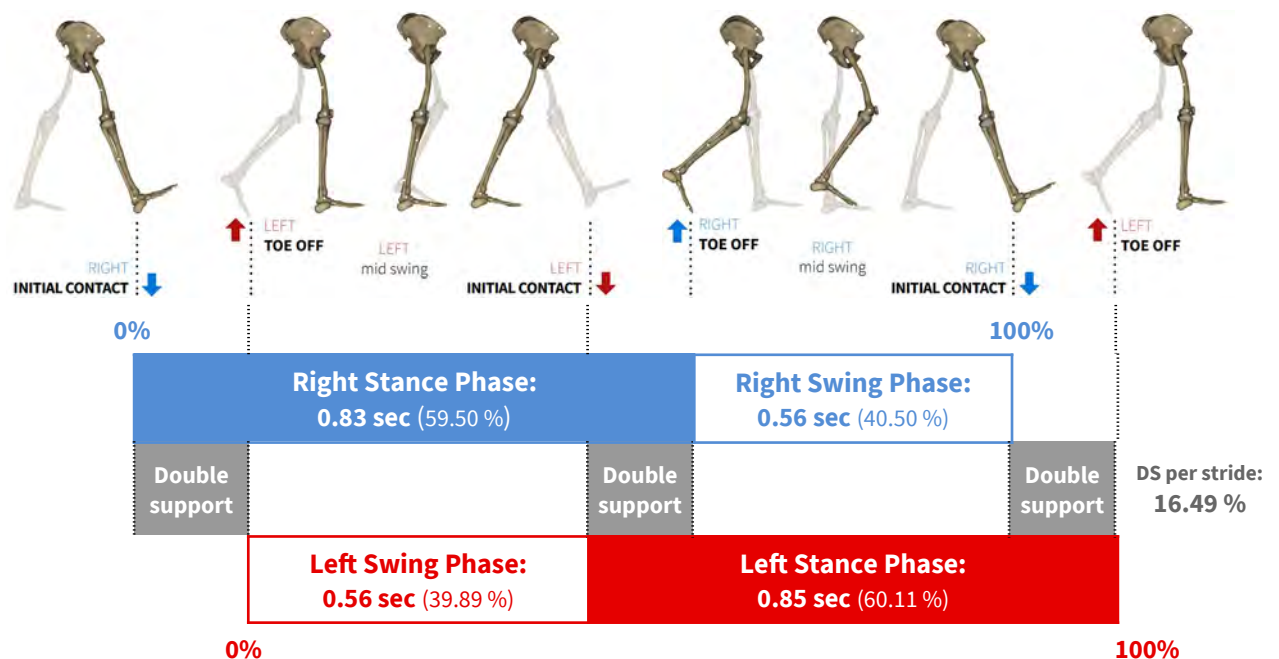


<b>FULL NAME</b> <b>CON, VICON</b>	<b>BIRTHDAY</b>	<b>STUDY PERFORMED BY:</b> 
<b>TESTER DETAILS</b> <b>Prop physics</b>	<b>REPORT DATE</b> <b>3/6/2021</b>	

## Overview of the study:

<b>Total number of strides</b>	<b>Cadence</b>	<b>Speed</b>
<b>Left: 5.00</b> <b>Right: 5.00</b>	85.78 steps/min	0.87 m/sec

## Gait cycle analysis:



## Step and stride analysis:

STEP OVER STRIDE LENGTHS (mm):			STEP OVER STRIDE DURATIONS (sec):		
L	611.28	1174.03	L	0.73	1.41
Mean	613.42	1201.46			
R	615.55	1228.88	R	0.70	1.39

<b>Max. Heel Height</b>	
<b>Left</b>	0.33 m
<b>Right</b>	0.34 m



<b>Width of base of support</b>	
	0.14 m



## Left Stride

<b>Pelvis</b>	<b>Minimum Value</b>	<b>Maximum Value</b>	<b>Joint Range</b>
<i>Sagittal Plane - Tilt Anterior [+)/Posterior [-]</i>	-17°	-8°	9°
<i>Coronal Plane - Obliquity Superior [+)/Inferior [-]</i>	-1°	8°	9°
<i>Transversal Plane - Rotation Internal [+)/External [-]</i>	-22°	26°	48°
<b>Left Hip</b>	<b>Minimum Value</b>	<b>Maximum Value</b>	<b>Joint Range</b>
<i>Sagittal Plane - Flexion [+)/Extension [-]</i>	-35°	3°	38°
<i>Coronal Plane - Adduction [+)/Abduction [-]</i>	-7°	10°	17°
<i>Transversal Plane - Rotation Internal [+)/External [-]</i>	-7°	0°	7°
<b>Left Knee</b>	<b>Minimum Value</b>	<b>Maximum Value</b>	<b>Joint Range</b>
<i>Sagittal Plane - Flexion [+)/Extension [-]</i>	-12°	53°	65°
<i>Coronal Plane - Valgus [+)/Varus [-]</i>	-7°	4°	11°
<i>Transversal Plane - Rotation Internal [+)/External [-]</i>	-19°	3°	22°
<b>Left Ankle</b>	<b>Minimum Value</b>	<b>Maximum Value</b>	<b>Joint Range</b>
<i>Sagittal Plane - Dorsal Flexion[+)/ Plantar Flexion[-]</i>	-10°	24°	34°
<i>Coronal Plane - Adduction [+)/Abduction [-]</i>	-9°	6°	15°
<i>Transversal Plane - Rotation Internal [+)/External [-]</i>	-2°	20°	22°
<b>Left Foot</b>	<b>Minimum Value</b>	<b>Maximum Value</b>	<b>Joint Range</b>
<i>Transversal Plane - Rotation Internal [+)/External [-]</i>	-22°	17°	38°

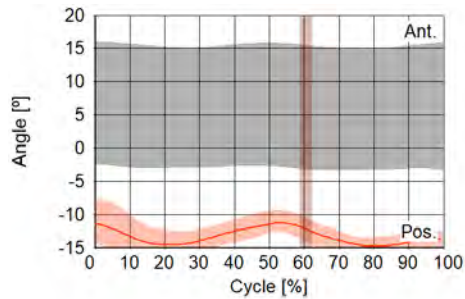
## Right Stride

<b>Pelvis</b>	<b>Minimum Value</b>	<b>Maximum Value</b>	<b>Joint Range</b>
<i>Sagittal Plane - Tilt Anterior [+]/Posterior [-]</i>	-17°	-8°	9°
<i>Coronal Plane - Obliquity Superior [+]/Inferior [-]</i>	-8°	1°	9°
<i>Transversal Plane - Rotation Internal [+]/External [-]</i>	-20°	20°	40°
<b>Right Hip</b>	<b>Minimum Value</b>	<b>Maximum Value</b>	<b>Joint Range</b>
<i>Sagittal Plane - Flexion [+]/Extension [-]</i>	-38°	5°	43°
<i>Coronal Plane - Adduction [+]/Abduction [-]</i>	-15°	1°	16°
<i>Transversal Plane - Rotation Internal [+]/External [-]</i>	-5°	7°	12°
<b>Right Knee</b>	<b>Minimum Value</b>	<b>Maximum Value</b>	<b>Joint Range</b>
<i>Sagittal Plane - Flexion [+]/Extension [-]</i>	-10°	56°	67°
<i>Coronal Plane - Valgus [+]/Varus [-]</i>	-12°	-5°	7°
<i>Transversal Plane - Rotation Internal [+]/External [-]</i>	-15°	0°	15°
<b>Right Ankle</b>	<b>Minimum Value</b>	<b>Maximum Value</b>	<b>Joint Range</b>
<i>Sagittal Plane - Dorsal Flexion[+]/ Plantar Flexion[-]</i>	-8°	22°	30°
<i>Coronal Plane - Adduction [+]/Abduction [-]</i>	-19°	-5°	14°
<i>Transversal Plane - Rotation Internal [+]/External [-]</i>	-11°	5°	16°
<b>Right Foot</b>	<b>Minimum Value</b>	<b>Maximum Value</b>	<b>Joint Range</b>
<i>Transversal Plane - Rotation Internal [+]/External [-]</i>	-24°	4°	28°

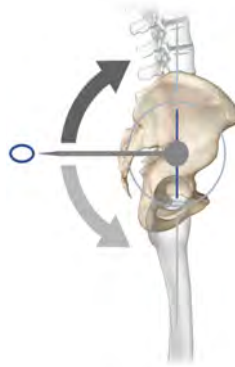
## Gait graphs

### 1. PELVIS

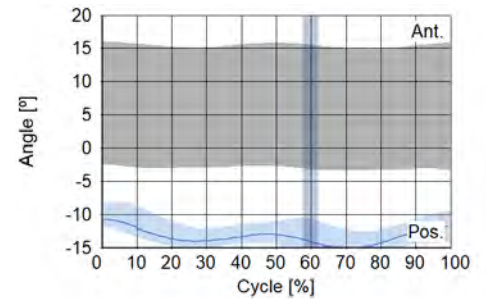
**Left**



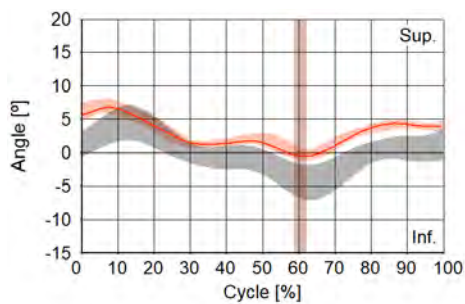
**Pelvic Tilt**



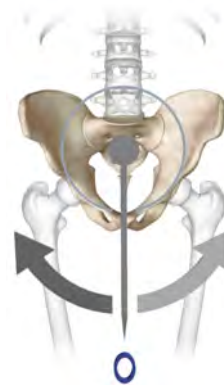
**Right**



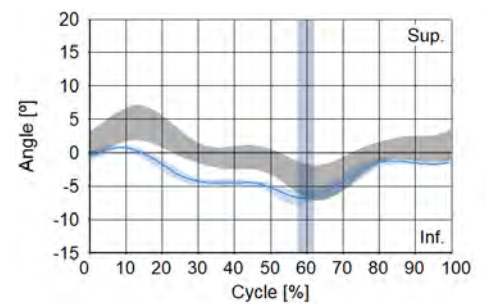
**Left**



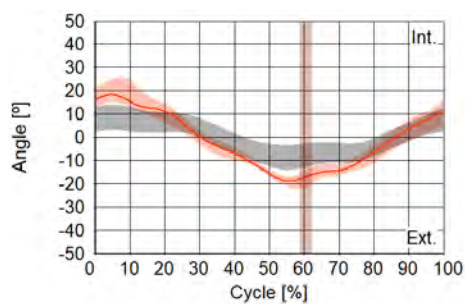
**Pelvic Obliquity**



**Right**



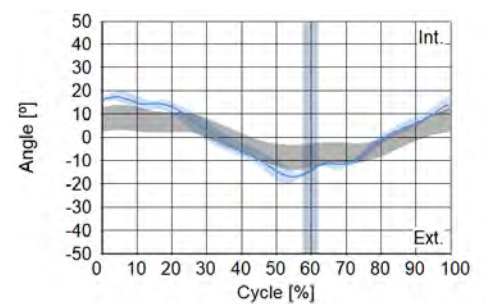
**Left**



**Pelvic Rotation**



**Right**



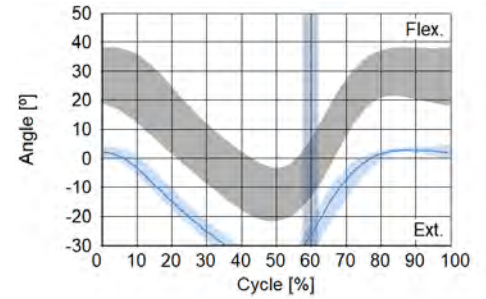
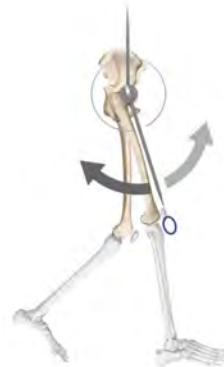
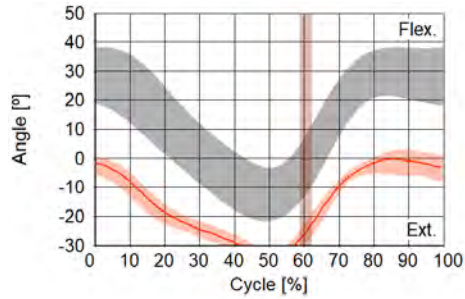
The reference data presented in the graphs belongs to the STT Helen Hayes (2019) and contains the following samples and filters:  
Samples: 27 Gender: Female

## 2. Hips

**Left**

**Hips Flex/Ext**

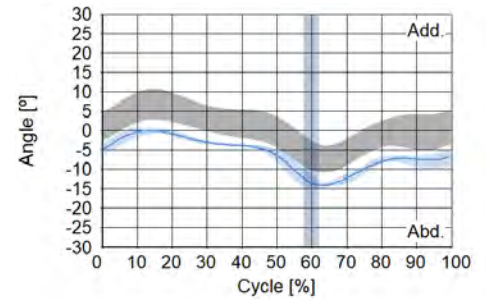
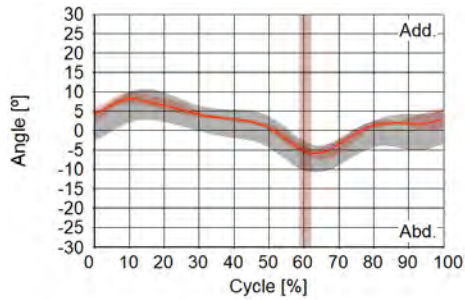
**Right**



**Left**

**Hips Abd/Add**

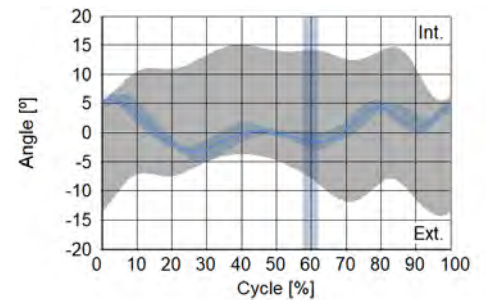
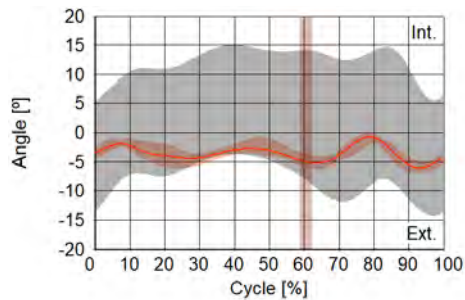
**Right**



**Left**

**Hips Int/Ext Rot**

**Right**



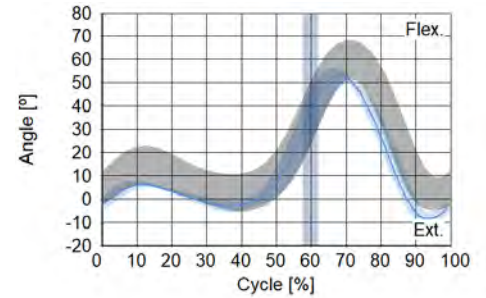
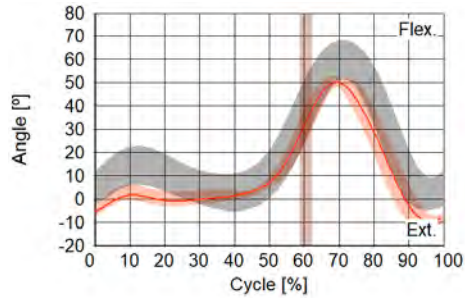
The reference data presented in the graphs belongs to the STT Helen Hayes (2019) and contains the following samples and filters:  
Samples: 27 Gender: Female

## 3. Knees

**Left**

**Knee Flex/Ext**

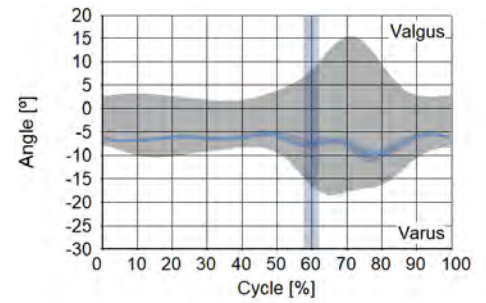
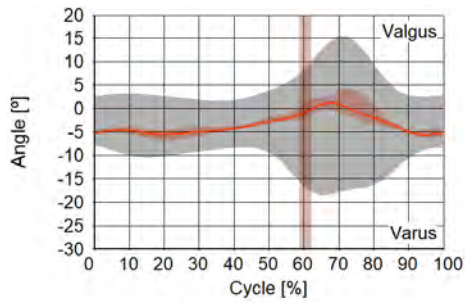
**Right**



**Left**

**Knee Abd/Add**

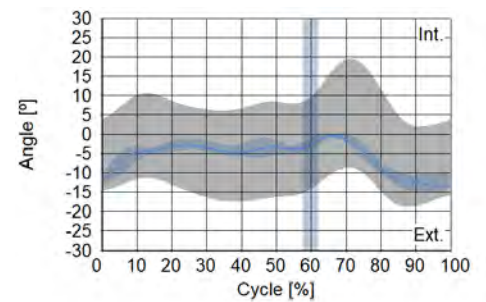
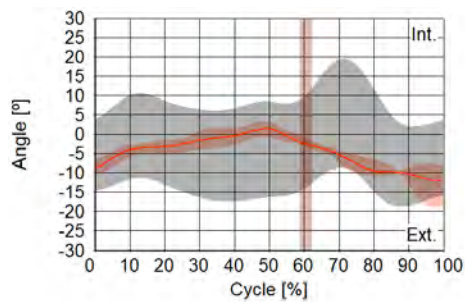
**Right**



**Left**

**Knee Int/Ext Rot**

**Right**



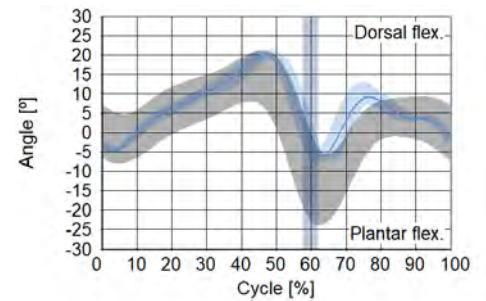
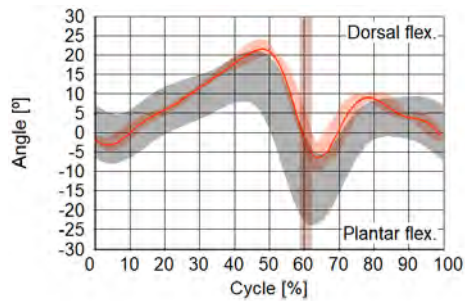
The reference data presented in the graphs belongs to the STT Helen Hayes (2019) and contains the following samples and filters:  
 Samples: 27 Gender: Female

## 4. Ankles

**Left**

**Ankle Flex/Ext**

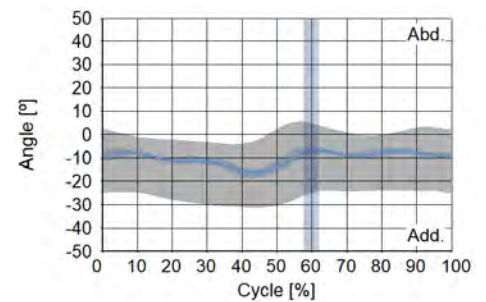
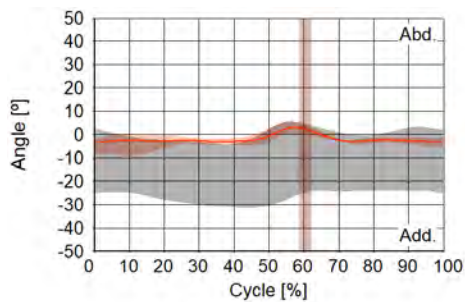
**Right**



**Left**

**Ankle Abd/Add**

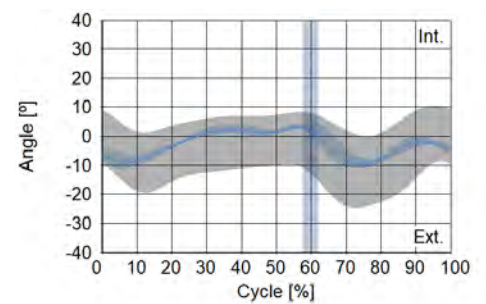
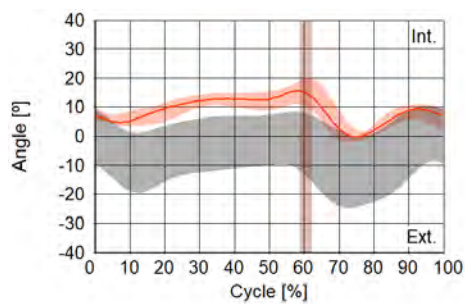
**Right**



**Left**

**Ankle Int/Ext Rot**

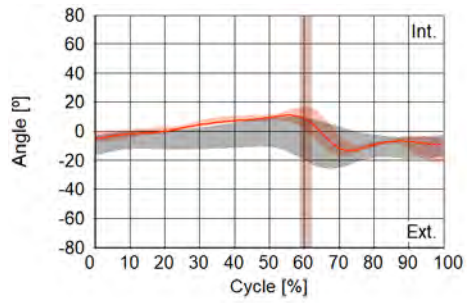
**Right**



The reference data presented in the graphs belongs to the STT Helen Hayes (2019) and contains the following samples and filters:  
Samples: 27 Gender: Female

## 5. Foot

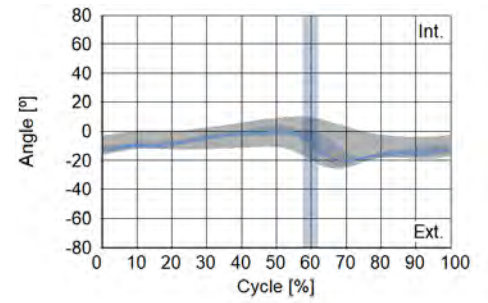
**Left**



**Foot Direction**



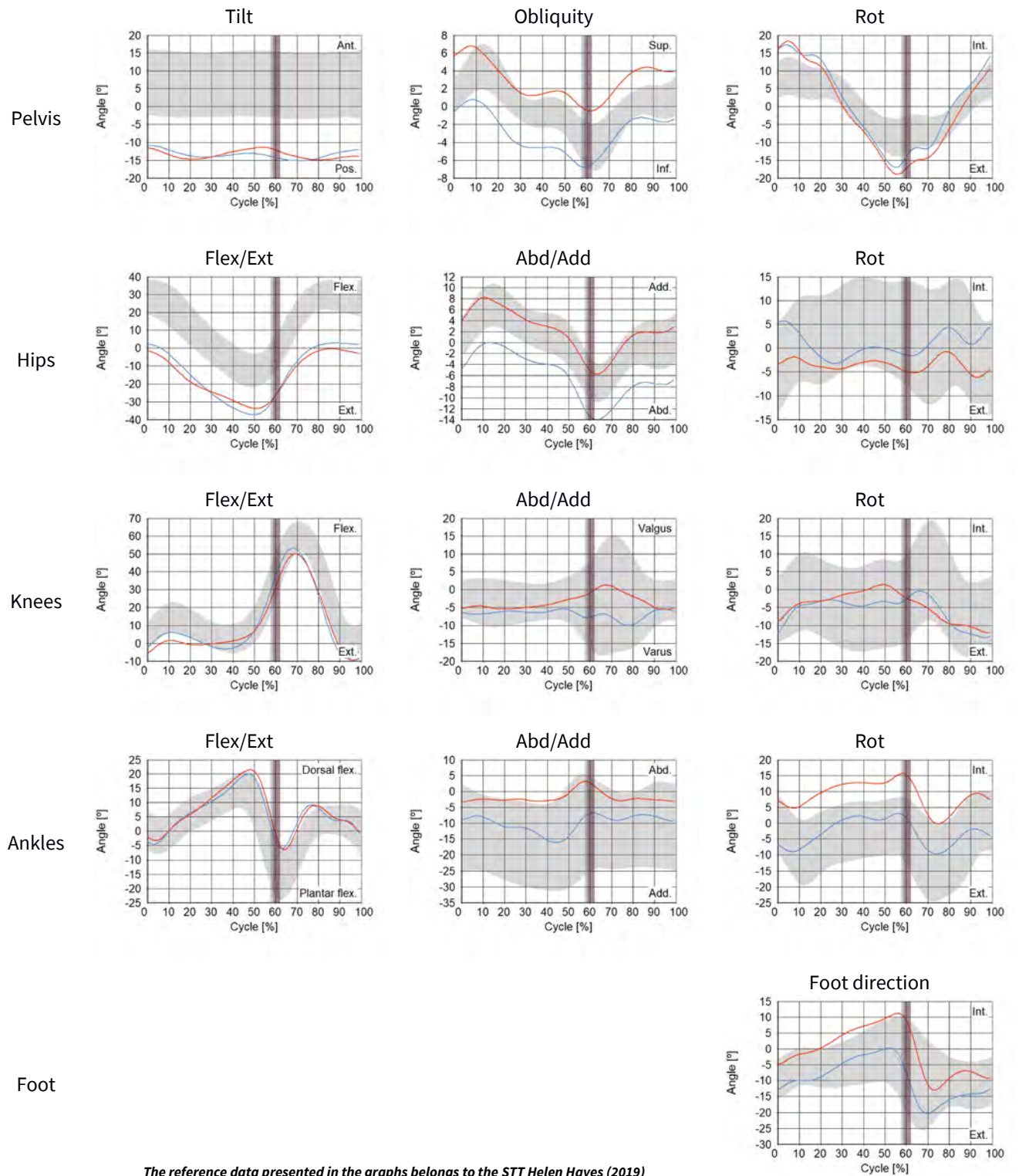
**Right**



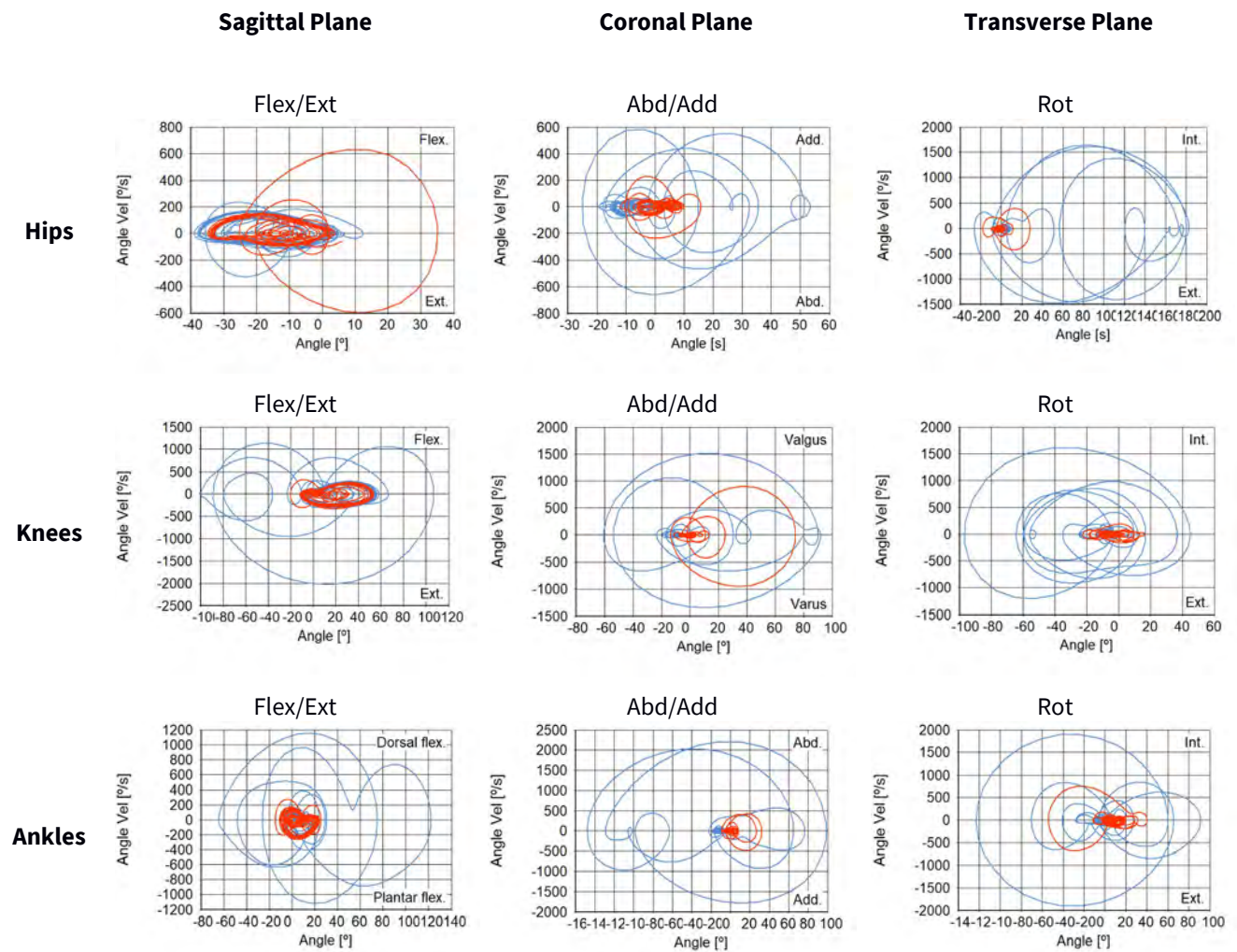
*The reference data presented in the graphs belongs to the STT Helen Hayes (2019) and contains the following samples and filters:  
Samples: 27 Gender: Female*



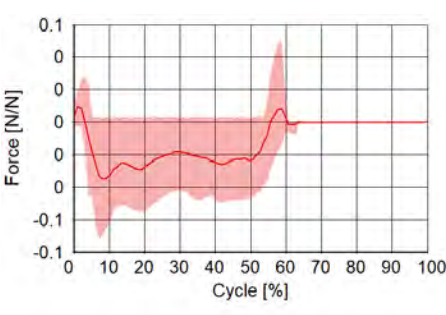
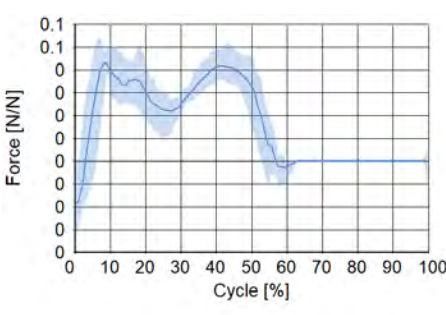
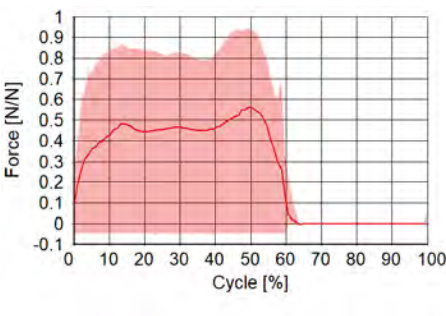
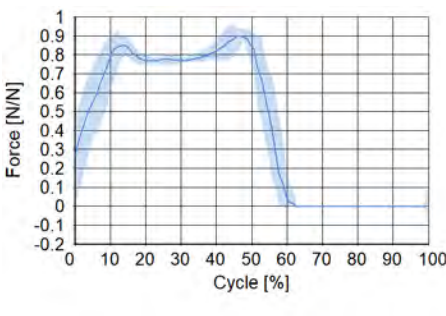
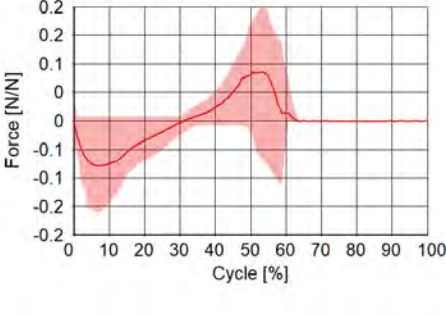
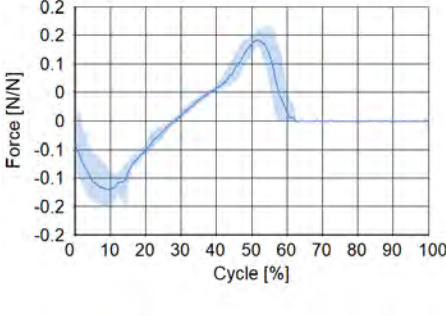
## General view



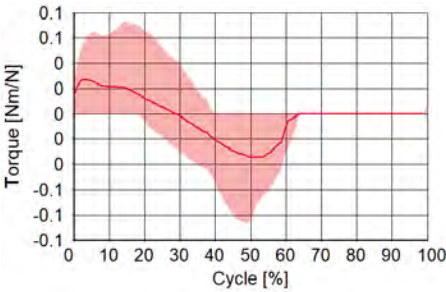
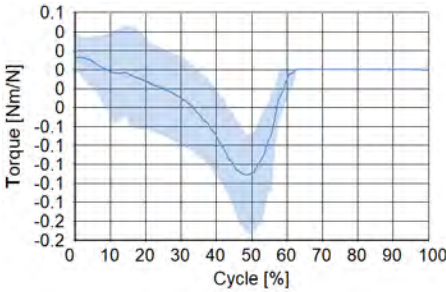
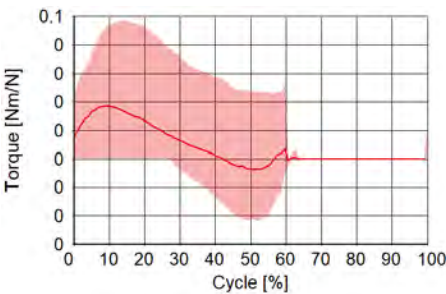
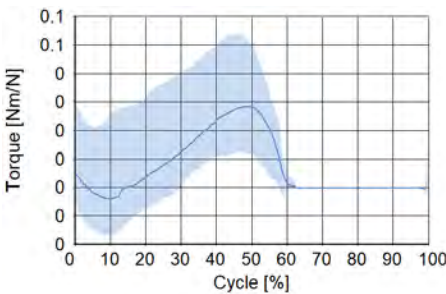
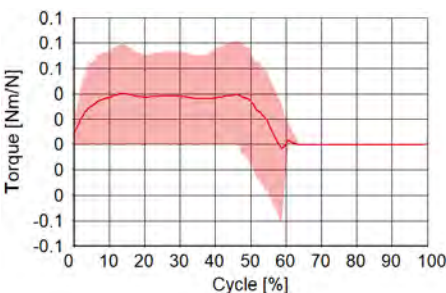
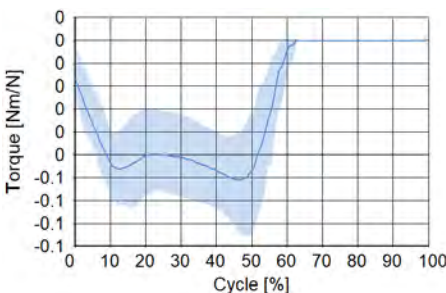
## Angle vs. Angular Speed



## Gait force data

	Ground force for gait cycle divided by weight (left)	Ground force for gait cycle divided by weight (right)
<b>X</b>		
<b>Y</b>		
<b>Z</b>		

## Gait torque data

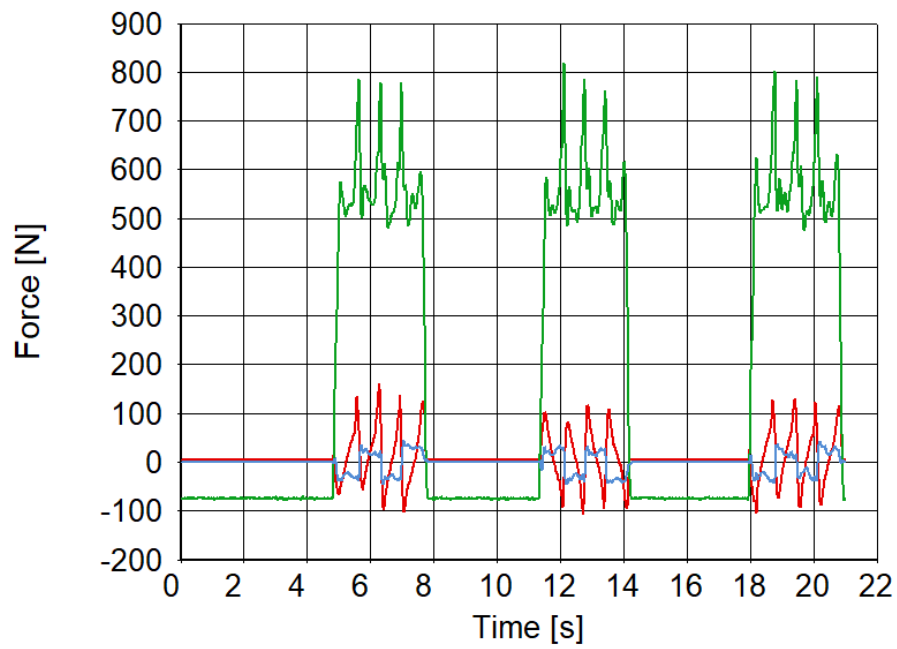
	Ground moments for gait cycle divided by weight (left)	Ground moments for gait cycle divided by weight (right)
<b>X</b>		
<b>Y</b>		
<b>Z</b>		

## Force plates

### Force values

	Maximum	Minimum
F <sub>x</sub>	162.54 [N]	-106.51 [N]
F <sub>y</sub>	820.11 [N]	-77.17 [N]
F <sub>z</sub>	45.28 [N]	-44.81 [N]

### Graphs

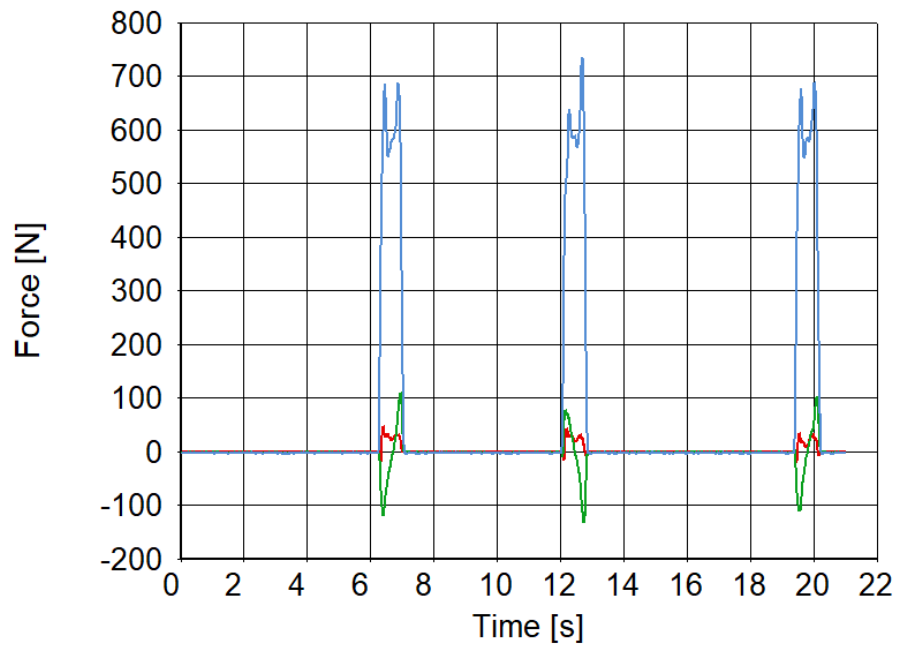


## Force plate 0

### Absolute values

	Maximum	Minimum
Fx	47.36 [N]	-22.78 [N]
Fy	109.61 [N]	-130.55 [N]
Fz	734.45 [N]	-4.37 [N]

### Graphs

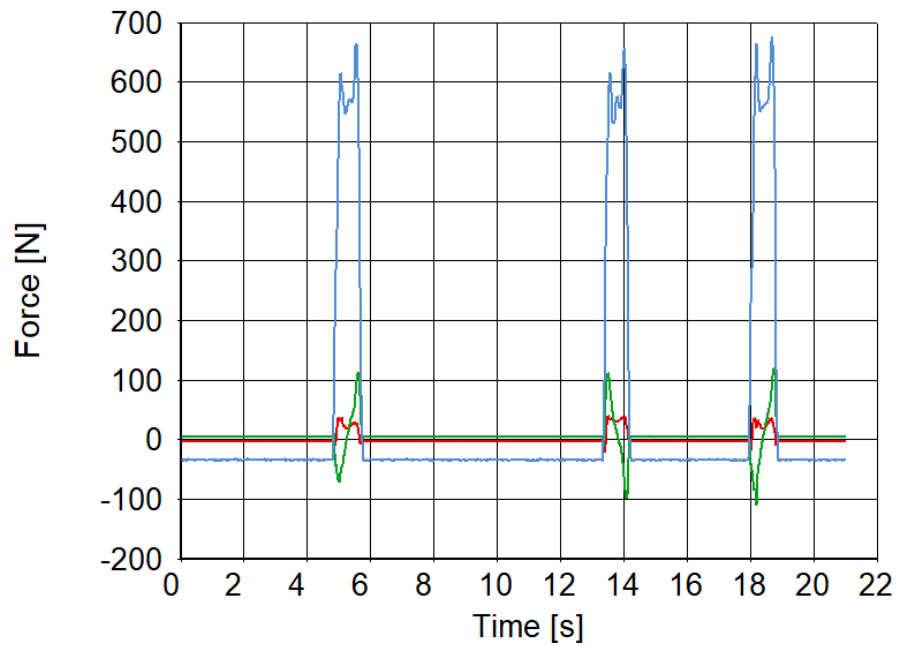


## Force plate 1

### Absolute values

	Maximum	Minimum
Fx	40.30 [N]	-20.44 [N]
Fy	120.79 [N]	-109.75 [N]
Fz	677.24 [N]	-35.57 [N]

### Graphs

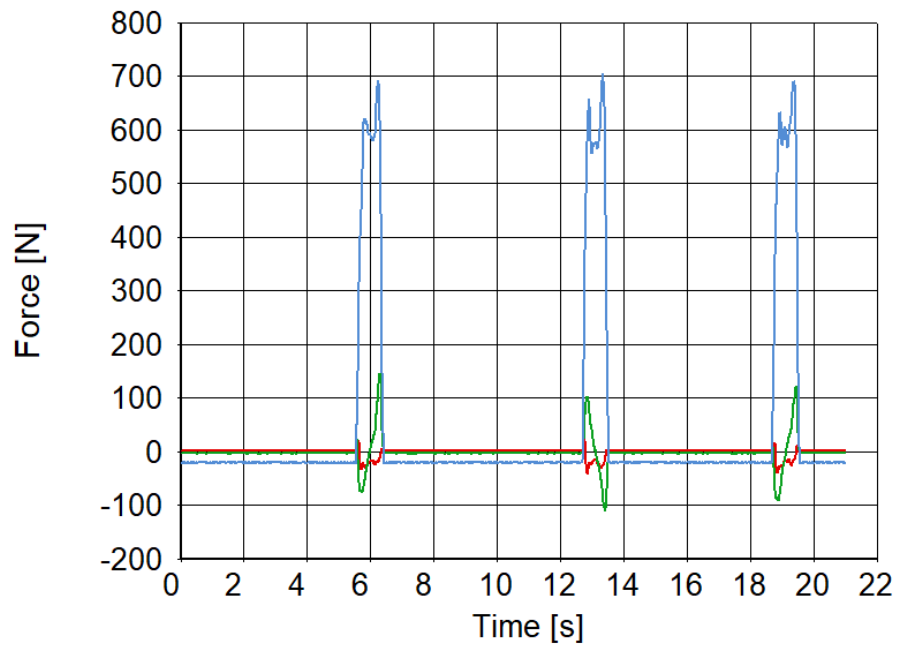


## Force plate 2

### Absolute values

	Maximum	Minimum
Fx	29.34 [N]	-40.04 [N]
Fy	145.67 [N]	-108.61 [N]
Fz	704.37 [N]	-22.07 [N]

### Graphs





## Force plate 3

### Absolute values

	Maximum	Minimum
Fx	14.93 [N]	-52.43 [N]
Fy	118.75 [N]	-117.58 [N]
Fz	688.90 [N]	-21.10 [N]

### Graphs

