

COUNTERMOVEMENT JUMP TEST

Final Functional Report

Athlete's Details:

FIRST NAME: DEMO

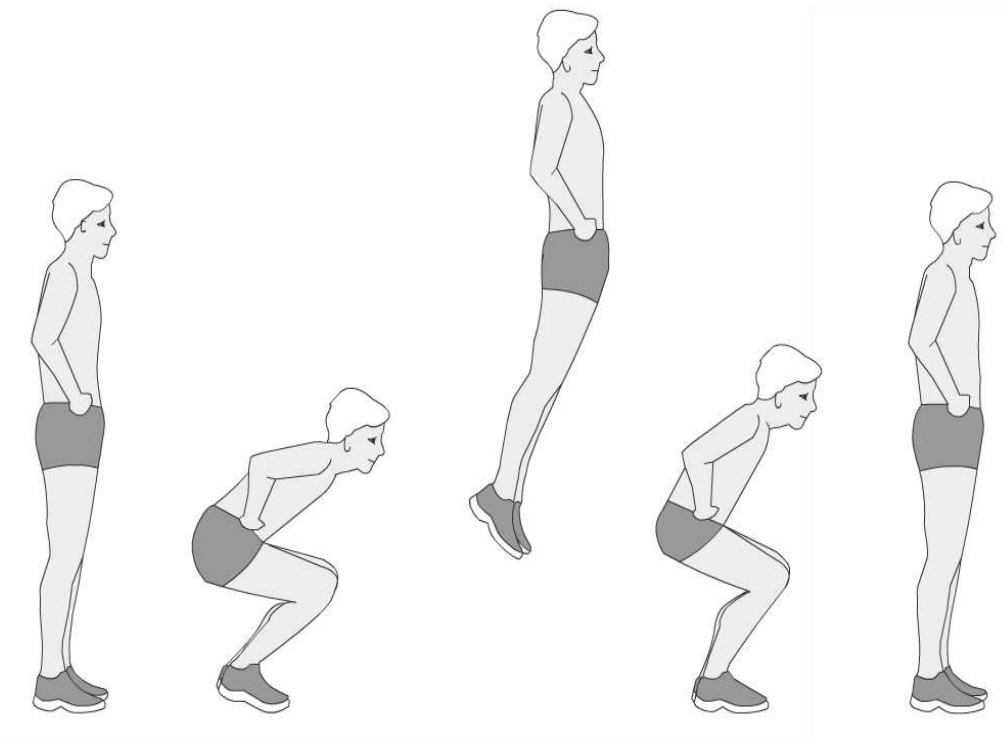
SESSION DATE: 3/13/2017

LAST NAME: DUCKS

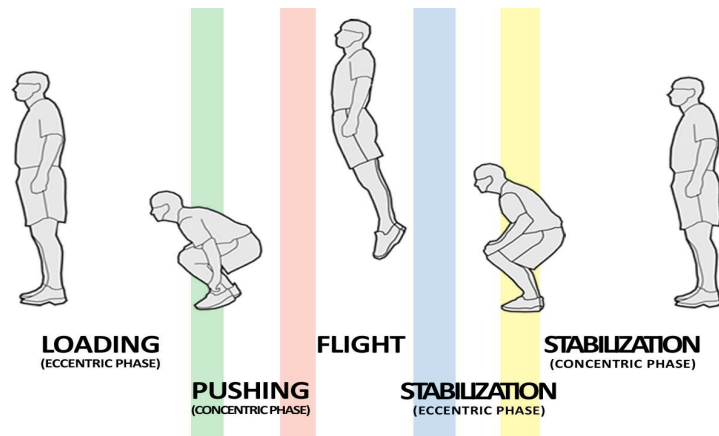
SPORT: BASEBALL

BIRTHDAY: 13/3/2000

PROTOCOL: CM Jump complete



Notes:



Temporal Parameters

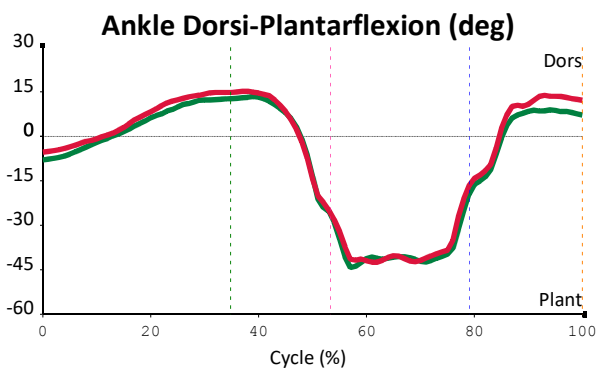
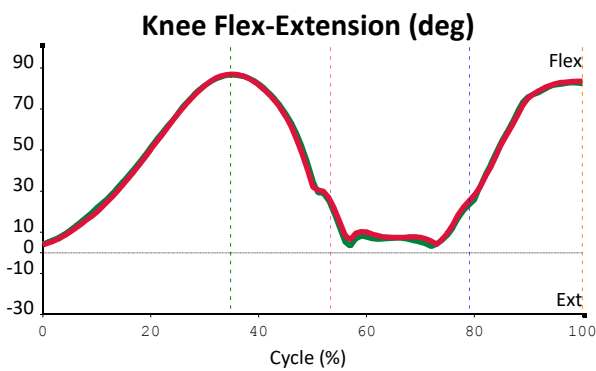
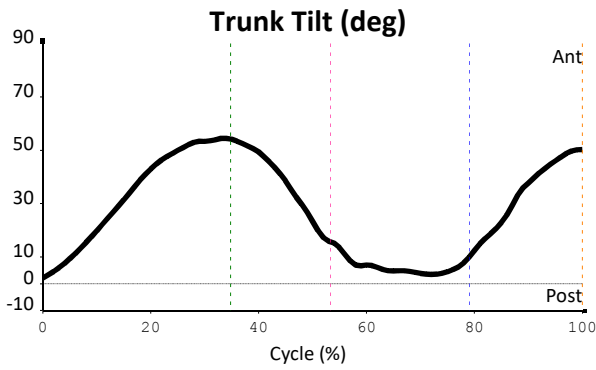
Jump Duration (s):	1.94 ± .05
Eccentric Phase Duration(s):	0.67 ± .04
Concentric Phase Duration (s):	0.36 ± .01
Flight Phase Duration (s):	0.5 ± .01
Stabilization Phase Duration (s):	0.41 ± .08
Eccentric Phase (%):	34.8 ± 3
Concentric Phase (%):	18.54 ± .07
Flight Phase (%):	25.75 ± .92
Stabilization Phase (%):	20.92 ± 3.85

Spatial Parameters

	AVERAGE	BEST VALUE
Flight Height (cm):	29.44 ± .99	30.43
Jump Height (cm):	40.47 ± 1.03	41.5
Countermovement Depth (cm):	35.04 ± 1.34	36.38
Flight Height (%height):	16.54 ± .55	17.09
Jump Height (%height):	22.74 ± .58	23.32
Countermovement Depth (%height):	19.69 ± .76	20.44
Velocity at Toe Off (m/s):	2.52 ± .04	2.56
Peak Velocity (m/s):	2.52 ± .04	2.56
Drop-Off Velocity (%):	0.12 ± .03	0.09
R Foot Ant-Post Displacement (cm):	4.29 ± .27	(+) Anterior
L Foot Ant-Post Displacement (cm):	-.74 ± .69	(-) Posterior

Kinematics: Right VS Left Limb

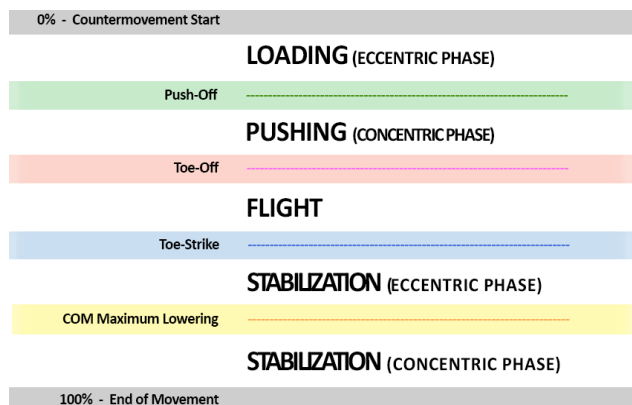
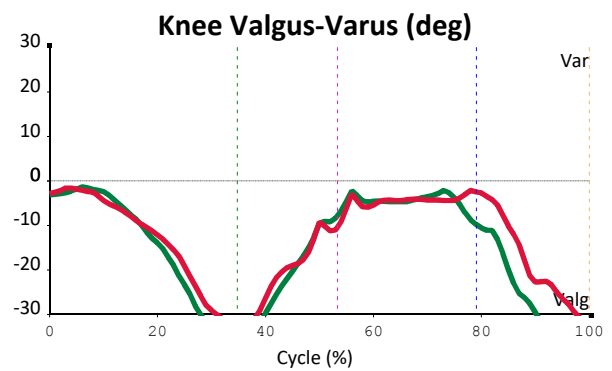
Sagittal Plane



— R Limb

— L Limb

Frontal Plane



Kinematics: Right VS Left Limb

Angles

Trunk Tilt (deg):	- Standing		8.5 ± 6.2
	- Concentric Start		53.35 ± .55
	- Toe Off		13.5
	- Toe Strike		4.6
	- Max Lowering (Stab)		50.25 ± 3.25
		RIGHT LIMB	LEFT LIMB
Knee Flex-Extension (deg):	- Standing	9.6 ± 8.6	8.6 ± 7.8
	- Concentric Start	89.2 ± .4	89.5 ± 1
	- Toe Off	4.4 ± 1	3.45 ± 1.95
	- Toe Strike	14.45 ± .55	13.15 ± .45
	- Max Lowering (Stab)	82.35 ± 2.65	83.5 ± 3.8
Knee Valgus-Varus (deg):	- Standing	-4.45 ± 1.25	-4.5 ± 1
	- Concentric Start	-42.35 ± .05	-36.7 ± .4
	- Toe Off	-.35 ± .25	-.7 ± .6
	- Toe Strike	-2.95 ± .95	-2.45 ± 1.35
	- Max Lowering (Stab)	-42.1 ± 7	-32.2 ± 10.2
Ankle Dorsi-Plantarflex (deg):	- Standing	-6.35 ± 3.65	-3.5 ± 2.5
	- Concentric Start	13.55 ± .45	15.65 ± .85
	- Toe Off	-38.05 ± 1.45	-37.65 ± .85
	- Toe Strike	-34.4 ± 3.3	-34.15 ± .45
	- Max Lowering (Stab)	7.2 ± .6	12.15 ± .25

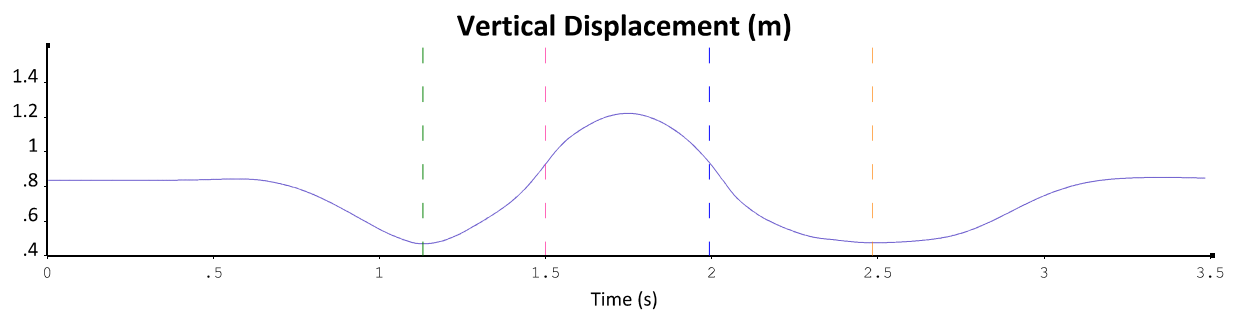
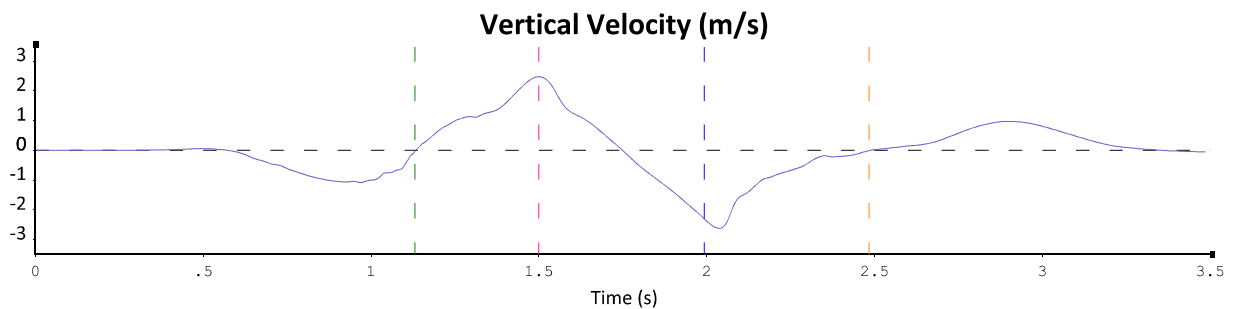
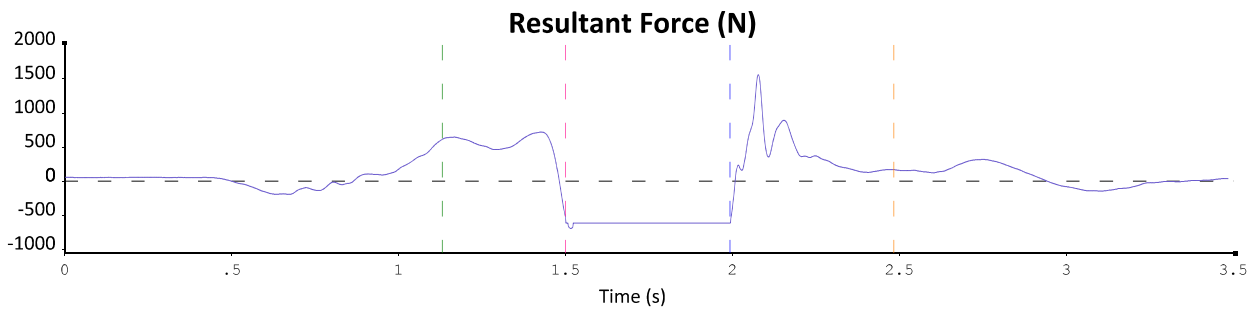
0049~ae~CMJump 01

Jump Height (cm): 41.5

Peak Concentric Force (N): 1334

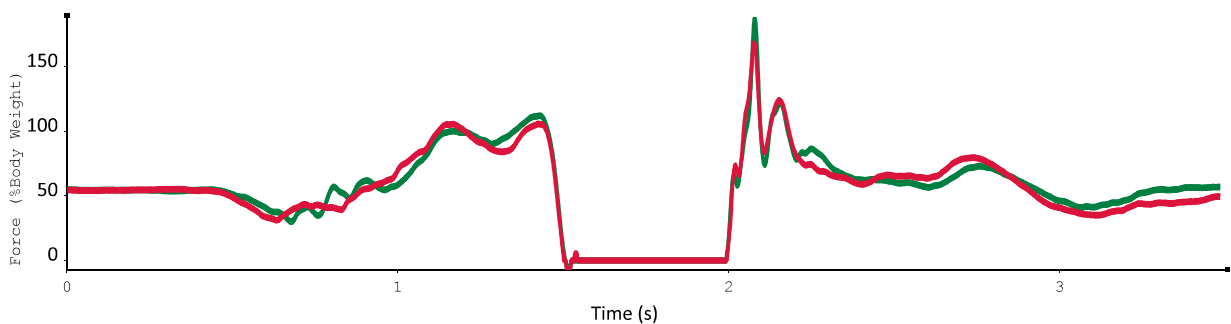
Flight Height (cm): 28.46

Velocity at Toe Off (m/s): 2.47



Kinetics: Right VS Left Limb

Weight (kg): 65.2



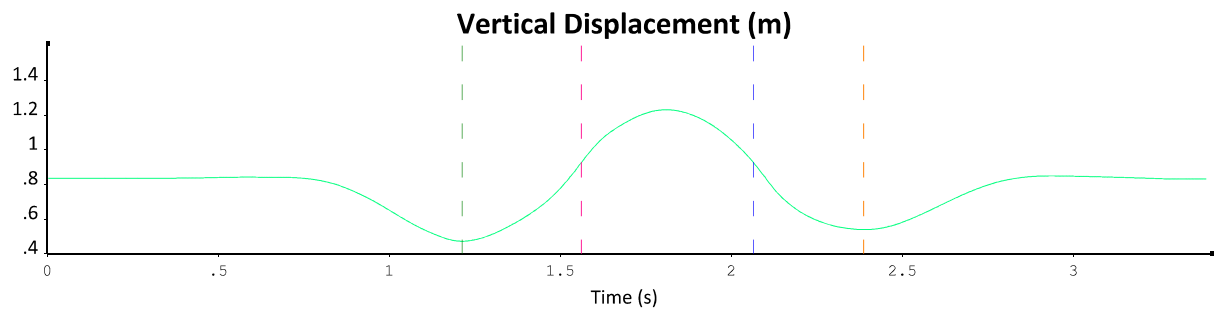
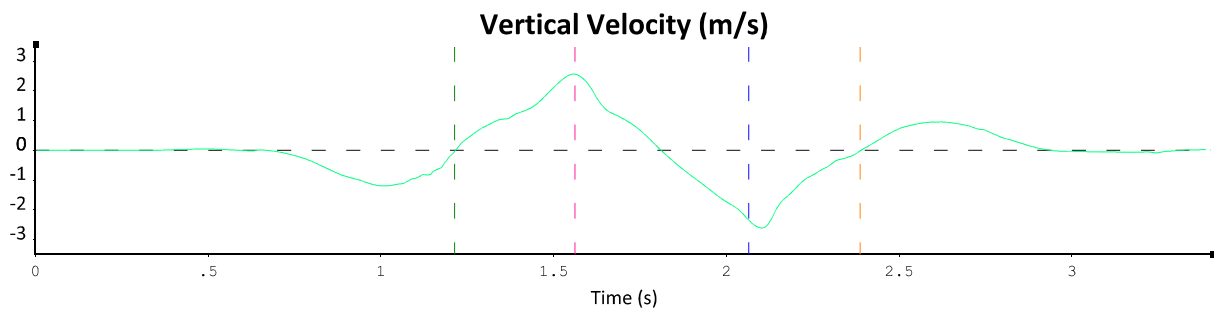
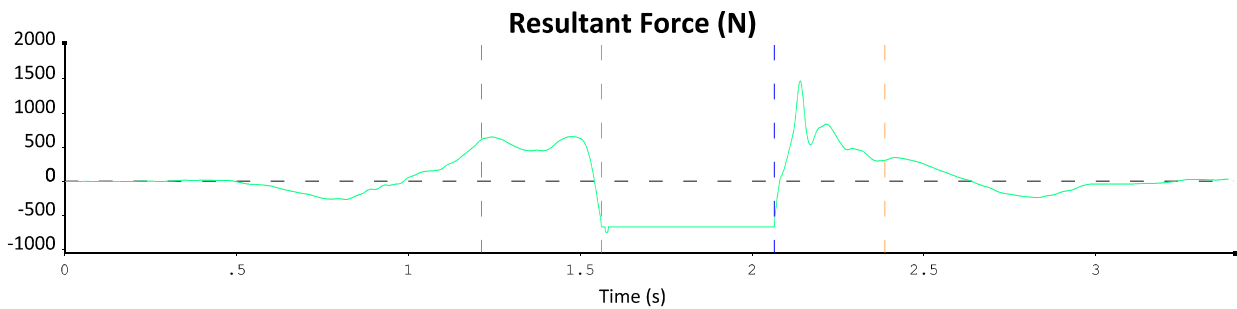
0049~ae~CMJump 02

Jump Height (cm): 39.44

Peak Concentric Force (N): 1321

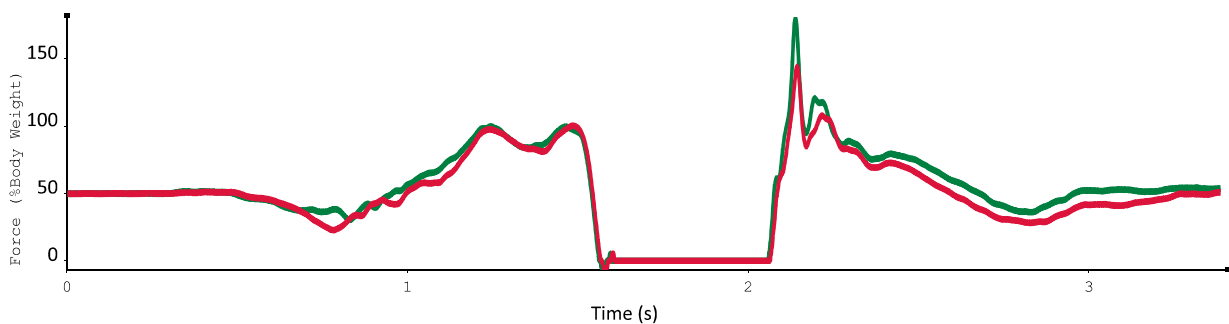
Flight Height (cm): 30.43

Velocity at Toe Off (m/s): 2.56



Kinetics: Right VS Left Limb

Weight (kg): 65.2



Kinetics: Right VS Left Limb

Vertical Force	TOTAL (N)	RIGHT LIMB (%)	LEFT LIMB (%)
- Standing	639 ± 28	50.36 ± .3	49.64 ± .3
- Concentric Start	1255 ± 25	49.79 ± 1.11	50.21 ± 1.11
- Peak Concentric Force	1328 ± 6	50.48 ± .99	49.53 ± 1
- Max Lowering (Stab)	878 ± 97	50.23 ± 1.98	49.77 ± 1.98
Power	TOTAL (kW)	RIGHT LIMB (%)	LEFT LIMB (%)
- Peak Power	2.744 ± .067	50.14 ± .76	49.86 ± .76

Kinetics: Performance Parameters

	AVERAGE	BEST VALUE
Peak Concentric Force (N):	1328 ± 6	1334
Peak Concentric Force (N/Kg)	20.4 ± .98	21.38
Peak Power (kW):	2.744 ± .067	2.812
Peak Power (W/Kg):	42.11 ± .79	42.9
Eccentric Rate of Force Develop (N/s):	2521.39 ± 198.79	2720.17
Eccentric Rate of Force Develop (N/Kg/s):	3.78 ± .14	3.92
Concentric Rate of Force Develop (N/s):	253.12 ± 100.52	353.64
Concentric Rate of Force Develop (N/Kg/s):	0.39 ± .17	0.56
	AVERAGE	
Concentric Power (kW):	1.394 ± .045	
Leg Stiffness (kN/m):	3.8 ± .16	