

Influence of Scanning Temporary Prostheses Using Analog-ScanBody on the Accuracy of Scanning Edentulous Full Arches for Screw-Retained Fixed Implant Prostheses

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Introduction

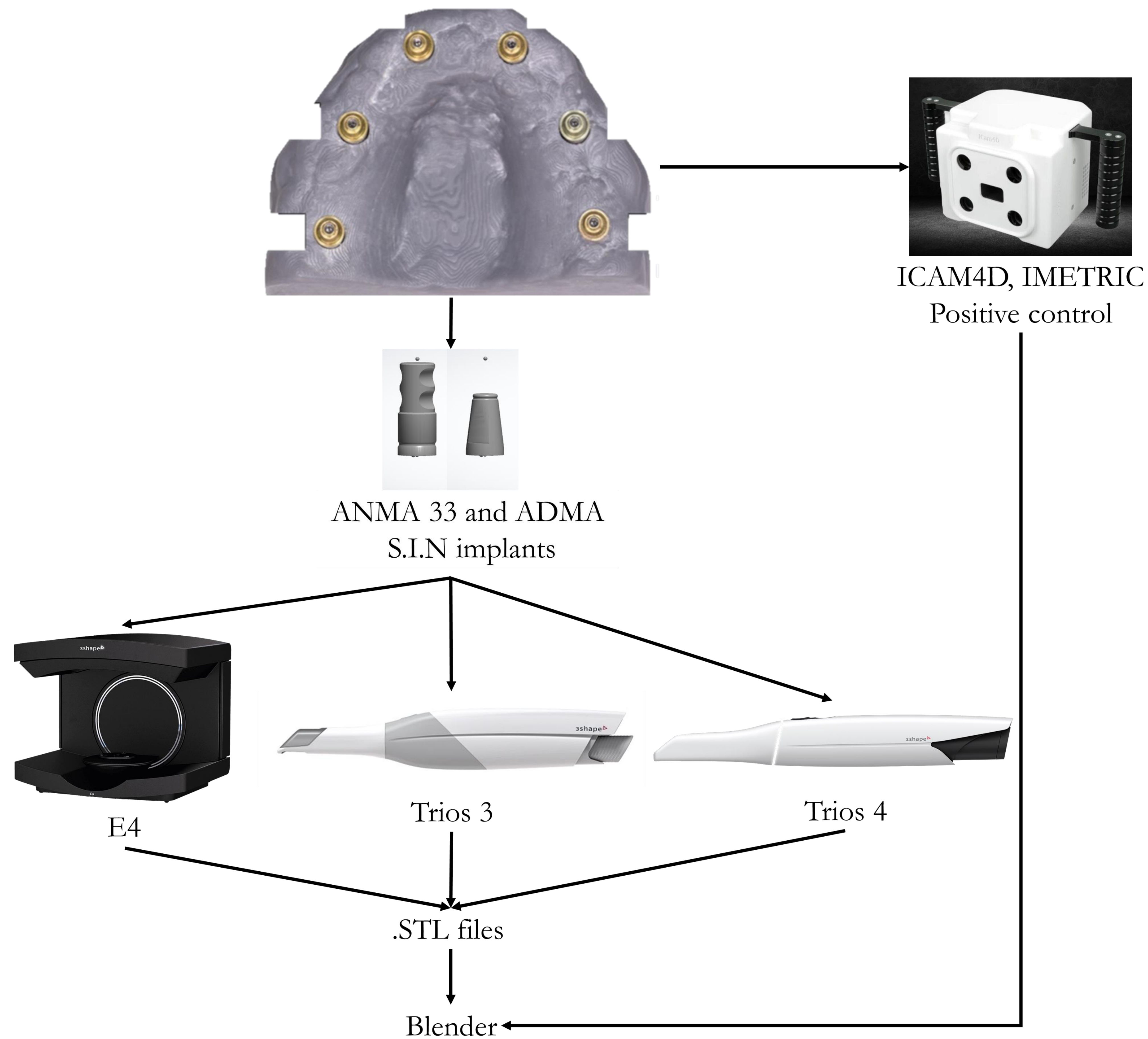
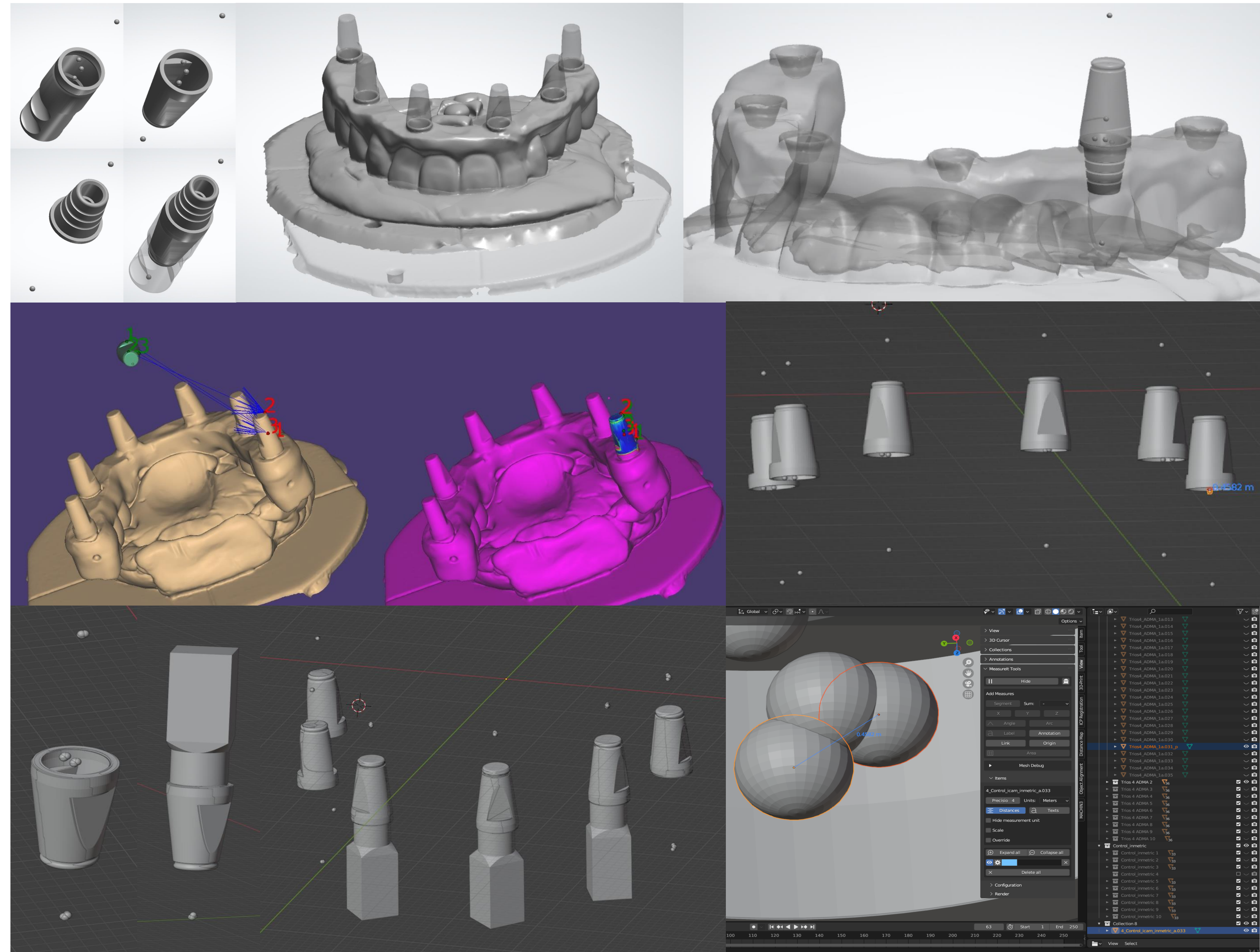
The use of CAD/CAM workflows for full arch rehabilitations are a challenge as Intraoral scanners often struggle to maintain the accuracy of edentulous arches.

The objective of this study was to asses how scanning temporary prostheses with scanning analogs affects the accuracy of edentulous arches scan for implant-retained fixed prostheses.

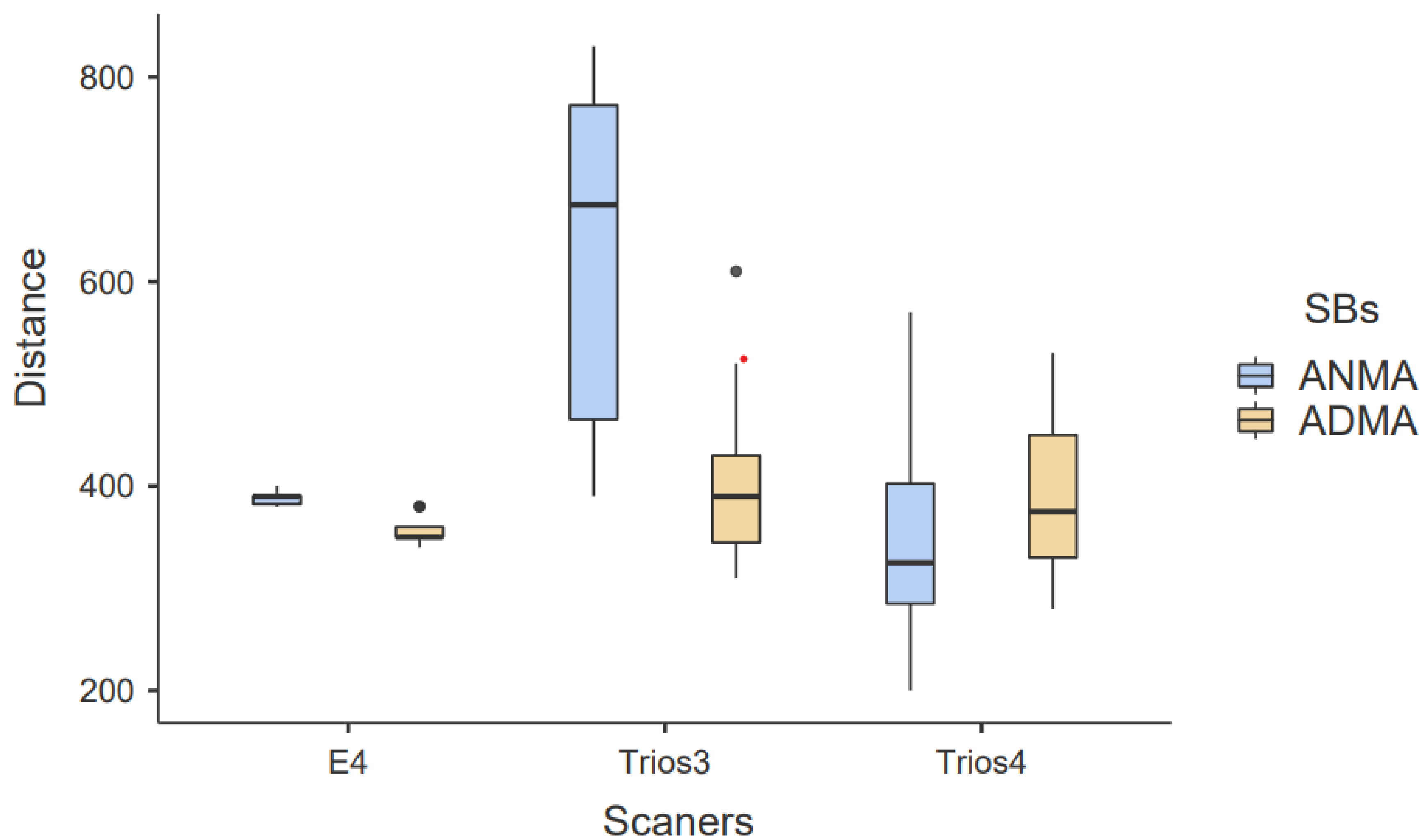


Methods

A master model with 6 implants - #3, 5, 7, 10, 12, and 14



Results



Pairwise comparisons – Distance between points - Scanners			
		W	p
E4	Trios3	4,77	0,002
E4	Trios4	-1,44	0,565
Trios3	Trios4	-4,02	0,012

Pairwise Comparisons – Distance between points – SB's			
		W	p
ANMA	ADMA	-2,52	0,075

- No difference for scanbodies (p=0.075)
- The scanners used influenced the distance (p<0.001)
- E4 = Trios 4 < Trios 3
- E4 - smallest distance for ADMA SB (350 µm)
- Trios3 – smallest distance for ADMA SB (390 µm)
- Trios4 - smallest distance for ANMA SB (325 µm)

Conclusion

- Different scanning bodies did not influence the fit, but the scanners used influence it.
- All scanners had higher deviation when compared with photogrammetry method.

References

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