

SUPPLEMENTARY MATERIAL

Osteotomy: Calcaneus anterior (migrating object) with reference to calcaneus posterior (rigid object)

x-translation						Within double-examinations (intra)				Between double-examinations (inter)	
						diff_n1abc	diff_n2abc	avg_n1abc	avg_n2abc	diff_n1n2	avg_n1n2
Cadaver foot	wedge	wtx_n1abc1	wtx_n1abc2	wtx_n2abc1	wtx_n2abc2	0.0174999	0.0199001	-2.58415	-2.48565	-0.0985	-1.23785
1	a	-2.5754	-2.5929	-2.4757	-2.4956	0.0174999	0.0199001	-2.58415	-2.48565	-0.0985	-1.23785
2	a	0.4809	0.4415	0.4094	0.3704	0.0394	0.039	0.4612	0.3899	0.0713	0.2047
3	a	-1.8173	-1.8396	-1.7801	-1.8021	0.0223	0.022	-1.82845	-1.7911	-0.0373499	-0.89005
4	a	-0.9712	-1.0032	-0.9722	-1.0042	0.0320001	0.032	-0.9872	-0.9881999	0.0009999	-0.4861
5	a	-3.4125	-3.4902	-3.3943	-3.4712	0.0777001	0.0769	-3.45135	-3.43275	-0.0186	-1.69715
1	b	-4.2001	-4.1857	-4.0522	-4.0318	-0.0144	-0.0204	-4.1929	-4.042	-0.1508999	-2.0261
2	b	-2.0995	-2.0364	-2.1372	-2.0732	-0.0630999	-0.0640001	-2.06795	-2.1052	0.03725	-1.0686001
3	b	-4.1932	-4.1855	-4.1561	-4.1484	-0.0077	-0.0077	-4.18935	-4.15225	-0.0371003	-2.07805
4	b	-2.0467	-2.0813	-2.0286	-2.0633	0.0346	0.0346999	-2.064	-2.04595	-0.0180502	-1.0143001
5	b	-5.5379	-5.5291	-5.5029	-5.4935	-0.0088	-0.0093999	-5.5335	-5.4982	-0.0352993	-2.75145
1	c	-3.823	-3.9087	-3.8916	-3.9779	0.0857	0.0863001	-3.86585	-3.93475	0.0689001	-1.9458
2	c	-3.8259	-3.848	-3.836	-3.8573	0.0221	0.0213001	-3.83695	-3.84665	0.0097001	-1.918
3	c	-5.7285	-5.7603	-5.6924	-5.7239	0.0318003	0.0314999	-5.7444	-5.70815	-0.0362501	-2.8462001
4	c	-2.2974	-2.3022	-2.2652	-2.2696	0.0048001	0.0044	-2.2998	-2.2674	-0.0324001	-1.1326
5	c	-7.9233	-7.9983	-7.8732	-7.949	0.0750003	0.0757999	-7.9608	-7.9111	-0.0497003	-3.9366001

Explanation of variable names**Cadaver foot:** Is the cadaver foot number**Wedge:** Wedge a is 1 cm lengthening, wedge b is 1.25 cm lengthening and wedge c is 1.5 cm lengthening (lengthenings are approx!)**wtx_n1abc1:** translation from neutral examination 1 to wedges a,b,c in examination 1**wtx_n1abc2:** translation from neutral examination 1 to wedges a,b,c in examination 2**wtx_n2abc1:** translation from neutral examination 2 to wedges a,b,c in examination 1**wtx_n2abc2:** translation from neutral examination 2 to wedges a,b,c in examination 2**diff_n1abc (=wtx_n1abc1-wtx_n1abc2)** is the difference within the examination no1 in neutral position to the examination with each wedge within each cadaver foot
diff_n2abc (=wtx_n2abc1-wtx_n2abc2) is the same as above, just with neutral examination no2 as reference**avg_n1abc** is the average of **wtx_n1abc1** and **wtx_n1abc2****avg_n2abc** is the average of **wtx_n2abc1** and **wtx_n2abc2****diff_n1n2** is the difference between the **avg_n1abc** and **avg_n2abc** - used in the Bland Altman plot**avg_n1n2:** mean of the **avg_n1abc** and **avg_n2abc** - used in the Bland Altman plot

The marked area is the differences within each double-examination to assess quality of each double-examination

The green marked area are the means within each double-examination. It can be viewed here, that the measured mean within each wedge, does not correspond to the wedge markings.

This was expected as we did not plan this as an accuracy study, since keeping the wedge in place would be difficult in stiff cadaver feet and we wanted to avoid "crushing" the bone while inserting the wedge to the corresponded markings.

NB! All the measurements of translations are reported in millimetres and all the measurements of rotations are reported in degrees.

y-translation						Within double-examinations (intra)				Between double-examinations (inter)	
						diff_n1abc	diff_n2abc	avg_n1abc	avg_n2abc	diff_n1n2	avg_n1n2
Cadaver foot	wedge	wty_n1abc1	wty_n1abc2	wty_n2abc1	wty_n2abc2	0.1311998	-2.24875	-2.5381	0.28935	-1.2362501	
1	a	-2.1817	-2.3158	-2.4725	-2.6037	0.1341	0.1311998	-2.24875	-2.5381	0.28935	-1.2362501
2	a	0.3901	0.3711	0.407	0.387	0.019	0.02	0.3806	0.397	-0.0164	0.2035
3	a	-0.573	-0.562	-0.5915	-0.5797	-0.011	-0.0118	-0.5675	-0.5856	0.0181	-0.29575
4	a	-3.1761	-3.1095	-3.2444	-3.1775	-0.0666001	-0.0669	-3.1428	-3.21095	0.06815	-1.6222
5	a	-4.4814	-4.537	-4.5685	-4.6241	0.0556002	0.0556002	-4.5092	-4.5963	0.0871	-2.2842499
1	b	-3.4517	-3.4327	-3.7921	-3.7792	-0.0190001	-0.0128999	-3.4422	-3.78565	0.3434501	-1.89605
2	b	-1.3762	-1.4284	-1.4052	-1.4558	0.0522001	0.0506001	-1.4023	-1.4305	0.0282	-0.7026
3	b	-0.1419	-0.1336	-0.1486	-0.1406	-0.0083	-0.008	-0.13775	-0.1446	0.00685	-0.0743
4	b	-5.7946	-5.7403	-5.8575	-5.8032	-0.0542998	-0.0543003	-5.76745	-5.83035	0.0628996	-2.9287502
5	b	-5.9011	-5.9452	-6.0089	-6.053	0.0440998	0.0440998	-5.92315	-6.03095	0.1078	-3.0044501
1	c	0.1513	0.2154	0.0103	0.0743	-0.0641	-0.064	0.18335	0.0423	0.14105	0.00515
2	c	-2.8901	-2.9291	-2.9447	-2.9843	0.039	0.0395999	-2.9096	-2.9645	0.0548999	-1.4723501
3	c	-0.1914	-0.2029	-0.1877	-0.1984	0.0115	0.0107	-0.19715	-0.19305	-0.0041	-0.09385
4	c	-7.9083	-7.9524	-7.9659	-8.0097	0.0441003	0.0437999	-7.93035	-7.9878	0.0574493	-3.9829501
5	c	-7.1294	-7.0375	-7.2609	-7.1692	-0.0918999	-0.0917001	-7.08345	-7.21505	0.1315999	-3.6304501

z-translation						Within double-examinations (intra)				Between double-examinations (inter)	
						diff_n1abc	diff_n2abc	avg_n1abc	avg_n2abc	diff_n1n2	avg_n1n2
Cadaver foot	wedge	wtz_n1abc1	wtz_n1abc2	wtz_n2abc1	wtz_n2abc2	0.313965	3.21965	-0.08	3.17965		
1	a	3.1812	3.0981	3.2632	3.1761	0.0831	0.0871	3.13965	3.21965	-0.08	3.17965
2	a	0.1864	0.1147	0.2349	0.1632	0.0717	0.0717	0.15055	0.19905	-0.0485	0.1748
3	a	1.2787	1.3508	1.1969	1.2692	-0.0721	-0.0723	1.31475	1.23305	0.0817	1.2739
4	a	3.2873	3.4655	3.3339	3.512	-0.1782	-0.1781	3.3764	3.42295	-0.04655	3.399675
5	a	2.8518	3.0534	2.7735	2.9752	-0.2016	-0.2017	2.9526	2.87435	0.07825	2.913475
1	b	4.3465	4.515	4.4396	4.608	-0.1685	-0.1684	4.43075	4.5238	-0.09305	4.477275
2	b	1.7161	1.875	1.7676	1.9265	-0.1589	-0.1589	1.79555	1.84705	-0.0515	1.8213
3	b	0.3453	0.3203	0.2695	0.2442	0.025	0.0253	0.3328	0.25685	0.07595	0.294825
4	b	7.0814	7.1894	7.1371	7.2449	-0.108	-0.1078	7.1354	7.191	-0.0556	7.1632
5	b	3.6835	3.7135	3.6122	3.6424	-0.03	-0.0302	3.6985	3.6273	0.0712	3.6629
1	c	-1.2591	-1.2665	-1.0434	-1.0453	0.0074	0.0019	-1.2628	-1.04435	-0.21845	-1.153575
2	c	4.5912	4.5678	4.6454	4.622	0.0234	0.0234	4.5795	4.6337	-0.0542	4.6066
3	c	0.1626	0.2404	0.0926	0.1707	-0.0778	-0.0781	0.2015	0.13165	0.06985	0.166575
4	c	9.4899	9.5739	9.5518	9.6358	-0.084	-0.084	9.5319	9.5938	-0.0619	9.56285
5	c	4.5579	4.7505	4.4934	4.6862	-0.1926	-0.1928	4.6542	4.5898	0.0644	4.622

