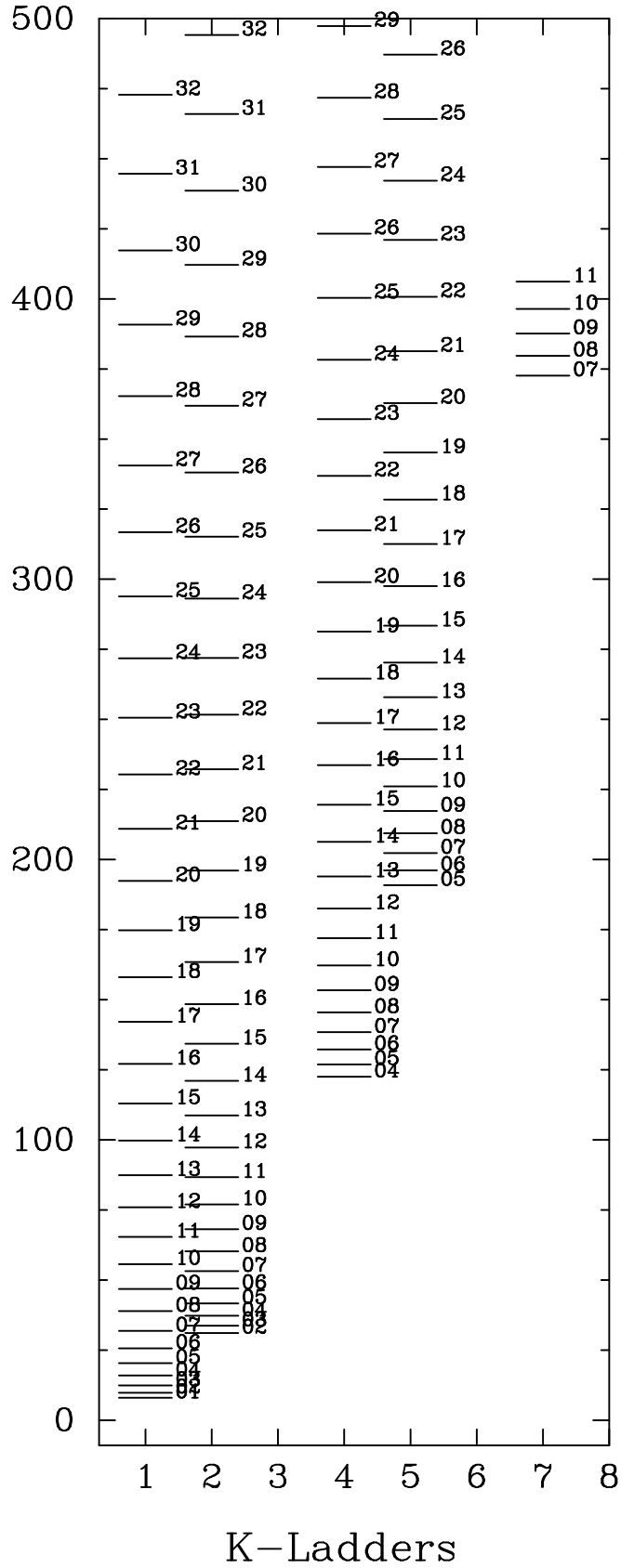
para−$CH_3{}^{13}CN$

B0: 9.19430 GHz C0: 1.5730E+02 GHz Dipole Mom: 3.913 Debye
DJ: 3.82E−06 GHz DK: 2.84E−03 GHz DJK: 1.76E−04 GHz



Quantum Numbers J	K	K1	Level Degeneracy	Energy Above Ground (Kelvins)
01	01		6.	7.99
02	01		10.	9.76
03	01		14.	12.40
04	01		18.	15.93
05	01		22.	20.34
06	01		26.	25.64
07	01		30.	31.82
08	01		34.	38.88
09	01		38.	46.82
10	01		42.	55.64
11	01		46.	65.35
12	01		50.	75.94
13	01		54.	87.41
14	01		58.	99.76
15	01		62.	113.00
16	01		66.	127.11
17	01		70.	142.11
18	01		74.	157.99
19	01		78.	174.75
20	01		82.	192.40

QN(up) J	K	K1	QN(low) J	K	K1	Freq (GHz)	A(U−L)	B(L−U)	Log(Tau) relative
02	01		01	01		36.776	2.65E−06	6.03E+18	−0.23
03	01		02	01		55.164	1.14E−05	6.44E+18	0.18
04	01		03	01		73.552	2.95E−05	6.46E+18	0.43
05	01		04	01		91.939	6.03E−05	6.44E+18	0.60
06	01		05	01		110.326	1.07E−04	6.40E+18	0.73
07	01		06	01		128.712	1.73E−04	6.36E+18	0.83
08	01		07	01		147.098	2.62E−04	6.33E+18	0.90
09	01		08	01		165.483	3.77E−04	6.31E+18	0.95
10	01		09	01		183.867	5.21E−04	6.29E+18	0.98
11	01		10	01		202.250	6.98E−04	6.27E+18	1.00
12	01		11	01		220.633	9.11E−04	6.25E+18	1.00
13	01		12	01		239.014	1.16E−03	6.24E+18	0.99
14	01		13	01		257.394	1.46E−03	6.22E+18	0.97
15	01		14	01		275.772	1.80E−03	6.21E+18	0.94
16	01		15	01		294.150	2.19E−03	6.20E+18	0.89
17	01		16	01		312.525	2.63E−03	6.19E+18	0.84
18	01		17	01		330.899	3.13E−03	6.19E+18	0.78
19	01		18	01		349.272	3.68E−03	6.18E+18	0.71
20	01		19	01		367.643	4.30E−03	6.17E+18	0.63
21	01		20	01		386.011	4.99E−03	6.17E+18	0.54
22	01		21	01		404.379	5.74E−03	6.16E+18	0.44
23	01		22	01		422.744	6.57E−03	6.16E+18	0.34
24	01		23	01		441.107	7.47E−03	6.15E+18	0.23
25	01		24	01		459.467	8.45E−03	6.15E+18	0.11
26	01		25	01		477.826	9.51E−03	6.14E+18	−0.02
27	01		26	01		496.182	1.07E−02	6.14E+18	−0.16
28	01		27	01		514.537	1.19E−02	6.14E+18	−0.30
29	01		28	01		532.886	1.32E−02	6.13E+18	−0.45
30	01		29	01		551.234	1.46E−02	6.13E+18	−0.61

Quantum Numbers J	K	K1	Level Degeneracy	Energy Above Ground (Kelvins)	QN(up) J	K	K1	QN(low) J	K	K1	Freq (GHz)	A(U−L)	B(L−U)	Log(Tau relative
21	01		86.	210.92	02	01		01	01		36.776	2.65E−06	6.03E+18	−0.23
22	01		90.	230.33	03	02		02	02		55.161	7.11E−06	4.02E+18	−0.18
23	01		94.	250.62	03	01		02	01		55.164	1.14E−05	6.44E+18	0.18
24	01		98.	271.79	04	02		03	02		73.548	2.36E−05	5.17E+18	0.18
25	01		102.	293.84	04	01		03	01		73.552	2.95E−05	6.46E+18	0.43
26	01		106.	316.77	05	04		04	04		91.913	2.26E−05	2.41E+18	−0.59
27	01		110.	340.58	05	02		04	02		91.934	5.28E−05	5.63E+18	0.39
28	01		114.	365.28	05	01		04	01		91.939	6.03E−05	6.44E+18	0.60
29	01		118.	390.85	06	05		05	05		110.275	3.36E−05	2.01E+18	−1.00
30	01		122.	417.31	06	04		05	04		110.294	6.12E−05	3.66E+18	−0.28
31	01		126.	444.64	06	02		05	02		110.320	9.80E−05	5.85E+18	0.54
32	01		130.	472.86	06	01		05	01		110.326	1.07E−04	6.40E+18	0.73
02	02		10.	31.08	07	05		06	05		128.653	8.66E−05	3.18E+18	−0.71
03	02		14.	33.72	07	04		06	04		128.676	1.19E−04	4.38E+18	−0.11
04	02		18.	37.25	07	02		06	02		128.705	1.63E−04	5.97E+18	0.65
05	02		22.	41.67	07	01		06	01		128.712	1.73E−04	6.36E+18	0.83
06	02		26.	46.96	08	07		07	07		146.963	6.23E−05	1.51E+18	−2.19
07	02		30.	53.14	08	05		07	05		147.031	1.62E−04	3.92E+18	−0.54
08	02		34.	60.20	08	04		07	04		147.056	2.00E−04	4.83E+18	0.01
09	02		38.	68.14	08	02		07	02		147.090	2.50E−04	6.03E+18	0.72
10	02		42.	76.96	08	01		07	01		147.098	2.62E−04	6.33E+18	0.90
11	02		46.	86.67	09	07		08	07		165.331	1.50E−04	2.52E+18	−1.92
12	02		50.	97.26	09	05		08	05		165.407	2.64E−04	4.42E+18	−0.44
13	02		54.	108.73	09	04		08	04		165.436	3.06E−04	5.13E+18	0.09
14	02		58.	121.08	09	02		08	02		165.474	3.63E−04	6.07E+18	0.78
15	02		62.	134.31	09	01		08	01		165.483	3.77E−04	6.31E+18	0.95
16	02		66.	148.43	10	07		09	07		183.699	2.68E−04	3.24E+18	−1.77
17	02		70.	163.43	10	05		09	05		183.782	3.94E−04	4.76E+18	−0.37
18	02		74.	179.31	10	04		09	04		183.814	4.42E−04	5.33E+18	0.14
19	02		78.	196.07	10	02		09	02		183.857	5.05E−04	6.10E+18	0.81
20	02		82.	213.71	10	01		09	01		183.867	5.21E−04	6.29E+18	0.98
21	02		86.	232.23	11	07		10	07		202.064	4.18E−04	3.76E+18	−1.69
22	02		90.	251.64	11	05		10	05		202.158	5.58E−04	5.01E+18	−0.33
23	02		94.	271.93	11	04		10	04		202.192	6.10E−04	5.48E+18	0.17
24	02		98.	293.10	11	02		10	02		202.239	6.81E−04	6.11E+18	0.83
25	02		102.	315.14	11	01		10	01		202.250	6.98E−04	6.27E+18	1.00
26	02		106.	338.08	12	05		11	05		220.531	7.57E−04	5.20E+18	−0.31
27	02		110.	361.89	12	04		11	04		220.569	8.15E−04	5.60E+18	0.18
28	02		114.	386.58	12	02		11	02		220.620	8.92E−04	6.12E+18	0.84
29	02		118.	412.15	12	01		11	01		220.633	9.11E−04	6.25E+18	1.00
30	02		122.	438.60	13	05		12	05		238.904	9.95E−04	5.35E+18	−0.31
31	02		126.	465.94	13	04		12	04		238.945	1.06E−03	5.68E+18	0.18
32	02		130.	494.15	13	02		12	02		239.000	1.14E−03	6.13E+18	0.83
04	04		18.	122.51	13	01		12	01		239.014	1.16E−03	6.24E+18	0.99
05	04		22.	126.92	14	05		13	05		257.275	1.28E−03	5.46E+18	−0.32
06	04		26.	132.22	14	04		13	04		257.320	1.34E−03	5.75E+18	0.16
07	04		30.	138.39	14	02		13	02		257.379	1.43E−03	6.13E+18	0.81
08	04		34.	145.45	14	01		13	01		257.394	1.46E−03	6.22E+18	0.97
09	04		38.	153.39	15	05		14	05		275.646	1.60E−03	5.55E+18	−0.35
10	04		42.	162.21	15	04		14	04		275.693	1.68E−03	5.80E+18	0.14
11	04		46.	171.92	15	02		14	02		275.756	1.77E−03	6.13E+18	0.78
12	04		50.	182.50	15	01		14	01		275.772	1.80E−03	6.21E+18	0.94
13	04		54.	193.97	16	05		15	05		294.014	1.98E−03	5.62E+18	−0.38
14	04		58.	206.32	16	04		15	04		294.065	2.06E−03	5.84E+18	0.10
15	04		62.	219.55	16	02		15	02		294.133	2.16E−03	6.13E+18	0.73
16	04		66.	233.66	16	01		15	01		294.150	2.19E−03	6.20E+18	0.89
17	04		70.	248.66	17	05		16	05		312.381	2.41E−03	5.68E+18	−0.43
18	04		74.	264.53	17	04		16	04		312.435	2.49E−03	5.87E+18	0.05
19	04		78.	281.29	17	02		16	02		312.507	2.60E−03	6.13E+18	0.68
20	04		82.	298.93	17	01		16	01		312.525	2.63E−03	6.19E+18	0.84