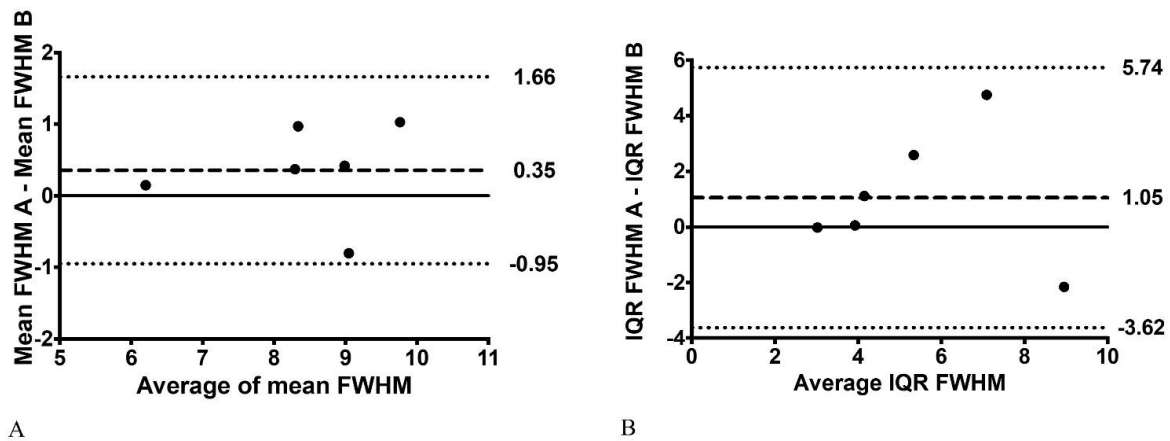


Supplemental Material



Supplemental figure: Bland Altman plots for mean (A) and interquartile range (B) of full width of half maximum (FWHM), respectively. Bias in dark line and 95% limits of agreement in dotted lines. All metrics in seconds.

Temporal resolution was altered slightly for each case due to the bespoke slice positioning by the MR radiographer on each scan session, we acknowledge this as a potential limitation and this has now been included in the discussion of the manuscript. This is reported in the table below.

Patient	Session A temporal resolution	Session B temporal resolution	%difference
IPF01	0.643	0.598	-7.00%
IPF05	0.643	0.605	-5.91%
IPF06	0.735	0.689	-6.26%
IPF08	0.643	0.605	-5.91%
IPF12	0.689	0.689	0.00%
IPF13	0.643	0.605	-5.91%

These data tables describe the standard deviation of FWHM per slice for every subject

IPF01_V1	IPF01_V2	IPF01_V3	IPF02_V1	IPF03_V2	IPF03_V3	IPF04_V1
0	0	0	0	0	0	1.375824039
0	0	0	0	0	3.748868363	1.125908851
3.230170062	1.906742047	0	0	0	1.632178465	1.365361449
1.145578372	1.075037303	1.857315571	3.688019809	1.303071621	0.982666973	1.321468181
1.286840013	1.430626114	1.699289184	1.953734127	1.827663589	1.12096587	1.408456014
1.352593464	1.530760124	1.660268208	1.335187306	1.690528544	1.218392555	1.480310123
1.403170747	1.683851347	1.38756886	1.476129077	1.326370021	1.362138037	1.722864528
1.393082117	1.657934782	1.494826372	1.420648213	1.923430187	1.63828986	1.99141668
1.626379469	1.782973958	1.625285116	1.513076618	1.790750775	1.943733661	2.266157421
1.920743309	1.784817782	1.786582751	1.820972211	2.49580359	2.329845476	2.101947784
1.872853293	1.880359735	1.76293266	1.845032521	2.811838743	2.327241407	2.105683184
2.233703356	1.923056052	2.046335492	1.479539121	2.918170339	2.493145778	2.339599502
2.506628053	2.078024561	2.16986447	1.675524796	2.960871929	2.927609646	2.727234442
2.617540073	2.463001677	2.105974531	1.781407648	3.323558941	2.940833567	2.596737392
2.458995992	2.933867039	2.29903174	1.857108076	3.143460355	3.095392584	1.978425245
2.30636281	2.728440877	2.502830321	1.955440327	3.25598213	2.957795196	2.506315762
2.552244481	2.991197164	2.31851815	1.763647945	3.446258895	3.204356843	2.78440554
2.625109073	3.225569955	2.40683953	1.759452721	3.213986197	3.518511989	3.34212727
3.020090034	3.943758462	3.033351668	4.230249116	3.667680958	3.575192711	4.405564108
3.154947993	3.580125078	3.47653254	1.231200962	4.023852445	3.753483134	3.33901327
3.908026867	3.534013891	3.818088689		0 4.743311539	4.611754829	5.188491602
	0	2.814635452		0 4.649302606	4.837745364	7.219525561
	0	0		0 5.060903593	4.878497705	0
	0	0		0 5.625570606	4.220317869	0
	0	0		0 5.975555691	3.215654658	0
	0	0		0 6.462019654	0	0
	0	0		0 8.068960758	0	0
	0	0		0	0	0
	0	0		0	0	0
	0	0		0	0	0
	0	0		0	0	0
	0	0		0	0	0
	0	0		0	0	0
	0	0		0	0	0
	0	0		0	0	0

IPF04_V2	IPF04_V3	IPF05_V1	IPF05_V2	IPF06_V1	IPF06_V2	IPF06_V3
0	0	0	0	0	0	0
2.101566926	2.407905315	2.628085102	0	0	0	4.779499874
1.782033568	1.17143759	1.635086512	0	0	2.355386149	2.75115271
1.431983214	1.230290405	1.11021529	0	1.183858123	1.901782355	3.434184354
1.430324119	1.272896664	1.142469335	1.562522059	2.016176795	2.567791826	3.31498729
1.427876968	1.323878003	1.160410704	1.448325365	2.09412143	2.353439783	2.657851682
1.363144576	1.313493919	1.254562393	1.48473594	1.57976901	2.253247083	2.503339397
1.557154344	1.414194174	1.499161617	1.348770618	1.977673861	2.574079414	2.912128229
1.694757555	1.343505103	1.863061537	1.618377431	1.96930177	2.308093665	2.469821736
1.847340889	1.562230279	2.021554367	1.594925108	2.832096139	2.461667291	3.282761729
1.84529581	1.662900671	2.431931699	2.059732315	2.969284677	2.640523067	2.723555356
2.304994342	1.701625204	1.819948892	2.128989014	3.276411133	2.6200721	2.074377965
2.248092968	1.6794586	2.053218753	1.980898864	3.248154173	2.749234933	2.646756436
2.240958749	2.041633342	1.906578204	1.820173291	3.405745093	2.779688463	2.361797019
2.325758126	1.893964968	1.823289982	2.118689015	3.368634103	3.01635492	2.719623814
2.761169126	1.797790922	1.939750377	1.766482109	3.082164499	2.841203427	3.285824487
2.789763509	1.402569768	1.805650033	1.836427986	2.885924297	2.923225691	2.599963448
2.9575712	2.278651664	1.527566317	1.826385896	2.381152434	2.53235805	2.531148951
3.221988244	3.676087249	1.810094149	2.296160783	2.476330003	2.658745237	2.272354196
3.985506421	2.462135033	1.649431344	2.090344719	2.889261848	2.443728539	1.816584702
3.946584542	2.580316983	1.046589216	2.221877768	3.196297812	2.131087193	1.499441447
3.964395283	3.165881754	0	1.880610545	2.730593753	2.358672115	1.592662187
6.104966719	0	0	1.656334254	3.12871259	2.53082418	0
0	0	0	0	2.862726276	2.973090537	0
0	0	0	0	4.724100032	0.990286317	0
0	0	0	0	4.526939886	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0

IPF08_V1	IPF08_V2	IPF08_V3	IPF09_V1	IPF09_V2	IPF09_V3	IPF11_V1
0	0	0	0	0	0	0
1.828870216	0	0	0	0	0	0
1.077034966	0	0.959237954	0	0	0	0
1.153258075	4.680802125	1.298837609	0	0	0.843128374	0
1.235539071	1.347535942	1.436757022	4.098781282	2.028452705	2.105108959	1.461226594
1.318385668	1.431561114	1.364820837	3.818596022	1.354007069	2.732747072	3.976560455
1.413360181	1.610812956	1.302217393	3.195348067	1.765147521	3.321821548	3.374685682
1.396500587	1.618065482	1.518047237	2.34264092	1.712217326	1.811825774	3.357033383
1.525815032	1.679591479	1.487386881	2.190767911	2.356626246	2.549355901	2.626342542
1.594114359	1.732340185	1.380395088	2.075551402	2.528236697	2.591571128	3.237675855
1.898281169	1.81898952	1.457200681	2.554312521	2.596622584	3.188405242	3.300479139
2.221091083	1.978872926	1.588209965	3.426790901	2.734072407	3.018749414	3.502643647
2.190837686	2.059816868	1.748222145	3.471838564	3.055851907	4.565253725	2.949412859
2.001888353	2.203944989	1.822300786	3.582833088	3.970822297	3.465685539	3.018828849
2.226961813	2.165827768	1.884625042	3.7095501	3.881410929	4.589568644	3.581447884
2.55229556	2.092107783	1.520290813	3.890760865	4.842065088	5.437635225	3.976263913
2.566831142	1.806397484	1.855170552	4.493674826	5.777018942	6.632423062	4.083508064
2.698540007	2.265078738	2.009294786	4.738559775	6.989479836	6.824658095	3.554035975
3.495081001	2.31835426	2.635832269	3.771460861	6.173405545	6.208368653	3.524215495
3.194110061	3.070154075	2.546697159	4.066856528	5.72028172	4.846190897	3.428499116
3.453764313	2.482746983	2.662195916	5.19020279	5.912863386	6.429776051	3.664323637
0	3.25804192	3.437701921	0	0	2.407647251	0
0	2.566285376	0	0	0	0	0
0	2.210053913	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0

IPF12_V1	IPF12_V2	IPF12_V3	IPF13_V1	IPF13_V2	IPF17_V1	IPF17_V2
0	0	0	0	0	0	0
0	2.074204391	0	1.255748091	0	1.199959673	2.76809503
2.110561266	1.212538364	0	4.030969904	1.021286229	1.145512679	1.057263087
3.016784115	1.699389662	0	3.510784247	4.085198181	1.210771566	1.113948636
3.162909335	1.591383077	0	2.611615356	4.707111646	1.00039061	1.100251693
2.593645694	1.556866968	0	3.098426355	4.315379843	1.084243207	1.228128872
2.082812641	1.623359367	2.454492682	2.738677859	3.548676646	1.061083589	1.211914864
2.262360798	1.814524065	2.530261652	3.448884884	3.471403679	0.973416722	1.076818177
2.419571602	1.897621935	2.03809788	3.654586163	4.028213235	1.20603622	1.303643259
3.052123335	2.380764423	2.114754698	3.974291356	4.317561287	1.296374961	1.515199687
2.799923146	2.833539354	2.257399142	3.988111493	4.274501263	1.336740613	1.461945062
3.132079161	2.44288981	2.710164181	4.115754873	5.064336787	1.395754089	1.782012756
2.913582958	2.663130577	2.974716836	4.727030231	5.202548189	1.398256345	1.844263852
3.179501945	2.408825171	3.285418206	5.048028077	5.417516035	1.841918678	2.27272072
3.062697718	2.479424954	3.393019754	4.922607189	4.823458746	1.776236373	2.171742137
2.51548944	2.338881858	3.272415071	5.264795265	5.067293871	1.741791948	2.440322323
2.648677373	2.068851678	3.884072611	5.131259214	5.028888415	1.894160563	2.315774561
2.603112211	1.960689682	3.4274487	5.392243964	5.05176042	2.388187188	3.323349863
2.165664567	2.365727965	4.054362795	5.319592233	5.526683335	2.468171475	3.440314631
2.001829965	1.654841652	4.204053682	5.414025353	5.186883374	2.330023686	5.252942521
1.878244052	2.016519399	3.490970637	5.699328729	4.99010428	1.099750894	1.57643385
2.10200195	1.099687585	3.780117163	0	3.790874596	0	0
1.600629449	0	2.40966641	0	0	0	0
1.316105325	0	1.716362845	0	0	0	0
0	0	1.48073427	0	0	0	0
0	0	1.669868274	0	0	0	0
0	0	1.312735103	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0

IPF17_V3	IPF18_V1	IPF18_V2	IPF18_V3	IPF19_V1	IPF19_V2	IPF19_V3
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	1.168610606	0	0	3.830906253	0	0
0	1.253271798	0	0	1.658885603	0	0
2.827951864	1.22524803	0	0	1.564558966	3.427635666	0
1.540879479	1.165875174	5.521600518	1.291000438	1.599392274	2.448697863	2.262754241
1.317347122	1.305487753	2.37133853	1.834717644	1.710520383	1.972744608	2.302455923
1.225564359	1.263676396	1.634827777	1.825278478	1.907156693	2.347054148	1.794889349
1.099896005	1.336268473	1.695441994	1.89559919	1.736656319	2.475332354	2.062546873
1.143975222	1.559081387	1.861157939	1.896594564	1.68283542	1.617638798	2.089313554
1.294239124	1.857975853	1.720092043	2.104644541	1.935420024	1.906055835	1.886934367
1.600326698	1.536751799	2.145570607	1.856086886	1.852680257	1.793993207	1.763664594
1.595989388	1.844359813	2.19294275	1.961431522	1.815691187	1.279580362	1.700371218
2.070467497	1.843559716	2.221273791	1.77225189	1.705742585	1.375410195	1.661324903
2.280367536	1.848020996	1.870622822	2.247952447	1.623894598	1.299992194	1.725069162
2.355326691	1.983830084	1.883358252	2.198620871	1.957229925	1.352907403	1.50471312
2.538635529	1.905689724	1.867367572	2.002523845	2.370540685	1.452686703	1.683980396
2.469781661	1.897271891	2.509383509	2.064261519	2.797826674	2.267597671	1.742451138
3.006016389	1.811402319	2.219405663	1.875472149	2.211413466	1.337887695	1.591065264
2.763742409	2.885260003	2.068896428	1.881679886	2.555572541	1.173954939	1.871962905
2.469640695	3.39218774	1.583092122	1.838542756	3.891036629	0.836633064	1.740272167
3.247139695	0	2.623203659	2.144085861	4.364970996	0.925709352	1.361008852
4.322293544	0	3.587435477	2.61874684	1.553939781	2.501978666	0.953218298
5.467068142	0	3.422099245	2.178282681	0	3.409983086	1.585430129
6.548063056	0	0	0	0	0	1.566342114
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0

IPF22_V1	IPF22_V2	IPF22_V3	IPF23_V2	IPF23_V3	IPF24_V2	IPF24_V3
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	1.336801467	0
0	1.087381147	1.687066922	0	4.06932642	1.503086385	1.427708191
0	1.130399758	2.01377952	4.105579905	5.053256724	1.441359483	2.067733798
1.650577661	1.117370705	2.550286015	2.846929962	2.986608506	1.457078352	1.867418926
1.535318112	1.015306536	2.744535756	2.068308661	3.0043902	1.631137352	1.660149233
1.523295779	1.027376517	2.721351961	1.990930618	3.189237434	1.467152719	1.782029823
1.386451123	1.160961461	2.97796632	2.265211095	3.857465824	1.642659063	1.646202971
1.340596314	1.210789905	3.05959834	2.311393843	3.81546745	1.706212058	1.89685748
1.344348595	1.20744384	2.731819862	2.370188619	3.884386194	1.459537075	1.99360069
1.613061159	1.306225622	2.962876896	2.969291348	4.113009333	1.685981036	2.209436173
1.746284341	1.345880072	3.384361172	3.763301873	4.572954909	2.452038799	2.006652338
1.78058704	1.378041141	3.791709446	4.030662297	4.601103918	2.806133844	1.918580403
2.114208414	1.232340722	3.709675336	3.389808487	4.428143152	2.809721351	3.561880361
2.115570421	1.132295699	3.662799103	2.782098018	4.623369412	2.295863564	2.23316157
1.722378666	1.400411199	3.70205631	2.387044814	2.631926841	1.91653083	2.169282396
1.851614191	1.436080998	3.985785408	3.040494576	1.154489567	2.512372569	2.121826106
1.775924692	1.566191988	4.995248303	2.809103251	0	2.103579498	2.260077567
1.777531678	1.811537547	4.404215848	0	0	3.556470426	2.316689963
1.88475686	2.415198832	3.505431147	0	0	4.947412467	2.653906724
2.13828084	0	0	0	0	0	2.592518203
1.957888441	0	0	0	0	0	2.230205079
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0

IPF28_V1	IPF28_V2	IPF28_V3	IPF29_V1	IPF30_V1	IPF30_V2	IPF30_V3
	0	0	0	0	0	0
	0	0	0	0	0	0.72846992
	0	1.153166537	0	0	1.176987686	1.062423994
1.084125937	1.855362231		0	1.059102435	0.897933086	1.066668575
0.948280361	1.458996856		0	1.217159576	0.950141683	1.506374576
1.162354508	1.209450859		0	1.011179099	1.18690558	1.388796961
1.06432752	1.441018856		0	0.854324949	1.162585616	1.567699756
1.141669217	1.770136644	1.308746588	0.841839591	1.202732628	2.006899654	1.67158644
1.196513612	1.595228045	1.166246385	0.878972127	1.564387619	1.719297771	1.657281436
1.015497086	1.948235466	1.400162864	1.304654206	1.221552505	1.993370274	1.781162791
1.262350444	2.583749915	1.281499993	1.445297112	1.497253522	2.094106701	1.570765163
1.13419116	2.641607981	1.590225146	1.472766988	1.844680054	1.777879446	1.745450348
1.373379347	2.015810937	1.839559608	1.390682864	2.497596587	2.119881719	2.15964343
1.450860375	2.406739355	1.592742356	1.716056446	1.793868846	2.36340811	1.783323662
1.445820976	2.218554415	2.417340769	1.627747967	1.76160225	1.957871572	1.772831572
1.391731511	3.368688055	2.191427492	1.577439156	1.751728368	1.953970682	1.944007854
1.5627032	2.736484498	3.11569885	1.301153522	1.248501064	1.874267179	1.760911693
2.389165515	2.501169476	3.14721484	1.578490633	1.432332045	2.129800724	1.627252821
2.453654718		0	2.212975309		0	1.423588659
	0	0	2.726457502		0	1.192093147
	0	0	2.1619833		0	1.327310903
	0	0	3.288141594		0	1.60645129
	0	0	3.482793813		0	
	0	0	0		0	
	0	0	0		0	
	0	0	0		0	
	0	0	0		0	
	0	0	0		0	
	0	0	0		0	
	0	0	0		0	
	0	0	0		0	
	0	0	0		0	
	0	0	0		0	
	0	0	0		0	
	0	0	0		0	
	0	0	0		0	
	0	0	0		0	
	0	0	0		0	
	0	0	0		0	
	0	0	0		0	
	0	0	0		0	
	0	0	0		0	

IPF31_V1	IPF31_V2	IPF31_V3	IPF32_V1	IPF32_V2	IPF33_V1	IPF34_V1
0	0	0	0	0	0	0
0	0	0	0	0	0	0
1.64763968	2.197271472	0	0	0	0	0
1.309145237	1.956502769	2.021411016	0	3.128768613	2.99499872	1.338697174
1.910340284	2.0943918	1.778558213	4.362967021	3.049790923	3.269441444	1.372901289
1.958932696	1.956475441	1.730799689	2.814663716	3.013375979	2.938405375	1.707095569
1.713382665	2.111867644	1.765584437	2.456831671	2.772328654	3.339852839	1.679097375
1.640386312	1.957302848	1.876921803	2.772539692	3.257826572	3.179242352	2.108763456
1.976149099	2.125957714	1.495779757	3.286845917	3.652636994	3.1194374	2.435653968
1.766130431	2.119775824	2.082515436	3.135664504	3.510928152	2.619240859	2.137622492
2.629913364	1.736042029	1.669154386	3.029542625	3.700587245	2.478013139	2.507360387
2.008307989	1.900226475	2.101669556	3.749262893	3.575116173	2.355089636	2.655270789
1.880264437	1.90555339	2.139954931	3.748620514	3.812548089	2.71286603	2.419463008
1.898459637	2.015758004	2.092596734	4.693787542	3.717474996	2.783263179	2.569656535
1.790200237	3.12299288	2.389676333	4.603670379	3.567710421	2.794329669	2.396426858
1.935884728	3.031534318	2.569417155	4.475660497	3.529608739	2.433705526	2.061387046
2.169068178	2.8327809	2.327800107	3.630997433	3.677359059	2.735207037	2.212752707
2.302962996	3.289866321	2.942415445	2.917842335	2.784378179	2.905826511	2.539450191
2.684733757	3.805968621	3.347128935	3.771501618	2.279443122	3.291742624	2.879769755
0	6.115373689	5.854168741	3.25219041	2.113995188	2.90096216	3.091689254
0	0	0	3.351196531	0	0	3.419425569
0	0	0	1.639801512	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0

IPF35_V1

0

0

0

1.355428993

2.010083417

2.44332907

2.61146867

2.726050138

3.187099334

3.106732764

2.83078508

2.458064603

2.761567111

2.516719138

2.643828339

3.037696296

2.993651988

3.283914086

3.199671748

3.628428939

4.130718667

5.255021555

5.749688908

6.793798532

0

0

0

0

0

0

0

0

0