

# READ ME

This repository contains the following data and models used in the current sensitivity analysis (Lower Limb 2010 – ALLM; Gait 2392 - G2392; London Lower Limb - LLLM).

- Three scaled musculoskeletal models:
  1. ALLM\_Scaled.osim
  2. G2392\_Scaled.osim
  3. LLLM\_Scaled.osim
- Experimental data from the gait lab (static and walking trials) in the OpenSim format:
  1. static\_marker\_trj.trc
  2. walk\_marker\_trj.trc
  3. walk\_grf.mot
- 500 artefact-affected trajectories for each musculoskeletal model. These files, containing the modelled statistical distribution of the soft tissue artefact marker-by-marker, can be visualized in OpenSim (version 3.1 - File-->Preview Experimental Data) as well as being used as an input for simulations.
  1. 500\_TRC\_ALLM.zip
  2. 500\_TRC\_G2392.zip
  3. 500\_TRC\_LLLM.zip

The following table allows matching the marker acronyms used in the article with the ones adopted in the shared data above. The authors apologies for this mismatch, but we decided to change the acronyms in the article to improve readability.

Marker description	Article Acronym	Figshare data Acronym
posterior superior iliac spine	ASIS	ASIS
anterior superior iliac spine	PSIS	PSIS
lateral femoral condyle	LE	KNE
tibial tuberosity	TT	TTB
lateral malleolus	LM	ANK
posterior distal aspect of the heel	HEE	HEE
forefoot	FF	TOE
heads of first metatarsals	MT1	D1MT
heads of fifth metatarsals	MT5	D5MT
lateral thigh cluster	TH1	THI
lateral thigh cluster	TH2	TH2
lateral thigh cluster	TH3	TH3
shank cluster	SH1	SHN1
shank cluster	SH2	TIB

Table – Acronyms used in the article and in the share data. The first letter in the data markers indicates the body side (R = right, L = left). Additional markers on the trunk in the shared data files: 7th Cervical vertebra (C7), 10th Thoracic vertebra (T10), Jugular notch (CLAV), Process Xyphoideus (STRN), Left shoulder - acromioclavicular joint (LSHO), Right shoulder - acromioclavicular joint (RSHO).