Bruker BioSpin MRI

Reference Power Adjustment

- TX Coil: RF RES 128 1H/13C 103/040
  L/L TR (BMRIDE T160788/0017)

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1. Result Summary

Reference gain in use:

PVM_StudyRefPow	0.161 W
Reference Power Status	Adj by Bruker:AdjRefPowADJ_REF_POW
Adjustment Status	Succeeded

2. Acquisition Information

Table 1. Protocol Parameters

Method	Bruker:AdjRefPow
Nucleus	1H
Excitation Pulse Length	0.5 ms
Excitation Pulse Bandwidth	2,560 ms
Excitation Pulse Shape	bp.exc
Derive Init. Power	false
Adjustment Precision	0.3 dB
Initial Power	0.001 W
Max Power	400 W
Calculated Shape	false
Excitation Pulse Shape	bp.exc
Slice Thickness	5 mm
SliceOri	axial
Repetition Time	1,000 ms
Echo Time	15 ms
N Receive Channels	1
Channel Combination	SumOfSquares

Table 2. Coil information

Coil configuration	RF RES 128 1H/13C 103/040 L/L TR (BMRIDE T160788/0017)
Operation Mode	[1H] TX/RX Volume
Active Tx Coil	1
Tx Coil Element 1 active	true
Active Rx Coil	1
Active Receivers	1
Rx Coil Element 1 active	true

Routing Information

$Bis,1,20230404,2048,ROUTING,2#$Name,[1H]   TX/RX   Volume#$OpMode,1.0,D/
A,2.16.756.5.5.200.8323328.51270.1680621873.17#$TxCoil,1.0,1,RF RES 128 1H/13C 103/040
L/L   TR,BMRIDE,T160788,0017,1#$TxCoil,1.0,2,RF   RES   128   1H/13C   103/040   L/
L   TR,BMRIDE,T160788,0017,2#$RxCoil,1.0,1,RF   RES   128   1H/13C   103/040   L/
L   TR,BMRIDE,T160788,0017,1#$RxCoil,1.0,2,RF   RES   128   1H/13C   103/040   L/L
TR,BMRIDE,T160788,0017,2#$RfConn,1.0, Chan,1, Nuc,1H#$RfConn,1.0, Chan,1, TxSgu,2#
$RfConn,1.0,   TxSgu,2,   Amp,2#$RfConn,1.0,   Amp,2,   TxPreamp,3#$RfConn,1.0,   Chan,1,
RxSgu,2#$RfConn,1.0, RxSgu,2, Rec,2#$RfConn,1.0, Rec,2, RxPreamp,3#$RfConn,1.0, Chan,2,
Nuc,13C#$RfConn,1.0, Chan,2, TxSgu,1#$RfConn,1.0, TxSgu,1, Amp,1#$RfConn,1.0, Amp,1,
TxPreamp,2#$RfConn,1.0, Chan,2, RxSgu,1#$RfConn,1.0, RxSgu,1, Rec,1#$RfConn,1.0, Rec,1,
RxPreamp,2#$RfDevProp,1.0, Amp,1/2, HpMode,On#$RfDevProp,1.0, Amp,1, OutSwitchPos,1##
$EndBis,DF,4C#

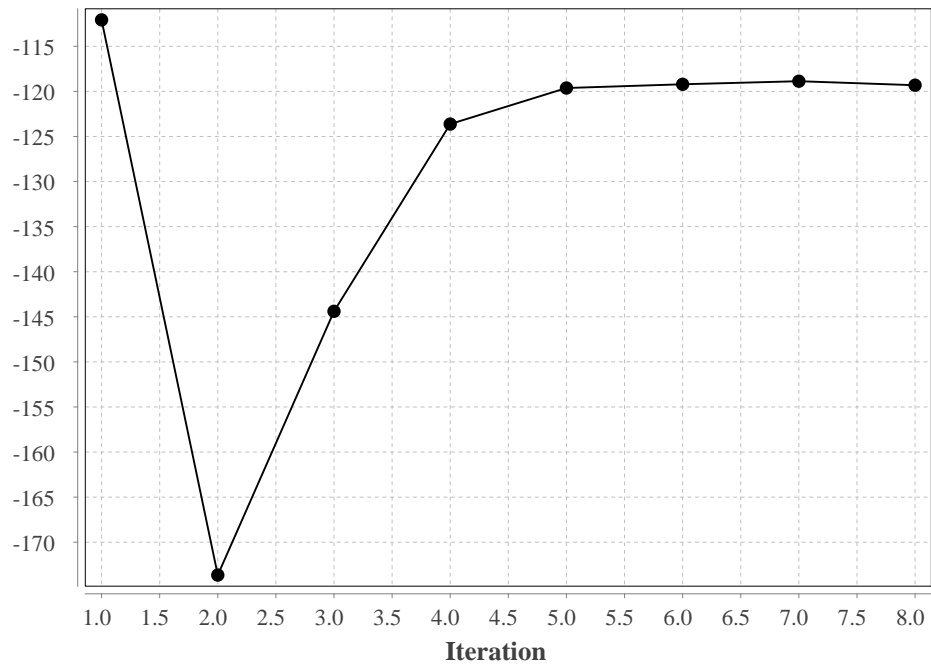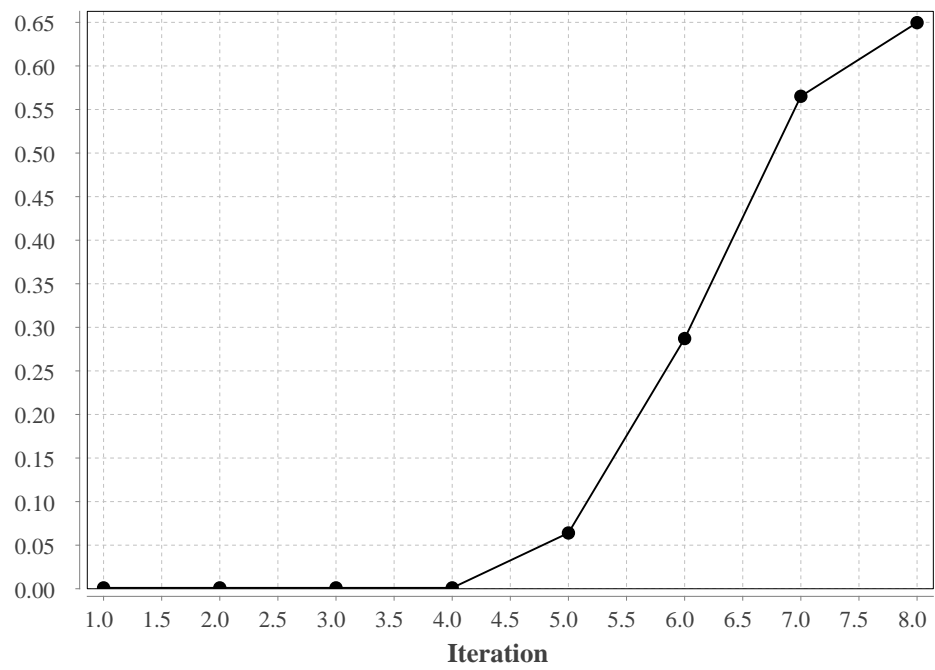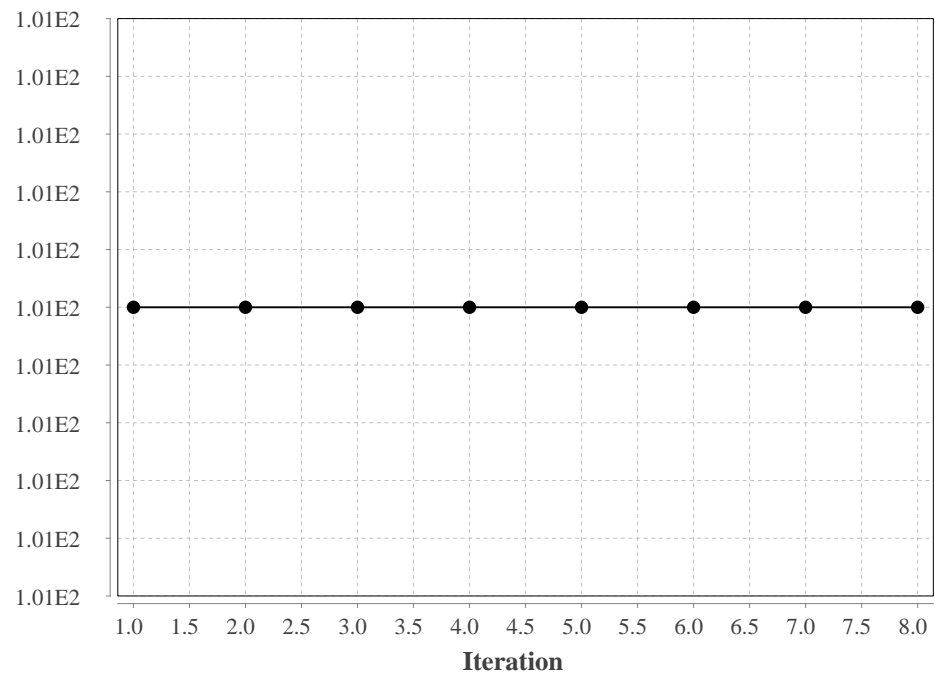# 3. Adjustment Progression

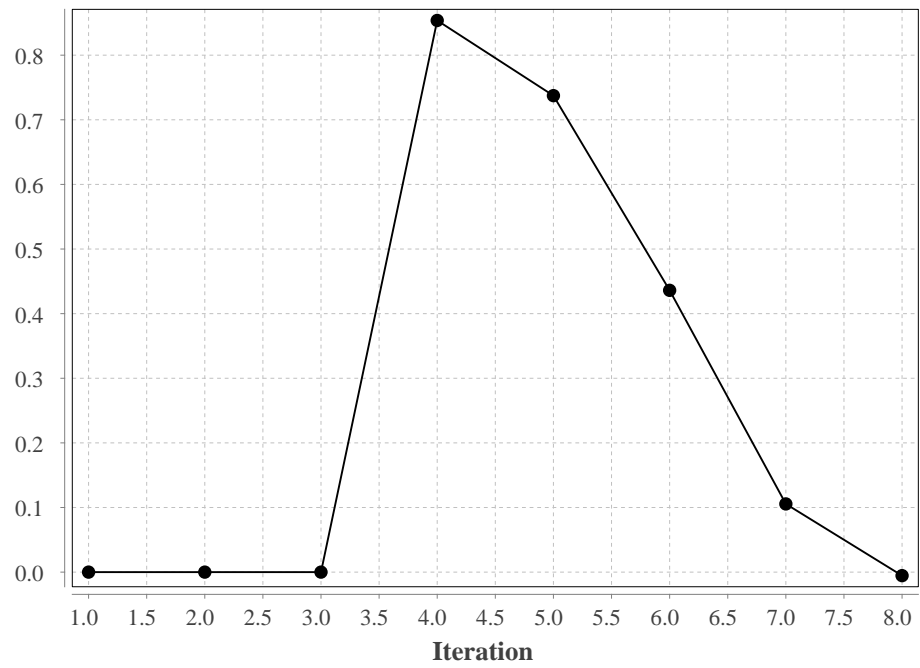### Figure 1. Spin Echo Phase Channel 1

Figure 2. Pulse Power of Adjustment Pulse

Figure 3. Receiver Gain

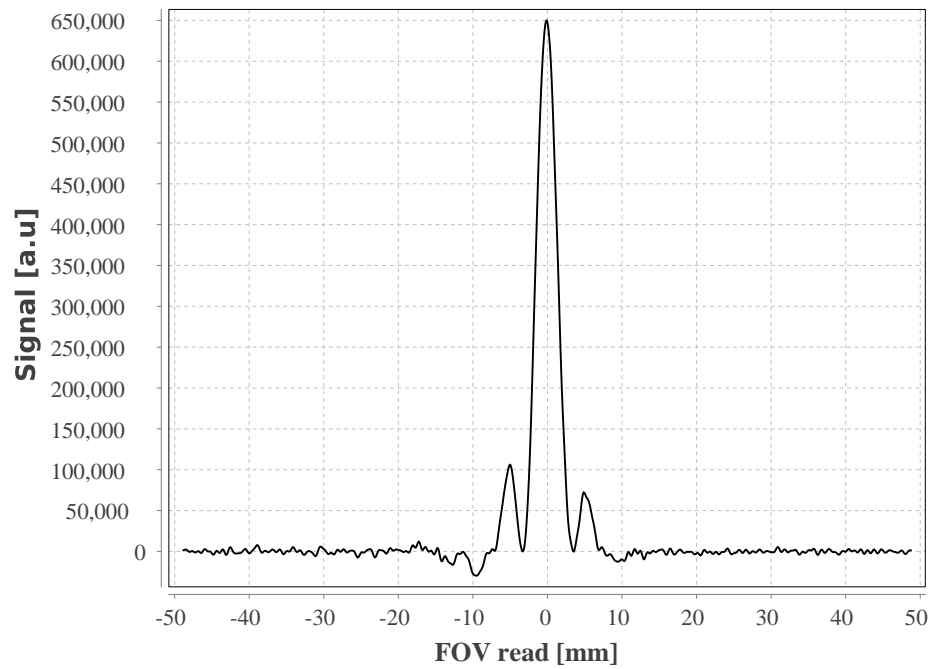**Figure 4. STE / SE ratio**

4. Profiles

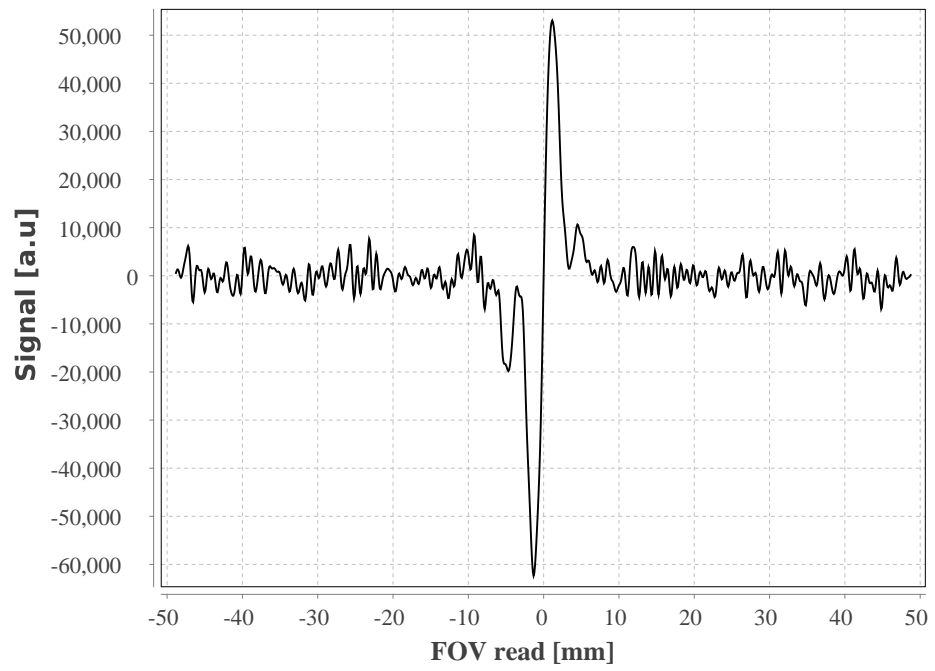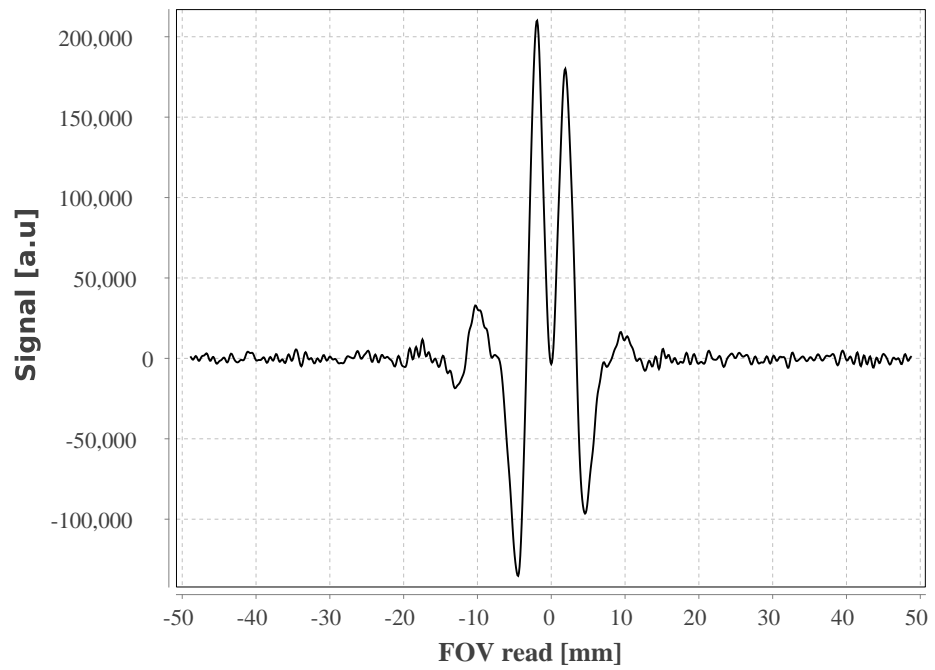**Figure 5. Spin Echo Sum Profile (real part)**

Figure 6. Spin Echo Sum Profile (imag part)

Figure 7. Stimulated Echo Sum Profile (real part)
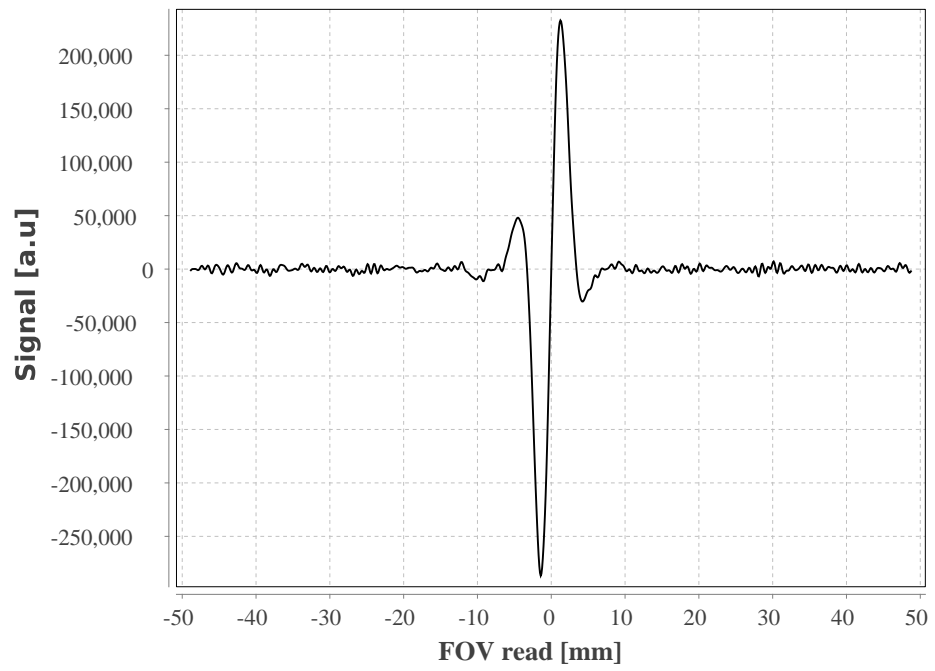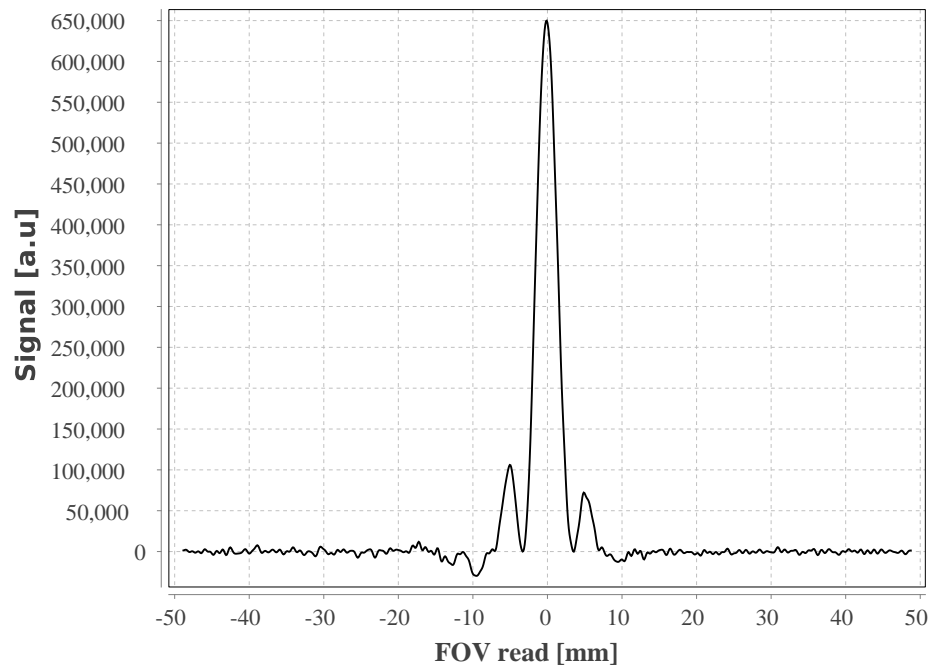
Figure 8. Stimulated Echo Sum Profile (imag part)

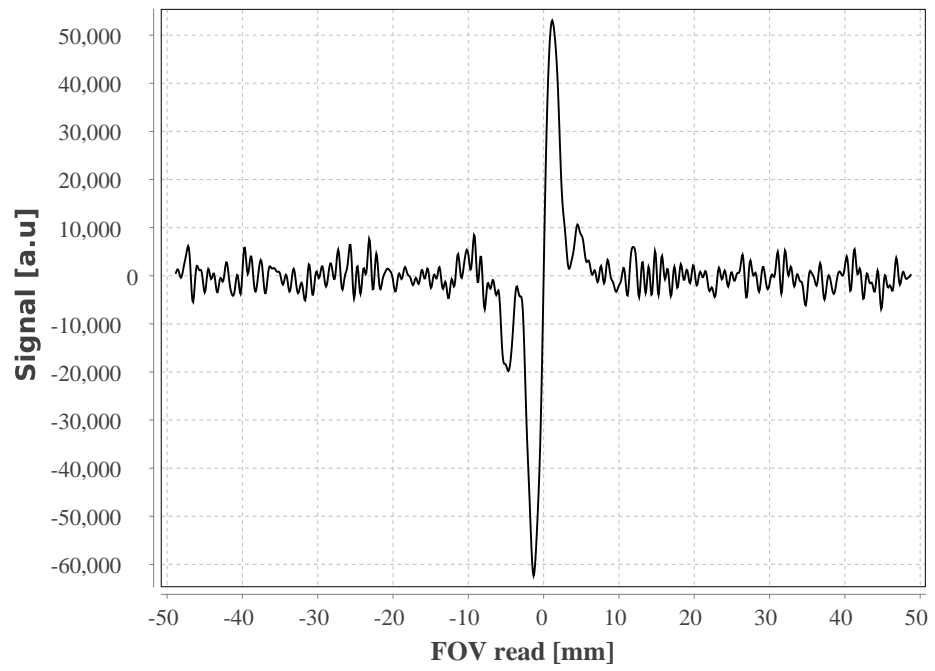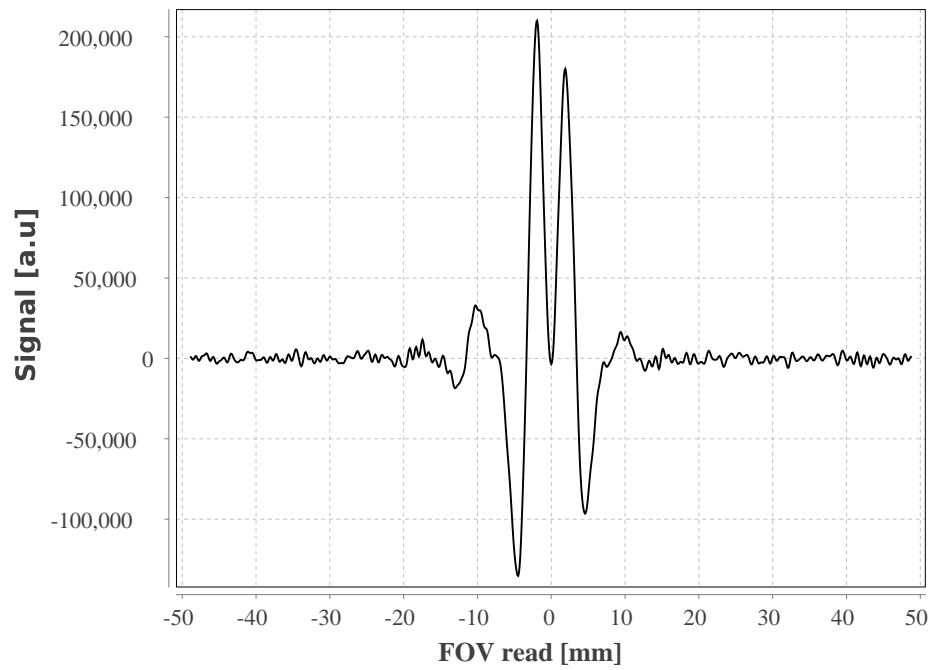**Figure 9. Spin Echo Profile (real part) channel 1**

Figure 10. Spin Echo Profile (imag part) channel 1

Figure 11. Stimulated Echo Profile (real part) channel 1

Figure 12. Stimulated Echo Profile (imag part) channel 1