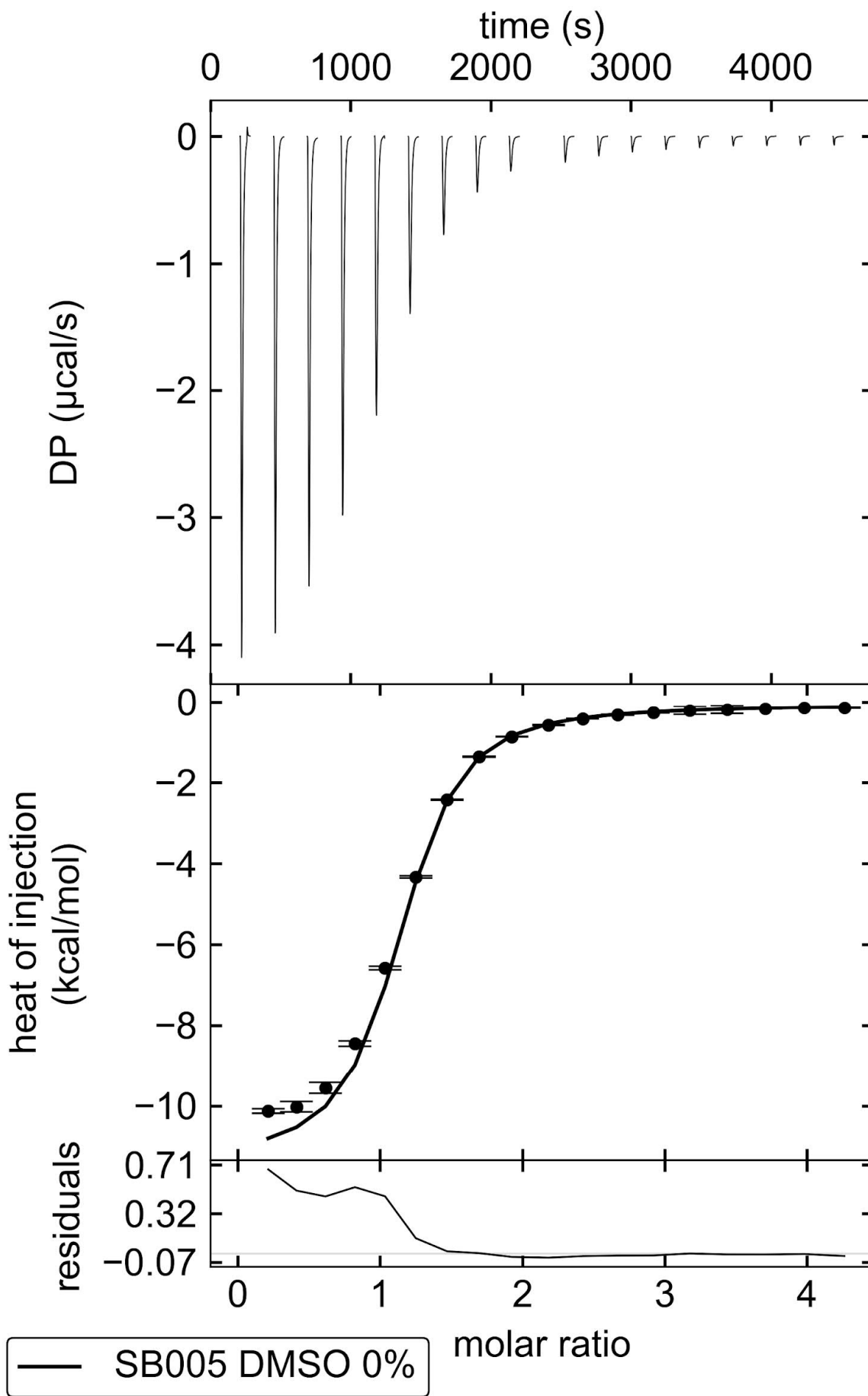
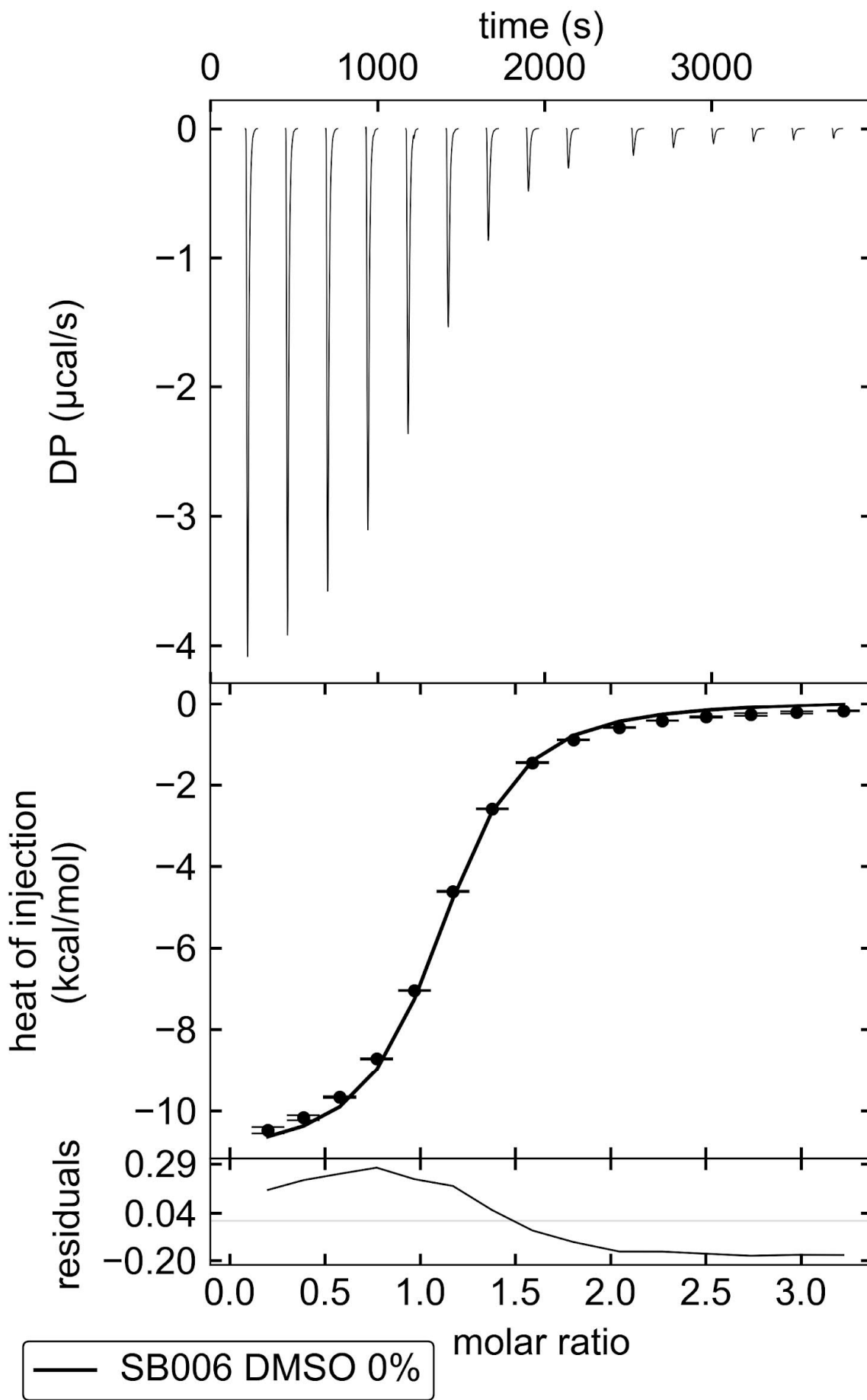


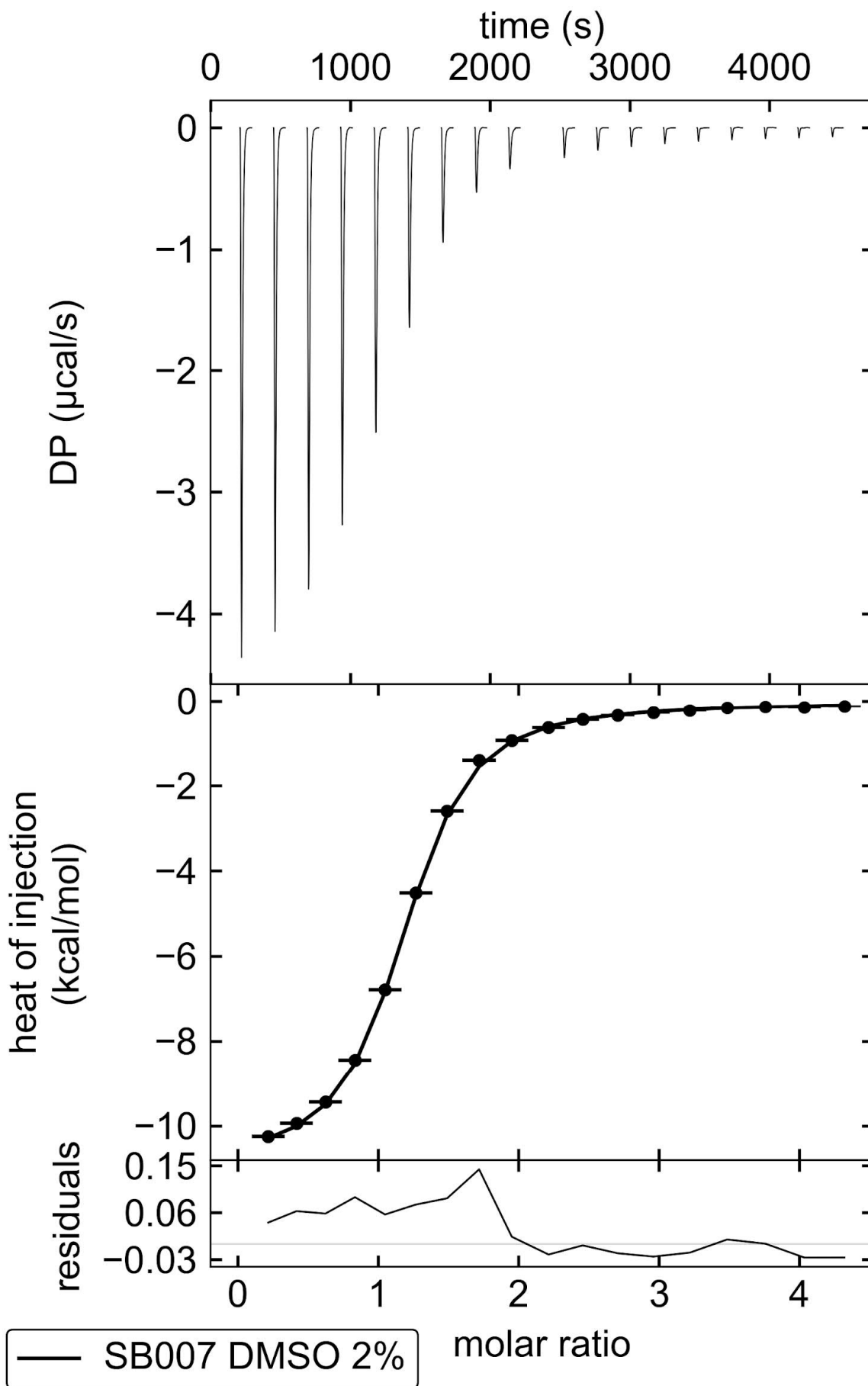
Appendix

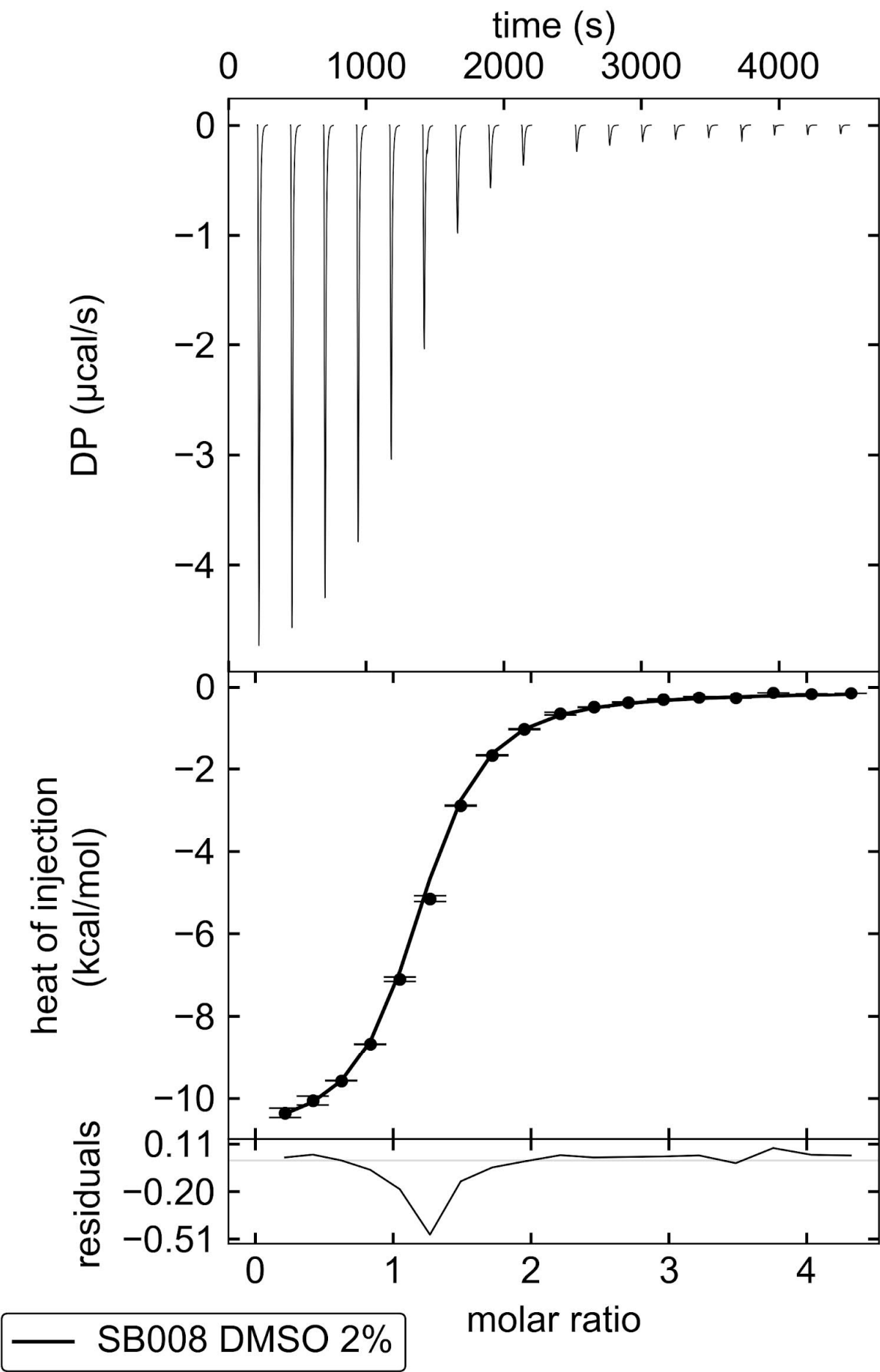
Appendix A - Thermograms

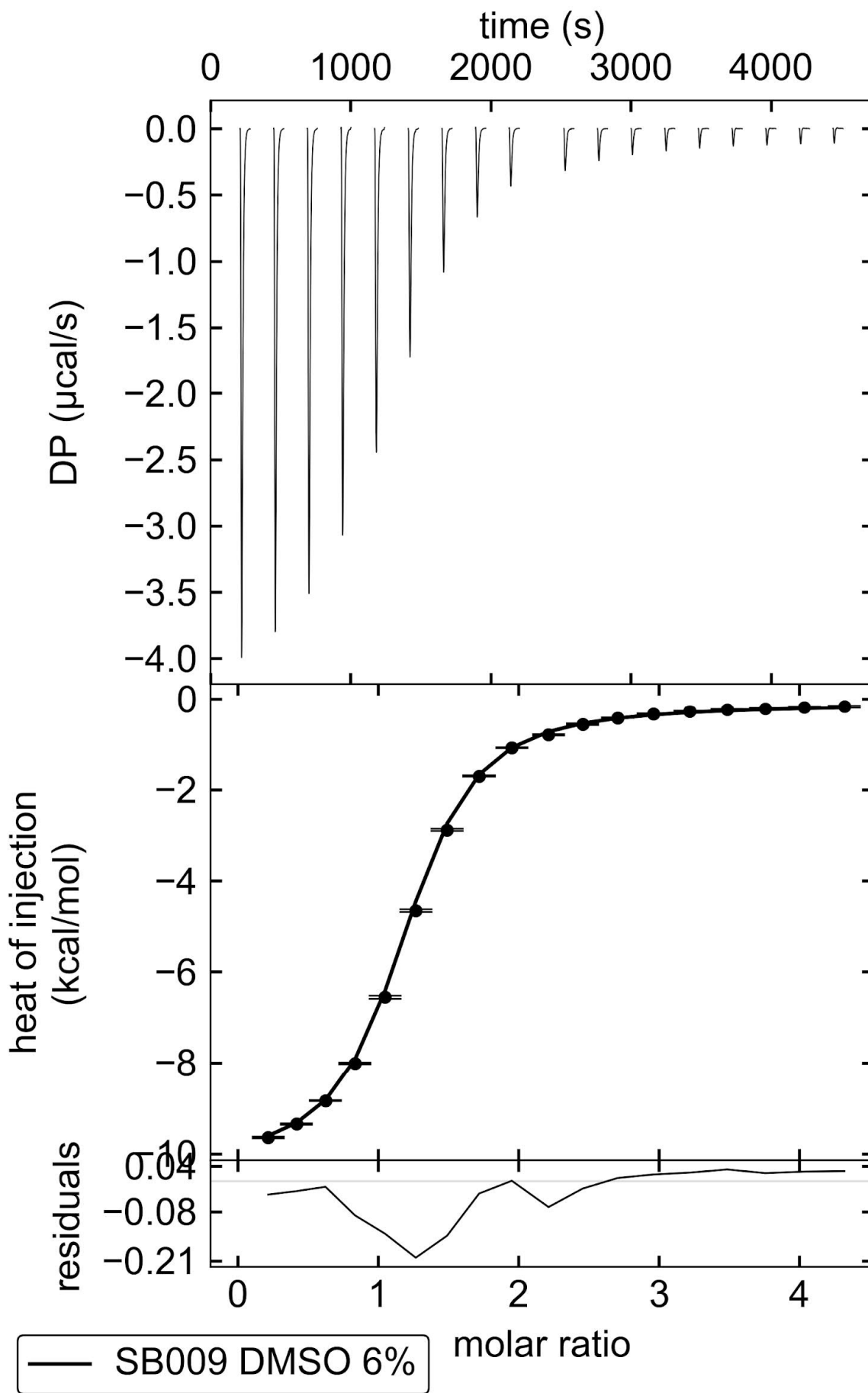
Figure A1-A16 shows the thermograms derived from ITC runs. Five runs of 0% DMSO (SB005, SB006, SB015, SB016, SB020), three runs of 2% DMSO (SB007, SB008, SB019), five runs of 6% (SB009, SB010, SB013), and three runs of 10% (SB011, SB012, SB017) are presented below.

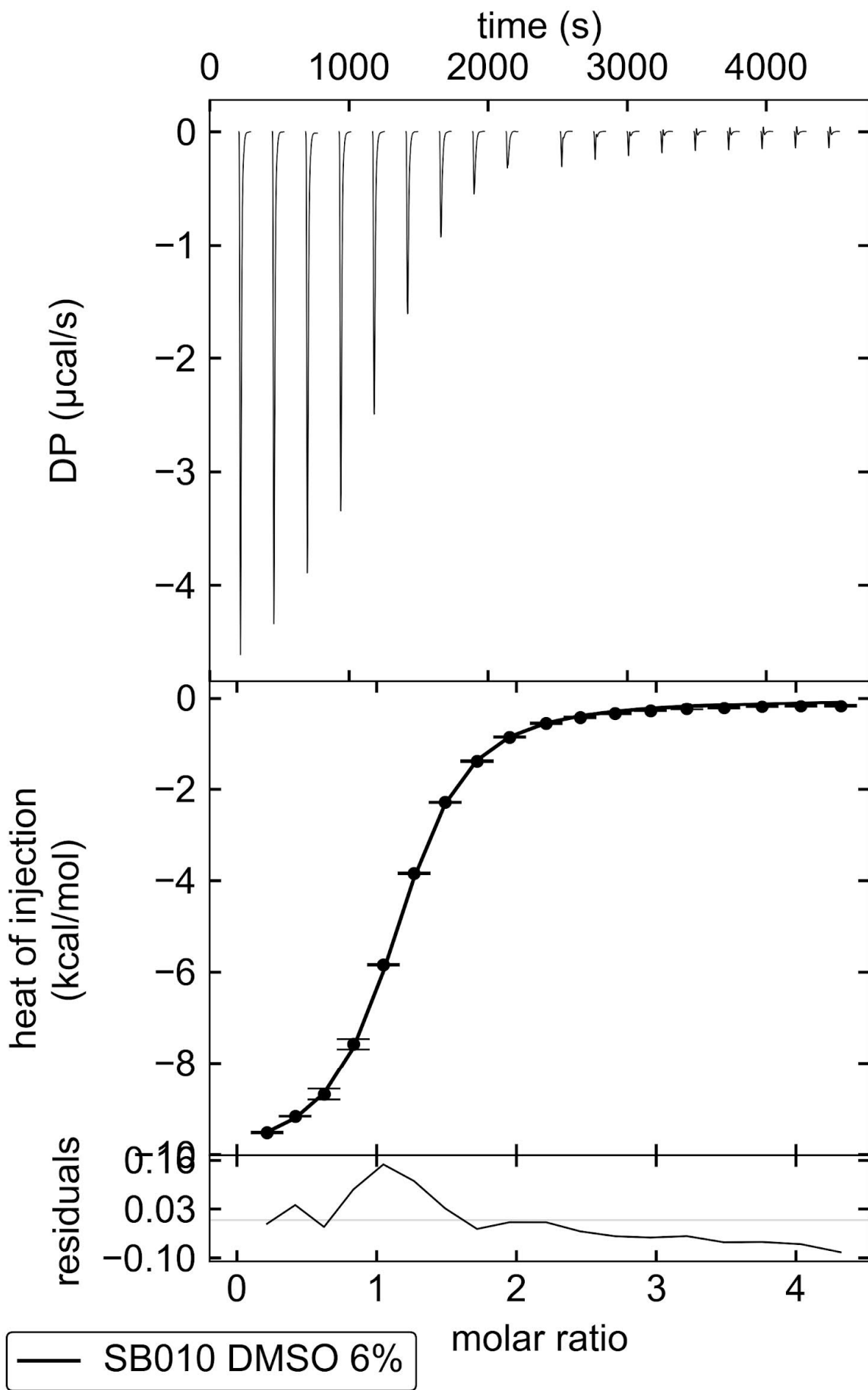


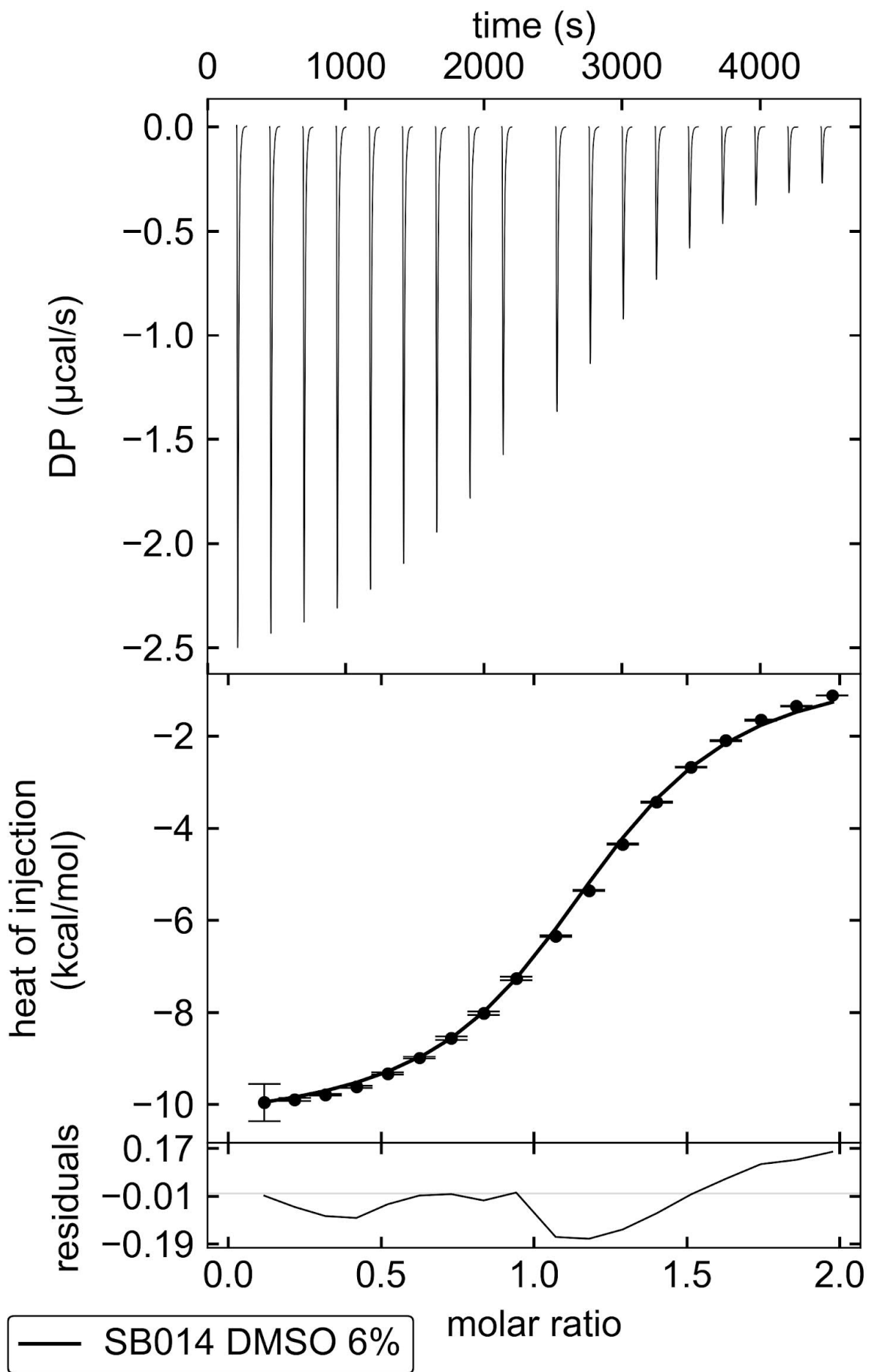


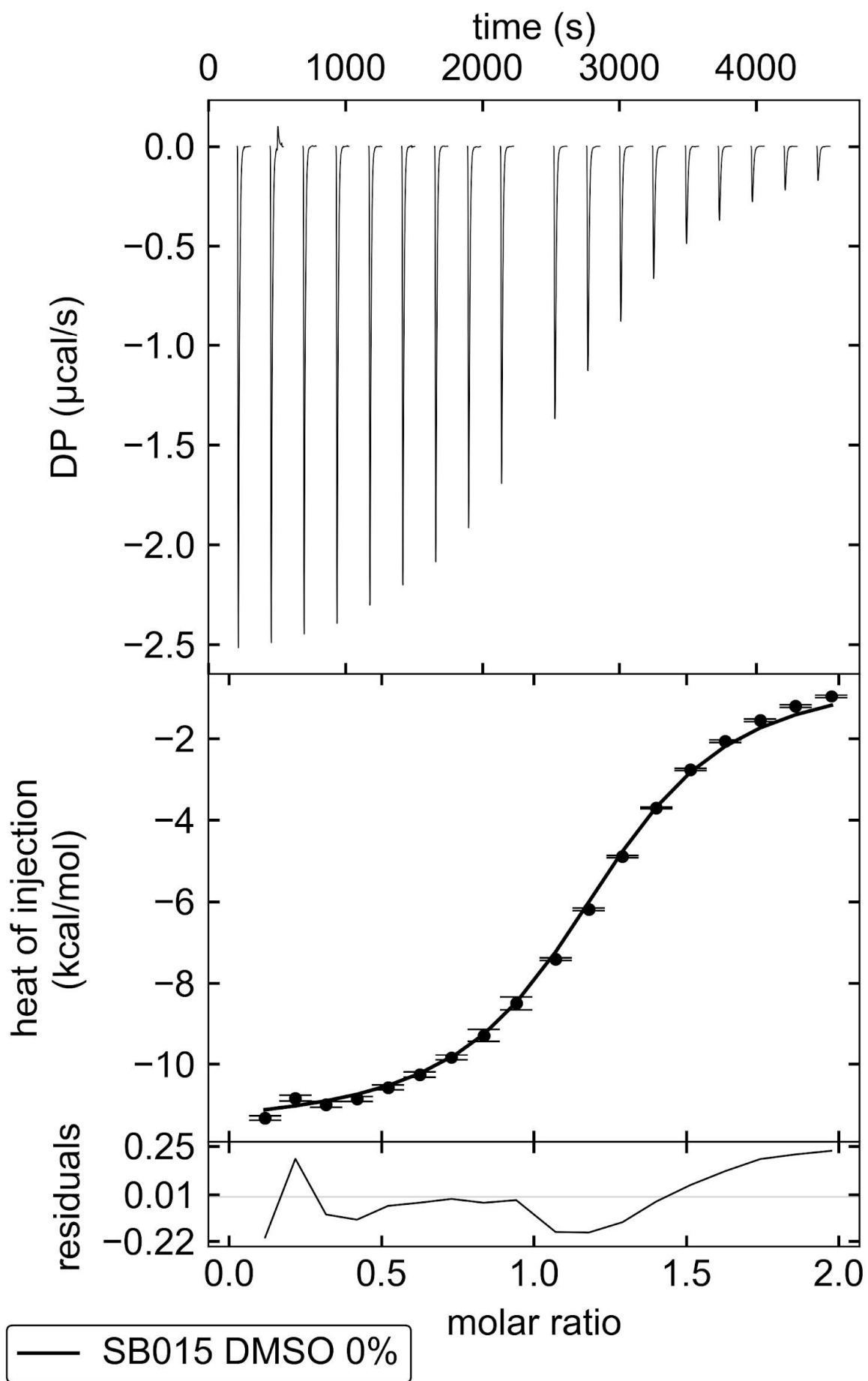


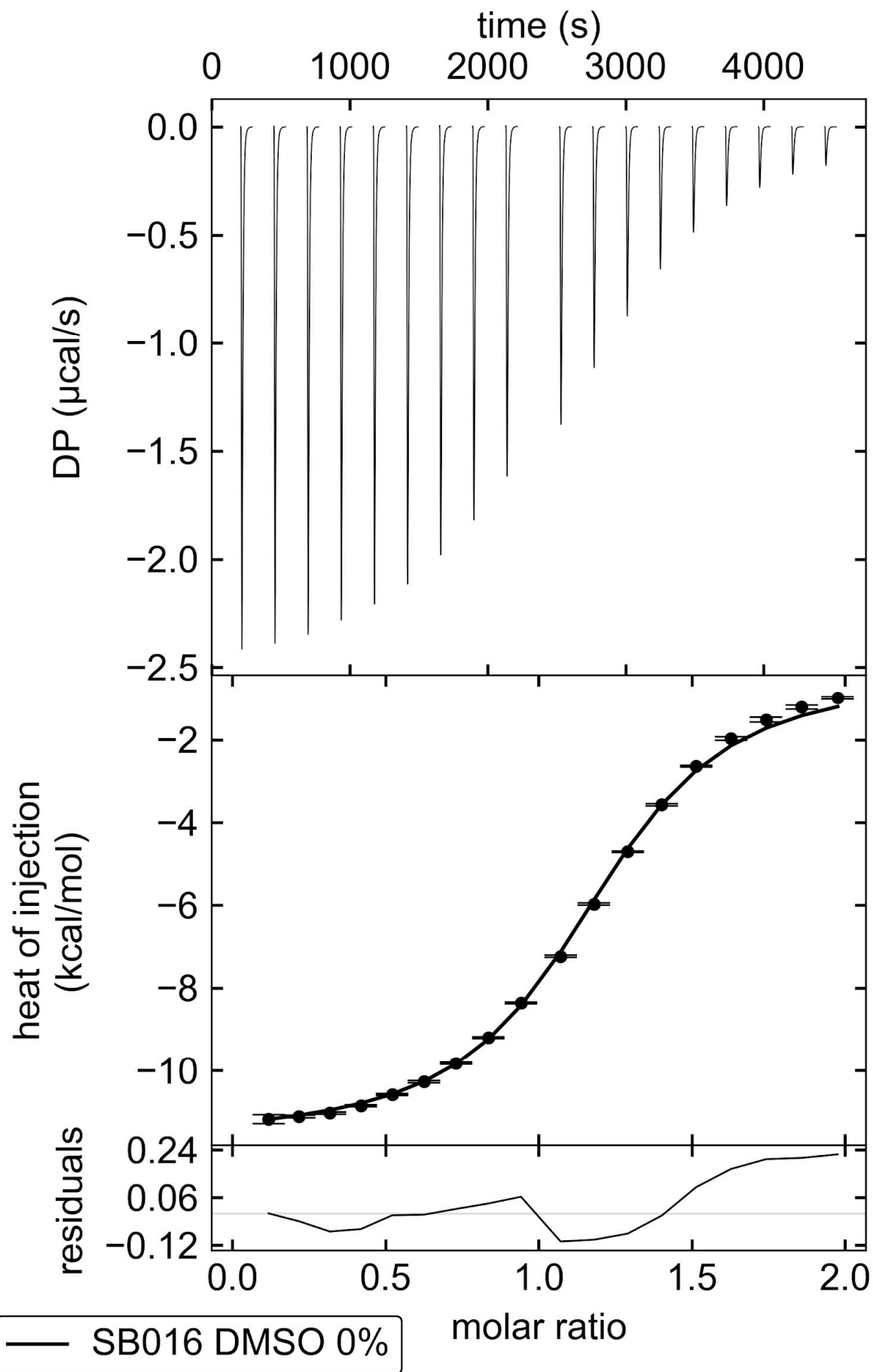


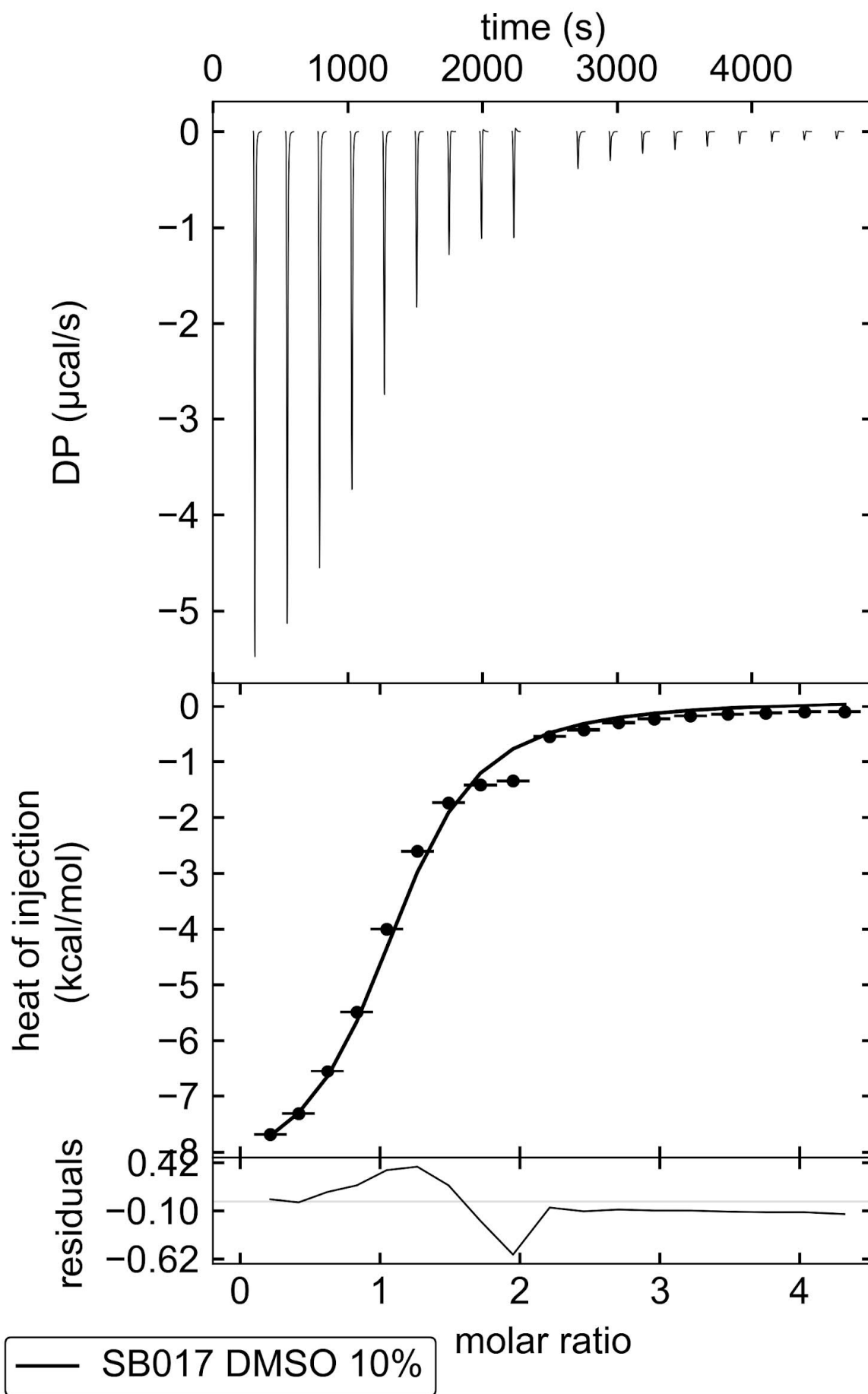


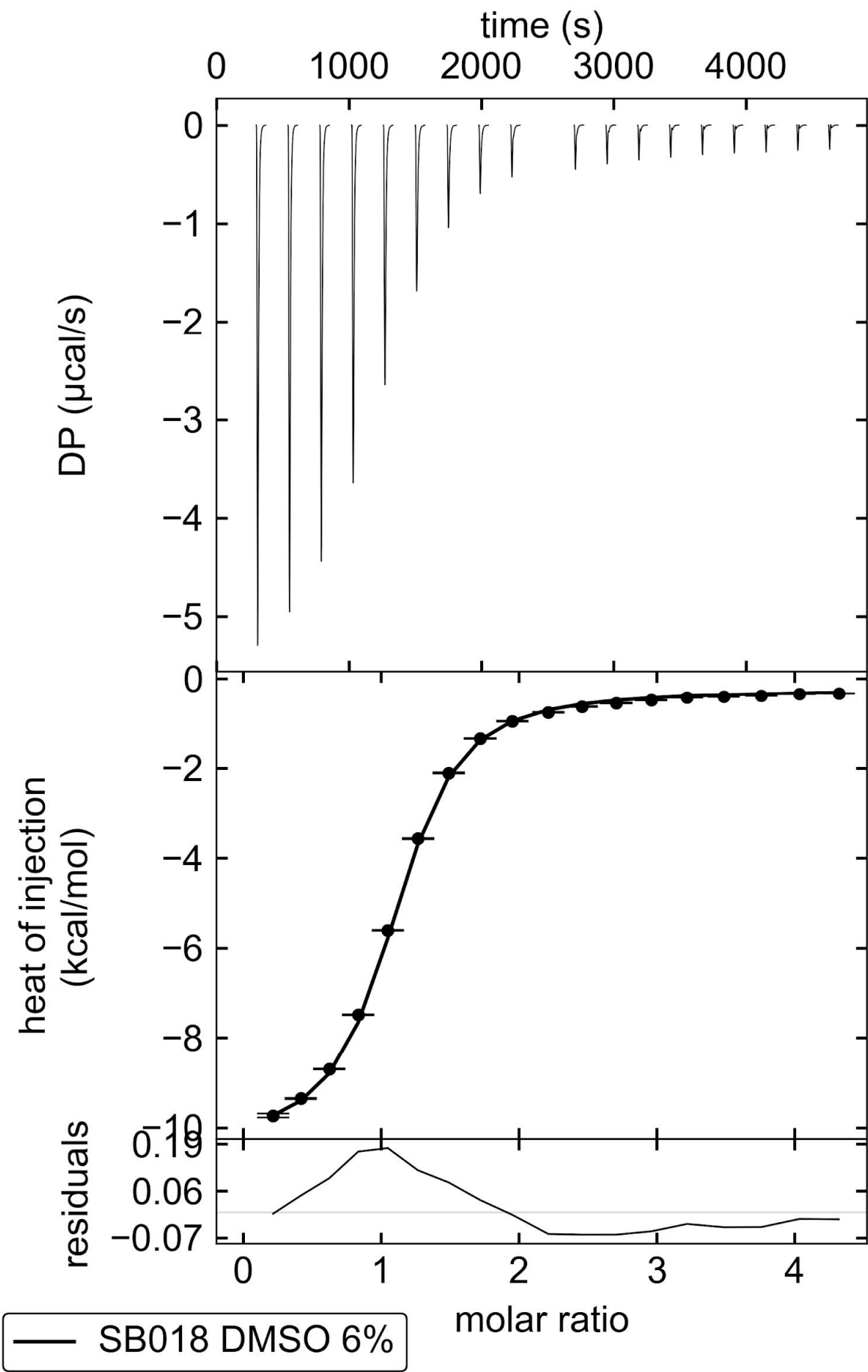


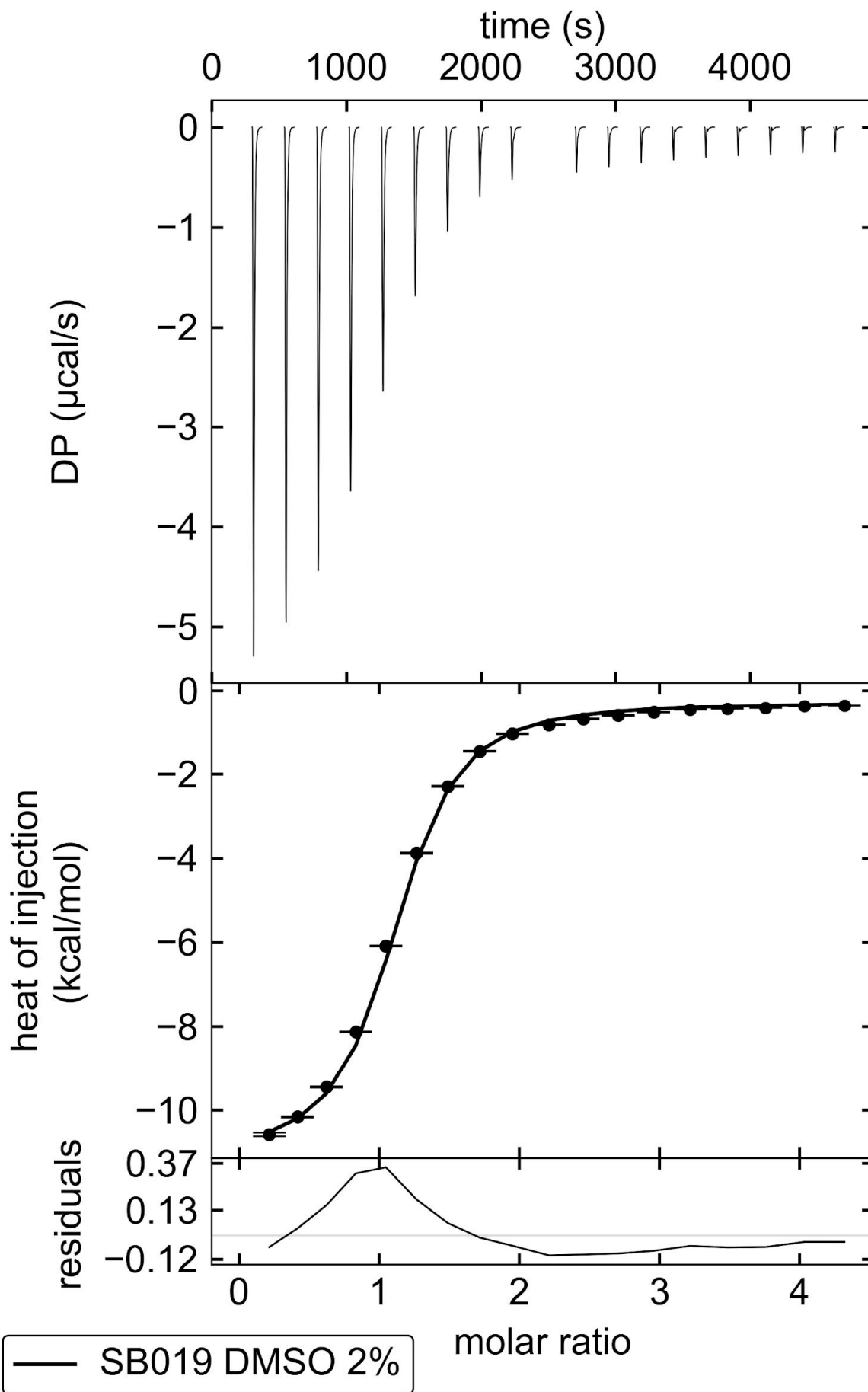


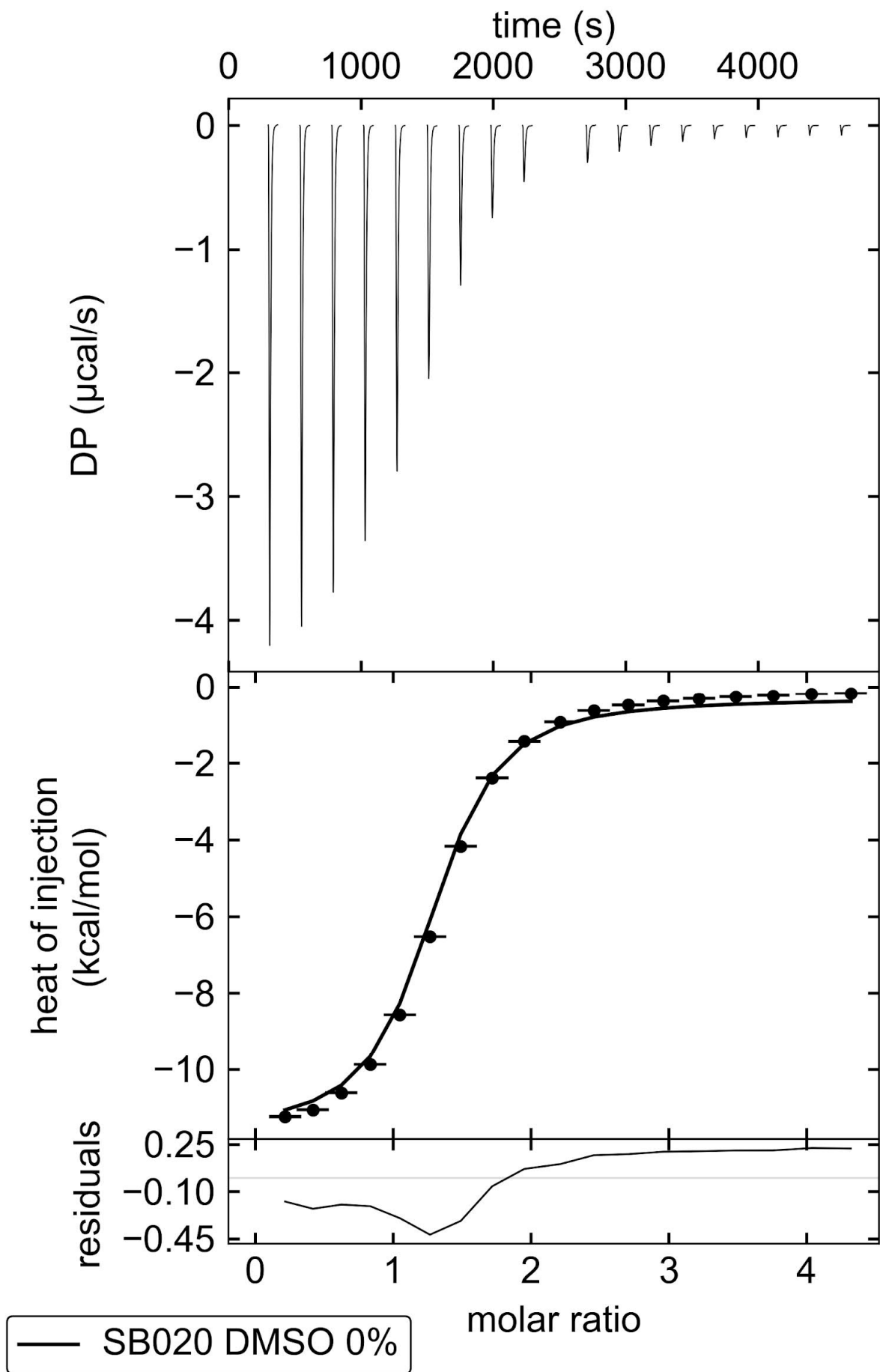






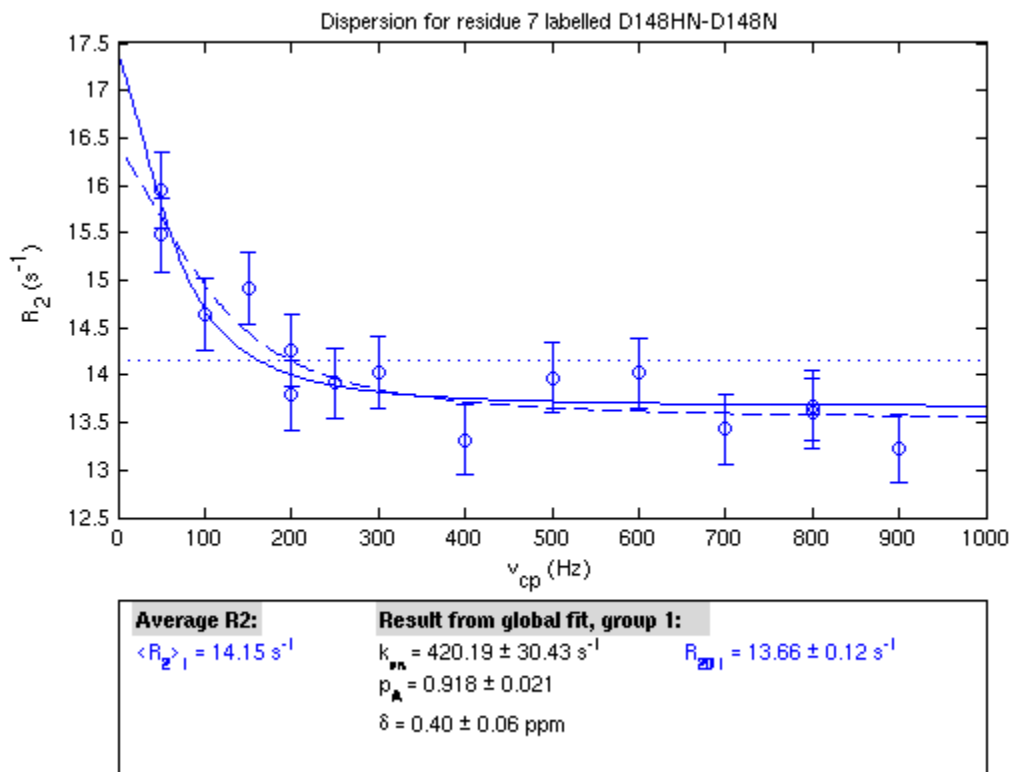


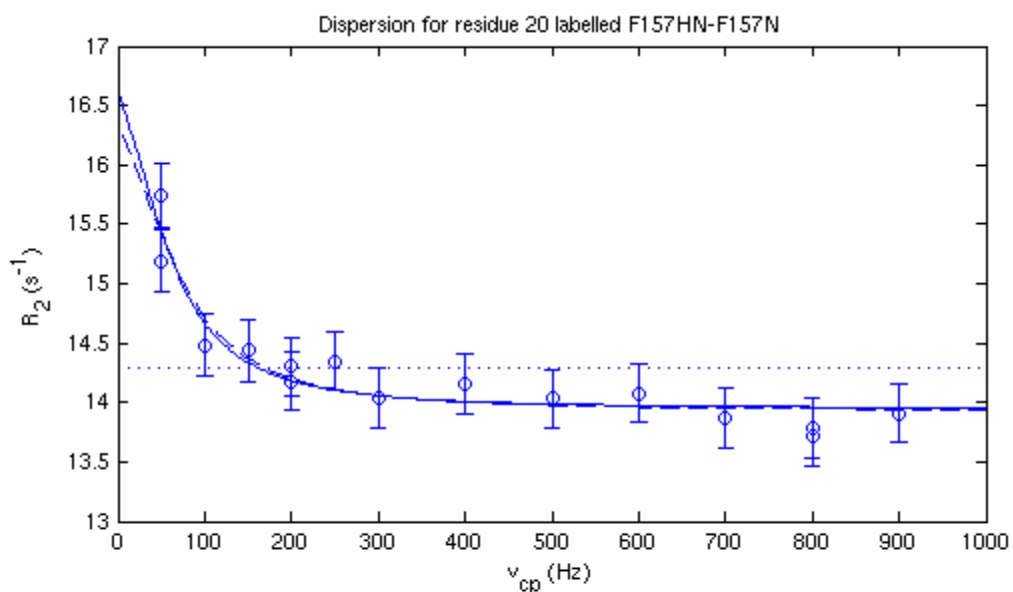




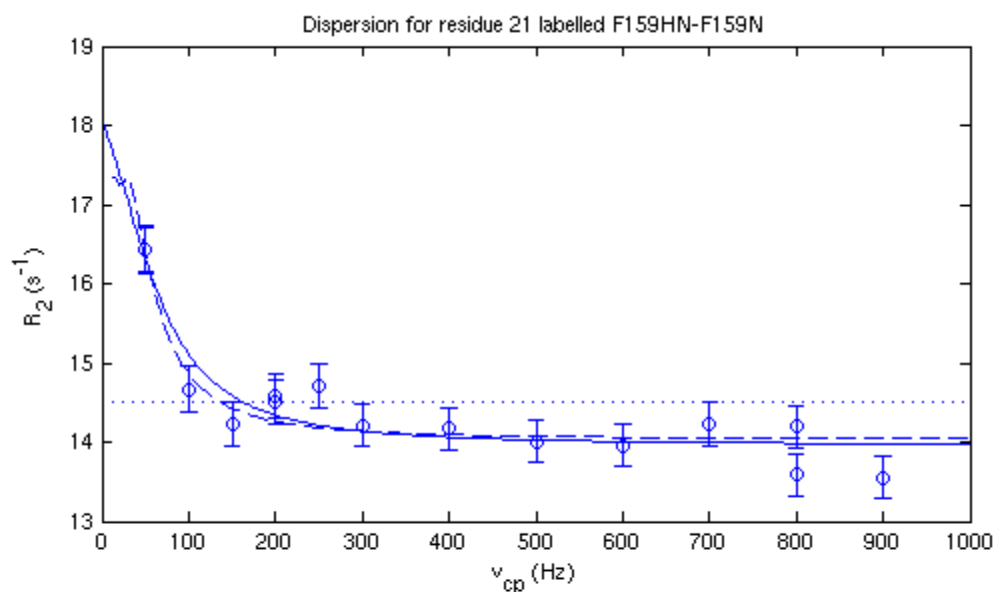
Appendix B - CPMG relaxation Dispersions

Figure B1-B12 shows relaxation data for twelve dispersions (D148, F157, F159, I145, K176, L177, N143, N160, N174, R144, V155, and V172) derived from the 2% DMSO CPMG experiment, and plotted in CPMG-fit.

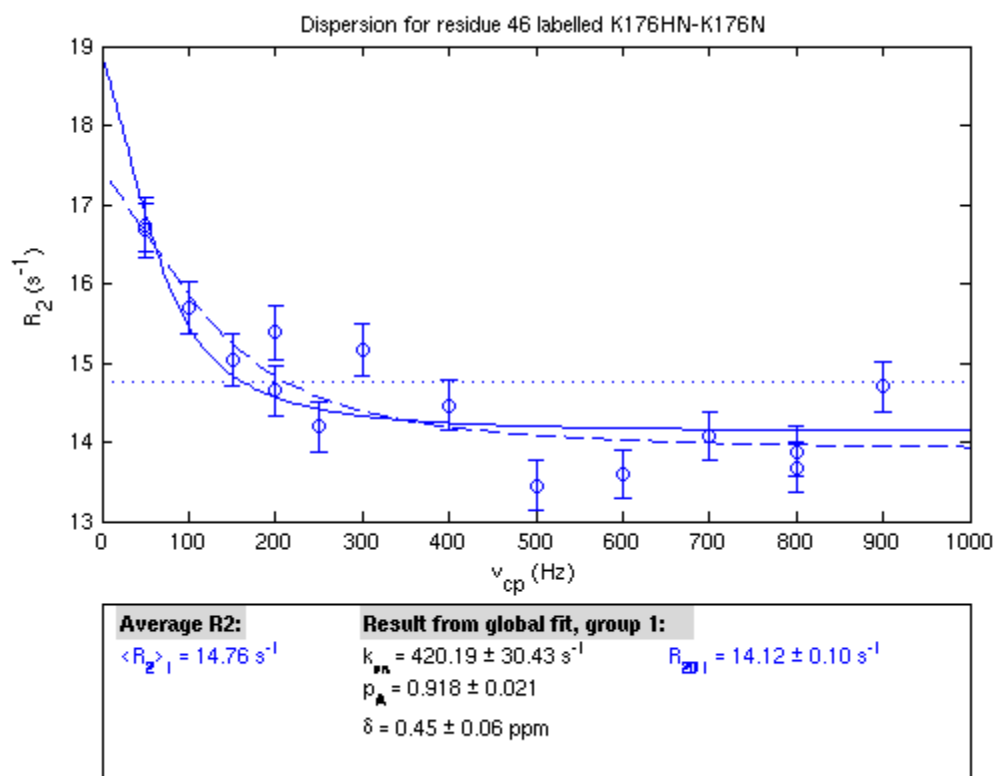
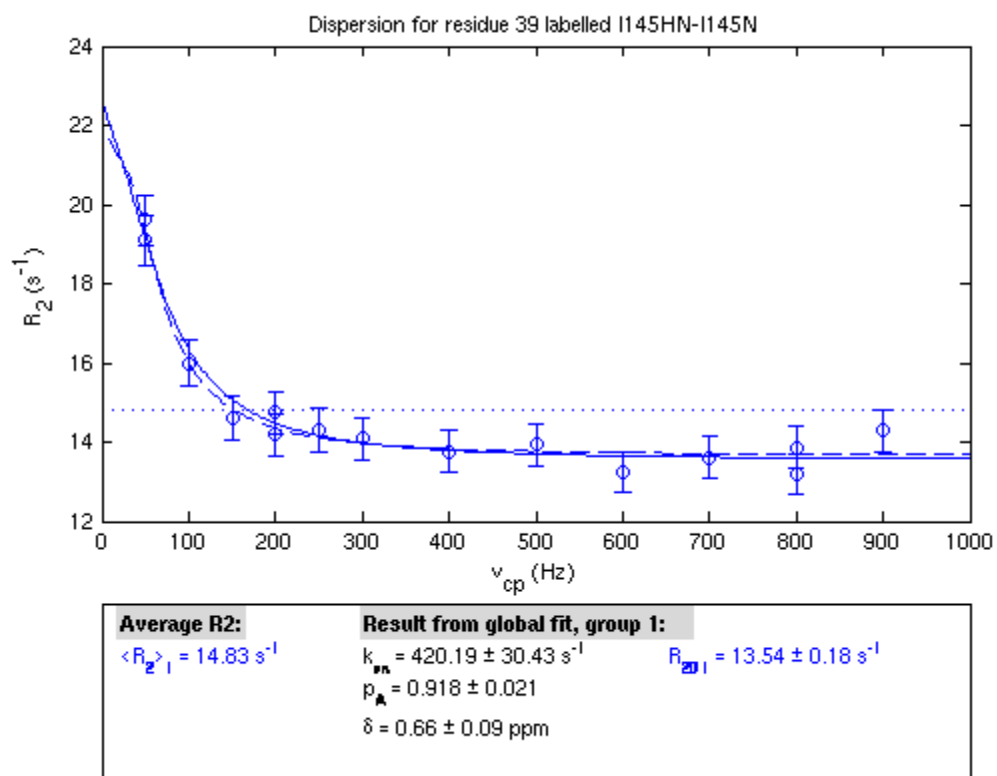


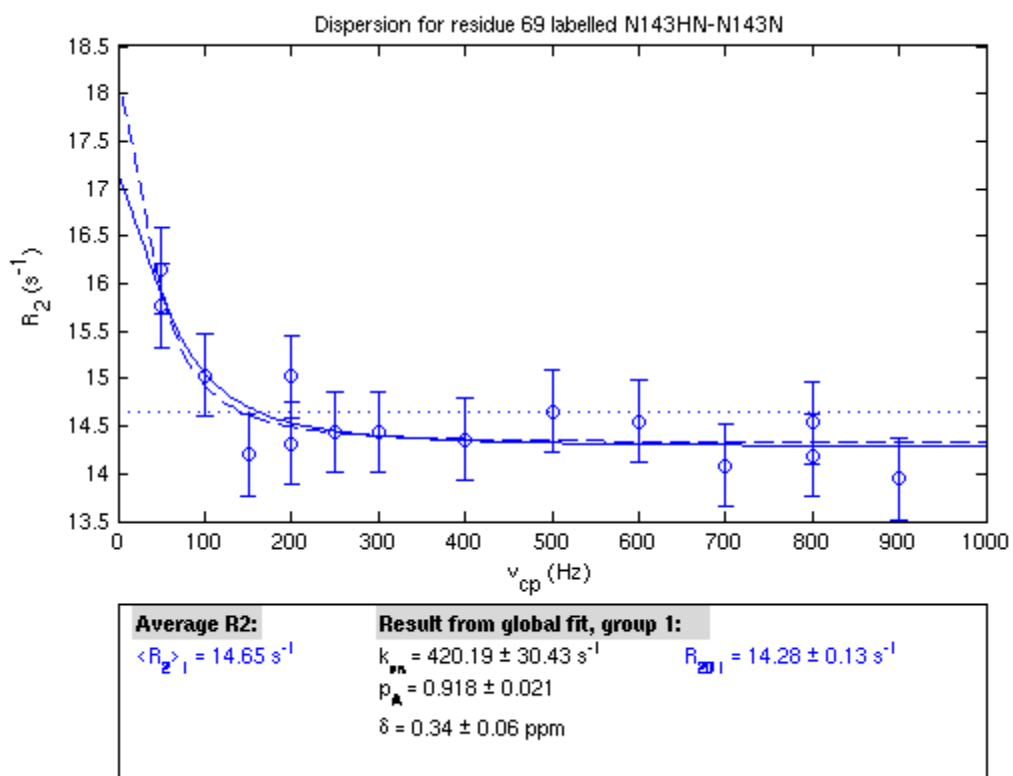
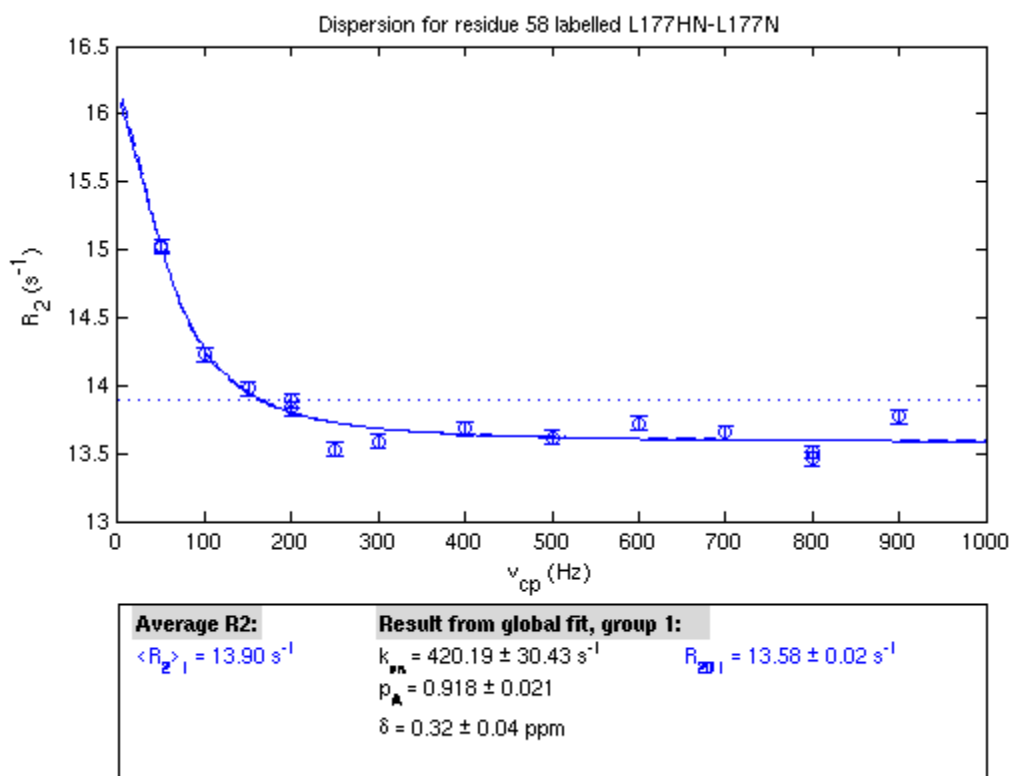


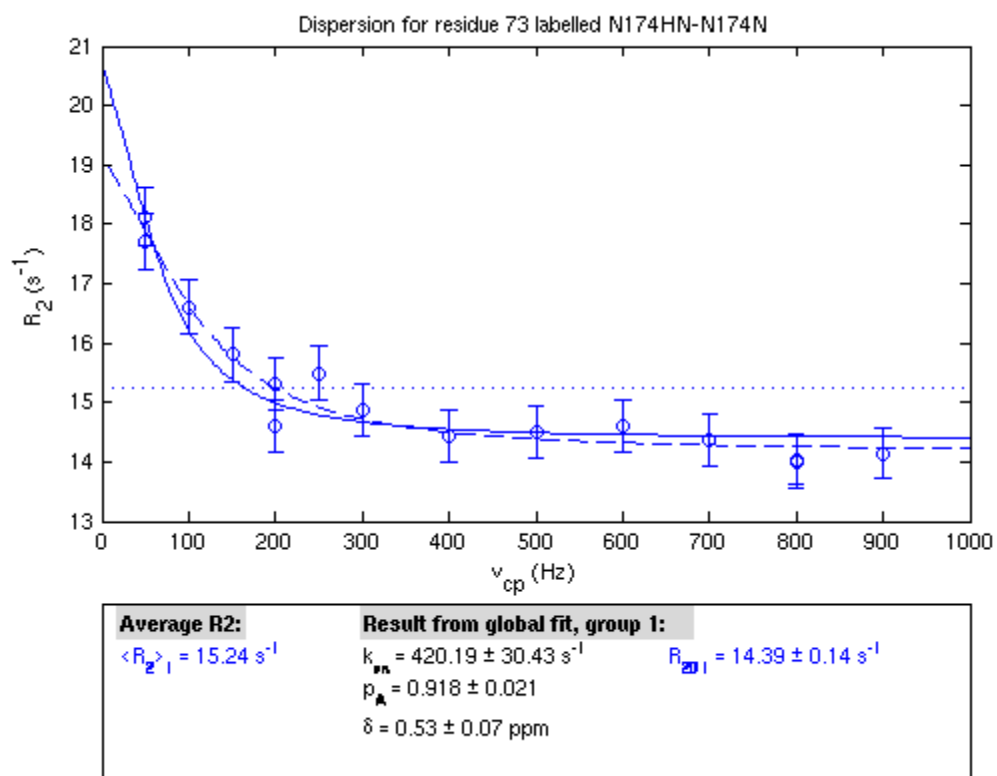
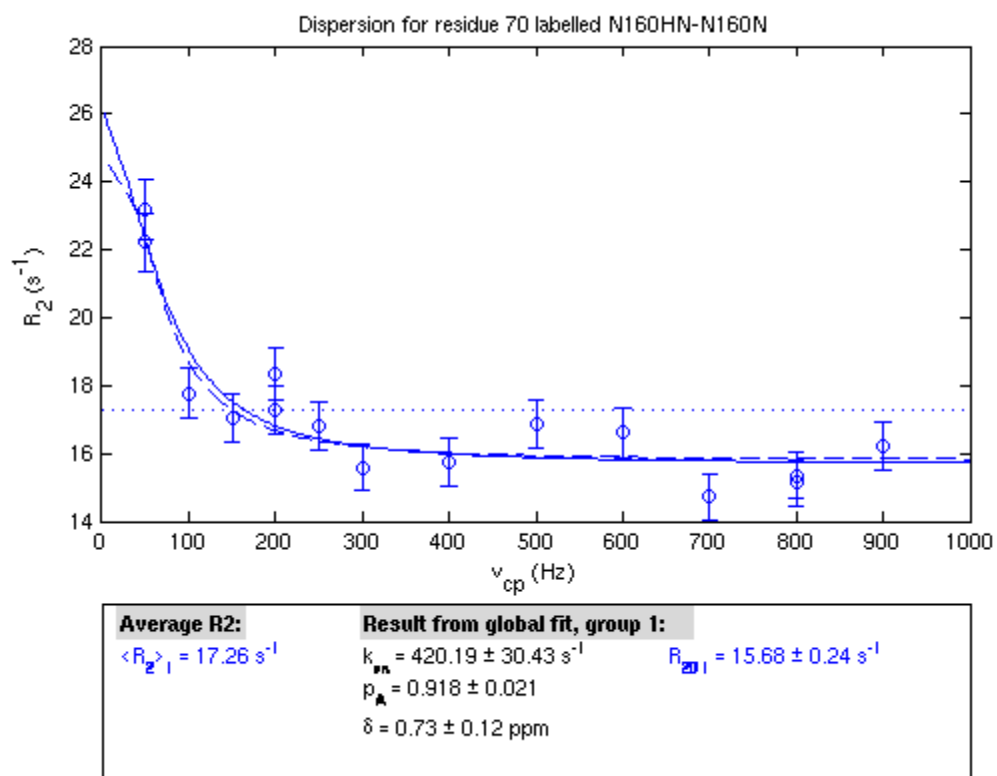
Average R2:	Result from global fit, group 1:	
$\langle R_2 \rangle_1 = 14.28 \text{ s}^{-1}$	$k_{\text{ex}} = 420.19 \pm 30.43 \text{ s}^{-1}$	$R_{201} = 13.95 \pm 0.08 \text{ s}^{-1}$
	$p_{\text{A}} = 0.918 \pm 0.021$	
	$\delta = 0.33 \pm 0.05 \text{ ppm}$	

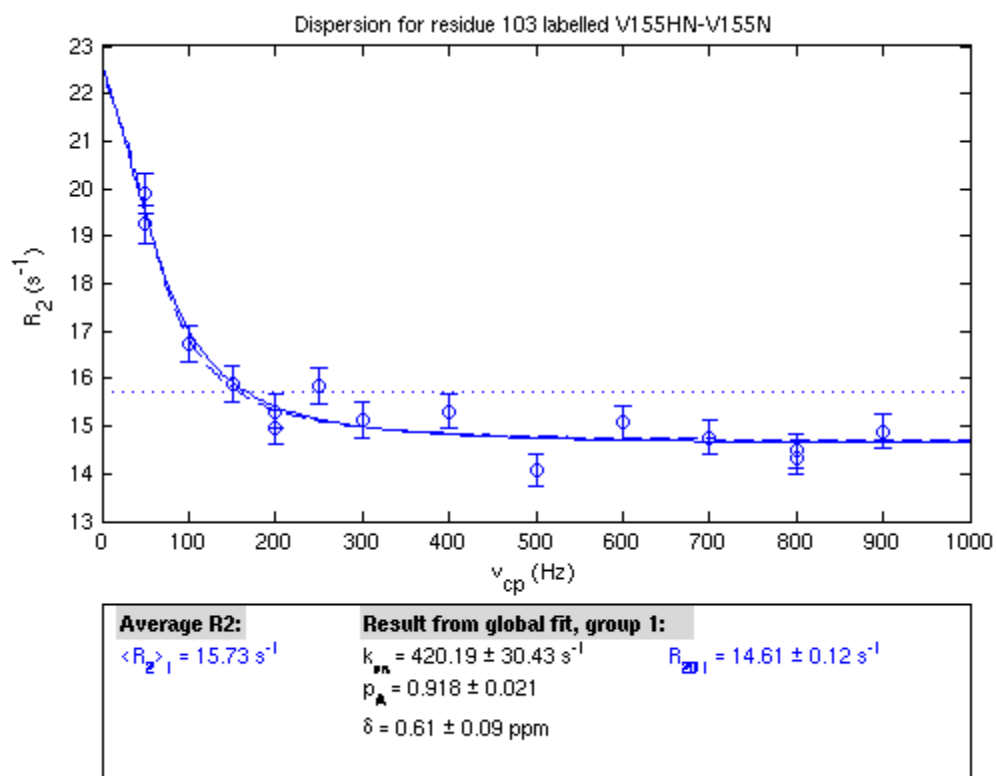
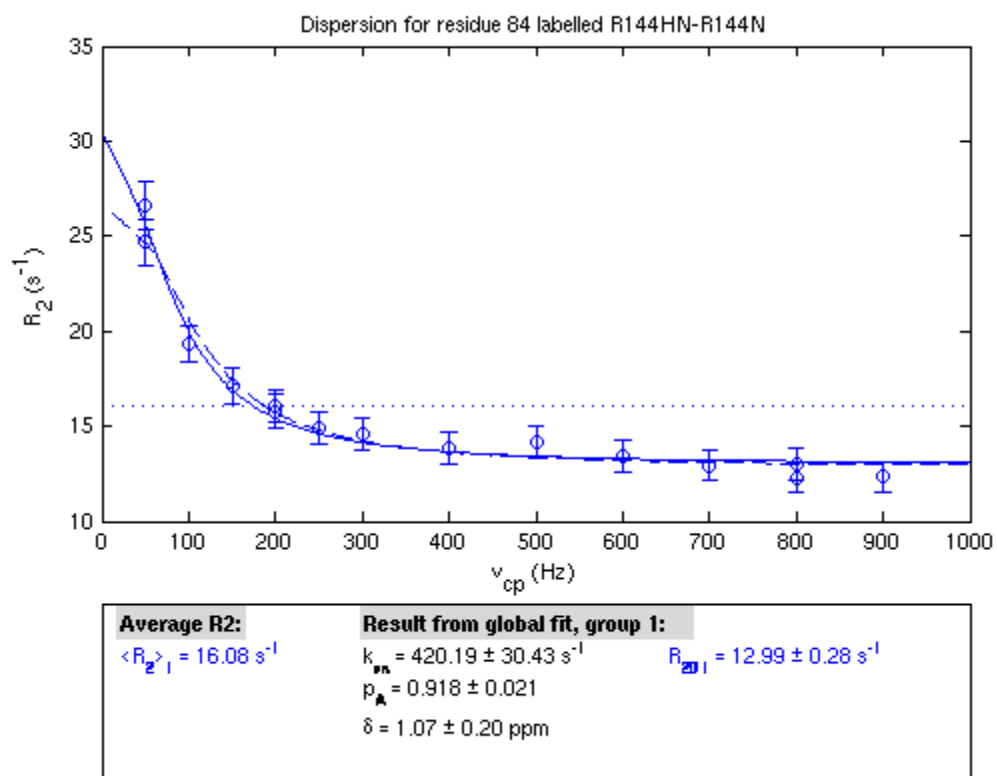


Average R2:	Result from global fit, group 1:	
$\langle R_2 \rangle_1 = 14.50 \text{ s}^{-1}$	$k_{\text{ex}} = 420.19 \pm 30.43 \text{ s}^{-1}$	$R_{201} = 13.96 \pm 0.09 \text{ s}^{-1}$
	$p_{\text{A}} = 0.918 \pm 0.021$	
	$\delta = 0.42 \pm 0.06 \text{ ppm}$	









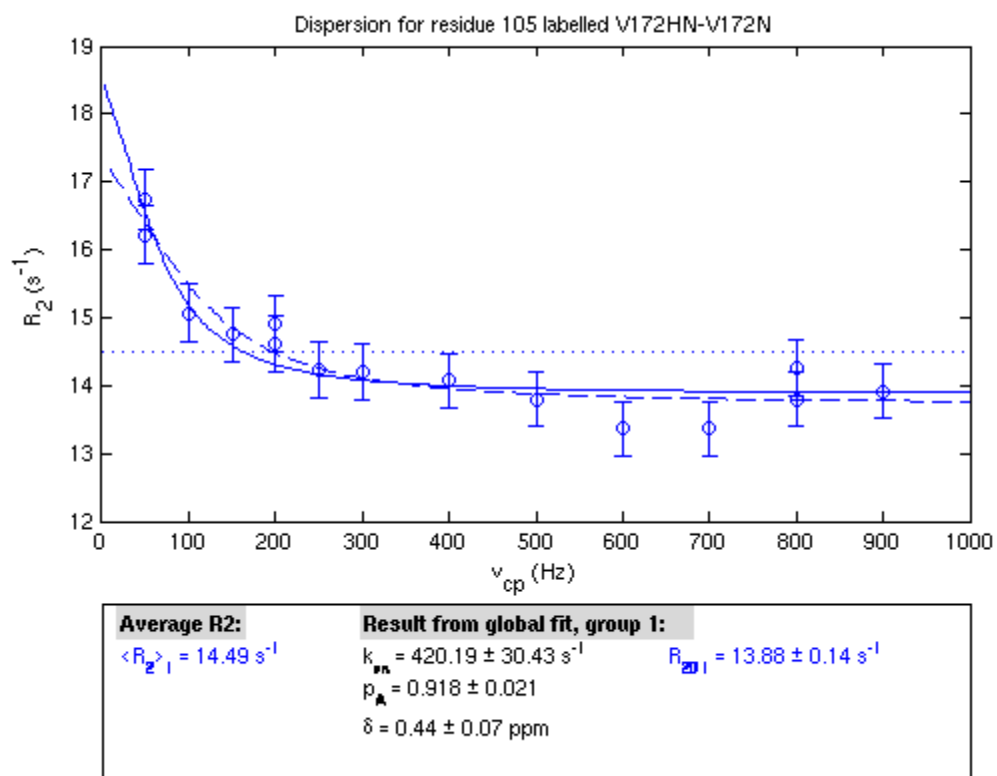
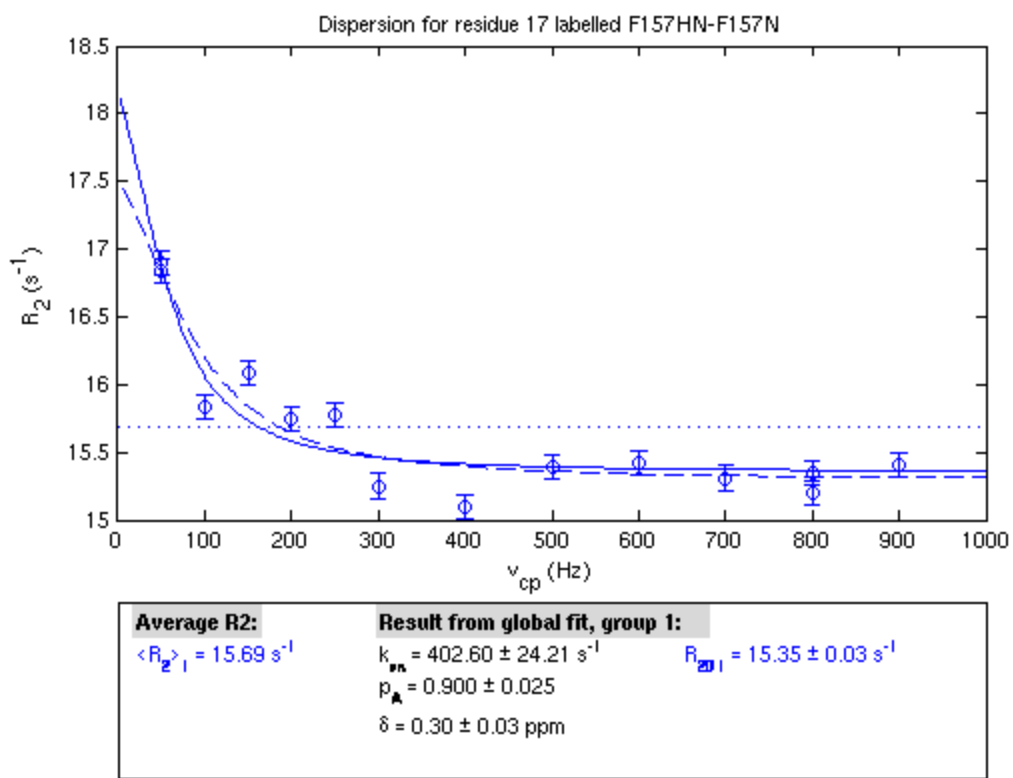
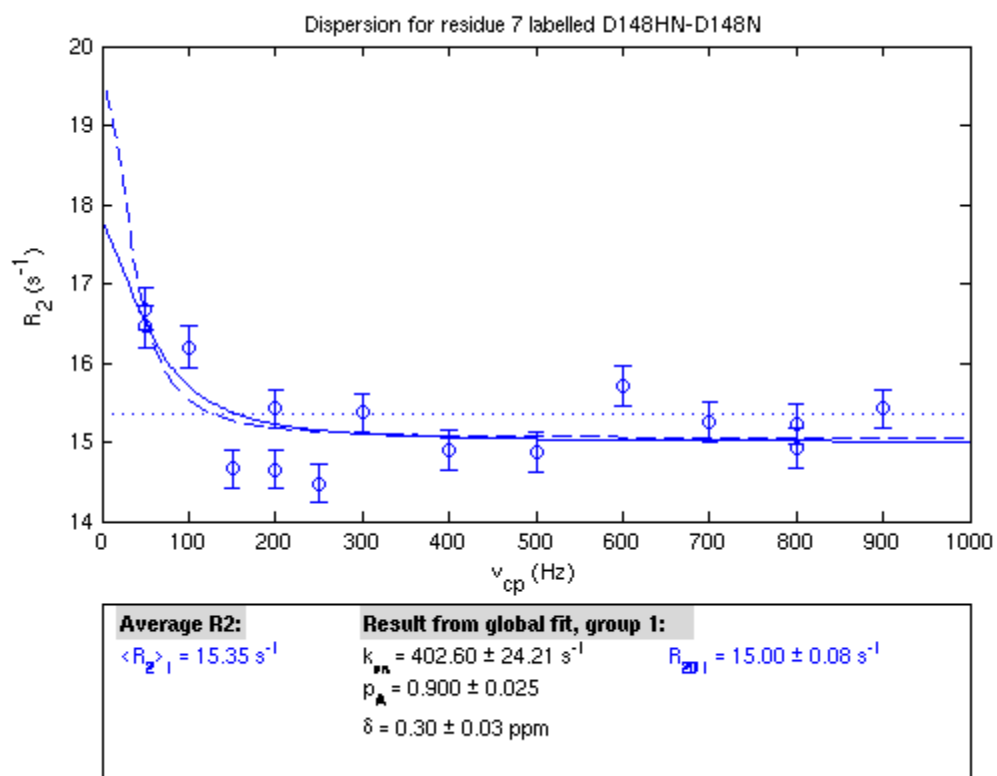
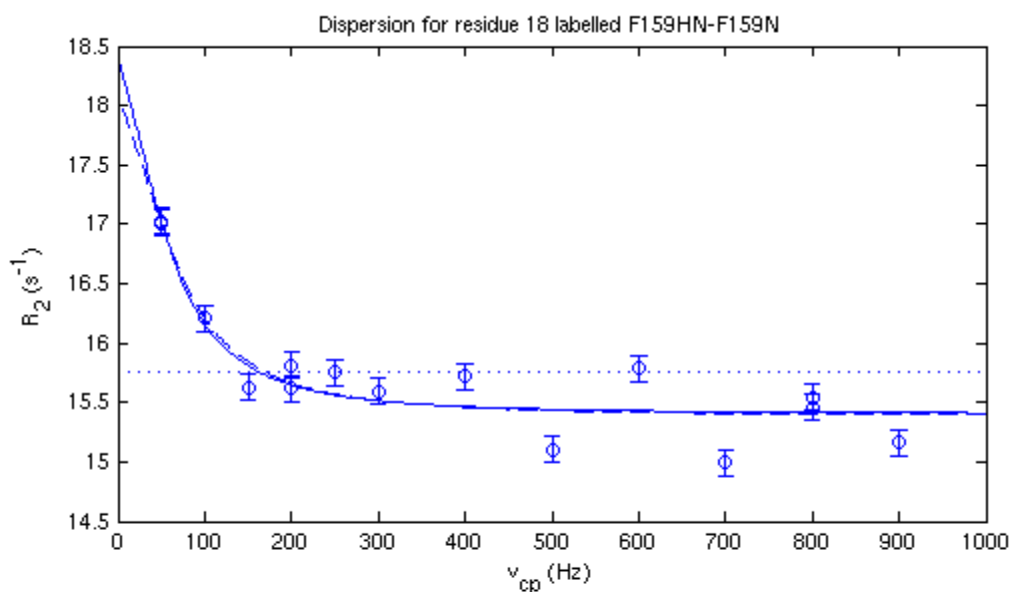
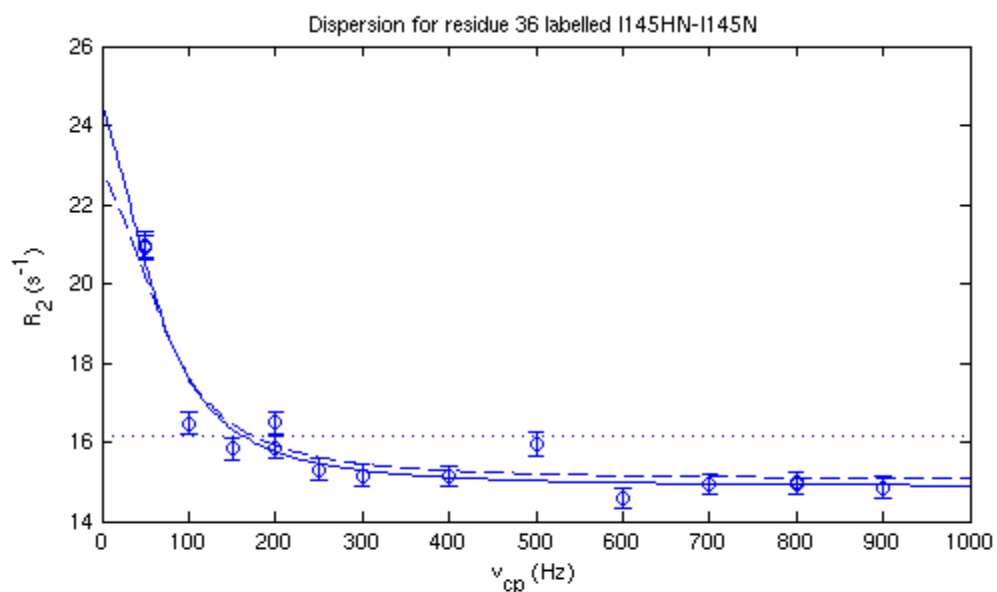


Figure B13-B24 shows relaxation data for twelve dispersions (D148, F157, F159, I145, K176, L177, N143, N160, N174, R144, V155, and V172) derived from the 6% DMSO CPMG experiment, and plotted in CPMG-fit.

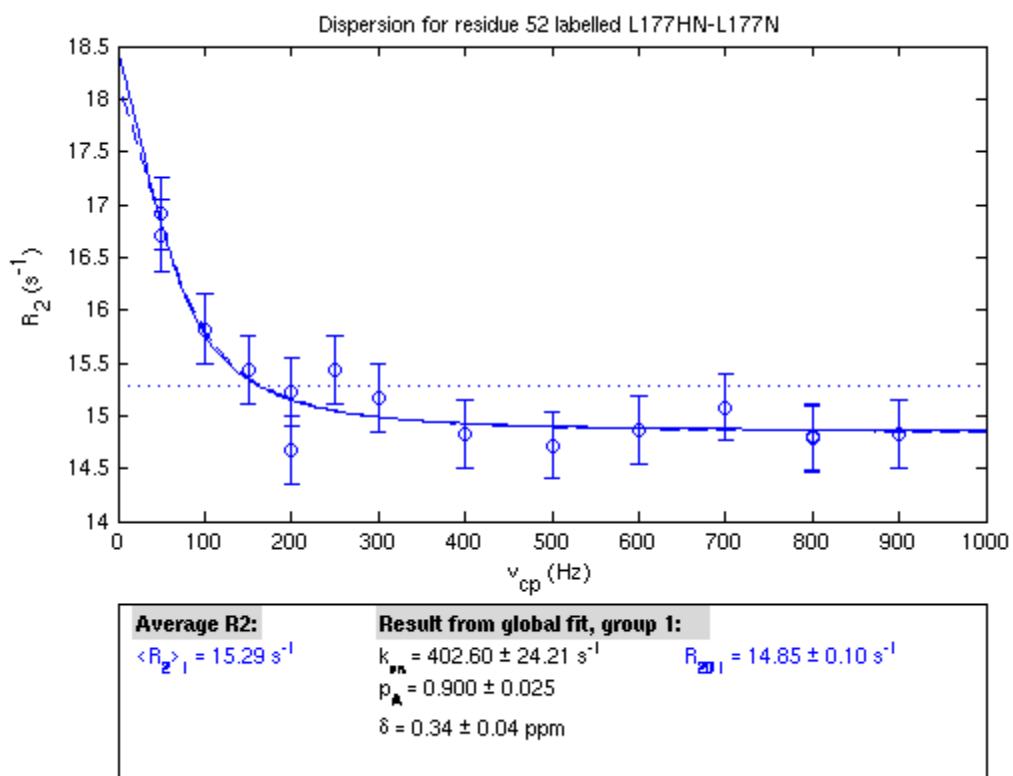
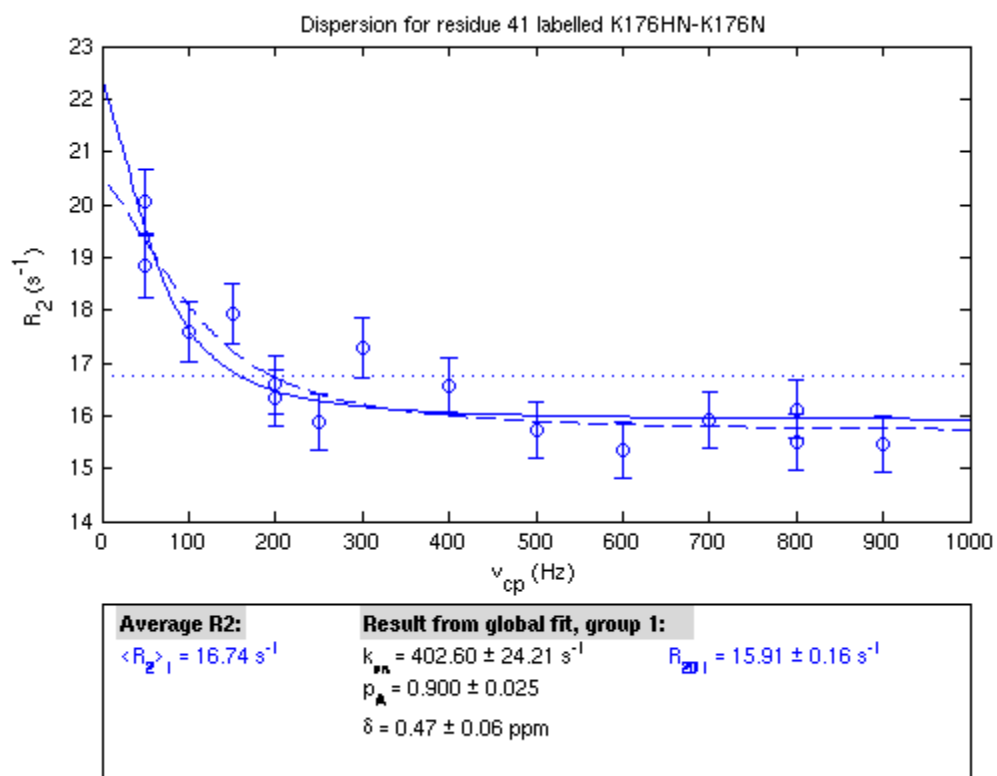


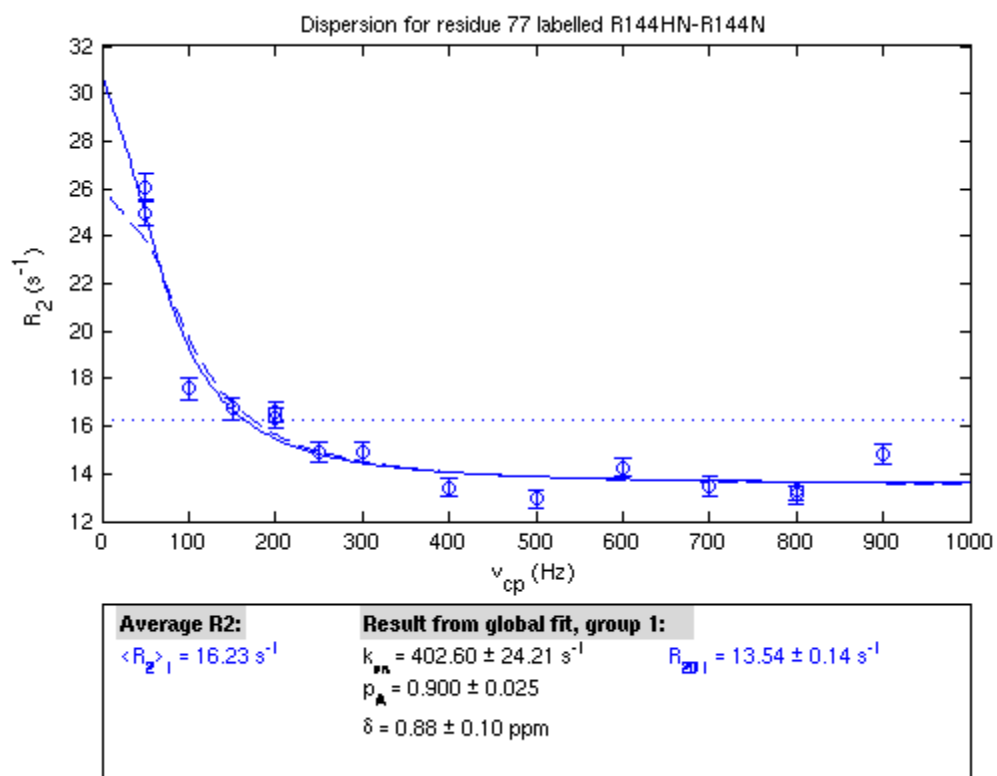
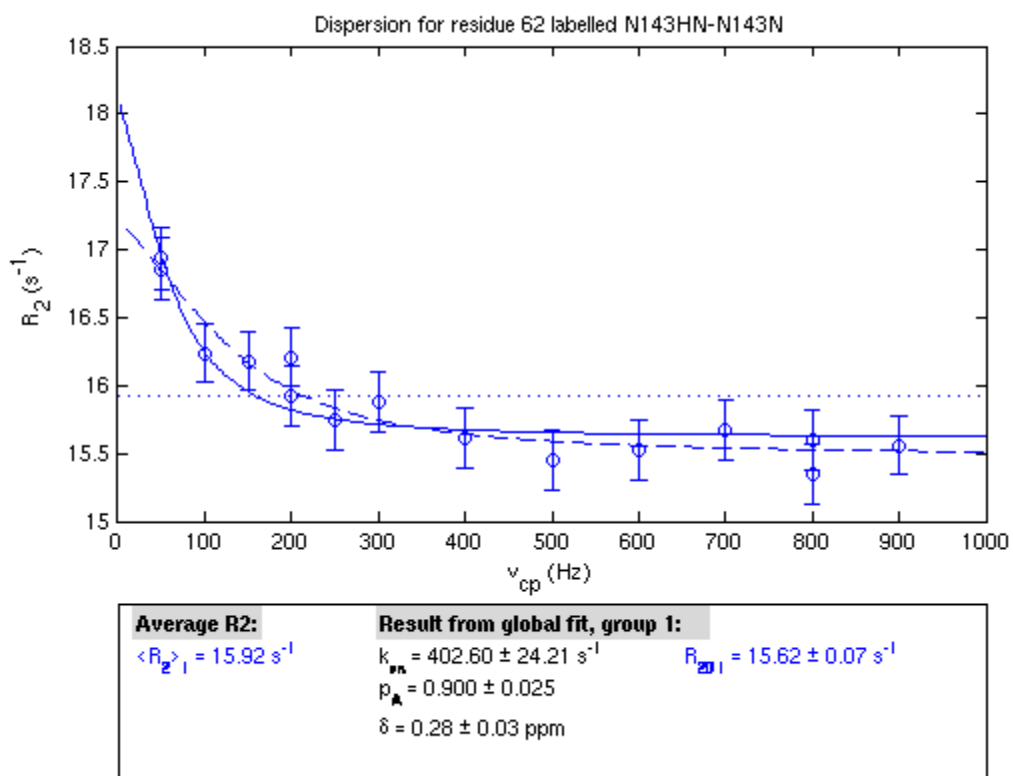


Average R2:	Result from global fit, group 1:	
$\langle R_2 \rangle_1 = 15.76 \text{ s}^{-1}$	$k_{\text{ex}} = 402.60 \pm 24.21 \text{ s}^{-1}$	$R_{201} = 15.40 \pm 0.03 \text{ s}^{-1}$
	$p_{\text{A}} = 0.900 \pm 0.025$	
	$\delta = 0.31 \pm 0.03 \text{ ppm}$	



Average R2:	Result from global fit, group 1:	
$\langle R_2 \rangle_1 = 16.16 \text{ s}^{-1}$	$k_{\text{ex}} = 402.60 \pm 24.21 \text{ s}^{-1}$	$R_{201} = 14.87 \pm 0.09 \text{ s}^{-1}$
	$p_{\text{A}} = 0.900 \pm 0.025$	
	$\delta = 0.60 \pm 0.06 \text{ ppm}$	





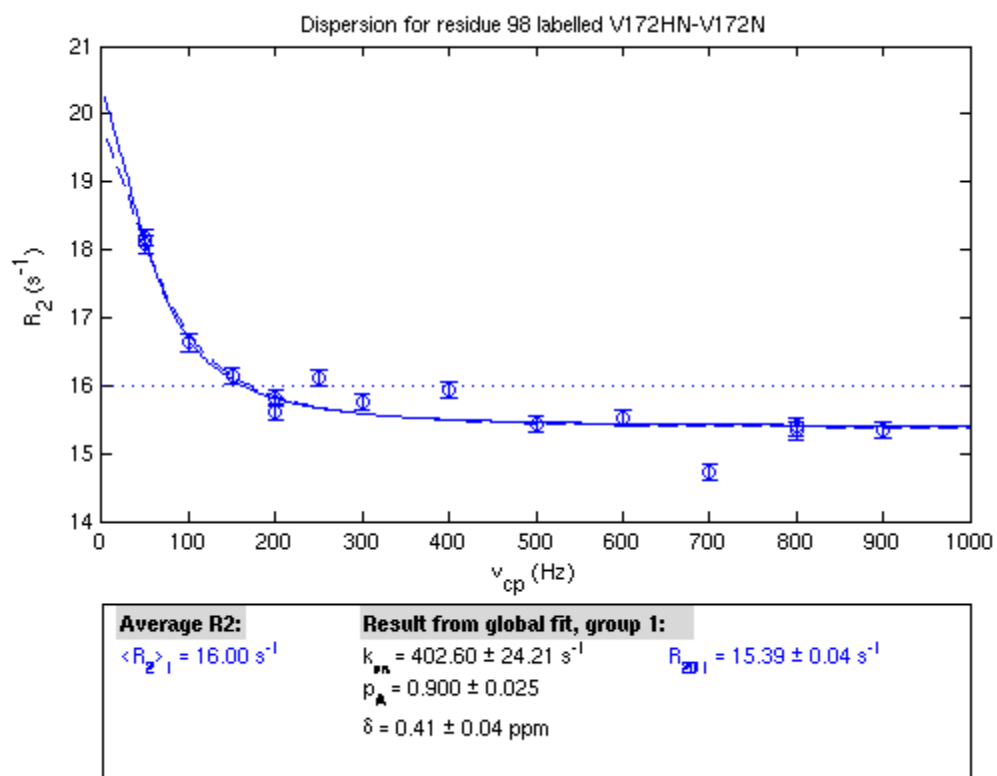
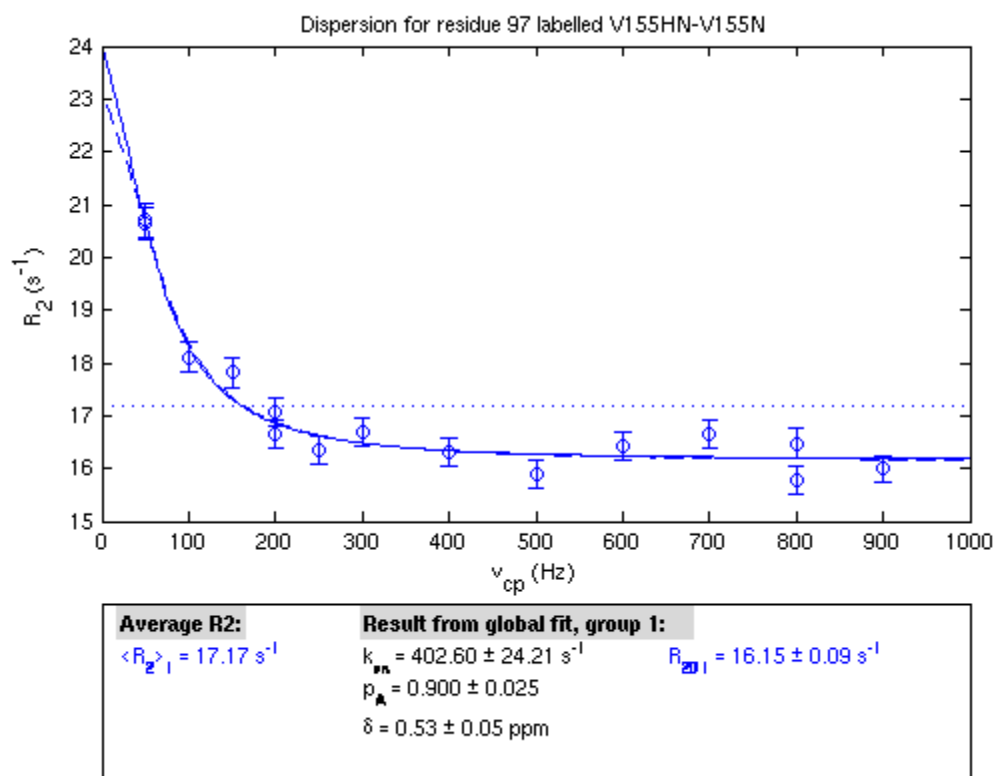
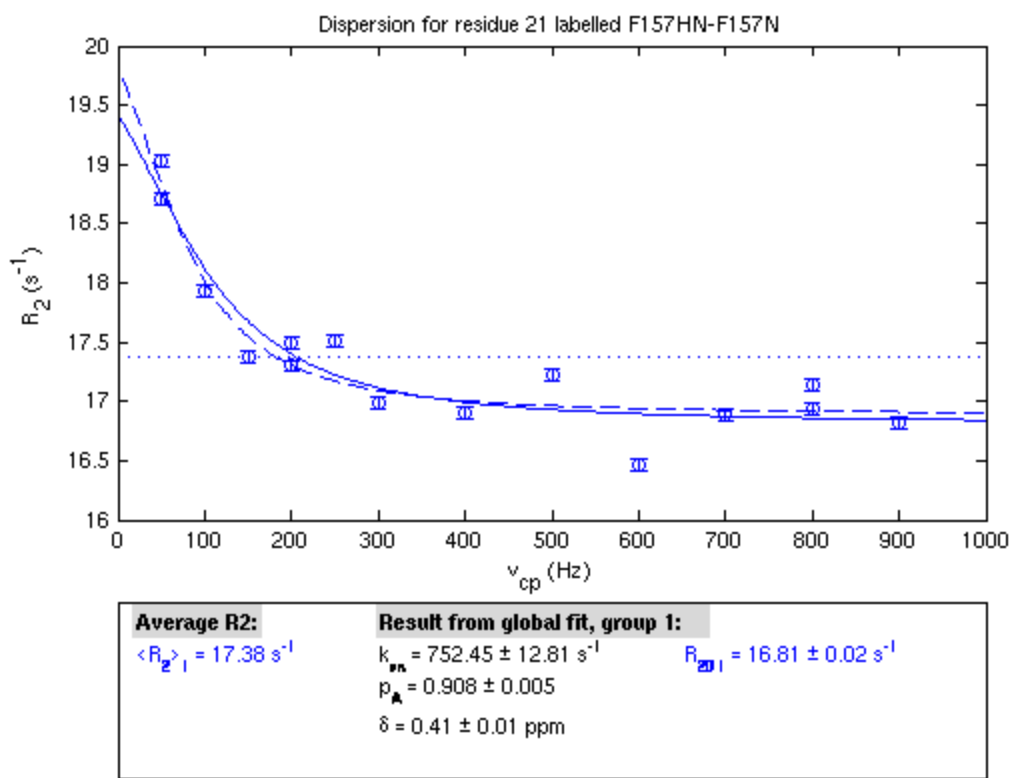
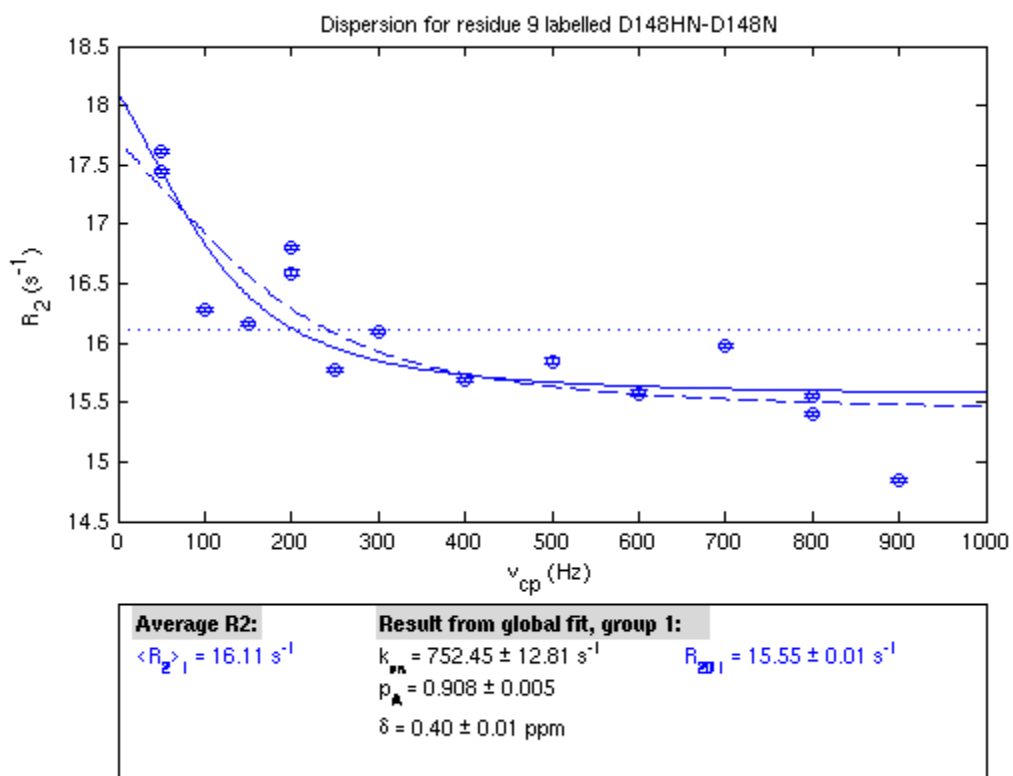
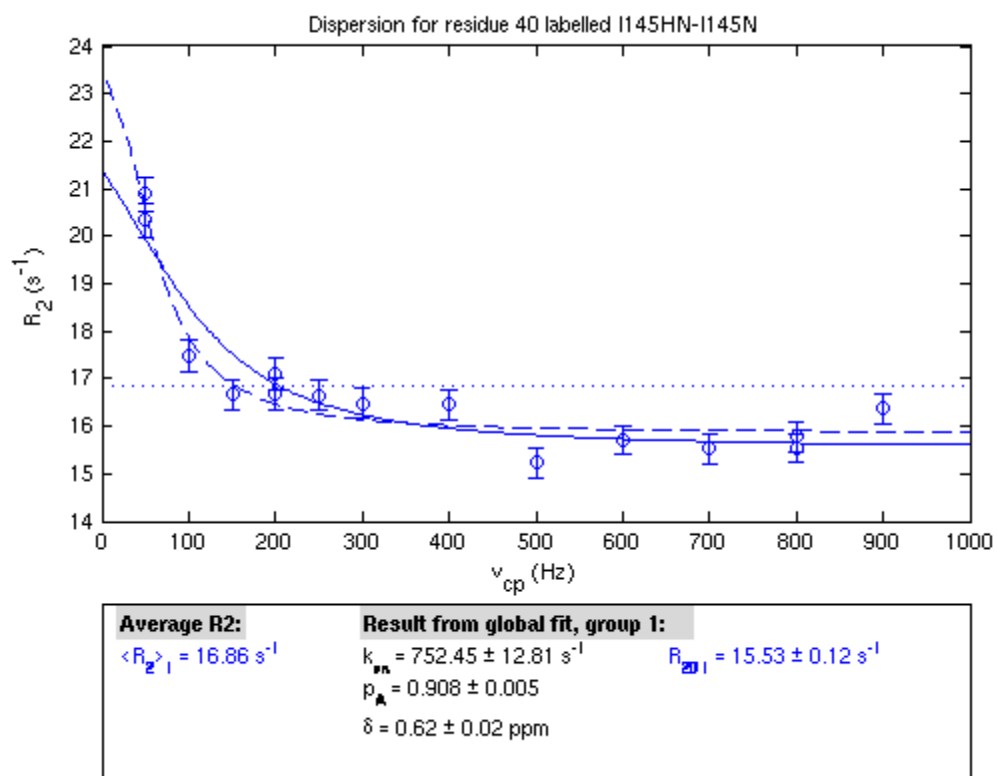
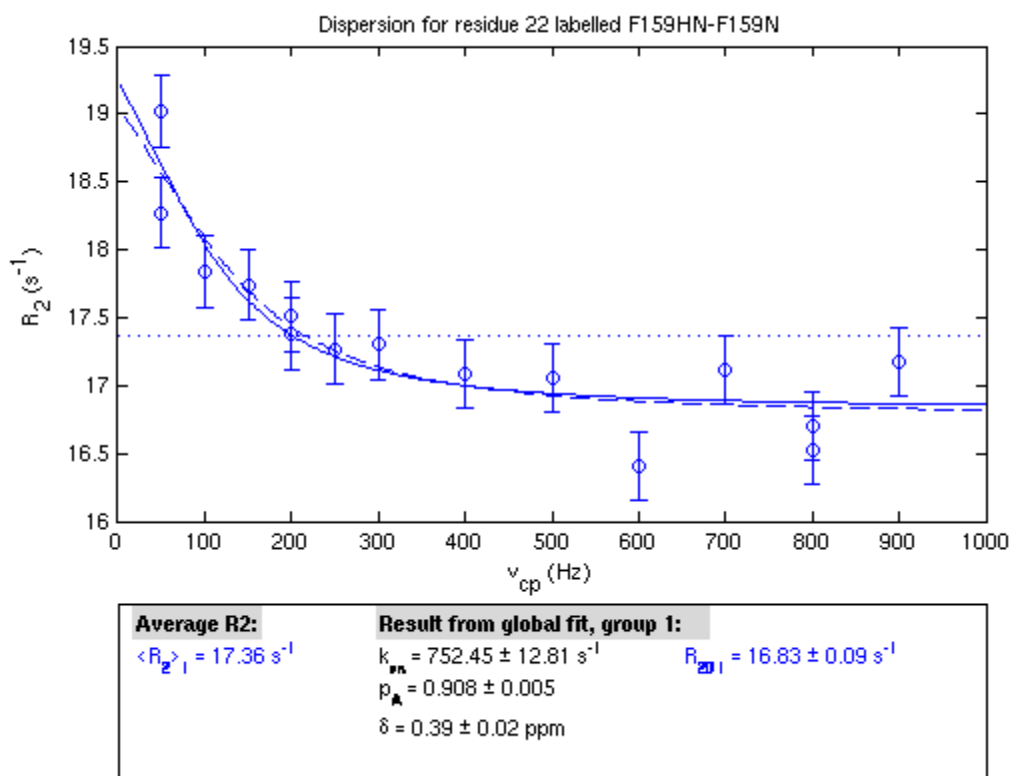
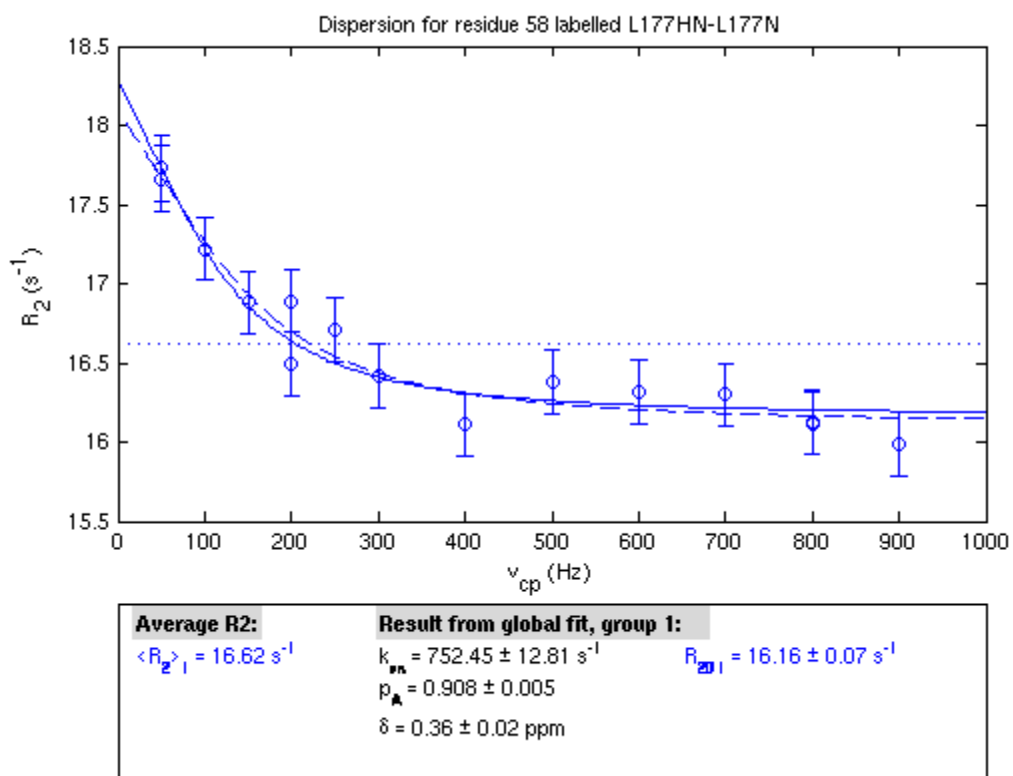
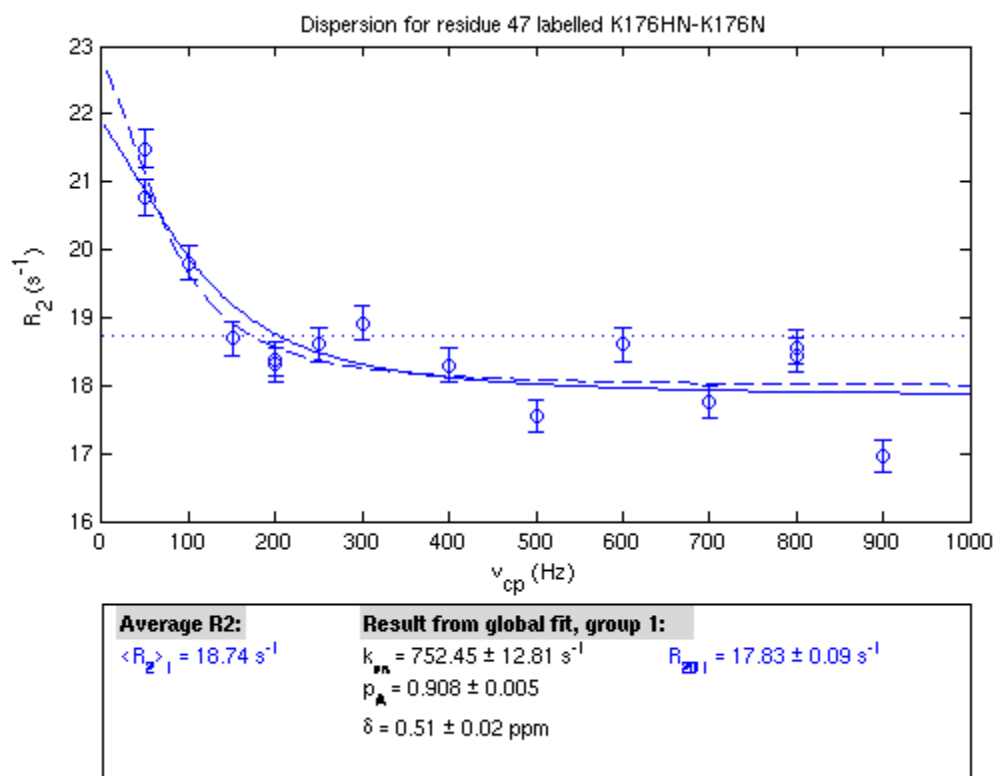
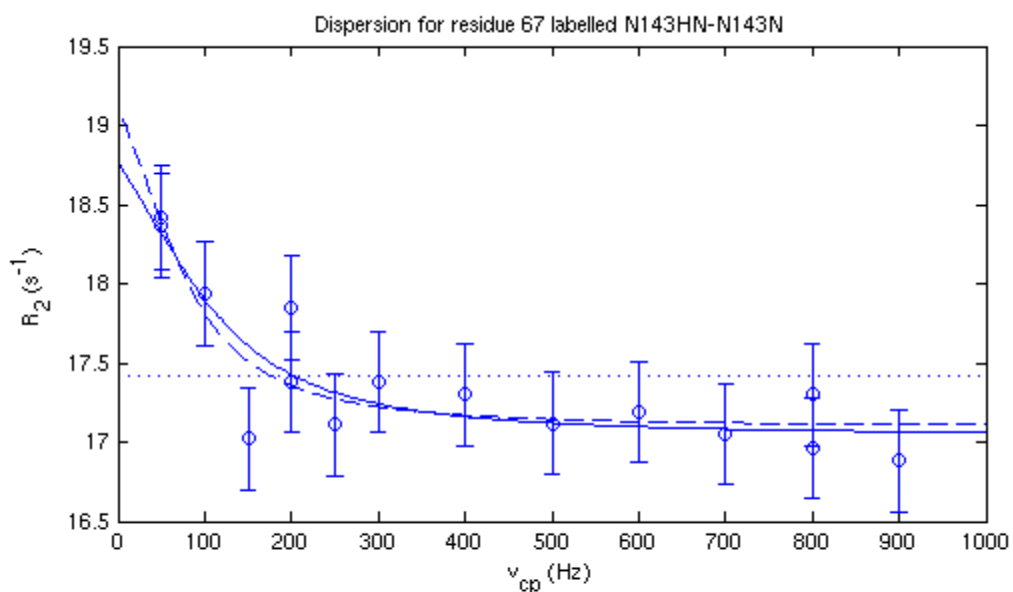


Figure B25-B36 shows relaxation data for twelve dispersions (D148, F157, F159, I145, K176, L177, N143, N160, N174, R144, V155, and V172) derived from the 10% DMSO CPMG experiment, and plotted in CPMG-fit.

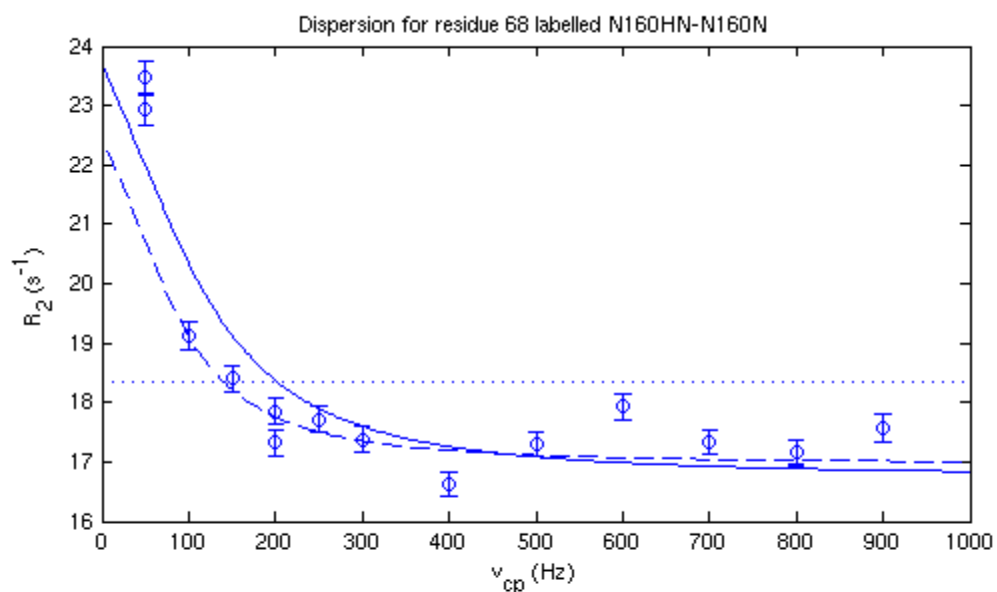




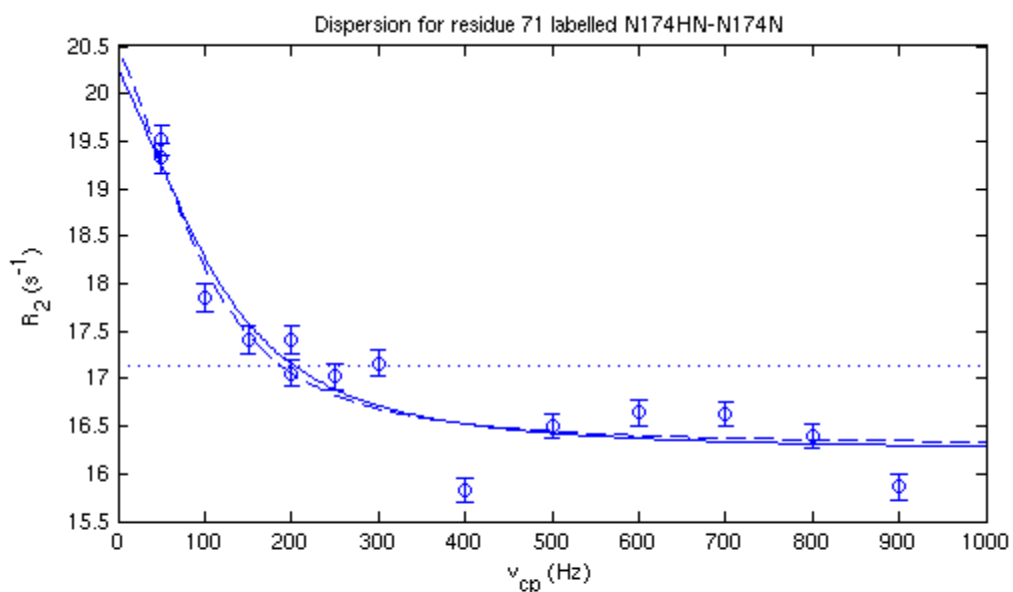




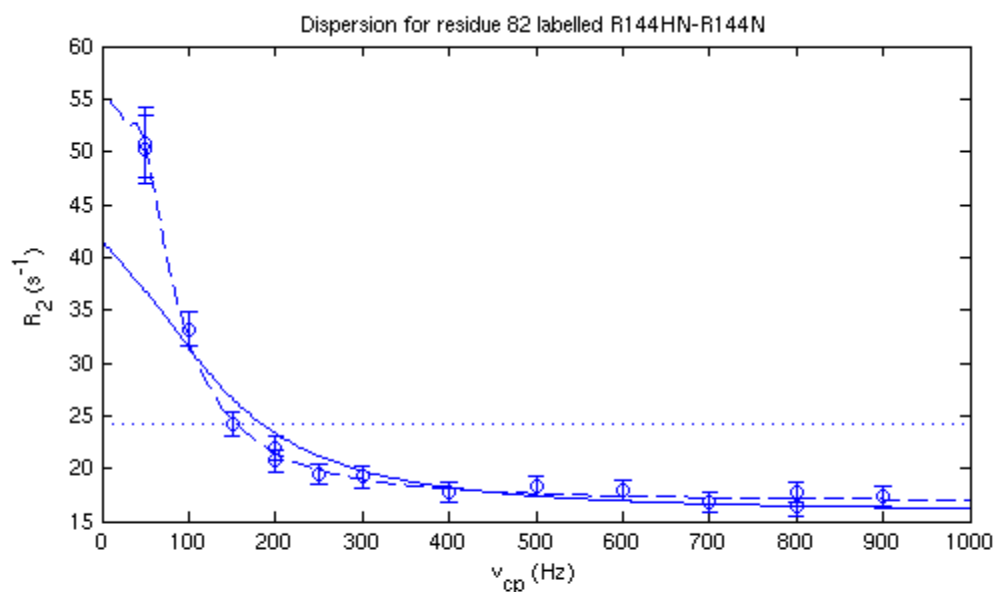
Average R2:	Result from global fit, group 1:	
$\langle R_2 \rangle_1 = 17.42 \text{ s}^{-1}$	$k_{\text{ex}} = 752.45 \pm 12.81 \text{ s}^{-1}$	$R_{201} = 17.04 \pm 0.11 \text{ s}^{-1}$
	$p_{\text{A}} = 0.908 \pm 0.005$	
	$\delta = 0.33 \pm 0.03 \text{ ppm}$	



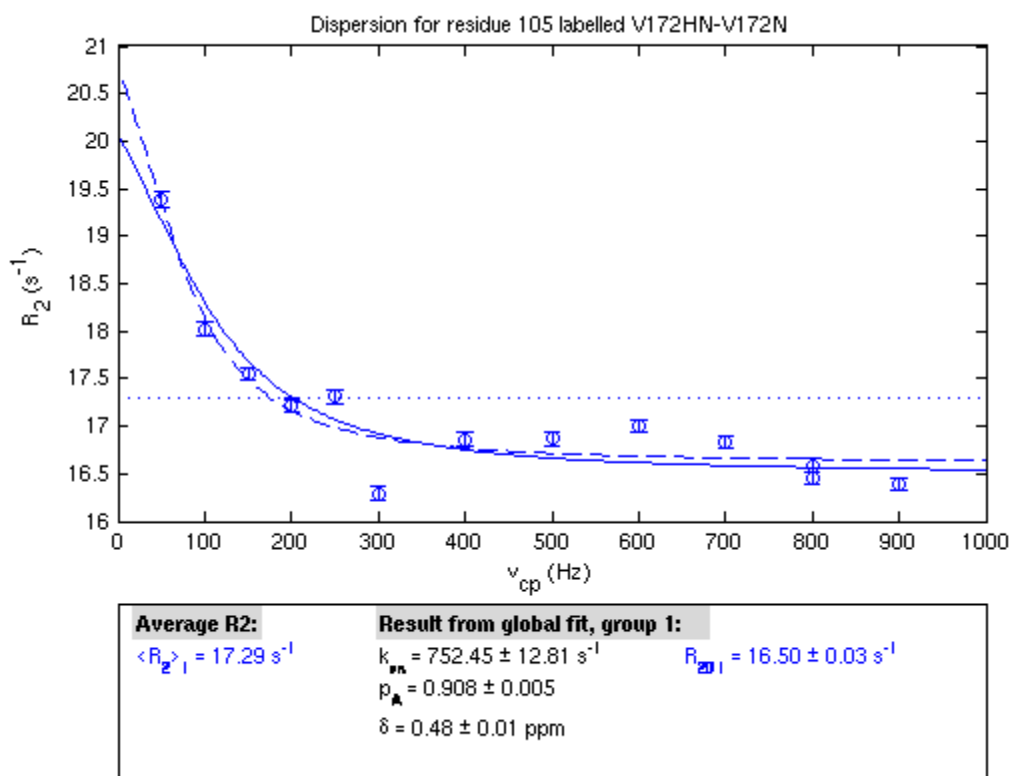
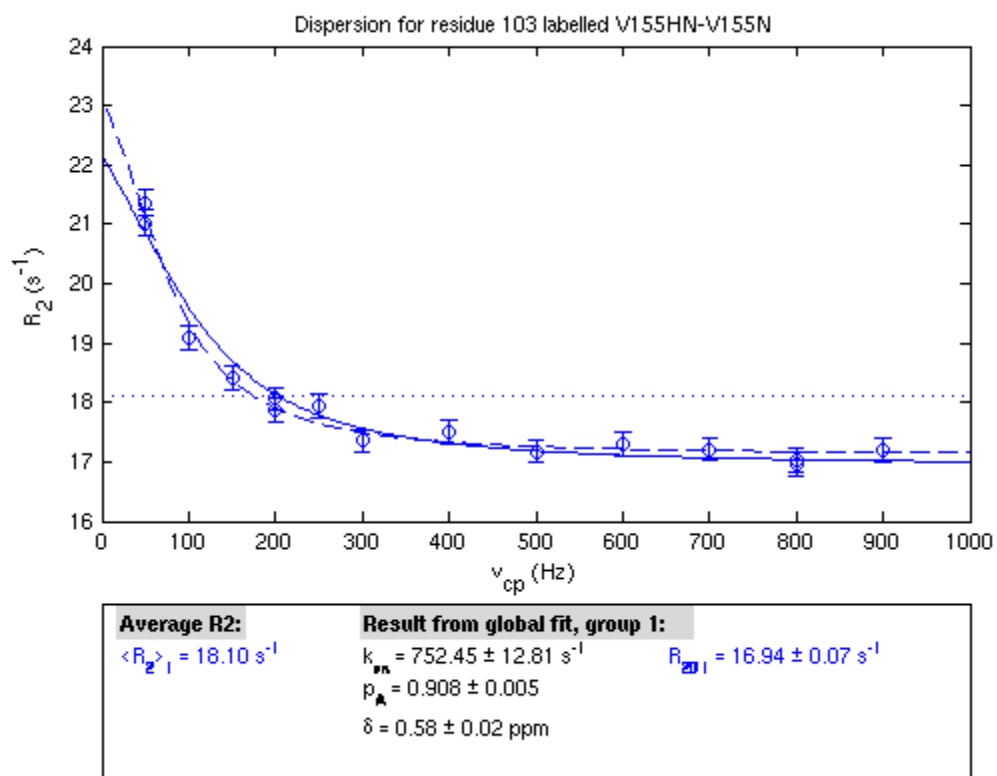
Average R2:	Result from global fit, group 1:	
$\langle R_2 \rangle_1 = 18.35 \text{ s}^{-1}$	$k_{\text{ex}} = 752.45 \pm 12.81 \text{ s}^{-1}$	$R_{201} = 16.75 \pm 0.08 \text{ s}^{-1}$
	$p_{\text{A}} = 0.908 \pm 0.005$	
	$\delta = 0.68 \pm 0.02 \text{ ppm}$	



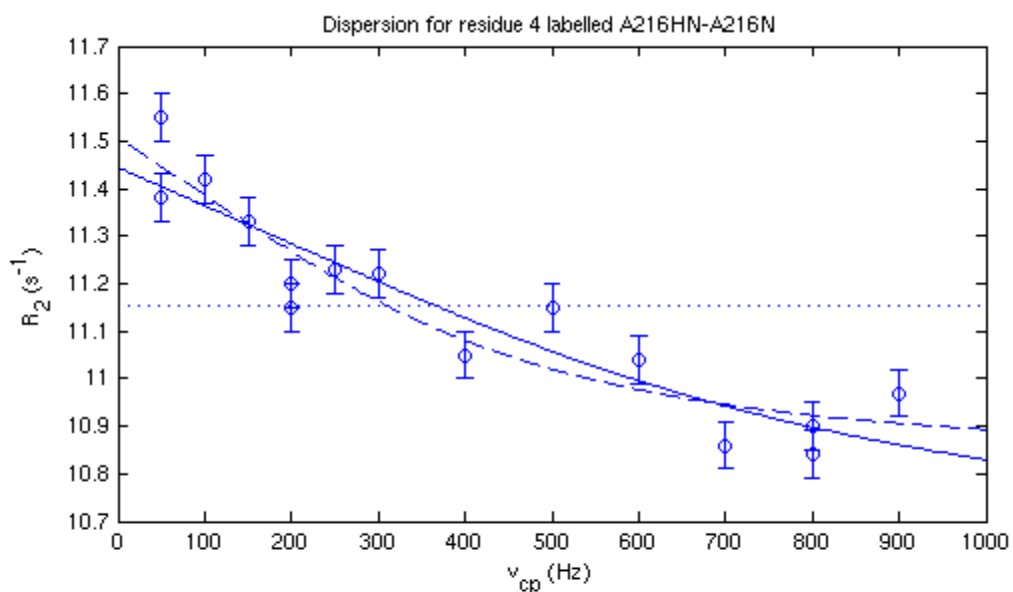
Average R2:	Result from global fit, group 1:	
$\langle R_2 \rangle_1 = 17.13 \text{ s}^{-1}$	$k_{\text{ex}} = 752.45 \pm 12.81 \text{ s}^{-1}$	$R_{201} = 16.24 \pm 0.04 \text{ s}^{-1}$
	$p_{\text{A}} = 0.908 \pm 0.005$	
	$\delta = 0.51 \pm 0.01 \text{ ppm}$	



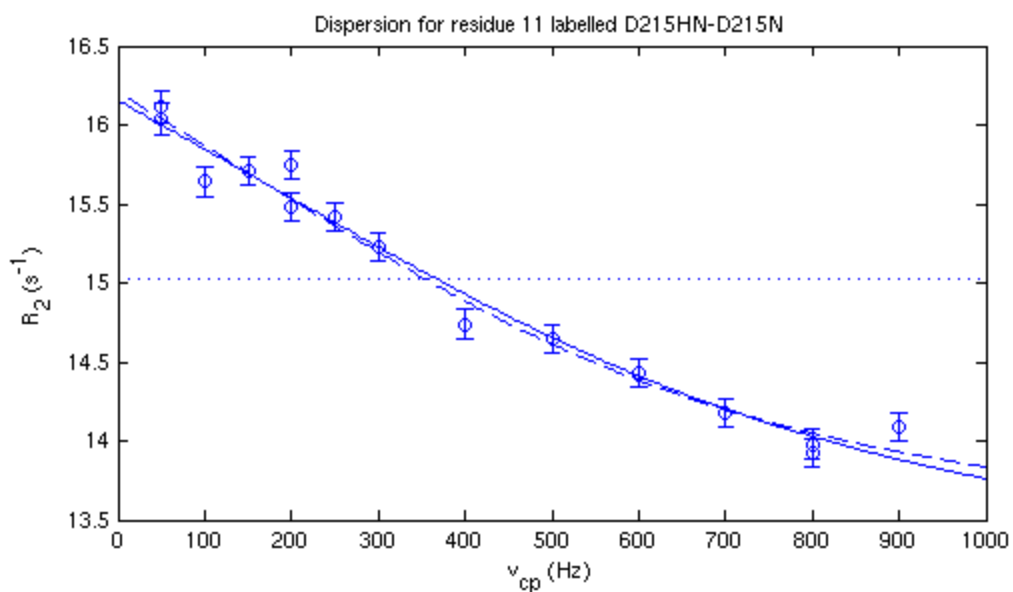
Average R2:	Result from global fit, group 1:	
$\langle R_2 \rangle_1 = 24.13 \text{ s}^{-1}$	$k_{\text{ex}} = 752.45 \pm 12.81 \text{ s}^{-1}$	$R_{201} = 15.80 \pm 0.38 \text{ s}^{-1}$
	$p_{\text{A}} = 0.908 \pm 0.005$	
	$\delta = 1.49 \pm 0.07 \text{ ppm}$	



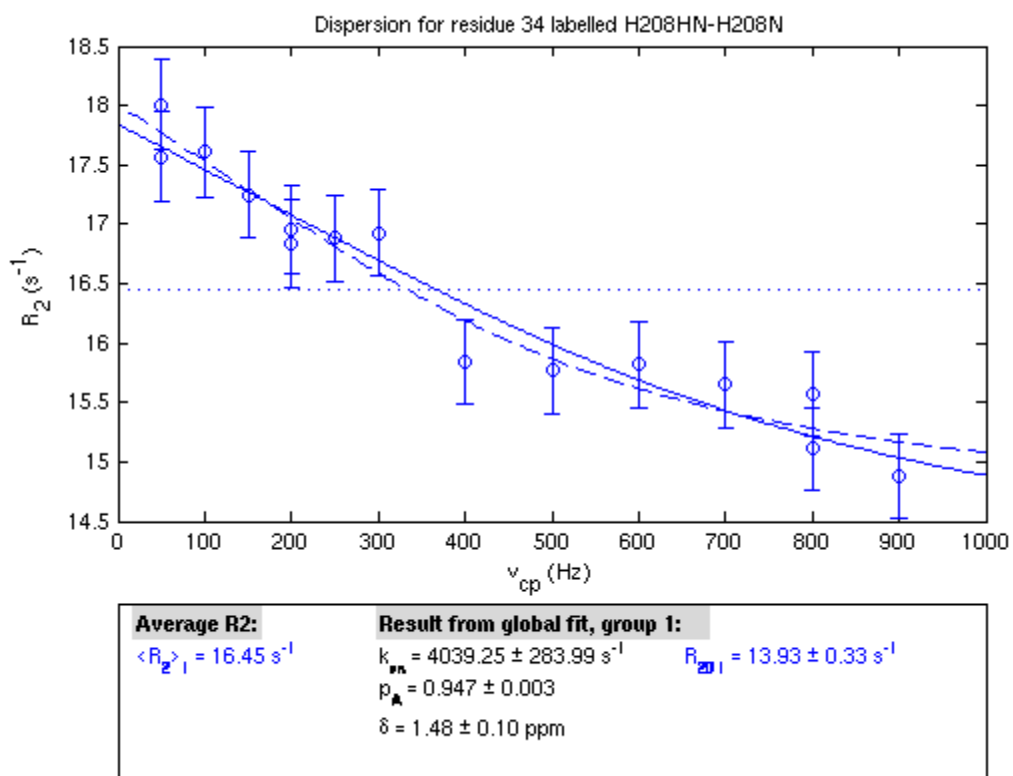
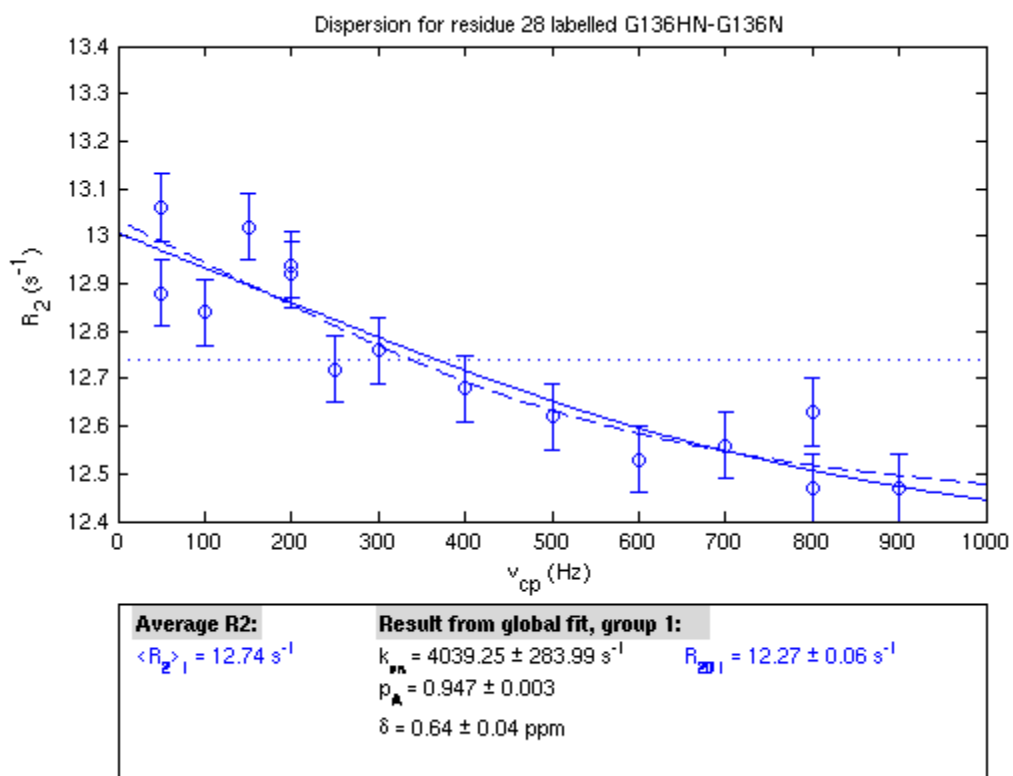
Figures B37-B50 show common relaxation data for 14 dispersions located outside the binding site (A216, D215, G136, H208, K199, K210, Q220, V202, V204, V213, F192, Q187, E230, V225) derived from the 2% DMSO CPMG experiment, and plotted in CPMG-fit.

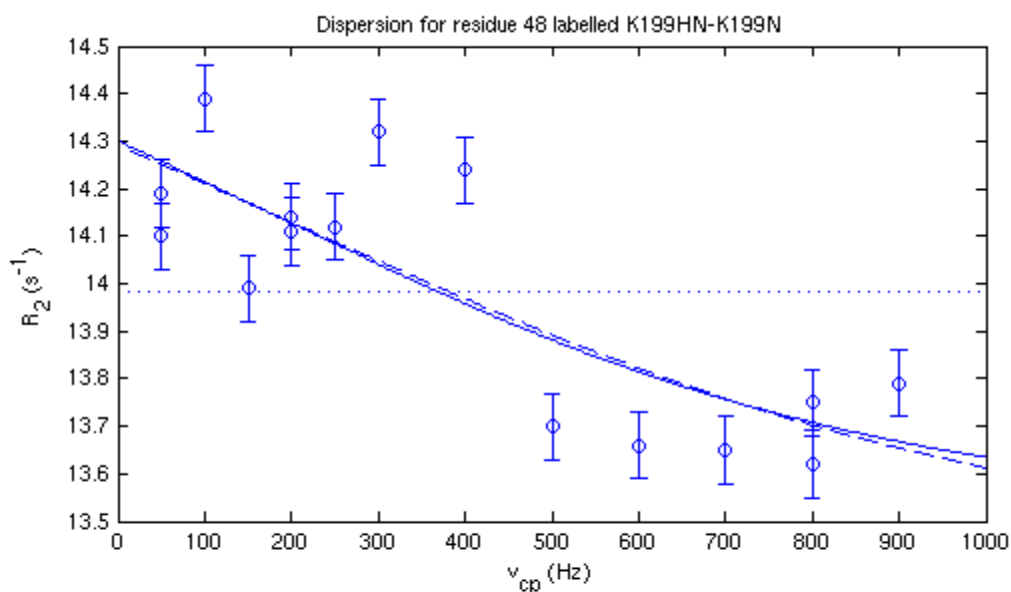


Average R2:	Result from global fit, group 1:	
$\langle R_2 \rangle_1 = 11.15 \text{ s}^{-1}$	$k_{rn} = 4039.25 \pm 283.99 \text{ s}^{-1}$	$R_{201} = 10.63 \pm 0.05 \text{ s}^{-1}$
	$p_A = 0.947 \pm 0.003$	
	$\delta = 0.67 \pm 0.03 \text{ ppm}$	

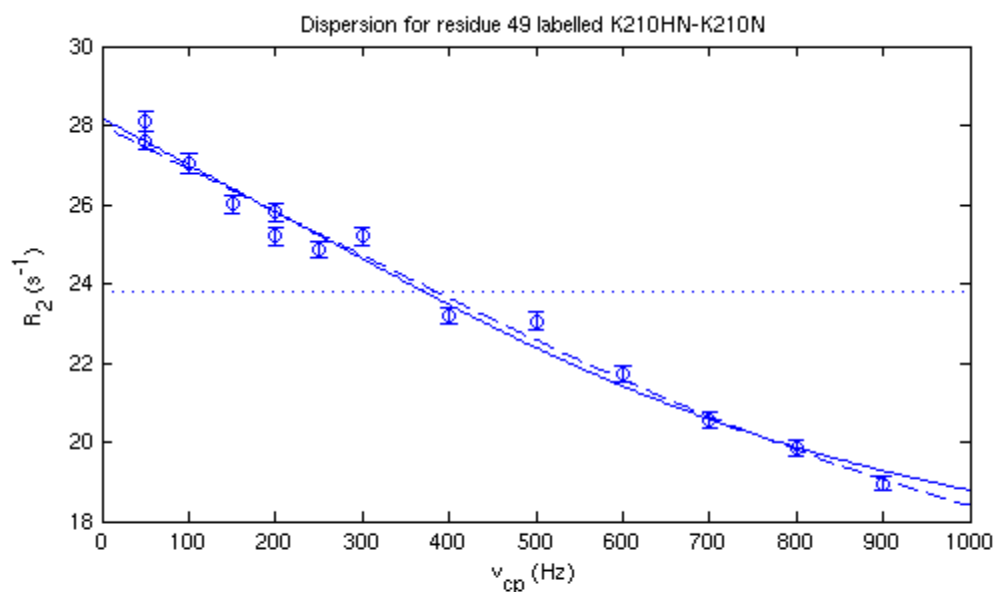


Average R2:	Result from global fit, group 1:	
$\langle R_2 \rangle_1 = 15.02 \text{ s}^{-1}$	$k_{rn} = 4039.25 \pm 283.99 \text{ s}^{-1}$	$R_{201} = 12.99 \pm 0.16 \text{ s}^{-1}$
	$p_A = 0.947 \pm 0.003$	
	$\delta = 1.33 \pm 0.05 \text{ ppm}$	

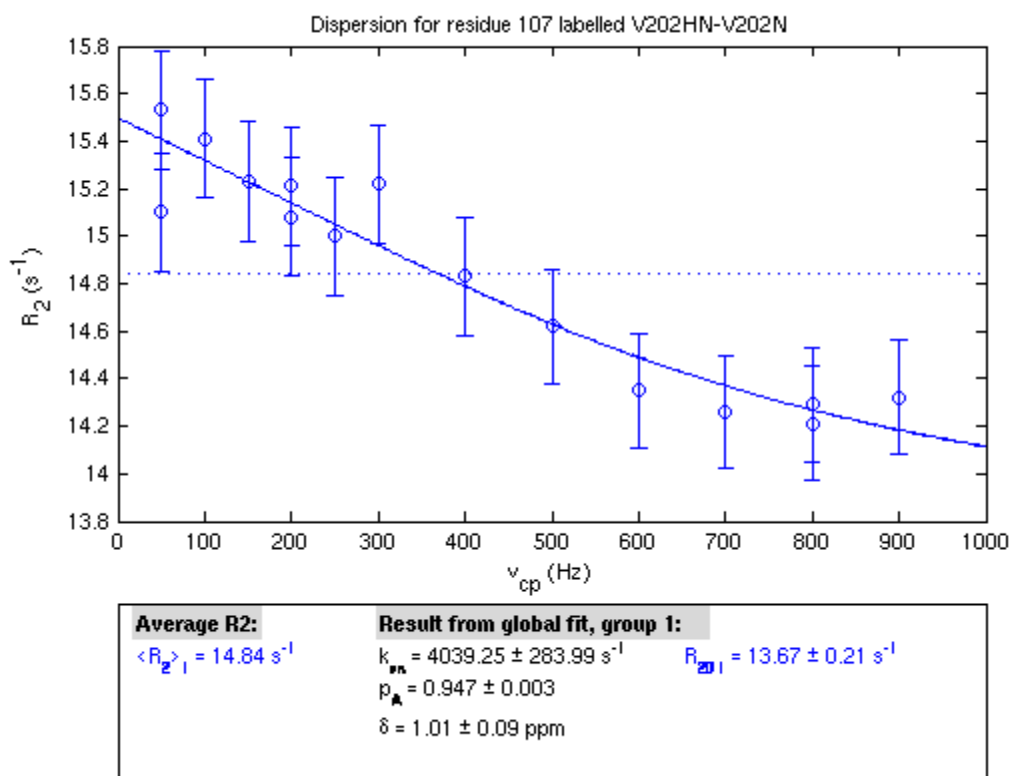
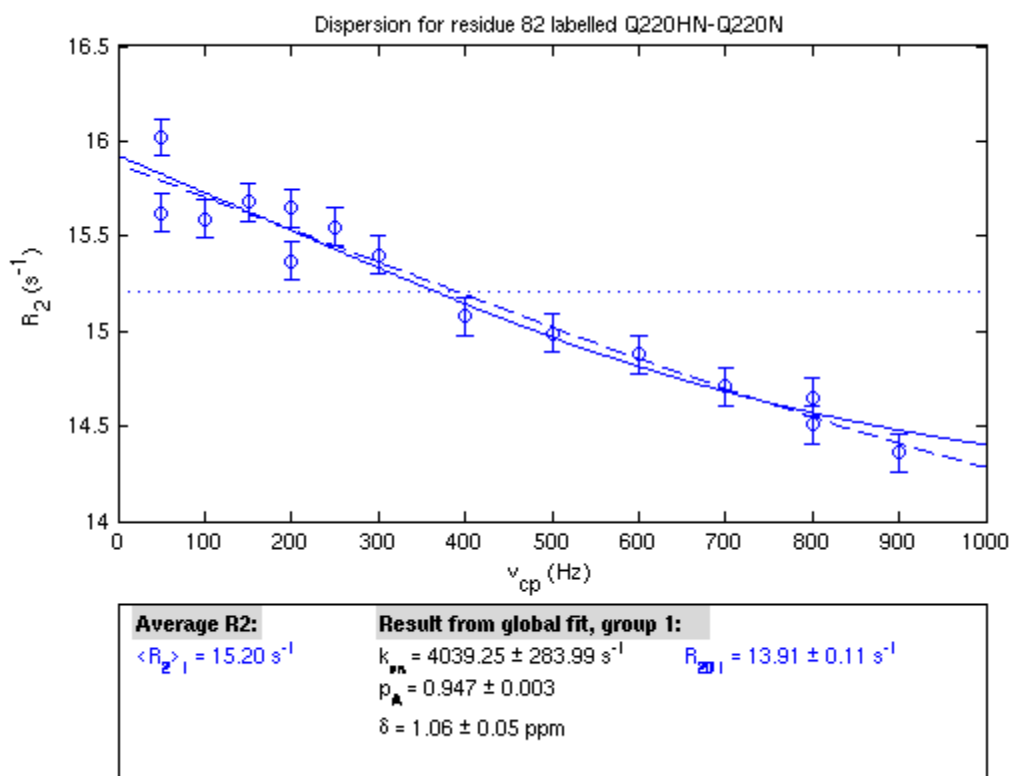


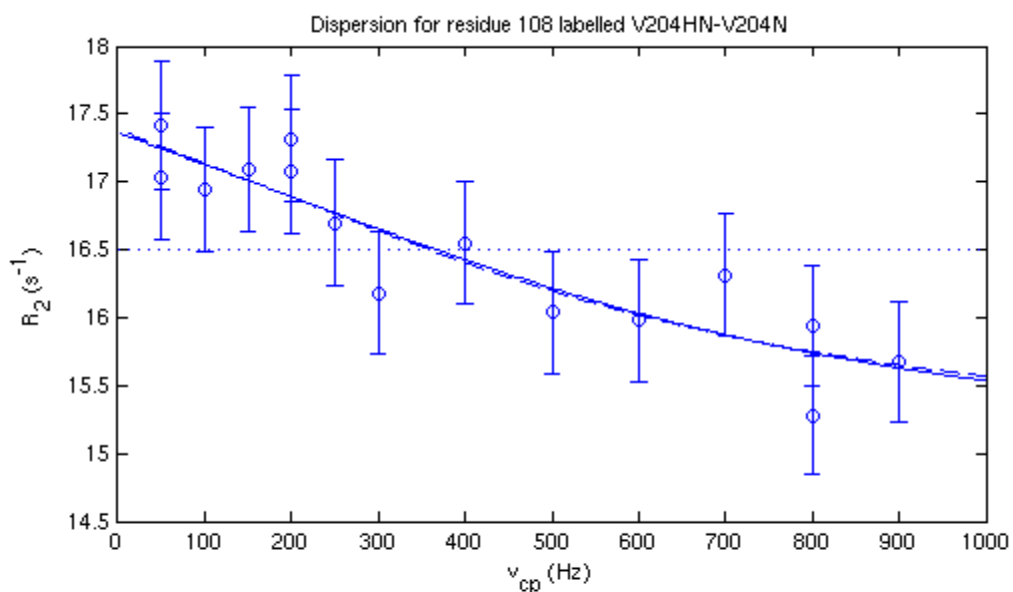


Average R2:	Result from global fit, group 1:	
$\langle R_2 \rangle_1 = 13.98 \text{ s}^{-1}$	$k_{rn} = 4039.25 \pm 283.99 \text{ s}^{-1}$	$R_{201} = 13.42 \pm 0.07 \text{ s}^{-1}$
	$p_A = 0.947 \pm 0.003$	
	$\delta = 0.70 \pm 0.04 \text{ ppm}$	

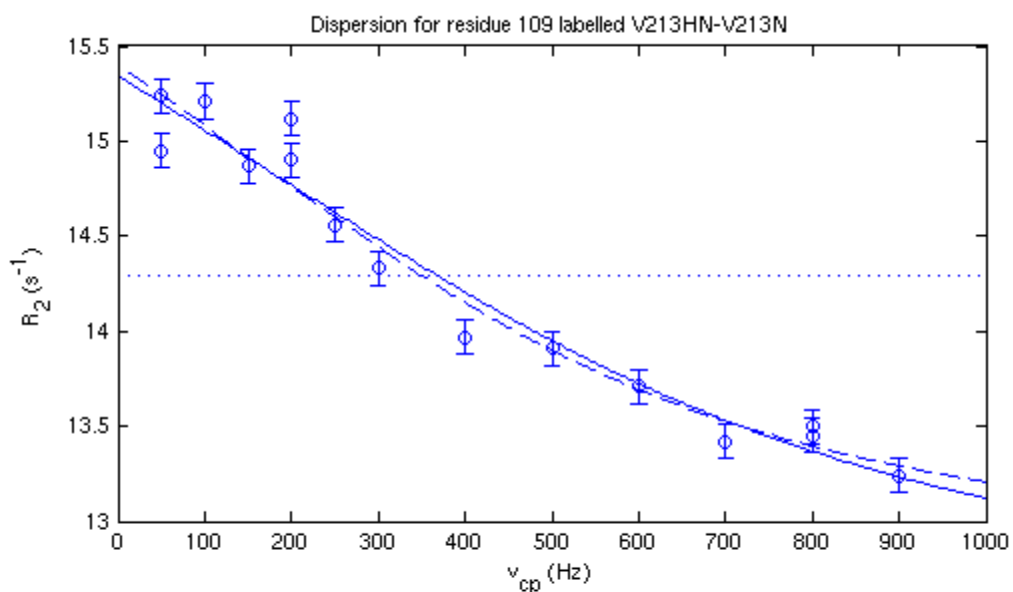


Average R2:	Result from global fit, group 1:	
$\langle R_2 \rangle_1 = 23.80 \text{ s}^{-1}$	$k_{rn} = 4039.25 \pm 283.99 \text{ s}^{-1}$	$R_{201} = 15.62 \pm 0.57 \text{ s}^{-1}$
	$p_A = 0.947 \pm 0.003$	
	$\delta = 2.70 \pm 0.09 \text{ ppm}$	

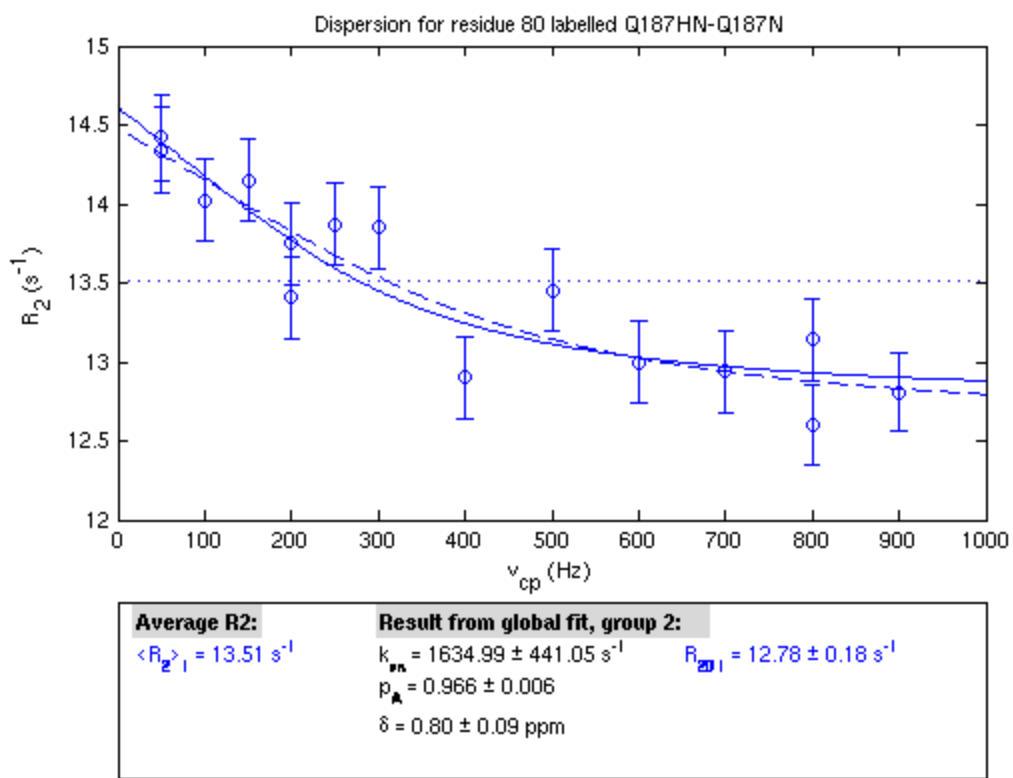
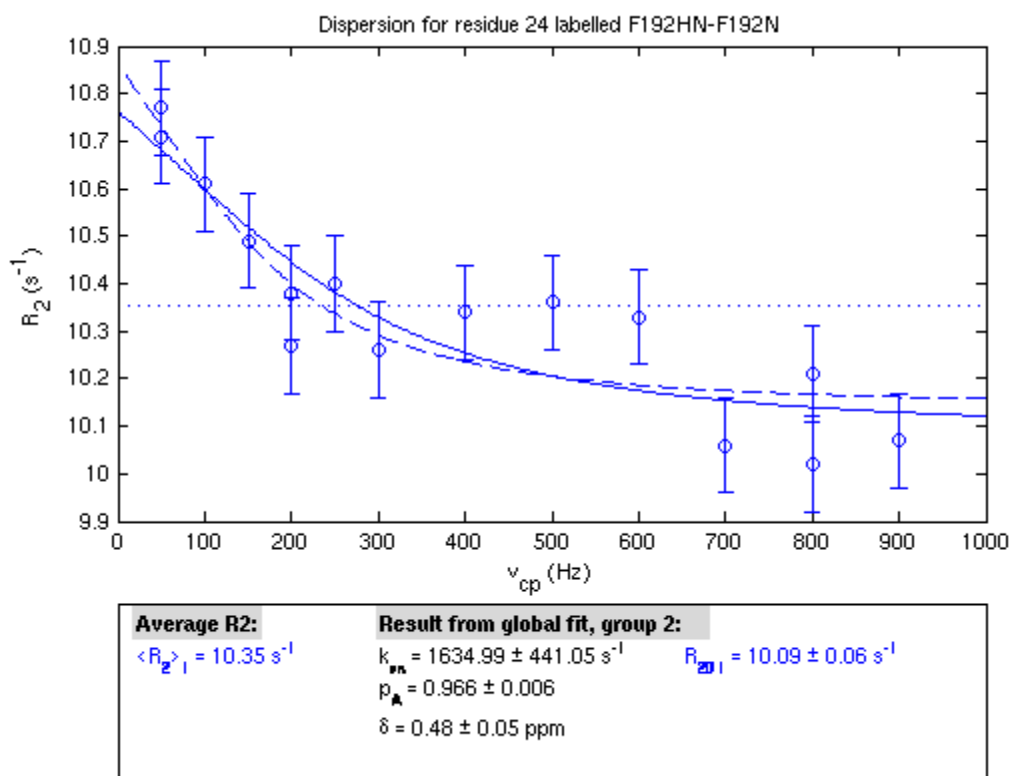


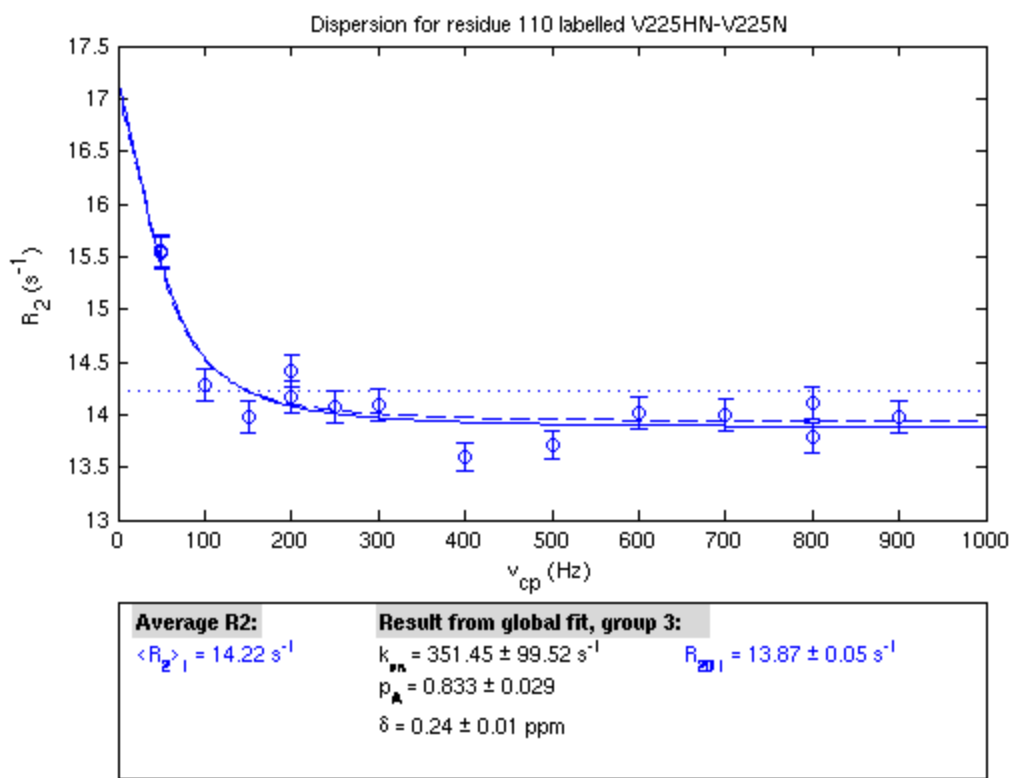
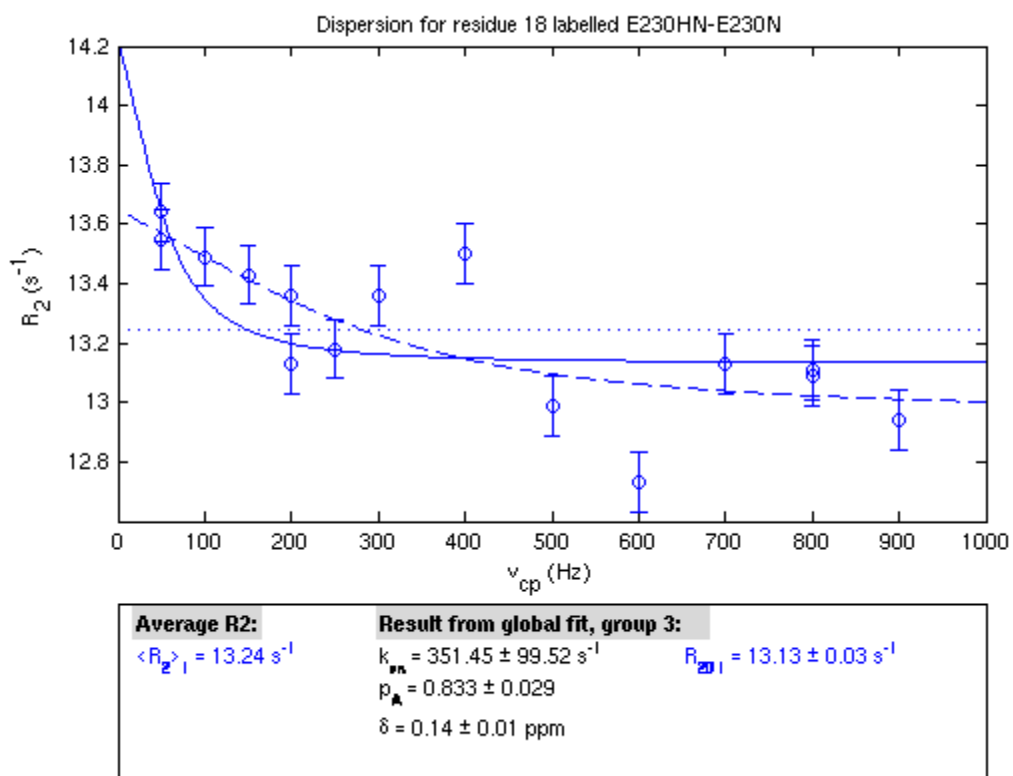


Average R2:	Result from global fit, group 1:	
$\langle R_2 \rangle_1 = 16.50 \text{ s}^{-1}$	$k_{rn} = 4039.25 \pm 283.99 \text{ s}^{-1}$	$R_{201} = 14.95 \pm 0.35 \text{ s}^{-1}$
	$p_A = 0.947 \pm 0.003$	
	$\delta = 1.16 \pm 0.13 \text{ ppm}$	

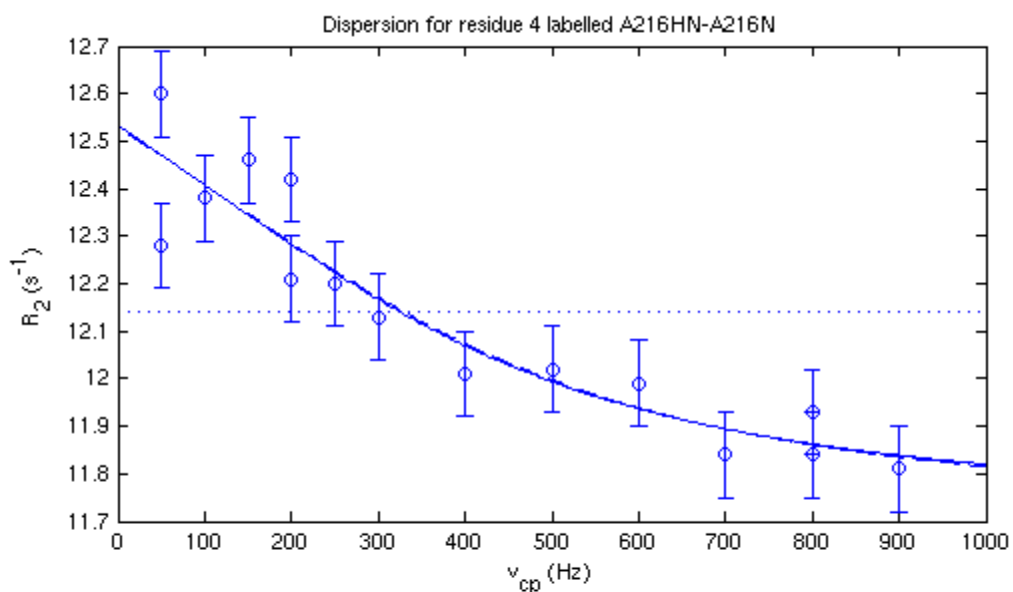


Average R2:	Result from global fit, group 1:	
$\langle R_2 \rangle_1 = 14.29 \text{ s}^{-1}$	$k_{rn} = 4039.25 \pm 283.99 \text{ s}^{-1}$	$R_{201} = 12.40 \pm 0.14 \text{ s}^{-1}$
	$p_A = 0.947 \pm 0.003$	
	$\delta = 1.28 \pm 0.05 \text{ ppm}$	

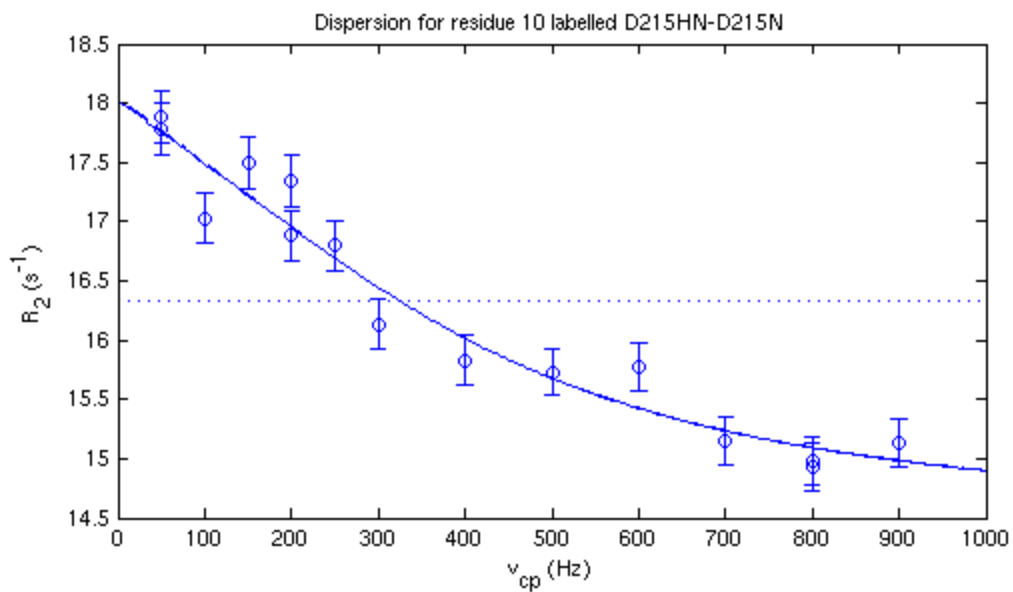




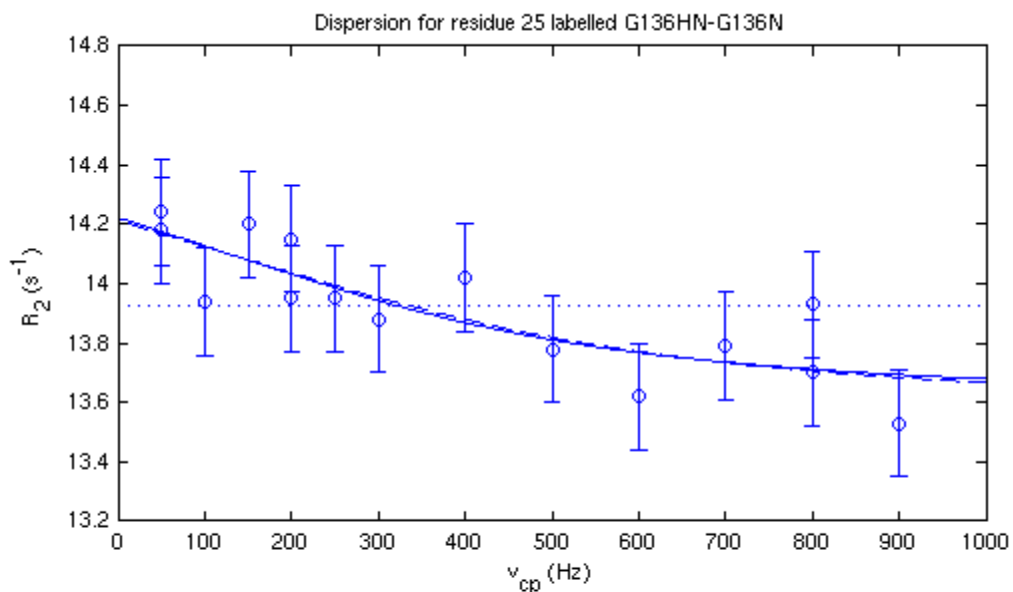
Figures B51-B64 show common relaxation data for 14 dispersions located outside the binding site (A216, D215, G136, H208, K199, K210, Q220, V202, V204, V213, F192, Q187, E230, V225) derived from the 6% DMSO CPMG experiment, and plotted in CPMG-fit.



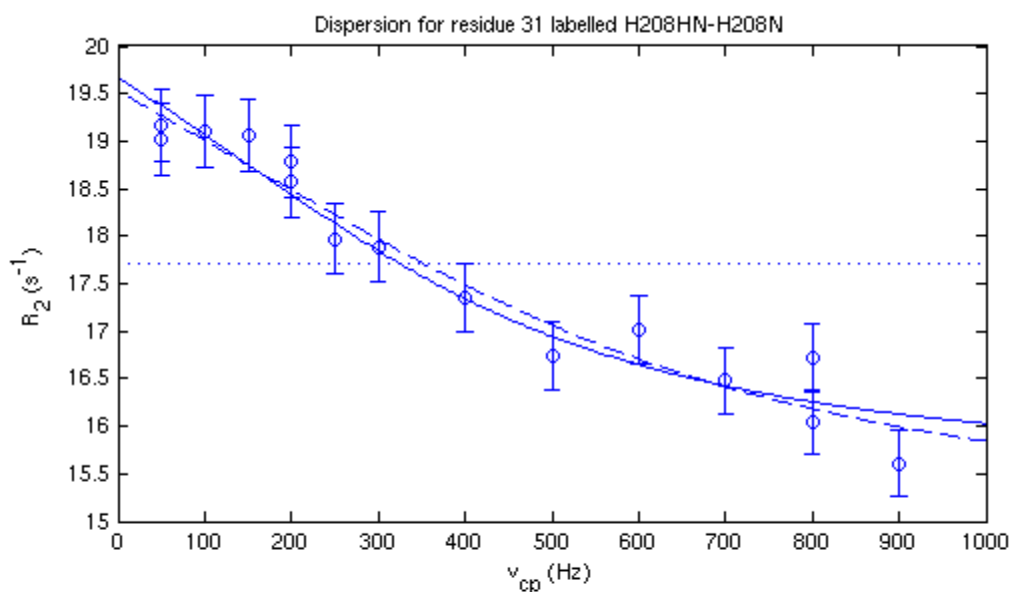
Average R2: $\langle R_2 \rangle_1 = 12.14 \text{ s}^{-1}$	Result from global fit, group 1: $k_{rn} = 2558.46 \pm 100.88 \text{ s}^{-1}$ $p_A = 0.966 \pm 0.002$ $\delta = 0.66 \pm 0.04 \text{ ppm}$	$R_{201} = 11.72 \pm 0.05 \text{ s}^{-1}$
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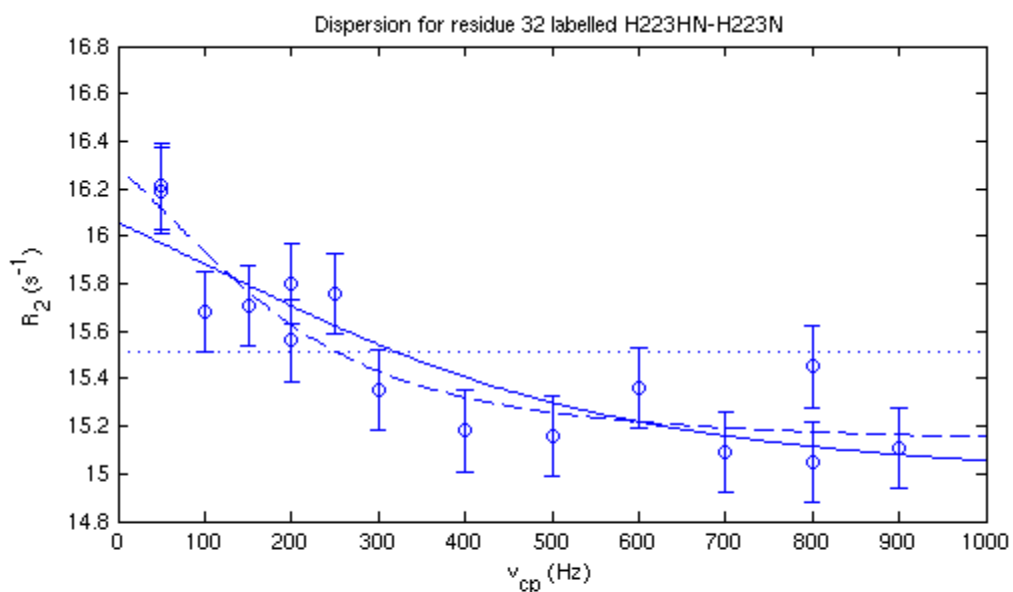
Average R2: $\langle R_2 \rangle_1 = 16.33 \text{ s}^{-1}$	Result from global fit, group 1: $k_{rn} = 2558.46 \pm 100.88 \text{ s}^{-1}$ $p_A = 0.966 \pm 0.002$ $\delta = 1.40 \pm 0.07 \text{ ppm}$	$R_{201} = 14.47 \pm 0.13 \text{ s}^{-1}$
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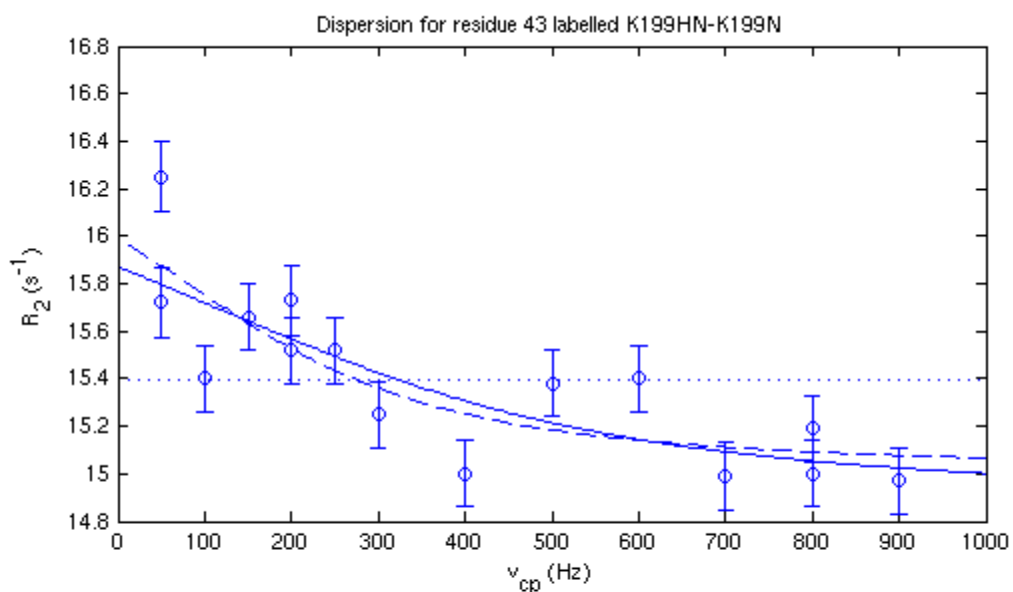
Average R2:	Result from global fit, group 1:	
$\langle R_2 \rangle_1 = 13.92 \text{ s}^{-1}$	$k_{rn} = 2558.46 \pm 100.88 \text{ s}^{-1}$	$R_{201} = 13.61 \pm 0.10 \text{ s}^{-1}$
	$p_A = 0.966 \pm 0.002$	
	$\delta = 0.57 \pm 0.09 \text{ ppm}$	



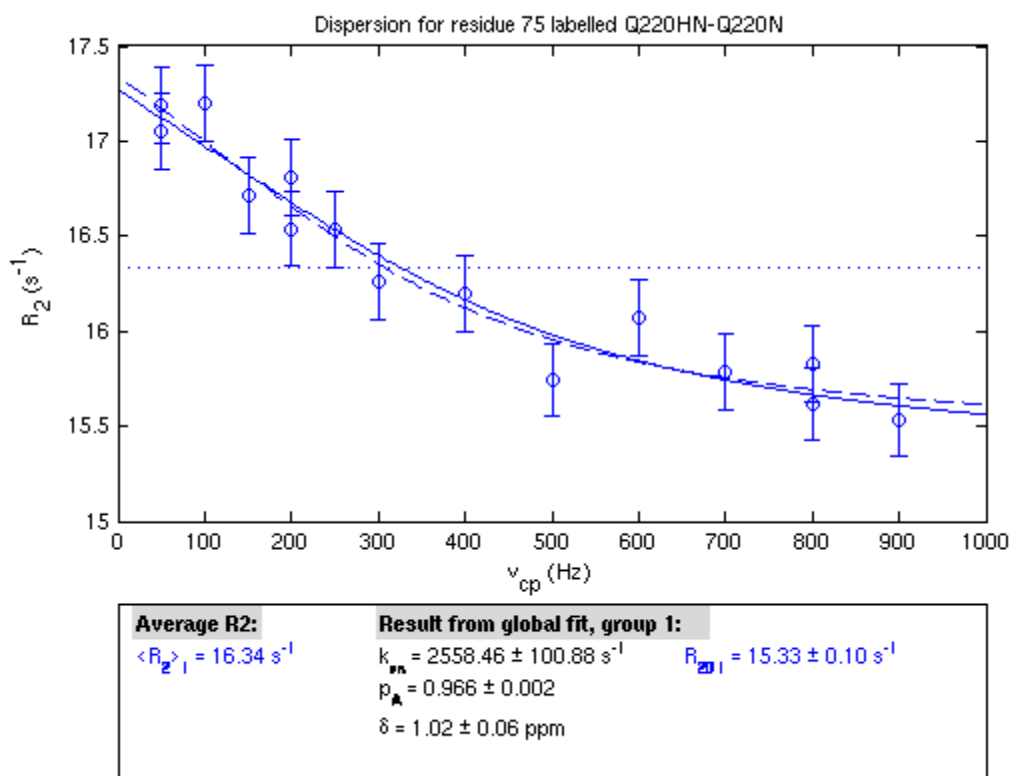
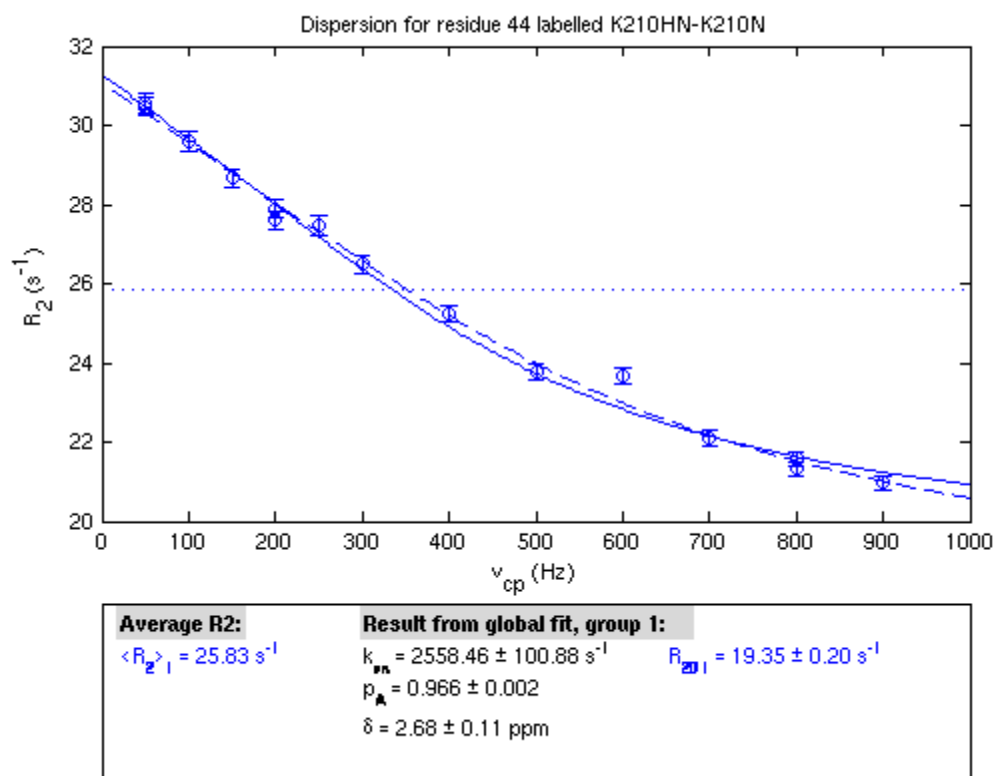
Average R2:	Result from global fit, group 1:	
$\langle R_2 \rangle_1 = 17.70 \text{ s}^{-1}$	$k_{rn} = 2558.46 \pm 100.88 \text{ s}^{-1}$	$R_{201} = 15.52 \pm 0.20 \text{ s}^{-1}$
	$p_A = 0.966 \pm 0.002$	
	$\delta = 1.52 \pm 0.09 \text{ ppm}$	

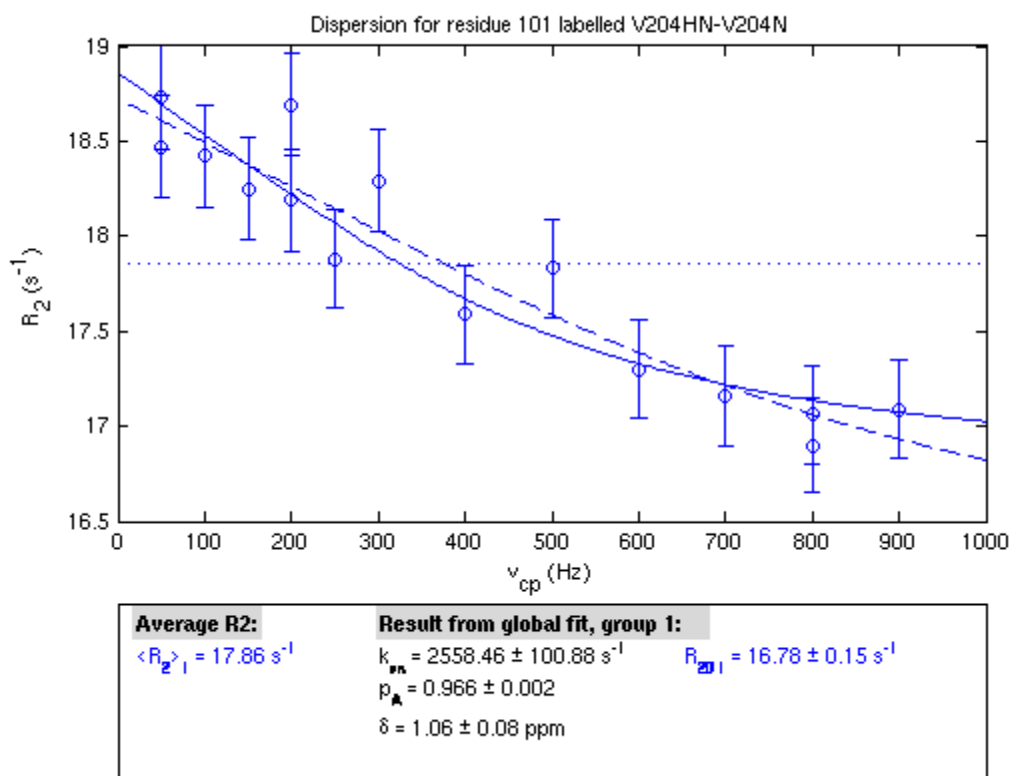
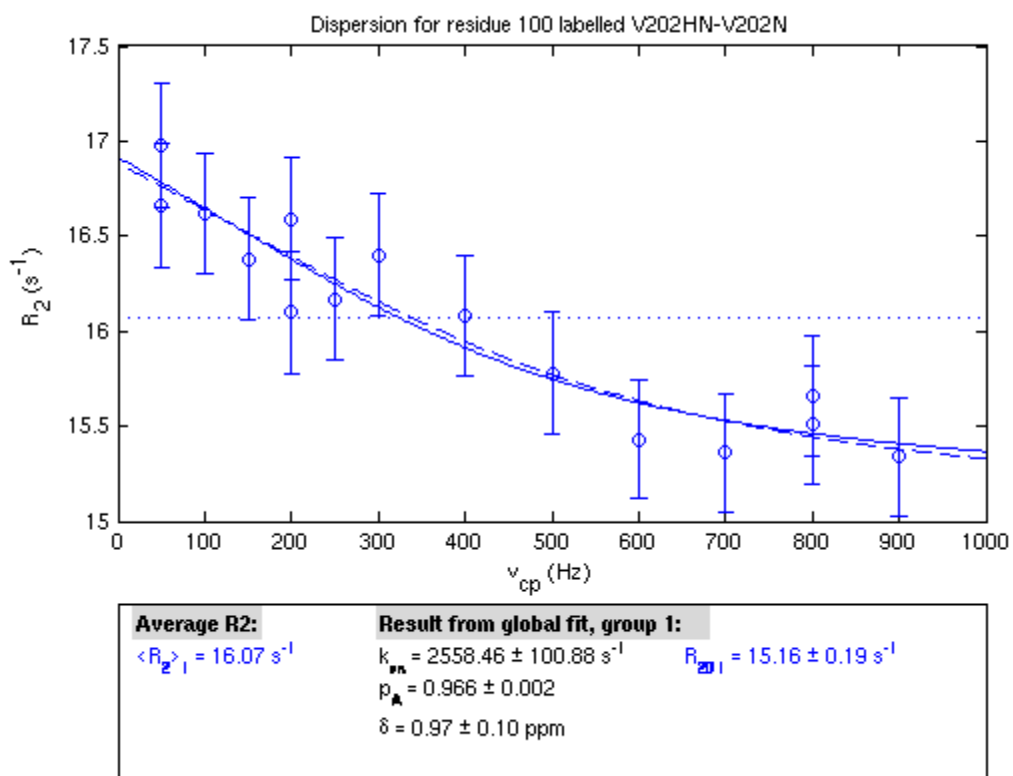


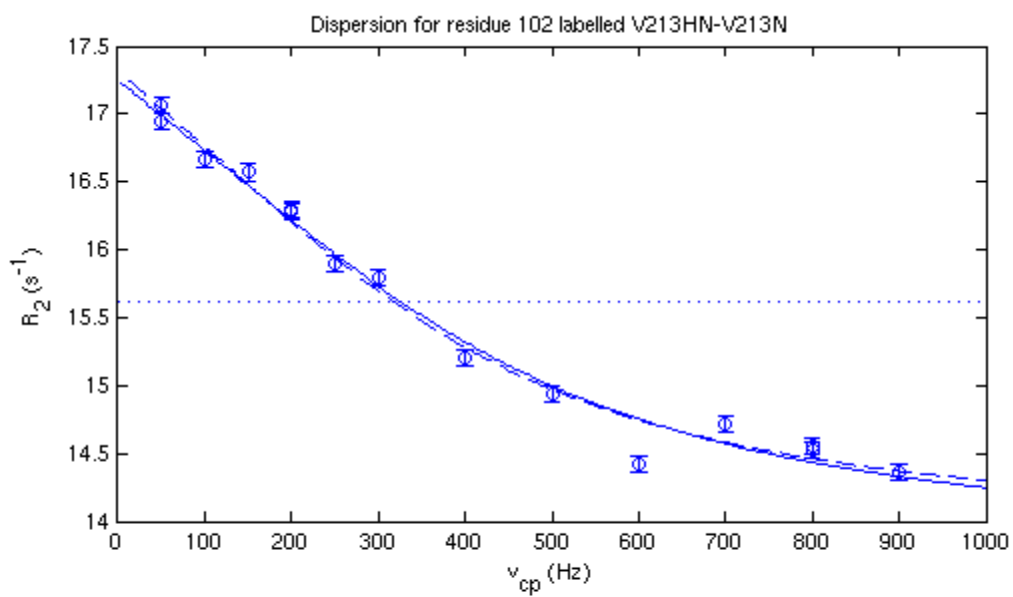
Average R2:	Result from global fit, group 1:	
$\langle R_2 \rangle_1 = 15.51 \text{ s}^{-1}$	$k_{rn} = 2558.46 \pm 100.88 \text{ s}^{-1}$	$R_{201} = 14.92 \pm 0.10 \text{ s}^{-1}$
	$p_A = 0.966 \pm 0.002$	
	$\delta = 0.78 \pm 0.06 \text{ ppm}$	



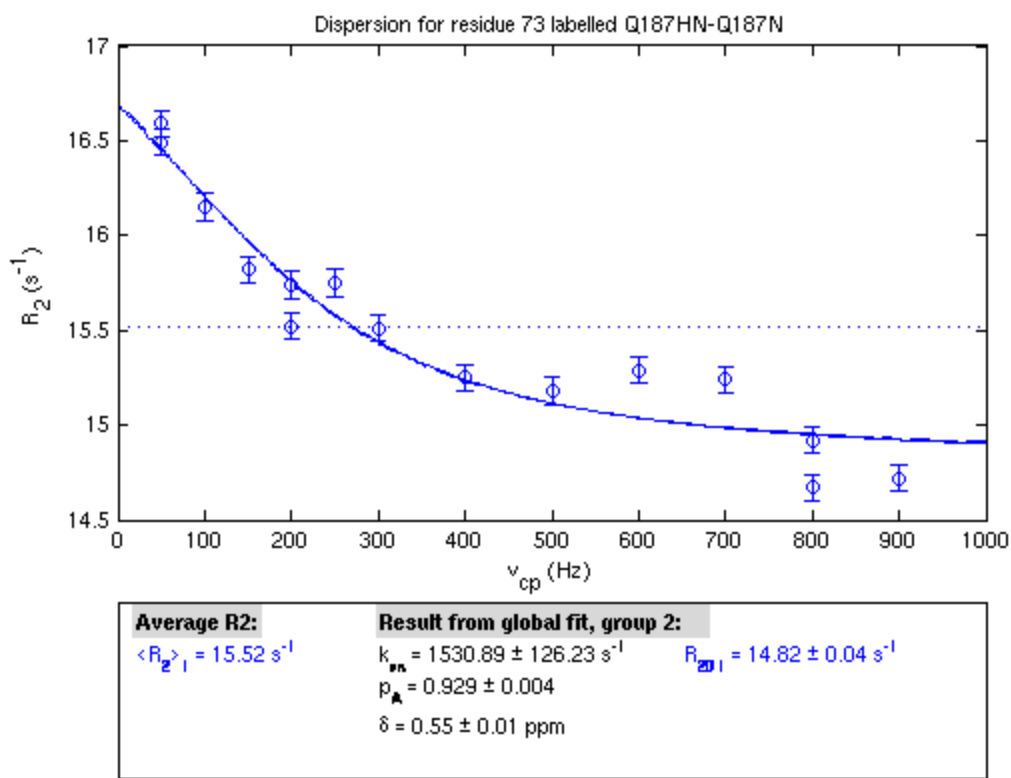
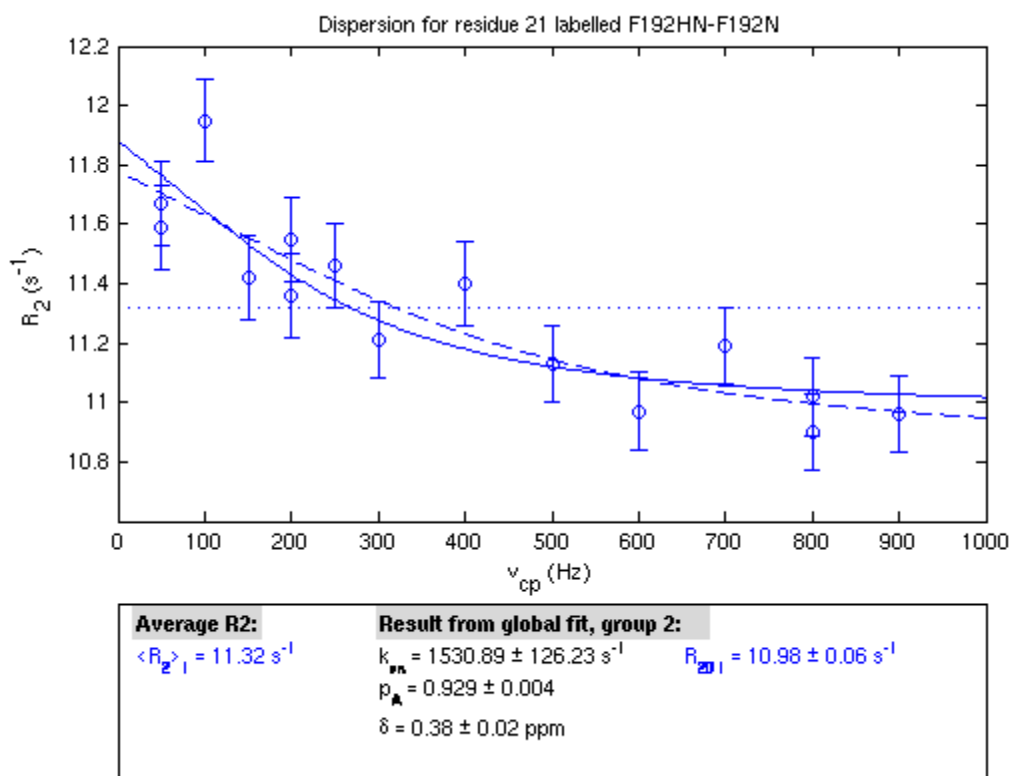
Average R2:	Result from global fit, group 1:	
$\langle R_2 \rangle_1 = 15.40 \text{ s}^{-1}$	$k_{rn} = 2558.46 \pm 100.88 \text{ s}^{-1}$	$R_{201} = 14.88 \pm 0.08 \text{ s}^{-1}$
	$p_A = 0.966 \pm 0.002$	
	$\delta = 0.73 \pm 0.06 \text{ ppm}$	

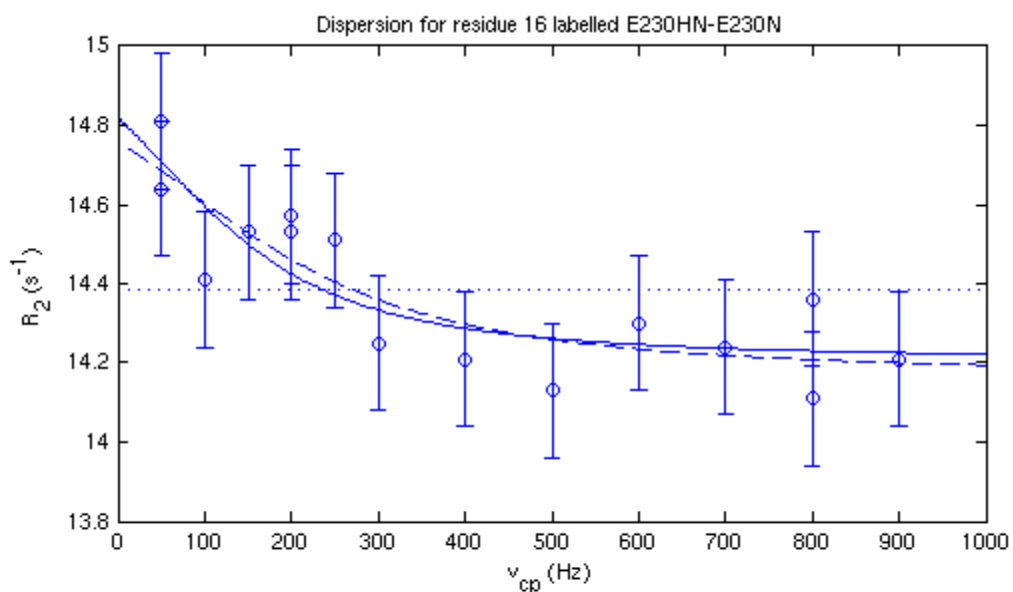




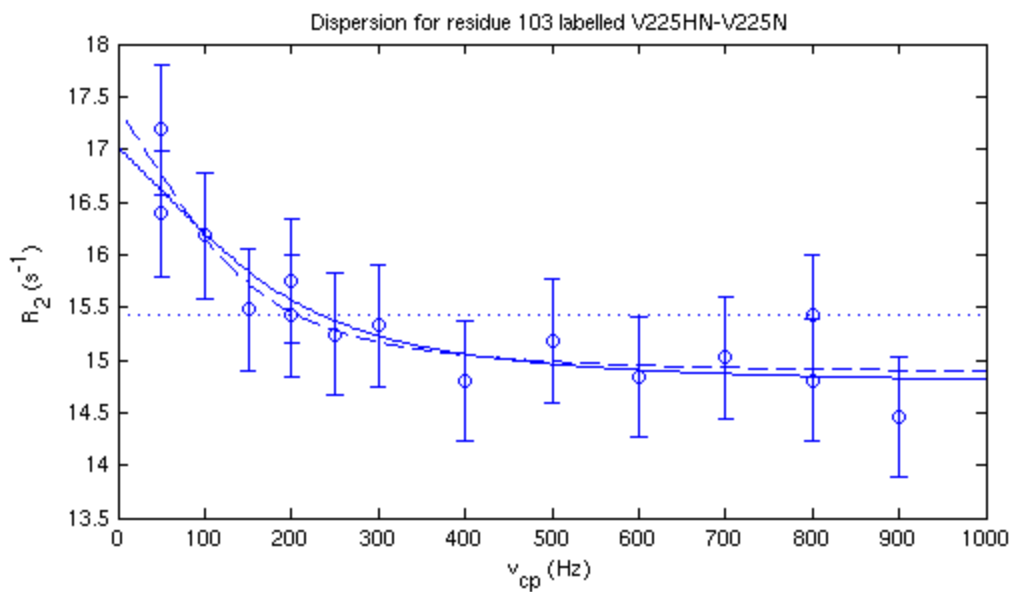


Average R2:	Result from global fit, group 1:	
$\langle R_2 \rangle_1 = 15.61 \text{ s}^{-1}$	$k_{ex} = 2558.46 \pm 100.88 \text{ s}^{-1}$	$R_{201} = 13.84 \pm 0.06 \text{ s}^{-1}$
	$p_A = 0.966 \pm 0.002$	
	$\delta = 1.37 \pm 0.05 \text{ ppm}$	



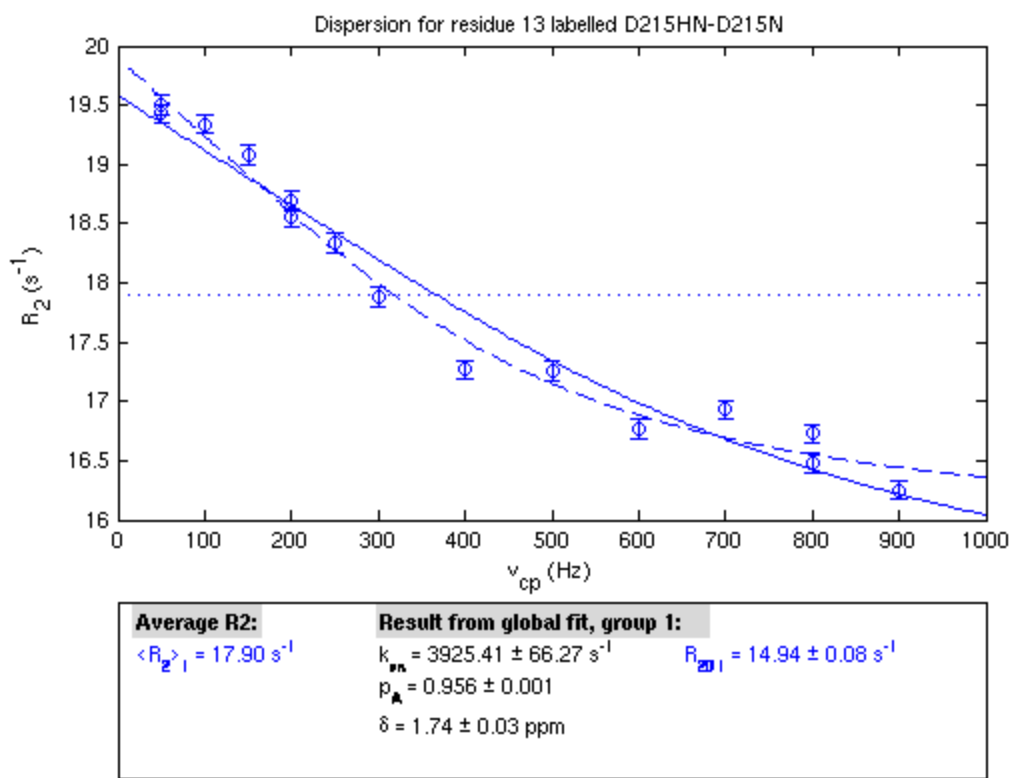
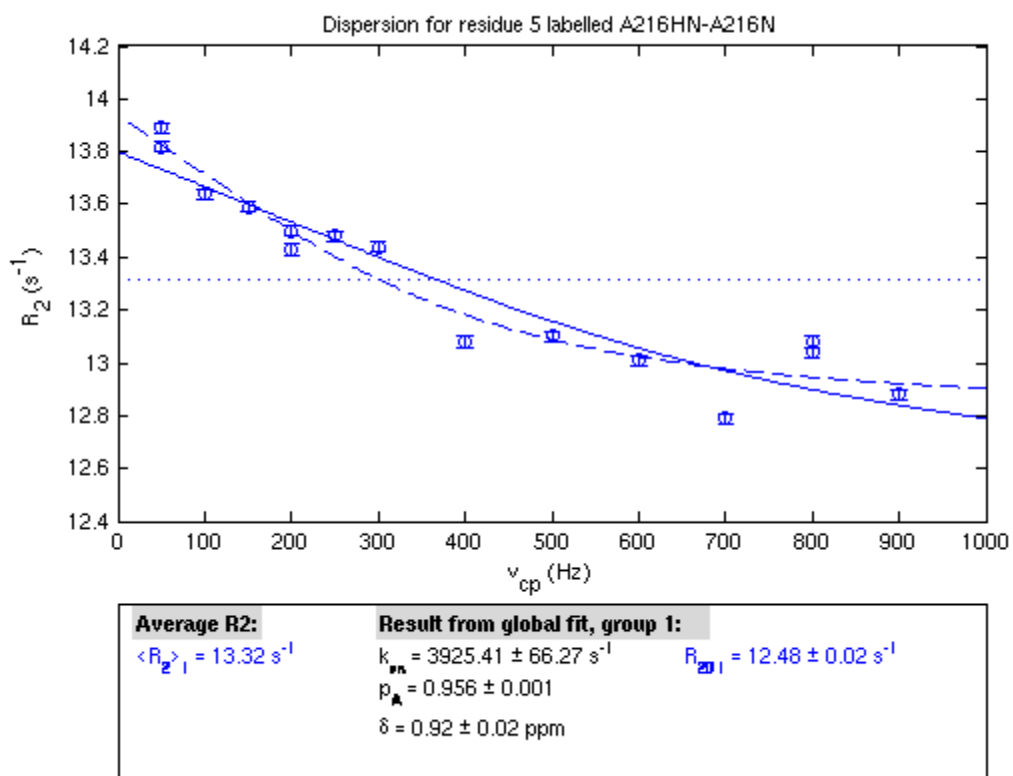


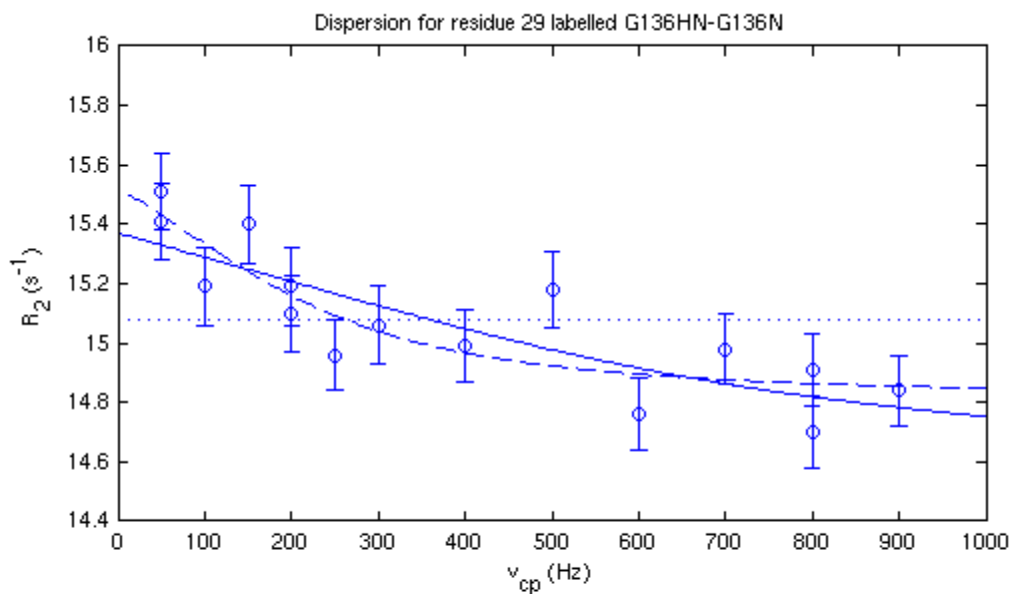
Average R2:	Result from global fit, group 3:	
$\langle R_2 \rangle_1 = 14.39 \text{ s}^{-1}$	$k_{rn} = 1079.29 \pm 466.90 \text{ s}^{-1}$	$R_{201} = 14.21 \pm 0.08 \text{ s}^{-1}$
	$p_A = 0.900 \pm 0.042$	
	$\delta = 0.23 \pm 0.04 \text{ ppm}$	



Average R2:	Result from global fit, group 3:	
$\langle R_2 \rangle_1 = 15.43 \text{ s}^{-1}$	$k_{rn} = 1079.29 \pm 466.90 \text{ s}^{-1}$	$R_{201} = 14.76 \pm 0.27 \text{ s}^{-1}$
	$p_A = 0.900 \pm 0.042$	
	$\delta = 0.43 \pm 0.07 \text{ ppm}$	

Figures B65-B78 show common relaxation data for 12 dispersions located outside the binding site (A216, D215, G136, H208, K199, K210, Q220, V202, V204, V213, F192, Q187) derived from the 10% DMSO CPMG experiment, and plotted in CPMG-fit.





Average R2:

$\langle R_2 \rangle_1 = 15.08 \text{ s}^{-1}$

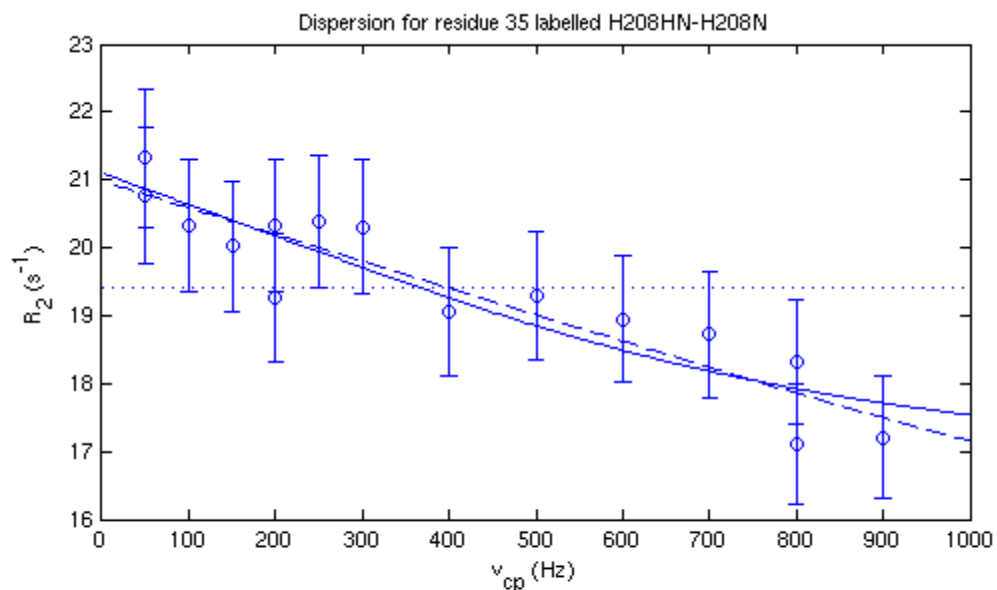
Result from global fit, group 1:

$k_{rn} = 3925.41 \pm 66.27 \text{ s}^{-1}$

$p_A = 0.956 \pm 0.001$

$\delta = 0.72 \pm 0.06 \text{ ppm}$

$R_{201} = 14.57 \pm 0.09 \text{ s}^{-1}$



Average R2:

$\langle R_2 \rangle_1 = 19.42 \text{ s}^{-1}$

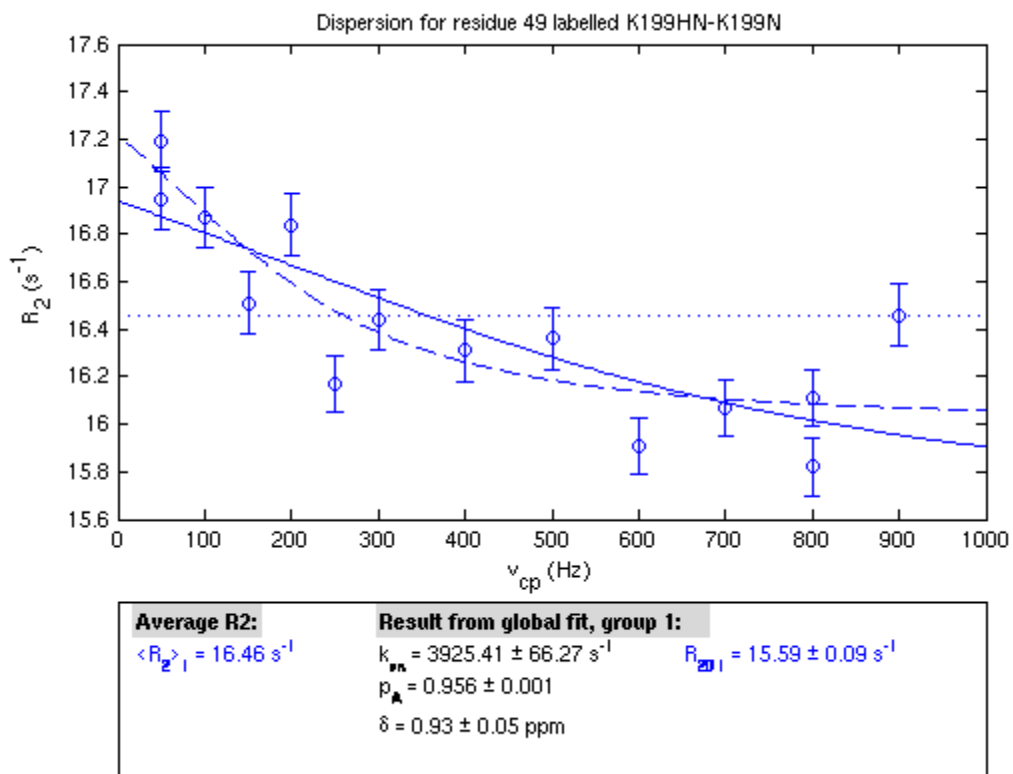
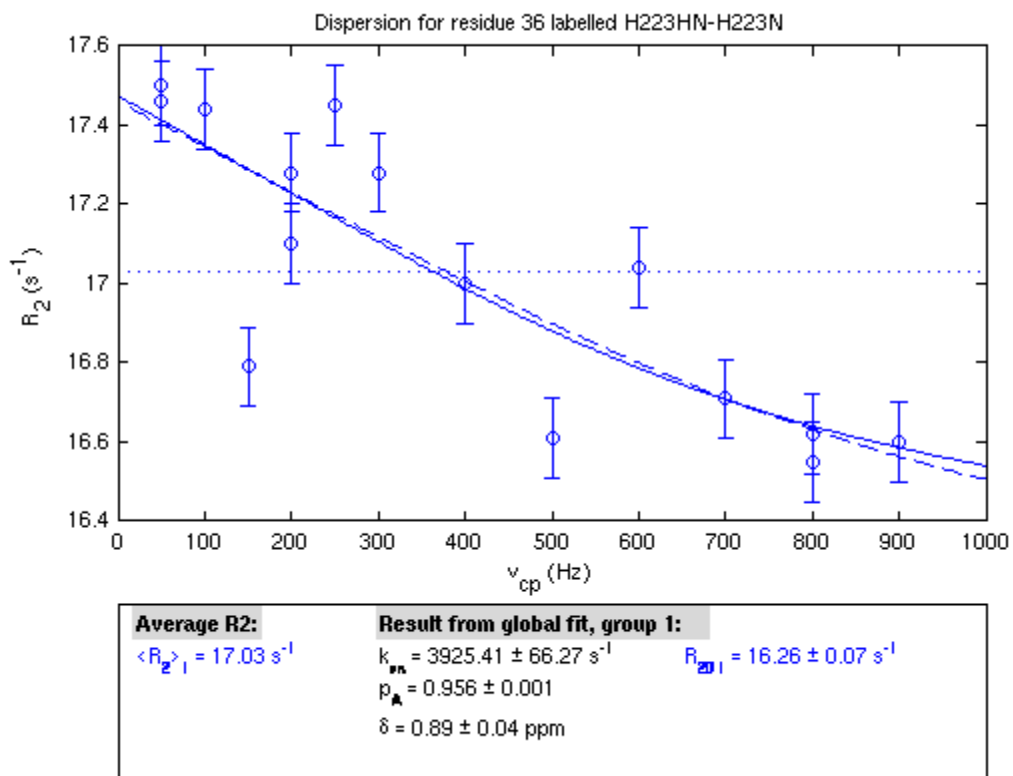
Result from global fit, group 1:

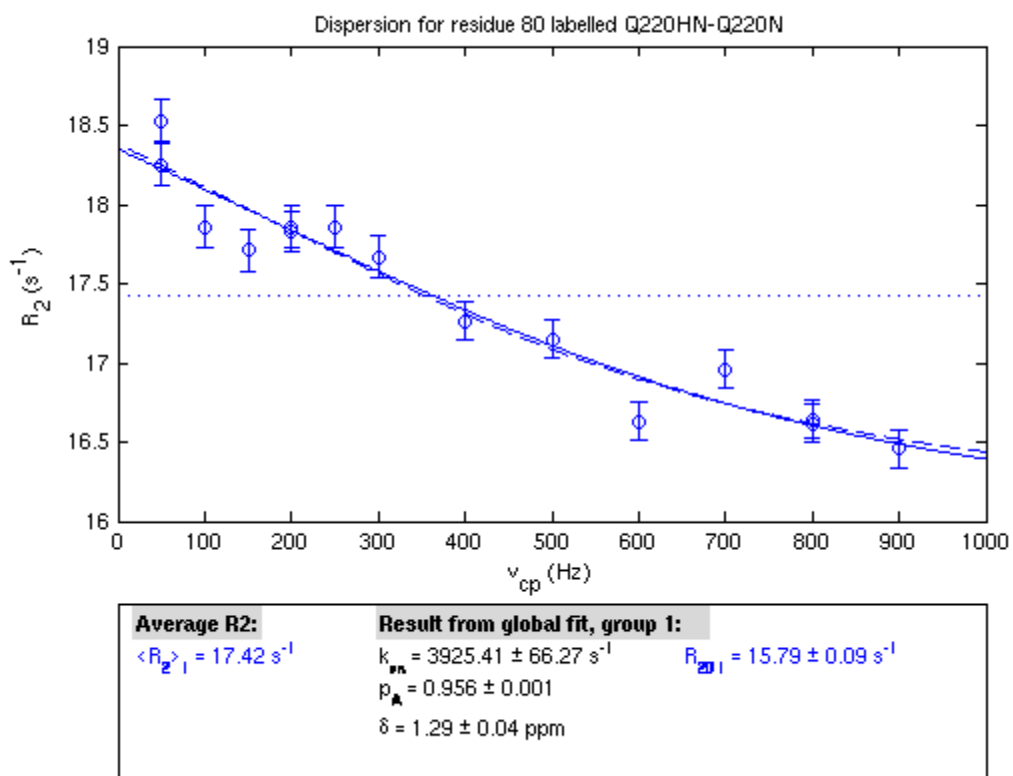
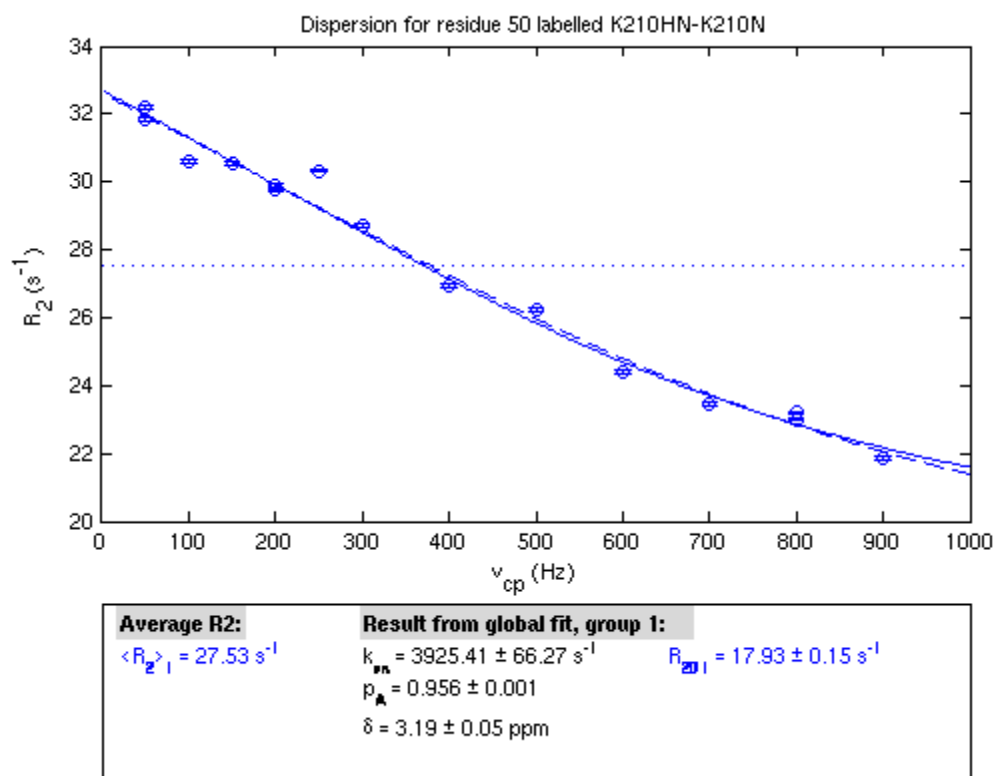
$k_{rn} = 3925.41 \pm 66.27 \text{ s}^{-1}$

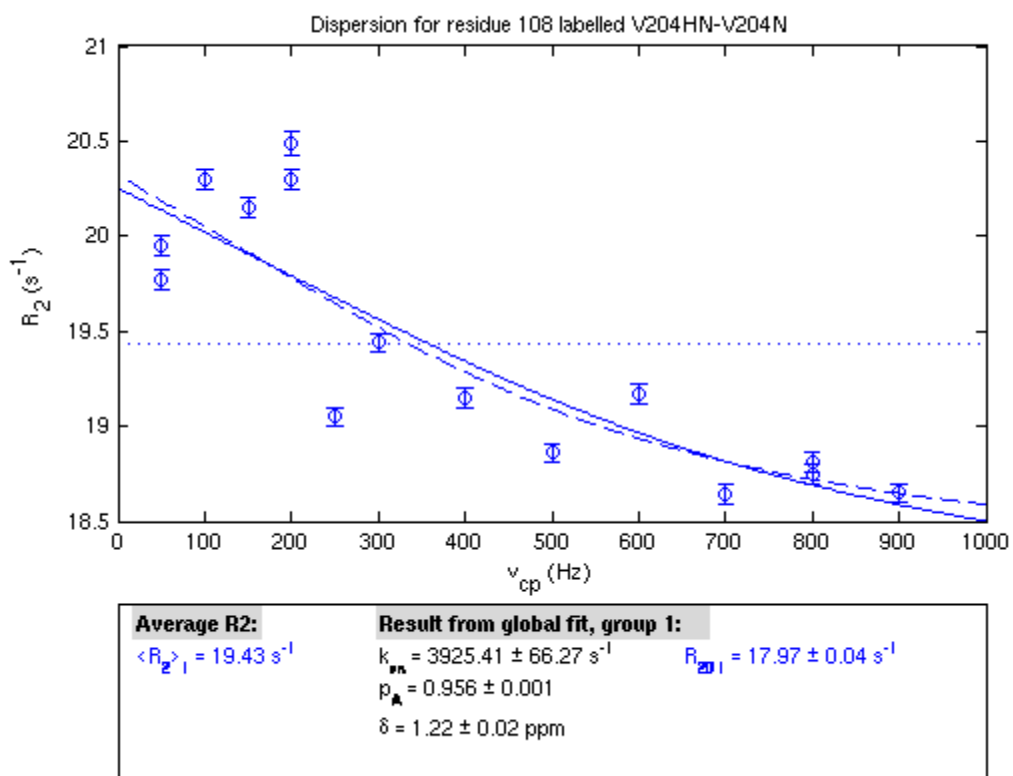
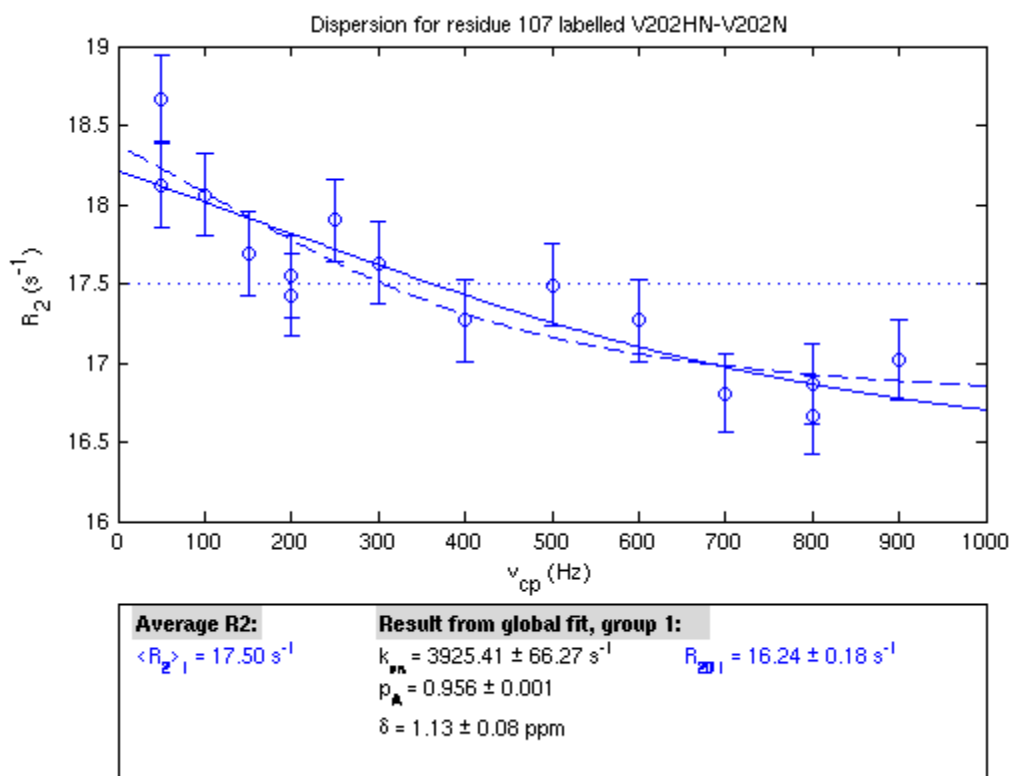
$p_A = 0.956 \pm 0.001$

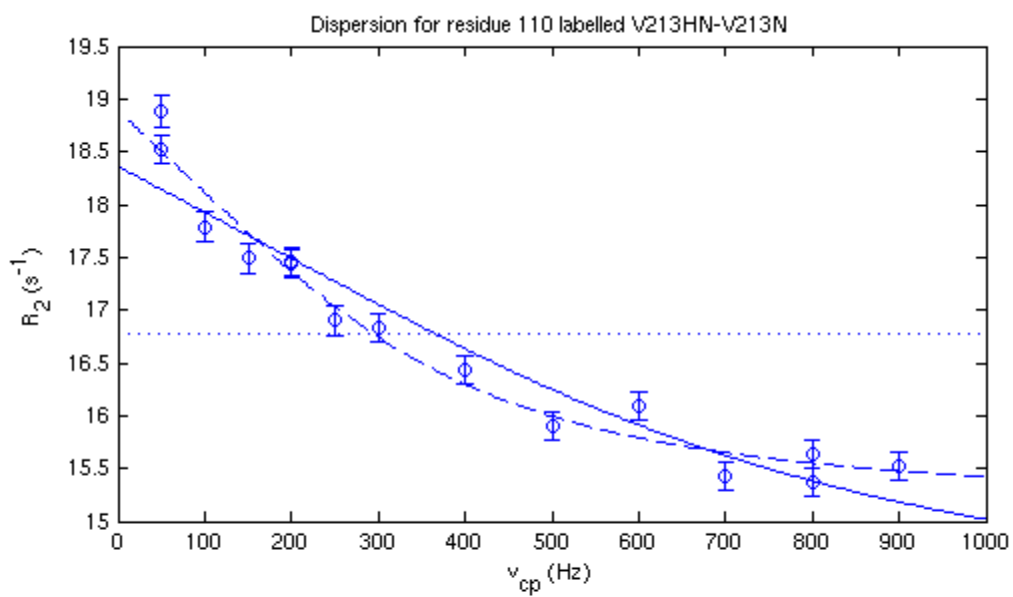
$\delta = 1.75 \pm 0.21 \text{ ppm}$

$R_{201} = 16.43 \pm 0.73 \text{ s}^{-1}$









Average R2:	Result from global fit, group 1:	
$\langle R_2 \rangle_1 = 16.78 \text{ s}^{-1}$	$k_{\text{ex}} = 3925.41 \pm 66.27 \text{ s}^{-1}$	$R_{201} = 13.98 \pm 0.11 \text{ s}^{-1}$
	$p_{\text{A}} = 0.956 \pm 0.001$	
	$\delta = 1.69 \pm 0.04 \text{ ppm}$	

