

Program Complot  
(Version 2018-1)

by

Dermott E. Cullen  
(Present Contact Information)

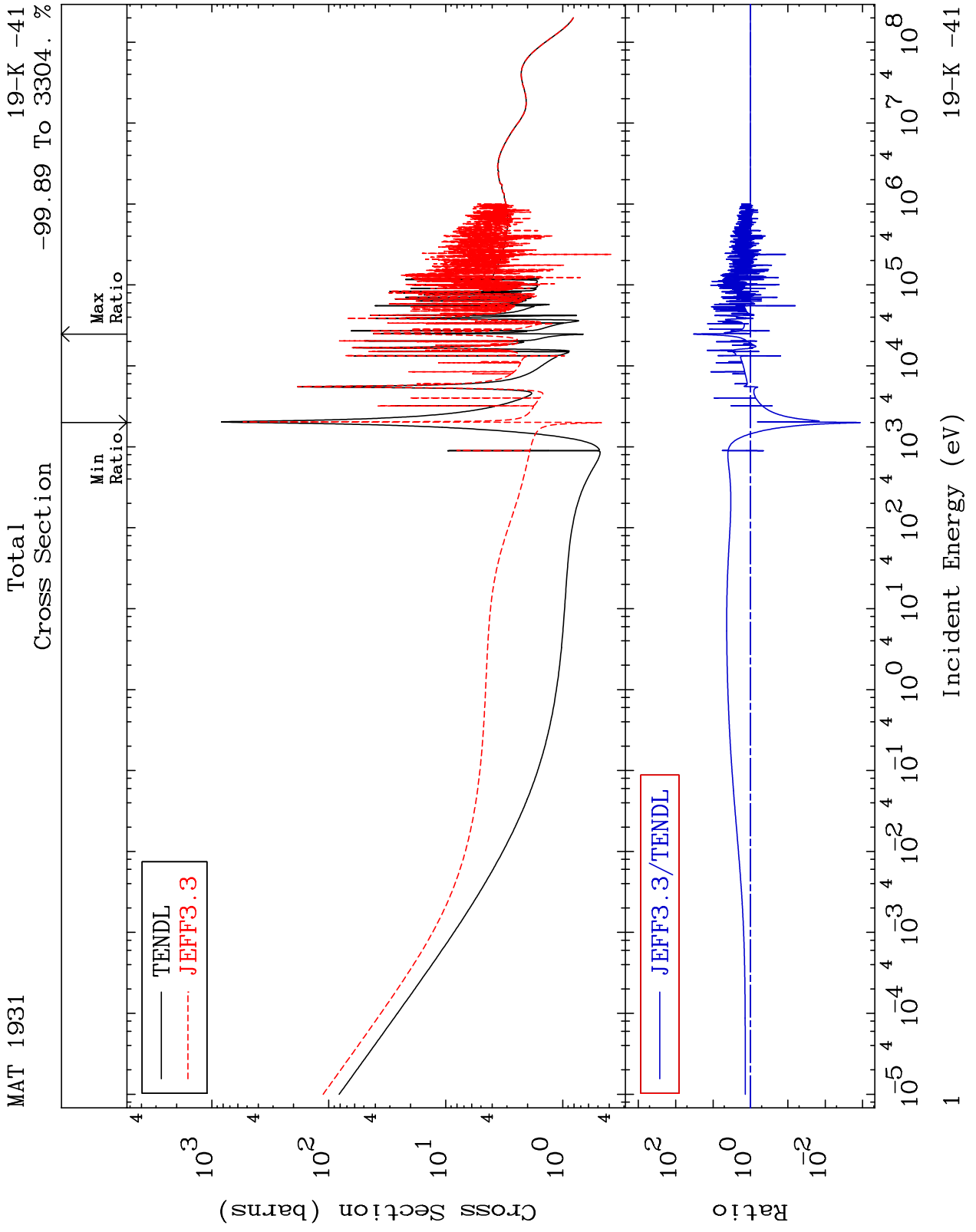
Dermott E. Cullen  
1466 Hudson Way  
Livermore, CA 94550

U.S.A.

Tele: 925-443-1911

E.Mail: [redcullen1@comcast.net](mailto:redcullen1@comcast.net)  
Web: [redcullen1.net/HOMEPAGE.NEW](http://redcullen1.net/HOMEPAGE.NEW)

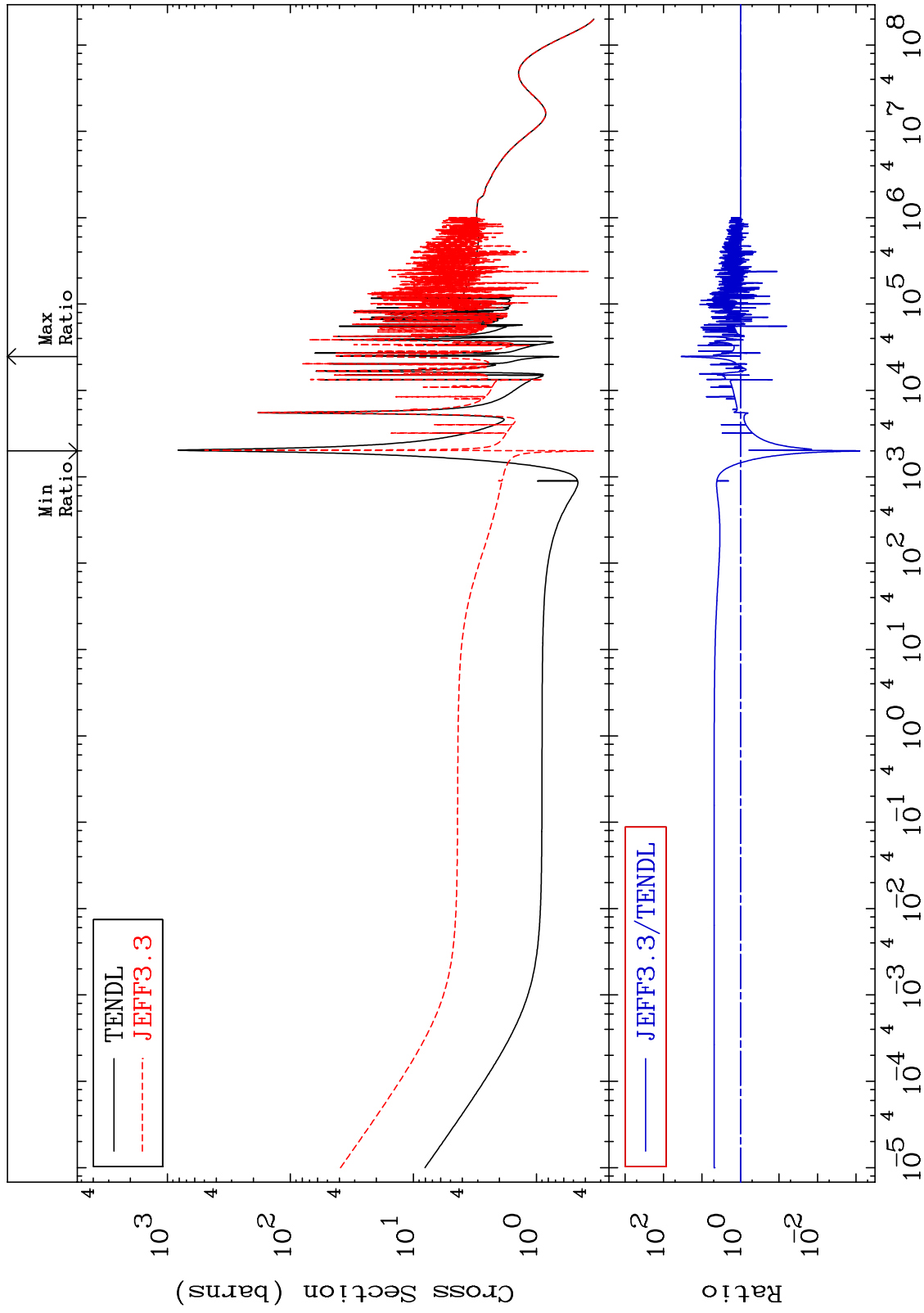
Press Mouse Button to Start



MAT 1931

Elastic  
Cross Section

19-K -41  
-99.92 To 3363. %

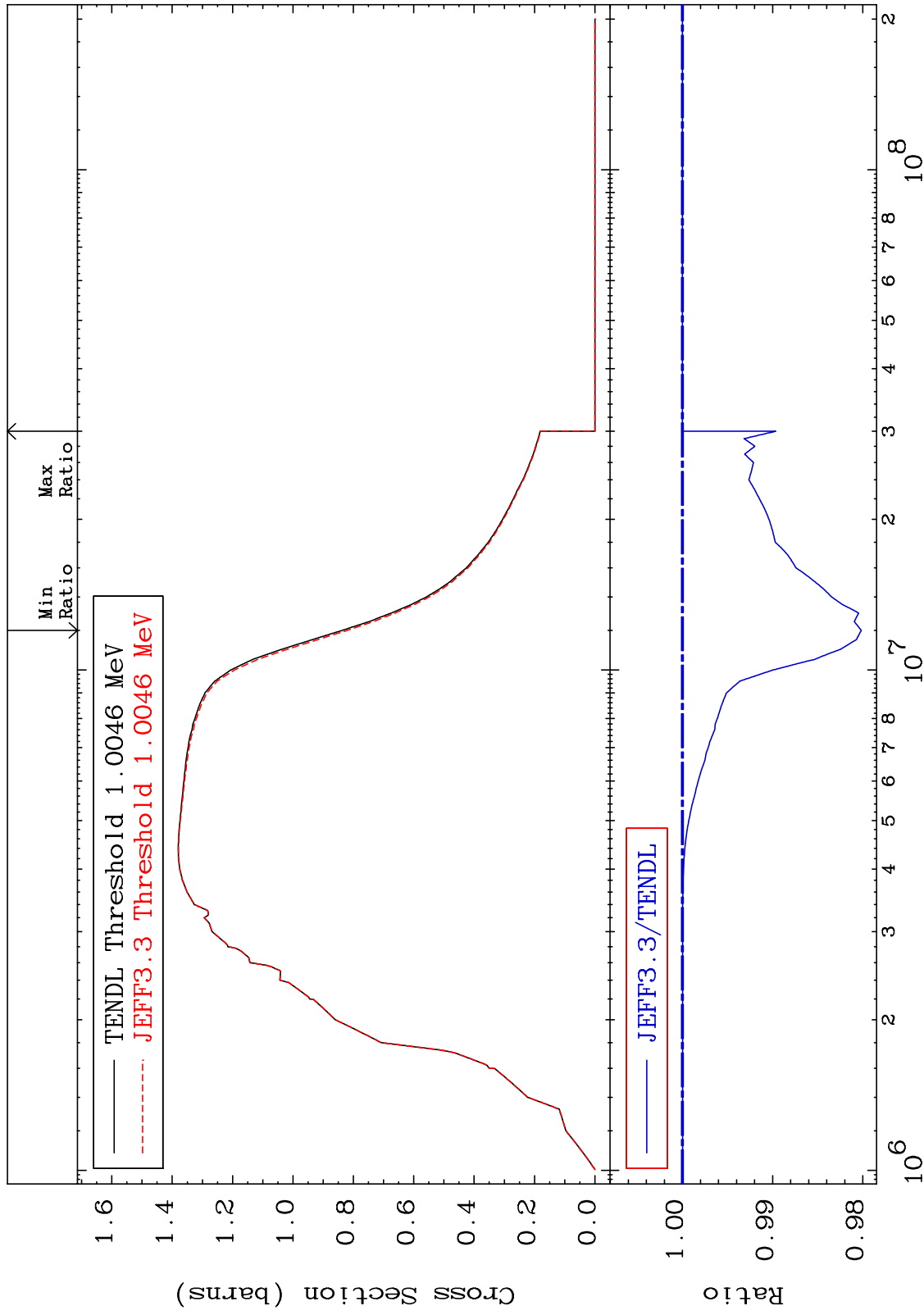


MAT 1931

Inelastic  
Cross Section

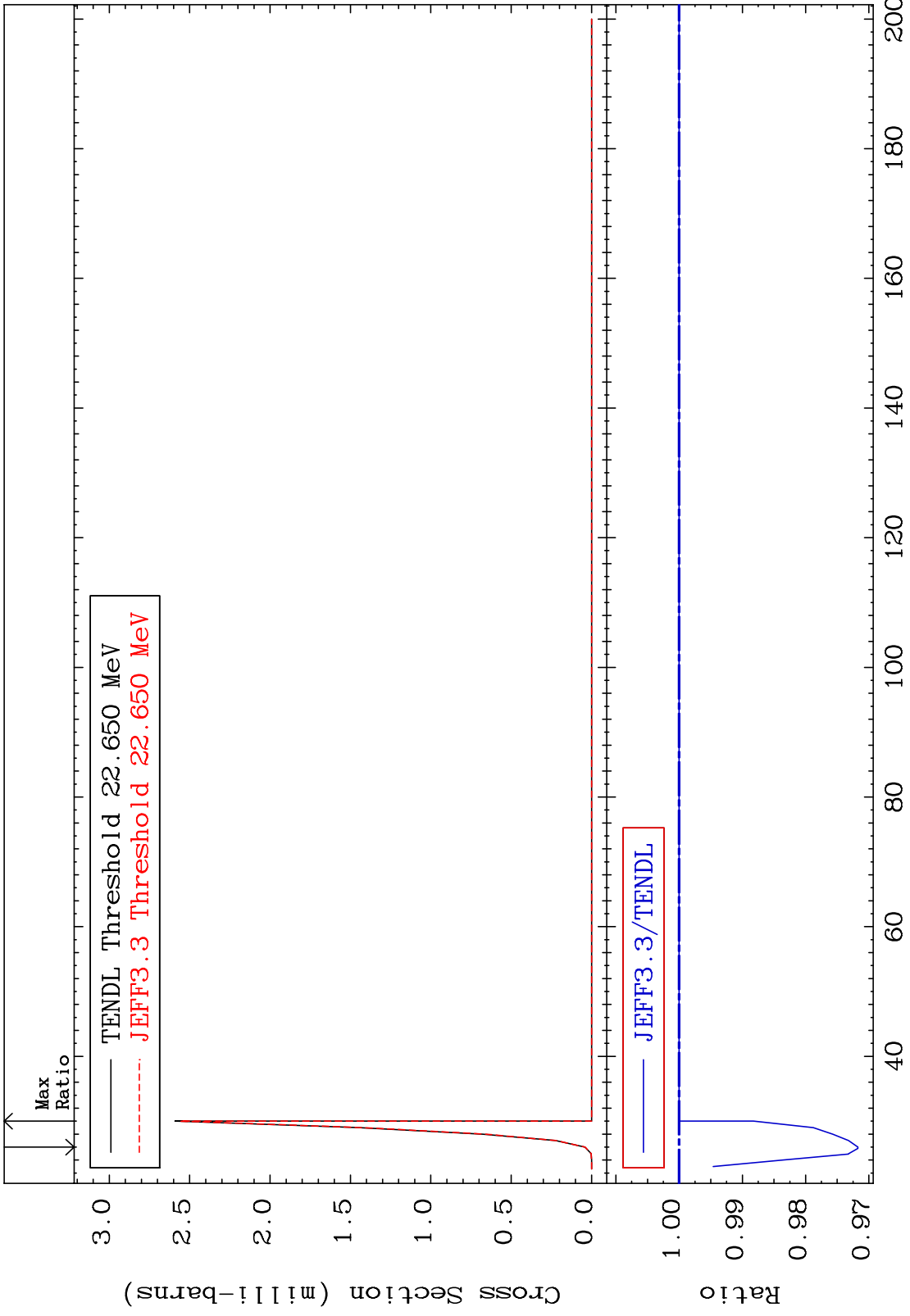
19-K -41

-1.983 To 0.000 %

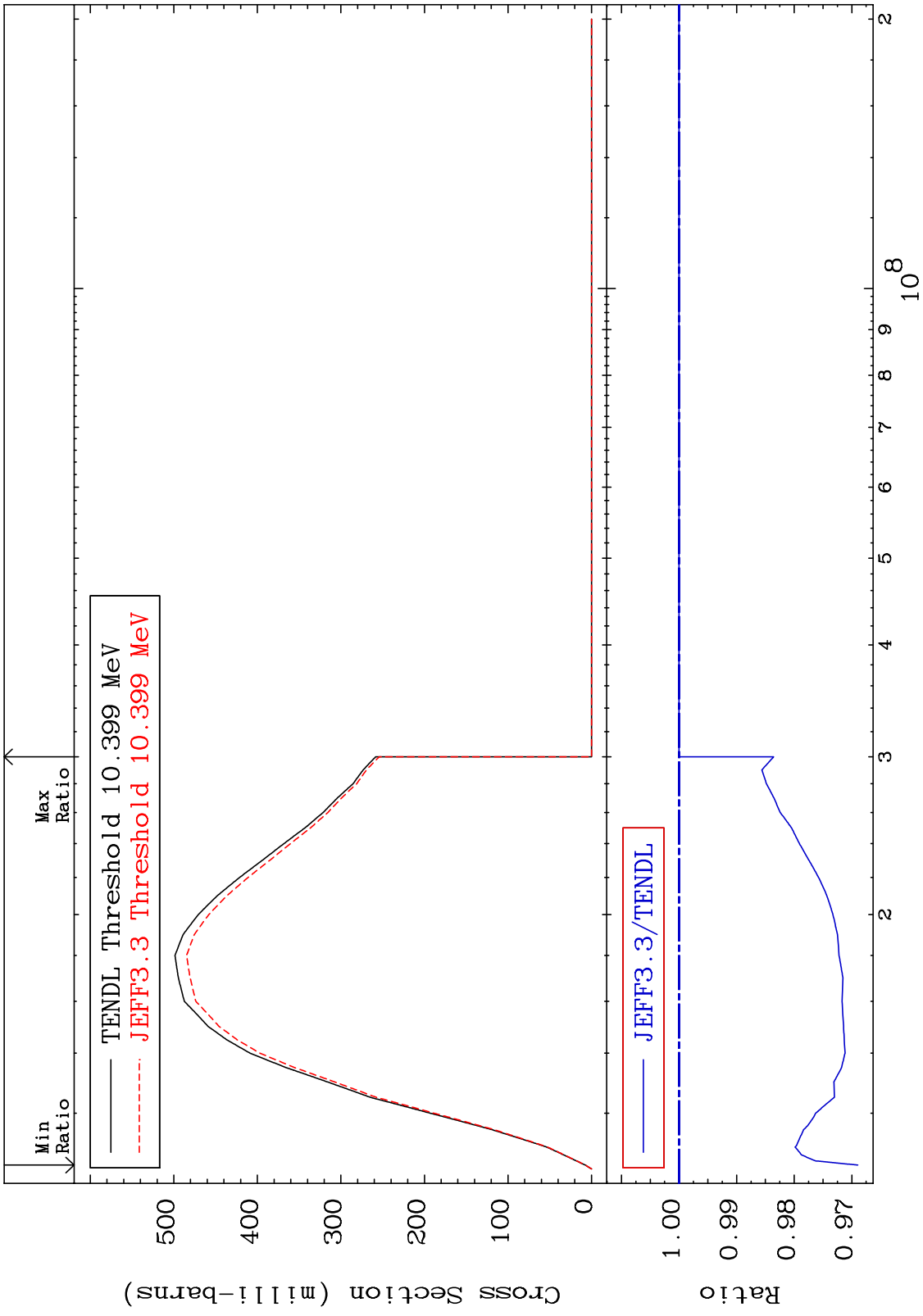


Incident Energy (eV)

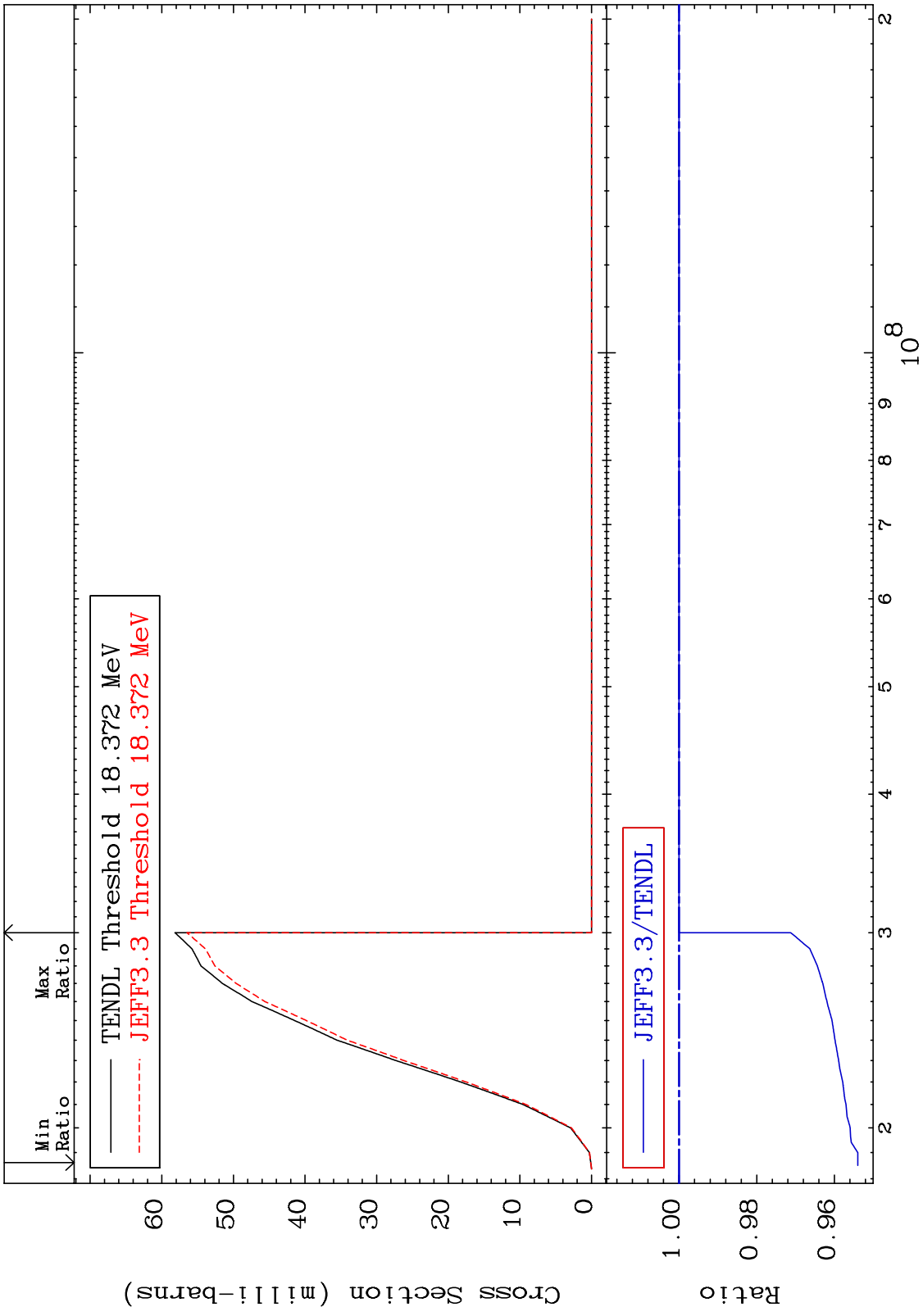
19-K -41



MAT 1931 (n,2n) Cross Section 19-K -41  
 -3.105 To 0.000 %

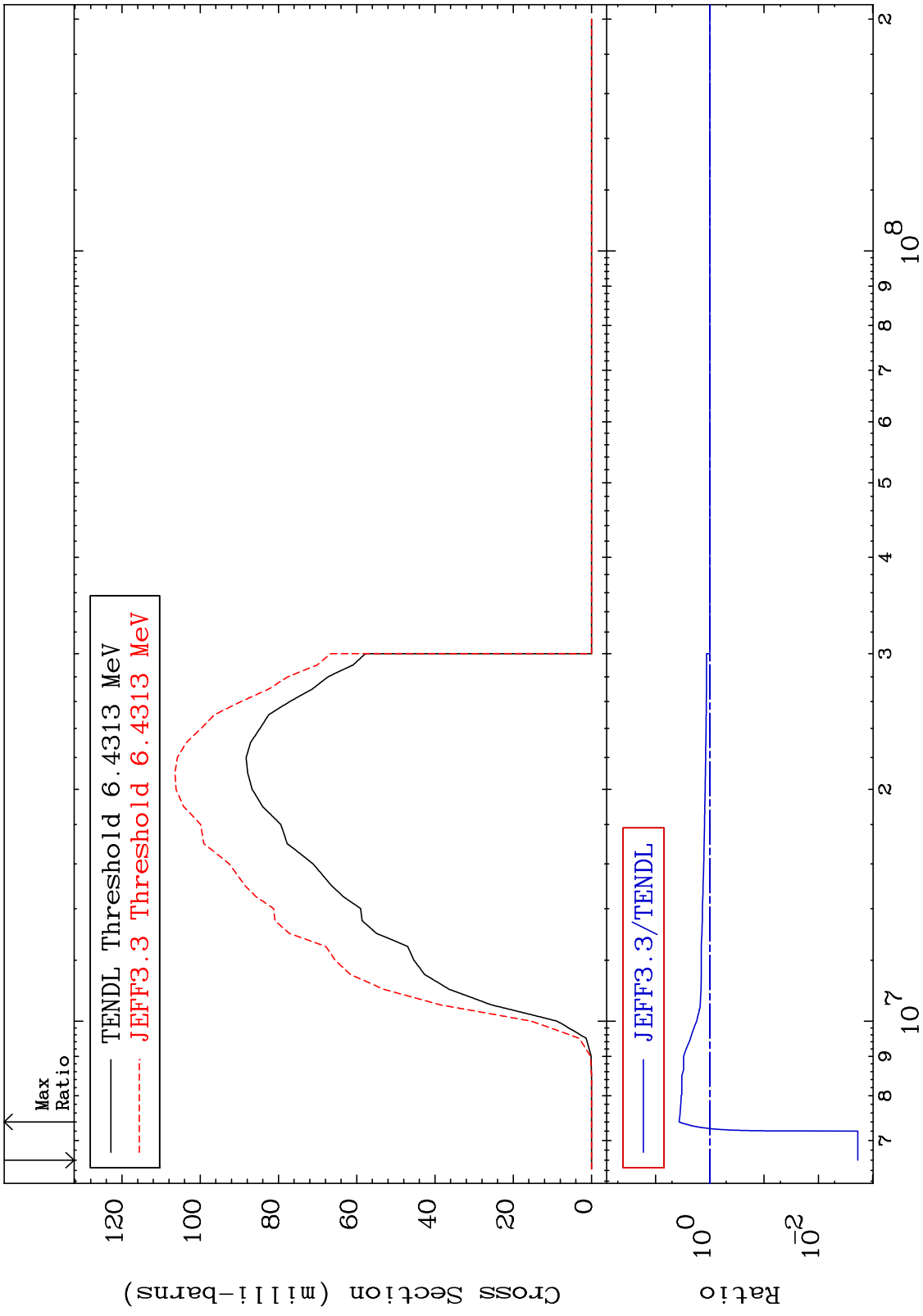


MAT 1931 (n,3n) 19-K -41  
 Cross Section -4.602 To 0.000 %



6 Incident Energy (eV) 19-K -41

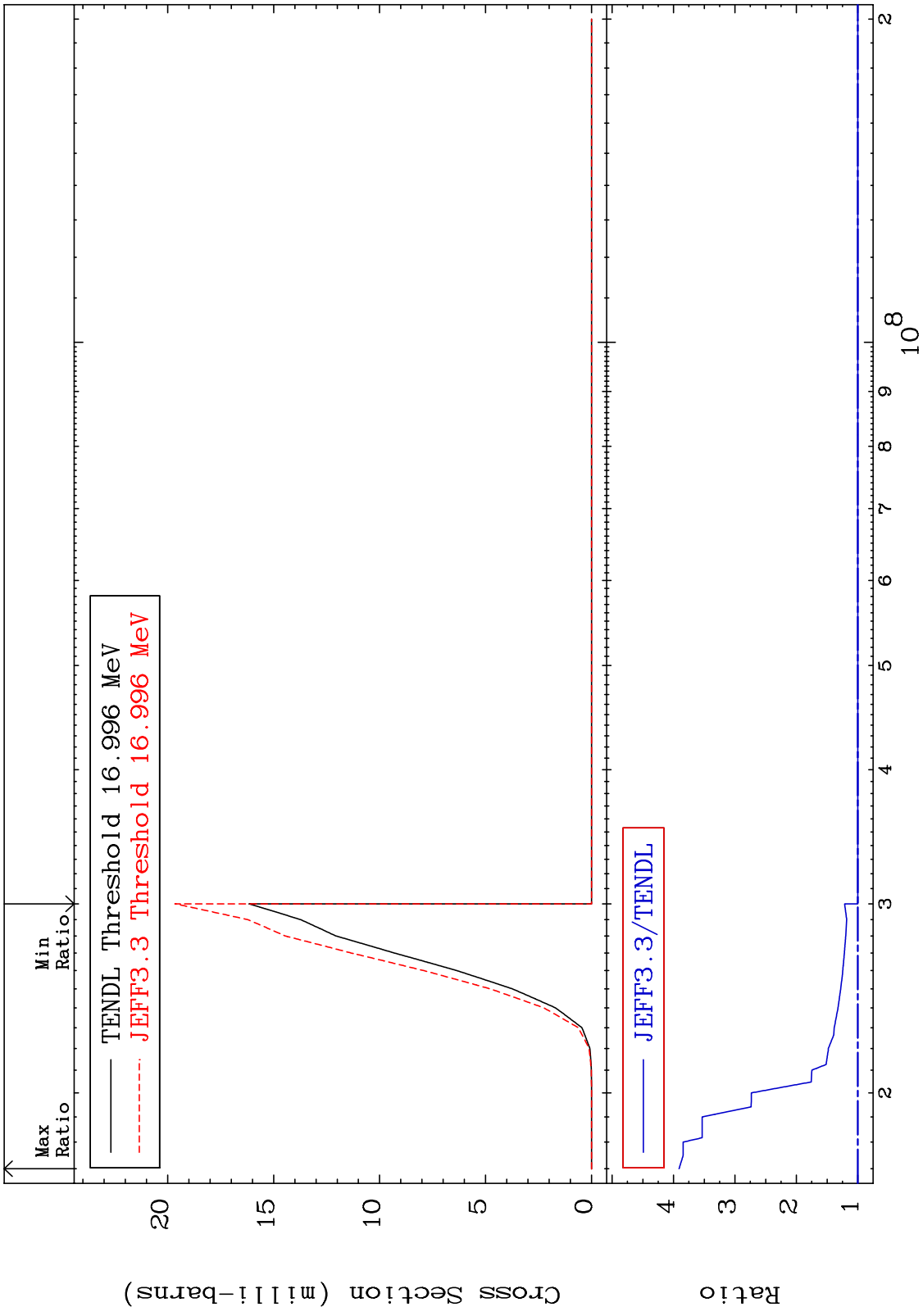
MAT 1931  $(n, n') \alpha$  19-K -41  
 Cross Section -99.81 To 270.1 %



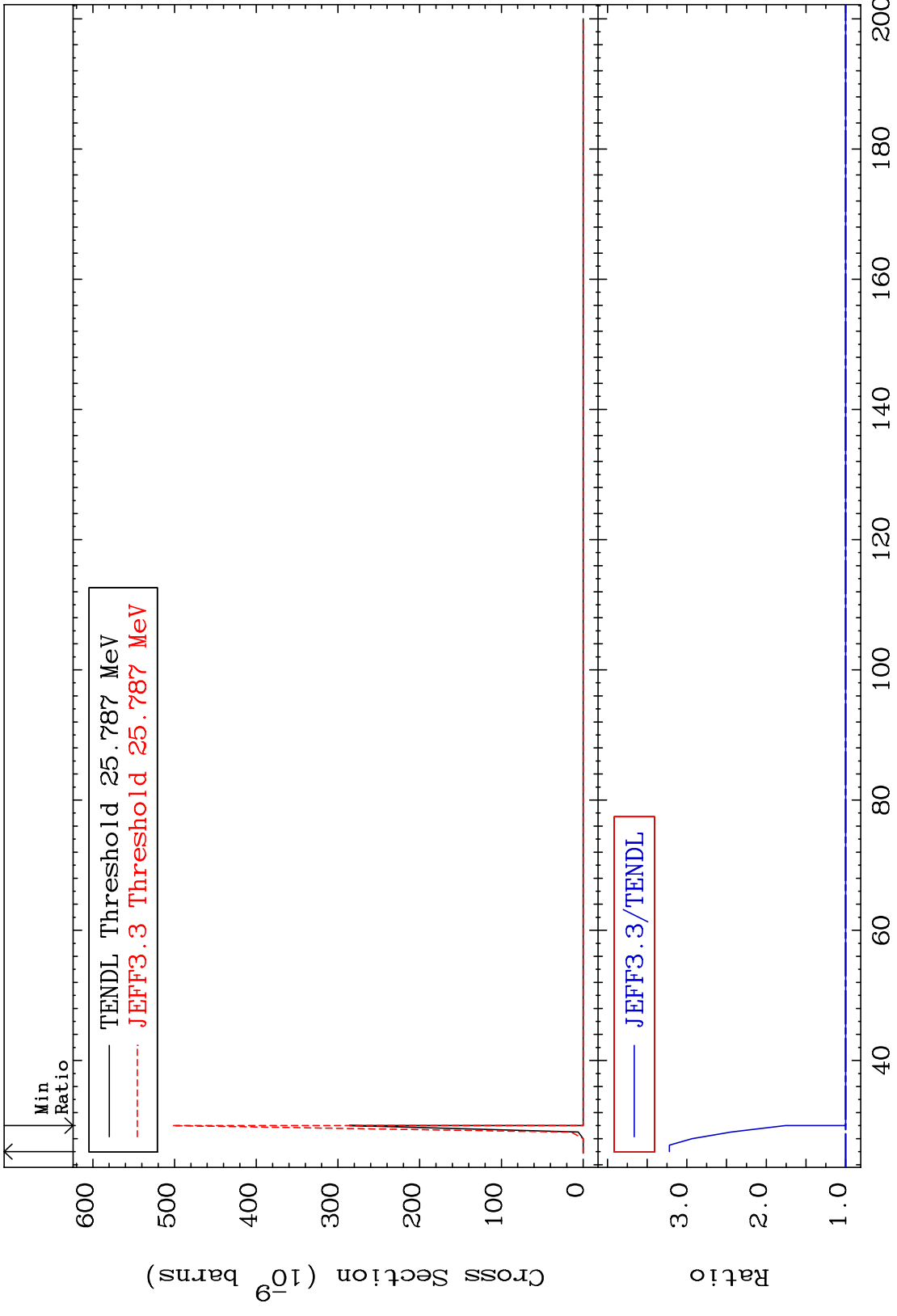
19-K -41



MAT 1931  $(n, 2n) \alpha$  19-K -41  
 Cross Section 0.000 To 291.1 %



MAT 1931 (n,3n)  $\alpha$  19-K -41  
Cross Section 0.000 To 221.9 %



MAT 1931

(n,n') p

19-K -41

-5.972 To 0.000 %

Cross Section

Min Ratio

Max Ratio

TENDL Threshold 7.9653 MeV  
JEFF3.3 Threshold 7.9653 MeV

JEFF3.3/TENDL

Cross Section (milli-barns)

Ratio

10

10<sup>7</sup>

2

3

4

5

6

7

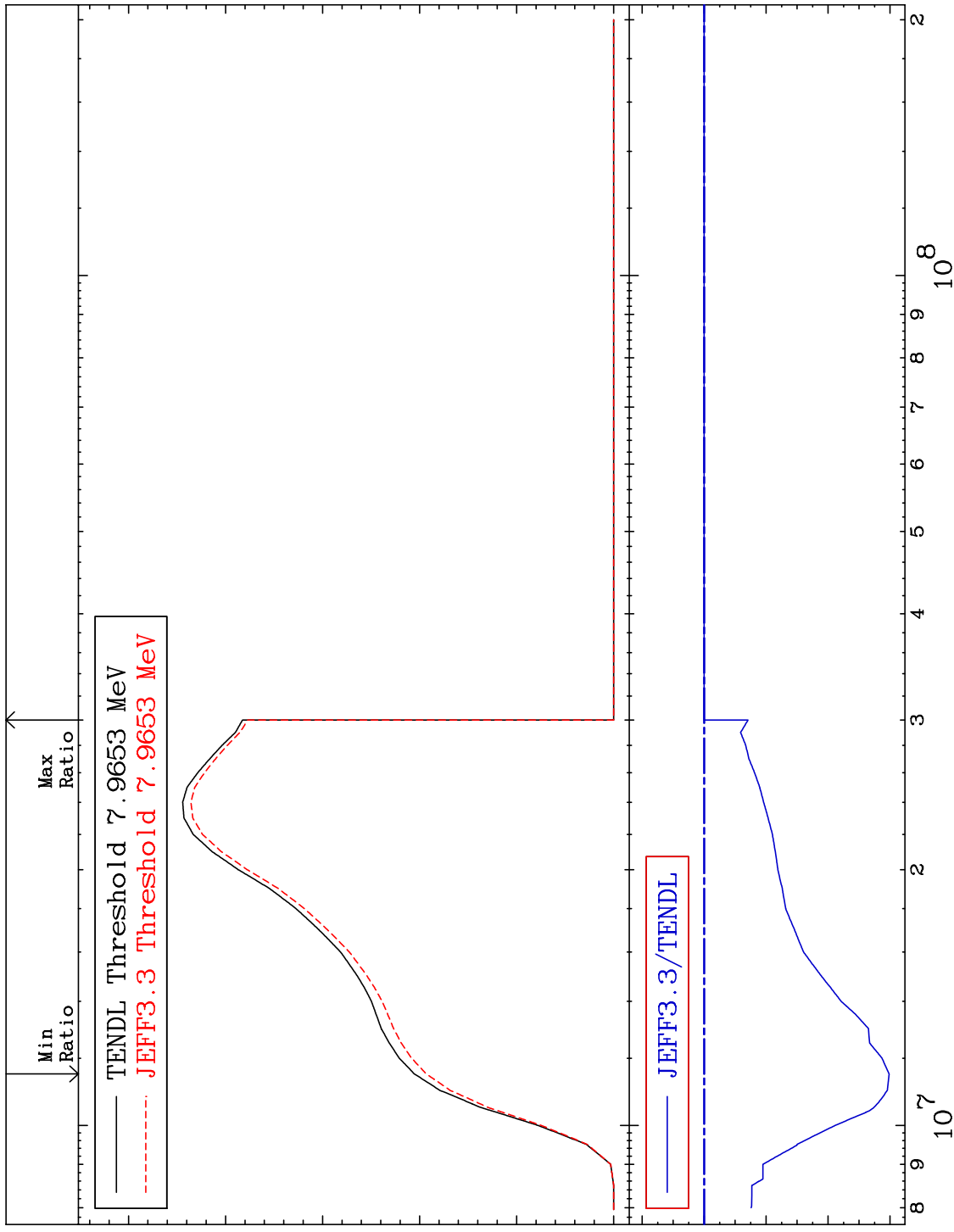
8

9

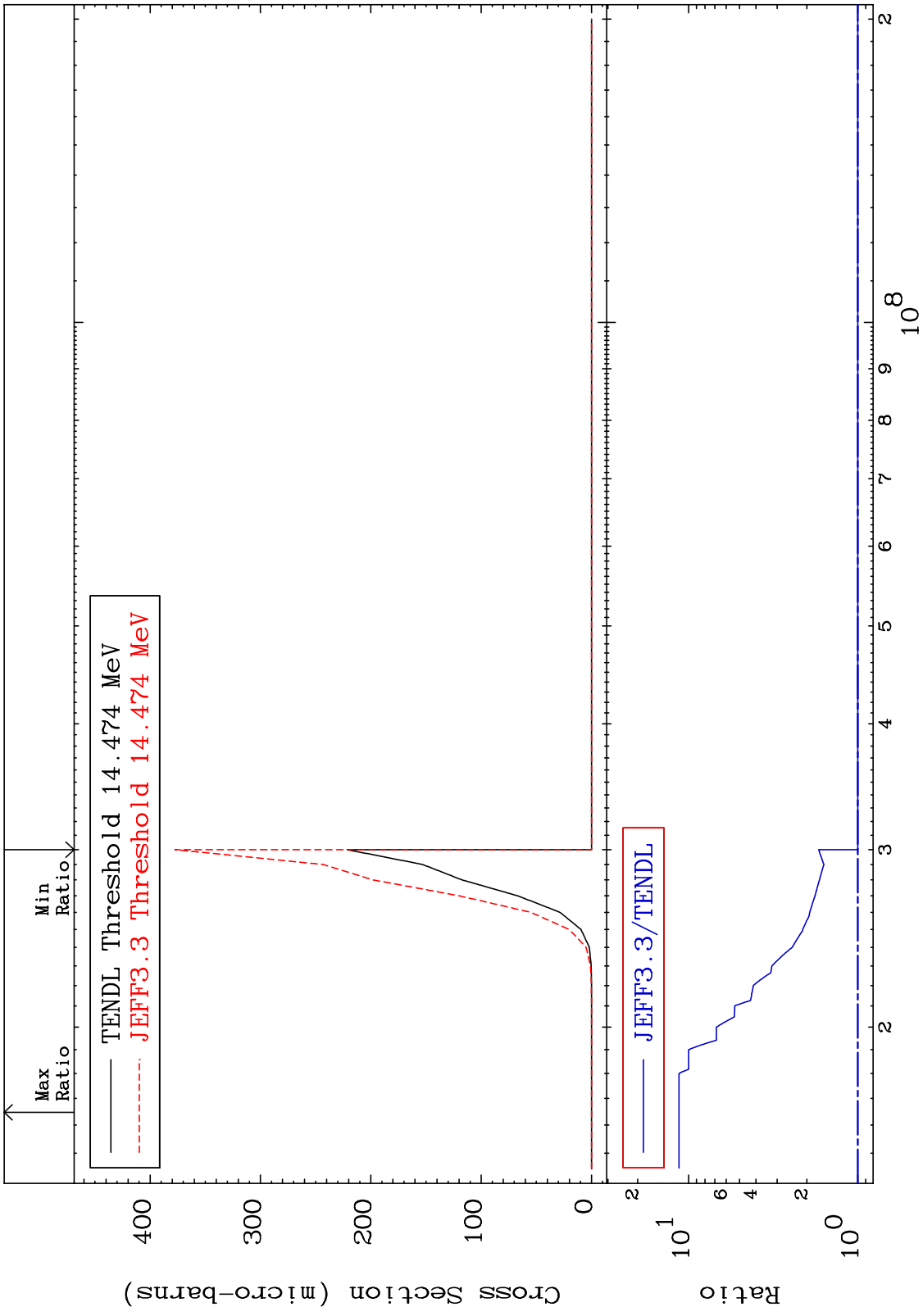
10<sup>8</sup>

Incident Energy (eV)

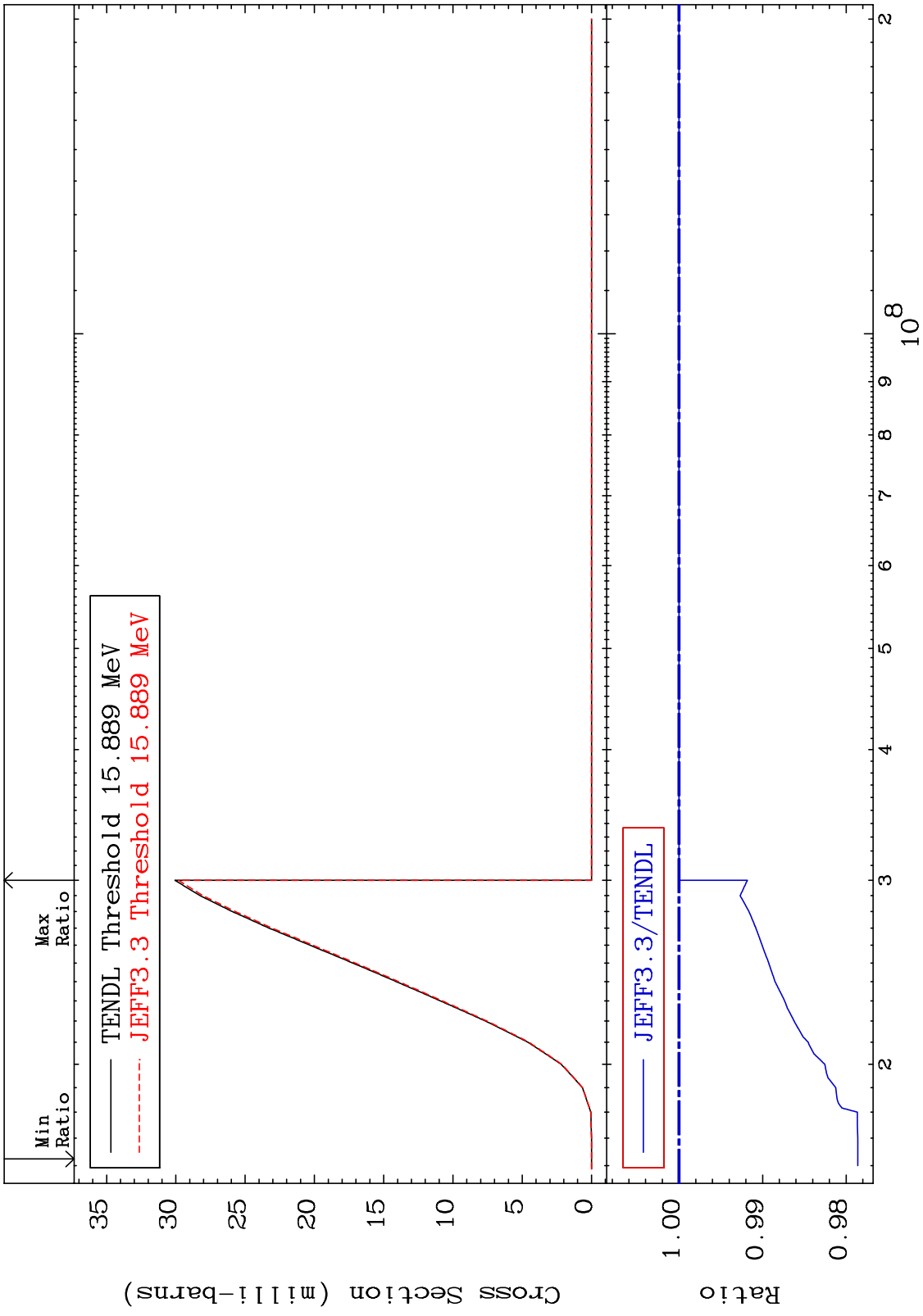
19-K -41



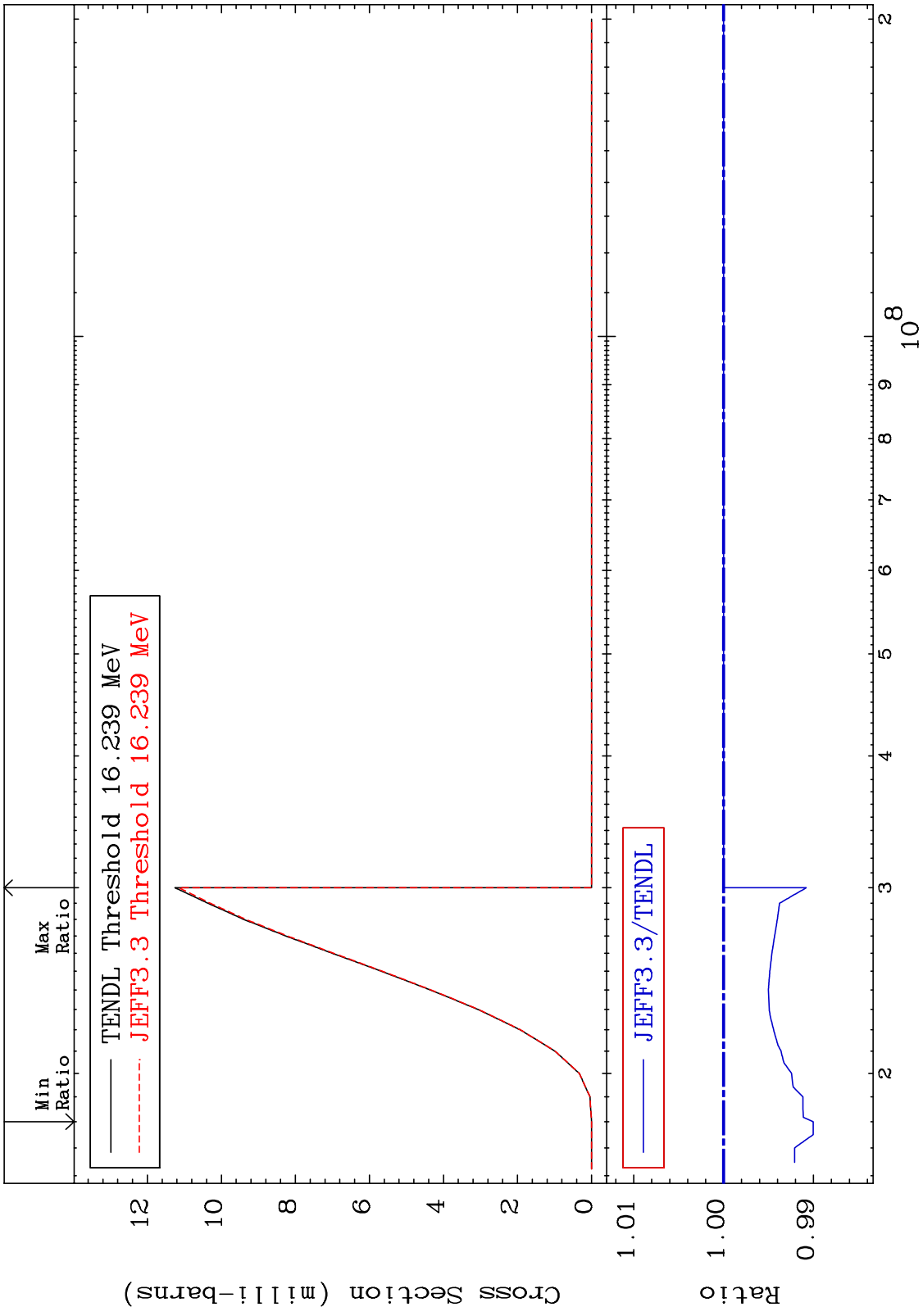
MAT 1931 (n,n') 2α Cross Section 19-K -41 To 1040. %



MAT 1931 (n,n') d 19-K -41  
 Cross Section -2.140 To 0.000 %



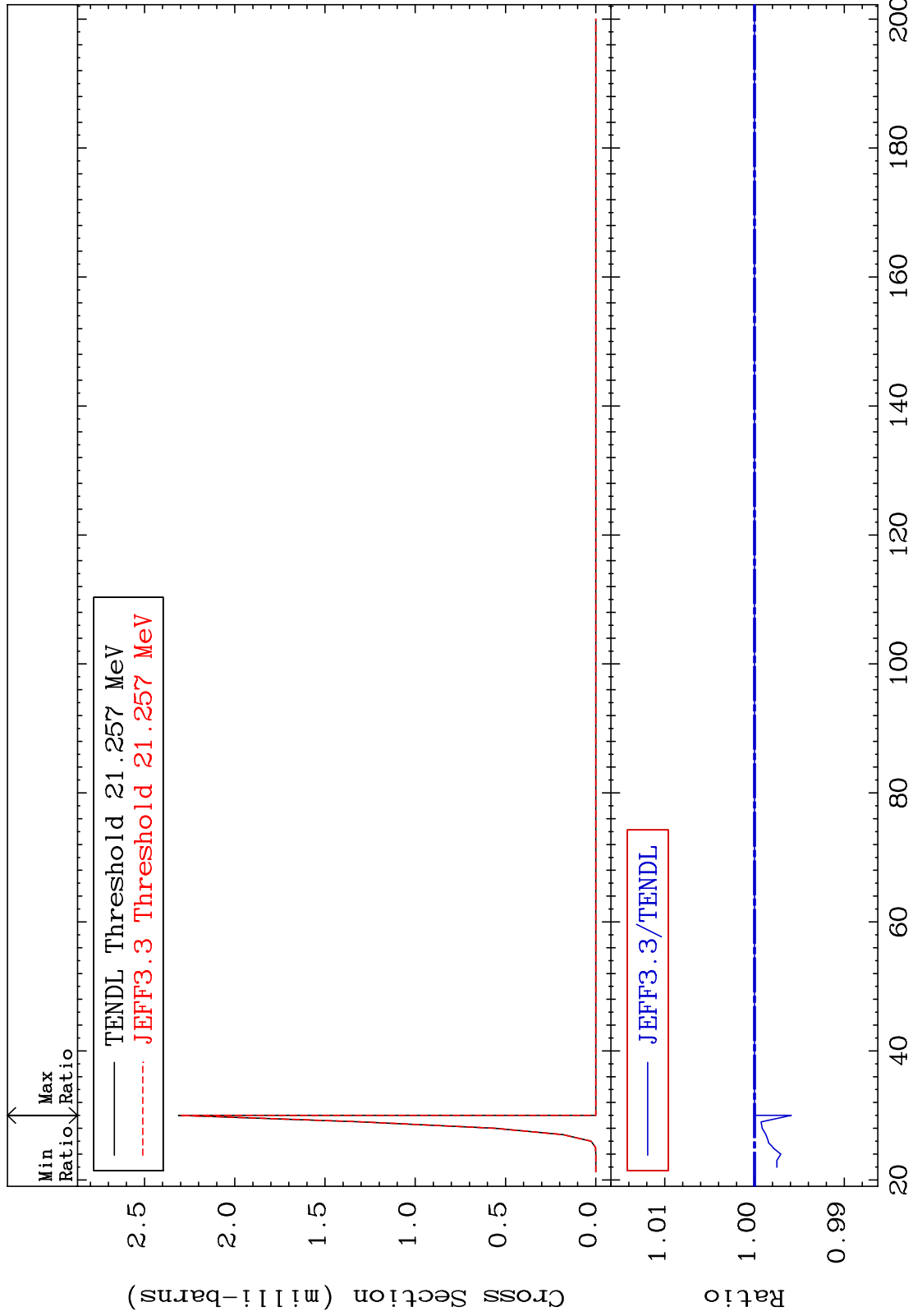
MAT 1931 (n,n') t 19-K -41  
 Cross Section -0.998 To 0.000 %



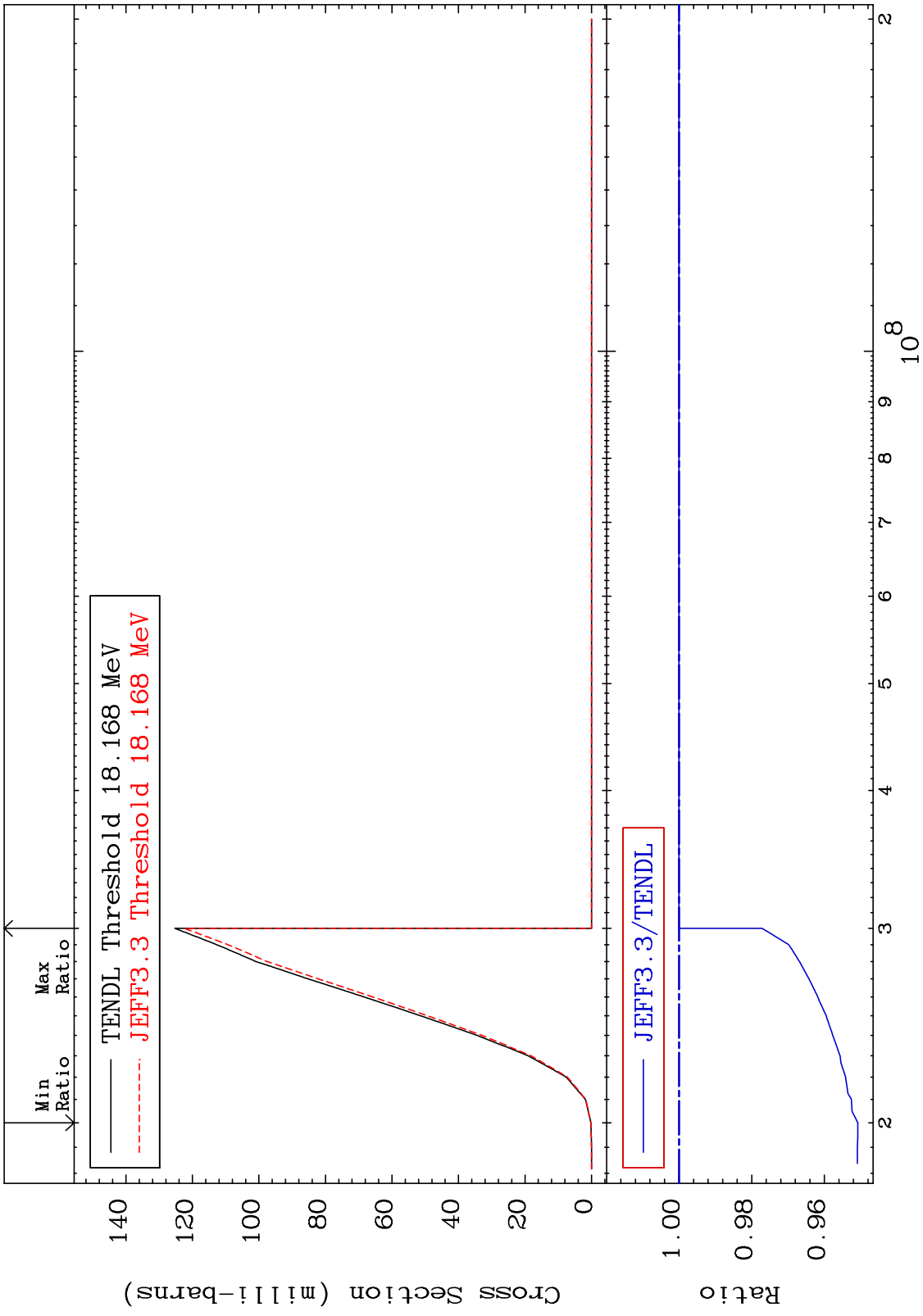
MAT 1931

(n,n') He-3  
Cross Section

19-K -41  
-0.411 To 0.000 %



MAT 1931 (n,2n) p 19-K -41  
Cross Section -4.919 To 0.000 %

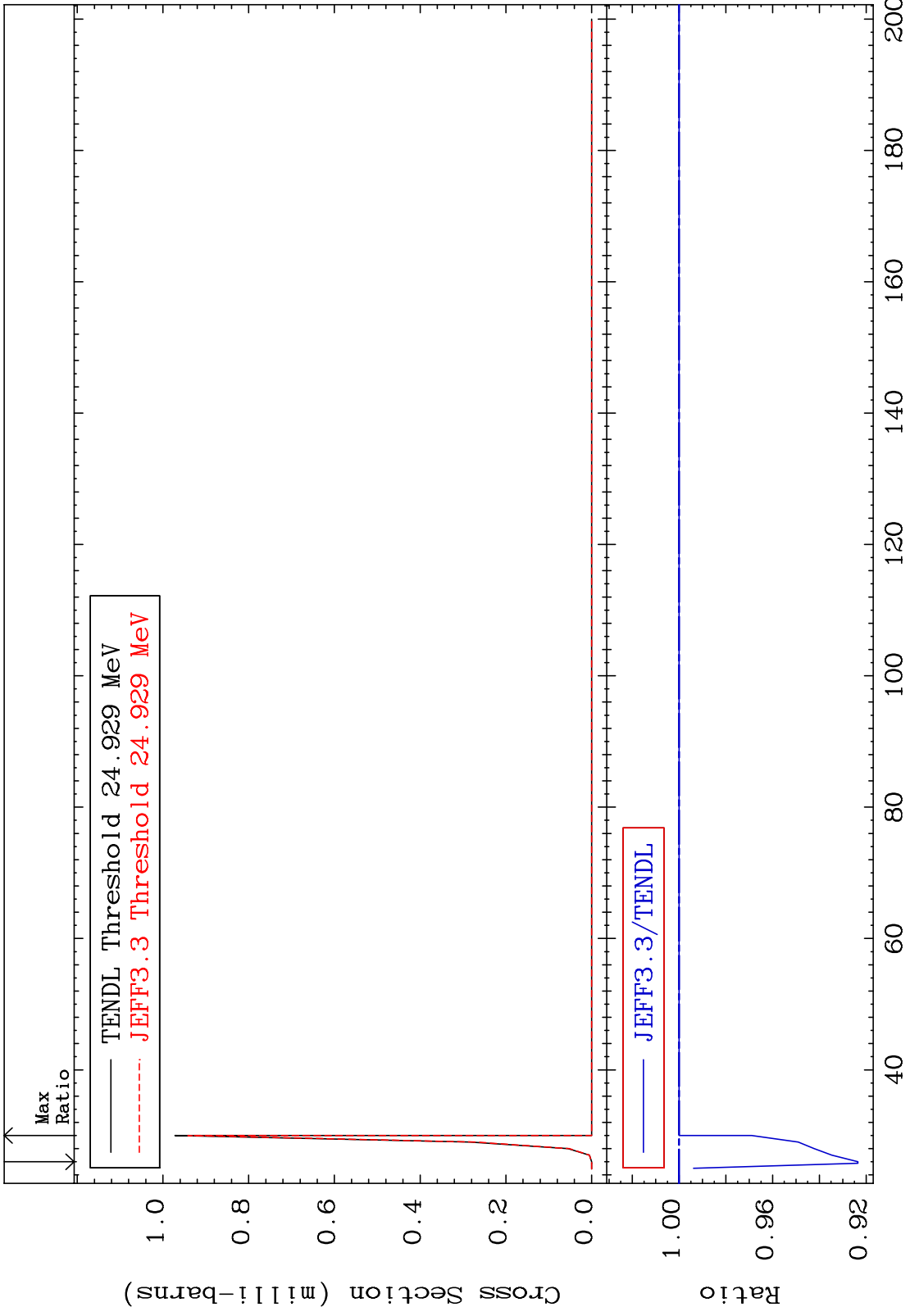


19-K -41

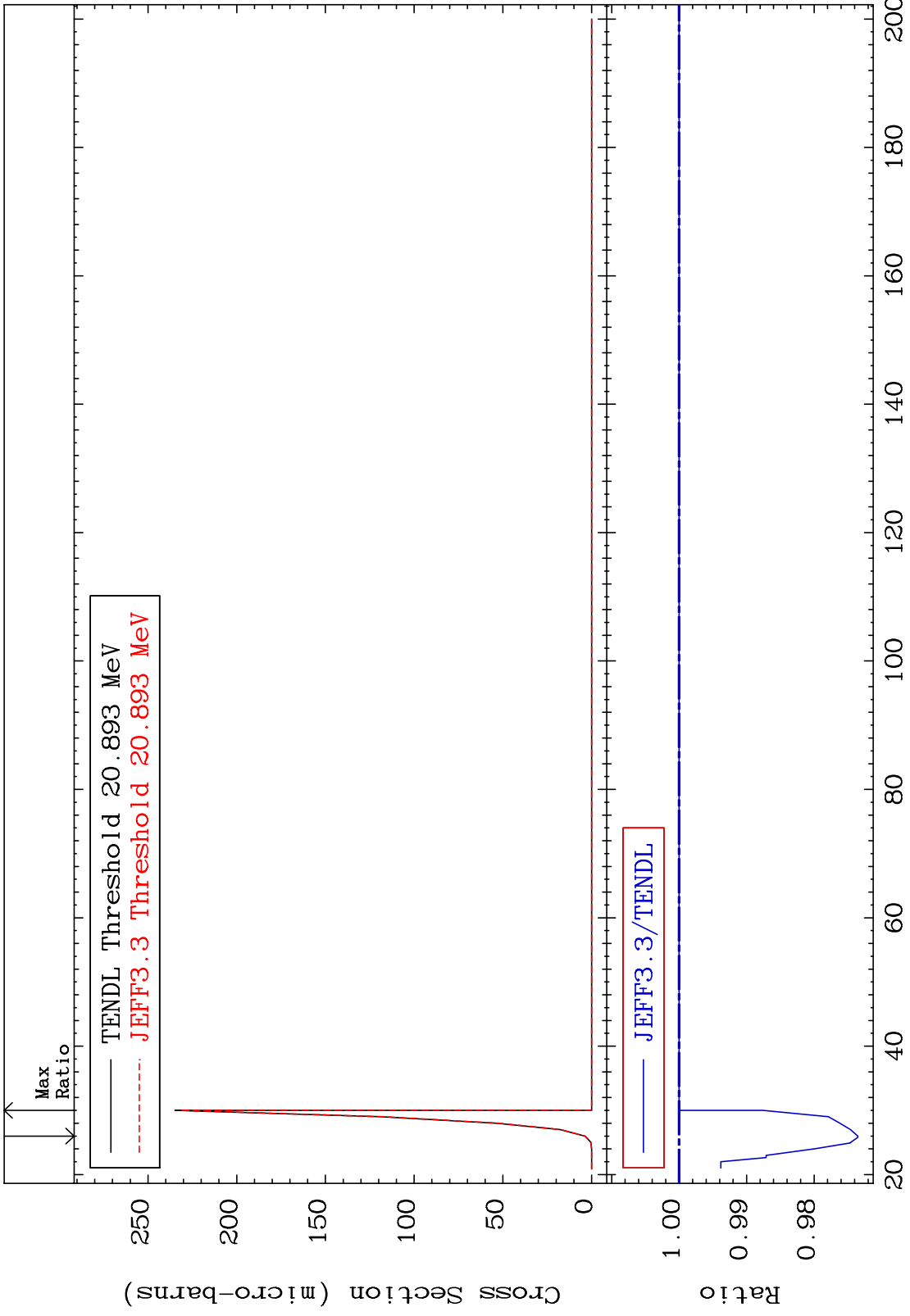
Incident Energy (eV)



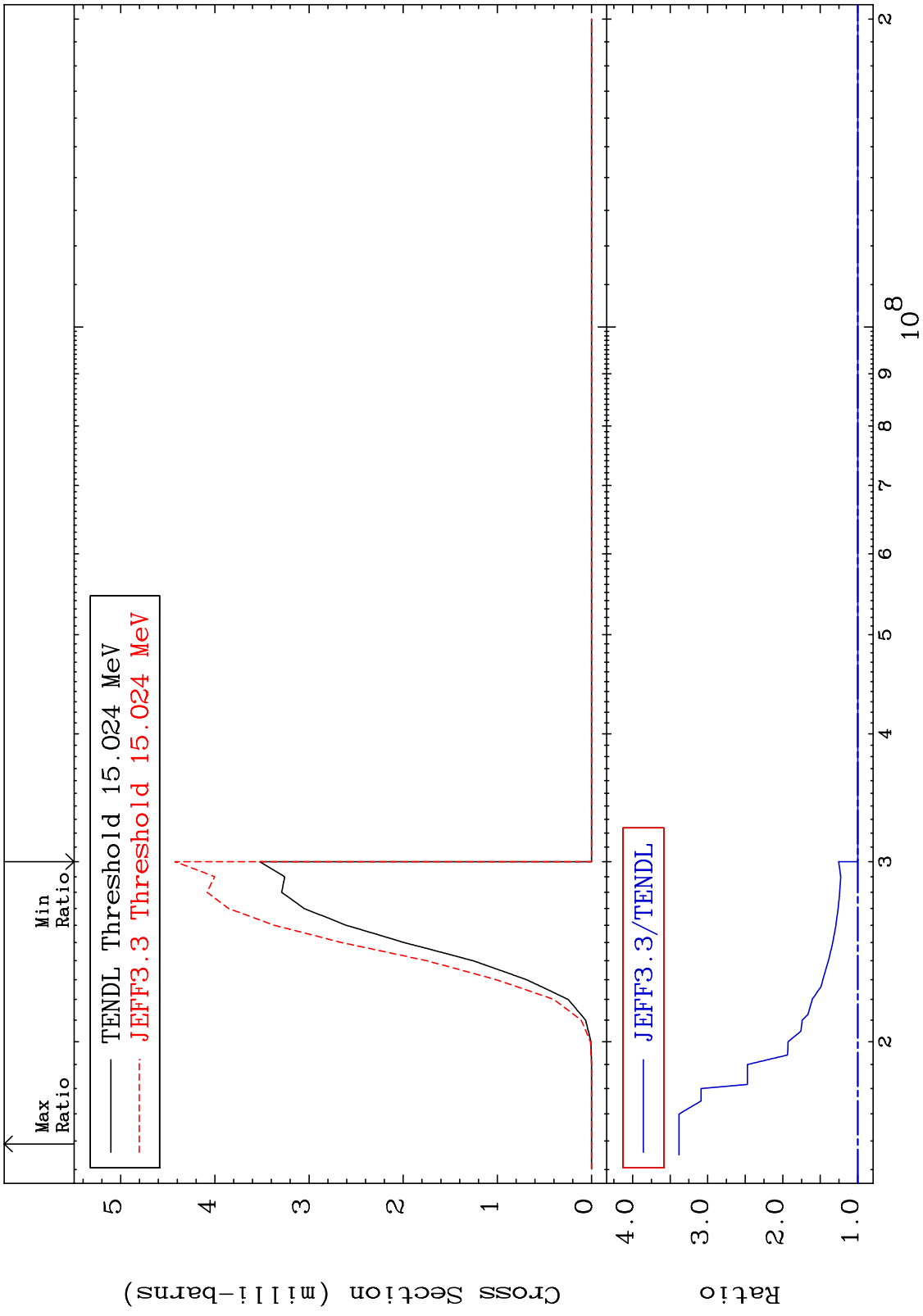
MAT 1931 (n,3n) p 19-K -41  
 Cross Section -7.650 To 0.000 %



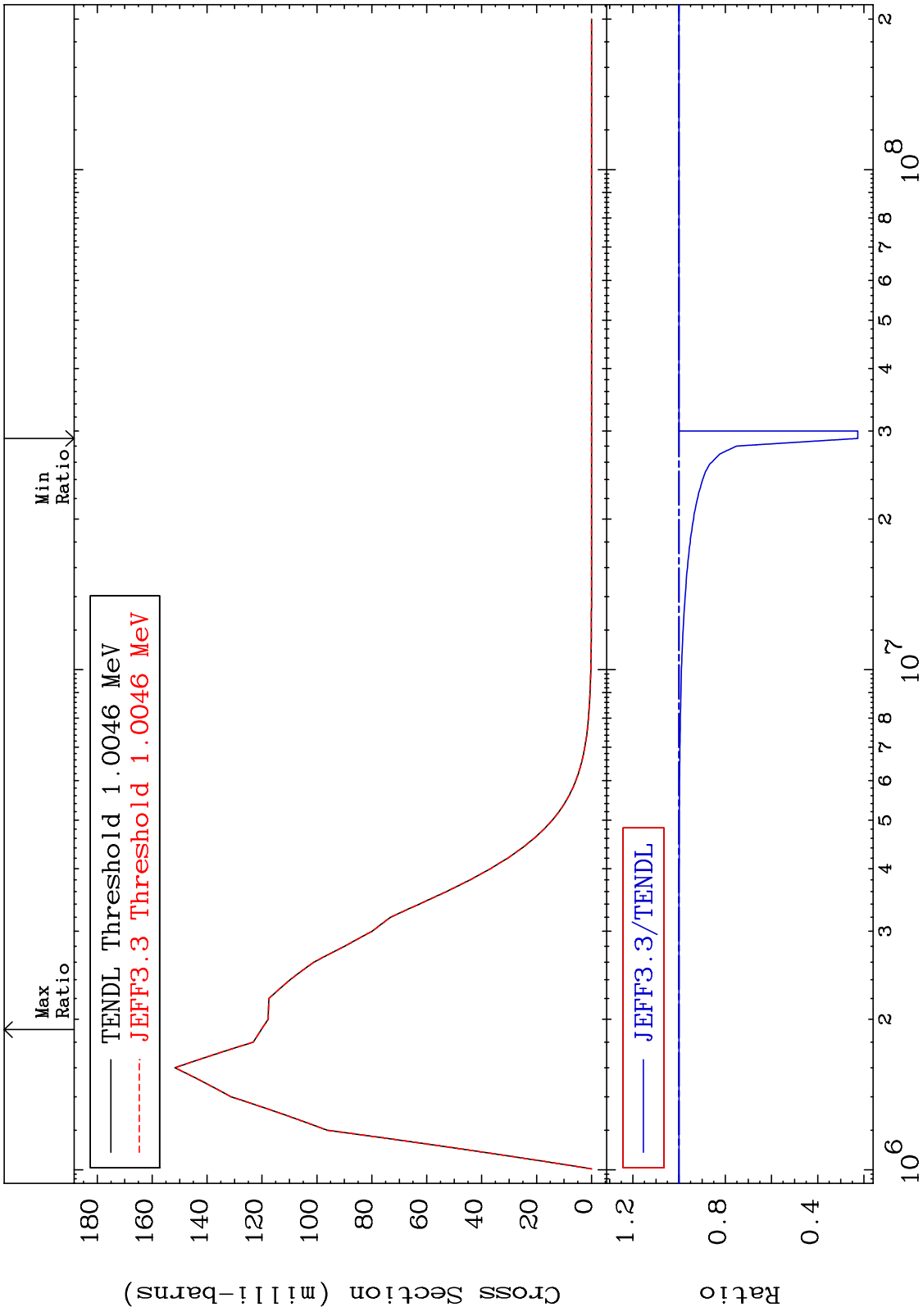
MAT 1931 (n,2n) p 19-K -41  
Cross Section -2.650 To 0.000 %



MAT 1931 (n,n') p α Cross Section 19-K -41 To 238.1 %

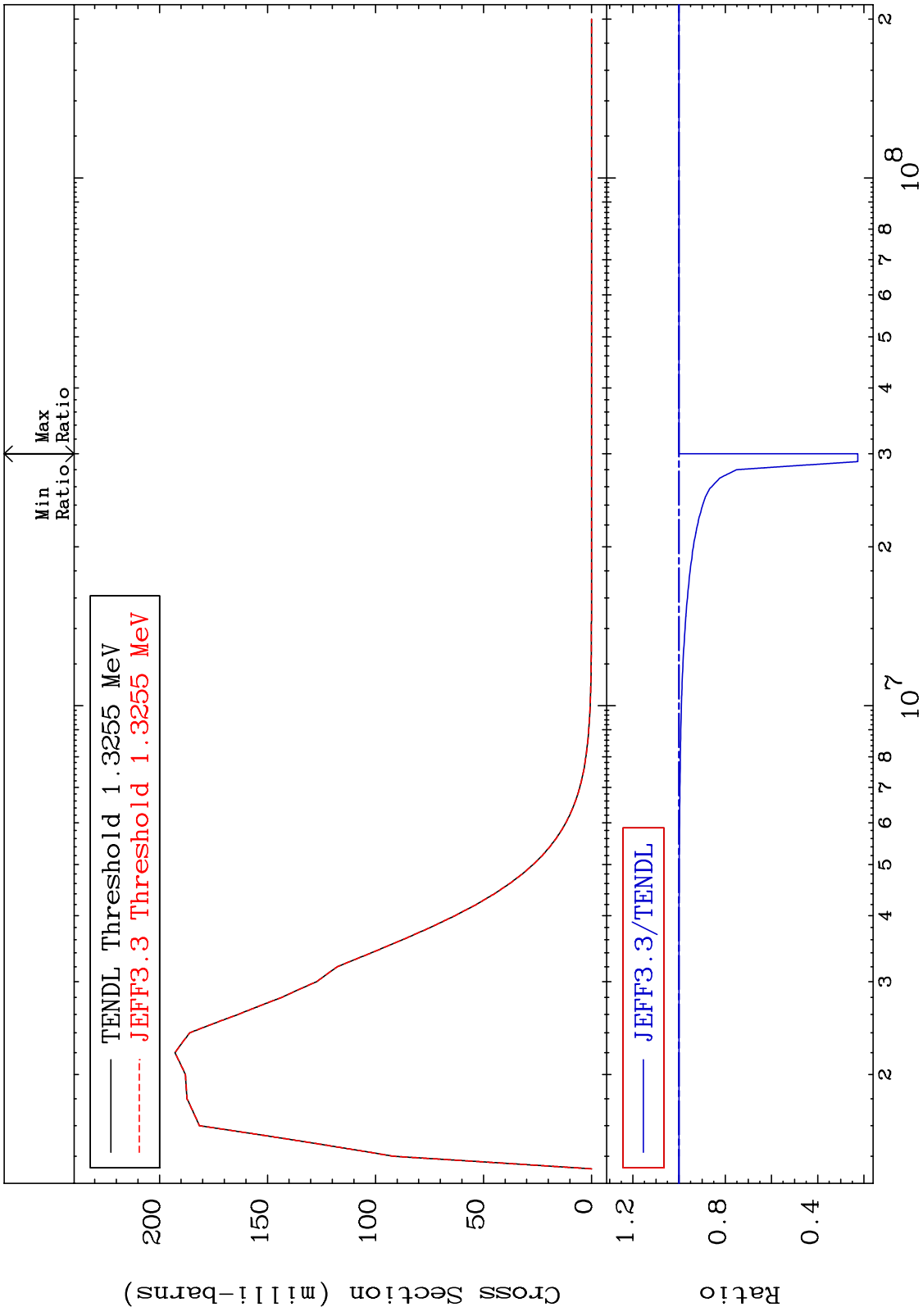


MAT 1931 MT= 51 (n,n') Level Cross Section -77.37 To 0.000 % 19-K -41



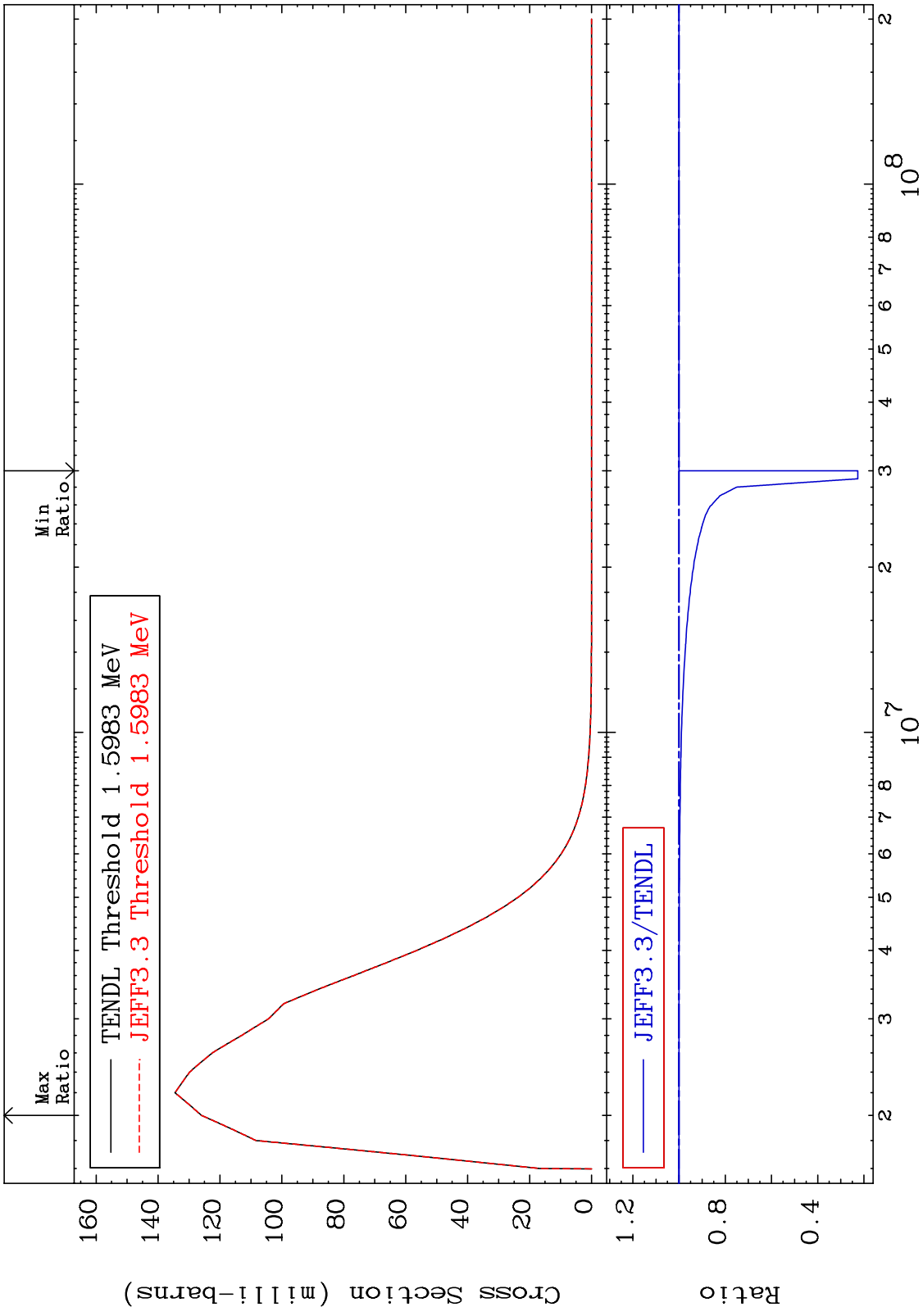
19-K -41

MAT 1931 MT= 52 (n,n') Level Cross Section -77.37 To 0.000 % 19-K -41

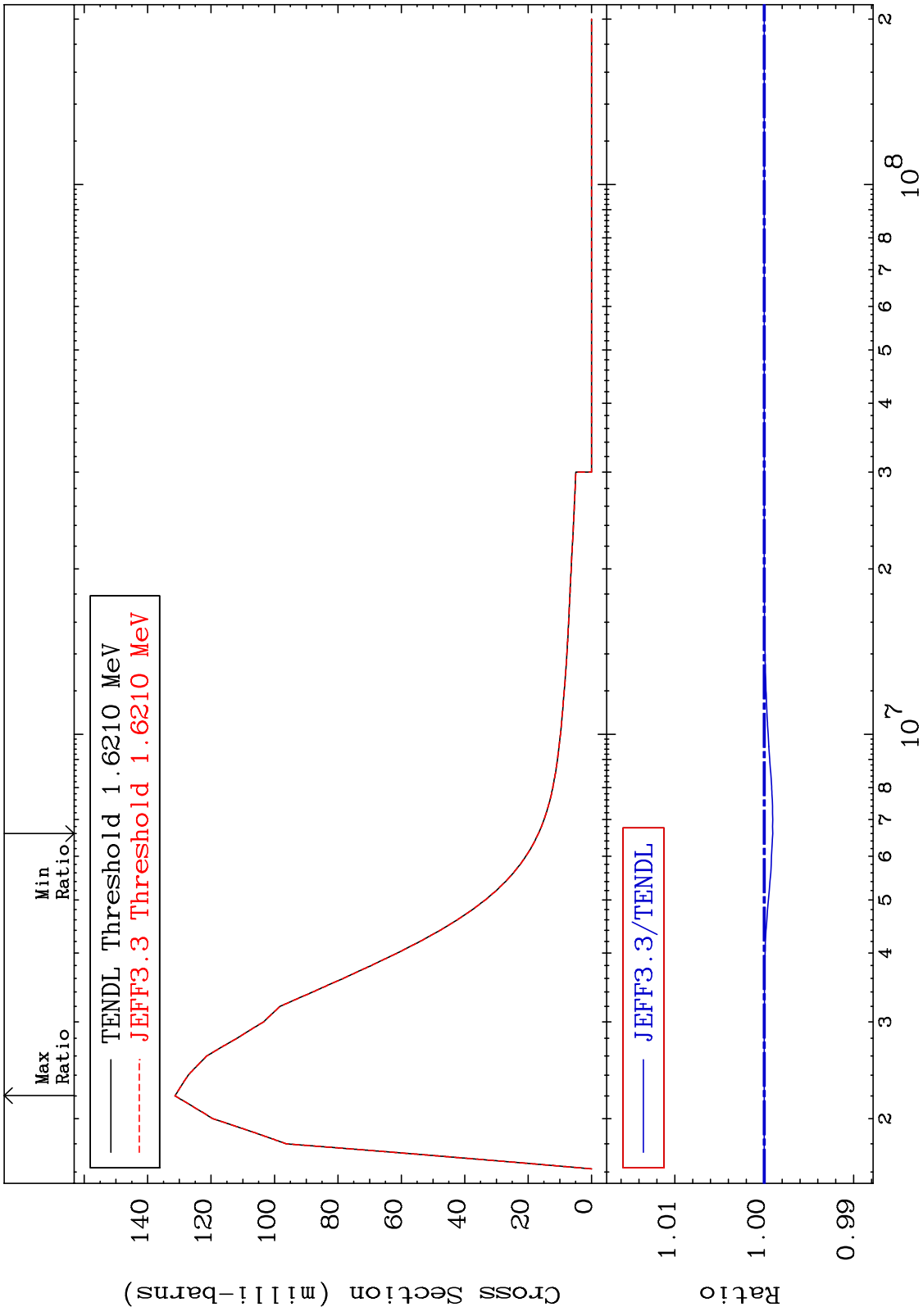


20 19-K -41

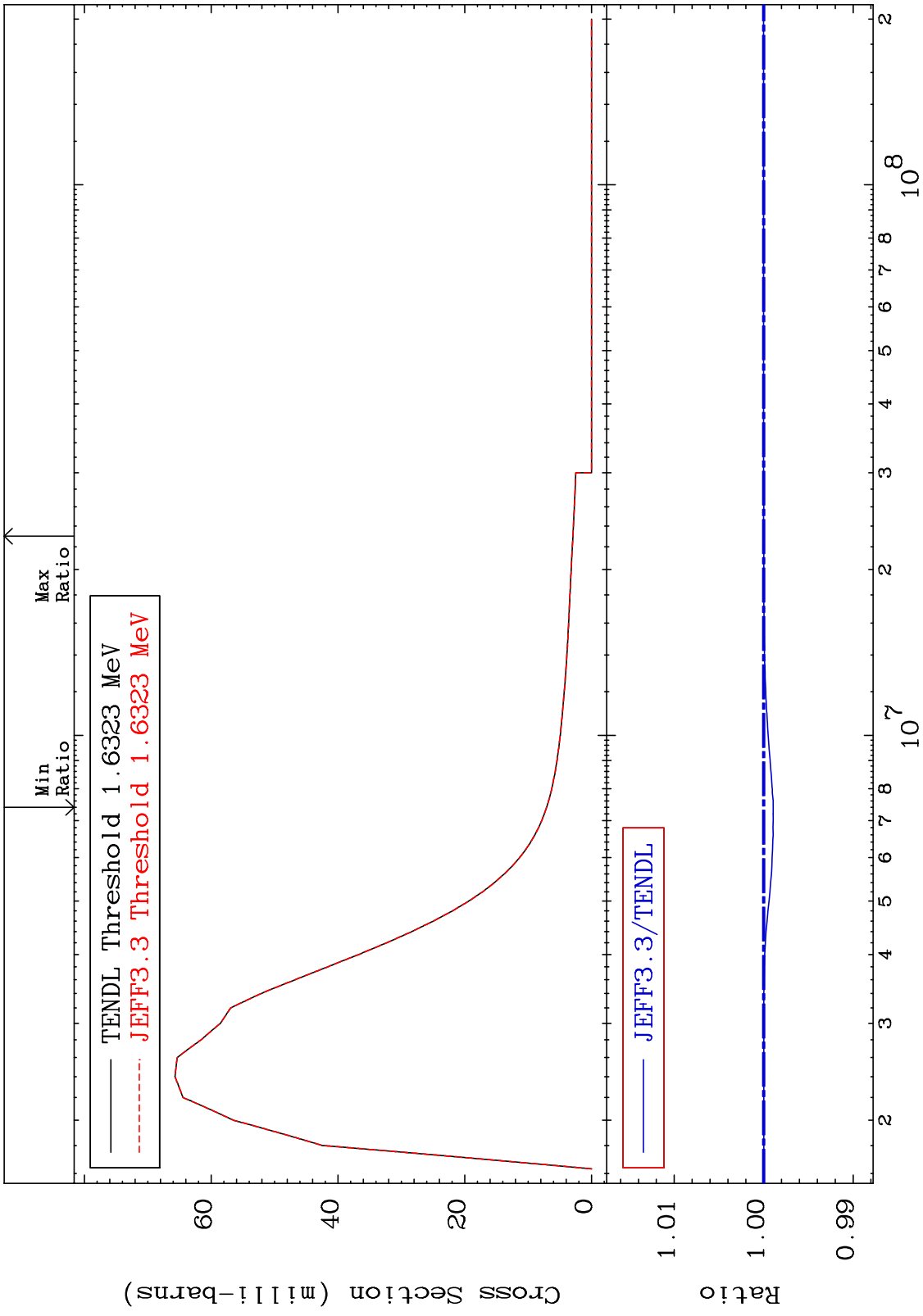
MAT 1931 MT= 53 (n,n') Level Cross Section -77.37 To 0.000 % 19-K -41



MAT 1931 MT= 54 (n,n') Level Cross Section 19-K -41  
 -0.094 To 0.000 %



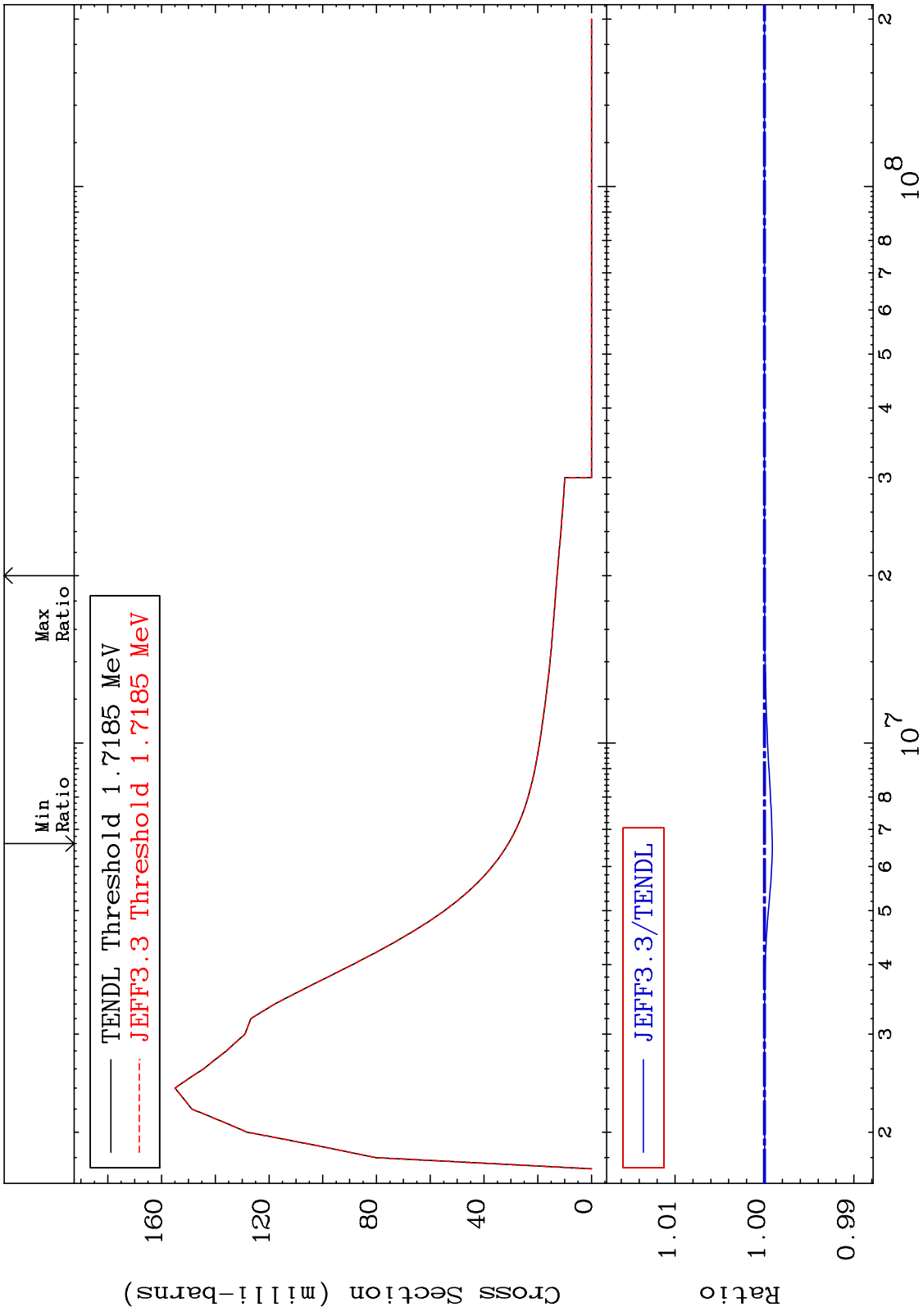
MAT 1931 MT= 55 (n,n') Level Cross Section -0.107 To 0.000 % 19-K -41



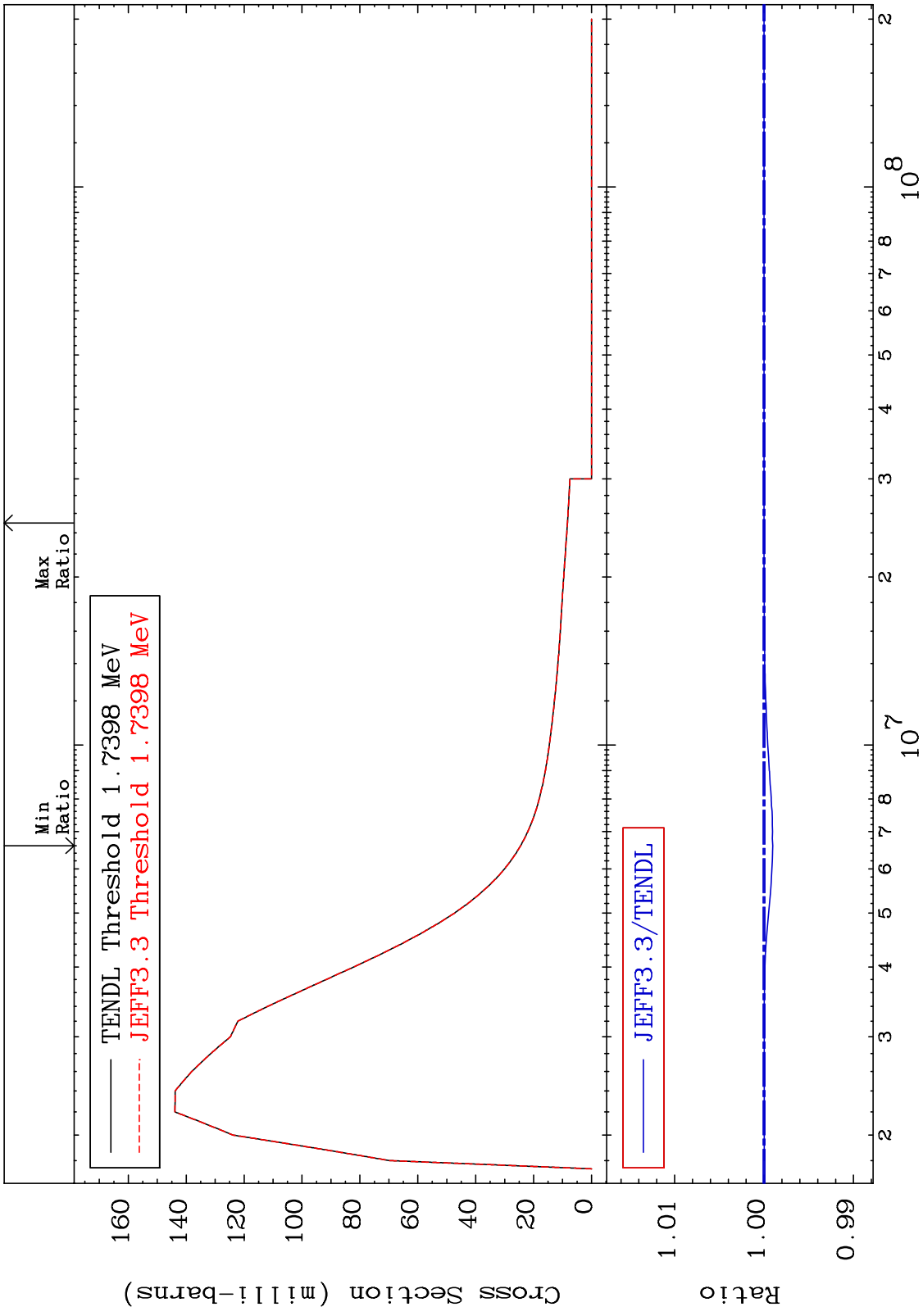
23 19-K -41



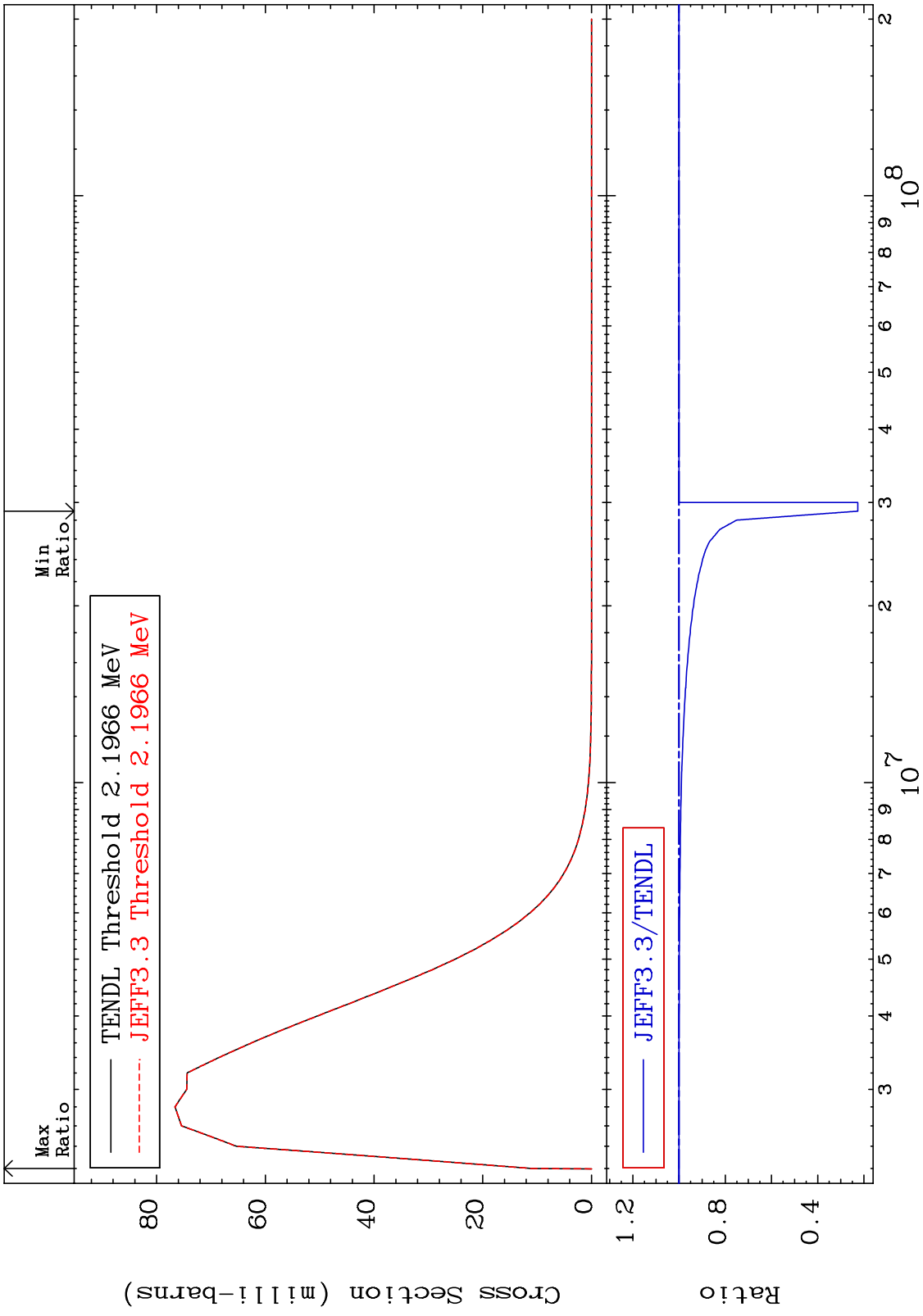
MAT 1931 MT= 56 (n,n') Level Cross Section 19-K -41  
 -0.089 To 0.000 %



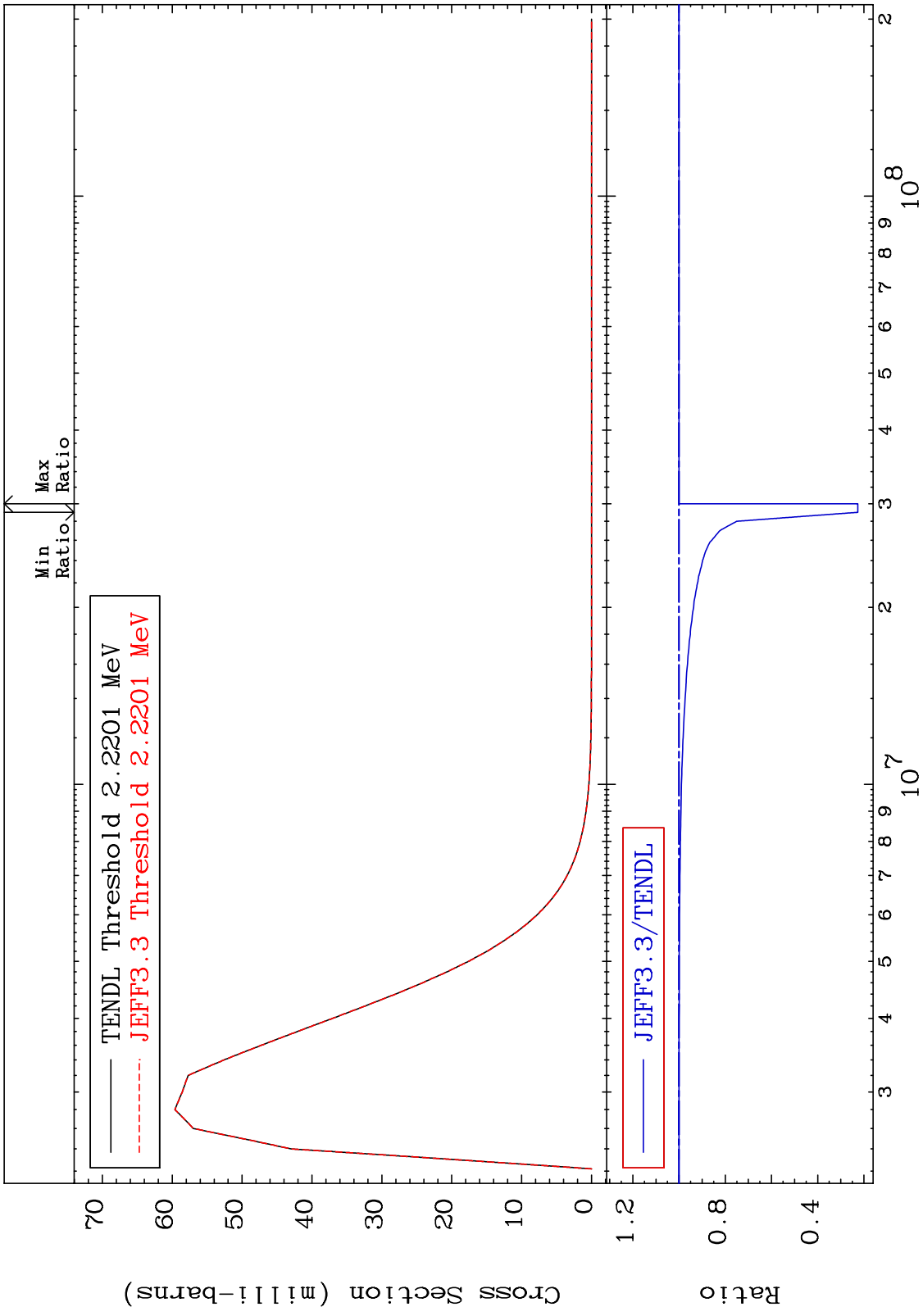
MAT 1931 MT= 57 (n, n') Level Cross Section -0.098 To 0.000 % 19-K -41



MAT 1931 MT= 58 (n,n') Level Cross Section -77.37 To 0.000 % 19-K -41



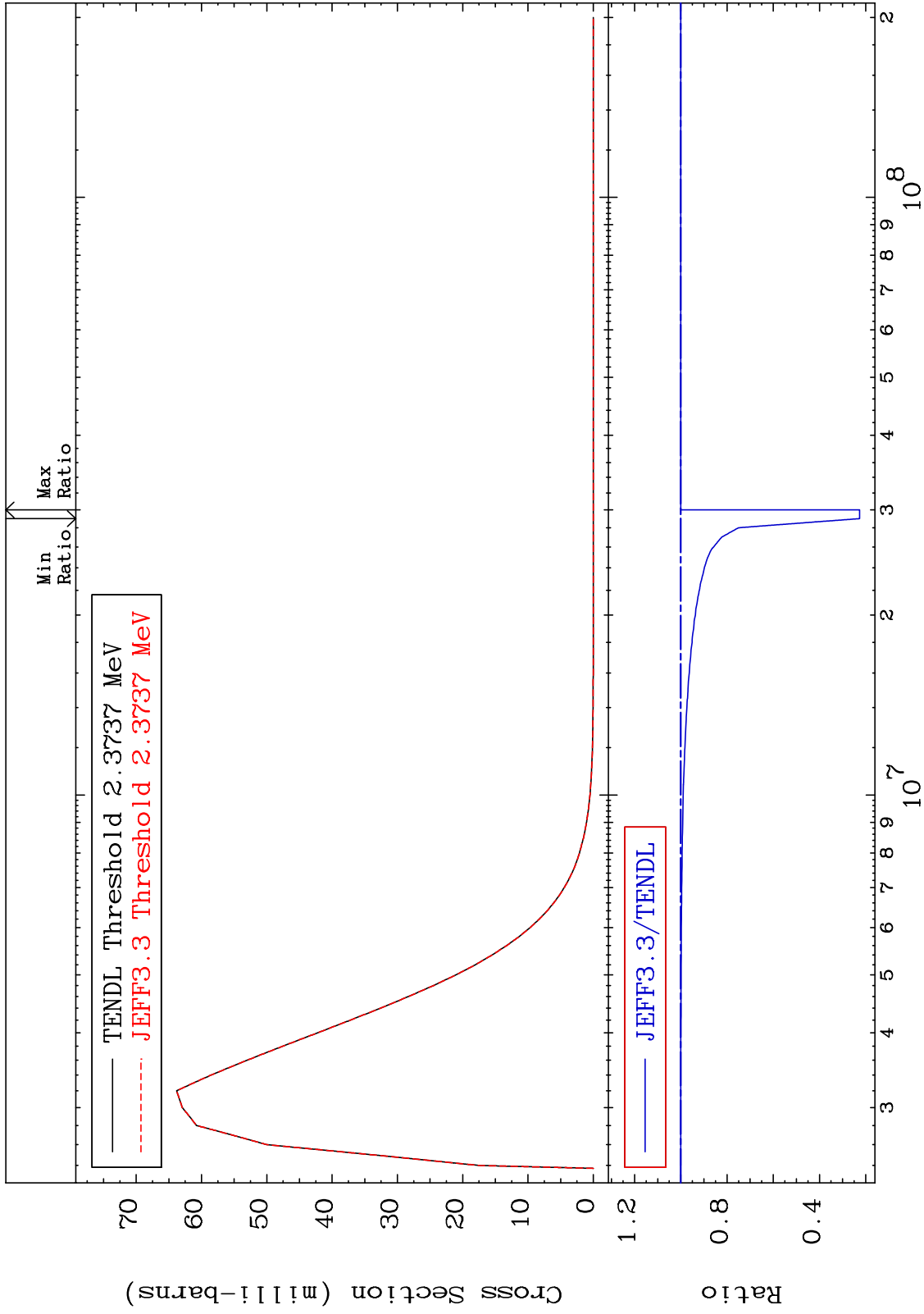
MAT 1931 MT= 59 (n,n') Level Cross Section -77.37 To 0.000 % 19-K -41



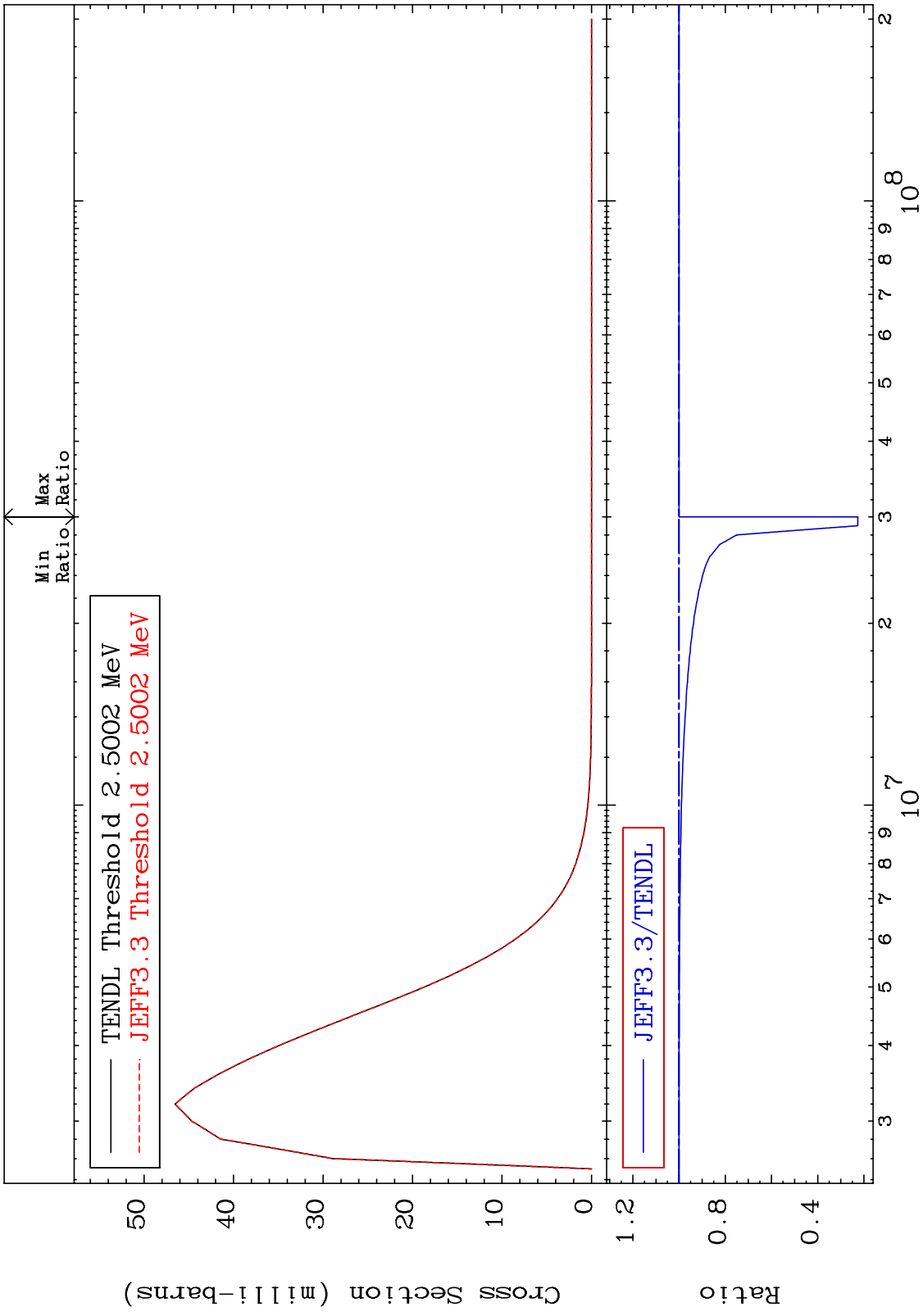
MAT 1931

MT= 60 (n,n') Level  
Cross Section

19-K -41  
-77.37 To 0.000 %

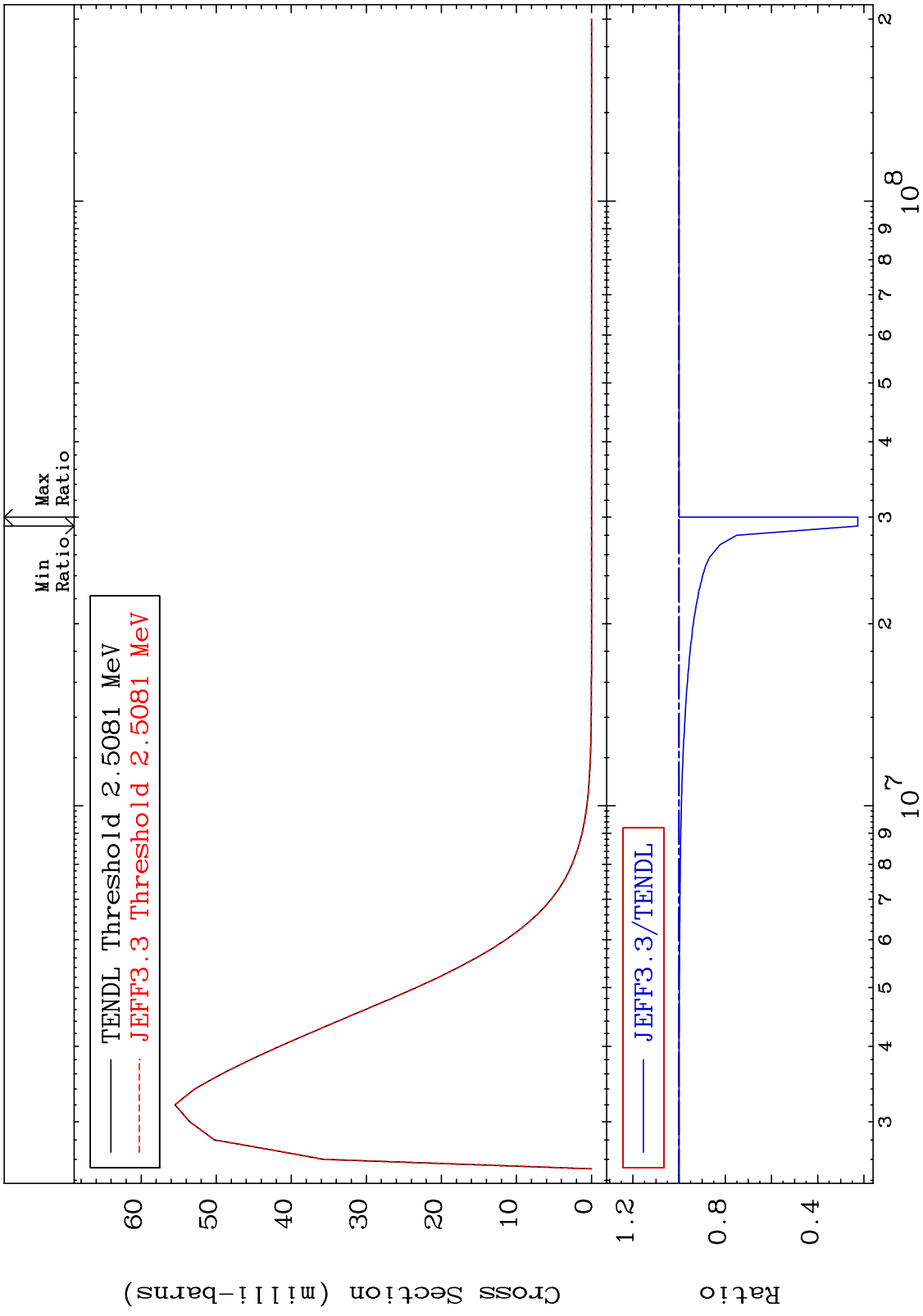


MAT 1931 MT= 61 (n,n') Level Cross Section -77.37 To 0.000 % 19-K -41

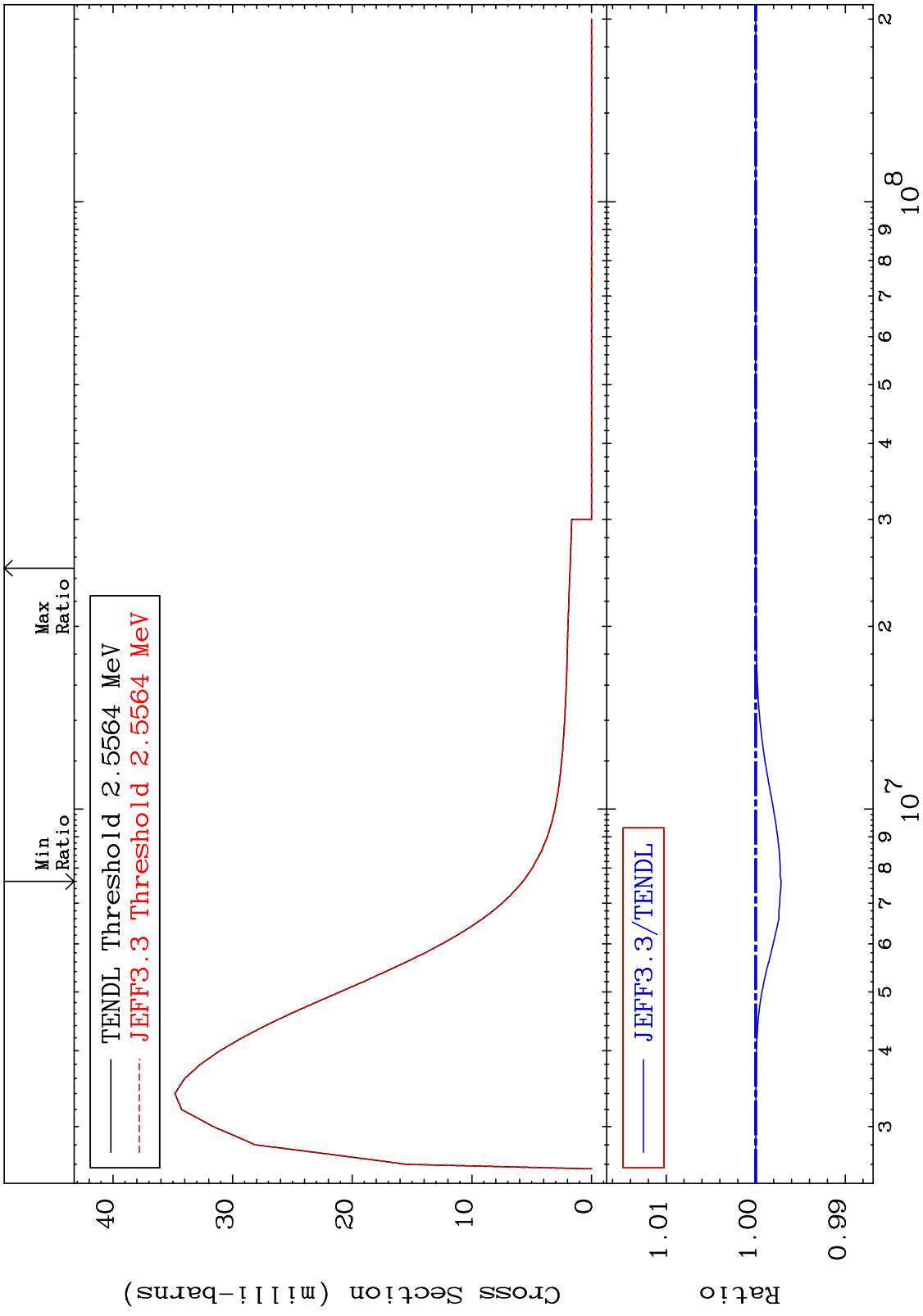


29 19-K -41

MAT 1931 MT= 62 (n,n') Level Cross Section 19-K -41  
 -77.37 To 0.000 %

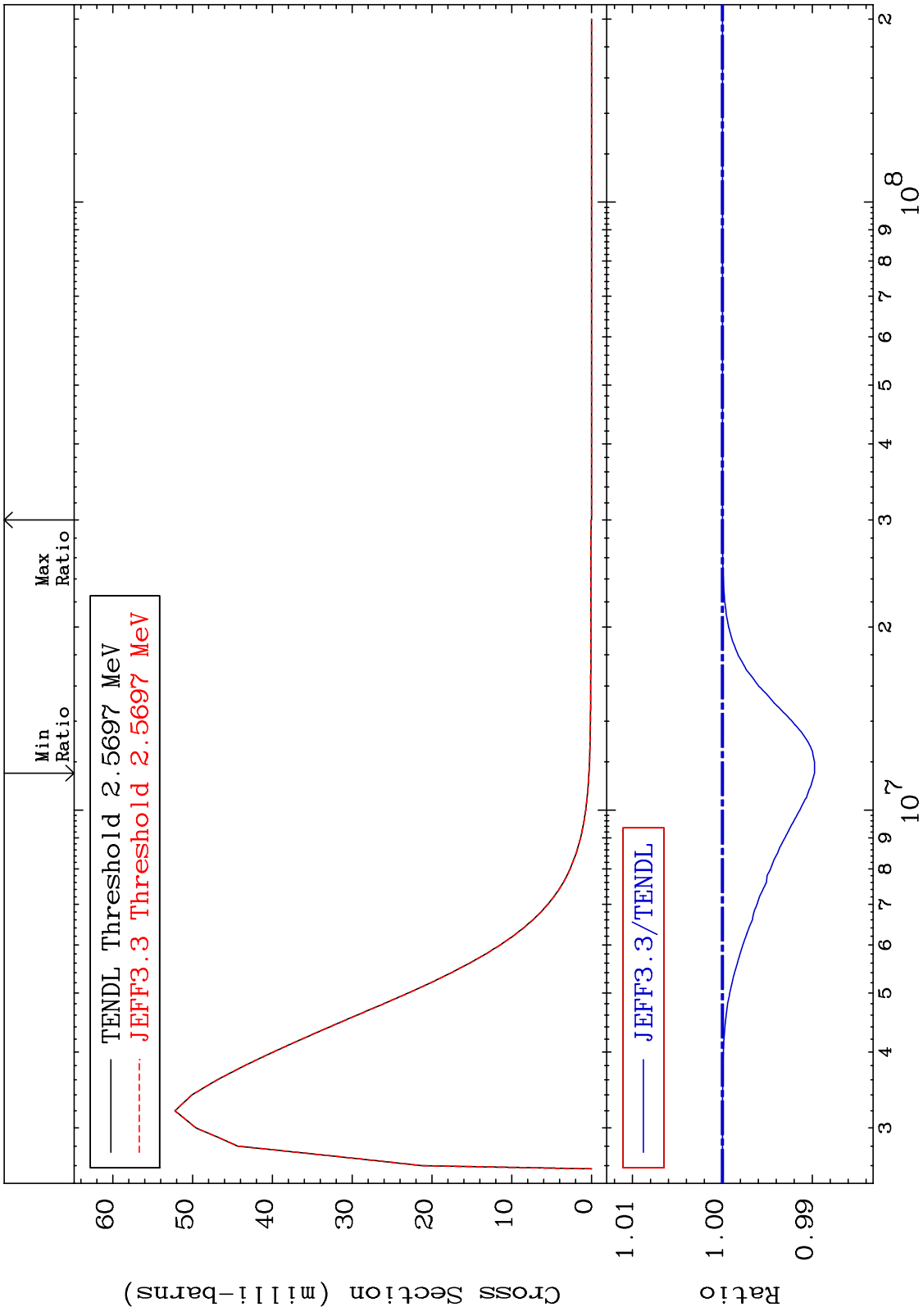


MAT 1931 MT= 63 (n,n') Level Cross Section -0.284 To 0.000 % 19-K -41

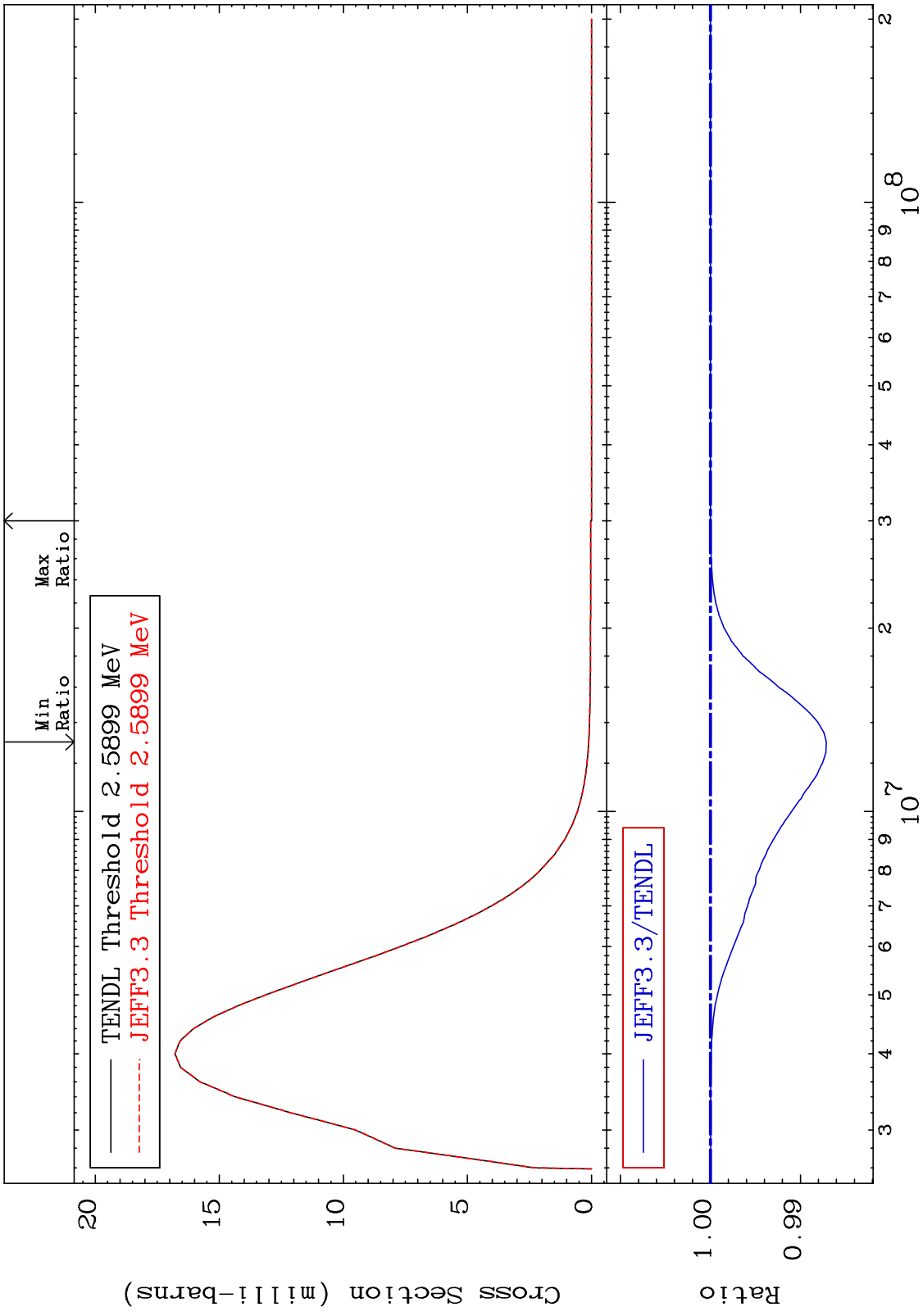




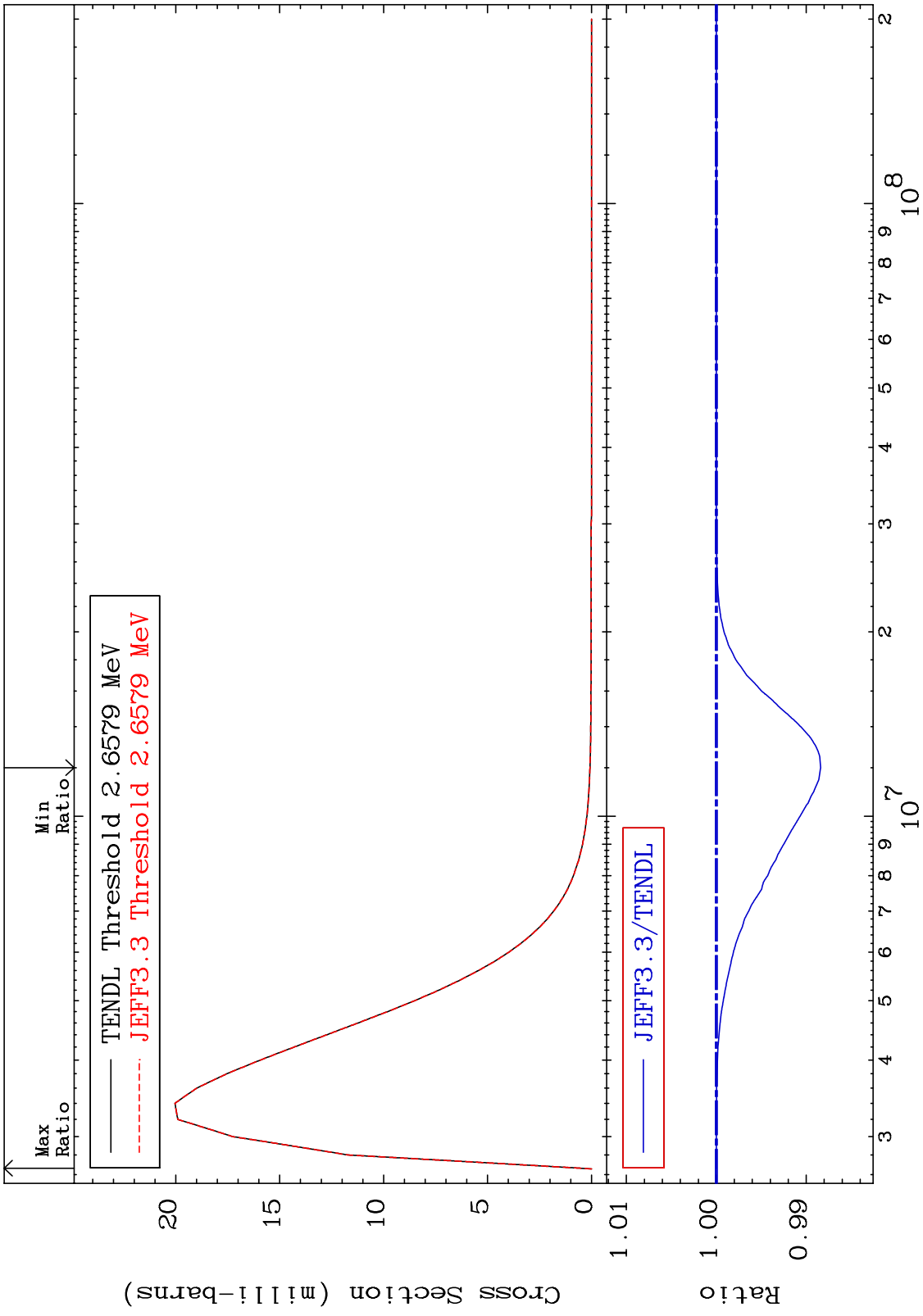
MAT 1931 MT= 64 (n,n') Level Cross Section -1.025 To 0.000 % 19-K -41



MAT 1931 MT= 65 (n,n') Level Cross Section -1.289 To 0.000 % 19-K -41



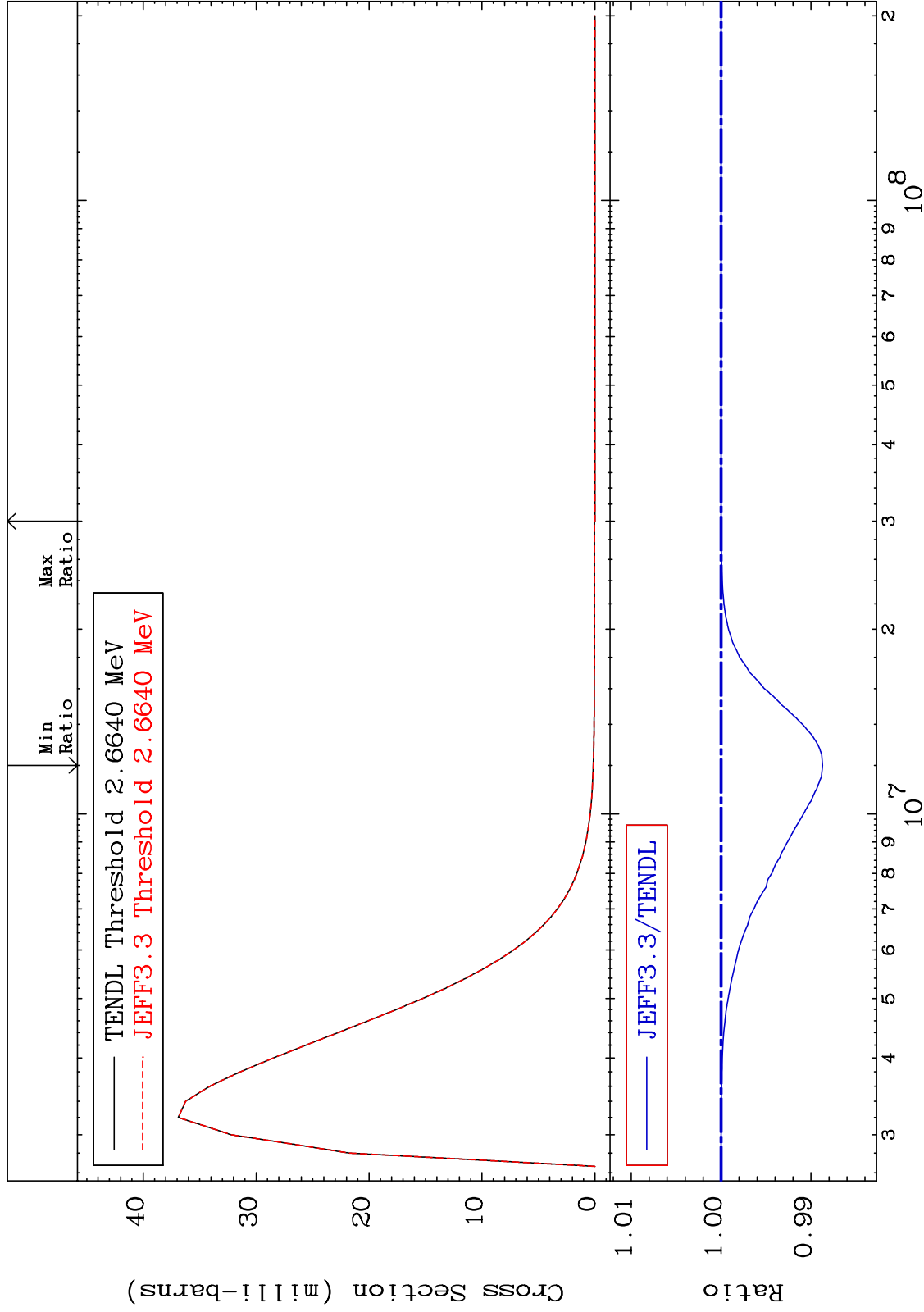
MAT 1931 MT= 66 (n,n') Level Cross Section 19-K -41  
 -1.160 To 0.000 %



MAT 1931

MT= 67 (n,n') Level  
Cross Section

19-K -41  
-1.129 To 0.000 %



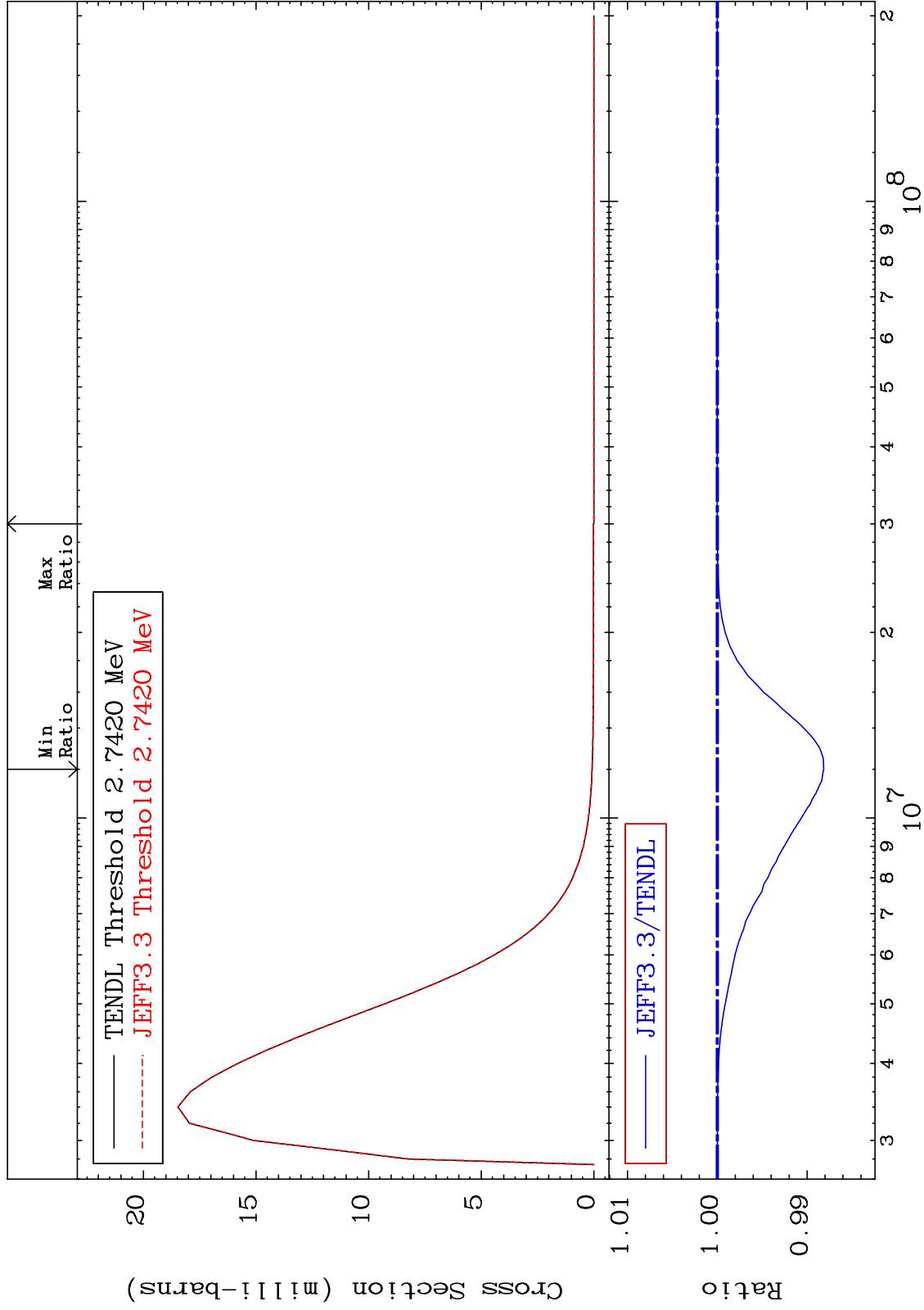
35

19-K -41

MAT 1931

MT= 68 (n,n') Level  
Cross Section

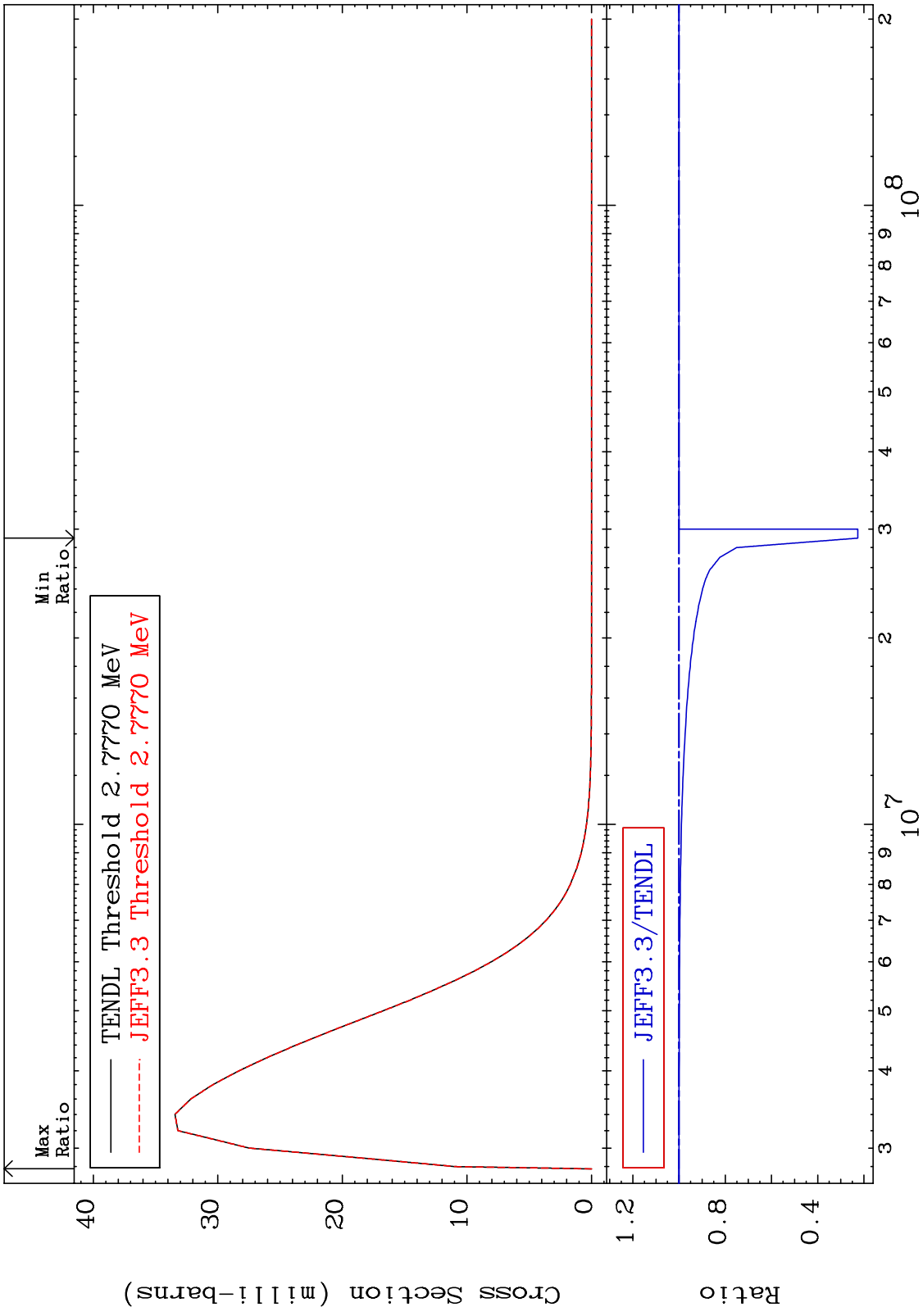
19-K -41  
-1.185 To 0.000 %



36

19-K -41

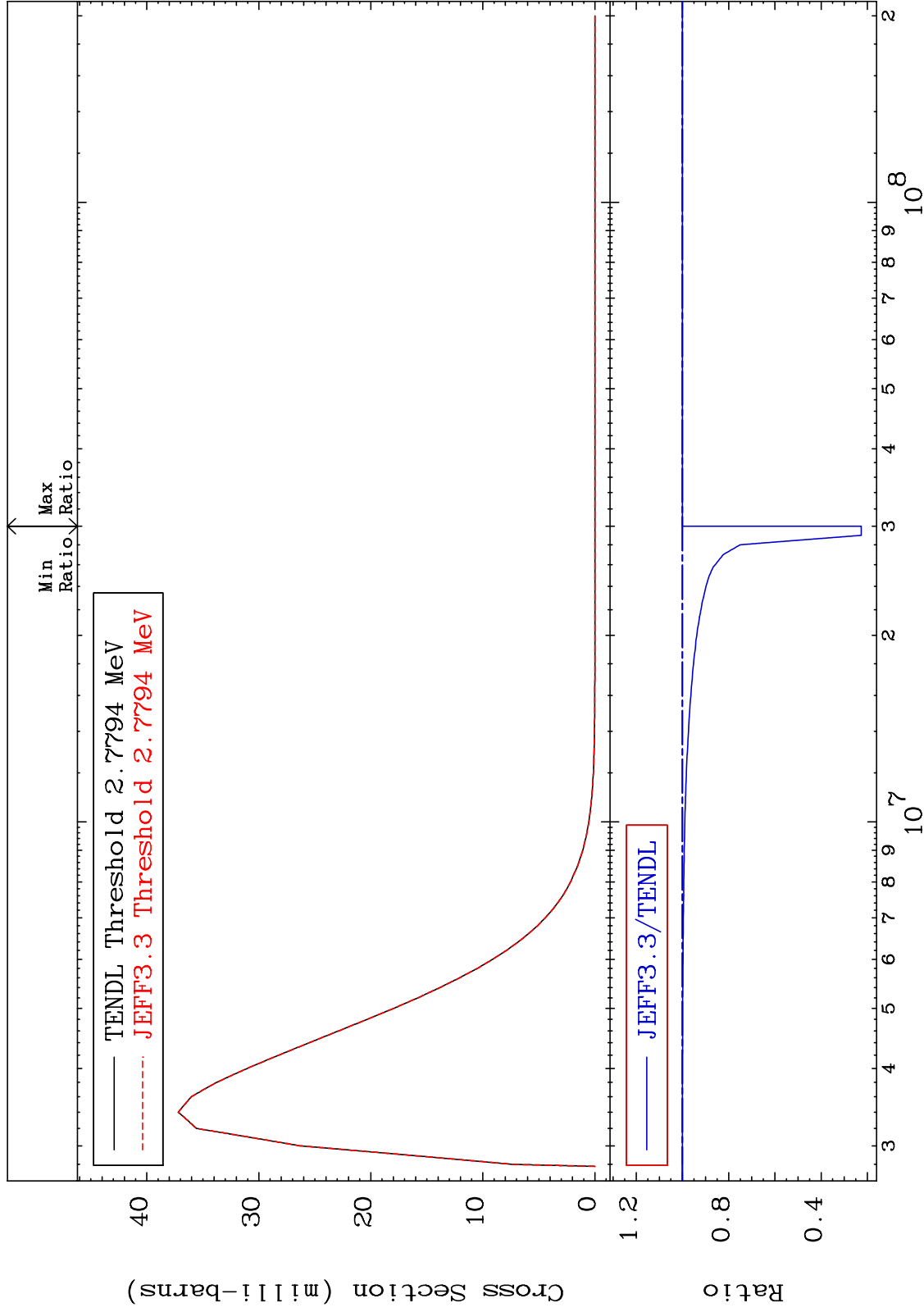
MAT 1931 MT= 69 (n,n') Level Cross Section 19-K -41  
 -77.37 To 0.000 %



MAT 1931

MT= 70 (n,n') Level  
Cross Section

19-K -41  
-77.37 To 0.000 %



38

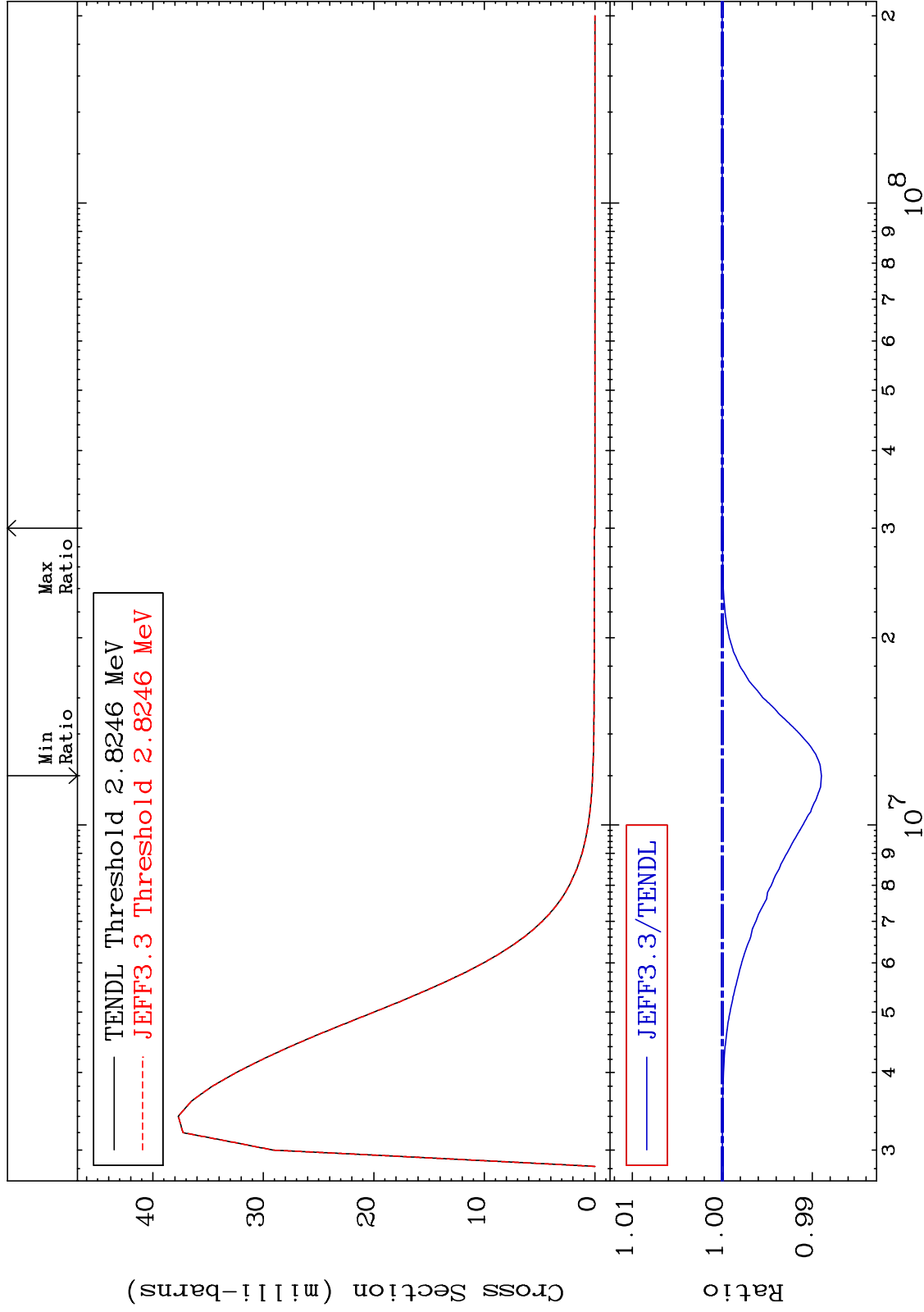
Incident Energy (eV)

19-K -41

MAT 1931

MT= 71 (n,n') Level  
Cross Section

19-K -41  
-1.103 To 0.000 %

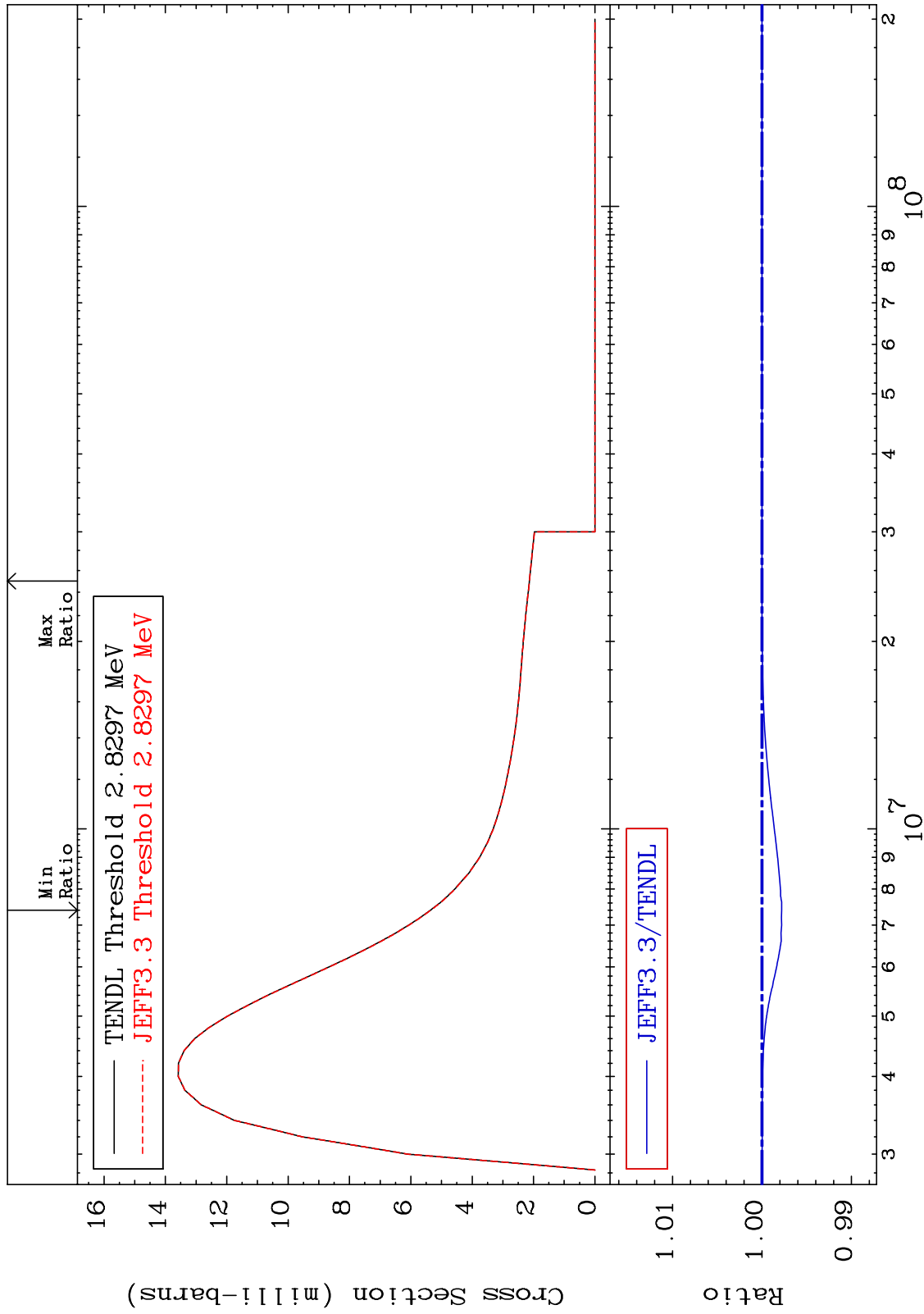




MAT 1931

MT= 72 (n,n') Level  
Cross Section

19-K -41  
-0.221 To 0.000 %

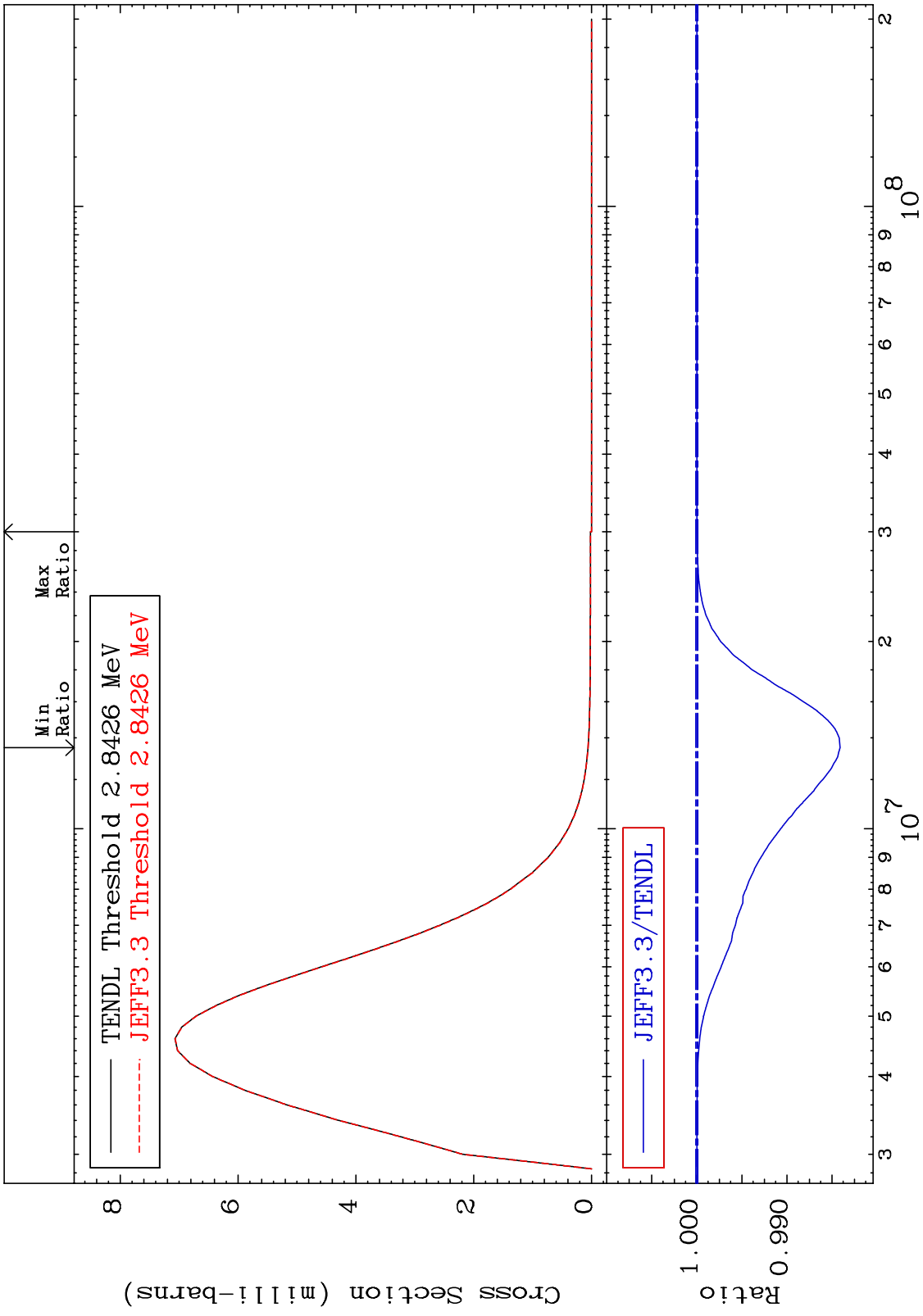


40

Incident Energy (eV)

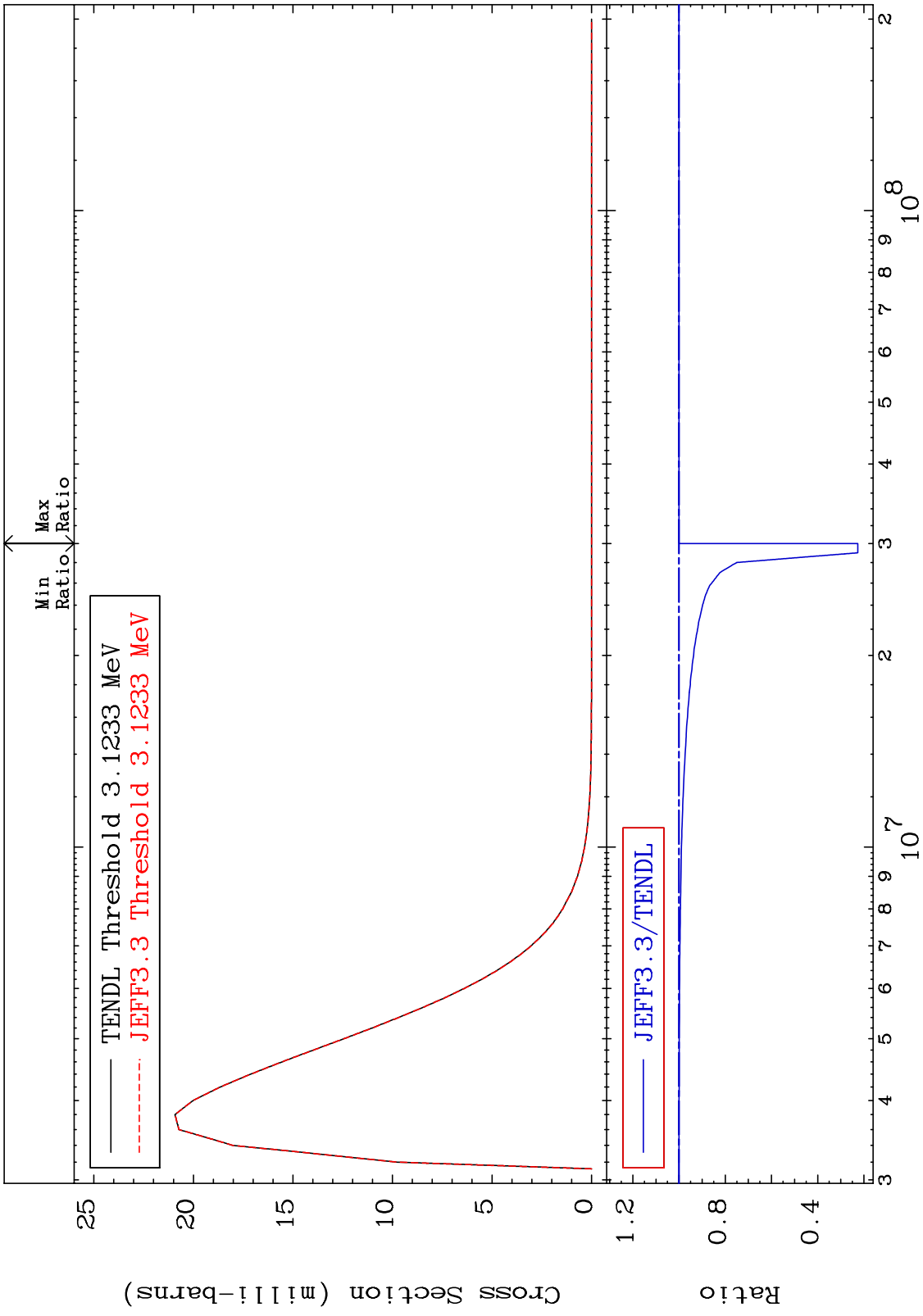
19-K -41

MAT 1931 MT= 73 (n,n') Level Cross Section 19-K -41  
 -1.590 To 0.000 %

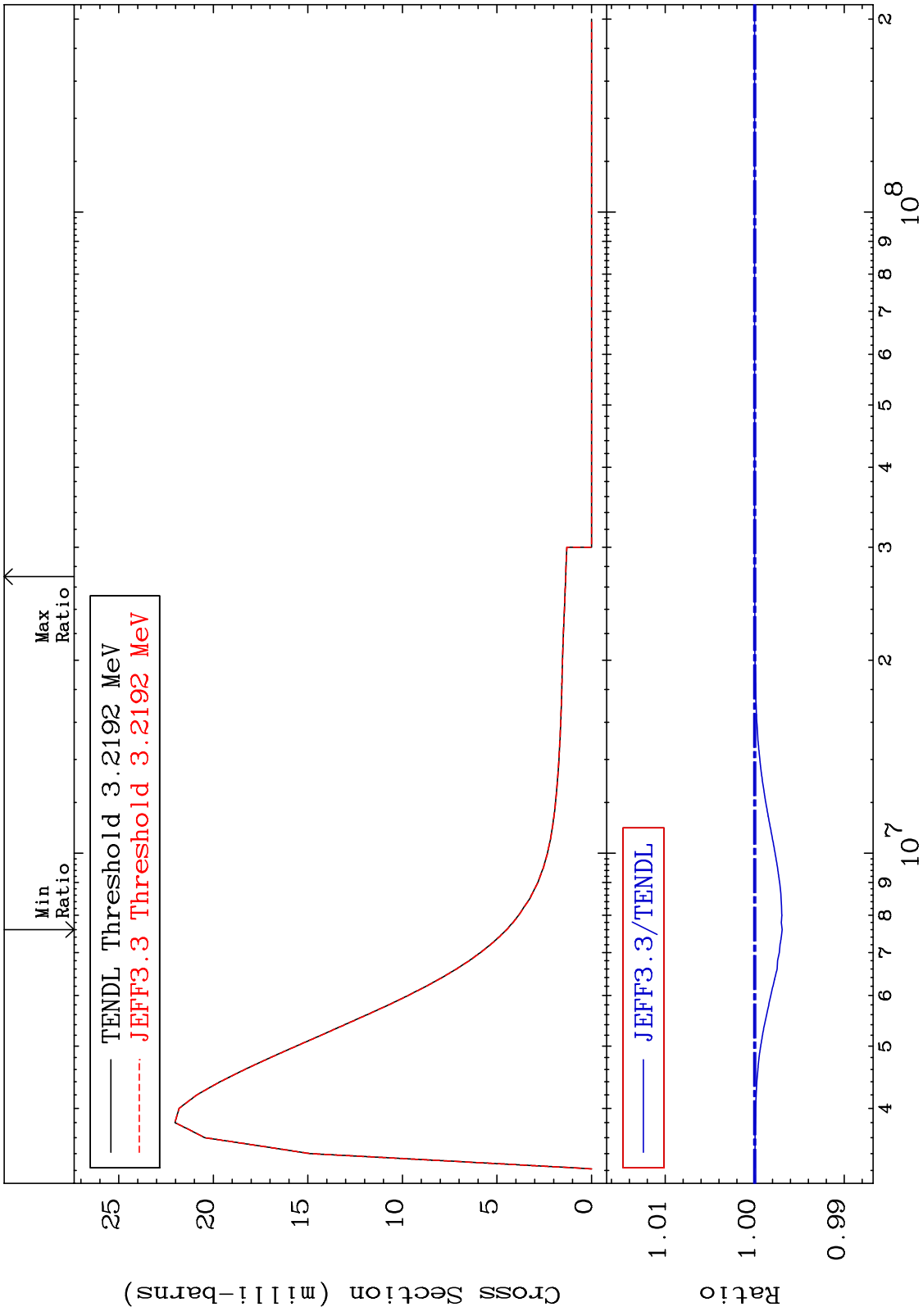


41 Incident Energy (eV) 19-K -41

MAT 1931 MT= 74 (n,n') Level Cross Section -77.37 To 0.000 % 19-K -41



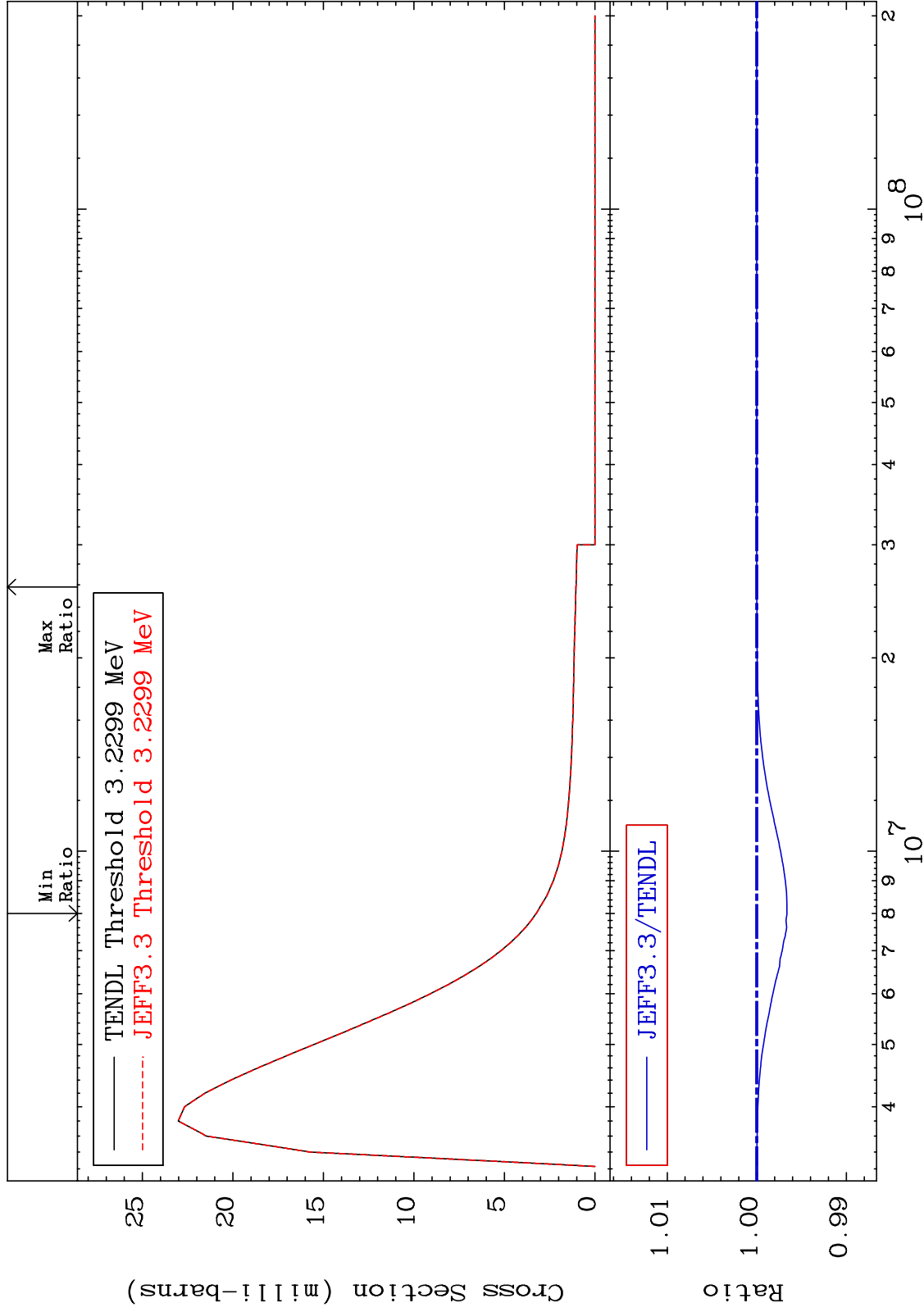
MAT 1931 MT= 75 (n,n') Level Cross Section 19-K -41  
 -0.307 To 0.000 %



MAT 1931

MT= 76 (n,n') Level  
Cross Section

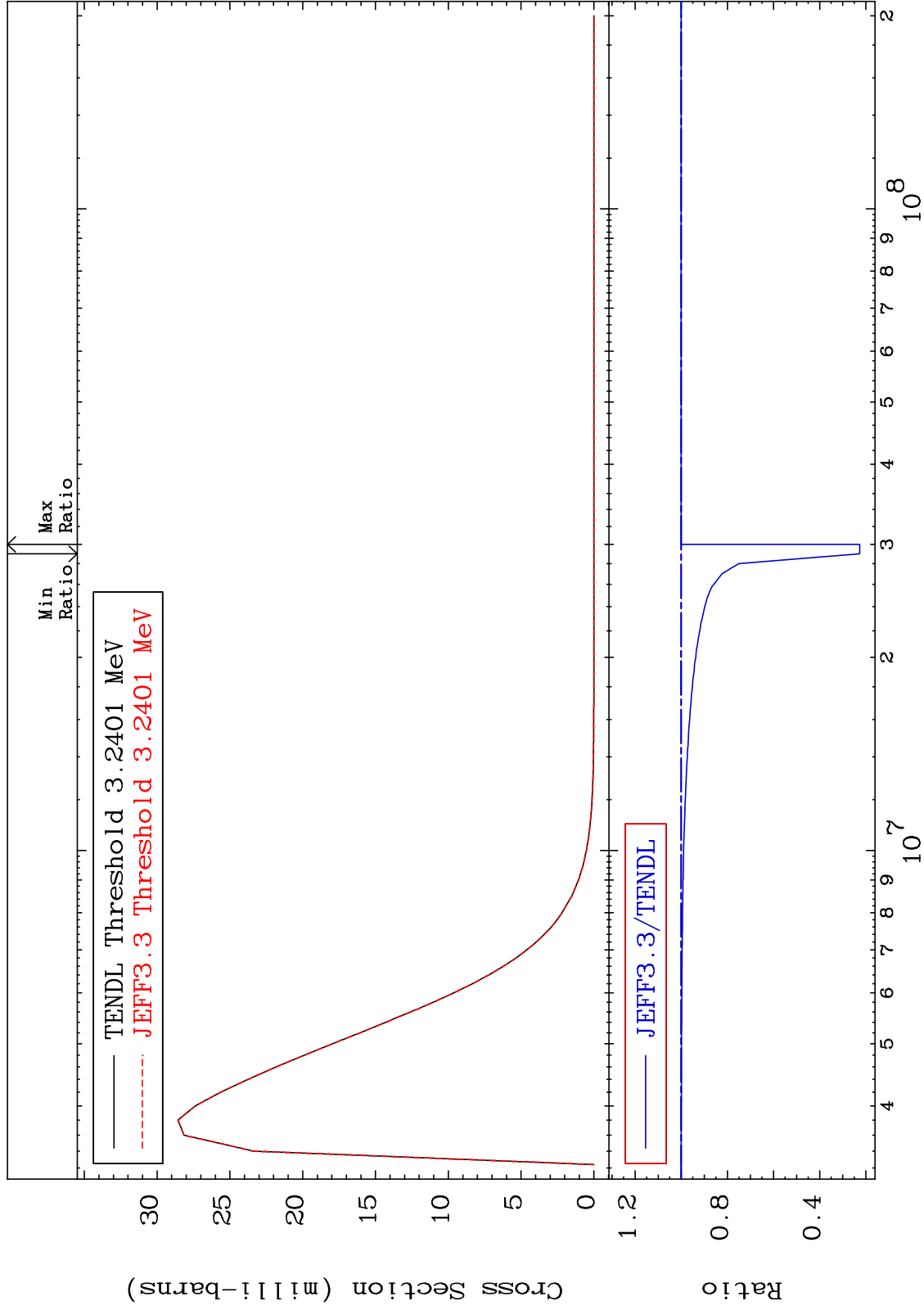
19-K -41  
-0.337 To 0.000 %



MAT 1931

MT= 77 (n,n') Level  
Cross Section

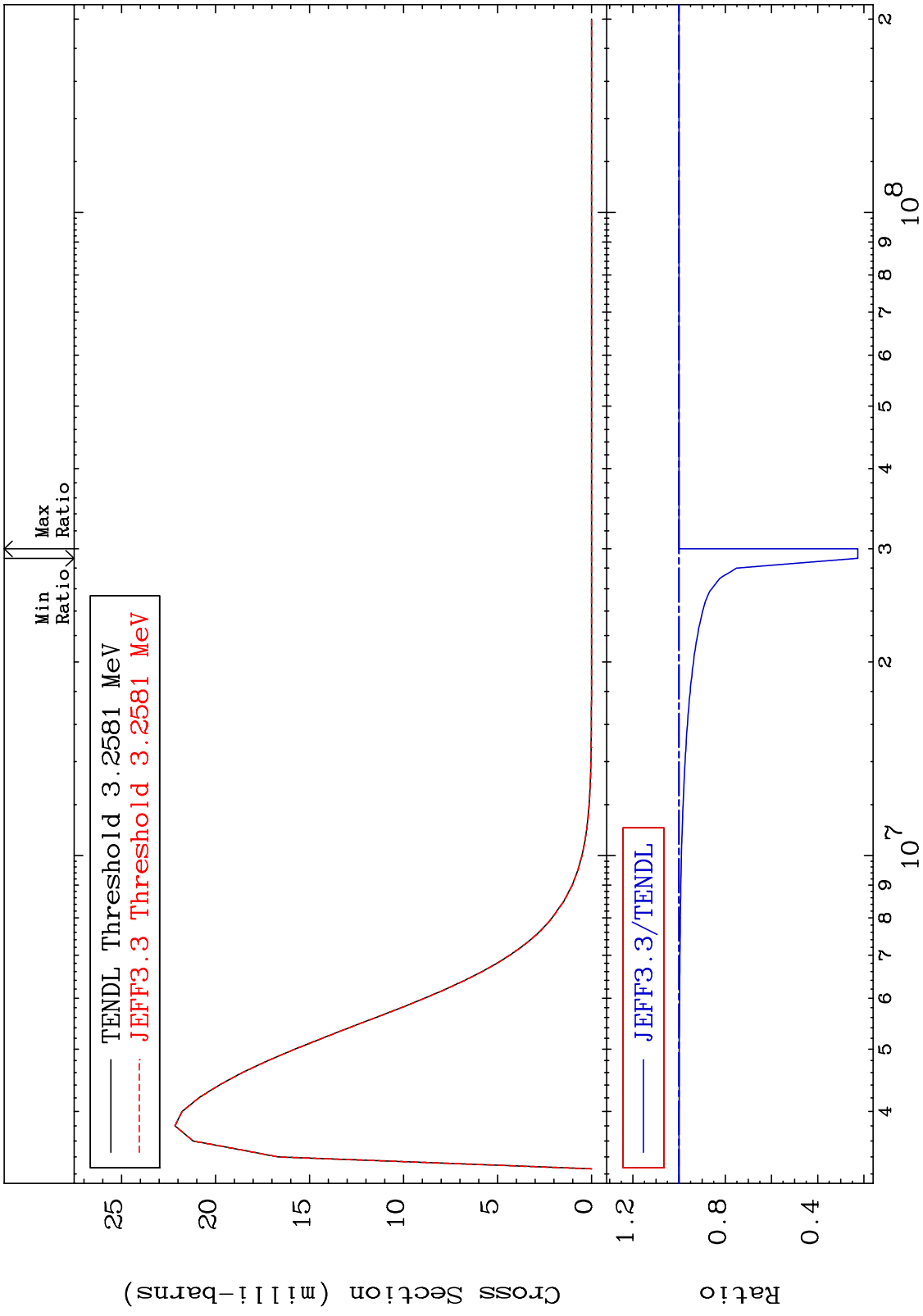
19-K -41  
-77.37 To 0.000 %



45

19-K -41

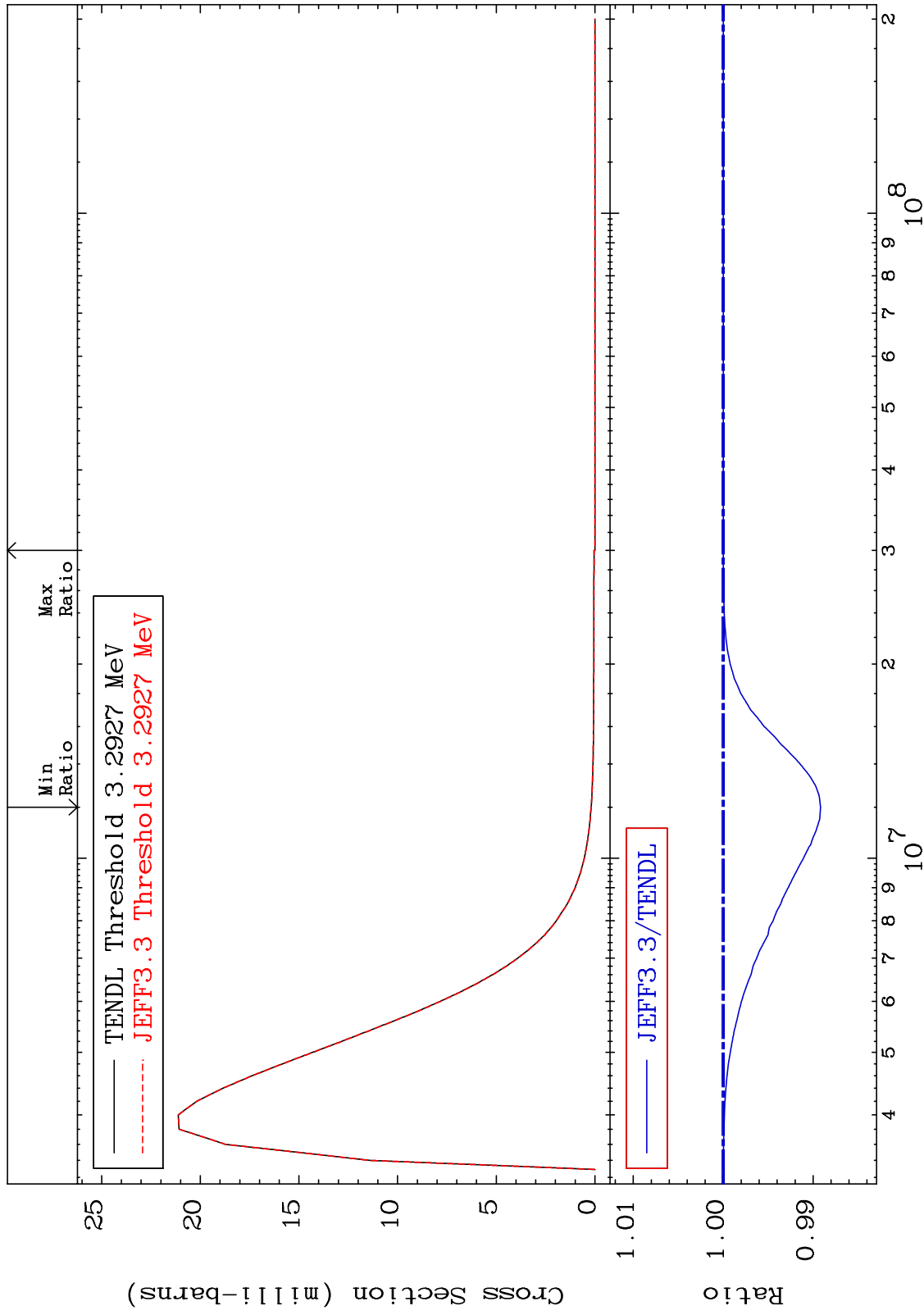
MAT 1931 MT= 78 (n,n') Level Cross Section 19-K -41  
 -77.37 To 0.000 %



MAT 1931

MT= 79 (n,n') Level  
Cross Section

19-K -41  
-1.083 To 0.000 %



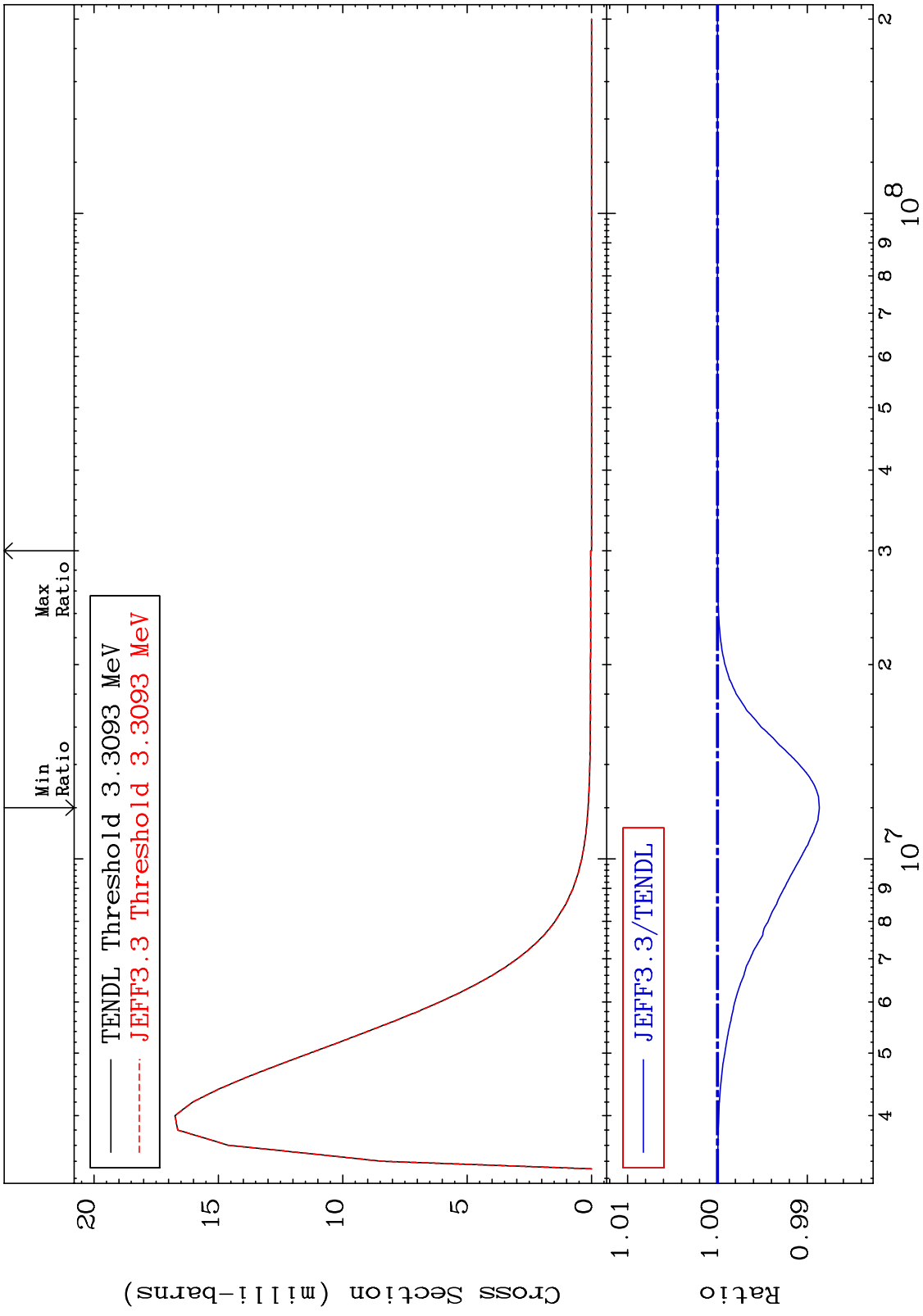
47

Incident Energy (eV)

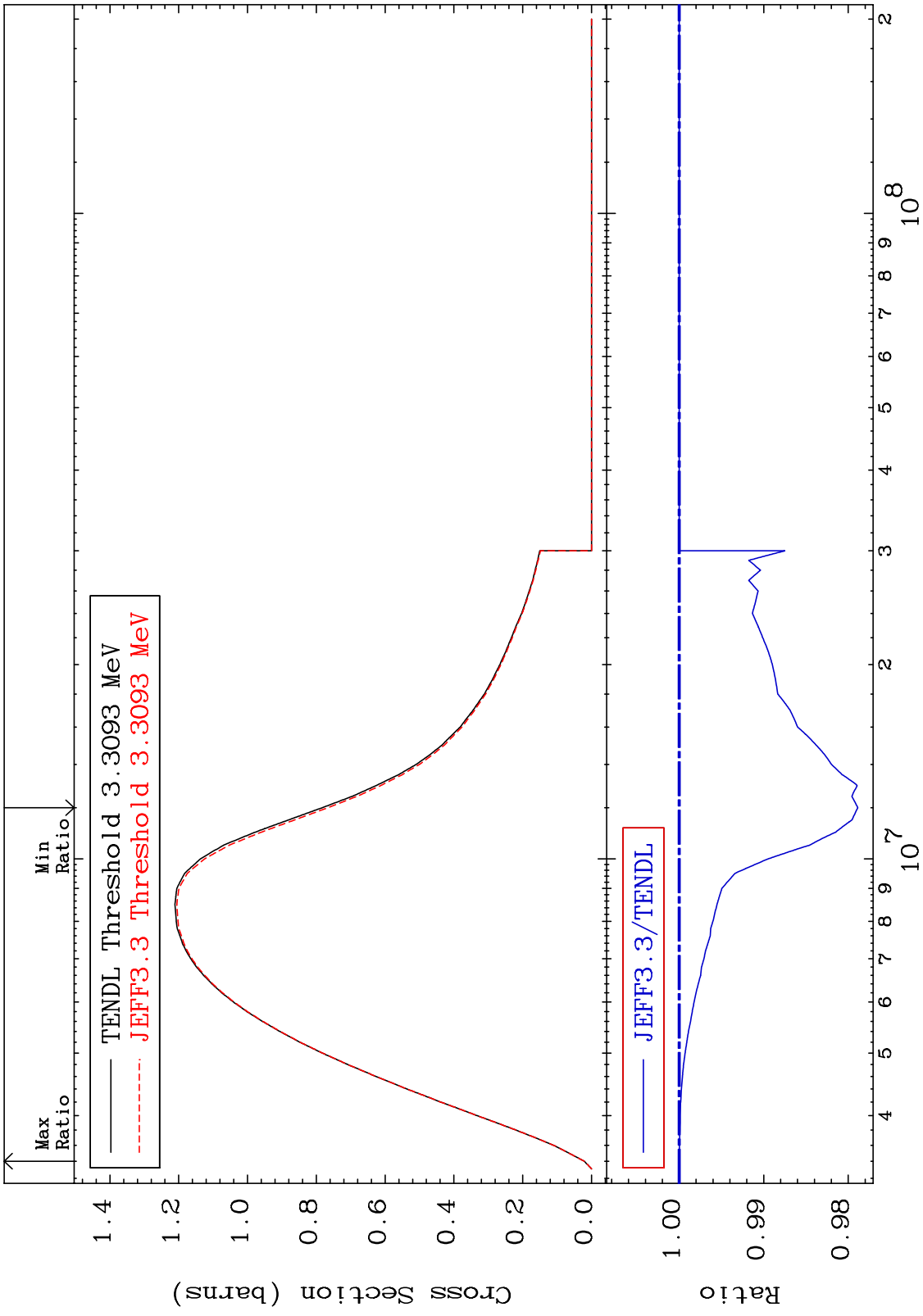
19-K -41



MAT 1931 MT= 80 (n,n') Level Cross Section 19-K -41  
 -1.133 To 0.000 %



48 19-K -41



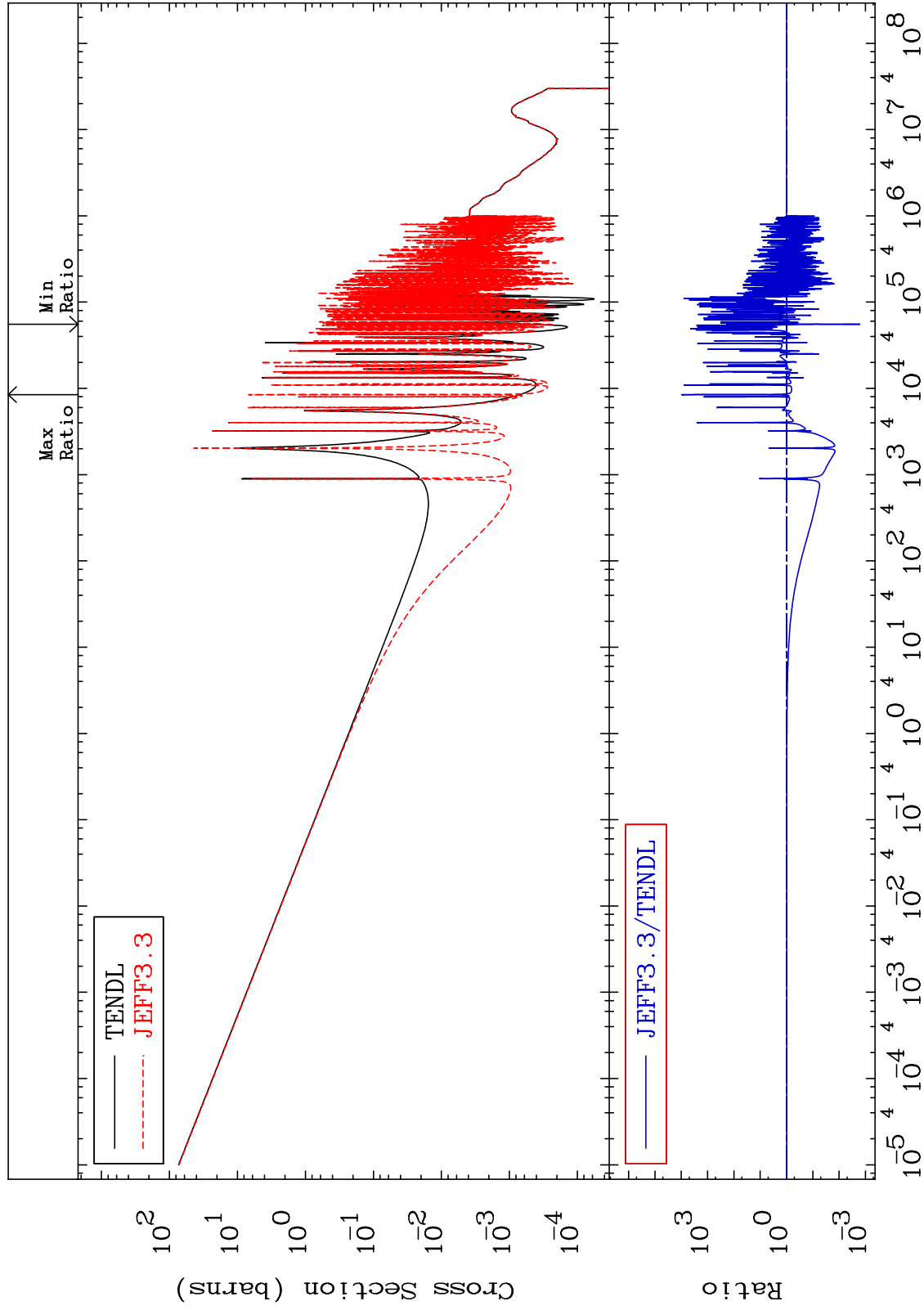
MAT 1931

(n,  $\gamma$ )

Cross Section

19-K -41

-99.84 To 9999. %



MAT 1931

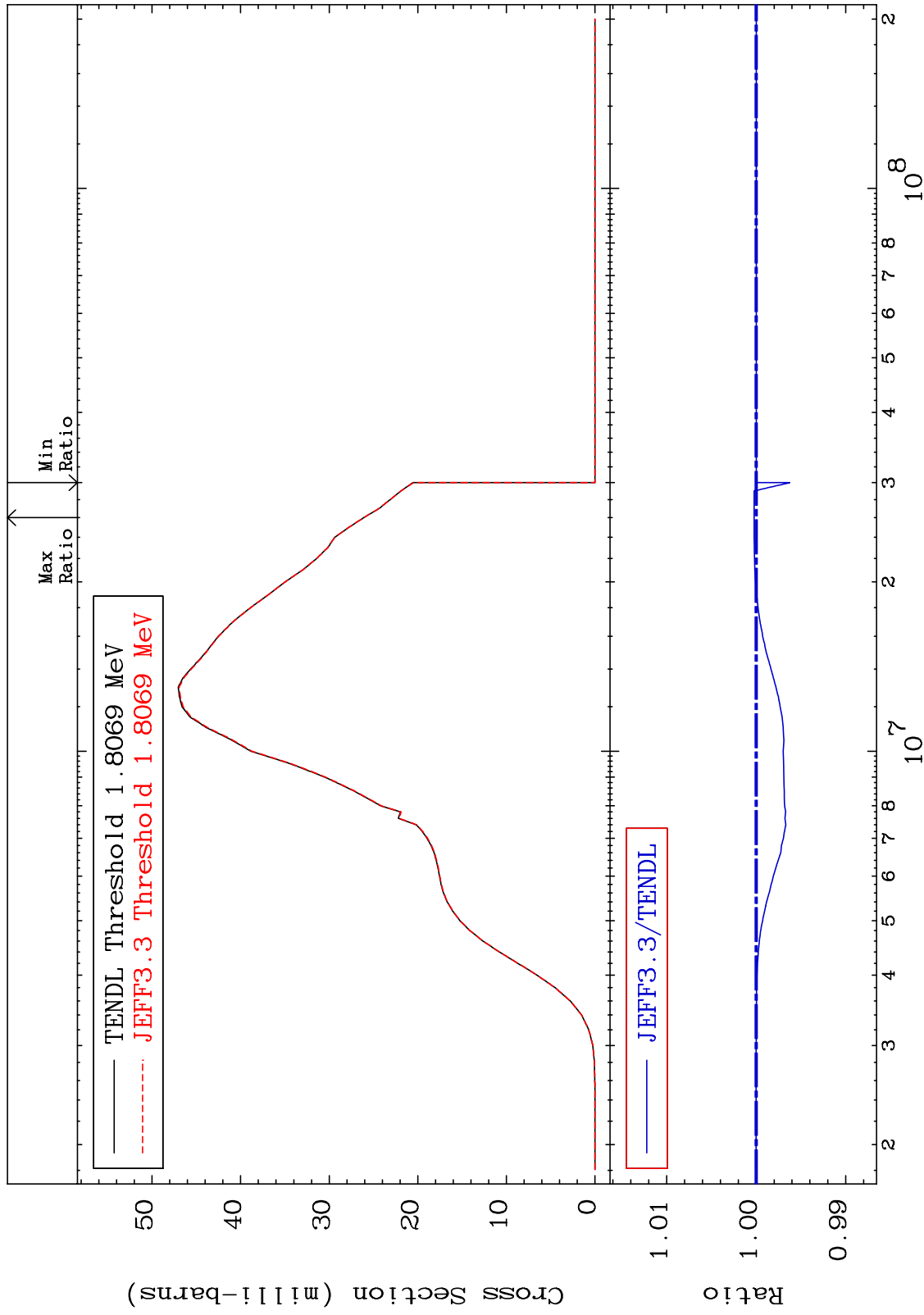
(n,p)

19-K -41

Cross Section

Cross Section

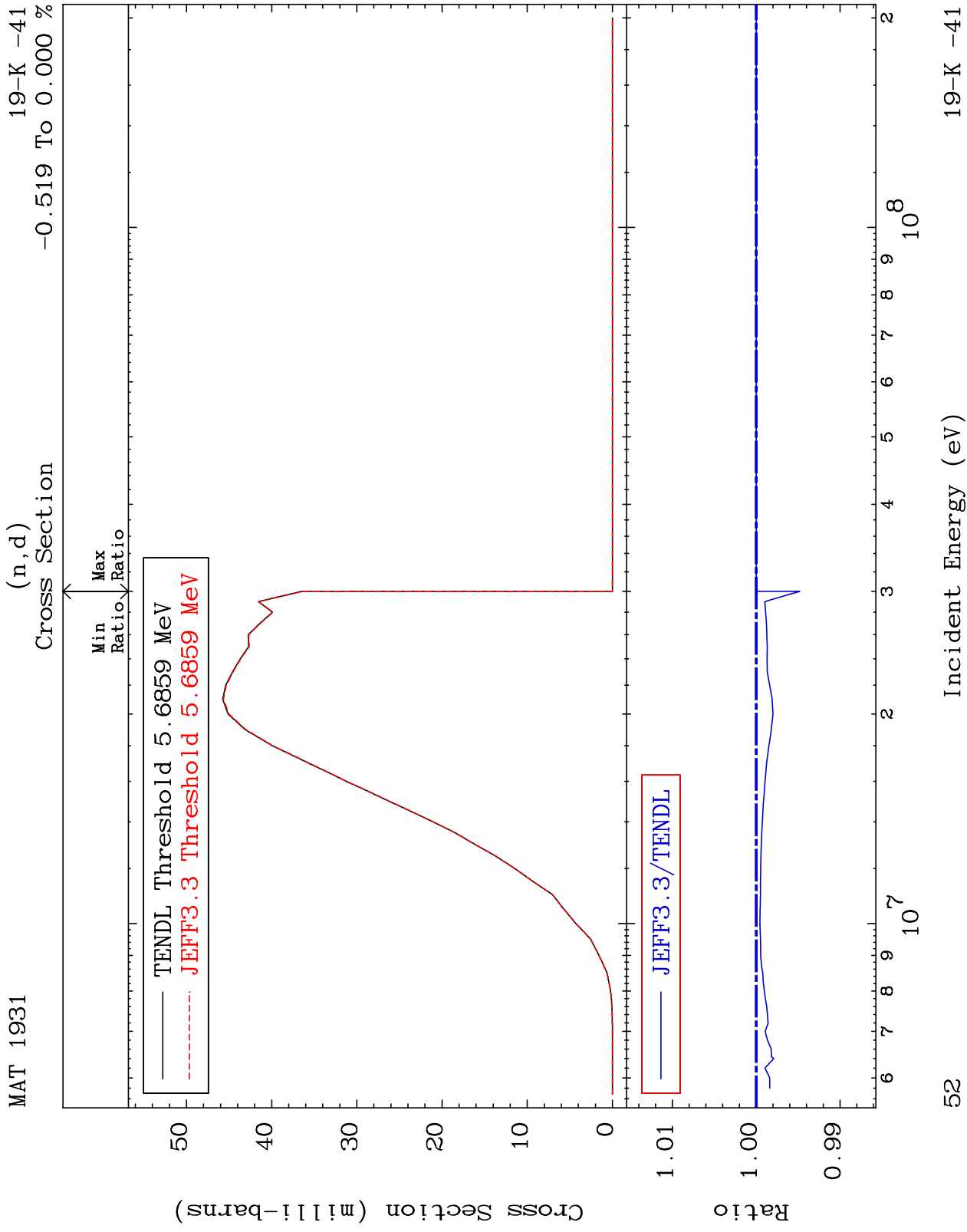
-0.374 To 0.025 %

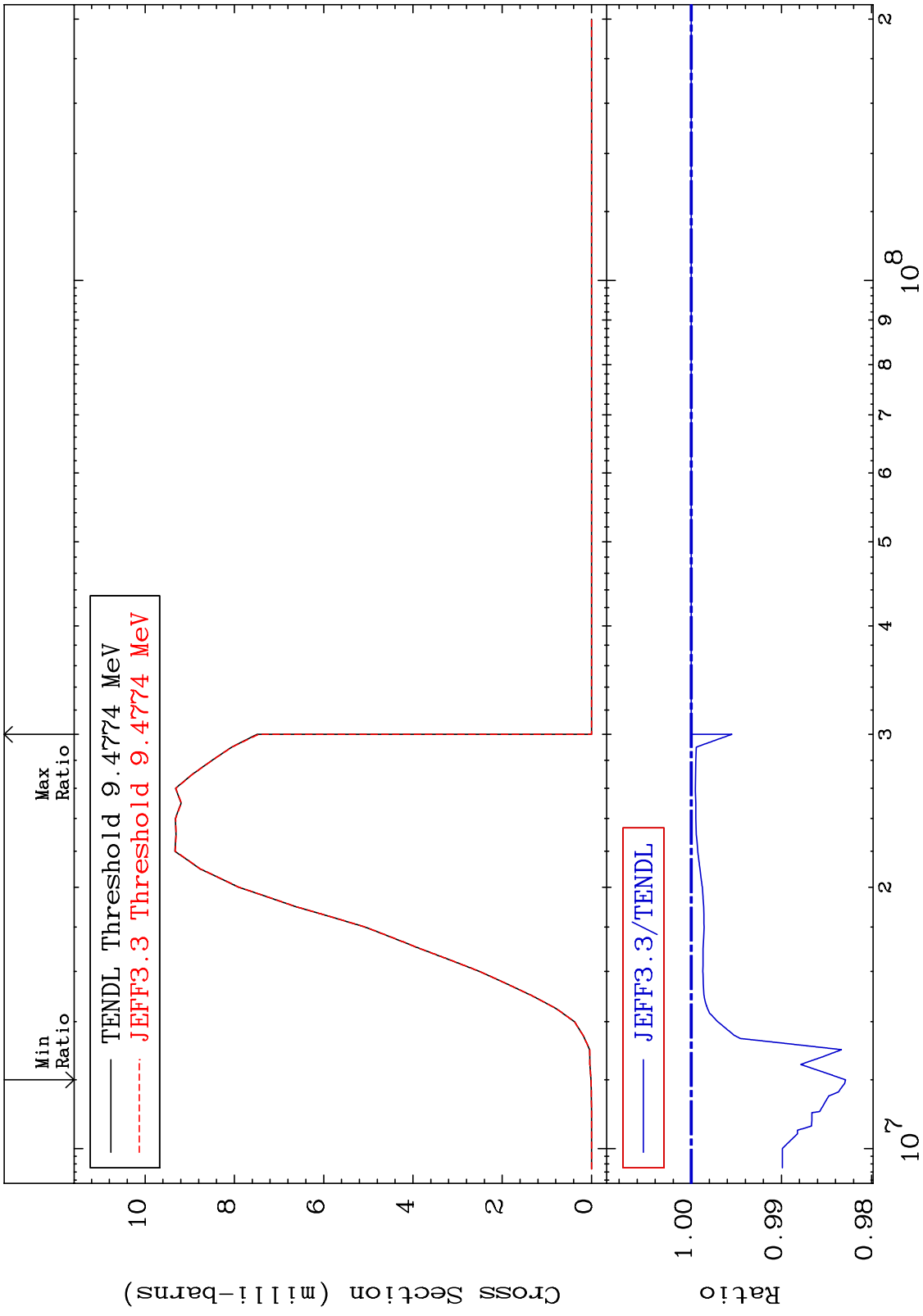


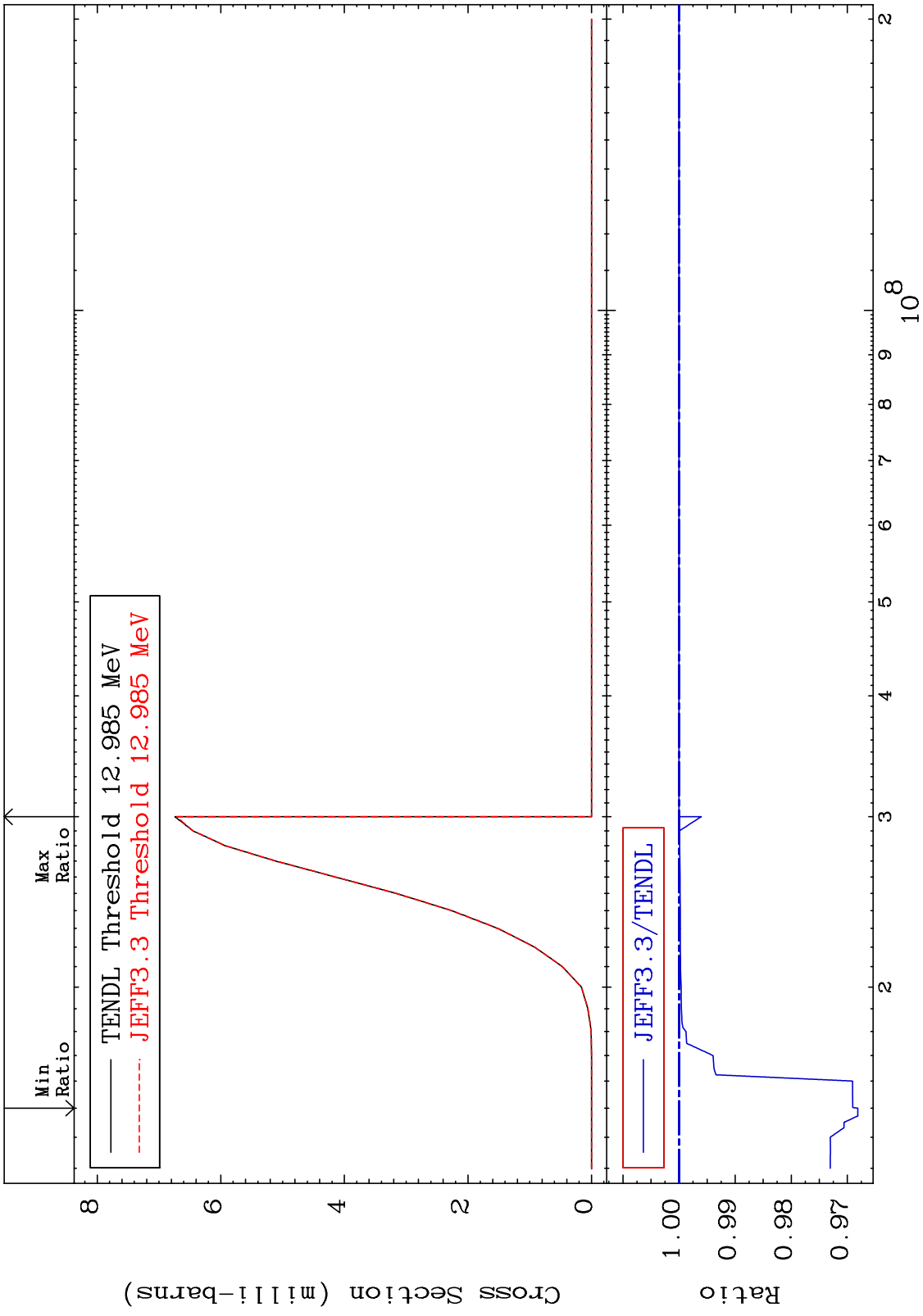
51

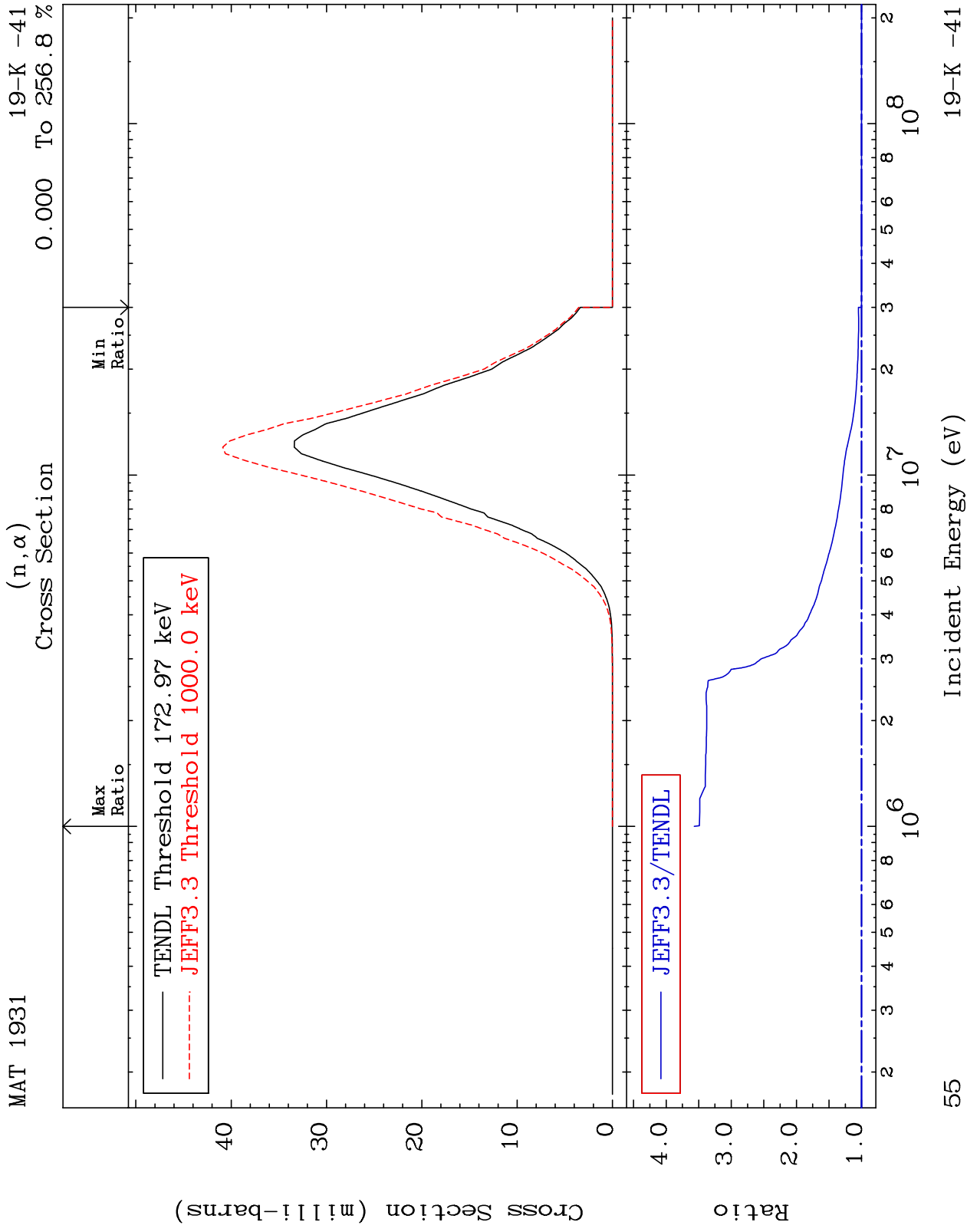
Incident Energy (eV)

19-K -41







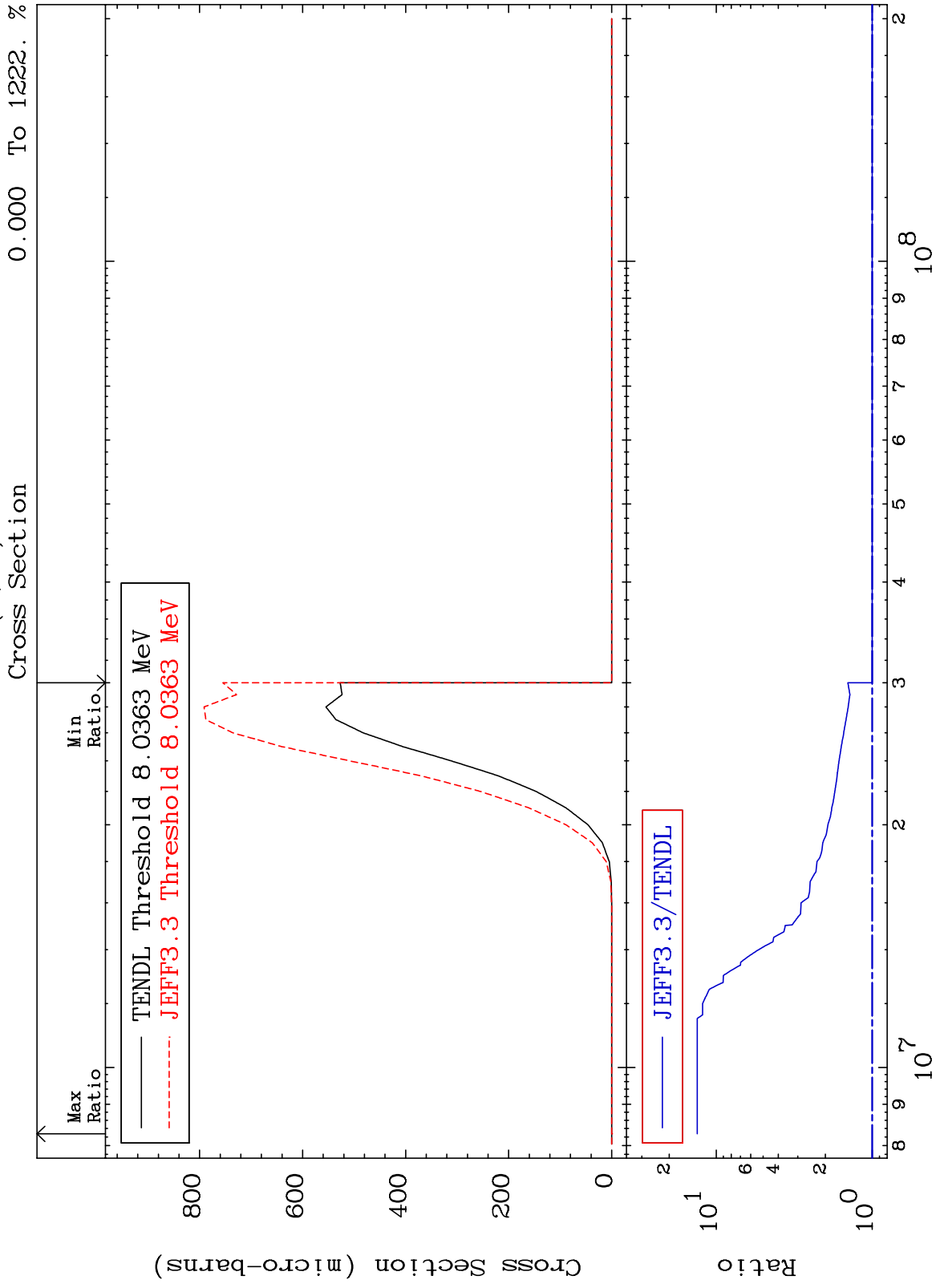




MAT 1931

(n,2α)

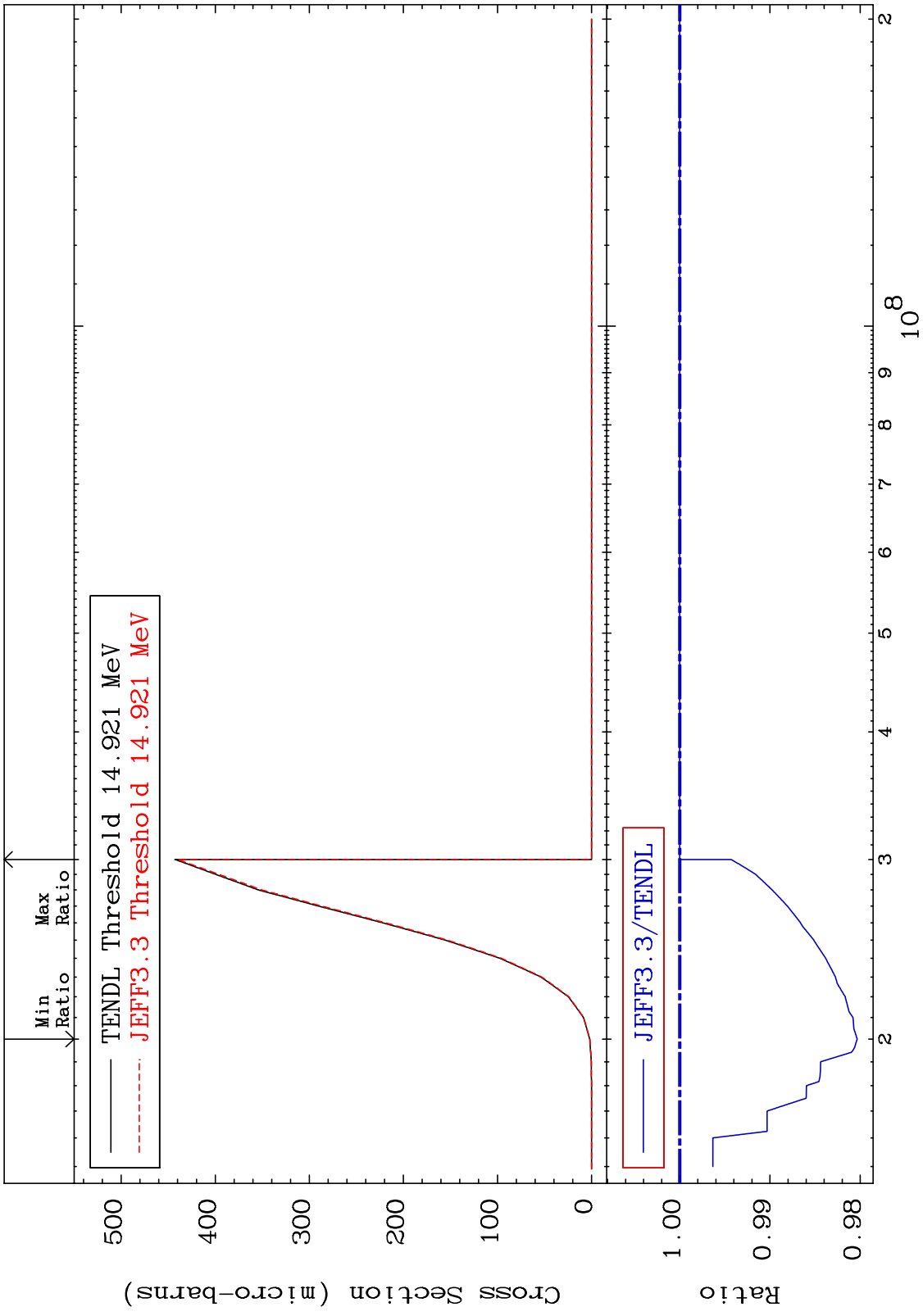
19-K -41  
0.000 To 1222. %



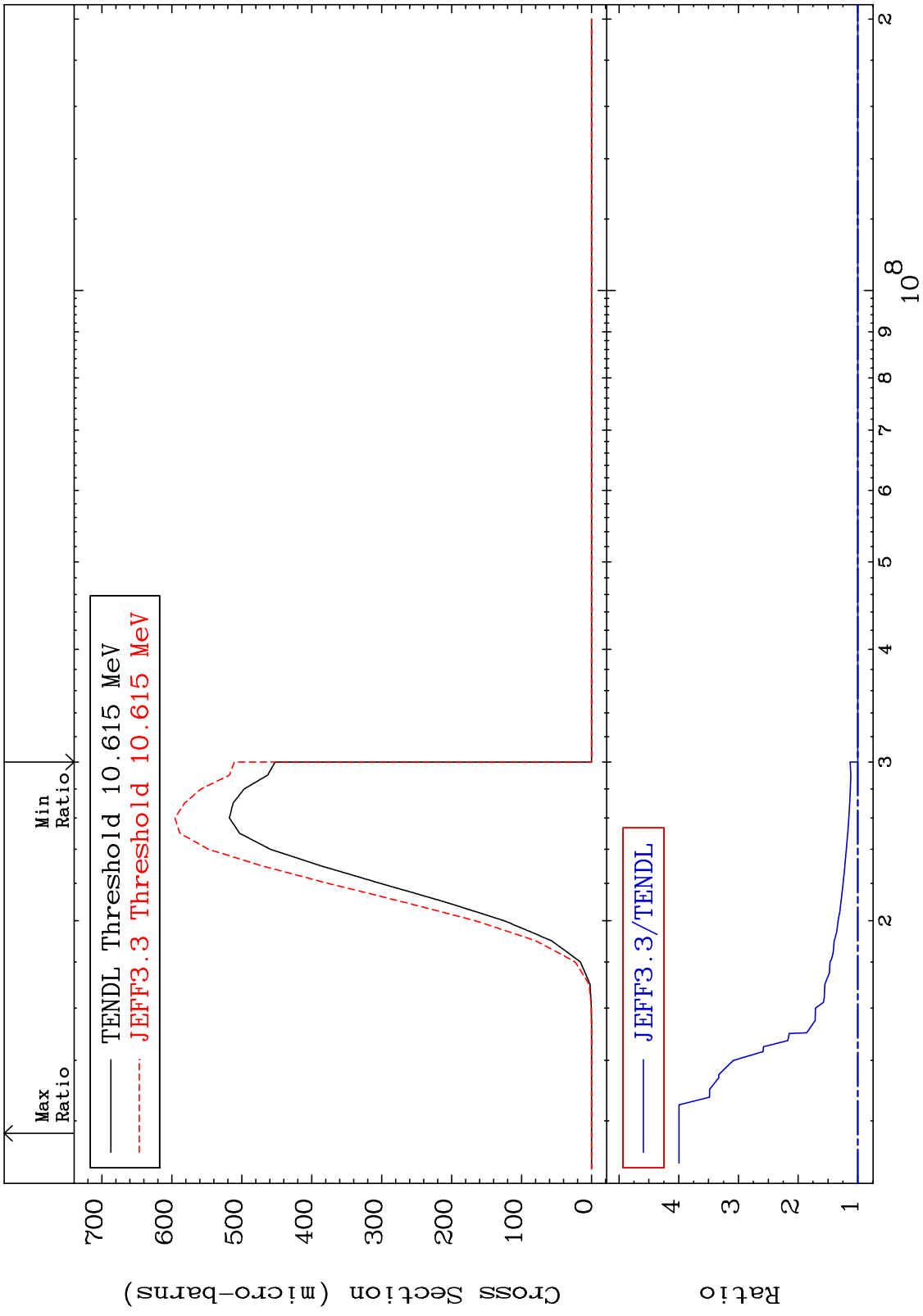
56

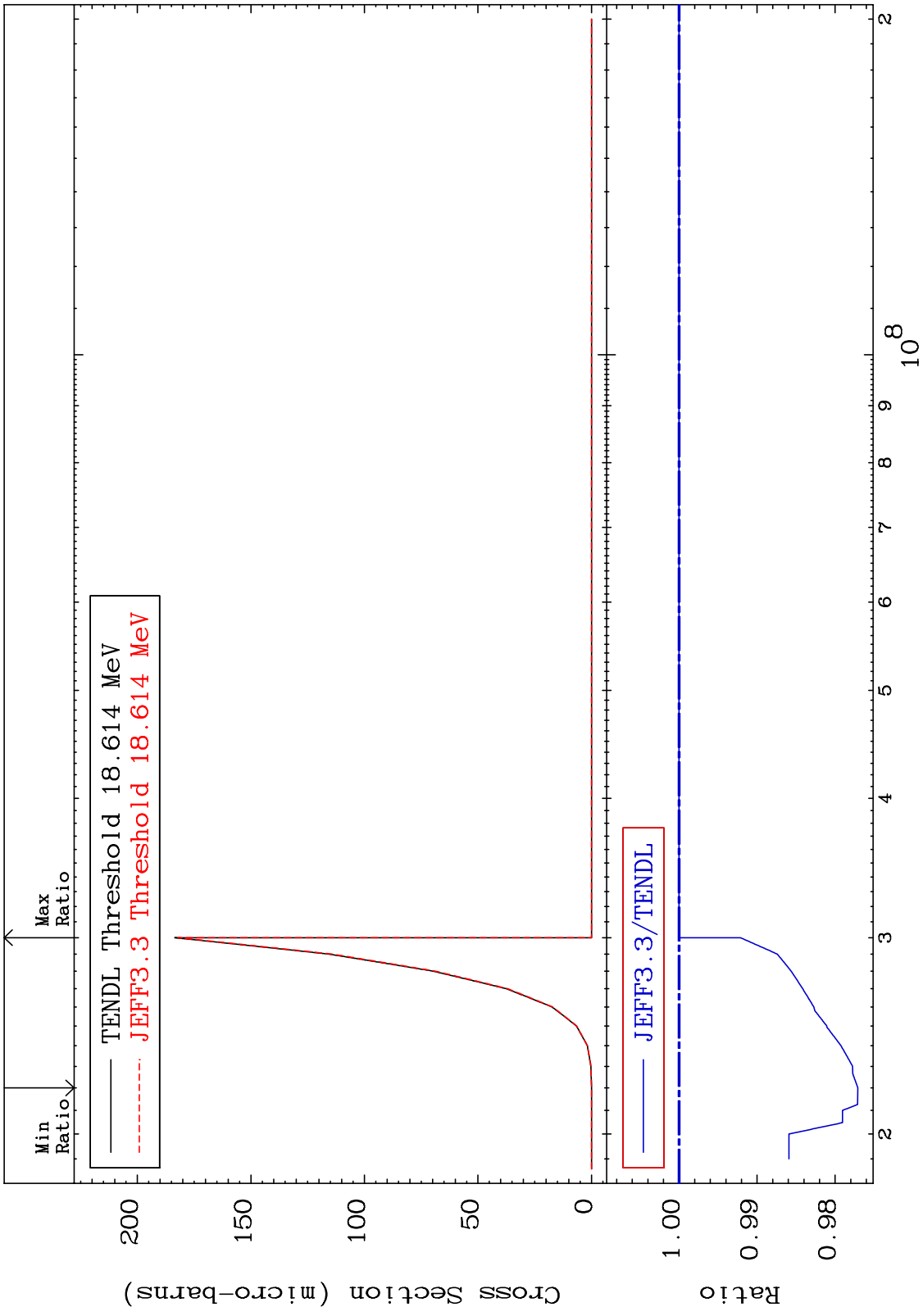
19-K -41

MAT 1931 (n,2p) 19-K -41  
 Cross Section -1.965 To 0.000 %

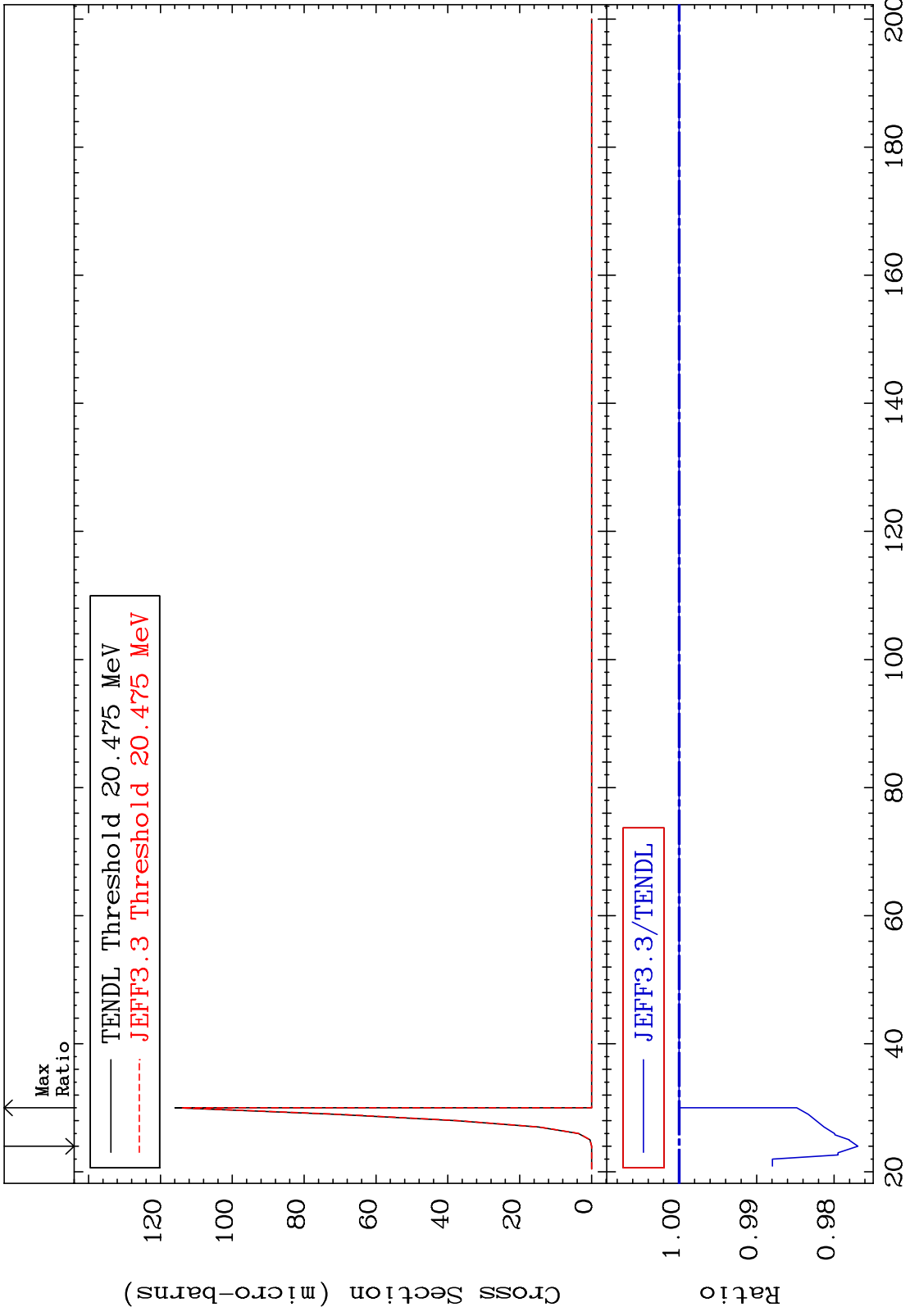


MAT 1931 (n,p)  $\alpha$  19-K -41  
 Cross Section 0.000 To 299.4 %



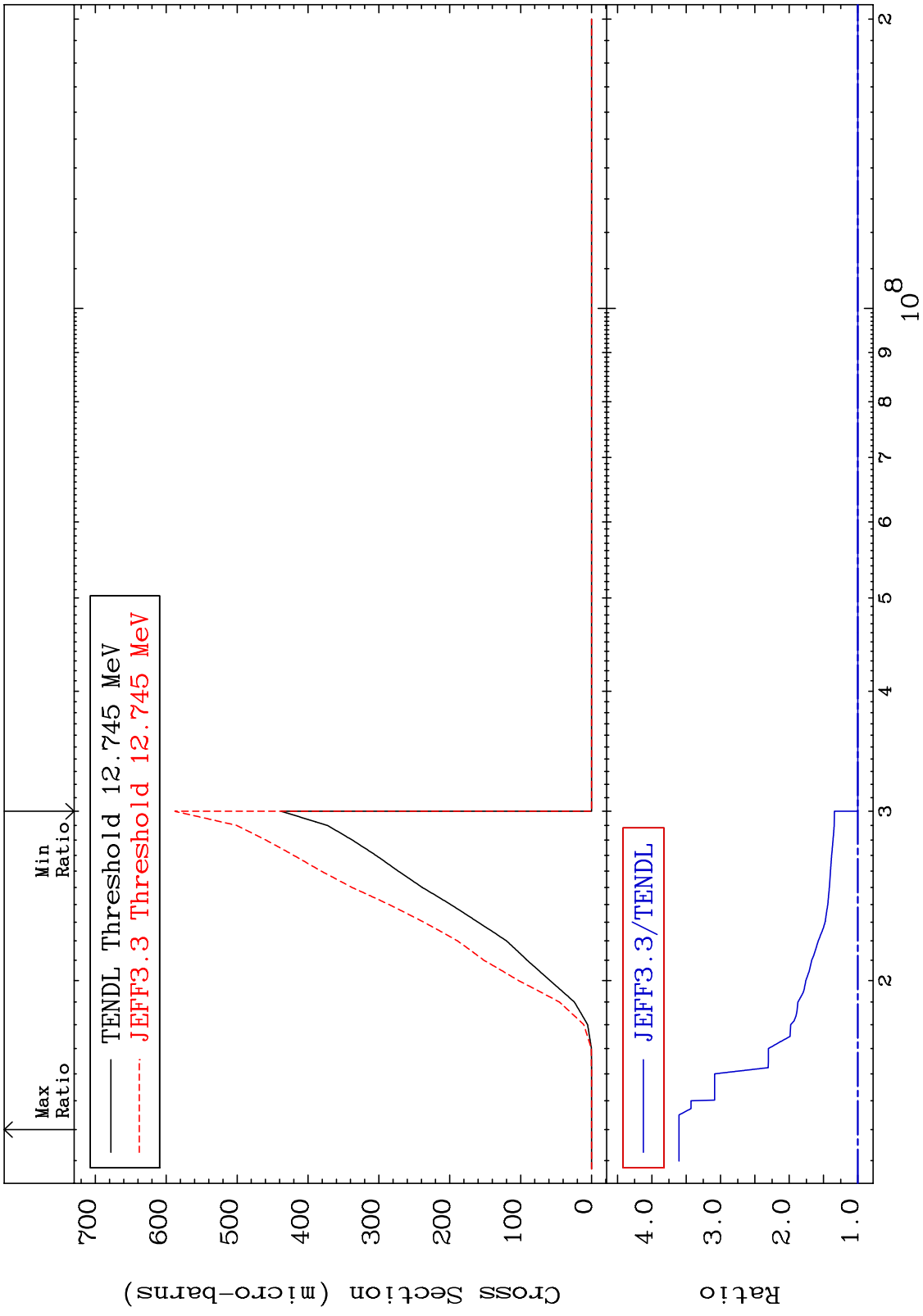


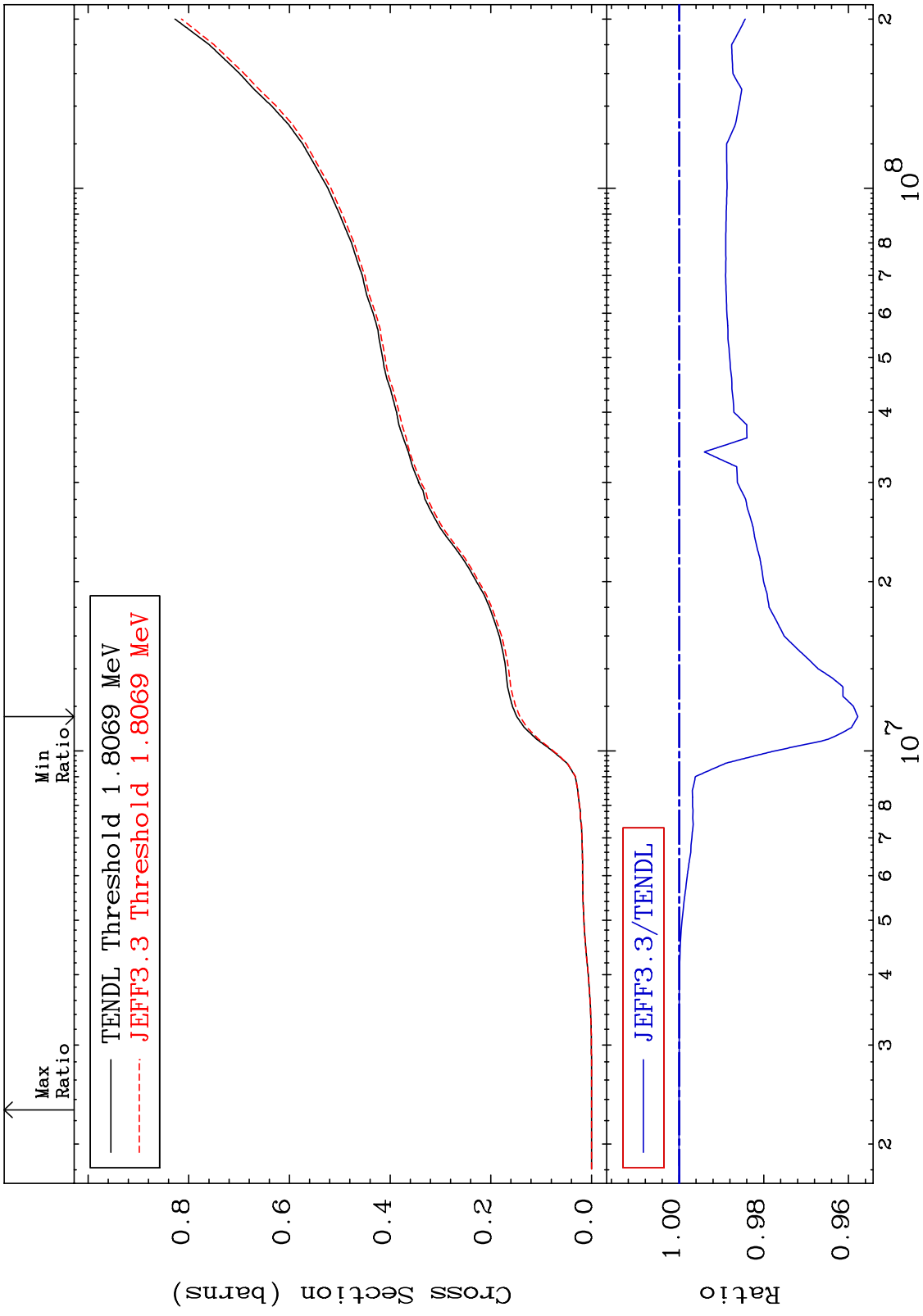
MAT 1931 (n,p) t 19-K -41  
Cross Section -2.309 To 0.000 %



60 19-K -41

MAT 1931 (n,d)  $\alpha$  19-K -41  
 Cross Section 0.000 To 260.4 %

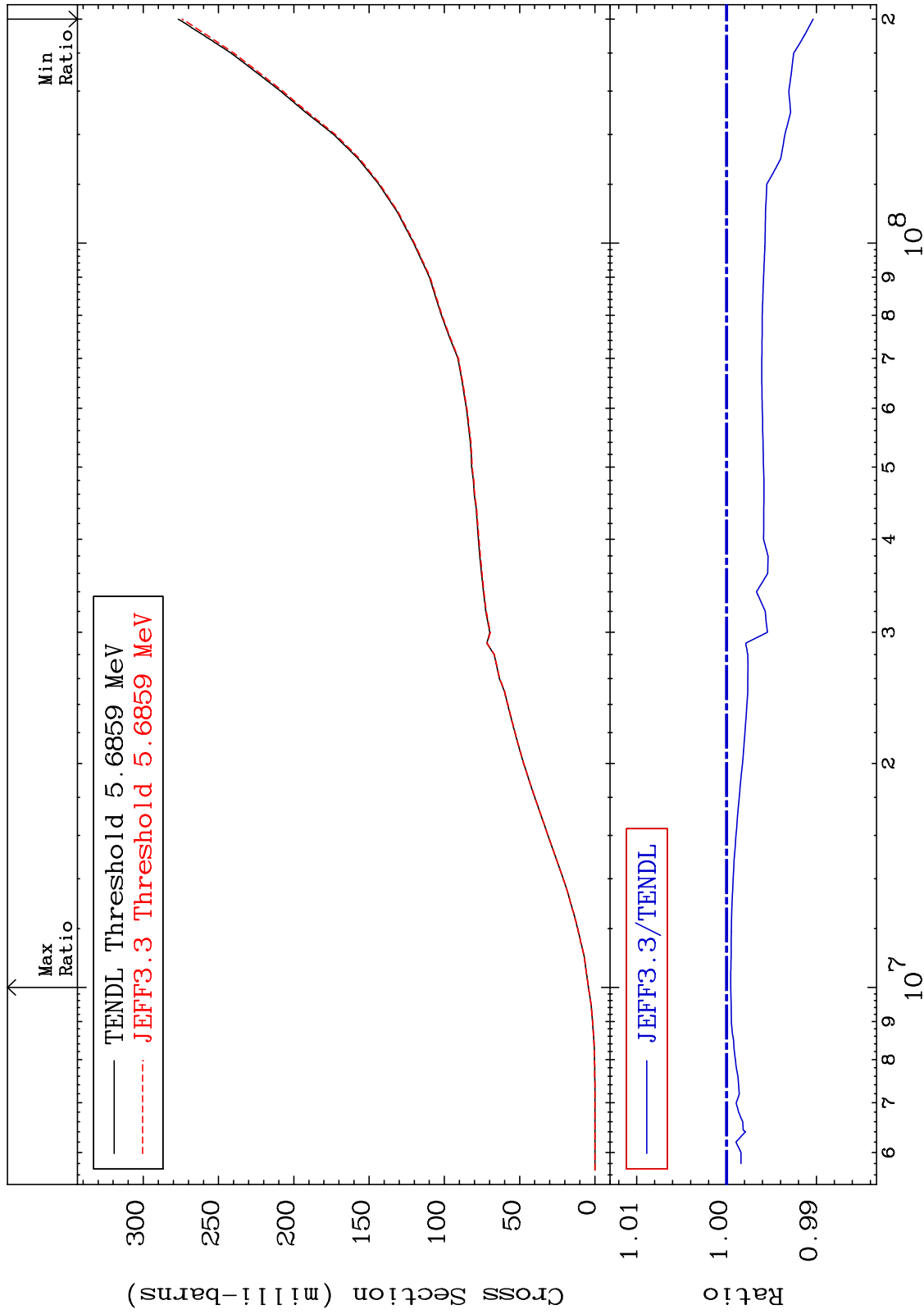




MAT 1931

Deuterium Production  
Cross Section

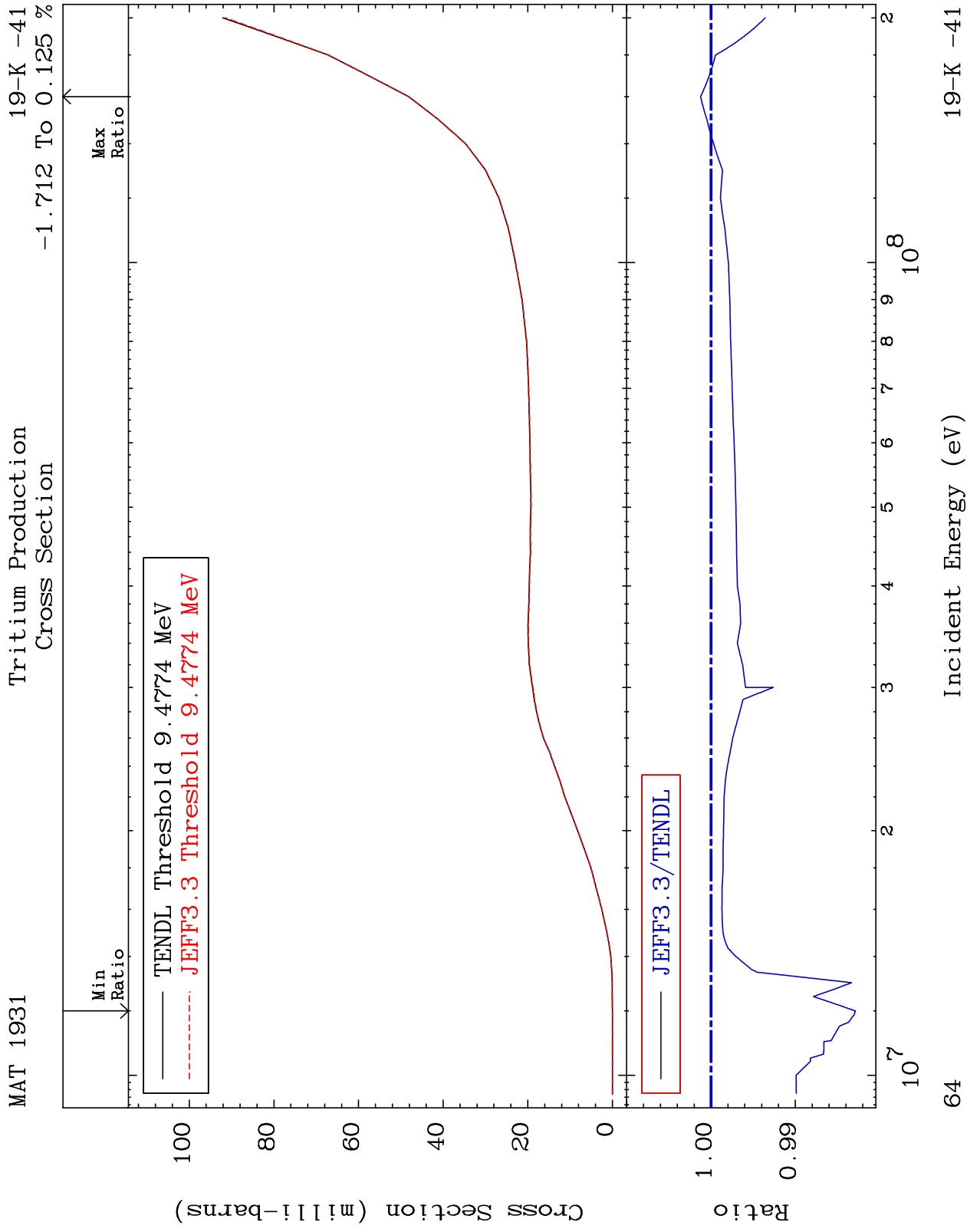
19-K -41  
-0.964 To -0.045%



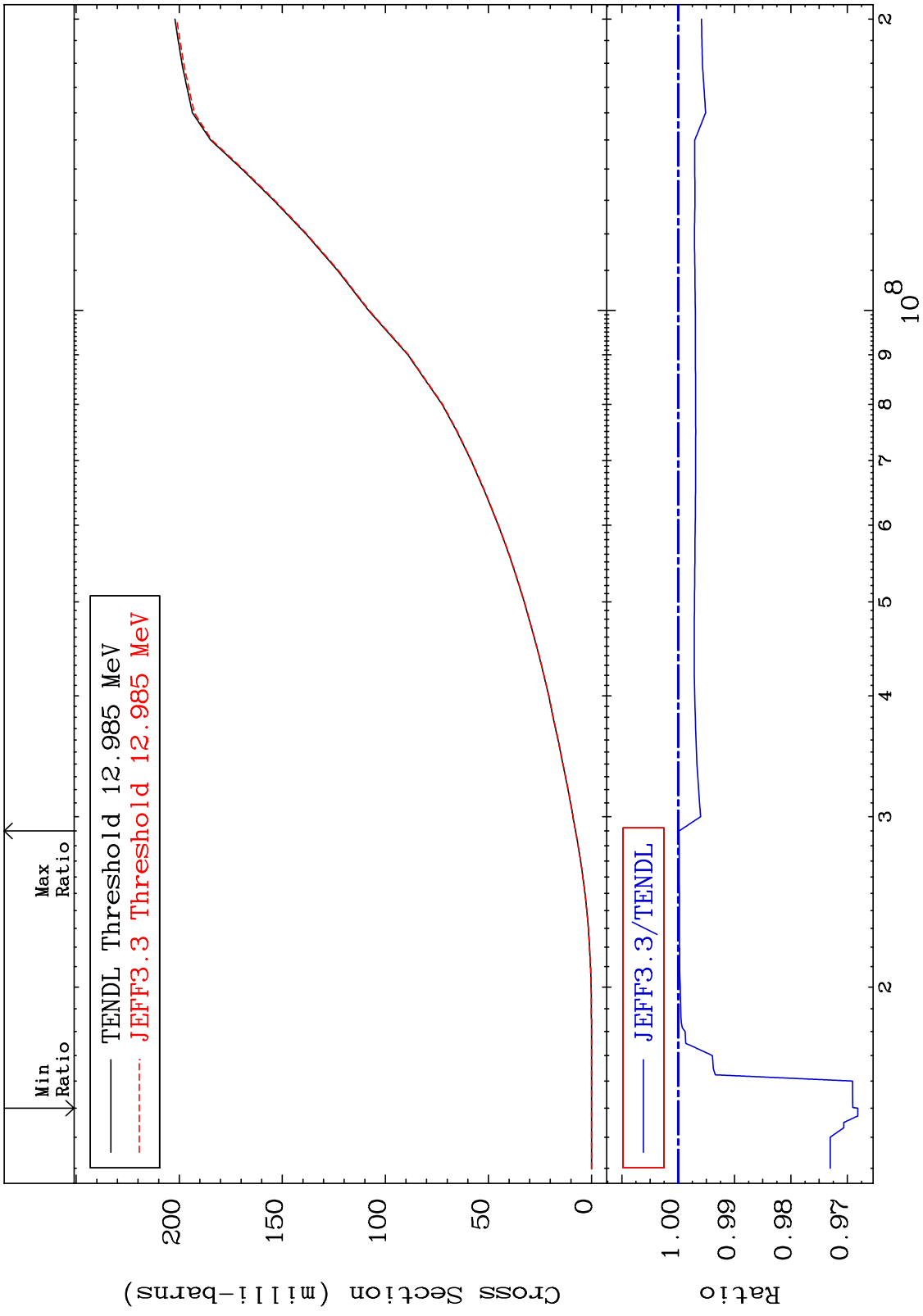
63

19-K -41





MAT 1931 He-3 Production Cross Section 19-K -41  
-3.187 To -0.015%

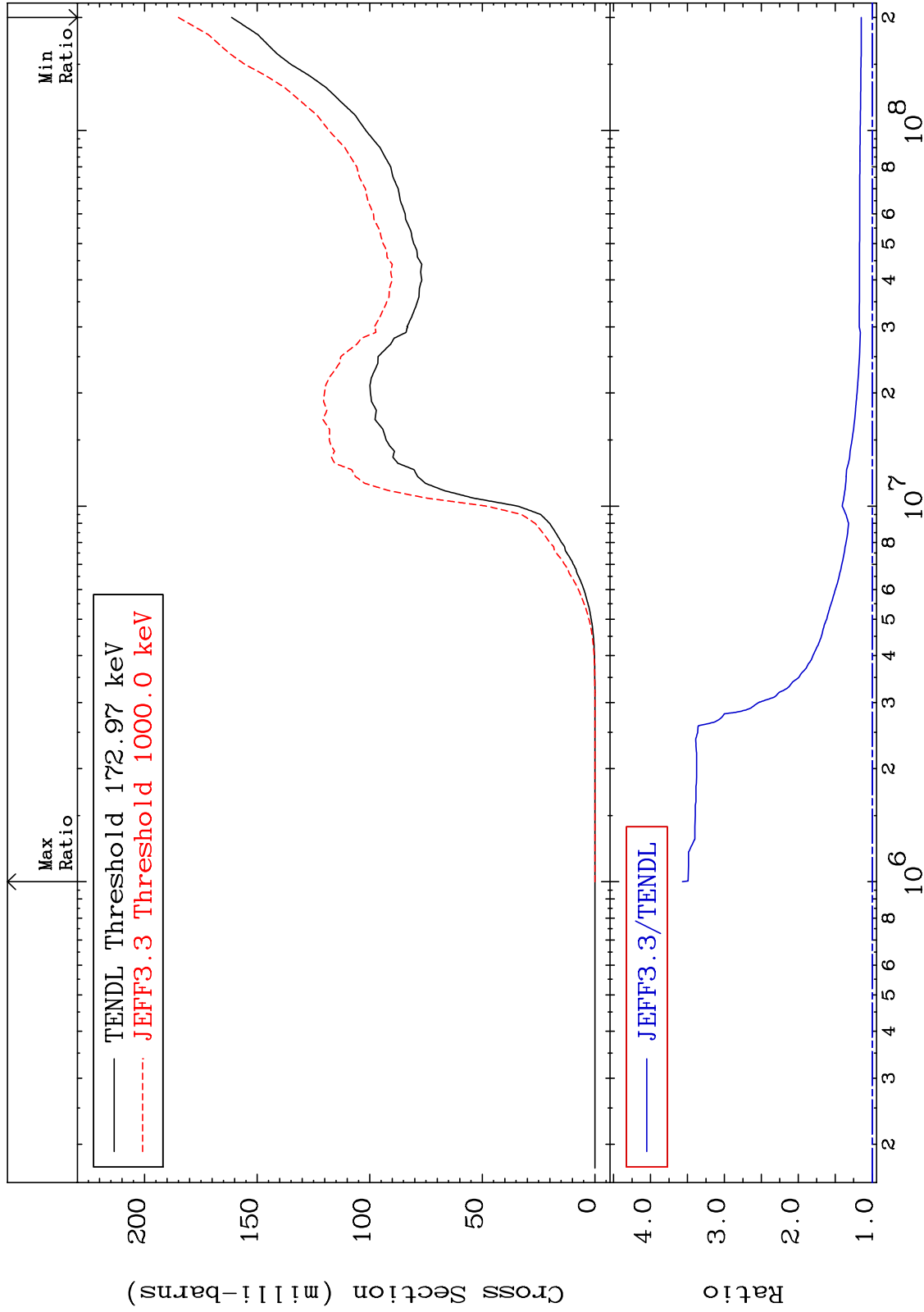


65 19-K -41

MAT 1931

He-4 Production  
Cross Section

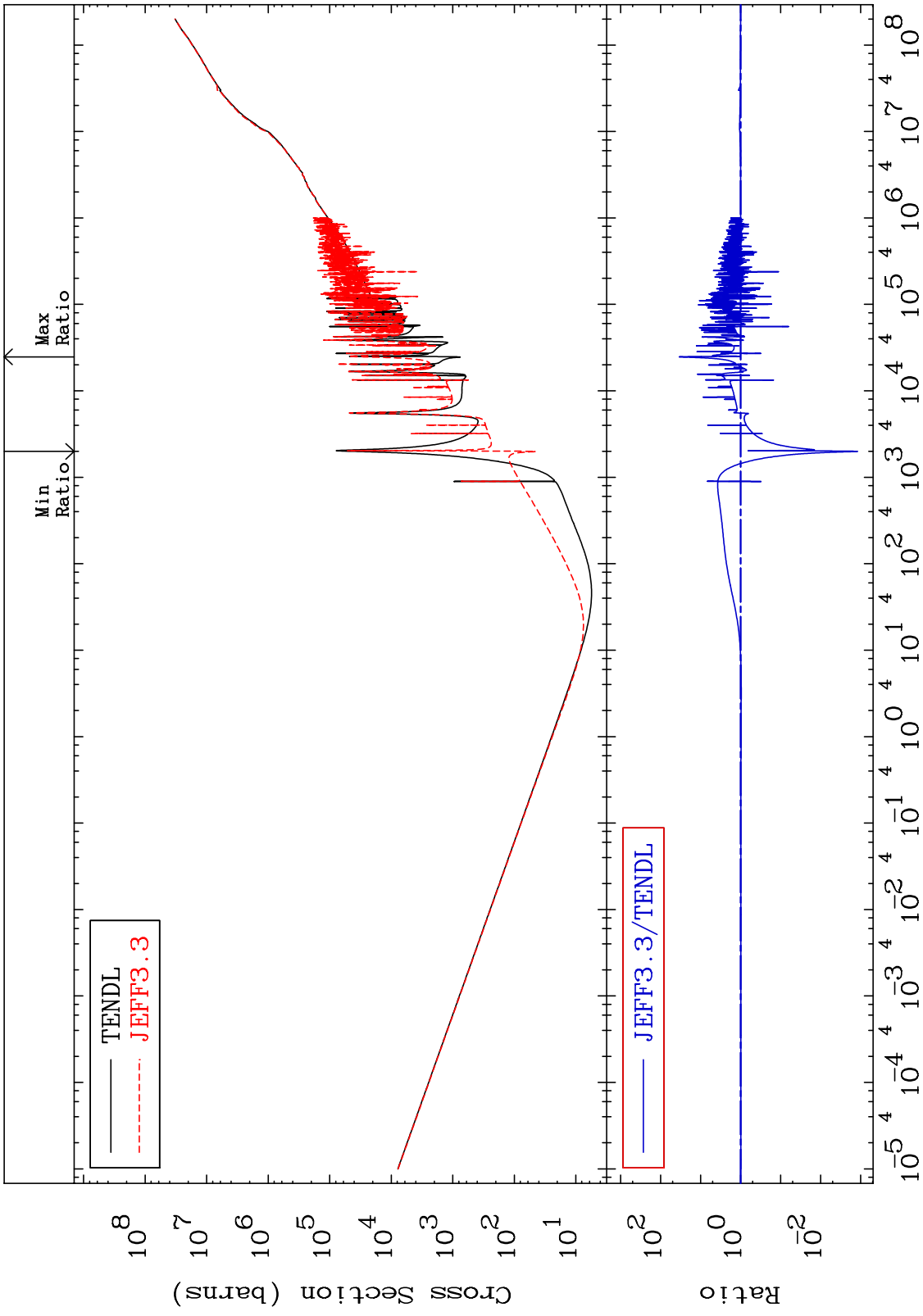
19-K -41  
14.67 To 256.8 %



66

19-K -41

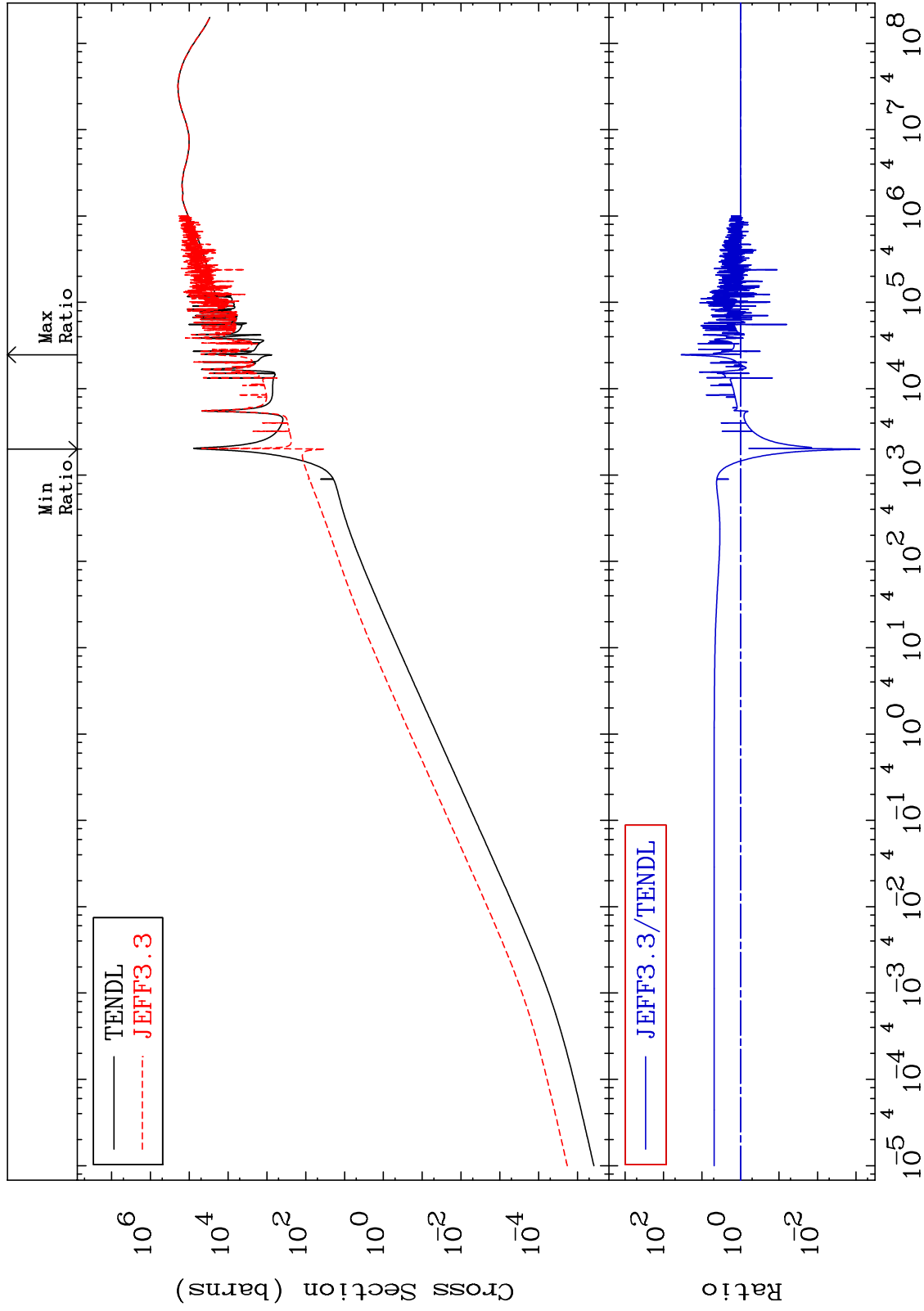
MAT 1931 Kerma total (eV-barns) 19-K -41  
 Cross Section -99.88 To 3357. %



MAT 1931

Kerma elastic  
Cross Section

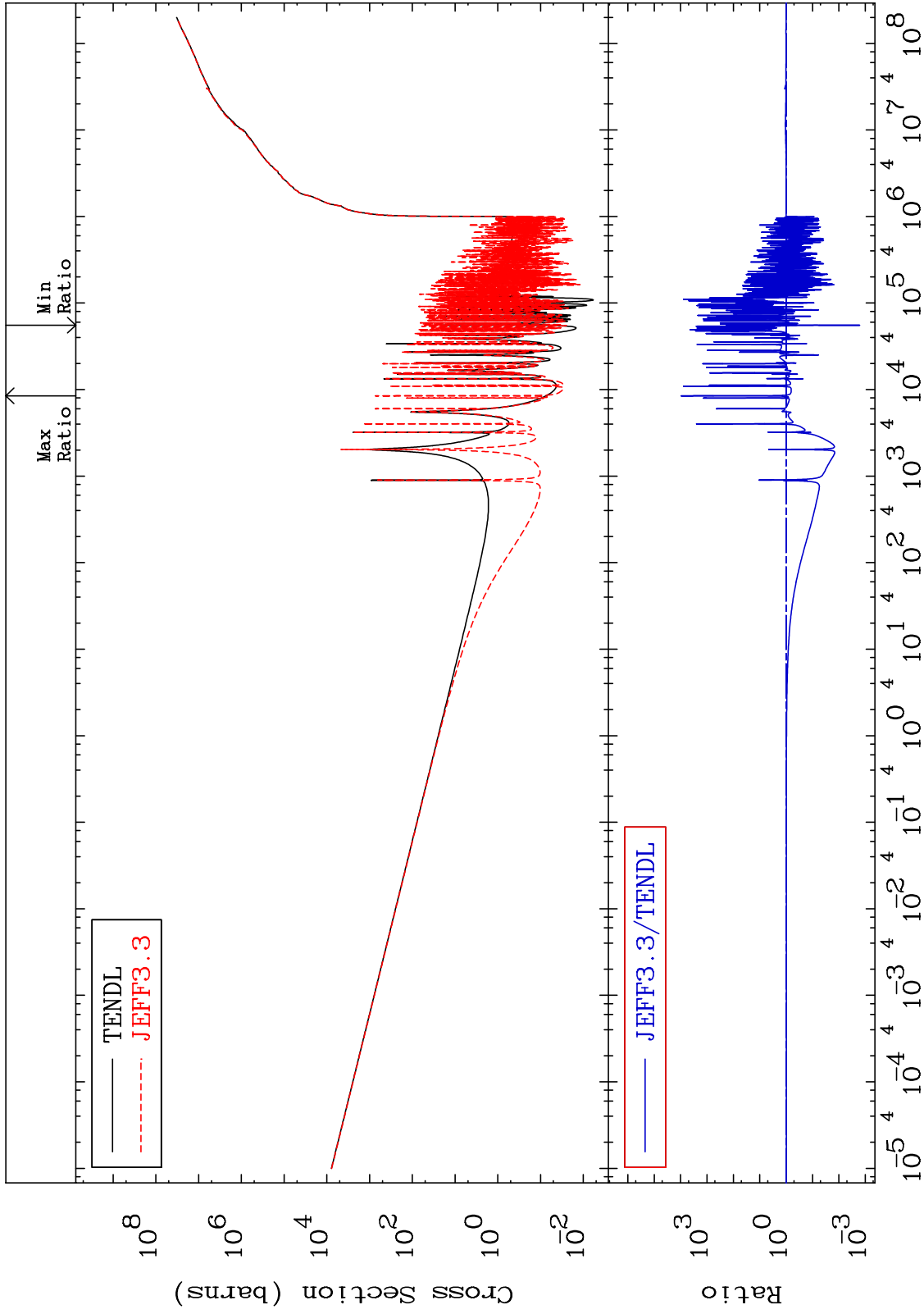
19-K -41  
-99.92 To 3363. %



MAT 1931

Kerma non-elastic (all but mt2)  
Cross Section

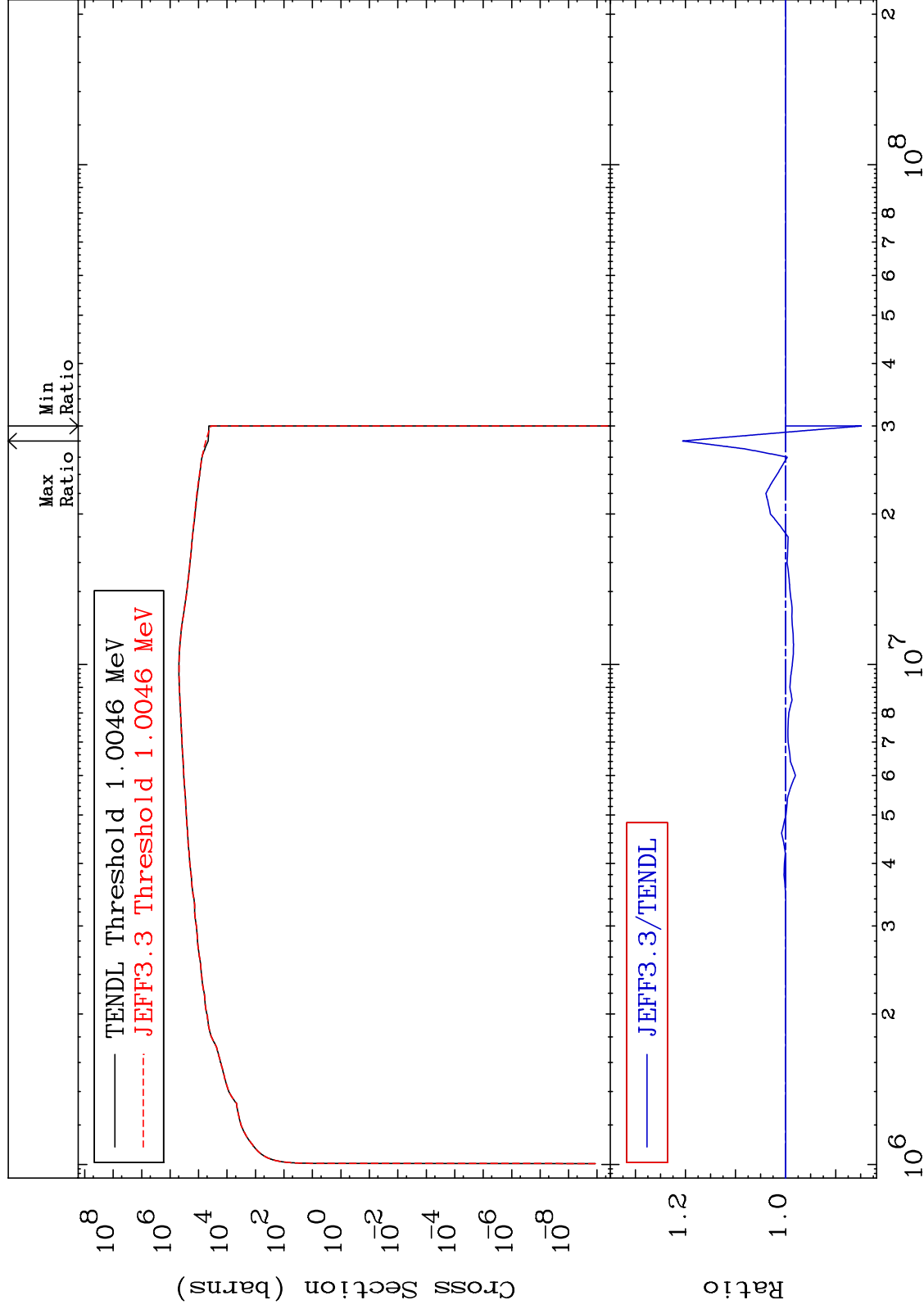
19-K -41  
-99.84 To 9999. %



MAT 1931

Kerma inelastic (mt51-91)  
Cross Section

19-K -41  
-15.12 To 20.57 %



70

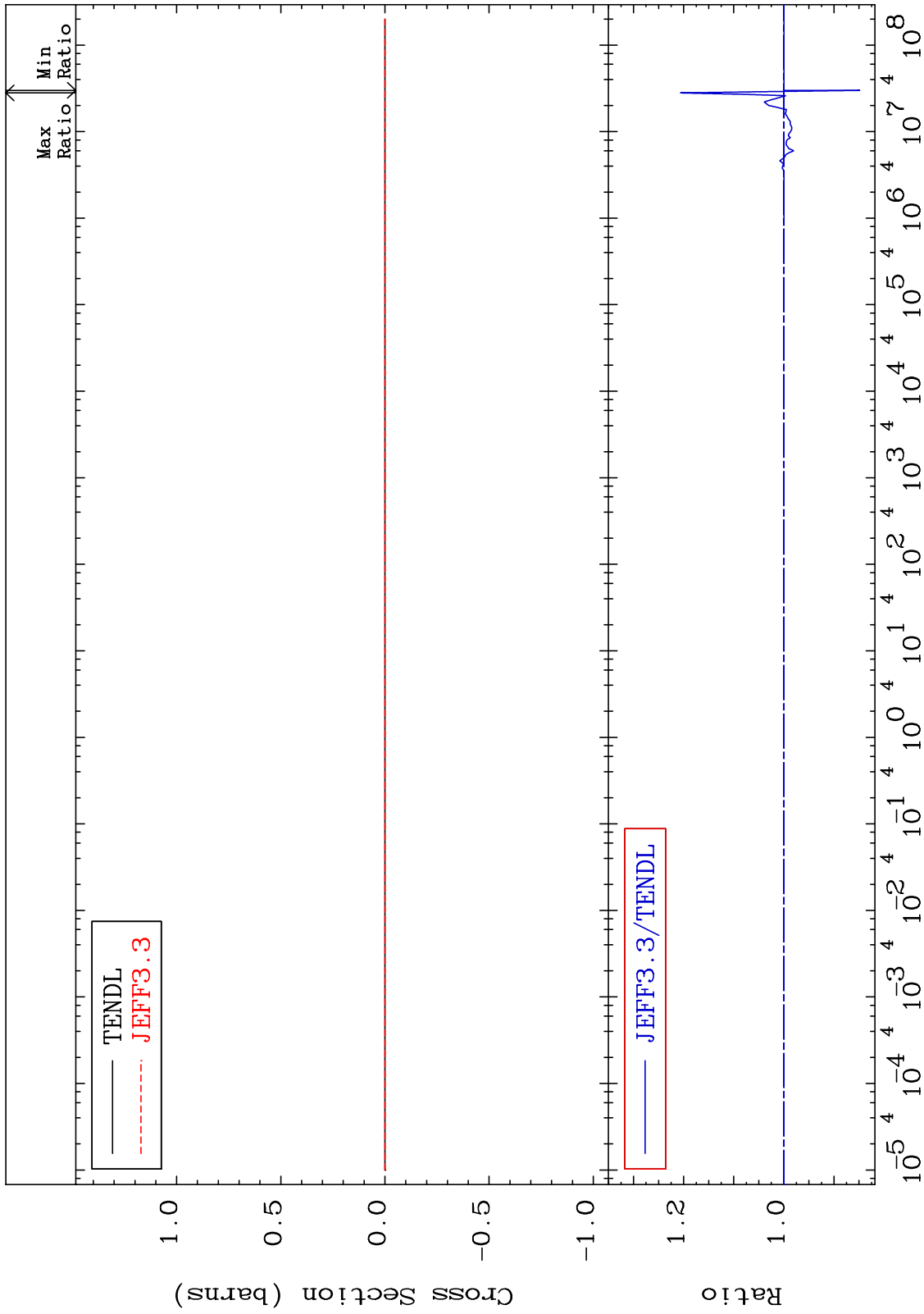
Incident Energy (eV)

19-K -41

MAT 1931

Kerma fission (mt18 or mt19-20-21-38)  
Cross Section

19-K -41  
-15.12 To 20.57 %



71

Incident Energy (eV)

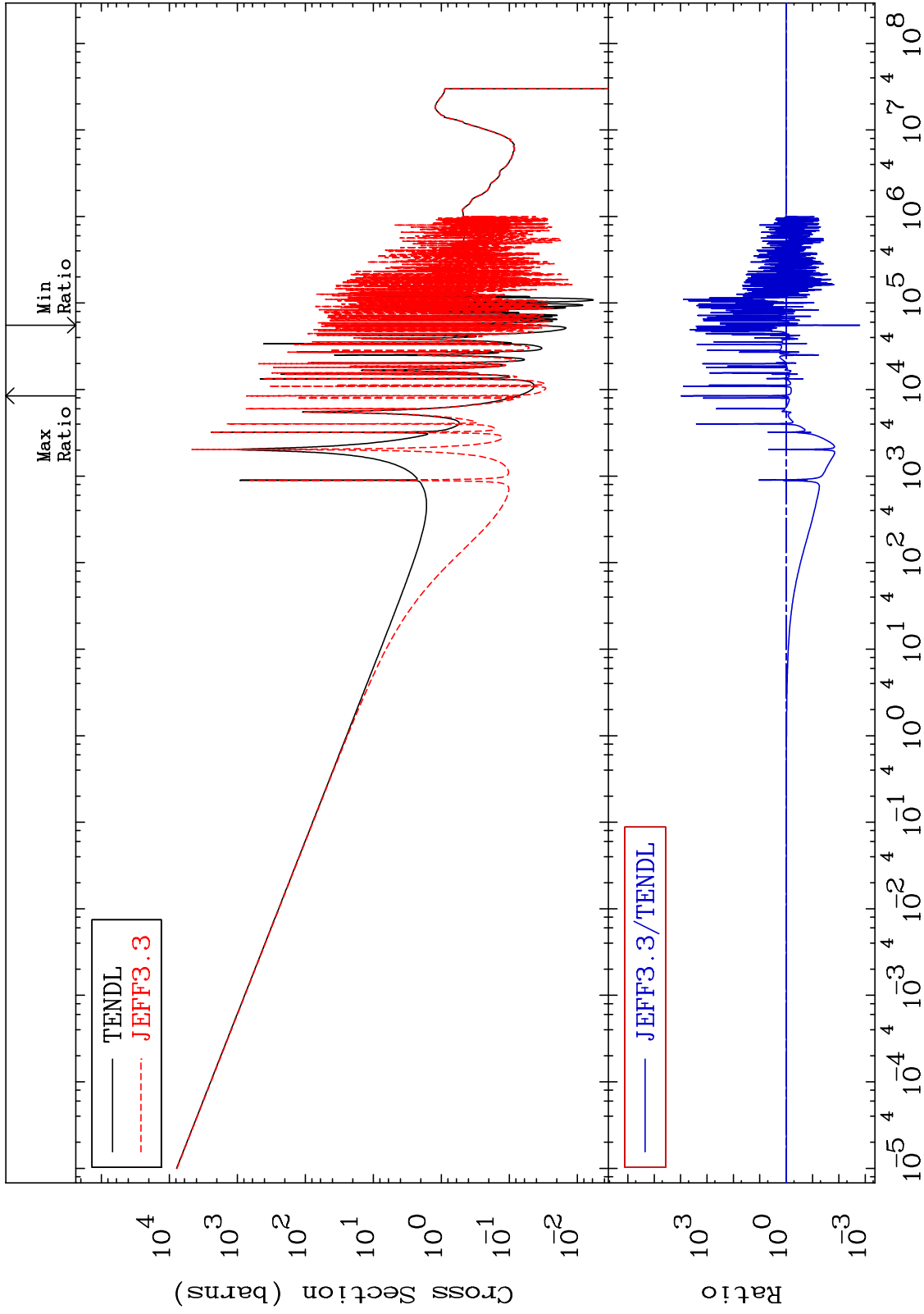
19-K -41



MAT 1931

Kerma capture (mt102)  
Cross Section

19-K -41  
-99.84 To 9999. %



72

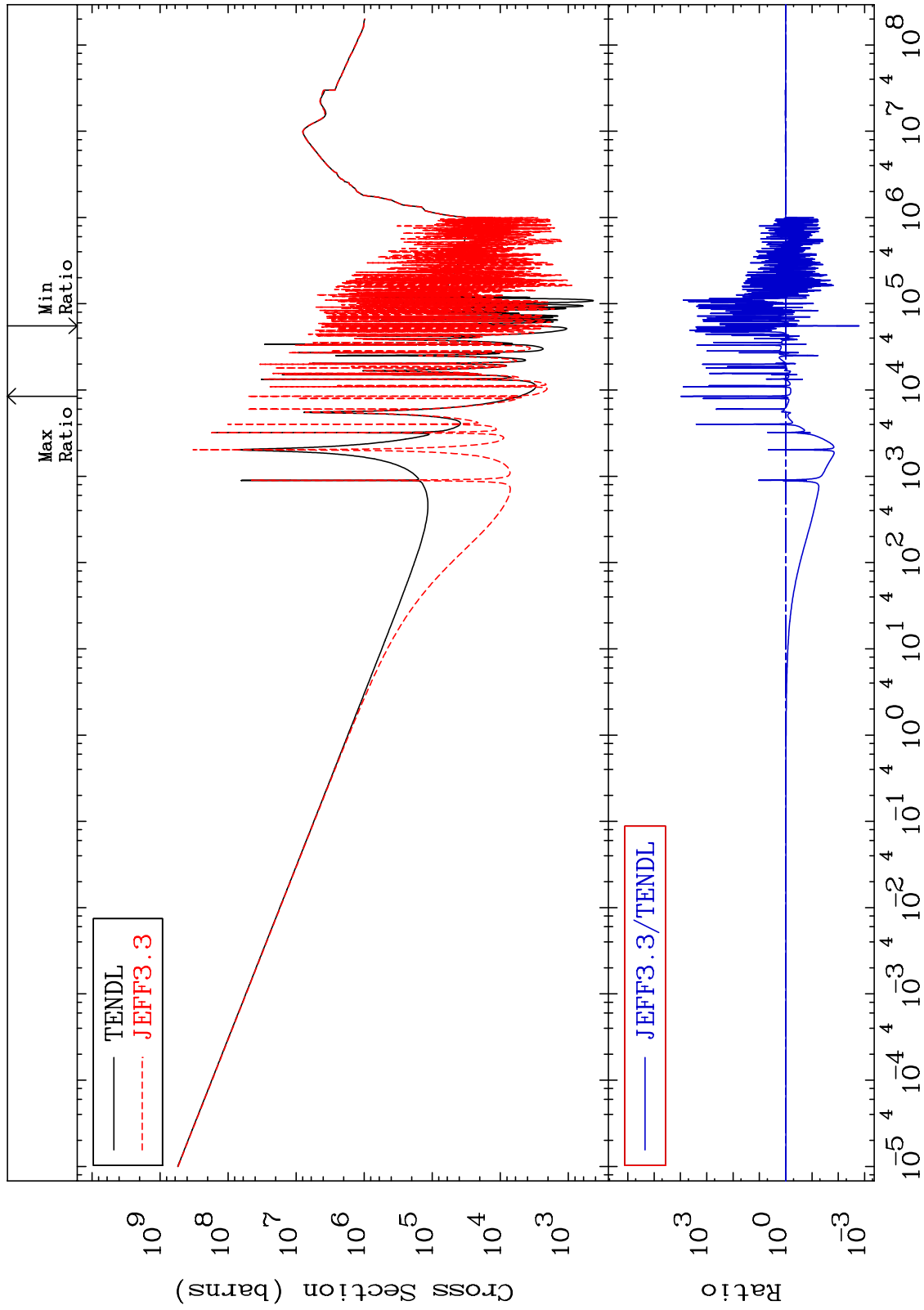
Incident Energy (eV)

19-K -41

MAT 1931

Total photon (eV-barns)  
Cross Section

19-K -41  
-99.84 To 9999. %

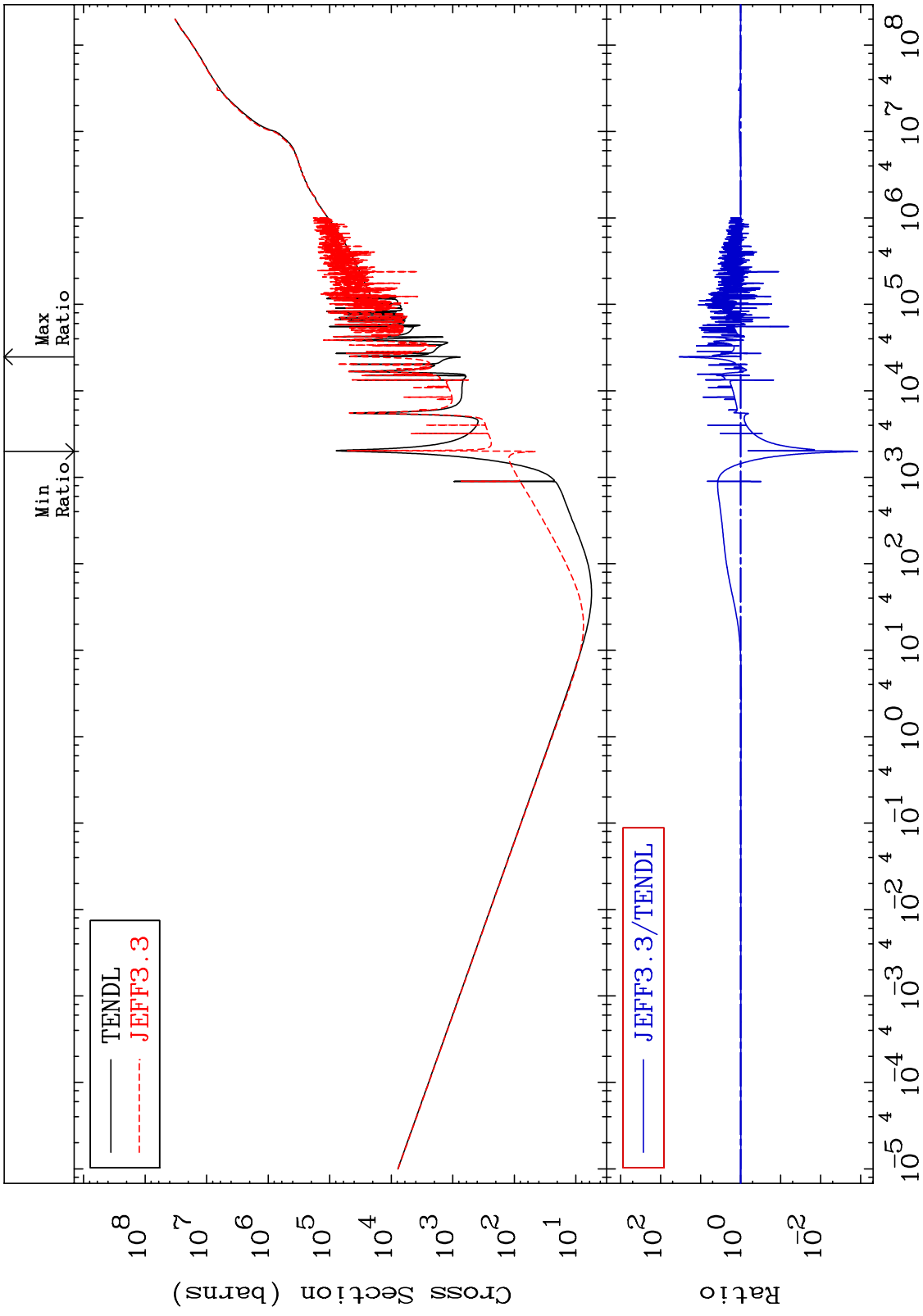


73

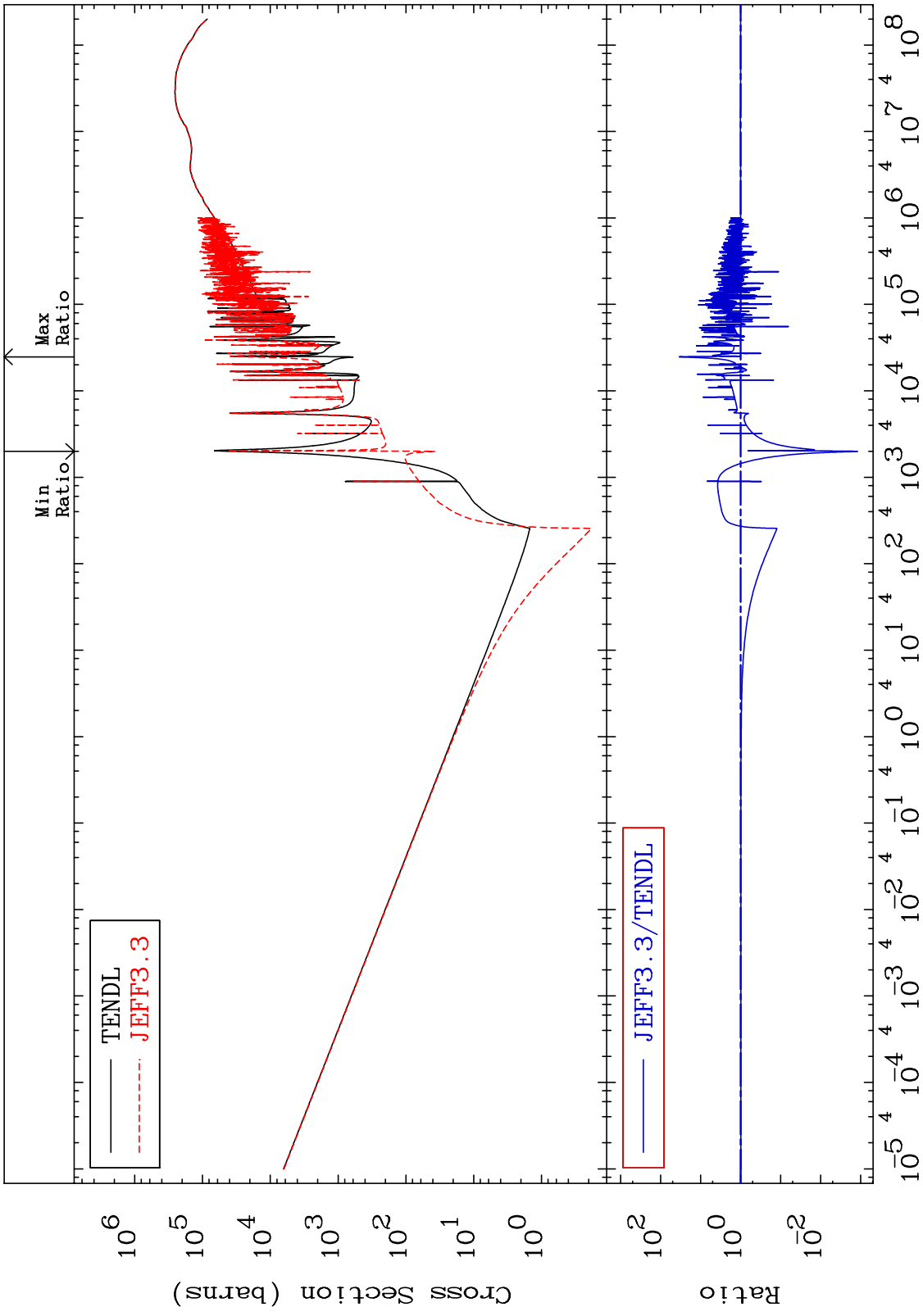
Incident Energy (eV)

19-K -41

MAT 1931 Total kinematic kerma (high limit) 19-K -41  
 Cross Section -99.88 To 3357. %



MAT 1931      Dpa total (eV-barns)      19-K -41  
 Cross Section      -99.88 To 3357. %

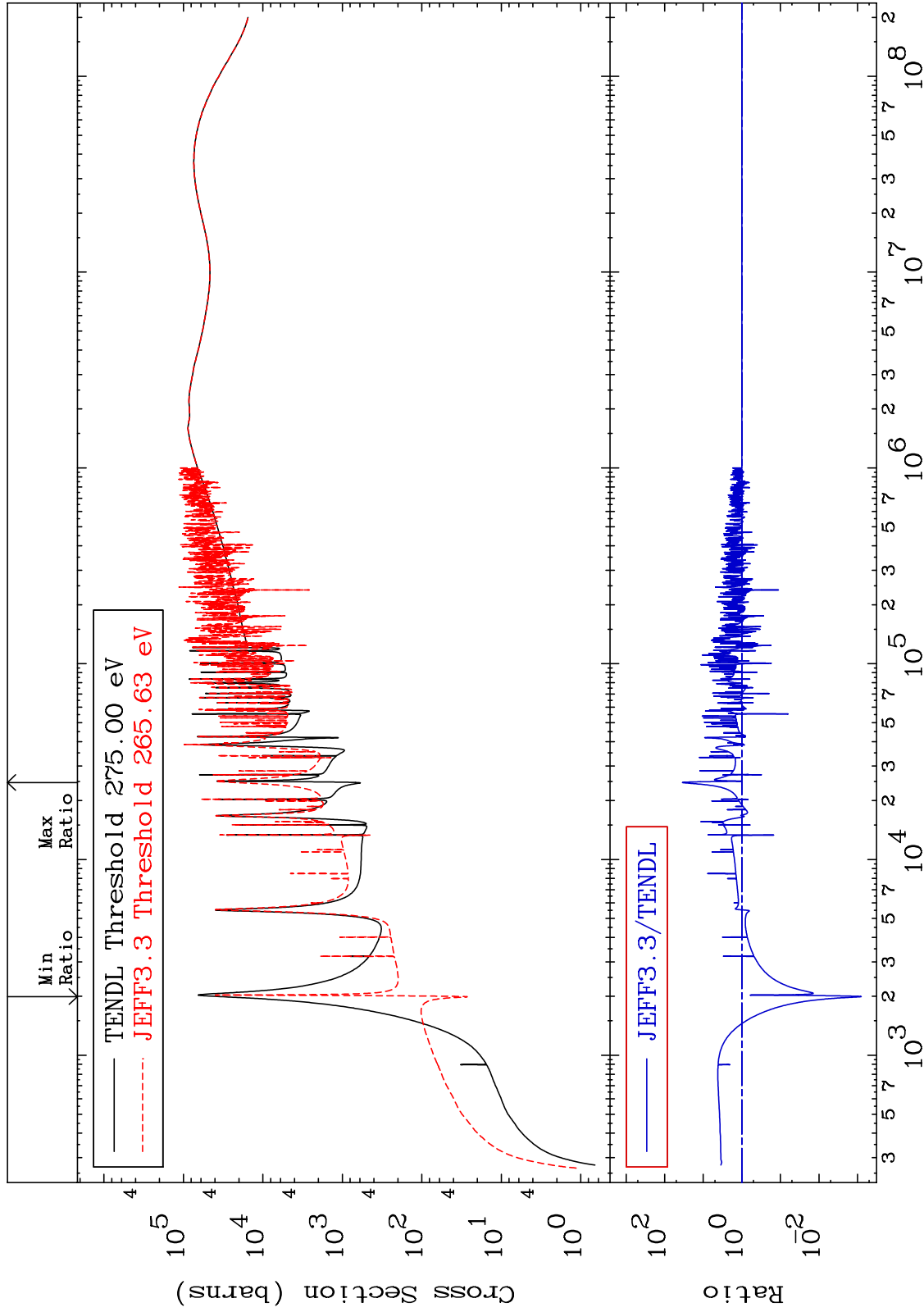


75      Incident Energy (eV)      19-K -41

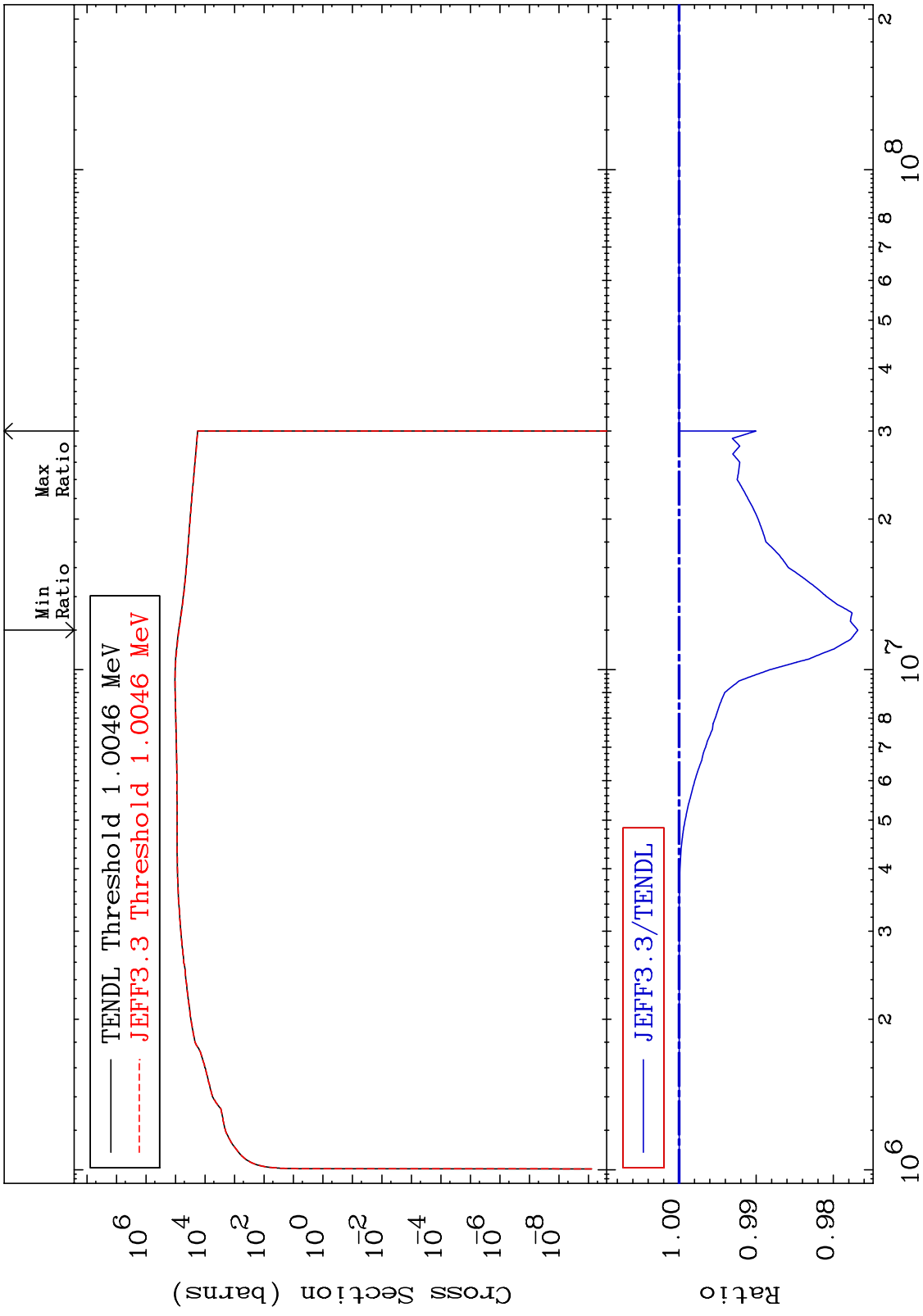
MAT 1931

Dpa elastic (mt2)  
Cross Section

19-K -41  
-99.92 To 3363. %



MAT 1931      Dpa inelastic (mt51-91)      19-K -41  
Cross Section      -2.318 To 0.000 %

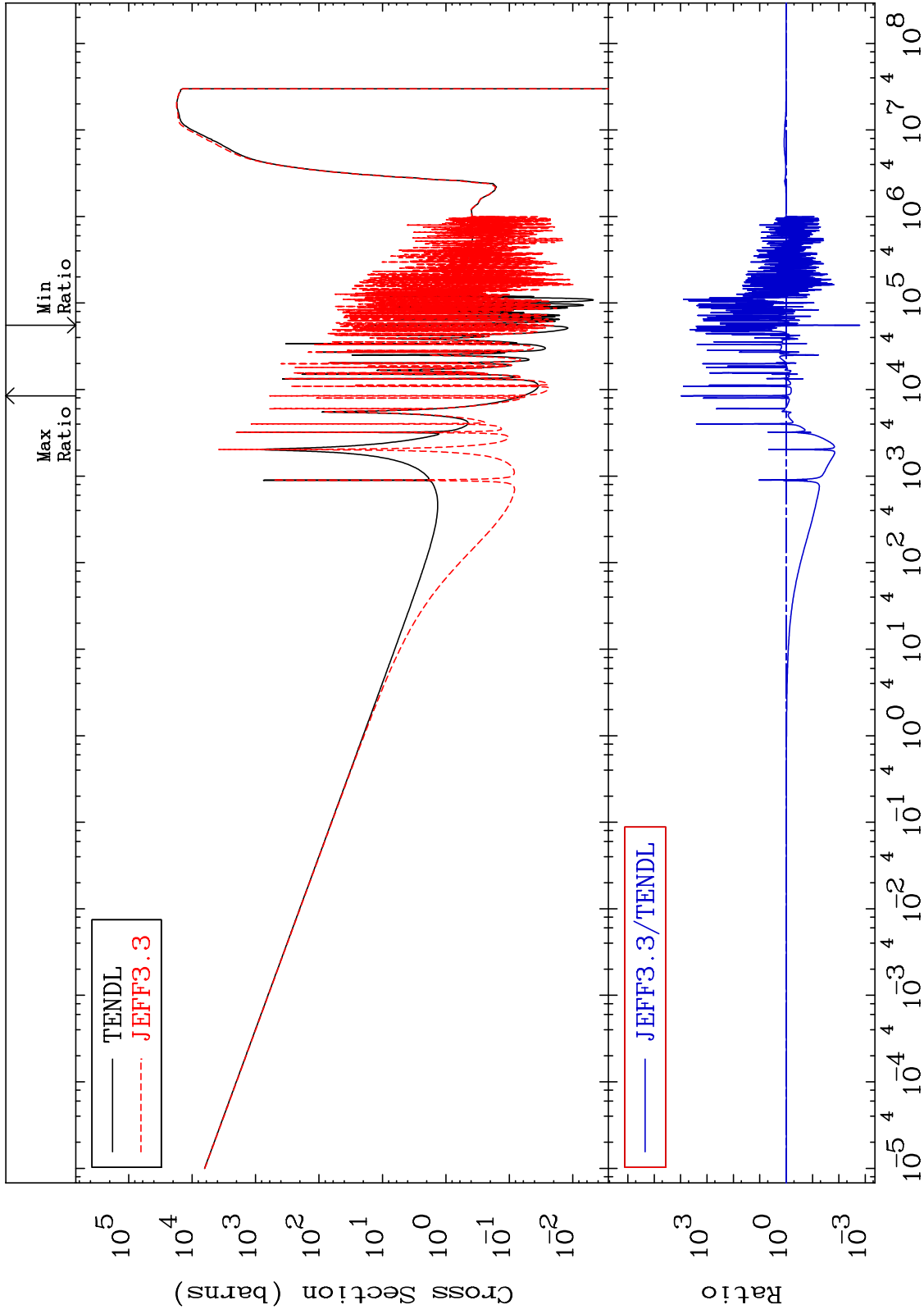


777      Incident Energy (eV)      19-K -41

MAT 1931

Dpa disappearance (mt102 -120)  
Cross Section

19-K -41  
-99.84 To 9999. %



78

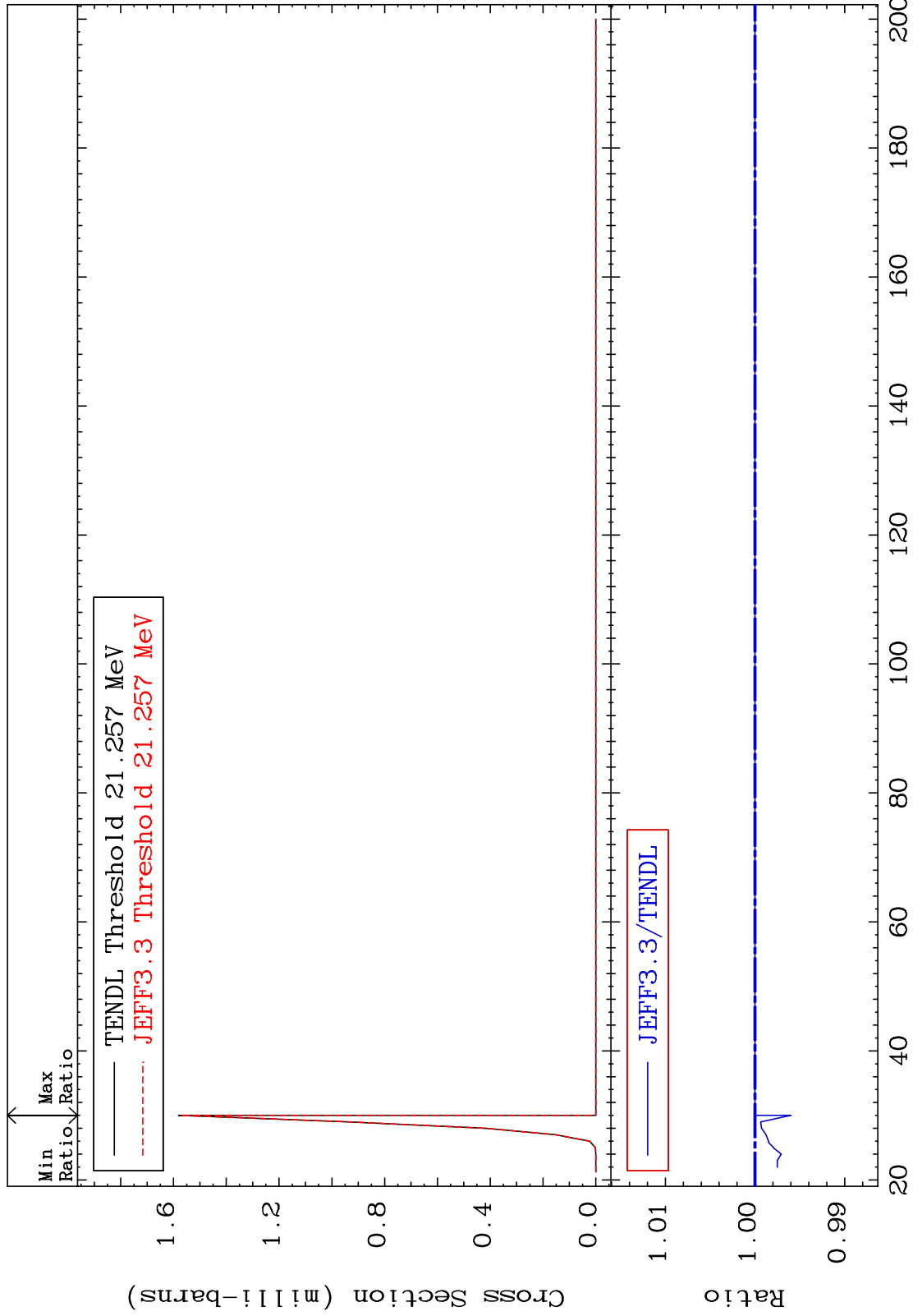
Incident Energy (eV)

19-K -41

MAT 1931

(n,n') He-3:17-Cl-38g  
Radionuclide Production Cross Section -0.400 To 0.000 %

19-K -41



79

19-K -41

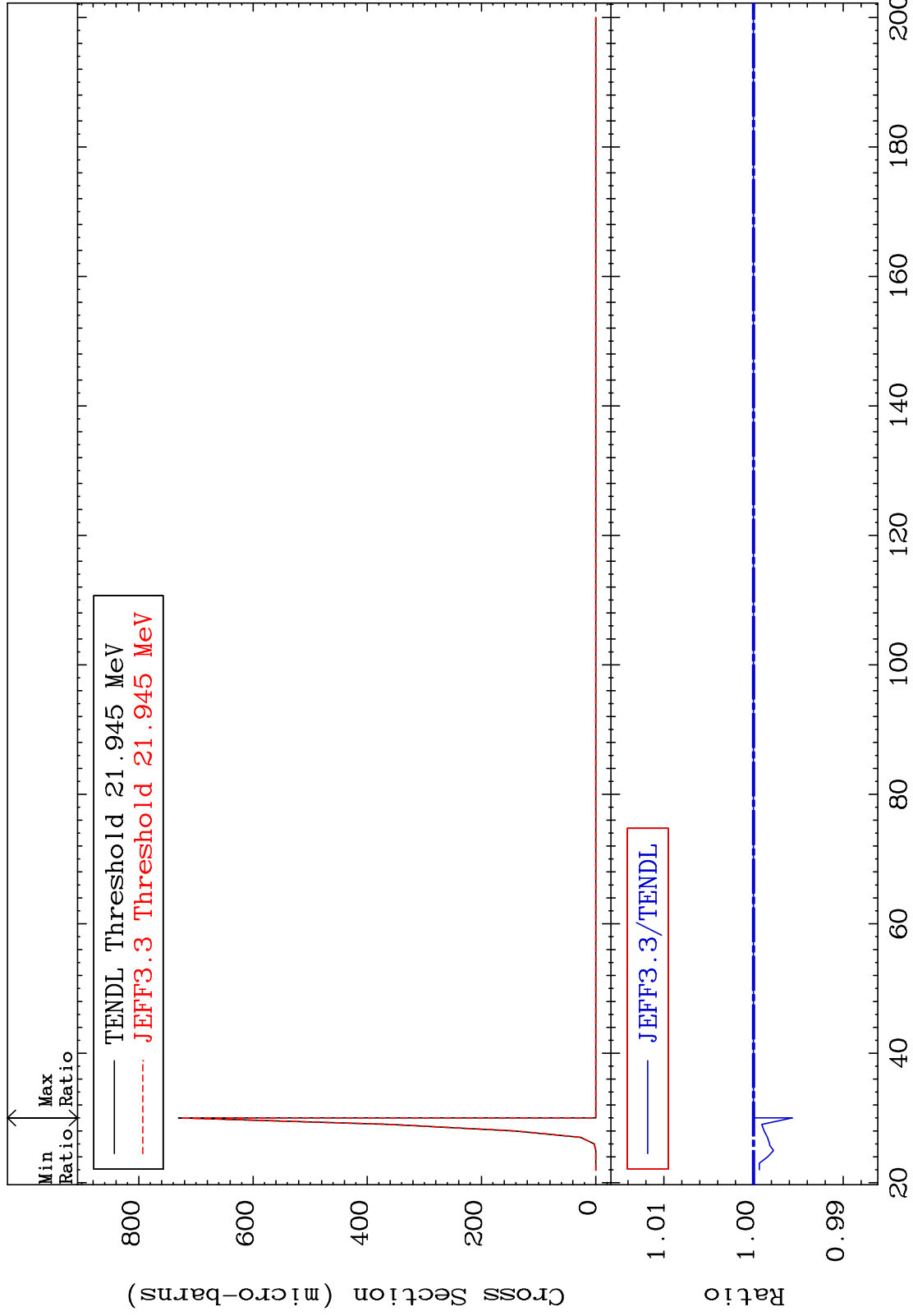


MAT 1931

(n,n') He-3:17-Cl-38m1

19-K -41

Radionuclide Production Cross Section -0.433 To 0.000 %



80

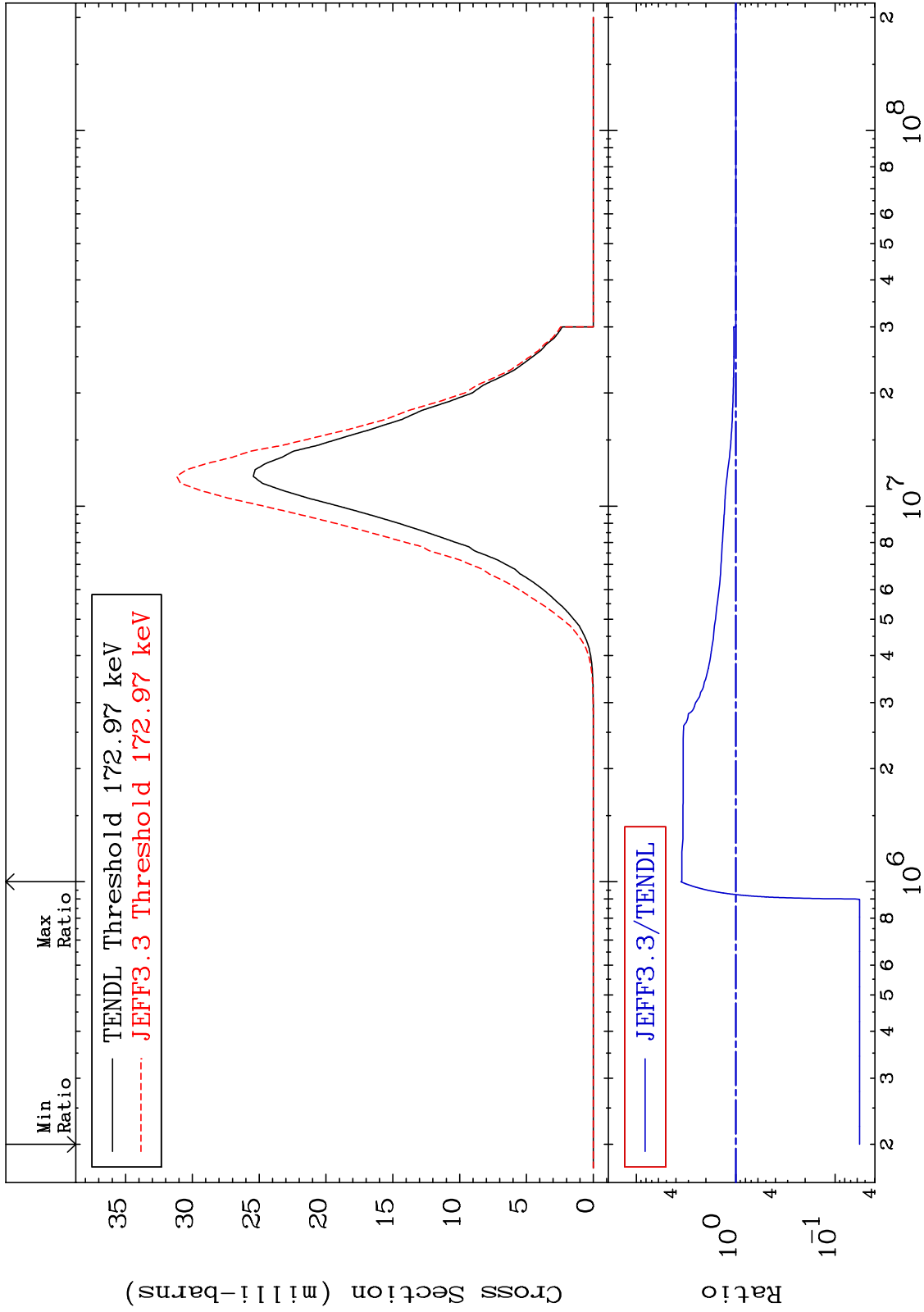
19-K -41

MAT 1931

(n,  $\alpha$ ): 17-Cl-38g

19-K -41

Radionuclide Production Cross Section -94.33 To 257.2 %

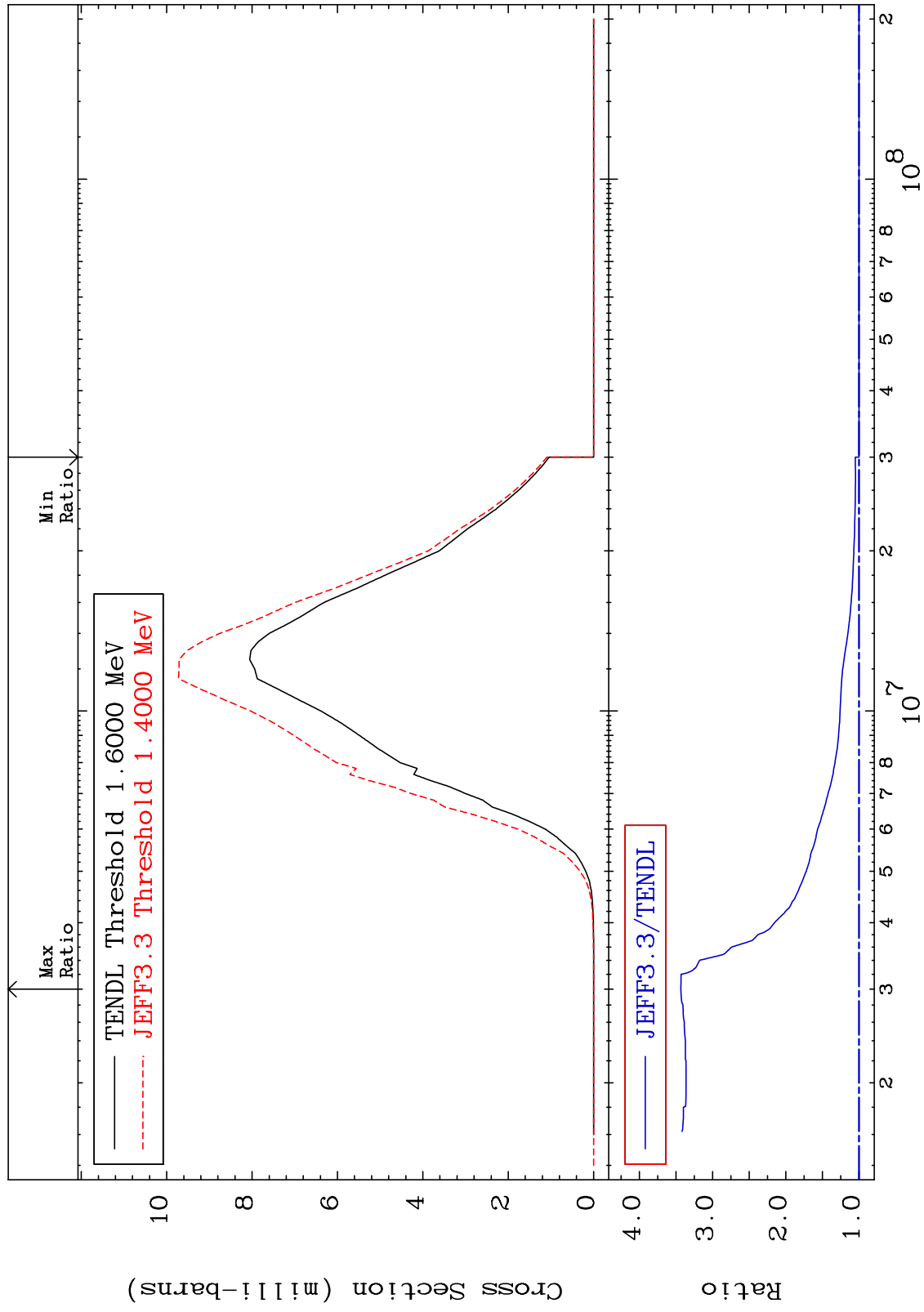


81

Incident Energy (eV)

19-K -41

MAT 1931 (n,  $\alpha$ ): 17-Cl-38m1 19-K -41  
Radionuclide Production Cross Section 0.000 To 243.3 %

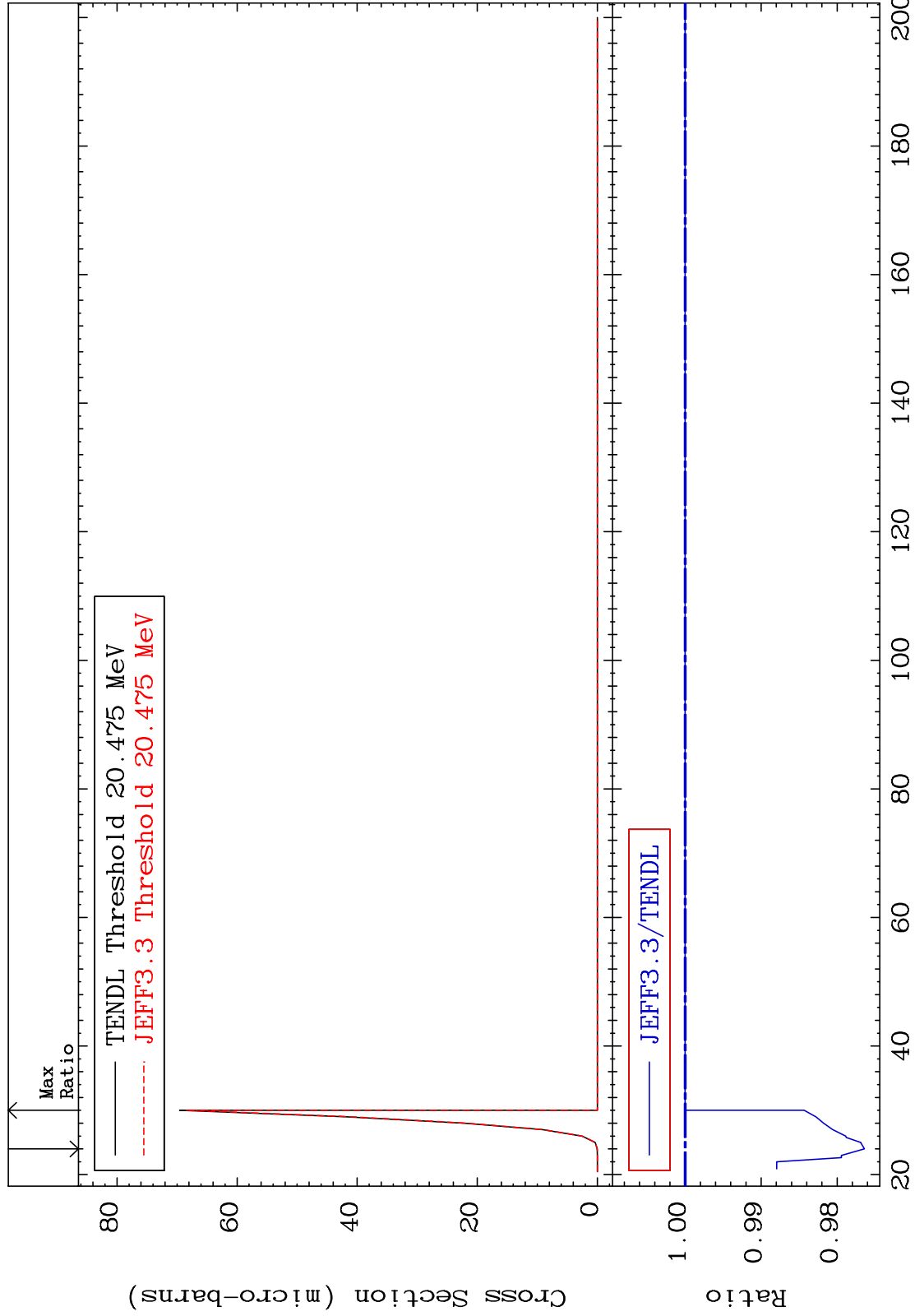


MAT 1931

(n,p) t:17-Cl-38g

19-K -41

Radionuclide Production Cross Section -2.359 To 0.000 %



83

Incident Energy (MeV)

19-K -41

MAT 1931

(n,p) t:17-Cl-38m1

19-K -41

Radionuclide Production Cross Section -1.756 To 0.000 %

