			2022 Trice starright		
	IMAGING PARAMETERS		SCAN TIMING		
	Imaging Mode	2D	TE	80.0	
	Pulse Sequence	Spin Echo	Number of Echoes	1	
	Imaging Options	Seq, EDR, TRF, Fast, SS,	TR	600.0	
	Phase	ARC 2.00	Receiver Bandwidth	83.33	
		2.00	IMAGE ENHANCE		
	SCAN RANGE	00.0	Filter Choice	None	
	FOV Slice Thickness	30.0 7.00	USER CVS		
		7.00 5.0	User CV1	1.00	
	Slice Spacing Overlap Locations	0	User CV39	1.00	
	-	0	User CV Mask2	256	
	ACQ TIMING	000	MULTI-PHASE		
	Freq	288	Seperate Series	0	
	Phase	240	Mask Phase	0	
	Freq DIR	Unswap 0	Mask Pause	0	
	# of Acq. Before Pause Phase FOV	1.00	Preserve	0	
	Auto Shim	Auto	DIFFUSION		
ght	Phase Correction	No	Recon All Images	On	ght
竖	RF Drive Mode	Single	# Synthetic b-values	1	运
izel	Excitation Mode	Selective	Synthetic b-value	1000.0;	ize
cal		35/55/175	-	1000.0,	cal
Lo	FMRI DSD Trimmor	Intornal	CONTRAST Contrast Yes/No	No	_ 5
ane	PSD Trigger View Order	Internal Pottom/Un	Contrast res/No	NO	ane
ج	# of Repetitions REST	Bottom/Up 0			<del>-</del>
. 3	# of Repetitions ACTIVE	0			
3-Plane Localizer Right - 3-Plane Localizer Right	-				ight
<u>۔</u> ح	SAT Tog Type	None			3-Plane Localizer Right - 3-Plane Localizer Right
lize	Tag Type	None			lize
၁ငခ	TRICKS				oca
)   	Pause On/Off	On			L O
ane	Auto Subtract	0			an(
<u>~</u>	Auto SCIC	Off			무
(J	OTHERS				0.5
	Protocol Notes	For accurate AIRx Knee calculations, ensure coverage spans above patella to below tibial plateau. Localizer must meet the following criteria: * Frequency and phase resolution >=192 or in-plane resolution of <=1.5 mm for both frequency and phase direction * Slice thickness <=10 mm * Slice coverage for all axial, sagittal and coronal plane >= 4 cm * Slice gap <=5 mm * TE for SSFSE <=80 ms			

	IMAGING PARAMETERS		SCAN TIMING		
	Imaging Mode	2D	Flip Angle	150	
	Pulse Sequence	FSE-XL	TE	68.0	
	Imaging Options	EDR, TRF, Fast, ARC	Number of Echoes	1	
	Phase	2.00	TR	5810.0	
	SCAN RANGE		Echo Train Length	15	
	FOV	16.0	Receiver Bandwidth	31.25	
	Slice Thickness	3.00	IMAGE ENHANCE		
	Slice Spacing	0.5	Filter Choice	None	
	Overlap Locations	0	USER CVS		
	Number of Slices	27	User CV12	1.00	
	ACQ TIMING		User CV19	1.00	
	Freq	384	User CV19	1.00	
	Phase	320	TR Min	1500.0	
	Freq DIR	A/P	TR Max	1000.0	
	Fat Shift DIR	Normal (P)	User CV30	1.00	
FS	NEX	1.00	User CV39	1.00	FS
T2 F	Phase FOV	1.00	User CV Mask2	256	2 F
Ε.	Auto Shim	Auto			- SAG T2
SAG	Phase Correction	Yes	MULTI-PHASE	2	l X
FS-8	RF Drive Mode	Single	Seperate Series	0	1
E.	Excitation Mode	Selective	Mask Phase Mask Pause	0 0	FS
SAG T2	FMRI		Preserve	0	SAG T2
AG	PSD Trigger	Internal		0	AG
S	View Order	Bottom/Up	DIFFUSION		S
	# of Repetitions REST	0	Recon All Images	On	
	# of Repetitions ACTIVE	0	# Synthetic b-values	1	
		Ü	Synthetic b-value	1000.0;	
	SAT		TRACKER		
	SAT Location	S	Tracker Length	200.0	
	SAT Location	1	Tracker Thickness	20.0	
	Tag Type	None			
	Fat/Water Saturation	Fat Classic			
	TRICKS				
	Pause On/Off	On			
	Auto Subtract	0			
	Auto SCIC	3			
	CONTRAST				
	Contrast Yes/No	No			

			2022 Tilloo ota riigirr		
	IMAGING PARAMETERS		SCAN TIMING		
	Imaging Mode	2D	Flip Angle	150	
	Pulse Sequence	FSE-XL	TE	15.0	
	Imaging Options	EDR, TRF, Fast, ARC	Number of Echoes	1	
	Phase	2.00	TR	1892.0	
	SCAN RANGE		Echo Train Length	9	
	FOV	16.0	Receiver Bandwidth	31.25	
	Slice Thickness	3.00	IMAGE ENHANCE		
	Slice Spacing	0.5	Filter Choice	None	
	Overlap Locations	0	USER CVS		
	Number of Slices	27	User CV12	1.00	_
	ACQ TIMING		User CV19	1.00	
	Freq	384	User CV21	1.00	
	Phase	320	TR Min	1500.0	
	Freq DIR	A/P	TR Max	3500.0	
	Fat Shift DIR	Normal (P)	User CV30	1.00	
ES.	NEX	1.00	User CV39	1.00	
	Phase FOV	1.00	User CV Mask2	256	
Ω .	Auto Shim	Auto	MULTI-PHASE		
SA	Phase Correction	Yes	Seperate Series	0	-
'n	RF Drive Mode	Single	Mask Phase	0	
Ŭ.	Excitation Mode	Selective	Mask Pause	0	
ᆸ	FMRI		Preserve	0	
SAG PD FS - SAG	PSD Trigger	Internal	DIFFUSION		
S	View Order	Bottom/Up	Recon All Images	On	
	# of Repetitions REST	0	Multi b-values	1000.0;	
	# of Repetitions ACTIVE	0	Multi NEX Values	1.0;	
	SAT		# Synthetic b-values	1	
	SAT Location	S	Synthetic b-value	1000.0;	
	SAT Location	1	TRACKER		
	Tag Type	None		200.0	
	Fat/Water Saturation	Fat Classic	Tracker Length Tracker Thickness	200.0 20.0	
	TRICKS		Tracker Tillckiless	20.0	
	Pause On/Off	On			
	Auto Subtract	0			
	Auto SCIC	3			
	CONTRAST	A1-			
	Contrast Yes/No	No			

	<del>_</del>				
	IMAGING PARAMETERS		SCAN TIMING		
	Imaging Mode	2D	Flip Angle	150	
	Pulse Sequence	FSE-XL	TE	35.0	
	Imaging Options	EDR, TRF, Fast, ARC	Number of Echoes	1	
	Phase	2.00	TR	2199.0	
	SCAN RANGE		Echo Train Length	9	
	FOV	16.0	Receiver Bandwidth	31.25	
	Slice Thickness	3.00	IMAGE ENHANCE		
	Slice Spacing	0.5	Filter Choice	None	
	Overlap Locations	0	USER CVS		
	Number of Slices	34	User CV12	1.00	
	ACQ TIMING		User CV19	1.00	
	Freq	384	User CV21	1.00	
	Phase	320	TR Min	1500.0	
	Freq DIR	S/I	TR Max	3500.0	
FS	Fat Shift DIR	Normal (I)	User CV30	1.00	FS
D F	NEX	1.00	User CV39	1.00	<u>Н</u>
r PD	Phase FOV	1.00	User CV Mask2	256	r PD
FS - Cor	Auto Shim	Auto	MULTI-PHASE		FS - Cor
Ś	Phase Correction	Yes	Seperate Series	0	S
E C	RF Drive Mode	Single	Mask Phase	0	Ë
PD	<b>Excitation Mode</b>	Selective	Mask Pause	0	占
Cor	FMRI		Preserve	0	Cor PD
	PSD Trigger	Internal	DIFFUSION		
	View Order	Bottom/Up	Recon All Images	On	
	# of Repetitions REST	0	# Synthetic b-values	1	
	# of Repetitions ACTIVE	0	Synthetic b-value	1000.0;	
	SAT		TRACKER		
	Tag Type	None	Tracker Length	200.0	
	Fat/Water Saturation	Fat Classic	Tracker Thickness	20.0	
	TRICKS		Tracker Timokness	20.0	
	Pause On/Off	On			
	Auto Subtract	0			
	Auto SCIC	3			
	CONTRAST				
	Contrast Yes/No	No			

IMAGING PARAMETERS   Imaging Mode   2D   Flip Angle   160     Pulse Sequence   FSE-XL   TE   Min Full     Imaging Options   EDR, TRF, Fast, ARC   Number of Echoes   1     Phase   2.00   TR   471.0     SCAN RANGE   Echo Train Length   4     Receiver Bandwidth   41.67     Silice Thickness   3.00   IMAGE ENHANCE     Slice Spacing   0.5   Filter Choice   None     Overlap Locations   0   USER CVS     Number of Slices   22   User CV12   1.00     ACQ TIMING   TR Min   400.0     Freq   384   TR Max   800.0	
Pulse Sequence FSE-XL TE Min Full Imaging Options EDR, TRF, Fast, ARC Number of Echoes 1 Phase 2.00 TR 471.0  SCAN RANGE Echo Train Length 4 Receiver Bandwidth 41.67  Slice Thickness 3.00 IMAGE ENHANCE Slice Spacing 0.5 Filter Choice None Overlap Locations 0 Number of Slices 22 User CV12 1.00 ACQ TIMING TR Min 400.0	_
Imaging OptionsEDR, TRF, Fast, ARCNumber of Echoes1Phase2.00TR471.0SCAN RANGEEcho Train Length4FOV16.0Receiver Bandwidth41.67Slice Thickness3.00IMAGE ENHANCESlice Spacing0.5Filter ChoiceNoneOverlap Locations0USER CVSNumber of Slices22User CV121.00ACQ TIMINGTR Min400.0	
Phase         2.00         TR         471.0           SCAN RANGE         Echo Train Length         4           FOV         16.0         Receiver Bandwidth         41.67           Slice Thickness         3.00         IMAGE ENHANCE           Slice Spacing         0.5         Filter Choice         None           Overlap Locations         0         USER CVS           Number of Slices         22         User CV12         1.00           ACQ TIMING         TR Min         400.0	
SCAN RANGE           FOV         16.0           Slice Thickness         3.00           Slice Spacing         0.5           Overlap Locations         0           Number of Slices         22           ACQ TIMING         TR Min    ### Choice ### None  USER CVS  User CV12 ### 1.00  TR Min ### 400.0	
FOV 16.0  Slice Thickness 3.00  Slice Spacing 0.5  Overlap Locations 0  Number of Slices 22  ACQ TIMING  Receiver Bandwidth 41.67  IMAGE ENHANCE  Filter Choice None  USER CVS  User CV12 1.00  TR Min 400.0	
Slice Thickness   3.00   IMAGE ENHANCE	
Slice Spacing         0.5         Filter Choice         None           Overlap Locations         0         USER CVS           Number of Slices         22         User CV12         1.00           ACQ TIMING         TR Min         400.0	
Overlap Locations         0         USER CVS           Number of Slices         22         User CV12         1.00           ACQ TIMING         TR Min         400.0	
Number of Slices         22         User CV12         1.00           ACQ TIMING         TR Min         400.0	
ACQ TIMING TR Min 400.0	
Freq 384 TR Max 800.0	
Phase 352 User CV30 1.00	
Freq DIR S// User CV39 1.00	
Fat Shift DIR Normal (I) User CV Mask2 256	F
Fat Shift DIR Normal (I) User CV Mask2 256  NEX 2.00 MULTI-PHASE	Cor T1
# of Acq. Before Pause 0 Seperate Series 0	1
# of Acq. Before Pause 0 Seperate Series 0 Phase FOV 1.00 Mask Phase 0 Auto Shim Auto Mask Pause 0	Cor T1
Auto Shim Auto Mask Pause 0	S
Phase Correction Yes Preserve 0	
RF Drive Mode Single DIFFUSION	
Excitation Mode Selective Recon All Images On	
FMRI # Synthetic b-values 1	
PSD Trigger Internal Synthetic b-value 1000.0;	
View Order Bottom/Up	
# of Repetitions REST 0	
# of Repetitions ACTIVE 0 Contrast Yes/No No	
SAT	
Tag Type None	
TRICKS	
Pause On/Off On	
Auto Subtract 0	
Auto SCIC 3	

	IMAGING PARAMETERS		SCAN TIMING		
	Imaging Mode	2D	Flip Angle	150	
	Pulse Sequence	FSE-XL	TE	34.0	
	Imaging Options	EDR, TRF, Fast, ARC	Number of Echoes	1	
	Phase	2.00	TR	2012.0	
	SCAN RANGE		Echo Train Length	9	
	FOV	16.0	Receiver Bandwidth	35.71	
	Slice Thickness	3.00	IMAGE ENHANCE		
	Slice Spacing	0.5	Filter Choice	None	
	Overlap Locations	0	USER CVS		
	Number of Slices	28	User CV12	1.00	
	ACQ TIMING		User CV19	1.00	
	Freq	384	User CV21	1.00	
	Phase	320	TR Min	1500.0	
	Freq DIR	A/P	TR Max	3500.0	
(A)	Fat Shift DIR	Normal (A)	User CV30	1.00	(C)
S ES	NEX	1.00	User CV39	1.00	) FS
<u>L</u>	Phase FOV	1.00	User CV Mask2	256	Ax PD FS - Ax PD
Ax PD FS - Ax PD	Auto Shim	Auto	MULTI-PHASE		¥
က်	Phase Correction	Yes	Seperate Series	0	ပ္ပ
D	RF Drive Mode	Single	Mask Phase	0	D
⊥ □	Excitation Mode	Selective	Mask Pause	0	Υ.
Ã	FMRI		Preserve	0	Ä
	PSD Trigger	Internal	DIFFUSION		
	View Order	Bottom/Up	Recon All Images	On	
	# of Repetitions REST	0	# Synthetic b-values	1	
	# of Repetitions ACTIVE	0	Synthetic b-value	1000.0;	
	SAT		TRACKER		
	Tag Type	None	Tracker Length	200.0	
	Fat/Water Saturation	Fat Classic	Tracker Thickness	20.0	
	TRICKS			2010	
	Pause On/Off	On			
	Auto Subtract	0			
	Auto SCIC	3			
	CONTRAST				
	Contrast Yes/No	No			
		·			

	IMAGING PARAMETERS	
	Imaging Mode	3D
	Pulse Sequence	SPGR
	Imaging Options	Fast, SqP
	PSD Name	ozteo
	SCAN RANGE	
	FOV	20.0
	Slice Thickness	1.10
	Overlap Locations	0
	Number of Slices	1
	ACQ TIMING	
	Freq	200
Je	Freq DIR	S/I
Bol	NEX	8.00
AR.	Auto Shim	Auto
>	Phase Correction	No
Ö	RF Drive Mode	Single
<u>=</u>	Excitation Mode	Selective
Sm	Spokes Per Segment	384
T D	USER CVS	
on	User CV Mask2	0
Small FOV MR Bone - Small FOV MR Bone	MULTI-PHASE	
Σ .	Seperate Series	0
Ó	Mask Phase	0
≡ E	Mask Pause	0
Sme	Preserve	0
0,	DIFFUSION	
	Recon All Images	On
	Multi b-values	1000.0;
	Multi NEX Values	1.0;
	# Synthetic b-values	1
	Synthetic b-value	1000.0;
	CONTRAST	·
	Contrast Yes/No	No
	Joint ast 163/110	140

SCAN TIMING		
Flip Angle	2	
Number of Echoes	1	
Receiver Bandwidth	50.00	
IMAGE ENHANCE		
Filter Choice	G	
GATING/TRIGGER		
Pause After Navigator Prescan	0	
FMRI		
PSD Trigger	Internal	
View Order	Bottom/Up	
# of Repetitions REST	0	
# of Repetitions ACTIVE	0	
SAT		
Тад Туре	None	
TRICKS		
Pause On/Off	On	
Auto Subtract	0	
Auto SCIC	3	