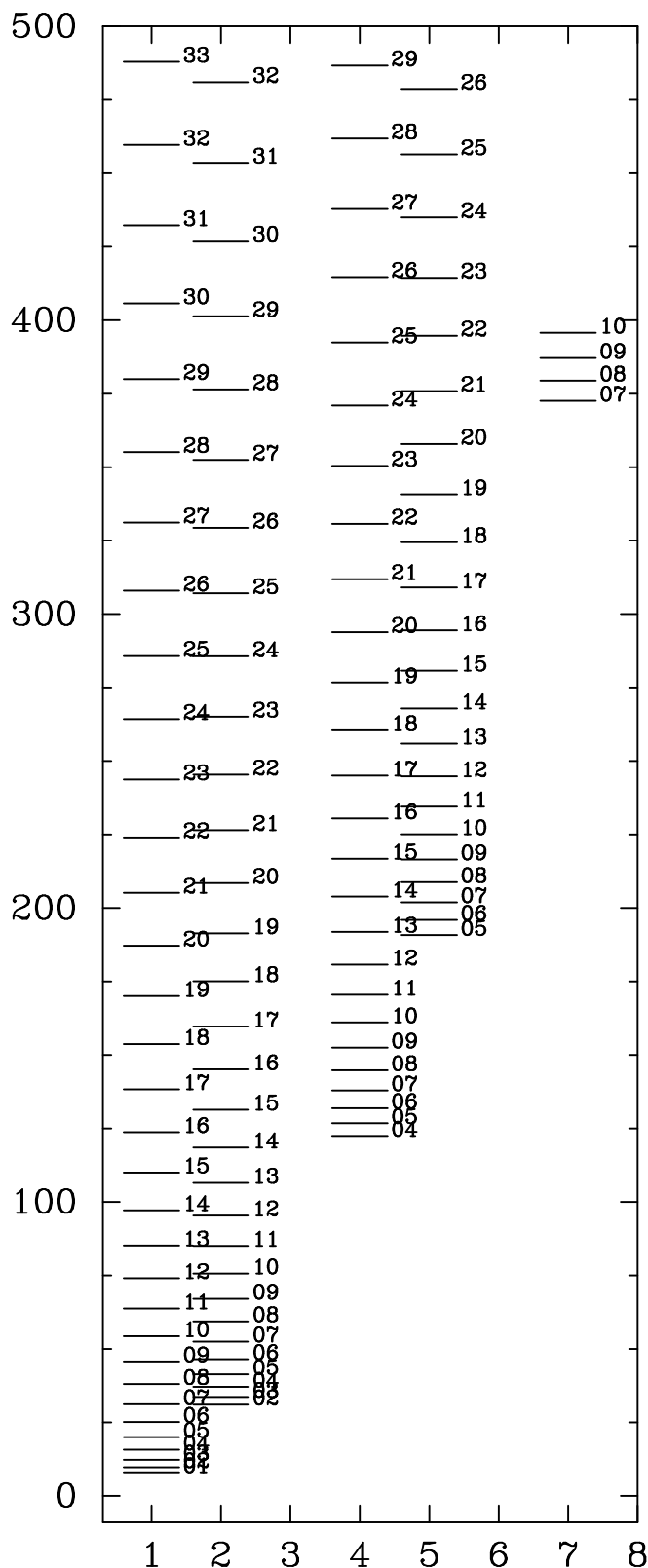


para-¹³CH₃CN

B0: 8.93330 GHz C0: 1.5730E+02 GHz Dipole Mom: 3.913 Debye
 DJ: 3.67E-06 GHz DK: 2.85E-03 GHz DJK: 1.68E-04 GHz



K-Ladders

Quantum Numbers			Level Degeneracy	Energy Above Ground (Kelvins)
J	K	K1		
01	01		6.	7.98
02	01		10.	9.69
03	01		14.	12.26
04	01		18.	15.69
05	01		22.	19.98
06	01		26.	25.13
07	01		30.	31.13
08	01		34.	37.99
09	01		38.	45.70
10	01		42.	54.28
11	01		46.	63.71
12	01		50.	74.00
13	01		54.	85.14
14	01		58.	97.14
15	01		62.	110.00
16	01		66.	123.72
17	01		70.	138.29
18	01		74.	153.72
19	01		78.	170.01
20	01		82.	187.15

QN(up)			QN(low)			Freq (GHz)	A(U-L)	B(L-U)	Log(Tau) relative
J	K	K1	J	K	K1				
02	01		01	01		35.732	2.44E-06	6.03E+18	-0.24
03	01		02	01		53.598	1.04E-05	6.44E+18	0.17
04	01		03	01		71.464	2.71E-05	6.46E+18	0.42
05	01		04	01		89.329	5.53E-05	6.44E+18	0.59
06	01		05	01		107.194	9.83E-05	6.40E+18	0.72
07	01		06	01		125.059	1.59E-04	6.36E+18	0.82
08	01		07	01		142.923	2.41E-04	6.33E+18	0.89
09	01		08	01		160.786	3.46E-04	6.31E+18	0.94
10	01		09	01		178.648	4.78E-04	6.29E+18	0.98
11	01		10	01		196.509	6.40E-04	6.27E+18	1.00
12	01		11	01		214.370	8.35E-04	6.25E+18	1.00
13	01		12	01		232.229	1.07E-03	6.24E+18	0.99
14	01		13	01		250.088	1.34E-03	6.22E+18	0.97
15	01		14	01		267.944	1.65E-03	6.21E+18	0.94
16	01		15	01		285.800	2.01E-03	6.20E+18	0.90
17	01		16	01		303.654	2.41E-03	6.19E+18	0.85
18	01		17	01		321.507	2.87E-03	6.19E+18	0.80
19	01		18	01		339.358	3.38E-03	6.18E+18	0.73
20	01		19	01		357.208	3.95E-03	6.17E+18	0.65
21	01		20	01		375.055	4.57E-03	6.17E+18	0.57
22	01		21	01		392.901	5.26E-03	6.16E+18	0.47
23	01		22	01		410.745	6.02E-03	6.16E+18	0.37
24	01		23	01		428.587	6.85E-03	6.15E+18	0.27
25	01		24	01		446.427	7.75E-03	6.15E+18	0.15
26	01		25	01		464.265	8.72E-03	6.14E+18	0.03
27	01		26	01		482.099	9.77E-03	6.14E+18	-0.11
28	01		27	01		499.933	1.09E-02	6.14E+18	-0.24
29	01		28	01		517.763	1.21E-02	6.13E+18	-0.39
30	01		29	01		535.591	1.34E-02	6.13E+18	-0.54

Quantum Numbers			Level Degeneracy	Energy Above Ground (Kelvins)	QN(up)			QN(low)			Freq (GHz)	A(U-L)	B(L-U)	Log(Tau relative)
J	K	K1			J	K	K1	J	K	K1				
21	01		86.	205.15	02	01		01	01		35.732	2.44E-06	6.03E+18	-0.24
22	01		90.	224.01	03	02		02	02		53.595	6.52E-06	4.02E+18	-0.19
23	01		94.	243.72	03	01		02	01		53.598	1.04E-05	6.44E+18	0.17
24	01		98.	264.29	04	02		03	02		71.460	2.16E-05	5.17E+18	0.17
25	01		102.	285.71	04	01		03	01		71.464	2.71E-05	6.46E+18	0.42
26	01		106.	307.99	05	04		04	04		89.304	2.07E-05	2.41E+18	-0.61
27	01		110.	331.13	05	02		04	02		89.324	4.84E-05	5.63E+18	0.38
28	01		114.	355.12	05	01		04	01		89.329	5.53E-05	6.44E+18	0.59
29	01		118.	379.97	06	05		05	05		107.146	3.09E-05	2.01E+18	-1.02
30	01		122.	405.68	06	04		05	04		107.165	5.61E-05	3.66E+18	-0.29
31	01		126.	432.24	06	02		05	02		107.188	8.99E-05	5.85E+18	0.53
32	01		130.	459.65	06	01		05	01		107.194	9.83E-05	6.40E+18	0.72
33	01		134.	487.92	07	05		06	05		125.002	7.94E-05	3.18E+18	-0.72
02	02		10.	31.05	07	04		06	04		125.024	1.09E-04	4.38E+18	-0.12
03	02		14.	33.62	07	02		06	02		125.052	1.49E-04	5.97E+18	0.64
04	02		18.	37.05	07	01		06	01		125.059	1.59E-04	6.36E+18	0.82
05	02		22.	41.34	08	07		07	07		142.794	5.71E-05	1.51E+18	-2.20
06	02		26.	46.48	08	05		07	05		142.859	1.49E-04	3.92E+18	-0.55
07	02		30.	52.49	08	04		07	04		142.882	1.83E-04	4.83E+18	0.00
08	02		34.	59.34	08	02		07	02		142.915	2.29E-04	6.03E+18	0.72
09	02		38.	67.06	08	01		07	01		142.923	2.41E-04	6.33E+18	0.89
10	02		42.	75.63	09	07		08	07		160.641	1.38E-04	2.52E+18	-1.93
11	02		46.	85.06	09	05		08	05		160.713	2.42E-04	4.42E+18	-0.45
12	02		50.	95.35	09	04		08	04		160.740	2.81E-04	5.13E+18	0.08
13	02		54.	106.50	09	02		08	02		160.777	3.33E-04	6.07E+18	0.77
14	02		58.	118.50	09	01		08	01		160.786	3.46E-04	6.31E+18	0.94
15	02		62.	131.36	10	07		09	07		178.486	2.46E-04	3.24E+18	-1.78
16	02		66.	145.07	10	05		09	05		178.568	3.62E-04	4.76E+18	-0.38
17	02		70.	159.64	10	04		09	04		178.597	4.05E-04	5.33E+18	0.13
18	02		74.	175.07	10	02		09	02		178.638	4.64E-04	6.10E+18	0.81
19	02		78.	191.36	10	01		09	01		178.648	4.78E-04	6.29E+18	0.98
20	02		82.	208.50	11	05		10	05		196.421	5.12E-04	5.01E+18	-0.34
21	02		86.	226.50	11	04		10	04		196.454	5.60E-04	5.48E+18	0.16
22	02		90.	245.35	11	02		10	02		196.498	6.24E-04	6.11E+18	0.83
23	02		94.	265.07	11	01		10	01		196.509	6.40E-04	6.27E+18	1.00
24	02		98.	285.63	12	05		11	05		214.273	6.94E-04	5.20E+18	-0.32
25	02		102.	307.06	12	04		11	04		214.309	7.47E-04	5.60E+18	0.18
26	02		106.	329.34	12	02		11	02		214.358	8.18E-04	6.12E+18	0.84
27	02		110.	352.47	12	01		11	01		214.370	8.35E-04	6.25E+18	1.00
28	02		114.	376.46	13	05		12	05		232.125	9.13E-04	5.35E+18	-0.31
29	02		118.	401.31	13	04		12	04		232.164	9.70E-04	5.68E+18	0.18
30	02		122.	427.01	13	02		12	02		232.216	1.05E-03	6.13E+18	0.83
31	02		126.	453.57	13	01		12	01		232.229	1.07E-03	6.24E+18	0.99
32	02		130.	480.98	14	05		13	05		249.974	1.17E-03	5.46E+18	-0.32
04	04		18.	122.46	14	04		13	04		250.017	1.23E-03	5.75E+18	0.17
05	04		22.	126.75	14	02		13	02		250.073	1.32E-03	6.13E+18	0.81
06	04		26.	131.89	14	01		13	01		250.088	1.34E-03	6.22E+18	0.97
07	04		30.	137.89	15	05		14	05		267.824	1.47E-03	5.55E+18	-0.34
08	04		34.	144.75	15	04		14	04		267.870	1.54E-03	5.80E+18	0.14
09	04		38.	152.46	15	02		14	02		267.929	1.63E-03	6.13E+18	0.78
10	04		42.	161.04	15	01		14	01		267.944	1.65E-03	6.21E+18	0.94
11	04		46.	170.46	16	05		15	05		285.671	1.81E-03	5.62E+18	-0.38
12	04		50.	180.75	16	04		15	04		285.719	1.89E-03	5.84E+18	0.11
13	04		54.	191.89	16	02		15	02		285.784	1.98E-03	6.13E+18	0.74
14	04		58.	203.89	16	01		15	01		285.800	2.01E-03	6.20E+18	0.90
15	04		62.	216.75	17	05		16	05		303.517	2.21E-03	5.68E+18	-0.42
16	04		66.	230.46	17	04		16	04		303.569	2.28E-03	5.87E+18	0.06
17	04		70.	245.03	17	02		16	02		303.637	2.39E-03	6.13E+18	0.70
18	04		74.	260.45	17	01		16	01		303.654	2.41E-03	6.19E+18	0.85
19	04		78.	276.73	18	05		17	05		321.363	2.65E-03	5.73E+18	-0.47