

RESONANCE PARAMETERS IN THE ENERGY RANGE
0.3 kev TO 2.0 kev

H. DERRIEN and G. DESAUSSURE

Les récentes données expérimentales de fission de ^{239}Pu de WESTON et TODD (4) ont été introduites dans la base de données utilisées pour obtenir les paramètres de résonances neutroniques de ^{239}Pu à partir du Code SAMMY (S). Il en a résulté une mise à jour du fichier de paramètres de résonances dans le domaine d'énergie thermique à 1 Kev, et un ensemble inédit de paramètres dans le domaine de 1 Kev à 2 Kev. Les nouvelles données ont été mises dans le format ENDF/B-VI et sont ainsi directement utilisables pour une nouvelle version de ENDF/B-VI et de JEF 2. Aucune modification due à cette mise à jour n'est nécessaire dans les autres domaines d'énergie.

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I INTRODUCTION

The fission cross sections measured by WESTON and TODD in 1984 (1) were analysed along with the transmission data of HARVEY et al. (2) in order to obtain the resonances parameters in the energy range thermal to 1 Kev (3). The results are used in the current version of ENDF/B-VI and of JEF2. The resolution of the 1984 data of WESTON dan TODD, which were obtained on a 20 m flight path, was too poor above 1 Kev to allow a resonance analysis at higher energy. A new measurement has been performed recently by WESTON and TODD (4) on a 80 m flight path leading to a drastic improvement of the experimental resolution.

The resolution of the new data of WESTON and TODD is comparable to the resolution of the transmission of HARVEY et al. which were taken on a 80 m flight path with samples cooled to liquid nitrogen temperature in order to reduce the DOPPLER effect. The purpose of the present paper is to report on a simultaneous SAMMY analysis of the transmissions of HARVEY et al. and of the new fission data of WESTON and TODD.

In the following section, we will present :

- 1) The method of analysis and the data analysed,
- 2) some comments on the resonance parameters obtained and the limit of their significance,
- 3) tabulated and graphical comparisons between the calculated data,

the experimental cross sections and some recent evaluations in the low energy part of the unresolved range.

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II METHOD OF ANALYSIS AND THE EXPERIMENTAL DATA ANALYSED

The Bayesian Reich-Moore code SAMMY was used for a consistent analysis of the transmission and fission data. The method is described in reference (5). In the energy range 300 ev to 1 kev, a prior set of resonance parameter was available. This set was obtained in a previous SAMMY analysis (3) of the transmission of HARVEY et al. and of the 1984 fission data of WESTON and TODD. Basically, the present analysis consisted to add to the previous experimental data base the new experimental fission cross sections of WESTON and TODD, starting with the resonance parameter file and the covariance file obtained in the previous analysis. Practically, in some energy ranges, due to the improvement of the resolution in the new fission data, new resonances had to be included in the covariance file and the process of analysis had to be restarted by including the entire experimental data base.

In the energy range 1 Kev to 2 kev no previous set of resonance parameters existed. The input values to SAMMY had to be guessed from the graphical examination of the experimental data and roughly adjusted by trial and error using a no-Bayes calculation in SAMMY for the preliminary runs. Due to a lack of time, only two sets of experimental data were used : the thick sample transmission of HARVEY et al. and the 1988 fission data of WESTON and TODD. Obviously, including the medium sample transmission of HARVEY et al. could have improved the accuracy of the neutron width of the largest resonances. Nevertheless, the set of resonance parameters obtained is expected to give a quite good representation of the cross sections in the energy range 1 kev to 2 kev and should be most useful for self-shielding factor calculations in this energy range by providing better accuracy than the usual method used in the unresolved energy range.

In the previous analysis (3), the 1984 fission cross sections of WESTON and TODD have proved to be free of remaining background and a consistent SAMMY analysis of the transmission and of the fission data was possible without renormalization and background adjustment. Unfortunately, that is not the case for the 1988 fission data of WESTON and TODD. A preliminary analysis including the 1984 data and the 1988 data, showed that an important background adjustment was necessary for the 1988 data to obtain a consistent fit of the transmission and of the fission data. That is still not well understood by the authors of the measurement and more

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work should be done concerning the background problem. For this reason, the set of resonance parameters obtained by analysing the 1988 fission data should be used with a smooth background in the ENDF/B File 3 format to match the 1984 fission data. The important improvement obtained by using the 1988 fission data is the very high quality of the experimental resolution which allows the resolved resonance range to be extended up to 2 kev.

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III THE RESONANCE PARAMETERS

The previous set of resonance parameters obtained in the energy range thermal to 1 kev (3) has been up-dated by including the results of the present work in the energy range 300 ev to 1 Kev. The thermal range has been refitted and new values were obtained for the cross sections at 0.0253 ev. The new values are shown on Table 1 where they are compared to the previous one and to the ENDF/B-VI standard data (6). Better agreement is obtained with the standard data. The scattering radius is smaller by 0.5 % compared to the previous evaluation (9.41 fm in the present evaluation and 9.46 fm in the previous one). The difference is due to the fact that the transmission data of HARVEY et al. were slightly renormalized to take into account a reevaluation of the amount of aluminium in the ^{239}Pu samples. The new set of resonance parameters has improved compared to the previous one. More resonances have been identified in the high energy range of the data and the fission widths are more accurate. The average fission widths and capture widths obtained in the energy range 300 ev to 1 kev are shown in Table 2. The values of the s wave local strength functions are also shown on Table 2. The comparison on this Table between the average parameters obtained in the previous work (1987) and the average parameters obtained in the present work (1989) shows that the average values have not varied very much by including the 1988 fission data of WESTON and TODD in the experimental data base, apart for the energy range 0.6 kev to 0.7 kev and the energy range 0.8 kev to 0.9 kev where the new values are much smaller. Particularly in these ranges, the accuracy on the single fission width values have improved.

TABLE 2

ENERGY RANGE kev	FISSION WIDTH mev		CAPTURE WIDTH mev		STRENGHT FUNCTION x10-4	
	1987	1989	1987	1989	1987	1989
0.3-0.4	23.4	22.1	44.6	46.1	0.912	0.922
0.4-0.5	52.5	39.2	41.0	44.9	0.723	0.731
0.5-0.6	31.2	32.2	48.1	46.6	1.992	1.991
0.6-0.7	25.4	17.4	43.7	43.4	0.807	0.814
0.7-0.8	25.5	24.4	46.3	46.4	0.786	0.800
0.8-0.9	75.3	50.2	45.6	47.1	0.794	0.805
0.9-1.0	68.4	64.2	45.1	41.4	1.290	1.343
0.3-1.0	43.1	37.1	44.4	45.1	1.043	1.058

In the energy range 1 kev to 2 kev, 364 resonances have been identified, which is only 10 % smaller than the number of 396 resonances identified in the energy range thermal to 1 kev. Therefore, the number of missing resonances is not too large and one could expect that most of the resonance parameters are not too much distorted by the unresolved or unobserved resonances. The spin assignments were made assuming that the resonances with a fission width value larger than 300 mev were 0+ resonances. All the other resonances were assigned the spin 1+. However, in the high energy part of the data the very wide resonances are hardly seen because they are hidden by the background due to the other resonances. In the present set of data, one finds 45 wide resonances in the energy range 1.0 kev to 1.5 kev and only 24 in the energy range 1.5 kev to 2.0 kev. According to the energy range thermal to 1.0 kev one should find more than 50 wide resonances over an energy range of 0.5 kev. The lack of wide resonances in the present data set could explain in part the increasing background found in the SAMMY fit of the fission data, the contribution of the missing wide resonances beeing taken into account by this part of the background which is not due to the experimental effects. Further work should be done in order to identify more wide resonances.

All the resonances were considered as s wave resonances. The p wave penetration factor is approximatively $5 \times 10E-3$ at 1 kev. Therefore some of the small levels identified in the energy range 1 kev to 2 kev could be p wave resonances, but existing data do not allow to distinguish between the smaller s wave resonances and the large p wave resonances. The

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effect on the accuracy of the s wave strength function obtained by considering all the resonances as s wave resonances is negligible compared to the effect of the missed small s wave resonances. The strength function values obtained by summing the reduced neutron widths g_{NO} are shown in Table 3. The value obtained in the energy range 1 kev to 2 kev is :

$(0.935 \pm 0.090) \times 10^{-4}$ which is slightly smaller than the value $(1.145 \pm 0.082) \times 10^{-4}$ obtained in the energy range thermal to 1 kev in reference (3).

Part of the difference could be due to the missing wide $0+$ resonances. The strength function over the entire energy range thermal to 2 kev is $(1.040 \pm 0.060) \times 10^{-4}$.

The average fission widths obtained in the energy range 1 kev to 2 kev for the narrow resonances, which are mainly $1+$ resonances, are shown in Table 3. They are, on average, larger than the values obtained in the energy range thermal to 1 kev. This could be due to several effects, the most important being the effect of the large experimental resolution widths on the accuracy on the resonance reaction widths in the SAMMY fits, and the impossibility to identify the narrow $0+$ resonances. Note the very low average fission width obtained in the energy range 1.5 kev to 1.6 kev similar to the one obtained in the energy range 0.55 kev to 0.65 kev ; this could be another minimum in the average fission cross section due the $1+$ double humped fission barrier. Typical values of the resolution and Doppler widths are 655 mev and 600 mev respectively at 1 kev, which is large compared to the average total width of about 80 mev of the $1+$ resonances. No attempt has been made to search on the capture width. A value of 46 mev has been used for all the resonances, which is the average value obtained in the energy range 0.5 kev to 1.0 kev in the previous analysis (3).

TABLE 3

ENERGY RANGE kev	FISSION WIDTH mev	STRENGTH FUNCTION x 10E-4
1.0-1.1	47.26	1.115
1.1-1.2	37.50	0.972
1.2-1.3	55.00	0.976
1.3-1.4	69.14	1.055
1.4-1.5	32.60	0.751
1.5-1.6	15.19	0.636
1.6-1.7	65.33	0.955
1.7-1.8	48.93	1.066
1.8-1.9	57.30	1.094
1.9-2.0	44.56	0.724
1.0-2.0	47.29	0.934

The two sets of resonance parameters, the first from thermal to 1 kev and the second from 1 kev to 2 kev, are independant and should be used separatly in two different sections in the evaluated data files as is allowed now in the ENDF/B-VI format. The corresponding ENDF/B-VI file is given in Annex I of the present report and is available at the data centers (NNDC, Brookhaven and NEADB, Saclay).

IV THE CROSS SECTIONS

Figures 1 to 12 provide a detailed graphical comparison between the experimental data and the corresponding quantities as computed from the resonance parameters. The curves represent the calculated data ; the crosses or the vertical bars (error bars) represent the experimental values. The figures 1 and 2 show the data in the energy range 150 ev to 500 ev and in the energy range 600 ev to 650 ev. The upper curves are the effective total cross sections as obtained from the thick and the medium sample transmission of HARVEY et al. The lower curves are the 1984 and the 1988 fission data of WESTON and TODD. The 1988 fission data are displaced by one decade and the effective total cross sections by two and three decades respectively for clarity of the figures. Note the drastic amelioration of the experimental resolution in the 1988 data of WESTON and TODD compared to their 1984 data. Almost all the resonances appearing in the total cross section data are also seen in the 1988 fission data.

The figures 3 to 14 show the data in the energy range 1 kev to 2 kev. On each figure the upper curve represent the effective total cross section obtained from the thick sample transmission of HARVEY et al. The lower curve is the 1988 fission data of WESTON and TODD. A detailed examination of these figures show that the best fit of the experimental data is not yet obtained. In the energy range 1 kev to 2 kev, the present set of resonance parameters should be considered as preliminary. The structures in the data are quite well represented but more work should be done to obtain the best values of the resonance parameters particularly of the fission widths. Note that the calculated data include the normalization and background adjustment obtained in the SAMMY fits.

The average cross sections calculated from the resonance parameters are shown on Table 4 for the energy range 300 ev to 1 kev along with some experimental data. Particularly, the table shows two sets of uncorrelated data : the absorption cross sections and the alpha values calculated from the resonance parameters which were obtained by analysing only the experimental transmission and fission data, and the experimental absorption and alpha values obtained by GWIN et al. There is a remarkable agreement between the two sets of data. The agreement is better than in the previous analysis (3).

TABLE 4

ENERGY RANGE	FISSION		CAPTURE	ABSORPTION		ALPHA	
kev	calc	exp(1984)	calc	calc	exp(1976)	calc	exp(1976)
0.3-0.4	8.12	8.13	9.83	17.95	18.31	1.21	1.16
0.4-0.5	9.32	9.34	4.07	13.39	13.56	0.44	0.44
0.5-0.6	14.94	15.17	11.12	26.06	26.54	0.74	0.72
0.6-0.7	4.34	4.19	6.51	10.85	11.57	1.50	1.54
0.7-0.8	5.34	5.38	5.01	10.35	10.52	0.93	0.97
0.8-0.9	4.64	4.76	3.78	8.42	9.30	0.81	0.82
0.9-1.0	8.05	8.16	5.39	13.44	13.23	0.67	0.70
0.3-1.0	7.82	7.88	6.53	14.35	14.72	0.84	0.83

The cross sections are given in barns ; the values given in the columns "calc" are those calculated from the resonance parameters.

exp(1984) = 1984 fission data of WESTON and TODD.

exp(1976) = 1976 data of GWIN et al.

Table 5 shows the average fission and capture data in the energy range 1 kev to 2 kev. As was explained above, the calculated fission cross sections are smaller than the experimental data in the energy ranges above 1.2 kev ; a smooth background is needed to match the calculated cross section with the experimental values. The smooth background increases from a small negative value at 1 kev to about 0.5 barn at 1.5 kev and conserves the value of about 0.5 barn in the energy range 1.5 kev to 2 kev. More analysis should be done in this energy range, particularly to search for the missing wide $0+$ resonances and for the accuracy of the fission width of the narrow resonances. In any case, the strong variations in the fission and in the total cross sections are not due to the hidden wide $0+$ resonances ; the effect on the accuracy on the calculated self-shielding factors will be negligible. As it is, the present set of resonance parameters is much more useful than the statistical parameters in the energy range 1 kev to 2 kev for the calculation of the self-shielding factors.

The fission cross sections obtained from the current version of ENDF/B-VI are also shown on Table 5. They are in good agreement with the 1988 experimental values of WESTON and TODD which were normalized on the 1984 data of WESTON and TODD in the energy range 100 ev to 1 kev. Three sets of average capture cross sections are also shown on Table 5 : the values calculated from the resonance parameters, those obtained from the current version of ENDF/B-VI and the experimental data obtained by GWIN et al. The values averaged over the entire energy range 1 kev to 2 kev are quite consistent ; in particular, the value obtained from the resonance parameters agrees with the value of GWIN et al. within 1.3 %. However, the comparison in intervals of 100 ev show variations as large as 30 %.

TABLE 5

ENERGY RANGE	FISSION				CAPTURE		
kev	calc	exp(1988)	eval	B-VI	calc	exp(1976)	B-VI
1.0-1.1	5.67	5.54	5.60	5.58	5.20	5.04	4.47
1.1-1.2	6.08	5.95	5.98	6.10	4.02	2.95	3.53
1.2-1.3	4.59	4.69	4.70	4.77	4.25	4.00	4.11
1.3-1.4	6.70	6.89	7.05	7.33	3.25	2.52	2.46
1.4-1.5	3.60	4.12	4.07	4.03	3.24	3.57	3.25
1.5-1.6	2.16	2.77	2.72	2.52	3.29	3.89	3.66
1.6-1.7	3.48	4.03	4.06	4.04	3.61	4.36	3.71
1.7-1.8	2.89	3.52	3.48	3.43	4.35	4.37	4.15
1.8-1.9	4.56	5.09	4.98	5.10	3.80	3.14	3.40
1.9-2.0	1.75	2.26	2.24	2.04	3.33	4.06	3.54
1.0-2.0	4.15	4.49	4.49	4.49	3.83	3.79	3.63

The cross sections are in barns.

"calc" = values calculated from the resonance parameters.

"eval" = calculated values + the smooth file contribution needed to match the experimental fission data.

B-VI = current ENDF/B-VI file.

exp(1988) = 1988 fission data of WESTON and TODD.

exp(1976) = 1971 data from GWIN et al. normalized to 1976 data from GWIN et al.

V CONCLUSION

Some results of the SAMMY analysis of ²³⁹Pu experimental neutron cross section data including the very high resolution 1988 fission data of WESTON and TODD have been presented. These results are preliminary, particularly in the energy range 1 kev to 2 kev. Due to the decreasing funding for cross section evaluation, non continuation of this work is foreseen for the near future. The data have to be used as they are. Nevertheless, the present report has shown that they have improved compared to the previous evaluation due to the high quality of the resolution of the 1988 fission measurement of WESTON and TODD. The new set of resonance parameters should be used in the ENDF/B-VI and JEF2 evaluated data files.

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REFERENCES

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- /2/ J.A. HARVEY et al., High Resolution Transmission Measurement on ^{235}U , ^{238}U , ^{239}Pu , International Conference on Nuclear data for Science and Technology, May 30 June 3, Mito, Japan (1988)
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- /4/ L.W. WESTON and J.H. TODD, private communication.
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ANNEXE 1

FICHER NEWENDFALL.DAT & NEADB SACLAY

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ORNL/CAD TAPE2
9.42390+04 2.36999+02      1      1      0      39439 1451
0.      1.      0      0      0      69439 1451
1.      0.      0      0      10     69439 1451
0.      0.      0      0      52     79439 1451
DERRIEN/DESAUSSURE      PU239 SEPTEMBER 1989      9439 1451
-----ENDFB/VI      MATERIAL 9439      9439 1451
-----INCIDENT NEUTRON DATA      9439 1451
-----ENDF/8-VI FORMAT      9439 1451
STATUS OF THE EVALUATION / SEPTEMBER 1989      9439 1451
*****      9439 1451
THERMAL REGION      9439 1451
*****      9439 1451
      THE NEW SET OF RESONANCE PARAMETERS WAS OBTAINED BY INCLUDING
      TO THE EXPERIMENTAL DATA BASE THE 1988 FISSION DATA OF WESTON AND
      TODD. THE THERMAL REGION WAS THEN REFITTED AND THE FOLLOWING
      VALUES WERE OBTAINED FOR THE 0.0253 EV CROSS SECTIONS:
      EVALUATION      STANDARD GROUP
      FISSION      747.08      747.99
      CAPTURE      271.39      271.43
      SCATTERING      8.00      7.88
      TOTAL      1026.47      1027.30
*****      9439 1451
      RESOLVED RESONANCE REGION
*****      9439 1451
      THE WESTON AND TODD 1988 FISSION DATA, OBTAINED ON A 80 M
      FLIGHT PATH WITH A RESOLUTION COMPARABLE TO THE HARVEY
      TRANSMISSION RESOLUTION, WERE INCLUDED IN THE SAMMY FIT
      EXPERIMENTAL DATA BASE. DESPITE OF THE DIFFICULTIES ENCOUNTERED
      WITH A QUITE LARGE RESIDUAL BACKGROUND IN THE NEW WESTON DATA, THE
      NEW SET OF RESONANCE PARAMETERS HAS IMPROVED COMPARED TO THE
      PREVIOUS ONE. DUE TO THE IMPROVEMENT OF THE RESOLUTION IN THE
      FISSION EXPERIMENT MORE RESONANCES WERE IDENTIFIED IN THE HIGH
      ENERGY RANGE OF THE DATA AND THE FISSION WIDTH ARE MORE ACCURATE
      IN THE HIGH ENERGY PART OF THE DATA.
      A REICH-MOORE SAMMY FIT OF HARVEY TRANSMISSION DATA AND WESTON
      1988 FISSION DATA WAS PERFORMED IN THE ENERGY RANGE 1 KEY TO 2
      KEY. PRELIMINARY RESULTS ARE GIVEN IN THE PRESENT FILE. THESE
      PARAMETERS HAVE TO BE USED WITH A BACKGROUND CONTRIBUTION IN THE
      FILE 3 TO MATCH THE CALCULATED FISSION CROSS SECTION TO THE 1988
      WESTON DATA NORMALIZED TO THE 1984 WESTON DATA. FURTHER ANALYSIS
      SHOULD BE PERFORMED TO OBTAIN MORE ACCURATE SET OF RESONANCE
      PARAMETERS IN THE 1 KEY TO 2 KEY ENERGY RANGE. HOWEVER THE PRESENT
      SET OF DATA COULD BE MOST USEFUL FOR THE CALCULATION OF THE SELF
      SHIELDING IN THE CORRESPONDING ENERGY RANGE.
      A SCATTERING RADIUS OF 9.41 F SHOULD BE USED WITH THE NEW SET
      OF RESONANCE PARAMETERS.
*****      9439 1451
      1      451      63      09439 1451
      1      452      13      09439 1451
      2      151      795      09439 1451
      3      1      9      09439 1451
      3      2      9      09439 1451

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		3	18	9	09439	1451
		3	102	9	09439	1451
0.	0.	0	0	0	09439	1 0
9.42390+04	2.36999+02	0	2	0	09439	1452
0.00000+00	0.00000+00	0	0	1	289439	1452
	28	2			9439	1452
1.0000E-05	2.8736E+00	2.5300E-02	2.8736E+00	5.0000E-02	2.8725E+00	9439 1452
1.0000E-01	2.8660E+00	2.0000E-01	2.8555E+00	4.0000E-01	2.8555E+00	9439 1452
1.0000E+00	2.8750E+00	6.0000E+00	2.8750E+00	7.0000E+00	2.8560E+00	9439 1452
2.0000E+01	2.8660E+00	4.0000E+01	2.8195E+00	4.8000E+01	2.8220E+00	9439 1452
5.8000E+01	2.8740E+00	9.6000E+01	2.8560E+00	1.0500E+02	2.8110E+00	9439 1452
1.2500E+02	2.8710E+00	2.0000E+02	2.8710E+00	3.2000E+02	2.8420E+00	9439 1452
4.5000E+02	2.8720E+00	5.7000E+02	2.8720E+00	5.8000E+02	2.8540E+00	9439 1452
6.5000E+02	2.8540E+00	6.6000E+02	2.8735E+00	1.0000E+06	2.9919E+00	9439 1452
4.2000E+06	3.4492E+00	1.0600E+07	4.4866E+00	1.9600E+07	5.6542E+00	9439 1452
3.0000E+07	6.5928E+00	0.	0.	0.	0.	9439 1452
0.	0.	0	0	0	09439	1 0
0.	0.	0	0	0	09439	0 0
9.42390+04	2.36999+02	0	0	1	09439	2151
9.42390+04	1.00000+00	0	1	2	09439	2151
1.00000-05	1.00000+03	1	3	0	09439	2151
5.00000-01	9.41000-01	0	0	1	19439	2151
2.36999+02	0.	0	0	2418	4039439	2151
-1.500200+2	1.00000+0	4.289400-1	4.451600-2	1.917200-1	0.000000+09439	2151
-1.546700+1	1.000000+0	1.354600-4	2.685500-2	-2.552800-6	0.000000+09439	2151
-6.908700+0	0.000000+0	1.242500-2	2.600200-1	-9.416900-1	2.962300-19439	2151
-2.194400-1	0.000000+0	3.065100-5	2.590600-3	-1.614300-3	-5.824600-19439	2151
2.956243-1	1.000000+0	7.992700-5	3.930300-2	5.737700-2	0.000000+09439	2151
7.815800+0	1.000000+0	7.920400-4	3.775400-2	-4.474800-2	0.000000+09439	2151
1.092800+1	1.000000+0	1.794700-3	4.060000-2	-1.494800-1	0.000000+09439	2151
1.189800+1	1.000000+0	9.751301-4	3.856800-2	2.010400-2	0.000000+09439	2151
1.432900+1	1.000000+0	6.047001-4	3.093200-2	5.731601-2	0.000000+09439	2151
1.467800+1	1.000000+0	1.910500-3	4.005100-2	2.956100-2	0.000000+09439	2151
1.541700+1	0.000000+0	2.004200-3	4.200000-2	-7.548100-6	7.550400-19439	2151
1.765700+1	1.000000+0	1.803100-3	3.930000-2	-3.534200-2	0.000000+09439	2151
2.226600+1	1.000000+0	2.587700-3	4.341600-2	-6.115200-2	0.000000+09439	2151
2.393300+1	1.000000+0	8.572001-5	3.609300-2	2.512800-2	0.000000+09439	2151
2.626900+1	1.000000+0	1.542700-3	4.023800-2	3.992000-2	0.000000+09439	2151
2.728800+1	1.000000+0	1.493100-4	3.879400-2	2.706600-3	0.000000+09439	2151
3.232700+1	0.000000+0	8.451301-4	4.251600-2	8.170701-3	-1.278500-19439	2151
3.548600+1	1.000000+0	2.698100-4	4.102700-2	3.443800-3	0.000000+09439	2151
4.145700+1	1.000000+0	3.303500-3	4.911800-2	-6.222400-3	0.000000+09439	2151
4.173600+1	1.000000+0	9.350201-4	3.947500-2	5.924900-2	0.000000+09439	2151
4.453100+1	1.000000+0	6.131800-3	4.016200-2	-4.246100-3	0.000000+09439	2151
4.753400+1	0.000000+0	4.698400-3	3.146400-2	4.814800-1	-1.273900-79439	2151
4.957600+1	0.000000+0	4.151500-3	4.200000-2	-1.049300+0	4.982700-39439	2151
5.014400+1	1.000000+0	3.253600-3	2.264900-2	-4.850100-3	0.000000+09439	2151
5.264800+1	1.000000+0	9.460201-3	4.419900-2	-8.781101-3	0.000000+09439	2151
5.570400+1	1.000000+0	1.507800-3	3.826300-2	2.356500-2	0.000000+09439	2151
5.692400+1	0.000000+0	1.136200-2	4.200000-2	-2.204300+0	2.530400-29439	2151
5.929100+1	1.000000+0	4.444900-3	3.677700-2	9.581200-2	0.000000+09439	2151
6.162100+1	0.000000+0	2.741100-2	4.200000-2	7.097701+0	6.679201-39439	2151
6.317000+1	1.000000+0	6.293900-4	3.738300-2	7.030800-2	0.000000+09439	2151
6.545400+1	0.000000+0	4.007100-3	2.411300-2	4.502000-1	-2.116900-99439	2151
6.579300+1	1.000000+0	9.690900-3	6.478400-2	1.059600-1	0.000000+09439	2151
7.416700+1	1.000000+0	3.210900-3	3.208000-2	-2.884100-2	0.000000+09439	2151
7.488500+1	0.000000+0	2.877000-3	4.200000-2	1.252700-3	-3.402700-19439	2151
7.503400+1	1.000000+0	2.088600-2	4.275200-2	-8.643200-2	0.000000+09439	2151
7.908500+1	1.000000+0	4.291600-5	4.200000-2	6.000001-3	0.000000+09439	2151
8.087200+1	0.000000+0	4.619300-3	4.200000-2	1.859600+0	-1.760200-39439	2151
8.277400+1	1.000000+0	3.311800-4	4.700000-2	5.000000-3	0.000000+09439	2151
8.550700+1	0.000000+0	4.883300-2	5.100000-2	-1.844400+0	3.044200-39439	2151

8.561800+1	1.000000+0	8.194501-3	2.635200-2	5.694700-3	0.000000+09439	2151
9.085000+1	1.000000+0	1.220900-2	3.420900-2	7.146600-3	0.000000+09439	2151
9.307900+1	1.000000+0	6.749600-4	3.772600-2	2.813500-3	0.000000+09439	2151
9.550900+1	1.000000+0	2.078400-3	6.412701-2	3.210800-2	0.000000+09439	2151
9.646500+1	0.000000+0	6.634900-3	4.200000-2	1.500300+0	-2.135000-19439	2151
9.939900+1	0.000000+0	2.713300-2	4.200000-2	1.326800-1	9.945100+09439	2151
1.031400+2	1.000000+0	1.646400-3	3.462600-2	7.025001-3	0.000000+09439	2151
1.054600+2	1.000000+0	4.715900-3	4.365001-2	4.847000-3	0.000000+09439	2151
1.068300+2	1.000000+0	9.943901-3	3.819100-2	2.092000-2	0.000000+09439	2151
1.105500+2	1.000000+0	4.962000-4	5.381800-2	2.037200-2	0.000000+09439	2151
1.144200+2	0.000000+0	2.351300-3	4.200000-2	1.457400+0	3.031700-19439	2151
1.153200+2	1.000000+0	2.166700-4	4.200000-2	1.600000-1	0.000000+09439	2151
1.161900+2	0.000000+0	1.005500-2	3.264400-2	1.395900-1	-4.930900-29439	2151
1.190000+2	1.000000+0	1.690400-2	4.121700-2	4.086500-2	0.000000+09439	2151
1.211800+2	1.000000+0	2.573500-3	3.609400-2	2.562800-2	0.000000+09439	2151
1.236200+2	1.000000+0	5.803500-4	7.497900-2	6.455800-2	0.000000+09439	2151
1.263900+2	1.000000+0	1.742400-3	4.663000-2	9.936500-3	0.000000+09439	2151
1.277200+2	1.000000+0	5.377700-4	3.833900-2	1.083600-2	0.000000+09439	2151
1.317700+2	0.000000+0	3.565400-2	4.200000-2	3.949100+0	-9.849500-39439	2151
1.339800+2	1.000000+0	5.861200-3	3.945700-2	3.560300-3	0.000000+09439	2151
1.369400+2	0.000000+0	1.103800-2	3.370400-2	3.186300-4	-9.016101-29439	2151
1.394500+2	1.000000+0	9.109600-5	4.200000-2	1.930000-2	0.000000+09439	2151
1.431600+2	1.000000+0	3.258600-3	2.813700-2	4.628800-2	0.000000+09439	2151
1.436700+2	1.000000+0	4.574300-3	4.039000-2	3.075600-2	0.000000+09439	2151
1.464700+2	1.000000+0	7.390400-3	4.064700-2	7.967700-3	0.000000+09439	2151
1.474100+2	0.000000+0	4.977500-3	4.200000-2	2.410500+0	1.616200-39439	2151
1.484400+2	1.000000+0	3.353400-4	5.092900-2	3.314800-2	0.000000+09439	2151
1.496500+2	1.000000+0	1.604700-3	3.649700-2	2.412800-2	0.000000+09439	2151
1.571699+2	1.000000+0	1.200000-3	4.200000-2	6.000001-3	0.000000+09439	2151
1.571700+2	0.000000+0	3.042200-2	3.619700-2	1.724900-1	6.074501-19439	2151
1.621500+2	1.000000+0	1.107700-4	3.560000-2	1.540000-2	0.000000+09439	2151
1.647100+2	1.000000+0	2.806000-2	4.500800-2	7.674800-3	0.000000+09439	2151
1.672900+2	1.000000+0	6.172400-3	4.429600-2	6.683900-2	0.000000+09439	2151
1.700700+2	1.000000+0	1.268100-4	4.200000-2	3.000000-3	0.000000+09439	2151
1.706700+2	1.000000+0	4.281100-4	4.068400-2	4.764700-2	0.000000+09439	2151
1.708100+2	0.000000+0	3.495000-3	4.200000-2	3.596100-2	1.624000+09439	2151
1.713200+2	1.000000+0	2.500000-5	4.200000-2	3.000000-3	0.000000+09439	2151
1.761700+2	1.000000+0	2.175100-3	4.910900-2	3.191800-2	0.000000+09439	2151
1.774100+2	1.000000+0	3.641500-3	4.344500-2	6.689400-3	0.000000+09439	2151
1.790900+2	1.000000+0	1.255400-3	3.392800-2	9.092600-3	0.000000+09439	2151
1.838300+2	1.000000+0	1.583300-3	3.754200-2	1.383600-2	0.000000+09439	2151
1.847600+2	0.000000+0	1.918900-2	4.200000-2	2.357400+0	9.584401-29439	2151
1.884700+2	1.000000+0	6.487800-4	4.449200-2	1.478200-2	0.000000+09439	2151
1.908400+2	1.000000+0	1.680100-3	4.169400-2	1.089400-2	0.000000+09439	2151
1.912900+2	0.000000+0	1.162100-3	4.200000-2	4.054000-2	3.168400+09439	2151
1.954000+2	0.000000+0	5.300000-2	2.213600-2	6.409700-1	3.388400-49439	2151
1.969200+2	1.000000+0	3.910700-3	3.900500-2	1.458200-2	0.000000+09439	2151
1.996100+2	1.000000+0	9.031600-3	4.735300-2	7.159301-2	0.000000+09439	2151
2.036300+2	1.000000+0	1.701400-3	2.306100-2	2.208700-2	0.000000+09439	2151
2.040700+2	0.000000+0	6.288300-2	5.607800-2	1.450500-1	3.118100-19439	2151
2.076000+2	1.000000+0	7.226800-3	4.571500-2	6.681500-3	0.000000+09439	2151
2.110000+2	0.000000+0	3.246000-3	4.200000-2	1.068800-1	1.524800+09439	2151
2.135000+2	1.000000+0	3.606100-4	3.825000-2	3.215300-2	0.000000+09439	2151
2.146500+2	0.000000+0	9.296000-3	4.200000-2	1.117100+1	-2.279800-19439	2151
2.155000+2	1.000000+0	4.600000-5	4.200000-2	3.400000-2	0.000000+09439	2151
2.167700+2	1.000000+0	6.237100-3	3.733100-2	5.629600-3	0.000000+09439	2151
2.197100+2	1.000000+0	3.537900-3	3.855800-2	2.129200-2	0.000000+09439	2151
2.204700+2	1.000000+0	7.732200-3	3.904700-2	1.140700-2	0.000000+09439	2151
2.234100+2	1.000000+0	3.383500-3	3.357400-2	4.876800-3	0.000000+09439	2151
2.251300+2	1.000000+0	1.730500-3	5.684200-2	2.083500-2	0.000000+09439	2151
2.265100+2	0.000000+0	1.064800-2	4.200000-2	1.487000+0	-2.698100+09439	2151
2.281400+2	1.000000+0	1.783000-3	3.880900-2	1.651200-2	0.000000+09439	2151

2.302100+2	0.000000+0	5.526500-3	4.200000-2	3.036300+0	-2.845300-29439	2151
2.316500+2	1.000000+0	1.273800-2	3.751900-2	6.517900-3	0.000000+09439	2151
2.328400+2	1.000000+0	3.732700-4	4.200000-2	2.790000-2	0.000000+09439	2151
2.335800+2	0.000000+0	9.656801-3	4.200000-2	4.245700+0	-2.802500-19439	2151
2.345700+2	1.000000+0	1.024900-2	3.517800-2	7.303200-3	0.000000+09439	2151
2.393100+2	1.000000+0	5.536000-3	4.124900-2	1.213000-2	0.000000+09439	2151
2.408400+2	1.000000+0	3.330000-5	4.200000-2	3.400000-2	0.000000+09439	2151
2.431400+2	1.000000+0	6.648100-3	3.857300-2	6.031100-2	0.000000+09439	2151
2.477700+2	1.000000+0	7.969200-4	4.482700-2	1.383100-1	0.000000+09439	2151
2.491200+2	1.000000+0	1.500100-2	3.748100-2	5.029100-3	0.000000+09439	2151
2.514900+2	1.000000+0	2.942900-2	3.423900-2	1.027200-2	0.000000+09439	2151
2.548500+2	1.000000+0	3.023600-3	4.411000-2	3.713900-2	0.000000+09439	2151
2.561600+2	0.000000+0	1.629100-3	4.150000-2	8.758500-1	1.005000-39439	2151
2.563800+2	1.000000+0	5.575800-3	4.204200-2	1.054400-2	0.000000+09439	2151
2.592600+2	1.000000+0	2.640000-4	4.150000-2	3.600000-2	0.000000+09439	2151
2.624300+2	0.000000+0	8.292601-2	4.200000-2	2.474900+0	2.844800+09439	2151
2.630100+2	1.000000+0	2.271800-3	3.544400-2	8.054500-3	0.000000+09439	2151
2.644900+2	1.000000+0	1.650000-4	4.150000-2	2.100000-2	0.000000+09439	2151
2.693600+2	1.000000+0	1.213200-3	4.147300-2	5.547900-2	0.000000+09439	2151
2.698400+2	1.000000+0	4.089800-3	2.475500-2	1.841300-2	0.000000+09439	2151
2.729100+2	1.000000+0	2.641000-2	4.139600-2	4.236900-2	0.000000+09439	2151
2.750600+2	0.000000+0	3.879500-2	4.200000-2	8.745500-2	8.636800-19439	2151
2.758800+2	1.000000+0	2.239900-2	4.185000-2	5.547800-2	0.000000+09439	2151
2.761900+2	0.000000+0	2.848900-2	4.200000-2	9.566600+0	1.783200-29439	2151
2.798600+2	1.000000+0	7.904201-3	3.417100-2	2.802300-2	0.000000+09439	2151
2.832200+2	1.000000+0	2.752200-2	3.936800-2	5.977800-3	0.000000+09439	2151
2.860200+2	1.000000+0	2.000000-4	4.150000-2	1.000000-2	0.000000+09439	2151
2.883200+2	1.000000+0	9.330000-5	4.150000-2	3.400000-2	0.000000+09439	2151
2.918400+2	0.000000+0	2.097200-2	4.200000-2	6.306500+0	1.608900-29439	2151
2.926600+2	1.000000+0	3.565100-3	2.740800-2	2.128300-2	0.000000+09439	2151
2.930500+2	0.000000+0	5.044600-4	4.200000-2	1.062400-4	6.553401-19439	2151
2.968000+2	1.000000+0	3.373700-3	4.879300-2	3.262100-2	0.000000+09439	2151
2.989200+2	1.000000+0	1.043700-2	5.086700-2	2.731100-2	0.000000+09439	2151
3.021500+2	1.000000+0	1.951200-2	4.542200-2	4.457800-2	0.000000+09439	2151
3.085800+2	1.000000+0	3.256100-3	3.570700-2	1.184000-1	0.000000+09439	2151
3.093500+2	1.000000+0	1.409300-2	5.441200-2	2.664200-2	0.000000+09439	2151
3.112200+2	0.000000+0	1.370200-3	4.200000-2	1.296800+0	1.006900-39439	2151
3.115000+2	1.000000+0	2.415600-4	4.200000-2	3.200000-3	0.000000+09439	2151
3.139700+2	1.000000+0	1.466900-2	3.884700-2	1.006100-2	0.000000+09439	2151
3.170200+2	1.000000+0	5.645500-3	4.188300-2	2.186700-2	0.000000+09439	2151
3.237300+2	1.000000+0	1.924000-2	8.292901-2	2.724800-2	0.000000+09439	2151
3.246000+2	0.000000+0	1.781100-2	4.200000-2	3.652400+0	1.179300+09439	2151
3.256600+2	1.000000+0	8.328400-3	2.959200-2	1.617200-2	0.000000+09439	2151
3.302500+2	0.000000+0	5.772200-3	4.200000-2	1.077600+0	-9.541200-19439	2151
3.343000+2	1.000000+0	5.677200-3	8.035300-2	1.724900-2	0.000000+09439	2151
3.363100+2	1.000000+0	1.510800-2	4.294200-2	1.539400-2	0.000000+09439	2151
3.383400+2	1.000000+0	8.241101-3	7.406900-2	1.562200-2	0.000000+09439	2151
3.396300+2	1.000000+0	3.670700-3	3.851200-2	1.602000-2	0.000000+09439	2151
3.435700+2	1.000000+0	1.663400-2	3.557000-2	1.969400-2	0.000000+09439	2151
3.466500+2	0.000000+0	1.112200-2	4.200000-2	1.143500-3	-1.357900+09439	2151
3.507000+2	1.000000+0	2.198000-2	3.776600-2	2.931200-2	0.000000+09439	2151
3.532100+2	1.000000+0	3.941600-3	3.823900-2	1.681000-2	0.000000+09439	2151
3.553300+2	1.000000+0	3.691600-4	4.298401-2	1.614900-2	0.000000+09439	2151
3.604100+2	1.000000+0	1.126200-3	7.748701-2	2.720400-2	0.000000+09439	2151
3.616000+2	0.000000+0	2.883500-3	4.250000-2	6.457601-1	4.962300-19439	2151
3.617400+2	1.000000+0	2.085900-4	4.250000-2	3.200000-3	0.000000+09439	2151
3.673400+2	0.000000+0	6.843200-2	4.200000-2	2.153500+1	5.676100-19439	2151
3.686600+2	1.000000+0	2.636100-4	4.200000-2	1.500000-2	0.000000+09439	2151
3.701100+2	0.000000+0	1.004600-3	4.150000-2	1.119700-3	2.150300-19439	2151
3.707500+2	1.000000+0	2.887000-3	5.574600-2	1.368500-2	0.000000+09439	2151
3.735100+2	0.000000+0	1.495100-3	4.200000-2	2.851100+0	1.888600+09439	2151
3.754600+2	1.000000+0	2.783500-3	4.254800-2	6.719400-3	0.000000+09439	2151

3.775300+2	1.000000+0	1.802300-3	2.949300-2	-1.444200-2	0.000000+09439	2151
3.784900+2	1.000000+0	1.037800-3	7.316001-2	8.328801-3	0.000000+09439	2151
3.828200+2	1.000000+0	3.726600-4	4.256601-2	1.142400-2	0.000000+09439	2151
3.847100+2	1.000000+0	5.866401-3	3.027000-2	-2.938100-2	0.000000+09439	2151
3.870900+2	1.000000+0	2.200000-4	4.200000-2	1.500000-2	0.000000+09439	2151
3.871000+2	0.000000+0	2.865100-3	4.216400-2	4.177200+0	-1.589800+09439	2151
3.899800+2	1.000000+0	1.457300-3	3.428600-2	-1.065800-2	0.000000+09439	2151
3.919600+2	1.000000+0	9.900400-4	3.803700-2	1.721800-2	0.000000+09439	2151
3.948900+2	1.000000+0	6.833700-3	5.177000-2	-4.075900-2	0.000000+09439	2151
3.973600+2	1.000000+0	1.929800-3	2.951800-2	3.489300-2	0.000000+09439	2151
4.020600+2	1.000000+0	1.938300-2	4.296600-2	-1.632500-1	0.000000+09439	2151
4.046500+2	1.000000+0	2.235500-2	4.044800-2	-6.856100-2	0.000000+09439	2151
4.065200+2	1.000000+0	1.255900-3	4.985900-2	-1.074600-2	0.000000+09439	2151
4.075000+2	1.000000+0	8.285301-4	3.036500-2	1.492800-1	0.000000+09439	2151
4.092000+2	1.000000+0	1.161400-3	6.123200-2	-2.604400-2	0.000000+09439	2151
4.128000+2	1.000000+0	9.023900-3	3.877700-2	3.547400-2	0.000000+09439	2151
4.161600+2	1.000000+0	2.889000-3	4.441100-2	-5.099700-3	0.000000+09439	2151
4.181000+2	1.000000+0	1.207900-3	7.090001-2	-1.662100-2	0.000000+09439	2151
4.201300+2	0.000000+0	1.143400-2	4.200000-2	1.900100-1	3.209600+09439	2151
4.203300+2	1.000000+0	5.471800-3	3.361000-2	-2.146100-2	0.000000+09439	2151
4.251200+2	0.000000+0	1.683600-2	4.200000-2	1.834800-1	7.820500+09439	2151
4.261400+2	1.000000+0	2.859100-4	4.150000-2	2.128100-2	0.000000+09439	2151
4.301200+2	1.000000+0	3.650900-3	5.978600-2	5.720900-1	0.000000+09439	2151
4.333500+2	1.000000+0	6.216200-4	4.117100-2	-4.306600-3	0.000000+09439	2151
4.336800+2	0.000000+0	1.685400-2	4.150000-2	1.801100+0	-3.130400+09439	2151
4.382500+2	1.000000+0	2.895000-3	2.963000-2	-4.662100-3	0.000000+09439	2151
4.393000+2	1.000000+0	2.960500-3	4.682500-2	5.878400-3	0.000000+09439	2151
4.407200+2	1.000000+0	3.440300-4	4.600000-2	-1.331000-1	0.000000+09439	2151
4.429900+2	0.000000+0	2.144800-2	4.053300-2	-2.102600-1	2.172300-19439	2151
4.470670+2	1.000000+0	1.450000-4	4.200000-2	4.500000-2	0.000000+09439	2151
4.503200+2	1.000000+0	9.470901-4	3.912400-2	-3.516600-2	0.000000+09439	2151
4.518700+2	1.000000+0	1.459800-2	3.446500-2	3.171800-3	0.000000+09439	2151
4.551800+2	1.000000+0	8.577901-4	4.226400-2	-1.695300-1	0.000000+09439	2151
4.562900+2	0.000000+0	7.551201-2	3.623700-2	1.636000-1	-1.575800-19439	2151
4.578600+2	1.000000+0	7.312900-3	7.402800-2	-1.831200-1	0.000000+09439	2151
4.593700+2	1.000000+0	4.605400-3	2.830500-2	2.252600-2	0.000000+09439	2151
4.617900+2	1.000000+0	2.122000-3	3.857700-2	-7.699900-2	0.000000+09439	2151
4.632100+2	1.000000+0	6.138800-4	3.462600-2	1.286900-2	0.000000+09439	2151
4.661300+2	1.000000+0	3.246600-4	4.600000-2	2.440000-1	0.000000+09439	2151
4.685900+2	0.000000+0	1.765900-2	4.600000-2	-2.955200+0	6.912400-39439	2151
4.736600+2	1.000000+0	4.215500-3	4.212800-2	-3.481600-3	0.000000+09439	2151
4.757200+2	0.000000+0	3.290900-2	4.600000-2	4.253800-3	3.480600+09439	2151
4.761700+2	0.000000+0	6.210000-3	4.600000-2	3.072500+0	6.139800+09439	2151
4.797300+2	1.000000+0	2.051800-4	4.600000-2	2.084800-2	0.000000+09439	2151
4.847200+2	1.000000+0	2.552400-3	4.286000-2	-7.571200-3	0.000000+09439	2151
4.883400+2	0.000000+0	1.991700-2	4.730000-2	-9.025401-3	7.711700-19439	2151
4.917700+2	0.000000+0	4.049300-2	4.600000-2	1.446800+0	1.237100+09439	2151
4.946900+2	1.000000+0	5.245200-3	4.530300-2	-7.726900-2	0.000000+09439	2151
4.962300+2	1.000000+0	6.647800-4	3.932700-2	6.671700-3	0.000000+09439	2151
5.011200+2	1.000000+0	3.904200-3	2.525000-2	3.764200-2	0.000000+09439	2151
5.034400+2	1.000000+0	1.263000-2	1.220100-1	1.165600-1	0.000000+09439	2151
5.064800+2	1.000000+0	3.647800-4	4.600000-2	-1.231900-1	0.000000+09439	2151
5.100500+2	0.000000+0	4.470200-5	4.600000-2	2.324200-1	3.820500+09439	2151
5.102100+2	1.000000+0	2.670600-2	4.211200-2	-1.838400-1	0.000000+09439	2151
5.105800+2	0.000000+0	1.424500-1	4.600000-2	1.400200-1	1.732600+09439	2151
5.157100+2	1.000000+0	4.916600-4	4.600000-2	-1.226100-2	0.000000+09439	2151
5.172800+2	1.000000+0	6.462100-5	4.600000-2	5.930100-2	0.000000+09439	2151
5.186700+2	1.000000+0	6.623400-4	4.600000-2	-1.108300-1	0.000000+09439	2151
5.208500+2	1.000000+0	1.546900-2	4.619000-2	-2.662500-2	0.000000+09439	2151
5.248400+2	1.000000+0	3.908300-2	2.762100-2	-9.538400-3	0.000000+09439	2151
5.253900+2	0.000000+0	2.458800-1	4.600000-2	1.146600+1	-5.047901-39439	2151
5.267100+2	1.000000+0	1.490600-3	4.600000-2	2.852100-3	0.000000+09439	2151

5.280400+2	1.000000+0	1.764400-3	4.600000-2	2.789600-2	0.000000+09439	2151
5.292000+2	1.000000+0	8.000000-4	4.600000-2	3.000000-3	0.000000+09439	2151
5.309100+2	0.000000+0	2.525200-5	4.600000-2	-1.622800+0	1.405500-19439	2151
5.311800+2	1.000000+0	5.670000-2	4.085800-2	-2.853800-2	0.000000+09439	2151
5.398300+2	1.000000+0	1.261400-2	2.280800-2	2.696000-3	0.000000+09439	2151
5.412300+2	1.000000+0	1.731800-3	4.600000-2	-3.395000-2	0.000000+09439	2151
5.422000+2	1.000000+0	4.767600-3	4.600000-2	5.123401-1	0.000000+09439	2151
5.437500+2	1.000000+0	1.210000-2	8.239701-2	-1.186600-2	0.000000+09439	2151
5.464400+2	0.000000+0	3.299000-2	4.600000-2	-3.811400-1	1.082300+09439	2151
5.503400+2	1.000000+0	1.182200-2	5.404601-2	8.253100-3	0.000000+09439	2151
5.542400+2	1.000000+0	1.273100-2	3.899200-2	3.673800-3	0.000000+09439	2151
5.549600+2	0.000000+0	1.108900-1	4.600000-2	1.470900+0	-9.927201-29439	2151
5.562900+2	1.000000+0	1.551100-3	5.590900-2	-3.814100-3	0.000000+09439	2151
5.598400+2	1.000000+0	2.745700-2	5.679400-2	8.794900-3	0.000000+09439	2151
5.633500+2	0.000000+0	5.945700-2	4.600000-2	-3.016900-2	-1.070700+09439	2151
5.635400+2	1.000000+0	1.694600-2	4.600000-2	-3.983600-2	0.000000+09439	2151
5.646900+2	1.000000+0	7.942600-3	4.600000-2	2.672700-3	0.000000+09439	2151
5.665000+2	1.000000+0	9.614300-3	4.735500-2	-2.187500-3	0.000000+09439	2151
5.717800+2	1.000000+0	8.600401-3	4.600400-2	-4.200200-2	0.000000+09439	2151
5.740300+2	0.000000+0	9.923900-3	4.600000-2	8.605301-4	1.726800+09439	2151
5.746700+2	0.000000+0	1.458100-1	5.463500-2	1.874800-1	3.817700-49439	2151
5.765300+2	1.000000+0	4.199300-2	4.600000-2	7.512700-3	0.000000+09439	2151
5.787200+2	1.000000+0	1.662600-3	4.600000-2	6.299000-3	0.000000+09439	2151
5.797600+2	1.000000+0	6.136001-3	4.600000-2	8.226201-3	0.000000+09439	2151
5.855200+2	1.000000+0	7.121001-4	4.600000-2	-2.978900-2	0.000000+09439	2151
5.888200+2	1.000000+0	1.179800-2	7.099300-2	1.154600-2	0.000000+09439	2151
5.901500+2	1.000000+0	5.464900-4	4.600000-2	2.080000-1	0.000000+09439	2151
5.942900+2	1.000000+0	1.894900-3	5.682000-2	3.063200-2	0.000000+09439	2151
5.978500+2	0.000000+0	2.803800-2	4.600000-2	9.972200-1	3.161600+09439	2151
5.980600+2	1.000000+0	7.681600-3	3.102100-2	-2.160400-3	0.000000+09439	2151
6.047400+2	1.000000+0	2.445500-2	2.968800-2	-2.950900-3	0.000000+09439	2151
6.084100+2	1.000000+0	9.726901-3	2.827100-2	-7.331300-3	0.000000+09439	2151
6.100400+2	1.000000+0	1.614800-2	4.033100-2	-6.030701-3	0.000000+09439	2151
6.135800+2	1.000000+0	5.741500-3	4.675500-2	-1.284000-2	0.000000+09439	2151
6.216000+2	1.000000+0	1.129300-2	4.005900-2	-5.870501-3	0.000000+09439	2151
6.233400+2	1.000000+0	8.963801-3	6.153500-2	9.705100-3	0.000000+09439	2151
6.259400+2	1.000000+0	7.597200-3	4.646000-2	-1.197300-2	0.000000+09439	2151
6.289600+2	1.000000+0	1.600100-3	4.966900-2	1.082400-2	0.000000+09439	2151
6.333200+2	0.000000+0	6.646001-2	4.600000-2	2.854100-3	-3.993500+09439	2151
6.372500+2	1.000000+0	4.469601-3	8.250000-2	1.492000-2	0.000000+09439	2151
6.400400+2	1.000000+0	8.500000-3	2.786400-2	7.467600-3	0.000000+09439	2151
6.426499+2	0.000000+0	8.120500-3	4.600000-2	5.115200-3	3.750800+09439	2151
6.426500+2	1.000000+0	2.300000-4	4.600000-2	1.000000-2	0.000000+09439	2151
6.457400+2	1.000000+0	6.310300-3	1.095400-1	1.667700-2	0.000000+09439	2151
6.473400+2	1.000000+0	4.000000-4	4.600000-2	1.000000-2	0.000000+09439	2151
6.475300+2	0.000000+0	4.165000-3	4.600000-2	1.041500+0	1.062300-19439	2151
6.513700+2	1.000000+0	2.500000-4	4.600000-2	1.000000-2	0.000000+09439	2151
6.534000+2	1.000000+0	2.000000-4	4.600000-2	1.000000-2	0.000000+09439	2151
6.587500+2	0.000000+0	5.142500-2	4.864700-2	-4.618500-2	-4.354300-69439	2151
6.594000+2	1.000000+0	4.918800-2	7.129600-2	-1.383900-2	0.000000+09439	2151
6.625400+2	1.000000+0	3.748200-4	4.600000-2	3.000000-2	0.000000+09439	2151
6.671700+2	1.000000+0	2.215000-3	4.092500-2	-1.176300-2	0.000000+09439	2151
6.699000+2	1.000000+0	3.793700-3	3.248300-2	6.675601-3	0.000000+09439	2151
6.721400+2	1.000000+0	1.601200-2	3.564500-2	6.146000-3	0.000000+09439	2151
6.735700+2	1.000000+0	8.638001-4	4.600000-2	3.000000-2	0.000000+09439	2151
6.745758+2	0.000000+0	9.148100-3	4.600000-2	6.900300-5	-5.947100+09439	2151
6.750500+2	1.000000+0	2.239800-3	4.614300-2	3.179700-2	0.000000+09439	2151
6.762600+2	1.000000+0	7.096900-4	4.232500-2	2.111000-2	0.000000+09439	2151
6.830607+2	0.000000+0	3.129400-2	4.600000-2	-3.130100+0	0.000000+09439	2151
6.847000+2	1.000000+0	6.888200-3	4.344400-2	4.065800-4	0.000000+09439	2151
6.848326+2	0.000000+0	1.992700-2	4.600000-2	2.764600-2	-1.790600+09439	2151
6.865700+2	1.000000+0	5.680901-4	4.026100-2	3.200000-3	0.000000+09439	2151

6.885300+2	1.000000+0	1.467000-2	2.248300-2	8.698400-3	0.000000+09439	2151
6.927500+2	1.000000+0	5.616700-3	7.877401-2	1.607300-1	0.000000+09439	2151
6.937900+2	0.000000+0	8.485700-3	4.986500-2	5.522200-1	1.158200-29439	2151
7.014003+2	0.000000+0	6.145200-3	4.600000-2	1.694200-2	2.671200+09439	2151
7.070743+2	1.000000+0	2.726400-3	4.597100-2	1.012400-2	0.000000+09439	2151
7.076755+2	1.000000+0	9.546100-3	3.741800-2	1.116800-2	0.000000+09439	2151
7.089400+2	1.000000+0	2.100000-4	4.600000-2	7.200000-2	0.000000+09439	2151
7.105000+2	1.000000+0	1.900000-4	4.600000-2	3.600000-2	0.000000+09439	2151
7.132111+2	1.000000+0	9.378801-3	5.701600-2	2.269600-2	0.000000+09439	2151
7.139989+2	1.000000+0	6.316400-3	9.411300-2	6.580301-2	0.000000+09439	2151
7.174677+2	1.000000+0	1.157000-2	2.553900-2	6.026600-3	0.000000+09439	2151
7.188423+2	1.000000+0	7.417500-3	3.878900-2	4.167200-3	0.000000+09439	2151
7.208200+2	1.000000+0	1.877900-4	4.600000-2	3.600000-2	0.000000+09439	2151
7.263800+2	0.000000+0	1.250000-3	4.600000-2	3.600000-1	0.000000+09439	2151
7.278836+2	1.000000+0	3.046300-3	2.139700-2	7.610900-3	0.000000+09439	2151
7.329481+2	0.000000+0	1.770200-2	4.600000-2	3.428800-1	1.969700+09439	2151
7.331916+2	1.000000+0	7.644300-3	5.058500-2	4.039200-3	0.000000+09439	2151
7.348900+2	1.000000+0	6.672801-4	4.600000-2	4.000000-2	0.000000+09439	2151
7.380881+2	0.000000+0	2.699000-2	4.600000-2	1.137800+0	3.363800-19439	2151
7.395905+2	1.000000+0	4.740000-3	9.668801-2	2.099300-1	0.000000+09439	2151
7.446312+2	1.000000+0	1.214200-2	4.631400-2	2.365900-2	0.000000+09439	2151
7.470470+2	1.000000+0	1.408400-2	4.608500-2	9.841801-3	0.000000+09439	2151
7.493099+2	1.000000+0	1.202700-3	3.129600-2	5.052500-3	0.000000+09439	2151
7.507978+2	1.000000+0	2.061700-3	3.346800-2	9.295001-3	0.000000+09439	2151
7.534231+2	1.000000+0	3.913100-2	3.987100-2	8.892001-3	0.000000+09439	2151
7.553600+2	1.000000+0	1.446900-3	4.600000-2	2.954700-2	0.000000+09439	2151
7.576035+2	0.000000+0	7.474700-2	4.600000-2	1.054000-3	2.726600+09439	2151
7.581006+2	1.000000+0	4.206100-3	6.481800-2	3.581700-2	0.000000+09439	2151
7.647621+2	1.000000+0	7.679901-3	1.246000-1	2.099100-2	0.000000+09439	2151
7.671129+2	1.000000+0	3.027900-3	2.734700-2	1.496500-2	0.000000+09439	2151
7.738611+2	1.000000+0	6.609100-3	5.147500-2	1.456900-2	0.000000+09439	2151
7.757619+2	0.000000+0	3.516000-3	4.600000-2	3.903600-1	1.723400-29439	2151
7.776633+2	1.000000+0	1.039500-2	5.276600-2	3.569800-2	0.000000+09439	2151
7.809892+2	1.000000+0	1.927700-3	3.910400-2	6.475700-2	0.000000+09439	2151
7.817863+2	1.000000+0	1.352500-2	4.192100-2	4.048100-2	0.000000+09439	2151
7.826177+2	1.000000+0	2.252000-3	4.790800-2	1.644200-2	0.000000+09439	2151
7.846941+2	1.000000+0	2.411100-3	5.240400-2	5.849100-3	0.000000+09439	2151
7.871234+2	1.000000+0	9.367401-3	4.058700-2	1.137800-2	0.000000+09439	2151
7.895477+2	0.000000+0	4.748000-3	4.600000-2	6.090201-1	1.500000-39439	2151
7.905319+2	1.000000+0	1.526300-3	4.506700-2	3.313900-2	0.000000+09439	2151
7.957499+2	1.000000+0	7.888100-3	3.232200-2	3.581400-2	0.000000+09439	2151
7.980062+2	0.000000+0	1.322700-1	4.600000-2	4.793300+0	4.405300+09439	2151
8.009364+2	1.000000+0	3.201600-3	5.699800-2	4.539700-2	0.000000+09439	2151
8.053100+2	1.000000+0	6.591700-4	4.600000-2	3.600000-2	0.000000+09439	2151
8.053232+2	0.000000+0	3.452000-2	4.600000-2	1.206700+0	8.909700+09439	2151
8.070186+2	1.000000+0	7.685401-3	4.569801-2	1.062800-2	0.000000+09439	2151
8.109900+2	1.000000+0	7.584300-4	4.600000-2	3.689300-2	0.000000+09439	2151
8.166290+2	1.000000+0	1.348600-2	3.104400-2	1.053500-2	0.000000+09439	2151
8.206554+2	1.000000+0	5.748000-3	2.800100-2	1.146000-2	0.000000+09439	2151
8.242709+2	0.000000+0	2.472800-2	4.600000-2	1.101500+0	1.895300+09439	2151
8.252041+2	1.000000+0	5.393800-3	3.741000-2	3.798300-2	0.000000+09439	2151
8.297674+2	1.000000+0	2.892000-2	5.329900-2	3.152400-2	0.000000+09439	2151
8.311221+2	0.000000+0	6.265400-3	4.600000-2	1.382300+0	1.237400+09439	2151
8.329720+2	1.000000+0	1.743200-3	4.600000-2	2.529300-1	0.000000+09439	2151
8.361245+2	1.000000+0	2.550600-3	5.437700-2	3.200000-3	0.000000+09439	2151
8.432565+2	0.000000+0	1.304600-1	4.600000-2	4.406700-1	8.489201+09439	2151
8.437500+2	1.000000+0	1.381500-3	4.600000-2	3.943200-2	0.000000+09439	2151
8.455444+2	1.000000+0	5.604500-3	7.185000-2	7.343000-2	0.000000+09439	2151
8.481985+2	1.000000+0	6.703401-3	1.107700-1	1.226000-1	0.000000+09439	2151
8.532452+2	0.000000+0	1.452500-2	4.600000-2	4.374600-1	1.226500+09439	2151
8.544400+2	1.000000+0	7.927400-4	3.350300-2	8.554100-2	0.000000+09439	2151
8.558370+2	1.000000+0	2.044000-3	3.228800-2	5.085600-2	0.000000+09439	2151

8.579330+2	0.000000+0	1.711600-2	4.600000-2	4.172700+0	4.531600-29439	2151
8.586556+2	1.000000+0	1.973200-3	4.000100-2	2.249900-2	0.000000+09439	2151
8.614841+2	1.000000+0	2.407500-3	2.407600-2	4.358600-2	0.000000+09439	2151
8.658100+2	1.000000+0	1.919600-3	4.600000-2	2.376200-2	0.000000+09439	2151
8.674450+2	1.000000+0	3.961900-3	6.890000-2	1.558700-1	0.000000+09439	2151
8.701281+2	1.000000+0	3.987000-3	3.818300-2	4.144200-2	0.000000+09439	2151
8.744010+2	1.000000+0	1.842600-2	4.000000-2	2.316500-2	0.000000+09439	2151
8.756530+2	1.000000+0	1.549900-2	3.000000-2	1.421900-2	0.000000+09439	2151
8.785773+2	1.000000+0	4.084500-3	4.025400-2	7.493101-3	0.000000+09439	2151
8.855291+2	1.000000+0	1.264200-2	7.218600-2	1.716000-2	0.000000+09439	2151
8.890657+2	0.000000+0	9.231101-3	4.600000-2	7.241000+0	-6.285600-49439	2151
8.919053+2	1.000000+0	6.810801-2	2.681000-2	3.092000-3	0.000000+09439	2151
8.958430+2	1.000000+0	6.990900-3	6.407300-2	2.267700-1	0.000000+09439	2151
8.970737+2	1.000000+0	8.044800-3	9.504001-2	1.320200-1	0.000000+09439	2151
8.980792+2	0.000000+0	1.740200-3	4.600000-2	6.041400-1	-4.084100-29439	2151
9.037308+2	1.000000+0	1.103500-2	3.674100-2	-1.648000-2	0.000000+09439	2151
9.059904+2	1.000000+0	3.805800-3	4.800800-2	-2.917700-3	0.000000+09439	2151
9.074658+2	0.000000+0	6.075300-2	4.600000-2	-5.081201+0	1.711600+09439	2151
9.085139+2	1.000000+0	4.162800-3	3.228200-2	2.766300-2	0.000000+09439	2151
9.115536+2	0.000000+0	1.059900-3	4.600000-2	2.569300+0	2.158700-19439	2151
9.127023+2	0.000000+0	4.412700-2	4.600000-2	1.507200-1	3.435500+09439	2151
9.161522+2	1.000000+0	4.444800-3	3.711200-2	1.277800-1	0.000000+09439	2151
9.199619+2	1.000000+0	1.074800-2	4.600000-2	-2.441100-1	0.000000+09439	2151
9.206923+2	1.000000+0	9.268501-3	4.600000-2	1.046800-2	0.000000+09439	2151
9.231524+2	1.000000+0	2.611600-2	2.533200-2	4.940300-3	0.000000+09439	2151
9.259134+2	0.000000+0	9.852001-3	4.600000-2	1.407200+0	3.473600-39439	2151
9.279492+2	1.000000+0	3.426500-3	4.600000-2	8.861600-3	0.000000+09439	2151
9.295218+2	1.000000+0	9.520301-4	4.600000-2	6.153800-1	0.000000+09439	2151
9.329575+2	1.000000+0	1.197400-2	2.633500-2	-3.036500-3	0.000000+09439	2151
9.375280+2	1.000000+0	1.586600-3	4.600000-2	9.938800-2	0.000000+09439	2151
9.389407+2	0.000000+0	5.120200-2	4.600000-2	-6.360300+0	-6.955900-49439	2151
9.396876+2	1.000000+0	1.124400-2	1.012300-1	1.271600-1	0.000000+09439	2151
9.412340+2	1.000000+0	7.268500-3	4.600000-2	-1.263400-2	0.000000+09439	2151
9.441658+2	1.000000+0	7.016601-3	4.600000-2	3.031200-3	0.000000+09439	2151
9.464415+2	1.000000+0	8.308501-3	4.043500-2	-3.502100-3	0.000000+09439	2151
9.470426+2	0.000000+0	2.034800-3	4.600000-2	4.484800+0	-5.373901-19439	2151
9.516913+2	1.000000+0	6.298901-3	3.797000-2	1.807300-2	0.000000+09439	2151
9.549748+2	1.000000+0	8.621801-3	4.813900-2	8.961500-2	0.000000+09439	2151
9.588920+2	1.000000+0	4.167700-2	7.857801-2	4.825000-2	0.000000+09439	2151
9.623000+2	1.000000+0	3.500000-4	4.600000-2	1.200000-1	0.000000+09439	2151
9.663130+2	1.000000+0	2.913000-2	5.822400-2	1.309100-1	0.000000+09439	2151
9.721569+2	0.000000+0	6.592900-2	4.600000-2	1.494000+0	7.073800-49439	2151
9.743928+2	1.000000+0	6.325300-2	2.573400-2	3.479500-2	0.000000+09439	2151
9.779509+2	1.000000+0	4.170500-3	4.600000-2	6.507100-2	0.000000+09439	2151
9.802936+2	0.000000+0	7.482900-2	4.600000-2	-3.197100-3	1.587700+09439	2151
9.853574+2	1.000000+0	7.885501-2	3.185100-2	-1.651000-2	0.000000+09439	2151
9.895335+2	1.000000+0	2.815300-3	4.558800-2	1.486000-1	0.000000+09439	2151
9.908574+2	1.000000+0	5.638900-3	4.727600-2	3.918300-2	0.000000+09439	2151
9.942368+2	1.000000+0	1.891100-2	4.493100-2	3.068400-2	0.000000+09439	2151
9.979726+2	1.000000+0	3.556200-2	4.600000-2	-2.558200-1	0.000000+09439	2151
9.986684+2	1.000000+0	3.528900-2	4.600000-2	-3.842000-2	0.000000+09439	2151
1.005000+3	1.000000+0	7.722700-2	4.600000-2	1.195300-3	0.000000+09439	2151
1.010000+3	0.000000+0	1.850500-1	4.600000-2	-4.920300+0	2.085200-29439	2151
1.100000+3	1.000000+0	1.220000+0	4.600000-2	4.600000-2	0.000000+09439	2151
1.000000+03	2.000000+03	1	3	0	09439	2151
5.00000-01	9.41000-01	0	0	1	19439	2151
2.36999+02	0.	0	0	2304	3849439	2151
9.075000+2	0.000000+0	6.070000-2	4.600000-2	-5.100000+0	1.700000+09439	2151
9.127020+2	0.000000+0	4.400000-2	4.600000-2	2.500000+0	2.000000-19439	2151
9.231500+2	1.000000+0	2.600000-2	4.600000-2	4.900000-1	0.000000+09439	2151
9.389400+2	0.000000+0	5.100000-2	4.600000-2	-6.300000+0	1.000000-19439	2151
9.588900+2	1.000000+0	4.200000-2	4.600000-2	4.800000-1	0.000000+09439	2151

9.743900+2	1.000000+0	6.300000-2	4.600000-2	3.400000-2	0.000000+09439	2151
9.802936+2	0.000000+0	7.482900-2	4.600000-2	3.197100-3	1.597700+09439	2151
9.853574+2	1.000000+0	7.885501-2	3.185100-2	1.651000-2	0.000000+09439	2151
9.895335+2	1.000000+0	2.815300-3	4.558800-2	1.486000-1	0.000000+09439	2151
9.908574+2	1.000000+0	5.658900-3	4.727600-2	3.918900-2	0.000000+09439	2151
9.942368+2	1.000000+0	1.891100-2	4.493100-2	2.468400-2	0.000000+09439	2151
9.973305+2	0.000000+0	3.252700-2	4.600000-2	4.190400+0	7.607000-29439	2151
9.979726+2	1.000000+0	3.556200-2	4.600000-2	2.558200-1	0.000000+09439	2151
9.984849+2	1.000000+0	6.853100-2	4.600000-2	1.523900-2	0.000000+09439	2151
1.002597+3	1.000000+0	1.706400-2	4.600000-2	3.035700-1	0.000000+09439	2151
1.006998+3	1.000000+0	6.799000-3	4.600000-2	2.046900-2	0.000000+09439	2151
1.012274+3	1.000000+0	6.793301-3	4.600000-2	1.133600-2	0.000000+09439	2151
1.017035+3	1.000000+0	1.105300-2	4.600000-2	1.077100-2	0.000000+09439	2151
1.020153+3	1.000000+0	1.653700-2	4.600000-2	3.372300-1	0.000000+09439	2151
1.025090+3	1.000000+0	3.460000-3	4.600000-2	3.000000-2	0.000000+09439	2151
1.025241+3	0.000000+0	3.644700-2	4.600000-2	5.887001-1	6.406000-19439	2151
1.028258+3	1.000000+0	5.316900-2	4.600000-2	5.715600-2	0.000000+09439	2151
1.031667+3	1.000000+0	2.569800-2	4.600000-2	5.340200-3	0.000000+09439	2151
1.033524+3	1.000000+0	3.463700-3	4.600000-2	1.839200-2	0.000000+09439	2151
1.034163+3	1.000000+0	1.215500-3	4.600000-2	3.284100-2	0.000000+09439	2151
1.035740+3	1.000000+0	2.100000-3	4.600000-2	6.000001-3	0.000000+09439	2151
1.039356+3	1.000000+0	3.216600-3	4.600000-2	8.631801-2	0.000000+09439	2151
1.042024+3	1.000000+0	9.034501-4	4.600000-2	7.232901-3	0.000000+09439	2151
1.044103+3	1.000000+0	2.946500-2	4.600000-2	7.589400-2	0.000000+09439	2151
1.047837+3	0.000000+0	5.951500-2	4.600000-2	7.971200-1	8.753900-49439	2151
1.048218+3	0.000000+0	3.582900-2	4.600000-2	1.049100-2	1.524000+09439	2151
1.049438+3	1.000000+0	4.569400-3	4.600000-2	3.051000-3	0.000000+09439	2151
1.050673+3	1.000000+0	4.433200-3	4.600000-2	1.397800-2	0.000000+09439	2151
1.056428+3	0.000000+0	5.367200-2	4.600000-2	1.510301-2	6.850000-19439	2151
1.057171+3	1.000000+0	1.483300-2	4.600000-2	3.104700-3	0.000000+09439	2151
1.061159+3	1.000000+0	1.102000-2	4.600000-2	4.608900-2	0.000000+09439	2151
1.065225+3	1.000000+0	5.485600-3	4.600000-2	4.120100-3	0.000000+09439	2151
1.070478+3	1.000000+0	5.714000-2	4.600000-2	1.745400-2	0.000000+09439	2151
1.072080+3	0.000000+0	1.887000-3	4.600000-2	1.153600-1	0.000000+09439	2151
1.073536+3	0.000000+0	8.146101-3	4.600000-2	2.557400-3	9.523100-19439	2151
1.075952+3	1.000000+0	1.171100-2	4.600000-2	8.786600-3	0.000000+09439	2151
1.079333+3	1.000000+0	8.939801-4	4.600000-2	3.071300-3	0.000000+09439	2151
1.082377+3	1.000000+0	4.594800-3	4.600000-2	3.263900-3	0.000000+09439	2151
1.085944+3	1.000000+0	2.124900-2	4.600000-2	3.077400-3	0.000000+09439	2151
1.089329+3	1.000000+0	1.276400-2	4.600000-2	2.098500-2	0.000000+09439	2151
1.089702+3	0.000000+0	7.476700-2	4.600000-2	1.269000-2	1.581200+19439	2151
1.093576+3	1.000000+0	1.373100-3	4.600000-2	4.310200-3	0.000000+09439	2151
1.097376+3	1.000000+0	6.187100-2	4.600000-2	3.473000-2	0.000000+09439	2151
1.103972+3	0.000000+0	6.483401-2	4.600000-2	4.653300-3	3.397000+09439	2151
1.104439+3	1.000000+0	1.419300-2	4.600000-2	1.413700-2	0.000000+09439	2151
1.105900+3	0.000000+0	6.105100-2	4.600000-2	1.707300+1	4.058800-29439	2151
1.107370+3	1.000000+0	2.098000-2	4.600000-2	1.211400-2	0.000000+09439	2151
1.108548+3	1.000000+0	6.054901-3	4.600000-2	8.943401-2	0.000000+09439	2151
1.111552+3	1.000000+0	1.150000-3	4.600000-2	5.000000-2	0.000000+09439	2151
1.112879+3	0.000000+0	1.301200-5	4.600000-2	4.198500-5	1.440200+19439	2151
1.114101+3	1.000000+0	1.000000-3	4.600000-2	1.000000-1	0.000000+09439	2151
1.117033+3	1.000000+0	2.000000-3	4.600000-2	6.500001-2	0.000000+09439	2151
1.119289+3	1.000000+0	8.039100-3	4.600000-2	3.845200-3	0.000000+09439	2151
1.120809+3	1.000000+0	3.622600-3	4.600000-2	1.222900-2	0.000000+09439	2151
1.124700+3	1.000000+0	1.360900-2	4.600000-2	3.750000-2	0.000000+09439	2151
1.129890+3	0.000000+0	2.433000-2	4.600000-2	1.034100+1	8.048701-29439	2151
1.132880+3	0.000000+0	7.945800-4	4.600000-2	4.344700-1	3.346000-19439	2151
1.134115+3	1.000000+0	6.371400-3	4.600000-2	1.337200-2	0.000000+09439	2151
1.137279+3	0.000000+0	1.230100-2	4.600000-2	1.686100-2	4.854200+09439	2151
1.139331+3	0.000000+0	1.556500-1	4.600000-2	1.404200+0	0.000000+09439	2151
1.140321+3	1.000000+0	3.140200-2	4.600000-2	4.837200-2	0.000000+09439	2151
1.142842+3	1.000000+0	1.873300-2	4.600000-2	5.676100-5	0.000000+09439	2151

1.145281+3	1.000000+0	2.480100-2	4.600000-2	-1.806900-3	0.000000+09439	2151
1.149063+3	1.000000+0	2.417000-2	4.600000-2	4.453700-2	0.000000+09439	2151
1.151587+3	1.000000+0	3.000000-3	4.600000-2	3.500000-2	0.000000+09439	2151
1.153180+3	1.000000+0	1.257900-2	4.600000-2	4.713601-3	0.000000+09439	2151
1.155732+3	1.000000+0	1.326000-3	4.600000-2	7.443100-2	0.000000+09439	2151
1.158508+3	1.000000+0	2.570700-2	4.600000-2	4.882100-2	0.000000+09439	2151
1.160945+3	1.000000+0	2.384300-3	4.600000-2	-1.000000-2	0.000000+09439	2151
1.165937+3	1.000000+0	6.567700-4	4.600000-2	3.500000-1	0.000000+09439	2151
1.170233+3	1.000000+0	1.305100-2	4.600000-2	3.446800-2	0.000000+09439	2151
1.175043+3	0.000000+0	3.900000-2	4.600000-2	4.524100-1	0.000000+09439	2151
1.178439+3	1.000000+0	1.240400-3	4.600000-2	6.283101-2	0.000000+09439	2151
1.182330+3	1.000000+0	8.646200-4	4.600000-2	3.802700-2	0.000000+09439	2151
1.184157+3	1.000000+0	5.928200-3	4.600000-2	-1.043400-2	0.000000+09439	2151
1.184876+3	0.000000+0	1.051300-1	4.600000-2	1.856800+0	0.000000+09439	2151
1.188696+3	1.000000+0	1.313200-2	4.600000-2	4.255500-2	0.000000+09439	2151
1.191583+3	1.000000+0	1.205700-3	4.600000-2	1.000000-2	0.000000+09439	2151
1.194880+3	1.000000+0	2.683300-2	4.600000-2	-1.112700-1	0.000000+09439	2151
1.200400+3	1.000000+0	7.816400-3	4.600000-2	5.048700-3	0.000000+09439	2151
1.201625+3	1.000000+0	2.227100-3	4.600000-2	4.000000-2	0.000000+09439	2151
1.205837+3	1.000000+0	2.200000-3	4.600000-2	1.000000-2	0.000000+09439	2151
1.206509+3	0.000000+0	1.706900-2	4.600000-2	-1.265500+0	2.779500-19439	2151
1.212145+3	0.000000+0	1.236200-1	4.600000-2	7.212101-3	1.027900+19439	2151
1.215745+3	1.000000+0	2.898400-3	4.600000-2	-2.198400-2	0.000000+09439	2151
1.218650+3	1.000000+0	3.667800-2	4.600000-2	1.593900-2	0.000000+09439	2151
1.220501+3	1.000000+0	2.199300-3	4.600000-2	-4.481500-2	0.000000+09439	2151
1.222705+3	1.000000+0	3.987300-5	4.600000-2	2.000000-1	0.000000+09439	2151
1.225495+3	1.000000+0	1.170400-2	4.600000-2	-1.633600-2	0.000000+09439	2151
1.229271+3	1.000000+0	3.826000-3	4.600000-2	1.793400-1	0.000000+09439	2151
1.232431+3	1.000000+0	6.488800-4	4.600000-2	-2.000000-1	0.000000+09439	2151
1.233637+3	0.000000+0	3.437700-2	4.600000-2	3.092900+0	5.000000-19439	2151
1.236121+3	1.000000+0	1.275100-2	4.600000-2	1.804100-3	0.000000+09439	2151
1.237272+3	0.000000+0	3.166300-2	4.600000-2	-1.366500+0	6.000000-19439	2151
1.241558+3	1.000000+0	2.035300-4	4.600000-2	-2.000000-1	0.000000+09439	2151
1.243971+3	1.000000+0	3.305700-4	4.600000-2	2.000000-1	0.000000+09439	2151
1.245207+3	0.000000+0	7.600600-3	4.600000-2	-1.960500-1	5.069801-19439	2151
1.247223+3	0.000000+0	4.853100-2	4.600000-2	3.993300+0	5.000000-19439	2151
1.253439+3	1.000000+0	1.286500-2	4.600000-2	1.835000-2	0.000000+09439	2151
1.255354+3	1.000000+0	8.755400-3	4.600000-2	-3.766000-2	0.000000+09439	2151
1.258572+3	1.000000+0	4.254800-2	4.600000-2	-7.808900-3	0.000000+09439	2151
1.260580+3	1.000000+0	3.954100-2	4.600000-2	-7.115200-3	0.000000+09439	2151
1.267224+3	1.000000+0	1.398400-2	4.600000-2	8.227801-3	0.000000+09439	2151
1.267473+3	0.000000+0	9.538200-2	4.600000-2	-2.413600+0	0.000000+09439	2151
1.268660+3	1.000000+0	1.026600-2	4.600000-2	3.618400-3	0.000000+09439	2151
1.269935+3	1.000000+0	2.779800-2	4.600000-2	3.718300-3	0.000000+09439	2151
1.272235+3	1.000000+0	1.247600-3	4.600000-2	2.000000-1	0.000000+09439	2151
1.274257+3	1.000000+0	4.921000-3	4.600000-2	-1.332800-1	0.000000+09439	2151
1.277213+3	1.000000+0	1.770100-2	4.600000-2	1.166800-2	0.000000+09439	2151
1.282958+3	1.000000+0	2.595300-2	4.600000-2	2.997400-2	0.000000+09439	2151
1.285063+3	1.000000+0	8.825100-4	4.600000-2	-1.000000-1	0.000000+09439	2151
1.287866+3	0.000000+0	3.373900-2	4.600000-2	6.499800-1	0.000000+09439	2151
1.290364+3	1.000000+0	1.656800-2	4.600000-2	-1.522900-2	0.000000+09439	2151
1.294692+3	1.000000+0	5.617500-3	4.600000-2	1.068500-1	0.000000+09439	2151
1.297127+3	0.000000+0	1.641100-2	4.600000-2	1.200000-2	-2.400000+09439	2151
1.299838+3	1.000000+0	1.209100-2	4.600000-2	4.463200-1	0.000000+09439	2151
1.300250+3	1.000000+0	1.468200-2	4.600000-2	5.395300-2	0.000000+09439	2151
1.302601+3	1.000000+0	1.390500-2	4.600000-2	1.115700-2	0.000000+09439	2151
1.303950+3	1.000000+0	3.437900-3	4.600000-2	1.000000-2	0.000000+09439	2151
1.307417+3	0.000000+0	5.285100-2	4.600000-2	2.305300-2	3.757700+09439	2151
1.311934+3	1.000000+0	4.771200-3	4.600000-2	-2.462900-2	0.000000+09439	2151
1.313741+3	1.000000+0	1.238600-2	4.600000-2	1.398000-2	0.000000+09439	2151
1.316808+3	0.000000+0	9.267701-3	4.600000-2	4.967800-1	1.000000-29439	2151
1.318016+3	1.000000+0	1.918100-2	4.600000-2	1.401300-1	0.000000+09439	2151

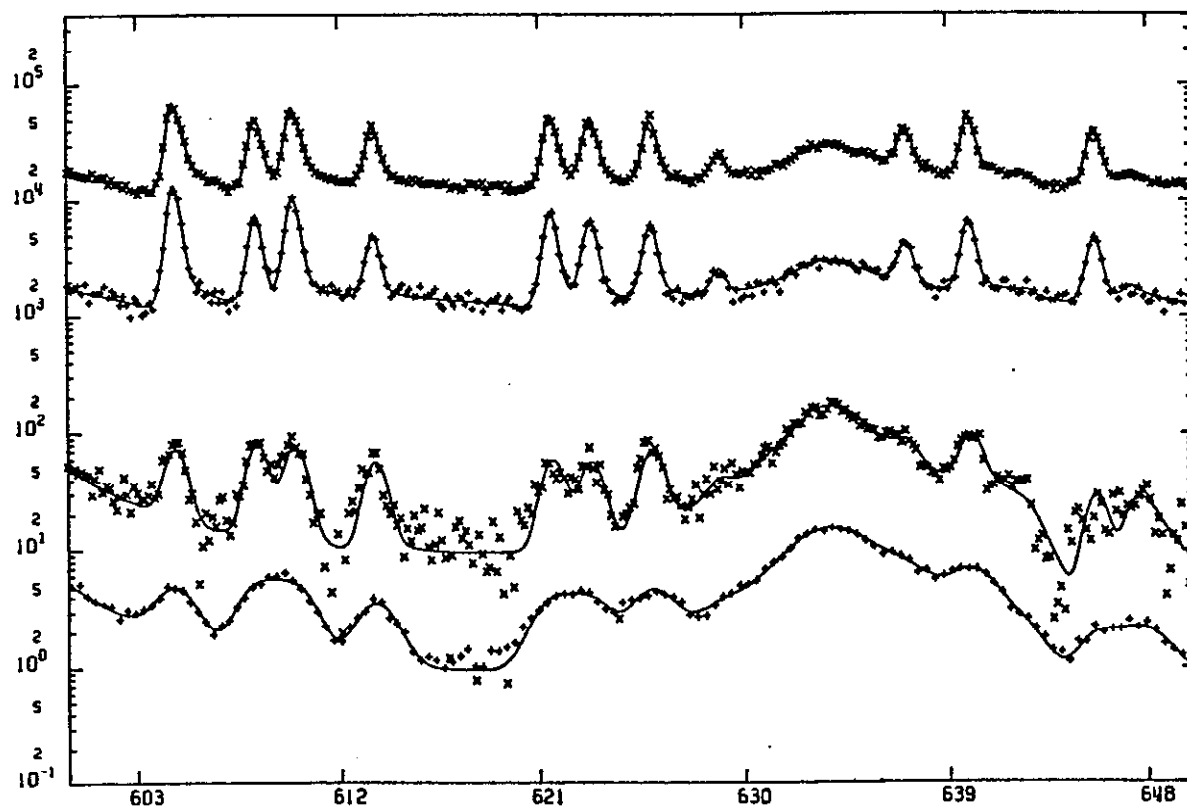
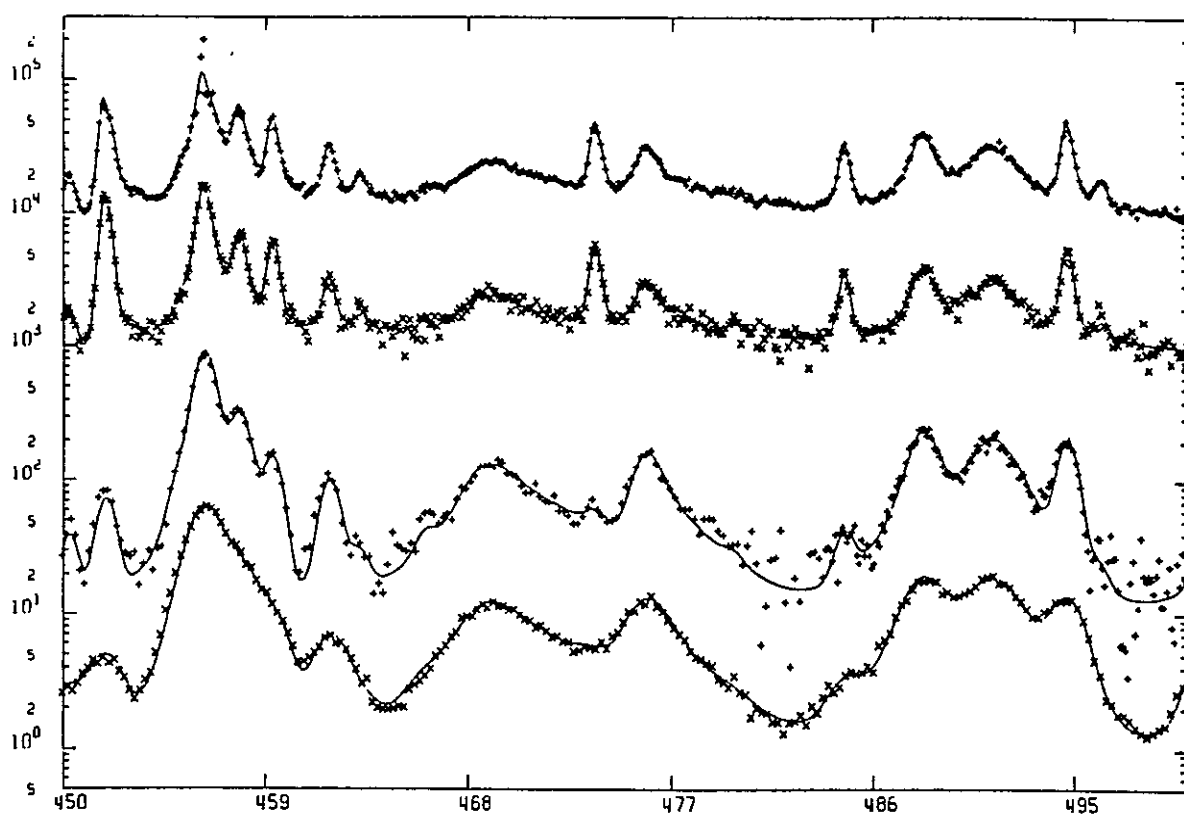
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1.329089+3	0.000000+0	3.528800-2	4.600000-2	1.634400-1	7.084400+09439	2151
1.330494+3	1.000000+0	3.383900-3	4.600000-2	3.106200-2	0.000000+09439	2151
1.333523+3	0.000000+0	2.777300-2	4.600000-2	1.230200+0	0.000000+09439	2151
1.335638+3	1.000000+0	5.266800-2	4.600000-2	1.001000-1	0.000000+09439	2151
1.337093+3	1.000000+0	3.702600-2	4.600000-2	6.525300-2	0.000000+09439	2151
1.339605+3	1.000000+0	1.731500-2	4.600000-2	3.568200-2	0.000000+09439	2151
1.342405+3	1.000000+0	1.150100-2	4.600000-2	6.193200-1	0.000000+09439	2151
1.345610+3	1.000000+0	1.200000-3	4.600000-2	1.000000-1	0.000000+09439	2151
1.347993+3	0.000000+0	1.232900-2	4.600000-2	5.723600-1	1.000000-19439	2151
1.349164+3	1.000000+0	3.490000-3	4.600000-2	4.344000-2	0.000000+09439	2151
1.353534+3	1.000000+0	4.476600-3	4.600000-2	5.089000-2	0.000000+09439	2151
1.354737+3	0.000000+0	8.142200-2	4.600000-2	1.993600+0	7.568000-19439	2151
1.356872+3	1.000000+0	1.718000-2	4.600000-2	1.408700-1	0.000000+09439	2151
1.358389+3	1.000000+0	4.346500-2	4.600000-2	8.258001-2	0.000000+09439	2151
1.359992+3	1.000000+0	1.271100-2	4.600000-2	7.207600-2	0.000000+09439	2151
1.361680+3	1.000000+0	6.028200-3	4.600000-2	5.000000-2	0.000000+09439	2151
1.364070+3	1.000000+0	3.996100-4	4.600000-2	5.000000-2	0.000000+09439	2151
1.369270+3	1.000000+0	1.000000-3	4.600000-2	1.000000-1	0.000000+09439	2151
1.371354+3	0.000000+0	1.066100-2	4.600000-2	9.300300-2	0.000000+09439	2151
1.373450+3	1.000000+0	1.049400-3	4.600000-2	1.000000-1	0.000000+09439	2151
1.378622+3	1.000000+0	3.562200-3	4.600000-2	2.816200-1	0.000000+09439	2151
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1.382208+3	0.000000+0	4.638100-3	4.600000-2	3.577700-1	0.000000+09439	2151
1.384332+3	0.000000+0	8.014800-3	4.600000-2	7.363501-3	7.430701-19439	2151
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1.404410+3	1.000000+0	1.947700-2	4.600000-2	2.046800-2	0.000000+09439	2151
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1.421665+3	1.000000+0	3.689800-2	4.600000-2	1.034400-2	0.000000+09439	2151
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1.444528+3	1.000000+0	3.139800-3	4.600000-2	4.288600-2	0.000000+09439	2151
1.446502+3	1.000000+0	1.212400-2	4.600000-2	8.151800-3	0.000000+09439	2151
1.451748+3	0.000000+0	8.236001-2	4.600000-2	3.429200+0	2.914700-29439	2151
1.456418+3	0.000000+0	4.137500-2	4.600000-2	2.524600-4	1.921300+09439	2151
1.457779+3	1.000000+0	1.995000-2	4.600000-2	2.360600-2	0.000000+09439	2151
1.464904+3	1.000000+0	4.738800-3	4.600000-2	3.467500-2	0.000000+09439	2151
1.467603+3	1.000000+0	1.291600-2	4.600000-2	5.467100-2	0.000000+09439	2151
1.471205+3	0.000000+0	2.397700-2	4.600000-2	4.544700-1	0.000000+09439	2151
1.472938+3	1.000000+0	1.419000-2	4.600000-2	1.567900-2	0.000000+09439	2151
1.477109+3	1.000000+0	1.506500-2	4.600000-2	1.060000-2	0.000000+09439	2151
1.482272+3	0.000000+0	7.624200-2	4.600000-2	1.979400+0	1.176700-19439	2151
1.484327+3	1.000000+0	1.904400-2	4.600000-2	8.734400-3	0.000000+09439	2151
1.487172+3	1.000000+0	6.550300-3	4.600000-2	1.965500-2	0.000000+09439	2151

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1.499193+3	1.000000+0	1.059600-2	4.600000-2	4.917800-2	0.000000+09439	2151
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1.511054+3	1.000000+0	6.496200-3	4.600000-2	1.987400-2	0.000000+09439	2151
1.512560+3	1.000000+0	6.933700-3	4.600000-2	1.996800-2	0.000000+09439	2151
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1.515870+3	1.000000+0	6.000001-3	4.600000-2	1.000000-1	0.000000+09439	2151
1.519580+3	1.000000+0	2.000000-3	4.600000-2	1.000000-2	0.000000+09439	2151
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1.574830+3	1.000000+0	1.791600-2	4.600000-2	2.044200-2	0.000000+09439	2151
1.578270+3	1.000000+0	3.348200-2	4.600000-2	1.921000-2	0.000000+09439	2151
1.581000+3	1.000000+0	1.500000-3	4.600000-2	3.000000-2	0.000000+09439	2151
1.583033+3	1.000000+0	2.297200-2	4.600000-2	2.284800-2	0.000000+09439	2151
1.585220+3	1.000000+0	3.000000-3	4.600000-2	1.000000-1	0.000000+09439	2151
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1.627440+3	1.000000+0	4.000000-3	4.600000-2	1.638000-1	0.000000+09439	2151
1.631296+3	0.000000+0	6.475000-2	4.600000-2	2.785700+0	0.000000+09439	2151
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1.636945+3	1.000000+0	1.502800-2	4.600000-2	1.156200-2	0.000000+09439	2151
1.638970+3	1.000000+0	1.226500-4	4.600000-2	1.000000-1	0.000000+09439	2151
1.642560+3	0.000000+0	7.027901-5	4.600000-2	2.000000+0	0.000000+09439	2151
1.646290+3	0.000000+0	2.532900-2	4.600000-2	1.000000-1	1.000000+09439	2151
1.650461+3	1.000000+0	6.537701-3	4.600000-2	3.232400-2	0.000000+09439	2151
1.652440+3	1.000000+0	1.094300-3	4.600000-2	1.000000-1	0.000000+09439	2151
1.655000+3	0.000000+0	1.512800-3	4.600000-2	1.000000-3	6.000000-19439	2151
1.658200+3	1.000000+0	5.812800-3	4.600000-2	1.000000-1	0.000000+09439	2151
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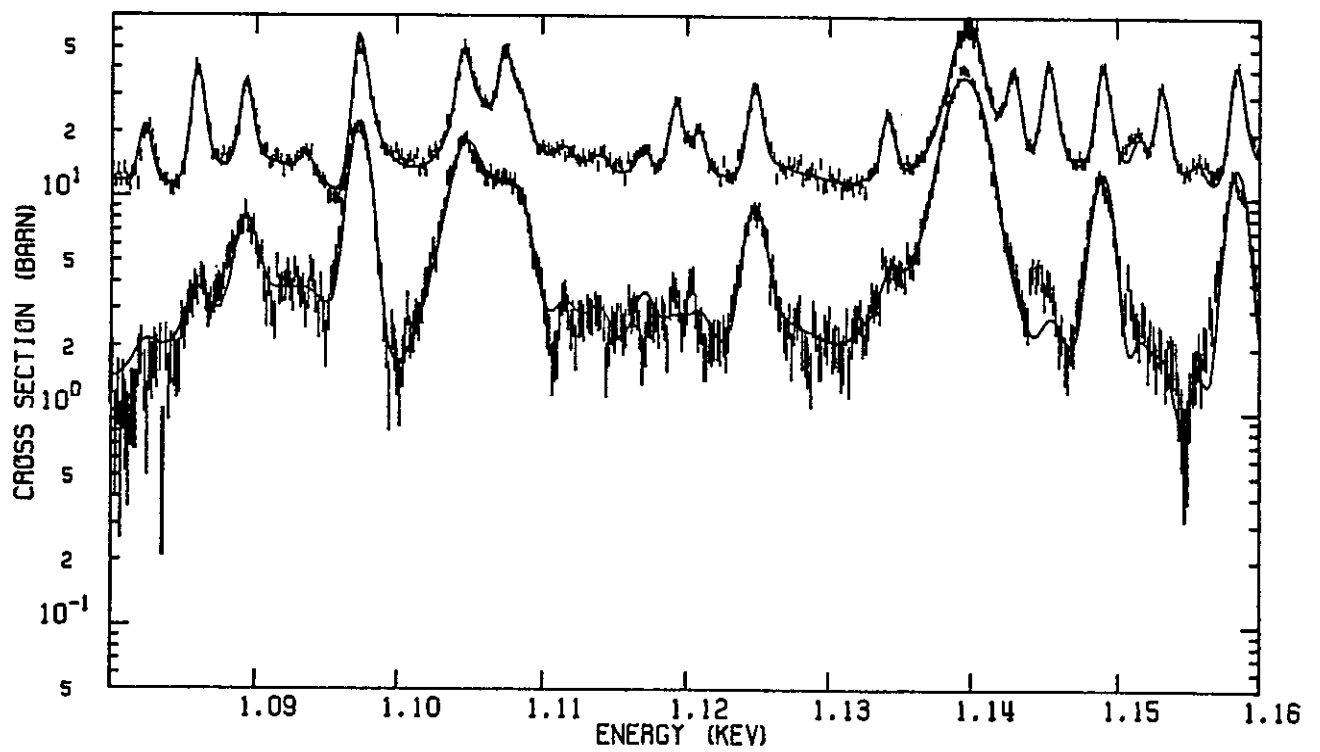
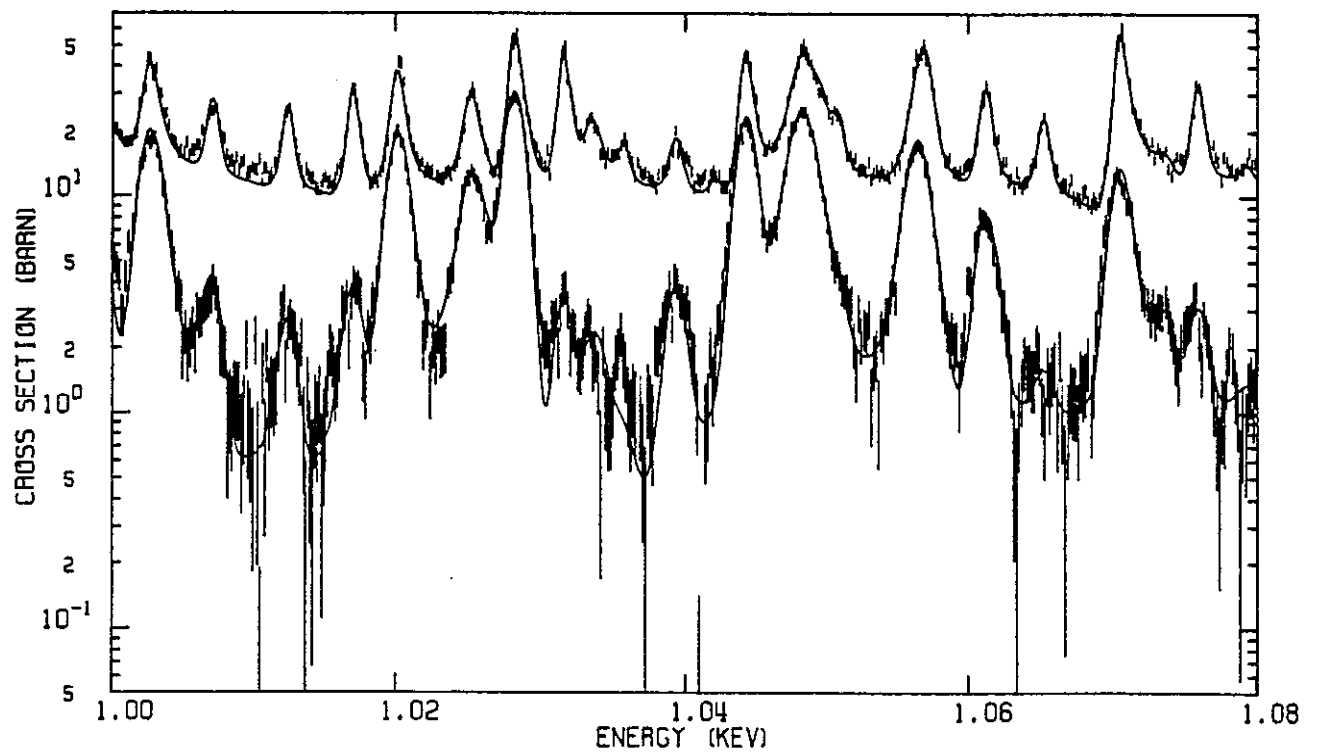
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1.669114+3	0.000000+0	5.421700-2	4.600000-2	-1.000000+0	0.000000+09439	2151
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1.683148+3	1.000000+0	7.495101-3	4.600000-2	2.326000-1	0.000000+09439	2151
1.684623+3	1.000000+0	3.836700-2	4.600000-2	-2.903800-2	0.000000+09439	2151
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1.693516+3	1.000000+0	2.057700-2	4.600000-2	6.843100-3	0.000000+09439	2151
1.702065+3	1.000000+0	5.384900-2	4.600000-2	-1.157400-2	0.000000+09439	2151
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1.706110+3	1.000000+0	2.735300-2	4.600000-2	-4.304900-2	0.000000+09439	2151
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1.723189+3	1.000000+0	1.119600-2	4.600000-2	-1.799500-2	0.000000+09439	2151
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1.772891+3	1.000000+0	2.196200-2	4.600000-2	7.132000-3	0.000000+09439	2151
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1.778396+3	1.000000+0	1.051800-2	4.600000-2	-7.000000-2	0.000000+09439	2151
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1.781178+3	1.000000+0	1.681200-2	4.600000-2	-1.262600-1	0.000000+09439	2151
1.783610+3	1.000000+0	2.778400-3	4.600000-2	-1.400000-1	0.000000+09439	2151
1.786180+3	1.000000+0	3.515600-3	4.600000-2	3.000000-1	0.000000+09439	2151
1.788063+3	1.000000+0	2.964800-2	4.600000-2	-2.596700-2	0.000000+09439	2151
1.789920+3	1.000000+0	4.519300-3	4.600000-2	-7.000000-2	0.000000+09439	2151
1.793862+3	1.000000+0	5.145300-3	4.600000-2	-1.033300-1	0.000000+09439	2151
1.796279+3	1.000000+0	1.073900-1	4.600000-2	3.004900-2	0.000000+09439	2151
1.798000+3	0.000000+0	7.419001-2	4.600000-2	-1.500000+1	0.000000+09439	2151
1.800630+3	1.000000+0	2.517200-2	4.600000-2	3.000000-3	0.000000+09439	2151
1.803290+3	1.000000+0	4.262700-2	4.600000-2	-7.000000-3	0.000000+09439	2151
1.807777+3	1.000000+0	5.149600-2	4.600000-2	-1.060000-1	0.000000+09439	2151
1.809332+3	1.000000+0	7.320800-2	4.600000-2	-5.045300-2	0.000000+09439	2151
1.812430+3	0.000000+0	5.625700-3	4.600000-2	1.000000+0	0.000000+09439	2151
1.815776+3	1.000000+0	1.161300-2	4.600000-2	2.630000-2	0.000000+09439	2151
1.819830+3	1.000000+0	1.525800-3	4.600000-2	-7.000000-2	0.000000+09439	2151
1.825346+3	1.000000+0	2.597400-2	4.600000-2	2.528600-1	0.000000+09439	2151
1.826443+3	1.000000+0	1.985600-2	4.600000-2	-9.833001-3	0.000000+09439	2151

1.827717+3	0.000000+0	4.802400-2	4.600000-2	3.472400-1	0.000000+09439	2151
1.832145+3	1.000000+0	3.150600-2	4.600000-2	1.798700-2	0.000000+09439	2151
1.834929+3	1.000000+0	3.121600-2	4.600000-2	7.154001-2	0.000000+09439	2151
1.835742+3	1.000000+0	1.521300-2	4.600000-2	2.715300-3	0.000000+09439	2151
1.839180+3	1.000000+0	1.539900-3	4.600000-2	7.000000-2	0.000000+09439	2151
1.840560+3	1.000000+0	5.134300-3	4.600000-2	3.500000-2	0.000000+09439	2151
1.843840+3	1.000000+0	2.869300-3	4.600000-2	3.000000-2	0.000000+09439	2151
1.844589+3	0.000000+0	1.993200-2	4.600000-2	7.000000-2	2.827400+09439	2151
1.846365+3	1.000000+0	2.536000-2	4.600000-2	1.764100-2	0.000000+09439	2151
1.848987+3	0.000000+0	2.539300-2	4.600000-2	1.303600+0	0.000000+09439	2151
1.851802+3	1.000000+0	1.541600-2	4.600000-2	1.900400-2	0.000000+09439	2151
1.853083+3	1.000000+0	1.559200-2	4.600000-2	7.430900-3	0.000000+09439	2151
1.855950+3	0.000000+0	9.212200-2	4.600000-2	3.000000+0	0.000000+09439	2151
1.857820+3	1.000000+0	2.168300-2	4.600000-2	7.000000-2	0.000000+09439	2151
1.861180+3	1.000000+0	1.666500-3	4.600000-2	7.000000-2	0.000000+09439	2151
1.864440+3	1.000000+0	2.000000-3	4.600000-2	7.000000-2	0.000000+09439	2151
1.869041+3	0.000000+0	1.728500-2	4.600000-2	1.019100+0	0.000000+09439	2151
1.873665+3	1.000000+0	2.181800-2	4.600000-2	1.892700-1	0.000000+09439	2151
1.874522+3	1.000000+0	1.223000-2	4.600000-2	1.088100-1	0.000000+09439	2151
1.876280+3	1.000000+0	3.956000-3	4.600000-2	7.000000-2	0.000000+09439	2151
1.878441+3	1.000000+0	1.734800-2	4.600000-2	1.907600-2	0.000000+09439	2151
1.882235+3	0.000000+0	1.537900-2	4.600000-2	1.000000+0	0.000000+09439	2151
1.886640+3	1.000000+0	6.978300-3	4.600000-2	7.000000-3	0.000000+09439	2151
1.888710+3	1.000000+0	1.846200-3	4.600000-2	7.000000-2	0.000000+09439	2151
1.890490+3	1.000000+0	1.839000-3	4.600000-2	7.000000-2	0.000000+09439	2151
1.893049+3	1.000000+0	9.801201-3	4.600000-2	5.068000-2	0.000000+09439	2151
1.896835+3	1.000000+0	2.395900-2	4.600000-2	1.021600-1	0.000000+09439	2151
1.898449+3	1.000000+0	3.013600-2	4.600000-2	2.504000-2	0.000000+09439	2151
1.901840+3	1.000000+0	2.000000-3	4.600000-2	7.000000-2	0.000000+09439	2151
1.904467+3	1.000000+0	1.500600-2	4.600000-2	7.570900-2	0.000000+09439	2151
1.907639+3	1.000000+0	4.343100-3	4.600000-2	4.751300-2	0.000000+09439	2151
1.908800+3	1.000000+0	1.000000-3	4.600000-2	7.000000-2	0.000000+09439	2151
1.912139+3	1.000000+0	3.861100-2	4.600000-2	1.472600-2	0.000000+09439	2151
1.919162+3	1.000000+0	8.821300-3	4.600000-2	3.151800-2	0.000000+09439	2151
1.921604+3	1.000000+0	5.757000-3	4.600000-2	5.989300-2	0.000000+09439	2151
1.924443+3	1.000000+0	7.405400-3	4.600000-2	1.142300-2	0.000000+09439	2151
1.929333+3	1.000000+0	1.671300-2	4.600000-2	1.761100-2	0.000000+09439	2151
1.932496+3	1.000000+0	1.150200-2	4.600000-2	2.822800-2	0.000000+09439	2151
1.933786+3	1.000000+0	8.570001-3	4.600000-2	3.101100-2	0.000000+09439	2151
1.938619+3	1.000000+0	2.016300-2	4.600000-2	4.259000-2	0.000000+09439	2151
1.941310+3	1.000000+0	8.550600-3	4.600000-2	1.500000-2	0.000000+09439	2151
1.943090+3	1.000000+0	1.000000-3	4.600000-2	3.000000-2	0.000000+09439	2151
1.945660+3	1.000000+0	1.000000-3	4.600000-2	1.500000-1	0.000000+09439	2151
1.949410+3	1.000000+0	4.388600-2	4.600000-2	1.840500-2	0.000000+09439	2151
1.951742+3	1.000000+0	1.407600-2	4.600000-2	3.896500-2	0.000000+09439	2151
1.954326+3	1.000000+0	5.878500-2	4.600000-2	6.587100-3	0.000000+09439	2151
1.960418+3	1.000000+0	1.587200-2	4.600000-2	6.746601-2	0.000000+09439	2151
1.965126+3	1.000000+0	1.152800-2	4.600000-2	1.784000-2	0.000000+09439	2151
1.966489+3	1.000000+0	1.667000-2	4.600000-2	1.742800-2	0.000000+09439	2151
1.968580+3	1.000000+0	1.500000-3	4.600000-2	7.000000-2	0.000000+09439	2151
1.970950+3	1.000000+0	5.605200-3	4.600000-2	1.000000-2	0.000000+09439	2151
1.972762+3	1.000000+0	2.292700-2	4.600000-2	4.064500-3	0.000000+09439	2151
1.973220+3	1.000000+0	9.734200-3	4.600000-2	1.000000-2	0.000000+09439	2151
1.976911+3	1.000000+0	1.810900-3	4.600000-2	1.000000-2	0.000000+09439	2151
1.978350+3	1.000000+0	9.919200-4	4.600000-2	7.000000-2	0.000000+09439	2151
1.981010+3	1.000000+0	1.610800-3	4.600000-2	7.000000-2	0.000000+09439	2151
1.984702+3	1.000000+0	1.252200-2	4.600000-2	2.646700-1	0.000000+09439	2151
1.987126+3	1.000000+0	8.096100-3	4.600000-2	6.366300-2	0.000000+09439	2151
1.989600+3	1.000000+0	3.330900-3	4.600000-2	7.000000-2	0.000000+09439	2151
1.992260+3	1.000000+0	3.293300-3	4.600000-2	1.500000-2	0.000000+09439	2151
1.994912+3	1.000000+0	1.055900-2	4.600000-2	1.777400-2	0.000000+09439	2151
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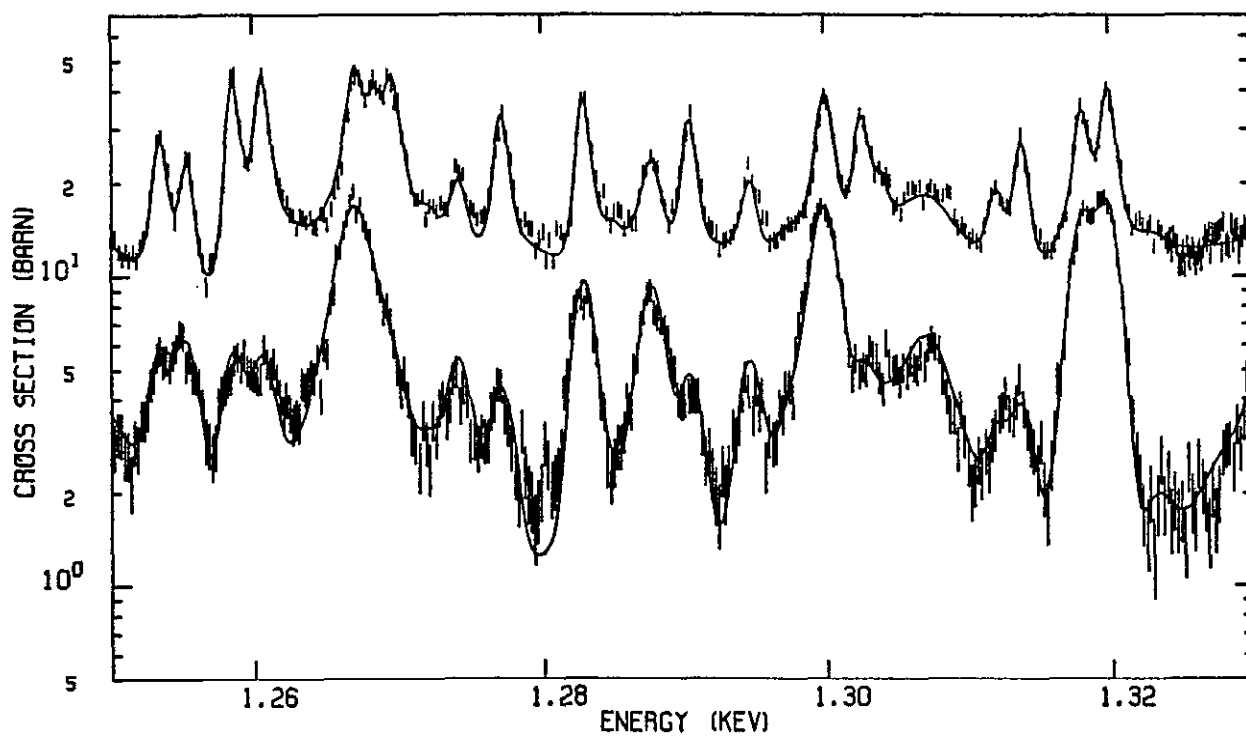
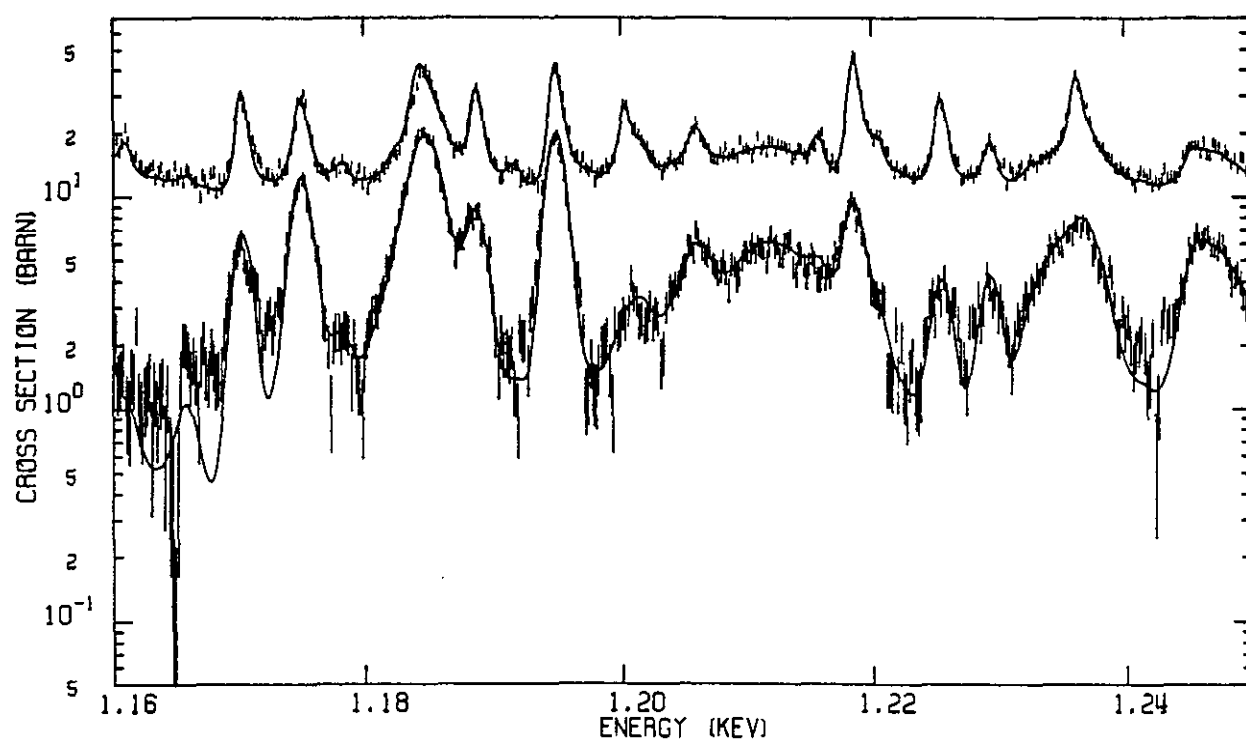
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2.003570+3	1.000000+0	1.400000-3	4.600000-2	7.000000-2	0.000000+09439	2151
2.007700+3	1.000000+0	6.000001-3	4.600000-2	7.000000-2	0.000000+09439	2151
2.009120+3	1.000000+0	1.000000-2	4.600000-2	4.000000-2	0.000000+09439	2151
2.018900+3	1.000000+0	1.081800-2	4.600000-2	5.622100-2	0.000000+09439	2151
2.050000+3	1.000000+0	5.364400-1	4.600000-2	4.146300-2	0.000000+09439	2151
0.	0.	0.	0.	0.	0.	9439 2 0
0.	0.	0.	0.	0.	0.	9439 0 0
9.42390+04	2.36999+02	0	0	0	0	09439 3 1
0.00000+00	0.00000+00	0	0	3	189439	3 1
2	2	14	2	18	29439	3 1
1.000000-5	0.000000+0	1.000000+3	0.000000+0	1.000000+3	-1.700000-19439	3 1
1.050000+3	1.600000-1	1.150000+3	-5.000000-2	1.250000+3	1.200000-19439	3 1
1.350000+3	3.000000-1	1.450000+3	4.600000-1	1.550000+3	5.600000-19439	3 1
1.650000+3	5.900000-1	1.750000+3	5.800000-1	1.850000+3	5.500000-19439	3 1
1.950000+3	5.000000-1	2.000000+3	4.300000-1	2.000000+3	0.000000+09439	3 1
1.000000+3	0.000000-1	1.000000+6	0.000000+0	2.000000+7	0.000000+09439	3 1
0.	0.	0.	0.	0.	0.	9439 3 0
9.42390+04	2.36999+02	0.	0.	0.	0.	9439 3 2
0.00000+00	0.00000+00	0	0	3	189439	3 2
2	2	14	2	18	29439	3 2
1.000000-5	0.000000+0	1.000000+3	0.000000+0	1.000000+3	0.000000+09439	3 2
1.050000+3	0.000000+0	1.150000+3	0.000000+0	1.250000+3	0.000000+09439	3 2
1.350000+3	0.000000+0	1.450000+3	0.000000+0	1.550000+3	0.000000+09439	3 2
1.650000+3	0.000000+0	1.750000+3	0.000000+0	1.850000+3	0.000000+09439	3 2
1.950000+3	0.000000+0	2.000000+3	0.000000+0	2.000000+3	0.000000+09439	3 2
1.000000+3	0.000000+0	1.000000+6	0.000000+0	2.000000+7	0.000000+09439	3 2
0.	0.	0.	0.	0.	0.	9439 3 0
9.42390+04	2.36999+02	0.	0.	0.	0.	9439 3 18
0.00000+02	0.00000+02	0	0	3	189439	3 18
2	2	14	2	18	29439	3 18
1.000000-5	0.000000+0	1.000000+3	0.000000+0	1.000000+3	-1.700000-19439	3 18
1.050000+3	1.600000-1	1.150000+3	-5.000000-2	1.250000+3	1.200000-19439	3 18
1.350000+3	3.000000-1	1.450000+3	4.600000-1	1.550000+3	5.600000-19439	3 18
1.650000+3	5.900000-1	1.750000+3	5.800000-1	1.850000+3	5.500000-19439	3 18
1.950000+3	5.000000-1	2.000000+3	4.300000-1	2.000000+3	0.000000+09439	3 18
1.000000+3	0.000000-1	1.000000+6	0.000000+0	2.000000+7	0.000000+09439	3 18
0.	0.	0.	0.	0.	0.	9439 3 0
9.42390+04	2.36999+02	0.	0.	0.	0.	9439 3 102
0.00000+00	0.00000+00	0	0	3	189439	3 102
2	2	14	2	18	29439	3 102
1.000000-5	0.000000+0	1.000000+3	0.000000+0	1.000000+3	0.000000+09439	3 102
1.050000+3	0.000000+0	1.150000+3	0.000000+0	1.250000+3	0.000000+09439	3 102
1.350000+3	0.000000+0	1.450000+3	0.000000+0	1.550000+3	0.000000+09439	3 102
1.650000+3	0.000000+0	1.750000+3	0.000000+0	1.850000+3	0.000000+09439	3 102
1.950000+3	0.000000+0	2.000000+3	0.000000+0	2.000000+3	0.000000+09439	3 102
1.000000+3	0.000000+0	1.000000+6	0.000000+0	2.000000+7	0.000000+09439	3 102
0.	0.	0.	0.	0.	0.	9439 3 0
0.	0.	0.	0.	0.	0.	9439 0 0
						0 0 0
						-1 0 0



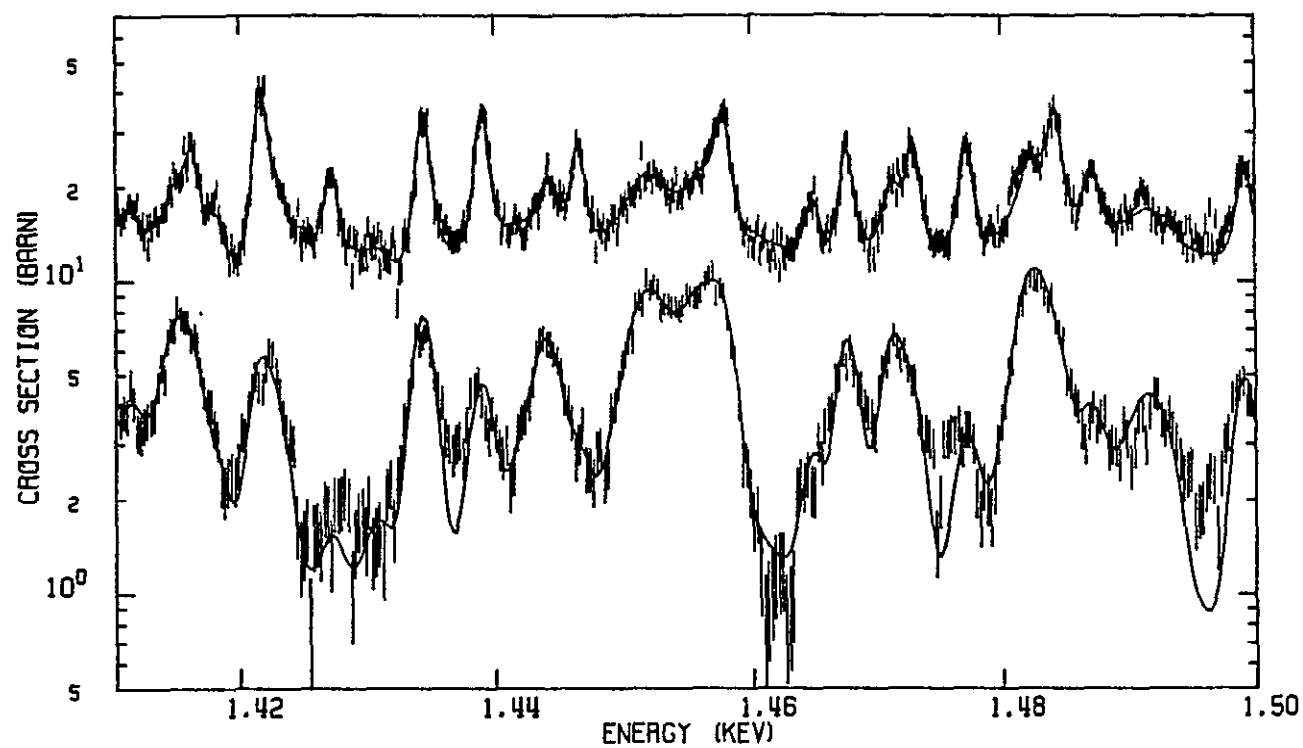
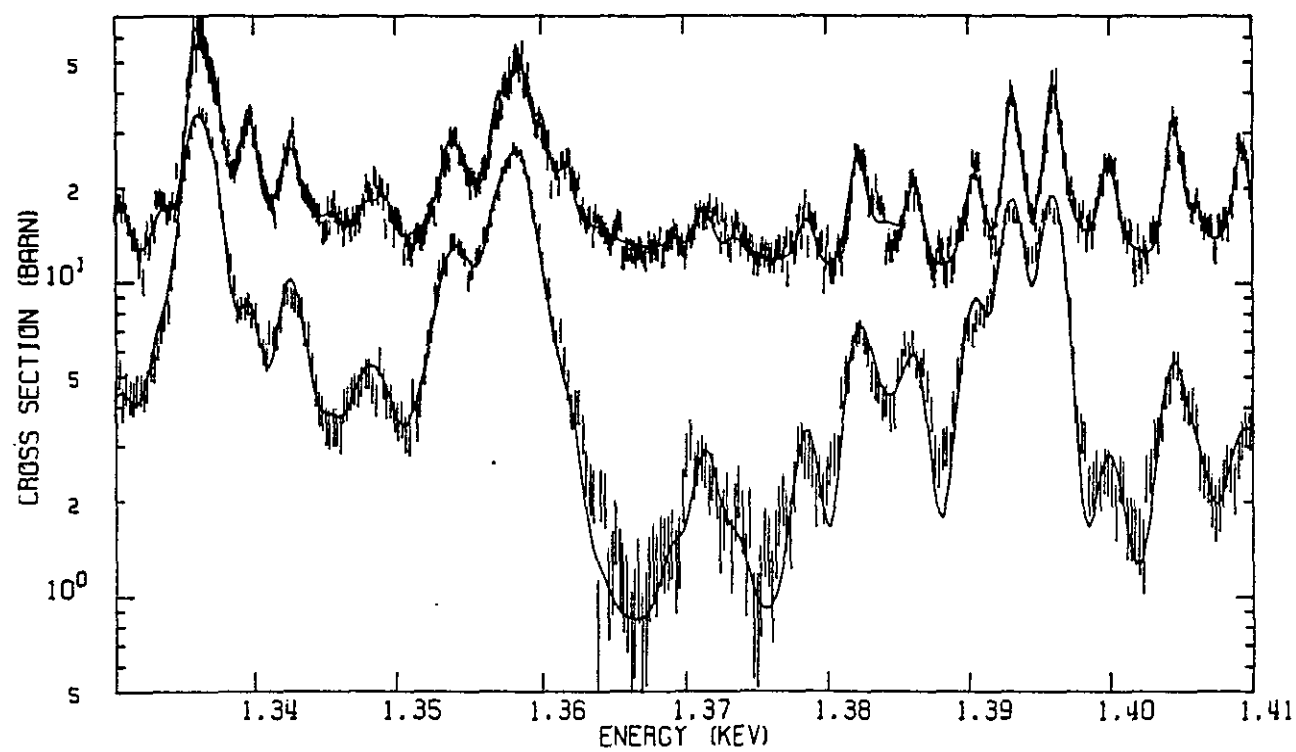
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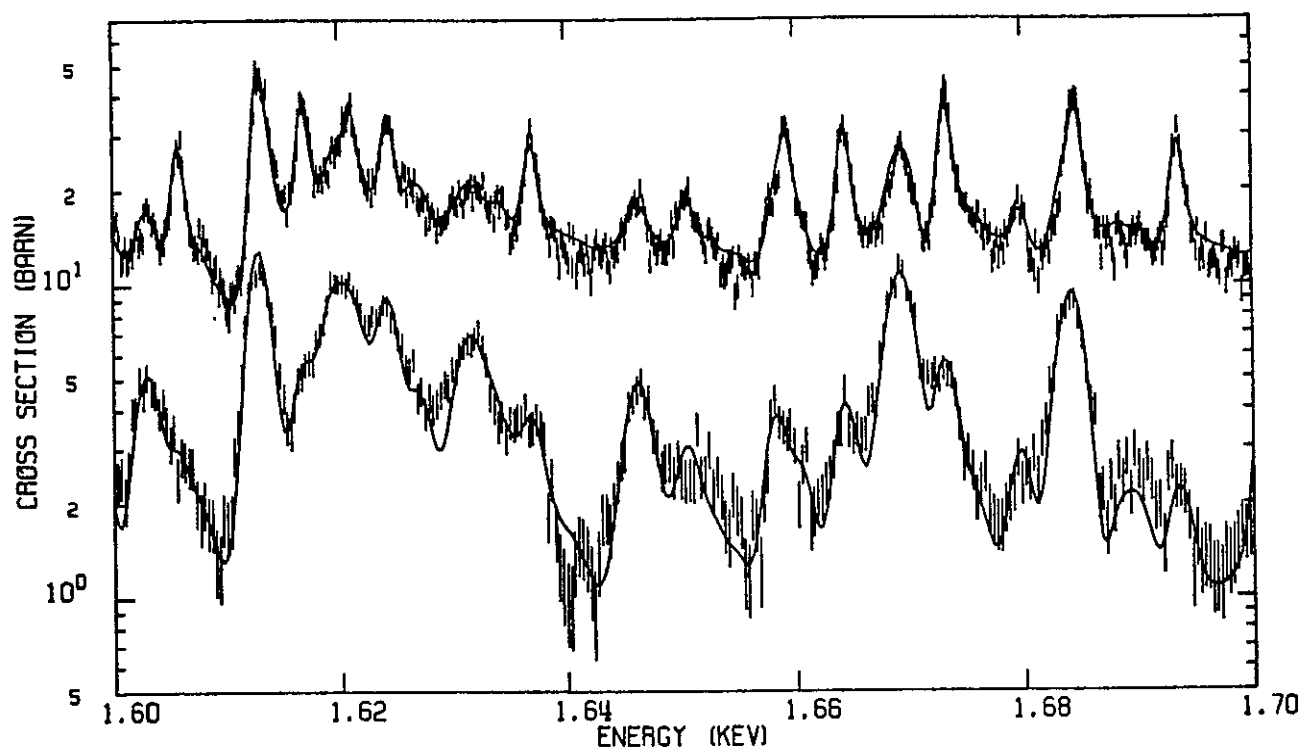
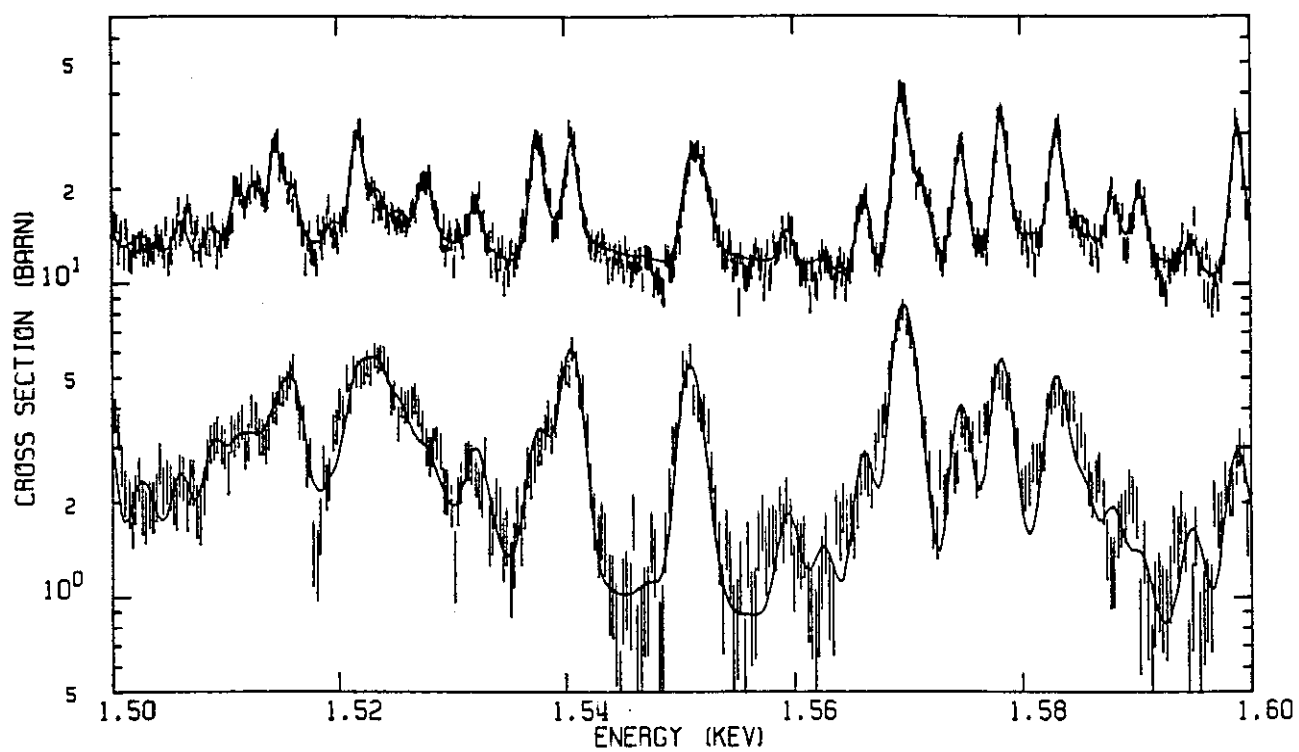
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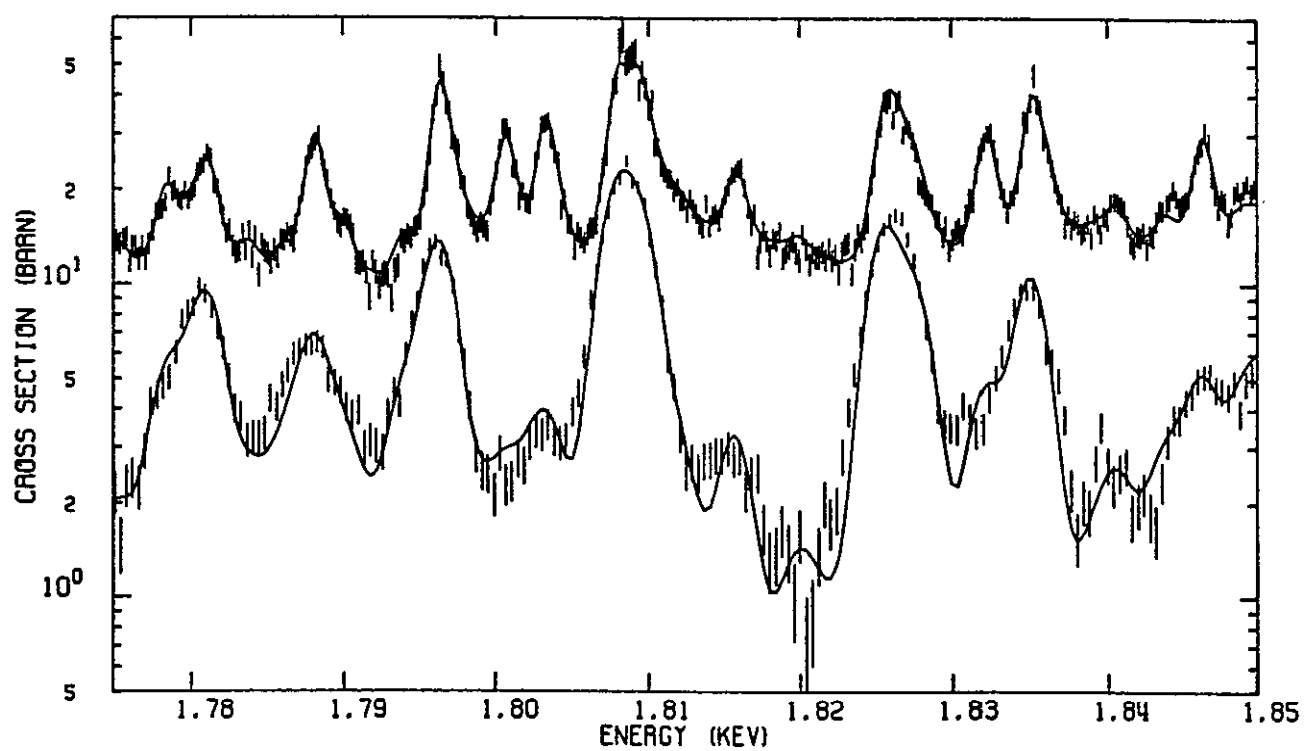
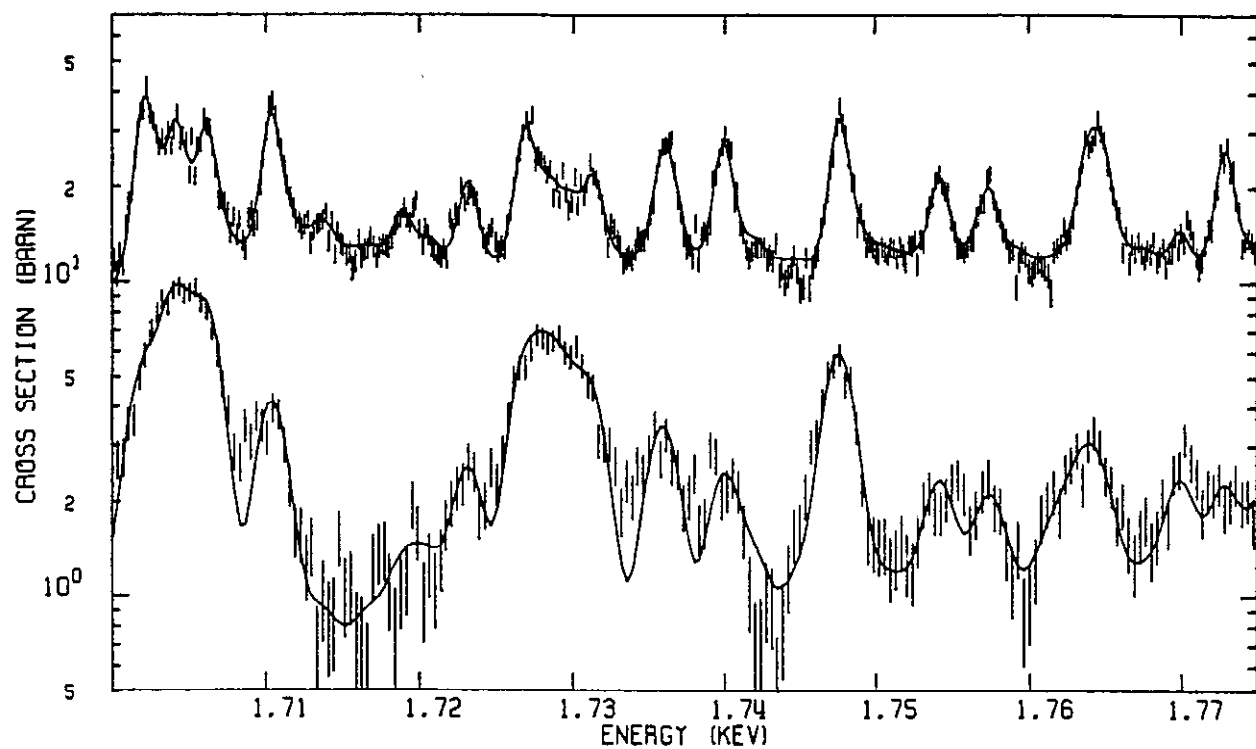
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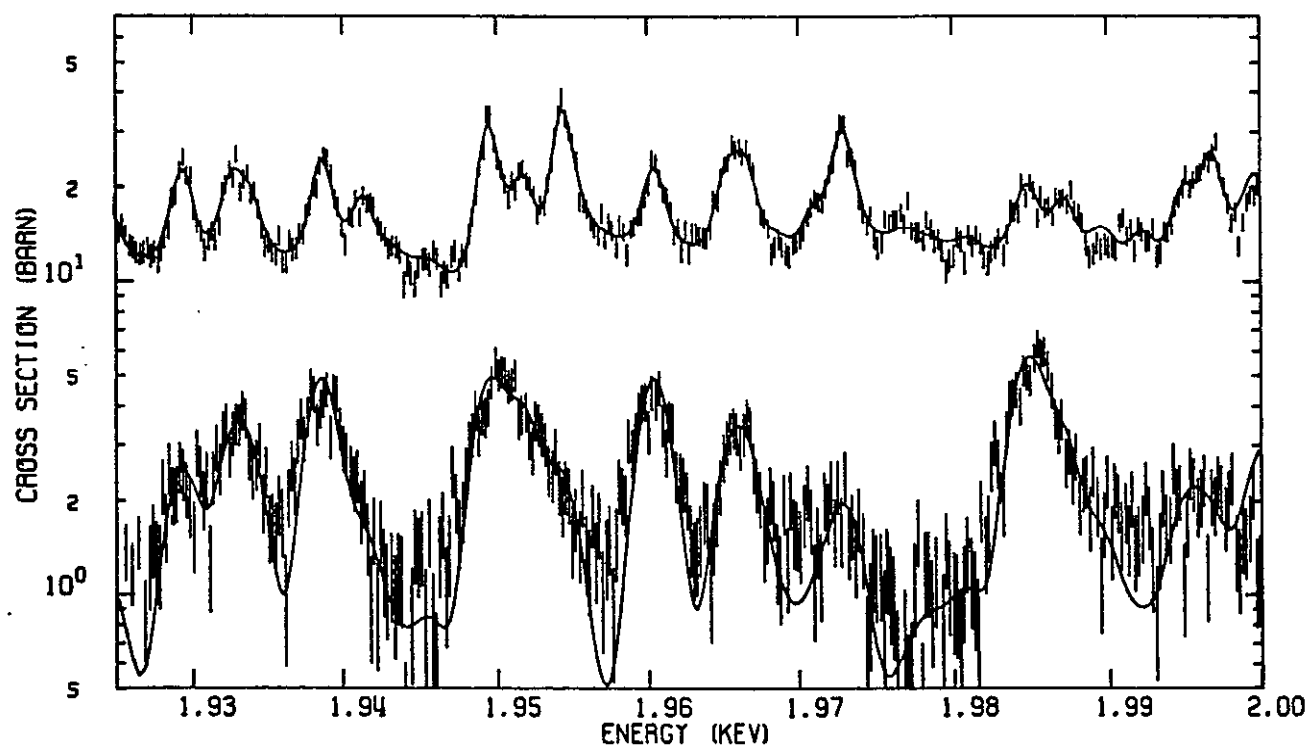
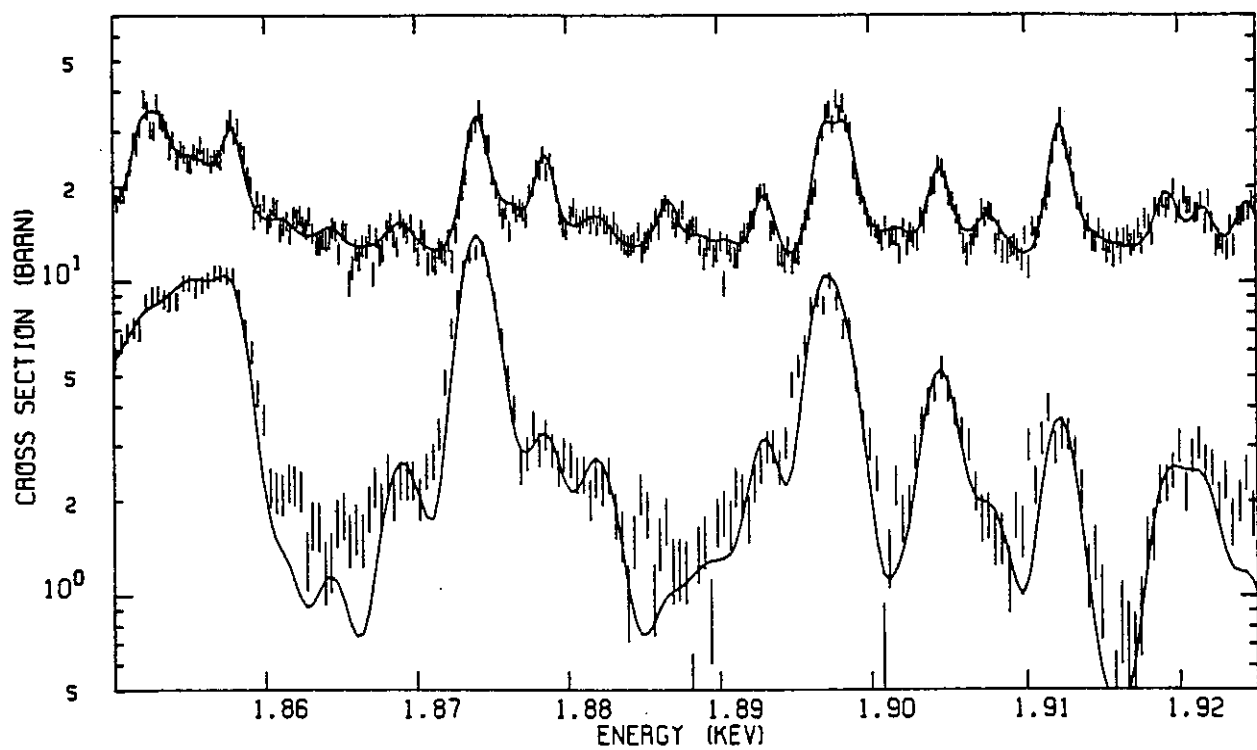
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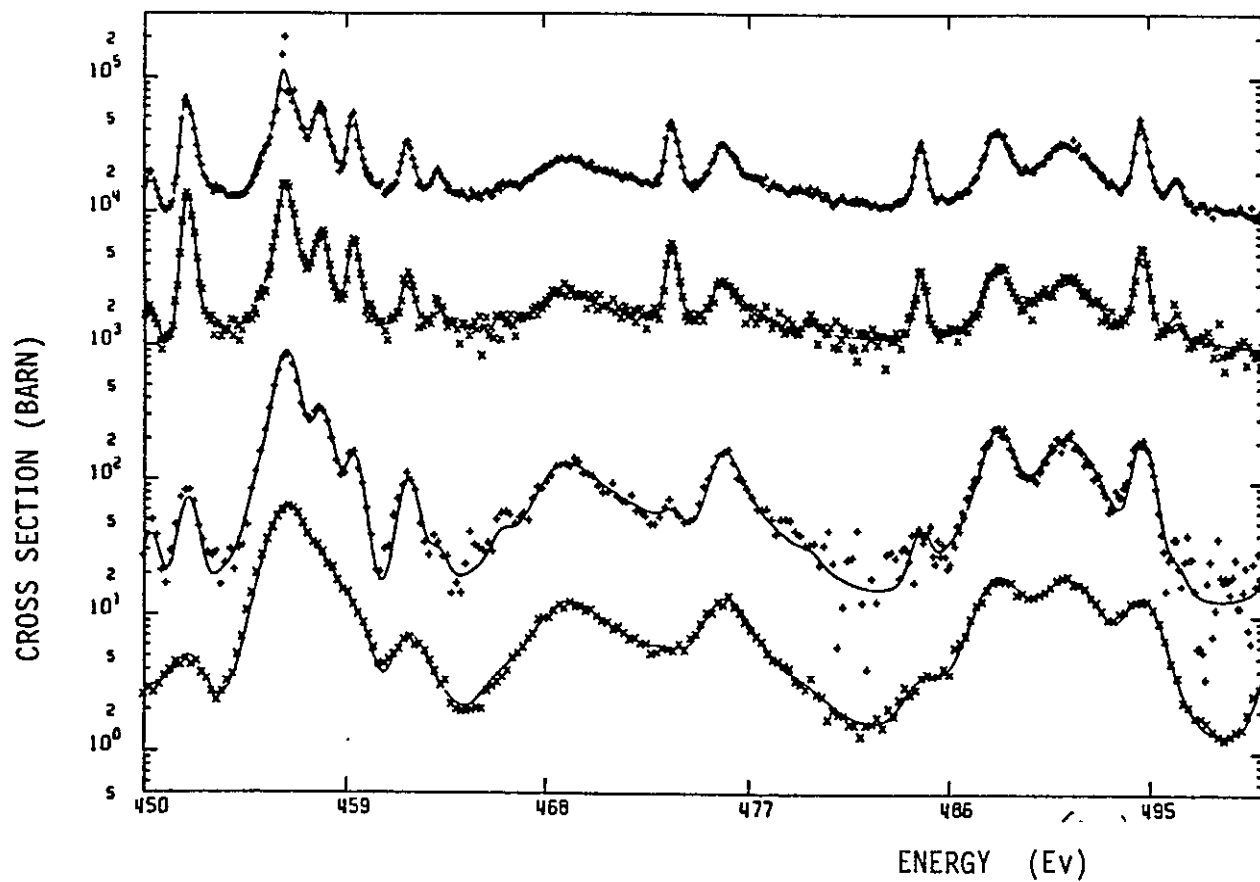


FIGURE 1

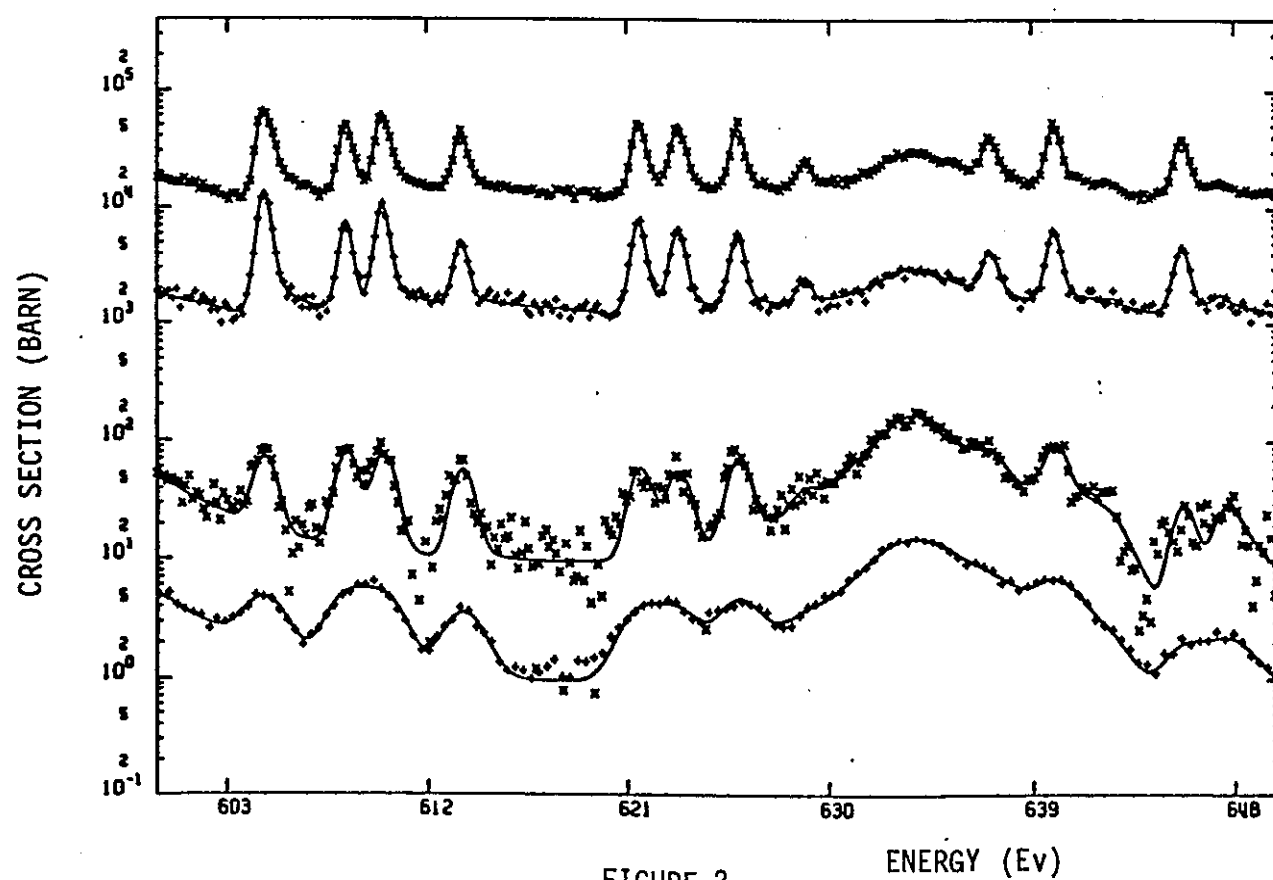


FIGURE 2

14120132

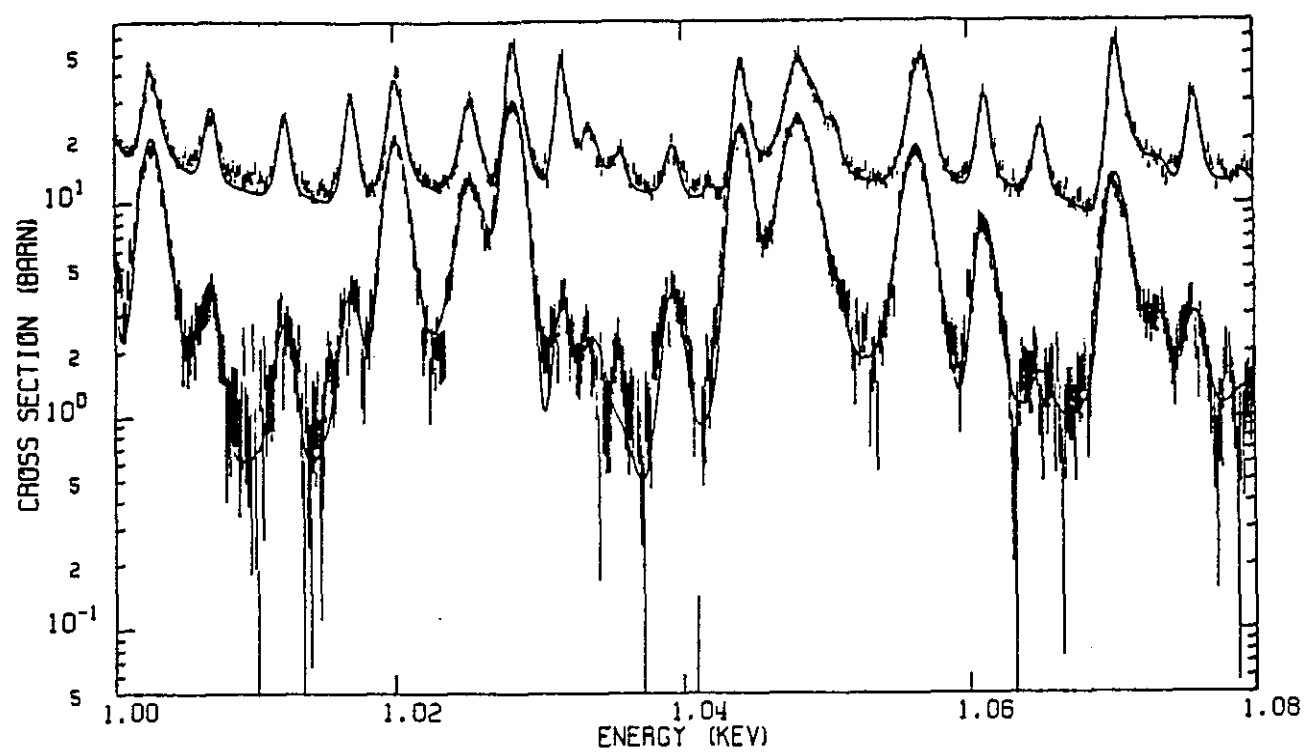


FIGURE 3

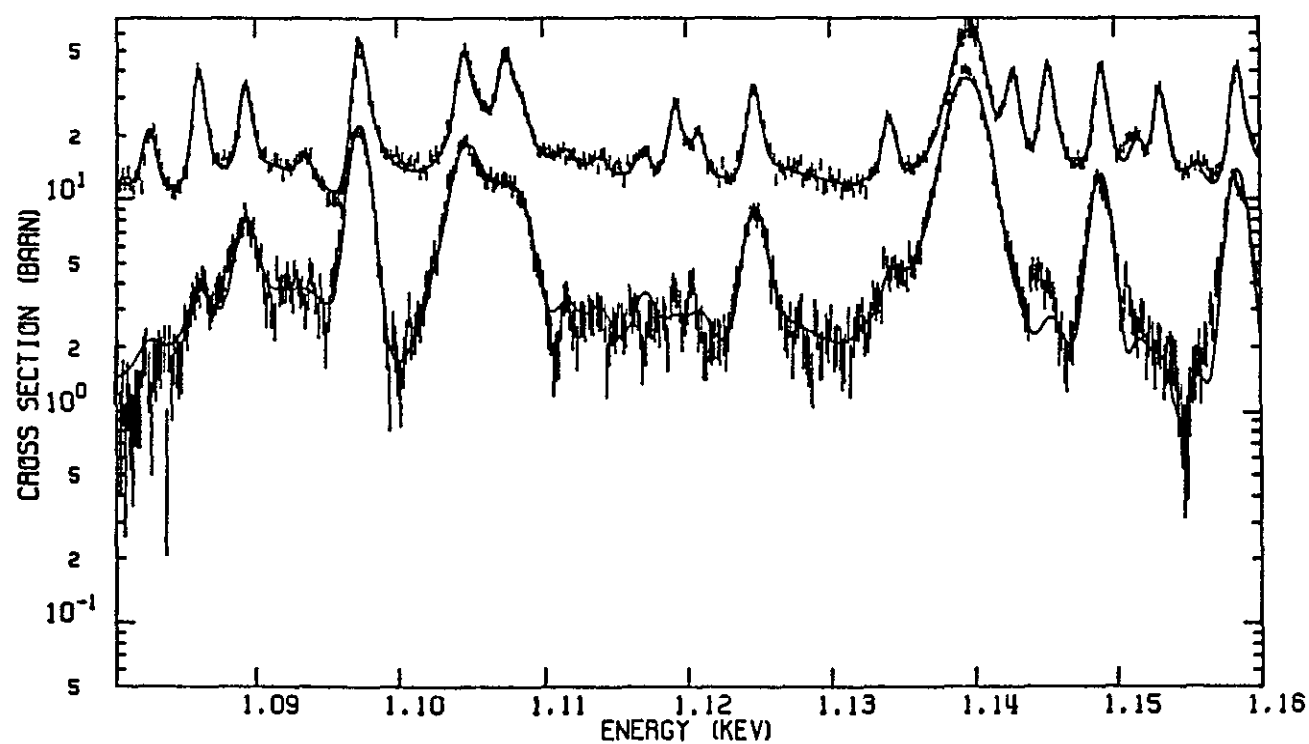


FIGURE 4

14120133

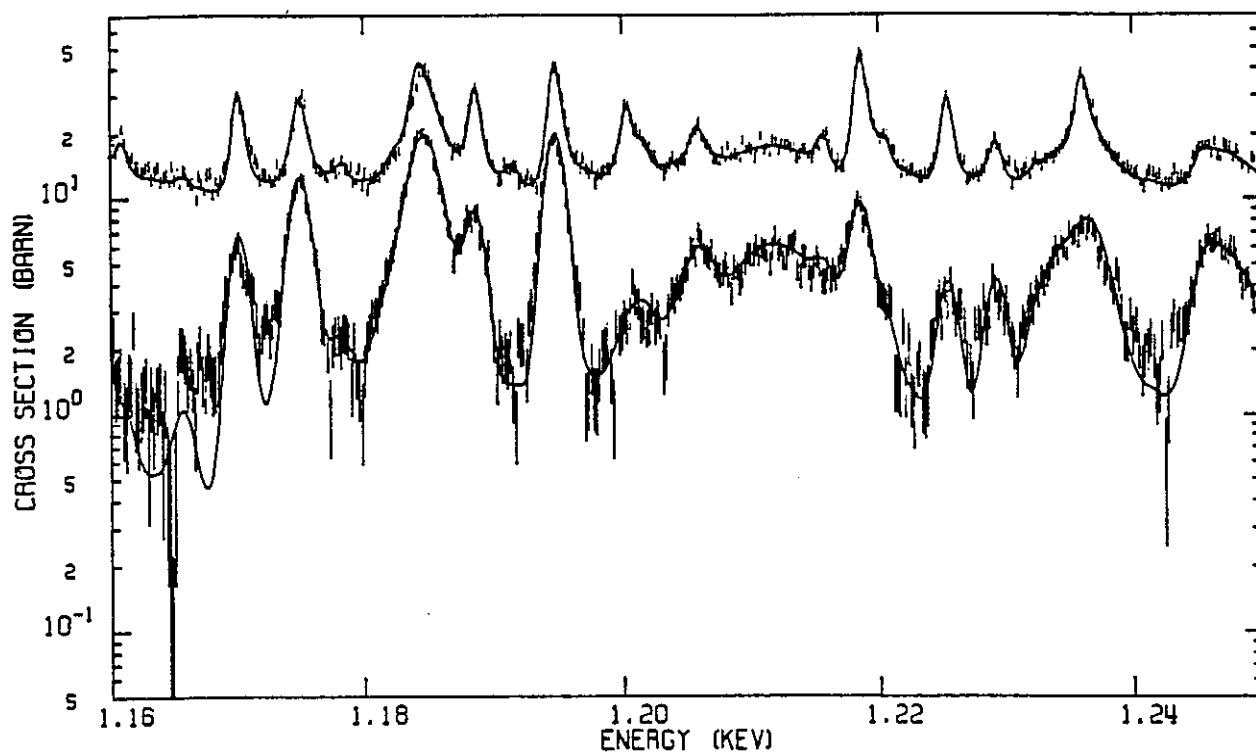


FIGURE 5

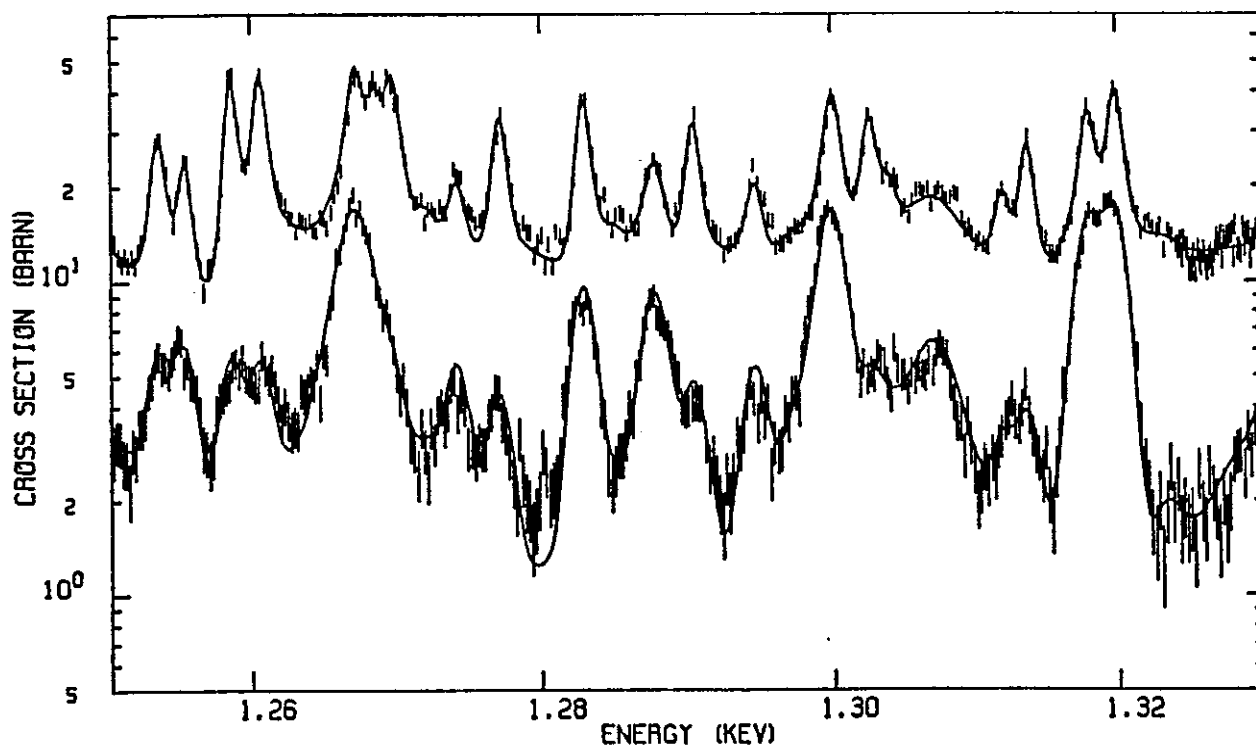


FIGURE 6

14120134

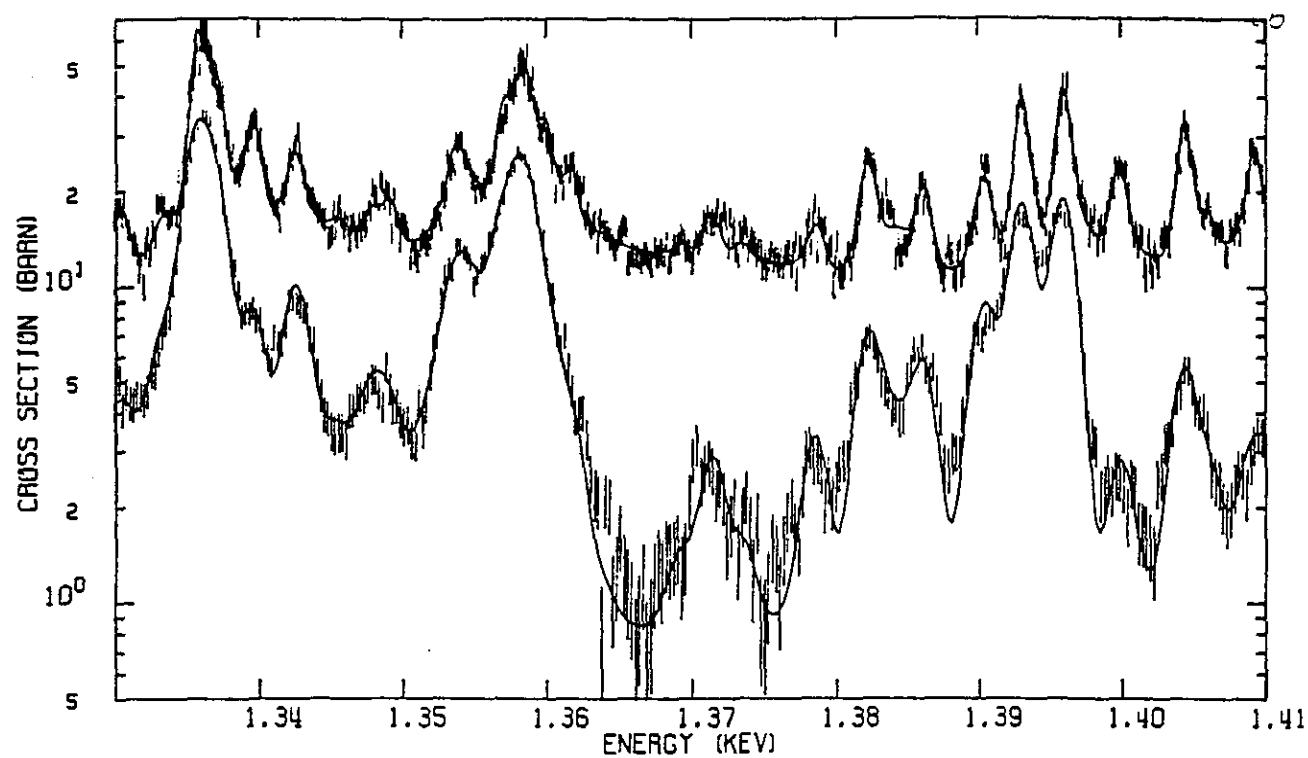


FIGURE 7

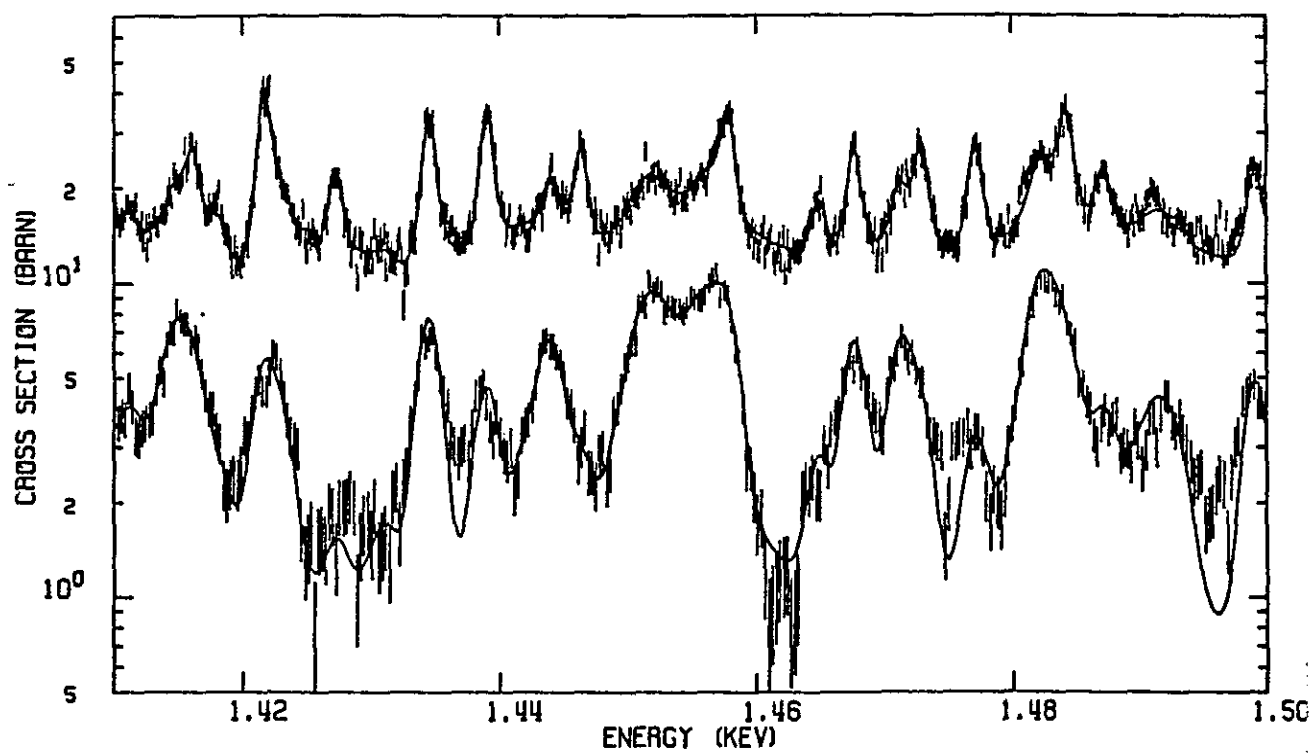


FIGURE 8

14120135

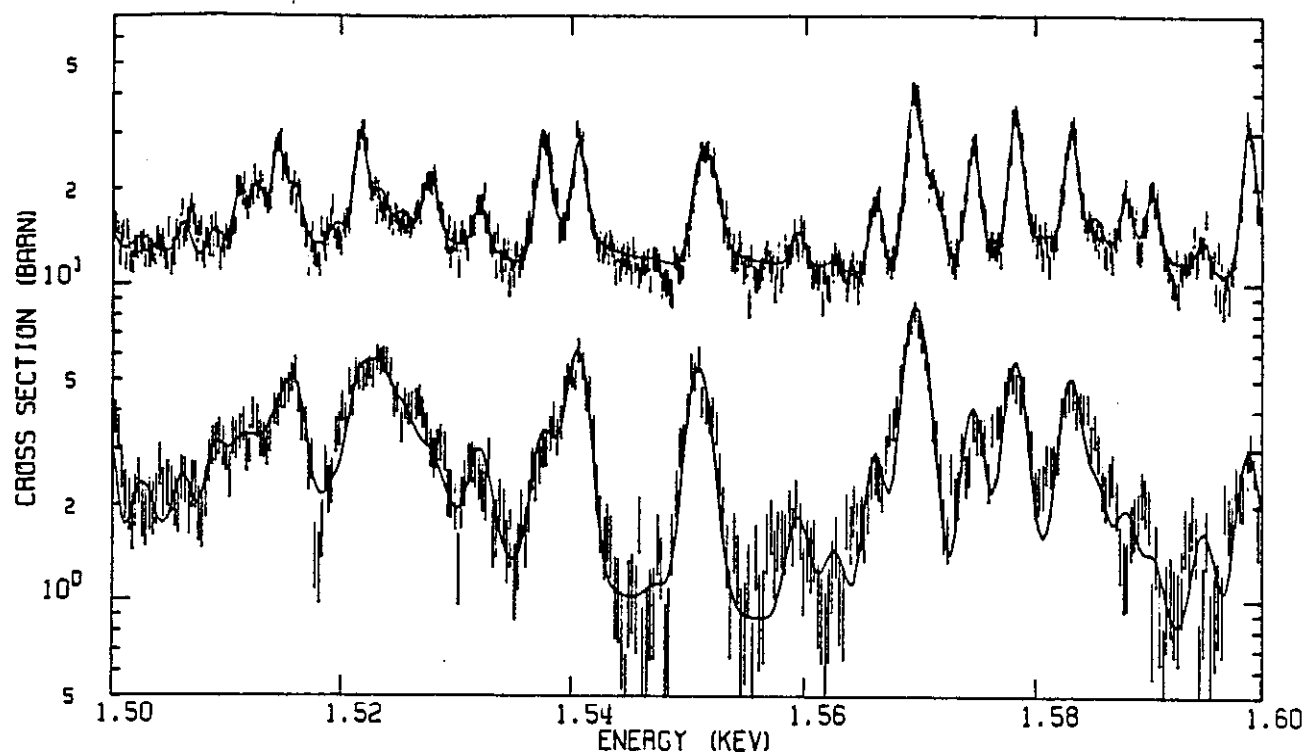


FIGURE 9

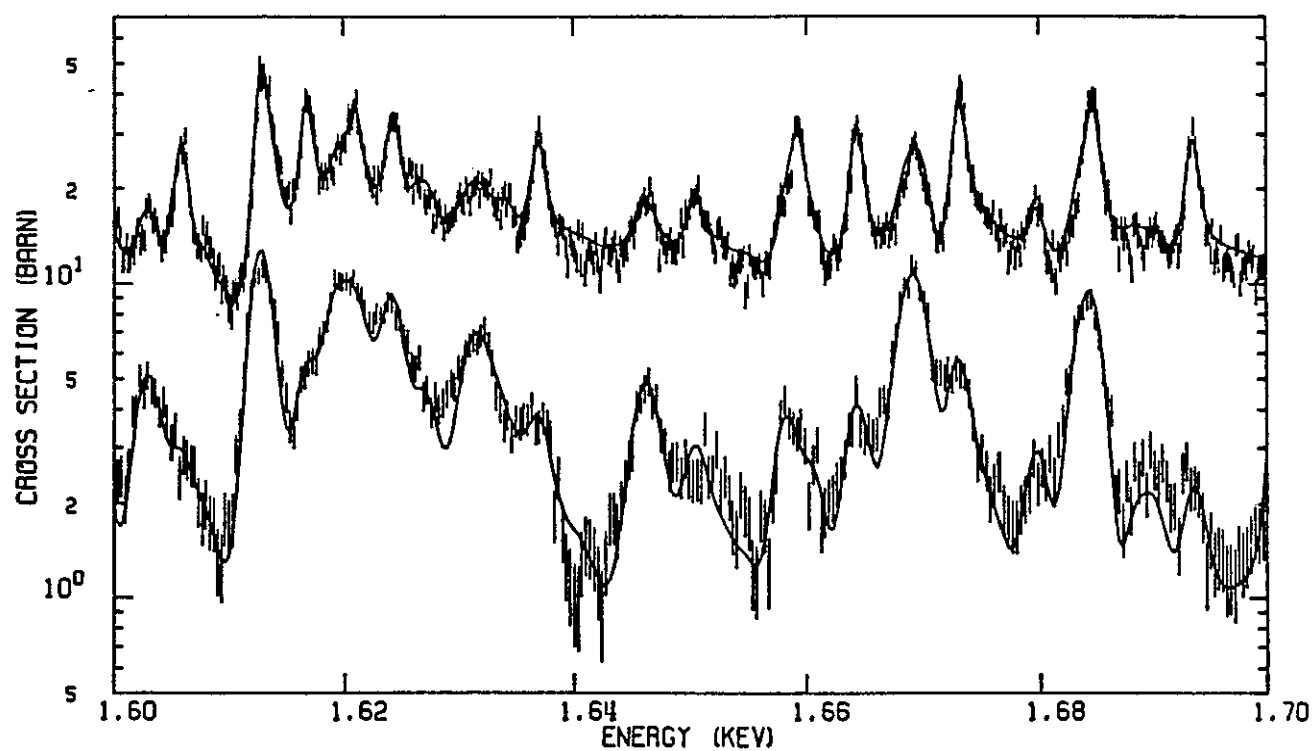


FIGURE 10

14120136

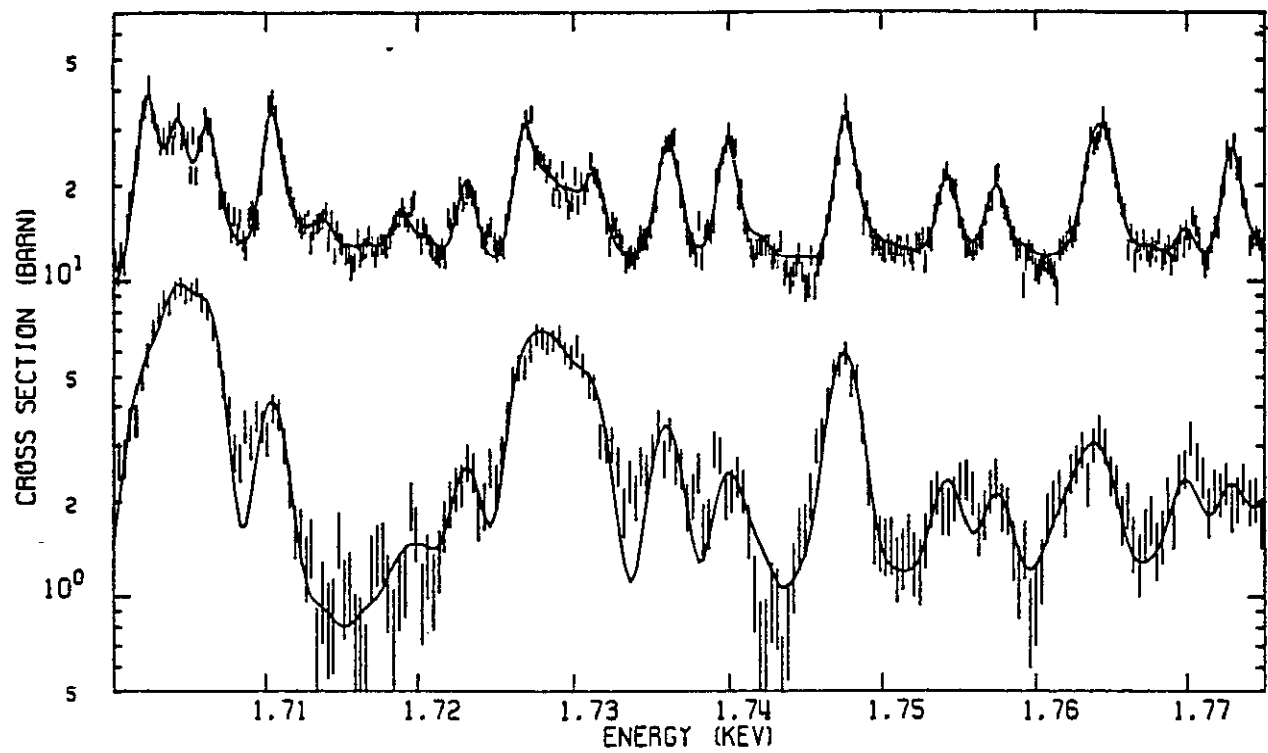


FIGURE 11

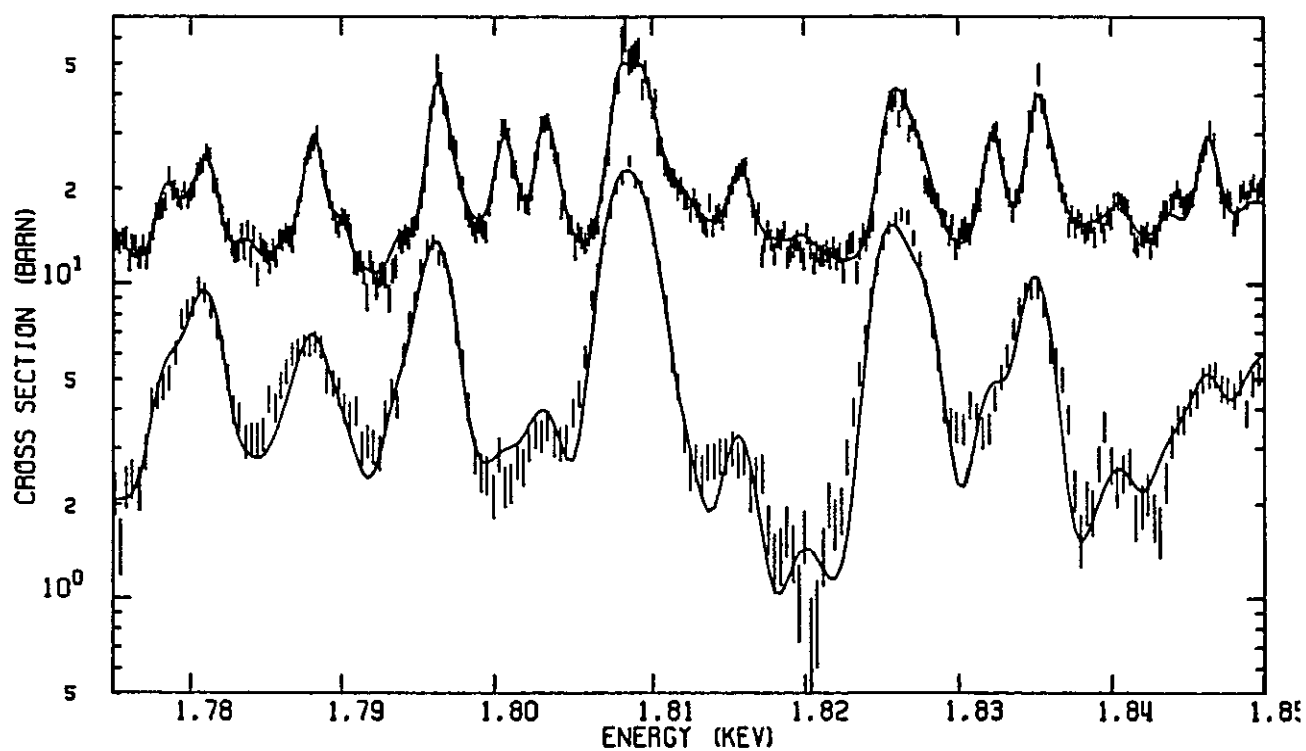


FIGURE 12

14120137

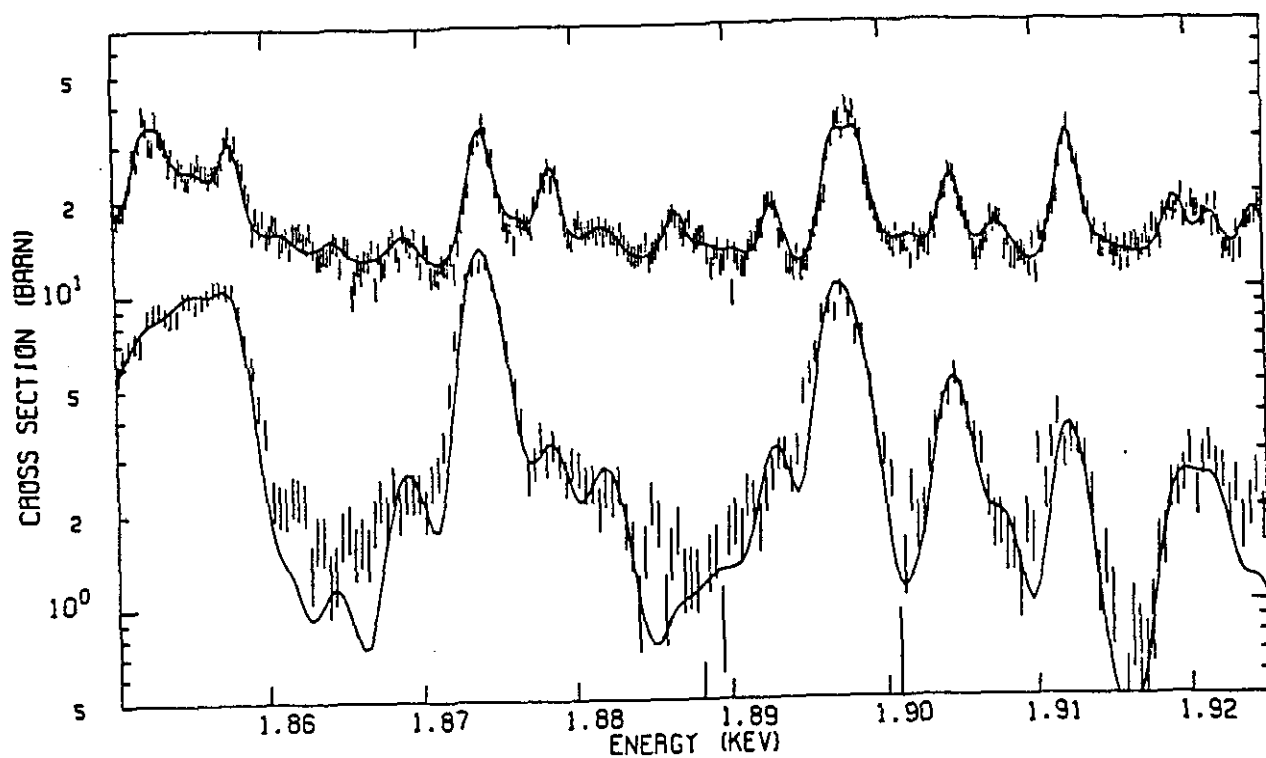


FIGURE 13

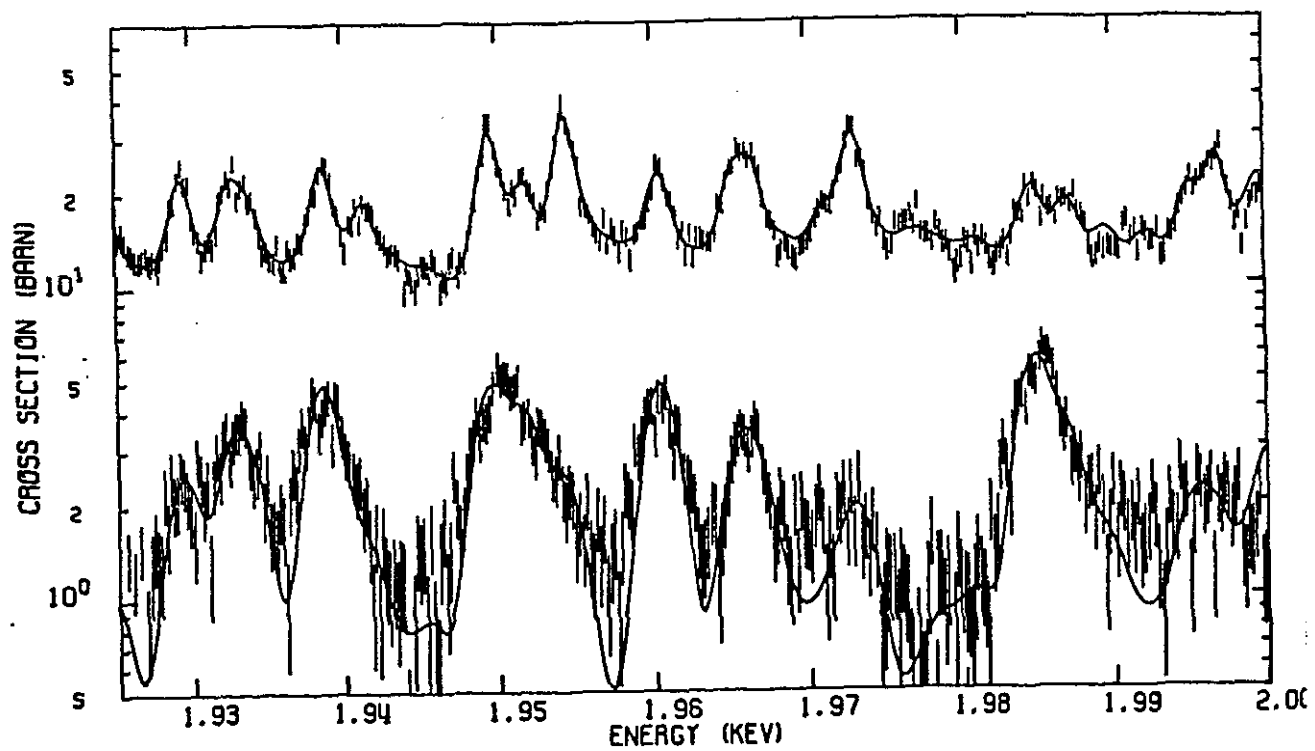


FIGURE 14

14120138