>Total Impulse (BW-s)</b>	0.000870	0.00801

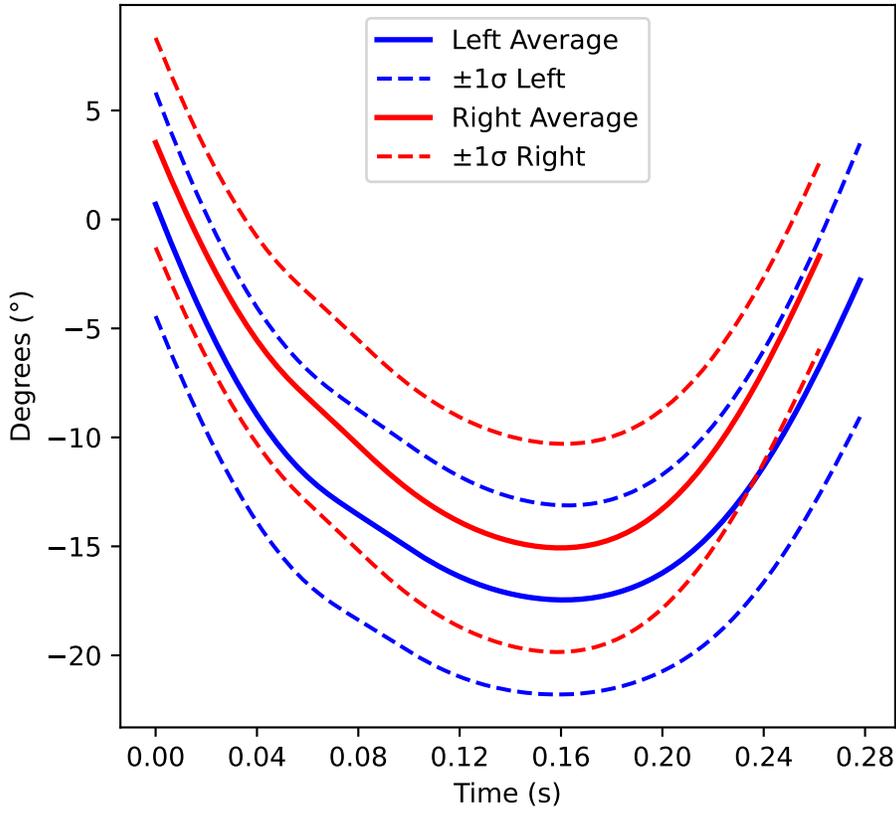
## Vertical Force



	Left Median	Right Median
<b>Peak 1 (BW)</b>	2.58	2.40
<b>Impulse (BW-s)</b>	0.360	0.346
<b>Loading Rate (BW/s)</b>	20.9	23.9
<b>Unloading Rate (BW/s)</b>	-24.2	-22.5

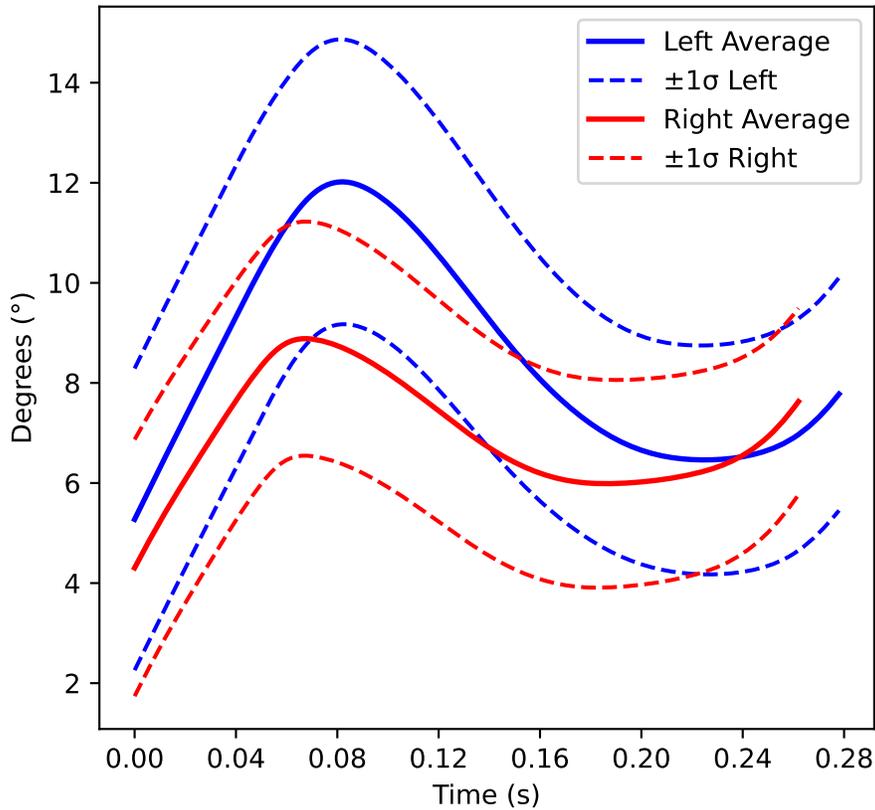
# Running Kinematic Information

## Dorsiflexion



	Left Median	Right Median
Foot Strike (Deg)	0.0176	3.19

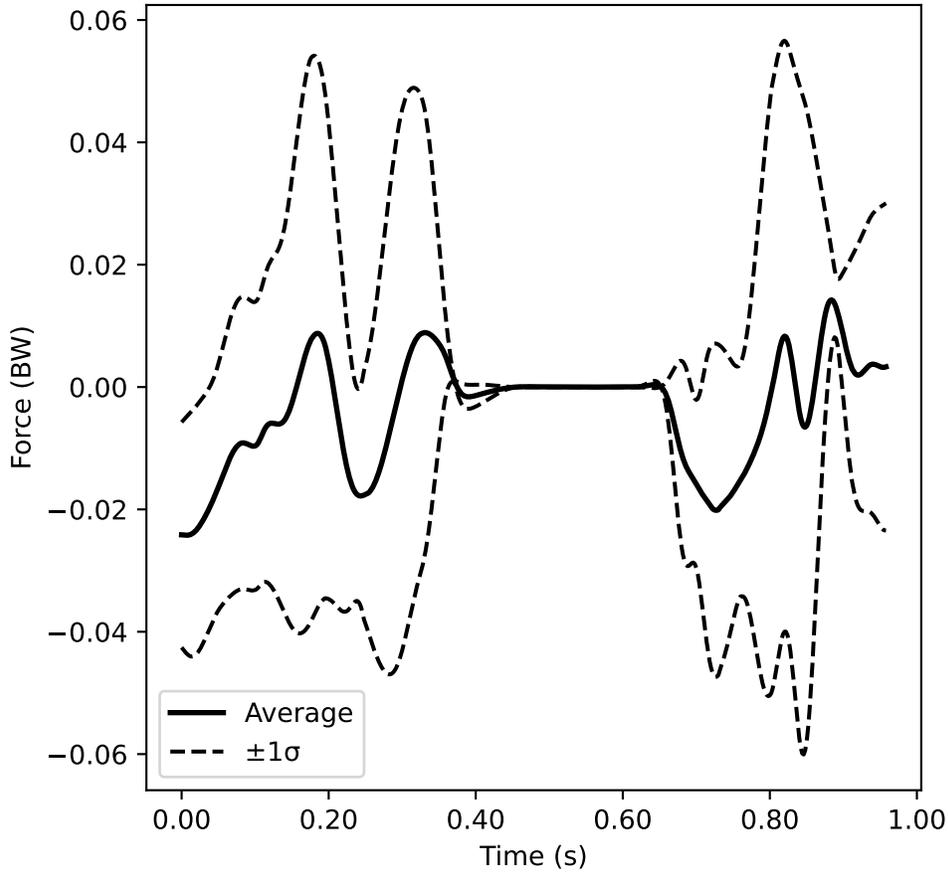
## Inversion



	Left Median	Right Median
Foot Strike (Deg)	5.54	4.56

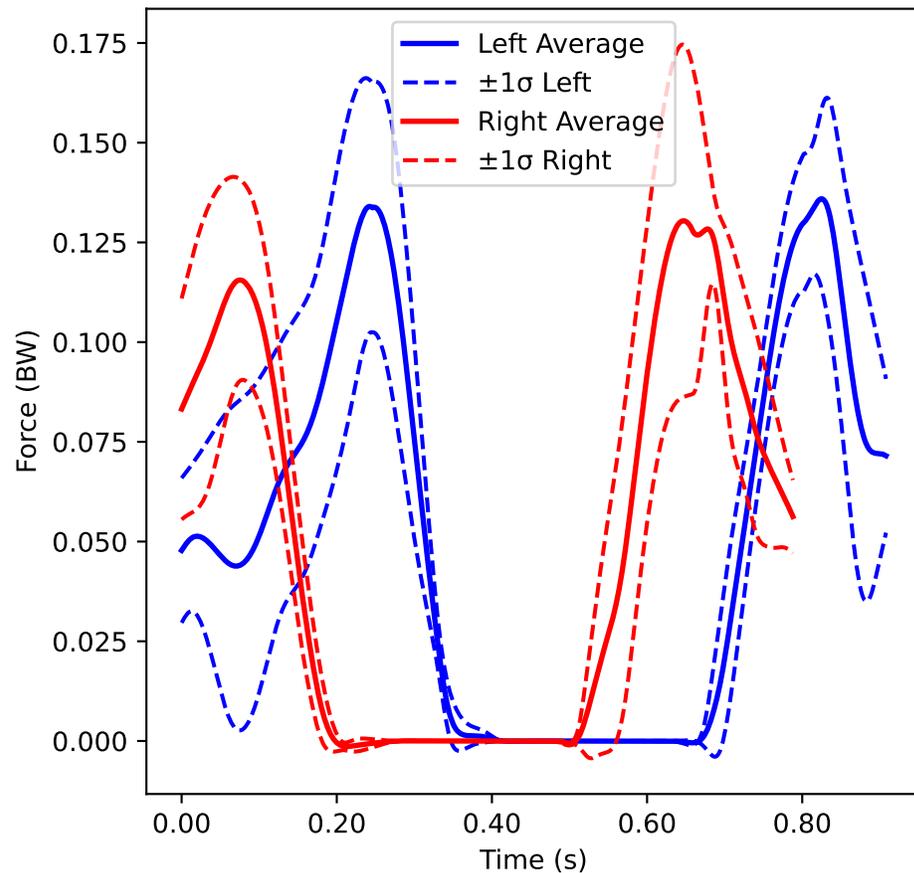
# Jumping Information

## Combined Lateral Force



	Median	Standard Deviation
Propulsive Peak (BW)	0.275	0.0515
Landing Peak (BW)	0.275	0.0553

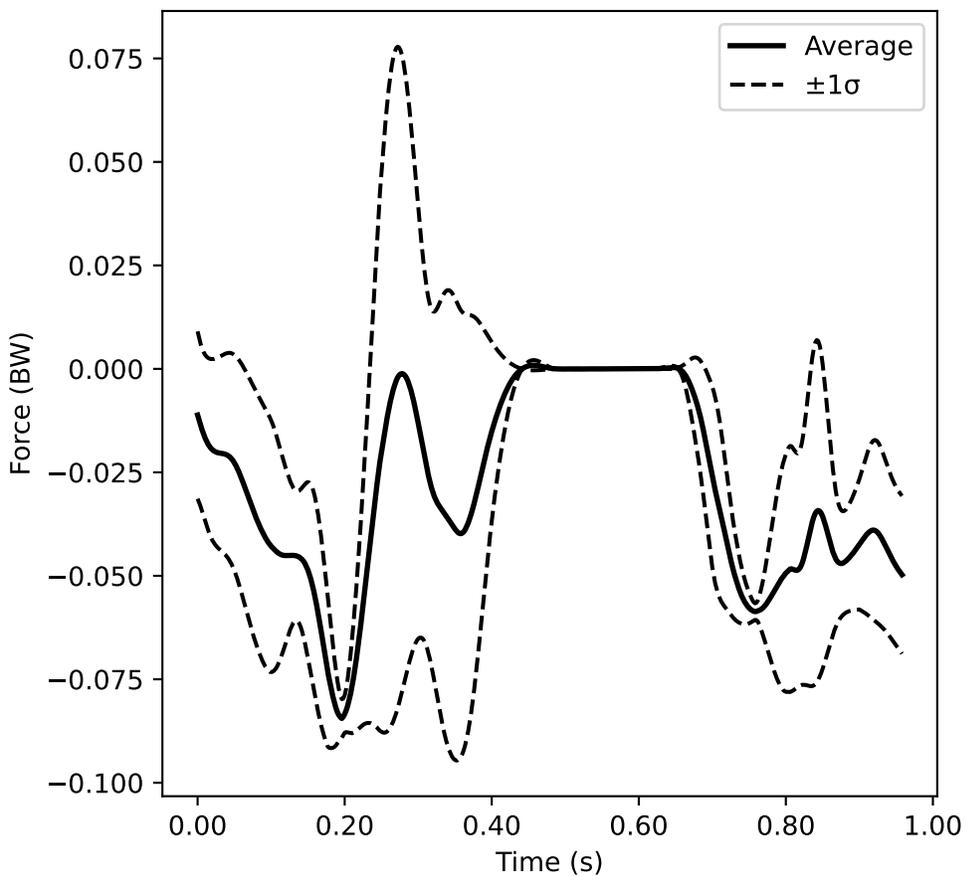
## Lateral Force



	Left Median	Right Median
Propulsive Peak (BW)	0.152	0.110
Landing Peak (BW)	0.129	0.136

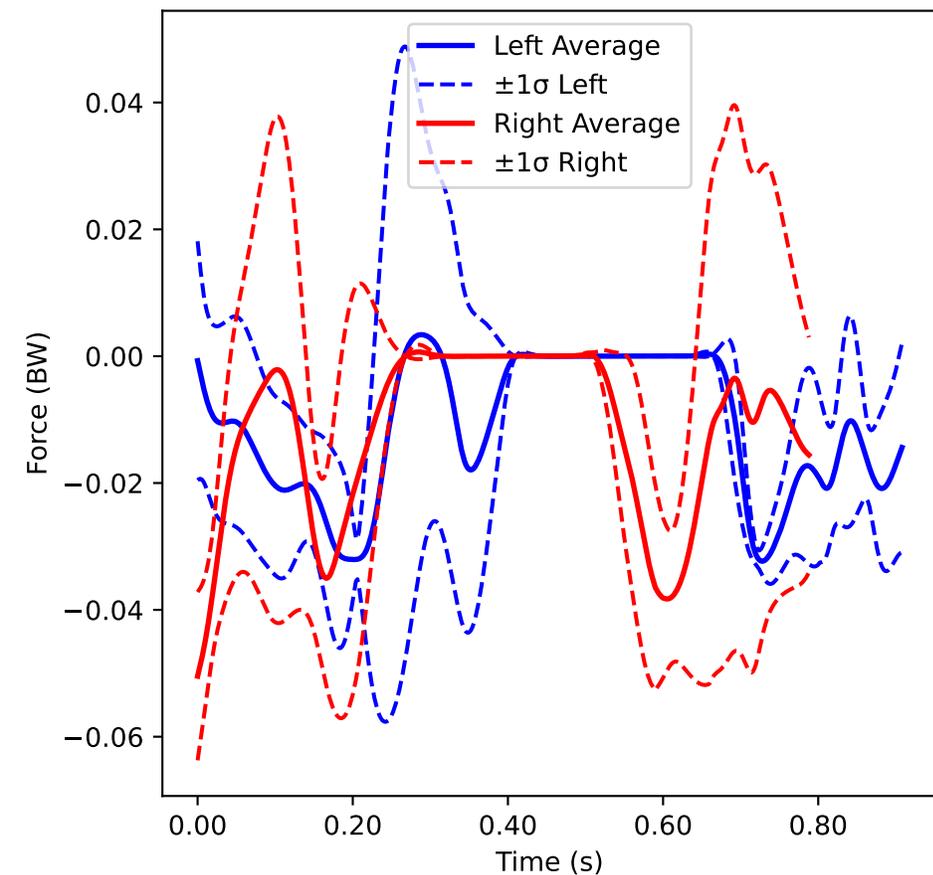
# Jumping Information

## Combined Anterior Force



	Median	Standard Deviation
Propulsive Peak (BW)	-0.0643	0.0836
Landing Peak (BW)	-0.0444	0.0302

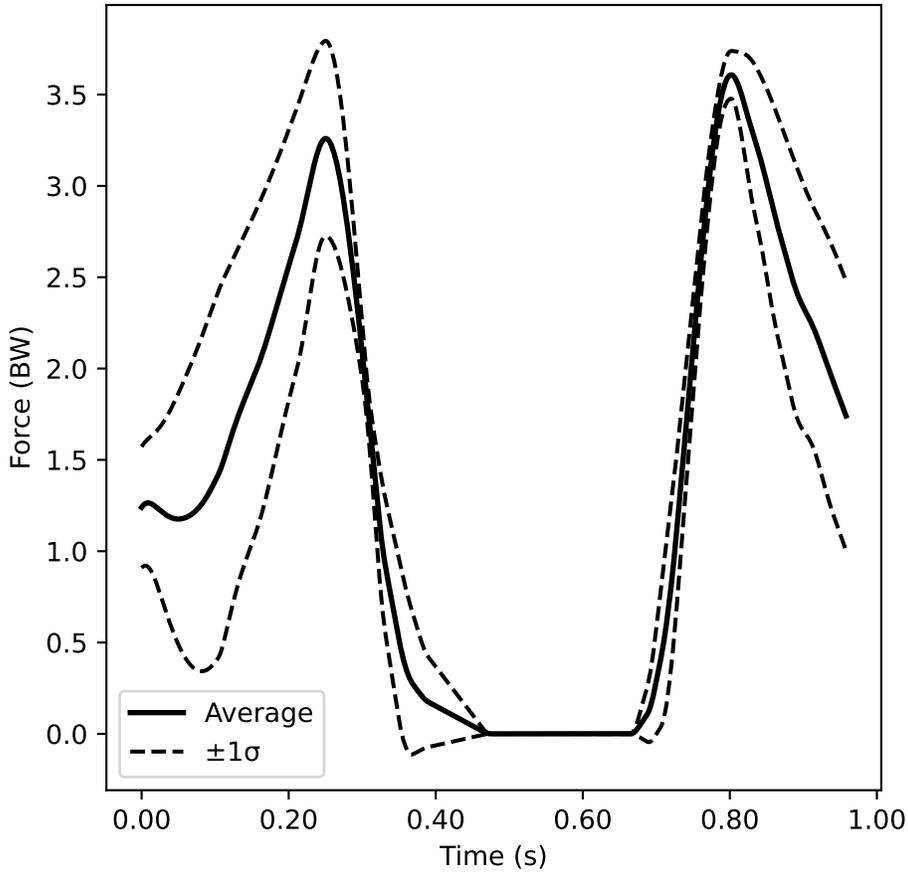
## Anterior Force



	Left Median	Right Median
Propulsive Peak (BW)	-0.0352	-0.00184
Landing Peak (BW)	-0.0200	-0.0195

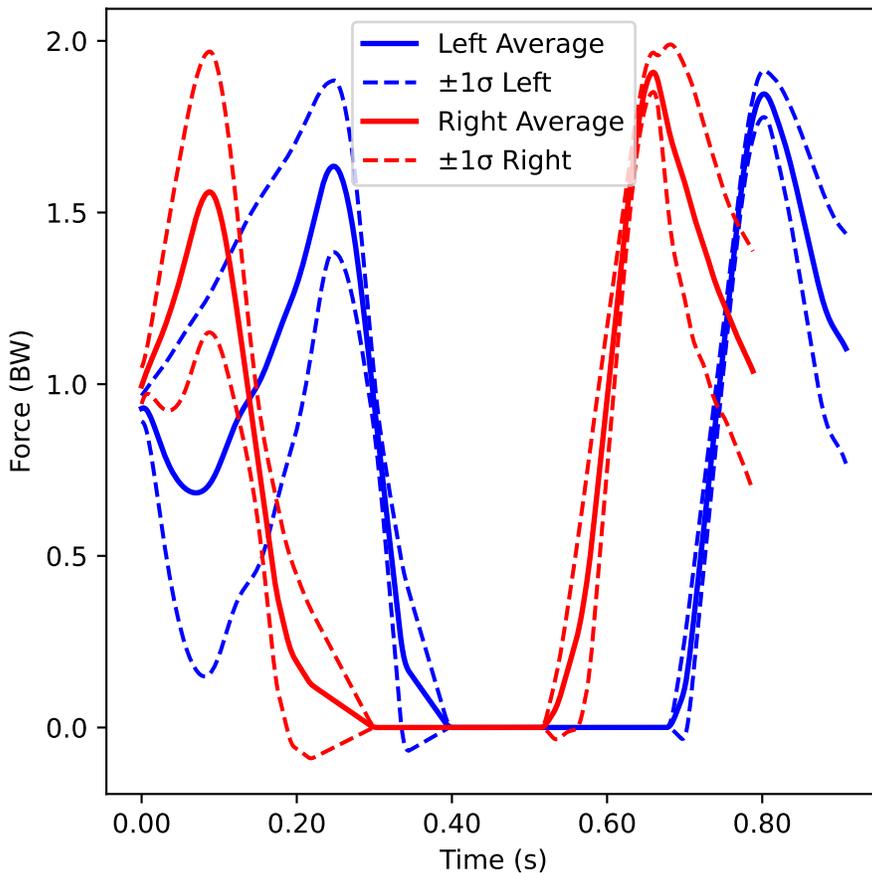
# Jumping Information

## Combined Vertical Force



	Median	Standard Deviation
Propulsive Peak (BW)	3.56	0.549
Landing Peak (BW)	3.69	0.130

## Vertical Force



	Left Median	Right Median
Propulsive Peak (BW)	1.64	1.61
Landing Peak (BW)	1.80	1.91

# Walking Symmetry Information

## General

	Left Median	Right Median	Symmetry Index (%)
Ground Contact Time (ms)	638	626	-1.90

## Lateral

	Left Median	Right Median	Symmetry Index (%)
Max Force (BW)	0.0978	0.0947	-3.22
Impulse (BW·s)	0.0297	0.0304	2.33

## Anterior

	Left Median	Right Median	Symmetry Index (%)
Peak Brake (BW)	0.140	0.139	-0.717
Impulse Brake (BW·s)	0.0194	0.0194	0.0
Peak Propulsion (BW)	0.181	0.168	-7.45
Impulse Propulsion (BW·s)	0.0299	0.0281	-6.21
Total Impulse (BW·s)	0.0105	0.00870	-18.8

## Vertical

	Left Median	Right Median	Symmetry Index (%)
Peak 1 (BW)	1.19	1.21	1.67
Peak 2 (BW)	1.04	1.09	4.69
Valley (BW)	0.861	0.858	-0.349
Impulse (BW·s)	0.520	0.510	-1.94
Loading Rate (BW/s)	12.1	12.9	6.40
Unloading Rate (BW/s)	-7.85	-7.58	-3.50

## Dorsiflexion

	Left Median	Right Median	Symmetry Index (%)
Foot Strike (Deg)	2.24	1.56	-35.8

## Inversion

	Left Median	Right Median	Symmetry Index (%)
Foot Strike (Deg)	8.92	9.58	7.14

# Running Symmetry Information

## General

	Left Median	Right Median	Symmetry Index (%)
Ground Contact Time (ms)	274	262	-4.48

## Lateral

	Left Median	Right Median	Symmetry Index (%)
Max Force (BW)	0.0440	0.0490	10.8
Impulse (BW·s)	-0.000198	0.00395	221

## Anterior

	Left Median	Right Median	Symmetry Index (%)
Peak Brake (BW)	0.170	0.117	-36.9
Impulse Brake (BW·s)	0.0130	0.00831	-44.0
Peak Propulsion (BW)	0.164	0.186	12.6
Impulse Propulsion (BW·s)	0.0138	0.0166	18.4
Total Impulse (BW·s)	0.000870	0.00801	161

## Vertical

	Left Median	Right Median	Symmetry Index (%)
Peak 1 (BW)	2.58	2.40	-7.23
Impulse (BW·s)	0.360	0.346	-3.97
Loading Rate (BW/s)	20.9	23.9	13.4
Unloading Rate (BW/s)	-24.2	-22.5	-7.28

## Dorsiflexion

	Left Median	Right Median	Symmetry Index (%)
Foot Strike (Deg)	0.0176	3.19	198

## Inversion

	Left Median	Right Median	Symmetry Index (%)
Foot Strike (Deg)	5.54	4.56	-19.4

# Jumping Symmetry Information

## General

	Combined Median	Left Median	Right Median	Symmetry Index (%)
Jump Time (ms)	418	426	410	-3.83
Jump Height (cm)	21.4	22.3	20.6	-7.93
Time to Takeoff (ms)	NaN	NaN	NaN	NaN
MRSI (ratio)	NaN	NaN	NaN	NaN

## Lateral

	Combined Median	Left Median	Right Median	Symmetry Index (%)
Propulsive Peak (BW)	0.275	0.152	0.110	-32.1
Landing Peak (BW)	0.275	0.129	0.136	5.28

## Anterior

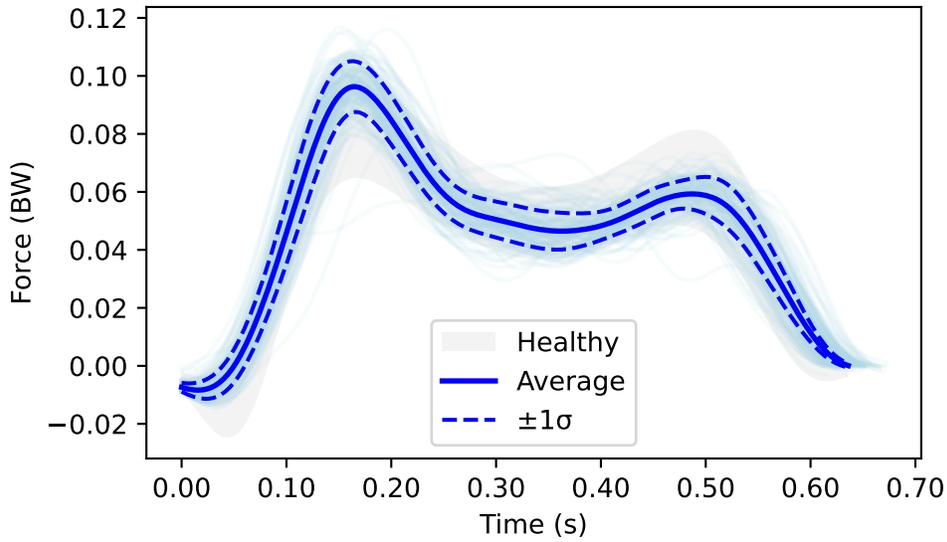
	Combined Median	Left Median	Right Median	Symmetry Index (%)
Propulsive Peak (BW)	-0.0643	-0.0352	-0.00184	-180
Landing Peak (BW)	-0.0444	-0.0200	-0.0195	-2.53

## Vertical

	Combined Median	Left Median	Right Median	Symmetry Index (%)
Propulsive Peak (BW)	3.56	1.64	1.61	-1.85
Landing Peak (BW)	3.69	1.80	1.91	5.93

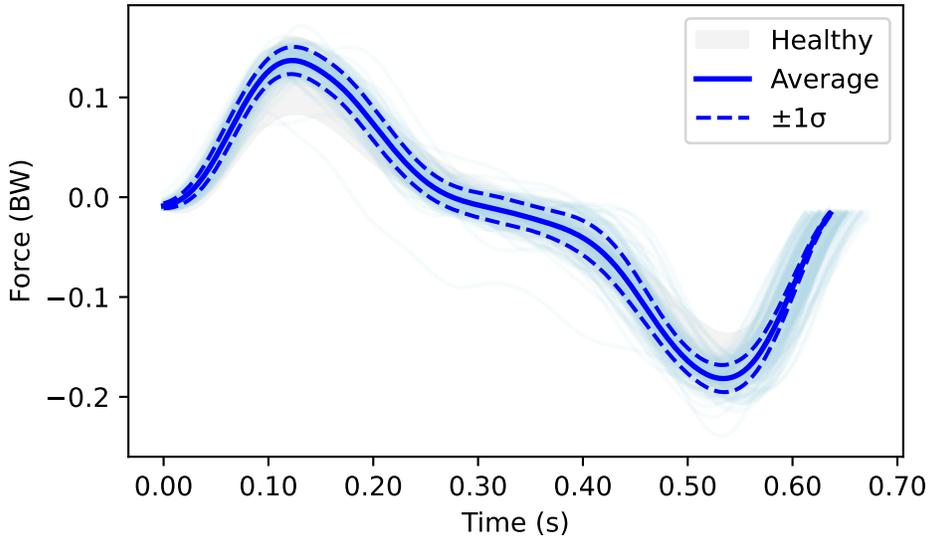
# Left Walking Information

## Lateral Force



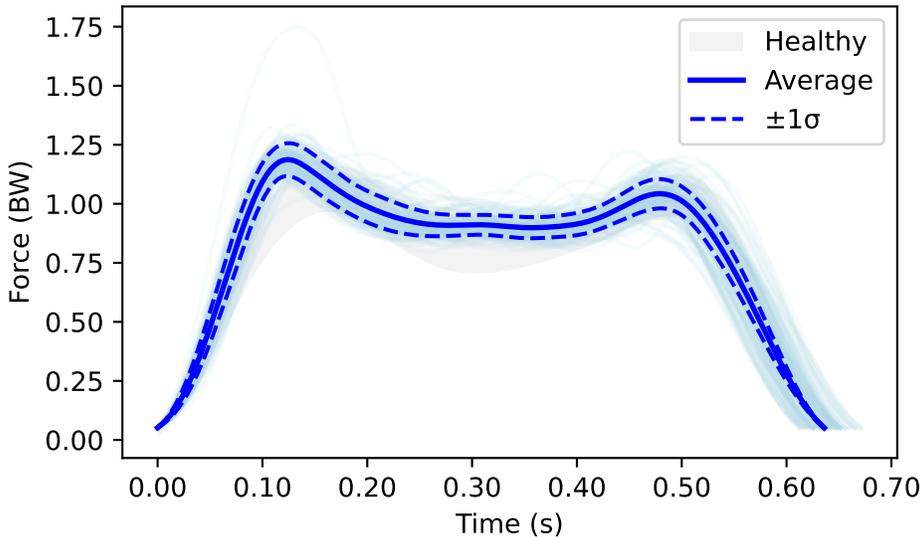
	Median	Standard Deviation
<b>Max Force (BW)</b>	0.0978	0.00817
<b>Impulse (BW-s)</b>	0.0297	0.00161

## Anterior Force



	Median	Standard Deviation
<b>Peak Brake (BW)</b>	0.140	0.0125
<b>Impulse Brake (BW-s)</b>	0.0194	0.00179
<b>Peak Propulsion (BW)</b>	0.181	0.0136
<b>Impulse Propulsion (BW-s)</b>	0.0299	0.00288
<b>Total Impulse (BW-s)</b>	0.0105	0.00387

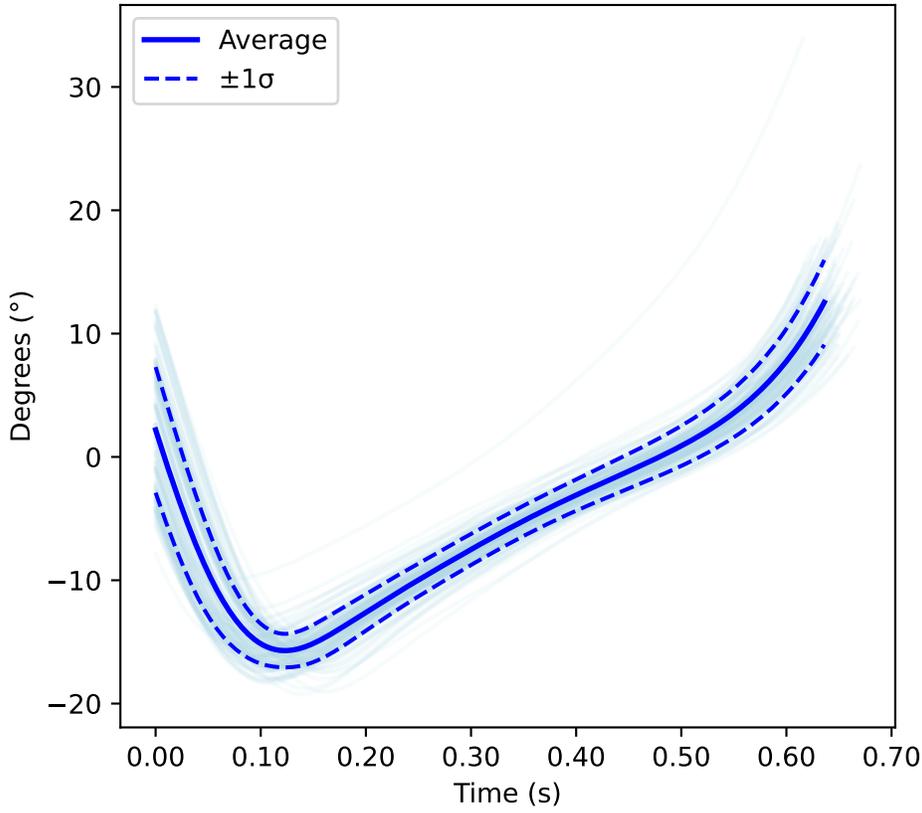
## Vertical Force



	Median	Standard Deviation
<b>Peak 1 (BW)</b>	1.19	0.0689
<b>Peak 2 (BW)</b>	1.04	0.0586
<b>Valley (BW)</b>	0.861	0.0280
<b>Impulse (BW-s)</b>	0.520	0.0168
<b>Loading Rate (BW/s)</b>	12.1	1.11
<b>Unloading Rate (BW/s)</b>	-7.85	1.05

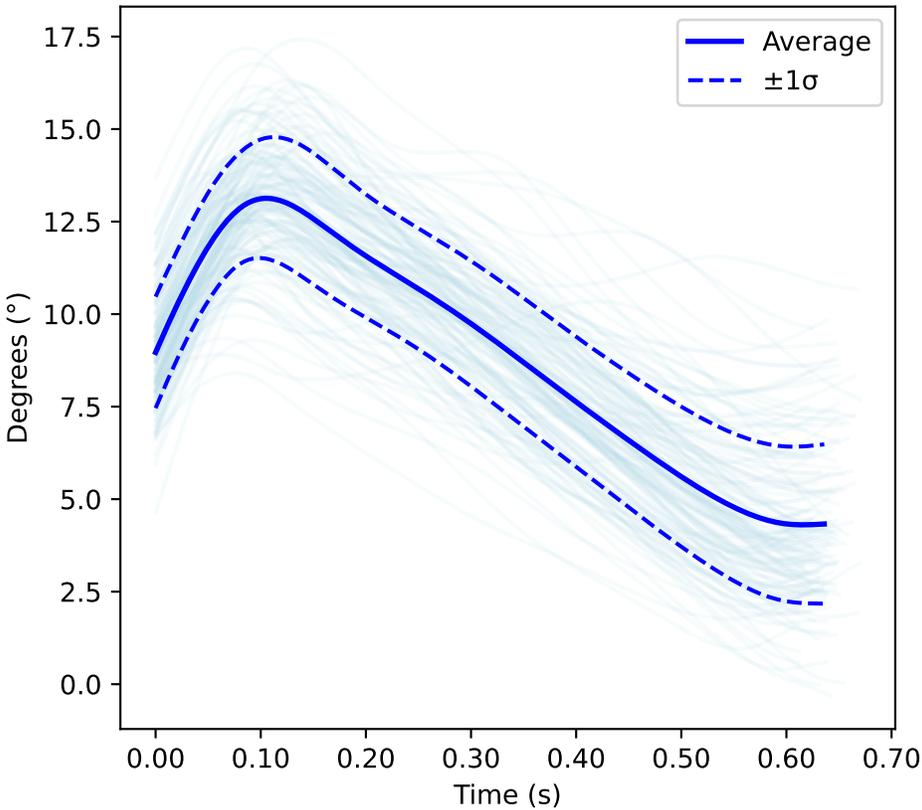
# Left Walking Kinematic Information

## Dorsiflexion



	Median	Standard Deviation
Foot Strike (Deg)	2.24	5.10

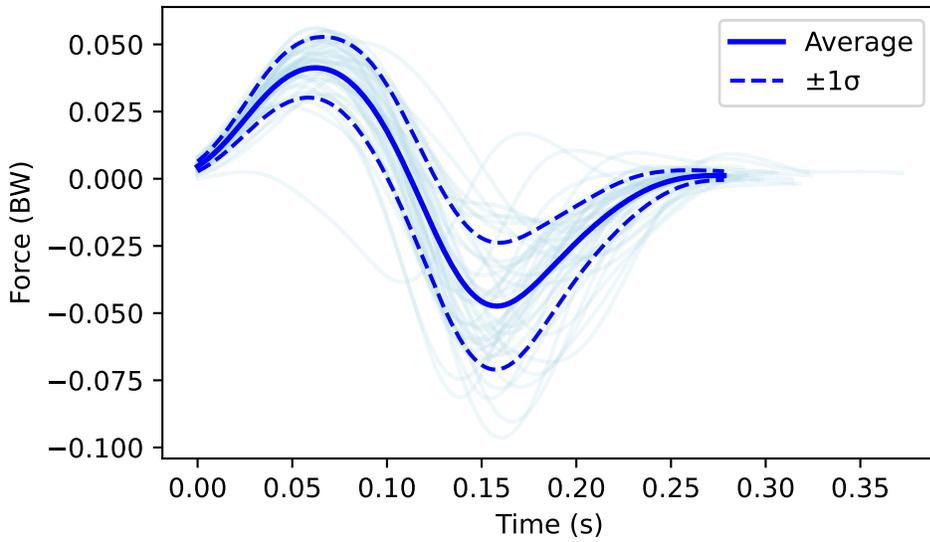
## Inversion



	Median	Standard Deviation
Foot Strike (Deg)	8.92	1.51

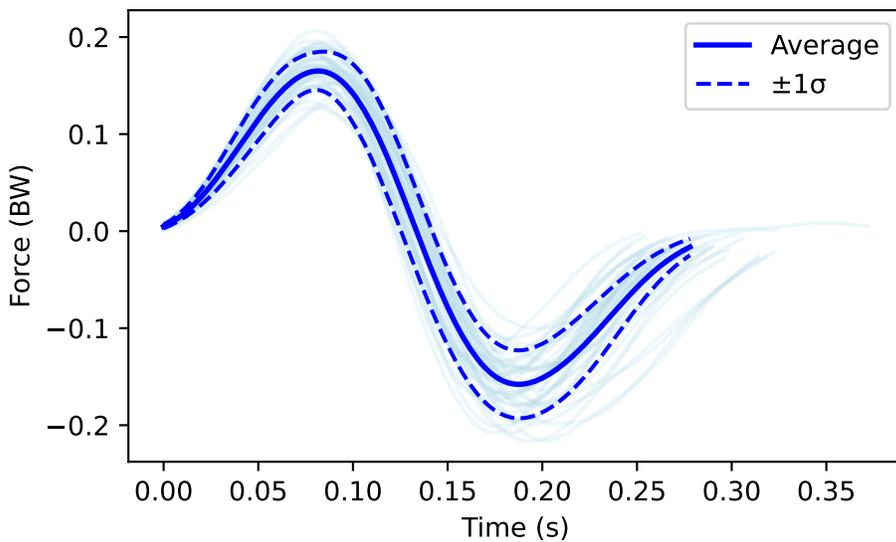
# Left Running Information

## Lateral Force



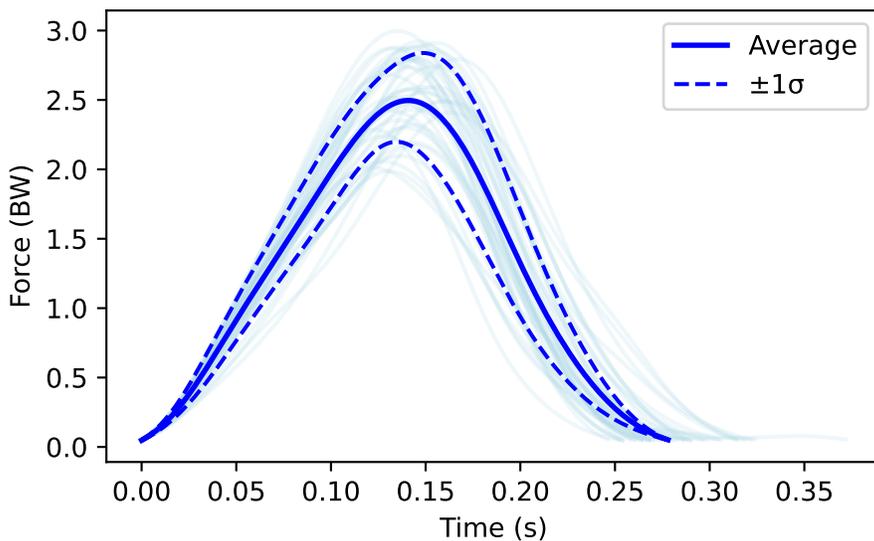
	Median	Standard Deviation
<b>Max Force (BW)</b>	0.0440	0.00848
<b>Impulse (BW·s)</b>	-0.000198	0.00176

## Anterior Force



	Median	Standard Deviation
<b>Peak Brake (BW)</b>	0.170	0.0182
<b>Impulse Brake (BW·s)</b>	0.0130	0.00162
<b>Peak Propulsion (BW)</b>	0.164	0.0286
<b>Impulse Propulsion (BW·s)</b>	0.0138	0.00357
<b>Total Impulse (BW·s)</b>	0.000870	0.00334

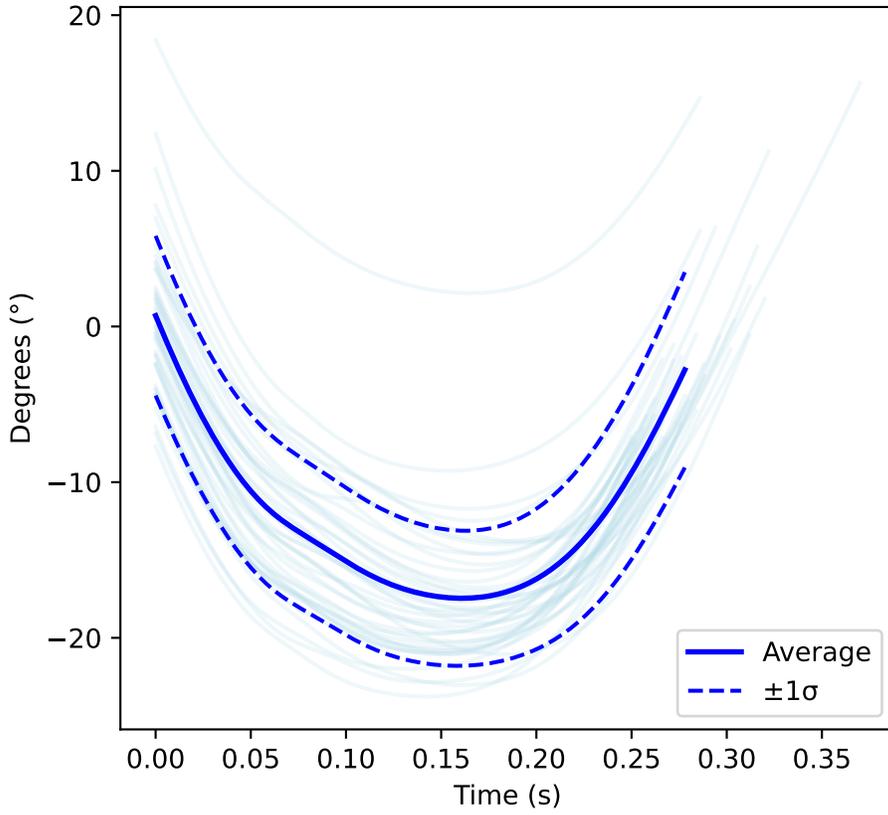
## Vertical Force



	Median	Standard Deviation
<b>Peak 1 (BW)</b>	2.58	0.275
<b>Impulse (BW·s)</b>	0.360	0.0431
<b>Loading Rate (BW/s)</b>	20.9	2.70
<b>Unloading Rate (BW/s)</b>	-24.2	6.59

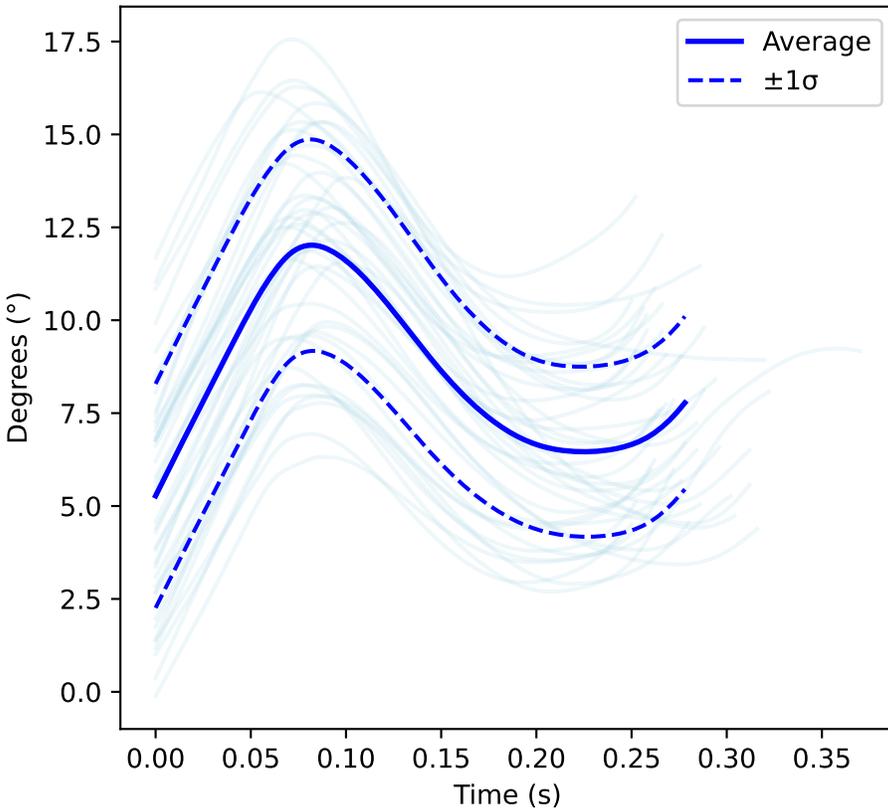
# Left Running Kinematic Information

## Dorsiflexion



	Median	Standard Deviation
Foot Strike (Deg)	0.0176	5.13

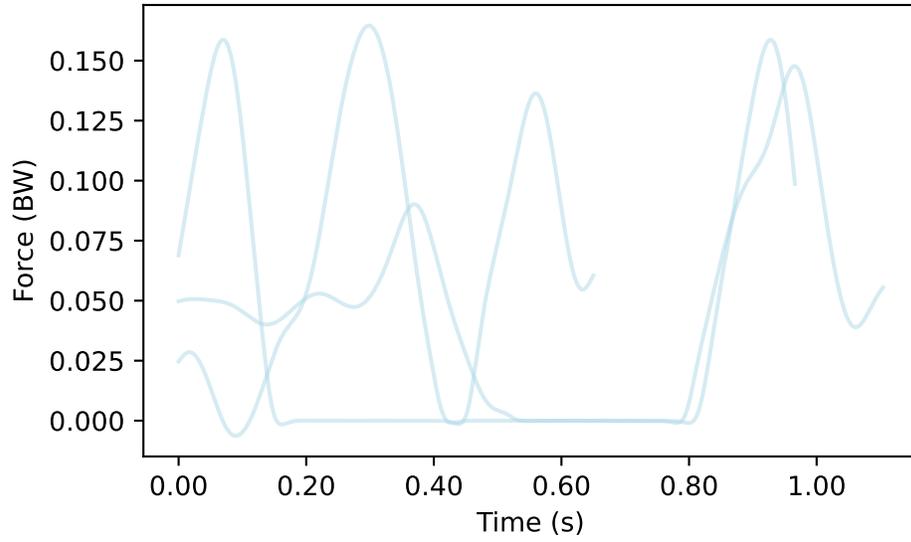
## Inversion



	Median	Standard Deviation
Foot Strike (Deg)	5.54	3.01

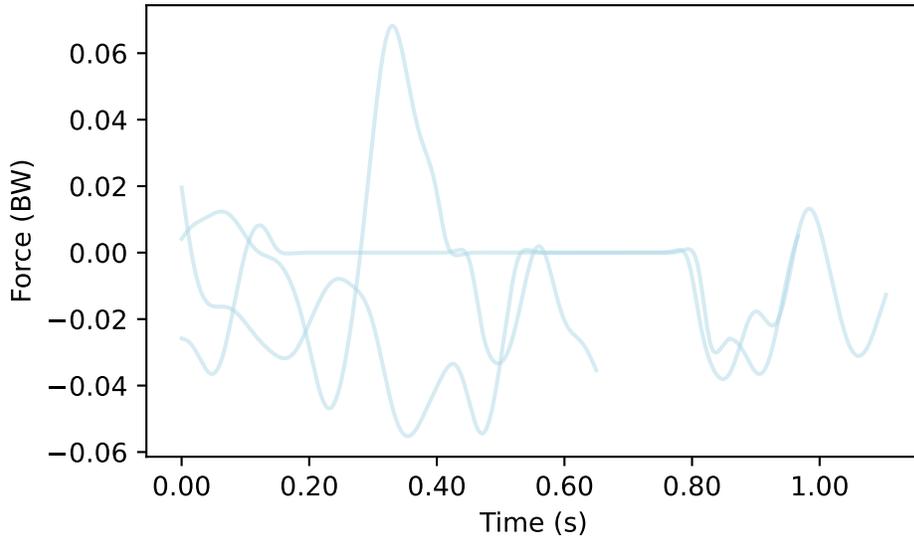
# Left Jumping Information

## Lateral Force



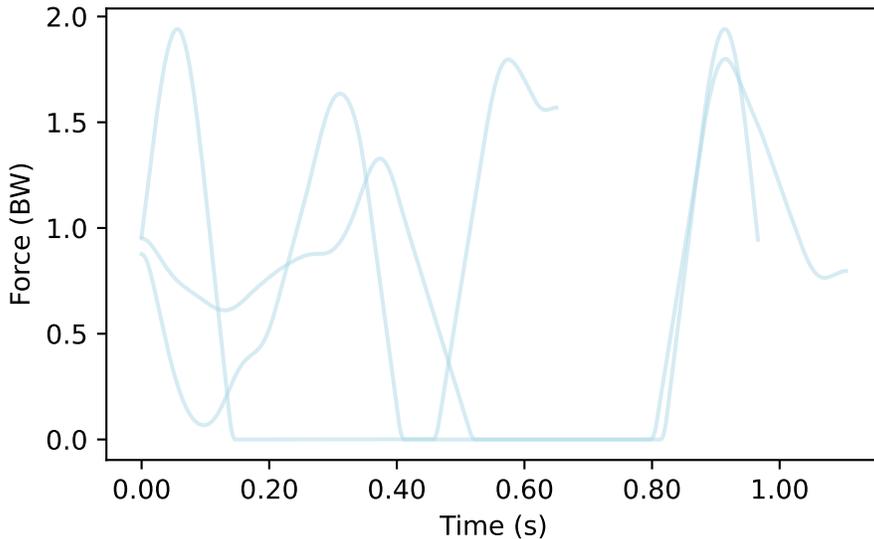
	Median	Standard Deviation
Propulsive Peak (BW)	0.152	0.0314
Landing Peak (BW)	0.129	0.0173

## Anterior Force



	Median	Standard Deviation
Propulsive Peak (BW)	-0.0352	0.0467
Landing Peak (BW)	-0.0200	0.0131

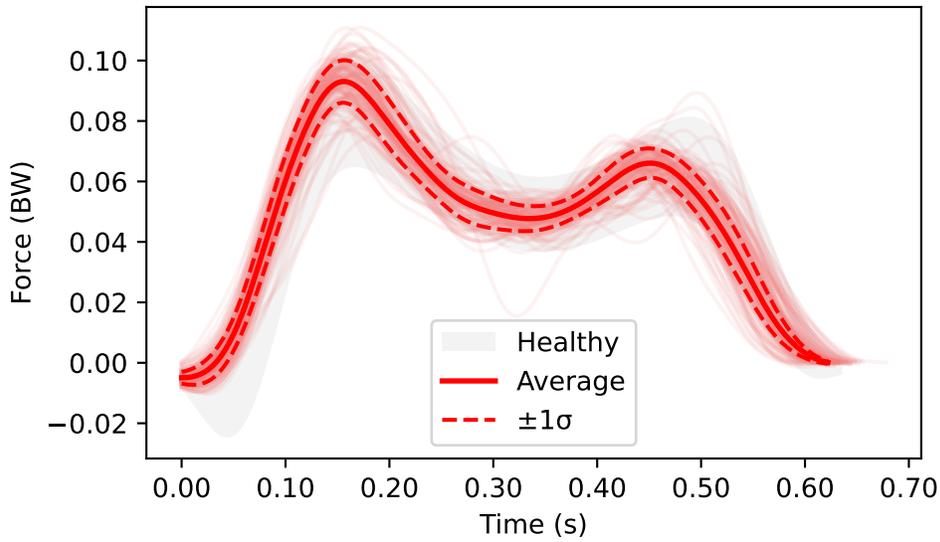
## Vertical Force



	Median	Standard Deviation
Propulsive Peak (BW)	1.64	0.250
Landing Peak (BW)	1.80	0.0674

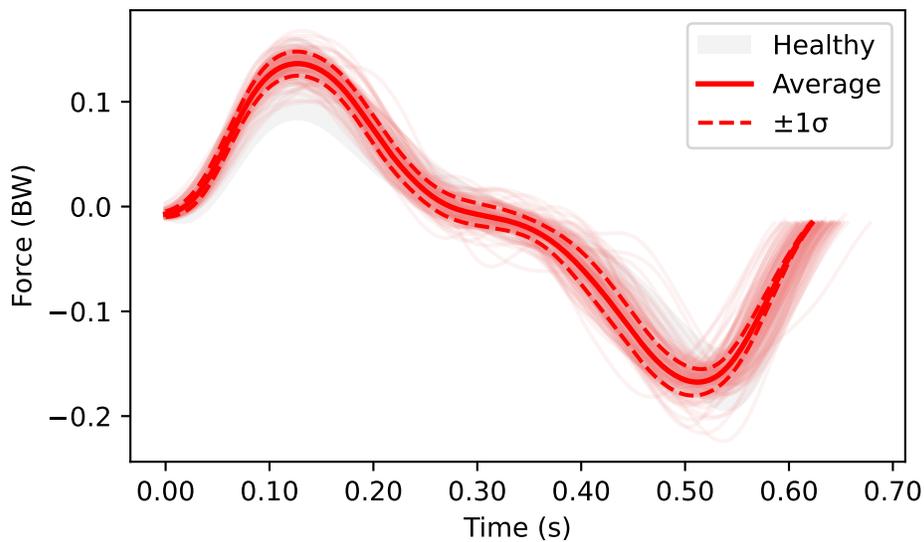
# Right Walking Information

## Lateral Force



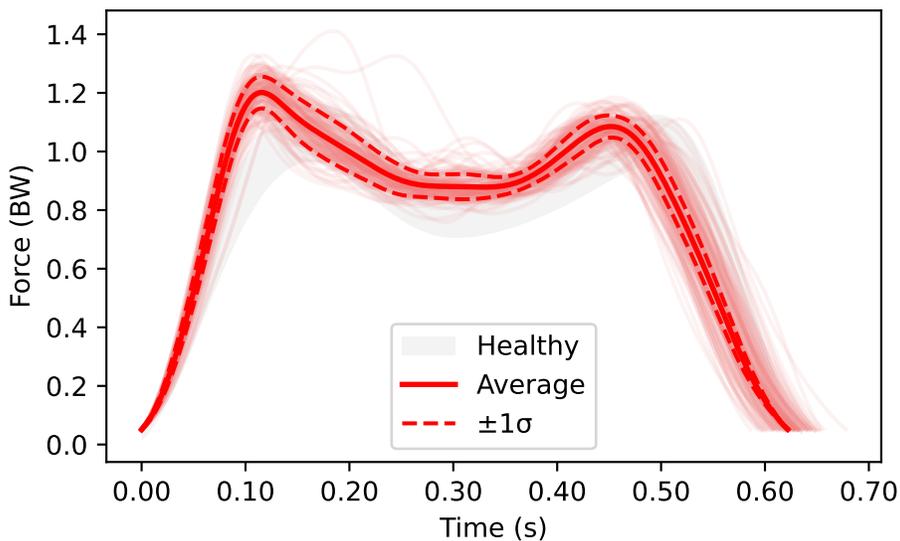
	Median	Standard Deviation
<b>Max Force (BW)</b>	0.0947	0.00684
<b>Impulse (BW-s)</b>	0.0304	0.00156

## Anterior Force



	Median	Standard Deviation
<b>Peak Brake (BW)</b>	0.139	0.0112
<b>Impulse Brake (BW-s)</b>	0.0194	0.00176
<b>Peak Propulsion (BW)</b>	0.168	0.0126
<b>Impulse Propulsion (BW-s)</b>	0.0281	0.00258
<b>Total Impulse (BW-s)</b>	0.00870	0.00333

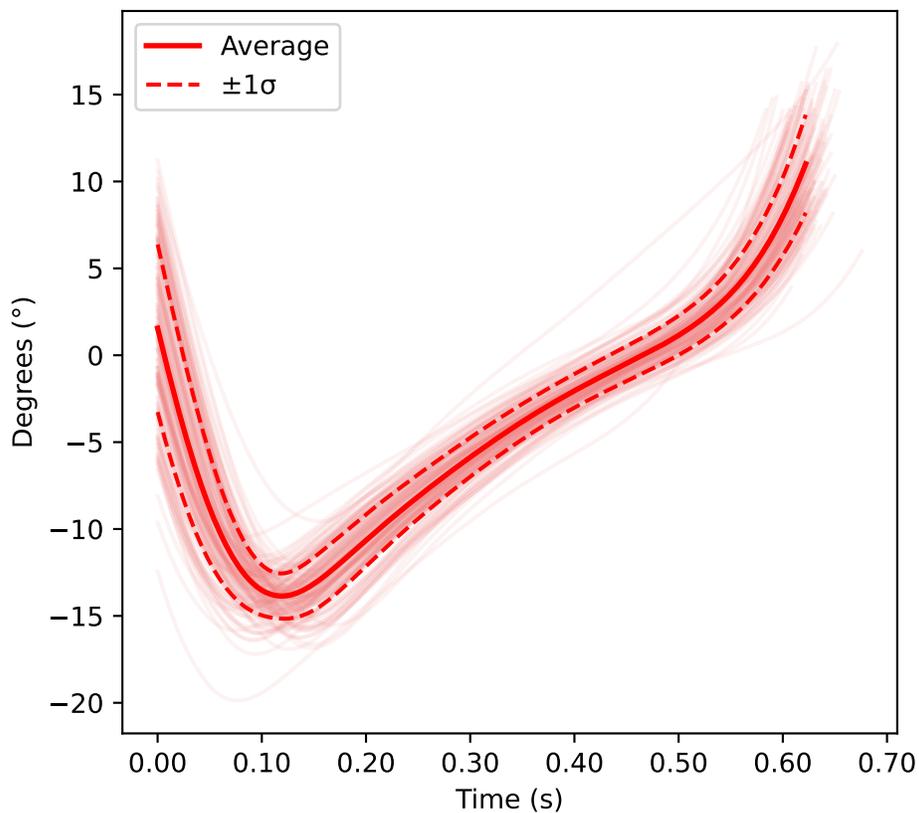
## Vertical Force



	Median	Standard Deviation
<b>Peak 1 (BW)</b>	1.21	0.0548
<b>Peak 2 (BW)</b>	1.09	0.0365
<b>Valley (BW)</b>	0.858	0.0279
<b>Impulse (BW-s)</b>	0.510	0.0147
<b>Loading Rate (BW/s)</b>	12.9	1.15
<b>Unloading Rate (BW/s)</b>	-7.58	0.686

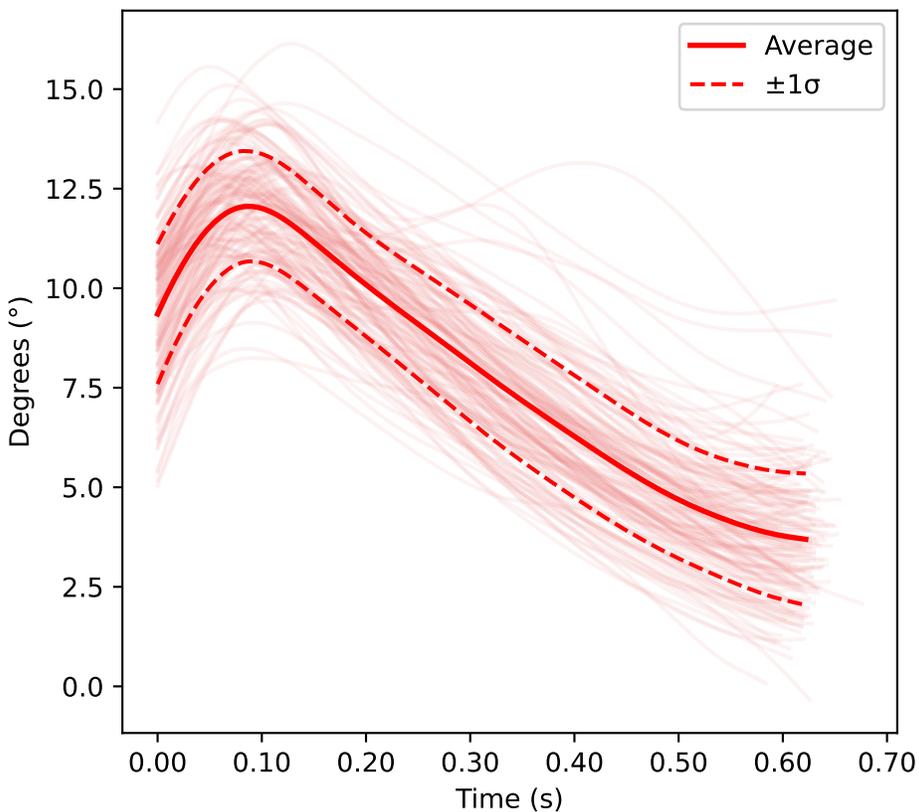
# Right Walking Kinematic Information

## Dorsiflexion



	Median	Standard Deviation
Foot Strike (Deg)	1.56	4.82

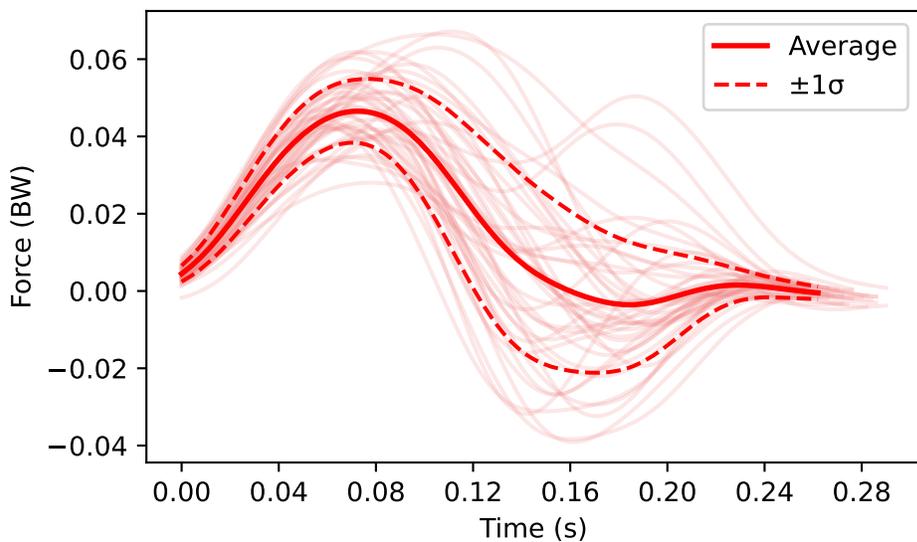
## Inversion



	Median	Standard Deviation
Foot Strike (Deg)	9.58	1.76

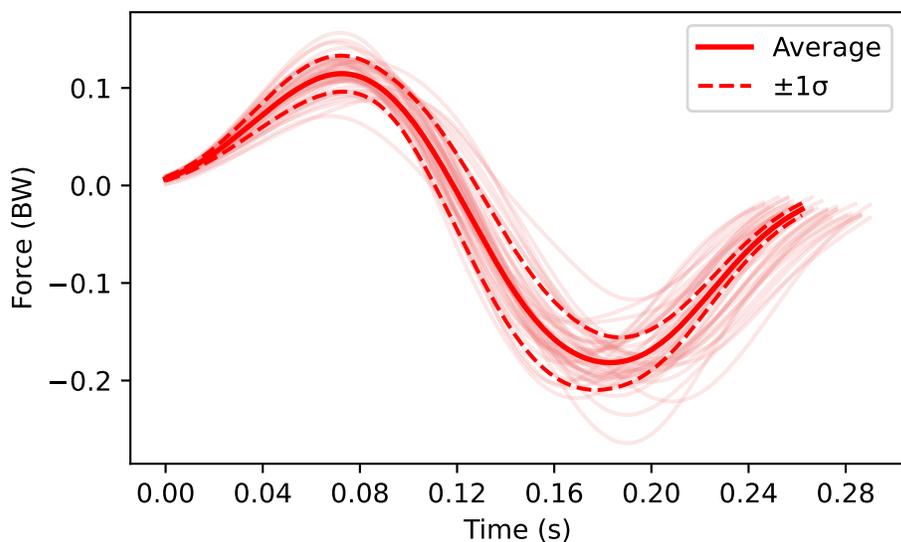
# Right Running Information

## Lateral Force



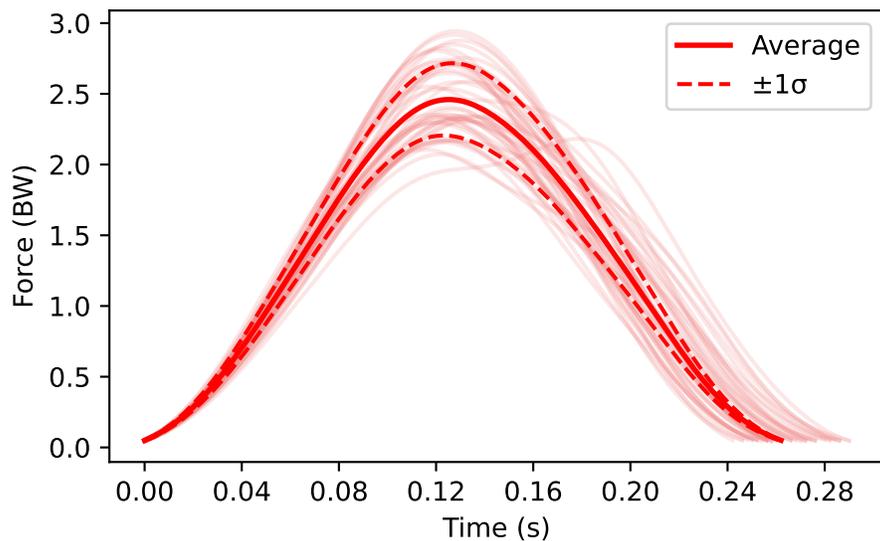
	Median	Standard Deviation
<b>Max Force (BW)</b>	0.0490	0.00864
<b>Impulse (BW-s)</b>	0.00395	0.00210

## Anterior Force



	Median	Standard Deviation
<b>Peak Brake (BW)</b>	0.117	0.0172
<b>Impulse Brake (BW-s)</b>	0.00831	0.00120
<b>Peak Propulsion (BW)</b>	0.186	0.0253
<b>Impulse Propulsion (BW-s)</b>	0.0166	0.00340
<b>Total Impulse (BW-s)</b>	0.00801	0.00388

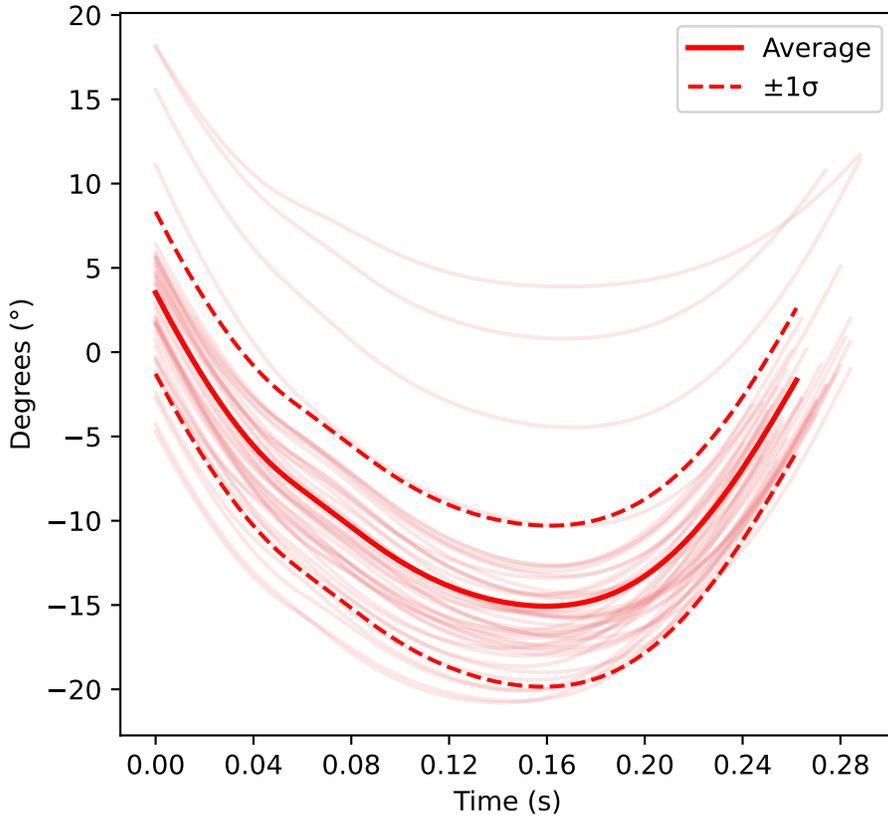
## Vertical Force



	Median	Standard Deviation
<b>Peak 1 (BW)</b>	2.40	0.244
<b>Impulse (BW-s)</b>	0.346	0.0284
<b>Loading Rate (BW/s)</b>	23.9	3.09
<b>Unloading Rate (BW/s)</b>	-22.5	3.69

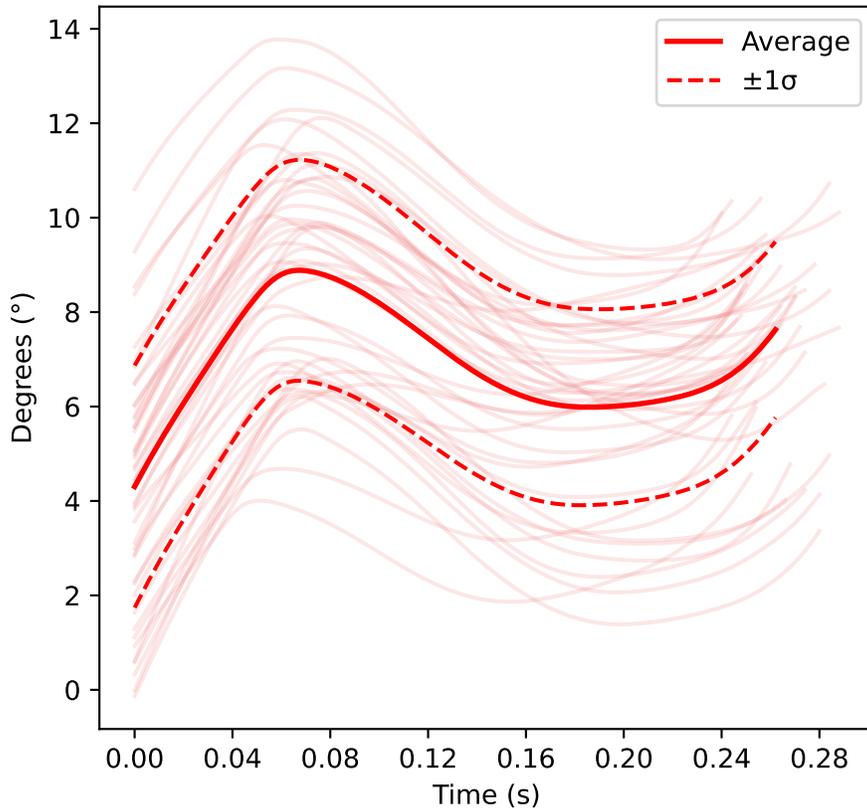
# Right Running Kinematic Information

## Dorsiflexion



	Median	Standard Deviation
Foot Strike (Deg)	3.19	4.81

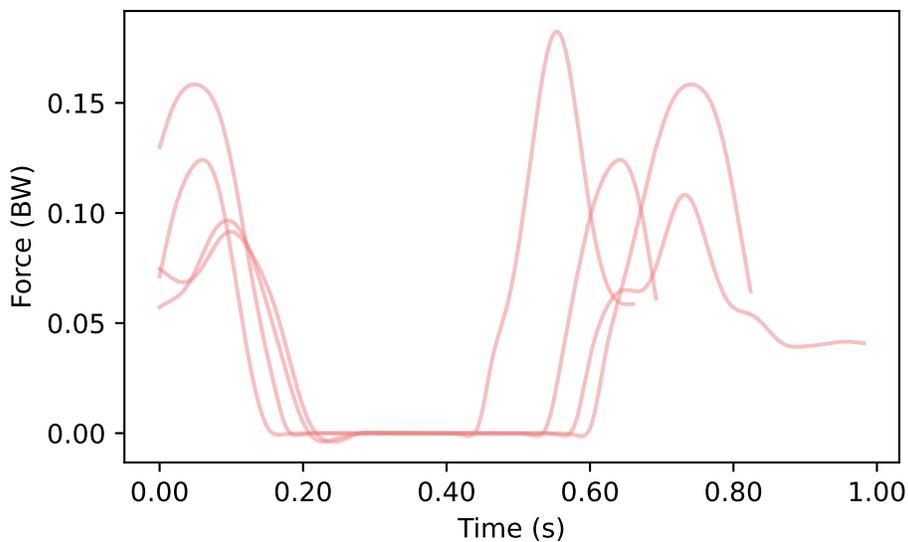
## Inversion



	Median	Standard Deviation
Foot Strike (Deg)	4.56	2.56

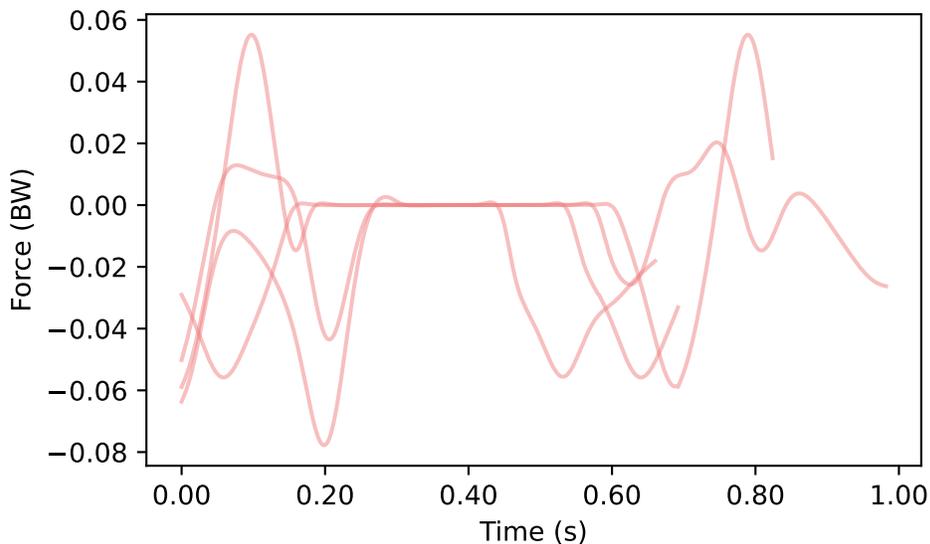
# Right Jumping Information

## Lateral Force



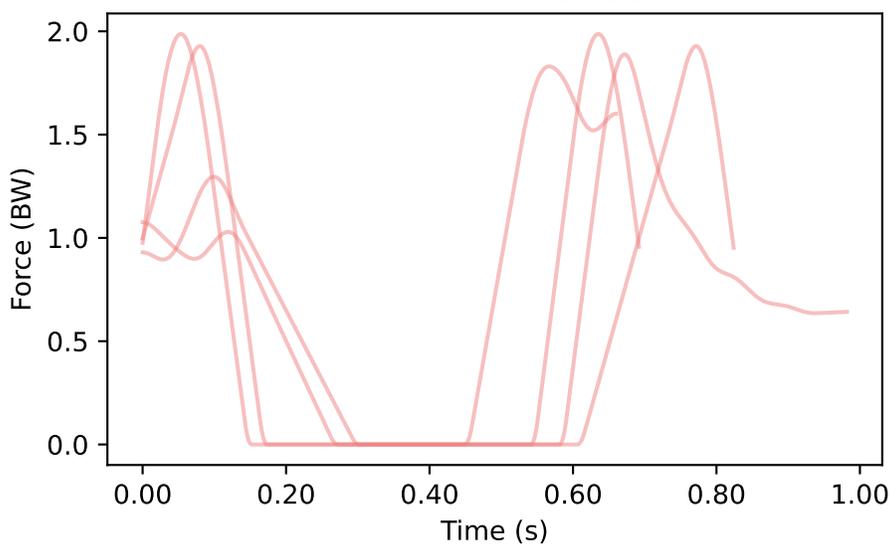
	Median	Standard Deviation
<b>Propulsive Peak (BW)</b>	0.110	0.0241
<b>Landing Peak (BW)</b>	0.136	0.0403

## Anterior Force



	Median	Standard Deviation
<b>Propulsive Peak (BW)</b>	-0.00184	0.0359
<b>Landing Peak (BW)</b>	-0.0195	0.0388

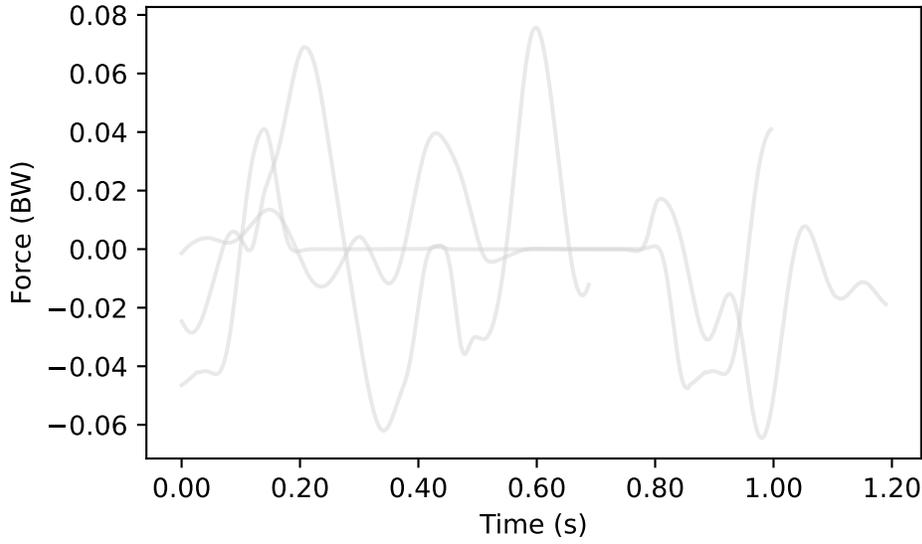
## Vertical Force



	Median	Standard Deviation
<b>Propulsive Peak (BW)</b>	1.61	0.409
<b>Landing Peak (BW)</b>	1.91	0.0572

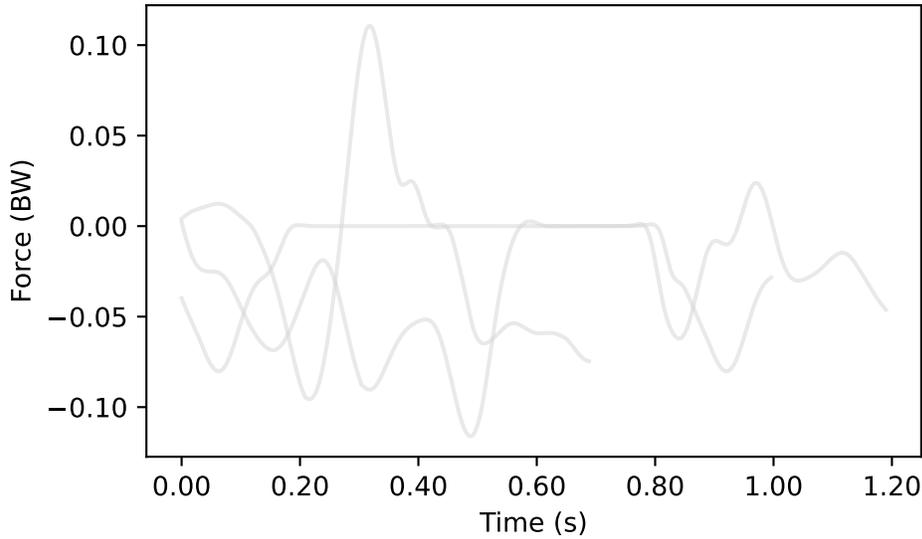
# Combined Jumping Information

## Lateral Force



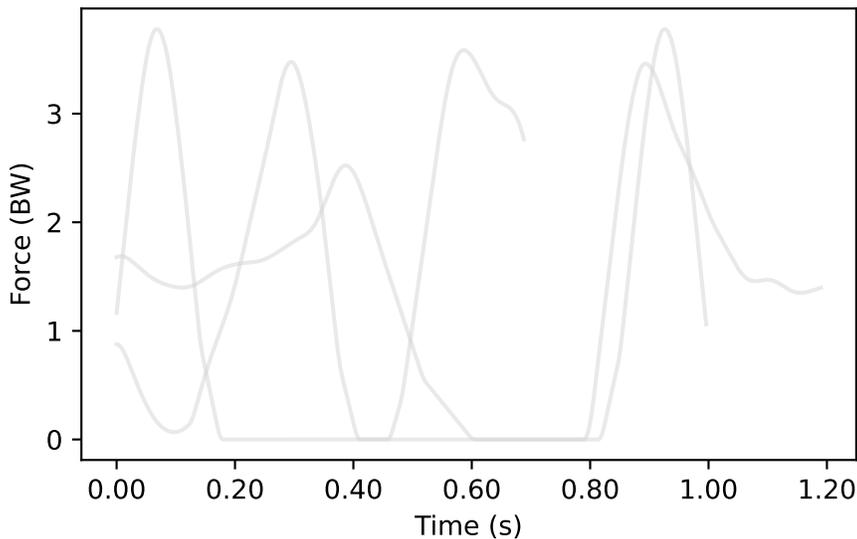
	Median	Standard Deviation
<b>Propulsive Peak (BW)</b>	0.275	0.0515
<b>Landing Peak (BW)</b>	0.275	0.0553

## Anterior Force



	Median	Standard Deviation
<b>Propulsive Peak (BW)</b>	-0.0643	0.0836
<b>Landing Peak (BW)</b>	-0.0444	0.0302

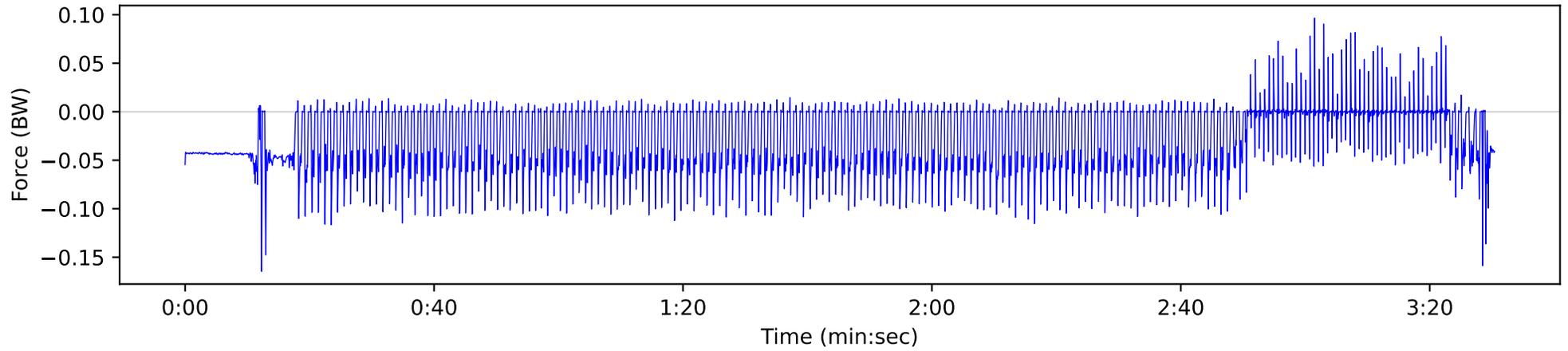
## Vertical Force



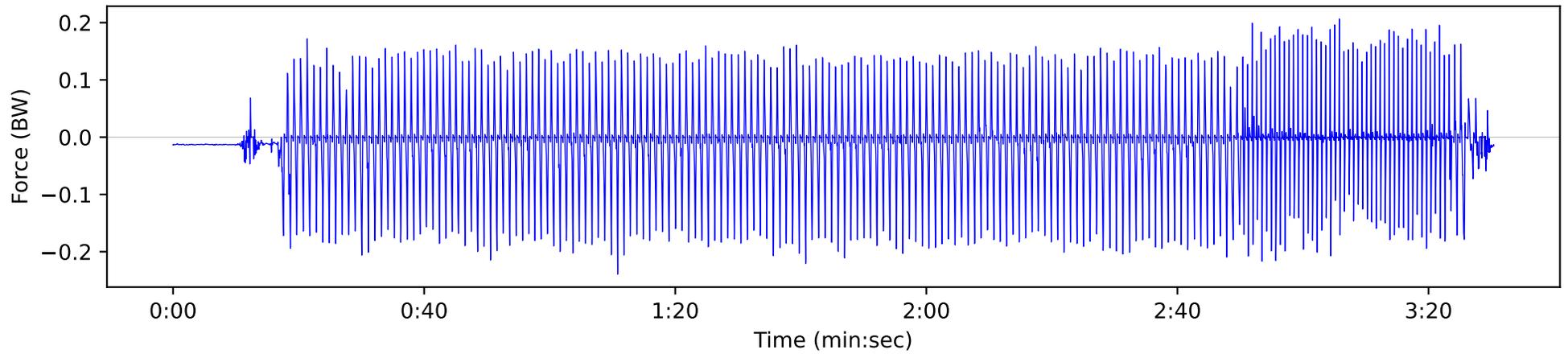
	Median	Standard Deviation
<b>Propulsive Peak (BW)</b>	3.56	0.549
<b>Landing Peak (BW)</b>	3.69	0.130

# Left Ground Reaction Forces

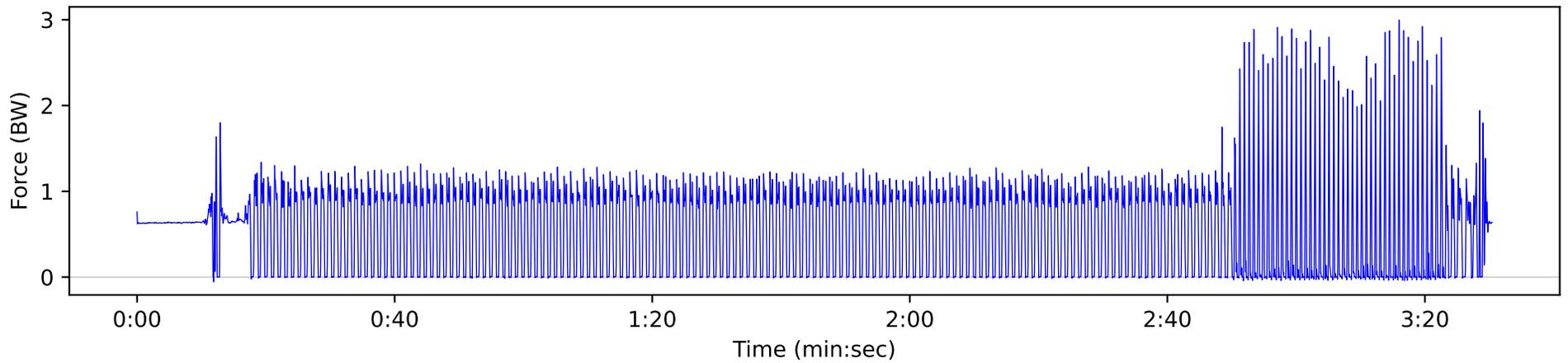
## Lateral



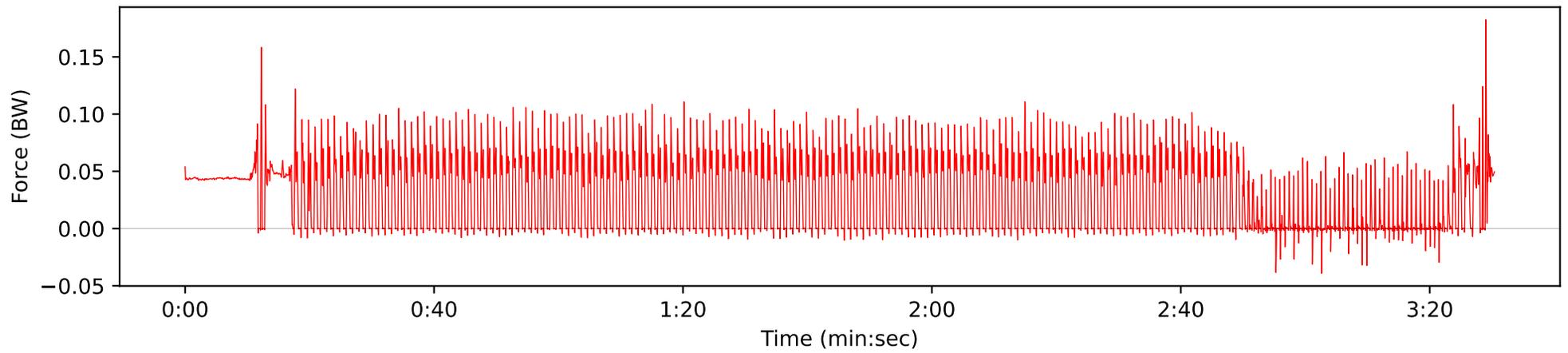
## Anterior



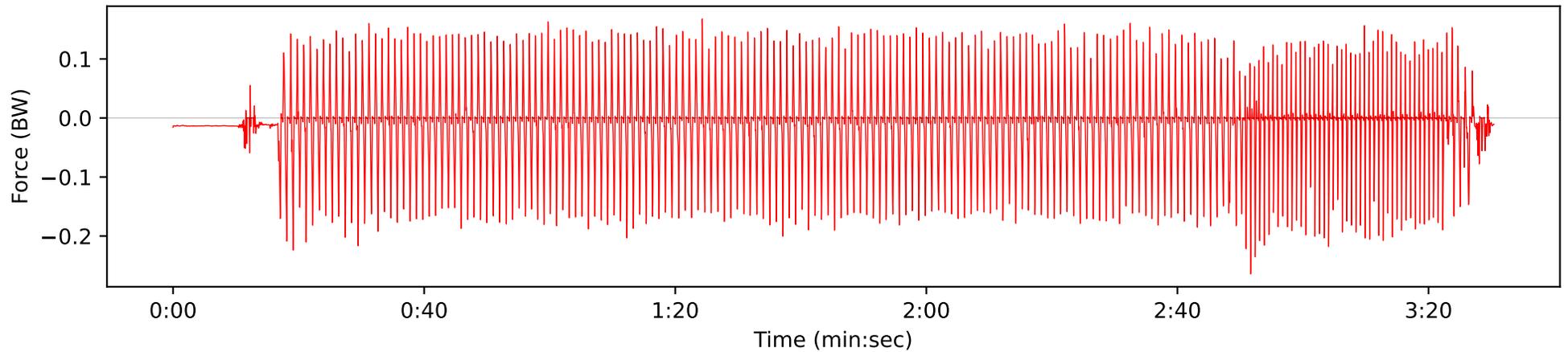
## Vertical



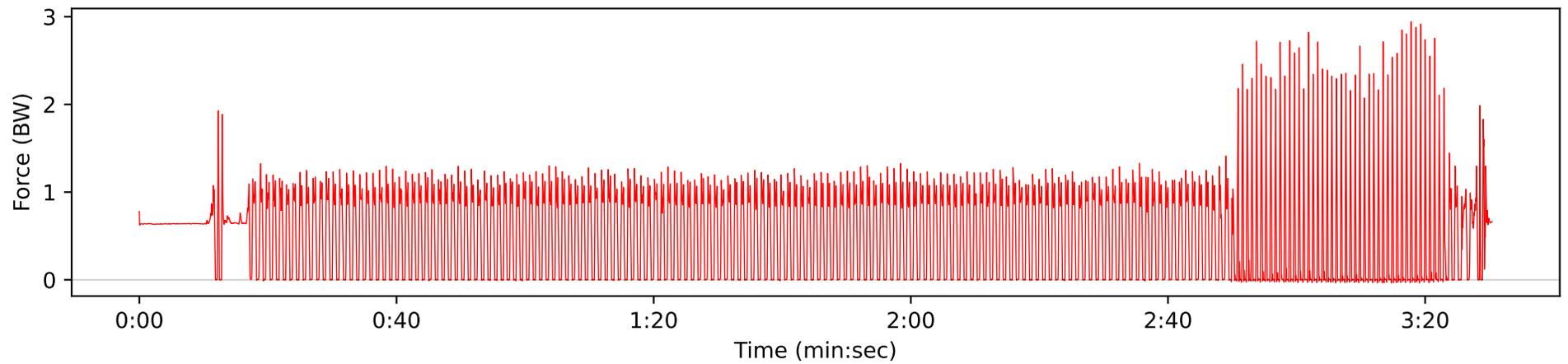
# Right Ground Reaction Forces Lateral



# Anterior

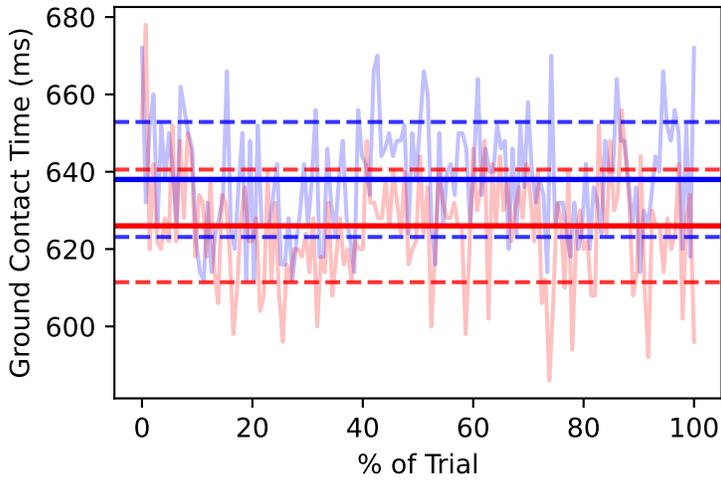


# Vertical

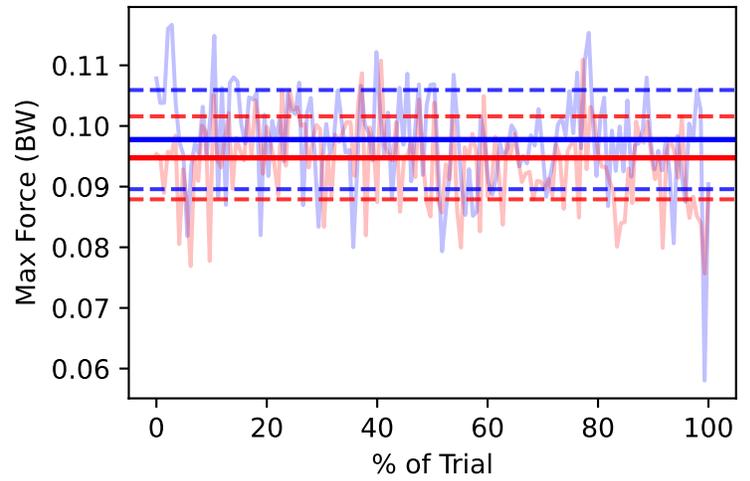


# Advanced Walking Information

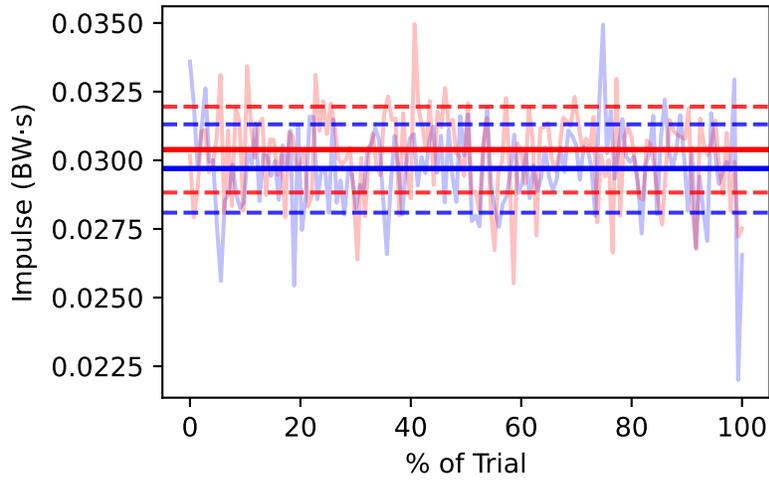
## Ground Contact Time



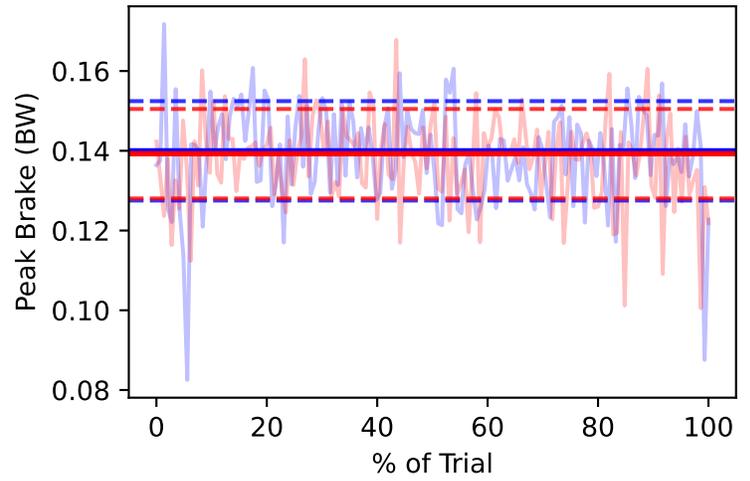
## Mediolateral Max Force



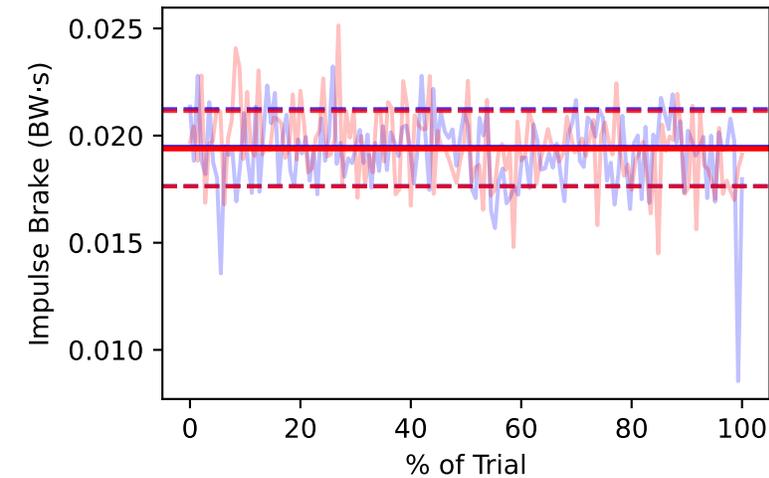
## Mediolateral Impulse



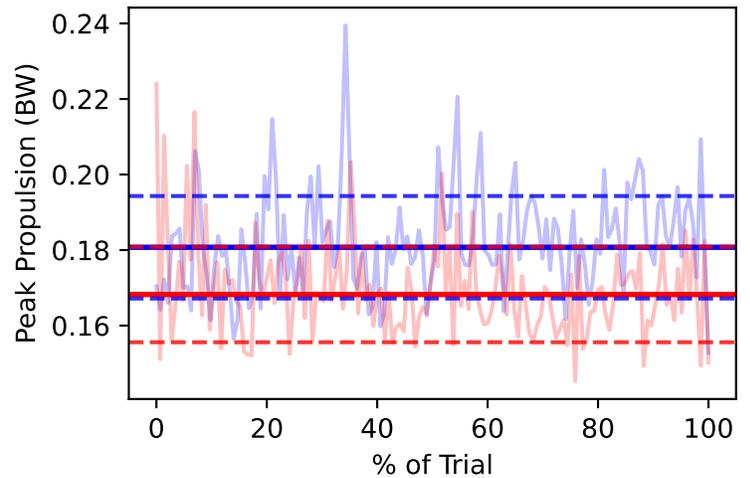
## Anteroposterior Peak Brake



## Anteroposterior Impulse Brake



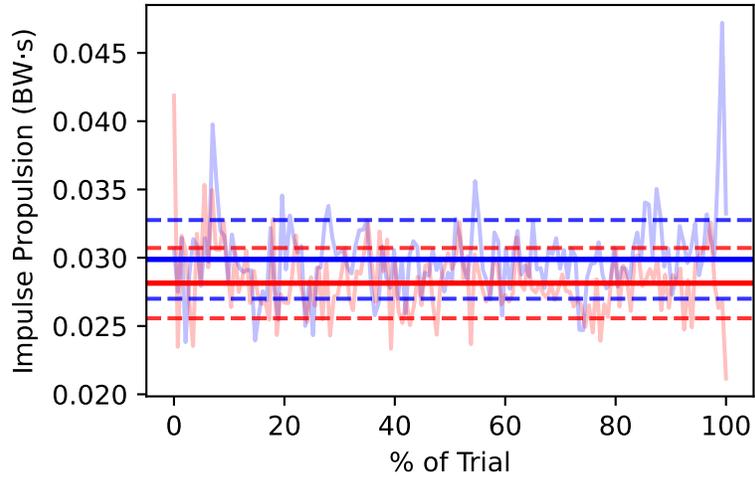
## Anteroposterior Peak Propulsion



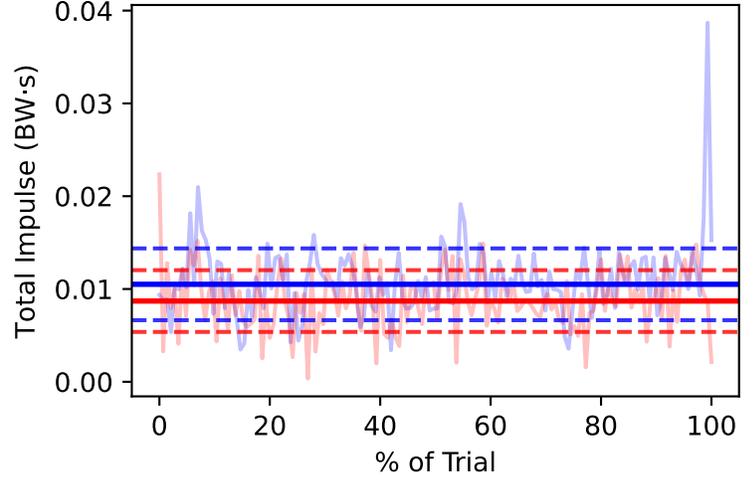
— Left Values    — Right Values    — Left Median    — Right Median    - - -  $\pm 1\sigma$  Left    - - -  $\pm 1\sigma$  Right

# Advanced Walking Information

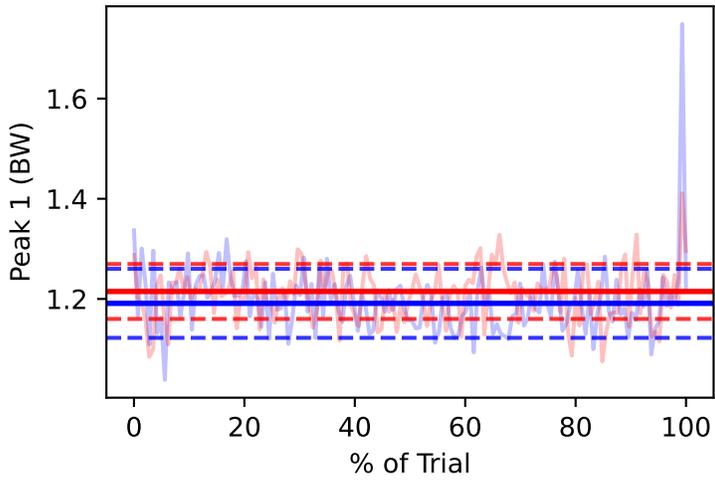
## Anteroposterior Impulse Propulsion



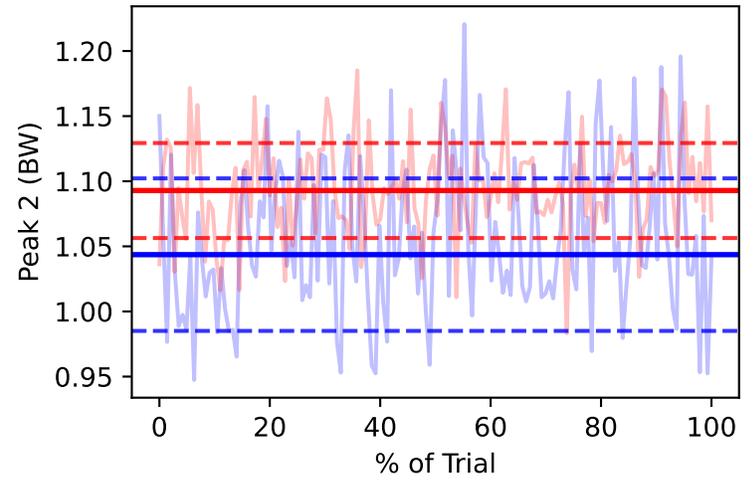
## Anteroposterior Total Impulse



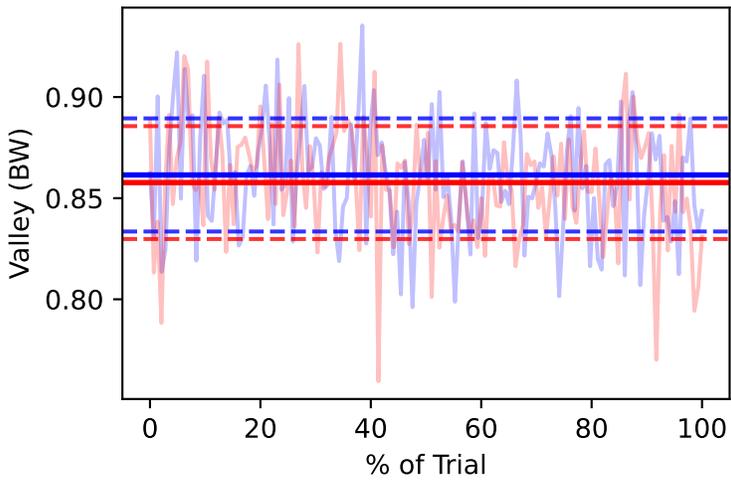
## Vertical Peak 1



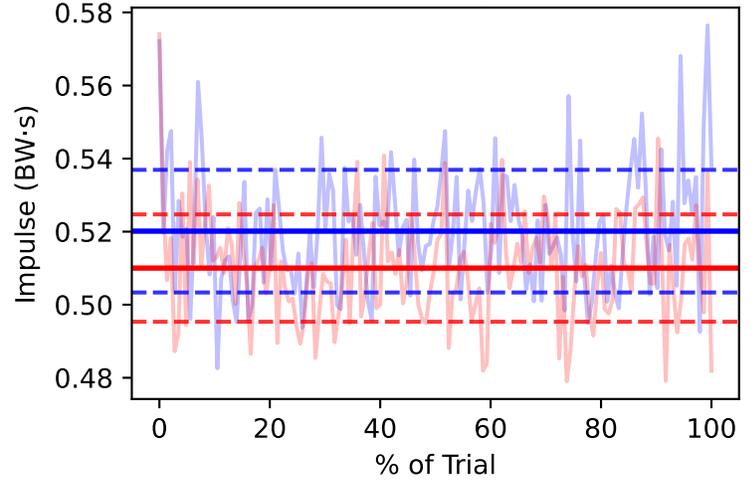
## Vertical Peak 2



## Vertical Valley



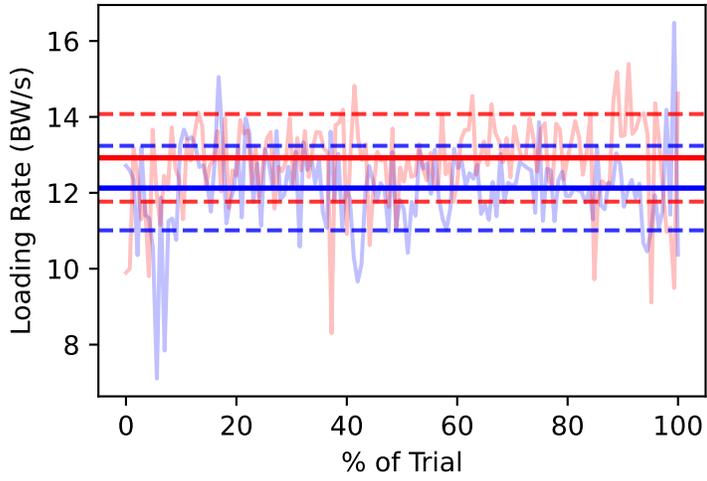
## Vertical Impulse



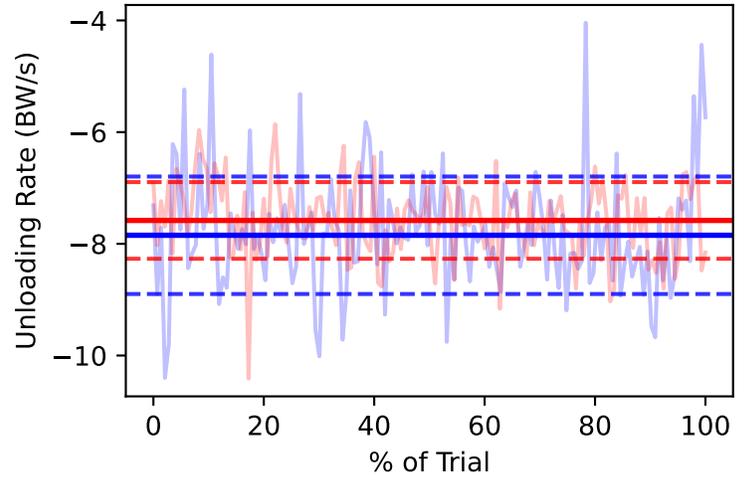
— Left Values    — Right Values    — Left Median    — Right Median    - - - ±1σ Left    - - - ±1σ Right

# Advanced Walking Information

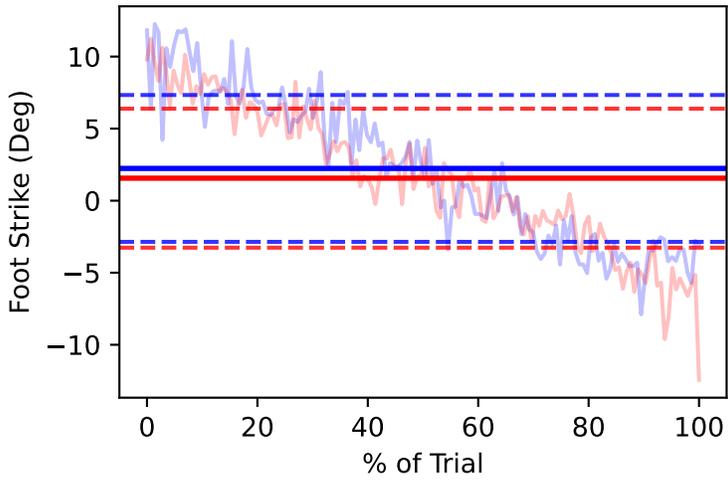
## Vertical Loading Rate



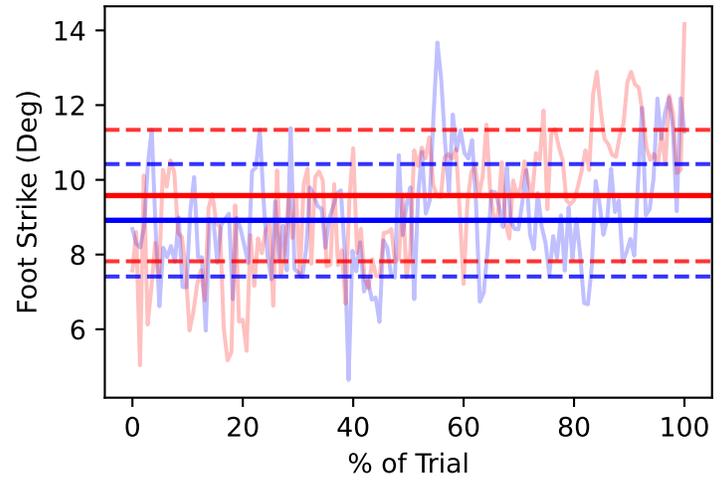
## Vertical Unloading Rate



## Dorsiflexion Foot Strike



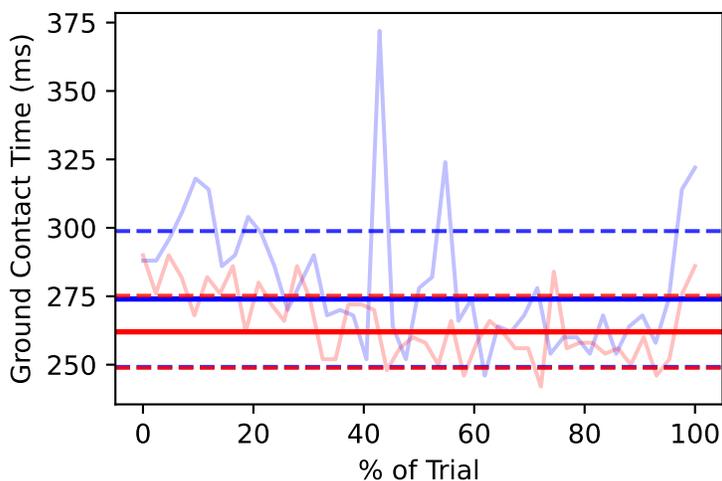
## Inversion Foot Strike



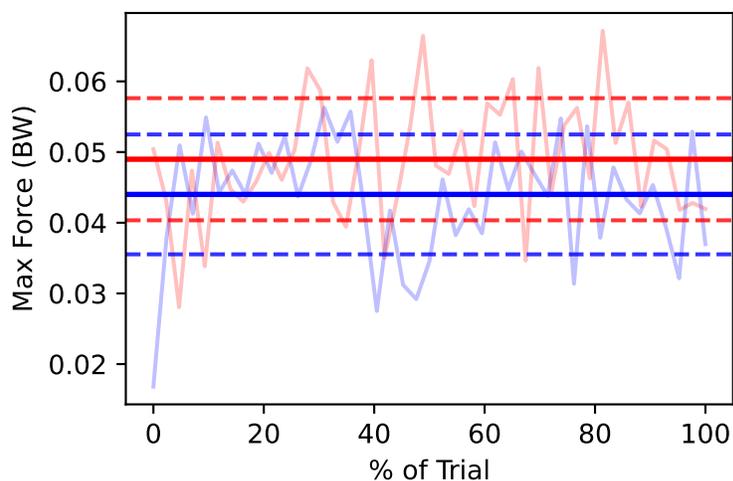
— Left Values    — Right Values    — Left Median    — Right Median    - - -  $\pm 1\sigma$  Left    - - -  $\pm 1\sigma$  Right

# Advanced Running Information

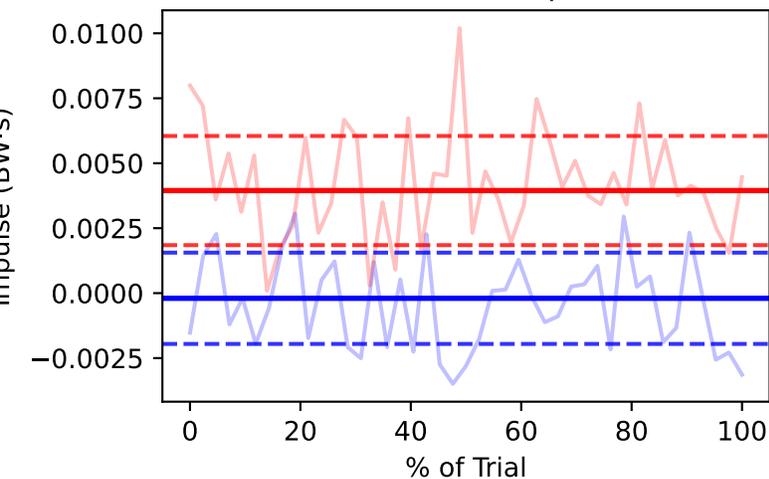
## Ground Contact Time



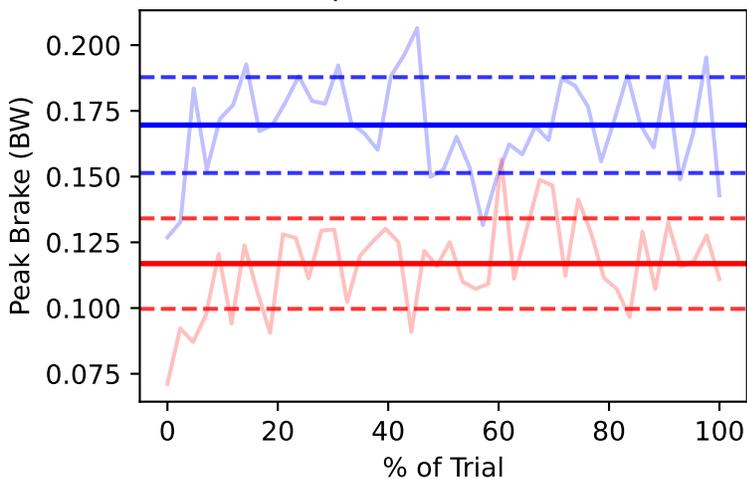
## Mediolateral Max Force



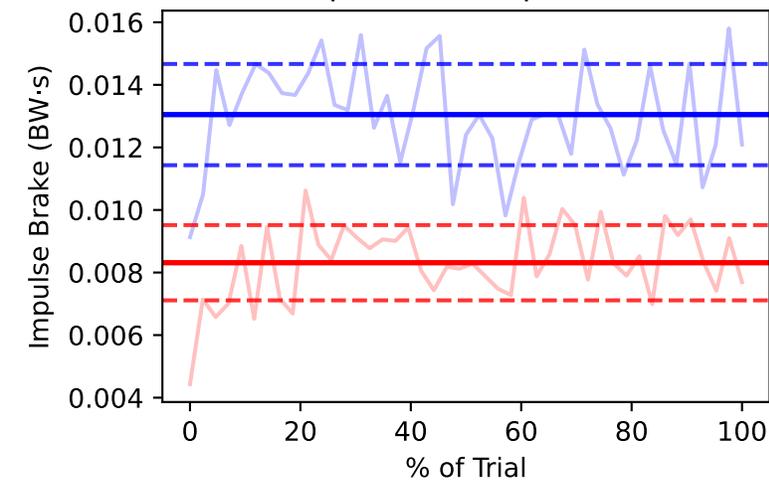
## Mediolateral Impulse



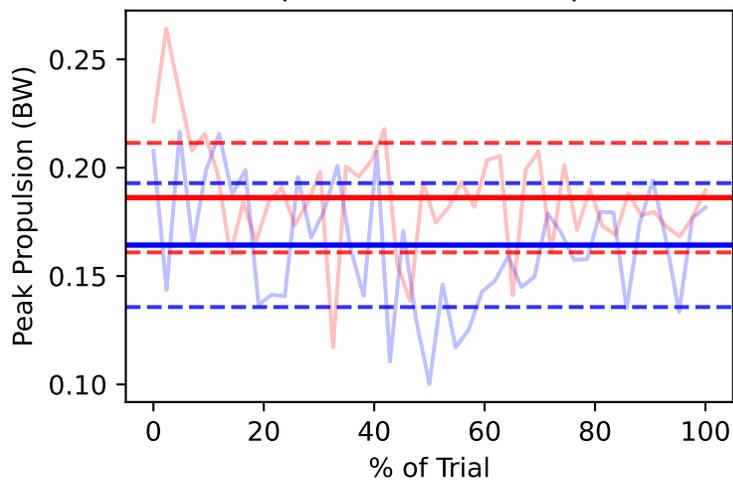
## Anteroposterior Peak Brake



## Anteroposterior Impulse Brake



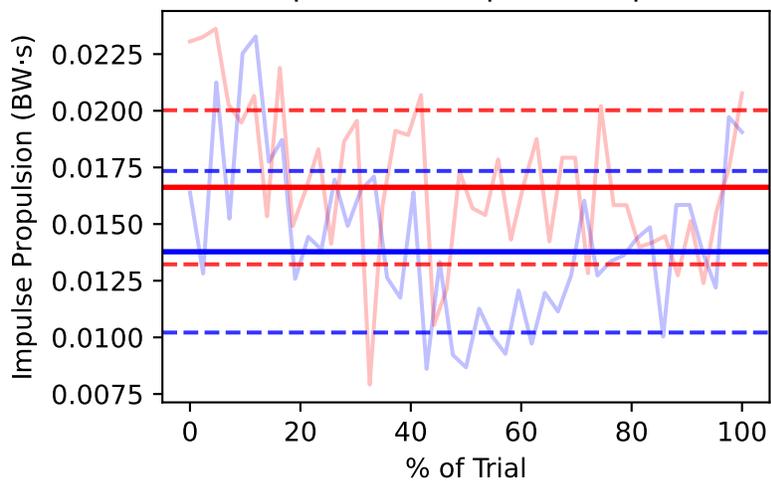
## Anteroposterior Peak Propulsion



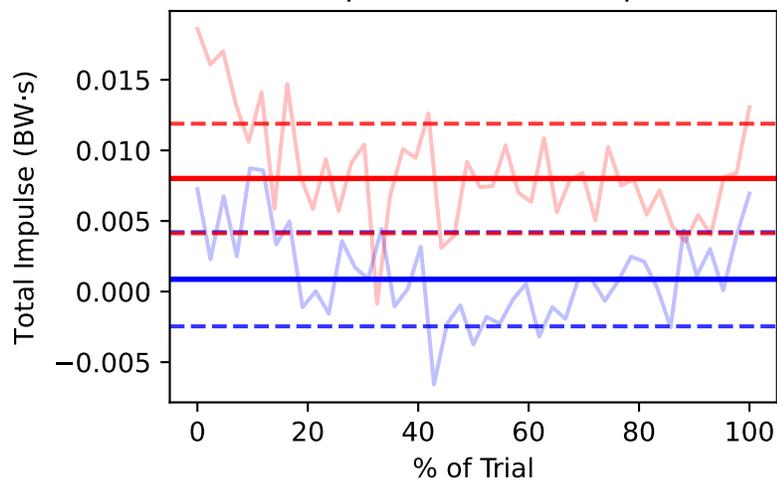
— Left Values    — Right Values    — Left Median    — Right Median    - - -  $\pm 1\sigma$  Left    - - -  $\pm 1\sigma$  Right

# Advanced Running Information

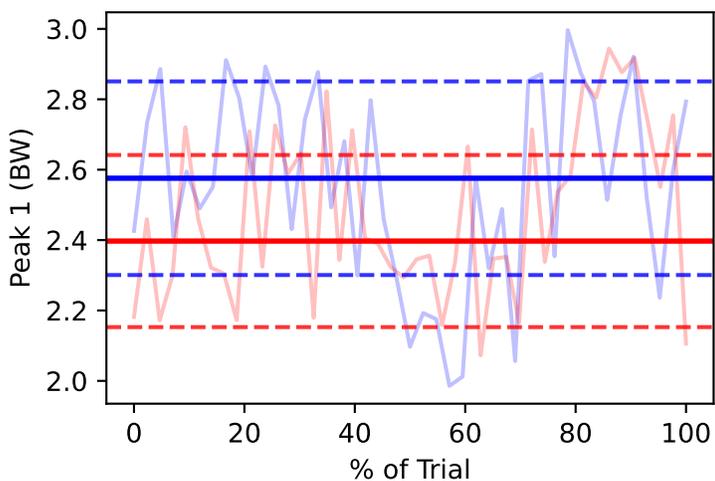
## Anteroposterior Impulse Propulsion



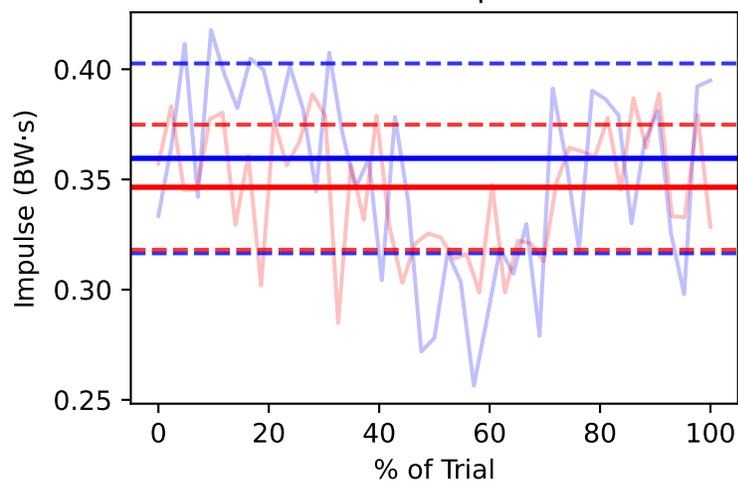
## Anteroposterior Total Impulse



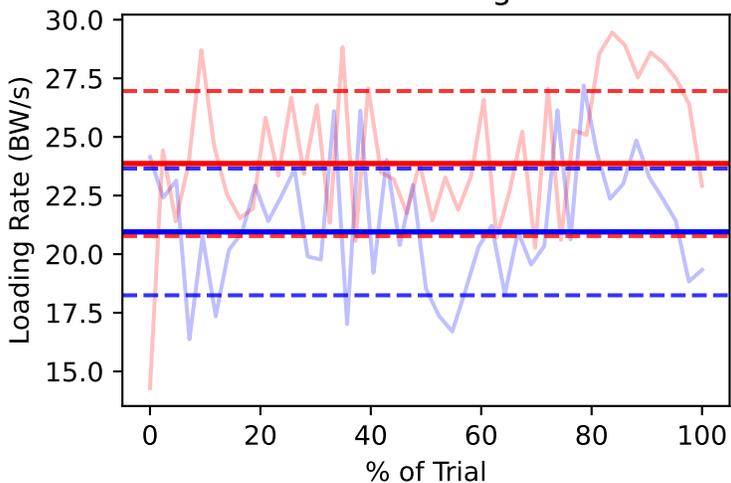
## Vertical Peak 1



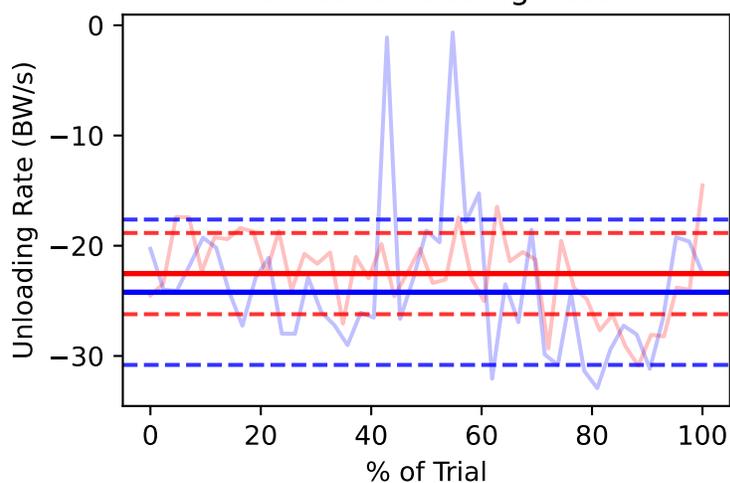
## Vertical Impulse



## Vertical Loading Rate



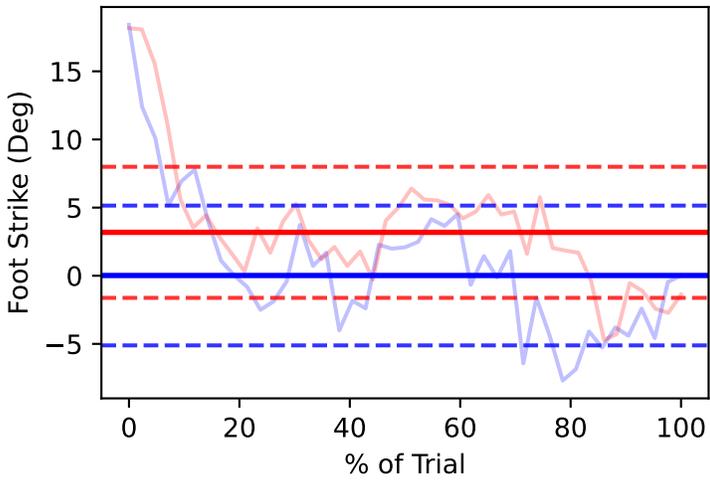
## Vertical Unloading Rate



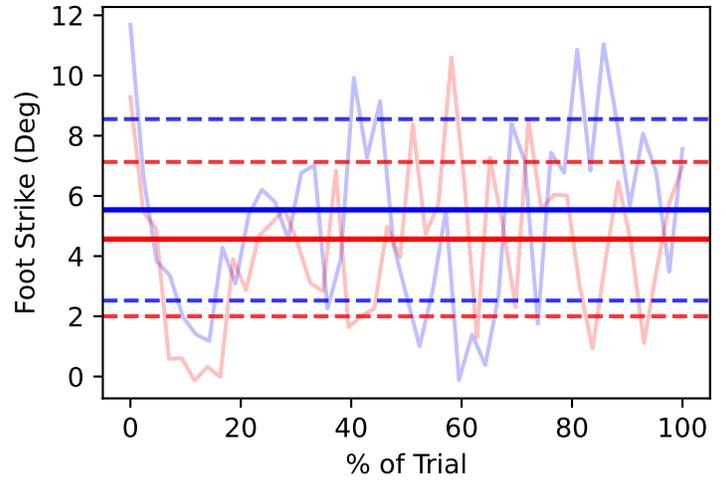
— Left Values    — Right Values    — Left Median    — Right Median    - - - ±1σ Left    - - - ±1σ Right

# Advanced Running Information

## Dorsiflexion Foot Strike



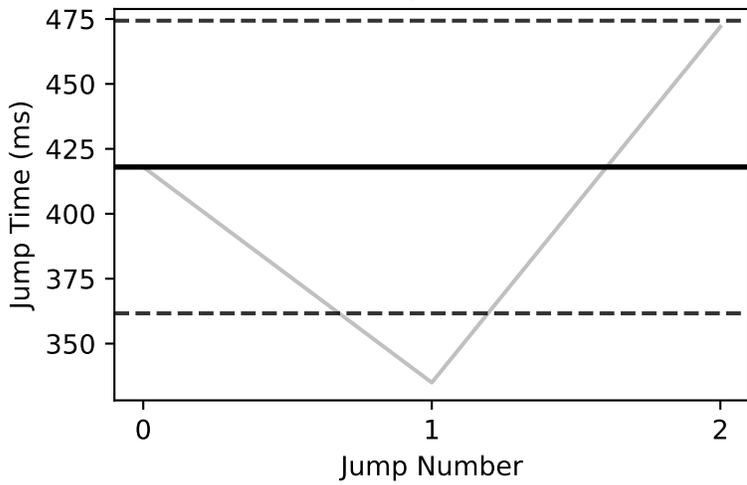
## Inversion Foot Strike



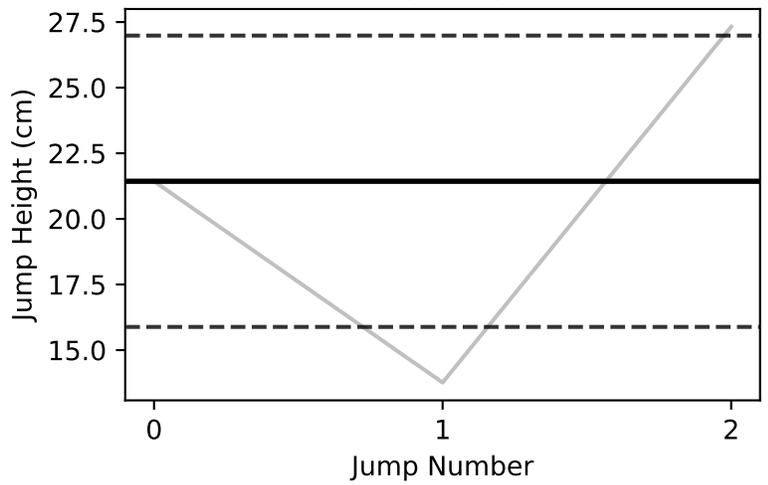
— Left Values    — Right Values    — Left Median    — Right Median    - - -  $\pm 1\sigma$  Left    - - -  $\pm 1\sigma$  Right

# Advanced Combined Jumping Information

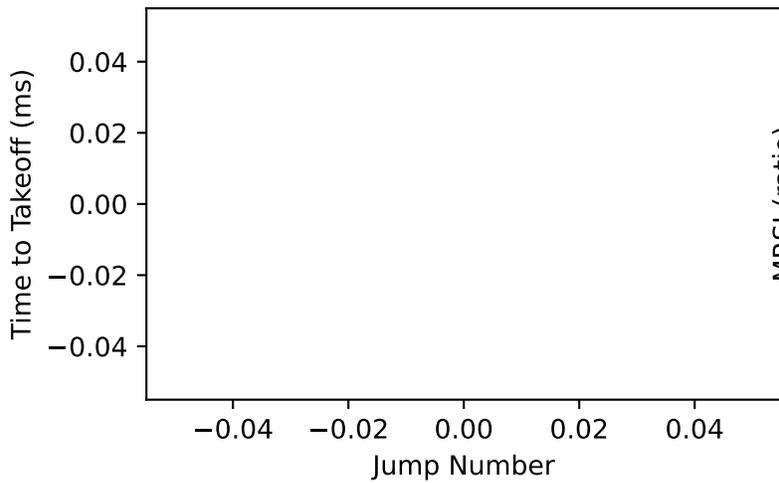
## Jump Time



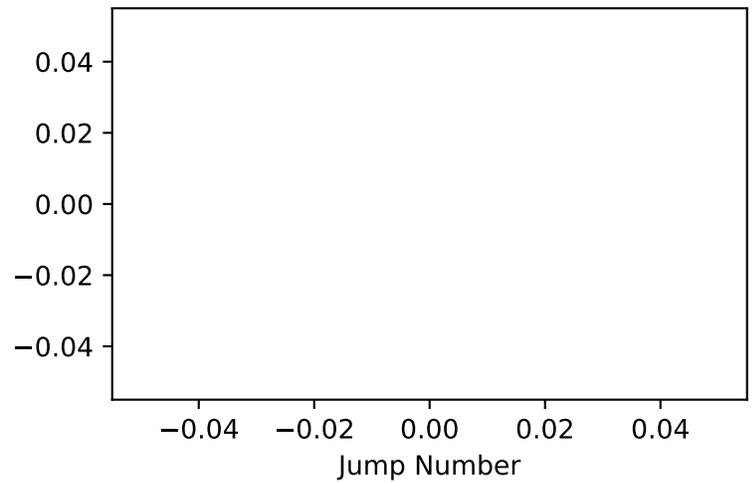
## Jump Height



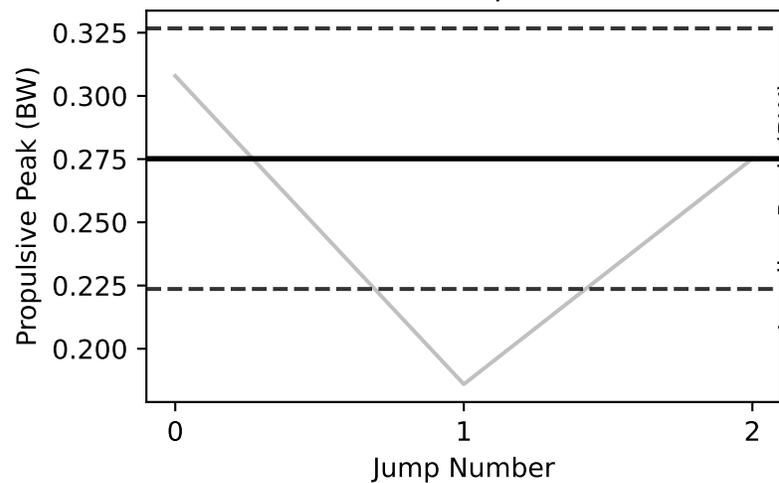
## Time to Takeoff



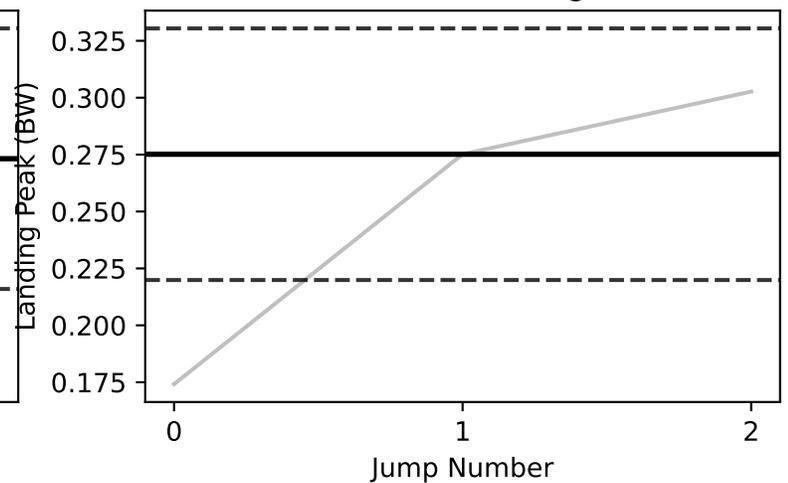
## MRSI



## Mediolateral Propulsive Peak



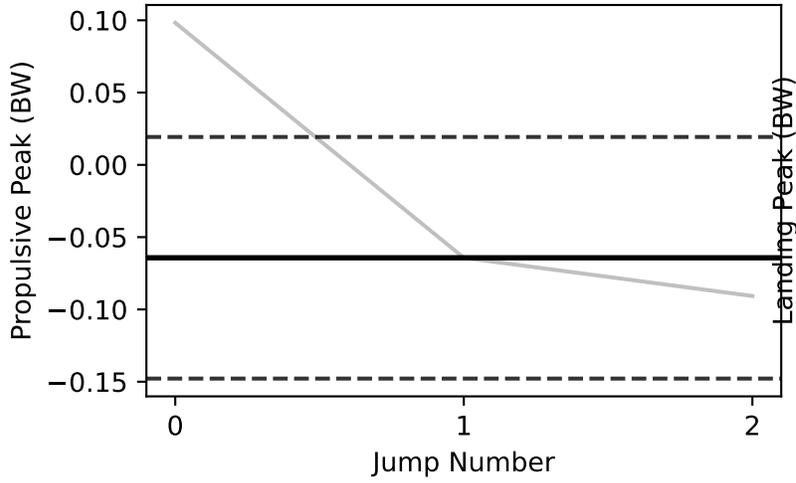
## Mediolateral Landing Peak



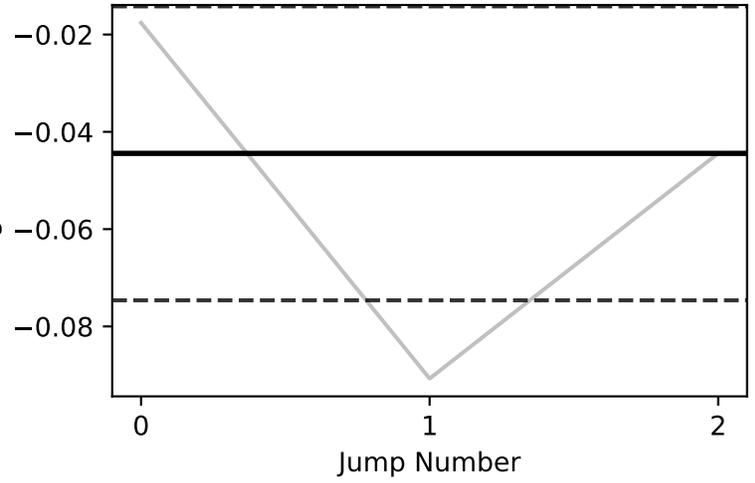
— Values    — Median    - - - ±1σ

# Advanced Combined Jumping Information

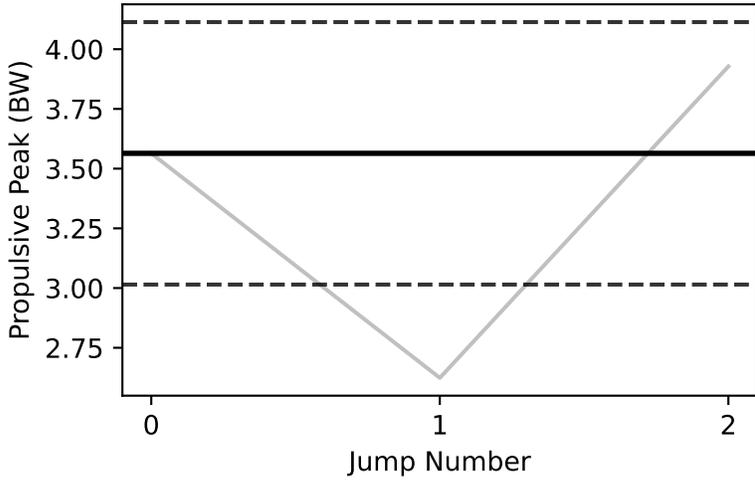
## Anteroposterior Propulsive Peak



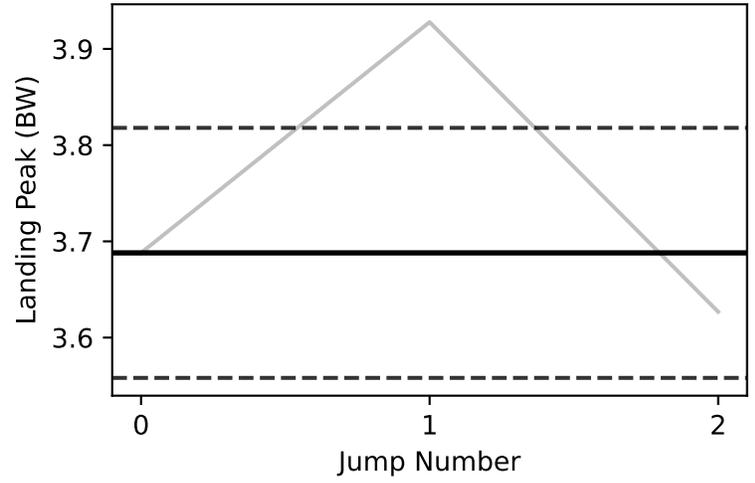
## Anteroposterior Landing Peak



## Vertical Propulsive Peak



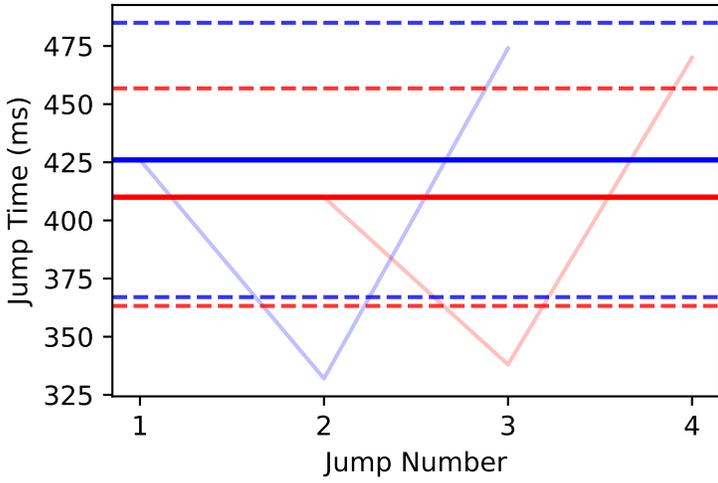
## Vertical Landing Peak



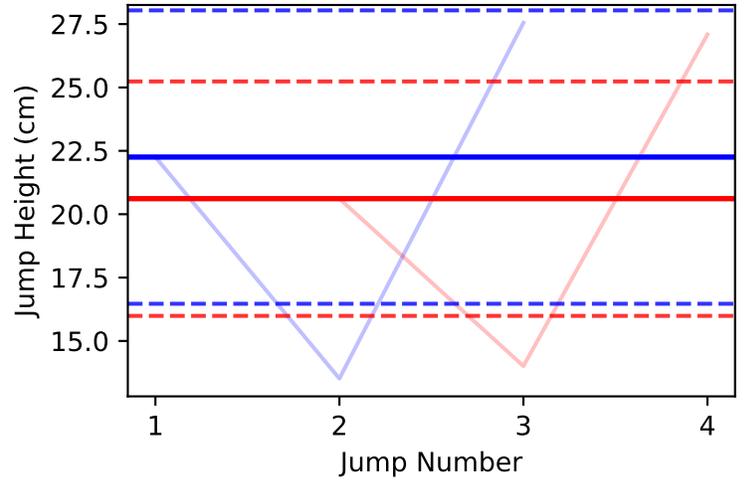
— Values    — Median    - - - ±1σ

# Advanced Jumping Information

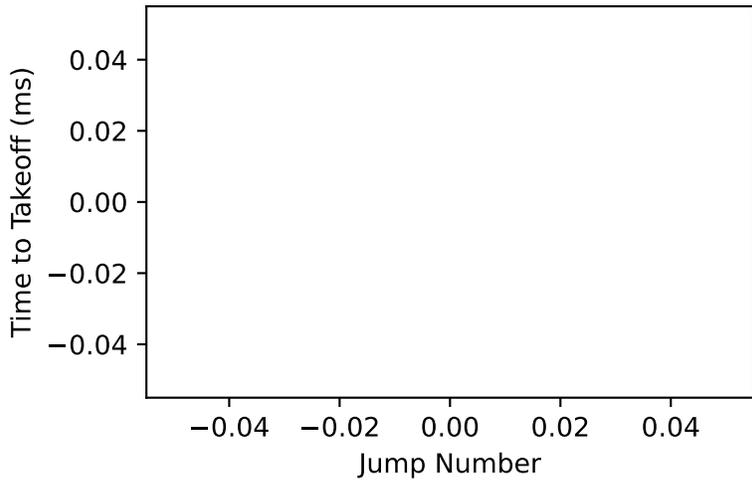
## Jump Time



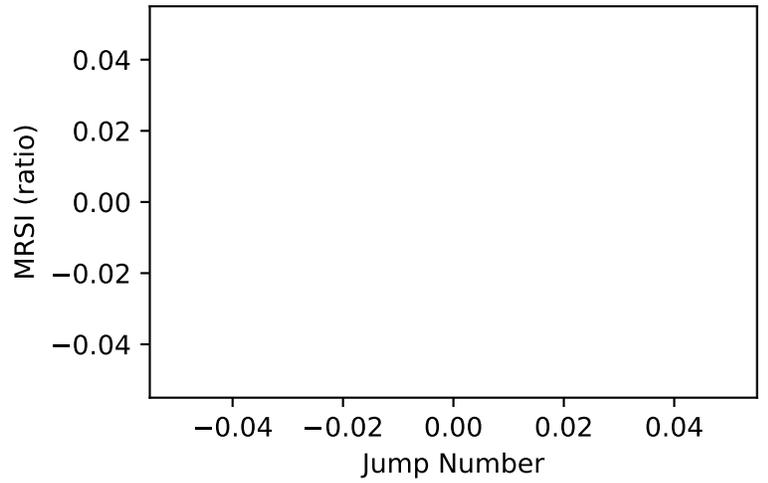
## Jump Height



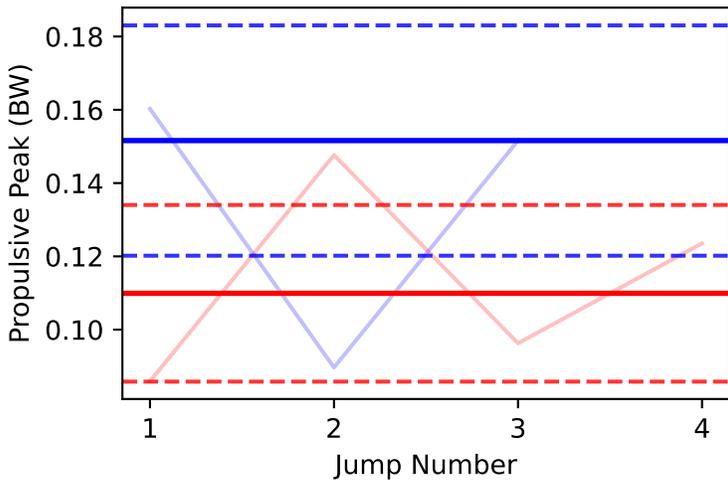
## Time to Takeoff



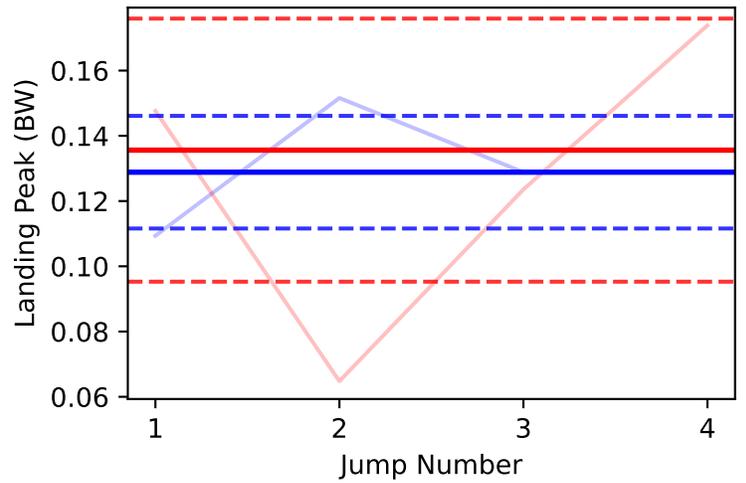
## MRSI



## Mediolateral Propulsive Peak



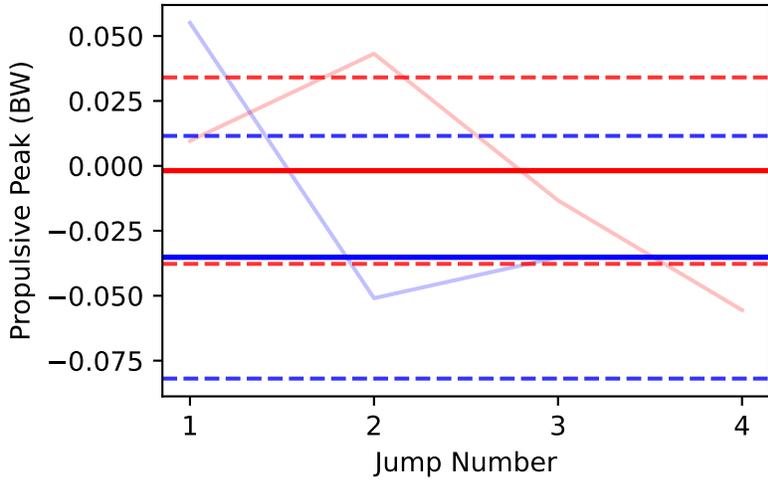
## Mediolateral Landing Peak



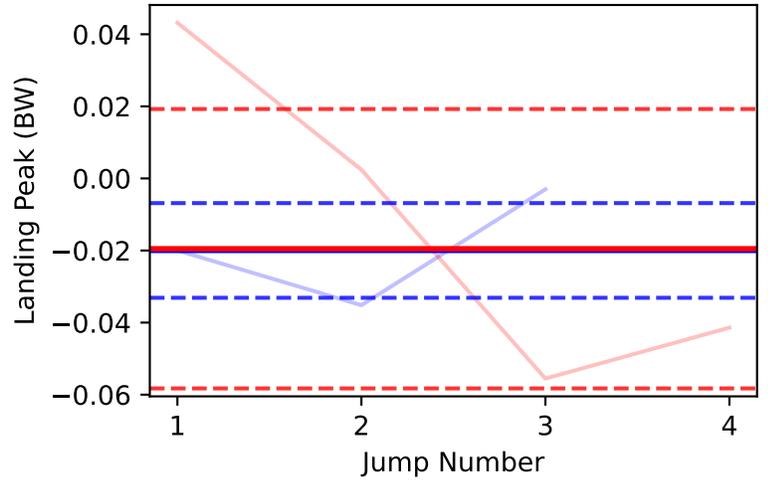
— Left Values   
 — Right Values   
 — Left Median   
 — Right Median   
 - - - ±1σ Left   
 - - - ±1σ Right

# Advanced Jumping Information

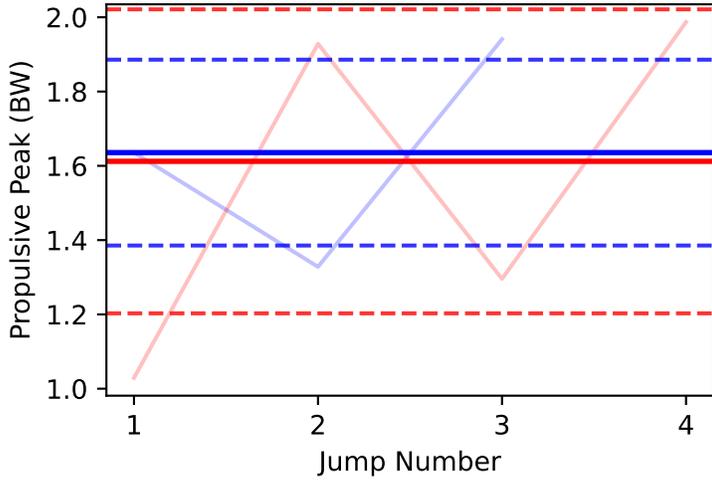
## Anteroposterior Propulsive Peak



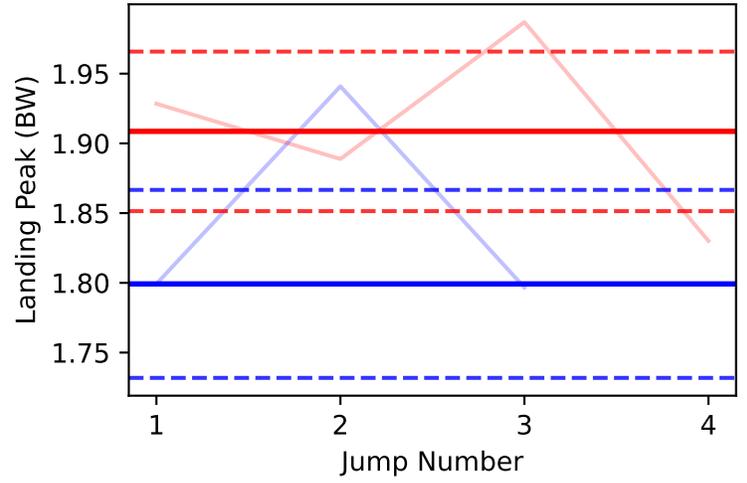
## Anteroposterior Landing Peak



## Vertical Propulsive Peak



## Vertical Landing Peak



— Left Values   
 — Right Values   
 — Left Median   
 — Right Median   
 - - -  $\pm 1\sigma$  Left   
 - - -  $\pm 1\sigma$  Right