Bruker BioSpin MRI

ParaVision 360 V3.4

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	262.144 W
Reference Power Status	
Adjustment Status	Max power exceeded!

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

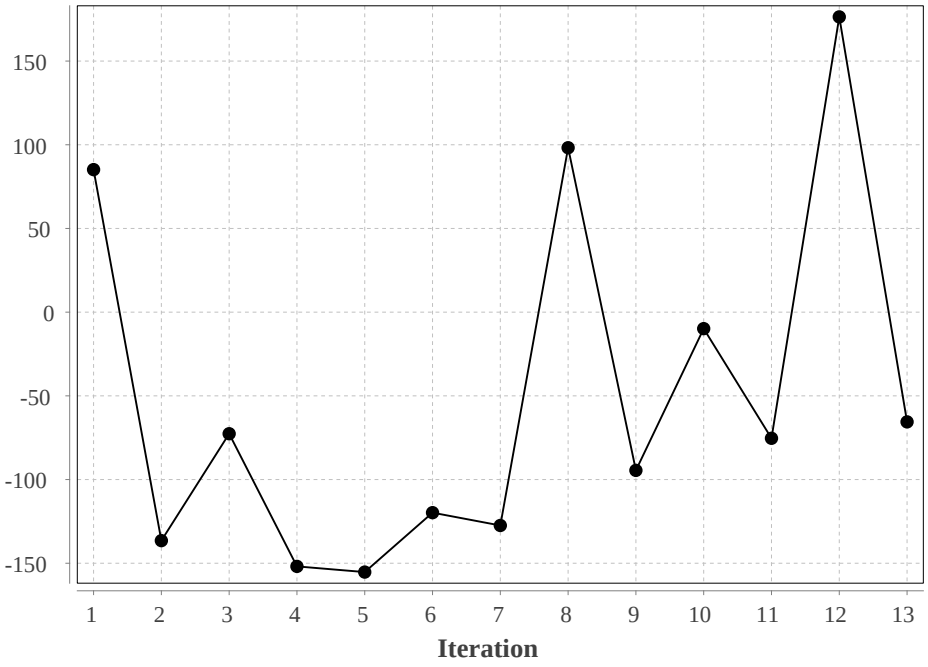


Figure 2. Pulse Power of Adjustment Pulse

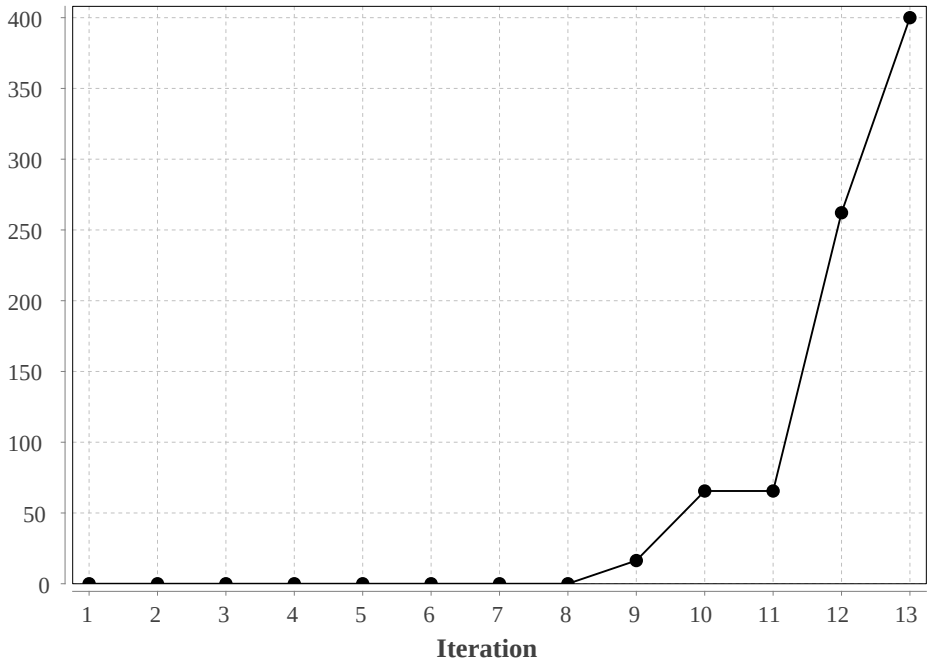


Figure 3. Receiver Gain

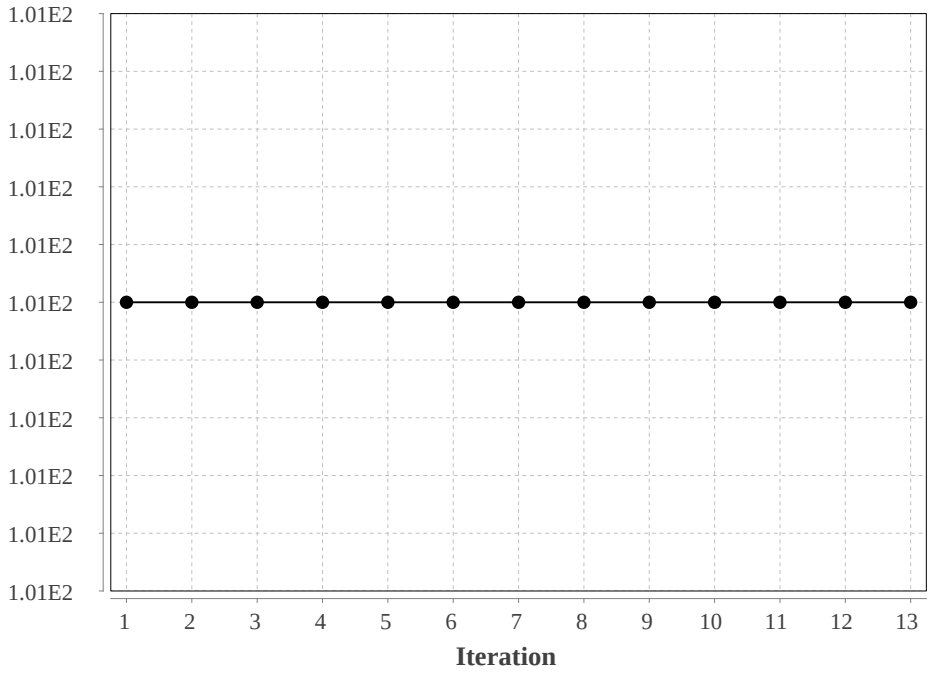
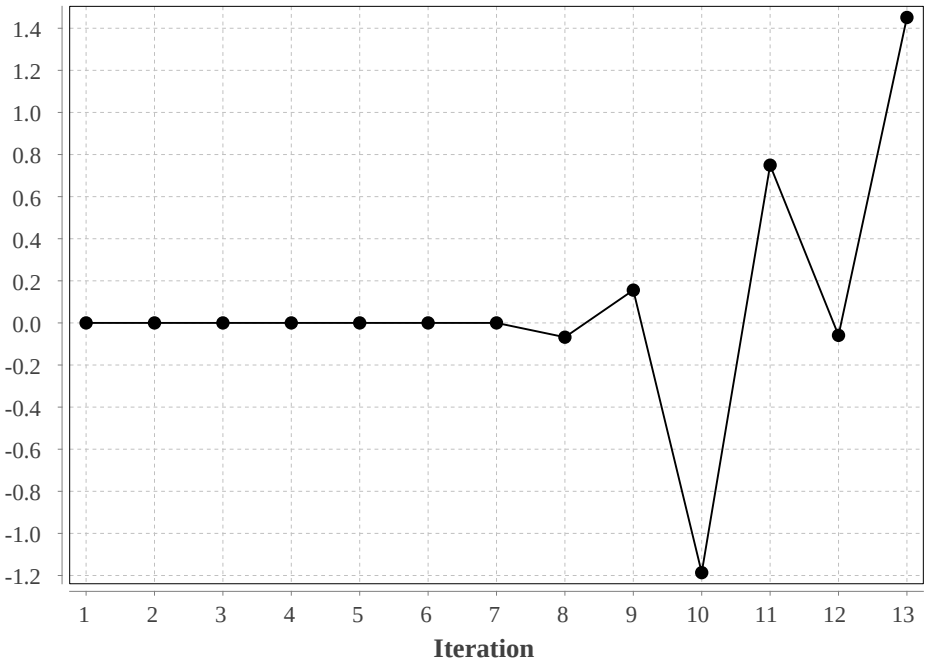


Figure 4. STE / SE ratio



4. Profiles

Figure 5. Spin Echo Sum Profile (real part)

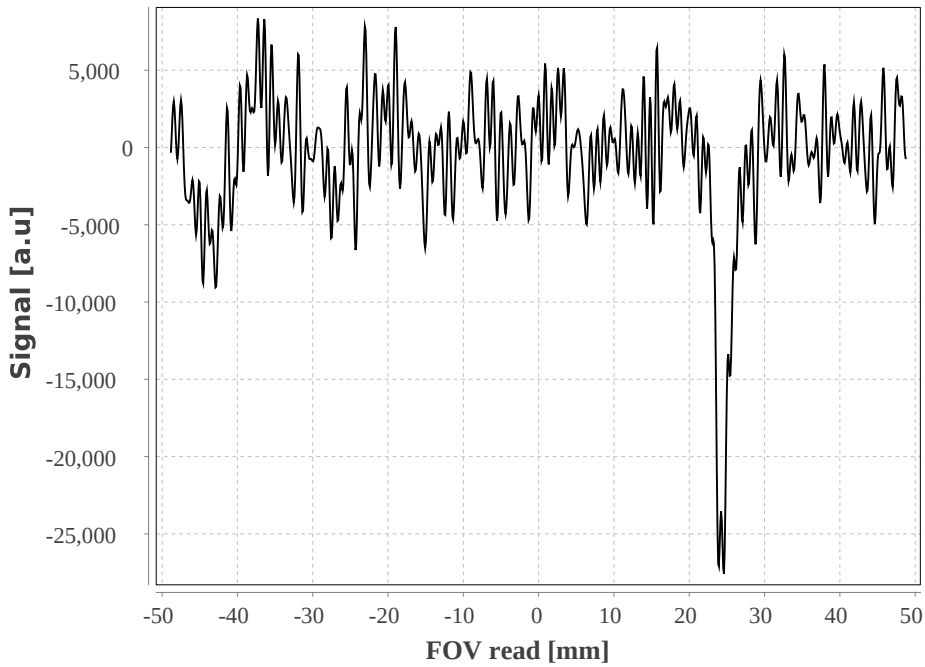


Figure 6. Spin Echo Sum Profile (imag part)

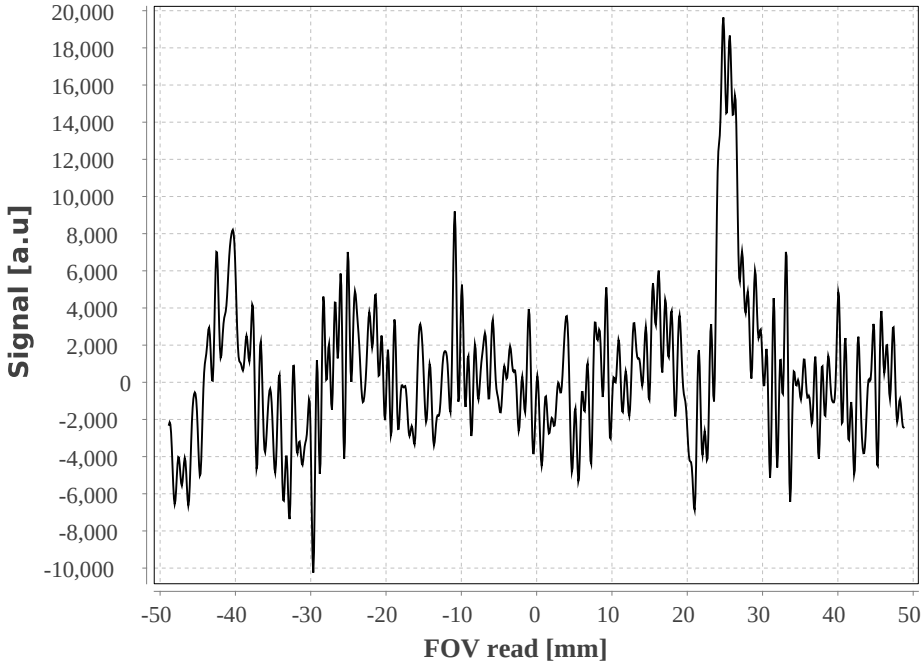


Figure 7. Stimulated Echo Sum Profile (real part)

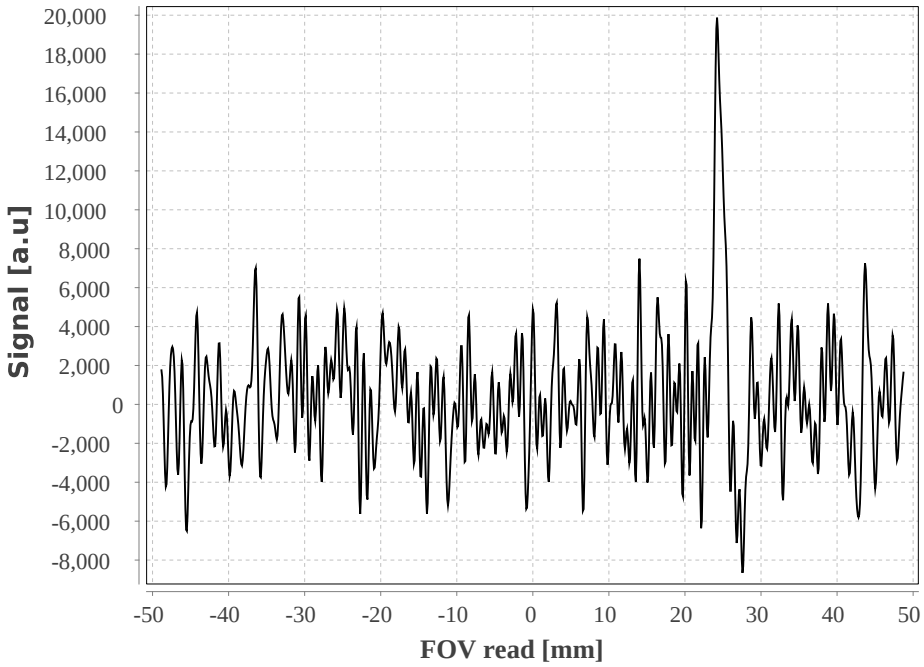


Figure 8. Stimulated Echo Sum Profile (imag part)

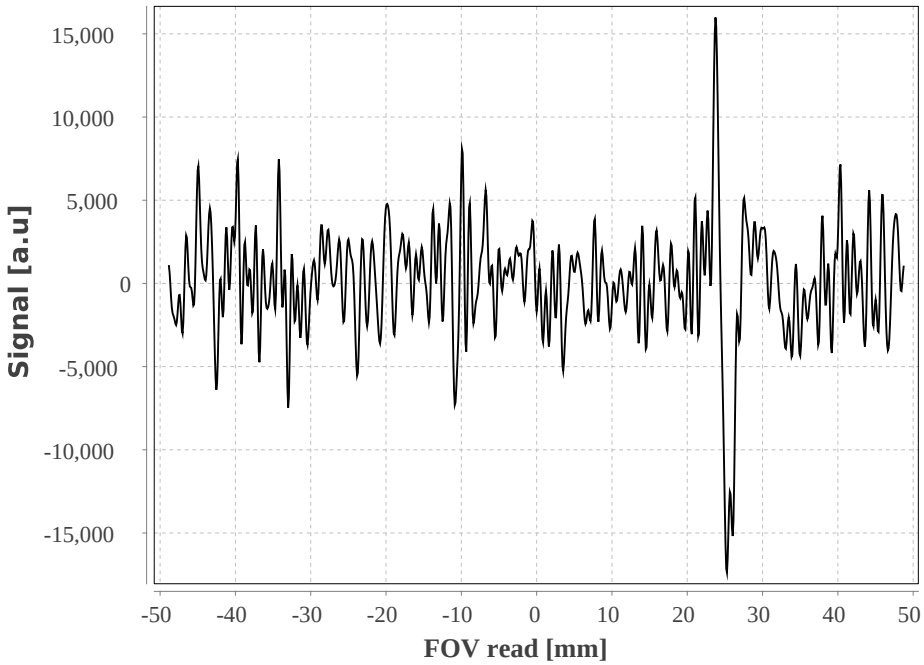


Figure 9. Spin Echo Profile (real part) channel 1

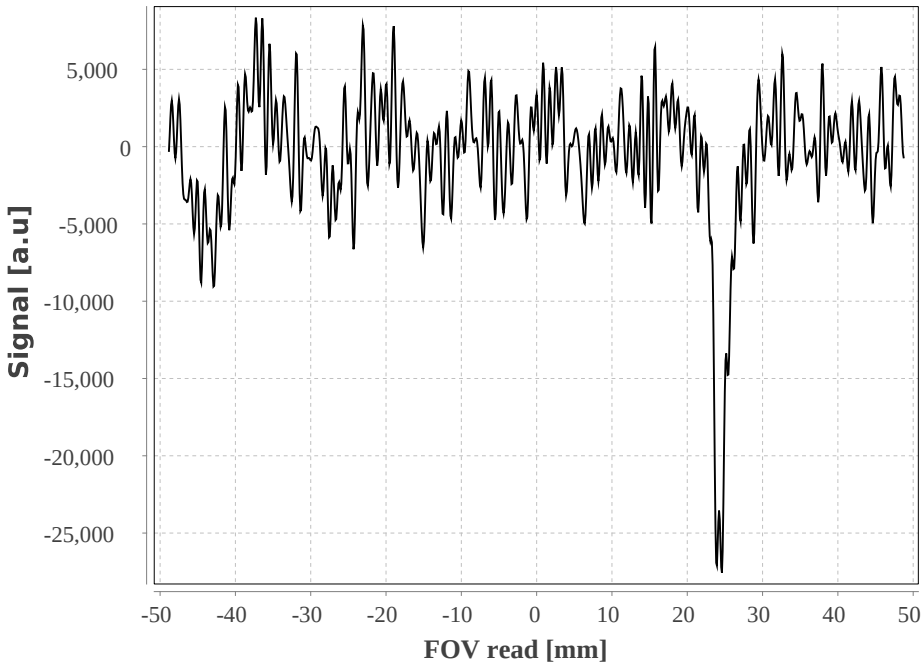


Figure 10. Spin Echo Profile (imag part) channel 1

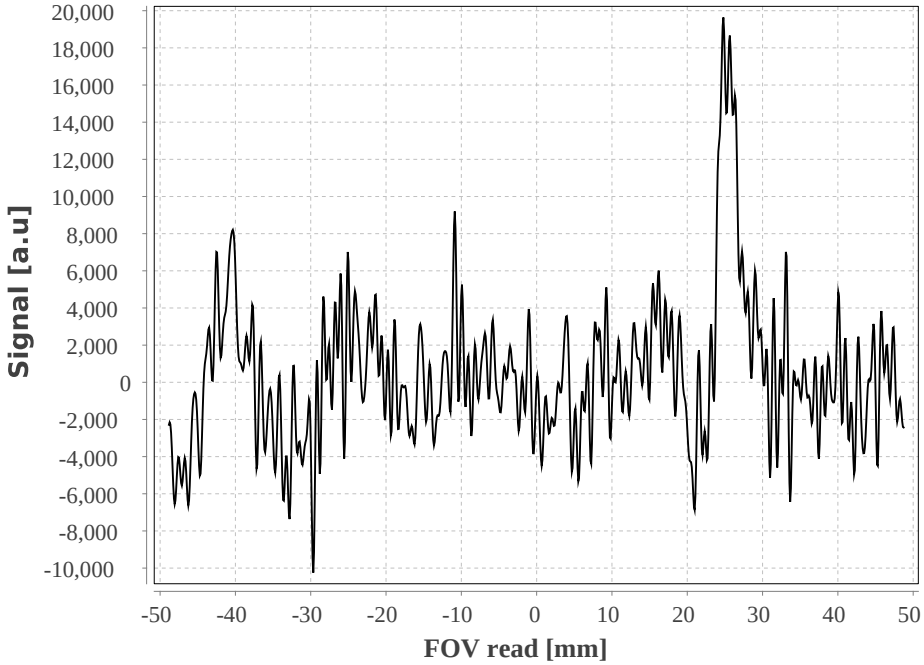


Figure 11. Stimulated Echo Profile (real part) channel 1

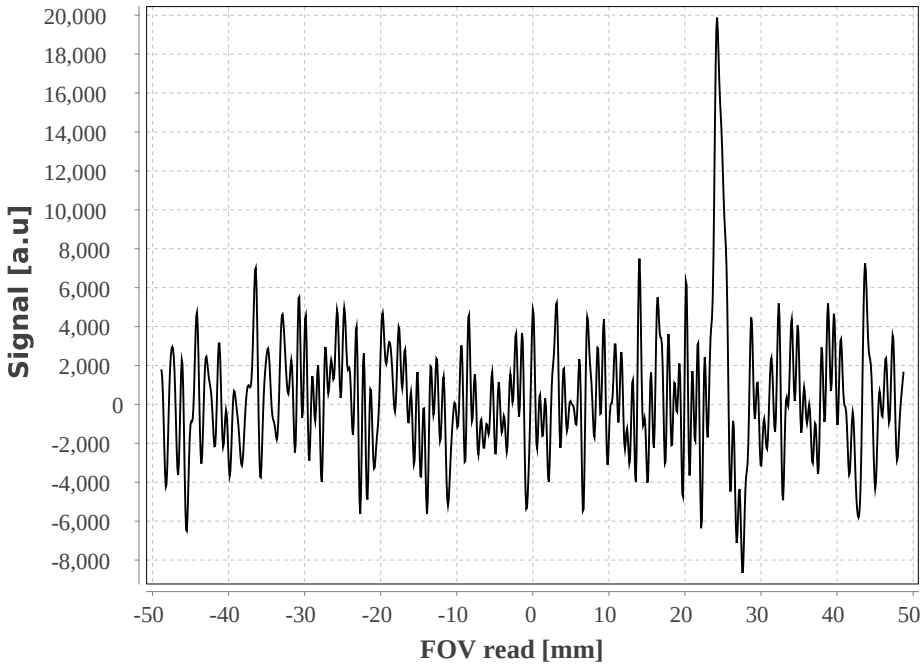


Figure 12. Stimulated Echo Profile (imag part) channel 1