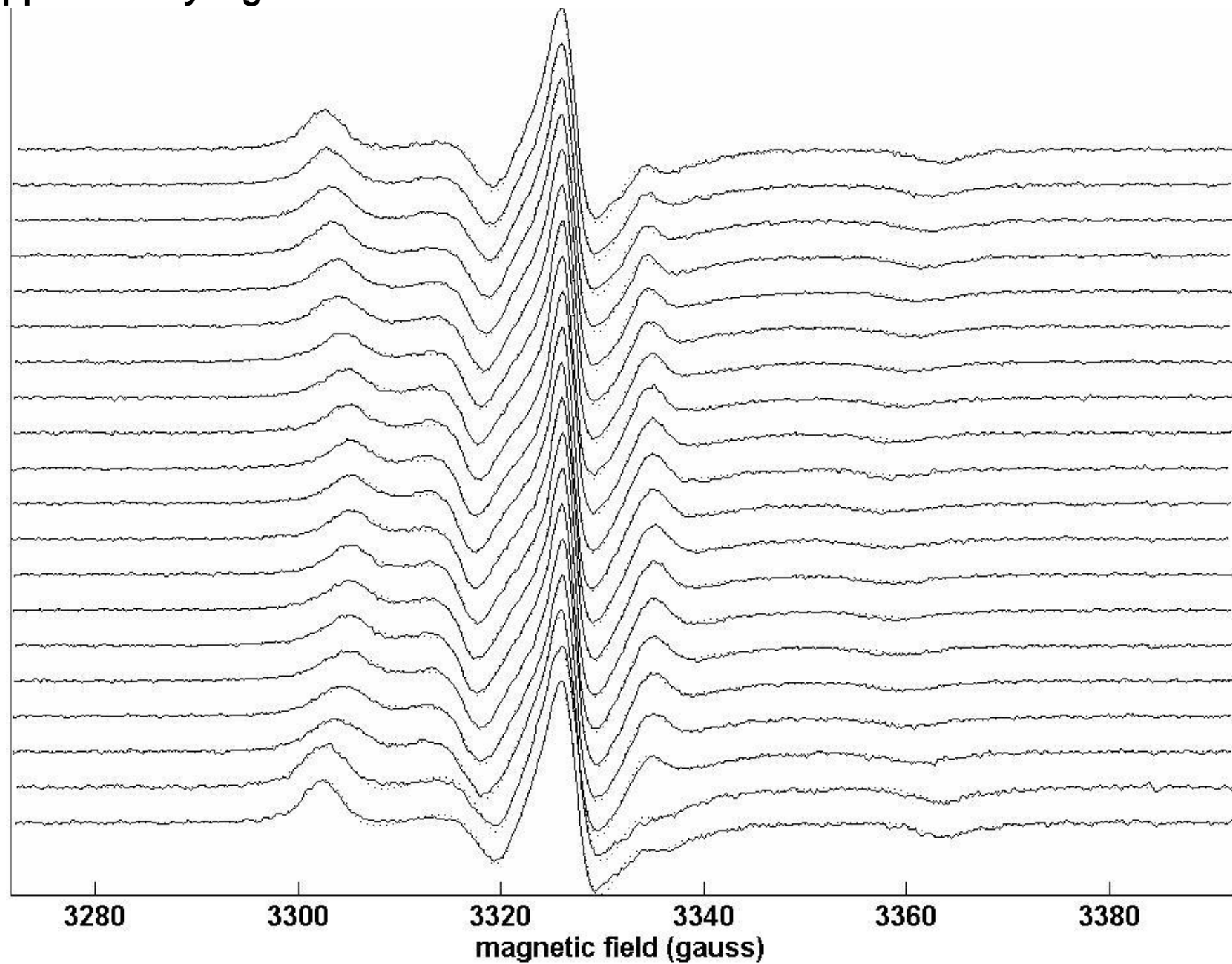


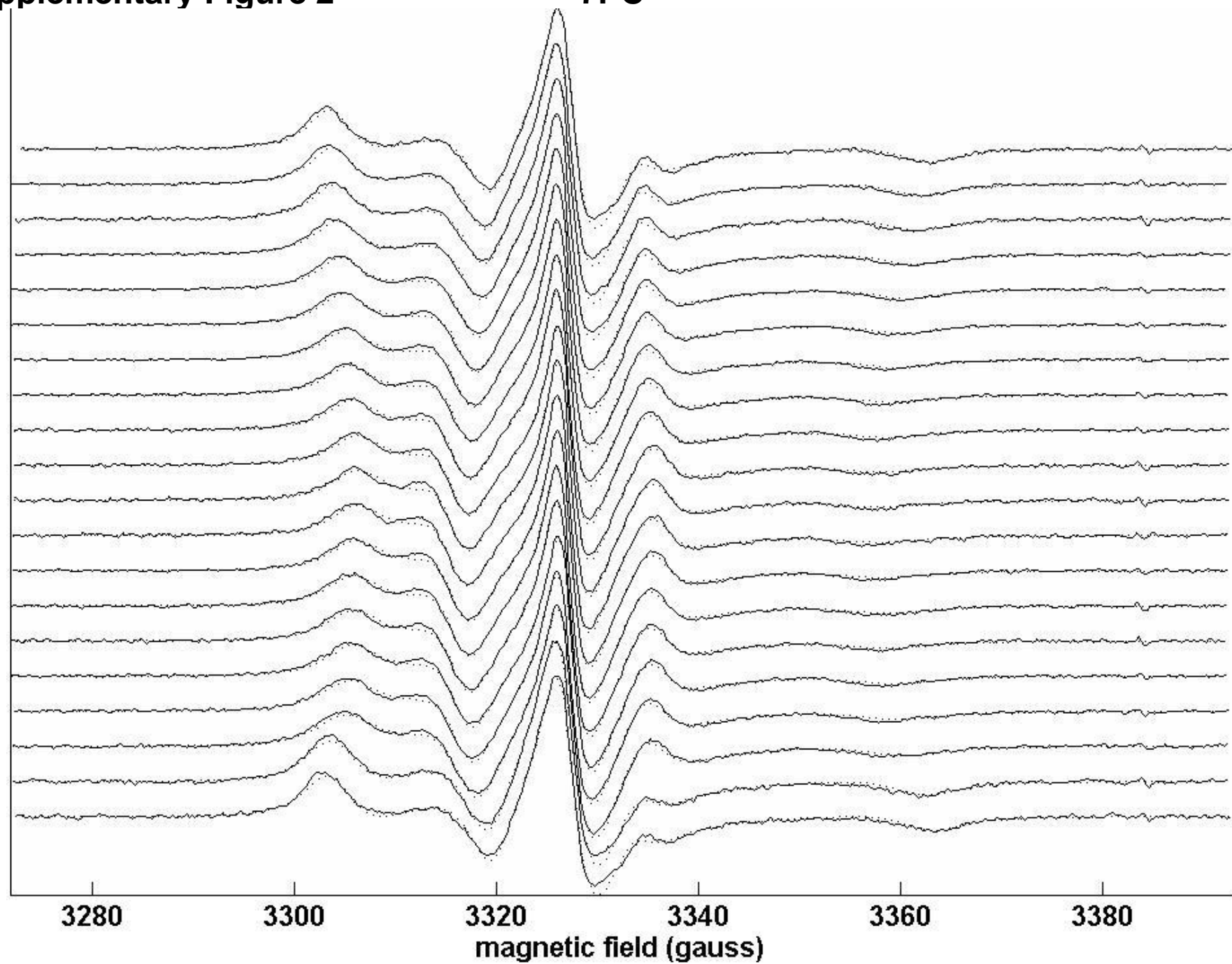
**Supplementary Figure 1**

**5PC**



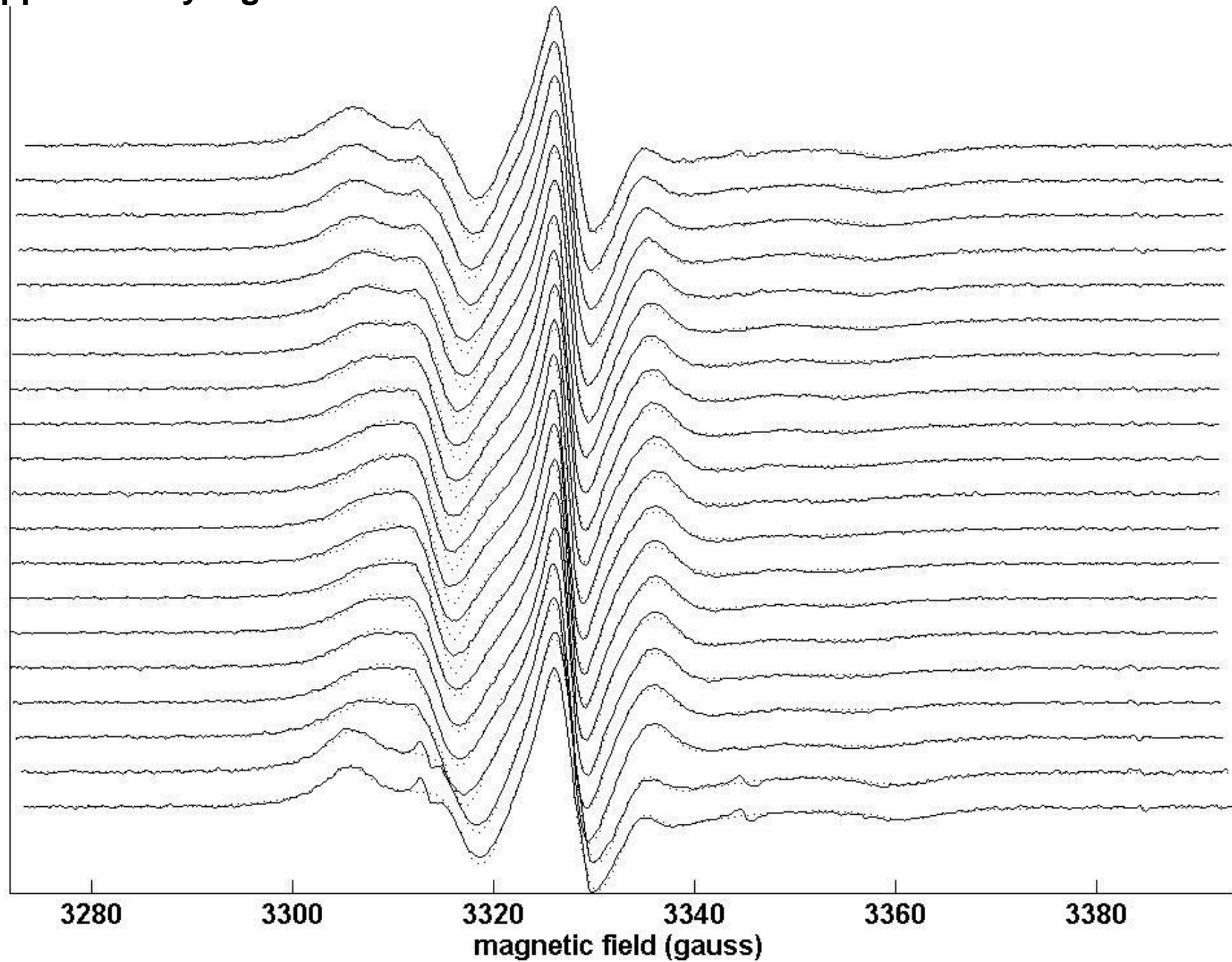
**Supplementary Figure 2**

**7PC**



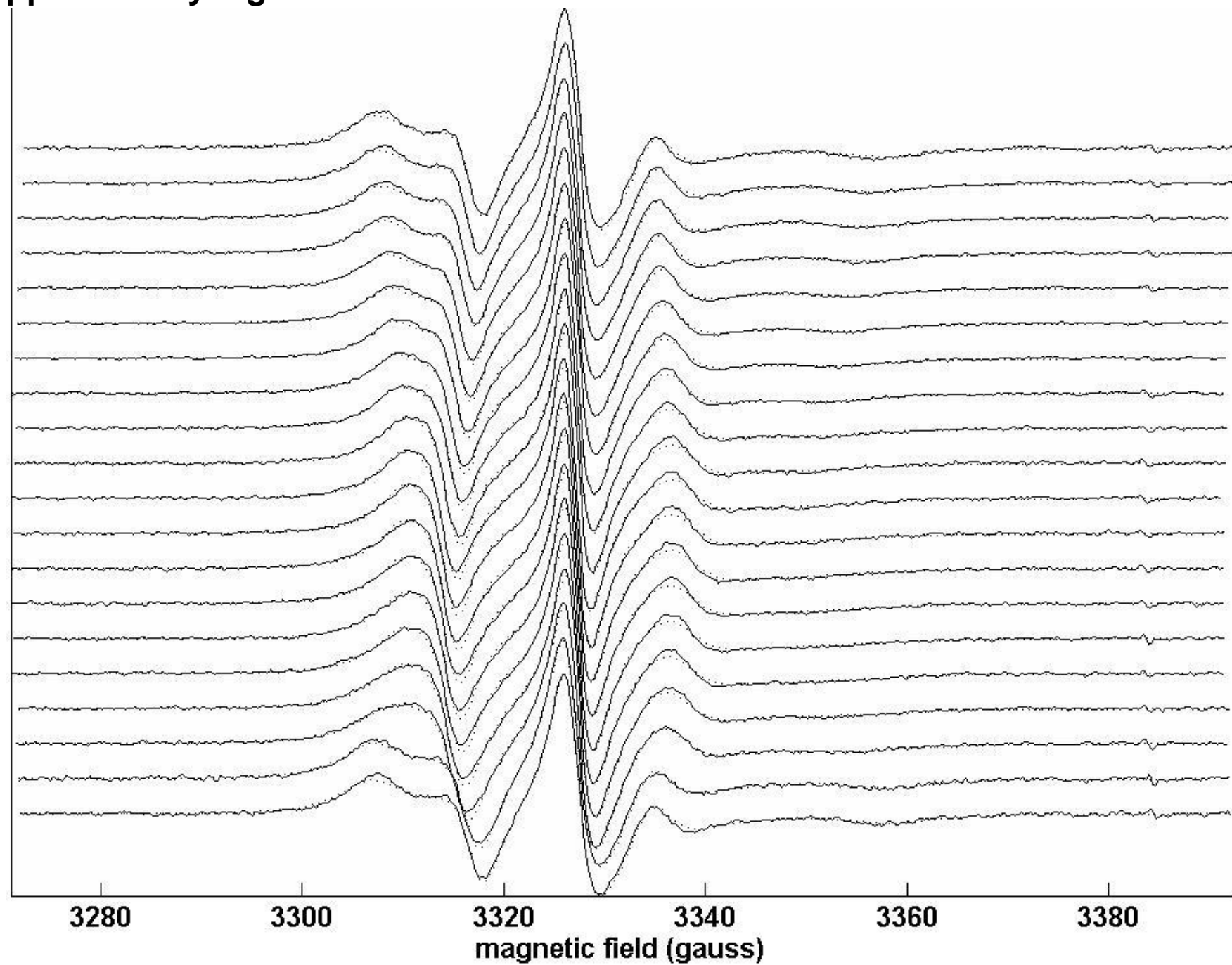
**Supplementary Figure 3**

**10PC**

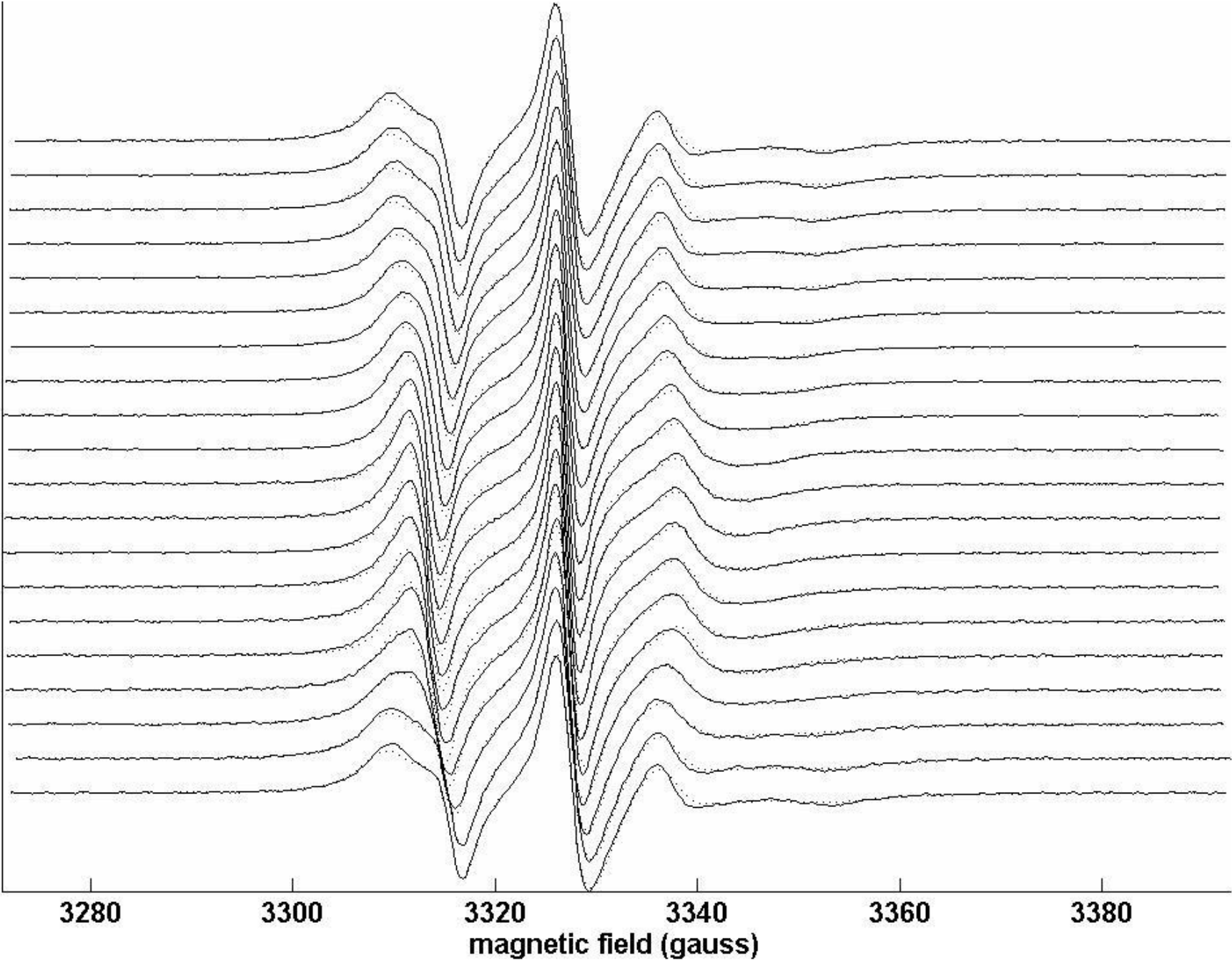


**Supplementary Figure 4**

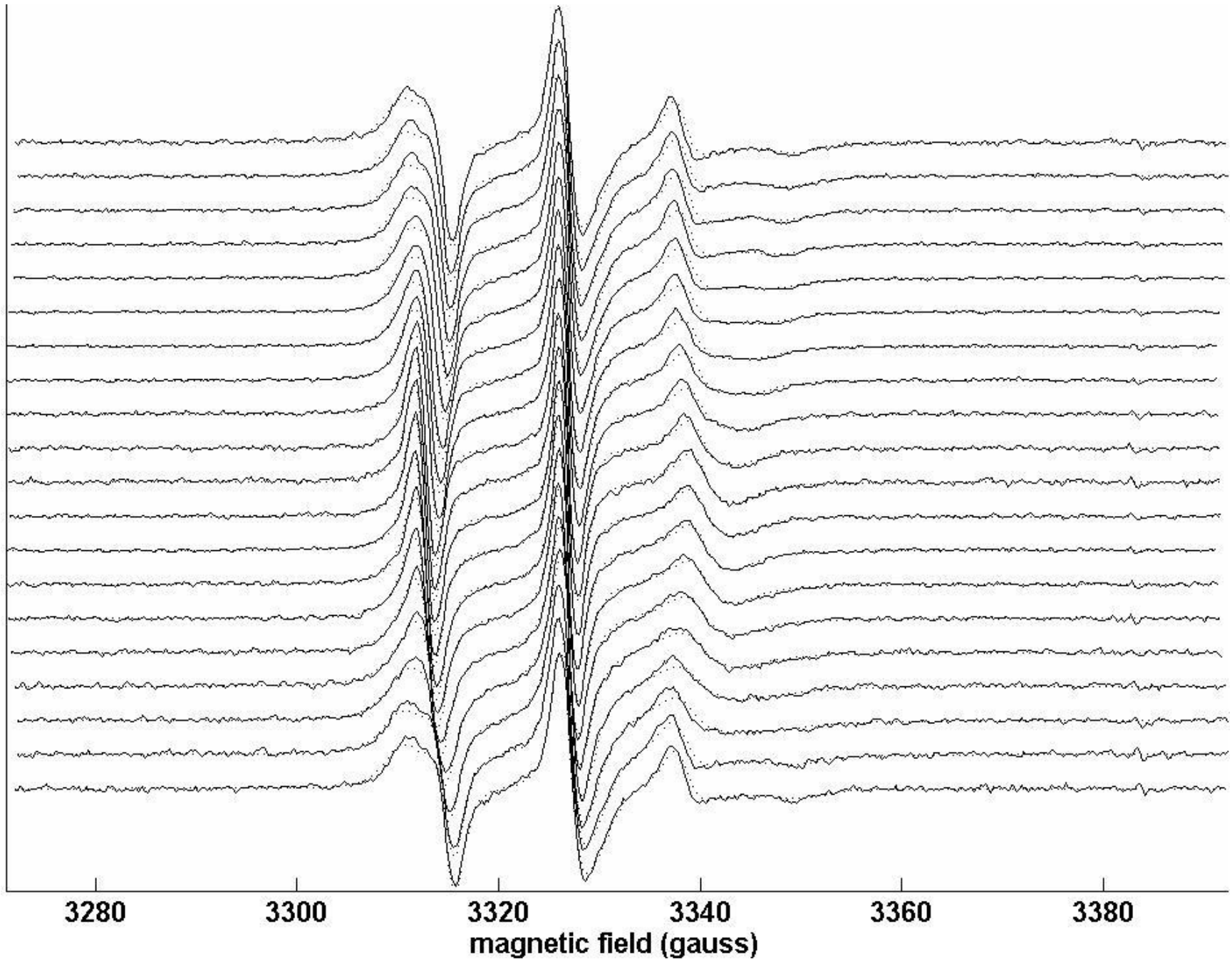
**12PC**



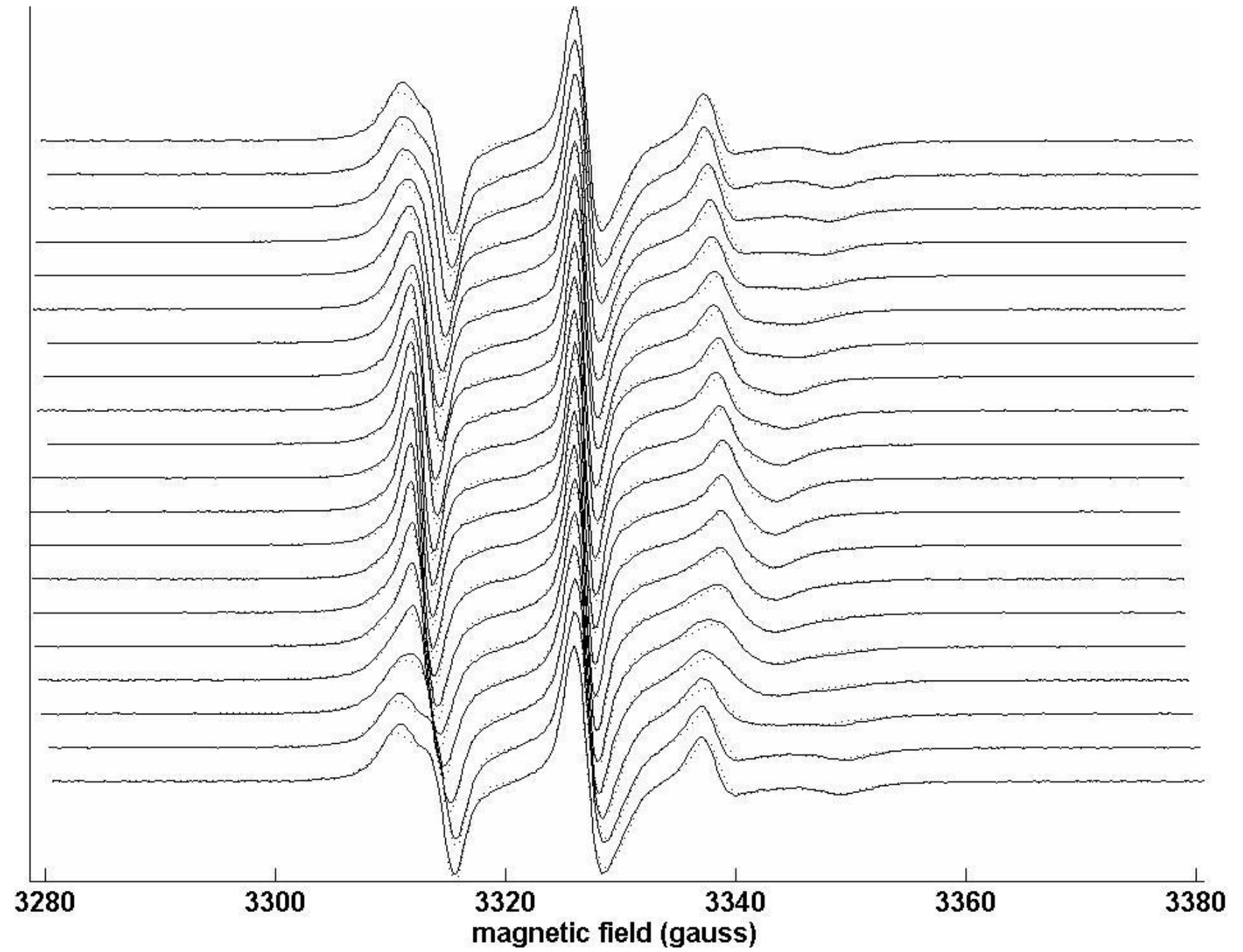
**Supplementary Figure 5** **14PC**



**Supplementary Figure 6** **14SPM**

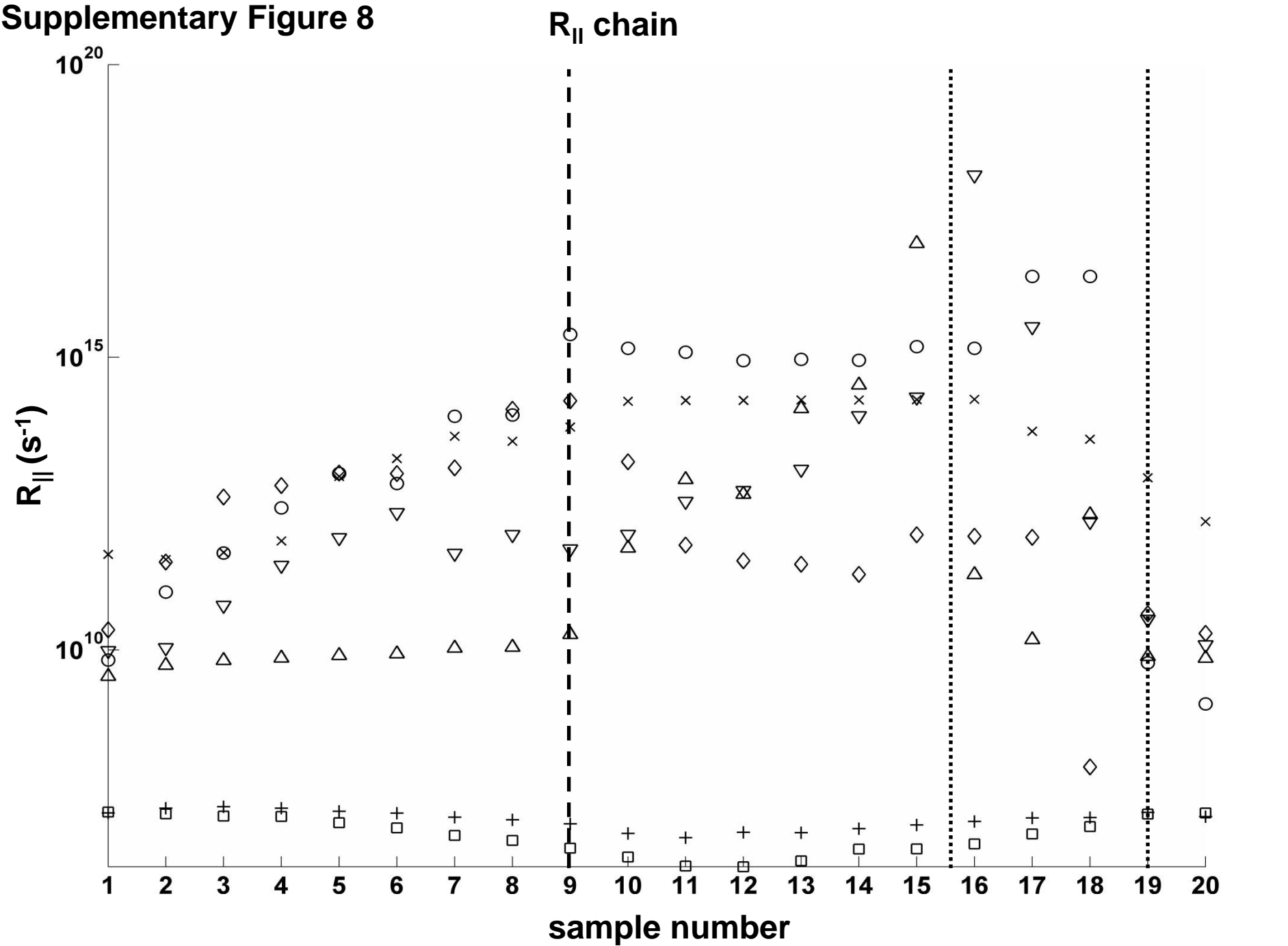


**Supplementary Figure 7** **16PC**





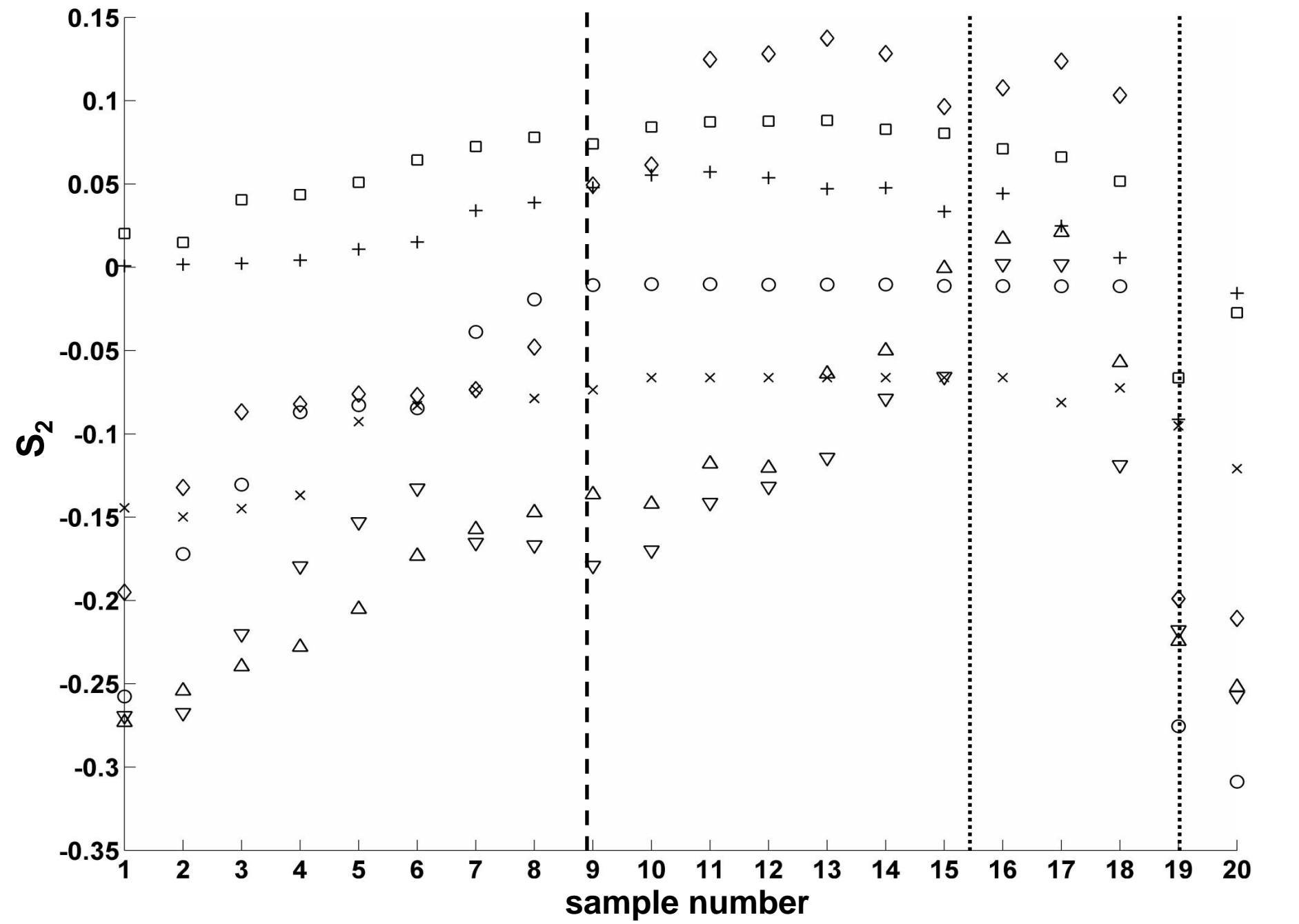
Supplementary Figure 8



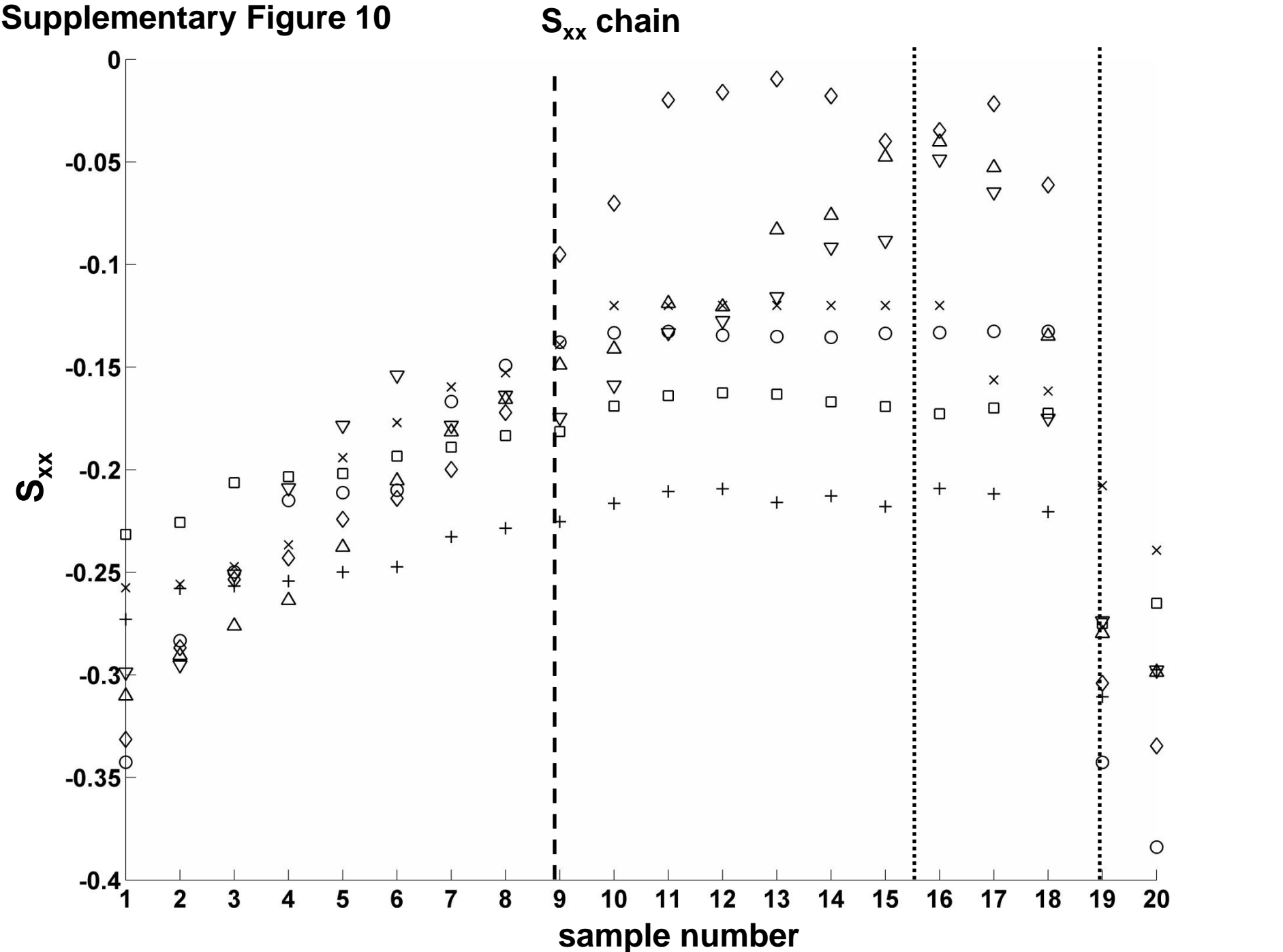


Supplementary Figure 9

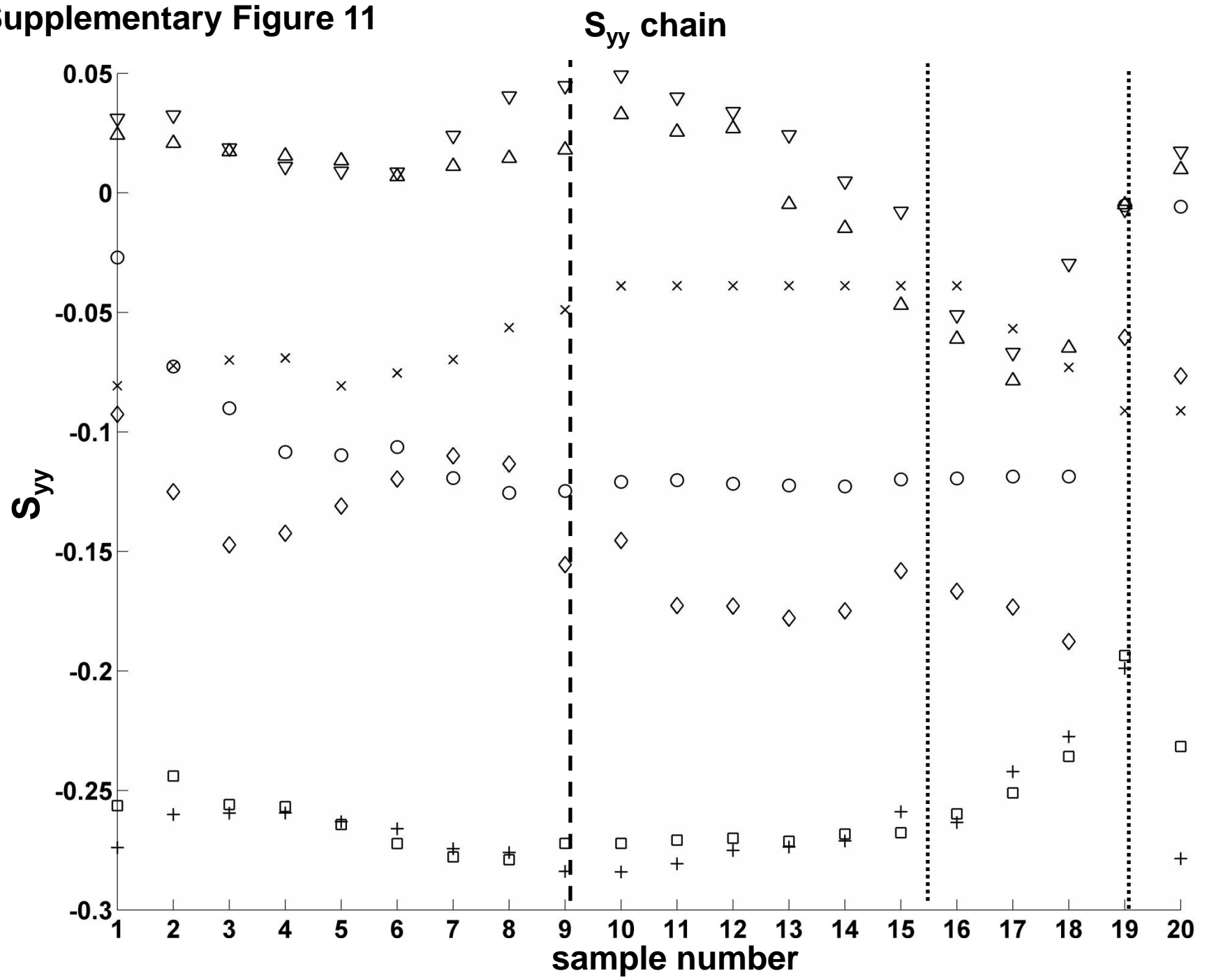
S<sub>2</sub> chain



Supplementary Figure 10

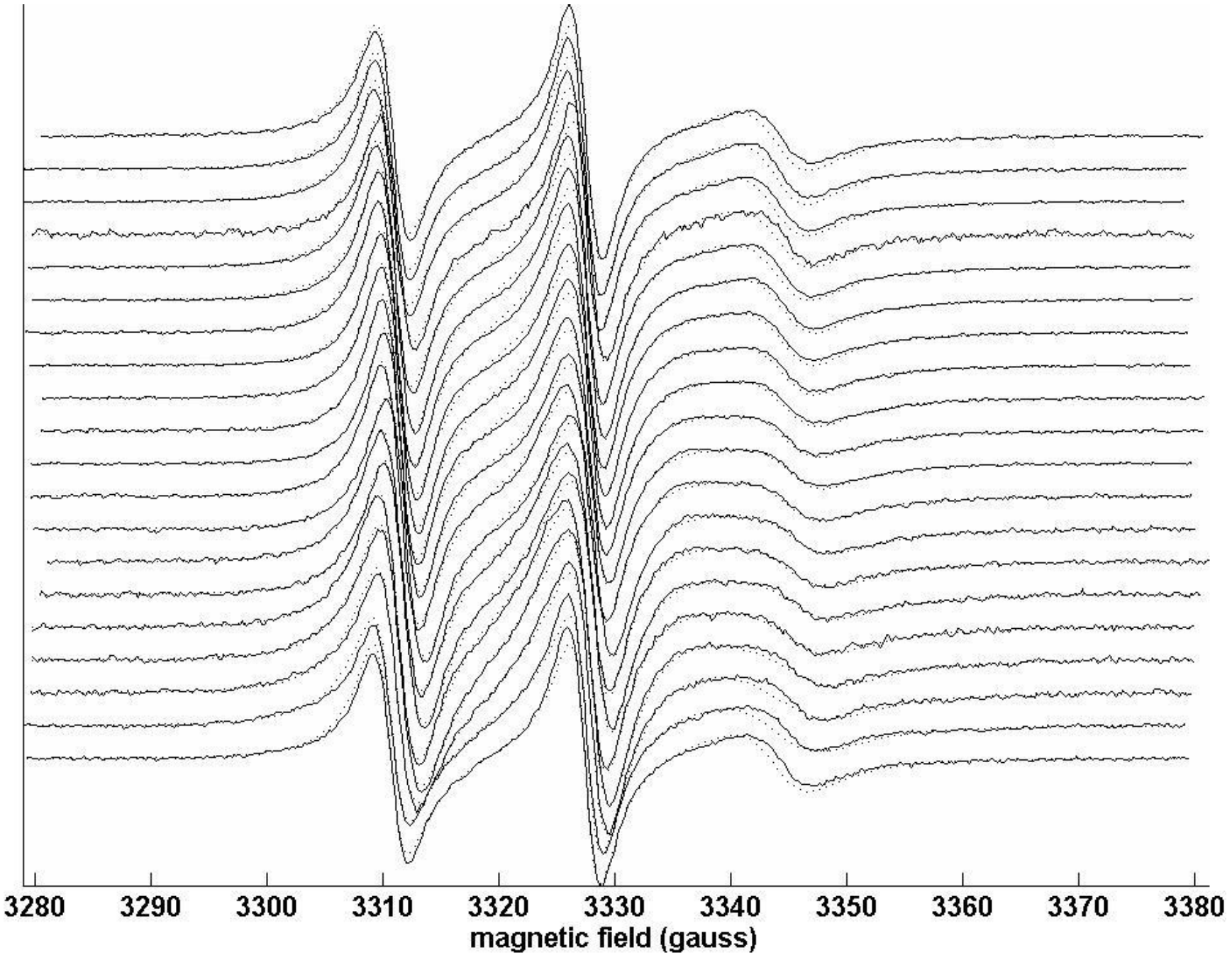


Supplementary Figure 11



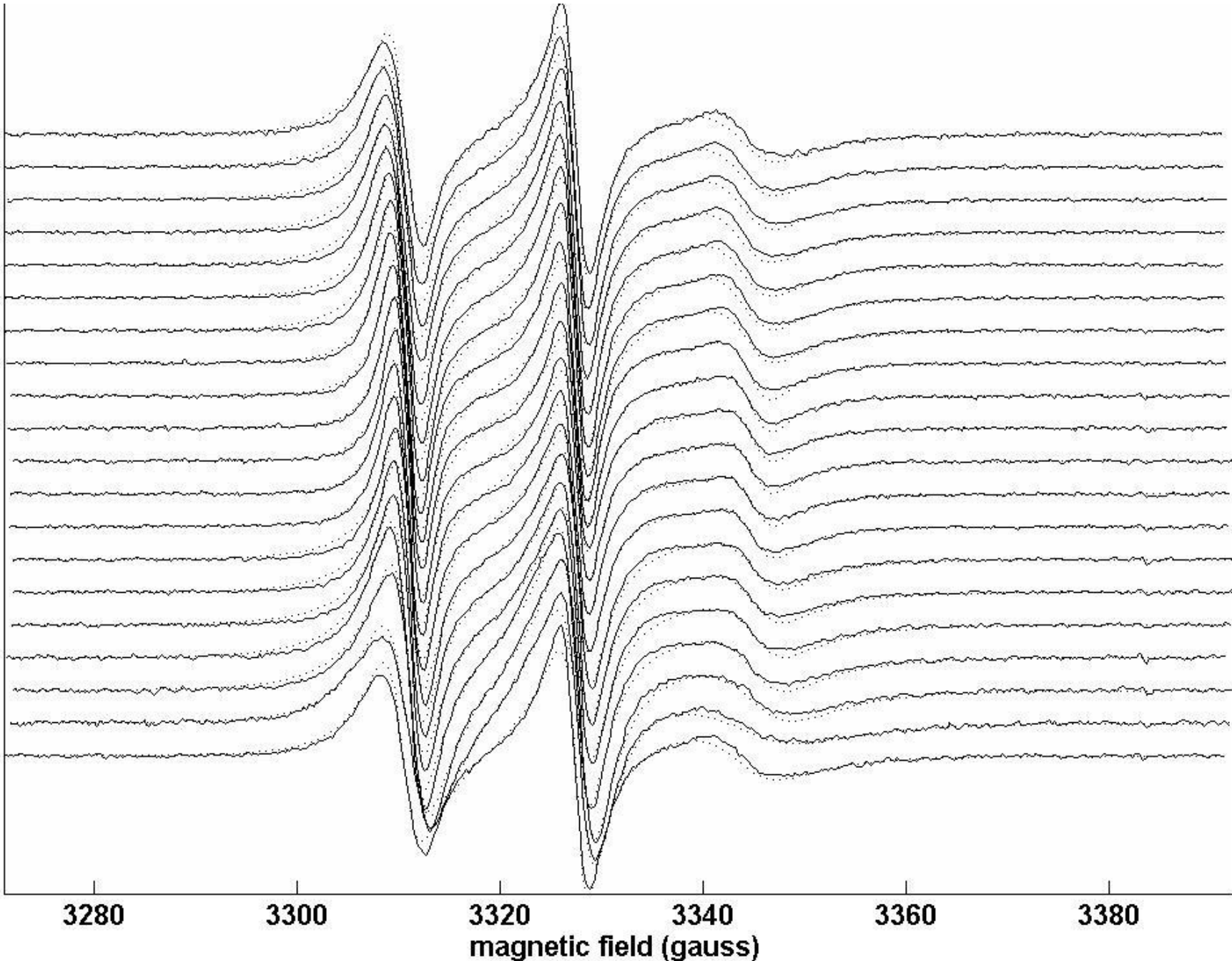
**Supplementary Figure 12**

**DPPTC**



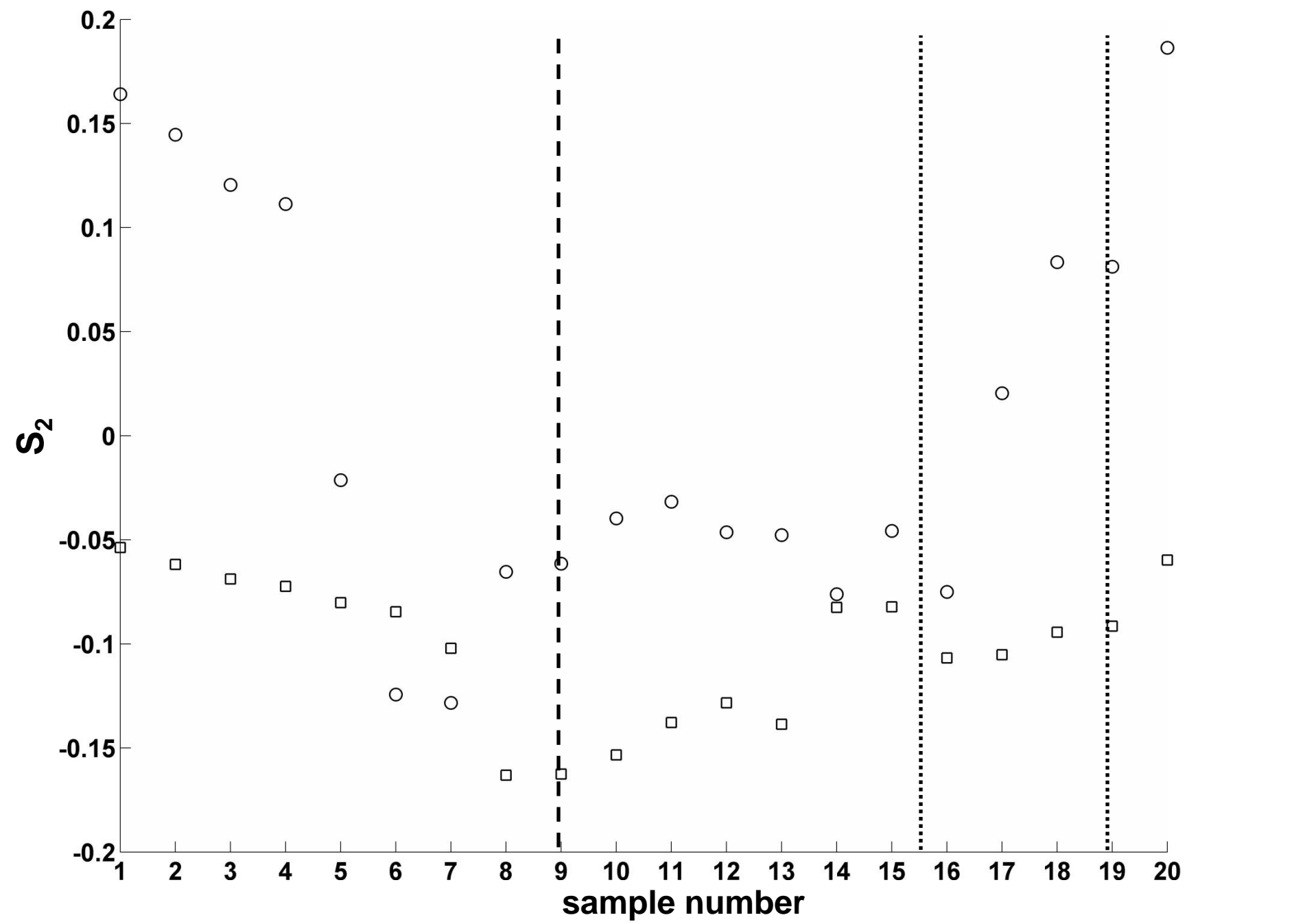
**Supplementary Figure 13**

**SPMHEAD**

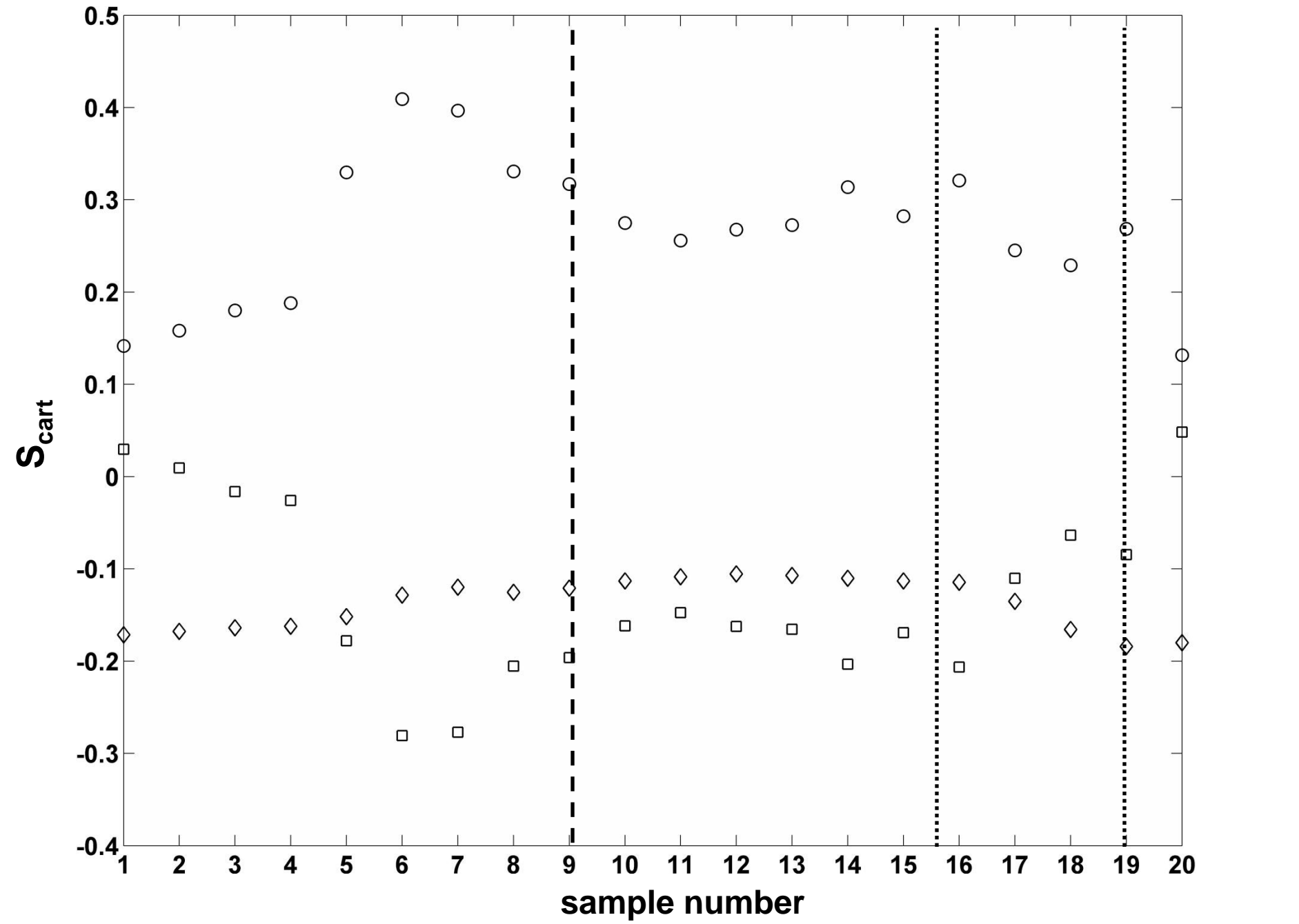


Supplementary Figure 14

S<sub>2</sub> DPPTC (circles) S<sub>2</sub> SPMHEAD (squares)

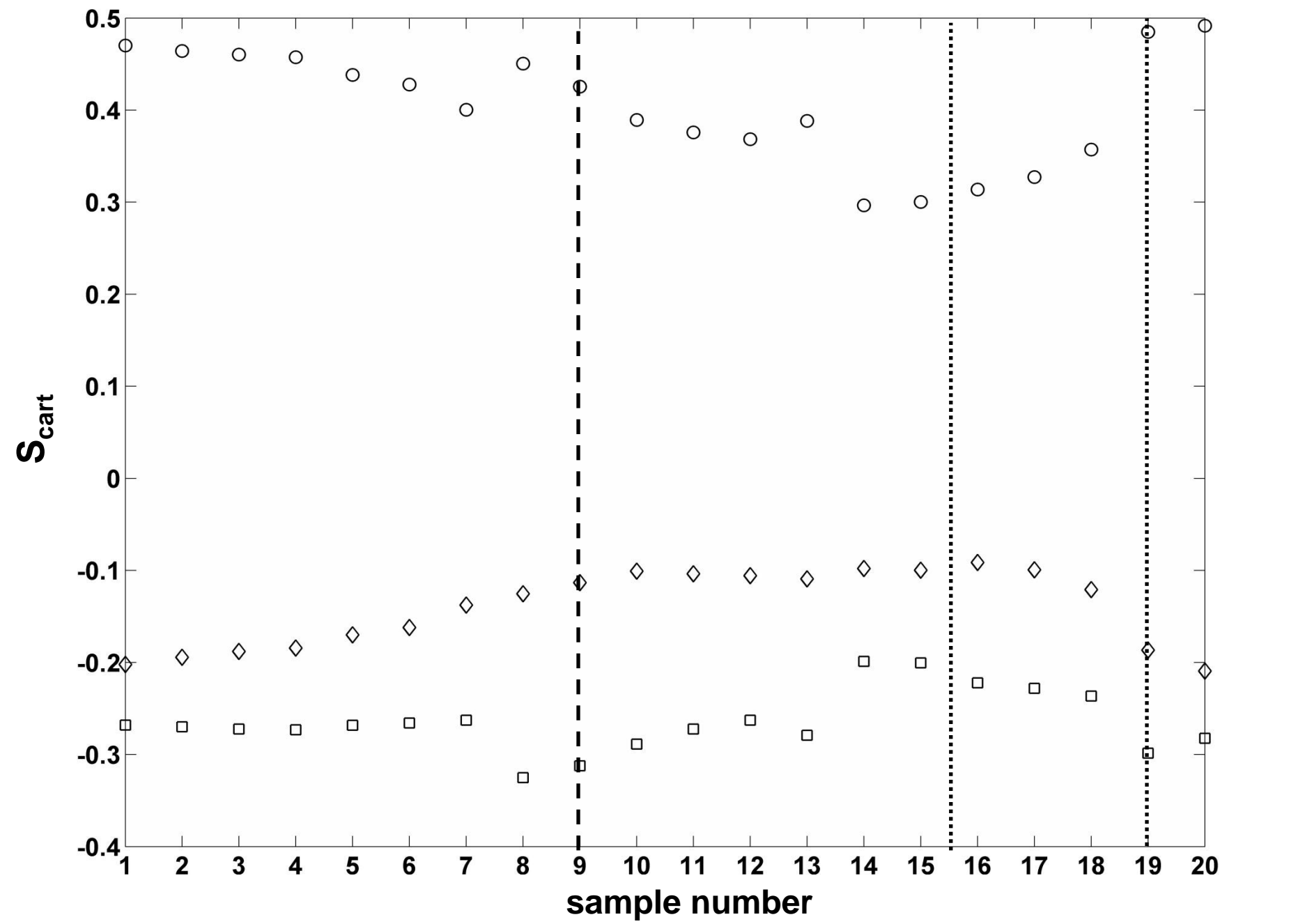


Supplementary Figure 15      DPPTC:  $S_{xx}$  (circles)  $S_{yy}$  (squares)  $S_{zz}$  (diamonds)



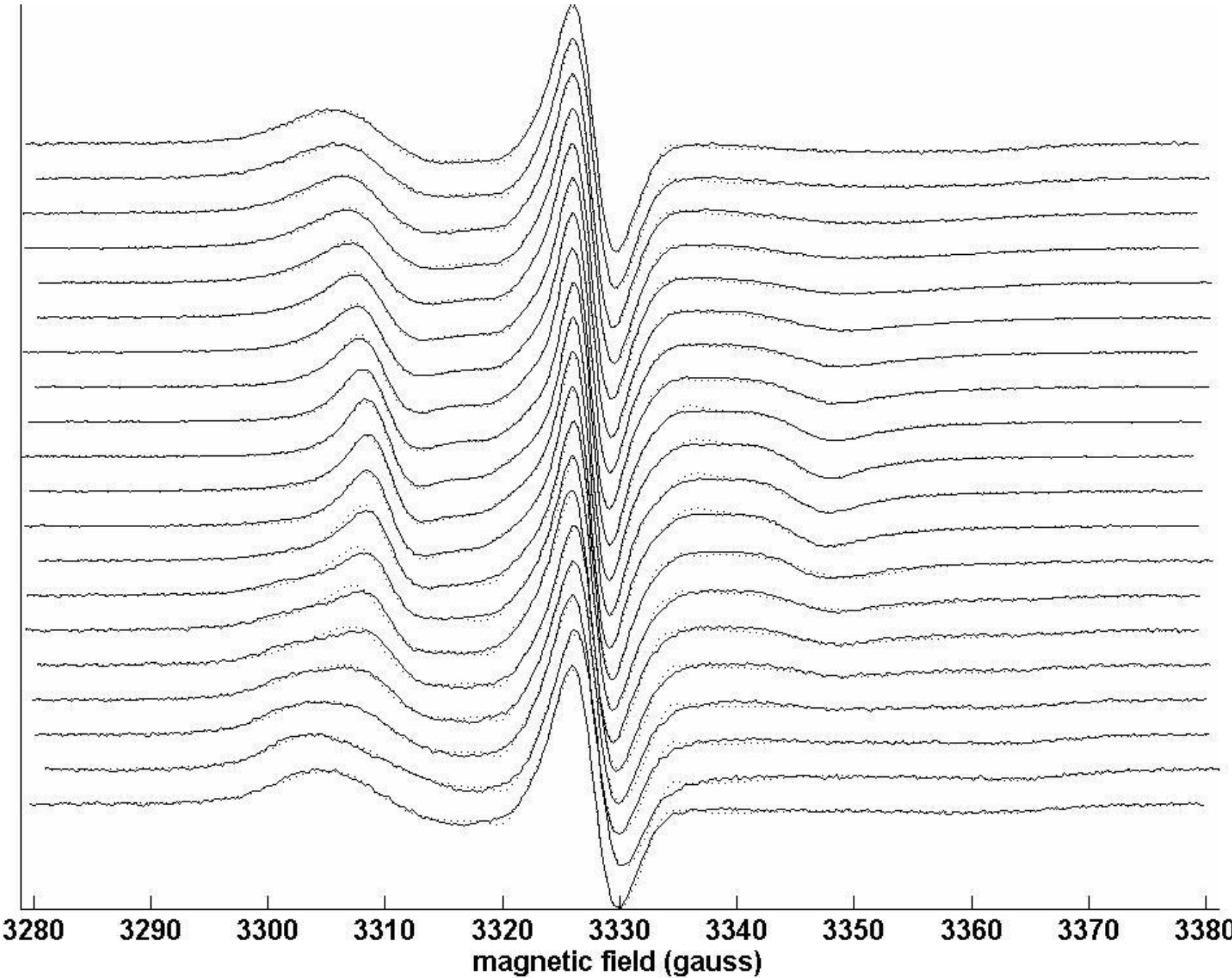


Supplementary Figure 16      SPMHEAD:  $S_{xx}$  (circles)  $S_{yy}$  (squares)  $S_{zz}$  (diamonds)



Supplementary Figure 17

CSL



Supplementary Figure 18

CSL:  $S_{yy}$  (circles)  $S_{xx}$  (diamonds)  $S_{zz}$  (squares)

