

**Table of contents**

\USER

SD

VASO

Neurovascular Coupling

[rslh\\_ep3d\\_vaso\\_v220920\\_singleShot\\_fatSat-off](#)

\\USER\SD\VASO\Neurovascular Coupling\rslh\_ep3d\_vaso\_v220920\_singleShot\_fatSat-off

TA: 0:23 PM: REF Voxel size: 0.9×0.9×0.9 mmPAT: 3 Rel. SNR: 1.00 : 26dc5a59

**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                    |
| Position         | Isocenter            |
| Orientation      | Transversal          |
| Phase enc. dir.  | A >> P               |
| AutoAlign        | ---                  |
| Slab Scale       | -10 %                |
| Slices per slab  | 16                   |
| FoV read         | 133 mm               |
| FoV phase        | 100.0 %              |
| Slice thickness  | 0.90 mm              |
| TR 1             | 42.0 ms              |
| TR 2             | 1930 ms              |
| TE 1             | 15.00 ms             |
| Averages         | 1                    |
| Multi-echo Shots | 1                    |
| Filter           | Distortion Corr.(3D) |
| Coil elements    | AC                   |

**Contrast - Common**

|                    |                 |
|--------------------|-----------------|
| TR 1               | 42.0 ms         |
| TR 2               | 1930 ms         |
| TE 1               | 15.00 ms        |
| Multi-echo spacing | 38.38 ms        |
| Magn. preparation  | Non-sel. HSN IR |
| TI 1               | 912 ms          |
| TI 2               | 1542 ms         |
| Flip angle         | 33 deg          |
| Fat suppr.         | None            |
| Magn. Prep. Shots  | 1               |

**Contrast - Dynamic**

|                     |             |
|---------------------|-------------|
| Averages            | 1           |
| Averaging mode      | Long term   |
| Reconstruction      | Magn./Phase |
| Measurements        | 10          |
| Pause after meas. 1 | 0.0 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       |
| Pause after meas. 6 | 0.0 s       |
| Pause after meas. 7 | 0.0 s       |
| Pause after meas. 8 | 0.0 s       |
| Pause after meas. 9 | 0.0 s       |

**Resolution - Common**

|                       |         |
|-----------------------|---------|
| FoV read              | 133 mm  |
| FoV phase             | 100.0 % |
| Slice thickness       | 0.90 mm |
| Base resolution       | 148     |
| Phase resolution      | 100 %   |
| Slice resolution      | 100 %   |
| Phase partial Fourier | 6/8     |
| Slice partial Fourier | Off     |
| Interpolation         | Off     |

**Resolution - iPAT**

|                     |              |
|---------------------|--------------|
| PAT mode            | CAIPIRINHA   |
| Acc. factor PE      | 1            |
| Ref. lines PE       | 24           |
| Acc. factor 3D      | 3            |
| Ref. lines 3D       | 16           |
| CAIPI 3D Shift      | 1            |
| Reference Scan Mode | GRE/separate |
| CAIPIRINHA mode     | Free         |

**Resolution - Filter Image**

|                   |     |
|-------------------|-----|
| Image Filter      | Off |
| Distortion Corr.  | On  |
| Mode              | 3D  |
| Unfiltered images | Off |
| Prescan Normalize | Off |
| Normalize         | Off |
| B1 filter         | Off |

**Resolution - Filter Rawdata**

|                   |     |
|-------------------|-----|
| Raw filter        | Off |
| Elliptical filter | Off |

**Geometry - Common**

|                  |             |
|------------------|-------------|
| Slab group       | 1           |
| Slabs            | 1           |
| Position         | Isocenter   |
| Orientation      | Transversal |
| Phase enc. dir.  | A >> P      |
| Slab Scale       | -10 %       |
| Slices per slab  | 16          |
| FoV read         | 133 mm      |
| FoV phase        | 100.0 %     |
| Slice thickness  | 0.90 mm     |
| TR 1             | 42.0 ms     |
| TR 2             | 1930 ms     |
| Multi-slice mode | Interleaved |
| Series           | Ascending   |
| Multi-echo Shots | 1           |

**Geometry - AutoAlign**

|                  |             |
|------------------|-------------|
| Slab 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      |

**Geometry - AutoAlign**

|                     |             |
|---------------------|-------------|
| Initial Rotation    | 0.00 deg    |
| Initial Orientation | Transversal |

**Geometry - Saturation**

|                 |          |
|-----------------|----------|
| Saturation mode | Standard |
| Fat suppr.      | 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    | Default        |

**System - Adjustments**

|                          |          |
|--------------------------|----------|
| B0 Shim mode             | Standard |
| B1 Shim mode             | TrueForm |
| 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      | 133 mm      |
| R >> L      | 133 mm      |
| F >> H      | 15 mm       |
| Reset       | Off         |

**System - pTx Volumes**

|              |           |
|--------------|-----------|
| B1 Shim mode | TrueForm  |
| Excitation   | Slab-sel. |

**System - Tx/Rx**

|                     |                |
|---------------------|----------------|
| Frequency 1H        | 297.191255 MHz |
| Correction factor   | 1              |
| Gain                | Low            |
| Img. Scale Cor.     | 1.000          |
| Reset               | Off            |
| ! Ref. amplitude 1H | 200.000 V      |

**Sequence - Part 1**

|                  |             |
|------------------|-------------|
| Introduction     | On          |
| Dimension        | 3D          |
| Reordering       | Linear      |
| Asymmetric echo  | Off         |
| Contrasts        | 1           |
| Multi-slice mode | Interleaved |

**Sequence - Part 1**

|              |            |
|--------------|------------|
| Echo spacing | 1.01 ms    |
| Bandwidth    | 1126 Hz/Px |

**Sequence - Part 2**

|               |           |
|---------------|-----------|
| EPI factor    | 37        |
| Segmentation  | 3         |
| RF pulse type | Normal    |
| Gradient mode | Fast      |
| Excitation    | Slab-sel. |
| RF spoiling   | On        |
| Turbo factor  | 15        |

**Sequence - Special**

|                      |            |
|----------------------|------------|
| PATRef FA            | 3 deg      |
| RF duration          | 1480 us    |
| RF BWT product       | 8          |
| Ernst T1             | 1200 ms    |
| PATRef prep. shots   | 10         |
| Volume dummy shots   | 0          |
| Dummy Measurements   | 0          |
| Invert PE            | Off        |
| Min. TE if PF        | On         |
| Echo Time Shift      | On         |
| Ramp Sampling        | On         |
| NORDIC               | Off        |
| SVDPC                | On         |
| Sym VASO             | Off        |
| Alternate RO         | Off        |
| Invert RO            | Off        |
| Water Exc.           | -none-     |
| External PC          | per Series |
| EPI rise time factor | 1.10       |
| Mosaic DICOMs        | On         |
| Modify Ice Config    | Off        |
| HSN RF power scale   | 2.00       |
| Inversion Delay      | 650 ms     |
| Relaxation Delay     | 0 ms       |
| Var. FA /MAGEC       | 4          |

**Sequence - Assistant**

|      |     |
|------|-----|
| Mode | Off |
|------|-----|