**Table S6**: <sup>15</sup>N-{<sup>1</sup>H} nuclear Overhauser effects

				Table	14-(11)	Hucical	erriause	enects							
residue	9.4 T		11.8 T			14.1 T			18.8 T			23.5 T			
145	-2.072	±	0.020	-1.828	±	0.029	-1.401	±	0.014	-0.780	±	0.011	-0.322	±	0.006
146	-1.854	±	0.013	-1.550	±	0.025	-1.195	±	0.013	-0.524	±	0.009	-0.102	±	0.006
147	-1.855	±	0.024	-1.360	±	0.028	-1.029	±	0.014	-0.400	±	0.010	0.016	±	0.006
148	-1.590	±	0.019	-1.172	±	0.024	-0.829	±	0.012	-0.284	±	0.010	0.088	±	0.006
149	-1.330	±	0.021	-0.960	±	0.024	-0.654	±	0.015	-0.126	±	0.010	0.138	±	0.006
150	-1.200	±	0.013	-0.842	±	0.021	-0.587	±	0.014	-0.092	±	0.009	0.176	±	0.007
151	-1.153	±	0.014	-0.827	±	0.020	-0.504	±	0.010	-0.040	±	0.009	0.205	±	0.006
152	-1.034	±	0.011	-0.565	±	0.014	-0.435	±	0.008	0.025	±	0.008	0.289	±	0.006
	-1.060	±	0.011	-0.714	±	0.016	-0.458	±	0.008	0.012	±	0.008	0.244	±	0.005
153															
154	-1.478	±	0.018	-0.631	±	0.034	-0.471	±	0.008	0.027	±	0.007	0.259	±	0.005
155	-0.986	±	0.013	-0.611	±	0.018	-0.409	±	0.010	0.029	±	0.008	0.302	±	0.006
156	-0.921	±	0.008	-0.665	±	0.026	-0.351	±	0.007	0.090	±	0.007	0.322	±	0.005
157	-1.070	±	0.009	-0.681	±	0.019	-0.408	±	0.010	0.035	±	0.009	0.299	±	0.007
158	-1.225	±	0.014	-0.760	±	0.020	-0.488	±	0.010	-0.017	±	0.008	0.239	±	0.006
159	-1.204	±	0.014	-0.875	±	0.023	-0.535	±	0.011	-0.112	±	0.010	0.177	±	0.007
	-1.176	±	0.009	-0.711	±	0.016	-0.508	±	0.008	-0.010	±	0.007	0.248	±	0.005
160															
161	-1.126	±	0.007	-0.711	±	0.021	-0.467	±	0.012	-0.070	±	0.011	0.228	±	0.007
162	-1.032	±	0.017	-0.504	±	0.025	-0.422	±	0.010	0.010	±	0.009	0.241	±	0.006
163	-0.926	±	0.012	-0.678	±	0.022	-0.394	±	0.012	0.007	±	0.012	0.256	±	0.009
164	-0.950	±	0.019	-0.617	±	0.022	-0.338	±	0.012	0.055	±	0.010	0.307	±	0.008
165	-0.753	±	0.018	-0.520	±	0.032	-0.291	±	0.020	0.062	±	0.014	0.266	±	0.010
167	-0.515	±	0.020	-0.294	±	0.035	-0.092	±	0.025	0.190	±	0.022	0.386	±	0.016
168	-0.328	±	0.030	-0.224	±	0.039	-0.042	±	0.031	0.250	±	0.023	0.428	±	0.020
169	-0.333	±	0.030	-0.081	±	0.039	0.142	±	0.036	0.315	±	0.028	0.453	±	0.024
171	-0.153	±	0.032	0.076	±	0.039	0.260	±	0.040	0.491	±	0.034	0.526	±	0.028
172	0.038	±	0.034	0.252	±	0.052	0.235	±	0.053	0.548	±	0.048	0.559	±	0.035
173	0.210	±	0.034	0.564	±	0.067	0.246	±	0.056	0.512	±	0.048	0.629	±	0.043
174	-0.104	±	0.020	0.214	±	0.096	0.166	±	0.078	0.506	±	0.069	0.613	±	0.057
175	-0.191	±	0.039	0.051	±	0.050	0.228	±	0.047	0.396	±	0.036	0.486	±	0.032
176	-0.121	±	0.033	-0.086	±	0.045	0.171	±	0.040	0.390	±	0.032	0.568	±	0.025
177	-0.167	±	0.047	-0.026	±	0.043	0.100	±	0.031	0.450	±	0.030	0.523	±	0.021
178	-0.281	±	0.017	0.074	±	0.042	0.118	±	0.028	0.329	±	0.023	0.532	±	0.016
179	-0.313	±	0.018	-0.123	±	0.036	0.085	±	0.019	0.330	±	0.018	0.519	±	0.014
180	-0.351	±	0.012	-0.249	±	0.022	0.074	±	0.017	0.343	±	0.015	0.488	±	0.012
181	-0.817	±	0.025	0.179	±	0.020	-0.056	±	0.014	0.273	±	0.013	0.429	±	0.010
183	-0.658	±	0.019	-0.387	±	0.027	-0.124	±	0.015	0.183	±	0.015	0.411	±	0.010
184	-0.614	±	0.012	-0.432	±	0.028	-0.195	±	0.018	0.128	±	0.017	0.358	±	0.014
185	-0.771	±	0.013	-0.503	±	0.022	-0.268	±	0.012	0.050	±	0.011	0.283	±	0.008
187	-0.496	±	0.019	-0.374	±	0.026	-0.173	±	0.016	0.153	±	0.015	0.348	±	0.011
188	-0.565	±	0.020	-0.302	±	0.026	-0.097	±	0.015	0.209	±	0.016	0.387	±	0.011
189	-0.620	±	0.018	-0.347	±	0.032	-0.043	±	0.020	0.243	±	0.016	0.401	±	0.013
			0.016			0.033	-0.105			0.205		0.015		±	
190	-0.534	±		-0.279	±			±	0.016		±		0.380		0.012
192	-0.553	±	0.011	-0.430	±	0.021	-0.167	±	0.011	0.162	±	0.011	0.392	±	0.008
193	-0.605	±	0.016	-0.390	±	0.028	-0.125	±	0.015	0.197	±	0.013	0.365	±	0.010
194	-0.623	±	0.014	-0.363	±	0.026	-0.161	±	0.015	0.183	±	0.013	0.430	±	0.010
195	-0.594	±	0.016	-0.391	±	0.023	-0.163	±	0.013	0.165	±	0.014	0.362	±	0.011
197	-0.465	±	0.006	-0.307	±	0.019	-0.090	±	0.012	0.189	±	0.012	0.371	±	0.009
198	-0.456	±	0.008	-0.289	±	0.023	-0.090	±	0.013	0.235	±	0.014	0.400	±	0.012
199	-0.557	±	0.011	-0.347	±	0.018	-0.115	±	0.009	0.196	±	0.009	0.385	±	0.007
200	-0.762	±	0.012	-0.138	±	0.014	-0.071	±	0.009	0.148	±	0.009	0.433	±	0.008
201	-0.483	±	0.014	-0.156	±	0.022	-0.057	±	0.010	0.194	±	0.012	0.363	±	0.009
202	-0.339	±	0.011	-0.216	±	0.017	-0.024	±	0.010	0.235	±	0.011	0.424	±	0.009
204	-0.272	±	0.015	-0.096	±	0.020	0.094	±	0.011	0.282	±	0.011	0.516	±	0.009
205	0.246	±	0.007	-0.028	±	0.024	0.102	±	0.017	0.373	±	0.016	0.494	±	0.013
		±		0.105	±	0.024	0.102	±		0.420	±	0.016		±	0.013
206	-0.062		0.021						0.017				0.518		
207	0.344	±	0.015	0.448	±	0.029	0.448	±	0.016	0.549	±	0.016	0.600	±	0.014
208	0.631	±	0.017	0.652	±	0.039	0.656	±	0.022	0.876	±	0.029	0.810	±	0.026
209	0.683	±	0.024	0.708	±	0.031	0.722	±	0.017	0.812	±	0.020	0.850	±	0.020
210	0.555	±	0.011	0.690	±	0.031	0.718	±	0.017	0.763	±	0.017	0.876	±	0.017
211	0.661		0.029	0.718	±	0.037	0.686	±	0.019	0.801	±	0.024	0.801		0.016
	2.001	-	2.025	10	-	,	2.000	_	2.010		-	2.04		-	2.010

## ps-ns Motions in Disordered Proteins

```
0.595 ± 0.025
                        0.771 \pm 0.046
                                         0.693 \pm 0.022
                                                         0.825 ± 0.025
                                                                           0.823 ± 0.020
212
       0.520 \pm 0.012
                        0.651 ± 0.030
                                         0.697 ± 0.016
                                                          0.740 ± 0.018
                                                                           0.793 ± 0.015
213
       0.601 \pm
                0.024
                        0.606 ±
                                 0.035
                                         0.713 \pm 0.022
                                                          0.790 \pm 0.023
                                                                           0.779 ± 0.018
214
       0.578 ±
                0.016
                        0.637 ±
                                 0.046
                                         0.713 \pm 0.021
                                                          0.768 ± 0.022
                                                                           0.840 \pm 0.020
215
       0.686 \pm
                0.032
                        0.659 \pm
                                 0.045
                                         0.733 \pm 0.027
                                                          0.773 \pm 0.028
                                                                           0.815 \pm
                                                                                    0.026
216
217
       0.551 \pm 0.014
                        0.624 \pm 0.038
                                         0.744 \pm 0.024
                                                          0.860 \pm 0.025
                                                                           0.813 \pm
                                                                                    0.018
       0.555 ± 0.018
                        0.689 \pm 0.040
                                         0.704 ± 0.025
                                                          0.782 \pm 0.027
                                                                           0.764
218
       0.718 \pm 0.042
                        0.615 \pm 0.065
                                         0.685 \pm 0.057
                                                          0.764 \pm 0.052
                                                                           0.757 \pm
219
                                                                                    0.047
       0.585 \pm 0.028
                        0.657 \pm 0.044
                                         0.735 \pm 0.028
                                                          0.766 \pm 0.031
                                                                           0.810 \pm
                                                                                    0.028
220
221
       0.552 \pm 0.028
                        0.605 \pm 0.050
                                        0.695 \pm 0.037
                                                          0.776 \pm 0.036
                                                                           0.801 \pm 0.029
                                        0.675 \pm 0.020
                                                         0.702 ± 0.020
                                                                           0.797 ± 0.018
222
       0.591 \pm 0.027
                        0.589 \pm 0.031
       0.431 \pm 0.038
                       -0.147 ± 0.057
                                         0.692 \pm 0.031
                                                          0.718 \pm 0.036
                                                                           0.770 \pm 0.034
223
                                        0.701 ± 0.033
       0.475 \pm 0.004
                        0.734 \pm 0.145
                                                          0.761 \pm 0.033
                                                                           0.828 \pm 0.037
224
                                         0.603 ± 0.031
       0.393 \pm 0.040
                       -0.175 \pm 0.031
                                                          0.782 \pm 0.051
                                                                           0.677 ± 0.055
225
                                         0.644 \pm 0.020
                                                                           0.780 ± 0.019
226
       0.436 \pm 0.014
                        0.641 ± 0.035
                                                          0.686 \pm 0.021
                                                          0.729 ± 0.022
                                                                           0.817 ± 0.026
227
       0.551 \pm 0.013
                        0.603 \pm 0.030
                                         0.740 \pm 0.020
                                                          0.802 ± 0.019
                                                                           0.842 \pm 0.016
228
       0.531 \pm 0.019
                        0.654 \pm 0.032
                                         0.677 \pm 0.018
                                                          0.693 ± 0.020
       0.809 ± 0.034
                                                                           0.810 ± 0.017
229
                        0.737 \pm 0.037
                                         0.717 \pm 0.021
       0.602 \pm 0.032
                        0.621 \pm 0.033
                                         0.747 ± 0.022
                                                          0.805 ± 0.026
                                                                           0.823 \pm 0.021
230
       0.488 \pm 0.015
                        0.632 \pm 0.029
                                         0.709 ± 0.019
                                                          0.776 ± 0.021
                                                                           0.871 ± 0.021
231
232
       0.689 \pm 0.030
                        0.634 \pm 0.027
                                         0.763 \pm 0.017
                                                          0.780
                                                                ± 0.018
                                                                           0.893 \pm 0.015
       0.647 \pm 0.015
                        0.631 \pm 0.032
                                         0.728 \pm 0.020
                                                          0.836 \pm 0.023
                                                                           0.758
233
                                                                                ± 0.021
       0.367 \pm 0.007
                        0.157 \pm 0.024
                                         0.764 \pm
                                                 0.021
                                                          0.822 \pm 0.022
                                                                           0.827 \pm 0.019
234
       0.552 \pm 0.010
                        0.665
                                 0.027
                                         0.700 ±
                                                  0.015
                                                          0.791
                                                                ±
                                                                   0.018
                                                                           0.806
                                                                                ± 0.013
235
                             ±
       0.585 \pm 0.013
                        0.663
                              ±
                                 0.027
                                         0.727 \pm
                                                 0.017
                                                          0.809
                                                                ± 0.019
                                                                           0.806 \pm 0.014
236
237
       0.586 \pm 0.017
                        0.630 \pm 0.045
                                         0.668 \pm 0.028
                                                          0.738
                                                                ± 0.028
                                                                           0.836 \pm 0.027
238
       0.567 \pm 0.016
                        0.627 \pm 0.039
                                         0.690 \pm 0.026
                                                          0.788 \pm 0.029
                                                                           0.834 \pm 0.025
239
       0.491 \pm 0.018
                        0.621
                              ±
                                 0.035
                                         0.727 \pm 0.025
                                                          0.755 \pm 0.024
                                                                           0.808 \pm 0.018
240
       0.510 \pm 0.020
                        0.630 \pm 0.038
                                         0.609 \pm 0.023
                                                          0.660 \pm 0.021
                                                                           0.819 \pm 0.021
241
       0.567 \pm 0.015
                        0.574 \pm 0.047
                                         0.749 \pm 0.037
                                                          0.805 \pm 0.039
                                                                           0.808 \pm 0.039
       0.550 \pm 0.022
                        0.663 \pm 0.033
                                         0.697 \pm 0.021
                                                          0.738 \pm 0.021
                                                                           0.797 ± 0.025
242
       0.541 \pm 0.018
                        0.673 \pm
                                 0.034
                                         0.738 \pm 0.022
                                                          0.820 \pm 0.024
                                                                           0.807 \pm 0.018
243
244
       0.484 \pm 0.024
                        0.647 ± 0.045
                                         0.652 \pm 0.024
                                                          0.708 ± 0.030
                                                                           0.733 ± 0.025
245
       0.701 \pm 0.031
                        0.658 \pm 0.054
                                         0.749 ± 0.038
                                                          0.827 ± 0.036
                                                                           0.820 \pm 0.033
       0.576 ± 0.022
                        0.719 \pm 0.066
                                         0.680 \pm 0.046
                                                          0.751 ± 0.049
                                                                           0.765 ± 0.045
246
       0.682 \pm 0.021
                        0.643 \pm 0.031
                                         0.717 ± 0.019
                                                          0.851 \pm 0.022
                                                                           0.884 ± 0.020
247
                        0.598 ± 0.059
                                         0.664 ± 0.039
248
       0.724 \pm 0.068
                                                          0.803 \pm 0.042
                                                                           0.709 \pm 0.049
       0.586 ± 0.016
                        0.684 ± 0.036
                                         0.762 ± 0.024
                                                          0.883 ± 0.027
                                                                           0.792 ± 0.021
249
       0.549 ± 0.018
                        0.654 \pm 0.033
                                         0.668 ± 0.020
                                                          0.788 \pm 0.025
                                                                           0.745 ± 0.018
250
       0.596 ± 0.041
                        0.300 \pm 0.034
                                         0.724 \pm 0.036
                                                          0.800 \pm 0.034
                                                                           0.827 \pm 0.031
251
       0.513 ± 0.031
                        0.597 ± 0.080
                                         0.613 \pm 0.033
                                                          0.766 \pm 0.034
                                                                           0.728 \pm 0.031
252
253
       0.776 ± 0.251
                        0.570 \pm 0.100
                                        0.558 ± 0.057
                                                          0.628 \pm 0.054
                                                                           0.726 \pm 0.036
                        0.503 \pm 0.063
                                        0.509 ± 0.036
254
       0.310 \pm 0.029
                                                         0.507 \pm 0.033
                                                                           0.620 \pm 0.033
                        0.223 \pm 0.029
                                        0.337 ± 0.019
                                                          0.517 \pm 0.020
                                                                           0.569 ± 0.015
255
       0.127 \pm 0.014
                        0.015 \pm 0.020
                                        0.161 \pm 0.012
                                                         0.360 ± 0.014
                                                                           0.504 \pm 0.011
      -0.134 ± 0.013
256
      -0.592 ± 0.010 -0.382 ± 0.017 -0.125 ± 0.009
                                                          0.100 \pm 0.010
                                                                           0.320 ± 0.008
257
      -1.118 \pm 0.007 -0.962 \pm 0.015 -0.683 \pm 0.007 -0.250 \pm 0.007
                                                                           0.049 ± 0.005
258
      -2.011 ± 0.017 -1.674 ± 0.018 -1.330 ± 0.009 -0.702 ± 0.007 -0.316 ± 0.004
259
```