

NASA Technical Memorandum 104601

A Spectral Atlas of the ν_{12} Fundamental
of $^{13}\text{C}^{12}\text{CH}_6$ in the $12\mu\text{m}$ Region

Mark Weber, Dennis Reuter, J. Marcos Sirota, and John Hillman
NASA Goddard Space Flight Center
Greenbelt, Maryland

William E. Blass
Department of Physics
University of Tennessee



National Aeronautics and
Space Administration

Goddard Space Flight Center
Greenbelt, Maryland 20771

Abstract

The recent discovery of the minor isotopomer of ethane, $^{13}\text{C}^{12}\text{CH}_6$, in the planetary atmospheres of Jupiter and Neptune, added ethane to the molecules which can be used to determine isotopic $^{12}\text{C}/^{13}\text{C}$ ratios for the jovian planets. The increased spectral resolution and coverage of the IR and far-IR instruments to be carried on the Cassini mission to Saturn and Titan may enable the detection of the minor isotopomer. Accurate frequency and cross-section measurements of the ν_{12} fundamental under controlled laboratory condition are important to interpret current and future planetary spectra. High resolution spectra of the minor isotopomer $^{13}\text{C}^{12}\text{CH}_6$ have been recorded in the $12.2\ \mu\text{m}$ region using the Kitt Peak Fourier Transform (FTS) and the Goddard Tunable Diode Laser spectrometer (TDL). In a global fit to 19 molecular constants in a symmetric top Hamiltonian, transition frequencies of the ν_{12} fundamental ranging up to $J = 35$ and $K = 20$ have been determined with a standard deviation of less than $0.0005\ \text{cm}^{-1}$. From selected line intensity measurements, a vibrational dipole moment for the ν_{12} fundamental has been derived. Observed and calculated spectra covering the region from 740cm^{-1} to 910cm^{-1} are presented. A compilation of transition frequencies, line intensities, and lower state energies are included for general use in the astronomical community.

PRECEDING PAGE BLANK NOT FILMED

Introduction

The current spectroscopic study of the minor isotopomer $^{13}\text{C}^{12}\text{CH}_6$ is motivated by its recent discovery as a constituent in the atmosphere of Jupiter by Wiedemann *et al.* (1). Employing a cryogenic echelle array spectrometer, Orton *et al.* (2) identified traces of ^{13}C -ethane in Neptune's atmosphere. In both cases a near-terrestrial isotopic $^{12}\text{C}/^{13}\text{C}$ ratio has been found (1,2). Laboratory measurements of frequencies and intensities are important for future identification and atmospheric modeling of $^{13}\text{C}^{12}\text{CH}_6$ in the outer planetary atmospheres using for instance high resolution heterodyne remote sensing.

Regular ethane and its deuterated species have been studied in some detail in the mid- and far-infrared (3-9). The minor isotopomer $^{13}\text{C}^{12}\text{CH}_6$ has been investigated in the 2700 cm^{-1} region of the $\nu_3 + \nu_4$ overtone (equivalent to $\nu_2 + \nu_6$ in normal ethane) by Lafferty *et al.* (10). More recently, in studies of the $12\mu\text{m}$ region Kurtz *et al.* (11) obtained the ratio of the integrated intensity of the rQ_o -branch of the ν_{12} band of $^{13}\text{C}^{12}\text{CH}_6$ with respect to the equivalent ν_9 band of normal ethane. These studies were based on high resolution (0.0025 cm^{-1}) data recorded with the 1 m McMath FTS instrument at the National Solar Observatory in Kitt Peak, Arizona. The same laboratory data have been analyzed to assign rotation-torsional transitions in the ν_{12} fundamental and to determine ground state rotational constants from lower state combination differences (12).

More recently, the analysis has been extended to determine upper state constants for the ν_{12} fundamental of the minor isotopomer and to derive barriers to internal rotation in the ground and vibrational excited state (13). In this publication, a complete line by line compilation of calculated frequencies, lower state energies, and line strengths are published. From the molecular parameters a spectral atlas has been produced covering the region from 740 to 910 cm^{-1} .

Experimental Details

Several spectra at room and typical planetary temperatures (101K and 161K) were recorded using the 1-m Fourier transform spectrometer at the Kitt Peak National Solar Observatory (11,12). This instrument was operated in a double-pass configuration yielding a spectral resolution of 0.0025 cm^{-1} (14). The $^{13}\text{C}^{12}\text{CH}_6$ sample was provided in a 99% purified form by Matheson Co. No traces of the major isotopomer have been found in the unapodized FTS spectra. Calibration to absolute wavenumbers was done using well-isolated P - and R -branch lines of the ν_2^{1e} and $2\nu_2^{0e}$ band of N_2O at 580 cm^{-1} and 1168 cm^{-1} respectively (12).

Details of the tunable diode laser system at NASA Goddard Space Flight Center can be found in Ref. (15). Several Q -branches ranging from $K\Delta K = -6$ to 6 were measured to obtain complementary information on observed torsional splittings (13). These spectra were recorded with gas pressures of $p = 1.5$ Torr and an absorption cell length of $\ell = 30\text{ cm}$. Relative wavenumber calibrations were obtained using a 3 inch solid Ge-etalon (0.01623 cm^{-1} fringe spacing). A total of 68 splittings from the diode laser observations (Table II)

Table I. Molecular constants of $^{13}\text{C}^{12}\text{CH}_6$ in cm^{-1} . C_σ is the torsional Coriolis interaction parameter connecting the $\nu_{12} = 1$ state with the $\nu_6 = 3$ state. σ_F is the weighted standard deviation of the overall fit. 2307 transitions and torsional splitting values survived the fit. For convenience parameters are also given in Hz.

ν_0	820.931 394(42)	
B_0	0.649 764 9(91)	19 479.46(27) MHz
A_0	2.668 52†	80 000.2† MHz
D_0^J	$0.993\ 85(67) \times 10^{-6}$	29.795(20) kHz
D_0^{JK}	$2.608\ 8(87) \times 10^{-6}$	78.08(21) kHz
D_0^K	$9.54 \times 10^{-6} \dagger\dagger$	286†† kHz
α_{12}^B	$1.296\ 18(50) \times 10^{-3}$	38.858(15) MHz
α_{12}^A	$-7.796\ 4(11) \times 10^{-3}$	-233.730(33) MHz
β_{12}^J	$3.07(10) \times 10^{-9}$	92.0(39) Hz
β_{12}^{JK}	$-2.063(81) \times 10^{-8}$	-618(24) Hz
β_{12}^K	$-1.868(20) \times 10^{-7}$	-5600(60) Hz
$(A\zeta)_{12}^z$	0.696 191(18)	20 871.28(54) MHz
η_{12}^J	$-2.024(21) \times 10^{-6}$	-60.68(63) kHz
η_{12}^K	$2.391\ 1(30) \times 10^{-5}$	716.83(90) kHz
q_{12}^0	$-1.726\ 70(83) \times 10^{-3}$	-51.765(25) MHz
q_{12}^J	$9.07(88) \times 10^{-9}$	272(26) Hz
$V_6^{(0)}$	1026.888(79)	30 785.3(24) GHz
$V_6^{(12)}$	1088.61(77)	32 635(24) GHz
F_{1J}	$-1.542(12) \times 10^{-2}$	-462.3(36) MHz
F_{1K}	$-0.947(11) \times 10^{-2}$	-283.9(33) MHz
C_σ	$3.651\ 0(28) \times 10^{-2}$	1094.54(84) MHz
σ_F	5.5×10^{-4}	16MHz
data	2307/2447	

† Moazzen-Ahmadi *et al.* (9)

†† Duncan *et al.* (16)

were added to the FTS data in the global fit to determine molecular constants for ν_{12} .

Global Least Squares Fit

An iterative bi-weighted non-linear least squares fit of the upper and lower state energies has been carried out simultaneously. The upper state Hamiltonian included off-diagonal ℓ -resonance terms within the $\nu_{12} = 1$ state and off-diagonal torsional Coriolis interaction terms connecting with the excited torsional state of $\nu_6 = 3$. The results of the global fit are summarized in Table I (13). A more detailed account of the fitting procedure and the Hamiltonian used can be found in Ref. (13).

Of the 21 parameters employed in the upper and lower state Hamiltonian, the rotational constants A_o and D_o^K have been fixed to 2.66852 cm^{-1} (9) and $9.54 \times 10^{-6} \text{ cm}^{-1}$ (16), respectively. The rotation-torsional constants F_{1J} and F_{1K} in the $\nu_{12} = 1$ state were fixed to the ground state value. Observed torsional splittings recorded with the TDL spectrometer have been weighted by an extra factor of 4 corresponding to the enhancement in spectral resolution over the FTS data.

The intrinsic and unperturbed torsional splitting between the components of the torsional doublets as calculated from the upper and lower state barriers is $1.53 \times 10^{-3} \text{ cm}^{-1}$ which is not resolved in the current FTS data. For $K = 3n$ transitions with relative intensities of 2:1, both peaks of the doublets can be measured from the FTS data if they are separated by more than about $4.5 \times 10^{-3} \text{ cm}^{-1}$ and for $K \neq 3n$ (4:1 relative intensities) by more than $7.0 \times 10^{-3} \text{ cm}^{-1}$. Therefore, most torsional doublets could not be resolved, except near the crossing region which occurs at $K\Delta K = -18$. Most transition frequencies, particularly in the R -branches ($\Delta K = 1$) and as J approaches K , represent rather an average of the doublets. In order to avoid "frequency pulling" (5), transition frequencies of the $K = 3n$ series have been calculated using a weighted average of the two calculated frequencies of the doublets. The weights were chosen according to their statistical weights. Simulated spectra showed that such a weighting scheme yields a good approximation. In cases where one of the components of the doublets is rather weak, the average of the frequencies tends to be closer to the frequency of the strong component and therefore observed frequencies of unresolved $K \neq 3n$ torsional doublets (with 4:1 relative intensity ratio) have been assigned to the stronger component of the doublet.

Intensity Analysis

Forty-two individual lines of the ν_{12} band observed with the FTS have been measured to retrieve their intensities. Only those lines whose torsional components were sufficiently separated (mostly ${}^pP_K(J)$ lines) permitting a measurement of both components were included in the analysis. Since the intensity retrieval is constrained to a limited region, no attempts were made to determine the F -factors. Some of the very weak intensities have been discarded if their peak strength was below 10%. The lines were fitted to a convolution

Table II. Torsional Splittings Δ_{obs} measured with the TDL for the ν_{12} fundamental of $^{13}\text{C}^{12}\text{CH}_6$.

ΔK	ΔJ	K	J	Δ_{obs} [cm ⁻¹]	o-c	ΔK	ΔJ	K	J	Δ_{obs} [cm ⁻¹]	o-c
-1	0	6	12	0.00532	0.00029	-1	0	2	17	0.00654	0.00028
-1	0	6	13	0.00607	0.00035	-1	0	2	18	0.00751	0.00076
-1	0	6	14	0.00674	0.00030	-1	0	2	19	0.00696	-0.00029
-1	0	6	15	0.00750	0.00030	1	0	1	10	0.00283	0.00046
-1	0	6	16	0.00848	0.00049	1	0	2	9	0.00263	0.00013
-1	0	6	17	0.00915	0.00033	1	0	2	10	0.00309	0.00036
-1	0	6	18	0.00991	0.00024	1	0	2	11	0.00341	0.00042
-1	0	6	19	0.01049	-0.00006	1	0	2	12	0.00371	0.00044
-1	0	4	17	0.00852	0.00107	1	0	3	12	0.00240	-0.00007
-1	0	4	18	0.00828	0.00018	1	0	3	13	0.00286	0.00022
-1	0	4	19	0.00893	0.00016	1	0	3	14	0.00295	0.00013
-1	0	4	20	0.00971	0.00026	1	0	3	15	0.00281	-0.00021
-1	0	4	21	0.01023	0.00007	1	0	3	16	0.00311	-0.00011
-1	0	4	22	0.01101	0.00014	1	0	3	17	0.00334	-0.00010
-1	0	3	10	0.00247	-0.00015	1	0	3	18	0.00379	0.00012
-1	0	3	11	0.00295	0.00011	1	0	3	19	0.00368	-0.00024
-1	0	3	12	0.00320	0.00012	1	0	3	21	0.00415	-0.00029
-1	0	3	13	0.00354	0.00020	1	0	3	22	0.00457	-0.00015
-1	0	3	14	0.00359	-0.00002	1	0	5	16	0.00300	0.00011
-1	0	3	15	0.00412	0.00023	1	0	5	17	0.00325	0.00018
-1	0	3	17	0.00398	-0.00051	1	0	5	18	0.00320	-0.00007
-1	0	3	18	0.00457	-0.00025	1	0	5	19	0.00361	0.00013
-1	0	3	19	0.00517	0.00002	1	0	5	20	0.00351	-0.00019
-1	0	3	20	0.00512	-0.00036	1	0	5	21	0.00357	-0.00035
-1	0	3	21	0.00540	-0.00043	1	0	6	10	0.00240	0.00031
-1	0	3	22	0.00577	-0.00042	1	0	6	11	0.00275	0.00048
-1	0	3	23	0.00584	-0.00071	1	0	6	12	0.00287	0.00040
-1	0	3	24	0.00595	-0.00096	1	0	6	13	0.00312	0.00044
-1	0	3	25	0.00651	-0.00077	1	0	6	14	0.00353	0.00063
-1	0	2	12	0.00427	0.00021	1	0	6	15	0.00364	0.00050
-1	0	2	13	0.00488	0.00042	1	0	6	16	0.00393	0.00053
-1	0	2	14	0.00538	0.00050	1	0	6	18	0.00441	0.00046
-1	0	2	15	0.00562	0.00029	1	0	6	19	0.00468	0.00043
-1	0	2	16	0.00601	0.00022	1	0	6	20	0.00506	0.00050

Table III. Measured Line Intensities of the ν_{12} band (822 cm^{-1}) of $^{13}\text{C}^{12}\text{CH}_6$ at 294K.

J	ΔJ	K	ΔK	σ	ν_i [cm^{-1}]	$S_i \times 10^3$ [$\text{cm}^{-2}\text{atm}^{-1}$]	(o-c)/o %	W_i
24	-1	8	-1	2	769.1331	3.664	-4.1	1.010
22	-1	9	-1	3	769.3221	4.289	-3.7	1.006
18	-1	11	-1	1	769.7383	5.201	-3.1	1.001
24	-1	6	-1	0	774.1979	4.520	0.8	1.016
22	-1	7	-1	1	774.3451	5.187	-3.8	1.010
20	-1	8	-1	2	774.5033	5.901	-5.5	1.005
18	-1	9	-1	3	774.6752	7.217	3.8	1.003
18	-1	9	-1	1	774.6813	3.808	9.0	1.002
16	-1	10	-1	2	774.8591	7.580	1.4	1.001
15	-1	8	-1	2	781.1717	9.667	-2.5	1.002
19	-1	4	-1	2	786.0276	8.304	1.0	1.017
22	-1	2	-1	2	787.1992	6.327	3.5	1.062
18	-1	4	-1	2	787.3652	8.625	-3.6	1.015
21	-1	2	-1	2	788.5452	6.427	-4.6	1.056
17	-1	4	-1	2	788.7006	9.790	1.5	1.013
18	0	2	-1	2	815.8488	14.295	2.5	0.944
18	0	2	-1	0	815.8856	3.517	1.0	0.943

$$R_v^2 = 7.45(29) \times 10^{-4} \text{ (Debye)}^2$$

$$S_{\text{band}} = \sum_i S_i = 15.93(62) \text{ cm}^{-2}\text{atm}^{-1} @ 294\text{K}$$

of a Doppler spectrum in absorption with an appropriate FTS instrument function whose amplitude modulation function of the interferogram is a cosine truncated by the length of the mirror scan(17).

The retrieved intensities (Table III) were subjected to a least squares fit to the usual equation

$$S_i = \frac{8\pi^3 L_o T_o}{3hc T p_o} \gamma_a g_{JK} \frac{\exp(-E''_{vrt}/kT)}{Q_v Q_r Q_t} \left[1 - \exp\left(-\frac{hc\nu_i}{kT}\right) \right] L_r R_v^2 W_i, \quad (1)$$

where S_i is the line intensity in units of $\text{cm}^{-2}\text{atm}^{-1}$; h Planck's constant; k the Boltzmann

constant; c the speed of light; L_o Loschmidt's number at standard temperature $T_o=273.15$ K and pressure $p_o=1$ atm; T the ambient temperature; E''_{vrt} the lower state energy, and Q_v , Q_r , and Q_t are the vibrational, rotational, and torsional partition function, respectively. γ_a is the isotopic abundance of the species which equals 1 for a purified sample.

The last three terms in Eq. (1) represent the effective square dipole moment, where R_v^2 is the square vibrational transition moment and L_r the Hönl-London factor (18). The perturbation factor W_i is a correction factor to the rigid-rotor intensity caused by combined ℓ -resonance within the $v_{12} = 1$ state and the torsional Coriolis interaction between $v_{12} = 1$ and $v_6 = 3$. These factors have been calculated by transforming the rotational transition moment matrix using the unitary eigenvector matrix which also diagonalizes the upper state Hamiltonian. Values for W_i are obtained after squaring and normalizing to the square rotational transition moment L_r in the unperturbed limit. Due to the mixing effects, pP , rQ , and pR type transitions are enhanced in their intensities, while rP , pQ , and rR transitions are depleted.

The partition functions at $T=294$ K were calculated to be: $Q_r = 18,613$, $Q_v = 1.058$, and $Q_t=4.063$. The fitted square vibrational dipole moment was $R_v^2 = 7.45(29) \times 10^{-4} \text{ D}^2$, which is about 11% less than the value derived from the major isotopomer (5). This result is also in agreement with earlier analysis of the integrated strength of the rQ_o branch (11).

The Line Atlas

In Appendix A calculated line parameters for transitions of the ν_{12} fundamental are listed. The line parameters for each transition are the rotational quantum numbers $J, K, \Delta K$, and ΔJ and the torsional quantum number σ , calculated frequency ν_i in cm^{-1} , observed minus calculated frequency (o-c) given in the last digits, lower state (ground state) energy E_i in cm^{-1} , line intensity in $\text{cm}^{-2}\text{atm}^{-1}$ @296K, and the perturbation factor W_i . Line parameters have been calculated up to $K = 20$ and $J = 35$. The intensities have been converted from 294 K to the standard temperature $T = 296$ K using the exact expression in Eq. (1). For general conversion to other temperatures, for instance planetary temperatures, values for the torsional partition function have been calculated in the range of 100 K to 400 K using a ground state torsional barrier height of 1026.88cm^{-1} (Table IV).

The observed FTS spectrum of ${}^{13}\text{C}{}^{12}\text{CH}_6$ is shown in Appendix B. The experimental conditions were $p = 1.05$ Torr, $\ell = 150$ cm, and $T = 294$ K. Below the observed spectrum in each panel the calculated spectrum under the same experimental condition is shown in two ways, first on a scale from 0% to 100% transmission and, secondly, from 90% to 100% transmission. The calculated Doppler spectra has been properly convolved with an appropriate instrumental profile as outlined as follows.

The approximate FTS apparatus function in interferogram space due to the aperture

Table IV. The torsional partition function Q_t as a function of temperature T .

T [K]	Q_t	T [K]	Q_t	T [K]	Q_t
100	3.049	200	3.456	300	4.105
110	3.072	210	3.513	310	4.178
120	3.100	220	3.572	320	4.251
130	3.132	230	3.633	330	4.326
140	3.168	240	3.696	340	4.401
150	3.209	250	3.761	350	4.477
160	3.252	260	3.827	360	4.553
170	3.299	270	3.895	370	4.631
180	3.349	280	3.964	380	4.709
190	3.401	290	4.034	390	4.787
		296	4.077	400	4.866

effect can be written as (17)

$$A(\delta) = \cos\left(b\frac{\delta}{L}\right); \quad |\delta| \leq L, \quad (2)$$

where δ is the optical path difference in the two arms of the interferometer and L the maximum optical path difference. The form of Eq. (2) introduces a self-apodization in the observed spectra. The Fourier transform of $A(\delta)$ is then given by

$$\begin{aligned} A(\nu) &= L \left\{ \frac{\sin(2\pi\nu L + b)}{2\pi\nu L + b} + \frac{\sin(2\pi\nu L - b)}{2\pi\nu L - b} \right\} \\ &= L \{ \text{sinc}(2\pi\nu L + b) + \text{sinc}(2\pi\nu L - b) \} \end{aligned} \quad (3)$$

The parameters used were $L = 173$ cm and $b = 0.818$ as determined from a least squares fit of the line profiles. This apparatus function was convolved with a calculated Doppler spectrum to simulate the observed FTS spectra, i.e. the normalized transmission τ at frequency ν is

$$\tau(\nu) = \int_{-\infty}^{\infty} d\nu' A(\nu' - \nu) \exp\left(-\sum_i S_i f(\nu' - \nu_i)x\right) \quad (4)$$

S_i is the line strength of the transition at frequency ν_i , $x = p\ell$ the optical density, and $f(\nu - \nu_i)$, the unit area line profile, here a Doppler profile. The convolution integral has been calculated by numerical summation with proper truncation to a finite sum of

intensities, the apparatus function, and line shapes in the far wing.

The spectra shown in Appendix B extends from 740cm^{-1} to 910cm^{-1} . The top spectrum shows the observed FTS spectrum, the middle and bottom trace the calculated spectrum in different scales. Observed lines which do not appear in the calculated spectra belong either to the $\nu_6 + \nu_{12} \leftarrow \nu_6$ vibration-torsional hotband, which is equivalent to the $\nu_4 + \nu_9 \leftarrow \nu_4$ band of normal ethane, or are outside the range of calculated quantum numbers.

References

- [1] G. Wiedemann, G.L. Bjoraker, and D.E. Jennings, *Astrophys. J.* **383**, L29 (1991).
- [2] G.S. Orton, J.H. Lacy, J.M. Achtermann, P. Parmar, and W.E. Blass, *Icarus* **100**, 541 (1992).
- [3] S.J. Daunt, W.E. Blass, G.W. Halsey, K. Fox, R.J. Lovell, H. Flicker, and J.D. King, *J. Mol. Spectrosc.* **86**, 327 (1981).
- [4] J. Susskind, D. Reuter, D.E. Jennings, S.J. Daunt, W.E. Blass, and G.W. Halsey, *J. Chem. Phys.* **77**, 2728 (1982).
- [5] L. Henry, A. Valentin, W.J. Lafferty, J.T. Hougen, V. Malathy Devi, P.P. Das, K.N. Rao, *J. Mol. Spectrosc.* **100**, 260 (1983).
- [6] S.J. Daunt, A.K. Atakan, W.E. Blass, G.W. Halsey, D.E. Jennings, D.C. Reuter, J. Susskind, and J.W. Brault, *Astrophys. J.* **280**, 921 (1984).
- [7] N. Moazzen-Ahmadi, H.P. Gush, M. Halpern, H. Jagannath, A. Leung, and I. Ozier, *J. Chem. Phys.* **88**, 563 (1988).
- [8] W.E. Blass, G.W. Halsey, J. Susskind, D.C. Reuter, and D.E. Jennings, *J. Mol. Spectrosc.* **141**, 334 (1990).
- [9] N. Moazzen-Ahmadi, A.R.W. Kellar, J.W.C. Johns, and I. Ozier, *J. Chem. Phys.* **97**, 3981 (1992).
- [10] W.J. Lafferty and E.K. Plyler, *J. Res. Nat. Bur. Stand. A* **67**, 225 (1963).
- [11] J. Kurtz, D.C. Reuter, D.E. Jennings, and J.J. Hillman, *J. Geophys. Res.* **96**, 17489 (1991).
- [12] M. Weber, W.E. Blass, D.C. Reuter, D.E. Jennings, and J.J. Hillman, *J. Mol. Spectrosc.* **159**, 388 (1993).
- [13] M. Weber, D.C. Reuter, J.M. Sirota, W.E. Blass, and J.J. Hillman, *J. Chem. Phys.*, To be Published (1994).
- [14] D.E. Jennings, R. Hubbard, J.W. Brault, *Appl. Opt.* **24**, 3438 (1985).
- [15] J.M. Sirota, D.C. Reuter, and M.J. Mumma, *Appl. Opt.* **32**, 2117 (1993).
- [16] J.L. Duncan, R.A. Kelly, G.D. Nivellini, and F. Tullini, *J. Mol. Spectrosc.* **98**, 87 (1983).
- [17] V. Dana and A. Valentin, *Appl. Opt.* **27**, 4450 (1988).
- [18] H.C. Allen Jr., P.C. Cross, *Molecular Vib-Rotors*, Wiley and Sons, New York-London, 1963.

Appendix A

Table of Calculated ν_{12} Transitions of $^{13}\text{C}^{12}\text{CH}_6$

Legend:

K, J	Lower state rotational quantum number, i.e. K'', J''
$\Delta K, \Delta J$	Difference in rotational quantum number of upper and lower state, i.e. $\Delta K = K' - K'', \Delta J = J' - J''$. The ℓ quantum number of the upper state can be deduced from the selection rules $\Delta K = \Delta \ell$
σ	Torsional quantum number with selection rule $\Delta \sigma = 0$
ν_i	Calculated transition frequency in cm^{-1}
o-c	Observed minus calculated frequency in the last five digits. Transitions marked with an asterisk (*) were excluded from the global fit
E_i''	Lower state energy in cm^{-1}
S_i	Line intensity in $\text{cm}^{-2} \text{atm}^{-1} @ 296\text{K}$
W_i	Intensity perturbation factor (dimensionless)

ΔK	ΔJ	K	J	σ	ν_i	o-c	E_i''	S_i	W_i	ΔK	ΔJ	K	J	σ	ν_i	o-c	E_i''	S_i	W_i
-1	-1	20	35	0	725.23929		1620.005	.7592E-05	.910	-1	-1	18	32	0	734.86935		1335.740	.8415E-04	.686
-1	-1	20	35	2	725.60270		1620.011	.3346E-04	1.002	-1	-1	20	28	0	734.94903		1330.829	.3256E-04	.984
-1	-1	20	34	0	726.65151		1574.847	.9622E-05	.930	-1	-1	16	35	0	734.98272		1330.783	.2933E-04	.982
-1	-1	20	34	2	726.95814		1574.853	.4149E-04	1.002	-1	-1	20	28	2	735.05869		1330.835	.1324E-03	1.000
-1	-1	19	35	3	727.87297		1541.721	.1187E-04	1.003	-1	-1	17	33	3	735.20315		1308.032	.3419E-04	1.004
-1	-1	19	35	1	727.93442		1541.715	.4725E-04	.998	-1	-1	17	33	1	735.24321		1308.026	.1364E-03	1.001
-1	-1	20	33	0	728.05260		1530.971	.1205E-04	.945	-1	-1	18	31	2	735.59729		1294.421	.7463E-04	1.002
-1	-1	20	33	2	728.31208		1530.977	.5113E-04	1.002	-1	-1	19	29	3	735.99043		1289.966	.3910E-04	1.001
-1	-1	19	34	3	729.22970		1496.556	.1471E-04	1.003	-1	-1	19	29	1	736.03544		1289.960	.1556E-03	.996
-1	-1	19	34	1	729.28888		1496.550	.5849E-04	.997	-1	-1	16	34	2	736.18927		1285.605	.1485E-03	1.006
-1	-1	20	32	0	729.44467		1488.376	.1495E-04	.957	-1	-1	18	31	0	736.30297		1294.415	.9111E-04	.611
-1	-1	20	32	2	729.66451		1488.382	.6256E-04	1.001	-1	-1	20	27	0	736.31319		1294.654	.3882E-04	.987
-1	-1	18	35	2	730.17769		1467.415	.3302E-04	1.004	-1	-1	16	34	0	736.34056		1285.599	.3618E-04	.980
-1	-1	19	33	3	730.58492		1452.673	.1811E-04	1.003	-1	-1	20	27	2	736.40328		1294.660	.1573E-03	1.000
-1	-1	19	33	1	730.64165		1452.667	.7203E-04	.997	-1	-1	17	32	3	736.55842		1265.418	.4178E-04	1.004
-1	-1	18	35	0	730.64483		1467.409	.5463E-04	.830	-1	-1	17	32	1	736.59656		1265.412	.1666E-03	1.001
-1	-1	20	31	0	730.82931		1447.064	.1839E-04	.967	-1	-1	18	30	2	736.94828		1254.380	.9015E-04	1.002
-1	-1	20	31	2	731.01540		1447.070	.7616E-04	1.001	-1	-1	15	35	3	737.18027		1268.476	.1573E-03	1.008
-1	-1	18	34	2	731.53490		1422.244	.4088E-04	1.004	-1	-1	15	35	1	737.21353		1268.470	.7852E-04	1.006
-1	-1	19	32	3	731.93862		1410.071	.2215E-04	1.002	-1	-1	19	28	3	737.38788		1252.499	.4671E-04	1.001
-1	-1	19	32	1	731.99272		1410.065	.8807E-04	.996	-1	-1	19	28	1	737.37945		1252.494	.1859E-03	.996
-1	-1	18	34	0	732.04362		1422.238	.6463E-04	.793	-1	-1	16	33	2	737.54661		1241.703	.1823E-03	1.005
-1	-1	20	30	0	732.20769		1407.035	.2241E-04	.974	-1	-1	18	29	0	737.57513		1215.617	.1239E-03	.574
-1	-1	20	30	2	732.36474		1407.040	.9215E-04	1.001	-1	-1	20	26	0	737.67360		1259.765	.4600E-04	.990
-1	-1	17	35	3	732.48795		1397.106	.2250E-04	1.005	-1	-1	16	33	0	737.69654		1241.697	.4436E-04	.978
-1	-1	17	35	1	732.53162		1397.100	.8972E-04	1.002	-1	-1	20	26	2	737.74624		1259.771	.1859E-03	1.000
-1	-1	18	33	2	732.89058		1378.354	.5026E-04	1.003	-1	-1	18	30	0	737.75537		1254.374	.9440E-04	.524
-1	-1	19	31	3	733.29078		1368.752	.2694E-04	1.002	-1	-1	17	31	3	737.91213		1224.087	.5068E-04	1.003
-1	-1	19	31	1	733.34205		1368.746	.1071E-03	.996	-1	-1	17	31	1	737.94825		1224.081	.2021E-03	1.000
-1	-1	18	33	0	733.45078		1378.348	.7482E-04	.746	-1	-1	18	29	2	738.29769		1215.623	.1081E-03	1.001
-1	-1	20	29	0	733.58070		1368.290	.2709E-04	.979	-1	-1	15	34	3	738.54024		1223.287	.1942E-03	1.007
-1	-1	20	29	2	733.71251		1368.295	.1107E-03	1.000	-1	-1	15	34	1	738.57214		1223.281	.9690E-04	1.005
-1	-1	17	34	3	733.84632		1351.928	.2783E-04	1.005	-1	-1	19	27	3	738.68372		1216.319	.5546E-04	1.001
-1	-1	17	34	1	733.88823		1351.922	.1110E-03	1.002	-1	-1	19	27	1	738.72165		1216.313	.2208E-03	.996
-1	-1	18	32	2	734.24471		1335.746	.6146E-04	1.003	-1	-1	16	32	2	738.90237		1199.083	.2224E-03	1.004
-1	-1	19	30	3	734.64139		1328.717	.3254E-04	1.001	-1	-1	20	25	0	739.03056		1226.163	.5421E-04	.993
-1	-1	19	30	1	734.68963		1328.711	.1295E-03	.996	-1	-1	16	32	0	739.05062		1199.078	.5411E-04	.977
-1	-1	16	35	2	734.83037		1330.789	.1202E-03	1.006	-1	-1	18	28	0	739.08565		1178.145	.1723E-03	.669

ΔK	ΔJ	K	J	σ	ν_i	o-c	E''_i	S_i	W_i
-1	-1	20	25	2	739.08758		1226.169	.2184E-03	1.000
-1	-1	17	30	3	739.26424		1184.040	.6117E-04	1.003
-1	-1	17	30	1	739.29827		1184.034	.2440E-03	1.000
-1	-1	14	35	2	739.56047		1210.163	.2017E-03	1.009
-1	-1	14	35	0	739.64535		1210.157	.5003E-04	1.001
-1	-1	18	28	2	739.64548		1178.151	.1290E-03	1.001
-1	-1	15	33	3	739.89865		1179.379	.2381E-03	1.006
-1	-1	15	33	1	739.92914		1179.373	.1189E-03	1.005
-1	-1	19	26	3	740.02793		1181.424	.6540E-04	1.000
-1	-1	19	26	1	740.06200		1181.419	.2606E-03	.996
-1	-1	16	31	2	740.25653		1157.747	.2698E-03	1.004
-1	-1	20	24	0	740.38433		1193.848	.6344E-04	.995
-1	-1	16	31	0	740.40273		1157.741	.6551E-04	.975
-1	-1	20	24	2	740.42726		1193.854	.2551E-03	1.000
-1	-1	18	27	0	740.56193		1141.959	.2301E-03	.753
-1	-1	17	29	3	740.61475		1145.278	.7330E-04	1.002
-1	-1	17	29	1	740.64660		1145.272	.2926E-03	1.000
-1	-1	14	34	2	740.92102		1164.968	.2487E-03	1.008
-1	-1	18	27	2	740.99164		1141.964	.1531E-03	1.001
-1	-1	14	34	0	741.00364		1164.962	.6169E-04	1.000
-1	-1	15	32	3	741.25545		1136.754	.2904E-03	1.006
-1	-1	15	32	1	741.28450		1136.748	.1449E-03	1.004
-1	-1	19	25	3	741.37049		1147.817	.7675E-04	1.000
-1	-1	19	25	1	741.40051		1147.811	.3058E-03	.996
-1	-1	16	30	2	741.60909		1117.695	.3250E-03	1.003
-1	-1	20	23	0	741.73510		1162.821	.7376E-04	.996
-1	-1	16	30	0	741.75282		1117.689	.7883E-04	.973
-1	-1	20	23	2	741.76528		1162.827	.2962E-03	1.000
-1	-1	13	35	3	741.94964		1155.861	.6339E-04	1.011
-1	-1	17	28	3	741.96363		1107.800	.8739E-04	1.002
-1	-1	13	35	1	741.97607		1155.855	.2533E-03	1.010
-1	-1	17	28	1	741.99323		1107.794	.3485E-03	.999
-1	-1	18	26	0	742.00853		1107.059	.2963E-03	.822
-1	-1	14	33	2	742.27997		1121.055	.3047E-03	1.007
-1	-1	18	26	2	742.33616		1107.065	.1805E-03	1.001
-1	-1	14	33	0	742.36015		1121.050	.7557E-04	.999
-1	-1	15	31	3	742.61065		1095.412	.3517E-03	1.005
-1	-1	15	31	1	742.63820		1095.407	.1755E-03	1.003
-1	-1	19	24	3	742.71140		1115.497	.8955E-04	1.000
-1	-1	19	24	1	742.73715		1115.491	.3571E-03	.997
-1	-1	16	29	2	742.96001		1078.927	.3894E-03	1.003
-1	-1	20	22	0	743.08303		1133.083	.8536E-04	.998
-1	-1	16	29	0	743.10081		1078.921	.9427E-04	.971
-1	-1	20	22	2	743.10162		1133.088	.3421E-03	1.000
-1	-1	17	27	3	743.31087		1071.609	.1035E-03	1.001
-1	-1	13	34	3	743.31123		1110.661	.7809E-04	1.010
-1	-1	13	34	1	743.33658		1110.655	.3120E-03	1.009
-1	-1	17	27	1	743.33814		1071.603	.4130E-03	.999
-1	-1	18	25	0	743.43093		1073.447	.3694E-03	.874
-1	-1	14	32	2	743.63731		1078.426	.3713E-03	1.007
-1	-1	18	25	2	743.67901		1073.452	.2114E-03	1.000
-1	-1	14	32	0	743.71487		1078.420	.9201E-04	.998
-1	-1	15	30	3	743.96422		1055.355	.4233E-03	1.004
-1	-1	15	30	1	743.99024		1055.349	.2114E-03	1.003
-1	-1	19	23	3	744.05062		1084.465	.1039E-03	1.000
-1	-1	19	23	1	744.07191		1084.459	.4143E-03	.997
-1	-1	16	28	2	744.30930		1041.445	.4634E-03	1.002
-1	-1	12	35	2	744.36757		1105.565	.1561E-03	1.013
-1	-1	12	35	0	744.42419		1105.559	.3114E-03	1.010
-1	-1	20	21	0	744.42824		1104.633	.9816E-04	.999
-1	-1	20	21	2	744.43626		1104.639	.3930E-03	1.000
-1	-1	16	28	0	744.44663		1041.439	.1122E-03	.970
-1	-1	17	26	3	744.55645		1036.704	.1219E-03	1.001
-1	-1	13	33	3	744.67119		1066.744	.9358E-04	1.009
-1	-1	17	26	1	744.68132		1036.699	.4865E-03	.999
-1	-1	13	33	1	744.69544		1066.738	.3820E-03	1.008
-1	-1	18	24	0	744.83432		1041.122	.4497E-03	.913
-1	-1	14	31	2	744.99301		1037.079	.4492E-03	1.006
-1	-1	18	24	2	745.02019		1041.127	.2463E-03	1.000
-1	-1	14	31	0	745.06777		1037.073	.1114E-03	.998
-1	-1	15	29	3	745.31614		1016.583	.5067E-03	1.004
-1	-1	15	29	1	745.34060		1016.577	.2529E-03	1.002
-1	-1	19	22	3	745.38815		1054.722	.1198E-03	1.000
-1	-1	19	22	1	745.40478		1054.716	.4784E-03	.998
-1	-1	16	27	2	745.65691		1005.249	.5485E-03	1.002
-1	-1	12	34	2	745.72978		1060.361	.1922E-03	1.012

ΔK	ΔJ	K	J	σ	ν_i	σ -c	E_i''	S_i	W_i	ΔK	ΔJ	K	J	σ	ν_i	σ -c	E_i''	S_i	W_i
-1	-1	20	20	2	745.76919		1077.479	.4491E-03	1.000	-1	-1	16	25	0	748.47006		936.712	.1818E-03	.965
-1	-1	20	20	0	745.77083		1077.474	.1123E-03	1.000	-1	-1	12	32	0	748.49993	-23	973.794	.5688E-03	1.006
-1	-1	12	34	0	745.78451		1060.355	.3832E-03	1.009	-1	-1	17	23	3	748.68304	-14	939.717	.1921E-03	1.000
-1	-1	16	27	0	745.79018		1005.243	.1325E-03	.968	-1	-1	17	23	1	748.70040	62	939.711	.7675E-03	.999
-1	-1	17	25	3	746.00035		1003.087	.1427E-03	1.001	-1	-1	13	30	3	748.74118		942.692	.1689E-03	1.007
-1	-1	17	25	1	746.02277		1003.082	.5697E-03	.999	-1	-1	13	30	1	748.76200	-55	942.686	.6749E-03	1.006
-1	-1	13	32	3	746.02952		1024.109	.1163E-03	1.008	-1	-1	18	21	0	748.96815	-78	951.880	.7356E-03	.976
-1	-1	13	32	1	746.05264		1024.103	.4646E-03	1.007	-1	-1	18	21	2	749.03347		951.885	.3769E-03	1.000
-1	-1	18	23	0	746.22297	38	1010.085	.5371E-03	.941	-1	-1	14	28	2	749.05014	18	920.749	.7667E-03	1.004
-1	-1	14	30	2	746.34706		997.017	.5400E-03	1.005	-1	-1	14	28	0	749.11537	48	920.743	.1902E-03	.996
-1	-1	18	23	2	746.35967		1010.091	.2855E-03	1.000	-1	-1	10	35	2	749.25104	-11	1017.019	.4462E-03	1.019
-1	-1	14	30	0	746.41883		997.011	.1339E-03	.997	-1	-1	10	35	0	749.29225		1017.013	.1113E-03	1.017
-1	-1	15	28	3	746.66640		979.096	.6023E-03	1.003	-1	-1	15	26	3	749.36186	25	907.982	.8361E-03	1.002
-1	-1	15	28	1	746.68927		979.090	.3008E-03	1.002	-1	-1	15	26	1	749.38146	51	907.976	.4176E-03	1.001
-1	-1	19	21	3	746.72396		1026.268	.1375E-03	1.000	-1	-1	19	19	3	749.39036		973.230	.1782E-03	1.000
-1	-1	19	21	1	746.73575	121	1026.262	.5489E-03	.998	-1	-1	19	19	1	749.39200	-116	973.224	.7126E-03	1.000
-1	-1	11	35	3	746.79562		1059.286	.9429E-04	1.016	-1	-1	11	33	3	749.52040	48	970.152	.1415E-03	1.013
-1	-1	11	35	1	746.81721	-140	1059.280	.3768E-03	1.015	-1	-1	11	33	1	749.54023	-127	970.146	.5659E-03	1.013
-1	-1	16	26	2	747.00286	16	970.340	.6448E-03	1.001	-1	-1	16	24	2	749.68963	8	904.384	.8768E-03	1.001
-1	-1	12	33	2	747.09034	32	1016.439	.2350E-03	1.011	-1	-1	16	24	0	749.80614	109	904.379	.2111E-03	.964
-1	-1	16	26	0	747.13137		970.334	.1556E-03	.966	-1	-1	12	31	2	749.80645	78	932.445	.3447E-03	1.009
-1	-1	12	33	0	747.14309	-22	1016.433	.4681E-03	1.007	-1	-1	12	31	0	749.85501	-23	932.439	.6867E-03	1.005
-1	-1	17	24	3	747.34255		970.758	.1661E-03	1.001	-1	-1	17	22	3	750.02180	-50	909.965	.2210E-03	1.000
-1	-1	17	24	1	747.36246	76	970.752	.6632E-03	.999	-1	-1	17	22	1	750.03656	44	909.959	.8832E-03	.999
-1	-1	13	31	3	747.38618		982.758	.1405E-03	1.007	-1	-1	13	29	3	750.09449	-4	903.911	.2015E-03	1.006
-1	-1	13	31	1	747.40817	-69	982.752	.5614E-03	1.006	-1	-1	13	29	1	750.11413	-56	903.905	.8054E-03	1.005
-1	-1	18	22	0	747.60011	-59	980.338	.6321E-03	.961	-1	-1	18	20	0	750.32881	-71	924.711	.8470E-03	.986
-1	-1	18	22	2	747.69743		980.343	.3289E-03	1.000	-1	-1	18	20	2	750.36776		924.717	.4295E-03	1.000
-1	-1	14	29	2	747.69944	-51	958.240	.6458E-03	1.005	-1	-1	14	27	2	750.39914	33	884.544	.9047E-03	1.003
-1	-1	14	29	0	747.76804		958.234	.1600E-03	.996	-1	-1	14	27	0	750.46082	-4	884.538	.2246E-03	.996
-1	-1	15	27	3	748.01498	49	942.895	.7121E-03	1.003	-1	-1	10	34	2	750.61496	-19	971.806	.5481E-03	1.018
-1	-1	15	27	1	748.03622	-16	942.889	.3554E-03	1.001	-1	-1	10	34	0	750.65468		971.801	.1368E-03	1.016
-1	-1	19	20	3	748.05804		999.104	.1569E-03	1.000	-1	-1	15	25	3	750.70703	20	874.356	.9767E-03	1.002
-1	-1	19	20	1	748.06482	20	999.098	.6271E-03	.999	-1	-1	15	25	1	750.72496	23	874.350	.4879E-03	1.001
-1	-1	11	34	3	748.15885	29	1014.078	.1159E-03	1.015	-1	-1	11	32	3	750.88025	14	927.509	.1717E-03	1.012
-1	-1	11	34	1	748.17957	-99	1014.072	.4633E-03	1.014	-1	-1	11	32	1	750.89920	-115	927.503	.6869E-03	1.012
-1	-1	16	25	2	748.34710	14	936.718	.7541E-03	1.001	-1	-1	16	23	2	751.03043	20	873.339	.1013E-02	1.001
-1	-1	12	32	2	748.44923	16	973.800	.2855E-03	1.010	-1	-1	16	23	0	751.13941	150	873.334	.2438E-03	.963

ΔK	ΔJ	K	J	σ	ν_i	o-c	E_i''	S_i	W_i	ΔK	ΔJ	K	J	σ	ν_i	o-c	E_i''	S_i	W_i
-1	-1	12	30	2	751.16197	21	892.374	.4135E-03	1.008	-1	-1	16	21	2	753.70677	-12	815.117	.1329E-02	1.000
-1	-1	12	30	0	751.20833	5	892.369	.8246E-03	1.005	-1	-1	16	21	0	753.79674	9	815.112	.3204E-03	.964
-1	-1	17	21	3	751.35880	-73	881.503	.2529E-03	1.000	-1	-1	12	28	2	753.86785	24	816.090	.5837E-03	1.006
-1	-1	17	21	1	751.37094	34	881.497	.1011E-02	.999	-1	-1	12	28	0	753.90958	-8	816.084	.1164E-02	1.003
-1	-1	13	28	3	751.44609	-12	866.415	.2390E-03	1.005	-1	-1	17	19	3	754.02748	-68	828.449	.3258E-03	1.000
-1	-1	13	28	1	751.46455	-31	866.409	.9551E-03	1.004	-1	-1	17	19	1	754.03435	10	828.444	.1302E-02	.999
-1	-1	18	19	0	751.68334	-77	898.834	.9681E-03	.994	-1	-1	13	26	3	754.14412	80	795.285	.3302E-03	1.004
-1	-1	18	19	2	751.70029		898.839	.4870E-03	1.000	-1	-1	13	26	1	754.16017	-31	795.279	.1319E-02	1.003
-1	-1	9	35	3	751.71743	85	978.773	.5176E-03	1.023	-1	-1	8	35	2	754.20983	3	944.544	.5888E-03	1.028
-1	-1	9	35	1	751.73539	-207*	978.767	.2588E-03	1.023	-1	-1	8	35	0	754.24136	15	944.538	.1472E-03	1.028
-1	-1	14	26	2	751.74643	18	849.626	.1062E-02	1.003	-1	-1	14	24	2	754.43577	17	783.655	.1435E-02	1.002
-1	-1	14	26	0	751.80435	12	849.621	.2634E-03	.995	-1	-1	9	33	3	754.44560	40	889.625	.7735E-03	1.020
-1	-1	10	33	2	751.97716	12	927.877	.6682E-03	1.016	-1	-1	9	33	1	754.46214	-131	889.619	.3864E-03	1.019
-1	-1	10	33	0	752.01535	-58	927.871	.1667E-03	1.014	-1	-1	14	24	0	754.48564	-16	783.649	.3563E-03	.995
-1	-1	15	24	3	752.05046	25	842.018	.1133E-02	1.001	-1	-1	10	31	2	754.69640	17	843.868	.9748E-03	1.013
-1	-1	15	24	1	752.06672	12	842.012	.5659E-03	1.000	-1	-1	10	31	0	754.73141	9	843.862	.2435E-03	1.012
-1	-1	11	31	3	752.23840	125	886.150	.2071E-03	1.011	-1	-1	15	22	3	754.73206	-9	781.209	.1501E-02	1.001
-1	-1	11	31	1	752.25645	-84	886.144	.8275E-03	1.010	-1	-1	15	22	1	754.74494	4	781.204	.7496E-03	1.000
-1	-1	16	22	2	752.36949	12	843.583	.1163E-02	1.000	-1	-1	11	29	3	754.94952	65	807.287	.2954E-03	1.009
-1	-1	16	22	0	752.46970	67	843.578	.2801E-03	.963	-1	-1	11	29	1	754.96574	-61	807.281	.1180E-02	1.008
-1	-1	12	29	2	752.51577	40	853.589	.4929E-03	1.007	-1	-1	16	20	2	755.04228	-14	787.942	.1511E-02	1.000
-1	-1	12	29	0	752.55985	-21	853.584	.9828E-03	1.004	-1	-1	16	20	0	755.12022	-43	787.936	.3649E-03	.966
-1	-1	17	20	3	752.69404	9	854.331	.2878E-03	1.000	-1	-1	12	27	2	755.21819	0	779.878	.6870E-03	1.005
-1	-1	17	20	1	752.70354	20	854.325	.1150E-02	.999	-1	-1	12	27	0	755.25751	-17	779.872	.1370E-02	1.002
-1	-1	13	27	3	752.79598	45	830.206	.2817E-03	1.004	-1	-1	17	18	3	755.35912	-77	803.859	.3669E-03	1.000
-1	-1	13	27	1	752.81323	-46	830.201	.1127E-02	1.004	-1	-1	17	18	1	755.36335	25	803.854	.1468E-02	1.000
-1	-1	18	18	2	753.03104		874.252	.5493E-03	1.000	-1	-1	13	25	3	755.49051	25	761.651	.3843E-03	1.003
-1	-1	18	18	0	753.03266	21	874.247	.1099E-02	1.000	-1	-1	13	25	1	755.50535	-30	761.646	.1536E-02	1.002
-1	-1	9	34	3	753.08238	105	933.558	.6345E-03	1.021	-1	-1	8	34	2	755.57558	28	899.325	.7210E-03	1.026
-1	-1	14	25	2	753.09197	3	815.996	.1238E-02	1.002	-1	-1	14	23	2	755.77780	9	899.320	.1801E-03	1.025
-1	-1	9	34	1	753.09964	-39	933.552	.3173E-03	1.021	-1	-1	9	32	3	755.80705	70	752.602	.1652E-02	1.001
-1	-1	14	25	0	753.14596	1	815.991	.3073E-03	.995	-1	-1	9	32	1	755.82288	-24	846.975	.9357E-03	1.018
-1	-1	10	32	2	753.33765	21	885.230	.8101E-03	1.015	-1	-1	9	32	1	755.82338	-74	752.597	.4679E-03	1.018
-1	-1	10	32	0	753.37427	-25	885.224	.2021E-03	1.013	-1	-1	14	23	0	755.82338	20	803.790	.1167E-02	1.012
-1	-1	15	23	3	753.39214	23	810.969	.1308E-02	1.001	-1	-1	10	30	2	756.05339	33	752.740	.1712E-02	1.001
-1	-1	15	23	1	753.40672	-7	810.963	.6532E-03	1.000	-1	-1	15	21	3	756.07018	33	752.740	.1712E-02	1.001
-1	-1	11	30	3	753.59483	156	846.076	.2481E-03	1.010	-1	-1	15	21	1	756.08139	-14	752.734	.8553E-03	1.000
-1	-1	11	30	1	753.61197	-86	846.070	.9915E-03	1.009	-1	-1	10	30	0	756.08677		803.785	.2911E-03	1.010

ΔK	ΔJ	K	J	σ	ν_i	$\sigma-c$	E''_i	S_i	W_i	ΔK	ΔJ	K	J	σ	ν_i	$\sigma-c$	E''_i	S_i	W_i
-1	-1	11	28	3	756.30246	119	769.784	.3494E-03	1.008	-1	-1	15	19	3	758.74099	-12	699.673	.2190E-02	1.000
-1	-1	11	28	1	756.31776	-73	769.779	.1396E-02	1.007	-1	-1	15	19	1	758.74887	-12	699.667	.1095E-02	1.000
-1	-1	16	19	2	756.37599	-7	762.057	.1707E-02	1.000	-1	-1	10	28	2	758.76208	26	727.492	.1638E-02	1.010
-1	-1	16	19	0	756.43974	-71	762.051	.4136E-03	.969	-1	-1	10	28	0	758.79209	15	727.487	.4088E-03	1.008
-1	-1	12	26	2	756.56676	21	744.953	.8043E-03	1.005	-1	-1	11	26	3	759.00301	1	698.640	.4796E-03	1.006
-1	-1	12	26	0	756.60362	-12	744.947	.1604E-02	1.002	-1	-1	11	26	1	759.01647	-46	698.635	.1918E-02	1.006
-1	-1	17	17	3	756.68894		780.560	.4112E-03	1.000	-1	-1	16	17	2	759.03793	-32	714.162	.2147E-02	1.000
-1	-1	17	17	1	756.69055	-51	780.555	.1645E-02	1.000	-1	-1	16	17	0	759.06445	-97	714.156	.5283E-03	.984
-1	-1	7	35	3	756.71364		914.341	.1643E-03	1.035	-1	-1	6	35	2	759.24183	51	888.158	.3600E-03	1.044
-1	-1	7	35	1	756.72876	-113	914.335	.6573E-03	1.035	-1	-1	12	24	2	759.25857	36	678.967	.1080E-02	1.003
-1	-1	13	24	3	756.83512	17	729.306	.4450E-03	1.003	-1	-1	6	35	0	759.26666	-4	888.152	.7200E-03	1.044
-1	-1	13	24	1	756.84876	-28	729.301	.1778E-02	1.002	-1	-1	12	24	0	759.29035	-18	678.962	.2155E-02	1.001
-1	-1	8	33	2	756.93956	17	855.389	.8769E-03	1.024	-1	-1	7	33	3	759.44561	25	825.181	.2439E-03	1.030
-1	-1	8	33	0	756.96872	-103	855.384	.2190E-03	1.023	-1	-1	7	33	1	759.45957	-94	825.175	.9756E-03	1.030
-1	-1	14	22	2	757.11805	20	722.839	.1893E-02	1.001	-1	-1	13	22	3	759.51896	55	668.484	.5853E-03	1.002
-1	-1	14	22	0	757.15916	21	722.834	.4705E-03	.995	-1	-1	13	22	1	759.53020	-23	668.479	.2339E-02	1.001
-1	-1	9	31	3	757.16674	60	805.609	.1126E-02	1.017	-1	-1	8	31	2	759.66210	26	771.368	.1272E-02	1.020
-1	-1	9	31	1	757.18184	-72	805.603	.5623E-03	1.016	-1	-1	8	31	0	759.68881	-28	771.363	.3180E-03	1.020
-1	-1	15	20	3	757.40650	97	725.561	.1941E-02	1.000	-1	-1	14	20	2	759.79311	11	667.184	.2443E-02	1.001
-1	-1	10	29	2	757.40863	-117	764.998	.1387E-02	1.011	-1	-1	14	20	0	759.82486	-36	667.179	.6077E-03	.996
-1	-1	15	20	1	757.41603	-2	725.555	.9703E-03	1.000	-1	-1	9	29	3	759.88076	57	726.733	.1596E-02	1.014
-1	-1	10	29	0	757.44033	3	764.993	.3461E-03	1.009	-1	-1	9	29	1	759.89440	-37	726.728	.7972E-03	1.013
-1	-1	11	27	3	757.65363	51	733.568	.4107E-03	1.007	-1	-1	15	18	3	760.07364	-31	675.076	.2457E-02	1.000
-1	-1	11	27	1	757.66801	-64	733.563	.1641E-02	1.006	-1	-1	15	18	1	760.07990	64	675.071	.1229E-02	1.000
-1	-1	16	18	2	757.70787	-28	737.463	.1920E-02	1.000	-1	-1	10	27	2	760.11374	23	691.274	.1923E-02	1.009
-1	-1	16	18	0	757.75474	-130	737.458	.4679E-03	.975	-1	-1	10	27	0	760.14204	6	691.268	.4798E-03	1.007
-1	-1	12	25	2	757.91356	6	711.316	.9348E-03	1.004	-1	-1	11	25	3	760.35059	63	665.000	.5566E-03	1.005
-1	-1	12	25	0	757.94790	-19	711.310	.1864E-02	1.001	-1	-1	11	25	1	760.36313	158	664.994	.2226E-02	1.005
-1	-1	7	34	3	758.08054		869.120	.2008E-03	1.032	-1	-1	16	16	2	760.36612	-141	692.152	.2391E-02	1.000
-1	-1	7	34	1	758.09508	-95	869.114	.8031E-03	1.032	-1	-1	16	16	0	760.36773	21	692.146	.5977E-03	1.000
-1	-1	13	23	3	758.17794	-10	698.250	.5116E-03	1.002	-1	-1	12	23	2	760.60177	21	647.908	.1241E-02	1.003
-1	-1	13	23	1	758.19038	-36	698.245	.2044E-02	1.001	-1	-1	6	34	2	760.60976	19	842.934	.4393E-03	1.041
-1	-1	8	32	2	758.30173	14	812.737	.1060E-02	1.022	-1	-1	12	23	0	760.63096	34	647.903	.2474E-02	1.000
-1	-1	8	32	0	758.32968	35	812.731	.2649E-03	1.022	-1	-1	6	34	0	760.63366	-236*	842.928	.8786E-03	1.041
-1	-1	14	21	2	758.45649	12	694.367	.2157E-02	1.001	-1	-1	7	32	3	760.80883		782.526	.2943E-03	1.028
-1	-1	14	21	0	758.49299	-17	694.361	.5360E-03	.995	-1	-1	7	32	1	760.82221	-73	782.520	.1177E-02	1.028
-1	-1	9	30	3	758.52465	64	765.529	.1344E-02	1.015	-1	-1	13	21	3	760.85814	61	640.008	.6649E-03	1.001
-1	-1	9	30	1	758.53902	-53	765.523	.6721E-03	1.015	-1	-1	13	21	1	760.86820	-28	640.003	.2660E-02	1.001

ΔK	ΔJ	K	J	σ	ν_i	$\sigma-c$	E''_i	S_i	W_i	ΔK	ΔJ	K	J	σ	ν_i	$\sigma-c$	E''_i	S_i	W_i
-1	-1	8	30	2	761.02065	0	731.285	.1518E-02	1.019	-1	-1	6	32	2	763.33992	56	756.336	.6411E-03	1.035
-1	-1	8	30	0	761.04612	6	731.279	.3792E-03	1.018	-1	-1	6	32	0	763.36193	24	756.330	.1282E-02	1.035
-1	-1	14	19	2	761.12790	8	641.293	.2749E-02	1.000	-1	-1	7	30	3	763.52973		701.069	.4197E-03	1.023
-1	-1	14	19	0	761.15477	-35	641.288	.6844E-03	.996	-1	-1	13	19	3	763.53097	-35	586.929	.8451E-03	1.001
-1	-1	9	28	3	761.23506	39	689.225	.1881E-02	1.012	-1	-1	13	19	1	763.53872	84	586.924	.3377E-02	1.000
-1	-1	9	28	1	761.24796	-57	689.219	.9404E-03	1.012	-1	-1	7	30	1	763.54192	-236*	701.063	.1679E-02	1.023
-1	-1	15	17	3	761.40443	116	651.771	.2744E-02	1.000	-1	-1	8	28	2	763.73225	46	654.976	.2116E-02	1.015
-1	-1	15	17	1	761.40909		651.766	.1372E-02	1.000	-1	-1	8	28	0	763.75519	119	654.970	.5290E-03	1.015
-1	-1	10	26	2	761.46359	18	656.342	.2242E-02	1.008	-1	-1	14	17	2	763.79188	-25	593.386	.3431E-02	1.000
-1	-1	10	26	0	761.49016	-55	656.337	.5595E-03	1.006	-1	-1	14	17	0	763.80873	-2	593.381	.8552E-03	.997
-1	-1	11	24	3	761.69636	80	632.649	.6418E-03	1.004	-1	-1	9	26	3	763.93817	58	618.069	.2566E-02	1.010
-1	-1	11	24	1	761.70799	-40	632.643	.2567E-02	1.004	-1	-1	9	26	1	763.94962	-73	618.064	.1282E-02	1.009
-1	-1	5	35	3	761.78103		866.004	.1936E-03	1.056	-1	-1	15	15	3	764.06034	-37	609.039	.3372E-02	1.000
-1	-1	5	35	1	761.79380	-88	865.998	.7752E-03	1.057	-1	-1	15	15	1	764.06194		609.034	.1686E-02	1.000
-1	-1	12	22	2	761.94314	38	618.139	.1415E-02	1.002	-1	-1	10	24	2	764.15781	-29	590.345	.2991E-02	1.006
-1	-1	12	22	0	761.96971	-7	618.134	.2825E-02	1.000	-1	-1	10	24	0	764.18088	3	590.340	.7463E-03	1.004
-1	-1	6	33	2	761.97579		798.993	.5325E-03	1.038	-1	-1	4	35	2	764.34154	49	847.873	.8211E-03	1.075
-1	-1	6	33	0	761.99875	-14	798.987	.1065E-02	1.038	-1	-1	4	35	0	764.36126		847.867	.2055E-03	1.076
-1	-1	7	31	3	762.17021	67	741.155	.3528E-03	1.026	-1	-1	11	22	3	764.38237	-24	571.815	.8385E-03	1.003
-1	-1	7	31	1	762.18300	-84	741.149	.1410E-02	1.025	-1	-1	11	22	1	764.39220	-29	571.809	.3354E-02	1.003
-1	-1	13	20	3	762.19549	-65	612.823	.7518E-03	1.001	-1	-1	5	33	3	764.51780		776.835	.2854E-03	1.049
-1	-1	13	20	1	762.20438	-6	612.817	.3007E-02	1.001	-1	-1	5	33	1	764.52963	-70	776.830	.1142E-02	1.049
-1	-1	8	29	2	762.37738	37	692.487	.1798E-02	1.017	-1	-1	12	20	2	764.62034	-5	562.472	.1811E-02	1.001
-1	-1	8	29	0	762.40158		692.481	.4491E-03	1.016	-1	-1	12	20	0	764.64164	-8	562.467	.3616E-02	.999
-1	-1	14	18	2	762.46082	-17	616.694	.3079E-02	1.000	-1	-1	6	31	2	764.70215	-4	714.963	.7667E-03	1.032
-1	-1	14	18	0	762.48272	-49	616.688	.2204E-02	1.011	-1	-1	6	31	0	764.72320	25	714.957	.1533E-02	1.032
-1	-1	9	27	3	762.58753	53	653.003	.7674E-03	1.011	-1	-1	13	18	3	764.86457		562.327	.9438E-03	1.000
-1	-1	9	27	1	762.59971	-57	652.998	.1102E-02	1.011	-1	-1	13	18	1	764.87120	-7	562.321	.3775E-02	1.000
-1	-1	15	16	3	762.73333	-44	629.759	.3049E-02	1.000	-1	-1	7	29	3	764.88737	52	662.269	.4964E-03	1.021
-1	-1	15	16	1	762.73644		629.754	.1524E-02	1.000	-1	-1	7	29	1	764.89897	-71	662.263	.1986E-02	1.021
-1	-1	10	25	2	762.81162	16	622.699	.2598E-02	1.007	-1	-1	8	27	2	765.08528	9	618.752	.2476E-02	1.014
-1	-1	10	25	0	762.83644	66	622.694	.6483E-03	1.005	-1	-1	8	27	0	765.10693	8	618.746	.6183E-03	1.013
-1	-1	11	23	3	763.04029	-24	601.587	.7363E-03	1.004	-1	-1	14	16	2	765.12104	1	571.371	.3804E-02	1.000
-1	-1	11	23	1	763.05102	-52	601.581	.2942E-02	1.003	-1	-1	14	16	0	765.13280	6	571.366	.9491E-03	.998
-1	-1	5	34	3	763.15040		820.778	.2360E-03	1.053	-1	-1	9	25	3	765.28695	33	584.424	.2968E-02	1.009
-1	-1	5	34	1	763.16270	-72	820.773	.9440E-03	1.053	-1	-1	9	25	1	765.29769	-24	584.418	.1483E-02	1.008
-1	-1	12	21	2	763.28267	-8	589.660	.1607E-02	1.002	-1	-1	10	23	2	765.50214	12	559.281	.3422E-02	1.005
-1	-1	12	21	0	763.30660	-11	589.655	.3207E-02	1.000	-1	-1	10	23	0	765.52346	3	559.275	.8546E-03	1.004

ΔK	ΔJ	K	J	σ	ν_i	$\sigma-c$	E_i''	S_i	W_i	ΔK	ΔJ	K	J	σ	ν_i	$\sigma-c$	E_i''	S_i	W_i
-1	-1	4	34	2	765.71251	17	802.646	.9986E-03	1.071	-1	-1	14	14	2	767.77361	23	531.221	.4612E-02	1.000
-1	-1	11	21	3	765.72258		543.333	.9500E-03	1.003	-1	-1	14	14	0	767.77519		531.215	.1153E-02	1.000
-1	-1	4	34	0	765.73152		802.640	.2497E-03	1.071	-1	-1	8	25	2	767.78570	32	550.168	.3319E-02	1.011
-1	-1	11	21	1	765.73154	-17	543.328	.3796E-02	1.002	-1	-1	8	25	0	767.80480	81	550.162	.8289E-03	1.010
-1	-1	5	32	3	765.88323		734.176	.3431E-03	1.046	-1	-1	9	23	3	767.97890	33	521.000	.3894E-02	1.007
-1	-1	5	32	1	765.89459	-36	734.170	.1373E-02	1.046	-1	-1	9	23	1	767.98822	-21	520.995	.1945E-02	1.006
-1	-1	12	19	2	765.95613	4	536.576	.2032E-02	1.001	-1	-1	10	21	2	768.18517	12	501.023	.4393E-02	1.003
-1	-1	12	19	0	765.97480	12	536.570	.4056E-02	.999	-1	-1	10	21	0	768.20302	6	501.017	.1097E-02	1.002
-1	-1	6	30	2	766.06246	44	674.875	.9115E-03	1.030	-1	-1	3	34	3	768.28240	45	788.545	.1045E-02	1.100
-1	-1	6	30	0	766.08255	-4	674.869	.1823E-02	1.030	-1	-1	3	34	1	768.29266	-52	788.539	.5228E-03	1.101
-1	-1	13	17	3	766.19627		539.017	.1049E-02	1.000	-1	-1	11	19	3	768.39734		490.244	.1196E-02	1.002
-1	-1	13	17	1	766.20181	-34	539.011	.4198E-02	1.000	-1	-1	11	19	1	768.40459	-1	490.239	.4781E-02	1.001
-1	-1	7	28	3	766.24313	25	624.755	.5832E-03	1.019	-1	-1	4	32	2	768.44822	6	716.040	.1444E-02	1.061
-1	-1	7	28	1	766.25414	-56	624.750	.2333E-02	1.019	-1	-1	4	32	0	768.46579		716.034	.3613E-03	1.062
-1	-1	8	26	2	766.43643	-21	583.816	.2875E-02	1.012	-1	-1	5	30	3	768.60815	-17	652.711	.4855E-03	1.039
-1	-1	14	15	2	766.44829	-18	550.649	.4198E-02	1.000	-1	-1	5	30	1	768.61856	195*	652.706	.1942E-02	1.039
-1	-1	14	15	0	766.45495		550.644	.1048E-02	.999	-1	-1	12	17	2	768.62201	-149	488.659	.2512E-02	1.000
-1	-1	8	26	0	766.45681	-71	583.810	.7186E-03	1.012	-1	-1	12	17	0	768.63548	3	488.653	.5019E-02	.999
-1	-1	9	24	3	766.63386	3	552.067	.3411E-02	1.008	-1	-1	6	28	2	768.77732	26	598.557	.1261E-02	1.025
-1	-1	9	24	1	766.64389	-38	552.062	.1704E-02	1.007	-1	-1	6	28	0	768.79546	38	598.551	.2522E-02	1.025
-1	-1	10	22	2	766.84460	11	529.506	.3889E-02	1.004	-1	-1	13	15	3	768.85389		496.275	.1278E-02	1.000
-1	-1	10	22	0	766.86418	20	529.501	.9714E-03	1.003	-1	-1	13	15	1	768.85737	-45	496.270	.5111E-02	1.000
-1	-1	3	35	3	766.90893	35	833.774	.8624E-03	1.107	-1	-1	7	26	3	768.94895		553.591	.7895E-03	1.016
-1	-1	3	35	1	766.91954	-67	833.768	.4312E-03	1.107	-1	-1	7	26	1	768.95880	-49	553.585	.3158E-02	1.016
-1	-1	11	20	3	767.06091	-71	516.143	.1069E-02	1.002	-1	-1	8	24	2	769.13307	28	517.809	.3807E-02	1.010
-1	-1	11	20	1	767.06900	0	516.137	.4275E-02	1.002	-1	-1	8	24	0	769.15091	-15	517.803	.9508E-03	1.009
-1	-1	4	33	2	767.08140	12	758.701	.1205E-02	1.066	-1	-1	9	22	3	769.32203	12	491.224	.4418E-02	1.006
-1	-1	4	33	0	767.09970		758.695	.3012E-03	1.066	-1	-1	9	22	1	769.33065		491.218	.2207E-02	1.005
-1	-1	5	31	3	767.24668	-59	692.801	.4094E-03	1.042	-1	-1	2	35	2	769.48356	33	823.699	.9095E-03	1.169
-1	-1	5	31	1	767.25756	-57	692.795	.1637E-02	1.042	-1	-1	2	35	0	769.49851		823.693	.2278E-03	1.171
-1	-1	12	18	2	767.29002	-12	511.971	.2267E-02	1.001	-1	-1	10	20	2	769.52384	19	473.830	.4937E-02	1.003
-1	-1	12	18	0	767.30608	1	511.966	.4525E-02	.999	-1	-1	10	20	0	769.53998	-7	473.824	.1233E-02	1.002
-1	-1	6	29	2	767.42085	3	636.073	.1075E-02	1.027	-1	-1	3	33	3	769.65363	58	744.599	.1258E-02	1.094
-1	-1	6	29	0	767.43997	35	636.067	.2151E-02	1.027	-1	-1	3	33	1	769.66353		744.593	.6288E-03	1.094
-1	-1	13	16	3	767.52605		517.000	.1161E-02	1.000	-1	-1	11	18	3	769.73184		465.637	.1330E-02	1.001
-1	-1	13	16	1	767.53054	-41	516.994	.4643E-02	1.000	-1	-1	11	18	1	769.73827	-12	465.632	.5321E-02	1.001
-1	-1	7	27	3	767.59699		588.529	.6812E-03	1.018	-1	-1	4	31	2	769.81297	16	674.664	.1720E-02	1.057
-1	-1	7	27	1	767.60742	-53	588.523	.2725E-02	1.018	-1	-1	4	31	0	769.82980	35	674.658	.4304E-03	1.058

ΔK	ΔJ	K	J	σ	ν_i	$\sigma-c$	E_i''	S_i	W_i	ΔK	ΔJ	K	J	σ	ν_i	$\sigma-c$	E_i''	S_i	W_i
-1	-1	12	16	2	769.95206	-32	466.639	.2772E-02	1.000	-1	0	20	28	2	771.17290		1330.835	.5210E-04	.992
-1	-1	12	16	0	769.96300	12	466.634	.5539E-02	.999	-1	-1	4	30	2	771.17564	24	634.573	.2034E-02	1.053
-1	-1	5	29	3	769.96764		613.908	.5717E-03	1.036	-1	-1	4	30	0	771.19173	-18	634.567	.5086E-03	1.053
-1	-1	5	29	1	769.97757	-59	613.902	.2287E-02	1.036	-1	0	20	26	0	771.20211		1259.765	.1466E-04	.984
-1	-1	6	27	2	770.13184	37	562.329	.1469E-02	1.023	-1	0	20	27	2	771.23369		1294.660	.5620E-04	.994
-1	-1	6	27	0	770.14900	9	562.323	.2938E-02	1.023	-1	0	20	25	0	771.27581		1226.163	.1510E-04	.987
-1	-1	13	14	3	770.17978		476.844	.1400E-02	1.000	-1	-1	12	15	2	771.28015	-5	445.913	.3043E-02	1.000
-1	-1	13	14	1	770.18228	-40	476.839	.5601E-02	1.000	-1	-1	12	15	0	771.28863	17	445.908	.6081E-02	.999
-1	0	20	35	0	770.25054		1620.005	.4558E-05	.875	-1	0	20	26	2	771.29221		1259.771	.5930E-04	.995
-1	-1	7	25	3	770.29882	9	519.941	.9090E-03	1.014	-1	-1	5	28	3	771.32513	71	576.390	.6687E-03	1.033
-1	-1	7	25	1	770.30826	-33	519.935	.3636E-02	1.014	-1	-1	5	28	1	771.33458	-58	576.385	.2675E-02	1.033
-1	0	20	34	0	770.39665		1574.847	.5552E-05	.902	-1	0	20	24	0	771.34545		1193.848	.1505E-04	.990
-1	-1	8	23	2	770.47854	9	486.740	.4333E-02	1.008	-1	0	20	25	2	771.34848		1226.169	.6090E-04	.995
-1	-1	8	23	0	770.49511	-25	486.734	.1083E-02	1.008	-1	0	20	24	2	771.40249		1193.854	.6055E-04	.996
-1	0	20	33	0	770.52798		1530.971	.6638E-05	.922	-1	0	20	23	0	771.41129		1162.821	.1432E-04	.993
-1	0	20	32	0	770.64738		1488.376	.7813E-05	.938	-1	0	20	23	2	771.45425		1162.827	.5750E-04	.997
-1	-1	9	21	3	770.66324	12	462.737	.4980E-02	1.005	-1	0	20	22	0	771.47357		1133.083	.1269E-04	.995
-1	-1	9	21	1	770.67119	-7	462.732	.2490E-02	1.005	-1	-1	6	26	2	771.48441	-2	527.389	.1700E-02	1.021
-1	0	20	35	2	770.68322		1620.011	.2051E-04	.984	-1	-1	6	26	0	771.50061	322*	527.383	.3396E-02	1.020
-1	0	20	31	0	770.75697		1447.064	.9048E-05	.950	-1	-1	13	13	3	771.50368		458.707	.1528E-02	1.000
-1	0	20	34	2	770.76009		1574.853	.2429E-04	.986	-1	0	20	22	2	771.50378		1133.088	.5093E-04	.998
-1	0	20	33	2	770.83465		1530.977	.2844E-04	.987	-1	-1	13	13	1	771.50526		458.702	.6113E-02	1.000
-1	0	20	30	0	770.85836		1407.035	.1032E-04	.960	-1	0	20	21	0	771.53246		1104.633	.9956E-05	.997
-1	-1	10	19	2	770.86059	25	447.929	.5508E-02	1.002	-1	0	20	21	2	771.55107		1104.639	.3990E-04	.999
-1	-1	2	34	2	770.86114	-32	778.469	.1097E-02	1.159	-1	0	20	20	0	771.58810		1077.474	.5828E-05	.999
-1	-1	10	19	0	770.87504	19	447.923	.1376E-02	1.001	-1	0	20	20	2	771.59615	-51	1077.479	.2334E-04	1.000
-1	-1	2	34	0	770.87563		778.463	.2748E-03	1.161	-1	-1	7	24	3	771.64709		487.580	.1040E-02	1.013
-1	0	20	32	2	770.90689		1488.382	.3293E-04	.988	-1	-1	7	24	1	771.65580	-30	487.575	.4162E-02	1.013
-1	0	20	29	0	770.95275		1368.290	.1159E-04	.968	-1	-1	8	22	2	771.82208	14	456.961	.4905E-02	1.007
-1	0	20	31	2	770.97683		1447.070	.3769E-04	.989	-1	-1	8	22	0	771.83741	-3	456.956	.1226E-02	1.007
-1	-1	3	32	3	771.02262	66	701.937	.1503E-02	1.088	-1	-1	9	20	3	772.00253	15	435.543	.5577E-02	1.004
-1	-1	3	32	1	771.03216	-22	701.931	.7516E-03	1.088	-1	-1	9	20	1	772.00982	3	435.537	.2789E-02	1.004
-1	0	20	28	0	771.04107		1330.829	.1279E-04	.974	-1	-1	1	35	3	772.01030		817.656	.2548E-03	1.340
-1	0	20	30	2	771.04448		1407.040	.4260E-04	.990	-1	-1	1	35	1	772.01759		817.651	.1021E-02	1.342
-1	-1	11	17	3	771.06440		442.323	.1472E-02	1.001	-1	-1	10	18	2	772.19540	1	423.320	.6115E-02	1.002
-1	-1	11	17	1	771.07004	-22	442.317	.5888E-02	1.001	-1	-1	10	18	0	772.20820	21	423.314	.1527E-02	1.001
-1	0	20	29	2	771.10983		1368.295	.4748E-04	.991	-1	-1	2	33	2	772.23617	25	734.522	.1315E-02	1.149
-1	0	20	27	0	771.12400		1294.654	.1384E-04	.979	-1	-1	2	33	0	772.25019	236*	734.516	.3293E-03	1.151

ΔK	ΔJ	K	J	σ	ν_i	o-c	E''	S_i	W_i	ΔK	ΔJ	K	J	σ	ν_i	o-c	E''	S_i	W_i
-1	-1	3	31	3	772.38939		660.559	.1784E-02	1.082	-1	-1	10	17	0	773.53944	49	399.998	.1686E-02	1.001
-1	-1	11	16	3	772.39501		420.301	.1620E-02	1.001	-1	0	19	27	1	773.56013		1216.313	.9039E-04	.987
-1	-1	3	31	1	772.39856	96	660.553	.8922E-03	1.082	-1	0	19	26	3	773.57816		1181.424	.2436E-04	.994
-1	-1	11	16	1	772.39988	-35	420.296	.6474E-02	1.000	-1	-1	2	32	2	773.60867	-3	691.859	.1565E-02	1.140
-1	-1	4	29	2	772.53624	25	595.767	.2389E-02	1.049	-1	0	19	26	1	773.61606		1181.419	.9694E-04	.989
-1	-1	4	29	0	772.55158	55	595.762	.5973E-03	1.049	-1	-1	2	32	0	773.62221	-141	691.853	.3921E-03	1.142
-1	-1	12	14	2	772.60628	-87	426.480	.3325E-02	1.000	-1	0	19	25	3	773.63546		1147.817	.2555E-04	.995
-1	-1	12	14	0	772.61237	-1	426.475	.6651E-02	1.000	-1	0	19	25	1	773.66951		1147.811	.1017E-03	.990
-1	-1	5	27	3	772.68063		540.161	.7767E-03	1.030	-1	0	19	24	3	773.69050		1115.497	.2612E-04	.996
-1	-1	5	27	1	772.68960	-44	540.155	.3107E-02	1.030	-1	0	19	24	1	773.72049		1115.491	.1039E-03	.991
-1	-1	6	25	2	772.83502	22	493.737	.1953E-02	1.019	-1	0	19	24	1	773.72364		399.573	.1772E-02	1.000
-1	-1	6	25	0	772.85025	11	493.732	.3902E-02	1.018	-1	-1	11	15	3	773.72777	-38	399.567	.7087E-02	1.000
-1	0	19	35	3	772.95954		1541.721	.7869E-05	.984	-1	-1	11	15	1	773.74328		1084.465	.2582E-04	.997
-1	-1	7	23	3	772.99326		456.509	.1182E-02	1.011	-1	-1	3	30	3	773.75395	43	620.467	.2103E-02	1.076
-1	-1	7	23	1	773.00140	-31	456.504	.4727E-02	1.011	-1	-1	3	30	1	773.76274	-67	620.461	.1053E-02	1.077
-1	0	19	35	1	773.02305		1541.715	.3122E-04	.976	-1	0	19	23	1	773.76900		1084.459	.1029E-03	.993
-1	0	19	34	3	773.03749		1496.556	.9342E-05	.985	-1	0	19	22	3	773.79381		1054.722	.2438E-04	.998
-1	0	19	34	1	773.09891		1496.550	.3710E-04	.978	1	-1	0	35	2	773.81117		815.640	.3637E-03	1.000
-1	0	19	33	3	773.11313		1452.673	.1098E-04	.986	1	-1	0	35	0	773.81290	73	815.634	.7273E-03	1.000
-1	-1	8	21	2	773.16369		428.473	.5516E-02	1.006	-1	0	19	22	1	773.81507		1054.716	.9713E-04	.994
-1	0	19	33	1	773.17228		1452.667	.4362E-04	.979	-1	0	19	21	3	773.84209		1026.268	.2145E-04	.998
-1	-1	8	21	0	773.17778	-12	428.468	.1379E-02	1.006	-1	0	19	21	1	773.85869		1026.262	.8564E-04	.996
-1	0	19	32	3	773.18645		1410.071	.1278E-04	.987	-1	0	19	20	3	773.88813		999.104	.1672E-04	.999
-1	0	19	32	1	773.24315		1410.065	.5075E-04	.980	-1	-1	4	28	2	773.89476	25	558.249	.2787E-02	1.045
-1	0	19	31	3	773.25747		1368.752	.1472E-04	.989	-1	0	19	20	1	773.89989		999.098	.6681E-04	.998
-1	0	19	31	1	773.31153		1368.746	.5847E-04	.982	-1	-1	4	28	0	773.90935	4	558.243	.6967E-03	1.045
-1	0	19	30	3	773.32618		1328.717	.1675E-04	.990	-1	-1	12	13	2	773.93043		408.341	.3618E-02	1.000
-1	-1	9	19	3	773.33987	-22	409.640	.6207E-02	1.003	-1	0	19	19	3	773.93193		973.230	.9726E-05	1.000
-1	-1	9	19	1	773.34651	74	409.634	.3104E-02	1.003	-1	-1	12	13	0	773.93420	173	408.336	.7236E-02	1.000
-1	0	19	30	1	773.37742		1328.711	.6652E-04	.983	-1	0	19	19	1	773.93870		973.224	.3887E-04	.999
-1	0	19	29	3	773.39260		1289.966	.1881E-04	.991	-1	-1	5	26	3	774.03412		505.219	.8959E-03	1.027
-1	-1	1	34	3	773.39845		772.426	.3057E-03	1.323	-1	-1	5	26	1	774.04262	-34	505.213	.3584E-02	1.027
-1	-1	1	34	1	773.40562	-43	772.420	.1225E-02	1.325	-1	-1	6	24	2	774.18367	21	461.375	.2228E-02	1.017
-1	0	19	29	1	773.44081		1289.960	.7473E-04	.984	-1	-1	6	24	0	774.19794	20	461.369	.4452E-02	1.016
-1	0	19	28	3	773.45673		1252.499	.2084E-04	.992	-1	-1	7	22	3	774.33746	-118	426.729	.1335E-02	1.010
-1	0	19	28	1	773.50172		1252.494	.8287E-04	.986	-1	-1	7	22	1	774.34505	-12	426.723	.5339E-02	1.010
-1	0	19	27	3	773.51858		1216.319	.2273E-04	.993	-1	-1	8	20	2	774.50334	10	401.276	.6163E-02	1.005
-1	-1	10	17	2	773.52826	2	400.003	.6742E-02	1.001	-1	-1	8	20	0	774.51622	3	401.271	.1541E-02	1.005

ΔK	ΔJ	K	J	σ	ν_i	$\sigma-c$	E''_i	S_i	W_i	ΔK	ΔJ	K	J	σ	ν_i	$\sigma-c$	E''_i	S_i	W_i
-1	-1	9	18	3	774.67524	40	385.029	.6873E-02	1.003	-1	0	18	34	0	775.81607		1422.238	.4578E-04	.802
-1	-1	9	18	1	774.68125	53	385.023	.3433E-02	1.002	-1	0	18	27	2	775.83158		1141.964	.7121E-04	.992
-1	-1	1	33	3	774.78332		728.479	.3638E-03	1.305	-1	-1	8	19	2	775.84102	4	375.372	.6841E-02	1.004
-1	-1	1	33	1	774.79034	-12	728.473	.1458E-02	1.307	-1	-1	8	19	0	775.85271	34	375.366	.1710E-02	1.004
-1	-1	10	16	2	774.85914	-10	377.980	.7399E-02	1.001	-1	0	18	23	0	775.87080		1010.085	.1596E-03	.912
-1	-1	10	16	0	774.86875	101	377.974	.1848E-02	1.000	-1	0	18	26	2	775.89128		1107.065	.7721E-04	.993
-1	-1	2	31	2	774.97866	17	650.481	.1851E-02	1.131	-1	0	18	33	0	775.93357		1378.348	.5160E-04	.767
-1	-1	2	31	0	774.99171	15	650.475	.4635E-03	1.133	-1	0	18	25	2	775.94870		1073.452	.8224E-04	.994
-1	0	18	28	0	775.04699		1178.145	.7536E-04	.578	-1	0	18	22	0	775.97056		980.338	.1615E-03	.940
-1	-1	11	14	3	775.05027		380.138	.1930E-02	1.000	-1	0	18	24	2	776.00383		1041.127	.8576E-04	.995
-1	-1	11	14	1	775.05371	-42	380.133	.7720E-02	1.000	-1	-1	9	17	3	776.00864	53	361.710	.7556E-02	1.002
-1	-1	3	29	3	775.11629	6	581.661	.2461E-02	1.070	-1	-1	9	17	1	776.01404	59	361.705	.3778E-02	1.002
-1	-1	3	29	1	775.12471	-53	581.655	.1232E-02	1.071	-1	0	18	23	2	776.05669		1010.091	.8716E-04	.996
1	-1	0	34	2	775.23779		770.409	.4412E-03	1.000	-1	0	18	21	0	776.05827		951.880	.1548E-03	.960
1	-1	0	34	0	775.23951	76	770.403	.8824E-03	1.000	-1	0	18	32	0	776.05864		1335.740	.5669E-04	.722
-1	-1	4	27	2	775.25121	200*	522.018	.3227E-02	1.041	-1	0	18	22	2	776.10728		980.343	.8568E-04	.997
-1	-1	12	12	2	775.25256		391.497	.3922E-02	1.000	-1	0	18	20	0	776.13634		924.711	.1376E-03	.975
-1	-1	12	12	0	775.25414	12	391.491	.7844E-02	1.000	-1	0	18	21	2	776.15561		951.885	.8037E-04	.997
-1	-1	4	27	0	775.26505	116	522.012	.8076E-03	1.042	-1	-1	1	32	3	776.16493		685.815	.4301E-03	1.288
-1	0	18	35	2	775.27069		1467.415	.2354E-04	.982	-1	-1	1	32	1	776.17181	-98	685.810	.1723E-02	1.290
-1	0	18	27	0	775.27172		1141.959	.9627E-04	.671	-1	-1	10	15	2	776.18803	-11	357.250	.8075E-02	1.001
-1	0	18	34	2	775.34896		1422.244	.2804E-04	.983	-1	0	18	31	0	776.19434		1294.415	.6024E-04	.664
-1	-1	5	25	3	775.38560		471.566	.1027E-02	1.025	-1	-1	10	15	0	776.19613	24	357.244	.2017E-02	1.000
-1	-1	5	25	1	775.39363	-53	471.560	.4109E-02	1.025	-1	0	18	20	2	776.20168		924.717	.7042E-04	.998
-1	0	18	33	2	775.42488		1378.354	.3307E-04	.984	-1	0	18	19	0	776.20653		898.834	.1077E-03	.986
-1	0	18	26	0	775.46155		1107.059	.1172E-03	.754	-1	0	18	19	2	776.24551		898.839	.5459E-04	.999
-1	0	18	32	2	775.49847		1335.746	.3868E-04	.986	-1	0	18	18	0	776.27013		874.247	.6281E-04	.994
-1	-1	6	23	2	775.53033	6	430.302	.2525E-02	1.015	-1	0	18	18	2	776.28709		874.252	.3160E-04	1.000
-1	-1	6	23	0	775.54365	23	430.297	.5050E-02	1.015	-1	0	18	30	0	776.34431		1254.374	.6138E-04	.592
-1	0	18	31	2	775.56973		1294.421	.4473E-04	.987	-1	-1	2	30	2	776.34618	42	610.388	.2172E-02	1.122
-1	0	18	25	0	775.62104		1073.447	.1360E-03	.822	-1	-1	2	30	0	776.35871	100	610.382	.5439E-03	1.124
-1	0	18	30	2	775.63866		1254.380	.5117E-04	.988	-1	-1	11	13	3	776.37489		361.997	.2093E-02	1.000
-1	-1	7	21	3	775.67970		398.239	.1496E-02	1.008	-1	-1	11	13	1	776.37767	-47	361.992	.8372E-02	1.000
-1	-1	7	21	1	775.68675	-29	398.233	.5983E-02	1.008	-1	-1	3	28	3	776.47643	40	544.141	.2862E-02	1.065
-1	0	18	35	0	775.70376		1467.409	.3978E-04	.829	-1	-1	3	28	1	776.48448	-138	544.135	.1432E-02	1.066
-1	0	18	29	2	775.70527		1215.623	.5786E-04	.989	-1	0	18	29	0	776.51233		1215.617	.5939E-04	.507
-1	0	18	24	0	775.75573		1041.122	.1506E-03	.874	-1	-1	4	26	2	776.60557	20	487.075	.3715E-02	1.038
-1	0	18	28	2	775.76958		1178.151	.6460E-04	.990	-1	-1	4	26	0	776.61867	22	487.069	.9287E-03	1.038

ΔK	ΔJ	K	J	σ	ν_i	$\sigma-c$	E_i''	S_i	W_i	ΔK	ΔJ	K	J	σ	ν_i	$\sigma-c$	E_i''	S_i	W_i
1	-1	0	33	2	776.66107		726.462	.5314E-03	1.000	-1	0	17	29	3	778.02672		1145.278	.4334E-04	.988
1	-1	0	33	0	776.66278	74	726.456	.1063E-02	1.000	-1	0	17	29	1	778.06072		1145.272	.1728E-03	.985
-1	-1	5	24	3	776.73505		439.202	.1168E-02	1.022	1	-1	0	32	2	778.08097		683.798	.6353E-03	1.000
-1	-1	5	24	1	776.74263	-29	439.196	.4673E-02	1.022	-1	-1	5	23	3	778.08248	-98	408.128	.1321E-02	1.020
-1	-1	6	22	2	776.87501	-2	400.520	.2842E-02	1.013	1	-1	0	32	0	778.08267	-4	683.792	.1271E-02	1.000
-1	-1	6	22	0	776.88739	21	400.514	.5684E-02	1.013	-1	-1	5	23	1	778.08961	-15	408.122	.5283E-02	1.020
-1	-1	7	20	3	777.01995		371.040	.1667E-02	1.007	-1	0	17	28	3	778.09194		1107.800	.4876E-04	.990
-1	-1	7	20	1	777.02647	-31	371.035	.6667E-02	1.007	-1	0	17	28	1	778.12377		1107.794	.1943E-03	.986
-1	-1	8	18	2	777.17671	20	350.759	.7553E-02	1.004	-1	0	17	27	3	778.15485		1071.609	.5411E-04	.991
-1	-1	8	18	0	777.18726	42	350.754	.1886E-02	1.003	-1	0	17	27	1	778.18442		1071.603	.2158E-03	.988
-1	-1	9	16	3	777.34003	162	339.685	.8258E-02	1.001	-1	0	17	26	3	778.21545		1036.704	.5923E-04	.992
-1	-1	9	16	1	777.34485		339.680	.4129E-02	1.001	-1	-1	6	21	2	778.21768	-6	372.029	.3177E-02	1.011
-1	-1	10	14	2	777.51492	-10	337.813	.8758E-02	1.000	-1	-1	6	21	0	778.22914	14	372.023	.6353E-02	1.011
-1	-1	10	14	0	777.52155	157	337.808	.2190E-02	1.000	-1	0	17	26	1	778.24270		1036.699	.2362E-03	.989
-1	-1	1	31	3	777.54335		644.436	.5048E-03	1.271	-1	0	17	25	3	778.27375		1003.087	.6384E-04	.993
-1	-1	1	31	1	777.55006	-66	644.431	.2022E-02	1.273	-1	0	17	25	1	778.29860		1003.082	.2546E-03	.990
-1	0	17	35	3	777.58637		1397.106	.1723E-04	.981	-1	0	17	24	3	778.32974		970.758	.6760E-04	.994
-1	0	17	35	1	777.63167		1397.100	.6856E-04	.976	-1	0	17	24	1	778.35214		970.752	.2696E-03	.991
-1	0	17	34	3	777.66562		1351.928	.2057E-04	.982	-1	-1	7	19	3	778.35820		345.134	.1845E-02	1.006
-1	-1	11	12	3	777.69748		345.151	.2260E-02	1.000	-1	-1	7	19	1	778.36421	-22	345.129	.7380E-02	1.006
-1	-1	11	12	1	777.69963	-35	345.146	.9042E-02	1.000	-1	0	17	23	3	778.38344		939.717	.7009E-04	.995
1	-1	1	35	3	777.70750		817.656	.1055E-03	.618	-1	0	17	23	1	778.40334		939.711	.2798E-03	.993
-1	0	17	34	1	777.70925		1351.922	.8194E-04	.978	-1	0	17	22	3	778.43486		909.965	.7082E-04	.996
-1	-1	2	29	2	777.71123	-5	571.580	.2532E-02	1.114	-1	0	17	22	1	778.45220		909.959	.2827E-03	.994
1	-1	1	35	1	777.71941		817.651	.4206E-03	.616	-1	-1	8	17	2	778.48399		881.503	.6923E-04	.997
-1	-1	2	29	0	777.72325	-156	571.575	.6336E-03	1.115	-1	0	17	21	3	778.49874		881.497	.2764E-03	.995
-1	0	17	33	3	777.74252		1308.032	.2434E-04	.983	-1	0	17	21	1	778.51041	-4	327.439	.8278E-02	1.003
-1	0	17	33	1	777.78440		1308.026	.9697E-04	.979	-1	-1	8	17	0	778.51983	9	327.434	.2068E-02	1.002
-1	0	17	32	3	777.81708		1265.418	.2857E-04	.985	-1	0	17	20	3	778.53085		854.331	.6465E-04	.998
-1	-1	3	27	3	777.83437	28	507.909	.3305E-02	1.060	-1	0	17	20	1	778.54298		854.325	.2581E-03	.996
-1	-1	3	27	1	777.84204	40	507.903	.1652E-02	1.060	-1	0	17	19	3	778.57544		828.449	.5628E-04	.998
-1	0	17	32	1	777.85711		1265.412	.1138E-03	.981	-1	0	17	19	1	778.58493		828.444	.2249E-03	.997
-1	0	17	31	3	777.88929		1224.087	.3317E-04	.986	-1	0	17	18	3	778.61776		803.859	.4340E-04	.999
-1	0	17	31	1	777.92740		1224.081	.1321E-03	.982	-1	0	17	18	1	778.62461		803.854	.1736E-03	.999
-1	-1	4	25	2	777.95786	22	453.420	.4241E-02	1.034	-1	0	17	17	3	778.65783		780.560	.2500E-04	1.000
-1	0	17	30	3	777.95917		1184.040	.3812E-04	.987	-1	0	17	17	1	778.66204		780.555	.1000E-03	1.000
-1	-1	4	25	0	777.97021	-116	453.415	.1061E-02	1.035	-1	-1	9	15	3	778.66941	112	318.954	.8983E-02	1.001
-1	0	17	30	1	777.99526		1184.034	.1520E-03	.984	-1	-1	9	15	1	778.67367		318.948	.4491E-02	1.001

ΔK	ΔJ	K	J	σ	ν_i	$\sigma-c$	E''_i	S_i	W_i	ΔK	ΔJ	K	J	σ	ν_i	$\sigma-c$	E''_i	S_i	W_i
-1	-1	10	13	2	778.83977	5	319.671	.9463E-02	1.000	-1	-1	1	29	1	780.29712	-81	565.530	.2725E-02	1.240
-1	-1	10	13	0	778.84502		319.666	.2366E-02	1.000	-1	0	16	30	2	780.30890		1117.695	.2213E-03	.985
-1	-1	1	30	3	778.91861		604.343	.5884E-03	1.255	1	-1	2	35	0	780.30982		823.693	.1227E-03	.784
-1	-1	1	30	1	778.92515	-53	604.337	.2358E-02	1.257	-1	0	16	32	0	780.31611		1199.078	.3986E-04	.952
-1	-1	11	11	3	779.01801		329.600	.2433E-02	1.000	-1	0	16	29	2	780.37672		1078.927	.2531E-03	.987
-1	-1	11	11	1	779.01958	-23	329.594	.9733E-02	1.000	-1	0	16	31	0	780.38696		1157.741	.4645E-04	.953
1	-1	1	34	3	779.05474		772.426	.1315E-03	.636	1	-1	1	33	3	780.40195		728.479	.1627E-03	.655
1	-1	1	34	1	779.06603		772.420	.5242E-03	.634	1	-1	1	33	1	780.41262		728.473	.6480E-03	.652
-1	-1	2	28	0	779.07384	7	534.060	.2931E-02	1.106	-1	-1	2	27	2	780.43402	-6	497.827	.3368E-02	1.098
-1	-1	2	28	2	779.08533	97	534.055	.7335E-03	1.107	-1	0	16	28	2	780.44219		1041.445	.2859E-03	.988
-1	-1	3	26	3	779.19011	14	472.965	.3788E-02	1.055	-1	-1	2	27	0	780.44499	-114	497.822	.8427E-03	1.099
-1	-1	3	26	1	779.19742	51	472.959	.1894E-02	1.055	-1	0	16	30	0	780.45507		1117.689	.5354E-04	.953
-1	-1	4	24	2	779.30806	11	421.055	.4812E-02	1.031	-1	0	16	27	2	780.50533		1005.249	.3194E-03	.989
-1	-1	4	24	0	779.31967	-22	421.050	.1203E-02	1.031	-1	0	16	29	0	780.52043		1078.921	.6110E-04	.953
-1	-1	5	22	3	779.42787		378.344	.1482E-02	1.018	-1	-1	3	25	3	780.54367	7	439.310	.4310E-02	1.050
-1	-1	5	22	1	779.43455	-25	378.339	.5930E-02	1.018	-1	-1	3	25	1	780.55060	33	439.304	.2157E-02	1.051
1	-1	0	31	2	779.49746		642.419	.7541E-03	1.000	-1	0	16	26	2	780.56614		970.340	.3524E-03	.990
1	-1	0	31	0	779.49915	29	642.413	.1508E-02	1.000	-1	0	16	28	0	780.58297		1041.439	.6897E-04	.953
-1	-1	6	20	2	779.55833	-5	344.829	.3529E-02	1.010	-1	0	16	25	2	780.62462		936.718	.3838E-03	.992
-1	-1	6	20	0	779.56890	14	344.824	.7059E-02	1.010	-1	0	16	27	0	780.64264		1005.243	.7696E-04	.953
-1	-1	7	18	3	779.69444		320.520	.2029E-02	1.005	-1	-1	4	23	2	780.65616	-5	389.980	.5420E-02	1.028
-1	-1	7	18	1	779.69995	-29	320.514	.8114E-02	1.005	-1	-1	4	23	0	780.66706	84	389.975	.1355E-02	1.028
-1	-1	8	16	2	779.84209	-15	305.413	.9017E-02	1.002	-1	0	16	24	2	780.68079		904.384	.4112E-03	.993
-1	-1	8	16	0	779.85043	39	305.407	.2254E-02	1.002	-1	0	16	26	0	780.69938		970.334	.8481E-04	.953
-1	-1	0	16	35	2	779.93442	1330.789	.9836E-04	.978	-1	0	16	23	2	780.73465		873.339	.4328E-03	.994
-1	-1	9	14	3	779.99675	-17	299.516	.9717E-02	1.001	-1	0	16	25	0	780.75311		936.712	.9229E-04	.954
-1	-1	9	14	1	780.00048		299.510	.4859E-02	1.001	-1	-1	5	21	3	780.77121		349.852	.1652E-02	1.016
-1	0	16	34	2	780.01406		1285.605	.1178E-03	.980	-1	-1	5	21	1	780.77746	-32	349.846	.6609E-02	1.016
-1	0	16	35	0	780.08754		1330.783	.2392E-04	.951	-1	0	16	22	2	780.78621		843.583	.4462E-03	.995
-1	0	16	33	2	780.09132		1241.703	.1398E-03	.981	-1	0	16	24	0	780.80373		904.379	.9878E-04	.954
-1	-1	10	12	2	780.16258	37	302.824	.1018E-01	1.000	-1	0	16	21	2	780.83547		815.117	.4483E-03	.996
-1	0	16	32	2	780.16621		1199.083	.1646E-03	.983	-1	0	16	23	0	780.85113		873.334	.1039E-03	.954
-1	0	16	34	0	780.16638		1285.599	.2863E-04	.952	-1	0	16	20	2	780.88244		787.942	.4358E-03	.997
-1	-1	10	12	0	780.16652		302.818	.2545E-02	1.000	-1	0	16	22	0	780.89517		843.578	.1071E-03	.955
-1	0	16	31	2	780.23874		1157.747	.1918E-03	.984	-1	-1	6	19	2	780.89696	-32	318.921	.3891E-02	1.008
-1	0	16	33	0	780.24258		1241.697	.3393E-04	.952	-1	-1	6	19	0	780.90665	91	318.916	.7782E-02	1.008
-1	-1	1	29	3	780.29077		565.535	.6808E-03	1.239	1	-1	0	30	2	780.91052		602.325	.8884E-03	1.000
1	-1	2	35	2	780.29459		823.699	.4929E-03	.787	1	-1	0	30	0	780.91220	-353*	602.320	.1777E-02	1.000

ΔK	ΔJ	K	J	σ	ν_i	o-c	E''_i	S_i	W_i	ΔK	ΔJ	K	J	σ	ν_i	o-c	E''_i	S_i	W_i
-1	0	16	19	2	780.92712		762.057	.4048E-03	.998	-1	-1	7	16	3	782.36080		275.171	.2405E-02	1.003
-1	0	16	21	0	780.93566		815.112	.1077E-03	.957	-1	-1	7	16	1	782.36539	-42	275.165	.9620E-02	1.003
-1	0	16	18	2	780.96953		737.463	.3505E-03	.998	-1	0	15	34	3	782.36962		1223.287	.1650E-03	.978
-1	0	16	20	0	780.97238		787.936	.1048E-03	.959	-1	0	15	34	1	782.40285		1223.281	.8233E-04	.976
-1	0	16	19	0	781.00504		762.051	.9755E-04	.962	-1	0	15	33	3	782.44780		1179.379	.1964E-03	.980
-1	0	16	17	2	781.00967		714.162	.2690E-03	.999	-1	0	15	33	1	782.47967		1179.373	.9792E-04	.977
-1	-1	7	17	3	781.02864		297.199	.2216E-02	1.004	-1	-1	8	14	2	782.49933	-4	265.240	.1052E-01	1.001
-1	0	16	18	0	781.03327		737.458	.8483E-04	.966	-1	-1	8	14	0	782.50564		265.235	.2630E-02	1.001
-1	-1	7	17	1	781.03368	-37	297.193	.8864E-02	1.004	-1	0	15	32	3	782.52359		1136.754	.2316E-03	.981
-1	0	16	16	2	781.04754		692.152	.1542E-03	1.000	-1	0	15	32	1	782.55406		1136.748	.1156E-03	.979
-1	0	16	17	0	781.05652		714.156	.6549E-04	.973	-1	0	15	31	3	782.59701		1095.412	.2710E-03	.983
-1	0	16	16	0	781.07406		692.146	.3793E-04	.984	-1	0	15	31	1	782.62602		1095.407	.1351E-03	.980
-1	-1	8	15	2	781.17174	-15	284.679	.9773E-02	1.002	-1	-1	9	12	3	782.64525	-12	264.523	.1119E-01	1.000
-1	-1	8	15	0	781.17903	112	284.674	.2441E-02	1.001	-1	-1	9	12	1	782.64802		264.518	.5595E-02	1.000
-1	-1	9	13	3	781.32204	-11	281.372	.1045E-01	1.000	-1	0	15	30	3	782.66804		1055.355	.3138E-03	.984
-1	-1	9	13	1	781.32527		281.367	.5223E-02	1.000	-1	0	15	30	1	782.69557		1055.349	.1566E-03	.982
-1	-1	10	11	2	781.48333	42	287.271	.1091E-01	1.000	-1	0	15	29	3	782.73671		1016.583	.3602E-03	.986
-1	-1	10	11	0	781.48603		287.265	.2728E-02	1.000	-1	0	15	29	1	782.76271		1016.577	.1795E-03	.983
1	-1	2	34	2	781.65221		778.469	.6040E-03	.798	-1	-1	10	10	2	782.80199	31	273.013	.1166E-01	1.000
-1	-1	1	28	3	781.65987		528.014	.7817E-03	1.223	-1	0	15	28	3	782.80302		979.096	.4089E-03	.987
-1	-1	1	28	1	781.66603	-51	528.009	.3129E-02	1.224	-1	-1	10	10	0	782.80355		273.008	.2915E-02	1.000
1	-1	2	34	0	781.66667		778.463	.1506E-03	.796	-1	0	15	28	1	782.82745		979.090	.2040E-03	.985
1	-1	1	32	3	781.74902		685.815	.1995E-03	.673	-1	0	15	27	3	782.86697		942.895	.4592E-03	.988
1	-1	1	32	1	781.75911	-18	685.810	.7944E-03	.670	-1	0	15	27	1	782.88981		942.889	.2291E-03	.986
-1	-1	2	26	2	781.79181	5	462.883	.3841E-02	1.090	-1	0	15	26	3	782.92858		907.982	.5098E-03	.989
-1	-1	2	26	0	781.80224	48	462.877	.9611E-03	1.091	-1	0	15	26	1	782.94980		907.976	.2544E-03	.987
-1	-1	3	24	3	781.89504	43	406.944	.4873E-02	1.046	1	-1	3	35	3	782.95741		833.774	.4773E-03	.849
-1	-1	3	24	1	781.90161	51	406.938	.2436E-02	1.046	1	-1	3	35	1	782.96642		833.768	.2384E-03	.848
-1	-1	4	22	2	782.00218	21	360.196	.6060E-02	1.025	-1	0	15	25	3	782.98784		874.356	.5596E-03	.991
-1	-1	4	22	0	782.01235	16	360.190	.1515E-02	1.025	-1	0	15	25	1	783.00742		874.350	.2792E-03	.989
-1	-1	5	20	3	782.11250		322.651	.1828E-02	1.014	1	-1	2	33	2	783.00906	95	734.522	.7345E-03	.809
-1	-1	5	20	1	782.11832	-30	322.645	.7313E-02	1.014	1	-1	2	33	0	783.02276		734.516	.1829E-03	.806
-1	-1	6	18	2	782.23355	-15	294.306	.4264E-02	1.007	-1	-1	1	27	3	783.02596		491.781	.8907E-03	1.207
-1	-1	6	18	0	782.24238	25	294.300	.8528E-02	1.007	-1	-1	1	27	1	783.03192	-17	491.776	.3569E-02	1.209
-1	0	15	35	3	782.28905		1268.476	.1376E-03	.977	-1	0	15	24	3	783.04477		842.018	.6052E-03	.992
1	-1	0	29	2	782.32011		563.518	.1039E-02	1.000	-1	0	15	24	1	783.06268		842.012	.3020E-03	.990
1	-1	0	29	0	782.32178	20	563.512	.2077E-02	1.000	1	-1	1	31	3	783.09586		644.436	.2426E-03	.691
-1	0	15	35	1	782.32359		1268.470	.6857E-04	.974	-1	0	15	23	3	783.09937		810.969	.6446E-03	.993

ΔK	ΔJ	K	J	σ	ν_i	$\sigma-c$	E''_i	S_i	W_i	ΔK	ΔJ	K	J	σ	ν_i	$\sigma-c$	E''_i	S_i	W_i
1	-1	1	3	1	783.10538	-29	644.431	.9660E-03	.688	1	-1	2	32	2	784.36505	62	691.859	.8853E-03	.819
-1	0	15	23	1	783.11561		810.963	.3217E-03	.991	1	-1	2	32	0	784.37801		691.853	.2208E-03	.817
-1	-1	1	2	25	783.14720	14	429.227	.4351E-02	1.083	-1	-1	1	26	3	784.38909		456.836	.1008E-02	1.192
-1	0	15	22	3	783.15164		781.209	.6746E-03	.994	-1	-1	1	26	1	784.39484	-55	456.830	.4035E-02	1.193
-1	-1	1	2	25	783.15710	19	429.221	.1089E-02	1.084	1	-1	1	30	3	784.44238		604.343	.2921E-03	.708
-1	0	15	22	1	783.16620		781.204	.3370E-03	.993	1	-1	1	30	1	784.45134	-38	604.337	.1165E-02	.706
-1	0	15	21	3	783.20160	109	752.740	.6914E-03	.995	-1	-1	2	24	2	784.50023	12	396.860	.4888E-02	1.075
-1	0	15	21	1	783.21447		752.734	.3454E-03	.994	-1	-1	2	24	0	784.50960	-14	396.855	.1223E-02	1.076
-1	-1	1	3	23	783.24422	26	375.868	.5463E-02	1.041	-1	-1	3	22	3	784.59122	60	346.082	.6084E-02	1.037
-1	0	15	20	3	783.24924	146	725.561	.6908E-03	.996	-1	-1	3	22	1	784.59707	60	346.077	.3045E-02	1.038
-1	-1	1	3	23	783.25043	28	375.862	.2734E-02	1.042	-1	0	14	35	2	784.67408		1210.163	.1878E-03	.974
-1	0	15	20	1	783.26043		725.555	.3450E-03	.995	-1	-1	4	20	2	784.68790	-2	304.500	.7419E-02	1.020
-1	0	15	19	3	783.29458	51	699.673	.6678E-03	.997	-1	-1	4	20	0	784.69668	72	304.495	.1855E-02	1.020
-1	0	15	19	1	783.30410		699.667	.3336E-03	.996	-1	0	14	34	2	784.75511		1164.968	.2259E-03	.976
-1	0	15	18	3	783.33762		675.076	.6169E-03	.998	-1	0	14	35	0	784.76103		1210.157	.4642E-04	.963
-1	0	15	18	1	783.34548		675.071	.3082E-03	.997	-1	-1	5	18	3	784.78885		272.126	.2191E-02	1.010
-1	-1	1	4	21	783.34609	-9	331.702	.6727E-02	1.022	-1	-1	5	18	1	784.79387	-47	272.120	.8765E-02	1.010
-1	-1	1	4	21	783.35556	57	331.697	.1682E-02	1.022	-1	0	14	33	2	784.83371		1121.055	.2695E-03	.978
-1	0	15	17	3	783.37835	-1	651.771	.5315E-03	.998	-1	0	14	34	0	784.83996		1164.962	.5583E-04	.965
-1	0	15	17	1	783.38459		651.766	.2658E-03	.998	-1	-1	6	16	2	784.90054	-73	248.954	.5017E-02	1.005
-1	0	15	16	3	783.41680		629.759	.4058E-03	.999	-1	-1	6	16	0	784.90776	34	248.949	.1003E-01	1.005
-1	0	15	16	1	783.42144		629.754	.2029E-03	.999	-1	0	14	32	2	784.90991		1078.426	.3185E-03	.979
-1	-1	1	5	19	783.45172		296.742	.2009E-02	1.012	-1	0	14	33	0	784.91630		1121.050	.6661E-04	.967
-1	0	15	15	3	783.45296		609.039	.2315E-03	1.000	-1	0	14	31	2	784.98369		1037.079	.3735E-03	.981
-1	0	15	15	1	783.45605		609.034	.1158E-03	1.000	-1	0	14	32	0	784.99005		1078.420	.7873E-04	.968
-1	-1	1	5	19	783.45713	-49	296.737	.8035E-02	1.012	-1	-1	7	14	3	785.01892		234.996	.2782E-02	1.002
-1	-1	1	6	17	783.56808	-71	270.983	.4641E-02	1.006	-1	-1	7	14	1	785.02265	-46	234.991	.1113E-01	1.002
-1	-1	1	6	17	783.57609	26	270.978	.9282E-02	1.006	-1	0	14	30	2	785.05508		997.017	.4338E-03	.982
-1	-1	1	7	15	783.69090		254.436	.2596E-02	1.003	-1	0	14	31	0	785.06123		1037.073	.9235E-04	.970
-1	-1	1	7	15	783.69505	-47	254.431	.1038E-01	1.003	-1	0	14	29	2	785.12408		958.240	.4997E-03	.984
1	-1	0	28	2	783.72621		525.997	.1205E-02	1.000	1	-1	0	27	2	785.12879		489.763	.1388E-02	1.000
1	-1	0	28	0	783.72787	8	525.991	.2411E-02	1.000	-1	0	14	30	0	785.12982		997.011	.1074E-03	.972
-1	-1	1	8	13	783.82486	4	247.096	.1127E-01	1.001	1	-1	0	27	0	785.13044	-18	489.758	.2776E-02	1.000
-1	-1	1	8	13	783.83022		247.090	.2818E-02	1.001	-1	-1	8	12	2	785.14830	26	230.245	.1200E-01	1.000
-1	-1	1	9	11	783.96638	-1	248.969	.1194E-01	1.000	-1	-1	8	12	0	785.15277		230.240	.3001E-02	1.000
-1	-1	1	9	11	783.96871		248.964	.5968E-02	1.000	-1	0	14	28	2	785.19070		920.749	.5695E-03	.985
1	-1	3	34	3	784.31926		788.545	.5811E-03	.857	-1	0	14	29	0	785.19583		958.234	.1235E-03	.973
1	-1	3	34	1	784.32786		788.539	.2902E-03	.856	-1	0	14	27	2	785.25495		884.544	.6425E-03	.986

ΔK	ΔJ	K	J	σ	ν_i	$\sigma-c$	E''_i	S_i	W_i	ΔK	ΔJ	K	J	σ	ν_i	$\sigma-c$	E''_i	S_i	W_i
-1	0	14	28	0	785.25927		920.743	.1409E-03	.975	-1	0	14	15	0	785.85483		550.644	.1488E-03	.997
-1	-1	9	10	3	785.28539	-9	234.710	.1269E-01	1.000	-1	-1	2	23	0	785.85974	-3	365.778	.1366E-02	1.070
-1	-1	9	10	1	785.28732		234.705	.6345E-02	1.000	-1	0	14	14	2	785.87705		531.221	.3387E-03	1.000
-1	0	14	26	2	785.31682	117	849.626	.7178E-03	.988	-1	0	14	14	0	785.88370		531.215	.8460E-04	.999
-1	0	14	27	0	785.32015		884.538	.1592E-03	.977	-1	-1	3	21	3	785.93603	169	317.588	.6724E-02	1.033
-1	0	14	25	2	785.37633	65	815.996	.7921E-03	.989	-1	-1	3	21	1	785.94154		317.582	.3365E-02	1.034
-1	0	14	26	0	785.37847		849.621	.1777E-03	.978	-1	-1	4	19	2	786.02759	-5	278.590	.8114E-02	1.017
-1	0	14	24	2	785.43349	92	783.655	.8633E-03	.990	-1	-1	4	19	0	786.03570	100	278.585	.2029E-02	1.017
-1	0	14	25	0	785.43423		815.991	.1962E-03	.980	-1	-1	5	17	3	786.12390		248.802	.2376E-02	1.009
-1	0	14	24	0	785.48746		783.649	.2139E-03	.981	-1	-1	5	17	1	786.12853	-46	248.797	.9502E-02	1.009
-1	0	14	23	2	785.48831	-37	752.602	.9282E-03	.991	-1	-1	6	15	2	786.23092	-79	228.219	.5387E-02	1.004
-1	0	14	23	0	785.53815		752.597	.2302E-03	.983	-1	-1	6	15	0	786.23738	24	228.213	.1077E-01	1.004
-1	0	14	22	2	785.54078	12	722.839	.9837E-03	.993	-1	-1	7	13	3	786.34484		216.850	.2964E-02	1.001
-1	0	14	22	0	785.58633		722.834	.2440E-03	.985	-1	-1	7	13	1	786.34818	-51	216.845	.1186E-01	1.001
-1	0	14	21	2	785.59092	28	694.367	.1023E-02	.994	-1	-1	8	11	2	786.46963	40	214.690	.1274E-01	1.000
-1	0	14	21	0	785.63201		694.361	.2541E-03	.987	-1	-1	8	11	0	786.47328		214.685	.3184E-02	1.000
-1	0	14	20	2	785.63873	14	667.184	.1043E-02	.995	1	-1	0	26	2	786.52781		454.818	.1586E-02	1.000
1	-1	4	35	2	785.65948		847.873	.4347E-03	.880	1	-1	0	26	0	786.52945	3	454.812	.3172E-02	1.000
1	-1	4	35	0	785.67168		847.867	.1085E-03	.879	-1	-1	9	9	3	786.60227	-9	221.747	.1346E-01	1.000
-1	0	14	20	0	785.67521		667.179	.2589E-03	.988	-1	-1	9	9	1	786.60383		221.742	.6731E-02	1.000
1	-1	3	33	3	785.68003		744.599	.7013E-03	.864	1	-1	4	34	2	787.02359		802.646	.5267E-03	.886
-1	0	14	19	2	785.68422	72	641.293	.1036E-02	.996	1	-1	4	34	0	787.03521		802.640	.1315E-03	.885
1	-1	3	33	1	785.68822		744.593	.3502E-03	.863	1	-1	4	34	0	787.03965		701.937	.8397E-03	.871
-1	0	14	19	0	785.71594		641.288	.2575E-03	.990	1	-1	3	32	3	787.04745		701.931	.4199E-03	.871
1	-1	2	31	2	785.72012		650.481	.1059E-02	.829	-1	0	13	35	3	787.06729		1155.861	.6274E-04	.972
-1	0	14	18	2	785.72739	44	616.694	.9963E-03	.997	1	-1	2	30	2	787.07419	62	610.388	.1258E-02	.840
1	-1	2	31	0	785.73237		650.475	.2640E-03	.827	1	-1	2	30	0	787.08575		610.382	.3133E-03	.837
-1	-1	1	25	3	785.74931		423.180	.1131E-02	1.177	-1	0	13	35	1	787.09473		1155.855	.2504E-03	.970
-1	0	14	18	0	785.75424		616.688	.2478E-03	.992	-1	-1	1	24	3	787.10667		390.813	.1261E-02	1.163
-1	-1	1	25	1	785.75484	-52	423.174	.4533E-02	1.179	-1	-1	1	24	1	787.11198		390.807	.5049E-02	1.164
-1	0	14	17	2	785.76826		593.386	.9156E-03	.998	1	-1	1	28	3	787.13402		528.014	.4137E-03	.743
1	-1	1	29	3	785.78846		565.535	.3493E-03	.726	1	-1	1	28	1	787.14195	-22	528.009	.1650E-02	.741
-1	0	14	17	0	785.79014		593.381	.2280E-03	.994	-1	0	13	34	3	787.14923		1110.661	.7559E-04	.974
1	-1	1	29	1	785.79690	-57	565.530	.1391E-02	.723	-1	0	13	34	1	787.17562		1110.655	.3017E-03	.972
-1	0	14	16	2	785.80682		571.371	.7848E-03	.998	-1	-1	2	22	2	787.19923	-12	335.997	.6042E-02	1.062
-1	0	14	16	0	785.82365		571.366	.1956E-03	.995	-1	-1	2	22	0	787.20754	74	335.992	.1512E-02	1.063
-1	0	14	15	2	785.84308		550.649	.5964E-03	.999	-1	0	13	33	3	787.22872		1066.744	.9025E-04	.975
-1	-1	2	23	2	785.85090	3	365.783	.5458E-02	1.069	-1	0	13	33	1	787.25404		1066.738	.3606E-03	.974

ΔK	ΔJ	K	J	σ	ν_i	$\sigma-c$	E''_i	S_i	W_i	ΔK	ΔJ	K	J	σ	ν_i	$\sigma-c$	E''_i	S_i	W_i
-1	-1	3	20	3	787.27866	153	290.385	.7383E-02	1.030	-1	0	13	20	3	788.04335		612.823	.3778E-03	.994
-1	-1	3	20	1	787.28383		290.380	.3691E-02	1.030	-1	0	13	20	1	788.05339	-5	612.817	.1510E-02	.993
-1	0	13	32	3	787.30578		1024.109	.1070E-03	.977	-1	0	13	19	3	788.08942		586.929	.3829E-03	.995
-1	0	13	32	1	787.33000		1024.103	.4271E-03	.975	-1	0	13	19	1	788.09829	24	586.924	.1530E-02	.994
-1	-1	4	18	2	787.36516	-18	253.973	.8816E-02	1.015	-1	0	13	18	3	788.13315		562.327	.3782E-03	.996
-1	-1	4	18	0	787.37262	120	253.968	.2204E-02	1.015	-1	0	13	18	1	788.14088	-9	562.321	.1511E-02	.995
-1	0	13	31	3	787.38042		982.758	.1258E-03	.979	-1	0	13	17	3	788.17454		539.017	.3617E-03	.997
-1	0	13	31	1	787.40351		982.752	.5021E-03	.977	-1	0	13	17	1	788.18116	36	539.011	.1445E-02	.996
-1	0	13	30	3	787.45263		942.692	.1465E-03	.980	-1	0	13	16	3	788.21361		517.000	.3307E-03	.998
-1	-1	5	16	3	787.45684		226.772	.2554E-02	1.007	-1	0	13	16	1	788.21914	-43	516.994	.1321E-02	.997
-1	-1	5	16	1	787.46110	-47	226.767	.1022E-01	1.007	-1	0	13	15	3	788.25035		496.275	.2821E-03	.998
-1	0	13	30	1	787.47459		942.686	.5852E-03	.979	-1	0	13	15	1	788.25483	-29	496.270	.1128E-02	.998
-1	0	13	29	3	787.52244		903.911	.1692E-03	.982	-1	0	13	14	3	788.28477		476.844	.2134E-03	.999
-1	0	13	29	1	787.54323		903.905	.6754E-03	.980	-1	0	13	14	1	788.28823	-31	476.839	.8534E-03	.999
-1	-1	6	14	2	787.55920	-95	208.778	.5746E-02	1.003	-1	0	13	13	3	788.31688		458.707	.1207E-03	1.000
-1	-1	6	14	0	787.56493	14	208.772	.1149E-01	1.003	-1	0	13	13	1	788.31937	201*	458.702	.4828E-03	1.000
-1	0	13	28	3	787.58984		866.415	.1935E-03	.983	1	-1	5	35	3	788.38224		866.004	.9543E-04	.899
-1	0	13	28	1	787.60946		866.409	.7731E-03	.982	1	-1	4	33	2	788.38645	147	758.701	.6332E-03	.892
-1	0	13	27	3	787.65485		830.206	.2193E-03	.985	1	-1	5	35	1	788.38997		865.998	.3813E-03	.898
-1	-1	7	12	3	787.66865		199.999	.3143E-02	1.001	1	-1	4	33	0	788.39750		758.695	.1581E-03	.891
-1	-1	7	12	1	787.67163	-37	199.994	.1257E-01	1.001	1	-1	3	31	3	788.39806	128	660.559	.9988E-03	.879
-1	0	13	27	1	787.67328		830.201	.8756E-03	.983	1	-1	3	31	1	788.40548		660.553	.4988E-03	.878
-1	0	13	26	3	787.71746		795.285	.2459E-03	.986	1	-1	2	29	2	788.42719	22	571.580	.1479E-02	.849
-1	0	13	26	1	787.73470	-55	795.279	.9827E-03	.985	1	-1	2	29	0	788.43808		571.575	.3688E-03	.847
-1	0	13	25	3	787.77770		761.651	.2731E-03	.988	-1	-1	1	23	3	788.46122		359.736	.1395E-02	1.149
-1	-1	8	10	2	787.78884	68	200.430	.1346E-01	1.000	-1	-1	1	23	1	788.46629	-116	359.730	.5583E-02	1.150
-1	-1	8	10	0	787.79172		200.425	.3365E-02	1.000	1	-1	1	27	3	788.47895		491.781	.4852E-03	.759
-1	0	13	25	1	787.79373	-421*	761.646	.1090E-02	.986	1	-1	1	27	1	788.48640	-37	491.776	.1936E-02	.757
-1	0	13	24	3	787.83555		729.306	.2995E-03	.989	-1	-1	2	21	2	788.54523	-19	307.503	.6642E-02	1.056
-1	0	13	24	1	787.85038	-14	729.301	.1197E-02	.988	-1	-1	2	21	0	788.55301	-120	307.497	.1662E-02	1.057
-1	0	13	23	3	787.89104		698.250	.3244E-03	.990	-1	-1	3	19	3	788.61910	134	264.475	.8034E-02	1.026
-1	0	13	23	1	787.90466	-362*	698.245	.1296E-02	.989	-1	-1	3	19	1	788.62394		264.469	.4017E-02	1.026
1	-1	0	25	2	787.92325		421.161	.1798E-02	1.000	-1	-1	4	17	2	788.70059	-5	230.649	.9507E-02	1.013
1	-1	0	25	0	787.92489	-6	421.156	.3595E-02	1.000	-1	-1	4	17	0	788.70743	90	230.643	.2377E-02	1.013
-1	0	13	22	3	787.94416		668.484	.3467E-03	.991	-1	-1	5	15	3	788.78767		206.036	.2730E-02	1.006
-1	0	13	22	1	787.95658	-66	668.479	.1385E-02	.990	-1	-1	5	15	1	788.79158	-60	206.030	.1092E-01	1.006
-1	0	13	21	3	787.99493		640.008	.3653E-03	.993	-1	-1	6	13	2	788.88537		190.631	.6089E-02	1.002
-1	0	13	21	1	788.00615	-8	640.003	.1460E-02	.992	-1	-1	6	13	0	788.89041	-143	190.625	.1218E-01	1.002

ΔK	ΔJ	K	J	σ	ν_i	o-c	E''_i	S_i	W_i	ΔK	ΔJ	K	J	σ	ν_i	o-c	E''_i	S_i	W_i
-1	-1	7	11	3	788.99033		184.443	.3316E-02	1.001	-1	-1	4	16	0	790.04012		208.612	.2543E-02	1.011
-1	-1	7	11	1	788.99297	-48	184.438	.1326E-01	1.001	-1	0	12	28	0	790.05895	-60	816.084	.1021E-02	.976
-1	-1	8	9	2	789.10590	40	187.466	.1419E-01	1.000	-1	0	12	27	2	790.08025		779.878	.5838E-03	.983
-1	-1	8	9	0	789.10809		187.461	.3547E-02	1.000	-1	-1	5	14	3	790.11636		186.593	.2896E-02	1.005
1	-1	0	24	2	789.31508		388.794	.2021E-02	1.000	-1	-1	5	14	1	790.11994	-40	186.588	.1158E-01	1.005
1	-1	0	24	0	789.31671	-9	388.789	.4042E-02	1.000	-1	0	12	27	0	790.12196	-242*	779.872	.1162E-02	.978
-1	0	12	35	2	789.48924		1105.565	.1639E-03	.969	-1	0	12	26	2	790.14319	-22	744.953	.6571E-03	.984
-1	0	12	35	0	789.54764		1105.559	.3258E-03	.963	-1	0	12	26	0	790.18249	40	744.947	.1309E-02	.980
-1	0	12	34	2	789.57170		1060.361	.1977E-03	.971	-1	0	12	25	2	790.20372		711.316	.7329E-03	.986
-1	0	12	34	0	789.62829		1060.355	.3931E-03	.965	-1	-1	6	12	2	790.20940		173.779	.6418E-02	1.002
-1	0	12	33	2	789.65169		1016.439	.2367E-03	.973	-1	-1	6	12	0	790.21380	-112	173.773	.1284E-01	1.002
-1	0	12	33	0	789.70639		1016.433	.4706E-03	.967	-1	0	12	25	0	790.24056	-150	711.310	.1458E-02	.981
-1	0	12	32	2	789.72922		973.800	.2808E-03	.974	-1	0	12	24	2	790.26186	73	678.967	.8080E-03	.987
1	-1	4	32	2	789.74801	70	716.040	.7554E-03	.898	-1	0	12	24	0	790.29618	246*	678.962	.1609E-02	.983
1	-1	5	34	3	789.74805		820.778	.1152E-03	.904	-1	-1	7	10	3	790.30986		170.182	.3478E-02	1.000
1	-1	3	30	3	789.75521	616*	620.467	.1177E-02	.886	-1	-1	7	10	1	790.31218	-36	170.177	.1391E-01	1.000
1	-1	5	34	1	789.75544		820.773	.4604E-03	.903	-1	0	12	23	2	790.31761		647.908	.8816E-03	.989
1	-1	4	32	0	789.75850		716.034	.1884E-03	.896	-1	0	12	23	0	790.34937	8	647.903	.1756E-02	.985
1	-1	3	30	1	789.76225		620.461	.5879E-03	.885	-1	0	12	22	2	790.37098	-12	618.139	.9492E-03	.990
1	-1	2	28	2	789.77905	-92	534.060	.1726E-02	.859	-1	0	12	22	0	790.40015	-22	618.134	.1891E-02	.986
-1	0	12	32	0	789.78195		973.794	.5588E-03	.969	-1	-1	8	8	2	790.42081	33	175.797	.1493E-01	1.000
1	-1	2	28	0	789.78930		534.055	.4306E-03	.857	-1	0	12	21	2	790.42198	-84	589.660	.1008E-02	.991
-1	0	12	31	2	789.80430		932.445	.3308E-03	.976	-1	-1	8	8	0	790.42236		175.792	.3734E-02	1.000
-1	-1	1	22	3	789.81299		329.949	.1531E-02	1.136	-1	0	12	21	0	790.44853	33	589.655	.2011E-02	.988
-1	-1	1	22	1	789.81783	-38	329.944	.6129E-02	1.137	-1	0	12	20	2	790.47060	7	562.472	.1055E-02	.992
1	-1	1	26	3	789.82316		456.836	.5642E-03	.775	-1	0	12	20	0	790.49452	-18	562.467	.2104E-02	.989
1	-1	1	26	1	789.83014	-39	456.830	.2254E-02	.774	-1	0	12	19	2	790.51687	23	536.576	.1086E-02	.994
-1	0	12	31	0	789.85497		932.439	.6583E-03	.971	-1	0	12	19	0	790.53815	23	536.570	.2165E-02	.991
-1	0	12	30	2	789.87693		892.374	.3864E-03	.978	-1	0	12	18	2	790.56078	-335*	511.971	.1094E-02	.995
-1	-1	2	20	2	789.88891	-14	280.299	.7243E-02	1.050	-1	0	12	18	0	790.57943	5	511.966	.2182E-02	.992
-1	-1	2	20	0	789.89618	118	280.294	.1812E-02	1.051	-1	0	12	17	2	790.60234	34	488.659	.1075E-02	.996
-1	0	12	30	0	789.92547		892.369	.7682E-03	.972	-1	0	12	17	0	790.61838	20	488.653	.2146E-02	.994
-1	0	12	29	2	789.94713		853.589	.4476E-03	.980	-1	0	12	16	2	790.64156	-176*	466.639	.1023E-02	.997
-1	-1	3	18	3	789.95736	136	239.857	.8683E-02	1.023	-1	0	12	16	0	790.65502	-11	466.634	.2041E-02	.995
-1	-1	3	18	1	789.96187		239.851	.4342E-02	1.023	-1	0	12	15	2	790.67844	-2	445.913	.9301E-03	.998
-1	0	12	29	0	789.99346	109	853.584	.8897E-03	.974	-1	0	12	15	0	790.68937	9	445.908	.1857E-02	.996
-1	0	12	28	2	790.01490		816.090	.5133E-03	.981	1	-1	0	23	2	790.70328		357.717	.2254E-02	1.000
-1	-1	4	16	2	790.03389	-9	208.618	.1017E-01	1.011	1	-1	0	23	0	790.70490	-16	357.712	.4508E-02	1.000

ΔK	ΔJ	K	J	σ	ν_i	$\sigma-c$	E''_i	S_i	W_i	ΔK	ΔJ	K	J	σ	ν_i	$\sigma-c$	E''_i	S_i	W_i
-1	0	12	14	2	790.71299		426.480	.7896E-03	.998	1	-1	0	22	0	792.08942	-21	327.925	.4986E-02	1.000
-1	0	12	14	0	790.72145	7	426.475	.1578E-02	.997	-1	0	11	33	1	792.10554		970.146	.6054E-03	.968
-1	0	12	13	2	790.74521		408.341	.5946E-03	.999	-1	0	11	32	3	792.16325		927.509	.1804E-03	.972
-1	0	12	13	0	790.75128	-8	408.336	.1189E-02	.999	-1	0	11	32	1	792.18306		927.503	.7201E-03	.970
-1	0	12	12	2	790.77511		391.497	.3351E-03	1.000	-1	0	11	31	3	792.23917		886.150	.2129E-03	.974
-1	0	12	12	0	790.77887	152	391.491	.6701E-03	1.000	-1	0	11	31	1	792.25809		886.144	.8497E-03	.972
1	-1	4	31	2	791.10821	185*	674.664	.8928E-03	.903	-1	0	11	30	3	792.31262	-87	846.076	.2491E-03	.976
1	-1	3	29	3	791.11103	-97	581.661	.1375E-02	.892	-1	0	11	30	1	792.33063		846.070	.9945E-03	.974
1	-1	5	33	3	791.11250		776.835	.1380E-03	.909	-1	0	11	29	3	792.38360		807.287	.2889E-03	.977
1	-1	3	29	1	791.11771		581.655	.6873E-03	.892	-1	0	11	29	1	792.40071	-70	807.281	.1154E-02	.976
1	-1	4	31	0	791.11816		674.658	.2230E-03	.902	-1	0	11	28	3	792.45214		769.784	.3324E-03	.979
1	-1	5	33	1	791.11956	-162	776.830	.5515E-03	.908	1	-1	3	28	3	792.46548	135	544.141	.1594E-02	.899
1	-1	2	27	2	791.12970	34	497.827	.1997E-02	.868	1	-1	4	30	2	792.46700	-17	634.573	.1048E-02	.909
1	-1	6	35	2	791.13037		888.158	.1627E-03	.911	-1	0	11	28	1	792.46833	-150	769.779	.1328E-02	.978
1	-1	2	27	0	791.13932		497.822	.4980E-03	.866	1	-1	3	28	1	792.47180		544.135	.7960E-03	.898
1	-1	6	35	0	791.14070		888.152	.3249E-03	.910	1	-1	5	32	3	792.47554		734.176	.1638E-03	.913
-1	-1	1	21	3	791.16204		301.454	.1666E-02	1.123	1	-1	4	30	0	792.47642		634.567	.2617E-03	.908
-1	-1	1	25	3	791.16655		423.180	.6506E-03	.791	1	-1	2	26	2	792.47908	57	462.883	.2290E-02	.877
-1	-1	1	21	1	791.16665	-55	301.449	.6672E-02	1.124	1	-1	5	32	1	792.48227	-262*	734.170	.6553E-03	.913
1	-1	1	25	1	791.17308	55	423.174	.2599E-02	.790	1	-1	2	26	0	792.48810		462.877	.5712E-03	.875
-1	-1	2	19	2	791.23028	-20	254.388	.7841E-02	1.045	1	-1	6	34	2	792.49734		842.934	.1957E-03	.915
-1	-1	2	19	0	791.23705	100	254.383	.1960E-02	1.045	1	-1	6	34	0	792.50718		842.928	.3914E-03	.915
-1	-1	3	17	3	791.29341	107	216.532	.9310E-02	1.020	-1	-1	1	20	3	792.50840		274.250	.1800E-02	1.111
-1	-1	3	17	1	791.29761		216.526	.4655E-02	1.020	1	-1	1	24	3	792.50901		390.813	.7436E-03	.807
-1	-1	4	15	2	791.36504	-14	187.881	.1080E-01	1.009	-1	-1	1	20	1	792.51277	-26	274.245	.7208E-02	1.112
-1	-1	4	15	0	791.37069		187.875	.2701E-02	1.009	1	-1	1	24	1	792.51512	-262*	390.807	.2967E-02	.805
-1	-1	5	13	3	791.44290		168.446	.3051E-02	1.004	-1	0	11	27	3	792.51822		733.568	.3792E-03	.981
-1	-1	5	13	1	791.44617	-61	168.440	.1220E-01	1.004	-1	0	11	27	1	792.53350	-56	733.563	.1515E-02	.980
-1	-1	6	11	2	791.53129		158.222	.6720E-02	1.001	-1	-1	2	18	2	792.56935	-17	229.770	.8411E-02	1.039
-1	-1	6	11	0	791.53509	147	158.216	.1344E-01	1.001	-1	-1	2	18	0	792.57562		229.764	.2105E-02	1.040
-1	-1	7	9	3	791.62723		157.217	.3639E-02	1.000	-1	0	11	26	3	792.58188		698.640	.4282E-03	.982
-1	-1	7	9	1	791.62926	-51	157.212	.1455E-01	1.000	-1	0	11	26	1	792.59623	-47	698.635	.1711E-02	.981
-1	0	11	35	3	791.92059		1059.286	.1047E-03	.966	-1	-1	3	16	3	792.62727	-42	194.500	.9901E-02	1.017
-1	0	11	35	1	791.94299		1059.280	.4180E-03	.964	-1	-1	3	16	1	792.63118		194.495	.4950E-02	1.017
-1	0	11	34	3	792.00397		1014.078	.1265E-03	.968	-1	0	11	25	3	792.64310		665.000	.4793E-03	.984
-1	0	11	34	1	792.02552		1014.072	.5050E-03	.966	-1	0	11	25	1	792.65653	-68	664.994	.1915E-02	.983
-1	0	11	33	3	792.08485		970.152	.1517E-03	.970	-1	-1	4	14	2	792.69402	2	168.438	.1138E-01	1.007
1	-1	0	22	2	792.08781		327.931	.2493E-02	1.000	-1	-1	4	14	0	792.69913		168.432	.2846E-02	1.007

ΔK	ΔJ	K	J	σ	ν_i	$o-c$	E_i''	S_i	W_i	ΔK	ΔJ	K	J	σ	ν_i	$o-c$	E_i''	S_i	W_i
-1	0	11	24	3	792.70190		632.649	.5313E-03	.986	1	-1	3	27	1	793.82447		507.903	.9151E-03	.905
-1	0	11	24	1	792.71442	-12	632.643	.2123E-02	.985	1	-1	2	25	2	793.82711	-81	429.227	.2604E-02	.886
-1	0	11	23	3	792.75829	-69	601.587	.5821E-03	.987	1	-1	4	29	0	793.83324		595.762	.3043E-03	.913
-1	-1	5	12	3	792.76729		151.593	.3192E-02	1.003	1	-1	2	25	0	793.83555		429.221	.6495E-03	.884
-1	0	11	23	1	792.76990	-30	601.581	.2326E-02	.986	1	-1	5	31	3	793.83712		692.801	.1931E-03	.918
-1	-1	5	12	1	792.77026	-65	151.588	.1277E-01	1.003	1	-1	5	31	1	793.84353		692.795	.7714E-03	.917
-1	0	11	22	3	792.81227		571.815	.6306E-03	.988	1	-1	1	23	3	793.85046		359.736	.8412E-03	.822
-1	0	11	22	1	792.82298	-21	571.809	.2522E-02	.988	-1	-1	1	19	3	793.85211		248.339	.1930E-02	1.100
-1	-1	6	10	2	792.85101		143.960	.7004E-02	1.001	1	-1	1	23	1	793.85616	-68	359.730	.3357E-02	.820
-1	-1	6	10	0	792.85426	125	143.955	.1401E-01	1.001	-1	-1	1	19	1	793.85626	-77	248.334	.7726E-02	1.101
-1	0	11	21	3	792.86386		543.333	.6755E-03	.990	1	-1	6	33	2	793.86287		798.993	.2338E-03	.920
-1	0	11	21	1	792.87367	-29	543.328	.2699E-02	.989	1	-1	6	33	0	793.87224		798.987	.4670E-03	.919
-1	0	11	20	3	792.91304		516.143	.7132E-03	.991	1	-1	7	35	3	793.89467		914.341	.6756E-04	.920
-1	0	11	20	1	792.92198	-23	516.137	.2850E-02	.990	1	-1	7	35	1	793.90147		914.335	.2703E-03	.920
-1	-1	7	8	3	792.94240		145.548	.3798E-02	1.000	-1	-1	2	17	2	793.90612	6	206.444	.8962E-02	1.035
-1	-1	7	8	1	792.94417	-35	145.542	.1519E-01	1.000	-1	-1	2	17	0	793.91192		206.439	.2240E-02	1.035
-1	0	11	19	3	792.95985		490.244	.7418E-03	.992	-1	-1	3	15	3	793.95893	-20	173.762	.1044E-01	1.014
-1	0	11	19	1	792.96792	58	490.239	.2967E-02	.992	-1	-1	3	15	1	793.96255		173.757	.5226E-02	1.015
-1	0	11	18	3	793.00427		465.637	.7592E-03	.994	-1	-1	4	13	2	794.02083	45	150.290	.1192E-01	1.006
-1	0	11	18	1	793.01150	15	465.632	.3034E-02	.993	-1	-1	4	13	0	794.02542		150.284	.2979E-02	1.006
-1	0	11	17	3	793.04632		442.323	.7605E-03	.995	-1	-1	5	11	3	794.08950		136.035	.3317E-02	1.002
-1	0	11	17	1	793.05273	-22	442.317	.3039E-02	.994	-1	-1	5	11	1	794.09220	-48	136.030	.1327E-01	1.002
-1	0	11	16	3	793.08600		420.301	.7431E-03	.996	-1	-1	6	9	2	794.16854		130.995	.7259E-02	1.000
-1	0	11	16	1	793.09162	28	420.296	.2970E-02	.995	-1	-1	6	9	0	794.17129	109	130.989	.1452E-01	1.000
-1	0	11	15	3	793.12332		399.573	.7032E-03	.997	-1	-1	7	7	3	794.25536		135.175	.3964E-02	1.000
-1	0	11	15	1	793.12817	14	399.567	.2810E-02	.996	-1	-1	7	7	1	794.25691	-23	135.169	.1586E-01	1.000
-1	0	11	14	3	793.15827		380.138	.6364E-03	.998	-1	0	10	35	2	794.37922		1017.019	.5227E-03	.961
-1	0	11	14	1	793.16240	-63	380.133	.2543E-02	.997	-1	0	10	35	0	794.42185		1017.013	.1301E-03	.957
-1	0	11	13	3	793.19088		361.997	.5378E-03	.998	-1	0	10	34	2	794.46321		971.806	.6329E-03	.964
-1	0	11	13	1	793.19430	-73	361.992	.2151E-02	.998	-1	0	10	34	0	794.50439		971.801	.1576E-03	.960
-1	0	11	12	3	793.22114		345.151	.4034E-03	.999	-1	0	10	33	2	794.54468	-40	927.877	.7596E-03	.966
-1	0	11	12	1	793.22390	6	345.146	.1613E-02	.999	-1	0	10	33	0	794.58437		927.871	.1891E-03	.962
-1	0	11	11	3	793.24905		329.600	.2265E-03	1.000	-1	0	10	32	2	794.62362	8	885.230	.9048E-03	.968
-1	0	11	11	1	793.25119	-51	329.594	.9660E-03	1.000	-1	0	10	32	0	794.66179		885.224	.2253E-03	.964
1	-1	0	21	2	793.46865		299.435	.2733E-02	1.000	-1	0	10	31	2	794.70006	8	843.868	.1069E-02	.970
1	-1	0	21	0	793.47025	0	299.430	.5467E-02	1.000	-1	0	10	31	0	794.73665		843.862	.2665E-03	.967
1	-1	3	27	3	793.81848	-48	507.909	.1832E-02	.906	-1	0	10	30	2	794.77400	26	803.790	.1254E-02	.972
1	-1	4	29	2	793.82433	197*	595.767	.1218E-02	.914	-1	0	10	30	0	794.80898		803.785	.3124E-03	.969

ΔK	ΔJ	K	J	σ	ν_i	o-c	E_i''	S_i	W_i	ΔK	ΔJ	K	J	σ	ν_i	o-c	E_i''	S_i	W_i
-1	0	10	29	2	794.84544	86	764.998	.1458E-02	.974	-1	0	10	21	2	795.32848	29	501.023	.3514E-02	.988
1	-1	0	20	2	794.84576		272.232	.2971E-02	1.000	-1	-1	4	12	2	795.34545	61	133.436	.1237E-01	1.005
1	-1	0	20	0	794.84736	2	272.226	.5941E-02	1.000	-1	0	10	21	0	795.34805		501.017	.8766E-03	.986
-1	0	10	29	0	794.87879		764.993	.3633E-03	.971	-1	-1	4	12	0	795.34955		133.431	.3094E-02	1.005
-1	0	10	28	2	794.91441	63	727.492	.1681E-02	.976	-1	0	10	20	2	795.37793	23	473.830	.3737E-02	.989
-1	0	10	28	0	794.94609		727.487	.4190E-03	.973	-1	0	10	20	0	795.39576	31	473.824	.9333E-03	.988
-1	0	10	27	2	794.98091	16	691.274	.1922E-02	.978	-1	-1	5	10	3	795.40952		121.773	.3425E-02	1.001
-1	0	10	27	0	795.01089		691.268	.4791E-03	.975	-1	-1	5	10	1	795.41196	-51	121.768	.1370E-01	1.001
-1	0	10	26	2	795.04494	29	656.342	.2179E-02	.980	-1	0	10	19	2	795.42496	17	447.929	.3926E-02	.991
-1	0	10	26	0	795.07321		656.337	.5430E-03	.977	-1	0	10	19	0	795.44108	-7	447.923	.9794E-03	.989
-1	0	10	25	2	795.10652	6	622.699	.2447E-02	.982	-1	0	10	18	2	795.46960	-37	423.320	.4059E-02	.992
-1	0	10	25	0	795.13306		622.694	.6098E-03	.979	-1	-1	6	8	2	795.48388		119.325	.7505E-02	1.000
-1	0	10	24	2	795.16566	16	590.345	.2719E-02	.983	-1	0	10	18	0	795.48403		423.314	.1014E-02	.991
1	-1	3	26	3	795.17000	336*	472.965	.2086E-02	.912	-1	-1	6	8	0	795.48617	79	119.319	.1501E-01	1.000
1	-1	2	24	2	795.17373	-37	396.860	.2932E-02	.894	-1	0	10	17	2	795.51185	-5	400.003	.4125E-02	.993
1	-1	3	26	1	795.17566		472.959	.1042E-02	.911	-1	0	10	17	0	795.52463	20	399.998	.1030E-02	.992
1	-1	4	28	2	795.18016	129	558.249	.1404E-02	.919	-1	0	10	16	2	795.55171	4	377.980	.4109E-02	.994
1	-1	2	24	0	795.18161		396.855	.7313E-03	.892	-1	0	10	16	0	795.56288	390*	377.974	.1026E-02	.993
1	-1	4	28	0	795.18856		558.243	.3507E-03	.918	-1	0	10	15	2	795.58920	16	357.250	.3997E-02	.996
-1	0	10	24	0	795.19046		590.340	.6784E-03	.981	-1	0	10	15	0	795.59879	64	357.244	.9984E-03	.995
1	-1	1	22	3	795.19079		329.949	.9420E-03	.836	-1	0	10	14	2	795.62431	91	337.813	.3763E-02	.997
-1	-1	1	18	3	795.19322		223.720	.2050E-02	1.089	-1	0	10	14	0	795.63239		337.808	.9398E-03	.996
1	-1	1	22	1	795.19611	10	329.944	.3764E-02	.835	-1	0	10	13	2	795.65706	-35	319.671	.3389E-02	.998
-1	-1	1	18	1	795.19713	-92	223.715	.8208E-02	1.090	-1	0	10	13	0	795.66368		319.666	.8464E-03	.997
1	-1	5	30	3	795.19720		652.711	.2256E-03	.923	-1	0	10	12	2	795.68744	-5	302.824	.2851E-02	.998
1	-1	5	30	1	795.20330		652.706	.9015E-03	.922	-1	0	10	12	0	795.69268		302.818	.7128E-03	.998
-1	0	10	23	2	795.22236	-48	559.281	.2995E-02	.985	-1	0	10	11	2	795.71547	-7	287.271	.2130E-02	.999
1	-1	6	32	2	795.22692		756.336	.2767E-03	.924	-1	0	10	11	0	795.71939		287.265	.5326E-03	.999
1	-1	6	32	0	795.23582	464*	756.330	.5527E-03	.923	-1	0	10	10	2	795.74115	150	273.013	.1193E-02	1.000
-1	-1	2	16	2	795.24060	-12	184.412	.9457E-02	1.030	-1	0	10	10	0	795.74384		273.008	.2982E-03	1.000
-1	0	10	23	0	795.24541		559.275	.7472E-03	.983	1	-1	0	19	2	796.21913		246.320	.3199E-02	1.000
-1	-1	2	16	0	795.24594		184.407	.2364E-02	1.030	1	-1	0	19	0	796.22072	9	246.315	.6398E-02	1.000
1	-1	7	34	3	795.26273		869.120	.8106E-04	.924	1	-1	2	23	2	796.51888	74	365.783	.3271E-02	.902
1	-1	7	34	1	795.26924		869.114	.3239E-03	.923	1	-1	3	25	3	796.51998	-36	439.310	.2354E-02	.918
-1	0	10	22	2	795.27663	21	529.506	.3264E-02	.987	1	-1	3	25	1	796.52532		439.304	.1176E-02	.917
-1	-1	3	14	3	795.28837	-38	154.319	.1093E-01	1.012	1	-1	2	23	0	796.52623		365.778	.8169E-03	.901
-1	-1	3	14	1	795.29172		154.314	.5466E-02	1.012	1	-1	1	21	3	796.52992		301.454	.1045E-02	.850
-1	0	10	22	0	795.29794		529.501	.8135E-03	.984	-1	-1	1	17	3	796.53176		200.394	.2160E-02	1.079

ΔK	ΔJ	K	J	σ	ν_i	$\sigma-c$	E''_i	S_i	W_i	ΔK	ΔJ	K	J	σ	ν_i	$\sigma-c$	E''_i	S_i	W_i
1	-1	4	27	2	796.53443	22	522.018	.1605E-02	.924	-1	0	9	27	3	797.45667	32	653.003	.2379E-02	.975
1	-1	1	21	1	796.53488	-22	301.449	.4175E-02	.849	-1	0	9	27	1	797.46955	-84	652.998	.1189E-02	.974
-1	-1	1	17	1	796.53544	-79	200.389	.8640E-02	1.079	-1	0	9	26	3	797.52142	49	618.069	.2703E-02	.977
1	-1	4	27	0	796.54235		522.012	.4008E-03	.923	-1	0	9	26	1	797.53357	-33	618.064	.1350E-02	.976
1	-1	5	29	3	796.55573		613.908	.2611E-03	.927	-1	0	9	25	3	797.58368	553*	584.424	.3044E-02	.979
1	-1	5	29	1	796.56153	172	613.902	.1043E-02	.926	1	-1	0	18	2	797.58872		221.701	.3413E-02	1.000
-1	-1	2	15	2	796.57280	10	163.674	.9899E-02	1.026	1	-1	0	18	0	797.59031	-3	221.696	.6826E-02	1.000
-1	-1	2	15	0	796.57769		163.669	.2475E-02	1.026	-1	0	9	25	1	797.59511		584.418	.1520E-02	.978
1	-1	6	31	2	796.58944		714.963	.3247E-03	.928	-1	0	9	24	3	797.64348	41	552.067	.3396E-02	.981
1	-1	6	31	0	796.59789	-114	714.957	.6486E-03	.927	-1	0	9	24	1	797.65419	-32	552.062	.1696E-02	.980
-1	-1	3	13	3	796.61559	-25	136.170	.1135E-01	1.010	-1	0	9	23	3	797.70080	37	521.000	.3754E-02	.983
-1	-1	3	13	1	796.61869		136.165	.5673E-02	1.010	-1	0	9	23	1	797.71081	4	520.995	.1875E-02	.982
1	-1	7	33	3	796.62929		825.181	.9645E-04	.928	-1	0	9	22	3	797.75568	26	491.224	.4104E-02	.984
1	-1	7	33	1	796.63551		825.175	.3854E-03	.927	-1	0	9	22	1	797.76498	6	491.218	.2052E-02	.984
-1	-1	4	11	2	796.66788	50	117.878	.1274E-01	1.003	-1	0	9	21	3	797.80810	44	462.737	.4444E-02	.986
-1	-1	4	11	0	796.67152		117.873	.3185E-02	1.003	-1	0	9	21	1	797.81671	-28	462.732	.2220E-02	.985
1	-1	8	35	2	796.68154		944.544	.2191E-03	.927	-1	0	9	20	3	797.85809	57	435.543	.4760E-02	.988
1	-1	8	35	0	796.69045		944.538	.5471E-04	.926	1	-1	2	22	2	797.86249	-383*	335.997	.3616E-02	.910
-1	-1	5	9	3	796.72732		108.807	.3520E-02	1.001	-1	0	9	20	1	797.86602		435.537	.2377E-02	.987
-1	-1	5	9	1	796.72954	-43	108.802	.1408E-01	1.001	-1	-1	1	16	3	797.86775		178.362	.2254E-02	1.069
-1	-1	6	7	2	796.79699		108.951	.7747E-02	1.000	-1	-1	1	20	3	797.86775		274.250	.1147E-02	.863
-1	-1	6	7	0	796.79888	53	108.945	.1549E-01	1.000	1	-1	3	24	3	797.86835	217*	406.944	.2632E-02	.924
-1	0	9	35	3	796.84811		978.773	.6390E-03	.957	1	-1	2	22	0	797.86932		335.992	.9021E-03	.908
-1	0	9	35	1	796.86674		978.767	.3188E-03	.955	1	-1	1	16	1	797.87121	-69	178.357	.9017E-02	1.069
-1	0	9	34	3	796.93308		933.558	.7736E-03	.959	1	-1	3	24	1	797.87339		406.938	.1315E-02	.923
-1	0	9	34	1	796.95101		933.552	.3864E-03	.958	1	-1	4	26	2	797.88710	89	487.075	.1818E-02	.929
-1	0	9	33	3	797.01549		889.625	.9305E-03	.962	1	-1	4	26	0	797.89455		487.069	.4540E-03	.928
-1	0	9	33	1	797.03271		889.619	.4643E-03	.960	1	-1	4	26	0	797.89455		487.069	.4540E-03	.928
-1	0	9	32	3	797.09534		846.975	.1110E-02	.964	-1	-1	2	14	2	797.90271	154	144.230	.1027E-01	1.022
-1	0	9	32	1	797.11185		846.969	.5543E-03	.963	-1	0	9	19	3	797.90564	-140	409.640	.5031E-02	.989
-1	0	9	31	3	797.17265		805.609	.1313E-02	.966	1	-1	2	14	0	797.90718		144.225	.2567E-02	1.022
-1	0	9	31	1	797.18844		805.603	.6559E-03	.965	1	-1	5	28	3	797.91266		576.390	.2996E-03	.931
-1	0	9	30	3	797.24743	75	765.529	.1543E-02	.969	-1	0	9	19	1	797.91291		409.634	.2515E-02	.989
-1	0	9	30	1	797.26250		765.523	.7708E-03	.968	1	-1	5	28	1	797.91817		576.385	.1198E-02	.931
-1	0	9	29	3	797.31968	69	726.733	.1798E-02	.971	-1	-1	3	12	3	797.94059	-36	119.316	.1167E-01	1.008
-1	0	9	29	1	797.33402	-91	726.728	.8979E-03	.970	-1	-1	3	12	1	797.94344		119.311	.5837E-02	1.008
-1	0	9	28	3	797.38942	76	689.225	.2077E-02	.973	1	-1	6	30	2	797.95039		674.875	.3777E-03	.932
-1	0	9	28	1	797.40304	-98	689.219	.1037E-02	.972	-1	0	9	18	3	797.95077	53	385.029	.5252E-02	.991

ΔK	ΔJ	K	J	σ	ν_i	O-C	E_i''	S_i	W_i	ΔK	ΔJ	K	J	σ	ν_i	O-C	E_i''	S_i	W_i
-1	0	9	18	1	797.95739	90	385.023	.2624E-02	.990	1	-1	1	19	1	799.20849	-361*	248.334	.4980E-02	.875
1	-1	6	30	0	797.95840	-11	674.869	.7546E-03	.931	1	-1	2	21	0	799.21085		307.497	.9878E-03	.916
-1	-1	4	10	2	797.98808	196*	103.615	.1303E-01	1.002	1	-1	3	23	3	799.21508	172	375.868	.2913E-02	.929
-1	-1	4	10	0	797.99131		103.610	.3257E-02	1.002	1	-1	3	23	1	799.21983		375.862	.1457E-02	.929
-1	0	9	17	3	797.99348		361.710	.5398E-02	.992	-1	-1	2	13	2	799.23033	5	126.081	.1055E-01	1.018
1	-1	7	32	3	797.99431		782.526	.1137E-03	.931	-1	-1	2	13	0	799.23440		126.076	.2637E-02	1.018
-1	0	9	17	1	797.99948		361.705	.2699E-02	.992	1	-1	4	25	2	799.23812		453.420	.2040E-02	.934
1	-1	7	32	1	798.00024		782.520	.4547E-03	.931	1	-1	4	25	0	799.24512		453.415	.5095E-03	.933
-1	0	9	16	3	798.03378	-77	339.685	.5454E-02	.993	-1	-1	3	11	3	799.26334	-14	103.758	.1190E-01	1.006
-1	0	9	16	1	798.03917		339.680	.2727E-02	.993	-1	-1	3	11	1	799.26597		103.752	.5952E-02	1.006
-1	-1	5	8	3	798.04290		97.137	.3596E-02	1.000	1	-1	5	27	3	799.26796		540.161	.3407E-03	.935
-1	-1	5	8	1	798.04491	-50	97.131	.1438E-01	1.000	1	-1	5	27	1	799.27318		540.155	.1363E-02	.935
1	-1	8	34	2	798.05042		899.325	.2618E-03	.930	-1	-1	4	9	2	799.30606	38	90.649	.1324E-01	1.002
1	-1	8	34	0	798.05890		899.320	.6538E-04	.929	-1	-1	4	9	0	799.30891		90.643	.3310E-02	1.002
-1	0	9	15	3	798.07168	147	318.954	.5402E-02	.994	1	-1	6	29	2	799.30973		636.073	.4351E-03	.935
-1	0	9	15	1	798.07649		318.948	.2701E-02	.994	1	-1	6	29	0	799.31731	-30	636.067	.8702E-03	.935
-1	0	9	14	3	798.10717	175	299.516	.5226E-02	.996	-1	0	8	35	2	799.34285		944.544	.7622E-03	.950
-1	-1	6	6	2	798.10786		99.873	.8007E-02	1.000	-1	-1	5	7	3	799.35623		86.762	.3664E-02	1.000
-1	-1	6	6	0	798.10940	56	99.868	.1601E-01	1.000	1	-1	7	31	3	799.35774		741.155	.1329E-03	.935
-1	0	9	14	1	798.11143		299.510	.2611E-02	.995	-1	-1	5	7	1	799.35806	-10	86.757	.1466E-01	1.000
-1	0	9	13	3	798.14028	-8	281.372	.4894E-02	.997	1	-1	7	31	1	799.36340		741.149	.5312E-03	.934
-1	0	9	13	1	798.14400		281.367	.2445E-02	.996	-1	0	8	35	0	799.37550		944.538	.1899E-03	.947
-1	0	9	12	3	798.17100	-12	264.523	.4388E-02	.998	1	-1	8	33	2	799.41773		855.389	.3102E-03	.933
-1	0	9	12	1	798.17422		264.518	.2192E-02	.997	1	-1	8	33	0	799.42581		855.384	.7755E-04	.933
-1	0	9	11	3	798.19933	-15	248.969	.3676E-02	.998	-1	0	8	34	2	799.42857	-51	899.325	.9245E-03	.953
-1	0	9	11	1	798.20209		248.964	.1838E-02	.998	-1	0	8	34	0	799.46007		899.320	.2304E-03	.950
-1	0	9	10	3	798.22529	-115	234.710	.2737E-02	.999	1	-1	9	35	3	799.48359		978.773	.1733E-03	.932
-1	0	9	10	1	798.22761		234.705	.1369E-02	.999	1	-1	9	35	1	799.48963		978.767	.8654E-04	.931
-1	0	9	9	3	798.24887	-14	221.747	.1529E-02	1.000	-1	0	8	33	2	799.51169	-25	855.389	.1113E-02	.956
-1	0	9	9	1	798.25079		221.742	.7644E-03	1.000	-1	0	8	33	0	799.54202		855.384	.2774E-03	.953
-1	1	20	20	0	798.69232		1077.474	.1507E-06	1.020	-1	0	8	32	2	799.59222		812.737	.1330E-02	.959
-1	1	20	20	2	798.71096		1077.479	.6087E-06	1.030	-1	0	8	32	0	799.62135		812.731	.3315E-03	.956
1	-1	0	17	2	798.95451		198.375	.3606E-02	1.000	-1	0	8	31	2	799.67016	4	771.368	.1576E-02	.961
1	-1	0	17	0	798.95609	-10	198.370	.7211E-02	1.000	-1	0	8	31	0	799.69807	70	771.363	.3931E-03	.959
-1	-1	1	15	3	799.20123		157.624	.2332E-02	1.060	-1	0	8	30	2	799.74553	-1	731.285	.1854E-02	.964
1	-1	1	19	3	799.20420		248.339	.1247E-02	.876	-1	1	19	19	3	799.76202		973.230	.2657E-06	1.028
-1	-1	1	15	1	799.20448	40	157.618	.9327E-02	1.060	-1	0	8	30	0	799.77221	-17	731.279	.4621E-03	.961
1	-1	2	21	2	799.20450	38	307.503	.3955E-02	.917	-1	1	19	19	1	799.77377		973.224	.1065E-05	1.030

ΔK	ΔJ	K	J	σ	ν_i	$\sigma-c$	E_i''	S_i	W_i	ΔK	ΔJ	K	J	σ	ν_i	$\sigma-c$	E_i''	S_i	W_i
1	-1	9	34	3	800.85330		933.558	.2064E-03	.935	-1	0	7	33	1	802.03383	-228*	825.175	.1300E-02	.948
1	-1	9	34	1	800.85909		933.552	.1031E-03	.934	-1	1	18	19	2	802.07943		898.839	.2299E-05	1.028
-1	1	19	20	3	801.00625		999.104	.6708E-06	1.029	1	-1	7	29	3	802.07969		662.269	.1766E-03	.941
-1	1	19	20	1	801.02284		999.098	.2688E-05	1.031	1	-1	7	29	1	802.08482		662.263	.7065E-03	.941
-1	1	20	22	0	801.14977		1133.083	.6300E-06	1.018	-1	0	7	32	3	802.10086	8	782.526	.3891E-03	.952
-1	1	20	22	2	801.19274		1133.088	.2555E-05	1.032	-1	0	7	32	1	802.11479	-116	782.520	.1555E-02	.951
1	-1	0	15	2	801.67457		155.605	.3901E-02	1.000	1	-1	8	31	2	802.14756		771.368	.4246E-03	.940
1	-1	0	15	0	801.67614	34	155.599	.7801E-02	1.000	1	-1	8	31	0	802.15485		771.363	.1060E-03	.939
-1	0	7	35	3	801.84829		914.341	.2224E-03	.943	-1	0	7	31	3	802.17977	166	741.155	.4623E-03	.956
-1	-1	1	13	3	801.86076		120.030	.2420E-02	1.043	-1	0	7	31	1	802.19312	-98	741.149	.1846E-02	.954
-1	-1	1	13	1	801.86361	-77	120.025	.9689E-02	1.044	1	-1	9	33	3	802.22142		889.625	.2438E-03	.938
-1	0	7	35	1	801.86395		914.335	.8888E-03	.942	1	-1	9	33	1	802.22695		889.619	.1218E-03	.937
1	-1	1	17	3	801.87259		200.394	.1423E-02	.900	-1	1	19	21	3	802.24774		1026.268	.1126E-05	1.031
1	-1	1	17	1	801.87629	253*	200.389	.5687E-02	.899	-1	0	7	30	3	802.25607	39	701.069	.5441E-03	.958
-1	-1	2	11	2	801.87871	11	93.668	.1082E-01	1.012	-1	0	7	30	1	802.26883	-74	701.063	.2174E-02	.957
-1	-1	2	11	0	801.88206		93.663	.2705E-02	1.012	-1	1	19	21	1	802.26898		1026.262	.4507E-05	1.032
1	-1	2	19	2	801.88349		254.388	.4590E-02	.931	1	-1	10	35	2	802.30698		1017.019	.1338E-03	.936
1	-1	2	19	0	801.88893		254.383	.1146E-02	.930	1	-1	10	35	0	802.31474		1017.013	.3342E-04	.935
-1	-1	3	9	3	801.90208	9	76.527	.1206E-01	1.003	-1	0	7	29	3	802.32977	-18	662.269	.6360E-03	.961
1	-1	3	21	3	801.90339	-48	317.588	.3467E-02	.940	-1	0	7	29	1	802.34194	-70	662.263	.2541E-02	.960
-1	-1	3	9	1	801.90432		76.522	.6028E-02	1.003	-1	1	20	23	0	802.37241		1162.821	.8708E-06	1.017
1	-1	3	21	1	801.90758		317.582	.1732E-02	.939	-1	0	7	28	3	802.40088	49	624.755	.7377E-03	.964
-1	1	17	17	3	801.91647		780.560	.7559E-06	1.025	-1	0	7	28	1	802.41246	-56	624.750	.2948E-02	.963
-1	1	17	17	1	801.92330		780.555	.3029E-05	1.027	-1	1	20	23	2	802.42947		1162.827	.3542E-05	1.034
1	-1	4	23	2	801.93503	55	389.980	.2494E-02	.943	-1	0	7	27	3	802.46941	64	588.529	.8488E-03	.967
-1	0	7	34	3	801.93513		869.120	.2700E-03	.946	-1	0	7	27	1	802.48040	-41	588.523	.3392E-02	.966
-1	-1	4	7	2	801.93526	33	68.603	.1339E-01	1.000	-1	0	7	26	3	802.53538	-81	553.591	.9677E-03	.969
-1	-1	4	7	0	801.93746		68.598	.3347E-02	1.000	-1	0	7	26	1	802.54579	-28	553.585	.3867E-02	.968
1	-1	4	23	0	801.94117		389.975	.6228E-03	.942	-1	0	7	25	3	802.59880	11	519.941	.1095E-02	.972
-1	0	7	34	1	801.95022	-162	869.114	.1079E-02	.945	-1	0	7	25	1	802.60863	-25	519.935	.4377E-02	.971
1	-1	5	25	3	801.97347		471.566	.4281E-03	.943	-1	0	7	24	3	802.65952	-10	487.580	.1227E-02	.973
-1	-1	5	5	3	801.97608		69.903	.3810E-02	1.000	-1	0	7	24	1	802.66893	-30	487.575	.4907E-02	.973
-1	-1	5	5	1	801.97762	-28	69.898	.1524E-01	1.000	-1	0	7	23	3	802.71804	-22	456.509	.1365E-02	.976
1	-1	5	25	1	801.97816	-82	471.560	.1713E-02	.943	-1	0	7	23	1	802.72672	-19	456.504	.5458E-02	.976
-1	1	18	19	0	802.01407		898.834	.4405E-05	.985	-1	0	7	22	3	802.77388		426.729	.1504E-02	.979
-1	0	7	33	3	802.01932		825.181	.3253E-03	.949	-1	0	7	22	1	802.78200	-38	426.723	.6010E-02	.978
1	-1	6	27	2	802.02342		562.329	.5623E-03	.942	-1	0	7	21	3	802.82721		398.239	.1641E-02	.981
1	-1	6	27	0	802.03017	139	562.323	.1125E-02	.942	-1	0	7	21	1	802.83478	-7	398.233	.6557E-02	.980

ΔK	ΔJ	K	J	σ	ν_i	$o-c$	E''_i	S_i	W_i	ΔK	ΔJ	K	J	σ	ν_i	$o-c$	E''_i	S_i	W_i	
-1	0	7	20	3	802.87805		371.040	.1772E-02	.983	-1	-1	4	6	2	803.24645	184*	59.525	.1338E-01	1.000	
-1	0	7	20	1	802.88508	-19	371.035	.7082E-02	.982	-1	-1	4	6	0	803.24839		59.520	.3345E-02	1.000	
-1	0	7	19	3	802.92640		345.134	.1894E-02	.985	1	-1	3	20	1	803.24881		290.380	.1859E-02	.944	
-1	0	7	19	1	802.93290	-2	345.129	.7570E-02	.984	-1	0	7	10	3	803.25108		170.182	.1684E-02	.997	
-1	0	7	18	3	802.97227		320.520	.2001E-02	.986	-1	0	7	10	1	803.25370		170.177	.6737E-02	.997	
-1	0	7	18	1	802.97827	-11	320.514	.8003E-02	.986	-1	0	7	9	3	803.27502		157.217	.1402E-02	.998	
-1	0	7	17	3	803.01568		297.199	.2090E-02	.988	-1	0	7	9	1	803.27732	46	157.212	.5608E-02	.998	
-1	1	16	16	2	803.01929		692.152	.4930E-05	1.024	1	-1	4	22	2	803.28084	-305*	360.196	.2714E-02	.947	
-1	0	7	17	1	803.02118	-59	297.193	.8359E-02	.988	1	-1	4	22	0	803.28657		360.190	.6777E-03	.946	
1	-1	0	14	2	803.02879		136.161	.3989E-02	1.000	-1	0	7	8	3	803.29654		145.548	.1038E-02	.999	
1	-1	0	14	0	803.03036	48	136.155	.7978E-02	1.000	-1	0	7	8	1	803.29856	-42	145.542	.4153E-02	.999	
-1	0	7	16	3	803.05662		275.171	.2155E-02	.990	-1	0	7	7	3	803.31566		135.175	.5788E-03	1.000	
-1	0	7	16	1	803.06165	-35	275.165	.8610E-02	.989	-1	0	7	7	1	803.31743	-213*	135.169	.2315E-02	1.000	
-1	1	16	16	0	803.06612		692.146	.1223E-05	1.016	1	-1	5	24	3	803.32360		439.202	.4729E-03	.947	
-1	0	7	15	3	803.09512		254.436	.2187E-02	.991	-1	1	18	20	2	803.32382		924.717	.3873E-05	1.030	
-1	0	7	15	1	803.09969	-42	254.431	.8748E-02	.991	1	-1	5	24	1	803.32803	-40	439.196	.1892E-02	.947	
-1	0	7	14	3	803.13117		234.996	.2186E-02	.993	1	-1	6	26	2	803.37767		527.389	.6303E-03	.946	
-1	0	7	14	1	803.13531	-40	234.991	.8734E-02	.992	1	-1	6	26	0	803.38403	101	527.383	.1259E-02	.945	
-1	0	7	13	3	803.16479		216.850	.2140E-02	.994	1	-1	7	28	3	803.43813		624.755	.2010E-03	.945	
-1	1	17	18	3	803.16572		803.859	.1924E-05	1.027	1	-1	7	28	1	803.44301	-242*	624.750	.8030E-03	.944	
-1	0	7	13	1	803.16851	-51	216.845	.8559E-02	.994	-1	1	19	22	3	803.48646		1054.722	.1566E-05	1.032	
-1	1	17	18	1	803.17519		803.854	.7705E-05	1.028	1	-1	8	30	2	803.51000		731.285	.4897E-03	.943	
-1	-1	1	12	3	803.18686		103.176	.2427E-02	1.036	-1	1	19	22	1	803.51216		1054.716	.6269E-05	1.033	
-1	-1	1	12	1	803.18951	-90	103.171	.9709E-02	1.036	1	-1	1	19	22	1	803.51691		731.279	.1223E-03	.942
-1	0	7	12	3	803.19597		199.999	.2045E-02	.995	1	-1	9	32	3	803.58791		846.975	.2853E-03	.941	
-1	0	7	12	1	803.19930	24	199.994	.8182E-02	.995	-1	1	20	24	0	803.59069		1193.848	.1077E-05	1.015	
-1	-1	2	10	2	803.19946	8	79.405	.1078E-01	1.009	1	-1	9	32	1	803.59319		846.969	.1425E-03	.940	
-1	-1	2	10	0	803.20248		79.399	.2695E-02	1.009	-1	1	20	24	2	803.66339		1193.854	.4394E-05	1.035	
1	-1	1	16	3	803.20437		178.362	.1494E-02	.911	1	-1	10	34	2	803.67734		971.806	.1587E-03	.938	
1	-1	1	16	1	803.20780	-16	178.357	.5969E-02	.910	1	-1	10	34	0	803.68473		971.801	.3968E-04	.938	
-1	-1	3	8	3	803.21804	10	64.856	.1197E-01	1.002	-1	1	15	15	3	804.13643		609.039	.7852E-05	1.022	
-1	-1	3	8	1	803.22011		64.851	.5986E-02	1.002	-1	1	15	15	1	804.14106		609.034	.3930E-05	1.023	
1	-1	2	18	2	803.22035	-151	229.770	.4865E-02	.938	-1	1	16	17	2	804.27133		714.162	.1258E-04	1.025	
-1	0	7	11	3	803.22474		184.443	.1896E-02	.996	-1	1	16	17	0	804.33505		714.156	.3099E-05	1.010	
1	-1	2	18	0	803.22537		229.764	.1215E-02	.937	-1	0	6	35	2	804.37783		888.158	.5067E-03	.933	
-1	1	18	20	0	803.22646		924.711	.7294E-05	.970	1	-1	0	13	2	804.37910		118.011	.4030E-02	1.000	
-1	0	7	11	1	803.22770	35	184.438	.7584E-02	.996	1	-1	0	13	0	804.38066	25	118.006	.8060E-02	1.000	
1	-1	3	20	3	803.24488	209*	290.385	.3721E-02	.945	-1	0	6	35	0	804.40354		888.152	.1010E-02	.930	

ΔK	ΔJ	K	J	σ	ν_i	$\sigma-c$	E_i''	S_i	W_i	ΔK	ΔJ	K	J	σ	ν_i	$\sigma-c$	E_i''	S_i	W_i
-1	1	17	19	3	804.41226		828.449	.3251E-05	1.028	-1	0	6	30	0	804.81113	0	674.869	.2491E-02	.949
-1	1	17	19	1	804.42436		828.444	.1302E-04	1.029	-1	0	6	29	2	804.86453	1	636.073	.1460E-02	.954
-1	1	18	21	0	804.42871		951.880	.9949E-05	.948	1	-1	8	29	2	804.87073		692.487	.5594E-03	.946
-1	0	6	34	2	804.46569		842.934	.6154E-03	.936	1	-1	8	29	0	804.87726		692.481	.1397E-03	.945
-1	0	6	34	0	804.49049		842.928	.1228E-02	.934	-1	0	6	29	0	804.88459	-6	636.067	.2915E-02	.952
-1	-1	1	11	3	804.51052		87.617	.2407E-02	1.030	-1	1	20	25	2	804.89445		1226.169	.5069E-05	1.037
-1	-1	1	11	1	804.51300	244*	87.612	.9629E-02	1.030	-1	0	6	28	2	804.93632	-39	598.557	.1696E-02	.957
-1	-1	2	9	2	804.51790	-244*	66.437	.1063E-01	1.007	1	-1	9	31	3	804.95272		805.609	.3308E-03	.944
-1	-1	2	9	0	804.52063		66.432	.2658E-02	1.007	-1	0	6	28	0	804.95541	6	598.551	.3384E-02	.955
-1	-1	3	7	3	804.53171	87	54.481	.1178E-01	1.001	1	-1	9	31	1	804.95777		805.603	.1652E-03	.943
-1	-1	3	7	1	804.53364		54.476	.5892E-02	1.001	-1	0	6	27	2	805.00549	-1	562.329	.1953E-02	.960
1	-1	1	15	3	804.53443		157.624	.1547E-02	.921	-1	0	6	27	0	805.02361	0	562.323	.3899E-02	.958
1	-1	1	15	1	804.53762	-439*	157.618	.6190E-02	.921	1	-1	10	33	2	805.04608		927.877	.1867E-03	.941
-1	0	6	33	2	804.55083		798.993	.7428E-03	.940	1	-1	10	33	0	805.05311		927.871	.4669E-04	.941
-1	-1	4	5	2	804.55534	12	51.743	.1336E-01	1.000	-1	0	6	26	2	805.07205	35	527.389	.2232E-02	.963
1	-1	2	17	2	804.55538	8	206.444	.5092E-02	.944	-1	0	6	26	0	805.08920	11	527.383	.4456E-02	.961
-1	-1	4	5	0	804.55705		51.738	.3341E-02	1.000	-1	0	6	25	2	805.13602	-2	493.737	.2531E-02	.966
1	-1	2	17	0	804.56001		206.439	.1272E-02	.943	1	-1	11	35	3	805.14520		1059.286	.2522E-04	.939
-1	0	6	33	0	804.56545		951.885	.5411E-05	1.031	1	-1	11	35	1	805.15061		1059.280	.1009E-03	.939
1	-1	3	19	3	804.58451	-149	798.987	.1483E-02	.938	-1	0	6	25	0	805.15219	0	493.732	.5051E-02	.964
1	-1	3	19	1	804.58820		264.475	.3949E-02	.950	-1	0	6	24	2	805.19741	-8	461.375	.2845E-02	.969
1	-1	4	21	2	804.62481	0	264.469	.1973E-02	.949	-1	0	6	24	0	805.21262	17	461.369	.5678E-02	.967
1	-1	4	21	0	804.63015		331.702	.2921E-02	.951	-1	0	6	23	2	805.25624	19	430.302	.3171E-02	.972
-1	0	6	32	2	804.63327	361*	331.697	.7296E-03	.950	-1	0	6	23	0	805.27048	7	430.297	.6329E-02	.970
-1	0	6	32	0	804.65620	56	756.336	.8900E-03	.944	-1	1	14	14	2	805.27184		531.221	.1225E-04	1.021
1	-1	5	23	3	804.67193		408.128	.1774E-02	.941	-1	1	14	14	0	805.28358		531.215	.3067E-05	1.023
1	-1	5	23	1	804.67611	-51	408.122	.5169E-03	.951	-1	0	6	22	2	805.31251	-33	400.520	.3500E-02	.974
-1	0	6	31	2	804.71302	-45	714.963	.2065E-02	.950	-1	0	6	22	0	805.32581	22	400.514	.6993E-02	.973
-1	1	19	23	3	804.72238		1084.465	.1057E-02	.947	-1	0	6	21	2	805.36624	29	372.029	.3832E-02	.977
1	-1	6	25	2	804.73016		493.737	.1953E-05	1.034	-1	0	6	21	0	805.37860	26	372.023	.7648E-02	.975
-1	0	6	31	0	804.73500	45	714.957	.6988E-03	.949	-1	1	15	16	3	805.39073		629.759	.2011E-04	1.024
1	-1	6	25	0	804.73614	-68	493.732	.2110E-02	.945	-1	1	15	16	1	805.39695		629.754	.1007E-04	1.025
-1	1	19	23	1	804.75235		1084.459	.7813E-05	1.034	-1	0	6	20	2	805.41744	23	344.829	.4152E-02	.979
-1	0	6	30	2	804.79010	56	674.875	.1248E-02	.951	-1	0	6	20	0	805.42889	35	344.824	.8295E-02	.978
1	-1	7	27	3	804.79482		588.529	.2262E-03	.948	-1	0	6	19	2	805.46613	-2	318.921	.4454E-02	.981
1	-1	7	27	1	804.79946	18	588.523	.9037E-03	.947	-1	0	6	19	0	805.47668	21	318.916	.8900E-02	.980
-1	1	20	25	0	804.80432		1226.163	.1237E-05	1.012	-1	1	16	18	2	805.51232	-12	294.306	.4729E-02	.983

ΔK	ΔJ	K	J	σ	ν_i	O-C	E''_i	S_i	W_i	ΔK	ΔJ	K	J	σ	ν_i	O-C	E''_i	S_i	W_i
-1	1	17	21	1	806.91438		881.497	.2298E-04	1.032	1	-1	6	23	2	807.42965		430.302	.8323E-03	.956
-1	0	5	35	3	806.91758		866.004	.2812E-03	.919	1	-1	6	23	0	807.43491	-233*	430.297	.1663E-02	.955
-1	0	5	35	1	806.93079	-114	865.998	.1124E-02	.918	-1	0	5	28	3	807.48478	56	576.390	.9508E-03	.948
-1	0	5	34	3	807.00691		820.778	.3421E-03	.923	-1	0	5	28	1	807.49468	-55	576.385	.3799E-02	.947
-1	0	5	34	1	807.01965	30	820.773	.1367E-02	.922	1	-1	7	25	3	807.50284		519.941	.2776E-03	.954
-1	1	18	23	2	807.04034		1010.091	.7888E-05	1.034	1	-1	7	25	1	807.50700	-44	519.935	.1109E-02	.953
1	-1	0	11	2	807.06788		85.598	.3947E-02	1.000	-1	0	5	27	3	807.55492		540.161	.1098E-02	.952
1	-1	0	11	0	807.06944	33	85.592	.7894E-02	1.000	-1	0	5	27	1	807.56435	-62	540.155	.4386E-02	.951
-1	0	5	33	3	807.09343		776.835	.4136E-03	.928	1	-1	8	27	2	807.58692	-129	618.752	.7076E-03	.951
-1	0	5	33	1	807.10571	-140	776.830	.1653E-02	.927	-1	1	12	12	2	807.58989		391.497	.1396E-04	1.018
-1	-1	2	7	2	807.14785	308*	44.391	.9956E-02	1.003	1	-1	8	27	0	807.59274		618.746	.1769E-03	.951
-1	-1	2	7	0	807.15008		44.385	.2489E-02	1.003	-1	1	12	12	0	807.59595		391.491	.2797E-04	1.020
-1	-1	1	9	3	807.15064		60.386	.2272E-02	1.018	-1	0	5	26	3	807.62240	-12	505.219	.1256E-02	.955
-1	-1	3	5	3	807.15211	-175*	37.621	.1117E-01	1.000	-1	0	5	26	1	807.63135	-26	505.213	.5023E-02	.955
-1	-1	1	9	1	807.15280	-187*	60.381	.9097E-02	1.019	1	-1	9	29	3	807.67720		726.733	.4314E-03	.949
-1	-1	3	5	1	807.15380		37.616	.5586E-02	1.000	-1	1	13	14	3	807.68123		476.844	.1201E-04	1.021
-1	0	5	32	3	807.17718		734.176	.4959E-03	.932	1	-1	9	29	1	807.68178		726.728	.2157E-03	.949
-1	1	19	25	3	807.18569		1147.817	.2485E-05	1.037	-1	1	13	14	1	807.68569		476.839	.4808E-04	1.022
-1	0	5	32	1	807.18899	150	734.170	.1981E-02	.931	-1	0	5	25	3	807.68723		471.566	.1427E-02	.959
1	-1	1	13	3	807.18911		120.030	.1593E-02	.940	-1	0	5	25	1	807.69571	-36	471.560	.5701E-02	.958
1	-1	1	13	1	807.19186	-136	120.025	.6372E-02	.940	-1	0	5	24	3	807.74943	-151	439.202	.1606E-02	.962
-1	1	20	27	0	807.21604		1294.654	.1403E-05	1.005	-1	0	5	24	1	807.75744	-42	439.196	.6418E-02	.961
1	-1	2	15	2	807.21975	15	163.674	.5361E-02	.955	1	-1	10	31	2	807.77850		843.868	.2513E-03	.947
-1	1	19	25	1	807.22357		1147.811	.9931E-05	1.036	-1	1	14	16	2	807.78319		571.371	.5363E-04	1.024
1	-1	2	15	0	807.22366		163.669	.1340E-02	.955	1	-1	10	31	0	807.78484		843.862	.6275E-04	.946
1	-1	3	17	3	807.25807	-56	216.532	.4279E-02	.958	-1	1	14	16	0	807.80506		571.366	.1342E-04	1.025
-1	0	5	31	3	807.25817		692.801	.5901E-03	.936	-1	0	5	23	3	807.80901		408.128	.1793E-02	.965
1	-1	3	17	1	807.26131		216.526	.2140E-02	.958	-1	0	5	23	1	807.81656	-26	408.122	.7173E-02	.965
-1	0	5	31	1	807.26950	-93	692.795	.2358E-02	.935	-1	0	5	22	3	807.86598		378.344	.1985E-02	.968
1	-1	4	19	2	807.30710	24	278.590	.3265E-02	.958	-1	0	5	22	1	807.87309	-36	378.339	.7940E-02	.968
1	-1	4	19	0	807.31171		278.585	.8163E-03	.958	1	-1	11	33	3	807.88568		970.152	.3493E-04	.944
-1	0	5	30	3	807.33642	64	652.711	.6971E-03	.940	1	-1	11	33	1	807.89063		970.146	.1397E-03	.944
-1	0	5	30	1	807.34728	-15	652.706	.2785E-02	.939	-1	1	15	18	3	807.89121		675.076	.4839E-04	1.027
-1	1	20	27	2	807.34790		1294.660	.5809E-05	1.040	-1	1	15	18	1	807.90071		675.071	.2419E-04	1.027
1	-1	5	21	3	807.36299		349.852	.5958E-03	.957	-1	0	5	21	3	807.92037		349.852	.2178E-02	.971
1	-1	5	21	1	807.36671	-65	349.846	.2383E-02	.957	-1	0	5	21	1	807.92704	-38	349.846	.8711E-02	.971
-1	0	5	29	3	807.41195	-81	613.908	.8172E-03	.944	-1	1	18	24	0	807.94584		1041.122	.1378E-04	.820
-1	0	5	29	1	807.42233	-57	613.902	.3265E-02	.943	-1	0	5	20	3	807.97219		322.651	.2368E-02	.974

ΔK	ΔJ	K	J	σ	ν_i	$\sigma-c$	E_i''	S_i	W_i	ΔK	ΔJ	K	J	σ	ν_i	$\sigma-c$	E_i''	S_i	W_i
-1	0	5	20	1	807.97842	-37	322.645	.9471E-02	.974	-1	0	5	6	3	808.43413		77.684	.1398E-02	.999
1	-1	12	35	2	808.00395		1105.565	.3712E-04	.941	-1	0	5	6	1	808.43595	-20	77.679	.5594E-02	.999
1	-1	12	35	0	808.01075		1105.559	.7424E-04	.941	-1	0	5	5	3	808.44866		69.903	.7829E-03	1.000
-1	1	16	20	2	808.01113		787.942	.3798E-04	1.030	-1	0	5	5	1	808.45033	-79	69.898	.3132E-02	1.000
-1	0	5	19	3	808.02145		296.742	.2550E-02	.977	-1	1	19	26	1	808.45455		1181.419	.1046E-04	1.037
-1	0	5	19	1	808.02726	-34	296.737	.1019E-01	.976	-1	-1	3	4	3	808.45881	-4	31.136	.1083E-01	1.000
-1	0	5	18	3	808.06817		272.126	.2717E-02	.979	-1	-1	2	6	2	808.45933	-3	35.312	.9450E-02	1.002
-1	0	5	18	1	808.07356	-29	272.120	.1087E-01	.979	-1	-1	3	4	1	808.46041		31.131	.5414E-02	1.000
-1	1	16	20	0	808.11130		787.936	.9275E-05	1.006	-1	-1	2	6	0	808.46135		35.307	.2362E-02	1.002
-1	0	5	17	3	808.11235		248.802	.2867E-02	.982	-1	-1	1	8	3	808.46710		48.714	.2160E-02	1.014
-1	0	5	17	1	808.11735	-43	248.797	.1146E-01	.981	-1	-1	1	8	1	808.46913	-42	48.709	.8639E-02	1.014
-1	1	17	22	3	808.13526		909.965	.6712E-05	1.033	1	-1	1	12	3	808.51359		103.176	.1579E-02	.949
-1	0	5	16	3	808.15401		226.772	.2990E-02	.984	1	-1	1	12	1	808.51614	-52	103.171	.6309E-02	.948
-1	1	17	22	1	808.15514		909.959	.2685E-04	1.033	1	-1	2	14	2	808.54898	8	144.230	.5381E-02	.960
-1	0	5	16	1	808.15863	-51	226.767	.3081E-02	.984	1	-1	2	14	0	808.55256		144.225	.1345E-02	.960
-1	0	5	15	3	808.19316		206.036	.3081E-02	.986	-1	-1	20	28	2	808.57022		1330.835	.5895E-05	1.042
-1	0	5	15	1	808.19741	-56	206.030	.1232E-01	.986	1	-1	3	16	3	808.59190	25	194.500	.4370E-02	.963
-1	0	5	14	3	808.22982		186.593	.3134E-02	.988	1	-1	3	16	1	808.59493		194.495	.2183E-02	.962
-1	0	5	14	1	808.23371	-63	186.588	.1254E-01	.988	1	-1	4	18	2	808.64533	-2	253.973	.3388E-02	.962
-1	0	5	13	3	808.26398		168.446	.3142E-02	.990	1	-1	4	18	0	808.64961		253.968	.8470E-03	.962
-1	0	5	13	1	808.26754	-60	168.440	.1257E-01	.990	1	-1	5	20	3	808.70566		322.651	.6288E-03	.961
-1	1	18	24	2	808.27352		1041.127	.8707E-05	1.036	1	-1	5	20	1	808.70916	-61	322.645	.2513E-02	.960
-1	0	5	12	3	808.29566		151.593	.3100E-02	.992	-1	1	11	11	3	808.77271		329.600	.1023E-04	1.017
-1	0	5	12	1	808.29891	-51	151.588	.1239E-01	.991	-1	1	11	11	1	808.77546		329.594	.4091E-04	1.017
-1	0	5	11	3	808.32488		136.035	.2998E-02	.993	1	-1	6	22	2	808.77658		400.520	.8922E-03	.959
-1	0	5	11	1	808.32783	-52	136.030	.1199E-01	.993	1	-1	6	22	0	808.78150	-136	400.514	.1783E-02	.958
-1	0	5	10	3	808.35162		121.773	.2835E-02	.995	-1	-1	12	13	2	808.85191		408.341	.3595E-04	1.020
-1	0	5	10	1	808.35431	-12	121.768	.1134E-01	.995	1	-1	7	24	3	808.85408		487.580	.3025E-03	.957
-1	0	5	9	3	808.37592		108.807	.2600E-02	.996	1	-1	7	24	1	808.85802	110	487.575	.1209E-02	.956
-1	0	5	9	1	808.37835	-31	108.802	.1040E-01	.996	-1	1	12	13	0	808.86036		408.336	.7197E-04	1.021
-1	0	5	8	3	808.39776		97.137	.2289E-02	.997	-1	1	13	15	3	808.93791		496.275	.2053E-04	1.022
-1	0	5	8	1	808.39997	-78	97.131	.9155E-02	.997	1	-1	8	26	2	808.94231	10	583.816	.7836E-03	.954
1	-1	0	10	2	808.40631		71.334	.3815E-02	1.000	-1	-1	13	15	1	808.94342		496.270	.8222E-04	1.023
1	-1	0	10	0	808.40786	55	71.329	.7630E-02	1.000	1	-1	8	26	0	808.94779		583.810	.1959E-03	.954
-1	1	19	26	3	808.41302		1181.424	.2618E-05	1.038	-1	-1	14	17	2	809.03482		593.386	.7603E-04	1.025
-1	1	20	28	0	808.41312		1330.829	.1413E-05	.999	1	-1	9	28	3	809.03679		689.225	.4853E-03	.952
-1	0	5	7	3	808.41717		86.762	.1893E-02	.998	1	-1	9	28	1	809.04114		689.219	.2424E-03	.951
-1	0	5	7	1	808.41917	-21	86.757	.7571E-02	.998	-1	1	14	17	0	809.06166		593.381	.1903E-04	1.026

ΔK	ΔJ	K	J	σ	ν_i	$\sigma-c$	E''_i	S_i	W_i	ΔK	ΔJ	K	J	σ	ν_i	$\sigma-c$	E''_i	S_i	W_i
-1	1	18	25	0	809.07407		1073.447	.1329E-04	.748	1	-1	2	13	2	809.87618	18	126.081	.5312E-02	.965
-1	1	15	19	3	809.13733		699.673	.6131E-04	1.028	1	-1	2	13	0	809.87946		126.076	.1328E-02	.965
1	-1	10	30	2	809.14212		803.790	.2869E-03	.949	-1	0	4	30	2	809.90416	172	634.573	.3034E-02	.925
1	-1	10	30	0	809.14813		803.785	.7172E-04	.949	-1	0	4	30	0	809.92096		634.567	.7569E-03	.923
-1	1	15	19	1	809.14850		699.667	.3069E-04	1.029	1	-1	3	15	3	809.92371	-51	173.762	.4385E-02	.966
-1	1	16	21	2	809.25219		815.117	.4457E-04	1.031	1	-1	3	15	1	809.92655		173.757	.2192E-02	.966
1	-1	11	32	3	809.25339		927.509	.4054E-04	.947	-1	1	10	10	2	809.97329		273.013	.5882E-04	1.016
1	-1	11	32	1	809.25812		927.503	.1620E-03	.946	-1	1	10	10	0	809.97720		273.008	.1471E-04	1.016
-1	1	16	21	0	809.36113		815.112	.1088E-04	1.007	-1	0	4	29	2	809.98084	60	595.767	.3563E-02	.930
-1	1	17	23	3	809.37064		939.717	.7436E-05	1.034	1	-1	4	17	2	809.98158	-12	230.649	.3462E-02	.965
1	-1	12	34	2	809.37559		1060.361	.4374E-04	.944	1	-1	4	17	0	809.98553		230.643	.8655E-03	.965
1	-1	12	34	0	809.38206		1060.355	.8748E-04	.944	-1	0	4	29	0	809.99690	-12	595.762	.8889E-03	.928
-1	1	17	23	1	809.39301		939.711	.2978E-04	1.035	-1	1	11	12	3	810.03713		345.151	.2632E-04	1.018
-1	0	4	35	2	809.47805	62	847.873	.1212E-02	.898	-1	1	11	12	1	810.04054		345.146	.1054E-03	1.019
-1	0	4	35	0	809.49844		847.867	.3021E-03	.895	1	-1	5	19	3	810.04636		296.742	.6541E-03	.964
-1	1	18	25	2	809.50383		1073.452	.9216E-05	1.037	1	-1	5	19	1	810.04965	358*	296.737	.2616E-02	.964
-1	0	4	34	2	809.56905	-24	802.646	.1477E-02	.903	-1	0	4	28	2	810.05473	-150	558.249	.4148E-02	.934
-1	0	4	34	0	809.58874		802.640	.3685E-03	.901	-1	0	4	28	0	810.07004	-2	558.243	.1035E-02	.932
-1	1	20	29	0	809.60343		1368.290	.1382E-05	.992	-1	1	12	14	2	810.11127		426.480	.6159E-04	1.021
-1	1	19	27	3	809.63744		1216.319	.2670E-05	1.040	1	-1	6	21	2	810.12159		372.029	.9444E-03	.962
-1	0	4	33	2	809.65713	7	758.701	.1789E-02	.909	-1	1	12	14	0	810.12219		426.475	.1233E-03	1.022
-1	0	4	33	0	809.67611		758.695	.4463E-03	.907	-1	0	4	27	2	810.12586	4	522.018	.4798E-02	.939
-1	1	19	27	1	809.68240		1216.313	.1067E-04	1.039	1	-1	6	21	0	810.12617	-26	372.023	.1887E-02	.961
1	-1	0	9	2	809.74072		58.366	.3619E-02	1.000	-1	0	4	27	0	810.14042	11	522.012	.1197E-02	.937
1	-1	0	9	0	809.74227	51	58.361	.7237E-02	1.000	-1	1	18	26	0	810.17134		1107.059	.1197E-04	.659
-1	0	4	32	2	809.74233	-58	716.040	.2149E-02	.914	-1	1	13	16	3	810.19188		517.000	.2922E-04	1.024
-1	0	4	32	0	809.76059		716.034	.5360E-03	.912	-1	0	4	26	2	810.19424	16	487.075	.5500E-02	.943
-1	-1	3	3	3	809.76314	166	25.948	.1060E-01	1.000	-1	1	13	16	1	810.19848		516.994	.1170E-03	1.025
-1	-1	3	3	1	809.76467		25.942	.5298E-02	1.000	1	-1	7	23	3	810.20343		456.509	.3254E-03	.959
-1	-1	2	5	2	809.76847	-316*	27.530	.8840E-02	1.001	1	-1	7	23	1	810.20715	21	456.504	.1302E-02	.959
-1	-1	2	5	0	809.77032		27.525	.2210E-02	1.001	-1	0	4	26	0	810.20806	-70	487.069	.1374E-02	.942
-1	-1	1	7	3	809.78117		38.339	.2015E-02	1.010	-1	0	4	25	2	810.25990	17	453.420	.6262E-02	.948
-1	-1	1	7	1	809.78308	-44	38.334	.8059E-02	1.010	-1	0	4	25	0	810.27297	21	453.415	.1562E-02	.946
-1	1	20	29	2	809.78957		1368.295	.5814E-05	1.043	-1	1	14	18	2	810.28371		616.694	.9678E-04	1.027
-1	0	4	31	2	809.82466	-32	674.664	.2564E-02	.920	1	-1	8	25	2	810.29584	-71	550.168	.8579E-03	.957
1	-1	1	11	3	809.83607		87.617	.1536E-02	.957	1	-1	8	25	0	810.30100		550.162	.2143E-03	.956
1	-1	1	11	1	809.83845	-32	87.612	.6137E-02	.956	-1	1	14	18	0	810.31542		616.688	.2420E-04	1.027
-1	0	4	31	0	809.84220		674.658	.6389E-03	.917	-1	0	4	24	2	810.32285	16	421.055	.7065E-02	.952

ΔK	ΔJ	K	J	σ	ν_i	$\sigma-c$	E''_i	S_i	W_i	ΔK	ΔJ	K	J	σ	ν_i	$\sigma-c$	E''_i	S_i	W_i
-1	0	4	24	0	810.33518	28	421.050	.1763E-02	.950	-1	0	4	13	0	810.84739		150.284	.3600E-02	.986
-1	1	15	20	3	810.38067		725.561	.7231E-04	1.030	-1	1	19	28	3	810.85890		1252.499	.2649E-05	1.042
-1	0	4	23	2	810.38313	12	389.980	.7906E-02	.956	-1	0	4	12	2	810.87420	37	133.436	.1435E-01	.989
-1	1	15	20	1	810.39351		725.555	.3615E-04	1.030	1	-1	13	35	3	810.87734		1155.861	.1335E-04	.944
1	-1	0	4	23	810.39456	76	653.003	.5395E-03	.954	-1	0	4	12	0	810.87877		133.431	.3583E-02	.988
-1	0	4	23	0	810.39472	60	389.975	.1972E-02	.954	1	-1	13	35	1	810.88221	36	1155.855	.5335E-04	.943
1	-1	0	4	22	810.39869	7	652.998	.2698E-03	.954	-1	0	4	11	2	810.90360		117.878	.1405E-01	.991
-1	0	4	22	2	810.44074	25	360.196	.8773E-02	.960	-1	1	19	28	1	810.90709		1252.494	.1058E-04	1.040
-1	0	4	22	0	810.45161		360.190	.2189E-02	.958	-1	0	4	11	0	810.90768		117.873	.3510E-02	.990
-1	1	16	22	2	810.49042		843.583	.4964E-04	1.033	-1	0	4	10	2	810.93052	34	103.615	.1349E-01	.992
-1	0	4	21	2	810.49571	0	331.702	.9641E-02	.963	-1	0	4	10	0	810.93415		103.610	.3373E-02	.992
1	-1	10	29	2	810.50397	45	764.998	.3244E-03	.952	-1	0	4	9	2	810.95495	36	90.649	.1268E-01	.994
-1	0	4	21	0	810.50586		331.697	.2408E-02	.962	-1	0	4	9	0	810.95817		90.643	.3169E-02	.994
1	-1	10	29	0	810.50965		764.993	.8102E-04	.951	-1	0	4	8	2	810.97693	24	78.978	.1157E-01	.996
-1	0	4	20	2	810.54805	-8	304.500	.1051E-01	.967	-1	0	4	8	0	810.97976		78.972	.2889E-02	.995
-1	0	4	20	0	810.55750	56	304.495	.2626E-02	.966	-1	0	4	7	2	810.99644	29	68.603	.1013E-01	.997
-1	0	4	19	2	810.59778	4	278.590	.1135E-01	.970	-1	0	4	7	0	810.99893		68.598	.2533E-02	.997
-1	1	17	24	3	810.60314		970.758	.7916E-05	1.036	-1	1	20	30	2	811.00591		1407.040	.5606E-05	1.045
-1	0	4	19	0	810.60655	40	278.585	.2834E-02	.969	-1	0	4	6	2	811.01349	70	59.525	.8352E-02	.998
-1	1	16	22	0	810.60689		843.578	.1211E-04	1.008	-1	0	4	6	0	811.01568		59.520	.2088E-02	.998
1	-1	11	31	3	810.61936		886.150	.4653E-04	.949	-1	0	4	5	2	811.02810	58	51.743	.6172E-02	.999
1	-1	11	31	1	810.62387		886.144	.1861E-03	.949	-1	0	4	5	0	811.03003		51.738	.1543E-02	.999
-1	1	17	24	1	810.62797		970.752	.3166E-04	1.036	-1	0	4	4	2	811.04027	55	45.258	.3478E-02	1.000
-1	0	4	18	2	810.64493	-6	253.973	.1213E-01	.973	-1	0	4	4	0	811.04197		45.253	.8696E-03	1.000
-1	0	4	18	0	810.65302	59	253.968	.3030E-02	.972	1	-1	0	8	2	811.07109		46.695	.3357E-02	1.000
-1	0	4	17	2	810.68949	-8	230.649	.1284E-01	.976	1	-1	0	8	0	811.07263	209*	46.689	.6715E-02	1.000
-1	0	4	17	0	810.69694	151	230.643	.3208E-02	.975	-1	-1	2	4	2	811.07524	-154	21.045	.8152E-02	1.000
-1	1	18	26	2	810.73122		1107.065	.9447E-05	1.039	-1	-1	2	4	0	811.07695		21.040	.2038E-02	1.000
-1	0	4	16	2	810.73150	-12	208.618	.1346E-01	.979	-1	-1	1	6	3	811.09285		29.260	.1840E-02	1.007
-1	0	4	16	0	810.73832	122	208.612	.3361E-02	.978	-1	-1	1	6	1	811.09466	-25	29.255	.7361E-02	1.007
1	-1	12	33	2	810.74552		1016.439	.5098E-04	.946	1	-1	1	10	3	811.15649		73.353	.1462E-02	.964
1	-1	12	33	0	810.75168		1016.433	.1020E-03	.946	1	-1	1	10	1	811.15871	-48	73.348	.5842E-02	.963
-1	0	4	15	2	810.77096	-10	187.881	.1394E-01	.982	-1	1	9	9	3	811.18877		221.747	.8302E-04	1.014
-1	0	4	15	0	810.77718		187.875	.3482E-02	.981	-1	1	9	9	1	811.19108		221.742	.4151E-04	1.014
-1	1	20	30	0	810.78602		1407.035	.1317E-05	.982	1	-1	2	12	2	811.20130	14	109.227	.5147E-02	.970
-1	0	4	14	2	810.80789	1	168.438	.1426E-01	.984	1	-1	2	12	0	811.20430		109.222	.1287E-02	.970
-1	0	4	14	0	810.81353		168.432	.3565E-02	.984	-1	1	18	27	0	811.23307		1141.959	.1014E-04	.561
-1	0	4	13	2	810.84230	19	150.290	.1440E-01	.986	-1	1	10	11	2	811.24033		287.271	.1513E-03	1.017

ΔK	ΔJ	K	J	σ	ν_i	$\sigma-c$	E_i''	S_i	W_i	ΔK	ΔJ	K	J	σ	ν_i	$\sigma-c$	E_i''	S_i	W_i
-1	1	10	11	0	811.24555		287.265	.3786E-04	1.018	1	-1	12	32	2	812.11373		973.800	.5888E-04	.949
1	-1	3	14	3	811.25346	-16	154.319	.4329E-02	.970	1	-1	12	32	0	812.11957		973.794	.1176E-03	.948
1	-1	3	14	1	811.25611		154.314	.2165E-02	.970	-1	0	19	29	1	812.12860		1289.960	.1025E-04	1.042
-1	1	11	13	3	811.29888		361.997	.4520E-04	1.020	-1	0	3	34	3	812.13773	33	788.545	.1539E-02	.871
-1	1	11	13	1	811.30299		361.992	.1808E-03	1.020	-1	0	3	34	1	812.14831	-141	788.539	.7688E-03	.870
1	-1	4	16	2	811.31579	7	208.618	.3486E-02	.969	-1	1	20	31	2	812.21922		1447.070	.5291E-05	1.046
1	-1	4	16	0	811.31944		208.612	.8706E-03	.968	-1	0	3	33	3	812.22827	45	744.599	.1869E-02	.879
-1	1	12	15	2	811.36794		445.913	.8755E-04	1.023	-1	0	3	33	1	812.23850	-100	744.593	.9326E-03	.877
-1	1	12	15	0	811.38139		445.908	.1759E-03	1.024	1	-1	13	34	3	812.24960		1110.661	.1565E-04	.946
1	-1	5	18	3	811.38506		272.126	.6706E-03	.967	1	-1	13	34	1	812.25426		1110.655	.6259E-04	.946
1	-1	5	18	1	811.38815	-106	272.120	.2682E-02	.967	-1	0	3	32	3	812.31577	30	701.937	.2251E-02	.886
-1	1	13	17	3	811.44312		539.017	.3732E-04	1.026	-1	0	3	32	1	812.32563	-70	701.931	.1123E-02	.884
-1	1	13	17	1	811.45084		539.011	.1493E-03	1.026	-1	-1	2	3	2	812.37964	20	15.856	.7445E-02	1.000
1	-1	6	20	2	811.46463		344.829	.9851E-03	.964	-1	-1	2	3	0	812.38124		15.851	.1861E-02	1.000
1	-1	6	20	0	811.46890	-101	344.824	.1970E-02	.964	1	-1	0	7	2	812.39740		36.319	.3032E-02	1.000
-1	1	14	19	2	811.52983		641.293	.1146E-03	1.029	1	-1	0	7	0	812.39894	292*	36.314	.6064E-02	1.000
1	-1	7	22	3	811.55085		426.729	.3459E-03	.962	-1	0	3	31	3	812.40024	58	660.559	.2691E-02	.893
1	-1	7	22	1	811.55437	-103	426.723	.1384E-02	.962	-1	-1	1	5	3	812.40214		21.478	.1636E-02	1.004
-1	1	14	19	0	811.56629		641.288	.2862E-04	1.028	-1	-1	1	5	1	812.40386	-303*	21.473	.6545E-02	1.004
-1	1	15	21	3	811.62119		752.740	.8081E-04	1.031	-1	0	3	31	1	812.40974		660.553	.1343E-02	.891
-1	1	15	21	1	811.63572		752.734	.4044E-04	1.032	-1	1	8	8	2	812.42181		175.797	.1154E-03	1.013
1	-1	8	24	2	811.64749	61	517.809	.9270E-03	.959	-1	1	8	8	0	812.42468		175.792	.2886E-04	1.013
1	-1	8	24	0	811.65233		517.803	.2318E-03	.959	-1	1	9	10	3	812.45824		234.710	.2133E-03	1.016
-1	1	16	23	2	811.72581		873.339	.5309E-04	1.035	-1	1	9	10	1	812.46099		234.705	.1067E-03	1.016
1	-1	9	26	3	811.75048	98	618.069	.5936E-03	.957	1	-1	1	9	3	812.47479		60.386	.1357E-02	.970
1	-1	9	26	1	811.75440		618.064	.2968E-03	.957	1	-1	1	9	1	812.47687	-33	60.381	.5426E-02	.970
-1	1	17	25	3	811.83275		1003.087	.8145E-05	1.037	-1	0	3	30	3	812.48172	106	620.467	.3190E-02	.899
-1	1	16	23	0	811.84873		873.334	.1295E-04	1.010	-1	0	3	30	1	812.49086	-17	620.461	.1593E-02	.898
-1	1	17	25	1	811.85997		1003.082	.3261E-04	1.038	-1	1	10	12	2	812.50472		302.824	.2599E-03	1.019
1	-1	10	28	2	811.86401		727.492	.3625E-03	.954	-1	1	10	12	0	812.51134		302.818	.6497E-04	1.019
1	-1	10	28	0	811.86937		727.487	.9062E-04	.954	-1	-1	2	11	2	812.52429	294*	93.668	.4874E-02	.974
-1	1	18	27	2	811.95568		1141.964	.9421E-05	1.041	1	-1	1	11	0	812.52704		93.663	.1219E-02	.974
-1	1	20	31	0	811.95967		1447.064	.1226E-05	.970	-1	1	11	14	3	812.55795		380.138	.6453E-04	1.021
1	-1	11	30	3	811.98356		846.076	.5284E-04	.951	-1	1	11	14	3	812.56025	51	581.661	.3757E-02	.906
1	-1	11	30	1	811.98786		846.070	.2113E-03	.951	-1	0	3	29	3	812.56280		380.133	.2584E-03	1.022
-1	0	3	35	3	812.04409	8	833.774	.1260E-02	.864	-1	1	11	14	1	812.56902	-63	581.655	.1876E-02	.905
-1	0	3	35	1	812.05502	-88	833.768	.6284E-03	.862	-1	0	3	29	1	812.58110	-4	136.170	.4192E-02	.974
-1	1	19	29	3	812.07739		1289.966	.2565E-05	1.043	1	-1	3	13	1	812.58358		136.165	.2094E-02	.973

ΔK	ΔJ	K	J	σ	ν_i	o-c	E_i''	S_i	W_i	ΔK	ΔJ	K	J	σ	ν_i	o-c	E_i''	S_i	W_i
-1	1	12	16	2	812.62189		466.639	.1124E-03	1.024	1	-1	9	25	3	813.10452	22	584.424	.6444E-03	.959
-1	0	3	28	3	812.63585	64	544.141	.4386E-02	.912	1	-1	9	25	1	813.10824		584.418	.3222E-03	.959
-1	1	12	16	0	812.63792		466.634	.2250E-03	1.025	-1	1	20	32	0	813.12276		1488.376	.1115E-05	.953
-1	0	3	28	1	812.64425	276*	544.135	.2191E-02	.911	-1	0	3	20	3	813.13876	52	290.385	.1132E-01	.955
1	-1	4	15	2	812.64792	-91	187.881	.3445E-02	.972	-1	0	3	20	1	813.14425	31	290.380	.5656E-02	.954
1	-1	4	15	0	812.65129		187.875	.8612E-03	.972	-1	1	18	28	2	813.17716		1178.151	.9170E-05	1.042
-1	1	13	18	3	812.69159		562.327	.4429E-04	1.027	-1	0	3	19	3	813.18929	190*	264.475	.1225E-01	.959
-1	1	13	18	1	812.70045		562.321	.1773E-03	1.028	-1	0	3	19	1	813.19443		264.469	.6127E-02	.959
-1	0	3	27	3	812.70856	35	507.909	.5082E-02	.918	1	-1	10	27	2	813.22220		691.274	.4008E-03	.957
-1	0	3	27	1	812.71658	-5	507.903	.2538E-02	.917	1	-1	10	27	0	813.22726		691.268	.1001E-03	.956
1	-1	5	17	3	812.72172		248.802	.6764E-03	.970	-1	0	3	18	3	813.23714	149	239.857	.1315E-01	.964
1	-1	5	17	1	812.72462	-39	248.797	.2703E-02	.969	-1	0	3	18	1	813.24196		239.851	.6570E-02	.963
-1	1	14	20	2	812.77315		667.184	.1286E-03	1.030	-1	0	3	17	3	813.28236	141	216.532	.1397E-01	.968
-1	0	3	26	3	812.77840	23	472.965	.5843E-02	.924	-1	0	3	17	1	813.28685		216.526	.6978E-02	.967
-1	0	3	26	1	812.78605	29	472.959	.2918E-02	.923	-1	1	19	30	3	813.29286		1328.717	.2436E-05	1.045
1	-1	6	19	2	812.80567		318.921	.1013E-02	.967	-1	0	3	16	3	813.32495	122	194.500	.1468E-01	.971
1	-1	6	19	0	812.80964	193*	318.916	.2027E-02	.967	-1	0	3	16	1	813.32913		194.495	.7338E-02	.971
-1	1	14	20	0	812.81423		667.179	.3211E-04	1.029	1	-1	11	29	3	813.34596		807.287	.5940E-04	.954
-1	0	3	25	3	812.84540	17	439.310	.6665E-02	.930	-1	1	19	30	1	813.34690		1328.711	.9726E-05	1.043
-1	0	3	25	1	812.85268	65	439.304	.3329E-02	.929	-1	0	3	15	3	813.35005		807.281	.2376E-03	.954
-1	1	15	22	3	812.85887		781.209	.8679E-04	1.033	-1	0	3	15	3	813.36493	-21	173.762	.1527E-01	.975
-1	1	15	22	1	812.87509		781.204	.4344E-04	1.034	-1	0	3	15	1	813.36882		173.757	.7627E-02	.974
1	-1	7	21	3	812.89631		398.239	.3627E-03	.965	-1	0	3	14	3	813.40233	-21	154.319	.1570E-01	.978
1	-1	7	21	1	812.89962	-64	398.233	.1449E-02	.964	-1	0	3	14	1	813.40594		154.314	.7848E-02	.978
-1	0	3	24	3	812.90959	70	406.944	.7534E-02	.935	-1	1	20	32	2	813.42945		1488.382	.4907E-05	1.048
-1	0	3	24	1	812.91650	24	406.938	.3763E-02	.934	-1	0	3	13	3	813.43716	-28	136.170	.1594E-01	.981
-1	1	16	24	2	812.95831		904.384	.5489E-04	1.036	-1	0	3	13	1	813.44050		136.165	.7971E-02	.981
-1	0	3	23	3	812.97099	8	375.868	.8448E-02	.940	-1	0	3	12	3	813.46944	8	119.316	.1598E-01	.984
-1	0	3	23	1	812.97754	32	375.862	.4224E-02	.940	-1	0	3	12	1	813.47252		119.311	.7991E-02	.984
1	-1	8	23	2	812.99722	-23	486.740	.9898E-03	.962	1	-1	12	31	2	813.48017		932.445	.6722E-04	.951
1	-1	8	23	0	813.00175		486.734	.2475E-03	.962	1	-1	12	31	0	813.48571		932.439	.1344E-03	.951
-1	0	3	22	3	813.02964	51	346.082	.9404E-02	.946	-1	0	3	11	3	813.49917	-12	103.758	.1579E-01	.987
-1	0	3	22	1	813.03583	34	346.077	.4697E-02	.945	-1	0	3	11	1	813.50202		103.752	.7897E-02	.987
-1	1	17	26	3	813.05944		1036.704	.8164E-05	1.039	-1	0	3	10	3	813.52638	-17	89.495	.1534E-01	.989
-1	0	3	21	3	813.08556	168	317.588	.1036E-01	.950	-1	0	3	10	1	813.52900		89.489	.7672E-02	.989
-1	1	16	24	0	813.08678		904.379	.1341E-04	1.012	-1	0	3	9	3	813.55108	-24	76.527	.1463E-01	.991
-1	1	17	26	1	813.08898		1036.699	.3266E-04	1.039	-1	0	3	9	1	813.55350		76.522	.7314E-02	.991
-1	0	3	21	1	813.09139		317.582	.5179E-02	.950	-1	0	3	8	3	813.57328	-15	64.856	.1363E-01	.993

ΔK	ΔJ	K	J	σ	ν_i	O-c	E''_i	S_i	W_i	ΔK	ΔJ	K	J	σ	ν_i	O-c	E''_i	S_i	W_i	
-1	0	3	8	1	813.57551		64.851	.6817E-02	.993	1	-1	3	12	1	813.90891		119.311	.1982E-02	.977	
-1	0	3	7	3	813.59298	-19	54.481	.1235E-01	.995	-1	1	13	19	3	813.93727		586.929	.4993E-04	1.029	
-1	0	3	7	1	813.59504		54.476	.6175E-02	.995	-1	1	13	19	1	813.94730		586.924	.1997E-03	1.029	
-1	0	3	6	3	813.61020	-18	45.403	.1076E-01	.997	1	-1	4	14	2	813.97795	143	168.438	.3336E-02	.975	
-1	0	3	6	1	813.61212		45.398	.5381E-02	.997	1	-1	4	14	0	813.98105		168.432	.8340E-03	.975	
1	-1	13	33	3	813.62014		1066.744	.1815E-04	.948	-1	1	18	28	0	813.98419		1178.145	.1022E-04	.580	
1	-1	13	33	1	813.62459		1066.738	.7261E-04	.948	-1	1	14	21	2	814.01364		694.367	.1387E-03	1.032	
-1	0	3	5	3	813.62495	-33	37.621	.8836E-02	.998	1	-1	5	16	3	814.05631		226.772	.6693E-03	.972	
-1	0	3	5	1	813.62673		37.616	.4418E-02	.998	1	-1	5	16	1	814.05903	-65	226.767	.2677E-02	.972	
-1	0	3	4	3	813.63722	-3	31.136	.6536E-02	.999	-1	1	14	21	0	814.05918		694.361	.3460E-04	1.030	
-1	0	3	4	1	813.63890		31.131	.3268E-02	.999	-1	1	15	23	3	814.09368		810.969	.9023E-04	1.035	
-1	0	3	3	3	813.64704	19	25.948	.3728E-02	1.000	-1	1	15	23	1	814.11157		810.963	.4512E-04	1.035	
-1	0	3	3	1	813.64863		25.942	.1864E-02	1.000	1	-1	6	18	2	814.14468		294.306	.1026E-02	.970	
-1	1	7	7	3	813.66981		135.175	.3955E-04	1.011	1	-1	6	18	0	814.14836	126	294.300	.2049E-02	.969	
-1	1	7	7	1	813.67182	18	135.169	.1584E-03	1.012	-1	1	16	25	2	814.18791		936.718	.5528E-04	1.038	
-1	-1	2	2	2	813.68317		11.965	.6840E-02	1.000	1	-1	7	20	3	814.23976		371.040	.3742E-03	.967	
-1	-1	2	2	0	813.69388		11.960	.1710E-02	1.000	1	-1	7	20	1	814.24289	-98	371.035	.1497E-02	.967	
-1	1	8	9	2	813.69388		187.466	.2953E-03	1.014	-1	1	20	33	0	814.27312		1530.971	.9920E-06	.931	
-1	1	8	9	0	813.69751		187.461	.7389E-04	1.015	-1	1	17	27	3	814.28317		1071.609	.7994E-05	1.041	
-1	-1	1	4	3	813.70904		14.993	.1407E-02	1.002	-1	1	17	27	1	814.31496		1071.603	.3198E-04	1.041	
-1	-1	1	4	1	813.71068	-11	14.987	.5628E-02	1.002	-1	1	16	25	0	814.32112		936.712	.1350E-04	1.014	
1	-1	0	6	2	813.71962		27.241	.2646E-02	1.000	1	-1	8	22	2	814.34498	-25	456.961	.1041E-02	.964	
1	-1	0	6	0	813.72115	76	27.235	.5291E-02	1.000	1	-1	8	22	0	814.34922		456.956	.2603E-03	.964	
-1	1	9	11	3	813.72508		248.969	.3658E-03	1.017	-1	1	18	29	2	814.39565		1215.623	.8753E-05	1.044	
-1	1	10	13	2	813.72829		248.964	.1829E-03	1.017	1	-1	9	24	3	814.45663	23	552.067	.6912E-03	.962	
-1	1	14	35	2	813.76645		319.671	.3715E-03	1.020	1	-1	9	24	1	814.46015		552.062	.3453E-03	.961	
1	-1	1	14	35	2	813.77062		1210.163	.3743E-04	.945	-1	1	19	31	3	814.50530		1368.752	.2272E-05	1.047
-1	1	10	13	0	813.77451		319.666	.9296E-04	1.021	-1	1	19	31	1	814.56197		1368.746	.9070E-05	1.045	
1	-1	1	14	35	0	813.77661		1210.157	.9359E-05	.945	1	-1	10	26	2	814.57851		656.342	.4372E-03	.959
1	-1	1	8	3	813.79091		48.714	.1221E-02	.976	1	-1	10	26	0	814.58327		656.337	.1093E-03	.959	
1	-1	1	8	1	813.79287	-57	48.709	.4885E-02	.976	-1	0	2	35	2	814.61523	41	823.699	.1229E-02	.797	
-1	1	11	15	3	813.81431		399.573	.8284E-04	1.023	-1	0	2	35	0	814.63058		823.693	.3060E-03	.794	
-1	1	11	15	1	813.81991		399.567	.3314E-03	1.023	-1	1	20	33	2	814.63659		1530.977	.4477E-05	1.050	
1	-1	2	10	2	813.84512	26	79.405	.4497E-02	.978	1	-1	11	28	3	814.70651		769.784	.6594E-04	.956	
1	-1	2	10	0	813.84763		79.399	.1124E-02	.978	1	-1	11	28	1	814.71041		769.779	.2638E-03	.956	
-1	1	12	17	2	813.87309		488.659	.1340E-03	1.026	-1	0	2	34	2	814.71327	-163	778.469	.1510E-02	.808	
-1	1	12	17	0	813.89173		488.653	.2682E-03	1.027	-1	0	2	34	0	814.72818		778.463	.3761E-03	.805	
1	-1	3	12	3	813.90659	-33	119.316	.3963E-02	.977	-1	0	2	33	2	814.80789	-9	734.522	.1842E-02	.819	

ΔK	ΔJ	K	J	σ	ν_i	o-c	E''_i	S_i	W_i	ΔK	ΔJ	K	J	σ	ν_i	o-c	E''_i	S_i	W_i
-1	0	2	33	0	814.82235		734.516	.4583E-03	.815	-1	1	13	20	3	815.18013		612.823	.5408E-04	1.031
1	-1	12	30	2	814.84482		892.374	.7589E-04	.953	-1	1	13	20	1	815.19133		612.817	.2163E-03	1.031
1	-1	12	30	0	814.85007		892.369	.1518E-03	.953	1	-1	3	11	3	815.22990		103.758	.3645E-02	.980
-1	0	2	32	2	814.89916	44	691.859	.2228E-02	.829	-1	0	2	28	2	815.23154	-56	534.060	.4421E-02	.868
-1	0	2	32	0	814.91315		691.853	.5551E-03	.826	1	-1	3	11	1	815.23208		103.752	.1822E-02	.980
-1	1	6	6	2	814.93518		99.873	.1074E-03	1.010	-1	0	2	28	0	815.24353	-12	534.055	.1102E-02	.865
-1	1	6	6	0	814.93746		99.868	.2149E-03	1.010	-1	1	14	22	2	815.25128		722.839	.1448E-03	1.034
-1	1	7	8	3	814.94433		145.548	.1006E-03	1.013	-1	1	14	22	0	815.30111		722.834	.3610E-04	1.031
-1	1	7	8	1	814.94663		145.542	.4026E-03	1.013	1	-1	4	13	2	815.30584	69	150.290	.3155E-02	.978
-1	1	8	10	2	814.96332		200.430	.5058E-03	1.016	-1	0	2	27	2	815.30669	-17	497.827	.5144E-02	.877
-1	1	8	10	0	814.96777		200.425	.1265E-03	1.016	1	-1	4	13	0	815.30869		150.284	.7880E-03	.977
-1	0	2	31	2	814.98711	173	650.481	.2676E-02	.839	-1	0	2	27	0	815.31816	34	497.822	.1282E-02	.874
1	-1	13	32	3	814.98892		1024.109	.2086E-04	.951	-1	1	15	24	3	815.32559		842.018	.9131E-04	1.037
-1	1	9	12	3	814.98924		264.523	.5236E-03	1.019	-1	1	15	24	1	815.34514		842.012	.4565E-04	1.037
-1	1	9	12	1	814.99295		264.518	.2618E-03	1.019	-1	0	2	26	2	815.37875	5	462.883	.5932E-02	.885
1	-1	13	32	1	814.99317		1024.103	.8334E-04	.950	1	-1	5	15	3	815.38878		206.036	.6494E-03	.975
-1	0	2	31	0	815.00062		650.475	.6665E-03	.836	-1	0	2	26	0	815.38969	77	462.877	.1480E-02	.883
-1	-1	1	3	3	815.01352		9.804	.1155E-02	1.001	1	-1	5	15	1	815.39134	-87	206.030	.2598E-02	.975
-1	-1	1	3	1	815.01510	-30	9.799	.4621E-02	1.001	-1	1	20	34	0	815.40790		1574.847	.8620E-06	.902
-1	1	10	14	2	815.02547		337.813	.4778E-03	1.022	-1	1	16	26	2	815.41456		970.340	.5439E-04	1.040
-1	1	10	14	0	815.03505		337.808	.1194E-03	1.022	-1	0	2	25	2	815.44776	-20	429.227	.6794E-02	.894
1	-1	0	5	2	815.03772		19.458	.2202E-02	1.000	-1	0	2	25	0	815.45817	77	429.221	.1695E-02	.892
1	-1	0	5	0	815.03925	18	19.453	.4404E-02	1.000	1	-1	6	17	2	815.48161		270.983	.1018E-02	.972
-1	1	11	16	3	815.06792		420.301	.9901E-04	1.025	1	-1	6	17	0	815.48502	175	270.978	.2036E-02	.972
-1	0	2	30	2	815.07179	196*	610.388	.3189E-02	.849	-1	1	17	28	3	815.50391		1107.800	.7670E-05	1.043
-1	1	11	16	1	815.07431		420.296	.3961E-03	1.025	-1	0	2	24	2	815.51376	-11	396.860	.7712E-02	.902
-1	0	2	30	0	815.08481		610.382	.7943E-03	.846	-1	0	2	24	0	815.52364	48	396.855	.1924E-02	.900
-1	1	18	29	0	815.10127		1215.617	.1125E-04	.670	-1	1	17	28	1	815.53789		1107.794	.3065E-04	1.042
1	-1	1	7	3	815.10482		38.339	.1057E-02	.982	-1	1	16	26	0	815.55184		970.334	.1330E-04	1.017
1	-1	1	7	1	815.10666	-25	38.334	.4223E-02	.981	-1	0	2	23	2	815.57680	-5	365.783	.8682E-02	.910
-1	1	12	18	2	815.12152		511.971	.1516E-03	1.028	1	-1	7	19	3	815.58119		345.134	.3800E-03	.970
-1	1	12	18	0	815.14278		511.966	.3032E-03	1.028	1	-1	7	19	1	815.58413	120	345.129	.1518E-02	.969
1	-1	14	34	2	815.14338		1164.968	.4371E-04	.948	-1	0	2	23	0	815.58615	-82	365.778	.2166E-02	.908
1	-1	14	34	0	815.14908		1164.962	.1092E-04	.947	-1	1	18	30	2	815.61110		1254.380	.8205E-05	1.046
-1	0	2	29	2	815.15325	0	571.580	.3767E-02	.858	-1	0	2	22	2	815.63691	4	335.997	.9684E-02	.917
1	-1	2	9	2	815.16373	79	66.437	.4015E-02	.982	-1	0	2	22	0	815.64573	66	335.992	.2418E-02	.916
-1	0	2	29	0	815.16576		571.575	.9395E-03	.856	1	-1	8	21	2	815.69076		428.473	.1079E-02	.967
1	-1	2	9	0	815.16603		66.432	.1004E-02	.982	-1	0	2	21	2	815.69414	-35	307.503	.1072E-01	.925

ΔK	ΔJ	K	J	σ	ν_i	o-c	E''_i	S_i	W_i	ΔK	ΔJ	K	J	σ	ν_i	o-c	E''_i	S_i	W_i
1	-1	8	21	0	815.69472		428.468	.2696E-03	.966	-1	0	2	7	2	816.20918	47	44.391	.1401E-01	.992
-1	0	2	21	0	815.70242	67	307.497	.2675E-02	.923	-1	0	2	7	0	816.21163		44.385	.3500E-02	.991
-1	1	19	32	3	815.71466		1410.071	.2084E-05	1.049	-1	1	6	7	2	816.21227		108.951	.2708E-03	1.012
-1	0	2	20	2	815.74850	-14	280.299	.1175E-01	.931	1	-1	12	29	0	816.21259		853.584	.1694E-03	.955
-1	0	2	20	0	815.75627	0	280.294	.2933E-02	.930	-1	1	6	7	0	816.21500		108.945	.5416E-03	1.012
-1	1	19	32	1	815.77378		1410.065	.8312E-05	1.046	-1	1	5	5	3	816.21550		69.903	.7255E-04	1.009
-1	0	2	19	2	815.80005	-6	254.388	.1277E-01	.938	-1	1	7	9	3	816.21623		157.217	.1718E-03	1.015
1	-1	9	23	3	815.80679	19	521.000	.7303E-03	.964	-1	1	5	5	1	816.21732		69.898	.2902E-03	1.009
-1	0	2	19	0	815.80730	79	254.383	.3188E-02	.937	-1	1	7	9	1	816.21885		157.212	.6871E-03	1.015
1	-1	9	23	1	815.81012		520.995	.3651E-03	.964	-1	0	2	6	2	816.22652	20	35.312	.1256E-01	.994
-1	1	20	34	2	815.84061		1574.853	.4024E-05	1.052	-1	0	2	6	0	816.22873		35.307	.3141E-02	.994
-1	0	2	18	2	815.84881	1	229.770	.1374E-01	.944	-1	1	8	11	2	816.23010		214.690	.7235E-03	1.018
-1	0	2	18	0	815.85556		229.764	.3431E-02	.943	-1	1	8	11	0	816.23544		214.685	.1809E-03	1.018
-1	0	2	17	2	815.89481	-10	206.444	.1464E-01	.950	-1	1	18	30	0	816.23568		1254.374	.1171E-04	.746
-1	0	2	17	0	815.90107		206.439	.3657E-02	.949	-1	0	2	5	2	816.24136	12	27.530	.1084E-01	.996
1	-1	10	25	2	815.93291		622.699	.4707E-03	.961	-1	0	2	5	0	816.24337		27.525	.2711E-02	.996
1	-1	10	25	0	815.93739		622.694	.1177E-03	.961	-1	1	9	13	3	816.25071		281.372	.6736E-03	1.020
-1	0	2	16	2	815.93809	4	184.412	.1546E-01	.956	-1	0	2	4	2	816.25371		21.045	.8847E-02	.998
-1	0	2	16	0	815.94387		184.407	.3860E-02	.955	-1	1	9	13	1	816.25494		281.367	.3371E-03	1.021
-1	0	2	15	2	815.97867	46	163.674	.1613E-01	.961	-1	0	2	4	0	816.25555		21.040	.2212E-02	.998
-1	0	2	15	0	815.98400		163.669	.4029E-02	.960	-1	0	2	3	2	816.26358	240*	15.856	.6541E-02	.999
-1	0	2	14	2	816.01659	25	144.230	.1666E-01	.966	-1	0	2	3	0	816.26528		15.851	.1635E-02	.999
-1	0	2	14	0	816.02147		144.225	.4161E-02	.965	-1	0	2	2	2	816.27097		11.965	.3813E-02	1.000
-1	0	2	13	2	816.05186	15	126.081	.1701E-01	.971	-1	0	2	2	0	816.27257		11.960	.9533E-03	1.000
-1	0	2	13	0	816.05632		126.076	.4248E-02	.970	-1	1	10	15	2	816.28177		357.250	.5725E-03	1.024
1	-1	11	27	3	816.06519		733.568	.7229E-04	.958	-1	1	10	15	0	816.29292		357.244	.1431E-03	1.024
1	-1	11	27	1	816.06889		733.563	.2892E-03	.958	-1	-1	1	1	2	816.31558		5.913	.8836E-03	1.000
-1	0	2	12	2	816.08451	35	109.227	.1714E-01	.975	-1	-1	1	2	1	816.31712	-31	5.908	.3535E-02	1.000
-1	0	2	12	0	816.08857		109.222	.4284E-02	.975	-1	1	11	17	3	816.31875		442.323	.1123E-03	1.026
-1	0	2	11	2	816.11456	122	93.668	.1704E-01	.979	-1	1	11	17	1	816.32597		442.317	.4496E-03	1.027
-1	0	2	11	0	816.11825		93.663	.4259E-02	.979	1	-1	0	4	2	816.35168		12.973	.1708E-02	1.000
-1	0	2	10	2	816.14204	44	79.405	.1689E-01	.983	1	-1	0	4	0	816.35322	46	12.968	.3415E-02	1.000
-1	0	2	10	0	816.14537		79.399	.4168E-02	.982	1	-1	13	31	3	816.35591		982.758	.2367E-04	.953
-1	0	2	9	2	816.16695	7	66.437	.1607E-01	.986	1	-1	13	31	1	816.35996		982.752	.9458E-04	.952
-1	0	2	9	0	816.16997		66.432	.4017E-02	.986	-1	1	12	19	2	816.36713		536.576	.1648E-03	1.030
-1	0	2	8	2	816.18933	23	54.766	.1518E-01	.989	-1	1	12	19	0	816.39103		536.570	.3296E-03	1.030
-1	0	2	8	0	816.19205		54.761	.3795E-02	.989	1	-1	1	6	3	816.41644		29.260	.8641E-03	.986
1	-1	12	29	2	816.20763		853.589	.8468E-04	.955	1	-1	1	6	1	816.41819	-89	29.255	.3457E-02	.986

ΔK	ΔJ	K	J	σ	ν_i	o-c	E_i''	S_i	W_i	ΔK	ΔJ	K	J	σ	ν_i	o-c	E_i''	S_i	W_i
-1	1	13	21	3	816.42014		640.008	.5666E-04	1.032	1	-1	10	24	0	817.28957		590.340	.1249E-03	.963
-1	1	13	21	1	816.43253		640.003	.2269E-03	1.033	-1	0	1	33	3	817.34575		728.479	.3807E-03	.654
1	-1	2	8	2	816.48010	-5	54.766	.3431E-02	.985	-1	0	1	33	1	817.35288	-70	728.473	.1516E-02	.651
1	-1	2	8	0	816.48221		54.761	.8578E-03	.985	-1	1	18	31	0	817.38363		1294.415	.1166E-04	.807
-1	1	14	23	2	816.48602		752.602	.1472E-03	1.036	1	-1	11	26	3	817.42197		698.640	.7828E-04	.961
1	-1	14	33	2	816.51439		1121.055	.5044E-04	.950	1	-1	11	26	1	817.42548		698.635	.3128E-03	.960
1	-1	14	33	0	816.51981		1121.050	.1260E-04	.949	-1	0	1	32	3	817.44683		685.815	.4676E-03	.672
-1	1	14	23	0	816.53997		752.597	.3670E-04	1.033	-1	0	1	32	1	817.45383	-16	685.810	.1862E-02	.669
1	-1	3	10	3	816.55099	-7	89.495	.3239E-02	.983	-1	1	7	10	3	817.48548		170.182	.2450E-03	1.016
1	-1	3	10	1	816.55304		89.489	.1619E-02	.983	-1	1	6	8	2	817.48675		119.325	.4589E-03	1.013
-1	1	15	25	3	816.55456		874.356	.9020E-04	1.038	-1	1	7	10	1	817.48844	362*	170.177	.9809E-03	1.017
-1	1	15	25	1	816.57576	26	874.350	.4514E-04	1.039	-1	1	6	8	0	817.48999	423*	119.319	.9187E-03	1.014
1	-1	4	12	2	816.63154		133.436	.2897E-02	.980	-1	1	8	12	2	817.49421	-215*	230.245	.9311E-03	1.019
1	-1	4	12	0	816.63416		133.431	.7243E-03	.980	-1	1	5	6	3	817.49507		77.684	.1801E-03	1.010
-1	1	16	27	2	816.63823		1005.249	.5245E-04	1.042	-1	1	5	6	1	817.49706	-500*	77.679	.7212E-03	1.011
1	-1	15	35	3	816.67838		1268.476	.2563E-04	.947	-1	1	8	12	0	817.50049		230.240	.2330E-03	1.020
1	-1	15	35	1	816.68277		1268.470	.1282E-04	.947	-1	1	9	14	3	817.50944		299.516	.8086E-03	1.022
1	-1	5	14	3	816.71911		186.593	.6149E-03	.978	-1	1	4	4	2	817.51303		45.258	.3925E-03	1.007
1	-1	5	14	1	816.72151	-25	186.588	.2457E-02	.977	-1	1	9	14	1	817.51424		299.510	.4047E-03	1.023
-1	1	17	29	3	816.72164		1145.278	.7227E-05	1.045	-1	1	4	4	0	817.51495		45.253	.9823E-04	1.008
-1	1	17	29	1	816.75771		1145.272	.2888E-04	1.044	-1	1	10	16	2	817.53530		377.980	.6510E-03	1.025
-1	1	16	27	0	816.77898		1005.243	.1283E-04	1.019	-1	0	1	31	3	817.54388		644.436	.5696E-03	.690
1	-1	6	16	2	816.81644		248.954	.9899E-03	.975	-1	1	10	16	0	817.54807		377.974	.1629E-03	1.026
1	-1	6	16	0	816.81960	134	248.949	.1978E-02	.974	-1	0	1	31	1	817.55073	-67	644.431	.2269E-02	.687
-1	1	18	31	2	816.82348		1294.421	.7567E-05	1.048	-1	1	11	18	3	817.56678		465.637	.1225E-03	1.028
1	-1	7	18	3	816.92054		320.520	.3783E-03	.972	1	-1	12	28	2	817.56858		816.090	.9340E-04	.958
-1	1	19	33	3	816.92093		1452.673	.1883E-05	1.051	1	-1	12	28	0	817.57326		816.084	.1866E-03	.957
1	-1	7	18	1	816.92332	-56	320.514	.1513E-02	.972	-1	1	11	18	1	817.57484		465.632	.4905E-03	1.029
-1	1	19	33	1	816.98231		1452.667	.7511E-05	1.048	-1	1	12	20	2	817.60991		562.472	.1733E-03	1.031
1	-1	8	20	2	817.03451	-41	401.276	.1099E-02	.969	-1	-1	1	1	3	817.61521		3.319	.5976E-03	1.000
1	-1	8	20	0	817.03819		401.271	.2748E-03	.969	-1	-1	1	1	1	817.61672	-62	3.313	.2390E-02	1.000
-1	0	1	35	3	817.13121		817.656	.2461E-03	.617	-1	1	12	20	0	817.63644		562.467	.3467E-03	1.031
-1	0	1	35	1	817.13858		817.651	.9796E-03	.614	-1	0	1	30	3	817.63697		604.343	.6874E-03	.707
1	-1	9	22	3	817.15496	-14	491.224	.7596E-03	.966	-1	0	1	30	1	817.64366	-118	604.337	.2742E-02	.705
1	-1	9	22	1	817.15811		491.218	.3798E-03	.966	-1	1	13	22	3	817.65726		668.484	.5785E-04	1.034
-1	0	1	34	3	817.24056		772.426	.3076E-03	.636	1	-1	0	3	2	817.66148		7.785	.1170E-02	1.000
-1	0	1	34	1	817.24782	-94	772.420	.1224E-02	.633	1	-1	0	3	0	817.66302	30	7.779	.2339E-02	1.000
1	-1	10	24	2	817.28537		590.345	.4996E-03	.963	-1	1	13	22	1	817.67086		668.479	.2316E-03	1.035

ΔK	ΔJ	K	J	σ	ν_i	$\sigma-c$	E''_i	S_i	W_i	ΔK	ΔJ	K	J	σ	ν_i	$\sigma-c$	E''_i	S_i	W_i
-1	1	14	24	2	817.71785		783.655	.1461E-03	1.037	1	-1	6	15	2	818.14913		228.219	.9381E-03	.977
1	-1	13	30	3	817.72107		942.692	.2655E-04	.955	1	-1	6	15	0	818.15205	147	228.213	.1876E-02	.977
1	-1	13	30	1	817.72493		942.686	.1062E-03	.955	-1	0	1	23	3	818.18363		359.736	.2031E-02	.821
1	-1	1	5	3	817.72575		21.478	.6500E-03	.990	-1	1	19	34	1	818.18754		1496.550	.6695E-05	1.050
-1	0	1	29	3	817.72617		565.535	.8242E-03	.725	-1	0	1	23	1	818.18891	-61	359.730	.8115E-02	.820
1	-1	1	5	1	817.72742	184*	21.473	.2600E-02	.990	-1	0	1	22	3	818.24760		329.949	.2290E-02	.836
-1	0	1	29	1	817.73268		565.530	.3283E-02	.722	-1	0	1	22	1	818.25265	-26	329.944	.9138E-02	.834
-1	1	14	24	0	817.77573		783.649	.3642E-04	1.034	1	-1	7	17	3	818.25780		297.199	.3686E-03	.974
-1	1	15	26	3	817.78057		907.982	.8741E-04	1.040	1	-1	7	17	1	818.26041		297.193	.1474E-02	.974
1	-1	2	7	2	817.79417	19	44.391	.2763E-02	.988	-1	0	1	21	3	818.30825		301.454	.2557E-02	.850
1	-1	2	7	0	817.79613		44.385	.6907E-03	.988	-1	0	1	21	1	818.31307	-66	301.449	.1020E-01	.848
-1	1	15	26	1	817.80339		907.976	.4375E-04	1.041	-1	0	1	20	3	818.36564		274.250	.2826E-02	.863
-1	0	1	28	3	817.81154		528.014	.9789E-03	.742	-1	0	1	20	1	818.37023	-60	274.245	.1129E-01	.862
-1	0	1	28	1	817.81787	-80	528.009	.3905E-02	.740	1	-1	8	19	2	818.37619	394*	375.372	.1098E-02	.971
-1	1	16	28	2	817.85890		1041.445	.4963E-04	1.043	1	-1	8	19	0	818.37962		375.366	.2746E-03	.971
1	-1	3	9	3	817.86983	-53	76.527	.2751E-02	.986	-1	0	1	19	3	818.41986		248.339	.3097E-02	.876
1	-1	3	9	1	817.87176		76.522	.1374E-02	.985	-1	0	1	19	1	818.42421	-81	248.334	.1237E-01	.875
1	-1	14	32	2	817.88362		1078.426	.5755E-04	.952	-1	0	1	18	3	818.47094		223.720	.3358E-02	.888
1	-1	14	32	0	817.88876		1078.420	.1439E-04	.952	-1	0	1	18	1	818.47507	-77	223.715	.1342E-01	.887
-1	0	1	27	3	817.89316		491.781	.1152E-02	.758	1	-1	9	21	3	818.50111		462.737	.7767E-03	.968
-1	0	1	27	1	817.89930	-64	491.776	.4595E-02	.756	1	-1	9	21	1	818.50408		462.732	.3884E-03	.968
-1	1	17	30	3	817.93633		1184.040	.6694E-05	1.046	-1	0	1	17	3	818.51897		200.394	.3608E-02	.900
1	-1	4	11	2	817.95503	18	117.878	.2569E-02	.983	-1	0	1	17	1	818.52287	-73	200.389	.1441E-01	.899
1	-1	4	11	0	817.95743		117.873	.6417E-03	.982	-1	1	18	32	0	818.54143		1335.740	.1120E-04	.855
-1	0	1	26	3	817.97111		456.836	.1346E-02	.775	-1	0	1	16	3	818.56400		178.362	.3834E-02	.911
-1	1	17	30	1	817.97441		1184.034	.2678E-04	1.046	-1	0	1	16	1	818.56767	-67	178.357	.1532E-01	.910
-1	0	1	26	1	817.97705	-79	456.830	.5370E-02	.773	-1	0	1	15	3	818.60608		157.624	.4033E-02	.922
-1	1	16	28	0	818.00258		1041.439	.1216E-04	1.022	-1	0	1	15	1	818.60953	-72	157.618	.1611E-01	.921
-1	1	18	32	2	818.03278		1335.746	.6875E-05	1.050	1	-1	10	23	2	818.63584		559.281	.5220E-03	.965
-1	0	1	25	3	818.04546		423.180	.1558E-02	.791	1	-1	10	23	0	818.63977		559.275	.1305E-03	.965
1	-1	5	13	3	818.04726		168.446	.5648E-03	.980	-1	0	1	14	3	818.64526		138.180	.4188E-02	.931
1	-1	5	13	1	818.04951	26	168.440	.2259E-02	.980	-1	0	1	14	1	818.64850	-84	138.174	.1675E-01	.931
-1	0	1	25	1	818.05118	-140	423.174	.6216E-02	.789	-1	0	1	13	3	818.68160		120.030	.4306E-02	.941
1	-1	15	34	3	818.05171		1223.287	.2974E-04	.949	-1	0	1	13	1	818.68463	-16	120.025	.1720E-01	.940
1	-1	15	34	1	818.05591		1223.281	.1487E-04	.949	-1	0	1	12	3	818.71515		103.176	.4365E-02	.949
-1	0	1	24	3	818.11627		390.813	.1786E-02	.806	-1	0	1	12	1	818.71798	-70	103.171	.1746E-01	.949
-1	0	1	24	1	818.12178	-96	390.807	.7127E-02	.804	-1	0	1	11	3	818.74594		87.617	.4369E-02	.957
-1	1	19	34	3	818.12406		1496.556	.1677E-05	1.052	-1	0	1	11	1	818.74859	-64	87.612	.1747E-01	.957

ΔK	ΔJ	K	J	σ	ν_i	o-c	E_i''	S_i	W_i	ΔK	ΔJ	K	J	σ	ν_i	o-c	E_i''	S_i	W_i
-1	1	7	11	3	818.75206		184.443	.3154E-03	1.018	-1	0	1	3	1	818.89907	-40	9.799	.8096E-02	.997
-1	1	7	11	1	818.75537		184.438	.1262E-02	1.018	-1	0	1	2	3	818.90490		5.913	.1476E-02	.999
-1	1	8	13	2	818.75560		247.096	.1119E-02	1.021	-1	1	13	23	1	818.90627		698.245	.2312E-03	1.037
-1	1	6	9	2	818.75860		130.995	.6527E-03	1.015	-1	0	1	2	1	818.90648	153	5.908	.5905E-02	.999
-1	1	6	9	0	818.76239	477*	130.989	.1305E-02	1.015	-1	0	1	1	3	818.90987		3.319	.8979E-03	1.000
-1	1	8	13	0	818.76287		247.090	.2800E-03	1.022	-1	0	1	1	1	818.91142		3.313	.3592E-02	1.000
-1	1	9	15	3	818.76543		318.954	.9227E-03	1.024	1	-1	12	27	2	818.92763		779.878	.1015E-03	.960
-1	1	9	15	1	818.77080		318.948	.4614E-03	1.024	1	-1	12	27	0	818.93204		779.872	.2029E-03	.959
-1	1	5	7	3	818.77203		86.762	.3027E-03	1.012	-1	1	14	25	2	818.94673		815.996	.1423E-03	1.039
-1	0	1	10	3	818.77403		73.353	.4307E-02	.964	1	-1	0	2	2	818.96710		3.893	.5970E-03	1.000
-1	1	5	7	1	818.77423		86.757	.1211E-02	1.012	1	-1	0	2	0	818.96863		3.888	.1194E-02	1.000
-1	0	1	10	1	818.77650	-55	73.348	.1723E-01	.964	-1	1	15	27	3	819.00359		942.895	.8321E-04	1.042
1	-1	11	25	3	818.77680		665.000	.8348E-04	.963	-1	1	14	25	0	819.00835		815.991	.3547E-04	1.036
1	-1	11	25	1	818.78013		664.994	.3336E-03	.962	-1	1	15	27	1	819.02800		942.889	.4161E-04	1.042
-1	1	10	17	2	818.78605		400.003	.7126E-03	1.027	1	-1	1	4	3	819.03270		14.993	.4213E-03	.993
-1	1	4	5	2	818.79514		51.743	.9543E-03	1.009	1	-1	1	4	1	819.03431	-39	14.987	.1685E-02	.993
-1	1	4	5	0	818.79732		51.738	.2386E-03	1.009	-1	1	16	29	2	819.07654		1078.927	.4626E-04	1.045
-1	0	1	9	3	818.79944		60.386	.4181E-02	.971	1	-1	13	29	3	819.08437		903.911	.2940E-04	.957
-1	1	10	17	0	818.80047		399.998	.1783E-03	1.028	1	-1	13	29	1	819.08805		903.905	.1176E-03	.957
-1	0	1	9	1	818.80174	-46	60.381	.1673E-01	.971	1	-1	2	6	2	819.10593	12	35.312	.2031E-02	.991
-1	1	11	19	3	818.81198		490.244	.1295E-03	1.030	1	-1	2	6	0	819.10774		35.307	.5078E-03	.991
-1	1	11	19	1	818.82090		490.239	.5185E-03	1.031	-1	1	17	31	3	819.14794		1224.087	.6115E-05	1.048
-1	0	1	8	3	818.82221		48.714	.3985E-02	.977	1	-1	3	8	3	819.18637	-22	64.856	.2192E-02	.988
-1	0	1	8	1	818.82436	-47	48.709	.1594E-01	.977	-1	1	17	31	1	819.18795		1224.081	.2446E-04	1.048
-1	1	3	3	3	818.82545		25.948	.5394E-03	1.006	1	-1	3	8	1	819.18920		64.851	.1096E-02	.988
-1	1	3	3	1	818.82713		25.942	.2697E-03	1.006	-1	1	16	29	0	819.22268		1078.921	.1134E-04	1.025
-1	0	1	7	3	818.84237		38.339	.3717E-02	.982	-1	1	18	33	2	819.23895		1378.354	.6155E-05	1.051
-1	0	1	7	1	818.84439	-51	38.334	.1487E-01	.982	1	-1	14	31	2	819.25103		1037.079	.6489E-04	.954
-1	1	12	21	2	818.84982		589.660	.1777E-03	1.033	1	-1	14	31	0	819.25590		1037.073	.1622E-04	.954
-1	0	1	6	3	818.85995		29.260	.3384E-02	.987	1	-1	4	10	2	819.27626	-2	103.615	.2172E-02	.985
-1	0	1	6	1	818.86185	3	29.255	.1354E-01	.987	1	-1	4	10	0	819.27848		103.610	.5430E-03	.985
-1	0	1	5	3	818.87497		21.478	.2986E-02	.991	1	-1	5	12	3	819.37320		151.593	.5001E-03	.982
-1	0	1	5	1	818.87677	-31	21.473	.1195E-01	.991	1	-1	5	12	1	819.37532	-19	151.588	.2000E-02	.982
-1	1	12	21	0	818.87897		589.655	.3555E-03	1.033	1	-1	15	33	3	819.42327		1179.379	.3412E-04	.951
-1	0	1	4	3	818.88746		14.993	.2530E-02	.994	1	-1	15	33	1	819.42728		1179.373	.1706E-04	.951
-1	0	1	4	1	818.88917	-7	14.987	.1012E-01	.994	1	-1	6	14	2	819.47965		208.778	.8627E-03	.979
-1	1	13	23	3	818.89147		698.250	.5774E-04	1.036	1	-1	6	14	0	819.48234	150	208.772	.1725E-02	.979
-1	0	1	3	3	818.89743		9.804	.2024E-02	.997	1	-1	7	16	3	819.59292		275.171	.3502E-03	.976

ΔK	ΔJ	K	J	σ	ν_i	$\sigma-c$	E_i''	S_i	W_i	ΔK	ΔJ	K	J	σ	ν_i	$\sigma-c$	E_i''	S_i	W_i
1	-1	7	16	1	819.59537	-57	275.165	.1401E-02	.976	-1	1	14	26	0	820.23780		849.621	.3393E-04	1.038
1	-1	16	35	2	819.60544		1330.789	.1710E-04	.948	-1	1	15	28	1	820.24956		979.090	.3897E-04	1.044
1	-1	16	35	0	819.61073		1330.783	.4276E-05	.948	1	-1	12	26	2	820.28475		744.953	.1088E-03	.962
-1	1	18	33	0	819.70602		1378.348	.1047E-04	.893	1	-1	12	26	0	820.28890		744.947	.2174E-03	.961
1	-1	8	18	2	819.71579	-56	350.759	.1074E-02	.973	-1	1	16	30	2	820.29111		1117.695	.4248E-04	1.047
1	-1	8	18	0	819.71897		350.754	.2684E-03	.973	1	-1	1	3	3	820.33724		9.804	.1929E-03	.996
1	-1	9	20	3	819.84521	6	435.543	.7790E-03	.970	1	-1	1	3	1	820.33881	-92	9.799	.7717E-03	.996
1	-1	9	20	1	819.84801		435.537	.3895E-03	.970	-1	1	17	32	3	820.35645		1265.418	.5509E-05	1.050
1	-1	10	22	2	819.98430		529.506	.5365E-03	.968	-1	1	17	32	1	820.39830		1265.412	.2204E-04	1.050
1	-1	10	22	0	819.98798		529.501	.1340E-03	.967	1	-1	2	5	2	820.41532	28	27.530	.1271E-02	.993
-1	1	8	14	2	820.01425	389*	265.240	.1279E-02	1.023	1	-1	2	5	0	820.41702		27.525	.3176E-03	.993
-1	1	7	12	3	820.01592		199.999	.3792E-03	1.020	-1	1	16	30	0	820.43930		1117.689	.1043E-04	1.028
-1	1	9	16	3	820.01863	-49	339.685	.1013E-02	1.026	-1	1	18	34	2	820.44196		1422.244	.5446E-05	1.053
-1	1	7	12	1	820.01962	-149	199.994	.1517E-02	1.020	1	-1	13	28	3	820.44578		866.415	.3213E-04	.959
-1	1	8	14	0	820.02256		265.235	.3202E-03	1.024	1	-1	13	28	1	820.44928		866.409	.1285E-03	.959
-1	1	9	16	1	820.02460		339.680	.5065E-03	1.026	1	-1	3	7	3	820.50059	-39	54.481	.1587E-02	.990
-1	1	6	10	2	820.02778		143.960	.8386E-03	1.017	1	-1	3	7	1	820.50232		54.476	.7936E-03	.990
-1	1	6	10	0	820.03216	97	143.955	.1677E-02	1.017	1	-1	4	9	2	820.59522	-3	90.649	.1720E-02	.987
-1	1	10	18	2	820.03397		423.320	.7559E-03	1.029	1	-1	4	9	0	820.59726		90.643	.4301E-03	.987
-1	1	5	8	3	820.04636		97.137	.4279E-03	1.014	1	-1	14	30	2	820.61659		997.017	.7224E-04	.956
-1	1	5	8	1	820.04879	-32	97.131	.1711E-02	1.014	1	-1	14	30	0	820.62119		997.011	.1806E-04	.956
-1	1	10	18	0	820.05008		423.314	.1892E-03	1.030	1	-1	5	11	3	820.69689	121	136.035	.4220E-03	.984
-1	1	11	20	3	820.05431		516.143	.1333E-03	1.032	1	-1	5	11	1	820.69888		136.030	.1688E-02	.984
-1	1	11	20	1	820.06411		516.137	.5333E-03	1.032	1	-1	15	32	3	820.79302		1136.754	.3867E-04	.953
-1	1	4	6	2	820.07466	-29	59.525	.1581E-02	1.011	1	-1	15	32	1	820.79685		1136.748	.1934E-04	.953
-1	1	4	6	0	820.07715		59.520	.3952E-03	1.011	1	-1	6	13	2	820.80797		190.631	.7641E-03	.981
-1	1	12	22	2	820.08683		618.139	.1782E-03	1.035	1	-1	6	13	0	820.81044	120	190.625	.1528E-02	.981
-1	1	3	4	3	820.11005	-67	31.136	.1267E-02	1.008	-1	1	18	34	0	820.87499		1422.238	.9542E-05	.922
-1	1	3	4	1	820.11184		31.131	.6334E-03	1.008	1	-1	7	15	3	820.92587		254.436	.3226E-03	.978
-1	1	12	22	0	820.11857		618.134	.3564E-03	1.035	1	-1	7	15	1	820.92818	21	254.431	.1290E-02	.978
-1	1	13	24	3	820.12274		729.306	.5649E-04	1.038	1	-1	16	34	2	820.97923		1285.605	.1973E-04	.950
1	-1	11	24	3	820.12966		632.649	.8762E-04	.965	1	-1	16	34	0	820.98426		1285.599	.4932E-05	.950
1	-1	11	24	1	820.13281		632.643	.3505E-03	.965	1	-1	8	17	2	821.05326	84	327.439	.1023E-02	.975
-1	1	13	24	1	820.13875		729.301	.2262E-03	1.039	1	-1	8	17	0	821.05621		327.434	.2557E-03	.975
-1	1	2	2	2	820.15491	94	11.965	.7704E-03	1.005	1	0	0	35	2	821.09668		815.640	.8098E-03	1.000
-1	1	2	2	0	820.15661		11.960	.1926E-03	1.005	1	0	0	34	2	821.12311		770.409	.9817E-03	1.000
-1	1	14	26	2	820.17262		849.626	.1361E-03	1.041	1	0	0	35	0	821.12573		815.634	.1620E-02	1.000
-1	1	15	28	3	820.22359		979.096	.7795E-04	1.044	1	0	0	33	2	821.14875		726.462	.1182E-02	1.000

ΔK	ΔJ	K	J	σ	ν_i	o-c	E_i''	S_i	W_i	ΔK	ΔJ	K	J	σ	ν_i	o-c	E_i''	S_i	W_i
1	0	0	34	0	821.15097		770.403	.1963E-02	1.000	-1	1	13	25	3	821.35104		761.651	.5431E-04	1.040
1	0	0	32	2	821.17360		683.798	.1412E-02	1.000	-1	1	4	7	2	821.35157		68.603	.2214E-02	1.013
1	0	0	33	0	821.17541		726.456	.2363E-02	1.000	-1	1	4	7	0	821.35439		68.598	.5534E-03	1.013
1	-1	9	19	3	821.18722	-356*	409.640	.7650E-03	.973	-1	1	12	23	0	821.35520		647.903	.3503E-03	1.037
1	-1	9	19	1	821.18986		409.634	.3821E-03	.972	1	0	0	24	0	821.36059		388.789	.8990E-02	1.000
1	0	0	31	2	821.19767		642.419	.1675E-02	1.000	1	0	0	23	2	821.36208		357.717	.5018E-02	1.000
1	0	0	32	0	821.19907		683.792	.2824E-02	1.000	-1	1	13	25	1	821.36825		761.646	.2172E-03	1.040
1	0	0	30	2	821.22094		602.325	.1973E-02	1.000	1	0	0	23	0	821.37738		357.712	.1004E-01	1.000
1	0	0	31	0	821.22195		642.413	.3351E-02	1.000	1	0	0	22	2	821.37916		327.931	.5555E-02	1.000
1	0	0	29	2	821.24343		563.518	.2307E-02	1.000	-1	1	3	5	3	821.39207		37.621	.2053E-02	1.010
1	0	0	30	0	821.24405		602.320	.3946E-02	1.000	1	0	0	22	0	821.39343		327.925	.1111E-01	1.000
1	0	0	28	2	821.26514		525.997	.2677E-02	1.000	-1	1	3	5	1	821.39398		37.616	.1027E-02	1.010
1	0	0	29	0	821.26538		563.512	.4613E-02	1.000	1	0	0	21	2	821.39548		299.435	.6100E-02	1.000
-1	1	9	17	3	821.26901		361.710	.1078E-02	1.028	-1	1	14	27	2	821.40875		884.544	.1281E-03	1.043
-1	1	8	15	2	821.27012		284.679	.1408E-02	1.025	1	0	0	21	0	821.41104		299.430	.1220E-01	1.000
-1	1	9	17	1	821.27561		361.705	.5389E-03	1.028	1	0	0	20	2	821.42333		272.232	.6641E-02	1.000
-1	1	7	13	3	821.27704		216.850	.4340E-03	1.022	1	0	0	20	0	821.42584		272.226	.1328E-01	1.000
-1	1	10	19	2	821.27905		447.929	.7812E-03	1.031	1	0	0	19	2	821.42584		246.320	.7168E-02	1.000
-1	1	8	15	0	821.27951		284.674	.3523E-03	1.026	1	0	0	19	0	821.43719		246.315	.1434E-01	1.000
-1	1	7	13	1	821.28116		216.845	.1736E-02	1.022	1	0	0	14	2	821.43773		136.161	.9119E-02	1.000
1	0	0	28	0	821.28594		525.991	.5353E-02	1.000	1	0	0	18	2	821.43989		221.701	.7668E-02	1.000
1	0	0	27	2	821.28607		489.763	.3082E-02	1.000	-1	1	15	29	3	821.44054		1016.583	.7195E-04	1.046
-1	1	11	21	3	821.29376		543.333	.1342E-03	1.034	-1	1	2	3	2	821.44204		15.856	.1707E-02	1.007
-1	1	6	11	2	821.29427		158.222	.1008E-02	1.019	-1	1	2	3	0	821.44388		15.851	.4263E-03	1.007
-1	1	10	19	0	821.29686		447.923	.1955E-03	1.032	1	0	0	18	0	821.45033		221.696	.1534E-01	1.000
-1	1	6	11	0	821.29929		158.216	.2015E-02	1.019	1	0	0	17	2	821.45319		198.375	.8127E-02	1.000
-1	1	11	21	1	821.30444		543.328	.5369E-03	1.034	1	0	0	17	0	821.46275		198.370	.1625E-01	1.000
1	0	0	27	0	821.30573		489.758	.6165E-02	1.000	-1	1	14	27	0	821.46405		884.538	.3195E-04	1.040
1	0	0	26	2	821.30623		454.818	.3523E-02	1.000	1	0	0	16	2	821.46574		176.343	.8532E-02	1.000
-1	1	5	9	3	821.31803		108.807	.5477E-03	1.016	-1	1	15	29	1	821.46803		1016.577	.3598E-04	1.046
-1	1	5	9	1	821.32070		108.802	.2191E-02	1.016	1	0	0	16	0	821.47445		176.338	.1706E-01	1.000
-1	1	12	23	2	821.32091		647.908	.1751E-03	1.037	1	0	0	15	2	821.47753		155.605	.8867E-02	1.000
1	0	0	26	0	821.32477		454.812	.7046E-02	1.000	1	-1	11	23	3	821.48051		601.587	.9037E-04	.967
1	0	0	25	2	821.32561		421.161	.3995E-02	1.000	1	-1	11	23	1	821.48350		601.581	.3615E-03	.967
1	-1	10	21	2	821.33072		501.023	.5403E-03	.970	1	0	0	15	0	821.48544		155.599	.1773E-01	1.000
1	-1	10	21	0	821.33415		501.017	.1349E-03	.969	1	0	0	14	0	821.49573		136.155	.1824E-01	1.000
1	0	0	25	0	821.34306		421.156	.7990E-02	1.000	1	0	0	13	2	821.49889		118.011	.9276E-02	1.000
1	0	0	24	2	821.34423		388.794	.4495E-02	1.000	-1	1	1	1	3	821.49919		3.319	.3015E-03	1.004

ΔK	ΔJ	K	J	σ	ν_i	$\sigma-c$	E''_i	S_i	W_i	ΔK	ΔJ	K	J	σ	ν_i	$\sigma-c$	E''_i	S_i	W_i
-1	1	11	23	3	823.76383		601.587	.1286E-03	1.038	-1	1	3	7	1	823.95043		54.476	.1788E-02	1.015
-1	1	9	19	1	823.76911		409.634	.5677E-03	1.033	1	0	1	14	3	823.97846		138.180	.4796E-02	1.069
-1	1	8	17	2	823.77343	-157	327.439	.1563E-02	1.029	1	0	1	14	1	823.98163	-82	138.174	.1920E-01	1.070
-1	1	11	23	1	823.77633		601.581	.5148E-03	1.039	-1	1	2	5	2	824.00854		27.530	.3614E-02	1.012
1	0	1	19	3	823.77921		248.339	.3981E-02	1.124	-1	1	2	5	0	824.01075		27.525	.9034E-03	1.012
-1	1	12	25	2	823.78015		711.316	.1608E-03	1.041	1	0	1	13	3	824.01207		120.030	.4831E-02	1.060
-1	1	10	21	0	823.78180		501.017	.1959E-03	1.036	1	0	1	13	1	824.01502	-96	120.025	.1932E-01	1.060
1	0	1	19	1	823.78380	-49	248.334	.1594E-01	1.125	1	-1	10	19	2	824.01729		447.929	.5098E-03	.973
-1	1	8	17	0	823.78509		327.434	.3912E-03	1.030	1	-1	10	19	0	824.02025		447.923	.1274E-03	.973
-1	1	7	15	3	823.79094		254.436	.5119E-03	1.026	1	0	1	12	3	824.04350		103.176	.4806E-02	1.051
-1	1	7	15	1	823.79595	16	254.431	.2049E-02	1.027	1	0	1	12	1	824.04623	-53	103.171	.1924E-01	1.052
-1	1	13	27	3	823.79860		830.206	.4791E-04	1.044	-1	1	16	33	0	824.06840		1241.697	.7481E-05	1.036
-1	1	13	27	1	823.81819		830.201	.1918E-03	1.045	1	0	1	11	3	824.07267		87.617	.4726E-02	1.044
-1	1	6	13	2	823.81902		190.631	.1273E-02	1.023	1	0	1	11	1	824.07522	-29	87.612	.1891E-01	1.044
-1	1	12	25	0	823.81942		711.310	.3217E-03	1.041	-1	1	1	3	3	824.07586		9.804	.8847E-03	1.010
1	0	1	18	3	823.82303		223.720	.4210E-02	1.112	-1	1	1	3	1	824.07756	-263*	9.799	.3539E-02	1.010
-1	1	6	13	0	823.82545	109	190.625	.2549E-02	1.024	1	0	1	10	3	824.09957		73.353	.4577E-02	1.036
1	0	1	18	1	823.82730	-77	223.715	.1686E-01	1.113	1	0	1	10	1	824.10194	-52	73.348	.1832E-01	1.037
-1	1	14	29	2	823.83211		958.240	.1088E-03	1.047	1	0	1	9	3	824.12414		60.386	.4367E-02	1.030
-1	1	5	11	3	823.85325		136.035	.7515E-03	1.020	1	0	1	9	1	824.12635	-59	60.381	.1747E-01	1.030
-1	1	5	11	1	823.85649	32	136.030	.3009E-02	1.021	1	0	1	8	3	824.14636		48.714	.4089E-02	1.024
1	-1	9	17	3	823.86484		361.710	.6765E-03	.976	1	1	0	1	2	824.14718		1.299	.1826E-02	1.000
1	0	1	17	3	823.86492		200.394	.4411E-02	1.100	1	0	1	8	1	824.14843	-43	48.709	.1636E-01	1.024
-1	1	15	31	3	823.86515		1095.412	.5891E-04	1.050	1	1	0	1	0	824.14871		1.294	.3652E-02	1.000
1	-1	9	17	1	823.86719		361.705	.3383E-03	.976	1	0	1	7	3	824.16618	-34	38.339	.3742E-02	1.018
1	0	1	17	1	823.86889	-125	200.389	.1766E-01	1.101	1	0	1	7	1	824.16813		38.334	.1498E-01	1.019
-1	1	15	31	1	823.89558		1095.407	.2946E-04	1.050	1	-1	11	21	3	824.17607		543.333	.9036E-04	.971
-1	1	4	9	2	823.89738	-28	90.649	.3365E-02	1.017	1	-1	11	21	1	824.17873		543.328	.3611E-03	.970
-1	1	4	9	0	823.90101		90.643	.8420E-03	1.018	1	0	1	6	3	824.18359		29.260	.3335E-02	1.014
1	0	1	16	3	823.90483		178.362	.4581E-02	1.089	1	0	1	6	1	824.18543	-39	29.255	.1334E-01	1.014
-1	1	14	29	0	823.90681		958.234	.2713E-04	1.044	1	0	1	5	3	824.19856		21.478	.2861E-02	1.010
1	0	1	16	1	823.90851	-39	178.357	.1834E-01	1.090	1	0	1	5	1	824.20031	-36	21.473	.1144E-01	1.010
-1	1	16	33	2	823.91611		1241.703	.3041E-04	1.053	1	0	1	4	3	824.21107	-35	14.993	.2323E-02	1.007
1	-1	17	34	3	823.92114		1351.928	.3187E-05	.951	1	0	1	4	1	824.21273		14.987	.9290E-02	1.007
1	-1	17	34	1	823.92494		1351.922	.1275E-04	.951	1	0	1	3	3	824.22109		9.804	.1710E-02	1.004
1	0	1	15	3	823.94269		157.624	.4713E-02	1.079	1	0	1	3	1	824.22270	-41	9.799	.6841E-02	1.004
1	0	1	15	1	823.94611	34	157.618	.1887E-01	1.080	1	0	1	2	3	824.22863		5.913	.9940E-03	1.002
-1	1	3	7	3	823.94821		54.481	.3576E-02	1.015	1	0	1	2	1	824.23019	-75	5.908	.3976E-02	1.002

ΔK	ΔJ	K	J	σ	ν_i	o-c	E''_i	S_i	W_i	ΔK	ΔJ	K	J	σ	ν_i	o-c	E''_i	S_i	W_i
1	0	2	30	2	825.81325	26	610.388	.4365E-02	1.151	-1	1	8	19	2	826.26526	49	375.372	.1592E-02	1.034
1	0	2	30	0	825.82547	39	610.382	.1092E-02	1.152	-1	1	12	27	0	826.27133		779.872	.2788E-03	1.045
1	-1	13	24	3	825.87185		729.306	.3895E-04	.967	-1	1	15	33	3	826.27718		1179.379	.4603E-04	1.055
1	-1	13	24	1	825.87469		729.301	.1556E-03	.966	-1	1	8	19	0	826.27932		375.366	.3981E-03	1.034
1	0	2	29	2	825.88126	41	571.580	.5057E-02	1.141	-1	1	7	17	3	826.29351		297.199	.5462E-03	1.031
1	0	2	29	0	825.89280	83	571.575	.1266E-02	1.143	-1	1	7	17	1	826.29949	-2	297.193	.2185E-02	1.031
1	0	2	28	2	825.94750	37	534.060	.5819E-02	1.132	1	0	2	22	2	826.30489		335.997	.1151E-01	1.083
1	0	2	28	0	825.95836	50	534.055	.1456E-02	1.133	-1	1	15	33	1	826.31038		1179.373	.2302E-04	1.055
1	-1	5	7	3	825.96855		86.762	.5699E-04	.991	1	0	2	22	0	826.31222	133	335.992	.2879E-02	1.084
1	-1	5	7	1	825.97016		86.757	.2280E-03	.991	-1	1	6	15	2	826.33261		228.219	.1429E-02	1.028
1	0	2	27	2	826.01190	3	497.827	.6645E-02	1.123	-1	1	14	31	0	826.33641		1037.073	.2191E-04	1.048
1	0	2	27	0	826.02212	88	497.822	.1663E-02	1.124	-1	1	6	15	0	826.34059	49	228.213	.2861E-02	1.029
1	-1	14	26	2	826.05969		849.626	.9566E-04	.964	1	0	2	21	2	826.35739	-9	307.503	.1254E-01	1.076
1	-1	14	26	0	826.06331		849.621	.2389E-04	.963	1	0	2	21	0	826.36421	159	307.497	.3135E-02	1.076
1	0	2	26	2	826.07443	6	462.883	.7536E-02	1.115	-1	1	5	13	3	826.37744		168.446	.8913E-03	1.025
1	0	2	26	0	826.08402	79	462.877	.1886E-02	1.116	1	-1	8	13	2	826.38125		247.096	.5581E-03	.983
1	-1	6	9	2	826.09855		130.995	.2138E-03	.988	-1	1	5	13	1	826.38132	22	168.440	.3569E-02	1.026
1	-1	6	9	0	826.10034		130.989	.4276E-03	.988	1	-1	8	13	0	826.38339		247.090	.1395E-03	.983
1	0	2	25	2	826.13503	16	429.227	.8471E-02	1.106	1	0	2	20	2	826.40777	-5	280.299	.1355E-01	1.069
1	0	2	25	0	826.14403	87	429.221	.2120E-02	1.107	1	0	2	20	0	826.41410		280.294	.3386E-02	1.069
1	0	2	24	2	826.19367	12	396.860	.9456E-02	1.098	-1	1	4	11	2	826.43234	218*	117.878	.4248E-02	1.023
1	0	2	24	0	826.20209	48	396.855	.2366E-02	1.099	-1	1	4	11	0	826.43690		117.873	.1062E-02	1.023
-1	1	11	25	3	826.22197		665.000	.1158E-03	1.043	1	0	2	19	2	826.45599	1	254.388	.1450E-01	1.062
-1	1	12	27	2	826.22730		779.878	.1395E-03	1.046	1	-1	16	30	2	826.45607		1117.695	.3070E-04	.958
-1	1	10	23	2	826.23021		559.281	.7329E-03	1.040	1	-1	16	30	0	826.46011		1117.689	.7675E-05	.958
-1	1	13	29	3	826.23389		903.911	.4009E-04	1.049	1	0	2	19	0	826.46186	159	254.383	.3629E-02	1.063
1	-1	7	11	3	826.23538		184.443	.1346E-03	.986	-1	1	3	9	3	826.49362	-129	76.527	.4836E-02	1.020
-1	1	11	25	1	826.23630		664.994	.4630E-03	1.043	-1	1	3	9	1	826.49623		76.522	.2418E-02	1.020
1	-1	7	11	1	826.23719		184.438	.5384E-03	.986	1	0	2	18	2	826.50201	-3	229.770	.1540E-01	1.056
-1	1	9	21	3	826.24175		462.737	.1106E-02	1.037	1	0	2	18	0	826.50744		229.764	.3854E-02	1.057
1	0	2	23	2	826.25030	20	365.783	.1047E-01	1.090	1	-1	9	15	3	826.53374		318.954	.5098E-03	.980
-1	1	9	21	1	826.25103		462.732	.5532E-03	1.037	1	-1	9	15	1	826.53582		318.948	.2549E-03	.980
1	-1	15	28	3	826.25326		979.096	.5564E-04	.961	1	0	2	17	2	826.54581	8	206.444	.1620E-01	1.050
-1	1	10	23	0	826.25499		559.275	.1832E-03	1.040	1	0	2	17	0	826.55082		206.439	.4053E-02	1.051
-1	1	13	29	1	826.25582		903.905	.1604E-03	1.049	-1	1	2	7	2	826.56447	17	44.391	.5291E-02	1.018
-1	1	14	31	2	826.25629		1037.079	.8796E-04	1.052	-1	1	2	7	0	826.56718		44.385	.1324E-02	1.019
1	-1	15	28	1	826.25641		979.090	.2782E-04	.961	1	0	2	16	2	826.58735	175	184.412	.1688E-01	1.045
1	0	2	23	0	826.25816	78	365.778	.2620E-02	1.091	1	0	2	16	0	826.59196		184.407	.4220E-02	1.045

ΔK	ΔJ	K	J	σ	ν_i	o-c	E''_i	S_i	W_i	ΔK	ΔJ	K	J	σ	ν_i	o-c	E''_i	S_i	W_i
1	0	2	15	2	826.62660	-14	163.674	.1739E-01	1.039	1	0	2	3	2	826.91066	35	15.856	.3992E-02	1.002
1	0	2	15	0	826.63085		163.669	.4352E-02	1.040	1	0	2	3	0	826.91225		15.851	.9979E-03	1.002
-1	1	1	5	3	826.64207		21.478	.1410E-02	1.019	1	-1	12	21	2	827.04023		589.660	.1158E-03	.971
-1	1	1	5	1	826.64396	-82	21.473	.5640E-02	1.019	1	-1	12	21	0	827.04320		589.655	.2316E-03	.971
1	0	2	14	2	826.66354	51	144.230	.1773E-01	1.034	1	-1	13	23	3	827.22332		698.250	.3880E-04	.968
1	-1	17	32	3	826.66428		1265.418	.4023E-05	.955	1	-1	13	23	1	827.22600		698.245	.1552E-03	.968
1	0	2	14	0	826.66743		144.225	.4438E-02	1.035	1	-1	6	8	2	827.41538		119.325	.8519E-04	.990
1	-1	17	32	1	826.66774		1265.412	.1609E-04	.955	1	-1	14	25	2	827.41552		815.996	.9798E-04	.965
1	-1	10	17	2	826.69530		400.003	.4231E-03	.977	1	-1	6	8	0	827.41704		119.319	.1704E-03	.990
1	-1	10	17	0	826.69784		399.998	.1058E-03	.977	1	-1	14	25	0	827.41891		815.991	.2449E-04	.965
1	0	2	13	2	826.69813	65	126.081	.1789E-01	1.030	-1	1	12	28	2	827.44626		816.090	.1274E-03	1.048
1	0	2	13	0	826.70170		126.076	.4472E-02	1.030	-1	1	11	26	3	827.44647		698.640	.1076E-03	1.045
1	1	0	3	2	826.71148		7.785	.2959E-02	1.000	-1	1	13	30	3	827.44687		942.692	.3601E-04	1.051
1	1	0	3	0	826.71301	57	7.779	.5917E-02	1.000	-1	1	10	24	2	827.46056	51	590.345	.6934E-03	1.042
1	0	2	12	2	826.73036	16	109.227	.1779E-01	1.025	-1	1	11	26	1	827.46173		698.635	.4303E-03	1.045
1	0	2	12	0	826.73363		109.222	.4452E-02	1.026	-1	1	14	32	2	827.46365		1078.426	.7769E-04	1.054
1	0	2	11	2	826.76019	22	93.668	.1746E-01	1.021	-1	1	13	30	1	827.46994		942.686	.1440E-03	1.051
1	0	2	11	0	826.76318		93.663	.4370E-02	1.022	-1	1	9	22	3	827.47759	47	491.224	.1066E-02	1.039
1	0	2	10	2	826.78762	37	79.405	.1688E-01	1.018	-1	1	15	34	3	827.47840		1223.287	.4001E-04	1.057
1	0	2	10	0	826.79035		79.399	.4220E-02	1.018	-1	1	10	24	0	827.48708		590.340	.1734E-03	1.042
1	0	2	9	2	826.81261	26	66.437	.1601E-01	1.015	-1	1	9	22	1	827.48757		491.218	.5337E-03	1.040
1	0	2	9	0	826.81511		66.432	.4003E-02	1.015	-1	1	12	28	0	827.49256		816.084	.2546E-03	1.047
1	1	1	1	3	826.82292		3.319	.1813E-02	.999	-1	1	8	20	2	827.50680	67	401.276	.1565E-02	1.036
1	1	1	1	1	826.82448	-35	3.313	.7251E-02	.999	-1	1	15	34	1	827.51292		1223.281	.2000E-04	1.057
1	0	2	8	2	826.83516	28	54.766	.1485E-01	1.012	-1	1	8	20	0	827.52209		401.271	.3916E-03	1.037
1	0	2	8	0	826.83745		54.761	.3712E-02	1.012	-1	1	7	18	3	827.54047		320.520	.5477E-03	1.033
1	0	2	7	2	826.85524	26	44.391	.1338E-01	1.009	-1	1	14	32	0	827.54620		1078.420	.1935E-04	1.050
1	0	2	7	0	826.85735		44.385	.3346E-02	1.009	-1	1	7	18	1	827.54696	1	320.514	.2193E-02	1.034
1	-1	11	19	3	826.86322		490.244	.8105E-04	.974	1	-1	7	10	3	827.55703		170.182	.7958E-04	.987
1	-1	11	19	1	826.86559		490.239	.3242E-03	.974	1	-1	7	10	1	827.55874		170.177	.3183E-03	.987
1	0	2	6	2	826.87284	34	35.312	.1162E-01	1.007	-1	1	6	16	2	827.58514	-19	248.954	.1465E-02	1.031
1	0	2	6	0	826.87479		35.307	.2904E-02	1.007	-1	1	6	16	0	827.59394	49	248.949	.2931E-02	1.031
1	-1	18	34	2	826.88170		1422.244	.4009E-05	.952	1	-1	15	27	3	827.61347		942.895	.5849E-04	.963
1	-1	18	34	0	826.88615		1422.238	.8017E-05	.952	1	-1	15	27	1	827.61646		942.889	.2922E-04	.962
1	0	2	5	2	826.88795	15	27.530	.9510E-02	1.005	-1	1	5	14	3	827.63531		186.593	.9349E-03	1.028
1	0	2	5	0	826.88976		27.525	.2377E-02	1.005	-1	1	5	14	1	827.63955	-46	186.588	.3740E-02	1.028
1	0	2	4	2	826.90056	4	21.045	.7013E-02	1.003	-1	1	4	12	2	827.69566	53	133.436	.4561E-02	1.025
1	0	2	4	0	826.90225		21.040	.1753E-02	1.003	-1	1	4	12	0	827.70074		133.431	.1141E-02	1.026

ΔK	ΔJ	K	J	σ	ν_i	O-C	E_i''	S_i	W_i	ΔK	ΔJ	K	J	σ	ν_i	O-C	E_i''	S_i	W_i	
1	-1	8	12	2	827.70762		230.245	.3949E-03	.984	1	0	3	30	3	828.49039	310*	620.467	.3964E-02	1.101	
1	-1	8	12	0	827.70960		230.240	.9872E-04	.984	1	0	3	30	1	828.49778		620.461	.1982E-02	1.101	
-1	1	3	10	3	827.76222	12	89.495	.5331E-02	1.023	1	0	3	29	3	828.56151	624*	581.661	.4600E-02	1.094	
-1	1	3	10	1	827.76505		89.489	.2665E-02	1.023	1	0	3	29	1	828.56853		581.655	.2302E-02	1.095	
1	-1	16	29	2	827.82054		1078.927	.3303E-04	.960	1	-1	13	22	3	828.57270		668.484	.3767E-04	.970	
1	-1	16	29	0	827.82435		1078.921	.8249E-05	.959	1	-1	13	22	1	828.57523		668.479	.1507E-03	.970	
-1	1	2	8	2	827.83838	1	54.766	.5996E-02	1.022	1	0	3	28	3	828.63060	-12	544.141	.5304E-02	1.088	
-1	1	2	8	0	827.84138		54.761	.1499E-02	1.022	1	0	3	28	1	828.63725	52	544.135	.2652E-02	1.088	
1	-1	9	14	3	827.86484		299.516	.4018E-03	.982	1	1	13	31	3	828.65669		982.758	.3197E-04	1.053	
1	-1	9	14	1	827.86679		299.510	.2007E-03	.981	1	1	12	29	2	828.66210		853.589	.1150E-03	1.050	
-1	1	1	6	3	827.92115		29.260	.1640E-02	1.024	1	1	14	33	2	828.66780		1121.055	.6790E-04	1.056	
-1	1	1	6	1	827.92316	-18	29.255	.6560E-02	1.024	1	1	11	27	3	828.66790		733.568	.9875E-04	1.047	
1	1	1	0	4	827.98711		12.973	.3468E-02	1.000	1	1	13	31	1	828.68088		982.752	.1279E-03	1.053	
1	1	1	0	4	827.98864	47	12.968	.6935E-02	1.000	1	1	11	27	1	828.68407		733.563	.3954E-03	1.048	
1	-1	10	16	2	828.03101		377.980	.3588E-03	.979	1	1	10	25	2	828.68787		622.699	.6482E-03	1.045	
1	-1	17	31	3	828.03302		1224.087	.4422E-05	.957	1	0	3	27	3	828.69761	57	507.909	.6068E-02	1.082	
1	-1	10	16	0	828.03336		377.974	.8971E-04	.979	1	0	3	27	1	828.70391		507.903	.3034E-02	1.082	
1	-1	17	31	1	828.03632		1224.081	.1769E-04	.957	1	1	9	23	3	828.71042		521.000	.1014E-02	1.042	
1	1	0	3	35	828.10542		833.774	.1684E-02	1.136	1	1	12	29	0	828.71061		853.584	.2300E-03	1.050	
1	1	1	2	3	828.11248		5.913	.1990E-02	.998	1	1	10	25	0	828.71612		622.694	.1620E-03	1.045	
1	1	1	2	1	828.11408	-33	5.908	.7961E-02	.998	1	1	9	23	1	828.72111		520.995	.5073E-03	1.042	
1	0	3	35	1	828.11482		833.768	.8418E-03	1.136	1	1	8	21	2	828.74537	10	428.473	.1516E-02	1.039	
1	0	3	34	3	828.18621	86	788.545	.2026E-02	1.128	1	1	14	33	0	828.75262		1121.050	.1691E-04	1.052	
1	0	3	34	1	828.19519		788.539	.1014E-02	1.129	1	1	8	21	0	828.76191		428.468	.3790E-03	1.039	
1	-1	11	18	3	828.20356		465.637	.7262E-04	.976	1	0	3	26	3	828.76251	196*	472.965	.6888E-02	1.076	
1	-1	11	18	1	828.20579		465.632	.2905E-03	.976	1	0	3	26	1	828.76847		472.959	.3444E-02	1.076	
1	-1	18	33	2	828.25460		1378.354	.4497E-05	.954	1	-1	14	24	2	828.76930		783.655	.9816E-04	.967	
1	-1	18	33	0	828.25882		1378.348	.8994E-05	.954	1	-1	14	24	0	828.77247		783.649	.2454E-04	.967	
1	0	3	33	3	828.26514	70	744.599	.2422E-02	1.121	1	1	7	19	3	828.78450		345.134	.5408E-03	1.036	
1	0	3	33	1	828.27370	20	744.593	.1212E-02	1.122	1	1	7	19	1	828.79151	-66	345.129	.2163E-02	1.036	
1	0	3	32	3	828.34217	128	701.937	.2874E-02	1.114	1	0	3	25	3	828.82529	83	439.310	.7758E-02	1.070	
1	0	3	32	1	828.35033	-6	701.931	.1438E-02	1.115	1	0	3	25	1	828.83092		439.304	.3882E-02	1.071	
1	-1	12	20	2	828.38508		562.472	.1084E-03	.973	1	-1	1	6	17	2	828.83477	69	270.983	.1474E-02	1.033
1	-1	12	20	0	828.38784		562.467	.2168E-03	.973	1	-1	1	6	17	0	828.84443		270.978	.2951E-02	1.034
1	0	3	31	3	828.41727	82	660.559	.3386E-02	1.107	1	-1	7	9	3	828.87632		157.217	.3151E-04	.989	
1	0	3	31	1	828.42503	19	660.553	.1695E-02	1.108	1	-1	7	9	1	828.87795		157.212	.1261E-03	.989	
1	-1	19	35	3	828.48124		1541.721	.1087E-05	.951	1	1	0	3	24	3	828.88589	281*	406.944	.8675E-02	1.065
1	-1	19	35	1	828.48484		1541.715	.4347E-05	.951	1	-1	1	5	15	3	828.89033		206.036	.9611E-03	1.031

ΔK	ΔJ	K	J	σ	ν_i	O-c	E''_i	S_i	W_i
1	0	3	24	1	828.89121		406.938	.4337E-02	1.065
-1	1	5	15	1	828.89493	-623*	206.030	.3844E-02	1.031
1	0	3	23	3	828.94431	129	375.868	.9621E-02	1.060
1	0	3	23	1	828.94932		375.862	.4810E-02	1.060
-1	1	4	13	2	828.95616	42	150.290	.4790E-02	1.028
-1	1	4	13	0	828.96179		150.284	.1199E-02	1.029
1	-1	15	26	3	828.97168		907.982	.6020E-04	.964
1	-1	15	26	1	828.97452		907.976	.3010E-04	.964
1	0	3	22	3	829.00050	138	346.082	.1058E-01	1.055
1	0	3	22	1	829.00523		346.077	.5290E-02	1.055
-1	1	1	3	11	829.02802	1	103.758	.5730E-02	1.027
-1	1	1	3	11	829.03168		103.752	.2865E-02	1.027
1	-1	8	11	2	829.03168		214.690	.2332E-03	.986
1	-1	8	11	0	829.03350		214.685	.5830E-04	.986
1	0	3	21	3	829.05445	211*	317.588	.1154E-01	1.050
1	0	3	21	1	829.05889		317.582	.5769E-02	1.050
1	0	3	20	3	829.10612	211*	290.385	.1247E-01	1.045
-1	1	2	9	2	829.10953	-129	66.437	.6591E-02	1.026
1	0	3	20	1	829.11030		290.380	.6240E-02	1.046
-1	1	2	9	0	829.11286		66.432	.1648E-02	1.026
1	0	3	19	3	829.15550	-12	264.475	.1337E-01	1.041
1	0	3	19	1	829.15942		264.469	.6683E-02	1.041
1	-1	16	28	2	829.18304		1041.445	.3486E-04	.961
1	-1	16	28	0	829.18663		1041.439	.8716E-05	.961
1	-1	9	13	3	829.19366		281.372	.2844E-03	.983
1	-1	9	13	1	829.19550		281.367	.1422E-03	.983
-1	1	1	7	3	829.19747		38.339	.1844E-02	1.030
-1	1	1	7	1	829.19962	242*	38.334	.7377E-02	1.030
1	0	3	18	3	829.20255	-173*	239.857	.1419E-01	1.037
1	0	3	18	1	829.20623		239.851	.7096E-02	1.037
1	0	3	17	3	829.24726	2	216.532	.1492E-01	1.033
1	0	3	17	1	829.25070		216.526	.7460E-02	1.033
1	1	0	5	2	829.25836		19.458	.3926E-02	1.000
1	1	0	5	0	829.25989	30	19.453	.7852E-02	1.000
1	0	3	16	3	829.28960	-7	194.500	.1552E-01	1.029
1	0	3	16	1	829.29283		194.495	.7761E-02	1.029
1	0	3	15	3	829.32956	-55	173.762	.1599E-01	1.026
1	0	3	15	1	829.33258		173.757	.7993E-02	1.026

ΔK	ΔJ	K	J	σ	ν_i	$\sigma-c$	E_i''	S_i	W_i	ΔK	ΔJ	K	J	σ	ν_i	$\sigma-c$	E_i''	S_i	W_i	
-1	1	12	30	2	829.87479		892.374	.1028E-03	1.053	1	-1	16	27	2	830.54356		1005.249	.3610E-04	.963	
-1	1	11	28	3	829.88622		769.784	.8968E-04	1.050	1	-1	16	27	0	830.54693		1005.243	.9024E-05	.963	
-1	1	13	32	1	829.88860		1024.103	.1125E-03	1.056	1	1	1	4	3	830.68388		14.993	.2395E-02	.993	
-1	1	11	28	1	829.90330		769.779	.3587E-03	1.050	1	1	1	4	1	830.68562	-26	14.987	.9580E-02	.993	
-1	1	10	26	2	829.91211	9	656.342	.5979E-03	1.047	1	-1	10	14	2	830.69572		337.813	.2008E-03	.982	
1	-1	13	21	3	829.91997		640.008	.3540E-04	.972	1	-1	10	14	0	830.69771		337.808	.5020E-04	.982	
1	-1	13	21	1	829.92236		640.003	.1416E-03	.972	1	-1	17	29	3	830.76473		1145.278	.5074E-05	.960	
-1	1	12	30	0	829.92543	10	892.369	.2054E-03	1.052	1	-1	17	29	1	830.76772	38	1145.272	.2029E-04	.960	
-1	1	9	24	3	829.94021		552.067	.2054E-03	1.044	1	1	2	2	2	830.80199		11.965	.1166E-01	1.000	
-1	1	10	26	0	829.94207		656.337	.1495E-03	1.047	1	1	2	2	0	830.80358		11.960	.2915E-02	1.000	
-1	1	9	24	1	829.95162		552.062	.4759E-03	1.044	1	0	4	35	2	830.80373		847.873	.1520E-02	1.102	
-1	1	14	34	0	829.95564		1164.962	.1464E-04	1.055	1	0	4	35	0	830.81649		847.867	.3801E-03	1.102	
-1	1	8	22	2	829.98095	50	456.961	.1447E-02	1.041	1	-1	11	16	3	830.87763		420.301	.4885E-04	.979	
-1	1	8	22	0	829.99874		456.956	.3622E-03	1.042	1	-1	11	16	1	830.87962		420.296	.1954E-03	.979	
-1	1	7	20	3	830.02556		371.040	.5262E-03	1.039	1	0	4	34	2	830.88699	29	802.646	.1831E-02	1.096	
-1	1	7	20	1	830.03311	-34	371.035	.2105E-02	1.039	1	0	4	34	0	830.89916		802.640	.4583E-03	1.097	
-1	1	6	18	2	830.08149	-1	294.306	.1461E-02	1.036	1	0	4	33	2	830.96821	49	758.701	.2192E-02	1.091	
-1	1	6	18	0	830.09202	25	294.300	.2925E-02	1.037	1	0	4	33	0	830.97980		758.695	.5481E-03	1.091	
1	-1	14	23	2	830.12101		752.602	.9572E-04	.969	1	-1	18	31	2	830.99472		1294.421	.5403E-05	.958	
1	-1	14	23	0	830.12398		752.597	.2393E-04	.969	1	-1	18	31	0	830.99850		1294.415	.1080E-04	.957	
-1	1	5	16	3	830.14246		226.772	.9706E-03	1.034	1	0	4	32	2	831.04738	43	716.040	.2603E-02	1.085	
-1	1	5	16	1	830.14745	-35	226.767	.3882E-02	1.034	1	0	4	32	0	831.05840		716.034	.6513E-03	1.086	
-1	1	4	14	2	830.21381	-22	168.438	.4938E-02	1.032	-1	1	13	33	3	831.06672		1066.744	.2446E-04	1.058	
-1	1	4	14	0	830.22001		168.432	.1234E-02	1.032	1	-1	12	18	2	831.06830		511.971	.8309E-04	.976	
-1	1	3	12	3	830.29100	-20	119.316	.6020E-02	1.030	1	-1	12	18	0	831.07067		511.966	.1662E-03	.976	
-1	1	3	12	1	830.29433		119.311	.3010E-02	1.030	-1	1	12	31	2	831.08429		932.445	.9079E-04	1.055	
1	-1	15	25	3	830.32786		874.356	.6060E-04	.966	-1	1	13	33	1	831.09308		1066.738	.9784E-04	1.058	
1	-1	15	25	1	830.33055		874.350	.3030E-04	.966	-1	1	11	29	3	831.10139		807.287	.8048E-04	1.052	
1	-1	8	10	2	830.35341		200.430	.9191E-04	.987	-1	1	11	29	1	831.11938		807.281	.3222E-03	1.053	
1	-1	8	10	0	830.35508		200.425	.2298E-04	.987	1	0	4	31	2	831.12444	31	674.664	.3070E-02	1.080	
-1	1	2	10	2	830.37789	32	79.405	.7070E-02	1.030	-1	1	10	27	2	831.13324		691.274	.5458E-03	1.050	
-1	1	2	10	0	830.38156		79.399	.1769E-02	1.031	-1	1	0	4	31	0	831.13491		674.658	.7682E-03	1.081
-1	1	1	8	3	830.47100		48.714	.2019E-02	1.036	-1	1	12	31	0	831.13699		932.439	.1814E-03	1.054	
-1	1	1	8	1	830.47330	-9	48.709	.8083E-02	1.037	-1	1	10	27	0	831.16489		691.268	.1364E-03	1.050	
1	-1	9	12	3	830.52018		264.523	.1679E-03	.985	-1	1	9	25	3	831.16693	-19	584.424	.8831E-03	1.047	
1	-1	9	12	1	830.52192		264.518	.8394E-04	.985	-1	1	9	25	1	831.17906		584.418	.4416E-03	1.047	
1	1	0	6	2	830.52521		27.241	.4327E-02	1.000	1	0	4	30	2	831.19939	30	634.573	.3594E-02	1.075	
1	1	0	6	0	830.52674	44	27.235	.8654E-02	1.000	1	0	4	30	0	831.20931		634.567	.8994E-03	1.076	

ΔK	ΔJ	K	J	σ	ν_i	$\sigma-c$	E_i''	S_i	W_i	ΔK	ΔJ	K	J	σ	ν_i	$\sigma-c$	E_i''	S_i	W_i
1	-1	11	15	3	832.21130		399.573	.3472E-04	.981	-1	1	5	18	3	832.63791		272.126	.9456E-03	1.040
1	-1	11	15	1	832.21317		399.567	.1389E-03	.981	-1	1	5	18	1	832.64369	-41	272.120	.3783E-02	1.040
1	0	4	10	2	832.21766	34	103.615	.1295E-01	1.008	-1	1	4	16	2	832.72040	1	208.618	.4983E-02	1.038
1	0	4	10	0	832.22006		103.610	.3237E-02	1.008	-1	1	4	16	0	832.72783		208.612	.1247E-02	1.039
1	0	4	9	2	832.24313	33	90.649	.1184E-01	1.006	-1	1	3	14	3	832.80833	-39	154.319	.6308E-02	1.038
1	0	4	9	0	832.24534		90.643	.2960E-02	1.006	-1	1	3	14	1	832.81221		154.314	.3154E-02	1.038
1	0	4	8	2	832.26608	20	78.978	.1040E-01	1.005	1	-1	14	21	2	832.81809		694.367	.8180E-04	.972
-1	1	13	34	3	832.26687		1110.661	.2106E-04	1.060	1	-1	14	21	0	832.82066	6	694.361	.2045E-04	.972
1	0	4	8	0	832.26812		78.972	.2600E-02	1.005	-1	1	2	12	2	832.90604		109.227	.7686E-02	1.040
1	0	4	7	2	832.28650	19	68.603	.8584E-02	1.004	-1	1	2	12	0	832.91049		109.222	.1923E-02	1.041
1	0	4	7	0	832.28838		68.598	.2146E-02	1.004	-1	1	1	10	3	833.00945		73.353	.2280E-02	1.052
-1	1	12	32	2	832.29058		973.800	.7946E-04	1.058	-1	1	1	10	1	833.01208	-51	73.348	.9121E-02	1.052
-1	1	13	34	1	832.29428		1110.655	.8434E-04	1.061	1	-1	15	23	3	833.03399		810.969	.5622E-04	.969
1	0	4	6	2	832.30438	29	59.525	.6323E-02	1.002	1	-1	15	23	1	833.03639		810.963	.2811E-04	.969
1	0	4	6	0	832.30613		59.520	.1581E-02	1.002	1	1	0	8	2	833.04563		46.695	.4936E-02	1.000
-1	1	11	30	3	832.31338		846.076	.7154E-04	1.055	1	1	0	8	0	833.04716	41	46.689	.9872E-02	1.000
1	0	4	5	2	832.31972	0	51.743	.3533E-02	1.001	1	1	1	6	3	833.24496		29.260	.2726E-02	.986
1	0	4	5	0	832.32135		51.738	.8832E-03	1.001	1	1	1	6	1	833.24690	-46	29.255	.1090E-01	.986
-1	1	11	30	1	832.33227		846.070	.2862E-03	1.055	1	-1	16	25	2	833.25849		936.718	.3594E-04	.967
-1	1	12	32	0	832.34525		973.794	.1588E-03	1.057	1	-1	16	25	0	833.26144		936.712	.8975E-05	.966
-1	1	10	28	2	832.35123		727.492	.4923E-03	1.052	1	-1	10	12	2	833.35125		302.824	.4661E-04	.985
1	-1	18	30	2	832.36189		1254.380	.5762E-05	.959	1	-1	10	12	0	833.35295		302.818	.1165E-04	.985
1	-1	18	30	0	832.36545		1254.374	.1152E-04	.959	1	1	2	4	2	833.37319	9	21.045	.1251E-01	.998
-1	1	10	28	0	832.38455		727.487	.1231E-03	1.052	1	1	2	4	0	833.37499		21.040	.3127E-02	.998
-1	1	9	26	3	832.39055	124	618.069	.8093E-03	1.049	1	-1	17	27	3	833.48850		1071.609	.5367E-05	.964
-1	1	9	26	1	832.40341		618.064	.4051E-03	1.050	1	-1	17	27	1	833.49119		1071.603	.2147E-04	.964
1	-1	12	17	2	832.40660		488.659	.6596E-04	.978	-1	1	12	33	2	833.49362		1016.439	.6881E-04	1.060
1	-1	12	17	0	832.40879		488.653	.1319E-03	.978	-1	1	11	31	3	833.52217		886.150	.6289E-04	1.057
-1	1	8	24	2	832.44298	-12	517.809	.1273E-02	1.047	1	0	5	35	3	833.52300		866.004	.3397E-03	1.081
-1	1	8	24	0	832.46331		517.803	.3182E-03	1.047	1	0	5	35	1	833.53104	-51	865.998	.1359E-02	1.081
-1	1	7	22	3	832.49866		426.729	.4780E-03	1.044	-1	1	11	31	1	833.54195		886.144	.2518E-03	1.058
-1	1	7	22	1	832.50732	-41	426.723	.1914E-02	1.045	1	-1	11	14	3	833.54269		380.138	.2050E-04	.982
-1	1	6	20	2	832.56601	69	344.829	.1375E-02	1.042	-1	-1	11	14	1	833.54445		380.133	.8201E-04	.982
-1	1	6	20	0	832.57835	7	344.824	.2752E-02	1.043	-1	1	12	33	0	833.55018		1016.433	.1375E-03	1.059
1	-1	19	32	3	832.60130		1410.071	.1487E-05	.956	-1	1	10	29	2	833.56605		764.998	.4399E-03	1.055
1	-1	19	32	1	832.60444		1410.065	.5949E-05	.956	-1	1	10	29	0	833.60101		764.993	.1100E-03	1.055
1	-1	13	19	3	832.60803		586.929	.2734E-04	.975	1	0	5	34	3	833.60812		820.778	.4094E-03	1.076
1	-1	13	19	1	832.61016		586.924	.1094E-03	.975	-1	1	9	27	3	833.61103	330*	653.003	.7344E-03	1.052

ΔK	ΔJ	K	J	σ	ν_i	$\sigma-c$	E_i'	S_i	W_i	ΔK	ΔJ	K	J	σ	ν_i	$\sigma-c$	E_i'	S_i	W_i
1	0	5	16	3	834.75183		226.772	.3073E-02	1.017	1	-1	12	15	2	835.07645		445.913	.2781E-04	.981
1	0	5	16	1	834.75472	-61	226.767	.1229E-01	1.017	1	-1	12	15	0	835.07831		445.908	.5561E-04	.981
-1	1	10	30	2	834.77766		803.790	.3891E-03	1.058	1	-1	18	28	2	835.09027		1178.151	.6158E-05	.963
1	0	5	15	3	834.79263		206.036	.3131E-02	1.014	1	-1	18	28	0	835.09342		1178.145	.1230E-04	.962
1	1	3	3	3	834.79527	-60	25.948	.1533E-01	1.000	-1	1	5	20	3	835.12135		322.651	.8748E-03	1.047
1	0	5	15	1	834.79534	-14	206.030	.1254E-01	1.015	-1	1	5	20	1	835.12800	-38	322.645	.3499E-02	1.047
1	1	3	3	1	834.79685		25.942	.7664E-02	1.000	-1	1	4	18	2	835.21512	-6	253.973	.4765E-02	1.046
-1	1	10	30	0	834.81423		803.785	.9728E-04	1.058	-1	1	4	18	0	835.22387	52	253.968	.1192E-02	1.047
-1	1	9	28	3	834.82835		689.225	.6596E-03	1.055	1	-1	13	17	3	835.28728		539.017	.1554E-04	.978
1	0	5	14	3	834.83093		186.593	.3149E-02	1.012	1	-1	13	17	1	835.28917		539.011	.6216E-04	.978
1	0	5	14	1	834.83348	-59	186.588	.1261E-01	1.013	-1	1	3	16	3	835.31389	88	194.500	.6233E-02	1.047
-1	1	9	28	1	834.84267		689.219	.3298E-03	1.055	-1	1	3	16	1	835.31837		194.495	.3117E-02	1.047
1	-1	17	26	3	834.84733		1036.704	.5302E-05	.965	1	-1	19	30	3	835.33840		1328.717	.1678E-05	.960
1	-1	17	26	1	834.84989		1036.699	.2121E-04	.965	1	-1	19	30	1	835.34124		1328.711	.6713E-05	.960
1	0	5	13	3	834.86673		168.446	.3118E-02	1.011	-1	1	2	14	2	835.42246	-18	144.230	.7852E-02	1.051
1	0	5	13	1	834.86912	-48	168.440	.1247E-01	1.011	-1	1	2	14	0	835.42777		144.225	.1965E-02	1.052
1	-1	11	13	3	834.87176		361.997	.8071E-05	.984	1	-1	14	19	2	835.50652		641.293	.5614E-04	.975
1	-1	11	13	1	834.87342		361.992	.3225E-04	.983	1	-1	14	19	0	835.50872		641.288	.1404E-04	.975
-1	1	8	26	2	834.89261		583.816	.1070E-02	1.053	-1	1	1	12	3	835.53599		103.176	.2414E-02	1.070
1	0	5	12	3	834.90002		151.593	.3025E-02	1.009	-1	1	1	12	1	835.53901	-58	103.171	.9658E-02	1.070
1	0	5	12	1	834.90226	-45	151.588	.1210E-01	1.009	1	1	0	10	2	835.54818		71.334	.5270E-02	1.000
-1	1	8	26	0	834.91549		583.810	.2675E-03	1.053	1	1	0	10	0	835.54971	61	71.329	.1054E-01	1.000
1	0	5	11	3	834.93078		136.035	.2866E-02	1.007	1	-1	15	21	3	835.73161		752.740	.4417E-04	.973
1	0	5	11	1	834.93289	-40	136.030	.1147E-01	1.007	1	-1	15	21	1	835.73375		752.734	.2206E-04	.972
1	0	5	10	3	834.95901		121.773	.2638E-02	1.006	1	1	1	8	3	835.79571		48.714	.2926E-02	.976
-1	1	7	24	3	834.95950		487.580	.4146E-03	1.050	1	1	1	8	1	835.79791	-41	48.709	.1170E-01	.976
1	0	5	10	1	834.96100	-51	121.768	.1055E-01	1.006	-1	1	11	33	3	835.92998		970.152	.4732E-04	1.063
-1	1	7	24	1	834.96931		487.575	.1660E-02	1.051	1	1	2	6	2	835.93390	36	35.312	.1340E-01	.995
1	0	5	9	3	834.98470		108.807	.2328E-02	1.005	1	1	2	6	0	835.93601		35.307	.3350E-02	.995
1	0	5	9	1	834.98657	-41	108.802	.9313E-02	1.005	-1	1	11	33	1	835.95150		970.146	.1893E-03	1.063
1	0	5	8	3	835.00784		97.137	.1926E-02	1.003	1	-1	16	23	2	835.96508		873.339	.3126E-04	.970
1	0	5	8	1	835.00961	-38	97.131	.7702E-02	1.003	1	-1	16	23	0	835.96765		873.334	.7814E-05	.970
1	0	5	7	3	835.02843		86.762	.1421E-02	1.002	-1	1	10	31	2	835.98604		843.868	.3406E-03	1.060
1	0	5	7	1	835.03011	-32	86.757	.5684E-02	1.002	-1	1	10	31	0	836.02417		843.862	.8516E-04	1.060
-1	1	6	22	2	835.03841	32	400.520	.1231E-02	1.048	-1	1	9	29	3	836.04246		726.733	.5865E-03	1.058
1	0	5	6	3	835.04646		77.684	.7914E-03	1.001	-1	1	9	29	1	836.05750		726.728	.2933E-03	1.058
1	0	5	6	1	835.04806	155	77.679	.3166E-02	1.001	1	1	3	4	3	836.07943	-25	31.136	.1538E-01	.999
-1	1	6	22	0	835.05264	-303*	400.514	.2464E-02	1.049	1	1	3	4	1	836.08108		31.131	.7691E-02	.999

ΔK	ΔJ	K	J	σ	ν_i	$\sigma-c$	E''_i	S_i	W_i	ΔK	ΔJ	K	J	σ	ν_i	$\sigma-c$	E''_i	S_i	W_i
-1	1	8	27	2	836.11269	-33	618.752	.9658E-03	1.056	1	1	0	11	2	836.79270		85.598	.5335E-02	1.000
-1	1	8	27	0	836.13684		618.746	.2415E-03	1.056	1	1	0	11	0	836.79423	139	85.592	.1067E-01	1.000
-1	1	7	25	3	836.18524		519.941	.3799E-03	1.053	-1	1	1	13	3	836.79464		120.030	.2434E-02	1.079
-1	1	7	25	1	836.19562	-195*	519.935	.1521E-02	1.054	-1	1	1	13	1	836.79786	-326*	120.025	.9744E-02	1.080
1	-1	17	25	3	836.20409		1003.087	.5074E-05	.967	1	0	6	28	2	836.82520		598.557	.1897E-02	1.043
1	-1	17	25	1	836.20651		1003.082	.2030E-04	.967	1	0	6	28	0	836.83275	34	598.551	.3795E-02	1.043
1	0	6	35	2	836.26781		888.158	.5983E-03	1.067	1	-1	14	18	2	836.84741		616.694	.4024E-04	.977
-1	1	6	23	2	836.26998	86	430.302	.1146E-02	1.052	1	-1	14	18	0	836.84944		616.688	.1006E-04	.977
1	0	6	35	0	836.27860		888.152	.1197E-02	1.067	1	0	6	27	2	836.89560		562.329	.2170E-02	1.040
-1	1	6	23	0	836.28516	-28	430.297	.2292E-02	1.052	1	0	6	27	0	836.90273	53	562.323	.4340E-02	1.040
1	0	6	34	2	836.35423		842.934	.7212E-03	1.063	1	0	6	26	2	836.96363		527.389	.2462E-02	1.037
-1	1	5	21	3	836.35849		349.852	.8264E-03	1.050	1	0	6	26	0	836.97036	55	527.383	.4924E-02	1.037
1	0	6	34	0	836.36452		842.928	.1444E-02	1.064	1	0	6	25	2	837.02929		493.737	.2770E-02	1.034
-1	1	5	21	1	836.36557	-63	349.846	.3309E-02	1.051	1	0	6	25	0	837.03562	74	493.732	.5539E-02	1.034
1	-1	12	14	2	836.40794		426.480	.1095E-04	.982	1	1	1	9	3	837.06722		60.386	.2972E-02	.970
1	-1	12	14	0	836.40965		426.475	.2189E-04	.982	1	1	1	9	1	837.06958	-127	60.381	.1189E-01	.970
1	0	6	33	2	836.43842		798.993	.8638E-03	1.060	1	-1	15	20	3	837.07716		725.561	.3540E-04	.974
1	0	6	33	0	836.44823	85	798.987	.1728E-02	1.060	1	-1	15	20	1	837.07918		725.555	.1770E-04	.974
1	-1	18	27	2	836.45143		1141.964	.6114E-05	.964	1	0	6	24	2	837.09255		461.375	.3090E-02	1.031
1	-1	18	27	0	836.45438		1141.959	.1223E-04	.964	1	0	6	24	0	837.09850	196*	461.369	.6179E-02	1.031
-1	1	4	19	2	836.45794	8	278.590	.4575E-02	1.050	-1	1	11	34	3	837.12894		1014.078	.4048E-04	1.066
-1	1	4	19	0	836.46737	61	278.585	.1145E-02	1.051	-1	1	11	34	1	837.15131		1014.072	.1619E-03	1.066
1	0	6	32	2	836.52035		756.336	.1026E-02	1.056	1	0	6	23	2	837.15340		430.302	.3420E-02	1.029
1	0	6	32	0	836.52969	49	756.330	.2052E-02	1.056	1	0	6	23	0	837.15899	59	430.297	.6839E-02	1.029
-1	1	3	17	3	836.56214	57	216.532	.6076E-02	1.051	-1	1	10	32	2	837.19114		885.230	.2957E-03	1.063
-1	1	3	17	1	836.56694		216.526	.3041E-02	1.052	1	1	2	7	2	837.21030	66	44.391	.1371E-01	.993
1	0	6	31	2	836.60002		714.963	.1211E-02	1.053	1	0	6	22	2	837.21183		400.520	.3747E-02	1.026
1	0	6	31	0	836.60889	68	714.957	.2421E-02	1.053	1	1	2	7	0	837.21259		44.385	.3426E-02	.993
1	-1	13	16	3	836.62352		517.000	.9227E-05	.980	1	0	6	22	0	837.21706	94	400.514	.7494E-02	1.026
1	-1	13	16	1	836.62530		516.994	.3687E-04	.979	1	0	6	22	0	837.23080		885.224	.7392E-04	1.063
-1	1	2	15	2	836.67616	93	163.674	.7782E-02	1.057	-1	1	10	32	0	837.25333		765.529	.5166E-03	1.061
1	0	6	30	2	836.67740		674.875	.1416E-02	1.049	1	0	6	21	2	837.26782		372.029	.4071E-02	1.024
-1	1	2	15	0	836.68193		163.669	.1947E-02	1.058	-1	1	9	30	1	837.26910		765.523	.2583E-03	1.061
1	0	6	30	0	836.68582	91	674.869	.2832E-02	1.049	1	0	6	21	0	837.27271	-149	372.023	.8143E-02	1.024
1	-1	19	29	3	836.70397		1289.966	.1722E-05	.961	1	-1	16	22	2	837.31517		843.583	.2707E-04	.971
1	-1	19	29	1	836.70667		1289.960	.6886E-05	.961	1	-1	16	22	0	837.31756		843.578	.6766E-05	.971
1	0	6	29	2	836.75246		636.073	.1646E-02	1.046	1	0	6	20	2	837.32136		344.829	.4376E-02	1.021
1	0	6	29	0	836.76044	65	636.067	.3291E-02	1.046	1	0	6	20	0	837.32592	-102	344.824	.8752E-02	1.021

ΔK	ΔJ	K	J	σ	ν_i	$\sigma-c$	E_i''	S_i	W_i	ΔK	ΔJ	K	J	σ	ν_i	$\sigma-c$	E_i''	S_i	W_i
1	1	4	4	2	838.80465	20	45.258	.1803E-01	1.000	1	0	7	28	1	839.59830		624.750	.3269E-02	1.036
1	1	4	4	0	838.80627		45.253	.4508E-02	1.000	1	1	1	11	3	839.60258		87.617	.2957E-02	.956
-1	1	5	23	3	838.82338	-360*	408.128	.7156E-03	1.058	1	1	1	11	1	839.60531	-49	87.612	.1183E-01	.956
-1	1	5	23	1	838.83137	-45	408.122	.2862E-02	1.058	1	0	10	34	0	839.63399		971.801	.5422E-04	1.069
1	-1	17	23	3	838.91125		939.717	.4053E-05	.970	1	0	7	27	3	839.66441		588.529	.9333E-03	1.033
1	-1	17	23	1	838.91341		939.711	.1621E-04	.970	1	1	9	32	3	839.66523		846.975	.3899E-03	1.067
-1	1	4	21	2	838.93427	-21	331.702	.4080E-02	1.058	1	0	7	27	1	839.66927	-114	588.523	.3737E-02	1.034
-1	1	4	21	0	838.94512	8	331.697	.1021E-02	1.059	1	1	9	32	1	839.68243		846.969	.1950E-03	1.067
1	0	7	35	3	839.02853		914.341	.2588E-03	1.057	1	0	7	26	3	839.73322		553.591	.1058E-02	1.031
1	0	7	35	1	839.03559		914.335	.1035E-02	1.057	1	0	7	26	1	839.73782	-72	553.585	.4232E-02	1.031
-1	1	3	19	3	839.04939	157	264.475	.5589E-02	1.061	1	1	8	30	2	839.75358		731.285	.6705E-03	1.065
-1	1	3	19	1	839.05485		264.469	.2797E-02	1.062	1	1	2	9	2	839.75511	-3	66.437	.1394E-01	.988
1	0	7	34	3	839.11617		869.120	.3120E-03	1.054	1	1	2	9	0	839.75784		66.432	.3485E-02	.988
1	0	7	34	1	839.12293	-50	869.114	.1248E-02	1.054	1	-1	15	18	3	839.76157		675.076	.1519E-04	.977
1	-1	18	25	2	839.16751		1073.452	.5419E-05	.967	1	-1	15	18	1	839.76337		675.071	.7597E-05	.977
1	-1	18	25	0	839.17009		1073.447	.1084E-04	.967	1	1	8	30	0	839.78147		731.279	.1678E-03	1.066
-1	1	2	17	2	839.17427	-29	206.444	.7387E-02	1.070	1	0	7	25	3	839.79960		519.941	.1188E-02	1.028
-1	1	2	17	0	839.18100	126	206.439	.1849E-02	1.071	1	0	7	25	1	839.80396	5	519.935	.4758E-02	1.029
1	0	7	33	3	839.20151		825.181	.3730E-03	1.050	1	1	7	28	3	839.84328		624.755	.2758E-03	1.063
1	0	7	33	1	839.20799	-78	825.175	.1494E-02	1.051	1	1	7	28	1	839.85542		624.750	.1104E-02	1.064
1	1	0	13	2	839.26812		118.011	.5273E-02	1.000	1	0	7	24	3	839.86354		487.580	.1324E-02	1.026
1	1	0	13	0	839.26966	49	118.006	.1055E-01	1.000	1	0	7	24	1	839.86768	121	487.575	.5296E-02	1.026
1	0	7	32	3	839.28455		782.526	.4431E-03	1.047	1	1	3	7	3	839.91595	-31	54.481	.1578E-01	.997
1	0	7	32	1	839.29073	-124	782.520	.1774E-02	1.048	1	1	3	7	1	839.91787		54.476	.7888E-02	.997
-1	1	1	15	3	839.30232		157.624	.2393E-02	1.101	1	0	7	23	3	839.92503		456.509	.1462E-02	1.024
-1	1	1	15	1	839.30598	-58	157.618	.9582E-02	1.102	1	0	7	23	1	839.92894	-17	456.504	.5847E-02	1.024
1	0	7	31	3	839.36525		741.155	.5223E-03	1.044	1	0	7	23	1	839.94571		527.389	.8691E-03	1.062
1	0	7	31	1	839.37115	0	741.149	.2091E-02	1.045	1	1	6	26	2	839.96380	20	527.383	.1740E-02	1.063
1	-1	19	27	3	839.42901		1216.319	.1662E-05	.965	1	0	7	22	3	839.98405		426.729	.1599E-02	1.022
1	-1	19	27	1	839.43144		1216.313	.6640E-05	.964	1	0	7	22	1	839.98775	-68	426.723	.6395E-02	1.022
1	0	7	30	3	839.44360		701.069	.6115E-03	1.042	1	-1	16	20	2	840.00880		787.942	.1573E-04	.974
1	0	7	30	1	839.44923	-246*	701.063	.2446E-02	1.042	1	-1	16	20	0	840.01085		787.936	.3932E-05	.974
1	0	7	29	3	839.51959		662.269	.7098E-03	1.039	1	0	7	21	3	840.04060		398.239	.1731E-02	1.020
1	-1	14	16	2	839.52240		571.371	.9474E-05	.980	1	0	7	21	1	840.04409	-65	398.233	.6926E-02	1.020
1	-1	14	16	0	839.52412		571.366	.2368E-05	.980	1	1	5	24	3	840.05106		439.202	.6560E-03	1.062
1	0	7	29	1	839.52495	-117	662.263	.2839E-02	1.039	1	1	5	24	1	840.05952	-39	439.196	.2624E-02	1.062
-1	1	10	34	2	839.59139		971.806	.2169E-03	1.069	1	1	4	5	2	840.08603	21	51.743	.1781E-01	.999
1	0	7	28	3	839.59320		624.755	.8172E-03	1.036	1	1	4	5	0	840.08777		51.738	.4451E-02	.999

ΔK	ΔJ	K	J	σ	ν_i	$o-c$	E''_i	S_i	W_i	ΔK	ΔJ	K	J	σ	ν_i	$o-c$	E''_i	S_i	W_i
1	0	7	20	3	840.09466		371.040	.1856E-02	1.018	-1	1	1	16	1	840.55309	-51	178.357	.9354E-02	1.114
1	0	7	20	1	840.09795	-46	371.035	.7423E-02	1.018	1	1	0	14	2	840.63861		136.161	.5157E-02	1.000
1	0	7	19	3	840.14621		345.134	.1967E-02	1.016	1	-1	19	26	3	840.78841		1181.424	.1539E-05	.966
1	0	7	19	1	840.14932	-71	345.129	.7867E-02	1.016	1	-1	19	26	1	840.79071		1181.419	.6157E-05	.966
-1	1	4	22	2	840.16770	-1	360.196	.3797E-02	1.063	-1	1	9	33	3	840.86619		889.625	.3343E-03	1.070
-1	1	4	22	0	840.17928	-11	360.190	.9502E-03	1.064	1	1	1	12	3	840.86646		103.176	.2899E-02	.948
1	0	7	18	3	840.19526		320.520	.2059E-02	1.014	1	1	1	12	1	840.86940	-65	103.171	.1160E-01	.948
1	0	7	18	1	840.19819	-62	320.514	.8237E-02	1.014	-1	1	9	33	1	840.88408		889.619	.1673E-03	1.071
1	0	7	17	3	840.24179		297.199	.2128E-02	1.012	-1	1	8	31	2	840.96064		771.368	.5830E-03	1.068
1	0	7	17	1	840.24454	-50	297.193	.8513E-02	1.012	-1	1	8	31	0	840.98974		771.363	.1459E-03	1.069
1	-1	17	22	3	840.26160		909.965	.3279E-05	.972	1	1	2	10	2	841.02352	36	79.405	.1386E-01	.985
1	-1	17	22	1	840.26364		909.959	.1310E-04	.971	1	1	2	10	0	841.02650		79.399	.3465E-02	.985
1	0	7	16	3	840.28578		275.171	.2170E-02	1.011	-1	1	7	29	3	841.05611		662.269	.2434E-03	1.067
-1	1	3	20	3	840.28829	-21	290.385	.5276E-02	1.066	-1	1	7	29	1	841.06884		662.263	.9737E-03	1.067
1	0	7	16	1	840.28837	-30	275.165	.8678E-02	1.011	1	-1	15	17	3	841.10039		651.771	.6025E-05	.978
-1	1	3	20	1	840.29410		290.380	.2640E-02	1.067	1	-1	15	17	1	841.10208		651.766	.3013E-05	.978
1	0	7	15	3	840.32724		254.436	.2173E-02	1.009	-1	1	6	27	2	841.16450		562.329	.7780E-03	1.066
1	0	7	15	1	840.32968	-52	254.431	.8691E-02	1.009	-1	1	6	27	0	841.18356		562.323	.1558E-02	1.067
1	0	7	14	3	840.36614		234.996	.2135E-02	1.008	1	1	3	8	3	841.18942	-18	64.856	.1575E-01	.995
1	0	7	14	1	840.36844	-53	234.991	.8541E-02	1.008	1	1	3	8	1	841.19145		64.851	.7875E-02	.995
1	0	7	13	3	840.40249		216.850	.2048E-02	1.007	-1	1	5	25	3	841.27551		471.566	.5956E-03	1.066
1	0	7	13	1	840.40465	-43	216.845	.8194E-02	1.007	-1	1	5	25	1	841.28444	-53	471.560	.2385E-02	1.067
-1	1	2	18	2	840.41858	-17	229.770	.7084E-02	1.077	1	-1	16	19	2	841.35228		762.057	.9428E-05	.976
-1	1	2	18	0	840.42581		229.764	.1773E-02	1.078	1	-1	16	19	0	841.35417		762.051	.2357E-05	.976
1	0	7	12	3	840.43628		199.999	.1903E-02	1.005	1	1	4	6	2	841.36473	31	59.525	.1766E-01	.999
1	0	7	12	1	840.43831	-31	199.994	.7611E-02	1.005	1	1	4	6	0	841.36660		59.520	.4415E-02	.999
1	0	7	11	3	840.46749		184.443	.1695E-02	1.004	-1	1	4	23	2	841.39793	37	389.980	.3500E-02	1.068
1	0	7	11	1	840.46940	-35	184.438	.6778E-02	1.004	-1	1	4	23	0	841.41023	-85	389.975	.8758E-03	1.069
1	0	7	10	3	840.49613		170.182	.1413E-02	1.003	-1	1	4	23	3	841.52398	-10	317.588	.4936E-02	1.072
1	0	7	10	1	840.49793	128	170.177	.5651E-02	1.003	-1	1	3	21	1	841.53015	96	317.582	.2470E-02	1.073
1	1	0	14	0	840.50052	-132	136.155	.1031E-01	1.000	1	-1	17	21	3	841.60975		881.503	.2375E-05	.973
1	0	7	9	3	840.52218		157.217	.1047E-02	1.002	1	-1	17	21	1	841.61167		881.497	.9499E-05	.973
1	-1	18	24	2	840.52238		1041.127	.4740E-05	.969	-1	1	2	19	2	841.65964	-11	254.388	.6725E-02	1.084
1	0	7	9	1	840.52388	-71	157.212	.4187E-02	1.002	-1	1	2	19	0	841.66739	83	254.383	.1683E-02	1.085
1	-1	18	24	0	840.52478		1041.122	.9480E-05	.969	1	1	0	15	2	841.72524		155.605	.4991E-02	1.000
1	0	7	8	3	840.54564		145.548	.5826E-03	1.001	1	1	0	15	0	841.72679	22	155.599	.9982E-02	1.000
1	0	7	8	1	840.54726		145.542	.2330E-02	1.001	-1	1	1	17	3	841.79670		200.394	.2257E-02	1.125
-1	1	1	16	3	840.55121		178.362	.2336E-02	1.113	-1	1	1	17	1	841.80080	-55	200.389	.9045E-02	1.127

ΔK	ΔJ	K	J	σ	ν_i	$\sigma-c$	E''_i	S_i	W_i	ΔK	ΔJ	K	J	σ	ν_i	$\sigma-c$	E''_i	S_i	W_i
1	0	8	16	2	843.07991	25	305.413	.6946E-02	1.009	-1	1	3	23	3	843.98554	191*	375.868	.4199E-02	1.084
1	0	8	16	0	843.08284		305.407	.1737E-02	1.009	-1	1	3	23	1	843.99243		375.862	.2100E-02	1.084
1	0	8	15	2	843.12163	42	284.679	.6866E-02	1.008	1	1	5	6	3	844.10633		77.684	.4799E-02	1.000
1	0	8	15	0	843.12434		284.674	.1717E-02	1.008	1	1	5	6	1	844.10800	-36	77.679	.1919E-01	1.000
1	0	8	14	2	843.16079	29	265.240	.6617E-02	1.006	-1	1	2	21	2	844.13182	-9	307.503	.5899E-02	1.100
1	0	8	14	0	843.16329		265.235	.1654E-02	1.006	-1	1	2	21	0	844.14062	0	307.497	.1476E-02	1.101
1	0	8	13	2	843.19737	21	247.096	.6184E-02	1.005	1	1	0	17	2	844.16389	23	198.375	.4543E-02	1.000
1	0	8	13	0	843.19968		247.090	.1546E-02	1.005	1	1	0	17	0	844.16545	23	198.370	.9086E-02	1.000
1	-1	18	22	2	843.22562		980.343	.2801E-05	.972	-1	1	1	19	3	844.27710		248.339	.2051E-02	1.152
1	-1	18	22	0	843.22769		980.338	.5603E-05	.972	-1	1	1	19	1	844.28167	-44	248.334	.8213E-02	1.153
1	0	8	12	2	843.23136	21	230.245	.5533E-02	1.004	1	-1	17	19	3	844.29934		828.449	.5705E-06	.976
1	0	8	12	0	843.23349		230.240	.1383E-02	1.004	1	-1	17	19	1	844.30105		828.444	.2282E-05	.976
1	0	8	11	2	843.26276	22	214.690	.4631E-02	1.003	-1	1	8	34	2	844.56159		899.325	.3647E-03	1.079
1	0	8	11	0	843.26472		214.685	.1158E-02	1.003	1	-1	18	21	2	844.57394		951.885	.1691E-05	.973
1	0	8	10	2	843.29157	19	200.430	.3441E-02	1.002	1	-1	18	21	0	844.57585		951.880	.3382E-05	.973
1	0	8	10	0	843.29338		200.425	.8603E-03	1.002	-1	1	8	34	0	844.59421		899.320	.9128E-04	1.080
1	0	8	9	2	843.31777	10	187.466	.1918E-02	1.001	1	0	9	35	3	844.60969		978.773	.7302E-03	1.043
1	0	8	9	0	843.31944		187.461	.4795E-03	1.001	1	0	9	35	1	844.61596		978.767	.3651E-03	1.043
-1	1	8	33	2	843.36468		855.389	.4299E-03	1.075	1	1	1	15	3	844.64315		157.624	.2570E-02	.921
1	1	1	14	3	843.38672		138.180	.2701E-02	.930	1	1	1	15	1	844.64683	-51	157.618	.1027E-01	.920
1	1	1	14	1	843.39013	-77	138.174	.1080E-01	.930	-1	1	7	32	3	844.67457		782.526	.1587E-03	1.078
-1	1	8	33	0	843.39615		855.384	.1076E-03	1.076	-1	1	7	32	1	844.68905		782.520	.6356E-03	1.079
-1	1	7	31	3	843.47180		741.155	.1846E-03	1.074	1	0	9	34	3	844.69924		933.558	.8796E-03	1.041
-1	1	7	31	1	843.48570		741.149	.7389E-03	1.075	1	0	9	34	1	844.70526		933.552	.4398E-03	1.041
1	-1	19	24	3	843.50084		1115.497	.1103E-05	.969	1	0	9	33	3	844.78640		889.625	.1051E-02	1.038
1	-1	19	24	1	843.50289		1115.491	.4412E-05	.969	1	0	9	33	1	844.79216		889.619	.5253E-03	1.038
1	1	2	12	2	843.55231	31	109.227	.1332E-01	.978	-1	1	6	30	2	844.80097	35	674.875	.5294E-03	1.078
1	1	2	12	0	843.55587		109.222	.3331E-02	.978	1	1	2	13	2	844.81269		126.081	.1288E-01	.974
-1	1	6	29	2	843.59217		636.073	.6071E-03	1.074	1	1	2	13	0	844.81657		126.076	.3221E-02	.974
-1	1	6	29	0	843.61317	-78	636.067	.1215E-02	1.075	-1	1	6	30	0	844.82293		674.869	.1060E-02	1.079
-1	1	5	27	3	843.71457		540.161	.4783E-03	1.075	1	-1	19	23	3	844.85380		1084.465	.8059E-06	.970
-1	1	5	27	1	843.72445	423*	540.155	.1913E-02	1.075	1	-1	19	23	1	844.85574		1084.459	.3223E-05	.970
1	1	3	10	3	843.72822	-29	89.495	.1539E-01	.992	1	0	9	32	3	844.87116	177	846.975	.1246E-02	1.036
1	1	3	10	1	843.73052		89.489	.7694E-02	.992	1	0	9	32	1	844.87667		846.969	.6232E-03	1.036
-1	1	4	25	2	843.84857	25	453.420	.2889E-02	1.077	-1	1	5	28	3	844.92909		576.390	.4228E-03	1.079
-1	1	4	25	0	843.86236	8	453.415	.7230E-03	1.078	-1	1	5	28	1	844.93945	-50	576.385	.1693E-02	1.080
1	1	4	8	2	843.91400	40	78.978	.1727E-01	.998	1	0	9	31	3	844.95350	246*	805.609	.1466E-02	1.033
1	1	4	8	0	843.91619		78.972	.4312E-02	.997	1	0	9	31	1	844.95876		805.603	.7335E-03	1.034

ΔK	ΔJ	K	J	σ	ν_i	$\sigma-c$	E_i''	S_i	W_i	ΔK	ΔJ	K	J	σ	ν_i	$\sigma-c$	E_i''	S_i	W_i
1	1	3	11	3	844.99352	2	103.758	.1503E-01	.990	1	0	9	19	3	845.74832	-12	409.640	.5155E-02	1.011
1	1	3	11	1	844.99598		103.752	.7516E-02	.990	1	0	9	19	1	845.75110		409.634	.2577E-02	1.011
1	0	9	30	3	845.03341		765.529	.1711E-02	1.031	1	0	9	18	3	845.79812	-8	385.029	.5319E-02	1.010
1	0	9	30	1	845.03842		765.523	.8557E-03	1.031	1	0	9	18	1	845.80074		385.023	.2659E-02	1.010
-1	1	4	26	2	845.06889	19	487.075	.2594E-02	1.083	1	0	9	17	3	845.84534	32	361.710	.5395E-02	1.009
-1	1	4	26	0	845.08343		487.069	.6491E-03	1.084	1	0	9	17	1	845.84781		361.705	.2698E-02	1.009
1	0	9	29	3	845.11087	8	726.733	.1982E-02	1.029	-1	1	7	33	3	845.87391		825.181	.1354E-03	1.082
1	0	9	29	1	845.11565		726.728	.9911E-03	1.029	-1	1	7	33	1	845.88897		825.175	.5416E-03	1.082
1	1	4	9	2	845.18453	63	90.649	.1695E-01	.997	1	0	9	16	3	845.88999	-64	339.685	.5358E-02	1.007
1	0	9	28	3	845.18587	-72	689.225	.2277E-02	1.027	1	0	9	16	1	845.89231		339.680	.2679E-02	1.007
1	1	4	9	0	845.18692		90.643	.4233E-02	.996	1	1	1	16	3	845.89716		178.362	.2418E-02	.910
1	0	9	28	1	845.19042		689.219	.1138E-02	1.027	1	1	1	16	1	845.90112	-25	178.357	.9662E-02	.909
-1	1	3	24	3	845.21131	32	406.944	.3821E-02	1.090	1	-1	18	20	2	845.92001		924.717	.6776E-06	.974
-1	1	3	24	1	845.21857	257*	406.938	.1912E-02	1.091	1	-1	18	20	0	845.92177		924.711	.1355E-05	.974
1	0	9	27	3	845.25840	139	653.003	.2593E-02	1.025	1	0	9	15	3	845.93204	-25	318.954	.5197E-02	1.006
1	0	9	27	1	845.26272		652.998	.1296E-02	1.025	1	0	9	15	1	845.93424		318.948	.2598E-02	1.006
1	0	9	26	3	845.32845	141	618.069	.2927E-02	1.023	1	0	9	14	3	845.97151	-2	299.516	.4882E-02	1.005
1	0	9	26	1	845.33255		618.064	.1464E-02	1.023	1	0	9	14	1	845.97357		299.510	.2441E-02	1.005
-1	1	2	22	2	845.36282	-11	335.997	.5449E-02	1.108	-1	1	6	31	2	846.00637		714.963	.4577E-03	1.082
-1	1	2	22	0	845.37214		335.992	.1364E-02	1.109	1	0	9	13	3	846.00837	-23	281.372	.4389E-02	1.004
1	1	0	18	2	845.37624		221.701	.4275E-02	1.000	1	0	9	13	1	846.01031		281.367	.2194E-02	1.004
1	1	0	18	0	845.37781	-73	221.696	.8549E-02	1.000	-1	1	6	31	0	846.02927	-5	714.957	.9163E-03	1.083
1	1	5	7	3	845.38211		86.762	.4690E-02	.999	1	0	9	12	3	846.04262	-26	264.523	.3689E-02	1.003
1	1	5	7	1	845.38387	-44	86.757	.1876E-01	.999	1	0	9	12	1	846.04445		264.518	.1844E-02	1.003
1	0	9	25	3	845.39600	84	584.424	.3274E-02	1.021	1	1	2	14	2	846.07039	142	144.230	.1235E-01	.970
1	0	9	25	1	845.39990		584.418	.1637E-02	1.021	1	0	9	11	3	846.07426	-303*	248.969	.2750E-02	1.002
1	0	9	24	3	845.46104	-18	552.067	.3628E-02	1.019	1	1	2	14	0	846.07462		144.225	.3084E-02	.969
1	0	9	24	1	845.46474		552.062	.1814E-02	1.019	1	0	9	11	1	846.07599		248.964	.1375E-02	1.002
-1	1	1	20	3	845.51186		274.250	.1929E-02	1.166	1	0	9	10	3	846.10328	-51	234.710	.1537E-02	1.001
-1	1	1	20	1	845.51666	-59	274.245	.7730E-02	1.168	1	0	9	10	1	846.10492		234.705	.7684E-03	1.001
1	0	9	23	3	845.52357	1	521.000	.3980E-02	1.017	-1	1	5	29	3	846.14022		613.908	.3709E-03	1.084
1	0	9	23	1	845.52707		520.995	.1992E-02	1.018	-1	1	5	29	1	846.15105	-96	613.902	.1484E-02	1.084
1	0	9	22	3	845.58357	-30	491.224	.4324E-02	1.016	1	-1	19	22	3	846.20456		1054.722	.4890E-06	.972
1	0	9	22	1	845.58688		491.218	.2162E-02	1.016	1	-1	19	22	1	846.20639		1054.716	.1956E-05	.972
1	0	9	21	3	845.64104	-33	462.737	.4641E-02	1.014	1	1	3	12	3	846.25609	-9	119.316	.1457E-01	.988
1	0	9	21	1	845.64417		462.732	.2321E-02	1.014	1	1	3	12	1	846.25872		119.311	.7286E-02	.988
1	0	9	20	3	845.69596	-50	435.543	.4926E-02	1.013	-1	1	4	27	2	846.28583	18	522.018	.2306E-02	1.088
1	0	9	20	1	845.69891		435.537	.2463E-02	1.013	-1	1	4	27	0	846.30112	95	522.012	.5772E-03	1.089

ΔK	ΔJ	K	J	σ	ν_i	$o-c$	E_i''	S_i	W_i	ΔK	ΔJ	K	J	σ	ν_i	$o-c$	E_i''	S_i	W_i
-1	1	3	25	3	846.43368	43	439.310	.3447E-02	1.096	1	0	10	32	2	847.69254	314*	885.230	.1013E-02	1.032
-1	1	3	25	1	846.44130	-1	439.304	.1725E-02	1.097	1	0	10	32	0	847.69954		885.224	.2532E-03	1.032
1	1	4	10	2	846.45232	35	103.615	.1653E-01	.995	1	1	4	11	2	847.71734	39	117.878	.1603E-01	.994
1	1	4	10	0	846.45492		103.610	.4131E-02	.995	1	1	4	11	0	847.72017		117.873	.4006E-02	.994
1	1	0	19	2	846.58391		246.320	.3987E-02	1.000	1	0	10	31	2	847.77555	-6	843.868	.1190E-02	1.030
1	1	0	19	0	846.58548	23	246.315	.7973E-02	1.000	1	0	10	31	0	847.78220		843.862	.2975E-03	1.030
-1	1	2	23	2	846.59034	-568*	365.783	.4990E-02	1.116	1	1	0	20	2	847.78689		272.232	.3686E-02	1.000
-1	1	2	23	0	846.60020	15	365.778	.1250E-02	1.118	1	1	0	20	0	847.78846	-41	272.226	.7373E-02	1.000
1	1	5	8	3	846.65514		97.137	.4580E-02	.999	-1	1	2	24	2	847.81432	-5	396.860	.4534E-02	1.125
1	1	5	8	1	846.65701	-31	97.131	.1832E-01	.999	-1	1	2	24	0	847.82471	-77	396.855	.1135E-02	1.127
-1	1	1	21	3	846.74286		301.454	.1800E-02	1.181	1	0	10	30	2	847.85610	282*	803.790	.1386E-02	1.027
-1	1	1	21	1	846.74789	-70	301.449	.7211E-02	1.183	1	0	10	30	0	847.86241		803.785	.3468E-03	1.028
1	1	6	6	2	846.86668		99.873	.1009E-01	1.000	1	1	5	9	3	847.92541		108.807	.4453E-02	.998
1	1	6	6	0	846.86833	81	99.868	.2017E-01	1.000	1	1	5	9	1	847.92739	-68	108.802	.1781E-01	.998
-1	1	7	34	3	847.06979		869.120	.1146E-03	1.086	1	0	10	29	2	847.93417		764.998	.1604E-02	1.026
-1	1	7	34	1	847.08542		869.114	.4583E-03	1.086	1	0	10	29	0	847.94015		764.993	.4010E-03	1.026
1	1	1	17	3	847.14878		200.394	.2255E-02	.899	-1	1	1	22	3	847.97001		329.949	.1664E-02	1.196
1	1	1	17	1	847.15303	-51	200.389	.9011E-02	.898	-1	1	1	22	1	847.97527	12	329.944	.6668E-02	1.198
-1	1	6	32	2	847.20831		756.336	.3929E-03	1.087	1	0	10	28	2	848.00975	36	727.492	.1838E-02	1.024
-1	1	6	32	0	847.23215	-140	756.330	.7866E-03	1.088	1	0	10	28	0	848.01541		727.487	.4596E-03	1.024
1	1	2	15	2	847.32542	32	163.674	.1173E-01	.965	1	0	10	27	2	848.08283	25	691.274	.2089E-02	1.022
1	1	2	15	0	847.33002		163.669	.2932E-02	.965	1	0	10	27	0	848.08817		691.268	.5222E-03	1.022
-1	1	5	30	3	847.34791		652.711	.3227E-03	1.089	1	1	6	7	2	848.14228		108.951	.9758E-02	1.000
-1	1	5	30	1	847.35922	-123	652.706	.1291E-02	1.089	1	1	6	7	0	848.14406	78	108.945	.1952E-01	1.000
1	0	10	35	2	847.42882		1017.019	.5949E-03	1.038	1	0	10	26	2	848.15340	103	656.342	.2351E-02	1.020
1	0	10	35	0	847.43691		1017.013	.1487E-03	1.038	1	0	10	26	0	848.15843		656.337	.5878E-03	1.020
-1	1	4	28	2	847.49934	12	558.249	.2034E-02	1.093	1	0	10	25	2	848.22144	14	622.699	.2622E-02	1.018
-1	1	4	28	0	847.51536	-12	558.243	.5094E-03	1.095	1	0	10	25	0	848.22618		622.694	.6555E-03	1.018
1	1	3	13	3	847.51591		136.170	.1400E-01	.985	1	0	10	24	2	848.28695	15	590.345	.2897E-02	1.017
1	1	3	13	1	847.51871		136.165	.7001E-02	.985	1	0	10	24	0	848.29141		590.340	.7243E-03	1.017
1	0	10	34	2	847.51916		971.806	.7158E-03	1.036	1	0	10	23	2	848.34992	-111	559.281	.3165E-02	1.015
1	0	10	34	0	847.52688		971.801	.1790E-03	1.036	1	0	10	23	0	848.35410		559.275	.7912E-03	1.015
1	-1	19	21	3	847.55308		1026.268	.1967E-06	.973	1	1	1	18	3	848.39804		223.720	.2083E-02	.887
1	-1	19	21	1	847.55480		1026.262	.7870E-06	.973	1	1	1	18	1	848.40262	-46	223.715	.8322E-02	.886
1	0	10	33	2	847.60707	57	927.877	.8547E-03	1.034	-1	1	6	33	2	848.40677		798.993	.3343E-03	1.091
1	0	10	33	0	847.61442		927.871	.2137E-03	1.034	1	0	10	22	2	848.41034	33	529.506	.3422E-02	1.014
-1	1	3	26	3	847.65259	-79	472.965	.3086E-02	1.103	1	0	10	22	0	848.41425		529.501	.8554E-03	1.014
-1	1	3	26	1	847.66058	132	472.959	.1544E-02	1.104	-1	1	6	33	0	848.43153	1	798.987	.6692E-03	1.092

ΔK	ΔJ	K	J	σ	ν_i	$\sigma-c$	E''_i	S_i	W_i	ΔK	ΔJ	K	J	σ	ν_i	$\sigma-c$	E''_i	S_i	W_i
1	0	10	21	2	848.46819	36	501.023	.3651E-02	1.012	1	1	5	10	3	849.19291		121.773	.4310E-02	.997
1	0	10	21	0	848.47184		501.017	.9127E-03	1.012	-1	1	1	23	3	849.19323		359.736	.1527E-02	1.212
1	0	10	20	2	848.52348	47	473.830	.3847E-02	1.011	1	1	5	10	1	849.19500	29	121.768	.1724E-01	.997
1	0	10	20	0	848.52688		473.824	.9617E-03	1.011	-1	1	1	23	1	849.19871	-342*	359.730	.6118E-02	1.214
-1	1	5	31	3	848.55213		692.801	.2782E-03	1.093	1	1	6	8	2	849.41512		119.325	.9430E-02	.999
-1	1	5	31	1	848.56390	-33	692.795	.1114E-02	1.094	1	1	6	8	0	849.41704	82	119.319	.1886E-01	.999
1	0	10	19	2	848.57618	131	447.929	.3993E-02	1.010	-1	1	6	34	2	849.60169		842.934	.2824E-03	1.096
1	1	2	16	2	848.57778	-28	184.412	.1105E-01	.960	-1	1	6	34	0	849.62736		842.928	.5653E-03	1.097
1	0	10	19	0	848.57935		447.923	.9983E-03	1.010	1	1	1	19	3	849.64499		248.339	.1907E-02	.875
1	1	2	16	0	848.58277		184.407	.2759E-02	.959	1	1	1	19	1	849.64991	-39	248.334	.7620E-02	.874
1	0	10	18	2	848.62630	35	423.320	.4070E-02	1.008	-1	1	5	32	3	849.75282		734.176	.2382E-03	1.098
1	0	10	18	0	848.62925		423.314	.1018E-02	1.008	-1	1	5	32	1	849.76507	-63	734.170	.9537E-03	1.099
1	0	10	17	2	848.67383	30	400.003	.4070E-02	1.007	1	1	2	17	2	849.82748	17	206.444	.1032E-01	.955
1	0	10	17	0	848.67656		399.998	.1017E-02	1.007	1	1	2	17	0	849.83289		206.439	.2577E-02	.954
-1	1	4	29	2	848.70936	-14	595.767	.1780E-02	1.099	-1	1	4	30	2	849.91585	-125	634.573	.1546E-02	1.105
1	0	10	16	2	848.71875	48	377.980	.3969E-02	1.006	-1	1	4	30	0	849.93336		634.567	.3868E-03	1.106
1	0	10	16	0	848.72128		377.974	.9921E-03	1.006	1	1	3	15	3	850.02726	-3	173.762	.1264E-01	.980
-1	1	4	29	0	848.72613		595.762	.4455E-03	1.100	1	1	3	15	1	850.03047		173.757	.6322E-02	.980
1	0	10	15	2	848.76107	56	357.250	.3748E-02	1.005	-1	1	3	28	3	850.07981	35	544.141	.2412E-02	1.117
1	0	10	15	0	848.76340		357.244	.9369E-03	1.005	-1	1	3	28	1	850.08855	20	544.135	.1207E-02	1.118
1	1	3	14	3	848.77297	-1	154.319	.1336E-01	.983	1	1	0	22	2	850.17865		327.931	.3074E-02	1.000
1	1	3	14	1	848.77597		154.314	.6682E-02	.983	1	1	0	22	0	850.18024	9	327.925	.6149E-02	1.000
1	0	10	14	2	848.80077	26	337.813	.3385E-02	1.004	1	1	4	13	2	850.23905	41	150.290	.1475E-01	.991
1	0	10	14	0	848.80293		337.808	.8463E-03	1.004	1	1	4	13	0	850.24239		150.284	.3688E-02	.991
1	0	10	13	2	848.83785	9	319.671	.2858E-02	1.003	-1	1	2	26	2	850.25141	10	462.883	.3653E-02	1.144
1	0	10	13	0	848.83984		319.666	.7144E-03	1.003	1	0	11	35	3	850.26235		1059.286	.1187E-03	1.034
-1	1	3	27	3	848.86798	348*	507.909	.2739E-02	1.110	-1	1	2	26	0	850.26286	-215*	462.877	.9149E-03	1.146
1	0	10	12	2	848.87231	-84	302.824	.2139E-02	1.002	1	0	11	35	1	850.26796		1059.280	.4747E-03	1.034
1	0	10	12	0	848.87414		302.818	.5347E-03	1.002	1	0	11	34	3	850.35354		1014.078	.1426E-03	1.032
-1	1	3	27	1	848.87635		507.903	.1371E-02	1.111	1	0	11	34	1	850.35892		1014.072	.5705E-03	1.032
1	0	10	11	2	848.90414	31	287.271	.1199E-02	1.001	-1	1	1	24	3	850.41242		390.813	.1389E-02	1.228
1	0	10	11	0	848.90582		287.265	.2997E-03	1.001	-1	1	1	24	1	850.41812	-125	390.807	.5567E-02	1.230
1	1	4	12	2	848.97959	275*	133.436	.1544E-01	.993	1	0	11	33	3	850.44228		970.152	.1701E-03	1.030
1	1	4	12	0	848.98267		133.431	.3855E-02	.992	1	0	11	33	1	850.44743		970.146	.6802E-03	1.030
1	1	0	21	2	848.98514		299.435	.3380E-02	1.000	1	1	5	11	3	850.45760		136.035	.4149E-02	.996
1	1	0	21	0	848.98672	-333*	299.430	.6761E-02	1.000	1	1	5	11	1	850.45983	-45	136.030	.1659E-01	.996
-1	1	2	25	2	849.03470	-19	429.227	.4085E-02	1.134	1	0	11	32	3	850.52853		927.509	.2012E-03	1.028
-1	1	2	25	0	849.04562	26	429.221	.1023E-02	1.136	1	0	11	32	1	850.53346		927.503	.8046E-03	1.028

ΔK	ΔJ	K	J	σ	ν_i	$\sigma-c$	E_i''	S_i	W_i
1	0	11	31	3	850.61230		886.150	.2360E-03	1.026
1	0	11	31	1	850.61700		886.144	.9440E-03	1.026
1	1	6	9	2	850.68517		130.995	.9102E-02	.999
1	1	6	9	0	850.68725	73	130.989	.1820E-01	.999
1	0	11	30	3	850.69357		846.076	.2746E-03	1.024
1	0	11	30	1	850.69806	-62	846.070	.1098E-02	1.024
1	0	11	29	3	850.77233		807.287	.3171E-03	1.023
1	0	11	29	1	850.77661	-95	807.281	.1268E-02	1.023
1	0	11	28	3	850.84857		769.784	.3625E-03	1.021
1	0	11	28	1	850.85264	-101	769.779	.1450E-02	1.021
1	1	1	20	3	850.88966		274.250	.1730E-02	.862
1	1	1	20	1	850.89494	-40	274.245	.6912E-02	.861
1	1	7	7	3	850.91890		135.175	.4926E-02	1.000
1	1	7	7	1	850.92051	-15	135.169	.1970E-01	1.000
1	0	11	27	3	850.92228		733.568	.4107E-03	1.019
1	0	11	27	1	850.92615		733.563	.1643E-02	1.019
-1	1	5	33	3	850.94994		776.835	.2025E-03	1.104
-1	1	5	33	1	850.96266	-148	776.830	.8100E-03	1.104
1	0	11	26	3	850.99344		698.640	.4613E-03	1.018
1	0	11	26	1	850.99712	-131	698.635	.1845E-02	1.018
1	0	11	25	3	851.06206		665.000	.5125E-03	1.016
1	0	11	25	1	851.06554	-121	664.994	.2050E-02	1.016
1	1	2	18	2	851.07452	-2	229.770	.9552E-02	.949
1	1	2	18	0	851.08037		229.764	.2386E-02	.948
-1	1	4	31	2	851.11877	32	674.664	.1332E-02	1.111
1	0	11	24	3	851.12811		632.649	.5639E-03	1.015
1	0	11	24	1	851.13142	-69	632.643	.2255E-02	1.015
-1	1	4	31	0	851.13700		674.658	.3332E-03	1.112
1	0	11	23	3	851.19159		601.587	.6128E-03	1.013
1	0	11	23	1	851.19472	-81	601.581	.2451E-02	1.012
1	0	11	22	3	851.25249		571.815	.6585E-03	1.012
1	0	11	22	1	851.25546	-8	571.809	.2634E-02	1.012
1	1	3	16	3	851.27879	-21	194.500	.1187E-01	.977
1	1	3	16	1	851.28222		194.495	.5935E-02	.977
-1	1	3	29	3	851.28803	148	581.661	.2107E-02	1.124
-1	1	3	29	1	851.29714	-8	581.655	.1055E-02	1.125
1	0	11	21	3	851.31081		543.333	.6974E-03	1.010
1	0	11	21	1	851.31361	-56	543.328	.2792E-02	1.011

ΔK	ΔJ	K	J	σ	ν_i	$\sigma-c$	E_i''	S_i	W_i
1	0	11	20	3	851.36653		516.143	.7282E-03	1.009
1	1	0	23	2	851.36741		357.717	.2773E-02	1.000
1	1	0	23	0	851.36900	17	357.712	.5547E-02	1.000
1	0	11	20	1	851.36917	-105	516.137	.2913E-02	1.009
1	0	11	19	3	851.41965		490.244	.7474E-03	1.008
1	0	11	19	1	851.42214	-22	490.239	.2990E-02	1.008
-1	1	2	27	2	851.46439	-60	497.827	.3241E-02	1.154
1	0	11	18	3	851.47015		465.637	.7515E-03	1.007
1	0	11	18	1	851.47250	-57	465.632	.3006E-02	1.007
-1	1	2	27	0	851.47636		497.822	.8117E-03	1.156
1	1	4	14	2	851.49570	50	168.438	.1400E-01	.989
1	1	4	14	0	851.49933		168.432	.3499E-02	.989
1	0	11	17	3	851.51804		442.323	.7369E-03	1.006
1	0	11	17	1	851.52026	-69	442.317	.2948E-02	1.006
1	0	11	16	3	851.56331		420.301	.6995E-03	1.005
1	0	11	16	1	851.56540	-21	420.296	.2798E-02	1.005
1	0	11	15	3	851.60594		399.573	.6350E-03	1.004
1	0	11	15	1	851.60791	-79	399.567	.2540E-02	1.004
-1	1	1	25	3	851.62748		423.180	.1255E-02	1.245
-1	1	1	25	1	851.63339	-58	423.174	.5028E-02	1.247
1	0	11	14	3	851.64594		380.138	.5386E-03	1.003
1	0	11	14	1	851.64779	-71	380.133	.2154E-02	1.003
1	0	11	13	3	851.68330		361.997	.4048E-03	1.002
1	0	11	13	1	851.68504	204*	361.992	.1619E-02	1.002
1	0	11	12	3	851.71801		345.151	.2276E-03	1.001
1	1	5	12	3	851.71949		151.593	.3970E-02	.995
1	0	11	12	1	851.71965		345.146	.9105E-03	1.001
1	1	5	12	1	851.72187	-61	151.588	.1588E-01	.995
1	1	6	10	2	851.95243		143.960	.8744E-02	.998
1	1	6	10	0	851.95469	95	143.955	.1749E-01	.998
1	1	1	21	3	852.13210		301.454	.1554E-02	.848
1	1	1	21	1	852.13776	-42	301.449	.6210E-02	.847
-1	1	5	34	3	852.14346		820.778	.1707E-03	1.109
-1	1	5	34	1	852.15663		820.773	.6833E-03	1.110
1	1	7	8	3	852.19149		145.548	.4725E-02	1.000
1	1	7	8	1	852.19319	-24	145.542	.1890E-01	1.000
-1	1	4	32	2	852.31806	83	716.040	.1138E-02	1.117
1	1	2	19	2	852.31891	-1	254.388	.8773E-02	.943

ΔK	ΔJ	K	J	σ	ν_i	o-c	E_i''	S_i	W_i	ΔK	ΔJ	K	J	σ	ν_i	o-c	E_i''	S_i	W_i
1	1	2	19	0	852.32522		254.383	.219E-02	.942	1	0	12	29	2	853.62998		853.589	.489E-03	1.020
-1	1	4	32	0	852.33701		716.034	.284E-03	1.118	1	0	12	29	0	853.63520	-50	853.584	.979E-03	1.020
-1	1	3	30	3	852.49257	65	620.467	.182E-02	1.131	-1	1	3	31	3	853.69338	24	660.559	.157E-02	1.139
-1	1	3	30	1	852.50205	-19	620.461	.9139E-03	1.132	-1	1	3	31	1	853.70322		660.553	.786E-03	1.140
1	1	3	17	3	852.52755	-6	216.532	.1105E-01	.973	1	0	12	28	2	853.70676		816.090	.5590E-03	1.019
1	1	3	17	1	852.53121		216.526	.5524E-02	.973	1	0	12	28	0	853.71169	-55	816.084	.1118E-02	1.019
1	1	0	24	2	852.55139		388.794	.2482E-02	1.000	1	1	0	25	2	853.73057		421.161	.2204E-02	1.000
1	1	0	24	0	852.55298	-34	388.789	.4965E-02	1.000	1	1	0	25	0	853.73217	-7	421.156	.4409E-02	1.000
-1	1	2	28	2	852.67356	-1	534.060	.2852E-02	1.164	1	1	0	25	0	853.73217	-7	421.156	.1022E-01	.970
-1	1	2	28	0	852.68605	51	534.055	.7143E-03	1.166	1	1	3	18	3	853.77354	-7	239.857	.5108E-02	.970
1	1	4	15	2	852.74955	58	187.881	.1319E-01	.987	1	1	3	18	1	853.77744		239.851	.6313E-03	1.017
1	1	4	15	0	852.75347		187.875	.3296E-02	.987	1	0	12	27	2	853.78098	70	779.872	.1263E-02	1.017
-1	1	1	26	3	852.83832		456.836	.1124E-02	1.262	1	0	12	26	2	853.85263		744.953	.7064E-03	1.016
-1	1	1	26	1	852.84443	-193*	456.830	.4504E-02	1.264	1	0	12	26	0	853.85702	-72	744.947	.1413E-02	1.016
1	1	5	13	3	852.97855	-49	168.446	.3775E-02	.994	-1	1	2	29	2	853.87887	38	571.580	.2491E-02	1.174
1	1	5	13	1	852.98108		168.440	.1510E-01	.994	-1	1	2	29	0	853.89186		571.575	.6238E-03	1.176
-1	0	12	35	2	853.11619		1105.565	.1855E-03	1.031	1	0	12	25	2	853.92171		711.316	.7813E-03	1.014
1	0	12	35	0	853.12328		1105.559	.3710E-03	1.031	1	0	12	25	0	853.92583	53	711.310	.1563E-02	1.014
1	0	12	34	2	853.20809		1060.361	.2226E-03	1.029	1	0	12	24	2	853.98820		678.967	.8551E-03	1.013
1	0	12	34	0	853.21486		1060.355	.4452E-03	1.029	1	0	12	24	0	853.99207	272*	678.962	.1710E-02	1.013
1	1	6	11	2	853.21687		158.222	.8370E-02	.998	1	1	4	16	2	854.00058	47	208.618	.1233E-01	.985
1	1	6	11	0	853.21932	98	158.216	.1674E-01	.998	1	1	4	16	0	854.00482		208.612	.3083E-02	.985
1	0	12	33	2	853.29750		1016.439	.2650E-03	1.027	1	1	4	16	0	854.04484		491.781	.1000E-02	1.280
1	0	12	33	0	853.30394		1016.433	.5300E-03	1.027	-1	1	1	27	3	854.05114	15	491.776	.4006E-02	1.282
1	1	1	22	3	853.37235		329.949	.1385E-02	.834	-1	1	1	27	1	854.05210		647.908	.9236E-03	1.011
1	1	1	22	1	853.37841	-88	329.944	.5535E-02	.833	1	0	12	23	2	854.05573	-202*	647.903	.1847E-02	1.011
1	0	12	32	2	853.38441		973.800	.3129E-03	1.025	1	0	12	23	0	854.11340		618.139	.9850E-03	1.010
1	0	12	32	0	853.39053		973.794	.6258E-03	1.025	1	0	12	22	2	854.11679	159	618.134	.1970E-02	1.010
1	1	7	9	3	853.46128		157.217	.4522E-02	.999	1	0	12	22	0	854.17209		589.660	.1035E-02	1.009
1	1	7	9	1	853.46307	-36	157.212	.1809E-01	.999	1	0	12	21	2	854.17526	106	589.655	.2069E-02	1.009
1	0	12	31	2	853.46880		932.445	.3664E-03	1.023	1	0	12	20	2	854.22816		562.472	.1068E-02	1.008
1	0	12	31	0	853.47461		932.439	.7328E-03	1.023	1	0	12	20	0	854.23111	-473*	562.467	.2136E-02	1.008
-1	1	4	33	2	853.51367	46	758.701	.9652E-03	1.123	1	1	5	14	3	854.23478		186.593	.3567E-02	.993
-1	1	4	33	0	853.53333		758.695	.2417E-03	1.125	1	1	5	14	1	854.23748	-65	186.588	.1427E-01	.993
1	0	12	30	2	853.55066		892.374	.4257E-03	1.022	1	0	12	19	2	854.28161		536.576	.1080E-02	1.007
1	0	12	30	0	853.55617		892.369	.8515E-03	1.022	1	0	12	19	0	854.28435	112	536.570	.2160E-02	1.007
1	1	2	20	2	853.56066	-11	280.299	.7994E-02	.937	1	0	12	18	2	854.33243		511.971	.1065E-02	1.006
1	1	2	20	0	853.56746		280.294	.1996E-02	.936	1	0	12	18	0	854.33498	72	511.966	.2130E-02	1.006

ΔK	ΔJ	K	J	σ	ν_i	$\sigma-c$	E''_i	S_i	W_i	ΔK	ΔJ	K	J	σ	ν_i	$\sigma-c$	E''_i	S_i	W_i
1	0	12	17	2	854.38062		488.659	.1016E-02	1.005	1	1	1	24	3	855.84649		390.813	.1073E-02	.805
1	0	12	17	0	854.38297	100	488.653	.2033E-02	1.005	1	1	1	24	1	855.85342	-53	390.807	.4281E-02	.803
1	0	12	16	2	854.42616		466.639	.9274E-03	1.004	1	0	13	35	3	855.98423		1155.861	.7091E-04	1.028
1	0	12	16	0	854.42833	86	466.634	.1855E-02	1.004	1	0	13	35	1	855.98928		1155.855	.2836E-03	1.028
1	0	12	15	2	854.46905		445.913	.7903E-03	1.003	1	1	7	11	3	855.99236		184.443	.4112E-02	.999
1	0	12	15	0	854.47105	-51	445.908	.1581E-02	1.003	1	1	7	11	1	855.99438	-34	184.438	.1645E-01	.999
1	1	6	12	2	854.47847		173.779	.7963E-02	.997	1	1	2	22	2	856.03632	12	335.997	.6473E-02	.923
1	1	6	12	0	854.48114	116	173.773	.1593E-01	.997	1	1	2	22	0	856.04416		335.992	.1616E-02	.922
1	0	12	14	2	854.50929		426.480	.5966E-03	1.002	1	1	0	27	2	856.07446		489.763	.1699E-02	1.000
1	0	12	14	0	854.51113	96	426.475	.1193E-02	1.002	1	1	0	27	0	856.07608	21	489.758	.3398E-02	1.000
1	0	12	13	2	854.54686		408.341	.3368E-03	1.001	1	0	13	34	3	856.07692		1110.661	.8495E-04	1.026
1	0	12	13	0	854.54856	34	408.336	.6736E-03	1.001	1	0	13	34	1	856.08176		1110.655	.3398E-03	1.026
1	1	1	23	3	854.61047		359.736	.1225E-02	.820	-1	1	3	33	3	856.08360		744.599	.1138E-02	1.155
1	1	1	23	1	854.61695	-42	359.730	.4887E-02	.818	-1	1	3	33	1	856.09415		744.593	.5694E-03	1.156
-1	1	4	34	2	854.70557	89	802.646	.8124E-03	1.129	1	0	13	33	3	856.16710		1066.744	.1009E-03	1.024
-1	1	4	34	0	854.72592		802.640	.2035E-03	1.131	1	0	13	33	1	856.17172		1066.738	.4038E-03	1.024
1	1	7	10	3	854.72824		170.182	.4320E-02	.999	1	0	13	32	3	856.25473		1024.109	.1191E-03	1.023
1	1	7	10	1	854.73014	-32	170.177	.1728E-01	.999	1	1	8	9	2	856.25593	86	187.466	.1753E-01	1.000
1	1	2	21	2	854.79980	12	307.503	.7221E-02	.930	1	1	3	20	3	856.25718	-40	290.385	.8523E-02	.962
1	1	2	21	0	854.80711		307.497	.1803E-02	.929	1	1	8	9	0	856.25773		187.461	.4382E-02	1.000
-1	1	3	32	3	854.89041	40	701.937	.1342E-02	1.147	1	0	13	32	1	856.25915		1024.103	.4763E-03	1.023
-1	1	3	32	1	854.90061		701.931	.6718E-03	1.148	1	1	3	20	1	856.26160		290.380	.4261E-02	.962
1	1	0	26	2	854.90493		454.818	.1943E-02	1.000	-1	1	2	31	2	856.27760	-22	650.481	.1857E-02	1.195
1	1	0	26	0	854.90654	-5	454.812	.3885E-02	1.000	-1	1	2	31	0	856.29156		650.475	.4655E-03	1.198
1	1	8	8	2	854.98638	30	175.797	.1842E-01	1.000	1	0	13	31	3	856.33982		982.758	.1391E-03	1.021
1	1	8	8	0	854.98804		175.792	.4604E-02	1.000	1	0	13	31	1	856.34405	-117	982.752	.5564E-03	1.021
1	1	3	19	3	855.01675	135	264.475	.9366E-02	.966	1	0	13	30	3	856.42236		942.692	.1611E-03	1.019
1	1	3	19	1	855.02090		264.469	.4683E-02	.966	1	0	13	30	1	856.42639	-163	942.686	.6443E-03	1.019
-1	1	2	30	2	855.08024	-6	610.388	.2160E-02	1.185	-1	1	1	29	3	856.44453		565.535	.7727E-03	1.316
-1	1	2	30	0	855.09372	246*	610.382	.5409E-03	1.187	-1	1	1	29	1	856.45119	-66	565.530	.3095E-02	1.318
-1	1	1	28	3	855.24694		528.014	.8818E-03	1.297	1	1	4	18	2	856.49413	-1	253.973	.1055E-01	.980
1	1	4	17	2	855.24877	140	230.649	.1145E-01	.983	1	1	4	18	0	856.49907		253.968	.2637E-02	.980
1	1	4	17	0	855.25335		230.643	.2860E-02	.982	1	0	13	29	3	856.50233		903.911	.1850E-03	1.018
-1	1	1	28	1	855.25343	-326*	528.009	.3535E-02	1.300	1	0	13	29	1	856.50617	-10	903.905	.7399E-03	1.018
1	1	5	15	3	855.48816		206.036	.3344E-02	.991	1	0	13	28	3	856.57973		866.415	.2102E-03	1.016
1	1	5	15	1	855.49103	-95	206.030	.1338E-01	.991	1	0	13	28	1	856.58338	-74	866.409	.8415E-03	1.017
1	1	6	13	2	855.73723		190.631	.7532E-02	.996	1	0	13	27	3	856.65454		830.206	.2366E-03	1.015
1	1	6	13	0	855.74012	116	190.625	.1506E-01	.996	1	0	13	27	1	856.65801	169	830.201	.9466E-03	1.015

ΔK	ΔJ	K	J	σ	ν_i	$\sigma-c$	E_i''	S_i	W_i	ΔK	ΔJ	K	J	σ	ν_i	$\sigma-c$	E_i''	S_i	W_i
1	0	13	26	3	856.72676		795.285	.2636E-03	1.014	1	0	13	14	3	857.38835		476.844	.1213E-03	1.001
1	0	13	26	1	856.73006	-97	795.279	.1054E-02	1.014	1	0	13	14	1	857.39001	-23	476.839	.4853E-03	1.001
1	1	5	16	3	856.73867		226.772	.3118E-02	.990	-1	1	2	32	2	857.47089	-10	691.859	.1588E-02	1.207
1	1	5	16	1	856.74173	-65	226.767	.1247E-01	.990	-1	1	2	32	0	857.48531		691.853	.3976E-03	1.209
1	0	13	25	3	856.79638		761.651	.2900E-03	1.012	1	1	3	21	3	857.49484	160	317.588	.7698E-02	.958
1	0	13	25	1	856.79951	56	761.646	.1160E-02	1.012	1	1	3	21	1	857.49955		317.582	.3849E-02	.958
1	0	13	24	3	856.86338		729.306	.3155E-03	1.011	1	1	8	10	2	857.52264	30	200.430	.1663E-01	.999
1	0	13	24	1	856.86635	-98	729.301	.1262E-02	1.011	1	1	8	10	0	857.52460		200.425	.4158E-02	.999
1	0	13	23	3	856.92778		698.250	.3385E-03	1.010	-1	1	1	30	3	857.63751		604.343	.6714E-03	1.334
1	0	13	23	1	856.93058	74	698.245	.1354E-02	1.010	-1	1	1	30	1	857.64433	-112	604.337	.2690E-02	1.336
1	0	13	22	3	856.98954		668.484	.3577E-03	1.009	1	1	4	19	2	857.73665	14	278.590	.9645E-02	.977
1	0	13	22	1	856.99220		668.479	.1431E-02	1.009	1	1	4	19	0	857.74196		278.585	.2411E-02	.977
1	1	6	14	2	856.99312		208.778	.7083E-02	.995	1	1	5	17	3	857.98631	-55	248.802	.2884E-02	.988
1	1	6	14	0	856.99625	102	208.772	.1417E-01	.995	1	1	5	17	1	857.98956		248.797	.1153E-01	.988
1	0	13	21	3	857.04867		640.008	.3714E-03	1.008	1	1	6	15	2	858.24614		228.219	.6619E-02	.994
1	0	13	21	1	857.05119	33	640.003	.1485E-02	1.008	1	1	6	15	0	858.24952	143	228.213	.1324E-01	.994
1	1	1	25	3	857.08048		423.180	.9313E-03	.789	1	1	1	26	3	858.31247		456.836	.8020E-03	.773
1	1	1	25	1	857.08787	-33	423.174	.3721E-02	.788	1	1	1	26	1	858.32035	-41	456.830	.3204E-02	.772
1	0	13	20	3	857.10517		612.823	.3777E-03	1.007	1	1	0	29	2	858.39894		563.518	.1271E-02	1.000
1	0	13	20	1	857.10754	-20	612.817	.1511E-02	1.007	1	1	0	29	0	858.40057	-74	563.512	.2542E-02	1.000
1	0	13	19	3	857.15902		586.929	.3745E-03	1.006	1	1	2	24	2	858.50159	1	396.860	.5084E-02	.909
1	0	13	19	1	857.16125	-56	586.924	.1498E-02	1.006	1	1	2	24	0	858.51056		396.855	.1268E-02	.907
1	0	13	18	3	857.21021		562.327	.3593E-03	1.005	1	1	7	13	3	858.51201		216.850	.3663E-02	.997
1	0	13	18	1	857.21232	-63	562.321	.1437E-02	1.005	1	1	7	13	1	858.51429	-59	216.845	.1465E-01	.997
1	1	0	28	2	857.23914		525.997	.1475E-02	1.000	-1	1	2	33	2	858.66002	-3	734.522	.1346E-02	1.218
1	1	0	28	0	857.24076	-1	525.991	.2950E-02	1.000	-1	1	2	33	0	858.67490		734.516	.3373E-03	1.221
1	1	7	12	3	857.25362		199.999	.3891E-02	.998	1	1	3	22	3	858.72973	132	346.082	.6902E-02	.954
1	1	7	12	1	857.25577	-25	199.994	.1556E-01	.998	1	1	3	22	1	858.73472		346.077	.3448E-02	.953
1	0	13	17	3	857.25875		539.017	.3296E-03	1.004	1	1	8	11	2	858.78650	42	214.690	.1574E-01	.999
1	0	13	17	1	857.26073		539.011	.1318E-02	1.004	1	1	8	11	0	858.78862		214.685	.3936E-02	.999
1	1	2	23	2	857.27024	34	365.783	.5758E-02	.916	-1	1	1	31	3	858.82578		644.436	.5794E-03	1.353
-1	1	3	34	3	857.27289	740*	788.545	.9572E-03	1.163	-1	1	1	31	1	858.83275	-69	644.431	.2321E-02	1.355
1	1	2	23	0	857.27864		365.778	.1438E-02	.915	1	0	14	35	2	858.87190		1210.163	.2121E-03	1.025
-1	1	3	34	1	857.28379		788.539	.4790E-03	1.164	1	0	14	35	0	858.87815		1210.157	.5303E-04	1.025
1	0	13	16	3	857.30462		517.000	.2822E-03	1.003	1	0	14	34	2	858.96526		1164.968	.2539E-03	1.024
1	0	13	16	1	857.30649	-51	516.994	.1129E-02	1.003	1	0	14	34	0	858.97122		1164.962	.6347E-04	1.024
1	0	13	15	3	857.34782		496.275	.2140E-03	1.002	1	1	4	20	2	858.97632	16	304.500	.8766E-02	.975
1	0	13	15	1	857.34958	-65	496.270	.8561E-03	1.002	1	1	4	20	0	858.98201		304.495	.2189E-02	.974

ΔK	ΔJ	K	J	σ	ν_i	O-C	E_i''	S_i	W_i	ΔK	ΔJ	K	J	σ	ν_i	O-C	E_i''	S_i	W_i
1	0	14	33	2	859.05608		1121.055	.3011E-03	1.022	1	0	14	22	2	859.88399		722.839	.1005E-02	1.008
1	0	14	33	0	859.06174		1121.050	.7527E-04	1.022	1	0	14	22	0	859.88693		722.834	.2514E-03	1.008
1	1	9	9	3	859.06677	-17	221.747	.1654E-01	1.000	1	0	14	21	2	859.94349	8	694.367	.1028E-02	1.007
1	1	9	9	1	859.06839		221.742	.8271E-02	1.000	1	0	14	21	0	859.94623		694.361	.2571E-03	1.007
1	0	14	32	2	859.14433		1078.426	.3539E-03	1.020	1	1	3	23	3	859.96185	180	375.868	.6137E-02	.949
1	0	14	32	0	859.14971		1078.420	.8849E-04	1.020	1	1	3	23	1	859.96715		375.862	.3065E-02	.948
1	0	14	31	2	859.23001		1037.079	.4128E-03	1.019	1	0	14	20	2	860.00033	-62	667.184	.1025E-02	1.006
1	1	5	18	3	859.23106		272.126	.2649E-02	.986	1	0	14	20	0	860.00288		667.179	.2564E-03	1.006
1	1	5	18	1	859.23453	-36	272.120	.1060E-01	.986	-1	1	1	32	3	860.00926		685.815	.4958E-03	1.371
1	0	14	31	0	859.23511		1037.073	.1032E-03	1.019	-1	1	1	32	1	860.01637	-45	685.810	.1988E-02	1.374
1	0	14	30	2	859.31311		997.017	.4766E-03	1.017	1	1	8	12	2	860.04747	36	230.245	.1484E-01	.999
1	0	14	30	0	859.31794		997.011	.1191E-03	1.017	1	1	8	12	0	860.04977		230.240	.3711E-02	.999
1	0	14	29	2	859.39362		958.240	.5454E-03	1.016	1	0	14	19	2	860.05451		641.293	.9894E-03	1.005
1	0	14	29	0	859.39819		958.234	.1364E-03	1.016	-1	0	14	19	0	860.05687		641.288	.2473E-03	1.005
1	0	14	28	2	859.47153		920.749	.6180E-03	1.015	1	0	14	18	2	860.10601	75	616.694	.9122E-03	1.004
1	0	14	28	0	859.47585		920.743	.1545E-03	1.015	1	0	14	18	0	860.10820		616.688	.2281E-03	1.004
1	1	6	16	2	859.49627		248.954	.6146E-02	.993	1	0	14	17	2	860.15484	65	593.386	.7851E-03	1.003
1	1	6	16	0	859.49992	175	248.949	.1229E-01	.993	1	0	14	17	0	860.15686		593.381	.1963E-03	1.003
1	1	1	27	3	859.54253		491.781	.6853E-03	.757	1	0	14	16	2	860.20098	-30	571.371	.5982E-03	1.002
1	0	14	27	2	859.54684		884.544	.6920E-03	1.013	1	0	14	16	0	860.20284		571.366	.1496E-03	1.002
1	0	14	27	0	859.55091		884.538	.1730E-03	1.013	1	1	4	21	2	860.21314	12	331.702	.7902E-02	.972
1	1	1	27	1	859.55092	166	491.776	.2734E-02	.755	1	1	4	21	0	860.21923		331.697	.1974E-02	.971
1	1	0	30	2	859.55385		602.325	.1087E-02	1.000	1	0	14	15	2	860.24444		550.649	.3406E-03	1.001
1	1	0	30	0	859.55549	-182*	602.320	.2174E-02	1.000	1	0	14	15	0	860.24615		550.644	.8516E-04	1.001
1	0	14	26	2	859.61953	21	849.626	.7667E-03	1.012	1	1	9	10	3	860.33317	-16	234.710	.1563E-01	1.000
1	0	14	26	0	859.62336		849.621	.1917E-03	1.012	1	1	9	10	1	860.33489		234.705	.7814E-02	1.000
1	0	14	25	2	859.68960	-25	815.996	.8390E-03	1.011	1	1	5	19	3	860.47293		296.742	.2417E-02	.984
1	0	14	25	0	859.69319		815.991	.2098E-03	1.011	1	1	5	19	1	860.47660	-58	296.737	.9667E-02	.984
1	1	2	25	2	859.73038	6	429.227	.4451E-02	.901	1	1	0	31	2	860.70386		642.419	.9228E-03	1.000
1	1	2	25	0	859.73995		429.221	.1110E-02	.899	1	1	0	31	0	860.70550	14	642.413	.1846E-02	1.000
1	0	14	24	2	859.75703	-10	783.655	.9057E-03	1.010	1	1	6	17	2	860.74348		270.983	.5664E-02	.991
1	0	14	24	0	859.76040		783.649	.2264E-03	1.010	1	1	6	17	0	860.74742	162	270.978	.1133E-01	.991
1	1	7	14	3	859.76751		234.996	.3433E-02	.997	1	1	1	28	3	860.77071		528.014	.5802E-03	.740
1	1	7	14	1	859.76993	-51	234.991	.1373E-01	.997	1	1	1	28	1	860.77962	-41	528.009	.2314E-02	.738
1	0	14	23	2	859.82183	39	752.602	.9627E-03	1.009	1	1	2	26	2	860.95662	28	462.883	.3864E-02	.892
1	0	14	23	0	859.82499		752.597	.2407E-03	1.009	1	1	2	26	0	860.96682		462.877	.9649E-03	.891
-1	1	2	34	2	859.84493	-5	778.469	.1133E-02	1.230	1	1	7	15	3	861.02010		254.436	.3195E-02	.996
-1	1	2	34	0	859.86025		778.463	.2838E-03	1.232	1	1	7	15	1	861.02268	-35	254.431	.1278E-01	.996

ΔK	ΔJ	K	J	σ	ν_i	o-c	E''_i	S_i	W_i	ΔK	ΔJ	K	J	σ	ν_i	o-c	E''_i	S_i	W_i
-1	1	1	33	3	861.18786		728.479	.4215E-03	1.390	1	0	15	28	3	862.37796		979.096	.4425E-03	1.013
1	1	3	24	3	861.19120	211*	406.944	.5418E-02	.944	1	0	15	28	1	862.38124		979.090	.2212E-03	1.013
-1	1	1	33	1	861.19508	-178*	728.473	.1690E-02	1.393	1	1	3	25	3	862.41780	89	439.310	.4748E-02	.939
1	1	3	24	1	861.19681		406.938	.2709E-02	.944	1	1	3	25	1	862.42373		439.304	.2372E-02	.938
1	1	8	13	2	861.30556	42	247.096	.1391E-01	.998	1	0	15	27	3	862.45383		942.895	.4933E-03	1.012
1	1	8	13	0	861.30805		247.090	.3478E-02	.998	1	0	15	27	1	862.45696		942.889	.2466E-03	1.012
1	1	4	22	2	861.44710	0	360.196	.7065E-02	.968	1	0	15	26	3	862.52707		907.982	.5431E-03	1.011
1	1	4	22	0	861.45361		360.190	.1766E-02	.968	1	0	15	26	1	862.53004		907.976	.2715E-03	1.011
1	1	9	11	3	861.59670	-7	248.969	.1472E-01	1.000	1	1	8	14	2	862.56073	43	265.240	.1299E-01	.998
1	1	9	11	1	861.59852		248.964	.7362E-02	1.000	1	1	8	14	0	862.56342		265.235	.3247E-02	.998
1	1	5	20	3	861.71188		322.651	.2190E-02	.982	1	0	15	25	3	862.59766		874.356	.5897E-03	1.010
1	1	5	20	1	861.71579	-58	322.645	.8759E-02	.982	1	0	15	25	1	862.60048		874.350	.2949E-03	1.010
1	0	15	35	3	861.77362		1268.476	.1553E-03	1.023	1	0	15	24	3	862.66560		842.018	.6306E-03	1.009
1	0	15	35	1	861.77818		1268.470	.7764E-04	1.023	1	0	15	24	1	862.66827		842.012	.3153E-03	1.009
1	1	0	32	2	861.84893		683.798	.7779E-03	1.000	1	1	4	23	2	862.67819	18	389.980	.6279E-02	.965
1	1	0	32	0	861.85059	86	683.792	.1556E-02	1.000	1	1	4	23	0	862.68514		389.975	.1570E-02	.965
1	0	15	34	3	861.86774		1223.287	.1853E-03	1.021	1	0	15	23	3	862.73088		810.969	.6618E-03	1.007
1	0	15	34	1	861.87210		1223.281	.9264E-04	1.021	1	0	15	23	1	862.73340		810.963	.3309E-03	1.007
1	0	15	33	3	861.95927		1179.379	.2194E-03	1.020	1	0	15	22	3	862.79349		781.209	.6808E-03	1.006
1	0	15	33	1	861.96344		1179.373	.1097E-03	1.020	1	0	15	22	1	862.79587		781.204	.3404E-03	1.006
1	1	6	18	2	861.98778		294.306	.5191E-02	.990	1	0	15	21	3	862.85342		752.740	.6827E-03	1.005
1	1	6	18	0	861.99202	-113	294.300	.1038E-01	.990	1	0	15	21	1	862.85567		752.734	.3417E-03	1.006
1	1	1	29	3	861.99704		565.535	.4874E-03	.723	1	1	9	12	3	862.85733	-19	264.523	.1381E-01	.999
1	1	1	29	1	862.00650	-93	565.530	.1944E-02	.721	1	1	9	12	1	862.85926		264.518	.6903E-02	.999
1	0	15	32	3	862.04822		1136.754	.2573E-03	1.018	1	0	15	20	3	862.91067		725.561	.6630E-03	1.005
1	0	15	32	1	862.05220		1136.748	.1286E-03	1.018	1	0	15	20	1	862.91280		725.555	.3315E-03	1.005
1	0	15	31	3	862.13457		1095.412	.2992E-03	1.017	1	1	5	21	3	862.94793		349.852	.1970E-02	.980
1	0	15	31	1	862.13837		1095.407	.1496E-03	1.017	1	1	5	21	1	862.95207	-70	349.846	.7873E-02	.979
1	1	2	27	2	862.18035	72	497.827	.3333E-02	.884	1	0	15	19	3	862.96524		699.673	.6146E-03	1.004
1	1	2	27	0	862.19119		497.822	.8314E-03	.882	1	0	15	19	1	862.96724		699.667	.3073E-03	1.004
1	0	15	30	3	862.21832		1055.355	.3445E-03	1.016	1	1	0	33	2	862.98906		726.462	.6510E-03	1.000
1	0	15	30	1	862.22194		1055.349	.1723E-03	1.016	1	1	0	33	0	862.99073	25	726.456	.1302E-02	1.000
1	1	7	16	3	862.26977		275.171	.2956E-02	.995	1	0	15	18	3	863.01711		675.076	.5317E-03	1.003
1	1	7	16	1	862.27251	-72	275.165	.1182E-01	.995	1	0	15	18	1	863.01900		675.071	.2658E-03	1.003
1	0	15	29	3	862.29945		1016.583	.3923E-03	1.014	1	0	15	17	3	863.06629		651.771	.4071E-03	1.002
1	0	15	29	1	862.30290		1016.577	.1962E-03	1.014	1	0	15	17	1	863.06807		651.766	.2036E-03	1.002
-1	1	1	34	3	862.36147		772.426	.3556E-03	1.409	1	0	15	16	3	863.11276		629.759	.2329E-03	1.001
-1	1	1	34	1	862.36881	-126	772.420	.1426E-02	1.412	1	0	15	16	1	863.11443		629.754	.1165E-03	1.001

ΔK	ΔJ	K	J	σ	ν_i	O-C	E''_i	S_i	W_i	ΔK	ΔJ	K	J	σ	ν_i	O-C	E''_i	S_i	W_i
1	1	10	10	2	863.16196	8	273.013	.1432E-01	1.000	1	0	16	33	2	864.88128		1241.703	.1562E-03	1.018
1	1	10	10	0	863.16363		273.008	.3579E-02	1.000	1	0	16	33	0	864.88628		1241.697	.3906E-04	1.018
1	1	1	30	3	863.22160		604.343	.4063E-03	.706	1	0	16	32	2	864.97082		1199.083	.1828E-03	1.017
1	1	6	19	2	863.22916		318.921	.4721E-02	.988	1	0	16	32	0	864.97557		1199.078	.4571E-04	1.017
1	1	1	30	1	863.23163	88	604.337	.1620E-02	.704	1	0	16	31	2	865.05775		1157.747	.2116E-03	1.015
1	1	6	19	0	863.23370	-119	318.916	.9443E-02	.988	1	0	16	31	0	865.06224		1157.741	.5291E-04	1.015
1	1	2	28	2	863.40157	62	534.060	.2851E-02	.875	1	1	8	16	2	865.06227	77	305.413	.1111E-01	.996
1	1	2	28	0	863.41308		534.055	.7120E-03	.874	1	1	8	16	0	865.06541		305.407	.2776E-02	.996
1	1	7	17	3	863.51650		297.199	.2718E-02	.994	1	1	4	25	2	865.13179	12	453.420	.4851E-02	.958
1	1	7	17	1	863.51942	-52	297.193	.1087E-01	.994	1	1	4	25	0	865.13966		453.415	.1211E-02	.957
1	1	3	26	3	863.64163	215*	472.965	.4131E-02	.934	1	0	16	30	2	865.14204		1117.695	.2428E-03	1.014
1	1	3	26	1	863.64791		472.959	.2063E-02	.933	1	0	16	30	0	865.14629		1117.689	.6069E-04	1.014
1	1	8	15	2	863.81297	42	284.679	.1204E-01	.997	1	0	16	29	2	865.22370		1078.927	.2755E-03	1.013
1	1	8	15	0	863.81589		284.674	.3011E-02	.997	1	0	16	29	0	865.22772		1078.921	.6886E-04	1.013
1	1	4	24	2	863.90642	2	421.055	.5541E-02	.962	1	0	16	28	2	865.30272		1041.445	.3090E-03	1.012
1	1	4	24	0	863.91383		421.050	.1384E-02	.961	1	0	16	28	0	865.30650		1041.439	.7724E-04	1.012
1	1	9	13	3	864.11504	-19	281.372	.1290E-01	.999	1	1	9	14	3	865.36981	-12	299.516	.1199E-01	.998
1	1	9	13	1	864.11709		281.367	.6452E-02	.999	1	1	9	14	1	865.37199		299.510	.5994E-02	.998
1	1	0	34	2	864.12423		770.409	.5409E-03	1.000	1	0	16	27	2	865.37908		1005.249	.3422E-03	1.011
1	1	0	34	0	864.12591	202*	770.403	.1082E-02	1.000	1	0	16	27	0	865.38264		1005.243	.8555E-04	1.011
1	1	5	22	3	864.18105		378.344	.1759E-02	.977	1	1	5	23	3	865.41125		408.128	.1561E-02	.975
1	1	5	22	1	864.18544	-41	378.339	.7036E-02	.977	1	1	5	23	1	865.41589	-74	408.122	.6237E-02	.974
1	1	10	11	2	864.42520	33	287.271	.1343E-01	1.000	1	0	16	26	2	865.45278		970.340	.3735E-03	1.009
1	1	10	11	0	864.42701		287.265	.3357E-02	1.000	1	0	16	26	0	865.45613		970.334	.9337E-04	1.009
1	1	1	31	3	864.44442		644.436	.3355E-03	.688	1	0	16	25	2	865.52382		936.718	.4017E-03	1.008
1	1	1	31	1	864.45503	-77	644.431	.1338E-02	.686	1	0	16	25	0	865.52695		936.712	.1004E-03	1.008
1	1	6	20	2	864.46758		344.829	.4270E-02	.987	1	0	16	24	2	865.59218		904.384	.4245E-03	1.007
1	1	6	20	0	864.47246	-22	344.824	.8531E-02	.986	1	0	16	24	0	865.59511		904.379	.1061E-03	1.007
1	1	2	29	2	864.62032	65	571.580	.2421E-02	.866	1	0	16	23	2	865.65786		873.339	.4393E-03	1.006
1	1	2	29	0	864.63252		571.575	.6040E-03	.864	1	0	16	23	0	865.66060		873.334	.1098E-03	1.006
1	0	16	35	2	864.69437		1330.789	.1111E-03	1.021	1	1	1	32	3	865.66555		685.815	.2750E-03	.670
1	0	16	35	0	864.69990		1330.783	.2778E-04	1.021	1	1	1	32	1	865.67678	-180*	685.810	.1097E-02	.668
1	1	7	18	3	864.76029		320.520	.2483E-02	.993	1	1	10	12	2	865.68552	36	302.824	.1256E-01	1.000
1	1	7	18	1	864.76338	-51	320.514	.9933E-02	.993	1	1	10	12	0	865.68750		302.818	.3139E-02	1.000
1	0	16	34	2	864.78913		1285.605	.1323E-03	1.019	1	1	6	21	2	865.70306	-91	372.029	.3832E-02	.985
1	0	16	34	0	864.79439		1285.599	.3308E-04	1.019	1	1	6	21	0	865.70827	1	372.023	.7664E-02	.985
1	1	3	27	3	864.86272	-26	507.909	.3565E-02	.928	1	0	16	22	2	865.72085		843.583	.4430E-03	1.005
1	1	3	27	1	864.86935		507.903	.1783E-02	.928	1	0	16	22	0	865.72340		843.578	.1108E-03	1.005

ΔK	ΔJ	K	J	σ	ν_i	o-c	E''_i	S_i	W_i	ΔK	ΔJ	K	J	σ	ν_i	o-c	E''_i	S_i	W_i
1	0	16	21	2	865.78115		815.117	.4326E-03	1.005	1	1	8	18	2	867.55196	32	350.759	.9274E-02	.994
1	0	16	21	0	865.78352		815.112	.1082E-03	1.005	1	1	8	18	0	867.55561		350.754	.2319E-02	.994
1	1	2	30	2	865.83662	80	610.388	.2042E-02	.857	1	1	4	27	2	867.57392	12	522.018	.3640E-02	.950
1	0	16	20	2	865.83875		787.942	.4032E-03	1.004	1	1	4	27	0	867.58278		522.012	.9090E-03	.949
1	0	16	20	0	865.84095		787.936	.1008E-03	1.004	1	0	17	35	3	867.62901		1397.106	.1944E-04	1.019
1	1	2	30	0	865.84953		610.382	.5092E-03	.855	1	0	17	35	1	867.63313		1397.100	.7775E-04	1.019
1	0	16	19	2	865.89364		762.057	.3507E-03	1.003	1	0	17	34	3	867.72449		1351.928	.2310E-04	1.018
1	0	16	19	0	865.89567		762.051	.8767E-04	1.003	1	0	17	34	1	867.72844		1351.922	.9240E-04	1.018
1	0	16	18	2	865.94583		737.463	.2699E-03	1.002	1	0	17	33	3	867.81735		1308.032	.2717E-04	1.016
1	0	16	18	0	865.94770		737.458	.6747E-04	1.002	1	0	17	33	1	867.82112		1308.026	.1087E-03	1.016
1	0	16	17	2	865.99529		714.162	.1551E-03	1.001	1	1	5	25	3	867.86284		471.566	.1202E-02	.969
1	0	16	17	0	865.99702		714.156	.3878E-04	1.001	1	1	5	25	1	867.86802	234*	471.560	.4807E-02	.969
1	1	7	19	3	866.00110		345.134	.2252E-02	.991	1	1	9	16	3	867.87049	-94	339.685	.1020E-01	.997
1	1	7	19	1	866.00438	-51	345.129	.9009E-02	.991	1	1	9	16	1	867.87294		339.680	.5098E-02	.997
1	1	3	28	3	866.08108	632*	544.141	.3055E-02	.922	1	0	17	32	3	867.90757		1265.418	.3168E-04	1.015
1	1	3	28	1	866.08806		544.135	.1528E-02	.922	1	0	17	32	1	867.91117		1265.412	.1267E-03	1.015
1	1	8	17	2	866.30860	51	327.439	.1018E-01	.995	1	0	17	31	3	867.99514		1224.087	.3656E-04	1.014
1	1	8	17	0	866.31200		327.434	.2545E-02	.995	1	0	17	31	1	867.99858		1224.081	.1463E-03	1.014
1	1	4	26	2	866.35429	5	487.075	.4216E-02	.954	1	0	17	30	3	868.08007		1184.040	.4174E-04	1.013
1	1	4	26	0	866.36265		487.069	.1053E-02	.953	1	0	17	30	1	868.08334		1184.034	.1670E-03	1.013
1	1	9	15	3	866.62163	-15	318.954	.1109E-01	.998	1	1	1	34	3	868.10296		772.426	.1804E-03	.634
1	1	9	15	1	866.62395		318.948	.5546E-02	.998	1	1	1	34	1	868.11545	-40	772.420	.7193E-03	.632
1	1	5	24	3	866.63852		439.202	.1374E-02	.972	1	0	17	29	3	868.16233		1145.278	.4706E-04	1.011
1	1	5	24	1	866.64342	-81	439.196	.5498E-02	.972	1	1	6	23	2	868.16512		430.302	.3024E-02	.981
1	1	1	33	3	866.88505		728.479	.2236E-03	.652	1	0	17	29	1	868.16544		1145.272	.1884E-03	1.012
1	1	1	33	1	866.89690	-228*	728.473	.8916E-03	.650	1	1	6	23	0	868.17105	-123	430.297	.6049E-02	.981
1	1	6	22	2	866.93557		400.520	.3416E-02	.983	1	1	10	14	2	868.19734	39	337.813	.1083E-01	.999
1	1	6	22	0	866.94114	155	400.514	.6832E-02	.983	1	1	10	14	0	868.19967		337.808	.2707E-02	.999
1	1	10	13	2	866.94291	-21	319.671	.1168E-01	.999	1	0	17	28	3	868.24192		1107.800	.5244E-04	1.010
1	1	10	13	0	866.94505		319.666	.2920E-02	.999	1	0	17	28	1	868.24489		1107.794	.2098E-03	1.010
1	1	2	31	2	867.05049	36	650.481	.1707E-02	.847	1	1	2	32	2	868.26196	29	691.859	.1417E-02	.837
1	1	2	31	0	867.06413		650.475	.4258E-03	.845	1	1	2	32	0	868.27635		691.853	.3534E-03	.835
1	1	7	20	3	867.23895		371.040	.2031E-02	.990	1	0	17	27	3	868.31884		1071.609	.5763E-04	1.009
1	1	7	20	1	867.24242	-88	371.035	.8126E-02	.990	1	0	17	27	1	868.32166		1071.603	.2305E-03	1.009
1	1	11	11	3	867.26958		329.600	.2991E-02	1.000	1	0	17	26	3	868.39308		1036.704	.6236E-04	1.008
1	1	11	11	1	867.27122	-26	329.594	.1196E-01	1.000	1	0	17	26	1	868.39575		1036.699	.2495E-03	1.008
1	1	3	29	3	867.29670	292*	581.661	.2602E-02	.917	1	0	17	25	3	868.46463		1003.087	.6629E-04	1.007
1	1	3	29	1	867.30405		581.655	.1300E-02	.916	1	0	17	25	1	868.46716		1003.082	.2652E-03	1.007

ΔK	ΔJ	K	J	σ	ν_i	o-c	E_i''	S_i	W_i	ΔK	ΔJ	K	J	σ	ν_i	o-c	E_i''	S_i	W_i
1	1	7	21	3	868.47380		398.239	.1820E-02	.989	1	1	11	13	3	869.78655		361.997	.2586E-02	1.000
1	1	7	21	1	868.47748	-69	398.233	.7274E-02	.988	1	1	11	13	1	869.78839	-26	361.992	.1034E-01	1.000
1	1	3	30	3	868.50960	93	620.467	.2196E-02	.910	1	1	4	29	2	870.00459	47	595.767	.2656E-02	.942
1	1	3	30	1	868.51734		620.461	.1098E-02	.910	1	1	4	29	0	870.01449		595.762	.6633E-03	.941
1	1	11	12	3	868.52954		345.151	.2786E-02	1.000	1	1	8	20	2	870.02970	34	401.276	.7556E-02	.992
1	1	11	12	1	868.53128	-9	345.146	.1114E-01	1.000	1	1	8	20	0	870.03390		401.271	.1889E-02	.992
1	0	17	24	3	868.53348		970.758	.6900E-04	1.006	1	1	5	27	3	870.30266		540.161	.9002E-03	.963
1	0	17	24	1	868.53588		970.752	.2760E-03	1.006	1	1	5	27	1	870.30841	-84	540.155	.3601E-02	.963
1	0	17	23	3	868.59963		939.717	.6998E-04	1.005	1	1	9	18	3	870.35922	-16	385.029	.8477E-02	.996
1	0	17	23	1	868.60190		939.711	.2799E-03	1.005	1	1	9	18	1	870.36199		385.023	.4238E-02	.996
1	0	17	22	3	868.66307		909.965	.6872E-04	1.005	1	0	18	35	2	870.58212		1467.415	.2658E-04	1.017
1	0	17	22	1	868.66521		909.959	.2749E-03	1.005	1	0	18	35	0	870.58702		1467.409	.5316E-04	1.017
1	0	17	21	3	868.72380		881.503	.6440E-04	1.004	1	1	6	25	2	870.61524	-87	493.737	.2324E-02	.977
1	0	17	21	1	868.72582		881.497	.2576E-03	1.004	1	1	6	25	0	870.62195	48	493.732	.4642E-02	.976
1	0	17	20	3	868.78180		854.331	.5631E-04	1.003	1	1	2	34	2	870.67779	119	778.469	.9560E-03	.817
1	0	17	20	1	868.78371		854.325	.2252E-03	1.003	1	0	18	34	2	870.67823		1422.244	.3149E-04	1.016
1	1	4	28	2	868.79069	153	558.249	.3120E-02	.946	1	0	18	34	0	870.68288		1422.238	.6298E-04	1.016
1	1	8	19	2	868.79234	-11	375.372	.8397E-02	.993	1	1	2	34	0	870.69375		778.463	.2384E-03	.815
1	1	8	19	0	868.79626		375.366	.2099E-02	.993	1	1	10	16	2	870.69728	29	377.980	.9154E-02	.998
1	1	4	28	0	868.80006		558.243	.7792E-03	.945	1	1	10	16	0	870.70000		377.974	.2288E-02	.998
1	0	17	19	3	868.83708		828.449	.4357E-04	1.002	1	0	18	33	2	870.77169		1378.354	.3694E-04	1.015
1	0	17	19	1	868.83887		828.444	.1743E-03	1.002	1	0	18	33	0	870.77611		1378.348	.7388E-04	1.015
1	0	17	18	3	868.88962		803.859	.2517E-04	1.001	1	0	18	32	2	870.86249		1335.746	.4290E-04	1.014
1	0	17	18	1	868.89131		803.854	.1007E-03	1.001	1	0	18	32	0	870.86668		1335.740	.8580E-04	1.014
1	1	5	26	3	869.08423		505.219	.1044E-02	.966	1	1	3	32	3	870.92728	-3	701.937	.1535E-02	.898
1	1	5	26	1	869.08968	-63	505.213	.4175E-02	.966	1	1	7	23	3	870.93448		456.509	.1430E-02	.985
1	1	9	17	3	869.11635	-12	361.710	.9329E-02	.997	1	1	3	32	1	870.93581		701.931	.7668E-03	.897
1	1	9	17	1	869.11896		361.705	.4665E-02	.997	1	1	7	23	1	870.93860	-92	456.504	.5722E-02	.985
1	1	6	24	2	869.39167	-94	461.375	.2660E-02	.979	1	0	18	31	2	870.95063		1294.421	.4923E-04	1.012
1	1	6	24	0	869.39799	36	461.369	.5320E-02	.979	1	0	18	31	0	870.95459		1294.415	.9846E-04	1.012
1	1	10	15	2	869.44881	32	357.250	.9986E-02	.999	1	0	18	30	2	871.03610		1254.380	.5589E-04	1.011
1	1	10	15	0	869.45132		357.244	.2497E-02	.999	1	0	18	30	0	871.03984		1254.374	.1118E-03	1.011
1	1	2	33	2	869.47105	12	734.522	.1168E-02	.827	1	1	11	14	3	871.04058		380.138	.2387E-02	.999
1	1	2	33	0	869.48621		734.516	.2913E-03	.825	1	1	11	14	1	871.04253	-33	380.133	.9549E-02	.999
1	1	7	22	3	869.70565		426.729	.1619E-02	.987	1	0	18	29	2	871.11888		1215.623	.6266E-04	1.010
1	1	7	22	1	869.70954	-74	426.723	.6476E-02	.987	1	0	18	29	0	871.12241		1215.617	.1253E-03	1.010
1	1	3	31	3	869.71979	331*	660.559	.1843E-02	.904	1	0	18	28	2	871.19898		1178.151	.6928E-04	1.009
1	1	3	31	1	869.72792		660.553	.9204E-03	.903	1	0	18	28	0	871.20230		1178.145	.1386E-03	1.009

ΔK	ΔJ	K	J	σ	ν_i	o-c	E_i''	S_i	W_i	ΔK	ΔJ	K	J	σ	ν_i	o-c	E_i''	S_i	W_i
1	1	4	30	2	871.21563	62	634.573	.2243E-02	.937	1	1	4	31	2	872.42381	46	674.664	1.883E-02	.933
1	1	4	30	0	871.22607		634.567	.5602E-03	.936	1	1	4	31	0	872.43480		674.658	.4703E-03	.932
1	1	8	21	2	871.26405	23	428.473	.6755E-02	.991	1	1	8	22	2	872.49537	21	456.961	.6001E-02	.990
1	1	8	21	0	871.26854		428.468	.1689E-02	.991	1	1	8	22	0	872.50017		456.956	.1500E-02	.990
1	0	18	27	2	871.27638		1141.964	.7542E-04	1.008	1	1	12	13	2	872.64821	88	408.341	.4472E-02	1.000
1	0	18	27	0	871.27949		1141.959	.1508E-03	1.008	1	1	12	13	0	872.65004		408.336	.8945E-02	1.000
1	0	18	26	2	871.35107		1107.065	.8064E-04	1.007	1	1	5	29	3	872.73066		613.908	.6561E-03	.957
1	0	18	26	0	871.35400		1107.059	.1613E-03	1.007	1	1	5	29	1	872.73702	-107	613.902	.2621E-02	.956
1	1	12	12	2	871.39155		391.497	.4834E-02	1.000	1	1	9	20	3	872.83588	-16	435.543	.6873E-02	.994
1	1	12	12	0	871.39323	73	391.491	.9668E-02	1.000	1	1	9	20	1	872.83899		435.537	.3436E-02	.994
1	0	18	25	2	871.42306		1073.452	.8442E-04	1.006	1	1	6	27	2	873.05338	26	562.329	.1736E-02	.972
1	0	18	25	0	871.42580		1073.447	.1688E-03	1.006	1	1	6	27	0	873.06090	38	562.323	.3468E-02	.971
1	0	18	24	2	871.49234		1041.127	.8612E-04	1.005	1	1	10	18	2	873.18519	39	423.320	.7571E-02	.997
1	0	18	24	0	871.49489		1041.122	.1722E-03	1.005	1	1	10	18	0	873.18835		423.314	.1893E-02	.997
1	1	5	28	3	871.51814		576.390	.7711E-03	.960	1	1	3	34	3	873.33422	132	788.545	.1041E-02	.884
1	1	5	28	1	871.52419	-80	576.385	.3084E-02	.960	1	1	3	34	1	873.34359		788.539	.5201E-03	.883
1	0	18	23	2	871.55889		1010.091	.8497E-04	1.004	1	1	7	25	3	873.38307	-82	519.941	.1096E-02	.982
1	0	18	23	0	871.56126		1010.085	.1699E-03	1.004	1	1	7	25	1	873.38766		519.935	.4383E-02	.982
1	1	9	19	3	871.59907	-10	409.640	.7656E-02	.995	1	1	11	16	3	873.53964	-25	420.296	.2009E-02	.999
1	1	9	19	1	871.60200		409.634	.3828E-02	.995	1	1	11	16	1	873.54184		420.296	.8037E-02	.999
1	0	18	22	2	871.62271		980.343	.8015E-04	1.004	1	0	19	35	3	873.54894		1541.721	.8884E-05	1.016
1	0	18	22	0	871.62492		980.338	.1603E-03	1.004	1	0	19	35	1	873.55268		1541.715	.3554E-04	1.016
1	0	18	21	2	871.68380		951.885	.7046E-04	1.003	1	1	4	32	2	873.62914	30	716.040	.1569E-02	.928
1	0	18	21	0	871.68584		951.880	.1409E-03	1.003	1	1	4	32	0	873.64070		716.034	.3918E-03	.927
1	0	18	20	2	871.74215		924.717	.5480E-04	1.002	1	0	19	34	3	873.64576		1496.556	.1049E-04	1.015
1	0	18	20	0	871.74404		924.711	.1096E-03	1.002	1	0	19	34	1	873.64933		1496.550	.4195E-04	1.015
1	0	18	19	2	871.79776		898.839	.3182E-04	1.001	1	1	8	23	2	873.72364	21	486.740	.5297E-02	.989
1	0	18	19	0	871.79950		898.834	.6364E-04	1.001	1	1	8	23	0	873.72875		486.734	.1323E-02	.988
1	1	6	26	2	871.83581	-65	527.389	.2014E-02	.974	1	0	19	33	3	873.73990		1452.673	.1224E-04	1.013
1	1	6	26	0	871.84292	31	527.383	.4028E-02	.974	1	0	19	33	1	873.74332		1452.667	.4897E-04	1.013
1	1	10	17	2	871.94275	40	400.003	.8353E-02	.998	1	0	19	32	3	873.83137		1410.071	.1415E-04	1.012
1	1	10	17	0	871.94568		399.998	.2088E-02	.998	1	0	19	32	1	873.83463		1410.065	.5659E-04	1.012
1	1	3	33	3	872.13209	79	744.599	.1269E-02	.891	1	1	12	14	2	873.90188		426.480	.4121E-02	1.000
1	1	3	33	1	872.14103		744.593	.6337E-03	.890	1	1	12	14	0	873.90387	89	426.475	.8242E-02	1.000
1	1	7	24	3	872.16030		487.580	.1257E-02	.984	1	0	19	31	3	873.92015		1368.752	.1616E-04	1.011
1	1	7	24	1	872.16464	-102	487.575	.5027E-02	.984	1	0	19	31	1	873.92325		1368.746	.6465E-04	1.011
1	1	11	15	3	872.29161		399.573	.2196E-02	.999	1	1	5	30	3	873.94023		652.711	.5538E-03	.953
1	1	11	15	1	872.29369	-37	399.567	.8782E-02	.999	1	1	5	30	1	873.94690	-190*	652.706	.2215E-02	.953

ΔK	ΔJ	K	J	σ	ν_i	$\sigma-c$	E''_i	S_i	W_i	ΔK	ΔJ	K	J	σ	ν_i	$\sigma-c$	E''_i	S_i	W_i
1	0	19	30	3	874.00623		1328.717	.1823E-04	1.010	1	1	5	31	1	875.15383	18	692.795	.1857E-02	.949
1	0	19	30	1	874.00918		1328.711	.7292E-04	1.010	1	1	12	15	0	875.15470	76	445.908	.7553E-02	.999
1	1	9	21	3	874.06965	-15	462.737	.6132E-02	.993	1	1	9	22	3	875.30035	25	491.224	.5436E-02	.992
1	1	9	21	1	874.07294		462.732	.3066E-02	.993	1	1	9	22	1	875.30383		491.218	.2718E-02	.992
1	0	19	29	3	874.08961		1289.966	.2028E-04	1.009	1	1	6	29	2	875.47947	-75	636.073	.1262E-02	.967
1	0	19	29	1	874.09242		1289.960	.8111E-04	1.009	1	1	6	29	0	875.48786	39	636.067	.2522E-02	.966
1	0	19	28	3	874.17027		1252.499	.2220E-04	1.008	1	1	13	13	3	875.52545		458.707	.1891E-02	1.000
1	0	19	28	1	874.17295		1252.494	.8882E-04	1.008	1	1	13	13	1	875.52710	-28	458.702	.7564E-02	1.000
1	0	19	27	3	874.24822		1216.319	.2388E-04	1.007	1	1	10	20	2	875.66095	26	473.830	.6117E-02	.996
1	0	19	27	1	874.25076		1216.313	.9553E-04	1.007	1	1	10	20	0	875.66458		473.824	.1529E-02	.996
1	1	6	28	2	874.26793	-52	598.557	.1485E-02	.969	1	1	7	27	3	875.81948		588.529	.8167E-03	.978
1	1	6	28	0	874.27588	55	598.551	.2969E-02	.969	1	1	7	27	1	875.82456	-88	588.523	.3267E-02	.978
1	0	19	26	3	874.32345		1181.424	.2515E-04	1.006	1	1	11	18	3	876.02658		465.637	.1654E-02	.998
1	0	19	26	1	874.32585		1181.419	.1006E-03	1.006	1	1	11	18	1	876.02906	-20	465.632	.6615E-02	.998
1	0	19	25	3	874.39594		1147.817	.2580E-04	1.005	1	1	4	34	2	876.03124		802.646	.1066E-02	.918
1	0	19	25	1	874.39822		1147.811	.1032E-03	1.005	1	1	4	34	0	876.04397		802.640	.2663E-03	.917
1	1	10	19	2	874.42460	64	447.929	.6822E-02	.996	1	1	8	25	2	876.17100	17	550.168	.4043E-02	.986
1	1	10	19	0	874.42798		447.923	.1706E-02	.996	1	1	8	25	0	876.17678		550.162	.1011E-02	.986
1	0	19	24	3	874.46570		1115.497	.2561E-04	1.004	1	1	5	32	3	876.35048		734.176	.3871E-03	.946
1	0	19	24	1	874.46785		1115.491	.1024E-03	1.004	1	1	5	32	1	876.35780	-92	734.170	.1548E-02	.946
1	0	19	23	3	874.53271		1084.465	.2429E-04	1.004	1	1	12	16	2	876.40017		466.639	.3447E-02	.999
1	0	19	23	1	874.53475		1084.459	.9716E-04	1.004	1	1	12	16	0	876.40251	99	466.634	.6895E-02	.999
1	0	19	22	3	874.59698		1054.722	.2147E-04	1.003	1	1	9	23	3	876.52798	-9	521.000	.4789E-02	.991
1	0	19	22	1	874.59890		1054.716	.8589E-04	1.003	1	1	9	23	1	876.53166		520.995	.2394E-02	.991
1	1	7	26	3	874.60281		553.591	.9491E-03	.980	1	1	6	30	2	876.68797	12	674.875	.1065E-02	.964
1	1	7	26	1	874.60763	-56	553.585	.3797E-02	.980	1	1	6	30	0	876.69682	49	674.869	.2128E-02	.963
1	0	19	21	3	874.65849		1026.268	.1679E-04	1.002	1	1	13	14	3	876.77870		476.844	.1738E-02	1.000
1	0	19	21	1	874.66030		1026.262	.6716E-04	1.002	1	1	13	14	1	876.78045	-24	476.839	.6951E-02	1.000
1	0	19	20	3	874.71724		999.104	.9799E-05	1.001	1	1	10	21	2	876.89422	42	501.023	.5446E-02	.995
1	0	19	20	1	874.71895		999.098	.3920E-04	1.001	1	1	10	21	0	876.89811		501.017	.1362E-02	.995
1	1	11	17	3	874.78463		442.323	.1827E-02	.998	1	1	7	28	3	877.03310		624.755	.6980E-03	.976
1	1	11	17	1	874.78697	-50	442.317	.7308E-02	.998	1	1	7	28	1	877.03844	-60	624.750	.2792E-02	.976
1	1	4	33	2	874.83161	177	758.701	.1298E-02	.923	1	1	11	19	3	877.26546		490.244	.1487E-02	.997
1	1	4	33	0	874.84375	17	758.695	.3241E-03	.922	1	1	11	19	1	877.26809	-111	490.239	.5948E-02	.997
1	1	8	24	2	874.94886	17	517.809	.4640E-02	.987	1	1	8	26	2	877.39007	32	583.816	.3496E-02	.984
1	1	8	24	0	874.95430		517.803	.1160E-02	.987	1	1	8	26	0	877.39619		583.810	.8739E-03	.984
1	1	5	31	3	875.14683		692.801	.4648E-03	.950	1	1	5	33	3	877.55116		776.835	.3201E-03	.942
1	1	12	15	2	875.15254		445.913	.3777E-02	.999	1	1	5	33	1	877.55882	-98	776.830	.1281E-02	.942

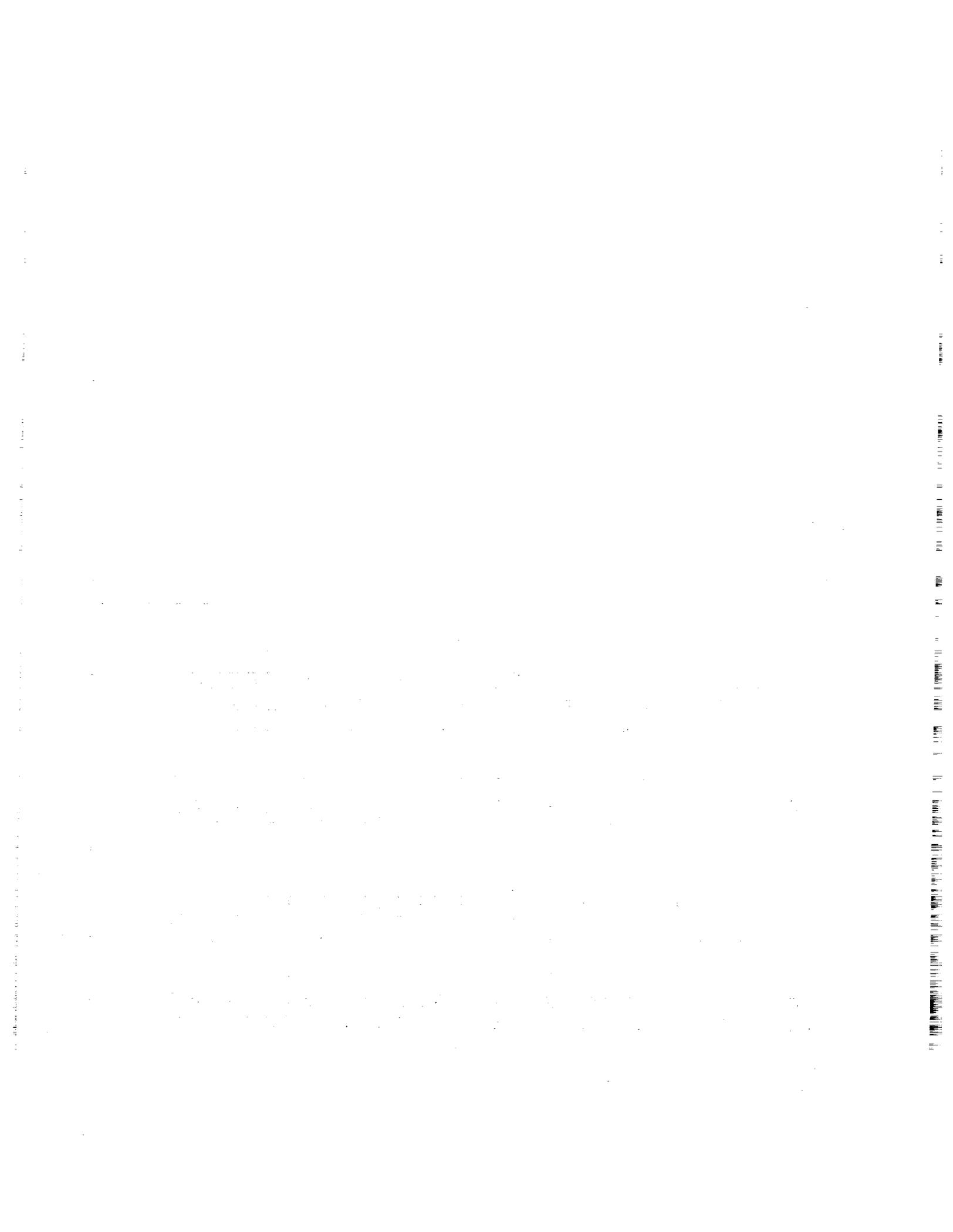
ΔK	ΔJ	K	J	σ	ν_i	$\sigma-c$	E''_i	S_i	W_i	ΔK	ΔJ	K	J	σ	ν_i	$\sigma-c$	E''_i	S_i	W_i
1	1	12	17	2	877.64475		488.659	.3131E-02	.999	1	1	9	26	3	880.19229	123	618.069	.3148E-02	.987
1	1	12	17	0	877.64727	118	488.653	.6262E-02	.999	1	1	9	26	1	880.19658		618.064	.1574E-02	.987
1	1	9	24	3	877.75252	-3	552.067	.4192E-02	.990	1	1	6	33	2	880.29530		798.993	.6146E-03	.955
1	1	9	24	1	877.75640		552.062	.2096E-02	.990	1	1	6	33	0	880.30557	60	798.987	.1228E-02	.954
1	1	6	31	2	877.89345		714.963	.8927E-03	.961	1	1	13	17	3	880.52018		539.017	.1311E-02	.999
1	1	6	31	0	877.90276	59	714.957	.1786E-02	.961	1	1	13	17	1	880.52228	-51	539.011	.5244E-02	.999
1	1	13	15	3	878.02892		496.275	.1590E-02	1.000	1	1	10	24	2	880.57548	3	590.345	.3704E-02	.992
1	1	13	15	1	878.03078	-32	496.270	.6361E-02	1.000	1	1	10	24	0	880.58020		590.340	.9259E-03	.992
1	1	10	22	2	878.12442	40	529.506	.4819E-02	.994	1	1	7	31	3	880.65548		741.155	.4184E-03	.969
1	1	10	22	0	878.12857		529.501	.1205E-02	.994	1	1	7	31	1	880.66164	-82	741.149	.1674E-02	.969
1	1	7	29	3	878.24364		662.269	.5927E-03	.974	1	1	14	15	2	880.92303	29	550.649	.5235E-02	1.000
1	1	7	29	1	878.24925	-118	662.263	.2371E-02	.974	1	1	14	15	0	880.92487		550.644	.1309E-02	1.000
1	1	11	20	3	878.50127		516.143	.1331E-02	.997	1	1	11	22	3	880.96357		571.815	.1045E-02	.995
1	1	11	20	1	878.50405	-61	516.137	.5323E-02	.997	1	1	11	22	1	880.96668	-65	571.809	.4178E-02	.995
1	1	8	27	2	878.60604	21	618.752	.3003E-02	.982	1	1	8	29	2	881.02868	30	692.487	.2175E-02	.979
1	1	8	27	0	878.61253		618.746	.7508E-03	.982	1	1	8	29	0	881.03591		692.481	.5438E-03	.979
1	1	5	34	3	878.74888		820.778	.2630E-03	.938	1	1	12	20	2	881.36002		562.472	.2264E-02	.997
1	1	5	34	1	878.75689		820.773	.1052E-02	.938	1	1	12	20	0	881.36317	150	562.467	.4529E-02	.997
1	1	12	18	2	878.88626		511.971	.2825E-02	.998	1	1	9	27	3	881.40748	144	653.003	.2703E-02	.986
1	1	12	18	0	878.88899	172	511.966	.5650E-02	.998	1	1	9	27	1	881.41200		652.998	.1351E-02	.986
1	1	9	25	3	878.97396	127	584.424	.3646E-02	.989	1	1	6	34	2	881.49167		842.934	.5049E-03	.952
1	1	9	25	1	878.97805		584.418	.1823E-02	.989	1	1	6	34	0	881.50243		842.928	.1009E-02	.951
1	1	6	32	2	879.09590		756.336	.7432E-03	.958	1	1	13	18	3	881.76119		562.327	.1182E-02	.999
1	1	6	32	0	879.10568	43	756.330	.1485E-02	.957	1	1	13	18	1	881.76341	-37	562.321	.4727E-02	.999
1	1	13	16	3	879.27609		517.000	.1447E-02	.999	1	1	10	25	2	881.79633	14	622.699	.3216E-02	.991
1	1	13	16	1	879.27806	-50	516.994	.5787E-02	.999	1	1	10	25	0	881.80134		622.694	.8041E-03	.991
1	1	10	23	2	879.35151	31	559.281	.4238E-02	.993	1	1	7	32	3	881.85677		782.526	.3483E-03	.967
1	1	10	23	0	879.35594		559.275	.1060E-02	.993	1	1	7	32	1	881.86321	-100	782.520	.1392E-02	.966
1	1	7	30	3	879.45111		701.069	.4994E-03	.971	1	1	14	16	2	882.16978	68	571.371	.4757E-02	1.000
1	1	7	30	1	879.45698	-95	701.063	.1998E-02	.971	1	1	14	16	0	882.17178		571.366	.1189E-02	1.000
1	1	14	14	2	879.67320	24	531.221	.5734E-02	1.000	1	1	11	23	3	882.19004		601.587	.9170E-03	.994
1	1	14	14	0	879.67490		531.215	.1434E-02	1.000	1	1	11	23	1	882.19332	-61	601.581	.3668E-02	.994
1	1	11	21	3	879.73398		543.333	.1183E-02	.996	1	1	8	30	2	882.23531	20	731.285	.1832E-02	.977
1	1	11	21	1	879.73692	-14	543.328	.4730E-02	.996	1	1	8	30	0	882.24293		731.279	.4581E-03	.977
1	1	8	28	2	879.81892	-1	654.976	.2566E-02	.981	1	1	12	21	2	882.59224		589.660	.2011E-02	.997
1	1	8	28	0	879.82577		654.970	.6407E-03	.980	1	1	12	21	0	882.59561	169	589.655	.4021E-02	.997
1	1	12	19	2	880.12469		536.576	.2538E-02	.998	1	1	9	28	3	882.61954	136	689.275	.2303E-02	.984
1	1	12	19	0	880.12762	56	536.570	.5075E-02	.998	1	1	9	28	1	882.62429		689.219	.1152E-02	.984

ΔK	ΔJ	K	J	σ	ν_i	$o-c$	E_i''	S_i	W_i	ΔK	ΔJ	K	J	σ	ν_i	$o-c$	E_i''	S_i	W_i
1	1	13	19	3	882.99910		586.929	.1060E-02	.999	1	1	13	21	3	885.46551		640.008	.8365E-03	.998
1	1	13	19	1	883.00145	-29	586.924	.4238E-02	.999	1	1	13	21	1	885.46815	-57	640.003	.3346E-02	.998
1	1	10	26	2	883.01403	6	656.342	.2775E-02	.990	1	1	8	33	2	885.83640	-1	855.389	.1053E-02	.971
1	1	10	26	0	883.01935		656.337	.6938E-03	.990	1	1	8	33	0	885.84524		855.384	.2629E-03	.970
1	1	7	33	3	883.05495		825.181	.2877E-03	.964	1	1	11	26	3	885.85053		698.640	.5984E-03	.992
1	1	7	33	1	883.06168	-145	825.175	.1151E-02	.964	1	1	11	26	1	885.85437	-87	698.635	.2393E-02	.992
1	1	11	24	3	883.41336		632.649	.8009E-03	.994	1	1	14	19	2	885.89143	38	641.293	.3461E-02	.999
1	1	14	17	2	883.41344	123	593.386	.4302E-02	1.000	1	1	14	19	0	885.89396		641.288	.8652E-03	.999
1	1	14	17	0	883.41561		593.381	.1075E-02	.999	1	1	9	31	3	886.23676	191*	805.609	.1374E-02	.980
1	1	11	24	1	883.41683	-215*	632.643	.3204E-02	.994	1	1	9	31	1	886.24223		805.603	.6864E-03	.979
1	1	8	31	2	883.43882	0	771.368	.1533E-02	.975	1	1	12	24	2	886.27001		678.967	.1355E-02	.995
1	1	8	31	0	883.44684		771.363	.3833E-03	.975	1	1	12	24	0	886.27411	-86	678.962	.2710E-02	.995
1	1	12	22	2	883.82132		618.139	.1773E-02	.996	1	1	15	17	3	886.32183	-24	651.771	.3451E-02	1.000
1	1	12	22	0	883.82492	106	618.134	.3546E-02	.996	1	1	15	17	1	886.32370		651.766	.1726E-02	1.000
1	1	9	29	3	883.82844	-485*	726.733	.1952E-02	.983	1	1	10	29	2	886.64815	19	764.998	.1714E-02	.986
1	1	15	15	3	883.83239	-76	609.039	.4216E-02	1.000	1	1	10	29	0	886.65443		764.993	.4286E-03	.986
1	1	9	29	1	883.83343		726.728	.9762E-03	.983	1	1	13	22	3	886.69400		668.484	.7365E-03	.997
1	1	15	15	1	883.83405		609.034	.2108E-02	1.000	1	1	13	22	1	886.69678	-62	668.479	.2946E-02	.997
1	1	10	27	2	884.22858	-62	691.274	.2380E-02	.989	1	1	8	34	2	887.03046	57	899.325	.8628E-03	.968
1	1	13	20	3	884.23388		612.823	.9437E-03	.998	1	1	8	34	0	887.03973		899.320	.2157E-03	.968
1	1	10	27	0	884.23421		691.268	.5943E-03	.988	1	1	11	27	3	887.06434		733.568	.5124E-03	.991
1	1	13	20	1	884.23637	-52	612.817	.3775E-02	.998	1	1	11	27	1	887.06838	-70	733.563	.2049E-02	.991
1	1	7	34	3	884.25002		869.120	.2360E-03	.961	1	1	14	20	2	887.12572	43	667.184	.3080E-02	.999
1	1	7	34	1	884.25706		869.114	.9441E-03	.961	1	1	14	20	0	887.12845		667.179	.7701E-03	.999
1	1	11	25	3	884.63353		665.000	.6944E-03	.993	1	1	9	32	3	887.43615	290*	846.975	.1141E-02	.978
1	1	11	25	1	884.63718	12	664.994	.2778E-02	.993	1	1	9	32	1	887.44187		846.969	.5705E-03	.978
1	1	8	32	2	884.63918	-188*	812.737	.1275E-02	.973	1	1	12	25	2	887.48959		711.316	.1173E-02	.994
1	1	8	32	0	884.64761		812.731	.3187E-03	.973	1	1	12	25	0	887.49395	-36	711.310	.2347E-02	.994
1	1	14	18	2	884.65400	25	616.694	.3867E-02	.999	1	1	15	18	3	887.56187	-31	675.076	.3100E-02	1.000
1	1	14	18	0	884.65635		616.688	.9668E-03	.999	1	1	15	18	1	887.56385		675.071	.1550E-02	1.000
1	1	9	30	3	885.03419	169	765.529	.1642E-02	.981	1	1	10	30	2	887.85315	45	803.790	.1442E-02	.985
1	1	9	30	1	885.03941		765.523	.8212E-03	.981	1	1	10	30	0	887.85978		803.785	.3601E-03	.984
1	1	12	23	2	885.04725		647.908	.1555E-02	.996	1	1	13	23	3	887.91930		698.250	.6452E-03	.997
1	1	12	23	0	885.05109	80	647.903	.3111E-02	.996	1	1	13	23	1	887.92225	-63	698.245	.2581E-02	.997
1	1	15	16	3	885.07866	-39	629.759	.3823E-02	1.000	1	1	16	16	2	888.00491	12	692.152	.3007E-02	1.000
1	1	15	16	1	885.08042		629.754	.1912E-02	1.000	1	1	16	16	0	888.00662		692.146	.7518E-03	1.000
1	1	10	28	2	885.43996	22	727.492	.2025E-02	.987	1	1	11	28	3	888.27495		769.784	.4359E-03	.990
1	1	10	28	0	885.44591		727.487	.5063E-03	.987	1	1	11	28	1	888.27920	-119	769.779	.1744E-02	.990

ΔK	ΔJ	K	J	σ	ν_i	$\sigma-c$	E_i''	S_i	W_i	ΔK	ΔJ	K	J	σ	ν_i	$\sigma-c$	E_i''	S_i	W_i
1	1	14	26	2	894.46451	139	849.626	.1351E-02	.996	1	1	18	19	2	897.61990		898.839	.6229E-03	1.000
1	1	14	26	0	894.46856		849.621	.3379E-03	.996	1	1	18	19	0	897.62177	70	898.834	.1246E-02	1.000
1	1	17	19	3	894.66321		828.449	.4151E-03	1.000	1	1	16	24	2	897.85751	31	904.384	.1125E-02	.998
1	1	17	19	1	894.66509	-37	828.444	.1661E-02	1.000	1	1	16	24	0	897.86062		904.379	.2812E-03	.998
1	1	12	31	2	894.73947		932.445	.4336E-03	.988	1	1	14	29	2	898.09013	-44	958.240	.8237E-03	.993
1	1	12	31	0	894.74557	89	932.439	.8671E-03	.988	1	1	14	29	0	898.09494		958.234	.2059E-03	.993
1	1	15	24	3	894.93541	-16	842.018	.1447E-02	.998	1	1	12	34	2	898.32033		1060.361	.2420E-03	.985
1	1	15	24	1	894.93820		842.012	.7235E-03	.998	1	1	12	34	0	898.32739		1060.355	.4834E-03	.984
1	1	13	29	3	895.20362		903.911	.2553E-03	.992	1	1	17	22	3	898.35145		909.965	.2838E-03	.999
1	1	13	29	1	895.20762	-117	903.905	.1021E-02	.992	1	1	17	22	1	898.35370	-95	909.959	.1135E-02	.999
1	1	16	22	2	895.41363	68	843.583	.1487E-02	.999	1	1	15	27	3	898.57853	30	942.895	.9127E-03	.996
1	1	16	22	0	895.41635		843.578	.3719E-03	.999	1	1	15	27	1	898.58179		942.889	.4563E-03	.996
1	1	11	34	3	895.47069		1014.078	.1444E-03	.982	1	1	13	32	3	898.80169		1024.109	.1476E-03	.989
1	1	11	34	1	895.47628		1014.072	.5775E-03	.982	1	1	13	32	1	898.80628		1024.103	.5903E-03	.989
1	1	14	27	2	895.67633	51	884.544	.1153E-02	.995	1	1	18	20	2	898.85201		924.717	.5512E-03	1.000
1	1	14	27	0	895.68062		884.538	.2882E-03	.995	1	1	18	20	0	898.85404	58	924.711	.1102E-02	1.000
1	1	17	20	3	895.89585		854.331	.3678E-03	1.000	1	1	16	25	2	899.07455	38	936.718	.9699E-03	.998
1	1	17	20	1	895.89785	-51	854.325	.1471E-02	1.000	1	1	16	25	0	899.07787		936.712	.2425E-03	.998
1	1	12	32	2	895.93639		973.800	.3592E-03	.987	1	1	14	30	2	899.29208	184*	997.017	.6905E-03	.993
1	1	12	32	0	895.94280	257*	973.794	.7185E-03	.987	1	1	14	30	0	899.29716		997.011	.1726E-03	.993
1	1	15	25	3	896.15305	7	874.356	.1248E-02	.997	1	1	17	23	3	899.57438		939.717	.2473E-03	.999
1	1	15	25	1	896.15600		874.350	.6240E-03	.997	1	1	17	23	1	899.57675	-9	939.711	.9892E-03	.999
1	1	18	18	2	896.38456	73	874.252	.7004E-03	1.000	1	1	15	28	3	899.78633	26	979.096	.7730E-03	.995
1	1	18	18	0	896.38628		874.247	.1401E-02	1.000	1	1	15	28	1	899.78975		979.090	.3865E-03	.995
1	1	13	30	3	896.40627		942.692	.2140E-03	.991	1	1	13	33	3	899.99442		1066.744	.1214E-03	.988
1	1	13	30	1	896.41047	-98	942.686	.8562E-03	.991	1	1	13	33	1	899.99922		1066.738	.4856E-03	.988
1	1	16	23	2	896.63720	-17	873.339	.1297E-02	.998	1	1	18	21	2	900.08088		951.885	.4851E-03	1.000
1	1	16	23	0	896.64011		873.334	.3241E-03	.998	1	1	18	21	0	900.08307	50	951.880	.9702E-03	1.000
1	1	14	28	2	896.88488	30	920.749	.9775E-03	.994	1	1	16	26	2	900.28830	103	970.340	.8306E-03	.997
1	1	14	28	0	896.88942		920.743	.2444E-03	.994	1	1	16	26	0	900.29184		970.334	.2076E-03	.997
1	1	17	21	3	897.12527		881.503	.3238E-03	.999	1	1	14	31	2	900.49071	-74	1037.079	.5746E-03	.992
1	1	17	21	1	897.12739	-3	881.497	.1295E-02	.999	1	1	14	31	0	900.49606		1037.073	.1437E-03	.992
1	1	12	33	2	897.13001		1016.439	.2958E-03	.986	1	1	19	19	3	900.59113		973.230	.2288E-03	1.000
1	1	12	33	0	897.13674		1016.433	.5915E-03	.986	1	1	19	19	1	900.59282		973.224	.9154E-03	1.000
1	1	15	26	3	897.36743	-25	907.982	.1071E-02	.997	1	1	17	24	3	900.79403		970.758	.2143E-03	.999
1	1	15	26	1	897.37053		907.976	.5350E-03	.996	1	1	17	24	1	900.79653	-63	970.752	.8571E-03	.999
1	1	13	31	3	897.60563		982.758	.1783E-03	.990	1	1	15	29	3	900.99081	28	1016.583	.6514E-03	.995
1	1	13	31	1	897.61003	-101	982.752	.7132E-03	.990	1	1	15	29	1	900.99441		1016.577	.3257E-03	.995

ΔK	ΔJ	K	J	σ	ν_i	$\sigma-c$	E''_i	S_i	W_i	ΔK	ΔJ	K	J	σ	ν_i	$\sigma-c$	E''_i	S_i	W_i
1	1	13	34	3	901.18381		1110.661	.9922E-04	.987	1	1	18	25	2	904.96362		1073.452	.2750E-03	.999
1	1	13	34	1	901.18883		1110.655	.3969E-03	.987	1	1	18	25	0	904.96652	86	1073.447	.5499E-03	.999
1	1	18	22	2	901.30650		.980.343	.4242E-03	.999	1	1	16	30	2	905.11012		1117.695	.4213E-03	.995
1	1	18	22	0	901.30886	105	.980.338	.8484E-03	.999	1	1	16	30	0	905.11458		1117.689	.1053E-03	.995
1	1	16	27	2	901.49875	-82	1005.249	.7078E-03	.997	1	1	19	23	3	905.49758		1084.465	.1350E-03	.999
1	1	16	27	0	901.50251		1005.243	.1769E-03	.997	1	1	19	23	1	905.49971		1084.459	.5399E-03	.999
1	1	14	32	2	901.68601		1078.426	.4752E-03	.991	1	1	17	28	3	905.63952		1107.800	.1136E-03	.997
1	1	14	32	0	901.69164		1078.420	.1188E-03	.991	1	1	17	28	1	905.64261		1107.794	.4544E-03	.997
1	1	19	20	3	901.82265		.999.104	.2022E-03	1.000	1	1	15	33	3	905.77529		1179.379	.3077E-03	.992
1	1	19	20	1	901.82445	-68	.999.098	.8089E-03	1.000	1	1	15	33	1	905.77962		1179.373	.1537E-03	.991
1	1	17	25	3	902.01038		1003.087	.1844E-03	.998	1	1	18	26	2	906.17602		1107.065	.2350E-03	.998
1	1	17	25	1	902.01303	-118	1003.082	.7375E-03	.998	1	1	18	26	0	906.17911		1107.059	.4700E-03	.998
1	1	15	30	3	902.19196	25	1055.355	.5449E-03	.994	1	1	16	31	2	906.30719		1157.747	.3500E-03	.994
1	1	15	30	1	902.19574		1055.349	.2725E-03	.994	1	1	16	31	0	906.31191		1157.741	.8750E-04	.994
1	1	18	23	2	902.52884		1010.091	.3692E-03	.999	1	1	19	24	3	906.71594		1115.497	.1167E-03	.999
1	1	18	23	0	902.53137	125	1010.085	.7384E-03	.999	1	1	19	24	1	906.71820		1115.491	.4668E-03	.999
1	1	16	28	2	902.70588		1041.445	.5988E-03	.996	1	1	17	29	3	906.84254		1145.278	.9546E-04	.996
1	1	16	28	0	902.70987		1041.439	.1497E-03	.996	1	1	17	29	1	906.84579		1145.272	.3818E-03	.996
1	1	14	33	2	902.87796		1121.055	.3905E-03	.990	1	1	15	34	3	906.96298		1223.287	.2511E-03	.991
1	1	14	33	0	902.88388		1121.050	.9763E-04	.990	1	1	15	34	1	906.96750		1223.281	.1255E-03	.991
1	1	19	21	3	903.05091		1026.268	.1778E-03	1.000	1	1	18	27	2	907.38508		1141.964	.1998E-03	.998
1	1	19	21	1	903.05281	-4	1026.262	.7110E-03	1.000	1	1	18	27	0	907.38837		1141.959	.3997E-03	.998
1	1	17	26	3	903.22343		1036.704	.1579E-03	.998	1	1	16	32	2	907.50088		1199.083	.2892E-03	.994
1	1	17	26	1	903.22622	-109	1036.699	.6316E-03	.998	1	1	16	32	0	907.50585		1199.078	.7224E-04	.993
1	1	15	31	3	903.38977	84	1095.412	.4531E-03	.993	1	1	19	25	3	907.93098		1147.817	.1003E-03	.999
1	1	15	31	1	903.39373		1095.407	.2265E-03	.993	1	1	19	25	1	907.93336		1147.811	.4013E-03	.999
1	1	18	24	2	903.74788		1041.127	.3195E-03	.999	1	1	17	30	3	908.04218		1184.040	.7979E-04	.996
1	1	18	24	0	903.75060	-23	1041.122	.6391E-03	.999	1	1	17	30	1	908.04559		1184.034	.3192E-03	.996
1	1	16	29	2	903.90968		1078.927	.5041E-03	.996	1	1	18	28	2	908.59077		1178.151	.1689E-03	.998
1	1	16	29	0	903.91390		1078.921	.1260E-03	.996	1	1	18	28	0	908.59427		1178.145	.3375E-03	.997
1	1	14	34	2	904.06654		1164.968	.3189E-03	.989	1	1	16	33	2	908.69118		1241.703	.2373E-03	.993
1	1	14	34	0	904.07276		1164.962	.7973E-04	.989	1	1	16	33	0	908.69640		1241.697	.5933E-04	.993
1	1	19	22	3	904.27589		1054.722	.1554E-03	1.000	1	1	19	26	3	909.14266		1181.424	.8573E-04	.999
1	1	19	22	1	904.27791	-180	1054.716	.6216E-03	1.000	1	1	19	26	1	909.14517		1181.419	.3429E-03	.999
1	1	17	27	3	904.43315		1071.609	.1343E-03	.997	1	1	17	31	3	909.23843		1224.087	.6623E-04	.995
1	1	17	27	1	904.43608		1071.603	.5371E-03	.997	1	1	17	31	1	909.24200		1224.081	.2649E-03	.995
1	1	15	32	3	904.58422	146	1136.754	.3744E-03	.992	1	1	18	29	2	909.79308		1215.623	.1418E-03	.997
1	1	15	32	1	904.58836		1136.748	.1872E-03	.992	1	1	18	29	0	909.79690		1215.617	.2836E-03	.997

ΔK	ΔJ	K	J	σ	ν_i	o-c	E_i''	S_i	W_i	ΔK	ΔJ	K	J	σ	ν_i	o-c	E_i''	S_i	W_i
1	1	16	34	2	909.87806		1285.605	.1935E-03	.992	1	1	16	34	2	909.87806		1285.605	.1935E-03	.992
1	1	16	34	0	909.88355		1285.599	.4837E-04	.992	1	1	16	34	0	909.88355		1285.599	.4837E-04	.992
1	1	19	27	3	910.35098		1216.319	.7277E-04	.998	1	1	19	27	3	910.35098		1216.319	.7277E-04	.998
1	1	19	27	1	910.35362		1216.313	.2911E-03	.998	1	1	19	27	1	910.35362		1216.313	.2911E-03	.998
1	1	17	32	3	910.43128		1265.418	.5468E-04	.995	1	1	17	32	3	910.43128		1265.418	.5468E-04	.995
1	1	17	32	1	910.43502		1265.412	.2187E-03	.995	1	1	17	32	1	910.43502		1265.412	.2187E-03	.995
1	1	18	30	2	910.99200		1254.380	.1184E-03	.997	1	1	18	30	2	910.99200		1254.380	.1184E-03	.997
1	1	18	30	0	910.99594		1254.374	.2369E-03	.997	1	1	18	30	0	910.99594		1254.374	.2369E-03	.997
1	1	19	28	3	911.55591		1252.499	.6146E-04	.998	1	1	19	28	3	911.55591		1252.499	.6146E-04	.998
1	1	19	28	1	911.55869		1252.494	.2458E-03	.998	1	1	19	28	1	911.55869		1252.494	.2458E-03	.998
1	1	17	33	3	911.62070		1308.032	.4483E-04	.994	1	1	17	33	3	911.62070		1308.032	.4483E-04	.994
1	1	17	33	1	911.62461		1308.026	.1793E-03	.994	1	1	17	33	1	911.62461		1308.026	.1793E-03	.994
1	1	18	31	2	912.18751		1294.421	.9822E-04	.996	1	1	18	31	2	912.18751		1294.421	.9822E-04	.996
1	1	18	31	0	912.19166		1294.415	.1964E-03	.996	1	1	18	31	0	912.19166		1294.415	.1964E-03	.996
1	1	19	29	3	912.75743		1289.966	.5160E-04	.998	1	1	19	29	3	912.75743		1289.966	.5160E-04	.998
1	1	19	29	1	912.76036		1289.960	.2064E-03	.998	1	1	19	29	1	912.76036		1289.960	.2064E-03	.998
1	1	17	34	3	912.80668		1351.928	.3652E-04	.993	1	1	17	34	3	912.80668		1351.928	.3652E-04	.993
1	1	17	34	1	912.81077		1351.922	.1461E-03	.993	1	1	17	34	1	912.81077		1351.922	.1461E-03	.993
1	1	18	32	2	913.37958		1335.746	.8103E-04	.996	1	1	18	32	2	913.37958		1335.746	.8103E-04	.996
1	1	18	32	0	913.38397		1335.740	.1619E-03	.995	1	1	18	32	0	913.38397		1335.740	.1619E-03	.995
1	1	19	30	3	913.95554		1328.717	.4302E-04	.997	1	1	19	30	3	913.95554		1328.717	.4302E-04	.997
1	1	19	30	1	913.95862		1328.711	.1721E-03	.997	1	1	19	30	1	913.95862		1328.711	.1721E-03	.997
1	1	18	33	2	914.56821		1378.354	.6638E-04	.995	1	1	18	33	2	914.56821		1378.354	.6638E-04	.995
1	1	18	33	0	914.57284		1378.348	.1328E-03	.995	1	1	18	33	0	914.57284		1378.348	.1328E-03	.995
1	1	19	31	3	915.15022		1368.752	.3568E-04	.997	1	1	19	31	3	915.15022		1368.752	.3568E-04	.997
1	1	19	31	1	915.15344		1368.746	.1427E-03	.997	1	1	19	31	1	915.15344		1368.746	.1427E-03	.997
1	1	18	34	2	915.75338		1422.244	.5404E-04	.994	1	1	18	34	2	915.75338		1422.244	.5404E-04	.994
1	1	18	34	0	915.75825		1422.238	.1081E-03	.994	1	1	18	34	0	915.75825		1422.238	.1081E-03	.994
1	1	19	32	3	916.34144		1410.071	.2939E-04	.996	1	1	19	32	3	916.34144		1410.071	.2939E-04	.996
1	1	19	32	1	916.34482		1410.065	.1175E-03	.996	1	1	19	32	1	916.34482		1410.065	.1175E-03	.996
1	1	19	33	3	917.52919		1452.673	.2408E-04	.996	1	1	19	33	3	917.52919		1452.673	.2408E-04	.996
1	1	19	33	1	917.53273		1452.667	.9632E-04	.996	1	1	19	33	1	917.53273		1452.667	.9632E-04	.996
1	1	19	34	3	918.71346		1496.556	.1959E-04	.995	1	1	19	34	3	918.71346		1496.556	.1959E-04	.995
1	1	19	34	1	918.71717		1496.550	.7836E-04	.995	1	1	19	34	1	918.71717		1496.550	.7836E-04	.995



Appendix B

Observed and Calculated FTS Spectra of ν_{12} $^{13}\text{C}^{12}\text{CH}_6$

Top trace:

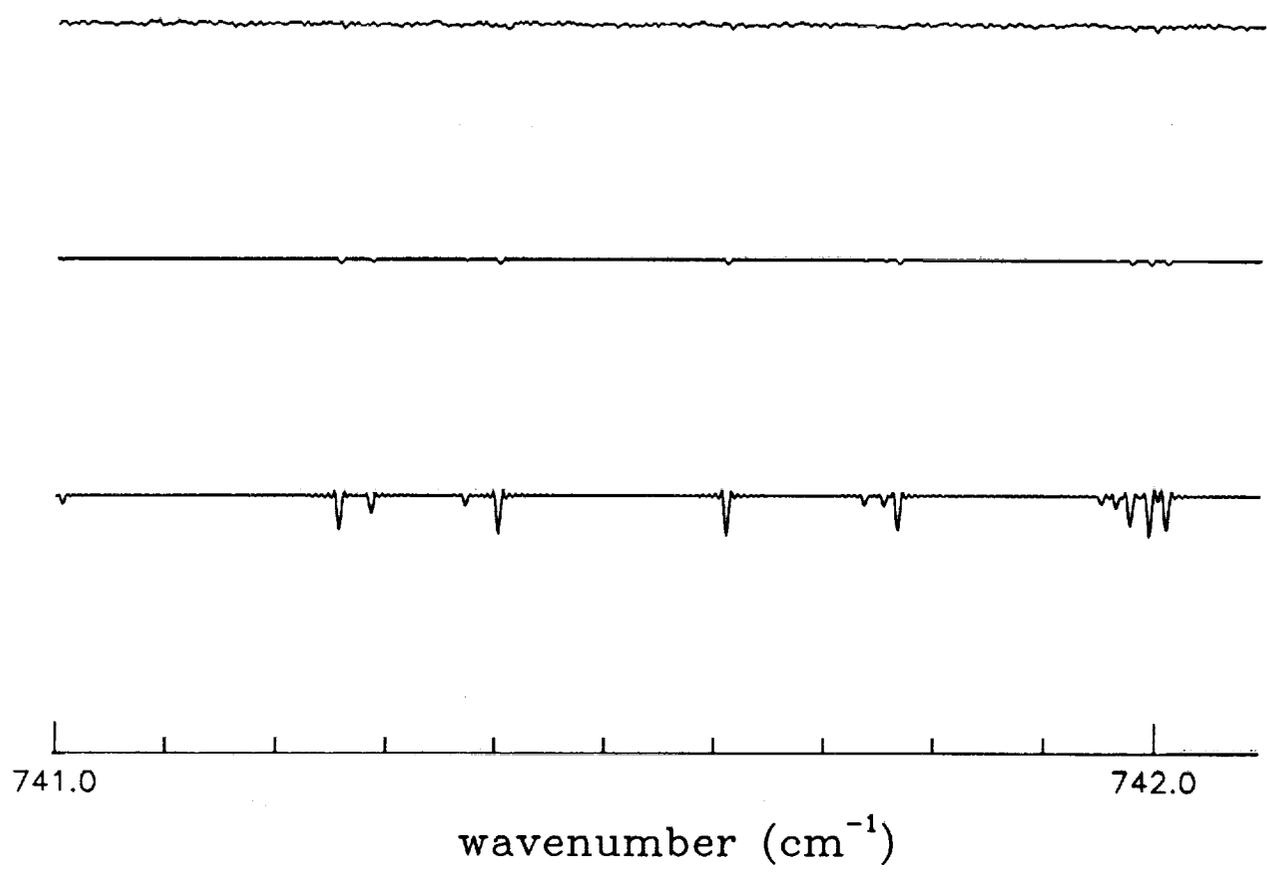
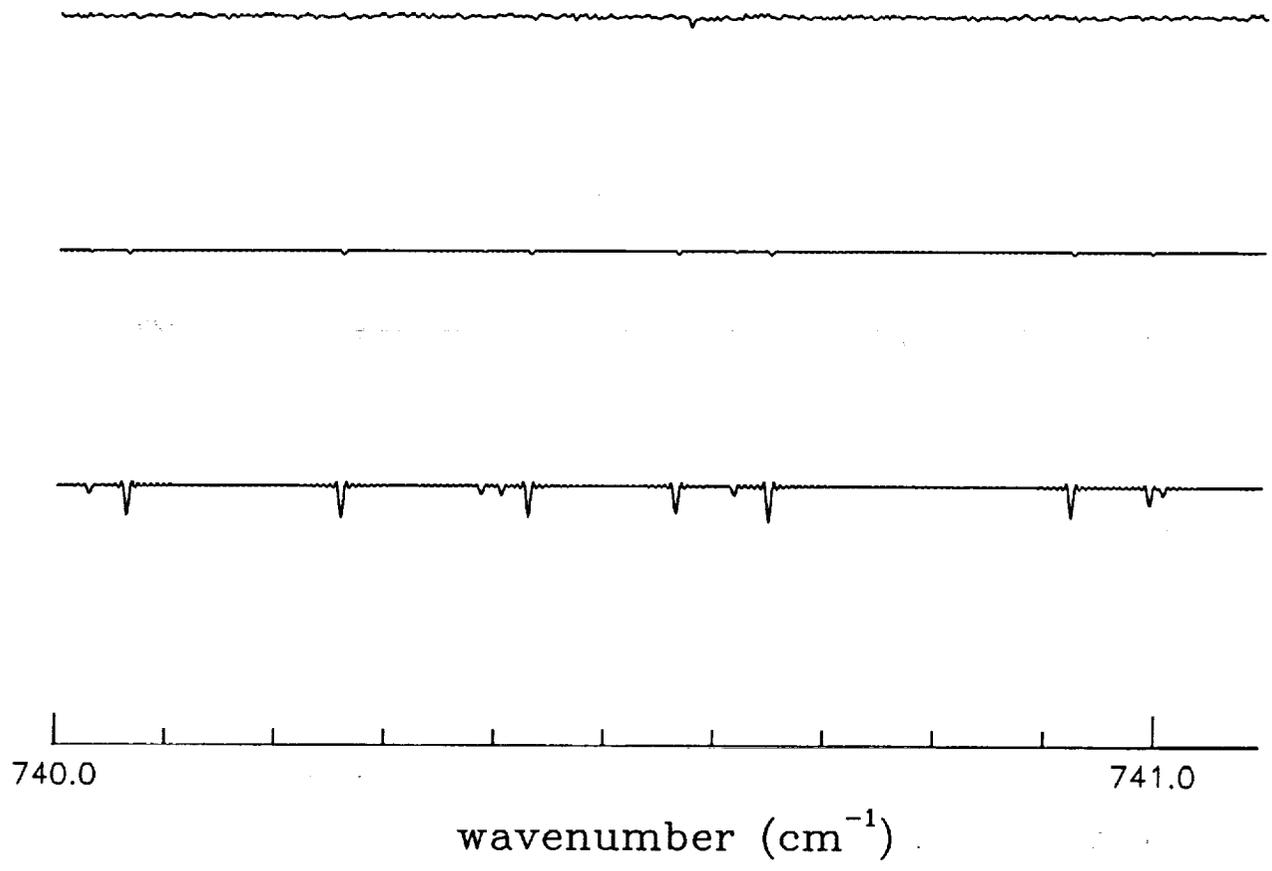
Observed at $p = 1.05$ Torr, $\ell = 1.5$ m and $T = 294$ K.

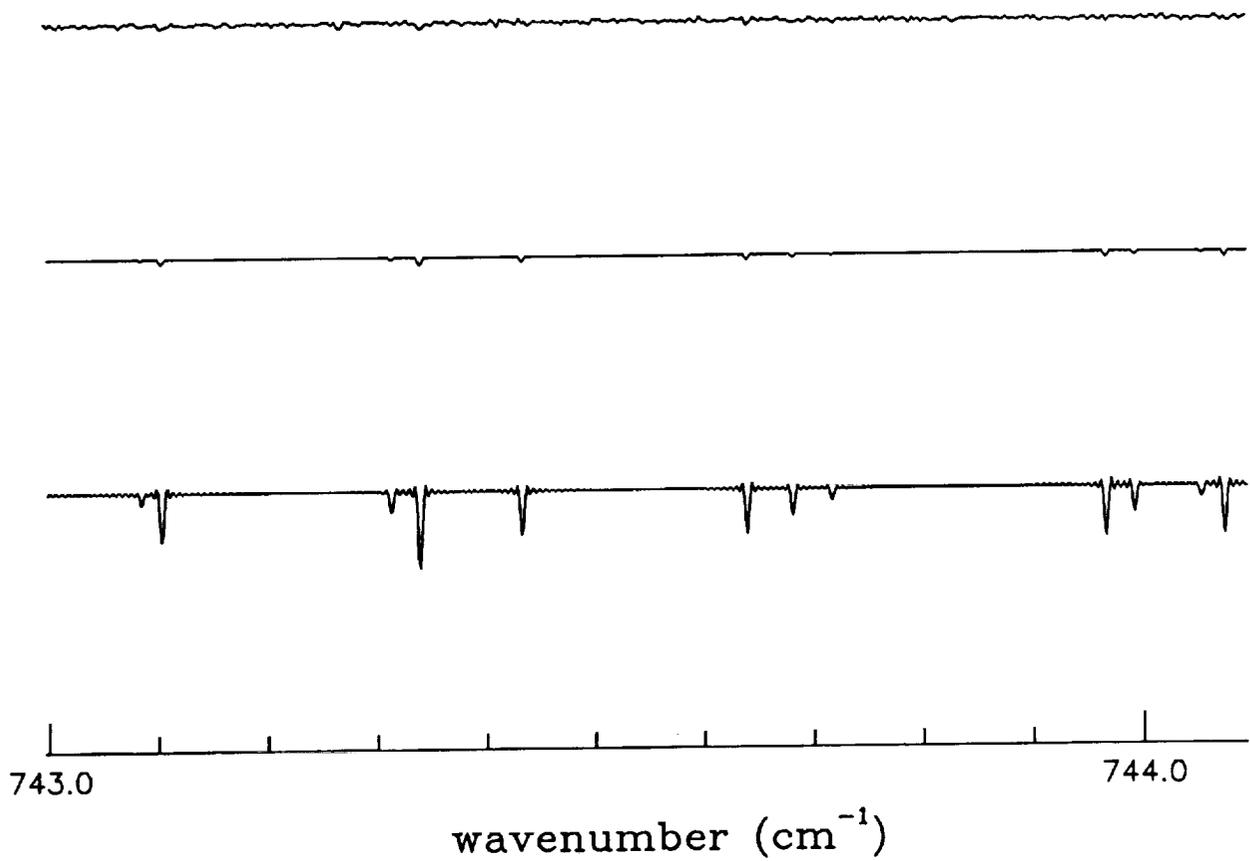
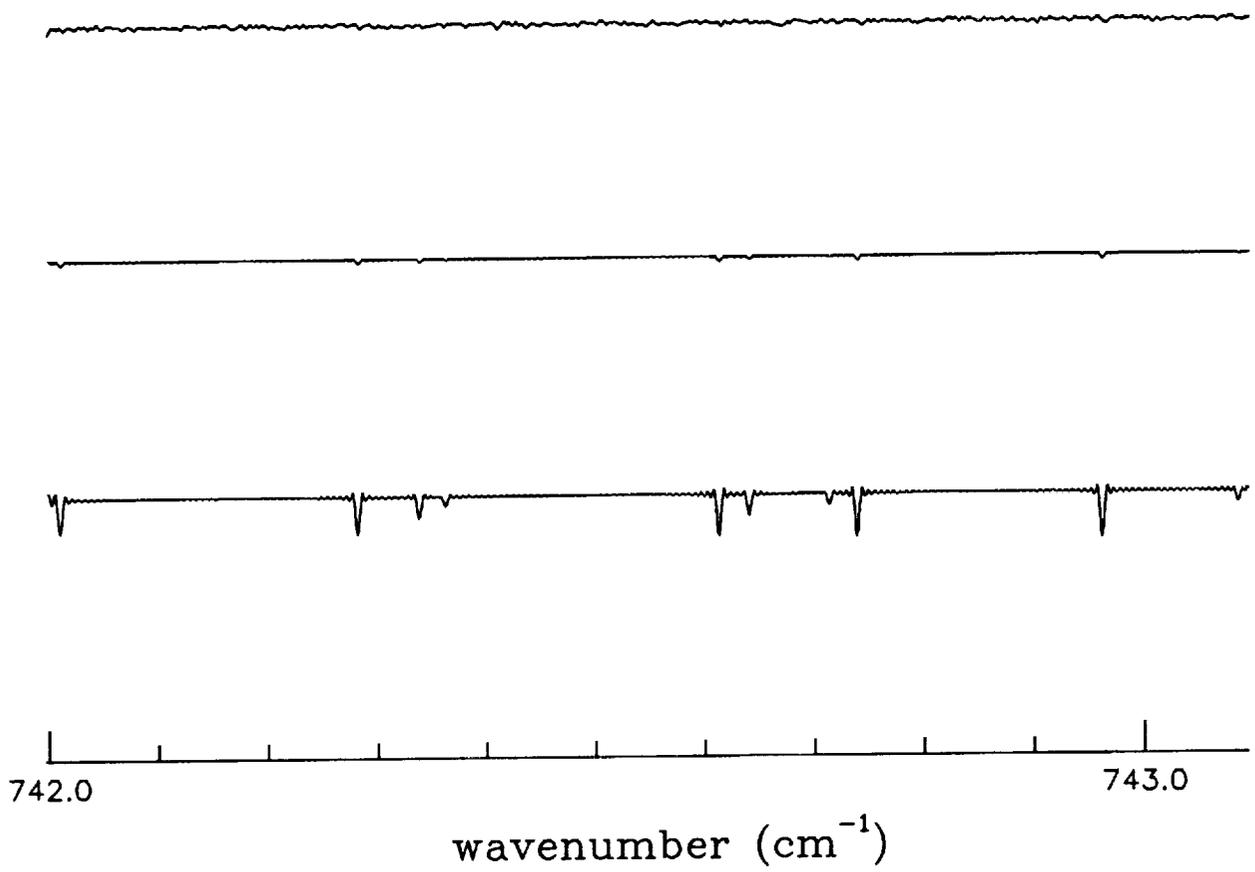
Middle trace:

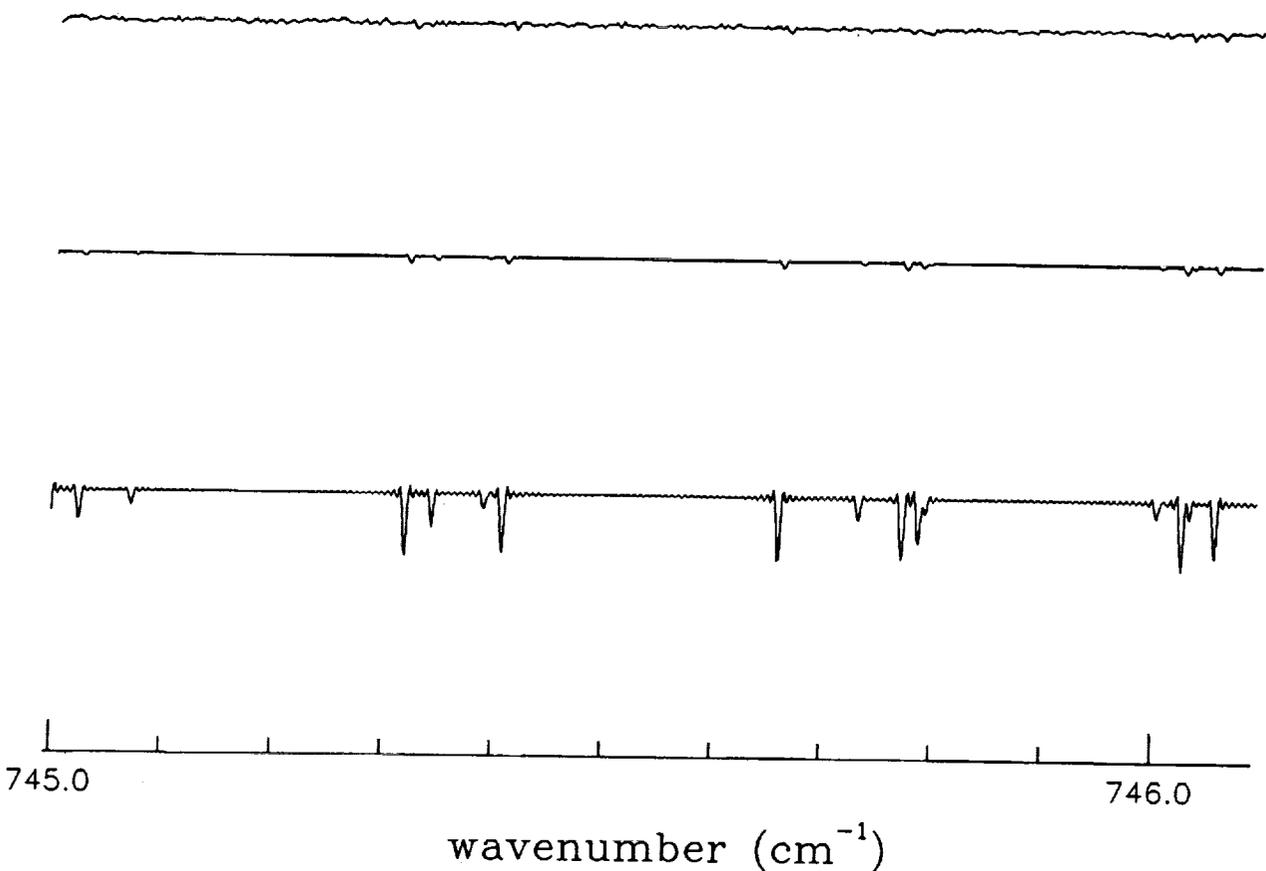
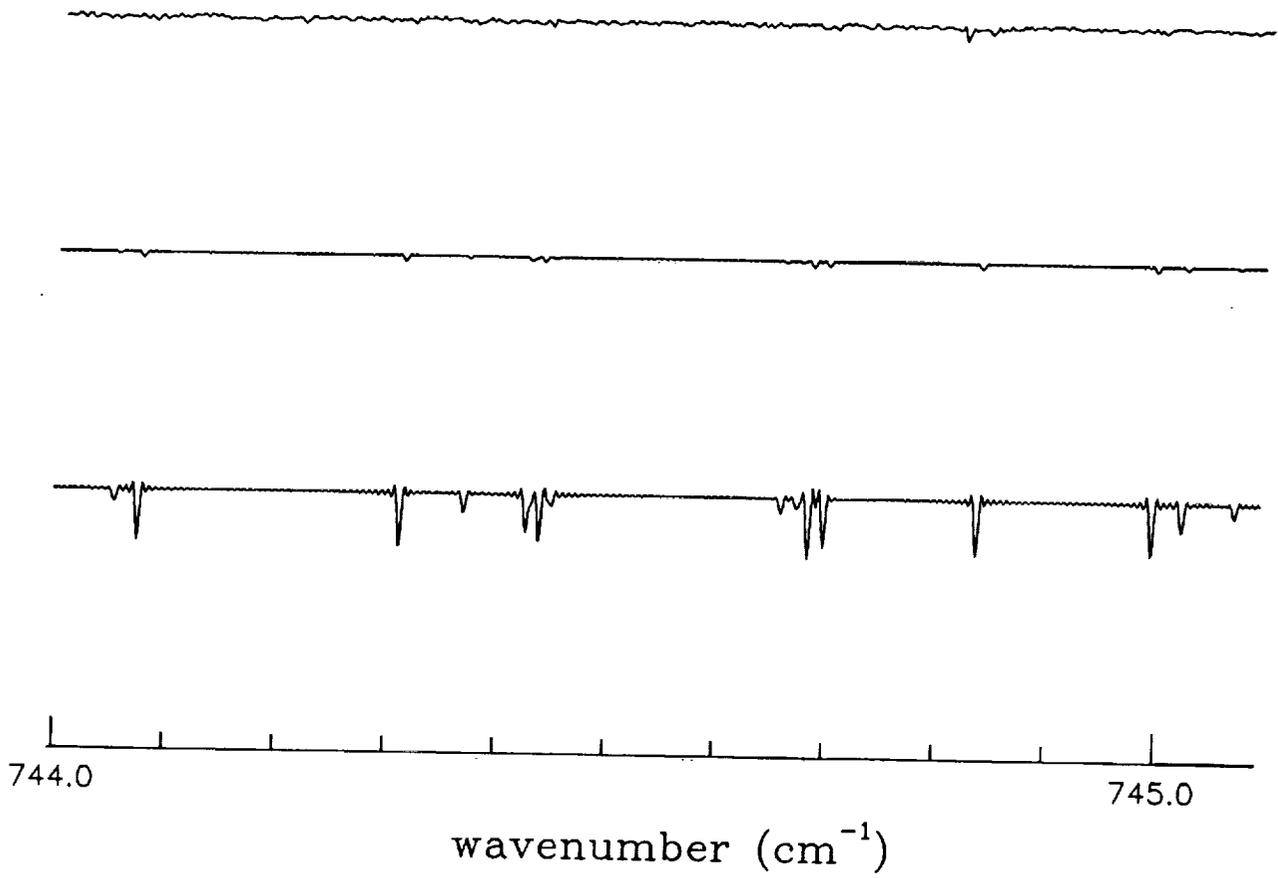
Calculated at $p = 1.05$ Torr, $\ell = 1.5$ m and $T = 294$ K. Spectrum shown on a scale from 0% to 100% transmission.

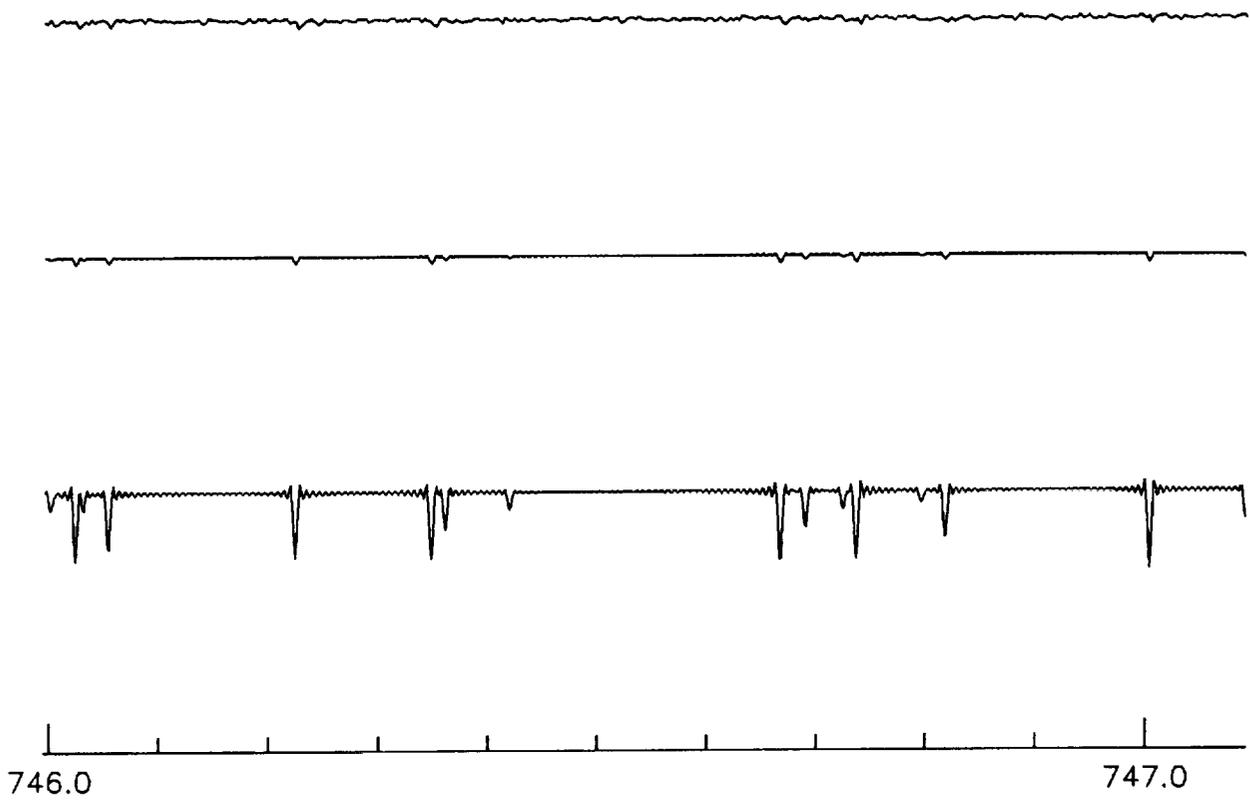
Bottom trace:

Same as middle trace. Spectrum shown on a blown up scale from 90% to 100% transmission.

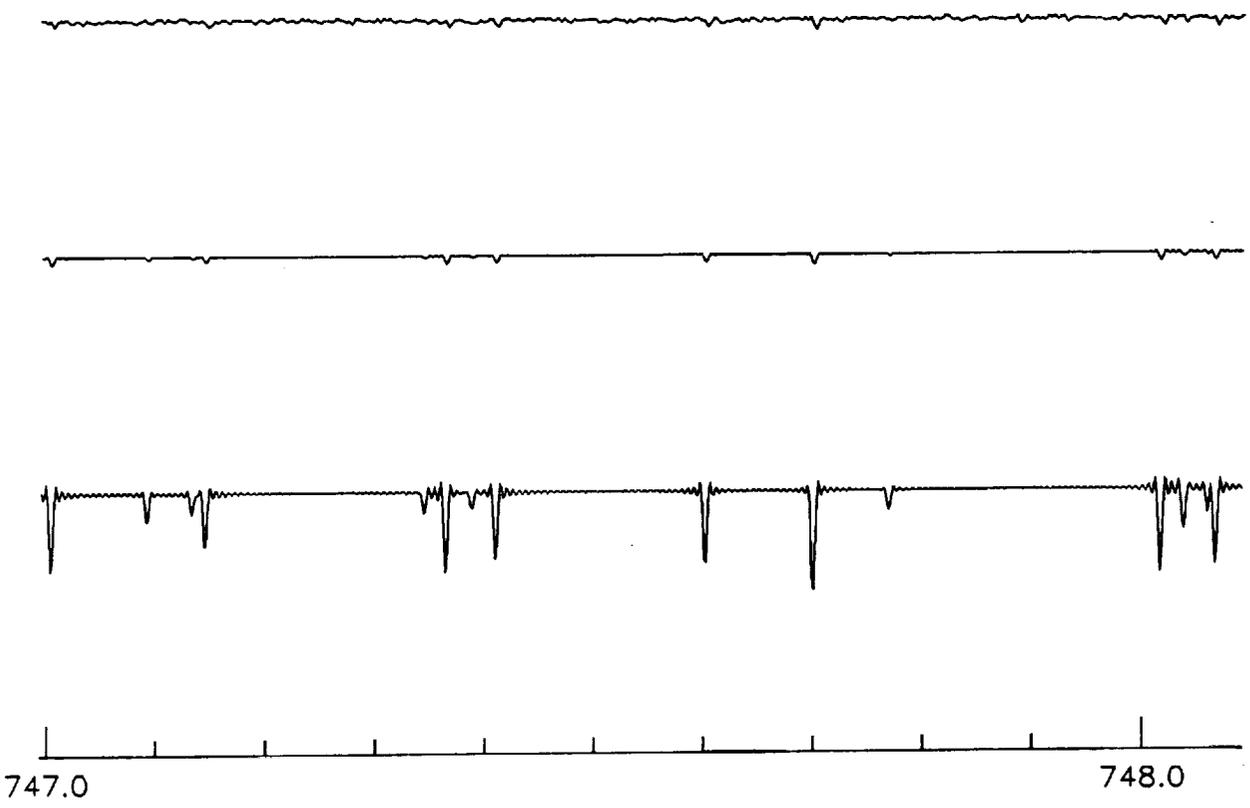






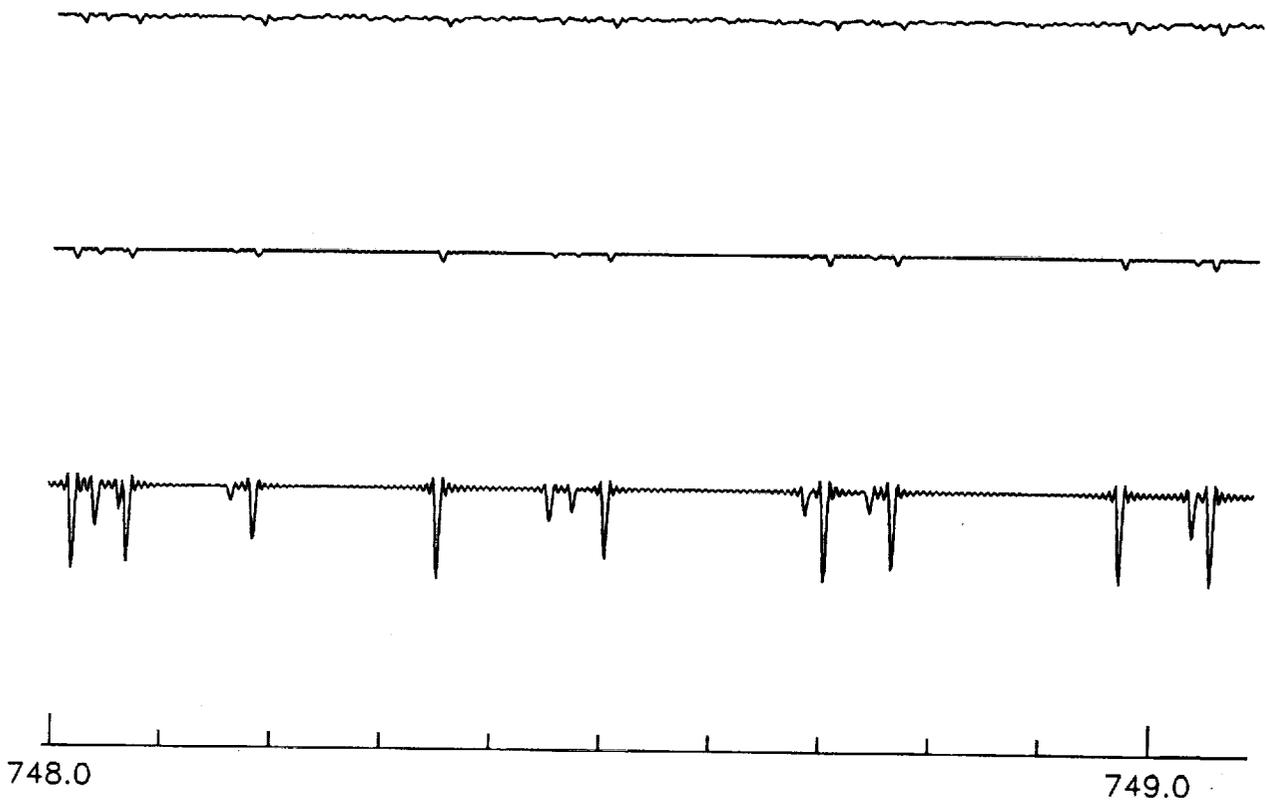


wavenumber (cm⁻¹)

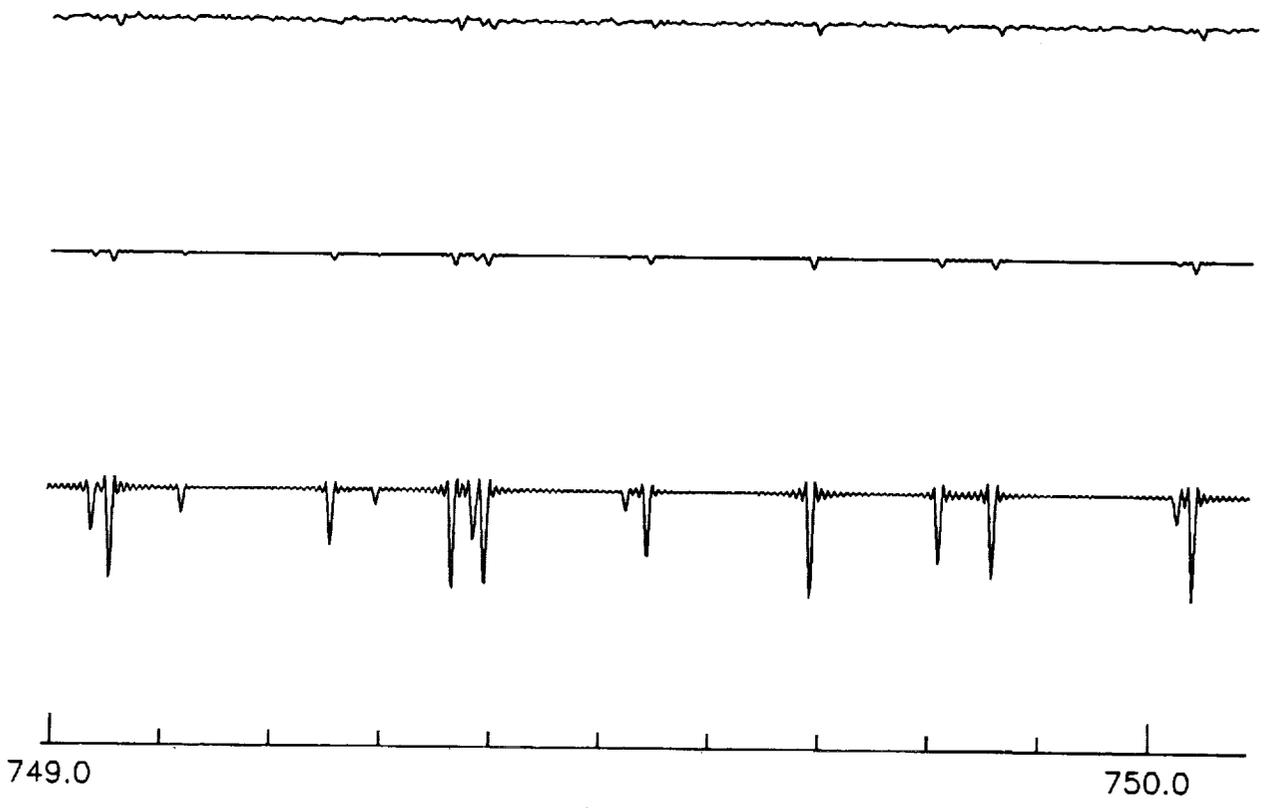


wavenumber (cm⁻¹)

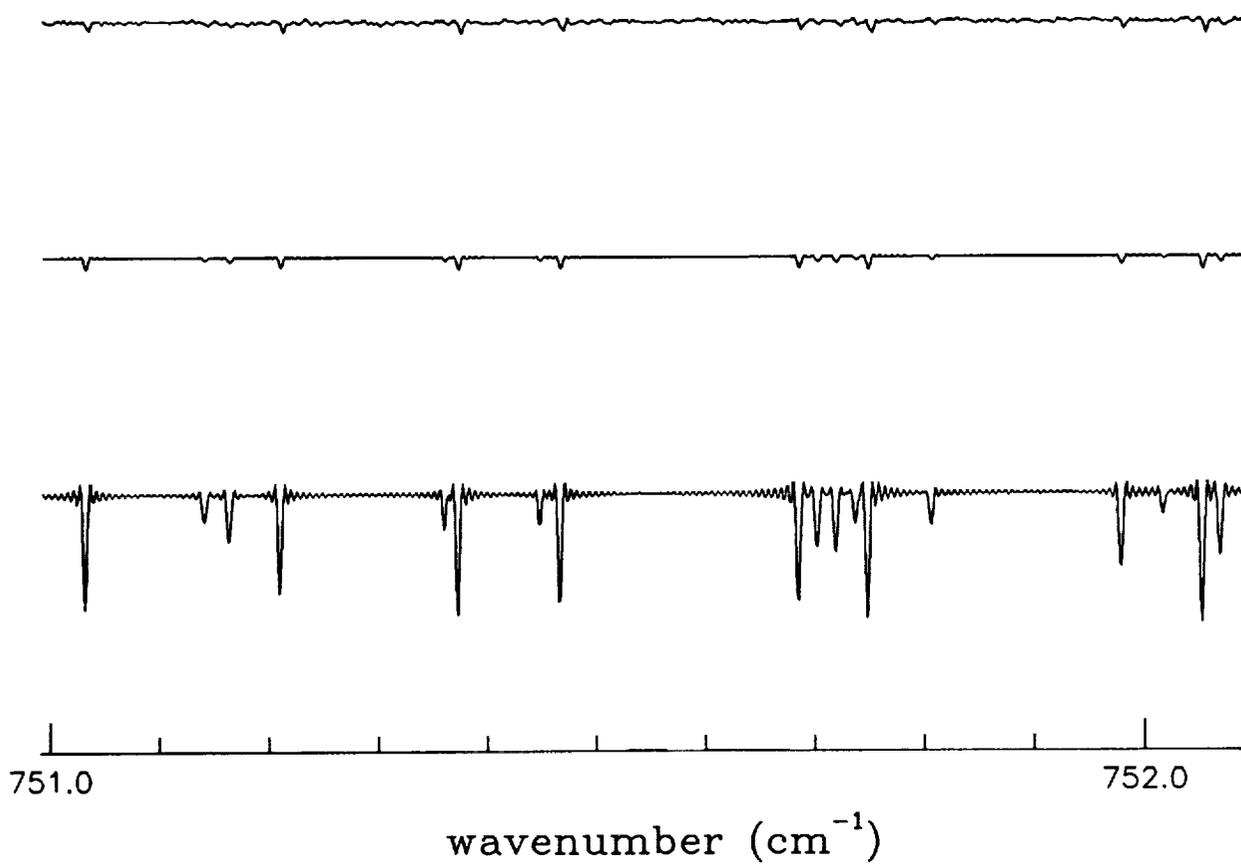
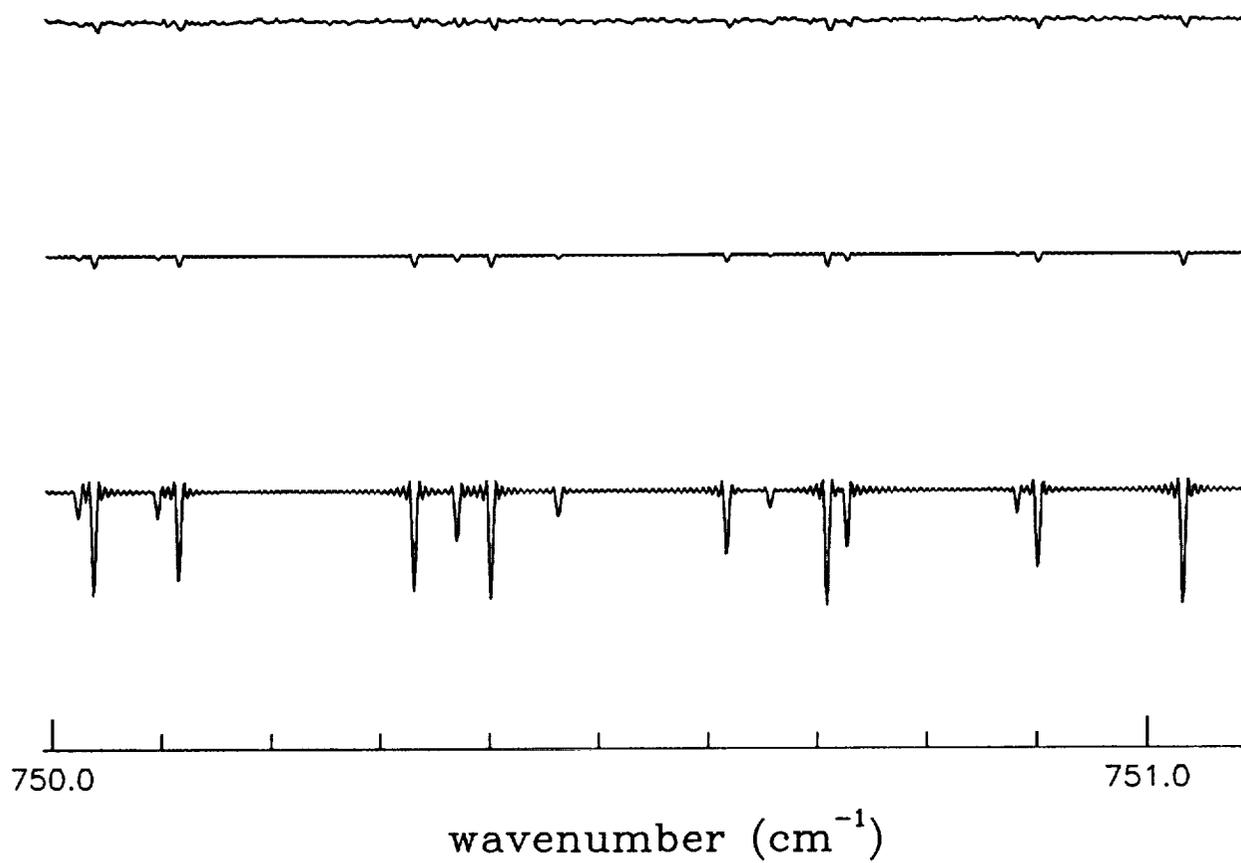
C-2

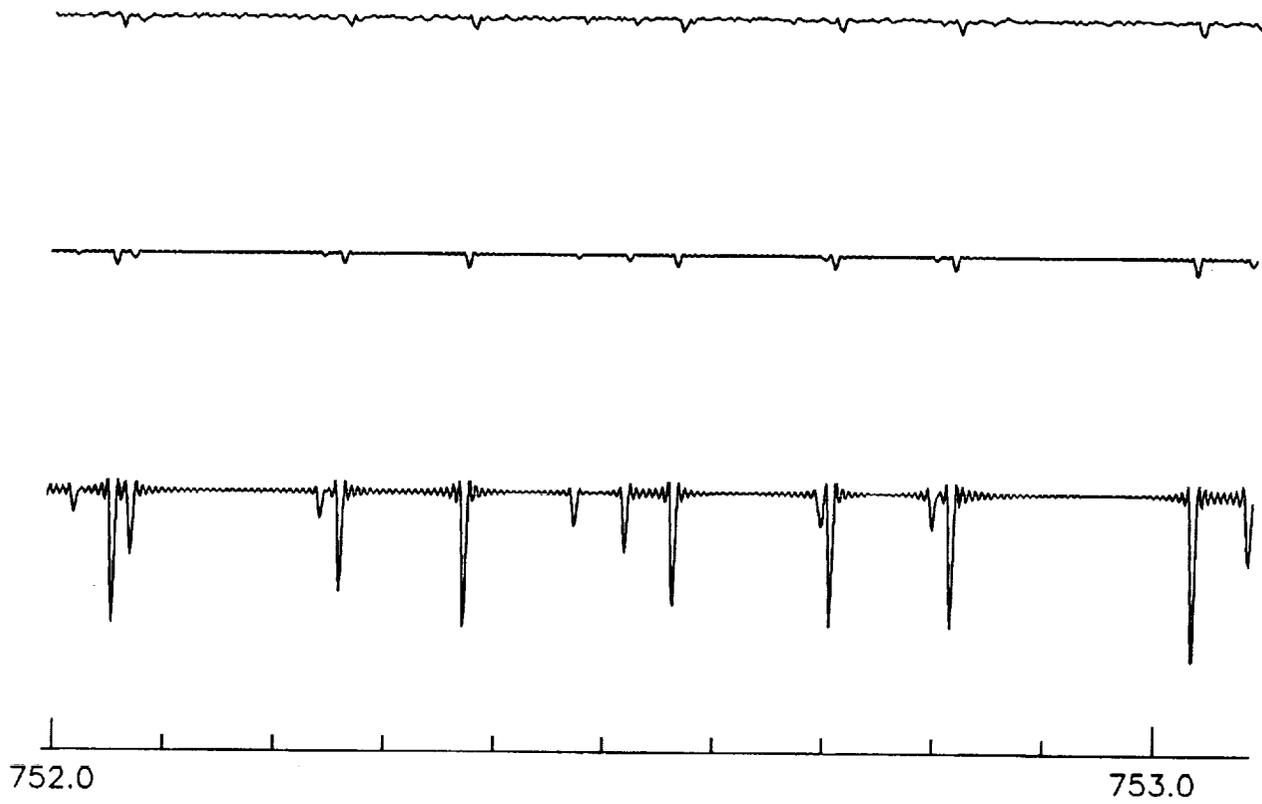


wavenumber (cm⁻¹)

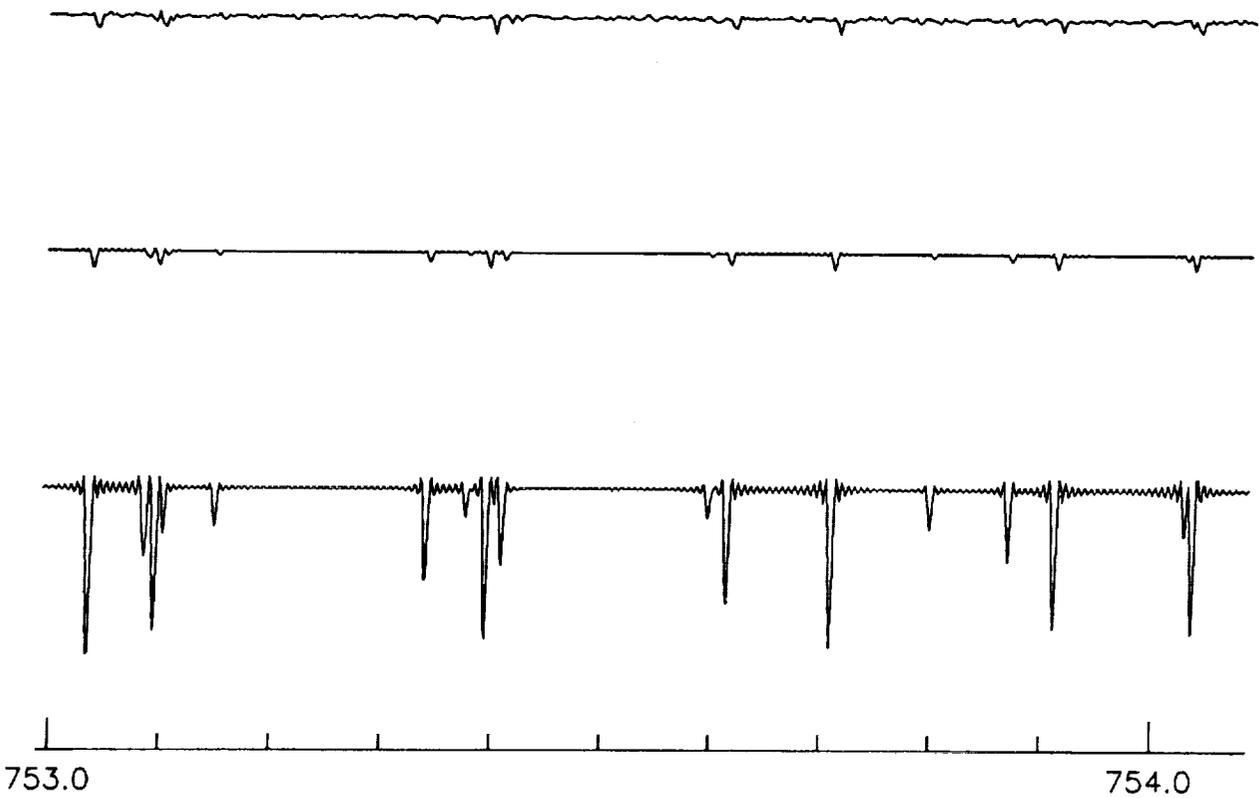


wavenumber (cm⁻¹)

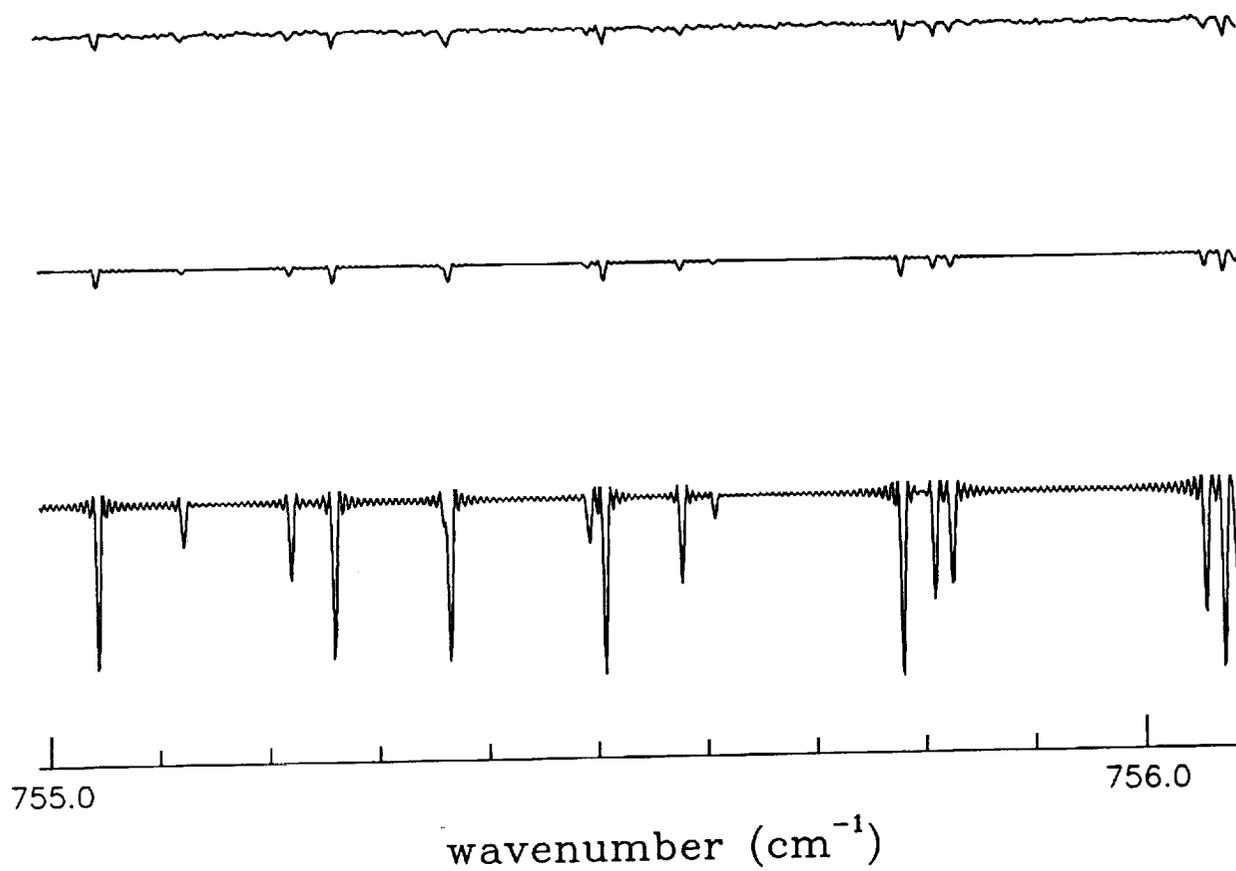
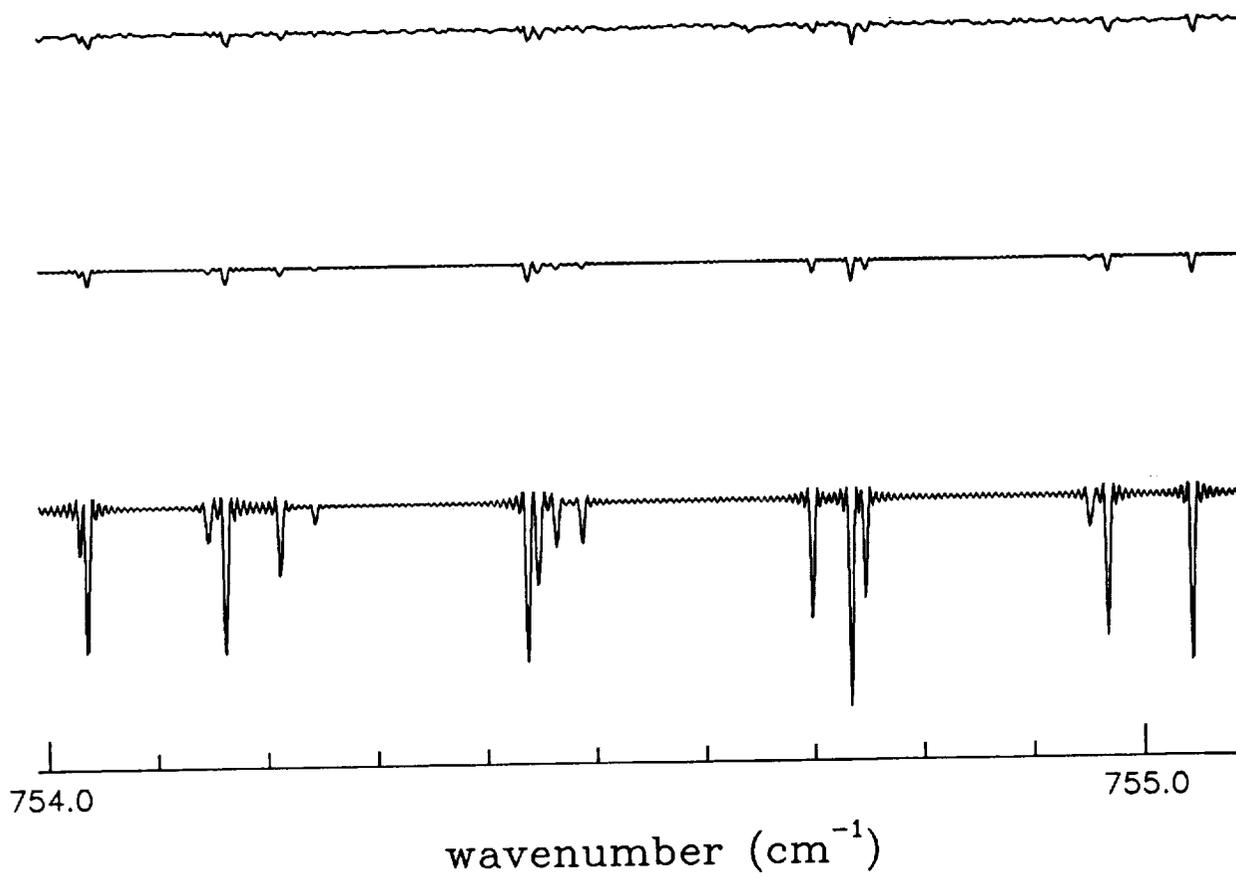


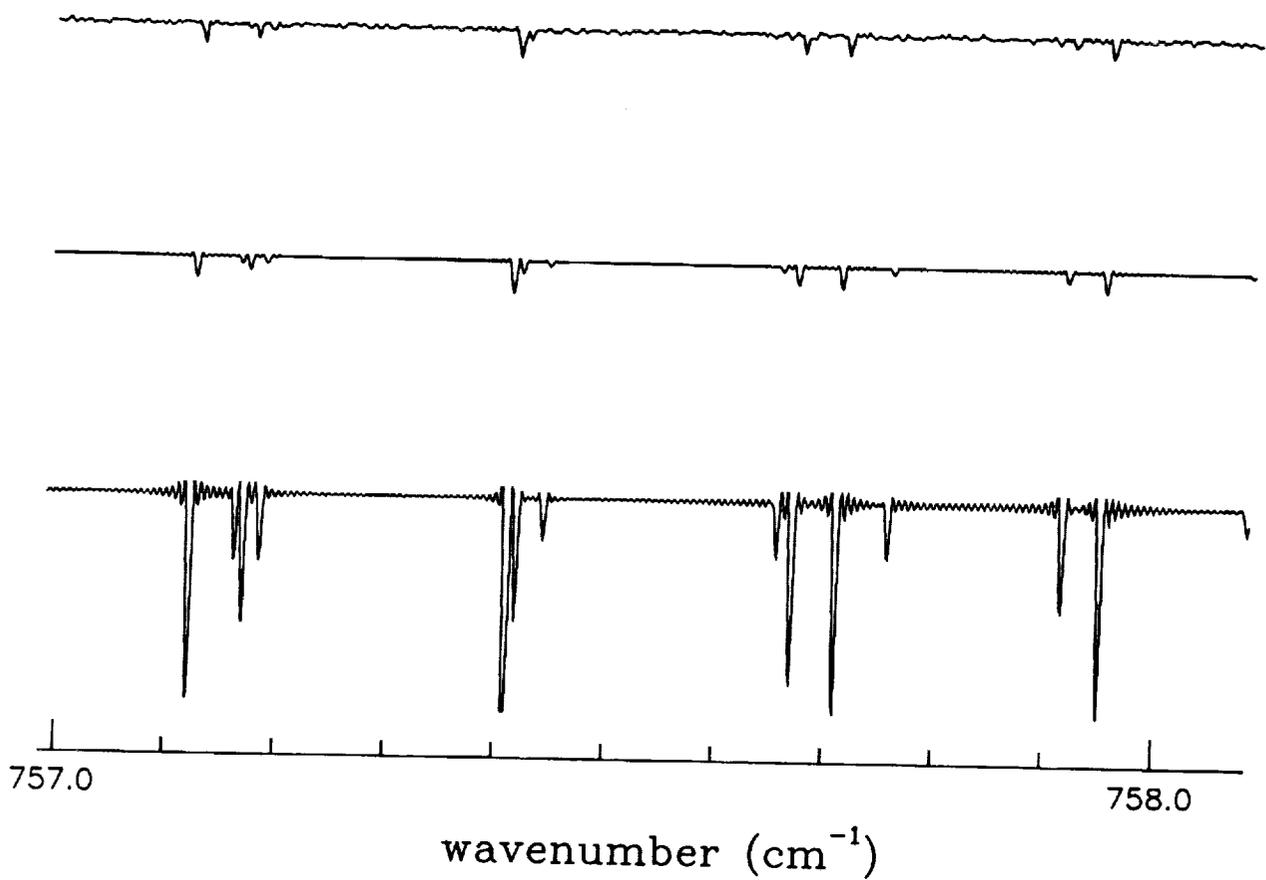
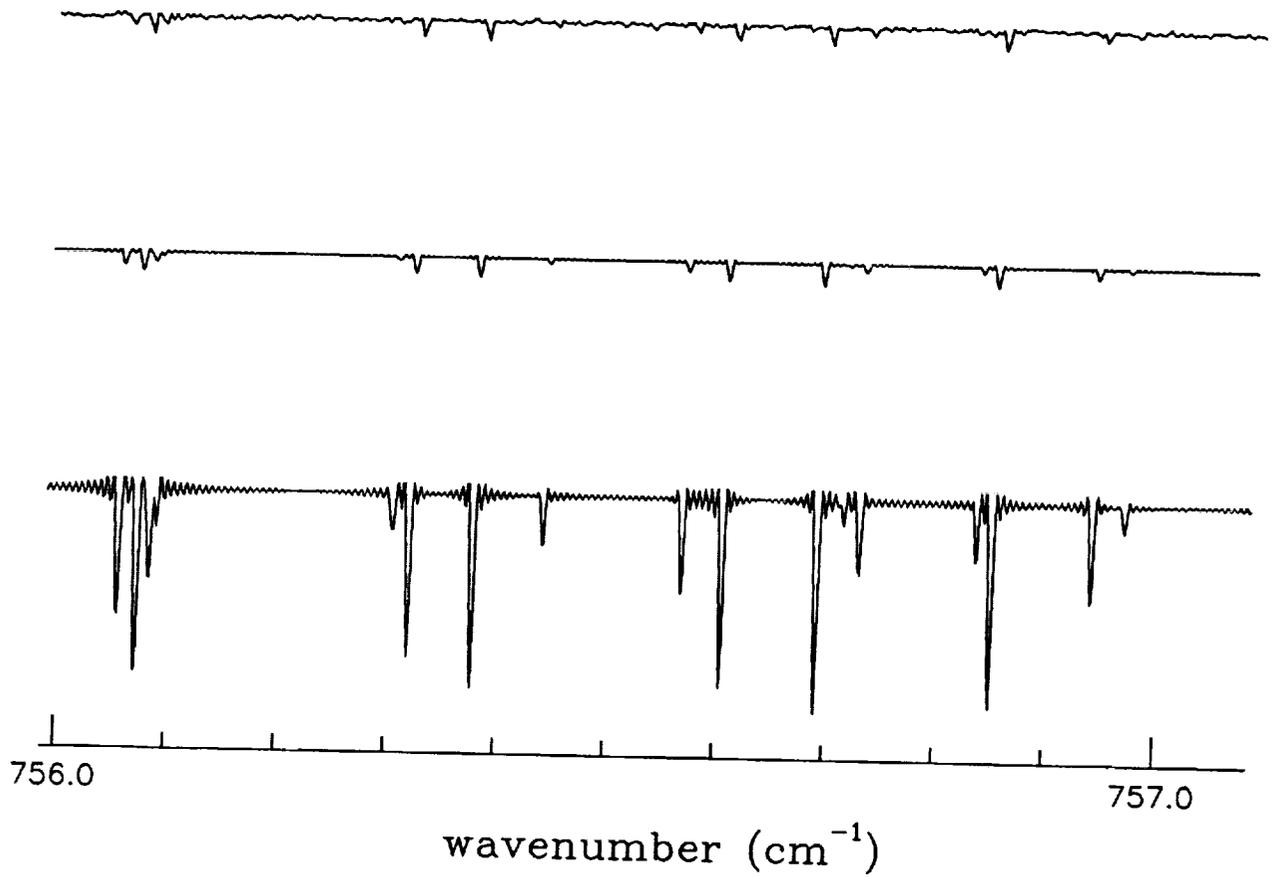


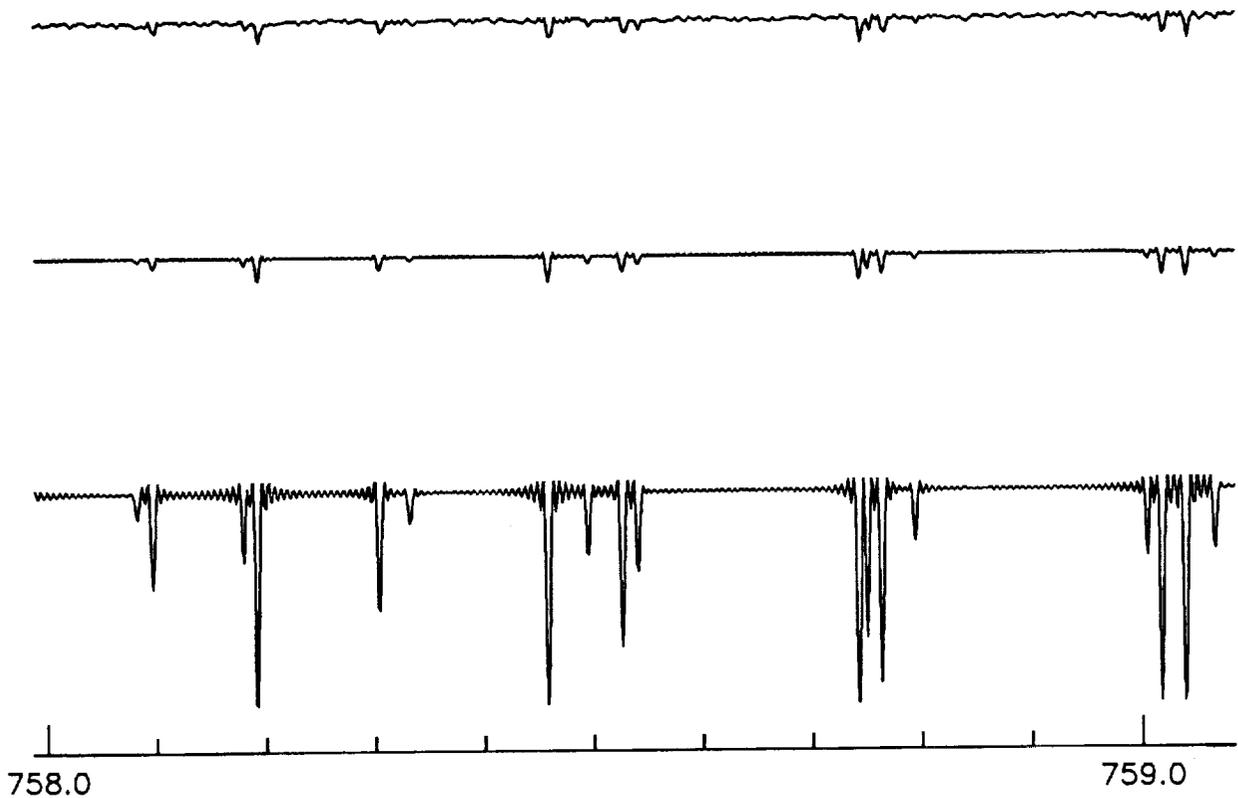
wavenumber (cm⁻¹)



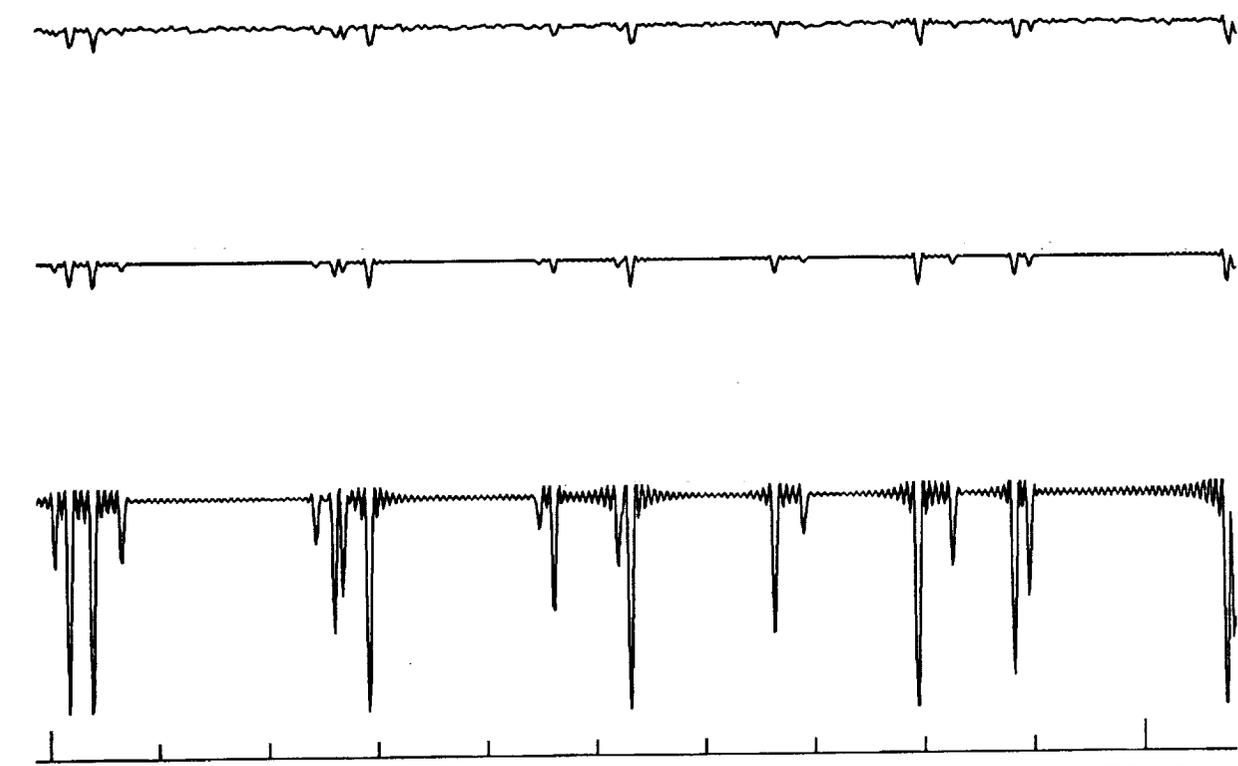
wavenumber (cm⁻¹)



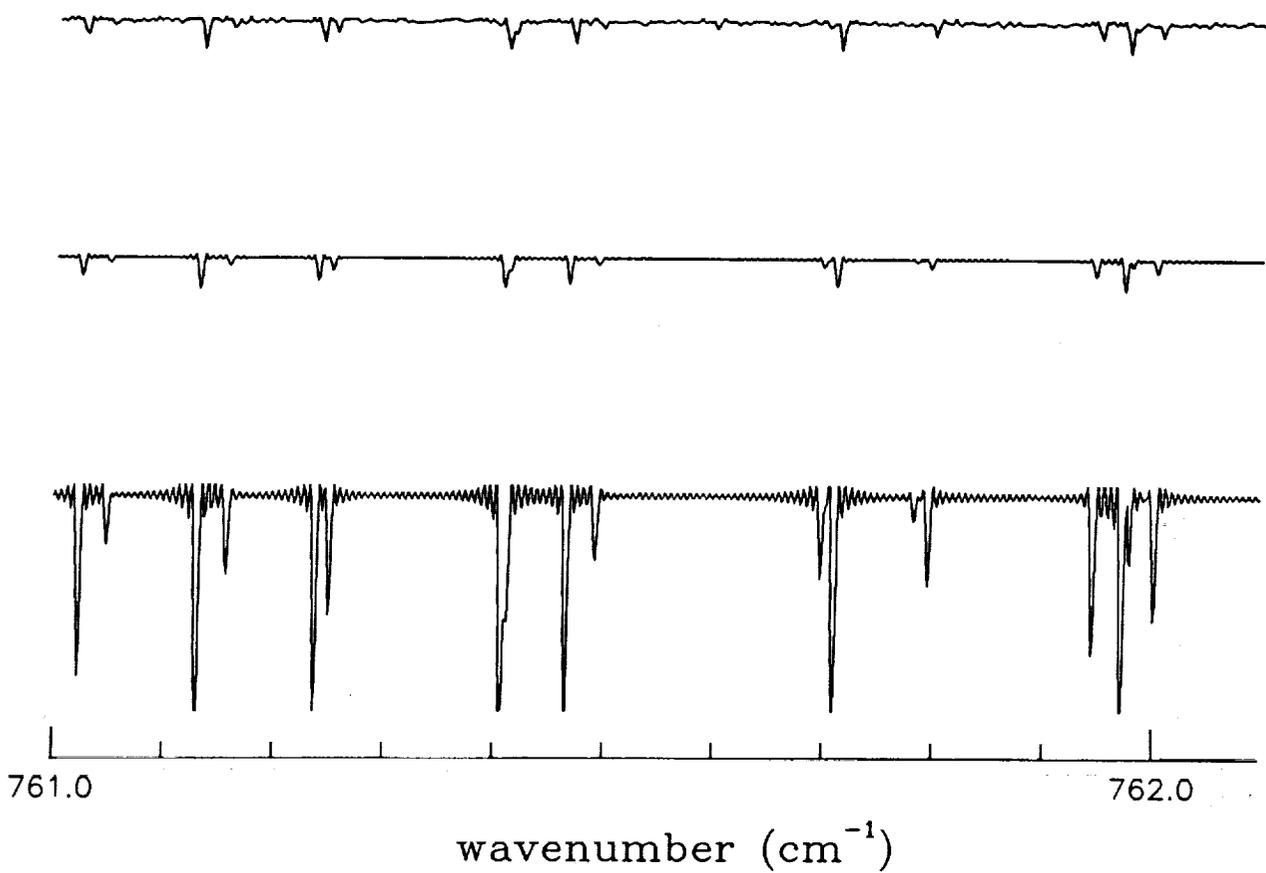
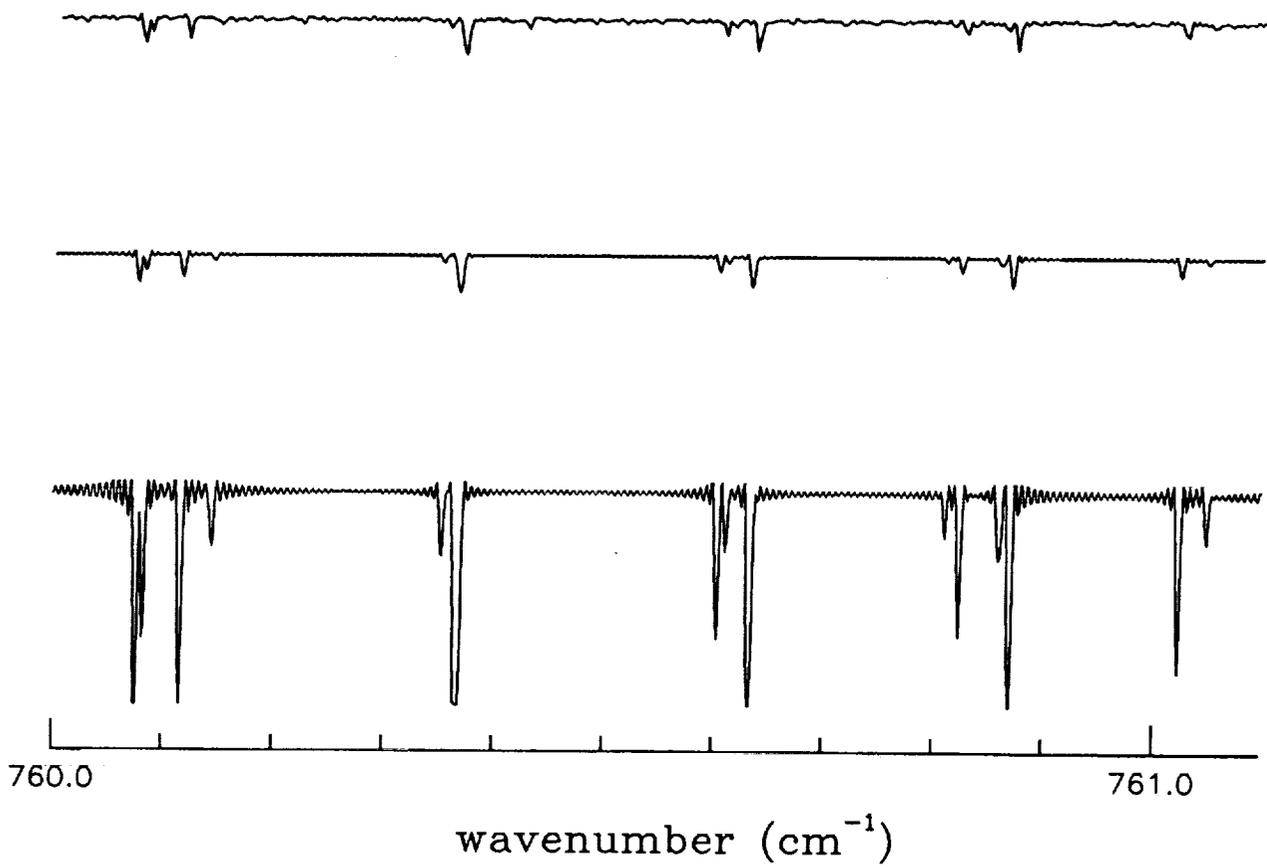


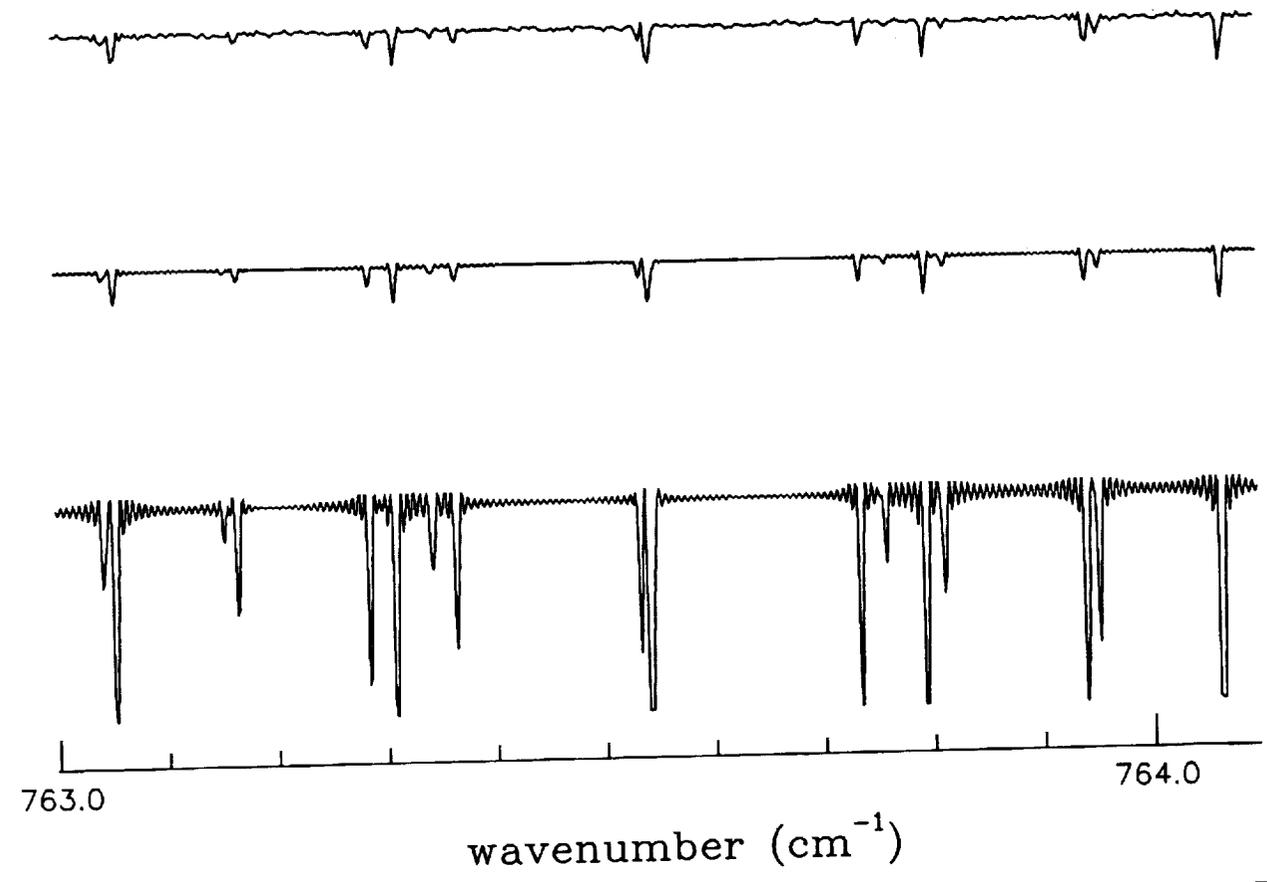
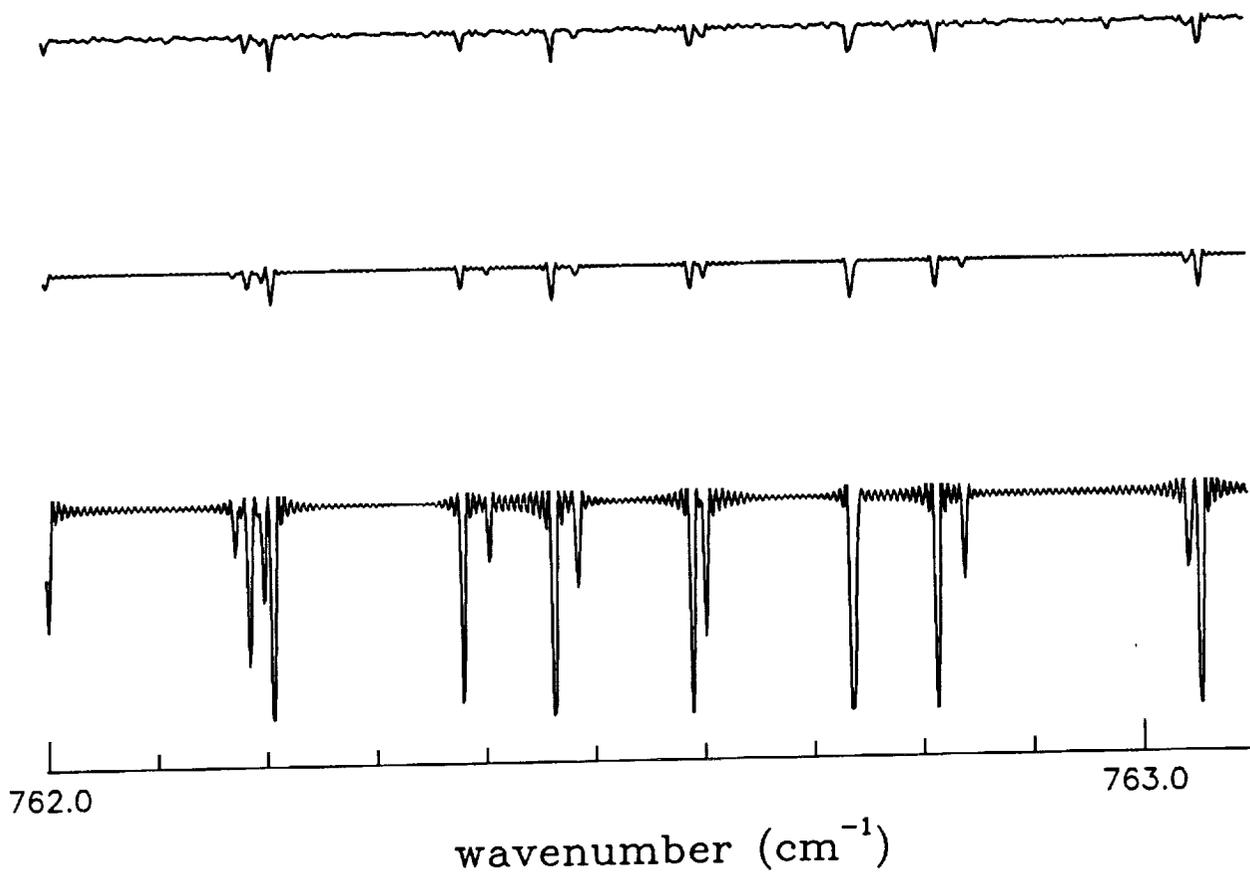


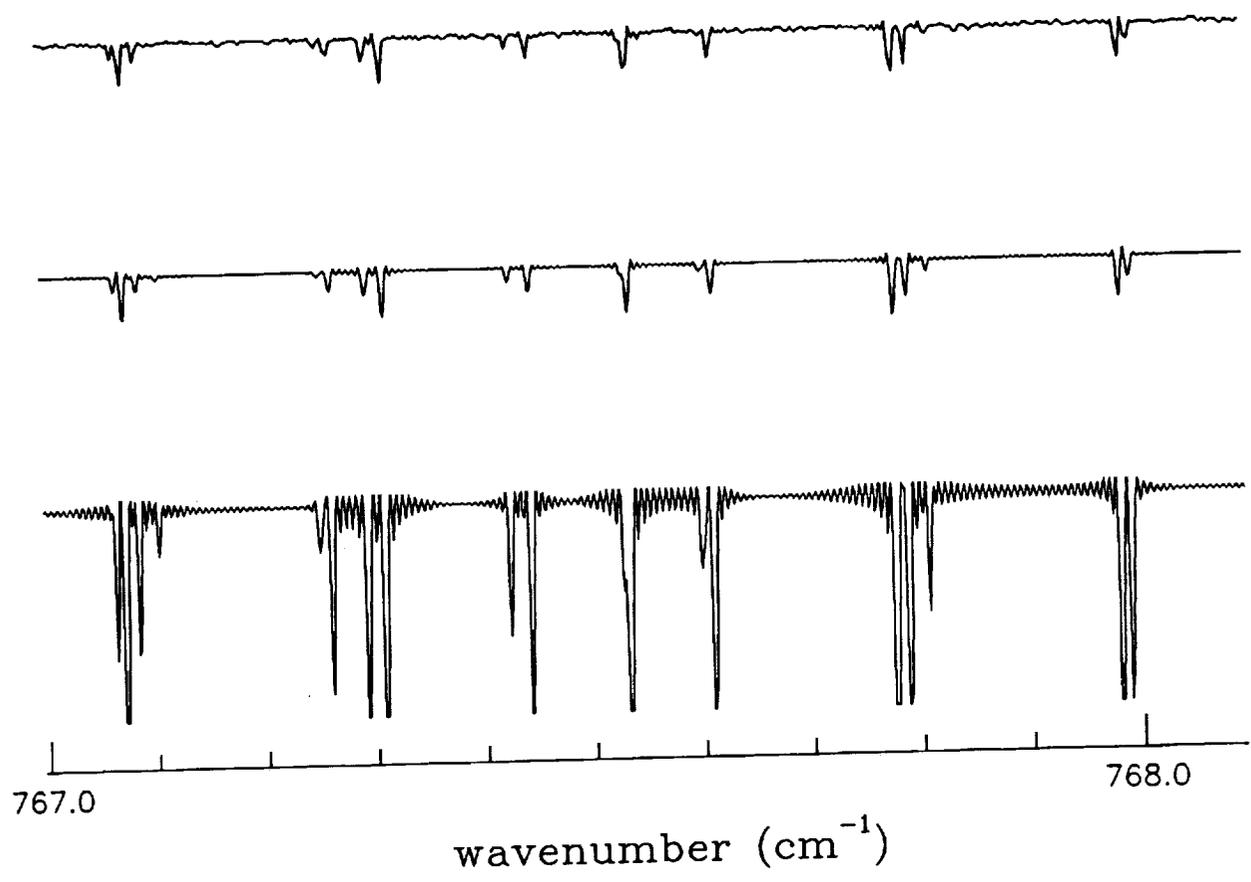
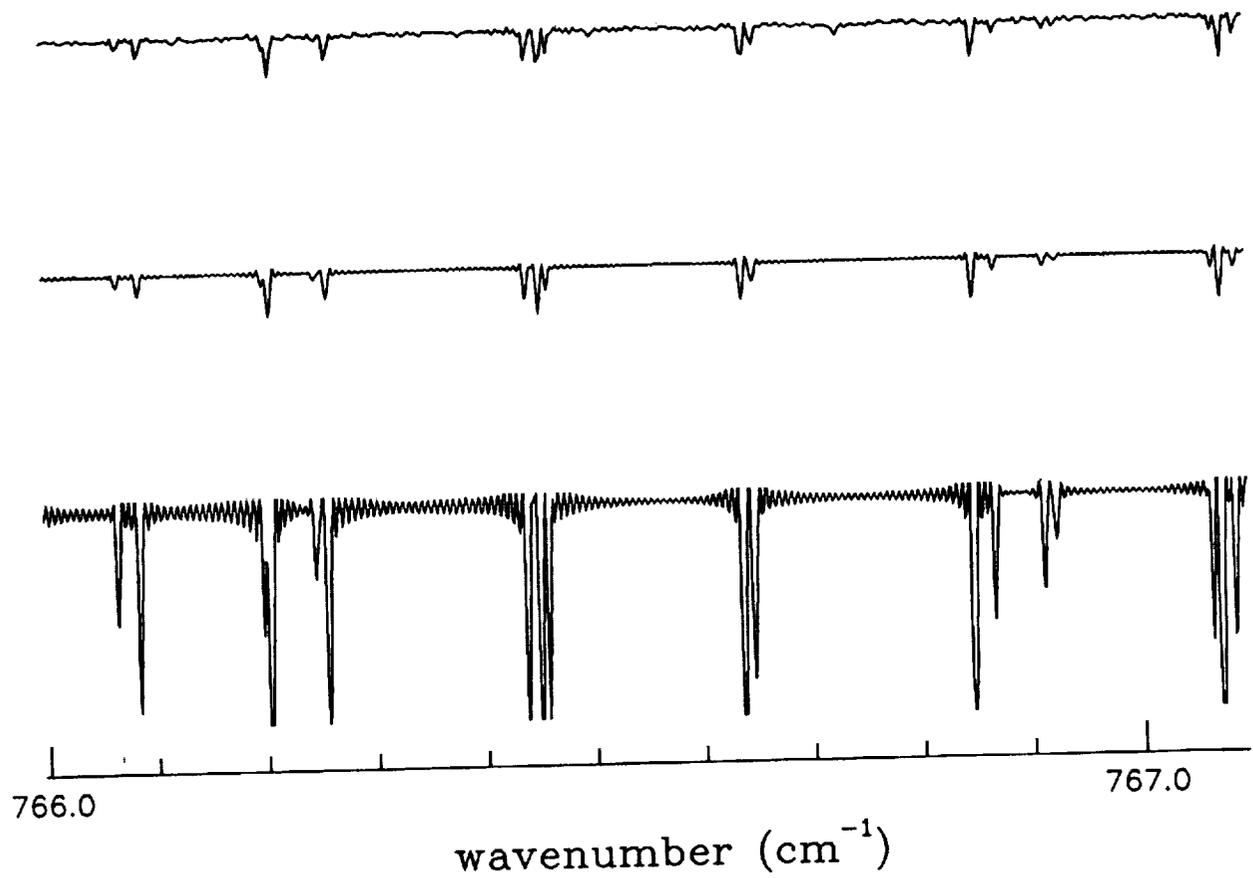
wavenumber (cm⁻¹)

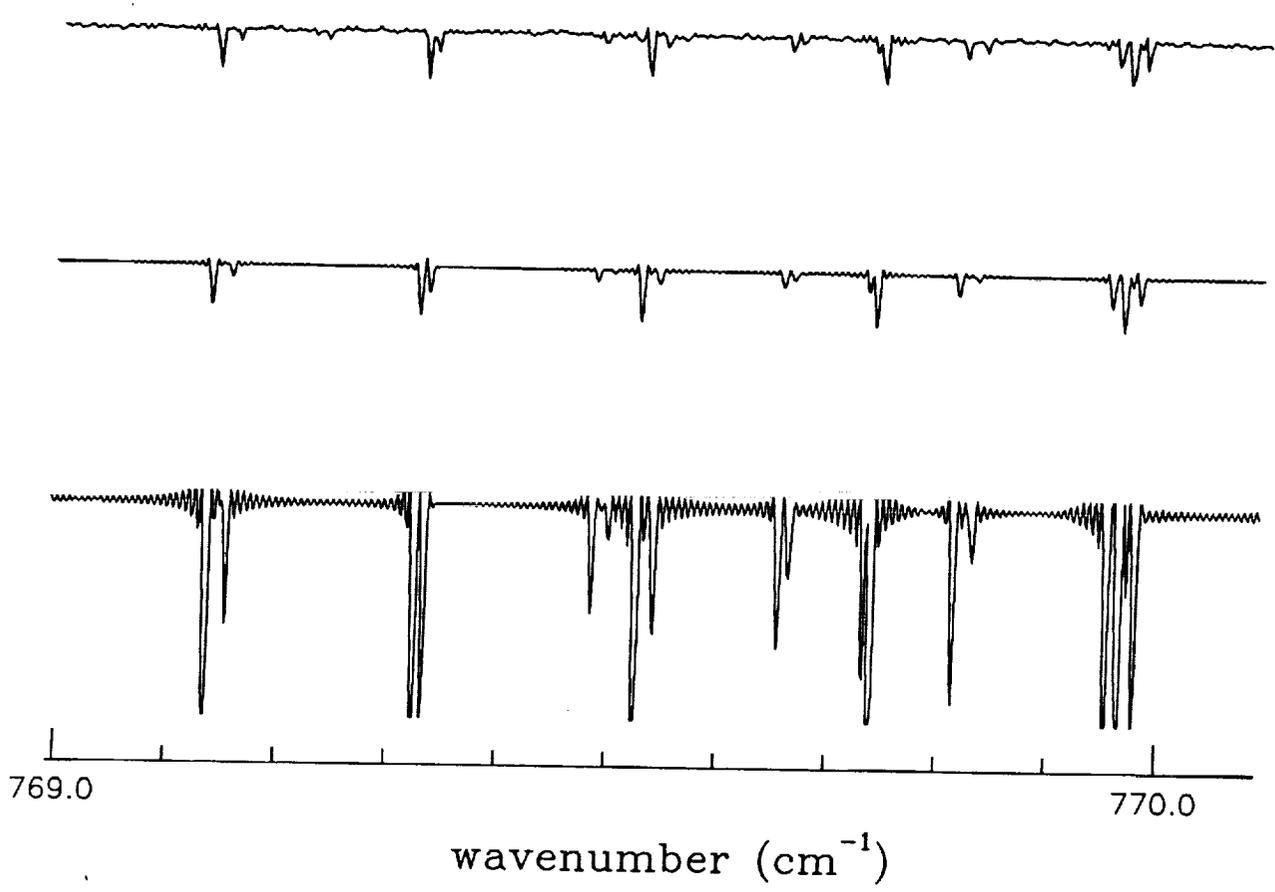
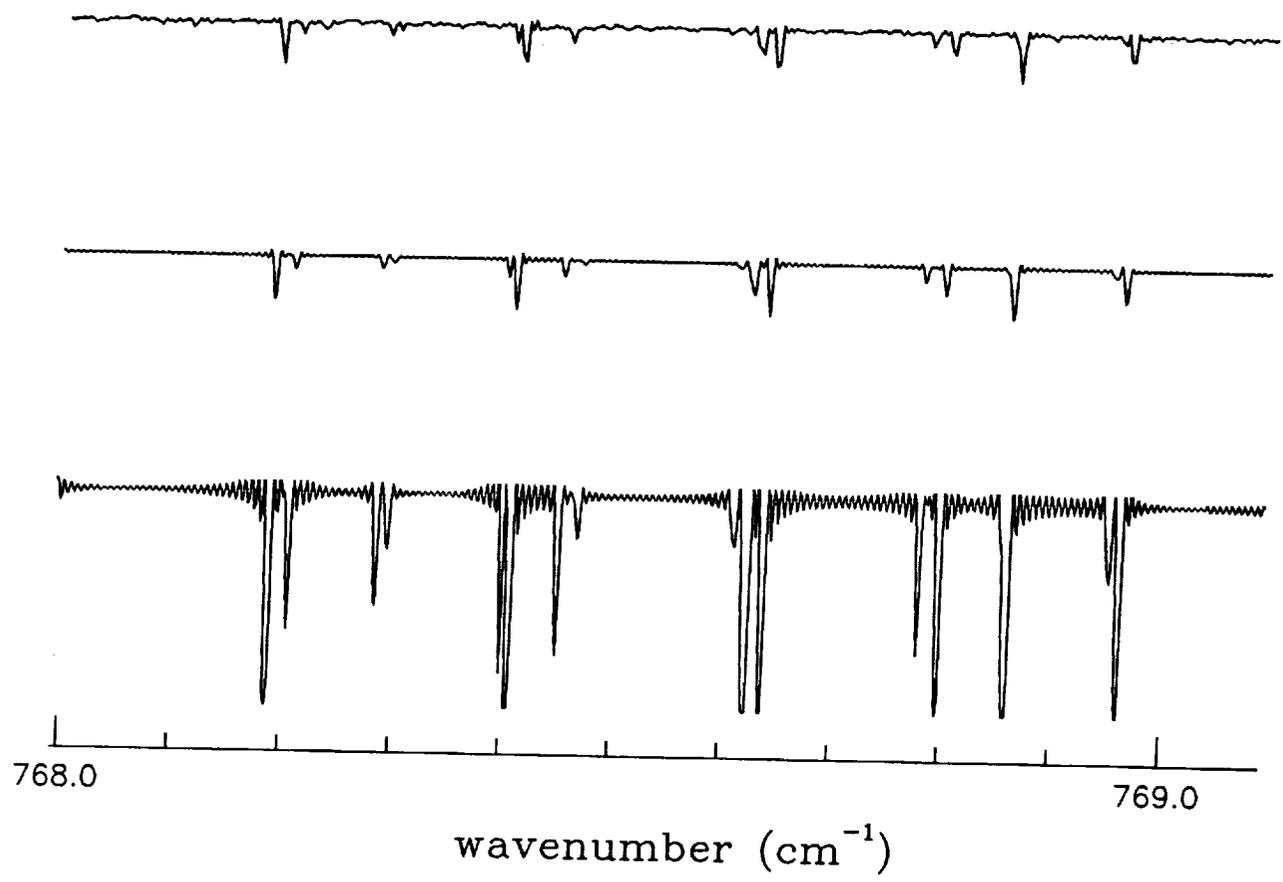


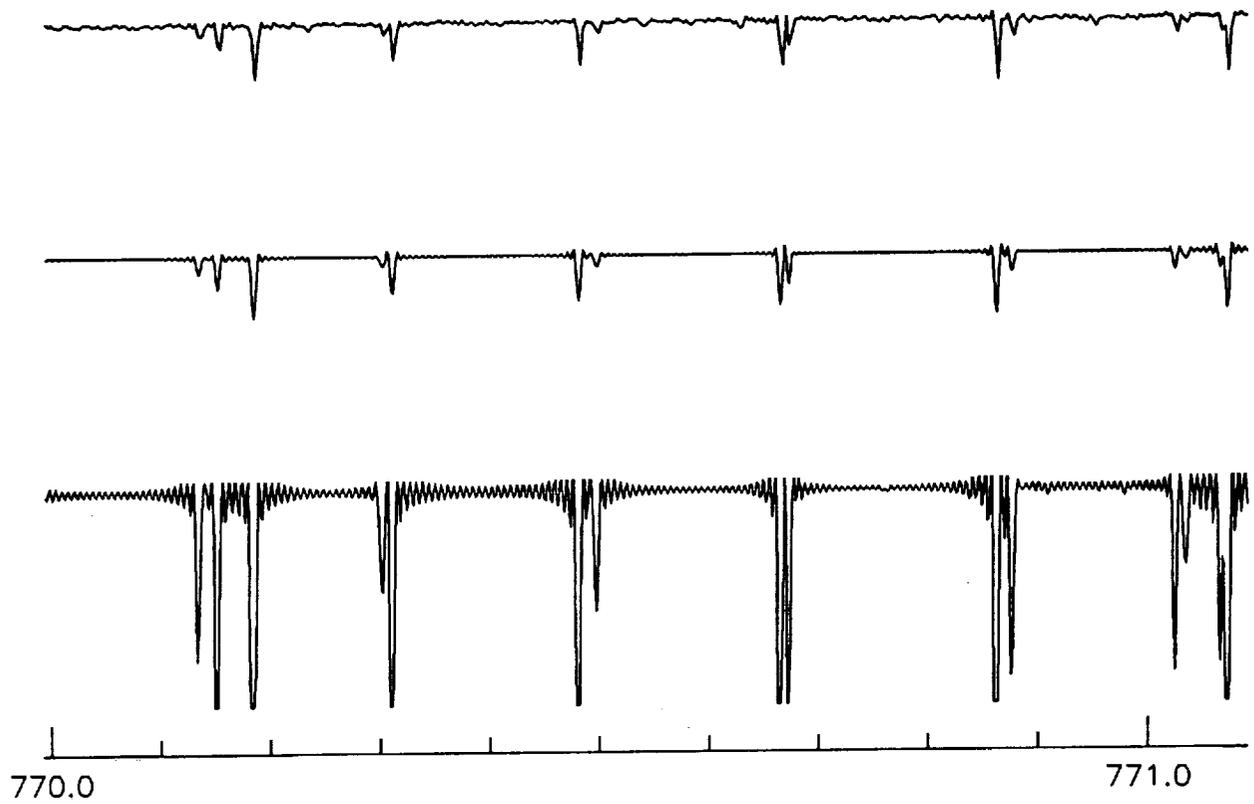
wavenumber (cm⁻¹)



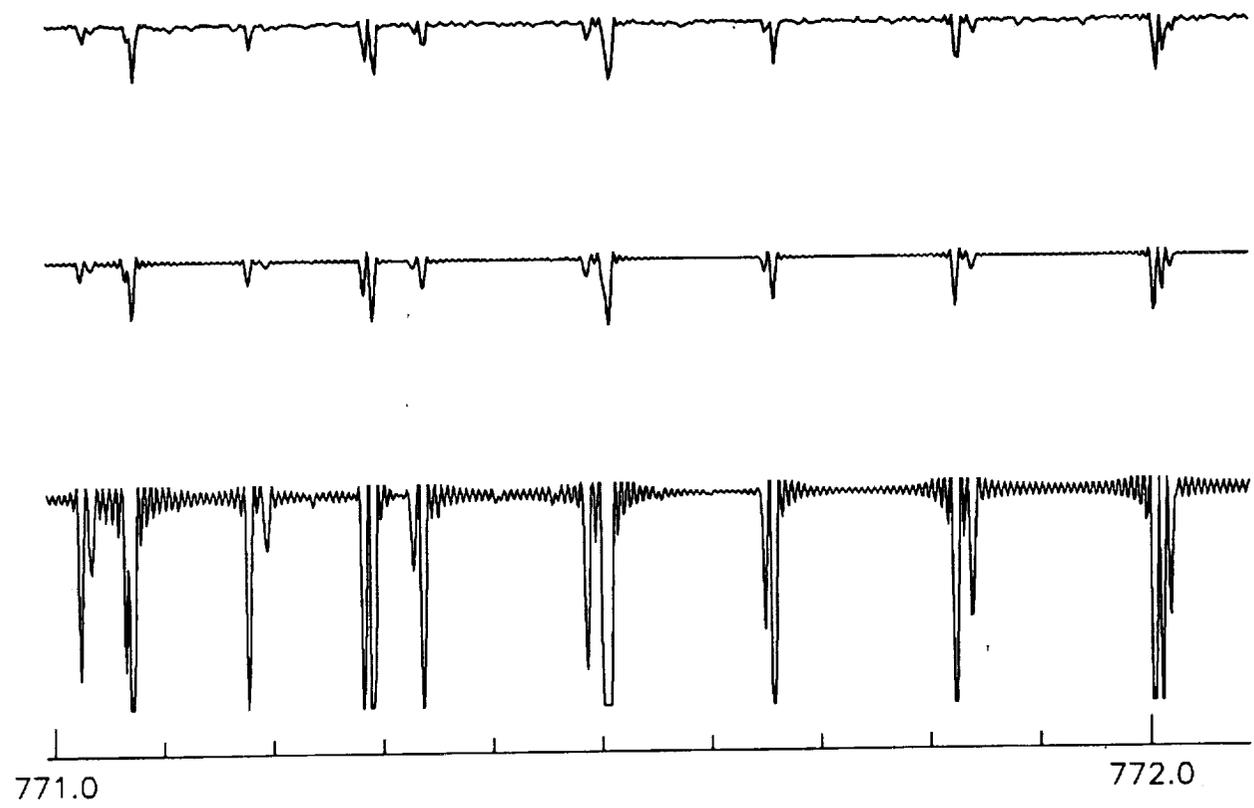




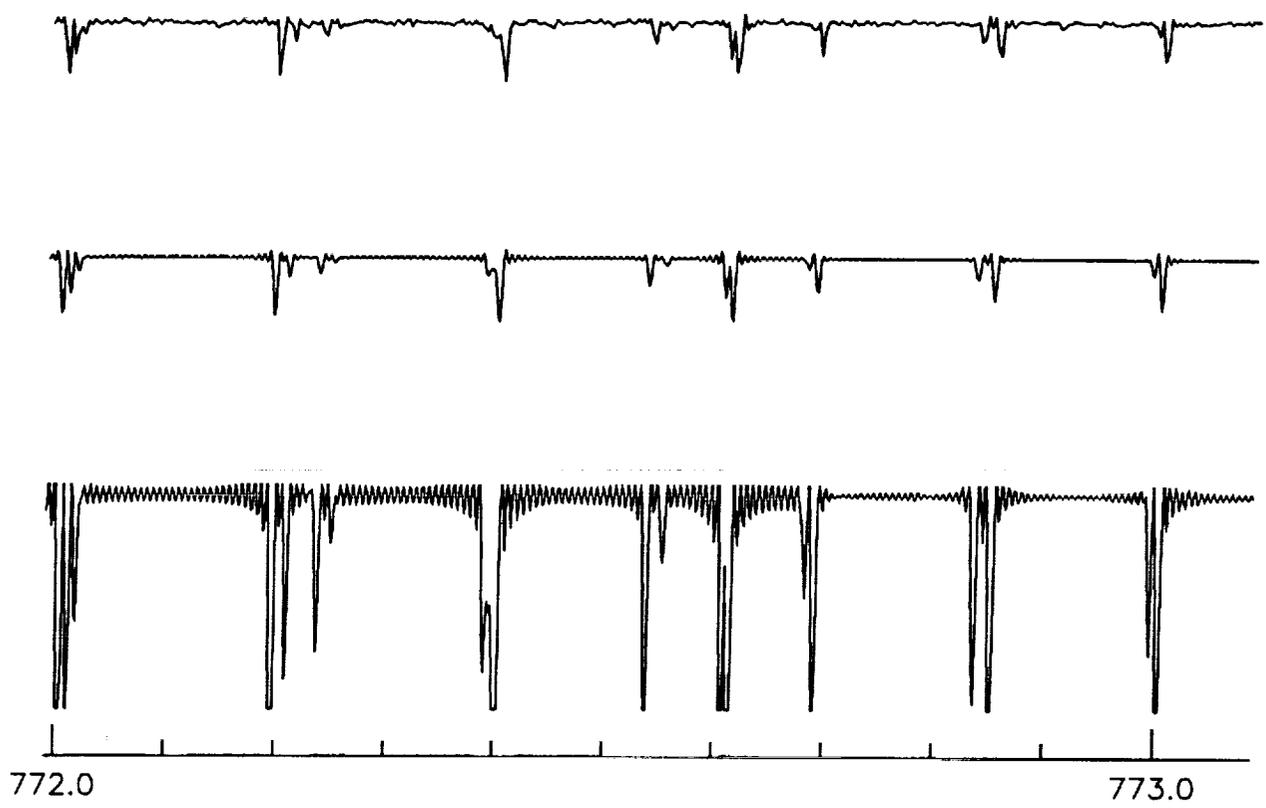




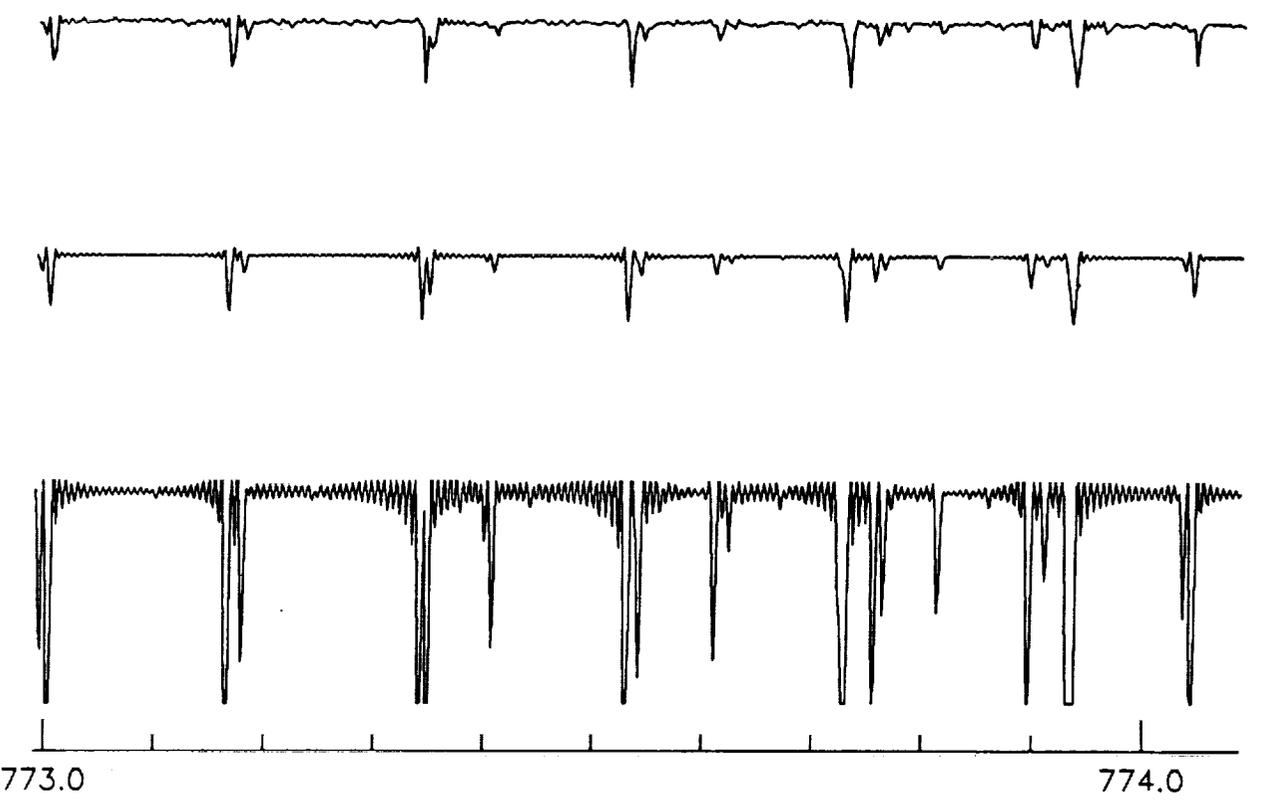
wavenumber (cm^{-1})



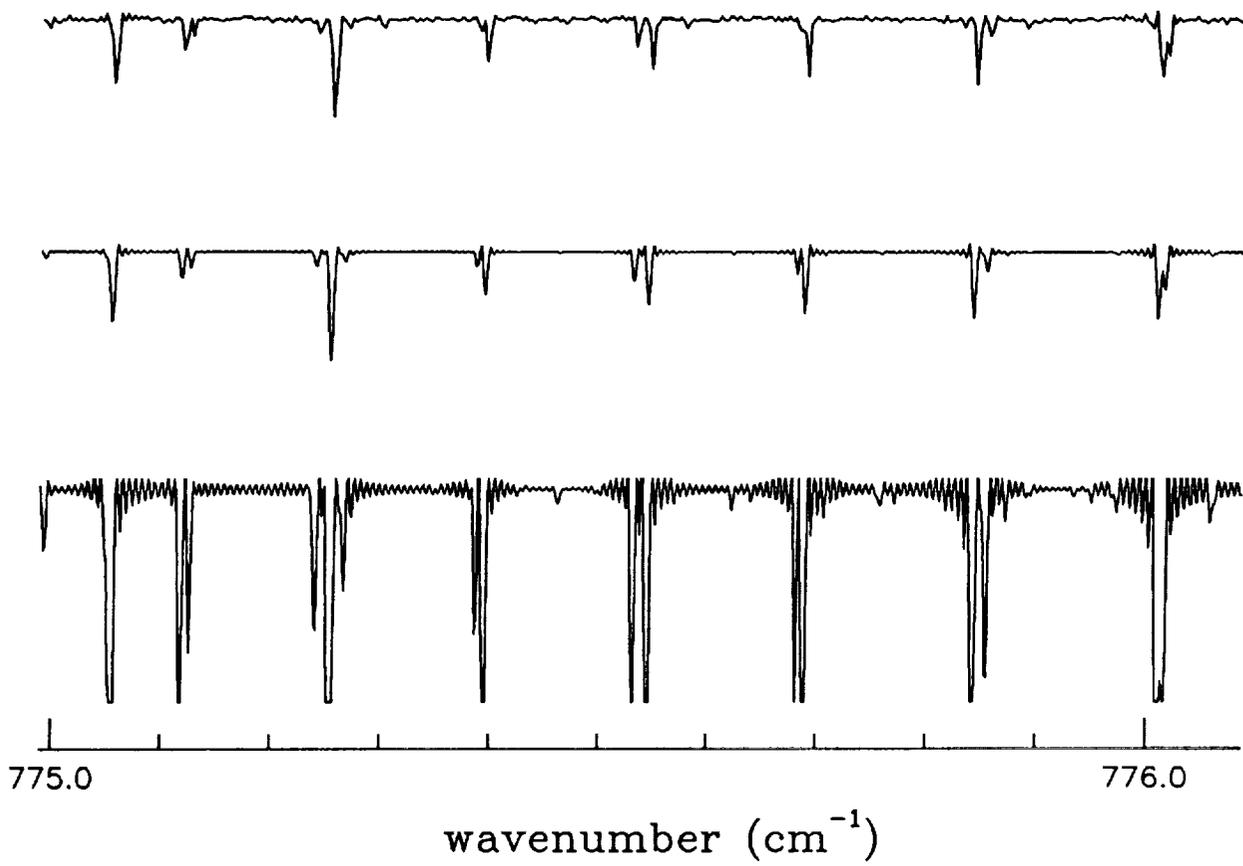
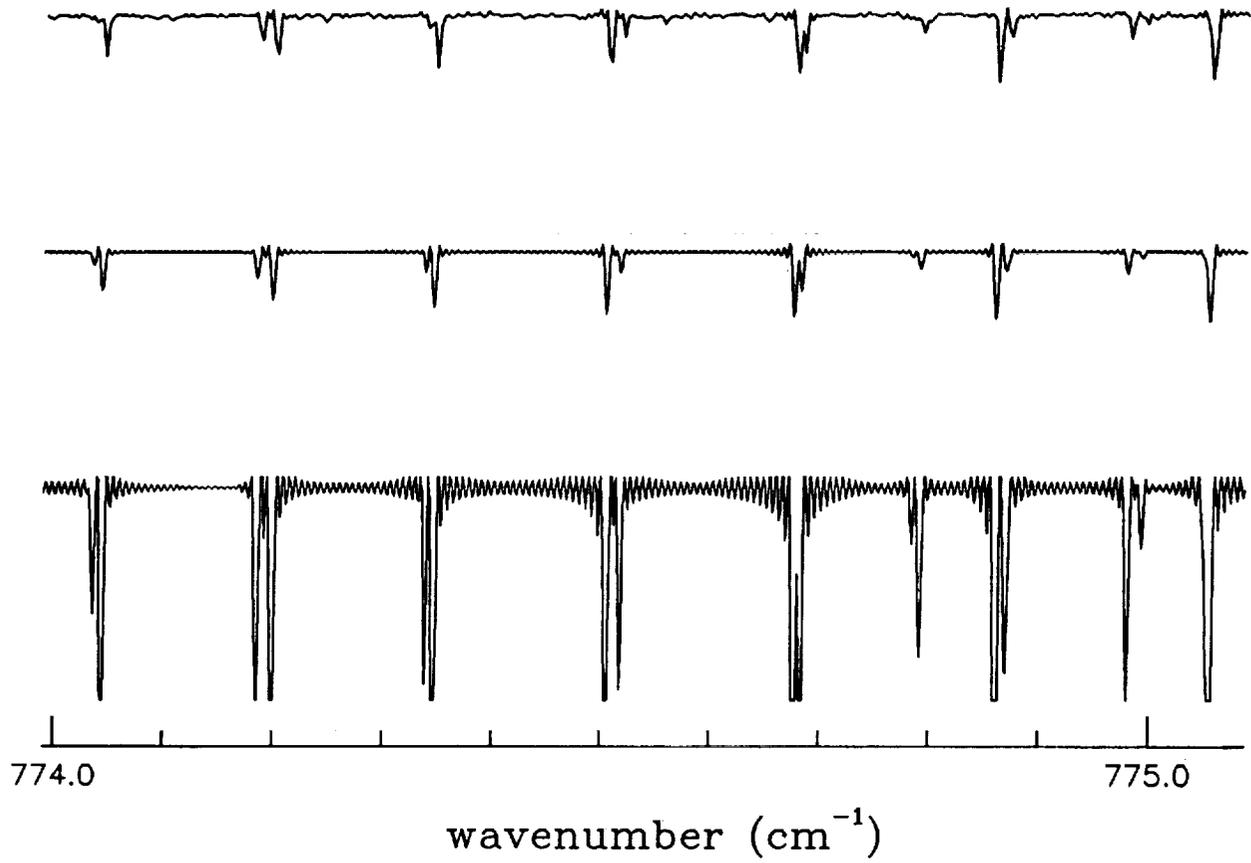
wavenumber (cm^{-1})

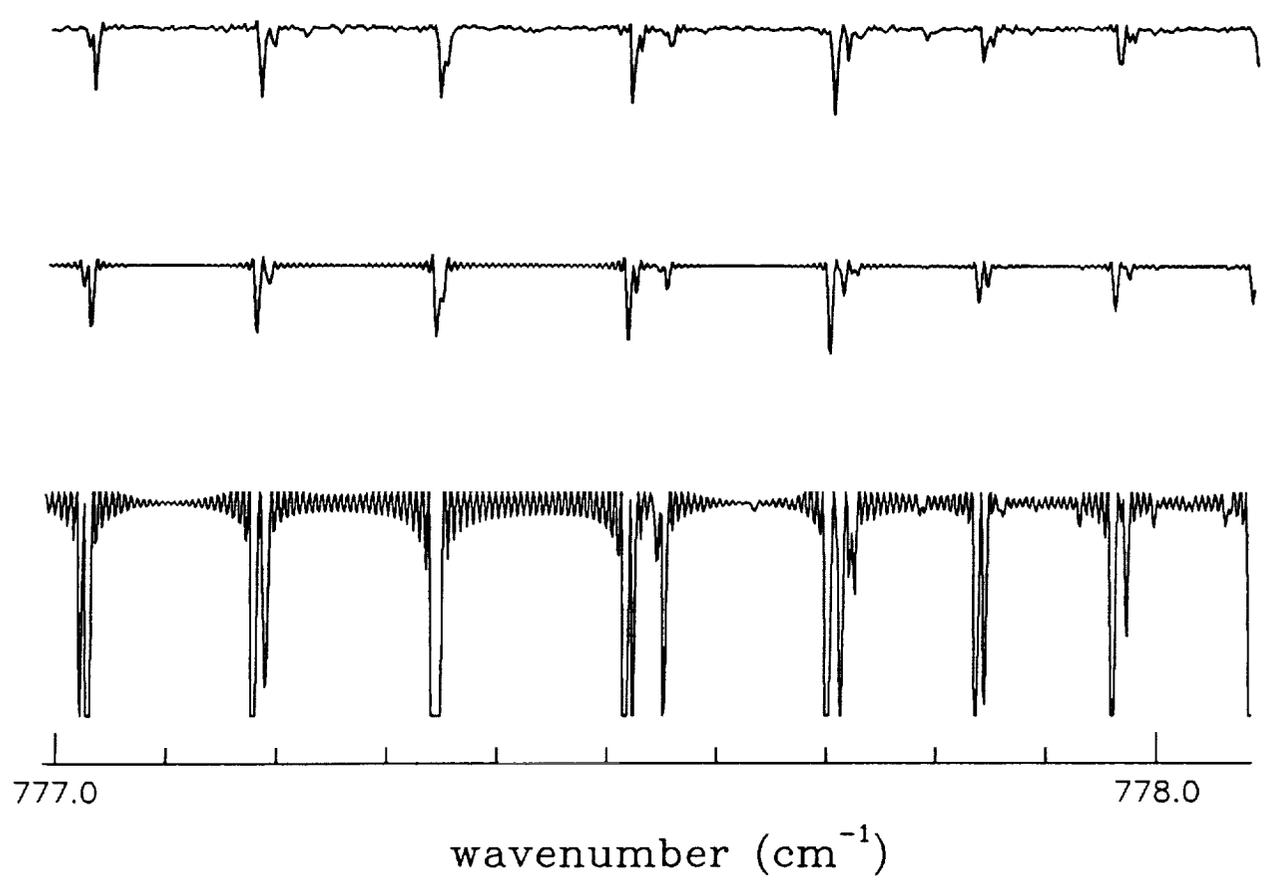
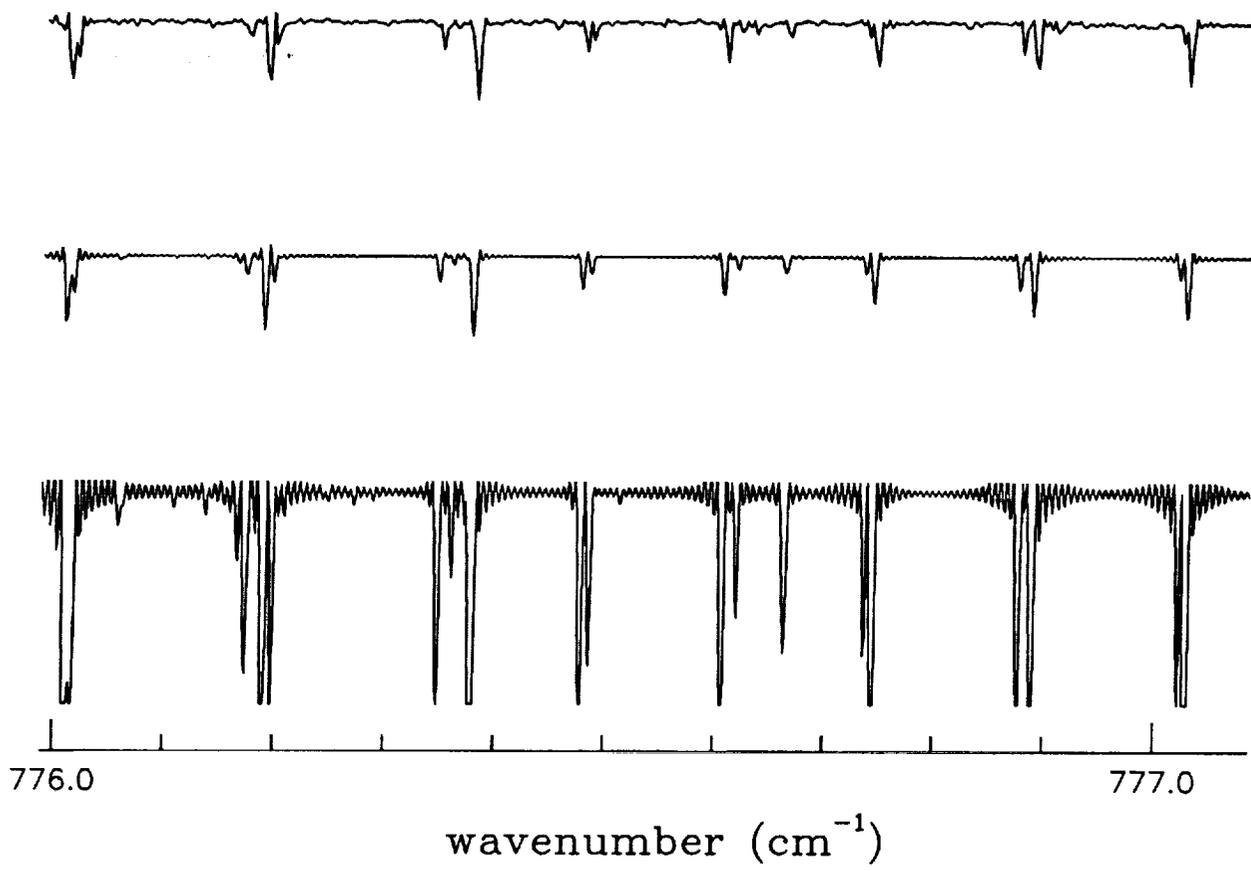


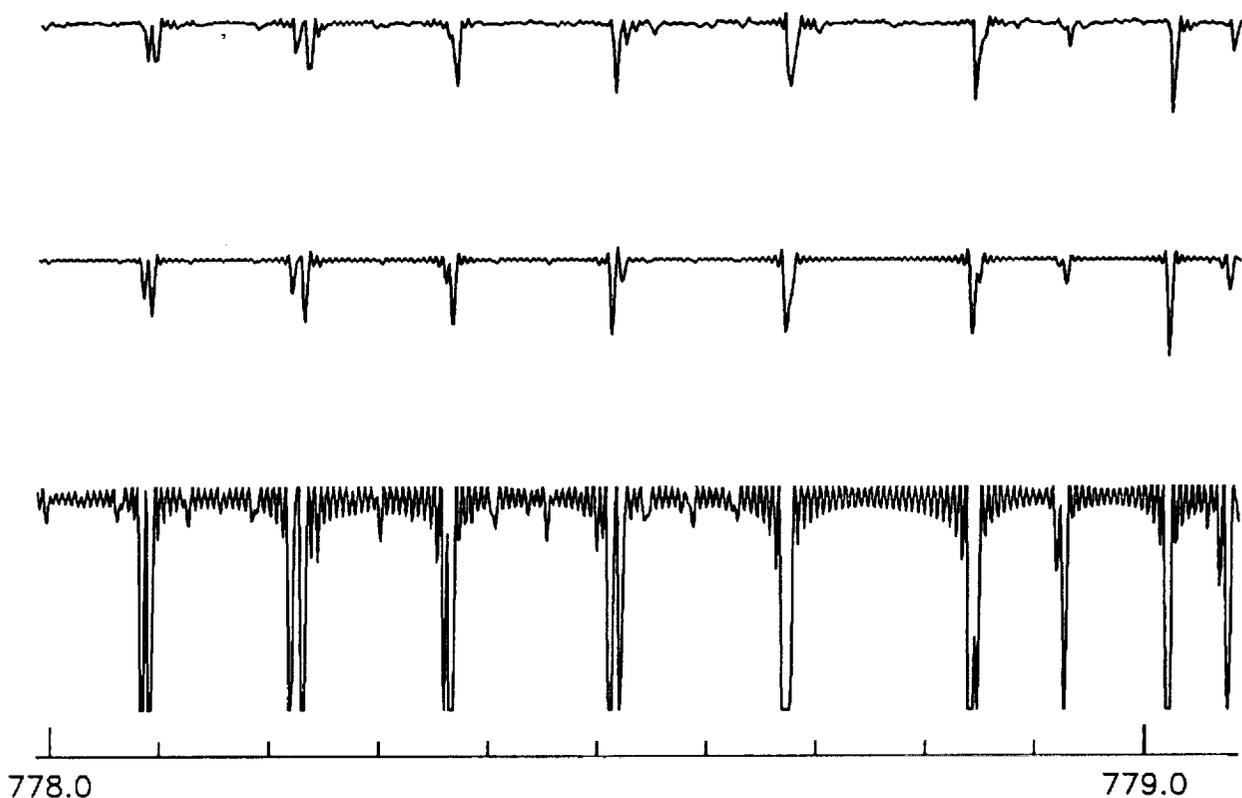
wavenumber (cm⁻¹)



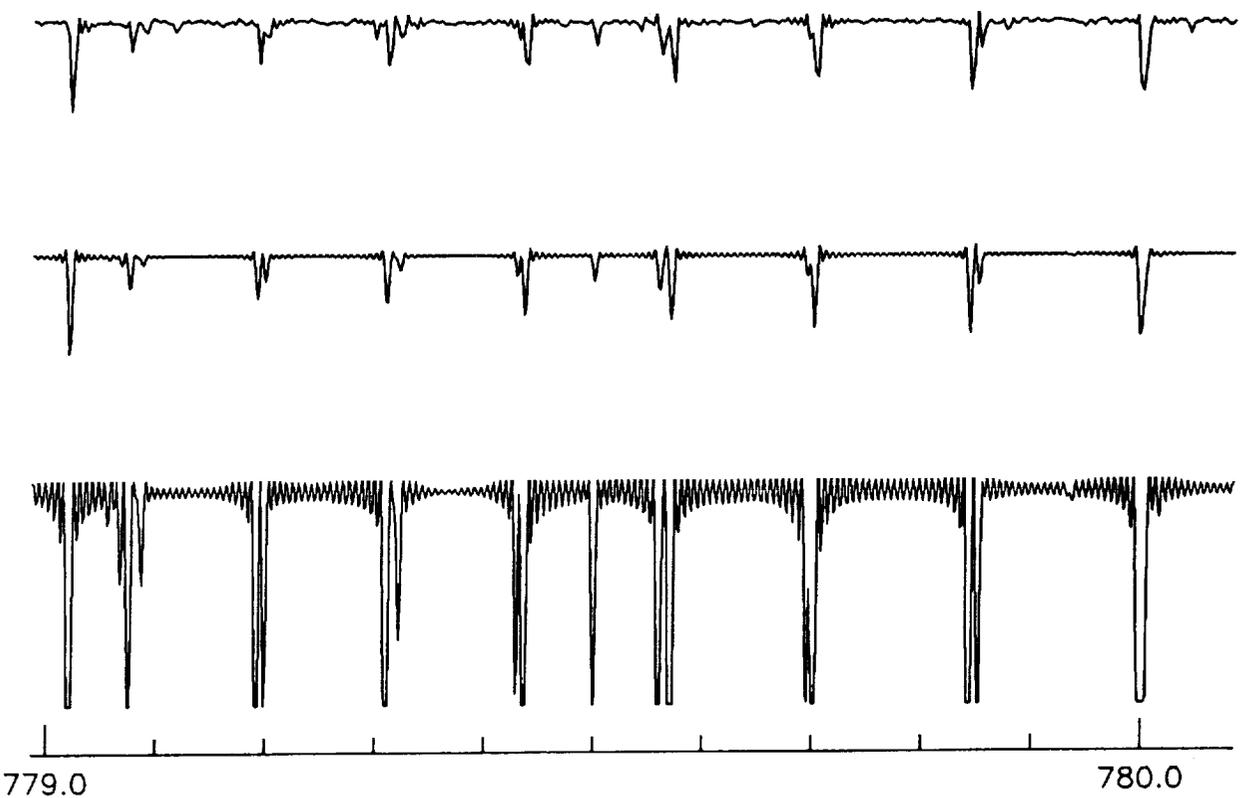
wavenumber (cm⁻¹)



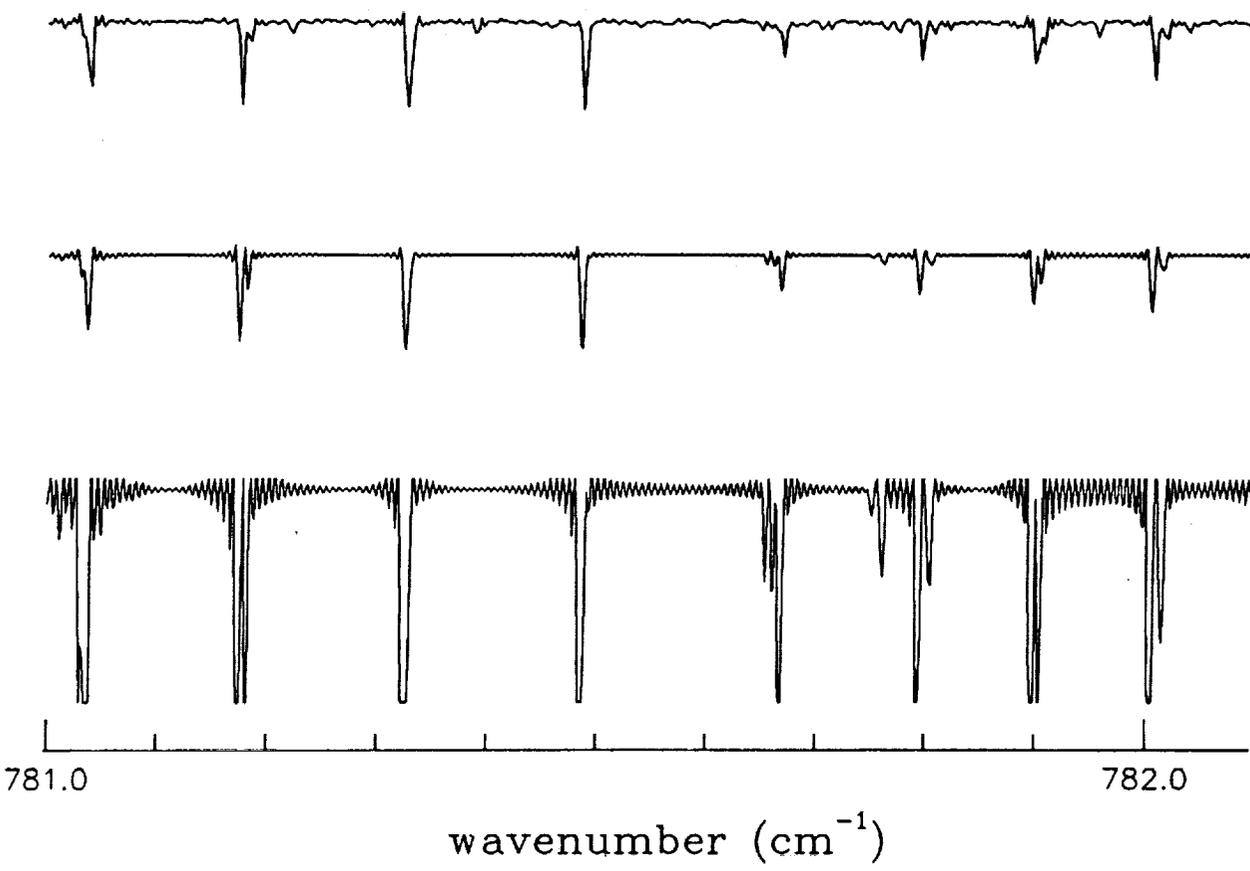
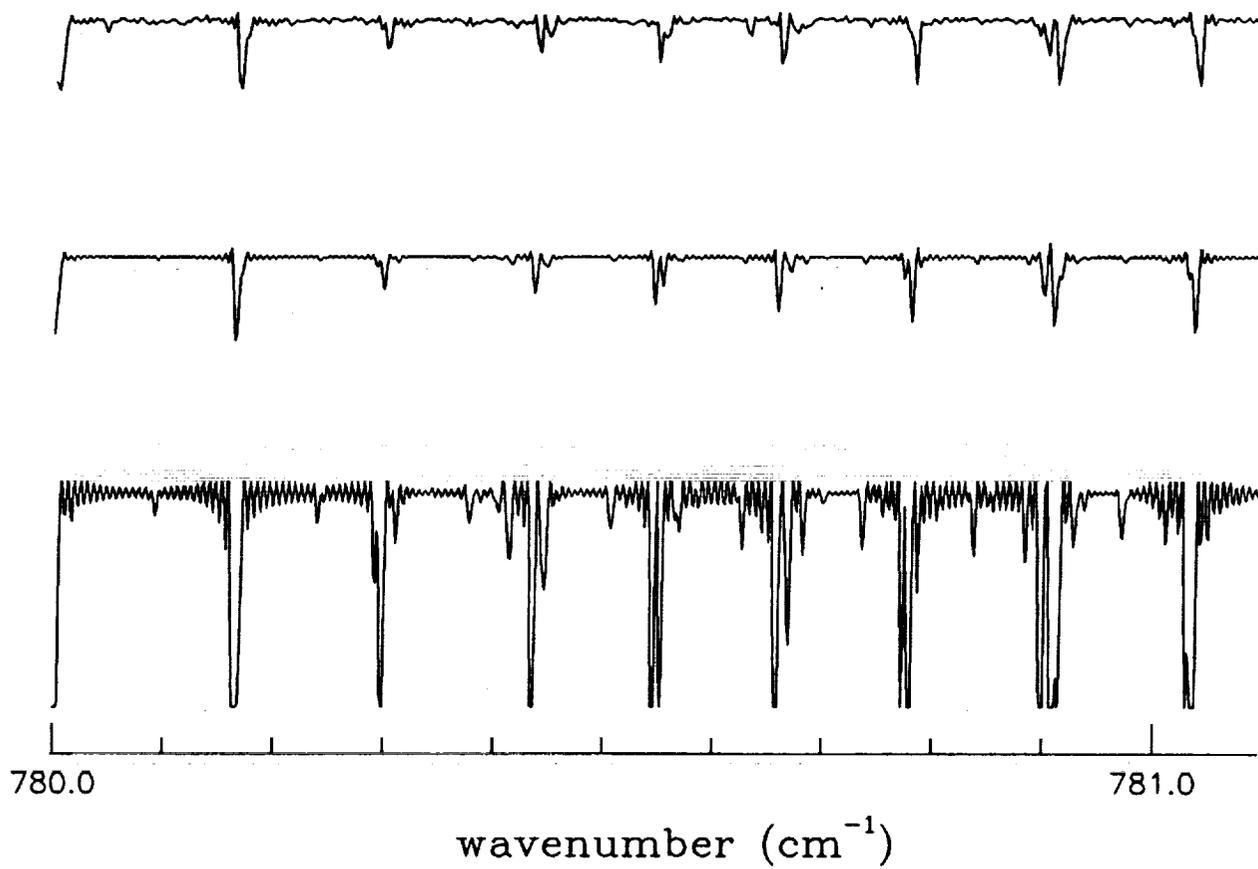


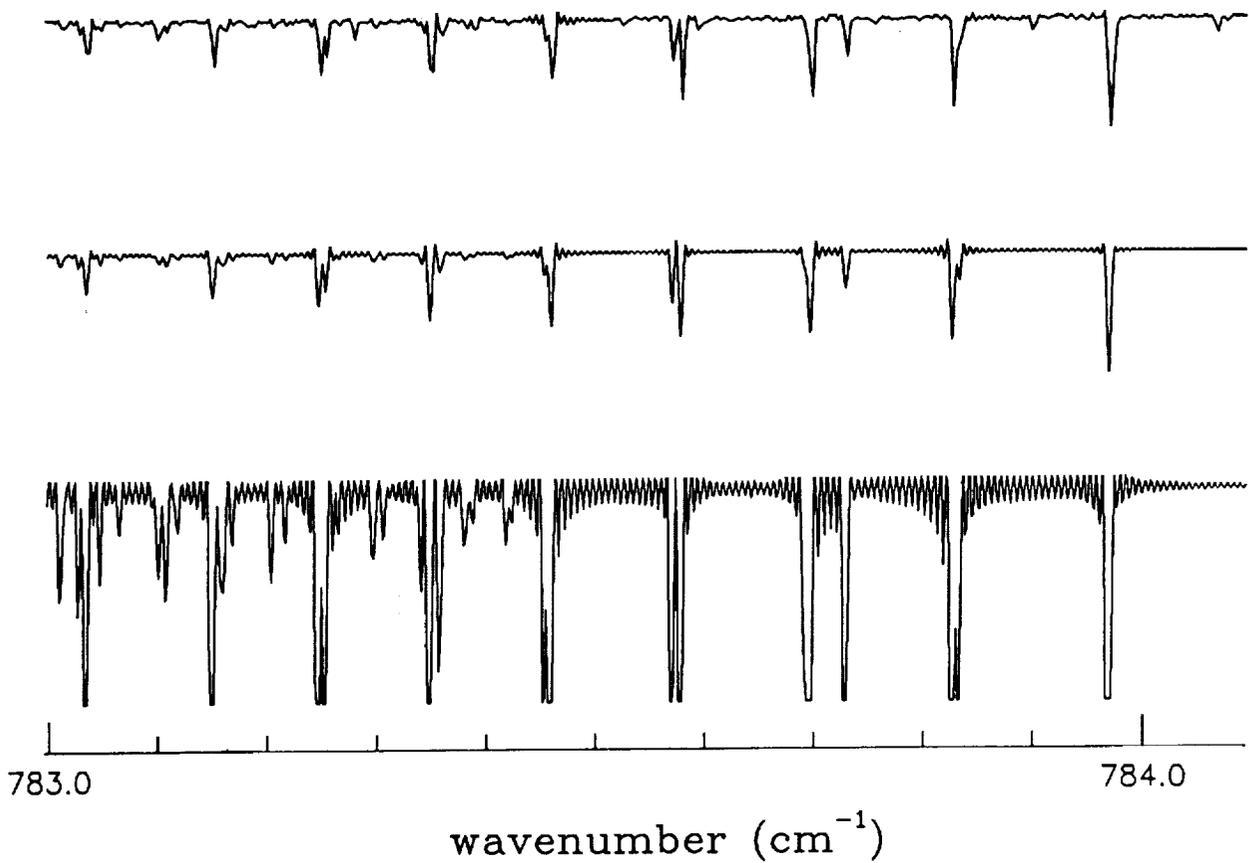
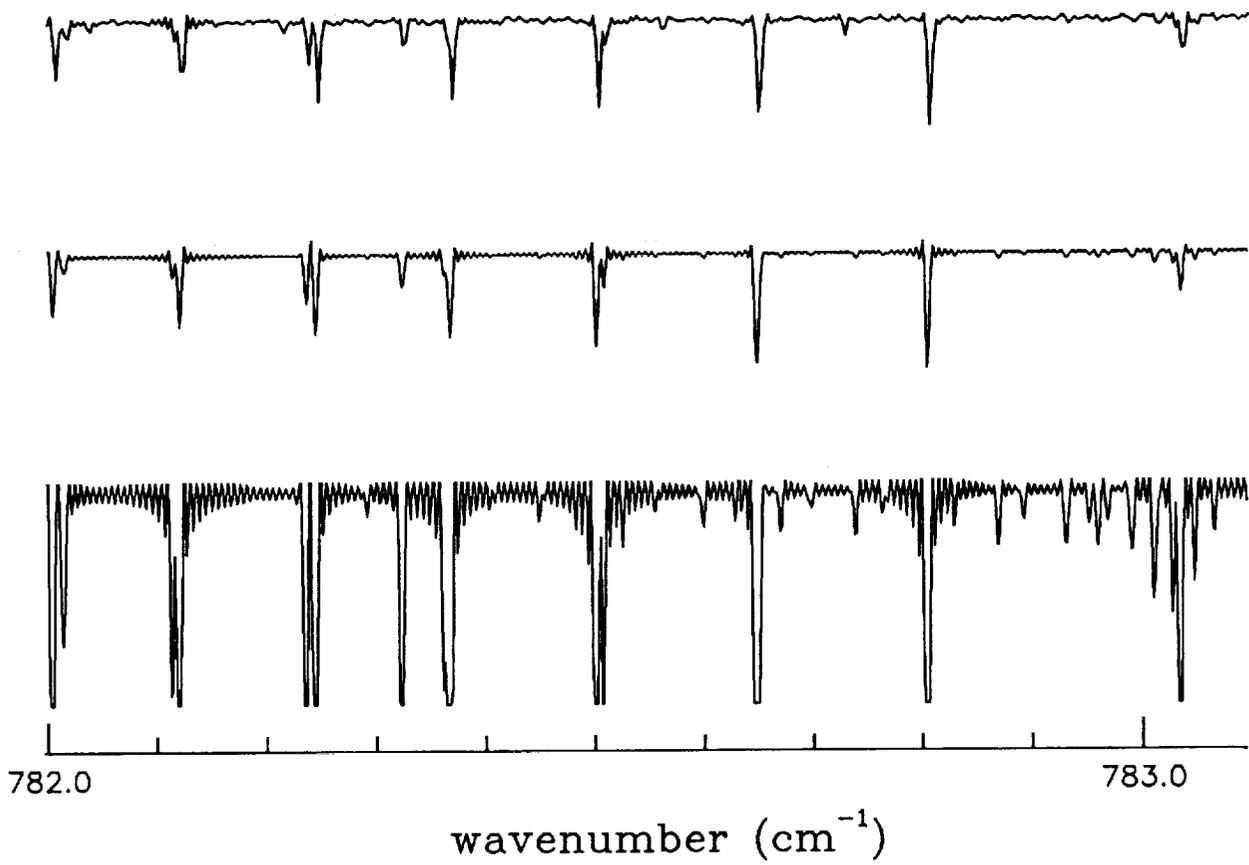


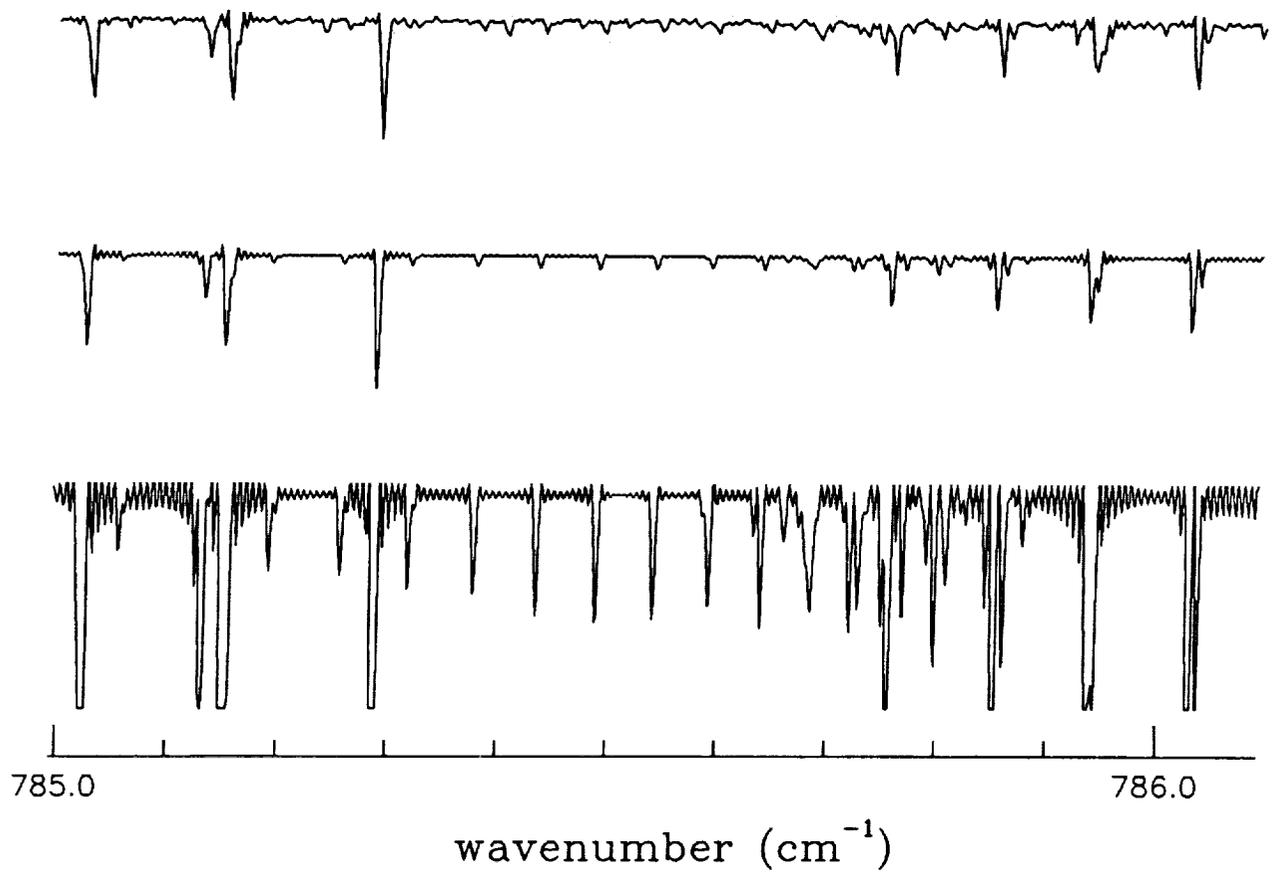
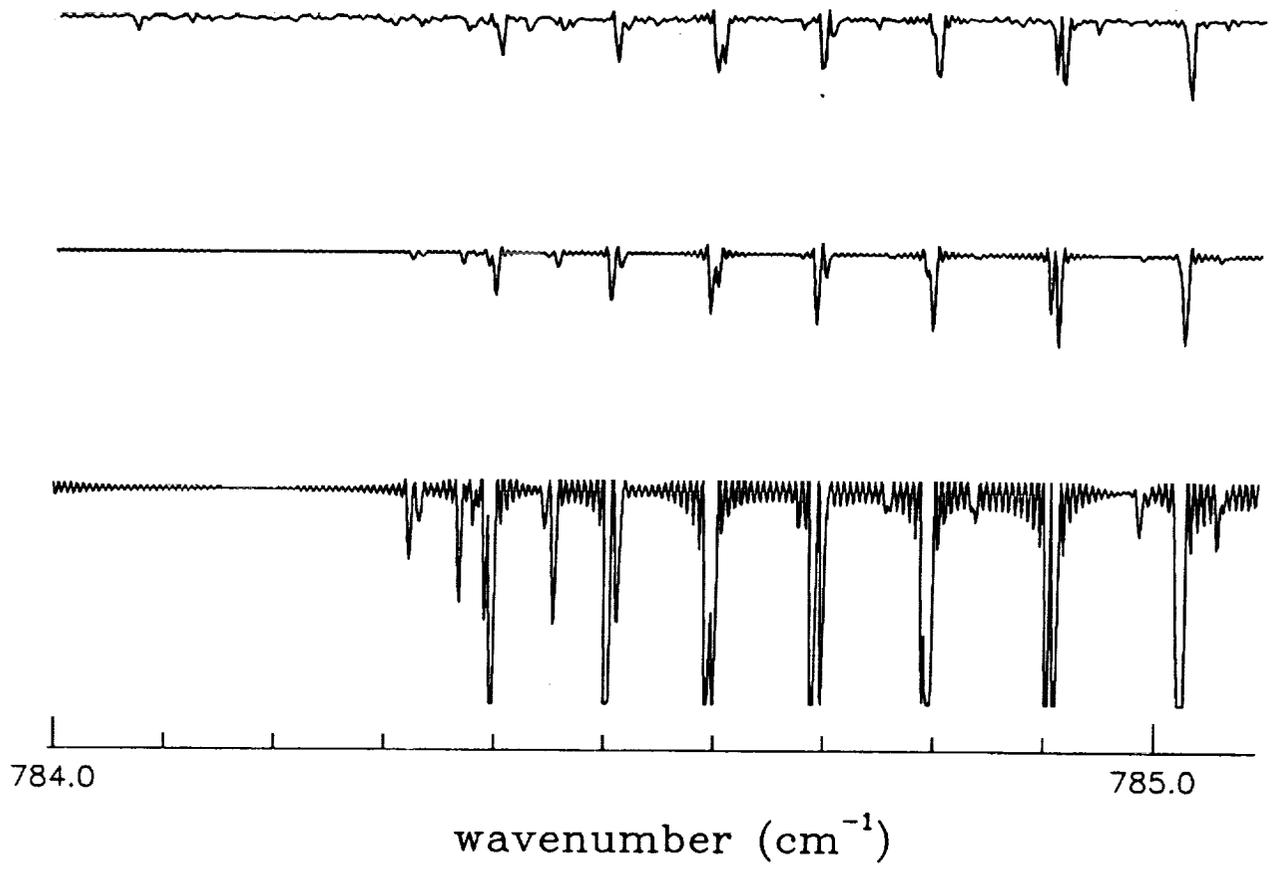
wavenumber (cm⁻¹)

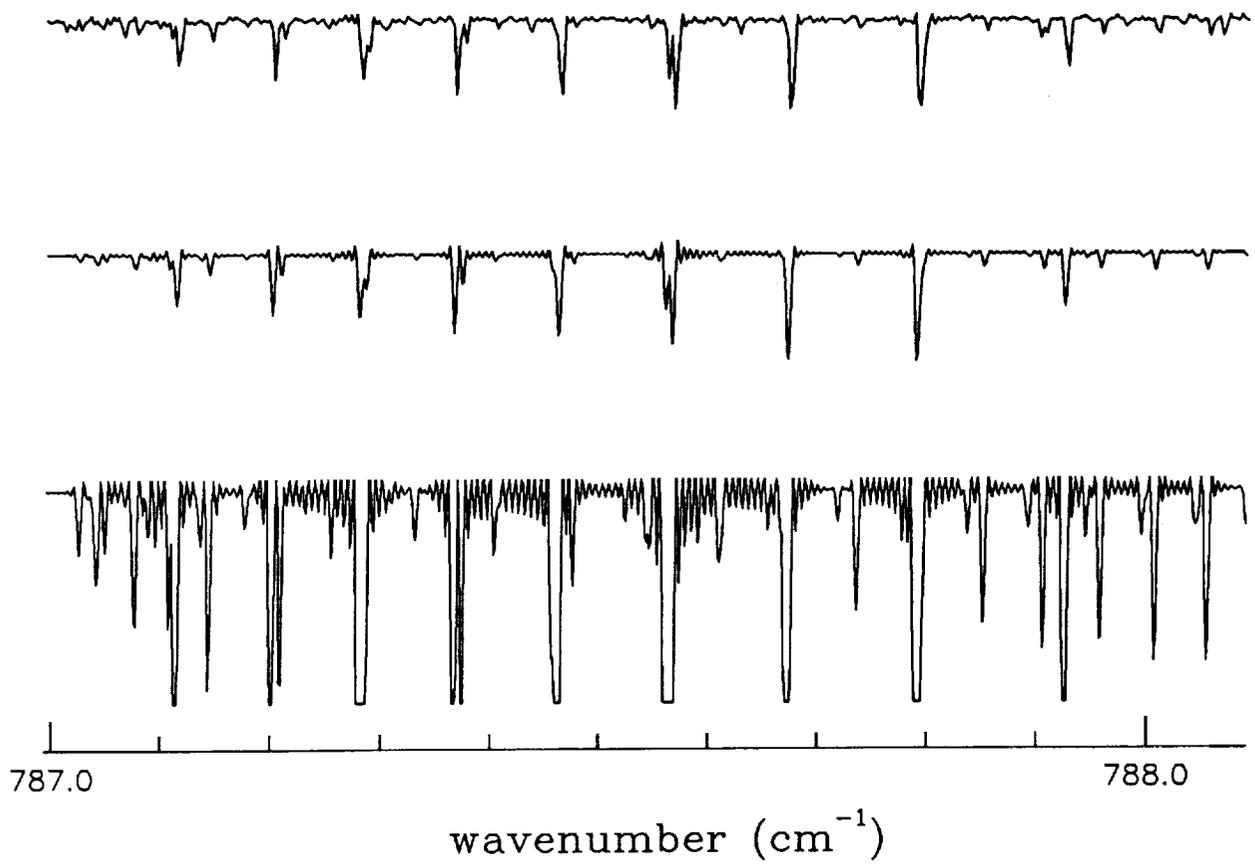
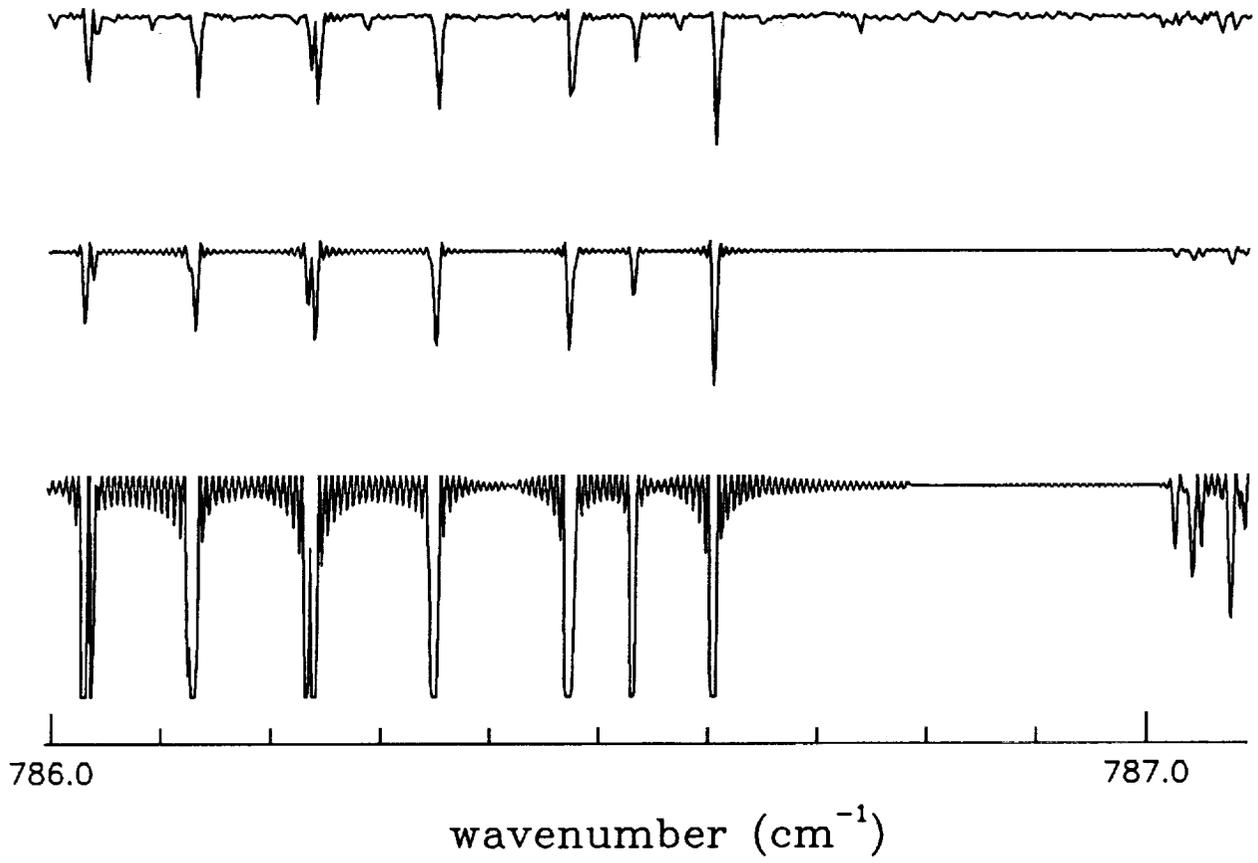


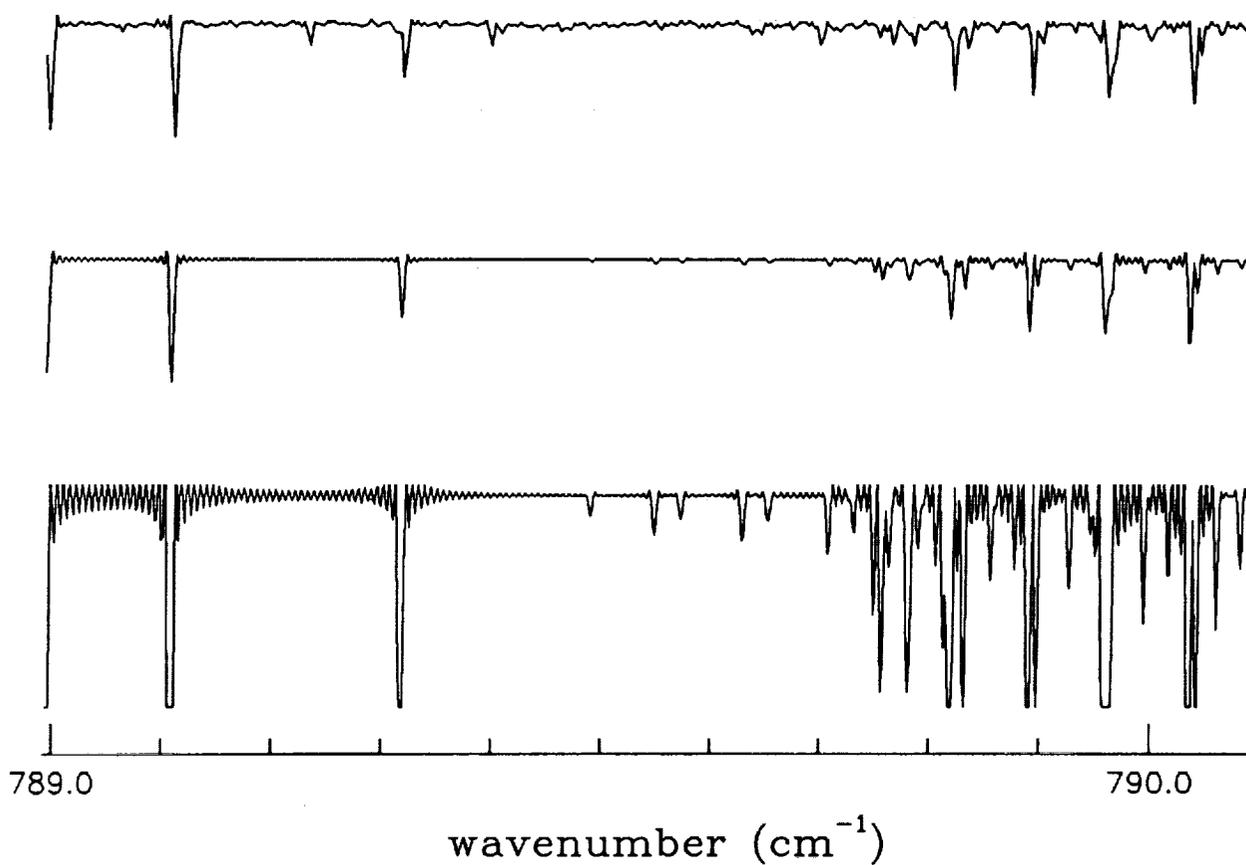
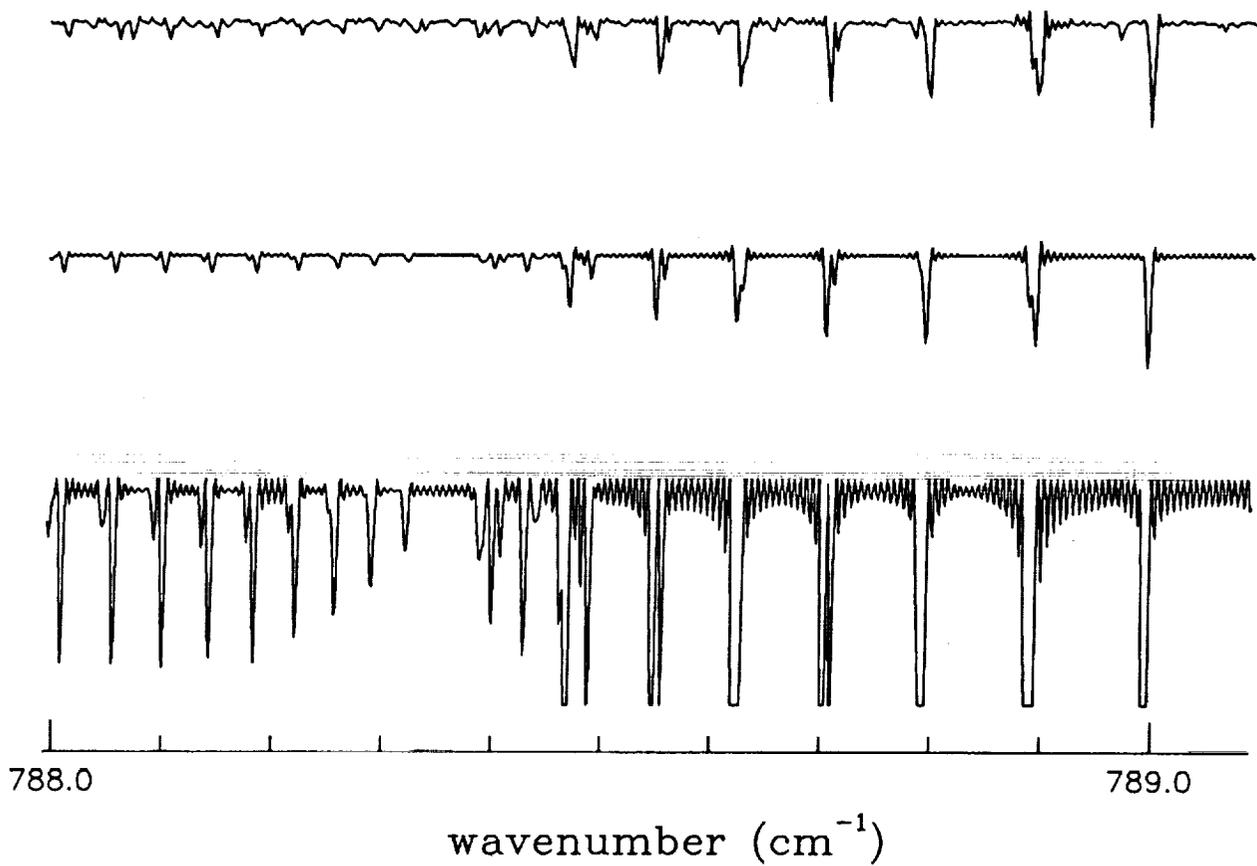
wavenumber (cm⁻¹)

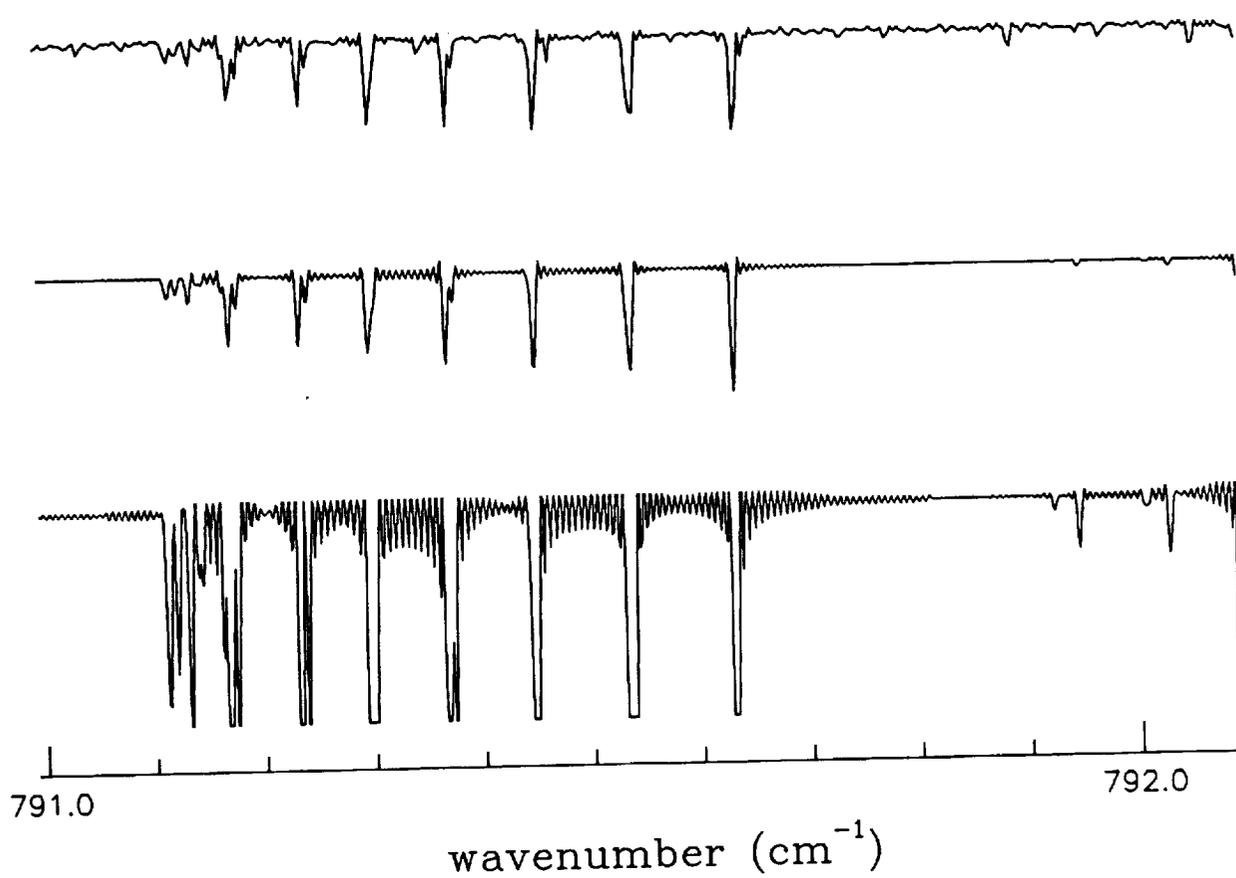
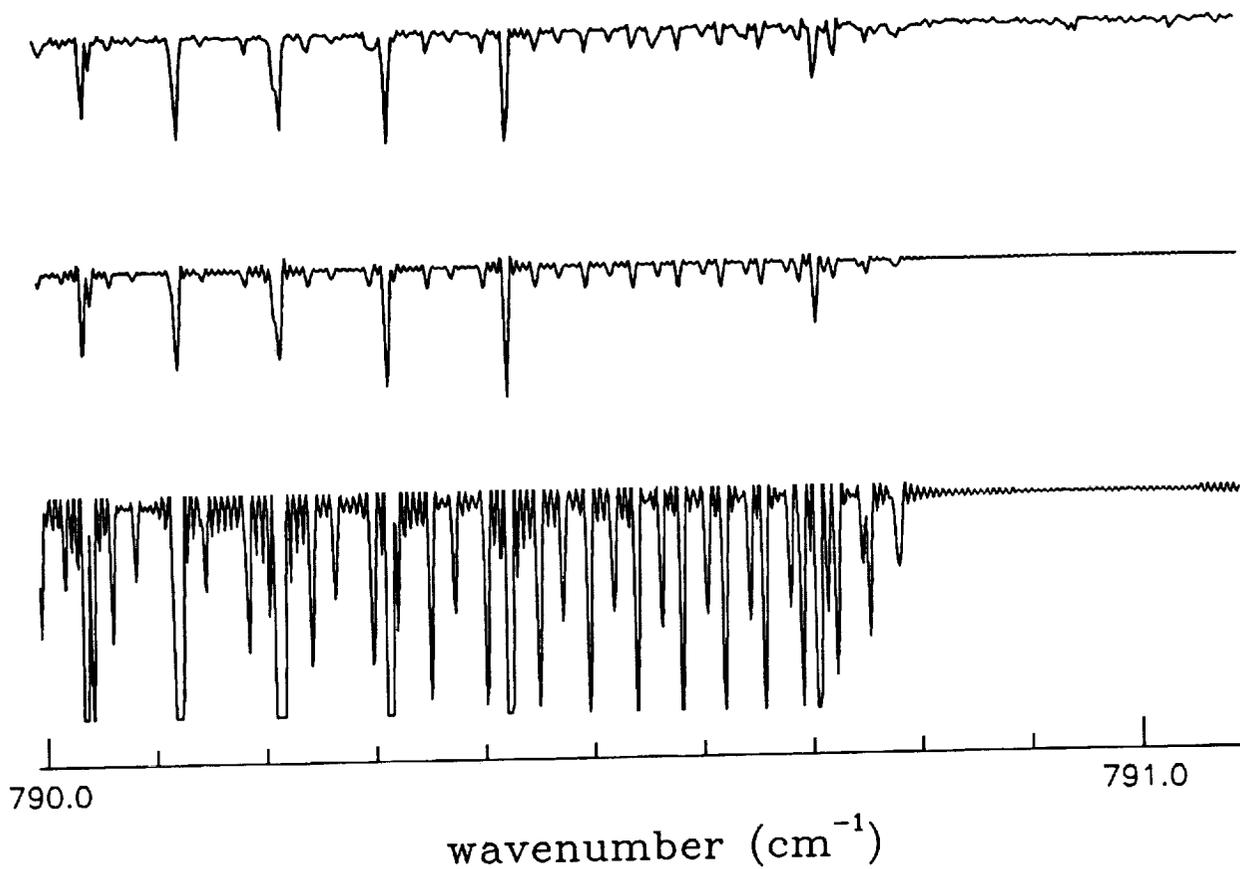


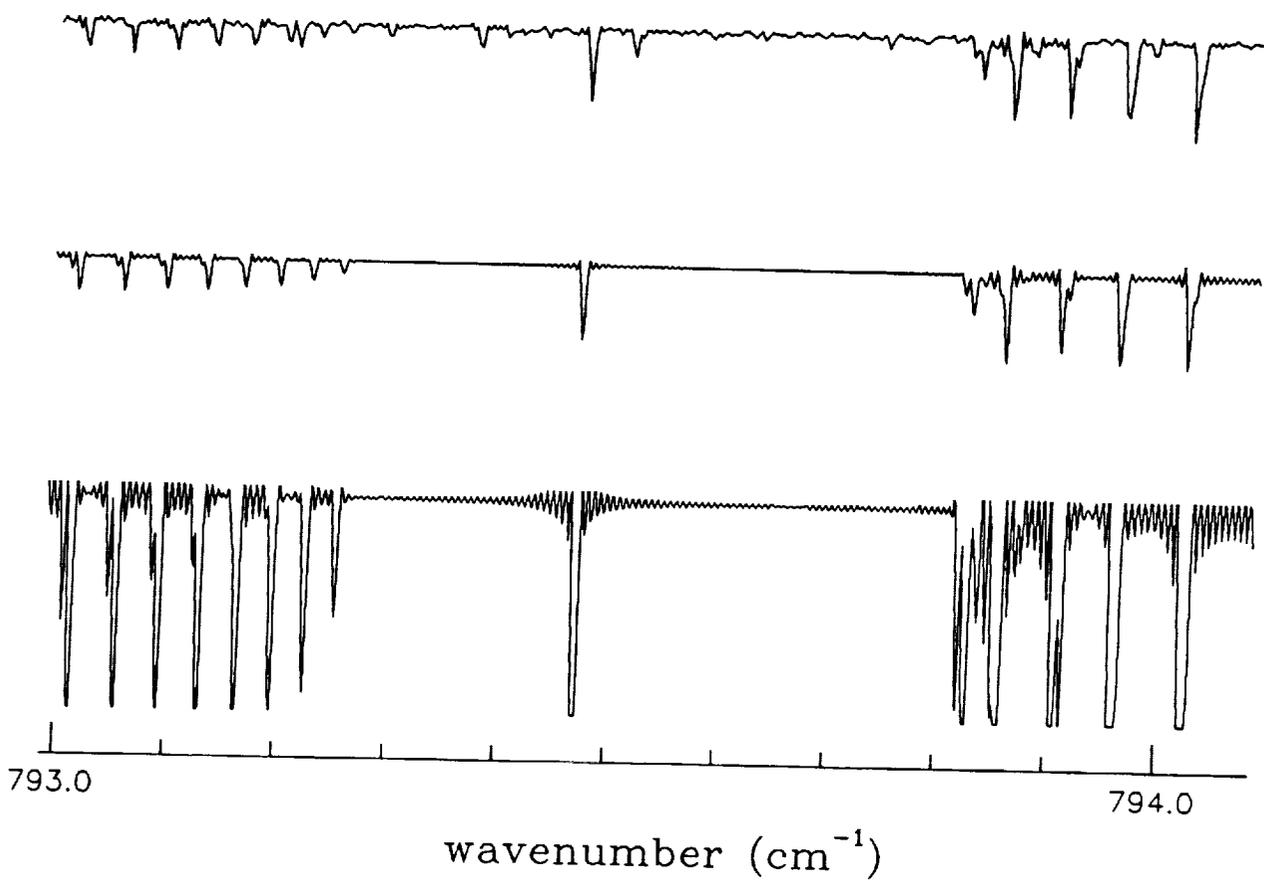
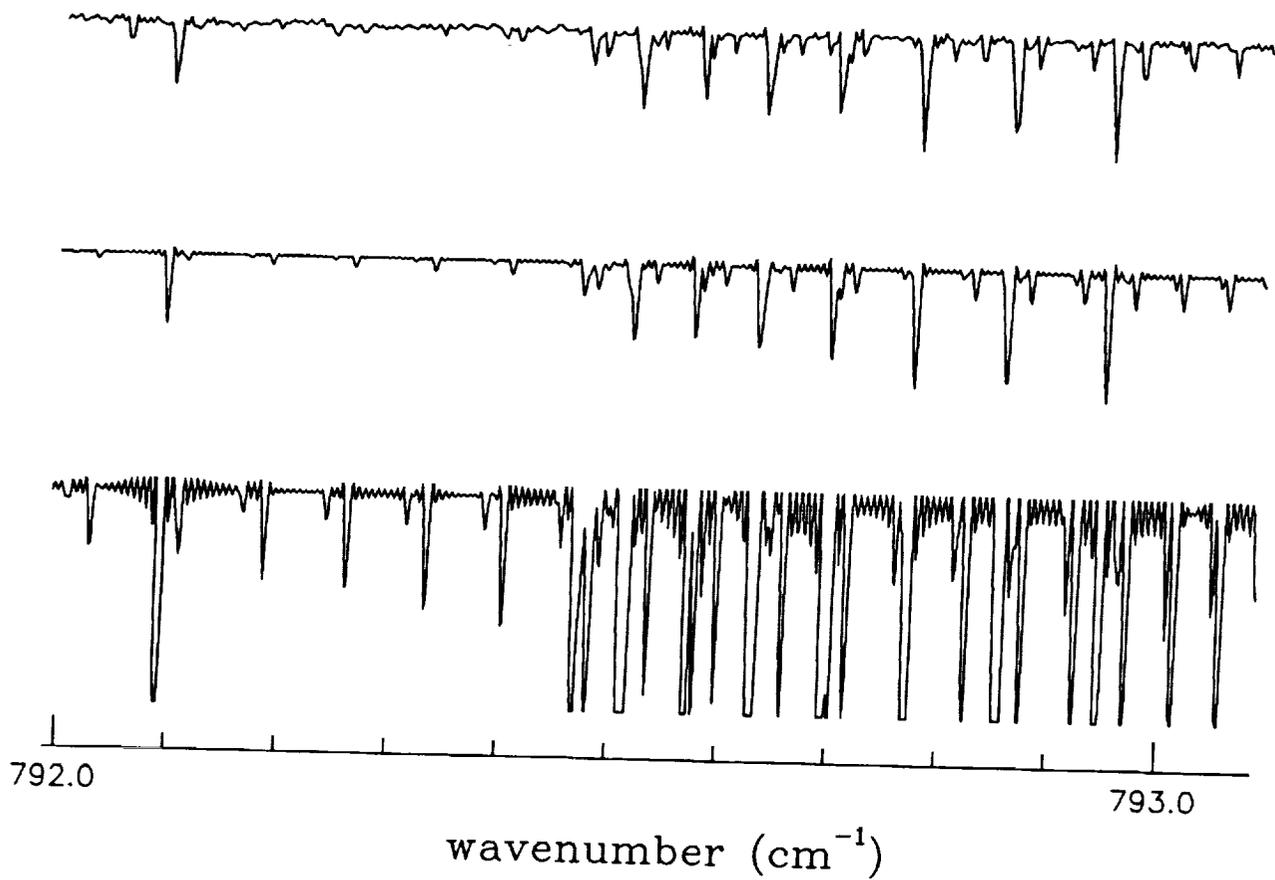


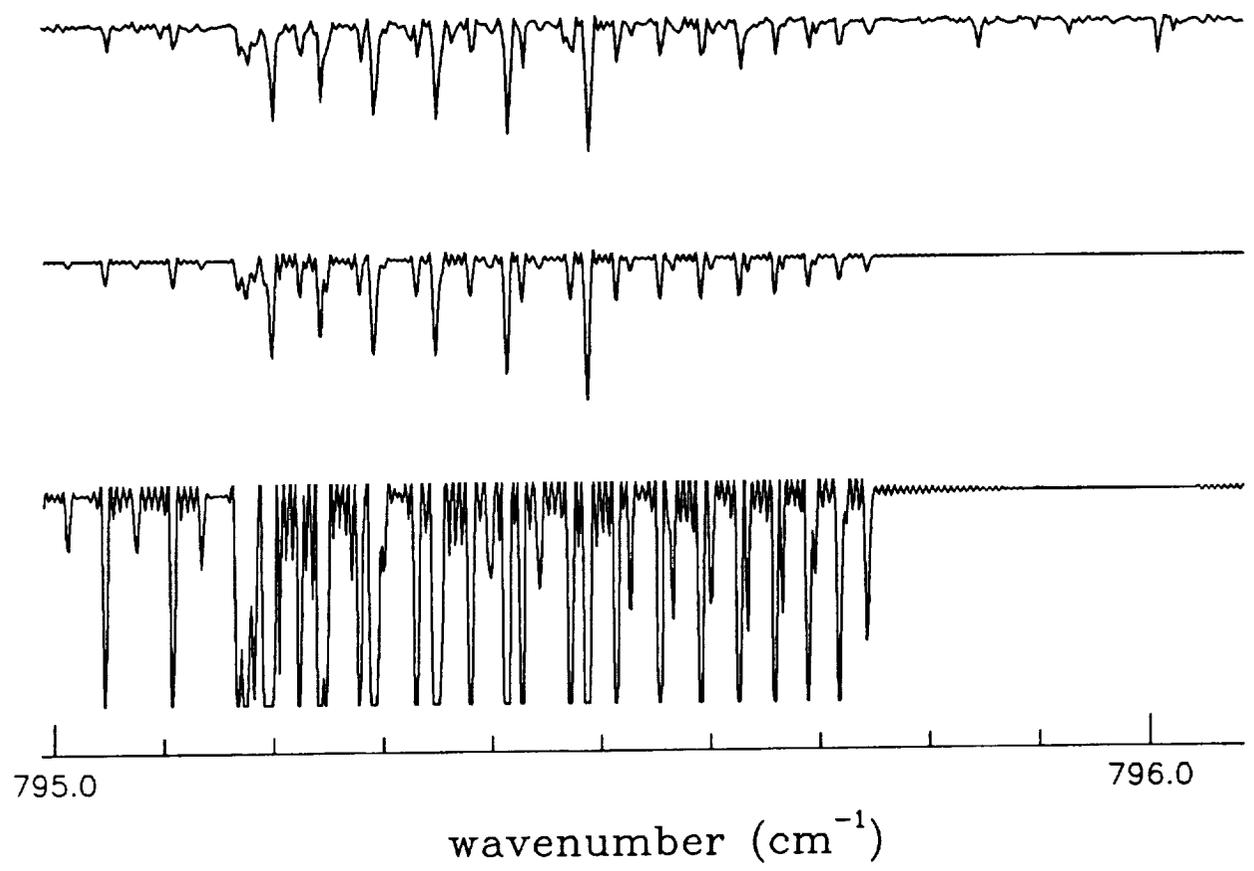
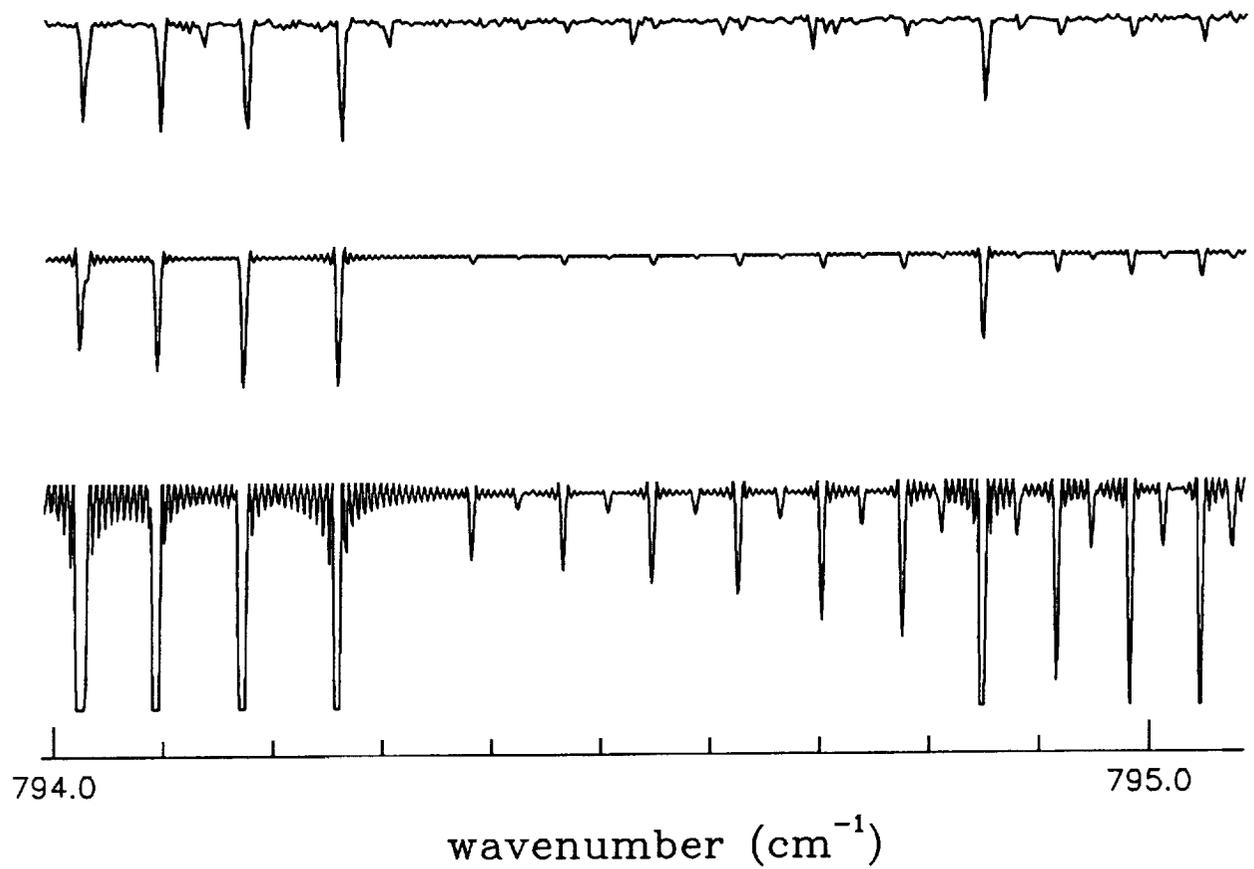


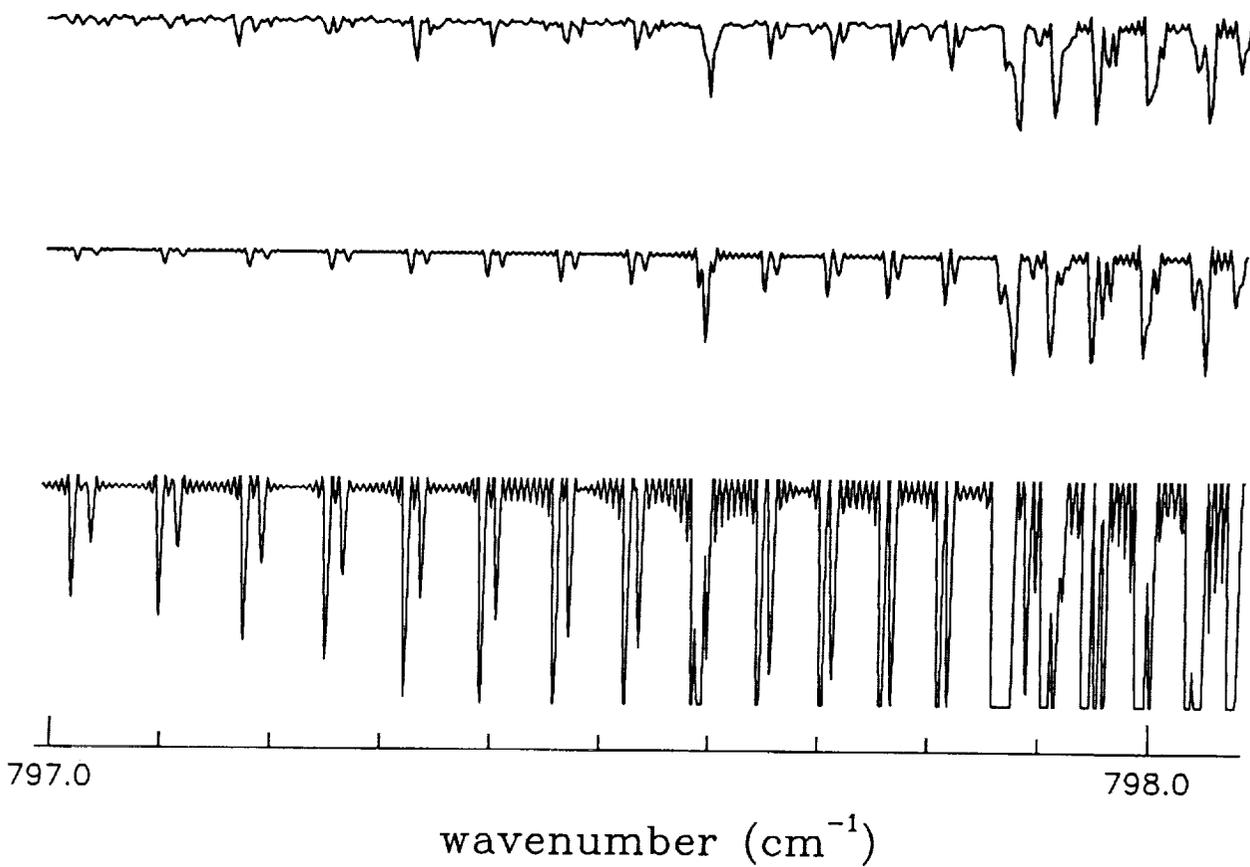
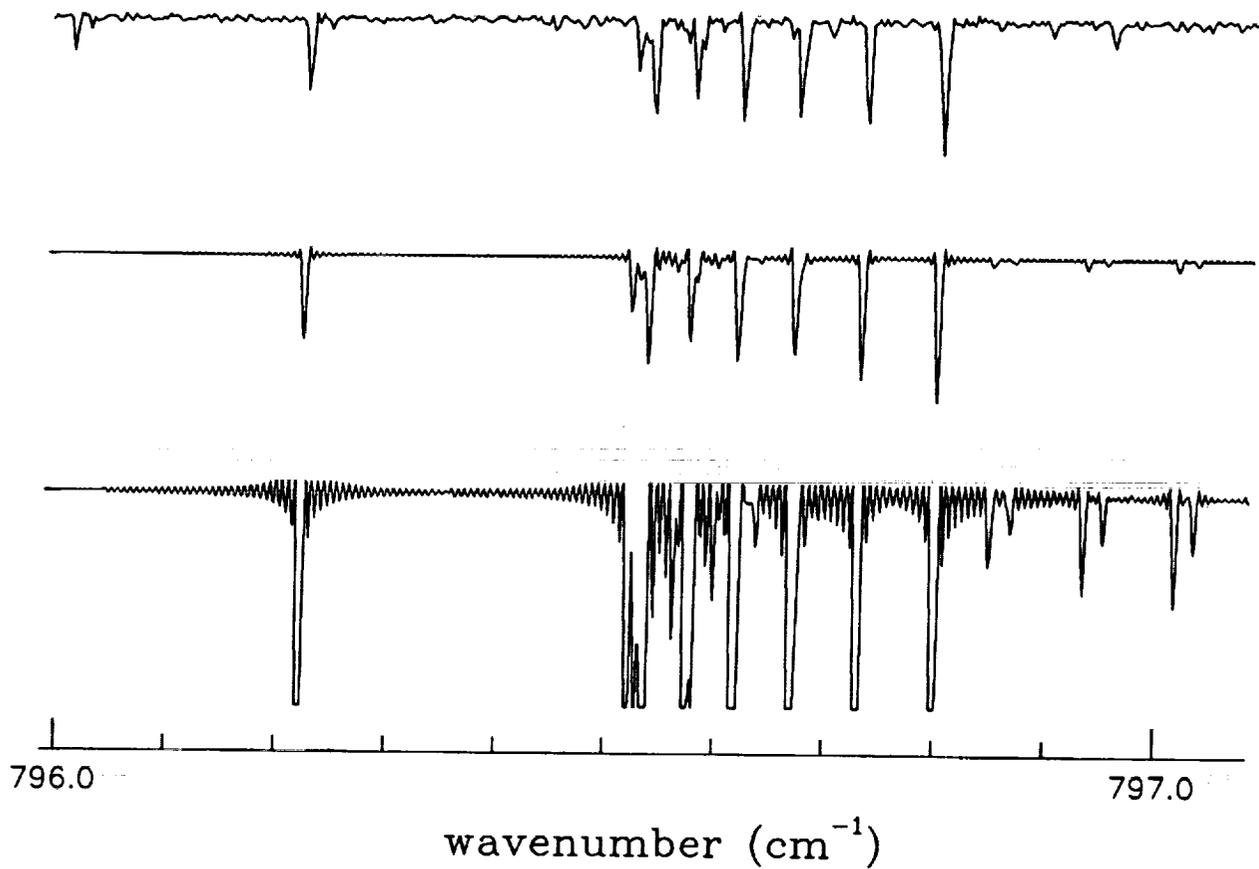


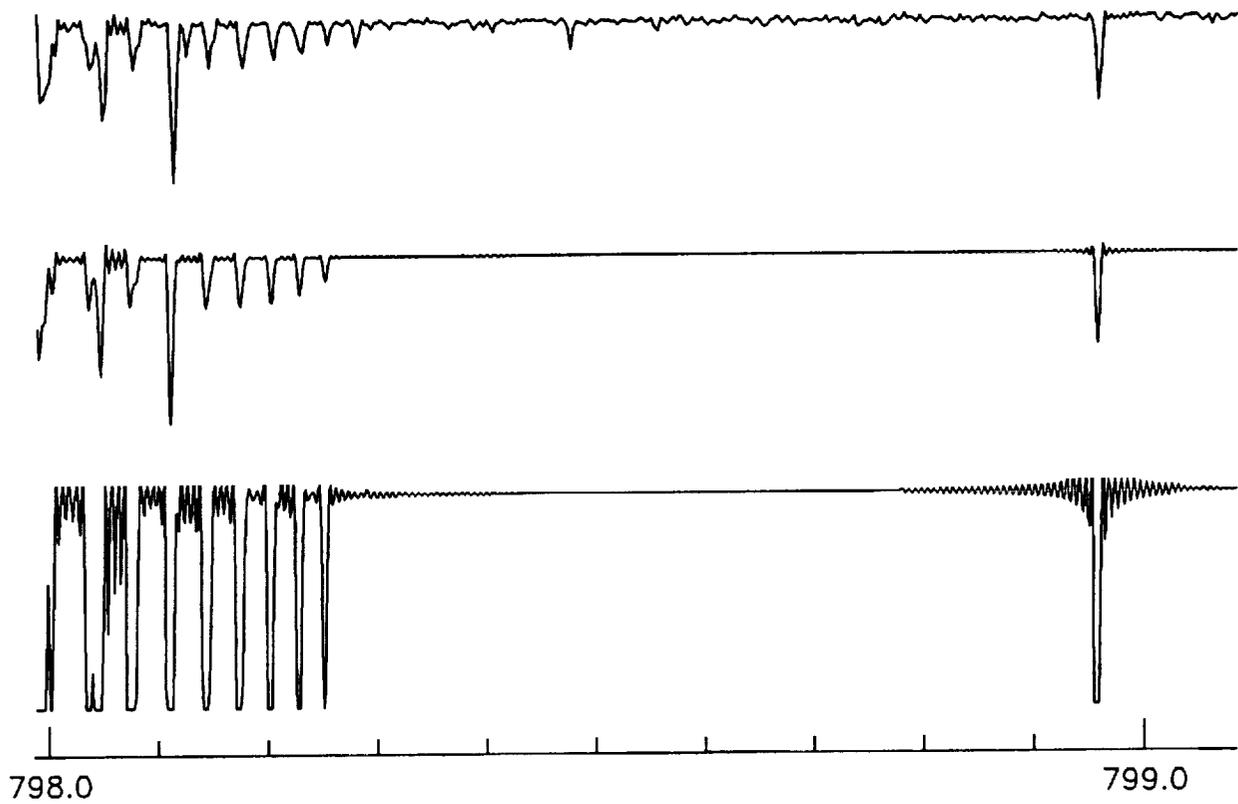




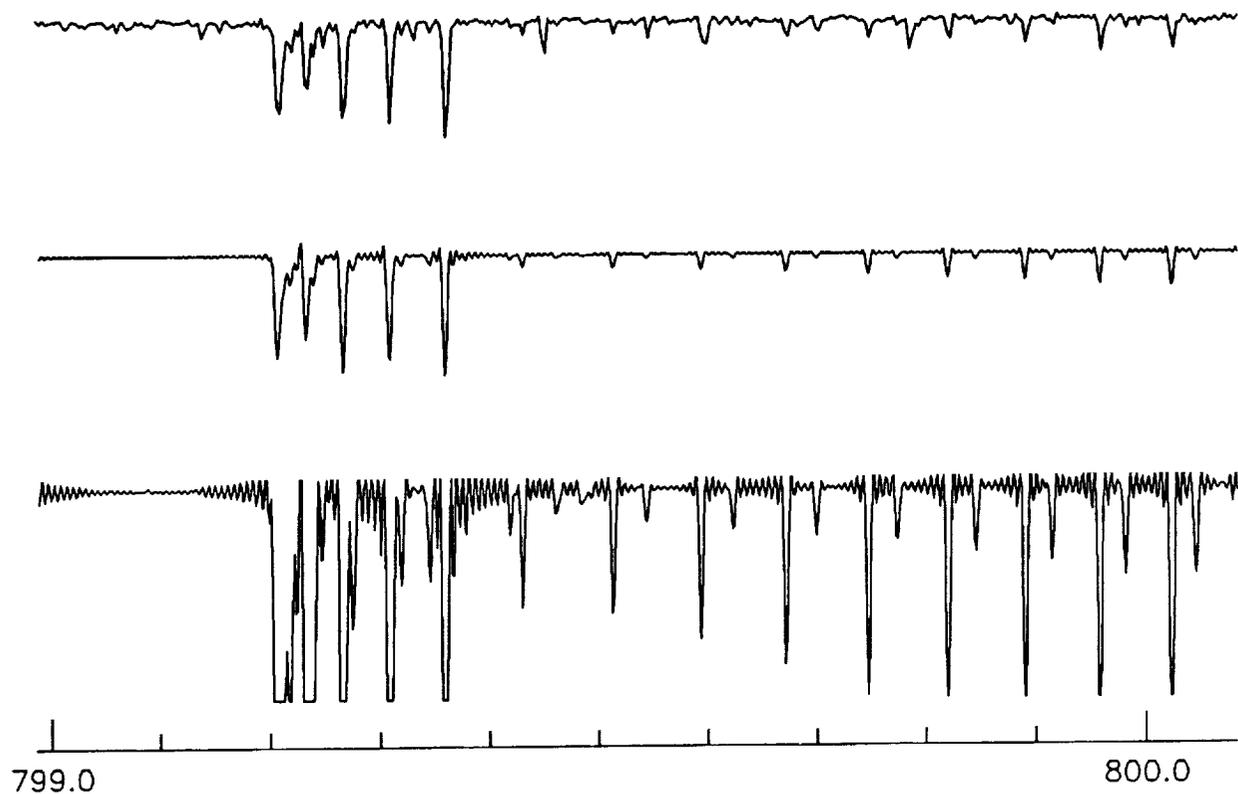




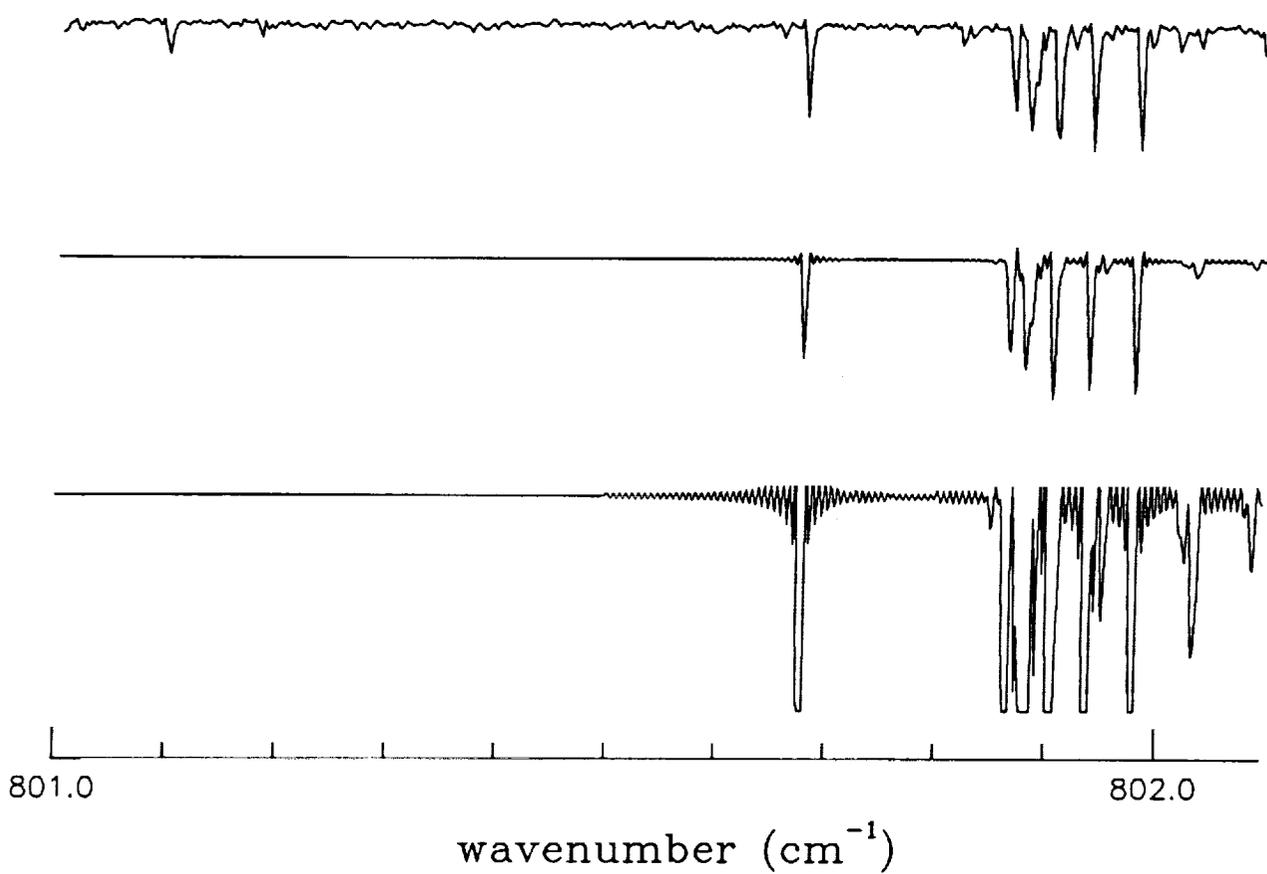
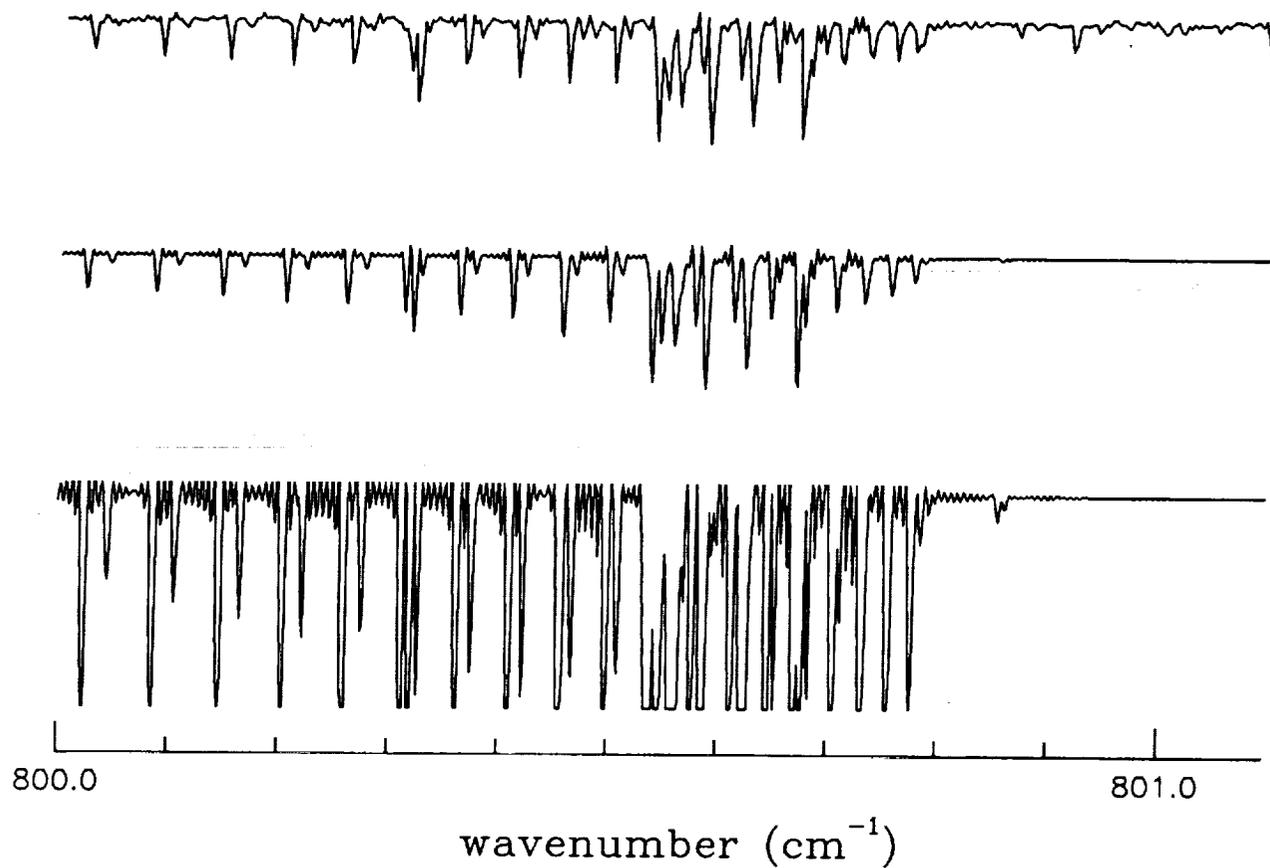


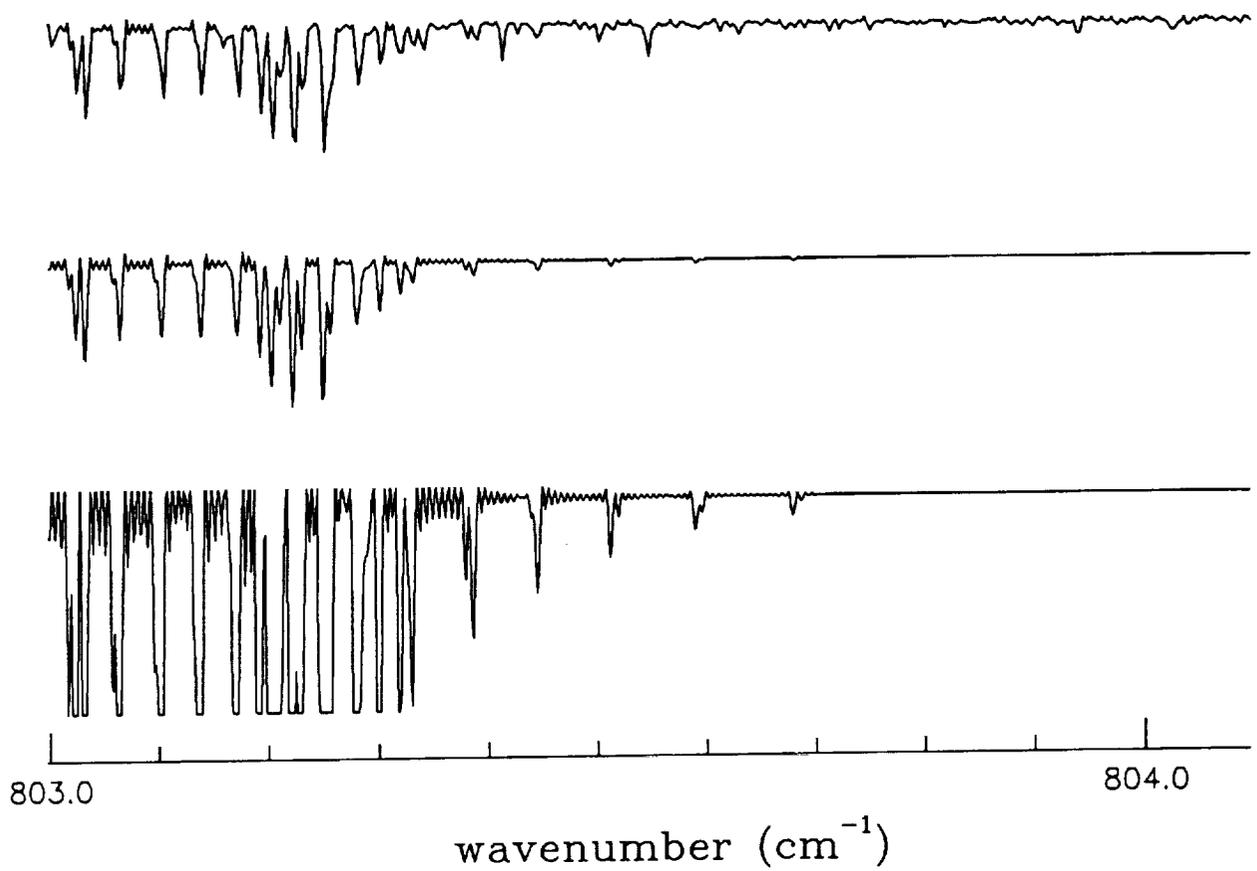
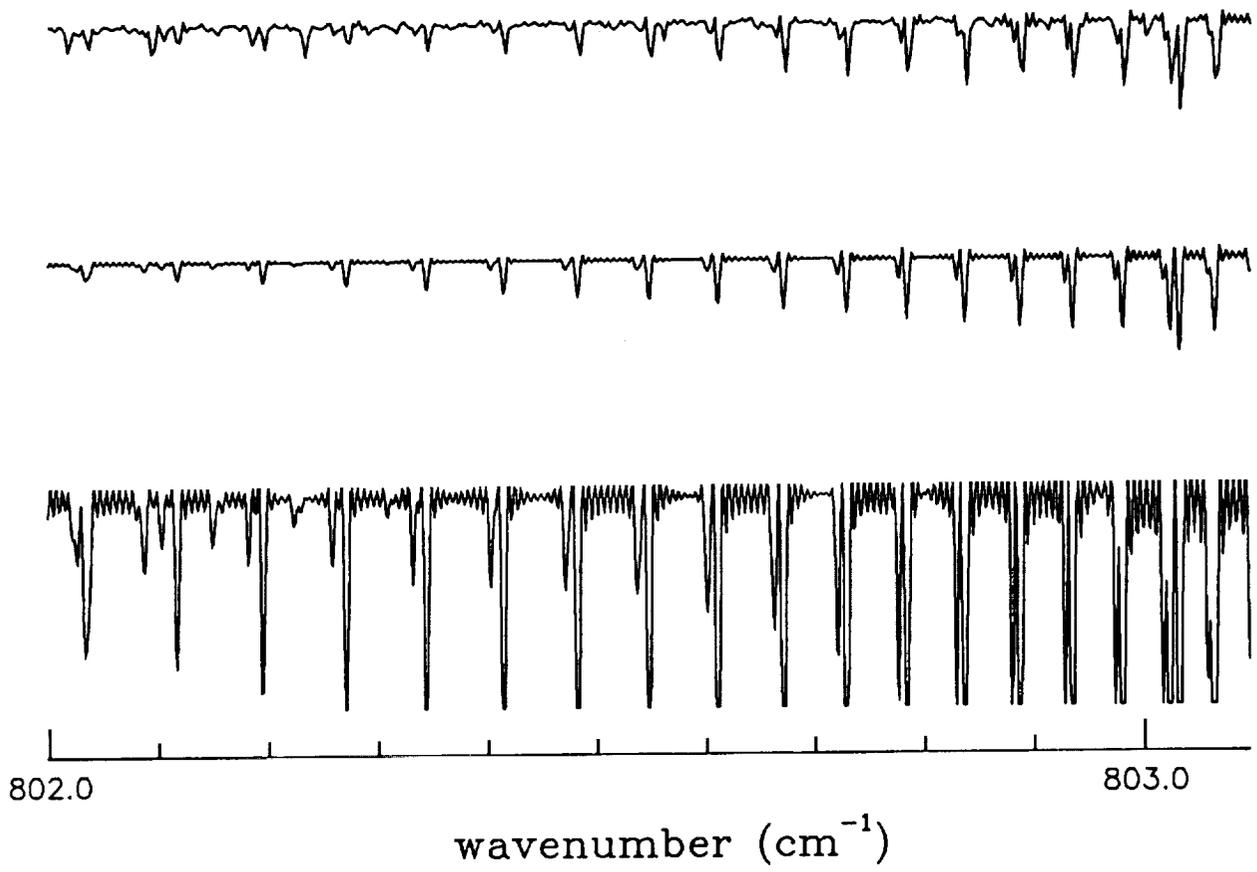


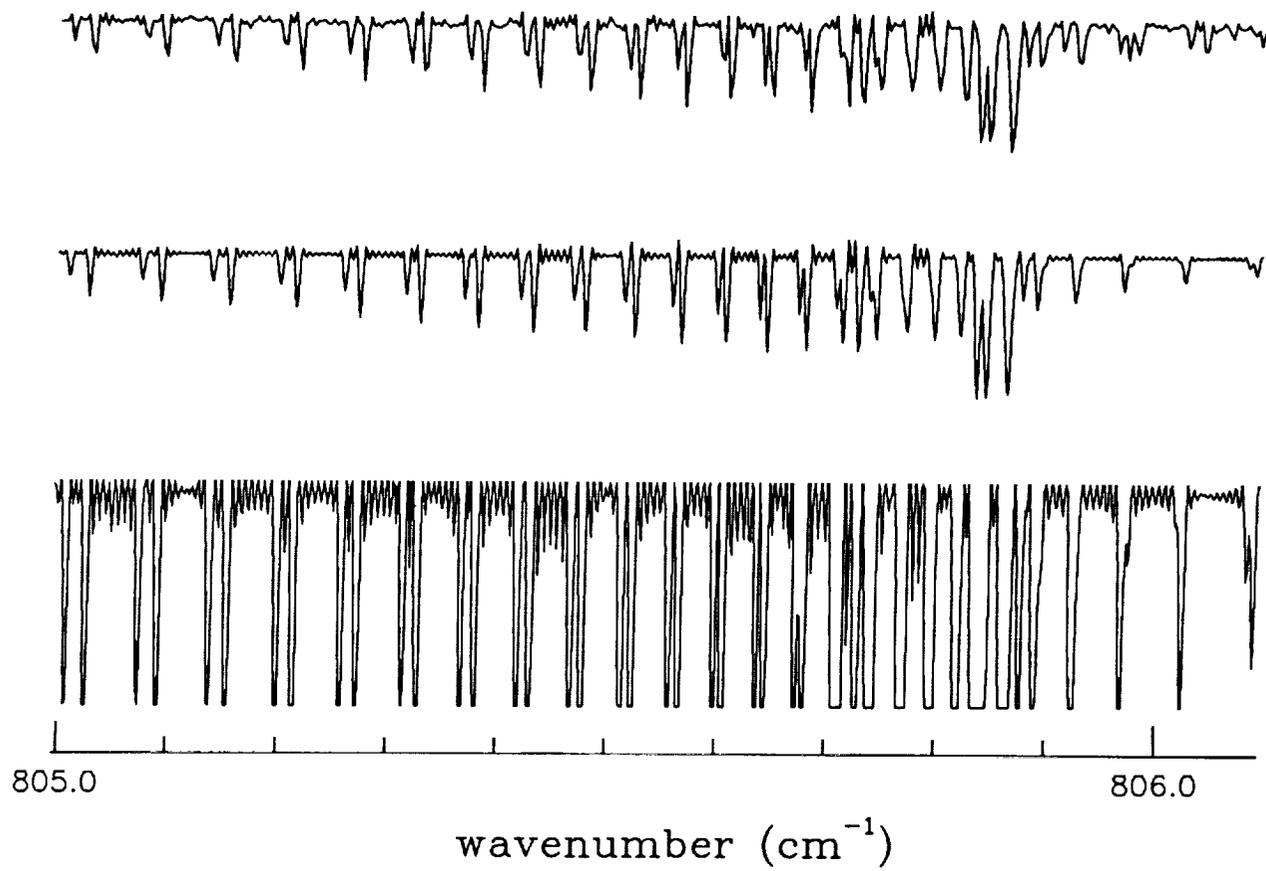
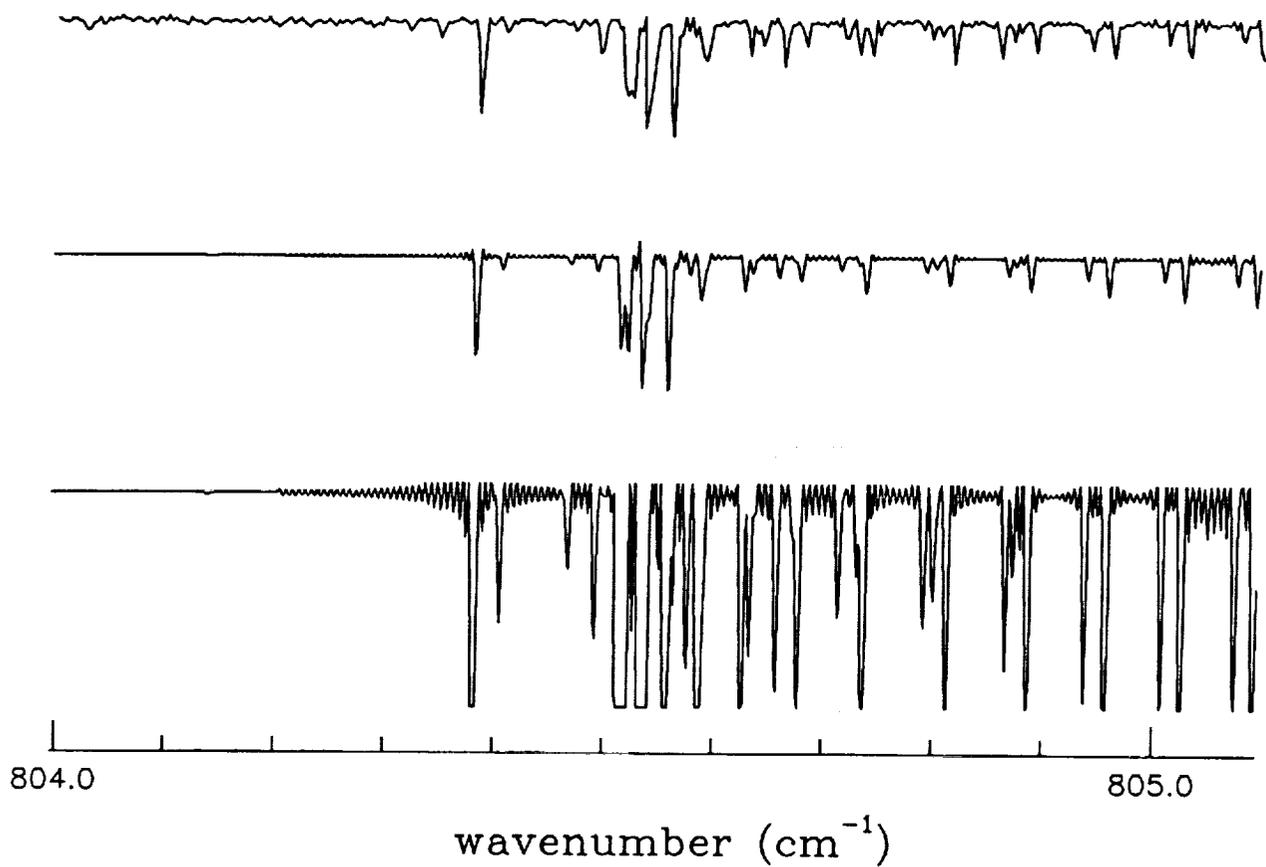
wavenumber (cm^{-1})

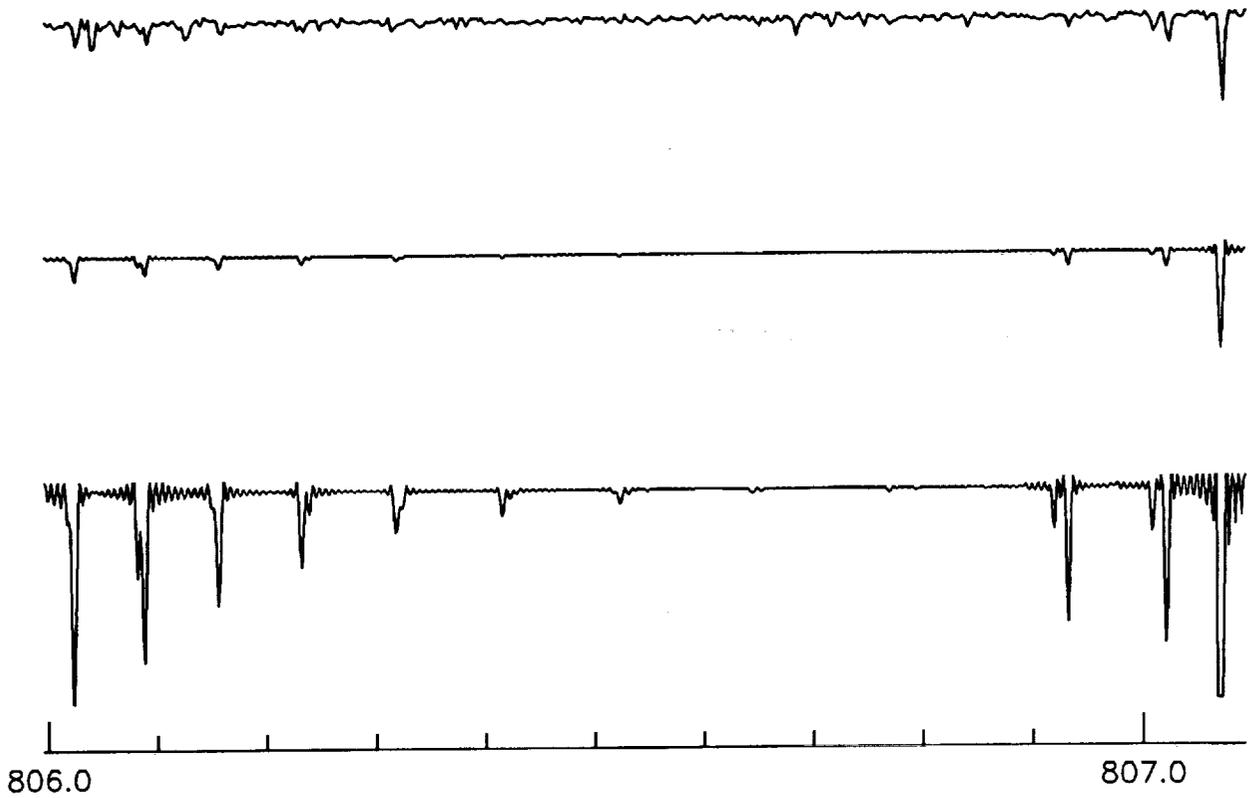


wavenumber (cm^{-1})

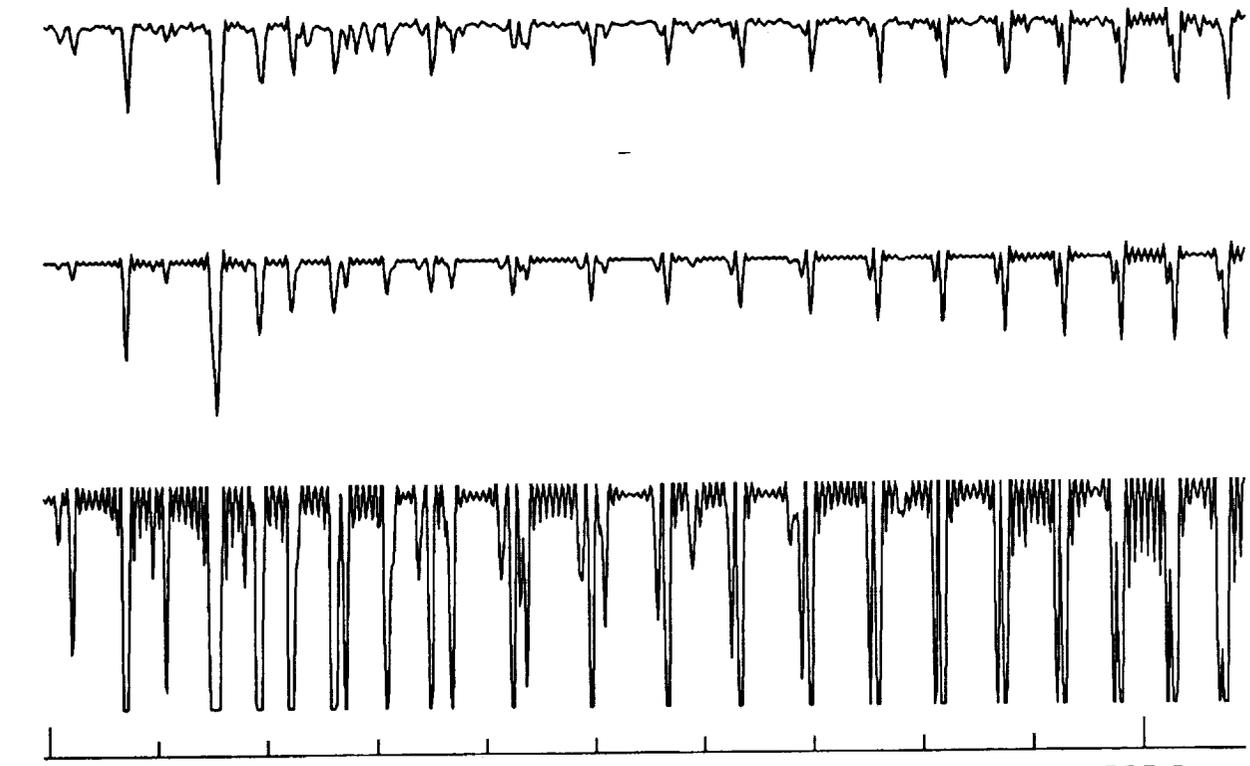




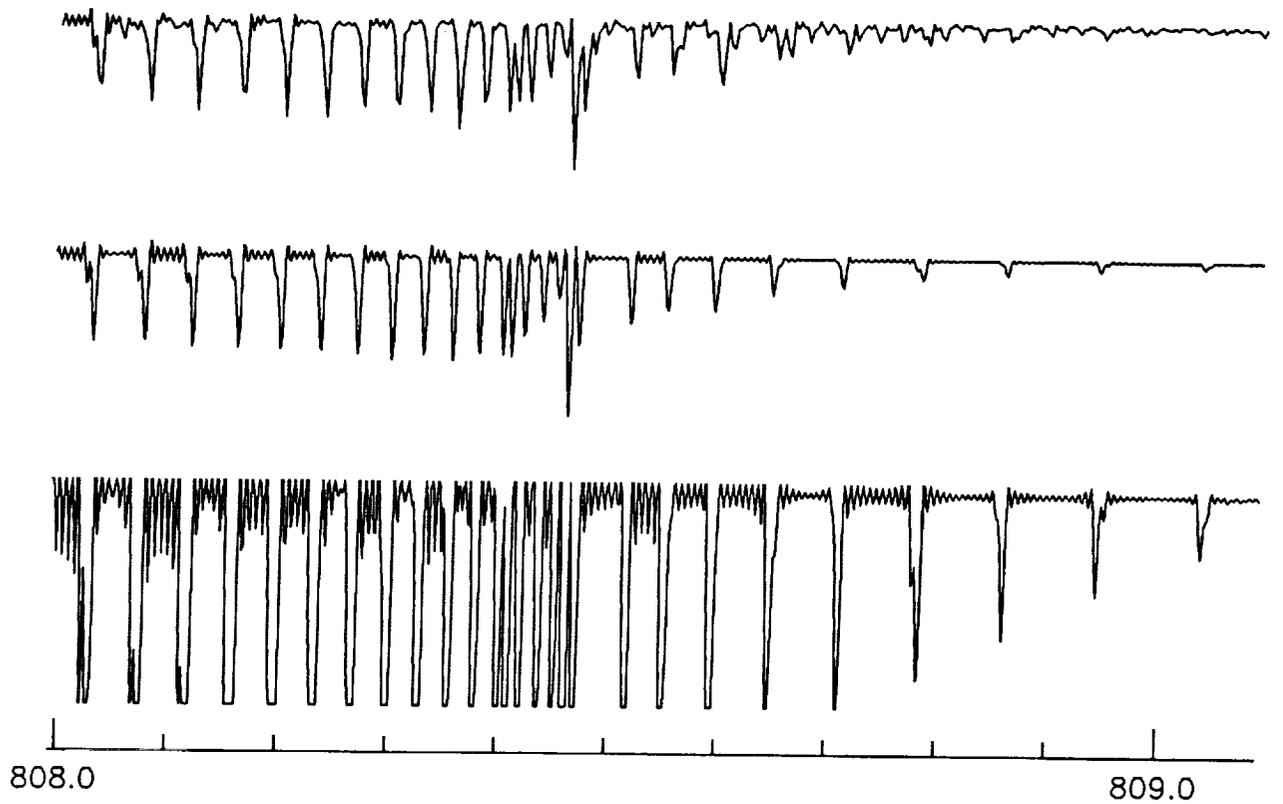




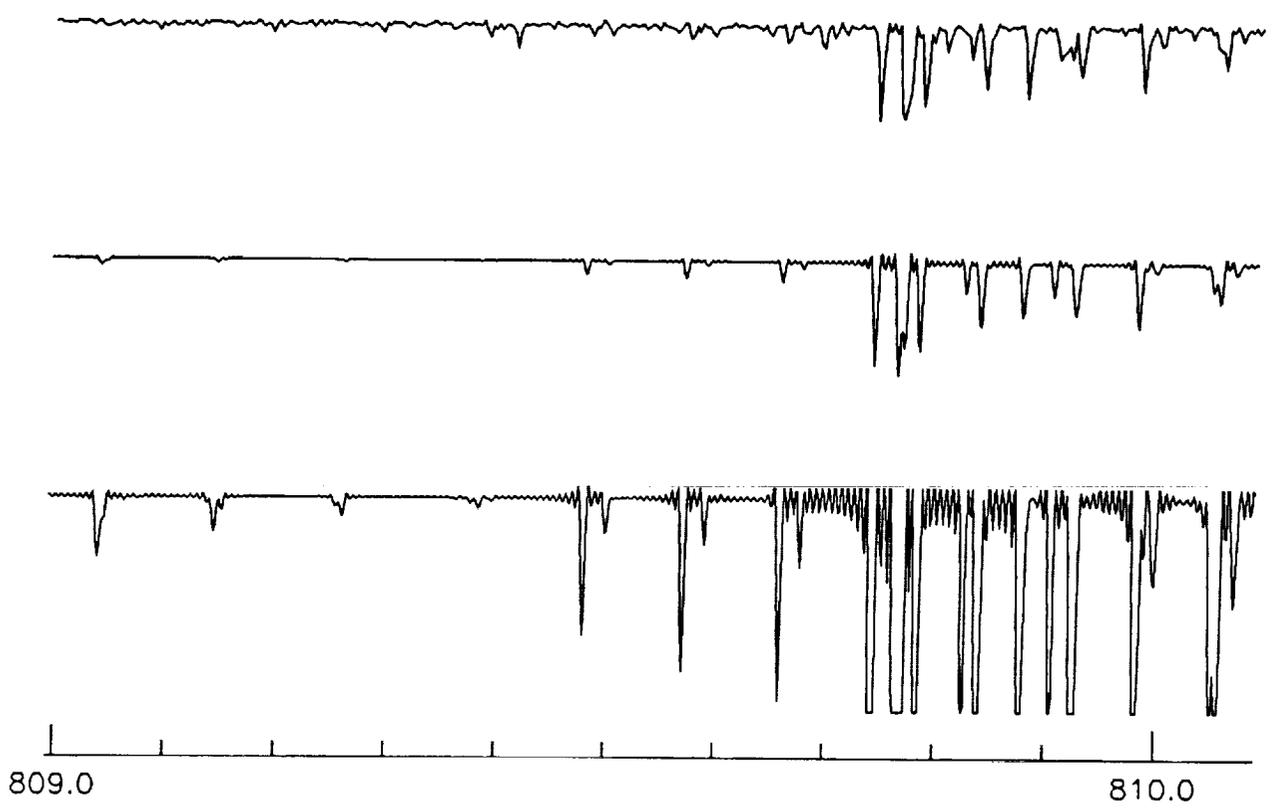
wavenumber (cm⁻¹)



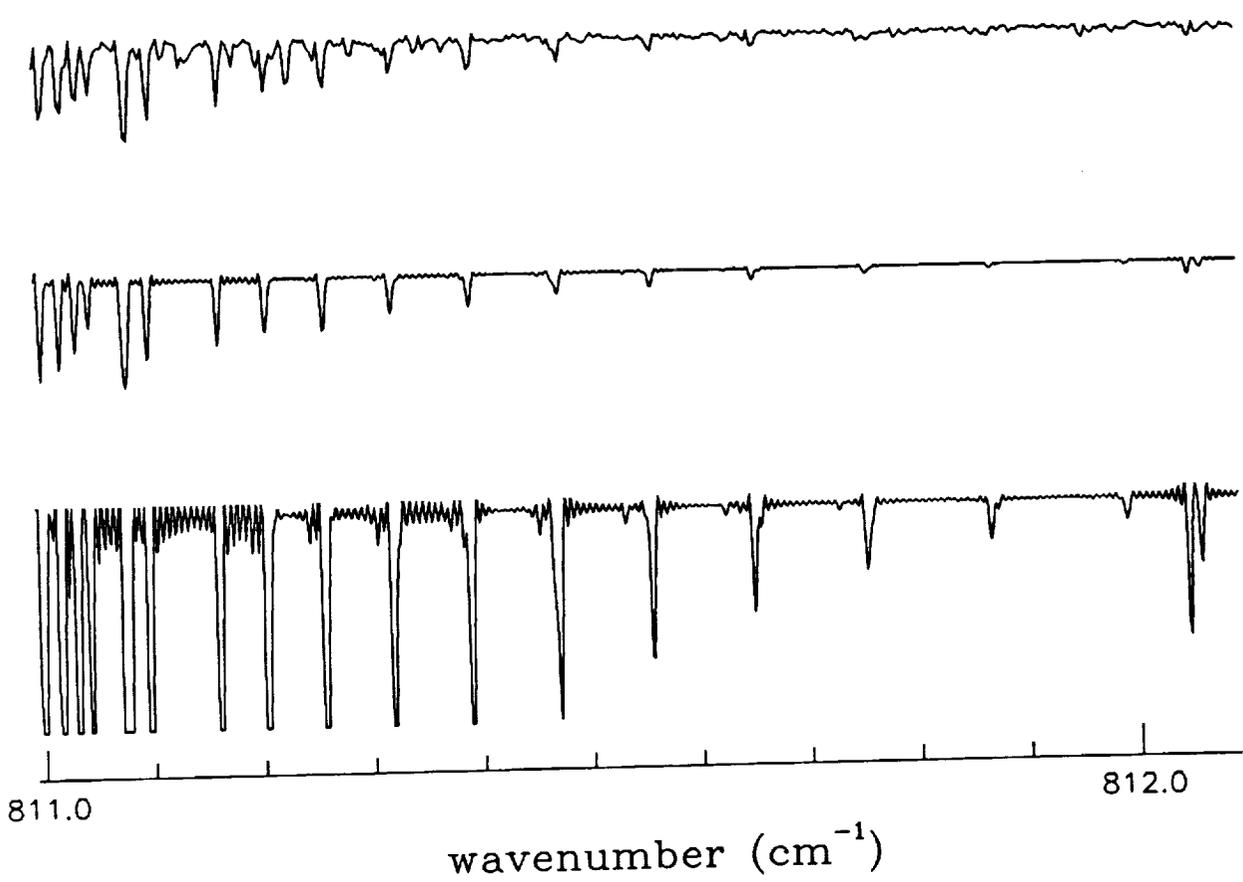
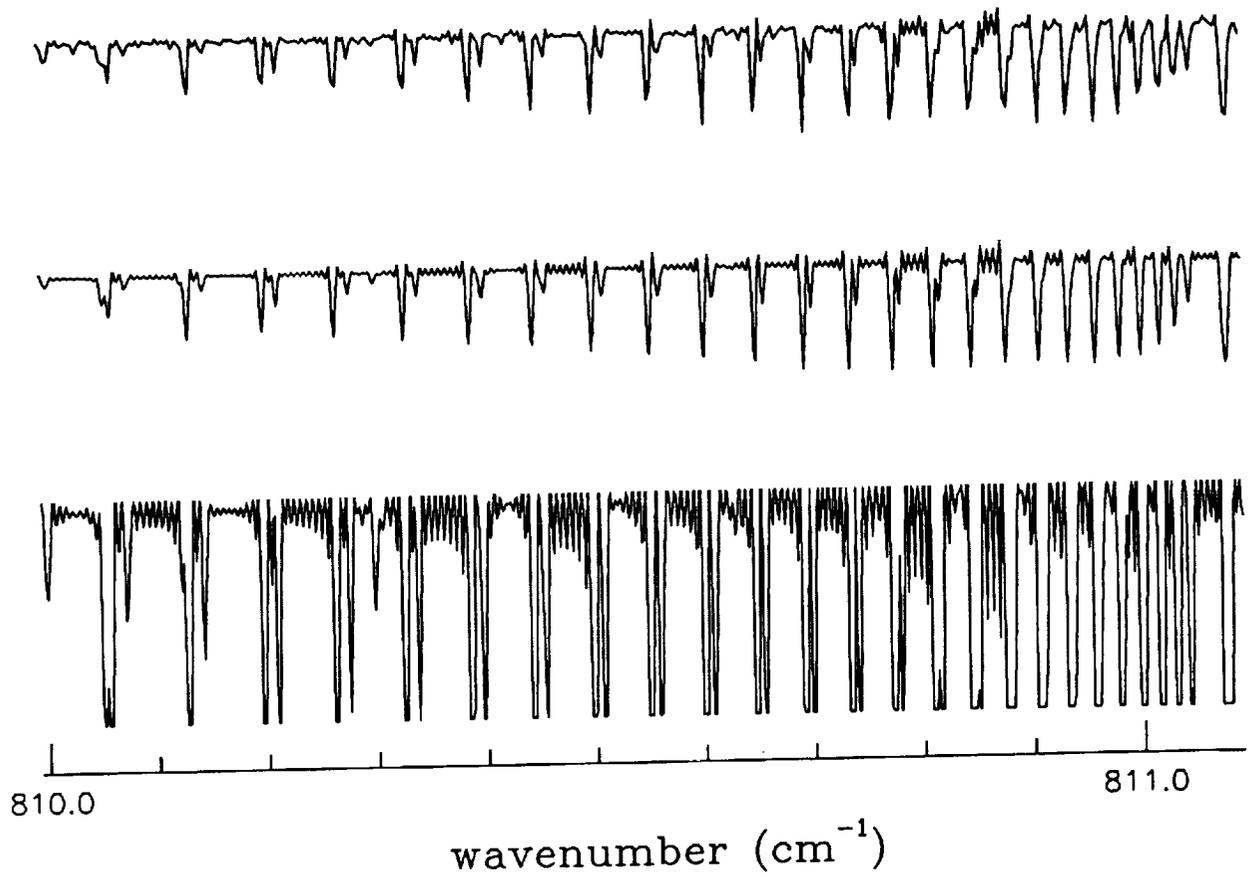
wavenumber (cm⁻¹)

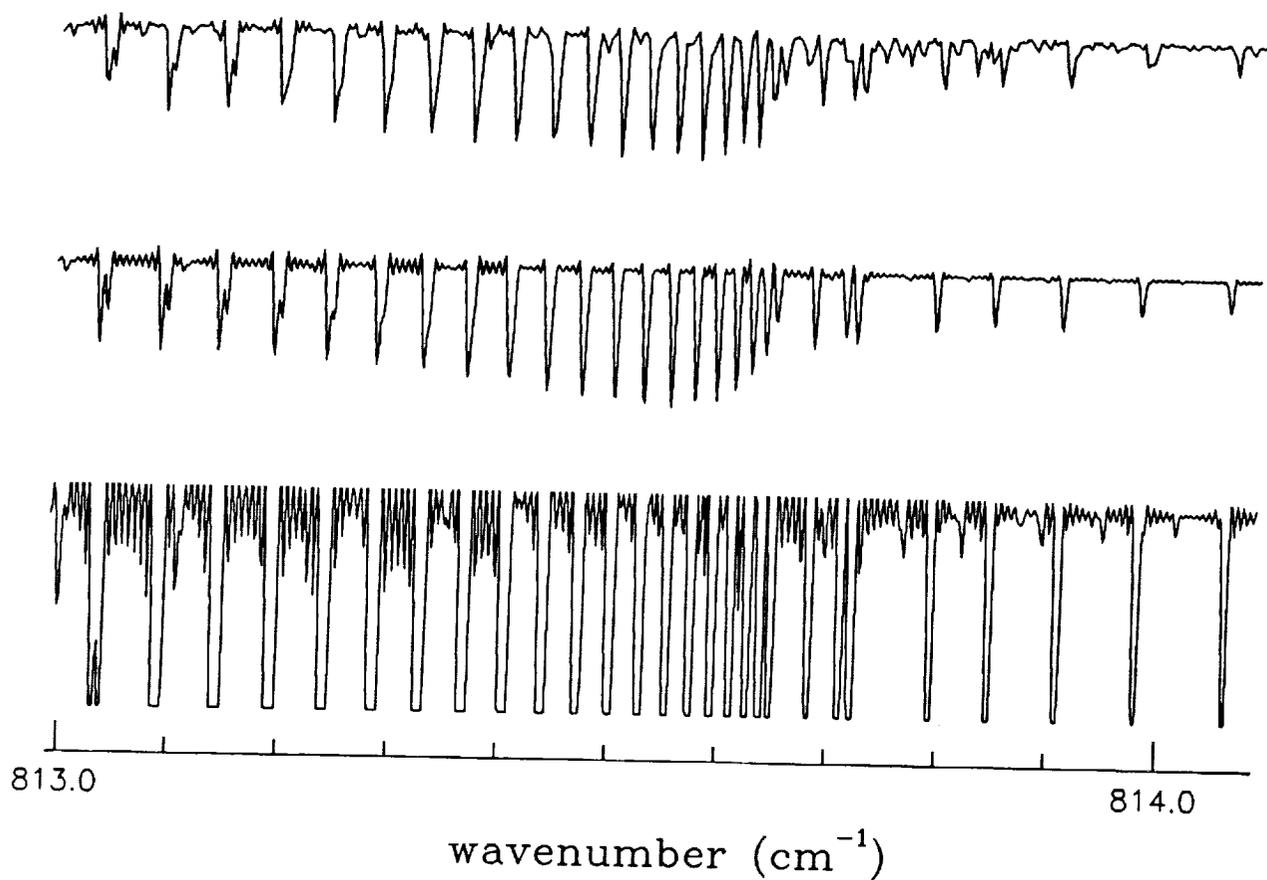
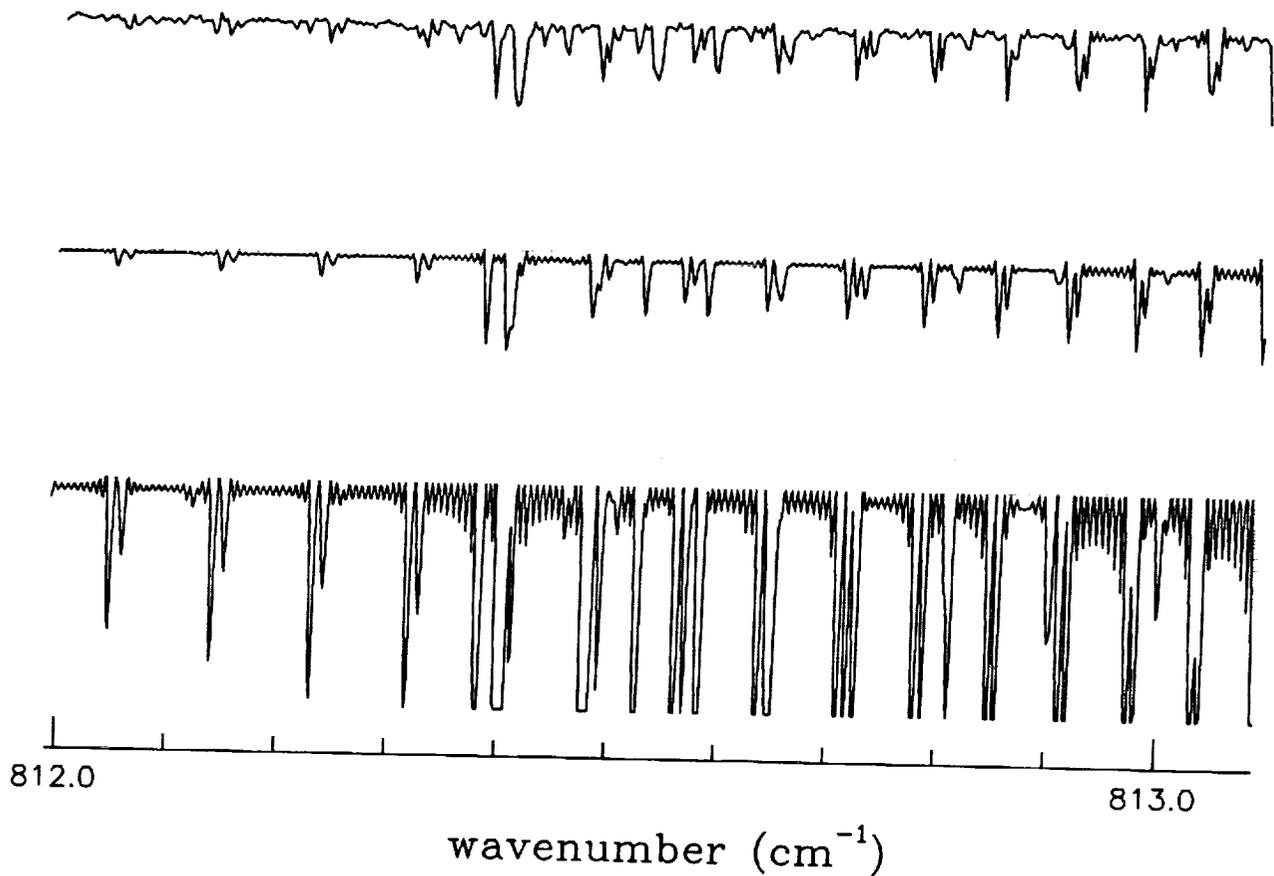


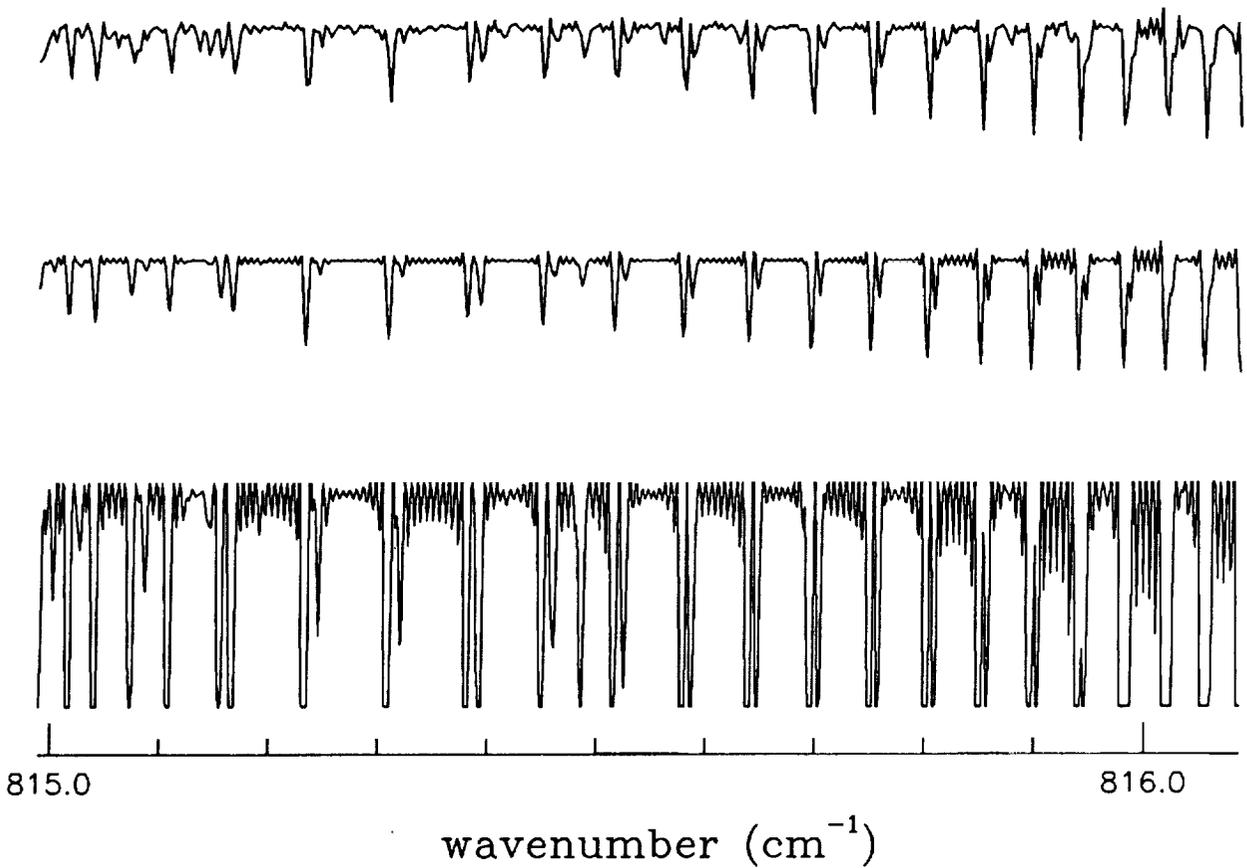
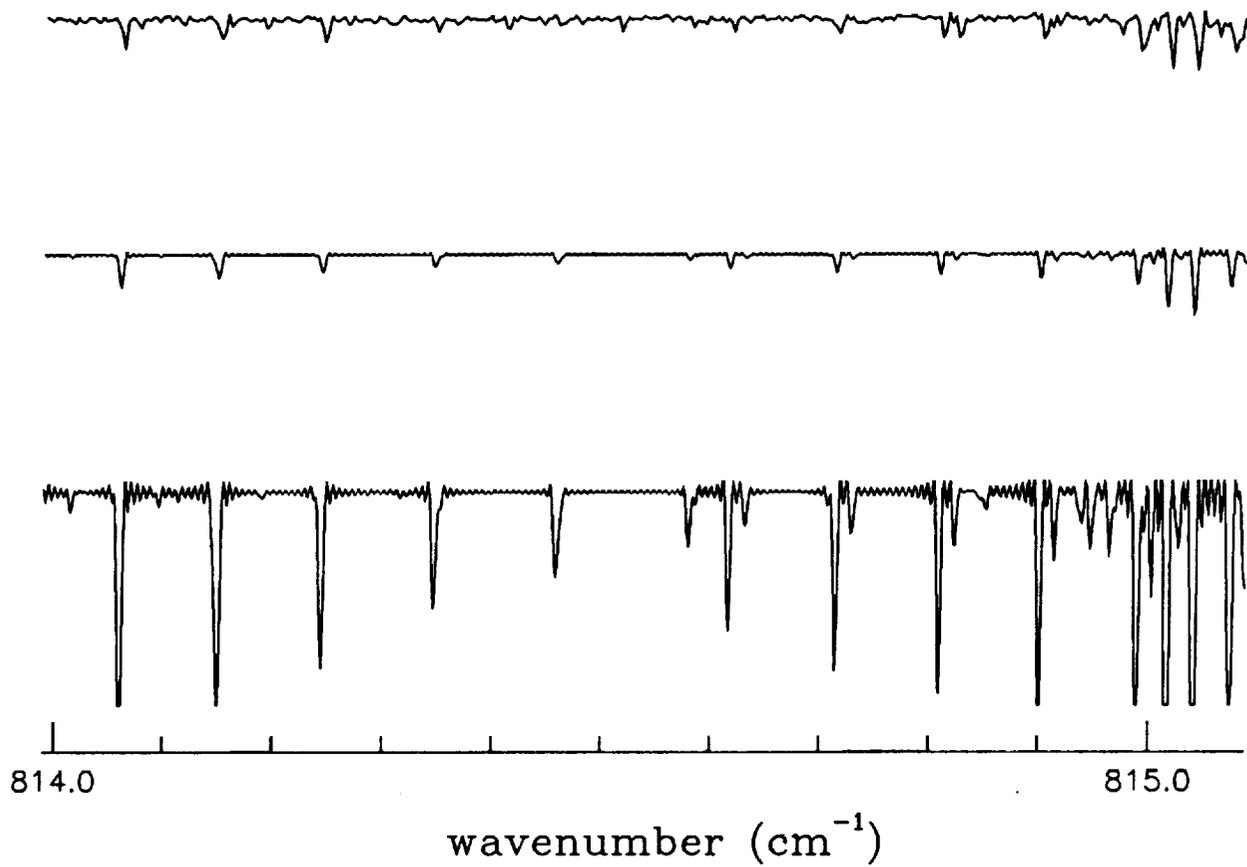
wavenumber (cm⁻¹)

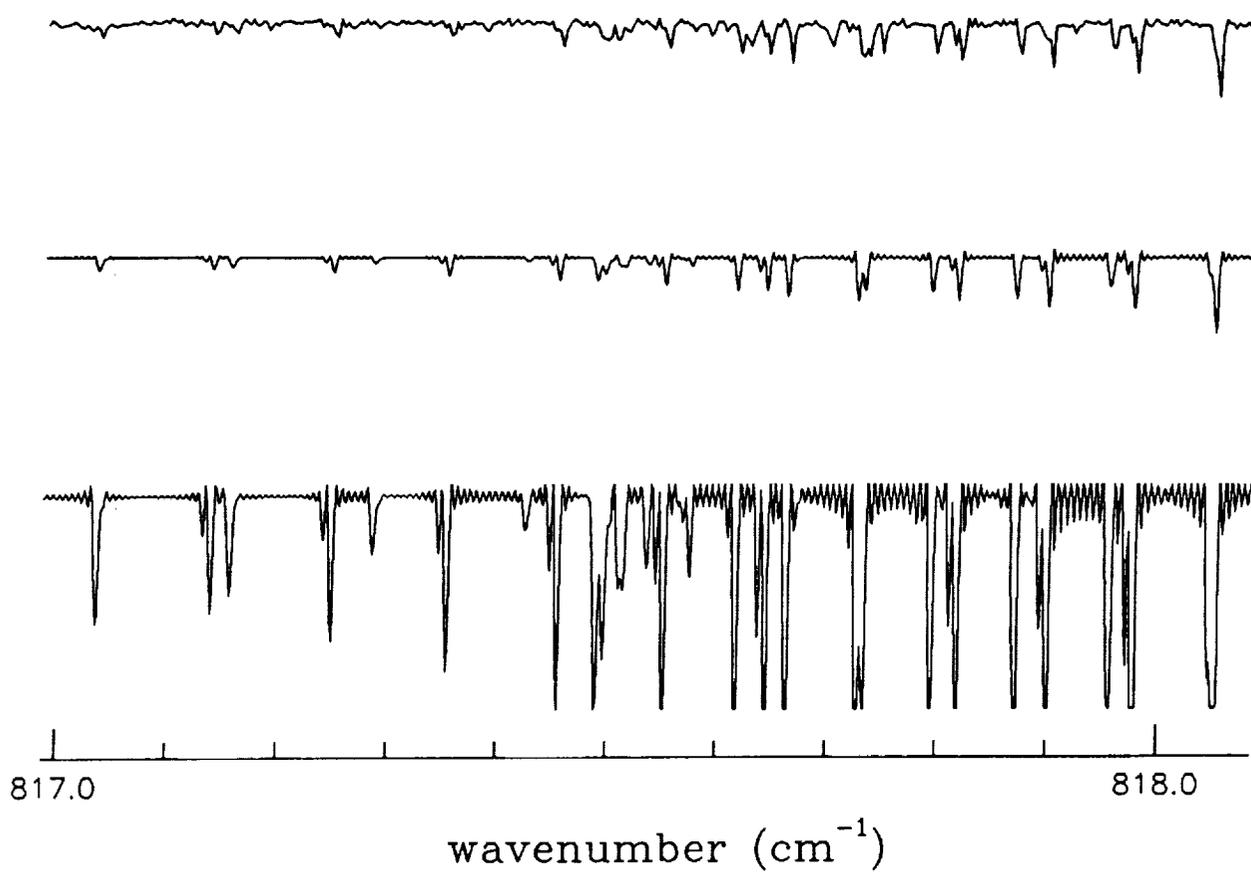
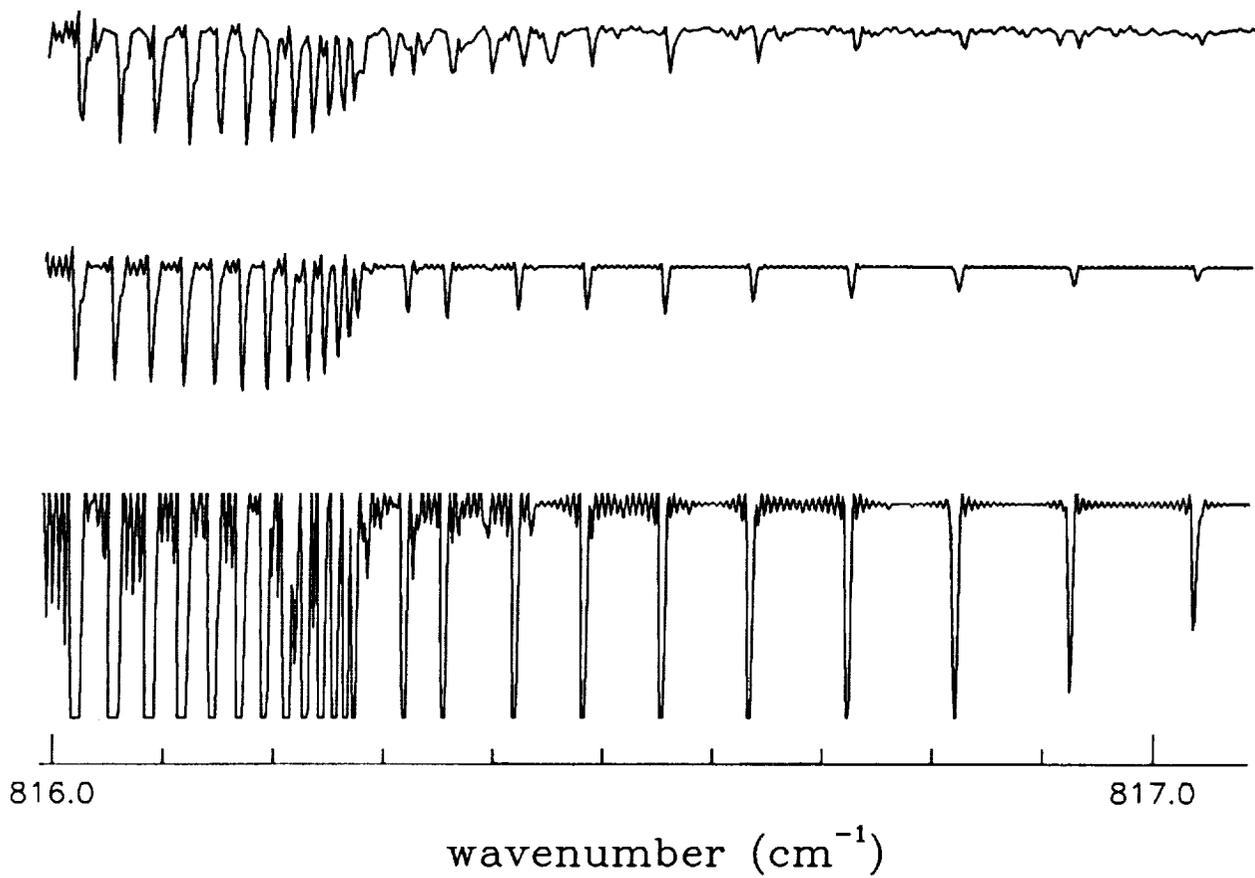


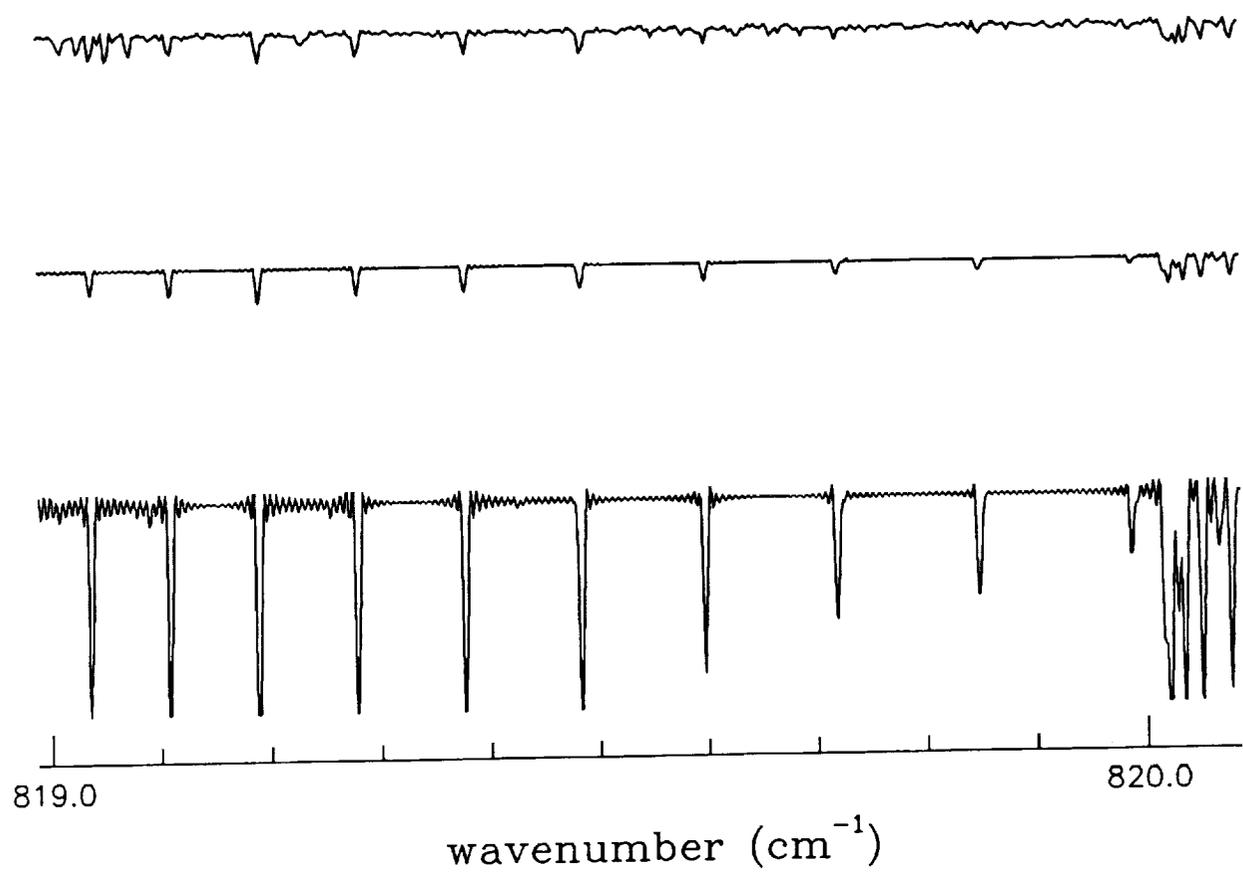
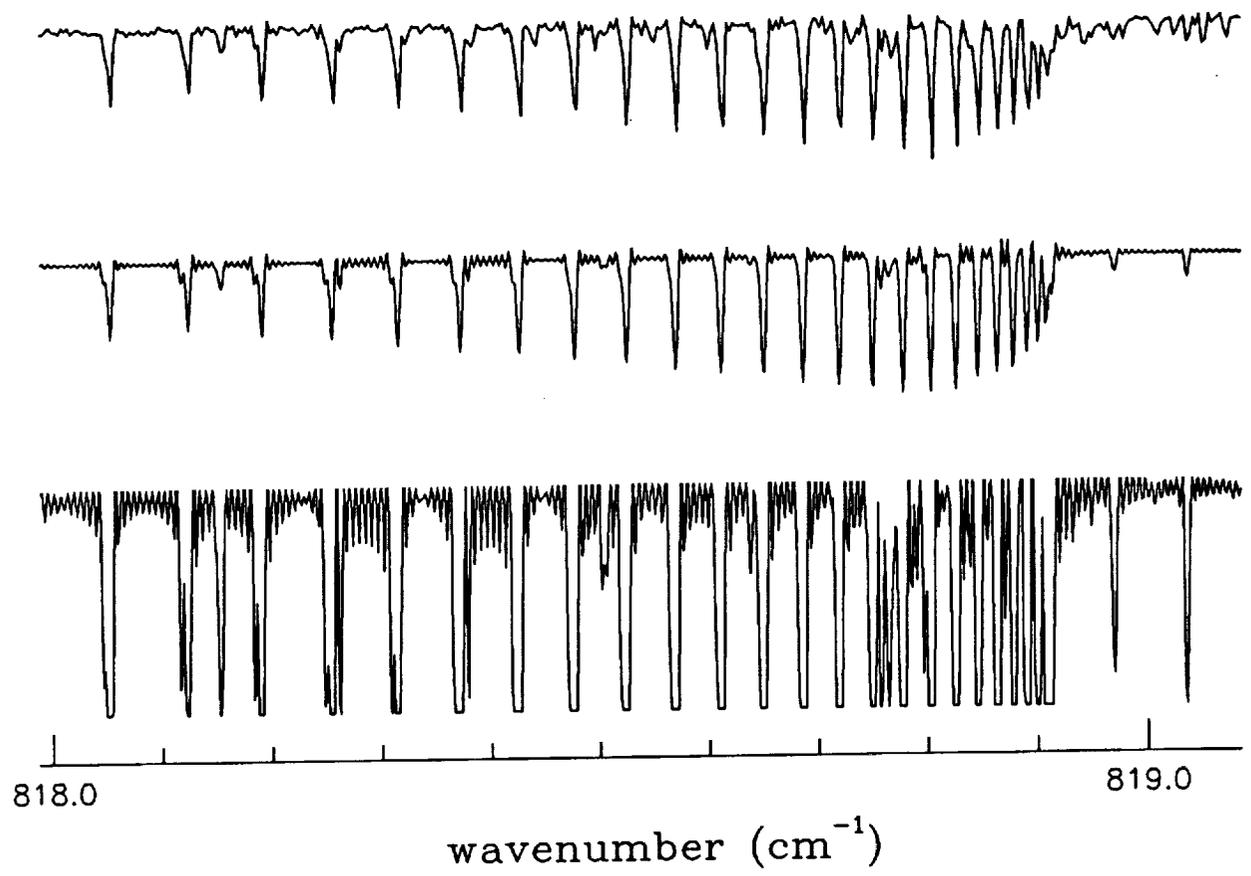
wavenumber (cm⁻¹)

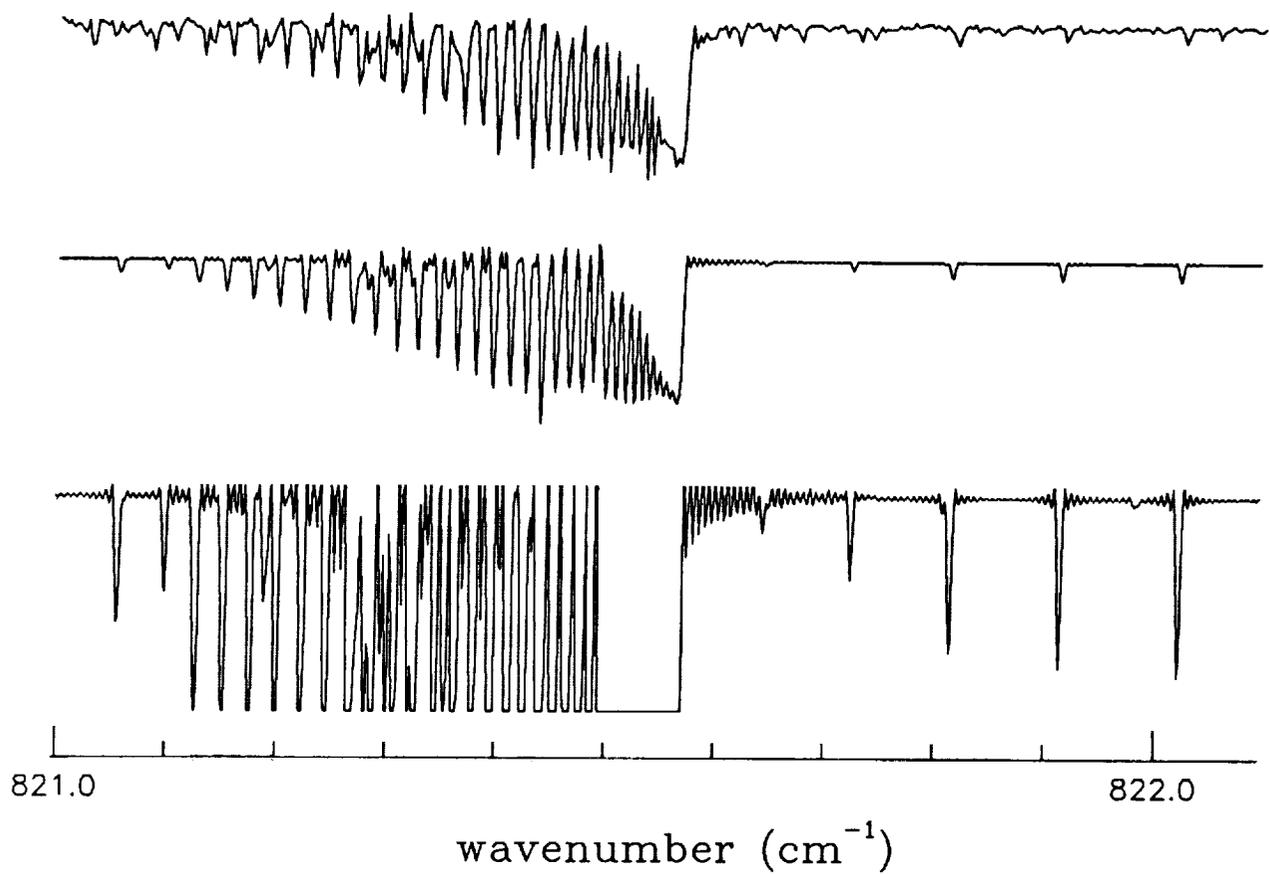
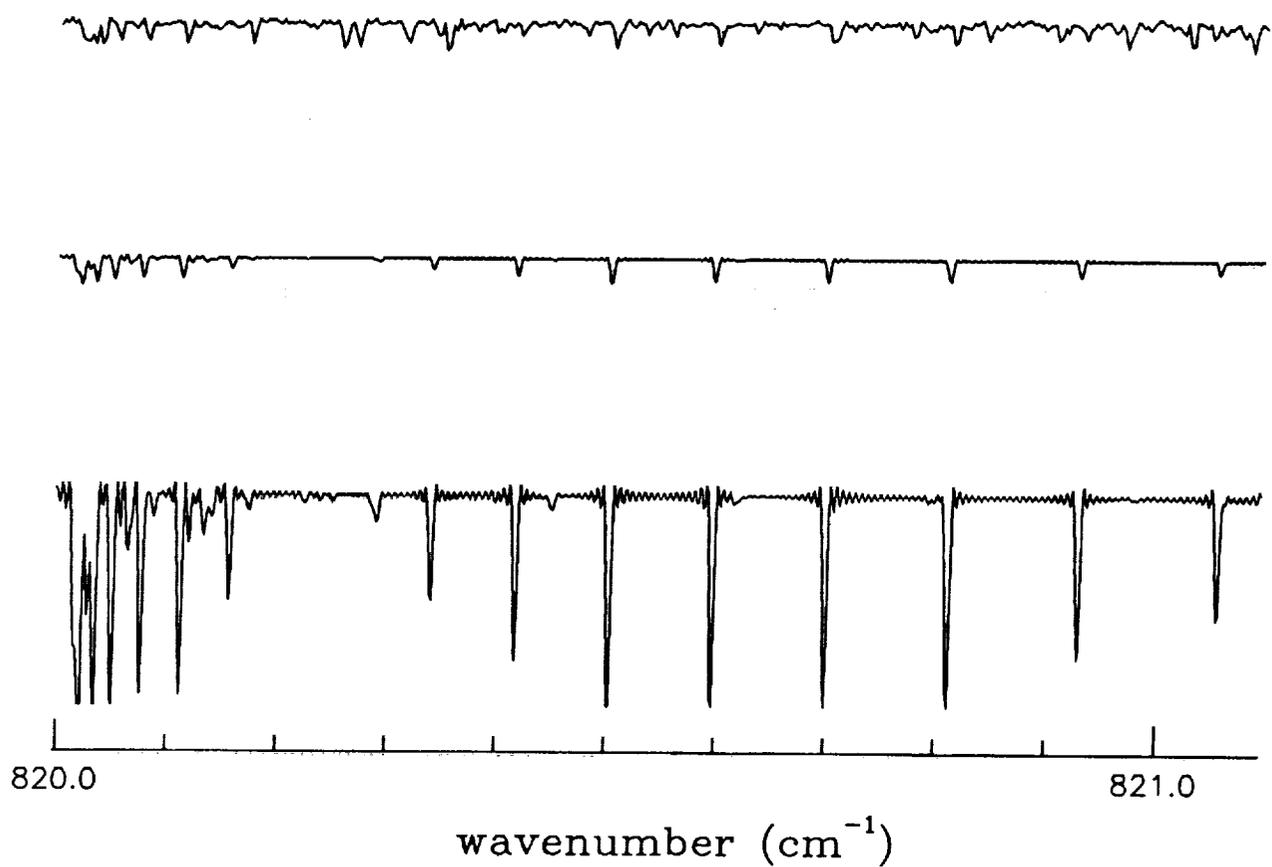


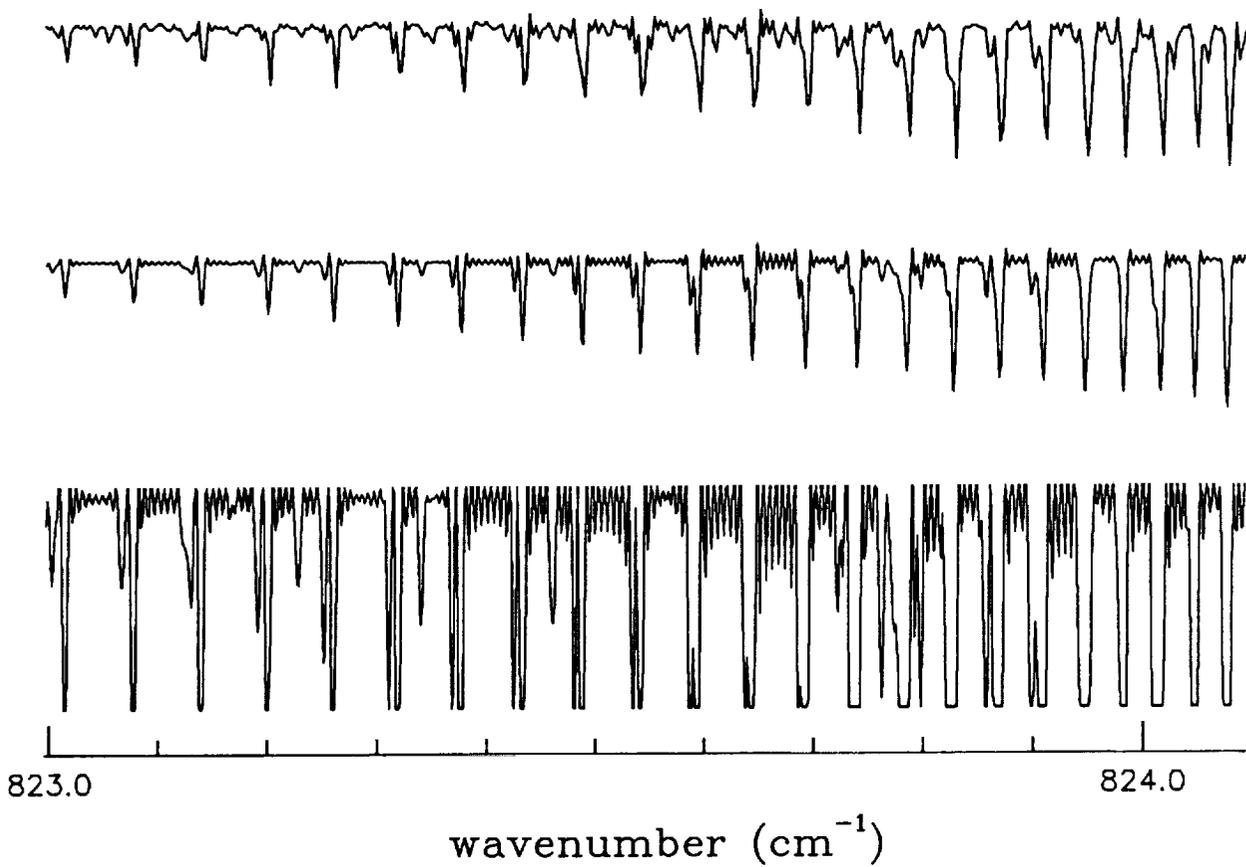
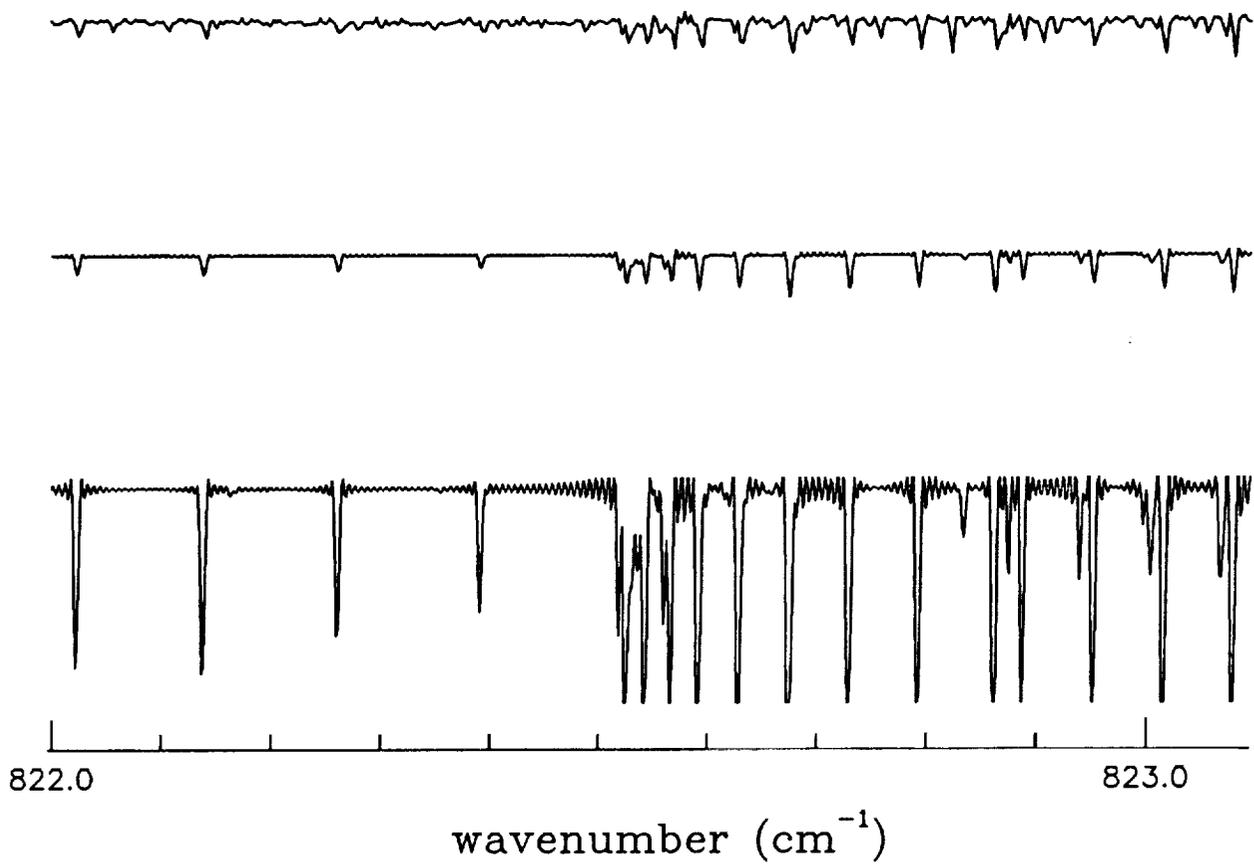


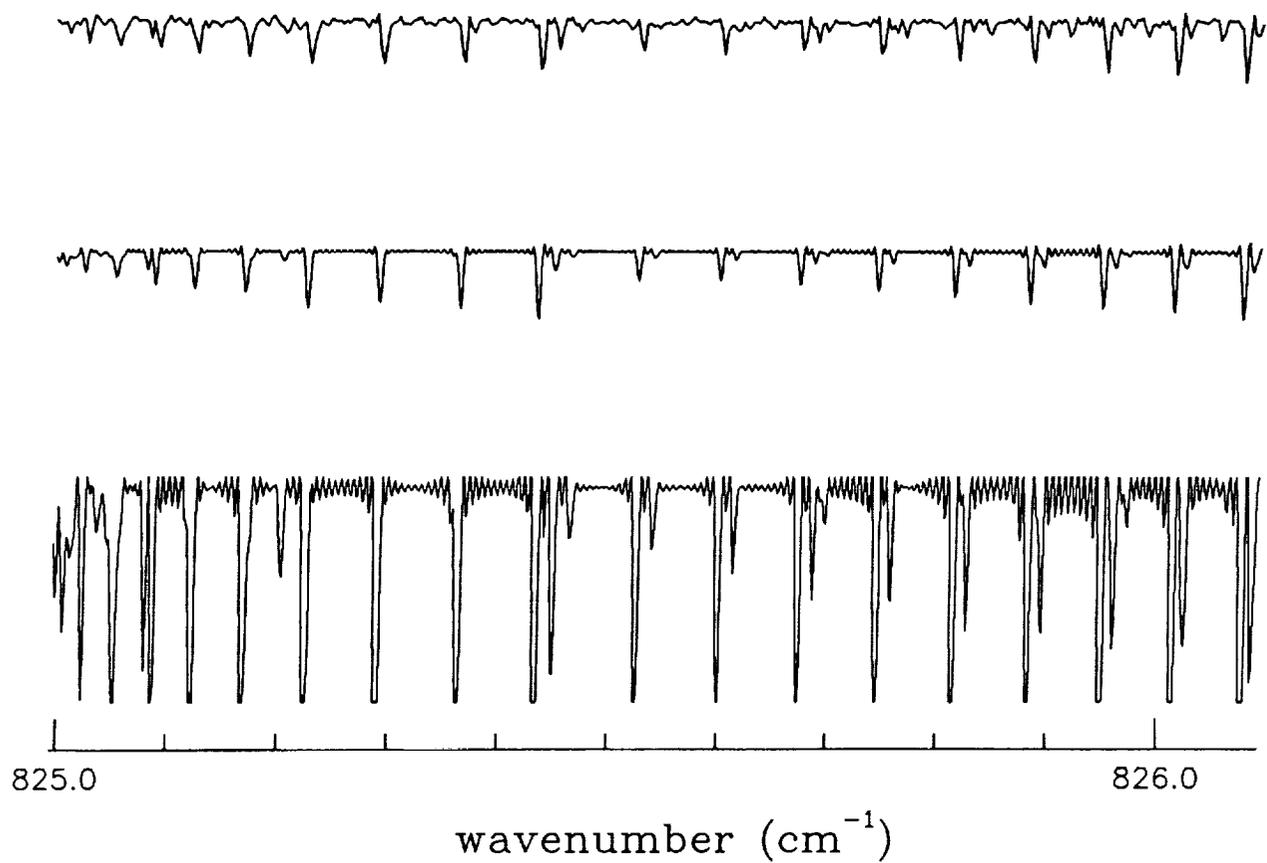
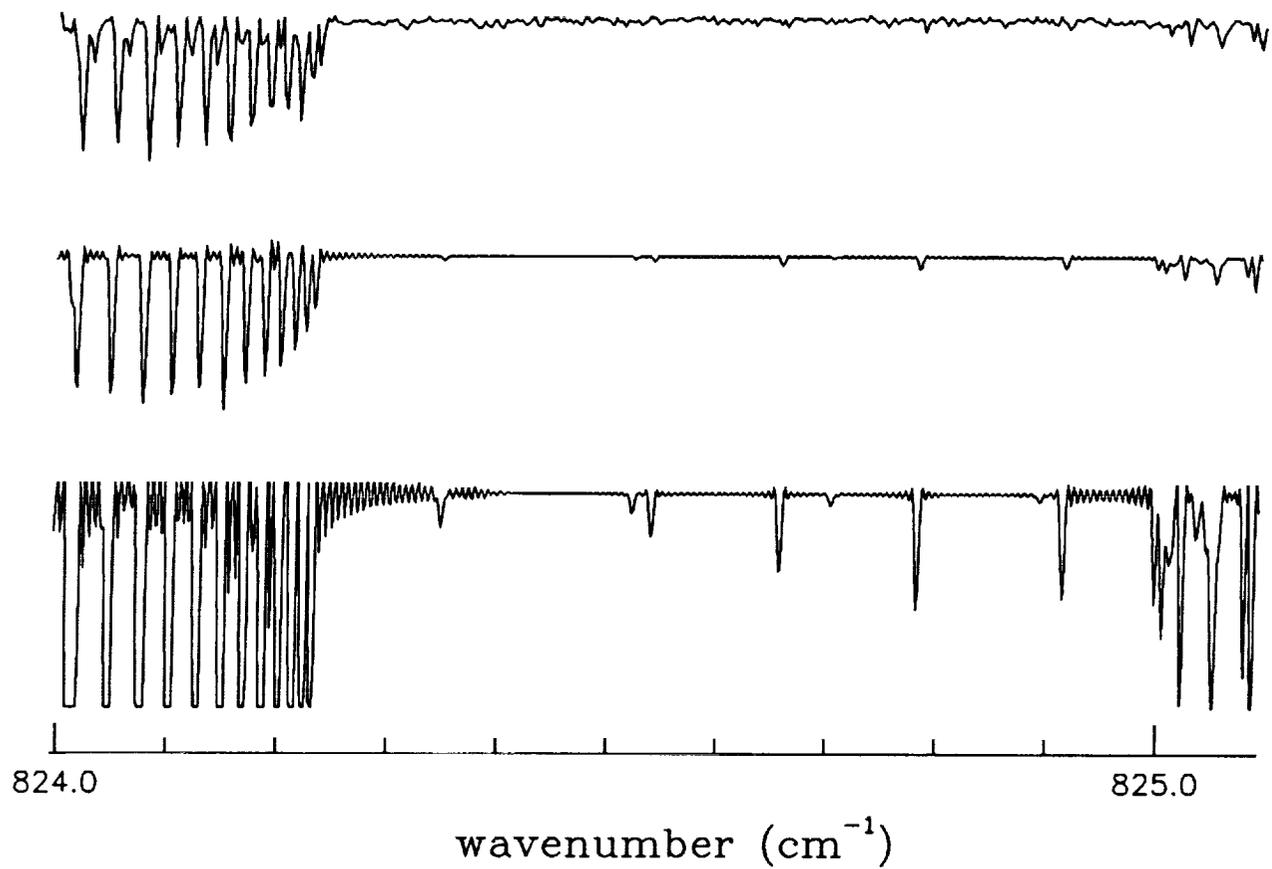


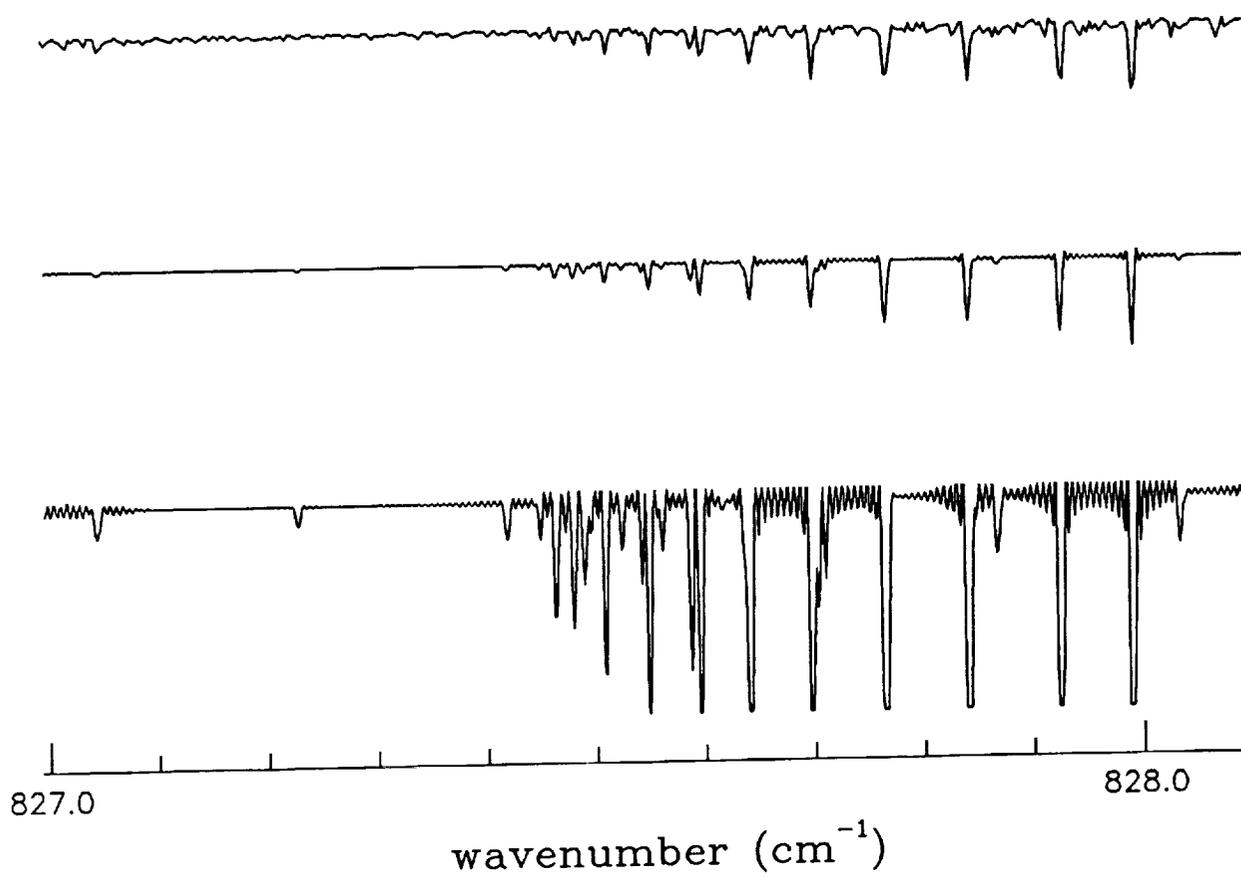
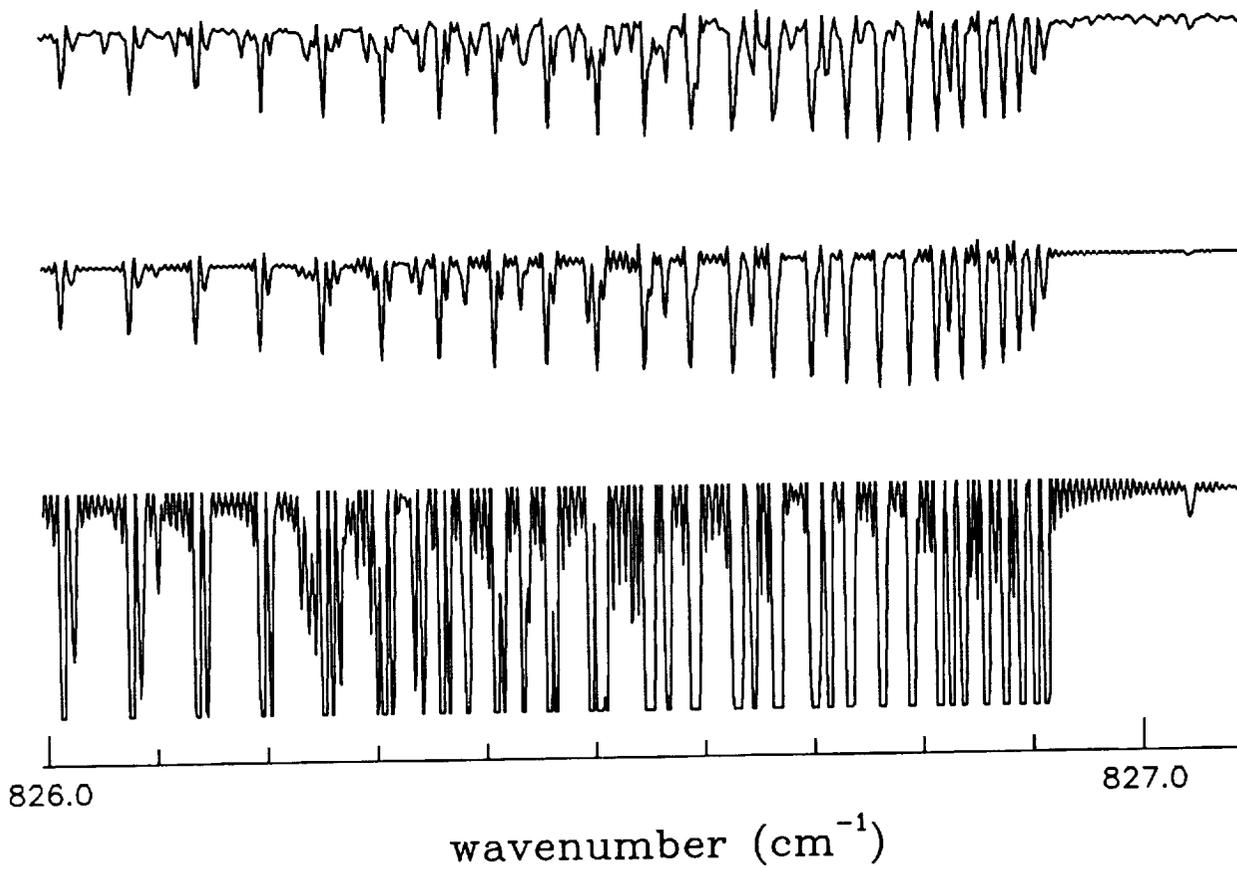


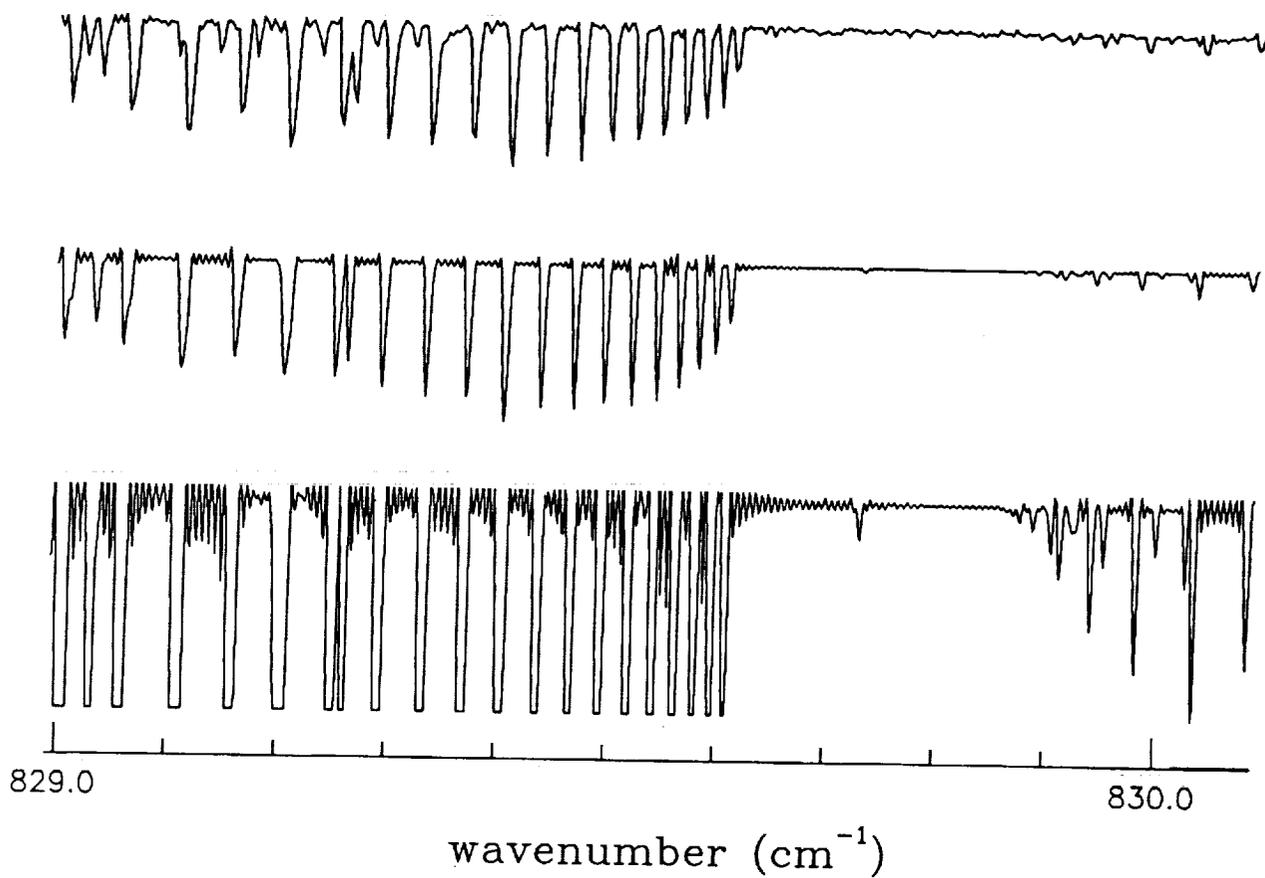
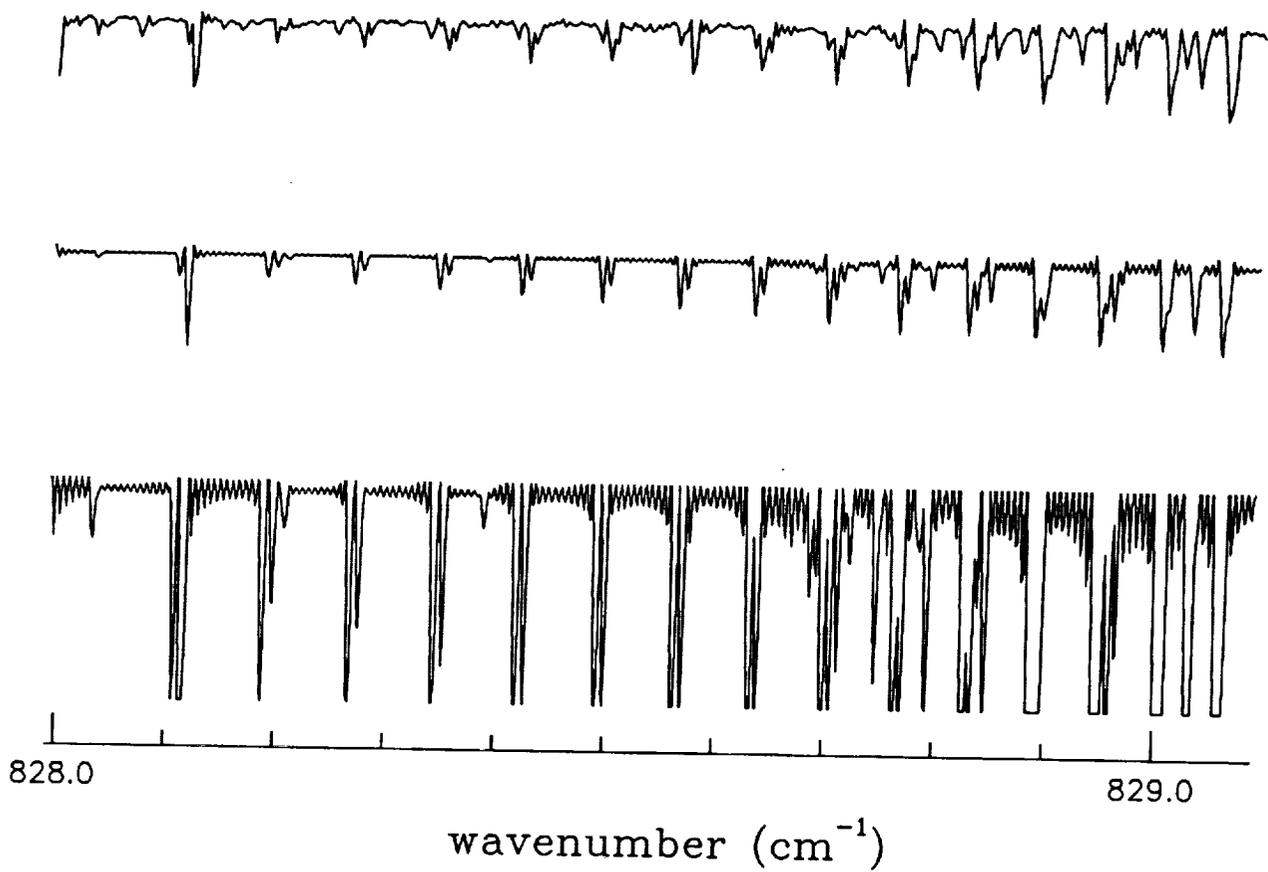


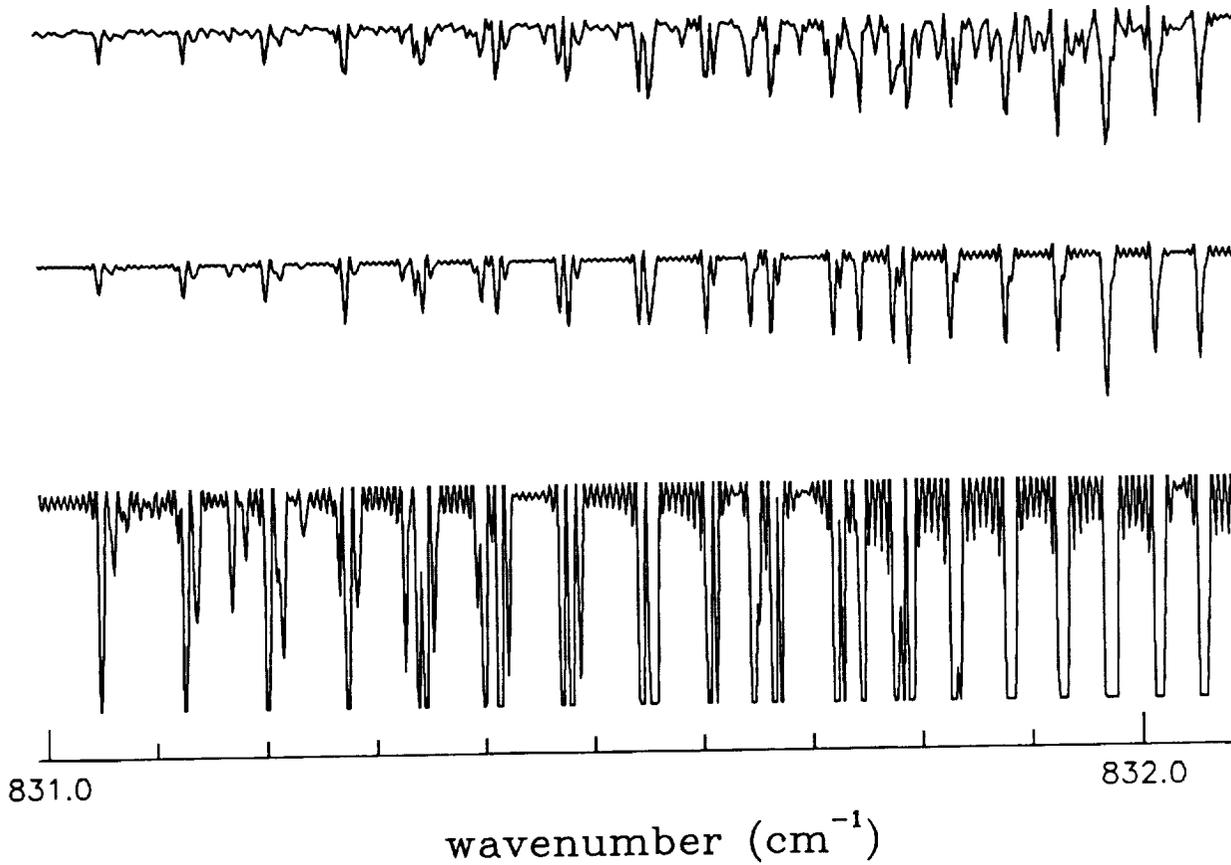
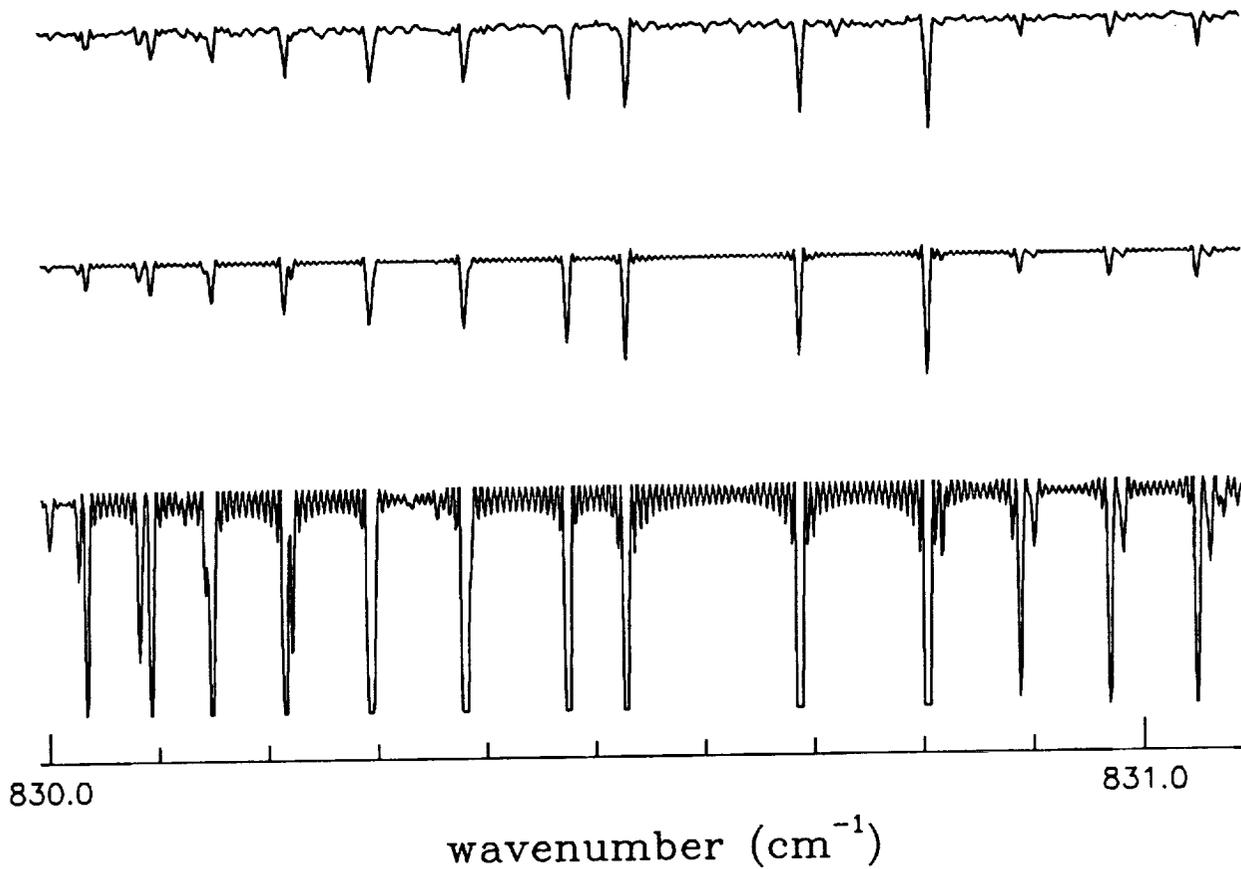


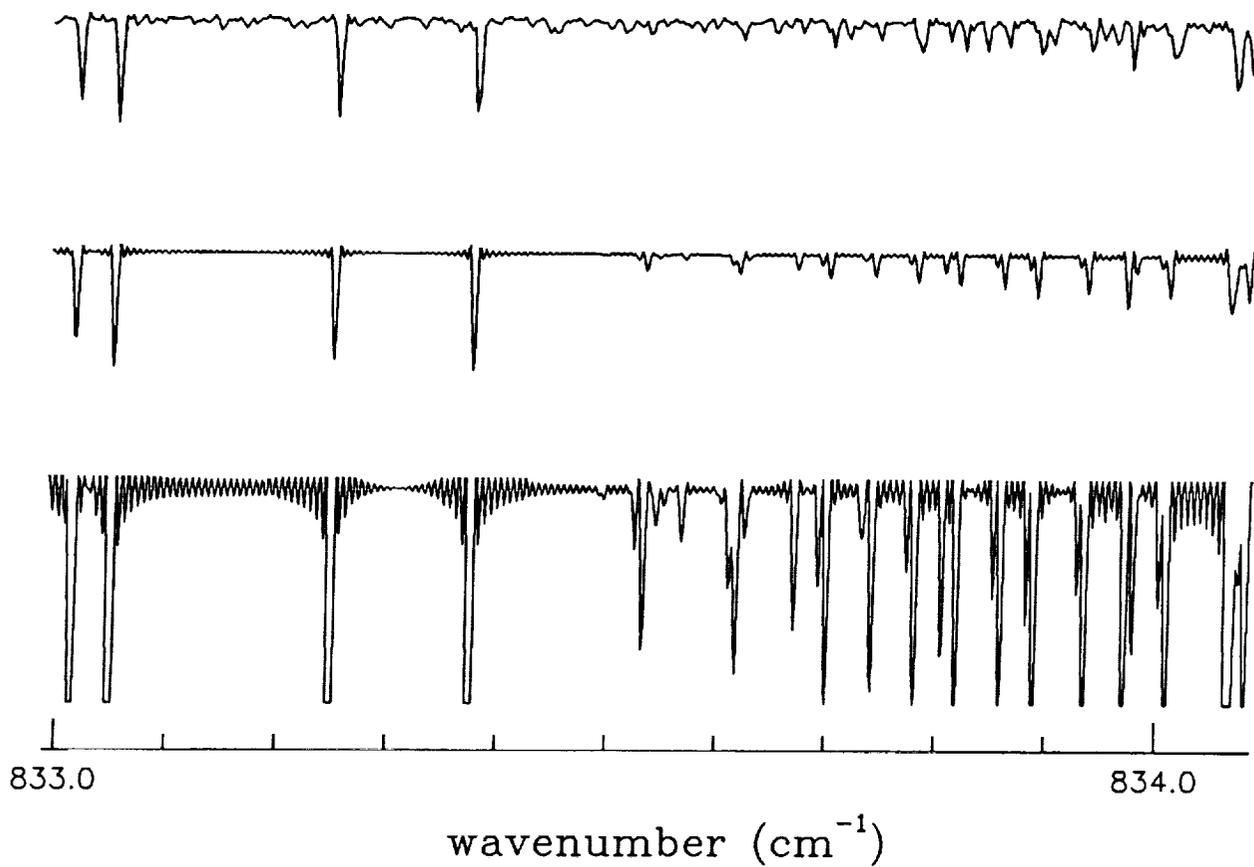
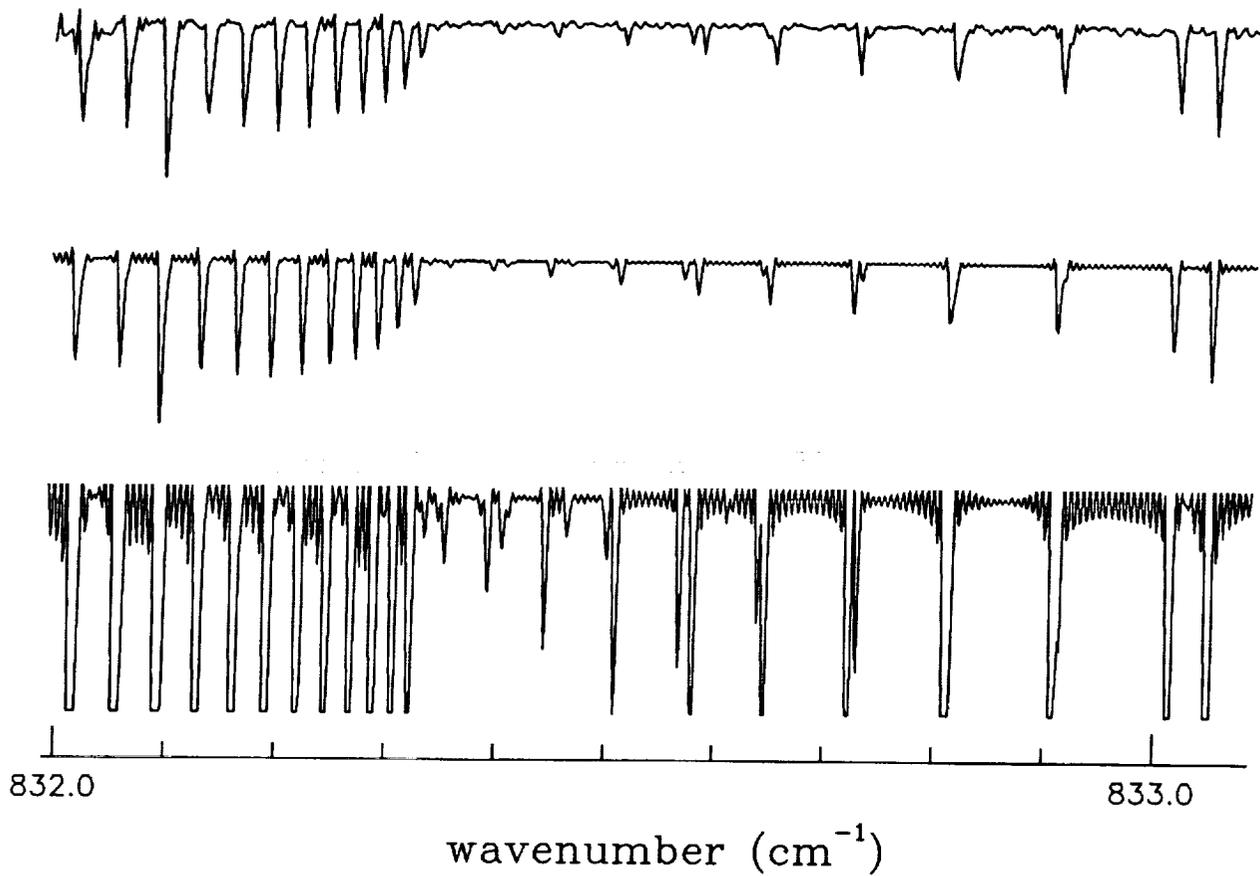


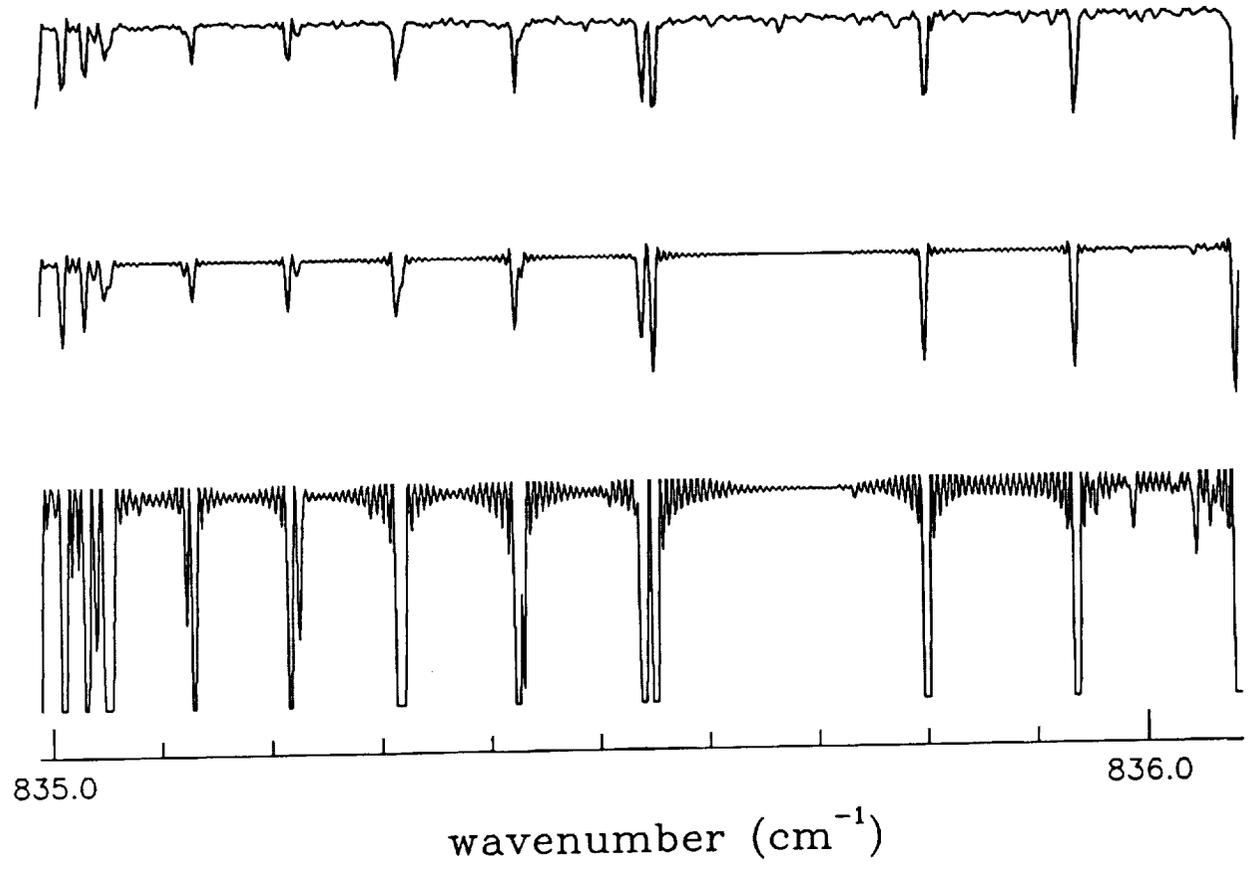
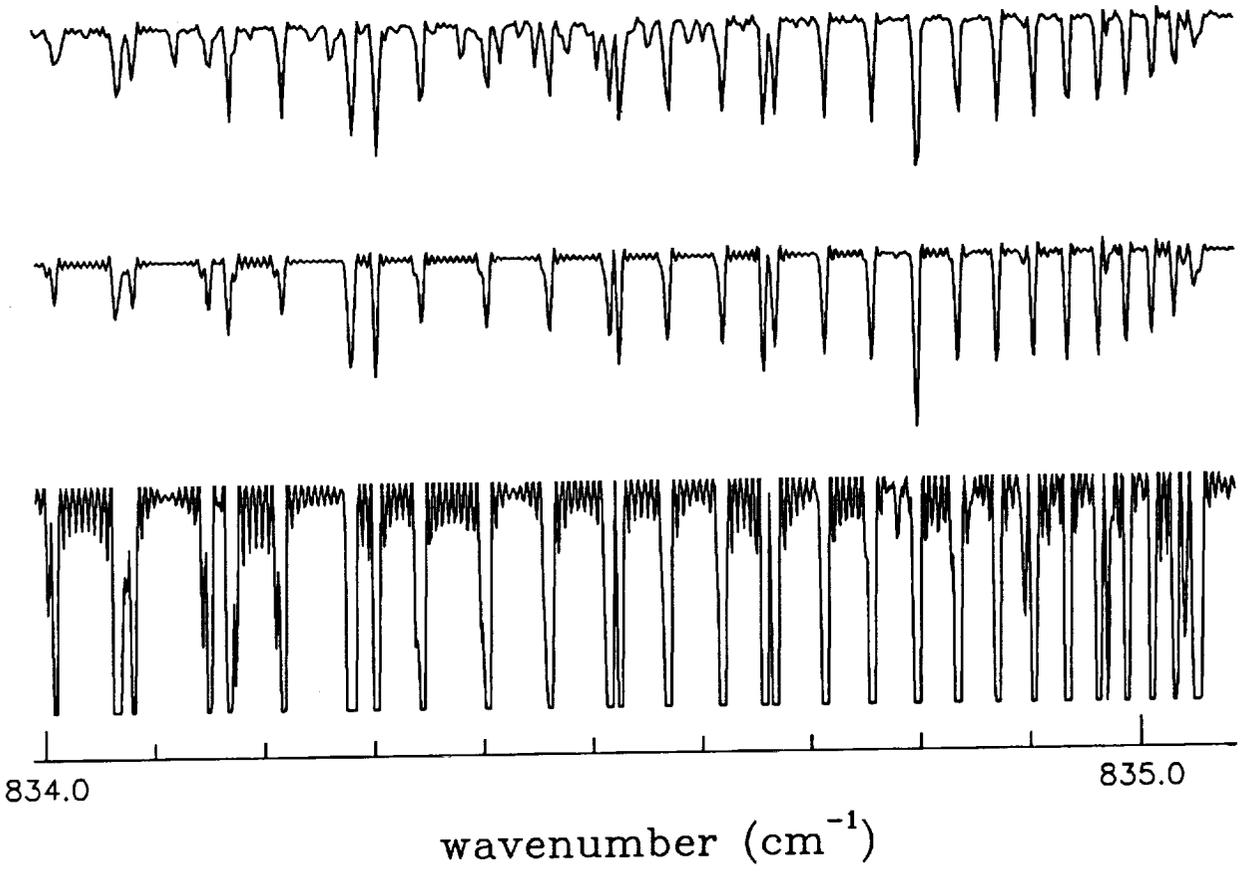


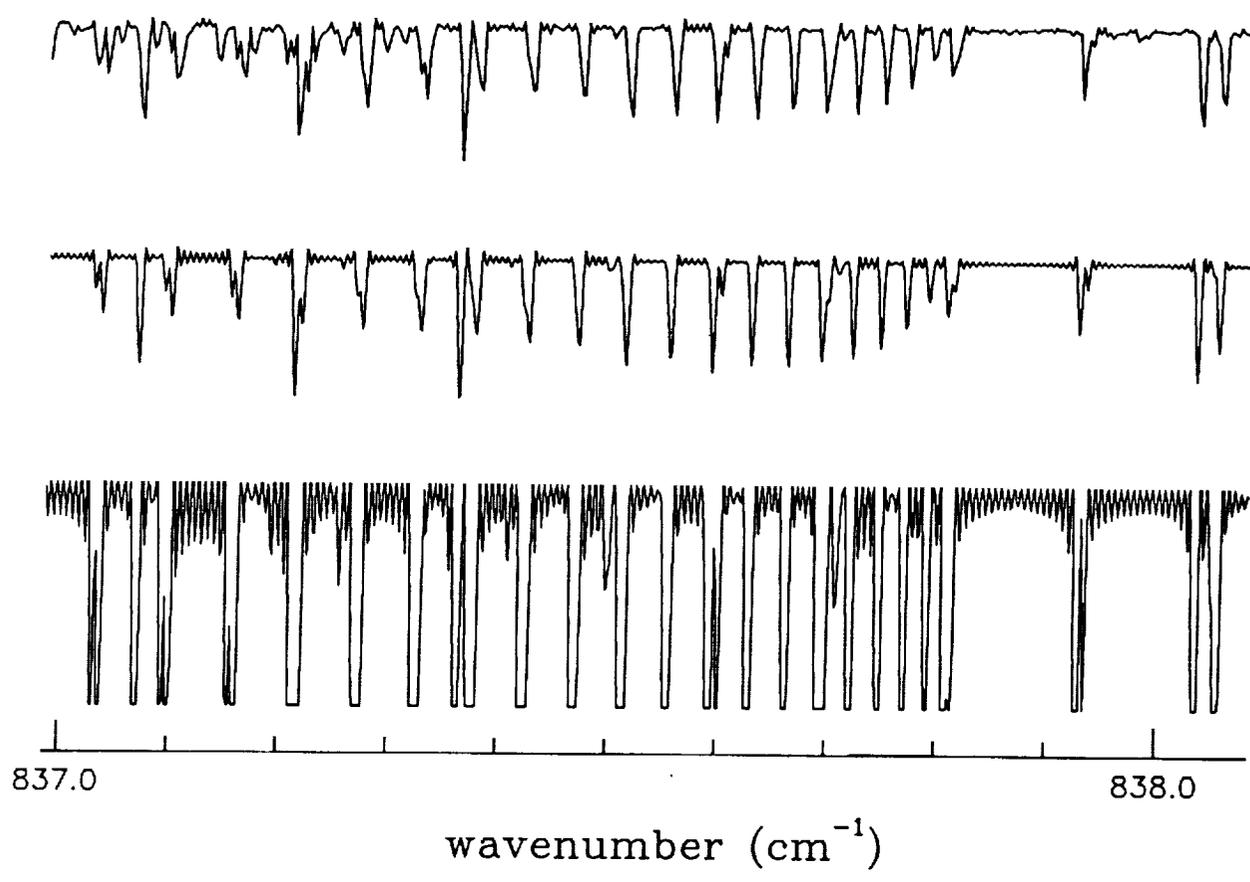
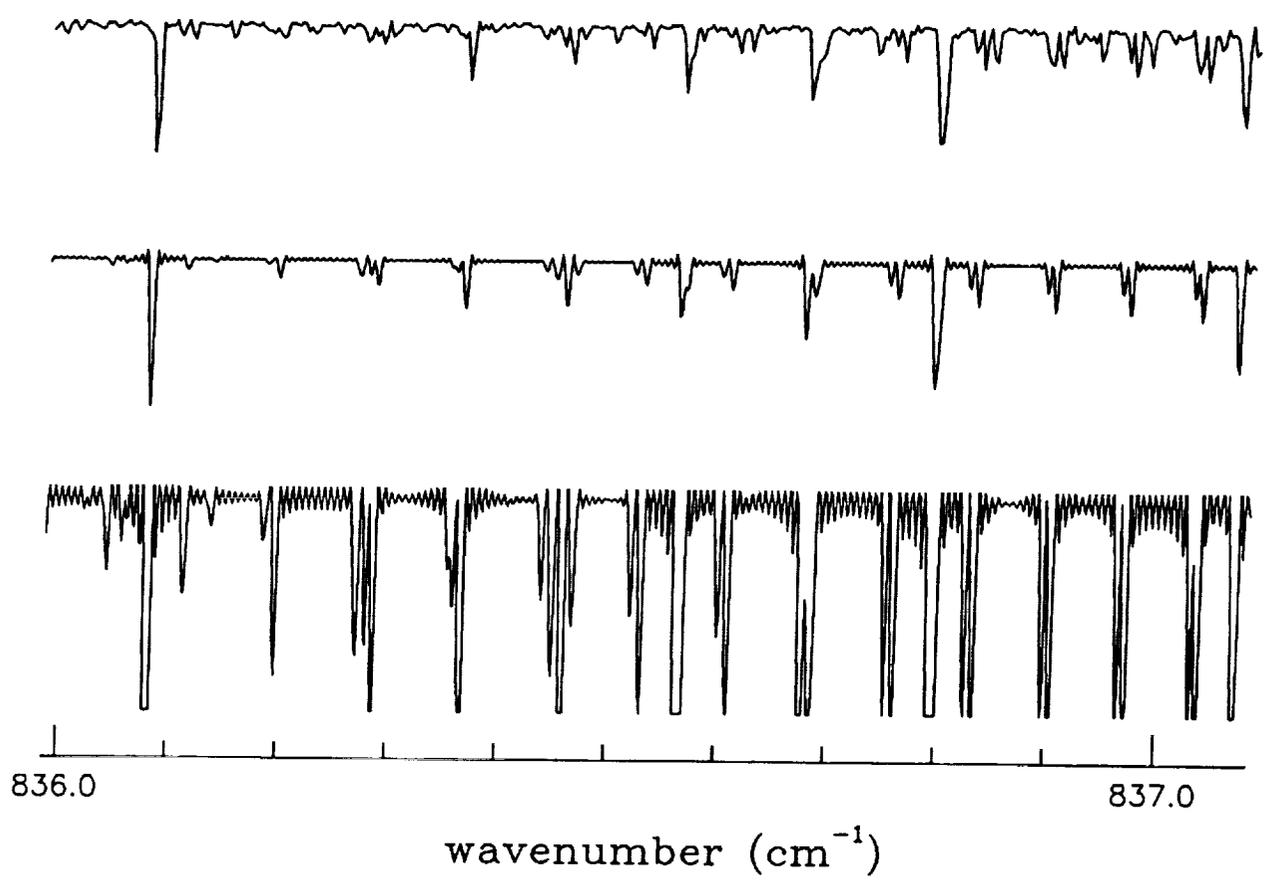


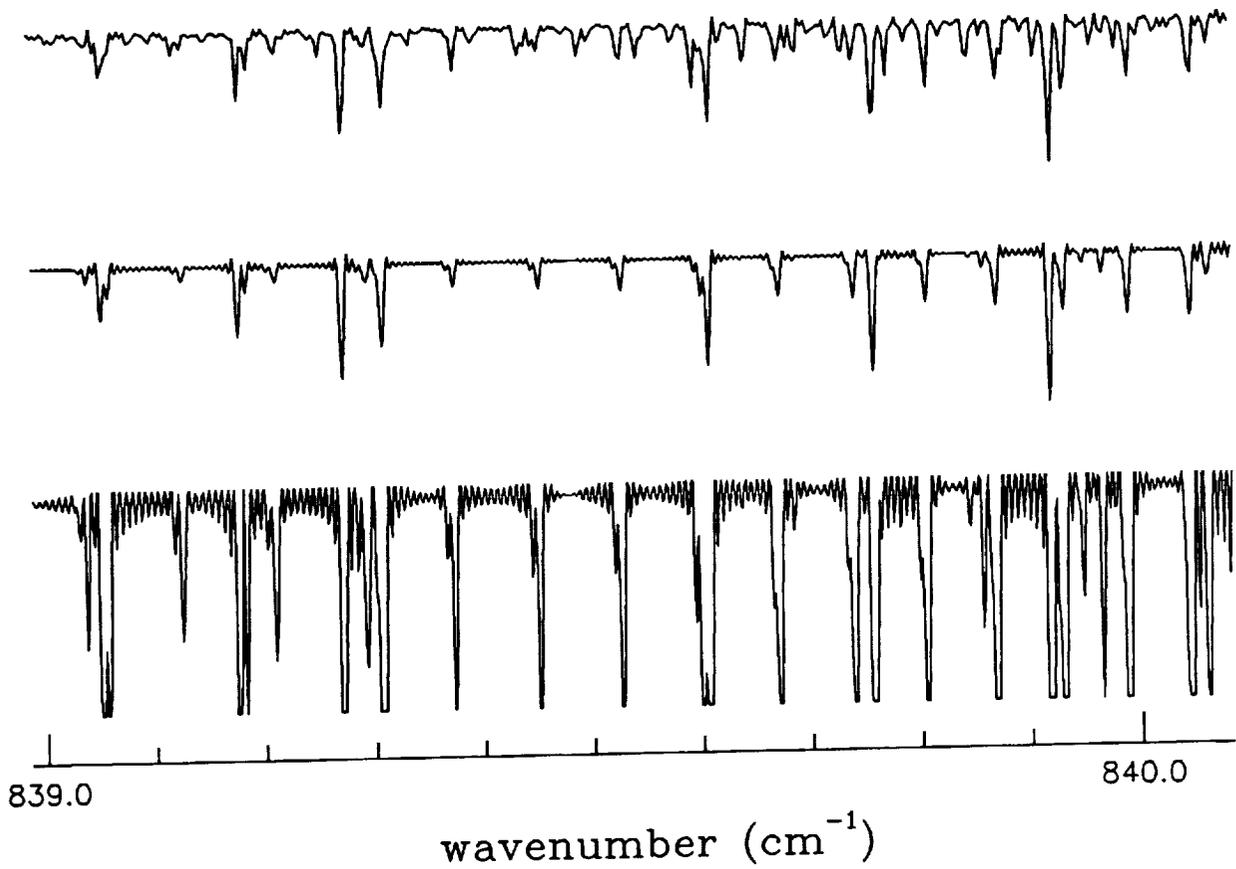
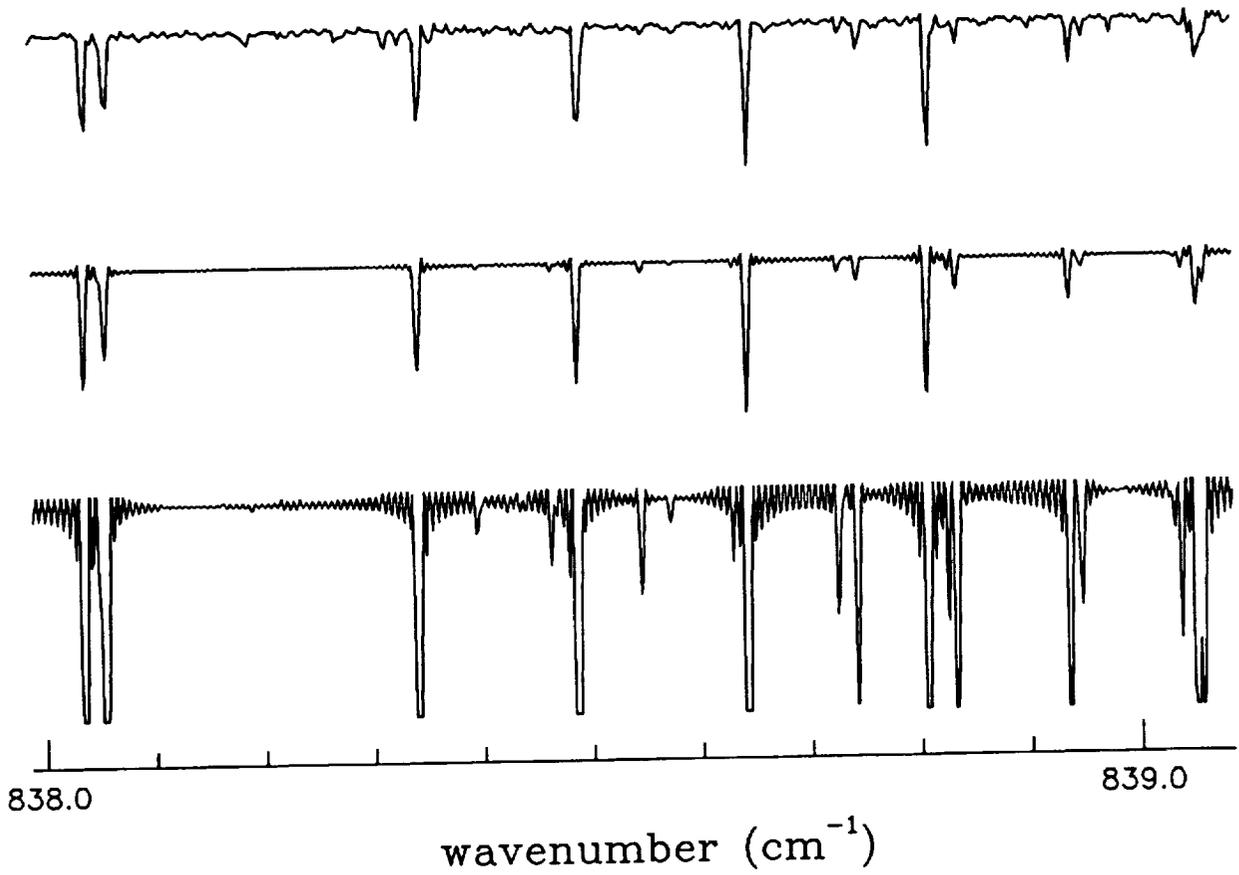


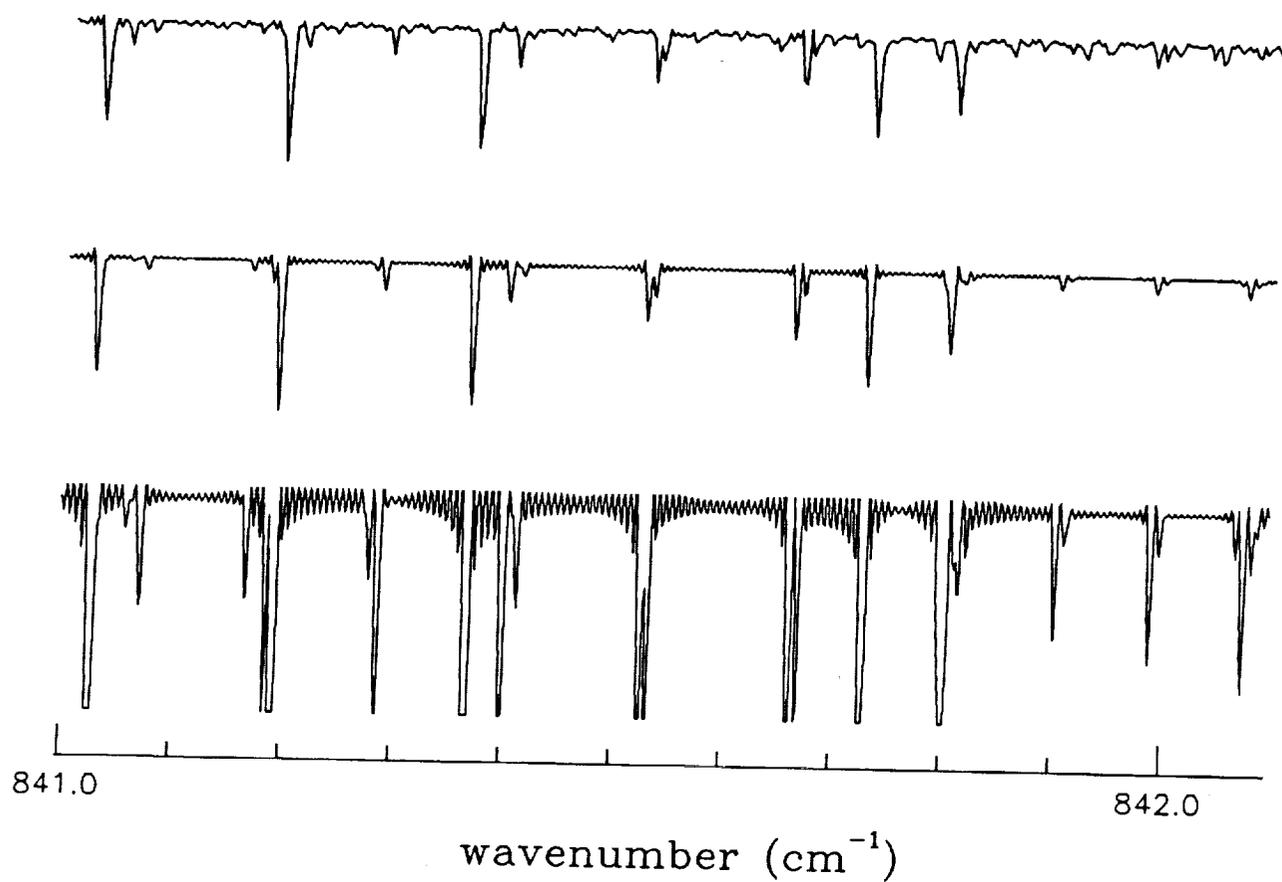
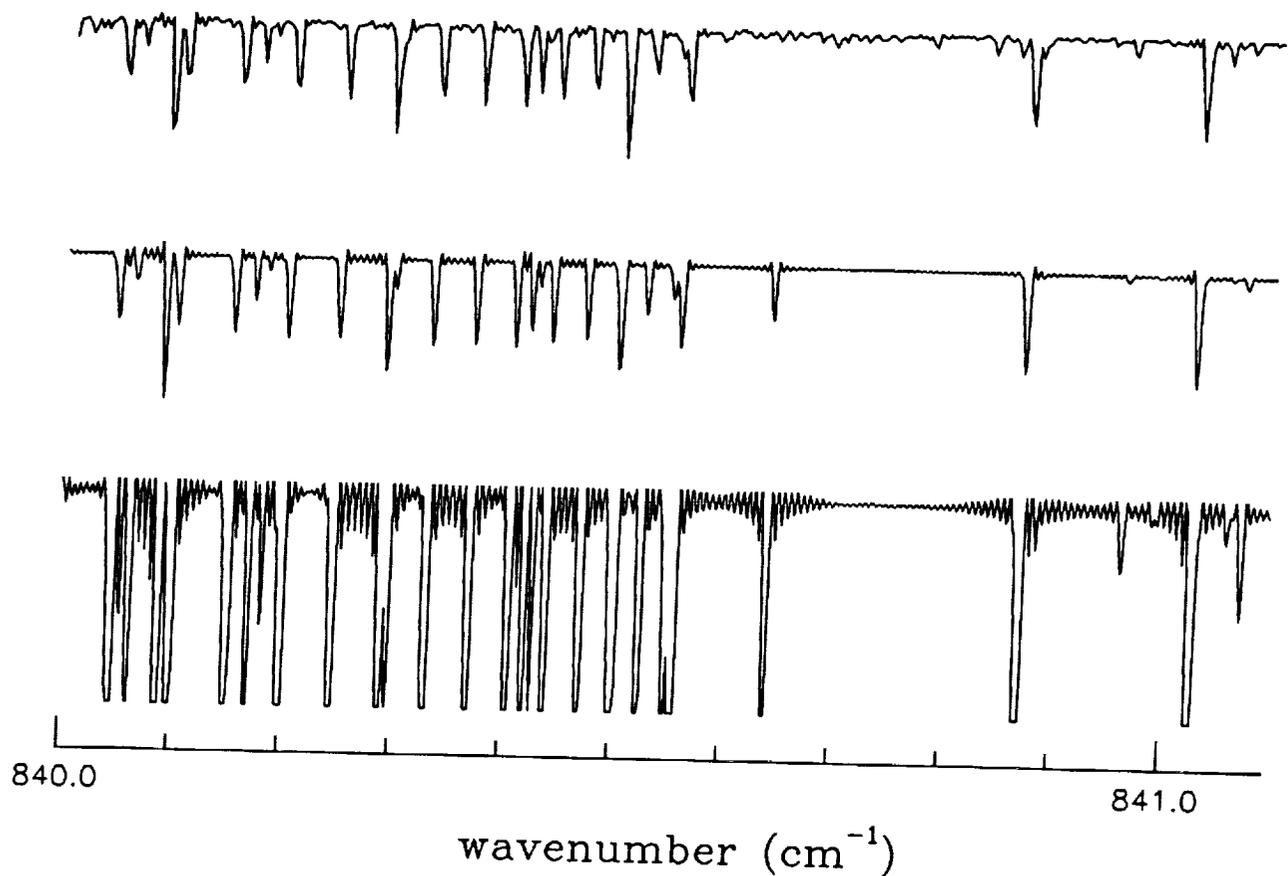


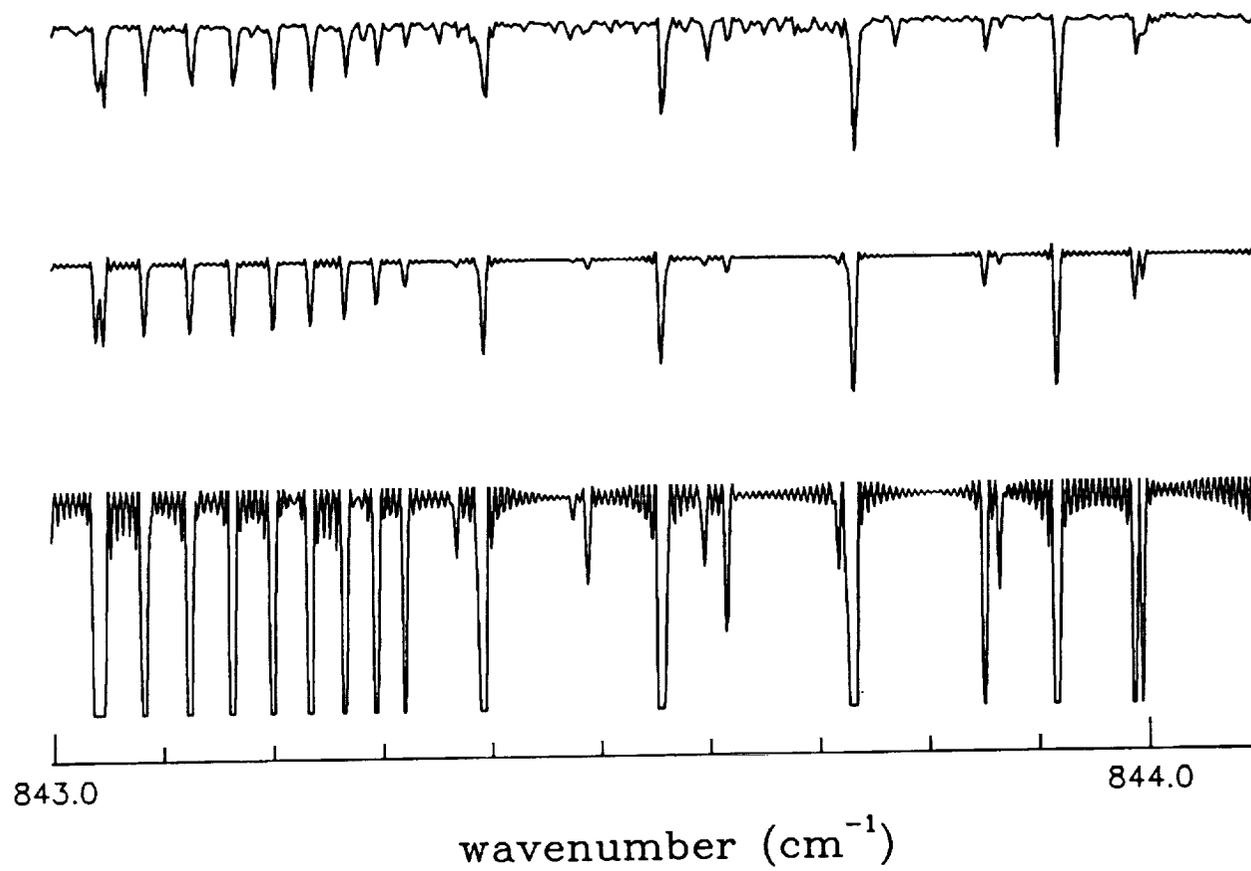
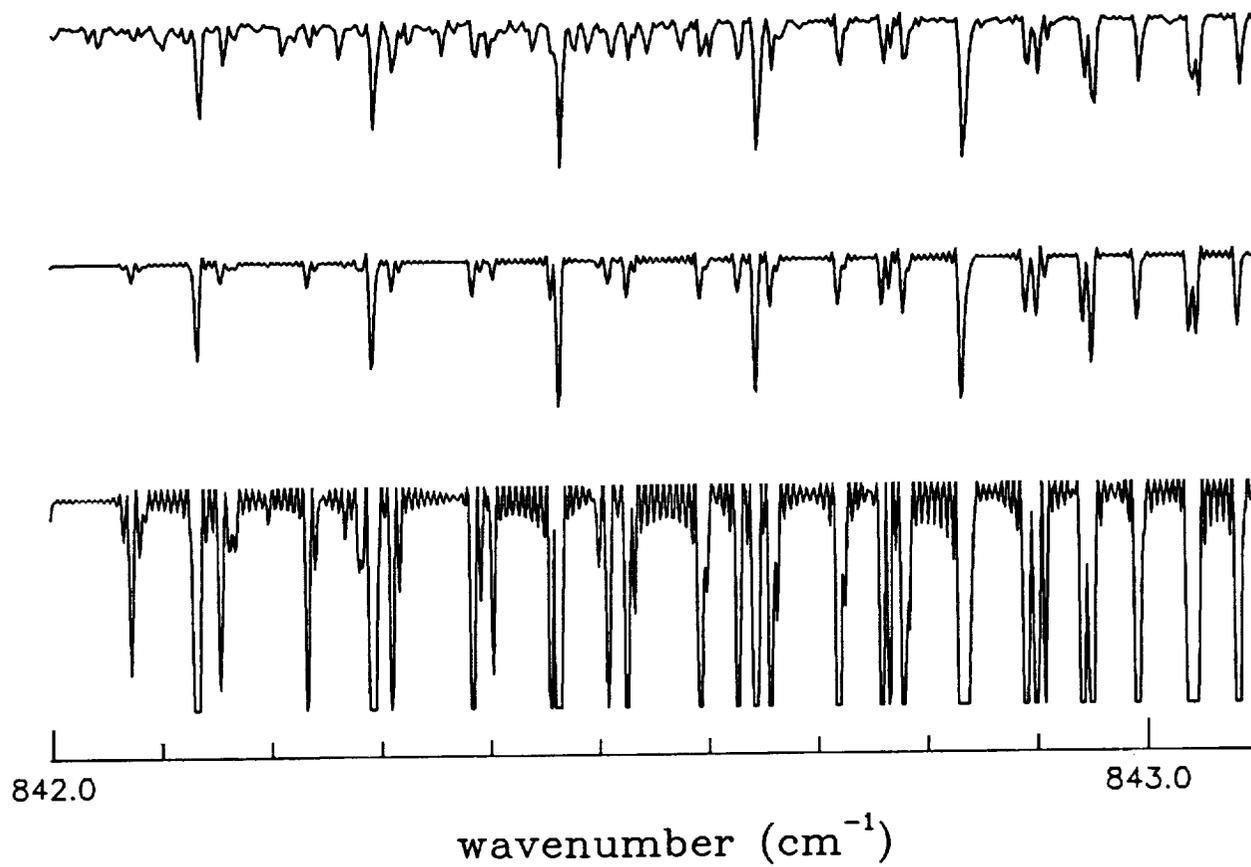


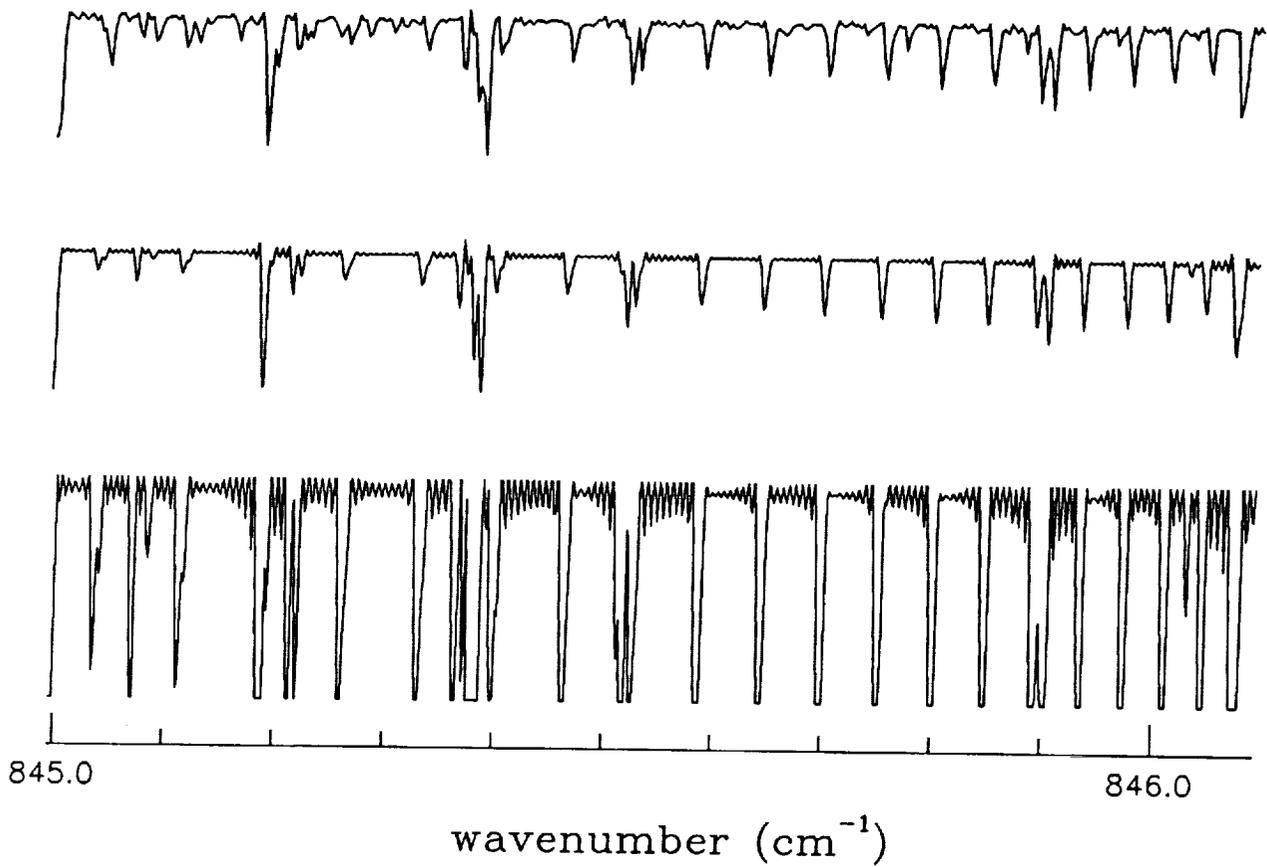
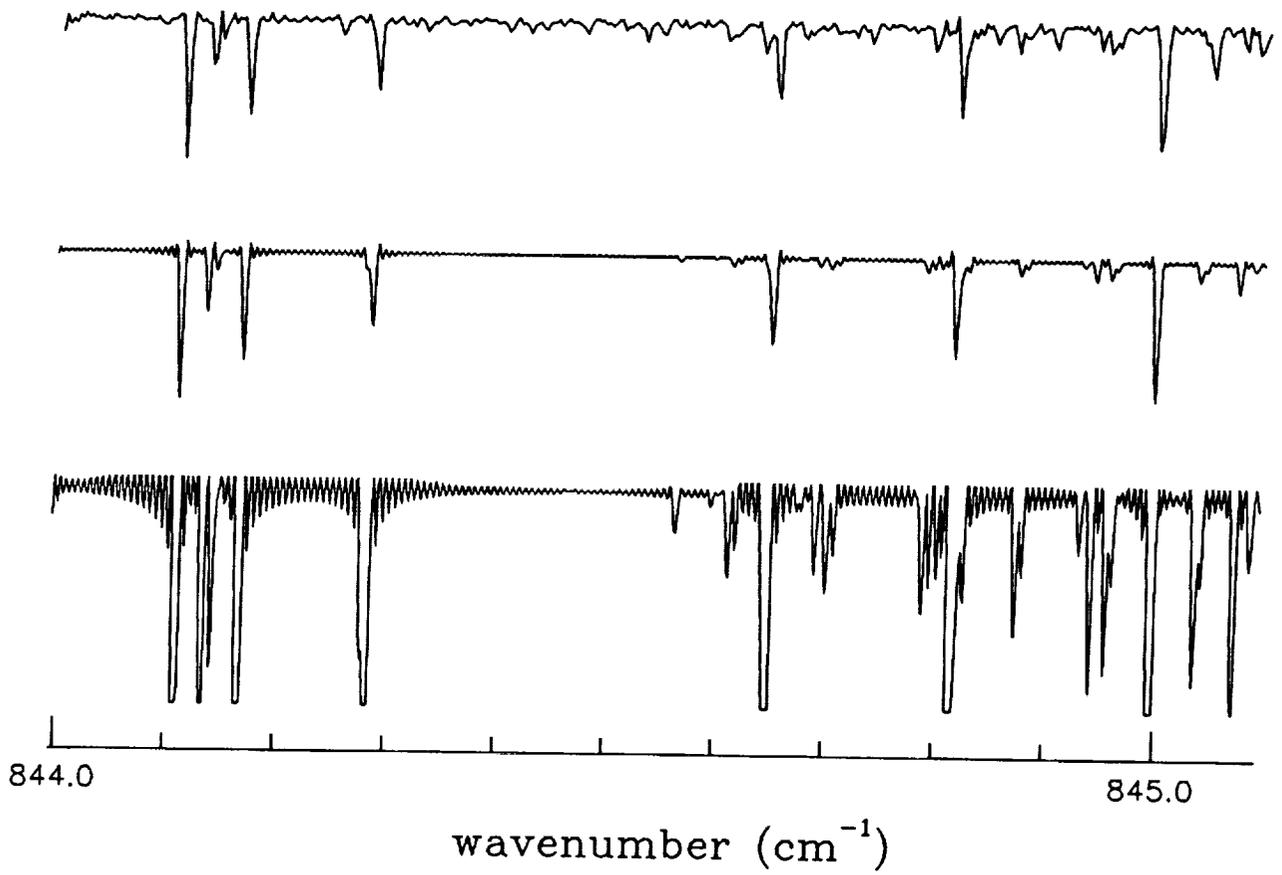


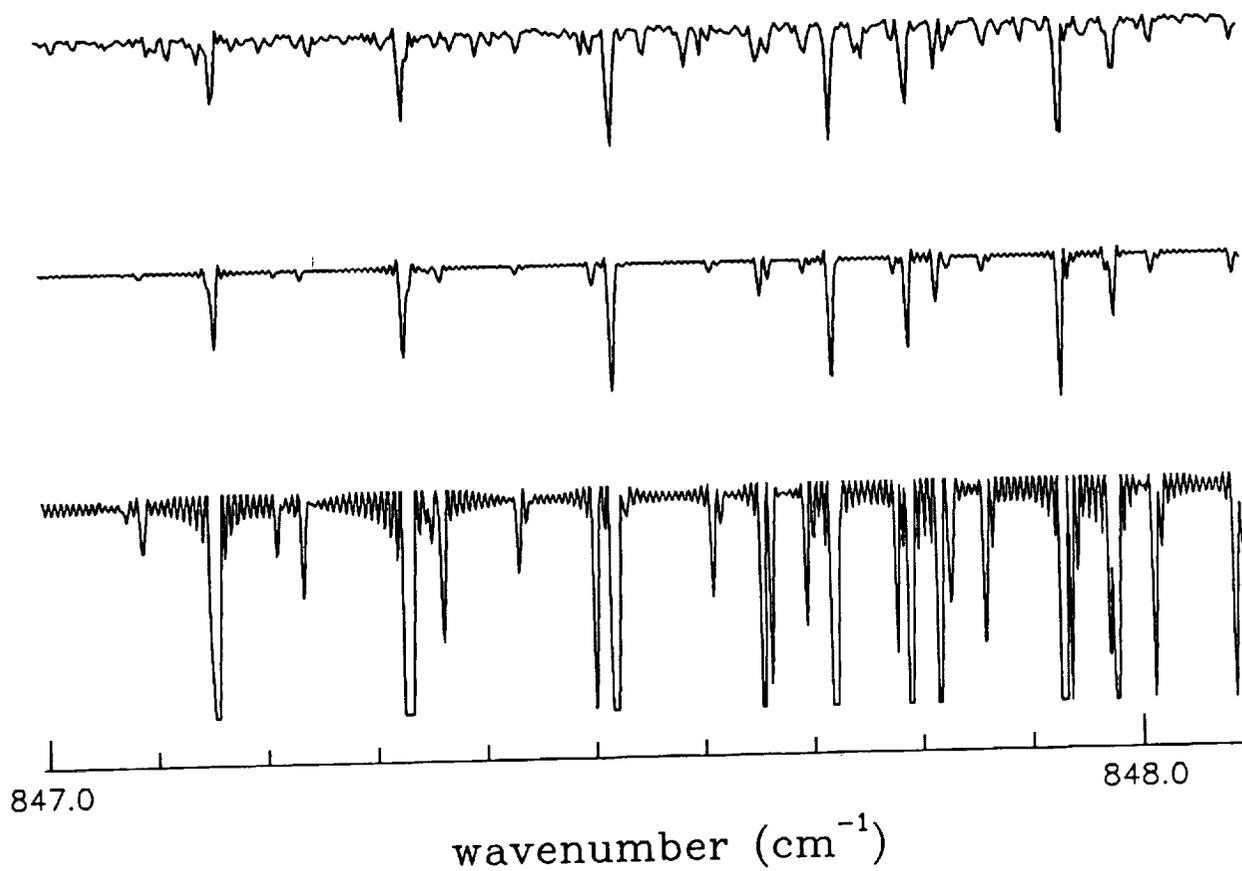
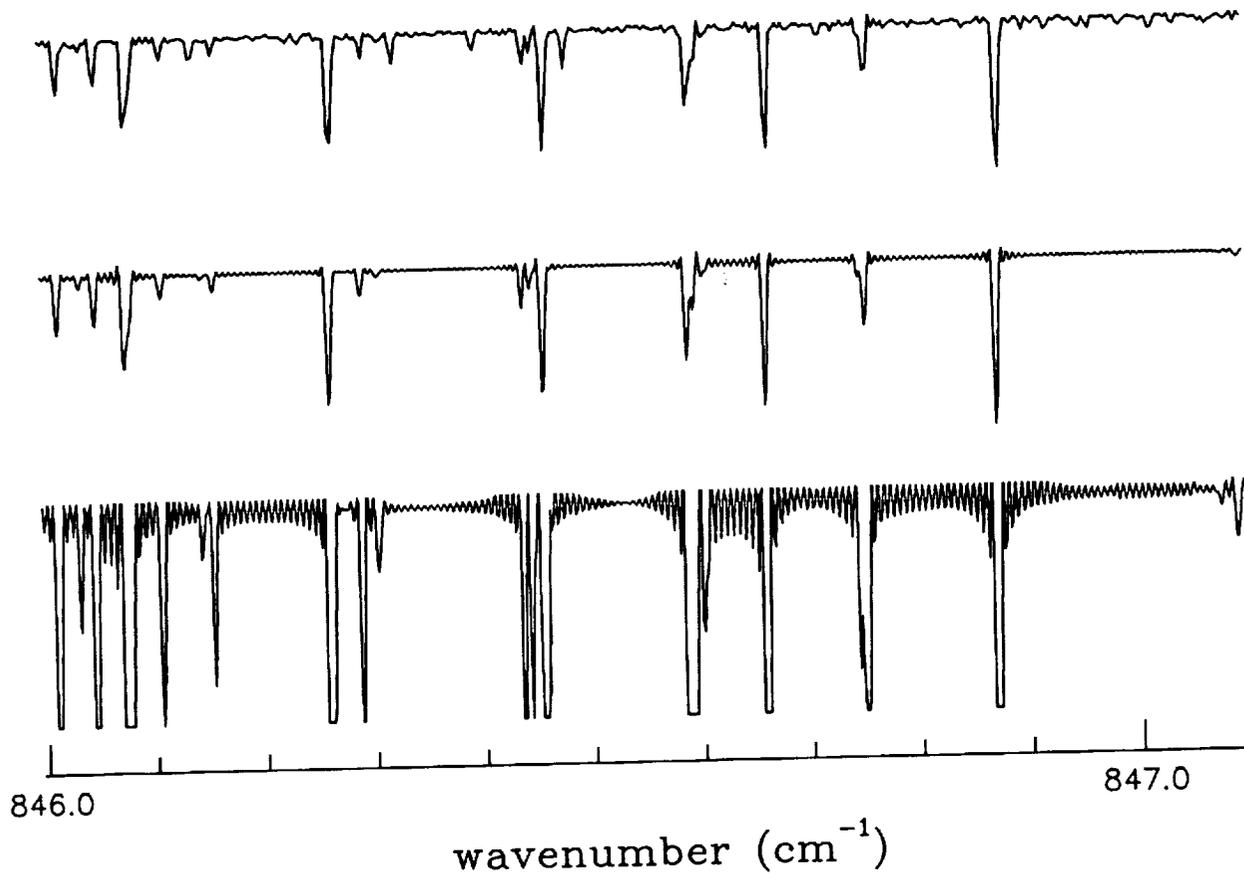


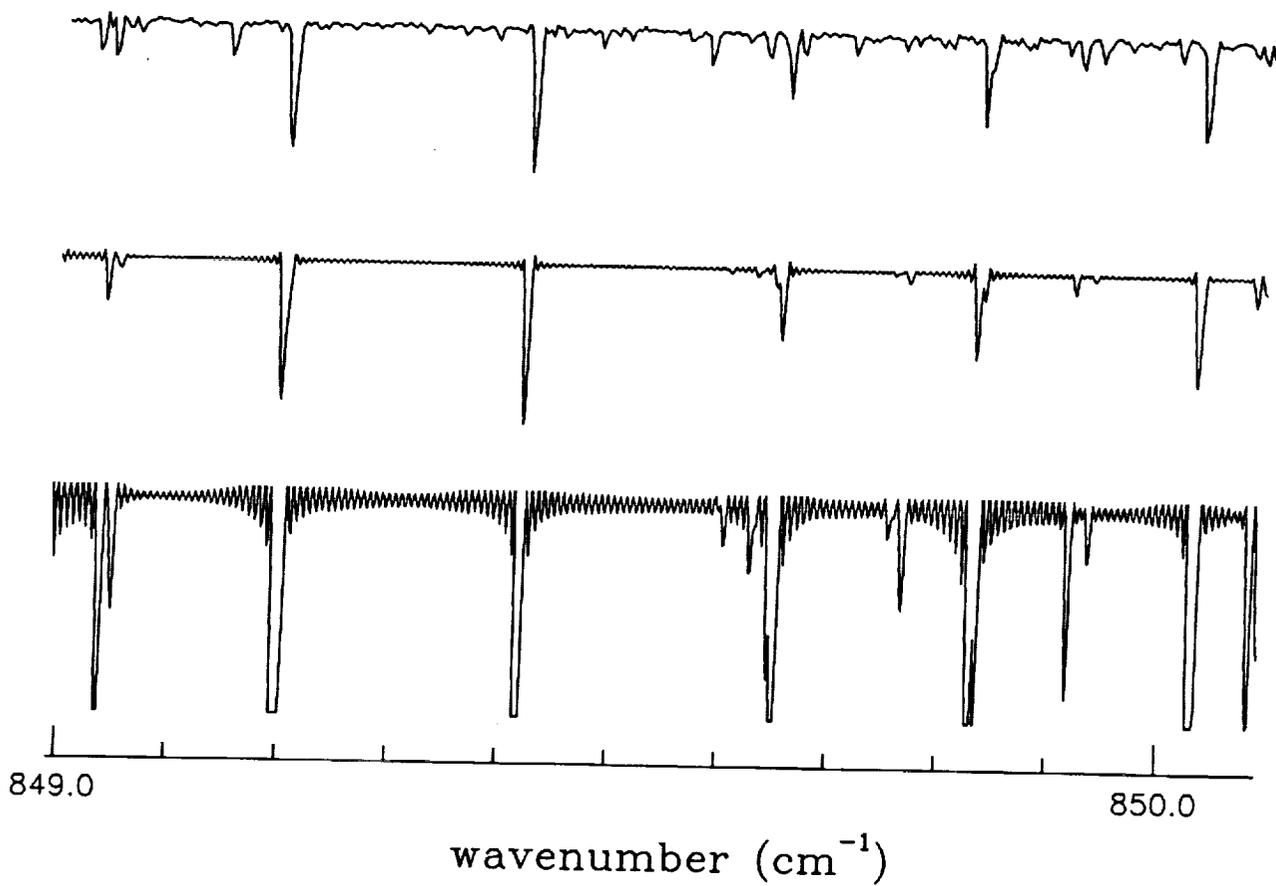
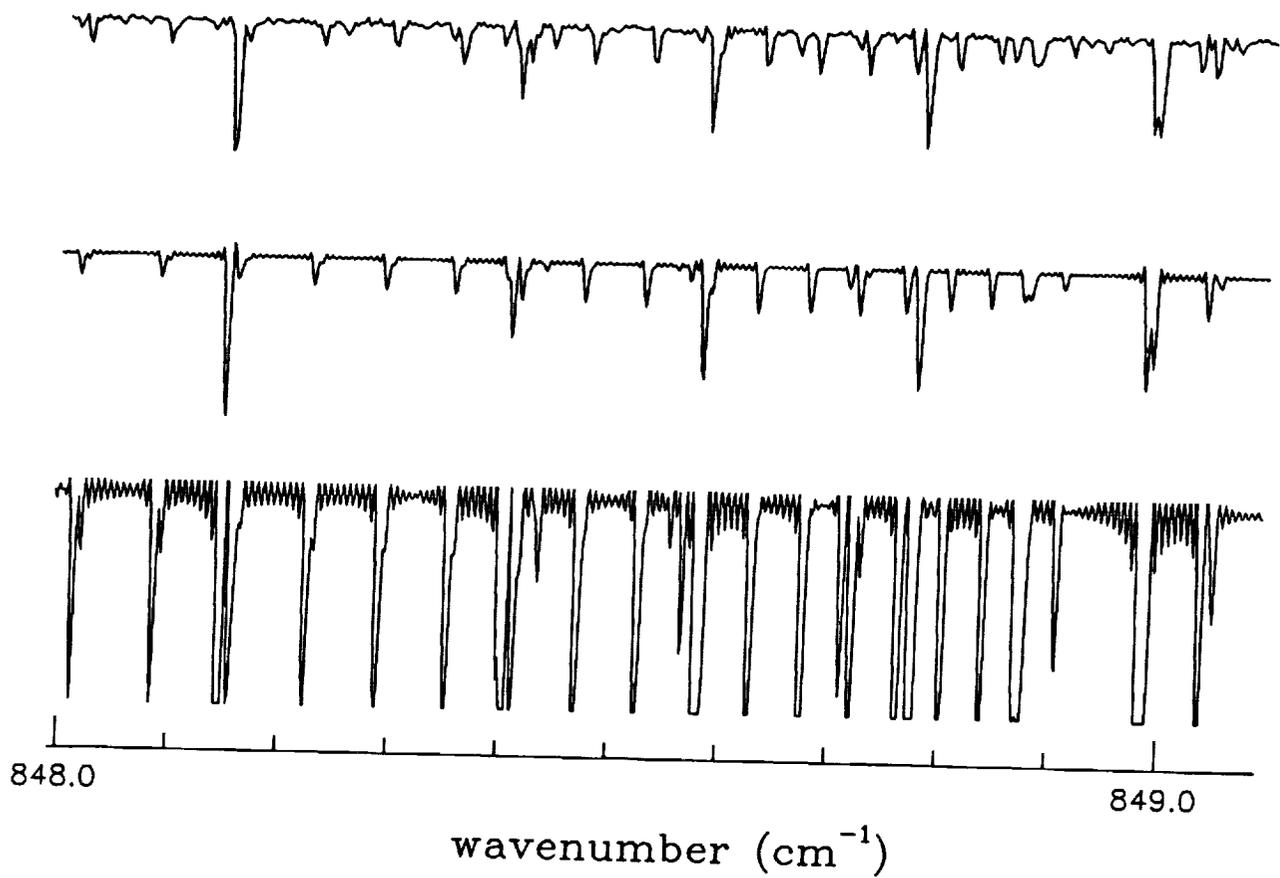


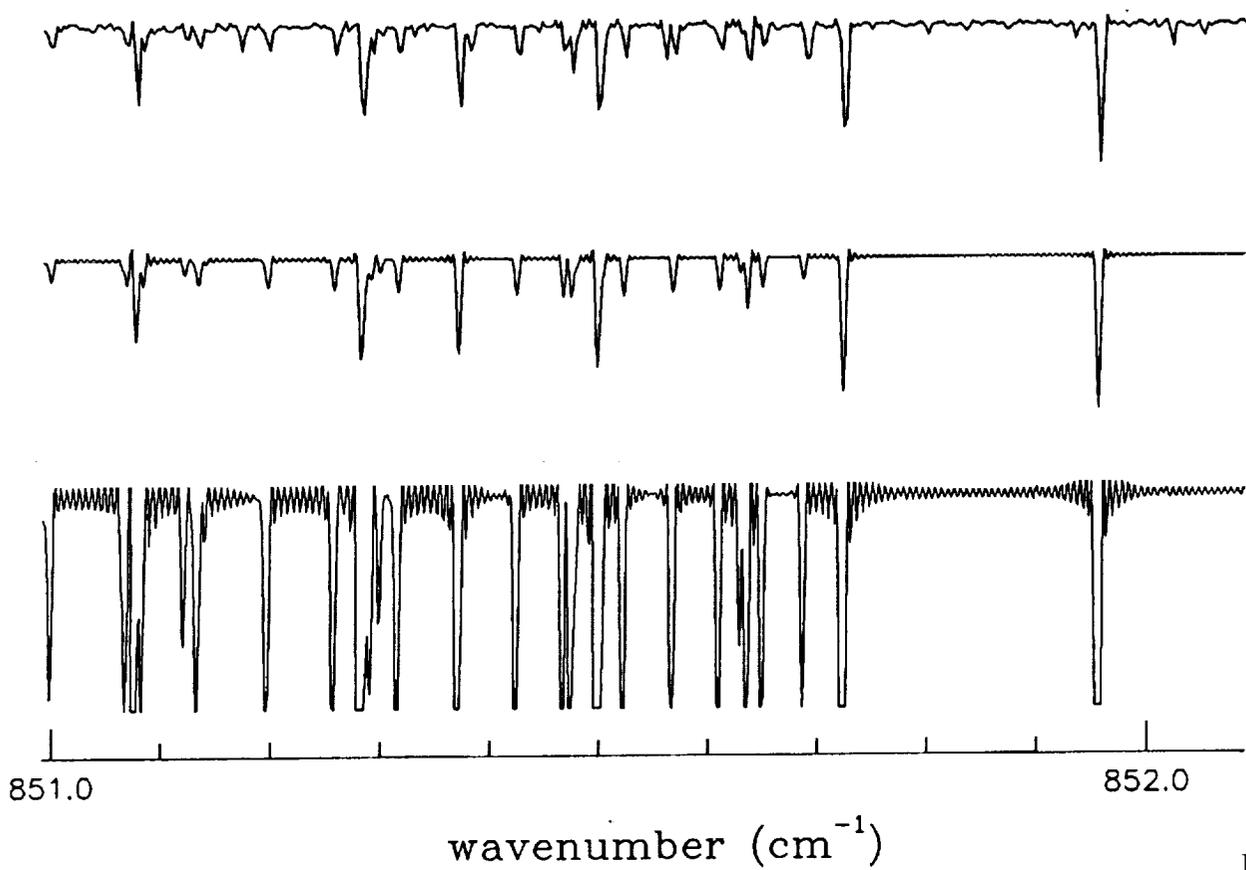
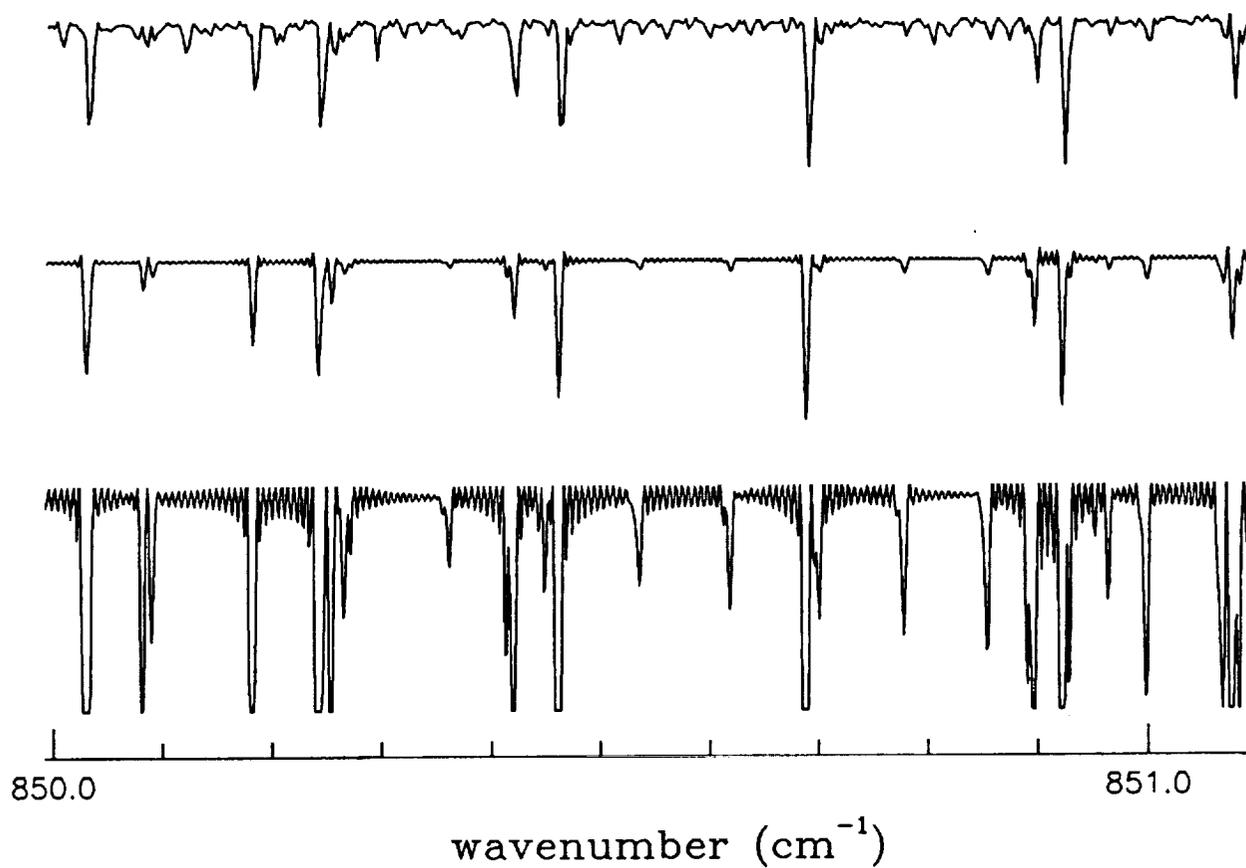


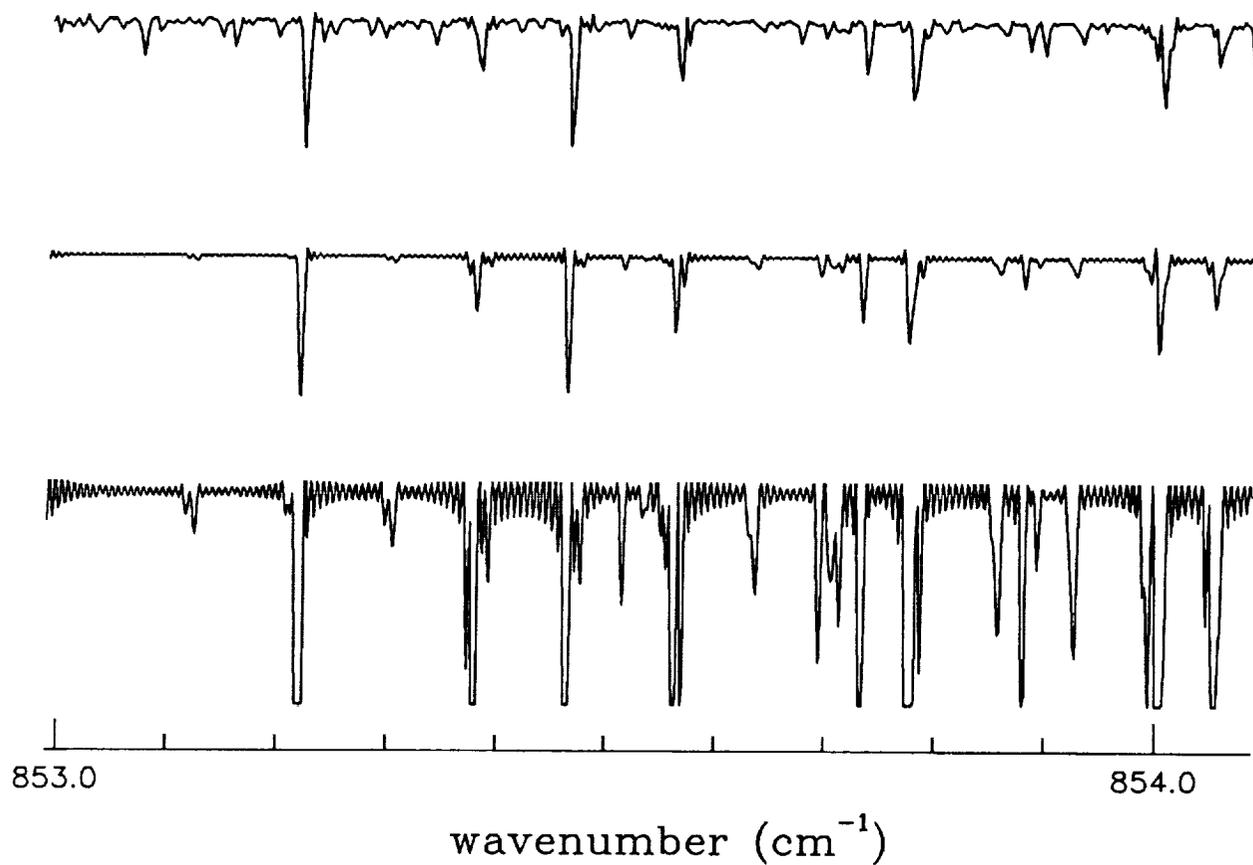
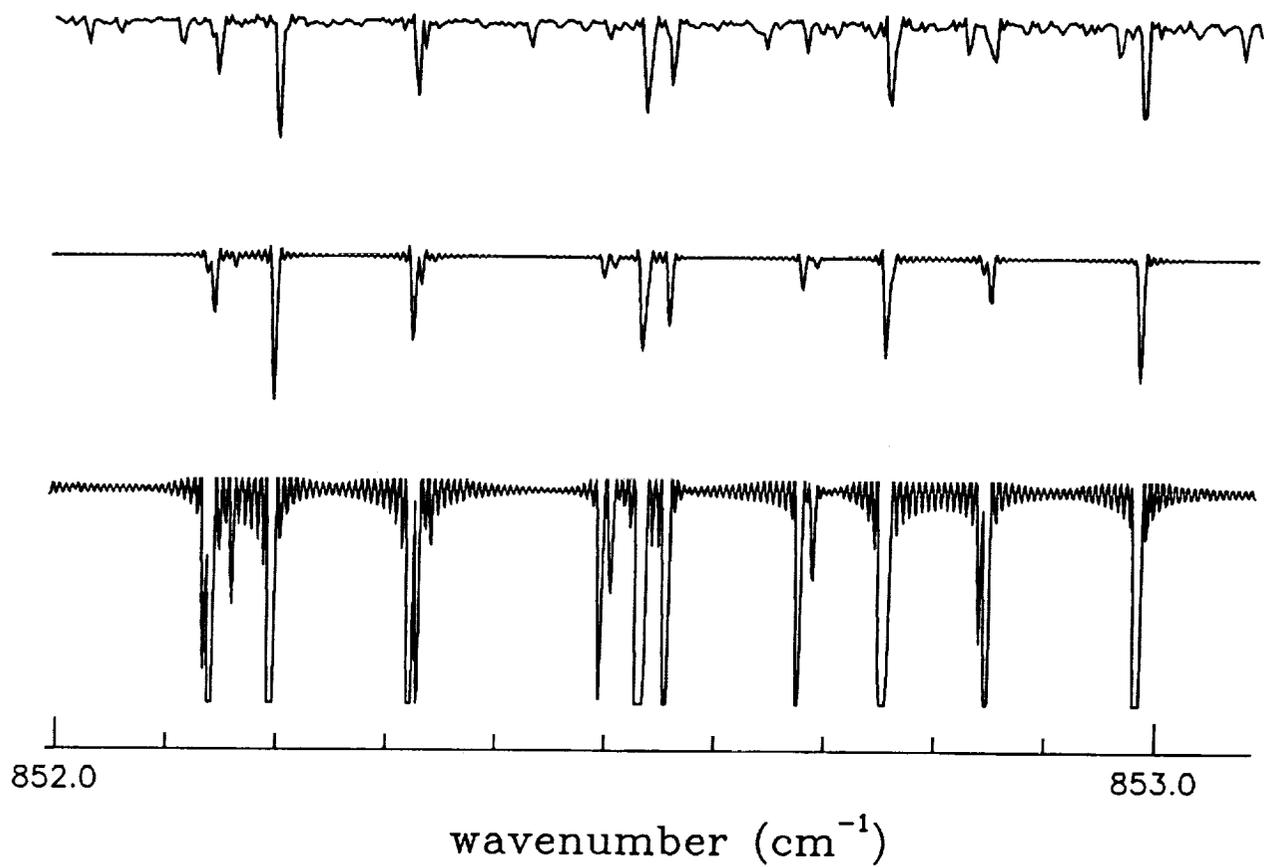


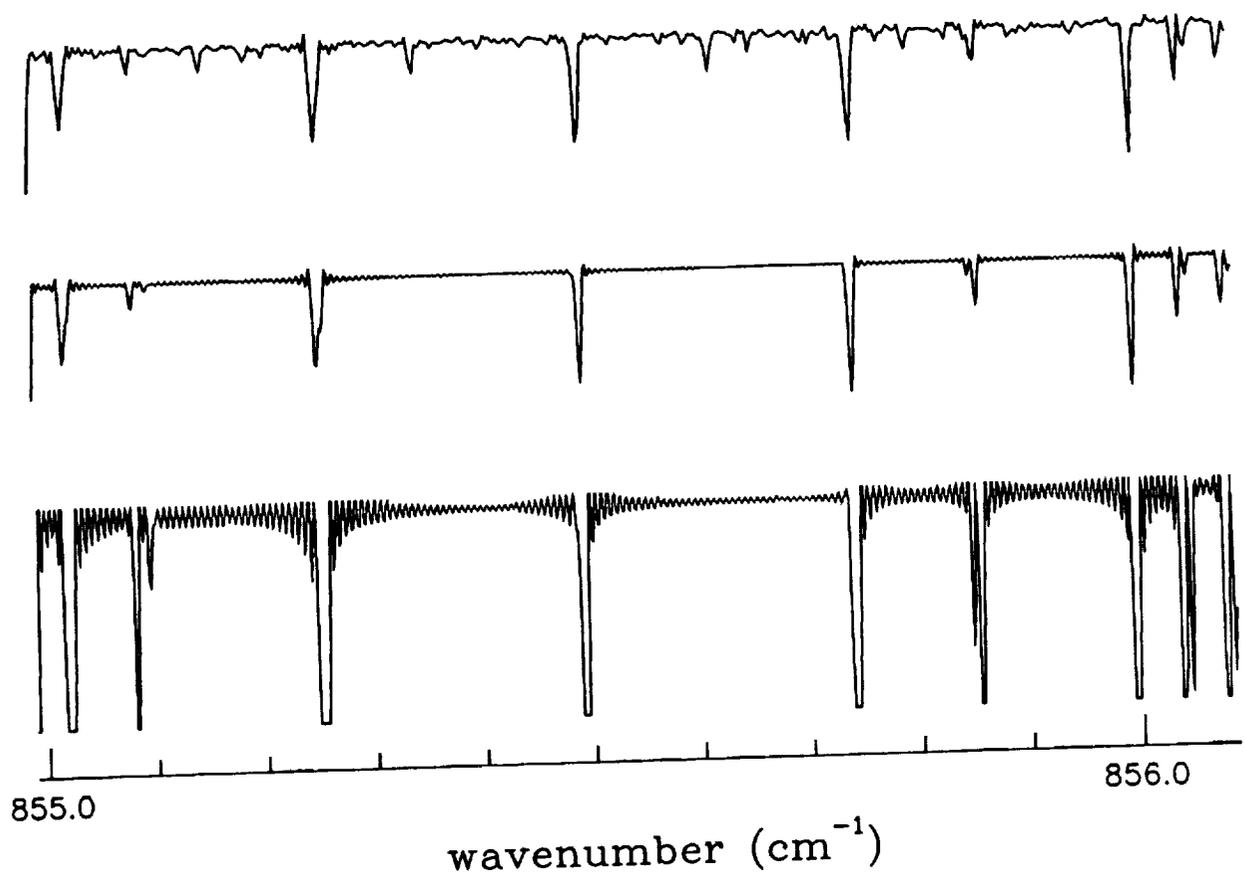
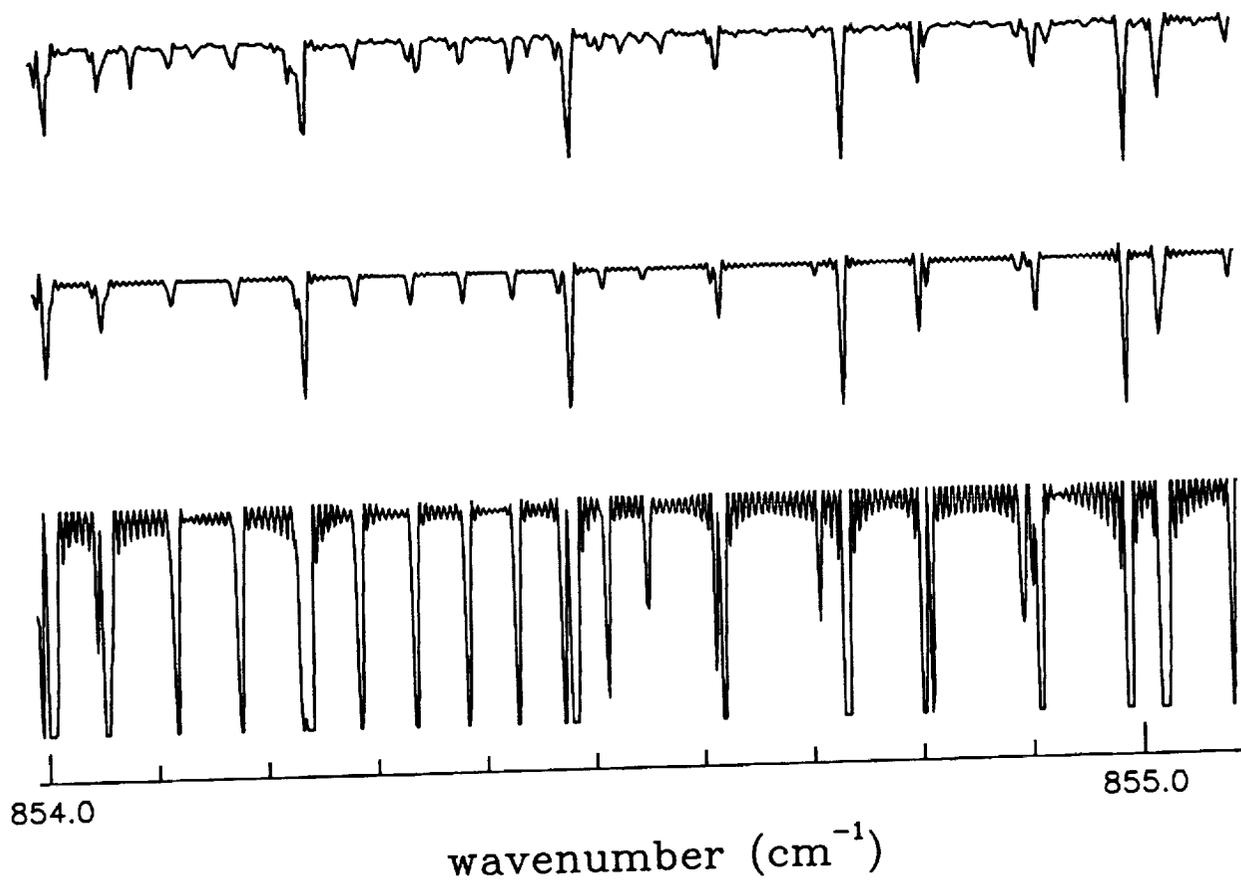


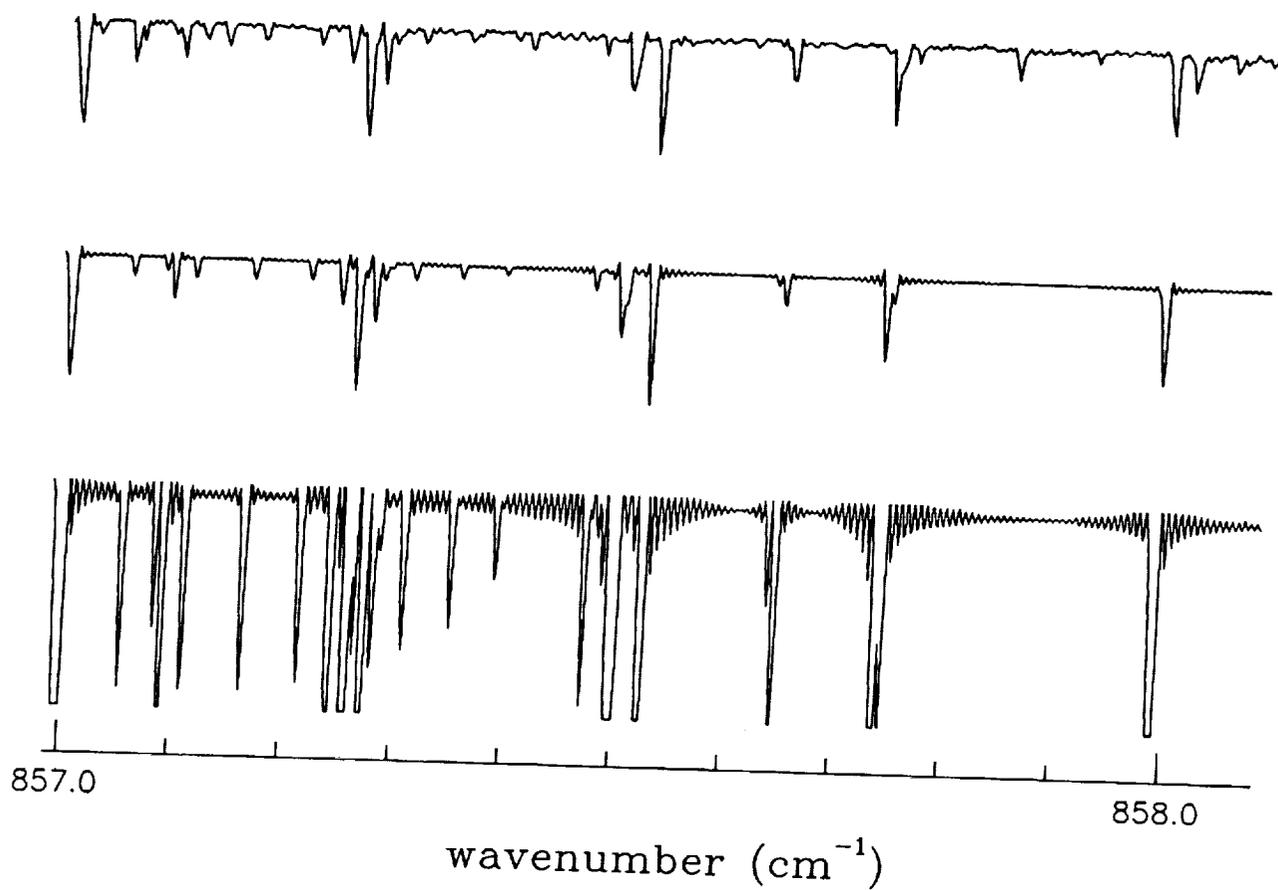
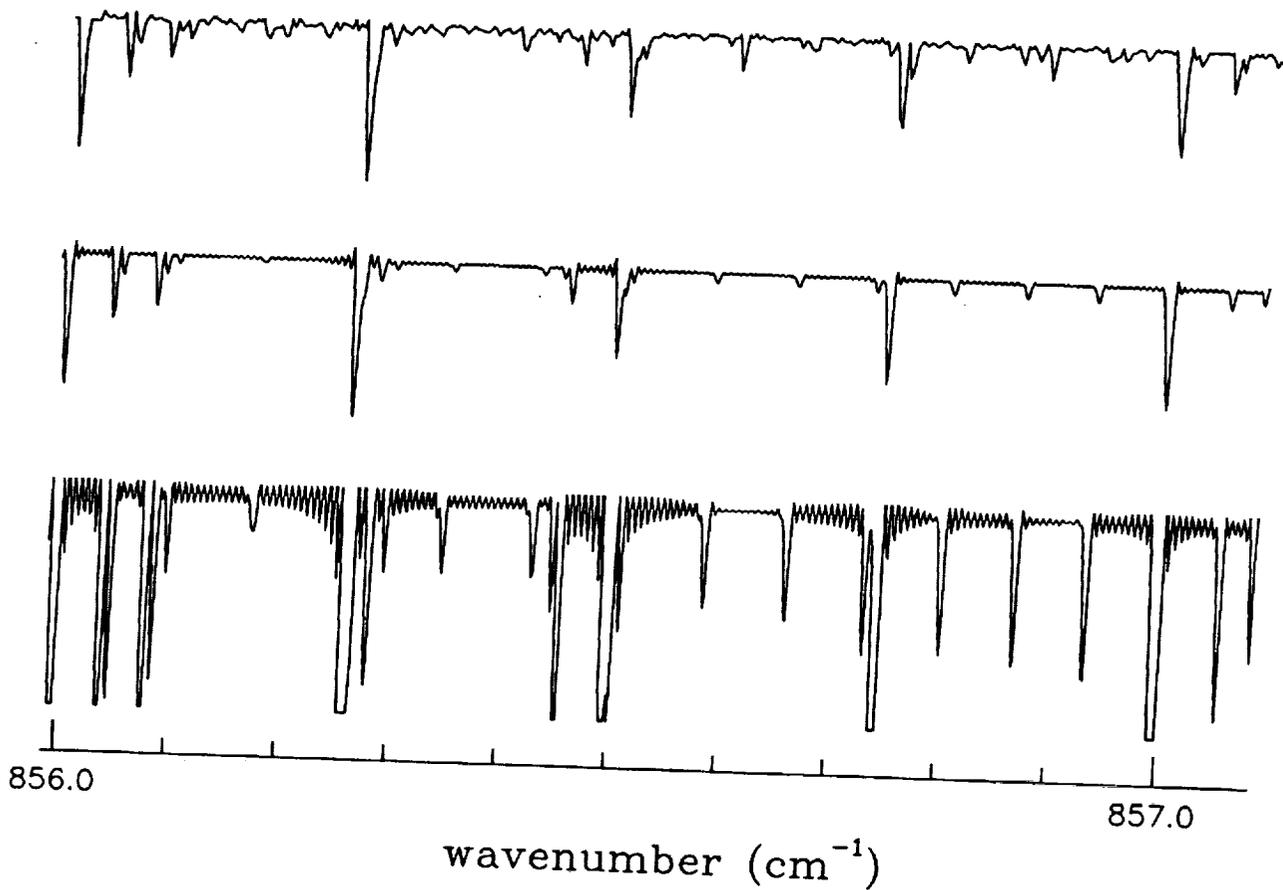


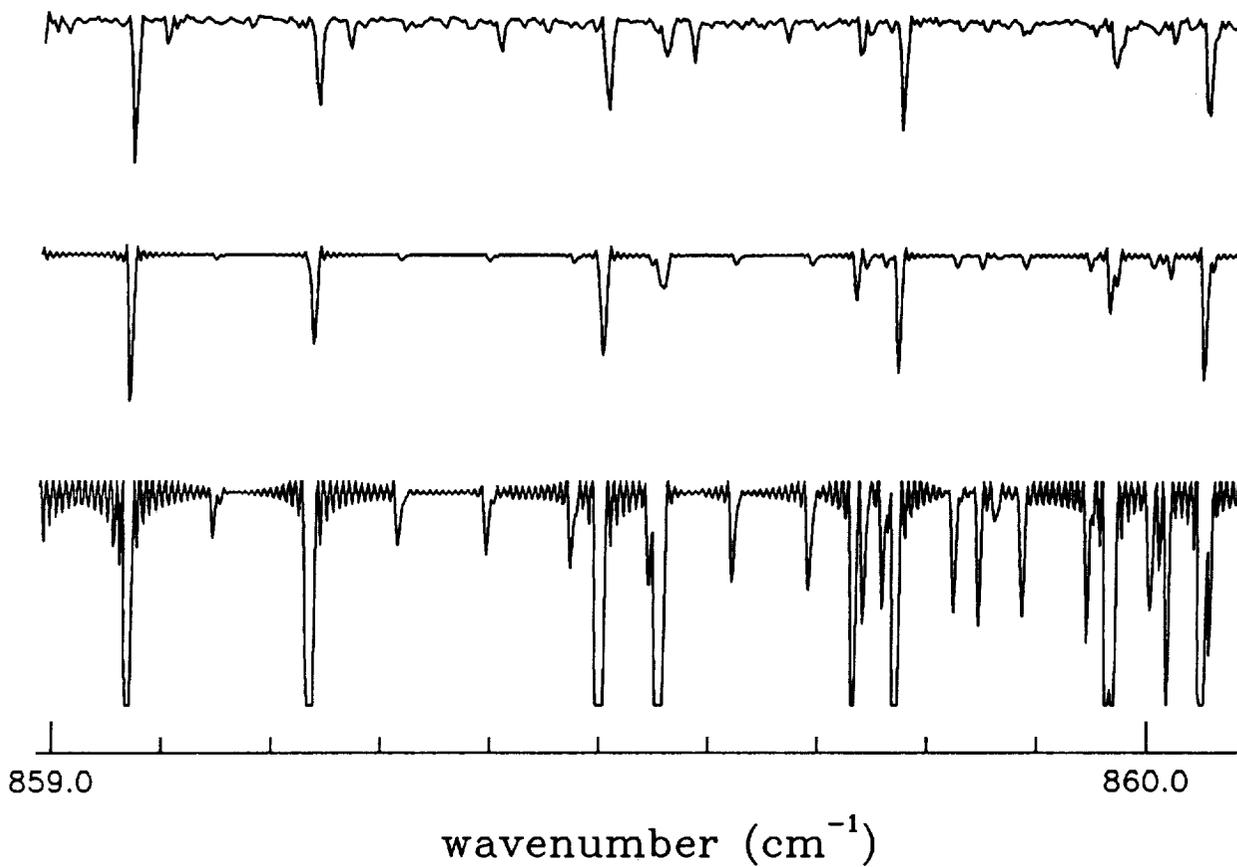
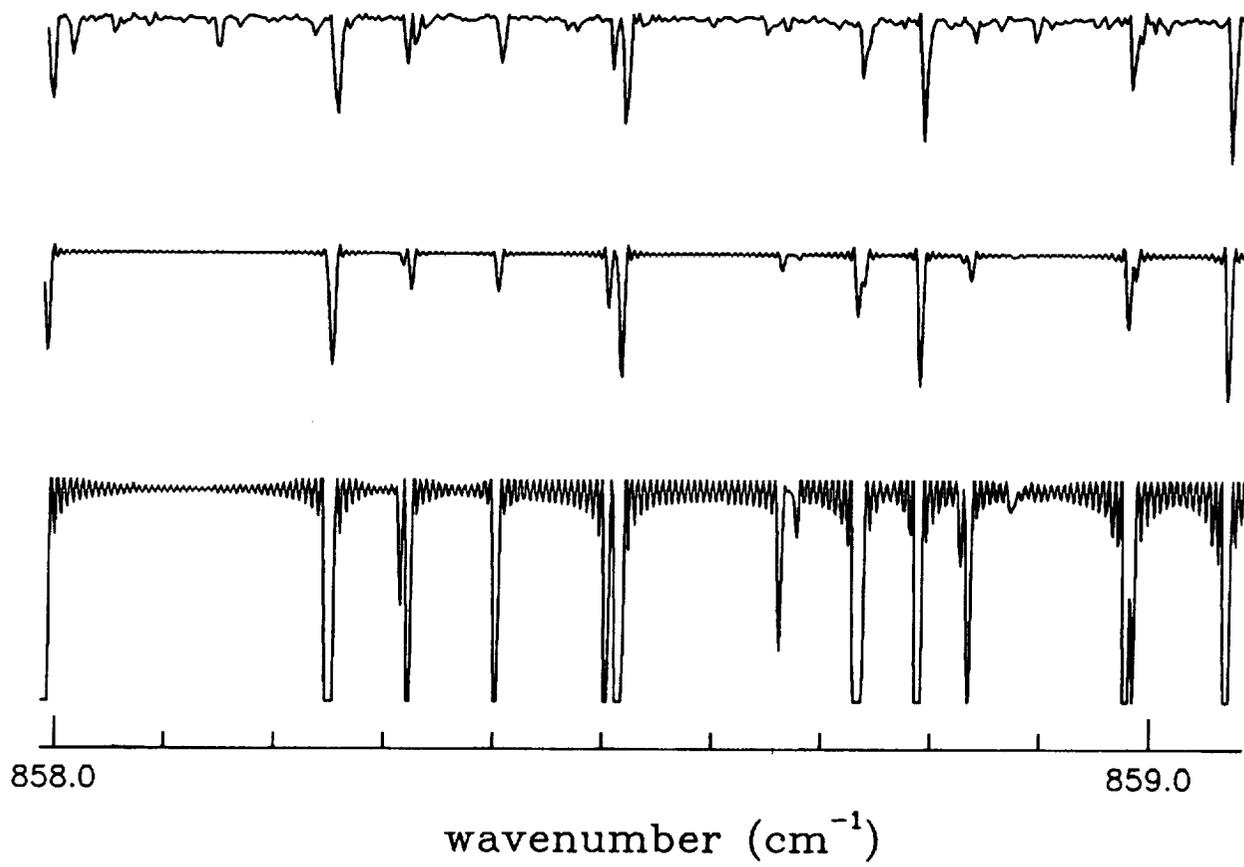


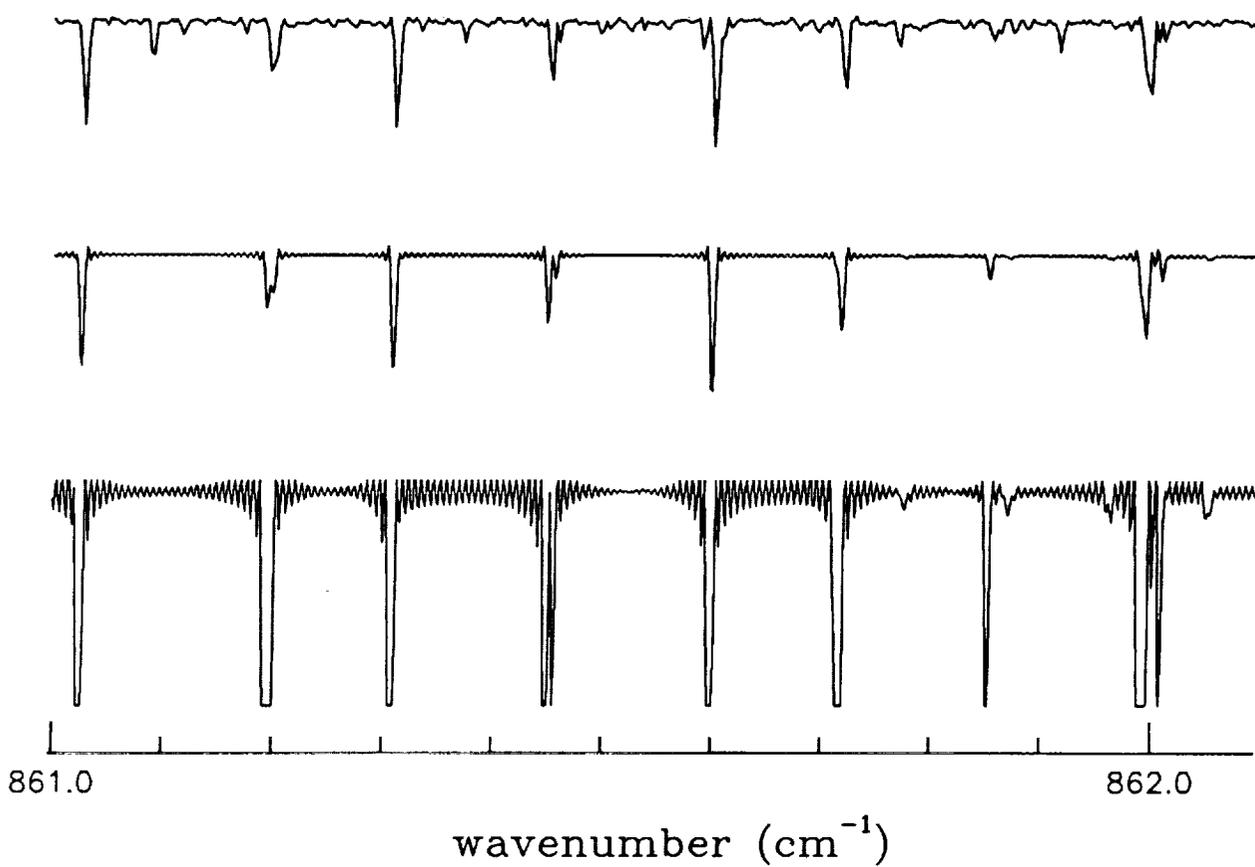
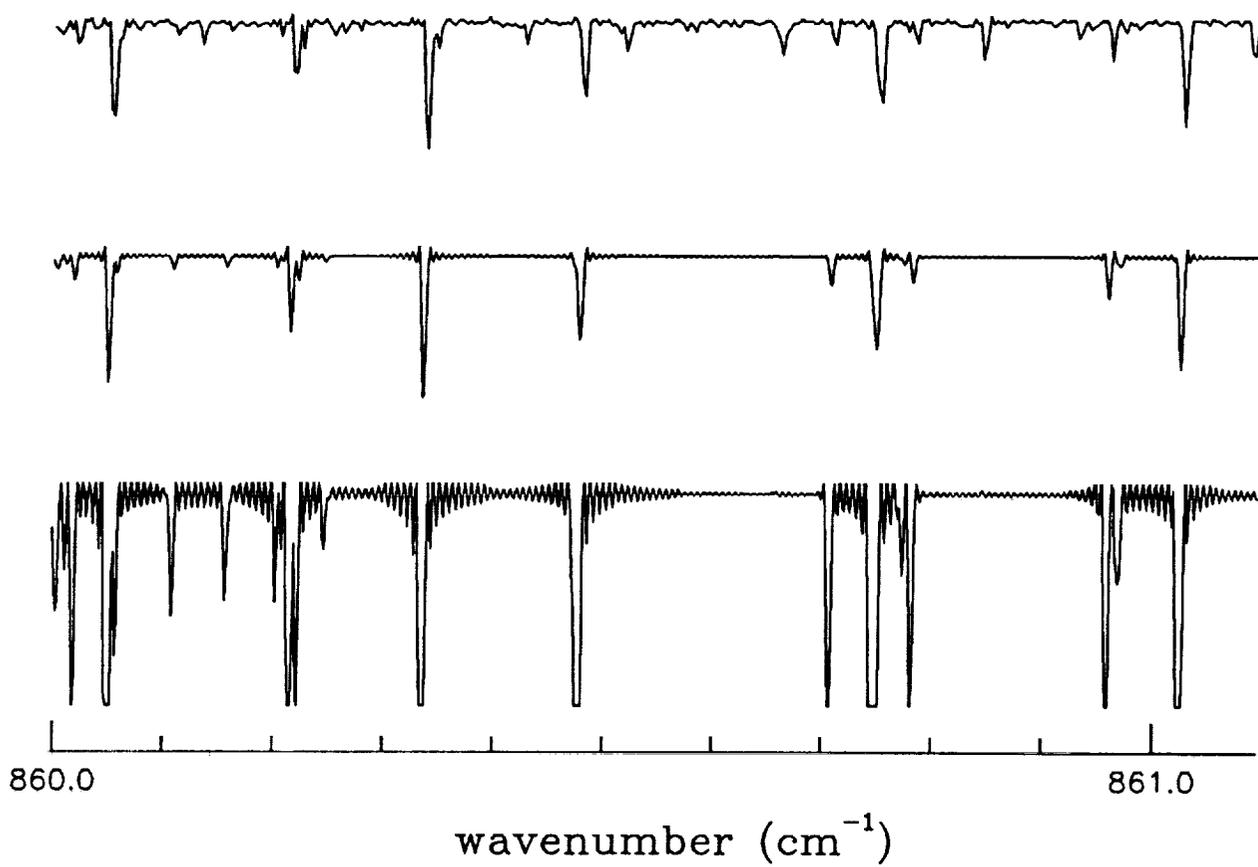


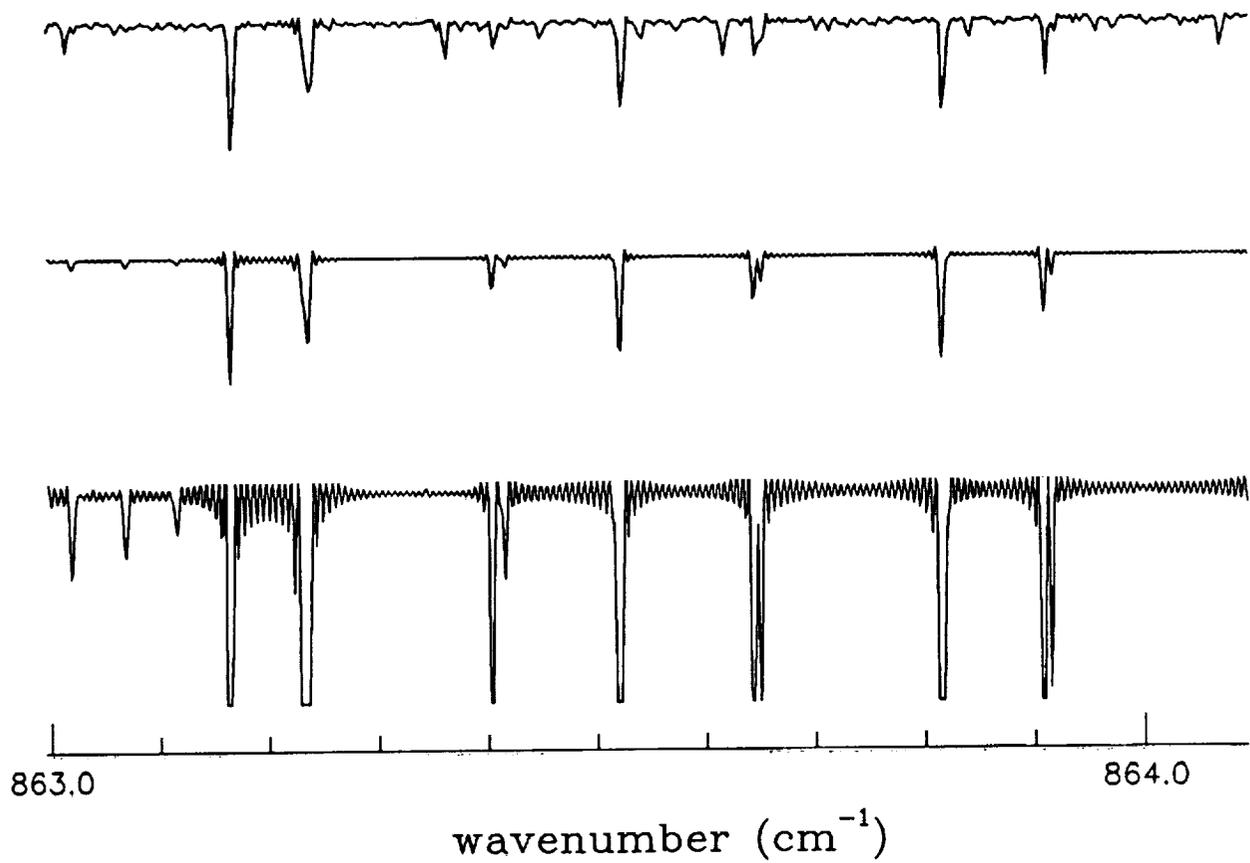
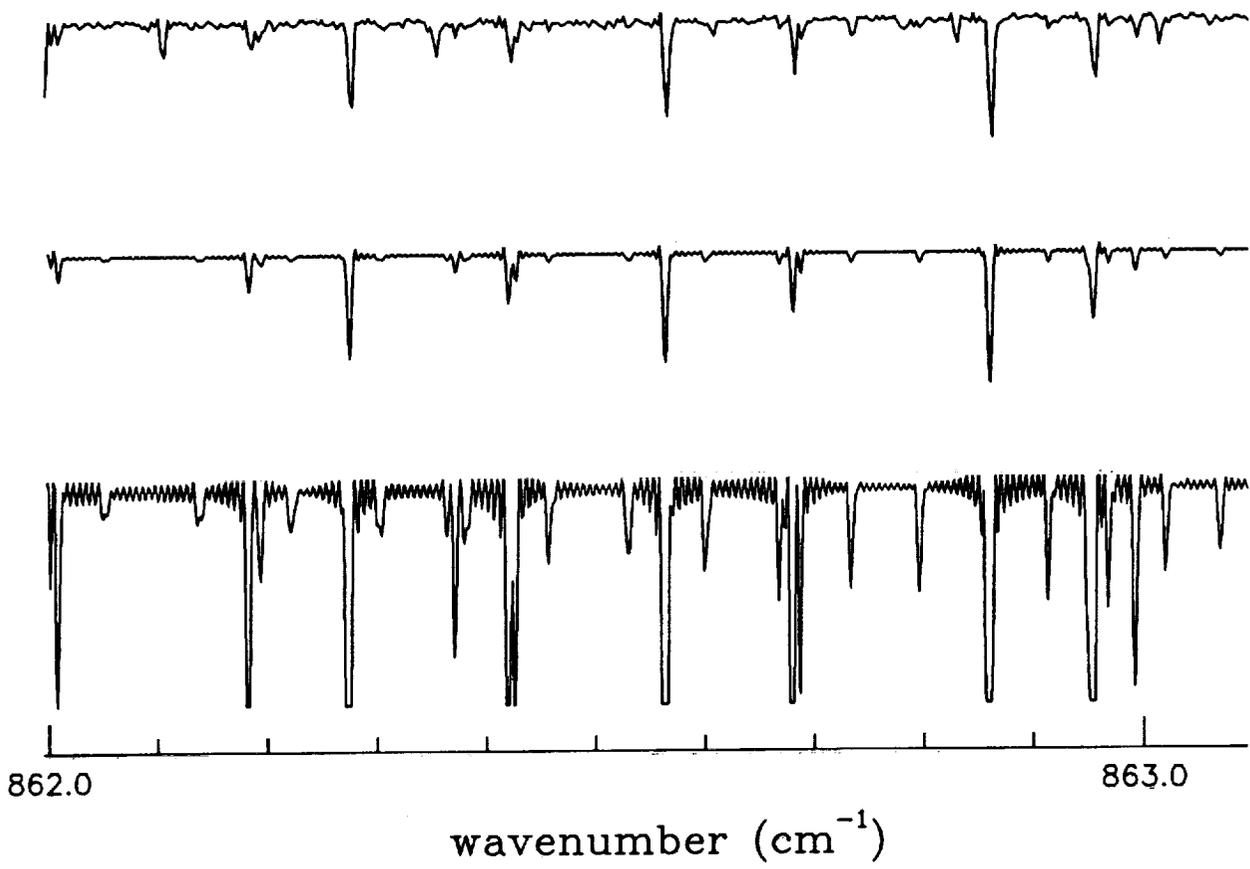


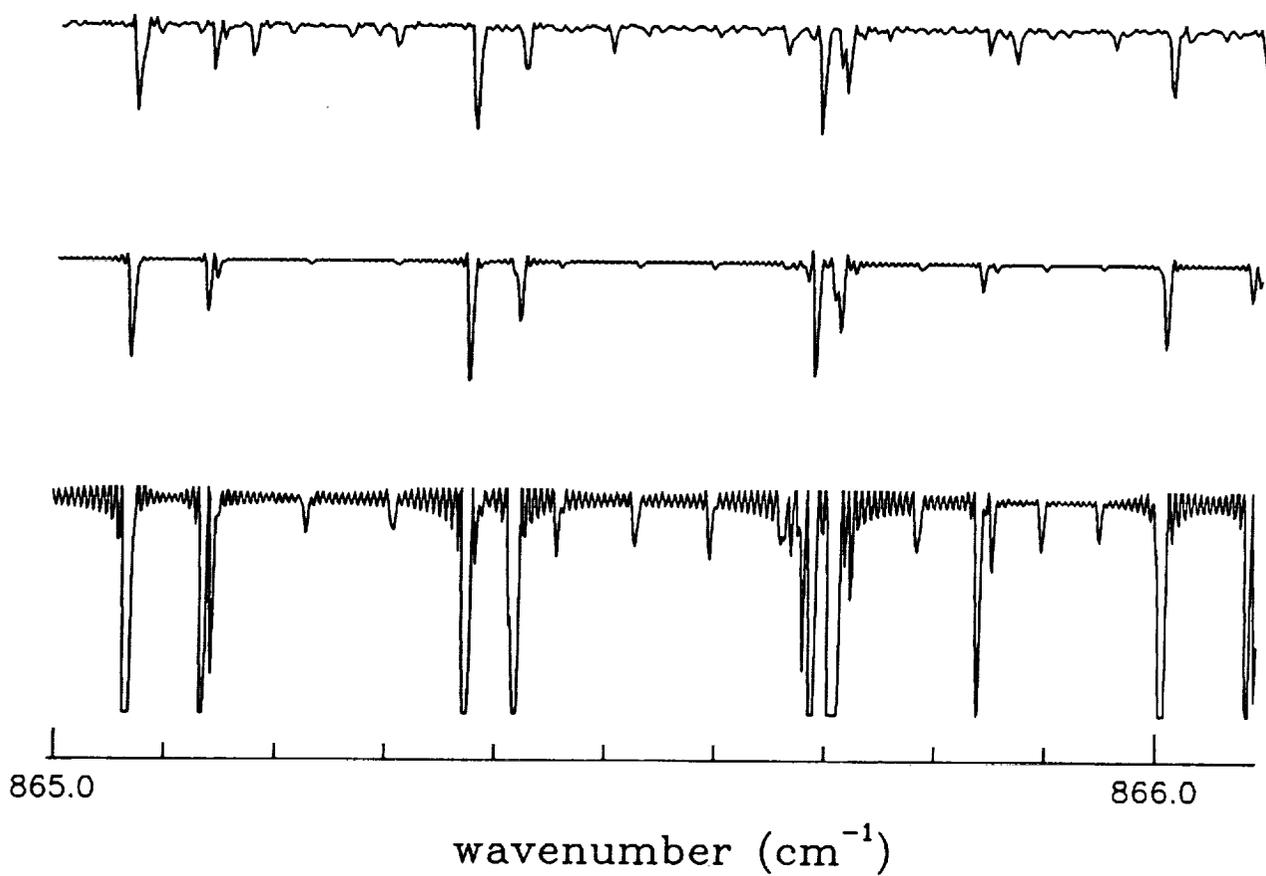
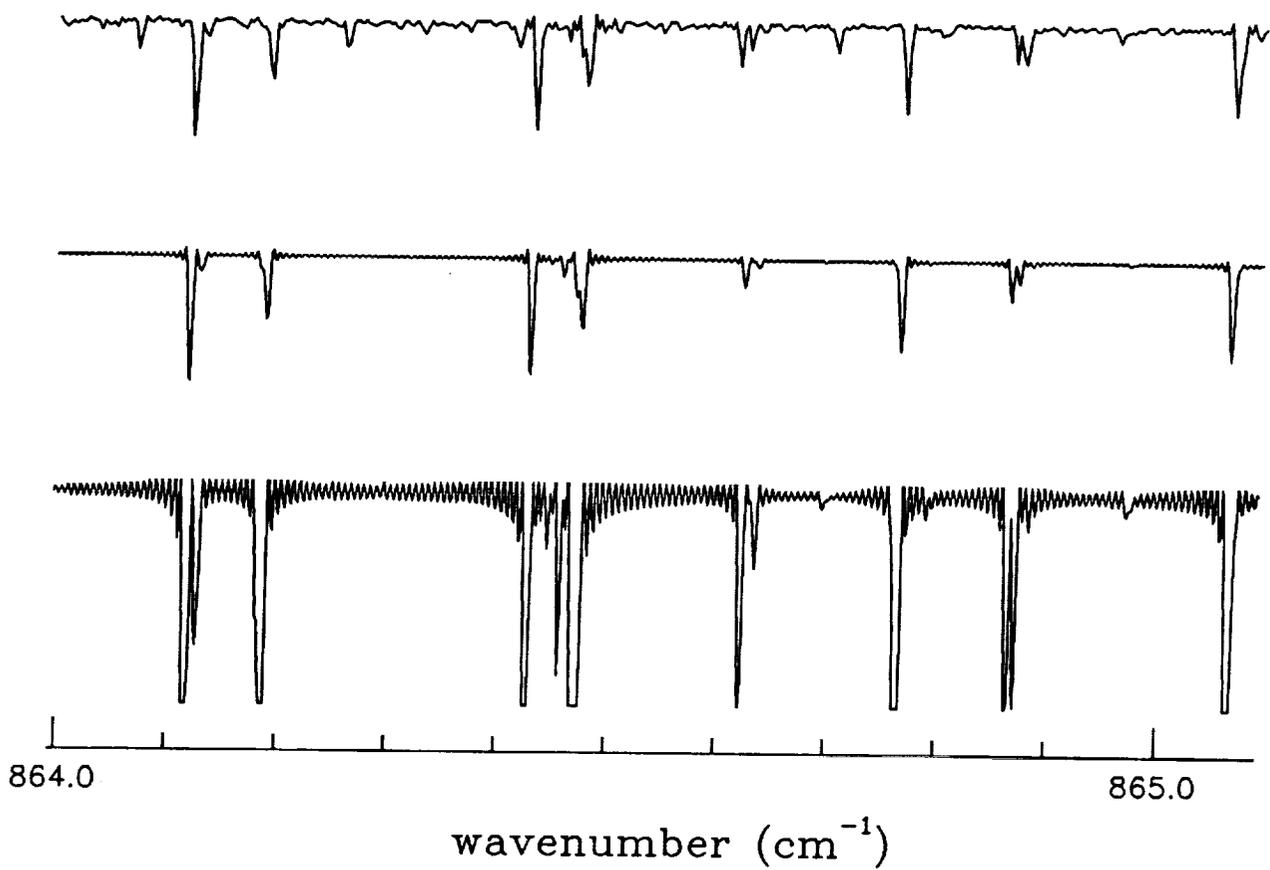


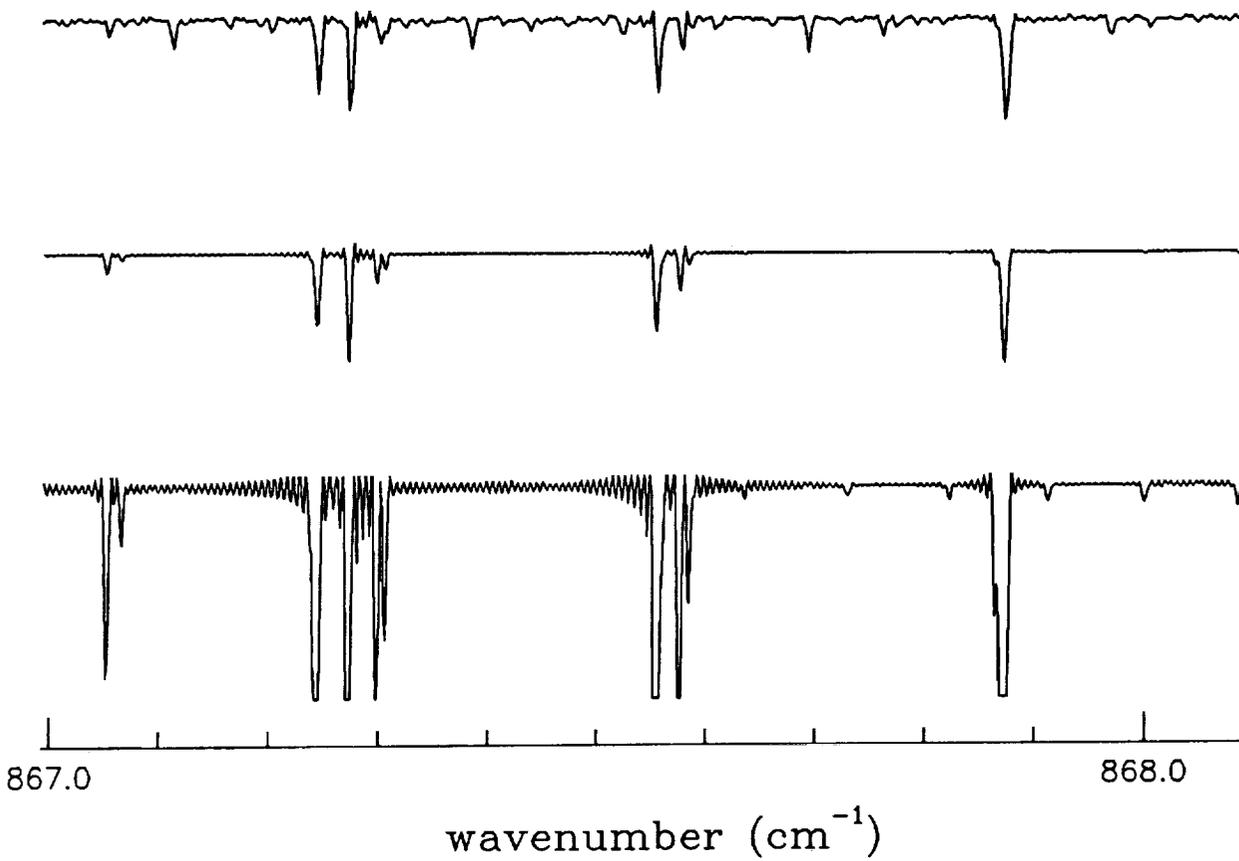
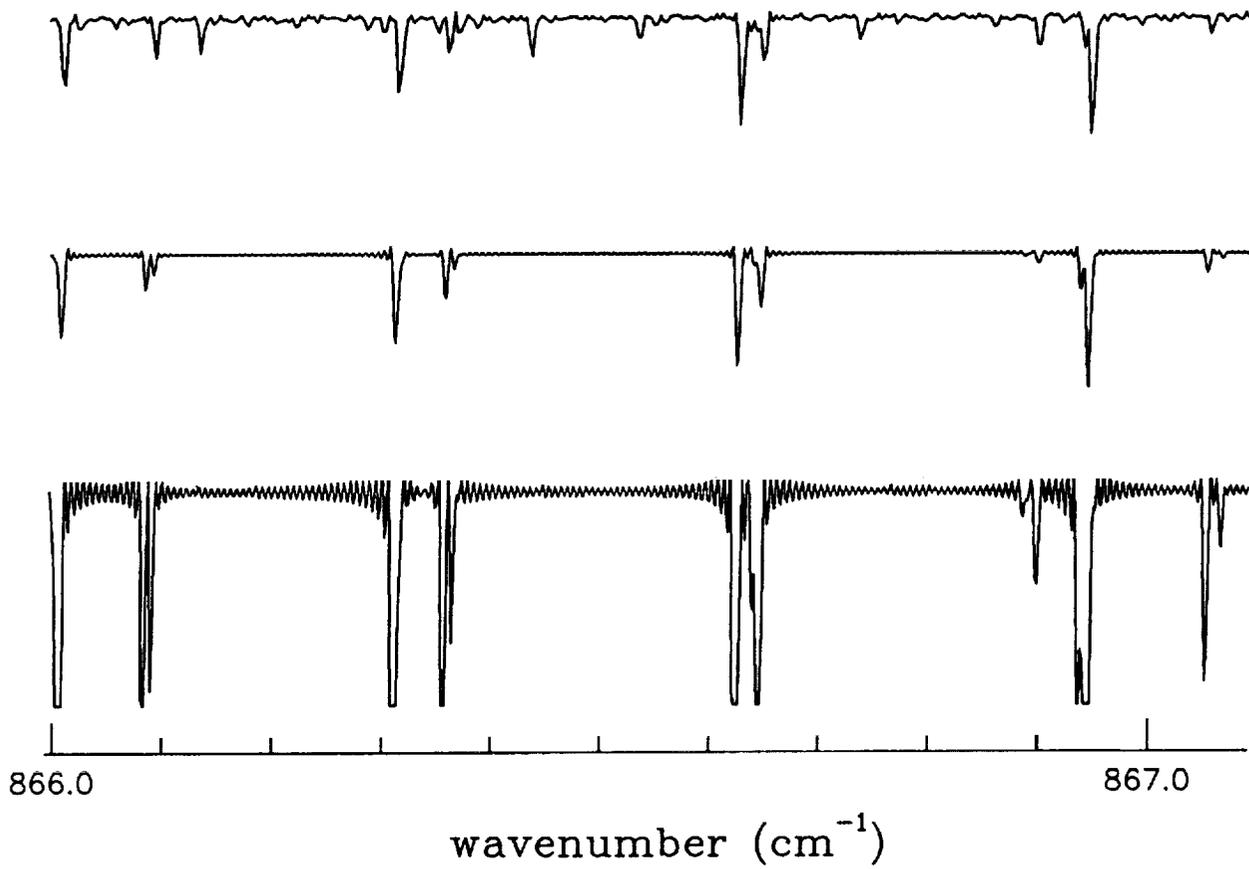


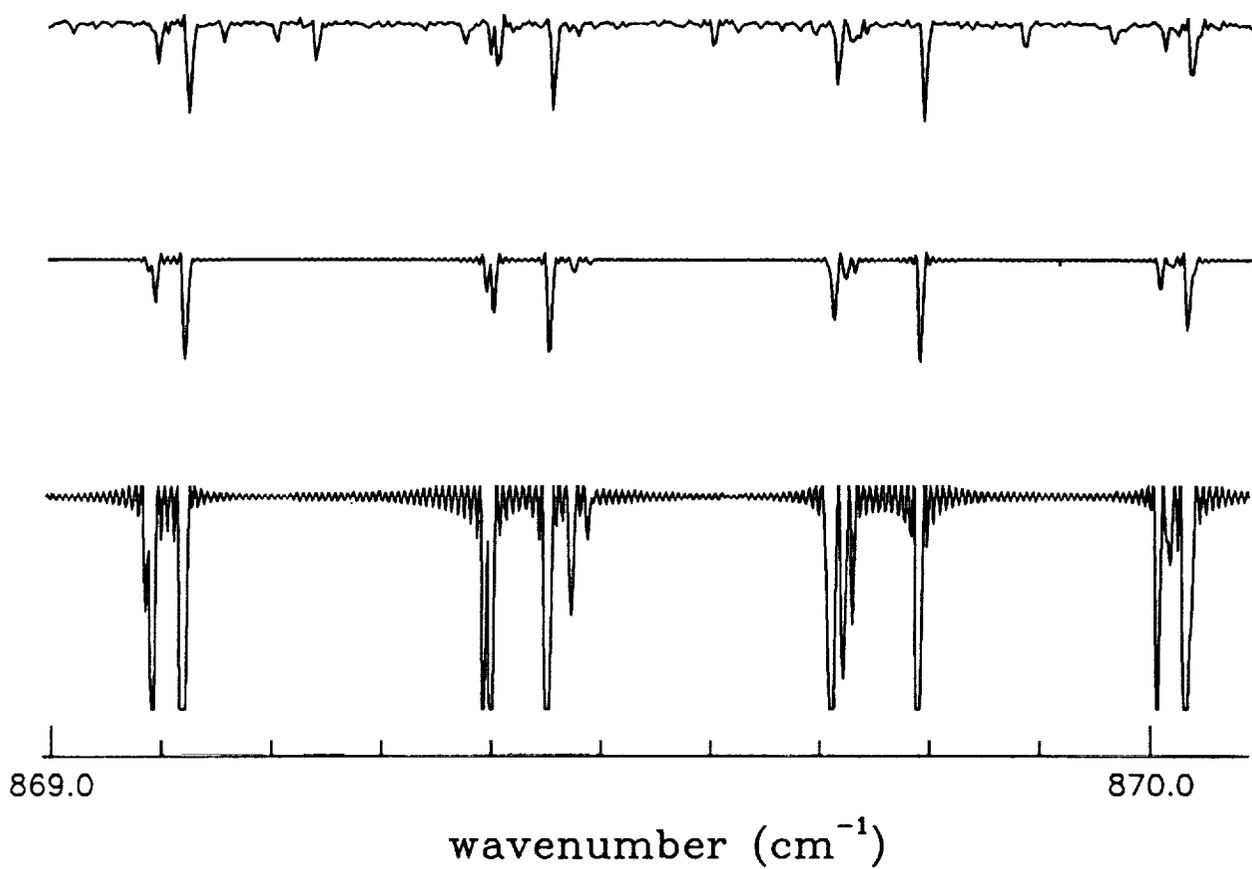
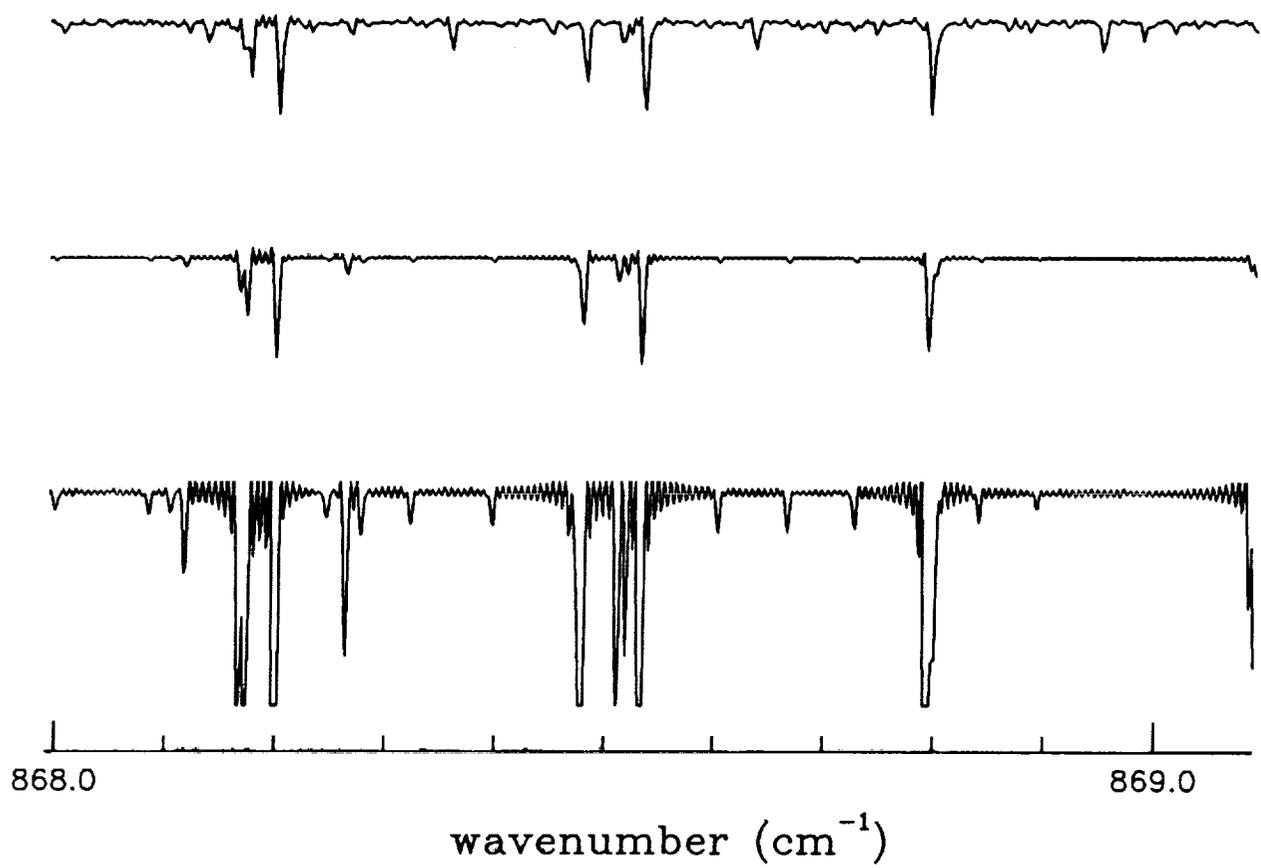


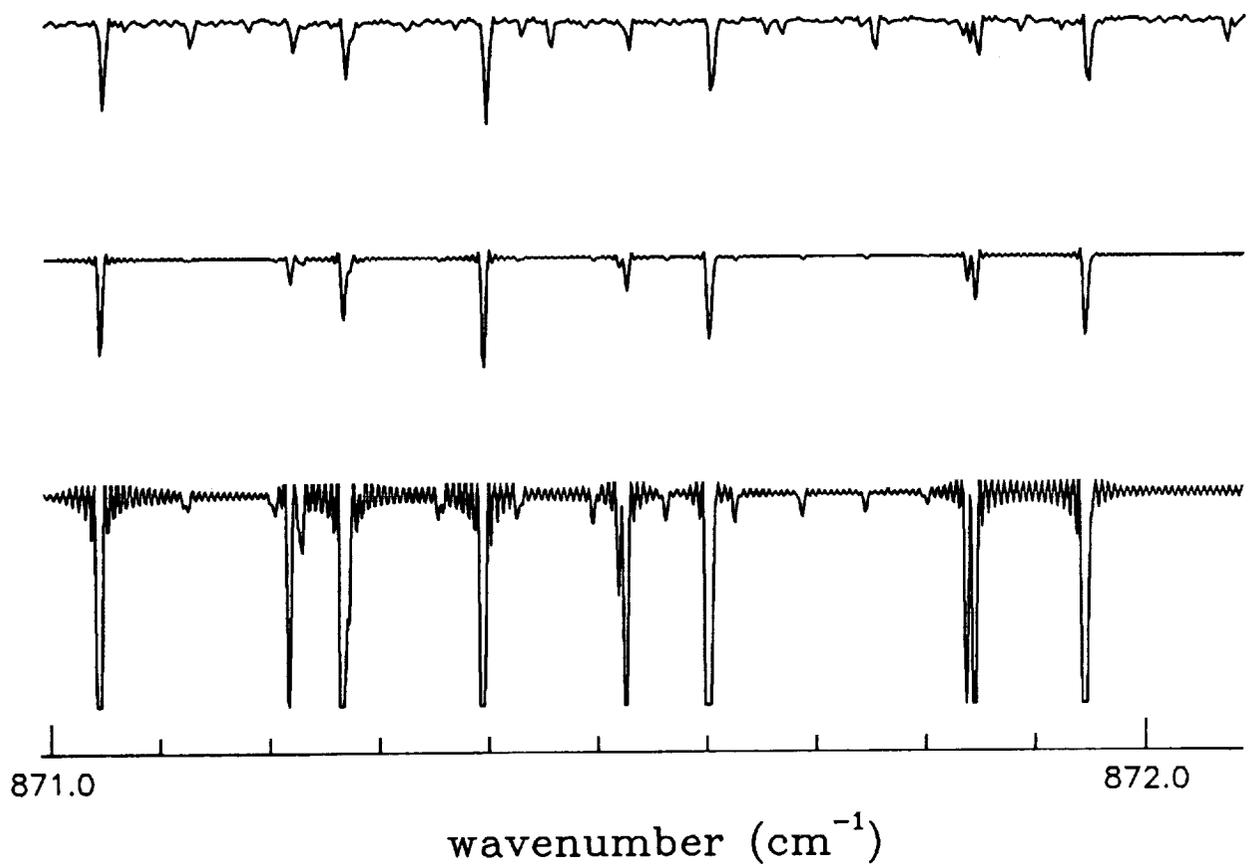
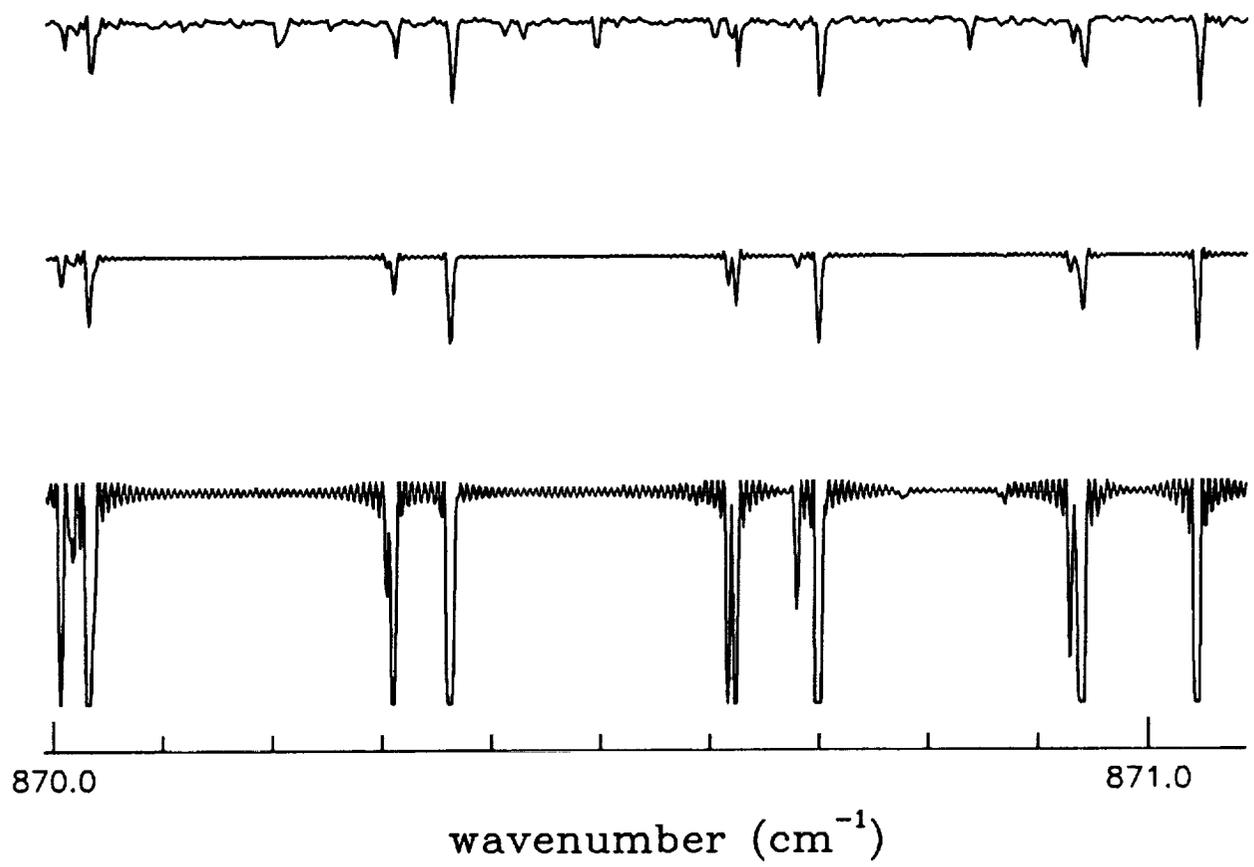


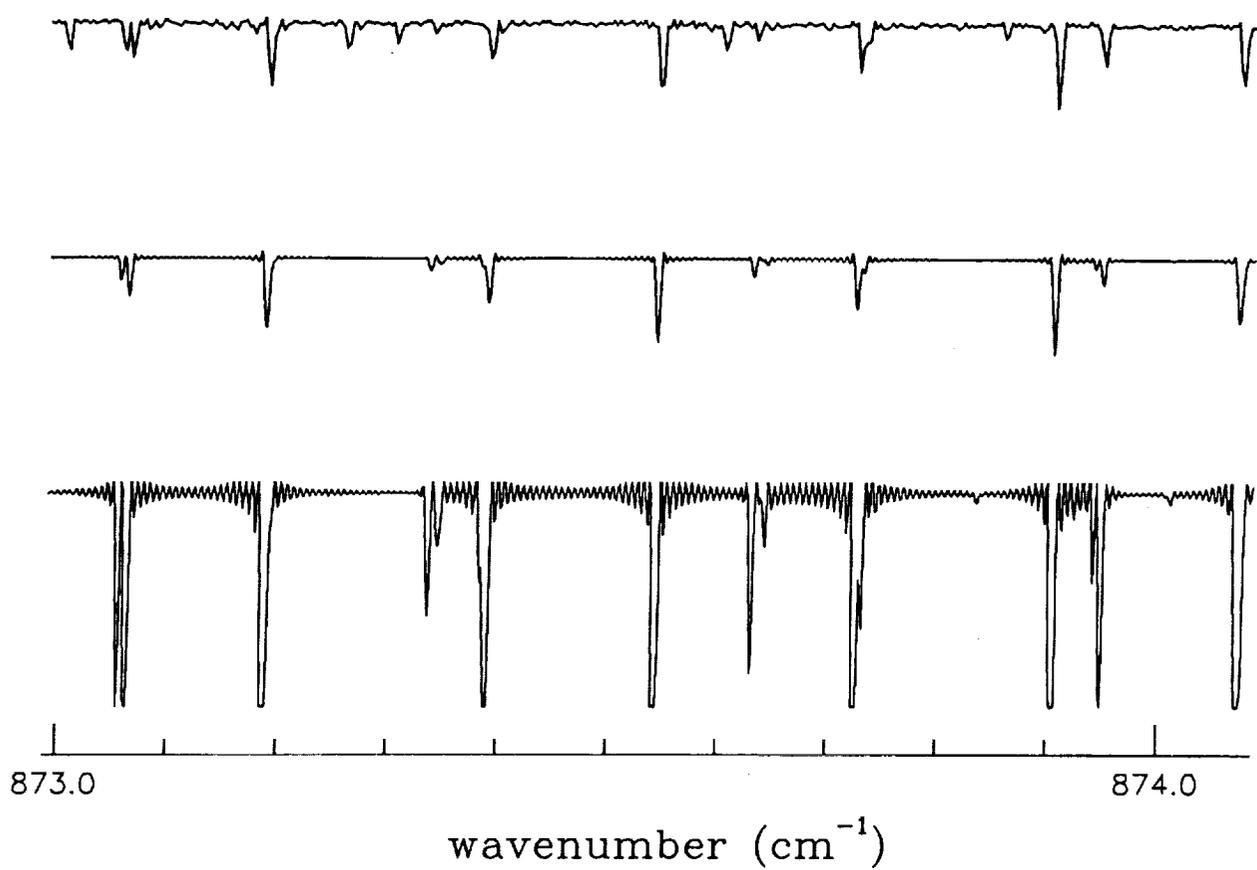
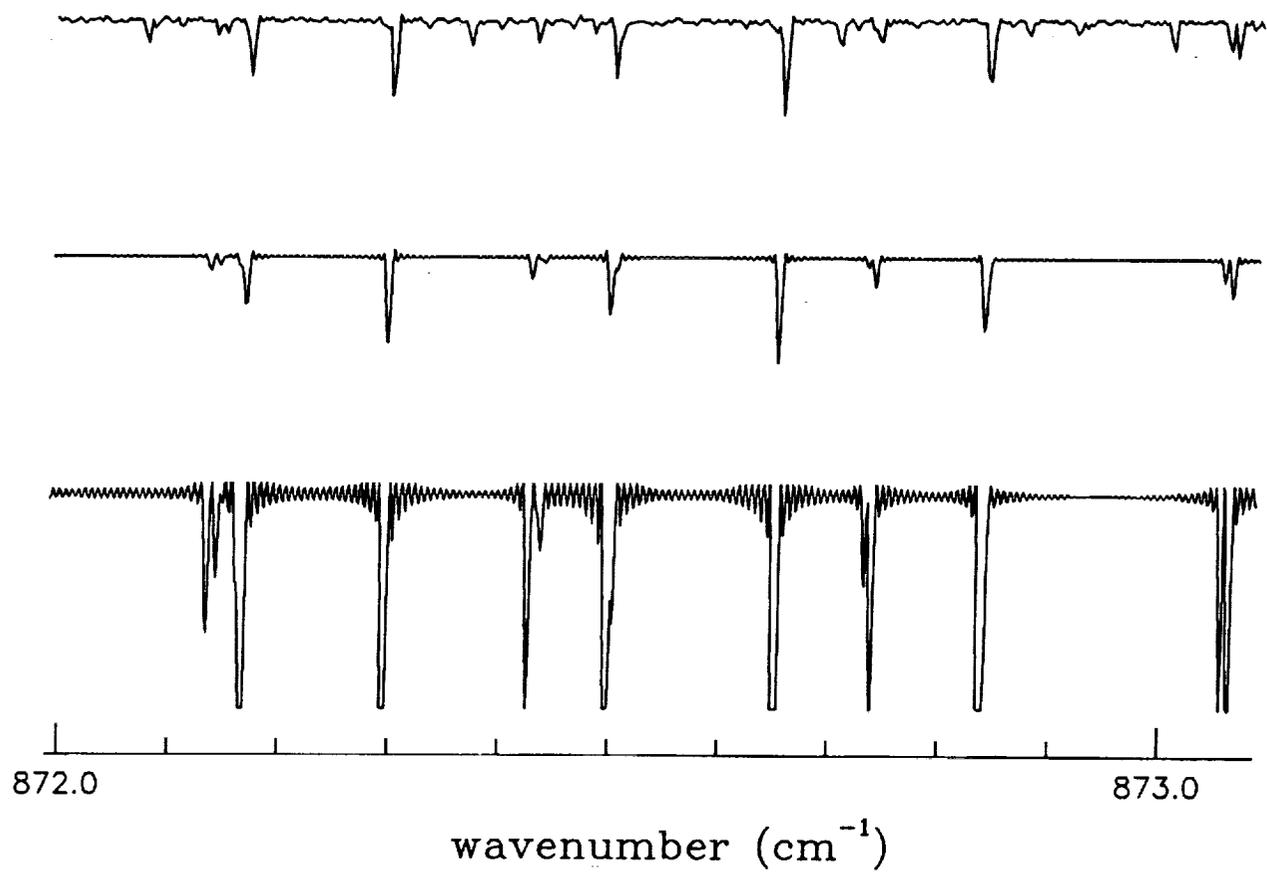


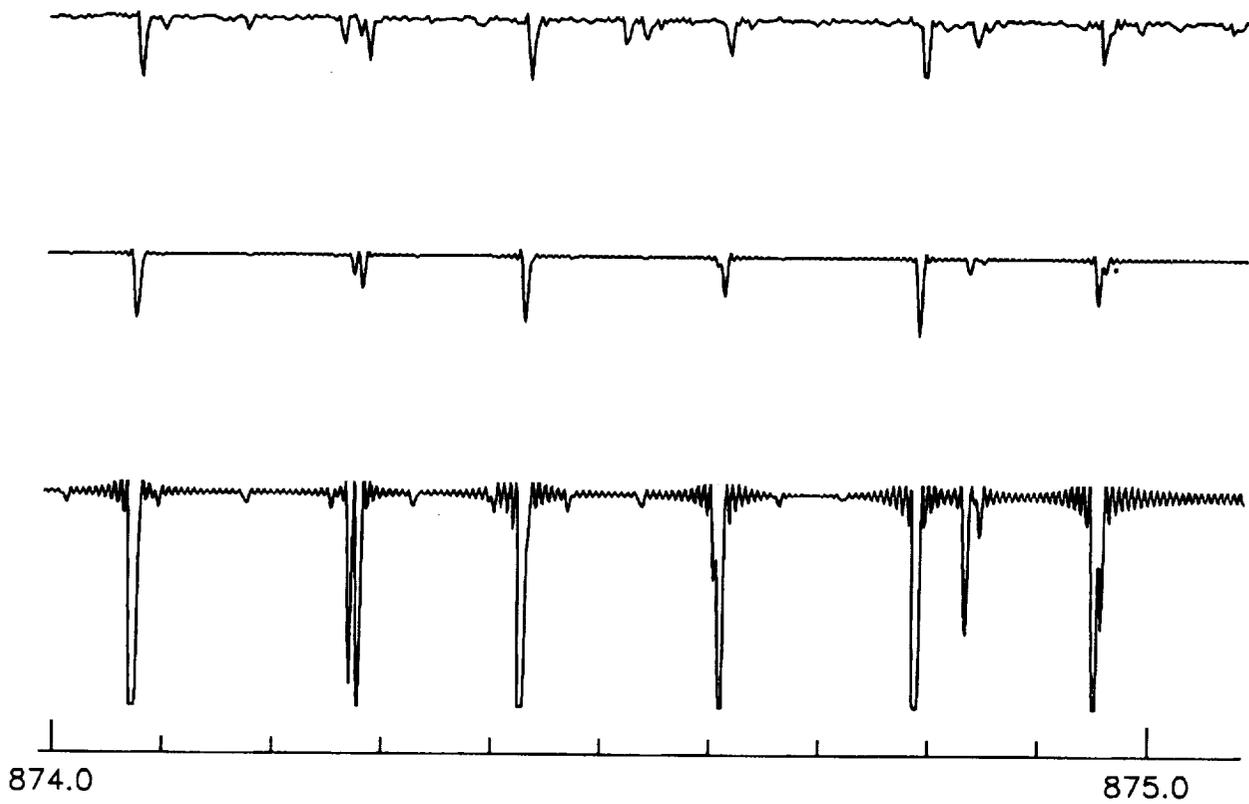




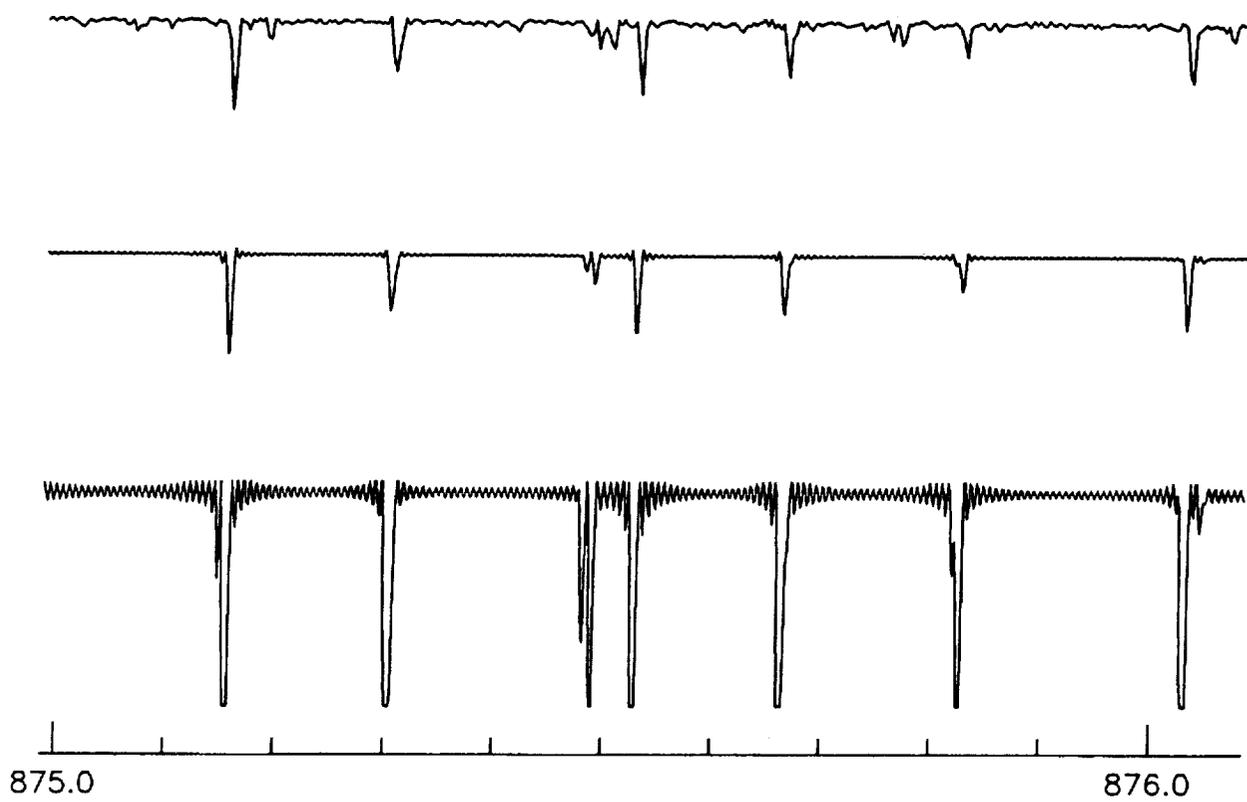




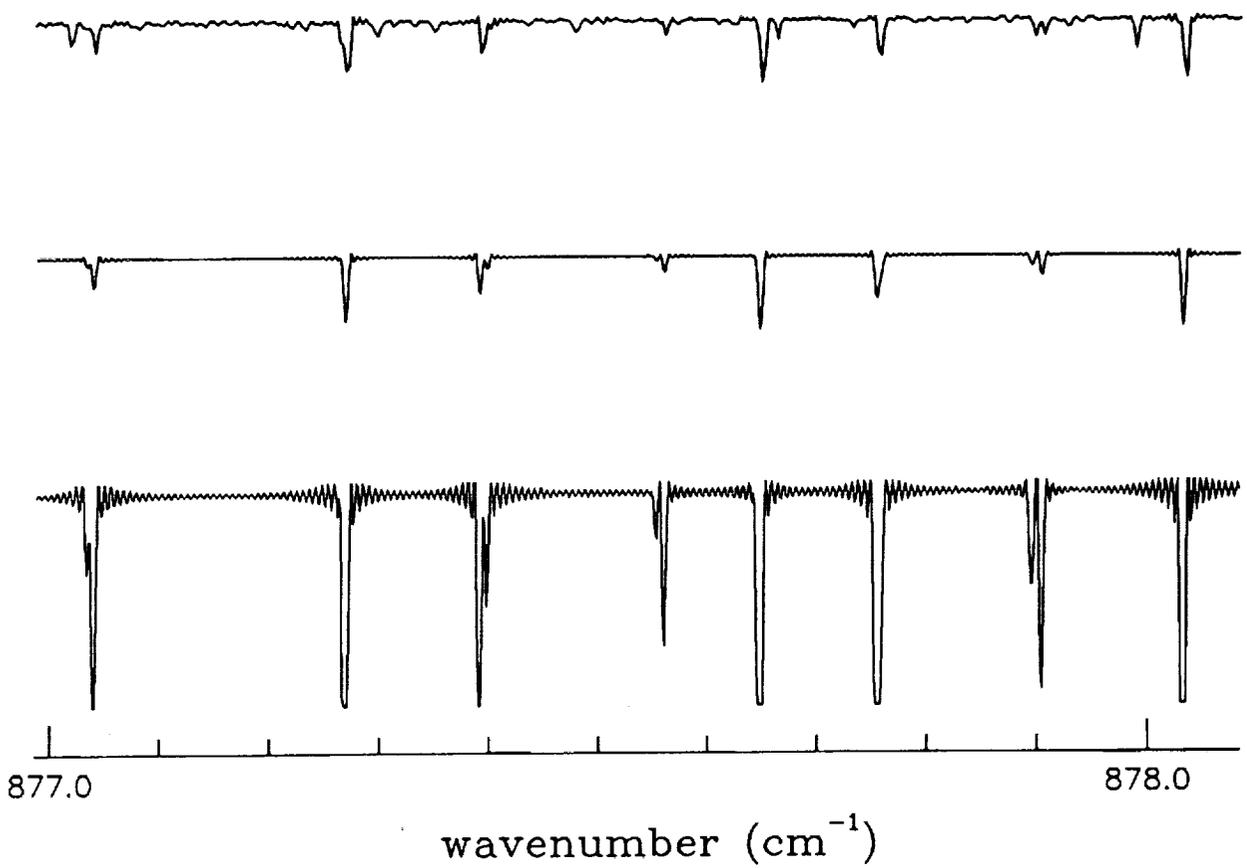
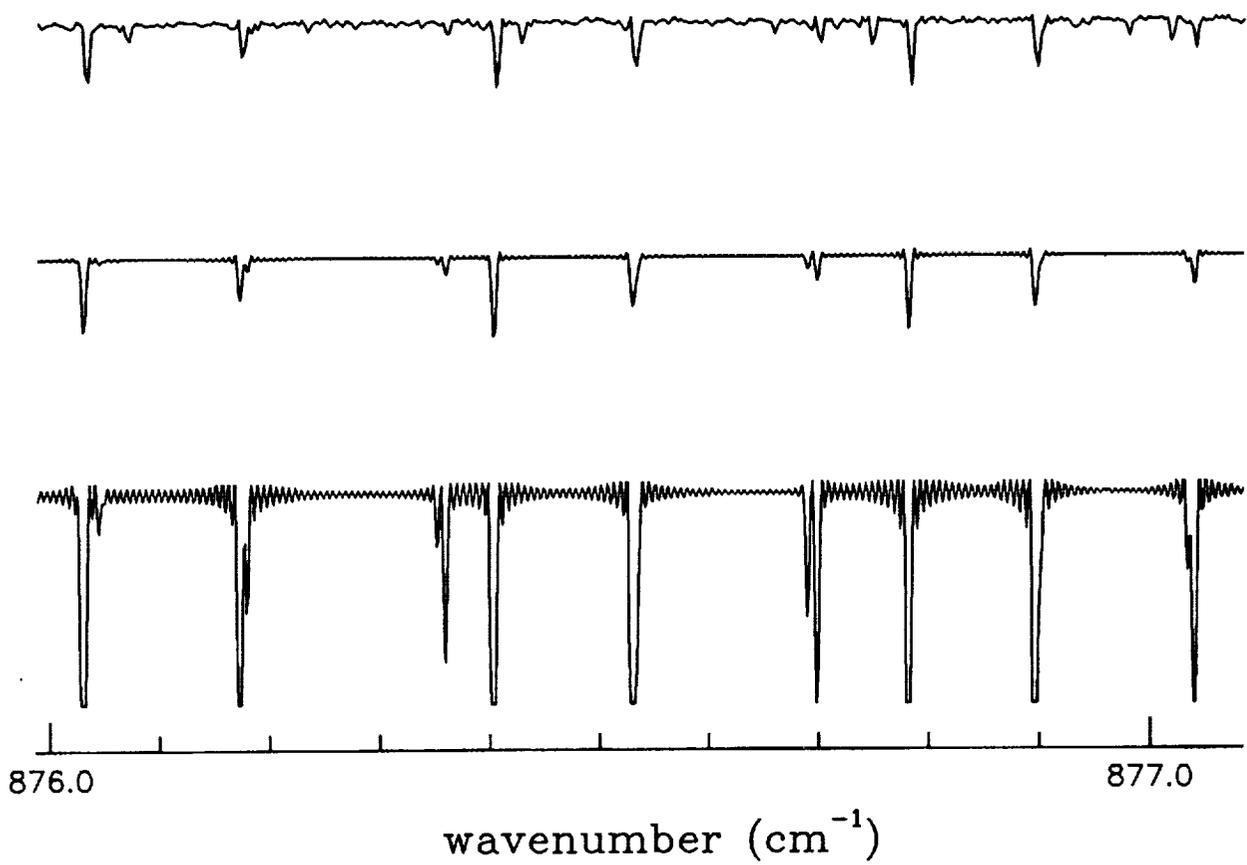


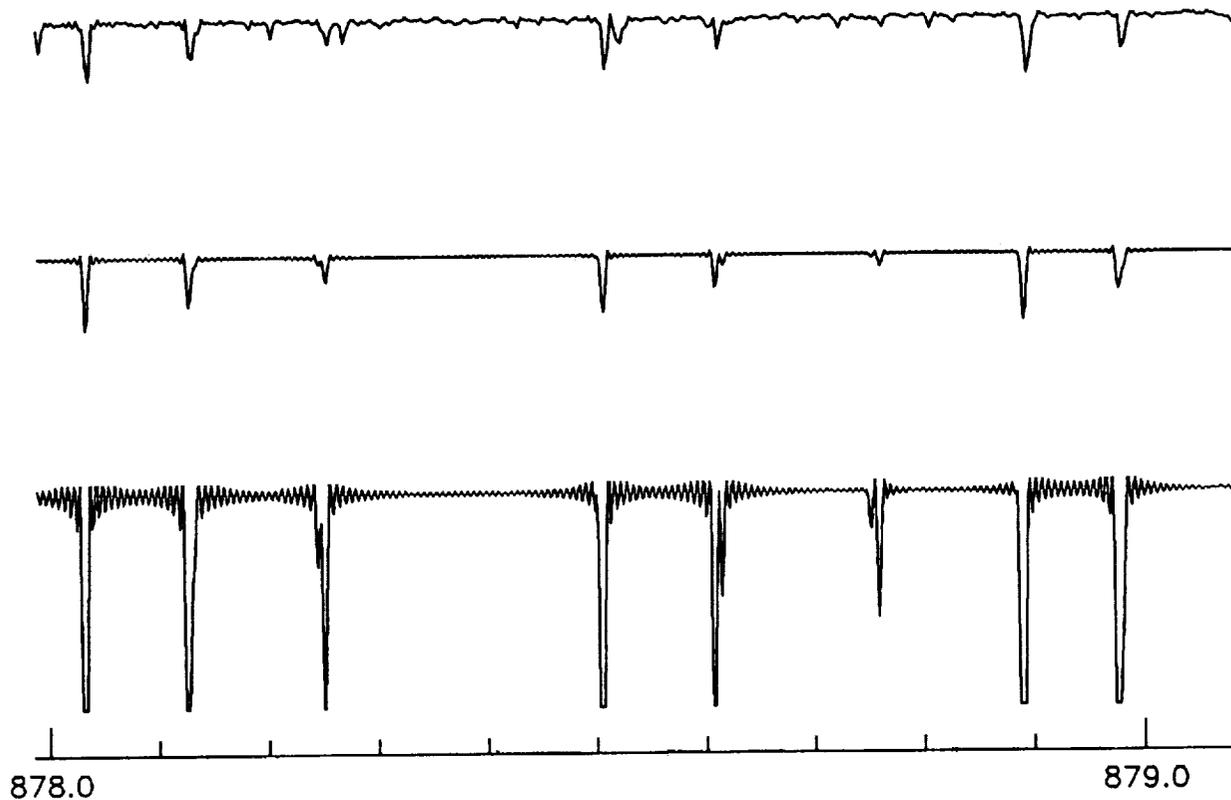


wavenumber (cm⁻¹)

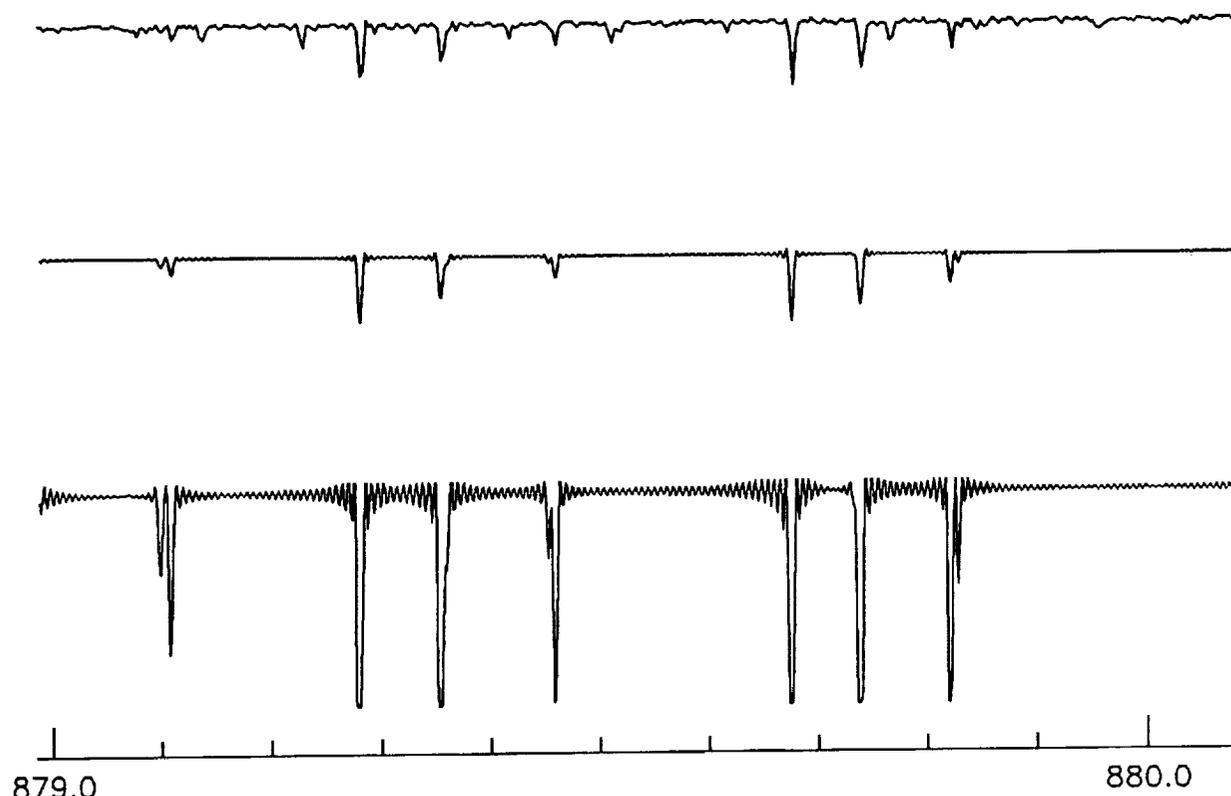


wavenumber (cm⁻¹)

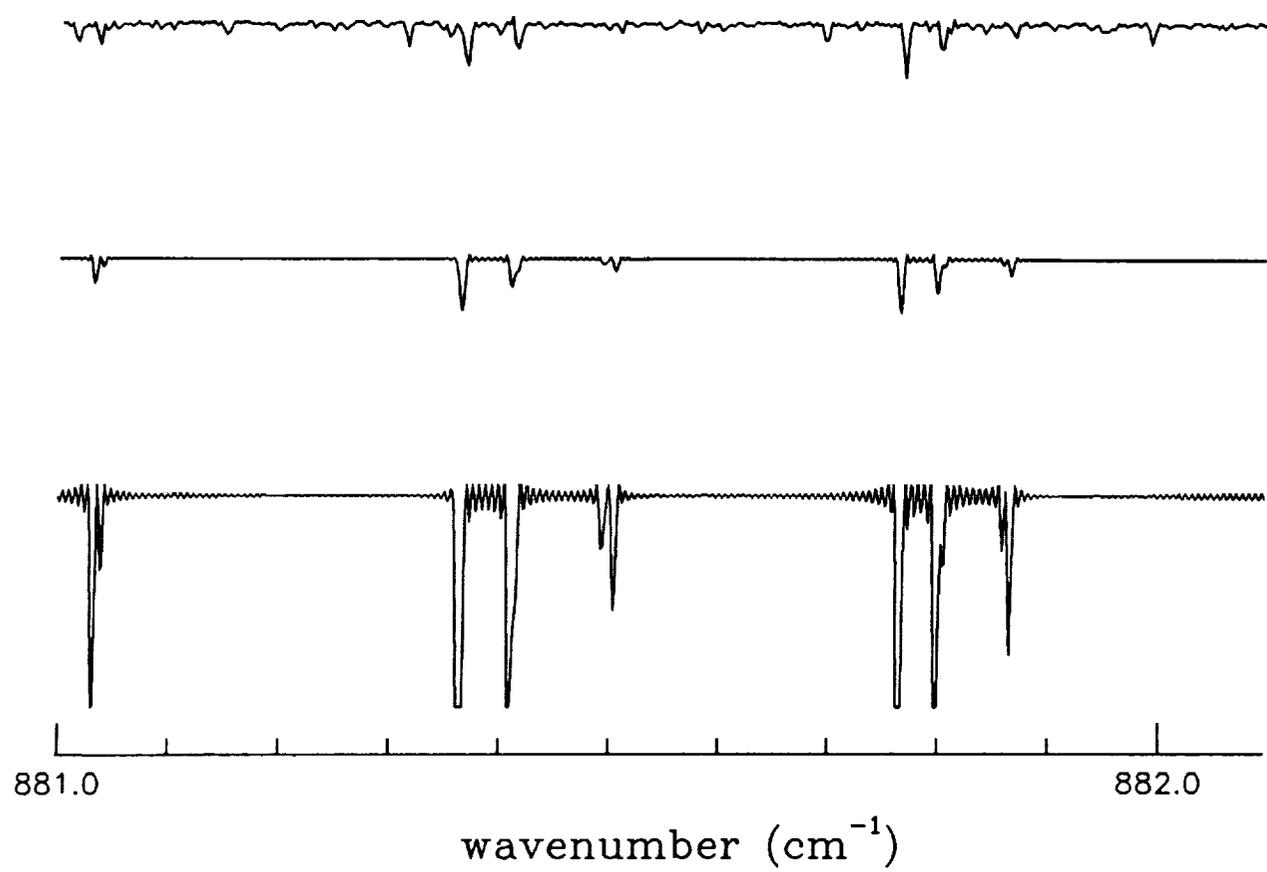
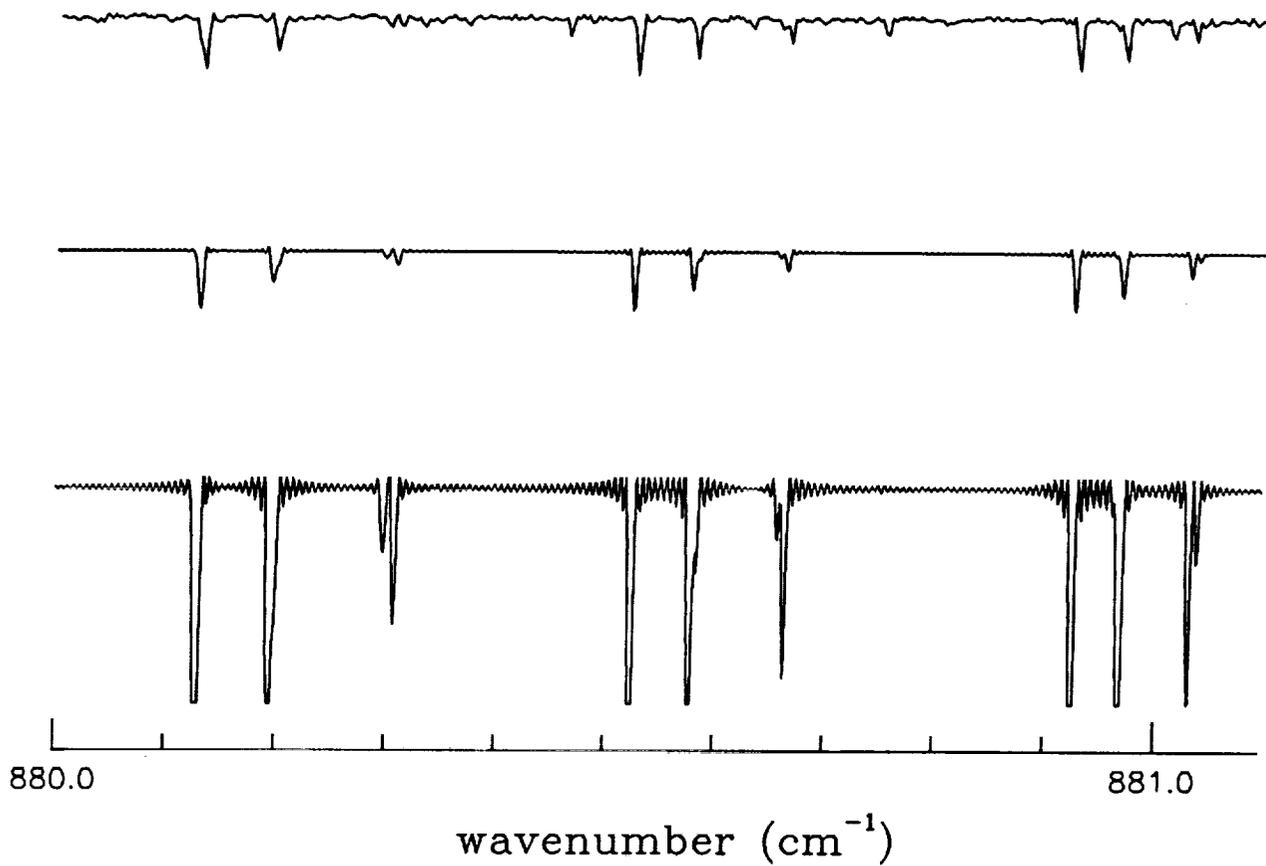


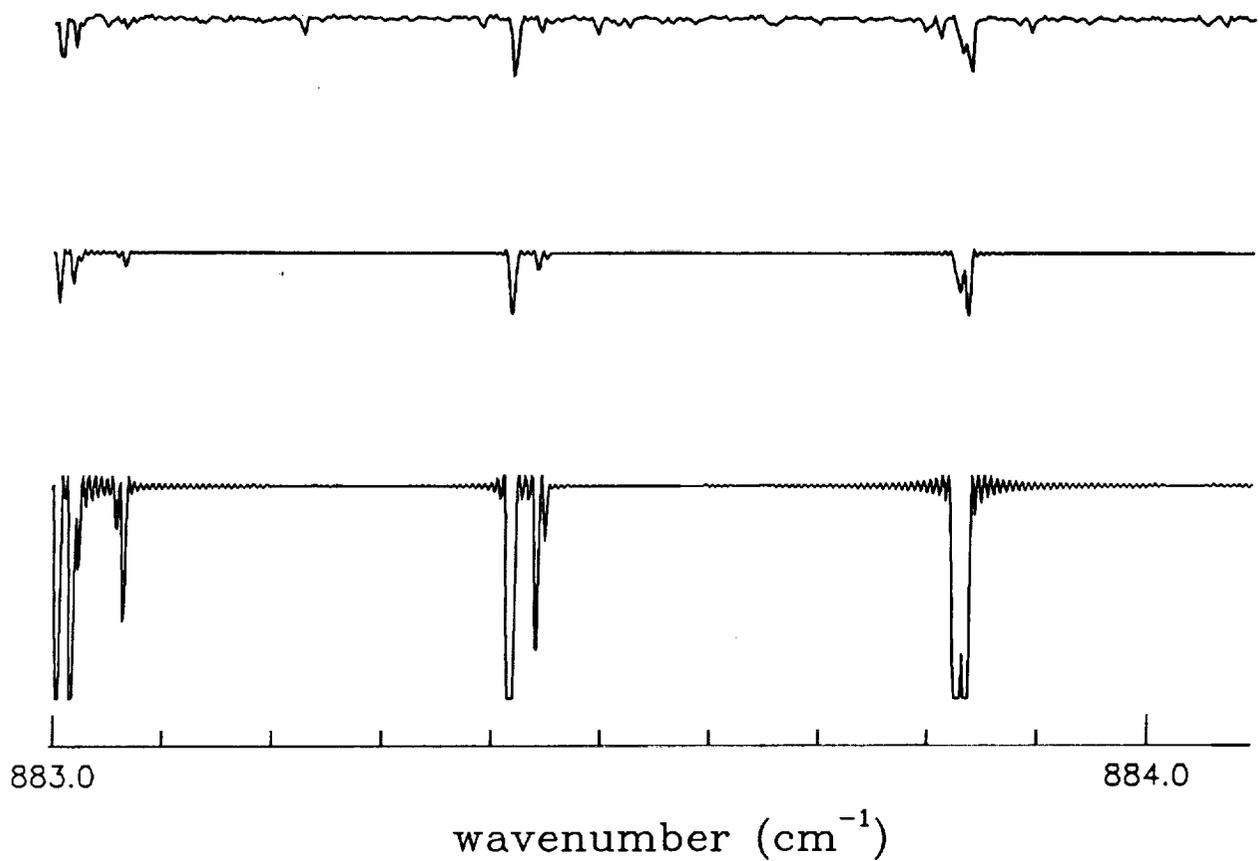
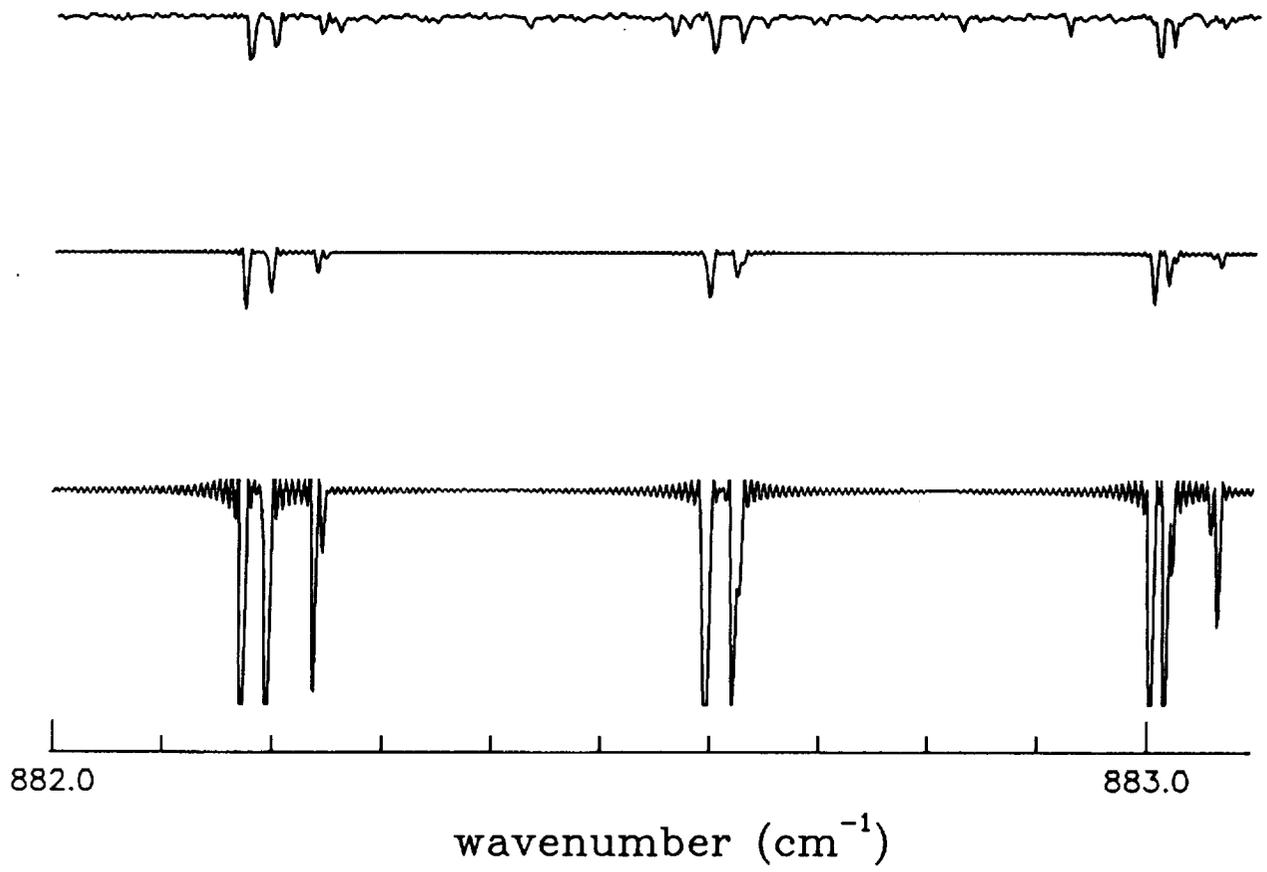


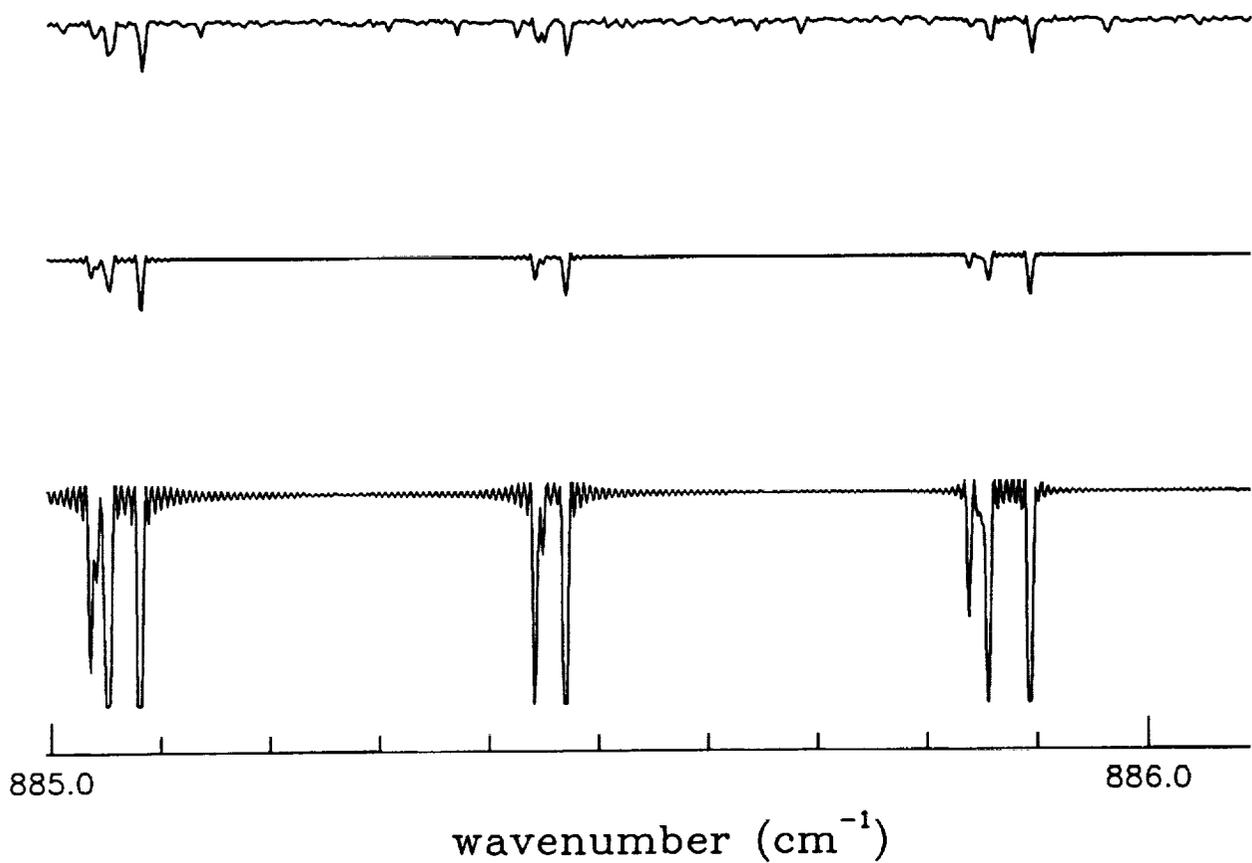
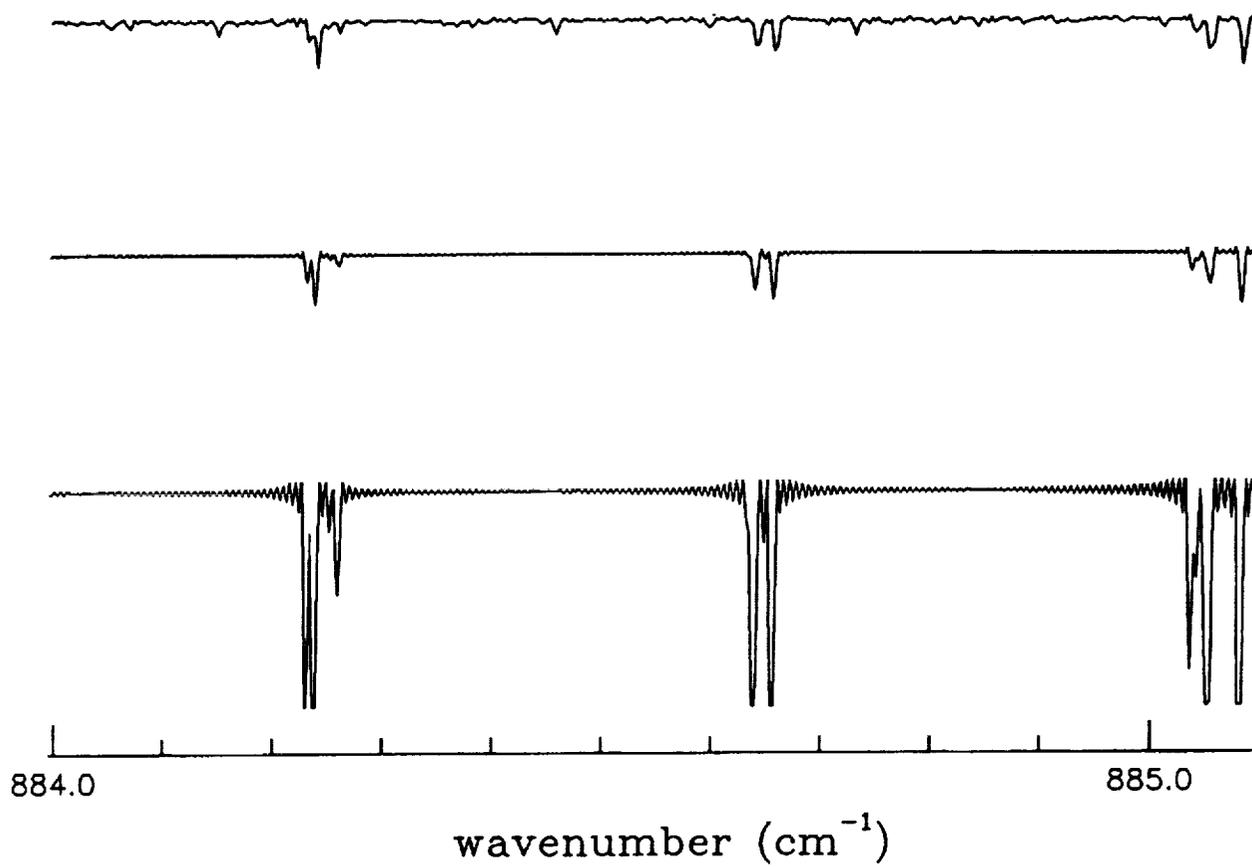
wavenumber (cm⁻¹)

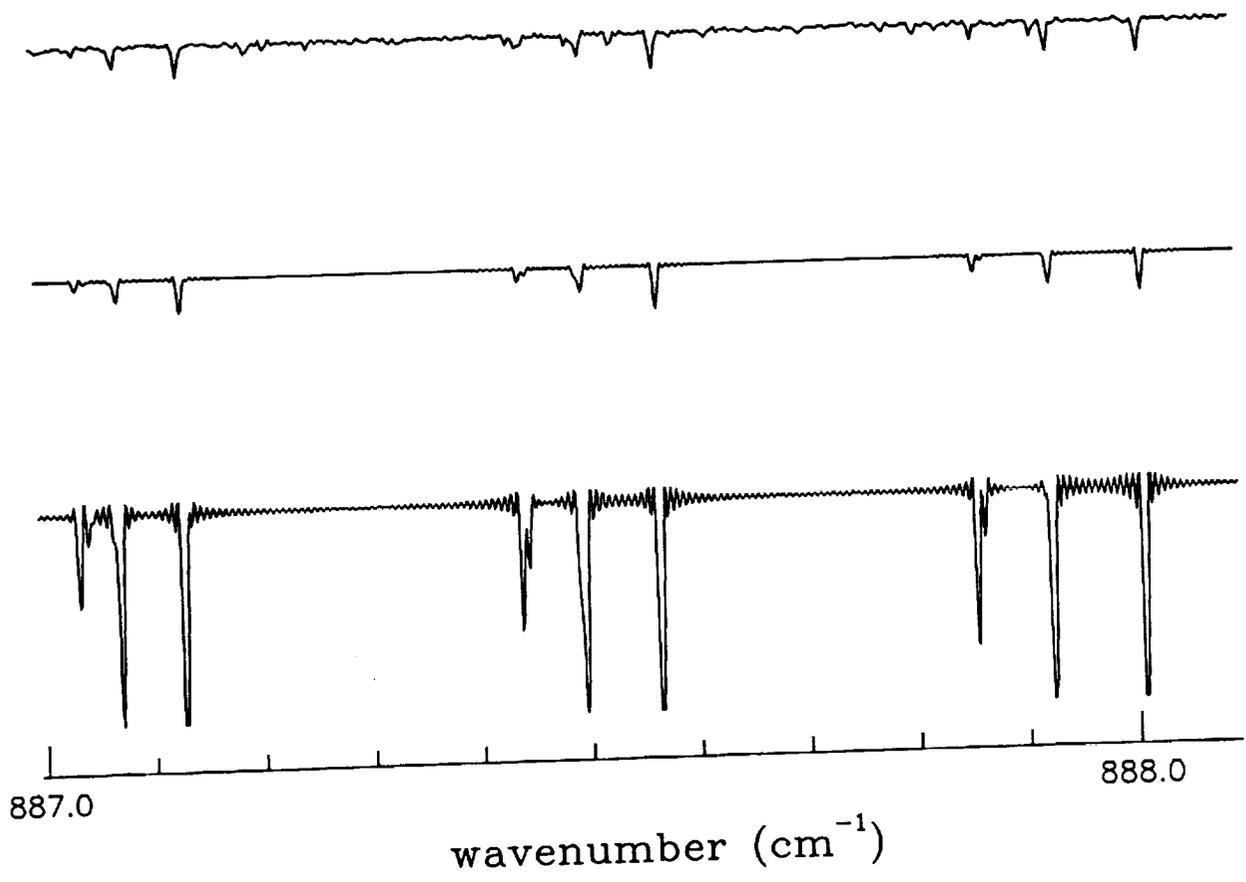
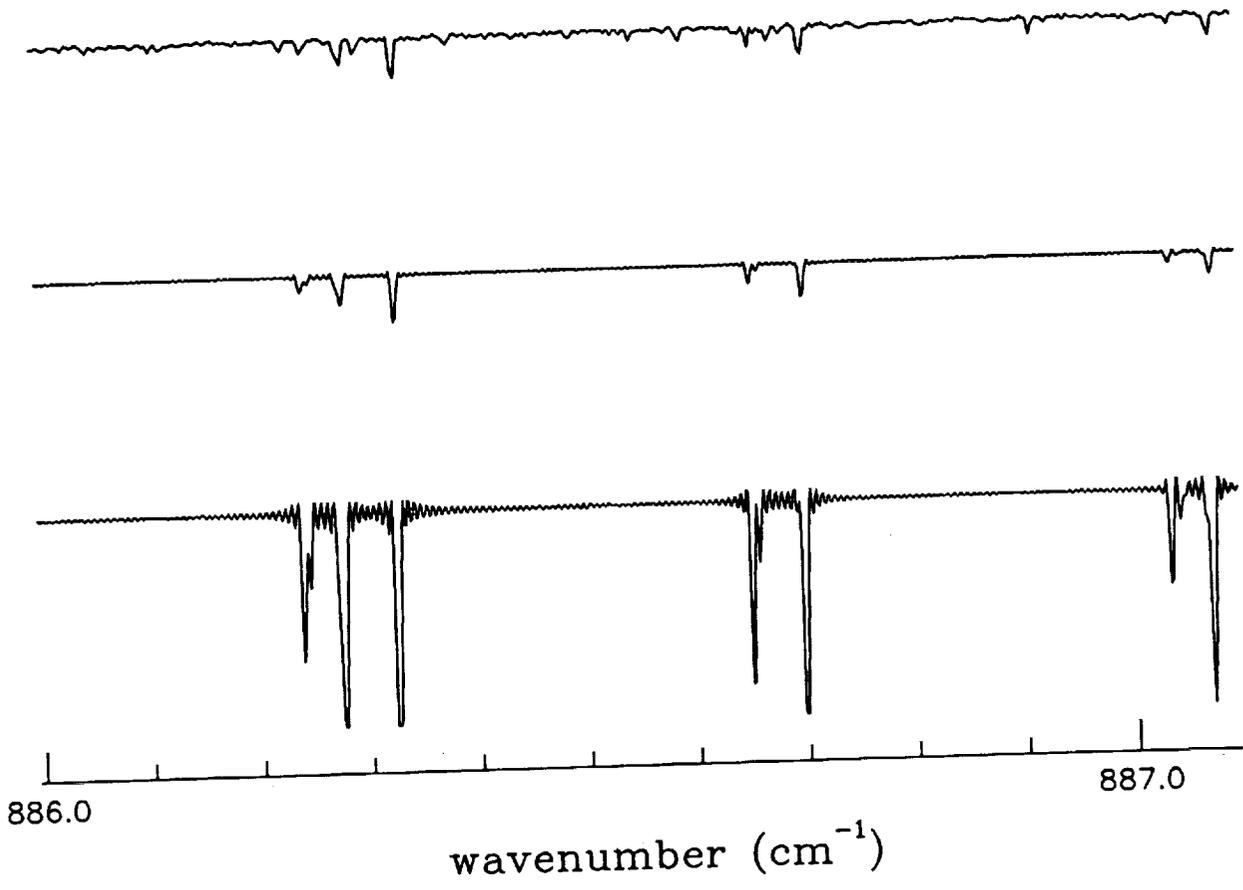


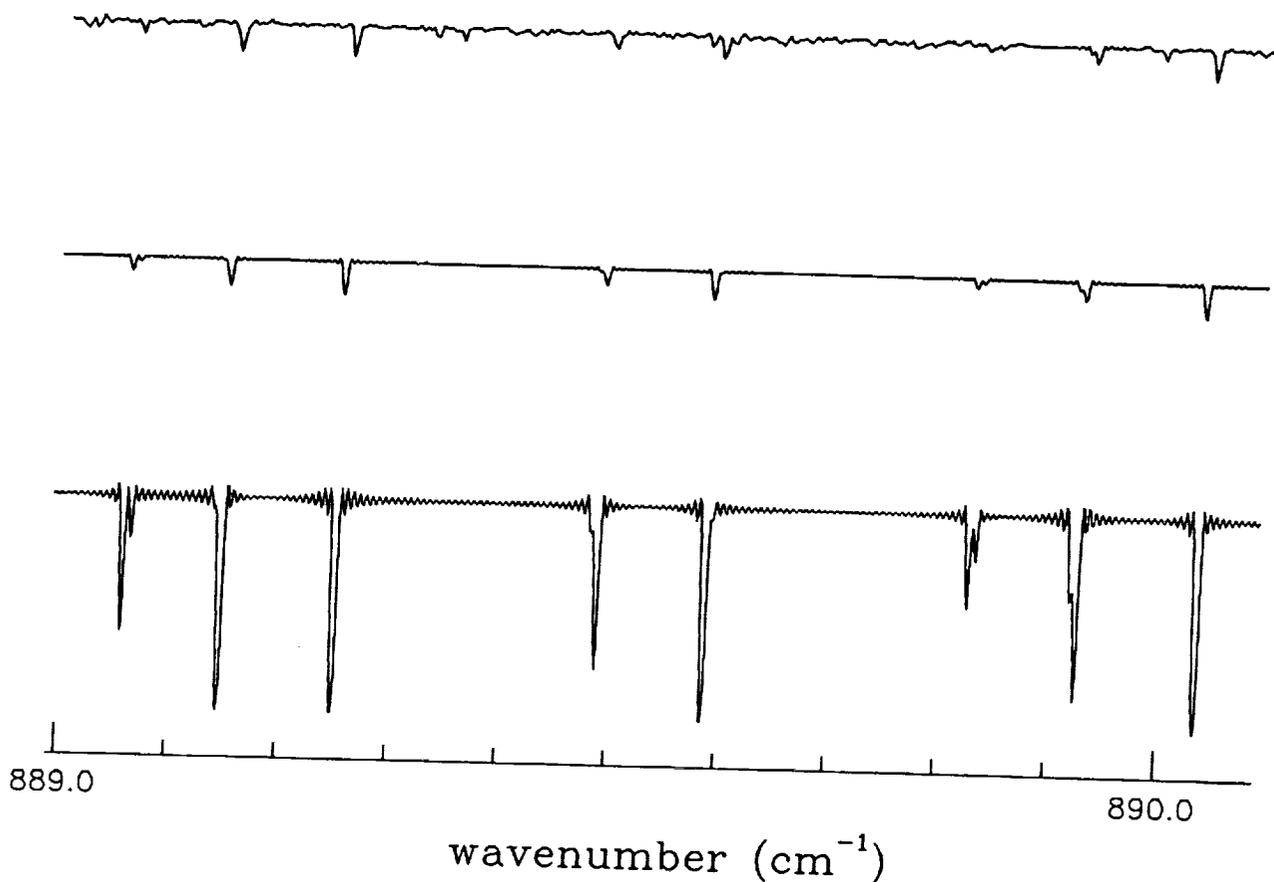
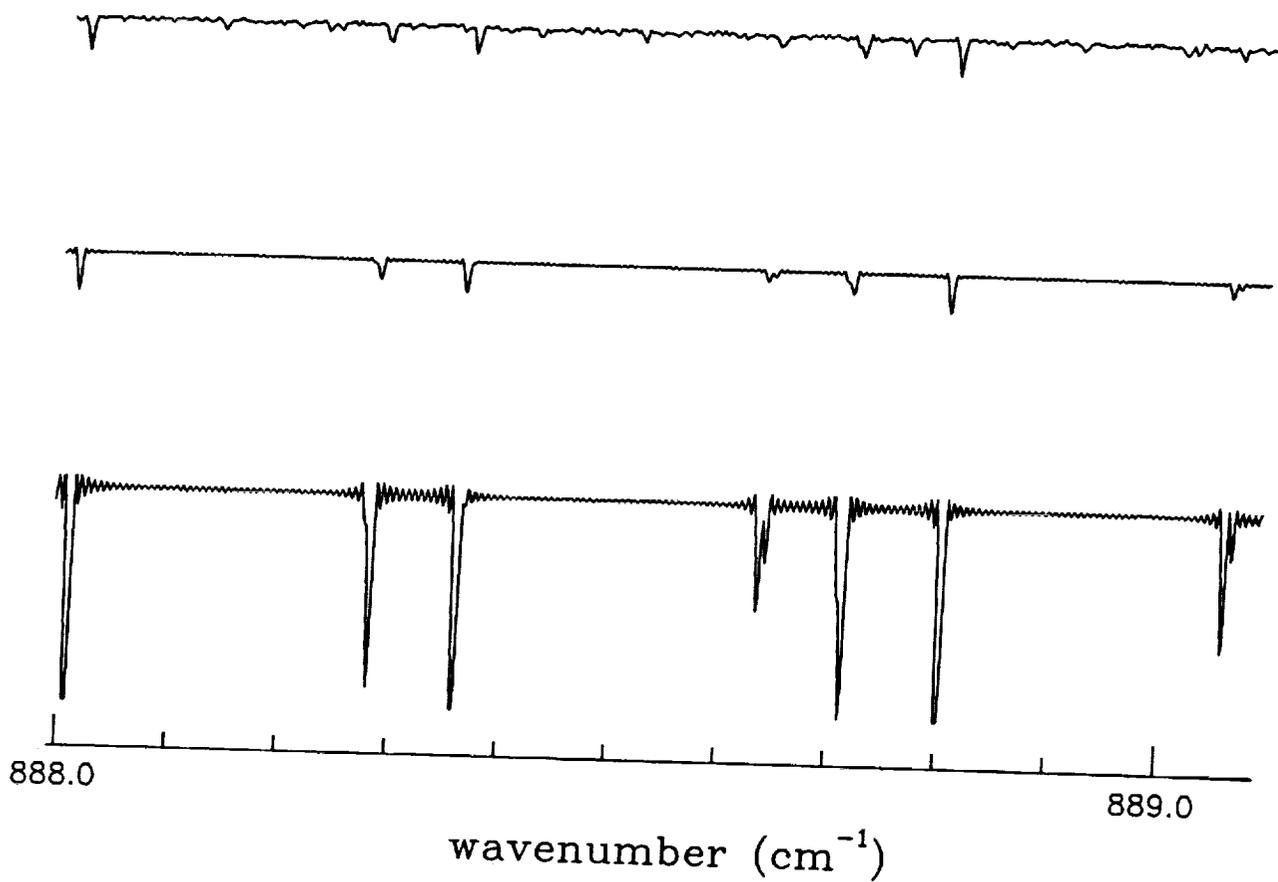
wavenumber (cm⁻¹)

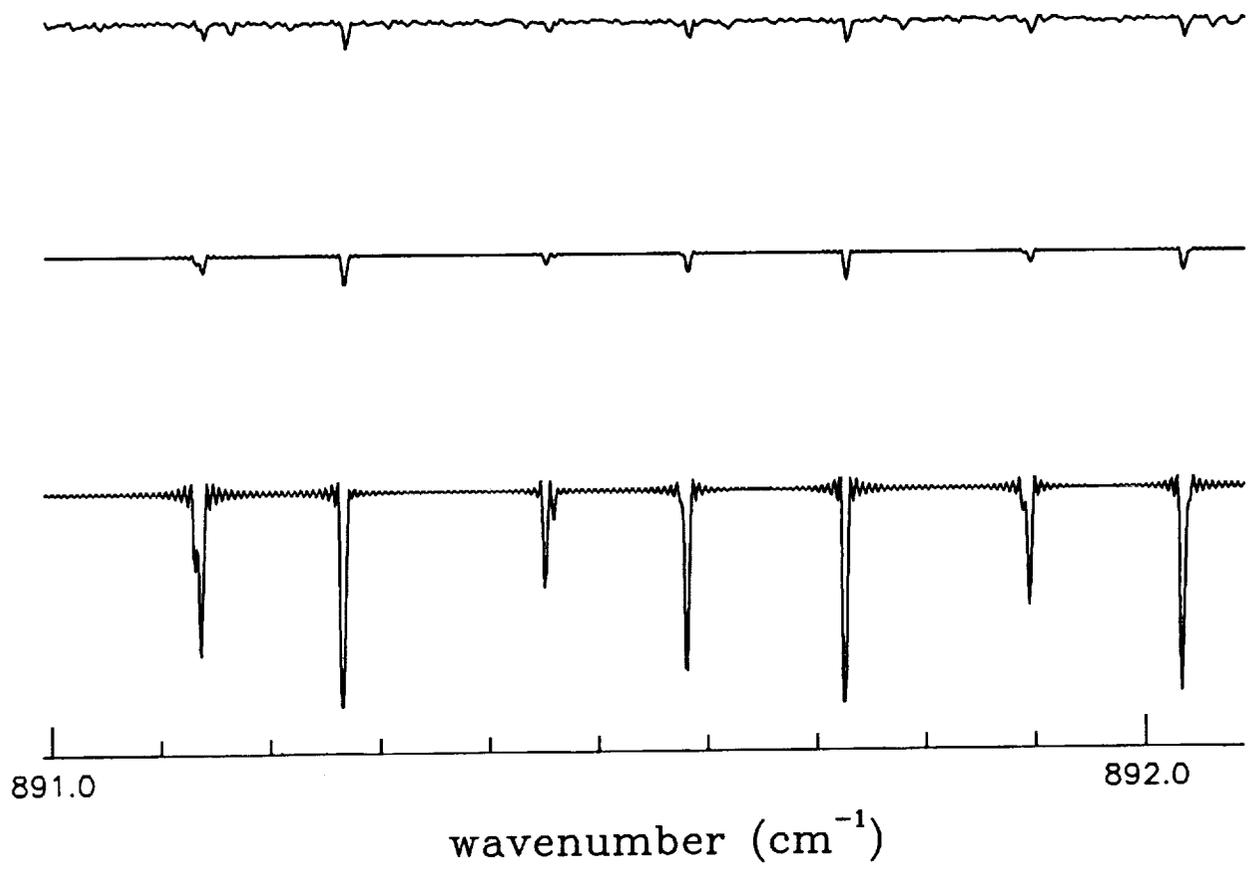
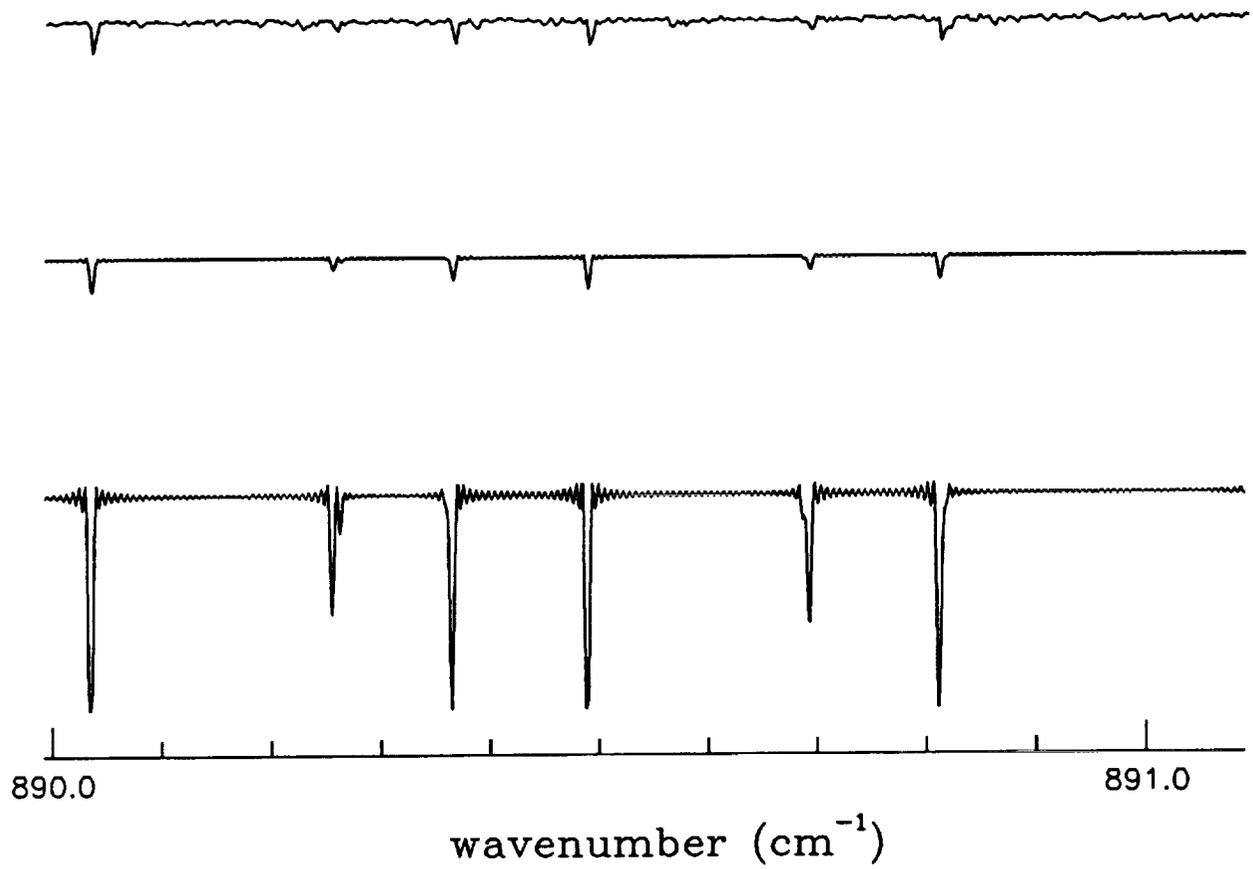


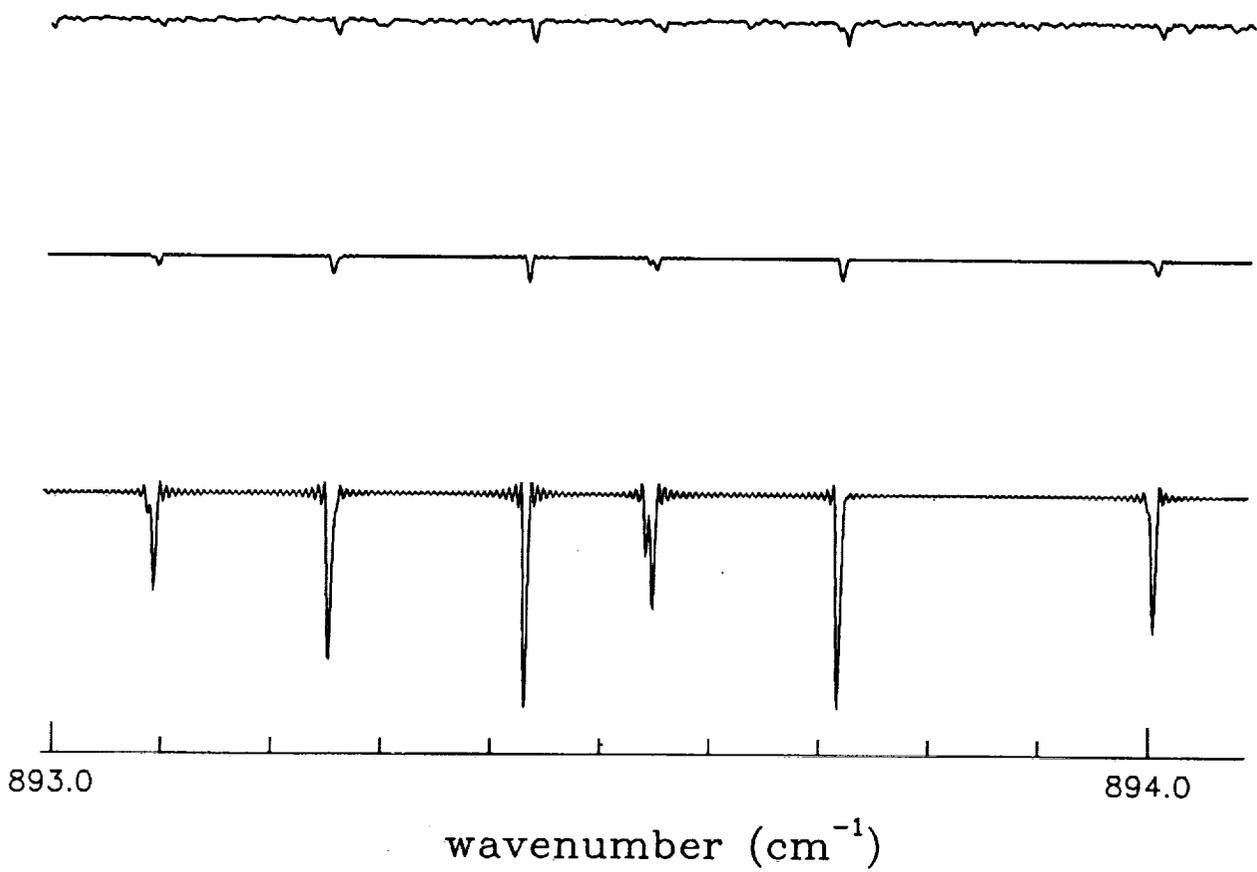
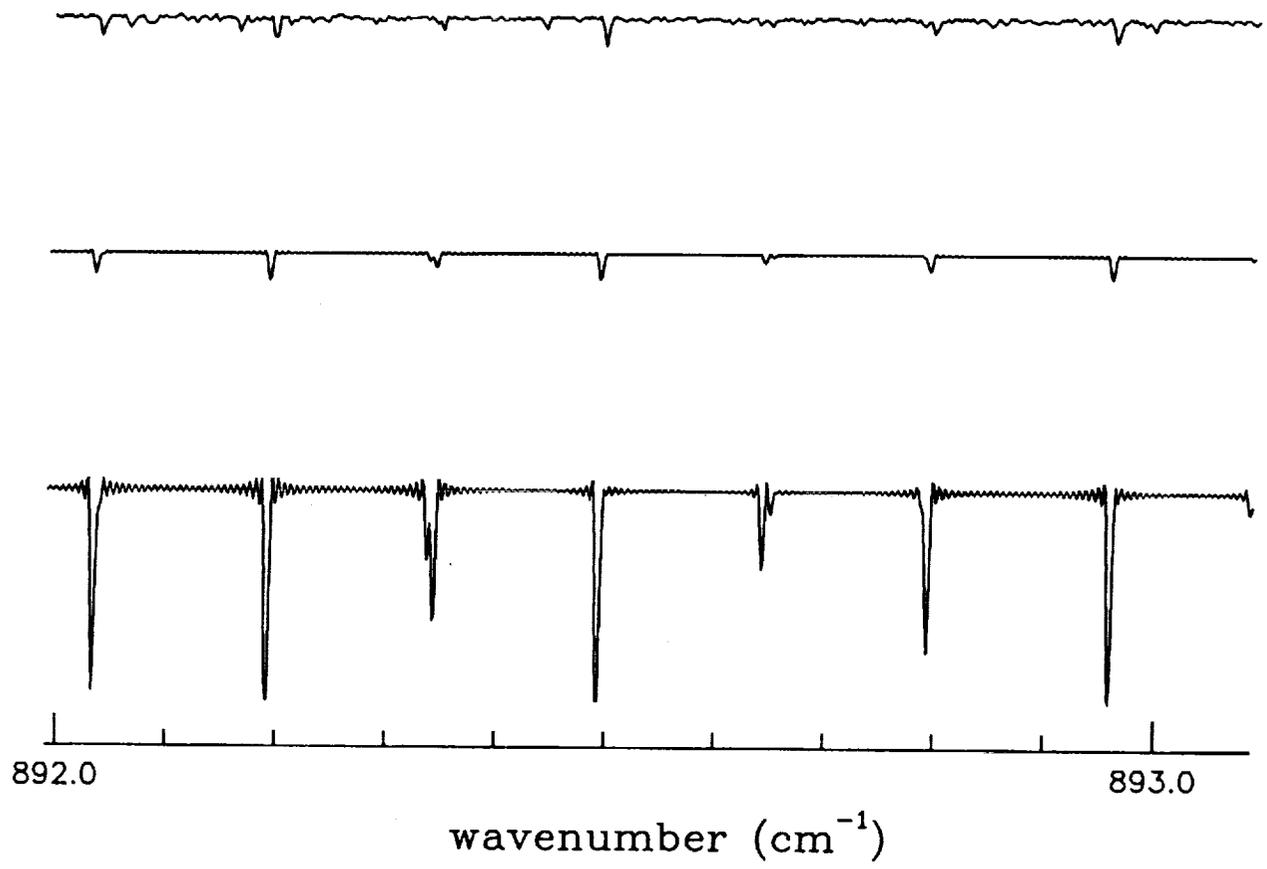


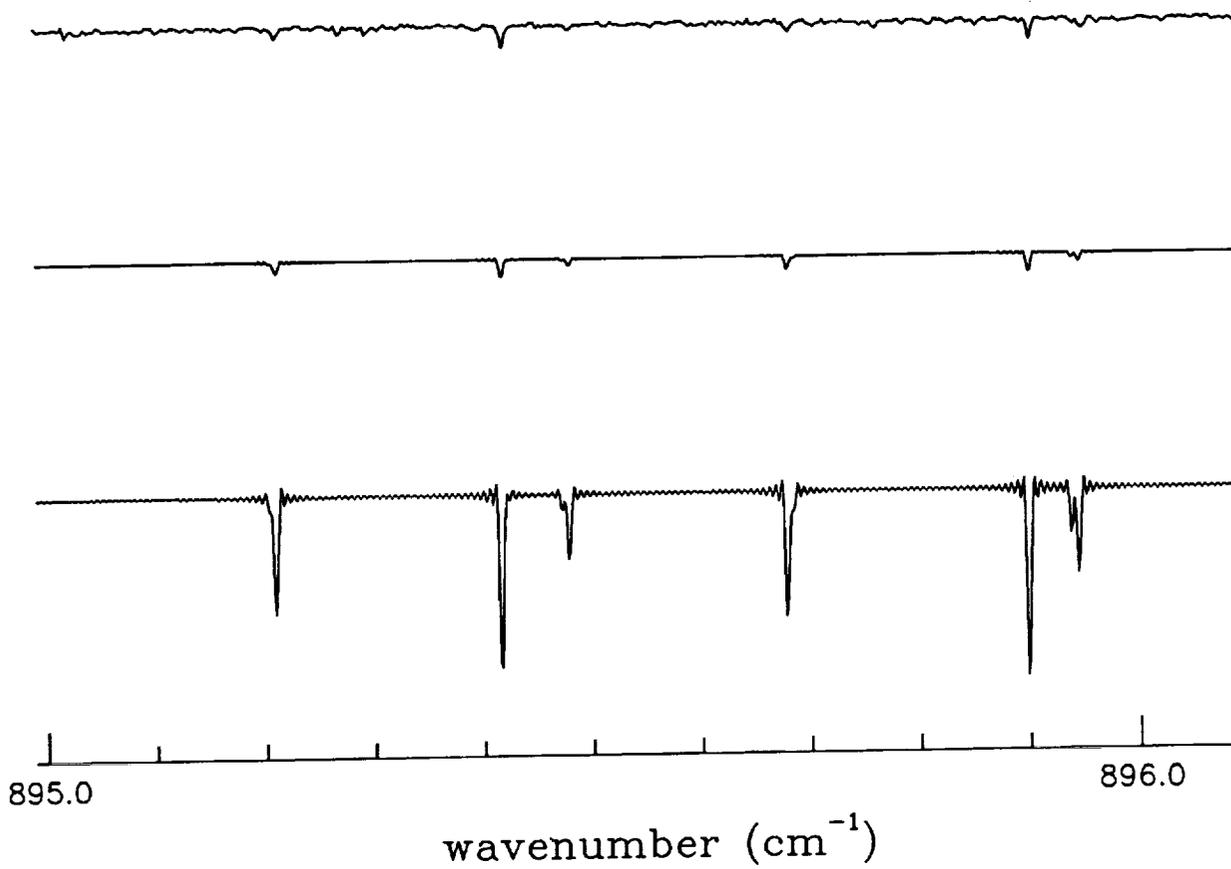
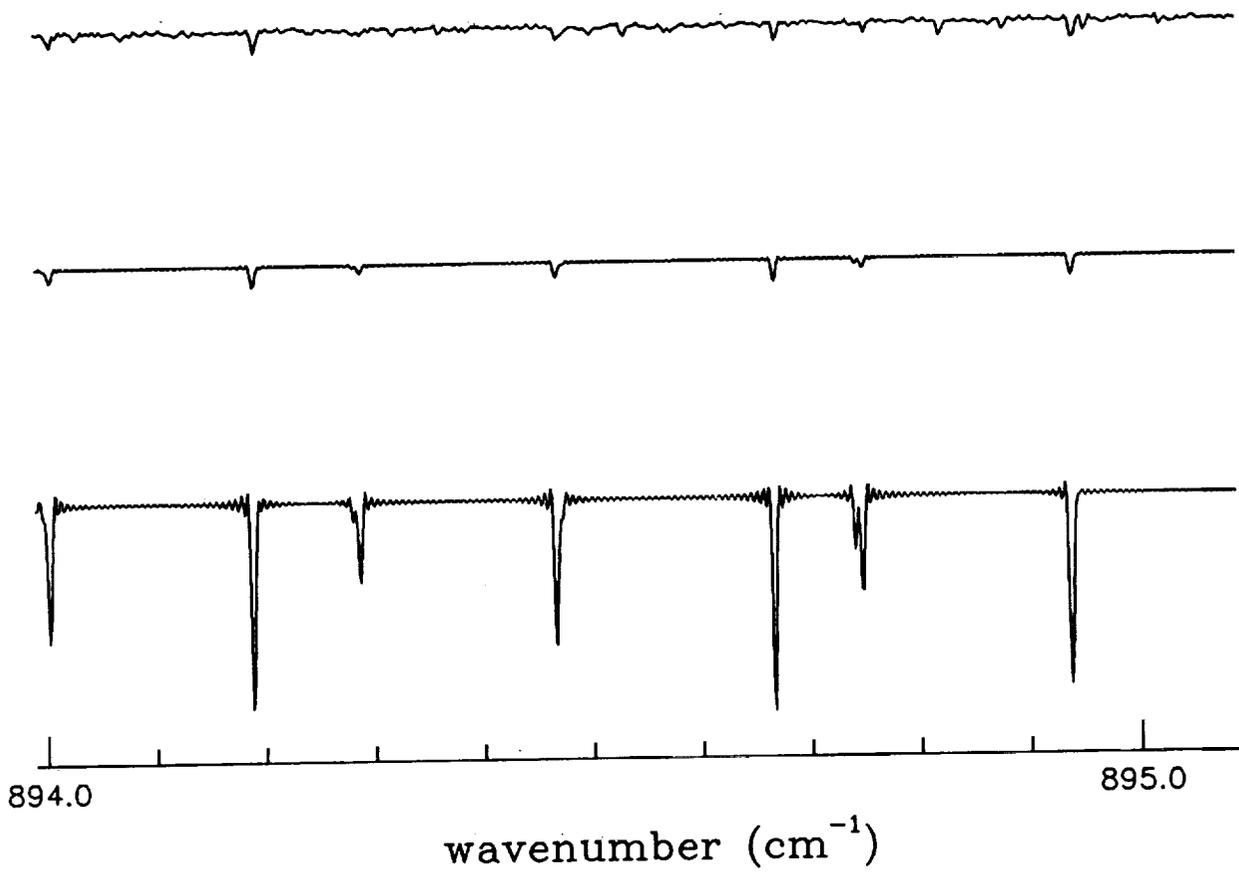


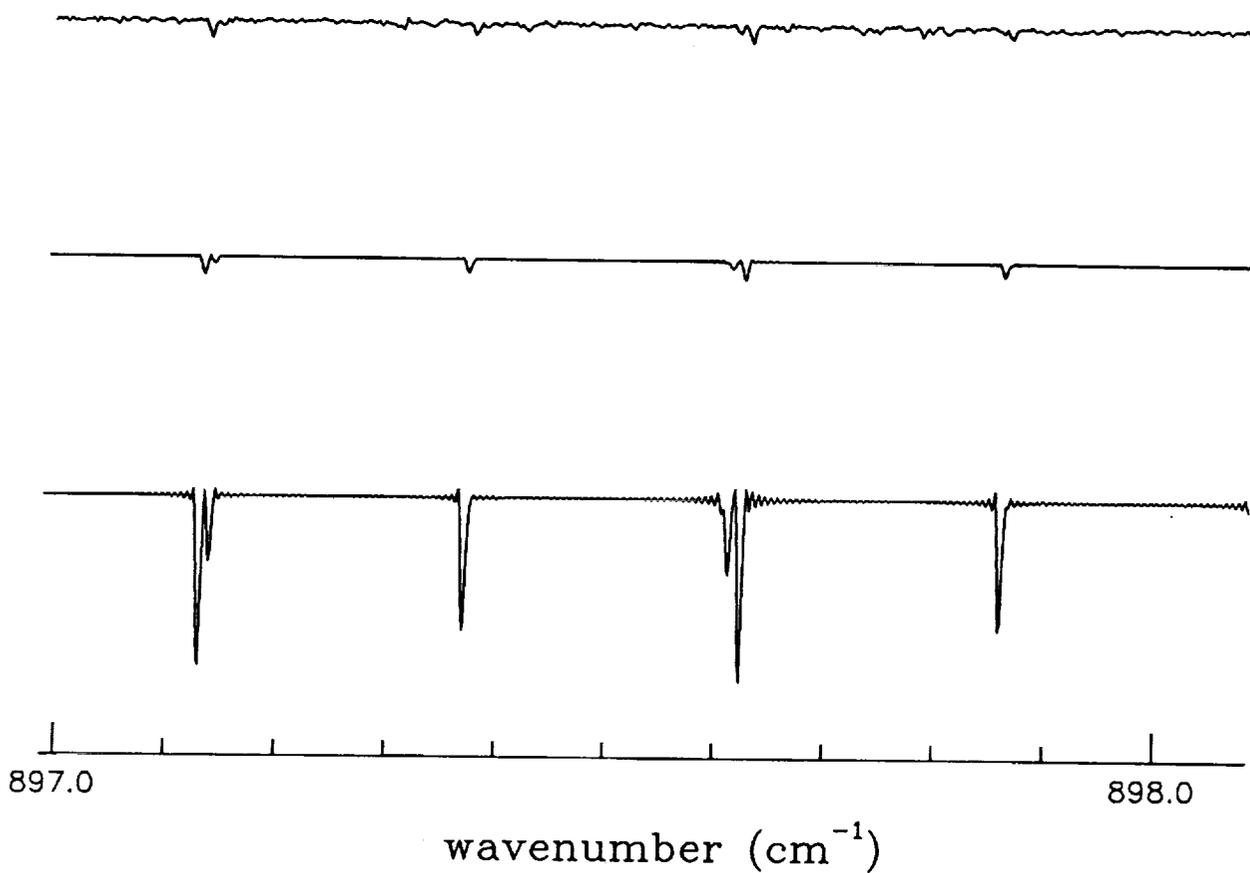
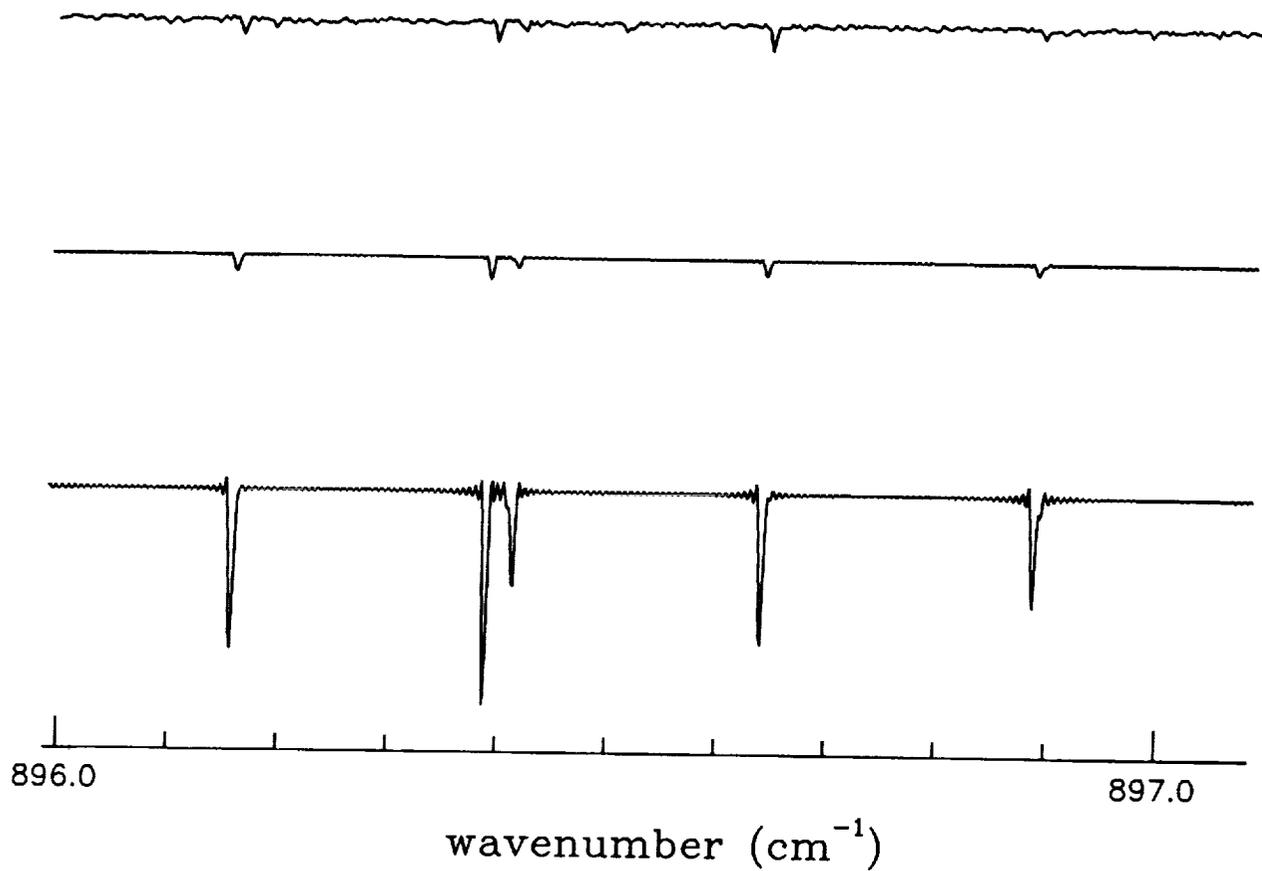


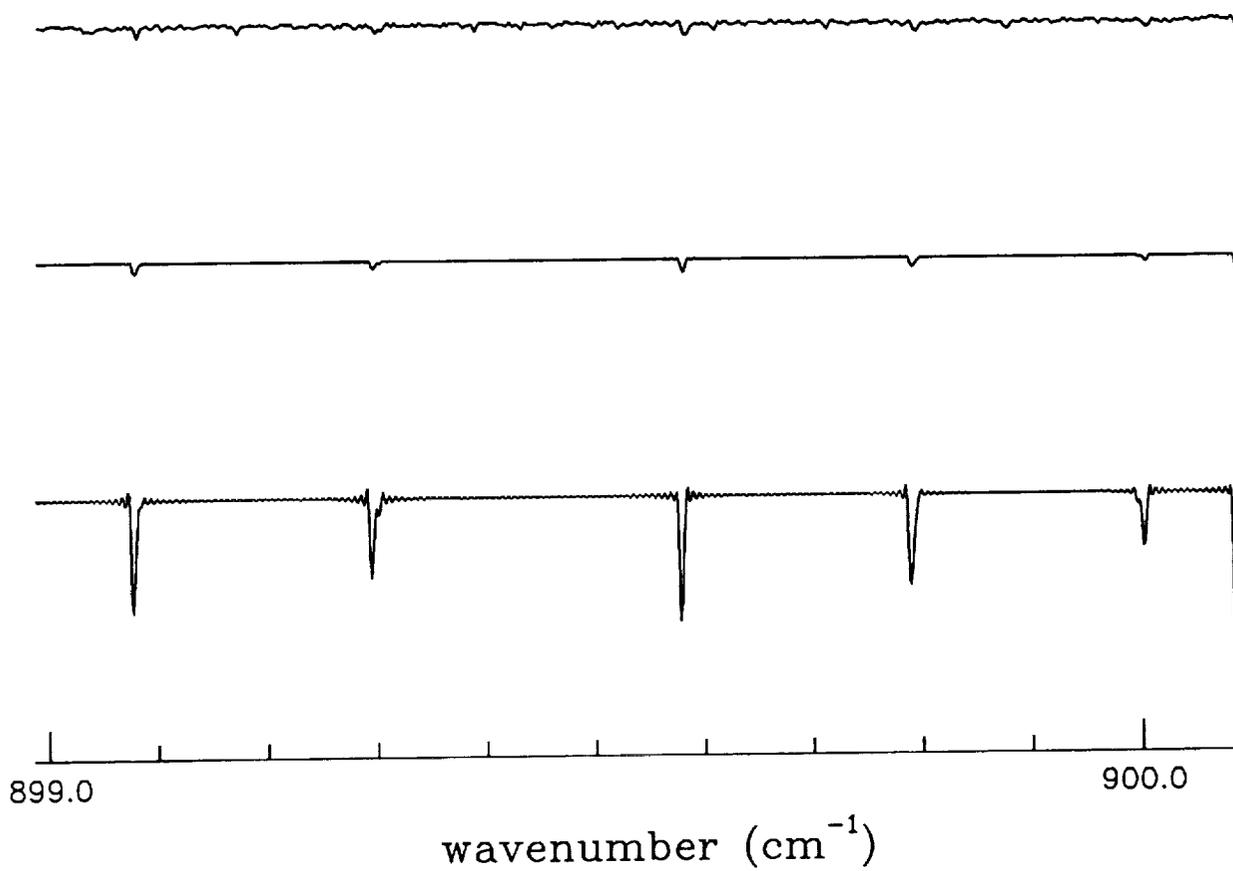
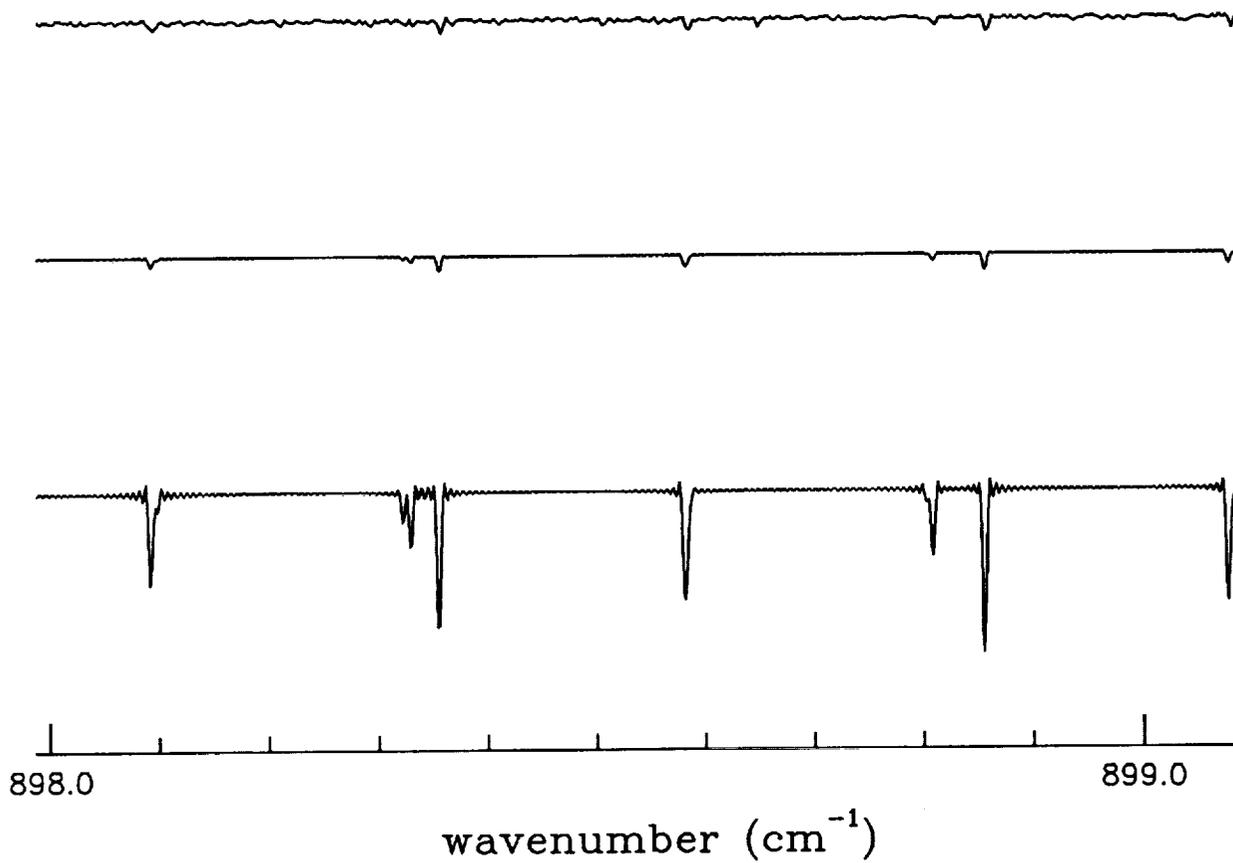


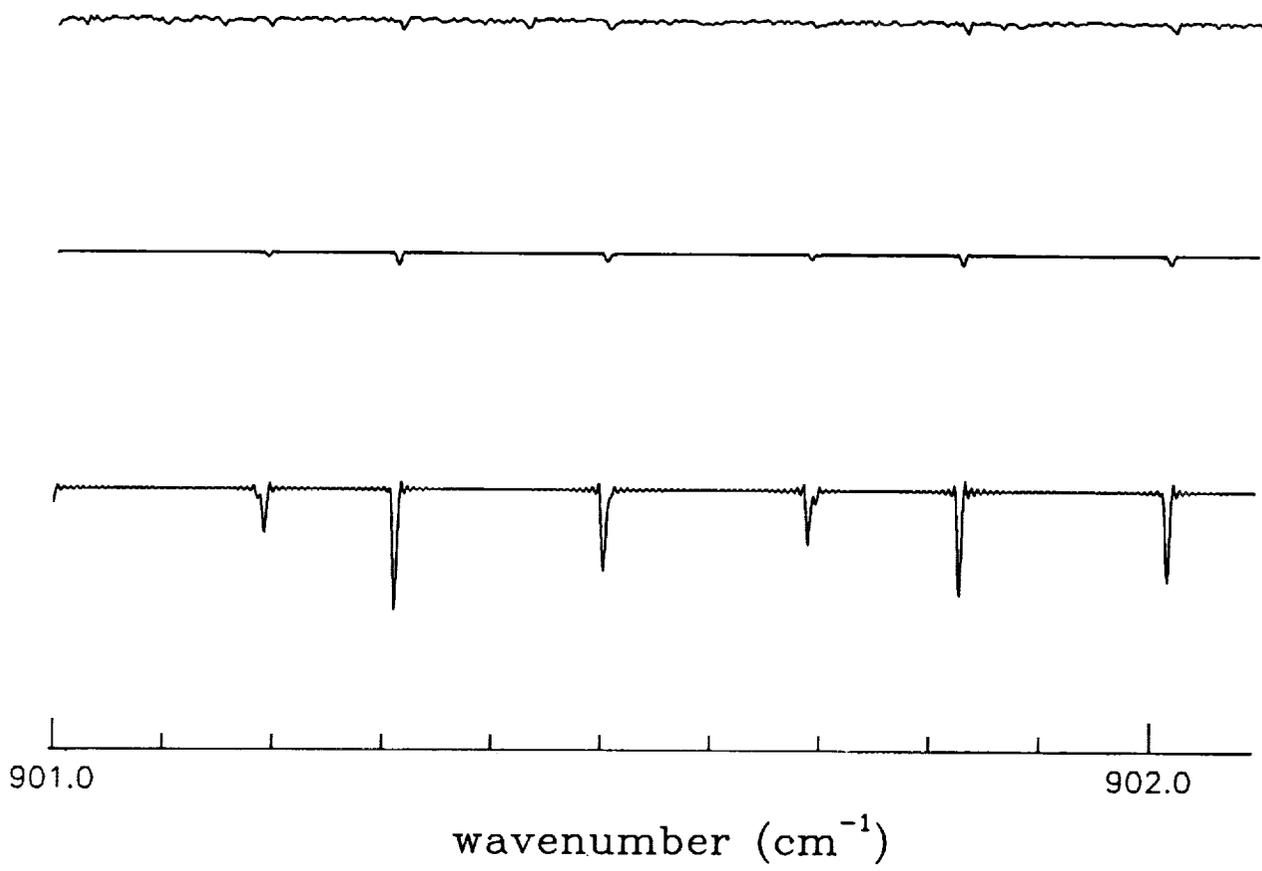
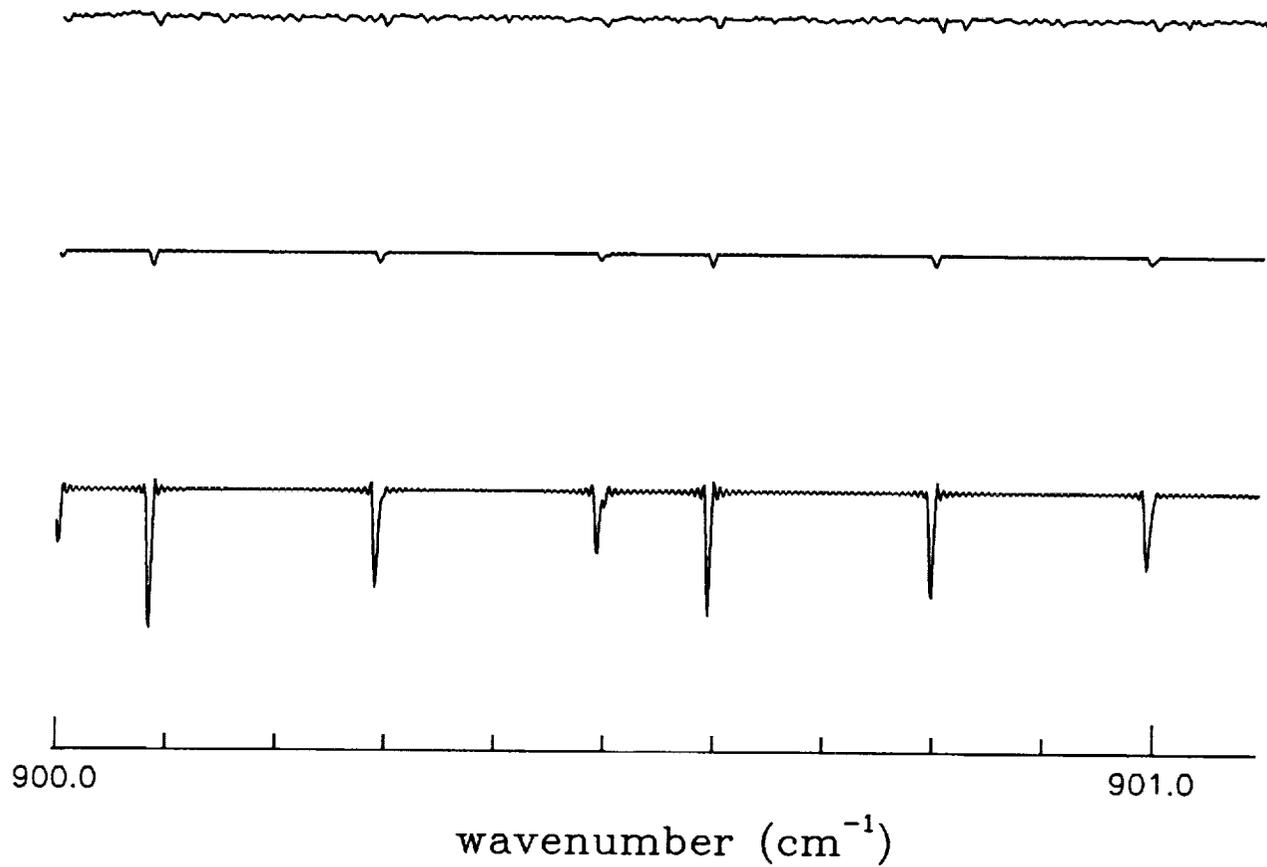


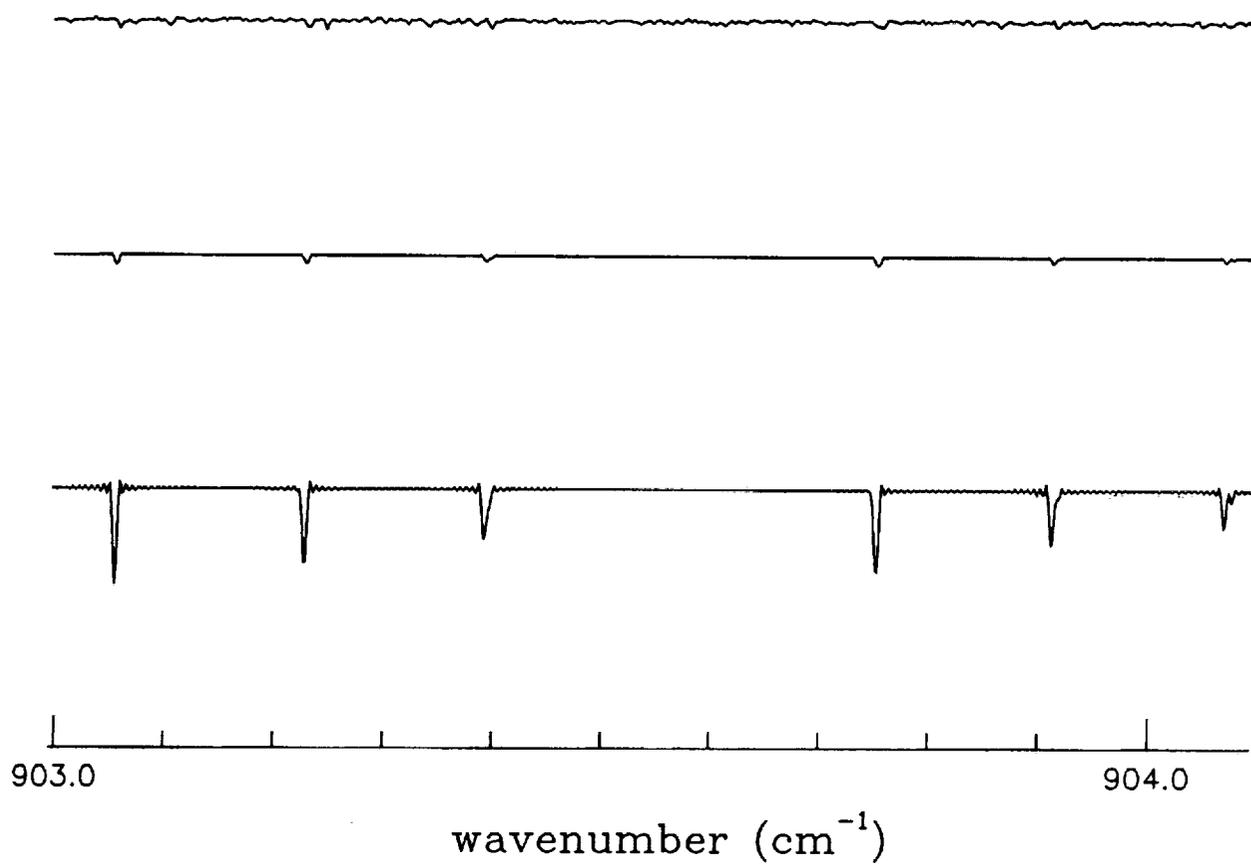
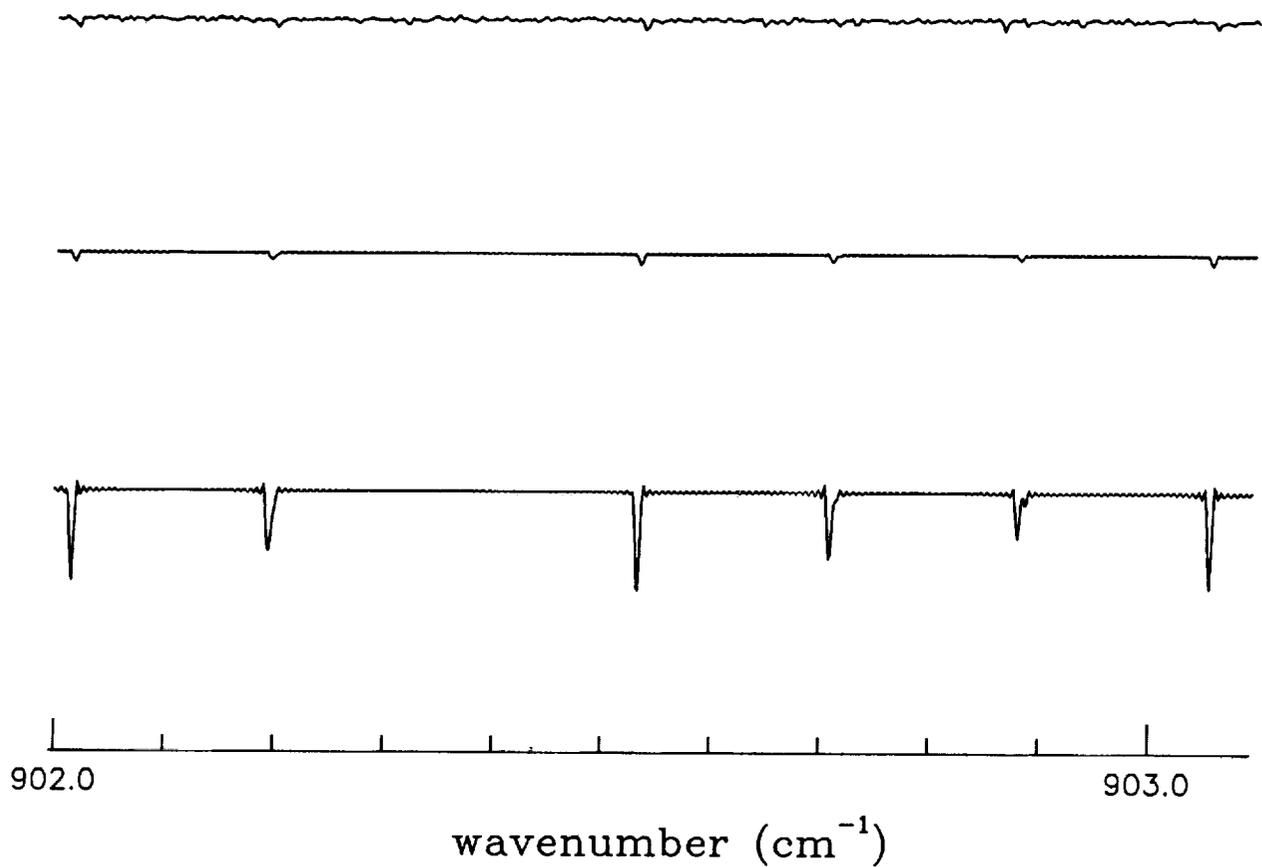


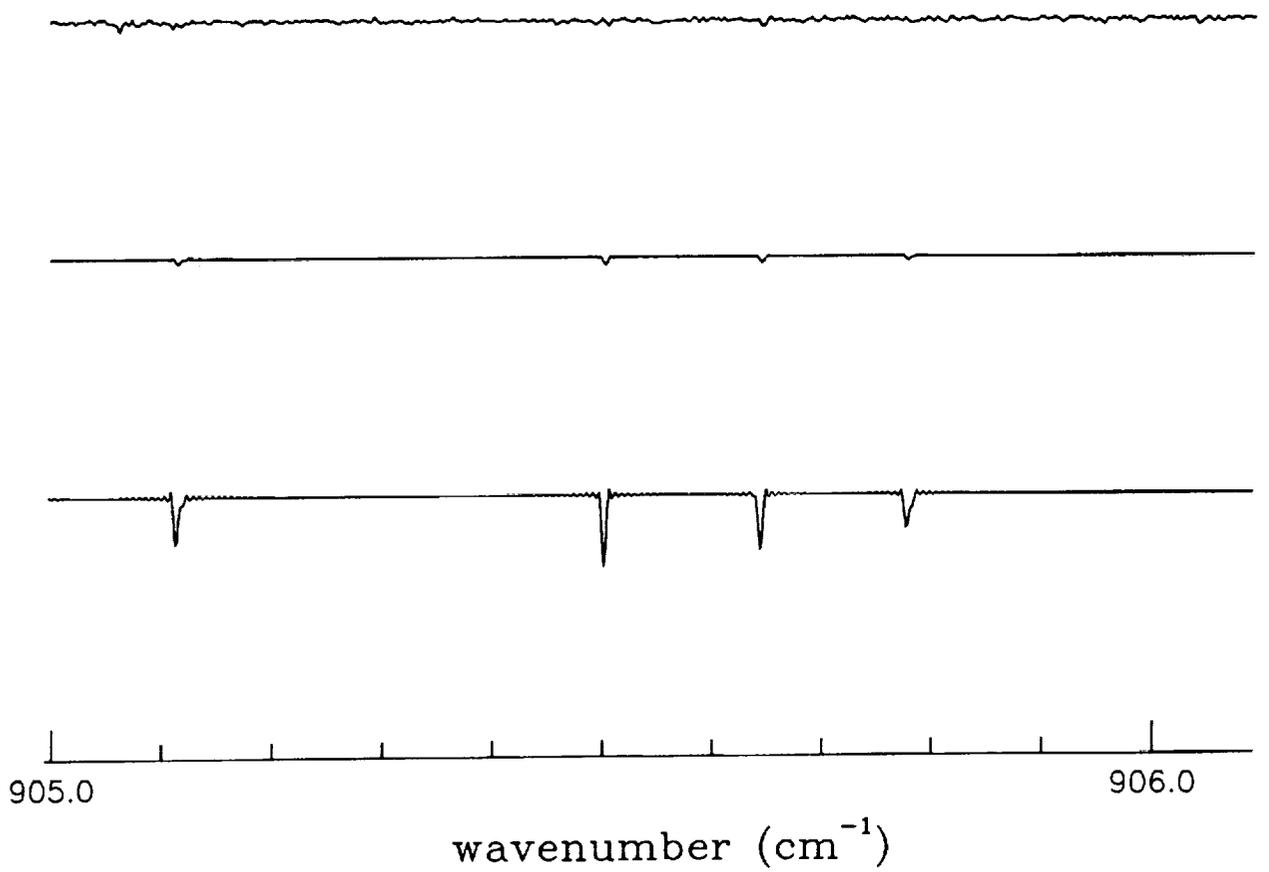
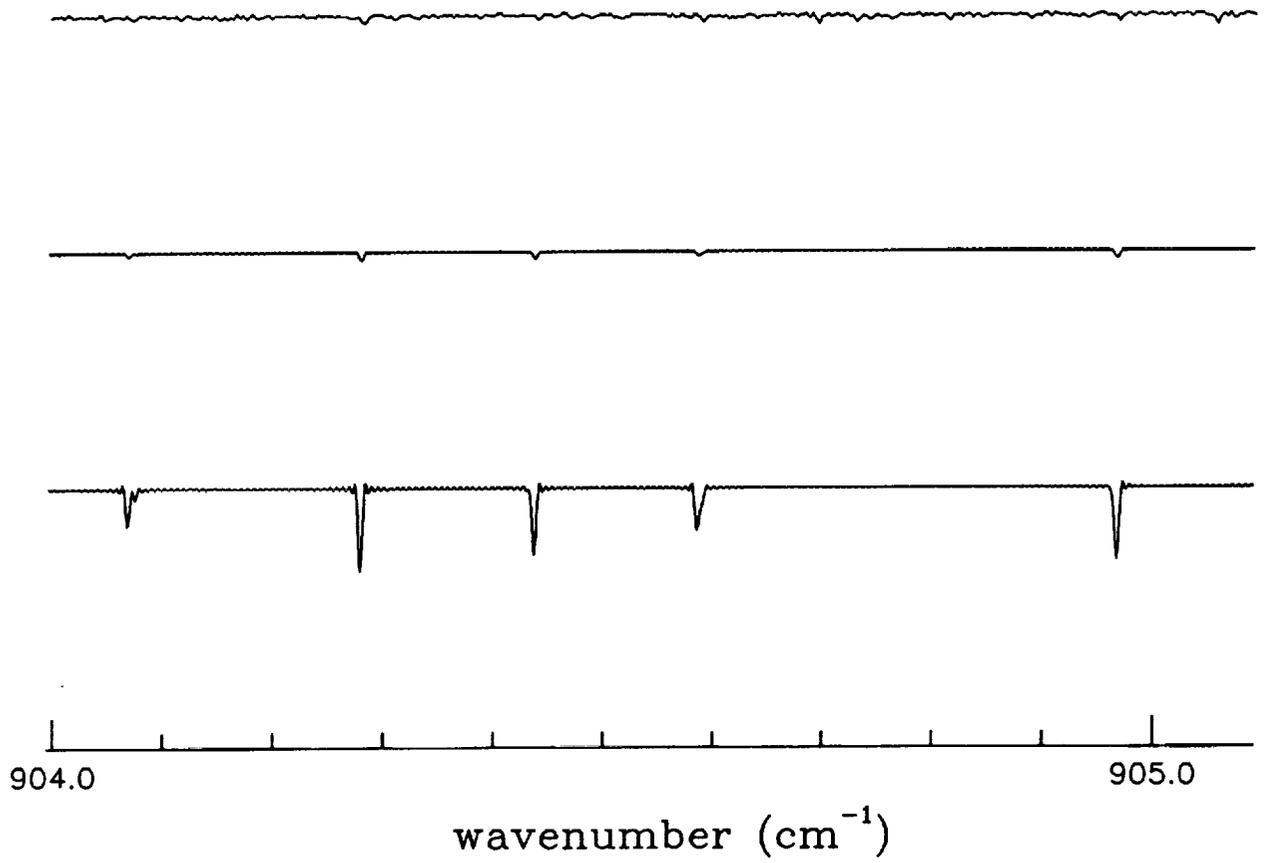


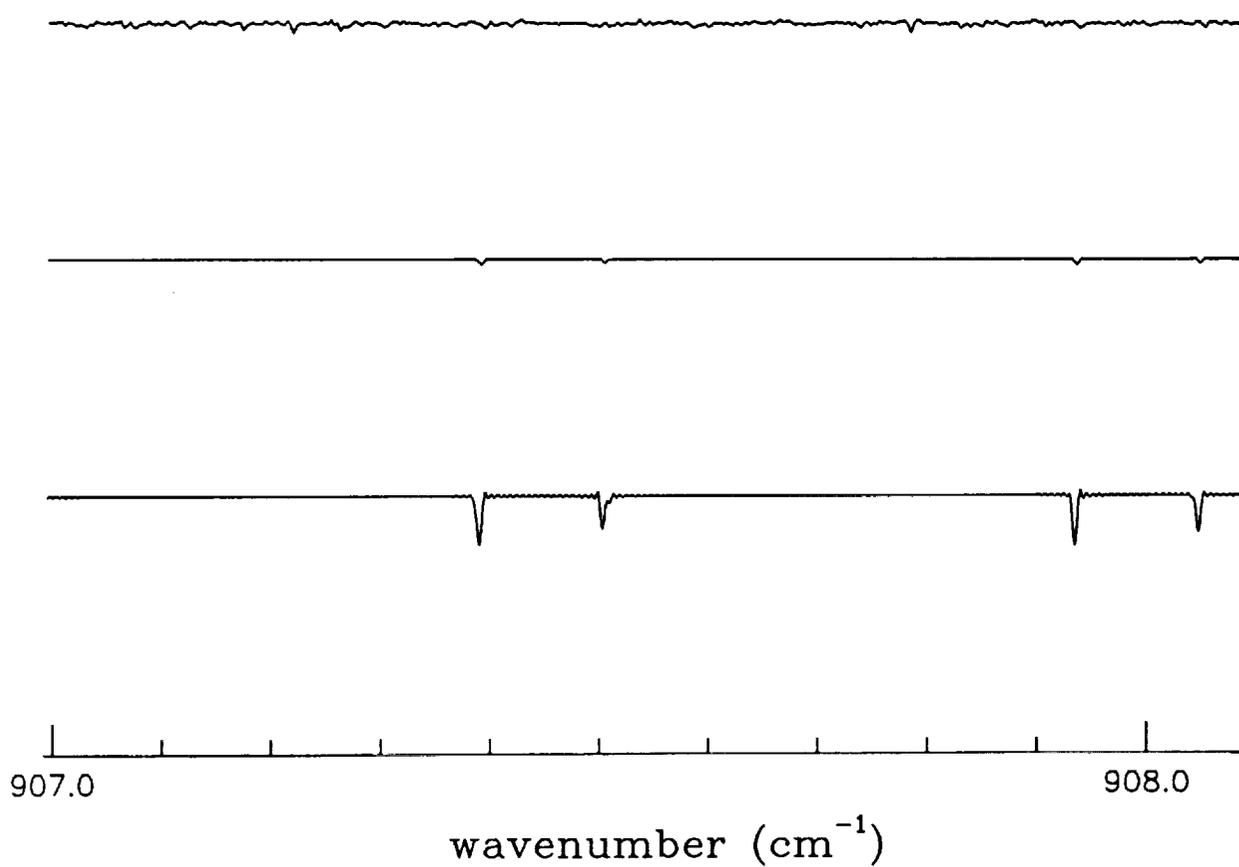
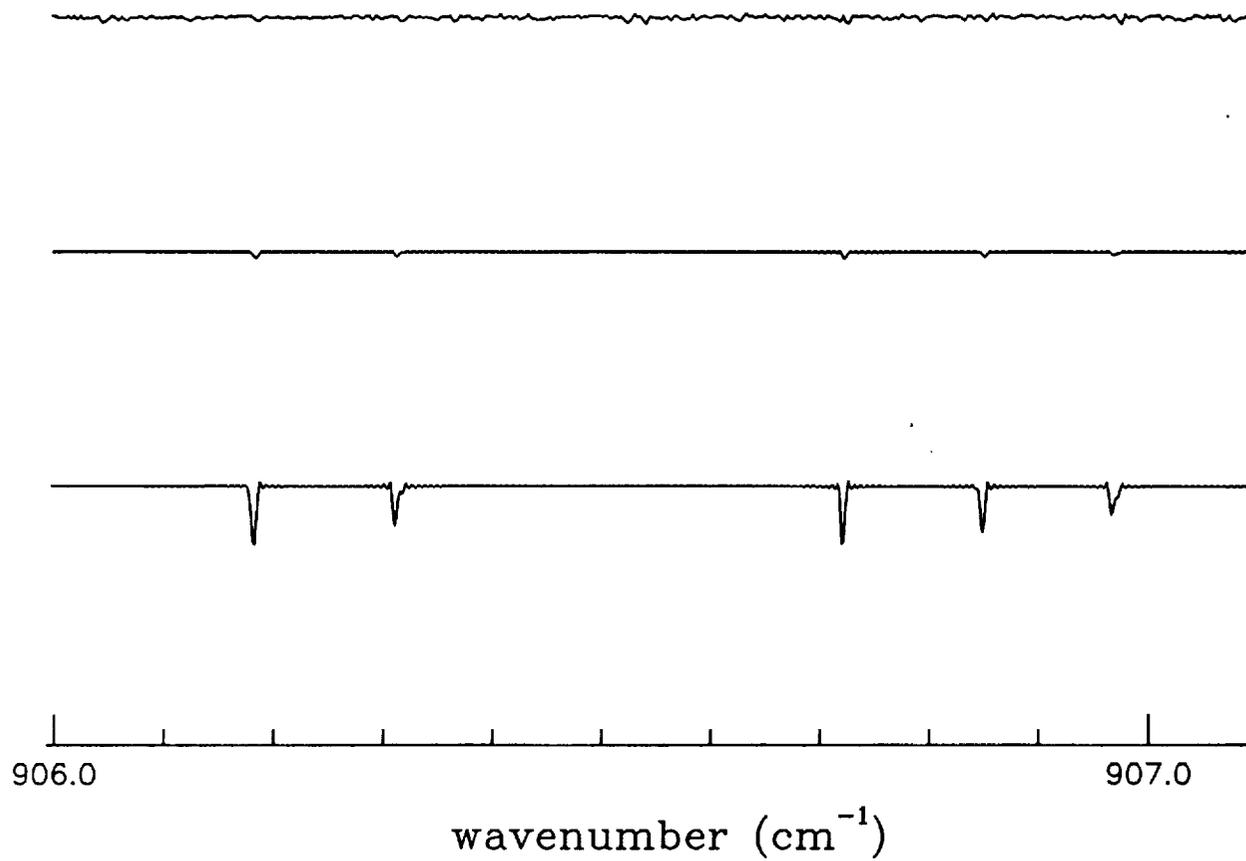


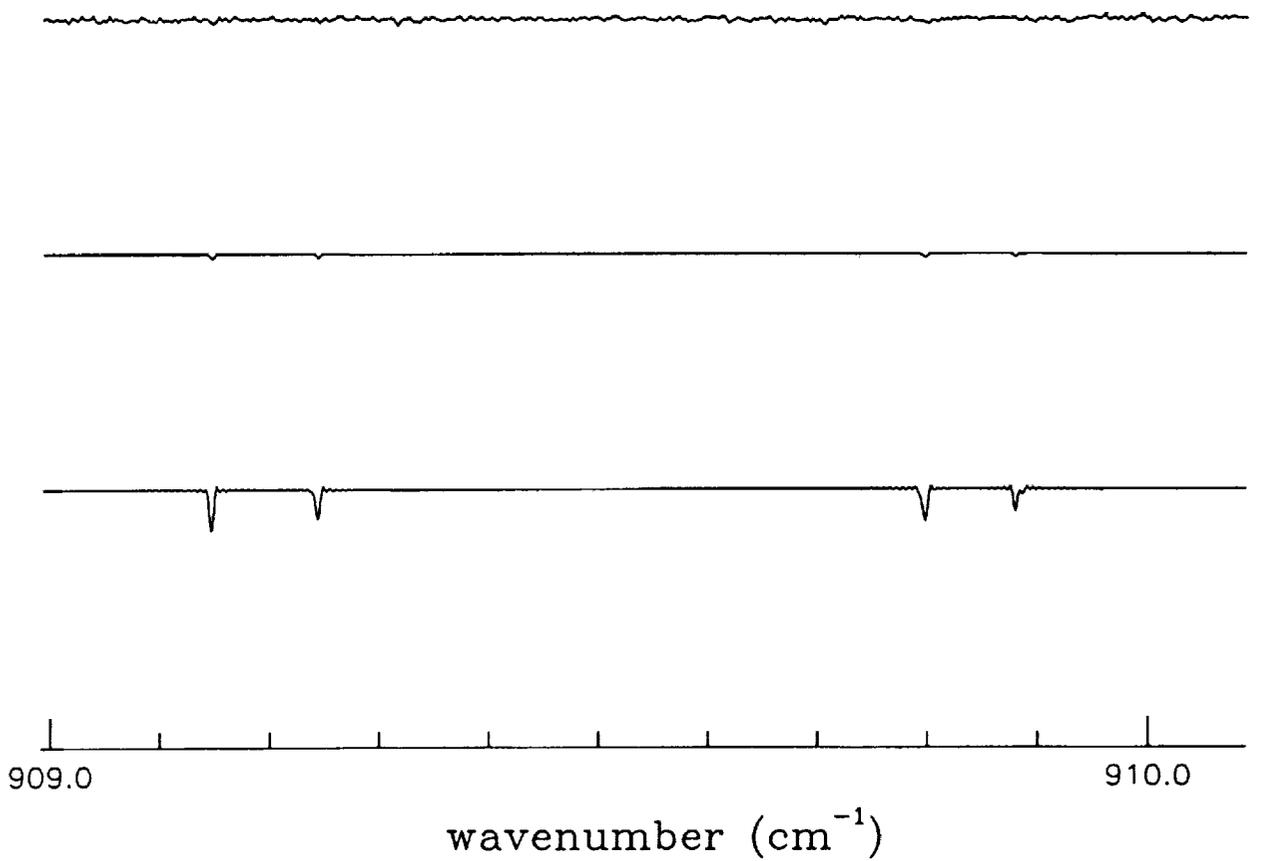
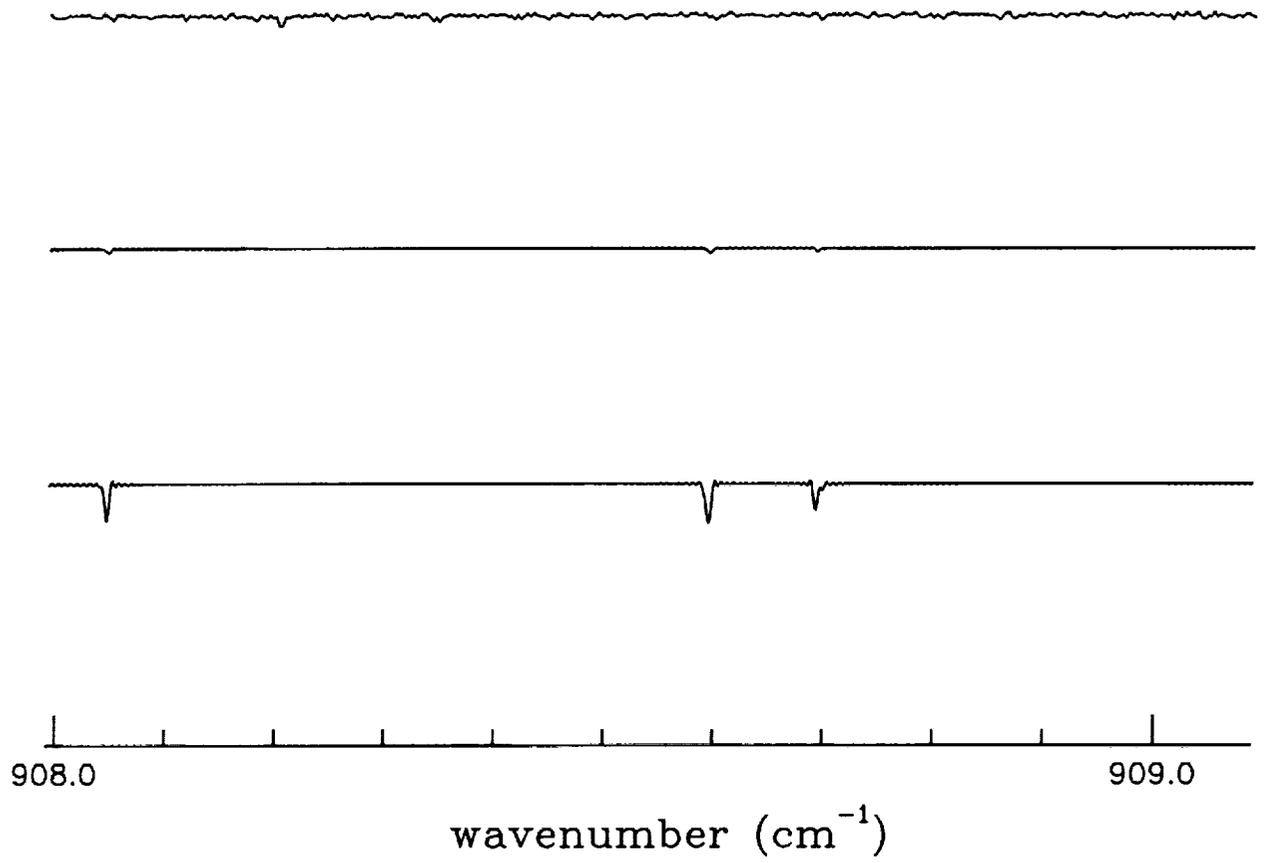














REPORT DOCUMENTATION PAGE

Form Approved
OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.

1. AGENCY USE ONLY (Leave blank)		2. REPORT DATE April 1994	3. REPORT TYPE AND DATES COVERED Technical Memorandum	
4. TITLE AND SUBTITLE A Spectral Atlas of the ν_{12} Fundamental of $^{13}\text{C}^{12}\text{CH}_6$ in the $12\mu\text{m}$ Region			5. FUNDING NUMBERS 693	
6. AUTHOR(S) Mark Weber, Dennis Reuter, J. Marcos Sirota, William Blass, John Hillman				
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Goddard Space Flight Center Greenbelt, Maryland 20771			8. PERFORMING ORGANIZATION REPORT NUMBER 94B00067	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES) National Aeronautics and Space Administration Washington, D.C. 20546-0001			10. SPONSORING/MONITORING AGENCY REPORT NUMBER TM-104601	
11. SUPPLEMENTARY NOTES William E. Blass: Department of Physics, University of Tennessee				
12a. DISTRIBUTION/AVAILABILITY STATEMENT Unclassified-Unlimited Subject Category 72 Report available from the NASA Center for AeroSpace Information, 800 Elkridge Landing Road, Linthicum Heights, MD 21090; (301) 621-0390.			12b. DISTRIBUTION CODE	
13. ABSTRACT (Maximum 200 words) The recent discovery of the minor isotopomer of ethane, $^{13}\text{C}^{12}\text{CH}_6$, in the planetary atmospheres of Jupiter and Neptune, added ethane to the molecules which can be used to determine isotopic $^{12}\text{C}^{12}\text{C}$ ratios for the jovian planets. The increased spectral resolution and coverage of the IR and far-IR instruments to be carried on the Cassini mission to Saturn and Titan may enable the detection of the minor isotopomer. Accurate frequency and cross-section measurements of the ν_{12} fundamental under controlled laboratory condition are important to interpret current and future planetary spectra. High resolution spectra of the minor isotopomer $^{13}\text{C}^{12}\text{CH}_6$ have been recorded in the $12.2\mu\text{m}$ region using the Kitt Peak Fourier Transform (FTS) and the Goddard Tunable Diode Laser spectrometer (TDL). In a global fit to 19 molecular constants in a symmetric top Hamiltonian, transition frequencies of the ν_{12} fundamental ranging up to $J=35$ and $K=20$ have been determined with a standard deviation of less than 0.0005 cm^{-1} . From selected line intensity measurements, a vibrational dipole moment for the ν_{12} fundamental has been derived. Observed and calculated spectra covering the region from 740cm^{-1} and to 910cm^{-1} are presented. A compilation of transition frequencies, line intensities, and lower state energies are included for general use in the astronomical community.				
14. SUBJECT TERMS Kitt Peak Fourier Transform, Goddard Tunable Diode Lasers, Molecular Spectroscopy, Infrared Spectrum			15. NUMBER OF PAGES 178	
			16. PRICE CODE	
17. SECURITY CLASSIFICATION OF REPORT Unclassified	18. SECURITY CLASSIFICATION OF THIS PAGE Unclassified	19. SECURITY CLASSIFICATION OF ABSTRACT Unclassified	20. LIMITATION OF ABSTRACT Unlimited	