

Appendix:

**Table A1. Transitions Assigned to the $2\nu_4$ (A_1/E), and ν_1
Bands of $^{13}\text{CHF}_3$.**

Electronic supplementary materials to:

**Isotope effects on the resonance interactions and vibrational
quantum dynamics of fluoroform $^{12,13}\text{CHF}_3$**

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Spectra:

**I - pressure 0.7 mbar, 19.2 m the absorption path length, resolution
0.0013 cm⁻¹;**

**II - pressure 0.15 mbar, 3.2 m the absorption path length, resolution
0.0015 cm⁻¹**

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Table A1. Transitions Assigned to the $2\nu_4$ (A_1/E) and ν_1 Bands of $^{13}\text{CHF}_3$.

$\tilde{\nu}_{\text{obs.}} / \text{cm}^{-1}$	J''	K''	γ''	J	K	γ	$\lg(I_0/I)/10^{-2}$	Band	Spectrum
2665.27425	42	0	a_1	41	0	a_2	5.8	$2\nu_4$ (A_1)	I
2665.29214	42	6	a_1/a_2	41	6	a_1/a_2	2.8	$2\nu_4$ (A_1)	I
2665.31514	42	9	a_1/a_2	41	9	a_1/a_2	3.4	$2\nu_4$ (A_1)	I
2665.32310	42	10	e	41	10	e	1.1	$2\nu_4$ (A_1)	I
2665.33354	42	11	e	41	11	e	1.6	$2\nu_4$ (A_1)	I
2665.34367	42	12	a_1/a_2	41	12	a_1/a_2	2.6	$2\nu_4$ (A_1)	I
2665.35572	42	13	e	41	13	e	1.1	$2\nu_4$ (A_1)	I
2665.36696	42	14	e	41	14	e	1.4	$2\nu_4$ (A_1)	I
2665.38132	42	15	a_1/a_2	41	15	a_1/a_2	2.5	$2\nu_4$ (A_1)	I
2665.39578	42	16	e	41	16	e	1.3	$2\nu_4$ (A_1)	I
2665.41165	42	17	e	41	17	e	1.3	$2\nu_4$ (A_1)	I
2665.42773	42	18	a_1/a_2	41	18	a_1/a_2	2.7	$2\nu_4$ (A_1)	I
2665.44518	42	19	e	41	19	e	1.4	$2\nu_4$ (A_1)	I
2665.46383	42	20	e	41	20	e	1.3	$2\nu_4$ (A_1)	I
2665.48222	42	21	a_1/a_2	41	21	a_1/a_2	2.5	$2\nu_4$ (A_1)	I
2665.50271	42	22	e	41	22	e	1.5	$2\nu_4$ (A_1)	I
2665.52405	42	23	e	41	23	e	1.3	$2\nu_4$ (A_1)	I
2665.54635	42	24	a_1/a_2	41	24	a_1/a_2	2.8	$2\nu_4$ (A_1)	I
2665.56949	42	25	e	41	25	e	1.4	$2\nu_4$ (A_1)	I
2665.59301	42	26	e	41	26	e	1.2	$2\nu_4$ (A_1)	I
2665.61814	42	27	a_1/a_2	41	27	a_1/a_2	2.5	$2\nu_4$ (A_1)	I
2665.64430	42	28	e	41	28	e	1.0	$2\nu_4$ (A_1)	I
2665.67127	42	29	e	41	29	e	1.2	$2\nu_4$ (A_1)	I
2665.69940	42	30	a_1/a_2	41	30	a_1/a_2	2.6	$2\nu_4$ (A_1)	I
2665.72835	42	31	e	41	31	e	1.1	$2\nu_4$ (A_1)	I
2665.75785	42	32	e	41	32	e	1.1	$2\nu_4$ (A_1)	I
2665.78848	42	33	a_1/a_2	41	33	a_1/a_2	2.2	$2\nu_4$ (A_1)	I
2665.82044	42	34	e	41	34	e	1.3	$2\nu_4$ (A_1)	I
2665.85293	42	35	e	41	35	e	1.2	$2\nu_4$ (A_1)	I
2665.88769	42	36	a_1/a_2	41	36	a_1/a_2	1.7	$2\nu_4$ (A_1)	I
2665.92209	42	37	e	41	37	e	0.8	$2\nu_4$ (A_1)	I
2665.95752	42	38	e	41	38	e	0.6	$2\nu_4$ (A_1)	I
2665.99359	42	39	a_1/a_2	41	39	a_1/a_2	1.3	$2\nu_4$ (A_1)	I
2666.00940	41	0	a_2	40	0	a_1	5.5	$2\nu_4$ (A_1)	I
2666.02637	41	6	a_1/a_2	40	6	a_1/a_2	4.2	$2\nu_4$ (A_1)	I
2666.03197	41	7	e	40	7	e	1.9	$2\nu_4$ (A_1)	I
2666.03197	42	40	e	41	40	e	1.9	$2\nu_4$ (A_1)	I
2666.03659	41	8	e	40	8	e	1.4	$2\nu_4$ (A_1)	I
2666.05431	41	9	a_1/a_2	40	9	a_1/a_2	3.1	$2\nu_4$ (A_1)	I
2666.06683	41	11	e	40	11	e	1.4	$2\nu_4$ (A_1)	I
2666.07704	41	12	a_1/a_2	40	12	a_1/a_2	2.7	$2\nu_4$ (A_1)	I
2666.08895	41	13	e	40	13	e	1.5	$2\nu_4$ (A_1)	I
2666.10159	41	14	e	40	14	e	1.3	$2\nu_4$ (A_1)	I
2666.11503	41	15	a_1/a_2	40	15	a_1/a_2	2.9	$2\nu_4$ (A_1)	I
2666.12936	41	16	e	40	16	e	1.6	$2\nu_4$ (A_1)	I
2666.14499	41	17	e	40	17	e	1.4	$2\nu_4$ (A_1)	I
2666.16126	41	18	a_1/a_2	40	18	a_1/a_2	2.9	$2\nu_4$ (A_1)	I
2666.17881	41	19	e	40	19	e	1.4	$2\nu_4$ (A_1)	I

Table A1 (cont.)

$\tilde{\nu}_{\text{obs.}} / \text{cm}^{-1}$	J''	K''	γ''	J	K	γ	$\lg(I_0/I)/10^{-2}$	Band	Spectrum
2666.19745	41	20	e	40	20	e	1.5	$2\nu_4 (A_1)$	I
2666.21583	41	21	a_1/a_2	40	21	a_1/a_2	2.8	$2\nu_4 (A_1)$	I
2666.23651	41	22	e	40	22	e	1.4	$2\nu_4 (A_1)$	I
2666.25822	41	23	e	40	23	e	1.3	$2\nu_4 (A_1)$	I
2666.28049	41	24	a_1/a_2	40	24	a_1/a_2	3.0	$2\nu_4 (A_1)$	I
2666.30319	41	25	e	40	25	e	1.4	$2\nu_4 (A_1)$	I
2666.32693	41	26	e	40	26	e	1.3	$2\nu_4 (A_1)$	I
2666.35345	41	27	a_1/a_2	40	27	a_1/a_2	3.7	$2\nu_4 (A_1)$	I
2666.37821	41	28	e	40	28	e	1.6	$2\nu_4 (A_1)$	I
2666.40603	41	29	e	40	29	e	1.4	$2\nu_4 (A_1)$	I
2666.43381	41	30	a_1/a_2	40	30	a_1/a_2	2.5	$2\nu_4 (A_1)$	I
2666.46290	41	31	e	40	31	e	1.3	$2\nu_4 (A_1)$	I
2666.49269	41	32	e	40	32	e	1.2	$2\nu_4 (A_1)$	I
2666.52356	41	33	a_1/a_2	40	33	a_1/a_2	2.2	$2\nu_4 (A_1)$	I
2666.55500	41	34	e	40	34	e	1.2	$2\nu_4 (A_1)$	I
2666.58845	41	35	e	40	35	e	1.0	$2\nu_4 (A_1)$	I
2666.62277	41	36	a_1/a_2	40	36	a_1/a_2	1.7	$2\nu_4 (A_1)$	I
2666.65764	41	37	e	40	37	e	0.8	$2\nu_4 (A_1)$	I
2666.69318	41	38	e	40	38	e	0.6	$2\nu_4 (A_1)$	I
2666.72998	41	39	a_1/a_2	40	39	a_1/a_2	0.7	$2\nu_4 (A_1)$	I
2666.74221	40	0	a_1	39	0	a_2	5.6	$2\nu_4 (A_1)$	I
2666.76736	40	6	a_1/a_2	39	6	a_1/a_2	4.0	$2\nu_4 (A_1)$	I
2666.77734	40	9	a_1/a_2	39	9	a_1/a_2	3.2	$2\nu_4 (A_1)$	I
2666.79445	40	10	e	39	10	e	1.7	$2\nu_4 (A_1)$	I
2666.80040	40	11	e	39	11	e	1.7	$2\nu_4 (A_1)$	I
2666.80987	40	12	a_1/a_2	39	12	a_1/a_2	3.2	$2\nu_4 (A_1)$	I
2666.82188	40	13	e	39	13	e	1.6	$2\nu_4 (A_1)$	I
2666.83424	40	14	e	39	14	e	1.5	$2\nu_4 (A_1)$	I
2666.84791	40	15	a_1/a_2	39	15	a_1/a_2	3.0	$2\nu_4 (A_1)$	I
2666.86254	40	16	e	39	16	e	1.5	$2\nu_4 (A_1)$	I
2666.87833	40	17	e	39	17	e	1.7	$2\nu_4 (A_1)$	I
2666.89444	40	18	a_1/a_2	39	18	a_1/a_2	3.2	$2\nu_4 (A_1)$	I
2666.91181	40	19	e	39	19	e	1.6	$2\nu_4 (A_1)$	I
2666.93038	40	20	e	39	20	e	1.7	$2\nu_4 (A_1)$	I
2666.94865	40	21	a_1/a_2	39	21	a_1/a_2	3.0	$2\nu_4 (A_1)$	I
2666.97005	40	22	e	39	22	e	1.6	$2\nu_4 (A_1)$	I
2666.99086	40	23	e	39	23	e	1.5	$2\nu_4 (A_1)$	I
2667.01377	40	24	a_1/a_2	39	24	a_1/a_2	3.2	$2\nu_4 (A_1)$	I
2667.03669	40	25	e	39	25	e	1.6	$2\nu_4 (A_1)$	I
2667.06153	40	26	e	39	26	e	1.4	$2\nu_4 (A_1)$	I
2667.08486	40	27	a_1/a_2	39	27	a_1/a_2	3.2	$2\nu_4 (A_1)$	I
2667.11198	40	28	e	39	28	e	1.6	$2\nu_4 (A_1)$	I
2667.13914	40	29	e	39	29	e	1.3	$2\nu_4 (A_1)$	I
2667.16762	40	30	a_1/a_2	39	30	a_1/a_2	2.7	$2\nu_4 (A_1)$	I
2667.19599	40	31	e	39	31	e	1.3	$2\nu_4 (A_1)$	I
2667.22686	40	32	e	39	32	e	1.1	$2\nu_4 (A_1)$	I
2667.25776	40	33	a_1/a_2	39	33	a_1/a_2	2.4	$2\nu_4 (A_1)$	I
2667.28863	40	34	e	39	34	e	1.1	$2\nu_4 (A_1)$	I

Table A1 (cont.)

$\tilde{\nu}_{\text{obs.}} / \text{cm}^{-1}$	J''	K''	γ''	J	K	γ	$\lg(I_0/I)/10^{-2}$	Band	Spectrum
2667.32309	40	35	e	39	35	e	0.9	$2\nu_4 (A_1)$	I
2667.35673	40	36	a_1/a_2	39	36	a_1/a_2	2.1	$2\nu_4 (A_1)$	I
2667.39229	40	37	e	39	37	e	0.5	$2\nu_4 (A_1)$	I
2667.42703	40	38	e	39	38	e	0.5	$2\nu_4 (A_1)$	I
2667.47350	39	0	a_2	38	0	a_1	6.8	$2\nu_4 (A_1)$	I
2667.48747	39	6	a_1/a_2	38	6	a_1/a_2	3.7	$2\nu_4 (A_1)$	I
2667.50394	39	8	e	38	8	e	1.8	$2\nu_4 (A_1)$	I
2667.51051	39	9	a_1/a_2	38	9	a_1/a_2	3.5	$2\nu_4 (A_1)$	I
2667.51840	39	10	e	38	10	e	1.7	$2\nu_4 (A_1)$	I
2667.53466	39	11	e	38	11	e	1.8	$2\nu_4 (A_1)$	I
2667.54253	39	12	a_1/a_2	38	12	a_1/a_2	3.4	$2\nu_4 (A_1)$	I
2667.55337	39	13	e	38	13	e	1.7	$2\nu_4 (A_1)$	I
2667.56599	39	14	e	38	14	e	1.9	$2\nu_4 (A_1)$	I
2667.57966	39	15	a_1/a_2	38	15	a_1/a_2	3.4	$2\nu_4 (A_1)$	I
2667.59393	39	16	e	38	16	e	1.9	$2\nu_4 (A_1)$	I
2667.61013	39	17	e	38	17	e	1.9	$2\nu_4 (A_1)$	I
2667.62606	39	18	a_1/a_2	38	18	a_1/a_2	3.3	$2\nu_4 (A_1)$	I
2667.64356	39	19	e	38	19	e	1.7	$2\nu_4 (A_1)$	I
2667.66230	39	20	e	38	20	e	1.9	$2\nu_4 (A_1)$	I
2667.68018	39	21	a_1/a_2	38	21	a_1/a_2	3.1	$2\nu_4 (A_1)$	I
2667.70246	39	22	e	38	22	e	1.7	$2\nu_4 (A_1)$	I
2667.72324	39	23	e	38	23	e	1.6	$2\nu_4 (A_1)$	I
2667.74581	39	24	a_1/a_2	38	24	a_1/a_2	3.3	$2\nu_4 (A_1)$	I
2667.76909	39	25	e	38	25	e	1.6	$2\nu_4 (A_1)$	I
2667.79317	39	26	e	38	26	e	1.7	$2\nu_4 (A_1)$	I
2667.81792	39	27	a_1/a_2	38	27	a_1/a_2	3.6	$2\nu_4 (A_1)$	I
2667.84467	39	28	e	38	28	e	1.4	$2\nu_4 (A_1)$	I
2667.87193	39	29	e	38	29	e	1.4	$2\nu_4 (A_1)$	I
2667.90044	39	30	a_1/a_2	38	30	a_1/a_2	3.2	$2\nu_4 (A_1)$	I
2667.92942	39	31	e	38	31	e	1.2	$2\nu_4 (A_1)$	I
2667.95961	39	32	e	38	32	e	1.3	$2\nu_4 (A_1)$	I
2667.99042	39	33	a_1/a_2	38	33	a_1/a_2	2.3	$2\nu_4 (A_1)$	I
2668.02332	39	34	e	38	34	e	1.0	$2\nu_4 (A_1)$	I
2668.05580	39	35	e	38	35	e	1.1	$2\nu_4 (A_1)$	I
2668.08951	39	36	a_1/a_2	38	36	a_1/a_2	1.3	$2\nu_4 (A_1)$	I
2668.12579	39	37	e	38	37	e	0.6	$2\nu_4 (A_1)$	I
2668.16115	39	38	e	38	38	e	0.3	$2\nu_4 (A_1)$	I
2668.20500	38	0	a_1	37	0	a_2	6.5	$2\nu_4 (A_1)$	I
2668.21539	38	5	e	37	5	e	3.4	$2\nu_4 (A_1)$	I
2668.21937	38	6	a_1/a_2	37	6	a_1/a_2	3.9	$2\nu_4 (A_1)$	I
2668.22642	38	7	e	37	7	e	3.1	$2\nu_4 (A_1)$	I
2668.24273	38	9	a_1/a_2	37	9	a_1/a_2	3.8	$2\nu_4 (A_1)$	I
2668.25064	38	10	e	37	10	e	2.8	$2\nu_4 (A_1)$	I
2668.25877	38	11	e	37	11	e	1.9	$2\nu_4 (A_1)$	I
2668.27473	38	12	a_1/a_2	37	12	a_1/a_2	3.7	$2\nu_4 (A_1)$	I
2668.28467	38	13	e	37	13	e	1.9	$2\nu_4 (A_1)$	I
2668.29749	38	14	e	37	14	e	1.8	$2\nu_4 (A_1)$	I
2668.31064	38	15	a_1/a_2	37	15	a_1/a_2	3.7	$2\nu_4 (A_1)$	I

Table A1 (cont.)

$\tilde{\nu}_{\text{obs.}} / \text{cm}^{-1}$	J''	K''	γ''	J	K	γ	$\lg(I_0/I)/10^{-2}$	Band	Spectrum
2668.32517	38	16	e	37	16	e	2.0	$2\nu_4 (A_1)$	I
2668.34076	38	17	e	37	17	e	1.9	$2\nu_4 (A_1)$	I
2668.35742	38	18	a_1/a_2	37	18	a_1/a_2	3.7	$2\nu_4 (A_1)$	I
2668.37443	38	19	e	37	19	e	1.8	$2\nu_4 (A_1)$	I
2668.39314	38	20	e	37	20	e	1.8	$2\nu_4 (A_1)$	I
2668.41165	38	21	a_1/a_2	37	21	a_1/a_2	3.4	$2\nu_4 (A_1)$	I
2668.43355	38	22	e	37	22	e	1.8	$2\nu_4 (A_1)$	I
2668.45506	38	23	e	37	23	e	2.0	$2\nu_4 (A_1)$	I
2668.47741	38	24	a_1/a_2	37	24	a_1/a_2	3.6	$2\nu_4 (A_1)$	I
2668.50085	38	25	e	37	25	e	1.9	$2\nu_4 (A_1)$	I
2668.52533	38	26	e	37	26	e	1.8	$2\nu_4 (A_1)$	I
2668.55051	38	27	a_1/a_2	37	27	a_1/a_2	3.8	$2\nu_4 (A_1)$	I
2668.57655	38	28	e	37	28	e	1.6	$2\nu_4 (A_1)$	I
2668.60348	38	29	e	37	29	e	1.6	$2\nu_4 (A_1)$	I
2668.63249	38	30	a_1/a_2	37	30	a_1/a_2	2.8	$2\nu_4 (A_1)$	I
2668.66122	38	31	e	37	31	e	1.7	$2\nu_4 (A_1)$	I
2668.69166	38	32	e	37	32	e	1.6	$2\nu_4 (A_1)$	I
2668.72275	38	33	a_1/a_2	37	33	a_1/a_2	2.3	$2\nu_4 (A_1)$	I
2668.75575	38	34	e	37	34	e	0.9	$2\nu_4 (A_1)$	I
2668.78819	38	35	e	37	35	e	0.7	$2\nu_4 (A_1)$	I
2668.82280	38	36	a_1/a_2	37	36	a_1/a_2	1.3	$2\nu_4 (A_1)$	I
2668.85878	38	37	e	37	37	e	0.4	$2\nu_4 (A_1)$	I
2668.93439	37	0	a_2	36	0	a_1	7.1	$2\nu_4 (A_1)$	I
2668.94998	37	6	a_1/a_2	36	6	a_1/a_2	4.8	$2\nu_4 (A_1)$	I
2668.95582	37	7	e	36	7	e	2.1	$2\nu_4 (A_1)$	I
2668.96272	37	8	e	36	8	e	2.2	$2\nu_4 (A_1)$	I
2668.96887	37	9	a_1/a_2	36	9	a_1/a_2	4.2	$2\nu_4 (A_1)$	I
2668.98148	37	10	e	36	10	e	3.3	$2\nu_4 (A_1)$	I
2668.99057	37	11	e	36	11	e	2.0	$2\nu_4 (A_1)$	I
2669.00125	37	12	a_1/a_2	36	12	a_1/a_2	4.0	$2\nu_4 (A_1)$	I
2669.01509	37	13	e	36	13	e	2.2	$2\nu_4 (A_1)$	I
2669.02745	37	14	e	36	14	e	2.1	$2\nu_4 (A_1)$	I
2669.04092	37	15	a_1/a_2	36	15	a_1/a_2	4.3	$2\nu_4 (A_1)$	I
2669.05537	37	16	e	36	16	e	2.1	$2\nu_4 (A_1)$	I
2669.07075	37	17	e	36	17	e	2.0	$2\nu_4 (A_1)$	I
2669.08728	37	18	a_1/a_2	36	18	a_1/a_2	4.0	$2\nu_4 (A_1)$	I
2669.10518	37	19	e	36	19	e	2.4	$2\nu_4 (A_1)$	I
2669.12357	37	20	e	36	20	e	1.9	$2\nu_4 (A_1)$	I
2669.14266	37	21	a_1/a_2	36	21	a_1/a_2	3.9	$2\nu_4 (A_1)$	I
2669.16415	37	22	e	36	22	e	1.8	$2\nu_4 (A_1)$	I
2669.18507	37	23	e	36	23	e	1.9	$2\nu_4 (A_1)$	I
2669.20771	37	24	a_1/a_2	36	24	a_1/a_2	3.6	$2\nu_4 (A_1)$	I
2669.23132	37	25	e	36	25	e	1.8	$2\nu_4 (A_1)$	I
2669.25534	37	26	e	36	26	e	1.6	$2\nu_4 (A_1)$	I
2669.28087	37	27	a_1/a_2	36	27	a_1/a_2	3.5	$2\nu_4 (A_1)$	I
2669.30693	37	28	e	36	28	e	1.5	$2\nu_4 (A_1)$	I
2669.33478	37	29	e	36	29	e	1.7	$2\nu_4 (A_1)$	I
2669.36315	37	30	a_1/a_2	36	30	a_1/a_2	2.8	$2\nu_4 (A_1)$	I

Table A1 (cont.)

$\tilde{\nu}_{\text{obs.}} / \text{cm}^{-1}$	J''	K''	γ''	J	K	γ	$\lg(I_0/I)/10^{-2}$	Band	Spectrum
2669.39329	37	31	e	36	31	e	1.7	$2\nu_4 (A_1)$	I
2669.42325	37	32	e	36	32	e	1.4	$2\nu_4 (A_1)$	I
2669.45402	37	33	a_1/a_2	36	33	a_1/a_2	2.1	$2\nu_4 (A_1)$	I
2669.48617	37	34	e	36	34	e	1.2	$2\nu_4 (A_1)$	I
2669.51982	37	35	e	36	35	e	0.8	$2\nu_4 (A_1)$	I
2669.55420	37	36	a_1/a_2	36	36	a_1/a_2	0.6	$2\nu_4 (A_1)$	I
2669.66333	36	0	a_1	35	0	a_2	8.2	$2\nu_4 (A_1)$	I
2669.67875	36	6	a_1/a_2	35	6	a_1/a_2	4.9	$2\nu_4 (A_1)$	I
2669.68503	36	7	e	35	7	e	2.4	$2\nu_4 (A_1)$	I
2669.69162	36	8	e	35	8	e	2.3	$2\nu_4 (A_1)$	I
2669.69993	36	9	a_1/a_2	35	9	a_1/a_2	4.5	$2\nu_4 (A_1)$	I
2669.70853	36	10	e	35	10	e	2.1	$2\nu_4 (A_1)$	I
2669.72107	36	11	e	35	11	e	2.2	$2\nu_4 (A_1)$	I
2669.73037	36	12	a_1/a_2	35	12	a_1/a_2	4.6	$2\nu_4 (A_1)$	I
2669.74513	36	13	e	35	13	e	3.8	$2\nu_4 (A_1)$	I
2669.77046	36	15	a_1/a_2	35	15	a_1/a_2	5.4	$2\nu_4 (A_1)$	I
2669.78441	36	16	e	35	16	e	2.3	$2\nu_4 (A_1)$	I
2669.80010	36	17	e	35	17	e	2.5	$2\nu_4 (A_1)$	I
2669.81661	36	18	a_1/a_2	35	18	a_1/a_2	4.3	$2\nu_4 (A_1)$	I
2669.83457	36	19	e	35	19	e	2.2	$2\nu_4 (A_1)$	I
2669.85282	36	20	e	35	20	e	2.2	$2\nu_4 (A_1)$	I
2669.87228	36	21	a_1/a_2	35	21	a_1/a_2	4.1	$2\nu_4 (A_1)$	I
2669.89312	36	22	e	35	22	e	2.0	$2\nu_4 (A_1)$	I
2669.91500	36	23	e	35	23	e	1.9	$2\nu_4 (A_1)$	I
2669.93755	36	24	a_1/a_2	35	24	a_1/a_2	3.9	$2\nu_4 (A_1)$	I
2669.96089	36	25	e	35	25	e	1.9	$2\nu_4 (A_1)$	I
2669.98553	36	26	e	35	26	e	2.4	$2\nu_4 (A_1)$	I
2670.01048	36	27	a_1/a_2	35	27	a_1/a_2	3.6	$2\nu_4 (A_1)$	I
2670.03644	36	28	e	35	28	e	1.9	$2\nu_4 (A_1)$	I
2670.06433	36	29	e	35	29	e	1.5	$2\nu_4 (A_1)$	I
2670.09325	36	30	a_1/a_2	35	30	a_1/a_2	3.1	$2\nu_4 (A_1)$	I
2670.12223	36	31	e	35	31	e	1.7	$2\nu_4 (A_1)$	I
2670.15270	36	32	e	35	32	e	1.2	$2\nu_4 (A_1)$	I
2670.18446	36	33	a_1/a_2	35	33	a_1/a_2	1.7	$2\nu_4 (A_1)$	I
2670.21646	36	34	e	35	34	e	0.7	$2\nu_4 (A_1)$	I
2670.24816	36	35	e	35	35	e	0.5	$2\nu_4 (A_1)$	I
2670.39088	35	0	a_2	34	0	a_1	8.6	$2\nu_4 (A_1)$	I
2670.40663	35	6	a_1/a_2	34	6	a_1/a_2	5.2	$2\nu_4 (A_1)$	I
2670.41272	35	7	e	34	7	e	2.6	$2\nu_4 (A_1)$	I
2670.42022	35	8	e	34	8	e	2.6	$2\nu_4 (A_1)$	I
2670.42802	35	9	a_1/a_2	34	9	a_1/a_2	5.2	$2\nu_4 (A_1)$	I
2670.43665	35	10	e	34	10	e	2.6	$2\nu_4 (A_1)$	I
2670.44620	35	11	e	34	11	e	2.3	$2\nu_4 (A_1)$	I
2670.45941	35	12	a_1/a_2	34	12	a_1/a_2	4.7	$2\nu_4 (A_1)$	I
2670.47213	35	13	e	34	13	e	2.3	$2\nu_4 (A_1)$	I
2670.48308	35	14	e	34	14	e	2.5	$2\nu_4 (A_1)$	I
2670.50319	35	15	a_1/a_2	34	15	a_1/a_2	4.5	$2\nu_4 (A_1)$	I
2670.51190	35	16	e	34	16	e	3.6	$2\nu_4 (A_1)$	I

Table A1 (cont.)

$\tilde{\nu}_{\text{obs.}} / \text{cm}^{-1}$	J''	K''	γ''	J	K	γ	$\lg(I_0/I)/10^{-2}$	Band	Spectrum
2670.54485	35	18	a_1/a_2	34	18	a_1/a_2	4.9	$2\nu_4 (A_1)$	I
2670.56239	35	19	e	34	19	e	2.4	$2\nu_4 (A_1)$	I
2670.58103	35	20	e	34	20	e	2.3	$2\nu_4 (A_1)$	I
2670.60100	35	21	a_1/a_2	34	21	a_1/a_2	4.5	$2\nu_4 (A_1)$	I
2670.62153	35	22	e	34	22	e	2.1	$2\nu_4 (A_1)$	I
2670.64324	35	23	e	34	23	e	2.1	$2\nu_4 (A_1)$	I
2670.66573	35	24	a_1/a_2	34	24	a_1/a_2	4.0	$2\nu_4 (A_1)$	I
2670.68930	35	25	e	34	25	e	2.0	$2\nu_4 (A_1)$	I
2670.71425	35	26	e	34	26	e	2.0	$2\nu_4 (A_1)$	I
2670.73978	35	27	a_1/a_2	34	27	a_1/a_2	4.2	$2\nu_4 (A_1)$	I
2670.76637	35	28	e	34	28	e	1.6	$2\nu_4 (A_1)$	I
2670.79420	35	29	e	34	29	e	1.5	$2\nu_4 (A_1)$	I
2670.82350	35	30	a_1/a_2	34	30	a_1/a_2	3.2	$2\nu_4 (A_1)$	I
2670.88206	35	32	e	34	32	e	0.9	$2\nu_4 (A_1)$	I
2670.91356	35	33	a_1/a_2	34	33	a_1/a_2	1.4	$2\nu_4 (A_1)$	I
2670.94497	35	34	e	34	34	e	0.8	$2\nu_4 (A_1)$	I
2671.11783	34	0	a_1	33	0	a_2	9.1	$2\nu_4 (A_1)$	I
2671.12794	34	5	e	33	5	e	3.2	$2\nu_4 (A_1)$	I
2671.13342	34	6	a_1/a_2	33	6	a_1/a_2	5.5	$2\nu_4 (A_1)$	I
2671.13993	34	7	e	33	7	e	3.0	$2\nu_4 (A_1)$	I
2671.14668	34	8	e	33	8	e	2.8	$2\nu_4 (A_1)$	I
2671.15477	34	9	a_1/a_2	33	9	a_1/a_2	5.4	$2\nu_4 (A_1)$	I
2671.16394	34	10	e	33	10	e	2.8	$2\nu_4 (A_1)$	I
2671.17447	34	11	e	33	11	e	2.7	$2\nu_4 (A_1)$	I
2671.18446	34	12	a_1/a_2	33	12	a_1/a_2	5.2	$2\nu_4 (A_1)$	I
2671.19513	34	13	e	33	13	e	3.0	$2\nu_4 (A_1)$	I
2671.21270	34	14	e	33	14	e	2.6	$2\nu_4 (A_1)$	I
2671.22598	34	15	a_1/a_2	33	15	a_1/a_2	5.1	$2\nu_4 (A_1)$	I
2671.24458	34	16	e	33	16	e	3.6	$2\nu_4 (A_1)$	I
2671.25561	34	17	e	33	17	e	2.4	$2\nu_4 (A_1)$	I
2671.27220	34	18	a_1/a_2	33	18	a_1/a_2	5.0	$2\nu_4 (A_1)$	I
2671.28985	34	19	e	33	19	e	2.4	$2\nu_4 (A_1)$	I
2671.30823	34	20	e	33	20	e	2.1	$2\nu_4 (A_1)$	I
2671.32822	34	21	a_1/a_2	33	21	a_1/a_2	4.7	$2\nu_4 (A_1)$	I
2671.34883	34	22	e	33	22	e	2.3	$2\nu_4 (A_1)$	I
2671.37065	34	23	e	33	23	e	2.2	$2\nu_4 (A_1)$	I
2671.39331	34	24	a_1/a_2	33	24	a_1/a_2	4.3	$2\nu_4 (A_1)$	I
2671.41729	34	25	e	33	25	e	2.1	$2\nu_4 (A_1)$	I
2671.44131	34	26	e	33	26	e	2.4	$2\nu_4 (A_1)$	I
2671.46714	34	27	a_1/a_2	33	27	a_1/a_2	3.6	$2\nu_4 (A_1)$	I
2671.49438	34	28	e	33	28	e	1.6	$2\nu_4 (A_1)$	I
2671.52112	34	29	e	33	29	e	1.9	$2\nu_4 (A_1)$	I
2671.55012	34	30	a_1/a_2	33	30	a_1/a_2	2.6	$2\nu_4 (A_1)$	I
2671.61148	34	32	e	33	32	e	2.0	$2\nu_4 (A_1)$	I
2671.63978	34	33	a_1/a_2	33	33	a_1/a_2	1.7	$2\nu_4 (A_1)$	I
2671.84342	33	0	a_2	32	0	a_1	9.7	$2\nu_4 (A_1)$	I
2671.85430	33	5	e	32	5	e	3.5	$2\nu_4 (A_1)$	I
2671.85928	33	6	a_1/a_2	32	6	a_1/a_2	5.9	$2\nu_4 (A_1)$	I

Table A1 (cont.)

$\tilde{\nu}_{\text{obs.}} / \text{cm}^{-1}$	J''	K''	γ''	J	K	γ	$\lg(I_0/I)/10^{-2}$	Band	Spectrum
2671.86571	33	7	e	32	7	e	2.9	$2\nu_4 (A_1)$	I
2671.87292	33	8	e	32	8	e	3.0	$2\nu_4 (A_1)$	I
2671.88086	33	9	a_1/a_2	32	9	a_1/a_2	5.7	$2\nu_4 (A_1)$	I
2671.88993	33	10	e	32	10	e	2.8	$2\nu_4 (A_1)$	I
2671.90035	33	11	e	32	11	e	3.0	$2\nu_4 (A_1)$	I
2671.91115	33	12	a_1/a_2	32	12	a_1/a_2	5.7	$2\nu_4 (A_1)$	I
2671.92305	33	13	e	32	13	e	2.8	$2\nu_4 (A_1)$	I
2671.93598	33	14	e	32	14	e	2.9	$2\nu_4 (A_1)$	I
2671.94974	33	15	a_1/a_2	32	15	a_1/a_2	5.4	$2\nu_4 (A_1)$	I
2671.96562	33	16	e	32	16	e	2.9	$2\nu_4 (A_1)$	I
2671.99863	33	18	a_1/a_2	32	18	a_1/a_2	6.8	$2\nu_4 (A_1)$	I
2672.01626	33	19	e	32	19	e	2.4	$2\nu_4 (A_1)$	I
2672.03502	33	20	e	32	20	e	2.6	$2\nu_4 (A_1)$	I
2672.05466	33	21	a_1/a_2	32	21	a_1/a_2	4.8	$2\nu_4 (A_1)$	I
2672.07564	33	22	e	32	22	e	2.6	$2\nu_4 (A_1)$	I
2672.09737	33	23	e	32	23	e	2.3	$2\nu_4 (A_1)$	I
2672.12022	33	24	a_1/a_2	32	24	a_1/a_2	4.3	$2\nu_4 (A_1)$	I
2672.14356	33	25	e	32	25	e	2.1	$2\nu_4 (A_1)$	I
2672.16858	33	26	e	32	26	e	2.0	$2\nu_4 (A_1)$	I
2672.19405	33	27	a_1/a_2	32	27	a_1/a_2	3.4	$2\nu_4 (A_1)$	I
2672.22116	33	28	e	32	28	e	2.1	$2\nu_4 (A_1)$	I
2672.24821	33	29	e	32	29	e	1.1	$2\nu_4 (A_1)$	I
2672.27707	33	30	a_1/a_2	32	30	a_1/a_2	2.4	$2\nu_4 (A_1)$	I
2672.30670	33	31	e	32	31	e	1.0	$2\nu_4 (A_1)$	I
2672.33389	33	32	e	32	32	e	0.7	$2\nu_4 (A_1)$	I
2672.56826	32	0	a_1	31	0	a_2	10.6	$2\nu_4 (A_1)$	I
2672.57909	32	5	e	31	5	e	3.7	$2\nu_4 (A_1)$	I
2672.58430	32	6	a_1/a_2	31	6	a_1/a_2	6.4	$2\nu_4 (A_1)$	I
2672.59076	32	7	e	31	7	e	3.3	$2\nu_4 (A_1)$	I
2672.59759	32	8	e	31	8	e	3.1	$2\nu_4 (A_1)$	I
2672.60595	32	9	a_1/a_2	31	9	a_1/a_2	6.2	$2\nu_4 (A_1)$	I
2672.61512	32	10	e	31	10	e	3.0	$2\nu_4 (A_1)$	I
2672.62516	32	11	e	31	11	e	3.3	$2\nu_4 (A_1)$	I
2672.63641	32	12	a_1/a_2	31	12	a_1/a_2	6.2	$2\nu_4 (A_1)$	I
2672.64844	32	13	e	31	13	e	2.9	$2\nu_4 (A_1)$	I
2672.66128	32	14	e	31	14	e	3.0	$2\nu_4 (A_1)$	I
2672.67541	32	15	a_1/a_2	31	15	a_1/a_2	6.1	$2\nu_4 (A_1)$	I
2672.69020	32	16	e	31	16	e	3.1	$2\nu_4 (A_1)$	I
2672.70781	32	17	e	31	17	e	3.2	$2\nu_4 (A_1)$	I
2672.72071	32	18	a_1/a_2	31	18	a_1/a_2	5.9	$2\nu_4 (A_1)$	I
2672.74158	32	19	e	31	19	e	3.0	$2\nu_4 (A_1)$	I
2672.76045	32	20	e	31	20	e	2.6	$2\nu_4 (A_1)$	I
2672.78108	32	21	a_1/a_2	31	21	a_1/a_2	4.3	$2\nu_4 (A_1)$	I
2672.80087	32	22	e	31	22	e	2.3	$2\nu_4 (A_1)$	I
2672.82248	32	23	e	31	23	e	2.5	$2\nu_4 (A_1)$	I
2672.84550	32	24	a_1/a_2	31	24	a_1/a_2	4.3	$2\nu_4 (A_1)$	I
2672.86977	32	25	e	31	25	e	2.6	$2\nu_4 (A_1)$	I
2672.89410	32	26	e	31	26	e	1.7	$2\nu_4 (A_1)$	I

Table A1 (cont.)

$\tilde{\nu}_{\text{obs.}} / \text{cm}^{-1}$	J''	K''	γ''	J	K	γ	$\lg(I_0/I)/10^{-2}$	Band	Spectrum
2672.92025	32	27	a_1/a_2	31	27	a_1/a_2	3.7	$2\nu_4 (A_1)$	I
2672.94678	32	28	e	31	28	e	1.3	$2\nu_4 (A_1)$	I
2672.97415	32	29	e	31	29	e	1.5	$2\nu_4 (A_1)$	I
2673.00235	32	30	a_1/a_2	31	30	a_1/a_2	2.3	$2\nu_4 (A_1)$	I
2673.03396	32	31	e	31	31	e	0.5	$2\nu_4 (A_1)$	I
2673.29222	31	0	a_2	30	0	a_1	11.3	$2\nu_4 (A_1)$	I
2673.30294	31	5	e	30	5	e	3.9	$2\nu_4 (A_1)$	I
2673.30837	31	6	a_1/a_2	30	6	a_1/a_2	6.8	$2\nu_4 (A_1)$	I
2673.31432	31	7	e	30	7	e	3.4	$2\nu_4 (A_1)$	I
2673.32193	31	8	e	30	8	e	3.4	$2\nu_4 (A_1)$	I
2673.33000	31	9	a_1/a_2	30	9	a_1/a_2	6.7	$2\nu_4 (A_1)$	I
2673.33880	31	10	e	30	10	e	3.1	$2\nu_4 (A_1)$	I
2673.34918	31	11	e	30	11	e	3.4	$2\nu_4 (A_1)$	I
2673.36029	31	12	a_1/a_2	30	12	a_1/a_2	6.4	$2\nu_4 (A_1)$	I
2673.37255	31	13	e	30	13	e	3.2	$2\nu_4 (A_1)$	I
2673.38557	31	14	e	30	14	e	3.0	$2\nu_4 (A_1)$	I
2673.39970	31	15	a_1/a_2	30	15	a_1/a_2	6.3	$2\nu_4 (A_1)$	I
2673.41483	31	16	e	30	16	e	3.2	$2\nu_4 (A_1)$	I
2673.43025	31	17	e	30	17	e	3.0	$2\nu_4 (A_1)$	I
2673.44750	31	18	a_1/a_2	30	18	a_1/a_2	6.1	$2\nu_4 (A_1)$	I
2673.46400	31	19	e	30	19	e	2.7	$2\nu_4 (A_1)$	I
2673.48628	31	20	e	30	20	e	3.8	$2\nu_4 (A_1)$	I
2673.50486	31	21	a_1/a_2	30	21	a_1/a_2	5.6	$2\nu_4 (A_1)$	I
2673.52539	31	22	e	30	22	e	2.5	$2\nu_4 (A_1)$	I
2673.54721	31	23	e	30	23	e	2.3	$2\nu_4 (A_1)$	I
2673.57030	31	24	a_1/a_2	30	24	a_1/a_2	4.3	$2\nu_4 (A_1)$	I
2673.59276	31	25	e	30	25	e	2.5	$2\nu_4 (A_1)$	I
2673.62093	31	26	e	30	26	e	1.3	$2\nu_4 (A_1)$	I
2673.64517	31	27	a_1/a_2	30	27	a_1/a_2	3.2	$2\nu_4 (A_1)$	I
2673.67156	31	28	e	30	28	e	1.1	$2\nu_4 (A_1)$	I
2673.69985	31	29	e	30	29	e	1.3	$2\nu_4 (A_1)$	I
2673.72790	31	30	a_1/a_2	30	30	a_1/a_2	1.1	$2\nu_4 (A_1)$	I
2674.01496	30	0	a_1/a_2	29	0	a_1/a_2	12.0	$2\nu_4 (A_1)$	I
2674.02623	30	5	e	29	5	e	4.3	$2\nu_4 (A_1)$	I
2674.03099	30	6	a_1/a_2	29	6	a_1/a_2	7.3	$2\nu_4 (A_1)$	I
2674.03726	30	7	e	29	7	e	3.7	$2\nu_4 (A_1)$	I
2674.04465	30	8	e	29	8	e	3.7	$2\nu_4 (A_1)$	I
2674.05292	30	9	a_1/a_2	29	9	a_1/a_2	7.1	$2\nu_4 (A_1)$	I
2674.06214	30	10	e	29	10	e	3.5	$2\nu_4 (A_1)$	I
2674.07223	30	11	e	29	11	e	3.6	$2\nu_4 (A_1)$	I
2674.08342	30	12	a_1/a_2	29	12	a_1/a_2	6.8	$2\nu_4 (A_1)$	I
2674.09566	30	13	e	29	13	e	3.4	$2\nu_4 (A_1)$	I
2674.10832	30	14	e	29	14	e	3.4	$2\nu_4 (A_1)$	I
2674.12277	30	15	a_1/a_2	29	15	a_1/a_2	6.8	$2\nu_4 (A_1)$	I
2674.13764	30	16	e	29	16	e	3.2	$2\nu_4 (A_1)$	I
2674.15380	30	17	e	29	17	e	3.1	$2\nu_4 (A_1)$	I
2674.17092	30	18	a_1/a_2	29	18	a_1/a_2	5.9	$2\nu_4 (A_1)$	I
2674.18906	30	19	e	29	19	e	3.0	$2\nu_4 (A_1)$	I

Table A1 (cont.)

$\tilde{\nu}_{\text{obs.}} / \text{cm}^{-1}$	J''	K''	γ''	J	K	γ	$\lg(I_0/I)/10^{-2}$	Band	Spectrum
2674.20798	30	20	e	29	20	e	2.9	$2\nu_4 (A_1)$	I
2674.22743	30	21	a_1/a_2	29	21	a_1/a_2	5.2	$2\nu_4 (A_1)$	I
2674.24866	30	22	e	29	22	e	4.1	$2\nu_4 (A_1)$	I
2674.27038	30	23	e	29	23	e	2.7	$2\nu_4 (A_1)$	I
2674.29369	30	24	a_1/a_2	29	24	a_1/a_2	4.1	$2\nu_4 (A_1)$	I
2674.31773	30	25	e	29	25	e	2.5	$2\nu_4 (A_1)$	I
2674.34312	30	26	e	29	26	e	1.6	$2\nu_4 (A_1)$	I
2674.36853	30	27	a_1/a_2	29	27	a_1/a_2	2.7	$2\nu_4 (A_1)$	I
2674.39593	30	28	e	29	28	e	2.4	$2\nu_4 (A_1)$	I
2674.42265	30	29	e	29	29	e	1.3	$2\nu_4 (A_1)$	I
2674.73706	29	0	a_2	28	0	a_1	13.0	$2\nu_4 (A_1)$	I
2674.74775	29	5	e	28	5	e	4.6	$2\nu_4 (A_1)$	I
2674.75282	29	6	a_1/a_2	28	6	a_1/a_2	7.9	$2\nu_4 (A_1)$	I
2674.75890	29	7	e	28	7	e	3.7	$2\nu_4 (A_1)$	I
2674.76666	29	8	e	28	8	e	3.8	$2\nu_4 (A_1)$	I
2674.77467	29	9	a_1/a_2	28	9	a_1/a_2	7.5	$2\nu_4 (A_1)$	I
2674.78395	29	10	e	28	10	e	3.9	$2\nu_4 (A_1)$	I
2674.79415	29	11	e	28	11	e	3.7	$2\nu_4 (A_1)$	I
2674.80532	29	12	a_1/a_2	28	12	a_1/a_2	7.1	$2\nu_4 (A_1)$	I
2674.81757	29	13	e	28	13	e	3.5	$2\nu_4 (A_1)$	I
2674.83060	29	14	e	28	14	e	3.4	$2\nu_4 (A_1)$	I
2674.84491	29	15	a_1/a_2	28	15	a_1/a_2	6.9	$2\nu_4 (A_1)$	I
2674.86011	29	16	e	28	16	e	3.4	$2\nu_4 (A_1)$	I
2674.87618	29	17	e	28	17	e	3.2	$2\nu_4 (A_1)$	I
2674.89316	29	18	a_1/a_2	28	18	a_1/a_2	6.1	$2\nu_4 (A_1)$	I
2674.91121	29	19	e	28	19	e	2.8	$2\nu_4 (A_1)$	I
2674.93042	29	20	e	28	20	e	2.7	$2\nu_4 (A_1)$	I
2674.95001	29	21	a_1/a_2	28	21	a_1/a_2	5.2	$2\nu_4 (A_1)$	I
2674.97111	29	22	e	28	22	e	2.7	$2\nu_4 (A_1)$	I
2674.99363	29	23	e	28	23	e	2.8	$2\nu_4 (A_1)$	I
2675.01633	29	24	a_1/a_2	28	24	a_1/a_2	3.8	$2\nu_4 (A_1)$	I
2675.04035	29	25	e	28	25	e	2.4	$2\nu_4 (A_1)$	I
2675.06630	29	26	e	28	26	e	1.9	$2\nu_4 (A_1)$	I
2675.09136	29	27	a_1/a_2	28	27	a_1/a_2	1.9	$2\nu_4 (A_1)$	I
2675.45773	28	0	a_1	27	0	a_2	13.7	$2\nu_4 (A_1)$	I
2675.46852	28	5	e	27	5	e	4.8	$2\nu_4 (A_1)$	I
2675.47364	28	6	a_1/a_2	27	6	a_1/a_2	8.2	$2\nu_4 (A_1)$	I
2675.47984	28	7	e	27	7	e	4.0	$2\nu_4 (A_1)$	I
2675.48726	28	8	e	27	8	e	4.1	$2\nu_4 (A_1)$	I
2675.49564	28	9	a_1/a_2	27	9	a_1/a_2	7.8	$2\nu_4 (A_1)$	I
2675.50520	28	10	e	27	10	e	3.9	$2\nu_4 (A_1)$	I
2675.51517	28	11	e	27	11	e	3.8	$2\nu_4 (A_1)$	I
2675.52643	28	12	a_1/a_2	27	12	a_1/a_2	7.4	$2\nu_4 (A_1)$	I
2675.53880	28	13	e	27	13	e	3.6	$2\nu_4 (A_1)$	I
2675.55222	28	14	e	27	14	e	3.8	$2\nu_4 (A_1)$	I
2675.56596	28	15	a_1/a_2	27	15	a_1/a_2	7.2	$2\nu_4 (A_1)$	I
2675.58063	28	16	e	27	16	e	3.3	$2\nu_4 (A_1)$	I
2675.59730	28	17	e	27	17	e	3.2	$2\nu_4 (A_1)$	I

Table A1 (cont.)

$\tilde{\nu}_{\text{obs.}} / \text{cm}^{-1}$	J''	K''	γ''	J	K	γ	$\lg(I_0/I)/10^{-2}$	Band	Spectrum
2675.61434	28	18	a_1/a_2	27	18	a_1/a_2	6.2	$2\nu_4 (A_1)$	I
2675.63252	28	19	e	27	19	e	2.9	$2\nu_4 (A_1)$	I
2675.65175	28	20	e	27	20	e	2.7	$2\nu_4 (A_1)$	I
2675.67153	28	21	a_1/a_2	27	21	a_1/a_2	5.0	$2\nu_4 (A_1)$	I
2675.69297	28	22	e	27	22	e	2.2	$2\nu_4 (A_1)$	I
2675.71484	28	23	e	27	23	e	2.0	$2\nu_4 (A_1)$	I
2675.76203	28	25	e	27	25	e	1.4	$2\nu_4 (A_1)$	I
2676.17747	27	0	a_2	26	0	a_1	14.5	$2\nu_4 (A_1)$	I
2676.18829	27	5	e	26	5	e	5.3	$2\nu_4 (A_1)$	I
2676.19344	27	6	a_1/a_2	26	6	a_1/a_2	8.7	$2\nu_4 (A_1)$	I
2676.19970	27	7	e	26	7	e	4.4	$2\nu_4 (A_1)$	I
2676.20731	27	8	e	26	8	e	4.2	$2\nu_4 (A_1)$	I
2676.21542	27	9	a_1/a_2	26	9	a_1/a_2	8.2	$2\nu_4 (A_1)$	I
2676.22455	27	10	e	26	10	e	4.0	$2\nu_4 (A_1)$	I
2676.23513	27	11	e	26	11	e	3.9	$2\nu_4 (A_1)$	I
2676.24631	27	12	a_1/a_2	26	12	a_1/a_2	7.8	$2\nu_4 (A_1)$	I
2676.25854	27	13	e	26	13	e	3.7	$2\nu_4 (A_1)$	I
2676.27198	27	14	e	26	14	e	3.8	$2\nu_4 (A_1)$	I
2676.28602	27	15	a_1/a_2	26	15	a_1/a_2	7.1	$2\nu_4 (A_1)$	I
2676.30117	27	16	e	26	16	e	3.5	$2\nu_4 (A_1)$	I
2676.31742	27	17	e	26	17	e	3.3	$2\nu_4 (A_1)$	I
2676.33462	27	18	a_1/a_2	26	18	a_1/a_2	6.1	$2\nu_4 (A_1)$	I
2676.35268	27	19	e	26	19	e	2.8	$2\nu_4 (A_1)$	I
2676.37192	27	20	e	26	20	e	2.7	$2\nu_4 (A_1)$	I
2676.39203	27	21	a_1/a_2	26	21	a_1/a_2	4.8	$2\nu_4 (A_1)$	I
2676.41322	27	22	e	26	22	e	2.0	$2\nu_4 (A_1)$	I
2676.43533	27	23	e	26	23	e	2.0	$2\nu_4 (A_1)$	I
2676.45912	27	24	a_1/a_2	26	24	a_1/a_2	3.8	$2\nu_4 (A_1)$	I
2676.48233	27	25	e	26	25	e	1.5	$2\nu_4 (A_1)$	I
2676.89666	26	0	a_1	25	0	a_2	15.2	$2\nu_4 (A_1)$	I
2676.90697	26	5	e	25	5	e	5.4	$2\nu_4 (A_1)$	I
2676.91225	26	6	a_1/a_2	25	6	a_1/a_2	9.2	$2\nu_4 (A_1)$	I
2676.91847	26	7	e	25	7	e	4.6	$2\nu_4 (A_1)$	I
2676.92618	26	8	e	25	8	e	4.4	$2\nu_4 (A_1)$	I
2676.93443	26	9	a_1/a_2	25	9	a_1/a_2	8.5	$2\nu_4 (A_1)$	I
2676.94385	26	10	e	25	10	e	4.6	$2\nu_4 (A_1)$	I
2676.95388	26	11	e	25	11	e	4.1	$2\nu_4 (A_1)$	I
2676.96529	26	12	a_1/a_2	25	12	a_1/a_2	8.1	$2\nu_4 (A_1)$	I
2676.97758	26	13	e	25	13	e	4.0	$2\nu_4 (A_1)$	I
2676.99085	26	14	e	25	14	e	4.1	$2\nu_4 (A_1)$	I
2677.00502	26	15	a_1/a_2	25	15	a_1/a_2	7.3	$2\nu_4 (A_1)$	I
2677.02039	26	16	e	25	16	e	3.5	$2\nu_4 (A_1)$	I
2677.03619	26	17	e	25	17	e	3.2	$2\nu_4 (A_1)$	I
2677.05375	26	18	a_1/a_2	25	18	a_1/a_2	6.1	$2\nu_4 (A_1)$	I
2677.07208	26	19	e	25	19	e	2.9	$2\nu_4 (A_1)$	I
2677.09104	26	20	e	25	20	e	2.5	$2\nu_4 (A_1)$	I
2677.11116	26	21	a_1/a_2	25	21	a_1/a_2	4.5	$2\nu_4 (A_1)$	I
2677.13245	26	22	e	25	22	e	2.0	$2\nu_4 (A_1)$	I

Table A1 (cont.)

$\tilde{\nu}_{\text{obs.}} / \text{cm}^{-1}$	J''	K''	γ''	J	K	γ	$\lg(I_0/I)/10^{-2}$	Band	Spectrum
2677.15472	26	23	e	25	23	e	1.5	$2\nu_4 (A_1)$	I
2677.17728	26	24	a_1/a_2	25	24	a_1/a_2	3.4	$2\nu_4 (A_1)$	I
2677.61391	25	0	a_2	24	0	a_1	16.0	$2\nu_4 (A_1)$	I
2677.62466	25	5	e	24	5	e	5.5	$2\nu_4 (A_1)$	I
2677.62996	25	6	a_1/a_2	24	6	a_1/a_2	9.4	$2\nu_4 (A_1)$	I
2677.63689	25	7	e	24	7	e	4.8	$2\nu_4 (A_1)$	I
2677.64377	25	8	e	24	8	e	5.7	$2\nu_4 (A_1)$	I
2677.65202	25	9	a_1/a_2	24	9	a_1/a_2	9.4	$2\nu_4 (A_1)$	I
2677.66089	25	10	e	24	10	e	5.0	$2\nu_4 (A_1)$	I
2677.67166	25	11	e	24	11	e	4.2	$2\nu_4 (A_1)$	I
2677.68318	25	12	a_1/a_2	24	12	a_1/a_2	8.2	$2\nu_4 (A_1)$	I
2677.69547	25	13	e	24	13	e	4.6	$2\nu_4 (A_1)$	I
2677.70888	25	14	e	24	14	e	4.3	$2\nu_4 (A_1)$	I
2677.72288	25	15	a_1/a_2	24	15	a_1/a_2	7.3	$2\nu_4 (A_1)$	I
2677.73789	25	16	e	24	16	e	3.9	$2\nu_4 (A_1)$	I
2677.75462	25	17	e	24	17	e	3.1	$2\nu_4 (A_1)$	I
2677.77187	25	18	a_1/a_2	24	18	a_1/a_2	6.0	$2\nu_4 (A_1)$	I
2677.78996	25	19	e	24	19	e	2.6	$2\nu_4 (A_1)$	I
2677.80922	25	20	e	24	20	e	2.5	$2\nu_4 (A_1)$	I
2677.82963	25	21	a_1/a_2	24	21	a_1/a_2	4.1	$2\nu_4 (A_1)$	I
2677.85101	25	22	e	24	22	e	1.6	$2\nu_4 (A_1)$	I
2677.87267	25	23	e	24	23	e	1.2	$2\nu_4 (A_1)$	I
2678.33040	24	0	a_1/a_2	23	0	a_1/a_2	16.2	$2\nu_4 (A_1)$	I
2678.34101	24	5	e	22	19	e	5.6	$2\nu_4 (A_1)$	I
2678.34653	24	6	a_1/a_2	23	6	a_1/a_2	9.7	$2\nu_4 (A_1)$	I
2678.35272	24	7	e	23	7	e	4.8	$2\nu_4 (A_1)$	I
2678.36047	24	8	e	23	8	e	4.7	$2\nu_4 (A_1)$	I
2678.36883	24	9	a_1/a_2	23	9	a_1/a_2	9.1	$2\nu_4 (A_1)$	I
2678.37821	24	10	e	23	10	e	4.4	$2\nu_4 (A_1)$	I
2678.38862	24	11	e	23	11	e	4.4	$2\nu_4 (A_1)$	I
2678.40000	24	12	a_1/a_2	23	12	a_1/a_2	10.5	$2\nu_4 (A_1)$	I
2678.41254	24	13	e	23	13	e	4.8	$2\nu_4 (A_1)$	I
2678.42589	24	14	e	23	14	e	4.3	$2\nu_4 (A_1)$	I
2678.43995	24	15	a_1/a_2	23	15	a_1/a_2	7.2	$2\nu_4 (A_1)$	I
2678.45527	24	16	e	23	16	e	3.8	$2\nu_4 (A_1)$	I
2678.47155	24	17	e	23	17	e	3.2	$2\nu_4 (A_1)$	I
2678.48889	24	18	a_1/a_2	23	18	a_1/a_2	5.6	$2\nu_4 (A_1)$	I
2678.50748	24	19	e	23	19	e	2.5	$2\nu_4 (A_1)$	I
2678.52639	24	20	e	23	20	e	2.1	$2\nu_4 (A_1)$	I
2678.54678	24	21	a_1/a_2	23	21	a_1/a_2	3.2	$2\nu_4 (A_1)$	I
2678.56775	24	22	e	23	22	e	1.1	$2\nu_4 (A_1)$	I
2678.58979	24	23	e	23	23	e	0.8	$2\nu_4 (A_1)$	I
2679.04591	23	0	a_2	22	0	a_1	16.8	$2\nu_4 (A_1)$	I
2679.05727	23	5	e	22	5	e	5.8	$2\nu_4 (A_1)$	I
2679.06229	23	6	a_1/a_2	22	6	a_1/a_2	10.2	$2\nu_4 (A_1)$	I
2679.06870	23	7	e	22	7	e	4.9	$2\nu_4 (A_1)$	I
2679.07607	23	8	e	22	8	e	5.0	$2\nu_4 (A_1)$	I
2679.08458	23	9	a_1/a_2	22	9	a_1/a_2	9.3	$2\nu_4 (A_1)$	I

Table A1 (cont.)

$\tilde{\nu}_{\text{obs.}} / \text{cm}^{-1}$	J''	K''	γ''	J	K	γ	$\lg(I_0/I)/10^{-2}$	Band	Spectrum
2679.09413	23	10	e	22	10	e	4.5	$2\nu_4 (A_1)$	I
2679.10430	23	11	e	22	11	e	4.4	$2\nu_4 (A_1)$	I
2679.11567	23	12	a_1/a_2	22	12	a_1/a_2	8.8	$2\nu_4 (A_1)$	I
2679.12792	23	13	e	22	13	e	4.2	$2\nu_4 (A_1)$	I
2679.14140	23	14	e	22	14	e	3.7	$2\nu_4 (A_1)$	I
2679.15595	23	15	a_1/a_2	22	15	a_1/a_2	8.5	$2\nu_4 (A_1)$	I
2679.17131	23	16	e	22	16	e	3.3	$2\nu_4 (A_1)$	I
2679.18745	23	17	e	22	17	e	3.3	$2\nu_4 (A_1)$	I
2679.20485	23	18	a_1/a_2	22	18	a_1/a_2	5.4	$2\nu_4 (A_1)$	I
2679.22316	23	19	e	22	19	e	2.2	$2\nu_4 (A_1)$	I
2679.24261	23	20	e	22	20	e	1.7	$2\nu_4 (A_1)$	I
2679.26281	23	21	a_1/a_2	22	21	a_1/a_2	2.4	$2\nu_4 (A_1)$	I
2679.28361	23	22	e	22	22	e	0.7	$2\nu_4 (A_1)$	I
2679.76059	22	0	a_1	21	0	a_2	17.3	$2\nu_4 (A_1)$	I
2679.77156	22	5	e	21	5	e	6.1	$2\nu_4 (A_1)$	I
2679.77678	22	6	a_1/a_2	21	6	a_1/a_2	10.4	$2\nu_4 (A_1)$	I
2679.78319	22	7	e	21	7	e	5.0	$2\nu_4 (A_1)$	I
2679.79073	22	8	e	21	8	e	4.9	$2\nu_4 (A_1)$	I
2679.79899	22	9	a_1/a_2	21	9	a_1/a_2	9.4	$2\nu_4 (A_1)$	I
2679.80853	22	10	e	21	10	e	4.7	$2\nu_4 (A_1)$	I
2679.81876	22	11	e	21	11	e	4.4	$2\nu_4 (A_1)$	I
2679.83039	22	12	a_1/a_2	21	12	a_1/a_2	8.7	$2\nu_4 (A_1)$	I
2679.84295	22	13	e	21	13	e	4.2	$2\nu_4 (A_1)$	I
2679.85613	22	14	e	21	14	e	3.6	$2\nu_4 (A_1)$	I
2679.87054	22	15	a_1/a_2	21	15	a_1/a_2	6.8	$2\nu_4 (A_1)$	I
2679.88601	22	16	e	21	16	e	3.0	$2\nu_4 (A_1)$	I
2679.90239	22	17	e	21	17	e	2.8	$2\nu_4 (A_1)$	I
2679.91919	22	18	a_1/a_2	21	18	a_1/a_2	9.2	$2\nu_4 (A_1)$	I
2679.93785	22	19	e	21	19	e	1.9	$2\nu_4 (A_1)$	I
2679.95794	22	20	e	21	20	e	1.2	$2\nu_4 (A_1)$	I
2679.97863	22	21	a_1/a_2	21	21	a_1/a_2	1.3	$2\nu_4 (A_1)$	I
2680.47396	21	0	a_2	20	0	a_1	17.9	$2\nu_4 (A_1)$	I
2680.48473	21	5	e	20	5	e	6.2	$2\nu_4 (A_1)$	I
2680.49028	21	6	a_1/a_2	20	6	a_1/a_2	10.4	$2\nu_4 (A_1)$	I
2680.49679	21	7	e	20	7	e	5.1	$2\nu_4 (A_1)$	I
2680.50417	21	8	e	20	8	e	5.0	$2\nu_4 (A_1)$	I
2680.51266	21	9	a_1/a_2	20	9	a_1/a_2	9.5	$2\nu_4 (A_1)$	I
2680.52216	21	10	e	20	10	e	4.6	$2\nu_4 (A_1)$	I
2680.53229	21	11	e	20	11	e	4.8	$2\nu_4 (A_1)$	I
2680.54398	21	12	a_1/a_2	20	12	a_1/a_2	8.3	$2\nu_4 (A_1)$	I
2680.55632	21	13	e	20	13	e	4.0	$2\nu_4 (A_1)$	I
2680.56994	21	14	e	20	14	e	3.6	$2\nu_4 (A_1)$	I
2680.58419	21	15	a_1/a_2	20	15	a_1/a_2	6.3	$2\nu_4 (A_1)$	I
2680.59927	21	16	e	20	16	e	2.8	$2\nu_4 (A_1)$	I
2680.61614	21	17	e	20	17	e	2.4	$2\nu_4 (A_1)$	I
2680.63346	21	18	a_1/a_2	20	18	a_1/a_2	3.7	$2\nu_4 (A_1)$	I
2680.65157	21	19	e	20	19	e	1.4	$2\nu_4 (A_1)$	I
2680.67314	21	20	e	20	20	e	6.3	$2\nu_4 (A_1)$	I

Table A1 (cont.)

$\tilde{\nu}_{\text{obs.}} / \text{cm}^{-1}$	J''	K''	γ''	J	K	γ	$\lg(I_0/I)/10^{-2}$	Band	Spectrum
2681.18612	20	0	a_1	19	0	a_2	18.2	$2\nu_4 (A_1)$	I
2681.19726	20	5	e	19	5	e	6.2	$2\nu_4 (A_1)$	I
2681.20260	20	6	a_1/a_2	19	6	a_1/a_2	10.6	$2\nu_4 (A_1)$	I
2681.20914	20	7	e	19	7	e	5.1	$2\nu_4 (A_1)$	I
2681.21655	20	8	e	19	8	e	5.1	$2\nu_4 (A_1)$	I
2681.22493	20	9	a_1/a_2	19	9	a_1/a_2	9.5	$2\nu_4 (A_1)$	I
2681.23451	20	10	e	19	10	e	4.6	$2\nu_4 (A_1)$	I
2681.24493	20	11	e	19	11	e	4.6	$2\nu_4 (A_1)$	I
2681.25646	20	12	a_1/a_2	19	12	a_1/a_2	8.3	$2\nu_4 (A_1)$	I
2681.26876	20	13	e	19	13	e	3.6	$2\nu_4 (A_1)$	I
2681.28257	20	14	e	19	14	e	3.2	$2\nu_4 (A_1)$	I
2681.29684	20	15	a_1/a_2	19	15	a_1/a_2	6.0	$2\nu_4 (A_1)$	I
2681.31234	20	16	e	19	16	e	2.4	$2\nu_4 (A_1)$	I
2681.32909	20	17	e	19	17	e	2.0	$2\nu_4 (A_1)$	I
2681.34627	20	18	a_1/a_2	19	18	a_1/a_2	2.8	$2\nu_4 (A_1)$	I
2681.36456	20	19	e	19	19	e	0.6	$2\nu_4 (A_1)$	I
2681.89742	19	0	a_2	18	0	a_1	18.4	$2\nu_4 (A_1)$	I
2681.90846	19	5	e	18	5	e	6.2	$2\nu_4 (A_1)$	I
2681.91381	19	6	a_1/a_2	18	6	a_1/a_2	10.6	$2\nu_4 (A_1)$	I
2681.92007	19	7	e	18	7	e	5.1	$2\nu_4 (A_1)$	I
2681.92766	19	8	e	18	8	e	4.9	$2\nu_4 (A_1)$	I
2681.93640	19	9	a_1/a_2	18	9	a_1/a_2	9.5	$2\nu_4 (A_1)$	I
2681.94596	19	10	e	18	10	e	4.8	$2\nu_4 (A_1)$	I
2681.95645	19	11	e	18	11	e	4.3	$2\nu_4 (A_1)$	I
2681.96780	19	12	a_1/a_2	18	12	a_1/a_2	8.0	$2\nu_4 (A_1)$	I
2681.98032	19	13	e	18	13	e	3.6	$2\nu_4 (A_1)$	I
2681.99372	19	14	e	18	14	e	3.3	$2\nu_4 (A_1)$	I
2682.00823	19	15	a_1/a_2	18	15	a_1/a_2	5.1	$2\nu_4 (A_1)$	I
2682.02409	19	16	e	18	16	e	2.1	$2\nu_4 (A_1)$	I
2682.04018	19	17	e	18	17	e	1.3	$2\nu_4 (A_1)$	I
2682.05751	19	18	a_1/a_2	18	18	a_1/a_2	1.5	$2\nu_4 (A_1)$	I
2682.60751	18	0	a_1	17	0	a_2	18.7	$2\nu_4 (A_1)$	I
2682.61853	18	5	e	17	5	e	6.3	$2\nu_4 (A_1)$	I
2682.62384	18	6	a_1/a_2	17	6	a_1/a_2	10.8	$2\nu_4 (A_1)$	I
2682.63045	18	7	e	17	7	e	5.1	$2\nu_4 (A_1)$	I
2682.63805	18	8	e	17	8	e	5.0	$2\nu_4 (A_1)$	I
2682.64651	18	9	a_1/a_2	17	9	a_1/a_2	9.3	$2\nu_4 (A_1)$	I
2682.65614	18	10	e	17	10	e	4.6	$2\nu_4 (A_1)$	I
2682.66652	18	11	e	17	11	e	4.1	$2\nu_4 (A_1)$	I
2682.67809	18	12	a_1/a_2	17	12	a_1/a_2	7.1	$2\nu_4 (A_1)$	I
2682.69081	18	13	e	17	13	e	3.2	$2\nu_4 (A_1)$	I
2682.70415	18	14	e	17	14	e	2.7	$2\nu_4 (A_1)$	I
2682.71885	18	15	a_1/a_2	17	15	a_1/a_2	4.1	$2\nu_4 (A_1)$	I
2682.73459	18	16	e	17	16	e	1.5	$2\nu_4 (A_1)$	I
2682.75015	18	17	e	17	17	e	0.7	$2\nu_4 (A_1)$	I
2683.31617	17	0	a_2	16	0	a_1	19.3	$2\nu_4 (A_1)$	I
2683.32744	17	5	e	16	5	e	6.3	$2\nu_4 (A_1)$	I
2683.33310	17	6	a_1/a_2	16	6	a_1/a_2	11.3	$2\nu_4 (A_1)$	I

Table A1 (cont.)

$\tilde{\nu}_{\text{obs.}} / \text{cm}^{-1}$	J''	K''	γ''	J	K	γ	$\lg(I_0/I)/10^{-2}$	Band	Spectrum
2683.33899	17	7	e	16	7	e	5.4	$2\nu_4 (A_1)$	I
2683.34680	17	8	e	16	8	e	4.9	$2\nu_4 (A_1)$	I
2683.35545	17	9	a_1/a_2	16	9	a_1/a_2	9.5	$2\nu_4 (A_1)$	I
2683.36497	17	10	e	16	10	e	4.7	$2\nu_4 (A_1)$	I
2683.37552	17	11	e	16	11	e	3.7	$2\nu_4 (A_1)$	I
2683.38729	17	12	a_1/a_2	16	12	a_1/a_2	6.4	$2\nu_4 (A_1)$	I
2683.39995	17	13	e	16	13	e	3.0	$2\nu_4 (A_1)$	I
2683.41343	17	14	e	16	14	e	2.2	$2\nu_4 (A_1)$	I
2683.42785	17	15	a_1/a_2	16	15	a_1/a_2	3.1	$2\nu_4 (A_1)$	I
2683.44393	17	16	e	16	16	e	0.7	$2\nu_4 (A_1)$	I
2684.02441	16	0	a_1	15	0	a_2	18.5	$2\nu_4 (A_1)$	I
2684.03528	16	5	e	15	5	e	6.0	$2\nu_4 (A_1)$	I
2684.04080	16	6	a_1/a_2	15	6	a_1/a_2	10.3	$2\nu_4 (A_1)$	I
2684.04751	16	7	e	15	7	e	4.8	$2\nu_4 (A_1)$	I
2684.05539	16	8	e	15	8	e	5.7	$2\nu_4 (A_1)$	I
2684.06299	16	9	a_1/a_2	15	9	a_1/a_2	9.9	$2\nu_4 (A_1)$	I
2684.07335	16	10	e	15	10	e	4.2	$2\nu_4 (A_1)$	I
2684.08369	16	11	e	15	11	e	3.5	$2\nu_4 (A_1)$	I
2684.09537	16	12	a_1/a_2	15	12	a_1/a_2	5.8	$2\nu_4 (A_1)$	I
2684.10806	16	13	e	15	13	e	3.0	$2\nu_4 (A_1)$	I
2684.12193	16	14	e	15	14	e	1.7	$2\nu_4 (A_1)$	I
2684.13624	16	15	a_1/a_2	15	15	a_1/a_2	2.0	$2\nu_4 (A_1)$	I
2684.73094	15	0	a_2	14	0	a_1	17.9	$2\nu_4 (A_1)$	I
2684.74215	15	5	e	14	5	e	5.8	$2\nu_4 (A_1)$	I
2684.74766	15	6	a_1/a_2	14	6	a_1/a_2	10.1	$2\nu_4 (A_1)$	I
2684.75414	15	7	e	14	7	e	5.0	$2\nu_4 (A_1)$	I
2684.76175	15	8	e	14	8	e	4.5	$2\nu_4 (A_1)$	I
2684.77031	15	9	a_1/a_2	14	9	a_1/a_2	7.7	$2\nu_4 (A_1)$	I
2684.77987	15	10	e	14	10	e	3.4	$2\nu_4 (A_1)$	I
2684.79054	15	11	e	14	11	e	3.2	$2\nu_4 (A_1)$	I
2684.80213	15	12	a_1/a_2	14	12	a_1/a_2	4.6	$2\nu_4 (A_1)$	I
2684.82863	15	14	e	14	14	e	2.6	$2\nu_4 (A_1)$	I
2685.43665	14	0	a_1	13	0	a_2	17.5	$2\nu_4 (A_1)$	I
2685.44775	14	5	e	13	5	e	5.7	$2\nu_4 (A_1)$	I
2685.45332	14	6	a_1/a_2	13	6	a_1/a_2	9.7	$2\nu_4 (A_1)$	I
2685.45964	14	7	e	13	7	e	4.5	$2\nu_4 (A_1)$	I
2685.46746	14	8	e	13	8	e	4.2	$2\nu_4 (A_1)$	I
2685.47596	14	9	a_1/a_2	13	9	a_1/a_2	6.9	$2\nu_4 (A_1)$	I
2685.48592	14	10	e	13	10	e	3.0	$2\nu_4 (A_1)$	I
2685.49647	14	11	e	13	11	e	2.3	$2\nu_4 (A_1)$	I
2685.50789	14	12	a_1/a_2	13	12	a_1/a_2	3.4	$2\nu_4 (A_1)$	I
2685.52050	14	13	e	13	13	e	0.8	$2\nu_4 (A_1)$	I
2686.14103	13	0	a_2	12	0	a_1	16.9	$2\nu_4 (A_1)$	I
2686.15231	13	5	e	12	5	e	5.7	$2\nu_4 (A_1)$	I
2686.15768	13	6	a_1/a_2	12	6	a_1/a_2	9.0	$2\nu_4 (A_1)$	I
2686.16426	13	7	e	12	7	e	4.1	$2\nu_4 (A_1)$	I
2686.17175	13	8	e	12	8	e	3.6	$2\nu_4 (A_1)$	I
2686.18046	13	9	a_1/a_2	12	9	a_1/a_2	6.3	$2\nu_4 (A_1)$	I

Table A1 (cont.)

$\tilde{\nu}_{\text{obs.}} / \text{cm}^{-1}$	J''	K''	γ''	J	K	γ	$\lg(I_0/I)/10^{-2}$	Band	Spectrum
2686.19012	13	10	e	12	10	e	2.5	$2\nu_4 (A_1)$	I
2686.20087	13	11	e	12	11	e	2.1	$2\nu_4 (A_1)$	I
2686.21235	13	12	a_1/a_2	12	12	a_1/a_2	1.7	$2\nu_4 (A_1)$	I
2686.84425	12	0	a_1	11	0	a_2	16.8	$2\nu_4 (A_1)$	I
2686.85555	12	5	e	11	5	e	5.1	$2\nu_4 (A_1)$	I
2686.86097	12	6	a_1/a_2	11	6	a_1/a_2	8.1	$2\nu_4 (A_1)$	I
2686.86747	12	7	e	11	7	e	3.7	$2\nu_4 (A_1)$	I
2686.87535	12	8	e	11	8	e	3.3	$2\nu_4 (A_1)$	I
2686.88402	12	9	a_1/a_2	11	9	a_1/a_2	4.9	$2\nu_4 (A_1)$	I
2686.89411	12	10	e	11	10	e	1.6	$2\nu_4 (A_1)$	I
2686.90445	12	11	e	11	11	e	0.9	$2\nu_4 (A_1)$	I
2687.54608	11	0	a_2	10	0	a_1	16.0	$2\nu_4 (A_1)$	I
2687.55794	11	5	e	10	5	e	4.7	$2\nu_4 (A_1)$	I
2687.56306	11	6	a_1/a_2	10	6	a_1/a_2	7.8	$2\nu_4 (A_1)$	I
2687.56977	11	7	e	10	7	e	3.2	$2\nu_4 (A_1)$	I
2687.57737	11	8	e	10	8	e	2.7	$2\nu_4 (A_1)$	I
2687.58616	11	9	a_1/a_2	10	9	a_1/a_2	3.5	$2\nu_4 (A_1)$	I
2687.59567	11	10	e	10	10	e	1.9	$2\nu_4 (A_1)$	I
2688.24720	10	0	a_1	9	0	a_2	15.0	$2\nu_4 (A_1)$	I
2688.26394	10	6	a_1/a_2	9	6	a_1/a_2	6.4	$2\nu_4 (A_1)$	I
2688.27061	10	7	e	9	7	e	2.4	$2\nu_4 (A_1)$	I
2688.27896	10	8	e	9	8	e	2.0	$2\nu_4 (A_1)$	I
2688.28676	10	9	a_1/a_2	9	9	a_1/a_2	2.2	$2\nu_4 (A_1)$	I
2688.94691	9	0	a_1	8	0	a_2	13.3	$2\nu_4 (A_1)$	I
2688.96386	9	6	a_1/a_2	8	6	a_1/a_2	5.2	$2\nu_4 (A_1)$	I
2688.97029	9	7	e	8	7	e	2.0	$2\nu_4 (A_1)$	I
2689.64514	8	0	a_1	7	0	a_2	12.0	$2\nu_4 (A_1)$	I
2689.66237	8	6	a_1/a_2	7	6	a_1/a_2	4.0	$2\nu_4 (A_1)$	I
2690.34238	7	0	a_2	6	0	a_1	10.7	$2\nu_4 (A_1)$	I
2690.35959	7	6	a_1	6	6	a_2	2.2	$2\nu_4 (A_1)$	I
2691.03876	6	0	a_1	5	0	a_2	10.0	$2\nu_4 (A_1)$	I
2691.73319	5	0	a_2	4	0	a_1	5.3	$2\nu_4 (A_1)$	I
2694.57683	34	17	e	34	17	e	16.6	$2\nu_4 (A_1)$	I
2695.16098	8	6	a_1/a_2	8	6	a_1/a_2	48.9	$2\nu_4 (A_1)$	I
2697.93006	3	0	a_2	4	0	a_1	7.6	$2\nu_4 (A_1)$	I
2698.61251	4	0	a_1	5	0	a_2	7.2	$2\nu_4 (A_1)$	I
2699.29361	5	0	a_2	6	0	a_1	8.7	$2\nu_4 (A_1)$	I
2699.97296	6	0	a_1	7	0	a_2	9.9	$2\nu_4 (A_1)$	I
2699.99043	6	6	a_1/a_2	7	6	a_1/a_2	2.6	$2\nu_4 (A_1)$	I
2700.65121	7	0	a_1	8	0	a_2	11.5	$2\nu_4 (A_1)$	I
2700.66898	7	6	a_1/a_2	8	6	a_1/a_2	3.8	$2\nu_4 (A_1)$	I
2701.32789	8	0	a_1	9	0	a_2	12.8	$2\nu_4 (A_1)$	I
2701.34593	8	6	a_1/a_2	9	6	a_1/a_2	4.9	$2\nu_4 (A_1)$	I
2701.35239	8	7	e	9	7	e	1.9	$2\nu_4 (A_1)$	I
2702.00343	9	0	a_2	10	0	a_1	14.5	$2\nu_4 (A_1)$	I
2702.01583	9	5	e	10	5	e	4.0	$2\nu_4 (A_1)$	I
2702.02134	9	6	a_1/a_2	10	6	a_1/a_2	6.6	$2\nu_4 (A_1)$	I
2702.02846	9	7	e	10	7	e	2.6	$2\nu_4 (A_1)$	I

Table A1 (cont.)

$\tilde{\nu}_{\text{obs.}} / \text{cm}^{-1}$	J''	K''	γ''	J	K	γ	$\lg(I_0/I)/10^{-2}$	Band	Spectrum
2702.04504	9	9	a_1/a_2	10	9	a_1/a_2	1.9	$2\nu_4 (A_1)$	I
2702.67774	10	0	a_1	11	0	a_2	14.5	$2\nu_4 (A_1)$	I
2702.68937	10	5	e	11	5	e	4.3	$2\nu_4 (A_1)$	I
2702.69540	10	6	a_1/a_2	11	6	a_1/a_2	7.4	$2\nu_4 (A_1)$	I
2702.71052	10	8	e	11	8	e	2.8	$2\nu_4 (A_1)$	I
2702.71943	10	9	a_1/a_2	11	9	a_1/a_2	3.3	$2\nu_4 (A_1)$	I
2702.72988	10	10	e	11	10	e	1.0	$2\nu_4 (A_1)$	I
2703.08349	40	15	a_1/a_2	39	14	a_1/a_2	1.3	$2\nu_4 (E)$	I
2703.35020	11	0	a_2	12	0	a_1	15.5	$2\nu_4 (A_1)$	I
2703.36803	11	6	a_1/a_2	12	6	a_1/a_2	14.8	$2\nu_4 (A_1)$	I
2703.37503	11	7	e	12	7	e	3.8	$2\nu_4 (A_1)$	I
2703.39259	11	9	a_1/a_2	12	9	a_1/a_2	4.7	$2\nu_4 (A_1)$	I
2703.40274	11	10	e	12	10	e	1.7	$2\nu_4 (A_1)$	I
2703.41331	11	11	e	12	11	e	1.6	$2\nu_4 (A_1)$	I
2703.82447	39	15	a_1/a_2	38	14	a_1/a_2	1.5	$2\nu_4 (E)$	I
2704.02148	12	0	a_1	13	0	a_2	16.3	$2\nu_4 (A_1)$	I
2704.03367	12	5	e	13	5	e	5.0	$2\nu_4 (A_1)$	I
2704.03944	12	6	a_1/a_2	13	6	a_1/a_2	8.4	$2\nu_4 (A_1)$	I
2704.04644	12	7	e	13	7	e	4.0	$2\nu_4 (A_1)$	I
2704.05469	12	8	e	13	8	e	3.5	$2\nu_4 (A_1)$	I
2704.07394	12	10	e	13	10	e	2.4	$2\nu_4 (A_1)$	I
2704.69169	13	0	a_2	14	0	a_1	16.4	$2\nu_4 (A_1)$	I
2704.70369	13	5	e	14	5	e	5.8	$2\nu_4 (A_1)$	I
2704.70932	13	6	a_1/a_2	14	6	a_1/a_2	9.0	$2\nu_4 (A_1)$	I
2704.71613	13	7	e	14	7	e	4.3	$2\nu_4 (A_1)$	I
2704.72487	13	8	e	14	8	e	5.1	$2\nu_4 (A_1)$	I
2704.73356	13	9	a_1/a_2	14	9	a_1/a_2	6.9	$2\nu_4 (A_1)$	I
2704.74460	13	10	e	14	10	e	7.8	$2\nu_4 (A_1)$	I
2704.75559	13	11	e	14	11	e	2.3	$2\nu_4 (A_1)$	I
2704.76745	13	12	a_1/a_2	14	12	a_1/a_2	3.2	$2\nu_4 (A_1)$	I
2704.78183	13	13	e	14	13	e	1.2	$2\nu_4 (A_1)$	I
2705.36009	14	0	a_1	15	0	a_2	16.7	$2\nu_4 (A_1)$	I
2705.37159	14	5	e	15	5	e	6.2	$2\nu_4 (A_1)$	I
2705.37802	14	6	a_1/a_2	15	6	a_1/a_2	10.7	$2\nu_4 (A_1)$	I
2705.38495	14	7	e	15	7	e	4.7	$2\nu_4 (A_1)$	I
2705.39307	14	8	e	15	8	e	4.2	$2\nu_4 (A_1)$	I
2705.40223	14	9	a_1/a_2	15	9	a_1/a_2	7.4	$2\nu_4 (A_1)$	I
2705.41239	14	10	e	15	10	e	3.6	$2\nu_4 (A_1)$	I
2705.42377	14	11	e	15	11	e	3.1	$2\nu_4 (A_1)$	I
2705.43654	14	12	a_1/a_2	15	12	a_1/a_2	4.5	$2\nu_4 (A_1)$	I
2705.45046	14	13	e	15	13	e	2.0	$2\nu_4 (A_1)$	I
2706.02707	15	0	a_2	16	0	a_1	16.7	$2\nu_4 (A_1)$	I
2706.04500	15	6	a_1/a_2	16	6	a_1/a_2	10.2	$2\nu_4 (A_1)$	I
2706.05195	15	7	e	16	7	e	4.9	$2\nu_4 (A_1)$	I
2706.05983	15	8	e	16	8	e	4.5	$2\nu_4 (A_1)$	I
2706.06931	15	9	a_1/a_2	16	9	a_1/a_2	8.0	$2\nu_4 (A_1)$	I
2706.07976	15	10	e	16	10	e	3.6	$2\nu_4 (A_1)$	I
2706.09087	15	11	e	16	11	e	3.4	$2\nu_4 (A_1)$	I

Table A1 (cont.)

$\tilde{\nu}_{\text{obs.}} / \text{cm}^{-1}$	J''	K''	γ''	J	K	γ	$\lg(I_0/I)/10^{-2}$	Band	Spectrum
2706.10364	15	12	a_1/a_2	16	12	a_1/a_2	5.6	$2\nu_4 (A_1)$	I
2706.13134	15	14	e	16	14	e	1.7	$2\nu_4 (A_1)$	I
2706.14766	15	15	a_1/a_2	16	15	a_1/a_2	1.8	$2\nu_4 (A_1)$	I
2706.69259	16	0	a_1	17	0	a_2	16.8	$2\nu_4 (A_1)$	I
2706.70496	16	5	e	17	5	e	6.8	$2\nu_4 (A_1)$	I
2706.71073	16	6	a_1/a_2	17	6	a_1/a_2	10.0	$2\nu_4 (A_1)$	I
2706.71778	16	7	e	17	7	e	4.9	$2\nu_4 (A_1)$	I
2706.72590	16	8	e	17	8	e	4.7	$2\nu_4 (A_1)$	I
2706.73521	16	9	a_1/a_2	17	9	a_1/a_2	8.5	$2\nu_4 (A_1)$	I
2706.75686	16	11	e	17	11	e	3.8	$2\nu_4 (A_1)$	I
2706.76899	16	12	a_1/a_2	17	12	a_1/a_2	14.1	$2\nu_4 (A_1)$	I
2706.77786	35	15	a_1/a_2	34	14	a_1/a_2	2.7	$2\nu_4 (E)$	I
2706.78319	16	13	e	17	13	e	2.8	$2\nu_4 (A_1)$	I
2706.79755	16	14	e	17	14	e	2.1	$2\nu_4 (A_1)$	I
2706.81304	16	15	a_1/a_2	17	15	a_1/a_2	3.3	$2\nu_4 (A_1)$	I
2706.83050	16	16	e	17	16	e	1.2	$2\nu_4 (A_1)$	I
2707.27761	36	12	a_1/a_2	35	11	a_1/a_2	2.1	$2\nu_4 (E)$	I
2707.35672	17	0	a_2	18	0	a_1	16.9	$2\nu_4 (A_1)$	I
2707.36877	17	5	e	18	5	e	6.3	$2\nu_4 (A_1)$	I
2707.37497	17	6	a_1/a_2	18	6	a_1/a_2	9.9	$2\nu_4 (A_1)$	I
2707.38183	17	7	e	18	7	e	5.4	$2\nu_4 (A_1)$	I
2707.38997	17	8	e	18	8	e	4.9	$2\nu_4 (A_1)$	I
2707.39937	17	9	a_1/a_2	18	9	a_1/a_2	8.7	$2\nu_4 (A_1)$	I
2707.40984	17	10	e	18	10	e	4.3	$2\nu_4 (A_1)$	I
2707.43352	17	12	a_1/a_2	18	12	a_1/a_2	7.6	$2\nu_4 (A_1)$	I
2707.44729	17	13	e	18	13	e	3.1	$2\nu_4 (A_1)$	I
2707.46239	17	14	e	18	14	e	2.6	$2\nu_4 (A_1)$	I
2707.47781	17	15	a_1/a_2	18	15	a_1/a_2	4.2	$2\nu_4 (A_1)$	I
2707.51279	17	17	e	18	17	e	4.7	$2\nu_4 (A_1)$	I
2707.51279	34	15	a_1/a_2	33	14	a_1/a_2	4.7	$2\nu_4 (E)$	I
2708.01938	18	0	a_1	19	0	a_2	18.7	$2\nu_4 (A_1)$	I
2708.03190	18	5	e	19	5	e	5.8	$2\nu_4 (A_1)$	I
2708.03780	18	6	a_1/a_2	19	6	a_1/a_2	10.3	$2\nu_4 (A_1)$	I
2708.04478	18	7	e	19	7	e	5.8	$2\nu_4 (A_1)$	I
2708.05289	18	8	e	19	8	e	4.9	$2\nu_4 (A_1)$	I
2708.06243	18	9	a_1/a_2	19	9	a_1/a_2	9.2	$2\nu_4 (A_1)$	I
2708.07222	18	10	e	19	10	e	4.4	$2\nu_4 (A_1)$	I
2708.08399	18	11	e	19	11	e	4.2	$2\nu_4 (A_1)$	I
2708.09663	18	12	a_1/a_2	19	12	a_1/a_2	7.3	$2\nu_4 (A_1)$	I
2708.11038	18	13	e	19	13	e	3.7	$2\nu_4 (A_1)$	I
2708.12465	18	14	e	19	14	e	3.2	$2\nu_4 (A_1)$	I
2708.14078	18	15	a_1/a_2	19	15	a_1/a_2	4.8	$2\nu_4 (A_1)$	I
2708.15773	18	16	e	19	16	e	3.7	$2\nu_4 (A_1)$	I
2708.17645	18	17	e	19	17	e	2.0	$2\nu_4 (A_1)$	I
2708.24665	33	15	a_1/a_2	32	14	a_1/a_2	3.1	$2\nu_4 (E)$	I
2708.68094	19	0	a_2	20	0	a_1	16.5	$2\nu_4 (A_1)$	I
2708.69310	19	5	e	20	5	e	5.7	$2\nu_4 (A_1)$	I
2708.69913	19	6	a_1/a_2	20	6	a_1/a_2	10.2	$2\nu_4 (A_1)$	I

Table A1 (cont.)

$\tilde{\nu}_{\text{obs.}} / \text{cm}^{-1}$	J''	K''	γ''	J	K	γ	$\lg(I_0/I)/10^{-2}$	Band	Spectrum
2708.72368	19	9	a_1/a_2	20	9	a_1/a_2	9.3	$2\nu_4 (A_1)$	I
2708.73401	19	10	e	20	10	e	4.8	$2\nu_4 (A_1)$	I
2708.74543	19	11	e	20	11	e	4.5	$2\nu_4 (A_1)$	I
2708.75791	19	12	a_1/a_2	20	12	a_1/a_2	8.9	$2\nu_4 (A_1)$	I
2708.77195	19	13	e	20	13	e	3.7	$2\nu_4 (A_1)$	I
2708.78670	19	14	e	20	14	e	3.4	$2\nu_4 (A_1)$	I
2708.80223	19	15	a_1/a_2	20	15	a_1/a_2	5.7	$2\nu_4 (A_1)$	I
2708.81817	19	16	e	20	16	e	4.3	$2\nu_4 (A_1)$	I
2708.83741	19	17	e	20	17	e	2.5	$2\nu_4 (A_1)$	I
2708.85656	19	18	a_1/a_2	20	18	a_1/a_2	4.2	$2\nu_4 (A_1)$	I
2708.97898	32	15	a_1/a_2	31	14	a_1/a_2	3.6	$2\nu_4 (E)$	I
2709.34072	20	0	a_1	21	0	a_2	15.9	$2\nu_4 (A_1)$	I
2709.35892	20	6	a_1/a_2	21	6	a_1/a_2	10.4	$2\nu_4 (A_1)$	I
2709.36596	20	7	e	21	7	e	5.4	$2\nu_4 (A_1)$	I
2709.37437	20	8	e	21	8	e	5.2	$2\nu_4 (A_1)$	I
2709.38366	20	9	a_1/a_2	21	9	a_1/a_2	9.2	$2\nu_4 (A_1)$	I
2709.39363	20	10	e	21	10	e	6.1	$2\nu_4 (A_1)$	I
2709.40557	20	11	e	21	11	e	4.6	$2\nu_4 (A_1)$	I
2709.41817	20	12	a_1/a_2	21	12	a_1/a_2	8.6	$2\nu_4 (A_1)$	I
2709.43210	20	13	e	21	13	e	4.0	$2\nu_4 (A_1)$	I
2709.44645	20	14	e	21	14	e	3.8	$2\nu_4 (A_1)$	I
2709.46249	20	15	a_1/a_2	21	15	a_1/a_2	6.6	$2\nu_4 (A_1)$	I
2709.47881	20	16	e	21	16	e	3.4	$2\nu_4 (A_1)$	I
2709.49058	33	12	a_1/a_2	32	11	a_1/a_2	2.9	$2\nu_4 (E)$	I
2709.49782	20	17	e	21	17	e	4.0	$2\nu_4 (A_1)$	I
2709.51664	20	18	a_1/a_2	21	18	a_1/a_2	5.7	$2\nu_4 (A_1)$	I
2709.53740	20	19	e	21	19	e	1.8	$2\nu_4 (A_1)$	I
2709.55879	20	20	e	21	20	e	1.6	$2\nu_4 (A_1)$	I
2709.71038	31	15	a_1/a_2	30	14	a_1/a_2	3.9	$2\nu_4 (E)$	I
2709.99925	21	0	a_2	22	0	a_1	16.6	$2\nu_4 (A_1)$	I
2710.01736	21	6	a_1/a_2	22	6	a_1/a_2	10.5	$2\nu_4 (A_1)$	I
2710.02524	21	7	e	22	7	e	6.6	$2\nu_4 (A_1)$	I
2710.03305	21	8	e	22	8	e	5.8	$2\nu_4 (A_1)$	I
2710.04215	21	9	a_1/a_2	22	9	a_1/a_2	9.4	$2\nu_4 (A_1)$	I
2710.05217	21	10	e	22	10	e	5.2	$2\nu_4 (A_1)$	I
2710.06406	21	11	e	22	11	e	4.6	$2\nu_4 (A_1)$	I
2710.07680	21	12	a_1/a_2	22	12	a_1/a_2	9.1	$2\nu_4 (A_1)$	I
2710.09058	21	13	e	22	13	e	5.2	$2\nu_4 (A_1)$	I
2710.10533	21	14	e	22	14	e	4.5	$2\nu_4 (A_1)$	I
2710.12119	21	15	a_1/a_2	22	15	a_1/a_2	8.0	$2\nu_4 (A_1)$	I
2710.13764	21	16	e	22	16	e	3.7	$2\nu_4 (A_1)$	I
2710.15628	21	17	e	22	17	e	4.8	$2\nu_4 (A_1)$	I
2710.17518	21	18	a_1/a_2	22	18	a_1/a_2	5.6	$2\nu_4 (A_1)$	I
2710.19596	21	19	e	22	19	e	2.5	$2\nu_4 (A_1)$	I
2710.22379	32	12	a_1/a_2	31	11	a_1/a_2	3.0	$2\nu_4 (E)$	I
2710.44093	30	15	a_1/a_2	29	14	a_1/a_2	4.8	$2\nu_4 (E)$	I
2710.53966	31	13	e	30	12	e	1.6	$2\nu_4 (E)$	I
2710.66822	22	5	e	23	5	e	5.4	$2\nu_4 (A_1)$	I

Table A1 (cont.)

$\tilde{\nu}_{\text{obs.}} / \text{cm}^{-1}$	J''	K''	γ''	J	K	γ	$\lg(I_0/I)/10^{-2}$	Band	Spectrum
2710.67441	22	6	a_1/a_2	23	6	a_1/a_2	9.5	$2\nu_4 (A_1)$	I
2710.68173	22	7	e	23	7	e	4.6	$2\nu_4 (A_1)$	I
2710.68993	22	8	e	23	8	e	4.8	$2\nu_4 (A_1)$	I
2710.69926	22	9	a_1/a_2	23	9	a_1/a_2	9.0	$2\nu_4 (A_1)$	I
2710.70947	22	10	e	23	10	e	4.4	$2\nu_4 (A_1)$	I
2710.72112	22	11	e	23	11	e	4.8	$2\nu_4 (A_1)$	I
2710.73362	22	12	a_1/a_2	23	12	a_1/a_2	7.9	$2\nu_4 (A_1)$	I
2710.74769	22	13	e	23	13	e	5.0	$2\nu_4 (A_1)$	I
2710.76235	22	14	e	23	14	e	3.7	$2\nu_4 (A_1)$	I
2710.77829	22	15	a_1/a_2	23	15	a_1/a_2	6.9	$2\nu_4 (A_1)$	I
2710.79586	22	16	e	23	16	e	3.4	$2\nu_4 (A_1)$	I
2710.81360	22	17	e	23	17	e	3.1	$2\nu_4 (A_1)$	I
2710.83281	22	18	a_1/a_2	23	18	a_1/a_2	5.5	$2\nu_4 (A_1)$	I
2710.85449	30	14	e	29	13	e	3.9	$2\nu_4 (E)$	I
2710.87494	22	20	e	23	20	e	2.4	$2\nu_4 (A_1)$	I
2710.92070	22	22	e	23	22	e	1.5	$2\nu_4 (A_1)$	I
2710.95514	31	12	a_1/a_2	30	11	a_1/a_2	3.6	$2\nu_4 (E)$	I
2711.16929	29	15	a_1/a_2	28	14	a_1/a_2	4.3	$2\nu_4 (E)$	I
2711.27009	30	13	e	29	12	e	1.8	$2\nu_4 (E)$	I
2711.31158	23	0	a_2	24	0	a_1	14.4	$2\nu_4 (A_1)$	I
2711.32390	23	5	e	24	5	e	5.8	$2\nu_4 (A_1)$	I
2711.32994	23	6	a_1/a_2	24	6	a_1/a_2	9.4	$2\nu_4 (A_1)$	I
2711.33710	23	7	e	24	7	e	4.7	$2\nu_4 (A_1)$	I
2711.34511	23	8	e	24	8	e	4.8	$2\nu_4 (A_1)$	I
2711.35460	23	9	a_1/a_2	24	9	a_1/a_2	8.6	$2\nu_4 (A_1)$	I
2711.36509	23	10	e	24	10	e	4.5	$2\nu_4 (A_1)$	I
2711.37655	23	11	e	24	11	e	4.1	$2\nu_4 (A_1)$	I
2711.38913	23	12	a_1/a_2	24	12	a_1/a_2	14.1	$2\nu_4 (A_1)$	I
2711.40319	23	13	e	24	13	e	3.9	$2\nu_4 (A_1)$	I
2711.41787	23	14	e	24	14	e	4.0	$2\nu_4 (A_1)$	I
2711.43388	23	15	a_1/a_2	24	15	a_1/a_2	6.9	$2\nu_4 (A_1)$	I
2711.45137	23	16	e	24	16	e	3.8	$2\nu_4 (A_1)$	I
2711.46881	23	17	e	24	17	e	3.4	$2\nu_4 (A_1)$	I
2711.48792	23	18	a_1/a_2	24	18	a_1/a_2	7.1	$2\nu_4 (A_1)$	I
2711.50908	23	19	e	24	19	e	2.7	$2\nu_4 (A_1)$	I
2711.53038	23	20	e	24	20	e	3.4	$2\nu_4 (A_1)$	I
2711.55295	23	21	a_1/a_2	24	21	a_1/a_2	3.6	$2\nu_4 (A_1)$	I
2711.58408	29	14	e	28	13	e	2.2	$2\nu_4 (E)$	I
2711.60166	23	23	e	24	23	e	1.0	$2\nu_4 (A_1)$	I
2711.68487	30	12	a_1/a_2	29	11	a_1/a_2	3.6	$2\nu_4 (E)$	I
2711.89688	28	15	a_1/a_2	27	14	a_1/a_2	5.3	$2\nu_4 (E)$	I
2711.96583	24	0	a_1	25	0	a_2	13.8	$2\nu_4 (A_1)$	I
2711.97816	24	5	e	25	5	e	5.0	$2\nu_4 (A_1)$	I
2711.98384	24	6	a_1/a_2	25	6	a_1/a_2	8.8	$2\nu_4 (A_1)$	I
2711.99100	24	7	e	25	7	e	4.5	$2\nu_4 (A_1)$	I
2711.99925	24	8	e	25	8	e	6.4	$2\nu_4 (A_1)$	I
2712.00875	24	9	a_1/a_2	25	9	a_1/a_2	9.0	$2\nu_4 (A_1)$	I
2712.01950	24	10	e	25	10	e	4.7	$2\nu_4 (A_1)$	I

Table A1 (cont.)

$\tilde{\nu}_{\text{obs.}} / \text{cm}^{-1}$	J''	K''	γ''	J	K	γ	$\lg(I_0/I)/10^{-2}$	Band	Spectrum
2712.03085	24	11	e	25	11	e	4.4	$2\nu_4 (A_1)$	I
2712.04340	24	12	a_1/a_2	25	12	a_1/a_2	7.7	$2\nu_4 (A_1)$	I
2712.05733	24	13	e	25	13	e	3.8	$2\nu_4 (A_1)$	I
2712.07179	24	14	e	25	14	e	3.6	$2\nu_4 (A_1)$	I
2712.08809	24	15	a_1/a_2	25	15	a_1/a_2	6.8	$2\nu_4 (A_1)$	I
2712.10478	24	16	e	25	16	e	4.0	$2\nu_4 (A_1)$	I
2712.12349	24	17	e	25	17	e	3.3	$2\nu_4 (A_1)$	I
2712.14283	24	18	a_1/a_2	25	18	a_1/a_2	7.1	$2\nu_4 (A_1)$	I
2712.16342	24	19	e	25	19	e	2.6	$2\nu_4 (A_1)$	I
2712.20778	24	21	a_1/a_2	25	21	a_1/a_2	6.5	$2\nu_4 (A_1)$	I
2712.25678	24	23	e	25	23	e	1.4	$2\nu_4 (A_1)$	I
2712.28200	24	24	a_1/a_2	25	24	a_1/a_2	1.3	$2\nu_4 (A_1)$	I
2712.31084	28	14	e	27	13	e	2.8	$2\nu_4 (E)$	I
2712.41513	29	12	a_1/a_2	28	11	a_1/a_2	3.5	$2\nu_4 (E)$	I
2712.61890	25	0	a_2	26	0	a_1	15.1	$2\nu_4 (A_1)$	I
2712.63631	25	6	a_1/a_2	26	6	a_1/a_2	8.7	$2\nu_4 (A_1)$	I
2712.64360	25	7	e	26	7	e	4.3	$2\nu_4 (A_1)$	I
2712.65177	25	8	e	26	8	e	4.4	$2\nu_4 (A_1)$	I
2712.66122	25	9	a_1/a_2	26	9	a_1/a_2	8.0	$2\nu_4 (A_1)$	I
2712.67190	25	10	e	26	10	e	4.0	$2\nu_4 (A_1)$	I
2712.68341	25	11	e	26	11	e	4.1	$2\nu_4 (A_1)$	I
2712.69612	25	12	a_1/a_2	26	12	a_1/a_2	7.6	$2\nu_4 (A_1)$	I
2712.70981	25	13	e	26	13	e	3.8	$2\nu_4 (A_1)$	I
2712.72505	25	14	e	26	14	e	5.3	$2\nu_4 (A_1)$	I
2712.74070	25	15	a_1/a_2	26	15	a_1/a_2	7.2	$2\nu_4 (A_1)$	I
2712.75791	25	16	e	26	16	e	3.5	$2\nu_4 (A_1)$	I
2712.77633	25	17	e	26	17	e	3.4	$2\nu_4 (A_1)$	I
2712.79567	25	18	a_1/a_2	26	18	a_1/a_2	7.1	$2\nu_4 (A_1)$	I
2712.81610	25	19	e	26	19	e	3.2	$2\nu_4 (A_1)$	I
2712.86044	25	21	a_1/a_2	26	21	a_1/a_2	4.6	$2\nu_4 (A_1)$	I
2712.88416	25	22	e	26	22	e	2.5	$2\nu_4 (A_1)$	I
2712.90911	25	23	e	26	23	e	1.8	$2\nu_4 (A_1)$	I
2712.93536	25	24	a_1/a_2	26	24	a_1/a_2	2.4	$2\nu_4 (A_1)$	I
2712.96143	25	25	e	26	25	e	2.0	$2\nu_4 (A_1)$	I
2713.03751	27	14	e	26	13	e	2.5	$2\nu_4 (E)$	I
2713.14245	28	12	a_1/a_2	27	11	a_1/a_2	3.9	$2\nu_4 (E)$	I
2713.26885	26	0	a_1	27	0	a_2	12.6	$2\nu_4 (A_1)$	I
2713.28153	26	5	e	27	5	e	4.4	$2\nu_4 (A_1)$	I
2713.28741	26	6	a_1/a_2	27	6	a_1/a_2	8.4	$2\nu_4 (A_1)$	I
2713.29399	26	7	e	27	7	e	5.0	$2\nu_4 (A_1)$	I
2713.30282	26	8	e	27	8	e	4.3	$2\nu_4 (A_1)$	I
2713.31219	26	9	a_1/a_2	27	9	a_1/a_2	7.9	$2\nu_4 (A_1)$	I
2713.32269	26	10	e	27	10	e	3.9	$2\nu_4 (A_1)$	I
2713.33435	26	11	e	27	11	e	3.8	$2\nu_4 (A_1)$	I
2713.34752	26	12	a_1/a_2	27	12	a_1/a_2	12.4	$2\nu_4 (A_1)$	I
2713.36104	26	13	e	27	13	e	4.4	$2\nu_4 (A_1)$	I
2713.37544	26	14	e	27	14	e	3.6	$2\nu_4 (A_1)$	I
2713.39200	26	15	a_1/a_2	27	15	a_1/a_2	6.9	$2\nu_4 (A_1)$	I

Table A1 (cont.)

$\tilde{\nu}_{\text{obs.}} / \text{cm}^{-1}$	J''	K''	γ''	J	K	γ	$\lg(I_0/I)/10^{-2}$	Band	Spectrum
2713.40908	26	16	e	27	16	e	3.8	$2\nu_4 (A_1)$	I
2713.44673	26	18	a_1/a_2	27	18	a_1/a_2	6.9	$2\nu_4 (A_1)$	I
2713.45248	27	13	e	26	12	e	3.5	$2\nu_4 (E)$	I
2713.46735	26	19	e	27	19	e	3.4	$2\nu_4 (A_1)$	I
2713.48854	26	20	e	27	20	e	2.8	$2\nu_4 (A_1)$	I
2713.51193	26	21	a_1/a_2	27	21	a_1/a_2	5.5	$2\nu_4 (A_1)$	I
2713.53577	26	22	e	27	22	e	2.8	$2\nu_4 (A_1)$	I
2713.58654	26	24	a_1/a_2	27	24	a_1/a_2	3.1	$2\nu_4 (A_1)$	I
2713.61393	26	25	e	27	25	e	1.4	$2\nu_4 (A_1)$	I
2713.66525	29	9	a_1/a_2	28	8	a_1/a_2	6.1	$2\nu_4 (E)$	I
2713.86901	27	12	a_1/a_2	26	11	a_1/a_2	4.4	$2\nu_4 (E)$	I
2713.91830	27	0	a_2	28	0	a_1	11.9	$2\nu_4 (A_1)$	I
2713.93100	27	5	e	28	5	e	4.3	$2\nu_4 (A_1)$	I
2713.93677	27	6	a_1/a_2	28	6	a_1/a_2	7.6	$2\nu_4 (A_1)$	I
2713.94382	27	7	e	28	7	e	4.1	$2\nu_4 (A_1)$	I
2713.95237	27	8	e	28	8	e	4.0	$2\nu_4 (A_1)$	I
2713.96162	27	9	a_1/a_2	28	9	a_1/a_2	7.3	$2\nu_4 (A_1)$	I
2713.97211	27	10	e	28	10	e	7.8	$2\nu_4 (A_1)$	I
2713.98365	27	11	e	28	11	e	3.7	$2\nu_4 (A_1)$	I
2713.99661	27	12	a_1/a_2	28	12	a_1/a_2	7.0	$2\nu_4 (A_1)$	I
2714.01052	27	13	e	28	13	e	3.8	$2\nu_4 (A_1)$	I
2714.02557	27	14	e	28	14	e	4.7	$2\nu_4 (A_1)$	I
2714.04157	27	15	a_1/a_2	28	15	a_1/a_2	6.6	$2\nu_4 (A_1)$	I
2714.05855	27	16	e	28	16	e	4.0	$2\nu_4 (A_1)$	I
2714.07239	25	15	a_1/a_2	24	14	a_1/a_2	6.6	$2\nu_4 (E)$	I
2714.07681	27	17	e	28	17	e	4.3	$2\nu_4 (A_1)$	I
2714.09675	27	18	a_1/a_2	28	18	a_1/a_2	8.3	$2\nu_4 (A_1)$	I
2714.11709	27	19	e	28	19	e	3.0	$2\nu_4 (A_1)$	I
2714.13863	27	20	e	28	20	e	3.1	$2\nu_4 (A_1)$	I
2714.16141	27	21	a_1/a_2	28	21	a_1/a_2	4.9	$2\nu_4 (A_1)$	I
2714.17843	26	13	e	25	12	e	2.8	$2\nu_4 (E)$	I
2714.18514	27	22	e	28	22	e	8.0	$2\nu_4 (A_1)$	I
2714.21158	27	23	e	28	23	e	3.5	$2\nu_4 (A_1)$	I
2714.23704	27	24	a_1/a_2	28	24	a_1/a_2	3.8	$2\nu_4 (A_1)$	I
2714.26429	27	25	e	28	25	e	1.6	$2\nu_4 (A_1)$	I
2714.32280	27	27	a_1/a_2	28	27	a_1/a_2	1.9	$2\nu_4 (A_1)$	I
2714.56614	28	0	a_1/a_2	29	0	a_1/a_2	11.1	$2\nu_4 (A_1)$	I
2714.57923	28	5	e	29	5	e	10.0	$2\nu_4 (A_1)$	I
2714.58453	28	6	a_1/a_2	29	6	a_1/a_2	7.3	$2\nu_4 (A_1)$	I
2714.59322	26	12	a_1/a_2	25	11	a_1/a_2	8.1	$2\nu_4 (E)$	I
2714.60026	28	8	e	29	8	e	3.9	$2\nu_4 (A_1)$	I
2714.60970	28	9	a_1/a_2	29	9	a_1/a_2	7.0	$2\nu_4 (A_1)$	I
2714.61988	28	10	e	29	10	e	3.6	$2\nu_4 (A_1)$	I
2714.63214	28	11	e	29	11	e	4.3	$2\nu_4 (A_1)$	I
2714.64458	28	12	a_1/a_2	29	12	a_1/a_2	6.6	$2\nu_4 (A_1)$	I
2714.65851	28	13	e	29	13	e	3.7	$2\nu_4 (A_1)$	I
2714.67308	28	14	e	29	14	e	3.7	$2\nu_4 (A_1)$	I
2714.68976	28	15	a_1/a_2	29	15	a_1/a_2	6.8	$2\nu_4 (A_1)$	I

Table A1 (cont.)

$\tilde{\nu}_{\text{obs.}} / \text{cm}^{-1}$	J''	K''	γ''	J	K	γ	$\lg(I_0/I)/10^{-2}$	Band	Spectrum
2714.72542	28	17	e	29	17	e	3.0	$2\nu_4 (A_1)$	I
2714.74484	28	18	a_1/a_2	29	18	a_1/a_2	6.3	$2\nu_4 (A_1)$	I
2714.76485	28	19	e	29	19	e	3.3	$2\nu_4 (A_1)$	I
2714.78742	28	20	e	29	20	e	3.3	$2\nu_4 (A_1)$	I
2714.79437	24	15	a_1/a_2	23	14	a_1/a_2	6.9	$2\nu_4 (E)$	I
2714.80949	28	21	a_1/a_2	29	21	a_1/a_2	5.0	$2\nu_4 (A_1)$	I
2714.83436	28	22	e	29	22	e	2.8	$2\nu_4 (A_1)$	I
2714.85860	28	23	e	29	23	e	2.1	$2\nu_4 (A_1)$	I
2714.88591	28	24	a_1/a_2	29	24	a_1/a_2	9.1	$2\nu_4 (A_1)$	I
2714.90150	25	13	e	24	12	e	2.7	$2\nu_4 (E)$	I
2714.91321	28	25	e	29	25	e	2.2	$2\nu_4 (A_1)$	I
2714.94158	28	26	e	29	26	e	2.4	$2\nu_4 (A_1)$	I
2714.97105	28	27	a_1/a_2	29	27	a_1/a_2	2.7	$2\nu_4 (A_1)$	I
2715.12256	27	9	a_1/a_2	26	8	a_1/a_2	3.6	$2\nu_4 (E)$	I
2715.21187	29	0	a_2	30	0	a_1	10.9	$2\nu_4 (A_1)$	I
2715.22498	29	5	e	30	5	e	3.9	$2\nu_4 (A_1)$	I
2715.23098	29	6	a_1/a_2	30	6	a_1/a_2	7.0	$2\nu_4 (A_1)$	I
2715.23874	29	7	e	30	7	e	4.0	$2\nu_4 (A_1)$	I
2715.24666	29	8	e	30	8	e	3.6	$2\nu_4 (A_1)$	I
2715.25614	29	9	a_1/a_2	30	9	a_1/a_2	6.3	$2\nu_4 (A_1)$	I
2715.26653	29	10	e	30	10	e	3.7	$2\nu_4 (A_1)$	I
2715.27829	29	11	e	30	11	e	3.4	$2\nu_4 (A_1)$	I
2715.29115	29	12	a_1/a_2	30	12	a_1/a_2	6.5	$2\nu_4 (A_1)$	I
2715.30516	29	13	e	30	13	e	4.2	$2\nu_4 (A_1)$	I
2715.31826	25	12	a_1/a_2	24	11	a_1/a_2	6.8	$2\nu_4 (E)$	I
2715.33614	29	15	a_1/a_2	30	15	a_1/a_2	6.1	$2\nu_4 (A_1)$	I
2715.35359	29	16	e	30	16	e	3.1	$2\nu_4 (A_1)$	I
2715.37163	29	17	e	30	17	e	3.4	$2\nu_4 (A_1)$	I
2715.39134	29	18	a_1/a_2	30	18	a_1/a_2	6.3	$2\nu_4 (A_1)$	I
2715.41051	29	19	e	30	19	e	3.0	$2\nu_4 (A_1)$	I
2715.43547	29	20	e	30	20	e	2.9	$2\nu_4 (A_1)$	I
2715.45693	29	21	a_1/a_2	30	21	a_1/a_2	5.1	$2\nu_4 (A_1)$	I
2715.50578	29	23	e	30	23	e	2.5	$2\nu_4 (A_1)$	I
2715.53256	29	24	a_1/a_2	30	24	a_1/a_2	4.8	$2\nu_4 (A_1)$	I
2715.55928	29	25	e	30	25	e	1.9	$2\nu_4 (A_1)$	I
2715.59006	29	26	e	30	26	e	1.8	$2\nu_4 (A_1)$	I
2715.62387	24	13	e	23	12	e	3.0	$2\nu_4 (E)$	I
2715.64831	29	28	e	30	28	e	1.0	$2\nu_4 (A_1)$	I
2715.66804	38	11	e	37	12	e	0.5	$2\nu_4 (E)$	I
2715.84844	26	9	a_1/a_2	25	8	a_1/a_2	3.9	$2\nu_4 (E)$	I
2715.85738	30	0	a_1	31	0	a_2	9.5	$2\nu_4 (A_1)$	I
2715.87596	30	6	a_1/a_2	31	6	a_1/a_2	6.3	$2\nu_4 (A_1)$	I
2715.88321	30	7	e	31	7	e	3.4	$2\nu_4 (A_1)$	I
2715.89162	30	8	e	31	8	e	3.8	$2\nu_4 (A_1)$	I
2715.90100	30	9	a_1/a_2	31	9	a_1/a_2	6.2	$2\nu_4 (A_1)$	I
2715.91173	30	10	e	31	10	e	3.4	$2\nu_4 (A_1)$	I
2715.92291	30	11	e	31	11	e	3.6	$2\nu_4 (A_1)$	I
2715.93102	23	14	e	22	13	e	3.9	$2\nu_4 (E)$	I

Table A1 (cont.)

$\tilde{\nu}_{\text{obs.}} / \text{cm}^{-1}$	J''	K''	γ''	J	K	γ	$\lg(I_0/I)/10^{-2}$	Band	Spectrum
2715.93602	30	12	a_1/a_2	31	12	a_1/a_2	6.1	$2\nu_4 (A_1)$	I
2715.94994	30	13	e	31	13	e	3.2	$2\nu_4 (A_1)$	I
2715.96508	30	14	e	31	14	e	3.2	$2\nu_4 (A_1)$	I
2715.98108	30	15	a_1/a_2	31	15	a_1/a_2	6.0	$2\nu_4 (A_1)$	I
2715.99838	30	16	e	31	16	e	2.9	$2\nu_4 (A_1)$	I
2716.03381	30	18	a_1/a_2	31	18	a_1/a_2	5.9	$2\nu_4 (A_1)$	I
2716.04009	24	12	a_1/a_2	23	11	a_1/a_2	6.6	$2\nu_4 (E)$	I
2716.05741	30	19	e	31	19	e	3.2	$2\nu_4 (A_1)$	I
2716.07938	30	20	e	31	20	e	2.6	$2\nu_4 (A_1)$	I
2716.10333	30	21	a_1/a_2	31	21	a_1/a_2	4.3	$2\nu_4 (A_1)$	I
2716.12572	30	22	e	31	22	e	2.6	$2\nu_4 (A_1)$	I
2716.17755	30	24	a_1/a_2	31	24	a_1/a_2	4.0	$2\nu_4 (A_1)$	I
2716.20527	30	25	e	31	25	e	2.5	$2\nu_4 (A_1)$	I
2716.23510	22	15	a_1/a_2	21	14	a_1/a_2	8.5	$2\nu_4 (E)$	I
2716.26346	30	27	a_1/a_2	31	27	a_1/a_2	3.3	$2\nu_4 (A_1)$	I
2716.29419	30	28	e	31	28	e	1.7	$2\nu_4 (A_1)$	I
2716.32595	30	29	e	31	29	e	1.3	$2\nu_4 (A_1)$	I
2716.34538	23	13	e	22	12	e	3.4	$2\nu_4 (E)$	I
2716.48312	41	18	a_1/a_2	40	19	a_1/a_2	0.5	$2\nu_4 (E)$	I
2716.50025	31	0	a_2	32	0	a_1	8.9	$2\nu_4 (A_1)$	I
2716.51323	31	5	e	32	5	e	3.3	$2\nu_4 (A_1)$	I
2716.51915	31	6	a_1/a_2	32	6	a_1/a_2	7.6	$2\nu_4 (A_1)$	I
2716.52650	31	7	e	32	7	e	3.0	$2\nu_4 (A_1)$	I
2716.53491	31	8	e	32	8	e	3.1	$2\nu_4 (A_1)$	I
2716.54497	31	9	a_1/a_2	32	9	a_1/a_2	8.1	$2\nu_4 (A_1)$	I
2716.55474	31	10	e	32	10	e	3.1	$2\nu_4 (A_1)$	I
2716.56661	31	11	e	32	11	e	3.1	$2\nu_4 (A_1)$	I
2716.57916	31	12	a_1/a_2	32	12	a_1/a_2	5.6	$2\nu_4 (A_1)$	I
2716.59304	31	13	e	32	13	e	2.9	$2\nu_4 (A_1)$	I
2716.60797	31	14	e	32	14	e	3.0	$2\nu_4 (A_1)$	I
2716.62407	31	15	a_1/a_2	32	15	a_1/a_2	5.6	$2\nu_4 (A_1)$	I
2716.64247	31	16	e	32	16	e	3.8	$2\nu_4 (A_1)$	I
2716.68013	31	18	a_1/a_2	32	18	a_1/a_2	5.8	$2\nu_4 (A_1)$	I
2716.70113	31	19	e	32	19	e	2.8	$2\nu_4 (A_1)$	I
2716.71269	36	10	e	35	11	e	1.2	$2\nu_4 (E)$	I
2716.72326	31	20	e	32	20	e	2.9	$2\nu_4 (A_1)$	I
2716.74575	31	21	a_1/a_2	32	21	a_1/a_2	5.0	$2\nu_4 (A_1)$	I
2716.76151	23	12	a_1/a_2	22	11	a_1/a_2	5.8	$2\nu_4 (E)$	I
2716.77025	31	22	e	32	22	e	2.6	$2\nu_4 (A_1)$	I
2716.79482	31	23	e	32	23	e	2.8	$2\nu_4 (A_1)$	I
2716.82116	31	24	a_1/a_2	32	24	a_1/a_2	5.7	$2\nu_4 (A_1)$	I
2716.90698	31	27	a_1/a_2	32	27	a_1/a_2	3.2	$2\nu_4 (A_1)$	I
2716.93841	31	28	e	32	28	e	1.5	$2\nu_4 (A_1)$	I
2716.95715	21	15	a_1/a_2	20	14	a_1/a_2	8.0	$2\nu_4 (E)$	I
2717.00374	31	30	a_1/a_2	32	30	a_1/a_2	1.9	$2\nu_4 (A_1)$	I
2717.03728	31	31	e	32	31	e	1.6	$2\nu_4 (A_1)$	I
2717.14227	32	0	a_1	33	0	a_2	19.6	$2\nu_4 (A_1)$	I
2717.15478	32	5	e	33	5	e	3.3	$2\nu_4 (A_1)$	I

Table A1 (cont.)

$\tilde{\nu}_{\text{obs.}} / \text{cm}^{-1}$	J''	K''	γ''	J	K	γ	$\lg(I_0/I)/10^{-2}$	Band	Spectrum
2717.16070	32	6	a_1/a_2	33	6	a_1/a_2	5.7	$2\nu_4 (A_1)$	I
2717.16827	32	7	e	33	7	e	2.8	$2\nu_4 (A_1)$	I
2717.17717	32	8	e	33	8	e	4.5	$2\nu_4 (A_1)$	I
2717.18583	32	9	a_1/a_2	33	9	a_1/a_2	5.4	$2\nu_4 (A_1)$	I
2717.19632	32	10	e	33	10	e	2.8	$2\nu_4 (A_1)$	I
2717.20815	32	11	e	33	11	e	2.7	$2\nu_4 (A_1)$	I
2717.22012	32	12	a_1/a_2	33	12	a_1/a_2	5.3	$2\nu_4 (A_1)$	I
2717.25284	32	14	e	33	14	e	2.8	$2\nu_4 (A_1)$	I
2717.26830	32	15	a_1/a_2	33	15	a_1/a_2	5.2	$2\nu_4 (A_1)$	I
2717.28970	32	16	e	33	16	e	2.7	$2\nu_4 (A_1)$	I
2717.29515	24	9	a_1/a_2	23	8	a_1/a_2	4.3	$2\nu_4 (E)$	I
2717.30288	32	17	e	33	17	e	2.5	$2\nu_4 (A_1)$	I
2717.32241	32	18	a_1/a_2	33	18	a_1/a_2	5.4	$2\nu_4 (A_1)$	I
2717.34309	32	19	e	33	19	e	3.1	$2\nu_4 (A_1)$	I
2717.38786	32	21	a_1/a_2	33	21	a_1/a_2	4.7	$2\nu_4 (A_1)$	I
2717.41221	32	22	e	33	22	e	2.5	$2\nu_4 (A_1)$	I
2717.43723	32	23	e	33	23	e	3.0	$2\nu_4 (A_1)$	I
2717.46357	32	24	a_1/a_2	33	24	a_1/a_2	4.8	$2\nu_4 (A_1)$	I
2717.48164	22	12	a_1/a_2	21	11	a_1/a_2	5.8	$2\nu_4 (E)$	I
2717.51988	32	26	e	33	26	e	2.0	$2\nu_4 (A_1)$	I
2717.54960	32	27	a_1/a_2	33	27	a_1/a_2	3.5	$2\nu_4 (A_1)$	I
2717.58084	32	28	e	33	28	e	1.6	$2\nu_4 (A_1)$	I
2717.64593	32	30	a_1/a_2	33	30	a_1/a_2	2.5	$2\nu_4 (A_1)$	I
2717.67921	20	15	a_1/a_2	19	14	a_1/a_2	9.1	$2\nu_4 (E)$	I
2717.78403	33	0	a_2	34	0	a_1	10.4	$2\nu_4 (A_1)$	I
2717.80081	33	6	a_1/a_2	34	6	a_1/a_2	6.0	$2\nu_4 (A_1)$	I
2717.80782	33	7	e	34	7	e	2.9	$2\nu_4 (A_1)$	I
2717.81647	33	8	e	34	8	e	2.7	$2\nu_4 (A_1)$	I
2717.82586	33	9	a_1/a_2	34	9	a_1/a_2	5.1	$2\nu_4 (A_1)$	I
2717.84780	33	11	e	34	11	e	3.0	$2\nu_4 (A_1)$	I
2717.89079	33	14	e	34	14	e	2.7	$2\nu_4 (A_1)$	I
2717.91270	33	15	a_1/a_2	34	15	a_1/a_2	4.6	$2\nu_4 (A_1)$	I
2717.94294	33	17	e	34	17	e	2.5	$2\nu_4 (A_1)$	I
2717.96279	33	18	a_1/a_2	34	18	a_1/a_2	5.7	$2\nu_4 (A_1)$	I
2717.98364	33	19	e	34	19	e	2.8	$2\nu_4 (A_1)$	I
2718.00532	33	20	e	34	20	e	2.5	$2\nu_4 (A_1)$	I
2718.01669	23	9	a_1/a_2	22	8	a_1/a_2	4.6	$2\nu_4 (E)$	I
2718.02840	33	21	a_1/a_2	34	21	a_1/a_2	4.8	$2\nu_4 (A_1)$	I
2718.05271	33	22	e	34	22	e	2.7	$2\nu_4 (A_1)$	I
2718.10415	33	24	a_1/a_2	34	24	a_1/a_2	4.1	$2\nu_4 (A_1)$	I
2718.13221	33	25	e	34	25	e	3.2	$2\nu_4 (A_1)$	I
2718.16012	33	26	e	34	26	e	2.7	$2\nu_4 (A_1)$	I
2718.19046	33	27	a_1/a_2	34	27	a_1/a_2	3.9	$2\nu_4 (A_1)$	I
2718.20031	21	12	a_1/a_2	20	11	a_1/a_2	6.7	$2\nu_4 (E)$	I
2718.22192	33	28	e	34	28	e	1.8	$2\nu_4 (A_1)$	I
2718.28828	33	30	a_1/a_2	34	30	a_1/a_2	2.6	$2\nu_4 (A_1)$	I
2718.35756	33	32	e	34	32	e	1.0	$2\nu_4 (A_1)$	I
2718.37741	19	15	a_1/a_2	18	14	a_1/a_2	8.5	$2\nu_4 (E)$	I

Table A1 (cont.)

$\tilde{\nu}_{\text{obs.}} / \text{cm}^{-1}$	J''	K''	γ''	J	K	γ	$\lg(I_0/I)/10^{-2}$	Band	Spectrum
2718.42066	34	0	a_1	35	0	a_2	7.1	$2\nu_4 (A_1)$	I
2718.43858	34	6	a_1/a_2	35	6	a_1/a_2	6.1	$2\nu_4 (A_1)$	I
2718.44661	34	7	e	35	7	e	2.7	$2\nu_4 (A_1)$	I
2718.45481	34	8	e	35	8	e	2.5	$2\nu_4 (A_1)$	I
2718.46415	34	9	a_1/a_2	35	9	a_1/a_2	5.1	$2\nu_4 (A_1)$	I
2718.47448	34	10	e	35	10	e	2.6	$2\nu_4 (A_1)$	I
2718.48850	34	11	e	35	11	e	2.5	$2\nu_4 (A_1)$	I
2718.50090	34	12	a_1/a_2	35	12	a_1/a_2	7.2	$2\nu_4 (A_1)$	I
2718.51660	34	13	e	35	13	e	2.8	$2\nu_4 (A_1)$	I
2718.54630	34	15	a_1/a_2	35	15	a_1/a_2	5.8	$2\nu_4 (A_1)$	I
2718.56265	24	6	a_1/a_2	23	5	a_1/a_2	5.8	$2\nu_4 (E)$	I
2718.56265	34	16	e	35	16	e	5.8	$2\nu_4 (A_1)$	I
2718.58211	34	17	e	35	17	e	2.3	$2\nu_4 (A_1)$	I
2718.60145	34	18	a_1/a_2	35	18	a_1/a_2	4.5	$2\nu_4 (A_1)$	I
2718.64397	34	20	e	35	20	e	2.7	$2\nu_4 (A_1)$	I
2718.66688	34	21	a_1/a_2	35	21	a_1/a_2	4.4	$2\nu_4 (A_1)$	I
2718.73676	22	9	a_1/a_2	21	8	a_1/a_2	4.9	$2\nu_4 (E)$	I
2718.74330	34	24	a_1/a_2	35	24	a_1/a_2	4.1	$2\nu_4 (A_1)$	I
2718.77099	34	25	e	35	25	e	2.6	$2\nu_4 (A_1)$	I
2718.82969	34	27	a_1/a_2	35	27	a_1/a_2	3.3	$2\nu_4 (A_1)$	I
2718.89310	34	29	e	35	29	e	1.8	$2\nu_4 (A_1)$	I
2718.99663	34	32	e	35	32	e	0.9	$2\nu_4 (A_1)$	I
2719.05774	35	0	a_2	36	0	a_1	6.8	$2\nu_4 (A_1)$	I
2719.07632	35	6	a_1/a_2	36	6	a_1/a_2	5.1	$2\nu_4 (A_1)$	I
2719.09180	35	8	e	36	8	e	3.5	$2\nu_4 (A_1)$	I
2719.10283	18	15	a_1/a_2	17	14	a_1/a_2	9.9	$2\nu_4 (E)$	I
2719.12420	35	11	e	36	11	e	2.2	$2\nu_4 (A_1)$	I
2719.13679	35	12	a_1/a_2	36	12	a_1/a_2	4.2	$2\nu_4 (A_1)$	I
2719.16733	35	14	e	36	14	e	2.2	$2\nu_4 (A_1)$	I
2719.18335	35	15	a_1/a_2	36	15	a_1/a_2	4.4	$2\nu_4 (A_1)$	I
2719.20107	35	16	e	36	16	e	2.5	$2\nu_4 (A_1)$	I
2719.21992	32	9	a_1/a_2	31	10	a_1/a_2	3.2	$2\nu_4 (E)$	I
2719.23890	35	18	a_1/a_2	36	18	a_1/a_2	4.5	$2\nu_4 (A_1)$	I
2719.25990	35	19	e	36	19	e	2.3	$2\nu_4 (A_1)$	I
2719.30412	35	21	a_1/a_2	36	21	a_1/a_2	4.3	$2\nu_4 (A_1)$	I
2719.32919	35	22	e	36	22	e	2.5	$2\nu_4 (A_1)$	I
2719.35378	35	23	e	36	23	e	2.2	$2\nu_4 (A_1)$	I
2719.37089	30	6	a_1/a_2	29	7	a_1/a_2	1.3	$2\nu_4 (E)$	I
2719.38065	35	24	a_1/a_2	36	24	a_1/a_2	3.9	$2\nu_4 (A_1)$	I
2719.40839	35	25	e	36	25	e	2.1	$2\nu_4 (A_1)$	I
2719.43759	35	26	e	36	26	e	2.2	$2\nu_4 (A_1)$	I
2719.45529	21	9	a_1/a_2	20	8	a_1/a_2	4.9	$2\nu_4 (E)$	I
2719.46729	35	27	a_1/a_2	36	27	a_1/a_2	3.4	$2\nu_4 (A_1)$	I
2719.49844	35	28	e	36	28	e	1.9	$2\nu_4 (A_1)$	I
2719.51044	18	14	e	17	13	e	4.5	$2\nu_4 (E)$	I
2719.53112	35	29	e	36	29	e	1.6	$2\nu_4 (A_1)$	I
2719.56471	35	30	a_1/a_2	36	30	a_1/a_2	3.2	$2\nu_4 (A_1)$	I
2719.59928	35	31	e	36	31	e	1.4	$2\nu_4 (A_1)$	I

Table A1 (cont.)

$\tilde{\nu}_{\text{obs.}} / \text{cm}^{-1}$	J''	K''	γ''	J	K	γ	$\lg(I_0/I)/10^{-2}$	Band	Spectrum
2719.63468	19	12	a_1/a_2	18	11	a_1/a_2	8.1	$2\nu_4 (E)$	I
2719.69321	36	0	a_1	37	0	a_2	5.9	$2\nu_4 (A_1)$	I
2719.71069	36	6	a_1/a_2	37	6	a_1/a_2	4.3	$2\nu_4 (A_1)$	I
2719.71877	36	7	e	37	7	e	2.7	$2\nu_4 (A_1)$	I
2719.73856	36	9	a_1/a_2	37	9	a_1/a_2	3.9	$2\nu_4 (A_1)$	I
2719.74838	36	10	e	37	10	e	2.8	$2\nu_4 (A_1)$	I
2719.75758	36	11	e	37	11	e	2.3	$2\nu_4 (A_1)$	I
2719.77569	36	12	a_1/a_2	37	12	a_1/a_2	4.0	$2\nu_4 (A_1)$	I
2719.78776	36	13	e	37	13	e	2.4	$2\nu_4 (A_1)$	I
2719.80331	36	14	e	37	14	e	2.7	$2\nu_4 (A_1)$	I
2719.82041	17	15	a_1/a_2	16	14	a_1/a_2	12.4	$2\nu_4 (E)$	I
2719.83677	36	16	e	37	16	e	2.6	$2\nu_4 (A_1)$	I
2719.85449	36	17	e	37	17	e	2.1	$2\nu_4 (A_1)$	I
2719.87489	36	18	a_1/a_2	37	18	a_1/a_2	5.7	$2\nu_4 (A_1)$	I
2719.89513	36	19	e	37	19	e	2.1	$2\nu_4 (A_1)$	I
2719.91744	36	20	e	37	20	e	2.7	$2\nu_4 (A_1)$	I
2719.93957	36	21	a_1/a_2	37	21	a_1/a_2	3.9	$2\nu_4 (A_1)$	I
2719.96448	36	22	e	37	22	e	2.0	$2\nu_4 (A_1)$	I
2719.98994	36	23	e	37	23	e	2.0	$2\nu_4 (A_1)$	I
2720.00529	22	6	a_1/a_2	21	5	a_1/a_2	3.9	$2\nu_4 (E)$	I
2720.01657	36	24	a_1/a_2	37	24	a_1/a_2	3.7	$2\nu_4 (A_1)$	I
2720.04446	36	25	e	37	25	e	2.2	$2\nu_4 (A_1)$	I
2720.07325	36	26	e	37	26	e	1.8	$2\nu_4 (A_1)$	I
2720.13446	36	28	e	37	28	e	2.0	$2\nu_4 (A_1)$	I
2720.17282	20	9	a_1/a_2	19	8	a_1/a_2	5.2	$2\nu_4 (E)$	I
2720.20079	36	30	a_1/a_2	37	30	a_1/a_2	3.4	$2\nu_4 (A_1)$	I
2720.22457	17	14	e	16	13	e	4.7	$2\nu_4 (E)$	I
2720.23495	36	31	e	37	31	e	1.7	$2\nu_4 (A_1)$	I
2720.25039	27	3	a_1/a_2	26	4	a_1/a_2	1.5	$2\nu_4 (E)$	I
2720.30790	36	33	a_1/a_2	37	33	a_1/a_2	2.2	$2\nu_4 (A_1)$	I
2720.35332	18	12	a_1/a_2	17	11	a_1/a_2	7.8	$2\nu_4 (E)$	I
2720.36220	37	8	e	38	8	e	2.0	$2\nu_4 (A_1)$	I
2720.37094	37	9	a_1/a_2	38	9	a_1/a_2	3.6	$2\nu_4 (A_1)$	I
2720.38000	37	10	e	38	10	e	1.9	$2\nu_4 (A_1)$	I
2720.39841	37	11	e	38	11	e	2.3	$2\nu_4 (A_1)$	I
2720.40831	37	12	a_1/a_2	38	12	a_1/a_2	6.2	$2\nu_4 (A_1)$	I
2720.42633	36	36	a_1/a_2	37	36	a_1/a_2	2.6	$2\nu_4 (A_1)$	I
2720.45259	37	15	a_1/a_2	38	15	a_1/a_2	3.6	$2\nu_4 (A_1)$	I
2720.46982	37	16	e	38	16	e	5.0	$2\nu_4 (A_1)$	I
2720.48864	37	17	e	38	17	e	2.5	$2\nu_4 (A_1)$	I
2720.50848	37	18	a_1/a_2	38	18	a_1/a_2	3.9	$2\nu_4 (A_1)$	I
2720.52027	16	15	a_1/a_2	15	14	a_1/a_2	10.6	$2\nu_4 (E)$	I
2720.52936	37	19	e	38	19	e	1.8	$2\nu_4 (A_1)$	I
2720.55112	37	20	e	38	20	e	2.6	$2\nu_4 (A_1)$	I
2720.57327	37	21	a_1/a_2	38	21	a_1/a_2	3.6	$2\nu_4 (A_1)$	I
2720.62441	37	23	e	38	23	e	2.0	$2\nu_4 (A_1)$	I
2720.65093	17	13	e	16	12	e	3.3	$2\nu_4 (E)$	I
2720.65093	37	24	a_1/a_2	38	24	a_1/a_2	3.3	$2\nu_4 (A_1)$	I

Table A1 (cont.)

$\tilde{\nu}_{\text{obs.}} / \text{cm}^{-1}$	J''	K''	γ''	J	K	γ	$\lg(I_0/I)/10^{-2}$	Band	Spectrum
2720.67914	37	25	e	38	25	e	2.0	$2\nu_4 (A_1)$	I
2720.73749	37	27	a_1/a_2	38	27	a_1/a_2	3.2	$2\nu_4 (A_1)$	I
2720.80152	37	29	e	38	29	e	2.3	$2\nu_4 (A_1)$	I
2720.83518	37	30	a_1/a_2	38	30	a_1/a_2	3.7	$2\nu_4 (A_1)$	I
2720.86975	37	31	e	38	31	e	1.6	$2\nu_4 (A_1)$	I
2720.88889	19	9	a_1/a_2	18	8	a_1/a_2	5.6	$2\nu_4 (E)$	I
2720.90578	37	32	e	38	32	e	1.3	$2\nu_4 (A_1)$	I
2720.94222	37	33	a_1/a_2	38	33	a_1/a_2	2.4	$2\nu_4 (A_1)$	I
2720.95855	38	0	a_1	39	0	a_2	4.9	$2\nu_4 (A_1)$	I
2720.98705	38	6	a_1/a_2	39	6	a_1/a_2	5.4	$2\nu_4 (A_1)$	I
2721.00127	38	9	a_1/a_2	39	9	a_1/a_2	3.6	$2\nu_4 (A_1)$	I
2721.02004	37	35	e	38	35	e	2.6	$2\nu_4 (A_1)$	I
2721.02004	38	10	e	39	10	e	2.6	$2\nu_4 (A_1)$	I
2721.02789	38	11	e	39	11	e	2.0	$2\nu_4 (A_1)$	I
2721.03993	38	12	a_1/a_2	39	12	a_1/a_2	3.4	$2\nu_4 (A_1)$	I
2721.05151	17	12	a_1/a_2	16	11	a_1/a_2	8.4	$2\nu_4 (E)$	I
2721.06870	38	14	e	39	14	e	2.4	$2\nu_4 (A_1)$	I
2721.08490	38	15	a_1/a_2	39	15	a_1/a_2	3.4	$2\nu_4 (A_1)$	I
2721.10284	38	16	e	39	16	e	2.5	$2\nu_4 (A_1)$	I
2721.12096	38	17	e	39	17	e	2.5	$2\nu_4 (A_1)$	I
2721.14073	38	18	a_1/a_2	39	18	a_1/a_2	3.5	$2\nu_4 (A_1)$	I
2721.20611	38	21	a_1/a_2	39	21	a_1/a_2	3.5	$2\nu_4 (A_1)$	I
2721.23359	15	15	a_1/a_2	14	14	a_1/a_2	12.0	$2\nu_4 (E)$	I
2721.25691	38	23	e	39	23	e	2.2	$2\nu_4 (A_1)$	I
2721.28296	34	17	e	33	18	e	4.3	$2\nu_4 (E)$	I
2721.35446	16	13	e	15	12	e	4.4	$2\nu_4 (E)$	I
2721.36955	38	27	a_1/a_2	39	27	a_1/a_2	3.1	$2\nu_4 (A_1)$	I
2721.40131	38	28	e	39	28	e	1.5	$2\nu_4 (A_1)$	I
2721.43648	20	6	a_1/a_2	19	5	a_1/a_2	5.2	$2\nu_4 (E)$	I
2721.46807	38	30	a_1/a_2	39	30	a_1/a_2	2.8	$2\nu_4 (A_1)$	I
2721.50298	38	31	e	39	31	e	1.5	$2\nu_4 (A_1)$	I
2721.53794	38	32	e	39	32	e	1.5	$2\nu_4 (A_1)$	I
2721.58903	39	0	a_2	40	0	a_1	5.0	$2\nu_4 (A_1)$	I
2721.60380	18	9	a_1/a_2	17	8	a_1/a_2	6.2	$2\nu_4 (E)$	I
2721.64524	15	14	e	14	13	e	6.6	$2\nu_4 (E)$	I
2721.65730	39	11	e	40	11	e	2.1	$2\nu_4 (A_1)$	I
2721.67003	39	12	a_1/a_2	40	12	a_1/a_2	2.8	$2\nu_4 (A_1)$	I
2721.68434	39	13	e	40	13	e	1.6	$2\nu_4 (A_1)$	I
2721.70004	39	14	e	40	14	e	3.1	$2\nu_4 (A_1)$	I
2721.71600	39	15	a_1/a_2	40	15	a_1/a_2	3.6	$2\nu_4 (A_1)$	I
2721.75151	39	17	e	40	17	e	1.9	$2\nu_4 (A_1)$	I
2721.77065	16	12	a_1/a_2	15	11	a_1/a_2	11.0	$2\nu_4 (E)$	I
2721.79267	39	19	e	40	19	e	1.7	$2\nu_4 (A_1)$	I
2721.81461	39	20	e	40	20	e	1.6	$2\nu_4 (A_1)$	I
2721.83775	39	21	a_1/a_2	40	21	a_1/a_2	3.3	$2\nu_4 (A_1)$	I
2721.86249	39	22	e	40	22	e	3.3	$2\nu_4 (A_1)$	I
2721.88759	39	23	e	40	23	e	1.5	$2\nu_4 (A_1)$	I
2721.91465	39	24	a_1/a_2	40	24	a_1/a_2	3.3	$2\nu_4 (A_1)$	I

Table A1 (cont.)

$\tilde{\nu}_{\text{obs.}} / \text{cm}^{-1}$	J''	K''	γ''	J	K	γ	$\lg(I_0/I)/10^{-2}$	Band	Spectrum
2721.94221	39	25	e	40	25	e	1.5	$2\nu_4 (A_1)$	I
2721.97065	39	26	e	40	26	e	2.4	$2\nu_4 (A_1)$	I
2722.03179	39	28	e	40	28	e	2.2	$2\nu_4 (A_1)$	I
2722.06537	39	29	e	40	29	e	1.6	$2\nu_4 (A_1)$	I
2722.09913	39	30	a_1/a_2	40	30	a_1/a_2	2.6	$2\nu_4 (A_1)$	I
2722.13488	39	31	e	40	31	e	2.8	$2\nu_4 (A_1)$	I
2722.15387	19	6	a_1/a_2	18	5	a_1/a_2	4.5	$2\nu_4 (E)$	I
2722.16932	39	32	e	40	32	e	1.2	$2\nu_4 (A_1)$	I
2722.20708	39	33	a_1/a_2	40	33	a_1/a_2	2.7	$2\nu_4 (A_1)$	I
2722.21626	40	0	a_1	41	0	a_2	5.8	$2\nu_4 (A_1)$	I
2722.27462	40	10	e	41	10	e	1.5	$2\nu_4 (A_1)$	I
2722.28483	39	35	e	40	35	e	4.8	$2\nu_4 (A_1)$	I
2722.31720	17	9	a_1/a_2	16	8	a_1/a_2	6.5	$2\nu_4 (E)$	I
2722.32690	39	36	a_1/a_2	40	36	a_1/a_2	2.6	$2\nu_4 (A_1)$	I
2722.34486	40	15	a_1/a_2	41	15	a_1/a_2	2.7	$2\nu_4 (A_1)$	I
2722.35676	14	14	e	13	13	e	6.0	$2\nu_4 (E)$	I
2722.36758	39	37	e	40	37	e	0.9	$2\nu_4 (A_1)$	I
2722.38137	40	17	e	41	17	e	1.5	$2\nu_4 (A_1)$	I
2722.40074	40	18	a_1/a_2	41	18	a_1/a_2	2.9	$2\nu_4 (A_1)$	I
2722.41120	39	38	e	40	38	e	1.3	$2\nu_4 (A_1)$	I
2722.45492	39	39	a_1/a_2	40	39	a_1/a_2	1.1	$2\nu_4 (A_1)$	I
2722.46717	40	21	a_1/a_2	41	21	a_1/a_2	3.1	$2\nu_4 (A_1)$	I
2722.48264	15	12	a_1/a_2	14	11	a_1/a_2	8.9	$2\nu_4 (E)$	I
2722.49161	40	22	e	41	22	e	1.7	$2\nu_4 (A_1)$	I
2722.54428	40	24	a_1/a_2	41	24	a_1/a_2	3.5	$2\nu_4 (A_1)$	I
2722.57158	40	25	e	41	25	e	2.1	$2\nu_4 (A_1)$	I
2722.60085	40	26	e	41	26	e	1.4	$2\nu_4 (A_1)$	I
2722.63102	40	27	a_1/a_2	41	27	a_1/a_2	5.0	$2\nu_4 (A_1)$	I
2722.69519	40	29	e	41	29	e	1.3	$2\nu_4 (A_1)$	I
2722.71239	20	3	a_1/a_2	19	2	a_1/a_2	2.4	$2\nu_4 (E)$	I
2722.72894	40	30	a_1/a_2	41	30	a_1/a_2	4.1	$2\nu_4 (A_1)$	I
2722.76987	14	13	e	13	12	e	5.0	$2\nu_4 (E)$	I
2722.80019	40	32	e	41	32	e	1.9	$2\nu_4 (A_1)$	I
2722.86922	18	6	a_1/a_2	17	5	a_1/a_2	5.8	$2\nu_4 (E)$	I
2723.00733	25	6	a_1/a_2	24	7	a_1/a_2	3.3	$2\nu_4 (E)$	I
2723.18820	14	12	a_1/a_2	13	11	a_1/a_2	8.7	$2\nu_4 (E)$	I
2723.43021	19	3	a_1/a_2	18	2	a_1/a_2	4.2	$2\nu_4 (E)$	I
2723.47953	13	13	e	12	12	e	6.9	$2\nu_4 (E)$	I
2723.58246	17	6	a_1/a_2	16	5	a_1/a_2	7.4	$2\nu_4 (E)$	I
2723.72904	15	9	a_1/a_2	14	8	a_1/a_2	6.7	$2\nu_4 (E)$	I
2723.89368	13	12	a_1/a_2	12	11	a_1/a_2	9.5	$2\nu_4 (E)$	I
2724.29442	16	6	a_1/a_2	15	5	a_1/a_2	5.4	$2\nu_4 (E)$	I
2724.44611	14	9	a_1/a_2	13	8	a_1/a_2	7.3	$2\nu_4 (E)$	I
2724.60206	12	12	a_1/a_2	11	11	a_1/a_2	10.1	$2\nu_4 (E)$	I
2724.85926	17	3	a_1/a_2	16	2	a_1/a_2	3.4	$2\nu_4 (E)$	I
2725.00517	15	6	a_1/a_2	14	5	a_1/a_2	6.1	$2\nu_4 (E)$	I
2725.04803	24	9	a_1/a_2	23	10	a_1/a_2	1.2	$2\nu_4 (E)$	I
2725.15327	13	9	a_1/a_2	12	8	a_1/a_2	7.0	$2\nu_4 (E)$	I

Table A1 (cont.)

$\tilde{\nu}_{\text{obs.}} / \text{cm}^{-1}$	J''	K''	γ''	J	K	γ	$\lg(I_0/I)/10^{-2}$	Band	Spectrum
2725.71669	14	6	a_1/a_2	13	5	a_1/a_2	5.7	$2\nu_4 (E)$	I
2725.86457	12	9	a_1/a_2	11	8	a_1/a_2	7.6	$2\nu_4 (E)$	I
2726.28132	15	3	a_1/a_2	14	2	a_1/a_2	6.6	$2\nu_4 (E)$	I
2726.41753	13	6	a_1/a_2	12	5	a_1/a_2	5.5	$2\nu_4 (E)$	I
2726.43302	27	17	e	26	18	e	2.3	$2\nu_4 (E)$	I
2726.55792	11	9	a_1/a_2	10	8	a_1/a_2	7.5	$2\nu_4 (E)$	I
2726.99075	14	3	a_1/a_2	13	2	a_1/a_2	7.0	$2\nu_4 (E)$	I
2727.13347	12	6	a_1/a_2	11	5	a_1/a_2	4.5	$2\nu_4 (E)$	I
2727.26547	10	9	a_1/a_2	9	8	a_1/a_2	9.8	$2\nu_4 (E)$	I
2727.52943	32	27	a_1/a_2	31	28	a_1/a_2	0.8	$2\nu_4 (E)$	I
2727.65438	21	10	e	20	11	e	1.2	$2\nu_4 (E)$	I
2727.69886	13	3	a_1/a_2	12	2	a_1/a_2	3.4	$2\nu_4 (E)$	I
2727.83076	11	6	a_1/a_2	10	5	a_1/a_2	5.7	$2\nu_4 (E)$	I
2727.96815	9	9	a_1/a_2	8	8	a_1/a_2	8.0	$2\nu_4 (E)$	I
2728.40007	12	3	a_1/a_2	11	2	a_1/a_2	3.4	$2\nu_4 (E)$	I
2729.10378	11	3	a_1/a_2	10	2	a_1/a_2	4.0	$2\nu_4 (E)$	I
2729.19026	17	7	e	16	8	e	2.8	$2\nu_4 (E)$	I
2729.80934	10	3	a_1/a_2	9	2	a_1/a_2	2.7	$2\nu_4 (E)$	I
2730.54329	39	15	a_1/a_2	39	14	a_1/a_2	2.2	$2\nu_4 (E)$	I
2730.60151	38	15	a_1/a_2	38	14	a_1/a_2	2.3	$2\nu_4 (E)$	I
2730.71634	36	15	a_1/a_2	36	14	a_1/a_2	2.2	$2\nu_4 (E)$	I
2730.77140	35	15	a_1/a_2	35	14	a_1/a_2	2.3	$2\nu_4 (E)$	I
2730.82419	34	15	a_1/a_2	34	14	a_1/a_2	2.4	$2\nu_4 (E)$	I
2730.87554	33	15	a_1/a_2	33	14	a_1/a_2	2.7	$2\nu_4 (E)$	I
2730.88646	14	6	a_1/a_2	13	7	a_1/a_2	1.3	$2\nu_4 (E)$	I
2730.92587	32	15	a_1/a_2	32	14	a_1/a_2	3.5	$2\nu_4 (E)$	I
2730.97450	31	15	a_1/a_2	31	14	a_1/a_2	3.7	$2\nu_4 (E)$	I
2731.02114	30	15	a_1/a_2	30	14	a_1/a_2	3.2	$2\nu_4 (E)$	I
2731.05517	20	16	e	19	17	e	3.0	$2\nu_4 (E)$	I
2731.06671	29	15	a_1/a_2	29	14	a_1/a_2	3.3	$2\nu_4 (E)$	I
2731.11035	28	15	a_1/a_2	28	14	a_1/a_2	3.4	$2\nu_4 (E)$	I
2731.15298	27	15	a_1/a_2	27	14	a_1/a_2	4.0	$2\nu_4 (E)$	I
2731.19368	26	15	a_1/a_2	26	14	a_1/a_2	3.7	$2\nu_4 (E)$	I
2731.21400	8	3	a_1/a_2	7	2	a_1/a_2	3.6	$2\nu_4 (E)$	I
2731.23317	25	15	a_1/a_2	25	14	a_1/a_2	4.0	$2\nu_4 (E)$	I
2731.27073	24	15	a_1/a_2	24	14	a_1/a_2	4.1	$2\nu_4 (E)$	I
2731.30693	23	15	a_1/a_2	23	14	a_1/a_2	3.7	$2\nu_4 (E)$	I
2731.37481	21	15	a_1/a_2	21	14	a_1/a_2	3.6	$2\nu_4 (E)$	I
2731.40967	20	15	a_1/a_2	20	14	a_1/a_2	3.7	$2\nu_4 (E)$	I
2731.44507	19	15	a_1/a_2	19	14	a_1/a_2	3.0	$2\nu_4 (E)$	I
2731.45612	18	15	a_1/a_2	18	14	a_1/a_2	2.8	$2\nu_4 (E)$	I
2731.47947	29	14	e	29	13	e	2.5	$2\nu_4 (E)$	I
2731.52381	16	15	a_1/a_2	16	14	a_1/a_2	3.7	$2\nu_4 (E)$	I
2731.52381	28	14	e	28	13	e	3.7	$2\nu_4 (E)$	I
2731.56520	27	14	e	27	13	e	2.5	$2\nu_4 (E)$	I
2731.59882	13	6	a_1/a_2	12	7	a_1/a_2	1.5	$2\nu_4 (E)$	I
2731.60694	26	14	e	26	13	e	2.1	$2\nu_4 (E)$	I
2731.75592	22	14	e	22	13	e	4.4	$2\nu_4 (E)$	I

Table A1 (cont.)

$\tilde{\nu}_{\text{obs.}} / \text{cm}^{-1}$	J''	K''	γ''	J	K	γ	$\lg(I_0/I)/10^{-2}$	Band	Spectrum
2731.84834	30	13	e	30	12	e	3.4	$2\nu_4 (E)$	I
2731.90138	17	14	e	17	13	e	1.9	$2\nu_4 (E)$	I
2731.91334	7	3	a_1/a_2	6	2	a_1/a_2	4.9	$2\nu_4 (E)$	I
2731.92729	16	14	e	16	13	e	1.1	$2\nu_4 (E)$	I
2731.97268	14	14	e	14	13	e	1.5	$2\nu_4 (E)$	I
2732.00397	35	12	a_1/a_2	35	11	a_1/a_2	2.4	$2\nu_4 (E)$	I
2732.02110	26	13	e	26	12	e	2.5	$2\nu_4 (E)$	I
2732.06107	25	13	e	25	12	e	4.1	$2\nu_4 (E)$	I
2732.06107	34	12	a_1/a_2	34	11	a_1/a_2	4.1	$2\nu_4 (E)$	I
2732.09875	24	13	e	24	12	e	2.3	$2\nu_4 (E)$	I
2732.11595	33	12	a_1/a_2	33	11	a_1/a_2	2.8	$2\nu_4 (E)$	I
2732.16670	32	12	a_1/a_2	32	11	a_1/a_2	3.7	$2\nu_4 (E)$	I
2732.21618	31	12	a_1/a_2	31	11	a_1/a_2	3.2	$2\nu_4 (E)$	I
2732.26325	30	12	a_1/a_2	30	11	a_1/a_2	3.6	$2\nu_4 (E)$	I
2732.30775	12	6	a_1/a_2	11	7	a_1/a_2	4.3	$2\nu_4 (E)$	I
2732.30775	29	12	a_1/a_2	29	11	a_1/a_2	4.3	$2\nu_4 (E)$	I
2732.35350	16	13	e	16	12	e	3.6	$2\nu_4 (E)$	I
2732.35350	28	12	a_1/a_2	28	11	a_1/a_2	3.6	$2\nu_4 (E)$	I
2732.36949	15	13	e	15	12	e	2.0	$2\nu_4 (E)$	I
2732.39578	27	12	a_1/a_2	27	11	a_1/a_2	4.2	$2\nu_4 (E)$	I
2732.40932	13	13	e	13	12	e	1.6	$2\nu_4 (E)$	I
2732.43661	26	12	a_1/a_2	26	11	a_1/a_2	4.5	$2\nu_4 (E)$	I
2732.47570	25	12	a_1/a_2	25	11	a_1/a_2	5.0	$2\nu_4 (E)$	I
2732.51397	24	12	a_1/a_2	24	11	a_1/a_2	4.1	$2\nu_4 (E)$	I
2732.55018	23	12	a_1/a_2	23	11	a_1/a_2	4.6	$2\nu_4 (E)$	I
2732.58573	22	12	a_1/a_2	22	11	a_1/a_2	4.2	$2\nu_4 (E)$	I
2732.61158	6	3	a_1/a_2	5	2	a_1/a_2	2.9	$2\nu_4 (E)$	I
2732.61852	21	12	a_1/a_2	21	11	a_1/a_2	4.3	$2\nu_4 (E)$	I
2732.65071	20	12	a_1/a_2	20	11	a_1/a_2	4.2	$2\nu_4 (E)$	I
2732.68111	19	12	a_1/a_2	19	11	a_1/a_2	4.8	$2\nu_4 (E)$	I
2732.71115	18	12	a_1/a_2	18	11	a_1/a_2	3.9	$2\nu_4 (E)$	I
2732.74257	17	12	a_1/a_2	17	11	a_1/a_2	3.7	$2\nu_4 (E)$	I
2732.75332	16	12	a_1/a_2	16	11	a_1/a_2	3.6	$2\nu_4 (E)$	I
2732.78498	15	12	a_1/a_2	15	11	a_1/a_2	3.3	$2\nu_4 (E)$	I
2733.30934	5	3	a_1/a_2	4	2	a_1/a_2	4.7	$2\nu_4 (E)$	I
2733.60084	28	9	a_1/a_2	28	8	a_1/a_2	4.8	$2\nu_4 (E)$	I
2733.64579	27	9	a_1/a_2	27	8	a_1/a_2	4.9	$2\nu_4 (E)$	I
2733.68848	26	9	a_1/a_2	26	8	a_1/a_2	5.0	$2\nu_4 (E)$	I
2733.72865	25	9	a_1/a_2	25	8	a_1/a_2	4.2	$2\nu_4 (E)$	I
2733.76683	24	9	a_1/a_2	24	8	a_1/a_2	4.7	$2\nu_4 (E)$	I
2733.80360	23	9	a_1/a_2	23	8	a_1/a_2	4.7	$2\nu_4 (E)$	I
2733.83897	22	9	a_1/a_2	22	8	a_1/a_2	4.5	$2\nu_4 (E)$	I
2733.87204	21	9	a_1/a_2	21	8	a_1/a_2	4.6	$2\nu_4 (E)$	I
2733.88443	11	8	e	10	9	e	2.6	$2\nu_4 (E)$	I
2733.90388	20	9	a_1/a_2	20	8	a_1/a_2	4.6	$2\nu_4 (E)$	I
2733.93535	19	9	a_1/a_2	19	8	a_1/a_2	5.1	$2\nu_4 (E)$	I
2733.96387	18	9	a_1/a_2	18	8	a_1/a_2	4.7	$2\nu_4 (E)$	I
2733.99145	17	9	a_1/a_2	17	8	a_1/a_2	4.7	$2\nu_4 (E)$	I

Table A1 (cont.)

$\tilde{\nu}_{\text{obs.}} / \text{cm}^{-1}$	J''	K''	γ''	J	K	γ	$\lg(I_0/I)/10^{-2}$	Band	Spectrum
2733.99803	4	3	a_1/a_2	3	2	a_1/a_2	3.4	$2\nu_4 (E)$	I
2734.01776	16	9	a_1/a_2	16	8	a_1/a_2	4.3	$2\nu_4 (E)$	I
2734.04492	15	9	a_1/a_2	15	8	a_1/a_2	4.1	$2\nu_4 (E)$	I
2734.05422	14	9	a_1/a_2	14	8	a_1/a_2	4.4	$2\nu_4 (E)$	I
2734.08371	13	9	a_1/a_2	13	8	a_1/a_2	3.8	$2\nu_4 (E)$	I
2734.10286	12	9	a_1/a_2	12	8	a_1/a_2	4.7	$2\nu_4 (E)$	I
2734.12646	11	9	a_1/a_2	11	8	a_1/a_2	3.0	$2\nu_4 (E)$	I
2734.41095	9	6	a_1/a_2	8	7	a_1/a_2	3.0	$2\nu_4 (E)$	I
2735.06927	23	6	a_1/a_2	23	5	a_1/a_2	4.5	$2\nu_4 (E)$	I
2735.13990	21	6	a_1/a_2	21	5	a_1/a_2	5.6	$2\nu_4 (E)$	I
2735.16932	20	6	a_1/a_2	20	5	a_1/a_2	1.7	$2\nu_4 (E)$	I
2735.19762	19	6	a_1/a_2	19	5	a_1/a_2	5.8	$2\nu_4 (E)$	I
2735.22788	18	6	a_1/a_2	18	5	a_1/a_2	5.2	$2\nu_4 (E)$	I
2735.25584	17	6	a_1/a_2	17	5	a_1/a_2	5.8	$2\nu_4 (E)$	I
2735.28179	16	6	a_1/a_2	16	5	a_1/a_2	4.9	$2\nu_4 (E)$	I
2735.30667	15	6	a_1/a_2	15	5	a_1/a_2	4.6	$2\nu_4 (E)$	I
2735.32978	14	6	a_1/a_2	14	5	a_1/a_2	5.0	$2\nu_4 (E)$	I
2735.35362	13	6	a_1/a_2	13	5	a_1/a_2	5.1	$2\nu_4 (E)$	I
2735.39507	11	6	a_1/a_2	11	5	a_1/a_2	3.1	$2\nu_4 (E)$	I
2735.40426	10	6	a_1/a_2	10	5	a_1/a_2	3.8	$2\nu_4 (E)$	I
2736.47275	19	3	a_1/a_2	19	2	a_1/a_2	2.4	$2\nu_4 (E)$	I
2736.50387	18	3	a_1/a_2	18	2	a_1/a_2	5.1	$2\nu_4 (E)$	I
2736.53228	17	3	a_1/a_2	17	2	a_1/a_2	5.7	$2\nu_4 (E)$	I
2736.55809	16	3	a_1/a_2	16	2	a_1/a_2	2.8	$2\nu_4 (E)$	I
2736.57919	15	3	a_1/a_2	15	2	a_1/a_2	6.2	$2\nu_4 (E)$	I
2736.60514	14	3	a_1/a_2	14	2	a_1/a_2	6.0	$2\nu_4 (E)$	I
2736.62694	13	3	a_1/a_2	13	2	a_1/a_2	4.9	$2\nu_4 (E)$	I
2736.64772	12	3	a_1/a_2	12	2	a_1/a_2	5.4	$2\nu_4 (E)$	I
2736.66055	11	3	a_1/a_2	11	2	a_1/a_2	4.9	$2\nu_4 (E)$	I
2736.67643	10	3	a_1/a_2	10	2	a_1/a_2	4.4	$2\nu_4 (E)$	I
2736.69362	9	3	a_1/a_2	9	2	a_1/a_2	3.0	$2\nu_4 (E)$	I
2736.70957	8	3	a_1/a_2	8	2	a_1/a_2	4.1	$2\nu_4 (E)$	I
2736.72223	7	3	a_1/a_2	7	2	a_1/a_2	3.2	$2\nu_4 (E)$	I
2736.73345	6	3	a_1/a_2	6	2	a_1/a_2	4.5	$2\nu_4 (E)$	I
2736.74282	5	3	a_1/a_2	5	2	a_1/a_2	3.3	$2\nu_4 (E)$	I
2736.75265	3	3	a_1/a_2	3	2	a_1/a_2	2.8	$2\nu_4 (E)$	I
2736.75265	4	3	a_1/a_2	4	2	a_1/a_2	2.8	$2\nu_4 (E)$	I
2738.08104	40	3	a_1/a_2	40	4	a_1/a_2	1.5	$2\nu_4 (E)$	I
2738.14408	39	3	a_1/a_2	39	4	a_1/a_2	1.8	$2\nu_4 (E)$	I
2738.20582	38	3	a_1/a_2	38	4	a_1/a_2	3.1	$2\nu_4 (E)$	I
2738.26479	37	3	a_1/a_2	37	4	a_1/a_2	1.8	$2\nu_4 (E)$	I
2738.43381	34	3	a_1/a_2	34	4	a_1/a_2	3.9	$2\nu_4 (E)$	I
2738.48729	33	3	a_1/a_2	33	4	a_1/a_2	3.1	$2\nu_4 (E)$	I
2738.53889	32	3	a_1/a_2	32	4	a_1/a_2	2.9	$2\nu_4 (E)$	I
2738.58865	31	3	a_1/a_2	31	4	a_1/a_2	3.0	$2\nu_4 (E)$	I
2738.63661	30	3	a_1/a_2	30	4	a_1/a_2	3.1	$2\nu_4 (E)$	I
2738.68348	29	3	a_1/a_2	29	4	a_1/a_2	6.1	$2\nu_4 (E)$	I
2738.72854	28	3	a_1/a_2	28	4	a_1/a_2	3.8	$2\nu_4 (E)$	I

Table A1 (cont.)

$\tilde{\nu}_{\text{obs.}} / \text{cm}^{-1}$	J''	K''	γ''	J	K	γ	$\lg(I_0/I)/10^{-2}$	Band	Spectrum
2738.77183	27	3	a_1/a_2	27	4	a_1/a_2	3.8	$2\nu_4 (E)$	I
2738.81417	26	3	a_1/a_2	26	4	a_1/a_2	4.6	$2\nu_4 (E)$	I
2738.85400	25	3	a_1/a_2	25	4	a_1/a_2	4.3	$2\nu_4 (E)$	I
2738.89284	24	3	a_1/a_2	24	4	a_1/a_2	4.8	$2\nu_4 (E)$	I
2738.93020	23	3	a_1/a_2	23	4	a_1/a_2	4.5	$2\nu_4 (E)$	I
2738.96623	22	3	a_1/a_2	22	4	a_1/a_2	4.6	$2\nu_4 (E)$	I
2739.00131	21	3	a_1/a_2	21	4	a_1/a_2	4.9	$2\nu_4 (E)$	I
2739.08792	18	3	a_1/a_2	18	4	a_1/a_2	4.9	$2\nu_4 (E)$	I
2739.11713	17	3	a_1/a_2	17	4	a_1/a_2	6.4	$2\nu_4 (E)$	I
2739.14358	16	3	a_1/a_2	16	4	a_1/a_2	5.0	$2\nu_4 (E)$	I
2739.19183	14	3	a_1/a_2	14	4	a_1/a_2	5.9	$2\nu_4 (E)$	I
2739.21347	13	3	a_1/a_2	13	4	a_1/a_2	5.0	$2\nu_4 (E)$	I
2739.23394	12	3	a_1/a_2	12	4	a_1/a_2	4.2	$2\nu_4 (E)$	I
2739.28293	9	3	a_1/a_2	9	4	a_1/a_2	3.7	$2\nu_4 (E)$	I
2739.29736	8	3	a_1/a_2	8	4	a_1/a_2	3.3	$2\nu_4 (E)$	I
2739.32033	6	3	a_1/a_2	6	4	a_1/a_2	2.4	$2\nu_4 (E)$	I
2739.33715	4	3	a_1/a_2	4	4	a_1/a_2	1.4	$2\nu_4 (E)$	I
2739.38911	40	6	a_1/a_2	40	7	a_1/a_2	1.6	$2\nu_4 (E)$	I
2739.45161	39	6	a_1/a_2	39	7	a_1/a_2	1.6	$2\nu_4 (E)$	I
2739.57175	37	6	a_1/a_2	37	7	a_1/a_2	2.0	$2\nu_4 (E)$	I
2739.79386	33	6	a_1/a_2	33	7	a_1/a_2	2.7	$2\nu_4 (E)$	I
2739.84528	32	6	a_1/a_2	32	7	a_1/a_2	3.1	$2\nu_4 (E)$	I
2739.94272	30	6	a_1/a_2	30	7	a_1/a_2	5.0	$2\nu_4 (E)$	I
2739.99005	29	6	a_1/a_2	29	7	a_1/a_2	3.8	$2\nu_4 (E)$	I
2740.03578	28	6	a_1/a_2	28	7	a_1/a_2	4.1	$2\nu_4 (E)$	I
2740.07902	27	6	a_1/a_2	27	7	a_1/a_2	3.8	$2\nu_4 (E)$	I
2740.16125	25	6	a_1/a_2	25	7	a_1/a_2	4.0	$2\nu_4 (E)$	I
2740.20048	24	6	a_1/a_2	24	7	a_1/a_2	4.4	$2\nu_4 (E)$	I
2740.23803	23	6	a_1/a_2	23	7	a_1/a_2	4.4	$2\nu_4 (E)$	I
2740.27384	22	6	a_1/a_2	22	7	a_1/a_2	4.4	$2\nu_4 (E)$	I
2740.28224	32	7	e	32	8	e	1.6	$2\nu_4 (E)$	I
2740.33241	31	7	e	31	8	e	1.8	$2\nu_4 (E)$	I
2740.51694	27	7	e	27	8	e	2.1	$2\nu_4 (E)$	I
2740.52334	13	6	a_1/a_2	13	7	a_1/a_2	4.0	$2\nu_4 (E)$	I
2740.54833	12	6	a_1/a_2	12	7	a_1/a_2	3.1	$2\nu_4 (E)$	I
2740.55942	26	7	e	26	8	e	3.5	$2\nu_4 (E)$	I
2740.56895	11	6	a_1/a_2	11	7	a_1/a_2	3.0	$2\nu_4 (E)$	I
2740.57802	10	6	a_1/a_2	10	7	a_1/a_2	2.9	$2\nu_4 (E)$	I
2740.59363	9	6	a_1/a_2	9	7	a_1/a_2	2.3	$2\nu_4 (E)$	I
2740.59956	25	7	e	25	8	e	2.4	$2\nu_4 (E)$	I
2740.60787	8	6	a_1/a_2	8	7	a_1/a_2	1.7	$2\nu_4 (E)$	I
2740.62014	7	6	a_1/a_2	7	7	a_1/a_2	1.5	$2\nu_4 (E)$	I
2740.63809	24	7	e	24	8	e	2.4	$2\nu_4 (E)$	I
2740.67643	23	7	e	23	8	e	2.1	$2\nu_4 (E)$	I
2740.69649	40	9	a_1/a_2	40	10	a_1/a_2	1.6	$2\nu_4 (E)$	I
2740.71223	22	7	e	22	8	e	2.7	$2\nu_4 (E)$	I
2740.74669	21	7	e	21	8	e	2.4	$2\nu_4 (E)$	I
2740.76024	39	9	a_1/a_2	39	10	a_1/a_2	1.6	$2\nu_4 (E)$	I

Table A1 (cont.)

$\tilde{\nu}_{\text{obs.}} / \text{cm}^{-1}$	J''	K''	γ''	J	K	γ	$\lg(I_0/I)/10^{-2}$	Band	Spectrum
2740.78023	20	7	e	20	8	e	2.7	$2\nu_4 (E)$	I
2740.86129	17	7	e	17	8	e	3.0	$2\nu_4 (E)$	I
2740.88208	37	9	a_1/a_2	37	10	a_1/a_2	1.9	$2\nu_4 (E)$	I
2740.89018	16	7	e	16	8	e	2.2	$2\nu_4 (E)$	I
2740.94037	14	7	e	14	8	e	4.0	$2\nu_4 (E)$	I
2740.96295	13	7	e	13	8	e	2.0	$2\nu_4 (E)$	I
2740.98211	12	7	e	12	8	e	1.7	$2\nu_4 (E)$	I
2740.99807	11	7	e	11	8	e	5.2	$2\nu_4 (E)$	I
2741.01747	9	9	a_1/a_2	10	8	a_1/a_2	1.3	$2\nu_4 (E)$	I
2741.01747	10	7	e	10	8	e	1.3	$2\nu_4 (E)$	I
2741.10675	33	9	a_1/a_2	33	10	a_1/a_2	2.5	$2\nu_4 (E)$	I
2741.20955	31	9	a_1/a_2	31	10	a_1/a_2	2.8	$2\nu_4 (E)$	I
2741.25864	30	9	a_1/a_2	30	10	a_1/a_2	4.2	$2\nu_4 (E)$	I
2741.30537	29	9	a_1/a_2	29	10	a_1/a_2	3.6	$2\nu_4 (E)$	I
2741.35169	28	9	a_1/a_2	28	10	a_1/a_2	3.6	$2\nu_4 (E)$	I
2741.39524	27	9	a_1/a_2	27	10	a_1/a_2	3.7	$2\nu_4 (E)$	I
2741.41548	13	8	e	13	9	e	0.8	$2\nu_4 (E)$	I
2741.42390	12	8	e	12	9	e	1.9	$2\nu_4 (E)$	I
2741.43780	26	9	a_1/a_2	26	10	a_1/a_2	5.4	$2\nu_4 (E)$	I
2741.45790	10	8	e	10	9	e	1.0	$2\nu_4 (E)$	I
2741.47909	25	9	a_1/a_2	25	10	a_1/a_2	3.8	$2\nu_4 (E)$	I
2741.49196	34	10	e	34	11	e	1.3	$2\nu_4 (E)$	I
2741.55642	23	9	a_1/a_2	23	10	a_1/a_2	4.1	$2\nu_4 (E)$	I
2741.59279	22	9	a_1/a_2	22	10	a_1/a_2	4.3	$2\nu_4 (E)$	I
2741.62740	21	9	a_1/a_2	21	10	a_1/a_2	4.3	$2\nu_4 (E)$	I
2741.63503	39	11	e	39	12	e	1.0	$2\nu_4 (E)$	I
2741.64995	31	10	e	31	11	e	2.0	$2\nu_4 (E)$	I
2741.66140	20	9	a_1/a_2	20	10	a_1/a_2	4.3	$2\nu_4 (E)$	I
2741.69488	19	9	a_1/a_2	19	10	a_1/a_2	4.4	$2\nu_4 (E)$	I
2741.75928	37	11	e	37	12	e	1.2	$2\nu_4 (E)$	I
2741.77241	16	9	a_1/a_2	16	10	a_1/a_2	3.7	$2\nu_4 (E)$	I
2741.79230	28	10	e	28	11	e	2.3	$2\nu_4 (E)$	I
2741.83669	27	10	e	27	11	e	2.0	$2\nu_4 (E)$	I
2741.84452	13	9	a_1/a_2	13	10	a_1/a_2	3.0	$2\nu_4 (E)$	I
2741.85910	12	9	a_1/a_2	12	10	a_1/a_2	2.4	$2\nu_4 (E)$	I
2741.90028	10	9	a_1/a_2	10	10	a_1/a_2	1.4	$2\nu_4 (E)$	I
2741.92039	25	10	e	25	11	e	2.0	$2\nu_4 (E)$	I
2741.93278	34	11	e	34	12	e	1.4	$2\nu_4 (E)$	I
2741.96025	24	10	e	24	11	e	2.2	$2\nu_4 (E)$	I
2741.99852	23	10	e	23	11	e	2.2	$2\nu_4 (E)$	I
2742.03526	22	10	e	22	11	e	2.3	$2\nu_4 (E)$	I
2742.09161	3	3	a_1/a_2	4	4	a_1/a_2	4.6	$2\nu_4 (E)$	I
2742.10370	20	10	e	20	11	e	2.0	$2\nu_4 (E)$	I
2742.13928	19	10	e	19	11	e	4.5	$2\nu_4 (E)$	I
2742.21524	16	10	e	16	11	e	2.5	$2\nu_4 (E)$	I
2742.23437	28	11	e	28	12	e	2.2	$2\nu_4 (E)$	I
2742.30609	12	10	e	12	11	e	1.5	$2\nu_4 (E)$	I
2742.36364	25	11	e	25	12	e	2.1	$2\nu_4 (E)$	I

Table A1 (cont.)

$\tilde{\nu}_{\text{obs.}} / \text{cm}^{-1}$	J''	K''	γ''	J	K	γ	$\lg(I_0/I)/10^{-2}$	Band	Spectrum
2742.40295	24	11	e	24	12	e	2.2	$2\nu_4 (E)$	I
2742.51370	21	11	e	21	12	e	2.3	$2\nu_4 (E)$	I
2742.54781	20	11	e	20	12	e	2.1	$2\nu_4 (E)$	I
2742.58199	19	11	e	19	12	e	5.5	$2\nu_4 (E)$	I
2742.61269	18	11	e	18	12	e	1.8	$2\nu_4 (E)$	I
2742.65935	16	11	e	16	12	e	1.8	$2\nu_4 (E)$	I
2742.71019	14	11	e	14	12	e	1.5	$2\nu_4 (E)$	I
2742.77276	4	3	a_1/a_2	5	4	a_1/a_2	3.9	$2\nu_4 (E)$	I
2742.94280	15	14	e	16	13	e	0.7	$2\nu_4 (E)$	I
2742.95760	21	12	a_1/a_2	21	13	a_1/a_2	4.0	$2\nu_4 (E)$	I
2742.98888	20	12	a_1/a_2	20	13	a_1/a_2	3.6	$2\nu_4 (E)$	I
2743.01587	19	12	a_1/a_2	19	13	a_1/a_2	3.7	$2\nu_4 (E)$	I
2743.05003	18	12	a_1/a_2	18	13	a_1/a_2	3.6	$2\nu_4 (E)$	I
2743.07881	17	12	a_1/a_2	17	13	a_1/a_2	3.2	$2\nu_4 (E)$	I
2743.10806	16	12	a_1/a_2	16	13	a_1/a_2	2.6	$2\nu_4 (E)$	I
2743.13125	15	12	a_1/a_2	15	13	a_1/a_2	2.3	$2\nu_4 (E)$	I
2743.15672	14	12	a_1/a_2	14	13	a_1/a_2	1.7	$2\nu_4 (E)$	I
2743.29162	24	13	e	24	14	e	2.1	$2\nu_4 (E)$	I
2743.32974	23	13	e	23	14	e	2.9	$2\nu_4 (E)$	I
2743.36090	32	14	e	32	15	e	1.4	$2\nu_4 (E)$	I
2743.36922	22	13	e	22	14	e	2.1	$2\nu_4 (E)$	I
2743.41343	31	14	e	31	15	e	2.2	$2\nu_4 (E)$	I
2743.45205	5	3	a_1/a_2	6	4	a_1/a_2	3.7	$2\nu_4 (E)$	I
2743.49617	18	13	e	18	14	e	1.9	$2\nu_4 (E)$	I
2743.51448	29	14	e	29	15	e	1.7	$2\nu_4 (E)$	I
2743.55241	16	13	e	16	14	e	1.6	$2\nu_4 (E)$	I
2743.56178	28	14	e	28	15	e	2.6	$2\nu_4 (E)$	I
2743.60870	27	14	e	27	15	e	1.7	$2\nu_4 (E)$	I
2743.65185	26	14	e	26	15	e	3.6	$2\nu_4 (E)$	I
2743.69549	25	14	e	25	15	e	3.7	$2\nu_4 (E)$	I
2743.73631	24	14	e	24	15	e	1.9	$2\nu_4 (E)$	I
2743.77556	23	14	e	23	15	e	1.8	$2\nu_4 (E)$	I
2743.81399	22	14	e	22	15	e	2.0	$2\nu_4 (E)$	I
2743.85344	21	14	e	21	15	e	2.2	$2\nu_4 (E)$	I
2743.86811	20	14	e	20	15	e	1.6	$2\nu_4 (E)$	I
2743.89943	29	15	a_1/a_2	29	16	a_1/a_2	1.0	$2\nu_4 (E)$	I
2743.91014	19	14	e	19	15	e	1.5	$2\nu_4 (E)$	I
2743.94376	18	14	e	18	15	e	1.4	$2\nu_4 (E)$	I
2743.96474	37	16	e	37	17	e	1.4	$2\nu_4 (E)$	I
2743.97186	17	14	e	17	15	e	1.6	$2\nu_4 (E)$	I
2743.99855	27	15	a_1/a_2	27	16	a_1/a_2	1.3	$2\nu_4 (E)$	I
2744.08907	35	16	e	35	17	e	2.0	$2\nu_4 (E)$	I
2744.12997	6	3	a_1/a_2	7	4	a_1/a_2	6.4	$2\nu_4 (E)$	I
2744.14860	34	16	e	34	17	e	1.4	$2\nu_4 (E)$	I
2744.26121	32	16	e	32	17	e	2.9	$2\nu_4 (E)$	I
2744.29309	20	15	a_1/a_2	20	16	a_1/a_2	2.0	$2\nu_4 (E)$	I
2744.33723	38	17	e	38	18	e	3.6	$2\nu_4 (E)$	I
2744.37104	18	15	a_1/a_2	18	16	a_1/a_2	3.7	$2\nu_4 (E)$	I

Table A1 (cont.)

$\tilde{\nu}_{\text{obs.}} / \text{cm}^{-1}$	J''	K''	γ''	J	K	γ	$\lg(I_0/I)/10^{-2}$	Band	Spectrum
2744.43264	16	15	a_1/a_2	16	16	a_1/a_2	1.8	$2\nu_4 (E)$	I
2744.46654	28	16	e	28	17	e	2.3	$2\nu_4 (E)$	I
2744.51255	27	16	e	27	17	e	1.7	$2\nu_4 (E)$	I
2744.53084	35	17	e	35	18	e	1.3	$2\nu_4 (E)$	I
2744.60098	25	16	e	25	17	e	1.7	$2\nu_4 (E)$	I
2744.62911	40	18	a_1/a_2	40	19	a_1/a_2	1.5	$2\nu_4 (E)$	I
2744.64306	24	16	e	24	17	e	1.8	$2\nu_4 (E)$	I
2744.64863	33	17	e	33	18	e	1.1	$2\nu_4 (E)$	I
2744.68277	23	16	e	23	17	e	1.6	$2\nu_4 (E)$	I
2744.77280	38	18	a_1/a_2	38	19	a_1/a_2	1.6	$2\nu_4 (E)$	I
2744.78764	20	16	e	20	17	e	1.3	$2\nu_4 (E)$	I
2744.80562	7	3	a_1/a_2	8	4	a_1/a_2	3.7	$2\nu_4 (E)$	I
2744.81290	30	17	e	30	18	e	1.7	$2\nu_4 (E)$	I
2744.82142	19	16	e	19	17	e	1.2	$2\nu_4 (E)$	I
2744.84040	37	18	a_1/a_2	37	19	a_1/a_2	1.9	$2\nu_4 (E)$	I
2744.86378	29	17	e	29	18	e	1.6	$2\nu_4 (E)$	I
2744.88226	17	16	e	17	17	e	0.6	$2\nu_4 (E)$	I
2744.90711	36	18	a_1/a_2	36	19	a_1/a_2	3.0	$2\nu_4 (E)$	I
2744.96008	27	17	e	27	18	e	1.5	$2\nu_4 (E)$	I
2744.97528	41	19	e	41	20	e	1.1	$2\nu_4 (E)$	I
2745.03213	34	18	a_1/a_2	34	19	a_1/a_2	2.7	$2\nu_4 (E)$	I
2745.09202	33	18	a_1/a_2	33	19	a_1/a_2	3.5	$2\nu_4 (E)$	I
2745.12947	23	17	e	23	18	e	1.9	$2\nu_4 (E)$	I
2745.16631	22	17	e	22	18	e	1.3	$2\nu_4 (E)$	I
2745.20532	31	18	a_1/a_2	31	19	a_1/a_2	3.8	$2\nu_4 (E)$	I
2745.25897	30	18	a_1/a_2	30	19	a_1/a_2	2.9	$2\nu_4 (E)$	I
2745.31120	29	18	a_1/a_2	29	19	a_1/a_2	2.8	$2\nu_4 (E)$	I
2745.36099	28	18	a_1/a_2	28	19	a_1/a_2	2.9	$2\nu_4 (E)$	I
2745.40925	27	18	a_1/a_2	27	19	a_1/a_2	3.4	$2\nu_4 (E)$	I
2745.44005	6	6	a_1/a_2	7	7	a_1/a_2	6.1	$2\nu_4 (E)$	I
2745.45333	26	18	a_1/a_2	26	19	a_1/a_2	2.8	$2\nu_4 (E)$	I
2745.47917	8	3	a_1/a_2	9	4	a_1/a_2	3.8	$2\nu_4 (E)$	I
2745.48981	25	18	a_1/a_2	25	19	a_1/a_2	2.7	$2\nu_4 (E)$	I
2745.52531	24	18	a_1/a_2	24	19	a_1/a_2	2.3	$2\nu_4 (E)$	I
2745.57557	12	3	a_1/a_2	13	2	a_1/a_2	4.4	$2\nu_4 (E)$	I
2745.57557	23	18	a_1/a_2	23	19	a_1/a_2	4.4	$2\nu_4 (E)$	I
2745.59427	32	19	e	32	20	e	1.5	$2\nu_4 (E)$	I
2745.61782	22	18	a_1/a_2	22	19	a_1/a_2	2.1	$2\nu_4 (E)$	I
2745.65654	21	18	a_1/a_2	21	19	a_1/a_2	1.8	$2\nu_4 (E)$	I
2745.69301	20	18	a_1/a_2	20	19	a_1/a_2	1.9	$2\nu_4 (E)$	I
2745.72678	19	18	a_1/a_2	19	19	a_1/a_2	1.0	$2\nu_4 (E)$	I
2745.81327	28	19	e	28	20	e	1.6	$2\nu_4 (E)$	I
2745.82704	20	15	a_1/a_2	21	14	a_1/a_2	0.7	$2\nu_4 (E)$	I
2745.91023	26	19	e	26	20	e	2.3	$2\nu_4 (E)$	I
2745.95443	39	21	a_1/a_2	39	22	a_1/a_2	2.8	$2\nu_4 (E)$	I
2746.02064	24	19	e	24	20	e	0.9	$2\nu_4 (E)$	I
2746.03147	23	19	e	23	20	e	1.1	$2\nu_4 (E)$	I
2746.03837	38	21	a_1/a_2	38	22	a_1/a_2	2.6	$2\nu_4 (E)$	I

Table A1 (cont.)

$\tilde{\nu}_{\text{obs.}} / \text{cm}^{-1}$	J''	K''	γ''	J	K	γ	$\lg(I_0/I)/10^{-2}$	Band	Spectrum
2746.07442	22	19	e	22	20	e	1.1	$2\nu_4 (E)$	I
2746.09685	31	20	e	31	21	e	1.5	$2\nu_4 (E)$	I
2746.11617	7	6	a_1/a_2	8	7	a_1/a_2	7.0	$2\nu_4 (E)$	I
2746.15509	9	3	a_1/a_2	10	4	a_1/a_2	4.6	$2\nu_4 (E)$	I
2746.20861	29	20	e	29	21	e	1.4	$2\nu_4 (E)$	I
2746.24179	13	3	a_1/a_2	14	2	a_1/a_2	1.8	$2\nu_4 (E)$	I
2746.29417	15	6	a_1/a_2	16	5	a_1/a_2	1.4	$2\nu_4 (E)$	I
2746.34243	34	21	a_1/a_2	34	22	a_1/a_2	1.9	$2\nu_4 (E)$	I
2746.35212	17	9	a_1/a_2	18	8	a_1/a_2	3.6	$2\nu_4 (E)$	I
2746.36287	26	20	e	26	21	e	1.4	$2\nu_4 (E)$	I
2746.41051	25	20	e	25	21	e	3.2	$2\nu_4 (E)$	I
2746.45319	24	20	e	24	21	e	1.2	$2\nu_4 (E)$	I
2746.47646	32	21	a_1/a_2	32	22	a_1/a_2	2.5	$2\nu_4 (E)$	I
2746.49001	23	20	e	23	21	e	1.1	$2\nu_4 (E)$	I
2746.55569	7	7	e	8	8	e	3.8	$2\nu_4 (E)$	I
2746.57213	21	20	e	21	21	e	0.7	$2\nu_4 (E)$	I
2746.59958	30	21	a_1/a_2	30	22	a_1/a_2	2.8	$2\nu_4 (E)$	I
2746.65660	29	21	a_1/a_2	29	22	a_1/a_2	2.4	$2\nu_4 (E)$	I
2746.71167	28	21	a_1/a_2	28	22	a_1/a_2	2.4	$2\nu_4 (E)$	I
2746.76303	27	21	a_1/a_2	27	22	a_1/a_2	3.0	$2\nu_4 (E)$	I
2746.79041	8	6	a_1/a_2	9	7	a_1/a_2	6.3	$2\nu_4 (E)$	I
2746.80996	26	21	a_1/a_2	26	22	a_1/a_2	2.5	$2\nu_4 (E)$	I
2746.82697	10	3	a_1/a_2	11	4	a_1/a_2	2.3	$2\nu_4 (E)$	I
2746.85827	25	21	a_1/a_2	25	22	a_1/a_2	2.1	$2\nu_4 (E)$	I
2746.90569	24	21	a_1/a_2	24	22	a_1/a_2	3.1	$2\nu_4 (E)$	I
2746.95527	16	6	a_1/a_2	17	5	a_1/a_2	1.6	$2\nu_4 (E)$	I
2746.96311	36	23	e	36	24	e	1.2	$2\nu_4 (E)$	I
2746.99428	22	21	a_1/a_2	22	22	a_1/a_2	0.8	$2\nu_4 (E)$	I
2747.00160	31	22	e	31	23	e	0.6	$2\nu_4 (E)$	I
2747.01008	18	9	a_1/a_2	19	8	a_1/a_2	1.1	$2\nu_4 (E)$	I
2747.13289	22	15	a_1/a_2	23	14	a_1/a_2	0.9	$2\nu_4 (E)$	I
2747.15290	34	23	e	34	24	e	1.0	$2\nu_4 (E)$	I
2747.23030	8	7	e	9	8	e	3.5	$2\nu_4 (E)$	I
2747.30762	21	13	e	22	12	e	0.8	$2\nu_4 (E)$	I
2747.32573	32	23	e	32	24	e	1.2	$2\nu_4 (E)$	I
2747.40305	31	23	e	31	24	e	1.4	$2\nu_4 (E)$	I
2747.46297	9	6	a_1/a_2	10	7	a_1/a_2	5.7	$2\nu_4 (E)$	I
2747.47754	30	23	e	30	24	e	1.9	$2\nu_4 (E)$	I
2747.49473	11	3	a_1/a_2	12	4	a_1/a_2	4.1	$2\nu_4 (E)$	I
2747.54872	29	23	e	29	24	e	1.5	$2\nu_4 (E)$	I
2747.61521	17	6	a_1/a_2	18	5	a_1/a_2	1.7	$2\nu_4 (E)$	I
2747.67100	8	8	e	9	9	e	4.6	$2\nu_4 (E)$	I
2747.72298	21	12	a_1/a_2	22	11	a_1/a_2	1.5	$2\nu_4 (E)$	I
2747.90219	9	7	e	10	8	e	3.8	$2\nu_4 (E)$	I
2748.05258	28	24	a_1/a_2	28	25	a_1/a_2	1.5	$2\nu_4 (E)$	I
2748.14222	10	6	a_1/a_2	11	7	a_1/a_2	4.1	$2\nu_4 (E)$	I
2748.16258	12	3	a_1/a_2	13	4	a_1/a_2	4.3	$2\nu_4 (E)$	I
2748.27155	18	6	a_1/a_2	19	5	a_1/a_2	1.7	$2\nu_4 (E)$	I

Table A1 (cont.)

$\tilde{\nu}_{\text{obs.}} / \text{cm}^{-1}$	J''	K''	γ''	J	K	γ	$\lg(I_0/I)/10^{-2}$	Band	Spectrum
2748.34330	9	8	e	10	9	e	4.2	$2\nu_4 (E)$	I
2748.44285	28	25	e	28	26	e	1.0	$2\nu_4 (E)$	I
2748.57187	10	7	e	11	8	e	3.3	$2\nu_4 (E)$	I
2748.78578	9	9	a_1/a_2	10	10	a_1/a_2	9.2	$2\nu_4 (E)$	I
2748.80964	11	6	a_1/a_2	12	7	a_1/a_2	5.6	$2\nu_4 (E)$	I
2748.82849	13	3	a_1/a_2	14	4	a_1/a_2	4.4	$2\nu_4 (E)$	I
2748.89021	17	3	a_1/a_2	18	2	a_1/a_2	2.1	$2\nu_4 (E)$	I
2749.01394	10	8	e	11	9	e	3.8	$2\nu_4 (E)$	I
2749.24371	11	7	e	12	8	e	3.2	$2\nu_4 (E)$	I
2749.45617	10	9	a_1/a_2	11	10	a_1/a_2	7.9	$2\nu_4 (E)$	I
2749.47241	12	6	a_1/a_2	13	7	a_1/a_2	6.8	$2\nu_4 (E)$	I
2749.49236	14	3	a_1/a_2	15	4	a_1/a_2	4.3	$2\nu_4 (E)$	I
2749.51940	29	27	a_1/a_2	29	28	a_1/a_2	4.2	$2\nu_4 (E)$	I
2749.62563	22	9	a_1/a_2	23	8	a_1/a_2	1.5	$2\nu_4 (E)$	I
2749.68550	11	8	e	12	9	e	3.6	$2\nu_4 (E)$	I
2749.90013	10	10	e	11	11	e	5.3	$2\nu_4 (E)$	I
2749.91198	12	7	e	13	8	e	3.2	$2\nu_4 (E)$	I
2750.12097	11	9	a_1/a_2	12	10	a_1/a_2	7.5	$2\nu_4 (E)$	I
2750.15557	15	3	a_1/a_2	16	4	a_1/a_2	4.6	$2\nu_4 (E)$	I
2750.27490	23	9	a_1/a_2	24	8	a_1/a_2	1.4	$2\nu_4 (E)$	I
2750.31856	25	12	a_1/a_2	26	11	a_1/a_2	2.0	$2\nu_4 (E)$	I
2750.36480	12	8	e	13	9	e	4.8	$2\nu_4 (E)$	I
2750.56875	11	10	e	12	11	e	4.5	$2\nu_4 (E)$	I
2750.57739	13	7	e	14	8	e	3.3	$2\nu_4 (E)$	I
2750.79420	12	9	a_1/a_2	13	10	a_1/a_2	7.8	$2\nu_4 (E)$	I
2750.81587	16	3	a_1/a_2	17	4	a_1/a_2	4.1	$2\nu_4 (E)$	I
2750.88994	22	6	a_1/a_2	23	5	a_1/a_2	1.8	$2\nu_4 (E)$	I
2750.92309	24	9	a_1/a_2	25	8	a_1/a_2	1.2	$2\nu_4 (E)$	I
2750.96359	26	12	a_1/a_2	27	11	a_1/a_2	1.1	$2\nu_4 (E)$	I
2751.01476	11	11	e	12	12	e	5.9	$2\nu_4 (E)$	I
2751.04179	13	8	e	14	9	e	2.8	$2\nu_4 (E)$	I
2751.23942	14	7	e	15	8	e	6.8	$2\nu_4 (E)$	I
2751.46147	13	9	a_1/a_2	14	10	a_1/a_2	9.5	$2\nu_4 (E)$	I
2751.47419	17	3	a_1/a_2	18	4	a_1/a_2	3.7	$2\nu_4 (E)$	I
2751.56883	25	9	a_1/a_2	26	8	a_1/a_2	1.2	$2\nu_4 (E)$	I
2751.60691	27	12	a_1/a_2	28	11	a_1/a_2	1.0	$2\nu_4 (E)$	I
2751.64723	29	15	a_1/a_2	30	14	a_1/a_2	0.9	$2\nu_4 (E)$	I
2751.83347	28	13	e	29	12	e	0.9	$2\nu_4 (E)$	I
2751.90314	15	7	e	16	8	e	7.4	$2\nu_4 (E)$	I
2752.12472	14	9	a_1/a_2	15	10	a_1/a_2	14.6	$2\nu_4 (E)$	I
2752.24595	28	12	a_1/a_2	29	11	a_1/a_2	1.0	$2\nu_4 (E)$	I
2752.28494	30	15	a_1/a_2	31	14	a_1/a_2	0.8	$2\nu_4 (E)$	I
2752.34846	13	11	e	14	12	e	5.4	$2\nu_4 (E)$	I
2752.47236	29	13	e	30	12	e	0.9	$2\nu_4 (E)$	I
2752.56160	16	7	e	17	8	e	3.7	$2\nu_4 (E)$	I
2752.78551	15	9	a_1/a_2	16	10	a_1/a_2	8.5	$2\nu_4 (E)$	I
2752.79604	13	12	a_1/a_2	14	13	a_1/a_2	11.8	$2\nu_4 (E)$	I
2753.00828	14	11	e	15	12	e	4.3	$2\nu_4 (E)$	I

Table A1 (cont.)

$\tilde{\nu}_{\text{obs.}} / \text{cm}^{-1}$	J''	K''	γ''	J	K	γ	$\lg(I_0/I)/10^{-2}$	Band	Spectrum
2753.22927	15	10	e	16	11	e	5.6	$2\nu_4 (E)$	I
2753.23977	13	13	e	14	14	e	7.0	$2\nu_4 (E)$	I
2753.44860	16	9	a_1/a_2	17	10	a_1/a_2	8.5	$2\nu_4 (E)$	I
2753.44860	20	3	a_1/a_2	21	4	a_1/a_2	8.5	$2\nu_4 (E)$	I
2753.45822	14	12	a_1/a_2	15	13	a_1/a_2	10.1	$2\nu_4 (E)$	I
2753.52431	30	12	a_1/a_2	31	11	a_1/a_2	1.0	$2\nu_4 (E)$	I
2753.67329	15	11	e	16	12	e	4.6	$2\nu_4 (E)$	I
2753.90567	14	13	e	15	14	e	5.9	$2\nu_4 (E)$	I
2754.10736	17	9	a_1/a_2	18	10	a_1/a_2	9.0	$2\nu_4 (E)$	I
2754.12213	15	12	a_1/a_2	16	13	a_1/a_2	9.1	$2\nu_4 (E)$	I
2754.33529	16	11	e	17	12	e	4.3	$2\nu_4 (E)$	I
2754.34509	14	14	e	15	15	e	4.9	$2\nu_4 (E)$	I
2754.54185	19	7	e	20	8	e	3.3	$2\nu_4 (E)$	I
2754.56707	15	13	e	16	14	e	5.2	$2\nu_4 (E)$	I
2754.76967	18	9	a_1/a_2	19	10	a_1/a_2	7.0	$2\nu_4 (E)$	I
2754.78079	16	12	a_1/a_2	17	13	a_1/a_2	9.6	$2\nu_4 (E)$	I
2754.79235	32	12	a_1/a_2	33	11	a_1/a_2	1.6	$2\nu_4 (E)$	I
2755.00118	17	11	e	18	12	e	4.1	$2\nu_4 (E)$	I
2755.01549	15	14	e	16	15	e	5.8	$2\nu_4 (E)$	I
2755.19514	20	7	e	21	8	e	3.2	$2\nu_4 (E)$	I
2755.21468	18	10	e	19	11	e	3.9	$2\nu_4 (E)$	I
2755.22854	16	13	e	17	14	e	5.0	$2\nu_4 (E)$	I
2755.39896	23	3	a_1/a_2	24	4	a_1/a_2	6.8	$2\nu_4 (E)$	I
2755.40833	21	6	a_1/a_2	22	7	a_1/a_2	5.1	$2\nu_4 (E)$	I
2755.42331	19	9	a_1/a_2	20	10	a_1/a_2	6.3	$2\nu_4 (E)$	I
2755.43942	17	12	a_1/a_2	18	13	a_1/a_2	8.1	$2\nu_4 (E)$	I
2755.44888	15	15	a_1/a_2	16	16	a_1/a_2	10.5	$2\nu_4 (E)$	I
2755.65775	18	11	e	19	12	e	4.0	$2\nu_4 (E)$	I
2755.67467	16	14	e	17	15	e	5.3	$2\nu_4 (E)$	I
2755.84681	21	7	e	22	8	e	3.2	$2\nu_4 (E)$	I
2755.86650	19	10	e	20	11	e	3.5	$2\nu_4 (E)$	I
2755.88556	17	13	e	18	14	e	4.6	$2\nu_4 (E)$	I
2756.05897	22	6	a_1/a_2	23	7	a_1/a_2	4.3	$2\nu_4 (E)$	I
2756.07663	20	9	a_1/a_2	21	10	a_1/a_2	5.9	$2\nu_4 (E)$	I
2756.09197	18	12	a_1/a_2	19	13	a_1/a_2	7.3	$2\nu_4 (E)$	I
2756.10848	16	15	a_1/a_2	17	16	a_1/a_2	10.1	$2\nu_4 (E)$	I
2756.31096	19	11	e	20	12	e	4.3	$2\nu_4 (E)$	I
2756.33377	17	14	e	18	15	e	4.8	$2\nu_4 (E)$	I
2756.49736	22	7	e	23	8	e	2.4	$2\nu_4 (E)$	I
2756.51953	20	10	e	21	11	e	3.1	$2\nu_4 (E)$	I
2756.54009	18	13	e	19	14	e	4.2	$2\nu_4 (E)$	I
2756.58658	16	16	e	17	17	e	6.1	$2\nu_4 (E)$	I
2756.69734	37	15	a_1/a_2	38	14	a_1/a_2	1.6	$2\nu_4 (E)$	I
2756.70780	23	6	a_1/a_2	24	7	a_1/a_2	4.6	$2\nu_4 (E)$	I
2756.72833	21	9	a_1/a_2	22	10	a_1/a_2	5.2	$2\nu_4 (E)$	I
2756.75213	19	12	a_1/a_2	20	13	a_1/a_2	7.5	$2\nu_4 (E)$	I
2756.76211	17	15	a_1/a_2	18	16	a_1/a_2	9.7	$2\nu_4 (E)$	I
2756.96350	20	11	e	21	12	e	3.7	$2\nu_4 (E)$	I

Table A1 (cont.)

$\tilde{\nu}_{\text{obs.}} / \text{cm}^{-1}$	J''	K''	γ''	J	K	γ	$\lg(I_0/I)/10^{-2}$	Band	Spectrum
2756.98819	18	14	e	19	15	e	4.6	$2\nu_4 (E)$	I
2757.14582	23	7	e	24	8	e	2.4	$2\nu_4 (E)$	I
2757.17128	21	10	e	22	11	e	3.4	$2\nu_4 (E)$	I
2757.24495	17	16	e	18	17	e	6.4	$2\nu_4 (E)$	I
2757.33522	26	3	a_1/a_2	27	4	a_1/a_2	2.9	$2\nu_4 (E)$	I
2757.35453	24	6	a_1/a_2	25	7	a_1/a_2	4.0	$2\nu_4 (E)$	I
2757.37841	22	9	a_1/a_2	23	10	a_1/a_2	5.1	$2\nu_4 (E)$	I
2757.40808	20	12	a_1/a_2	21	13	a_1/a_2	7.7	$2\nu_4 (E)$	I
2757.41471	18	15	a_1/a_2	19	16	a_1/a_2	8.5	$2\nu_4 (E)$	I
2757.61439	21	11	e	22	12	e	3.2	$2\nu_4 (E)$	I
2757.63275	19	14	e	20	15	e	3.7	$2\nu_4 (E)$	I
2757.69580	17	17	e	18	18	e	6.3	$2\nu_4 (E)$	I
2757.79298	24	7	e	25	8	e	2.5	$2\nu_4 (E)$	I
2757.82061	22	10	e	23	11	e	3.0	$2\nu_4 (E)$	I
2757.84409	20	13	e	21	14	e	2.3	$2\nu_4 (E)$	I
2757.90062	18	16	e	19	17	e	5.3	$2\nu_4 (E)$	I
2757.97719	27	3	a_1/a_2	28	4	a_1/a_2	2.6	$2\nu_4 (E)$	I
2757.99974	25	6	a_1/a_2	26	7	a_1/a_2	3.5	$2\nu_4 (E)$	I
2758.02653	23	9	a_1/a_2	24	10	a_1/a_2	4.9	$2\nu_4 (E)$	I
2758.05892	19	15	a_1/a_2	20	16	a_1/a_2	13.1	$2\nu_4 (E)$	I
2758.05892	21	12	a_1/a_2	22	13	a_1/a_2	13.1	$2\nu_4 (E)$	I
2758.30548	20	14	e	21	15	e	4.5	$2\nu_4 (E)$	I
2758.36068	18	17	e	19	18	e	4.2	$2\nu_4 (E)$	I
2758.43842	25	7	e	26	8	e	2.0	$2\nu_4 (E)$	I
2758.46926	23	10	e	24	11	e	3.1	$2\nu_4 (E)$	I
2758.50752	21	13	e	22	14	e	3.8	$2\nu_4 (E)$	I
2758.55360	19	16	e	20	17	e	4.6	$2\nu_4 (E)$	I
2758.61701	28	3	a_1/a_2	29	4	a_1/a_2	2.5	$2\nu_4 (E)$	I
2758.64320	26	6	a_1/a_2	27	7	a_1/a_2	3.3	$2\nu_4 (E)$	I
2758.67336	24	9	a_1/a_2	25	10	a_1/a_2	4.5	$2\nu_4 (E)$	I
2758.80763	18	18	a_1/a_2	19	19	a_1/a_2	12.8	$2\nu_4 (E)$	I
2758.91249	23	11	e	24	12	e	2.9	$2\nu_4 (E)$	I
2758.95310	21	14	e	22	15	e	3.9	$2\nu_4 (E)$	I
2759.00569	19	17	e	20	18	e	5.7	$2\nu_4 (E)$	I
2759.08150	26	7	e	27	8	e	1.9	$2\nu_4 (E)$	I
2759.11534	24	10	e	25	11	e	2.4	$2\nu_4 (E)$	I
2759.15373	22	13	e	23	14	e	3.6	$2\nu_4 (E)$	I
2759.21004	20	16	e	21	17	e	4.9	$2\nu_4 (E)$	I
2759.25510	29	3	a_1/a_2	30	4	a_1/a_2	2.2	$2\nu_4 (E)$	I
2759.28487	27	6	a_1/a_2	28	7	a_1/a_2	3.1	$2\nu_4 (E)$	I
2759.31793	25	9	a_1/a_2	26	10	a_1/a_2	4.1	$2\nu_4 (E)$	I
2759.35715	21	15	a_1/a_2	22	16	a_1/a_2	6.0	$2\nu_4 (E)$	I
2759.46097	19	18	a_1/a_2	20	19	a_1/a_2	12.6	$2\nu_4 (E)$	I
2759.55878	24	11	e	25	12	e	2.6	$2\nu_4 (E)$	I
2759.60098	22	14	e	23	15	e	3.7	$2\nu_4 (E)$	I
2759.65742	20	17	e	21	18	e	5.3	$2\nu_4 (E)$	I
2759.72226	27	7	e	28	8	e	1.7	$2\nu_4 (E)$	I
2759.76008	25	10	e	26	11	e	2.4	$2\nu_4 (E)$	I

Table A1 (cont.)

$\tilde{\nu}_{\text{obs.}} / \text{cm}^{-1}$	J''	K''	γ''	J	K	γ	$\lg(I_0/I)/10^{-2}$	Band	Spectrum
2759.80224	23	13	e	24	14	e	3.4	$2\nu_4 (E)$	I
2759.86106	21	16	e	22	17	e	4.7	$2\nu_4 (E)$	I
2759.89113	30	3	a_1/a_2	31	4	a_1/a_2	2.0	$2\nu_4 (E)$	I
2759.91795	19	19	e	20	20	e	6.6	$2\nu_4 (E)$	I
2759.92441	28	6	a_1/a_2	29	7	a_1/a_2	2.9	$2\nu_4 (E)$	I
2759.96121	26	9	a_1/a_2	27	10	a_1/a_2	4.3	$2\nu_4 (E)$	I
2760.00291	22	15	a_1/a_2	23	16	a_1/a_2	5.5	$2\nu_4 (E)$	I
2760.11123	20	18	a_1/a_2	21	19	a_1/a_2	11.8	$2\nu_4 (E)$	I
2760.20361	25	11	e	26	12	e	2.6	$2\nu_4 (E)$	I
2760.24803	23	14	e	24	15	e	3.8	$2\nu_4 (E)$	I
2760.30707	21	17	e	22	18	e	4.9	$2\nu_4 (E)$	I
2760.36272	28	7	e	29	8	e	1.8	$2\nu_4 (E)$	I
2760.40276	26	10	e	27	11	e	2.2	$2\nu_4 (E)$	I
2760.50945	22	16	e	23	17	e	4.4	$2\nu_4 (E)$	I
2760.52568	31	3	a_1/a_2	32	4	a_1/a_2	1.8	$2\nu_4 (E)$	I
2760.56241	29	6	a_1/a_2	30	7	a_1/a_2	3.0	$2\nu_4 (E)$	I
2760.56879	20	19	e	21	20	e	6.1	$2\nu_4 (E)$	I
2760.60232	27	9	a_1/a_2	28	10	a_1/a_2	3.7	$2\nu_4 (E)$	I
2760.64712	23	15	a_1/a_2	24	16	a_1/a_2	5.3	$2\nu_4 (E)$	I
2760.76029	21	18	a_1/a_2	22	19	a_1/a_2	10.6	$2\nu_4 (E)$	I
2760.84624	26	11	e	27	12	e	2.6	$2\nu_4 (E)$	I
2760.89331	24	14	e	25	15	e	3.3	$2\nu_4 (E)$	I
2760.95714	22	17	e	23	18	e	4.7	$2\nu_4 (E)$	I
2761.00019	29	7	e	30	8	e	1.6	$2\nu_4 (E)$	I
2761.02880	20	20	e	21	21	e	6.8	$2\nu_4 (E)$	I
2761.04410	27	10	e	28	11	e	2.2	$2\nu_4 (E)$	I
2761.15648	23	16	e	24	17	e	5.0	$2\nu_4 (E)$	I
2761.19808	30	6	a_1/a_2	31	7	a_1/a_2	3.1	$2\nu_4 (E)$	I
2761.21698	21	19	e	22	20	e	5.5	$2\nu_4 (E)$	I
2761.24157	28	9	a_1/a_2	29	10	a_1/a_2	3.4	$2\nu_4 (E)$	I
2761.28968	24	15	a_1/a_2	25	16	a_1/a_2	4.8	$2\nu_4 (E)$	I
2761.40471	22	18	a_1/a_2	23	19	a_1/a_2	8.9	$2\nu_4 (E)$	I
2761.48657	27	11	e	28	12	e	2.1	$2\nu_4 (E)$	I
2761.53518	25	14	e	26	15	e	2.9	$2\nu_4 (E)$	I
2761.60480	23	17	e	24	18	e	4.4	$2\nu_4 (E)$	I
2761.63681	30	7	e	31	8	e	1.5	$2\nu_4 (E)$	I
2761.67636	21	20	e	22	21	e	6.3	$2\nu_4 (E)$	I
2761.68253	28	10	e	29	11	e	2.0	$2\nu_4 (E)$	I
2761.78829	33	3	a_1/a_2	34	4	a_1/a_2	1.6	$2\nu_4 (E)$	I
2761.80018	24	16	e	25	17	e	4.7	$2\nu_4 (E)$	I
2761.83336	31	6	a_1/a_2	32	7	a_1/a_2	2.3	$2\nu_4 (E)$	I
2761.86094	22	19	e	23	20	e	4.9	$2\nu_4 (E)$	I
2761.87923	29	9	a_1/a_2	30	10	a_1/a_2	3.5	$2\nu_4 (E)$	I
2761.92996	25	15	a_1/a_2	26	16	a_1/a_2	4.4	$2\nu_4 (E)$	I
2762.04049	23	18	a_1/a_2	24	19	a_1/a_2	6.2	$2\nu_4 (E)$	I
2762.12559	28	11	e	29	12	e	2.4	$2\nu_4 (E)$	I
2762.13896	21	21	a_1/a_2	22	22	a_1/a_2	13.1	$2\nu_4 (E)$	I
2762.17820	26	14	e	27	15	e	3.6	$2\nu_4 (E)$	I

Table A1 (cont.)

$\tilde{\nu}_{\text{obs.}} / \text{cm}^{-1}$	J''	K''	γ''	J	K	γ	$\lg(I_0/I)/10^{-2}$	Band	Spectrum
2762.24960	24	17	e	25	18	e	4.1	$2\nu_4 (E)$	I
2762.27091	31	7	e	32	8	e	1.7	$2\nu_4 (E)$	I
2762.32082	22	20	e	23	21	e	6.8	$2\nu_4 (E)$	I
2762.41696	34	3	a_1/a_2	35	4	a_1/a_2	1.6	$2\nu_4 (E)$	I
2762.44324	25	16	e	26	17	e	3.5	$2\nu_4 (E)$	I
2762.46580	32	6	a_1/a_2	33	7	a_1/a_2	2.4	$2\nu_4 (E)$	I
2762.51487	30	9	a_1/a_2	31	10	a_1/a_2	3.2	$2\nu_4 (E)$	I
2762.53733	23	19	e	24	20	e	3.7	$2\nu_4 (E)$	I
2762.56844	26	15	a_1/a_2	27	16	a_1/a_2	4.2	$2\nu_4 (E)$	I
2762.69107	24	18	a_1/a_2	25	19	a_1/a_2	6.9	$2\nu_4 (E)$	I
2762.78304	22	21	a_1/a_2	23	22	a_1/a_2	12.0	$2\nu_4 (E)$	I
2762.81691	27	14	e	28	15	e	2.9	$2\nu_4 (E)$	I
2762.89180	25	17	e	26	18	e	3.7	$2\nu_4 (E)$	I
2762.90345	32	7	e	33	8	e	1.5	$2\nu_4 (E)$	I
2762.95568	30	10	e	31	11	e	1.7	$2\nu_4 (E)$	I
2762.97073	23	20	e	24	21	e	5.3	$2\nu_4 (E)$	I
2763.04358	35	3	a_1/a_2	36	4	a_1/a_2	1.3	$2\nu_4 (E)$	I
2763.08386	26	16	e	27	17	e	3.1	$2\nu_4 (E)$	I
2763.09594	33	6	a_1/a_2	34	7	a_1/a_2	2.0	$2\nu_4 (E)$	I
2763.14809	31	9	a_1/a_2	32	10	a_1/a_2	2.9	$2\nu_4 (E)$	I
2763.16193	24	19	e	25	20	e	4.6	$2\nu_4 (E)$	I
2763.20529	27	15	a_1/a_2	28	16	a_1/a_2	3.6	$2\nu_4 (E)$	I
2763.24884	22	22	e	23	23	e	6.7	$2\nu_4 (E)$	I
2763.34131	25	18	a_1/a_2	26	19	a_1/a_2	8.7	$2\nu_4 (E)$	I
2763.39722	30	11	e	31	12	e	1.7	$2\nu_4 (E)$	I
2763.42400	23	21	a_1/a_2	24	22	a_1/a_2	10.7	$2\nu_4 (E)$	I
2763.45484	28	14	e	29	15	e	2.4	$2\nu_4 (E)$	I
2763.53251	26	17	e	27	18	e	4.2	$2\nu_4 (E)$	I
2763.58886	31	10	e	32	11	e	1.6	$2\nu_4 (E)$	I
2763.61398	24	20	e	25	21	e	4.8	$2\nu_4 (E)$	I
2763.66894	36	3	a_1/a_2	37	4	a_1/a_2	1.5	$2\nu_4 (E)$	I
2763.72335	27	16	e	28	17	e	4.0	$2\nu_4 (E)$	I
2763.72335	34	6	a_1/a_2	35	7	a_1/a_2	4.0	$2\nu_4 (E)$	I
2763.78025	32	9	a_1/a_2	33	10	a_1/a_2	2.5	$2\nu_4 (E)$	I
2763.79858	25	19	e	26	20	e	4.2	$2\nu_4 (E)$	I
2763.84019	28	15	a_1/a_2	29	16	a_1/a_2	3.6	$2\nu_4 (E)$	I
2763.88836	23	22	e	24	23	e	5.9	$2\nu_4 (E)$	I
2763.98233	26	18	a_1/a_2	27	19	a_1/a_2	7.3	$2\nu_4 (E)$	I
2764.03097	31	11	e	32	12	e	1.5	$2\nu_4 (E)$	I
2764.06349	24	21	a_1/a_2	25	22	a_1/a_2	9.8	$2\nu_4 (E)$	I
2764.09040	29	14	e	30	15	e	2.2	$2\nu_4 (E)$	I
2764.17033	27	17	e	28	18	e	3.5	$2\nu_4 (E)$	I
2764.25293	25	20	e	26	21	e	4.6	$2\nu_4 (E)$	I
2764.29135	37	3	a_1/a_2	38	4	a_1/a_2	1.7	$2\nu_4 (E)$	I
2764.35820	23	23	e	24	24	e	8.5	$2\nu_4 (E)$	I
2764.40963	33	9	a_1/a_2	34	10	a_1/a_2	2.2	$2\nu_4 (E)$	I
2764.43663	26	19	e	27	20	e	4.1	$2\nu_4 (E)$	I
2764.47251	29	15	a_1/a_2	30	16	a_1/a_2	3.3	$2\nu_4 (E)$	I

Table A1 (cont.)

$\tilde{\nu}_{\text{obs.}} / \text{cm}^{-1}$	J''	K''	γ''	J	K	γ	$\lg(I_0/I)/10^{-2}$	Band	Spectrum
2764.52459	24	22	e	25	23	e	5.4	$2\nu_4 (E)$	I
2764.62008	27	18	a_1/a_2	28	19	a_1/a_2	6.7	$2\nu_4 (E)$	I
2764.66179	32	11	e	33	12	e	1.5	$2\nu_4 (E)$	I
2764.70096	25	21	a_1/a_2	26	22	a_1/a_2	9.1	$2\nu_4 (E)$	I
2764.72340	30	14	e	31	15	e	2.0	$2\nu_4 (E)$	I
2764.80659	28	17	e	29	18	e	3.1	$2\nu_4 (E)$	I
2764.85006	33	10	e	34	11	e	1.4	$2\nu_4 (E)$	I
2764.88920	26	20	e	27	21	e	4.1	$2\nu_4 (E)$	I
2764.97618	36	6	a_1/a_2	37	7	a_1/a_2	1.5	$2\nu_4 (E)$	I
2764.99109	24	23	e	25	24	e	6.4	$2\nu_4 (E)$	I
2765.03808	34	9	a_1/a_2	35	10	a_1/a_2	2.0	$2\nu_4 (E)$	I
2765.07314	27	19	e	28	20	e	3.6	$2\nu_4 (E)$	I
2765.10394	30	15	a_1/a_2	31	16	a_1/a_2	2.9	$2\nu_4 (E)$	I
2765.15402	25	22	e	26	23	e	4.6	$2\nu_4 (E)$	I
2765.25560	28	18	a_1/a_2	29	19	a_1/a_2	6.0	$2\nu_4 (E)$	I
2765.29166	33	11	e	34	12	e	1.4	$2\nu_4 (E)$	I
2765.34065	26	21	a_1/a_2	27	22	a_1/a_2	8.7	$2\nu_4 (E)$	I
2765.35491	31	14	e	32	15	e	1.9	$2\nu_4 (E)$	I
2765.44073	29	17	e	30	18	e	2.8	$2\nu_4 (E)$	I
2765.46644	24	24	a_1/a_2	25	25	a_1/a_2	12.8	$2\nu_4 (E)$	I
2765.47846	34	10	e	35	11	e	1.5	$2\nu_4 (E)$	I
2765.52370	27	20	e	28	21	e	3.7	$2\nu_4 (E)$	I
2765.53026	39	3	a_1/a_2	40	4	a_1/a_2	1.0	$2\nu_4 (E)$	I
2765.59616	37	6	a_1/a_2	38	7	a_1/a_2	1.1	$2\nu_4 (E)$	I
2765.61814	25	23	e	26	24	e	5.4	$2\nu_4 (E)$	I
2765.62735	30	16	e	31	17	e	2.4	$2\nu_4 (E)$	I
2765.66486	35	9	a_1/a_2	36	10	a_1/a_2	1.9	$2\nu_4 (E)$	I
2765.70176	28	19	e	29	20	e	3.2	$2\nu_4 (E)$	I
2765.73258	31	15	a_1/a_2	32	16	a_1/a_2	2.6	$2\nu_4 (E)$	I
2765.88857	29	18	a_1/a_2	30	19	a_1/a_2	5.6	$2\nu_4 (E)$	I
2765.91849	34	11	e	35	12	e	1.3	$2\nu_4 (E)$	I
2765.97480	27	21	a_1/a_2	28	22	a_1/a_2	8.1	$2\nu_4 (E)$	I
2765.98389	32	14	e	33	15	e	1.7	$2\nu_4 (E)$	I
2766.07305	30	17	e	31	18	e	2.4	$2\nu_4 (E)$	I
2766.08603	25	24	a_1/a_2	26	25	a_1/a_2	11.7	$2\nu_4 (E)$	I
2766.15601	28	20	e	29	21	e	3.6	$2\nu_4 (E)$	I
2766.22111	38	6	a_1/a_2	39	7	a_1/a_2	1.2	$2\nu_4 (E)$	I
2766.24198	26	23	e	27	24	e	4.1	$2\nu_4 (E)$	I
2766.25759	31	16	e	32	17	e	2.2	$2\nu_4 (E)$	I
2766.28850	36	9	a_1/a_2	37	10	a_1/a_2	1.7	$2\nu_4 (E)$	I
2766.33645	29	19	e	30	20	e	4.3	$2\nu_4 (E)$	I
2766.35974	32	15	a_1/a_2	33	16	a_1/a_2	2.4	$2\nu_4 (E)$	I
2766.44749	27	22	e	28	23	e	3.4	$2\nu_4 (E)$	I
2766.51974	30	18	a_1/a_2	31	19	a_1/a_2	5.1	$2\nu_4 (E)$	I
2766.57318	25	25	e	26	26	e	6.8	$2\nu_4 (E)$	I
2766.60515	28	21	a_1/a_2	29	22	a_1/a_2	7.4	$2\nu_4 (E)$	I
2766.69356	26	24	a_1/a_2	27	25	a_1/a_2	8.0	$2\nu_4 (E)$	I
2766.70302	31	17	e	32	18	e	2.1	$2\nu_4 (E)$	I

Table A1 (cont.)

$\tilde{\nu}_{\text{obs.}} / \text{cm}^{-1}$	J''	K''	γ''	J	K	γ	$\lg(I_0/I)/10^{-2}$	Band	Spectrum
2766.78627	29	20	e	30	21	e	3.1	$2\nu_4 (E)$	I
2766.83962	39	6	a_1/a_2	40	7	a_1/a_2	1.2	$2\nu_4 (E)$	I
2766.88711	27	23	e	28	24	e	5.8	$2\nu_4 (E)$	I
2766.91005	37	9	a_1/a_2	38	10	a_1/a_2	1.6	$2\nu_4 (E)$	I
2766.96692	30	19	e	31	20	e	2.7	$2\nu_4 (E)$	I
2766.98397	33	15	a_1/a_2	34	16	a_1/a_2	2.3	$2\nu_4 (E)$	I
2767.07303	28	22	e	29	23	e	4.1	$2\nu_4 (E)$	I
2767.14923	31	18	a_1/a_2	32	19	a_1/a_2	9.1	$2\nu_4 (E)$	I
2767.16731	36	11	e	37	12	e	0.9	$2\nu_4 (E)$	I
2767.23334	29	21	a_1/a_2	30	22	a_1/a_2	7.6	$2\nu_4 (E)$	I
2767.32019	27	24	a_1/a_2	28	25	a_1/a_2	8.6	$2\nu_4 (E)$	I
2767.33058	32	17	e	33	18	e	2.0	$2\nu_4 (E)$	I
2767.41387	30	20	e	31	21	e	2.8	$2\nu_4 (E)$	I
2767.45738	40	6	a_1/a_2	41	7	a_1/a_2	1.0	$2\nu_4 (E)$	I
2767.50021	28	23	e	29	24	e	4.3	$2\nu_4 (E)$	I
2767.51330	33	16	e	34	17	e	1.6	$2\nu_4 (E)$	I
2767.53105	38	9	a_1/a_2	39	10	a_1/a_2	1.3	$2\nu_4 (E)$	I
2767.59421	31	19	e	32	20	e	2.4	$2\nu_4 (E)$	I
2767.60776	34	15	a_1/a_2	35	16	a_1/a_2	1.9	$2\nu_4 (E)$	I
2767.69849	29	22	e	30	23	e	2.7	$2\nu_4 (E)$	I
2767.71144	27	25	e	28	26	e	3.6	$2\nu_4 (E)$	I
2767.77522	32	18	a_1/a_2	33	19	a_1/a_2	5.3	$2\nu_4 (E)$	I
2767.78868	37	11	e	38	12	e	1.3	$2\nu_4 (E)$	I
2767.85754	30	21	a_1/a_2	31	22	a_1/a_2	7.2	$2\nu_4 (E)$	I
2767.95371	33	17	e	34	18	e	4.5	$2\nu_4 (E)$	I
2768.03934	31	20	e	32	21	e	2.6	$2\nu_4 (E)$	I
2768.11449	29	23	e	30	24	e	3.6	$2\nu_4 (E)$	I
2768.13728	34	16	e	35	17	e	1.6	$2\nu_4 (E)$	I
2768.14886	39	9	a_1/a_2	40	10	a_1/a_2	1.5	$2\nu_4 (E)$	I
2768.21904	32	19	e	33	20	e	2.7	$2\nu_4 (E)$	I
2768.22853	35	15	a_1/a_2	36	16	a_1/a_2	1.8	$2\nu_4 (E)$	I
2768.29763	28	25	e	29	26	e	5.7	$2\nu_4 (E)$	I
2768.32145	30	22	e	31	23	e	2.4	$2\nu_4 (E)$	I
2768.39931	33	18	a_1/a_2	34	19	a_1/a_2	3.9	$2\nu_4 (E)$	I
2768.40800	38	11	e	39	12	e	1.2	$2\nu_4 (E)$	I
2768.47948	31	21	a_1/a_2	32	22	a_1/a_2	5.5	$2\nu_4 (E)$	I
2768.58014	34	17	e	35	18	e	1.8	$2\nu_4 (E)$	I
2768.65996	32	20	e	33	21	e	2.4	$2\nu_4 (E)$	I
2768.72517	30	23	e	31	24	e	3.3	$2\nu_4 (E)$	I
2768.75958	35	16	e	36	17	e	1.5	$2\nu_4 (E)$	I
2768.81358	27	27	a_1/a_2	28	28	a_1/a_2	12.0	$2\nu_4 (E)$	I
2768.84754	33	19	e	34	20	e	4.1	$2\nu_4 (E)$	I
2768.90722	29	25	e	30	26	e	2.1	$2\nu_4 (E)$	I
2768.94214	31	22	e	32	23	e	3.5	$2\nu_4 (E)$	I
2769.02135	34	18	a_1/a_2	35	19	a_1/a_2	3.4	$2\nu_4 (E)$	I
2769.09741	32	21	a_1/a_2	33	22	a_1/a_2	7.9	$2\nu_4 (E)$	I
2769.20006	35	17	e	36	18	e	2.0	$2\nu_4 (E)$	I
2769.28102	33	20	e	34	21	e	2.6	$2\nu_4 (E)$	I

Table A1 (cont.)

$\tilde{\nu}_{\text{obs.}} / \text{cm}^{-1}$	J''	K''	γ''	J	K	γ	$\lg(I_0/I)/10^{-2}$	Band	Spectrum
2769.33223	31	23	e	32	24	e	3.3	$2\nu_4 (E)$	I
2769.37881	36	16	e	37	17	e	2.1	$2\nu_4 (E)$	I
2769.46225	34	19	e	35	20	e	2.8	$2\nu_4 (E)$	I
2769.47780	28	27	a_1/a_2	29	28	a_1/a_2	11.4	$2\nu_4 (E)$	I
2769.52531	30	25	e	31	26	e	2.8	$2\nu_4 (E)$	I
2769.56122	32	22	e	33	23	e	3.4	$2\nu_4 (E)$	I
2769.64082	35	18	a_1/a_2	36	19	a_1/a_2	3.6	$2\nu_4 (E)$	I
2769.71430	33	21	a_1/a_2	34	22	a_1/a_2	4.5	$2\nu_4 (E)$	I
2769.81925	36	17	e	37	18	e	1.5	$2\nu_4 (E)$	I
2769.89854	34	20	e	35	21	e	2.4	$2\nu_4 (E)$	I
2770.07836	35	19	e	36	20	e	3.3	$2\nu_4 (E)$	I
2770.13502	31	25	e	32	26	e	2.4	$2\nu_4 (E)$	I
2770.17633	33	22	e	34	23	e	2.0	$2\nu_4 (E)$	I
2770.18665	29	27	a_1/a_2	30	28	a_1/a_2	9.1	$2\nu_4 (E)$	I
2770.25784	36	18	a_1/a_2	37	19	a_1/a_2	2.9	$2\nu_4 (E)$	I
2770.32733	34	21	a_1/a_2	35	22	a_1/a_2	3.8	$2\nu_4 (E)$	I
2770.43555	37	17	e	38	18	e	1.2	$2\nu_4 (E)$	I
2770.51179	35	20	e	36	21	e	2.8	$2\nu_4 (E)$	I
2770.52864	33	23	e	34	24	e	2.4	$2\nu_4 (E)$	I
2770.69178	36	19	e	37	20	e	2.0	$2\nu_4 (E)$	I
2770.73990	32	25	e	33	26	e	1.9	$2\nu_4 (E)$	I
2770.87314	30	27	a_1/a_2	31	28	a_1/a_2	8.1	$2\nu_4 (E)$	I
2770.87314	37	18	a_1/a_2	38	19	a_1/a_2	8.1	$2\nu_4 (E)$	I
2770.93628	35	21	a_1/a_2	36	22	a_1/a_2	3.3	$2\nu_4 (E)$	I
2771.12003	34	23	e	35	24	e	2.6	$2\nu_4 (E)$	I
2771.12003	36	20	e	37	21	e	2.6	$2\nu_4 (E)$	I
2771.30522	37	19	e	38	20	e	1.5	$2\nu_4 (E)$	I
2771.34074	33	25	e	34	26	e	1.9	$2\nu_4 (E)$	I
2771.40234	35	22	e	36	23	e	1.5	$2\nu_4 (E)$	I
2771.48301	38	18	a_1/a_2	39	19	a_1/a_2	2.2	$2\nu_4 (E)$	I
2771.54185	36	21	a_1/a_2	37	22	a_1/a_2	3.4	$2\nu_4 (E)$	I
2771.70552	35	23	e	36	24	e	1.8	$2\nu_4 (E)$	I
2771.73131	37	20	e	38	21	e	2.2	$2\nu_4 (E)$	I
2771.91415	38	19	e	39	20	e	1.2	$2\nu_4 (E)$	I
2771.93699	34	25	e	35	26	e	1.5	$2\nu_4 (E)$	I
2772.01133	36	22	e	37	23	e	1.3	$2\nu_4 (E)$	I
2772.09355	39	18	a_1/a_2	40	19	a_1/a_2	1.9	$2\nu_4 (E)$	I
2772.14340	37	21	a_1/a_2	38	22	a_1/a_2	2.7	$2\nu_4 (E)$	I
2772.28198	36	23	e	37	24	e	1.3	$2\nu_4 (E)$	I
2772.33671	38	20	e	39	21	e	1.8	$2\nu_4 (E)$	I
2772.52867	39	19	e	40	20	e	1.6	$2\nu_4 (E)$	I
2772.61914	37	22	e	38	23	e	1.1	$2\nu_4 (E)$	I
2772.70036	40	18	a_1/a_2	41	19	a_1/a_2	1.6	$2\nu_4 (E)$	I
2772.74175	38	21	a_1/a_2	39	22	a_1/a_2	2.4	$2\nu_4 (E)$	I
2773.11528	36	25	e	37	26	e	1.2	$2\nu_4 (E)$	I
2773.12339	40	19	e	41	20	e	1.0	$2\nu_4 (E)$	I
2773.33536	39	21	a_1/a_2	40	22	a_1/a_2	2.0	$2\nu_4 (E)$	I
2773.92448	40	21	a_1/a_2	41	22	a_1/a_2	2.2	$2\nu_4 (E)$	I

Table A1 (cont.)

$\tilde{\nu}_{\text{obs.}} / \text{cm}^{-1}$	J''	K''	γ''	J	K	γ	$\lg(I_0/I)/10^{-2}$	Band	Spectrum
3007.44541	25	6	a_1/a_2	24	6	a_1/a_2	22.2	ν_1	II
3007.45708	25	7	e	24	7	e	11.4	ν_1	II
3007.47025	25	8	e	24	8	e	9.9	ν_1	II
3007.49124	25	9	a_1/a_2	24	9	a_1/a_2	16.0	ν_1	II
3007.52566	25	10	e	24	10	e	8.2	ν_1	II
3007.58992	25	11	e	24	11	e	5.6	ν_1	II
3007.71350	25	12	a_1/a_2	24	12	a_1/a_2	6.3	ν_1	II
3008.12328	24	6	a_1/a_2	23	6	a_1/a_2	19.8	ν_1	II
3008.13159	24	7	e	23	7	e	12.6	ν_1	II
3008.14144	24	8	e	23	8	e	9.6	ν_1	II
3008.15529	24	9	a_1/a_2	23	9	a_1/a_2	18.1	ν_1	II
3008.17550	24	10	e	23	10	e	9.1	ν_1	II
3008.20977	24	11	e	23	11	e	7.6	ν_1	II
3008.27565	24	12	a_1/a_2	23	12	a_1/a_2	10.7	ν_1	II
3008.79149	23	0	a_1/a_2	22	0	a_1/a_2	41.7	ν_1	II
3008.80384	23	6	a_1/a_2	22	6	a_1/a_2	22.6	ν_1	II
3008.81154	23	7	e	22	7	e	12.1	ν_1	II
3008.81884	23	8	e	22	8	e	10.1	ν_1	II
3008.82964	23	9	a_1/a_2	22	9	a_1/a_2	19.7	ν_1	II
3008.84335	23	10	e	22	10	e	11.2	ν_1	II
3008.86503	23	11	e	22	11	e	8.9	ν_1	II
3008.90105	23	12	a_1/a_2	22	12	a_1/a_2	14.0	ν_1	II
3008.97613	23	13	e	22	13	e	5.4	ν_1	II
3009.47661	22	0	a_1/a_2	21	0	a_1/a_2	48.9	ν_1	II
3009.48544	22	6	a_1/a_2	21	6	a_1/a_2	26.8	ν_1	II
3009.50032	22	8	e	21	8	e	11.3	ν_1	II
3009.50885	22	9	a_1/a_2	21	9	a_1/a_2	19.1	ν_1	II
3009.51994	22	10	e	21	10	e	10.1	ν_1	II
3009.53533	22	11	e	21	11	e	9.0	ν_1	II
3009.55850	22	12	a_1/a_2	21	12	a_1/a_2	17.3	ν_1	II
3009.59994	22	13	e	21	13	e	6.8	ν_1	II
3010.16174	21	0	a_1/a_2	20	0	a_1/a_2	46.1	ν_1	II
3010.17387	21	6	a_1/a_2	20	6	a_1/a_2	25.1	ν_1	II
3010.18348	21	8	e	20	8	e	11.6	ν_1	II
3010.19089	21	9	a_1/a_2	20	9	a_1/a_2	19.3	ν_1	II
3010.20031	21	10	e	20	10	e	10.9	ν_1	II
3010.21250	21	11	e	20	11	e	9.9	ν_1	II
3010.22962	21	12	a_1/a_2	20	12	a_1/a_2	16.0	ν_1	II
3010.25616	21	13	e	20	13	e	7.9	ν_1	II
3010.84814	20	0	a_1/a_2	19	0	a_1/a_2	53.8	ν_1	II
3010.85835	20	6	a_1/a_2	19	6	a_1/a_2	24.1	ν_1	II
3010.86820	20	8	e	19	8	e	12.1	ν_1	II
3010.87485	20	9	a_1/a_2	19	9	a_1/a_2	19.4	ν_1	II
3010.88317	20	10	e	19	10	e	9.9	ν_1	II
3010.89349	20	11	e	19	11	e	9.3	ν_1	II
3010.90715	20	12	a_1/a_2	19	12	a_1/a_2	15.8	ν_1	II
3010.92664	20	13	e	19	13	e	7.9	ν_1	II
3010.96013	20	14	e	19	14	e	7.0	ν_1	II

Table A1 (cont.)

$\tilde{\nu}_{\text{obs.}} / \text{cm}^{-1}$	J''	K''	γ''	J	K	γ	$\lg(I_0/I)/10^{-2}$	Band	Spectrum
3011.06273	20	15	a_1/a_2	19	15	a_1/a_2	4.9	ν_1	II
3011.53437	19	0	a_1/a_2	18	0	a_1/a_2	50.7	ν_1	II
3011.54354	19	6	a_1/a_2	18	6	a_1/a_2	27.0	ν_1	II
3011.55371	19	8	e	18	8	e	12.8	ν_1	II
3011.55985	19	9	a_1/a_2	18	9	a_1/a_2	20.4	ν_1	II
3011.56740	19	10	e	18	10	e	9.8	ν_1	II
3011.57670	19	11	e	18	11	e	9.2	ν_1	II
3011.58838	19	12	a_1/a_2	18	12	a_1/a_2	16.3	ν_1	II
3011.60397	19	13	e	18	13	e	8.3	ν_1	II
3011.62814	19	14	e	18	14	e	6.2	ν_1	II
3011.67767	19	15	a_1/a_2	18	15	a_1/a_2	8.2	ν_1	II
3011.74179	19	16	e	18	16	e	4.0	ν_1	II
3011.79824	19	17	e	18	17	e	2.0	ν_1	II
3012.22154	18	0	a_1/a_2	17	0	a_1/a_2	51.6	ν_1	II
3012.23014	18	6	a_1/a_2	17	6	a_1/a_2	26.7	ν_1	II
3012.24013	18	8	e	17	8	e	13.4	ν_1	II
3012.24576	18	9	a_1/a_2	17	9	a_1/a_2	19.5	ν_1	II
3012.25281	18	10	e	17	10	e	9.7	ν_1	II
3012.26122	18	11	e	17	11	e	8.9	ν_1	II
3012.27164	18	12	a_1/a_2	17	12	a_1/a_2	14.5	ν_1	II
3012.28514	18	13	e	17	13	e	7.0	ν_1	II
3012.30406	18	14	e	17	14	e	6.4	ν_1	II
3012.33607	18	15	a_1/a_2	17	15	a_1/a_2	7.8	ν_1	II
3012.90900	17	0	a_1/a_2	16	0	a_1/a_2	52.2	ν_1	II
3012.91658	17	6	a_1/a_2	16	6	a_1/a_2	26.7	ν_1	II
3012.93223	17	9	a_1/a_2	16	9	a_1/a_2	19.1	ν_1	II
3012.93892	17	10	e	16	10	e	9.5	ν_1	II
3012.94679	17	11	e	16	11	e	8.2	ν_1	II
3012.95624	17	12	a_1/a_2	16	12	a_1/a_2	13.3	ν_1	II
3012.96822	17	13	e	16	13	e	6.2	ν_1	II
3012.98423	17	14	e	16	14	e	5.2	ν_1	II
3013.00878	17	15	a_1/a_2	16	15	a_1/a_2	6.2	ν_1	II
3013.59669	16	0	a_1/a_2	15	0	a_1/a_2	52.4	ν_1	II
3013.60602	16	6	a_1/a_2	15	6	a_1/a_2	24.8	ν_1	II
3013.61935	16	9	a_1/a_2	15	9	a_1/a_2	18.3	ν_1	II
3013.62577	16	10	e	15	10	e	8.7	ν_1	II
3013.63294	16	11	e	15	11	e	8.0	ν_1	II
3013.64178	16	12	a_1/a_2	15	12	a_1/a_2	11.8	ν_1	II
3013.65271	16	13	e	15	13	e	5.0	ν_1	II
3013.66713	16	14	e	15	14	e	3.9	ν_1	II
3013.68696	16	15	a_1/a_2	15	15	a_1/a_2	4.0	ν_1	II
3014.28465	15	0	a_1/a_2	14	0	a_1/a_2	52.1	ν_1	II
3014.29304	15	6	a_1/a_2	14	6	a_1/a_2	24.6	ν_1	II
3014.30661	15	9	a_1/a_2	14	9	a_1/a_2	17.4	ν_1	II
3014.31985	15	11	e	14	11	e	6.8	ν_1	II
3014.32821	15	12	a_1/a_2	14	12	a_1/a_2	9.8	ν_1	II
3014.33854	15	13	e	14	13	e	4.0	ν_1	II
3014.97284	14	0	a_1/a_2	13	0	a_1/a_2	51.3	ν_1	II

Table A1 (cont.)

$\tilde{\nu}_{\text{obs.}} / \text{cm}^{-1}$	J''	K''	γ''	J	K	γ	$\lg(I_0/I)/10^{-2}$	Band	Spectrum
3014.98084	14	6	a_1/a_2	13	6	a_1/a_2	24.0	ν_1	II
3014.99444	14	9	a_1/a_2	13	9	a_1/a_2	16.2	ν_1	II
3015.00717	14	11	e	13	11	e	5.8	ν_1	II
3015.01528	14	12	a_1/a_2	13	12	a_1/a_2	7.4	ν_1	II
3015.02446	14	13	e	13	13	e	3.1	ν_1	II
3015.66111	13	0	a_1/a_2	12	0	a_1/a_2	50.0	ν_1	II
3015.68216	13	9	a_1/a_2	12	9	a_1/a_2	14.5	ν_1	II
3015.69470	13	11	e	12	11	e	4.6	ν_1	II
3015.70253	13	12	a_1/a_2	12	12	a_1/a_2	4.8	ν_1	II
3016.34957	12	0	a_1/a_2	11	0	a_1/a_2	47.9	ν_1	II
3017.03810	11	0	a_1/a_2	10	0	a_1/a_2	45.6	ν_1	II
3017.72672	10	0	a_1/a_2	9	0	a_1/a_2	42.5	ν_1	II
3018.41550	9	0	a_1/a_2	8	0	a_1/a_2	39.1	ν_1	II
3019.10419	8	0	a_1/a_2	7	0	a_1/a_2	35.2	ν_1	II
3019.79284	7	0	a_1/a_2	6	0	a_1/a_2	30.6	ν_1	II
3020.48156	6	0	a_1/a_2	5	0	a_1/a_2	25.5	ν_1	II
3021.17013	5	0	a_1/a_2	4	0	a_1/a_2	20.5	ν_1	II
3021.85873	4	0	a_1/a_2	3	0	a_1/a_2	14.5	ν_1	II
3022.54684	3	0	a_1/a_2	2	0	a_1/a_2	8.9	ν_1	II
3023.23504	2	0	a_1/a_2	1	0	a_1/a_2	6.1	ν_1	II
3025.98987	1	0	a_1/a_2	2	0	a_1/a_2	5.1	ν_1	II
3026.67844	2	0	a_1/a_2	3	0	a_1/a_2	8.7	ν_1	II
3027.36721	3	0	a_1/a_2	4	0	a_1/a_2	14.5	ν_1	II
3028.05567	4	0	a_1/a_2	5	0	a_1/a_2	20.2	ν_1	II
3028.74396	5	0	a_1/a_2	6	0	a_1/a_2	26.1	ν_1	II
3029.43198	6	0	a_1/a_2	7	0	a_1/a_2	31.2	ν_1	II
3030.11984	7	0	a_1/a_2	8	0	a_1/a_2	35.3	ν_1	II
3030.80773	8	0	a_1/a_2	9	0	a_1/a_2	38.9	ν_1	II
3031.49545	9	0	a_1/a_2	10	0	a_1/a_2	42.2	ν_1	II
3032.18304	10	0	a_1/a_2	11	0	a_1/a_2	45.1	ν_1	II
3032.87056	11	0	a_1/a_2	12	0	a_1/a_2	47.1	ν_1	II
3032.89415	11	9	a_1/a_2	12	9	a_1/a_2	10.6	ν_1	II
3032.90789	11	11	e	12	11	e	2.7	ν_1	II
3033.55794	12	0	a_1/a_2	13	0	a_1/a_2	48.9	ν_1	II
3033.56708	12	6	a_1/a_2	13	6	a_1/a_2	21.7	ν_1	II
3033.58216	12	9	a_1/a_2	13	9	a_1/a_2	12.7	ν_1	II
3033.59627	12	11	e	13	11	e	4.3	ν_1	II
3033.60505	12	12	a_1/a_2	13	12	a_1/a_2	4.5	ν_1	II
3034.24516	13	0	a_1/a_2	14	0	a_1/a_2	50.5	ν_1	II
3034.25491	13	6	a_1/a_2	14	6	a_1/a_2	22.8	ν_1	II
3034.27011	13	9	a_1/a_2	14	9	a_1/a_2	14.6	ν_1	II
3034.27688	13	10	e	14	10	e	6.8	ν_1	II
3034.28480	13	11	e	14	11	e	5.6	ν_1	II
3034.29386	13	12	a_1/a_2	14	12	a_1/a_2	7.4	ν_1	II
3034.93236	14	0	a_1/a_2	15	0	a_1/a_2	50.9	ν_1	II
3034.94294	14	6	a_1/a_2	15	6	a_1/a_2	23.9	ν_1	II
3034.95808	14	9	a_1/a_2	15	9	a_1/a_2	16.1	ν_1	II
3034.96524	14	10	e	15	10	e	7.5	ν_1	II

Table A1 (cont.)

$\tilde{\nu}_{\text{obs.}} / \text{cm}^{-1}$	J''	K''	γ''	J	K	γ	$\lg(I_0/I)/10^{-2}$	Band	Spectrum
3034.97331	14	11	e	15	11	e	7.8	ν_1	II
3034.98295	14	12	a_1/a_2	15	12	a_1/a_2	10.2	ν_1	II
3034.99498	14	13	e	15	13	e	4.7	ν_1	II
3035.61965	15	0	a_1/a_2	16	0	a_1/a_2	50.8	ν_1	II
3035.62883	15	6	a_1/a_2	16	6	a_1/a_2	25.7	ν_1	II
3035.64615	15	9	a_1/a_2	16	9	a_1/a_2	17.1	ν_1	II
3035.65357	15	10	e	16	10	e	8.5	ν_1	II
3035.66214	15	11	e	16	11	e	7.8	ν_1	II
3035.67246	15	12	a_1/a_2	16	12	a_1/a_2	11.8	ν_1	II
3035.68555	15	13	e	16	13	e	5.4	ν_1	II
3035.70244	15	14	e	16	14	e	4.5	ν_1	II
3035.72813	15	15	a_1/a_2	16	15	a_1/a_2	4.1	ν_1	II
3036.30683	16	0	a_1/a_2	17	0	a_1/a_2	50.4	ν_1	II
3036.31695	16	6	a_1/a_2	17	6	a_1/a_2	25.4	ν_1	II
3036.32789	16	8	e	17	8	e	10.8	ν_1	II
3036.33438	16	9	a_1/a_2	17	9	a_1/a_2	18.0	ν_1	II
3036.34228	16	10	e	17	10	e	8.9	ν_1	II
3036.35151	16	11	e	17	11	e	8.3	ν_1	II
3036.36282	16	12	a_1/a_2	17	12	a_1/a_2	13.3	ν_1	II
3036.37732	16	13	e	17	13	e	6.4	ν_1	II
3036.39736	16	14	e	17	14	e	5.0	ν_1	II
3036.43071	16	15	a_1/a_2	17	15	a_1/a_2	6.8	ν_1	II
3036.99413	17	0	a_1/a_2	18	0	a_1/a_2	49.3	ν_1	II
3037.00458	17	6	a_1/a_2	18	6	a_1/a_2	25.6	ν_1	II
3037.01611	17	8	e	18	8	e	10.8	ν_1	II
3037.02306	17	9	a_1/a_2	18	9	a_1/a_2	18.6	ν_1	II
3037.03153	17	10	e	18	10	e	9.4	ν_1	II
3037.04151	17	11	e	18	11	e	8.6	ν_1	II
3037.05417	17	12	a_1/a_2	18	12	a_1/a_2	14.6	ν_1	II
3037.07105	17	13	e	18	13	e	6.9	ν_1	II
3037.09634	17	14	e	18	14	e	5.8	ν_1	II
3037.14707	17	15	a_1/a_2	18	15	a_1/a_2	6.9	ν_1	II
3037.21262	17	16	e	18	16	e	2.6	ν_1	II
3037.68194	18	0	a_1/a_2	19	0	a_1/a_2	50.8	ν_1	II
3037.69344	18	6	a_1/a_2	19	6	a_1/a_2	22.9	ν_1	II
3037.70464	18	8	e	19	8	e	10.7	ν_1	II
3037.71211	18	9	a_1/a_2	19	9	a_1/a_2	19.1	ν_1	II
3037.72132	18	10	e	19	10	e	9.9	ν_1	II
3037.73283	18	11	e	19	11	e	9.2	ν_1	II
3037.74732	18	12	a_1/a_2	19	12	a_1/a_2	15.5	ν_1	II
3037.76810	18	13	e	19	13	e	7.3	ν_1	II
3037.80270	18	14	e	19	14	e	6.0	ν_1	II
3037.90662	18	15	a_1/a_2	19	15	a_1/a_2	4.6	ν_1	II
3038.36906	19	0	a_1/a_2	20	0	a_1/a_2	46.0	ν_1	II
3038.38248	19	6	a_1/a_2	20	6	a_1/a_2	23.1	ν_1	II
3038.39367	19	8	e	20	8	e	10.7	ν_1	II
3038.40208	19	9	a_1/a_2	20	9	a_1/a_2	20.5	ν_1	II
3038.41242	19	10	e	20	10	e	10.1	ν_1	II

Table A1 (cont.)

$\tilde{\nu}_{\text{obs.}} / \text{cm}^{-1}$	J''	K''	γ''	J	K	γ	$\lg(I_0/I)/10^{-2}$	Band	Spectrum
3038.42539	19	11	e	20	11	e	9.6	ν_1	II
3038.44375	19	12	a_1/a_2	20	12	a_1/a_2	15.9	ν_1	II
3038.47159	19	13	e	20	13	e	7.6	ν_1	II
3039.05672	20	0	a_1/a_2	21	0	a_1/a_2	42.2	ν_1	II
3039.06785	20	6	a_1/a_2	21	6	a_1/a_2	24.3	ν_1	II
3039.08390	20	8	e	21	8	e	10.9	ν_1	II
3039.09329	20	9	a_1/a_2	21	9	a_1/a_2	19.7	ν_1	II
3039.10560	20	10	e	21	10	e	10.4	ν_1	II
3039.12192	20	11	e	21	11	e	9.2	ν_1	II
3039.14619	20	12	a_1/a_2	21	12	a_1/a_2	15.6	ν_1	II
3039.18888	20	13	e	21	13	e	7.1	ν_1	II
3039.74460	21	0	a_1/a_2	22	0	a_1/a_2	39.2	ν_1	II
3039.75911	21	6	a_1/a_2	22	6	a_1/a_2	21.5	ν_1	II
3039.76694	21	7	e	22	7	e	11.0	ν_1	II
3039.77576	21	8	e	22	8	e	10.4	ν_1	II
3039.78723	21	9	a_1/a_2	22	9	a_1/a_2	24.3	ν_1	II
3039.80251	21	10	e	22	10	e	9.6	ν_1	II
3039.82483	21	11	e	22	11	e	9.1	ν_1	II
3039.86197	21	12	a_1/a_2	22	12	a_1/a_2	15.5	ν_1	II
3039.93874	21	13	e	22	13	e	6.4	ν_1	II
3040.45161	22	6	a_1/a_2	23	6	a_1/a_2	31.9	ν_1	II
3040.45988	22	7	e	23	7	e	10.3	ν_1	II
3040.47097	22	8	e	23	8	e	11.3	ν_1	II
3040.48557	22	9	a_1/a_2	23	9	a_1/a_2	24.0	ν_1	II
3040.50721	22	10	e	23	10	e	9.3	ν_1	II
3040.54223	22	11	e	23	11	e	8.0	ν_1	II
3040.60955	22	12	a_1/a_2	23	12	a_1/a_2	11.5	ν_1	II
3041.17208	23	8	e	24	8	e	9.8	ν_1	II
3041.19375	23	9	a_1/a_2	24	9	a_1/a_2	18.4	ν_1	II
3041.22930	23	10	e	24	10	e	12.0	ν_1	II
3041.29474	23	11	e	24	11	e	6.2	ν_1	II
3041.41962	23	12	a_1/a_2	24	12	a_1/a_2	6.9	ν_1	II