

Table 4-S Observed transition frequencies and their deviations from the calculated frequencies of Ar-(CH₃)₂³⁴S and Ar-¹³CH₃CH₃S (in MHz).

TRANSITION	Ar-(CH ₃) ₂ ³⁴ S			Ar- ¹³ CH ₃ CH ₃ S		
	OBS	O - C	WEIGHT	OBS	O - C	WEIGHT
3 0 3 2 0 2	7523.4246	-0.0011	1.0000			
3 1 3 2 1 2	7350.3950	-0.0011	1.0000			
3 1 2 2 1 1	7712.2480	0.0012	1.0000			
4 0 4 3 0 3	10019.4125	-0.0003	1.0000			
4 1 4 3 1 3	9797.2223	-0.0006	1.0000			
4 2 3 3 2 2	10040.3354	0.0006	1.0000			
5 0 5 4 0 4	12505.4166	0.0014	1.0000			
5 1 5 4 1 4	12241.3056	-0.0020	1.0000			
5 1 4 4 1 3	12843.4916	0.0003	1.0000			
5 2 4 4 2 3	12546.5218	0.0933	0.0010			
6 0 6 5 0 5	14979.2535	0.0031	1.0000			
6 1 6 5 1 5	14682.0768	0.0006	1.0000			
6 1 5 5 1 4	15403.5133	0.0019	1.0000			
7 0 7 6 0 6	17439.1248	0.0016	1.0000			
7 1 7 6 1 6	17119.0236	-0.0013	1.0000			
7 1 6 6 1 5	17958.5288	0.0010	1.0000			
1 1 0 0 0 0	7094.7630	-0.0010	1.0000	7004.8121	-0.0004	1.0000
1 1 1 1 0 1	4462.9050	0.0000	1.0000	4349.7583	0.0003	1.0000
2 1 1 1 0 1	9726.3159	-0.0021	1.0000	9659.5553	-0.0014	1.0000
2 1 2 2 0 2	4344.5118	0.0012	1.0000			
2 2 0 2 1 2	13753.0765	0.0004	1.0000	13438.9801	0.0005	1.0000
2 2 1 1 1 1	18652.1196	-0.0069	1.0000	18359.0741	-0.0053	1.0000
2 2 1 2 1 1	13388.7176	0.0040	1.0000	13049.2829	0.0022	1.0000
2 2 0 1 1 0	18533.8794	0.0026	1.0000	18232.9333	0.0011	1.0000
3 1 2 2 0 2	12418.7114	0.0009	1.0000	12379.4415	0.0022	1.0000
3 2 1 2 1 1	20932.8684	0.0017	1.0000	20640.1231	0.0022	1.0000
3 2 2 2 1 2	21282.7786	-0.0023	1.0000	21012.9049	-0.0013	1.0000
3 2 2 3 1 2	13208.5785	-0.0025	1.0000	12856.9275	-0.0019	1.0000

