

Supplementary Table S1. The measured  $T_1$ ,  $T_2$  and NOE values, and the derived values for the rotational correlation time ( $\tau_c$ ), the correlation time for internal motion ( $\tau_e$ ) and the order parameter ( $S^2$ ).

Res. # <sup>c</sup>	$T_1$ (ms)	$T_2$ (ms)	NOE	$\tau_c$ (ns)	$S^2$	$\tau_e$ (ns)
3	919	342	<-1.00		0.25	108
4	672	208	0.15		0.49	68
5	538	149	0.61		0.69	43
6	522	115	0.65	7.16	0.79	48
7	526	112	0.55		0.79	90
8	518	111	0.66	7.28	0.81	50
10	495	101	0.73	7.56	0.89	31
11	500	101	0.71 <sup>b</sup>	7.62	0.88	37
12	500	97 <sup>a</sup>	0.76 <sup>b</sup>	7.79	0.83	11
13	496	102	0.74	7.51	0.88	19
14	511	99	0.59		0.87	122
15	498	96 <sup>a</sup>	0.65	7.84	0.81	59
16	498	101	0.66	7.54	0.87	73
17	494	100	0.71	7.59	0.89	44
18	498	92 <sup>a</sup>	0.70	6.80	0.82	40
19	460	103	0.68 <sup>b</sup>	7.09	0.90	90
20	484	103	0.73 <sup>b</sup>	7.34	0.88	31
21	520	122	0.67	6.82	0.77	40
22	496	106	0.73	7.33	0.86	29
23	563	123	0.67	7.22	0.74	30
24	496	117	0.73	6.82	0.82	25
25	460	119	0.73 <sup>b</sup>	6.41	0.84	41
26	516	102	0.70	7.68	0.86	34
27	488	95 <sup>a</sup>	0.80	6.57	0.86	0

28	468	110	0.72	6.85	0.86	46
29	503	125	0.70	6.61	0.78	33
30	516	113	0.71	7.21	0.81	29
31	451	115	0.72	6.49	0.86	53
32	473	113	0.74	7.29	0.85	29
33	491	109	0.72 <sup>b</sup>	7.12	0.85	33
34	494	119	0.73 <sup>b</sup>	6.72	0.81	27
35	463	117	0.73 <sup>b</sup>	6.53	0.85	40
37	492	114	0.73	6.93	0.83	29
39	521	80 <sup>a</sup>	0.64		0.77	49
41	515	121	0.66	6.87	0.78	45
42	690	125	0.65 <sup>b</sup>	8.13	0.68	20
44	561	116	0.61	7.48	0.76	51
45	485	113	0.71	6.89	0.83	40
46	491	115	0.76	6.86	0.83	18
48	490	111	0.74 <sup>b</sup>	7.04	0.84	23
50	486	116	0.74 <sup>b</sup>	6.80	0.83	25
51	487	110	0.73 <sup>b</sup>	7.01	0.85	29
52	499	106	0.65	7.36	0.85	68
53	486	115	0.69	6.82	0.83	45
54	480	115	0.69	6.77	0.83	52
55	520	79 <sup>a</sup>	0.69		0.78	35
56	497	118	0.75	6.83	0.82	17
57	598	156	0.68 <sup>b</sup>	6.38	0.64	22
58	476	127	0.74	6.28	0.80	29
60	522	110	0.70	7.40	0.82	32
61	507	105	0.68	7.48	0.85	52

63	483	100	0.78	7.48	0.91	-4
64	477	117	0.71 <sup>b</sup>	6.66	0.83	41
65	515	103	0.78	7.62	0.86	-7
68	507	106	0.75 <sup>b</sup>	7.44	0.85	12
69	477	104	0.72 <sup>b</sup>	7.24	0.88	43
70	496	106	0.65	7.29	0.85	68
71	502	98	0.70	7.74	0.89	47
72	493	81 <sup>a</sup>	0.67		0.83	55
73	493	102	0.69	7.59	0.88	56
76	536	128	0.42		0.72	100
77	566	148	0.30		0.64	95
78	564	184	0.21		0.57	93
79	637	221	0.15		0.49	73
80	588	200	0.25		0.54	74
81	580	168	0.35		0.60	74
82	513	120	0.70	6.88	0.80	22
83	501	126	0.73	6.53	0.79	13
84	494	132	0.66	6.27	0.77	39
85	504	94 <sup>a</sup>	0.71	6.91	0.76	21
86	520	102 <sup>a</sup>	0.70	7.24	0.73	23
89	485	97 <sup>a</sup>	0.73 <sup>b</sup>	6.51	0.79	20
91	488	116	0.79	6.79	0.85	-15
93	515	103 <sup>a</sup>	0.71	7.14	0.74	21
94	480	130	0.68	6.22	0.79	38
95	463	140	0.76	5.72	0.79	14
96	452	141	0.75 <sup>b</sup>	5.59	0.79	21
98	468	134	0.79	5.95	0.80	3

100	484	131	0.70	6.22	0.79	31
101	446	129	0.75 <sup>b</sup>	5.92	0.83	22
102	456	138	0.72	5.74	0.79	30
105	464	127	0.62	6.17	0.80	69
106	450	128	0.68	6.00	0.82	50
109	457	111	0.69	6.73	0.88	55
110	467	131	0.71 <sup>b</sup>	6.05	0.80	31
112	496	96 <sup>a</sup>	0.67		0.76	36
114	496	151	0.56 <sup>b</sup>	5.69	0.71	59
115	610	182	0.33		0.56	66
116	631	226	0.33		0.50	53
117	510	159	0.62 <sup>b</sup>	5.61	0.69	41
118	522	135	0.57		0.73	60
119	543	114	0.60	7.39	0.80	65
120	484	119	0.70 <sup>b</sup>	6.61	0.83	29
121	488	117	0.65 <sup>b</sup>	6.78	0.83	54
122	475	116	0.67	6.70	0.84	51
123	464	125	0.62	6.23	0.81	74
127	468	126	0.66	6.22	0.81	50
128	513	115	0.71	7.07	0.83	20
130	637	169	0.61	6.30	0.59	25
131	470	128	0.63	6.17	0.80	61
133	516	113	0.70	7.17	0.83	21
134	483	135	0.71	6.06	0.77	26
135	478	127	0.70	6.28	0.80	31
136	465	132	0.73 <sup>b</sup>	6.00	0.80	23
137	462	131	0.75 <sup>b</sup>	6.00	0.81	16

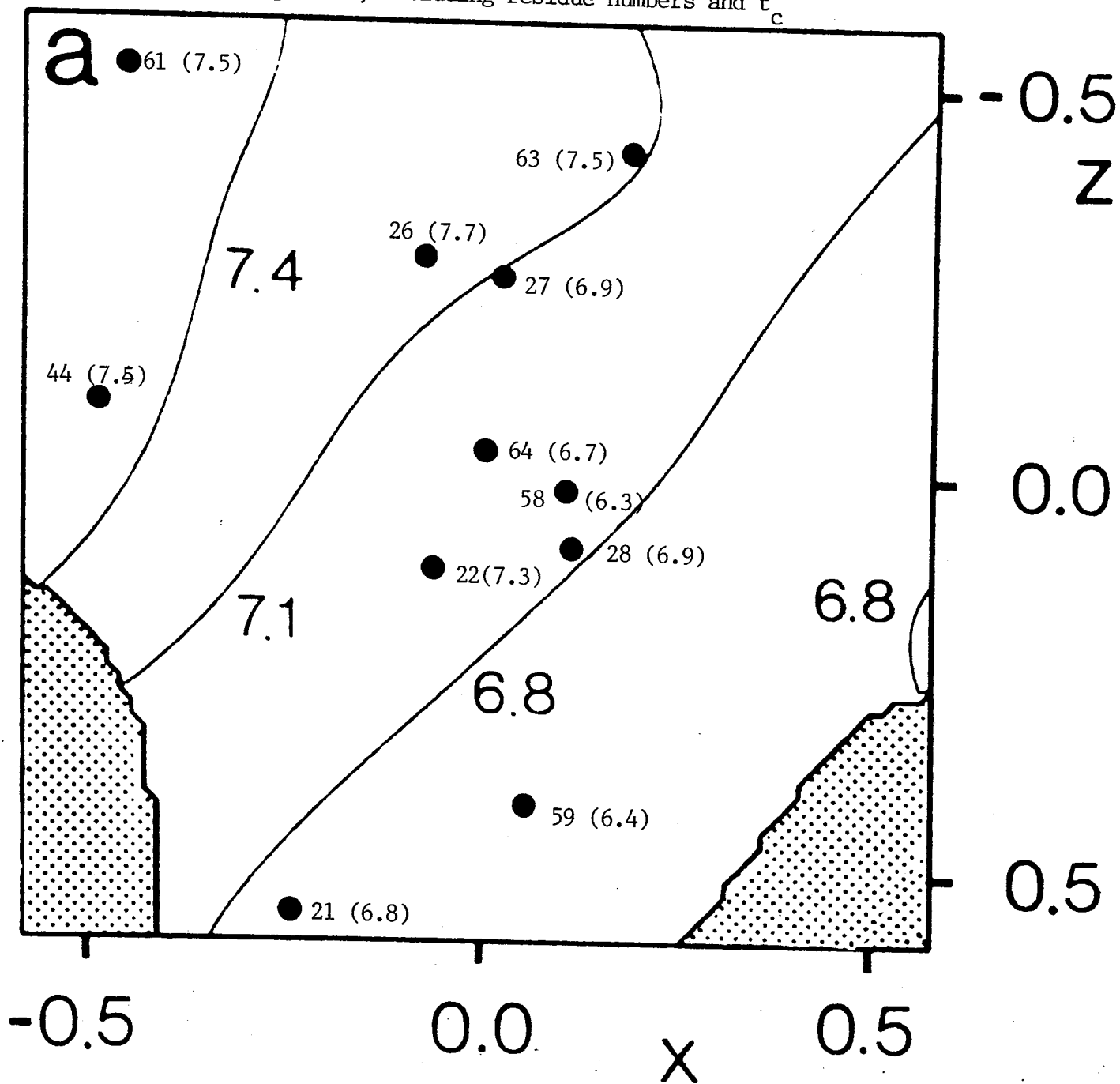
139	478	138	5.92	0.65	0.76	47
140	450	121	6.26	0.69	0.85	48
141	437	128	5.85	0.68	0.83	57
142	434	127	5.86	0.63	0.83	87
143	463	124	6.24	0.63	0.82	70
145	454	135	5.80	0.62	0.79	68
146	486	146	5.74	0.64	0.74	44
147	552	200	0.44	0.58		56
148	750	489	-0.55	0.30		91

<sup>a</sup> The  $T_2$  value has not been used in deriving  $\tau_c$ ,  $S^2$ , and  $\tau_e$ .

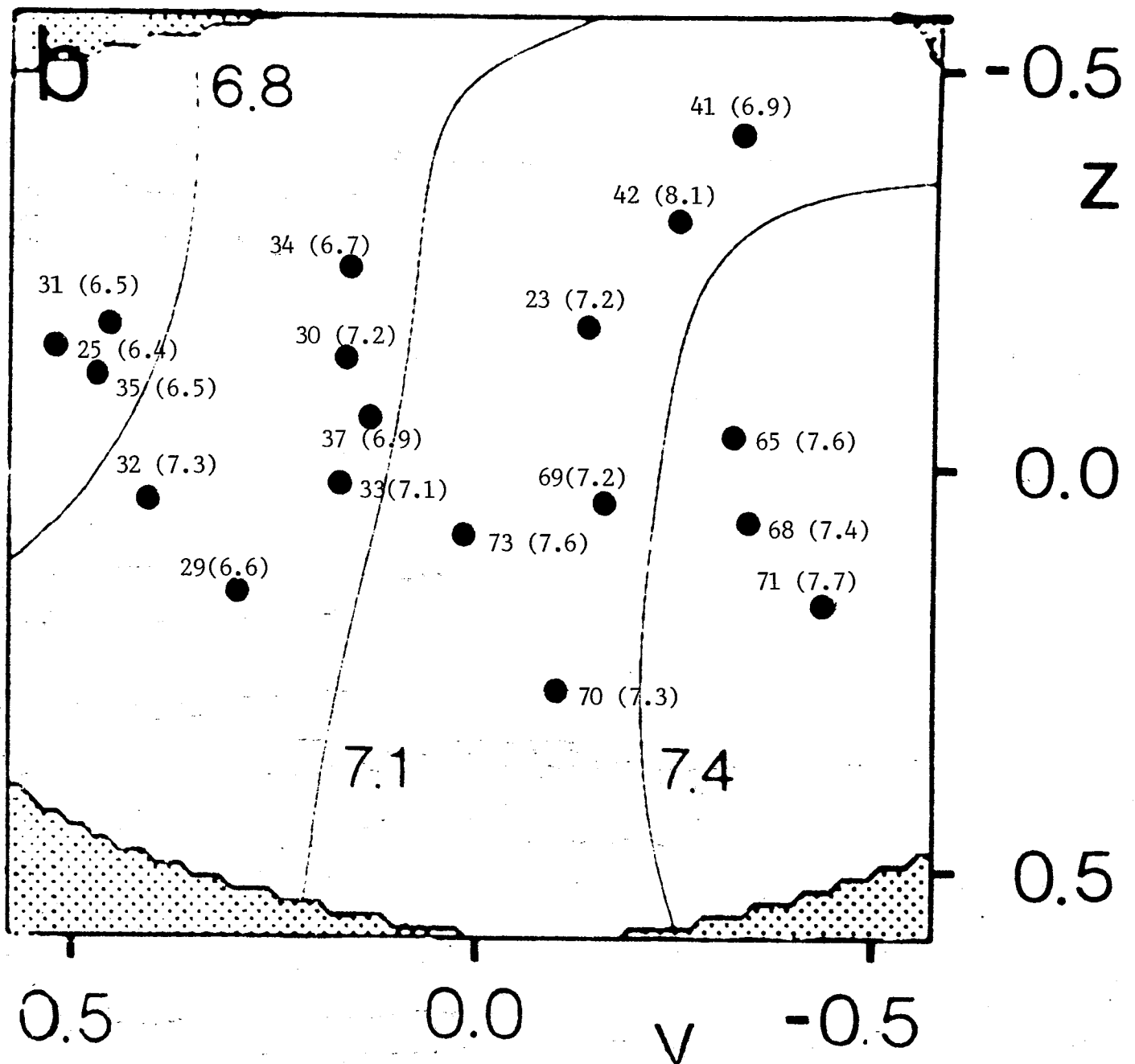
<sup>b</sup> Measured at 600 MHz  $^1\text{H}$  frequency

<sup>c</sup> Only resonances that are sufficiently well resolved for accurate measurement of the  $^{15}\text{N}$ - $^1\text{H}$  correlation intensity are included.  $\tau_c$  values are not calculated for residues with anomalously short  $T_2$  values (cf. eq 7) and for residues with a significant NOE contribution ( $\text{NOE} < 0.65$ ).

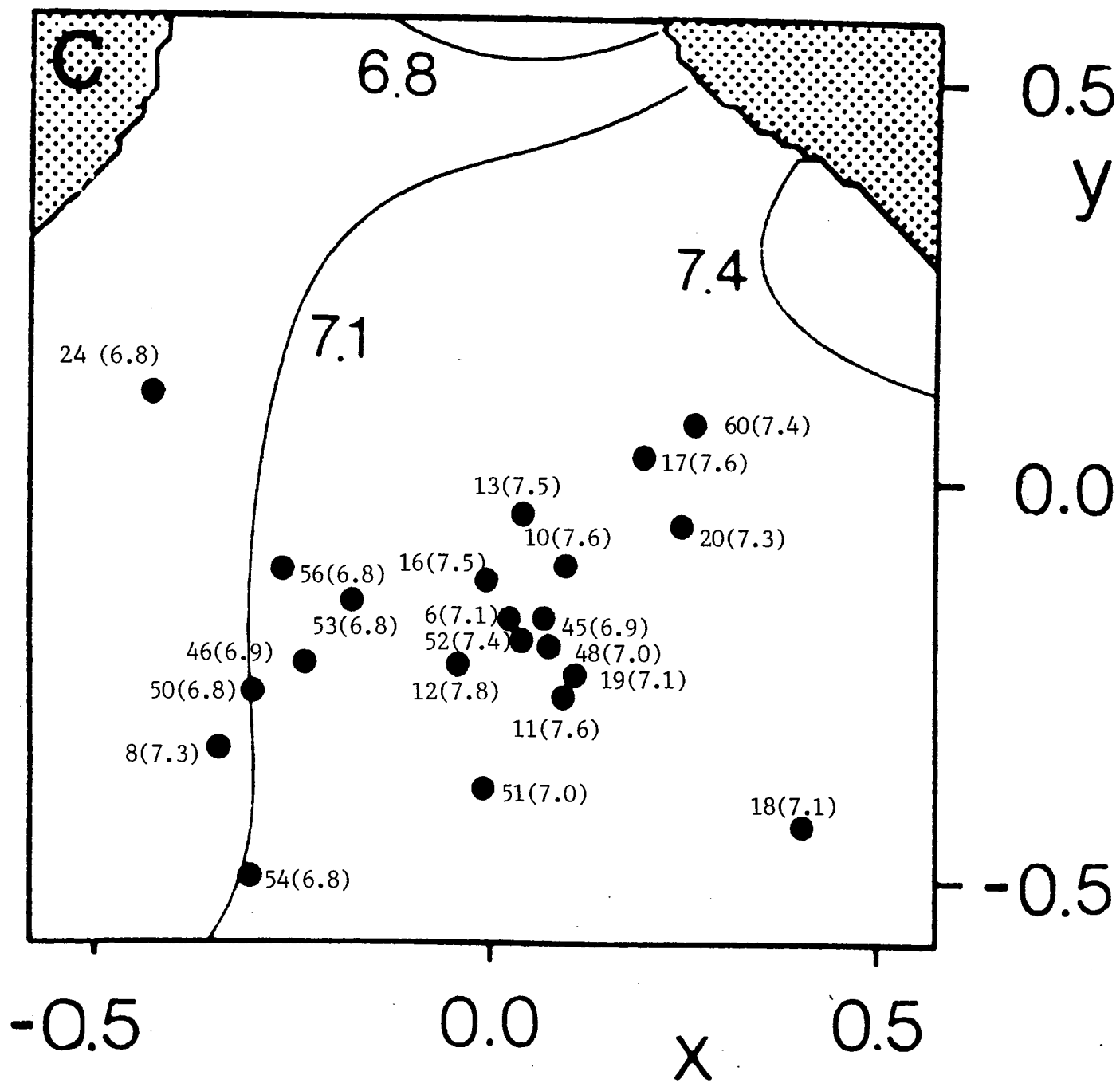
Enlargement of Figure 5a, including residue numbers and  $t_c$



Enlargement of Figure 5b, including residue numbers and  $t_c$

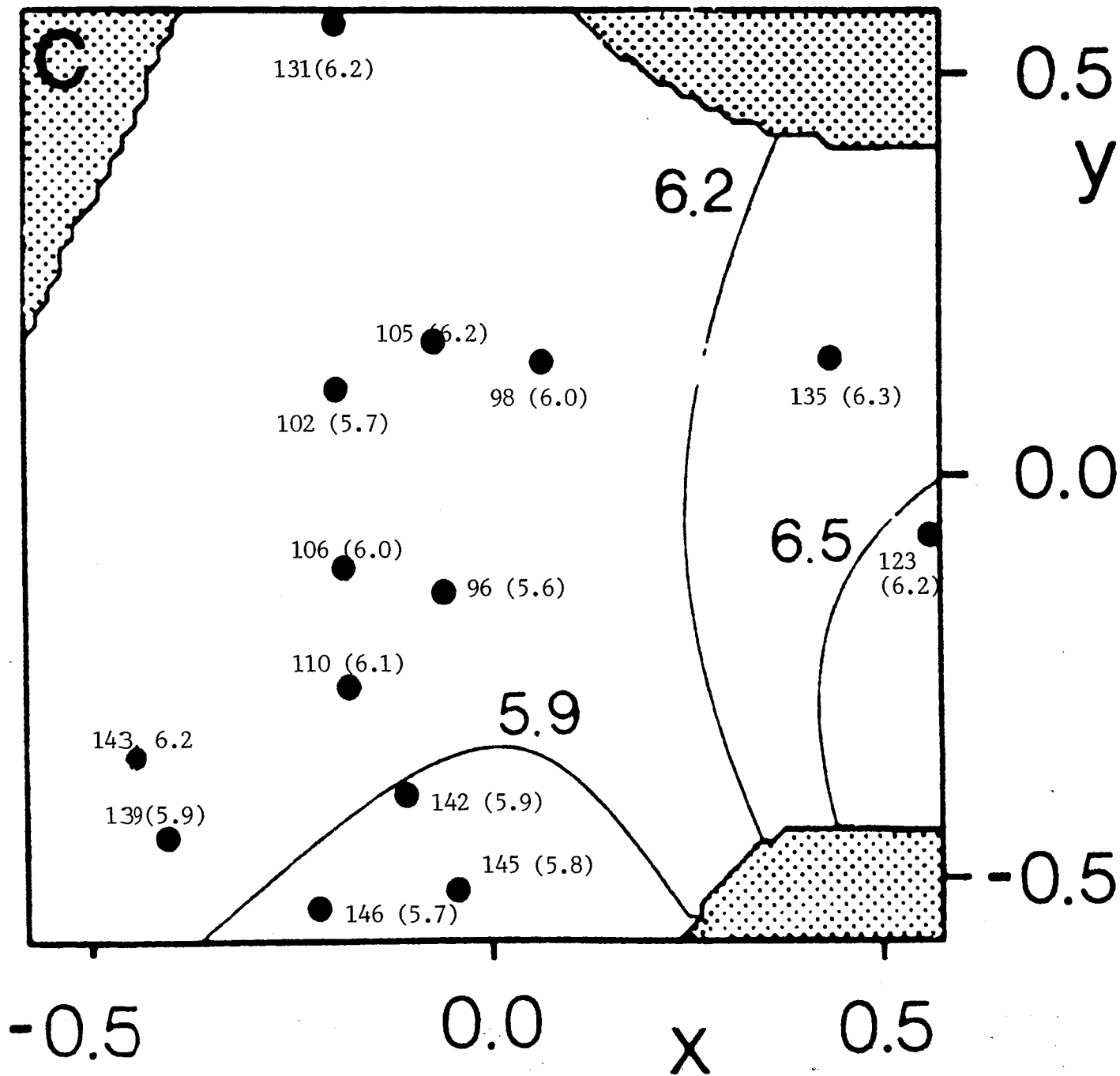


Enlargement of Figure 5c, including residue numbers and  $t_c$

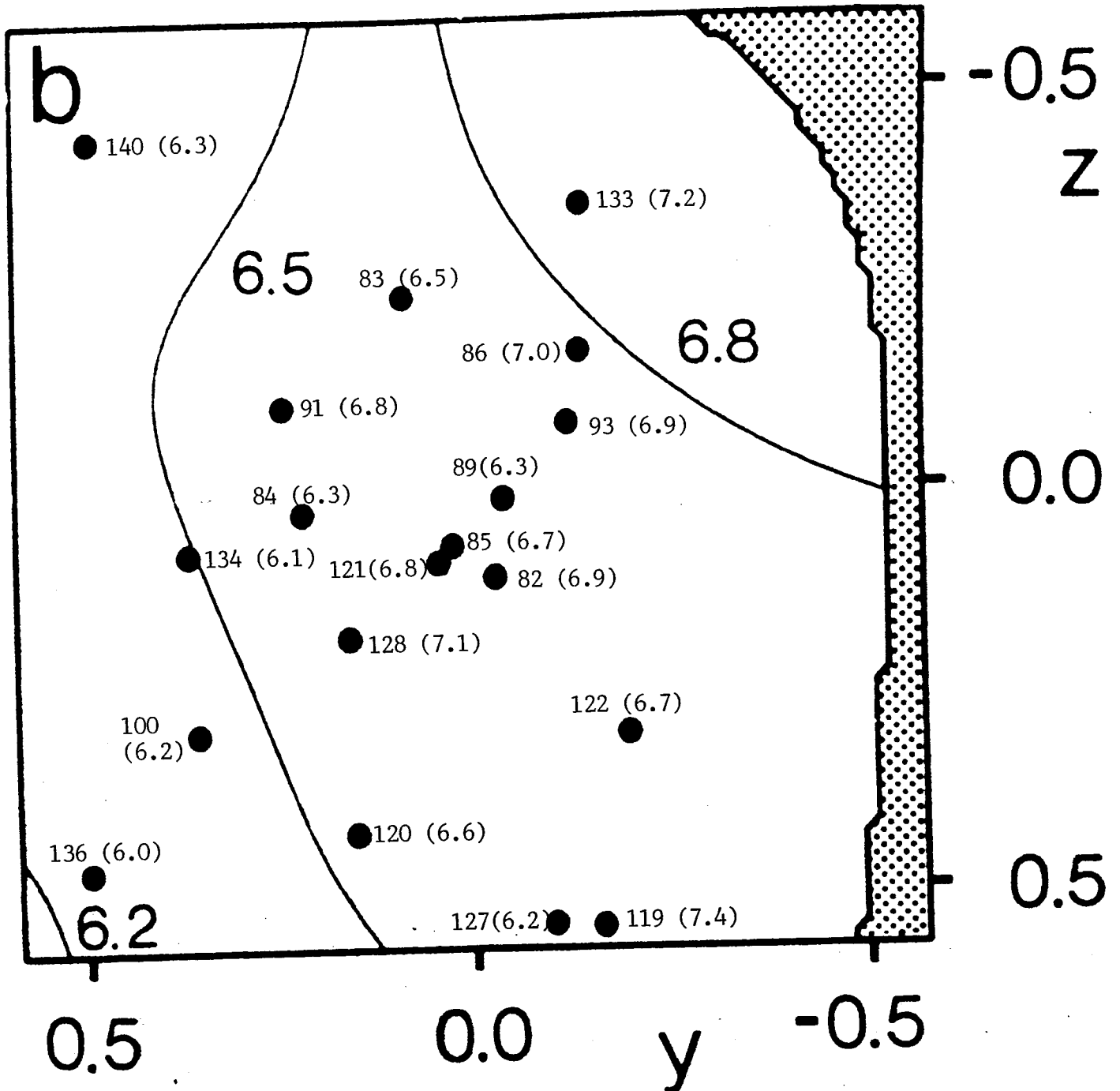




Enlargement of Figure 6c, including residue numbers and  $t_c$



Enlargement of Fig.6b, including residue numbers and  $t_c$



Enlargement of Figure 6a, including residue number and  $t_c$

