

Table of contents
-------------------

\\USER

ABCD

20190320

ABCD\_PROTOCOL\_\_one\_session\_\_32ch

[localizer\\_32ch](#)  
[ABCD\\_T1w\\_MPR\\_vNav\\_setter](#)  
[ABCD\\_T1w\\_MPR\\_vNav](#)  
[ABCD\\_fMRI\\_DistortionMap\\_PA](#)  
[ABCD\\_fMRI\\_DistortionMap\\_AP](#)  
[ABCD\\_fMRI\\_rest](#)  
[ABCD\\_fMRI\\_rest](#)  
[ABCD\\_dMRI\\_DistortionMap\\_PA](#)  
[ABCD\\_dMRI\\_DistortionMap\\_AP](#)  
[ABCD\\_dMRI](#)  
[ABCD\\_T2w\\_SPC\\_vNav\\_setter](#)  
[ABCD\\_T2w\\_SPC\\_vNav](#)  
[ABCD\\_fMRI\\_DistortionMap\\_PA](#)  
[ABCD\\_fMRI\\_DistortionMap\\_AP](#)  
[ABCD\\_fMRI\\_rest](#)  
[ABCD\\_fMRI\\_rest](#)  
[ABCD\\_fMRI\\_DistortionMap\\_PA](#)  
[ABCD\\_fMRI\\_DistortionMap\\_AP](#)  
[ABCD\\_fMRI\\_task\\_Stop](#)  
[ABCD\\_fMRI\\_task\\_Stop](#)  
[ABCD\\_fMRI\\_DistortionMap\\_PA](#)  
[ABCD\\_fMRI\\_DistortionMap\\_AP](#)  
[ABCD\\_fMRI\\_task\\_Emotional\\_n-back](#)  
[ABCD\\_fMRI\\_task\\_Emotional\\_n-back](#)  
[ABCD\\_fMRI\\_DistortionMap\\_PA](#)  
[ABCD\\_fMRI\\_DistortionMap\\_AP](#)  
[ABCD\\_fMRI\\_task\\_Monetary\\_Incentive](#)  
[ABCD\\_fMRI\\_task\\_Monetary\\_Incentive](#)

ABCD\_PROTOCOL\_\_one\_session\_\_streaming\_\_32ch

[localizer\\_32ch](#)  
[ABCD\\_T1w\\_MPR\\_vNav\\_setter](#)  
[ABCD\\_T1w\\_MPR\\_vNav](#)  
[ABCD\\_fMRI\\_DistortionMap\\_PA](#)  
[ABCD\\_fMRI\\_DistortionMap\\_AP](#)  
[ABCD\\_fMRI\\_rest](#)  
[ABCD\\_fMRI\\_rest](#)  
[ABCD\\_dMRI\\_DistortionMap\\_PA](#)  
[ABCD\\_dMRI\\_DistortionMap\\_AP](#)  
[ABCD\\_dMRI](#)  
[ABCD\\_T2w\\_SPC\\_vNav\\_setter](#)  
[ABCD\\_T2w\\_SPC\\_vNav](#)  
[ABCD\\_fMRI\\_DistortionMap\\_PA](#)

	ABCD_fMRI_DistortionMap_AP ABCD_fMRI_rest ABCD_fMRI_rest ABCD_fMRI_DistortionMap_PA ABCD_fMRI_DistortionMap_AP ABCD_fMRI_task_Stop ABCD_fMRI_task_Stop ABCD_fMRI_DistortionMap_PA ABCD_fMRI_DistortionMap_AP ABCD_fMRI_task_Emotional_n-back ABCD_fMRI_task_Emotional_n-back ABCD_fMRI_DistortionMap_PA ABCD_fMRI_DistortionMap_AP ABCD_fMRI_task_Monetary_Incentive ABCD_fMRI_task_Monetary_Incentive
ABCD_QA_quick__32ch	
	localizer_32ch localizer_32ch_uncombined SNR_Map ABCD_QA_fMRI ABCD_QA_dMRI FBIRN_QA_fMRI_flip77
ABCD_QA_full__32ch	
	localizer_32ch localizer_32ch_uncombined SNR_Map ABCD_QA_fMRI ABCD_QA_fMRI ABCD_QA_dMRI FBIRN_QA_fMRI_flip77 FBIRN_QA_fMRI_flip10
ABCD_PROTOCOL__one_session__64ch	
	localizer_64ch ABCD_T1w_MPR_vNav_setter ABCD_T1w_MPR_vNav ABCD_fMRI_DistortionMap_PA ABCD_fMRI_DistortionMap_AP ABCD_fMRI_rest ABCD_fMRI_rest ABCD_dMRI_DistortionMap_PA ABCD_dMRI_DistortionMap_AP ABCD_dMRI ABCD_T2w_SPC_vNav_setter ABCD_T2w_SPC_vNav ABCD_fMRI_DistortionMap_PA ABCD_fMRI_DistortionMap_AP ABCD_fMRI_rest ABCD_fMRI_rest

				ABCD_fMRI_DistortionMap_PA ABCD_fMRI_DistortionMap_AP ABCD_fMRI_task_Stop ABCD_fMRI_task_Stop ABCD_fMRI_DistortionMap_PA ABCD_fMRI_DistortionMap_AP ABCD_fMRI_task_Emotional_n-back ABCD_fMRI_task_Emotional_n-back ABCD_fMRI_DistortionMap_PA ABCD_fMRI_DistortionMap_AP ABCD_fMRI_task_Monetary_Incentive ABCD_fMRI_task_Monetary_Incentive
			ABCD_PROTOCOL__one_session__streaming__64ch	localizer_64ch ABCD_T1w_MPR_vNav_setter ABCD_T1w_MPR_vNav ABCD_fMRI_DistortionMap_PA ABCD_fMRI_DistortionMap_AP ABCD_fMRI_rest ABCD_fMRI_rest ABCD_dMRI_DistortionMap_PA ABCD_dMRI_DistortionMap_AP ABCD_dMRI ABCD_T2w_SPC_vNav_setter ABCD_T2w_SPC_vNav ABCD_fMRI_DistortionMap_PA ABCD_fMRI_DistortionMap_AP ABCD_fMRI_rest ABCD_fMRI_rest ABCD_fMRI_DistortionMap_PA ABCD_fMRI_DistortionMap_AP ABCD_fMRI_task_Stop ABCD_fMRI_task_Stop ABCD_fMRI_DistortionMap_PA ABCD_fMRI_DistortionMap_AP ABCD_fMRI_task_Emotional_n-back ABCD_fMRI_task_Emotional_n-back ABCD_fMRI_DistortionMap_PA ABCD_fMRI_DistortionMap_AP ABCD_fMRI_task_Monetary_Incentive ABCD_fMRI_task_Monetary_Incentive
			ABCD_QA_full__64ch	localizer_64ch localizer_64ch_uncombined SNR_Map ABCD_QA_fMRI ABCD_QA_fMRI ABCD_QA_dMRI FBIRN_QA_fMRI_flip77 FBIRN_QA_fMRI_flip10

ABCD_QA_quick__64ch
---------------------

<a href="#">localizer_64ch</a> <a href="#">localizer_64ch_uncombined</a> <a href="#">SNR_Map</a> <a href="#">ABCD_QA_fMRI</a> <a href="#">ABCD_QA_dMRI</a> <a href="#">FBIRN_QA_fMRI_flip77</a>
----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_32ch\localizer\_32ch

TA: 0:12 PM: REF Voxel size: 0.5×0.5×7.0 mmPAT: Off Rel. SNR: 1.00 : fl

**Properties**

Prio recon	On
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	On
Load images to graphic segments	On
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	Single measurement

**Routine**

Slice group	1
Slices	1
Dist. factor	20 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice group	2
Slices	1
Dist. factor	20 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
Slice group	3
Slices	1
Dist. factor	20 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Coronal
Phase enc. dir.	R >> L
AutoAlign	---
Phase oversampling	0 %
FoV read	250 mm
FoV phase	100.0 %
Slice thickness	7.0 mm
TR	7.5 ms
TE	3.69 ms
Averages	2
Concatenations	3
Filter	Prescan Normalize, Elliptical filter
Coil elements	HEA;HEP

**Contrast - Common**

TR	7.5 ms
TE	3.69 ms
TD	0 ms
MTC	Off
Magn. preparation	None
Flip angle	20 deg
Fat suppr.	None
Water suppr.	None
SWI	Off

**Contrast - Dynamic**

Averages	2
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1

**Contrast - Dynamic**

Multiple series	Each measurement
-----------------	------------------

**Resolution - Common**

FoV read	250 mm
FoV phase	100.0 %
Slice thickness	7.0 mm
Base resolution	256
Phase resolution	91 %
Phase partial Fourier	Off
Interpolation	On

**Resolution - iPAT**

PAT mode	None
----------	------

**Resolution - Filter Image**

Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	On
Unfiltered images	Off
Normalize	Off
B1 filter	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	On

**Geometry - Common**

Slice group	1
Slices	1
Dist. factor	20 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice group	2
Slices	1
Dist. factor	20 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
Slice group	3
Slices	1
Dist. factor	20 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Coronal
Phase enc. dir.	R >> L
FoV read	250 mm
FoV phase	100.0 %
Slice thickness	7.0 mm
TR	7.5 ms
Multi-slice mode	Sequential
Series	Interleaved
Concatenations	3

**Geometry - AutoAlign**

Slice group	1
Position	L0.0 A20.0 H0.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice group	2
Position	L0.0 A20.0 H0.0 mm

**Geometry - AutoAlign**

Orientation	Transversal
Phase enc. dir.	A >> P
Slice group	3
Position	L0.0 A20.0 H0.0 mm
Orientation	Coronal
Phase enc. dir.	R >> L
AutoAlign	---
Initial Position	L0.0 A20.0 H0.0
L	0.0 mm
A	20.0 mm
H	0.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Sagittal

**Geometry - Saturation**

Saturation mode	Standard
Fat suppr.	None
Water suppr.	None
Special sat.	None

**Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

**System - Miscellaneous**

Positioning mode	REF
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Tune up
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
A >> P	263 mm
R >> L	350 mm
F >> H	350 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Slice-sel.

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	7.5 ms
Concatenations	3
Segments	1

**Physio - Cardiac**

Tagging	None
Magn. preparation	None
Fat suppr.	None
Dark blood	Off
FoV read	250 mm
FoV phase	100.0 %
Phase resolution	91 %

**Physio - PACE**

Resp. control	Off
Concatenations	3

**Inline - Common**

Subtract	Off
Measurements	1
StdDev	Off
Liver registration	Off
Save original images	On

**Inline - MIP**

MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On

**Inline - Soft Tissue**

Wash - In	Off
Wash - Out	Off
TTP	Off
PEI	Off
MIP - time	Off
Measurements	1

**Inline - Composing**

Inline Composing	Off
Distortion Corr.	Off

**Inline - MapIt**

Save original images	On
MapIt	None
Flip angle	20 deg
Measurements	1
Contrasts	1
TR	7.5 ms
TE	3.69 ms

**Sequence - Part 1**

Introduction	On
--------------	----

**Sequence - Part 1**

Dimension	2D
Phase stabilisation	Off
Asymmetric echo	Allowed
Contrasts	1
Flow comp.	No
Multi-slice mode	Sequential
Bandwidth	320 Hz/Px

**Sequence - Part 2**

Segments	1
Acoustic noise reduction	None
RF pulse type	Fast
Gradient mode	Fast
Excitation	Slice-sel.
RF spoiling	On

**Sequence - Assistant**

Mode	Off
Allowed delay	0 s

\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_32ch\ABCD\_T1w\_MPR\_vNav\_setter

TA: 0.3 s PM: FIX Voxel size: 8.0×8.0×8.0 mmRel. SNR: 1.00 : ABCD

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	Off
Wait for user to start	Off
Start measurements	Single measurement

**Routine**

Slab group	1
Slabs	1
Dist. factor	50 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	32
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	8.00 mm
TR	11.0 ms
TE	4.8 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	BC

**Contrast - Common**

TR	11.0 ms
TE	4.8 ms
MTC	Off
Flip angle	2 deg
Fat suppr.	None

**Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

**Resolution - Common**

FoV read	256 mm
FoV phase	100.0 %
Slice thickness	8.00 mm
Base resolution	32
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	Off
Slice partial Fourier	6/8
Interpolation	Off

**Resolution - Filter Image**

Distortion Corr.	Off
Prescan Normalize	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off
Hamming	Off

**Geometry - Common**

Slab group	1
Slabs	1
Dist. factor	50 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice oversampling	0.0 %
Slices per slab	32
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	8.00 mm
TR	11.0 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

**Geometry - AutoAlign**

Slab group	1
Position	L0.0 A20.0 H0.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A20.0 H0.0
L	0.0 mm
A	20.0 mm
H	0.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Sagittal

**Geometry - Saturation**

Fat suppr.	None
Special sat.	None

**Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

**System - Miscellaneous**

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---



**System - Miscellaneous**

Coil Select Mode	Off - All
------------------	-----------

**System - Adjustments**

B0 Shim mode	Tune up
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
A >> P	263 mm
R >> L	350 mm
F >> H	350 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Non-sel.

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	Low
Img. Scale Cor.	10.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	11.0 ms
Concatenations	1

**Sequence - Part 1**

Introduction	Off
Dimension	3D
Contrasts	1
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.27 ms
Bandwidth	4882 Hz/Px

**Sequence - Part 2**

EPI factor	32
RF pulse type	Normal
Gradient mode	Fast
Excitation	Non-sel.
RF spoiling	On

**Sequence - Special**

Protocol filename	MPRAGE
-------------------	--------

\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_32ch\ABCD\_T1w\_MPR\_vNav

TA: 7:12 PM: FIX Voxel size: 1.0×1.0×1.0 mmPAT: 2 Rel. SNR: 1.00 : tfl

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	On
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	Off
Wait for user to start	On
Start measurements	Single measurement

**Routine**

Slab group	1
Slabs	1
Dist. factor	50 %
Position	L0.0 A20.0 F30.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	176
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	1.00 mm
TR	2500.0 ms
TE	2.9 ms
Averages	1
Concatenations	1
Filter	Prescan Normalize
Coil elements	HEA;HEP

**Contrast - Common**

TR	2500.0 ms
TE	2.9 ms
Magn. preparation	Non-sel. IR
T1	1070 ms
Flip angle	8.0 deg
Fat suppr.	Water excit. fast
Water suppr.	None

**Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

**Resolution - Common**

FoV read	256 mm
FoV phase	100.0 %
Slice thickness	1.00 mm
Base resolution	256
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	Off
Slice partial Fourier	Off
Interpolation	Off

**Resolution - iPAT**

PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	32
Accel. factor 3D	1
Reference scan mode	Integrated

**Resolution - Filter Image**

Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	On
Unfiltered images	On
Normalize	Off
B1 filter	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off

**Geometry - Common**

Slab group	1
Slabs	1
Dist. factor	50 %
Position	L0.0 A20.0 F30.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice oversampling	0.0 %
Slices per slab	176
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	1.00 mm
TR	2500.0 ms
Multi-slice mode	Single shot
Series	Interleaved
Concatenations	1

**Geometry - AutoAlign**

Slab group	1
Position	L0.0 A20.0 F30.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A20.0 F30.0
R	0.0 mm
A	20.0 mm
F	30.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Sagittal

**Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

**System - Miscellaneous**

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L

**System - Miscellaneous**

Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A20.0 F30.0 mm
Orientation	Sagittal
Rotation	0.00 deg
A >> P	256 mm
F >> H	256 mm
R >> L	176 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Non-sel.

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	Low
Img. Scale Cor.	5.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	2500.0 ms
Concatenations	1

**Physio - Cardiac**

Magn. preparation	Non-sel. IR
TI	1070 ms
Fat suppr.	Water excit. fast
Dark blood	Off
FoV read	256 mm
FoV phase	100.0 %
Phase resolution	100 %

**Inline - Common**

Subtract	Off
Measurements	1
StdDev	Off
Save original images	On

**Inline - MIP**

MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off

**Inline - MIP**

Save original images	On
----------------------	----

**Inline - Composing**

Inline Composing	Off
Distortion Corr.	Off

**Inline - Maplt**

Save original images	On
Maplt	None
Flip angle	8.0 deg
Measurements	1
Contrasts	1
TR	2500.0 ms
TE	2.9 ms

**Sequence - Part 1**

Introduction	On
Dimension	3D
Elliptical scanning	Off
Reordering	Linear
Asymmetric echo	Off
Contrasts	1
Flow comp.	No
Multi-slice mode	Single shot
Echo spacing	8.1 ms
Bandwidth	240 Hz/Px

**Sequence - Part 2**

RF pulse type	Fast
Gradient mode	Fast
Excitation	Non-sel.
RF spoiling	On
Turbo factor	256

**Sequence - Special**

Readout polarity	Positive
Nav. location	Before
Apply moco to	parent and nav
Remeasure	24 TRs
Reacq. threshold	0.50
Feedback delay	60 ms
Moco ref. image	Use Temp Ref
K-space streaming	None
ABCD navigator	On
Add. grad time	0.0 ms
Apply freq to	parent and nav
Averaging	None

**Sequence - Assistant**

Mode	Off
------	-----

\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_32ch\ABCD\_fMRI\_DistortionMap\_PA

TA: 0:14 PM: FIX Voxel size: 2.4×2.4×2.4 mmPAT: Off Rel. SNR: 1.00 : epse

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	Off
Wait for user to start	Off
Start measurements	Single measurement

**Routine**

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	7030 ms
TE	80.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HEA;HEP

**Contrast - Common**

TR	7030 ms
TE	80.0 ms
MTC	Off
Magn. preparation	None
Fat suppr.	Fat sat.
Fat sat. mode	Weak

**Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Delay in TR	0 ms
Multiple series	Off

**Resolution - Common**

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
Base resolution	90
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

**Resolution - iPAT**

Accel. mode	None
-------------	------

**Resolution - Filter Image**

Distortion Corr.	Off
Prescan Normalize	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off
Hamming	Off

**Geometry - Common**

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	7030 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

**Geometry - AutoAlign**

Slice group	1
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A10.0 H10.0
L	0.0 mm
A	10.0 mm
H	10.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

**Geometry - Saturation**

Fat suppr.	Fat sat.
Fat sat. mode	Weak
Special sat.	None

**Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

**System - Miscellaneous**

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**Sequence - Special**

Dummy Scans	1
Reverse Phase Encoding	On

**System - Adjust Volume**

Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	144 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
--------------	----------

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	2.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	7030 ms
Concatenations	1

**Inline - Common**

Subtract	Off
Measurements	1
StdDev	Off
Save original images	On

**Inline - MIP**

MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On

**Inline - Composing**

Inline Composing	Off
Distortion Corr.	Off

**Sequence - Part 1**

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	On
Echo spacing	0.51 ms
Bandwidth	2778 Hz/Px

**Sequence - Part 2**

EPI factor	90
RF pulse type	Normal
Gradient mode	Performance

\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_32ch\ABCD\_fMRI\_DistortionMap\_AP

TA: 0:14 PM: FIX Voxel size: 2.4×2.4×2.4 mmPAT: Off Rel. SNR: 1.00 : epse

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	Single measurement

**Routine**

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	7030 ms
TE	80.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HEA;HEP

**Contrast - Common**

TR	7030 ms
TE	80.0 ms
MTC	Off
Magn. preparation	None
Fat suppr.	Fat sat.
Fat sat. mode	Weak

**Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Delay in TR	0 ms
Multiple series	Off

**Resolution - Common**

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
Base resolution	90
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

**Resolution - iPAT**

Accel. mode	None
-------------	------

**Resolution - Filter Image**

Distortion Corr.	Off
Prescan Normalize	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off
Hamming	Off

**Geometry - Common**

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	7030 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

**Geometry - AutoAlign**

Slice group	1
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A10.0 H10.0
L	0.0 mm
A	10.0 mm
H	10.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

**Geometry - Saturation**

Fat suppr.	Fat sat.
Fat sat. mode	Weak
Special sat.	None

**Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

**System - Miscellaneous**

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**Sequence - Special**

Dummy Scans	1
Reverse Phase Encoding	Off

**System - Adjust Volume**

Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	144 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
--------------	----------

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	2.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	7030 ms
Concatenations	1

**Inline - Common**

Subtract	Off
Measurements	1
StdDev	Off
Save original images	On

**Inline - MIP**

MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On

**Inline - Composing**

Inline Composing	Off
Distortion Corr.	Off

**Sequence - Part 1**

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	On
Echo spacing	0.51 ms
Bandwidth	2778 Hz/Px

**Sequence - Part 2**

EPI factor	90
RF pulse type	Normal
Gradient mode	Performance

\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_32ch\ABCD\_fmri\_rest

TA: 5:11 PM: FIX Voxel size: 2.4×2.4×2.4 mmPAT: 6 Rel. SNR: 1.00 : eptid

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	On
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	On
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	On
Start measurements	Single measurement

**Resolution - iPAT**

Accel. factor slice	6
Reference scan mode	EPI/separate

**Resolution - Filter Image**

Distortion Corr.	Off
Prescan Normalize	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off
Hamming	Off

**Routine**

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	800 ms
TE	30.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HEA;HEP

**Geometry - Common**

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	800 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

**Geometry - AutoAlign**

Slice group	1
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A10.0 H10.0
L	0.0 mm
A	10.0 mm
H	10.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

**Contrast - Common**

TR	800 ms
TE	30.0 ms
MTC	Off
Flip angle	52 deg
Fat suppr.	Fat sat.

**Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	383
Delay in TR	0 ms
Multiple series	Off

**Resolution - Common**

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
Base resolution	90
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

**Resolution - iPAT**

Accel. mode	Slice accel.
Accel. factor PE	1
Ref. lines PE	22

**Geometry - Saturation**

Fat suppr.	Fat sat.
Special sat.	None

**Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

**System - Miscellaneous**

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
Matrix Optimization	Off



**System - Miscellaneous**

AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	144 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Standard

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	Pulse/Trigger
Average cycle	No Signal ms
Average cycle	No Signal ms
Acquisition window	833 ms
Trigger pulse	1
Trigger delay	0 ms
TR	800 ms
Concatenations	1
Phases	1

**BOLD**

GLM Statistics	Off
Dynamic t-maps	Off
Ignore meas. at start	0
Ignore after transition	0
Model transition states	Off
Temp. highpass filter	Off
Threshold	4.00
Paradigm size	3
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Active
Motion correction	Off
Spatial filter	Off
Measurements	383
Delay in TR	0 ms
Multiple series	Off

**Sequence - Part 1**

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.51 ms
Bandwidth	2778 Hz/Px

**Sequence - Part 2**

EPI factor	90
RF pulse type	Normal
Gradient mode	Fast
Excitation	Standard

**Sequence - pTX Pulses****Sequence - Special**

Dummy Scans	0
K-space streaming	None
Physio recording	Continuous
Reverse Phase Encoding	On

\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_32ch\ABCD\_fmri\_rest

TA: 5:11 PM: FIX Voxel size: 2.4×2.4×2.4 mmPAT: 6 Rel. SNR: 1.00 : epfid

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	On
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	On
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	On
Start measurements	Single measurement

**Resolution - iPAT**

Accel. factor slice	6
Reference scan mode	EPI/separate

**Resolution - Filter Image**

Distortion Corr.	Off
Prescan Normalize	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off
Hamming	Off

**Routine**

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	800 ms
TE	30.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HEA;HEP

**Geometry - Common**

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	800 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

**Geometry - AutoAlign**

Slice group	1
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A10.0 H10.0
L	0.0 mm
A	10.0 mm
H	10.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

**Contrast - Common**

TR	800 ms
TE	30.0 ms
MTC	Off
Flip angle	52 deg
Fat suppr.	Fat sat.

**Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	383
Delay in TR	0 ms
Multiple series	Off

**Resolution - Common**

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
Base resolution	90
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

**Resolution - iPAT**

Accel. mode	Slice accel.
Accel. factor PE	1
Ref. lines PE	22

**Geometry - Saturation**

Fat suppr.	Fat sat.
Special sat.	None

**Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

**System - Miscellaneous**

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
Matrix Optimization	Off

**System - Miscellaneous**

AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	144 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Standard

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	Pulse/Trigger
Average cycle	No Signal ms
Average cycle	No Signal ms
Acquisition window	833 ms
Trigger pulse	1
Trigger delay	0 ms
TR	800 ms
Concatenations	1
Phases	1

**BOLD**

GLM Statistics	Off
Dynamic t-maps	Off
Ignore meas. at start	0
Ignore after transition	0
Model transition states	Off
Temp. highpass filter	Off
Threshold	4.00
Paradigm size	3
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Active
Motion correction	Off
Spatial filter	Off
Measurements	383
Delay in TR	0 ms
Multiple series	Off

**Sequence - Part 1**

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.51 ms
Bandwidth	2778 Hz/Px

**Sequence - Part 2**

EPI factor	90
RF pulse type	Normal
Gradient mode	Fast
Excitation	Standard

**Sequence - pTX Pulses****Sequence - Special**

Dummy Scans	0
K-space streaming	None
Physio recording	Continuous
Reverse Phase Encoding	On

\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_32ch\ABCD\_dMRI\_DistortionMap\_PA

TA: 0:25 PM: REF Voxel size: 1.7×1.7×1.7 mmPAT: Off Rel. SNR: 1.00 : epse

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	Off
Wait for user to start	On
Start measurements	Single measurement

**Routine**

Slice group	1
Slices	81
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	240 mm
FoV phase	100.0 %
Slice thickness	1.7 mm
TR	12400 ms
TE	89.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HEA;HEP

**Contrast - Common**

TR	12400 ms
TE	89.0 ms
MTC	Off
Magn. preparation	None
Fat suppr.	Fat sat.
Fat sat. mode	Strong

**Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Delay in TR	0 ms
Multiple series	Off

**Resolution - Common**

FoV read	240 mm
FoV phase	100.0 %
Slice thickness	1.7 mm
Base resolution	140
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off

**Resolution - iPAT**

Accel. mode	None
-------------	------

**Resolution - Filter Image**

Distortion Corr.	Off
Prescan Normalize	Off
Dynamic Field Corr.	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off

**Geometry - Common**

Slice group	1
Slices	81
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	240 mm
FoV phase	100.0 %
Slice thickness	1.7 mm
TR	12400 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

**Geometry - AutoAlign**

Slice group	1
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A10.0 H10.0
L	0.0 mm
A	10.0 mm
H	10.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

**Geometry - Saturation**

Fat suppr.	Fat sat.
Fat sat. mode	Strong
Special sat.	None

**Geometry - Navigator****Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

**System - Miscellaneous**

Positioning mode	REF
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Matrix Optimization	Off
AutoAlign	---

**System - Miscellaneous**

Coil Select Mode	Off - All
------------------	-----------

**System - Adjustments**

B0 Shim mode	Advanced
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	240 mm
R >> L	240 mm
F >> H	138 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Standard

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	2.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	12400 ms
Concatenations	1

**Physio - PACE**

Resp. control	Off
Concatenations	1

**Diff - Neuro**

Diffusion mode	Free
Diff. directions	102
Diffusion Scheme	Monopolar
Diff. weightings	1
b-value	0 s/mm <sup>2</sup>
b-value	1
Diff. weighted images	On
Trace weighted images	Off
ADC maps	Off
FA maps	Off
Mosaic	Off
Tensor	Off
Noise level	40

**Diff - Body**

Diffusion mode	Free
Diff. directions	102
Diffusion Scheme	Monopolar
Diff. weightings	1
b-value	0 s/mm <sup>2</sup>
b-value	1

**Diff - Body**

Diff. weighted images	On
Trace weighted images	Off
ADC maps	Off
Exponential ADC Maps	Off
FA maps	Off
Invert Gray Scale	Off
Calculated Image	Off
b-Value >=	0 s/mm <sup>2</sup>
Noise level	40

**Diff - Composing**

Inline Composing	Off
Distortion Corr.	Off

**Sequence - Part 1**

Introduction	Off
Optimization	None
Multi-slice mode	Interleaved
Free echo spacing	On
Echo spacing	0.69 ms
Bandwidth	1700 Hz/Px

**Sequence - Part 2**

EPI factor	140
RF pulse type	Normal
Gradient mode	Performance
Excitation	Standard

**Sequence - pTX Pulses****Sequence - Special**

K-space streaming	None
Reverse Phase Encoding	On

\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_32ch\ABCD\_dMRI\_DistortionMap\_AP

TA: 0:25 PM: FIX Voxel size: 1.7×1.7×1.7 mmPAT: Off Rel. SNR: 1.00 : epse

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	Single measurement

**Routine**

Slice group	1
Slices	81
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	240 mm
FoV phase	100.0 %
Slice thickness	1.7 mm
TR	12400 ms
TE	89.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HEA;HEP

**Contrast - Common**

TR	12400 ms
TE	89.0 ms
MTC	Off
Magn. preparation	None
Fat suppr.	Fat sat.
Fat sat. mode	Strong

**Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Delay in TR	0 ms
Multiple series	Off

**Resolution - Common**

FoV read	240 mm
FoV phase	100.0 %
Slice thickness	1.7 mm
Base resolution	140
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off

**Resolution - iPAT**

Accel. mode	None
-------------	------

**Resolution - Filter Image**

Distortion Corr.	Off
Prescan Normalize	Off
Dynamic Field Corr.	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off

**Geometry - Common**

Slice group	1
Slices	81
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	240 mm
FoV phase	100.0 %
Slice thickness	1.7 mm
TR	12400 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

**Geometry - AutoAlign**

Slice group	1
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A10.0 H10.0
L	0.0 mm
A	10.0 mm
H	10.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

**Geometry - Saturation**

Fat suppr.	Fat sat.
Fat sat. mode	Strong
Special sat.	None

**Geometry - Navigator****Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

**System - Miscellaneous**

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Matrix Optimization	Off
AutoAlign	---

**System - Miscellaneous**

Coil Select Mode	Off - All
------------------	-----------

**System - Adjustments**

B0 Shim mode	Advanced
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	240 mm
R >> L	240 mm
F >> H	138 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Standard

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	2.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	12400 ms
Concatenations	1

**Physio - PACE**

Resp. control	Off
Concatenations	1

**Diff - Neuro**

Diffusion mode	Free
Diff. directions	102
Diffusion Scheme	Monopolar
Diff. weightings	1
b-value	0 s/mm <sup>2</sup>
b-value	1
Diff. weighted images	On
Trace weighted images	Off
ADC maps	Off
FA maps	Off
Mosaic	Off
Tensor	Off
Noise level	40

**Diff - Body**

Diffusion mode	Free
Diff. directions	102
Diffusion Scheme	Monopolar
Diff. weightings	1
b-value	0 s/mm <sup>2</sup>
b-value	1

**Diff - Body**

Diff. weighted images	On
Trace weighted images	Off
ADC maps	Off
Exponential ADC Maps	Off
FA maps	Off
Invert Gray Scale	Off
Calculated Image	Off
b-Value >=	0 s/mm <sup>2</sup>
Noise level	40

**Diff - Composing**

Inline Composing	Off
Distortion Corr.	Off

**Sequence - Part 1**

Introduction	Off
Optimization	None
Multi-slice mode	Interleaved
Free echo spacing	On
Echo spacing	0.69 ms
Bandwidth	1700 Hz/Px

**Sequence - Part 2**

EPI factor	140
RF pulse type	Normal
Gradient mode	Performance
Excitation	Standard

**Sequence - pTX Pulses****Sequence - Special**

K-space streaming	None
Reverse Phase Encoding	Off

\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_32ch\ABCD\_dMRI

TA: 7:29 PM: FIX Voxel size: 1.7×1.7×1.7 mmPAT: 3 Rel. SNR: 1.00 : epse

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	On
Start measurements	Single measurement

**Routine**

Slice group	1
Slices	81
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	240 mm
FoV phase	100.0 %
Slice thickness	1.7 mm
TR	4200 ms
TE	89.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HEA;HEP

**Contrast - Common**

TR	4200 ms
TE	89.0 ms
MTC	Off
Magn. preparation	None
Fat suppr.	Fat sat.
Fat sat. mode	Strong

**Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Delay in TR	0 ms
Multiple series	Off

**Resolution - Common**

FoV read	240 mm
FoV phase	100.0 %
Slice thickness	1.7 mm
Base resolution	140
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off

**Resolution - iPAT**

Accel. mode	Slice accel.
Accel. factor PE	1

**Resolution - iPAT**

Ref. lines PE	71
Accel. factor slice	3
Reference scan mode	EPI/separate

**Resolution - Filter Image**

Distortion Corr.	Off
Prescan Normalize	Off
Dynamic Field Corr.	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off

**Geometry - Common**

Slice group	1
Slices	81
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	240 mm
FoV phase	100.0 %
Slice thickness	1.7 mm
TR	4200 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

**Geometry - AutoAlign**

Slice group	1
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A10.0 H10.0
L	0.0 mm
A	10.0 mm
H	10.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

**Geometry - Saturation**

Fat suppr.	Fat sat.
Fat sat. mode	Strong
Special sat.	None

**Geometry - Navigator****Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

**System - Miscellaneous**

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T



**System - Miscellaneous**

Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Advanced
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	240 mm
R >> L	240 mm
F >> H	138 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Standard

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	3.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	4200 ms
Concatenations	1

**Physio - PACE**

Resp. control	Off
Concatenations	1

**Diff - Neuro**

Diffusion mode	Free
Diff. directions	102
Diffusion Scheme	Monopolar
Diff. weightings	2
b-value 1	0 s/mm <sup>2</sup>
b-value 2	3000 s/mm <sup>2</sup>
b-value 1	1
b-value 2	1
Diff. weighted images	On
Trace weighted images	Off
ADC maps	Off
FA maps	Off
Mosaic	On
Tensor	Off
Noise level	40

**Diff - Body**

Diffusion mode	Free
Diff. directions	102
Diffusion Scheme	Monopolar
Diff. weightings	2
b-value 1	0 s/mm <sup>2</sup>
b-value 2	3000 s/mm <sup>2</sup>
b-value 1	1
b-value 2	1
Diff. weighted images	On
Trace weighted images	Off
ADC maps	Off
Exponential ADC Maps	Off
FA maps	Off
Invert Gray Scale	Off
Calculated Image	Off
b-Value >=	0 s/mm <sup>2</sup>
Noise level	40

**Diff - Composing**

Inline Composing	Off
Distortion Corr.	Off

**Sequence - Part 1**

Introduction	Off
Optimization	None
Multi-slice mode	Interleaved
Free echo spacing	On
Echo spacing	0.69 ms
Bandwidth	1700 Hz/Px

**Sequence - Part 2**

EPI factor	140
RF pulse type	Normal
Gradient mode	Performance*
Excitation	Standard

**Sequence - pTX Pulses****Sequence - Special**

K-space streaming	None
Reverse Phase Encoding	On

\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_32ch\ABCD\_T2w\_SPC\_vNav\_setter

TA: 0.3 s PM: FIX Voxel size: 8.0×8.0×8.0 mmRel. SNR: 1.00 : ABCD

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	On
Start measurements	Single measurement

**Routine**

Slab group	1
Slabs	1
Dist. factor	50 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	32
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	8.00 mm
TR	13.0 ms
TE	6.1 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	BC

**Contrast - Common**

TR	13.0 ms
TE	6.1 ms
MTC	Off
Flip angle	2 deg
Fat suppr.	Water excit. normal

**Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

**Resolution - Common**

FoV read	256 mm
FoV phase	100.0 %
Slice thickness	8.00 mm
Base resolution	32
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	Off
Slice partial Fourier	6/8
Interpolation	Off

**Resolution - Filter Image**

Distortion Corr.	Off
Prescan Normalize	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off
Hamming	Off

**Geometry - Common**

Slab group	1
Slabs	1
Dist. factor	50 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice oversampling	0.0 %
Slices per slab	32
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	8.00 mm
TR	13.0 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

**Geometry - AutoAlign**

Slab group	1
Position	L0.0 A20.0 H0.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A20.0 H0.0
L	0.0 mm
A	20.0 mm
H	0.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Sagittal

**Geometry - Saturation**

Fat suppr.	Water excit. normal
Special sat.	None

**Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

**System - Miscellaneous**

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---

**System - Miscellaneous**

Coil Select Mode	Off - All
------------------	-----------

**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A20.0 H0.0 mm
Orientation	Sagittal
Rotation	0.00 deg
A >> P	256 mm
F >> H	256 mm
R >> L	256 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Non-sel.

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	Low
Img. Scale Cor.	10.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	13.0 ms
Concatenations	1

**Sequence - Part 1**

Introduction	Off
Dimension	3D
Contrasts	1
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.27 ms
Bandwidth	4882 Hz/Px

**Sequence - Part 2**

EPI factor	32
RF pulse type	Normal
Gradient mode	Fast
Excitation	Non-sel.
RF spoiling	On

**Sequence - Special**

Protocol filename	T2-SPACE
-------------------	----------

\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_32ch\ABCD\_T2w\_SPC\_vNav

TA: 6:35 PM: FIX Voxel size: 1.0×1.0×1.0 mmPAT: 2 Rel. SNR: 1.00 : spc

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	Single measurement

**Routine**

Slab group	1
Slabs	1
Position	L0.0 A20.0 F30.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	176
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	1.00 mm
TR	3200 ms
TE	565 ms
Averages	1.0
Concatenations	1
Filter	Prescan Normalize
Coil elements	HEA;HEP

**Contrast - Common**

TR	3200 ms
TE	565 ms
MTC	Off
Magn. preparation	None
Fat suppr.	None
Blood suppr.	Off
Restore magn.	Off

**Contrast - Dynamic**

Averages	1.0
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

**Resolution - Common**

FoV read	256 mm
FoV phase	100.0 %
Slice thickness	1.00 mm
Base resolution	256
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	Allowed
Slice partial Fourier	Off
Interpolation	Off

**Resolution - iPAT**

PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	32
Accel. factor 3D	1
Reference scan mode	Integrated

**Resolution - Filter Image**

Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	On
Unfiltered images	On
Normalize	Off
B1 filter	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off

**Geometry - Common**

Slab group	1
Slabs	1
Position	L0.0 A20.0 F30.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice oversampling	0.0 %
Slices per slab	176
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	1.00 mm
TR	3200 ms
Concatenations	1

**Geometry - AutoAlign**

Slab group	1
Position	L0.0 A20.0 F30.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A20.0 F30.0
R	0.0 mm
A	20.0 mm
F	30.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Sagittal

**Geometry - Saturation**

Fat suppr.	None
Restore magn.	Off
Special sat.	None

**Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

**System - Miscellaneous**

Positioning mode	FIX
Table position	H
Table position	0 mm

**System - Miscellaneous**

MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A20.0 F30.0 mm
Orientation	Sagittal
Rotation	0.00 deg
A >> P	256 mm
F >> H	256 mm
R >> L	176 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Non-sel.

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	5.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
Trigger delay	0 ms
TR	3200 ms
Concatenations	1

**Physio - Cardiac**

Magn. preparation	None
Fat suppr.	None
Dark blood	Off
FoV read	256 mm
FoV phase	100.0 %
Phase resolution	100 %

**Inline - Common**

Subtract	Off
Measurements	1
StdDev	Off
Save original images	On

**Inline - MIP**

MIP-Sag	Off
MIP-Cor	Off

**Inline - MIP**

MIP-Tra	Off
MIP-Time	Off
Save original images	On

**Inline - Composing**

Inline Composing	Off
Distortion Corr.	Off

**Sequence - Part 1**

Introduction	On
Dimension	3D
Elliptical scanning	On
Reordering	Linear
Flow comp.	No
Echo spacing	6.28 ms
Adiabatic-mode	Off
Bandwidth	241 Hz/Px

**Sequence - Part 2**

Echo train duration	1187 ms
RF pulse type	Fast
Gradient mode	Fast
Excitation	Non-sel.
Flip angle mode	T2 var
Turbo factor	200

**Sequence - Special**

Include nav.	On
Apply moco to	parent and nav
Remeasure	18 TRs
Reacq. threshold	0.50
Feedback delay	80 ms
Moco ref. image	Use Temp Ref
K-space streaming	None
ABCD navigator	On
Apply freq to	parent and nav

**Sequence - Assistant**

Allowed delay	0 s
---------------	-----

\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_32ch\ABCD\_fMRI\_DistortionMap\_PA

TA: 0:14 PM: FIX Voxel size: 2.4×2.4×2.4 mmPAT: Off Rel. SNR: 1.00 : epse

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	On
Start measurements	Single measurement

**Routine**

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	7030 ms
TE	80.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HEA;HEP

**Contrast - Common**

TR	7030 ms
TE	80.0 ms
MTC	Off
Magn. preparation	None
Fat suppr.	Fat sat.
Fat sat. mode	Weak

**Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Delay in TR	0 ms
Multiple series	Off

**Resolution - Common**

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
Base resolution	90
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

**Resolution - iPAT**

Accel. mode	None
-------------	------

**Resolution - Filter Image**

Distortion Corr.	Off
Prescan Normalize	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off
Hamming	Off

**Geometry - Common**

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	7030 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

**Geometry - AutoAlign**

Slice group	1
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A10.0 H10.0
L	0.0 mm
A	10.0 mm
H	10.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

**Geometry - Saturation**

Fat suppr.	Fat sat.
Fat sat. mode	Weak
Special sat.	None

**Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

**System - Miscellaneous**

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**Sequence - Special**

Dummy Scans	1
Reverse Phase Encoding	On

**System - Adjust Volume**

Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	144 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
--------------	----------

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	2.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	7030 ms
Concatenations	1

**Inline - Common**

Subtract	Off
Measurements	1
StdDev	Off
Save original images	On

**Inline - MIP**

MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On

**Inline - Composing**

Inline Composing	Off
Distortion Corr.	Off

**Sequence - Part 1**

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	On
Echo spacing	0.51 ms
Bandwidth	2778 Hz/Px

**Sequence - Part 2**

EPI factor	90
RF pulse type	Normal
Gradient mode	Performance

\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_32ch\ABCD\_fMRI\_DistortionMap\_AP

TA: 0:14 PM: FIX Voxel size: 2.4×2.4×2.4 mmPAT: Off Rel. SNR: 1.00 : epse

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	Single measurement

**Routine**

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	7030 ms
TE	80.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HEA;HEP

**Contrast - Common**

TR	7030 ms
TE	80.0 ms
MTC	Off
Magn. preparation	None
Fat suppr.	Fat sat.
Fat sat. mode	Weak

**Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Delay in TR	0 ms
Multiple series	Off

**Resolution - Common**

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
Base resolution	90
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

**Resolution - iPAT**

Accel. mode	None
-------------	------

**Resolution - Filter Image**

Distortion Corr.	Off
Prescan Normalize	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off
Hamming	Off

**Geometry - Common**

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	7030 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

**Geometry - AutoAlign**

Slice group	1
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A10.0 H10.0
L	0.0 mm
A	10.0 mm
H	10.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

**Geometry - Saturation**

Fat suppr.	Fat sat.
Fat sat. mode	Weak
Special sat.	None

**Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

**System - Miscellaneous**

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - All



**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**Sequence - Special**

Dummy Scans	1
Reverse Phase Encoding	Off

**System - Adjust Volume**

Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	144 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
--------------	----------

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	2.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	7030 ms
Concatenations	1

**Inline - Common**

Subtract	Off
Measurements	1
StdDev	Off
Save original images	On

**Inline - MIP**

MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On

**Inline - Composing**

Inline Composing	Off
Distortion Corr.	Off

**Sequence - Part 1**

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	On
Echo spacing	0.51 ms
Bandwidth	2778 Hz/Px

**Sequence - Part 2**

EPI factor	90
RF pulse type	Normal
Gradient mode	Performance

\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_32ch\ABCD\_fmri\_rest

TA: 5:11 PM: FIX Voxel size: 2.4×2.4×2.4 mmPAT: 6 Rel. SNR: 1.00 : epfid

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	On
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	On
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	On
Start measurements	Single measurement

**Routine**

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	800 ms
TE	30.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HEA;HEP

**Contrast - Common**

TR	800 ms
TE	30.0 ms
MTC	Off
Flip angle	52 deg
Fat suppr.	Fat sat.

**Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	383
Delay in TR	0 ms
Multiple series	Off

**Resolution - Common**

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
Base resolution	90
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

**Resolution - iPAT**

Accel. mode	Slice accel.
Accel. factor PE	1
Ref. lines PE	22

**Resolution - iPAT**

Accel. factor slice	6
Reference scan mode	EPI/separate

**Resolution - Filter Image**

Distortion Corr.	Off
Prescan Normalize	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off
Hamming	Off

**Geometry - Common**

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	800 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

**Geometry - AutoAlign**

Slice group	1
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A10.0 H10.0
L	0.0 mm
A	10.0 mm
H	10.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

**Geometry - Saturation**

Fat suppr.	Fat sat.
Special sat.	None

**Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

**System - Miscellaneous**

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
Matrix Optimization	Off

**System - Miscellaneous**

AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	144 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Standard

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	Pulse/Trigger
Average cycle	No Signal ms
Average cycle	No Signal ms
Acquisition window	833 ms
Trigger pulse	1
Trigger delay	0 ms
TR	800 ms
Concatenations	1
Phases	1

**BOLD**

GLM Statistics	Off
Dynamic t-maps	Off
Ignore meas. at start	0
Ignore after transition	0
Model transition states	Off
Temp. highpass filter	Off
Threshold	4.00
Paradigm size	3
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Active
Motion correction	Off
Spatial filter	Off
Measurements	383
Delay in TR	0 ms
Multiple series	Off

**Sequence - Part 1**

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.51 ms
Bandwidth	2778 Hz/Px

**Sequence - Part 2**

EPI factor	90
RF pulse type	Normal
Gradient mode	Fast
Excitation	Standard

**Sequence - pTX Pulses****Sequence - Special**

Dummy Scans	0
K-space streaming	None
Physio recording	Continuous
Reverse Phase Encoding	On

\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_32ch\ABCD\_fmri\_rest

TA: 5:11 PM: FIX Voxel size: 2.4×2.4×2.4 mmPAT: 6 Rel. SNR: 1.00 : epfid

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	On
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	On
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	On
Start measurements	Single measurement

**Resolution - iPAT**

Accel. factor slice	6
Reference scan mode	EPI/separate

**Resolution - Filter Image**

Distortion Corr.	Off
Prescan Normalize	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off
Hamming	Off

**Routine**

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	800 ms
TE	30.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HEA;HEP

**Geometry - Common**

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	800 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

**Geometry - AutoAlign**

Slice group	1
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A10.0 H10.0
L	0.0 mm
A	10.0 mm
H	10.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

**Contrast - Common**

TR	800 ms
TE	30.0 ms
MTC	Off
Flip angle	52 deg
Fat suppr.	Fat sat.

**Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	383
Delay in TR	0 ms
Multiple series	Off

**Resolution - Common**

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
Base resolution	90
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

**Resolution - iPAT**

Accel. mode	Slice accel.
Accel. factor PE	1
Ref. lines PE	22

**Geometry - Saturation**

Fat suppr.	Fat sat.
Special sat.	None

**Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

**System - Miscellaneous**

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
Matrix Optimization	Off

**System - Miscellaneous**

AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	144 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Standard

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	Pulse/Trigger
Average cycle	No Signal ms
Average cycle	No Signal ms
Acquisition window	833 ms
Trigger pulse	1
Trigger delay	0 ms
TR	800 ms
Concatenations	1
Phases	1

**BOLD**

GLM Statistics	Off
Dynamic t-maps	Off
Ignore meas. at start	0
Ignore after transition	0
Model transition states	Off
Temp. highpass filter	Off
Threshold	4.00
Paradigm size	3
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Active
Motion correction	Off
Spatial filter	Off
Measurements	383
Delay in TR	0 ms
Multiple series	Off

**Sequence - Part 1**

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.51 ms
Bandwidth	2778 Hz/Px

**Sequence - Part 2**

EPI factor	90
RF pulse type	Normal
Gradient mode	Fast
Excitation	Standard

**Sequence - pTX Pulses****Sequence - Special**

Dummy Scans	0
K-space streaming	None
Physio recording	Continuous
Reverse Phase Encoding	On

\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_32ch\ABCD\_fMRI\_DistortionMap\_PA

TA: 0:14 PM: FIX Voxel size: 2.4×2.4×2.4 mmPAT: Off Rel. SNR: 1.00 : epse

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	On
Start measurements	Single measurement

**Routine**

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	7030 ms
TE	80.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HEA;HEP

**Contrast - Common**

TR	7030 ms
TE	80.0 ms
MTC	Off
Magn. preparation	None
Fat suppr.	Fat sat.
Fat sat. mode	Weak

**Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Delay in TR	0 ms
Multiple series	Off

**Resolution - Common**

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
Base resolution	90
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

**Resolution - iPAT**

Accel. mode	None
-------------	------

**Resolution - Filter Image**

Distortion Corr.	Off
Prescan Normalize	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off
Hamming	Off

**Geometry - Common**

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	7030 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

**Geometry - AutoAlign**

Slice group	1
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A10.0 H10.0
L	0.0 mm
A	10.0 mm
H	10.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

**Geometry - Saturation**

Fat suppr.	Fat sat.
Fat sat. mode	Weak
Special sat.	None

**Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

**System - Miscellaneous**

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**Sequence - Special**

Dummy Scans	1
Reverse Phase Encoding	On

**System - Adjust Volume**

Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	144 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
--------------	----------

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	2.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	7030 ms
Concatenations	1

**Inline - Common**

Subtract	Off
Measurements	1
StdDev	Off
Save original images	On

**Inline - MIP**

MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On

**Inline - Composing**

Inline Composing	Off
Distortion Corr.	Off

**Sequence - Part 1**

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	On
Echo spacing	0.51 ms
Bandwidth	2778 Hz/Px

**Sequence - Part 2**

EPI factor	90
RF pulse type	Normal
Gradient mode	Performance

\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_32ch\ABCD\_fMRI\_DistortionMap\_AP

TA: 0:14 PM: FIX Voxel size: 2.4×2.4×2.4 mmPAT: Off Rel. SNR: 1.00 : epse

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	Single measurement

**Routine**

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	7030 ms
TE	80.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HEA;HEP

**Contrast - Common**

TR	7030 ms
TE	80.0 ms
MTC	Off
Magn. preparation	None
Fat suppr.	Fat sat.
Fat sat. mode	Weak

**Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Delay in TR	0 ms
Multiple series	Off

**Resolution - Common**

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
Base resolution	90
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

**Resolution - iPAT**

Accel. mode	None
-------------	------

**Resolution - Filter Image**

Distortion Corr.	Off
Prescan Normalize	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off
Hamming	Off

**Geometry - Common**

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	7030 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

**Geometry - AutoAlign**

Slice group	1
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A10.0 H10.0
L	0.0 mm
A	10.0 mm
H	10.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

**Geometry - Saturation**

Fat suppr.	Fat sat.
Fat sat. mode	Weak
Special sat.	None

**Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

**System - Miscellaneous**

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - All



**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**Sequence - Special**

Dummy Scans	1
Reverse Phase Encoding	Off

**System - Adjust Volume**

Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	144 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
--------------	----------

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	2.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	7030 ms
Concatenations	1

**Inline - Common**

Subtract	Off
Measurements	1
StdDev	Off
Save original images	On

**Inline - MIP**

MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On

**Inline - Composing**

Inline Composing	Off
Distortion Corr.	Off

**Sequence - Part 1**

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	On
Echo spacing	0.51 ms
Bandwidth	2778 Hz/Px

**Sequence - Part 2**

EPI factor	90
RF pulse type	Normal
Gradient mode	Performance

\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_32ch\ABCD\_fMRI\_task\_Stop

TA: 6:00 PM: FIX Voxel size: 2.4×2.4×2.4 mmPAT: 6 Rel. SNR: 1.00 : epfid

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	On
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	On
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	On
Start measurements	Single measurement

**Resolution - iPAT**

Accel. factor slice	6
Reference scan mode	EPI/separate

**Resolution - Filter Image**

Distortion Corr.	Off
Prescan Normalize	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off
Hamming	Off

**Routine**

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	800 ms
TE	30.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HEA;HEP

**Geometry - Common**

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	800 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

**Geometry - AutoAlign**

Slice group	1
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A10.0 H10.0
L	0.0 mm
A	10.0 mm
H	10.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

**Contrast - Common**

TR	800 ms
TE	30.0 ms
MTC	Off
Flip angle	52 deg
Fat suppr.	Fat sat.

**Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	445
Delay in TR	0 ms
Multiple series	Off

**Resolution - Common**

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
Base resolution	90
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

**Resolution - iPAT**

Accel. mode	Slice accel.
Accel. factor PE	1
Ref. lines PE	22

**Geometry - Saturation**

Fat suppr.	Fat sat.
Special sat.	None

**Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

**System - Miscellaneous**

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
Matrix Optimization	Off

**System - Miscellaneous**

AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	144 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Standard

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	Pulse/Trigger
Average cycle	No Signal ms
Average cycle	No Signal ms
Acquisition window	833 ms
Trigger pulse	1
Trigger delay	0 ms
TR	800 ms
Concatenations	1
Phases	1

**BOLD**

GLM Statistics	Off
Dynamic t-maps	Off
Ignore meas. at start	0
Ignore after transition	0
Model transition states	Off
Temp. highpass filter	Off
Threshold	4.00
Paradigm size	3
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Active
Motion correction	Off
Spatial filter	Off
Measurements	445
Delay in TR	0 ms
Multiple series	Off

**Sequence - Part 1**

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.51 ms
Bandwidth	2778 Hz/Px

**Sequence - Part 2**

EPI factor	90
RF pulse type	Normal
Gradient mode	Fast
Excitation	Standard

**Sequence - pTX Pulses****Sequence - Special**

Dummy Scans	0
K-space streaming	None
Physio recording	Continuous
Reverse Phase Encoding	On

\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_32ch\ABCD\_fMRI\_task\_Stop

TA: 6:00 PM: FIX Voxel size: 2.4×2.4×2.4 mmPAT: 6 Rel. SNR: 1.00 : epfid

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	On
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	On
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	On
Start measurements	Single measurement

**Resolution - iPAT**

Accel. factor slice	6
Reference scan mode	EPI/separate

**Resolution - Filter Image**

Distortion Corr.	Off
Prescan Normalize	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off
Hamming	Off

**Routine**

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	800 ms
TE	30.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HEA;HEP

**Geometry - Common**

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	800 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

**Geometry - AutoAlign**

Slice group	1
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A10.0 H10.0
L	0.0 mm
A	10.0 mm
H	10.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

**Contrast - Common**

TR	800 ms
TE	30.0 ms
MTC	Off
Flip angle	52 deg
Fat suppr.	Fat sat.

**Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	445
Delay in TR	0 ms
Multiple series	Off

**Resolution - Common**

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
Base resolution	90
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

**Resolution - iPAT**

Accel. mode	Slice accel.
Accel. factor PE	1
Ref. lines PE	22

**Geometry - Saturation**

Fat suppr.	Fat sat.
Special sat.	None

**Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

**System - Miscellaneous**

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
Matrix Optimization	Off

**System - Miscellaneous**

AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	144 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Standard

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	Pulse/Trigger
Average cycle	No Signal ms
Average cycle	No Signal ms
Acquisition window	833 ms
Trigger pulse	1
Trigger delay	0 ms
TR	800 ms
Concatenations	1
Phases	1

**BOLD**

GLM Statistics	Off
Dynamic t-maps	Off
Ignore meas. at start	0
Ignore after transition	0
Model transition states	Off
Temp. highpass filter	Off
Threshold	4.00
Paradigm size	3
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Active
Motion correction	Off
Spatial filter	Off
Measurements	445
Delay in TR	0 ms
Multiple series	Off

**Sequence - Part 1**

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.51 ms
Bandwidth	2778 Hz/Px

**Sequence - Part 2**

EPI factor	90
RF pulse type	Normal
Gradient mode	Fast
Excitation	Standard

**Sequence - pTX Pulses****Sequence - Special**

Dummy Scans	0
K-space streaming	None
Physio recording	Continuous
Reverse Phase Encoding	On

\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_32ch\ABCD\_fMRI\_DistortionMap\_PA

TA: 0:14 PM: FIX Voxel size: 2.4×2.4×2.4 mmPAT: Off Rel. SNR: 1.00 : epse

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	On
Start measurements	Single measurement

**Routine**

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	7030 ms
TE	80.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HEA;HEP

**Contrast - Common**

TR	7030 ms
TE	80.0 ms
MTC	Off
Magn. preparation	None
Fat suppr.	Fat sat.
Fat sat. mode	Weak

**Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Delay in TR	0 ms
Multiple series	Off

**Resolution - Common**

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
Base resolution	90
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

**Resolution - iPAT**

Accel. mode	None
-------------	------

**Resolution - Filter Image**

Distortion Corr.	Off
Prescan Normalize	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off
Hamming	Off

**Geometry - Common**

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	7030 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

**Geometry - AutoAlign**

Slice group	1
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A10.0 H10.0
L	0.0 mm
A	10.0 mm
H	10.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

**Geometry - Saturation**

Fat suppr.	Fat sat.
Fat sat. mode	Weak
Special sat.	None

**Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

**System - Miscellaneous**

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**Sequence - Special**

Dummy Scans	1
Reverse Phase Encoding	On

**System - Adjust Volume**

Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	144 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
--------------	----------

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	2.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	7030 ms
Concatenations	1

**Inline - Common**

Subtract	Off
Measurements	1
StdDev	Off
Save original images	On

**Inline - MIP**

MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On

**Inline - Composing**

Inline Composing	Off
Distortion Corr.	Off

**Sequence - Part 1**

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	On
Echo spacing	0.51 ms
Bandwidth	2778 Hz/Px

**Sequence - Part 2**

EPI factor	90
RF pulse type	Normal
Gradient mode	Performance

\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_32ch\ABCD\_fMRI\_DistortionMap\_AP

TA: 0:14 PM: FIX Voxel size: 2.4×2.4×2.4 mmPAT: Off Rel. SNR: 1.00 : epse

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	Single measurement

**Routine**

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	7030 ms
TE	80.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HEA;HEP

**Contrast - Common**

TR	7030 ms
TE	80.0 ms
MTC	Off
Magn. preparation	None
Fat suppr.	Fat sat.
Fat sat. mode	Weak

**Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Delay in TR	0 ms
Multiple series	Off

**Resolution - Common**

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
Base resolution	90
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

**Resolution - iPAT**

Accel. mode	None
-------------	------

**Resolution - Filter Image**

Distortion Corr.	Off
Prescan Normalize	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off
Hamming	Off

**Geometry - Common**

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	7030 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

**Geometry - AutoAlign**

Slice group	1
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A10.0 H10.0
L	0.0 mm
A	10.0 mm
H	10.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

**Geometry - Saturation**

Fat suppr.	Fat sat.
Fat sat. mode	Weak
Special sat.	None

**Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

**System - Miscellaneous**

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - All



**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**Sequence - Special**

Dummy Scans	1
Reverse Phase Encoding	Off

**System - Adjust Volume**

Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	144 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
--------------	----------

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	2.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	7030 ms
Concatenations	1

**Inline - Common**

Subtract	Off
Measurements	1
StdDev	Off
Save original images	On

**Inline - MIP**

MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On

**Inline - Composing**

Inline Composing	Off
Distortion Corr.	Off

**Sequence - Part 1**

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	On
Echo spacing	0.51 ms
Bandwidth	2778 Hz/Px

**Sequence - Part 2**

EPI factor	90
RF pulse type	Normal
Gradient mode	Performance

\\USER\ABCD\20190320\ABCD\_PROTOCOL\_\_one\_session\_\_32ch\ABCD\_fMRI\_task\_Emoctional\_n-b  
ack

TA: 5:00 PM: FIX Voxel size: 2.4×2.4×2.4 mmPAT: 6 Rel. SNR: 1.00 : epfid

### Properties

Prio recon	Off
Load images to viewer	On
Inline movie	On
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	On
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	On
Start measurements	Single measurement

### Resolution - iPAT

Ref. lines PE	22
Accel. factor slice	6
Reference scan mode	EPI/separate

### Resolution - Filter Image

Distortion Corr.	Off
Prescan Normalize	Off

### Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off
Hamming	Off

### Routine

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	800 ms
TE	30.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HEA;HEP

### Geometry - Common

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	800 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

### Contrast - Common

TR	800 ms
TE	30.0 ms
MTC	Off
Flip angle	52 deg
Fat suppr.	Fat sat.

### Geometry - AutoAlign

Slice group	1
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A10.0 H10.0
L	0.0 mm
A	10.0 mm
H	10.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

### Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	370
Delay in TR	0 ms
Multiple series	Off

### Geometry - Saturation

Fat suppr.	Fat sat.
Special sat.	None

### Resolution - Common

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
Base resolution	90
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

### Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

### System - Miscellaneous

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P

### Resolution - iPAT

Accel. mode	Slice accel.
Accel. factor PE	1

**System - Miscellaneous**

Transversal	F >> H
Coil Combine Mode	Sum of Squares
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	144 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Standard

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	Pulse/Trigger
Average cycle	No Signal ms
Average cycle	No Signal ms
Acquisition window	833 ms
Trigger pulse	1
Trigger delay	0 ms
TR	800 ms
Concatenations	1
Phases	1

**BOLD**

GLM Statistics	Off
Dynamic t-maps	Off
Ignore meas. at start	0
Ignore after transition	0
Model transition states	Off
Temp. highpass filter	Off
Threshold	4.00
Paradigm size	3
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Active
Motion correction	Off
Spatial filter	Off
Measurements	370
Delay in TR	0 ms
Multiple series	Off

**Sequence - Part 1**

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.51 ms
Bandwidth	2778 Hz/Px

**Sequence - Part 2**

EPI factor	90
RF pulse type	Normal
Gradient mode	Fast
Excitation	Standard

**Sequence - pTX Pulses****Sequence - Special**

Dummy Scans	0
K-space streaming	None
Physio recording	Continuous
Reverse Phase Encoding	On

\\USER\ABCD\20190320\ABCD\_PROTOCOL\_\_one\_session\_\_32ch\ABCD\_fmRI\_task\_Emotional\_n-b  
ack

TA: 5:00 PM: FIX Voxel size: 2.4×2.4×2.4 mmPAT: 6 Rel. SNR: 1.00 : epfid

### Properties

Prio recon	Off
Load images to viewer	On
Inline movie	On
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	On
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	On
Start measurements	Single measurement

### Resolution - iPAT

Ref. lines PE	22
Accel. factor slice	6
Reference scan mode	EPI/separate

### Resolution - Filter Image

Distortion Corr.	Off
Prescan Normalize	Off

### Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off
Hamming	Off

### Routine

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	800 ms
TE	30.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HEA;HEP

### Geometry - Common

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	800 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

### Geometry - AutoAlign

Slice group	1
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A10.0 H10.0
L	0.0 mm
A	10.0 mm
H	10.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

### Contrast - Common

TR	800 ms
TE	30.0 ms
MTC	Off
Flip angle	52 deg
Fat suppr.	Fat sat.

### Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	370
Delay in TR	0 ms
Multiple series	Off

### Resolution - Common

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
Base resolution	90
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

### Resolution - iPAT

Accel. mode	Slice accel.
Accel. factor PE	1

### Geometry - Saturation

Fat suppr.	Fat sat.
Special sat.	None

### Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

### System - Miscellaneous

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P

**System - Miscellaneous**

Transversal	F >> H
Coil Combine Mode	Sum of Squares
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	144 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Standard

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	Pulse/Trigger
Average cycle	No Signal ms
Average cycle	No Signal ms
Acquisition window	833 ms
Trigger pulse	1
Trigger delay	0 ms
TR	800 ms
Concatenations	1
Phases	1

**BOLD**

GLM Statistics	Off
Dynamic t-maps	Off
Ignore meas. at start	0
Ignore after transition	0
Model transition states	Off
Temp. highpass filter	Off
Threshold	4.00
Paradigm size	3
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Active
Motion correction	Off
Spatial filter	Off
Measurements	370
Delay in TR	0 ms
Multiple series	Off

**Sequence - Part 1**

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.51 ms
Bandwidth	2778 Hz/Px

**Sequence - Part 2**

EPI factor	90
RF pulse type	Normal
Gradient mode	Fast
Excitation	Standard

**Sequence - pTX Pulses****Sequence - Special**

Dummy Scans	0
K-space streaming	None
Physio recording	Continuous
Reverse Phase Encoding	On

\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_32ch\ABCD\_fMRI\_DistortionMap\_PA

TA: 0:14 PM: FIX Voxel size: 2.4×2.4×2.4 mmPAT: Off Rel. SNR: 1.00 : epse

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	On
Start measurements	Single measurement

**Routine**

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	7030 ms
TE	80.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HEA;HEP

**Contrast - Common**

TR	7030 ms
TE	80.0 ms
MTC	Off
Magn. preparation	None
Fat suppr.	Fat sat.
Fat sat. mode	Weak

**Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Delay in TR	0 ms
Multiple series	Off

**Resolution - Common**

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
Base resolution	90
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

**Resolution - iPAT**

Accel. mode	None
-------------	------

**Resolution - Filter Image**

Distortion Corr.	Off
Prescan Normalize	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off
Hamming	Off

**Geometry - Common**

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	7030 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

**Geometry - AutoAlign**

Slice group	1
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A10.0 H10.0
L	0.0 mm
A	10.0 mm
H	10.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

**Geometry - Saturation**

Fat suppr.	Fat sat.
Fat sat. mode	Weak
Special sat.	None

**Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

**System - Miscellaneous**

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**Sequence - Special**

Dummy Scans	1
Reverse Phase Encoding	On

**System - Adjust Volume**

Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	144 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
--------------	----------

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	2.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	7030 ms
Concatenations	1

**Inline - Common**

Subtract	Off
Measurements	1
StdDev	Off
Save original images	On

**Inline - MIP**

MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On

**Inline - Composing**

Inline Composing	Off
Distortion Corr.	Off

**Sequence - Part 1**

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	On
Echo spacing	0.51 ms
Bandwidth	2778 Hz/Px

**Sequence - Part 2**

EPI factor	90
RF pulse type	Normal
Gradient mode	Performance

\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_32ch\ABCD\_fMRI\_DistortionMap\_AP

TA: 0:14 PM: FIX Voxel size: 2.4×2.4×2.4 mmPAT: Off Rel. SNR: 1.00 : epse

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	Single measurement

**Routine**

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	7030 ms
TE	80.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HEA;HEP

**Contrast - Common**

TR	7030 ms
TE	80.0 ms
MTC	Off
Magn. preparation	None
Fat suppr.	Fat sat.
Fat sat. mode	Weak

**Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Delay in TR	0 ms
Multiple series	Off

**Resolution - Common**

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
Base resolution	90
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

**Resolution - iPAT**

Accel. mode	None
-------------	------

**Resolution - Filter Image**

Distortion Corr.	Off
Prescan Normalize	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off
Hamming	Off

**Geometry - Common**

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	7030 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

**Geometry - AutoAlign**

Slice group	1
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A10.0 H10.0
L	0.0 mm
A	10.0 mm
H	10.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

**Geometry - Saturation**

Fat suppr.	Fat sat.
Fat sat. mode	Weak
Special sat.	None

**Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

**System - Miscellaneous**

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - All



**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**Sequence - Special**

Dummy Scans	1
Reverse Phase Encoding	Off

**System - Adjust Volume**

Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	144 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
--------------	----------

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	2.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	7030 ms
Concatenations	1

**Inline - Common**

Subtract	Off
Measurements	1
StdDev	Off
Save original images	On

**Inline - MIP**

MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On

**Inline - Composing**

Inline Composing	Off
Distortion Corr.	Off

**Sequence - Part 1**

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	On
Echo spacing	0.51 ms
Bandwidth	2778 Hz/Px

**Sequence - Part 2**

EPI factor	90
RF pulse type	Normal
Gradient mode	Performance

\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_32ch\ABCD\_fMRI\_task\_Monetary\_Inc  
ntive

TA: 5:33 PM: FIX Voxel size: 2.4×2.4×2.4 mmPAT: 6 Rel. SNR: 1.00 : epfid

### Properties

Prio recon	Off
Load images to viewer	On
Inline movie	On
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	On
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	On
Start measurements	Single measurement

### Resolution - iPAT

Ref. lines PE	22
Accel. factor slice	6
Reference scan mode	EPI/separate

### Resolution - Filter Image

Distortion Corr.	Off
Prescan Normalize	Off

### Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off
Hamming	Off

### Routine

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	800 ms
TE	30.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HEA;HEP

### Geometry - Common

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	800 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

### Contrast - Common

TR	800 ms
TE	30.0 ms
MTC	Off
Flip angle	52 deg
Fat suppr.	Fat sat.

### Geometry - AutoAlign

Slice group	1
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A10.0 H10.0
L	0.0 mm
A	10.0 mm
H	10.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

### Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	411
Delay in TR	0 ms
Multiple series	Off

### Geometry - Saturation

Fat suppr.	Fat sat.
Special sat.	None

### Resolution - Common

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
Base resolution	90
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

### Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

### System - Miscellaneous

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P

### Resolution - iPAT

Accel. mode	Slice accel.
Accel. factor PE	1

**System - Miscellaneous**

Transversal	F >> H
Coil Combine Mode	Sum of Squares
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	144 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Standard

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	Pulse/Trigger
Average cycle	No Signal ms
Average cycle	No Signal ms
Acquisition window	833 ms
Trigger pulse	1
Trigger delay	0 ms
TR	800 ms
Concatenations	1
Phases	1

**BOLD**

GLM Statistics	Off
Dynamic t-maps	Off
Ignore meas. at start	0
Ignore after transition	0
Model transition states	Off
Temp. highpass filter	Off
Threshold	4.00
Paradigm size	3
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Active
Motion correction	Off
Spatial filter	Off
Measurements	411
Delay in TR	0 ms
Multiple series	Off

**Sequence - Part 1**

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.51 ms
Bandwidth	2778 Hz/Px

**Sequence - Part 2**

EPI factor	90
RF pulse type	Normal
Gradient mode	Fast
Excitation	Standard

**Sequence - pTX Pulses****Sequence - Special**

Dummy Scans	0
K-space streaming	None
Physio recording	Continuous
Reverse Phase Encoding	On

\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_32ch\ABCD\_fMRI\_task\_Monetary\_Ince  
ntive

TA: 5:33 PM: FIX Voxel size: 2.4×2.4×2.4 mmPAT: 6 Rel. SNR: 1.00 : epfid

### Properties

Prio recon	Off
Load images to viewer	On
Inline movie	On
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	On
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	On
Start measurements	Single measurement

### Resolution - iPAT

Ref. lines PE	22
Accel. factor slice	6
Reference scan mode	EPI/separate

### Resolution - Filter Image

Distortion Corr.	Off
Prescan Normalize	Off

### Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off
Hamming	Off

### Routine

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	800 ms
TE	30.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HEA;HEP

### Geometry - Common

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	800 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

### Contrast - Common

TR	800 ms
TE	30.0 ms
MTC	Off
Flip angle	52 deg
Fat suppr.	Fat sat.

### Geometry - AutoAlign

Slice group	1
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A10.0 H10.0
L	0.0 mm
A	10.0 mm
H	10.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

### Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	411
Delay in TR	0 ms
Multiple series	Off

### Geometry - Saturation

Fat suppr.	Fat sat.
Special sat.	None

### Resolution - Common

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
Base resolution	90
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

### Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

### System - Miscellaneous

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P

### Resolution - iPAT

Accel. mode	Slice accel.
Accel. factor PE	1

**System - Miscellaneous**

Transversal	F >> H
Coil Combine Mode	Sum of Squares
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	144 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Standard

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	Pulse/Trigger
Average cycle	No Signal ms
Average cycle	No Signal ms
Acquisition window	833 ms
Trigger pulse	1
Trigger delay	0 ms
TR	800 ms
Concatenations	1
Phases	1

**BOLD**

GLM Statistics	Off
Dynamic t-maps	Off
Ignore meas. at start	0
Ignore after transition	0
Model transition states	Off
Temp. highpass filter	Off
Threshold	4.00
Paradigm size	3
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Active
Motion correction	Off
Spatial filter	Off
Measurements	411
Delay in TR	0 ms
Multiple series	Off

**Sequence - Part 1**

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.51 ms
Bandwidth	2778 Hz/Px

**Sequence - Part 2**

EPI factor	90
RF pulse type	Normal
Gradient mode	Fast
Excitation	Standard

**Sequence - pTX Pulses****Sequence - Special**

Dummy Scans	0
K-space streaming	None
Physio recording	Continuous
Reverse Phase Encoding	On

\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_streaming\_32ch\localizer\_32ch

TA: 0:12 PM: REF Voxel size: 0.5×0.5×7.0 mmPAT: Off Rel. SNR: 1.00 : fl

**Properties**

Prio recon	On
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	On
Load images to graphic segments	On
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	Single measurement

**Routine**

Slice group	1
Slices	1
Dist. factor	20 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice group	2
Slices	1
Dist. factor	20 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
Slice group	3
Slices	1
Dist. factor	20 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Coronal
Phase enc. dir.	R >> L
AutoAlign	---
Phase oversampling	0 %
FoV read	250 mm
FoV phase	100.0 %
Slice thickness	7.0 mm
TR	7.5 ms
TE	3.69 ms
Averages	2
Concatenations	3
Filter	Prescan Normalize, Elliptical filter
Coil elements	HEA;HEP

**Contrast - Common**

TR	7.5 ms
TE	3.69 ms
TD	0 ms
MTC	Off
Magn. preparation	None
Flip angle	20 deg
Fat suppr.	None
Water suppr.	None
SWI	Off

**Contrast - Dynamic**

Averages	2
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1

**Contrast - Dynamic**

Multiple series	Each measurement
-----------------	------------------

**Resolution - Common**

FoV read	250 mm
FoV phase	100.0 %
Slice thickness	7.0 mm
Base resolution	256
Phase resolution	91 %
Phase partial Fourier	Off
Interpolation	On

**Resolution - iPAT**

PAT mode	None
----------	------

**Resolution - Filter Image**

Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	On
Unfiltered images	Off
Normalize	Off
B1 filter	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	On

**Geometry - Common**

Slice group	1
Slices	1
Dist. factor	20 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice group	2
Slices	1
Dist. factor	20 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
Slice group	3
Slices	1
Dist. factor	20 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Coronal
Phase enc. dir.	R >> L
FoV read	250 mm
FoV phase	100.0 %
Slice thickness	7.0 mm
TR	7.5 ms
Multi-slice mode	Sequential
Series	Interleaved
Concatenations	3

**Geometry - AutoAlign**

Slice group	1
Position	L0.0 A20.0 H0.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice group	2
Position	L0.0 A20.0 H0.0 mm

**Geometry - AutoAlign**

Orientation	Transversal
Phase enc. dir.	A >> P
Slice group	3
Position	L0.0 A20.0 H0.0 mm
Orientation	Coronal
Phase enc. dir.	R >> L
AutoAlign	---
Initial Position	L0.0 A20.0 H0.0
L	0.0 mm
A	20.0 mm
H	0.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Sagittal

**Geometry - Saturation**

Saturation mode	Standard
Fat suppr.	None
Water suppr.	None
Special sat.	None

**Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

**System - Miscellaneous**

Positioning mode	REF
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Tune up
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
A >> P	263 mm
R >> L	350 mm
F >> H	350 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Slice-sel.

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	7.5 ms
Concatenations	3
Segments	1

**Physio - Cardiac**

Tagging	None
Magn. preparation	None
Fat suppr.	None
Dark blood	Off
FoV read	250 mm
FoV phase	100.0 %
Phase resolution	91 %

**Physio - PACE**

Resp. control	Off
Concatenations	3

**Inline - Common**

Subtract	Off
Measurements	1
StdDev	Off
Liver registration	Off
Save original images	On

**Inline - MIP**

MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On

**Inline - Soft Tissue**

Wash - In	Off
Wash - Out	Off
TTP	Off
PEI	Off
MIP - time	Off
Measurements	1

**Inline - Composing**

Inline Composing	Off
Distortion Corr.	Off

**Inline - MapIt**

Save original images	On
MapIt	None
Flip angle	20 deg
Measurements	1
Contrasts	1
TR	7.5 ms
TE	3.69 ms

**Sequence - Part 1**

Introduction	On
--------------	----

**Sequence - Part 1**

Dimension	2D
Phase stabilisation	Off
Asymmetric echo	Allowed
Contrasts	1
Flow comp.	No
Multi-slice mode	Sequential
Bandwidth	320 Hz/Px

**Sequence - Part 2**

Segments	1
Acoustic noise reduction	None
RF pulse type	Fast
Gradient mode	Fast
Excitation	Slice-sel.
RF spoiling	On

**Sequence - Assistant**

Mode	Off
Allowed delay	0 s



\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_streaming\_32ch\ABCD\_T1w\_MPR\_vN  
av\_setter

TA: 0.3 s PM: FIX Voxel size: 8.0×8.0×8.0 mmRel. SNR: 1.00 : ABCD

### Properties

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	Off
Wait for user to start	Off
Start measurements	Single measurement

### Routine

Slab group	1
Slabs	1
Dist. factor	50 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	32
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	8.00 mm
TR	11.0 ms
TE	4.8 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	BC

### Contrast - Common

TR	11.0 ms
TE	4.8 ms
MTC	Off
Flip angle	2 deg
Fat suppr.	None

### Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

### Resolution - Common

FoV read	256 mm
FoV phase	100.0 %
Slice thickness	8.00 mm
Base resolution	32
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	Off
Slice partial Fourier	6/8
Interpolation	Off

### Resolution - Filter Image

Distortion Corr.	Off
Prescan Normalize	Off

### Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off
Hamming	Off

### Geometry - Common

Slab group	1
Slabs	1
Dist. factor	50 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice oversampling	0.0 %
Slices per slab	32
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	8.00 mm
TR	11.0 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

### Geometry - AutoAlign

Slab group	1
Position	L0.0 A20.0 H0.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A20.0 H0.0
L	0.0 mm
A	20.0 mm
H	0.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Sagittal

### Geometry - Saturation

Fat suppr.	None
Special sat.	None

### Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

### System - Miscellaneous

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
Save uncombined	Off
Matrix Optimization	Off

**System - Miscellaneous**

AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Tune up
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
A >> P	263 mm
R >> L	350 mm
F >> H	350 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Non-sel.

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	Low
Img. Scale Cor.	10.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	11.0 ms
Concatenations	1

**Sequence - Part 1**

Introduction	Off
Dimension	3D
Contrasts	1
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.27 ms
Bandwidth	4882 Hz/Px

**Sequence - Part 2**

EPI factor	32
RF pulse type	Normal
Gradient mode	Fast
Excitation	Non-sel.
RF spoiling	On

**Sequence - Special**

Protocol filename	MPRAGE
-------------------	--------

\\USER\ABCD\20190320\ABCD_PROTOCOL_one_session_streaming_32ch\ABCD_T1w_MPR_vN av
TA: 7:12 PM: FIX Voxel size: 1.0×1.0×1.0 mmPAT: 2 Rel. SNR: 1.00 : tfl

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	On
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	Off
Wait for user to start	On
Start measurements	Single measurement

**Routine**

Slab group	1
Slabs	1
Dist. factor	50 %
Position	L0.0 A20.0 F30.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	176
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	1.00 mm
TR	2500.0 ms
TE	2.9 ms
Averages	1
Concatenations	1
Filter	Prescan Normalize
Coil elements	HEA;HEP

**Contrast - Common**

TR	2500.0 ms
TE	2.9 ms
Magn. preparation	Non-sel. IR
TI	1070 ms
Flip angle	8.0 deg
Fat suppr.	Water excit. fast
Water suppr.	None

**Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

**Resolution - Common**

FoV read	256 mm
FoV phase	100.0 %
Slice thickness	1.00 mm
Base resolution	256
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	Off
Slice partial Fourier	Off

**Resolution - Common**

Interpolation	Off
---------------	-----

**Resolution - iPAT**

PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	32
Accel. factor 3D	1
Reference scan mode	Integrated

**Resolution - Filter Image**

Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	On
Unfiltered images	On
Normalize	Off
B1 filter	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off

**Geometry - Common**

Slab group	1
Slabs	1
Dist. factor	50 %
Position	L0.0 A20.0 F30.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice oversampling	0.0 %
Slices per slab	176
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	1.00 mm
TR	2500.0 ms
Multi-slice mode	Single shot
Series	Interleaved
Concatenations	1

**Geometry - AutoAlign**

Slab group	1
Position	L0.0 A20.0 F30.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A20.0 F30.0
R	0.0 mm
A	20.0 mm
F	30.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Sagittal

**Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

**System - Miscellaneous**

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A20.0 F30.0 mm
Orientation	Sagittal
Rotation	0.00 deg
A >> P	256 mm
F >> H	256 mm
R >> L	176 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Non-sel.

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	Low
Img. Scale Cor.	5.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	2500.0 ms
Concatenations	1

**Physio - Cardiac**

Magn. preparation	Non-sel. IR
T1	1070 ms
Fat suppr.	Water excit. fast
Dark blood	Off
FoV read	256 mm
FoV phase	100.0 %
Phase resolution	100 %

**Inline - Common**

Subtract	Off
Measurements	1
StdDev	Off
Save original images	On

**Inline - MIP**

MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On

**Inline - Composing**

Inline Composing	Off
Distortion Corr.	Off

**Inline - MapIt**

Save original images	On
MapIt	None
Flip angle	8.0 deg
Measurements	1
Contrasts	1
TR	2500.0 ms
TE	2.9 ms

**Sequence - Part 1**

Introduction	On
Dimension	3D
Elliptical scanning	Off
Reordering	Linear
Asymmetric echo	Off
Contrasts	1
Flow comp.	No
Multi-slice mode	Single shot
Echo spacing	8.1 ms
Bandwidth	240 Hz/Px

**Sequence - Part 2**

RF pulse type	Fast
Gradient mode	Fast
Excitation	Non-sel.
RF spoiling	On
Turbo factor	256

**Sequence - Special**

Readout polarity	Positive
Nav. location	Before
Apply moco to	parent and nav
Remeasure	24 TRs
Reacq. threshold	0.50
Feedback delay	60 ms
Moco ref. image	Use Temp Ref
K-space streaming	None
ABCD navigator	On
Add. grad time	0.0 ms
Apply freq to	parent and nav
Averaging	None

**Sequence - Assistant**

Mode	Off
------	-----

\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_streaming\_32ch\ABCD\_fMRI\_Distorti  
onMap\_PA

TA: 0:14 PM: FIX Voxel size: 2.4×2.4×2.4 mmPAT: Off Rel. SNR: 1.00 : epse

### Properties

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	Off
Wait for user to start	Off
Start measurements	Single measurement

### Routine

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	7030 ms
TE	80.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HEA;HEP

### Contrast - Common

TR	7030 ms
TE	80.0 ms
MTC	Off
Magn. preparation	None
Fat suppr.	Fat sat.
Fat sat. mode	Weak

### Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Delay in TR	0 ms
Multiple series	Off

### Resolution - Common

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
Base resolution	90
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

### Resolution - iPAT

Accel. mode	None
-------------	------

### Resolution - Filter Image

Distortion Corr.	Off
Prescan Normalize	Off

### Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off
Hamming	Off

### Geometry - Common

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	7030 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

### Geometry - AutoAlign

Slice group	1
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A10.0 H10.0
L	0.0 mm
A	10.0 mm
H	10.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

### Geometry - Saturation

Fat suppr.	Fat sat.
Fat sat. mode	Weak
Special sat.	None

### Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

### System - Miscellaneous

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---

**System - Miscellaneous**

Coil Select Mode	Off - All
------------------	-----------

**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	144 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
--------------	----------

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	2.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	7030 ms
Concatenations	1

**Inline - Common**

Subtract	Off
Measurements	1
StdDev	Off
Save original images	On

**Inline - MIP**

MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On

**Inline - Composing**

Inline Composing	Off
Distortion Corr.	Off

**Sequence - Part 1**

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	On
Echo spacing	0.51 ms
Bandwidth	2778 Hz/Px

**Sequence - Part 2**

EPI factor	90
RF pulse type	Normal

**Sequence - Part 2**

Gradient mode	Performance
---------------	-------------

**Sequence - Special**

Dummy Scans	1
Reverse Phase Encoding	On

\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_streaming\_32ch\ABCD\_fMRI\_DistortionMap\_AP

TA: 0:14 PM: FIX Voxel size: 2.4×2.4×2.4 mmPAT: Off Rel. SNR: 1.00 : epse

### Properties

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	Single measurement

### Routine

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	7030 ms
TE	80.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HEA;HEP

### Contrast - Common

TR	7030 ms
TE	80.0 ms
MTC	Off
Magn. preparation	None
Fat suppr.	Fat sat.
Fat sat. mode	Weak

### Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Delay in TR	0 ms
Multiple series	Off

### Resolution - Common

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
Base resolution	90
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

### Resolution - iPAT

Accel. mode	None
-------------	------

### Resolution - Filter Image

Distortion Corr.	Off
Prescan Normalize	Off

### Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off
Hamming	Off

### Geometry - Common

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	7030 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

### Geometry - AutoAlign

Slice group	1
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A10.0 H10.0
L	0.0 mm
A	10.0 mm
H	10.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

### Geometry - Saturation

Fat suppr.	Fat sat.
Fat sat. mode	Weak
Special sat.	None

### Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

### System - Miscellaneous

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---

**System - Miscellaneous**

Coil Select Mode	Off - All
------------------	-----------

**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	144 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
--------------	----------

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	2.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	7030 ms
Concatenations	1

**Inline - Common**

Subtract	Off
Measurements	1
StdDev	Off
Save original images	On

**Inline - MIP**

MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On

**Inline - Composing**

Inline Composing	Off
Distortion Corr.	Off

**Sequence - Part 1**

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	On
Echo spacing	0.51 ms
Bandwidth	2778 Hz/Px

**Sequence - Part 2**

EPI factor	90
RF pulse type	Normal

**Sequence - Part 2**

Gradient mode	Performance
---------------	-------------

**Sequence - Special**

Dummy Scans	1
Reverse Phase Encoding	Off



\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_streaming\_32ch\ABCD\_fMRI\_rest

TA: 5:11 PM: FIX Voxel size: 2.4×2.4×2.4 mmPAT: 6 Rel. SNR: 1.00 : epfid

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	On
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	On
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	On
Start measurements	Single measurement

**Routine**

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	800 ms
TE	30.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HEA;HEP

**Contrast - Common**

TR	800 ms
TE	30.0 ms
MTC	Off
Flip angle	52 deg
Fat suppr.	Fat sat.

**Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	383
Delay in TR	0 ms
Multiple series	Off

**Resolution - Common**

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
Base resolution	90
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

**Resolution - iPAT**

Accel. mode	Slice accel.
Accel. factor PE	1
Ref. lines PE	22

**Resolution - iPAT**

Accel. factor slice	6
Reference scan mode	EPI/separate

**Resolution - Filter Image**

Distortion Corr.	Off
Prescan Normalize	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off
Hamming	Off

**Geometry - Common**

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	800 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

**Geometry - AutoAlign**

Slice group	1
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A10.0 H10.0
L	0.0 mm
A	10.0 mm
H	10.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

**Geometry - Saturation**

Fat suppr.	Fat sat.
Special sat.	None

**Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

**System - Miscellaneous**

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
Matrix Optimization	Off

**System - Miscellaneous**

AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	144 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Standard

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	Pulse/Trigger
Average cycle	No Signal ms
Average cycle	No Signal ms
Acquisition window	833 ms
Trigger pulse	1
Trigger delay	0 ms
TR	800 ms
Concatenations	1
Phases	1

**BOLD**

GLM Statistics	Off
Dynamic t-maps	Off
Ignore meas. at start	0
Ignore after transition	0
Model transition states	Off
Temp. highpass filter	Off
Threshold	4.00
Paradigm size	3
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Active
Motion correction	Off
Spatial filter	Off
Measurements	383
Delay in TR	0 ms
Multiple series	Off

**Sequence - Part 1**

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.51 ms
Bandwidth	2778 Hz/Px

**Sequence - Part 2**

EPI factor	90
RF pulse type	Normal
Gradient mode	Fast
Excitation	Standard

**Sequence - pTX Pulses****Sequence - Special**

Dummy Scans	0
K-space streaming	File
Physio recording	Continuous
Reverse Phase Encoding	On

\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_streaming\_32ch\ABCD\_fMRI\_rest

TA: 5:11 PM: FIX Voxel size: 2.4×2.4×2.4 mmPAT: 6 Rel. SNR: 1.00 : epfid

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	On
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	On
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	On
Start measurements	Single measurement

**Resolution - iPAT**

Accel. factor slice	6
Reference scan mode	EPI/separate

**Resolution - Filter Image**

Distortion Corr.	Off
Prescan Normalize	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off
Hamming	Off

**Routine**

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	800 ms
TE	30.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HEA;HEP

**Geometry - Common**

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	800 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

**Geometry - AutoAlign**

Slice group	1
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A10.0 H10.0
L	0.0 mm
A	10.0 mm
H	10.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

**Contrast - Common**

TR	800 ms
TE	30.0 ms
MTC	Off
Flip angle	52 deg
Fat suppr.	Fat sat.

**Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	383
Delay in TR	0 ms
Multiple series	Off

**Resolution - Common**

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
Base resolution	90
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

**Resolution - iPAT**

Accel. mode	Slice accel.
Accel. factor PE	1
Ref. lines PE	22

**Geometry - Saturation**

Fat suppr.	Fat sat.
Special sat.	None

**Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

**System - Miscellaneous**

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
Matrix Optimization	Off

**System - Miscellaneous**

AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	144 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Standard

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	Pulse/Trigger
Average cycle	No Signal ms
Average cycle	No Signal ms
Acquisition window	833 ms
Trigger pulse	1
Trigger delay	0 ms
TR	800 ms
Concatenations	1
Phases	1

**BOLD**

GLM Statistics	Off
Dynamic t-maps	Off
Ignore meas. at start	0
Ignore after transition	0
Model transition states	Off
Temp. highpass filter	Off
Threshold	4.00
Paradigm size	3
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Active
Motion correction	Off
Spatial filter	Off
Measurements	383
Delay in TR	0 ms
Multiple series	Off

**Sequence - Part 1**

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.51 ms
Bandwidth	2778 Hz/Px

**Sequence - Part 2**

EPI factor	90
RF pulse type	Normal
Gradient mode	Fast
Excitation	Standard

**Sequence - pTX Pulses****Sequence - Special**

Dummy Scans	0
K-space streaming	File
Physio recording	Continuous
Reverse Phase Encoding	On

\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_streaming\_32ch\ABCD\_dMRI\_DistortionMap\_PA

TA: 0:25 PM: REF Voxel size: 1.7×1.7×1.7 mmPAT: Off Rel. SNR: 1.00 : epse

### Properties

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	Off
Wait for user to start	On
Start measurements	Single measurement

### Routine

Slice group	1
Slices	81
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	240 mm
FoV phase	100.0 %
Slice thickness	1.7 mm
TR	12400 ms
TE	89.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HEA;HEP

### Contrast - Common

TR	12400 ms
TE	89.0 ms
MTC	Off
Magn. preparation	None
Fat suppr.	Fat sat.
Fat sat. mode	Strong

### Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Delay in TR	0 ms
Multiple series	Off

### Resolution - Common

FoV read	240 mm
FoV phase	100.0 %
Slice thickness	1.7 mm
Base resolution	140
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off

### Resolution - iPAT

Accel. mode	None
-------------	------

### Resolution - Filter Image

Distortion Corr.	Off
Prescan Normalize	Off
Dynamic Field Corr.	Off

### Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off

### Geometry - Common

Slice group	1
Slices	81
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	240 mm
FoV phase	100.0 %
Slice thickness	1.7 mm
TR	12400 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

### Geometry - AutoAlign

Slice group	1
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A10.0 H10.0
L	0.0 mm
A	10.0 mm
H	10.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

### Geometry - Saturation

Fat suppr.	Fat sat.
Fat sat. mode	Strong
Special sat.	None

### Geometry - Navigator

### Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

### System - Miscellaneous

Positioning mode	REF
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine

**System - Miscellaneous**

Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Advanced
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	240 mm
R >> L	240 mm
F >> H	138 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Standard

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	2.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	12400 ms
Concatenations	1

**Physio - PACE**

Resp. control	Off
Concatenations	1

**Diff - Neuro**

Diffusion mode	Free
Diff. directions	102
Diffusion Scheme	Monopolar
Diff. weightings	1
b-value	0 s/mm <sup>2</sup>
b-value	1
Diff. weighted images	On
Trace weighted images	Off
ADC maps	Off
FA maps	Off
Mosaic	Off
Tensor	Off
Noise level	40

**Diff - Body**

Diffusion mode	Free
Diff. directions	102
Diffusion Scheme	Monopolar
Diff. weightings	1

**Diff - Body**

b-value	0 s/mm <sup>2</sup>
b-value	1
Diff. weighted images	On
Trace weighted images	Off
ADC maps	Off
Exponential ADC Maps	Off
FA maps	Off
Invert Gray Scale	Off
Calculated Image	Off
b-Value >=	0 s/mm <sup>2</sup>
Noise level	40

**Diff - Composing**

Inline Composing	Off
Distortion Corr.	Off

**Sequence - Part 1**

Introduction	Off
Optimization	None
Multi-slice mode	Interleaved
Free echo spacing	On
Echo spacing	0.69 ms
Bandwidth	1700 Hz/Px

**Sequence - Part 2**

EPI factor	140
RF pulse type	Normal
Gradient mode	Performance
Excitation	Standard

**Sequence - pTX Pulses****Sequence - Special**

K-space streaming	None
Reverse Phase Encoding	On

\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_streaming\_32ch\ABCD\_dMRI\_DistortionMap\_AP

TA: 0:25 PM: FIX Voxel size: 1.7×1.7×1.7 mmPAT: Off Rel. SNR: 1.00 : epse

### Properties

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	Single measurement

### Routine

Slice group	1
Slices	81
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	240 mm
FoV phase	100.0 %
Slice thickness	1.7 mm
TR	12400 ms
TE	89.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HEA;HEP

### Contrast - Common

TR	12400 ms
TE	89.0 ms
MTC	Off
Magn. preparation	None
Fat suppr.	Fat sat.
Fat sat. mode	Strong

### Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Delay in TR	0 ms
Multiple series	Off

### Resolution - Common

FoV read	240 mm
FoV phase	100.0 %
Slice thickness	1.7 mm
Base resolution	140
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off

### Resolution - iPAT

Accel. mode	None
-------------	------

### Resolution - Filter Image

Distortion Corr.	Off
Prescan Normalize	Off
Dynamic Field Corr.	Off

### Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off

### Geometry - Common

Slice group	1
Slices	81
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	240 mm
FoV phase	100.0 %
Slice thickness	1.7 mm
TR	12400 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

### Geometry - AutoAlign

Slice group	1
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A10.0 H10.0
L	0.0 mm
A	10.0 mm
H	10.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

### Geometry - Saturation

Fat suppr.	Fat sat.
Fat sat. mode	Strong
Special sat.	None

### Geometry - Navigator

### Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

### System - Miscellaneous

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine

**System - Miscellaneous**

Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Advanced
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	240 mm
R >> L	240 mm
F >> H	138 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Standard

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	2.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	12400 ms
Concatenations	1

**Physio - PACE**

Resp. control	Off
Concatenations	1

**Diff - Neuro**

Diffusion mode	Free
Diff. directions	102
Diffusion Scheme	Monopolar
Diff. weightings	1
b-value	0 s/mm <sup>2</sup>
b-value	1
Diff. weighted images	On
Trace weighted images	Off
ADC maps	Off
FA maps	Off
Mosaic	Off
Tensor	Off
Noise level	40

**Diff - Body**

Diffusion mode	Free
Diff. directions	102
Diffusion Scheme	Monopolar
Diff. weightings	1

**Diff - Body**

b-value	0 s/mm <sup>2</sup>
b-value	1
Diff. weighted images	On
Trace weighted images	Off
ADC maps	Off
Exponential ADC Maps	Off
FA maps	Off
Invert Gray Scale	Off
Calculated Image	Off
b-Value >=	0 s/mm <sup>2</sup>
Noise level	40

**Diff - Composing**

Inline Composing	Off
Distortion Corr.	Off

**Sequence - Part 1**

Introduction	Off
Optimization	None
Multi-slice mode	Interleaved
Free echo spacing	On
Echo spacing	0.69 ms
Bandwidth	1700 Hz/Px

**Sequence - Part 2**

EPI factor	140
RF pulse type	Normal
Gradient mode	Performance
Excitation	Standard

**Sequence - pTX Pulses****Sequence - Special**

K-space streaming	None
Reverse Phase Encoding	Off



\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_streaming\_32ch\ABCD\_dMRI

TA: 7:29 PM: FIX Voxel size: 1.7×1.7×1.7 mmPAT: 3 Rel. SNR: 1.00 : epse

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	On
Start measurements	Single measurement

**Routine**

Slice group	1
Slices	81
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	240 mm
FoV phase	100.0 %
Slice thickness	1.7 mm
TR	4200 ms
TE	89.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HEA;HEP

**Contrast - Common**

TR	4200 ms
TE	89.0 ms
MTC	Off
Magn. preparation	None
Fat suppr.	Fat sat.
Fat sat. mode	Strong

**Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Delay in TR	0 ms
Multiple series	Off

**Resolution - Common**

FoV read	240 mm
FoV phase	100.0 %
Slice thickness	1.7 mm
Base resolution	140
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off

**Resolution - iPAT**

Accel. mode	Slice accel.
Accel. factor PE	1

**Resolution - iPAT**

Ref. lines PE	71
Accel. factor slice	3
Reference scan mode	EPI/separate

**Resolution - Filter Image**

Distortion Corr.	Off
Prescan Normalize	Off
Dynamic Field Corr.	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off

**Geometry - Common**

Slice group	1
Slices	81
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	240 mm
FoV phase	100.0 %
Slice thickness	1.7 mm
TR	4200 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

**Geometry - AutoAlign**

Slice group	1
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A10.0 H10.0
L	0.0 mm
A	10.0 mm
H	10.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

**Geometry - Saturation**

Fat suppr.	Fat sat.
Fat sat. mode	Strong
Special sat.	None

**Geometry - Navigator****Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

**System - Miscellaneous**

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T

**System - Miscellaneous**

Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Advanced
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	240 mm
R >> L	240 mm
F >> H	138 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Standard

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	3.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	4200 ms
Concatenations	1

**Physio - PACE**

Resp. control	Off
Concatenations	1

**Diff - Neuro**

Diffusion mode	Free
Diff. directions	102
Diffusion Scheme	Monopolar
Diff. weightings	2
b-value 1	0 s/mm <sup>2</sup>
b-value 2	3000 s/mm <sup>2</sup>
b-value 1	1
b-value 2	1
Diff. weighted images	On
Trace weighted images	Off
ADC maps	Off
FA maps	Off
Mosaic	On
Tensor	Off
Noise level	40

**Diff - Body**

Diffusion mode	Free
Diff. directions	102
Diffusion Scheme	Monopolar
Diff. weightings	2
b-value 1	0 s/mm <sup>2</sup>
b-value 2	3000 s/mm <sup>2</sup>
b-value 1	1
b-value 2	1
Diff. weighted images	On
Trace weighted images	Off
ADC maps	Off
Exponential ADC Maps	Off
FA maps	Off
Invert Gray Scale	Off
Calculated Image	Off
b-Value >=	0 s/mm <sup>2</sup>
Noise level	40

**Diff - Composing**

Inline Composing	Off
Distortion Corr.	Off

**Sequence - Part 1**

Introduction	Off
Optimization	None
Multi-slice mode	Interleaved
Free echo spacing	On
Echo spacing	0.69 ms
Bandwidth	1700 Hz/Px

**Sequence - Part 2**

EPI factor	140
RF pulse type	Normal
Gradient mode	Performance*
Excitation	Standard

**Sequence - pTX Pulses****Sequence - Special**

K-space streaming	File
Reverse Phase Encoding	On

\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_streaming\_32ch\ABCD\_T2w\_SPC\_vN  
av\_setter

TA: 0.3 s PM: FIX Voxel size: 8.0×8.0×8.0 mmRel. SNR: 1.00 : ABCD

### Properties

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	On
Start measurements	Single measurement

### Routine

Slab group	1
Slabs	1
Dist. factor	50 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	32
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	8.00 mm
TR	13.0 ms
TE	6.1 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	BC

### Contrast - Common

TR	13.0 ms
TE	6.1 ms
MTC	Off
Flip angle	2 deg
Fat suppr.	Water excit. normal

### Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

### Resolution - Common

FoV read	256 mm
FoV phase	100.0 %
Slice thickness	8.00 mm
Base resolution	32
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	Off
Slice partial Fourier	6/8
Interpolation	Off

### Resolution - Filter Image

Distortion Corr.	Off
Prescan Normalize	Off

### Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off
Hamming	Off

### Geometry - Common

Slab group	1
Slabs	1
Dist. factor	50 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice oversampling	0.0 %
Slices per slab	32
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	8.00 mm
TR	13.0 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

### Geometry - AutoAlign

Slab group	1
Position	L0.0 A20.0 H0.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A20.0 H0.0
L	0.0 mm
A	20.0 mm
H	0.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Sagittal

### Geometry - Saturation

Fat suppr.	Water excit. normal
Special sat.	None

### Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

### System - Miscellaneous

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
Save uncombined	Off
Matrix Optimization	Off

**System - Miscellaneous**

AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A20.0 H0.0 mm
Orientation	Sagittal
Rotation	0.00 deg
A >> P	256 mm
F >> H	256 mm
R >> L	256 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Non-sel.

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	Low
Img. Scale Cor.	10.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	13.0 ms
Concatenations	1

**Sequence - Part 1**

Introduction	Off
Dimension	3D
Contrasts	1
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.27 ms
Bandwidth	4882 Hz/Px

**Sequence - Part 2**

EPI factor	32
RF pulse type	Normal
Gradient mode	Fast
Excitation	Non-sel.
RF spoiling	On

**Sequence - Special**

Protocol filename	T2-SPACE
-------------------	----------

\\USER\ABCD\20190320\ABCD_PROTOCOL__one_session__streaming__32ch\ABCD_T2w_SPC_vN av
TA: 6:35 PM: FIX Voxel size: 1.0×1.0×1.0 mmPAT: 2 Rel. SNR: 1.00 : spc

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	Single measurement

**Routine**

Slab group	1
Slabs	1
Position	L0.0 A20.0 F30.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	176
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	1.00 mm
TR	3200 ms
TE	565 ms
Averages	1.0
Concatenations	1
Filter	Prescan Normalize
Coil elements	HEA;HEP

**Contrast - Common**

TR	3200 ms
TE	565 ms
MTC	Off
Magn. preparation	None
Fat suppr.	None
Blood suppr.	Off
Restore magn.	Off

**Contrast - Dynamic**

Averages	1.0
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

**Resolution - Common**

FoV read	256 mm
FoV phase	100.0 %
Slice thickness	1.00 mm
Base resolution	256
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	Allowed
Slice partial Fourier	Off
Interpolation	Off

**Resolution - iPAT**

PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	32
Accel. factor 3D	1
Reference scan mode	Integrated

**Resolution - Filter Image**

Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	On
Unfiltered images	On
Normalize	Off
B1 filter	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off

**Geometry - Common**

Slab group	1
Slabs	1
Position	L0.0 A20.0 F30.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice oversampling	0.0 %
Slices per slab	176
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	1.00 mm
TR	3200 ms
Concatenations	1

**Geometry - AutoAlign**

Slab group	1
Position	L0.0 A20.0 F30.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A20.0 F30.0
R	0.0 mm
A	20.0 mm
F	30.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Sagittal

**Geometry - Saturation**

Fat suppr.	None
Restore magn.	Off
Special sat.	None

**Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

**System - Miscellaneous**

Positioning mode	FIX
------------------	-----

**System - Miscellaneous**

Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A20.0 F30.0 mm
Orientation	Sagittal
Rotation	0.00 deg
A >> P	256 mm
F >> H	256 mm
R >> L	176 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Non-sel.

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	5.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
Trigger delay	0 ms
TR	3200 ms
Concatenations	1

**Physio - Cardiac**

Magn. preparation	None
Fat suppr.	None
Dark blood	Off
FoV read	256 mm
FoV phase	100.0 %
Phase resolution	100 %

**Inline - Common**

Subtract	Off
Measurements	1
StdDev	Off
Save original images	On

**Inline - MIP**

MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On

**Inline - Composing**

Inline Composing	Off
Distortion Corr.	Off

**Sequence - Part 1**

Introduction	On
Dimension	3D
Elliptical scanning	On
Reordering	Linear
Flow comp.	No
Echo spacing	6.28 ms
Adiabatic-mode	Off
Bandwidth	241 Hz/Px

**Sequence - Part 2**

Echo train duration	1187 ms
RF pulse type	Fast
Gradient mode	Fast
Excitation	Non-sel.
Flip angle mode	T2 var
Turbo factor	200

**Sequence - Special**

Include nav.	On
Apply moco to	parent and nav
Remeasure	18 TRs
Reacq. threshold	0.50
Feedback delay	80 ms
Moco ref. image	Use Temp Ref
K-space streaming	None
ABCD navigator	On
Apply freq to	parent and nav

**Sequence - Assistant**

Allowed delay	0 s
---------------	-----

\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_streaming\_32ch\ABCD\_fMRI\_Distorti  
onMap\_PA

TA: 0:14 PM: FIX Voxel size: 2.4×2.4×2.4 mmPAT: Off Rel. SNR: 1.00 : epse

### Properties

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	On
Start measurements	Single measurement

### Routine

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	7030 ms
TE	80.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HEA;HEP

### Contrast - Common

TR	7030 ms
TE	80.0 ms
MTC	Off
Magn. preparation	None
Fat suppr.	Fat sat.
Fat sat. mode	Weak

### Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Delay in TR	0 ms
Multiple series	Off

### Resolution - Common

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
Base resolution	90
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

### Resolution - iPAT

Accel. mode	None
-------------	------

### Resolution - Filter Image

Distortion Corr.	Off
Prescan Normalize	Off

### Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off
Hamming	Off

### Geometry - Common

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	7030 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

### Geometry - AutoAlign

Slice group	1
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A10.0 H10.0
L	0.0 mm
A	10.0 mm
H	10.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

### Geometry - Saturation

Fat suppr.	Fat sat.
Fat sat. mode	Weak
Special sat.	None

### Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

### System - Miscellaneous

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---

**System - Miscellaneous**

Coil Select Mode	Off - All
------------------	-----------

**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	144 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
--------------	----------

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	2.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	7030 ms
Concatenations	1

**Inline - Common**

Subtract	Off
Measurements	1
StdDev	Off
Save original images	On

**Inline - MIP**

MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On

**Inline - Composing**

Inline Composing	Off
Distortion Corr.	Off

**Sequence - Part 1**

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	On
Echo spacing	0.51 ms
Bandwidth	2778 Hz/Px

**Sequence - Part 2**

EPI factor	90
RF pulse type	Normal

**Sequence - Part 2**

Gradient mode	Performance
---------------	-------------

**Sequence - Special**

Dummy Scans	1
Reverse Phase Encoding	On



\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_streaming\_32ch\ABCD\_fMRI\_DistortionMap\_AP

TA: 0:14 PM: FIX Voxel size: 2.4×2.4×2.4 mmPAT: Off Rel. SNR: 1.00 : epse

### Properties

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	Single measurement

### Routine

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	7030 ms
TE	80.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HEA;HEP

### Contrast - Common

TR	7030 ms
TE	80.0 ms
MTC	Off
Magn. preparation	None
Fat suppr.	Fat sat.
Fat sat. mode	Weak

### Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Delay in TR	0 ms
Multiple series	Off

### Resolution - Common

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
Base resolution	90
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

### Resolution - iPAT

Accel. mode	None
-------------	------

### Resolution - Filter Image

Distortion Corr.	Off
Prescan Normalize	Off

### Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off
Hamming	Off

### Geometry - Common

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	7030 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

### Geometry - AutoAlign

Slice group	1
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A10.0 H10.0
L	0.0 mm
A	10.0 mm
H	10.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

### Geometry - Saturation

Fat suppr.	Fat sat.
Fat sat. mode	Weak
Special sat.	None

### Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

### System - Miscellaneous

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---

**System - Miscellaneous**

Coil Select Mode	Off - All
------------------	-----------

**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	144 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
--------------	----------

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	2.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	7030 ms
Concatenations	1

**Inline - Common**

Subtract	Off
Measurements	1
StdDev	Off
Save original images	On

**Inline - MIP**

MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On

**Inline - Composing**

Inline Composing	Off
Distortion Corr.	Off

**Sequence - Part 1**

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	On
Echo spacing	0.51 ms
Bandwidth	2778 Hz/Px

**Sequence - Part 2**

EPI factor	90
RF pulse type	Normal

**Sequence - Part 2**

Gradient mode	Performance
---------------	-------------

**Sequence - Special**

Dummy Scans	1
Reverse Phase Encoding	Off

\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_streaming\_32ch\ABCD\_fMRI\_rest

TA: 5:11 PM: FIX Voxel size: 2.4×2.4×2.4 mmPAT: 6 Rel. SNR: 1.00 : epfid

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	On
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	On
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	On
Start measurements	Single measurement

**Resolution - iPAT**

Accel. factor slice	6
Reference scan mode	EPI/separate

**Resolution - Filter Image**

Distortion Corr.	Off
Prescan Normalize	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off
Hamming	Off

**Routine**

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	800 ms
TE	30.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HEA;HEP

**Geometry - Common**

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	800 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

**Geometry - AutoAlign**

Slice group	1
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A10.0 H10.0
L	0.0 mm
A	10.0 mm
H	10.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

**Contrast - Common**

TR	800 ms
TE	30.0 ms
MTC	Off
Flip angle	52 deg
Fat suppr.	Fat sat.

**Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	383
Delay in TR	0 ms
Multiple series	Off

**Resolution - Common**

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
Base resolution	90
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

**Resolution - iPAT**

Accel. mode	Slice accel.
Accel. factor PE	1
Ref. lines PE	22

**Geometry - Saturation**

Fat suppr.	Fat sat.
Special sat.	None

**Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

**System - Miscellaneous**

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
Matrix Optimization	Off

**System - Miscellaneous**

AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	144 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Standard

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	Pulse/Trigger
Average cycle	No Signal ms
Average cycle	No Signal ms
Acquisition window	833 ms
Trigger pulse	1
Trigger delay	0 ms
TR	800 ms
Concatenations	1
Phases	1

**BOLD**

GLM Statistics	Off
Dynamic t-maps	Off
Ignore meas. at start	0
Ignore after transition	0
Model transition states	Off
Temp. highpass filter	Off
Threshold	4.00
Paradigm size	3
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Active
Motion correction	Off
Spatial filter	Off
Measurements	383
Delay in TR	0 ms
Multiple series	Off

**Sequence - Part 1**

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.51 ms
Bandwidth	2778 Hz/Px

**Sequence - Part 2**

EPI factor	90
RF pulse type	Normal
Gradient mode	Fast
Excitation	Standard

**Sequence - pTX Pulses****Sequence - Special**

Dummy Scans	0
K-space streaming	File
Physio recording	Continuous
Reverse Phase Encoding	On

\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_streaming\_32ch\ABCD\_fMRI\_rest

TA: 5:11 PM: FIX Voxel size: 2.4×2.4×2.4 mmPAT: 6 Rel. SNR: 1.00 : epfid

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	On
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	On
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	On
Start measurements	Single measurement

**Resolution - iPAT**

Accel. factor slice	6
Reference scan mode	EPI/separate

**Resolution - Filter Image**

Distortion Corr.	Off
Prescan Normalize	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off
Hamming	Off

**Routine**

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	800 ms
TE	30.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HEA;HEP

**Geometry - Common**

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	800 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

**Geometry - AutoAlign**

Slice group	1
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A10.0 H10.0
L	0.0 mm
A	10.0 mm
H	10.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

**Contrast - Common**

TR	800 ms
TE	30.0 ms
MTC	Off
Flip angle	52 deg
Fat suppr.	Fat sat.

**Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	383
Delay in TR	0 ms
Multiple series	Off

**Resolution - Common**

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
Base resolution	90
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

**Resolution - iPAT**

Accel. mode	Slice accel.
Accel. factor PE	1
Ref. lines PE	22

**Geometry - Saturation**

Fat suppr.	Fat sat.
Special sat.	None

**Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

**System - Miscellaneous**

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
Matrix Optimization	Off

**System - Miscellaneous**

AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	144 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Standard

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	Pulse/Trigger
Average cycle	No Signal ms
Average cycle	No Signal ms
Acquisition window	833 ms
Trigger pulse	1
Trigger delay	0 ms
TR	800 ms
Concatenations	1
Phases	1

**BOLD**

GLM Statistics	Off
Dynamic t-maps	Off
Ignore meas. at start	0
Ignore after transition	0
Model transition states	Off
Temp. highpass filter	Off
Threshold	4.00
Paradigm size	3
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Active
Motion correction	Off
Spatial filter	Off
Measurements	383
Delay in TR	0 ms
Multiple series	Off

**Sequence - Part 1**

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.51 ms
Bandwidth	2778 Hz/Px

**Sequence - Part 2**

EPI factor	90
RF pulse type	Normal
Gradient mode	Fast
Excitation	Standard

**Sequence - pTX Pulses****Sequence - Special**

Dummy Scans	0
K-space streaming	File
Physio recording	Continuous
Reverse Phase Encoding	On

\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_streaming\_32ch\ABCD\_fMRI\_DistortionMap\_PA

TA: 0:14 PM: FIX Voxel size: 2.4×2.4×2.4 mmPAT: Off Rel. SNR: 1.00 : epse

### Properties

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	On
Start measurements	Single measurement

### Routine

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	7030 ms
TE	80.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HEA;HEP

### Contrast - Common

TR	7030 ms
TE	80.0 ms
MTC	Off
Magn. preparation	None
Fat suppr.	Fat sat.
Fat sat. mode	Weak

### Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Delay in TR	0 ms
Multiple series	Off

### Resolution - Common

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
Base resolution	90
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

### Resolution - iPAT

Accel. mode	None
-------------	------

### Resolution - Filter Image

Distortion Corr.	Off
Prescan Normalize	Off

### Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off
Hamming	Off

### Geometry - Common

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	7030 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

### Geometry - AutoAlign

Slice group	1
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A10.0 H10.0
L	0.0 mm
A	10.0 mm
H	10.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

### Geometry - Saturation

Fat suppr.	Fat sat.
Fat sat. mode	Weak
Special sat.	None

### Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

### System - Miscellaneous

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---

**System - Miscellaneous**

Coil Select Mode	Off - All
------------------	-----------

**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	144 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
--------------	----------

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	2.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	7030 ms
Concatenations	1

**Inline - Common**

Subtract	Off
Measurements	1
StdDev	Off
Save original images	On

**Inline - MIP**

MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On

**Inline - Composing**

Inline Composing	Off
Distortion Corr.	Off

**Sequence - Part 1**

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	On
Echo spacing	0.51 ms
Bandwidth	2778 Hz/Px

**Sequence - Part 2**

EPI factor	90
RF pulse type	Normal

**Sequence - Part 2**

Gradient mode	Performance
---------------	-------------

**Sequence - Special**

Dummy Scans	1
Reverse Phase Encoding	On



\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_streaming\_32ch\ABCD\_fMRI\_DistortionMap\_AP

TA: 0:14 PM: FIX Voxel size: 2.4×2.4×2.4 mmPAT: Off Rel. SNR: 1.00 : epse

### Properties

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	Single measurement

### Routine

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	7030 ms
TE	80.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HEA;HEP

### Contrast - Common

TR	7030 ms
TE	80.0 ms
MTC	Off
Magn. preparation	None
Fat suppr.	Fat sat.
Fat sat. mode	Weak

### Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Delay in TR	0 ms
Multiple series	Off

### Resolution - Common

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
Base resolution	90
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

### Resolution - iPAT

Accel. mode	None
-------------	------

### Resolution - Filter Image

Distortion Corr.	Off
Prescan Normalize	Off

### Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off
Hamming	Off

### Geometry - Common

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	7030 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

### Geometry - AutoAlign

Slice group	1
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A10.0 H10.0
L	0.0 mm
A	10.0 mm
H	10.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

### Geometry - Saturation

Fat suppr.	Fat sat.
Fat sat. mode	Weak
Special sat.	None

### Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

### System - Miscellaneous

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---

**System - Miscellaneous**

Coil Select Mode	Off - All
------------------	-----------

**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	144 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
--------------	----------

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	2.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	7030 ms
Concatenations	1

**Inline - Common**

Subtract	Off
Measurements	1
StdDev	Off
Save original images	On

**Inline - MIP**

MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On

**Inline - Composing**

Inline Composing	Off
Distortion Corr.	Off

**Sequence - Part 1**

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	On
Echo spacing	0.51 ms
Bandwidth	2778 Hz/Px

**Sequence - Part 2**

EPI factor	90
RF pulse type	Normal

**Sequence - Part 2**

Gradient mode	Performance
---------------	-------------

**Sequence - Special**

Dummy Scans	1
Reverse Phase Encoding	Off

\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_streaming\_32ch\ABCD\_fMRI\_task\_St  
op

TA: 6:00 PM: FIX Voxel size: 2.4×2.4×2.4 mmPAT: 6 Rel. SNR: 1.00 : epfid

### Properties

Prio recon	Off
Load images to viewer	On
Inline movie	On
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	On
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	On
Start measurements	Single measurement

### Resolution - iPAT

Ref. lines PE	22
Accel. factor slice	6
Reference scan mode	EPI/separate

### Resolution - Filter Image

Distortion Corr.	Off
Prescan Normalize	Off

### Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off
Hamming	Off

### Routine

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	800 ms
TE	30.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HEA;HEP

### Geometry - Common

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	800 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

### Geometry - AutoAlign

Slice group	1
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A10.0 H10.0
L	0.0 mm
A	10.0 mm
H	10.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

### Contrast - Common

TR	800 ms
TE	30.0 ms
MTC	Off
Flip angle	52 deg
Fat suppr.	Fat sat.

### Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	445
Delay in TR	0 ms
Multiple series	Off

### Resolution - Common

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
Base resolution	90
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

### Resolution - iPAT

Accel. mode	Slice accel.
Accel. factor PE	1

### Geometry - Saturation

Fat suppr.	Fat sat.
Special sat.	None

### Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

### System - Miscellaneous

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P

**System - Miscellaneous**

Transversal	F >> H
Coil Combine Mode	Sum of Squares
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	144 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Standard

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	Pulse/Trigger
Average cycle	No Signal ms
Average cycle	No Signal ms
Acquisition window	833 ms
Trigger pulse	1
Trigger delay	0 ms
TR	800 ms
Concatenations	1
Phases	1

**BOLD**

GLM Statistics	Off
Dynamic t-maps	Off
Ignore meas. at start	0
Ignore after transition	0
Model transition states	Off
Temp. highpass filter	Off
Threshold	4.00
Paradigm size	3
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Active
Motion correction	Off
Spatial filter	Off
Measurements	445
Delay in TR	0 ms
Multiple series	Off

**Sequence - Part 1**

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.51 ms
Bandwidth	2778 Hz/Px

**Sequence - Part 2**

EPI factor	90
RF pulse type	Normal
Gradient mode	Fast
Excitation	Standard

**Sequence - pTX Pulses****Sequence - Special**

Dummy Scans	0
K-space streaming	File
Physio recording	Continuous
Reverse Phase Encoding	On

\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_streaming\_32ch\ABCD\_fMRI\_task\_St  
op

TA: 6:00 PM: FIX Voxel size: 2.4×2.4×2.4 mmPAT: 6 Rel. SNR: 1.00 : epfid

### Properties

Prio recon	Off
Load images to viewer	On
Inline movie	On
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	On
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	On
Start measurements	Single measurement

### Resolution - iPAT

Ref. lines PE	22
Accel. factor slice	6
Reference scan mode	EPI/separate

### Resolution - Filter Image

Distortion Corr.	Off
Prescan Normalize	Off

### Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off
Hamming	Off

### Routine

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	800 ms
TE	30.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HEA;HEP

### Geometry - Common

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	800 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

### Contrast - Common

TR	800 ms
TE	30.0 ms
MTC	Off
Flip angle	52 deg
Fat suppr.	Fat sat.

### Geometry - AutoAlign

Slice group	1
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A10.0 H10.0
L	0.0 mm
A	10.0 mm
H	10.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

### Geometry - Saturation

Fat suppr.	Fat sat.
Special sat.	None

### Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	445
Delay in TR	0 ms
Multiple series	Off

### Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

### Resolution - Common

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
Base resolution	90
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

### System - Miscellaneous

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P

### Resolution - iPAT

Accel. mode	Slice accel.
Accel. factor PE	1

**System - Miscellaneous**

Transversal	F >> H
Coil Combine Mode	Sum of Squares
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	144 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Standard

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	Pulse/Trigger
Average cycle	No Signal ms
Average cycle	No Signal ms
Acquisition window	833 ms
Trigger pulse	1
Trigger delay	0 ms
TR	800 ms
Concatenations	1
Phases	1

**BOLD**

GLM Statistics	Off
Dynamic t-maps	Off
Ignore meas. at start	0
Ignore after transition	0
Model transition states	Off
Temp. highpass filter	Off
Threshold	4.00
Paradigm size	3
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Active
Motion correction	Off
Spatial filter	Off
Measurements	445
Delay in TR	0 ms
Multiple series	Off

**Sequence - Part 1**

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.51 ms
Bandwidth	2778 Hz/Px

**Sequence - Part 2**

EPI factor	90
RF pulse type	Normal
Gradient mode	Fast
Excitation	Standard

**Sequence - pTX Pulses****Sequence - Special**

Dummy Scans	0
K-space streaming	File
Physio recording	Continuous
Reverse Phase Encoding	On

\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_streaming\_32ch\ABCD\_fMRI\_DistortionMap\_PA

TA: 0:14 PM: FIX Voxel size: 2.4×2.4×2.4 mmPAT: Off Rel. SNR: 1.00 : epse

### Properties

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	On
Start measurements	Single measurement

### Routine

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	7030 ms
TE	80.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HEA;HEP

### Contrast - Common

TR	7030 ms
TE	80.0 ms
MTC	Off
Magn. preparation	None
Fat suppr.	Fat sat.
Fat sat. mode	Weak

### Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Delay in TR	0 ms
Multiple series	Off

### Resolution - Common

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
Base resolution	90
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

### Resolution - iPAT

Accel. mode	None
-------------	------

### Resolution - Filter Image

Distortion Corr.	Off
Prescan Normalize	Off

### Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off
Hamming	Off

### Geometry - Common

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	7030 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

### Geometry - AutoAlign

Slice group	1
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A10.0 H10.0
L	0.0 mm
A	10.0 mm
H	10.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

### Geometry - Saturation

Fat suppr.	Fat sat.
Fat sat. mode	Weak
Special sat.	None

### Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

### System - Miscellaneous

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---

**System - Miscellaneous**

Coil Select Mode	Off - All
------------------	-----------

**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	144 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
--------------	----------

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	2.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	7030 ms
Concatenations	1

**Inline - Common**

Subtract	Off
Measurements	1
StdDev	Off
Save original images	On

**Inline - MIP**

MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On

**Inline - Composing**

Inline Composing	Off
Distortion Corr.	Off

**Sequence - Part 1**

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	On
Echo spacing	0.51 ms
Bandwidth	2778 Hz/Px

**Sequence - Part 2**

EPI factor	90
RF pulse type	Normal

**Sequence - Part 2**

Gradient mode	Performance
---------------	-------------

**Sequence - Special**

Dummy Scans	1
Reverse Phase Encoding	On



\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_streaming\_32ch\ABCD\_fMRI\_DistortionMap\_AP

TA: 0:14 PM: FIX Voxel size: 2.4×2.4×2.4 mmPAT: Off Rel. SNR: 1.00 : epse

### Properties

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	Single measurement

### Routine

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	7030 ms
TE	80.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HEA;HEP

### Contrast - Common

TR	7030 ms
TE	80.0 ms
MTC	Off
Magn. preparation	None
Fat suppr.	Fat sat.
Fat sat. mode	Weak

### Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Delay in TR	0 ms
Multiple series	Off

### Resolution - Common

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
Base resolution	90
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

### Resolution - iPAT

Accel. mode	None
-------------	------

### Resolution - Filter Image

Distortion Corr.	Off
Prescan Normalize	Off

### Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off
Hamming	Off

### Geometry - Common

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	7030 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

### Geometry - AutoAlign

Slice group	1
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A10.0 H10.0
L	0.0 mm
A	10.0 mm
H	10.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

### Geometry - Saturation

Fat suppr.	Fat sat.
Fat sat. mode	Weak
Special sat.	None

### Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

### System - Miscellaneous

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---

**System - Miscellaneous**

Coil Select Mode	Off - All
------------------	-----------

**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	144 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
--------------	----------

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	2.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	7030 ms
Concatenations	1

**Inline - Common**

Subtract	Off
Measurements	1
StdDev	Off
Save original images	On

**Inline - MIP**

MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On

**Inline - Composing**

Inline Composing	Off
Distortion Corr.	Off

**Sequence - Part 1**

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	On
Echo spacing	0.51 ms
Bandwidth	2778 Hz/Px

**Sequence - Part 2**

EPI factor	90
RF pulse type	Normal

**Sequence - Part 2**

Gradient mode	Performance
---------------	-------------

**Sequence - Special**

Dummy Scans	1
Reverse Phase Encoding	Off

\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_streaming\_32ch\ABCD\_fMRI\_task\_E  
motional\_n-back

TA: 5:00 PM: FIX Voxel size: 2.4×2.4×2.4 mmPAT: 6 Rel. SNR: 1.00 : epfid

### Properties

Prio recon	Off
Load images to viewer	On
Inline movie	On
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	On
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	On
Start measurements	Single measurement

### Resolution - iPAT

Ref. lines PE	22
Accel. factor slice	6
Reference scan mode	EPI/separate

### Resolution - Filter Image

Distortion Corr.	Off
Prescan Normalize	Off

### Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off
Hamming	Off

### Routine

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	800 ms
TE	30.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HEA;HEP

### Geometry - Common

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	800 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

### Geometry - AutoAlign

Slice group	1
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A10.0 H10.0
L	0.0 mm
A	10.0 mm
H	10.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

### Contrast - Common

TR	800 ms
TE	30.0 ms
MTC	Off
Flip angle	52 deg
Fat suppr.	Fat sat.

### Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	370
Delay in TR	0 ms
Multiple series	Off

### Resolution - Common

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
Base resolution	90
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

### Resolution - iPAT

Accel. mode	Slice accel.
Accel. factor PE	1

### Geometry - Saturation

Fat suppr.	Fat sat.
Special sat.	None

### Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

### System - Miscellaneous

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P

**System - Miscellaneous**

Transversal	F >> H
Coil Combine Mode	Sum of Squares
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	144 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Standard

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	Pulse/Trigger
Average cycle	No Signal ms
Average cycle	No Signal ms
Acquisition window	833 ms
Trigger pulse	1
Trigger delay	0 ms
TR	800 ms
Concatenations	1
Phases	1

**BOLD**

GLM Statistics	Off
Dynamic t-maps	Off
Ignore meas. at start	0
Ignore after transition	0
Model transition states	Off
Temp. highpass filter	Off
Threshold	4.00
Paradigm size	3
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Active
Motion correction	Off
Spatial filter	Off
Measurements	370
Delay in TR	0 ms
Multiple series	Off

**Sequence - Part 1**

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.51 ms
Bandwidth	2778 Hz/Px

**Sequence - Part 2**

EPI factor	90
RF pulse type	Normal
Gradient mode	Fast
Excitation	Standard

**Sequence - pTX Pulses****Sequence - Special**

Dummy Scans	0
K-space streaming	File
Physio recording	Continuous
Reverse Phase Encoding	On

\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_streaming\_32ch\ABCD\_fMRI\_task\_E  
motional\_n-back

TA: 5:00 PM: FIX Voxel size: 2.4×2.4×2.4 mmPAT: 6 Rel. SNR: 1.00 : epfid

### Properties

Prio recon	Off
Load images to viewer	On
Inline movie	On
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	On
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	On
Start measurements	Single measurement

### Routine

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	800 ms
TE	30.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HEA;HEP

### Contrast - Common

TR	800 ms
TE	30.0 ms
MTC	Off
Flip angle	52 deg
Fat suppr.	Fat sat.

### Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	370
Delay in TR	0 ms
Multiple series	Off

### Resolution - Common

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
Base resolution	90
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

### Resolution - iPAT

Accel. mode	Slice accel.
Accel. factor PE	1

### Resolution - iPAT

Ref. lines PE	22
Accel. factor slice	6
Reference scan mode	EPI/separate

### Resolution - Filter Image

Distortion Corr.	Off
Prescan Normalize	Off

### Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off
Hamming	Off

### Geometry - Common

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	800 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

### Geometry - AutoAlign

Slice group	1
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A10.0 H10.0
L	0.0 mm
A	10.0 mm
H	10.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

### Geometry - Saturation

Fat suppr.	Fat sat.
Special sat.	None

### Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

### System - Miscellaneous

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P

**System - Miscellaneous**

Transversal	F >> H
Coil Combine Mode	Sum of Squares
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	144 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Standard

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	Pulse/Trigger
Average cycle	No Signal ms
Average cycle	No Signal ms
Acquisition window	833 ms
Trigger pulse	1
Trigger delay	0 ms
TR	800 ms
Concatenations	1
Phases	1

**BOLD**

GLM Statistics	Off
Dynamic t-maps	Off
Ignore meas. at start	0
Ignore after transition	0
Model transition states	Off
Temp. highpass filter	Off
Threshold	4.00
Paradigm size	3
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Active
Motion correction	Off
Spatial filter	Off
Measurements	370
Delay in TR	0 ms
Multiple series	Off

**Sequence - Part 1**

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.51 ms
Bandwidth	2778 Hz/Px

**Sequence - Part 2**

EPI factor	90
RF pulse type	Normal
Gradient mode	Fast
Excitation	Standard

**Sequence - pTX Pulses****Sequence - Special**

Dummy Scans	0
K-space streaming	File
Physio recording	Continuous
Reverse Phase Encoding	On

\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_streaming\_32ch\ABCD\_fMRI\_Distorti  
onMap\_PA

TA: 0:14 PM: FIX Voxel size: 2.4×2.4×2.4 mmPAT: Off Rel. SNR: 1.00 : epse

### Properties

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	On
Start measurements	Single measurement

### Routine

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	7030 ms
TE	80.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HEA;HEP

### Contrast - Common

TR	7030 ms
TE	80.0 ms
MTC	Off
Magn. preparation	None
Fat suppr.	Fat sat.
Fat sat. mode	Weak

### Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Delay in TR	0 ms
Multiple series	Off

### Resolution - Common

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
Base resolution	90
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

### Resolution - iPAT

Accel. mode	None
-------------	------

### Resolution - Filter Image

Distortion Corr.	Off
Prescan Normalize	Off

### Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off
Hamming	Off

### Geometry - Common

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	7030 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

### Geometry - AutoAlign

Slice group	1
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A10.0 H10.0
L	0.0 mm
A	10.0 mm
H	10.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

### Geometry - Saturation

Fat suppr.	Fat sat.
Fat sat. mode	Weak
Special sat.	None

### Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

### System - Miscellaneous

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---

**System - Miscellaneous**

Coil Select Mode	Off - All
------------------	-----------

**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	144 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
--------------	----------

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	2.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	7030 ms
Concatenations	1

**Inline - Common**

Subtract	Off
Measurements	1
StdDev	Off
Save original images	On

**Inline - MIP**

MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On

**Inline - Composing**

Inline Composing	Off
Distortion Corr.	Off

**Sequence - Part 1**

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	On
Echo spacing	0.51 ms
Bandwidth	2778 Hz/Px

**Sequence - Part 2**

EPI factor	90
RF pulse type	Normal

**Sequence - Part 2**

Gradient mode	Performance
---------------	-------------

**Sequence - Special**

Dummy Scans	1
Reverse Phase Encoding	On



\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_streaming\_32ch\ABCD\_fMRI\_DistortionMap\_AP

TA: 0:14 PM: FIX Voxel size: 2.4×2.4×2.4 mmPAT: Off Rel. SNR: 1.00 : epse

### Properties

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	Single measurement

### Routine

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	7030 ms
TE	80.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HEA;HEP

### Contrast - Common

TR	7030 ms
TE	80.0 ms
MTC	Off
Magn. preparation	None
Fat suppr.	Fat sat.
Fat sat. mode	Weak

### Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Delay in TR	0 ms
Multiple series	Off

### Resolution - Common

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
Base resolution	90
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

### Resolution - iPAT

Accel. mode	None
-------------	------

### Resolution - Filter Image

Distortion Corr.	Off
Prescan Normalize	Off

### Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off
Hamming	Off

### Geometry - Common

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	7030 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

### Geometry - AutoAlign

Slice group	1
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A10.0 H10.0
L	0.0 mm
A	10.0 mm
H	10.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

### Geometry - Saturation

Fat suppr.	Fat sat.
Fat sat. mode	Weak
Special sat.	None

### Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

### System - Miscellaneous

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---

**System - Miscellaneous**

Coil Select Mode	Off - All
------------------	-----------

**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	144 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
--------------	----------

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	2.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	7030 ms
Concatenations	1

**Inline - Common**

Subtract	Off
Measurements	1
StdDev	Off
Save original images	On

**Inline - MIP**

MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On

**Inline - Composing**

Inline Composing	Off
Distortion Corr.	Off

**Sequence - Part 1**

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	On
Echo spacing	0.51 ms
Bandwidth	2778 Hz/Px

**Sequence - Part 2**

EPI factor	90
RF pulse type	Normal

**Sequence - Part 2**

Gradient mode	Performance
---------------	-------------

**Sequence - Special**

Dummy Scans	1
Reverse Phase Encoding	Off

\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_streaming\_32ch\ABCD\_fMRI\_task\_M  
onetary\_Incentive

TA: 5:33 PM: FIX Voxel size: 2.4×2.4×2.4 mmPAT: 6 Rel. SNR: 1.00 : epfid

### Properties

Prio recon	Off
Load images to viewer	On
Inline movie	On
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	On
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	On
Start measurements	Single measurement

### Routine

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	800 ms
TE	30.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HEA;HEP

### Contrast - Common

TR	800 ms
TE	30.0 ms
MTC	Off
Flip angle	52 deg
Fat suppr.	Fat sat.

### Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	411
Delay in TR	0 ms
Multiple series	Off

### Resolution - Common

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
Base resolution	90
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

### Resolution - iPAT

Accel. mode	Slice accel.
Accel. factor PE	1

### Resolution - iPAT

Ref. lines PE	22
Accel. factor slice	6
Reference scan mode	EPI/separate

### Resolution - Filter Image

Distortion Corr.	Off
Prescan Normalize	Off

### Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off
Hamming	Off

### Geometry - Common

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	800 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

### Geometry - AutoAlign

Slice group	1
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A10.0 H10.0
L	0.0 mm
A	10.0 mm
H	10.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

### Geometry - Saturation

Fat suppr.	Fat sat.
Special sat.	None

### Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

### System - Miscellaneous

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P

**System - Miscellaneous**

Transversal	F >> H
Coil Combine Mode	Sum of Squares
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	144 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Standard

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	Pulse/Trigger
Average cycle	No Signal ms
Average cycle	No Signal ms
Acquisition window	833 ms
Trigger pulse	1
Trigger delay	0 ms
TR	800 ms
Concatenations	1
Phases	1

**BOLD**

GLM Statistics	Off
Dynamic t-maps	Off
Ignore meas. at start	0
Ignore after transition	0
Model transition states	Off
Temp. highpass filter	Off
Threshold	4.00
Paradigm size	3
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Active
Motion correction	Off
Spatial filter	Off
Measurements	411
Delay in TR	0 ms
Multiple series	Off

**Sequence - Part 1**

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.51 ms
Bandwidth	2778 Hz/Px

**Sequence - Part 2**

EPI factor	90
RF pulse type	Normal
Gradient mode	Fast
Excitation	Standard

**Sequence - pTX Pulses****Sequence - Special**

Dummy Scans	0
K-space streaming	File
Physio recording	Continuous
Reverse Phase Encoding	On

\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_streaming\_32ch\ABCD\_fMRI\_task\_Monetary\_Incentive

TA: 5:33 PM: FIX Voxel size: 2.4×2.4×2.4 mmPAT: 6 Rel. SNR: 1.00 : epfid

### Properties

Prio recon	Off
Load images to viewer	On
Inline movie	On
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	On
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	On
Start measurements	Single measurement

### Routine

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	800 ms
TE	30.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HEA;HEP

### Contrast - Common

TR	800 ms
TE	30.0 ms
MTC	Off
Flip angle	52 deg
Fat suppr.	Fat sat.

### Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	411
Delay in TR	0 ms
Multiple series	Off

### Resolution - Common

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
Base resolution	90
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

### Resolution - iPAT

Accel. mode	Slice accel.
Accel. factor PE	1

### Resolution - iPAT

Ref. lines PE	22
Accel. factor slice	6
Reference scan mode	EPI/separate

### Resolution - Filter Image

Distortion Corr.	Off
Prescan Normalize	Off

### Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off
Hamming	Off

### Geometry - Common

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	800 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

### Geometry - AutoAlign

Slice group	1
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A10.0 H10.0
L	0.0 mm
A	10.0 mm
H	10.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

### Geometry - Saturation

Fat suppr.	Fat sat.
Special sat.	None

### Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

### System - Miscellaneous

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P

**System - Miscellaneous**

Transversal	F >> H
Coil Combine Mode	Sum of Squares
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	144 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Standard

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	Pulse/Trigger
Average cycle	No Signal ms
Average cycle	No Signal ms
Acquisition window	833 ms
Trigger pulse	1
Trigger delay	0 ms
TR	800 ms
Concatenations	1
Phases	1

**BOLD**

GLM Statistics	Off
Dynamic t-maps	Off
Ignore meas. at start	0
Ignore after transition	0
Model transition states	Off
Temp. highpass filter	Off
Threshold	4.00
Paradigm size	3
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Active
Motion correction	Off
Spatial filter	Off
Measurements	411
Delay in TR	0 ms
Multiple series	Off

**Sequence - Part 1**

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.51 ms
Bandwidth	2778 Hz/Px

**Sequence - Part 2**

EPI factor	90
RF pulse type	Normal
Gradient mode	Fast
Excitation	Standard

**Sequence - pTX Pulses****Sequence - Special**

Dummy Scans	0
K-space streaming	File
Physio recording	Continuous
Reverse Phase Encoding	On

\\USER\ABCD\20190320\ABCD\_QA\_quick\_32ch\localizer\_32ch

TA: 0:12 PM: REF Voxel size: 0.5×0.5×7.0 mmPAT: Off Rel. SNR: 1.00 : fl

**Properties**

Prio recon	On
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	On
Load images to graphic segments	On
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	Single measurement

**Routine**

Slice group	1
Slices	1
Dist. factor	20 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice group	2
Slices	1
Dist. factor	20 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
Slice group	3
Slices	1
Dist. factor	20 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Coronal
Phase enc. dir.	R >> L
AutoAlign	---
Phase oversampling	0 %
FoV read	250 mm
FoV phase	100.0 %
Slice thickness	7.0 mm
TR	7.5 ms
TE	3.69 ms
Averages	2
Concatenations	3
Filter	Prescan Normalize, Elliptical filter
Coil elements	HEA;HEP

**Contrast - Common**

TR	7.5 ms
TE	3.69 ms
TD	0 ms
MTC	Off
Magn. preparation	None
Flip angle	20 deg
Fat suppr.	None
Water suppr.	None
SWI	Off

**Contrast - Dynamic**

Averages	2
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1

**Contrast - Dynamic**

Multiple series	Each measurement
-----------------	------------------

**Resolution - Common**

FoV read	250 mm
FoV phase	100.0 %
Slice thickness	7.0 mm
Base resolution	256
Phase resolution	91 %
Phase partial Fourier	Off
Interpolation	On

**Resolution - iPAT**

PAT mode	None
----------	------

**Resolution - Filter Image**

Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	On
Unfiltered images	Off
Normalize	Off
B1 filter	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	On

**Geometry - Common**

Slice group	1
Slices	1
Dist. factor	20 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice group	2
Slices	1
Dist. factor	20 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
Slice group	3
Slices	1
Dist. factor	20 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Coronal
Phase enc. dir.	R >> L
FoV read	250 mm
FoV phase	100.0 %
Slice thickness	7.0 mm
TR	7.5 ms
Multi-slice mode	Sequential
Series	Interleaved
Concatenations	3

**Geometry - AutoAlign**

Slice group	1
Position	L0.0 A20.0 H0.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice group	2
Position	L0.0 A20.0 H0.0 mm

**Geometry - AutoAlign**

Orientation	Transversal
Phase enc. dir.	A >> P
Slice group	3
Position	L0.0 A20.0 H0.0 mm
Orientation	Coronal
Phase enc. dir.	R >> L
AutoAlign	---
Initial Position	L0.0 A20.0 H0.0
L	0.0 mm
A	20.0 mm
H	0.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Sagittal

**Geometry - Saturation**

Saturation mode	Standard
Fat suppr.	None
Water suppr.	None
Special sat.	None

**Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

**System - Miscellaneous**

Positioning mode	REF
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Tune up
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
A >> P	263 mm
R >> L	350 mm
F >> H	350 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Slice-sel.

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	7.5 ms
Concatenations	3
Segments	1

**Physio - Cardiac**

Tagging	None
Magn. preparation	None
Fat suppr.	None
Dark blood	Off
FoV read	250 mm
FoV phase	100.0 %
Phase resolution	91 %

**Physio - PACE**

Resp. control	Off
Concatenations	3

**Inline - Common**

Subtract	Off
Measurements	1
StdDev	Off
Liver registration	Off
Save original images	On

**Inline - MIP**

MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On

**Inline - Soft Tissue**

Wash - In	Off
Wash - Out	Off
TTP	Off
PEI	Off
MIP - time	Off
Measurements	1

**Inline - Composing**

Inline Composing	Off
Distortion Corr.	Off

**Inline - MapIt**

Save original images	On
MapIt	None
Flip angle	20 deg
Measurements	1
Contrasts	1
TR	7.5 ms
TE	3.69 ms

**Sequence - Part 1**

Introduction	On
--------------	----



**Sequence - Part 1**

Dimension	2D
Phase stabilisation	Off
Asymmetric echo	Allowed
Contrasts	1
Flow comp.	No
Multi-slice mode	Sequential
Bandwidth	320 Hz/Px

**Sequence - Part 2**

Segments	1
Acoustic noise reduction	None
RF pulse type	Fast
Gradient mode	Fast
Excitation	Slice-sel.
RF spoiling	On

**Sequence - Assistant**

Mode	Off
Allowed delay	0 s

\\USER\ABCD\20190320\ABCD\_QA\_quick\_32ch\localizer\_32ch\_uncombined

TA: 0:12 PM: REF Voxel size: 0.5×0.5×7.0 mmPAT: Off Rel. SNR: 1.00 : fl

**Properties**

Prio recon	On
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	Single measurement

**Routine**

Slice group	1
Slices	1
Dist. factor	20 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice group	2
Slices	1
Dist. factor	20 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
Slice group	3
Slices	1
Dist. factor	20 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Coronal
Phase enc. dir.	R >> L
AutoAlign	---
Phase oversampling	0 %
FoV read	250 mm
FoV phase	100.0 %
Slice thickness	7.0 mm
TR	7.5 ms
TE	3.69 ms
Averages	2
Concatenations	3
Filter	Prescan Normalize, Elliptical filter
Coil elements	HEA;HEP

**Contrast - Common**

TR	7.5 ms
TE	3.69 ms
TD	0 ms
MTC	Off
Magn. preparation	None
Flip angle	20 deg
Fat suppr.	None
Water suppr.	None
SWI	Off

**Contrast - Dynamic**

Averages	2
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1

**Contrast - Dynamic**

Multiple series	Each measurement
-----------------	------------------

**Resolution - Common**

FoV read	250 mm
FoV phase	100.0 %
Slice thickness	7.0 mm
Base resolution	256
Phase resolution	91 %
Phase partial Fourier	Off
Interpolation	On

**Resolution - iPAT**

PAT mode	None
----------	------

**Resolution - Filter Image**

Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	On
Unfiltered images	Off
Normalize	Off
B1 filter	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	On

**Geometry - Common**

Slice group	1
Slices	1
Dist. factor	20 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice group	2
Slices	1
Dist. factor	20 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
Slice group	3
Slices	1
Dist. factor	20 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Coronal
Phase enc. dir.	R >> L
FoV read	250 mm
FoV phase	100.0 %
Slice thickness	7.0 mm
TR	7.5 ms
Multi-slice mode	Sequential
Series	Interleaved
Concatenations	3

**Geometry - AutoAlign**

Slice group	1
Position	L0.0 A20.0 H0.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice group	2
Position	L0.0 A20.0 H0.0 mm

**Geometry - AutoAlign**

Orientation	Transversal
Phase enc. dir.	A >> P
Slice group	3
Position	L0.0 A20.0 H0.0 mm
Orientation	Coronal
Phase enc. dir.	R >> L
AutoAlign	---
Initial Position	L0.0 A20.0 H0.0
L	0.0 mm
A	20.0 mm
H	0.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Sagittal

**Geometry - Saturation**

Saturation mode	Standard
Fat suppr.	None
Water suppr.	None
Special sat.	None

**Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

**System - Miscellaneous**

Positioning mode	REF
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
Save uncombined	On
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Tune up
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
A >> P	263 mm
R >> L	350 mm
F >> H	350 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Slice-sel.

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	7.5 ms
Concatenations	3
Segments	1

**Physio - Cardiac**

Tagging	None
Magn. preparation	None
Fat suppr.	None
Dark blood	Off
FoV read	250 mm
FoV phase	100.0 %
Phase resolution	91 %

**Physio - PACE**

Resp. control	Off
Concatenations	3

**Inline - Common**

Subtract	Off
Measurements	1
StdDev	Off
Liver registration	Off
Save original images	On

**Inline - MIP**

MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On

**Inline - Soft Tissue**

Wash - In	Off
Wash - Out	Off
TTP	Off
PEI	Off
MIP - time	Off
Measurements	1

**Inline - Composing**

Inline Composing	Off
Distortion Corr.	Off

**Inline - MapIt**

Save original images	On
MapIt	None
Flip angle	20 deg
Measurements	1
Contrasts	1
TR	7.5 ms
TE	3.69 ms

**Sequence - Part 1**

Introduction	On
--------------	----

**Sequence - Part 1**

Dimension	2D
Phase stabilisation	Off
Asymmetric echo	Allowed
Contrasts	1
Flow comp.	No
Multi-slice mode	Sequential
Bandwidth	320 Hz/Px

**Sequence - Part 2**

Segments	1
Acoustic noise reduction	None
RF pulse type	Fast
Gradient mode	Fast
Excitation	Slice-sel.
RF spoiling	On

**Sequence - Assistant**

Mode	Off
Allowed delay	0 s

\\USER\ABCD\20190320\ABCD\_QA\_quick\_32ch\SNR\_Map

TA: 0:58 PM: REF Voxel size: 0.5×0.5×5.0 mmRel. SNR: 1.00 : fl

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	On
Load images to graphic segments	On
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	Off
Wait for user to start	Off
Start measurements	Single measurement

**Routine**

Slice group	1
Slices	1
Dist. factor	20 %
Position	L0.0 A14.0 F7.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	192 mm
FoV phase	100.0 %
Slice thickness	5.0 mm
TR	30.0 ms
TE	6.0 ms
Averages	4
Concatenations	1
Filter	None
Coil elements	HEA;HEP

**Contrast - Common**

TR	30.0 ms
TE	6.0 ms
MTC	Off
Flip angle	10 deg
Fat suppr.	None
Water suppr.	None

**Contrast - Dynamic**

Averages	4
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1
Multiple series	Off

**Resolution - Common**

FoV read	192 mm
FoV phase	100.0 %
Slice thickness	5.0 mm
Base resolution	384
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

**Resolution - Filter Image**

Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	Off

**Resolution - Filter Image**

Normalize	Off
B1 filter	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off

**Geometry - Common**

Slice group	1
Slices	1
Dist. factor	20 %
Position	L0.0 A14.0 F7.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	192 mm
FoV phase	100.0 %
Slice thickness	5.0 mm
TR	30.0 ms
Multi-slice mode	Sequential
Series	Ascending
Concatenations	1

**Geometry - AutoAlign**

Slice group	1
Position	L0.0 A14.0 F7.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A14.0 F7.0
L	0.0 mm
A	14.0 mm
F	7.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

**Geometry - Saturation**

Fat suppr.	None
Water suppr.	None
Special sat.	None

**Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

**System - Miscellaneous**

Positioning mode	REF
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Tune up
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
A >> P	263 mm
R >> L	350 mm
F >> H	350 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
--------------	----------

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	30.0 ms
Concatenations	1

**Inline - Common**

Subtract	Off
Measurements	1
StdDev	Off
Save original images	On

**Inline - MIP**

MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On

**Inline - Composing**

Inline Composing	Off
Distortion Corr.	Off

**Sequence - Part 1**

Introduction	Off
Dimension	2D
Contrasts	1
Multi-slice mode	Sequential
Bandwidth	390 Hz/Px

**Sequence - Part 2**

Gradient mode	Fast
RF spoiling	On

**Sequence - Nuclei**

TX/RX Nucleus	1H
---------------	----

**Sequence - Nuclei**

TX/RX delta frequency	0 Hz
TX Nucleus	None
TX delta frequency	0 Hz
Coil elements	HEA;HEP

**Sequence - Special**

ICE program	CoilArrayUtil
number of noise lines	384 lines
Optimal SNR	On
GFactor	On
Condition number	Off
Rx coil diode switching	On
coil channel reordering	Off

**Sequence - Assistant**

Mode	Off
------	-----

\\USER\ABCD\20190320\ABCD\_QA\_quick\_32ch\ABCD\_QA\_fMRI

TA: 6:44 PM: FIX Voxel size: 2.4×2.4×2.4 mmPAT: 6 Rel. SNR: 1.00 : epfid

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	On
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	On
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	Off
Wait for user to start	Off
Start measurements	Single measurement

**Resolution - iPAT**

Accel. factor slice	6
Reference scan mode	EPI/separate

**Resolution - Filter Image**

Distortion Corr.	Off
Prescan Normalize	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off
Hamming	Off

**Routine**

Slice group	1
Slices	60
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	800 ms
TE	30.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HEA;HEP

**Geometry - Common**

Slice group	1
Slices	60
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	800 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

**Geometry - AutoAlign**

Slice group	1
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	Isocenter
L	0.0 mm
P	0.0 mm
H	0.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

**Contrast - Common**

TR	800 ms
TE	30.0 ms
MTC	Off
Flip angle	52 deg
Fat suppr.	Fat sat.

**Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	500
Delay in TR	0 ms
Multiple series	Off

**Resolution - Common**

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
Base resolution	90
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

**Resolution - iPAT**

Accel. mode	Slice accel.
Accel. factor PE	1
Ref. lines PE	22

**Geometry - Saturation**

Fat suppr.	Fat sat.
Special sat.	None

**Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

**System - Miscellaneous**

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
Matrix Optimization	Off

**System - Miscellaneous**

AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	144 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Standard

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	800 ms
Concatenations	1

**BOLD**

GLM Statistics	Off
Dynamic t-maps	Off
Ignore meas. at start	0
Ignore after transition	0
Model transition states	Off
Temp. highpass filter	Off
Threshold	4.00
Paradigm size	3
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Active
Motion correction	Off
Spatial filter	Off
Measurements	500
Delay in TR	0 ms
Multiple series	Off

**Sequence - Part 1**

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.51 ms
Bandwidth	2778 Hz/Px

**Sequence - Part 2**

EPI factor	90
RF pulse type	Normal
Gradient mode	Fast
Excitation	Standard

**Sequence - pTX Pulses****Sequence - Special**

Dummy Scans	0
K-space streaming	None
Physio recording	Off
Reverse Phase Encoding	On



\\USER\ABCD\20190320\ABCD\_QA\_quick\_32ch\ABCD\_QA\_dMRI

TA: 0:46 PM: FIX Voxel size: 1.7×1.7×1.7 mmPAT: 3 Rel. SNR: 1.00 : epse

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	Single measurement

**Routine**

Slice group	1
Slices	81
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	240 mm
FoV phase	100.0 %
Slice thickness	1.7 mm
TR	4200 ms
TE	88.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HEA;HEP

**Contrast - Common**

TR	4200 ms
TE	88.0 ms
MTC	Off
Magn. preparation	None
Fat suppr.	Fat sat.
Fat sat. mode	Strong

**Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Delay in TR	0 ms
Multiple series	Off

**Resolution - Common**

FoV read	240 mm
FoV phase	100.0 %
Slice thickness	1.7 mm
Base resolution	140
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off

**Resolution - iPAT**

Accel. mode	Slice accel.
Accel. factor PE	1

**Resolution - iPAT**

Ref. lines PE	71
Accel. factor slice	3
Reference scan mode	EPI/separate

**Resolution - Filter Image**

Distortion Corr.	Off
Prescan Normalize	Off
Dynamic Field Corr.	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off

**Geometry - Common**

Slice group	1
Slices	81
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	240 mm
FoV phase	100.0 %
Slice thickness	1.7 mm
TR	4200 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

**Geometry - AutoAlign**

Slice group	1
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	Isocenter
L	0.0 mm
P	0.0 mm
H	0.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

**Geometry - Saturation**

Fat suppr.	Fat sat.
Fat sat. mode	Strong
Special sat.	None

**Geometry - Navigator****Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

**System - Miscellaneous**

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T

**System - Miscellaneous**

Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Advanced
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
A >> P	240 mm
R >> L	240 mm
F >> H	138 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Standard

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	3.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	4200 ms
Concatenations	1

**Physio - PACE**

Resp. control	Off
Concatenations	1

**Diff - Neuro**

Diffusion mode	Free
Diff. directions	6
Diffusion Scheme	Monopolar
Diff. weightings	2
b-value 1	0 s/mm <sup>2</sup>
b-value 2	50 s/mm <sup>2</sup>
b-value 1	1
b-value 2	1
Diff. weighted images	On
Trace weighted images	Off
ADC maps	Off
FA maps	Off
Mosaic	On
Tensor	Off
Noise level	40

**Diff - Body**

Diffusion mode	Free
Diff. directions	6
Diffusion Scheme	Monopolar
Diff. weightings	2
b-value 1	0 s/mm <sup>2</sup>
b-value 2	50 s/mm <sup>2</sup>
b-value 1	1
b-value 2	1
Diff. weighted images	On
Trace weighted images	Off
ADC maps	Off
Exponential ADC Maps	Off
FA maps	Off
Invert Gray Scale	Off
Calculated Image	Off
b-Value >=	0 s/mm <sup>2</sup>
Noise level	40

**Diff - Composing**

Inline Composing	Off
Distortion Corr.	Off

**Sequence - Part 1**

Introduction	Off
Optimization	None
Multi-slice mode	Interleaved
Free echo spacing	On
Echo spacing	0.69 ms
Bandwidth	1700 Hz/Px

**Sequence - Part 2**

EPI factor	140
RF pulse type	Normal
Gradient mode	Performance*
Excitation	Standard

**Sequence - pTX Pulses****Sequence - Special**

K-space streaming	None
Reverse Phase Encoding	On

\\USER\ABCD\20190320\ABCD\_QA\_quick\_32ch\FBIRN\_QA\_fMRI\_flip77

TA: 6:44 PM: FIX Voxel size: 3.4×3.4×4.0 mmPAT: Off Rel. SNR: 1.00 : efpid

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	On
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	On
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	Single measurement

**Routine**

Slice group	1
Slices	30
Dist. factor	25 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	220 mm
FoV phase	100.0 %
Slice thickness	4.0 mm
TR	2000 ms
TE	30.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HEA;HEP

**Contrast - Common**

TR	2000 ms
TE	30.0 ms
MTC	Off
Flip angle	77 deg
Fat suppr.	Fat sat.

**Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	200
Delay in TR	0 ms
Multiple series	Off

**Resolution - Common**

FoV read	220 mm
FoV phase	100.0 %
Slice thickness	4.0 mm
Base resolution	64
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

**Resolution - iPAT**

Accel. mode	None
-------------	------

**Resolution - Filter Image**

Distortion Corr.	Off
Prescan Normalize	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off
Hamming	Off

**Geometry - Common**

Slice group	1
Slices	30
Dist. factor	25 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	220 mm
FoV phase	100.0 %
Slice thickness	4.0 mm
TR	2000 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

**Geometry - AutoAlign**

Slice group	1
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	Isocenter
L	0.0 mm
P	0.0 mm
H	0.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

**Geometry - Saturation**

Fat suppr.	Fat sat.
Special sat.	None

**Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

**System - Miscellaneous**

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**Sequence - Part 2**

Excitation	Standard
------------	----------

**Sequence - pTX Pulses****System - Adjust Volume**

Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
A >> P	220 mm
R >> L	220 mm
F >> H	149 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Standard

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	2000 ms
Concatenations	1

**BOLD**

GLM Statistics	Off
Dynamic t-maps	Off
Ignore meas. at start	0
Ignore after transition	0
Model transition states	Off
Temp. highpass filter	Off
Threshold	4.00
Paradigm size	3
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Active
Motion correction	Off
Spatial filter	Off
Measurements	200
Delay in TR	0 ms
Multiple series	Off

**Sequence - Part 1**

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.5 ms
Bandwidth	2298 Hz/Px

**Sequence - Part 2**

EPI factor	64
RF pulse type	Normal
Gradient mode	Fast

\\USER\ABCD\20190320\ABCD\_QA\_full\_32ch\localizer\_32ch

TA: 0:12 PM: REF Voxel size: 0.5×0.5×7.0 mmPAT: Off Rel. SNR: 1.00 : fl

**Properties**

Prio recon	On
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	On
Load images to graphic segments	On
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	Single measurement

**Routine**

Slice group	1
Slices	1
Dist. factor	20 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice group	2
Slices	1
Dist. factor	20 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
Slice group	3
Slices	1
Dist. factor	20 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Coronal
Phase enc. dir.	R >> L
AutoAlign	---
Phase oversampling	0 %
FoV read	250 mm
FoV phase	100.0 %
Slice thickness	7.0 mm
TR	7.5 ms
TE	3.69 ms
Averages	2
Concatenations	3
Filter	Prescan Normalize, Elliptical filter
Coil elements	HEA;HEP

**Contrast - Common**

TR	7.5 ms
TE	3.69 ms
TD	0 ms
MTC	Off
Magn. preparation	None
Flip angle	20 deg
Fat suppr.	None
Water suppr.	None
SWI	Off

**Contrast - Dynamic**

Averages	2
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1

**Contrast - Dynamic**

Multiple series	Each measurement
-----------------	------------------

**Resolution - Common**

FoV read	250 mm
FoV phase	100.0 %
Slice thickness	7.0 mm
Base resolution	256
Phase resolution	91 %
Phase partial Fourier	Off
Interpolation	On

**Resolution - iPAT**

PAT mode	None
----------	------

**Resolution - Filter Image**

Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	On
Unfiltered images	Off
Normalize	Off
B1 filter	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	On

**Geometry - Common**

Slice group	1
Slices	1
Dist. factor	20 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice group	2
Slices	1
Dist. factor	20 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
Slice group	3
Slices	1
Dist. factor	20 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Coronal
Phase enc. dir.	R >> L
FoV read	250 mm
FoV phase	100.0 %
Slice thickness	7.0 mm
TR	7.5 ms
Multi-slice mode	Sequential
Series	Interleaved
Concatenations	3

**Geometry - AutoAlign**

Slice group	1
Position	L0.0 A20.0 H0.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice group	2
Position	L0.0 A20.0 H0.0 mm

**Geometry - AutoAlign**

Orientation	Transversal
Phase enc. dir.	A >> P
Slice group	3
Position	L0.0 A20.0 H0.0 mm
Orientation	Coronal
Phase enc. dir.	R >> L
AutoAlign	---
Initial Position	L0.0 A20.0 H0.0
L	0.0 mm
A	20.0 mm
H	0.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Sagittal

**Geometry - Saturation**

Saturation mode	Standard
Fat suppr.	None
Water suppr.	None
Special sat.	None

**Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

**System - Miscellaneous**

Positioning mode	REF
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Tune up
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
A >> P	263 mm
R >> L	350 mm
F >> H	350 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Slice-sel.

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	7.5 ms
Concatenations	3
Segments	1

**Physio - Cardiac**

Tagging	None
Magn. preparation	None
Fat suppr.	None
Dark blood	Off
FoV read	250 mm
FoV phase	100.0 %
Phase resolution	91 %

**Physio - PACE**

Resp. control	Off
Concatenations	3

**Inline - Common**

Subtract	Off
Measurements	1
StdDev	Off
Liver registration	Off
Save original images	On

**Inline - MIP**

MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On

**Inline - Soft Tissue**

Wash - In	Off
Wash - Out	Off
TTP	Off
PEI	Off
MIP - time	Off
Measurements	1

**Inline - Composing**

Inline Composing	Off
Distortion Corr.	Off

**Inline - MapIt**

Save original images	On
MapIt	None
Flip angle	20 deg
Measurements	1
Contrasts	1
TR	7.5 ms
TE	3.69 ms

**Sequence - Part 1**

Introduction	On
--------------	----

**Sequence - Part 1**

Dimension	2D
Phase stabilisation	Off
Asymmetric echo	Allowed
Contrasts	1
Flow comp.	No
Multi-slice mode	Sequential
Bandwidth	320 Hz/Px

**Sequence - Part 2**

Segments	1
Acoustic noise reduction	None
RF pulse type	Fast
Gradient mode	Fast
Excitation	Slice-sel.
RF spoiling	On

**Sequence - Assistant**

Mode	Off
Allowed delay	0 s

\\USER\ABCD\20190320\ABCD\_QA\_full\_32ch\localizer\_32ch\_uncombined

TA: 0:12 PM: REF Voxel size: 0.5×0.5×7.0 mmPAT: Off Rel. SNR: 1.00 : fl

**Properties**

Prio recon	On
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	Single measurement

**Routine**

Slice group	1
Slices	1
Dist. factor	20 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice group	2
Slices	1
Dist. factor	20 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
Slice group	3
Slices	1
Dist. factor	20 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Coronal
Phase enc. dir.	R >> L
AutoAlign	---
Phase oversampling	0 %
FoV read	250 mm
FoV phase	100.0 %
Slice thickness	7.0 mm
TR	7.5 ms
TE	3.69 ms
Averages	2
Concatenations	3
Filter	Prescan Normalize, Elliptical filter
Coil elements	HEA;HEP

**Contrast - Common**

TR	7.5 ms
TE	3.69 ms
TD	0 ms
MTC	Off
Magn. preparation	None
Flip angle	20 deg
Fat suppr.	None
Water suppr.	None
SWI	Off

**Contrast - Dynamic**

Averages	2
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1

**Contrast - Dynamic**

Multiple series	Each measurement
-----------------	------------------

**Resolution - Common**

FoV read	250 mm
FoV phase	100.0 %
Slice thickness	7.0 mm
Base resolution	256
Phase resolution	91 %
Phase partial Fourier	Off
Interpolation	On

**Resolution - iPAT**

PAT mode	None
----------	------

**Resolution - Filter Image**

Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	On
Unfiltered images	Off
Normalize	Off
B1 filter	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	On

**Geometry - Common**

Slice group	1
Slices	1
Dist. factor	20 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice group	2
Slices	1
Dist. factor	20 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
Slice group	3
Slices	1
Dist. factor	20 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Coronal
Phase enc. dir.	R >> L
FoV read	250 mm
FoV phase	100.0 %
Slice thickness	7.0 mm
TR	7.5 ms
Multi-slice mode	Sequential
Series	Interleaved
Concatenations	3

**Geometry - AutoAlign**

Slice group	1
Position	L0.0 A20.0 H0.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice group	2
Position	L0.0 A20.0 H0.0 mm



**Geometry - AutoAlign**

Orientation	Transversal
Phase enc. dir.	A >> P
Slice group	3
Position	L0.0 A20.0 H0.0 mm
Orientation	Coronal
Phase enc. dir.	R >> L
AutoAlign	---
Initial Position	L0.0 A20.0 H0.0
L	0.0 mm
A	20.0 mm
H	0.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Sagittal

**Geometry - Saturation**

Saturation mode	Standard
Fat suppr.	None
Water suppr.	None
Special sat.	None

**Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

**System - Miscellaneous**

Positioning mode	REF
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
Save uncombined	On
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Tune up
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
A >> P	263 mm
R >> L	350 mm
F >> H	350 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Slice-sel.

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	7.5 ms
Concatenations	3
Segments	1

**Physio - Cardiac**

Tagging	None
Magn. preparation	None
Fat suppr.	None
Dark blood	Off
FoV read	250 mm
FoV phase	100.0 %
Phase resolution	91 %

**Physio - PACE**

Resp. control	Off
Concatenations	3

**Inline - Common**

Subtract	Off
Measurements	1
StdDev	Off
Liver registration	Off
Save original images	On

**Inline - MIP**

MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On

**Inline - Soft Tissue**

Wash - In	Off
Wash - Out	Off
TTP	Off
PEI	Off
MIP - time	Off
Measurements	1

**Inline - Composing**

Inline Composing	Off
Distortion Corr.	Off

**Inline - MapIt**

Save original images	On
MapIt	None
Flip angle	20 deg
Measurements	1
Contrasts	1
TR	7.5 ms
TE	3.69 ms

**Sequence - Part 1**

Introduction	On
--------------	----

**Sequence - Part 1**

Dimension	2D
Phase stabilisation	Off
Asymmetric echo	Allowed
Contrasts	1
Flow comp.	No
Multi-slice mode	Sequential
Bandwidth	320 Hz/Px

**Sequence - Part 2**

Segments	1
Acoustic noise reduction	None
RF pulse type	Fast
Gradient mode	Fast
Excitation	Slice-sel.
RF spoiling	On

**Sequence - Assistant**

Mode	Off
Allowed delay	0 s

\\USER\ABCD\20190320\ABCD\_QA\_full\_32ch\SNR\_Map

TA: 0:58 PM: REF Voxel size: 0.5×0.5×5.0 mmRel. SNR: 1.00 : fl

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	On
Load images to graphic segments	On
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	Off
Wait for user to start	Off
Start measurements	Single measurement

**Routine**

Slice group	1
Slices	1
Dist. factor	20 %
Position	L0.0 A14.0 F7.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	192 mm
FoV phase	100.0 %
Slice thickness	5.0 mm
TR	30.0 ms
TE	6.0 ms
Averages	4
Concatenations	1
Filter	None
Coil elements	HEA;HEP

**Contrast - Common**

TR	30.0 ms
TE	6.0 ms
MTC	Off
Flip angle	10 deg
Fat suppr.	None
Water suppr.	None

**Contrast - Dynamic**

Averages	4
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1
Multiple series	Off

**Resolution - Common**

FoV read	192 mm
FoV phase	100.0 %
Slice thickness	5.0 mm
Base resolution	384
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

**Resolution - Filter Image**

Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	Off

**Resolution - Filter Image**

Normalize	Off
B1 filter	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off

**Geometry - Common**

Slice group	1
Slices	1
Dist. factor	20 %
Position	L0.0 A14.0 F7.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	192 mm
FoV phase	100.0 %
Slice thickness	5.0 mm
TR	30.0 ms
Multi-slice mode	Sequential
Series	Ascending
Concatenations	1

**Geometry - AutoAlign**

Slice group	1
Position	L0.0 A14.0 F7.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A14.0 F7.0
L	0.0 mm
A	14.0 mm
F	7.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

**Geometry - Saturation**

Fat suppr.	None
Water suppr.	None
Special sat.	None

**Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

**System - Miscellaneous**

Positioning mode	REF
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Tune up
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
A >> P	263 mm
R >> L	350 mm
F >> H	350 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
--------------	----------

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	30.0 ms
Concatenations	1

**Inline - Common**

Subtract	Off
Measurements	1
StdDev	Off
Save original images	On

**Inline - MIP**

MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On

**Inline - Composing**

Inline Composing	Off
Distortion Corr.	Off

**Sequence - Part 1**

Introduction	Off
Dimension	2D
Contrasts	1
Multi-slice mode	Sequential
Bandwidth	390 Hz/Px

**Sequence - Part 2**

Gradient mode	Fast
RF spoiling	On

**Sequence - Nuclei**

TX/RX Nucleus	1H
---------------	----

**Sequence - Nuclei**

TX/RX delta frequency	0 Hz
TX Nucleus	None
TX delta frequency	0 Hz
Coil elements	HEA;HEP

**Sequence - Special**

ICE program	CoilArrayUtil
number of noise lines	384 lines
Optimal SNR	On
GFactor	On
Condition number	Off
Rx coil diode switching	On
coil channel reordering	Off

**Sequence - Assistant**

Mode	Off
------	-----

\\USER\ABCD\20190320\ABCD\_QA\_full\_32ch\ABCD\_QA\_fMRI

TA: 6:44 PM: FIX Voxel size: 2.4×2.4×2.4 mmPAT: 6 Rel. SNR: 1.00 : epfid

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	On
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	On
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	Off
Wait for user to start	Off
Start measurements	Single measurement

**Resolution - iPAT**

Accel. factor slice	6
Reference scan mode	EPI/separate

**Resolution - Filter Image**

Distortion Corr.	Off
Prescan Normalize	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off
Hamming	Off

**Routine**

Slice group	1
Slices	60
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	800 ms
TE	30.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HEA;HEP

**Geometry - Common**

Slice group	1
Slices	60
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	800 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

**Geometry - AutoAlign**

Slice group	1
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	Isocenter
L	0.0 mm
P	0.0 mm
H	0.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

**Contrast - Common**

TR	800 ms
TE	30.0 ms
MTC	Off
Flip angle	52 deg
Fat suppr.	Fat sat.

**Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	500
Delay in TR	0 ms
Multiple series	Off

**Resolution - Common**

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
Base resolution	90
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

**Resolution - iPAT**

Accel. mode	Slice accel.
Accel. factor PE	1
Ref. lines PE	22

**Geometry - Saturation**

Fat suppr.	Fat sat.
Special sat.	None

**Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

**System - Miscellaneous**

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
Matrix Optimization	Off

**System - Miscellaneous**

AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	144 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Standard

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	800 ms
Concatenations	1

**BOLD**

GLM Statistics	Off
Dynamic t-maps	Off
Ignore meas. at start	0
Ignore after transition	0
Model transition states	Off
Temp. highpass filter	Off
Threshold	4.00
Paradigm size	3
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Active
Motion correction	Off
Spatial filter	Off
Measurements	500
Delay in TR	0 ms
Multiple series	Off

**Sequence - Part 1**

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.51 ms
Bandwidth	2778 Hz/Px

**Sequence - Part 2**

EPI factor	90
RF pulse type	Normal
Gradient mode	Fast
Excitation	Standard

**Sequence - pTX Pulses****Sequence - Special**

Dummy Scans	0
K-space streaming	None
Physio recording	Off
Reverse Phase Encoding	On

\\USER\ABCD\20190320\ABCD\_QA\_full\_32ch\ABCD\_QA\_fMRI

TA: 6:44 PM: FIX Voxel size: 2.4×2.4×2.4 mmPAT: 6 Rel. SNR: 1.00 : epfid

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	On
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	On
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	Single measurement

**Resolution - iPAT**

Accel. factor slice	6
Reference scan mode	EPI/separate

**Resolution - Filter Image**

Distortion Corr.	Off
Prescan Normalize	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off
Hamming	Off

**Routine**

Slice group	1
Slices	60
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	800 ms
TE	30.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HEA;HEP

**Geometry - Common**

Slice group	1
Slices	60
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	800 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

**Geometry - AutoAlign**

Slice group	1
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	Isocenter
L	0.0 mm
P	0.0 mm
H	0.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

**Contrast - Common**

TR	800 ms
TE	30.0 ms
MTC	Off
Flip angle	52 deg
Fat suppr.	Fat sat.

**Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	500
Delay in TR	0 ms
Multiple series	Off

**Resolution - Common**

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
Base resolution	90
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

**Resolution - iPAT**

Accel. mode	Slice accel.
Accel. factor PE	1
Ref. lines PE	22

**Geometry - Saturation**

Fat suppr.	Fat sat.
Special sat.	None

**Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

**System - Miscellaneous**

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
Matrix Optimization	Off

**System - Miscellaneous**

AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	144 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Standard

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	800 ms
Concatenations	1

**BOLD**

GLM Statistics	Off
Dynamic t-maps	Off
Ignore meas. at start	0
Ignore after transition	0
Model transition states	Off
Temp. highpass filter	Off
Threshold	4.00
Paradigm size	3
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Active
Motion correction	Off
Spatial filter	Off
Measurements	500
Delay in TR	0 ms
Multiple series	Off

**Sequence - Part 1**

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.51 ms
Bandwidth	2778 Hz/Px

**Sequence - Part 2**

EPI factor	90
RF pulse type	Normal
Gradient mode	Fast
Excitation	Standard

**Sequence - pTX Pulses****Sequence - Special**

Dummy Scans	0
K-space streaming	None
Physio recording	Off
Reverse Phase Encoding	On



\\USER\ABCD\20190320\ABCD\_QA\_full\_32ch\ABCD\_QA\_dMRI

TA: 0:46 PM: FIX Voxel size: 1.7×1.7×1.7 mmPAT: 3 Rel. SNR: 1.00 : epse

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	Single measurement

**Routine**

Slice group	1
Slices	81
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	240 mm
FoV phase	100.0 %
Slice thickness	1.7 mm
TR	4200 ms
TE	88.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HEA;HEP

**Contrast - Common**

TR	4200 ms
TE	88.0 ms
MTC	Off
Magn. preparation	None
Fat suppr.	Fat sat.
Fat sat. mode	Strong

**Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Delay in TR	0 ms
Multiple series	Off

**Resolution - Common**

FoV read	240 mm
FoV phase	100.0 %
Slice thickness	1.7 mm
Base resolution	140
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off

**Resolution - iPAT**

Accel. mode	Slice accel.
Accel. factor PE	1

**Resolution - iPAT**

Ref. lines PE	71
Accel. factor slice	3
Reference scan mode	EPI/separate

**Resolution - Filter Image**

Distortion Corr.	Off
Prescan Normalize	Off
Dynamic Field Corr.	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off

**Geometry - Common**

Slice group	1
Slices	81
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	240 mm
FoV phase	100.0 %
Slice thickness	1.7 mm
TR	4200 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

**Geometry - AutoAlign**

Slice group	1
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	Isocenter
L	0.0 mm
P	0.0 mm
H	0.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

**Geometry - Saturation**

Fat suppr.	Fat sat.
Fat sat. mode	Strong
Special sat.	None

**Geometry - Navigator****Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

**System - Miscellaneous**

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T

**System - Miscellaneous**

Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Advanced
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
A >> P	240 mm
R >> L	240 mm
F >> H	138 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Standard

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	3.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	4200 ms
Concatenations	1

**Physio - PACE**

Resp. control	Off
Concatenations	1

**Diff - Neuro**

Diffusion mode	Free
Diff. directions	6
Diffusion Scheme	Monopolar
Diff. weightings	2
b-value 1	0 s/mm <sup>2</sup>
b-value 2	50 s/mm <sup>2</sup>
b-value 1	1
b-value 2	1
Diff. weighted images	On
Trace weighted images	Off
ADC maps	Off
FA maps	Off
Mosaic	On
Tensor	Off
Noise level	40

**Diff - Body**

Diffusion mode	Free
Diff. directions	6
Diffusion Scheme	Monopolar
Diff. weightings	2
b-value 1	0 s/mm <sup>2</sup>
b-value 2	50 s/mm <sup>2</sup>
b-value 1	1
b-value 2	1
Diff. weighted images	On
Trace weighted images	Off
ADC maps	Off
Exponential ADC Maps	Off
FA maps	Off
Invert Gray Scale	Off
Calculated Image	Off
b-Value >=	0 s/mm <sup>2</sup>
Noise level	40

**Diff - Composing**

Inline Composing	Off
Distortion Corr.	Off

**Sequence - Part 1**

Introduction	Off
Optimization	None
Multi-slice mode	Interleaved
Free echo spacing	On
Echo spacing	0.69 ms
Bandwidth	1700 Hz/Px

**Sequence - Part 2**

EPI factor	140
RF pulse type	Normal
Gradient mode	Performance*
Excitation	Standard

**Sequence - pTX Pulses****Sequence - Special**

K-space streaming	None
Reverse Phase Encoding	On

\\USER\ABCD\20190320\ABCD\_QA\_full\_32ch\FBIRN\_QA\_fMRI\_flip77

TA: 6:44 PM: FIX Voxel size: 3.4×3.4×4.0 mmPAT: Off Rel. SNR: 1.00 : efpid

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	On
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	On
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	Single measurement

**Routine**

Slice group	1
Slices	30
Dist. factor	25 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	220 mm
FoV phase	100.0 %
Slice thickness	4.0 mm
TR	2000 ms
TE	30.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HEA;HEP

**Contrast - Common**

TR	2000 ms
TE	30.0 ms
MTC	Off
Flip angle	77 deg
Fat suppr.	Fat sat.

**Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	200
Delay in TR	0 ms
Multiple series	Off

**Resolution - Common**

FoV read	220 mm
FoV phase	100.0 %
Slice thickness	4.0 mm
Base resolution	64
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

**Resolution - iPAT**

Accel. mode	None
-------------	------

**Resolution - Filter Image**

Distortion Corr.	Off
Prescan Normalize	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off
Hamming	Off

**Geometry - Common**

Slice group	1
Slices	30
Dist. factor	25 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	220 mm
FoV phase	100.0 %
Slice thickness	4.0 mm
TR	2000 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

**Geometry - AutoAlign**

Slice group	1
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	Isocenter
L	0.0 mm
P	0.0 mm
H	0.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

**Geometry - Saturation**

Fat suppr.	Fat sat.
Special sat.	None

**Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

**System - Miscellaneous**

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**Sequence - Part 2**

Excitation	Standard
------------	----------

**Sequence - pTX Pulses****System - Adjust Volume**

Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
A >> P	220 mm
R >> L	220 mm
F >> H	149 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Standard

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	2000 ms
Concatenations	1

**BOLD**

GLM Statistics	Off
Dynamic t-maps	Off
Ignore meas. at start	0
Ignore after transition	0
Model transition states	Off
Temp. highpass filter	Off
Threshold	4.00
Paradigm size	3
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Active
Motion correction	Off
Spatial filter	Off
Measurements	200
Delay in TR	0 ms
Multiple series	Off

**Sequence - Part 1**

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.5 ms
Bandwidth	2298 Hz/Px

**Sequence - Part 2**

EPI factor	64
RF pulse type	Normal
Gradient mode	Fast

\\USER\ABCD\20190320\ABCD\_QA\_full\_32ch\FBIRN\_QA\_fMRI\_flip10

TA: 6:44 PM: FIX Voxel size: 3.4×3.4×4.0 mmPAT: Off Rel. SNR: 1.00 : efpid

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	On
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	On
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	Single measurement

**Routine**

Slice group	1
Slices	30
Dist. factor	25 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	220 mm
FoV phase	100.0 %
Slice thickness	4.0 mm
TR	2000 ms
TE	30.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HEA;HEP

**Contrast - Common**

TR	2000 ms
TE	30.0 ms
MTC	Off
Flip angle	10 deg
Fat suppr.	Fat sat.

**Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	200
Delay in TR	0 ms
Multiple series	Off

**Resolution - Common**

FoV read	220 mm
FoV phase	100.0 %
Slice thickness	4.0 mm
Base resolution	64
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

**Resolution - iPAT**

Accel. mode	None
-------------	------

**Resolution - Filter Image**

Distortion Corr.	Off
Prescan Normalize	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off
Hamming	Off

**Geometry - Common**

Slice group	1
Slices	30
Dist. factor	25 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	220 mm
FoV phase	100.0 %
Slice thickness	4.0 mm
TR	2000 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

**Geometry - AutoAlign**

Slice group	1
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	Isocenter
L	0.0 mm
P	0.0 mm
H	0.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

**Geometry - Saturation**

Fat suppr.	Fat sat.
Special sat.	None

**Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

**System - Miscellaneous**

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**Sequence - Part 2**

Excitation	Standard
------------	----------

**Sequence - pTX Pulses****System - Adjust Volume**

Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
A >> P	220 mm
R >> L	220 mm
F >> H	149 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Standard

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	2000 ms
Concatenations	1

**BOLD**

GLM Statistics	Off
Dynamic t-maps	Off
Ignore meas. at start	0
Ignore after transition	0
Model transition states	Off
Temp. highpass filter	Off
Threshold	4.00
Paradigm size	3
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Active
Motion correction	Off
Spatial filter	Off
Measurements	200
Delay in TR	0 ms
Multiple series	Off

**Sequence - Part 1**

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.5 ms
Bandwidth	2298 Hz/Px

**Sequence - Part 2**

EPI factor	64
RF pulse type	Normal
Gradient mode	Fast

\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_64ch\localizer\_64ch

TA: 0:12 PM: REF Voxel size: 0.5×0.5×7.0 mmPAT: Off Rel. SNR: 1.00 : fl

**Properties**

Prio recon	On
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	On
Load images to graphic segments	On
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	Single measurement

**Routine**

Slice group	1
Slices	1
Dist. factor	20 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice group	2
Slices	1
Dist. factor	20 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
Slice group	3
Slices	1
Dist. factor	20 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Coronal
Phase enc. dir.	R >> L
AutoAlign	---
Phase oversampling	0 %
FoV read	250 mm
FoV phase	100.0 %
Slice thickness	7.0 mm
TR	7.5 ms
TE	3.69 ms
Averages	2
Concatenations	3
Filter	Prescan Normalize, Elliptical filter
Coil elements	HC1-7;NC1,2

**Contrast - Common**

TR	7.5 ms
TE	3.69 ms
TD	0 ms
MTC	Off
Magn. preparation	None
Flip angle	20 deg
Fat suppr.	None
Water suppr.	None
SWI	Off

**Contrast - Dynamic**

Averages	2
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1

**Contrast - Dynamic**

Multiple series	Each measurement
-----------------	------------------

**Resolution - Common**

FoV read	250 mm
FoV phase	100.0 %
Slice thickness	7.0 mm
Base resolution	256
Phase resolution	91 %
Phase partial Fourier	Off
Interpolation	On

**Resolution - iPAT**

PAT mode	None
----------	------

**Resolution - Filter Image**

Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	On
Unfiltered images	Off
Normalize	Off
B1 filter	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	On

**Geometry - Common**

Slice group	1
Slices	1
Dist. factor	20 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice group	2
Slices	1
Dist. factor	20 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
Slice group	3
Slices	1
Dist. factor	20 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Coronal
Phase enc. dir.	R >> L
FoV read	250 mm
FoV phase	100.0 %
Slice thickness	7.0 mm
TR	7.5 ms
Multi-slice mode	Sequential
Series	Interleaved
Concatenations	3

**Geometry - AutoAlign**

Slice group	1
Position	L0.0 A20.0 H0.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice group	2
Position	L0.0 A20.0 H0.0 mm

**Geometry - AutoAlign**

Orientation	Transversal
Phase enc. dir.	A >> P
Slice group	3
Position	L0.0 A20.0 H0.0 mm
Orientation	Coronal
Phase enc. dir.	R >> L
AutoAlign	---
Initial Position	L0.0 A20.0 H0.0
L	0.0 mm
A	20.0 mm
H	0.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Sagittal

**Geometry - Saturation**

Saturation mode	Standard
Fat suppr.	None
Water suppr.	None
Special sat.	None

**Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

**System - Miscellaneous**

Positioning mode	REF
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Tune up
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
A >> P	263 mm
R >> L	350 mm
F >> H	350 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Slice-sel.

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	7.5 ms
Concatenations	3
Segments	1

**Physio - Cardiac**

Tagging	None
Magn. preparation	None
Fat suppr.	None
Dark blood	Off
FoV read	250 mm
FoV phase	100.0 %
Phase resolution	91 %

**Physio - PACE**

Resp. control	Off
Concatenations	3

**Inline - Common**

Subtract	Off
Measurements	1
StdDev	Off
Liver registration	Off
Save original images	On

**Inline - MIP**

MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On

**Inline - Soft Tissue**

Wash - In	Off
Wash - Out	Off
TTP	Off
PEI	Off
MIP - time	Off
Measurements	1

**Inline - Composing**

Inline Composing	Off
Distortion Corr.	Off

**Inline - MapIt**

Save original images	On
MapIt	None
Flip angle	20 deg
Measurements	1
Contrasts	1
TR	7.5 ms
TE	3.69 ms

**Sequence - Part 1**

Introduction	On
--------------	----



**Sequence - Part 1**

Dimension	2D
Phase stabilisation	Off
Asymmetric echo	Allowed
Contrasts	1
Flow comp.	No
Multi-slice mode	Sequential
Bandwidth	320 Hz/Px

**Sequence - Part 2**

Segments	1
Acoustic noise reduction	None
RF pulse type	Fast
Gradient mode	Fast
Excitation	Slice-sel.
RF spoiling	On

**Sequence - Assistant**

Mode	Off
Allowed delay	0 s

\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_64ch\ABCD\_T1w\_MPR\_vNav\_setter

TA: 0.3 s PM: FIX Voxel size: 8.0×8.0×8.0 mmRel. SNR: 1.00 : ABCD

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	Off
Wait for user to start	Off
Start measurements	Single measurement

**Routine**

Slab group	1
Slabs	1
Dist. factor	50 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	32
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	8.00 mm
TR	11.0 ms
TE	4.8 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	BC

**Contrast - Common**

TR	11.0 ms
TE	4.8 ms
MTC	Off
Flip angle	2 deg
Fat suppr.	None

**Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

**Resolution - Common**

FoV read	256 mm
FoV phase	100.0 %
Slice thickness	8.00 mm
Base resolution	32
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	Off
Slice partial Fourier	6/8
Interpolation	Off

**Resolution - Filter Image**

Distortion Corr.	Off
Prescan Normalize	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off
Hamming	Off

**Geometry - Common**

Slab group	1
Slabs	1
Dist. factor	50 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice oversampling	0.0 %
Slices per slab	32
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	8.00 mm
TR	11.0 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

**Geometry - AutoAlign**

Slab group	1
Position	L0.0 A20.0 H0.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A20.0 H0.0
L	0.0 mm
A	20.0 mm
H	0.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Sagittal

**Geometry - Saturation**

Fat suppr.	None
Special sat.	None

**Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

**System - Miscellaneous**

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---

**System - Miscellaneous**

Coil Select Mode	Off - All
------------------	-----------

**System - Adjustments**

B0 Shim mode	Tune up
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
A >> P	263 mm
R >> L	350 mm
F >> H	350 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Non-sel.

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	Low
Img. Scale Cor.	10.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	11.0 ms
Concatenations	1

**Sequence - Part 1**

Introduction	Off
Dimension	3D
Contrasts	1
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.27 ms
Bandwidth	4882 Hz/Px

**Sequence - Part 2**

EPI factor	32
RF pulse type	Normal
Gradient mode	Fast
Excitation	Non-sel.
RF spoiling	On

**Sequence - Special**

Protocol filename	MPRAGE
-------------------	--------

\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_64ch\ABCD\_T1w\_MPR\_vNav

TA: 7:12 PM: FIX Voxel size: 1.0×1.0×1.0 mmPAT: 2 Rel. SNR: 1.00 : tfl

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	On
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	Off
Wait for user to start	On
Start measurements	Single measurement

**Routine**

Slab group	1
Slabs	1
Dist. factor	50 %
Position	L0.0 A20.0 F30.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	176
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	1.00 mm
TR	2500.0 ms
TE	2.9 ms
Averages	1
Concatenations	1
Filter	Prescan Normalize
Coil elements	HC1-7

**Contrast - Common**

TR	2500.0 ms
TE	2.9 ms
Magn. preparation	Non-sel. IR
T1	1070 ms
Flip angle	8.0 deg
Fat suppr.	Water excit. fast
Water suppr.	None

**Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

**Resolution - Common**

FoV read	256 mm
FoV phase	100.0 %
Slice thickness	1.00 mm
Base resolution	256
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	Off
Slice partial Fourier	Off
Interpolation	Off

**Resolution - iPAT**

PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	32
Accel. factor 3D	1
Reference scan mode	Integrated

**Resolution - Filter Image**

Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	On
Unfiltered images	On
Normalize	Off
B1 filter	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off

**Geometry - Common**

Slab group	1
Slabs	1
Dist. factor	50 %
Position	L0.0 A20.0 F30.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice oversampling	0.0 %
Slices per slab	176
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	1.00 mm
TR	2500.0 ms
Multi-slice mode	Single shot
Series	Interleaved
Concatenations	1

**Geometry - AutoAlign**

Slab group	1
Position	L0.0 A20.0 F30.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A20.0 F30.0
R	0.0 mm
A	20.0 mm
F	30.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Sagittal

**Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

**System - Miscellaneous**

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L

**System - Miscellaneous**

Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A20.0 F30.0 mm
Orientation	Sagittal
Rotation	0.00 deg
A >> P	256 mm
F >> H	256 mm
R >> L	176 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Non-sel.

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	Low
Img. Scale Cor.	5.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	2500.0 ms
Concatenations	1

**Physio - Cardiac**

Magn. preparation	Non-sel. IR
TI	1070 ms
Fat suppr.	Water excit. fast
Dark blood	Off
FoV read	256 mm
FoV phase	100.0 %
Phase resolution	100 %

**Inline - Common**

Subtract	Off
Measurements	1
StdDev	Off
Save original images	On

**Inline - MIP**

MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off

**Inline - MIP**

Save original images	On
----------------------	----

**Inline - Composing**

Inline Composing	Off
Distortion Corr.	Off

**Inline - Maplt**

Save original images	On
Maplt	None
Flip angle	8.0 deg
Measurements	1
Contrasts	1
TR	2500.0 ms
TE	2.9 ms

**Sequence - Part 1**

Introduction	On
Dimension	3D
Elliptical scanning	Off
Reordering	Linear
Asymmetric echo	Off
Contrasts	1
Flow comp.	No
Multi-slice mode	Single shot
Echo spacing	8.1 ms
Bandwidth	240 Hz/Px

**Sequence - Part 2**

RF pulse type	Fast
Gradient mode	Fast
Excitation	Non-sel.
RF spoiling	On
Turbo factor	256

**Sequence - Special**

Readout polarity	Positive
Nav. location	Before
Apply moco to	parent and nav
Remeasure	24 TRs
Reacq. threshold	0.50
Feedback delay	60 ms
Moco ref. image	Use Temp Ref
K-space streaming	None
ABCD navigator	On
Add. grad time	0.0 ms
Apply freq to	parent and nav
Averaging	None

**Sequence - Assistant**

Mode	Off
------	-----

\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_64ch\ABCD\_fMRI\_DistortionMap\_PA

TA: 0:14 PM: REF Voxel size: 2.4×2.4×2.4 mmPAT: Off Rel. SNR: 1.00 : epse

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	Off
Wait for user to start	Off
Start measurements	Single measurement

**Routine**

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	7030 ms
TE	80.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HC1-7

**Contrast - Common**

TR	7030 ms
TE	80.0 ms
MTC	Off
Magn. preparation	None
Fat suppr.	Fat sat.
Fat sat. mode	Weak

**Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Delay in TR	0 ms
Multiple series	Off

**Resolution - Common**

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
Base resolution	90
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

**Resolution - iPAT**

Accel. mode	None
-------------	------

**Resolution - Filter Image**

Distortion Corr.	Off
Prescan Normalize	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off
Hamming	Off

**Geometry - Common**

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	7030 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

**Geometry - AutoAlign**

Slice group	1
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A29.8 F12.4
L	0.0 mm
A	29.8 mm
F	12.4 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

**Geometry - Saturation**

Fat suppr.	Fat sat.
Fat sat. mode	Weak
Special sat.	None

**Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

**System - Miscellaneous**

Positioning mode	REF
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**Sequence - Special**

Dummy Scans	1
Reverse Phase Encoding	On

**System - Adjust Volume**

Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	144 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
--------------	----------

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	2.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	7030 ms
Concatenations	1

**Inline - Common**

Subtract	Off
Measurements	1
StdDev	Off
Save original images	On

**Inline - MIP**

MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On

**Inline - Composing**

Inline Composing	Off
Distortion Corr.	Off

**Sequence - Part 1**

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	On
Echo spacing	0.51 ms
Bandwidth	2778 Hz/Px

**Sequence - Part 2**

EPI factor	90
RF pulse type	Normal
Gradient mode	Performance

\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_64ch\ABCD\_fMRI\_DistortionMap\_AP

TA: 0:14 PM: FIX Voxel size: 2.4×2.4×2.4 mmPAT: Off Rel. SNR: 1.00 : epse

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	Single measurement

**Routine**

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	7030 ms
TE	80.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HC1-7

**Contrast - Common**

TR	7030 ms
TE	80.0 ms
MTC	Off
Magn. preparation	None
Fat suppr.	Fat sat.
Fat sat. mode	Weak

**Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Delay in TR	0 ms
Multiple series	Off

**Resolution - Common**

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
Base resolution	90
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

**Resolution - iPAT**

Accel. mode	None
-------------	------

**Resolution - Filter Image**

Distortion Corr.	Off
Prescan Normalize	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off
Hamming	Off

**Geometry - Common**

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	7030 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

**Geometry - AutoAlign**

Slice group	1
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A29.8 F12.4
L	0.0 mm
A	29.8 mm
F	12.4 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

**Geometry - Saturation**

Fat suppr.	Fat sat.
Fat sat. mode	Weak
Special sat.	None

**Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

**System - Miscellaneous**

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - All



**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**Sequence - Special**

Dummy Scans	1
Reverse Phase Encoding	Off

**System - Adjust Volume**

Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	144 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
--------------	----------

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	2.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	7030 ms
Concatenations	1

**Inline - Common**

Subtract	Off
Measurements	1
StdDev	Off
Save original images	On

**Inline - MIP**

MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On

**Inline - Composing**

Inline Composing	Off
Distortion Corr.	Off

**Sequence - Part 1**

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	On
Echo spacing	0.51 ms
Bandwidth	2778 Hz/Px

**Sequence - Part 2**

EPI factor	90
RF pulse type	Normal
Gradient mode	Performance

\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_64ch\ABCD\_fmri\_rest

TA: 5:11 PM: FIX Voxel size: 2.4×2.4×2.4 mmPAT: 6 Rel. SNR: 1.00 : epfid

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	On
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	On
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	On
Start measurements	Single measurement

**Resolution - iPAT**

Accel. factor slice	6
Reference scan mode	EPI/separate

**Resolution - Filter Image**

Distortion Corr.	Off
Prescan Normalize	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off
Hamming	Off

**Routine**

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	800 ms
TE	30.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HC1-7

**Geometry - Common**

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	800 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

**Geometry - AutoAlign**

Slice group	1
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A29.8 F12.4
L	0.0 mm
A	29.8 mm
F	12.4 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

**Contrast - Common**

TR	800 ms
TE	30.0 ms
MTC	Off
Flip angle	52 deg
Fat suppr.	Fat sat.

**Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	383
Delay in TR	0 ms
Multiple series	Off

**Resolution - Common**

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
Base resolution	90
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

**Resolution - iPAT**

Accel. mode	Slice accel.
Accel. factor PE	1
Ref. lines PE	22

**Geometry - Saturation**

Fat suppr.	Fat sat.
Special sat.	None

**Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

**System - Miscellaneous**

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
Matrix Optimization	Off

**System - Miscellaneous**

AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	144 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Standard

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	Pulse/Trigger
Average cycle	No Signal ms
Average cycle	No Signal ms
Acquisition window	833 ms
Trigger pulse	1
Trigger delay	0 ms
TR	800 ms
Concatenations	1
Phases	1

**BOLD**

GLM Statistics	Off
Dynamic t-maps	Off
Ignore meas. at start	0
Ignore after transition	0
Model transition states	Off
Temp. highpass filter	Off
Threshold	4.00
Paradigm size	3
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Active
Motion correction	Off
Spatial filter	Off
Measurements	383
Delay in TR	0 ms
Multiple series	Off

**Sequence - Part 1**

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.51 ms
Bandwidth	2778 Hz/Px

**Sequence - Part 2**

EPI factor	90
RF pulse type	Normal
Gradient mode	Fast
Excitation	Standard

**Sequence - pTX Pulses****Sequence - Special**

Dummy Scans	0
K-space streaming	None
Physio recording	Continuous
Reverse Phase Encoding	On

\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_64ch\ABCD\_fmri\_rest

TA: 5:11 PM: FIX Voxel size: 2.4×2.4×2.4 mmPAT: 6 Rel. SNR: 1.00 : epfid

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	On
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	On
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	On
Start measurements	Single measurement

**Resolution - iPAT**

Accel. factor slice	6
Reference scan mode	EPI/separate

**Resolution - Filter Image**

Distortion Corr.	Off
Prescan Normalize	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off
Hamming	Off

**Routine**

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	800 ms
TE	30.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HC1-7

**Geometry - Common**

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	800 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

**Geometry - AutoAlign**

Slice group	1
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A29.8 F12.4
L	0.0 mm
A	29.8 mm
F	12.4 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

**Contrast - Common**

TR	800 ms
TE	30.0 ms
MTC	Off
Flip angle	52 deg
Fat suppr.	Fat sat.

**Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	383
Delay in TR	0 ms
Multiple series	Off

**Resolution - Common**

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
Base resolution	90
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

**Resolution - iPAT**

Accel. mode	Slice accel.
Accel. factor PE	1
Ref. lines PE	22

**Geometry - Saturation**

Fat suppr.	Fat sat.
Special sat.	None

**Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

**System - Miscellaneous**

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
Matrix Optimization	Off

**System - Miscellaneous**

AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	144 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Standard

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	Pulse/Trigger
Average cycle	No Signal ms
Average cycle	No Signal ms
Acquisition window	833 ms
Trigger pulse	1
Trigger delay	0 ms
TR	800 ms
Concatenations	1
Phases	1

**BOLD**

GLM Statistics	Off
Dynamic t-maps	Off
Ignore meas. at start	0
Ignore after transition	0
Model transition states	Off
Temp. highpass filter	Off
Threshold	4.00
Paradigm size	3
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Active
Motion correction	Off
Spatial filter	Off
Measurements	383
Delay in TR	0 ms
Multiple series	Off

**Sequence - Part 1**

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.51 ms
Bandwidth	2778 Hz/Px

**Sequence - Part 2**

EPI factor	90
RF pulse type	Normal
Gradient mode	Fast
Excitation	Standard

**Sequence - pTX Pulses****Sequence - Special**

Dummy Scans	0
K-space streaming	None
Physio recording	Continuous
Reverse Phase Encoding	On

\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_64ch\ABCD\_dMRI\_DistortionMap\_PA

TA: 0:25 PM: REF Voxel size: 1.7×1.7×1.7 mmPAT: Off Rel. SNR: 1.00 : epse

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	Off
Wait for user to start	On
Start measurements	Single measurement

**Routine**

Slice group	1
Slices	81
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	240 mm
FoV phase	100.0 %
Slice thickness	1.7 mm
TR	12400 ms
TE	89.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HC1-7

**Contrast - Common**

TR	12400 ms
TE	89.0 ms
MTC	Off
Magn. preparation	None
Fat suppr.	Fat sat.
Fat sat. mode	Strong

**Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Delay in TR	0 ms
Multiple series	Off

**Resolution - Common**

FoV read	240 mm
FoV phase	100.0 %
Slice thickness	1.7 mm
Base resolution	140
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off

**Resolution - iPAT**

Accel. mode	None
-------------	------

**Resolution - Filter Image**

Distortion Corr.	Off
Prescan Normalize	Off
Dynamic Field Corr.	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off

**Geometry - Common**

Slice group	1
Slices	81
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	240 mm
FoV phase	100.0 %
Slice thickness	1.7 mm
TR	12400 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

**Geometry - AutoAlign**

Slice group	1
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A10.0 H10.0
L	0.0 mm
A	10.0 mm
H	10.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

**Geometry - Saturation**

Fat suppr.	Fat sat.
Fat sat. mode	Strong
Special sat.	None

**Geometry - Navigator****Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

**System - Miscellaneous**

Positioning mode	REF
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Matrix Optimization	Off
AutoAlign	---

**System - Miscellaneous**

Coil Select Mode	Off - All
------------------	-----------

**System - Adjustments**

B0 Shim mode	Advanced
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	240 mm
R >> L	240 mm
F >> H	138 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Standard

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	2.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	12400 ms
Concatenations	1

**Physio - PACE**

Resp. control	Off
Concatenations	1

**Diff - Neuro**

Diffusion mode	Free
Diff. directions	102
Diffusion Scheme	Monopolar
Diff. weightings	1
b-value	0 s/mm <sup>2</sup>
b-value	1
Diff. weighted images	On
Trace weighted images	Off
ADC maps	Off
FA maps	Off
Mosaic	Off
Tensor	Off
Noise level	40

**Diff - Body**

Diffusion mode	Free
Diff. directions	102
Diffusion Scheme	Monopolar
Diff. weightings	1
b-value	0 s/mm <sup>2</sup>
b-value	1

**Diff - Body**

Diff. weighted images	On
Trace weighted images	Off
ADC maps	Off
Exponential ADC Maps	Off
FA maps	Off
Invert Gray Scale	Off
Calculated Image	Off
b-Value >=	0 s/mm <sup>2</sup>
Noise level	40

**Diff - Composing**

Inline Composing	Off
Distortion Corr.	Off

**Sequence - Part 1**

Introduction	Off
Optimization	None
Multi-slice mode	Interleaved
Free echo spacing	On
Echo spacing	0.69 ms
Bandwidth	1700 Hz/Px

**Sequence - Part 2**

EPI factor	140
RF pulse type	Normal
Gradient mode	Performance
Excitation	Standard

**Sequence - pTX Pulses****Sequence - Special**

K-space streaming	None
Reverse Phase Encoding	On

\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_64ch\ABCD\_dMRI\_DistortionMap\_AP

TA: 0:25 PM: FIX Voxel size: 1.7×1.7×1.7 mmPAT: Off Rel. SNR: 1.00 : epse

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	Single measurement

**Routine**

Slice group	1
Slices	81
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	240 mm
FoV phase	100.0 %
Slice thickness	1.7 mm
TR	12400 ms
TE	89.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HC1-7

**Contrast - Common**

TR	12400 ms
TE	89.0 ms
MTC	Off
Magn. preparation	None
Fat suppr.	Fat sat.
Fat sat. mode	Strong

**Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Delay in TR	0 ms
Multiple series	Off

**Resolution - Common**

FoV read	240 mm
FoV phase	100.0 %
Slice thickness	1.7 mm
Base resolution	140
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off

**Resolution - iPAT**

Accel. mode	None
-------------	------

**Resolution - Filter Image**

Distortion Corr.	Off
Prescan Normalize	Off
Dynamic Field Corr.	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off

**Geometry - Common**

Slice group	1
Slices	81
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	240 mm
FoV phase	100.0 %
Slice thickness	1.7 mm
TR	12400 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

**Geometry - AutoAlign**

Slice group	1
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A10.0 H10.0
L	0.0 mm
A	10.0 mm
H	10.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

**Geometry - Saturation**

Fat suppr.	Fat sat.
Fat sat. mode	Strong
Special sat.	None

**Geometry - Navigator****Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

**System - Miscellaneous**

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Matrix Optimization	Off
AutoAlign	---



**System - Miscellaneous**

Coil Select Mode	Off - All
------------------	-----------

**System - Adjustments**

B0 Shim mode	Advanced
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	240 mm
R >> L	240 mm
F >> H	138 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Standard

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	2.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	12400 ms
Concatenations	1

**Physio - PACE**

Resp. control	Off
Concatenations	1

**Diff - Neuro**

Diffusion mode	Free
Diff. directions	102
Diffusion Scheme	Monopolar
Diff. weightings	1
b-value	0 s/mm <sup>2</sup>
b-value	1
Diff. weighted images	On
Trace weighted images	Off
ADC maps	Off
FA maps	Off
Mosaic	Off
Tensor	Off
Noise level	40

**Diff - Body**

Diffusion mode	Free
Diff. directions	102
Diffusion Scheme	Monopolar
Diff. weightings	1
b-value	0 s/mm <sup>2</sup>
b-value	1

**Diff - Body**

Diff. weighted images	On
Trace weighted images	Off
ADC maps	Off
Exponential ADC Maps	Off
FA maps	Off
Invert Gray Scale	Off
Calculated Image	Off
b-Value >=	0 s/mm <sup>2</sup>
Noise level	40

**Diff - Composing**

Inline Composing	Off
Distortion Corr.	Off

**Sequence - Part 1**

Introduction	Off
Optimization	None
Multi-slice mode	Interleaved
Free echo spacing	On
Echo spacing	0.69 ms
Bandwidth	1700 Hz/Px

**Sequence - Part 2**

EPI factor	140
RF pulse type	Normal
Gradient mode	Performance
Excitation	Standard

**Sequence - pTX Pulses****Sequence - Special**

K-space streaming	None
Reverse Phase Encoding	Off

\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_64ch\ABCD\_dMRI

TA: 7:29 PM: FIX Voxel size: 1.7×1.7×1.7 mmPAT: 3 Rel. SNR: 1.00 : epse

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	On
Start measurements	Single measurement

**Routine**

Slice group	1
Slices	81
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	240 mm
FoV phase	100.0 %
Slice thickness	1.7 mm
TR	4200 ms
TE	89.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HC1-7

**Contrast - Common**

TR	4200 ms
TE	89.0 ms
MTC	Off
Magn. preparation	None
Fat suppr.	Fat sat.
Fat sat. mode	Strong

**Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Delay in TR	0 ms
Multiple series	Off

**Resolution - Common**

FoV read	240 mm
FoV phase	100.0 %
Slice thickness	1.7 mm
Base resolution	140
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off

**Resolution - iPAT**

Accel. mode	Slice accel.
Accel. factor PE	1

**Resolution - iPAT**

Ref. lines PE	71
Accel. factor slice	3
Reference scan mode	EPI/separate

**Resolution - Filter Image**

Distortion Corr.	Off
Prescan Normalize	Off
Dynamic Field Corr.	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off

**Geometry - Common**

Slice group	1
Slices	81
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	240 mm
FoV phase	100.0 %
Slice thickness	1.7 mm
TR	4200 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

**Geometry - AutoAlign**

Slice group	1
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A10.0 H10.0
L	0.0 mm
A	10.0 mm
H	10.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

**Geometry - Saturation**

Fat suppr.	Fat sat.
Fat sat. mode	Strong
Special sat.	None

**Geometry - Navigator****Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

**System - Miscellaneous**

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T

**System - Miscellaneous**

Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Advanced
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	240 mm
R >> L	240 mm
F >> H	138 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Standard

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	3.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	4200 ms
Concatenations	1

**Physio - PACE**

Resp. control	Off
Concatenations	1

**Diff - Neuro**

Diffusion mode	Free
Diff. directions	102
Diffusion Scheme	Monopolar
Diff. weightings	2
b-value 1	0 s/mm <sup>2</sup>
b-value 2	3000 s/mm <sup>2</sup>
b-value 1	1
b-value 2	1
Diff. weighted images	On
Trace weighted images	Off
ADC maps	Off
FA maps	Off
Mosaic	On
Tensor	Off
Noise level	40

**Diff - Body**

Diffusion mode	Free
Diff. directions	102
Diffusion Scheme	Monopolar
Diff. weightings	2
b-value 1	0 s/mm <sup>2</sup>
b-value 2	3000 s/mm <sup>2</sup>
b-value 1	1
b-value 2	1
Diff. weighted images	On
Trace weighted images	Off
ADC maps	Off
Exponential ADC Maps	Off
FA maps	Off
Invert Gray Scale	Off
Calculated Image	Off
b-Value >=	0 s/mm <sup>2</sup>
Noise level	40

**Diff - Composing**

Inline Composing	Off
Distortion Corr.	Off

**Sequence - Part 1**

Introduction	Off
Optimization	None
Multi-slice mode	Interleaved
Free echo spacing	On
Echo spacing	0.69 ms
Bandwidth	1700 Hz/Px

**Sequence - Part 2**

EPI factor	140
RF pulse type	Normal
Gradient mode	Performance*
Excitation	Standard

**Sequence - pTX Pulses****Sequence - Special**

K-space streaming	None
Reverse Phase Encoding	On

\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_64ch\ABCD\_T2w\_SPC\_vNav\_setter

TA: 0.3 s PM: FIX Voxel size: 8.0×8.0×8.0 mmRel. SNR: 1.00 : ABCD

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	On
Start measurements	Single measurement

**Routine**

Slab group	1
Slabs	1
Dist. factor	50 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	32
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	8.00 mm
TR	13.0 ms
TE	6.1 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	BC

**Contrast - Common**

TR	13.0 ms
TE	6.1 ms
MTC	Off
Flip angle	2 deg
Fat suppr.	Water excit. normal

**Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

**Resolution - Common**

FoV read	256 mm
FoV phase	100.0 %
Slice thickness	8.00 mm
Base resolution	32
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	Off
Slice partial Fourier	6/8
Interpolation	Off

**Resolution - Filter Image**

Distortion Corr.	Off
Prescan Normalize	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off
Hamming	Off

**Geometry - Common**

Slab group	1
Slabs	1
Dist. factor	50 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice oversampling	0.0 %
Slices per slab	32
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	8.00 mm
TR	13.0 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

**Geometry - AutoAlign**

Slab group	1
Position	L0.0 A20.0 H0.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A20.0 H0.0
L	0.0 mm
A	20.0 mm
H	0.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Sagittal

**Geometry - Saturation**

Fat suppr.	Water excit. normal
Special sat.	None

**Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

**System - Miscellaneous**

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---

**System - Miscellaneous**

Coil Select Mode	Off - All
------------------	-----------

**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A20.0 H0.0 mm
Orientation	Sagittal
Rotation	0.00 deg
A >> P	256 mm
F >> H	256 mm
R >> L	256 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Non-sel.

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	Low
Img. Scale Cor.	10.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	13.0 ms
Concatenations	1

**Sequence - Part 1**

Introduction	Off
Dimension	3D
Contrasts	1
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.27 ms
Bandwidth	4882 Hz/Px

**Sequence - Part 2**

EPI factor	32
RF pulse type	Normal
Gradient mode	Fast
Excitation	Non-sel.
RF spoiling	On

**Sequence - Special**

Protocol filename	T2-SPACE
-------------------	----------

\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_64ch\ABCD\_T2w\_SPC\_vNav

TA: 6:35 PM: FIX Voxel size: 1.0×1.0×1.0 mmPAT: 2 Rel. SNR: 1.00 : spc

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	Single measurement

**Routine**

Slab group	1
Slabs	1
Position	L0.0 A20.0 F30.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	176
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	1.00 mm
TR	3200 ms
TE	565 ms
Averages	1.0
Concatenations	1
Filter	Prescan Normalize
Coil elements	HC1-7

**Contrast - Common**

TR	3200 ms
TE	565 ms
MTC	Off
Magn. preparation	None
Fat suppr.	None
Blood suppr.	Off
Restore magn.	Off

**Contrast - Dynamic**

Averages	1.0
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

**Resolution - Common**

FoV read	256 mm
FoV phase	100.0 %
Slice thickness	1.00 mm
Base resolution	256
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	Allowed
Slice partial Fourier	Off
Interpolation	Off

**Resolution - iPAT**

PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	32
Accel. factor 3D	1
Reference scan mode	Integrated

**Resolution - Filter Image**

Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	On
Unfiltered images	On
Normalize	Off
B1 filter	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off

**Geometry - Common**

Slab group	1
Slabs	1
Position	L0.0 A20.0 F30.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice oversampling	0.0 %
Slices per slab	176
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	1.00 mm
TR	3200 ms
Concatenations	1

**Geometry - AutoAlign**

Slab group	1
Position	L0.0 A20.0 F30.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A20.0 F30.0
R	0.0 mm
A	20.0 mm
F	30.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Sagittal

**Geometry - Saturation**

Fat suppr.	None
Restore magn.	Off
Special sat.	None

**Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

**System - Miscellaneous**

Positioning mode	FIX
Table position	H
Table position	0 mm

**System - Miscellaneous**

MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A20.0 F30.0 mm
Orientation	Sagittal
Rotation	0.00 deg
A >> P	256 mm
F >> H	256 mm
R >> L	176 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Non-sel.

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	5.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
Trigger delay	0 ms
TR	3200 ms
Concatenations	1

**Physio - Cardiac**

Magn. preparation	None
Fat suppr.	None
Dark blood	Off
FoV read	256 mm
FoV phase	100.0 %
Phase resolution	100 %

**Inline - Common**

Subtract	Off
Measurements	1
StdDev	Off
Save original images	On

**Inline - MIP**

MIP-Sag	Off
MIP-Cor	Off

**Inline - MIP**

MIP-Tra	Off
MIP-Time	Off
Save original images	On

**Inline - Composing**

Inline Composing	Off
Distortion Corr.	Off

**Sequence - Part 1**

Introduction	On
Dimension	3D
Elliptical scanning	On
Reordering	Linear
Flow comp.	No
Echo spacing	6.28 ms
Adiabatic-mode	Off
Bandwidth	241 Hz/Px

**Sequence - Part 2**

Echo train duration	1187 ms
RF pulse type	Fast
Gradient mode	Fast
Excitation	Non-sel.
Flip angle mode	T2 var
Turbo factor	200

**Sequence - Special**

Include nav.	On
Apply moco to	parent and nav
Remeasure	18 TRs
Reacq. threshold	0.50
Feedback delay	80 ms
Moco ref. image	Use Temp Ref
K-space streaming	None
ABCD navigator	On
Apply freq to	parent and nav

**Sequence - Assistant**

Allowed delay	0 s
---------------	-----

\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_64ch\ABCD\_fMRI\_DistortionMap\_PA

TA: 0:14 PM: FIX Voxel size: 2.4×2.4×2.4 mmPAT: Off Rel. SNR: 1.00 : epse

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	On
Start measurements	Single measurement

**Routine**

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	7030 ms
TE	80.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HC1-7

**Contrast - Common**

TR	7030 ms
TE	80.0 ms
MTC	Off
Magn. preparation	None
Fat suppr.	Fat sat.
Fat sat. mode	Weak

**Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Delay in TR	0 ms
Multiple series	Off

**Resolution - Common**

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
Base resolution	90
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

**Resolution - iPAT**

Accel. mode	None
-------------	------

**Resolution - Filter Image**

Distortion Corr.	Off
Prescan Normalize	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off
Hamming	Off

**Geometry - Common**

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	7030 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

**Geometry - AutoAlign**

Slice group	1
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A29.8 F12.4
L	0.0 mm
A	29.8 mm
F	12.4 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

**Geometry - Saturation**

Fat suppr.	Fat sat.
Fat sat. mode	Weak
Special sat.	None

**Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

**System - Miscellaneous**

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - All



**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**Sequence - Special**

Dummy Scans	1
Reverse Phase Encoding	On

**System - Adjust Volume**

Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	144 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
--------------	----------

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	2.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	7030 ms
Concatenations	1

**Inline - Common**

Subtract	Off
Measurements	1
StdDev	Off
Save original images	On

**Inline - MIP**

MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On

**Inline - Composing**

Inline Composing	Off
Distortion Corr.	Off

**Sequence - Part 1**

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	On
Echo spacing	0.51 ms
Bandwidth	2778 Hz/Px

**Sequence - Part 2**

EPI factor	90
RF pulse type	Normal
Gradient mode	Performance

\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_64ch\ABCD\_fMRI\_DistortionMap\_AP

TA: 0:14 PM: FIX Voxel size: 2.4×2.4×2.4 mmPAT: Off Rel. SNR: 1.00 : epse

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	Single measurement

**Routine**

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	7030 ms
TE	80.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HC1-7

**Contrast - Common**

TR	7030 ms
TE	80.0 ms
MTC	Off
Magn. preparation	None
Fat suppr.	Fat sat.
Fat sat. mode	Weak

**Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Delay in TR	0 ms
Multiple series	Off

**Resolution - Common**

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
Base resolution	90
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

**Resolution - iPAT**

Accel. mode	None
-------------	------

**Resolution - Filter Image**

Distortion Corr.	Off
Prescan Normalize	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off
Hamming	Off

**Geometry - Common**

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	7030 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

**Geometry - AutoAlign**

Slice group	1
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A29.8 F12.4
L	0.0 mm
A	29.8 mm
F	12.4 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

**Geometry - Saturation**

Fat suppr.	Fat sat.
Fat sat. mode	Weak
Special sat.	None

**Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

**System - Miscellaneous**

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**Sequence - Special**

Dummy Scans	1
Reverse Phase Encoding	Off

**System - Adjust Volume**

Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	144 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
--------------	----------

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	2.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	7030 ms
Concatenations	1

**Inline - Common**

Subtract	Off
Measurements	1
StdDev	Off
Save original images	On

**Inline - MIP**

MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On

**Inline - Composing**

Inline Composing	Off
Distortion Corr.	Off

**Sequence - Part 1**

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	On
Echo spacing	0.51 ms
Bandwidth	2778 Hz/Px

**Sequence - Part 2**

EPI factor	90
RF pulse type	Normal
Gradient mode	Performance

\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_64ch\ABCD\_fmri\_rest

TA: 5:11 PM: FIX Voxel size: 2.4×2.4×2.4 mmPAT: 6 Rel. SNR: 1.00 : epfid

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	On
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	On
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	On
Start measurements	Single measurement

**Resolution - iPAT**

Accel. factor slice	6
Reference scan mode	EPI/separate

**Resolution - Filter Image**

Distortion Corr.	Off
Prescan Normalize	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off
Hamming	Off

**Routine**

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	800 ms
TE	30.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HC1-7

**Geometry - Common**

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	800 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

**Geometry - AutoAlign**

Slice group	1
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A29.8 F12.4
L	0.0 mm
A	29.8 mm
F	12.4 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

**Contrast - Common**

TR	800 ms
TE	30.0 ms
MTC	Off
Flip angle	52 deg
Fat suppr.	Fat sat.

**Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	383
Delay in TR	0 ms
Multiple series	Off

**Resolution - Common**

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
Base resolution	90
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

**Resolution - iPAT**

Accel. mode	Slice accel.
Accel. factor PE	1
Ref. lines PE	22

**Geometry - Saturation**

Fat suppr.	Fat sat.
Special sat.	None

**Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

**System - Miscellaneous**

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
Matrix Optimization	Off

**System - Miscellaneous**

AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	144 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Standard

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	Pulse/Trigger
Average cycle	No Signal ms
Average cycle	No Signal ms
Acquisition window	833 ms
Trigger pulse	1
Trigger delay	0 ms
TR	800 ms
Concatenations	1
Phases	1

**BOLD**

GLM Statistics	Off
Dynamic t-maps	Off
Ignore meas. at start	0
Ignore after transition	0
Model transition states	Off
Temp. highpass filter	Off
Threshold	4.00
Paradigm size	3
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Active
Motion correction	Off
Spatial filter	Off
Measurements	383
Delay in TR	0 ms
Multiple series	Off

**Sequence - Part 1**

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.51 ms
Bandwidth	2778 Hz/Px

**Sequence - Part 2**

EPI factor	90
RF pulse type	Normal
Gradient mode	Fast
Excitation	Standard

**Sequence - pTX Pulses****Sequence - Special**

Dummy Scans	0
K-space streaming	None
Physio recording	Continuous
Reverse Phase Encoding	On

\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_64ch\ABCD\_fmri\_rest

TA: 5:11 PM: FIX Voxel size: 2.4×2.4×2.4 mmPAT: 6 Rel. SNR: 1.00 : epfid

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	On
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	On
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	On
Start measurements	Single measurement

**Resolution - iPAT**

Accel. factor slice	6
Reference scan mode	EPI/separate

**Resolution - Filter Image**

Distortion Corr.	Off
Prescan Normalize	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off
Hamming	Off

**Routine**

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	800 ms
TE	30.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HC1-7

**Geometry - Common**

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	800 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

**Geometry - AutoAlign**

Slice group	1
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A29.8 F12.4
L	0.0 mm
A	29.8 mm
F	12.4 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

**Contrast - Common**

TR	800 ms
TE	30.0 ms
MTC	Off
Flip angle	52 deg
Fat suppr.	Fat sat.

**Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	383
Delay in TR	0 ms
Multiple series	Off

**Resolution - Common**

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
Base resolution	90
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

**Resolution - iPAT**

Accel. mode	Slice accel.
Accel. factor PE	1
Ref. lines PE	22

**Geometry - Saturation**

Fat suppr.	Fat sat.
Special sat.	None

**Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

**System - Miscellaneous**

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
Matrix Optimization	Off

**System - Miscellaneous**

AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	144 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Standard

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	Pulse/Trigger
Average cycle	No Signal ms
Average cycle	No Signal ms
Acquisition window	833 ms
Trigger pulse	1
Trigger delay	0 ms
TR	800 ms
Concatenations	1
Phases	1

**BOLD**

GLM Statistics	Off
Dynamic t-maps	Off
Ignore meas. at start	0
Ignore after transition	0
Model transition states	Off
Temp. highpass filter	Off
Threshold	4.00
Paradigm size	3
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Active
Motion correction	Off
Spatial filter	Off
Measurements	383
Delay in TR	0 ms
Multiple series	Off

**Sequence - Part 1**

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.51 ms
Bandwidth	2778 Hz/Px

**Sequence - Part 2**

EPI factor	90
RF pulse type	Normal
Gradient mode	Fast
Excitation	Standard

**Sequence - pTX Pulses****Sequence - Special**

Dummy Scans	0
K-space streaming	None
Physio recording	Continuous
Reverse Phase Encoding	On

\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_64ch\ABCD\_fMRI\_DistortionMap\_PA

TA: 0:14 PM: FIX Voxel size: 2.4×2.4×2.4 mmPAT: Off Rel. SNR: 1.00 : epse

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	On
Start measurements	Single measurement

**Routine**

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	7030 ms
TE	80.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HC1-7

**Contrast - Common**

TR	7030 ms
TE	80.0 ms
MTC	Off
Magn. preparation	None
Fat suppr.	Fat sat.
Fat sat. mode	Weak

**Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Delay in TR	0 ms
Multiple series	Off

**Resolution - Common**

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
Base resolution	90
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

**Resolution - iPAT**

Accel. mode	None
-------------	------

**Resolution - Filter Image**

Distortion Corr.	Off
Prescan Normalize	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off
Hamming	Off

**Geometry - Common**

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	7030 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

**Geometry - AutoAlign**

Slice group	1
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A29.8 F12.4
L	0.0 mm
A	29.8 mm
F	12.4 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

**Geometry - Saturation**

Fat suppr.	Fat sat.
Fat sat. mode	Weak
Special sat.	None

**Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

**System - Miscellaneous**

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - All



**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**Sequence - Special**

Dummy Scans	1
Reverse Phase Encoding	On

**System - Adjust Volume**

Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	144 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
--------------	----------

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	2.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	7030 ms
Concatenations	1

**Inline - Common**

Subtract	Off
Measurements	1
StdDev	Off
Save original images	On

**Inline - MIP**

MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On

**Inline - Composing**

Inline Composing	Off
Distortion Corr.	Off

**Sequence - Part 1**

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	On
Echo spacing	0.51 ms
Bandwidth	2778 Hz/Px

**Sequence - Part 2**

EPI factor	90
RF pulse type	Normal
Gradient mode	Performance

\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_64ch\ABCD\_fMRI\_DistortionMap\_AP

TA: 0:14 PM: FIX Voxel size: 2.4×2.4×2.4 mmPAT: Off Rel. SNR: 1.00 : epse

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	Single measurement

**Routine**

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	7030 ms
TE	80.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HC1-7

**Contrast - Common**

TR	7030 ms
TE	80.0 ms
MTC	Off
Magn. preparation	None
Fat suppr.	Fat sat.
Fat sat. mode	Weak

**Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Delay in TR	0 ms
Multiple series	Off

**Resolution - Common**

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
Base resolution	90
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

**Resolution - iPAT**

Accel. mode	None
-------------	------

**Resolution - Filter Image**

Distortion Corr.	Off
Prescan Normalize	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off
Hamming	Off

**Geometry - Common**

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	7030 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

**Geometry - AutoAlign**

Slice group	1
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A29.8 F12.4
L	0.0 mm
A	29.8 mm
F	12.4 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

**Geometry - Saturation**

Fat suppr.	Fat sat.
Fat sat. mode	Weak
Special sat.	None

**Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

**System - Miscellaneous**

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**Sequence - Special**

Dummy Scans	1
Reverse Phase Encoding	Off

**System - Adjust Volume**

Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	144 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
--------------	----------

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	2.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	7030 ms
Concatenations	1

**Inline - Common**

Subtract	Off
Measurements	1
StdDev	Off
Save original images	On

**Inline - MIP**

MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On

**Inline - Composing**

Inline Composing	Off
Distortion Corr.	Off

**Sequence - Part 1**

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	On
Echo spacing	0.51 ms
Bandwidth	2778 Hz/Px

**Sequence - Part 2**

EPI factor	90
RF pulse type	Normal
Gradient mode	Performance

\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_64ch\ABCD\_fMRI\_task\_Stop

TA: 6:00 PM: FIX Voxel size: 2.4×2.4×2.4 mmPAT: 6 Rel. SNR: 1.00 : epfid

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	On
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	On
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	On
Start measurements	Single measurement

**Resolution - iPAT**

Accel. factor slice	6
Reference scan mode	EPI/separate

**Resolution - Filter Image**

Distortion Corr.	Off
Prescan Normalize	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off
Hamming	Off

**Routine**

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	800 ms
TE	30.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HC1-7

**Geometry - Common**

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	800 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

**Geometry - AutoAlign**

Slice group	1
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A29.8 F12.4
L	0.0 mm
A	29.8 mm
F	12.4 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

**Contrast - Common**

TR	800 ms
TE	30.0 ms
MTC	Off
Flip angle	52 deg
Fat suppr.	Fat sat.

**Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	445
Delay in TR	0 ms
Multiple series	Off

**Resolution - Common**

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
Base resolution	90
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

**Resolution - iPAT**

Accel. mode	Slice accel.
Accel. factor PE	1
Ref. lines PE	22

**Geometry - Saturation**

Fat suppr.	Fat sat.
Special sat.	None

**Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

**System - Miscellaneous**

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
Matrix Optimization	Off

**System - Miscellaneous**

AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	144 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Standard

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	Pulse/Trigger
Average cycle	No Signal ms
Average cycle	No Signal ms
Acquisition window	833 ms
Trigger pulse	1
Trigger delay	0 ms
TR	800 ms
Concatenations	1
Phases	1

**BOLD**

GLM Statistics	Off
Dynamic t-maps	Off
Ignore meas. at start	0
Ignore after transition	0
Model transition states	Off
Temp. highpass filter	Off
Threshold	4.00
Paradigm size	3
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Active
Motion correction	Off
Spatial filter	Off
Measurements	445
Delay in TR	0 ms
Multiple series	Off

**Sequence - Part 1**

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.51 ms
Bandwidth	2778 Hz/Px

**Sequence - Part 2**

EPI factor	90
RF pulse type	Normal
Gradient mode	Fast
Excitation	Standard

**Sequence - pTX Pulses****Sequence - Special**

Dummy Scans	0
K-space streaming	None
Physio recording	Continuous
Reverse Phase Encoding	On

\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_64ch\ABCD\_fMRI\_task\_Stop

TA: 6:00 PM: FIX Voxel size: 2.4×2.4×2.4 mmPAT: 6 Rel. SNR: 1.00 : epfid

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	On
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	On
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	On
Start measurements	Single measurement

**Resolution - iPAT**

Accel. factor slice	6
Reference scan mode	EPI/separate

**Resolution - Filter Image**

Distortion Corr.	Off
Prescan Normalize	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off
Hamming	Off

**Routine**

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	800 ms
TE	30.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HC1-7

**Geometry - Common**

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	800 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

**Geometry - AutoAlign**

Slice group	1
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A29.8 F12.4
L	0.0 mm
A	29.8 mm
F	12.4 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

**Contrast - Common**

TR	800 ms
TE	30.0 ms
MTC	Off
Flip angle	52 deg
Fat suppr.	Fat sat.

**Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	445
Delay in TR	0 ms
Multiple series	Off

**Resolution - Common**

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
Base resolution	90
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

**Resolution - iPAT**

Accel. mode	Slice accel.
Accel. factor PE	1
Ref. lines PE	22

**Geometry - Saturation**

Fat suppr.	Fat sat.
Special sat.	None

**Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

**System - Miscellaneous**

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
Matrix Optimization	Off

**System - Miscellaneous**

AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	144 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Standard

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	Pulse/Trigger
Average cycle	No Signal ms
Average cycle	No Signal ms
Acquisition window	833 ms
Trigger pulse	1
Trigger delay	0 ms
TR	800 ms
Concatenations	1
Phases	1

**BOLD**

GLM Statistics	Off
Dynamic t-maps	Off
Ignore meas. at start	0
Ignore after transition	0
Model transition states	Off
Temp. highpass filter	Off
Threshold	4.00
Paradigm size	3
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Active
Motion correction	Off
Spatial filter	Off
Measurements	445
Delay in TR	0 ms
Multiple series	Off

**Sequence - Part 1**

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.51 ms
Bandwidth	2778 Hz/Px

**Sequence - Part 2**

EPI factor	90
RF pulse type	Normal
Gradient mode	Fast
Excitation	Standard

**Sequence - pTX Pulses****Sequence - Special**

Dummy Scans	0
K-space streaming	None
Physio recording	Continuous
Reverse Phase Encoding	On

\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_64ch\ABCD\_fMRI\_DistortionMap\_PA

TA: 0:14 PM: FIX Voxel size: 2.4×2.4×2.4 mmPAT: Off Rel. SNR: 1.00 : epse

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	On
Start measurements	Single measurement

**Routine**

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	7030 ms
TE	80.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HC1-7

**Contrast - Common**

TR	7030 ms
TE	80.0 ms
MTC	Off
Magn. preparation	None
Fat suppr.	Fat sat.
Fat sat. mode	Weak

**Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Delay in TR	0 ms
Multiple series	Off

**Resolution - Common**

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
Base resolution	90
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

**Resolution - iPAT**

Accel. mode	None
-------------	------

**Resolution - Filter Image**

Distortion Corr.	Off
Prescan Normalize	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off
Hamming	Off

**Geometry - Common**

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	7030 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

**Geometry - AutoAlign**

Slice group	1
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A29.8 F12.4
L	0.0 mm
A	29.8 mm
F	12.4 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

**Geometry - Saturation**

Fat suppr.	Fat sat.
Fat sat. mode	Weak
Special sat.	None

**Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

**System - Miscellaneous**

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - All



**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**Sequence - Special**

Dummy Scans	1
Reverse Phase Encoding	On

**System - Adjust Volume**

Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	144 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
--------------	----------

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	2.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	7030 ms
Concatenations	1

**Inline - Common**

Subtract	Off
Measurements	1
StdDev	Off
Save original images	On

**Inline - MIP**

MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On

**Inline - Composing**

Inline Composing	Off
Distortion Corr.	Off

**Sequence - Part 1**

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	On
Echo spacing	0.51 ms
Bandwidth	2778 Hz/Px

**Sequence - Part 2**

EPI factor	90
RF pulse type	Normal
Gradient mode	Performance

\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_64ch\ABCD\_fMRI\_DistortionMap\_AP

TA: 0:14 PM: FIX Voxel size: 2.4×2.4×2.4 mmPAT: Off Rel. SNR: 1.00 : epse

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	Single measurement

**Routine**

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	7030 ms
TE	80.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HC1-7

**Contrast - Common**

TR	7030 ms
TE	80.0 ms
MTC	Off
Magn. preparation	None
Fat suppr.	Fat sat.
Fat sat. mode	Weak

**Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Delay in TR	0 ms
Multiple series	Off

**Resolution - Common**

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
Base resolution	90
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

**Resolution - iPAT**

Accel. mode	None
-------------	------

**Resolution - Filter Image**

Distortion Corr.	Off
Prescan Normalize	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off
Hamming	Off

**Geometry - Common**

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	7030 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

**Geometry - AutoAlign**

Slice group	1
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A29.8 F12.4
L	0.0 mm
A	29.8 mm
F	12.4 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

**Geometry - Saturation**

Fat suppr.	Fat sat.
Fat sat. mode	Weak
Special sat.	None

**Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

**System - Miscellaneous**

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**Sequence - Special**

Dummy Scans	1
Reverse Phase Encoding	Off

**System - Adjust Volume**

Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	144 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
--------------	----------

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	2.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	7030 ms
Concatenations	1

**Inline - Common**

Subtract	Off
Measurements	1
StdDev	Off
Save original images	On

**Inline - MIP**

MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On

**Inline - Composing**

Inline Composing	Off
Distortion Corr.	Off

**Sequence - Part 1**

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	On
Echo spacing	0.51 ms
Bandwidth	2778 Hz/Px

**Sequence - Part 2**

EPI factor	90
RF pulse type	Normal
Gradient mode	Performance

\\USER\ABCD\20190320\ABCD\_PROTOCOL\_\_one\_session\_\_64ch\ABCD\_fMRI\_task\_Emoctional\_n-b  
ack

TA: 5:00 PM: FIX Voxel size: 2.4×2.4×2.4 mmPAT: 6 Rel. SNR: 1.00 : epfid

### Properties

Prio recon	Off
Load images to viewer	On
Inline movie	On
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	On
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	On
Start measurements	Single measurement

### Resolution - iPAT

Ref. lines PE	22
Accel. factor slice	6
Reference scan mode	EPI/separate

### Resolution - Filter Image

Distortion Corr.	Off
Prescan Normalize	Off

### Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off
Hamming	Off

### Routine

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	800 ms
TE	30.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HC1-7

### Geometry - Common

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	800 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

### Contrast - Common

TR	800 ms
TE	30.0 ms
MTC	Off
Flip angle	52 deg
Fat suppr.	Fat sat.

### Geometry - AutoAlign

Slice group	1
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A29.8 F12.4
L	0.0 mm
A	29.8 mm
F	12.4 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

### Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	370
Delay in TR	0 ms
Multiple series	Off

### Geometry - Saturation

Fat suppr.	Fat sat.
Special sat.	None

### Resolution - Common

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
Base resolution	90
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

### Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

### System - Miscellaneous

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P

### Resolution - iPAT

Accel. mode	Slice accel.
Accel. factor PE	1

**System - Miscellaneous**

Transversal	F >> H
Coil Combine Mode	Sum of Squares
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	144 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Standard

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	Pulse/Trigger
Average cycle	No Signal ms
Average cycle	No Signal ms
Acquisition window	833 ms
Trigger pulse	1
Trigger delay	0 ms
TR	800 ms
Concatenations	1
Phases	1

**BOLD**

GLM Statistics	Off
Dynamic t-maps	Off
Ignore meas. at start	0
Ignore after transition	0
Model transition states	Off
Temp. highpass filter	Off
Threshold	4.00
Paradigm size	3
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Active
Motion correction	Off
Spatial filter	Off
Measurements	370
Delay in TR	0 ms
Multiple series	Off

**Sequence - Part 1**

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.51 ms
Bandwidth	2778 Hz/Px

**Sequence - Part 2**

EPI factor	90
RF pulse type	Normal
Gradient mode	Fast
Excitation	Standard

**Sequence - pTX Pulses****Sequence - Special**

Dummy Scans	0
K-space streaming	None
Physio recording	Continuous
Reverse Phase Encoding	On

\\USER\ABCD\20190320\ABCD\_PROTOCOL\_\_one\_session\_\_64ch\ABCD\_fMRI\_task\_Emotional\_n-b  
ack

TA: 5:00 PM: FIX Voxel size: 2.4×2.4×2.4 mmPAT: 6 Rel. SNR: 1.00 : epfid

### Properties

Prio recon	Off
Load images to viewer	On
Inline movie	On
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	On
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	On
Start measurements	Single measurement

### Resolution - iPAT

Ref. lines PE	22
Accel. factor slice	6
Reference scan mode	EPI/separate

### Resolution - Filter Image

Distortion Corr.	Off
Prescan Normalize	Off

### Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off
Hamming	Off

### Routine

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	800 ms
TE	30.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HC1-7

### Geometry - Common

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	800 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

### Contrast - Common

TR	800 ms
TE	30.0 ms
MTC	Off
Flip angle	52 deg
Fat suppr.	Fat sat.

### Geometry - AutoAlign

Slice group	1
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A29.8 F12.4
L	0.0 mm
A	29.8 mm
F	12.4 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

### Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	370
Delay in TR	0 ms
Multiple series	Off

### Geometry - Saturation

Fat suppr.	Fat sat.
Special sat.	None

### Resolution - Common

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
Base resolution	90
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

### Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

### System - Miscellaneous

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P

### Resolution - iPAT

Accel. mode	Slice accel.
Accel. factor PE	1

**System - Miscellaneous**

Transversal	F >> H
Coil Combine Mode	Sum of Squares
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	144 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Standard

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	Pulse/Trigger
Average cycle	No Signal ms
Average cycle	No Signal ms
Acquisition window	833 ms
Trigger pulse	1
Trigger delay	0 ms
TR	800 ms
Concatenations	1
Phases	1

**BOLD**

GLM Statistics	Off
Dynamic t-maps	Off
Ignore meas. at start	0
Ignore after transition	0
Model transition states	Off
Temp. highpass filter	Off
Threshold	4.00
Paradigm size	3
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Active
Motion correction	Off
Spatial filter	Off
Measurements	370
Delay in TR	0 ms
Multiple series	Off

**Sequence - Part 1**

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.51 ms
Bandwidth	2778 Hz/Px

**Sequence - Part 2**

EPI factor	90
RF pulse type	Normal
Gradient mode	Fast
Excitation	Standard

**Sequence - pTX Pulses****Sequence - Special**

Dummy Scans	0
K-space streaming	None
Physio recording	Continuous
Reverse Phase Encoding	On

\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_64ch\ABCD\_fMRI\_DistortionMap\_PA

TA: 0:14 PM: FIX Voxel size: 2.4×2.4×2.4 mmPAT: Off Rel. SNR: 1.00 : epse

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	On
Start measurements	Single measurement

**Routine**

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	7030 ms
TE	80.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HC1-7

**Contrast - Common**

TR	7030 ms
TE	80.0 ms
MTC	Off
Magn. preparation	None
Fat suppr.	Fat sat.
Fat sat. mode	Weak

**Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Delay in TR	0 ms
Multiple series	Off

**Resolution - Common**

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
Base resolution	90
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

**Resolution - iPAT**

Accel. mode	None
-------------	------

**Resolution - Filter Image**

Distortion Corr.	Off
Prescan Normalize	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off
Hamming	Off

**Geometry - Common**

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	7030 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

**Geometry - AutoAlign**

Slice group	1
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A29.8 F12.4
L	0.0 mm
A	29.8 mm
F	12.4 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

**Geometry - Saturation**

Fat suppr.	Fat sat.
Fat sat. mode	Weak
Special sat.	None

**Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

**System - Miscellaneous**

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - All



**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**Sequence - Special**

Dummy Scans	1
Reverse Phase Encoding	On

**System - Adjust Volume**

Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	144 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
--------------	----------

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	2.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	7030 ms
Concatenations	1

**Inline - Common**

Subtract	Off
Measurements	1
StdDev	Off
Save original images	On

**Inline - MIP**

MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On

**Inline - Composing**

Inline Composing	Off
Distortion Corr.	Off

**Sequence - Part 1**

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	On
Echo spacing	0.51 ms
Bandwidth	2778 Hz/Px

**Sequence - Part 2**

EPI factor	90
RF pulse type	Normal
Gradient mode	Performance

\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_64ch\ABCD\_fMRI\_DistortionMap\_AP

TA: 0:14 PM: FIX Voxel size: 2.4×2.4×2.4 mmPAT: Off Rel. SNR: 1.00 : epse

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	Single measurement

**Routine**

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	7030 ms
TE	80.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HC1-7

**Contrast - Common**

TR	7030 ms
TE	80.0 ms
MTC	Off
Magn. preparation	None
Fat suppr.	Fat sat.
Fat sat. mode	Weak

**Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Delay in TR	0 ms
Multiple series	Off

**Resolution - Common**

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
Base resolution	90
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

**Resolution - iPAT**

Accel. mode	None
-------------	------

**Resolution - Filter Image**

Distortion Corr.	Off
Prescan Normalize	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off
Hamming	Off

**Geometry - Common**

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	7030 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

**Geometry - AutoAlign**

Slice group	1
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A29.8 F12.4
L	0.0 mm
A	29.8 mm
F	12.4 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

**Geometry - Saturation**

Fat suppr.	Fat sat.
Fat sat. mode	Weak
Special sat.	None

**Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

**System - Miscellaneous**

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**Sequence - Special**

Dummy Scans	1
Reverse Phase Encoding	Off

**System - Adjust Volume**

Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	144 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
--------------	----------

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	2.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	7030 ms
Concatenations	1

**Inline - Common**

Subtract	Off
Measurements	1
StdDev	Off
Save original images	On

**Inline - MIP**

MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On

**Inline - Composing**

Inline Composing	Off
Distortion Corr.	Off

**Sequence - Part 1**

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	On
Echo spacing	0.51 ms
Bandwidth	2778 Hz/Px

**Sequence - Part 2**

EPI factor	90
RF pulse type	Normal
Gradient mode	Performance

\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_64ch\ABCD\_fMRI\_task\_Monetary\_Inc  
ntive

TA: 5:33 PM: FIX Voxel size: 2.4×2.4×2.4 mmPAT: 6 Rel. SNR: 1.00 : epfid

### Properties

Prio recon	Off
Load images to viewer	On
Inline movie	On
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	On
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	On
Start measurements	Single measurement

### Resolution - iPAT

Ref. lines PE	22
Accel. factor slice	6
Reference scan mode	EPI/separate

### Resolution - Filter Image

Distortion Corr.	Off
Prescan Normalize	Off

### Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off
Hamming	Off

### Routine

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	800 ms
TE	30.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HC1-7

### Geometry - Common

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	800 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

### Contrast - Common

TR	800 ms
TE	30.0 ms
MTC	Off
Flip angle	52 deg
Fat suppr.	Fat sat.

### Geometry - AutoAlign

Slice group	1
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A29.8 F12.4
L	0.0 mm
A	29.8 mm
F	12.4 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

### Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	411
Delay in TR	0 ms
Multiple series	Off

### Geometry - Saturation

Fat suppr.	Fat sat.
Special sat.	None

### Resolution - Common

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
Base resolution	90
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

### Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

### System - Miscellaneous

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P

### Resolution - iPAT

Accel. mode	Slice accel.
Accel. factor PE	1

**System - Miscellaneous**

Transversal	F >> H
Coil Combine Mode	Sum of Squares
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	144 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Standard

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	Pulse/Trigger
Average cycle	No Signal ms
Average cycle	No Signal ms
Acquisition window	833 ms
Trigger pulse	1
Trigger delay	0 ms
TR	800 ms
Concatenations	1
Phases	1

**BOLD**

GLM Statistics	Off
Dynamic t-maps	Off
Ignore meas. at start	0
Ignore after transition	0
Model transition states	Off
Temp. highpass filter	Off
Threshold	4.00
Paradigm size	3
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Active
Motion correction	Off
Spatial filter	Off
Measurements	411
Delay in TR	0 ms
Multiple series	Off

**Sequence - Part 1**

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.51 ms
Bandwidth	2778 Hz/Px

**Sequence - Part 2**

EPI factor	90
RF pulse type	Normal
Gradient mode	Fast
Excitation	Standard

**Sequence - pTX Pulses****Sequence - Special**

Dummy Scans	0
K-space streaming	None
Physio recording	Continuous
Reverse Phase Encoding	On

\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_64ch\ABCD\_fMRI\_task\_Monetary\_Inc  
ntive

TA: 5:33 PM: FIX Voxel size: 2.4×2.4×2.4 mmPAT: 6 Rel. SNR: 1.00 : epfid

### Properties

Prio recon	Off
Load images to viewer	On
Inline movie	On
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	On
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	On
Start measurements	Single measurement

### Resolution - iPAT

Ref. lines PE	22
Accel. factor slice	6
Reference scan mode	EPI/separate

### Resolution - Filter Image

Distortion Corr.	Off
Prescan Normalize	Off

### Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off
Hamming	Off

### Routine

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	800 ms
TE	30.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HC1-7

### Geometry - Common

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	800 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

### Contrast - Common

TR	800 ms
TE	30.0 ms
MTC	Off
Flip angle	52 deg
Fat suppr.	Fat sat.

### Geometry - AutoAlign

Slice group	1
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A29.8 F12.4
L	0.0 mm
A	29.8 mm
F	12.4 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

### Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	411
Delay in TR	0 ms
Multiple series	Off

### Geometry - Saturation

Fat suppr.	Fat sat.
Special sat.	None

### Resolution - Common

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
Base resolution	90
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

### Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

### System - Miscellaneous

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P

### Resolution - iPAT

Accel. mode	Slice accel.
Accel. factor PE	1

**System - Miscellaneous**

Transversal	F >> H
Coil Combine Mode	Sum of Squares
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	144 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Standard

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	Pulse/Trigger
Average cycle	No Signal ms
Average cycle	No Signal ms
Acquisition window	833 ms
Trigger pulse	1
Trigger delay	0 ms
TR	800 ms
Concatenations	1
Phases	1

**BOLD**

GLM Statistics	Off
Dynamic t-maps	Off
Ignore meas. at start	0
Ignore after transition	0
Model transition states	Off
Temp. highpass filter	Off
Threshold	4.00
Paradigm size	3
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Active
Motion correction	Off
Spatial filter	Off
Measurements	411
Delay in TR	0 ms
Multiple series	Off

**Sequence - Part 1**

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.51 ms
Bandwidth	2778 Hz/Px

**Sequence - Part 2**

EPI factor	90
RF pulse type	Normal
Gradient mode	Fast
Excitation	Standard

**Sequence - pTX Pulses****Sequence - Special**

Dummy Scans	0
K-space streaming	None
Physio recording	Continuous
Reverse Phase Encoding	On

\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_streaming\_64ch\localizer\_64ch

TA: 0:12 PM: REF Voxel size: 0.5×0.5×7.0 mmPAT: Off Rel. SNR: 1.00 : fl

**Properties**

Prio recon	On
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	On
Load images to graphic segments	On
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	Single measurement

**Routine**

Slice group	1
Slices	1
Dist. factor	20 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice group	2
Slices	1
Dist. factor	20 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
Slice group	3
Slices	1
Dist. factor	20 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Coronal
Phase enc. dir.	R >> L
AutoAlign	---
Phase oversampling	0 %
FoV read	250 mm
FoV phase	100.0 %
Slice thickness	7.0 mm
TR	7.5 ms
TE	3.69 ms
Averages	2
Concatenations	3
Filter	Prescan Normalize, Elliptical filter
Coil elements	HC1-7;NC1,2

**Contrast - Common**

TR	7.5 ms
TE	3.69 ms
TD	0 ms
MTC	Off
Magn. preparation	None
Flip angle	20 deg
Fat suppr.	None
Water suppr.	None
SWI	Off

**Contrast - Dynamic**

Averages	2
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1

**Contrast - Dynamic**

Multiple series	Each measurement
-----------------	------------------

**Resolution - Common**

FoV read	250 mm
FoV phase	100.0 %
Slice thickness	7.0 mm
Base resolution	256
Phase resolution	91 %
Phase partial Fourier	Off
Interpolation	On

**Resolution - iPAT**

PAT mode	None
----------	------

**Resolution - Filter Image**

Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	On
Unfiltered images	Off
Normalize	Off
B1 filter	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	On

**Geometry - Common**

Slice group	1
Slices	1
Dist. factor	20 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice group	2
Slices	1
Dist. factor	20 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
Slice group	3
Slices	1
Dist. factor	20 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Coronal
Phase enc. dir.	R >> L
FoV read	250 mm
FoV phase	100.0 %
Slice thickness	7.0 mm
TR	7.5 ms
Multi-slice mode	Sequential
Series	Interleaved
Concatenations	3

**Geometry - AutoAlign**

Slice group	1
Position	L0.0 A20.0 H0.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice group	2
Position	L0.0 A20.0 H0.0 mm



**Geometry - AutoAlign**

Orientation	Transversal
Phase enc. dir.	A >> P
Slice group	3
Position	L0.0 A20.0 H0.0 mm
Orientation	Coronal
Phase enc. dir.	R >> L
AutoAlign	---
Initial Position	L0.0 A20.0 H0.0
L	0.0 mm
A	20.0 mm
H	0.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Sagittal

**Geometry - Saturation**

Saturation mode	Standard
Fat suppr.	None
Water suppr.	None
Special sat.	None

**Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

**System - Miscellaneous**

Positioning mode	REF
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Tune up
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
A >> P	263 mm
R >> L	350 mm
F >> H	350 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Slice-sel.

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	7.5 ms
Concatenations	3
Segments	1

**Physio - Cardiac**

Tagging	None
Magn. preparation	None
Fat suppr.	None
Dark blood	Off
FoV read	250 mm
FoV phase	100.0 %
Phase resolution	91 %

**Physio - PACE**

Resp. control	Off
Concatenations	3

**Inline - Common**

Subtract	Off
Measurements	1
StdDev	Off
Liver registration	Off
Save original images	On

**Inline - MIP**

MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On

**Inline - Soft Tissue**

Wash - In	Off
Wash - Out	Off
TTP	Off
PEI	Off
MIP - time	Off
Measurements	1

**Inline - Composing**

Inline Composing	Off
Distortion Corr.	Off

**Inline - MapIt**

Save original images	On
MapIt	None
Flip angle	20 deg
Measurements	1
Contrasts	1
TR	7.5 ms
TE	3.69 ms

**Sequence - Part 1**

Introduction	On
--------------	----

**Sequence - Part 1**

Dimension	2D
Phase stabilisation	Off
Asymmetric echo	Allowed
Contrasts	1
Flow comp.	No
Multi-slice mode	Sequential
Bandwidth	320 Hz/Px

**Sequence - Part 2**

Segments	1
Acoustic noise reduction	None
RF pulse type	Fast
Gradient mode	Fast
Excitation	Slice-sel.
RF spoiling	On

**Sequence - Assistant**

Mode	Off
Allowed delay	0 s

\\USER\ABCD\20190320\ABCD_PROTOCOL_one_session_streaming_64ch\ABCD_T1w_MPR_vN av_setter
TA: 0.3 s PM: FIX Voxel size: 8.0×8.0×8.0 mmRel. SNR: 1.00 : ABCD

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	Off
Wait for user to start	Off
Start measurements	Single measurement

**Routine**

Slab group	1
Slabs	1
Dist. factor	50 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	32
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	8.00 mm
TR	11.0 ms
TE	4.8 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	BC

**Contrast - Common**

TR	11.0 ms
TE	4.8 ms
MTC	Off
Flip angle	2 deg
Fat suppr.	None

**Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

**Resolution - Common**

FoV read	256 mm
FoV phase	100.0 %
Slice thickness	8.00 mm
Base resolution	32
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	Off
Slice partial Fourier	6/8
Interpolation	Off

**Resolution - Filter Image**

Distortion Corr.	Off
Prescan Normalize	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off
Hamming	Off

**Geometry - Common**

Slab group	1
Slabs	1
Dist. factor	50 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice oversampling	0.0 %
Slices per slab	32
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	8.00 mm
TR	11.0 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

**Geometry - AutoAlign**

Slab group	1
Position	L0.0 A20.0 H0.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A20.0 H0.0
L	0.0 mm
A	20.0 mm
H	0.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Sagittal

**Geometry - Saturation**

Fat suppr.	None
Special sat.	None

**Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

**System - Miscellaneous**

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
Save uncombined	Off
Matrix Optimization	Off

**System - Miscellaneous**

AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Tune up
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
A >> P	263 mm
R >> L	350 mm
F >> H	350 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Non-sel.

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	Low
Img. Scale Cor.	10.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	11.0 ms
Concatenations	1

**Sequence - Part 1**

Introduction	Off
Dimension	3D
Contrasts	1
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.27 ms
Bandwidth	4882 Hz/Px

**Sequence - Part 2**

EPI factor	32
RF pulse type	Normal
Gradient mode	Fast
Excitation	Non-sel.
RF spoiling	On

**Sequence - Special**

Protocol filename	MPRAGE
-------------------	--------

\\USER\ABCD\20190320\ABCD_PROTOCOL_one_session_streaming_64ch\ABCD_T1w_MPR_vN av
TA: 7:12 PM: FIX Voxel size: 1.0×1.0×1.0 mmPAT: 2 Rel. SNR: 1.00 : tfl

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	On
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	Off
Wait for user to start	On
Start measurements	Single measurement

**Routine**

Slab group	1
Slabs	1
Dist. factor	50 %
Position	L0.0 A20.0 F30.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	176
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	1.00 mm
TR	2500.0 ms
TE	2.9 ms
Averages	1
Concatenations	1
Filter	Prescan Normalize
Coil elements	HC1-7

**Contrast - Common**

TR	2500.0 ms
TE	2.9 ms
Magn. preparation	Non-sel. IR
TI	1070 ms
Flip angle	8.0 deg
Fat suppr.	Water excit. fast
Water suppr.	None

**Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

**Resolution - Common**

FoV read	256 mm
FoV phase	100.0 %
Slice thickness	1.00 mm
Base resolution	256
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	Off
Slice partial Fourier	Off

**Resolution - Common**

Interpolation	Off
---------------	-----

**Resolution - iPAT**

PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	32
Accel. factor 3D	1
Reference scan mode	Integrated

**Resolution - Filter Image**

Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	On
Unfiltered images	On
Normalize	Off
B1 filter	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off

**Geometry - Common**

Slab group	1
Slabs	1
Dist. factor	50 %
Position	L0.0 A20.0 F30.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice oversampling	0.0 %
Slices per slab	176
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	1.00 mm
TR	2500.0 ms
Multi-slice mode	Single shot
Series	Interleaved
Concatenations	1

**Geometry - AutoAlign**

Slab group	1
Position	L0.0 A20.0 F30.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A20.0 F30.0
R	0.0 mm
A	20.0 mm
F	30.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Sagittal

**Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

**System - Miscellaneous**

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A20.0 F30.0 mm
Orientation	Sagittal
Rotation	0.00 deg
A >> P	256 mm
F >> H	256 mm
R >> L	176 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Non-sel.

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	Low
Img. Scale Cor.	5.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	2500.0 ms
Concatenations	1

**Physio - Cardiac**

Magn. preparation	Non-sel. IR
T1	1070 ms
Fat suppr.	Water excit. fast
Dark blood	Off
FoV read	256 mm
FoV phase	100.0 %
Phase resolution	100 %

**Inline - Common**

Subtract	Off
Measurements	1
StdDev	Off
Save original images	On

**Inline - MIP**

MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On

**Inline - Composing**

Inline Composing	Off
Distortion Corr.	Off

**Inline - MapIt**

Save original images	On
MapIt	None
Flip angle	8.0 deg
Measurements	1
Contrasts	1
TR	2500.0 ms
TE	2.9 ms

**Sequence - Part 1**

Introduction	On
Dimension	3D
Elliptical scanning	Off
Reordering	Linear
Asymmetric echo	Off
Contrasts	1
Flow comp.	No
Multi-slice mode	Single shot
Echo spacing	8.1 ms
Bandwidth	240 Hz/Px

**Sequence - Part 2**

RF pulse type	Fast
Gradient mode	Fast
Excitation	Non-sel.
RF spoiling	On
Turbo factor	256

**Sequence - Special**

Readout polarity	Positive
Nav. location	Before
Apply moco to	parent and nav
Remeasure	24 TRs
Reacq. threshold	0.50
Feedback delay	60 ms
Moco ref. image	Use Temp Ref
K-space streaming	None
ABCD navigator	On
Add. grad time	0.0 ms
Apply freq to	parent and nav
Averaging	None

**Sequence - Assistant**

Mode	Off
------	-----

\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_streaming\_64ch\ABCD\_fMRI\_DistortionMap\_PA

TA: 0:14 PM: REF Voxel size: 2.4×2.4×2.4 mmPAT: Off Rel. SNR: 1.00 : epse

### Properties

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	Off
Wait for user to start	Off
Start measurements	Single measurement

### Routine

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	7030 ms
TE	80.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HC1-7

### Contrast - Common

TR	7030 ms
TE	80.0 ms
MTC	Off
Magn. preparation	None
Fat suppr.	Fat sat.
Fat sat. mode	Weak

### Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Delay in TR	0 ms
Multiple series	Off

### Resolution - Common

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
Base resolution	90
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

### Resolution - iPAT

Accel. mode	None
-------------	------

### Resolution - Filter Image

Distortion Corr.	Off
Prescan Normalize	Off

### Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off
Hamming	Off

### Geometry - Common

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	7030 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

### Geometry - AutoAlign

Slice group	1
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A29.8 F12.4
L	0.0 mm
A	29.8 mm
F	12.4 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

### Geometry - Saturation

Fat suppr.	Fat sat.
Fat sat. mode	Weak
Special sat.	None

### Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

### System - Miscellaneous

Positioning mode	REF
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---

**System - Miscellaneous**

Coil Select Mode	Off - All
------------------	-----------

**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	144 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
--------------	----------

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	2.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	7030 ms
Concatenations	1

**Inline - Common**

Subtract	Off
Measurements	1
StdDev	Off
Save original images	On

**Inline - MIP**

MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On

**Inline - Composing**

Inline Composing	Off
Distortion Corr.	Off

**Sequence - Part 1**

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	On
Echo spacing	0.51 ms
Bandwidth	2778 Hz/Px

**Sequence - Part 2**

EPI factor	90
RF pulse type	Normal

**Sequence - Part 2**

Gradient mode	Performance
---------------	-------------

**Sequence - Special**

Dummy Scans	1
Reverse Phase Encoding	On



\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_streaming\_64ch\ABCD\_fMRI\_DistortionMap\_AP

TA: 0:14 PM: FIX Voxel size: 2.4×2.4×2.4 mmPAT: Off Rel. SNR: 1.00 : epse

### Properties

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	Single measurement

### Routine

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	7030 ms
TE	80.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HC1-7

### Contrast - Common

TR	7030 ms
TE	80.0 ms
MTC	Off
Magn. preparation	None
Fat suppr.	Fat sat.
Fat sat. mode	Weak

### Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Delay in TR	0 ms
Multiple series	Off

### Resolution - Common

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
Base resolution	90
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

### Resolution - iPAT

Accel. mode	None
-------------	------

### Resolution - Filter Image

Distortion Corr.	Off
Prescan Normalize	Off

### Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off
Hamming	Off

### Geometry - Common

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	7030 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

### Geometry - AutoAlign

Slice group	1
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A29.8 F12.4
L	0.0 mm
A	29.8 mm
F	12.4 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

### Geometry - Saturation

Fat suppr.	Fat sat.
Fat sat. mode	Weak
Special sat.	None

### Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

### System - Miscellaneous

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---

**System - Miscellaneous**

Coil Select Mode	Off - All
------------------	-----------

**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	144 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
--------------	----------

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	2.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	7030 ms
Concatenations	1

**Inline - Common**

Subtract	Off
Measurements	1
StdDev	Off
Save original images	On

**Inline - MIP**

MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On

**Inline - Composing**

Inline Composing	Off
Distortion Corr.	Off

**Sequence - Part 1**

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	On
Echo spacing	0.51 ms
Bandwidth	2778 Hz/Px

**Sequence - Part 2**

EPI factor	90
RF pulse type	Normal

**Sequence - Part 2**

Gradient mode	Performance
---------------	-------------

**Sequence - Special**

Dummy Scans	1
Reverse Phase Encoding	Off

\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_streaming\_64ch\ABCD\_fMRI\_rest

TA: 5:11 PM: FIX Voxel size: 2.4×2.4×2.4 mmPAT: 6 Rel. SNR: 1.00 : epfid

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	On
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	On
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	On
Start measurements	Single measurement

**Resolution - iPAT**

Accel. factor slice	6
Reference scan mode	EPI/separate

**Resolution - Filter Image**

Distortion Corr.	Off
Prescan Normalize	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off
Hamming	Off

**Routine**

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	800 ms
TE	30.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HC1-7

**Geometry - Common**

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	800 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

**Geometry - AutoAlign**

Slice group	1
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A29.8 F12.4
L	0.0 mm
A	29.8 mm
F	12.4 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

**Contrast - Common**

TR	800 ms
TE	30.0 ms
MTC	Off
Flip angle	52 deg
Fat suppr.	Fat sat.

**Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	383
Delay in TR	0 ms
Multiple series	Off

**Resolution - Common**

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
Base resolution	90
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

**Resolution - iPAT**

Accel. mode	Slice accel.
Accel. factor PE	1
Ref. lines PE	22

**Geometry - Saturation**

Fat suppr.	Fat sat.
Special sat.	None

**Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

**System - Miscellaneous**

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
Matrix Optimization	Off

**System - Miscellaneous**

AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	144 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Standard

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	Pulse/Trigger
Average cycle	No Signal ms
Average cycle	No Signal ms
Acquisition window	833 ms
Trigger pulse	1
Trigger delay	0 ms
TR	800 ms
Concatenations	1
Phases	1

**BOLD**

GLM Statistics	Off
Dynamic t-maps	Off
Ignore meas. at start	0
Ignore after transition	0
Model transition states	Off
Temp. highpass filter	Off
Threshold	4.00
Paradigm size	3
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Active
Motion correction	Off
Spatial filter	Off
Measurements	383
Delay in TR	0 ms
Multiple series	Off

**Sequence - Part 1**

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.51 ms
Bandwidth	2778 Hz/Px

**Sequence - Part 2**

EPI factor	90
RF pulse type	Normal
Gradient mode	Fast
Excitation	Standard

**Sequence - pTX Pulses****Sequence - Special**

Dummy Scans	0
K-space streaming	File
Physio recording	Continuous
Reverse Phase Encoding	On

\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_streaming\_64ch\ABCD\_fMRI\_rest

TA: 5:11 PM: FIX Voxel size: 2.4×2.4×2.4 mmPAT: 6 Rel. SNR: 1.00 : epfid

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	On
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	On
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	On
Start measurements	Single measurement

**Resolution - iPAT**

Accel. factor slice	6
Reference scan mode	EPI/separate

**Resolution - Filter Image**

Distortion Corr.	Off
Prescan Normalize	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off
Hamming	Off

**Routine**

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	800 ms
TE	30.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HC1-7

**Geometry - Common**

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	800 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

**Geometry - AutoAlign**

Slice group	1
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A29.8 F12.4
L	0.0 mm
A	29.8 mm
F	12.4 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

**Contrast - Common**

TR	800 ms
TE	30.0 ms
MTC	Off
Flip angle	52 deg
Fat suppr.	Fat sat.

**Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	383
Delay in TR	0 ms
Multiple series	Off

**Resolution - Common**

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
Base resolution	90
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

**Resolution - iPAT**

Accel. mode	Slice accel.
Accel. factor PE	1
Ref. lines PE	22

**Geometry - Saturation**

Fat suppr.	Fat sat.
Special sat.	None

**Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

**System - Miscellaneous**

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
Matrix Optimization	Off

**System - Miscellaneous**

AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	144 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Standard

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	Pulse/Trigger
Average cycle	No Signal ms
Average cycle	No Signal ms
Acquisition window	833 ms
Trigger pulse	1
Trigger delay	0 ms
TR	800 ms
Concatenations	1
Phases	1

**BOLD**

GLM Statistics	Off
Dynamic t-maps	Off
Ignore meas. at start	0
Ignore after transition	0
Model transition states	Off
Temp. highpass filter	Off
Threshold	4.00
Paradigm size	3
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Active
Motion correction	Off
Spatial filter	Off
Measurements	383
Delay in TR	0 ms
Multiple series	Off

**Sequence - Part 1**

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.51 ms
Bandwidth	2778 Hz/Px

**Sequence - Part 2**

EPI factor	90
RF pulse type	Normal
Gradient mode	Fast
Excitation	Standard

**Sequence - pTX Pulses****Sequence - Special**

Dummy Scans	0
K-space streaming	File
Physio recording	Continuous
Reverse Phase Encoding	On

\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_streaming\_64ch\ABCD\_dMRI\_DistortionMap\_PA

TA: 0:25 PM: REF Voxel size: 1.7×1.7×1.7 mmPAT: Off Rel. SNR: 1.00 : epse

### Properties

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	Off
Wait for user to start	On
Start measurements	Single measurement

### Routine

Slice group	1
Slices	81
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	240 mm
FoV phase	100.0 %
Slice thickness	1.7 mm
TR	12400 ms
TE	89.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HC1-7

### Contrast - Common

TR	12400 ms
TE	89.0 ms
MTC	Off
Magn. preparation	None
Fat suppr.	Fat sat.
Fat sat. mode	Strong

### Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Delay in TR	0 ms
Multiple series	Off

### Resolution - Common

FoV read	240 mm
FoV phase	100.0 %
Slice thickness	1.7 mm
Base resolution	140
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off

### Resolution - iPAT

Accel. mode	None
-------------	------

### Resolution - Filter Image

Distortion Corr.	Off
Prescan Normalize	Off
Dynamic Field Corr.	Off

### Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off

### Geometry - Common

Slice group	1
Slices	81
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	240 mm
FoV phase	100.0 %
Slice thickness	1.7 mm
TR	12400 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

### Geometry - AutoAlign

Slice group	1
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A10.0 H10.0
L	0.0 mm
A	10.0 mm
H	10.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

### Geometry - Saturation

Fat suppr.	Fat sat.
Fat sat. mode	Strong
Special sat.	None

### Geometry - Navigator

### Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

### System - Miscellaneous

Positioning mode	REF
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine

**System - Miscellaneous**

Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Advanced
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	240 mm
R >> L	240 mm
F >> H	138 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Standard

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	2.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	12400 ms
Concatenations	1

**Physio - PACE**

Resp. control	Off
Concatenations	1

**Diff - Neuro**

Diffusion mode	Free
Diff. directions	102
Diffusion Scheme	Monopolar
Diff. weightings	1
b-value	0 s/mm <sup>2</sup>
b-value	1
Diff. weighted images	On
Trace weighted images	Off
ADC maps	Off
FA maps	Off
Mosaic	Off
Tensor	Off
Noise level	40

**Diff - Body**

Diffusion mode	Free
Diff. directions	102
Diffusion Scheme	Monopolar
Diff. weightings	1

**Diff - Body**

b-value	0 s/mm <sup>2</sup>
b-value	1
Diff. weighted images	On
Trace weighted images	Off
ADC maps	Off
Exponential ADC Maps	Off
FA maps	Off
Invert Gray Scale	Off
Calculated Image	Off
b-Value >=	0 s/mm <sup>2</sup>
Noise level	40

**Diff - Composing**

Inline Composing	Off
Distortion Corr.	Off

**Sequence - Part 1**

Introduction	Off
Optimization	None
Multi-slice mode	Interleaved
Free echo spacing	On
Echo spacing	0.69 ms
Bandwidth	1700 Hz/Px

**Sequence - Part 2**

EPI factor	140
RF pulse type	Normal
Gradient mode	Performance
Excitation	Standard

**Sequence - pTX Pulses****Sequence - Special**

K-space streaming	None
Reverse Phase Encoding	On



\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_streaming\_64ch\ABCD\_dMRI\_DistortionMap\_AP

TA: 0:25 PM: FIX Voxel size: 1.7×1.7×1.7 mmPAT: Off Rel. SNR: 1.00 : epse

### Properties

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	Single measurement

### Routine

Slice group	1
Slices	81
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	240 mm
FoV phase	100.0 %
Slice thickness	1.7 mm
TR	12400 ms
TE	89.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HC1-7

### Contrast - Common

TR	12400 ms
TE	89.0 ms
MTC	Off
Magn. preparation	None
Fat suppr.	Fat sat.
Fat sat. mode	Strong

### Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Delay in TR	0 ms
Multiple series	Off

### Resolution - Common

FoV read	240 mm
FoV phase	100.0 %
Slice thickness	1.7 mm
Base resolution	140
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off

### Resolution - iPAT

Accel. mode	None
-------------	------

### Resolution - Filter Image

Distortion Corr.	Off
Prescan Normalize	Off
Dynamic Field Corr.	Off

### Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off

### Geometry - Common

Slice group	1
Slices	81
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	240 mm
FoV phase	100.0 %
Slice thickness	1.7 mm
TR	12400 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

### Geometry - AutoAlign

Slice group	1
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A10.0 H10.0
L	0.0 mm
A	10.0 mm
H	10.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

### Geometry - Saturation

Fat suppr.	Fat sat.
Fat sat. mode	Strong
Special sat.	None

### Geometry - Navigator

### Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

### System - Miscellaneous

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine

**System - Miscellaneous**

Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Advanced
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	240 mm
R >> L	240 mm
F >> H	138 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Standard

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	2.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	12400 ms
Concatenations	1

**Physio - PACE**

Resp. control	Off
Concatenations	1

**Diff - Neuro**

Diffusion mode	Free
Diff. directions	102
Diffusion Scheme	Monopolar
Diff. weightings	1
b-value	0 s/mm <sup>2</sup>
b-value	1
Diff. weighted images	On
Trace weighted images	Off
ADC maps	Off
FA maps	Off
Mosaic	Off
Tensor	Off
Noise level	40

**Diff - Body**

Diffusion mode	Free
Diff. directions	102
Diffusion Scheme	Monopolar
Diff. weightings	1

**Diff - Body**

b-value	0 s/mm <sup>2</sup>
b-value	1
Diff. weighted images	On
Trace weighted images	Off
ADC maps	Off
Exponential ADC Maps	Off
FA maps	Off
Invert Gray Scale	Off
Calculated Image	Off
b-Value >=	0 s/mm <sup>2</sup>
Noise level	40

**Diff - Composing**

Inline Composing	Off
Distortion Corr.	Off

**Sequence - Part 1**

Introduction	Off
Optimization	None
Multi-slice mode	Interleaved
Free echo spacing	On
Echo spacing	0.69 ms
Bandwidth	1700 Hz/Px

**Sequence - Part 2**

EPI factor	140
RF pulse type	Normal
Gradient mode	Performance
Excitation	Standard

**Sequence - pTX Pulses****Sequence - Special**

K-space streaming	None
Reverse Phase Encoding	Off

\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_streaming\_64ch\ABCD\_dMRI

TA: 7:29 PM: FIX Voxel size: 1.7×1.7×1.7 mmPAT: 3 Rel. SNR: 1.00 : epse

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	On
Start measurements	Single measurement

**Routine**

Slice group	1
Slices	81
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	240 mm
FoV phase	100.0 %
Slice thickness	1.7 mm
TR	4200 ms
TE	89.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HC1-7

**Contrast - Common**

TR	4200 ms
TE	89.0 ms
MTC	Off
Magn. preparation	None
Fat suppr.	Fat sat.
Fat sat. mode	Strong

**Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Delay in TR	0 ms
Multiple series	Off

**Resolution - Common**

FoV read	240 mm
FoV phase	100.0 %
Slice thickness	1.7 mm
Base resolution	140
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off

**Resolution - iPAT**

Accel. mode	Slice accel.
Accel. factor PE	1

**Resolution - iPAT**

Ref. lines PE	71
Accel. factor slice	3
Reference scan mode	EPI/separate

**Resolution - Filter Image**

Distortion Corr.	Off
Prescan Normalize	Off
Dynamic Field Corr.	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off

**Geometry - Common**

Slice group	1
Slices	81
Dist. factor	0 %
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	240 mm
FoV phase	100.0 %
Slice thickness	1.7 mm
TR	4200 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

**Geometry - AutoAlign**

Slice group	1
Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A10.0 H10.0
L	0.0 mm
A	10.0 mm
H	10.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

**Geometry - Saturation**

Fat suppr.	Fat sat.
Fat sat. mode	Strong
Special sat.	None

**Geometry - Navigator****Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

**System - Miscellaneous**

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T

**System - Miscellaneous**

Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Advanced
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A10.0 H10.0 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	240 mm
R >> L	240 mm
F >> H	138 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Standard

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	3.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	4200 ms
Concatenations	1

**Physio - PACE**

Resp. control	Off
Concatenations	1

**Diff - Neuro**

Diffusion mode	Free
Diff. directions	102
Diffusion Scheme	Monopolar
Diff. weightings	2
b-value 1	0 s/mm <sup>2</sup>
b-value 2	3000 s/mm <sup>2</sup>
b-value 1	1
b-value 2	1
Diff. weighted images	On
Trace weighted images	Off
ADC maps	Off
FA maps	Off
Mosaic	On
Tensor	Off
Noise level	40

**Diff - Body**

Diffusion mode	Free
Diff. directions	102
Diffusion Scheme	Monopolar
Diff. weightings	2
b-value 1	0 s/mm <sup>2</sup>
b-value 2	3000 s/mm <sup>2</sup>
b-value 1	1
b-value 2	1
Diff. weighted images	On
Trace weighted images	Off
ADC maps	Off
Exponential ADC Maps	Off
FA maps	Off
Invert Gray Scale	Off
Calculated Image	Off
b-Value >=	0 s/mm <sup>2</sup>
Noise level	40

**Diff - Composing**

Inline Composing	Off
Distortion Corr.	Off

**Sequence - Part 1**

Introduction	Off
Optimization	None
Multi-slice mode	Interleaved
Free echo spacing	On
Echo spacing	0.69 ms
Bandwidth	1700 Hz/Px

**Sequence - Part 2**

EPI factor	140
RF pulse type	Normal
Gradient mode	Performance*
Excitation	Standard

**Sequence - pTX Pulses****Sequence - Special**

K-space streaming	File
Reverse Phase Encoding	On

\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_streaming\_64ch\ABCD\_T2w\_SPC\_vN  
av\_setter

TA: 0.3 s PM: FIX Voxel size: 8.0×8.0×8.0 mmRel. SNR: 1.00 : ABCD

### Properties

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	On
Start measurements	Single measurement

### Routine

Slab group	1
Slabs	1
Dist. factor	50 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	32
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	8.00 mm
TR	13.0 ms
TE	6.1 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	BC

### Contrast - Common

TR	13.0 ms
TE	6.1 ms
MTC	Off
Flip angle	2 deg
Fat suppr.	Water excit. normal

### Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

### Resolution - Common

FoV read	256 mm
FoV phase	100.0 %
Slice thickness	8.00 mm
Base resolution	32
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	Off
Slice partial Fourier	6/8
Interpolation	Off

### Resolution - Filter Image

Distortion Corr.	Off
Prescan Normalize	Off

### Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off
Hamming	Off

### Geometry - Common

Slab group	1
Slabs	1
Dist. factor	50 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice oversampling	0.0 %
Slices per slab	32
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	8.00 mm
TR	13.0 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

### Geometry - AutoAlign

Slab group	1
Position	L0.0 A20.0 H0.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A20.0 H0.0
L	0.0 mm
A	20.0 mm
H	0.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Sagittal

### Geometry - Saturation

Fat suppr.	Water excit. normal
Special sat.	None

### Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

### System - Miscellaneous

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
Save uncombined	Off
Matrix Optimization	Off

**System - Miscellaneous**

AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A20.0 H0.0 mm
Orientation	Sagittal
Rotation	0.00 deg
A >> P	256 mm
F >> H	256 mm
R >> L	256 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Non-sel.

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	Low
Img. Scale Cor.	10.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	13.0 ms
Concatenations	1

**Sequence - Part 1**

Introduction	Off
Dimension	3D
Contrasts	1
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.27 ms
Bandwidth	4882 Hz/Px

**Sequence - Part 2**

EPI factor	32
RF pulse type	Normal
Gradient mode	Fast
Excitation	Non-sel.
RF spoiling	On

**Sequence - Special**

Protocol filename	T2-SPACE
-------------------	----------

\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_streaming\_64ch\ABCD\_T2w\_SPC\_vN  
av

TA: 6:35 PM: FIX Voxel size: 1.0×1.0×1.0 mmPAT: 2 Rel. SNR: 1.00 : spc

### Properties

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	Single measurement

### Routine

Slab group	1
Slabs	1
Position	L0.0 A20.0 F30.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	176
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	1.00 mm
TR	3200 ms
TE	565 ms
Averages	1.0
Concatenations	1
Filter	Prescan Normalize
Coil elements	HC1-7

### Contrast - Common

TR	3200 ms
TE	565 ms
MTC	Off
Magn. preparation	None
Fat suppr.	None
Blood suppr.	Off
Restore magn.	Off

### Contrast - Dynamic

Averages	1.0
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

### Resolution - Common

FoV read	256 mm
FoV phase	100.0 %
Slice thickness	1.00 mm
Base resolution	256
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	Allowed
Slice partial Fourier	Off
Interpolation	Off

### Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	32
Accel. factor 3D	1
Reference scan mode	Integrated

### Resolution - Filter Image

Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	On
Unfiltered images	On
Normalize	Off
B1 filter	Off

### Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off

### Geometry - Common

Slab group	1
Slabs	1
Position	L0.0 A20.0 F30.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice oversampling	0.0 %
Slices per slab	176
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	1.00 mm
TR	3200 ms
Concatenations	1

### Geometry - AutoAlign

Slab group	1
Position	L0.0 A20.0 F30.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A20.0 F30.0
R	0.0 mm
A	20.0 mm
F	30.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Sagittal

### Geometry - Saturation

Fat suppr.	None
Restore magn.	Off
Special sat.	None

### Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

### System - Miscellaneous

Positioning mode	FIX
------------------	-----

**System - Miscellaneous**

Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A20.0 F30.0 mm
Orientation	Sagittal
Rotation	0.00 deg
A >> P	256 mm
F >> H	256 mm
R >> L	176 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Non-sel.

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	5.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
Trigger delay	0 ms
TR	3200 ms
Concatenations	1

**Physio - Cardiac**

Magn. preparation	None
Fat suppr.	None
Dark blood	Off
FoV read	256 mm
FoV phase	100.0 %
Phase resolution	100 %

**Inline - Common**

Subtract	Off
Measurements	1
StdDev	Off
Save original images	On

**Inline - MIP**

MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On

**Inline - Composing**

Inline Composing	Off
Distortion Corr.	Off

**Sequence - Part 1**

Introduction	On
Dimension	3D
Elliptical scanning	On
Reordering	Linear
Flow comp.	No
Echo spacing	6.28 ms
Adiabatic-mode	Off
Bandwidth	241 Hz/Px

**Sequence - Part 2**

Echo train duration	1187 ms
RF pulse type	Fast
Gradient mode	Fast
Excitation	Non-sel.
Flip angle mode	T2 var
Turbo factor	200

**Sequence - Special**

Include nav.	On
Apply moco to	parent and nav
Remeasure	18 TRs
Reacq. threshold	0.50
Feedback delay	80 ms
Moco ref. image	Use Temp Ref
K-space streaming	None
ABCD navigator	On
Apply freq to	parent and nav

**Sequence - Assistant**

Allowed delay	0 s
---------------	-----



\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_streaming\_64ch\ABCD\_fMRI\_DistortionMap\_PA

TA: 0:14 PM: FIX Voxel size: 2.4×2.4×2.4 mmPAT: Off Rel. SNR: 1.00 : epse

### Properties

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	On
Start measurements	Single measurement

### Routine

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	7030 ms
TE	80.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HC1-7

### Contrast - Common

TR	7030 ms
TE	80.0 ms
MTC	Off
Magn. preparation	None
Fat suppr.	Fat sat.
Fat sat. mode	Weak

### Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Delay in TR	0 ms
Multiple series	Off

### Resolution - Common

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
Base resolution	90
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

### Resolution - iPAT

Accel. mode	None
-------------	------

### Resolution - Filter Image

Distortion Corr.	Off
Prescan Normalize	Off

### Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off
Hamming	Off

### Geometry - Common

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	7030 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

### Geometry - AutoAlign

Slice group	1
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A29.8 F12.4
L	0.0 mm
A	29.8 mm
F	12.4 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

### Geometry - Saturation

Fat suppr.	Fat sat.
Fat sat. mode	Weak
Special sat.	None

### Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

### System - Miscellaneous

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---

**System - Miscellaneous**

Coil Select Mode	Off - All
------------------	-----------

**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	144 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
--------------	----------

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	2.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	7030 ms
Concatenations	1

**Inline - Common**

Subtract	Off
Measurements	1
StdDev	Off
Save original images	On

**Inline - MIP**

MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On

**Inline - Composing**

Inline Composing	Off
Distortion Corr.	Off

**Sequence - Part 1**

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	On
Echo spacing	0.51 ms
Bandwidth	2778 Hz/Px

**Sequence - Part 2**

EPI factor	90
RF pulse type	Normal

**Sequence - Part 2**

Gradient mode	Performance
---------------	-------------

**Sequence - Special**

Dummy Scans	1
Reverse Phase Encoding	On

\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_streaming\_64ch\ABCD\_fMRI\_DistortionMap\_AP

TA: 0:14 PM: FIX Voxel size: 2.4×2.4×2.4 mmPAT: Off Rel. SNR: 1.00 : epse

### Properties

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	Single measurement

### Routine

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	7030 ms
TE	80.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HC1-7

### Contrast - Common

TR	7030 ms
TE	80.0 ms
MTC	Off
Magn. preparation	None
Fat suppr.	Fat sat.
Fat sat. mode	Weak

### Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Delay in TR	0 ms
Multiple series	Off

### Resolution - Common

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
Base resolution	90
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

### Resolution - iPAT

Accel. mode	None
-------------	------

### Resolution - Filter Image

Distortion Corr.	Off
Prescan Normalize	Off

### Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off
Hamming	Off

### Geometry - Common

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	7030 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

### Geometry - AutoAlign

Slice group	1
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A29.8 F12.4
L	0.0 mm
A	29.8 mm
F	12.4 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

### Geometry - Saturation

Fat suppr.	Fat sat.
Fat sat. mode	Weak
Special sat.	None

### Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

### System - Miscellaneous

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---

**System - Miscellaneous**

Coil Select Mode	Off - All
------------------	-----------

**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	144 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
--------------	----------

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	2.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	7030 ms
Concatenations	1

**Inline - Common**

Subtract	Off
Measurements	1
StdDev	Off
Save original images	On

**Inline - MIP**

MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On

**Inline - Composing**

Inline Composing	Off
Distortion Corr.	Off

**Sequence - Part 1**

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	On
Echo spacing	0.51 ms
Bandwidth	2778 Hz/Px

**Sequence - Part 2**

EPI factor	90
RF pulse type	Normal

**Sequence - Part 2**

Gradient mode	Performance
---------------	-------------

**Sequence - Special**

Dummy Scans	1
Reverse Phase Encoding	Off

\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_streaming\_64ch\ABCD\_fMRI\_rest

TA: 5:11 PM: FIX Voxel size: 2.4×2.4×2.4 mmPAT: 6 Rel. SNR: 1.00 : epfid

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	On
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	On
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	On
Start measurements	Single measurement

**Resolution - iPAT**

Accel. factor slice	6
Reference scan mode	EPI/separate

**Resolution - Filter Image**

Distortion Corr.	Off
Prescan Normalize	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off
Hamming	Off

**Routine**

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	800 ms
TE	30.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HC1-7

**Geometry - Common**

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	800 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

**Geometry - AutoAlign**

Slice group	1
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A29.8 F12.4
L	0.0 mm
A	29.8 mm
F	12.4 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

**Contrast - Common**

TR	800 ms
TE	30.0 ms
MTC	Off
Flip angle	52 deg
Fat suppr.	Fat sat.

**Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	383
Delay in TR	0 ms
Multiple series	Off

**Resolution - Common**

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
Base resolution	90
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

**Resolution - iPAT**

Accel. mode	Slice accel.
Accel. factor PE	1
Ref. lines PE	22

**Geometry - Saturation**

Fat suppr.	Fat sat.
Special sat.	None

**Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

**System - Miscellaneous**

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
Matrix Optimization	Off

**System - Miscellaneous**

AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	144 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Standard

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	Pulse/Trigger
Average cycle	No Signal ms
Average cycle	No Signal ms
Acquisition window	833 ms
Trigger pulse	1
Trigger delay	0 ms
TR	800 ms
Concatenations	1
Phases	1

**BOLD**

GLM Statistics	Off
Dynamic t-maps	Off
Ignore meas. at start	0
Ignore after transition	0
Model transition states	Off
Temp. highpass filter	Off
Threshold	4.00
Paradigm size	3
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Active
Motion correction	Off
Spatial filter	Off
Measurements	383
Delay in TR	0 ms
Multiple series	Off

**Sequence - Part 1**

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.51 ms
Bandwidth	2778 Hz/Px

**Sequence - Part 2**

EPI factor	90
RF pulse type	Normal
Gradient mode	Fast
Excitation	Standard

**Sequence - pTX Pulses****Sequence - Special**

Dummy Scans	0
K-space streaming	File
Physio recording	Continuous
Reverse Phase Encoding	On

\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_streaming\_64ch\ABCD\_fMRI\_rest

TA: 5:11 PM: FIX Voxel size: 2.4×2.4×2.4 mmPAT: 6 Rel. SNR: 1.00 : epfid

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	On
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	On
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	On
Start measurements	Single measurement

**Resolution - iPAT**

Accel. factor slice	6
Reference scan mode	EPI/separate

**Resolution - Filter Image**

Distortion Corr.	Off
Prescan Normalize	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off
Hamming	Off

**Routine**

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	800 ms
TE	30.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HC1-7

**Geometry - Common**

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	800 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

**Geometry - AutoAlign**

Slice group	1
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A29.8 F12.4
L	0.0 mm
A	29.8 mm
F	12.4 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

**Contrast - Common**

TR	800 ms
TE	30.0 ms
MTC	Off
Flip angle	52 deg
Fat suppr.	Fat sat.

**Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	383
Delay in TR	0 ms
Multiple series	Off

**Resolution - Common**

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
Base resolution	90
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

**Resolution - iPAT**

Accel. mode	Slice accel.
Accel. factor PE	1
Ref. lines PE	22

**Geometry - Saturation**

Fat suppr.	Fat sat.
Special sat.	None

**Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

**System - Miscellaneous**

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
Matrix Optimization	Off

**System - Miscellaneous**

AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	144 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Standard

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	Pulse/Trigger
Average cycle	No Signal ms
Average cycle	No Signal ms
Acquisition window	833 ms
Trigger pulse	1
Trigger delay	0 ms
TR	800 ms
Concatenations	1
Phases	1

**BOLD**

GLM Statistics	Off
Dynamic t-maps	Off
Ignore meas. at start	0
Ignore after transition	0
Model transition states	Off
Temp. highpass filter	Off
Threshold	4.00
Paradigm size	3
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Active
Motion correction	Off
Spatial filter	Off
Measurements	383
Delay in TR	0 ms
Multiple series	Off

**Sequence - Part 1**

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.51 ms
Bandwidth	2778 Hz/Px

**Sequence - Part 2**

EPI factor	90
RF pulse type	Normal
Gradient mode	Fast
Excitation	Standard

**Sequence - pTX Pulses****Sequence - Special**

Dummy Scans	0
K-space streaming	File
Physio recording	Continuous
Reverse Phase Encoding	On



\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_streaming\_64ch\ABCD\_fMRI\_DistortionMap\_PA

TA: 0:14 PM: FIX Voxel size: 2.4×2.4×2.4 mmPAT: Off Rel. SNR: 1.00 : epse

### Properties

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	On
Start measurements	Single measurement

### Routine

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	7030 ms
TE	80.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HC1-7

### Contrast - Common

TR	7030 ms
TE	80.0 ms
MTC	Off
Magn. preparation	None
Fat suppr.	Fat sat.
Fat sat. mode	Weak

### Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Delay in TR	0 ms
Multiple series	Off

### Resolution - Common

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
Base resolution	90
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

### Resolution - iPAT

Accel. mode	None
-------------	------

### Resolution - Filter Image

Distortion Corr.	Off
Prescan Normalize	Off

### Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off
Hamming	Off

### Geometry - Common

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	7030 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

### Geometry - AutoAlign

Slice group	1
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A29.8 F12.4
L	0.0 mm
A	29.8 mm
F	12.4 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

### Geometry - Saturation

Fat suppr.	Fat sat.
Fat sat. mode	Weak
Special sat.	None

### Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

### System - Miscellaneous

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---

**System - Miscellaneous**

Coil Select Mode	Off - All
------------------	-----------

**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	144 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
--------------	----------

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	2.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	7030 ms
Concatenations	1

**Inline - Common**

Subtract	Off
Measurements	1
StdDev	Off
Save original images	On

**Inline - MIP**

MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On

**Inline - Composing**

Inline Composing	Off
Distortion Corr.	Off

**Sequence - Part 1**

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	On
Echo spacing	0.51 ms
Bandwidth	2778 Hz/Px

**Sequence - Part 2**

EPI factor	90
RF pulse type	Normal

**Sequence - Part 2**

Gradient mode	Performance
---------------	-------------

**Sequence - Special**

Dummy Scans	1
Reverse Phase Encoding	On

\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_streaming\_64ch\ABCD\_fMRI\_DistortionMap\_AP

TA: 0:14 PM: FIX Voxel size: 2.4×2.4×2.4 mmPAT: Off Rel. SNR: 1.00 : epse

### Properties

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	Single measurement

### Routine

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	7030 ms
TE	80.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HC1-7

### Contrast - Common

TR	7030 ms
TE	80.0 ms
MTC	Off
Magn. preparation	None
Fat suppr.	Fat sat.
Fat sat. mode	Weak

### Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Delay in TR	0 ms
Multiple series	Off

### Resolution - Common

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
Base resolution	90
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

### Resolution - iPAT

Accel. mode	None
-------------	------

### Resolution - Filter Image

Distortion Corr.	Off
Prescan Normalize	Off

### Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off
Hamming	Off

### Geometry - Common

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	7030 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

### Geometry - AutoAlign

Slice group	1
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A29.8 F12.4
L	0.0 mm
A	29.8 mm
F	12.4 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

### Geometry - Saturation

Fat suppr.	Fat sat.
Fat sat. mode	Weak
Special sat.	None

### Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

### System - Miscellaneous

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---

**System - Miscellaneous**

Coil Select Mode	Off - All
------------------	-----------

**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	144 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
--------------	----------

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	2.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	7030 ms
Concatenations	1

**Inline - Common**

Subtract	Off
Measurements	1
StdDev	Off
Save original images	On

**Inline - MIP**

MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On

**Inline - Composing**

Inline Composing	Off
Distortion Corr.	Off

**Sequence - Part 1**

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	On
Echo spacing	0.51 ms
Bandwidth	2778 Hz/Px

**Sequence - Part 2**

EPI factor	90
RF pulse type	Normal

**Sequence - Part 2**

Gradient mode	Performance
---------------	-------------

**Sequence - Special**

Dummy Scans	1
Reverse Phase Encoding	Off

\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_streaming\_64ch\ABCD\_fMRI\_task\_St  
op

TA: 6:00 PM: FIX Voxel size: 2.4×2.4×2.4 mmPAT: 6 Rel. SNR: 1.00 : epfid

### Properties

Prio recon	Off
Load images to viewer	On
Inline movie	On
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	On
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	On
Start measurements	Single measurement

### Resolution - iPAT

Ref. lines PE	22
Accel. factor slice	6
Reference scan mode	EPI/separate

### Resolution - Filter Image

Distortion Corr.	Off
Prescan Normalize	Off

### Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off
Hamming	Off

### Routine

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	800 ms
TE	30.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HC1-7

### Geometry - Common

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	800 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

### Geometry - AutoAlign

Slice group	1
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A29.8 F12.4
L	0.0 mm
A	29.8 mm
F	12.4 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

### Contrast - Common

TR	800 ms
TE	30.0 ms
MTC	Off
Flip angle	52 deg
Fat suppr.	Fat sat.

### Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	445
Delay in TR	0 ms
Multiple series	Off

### Resolution - Common

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
Base resolution	90
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

### Resolution - iPAT

Accel. mode	Slice accel.
Accel. factor PE	1

### Geometry - Saturation

Fat suppr.	Fat sat.
Special sat.	None

### Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

### System - Miscellaneous

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P

**System - Miscellaneous**

Transversal	F >> H
Coil Combine Mode	Sum of Squares
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	144 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Standard

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	Pulse/Trigger
Average cycle	No Signal ms
Average cycle	No Signal ms
Acquisition window	833 ms
Trigger pulse	1
Trigger delay	0 ms
TR	800 ms
Concatenations	1
Phases	1

**BOLD**

GLM Statistics	Off
Dynamic t-maps	Off
Ignore meas. at start	0
Ignore after transition	0
Model transition states	Off
Temp. highpass filter	Off
Threshold	4.00
Paradigm size	3
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Active
Motion correction	Off
Spatial filter	Off
Measurements	445
Delay in TR	0 ms
Multiple series	Off

**Sequence - Part 1**

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.51 ms
Bandwidth	2778 Hz/Px

**Sequence - Part 2**

EPI factor	90
RF pulse type	Normal
Gradient mode	Fast
Excitation	Standard

**Sequence - pTX Pulses****Sequence - Special**

Dummy Scans	0
K-space streaming	File
Physio recording	Continuous
Reverse Phase Encoding	On

\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_streaming\_64ch\ABCD\_fMRI\_task\_St  
op

TA: 6:00 PM: FIX Voxel size: 2.4×2.4×2.4 mmPAT: 6 Rel. SNR: 1.00 : epfid

### Properties

Prio recon	Off
Load images to viewer	On
Inline movie	On
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	On
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	On
Start measurements	Single measurement

### Resolution - iPAT

Ref. lines PE	22
Accel. factor slice	6
Reference scan mode	EPI/separate

### Resolution - Filter Image

Distortion Corr.	Off
Prescan Normalize	Off

### Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off
Hamming	Off

### Routine

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	800 ms
TE	30.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HC1-7

### Geometry - Common

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	800 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

### Contrast - Common

TR	800 ms
TE	30.0 ms
MTC	Off
Flip angle	52 deg
Fat suppr.	Fat sat.

### Geometry - AutoAlign

Slice group	1
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A29.8 F12.4
L	0.0 mm
A	29.8 mm
F	12.4 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

### Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	445
Delay in TR	0 ms
Multiple series	Off

### Geometry - Saturation

Fat suppr.	Fat sat.
Special sat.	None

### Resolution - Common

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
Base resolution	90
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

### Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

### System - Miscellaneous

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P

### Resolution - iPAT

Accel. mode	Slice accel.
Accel. factor PE	1

**System - Miscellaneous**

Transversal	F >> H
Coil Combine Mode	Sum of Squares
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	144 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Standard

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	Pulse/Trigger
Average cycle	No Signal ms
Average cycle	No Signal ms
Acquisition window	833 ms
Trigger pulse	1
Trigger delay	0 ms
TR	800 ms
Concatenations	1
Phases	1

**BOLD**

GLM Statistics	Off
Dynamic t-maps	Off
Ignore meas. at start	0
Ignore after transition	0
Model transition states	Off
Temp. highpass filter	Off
Threshold	4.00
Paradigm size	3
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Active
Motion correction	Off
Spatial filter	Off
Measurements	445
Delay in TR	0 ms
Multiple series	Off

**Sequence - Part 1**

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.51 ms
Bandwidth	2778 Hz/Px

**Sequence - Part 2**

EPI factor	90
RF pulse type	Normal
Gradient mode	Fast
Excitation	Standard

**Sequence - pTX Pulses****Sequence - Special**

Dummy Scans	0
K-space streaming	File
Physio recording	Continuous
Reverse Phase Encoding	On



\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_streaming\_64ch\ABCD\_fMRI\_Distorti  
onMap\_PA

TA: 0:14 PM: FIX Voxel size: 2.4×2.4×2.4 mmPAT: Off Rel. SNR: 1.00 : epse

### Properties

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	On
Start measurements	Single measurement

### Routine

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	7030 ms
TE	80.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HC1-7

### Contrast - Common

TR	7030 ms
TE	80.0 ms
MTC	Off
Magn. preparation	None
Fat suppr.	Fat sat.
Fat sat. mode	Weak

### Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Delay in TR	0 ms
Multiple series	Off

### Resolution - Common

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
Base resolution	90
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

### Resolution - iPAT

Accel. mode	None
-------------	------

### Resolution - Filter Image

Distortion Corr.	Off
Prescan Normalize	Off

### Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off
Hamming	Off

### Geometry - Common

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	7030 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

### Geometry - AutoAlign

Slice group	1
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A29.8 F12.4
L	0.0 mm
A	29.8 mm
F	12.4 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

### Geometry - Saturation

Fat suppr.	Fat sat.
Fat sat. mode	Weak
Special sat.	None

### Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

### System - Miscellaneous

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---

**System - Miscellaneous**

Coil Select Mode	Off - All
------------------	-----------

**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	144 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
--------------	----------

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	2.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	7030 ms
Concatenations	1

**Inline - Common**

Subtract	Off
Measurements	1
StdDev	Off
Save original images	On

**Inline - MIP**

MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On

**Inline - Composing**

Inline Composing	Off
Distortion Corr.	Off

**Sequence - Part 1**

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	On
Echo spacing	0.51 ms
Bandwidth	2778 Hz/Px

**Sequence - Part 2**

EPI factor	90
RF pulse type	Normal

**Sequence - Part 2**

Gradient mode	Performance
---------------	-------------

**Sequence - Special**

Dummy Scans	1
Reverse Phase Encoding	On

\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_streaming\_64ch\ABCD\_fMRI\_Distorti  
onMap\_AP

TA: 0:14 PM: FIX Voxel size: 2.4×2.4×2.4 mmPAT: Off Rel. SNR: 1.00 : epse

### Properties

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	Single measurement

### Routine

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	7030 ms
TE	80.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HC1-7

### Contrast - Common

TR	7030 ms
TE	80.0 ms
MTC	Off
Magn. preparation	None
Fat suppr.	Fat sat.
Fat sat. mode	Weak

### Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Delay in TR	0 ms
Multiple series	Off

### Resolution - Common

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
Base resolution	90
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

### Resolution - iPAT

Accel. mode	None
-------------	------

### Resolution - Filter Image

Distortion Corr.	Off
Prescan Normalize	Off

### Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off
Hamming	Off

### Geometry - Common

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	7030 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

### Geometry - AutoAlign

Slice group	1
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A29.8 F12.4
L	0.0 mm
A	29.8 mm
F	12.4 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

### Geometry - Saturation

Fat suppr.	Fat sat.
Fat sat. mode	Weak
Special sat.	None

### Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

### System - Miscellaneous

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---

**System - Miscellaneous**

Coil Select Mode	Off - All
------------------	-----------

**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	144 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
--------------	----------

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	2.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	7030 ms
Concatenations	1

**Inline - Common**

Subtract	Off
Measurements	1
StdDev	Off
Save original images	On

**Inline - MIP**

MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On

**Inline - Composing**

Inline Composing	Off
Distortion Corr.	Off

**Sequence - Part 1**

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	On
Echo spacing	0.51 ms
Bandwidth	2778 Hz/Px

**Sequence - Part 2**

EPI factor	90
RF pulse type	Normal

**Sequence - Part 2**

Gradient mode	Performance
---------------	-------------

**Sequence - Special**

Dummy Scans	1
Reverse Phase Encoding	Off

\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_streaming\_64ch\ABCD\_fMRI\_task\_E  
motional\_n-back

TA: 5:00 PM: FIX Voxel size: 2.4×2.4×2.4 mmPAT: 6 Rel. SNR: 1.00 : epfid

### Properties

Prio recon	Off
Load images to viewer	On
Inline movie	On
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	On
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	On
Start measurements	Single measurement

### Resolution - iPAT

Ref. lines PE	22
Accel. factor slice	6
Reference scan mode	EPI/separate

### Resolution - Filter Image

Distortion Corr.	Off
Prescan Normalize	Off

### Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off
Hamming	Off

### Routine

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	800 ms
TE	30.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HC1-7

### Geometry - Common

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	800 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

### Contrast - Common

TR	800 ms
TE	30.0 ms
MTC	Off
Flip angle	52 deg
Fat suppr.	Fat sat.

### Geometry - AutoAlign

Slice group	1
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A29.8 F12.4
L	0.0 mm
A	29.8 mm
F	12.4 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

### Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	370
Delay in TR	0 ms
Multiple series	Off

### Geometry - Saturation

Fat suppr.	Fat sat.
Special sat.	None

### Resolution - Common

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
Base resolution	90
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

### Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

### System - Miscellaneous

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P

### Resolution - iPAT

Accel. mode	Slice accel.
Accel. factor PE	1

**System - Miscellaneous**

Transversal	F >> H
Coil Combine Mode	Sum of Squares
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	144 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Standard

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	Pulse/Trigger
Average cycle	No Signal ms
Average cycle	No Signal ms
Acquisition window	833 ms
Trigger pulse	1
Trigger delay	0 ms
TR	800 ms
Concatenations	1
Phases	1

**BOLD**

GLM Statistics	Off
Dynamic t-maps	Off
Ignore meas. at start	0
Ignore after transition	0
Model transition states	Off
Temp. highpass filter	Off
Threshold	4.00
Paradigm size	3
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Active
Motion correction	Off
Spatial filter	Off
Measurements	370
Delay in TR	0 ms
Multiple series	Off

**Sequence - Part 1**

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.51 ms
Bandwidth	2778 Hz/Px

**Sequence - Part 2**

EPI factor	90
RF pulse type	Normal
Gradient mode	Fast
Excitation	Standard

**Sequence - pTX Pulses****Sequence - Special**

Dummy Scans	0
K-space streaming	File
Physio recording	Continuous
Reverse Phase Encoding	On

\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_streaming\_64ch\ABCD\_fMRI\_task\_E  
motional\_n-back

TA: 5:00 PM: FIX Voxel size: 2.4×2.4×2.4 mmPAT: 6 Rel. SNR: 1.00 : epfid

### Properties

Prio recon	Off
Load images to viewer	On
Inline movie	On
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	On
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	On
Start measurements	Single measurement

### Resolution - iPAT

Ref. lines PE	22
Accel. factor slice	6
Reference scan mode	EPI/separate

### Resolution - Filter Image

Distortion Corr.	Off
Prescan Normalize	Off

### Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off
Hamming	Off

### Routine

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	800 ms
TE	30.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HC1-7

### Geometry - Common

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	800 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

### Geometry - AutoAlign

Slice group	1
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A29.8 F12.4
L	0.0 mm
A	29.8 mm
F	12.4 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

### Contrast - Common

TR	800 ms
TE	30.0 ms
MTC	Off
Flip angle	52 deg
Fat suppr.	Fat sat.

### Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	370
Delay in TR	0 ms
Multiple series	Off

### Resolution - Common

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
Base resolution	90
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

### Resolution - iPAT

Accel. mode	Slice accel.
Accel. factor PE	1

### Geometry - Saturation

Fat suppr.	Fat sat.
Special sat.	None

### Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

### System - Miscellaneous

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P

**System - Miscellaneous**

Transversal	F >> H
Coil Combine Mode	Sum of Squares
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	144 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Standard

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	Pulse/Trigger
Average cycle	No Signal ms
Average cycle	No Signal ms
Acquisition window	833 ms
Trigger pulse	1
Trigger delay	0 ms
TR	800 ms
Concatenations	1
Phases	1

**BOLD**

GLM Statistics	Off
Dynamic t-maps	Off
Ignore meas. at start	0
Ignore after transition	0
Model transition states	Off
Temp. highpass filter	Off
Threshold	4.00
Paradigm size	3
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Active
Motion correction	Off
Spatial filter	Off
Measurements	370
Delay in TR	0 ms
Multiple series	Off

**Sequence - Part 1**

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.51 ms
Bandwidth	2778 Hz/Px

**Sequence - Part 2**

EPI factor	90
RF pulse type	Normal
Gradient mode	Fast
Excitation	Standard

**Sequence - pTX Pulses****Sequence - Special**

Dummy Scans	0
K-space streaming	File
Physio recording	Continuous
Reverse Phase Encoding	On



\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_streaming\_64ch\ABCD\_fMRI\_Distorti  
onMap\_PA

TA: 0:14 PM: FIX Voxel size: 2.4×2.4×2.4 mmPAT: Off Rel. SNR: 1.00 : epse

### Properties

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	On
Start measurements	Single measurement

### Routine

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	7030 ms
TE	80.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HC1-7

### Contrast - Common

TR	7030 ms
TE	80.0 ms
MTC	Off
Magn. preparation	None
Fat suppr.	Fat sat.
Fat sat. mode	Weak

### Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Delay in TR	0 ms
Multiple series	Off

### Resolution - Common

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
Base resolution	90
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

### Resolution - iPAT

Accel. mode	None
-------------	------

### Resolution - Filter Image

Distortion Corr.	Off
Prescan Normalize	Off

### Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off
Hamming	Off

### Geometry - Common

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	7030 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

### Geometry - AutoAlign

Slice group	1
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A29.8 F12.4
L	0.0 mm
A	29.8 mm
F	12.4 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

### Geometry - Saturation

Fat suppr.	Fat sat.
Fat sat. mode	Weak
Special sat.	None

### Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

### System - Miscellaneous

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---

**System - Miscellaneous**

Coil Select Mode	Off - All
------------------	-----------

**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	144 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
--------------	----------

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	2.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	7030 ms
Concatenations	1

**Inline - Common**

Subtract	Off
Measurements	1
StdDev	Off
Save original images	On

**Inline - MIP**

MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On

**Inline - Composing**

Inline Composing	Off
Distortion Corr.	Off

**Sequence - Part 1**

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	On
Echo spacing	0.51 ms
Bandwidth	2778 Hz/Px

**Sequence - Part 2**

EPI factor	90
RF pulse type	Normal

**Sequence - Part 2**

Gradient mode	Performance
---------------	-------------

**Sequence - Special**

Dummy Scans	1
Reverse Phase Encoding	On

\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_streaming\_64ch\ABCD\_fMRI\_DistortionMap\_AP

TA: 0:14 PM: FIX Voxel size: 2.4×2.4×2.4 mmPAT: Off Rel. SNR: 1.00 : epse

### Properties

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	Single measurement

### Routine

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	7030 ms
TE	80.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HC1-7

### Contrast - Common

TR	7030 ms
TE	80.0 ms
MTC	Off
Magn. preparation	None
Fat suppr.	Fat sat.
Fat sat. mode	Weak

### Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Delay in TR	0 ms
Multiple series	Off

### Resolution - Common

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
Base resolution	90
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

### Resolution - iPAT

Accel. mode	None
-------------	------

### Resolution - Filter Image

Distortion Corr.	Off
Prescan Normalize	Off

### Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off
Hamming	Off

### Geometry - Common

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	7030 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

### Geometry - AutoAlign

Slice group	1
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A29.8 F12.4
L	0.0 mm
A	29.8 mm
F	12.4 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

### Geometry - Saturation

Fat suppr.	Fat sat.
Fat sat. mode	Weak
Special sat.	None

### Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

### System - Miscellaneous

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---

**System - Miscellaneous**

Coil Select Mode	Off - All
------------------	-----------

**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	144 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
--------------	----------

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	2.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	7030 ms
Concatenations	1

**Inline - Common**

Subtract	Off
Measurements	1
StdDev	Off
Save original images	On

**Inline - MIP**

MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On

**Inline - Composing**

Inline Composing	Off
Distortion Corr.	Off

**Sequence - Part 1**

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	On
Echo spacing	0.51 ms
Bandwidth	2778 Hz/Px

**Sequence - Part 2**

EPI factor	90
RF pulse type	Normal

**Sequence - Part 2**

Gradient mode	Performance
---------------	-------------

**Sequence - Special**

Dummy Scans	1
Reverse Phase Encoding	Off

\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_streaming\_64ch\ABCD\_fMRI\_task\_M  
onetary\_Incentive

TA: 5:33 PM: FIX Voxel size: 2.4×2.4×2.4 mmPAT: 6 Rel. SNR: 1.00 : epfid

### Properties

Prio recon	Off
Load images to viewer	On
Inline movie	On
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	On
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	On
Start measurements	Single measurement

### Routine

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	800 ms
TE	30.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HC1-7

### Contrast - Common

TR	800 ms
TE	30.0 ms
MTC	Off
Flip angle	52 deg
Fat suppr.	Fat sat.

### Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	411
Delay in TR	0 ms
Multiple series	Off

### Resolution - Common

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
Base resolution	90
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

### Resolution - iPAT

Accel. mode	Slice accel.
Accel. factor PE	1

### Resolution - iPAT

Ref. lines PE	22
Accel. factor slice	6
Reference scan mode	EPI/separate

### Resolution - Filter Image

Distortion Corr.	Off
Prescan Normalize	Off

### Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off
Hamming	Off

### Geometry - Common

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	800 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

### Geometry - AutoAlign

Slice group	1
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A29.8 F12.4
L	0.0 mm
A	29.8 mm
F	12.4 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

### Geometry - Saturation

Fat suppr.	Fat sat.
Special sat.	None

### Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

### System - Miscellaneous

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P

**System - Miscellaneous**

Transversal	F >> H
Coil Combine Mode	Sum of Squares
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	144 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Standard

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	Pulse/Trigger
Average cycle	No Signal ms
Average cycle	No Signal ms
Acquisition window	833 ms
Trigger pulse	1
Trigger delay	0 ms
TR	800 ms
Concatenations	1
Phases	1

**BOLD**

GLM Statistics	Off
Dynamic t-maps	Off
Ignore meas. at start	0
Ignore after transition	0
Model transition states	Off
Temp. highpass filter	Off
Threshold	4.00
Paradigm size	3
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Active
Motion correction	Off
Spatial filter	Off
Measurements	411
Delay in TR	0 ms
Multiple series	Off

**Sequence - Part 1**

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.51 ms
Bandwidth	2778 Hz/Px

**Sequence - Part 2**

EPI factor	90
RF pulse type	Normal
Gradient mode	Fast
Excitation	Standard

**Sequence - pTX Pulses****Sequence - Special**

Dummy Scans	0
K-space streaming	File
Physio recording	Continuous
Reverse Phase Encoding	On

\\USER\ABCD\20190320\ABCD\_PROTOCOL\_one\_session\_streaming\_64ch\ABCD\_fMRI\_task\_Monetary\_Incentive

TA: 5:33 PM: FIX Voxel size: 2.4×2.4×2.4 mmPAT: 6 Rel. SNR: 1.00 : epfid

### Properties

Prio recon	Off
Load images to viewer	On
Inline movie	On
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	On
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	On
Start measurements	Single measurement

### Routine

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	800 ms
TE	30.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HC1-7

### Contrast - Common

TR	800 ms
TE	30.0 ms
MTC	Off
Flip angle	52 deg
Fat suppr.	Fat sat.

### Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	411
Delay in TR	0 ms
Multiple series	Off

### Resolution - Common

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
Base resolution	90
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

### Resolution - iPAT

Accel. mode	Slice accel.
Accel. factor PE	1

### Resolution - iPAT

Ref. lines PE	22
Accel. factor slice	6
Reference scan mode	EPI/separate

### Resolution - Filter Image

Distortion Corr.	Off
Prescan Normalize	Off

### Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off
Hamming	Off

### Geometry - Common

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	800 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

### Geometry - AutoAlign

Slice group	1
Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A29.8 F12.4
L	0.0 mm
A	29.8 mm
F	12.4 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

### Geometry - Saturation

Fat suppr.	Fat sat.
Special sat.	None

### Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

### System - Miscellaneous

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P

**System - Miscellaneous**

Transversal	F >> H
Coil Combine Mode	Sum of Squares
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A29.8 F12.4 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	144 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Standard

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	Pulse/Trigger
Average cycle	No Signal ms
Average cycle	No Signal ms
Acquisition window	833 ms
Trigger pulse	1
Trigger delay	0 ms
TR	800 ms
Concatenations	1
Phases	1

**BOLD**

GLM Statistics	Off
Dynamic t-maps	Off
Ignore meas. at start	0
Ignore after transition	0
Model transition states	Off
Temp. highpass filter	Off
Threshold	4.00
Paradigm size	3
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Active
Motion correction	Off
Spatial filter	Off
Measurements	411
Delay in TR	0 ms
Multiple series	Off

**Sequence - Part 1**

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.51 ms
Bandwidth	2778 Hz/Px

**Sequence - Part 2**

EPI factor	90
RF pulse type	Normal
Gradient mode	Fast
Excitation	Standard

**Sequence - pTX Pulses****Sequence - Special**

Dummy Scans	0
K-space streaming	File
Physio recording	Continuous
Reverse Phase Encoding	On



\\USER\ABCD\20190320\ABCD\_QA\_full\_64ch\localizer\_64ch

TA: 0:12 PM: REF Voxel size: 0.5×0.5×7.0 mmPAT: Off Rel. SNR: 1.00 : fl

**Properties**

Prio recon	On
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	On
Load images to graphic segments	On
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	Single measurement

**Routine**

Slice group	1
Slices	1
Dist. factor	20 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice group	2
Slices	1
Dist. factor	20 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
Slice group	3
Slices	1
Dist. factor	20 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Coronal
Phase enc. dir.	R >> L
AutoAlign	---
Phase oversampling	0 %
FoV read	250 mm
FoV phase	100.0 %
Slice thickness	7.0 mm
TR	7.5 ms
TE	3.69 ms
Averages	2
Concatenations	3
Filter	Prescan Normalize, Elliptical filter
Coil elements	HC1-7;NC1,2

**Contrast - Common**

TR	7.5 ms
TE	3.69 ms
TD	0 ms
MTC	Off
Magn. preparation	None
Flip angle	20 deg
Fat suppr.	None
Water suppr.	None
SWI	Off

**Contrast - Dynamic**

Averages	2
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1

**Contrast - Dynamic**

Multiple series	Each measurement
-----------------	------------------

**Resolution - Common**

FoV read	250 mm
FoV phase	100.0 %
Slice thickness	7.0 mm
Base resolution	256
Phase resolution	91 %
Phase partial Fourier	Off
Interpolation	On

**Resolution - iPAT**

PAT mode	None
----------	------

**Resolution - Filter Image**

Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	On
Unfiltered images	Off
Normalize	Off
B1 filter	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	On

**Geometry - Common**

Slice group	1
Slices	1
Dist. factor	20 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice group	2
Slices	1
Dist. factor	20 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
Slice group	3
Slices	1
Dist. factor	20 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Coronal
Phase enc. dir.	R >> L
FoV read	250 mm
FoV phase	100.0 %
Slice thickness	7.0 mm
TR	7.5 ms
Multi-slice mode	Sequential
Series	Interleaved
Concatenations	3

**Geometry - AutoAlign**

Slice group	1
Position	L0.0 A20.0 H0.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice group	2
Position	L0.0 A20.0 H0.0 mm

**Geometry - AutoAlign**

Orientation	Transversal
Phase enc. dir.	A >> P
Slice group	3
Position	L0.0 A20.0 H0.0 mm
Orientation	Coronal
Phase enc. dir.	R >> L
AutoAlign	---
Initial Position	L0.0 A20.0 H0.0
L	0.0 mm
A	20.0 mm
H	0.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Sagittal

**Geometry - Saturation**

Saturation mode	Standard
Fat suppr.	None
Water suppr.	None
Special sat.	None

**Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

**System - Miscellaneous**

Positioning mode	REF
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Tune up
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
A >> P	263 mm
R >> L	350 mm
F >> H	350 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Slice-sel.

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	7.5 ms
Concatenations	3
Segments	1

**Physio - Cardiac**

Tagging	None
Magn. preparation	None
Fat suppr.	None
Dark blood	Off
FoV read	250 mm
FoV phase	100.0 %
Phase resolution	91 %

**Physio - PACE**

Resp. control	Off
Concatenations	3

**Inline - Common**

Subtract	Off
Measurements	1
StdDev	Off
Liver registration	Off
Save original images	On

**Inline - MIP**

MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On

**Inline - Soft Tissue**

Wash - In	Off
Wash - Out	Off
TTP	Off
PEI	Off
MIP - time	Off
Measurements	1

**Inline - Composing**

Inline Composing	Off
Distortion Corr.	Off

**Inline - MapIt**

Save original images	On
MapIt	None
Flip angle	20 deg
Measurements	1
Contrasts	1
TR	7.5 ms
TE	3.69 ms

**Sequence - Part 1**

Introduction	On
--------------	----

**Sequence - Part 1**

Dimension	2D
Phase stabilisation	Off
Asymmetric echo	Allowed
Contrasts	1
Flow comp.	No
Multi-slice mode	Sequential
Bandwidth	320 Hz/Px

**Sequence - Part 2**

Segments	1
Acoustic noise reduction	None
RF pulse type	Fast
Gradient mode	Fast
Excitation	Slice-sel.
RF spoiling	On

**Sequence - Assistant**

Mode	Off
Allowed delay	0 s

\\USER\ABCD\20190320\ABCD\_QA\_full\_64ch\localizer\_64ch\_uncombined

TA: 0:12 PM: REF Voxel size: 0.5×0.5×7.0 mmPAT: Off Rel. SNR: 1.00 : fl

**Properties**

Prio recon	On
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	Single measurement

**Routine**

Slice group	1
Slices	1
Dist. factor	20 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice group	2
Slices	1
Dist. factor	20 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
Slice group	3
Slices	1
Dist. factor	20 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Coronal
Phase enc. dir.	R >> L
AutoAlign	---
Phase oversampling	0 %
FoV read	250 mm
FoV phase	100.0 %
Slice thickness	7.0 mm
TR	7.5 ms
TE	3.69 ms
Averages	2
Concatenations	3
Filter	Prescan Normalize, Elliptical filter
Coil elements	HC1-7;NC1,2

**Contrast - Common**

TR	7.5 ms
TE	3.69 ms
TD	0 ms
MTC	Off
Magn. preparation	None
Flip angle	20 deg
Fat suppr.	None
Water suppr.	None
SWI	Off

**Contrast - Dynamic**

Averages	2
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1

**Contrast - Dynamic**

Multiple series	Each measurement
-----------------	------------------

**Resolution - Common**

FoV read	250 mm
FoV phase	100.0 %
Slice thickness	7.0 mm
Base resolution	256
Phase resolution	91 %
Phase partial Fourier	Off
Interpolation	On

**Resolution - iPAT**

PAT mode	None
----------	------

**Resolution - Filter Image**

Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	On
Unfiltered images	Off
Normalize	Off
B1 filter	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	On

**Geometry - Common**

Slice group	1
Slices	1
Dist. factor	20 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice group	2
Slices	1
Dist. factor	20 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
Slice group	3
Slices	1
Dist. factor	20 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Coronal
Phase enc. dir.	R >> L
FoV read	250 mm
FoV phase	100.0 %
Slice thickness	7.0 mm
TR	7.5 ms
Multi-slice mode	Sequential
Series	Interleaved
Concatenations	3

**Geometry - AutoAlign**

Slice group	1
Position	L0.0 A20.0 H0.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice group	2
Position	L0.0 A20.0 H0.0 mm

**Geometry - AutoAlign**

Orientation	Transversal
Phase enc. dir.	A >> P
Slice group	3
Position	L0.0 A20.0 H0.0 mm
Orientation	Coronal
Phase enc. dir.	R >> L
AutoAlign	---
Initial Position	L0.0 A20.0 H0.0
L	0.0 mm
A	20.0 mm
H	0.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Sagittal

**Geometry - Saturation**

Saturation mode	Standard
Fat suppr.	None
Water suppr.	None
Special sat.	None

**Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

**System - Miscellaneous**

Positioning mode	REF
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
Save uncombined	On
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Tune up
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
A >> P	263 mm
R >> L	350 mm
F >> H	350 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Slice-sel.

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	7.5 ms
Concatenations	3
Segments	1

**Physio - Cardiac**

Tagging	None
Magn. preparation	None
Fat suppr.	None
Dark blood	Off
FoV read	250 mm
FoV phase	100.0 %
Phase resolution	91 %

**Physio - PACE**

Resp. control	Off
Concatenations	3

**Inline - Common**

Subtract	Off
Measurements	1
StdDev	Off
Liver registration	Off
Save original images	On

**Inline - MIP**

MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On

**Inline - Soft Tissue**

Wash - In	Off
Wash - Out	Off
TTP	Off
PEI	Off
MIP - time	Off
Measurements	1

**Inline - Composing**

Inline Composing	Off
Distortion Corr.	Off

**Inline - MapIt**

Save original images	On
MapIt	None
Flip angle	20 deg
Measurements	1
Contrasts	1
TR	7.5 ms
TE	3.69 ms

**Sequence - Part 1**

Introduction	On
--------------	----

**Sequence - Part 1**

Dimension	2D
Phase stabilisation	Off
Asymmetric echo	Allowed
Contrasts	1
Flow comp.	No
Multi-slice mode	Sequential
Bandwidth	320 Hz/Px

**Sequence - Part 2**

Segments	1
Acoustic noise reduction	None
RF pulse type	Fast
Gradient mode	Fast
Excitation	Slice-sel.
RF spoiling	On

**Sequence - Assistant**

Mode	Off
Allowed delay	0 s

\\USER\ABCD\20190320\ABCD\_QA\_full\_64ch\SNR\_Map

TA: 0:58 PM: REF Voxel size: 0.5×0.5×5.0 mmRel. SNR: 1.00 : fl

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	On
Load images to graphic segments	On
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	Off
Wait for user to start	Off
Start measurements	Single measurement

**Routine**

Slice group	1
Slices	1
Dist. factor	20 %
Position	L0.0 A14.0 F7.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	192 mm
FoV phase	100.0 %
Slice thickness	5.0 mm
TR	30.0 ms
TE	6.0 ms
Averages	4
Concatenations	1
Filter	None
Coil elements	HC1-7;NC1,2

**Contrast - Common**

TR	30.0 ms
TE	6.0 ms
MTC	Off
Flip angle	10 deg
Fat suppr.	None
Water suppr.	None

**Contrast - Dynamic**

Averages	4
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1
Multiple series	Off

**Resolution - Common**

FoV read	192 mm
FoV phase	100.0 %
Slice thickness	5.0 mm
Base resolution	384
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

**Resolution - Filter Image**

Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	Off

**Resolution - Filter Image**

Normalize	Off
B1 filter	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off

**Geometry - Common**

Slice group	1
Slices	1
Dist. factor	20 %
Position	L0.0 A14.0 F7.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	192 mm
FoV phase	100.0 %
Slice thickness	5.0 mm
TR	30.0 ms
Multi-slice mode	Sequential
Series	Ascending
Concatenations	1

**Geometry - AutoAlign**

Slice group	1
Position	L0.0 A14.0 F7.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A14.0 F7.0
L	0.0 mm
A	14.0 mm
F	7.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

**Geometry - Saturation**

Fat suppr.	None
Water suppr.	None
Special sat.	None

**Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

**System - Miscellaneous**

Positioning mode	REF
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Tune up
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
A >> P	263 mm
R >> L	350 mm
F >> H	350 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
--------------	----------

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	30.0 ms
Concatenations	1

**Inline - Common**

Subtract	Off
Measurements	1
StdDev	Off
Save original images	On

**Inline - MIP**

MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On

**Inline - Composing**

Inline Composing	Off
Distortion Corr.	Off

**Sequence - Part 1**

Introduction	Off
Dimension	2D
Contrasts	1
Multi-slice mode	Sequential
Bandwidth	390 Hz/Px

**Sequence - Part 2**

Gradient mode	Fast
RF spoiling	On

**Sequence - Nuclei**

TX/RX Nucleus	1H
---------------	----

**Sequence - Nuclei**

TX/RX delta frequency	0 Hz
TX Nucleus	None
TX delta frequency	0 Hz
Coil elements	HC1-7;NC1,2

**Sequence - Special**

ICE program	CoilArrayUtil
number of noise lines	384 lines
Optimal SNR	On
GFactor	On
Condition number	Off
Rx coil diode switching	On
coil channel reordering	Off

**Sequence - Assistant**

Mode	Off
------	-----



\\USER\ABCD\20190320\ABCD\_QA\_full\_64ch\ABCD\_QA\_fMRI

TA: 6:44 PM: FIX Voxel size: 2.4×2.4×2.4 mmPAT: 6 Rel. SNR: 1.00 : epfid

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	On
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	On
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	Off
Wait for user to start	Off
Start measurements	Single measurement

**Resolution - iPAT**

Accel. factor slice	6
Reference scan mode	EPI/separate

**Resolution - Filter Image**

Distortion Corr.	Off
Prescan Normalize	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off
Hamming	Off

**Routine**

Slice group	1
Slices	60
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	800 ms
TE	30.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HC1-7

**Geometry - Common**

Slice group	1
Slices	60
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	800 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

**Geometry - AutoAlign**

Slice group	1
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	Isocenter
L	0.0 mm
P	0.0 mm
H	0.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

**Contrast - Common**

TR	800 ms
TE	30.0 ms
MTC	Off
Flip angle	52 deg
Fat suppr.	Fat sat.

**Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	500
Delay in TR	0 ms
Multiple series	Off

**Resolution - Common**

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
Base resolution	90
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

**Resolution - iPAT**

Accel. mode	Slice accel.
Accel. factor PE	1
Ref. lines PE	22

**Geometry - Saturation**

Fat suppr.	Fat sat.
Special sat.	None

**Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

**System - Miscellaneous**

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
Matrix Optimization	Off

**System - Miscellaneous**

AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	144 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Standard

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	800 ms
Concatenations	1

**BOLD**

GLM Statistics	Off
Dynamic t-maps	Off
Ignore meas. at start	0
Ignore after transition	0
Model transition states	Off
Temp. highpass filter	Off
Threshold	4.00
Paradigm size	3
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Active
Motion correction	Off
Spatial filter	Off
Measurements	500
Delay in TR	0 ms
Multiple series	Off

**Sequence - Part 1**

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.51 ms
Bandwidth	2778 Hz/Px

**Sequence - Part 2**

EPI factor	90
RF pulse type	Normal
Gradient mode	Fast
Excitation	Standard

**Sequence - pTX Pulses****Sequence - Special**

Dummy Scans	0
K-space streaming	None
Physio recording	Off
Reverse Phase Encoding	On

\\USER\ABCD\20190320\ABCD\_QA\_full\_64ch\ABCD\_QA\_fMRI

TA: 6:44 PM: FIX Voxel size: 2.4×2.4×2.4 mmPAT: 6 Rel. SNR: 1.00 : epfid

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	On
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	On
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	Single measurement

**Resolution - iPAT**

Accel. factor slice	6
Reference scan mode	EPI/separate

**Resolution - Filter Image**

Distortion Corr.	Off
Prescan Normalize	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off
Hamming	Off

**Routine**

Slice group	1
Slices	60
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	800 ms
TE	30.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HC1-7

**Geometry - Common**

Slice group	1
Slices	60
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	800 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

**Geometry - AutoAlign**

Slice group	1
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	Isocenter
L	0.0 mm
P	0.0 mm
H	0.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

**Contrast - Common**

TR	800 ms
TE	30.0 ms
MTC	Off
Flip angle	52 deg
Fat suppr.	Fat sat.

**Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	500
Delay in TR	0 ms
Multiple series	Off

**Resolution - Common**

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
Base resolution	90
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

**Resolution - iPAT**

Accel. mode	Slice accel.
Accel. factor PE	1
Ref. lines PE	22

**Geometry - Saturation**

Fat suppr.	Fat sat.
Special sat.	None

**Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

**System - Miscellaneous**

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
Matrix Optimization	Off

**System - Miscellaneous**

AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	144 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Standard

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	800 ms
Concatenations	1

**BOLD**

GLM Statistics	Off
Dynamic t-maps	Off
Ignore meas. at start	0
Ignore after transition	0
Model transition states	Off
Temp. highpass filter	Off
Threshold	4.00
Paradigm size	3
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Active
Motion correction	Off
Spatial filter	Off
Measurements	500
Delay in TR	0 ms
Multiple series	Off

**Sequence - Part 1**

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.51 ms
Bandwidth	2778 Hz/Px

**Sequence - Part 2**

EPI factor	90
RF pulse type	Normal
Gradient mode	Fast
Excitation	Standard

**Sequence - pTX Pulses****Sequence - Special**

Dummy Scans	0
K-space streaming	None
Physio recording	Off
Reverse Phase Encoding	On

\\USER\ABCD\20190320\ABCD\_QA\_full\_64ch\ABCD\_QA\_dMRI

TA: 0:46 PM: FIX Voxel size: 1.7×1.7×1.7 mmPAT: 3 Rel. SNR: 1.00 : epse

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	Single measurement

**Routine**

Slice group	1
Slices	81
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	240 mm
FoV phase	100.0 %
Slice thickness	1.7 mm
TR	4200 ms
TE	88.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HC1-7

**Contrast - Common**

TR	4200 ms
TE	88.0 ms
MTC	Off
Magn. preparation	None
Fat suppr.	Fat sat.
Fat sat. mode	Strong

**Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Delay in TR	0 ms
Multiple series	Off

**Resolution - Common**

FoV read	240 mm
FoV phase	100.0 %
Slice thickness	1.7 mm
Base resolution	140
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off

**Resolution - iPAT**

Accel. mode	Slice accel.
Accel. factor PE	1

**Resolution - iPAT**

Ref. lines PE	71
Accel. factor slice	3
Reference scan mode	EPI/separate

**Resolution - Filter Image**

Distortion Corr.	Off
Prescan Normalize	Off
Dynamic Field Corr.	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off

**Geometry - Common**

Slice group	1
Slices	81
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	240 mm
FoV phase	100.0 %
Slice thickness	1.7 mm
TR	4200 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

**Geometry - AutoAlign**

Slice group	1
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	Isocenter
L	0.0 mm
P	0.0 mm
H	0.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

**Geometry - Saturation**

Fat suppr.	Fat sat.
Fat sat. mode	Strong
Special sat.	None

**Geometry - Navigator****Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

**System - Miscellaneous**

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T

**System - Miscellaneous**

Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Advanced
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
A >> P	240 mm
R >> L	240 mm
F >> H	138 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Standard

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	3.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	4200 ms
Concatenations	1

**Physio - PACE**

Resp. control	Off
Concatenations	1

**Diff - Neuro**

Diffusion mode	Free
Diff. directions	6
Diffusion Scheme	Monopolar
Diff. weightings	2
b-value 1	0 s/mm <sup>2</sup>
b-value 2	50 s/mm <sup>2</sup>
b-value 1	1
b-value 2	1
Diff. weighted images	On
Trace weighted images	Off
ADC maps	Off
FA maps	Off
Mosaic	On
Tensor	Off
Noise level	40

**Diff - Body**

Diffusion mode	Free
Diff. directions	6
Diffusion Scheme	Monopolar
Diff. weightings	2
b-value 1	0 s/mm <sup>2</sup>
b-value 2	50 s/mm <sup>2</sup>
b-value 1	1
b-value 2	1
Diff. weighted images	On
Trace weighted images	Off
ADC maps	Off
Exponential ADC Maps	Off
FA maps	Off
Invert Gray Scale	Off
Calculated Image	Off
b-Value >=	0 s/mm <sup>2</sup>
Noise level	40

**Diff - Composing**

Inline Composing	Off
Distortion Corr.	Off

**Sequence - Part 1**

Introduction	Off
Optimization	None
Multi-slice mode	Interleaved
Free echo spacing	On
Echo spacing	0.69 ms
Bandwidth	1700 Hz/Px

**Sequence - Part 2**

EPI factor	140
RF pulse type	Normal
Gradient mode	Performance*
Excitation	Standard

**Sequence - pTX Pulses****Sequence - Special**

K-space streaming	None
Reverse Phase Encoding	On

\\USER\ABCD\20190320\ABCD\_QA\_full\_64ch\FBIRN\_QA\_fMRI\_flip77

TA: 6:44 PM: FIX Voxel size: 3.4×3.4×4.0 mmPAT: Off Rel. SNR: 1.00 : efpid

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	On
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	On
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	Single measurement

**Routine**

Slice group	1
Slices	30
Dist. factor	25 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	220 mm
FoV phase	100.0 %
Slice thickness	4.0 mm
TR	2000 ms
TE	30.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HC1-7

**Contrast - Common**

TR	2000 ms
TE	30.0 ms
MTC	Off
Flip angle	77 deg
Fat suppr.	Fat sat.

**Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	200
Delay in TR	0 ms
Multiple series	Off

**Resolution - Common**

FoV read	220 mm
FoV phase	100.0 %
Slice thickness	4.0 mm
Base resolution	64
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

**Resolution - iPAT**

Accel. mode	None
-------------	------

**Resolution - Filter Image**

Distortion Corr.	Off
Prescan Normalize	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off
Hamming	Off

**Geometry - Common**

Slice group	1
Slices	30
Dist. factor	25 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	220 mm
FoV phase	100.0 %
Slice thickness	4.0 mm
TR	2000 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

**Geometry - AutoAlign**

Slice group	1
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	Isocenter
L	0.0 mm
P	0.0 mm
H	0.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

**Geometry - Saturation**

Fat suppr.	Fat sat.
Special sat.	None

**Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

**System - Miscellaneous**

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**Sequence - Part 2**

Excitation	Standard
------------	----------

**Sequence - pTX Pulses****System - Adjust Volume**

Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
A >> P	220 mm
R >> L	220 mm
F >> H	149 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Standard

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	2000 ms
Concatenations	1

**BOLD**

GLM Statistics	Off
Dynamic t-maps	Off
Ignore meas. at start	0
Ignore after transition	0
Model transition states	Off
Temp. highpass filter	Off
Threshold	4.00
Paradigm size	3
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Active
Motion correction	Off
Spatial filter	Off
Measurements	200
Delay in TR	0 ms
Multiple series	Off

**Sequence - Part 1**

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.5 ms
Bandwidth	2298 Hz/Px

**Sequence - Part 2**

EPI factor	64
RF pulse type	Normal
Gradient mode	Fast



\\USER\ABCD\20190320\ABCD\_QA\_full\_64ch\FBIRN\_QA\_fMRI\_flip10

TA: 6:44 PM: FIX Voxel size: 3.4×3.4×4.0 mmPAT: Off Rel. SNR: 1.00 : efpid

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	On
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	On
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	Single measurement

**Routine**

Slice group	1
Slices	30
Dist. factor	25 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	220 mm
FoV phase	100.0 %
Slice thickness	4.0 mm
TR	2000 ms
TE	30.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HC1-7

**Contrast - Common**

TR	2000 ms
TE	30.0 ms
MTC	Off
Flip angle	10 deg
Fat suppr.	Fat sat.

**Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	200
Delay in TR	0 ms
Multiple series	Off

**Resolution - Common**

FoV read	220 mm
FoV phase	100.0 %
Slice thickness	4.0 mm
Base resolution	64
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

**Resolution - iPAT**

Accel. mode	None
-------------	------

**Resolution - Filter Image**

Distortion Corr.	Off
Prescan Normalize	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off
Hamming	Off

**Geometry - Common**

Slice group	1
Slices	30
Dist. factor	25 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	220 mm
FoV phase	100.0 %
Slice thickness	4.0 mm
TR	2000 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

**Geometry - AutoAlign**

Slice group	1
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	Isocenter
L	0.0 mm
P	0.0 mm
H	0.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

**Geometry - Saturation**

Fat suppr.	Fat sat.
Special sat.	None

**Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

**System - Miscellaneous**

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**Sequence - Part 2**

Excitation	Standard
------------	----------

**Sequence - pTX Pulses****System - Adjust Volume**

Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
A >> P	220 mm
R >> L	220 mm
F >> H	149 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Standard

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	2000 ms
Concatenations	1

**BOLD**

GLM Statistics	Off
Dynamic t-maps	Off
Ignore meas. at start	0
Ignore after transition	0
Model transition states	Off
Temp. highpass filter	Off
Threshold	4.00
Paradigm size	3
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Active
Motion correction	Off
Spatial filter	Off
Measurements	200
Delay in TR	0 ms
Multiple series	Off

**Sequence - Part 1**

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.5 ms
Bandwidth	2298 Hz/Px

**Sequence - Part 2**

EPI factor	64
RF pulse type	Normal
Gradient mode	Fast

\\USER\ABCD\20190320\ABCD\_QA\_quick\_64ch\localizer\_64ch

TA: 0:12 PM: REF Voxel size: 0.5×0.5×7.0 mmPAT: Off Rel. SNR: 1.00 : fl

**Properties**

Prio recon	On
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	On
Load images to graphic segments	On
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	Single measurement

**Routine**

Slice group	1
Slices	1
Dist. factor	20 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice group	2
Slices	1
Dist. factor	20 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
Slice group	3
Slices	1
Dist. factor	20 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Coronal
Phase enc. dir.	R >> L
AutoAlign	---
Phase oversampling	0 %
FoV read	250 mm
FoV phase	100.0 %
Slice thickness	7.0 mm
TR	7.5 ms
TE	3.69 ms
Averages	2
Concatenations	3
Filter	Prescan Normalize, Elliptical filter
Coil elements	HC1-7;NC1,2

**Contrast - Common**

TR	7.5 ms
TE	3.69 ms
TD	0 ms
MTC	Off
Magn. preparation	None
Flip angle	20 deg
Fat suppr.	None
Water suppr.	None
SWI	Off

**Contrast - Dynamic**

Averages	2
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1

**Contrast - Dynamic**

Multiple series	Each measurement
-----------------	------------------

**Resolution - Common**

FoV read	250 mm
FoV phase	100.0 %
Slice thickness	7.0 mm
Base resolution	256
Phase resolution	91 %
Phase partial Fourier	Off
Interpolation	On

**Resolution - iPAT**

PAT mode	None
----------	------

**Resolution - Filter Image**

Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	On
Unfiltered images	Off
Normalize	Off
B1 filter	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	On

**Geometry - Common**

Slice group	1
Slices	1
Dist. factor	20 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice group	2
Slices	1
Dist. factor	20 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
Slice group	3
Slices	1
Dist. factor	20 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Coronal
Phase enc. dir.	R >> L
FoV read	250 mm
FoV phase	100.0 %
Slice thickness	7.0 mm
TR	7.5 ms
Multi-slice mode	Sequential
Series	Interleaved
Concatenations	3

**Geometry - AutoAlign**

Slice group	1
Position	L0.0 A20.0 H0.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice group	2
Position	L0.0 A20.0 H0.0 mm

**Geometry - AutoAlign**

Orientation	Transversal
Phase enc. dir.	A >> P
Slice group	3
Position	L0.0 A20.0 H0.0 mm
Orientation	Coronal
Phase enc. dir.	R >> L
AutoAlign	---
Initial Position	L0.0 A20.0 H0.0
L	0.0 mm
A	20.0 mm
H	0.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Sagittal

**Geometry - Saturation**

Saturation mode	Standard
Fat suppr.	None
Water suppr.	None
Special sat.	None

**Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

**System - Miscellaneous**

Positioning mode	REF
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Tune up
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
A >> P	263 mm
R >> L	350 mm
F >> H	350 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Slice-sel.

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	7.5 ms
Concatenations	3
Segments	1

**Physio - Cardiac**

Tagging	None
Magn. preparation	None
Fat suppr.	None
Dark blood	Off
FoV read	250 mm
FoV phase	100.0 %
Phase resolution	91 %

**Physio - PACE**

Resp. control	Off
Concatenations	3

**Inline - Common**

Subtract	Off
Measurements	1
StdDev	Off
Liver registration	Off
Save original images	On

**Inline - MIP**

MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On

**Inline - Soft Tissue**

Wash - In	Off
Wash - Out	Off
TTP	Off
PEI	Off
MIP - time	Off
Measurements	1

**Inline - Composing**

Inline Composing	Off
Distortion Corr.	Off

**Inline - MapIt**

Save original images	On
MapIt	None
Flip angle	20 deg
Measurements	1
Contrasts	1
TR	7.5 ms
TE	3.69 ms

**Sequence - Part 1**

Introduction	On
--------------	----

**Sequence - Part 1**

Dimension	2D
Phase stabilisation	Off
Asymmetric echo	Allowed
Contrasts	1
Flow comp.	No
Multi-slice mode	Sequential
Bandwidth	320 Hz/Px

**Sequence - Part 2**

Segments	1
Acoustic noise reduction	None
RF pulse type	Fast
Gradient mode	Fast
Excitation	Slice-sel.
RF spoiling	On

**Sequence - Assistant**

Mode	Off
Allowed delay	0 s

\\USER\ABCD\20190320\ABCD\_QA\_quick\_64ch\localizer\_64ch\_uncombined

TA: 0:12 PM: REF Voxel size: 0.5×0.5×7.0 mmPAT: Off Rel. SNR: 1.00 : fl

**Properties**

Prio recon	On
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	Single measurement

**Routine**

Slice group	1
Slices	1
Dist. factor	20 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice group	2
Slices	1
Dist. factor	20 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
Slice group	3
Slices	1
Dist. factor	20 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Coronal
Phase enc. dir.	R >> L
AutoAlign	---
Phase oversampling	0 %
FoV read	250 mm
FoV phase	100.0 %
Slice thickness	7.0 mm
TR	7.5 ms
TE	3.69 ms
Averages	2
Concatenations	3
Filter	Prescan Normalize, Elliptical filter
Coil elements	HC1-7;NC1,2

**Contrast - Common**

TR	7.5 ms
TE	3.69 ms
TD	0 ms
MTC	Off
Magn. preparation	None
Flip angle	20 deg
Fat suppr.	None
Water suppr.	None
SWI	Off

**Contrast - Dynamic**

Averages	2
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1

**Contrast - Dynamic**

Multiple series	Each measurement
-----------------	------------------

**Resolution - Common**

FoV read	250 mm
FoV phase	100.0 %
Slice thickness	7.0 mm
Base resolution	256
Phase resolution	91 %
Phase partial Fourier	Off
Interpolation	On

**Resolution - iPAT**

PAT mode	None
----------	------

**Resolution - Filter Image**

Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	On
Unfiltered images	Off
Normalize	Off
B1 filter	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	On

**Geometry - Common**

Slice group	1
Slices	1
Dist. factor	20 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice group	2
Slices	1
Dist. factor	20 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
Slice group	3
Slices	1
Dist. factor	20 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Coronal
Phase enc. dir.	R >> L
FoV read	250 mm
FoV phase	100.0 %
Slice thickness	7.0 mm
TR	7.5 ms
Multi-slice mode	Sequential
Series	Interleaved
Concatenations	3

**Geometry - AutoAlign**

Slice group	1
Position	L0.0 A20.0 H0.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice group	2
Position	L0.0 A20.0 H0.0 mm

**Geometry - AutoAlign**

Orientation	Transversal
Phase enc. dir.	A >> P
Slice group	3
Position	L0.0 A20.0 H0.0 mm
Orientation	Coronal
Phase enc. dir.	R >> L
AutoAlign	---
Initial Position	L0.0 A20.0 H0.0
L	0.0 mm
A	20.0 mm
H	0.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Sagittal

**Geometry - Saturation**

Saturation mode	Standard
Fat suppr.	None
Water suppr.	None
Special sat.	None

**Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

**System - Miscellaneous**

Positioning mode	REF
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
Save uncombined	On
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Tune up
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
A >> P	263 mm
R >> L	350 mm
F >> H	350 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Slice-sel.

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	7.5 ms
Concatenations	3
Segments	1

**Physio - Cardiac**

Tagging	None
Magn. preparation	None
Fat suppr.	None
Dark blood	Off
FoV read	250 mm
FoV phase	100.0 %
Phase resolution	91 %

**Physio - PACE**

Resp. control	Off
Concatenations	3

**Inline - Common**

Subtract	Off
Measurements	1
StdDev	Off
Liver registration	Off
Save original images	On

**Inline - MIP**

MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On

**Inline - Soft Tissue**

Wash - In	Off
Wash - Out	Off
TTP	Off
PEI	Off
MIP - time	Off
Measurements	1

**Inline - Composing**

Inline Composing	Off
Distortion Corr.	Off

**Inline - MapIt**

Save original images	On
MapIt	None
Flip angle	20 deg
Measurements	1
Contrasts	1
TR	7.5 ms
TE	3.69 ms

**Sequence - Part 1**

Introduction	On
--------------	----

**Sequence - Part 1**

Dimension	2D
Phase stabilisation	Off
Asymmetric echo	Allowed
Contrasts	1
Flow comp.	No
Multi-slice mode	Sequential
Bandwidth	320 Hz/Px

**Sequence - Part 2**

Segments	1
Acoustic noise reduction	None
RF pulse type	Fast
Gradient mode	Fast
Excitation	Slice-sel.
RF spoiling	On

**Sequence - Assistant**

Mode	Off
Allowed delay	0 s



\\USER\ABCD\20190320\ABCD\_QA\_quick\_64ch\SNR\_Map

TA: 0:58 PM: REF Voxel size: 0.5×0.5×5.0 mmRel. SNR: 1.00 : fl

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	On
Load images to graphic segments	On
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	Off
Wait for user to start	Off
Start measurements	Single measurement

**Routine**

Slice group	1
Slices	1
Dist. factor	20 %
Position	L0.0 A14.0 F7.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	192 mm
FoV phase	100.0 %
Slice thickness	5.0 mm
TR	30.0 ms
TE	6.0 ms
Averages	4
Concatenations	1
Filter	None
Coil elements	HC1-7;NC1,2

**Contrast - Common**

TR	30.0 ms
TE	6.0 ms
MTC	Off
Flip angle	10 deg
Fat suppr.	None
Water suppr.	None

**Contrast - Dynamic**

Averages	4
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1
Multiple series	Off

**Resolution - Common**

FoV read	192 mm
FoV phase	100.0 %
Slice thickness	5.0 mm
Base resolution	384
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

**Resolution - Filter Image**

Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	Off

**Resolution - Filter Image**

Normalize	Off
B1 filter	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off

**Geometry - Common**

Slice group	1
Slices	1
Dist. factor	20 %
Position	L0.0 A14.0 F7.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	192 mm
FoV phase	100.0 %
Slice thickness	5.0 mm
TR	30.0 ms
Multi-slice mode	Sequential
Series	Ascending
Concatenations	1

**Geometry - AutoAlign**

Slice group	1
Position	L0.0 A14.0 F7.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A14.0 F7.0
L	0.0 mm
A	14.0 mm
F	7.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

**Geometry - Saturation**

Fat suppr.	None
Water suppr.	None
Special sat.	None

**Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

**System - Miscellaneous**

Positioning mode	REF
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Tune up
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
A >> P	263 mm
R >> L	350 mm
F >> H	350 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
--------------	----------

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	30.0 ms
Concatenations	1

**Inline - Common**

Subtract	Off
Measurements	1
StdDev	Off
Save original images	On

**Inline - MIP**

MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On

**Inline - Composing**

Inline Composing	Off
Distortion Corr.	Off

**Sequence - Part 1**

Introduction	Off
Dimension	2D
Contrasts	1
Multi-slice mode	Sequential
Bandwidth	390 Hz/Px

**Sequence - Part 2**

Gradient mode	Fast
RF spoiling	On

**Sequence - Nuclei**

TX/RX Nucleus	1H
---------------	----

**Sequence - Nuclei**

TX/RX delta frequency	0 Hz
TX Nucleus	None
TX delta frequency	0 Hz
Coil elements	HC1-7;NC1,2

**Sequence - Special**

ICE program	CoilArrayUtil
number of noise lines	384 lines
Optimal SNR	On
GFactor	On
Condition number	Off
Rx coil diode switching	On
coil channel reordering	Off

**Sequence - Assistant**

Mode	Off
------	-----

\\USER\ABCD\20190320\ABCD\_QA\_quick\_64ch\ABCD\_QA\_fMRI

TA: 6:44 PM: FIX Voxel size: 2.4×2.4×2.4 mmPAT: 6 Rel. SNR: 1.00 : epfid

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	On
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	On
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	Off
Wait for user to start	Off
Start measurements	Single measurement

**Resolution - iPAT**

Accel. factor slice	6
Reference scan mode	EPI/separate

**Resolution - Filter Image**

Distortion Corr.	Off
Prescan Normalize	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off
Hamming	Off

**Routine**

Slice group	1
Slices	60
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	800 ms
TE	30.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HC1-7

**Geometry - Common**

Slice group	1
Slices	60
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	800 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

**Geometry - AutoAlign**

Slice group	1
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	Isocenter
L	0.0 mm
P	0.0 mm
H	0.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

**Contrast - Common**

TR	800 ms
TE	30.0 ms
MTC	Off
Flip angle	52 deg
Fat suppr.	Fat sat.

**Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	500
Delay in TR	0 ms
Multiple series	Off

**Resolution - Common**

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
Base resolution	90
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

**Resolution - iPAT**

Accel. mode	Slice accel.
Accel. factor PE	1
Ref. lines PE	22

**Geometry - Saturation**

Fat suppr.	Fat sat.
Special sat.	None

**Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

**System - Miscellaneous**

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
Matrix Optimization	Off

**System - Miscellaneous**

AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	144 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Standard

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	800 ms
Concatenations	1

**BOLD**

GLM Statistics	Off
Dynamic t-maps	Off
Ignore meas. at start	0
Ignore after transition	0
Model transition states	Off
Temp. highpass filter	Off
Threshold	4.00
Paradigm size	3
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Active
Motion correction	Off
Spatial filter	Off
Measurements	500
Delay in TR	0 ms
Multiple series	Off

**Sequence - Part 1**

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.51 ms
Bandwidth	2778 Hz/Px

**Sequence - Part 2**

EPI factor	90
RF pulse type	Normal
Gradient mode	Fast
Excitation	Standard

**Sequence - pTX Pulses****Sequence - Special**

Dummy Scans	0
K-space streaming	None
Physio recording	Off
Reverse Phase Encoding	On

\\USER\ABCD\20190320\ABCD\_QA\_quick\_64ch\ABCD\_QA\_dMRI

TA: 0:46 PM: FIX Voxel size: 1.7×1.7×1.7 mmPAT: 3 Rel. SNR: 1.00 : epse

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	Single measurement

**Routine**

Slice group	1
Slices	81
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	240 mm
FoV phase	100.0 %
Slice thickness	1.7 mm
TR	4200 ms
TE	88.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HC1-7

**Contrast - Common**

TR	4200 ms
TE	88.0 ms
MTC	Off
Magn. preparation	None
Fat suppr.	Fat sat.
Fat sat. mode	Strong

**Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Delay in TR	0 ms
Multiple series	Off

**Resolution - Common**

FoV read	240 mm
FoV phase	100.0 %
Slice thickness	1.7 mm
Base resolution	140
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off

**Resolution - iPAT**

Accel. mode	Slice accel.
Accel. factor PE	1

**Resolution - iPAT**

Ref. lines PE	71
Accel. factor slice	3
Reference scan mode	EPI/separate

**Resolution - Filter Image**

Distortion Corr.	Off
Prescan Normalize	Off
Dynamic Field Corr.	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off

**Geometry - Common**

Slice group	1
Slices	81
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	240 mm
FoV phase	100.0 %
Slice thickness	1.7 mm
TR	4200 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

**Geometry - AutoAlign**

Slice group	1
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	Isocenter
L	0.0 mm
P	0.0 mm
H	0.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

**Geometry - Saturation**

Fat suppr.	Fat sat.
Fat sat. mode	Strong
Special sat.	None

**Geometry - Navigator****Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

**System - Miscellaneous**

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T

**System - Miscellaneous**

Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Advanced
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
A >> P	240 mm
R >> L	240 mm
F >> H	138 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Standard

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	3.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	4200 ms
Concatenations	1

**Physio - PACE**

Resp. control	Off
Concatenations	1

**Diff - Neuro**

Diffusion mode	Free
Diff. directions	6
Diffusion Scheme	Monopolar
Diff. weightings	2
b-value 1	0 s/mm <sup>2</sup>
b-value 2	50 s/mm <sup>2</sup>
b-value 1	1
b-value 2	1
Diff. weighted images	On
Trace weighted images	Off
ADC maps	Off
FA maps	Off
Mosaic	On
Tensor	Off
Noise level	40

**Diff - Body**

Diffusion mode	Free
Diff. directions	6
Diffusion Scheme	Monopolar
Diff. weightings	2
b-value 1	0 s/mm <sup>2</sup>
b-value 2	50 s/mm <sup>2</sup>
b-value 1	1
b-value 2	1
Diff. weighted images	On
Trace weighted images	Off
ADC maps	Off
Exponential ADC Maps	Off
FA maps	Off
Invert Gray Scale	Off
Calculated Image	Off
b-Value >=	0 s/mm <sup>2</sup>
Noise level	40

**Diff - Composing**

Inline Composing	Off
Distortion Corr.	Off

**Sequence - Part 1**

Introduction	Off
Optimization	None
Multi-slice mode	Interleaved
Free echo spacing	On
Echo spacing	0.69 ms
Bandwidth	1700 Hz/Px

**Sequence - Part 2**

EPI factor	140
RF pulse type	Normal
Gradient mode	Performance*
Excitation	Standard

**Sequence - pTX Pulses****Sequence - Special**

K-space streaming	None
Reverse Phase Encoding	On

\\USER\ABCD\20190320\ABCD\_QA\_quick\_64ch\FBIRN\_QA\_fMRI\_flip77

TA: 6:44 PM: FIX Voxel size: 3.4×3.4×4.0 mmPAT: Off Rel. SNR: 1.00 : efpid

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	On
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	On
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	Single measurement

**Routine**

Slice group	1
Slices	30
Dist. factor	25 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	220 mm
FoV phase	100.0 %
Slice thickness	4.0 mm
TR	2000 ms
TE	30.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HC1-7

**Contrast - Common**

TR	2000 ms
TE	30.0 ms
MTC	Off
Flip angle	77 deg
Fat suppr.	Fat sat.

**Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	200
Delay in TR	0 ms
Multiple series	Off

**Resolution - Common**

FoV read	220 mm
FoV phase	100.0 %
Slice thickness	4.0 mm
Base resolution	64
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

**Resolution - iPAT**

Accel. mode	None
-------------	------

**Resolution - Filter Image**

Distortion Corr.	Off
Prescan Normalize	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off
Hamming	Off

**Geometry - Common**

Slice group	1
Slices	30
Dist. factor	25 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	220 mm
FoV phase	100.0 %
Slice thickness	4.0 mm
TR	2000 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

**Geometry - AutoAlign**

Slice group	1
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	Isocenter
L	0.0 mm
P	0.0 mm
H	0.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

**Geometry - Saturation**

Fat suppr.	Fat sat.
Special sat.	None

**Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

**System - Miscellaneous**

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**Sequence - Part 2**

Excitation	Standard
------------	----------

**Sequence - pTX Pulses****System - Adjust Volume**

Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
A >> P	220 mm
R >> L	220 mm
F >> H	149 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Standard

**System - Tx/Rx**

Frequency 1H	123.236413 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	2000 ms
Concatenations	1

**BOLD**

GLM Statistics	Off
Dynamic t-maps	Off
Ignore meas. at start	0
Ignore after transition	0
Model transition states	Off
Temp. highpass filter	Off
Threshold	4.00
Paradigm size	3
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Active
Motion correction	Off
Spatial filter	Off
Measurements	200
Delay in TR	0 ms
Multiple series	Off

**Sequence - Part 1**

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.5 ms
Bandwidth	2298 Hz/Px

**Sequence - Part 2**

EPI factor	64
RF pulse type	Normal
Gradient mode	Fast