

# SIEMENS MAGNETOM Espree syngo MR B17

\\USER\breast\library\Kaiser1.5T\Lokalizier

TA: 0:17    PAT: Off    Voxel size: 1.6x1.6x10.0 mm    Rel. SNR: 1.00    SIEMENS: gre

### Properties

Prio Recon	Off
Before measurement	
After measurement	
Load to viewer	On
Inline movie	Off
Auto store images	On
Load to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Start measurement without further preparation	Off
Wait for user to start	Off
Start measurements	single

### Routine

Slice group 1	
Slices	1
Dist. factor	20 %
Position	L82.6 P1.0 H0.0
Orientation	Sagittal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Slice group 2	
Slices	1
Dist. factor	20 %
Position	R79.7 P3.9 H0.0
Orientation	Sagittal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Slice group 3	
Slices	1
Dist. factor	20 %
Position	L0.0 A50.0 H0.0
Orientation	Coronal
Phase enc. dir.	R >> L
Rotation	0.00 deg
Slice group 4	
Slices	1
Dist. factor	20 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
FoV read	400 mm
FoV phase	100.0 %
Slice thickness	10.0 mm
TR	15 ms
TE	5.15 ms
Averages	1
Concatenations	4
Filter	Elliptical filter
Coil elements	BL;BR

### Contrast

TD	0 ms
MTC	Off
Magn. preparation	None
Flip angle	40 deg
Fat suppr.	None
Water suppr.	None
SWI	Off

Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

### Resolution

Base resolution	256
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	On
-----	
PAT mode	None
Matrix Coil Mode	Auto (CP)
-----	
Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	Off
Normalize	Off
B1 filter	Off
Raw filter	Off
Elliptical filter	On
Mode	Inplane

### Geometry

Multi-slice mode	Sequential
Series	Interleaved
-----	
Saturation mode	Standard
Special sat.	None
-----	
Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off
-----	
Tim CT mode	Off

### System

Body	Off
BL	On
BR	On
-----	
Positioning mode	REF
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
AutoAlign	---
Auto Coil Select	Default
-----	
Shim mode	Tune up
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
? Ref. amplitude 1H	0.000 V
Adjustment Tolerance	Auto
Adjust volume	
Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
R >> L	308 mm
A >> P	270 mm
F >> H	308 mm

### Physio

1st Signal/Mode	None
Segments	1

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Tagging	None
Dark blood	Off
-----	
Resp. control	Off

## Inline

Subtract	Off
Liver registration	Off
Std-Dev-Sag	Off
Std-Dev-Cor	Off
Std-Dev-Tra	Off
Std-Dev-Time	Off
MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On
-----	
Wash - In	Off
Wash - Out	Off
TTP	Off
PEI	Off
MIP - time	Off
-----	
MapIt	None
Contrasts	1

## Sequence

Introduction	On
Dimension	2D
Phase stabilisation	Off
Asymmetric echo	Off
Bandwidth	140 Hz/Px
Flow comp.	No
-----	
RF pulse type	Fast
Gradient mode	Normal
Excitation	Slice-sel.
RF spoiling	On
-----	
Algorithm	Undefined
Sleep interv.	0.0 ms

# SIEMENS MAGNETOM Espree syngo MR B17

\\USER\breast\library\Kaiser1.5T\t1-flash2d-cor grappa

TA: 0:43    PAT: 2    Voxel size: 1.5x1.4x3.0 mm    Rel. SNR: 1.00    SIEMENS: gre

## Properties

Prio Recon	Off
Before measurement	
After measurement	
Load to viewer	On
Inline movie	Off
Auto store images	On
Load to stamp segments	Off
Load images to graphic segments	On
Auto open inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	single

## Routine

Slice group 1	
Slices	33
Dist. factor	30 %
Position	L1.0 A44.6 F11.6
Orientation	Coronal
Phase enc. dir.	F >> H
Rotation	90.00 deg
Phase oversampling	0 %
FoV read	350 mm
FoV phase	100.0 %
Slice thickness	3.0 mm
TR	113 ms
TE	4.50 ms
Averages	1
Concatenations	3
Filter	Prescan Normalize, Elliptical filter
Coil elements	BL;BR

## Contrast

TD	0 ms
MTC	Off
Magn. preparation	None
Flip angle	80 deg
Fat suppr.	None
Water suppr.	None
SWI	Off
-----	
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

## Resolution

Base resolution	256
Phase resolution	90 %
Phase partial Fourier	Off
Interpolation	On
-----	
PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	24
Matrix Coil Mode	CP
Reference scan mode	Integrated
-----	
Image Filter	Off
Distortion Corr.	Off
Unfiltered images	Off
Prescan Normalize	On

Normalize	Off
B1 filter	Off
Raw filter	Off
Elliptical filter	On
Mode	Inplane

## Geometry

Multi-slice mode	Interleaved
Series	Interleaved
-----	
Saturation mode	Standard
Special sat.	None
-----	
Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off
-----	
Tim CT mode	Off

## System

Body	Off
BL	On
BR	On
-----	
Positioning mode	REF
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
AutoAlign	---
Auto Coil Select	Default
-----	
Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
? Ref. amplitude 1H	0.000 V
Adjustment Tolerance	Auto
Adjust volume	
! Position	L1.0 A44.6 F11.6
! Orientation	Coronal
! Rotation	90.00 deg
! R >> L	280 mm
! F >> H	200 mm
! A >> P	150 mm

## Physio

1st Signal/Mode	None
Segments	1
-----	
Tagging	None
Dark blood	Off
-----	
Resp. control	Off

## Inline

Subtract	Off
Liver registration	Off
Std-Dev-Sag	Off
Std-Dev-Cor	Off
Std-Dev-Tra	Off
Std-Dev-Time	Off
MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off

# SIEMENS MAGNETOM Espree syngo MR B17

Save original images	On
Wash - In	Off
Wash - Out	Off
TTP	Off
PEI	Off
MIP - time	Off
MapIt	None
Contrasts	1

## Sequence

Introduction	Off
Dimension	2D
Phase stabilisation	Off
Asymmetric echo	Off
Bandwidth	170 Hz/Px
Flow comp.	No
RF pulse type	Fast
Gradient mode	Fast*
Excitation	Slice-sel.
RF spoiling	On
Algorithm	Undefined
Sleep interv.	0.0 ms

# SIEMENS MAGNETOM Espree syngo MR B17

\\USER\breast\library\Kaiser1.5T\t1-flash2d-tra grappa

TA: 0:26    PAT: 2    Voxel size: 3.4x2.7x3.0 mm    Rel. SNR: 1.00    SIEMENS: gre

## Properties

Prio Recon	Off
Before measurement	
After measurement	
Load to viewer	On
Inline movie	Off
Auto store images	On
Load to stamp segments	Off
Load images to graphic segments	On
Auto open inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	single

## Routine

Slice group 1	
Slices	44
Dist. factor	0 %
Position	L1.0 A16.5 F3.5
Orientation	Transversal
Phase enc. dir.	R >> L
Rotation	90.00 deg
Phase oversampling	0 %
FoV read	350 mm
FoV phase	100.0 %
Slice thickness	3.0 mm
TR	113 ms
TE	4.56 ms
Averages	1
Concatenations	4
Filter	Prescan Normalize, Elliptical filter
Coil elements	BL;BR

## Contrast

TD	0 ms
MTC	Off
Magn. preparation	None
Flip angle	80 deg
Fat suppr.	None
Water suppr.	None
SWI	Off
-----	
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

## Resolution

Base resolution	128
Phase resolution	80 %
Phase partial Fourier	7/8
Interpolation	Off
-----	
PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	24
Matrix Coil Mode	CP
Reference scan mode	Integrated
-----	
Image Filter	Off
Distortion Corr.	Off
Unfiltered images	Off
Prescan Normalize	On

Normalize	Off
B1 filter	Off
Raw filter	Off
Elliptical filter	On
Mode	Inplane

## Geometry

Multi-slice mode	Interleaved
Series	Interleaved
-----	
Saturation mode	Standard
Special sat.	None
-----	
Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off
-----	
Tim CT mode	Off

## System

Body	Off
BL	On
BR	On
-----	
Positioning mode	REF
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
AutoAlign	---
Auto Coil Select	Default
-----	
Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
? Ref. amplitude 1H	0.000 V
Adjustment Tolerance	Auto
Adjust volume	
! Position	L1.0 A16.5 F3.5
! Orientation	Transversal
! Rotation	90.00 deg
! A >> P	200 mm
! R >> L	280 mm
! F >> H	132 mm

## Physio

1st Signal/Mode	None
Segments	1
-----	
Tagging	None
Dark blood	Off
-----	
Resp. control	Off

## Inline

Subtract	Off
Liver registration	Off
Std-Dev-Sag	Off
Std-Dev-Cor	Off
Std-Dev-Tra	Off
Std-Dev-Time	Off
MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off

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Save original images	On
Wash - In	Off
Wash - Out	Off
TTP	Off
PEI	Off
MIP - time	Off
MapIt	None
Contrasts	1

## Sequence

Introduction	Off
Dimension	2D
Phase stabilisation	Off
Asymmetric echo	Off
Bandwidth	170 Hz/Px
Flow comp.	No
RF pulse type	Fast
Gradient mode	Fast
Excitation	Slice-sel.
RF spoiling	On
Algorithm	Undefined
Sleep interv.	0.0 ms

# SIEMENS MAGNETOM Espree syngo MR B17

\\USER\breast\library\Kaiser1.5T\t1-flash2d-tra\_DYN

TA: 6:49    PAT: 2    Voxel size: 1.2x0.9x3.0 mm    Rel. SNR: 1.00    SIEMENS: gre

## Properties

Prio Recon	Off
Before measurement	
After measurement	
Load to viewer	On
Inline movie	Off
Auto store images	On
Load to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	single

## Routine

Slice group 1	
Slices	44
Dist. factor	0 %
Position	L1.0 A16.5 F3.5
Orientation	Transversal
Phase enc. dir.	R >> L
Rotation	90.00 deg
Phase oversampling	0 %
FoV read	350 mm
FoV phase	100.0 %
Slice thickness	3.0 mm
TR	113 ms
TE	4.55 ms
Averages	1
Concatenations	4
Filter	Prescan Normalize, Elliptical filter
Coil elements	BL;BR

## Contrast

TD	0 ms
MTC	Off
Magn. preparation	None
Flip angle	80 deg
Fat suppr.	None
Water suppr.	None
SWI	Off
-----	
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	6
Pause after meas. 1	35.0 s
Pause after meas. 2	0.0 s
Pause after meas. 3	0.0 s
Pause after meas. 4	0.0 s
Pause after meas. 5	0.0 s
Multiple series	Each measurement

## Resolution

Base resolution	384
Phase resolution	75 %
Phase partial Fourier	7/8
Interpolation	Off
-----	
PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	24
Matrix Coil Mode	CP
Reference scan mode	Integrated

Image Filter	Off
Distortion Corr.	Off
Unfiltered images	Off
Prescan Normalize	On
Normalize	Off
B1 filter	Off
Raw filter	Off
Elliptical filter	On
Mode	Inplane

## Geometry

Multi-slice mode	Interleaved
Series	Interleaved
-----	
Saturation mode	Standard
Special sat.	None
-----	
Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off
-----	
Tim CT mode	Off

## System

Body	Off
BL	On
BR	On
-----	
Positioning mode	FIX
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
AutoAlign	---
Auto Coil Select	Default
-----	
Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
? Ref. amplitude 1H	0.000 V
Adjustment Tolerance	Auto
Adjust volume	
! Position	L1.0 A16.5 F3.5
! Orientation	Transversal
! Rotation	90.00 deg
! A >> P	200 mm
! R >> L	280 mm
! F >> H	200 mm

## Physio

1st Signal/Mode	None
Segments	1
-----	
Tagging	None
Dark blood	Off
-----	
Resp. control	Off

## Inline

Subtract	On
Liver registration	Off
Autoscaling	On
Subtrahend	1
Std-Dev-Sag	Off
Std-Dev-Cor	Off

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Std-Dev-Tra	Off
Std-Dev-Time	Off
MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On
-----	
Wash - In	Off
Wash - Out	Off
TTP	Off
PEI	Off
MIP - time	Off
-----	
MapIt	None
Contrasts	1

## Sequence

Introduction	Off
Dimension	2D
Phase stabilisation	Off
Asymmetric echo	Off
Bandwidth	170 Hz/Px
Flow comp.	No
-----	
RF pulse type	Fast
Gradient mode	Fast
Excitation	Slice-sel.
RF spoiling	On
-----	
Algorithm	Undefined
Sleep interv.	0.0 ms



# SIEMENS MAGNETOM Espree syngo MR B17

\\USER\breast\library\Kaiser1.5T\t2\_tse\_tra\_512 grappa

TA: 1:41    PAT: 3    Voxel size: 0.8x0.7x3.0 mm    Rel. SNR: 1.00    SIEMENS: tse

## Properties

Prio Recon	Off
Before measurement	
After measurement	
Load to viewer	On
Inline movie	Off
Auto store images	On
Load to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	single

## Routine

Slice group 1	
Slices	44
Dist. factor	0 %
Position	L1.0 A16.5 F3.5
Orientation	Transversal
Phase enc. dir.	R >> L
Rotation	90.00 deg
Phase oversampling	0 %
FoV read	350 mm
FoV phase	100.0 %
Slice thickness	3.0 mm
TR	9080 ms
TE	197 ms
Averages	1
Concatenations	1
Filter	Prescan Normalize, Elliptical filter
Coil elements	BL;BR

## Contrast

MTC	Off
Magn. preparation	None
Flip angle	150 deg
Fat suppr.	None
Water suppr.	None
Restore magn.	Off
-----	
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

## Resolution

Base resolution	512
Phase resolution	85 %
Phase partial Fourier	Off
Trajectory	Cartesian
Interpolation	Off
-----	
PAT mode	GRAPPA
Accel. factor PE	3
Ref. lines PE	38
Matrix Coil Mode	Auto (Triple)
Reference scan mode	Integrated
-----	
Image Filter	Off
Distortion Corr.	Off
Unfiltered images	Off
Prescan Normalize	On

Normalize	Off
B1 filter	Off
Raw filter	Off
Elliptical filter	On
Mode	Inplane

## Geometry

Multi-slice mode	Interleaved
Series	Interleaved
-----	
Special sat.	None
-----	
Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off
-----	
Tim CT mode	Off

## System

Body	Off
BL	On
BR	On
-----	
Positioning mode	FIX
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
AutoAlign	---
Auto Coil Select	Default
-----	
Shim mode	Tune up
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
? Ref. amplitude 1H	0.000 V
Adjustment Tolerance	Auto
Adjust volume	
Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
R >> L	308 mm
A >> P	270 mm
F >> H	308 mm

## Physio

1st Signal/Mode	None
-----	
Dark blood	Off
-----	
Resp. control	Off

## Inline

Subtract	Off
Std-Dev-Sag	Off
Std-Dev-Cor	Off
Std-Dev-Tra	Off
Std-Dev-Time	Off
MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On

## Sequence

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

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Dimension	2D
Compensate T2 decay	Off
Reduce Motion Sens.	Off
Contrasts	1
Bandwidth	160 Hz/Px
Flow comp.	No
Allowed delay	0 s
Echo spacing	11.6 ms
-----	
Define	Turbo factor
Turbo factor	17
Echo trains per slice	10
RF pulse type	Normal
Gradient mode	Normal
-----	
Algorithm	Undefined
Sleep interv.	0.0 ms

SIEMENS MAGNETOM Espree syngo MR B17

\\USER\breast\library\Kaiser1.5T\tirm

TA: 1:58 PAT: 2 Voxel size: 1.1x0.9x3.0 mm Rel. SNR: 1.00 SIEMENS: tse

Properties

Prio Recon	Off
Before measurement	
After measurement	
Load to viewer	On
Inline movie	Off
Auto store images	On
Load to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	single

Routine

Slice group 1	
Slices	44
Dist. factor	0 %
Position	L1.0 A16.5 F3.5
Orientation	Transversal
Phase enc. dir.	R >> L
Rotation	90.00 deg
Phase oversampling	0 %
FoV read	350 mm
FoV phase	100.0 %
Slice thickness	3.0 mm
TR	2770 ms
TE	69.0 ms
Averages	1
Concatenations	2
Filter	Prescan Normalize, Elliptical filter
Coil elements	BL;BR

Contrast

TD	0.0 ms
MTC	Off
Magn. preparation	Slice-sel. IR
TI	150 ms
Freeze suppressed tissue	Off
Flip angle	150 deg
Fat suppr.	None
Water suppr.	None
Restore magn.	Off
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

Resolution

Base resolution	384
Phase resolution	85 %
Phase partial Fourier	Off
Trajectory	Cartesian
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	34
Matrix Coil Mode	Auto (Triple)
Reference scan mode	Integrated
Image Filter	Off

Distortion Corr.	Off
Unfiltered images	Off
Prescan Normalize	On
Normalize	Off
B1 filter	Off
Raw filter	Off
Elliptical filter	On
Mode	Inplane

Geometry

Multi-slice mode	Interleaved
Series	Interleaved
Special sat.	None
Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off
Tim CT mode	Off

System

Body	Off
BL	On
BR	On
Positioning mode	FIX
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
AutoAlign	---
Auto Coil Select	Default
Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
? Ref. amplitude 1H	0.000 V
Adjustment Tolerance	Auto
Adjust volume	
Position	L1.0 A16.5 F3.5
Orientation	Transversal
Rotation	90.00 deg
A >> P	350 mm
R >> L	350 mm
F >> H	132 mm

Physio

1st Signal/Mode	None
Dark blood	Off
Resp. control	Off

Inline

Subtract	Off
Std-Dev-Sag	Off
Std-Dev-Cor	Off
Std-Dev-Tra	Off
Std-Dev-Time	Off
MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On

# SIEMENS MAGNETOM Espree syngo MR B17

## Sequence

Introduction	On
Dimension	2D
Compensate T2 decay	Off
Reduce Motion Sens.	Off
Contrasts	1
Bandwidth	250 Hz/Px
Flow comp.	No
Allowed delay	0 s
Echo spacing	8.64 ms
-----	
Define	Turbo factor
Turbo factor	9
Echo trains per slice	20
RF pulse type	Normal
Gradient mode	Fast
-----	
Algorithm	Undefined
Sleep interv.	0.0 ms

# SIEMENS MAGNETOM Espree syngo MR B17

\\USER\breast\library\Kaiser1.5T\t1-flash2d-cor grappa

TA: 0:43    PAT: 2    Voxel size: 1.5x1.4x3.0 mm    Rel. SNR: 1.00    SIEMENS: gre

### Properties

Prio Recon	Off
Before measurement	
After measurement	
Load to viewer	On
Inline movie	Off
Auto store images	On
Load to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	single

### Routine

Slice group 1	
Slices	33
Dist. factor	30 %
Position	L1.0 A44.6 F11.6
Orientation	Coronal
Phase enc. dir.	F >> H
Rotation	90.00 deg
Phase oversampling	0 %
FoV read	350 mm
FoV phase	100.0 %
Slice thickness	3.0 mm
TR	113 ms
TE	4.50 ms
Averages	1
Concatenations	3
Filter	Prescan Normalize, Elliptical filter
Coil elements	BL;BR

### Contrast

TD	0 ms
MTC	Off
Magn. preparation	None
Flip angle	80 deg
Fat suppr.	None
Water suppr.	None
SWI	Off
-----	
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

### Resolution

Base resolution	256
Phase resolution	90 %
Phase partial Fourier	Off
Interpolation	On
-----	
PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	24
Matrix Coil Mode	CP
Reference scan mode	Integrated
-----	
Image Filter	Off
Distortion Corr.	Off
Unfiltered images	Off
Prescan Normalize	On

Normalize	Off
B1 filter	Off
Raw filter	Off
Elliptical filter	On
Mode	Inplane

### Geometry

Multi-slice mode	Interleaved
Series	Interleaved
-----	
Saturation mode	Standard
Special sat.	None
-----	
Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off
-----	
Tim CT mode	Off

### System

Body	Off
BL	On
BR	On
-----	
Positioning mode	FIX
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
AutoAlign	---
Auto Coil Select	Default
-----	
Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
? Ref. amplitude 1H	0.000 V
Adjustment Tolerance	Auto
Adjust volume	
! Position	L1.0 A44.6 F11.6
! Orientation	Coronal
! Rotation	90.00 deg
! R >> L	280 mm
! F >> H	200 mm
! A >> P	150 mm

### Physio

1st Signal/Mode	None
Segments	1
-----	
Tagging	None
Dark blood	Off
-----	
Resp. control	Off

### Inline

Subtract	Off
Liver registration	Off
Std-Dev-Sag	Off
Std-Dev-Cor	Off
Std-Dev-Tra	Off
Std-Dev-Time	Off
MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off

# SIEMENS MAGNETOM Espree syngo MR B17

Save original images	On
Wash - In	Off
Wash - Out	Off
TTP	Off
PEI	Off
MIP - time	Off
MapIt	None
Contrasts	1

## Sequence

Introduction	Off
Dimension	2D
Phase stabilisation	Off
Asymmetric echo	Off
Bandwidth	170 Hz/Px
Flow comp.	No
RF pulse type	Fast
Gradient mode	Fast*
Excitation	Slice-sel.
RF spoiling	On
Algorithm	Undefined
Sleep interv.	0.0 ms

# SIEMENS MAGNETOM Espree syngo MR B17

\\USER\breast\library\Kaiser1.5T\ep2d\_diff\_192\_WE\_3mm\_short3

TA: 2:47    PAT: 2    Voxel size: 1.8x1.8x3.0 mm    Rel. SNR: 1.00    SIEMENS: ep2d\_diff

## Properties

Prio Recon	Off
Before measurement	
After measurement	
Load to viewer	On
Inline movie	Off
Auto store images	On
Load to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	single

## Routine

Slice group 1	
Slices	44
Dist. factor	0 %
Position	L1.0 A16.5 F3.5
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
FoV read	344 mm
FoV phase	100.0 %
Slice thickness	3.0 mm
TR	6200 ms
TE	88 ms
Averages	6
Concatenations	1
Filter	Distortion Corr.(2D), Prescan Normalize
Coil elements	BL;BR

## Contrast

MTC	Off
Magn. preparation	None
Fat suppr.	Water excit. normal
-----	
Averaging mode	Long term
Reconstruction	Magnitude
Delay in TR	0 ms

## Resolution

Base resolution	192
Phase resolution	100 %
Phase partial Fourier	5/8
Interpolation	Off
-----	
PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	24
Matrix Coil Mode	Auto (Triple)
Reference scan mode	Separate
-----	
Distortion Corr. Mode	On
Unfiltered images	Off
Prescan Normalize	On
Raw filter	Off
Elliptical filter	Off
Hamming	Off

## Geometry

Multi-slice mode	Interleaved
------------------	-------------

## Series Interleaved

Special sat.	None
-----	
Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

## System

Body	Off
BL	On
BR	On
-----	
Positioning mode	FIX
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
AutoAlign	---
Auto Coil Select	Off
-----	
Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	On
Assume Silicone	Off
? Ref. amplitude 1H	0.000 V
Adjustment Tolerance	Auto
Adjust volume	
! Position	R3.9 A26.2 H7.7
! Orientation	Coronal
! Rotation	90.00 deg
! R >> L	209 mm
! F >> H	96 mm
! A >> P	97 mm

## Physio

1st Signal/Mode	None
-----	
Resp. control	Off

## Diff

Diffusion mode	3-Scan Trace
Diff. weightings	2
b-value 1	0 s/mm <sup>2</sup>
b-value 2	800 s/mm <sup>2</sup>
Diff. weighted images	Off
Trace weighted images	On
Average ADC maps	On
Individual ADC maps	Off
FA maps	Off
Mosaic	Off
Tensor	Off
Noise level	30
Diff. directions	3
-----	

## Sequence

Introduction	Off
Bandwidth	1370 Hz/Px
Free echo spacing	Off
Echo spacing	0.95 ms
-----	
EPI factor	192
RF pulse type	Normal
Gradient mode	Fast
-----	
Algorithm	Undefined

| Sleep interv.

0.0 ms