

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)

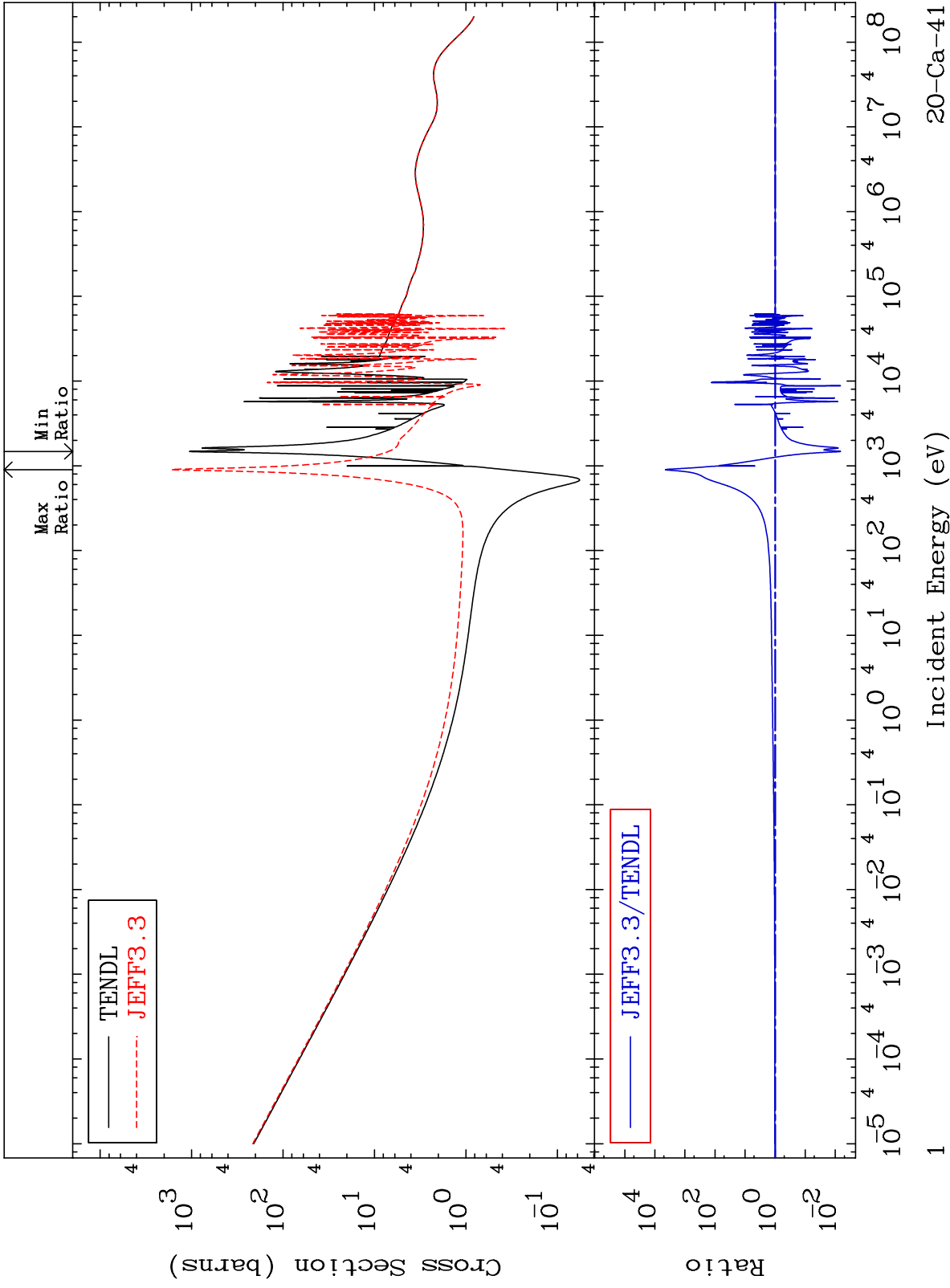
Press Mouse Button to Start

MAT 2028

Total

20-Ca-41

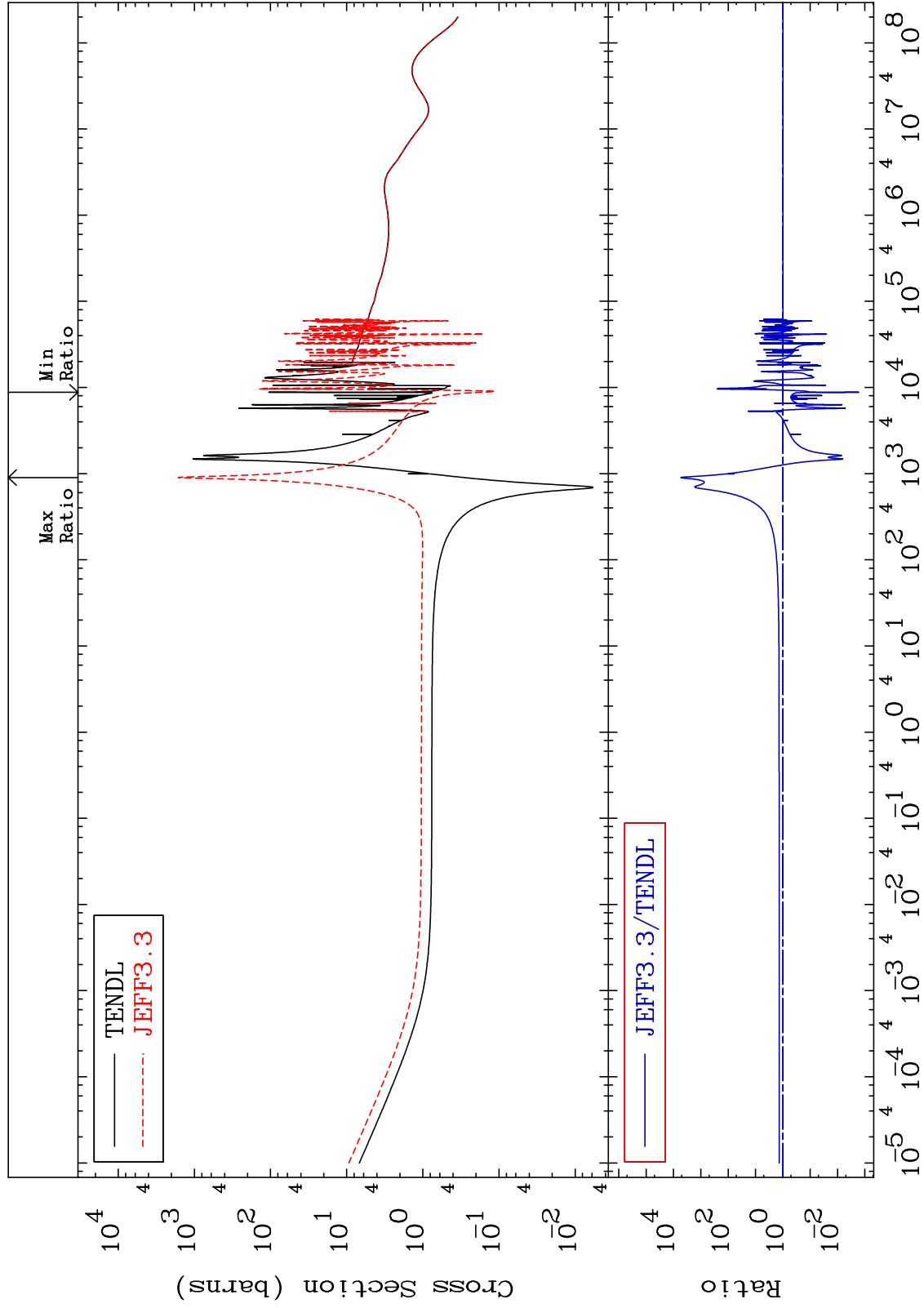
Cross Section  
-99.34 To 9999. %



MAT 2028

Elastic  
Cross Section

20-Ca-41  
-99.83 To 9999. %



2

Incident Energy (eV)

20-Ca-41

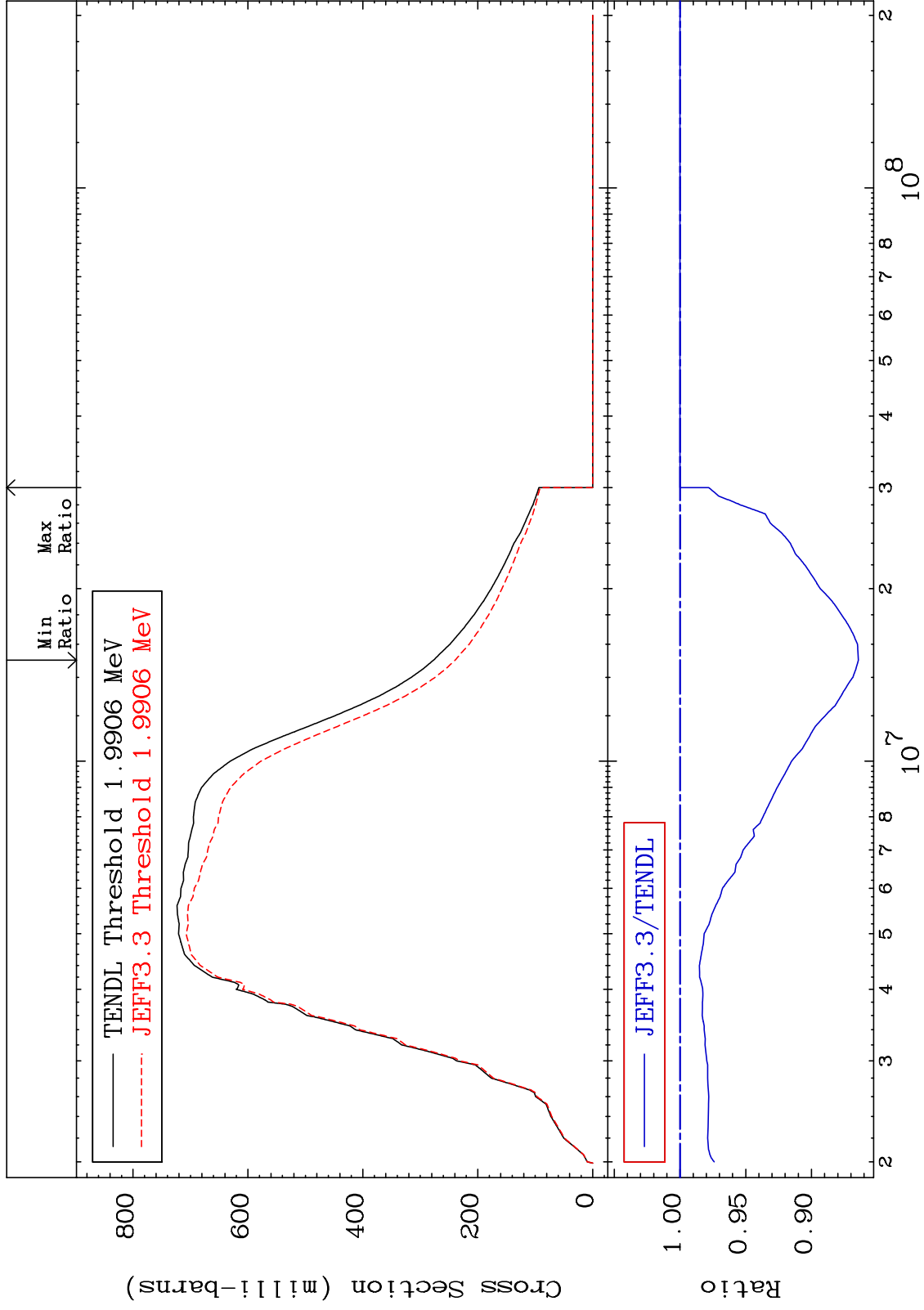
MAT 2028

Inelastic

20-Ca-41

-13.57 To 0.000 %

Cross Section



3

Incident Energy (eV)

20-Ca-41

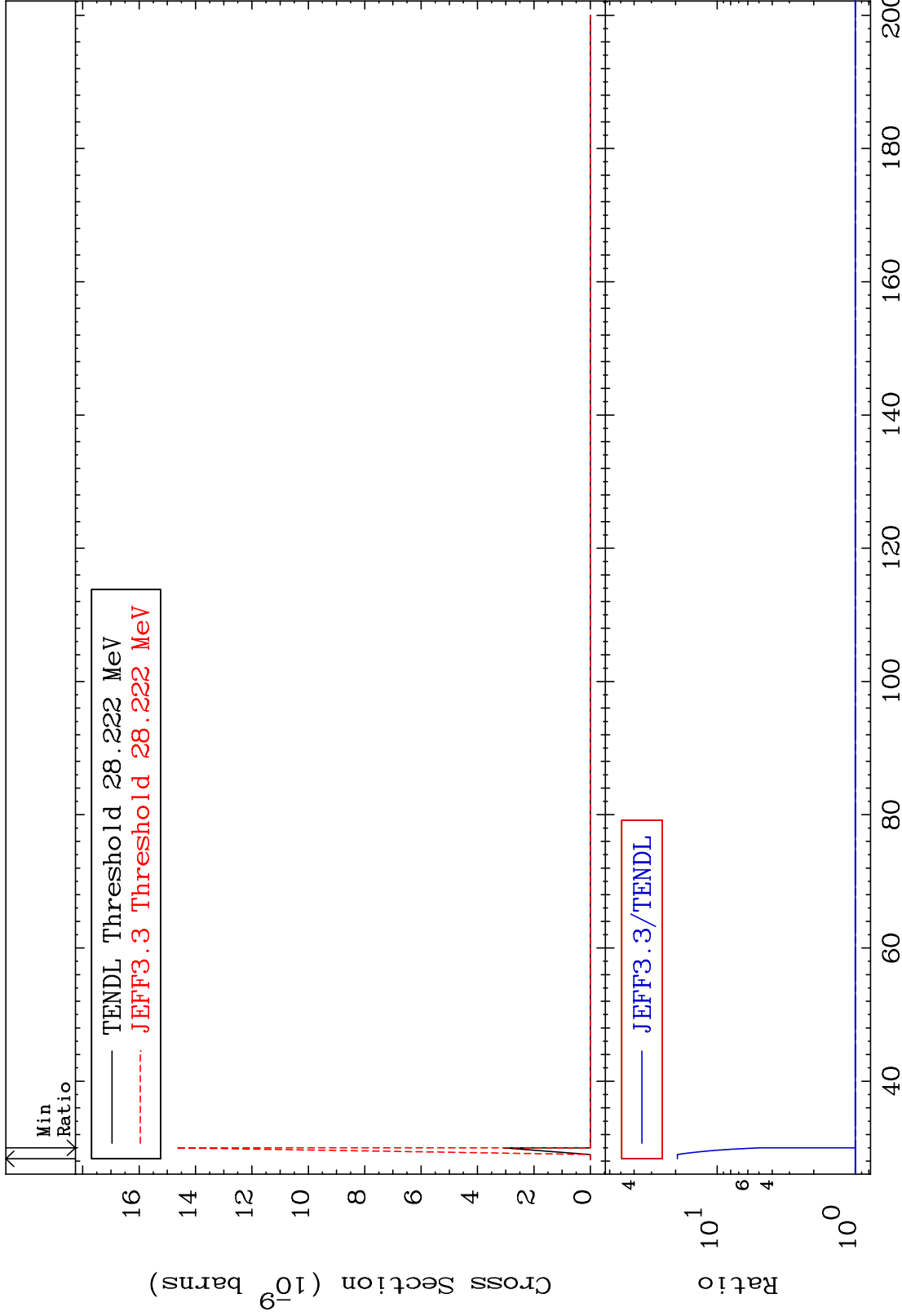
MAT 2028

(n,2n) d

20-Ca-41

Cross Section

0.000 To 1843. %



4

Incident Energy (MeV)

20-Ca-41

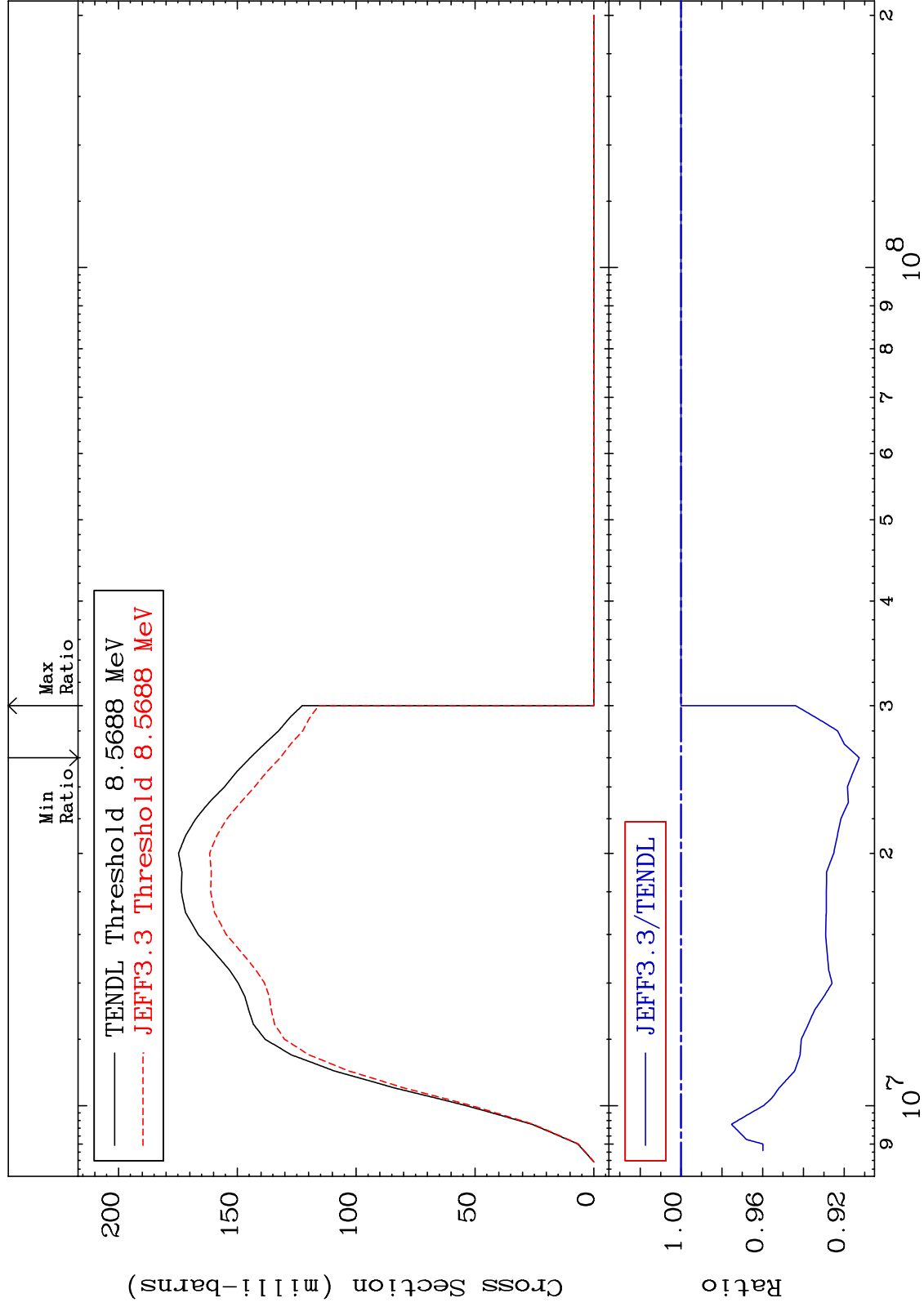
MAT 2028

(n,2n)

20-Ca-41

-8.738 To 0.000 %

Cross Section



5

Incident Energy (eV)

20-Ca-41

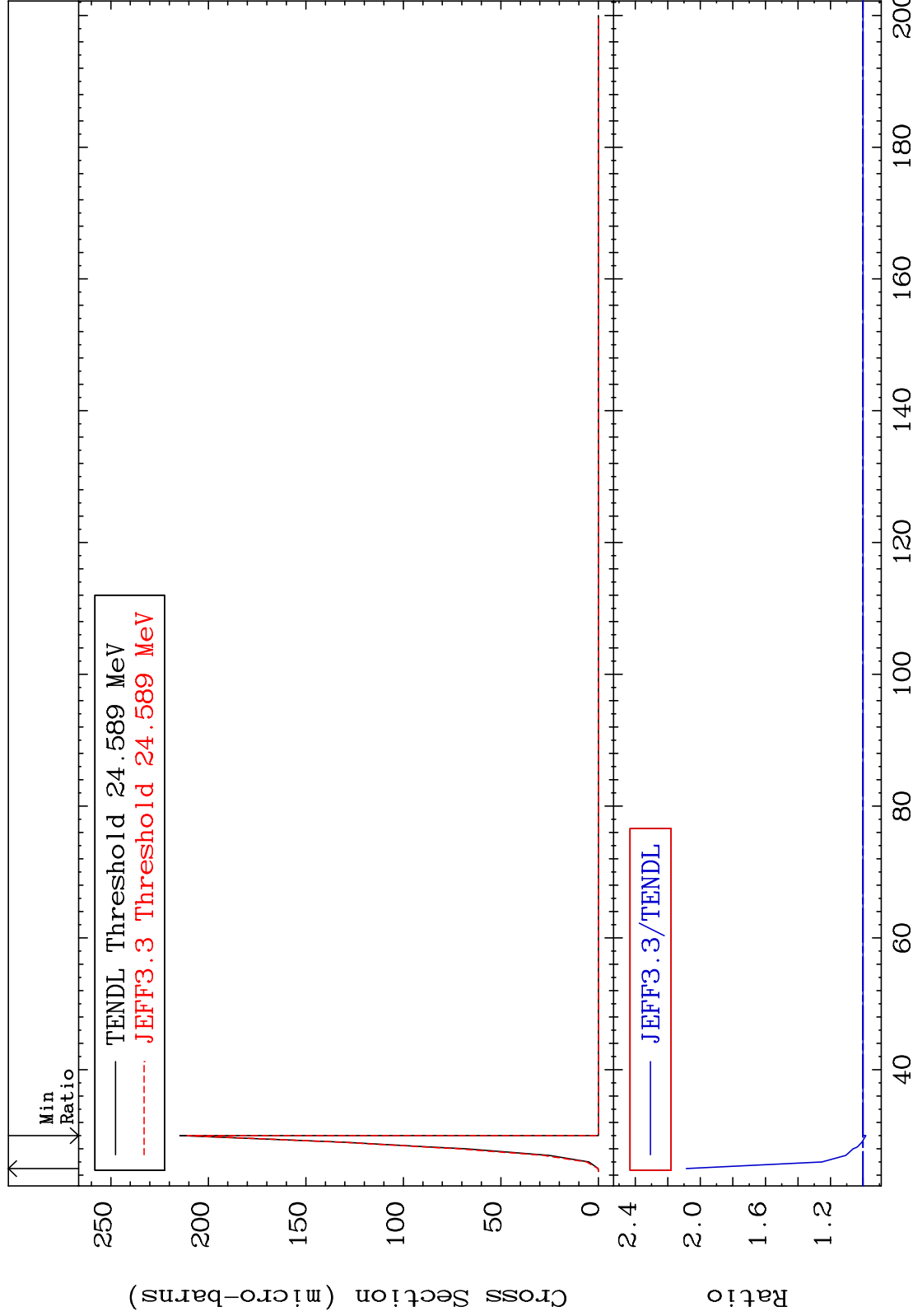
MAT 2028

(n,3n)

20-Ca-41

Cross Section

-1.727 To 108.6 %



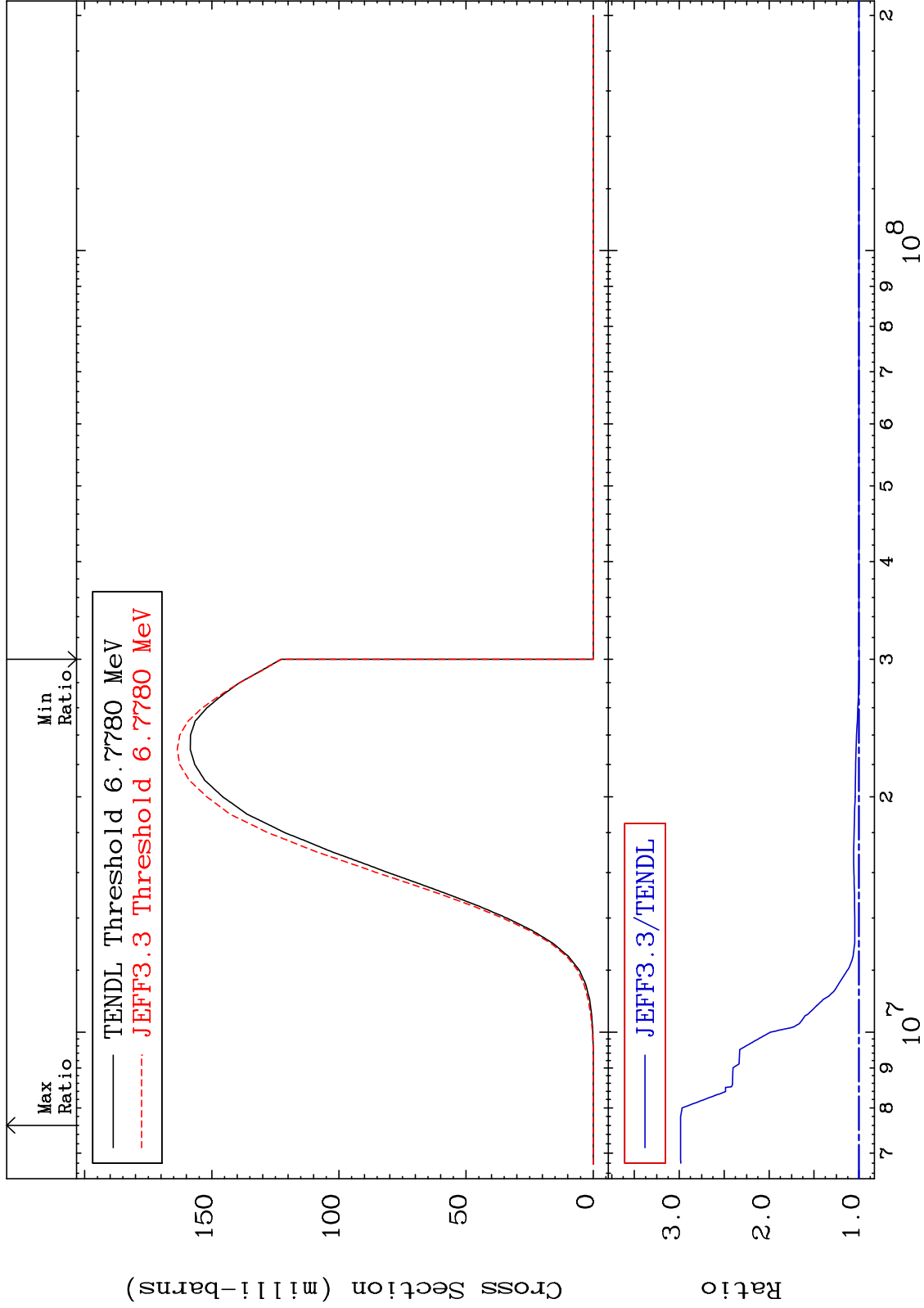
MAT 2028

(n, n')  $\alpha$

20-Ca-41

Cross Section

-0.219 To 198.5 %





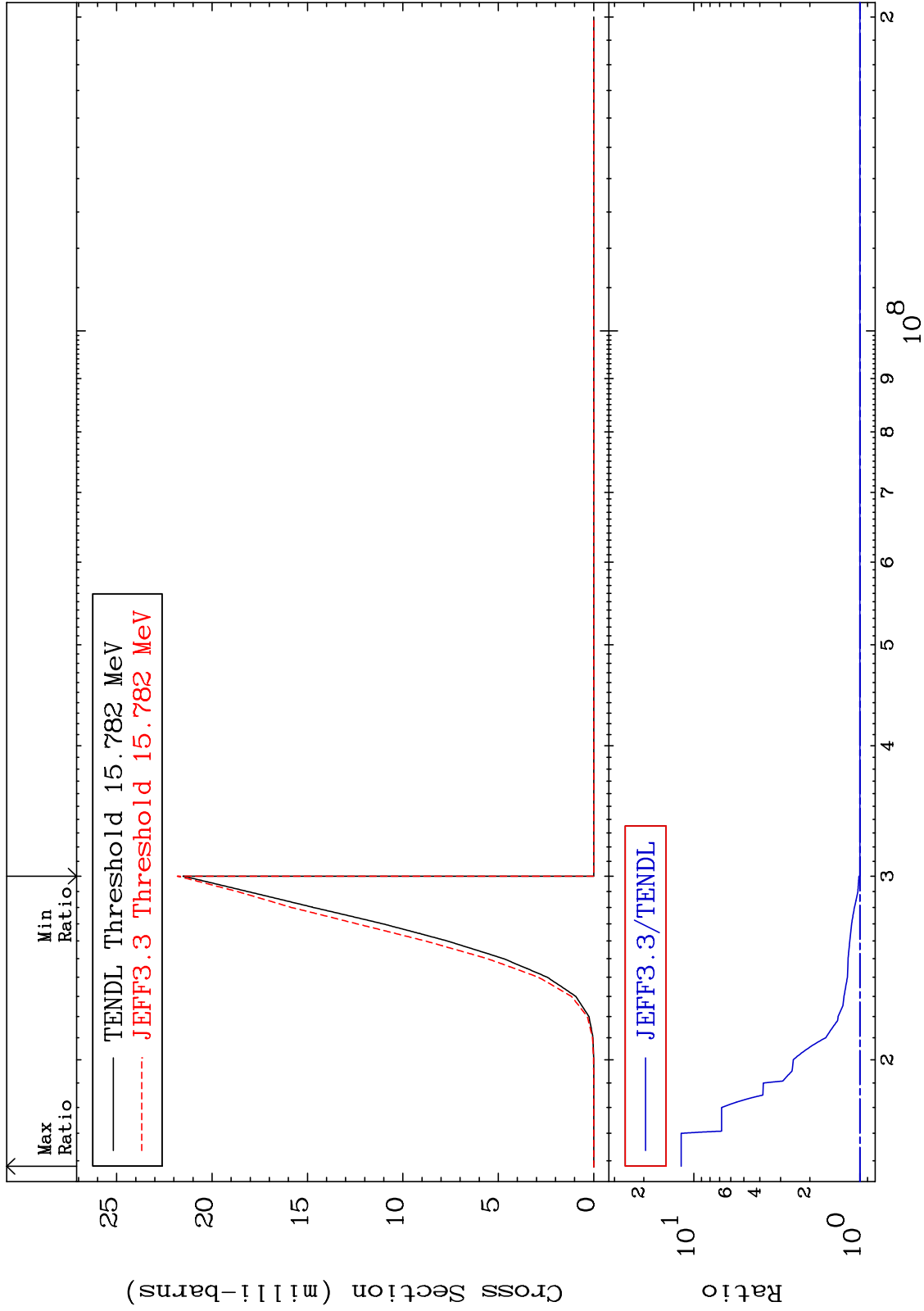
MAT 2028

(n,2n)  $\alpha$

20-Ca-41

Cross Section

0.000 To 1091. %



8

Incident Energy (eV)

20-Ca-41

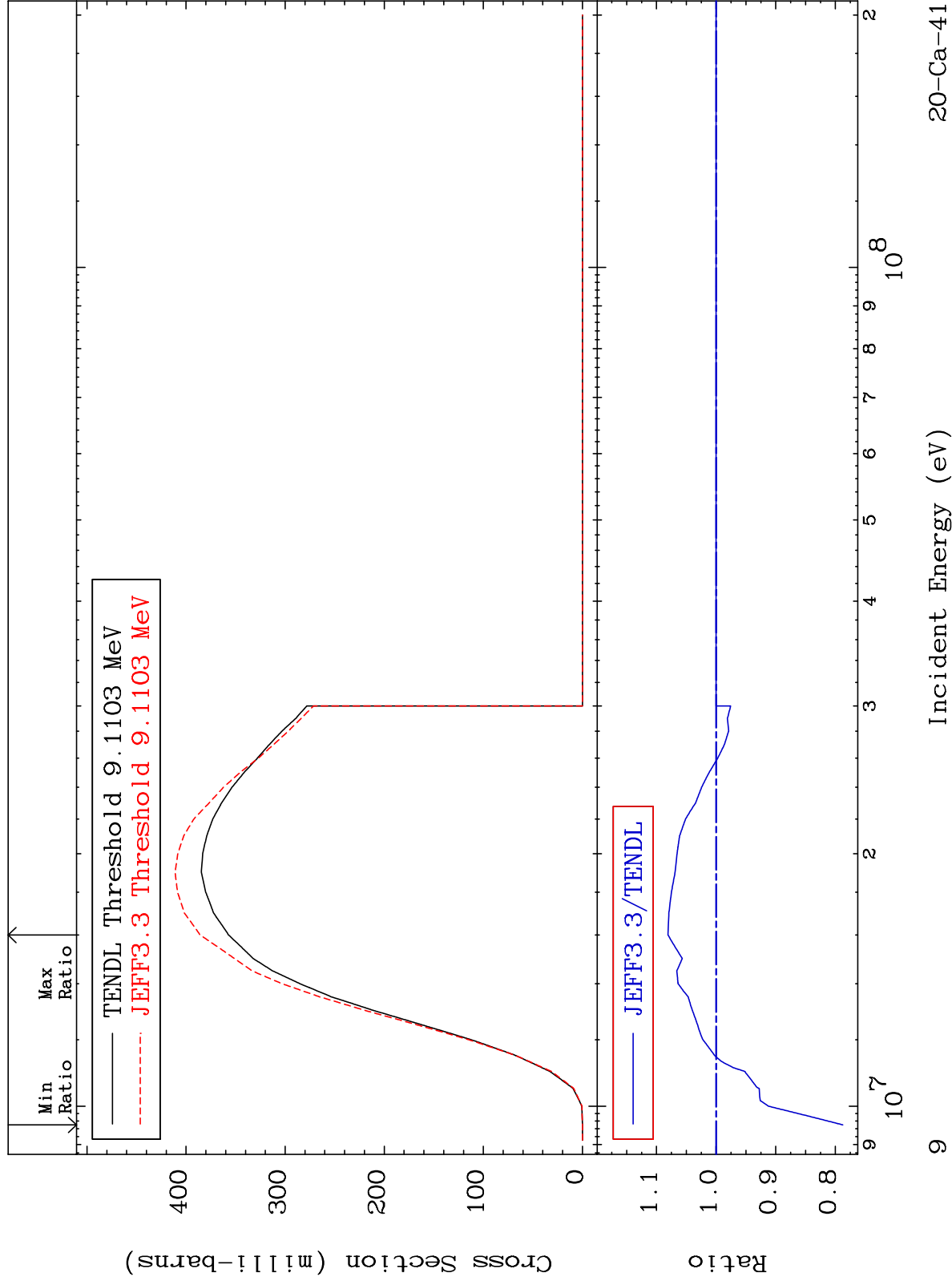
MAT 2028

(n,n') p

20-Ca-41

Cross Section

-21.25 To 8.067 %



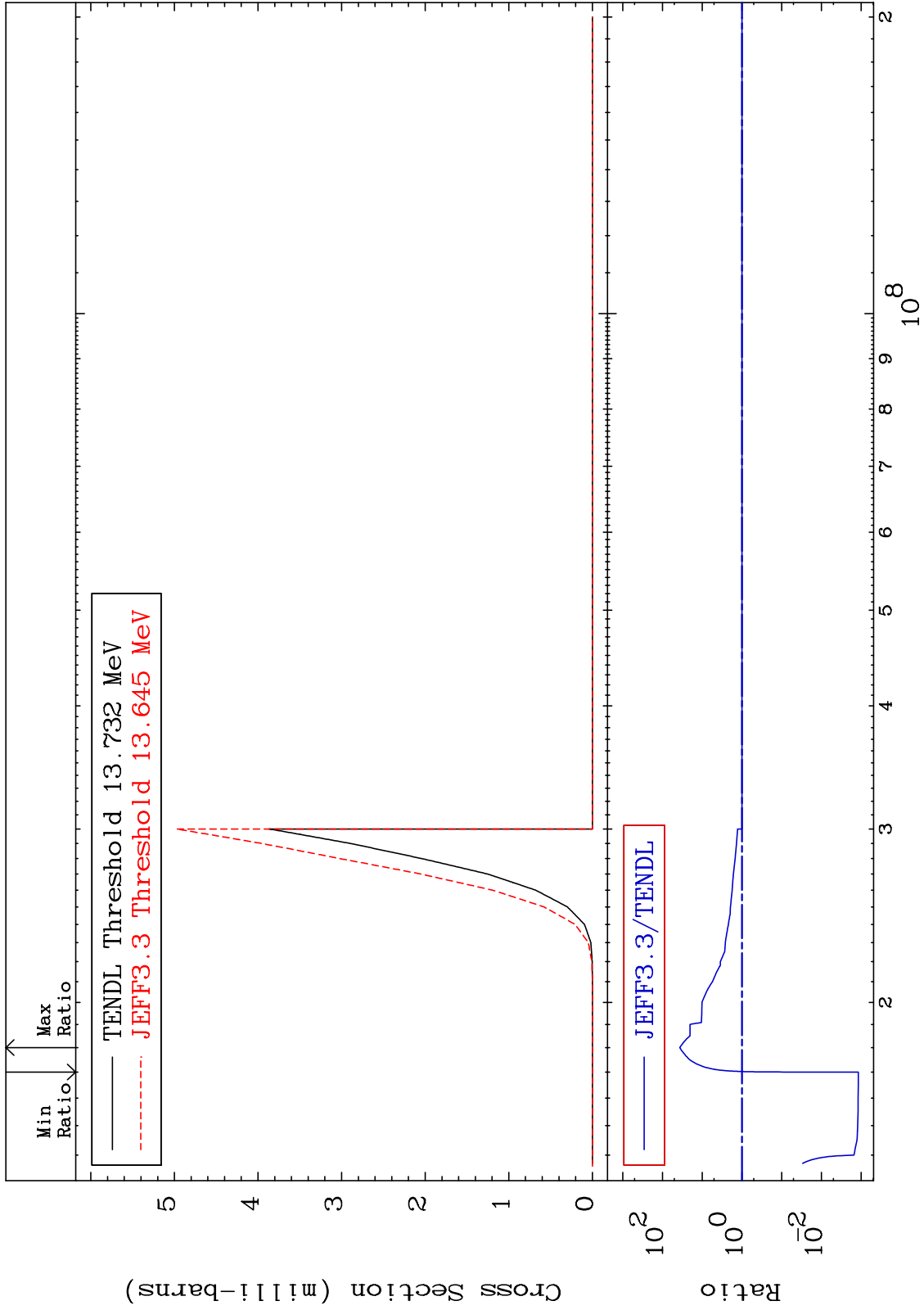
MAT 2028

(n,n')  $2\alpha$

20-Ca-41

Cross Section

-99.88 To 3548. %



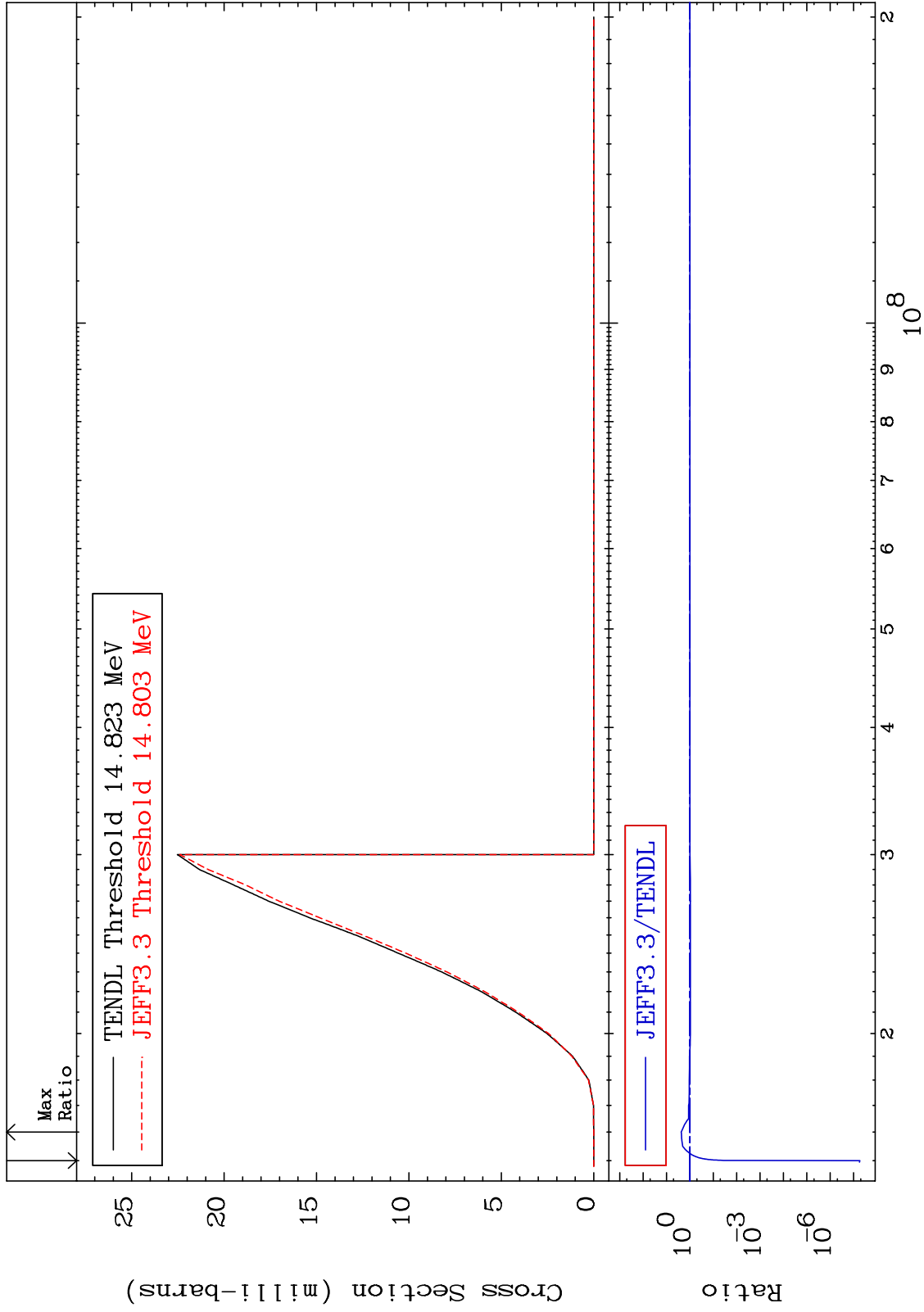
10

Incident Energy (eV)

20-Ca-41

Cross Section

-100.0 To 135.6 %



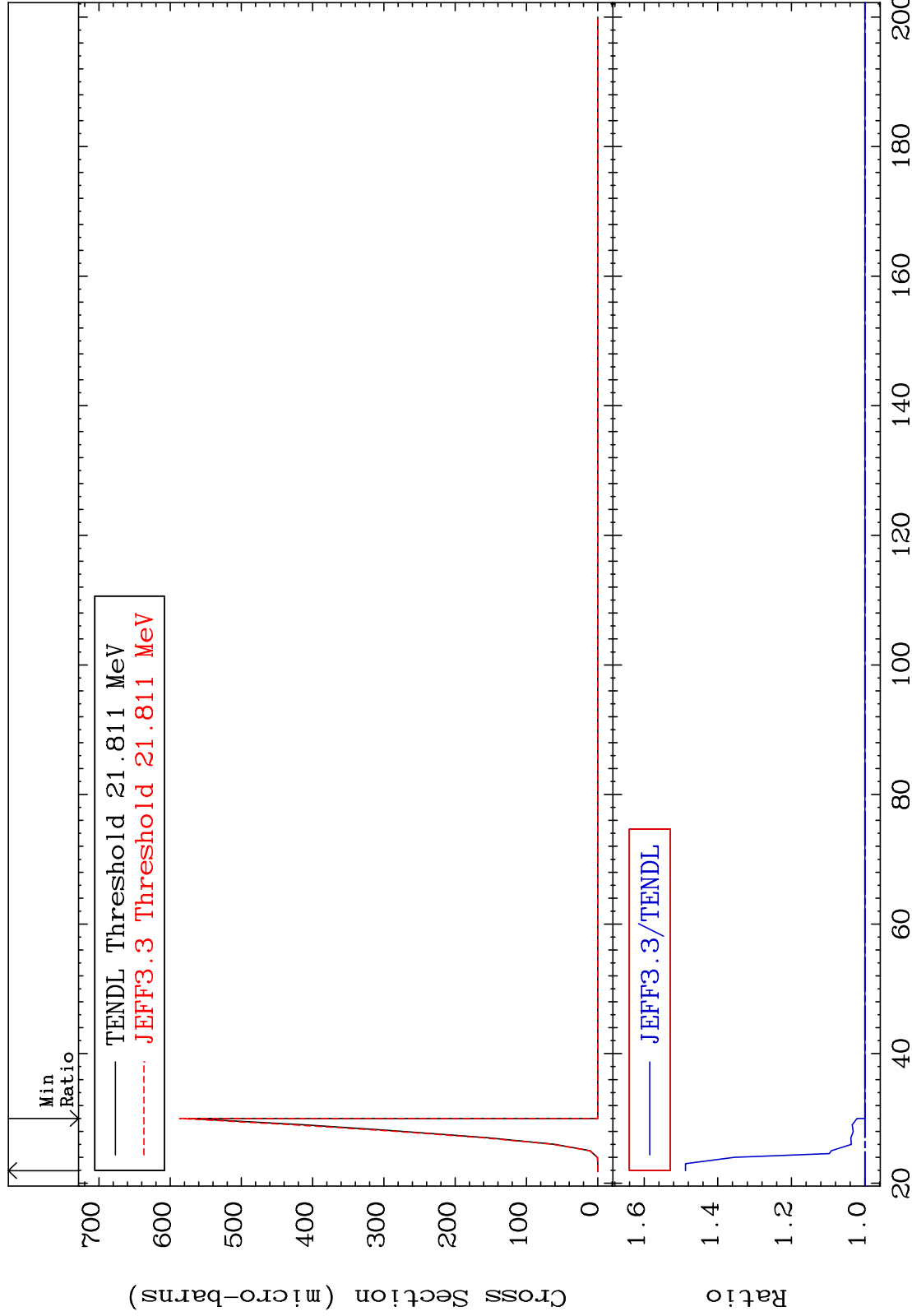
MAT 2028

(n,n') t

20-Ca-41

Cross Section

0.000 To 48.77 %



Incident Energy (MeV)

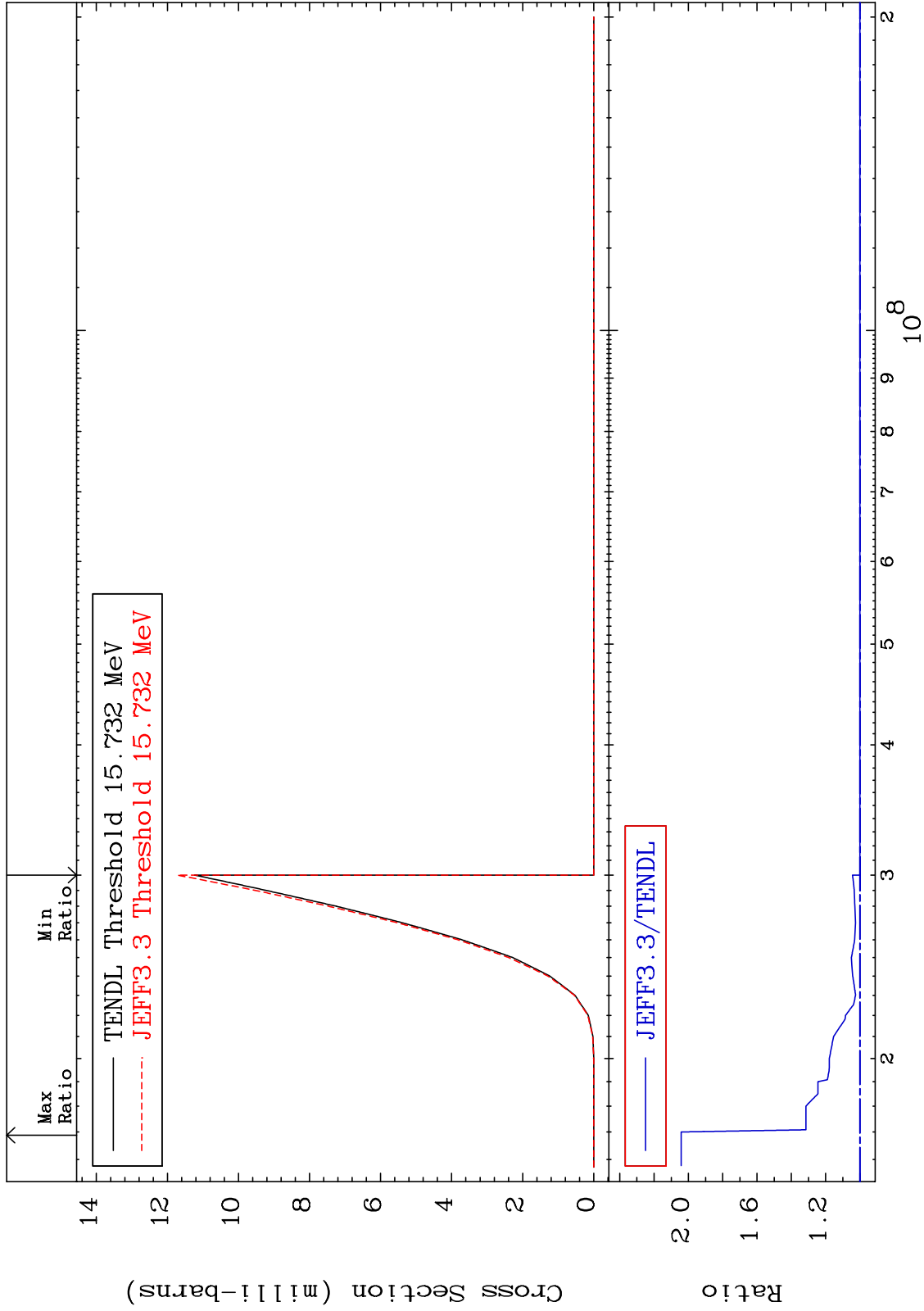
12

20-Ca-41

MAT 2028

(n,n') He-3  
Cross Section

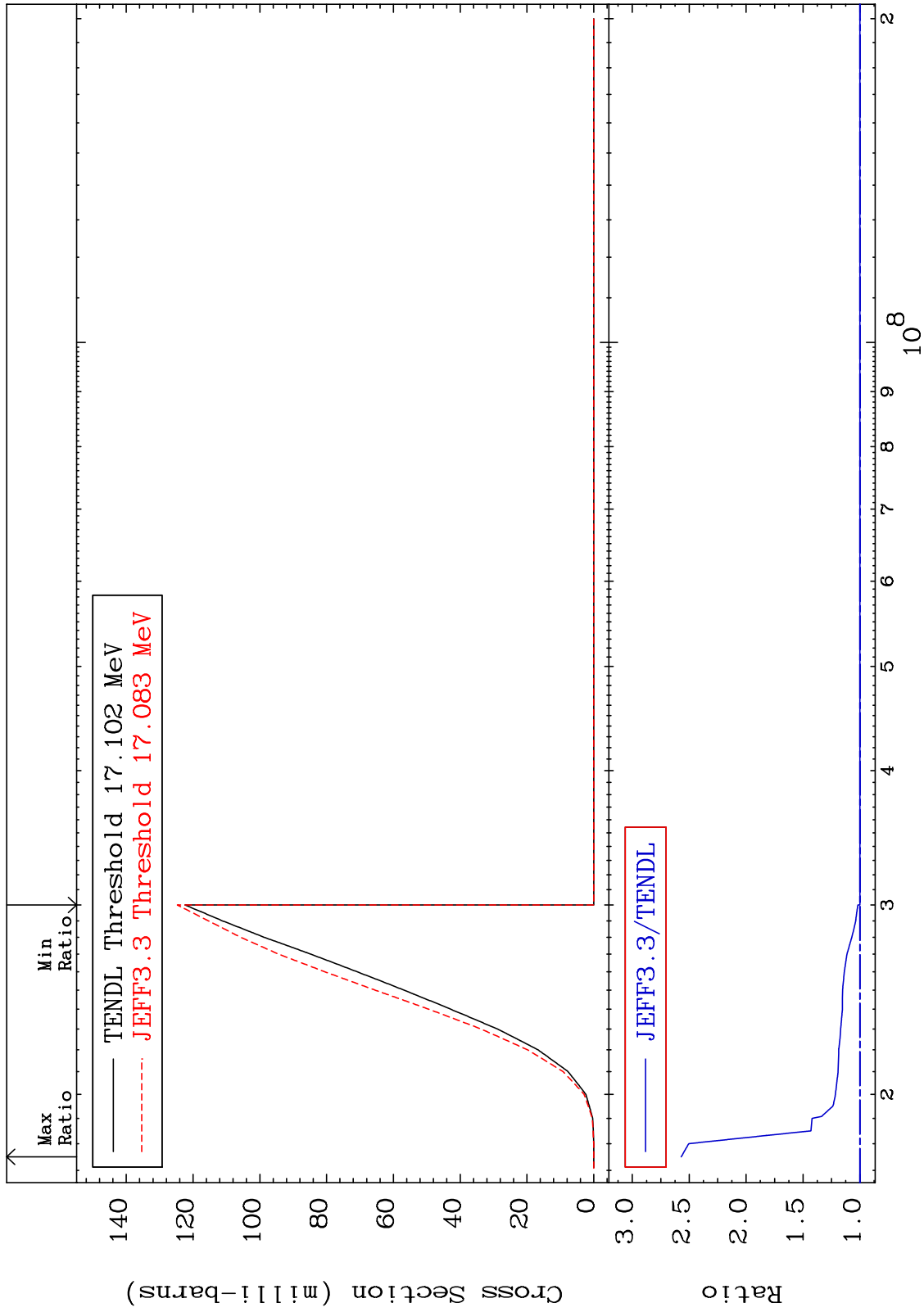
20-Ca-41  
0.000 To 104.2 %



MAT 2028

(n,2n) p  
Cross Section

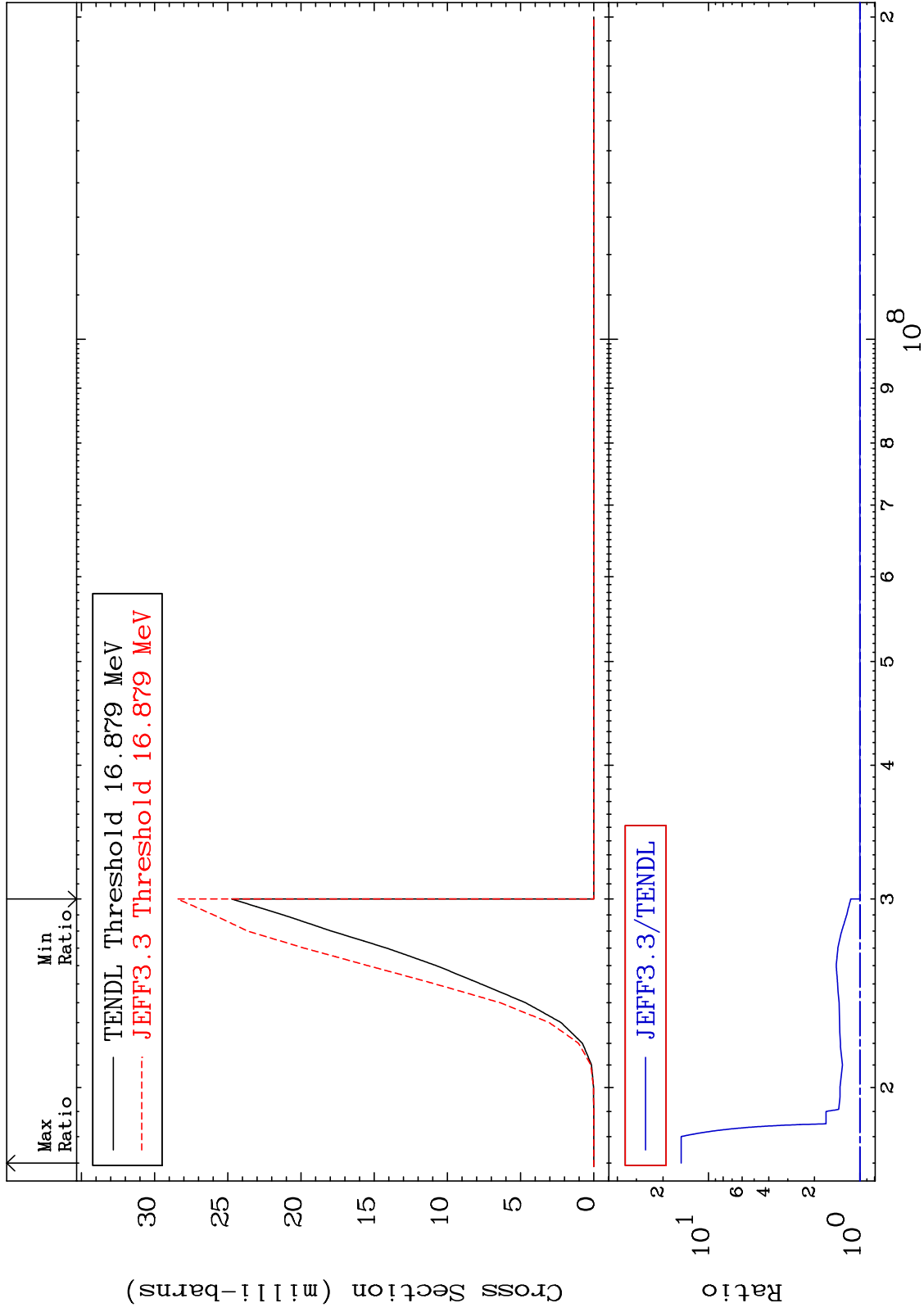
20-Ca-41  
0.000 To 157.0 %



MAT 2028

(n,2n) p  
Cross Section

20-Ca-41  
0.000 To 1414. %

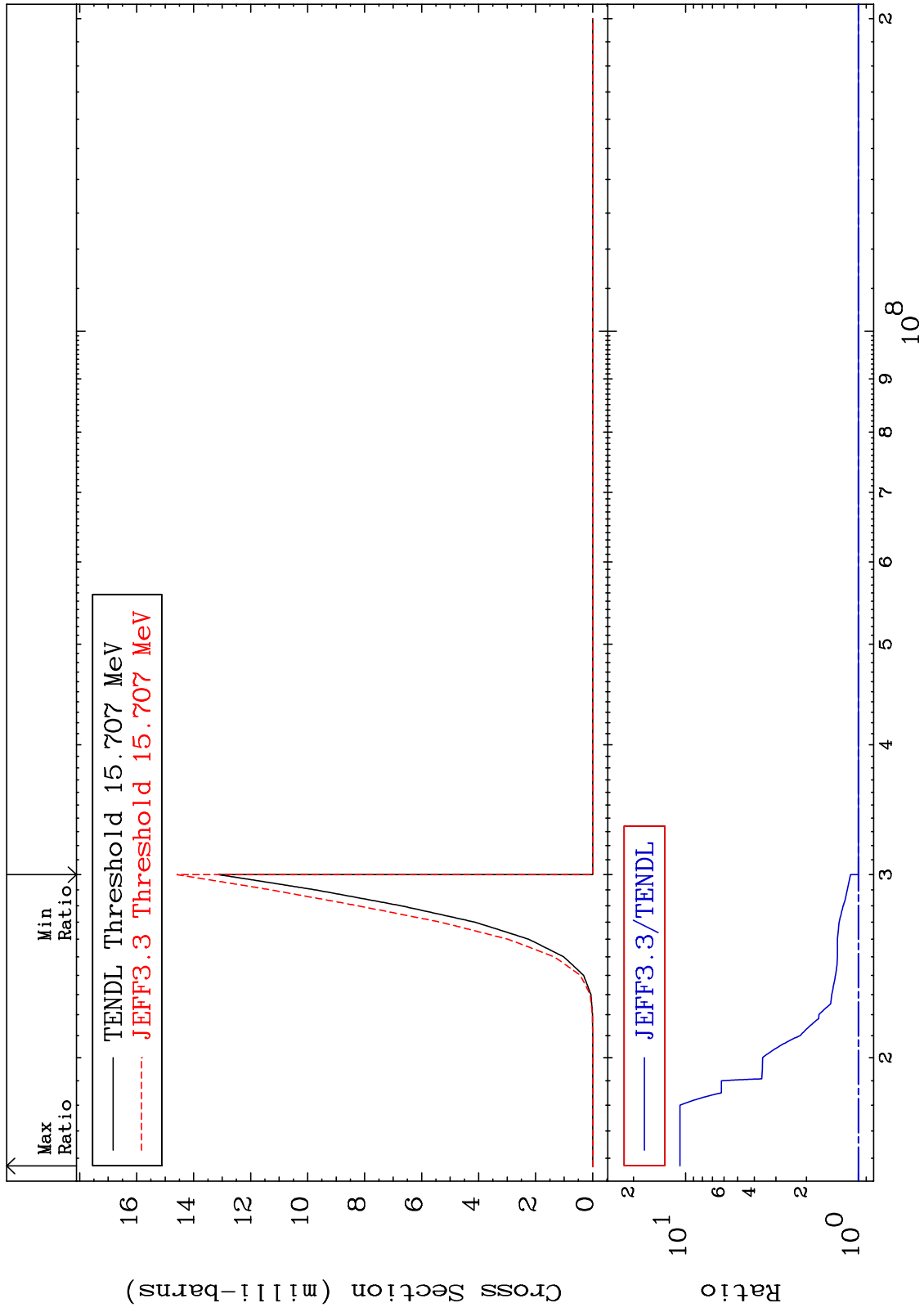




MAT 2028

(n,n') p  $\alpha$   
Cross Section

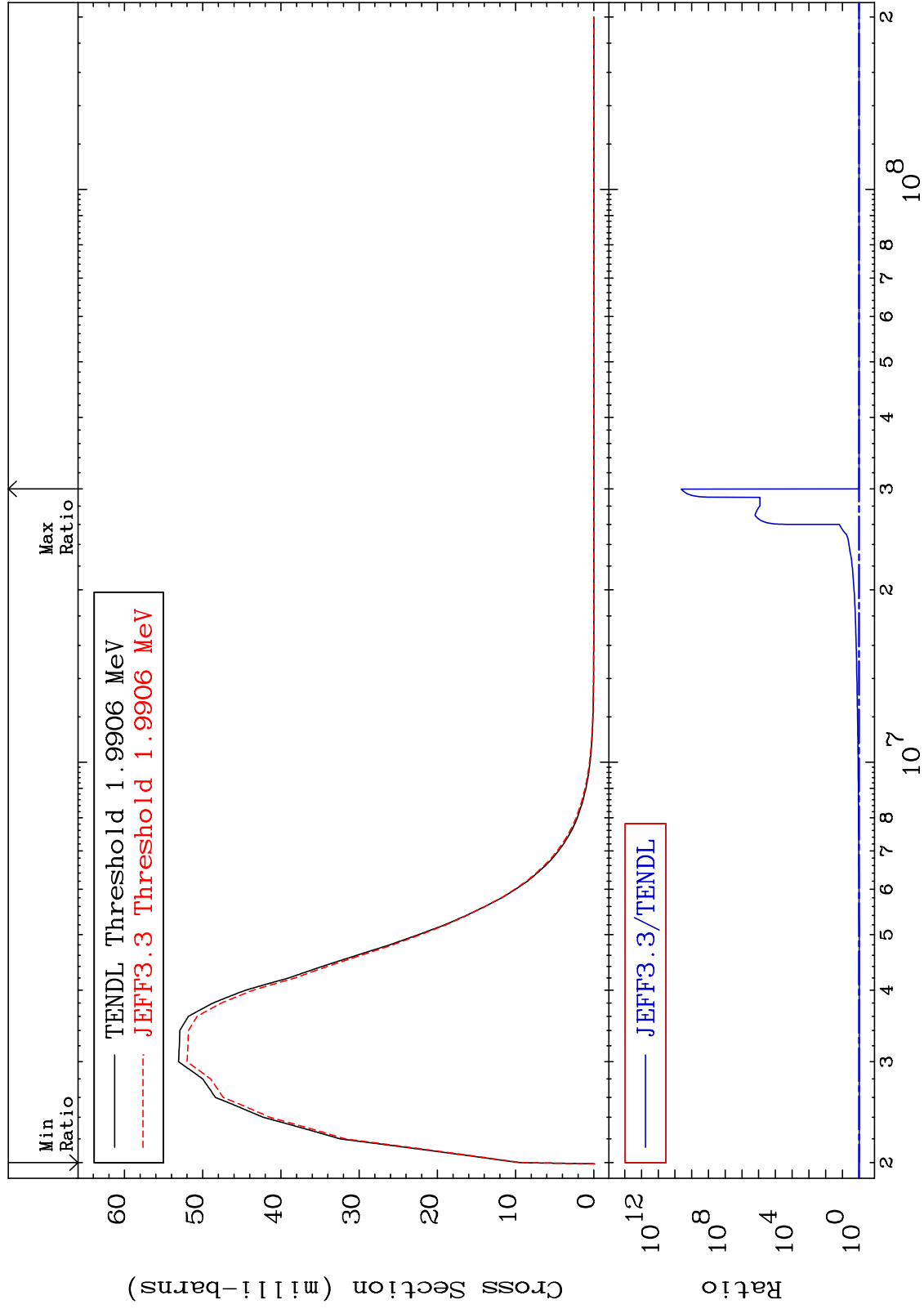
20-Ca-41  
0.000 To 977.0 %



MAT 2028

MT= 51 (n,n') Level  
Cross Section

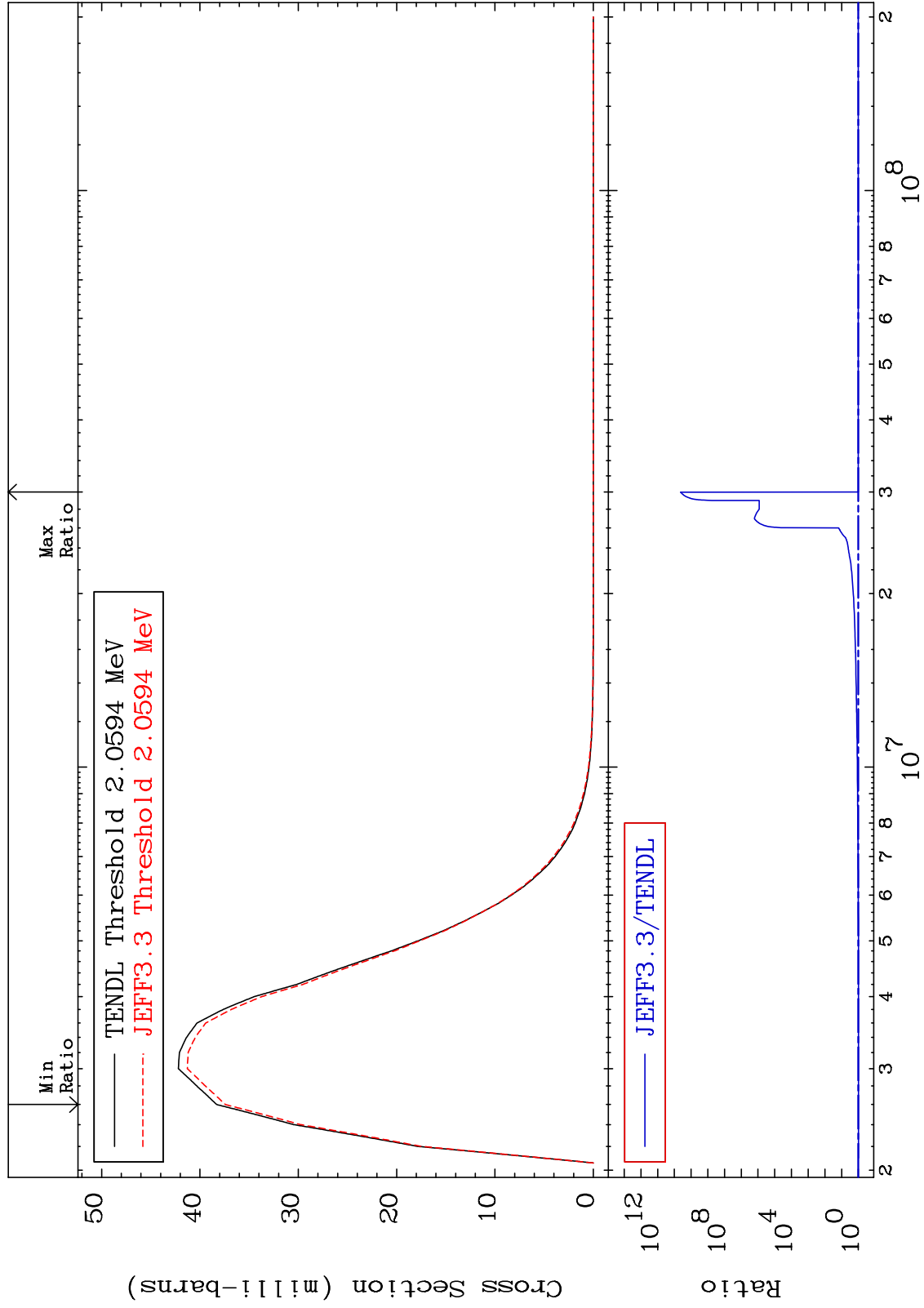
20-Ca-41  
-2.595 To 9999. %



MAT 2028

MT= 52 (n,n') Level  
Cross Section

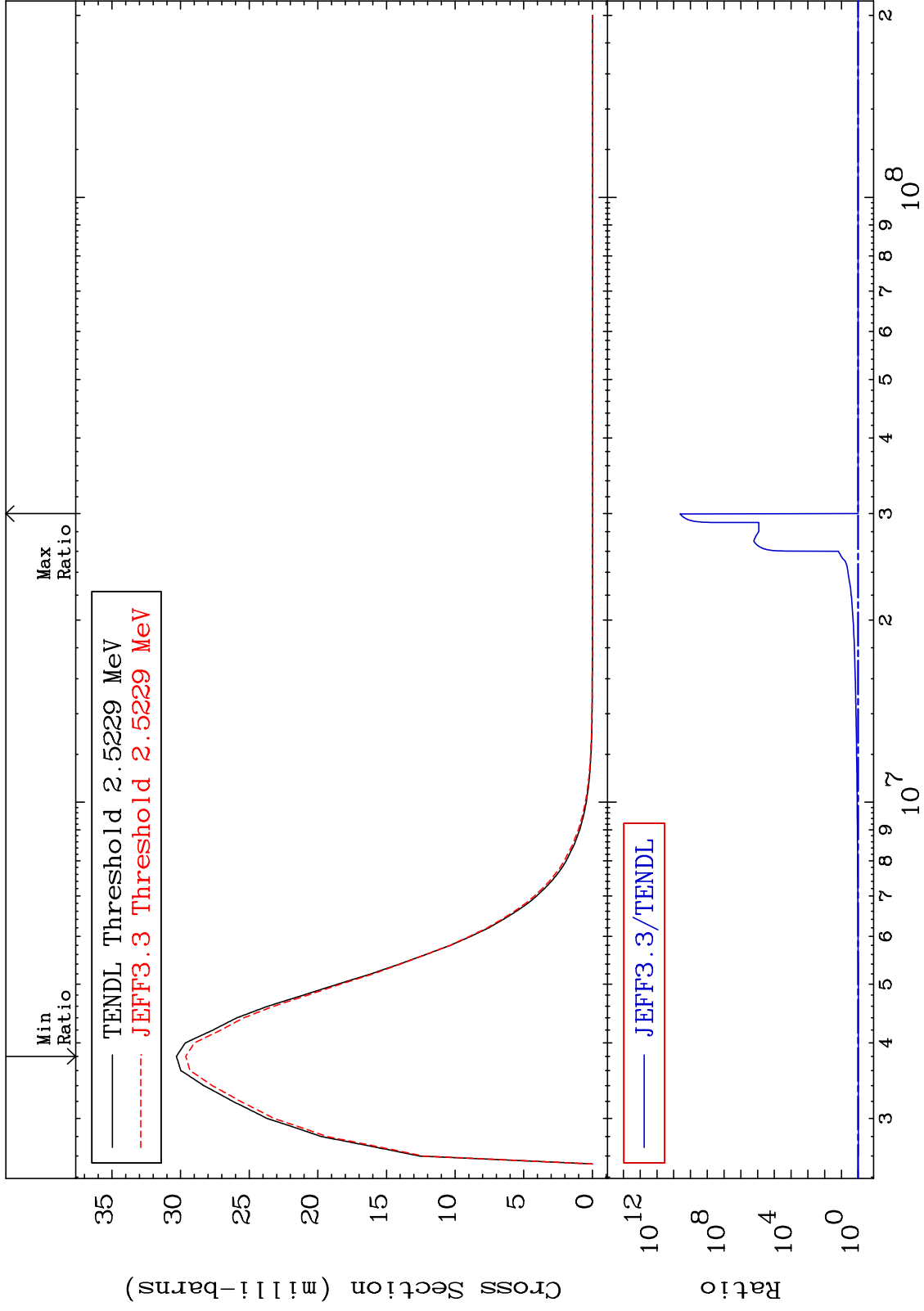
20-Ca-41  
-2.308 To 9999. %



MAT 2028

MT= 53 (n, n') Level  
Cross Section

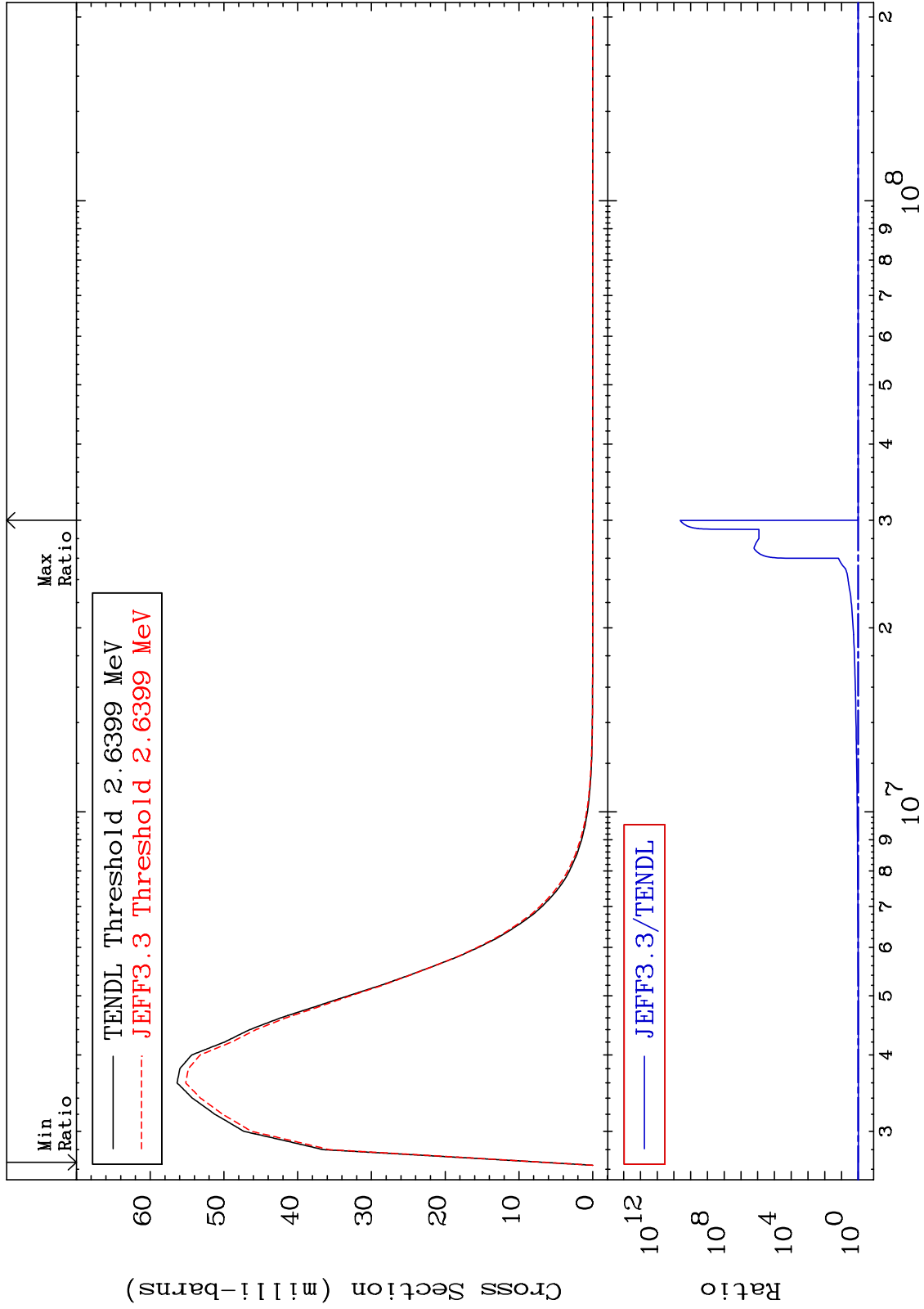
20-Ca-41  
-2.236 To 9999. %



MAT 2028

MT= 54 (n, n') Level  
Cross Section

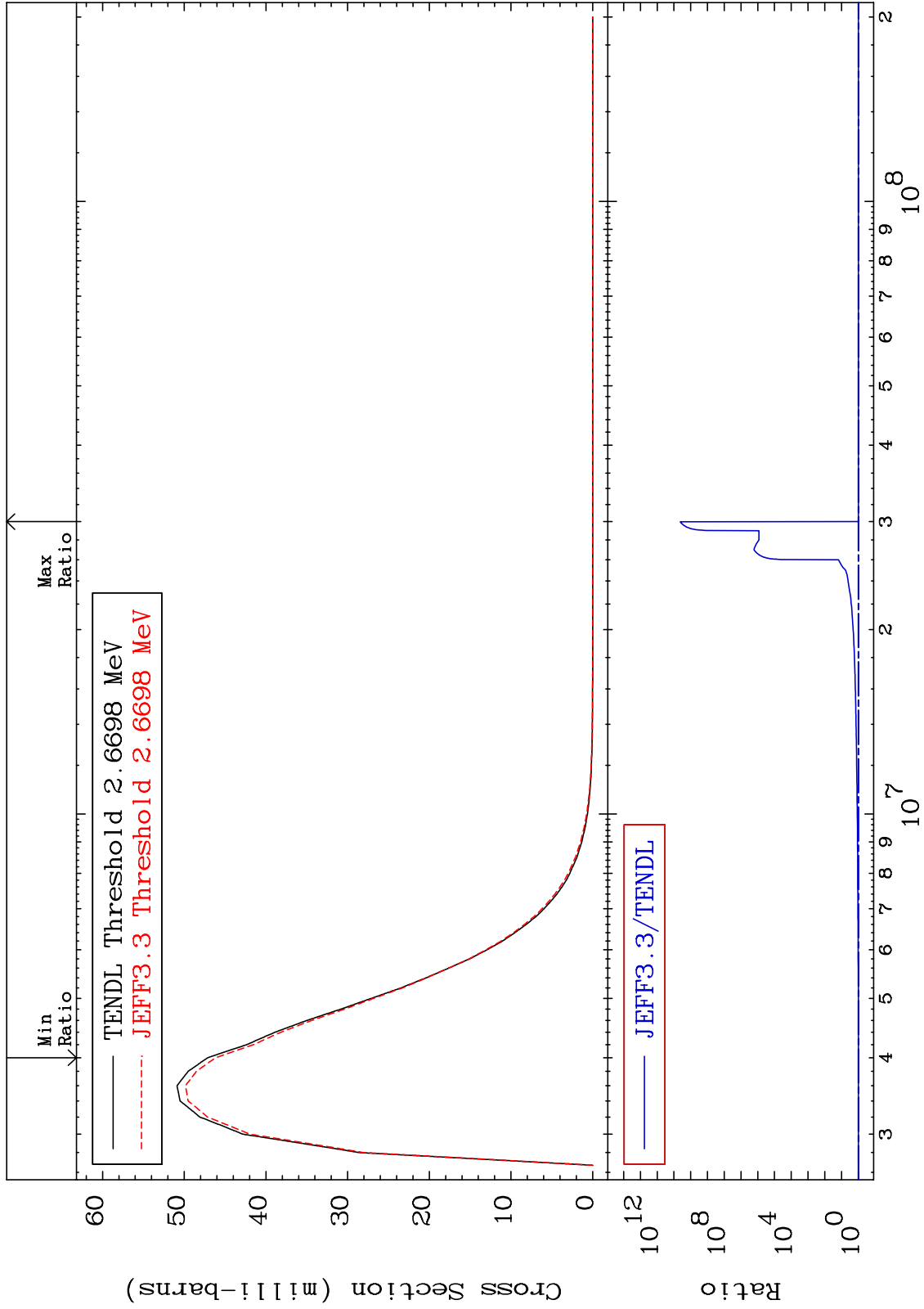
20-Ca-41  
-2.297 To 9999. %



MAT 2028

MT= 55 (n, n') Level  
Cross Section

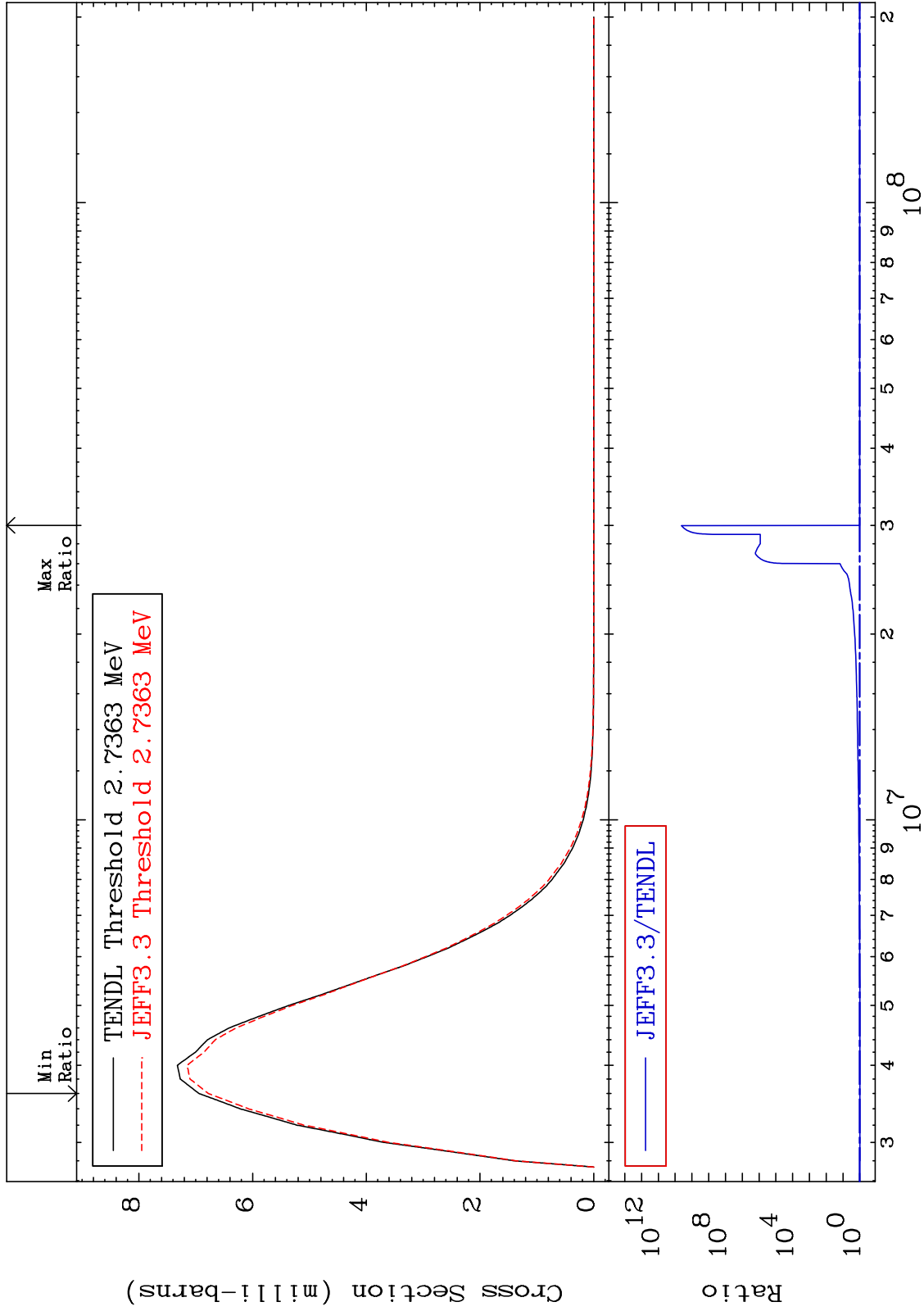
20-Ca-41  
-2.071 To 9999. %



MAT 2028

MT= 56 (n, n') Level  
Cross Section

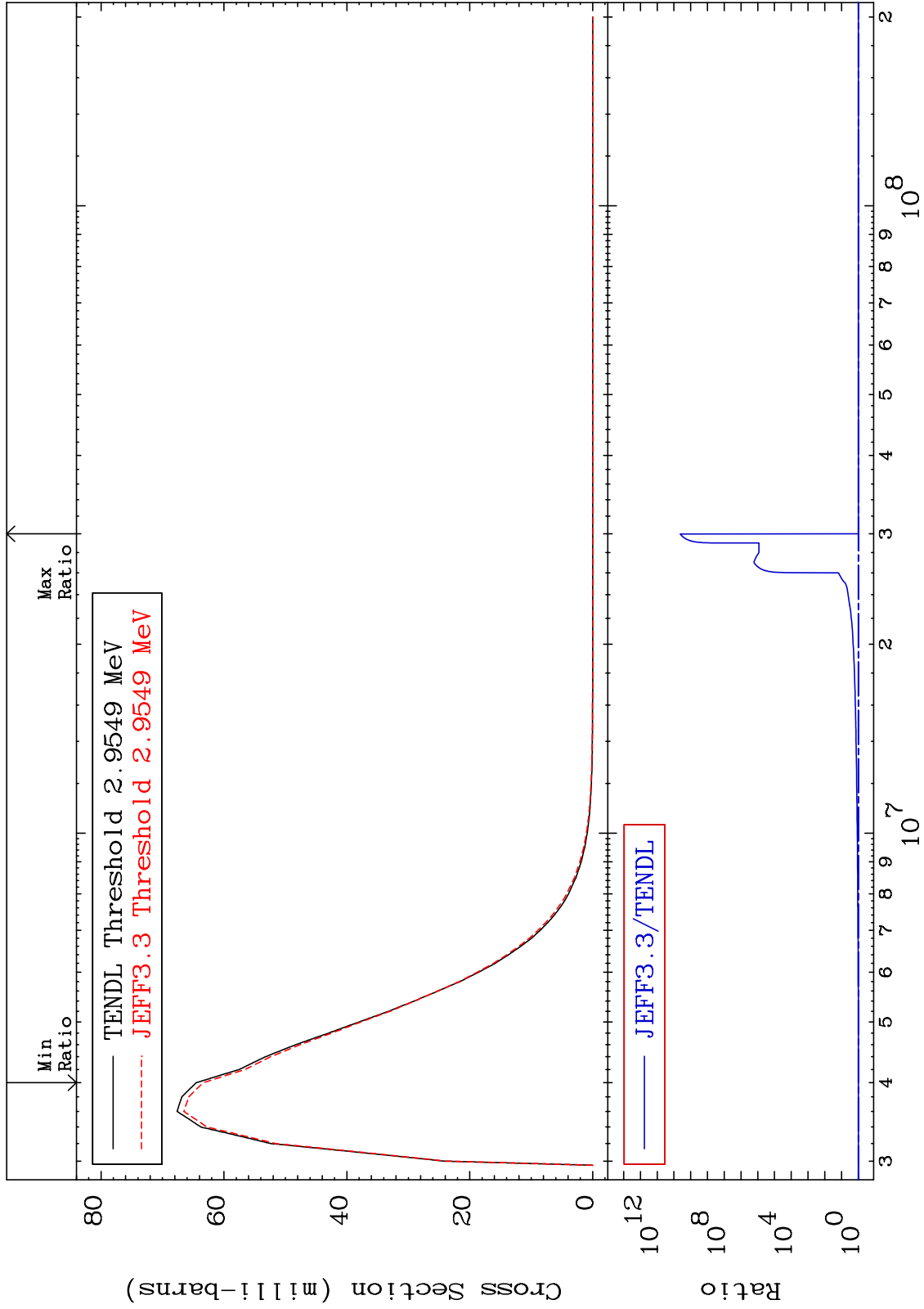
20-Ca-41  
-2.384 To 9999. %



MAT 2028

MT= 57 (n, n') Level  
Cross Section

20-Ca-41  
-1.758 To 9999. %

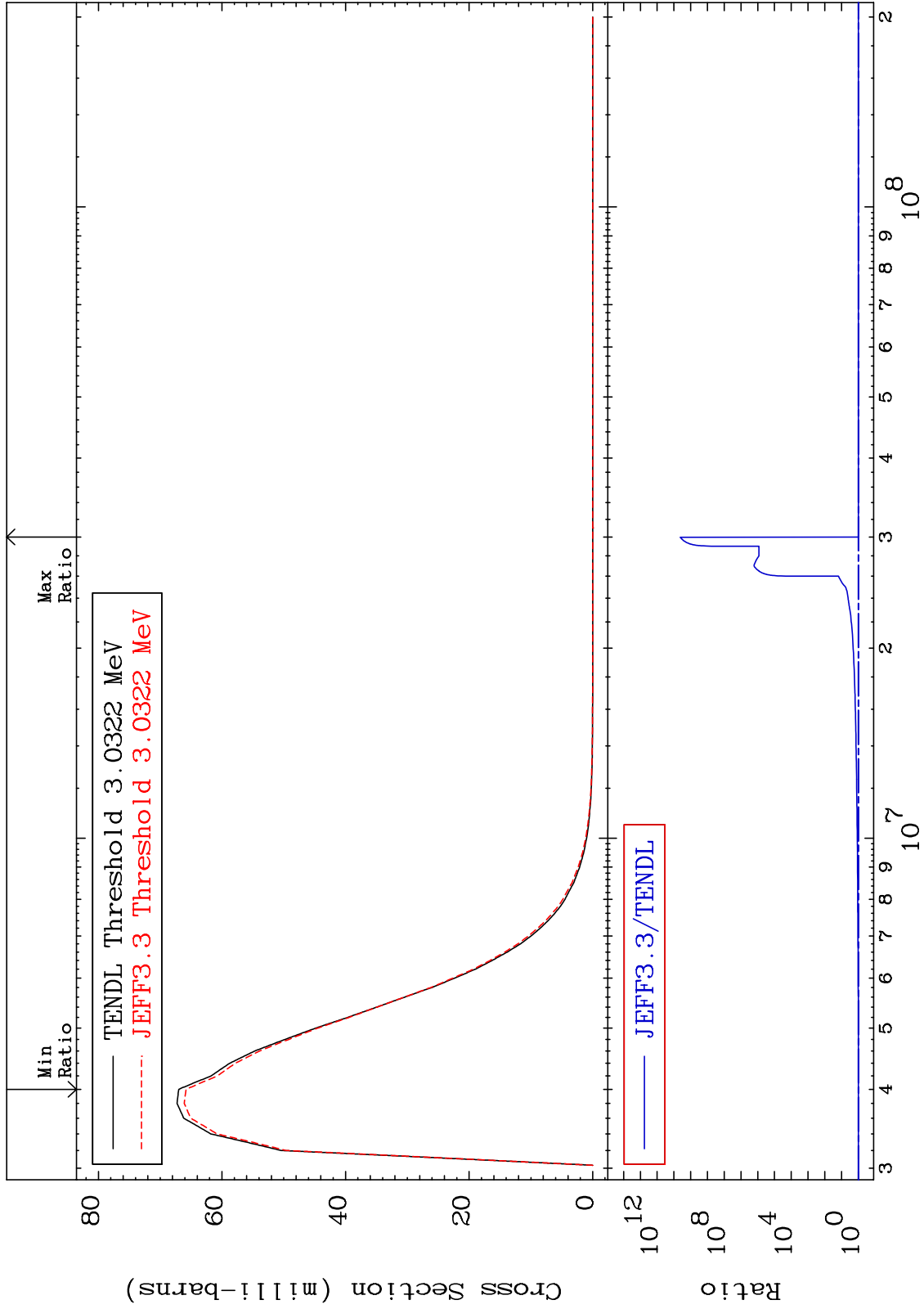




MAT 2028

MT= 58 (n, n') Level  
Cross Section

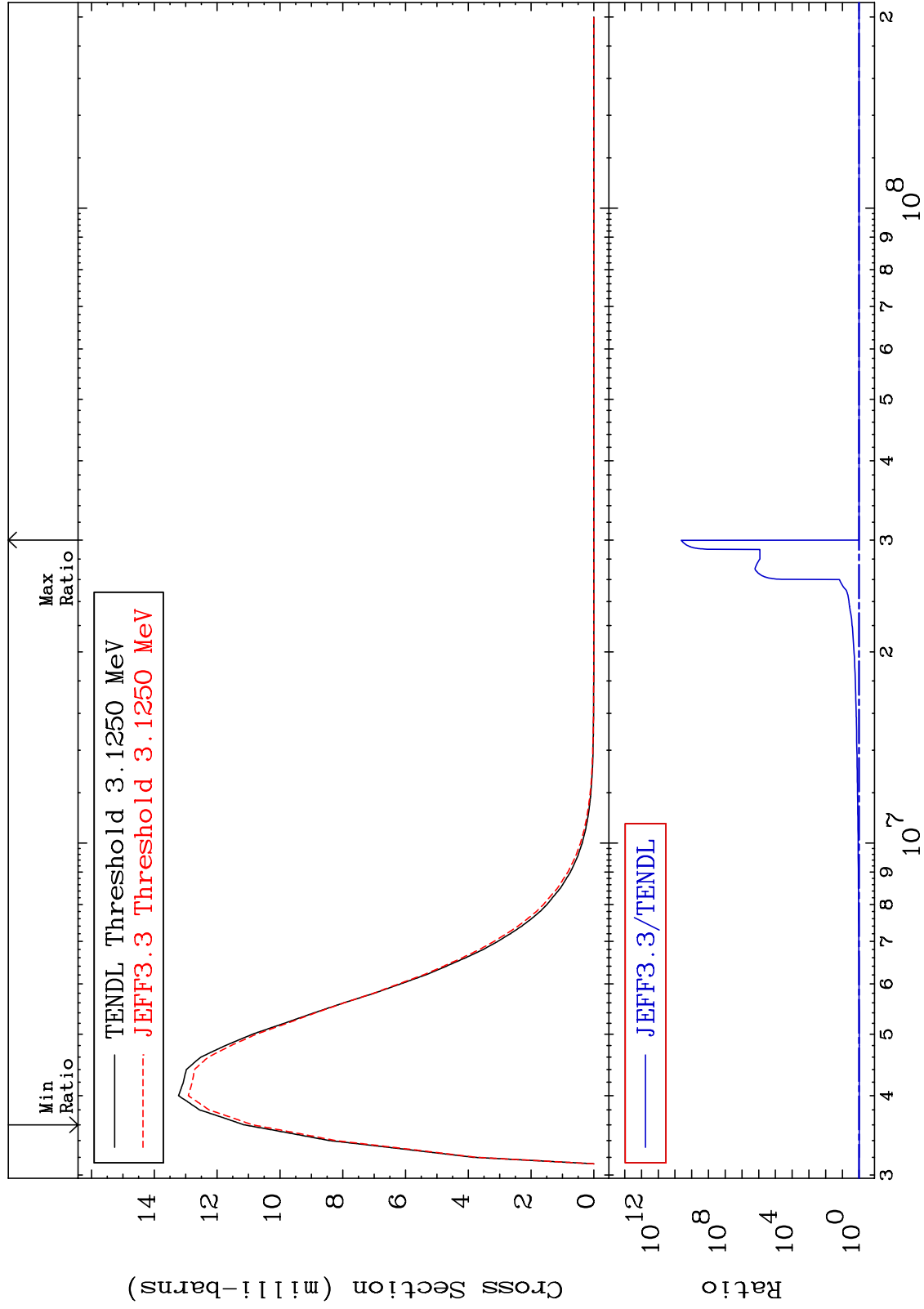
20-Ca-41  
-1.776 To 9999. %



MAT 2028

MT= 59 (n, n') Level  
Cross Section

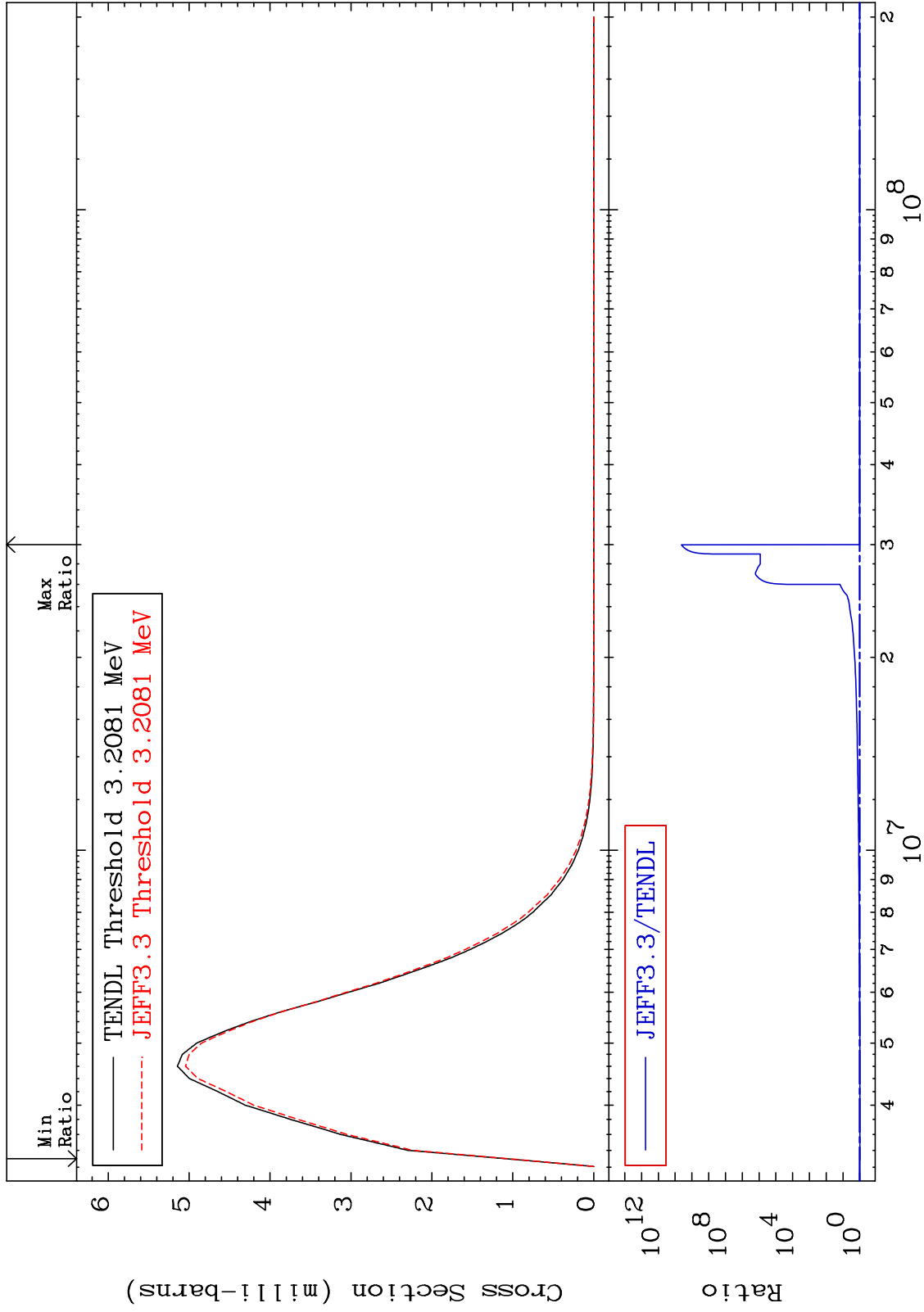
20-Ca-41  
-2.404 To 9999. %



MAT 2028

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

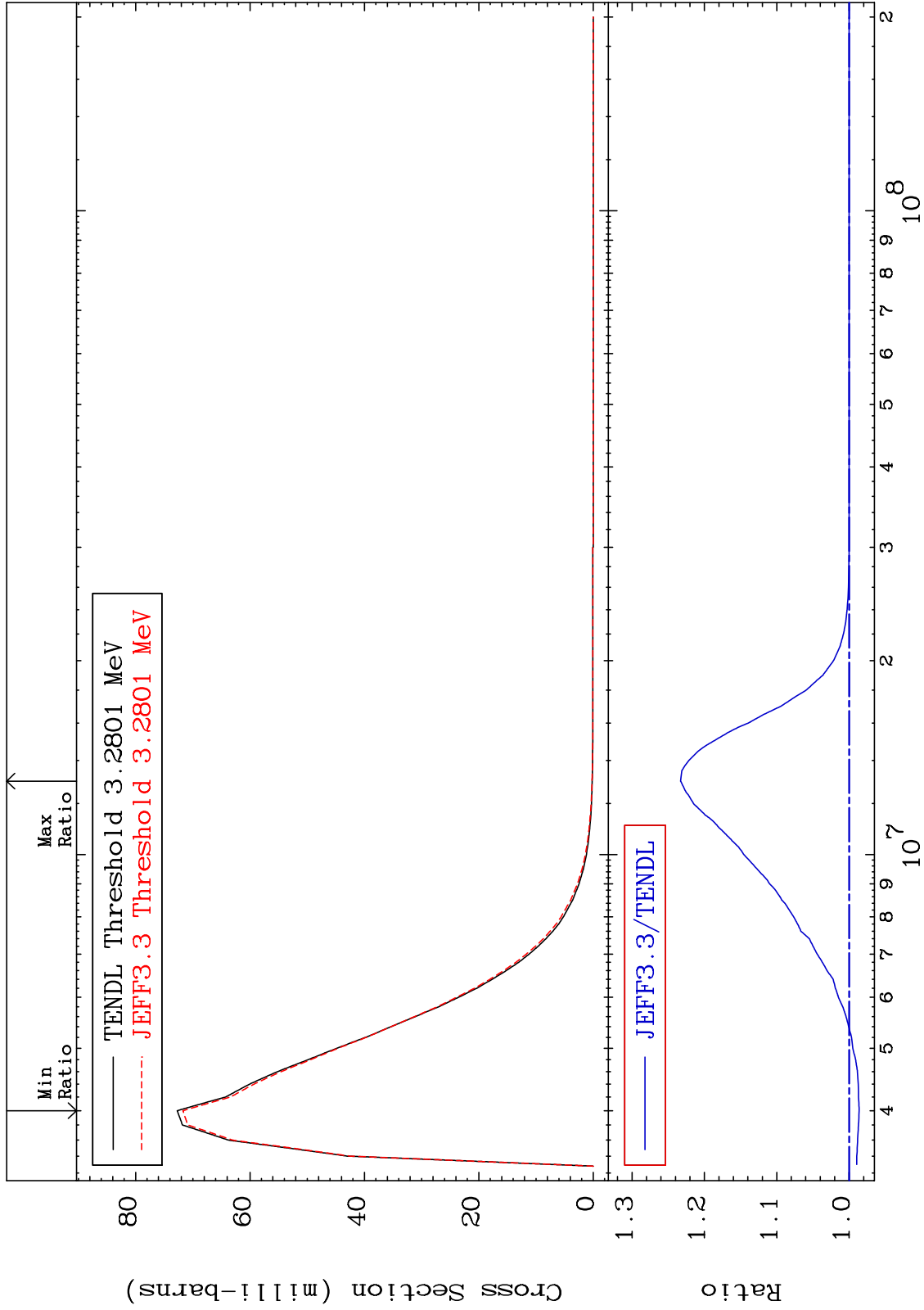
20-Ca-41  
-2.472 To 9999. %



MAT 2028

MT= 61 (n,n') Level  
Cross Section

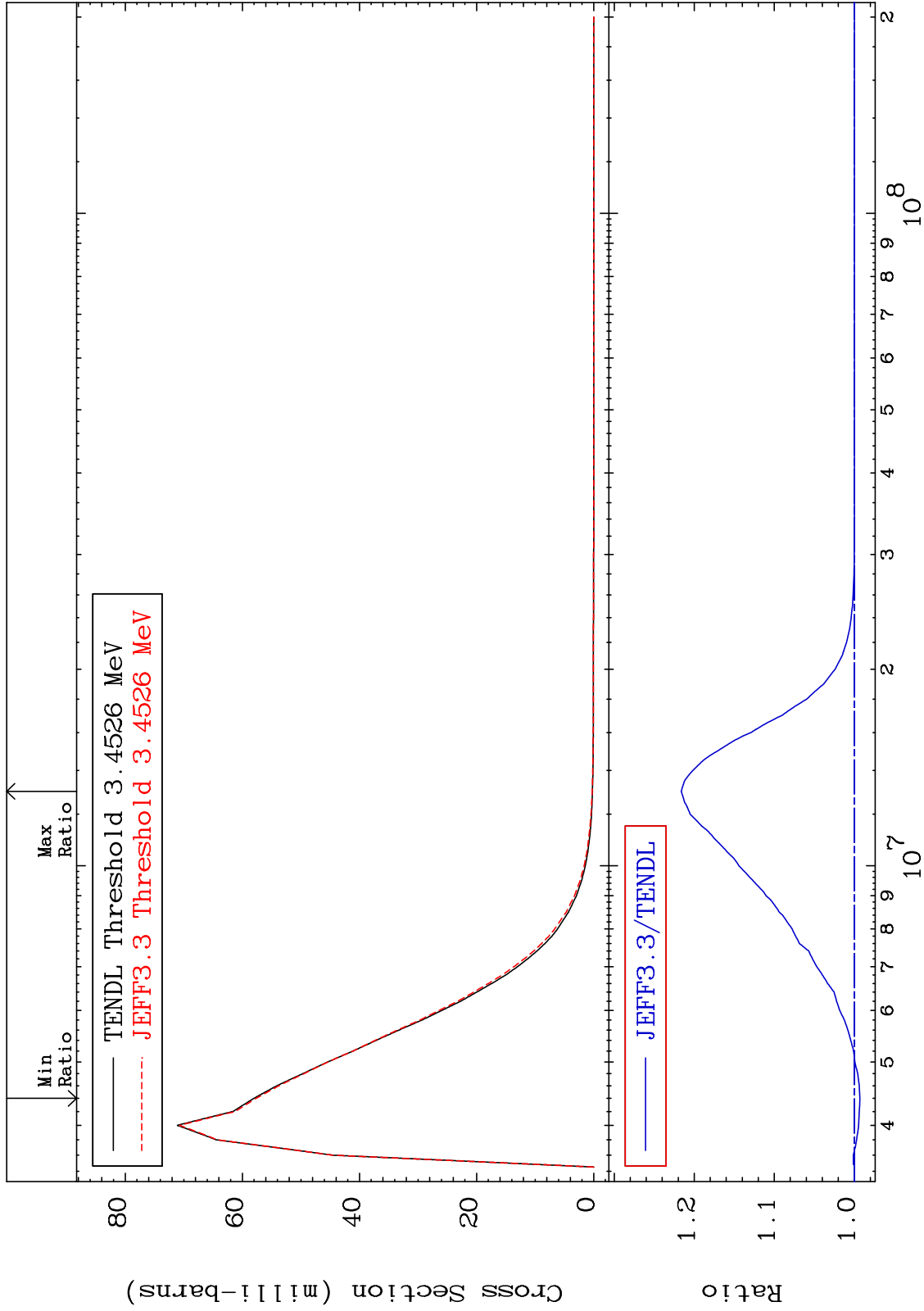
20-Ca-41  
-1.383 To 23.29 %



MAT 2028

MT= 62 (n,n') Level  
Cross Section

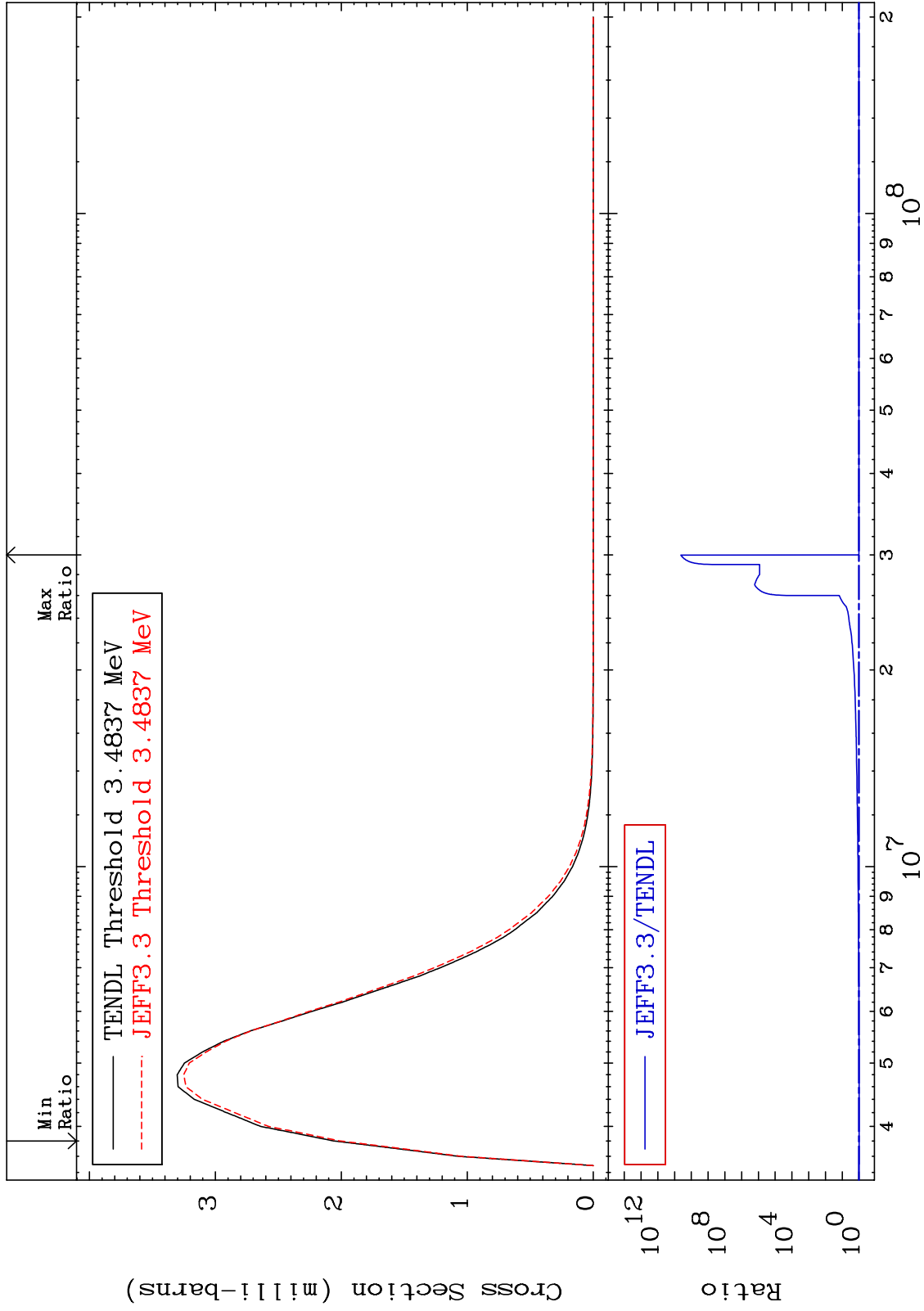
20-Ca-41  
-0.701 To 21.63 %



MAT 2028

MT= 63 (n, n') Level  
Cross Section

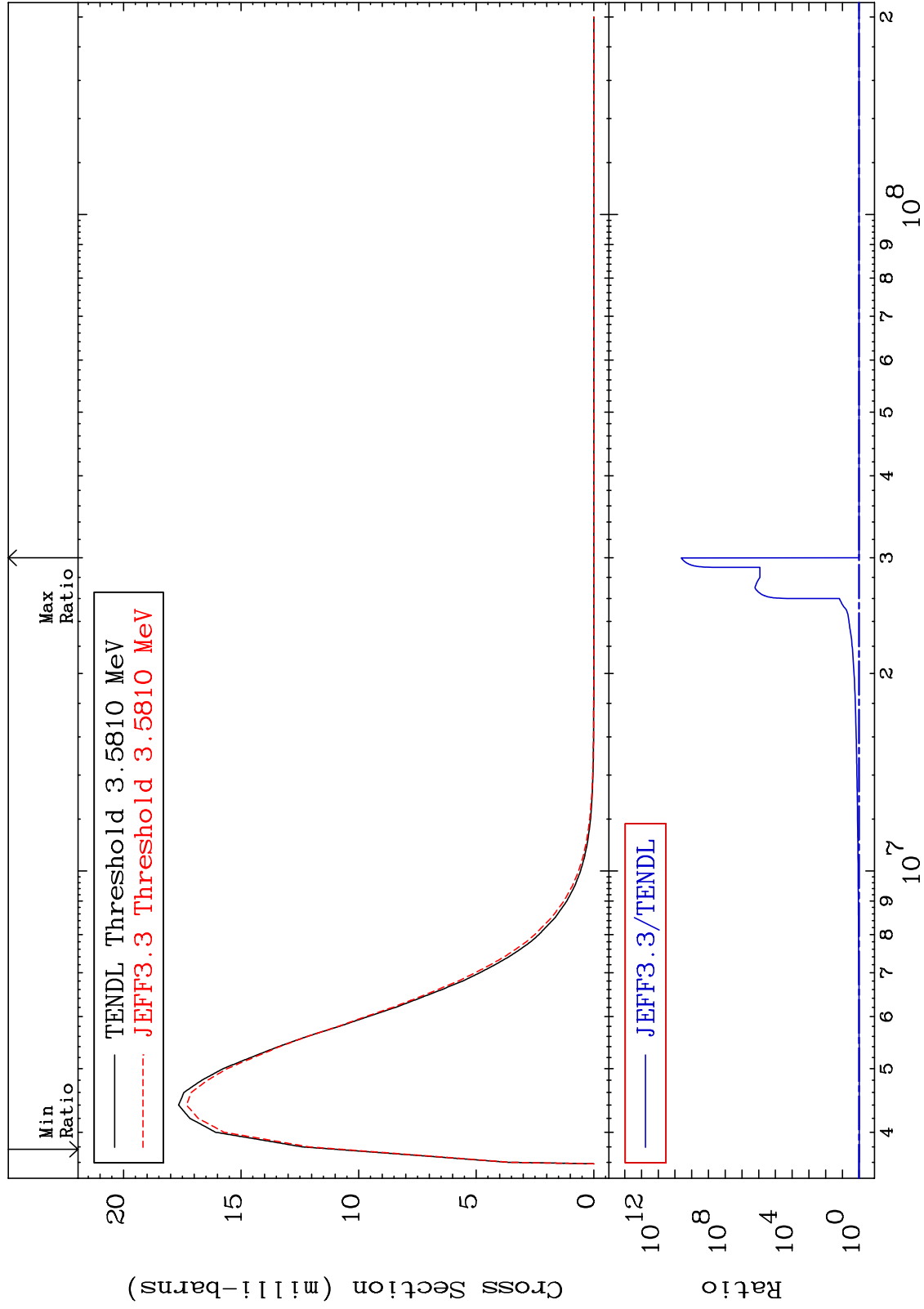
20-Ca-41  
-2.390 To 9999. %



MAT 2028

MT= 64 (n,n') Level  
Cross Section

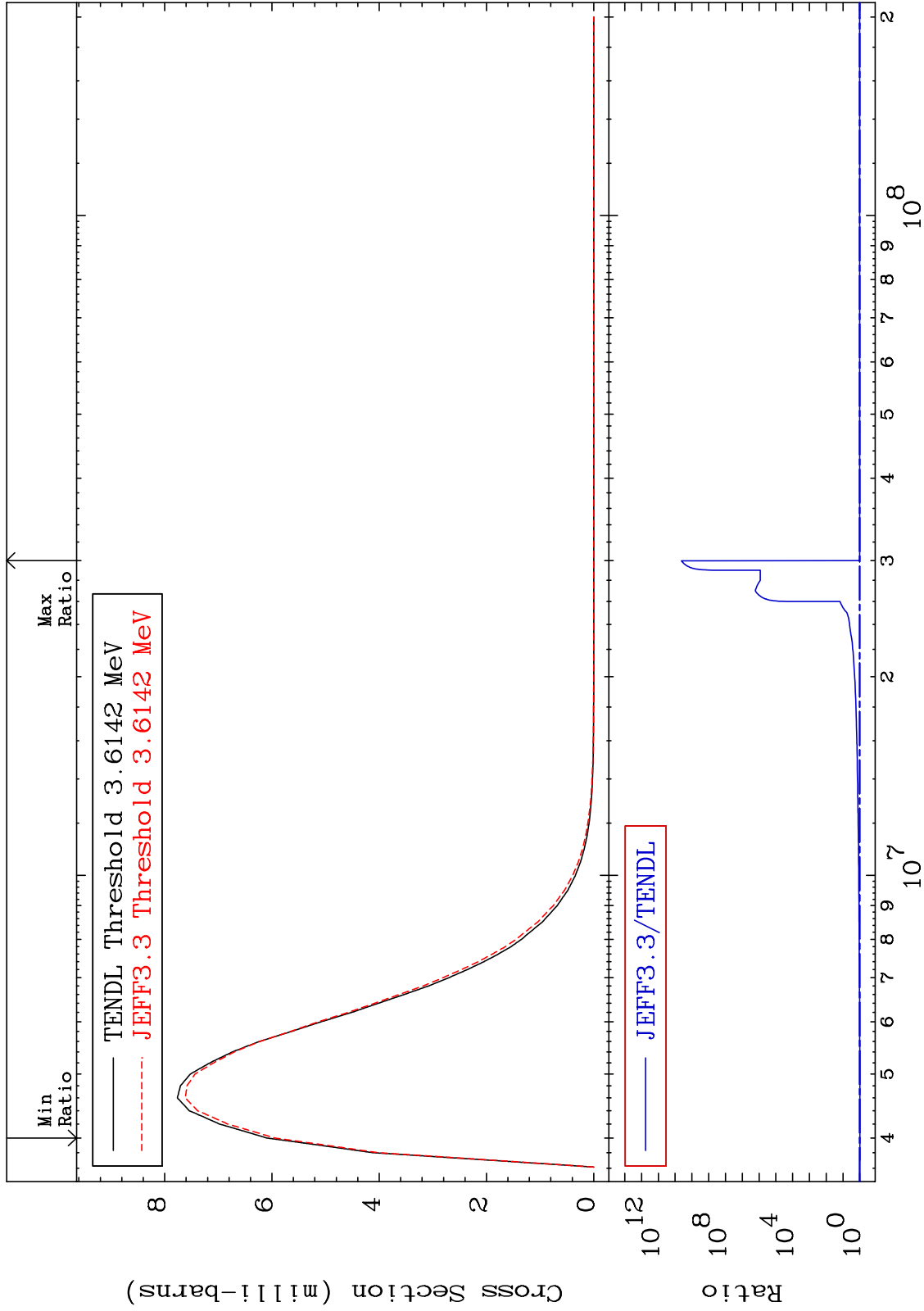
20-Ca-41  
-2.225 To 9999. %



MAT 2028

MT= 65 (n,n') Level  
Cross Section

20-Ca-41  
-2.389 To 9999. %

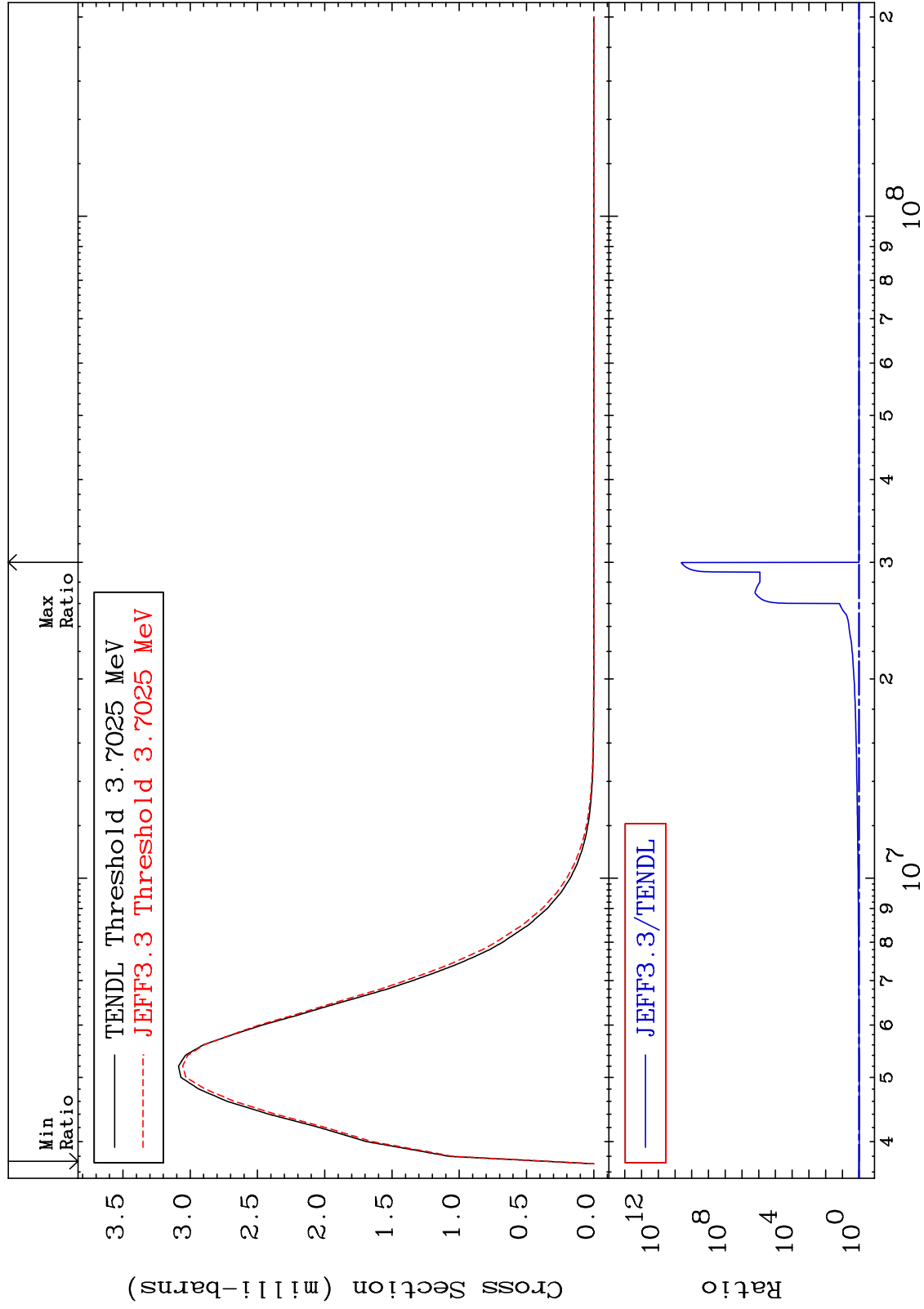




MAT 2028

MT= 66 (n,n') Level  
Cross Section

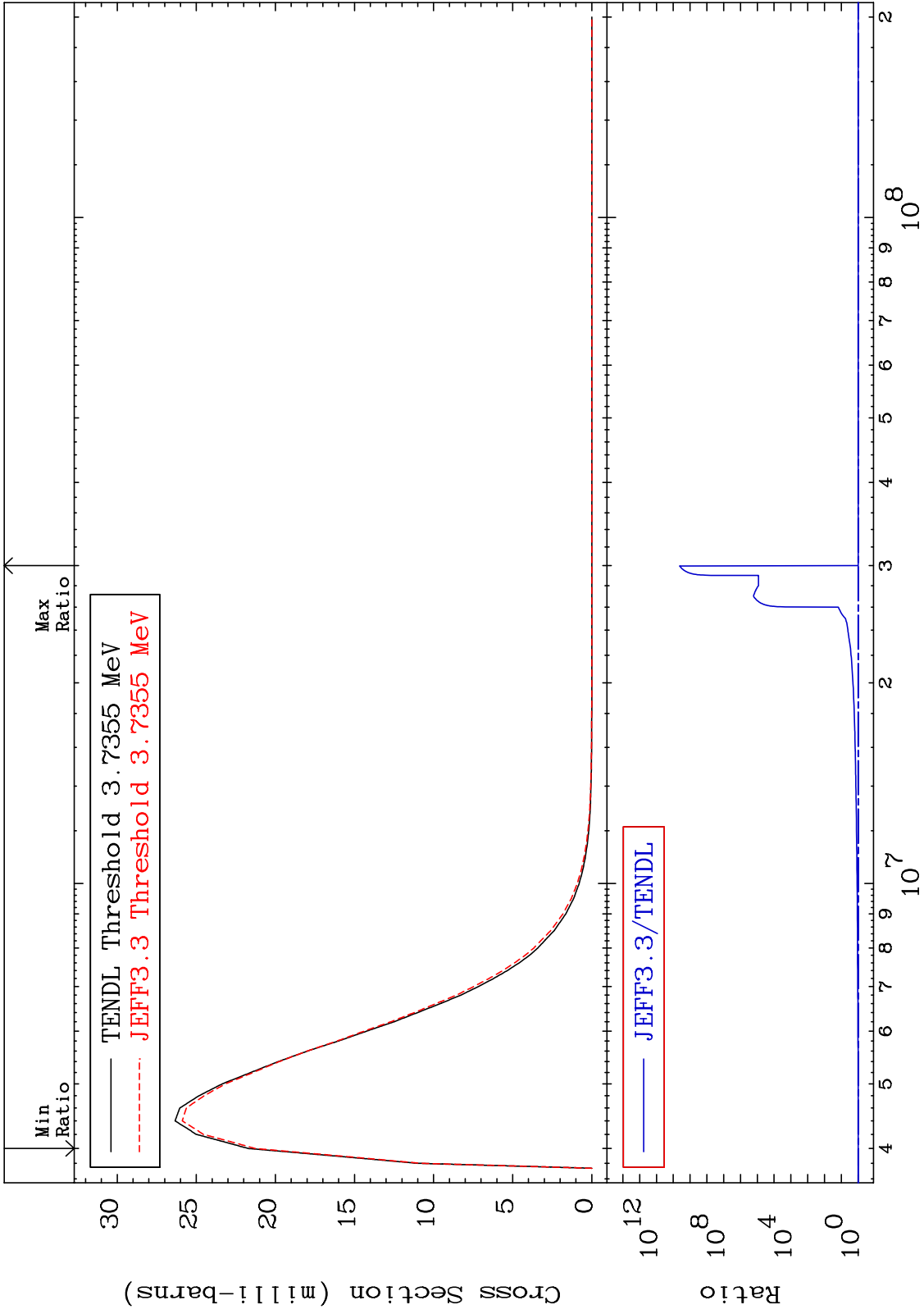
20-Ca-41  
-2.473 To 9999. %



MAT 2028

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

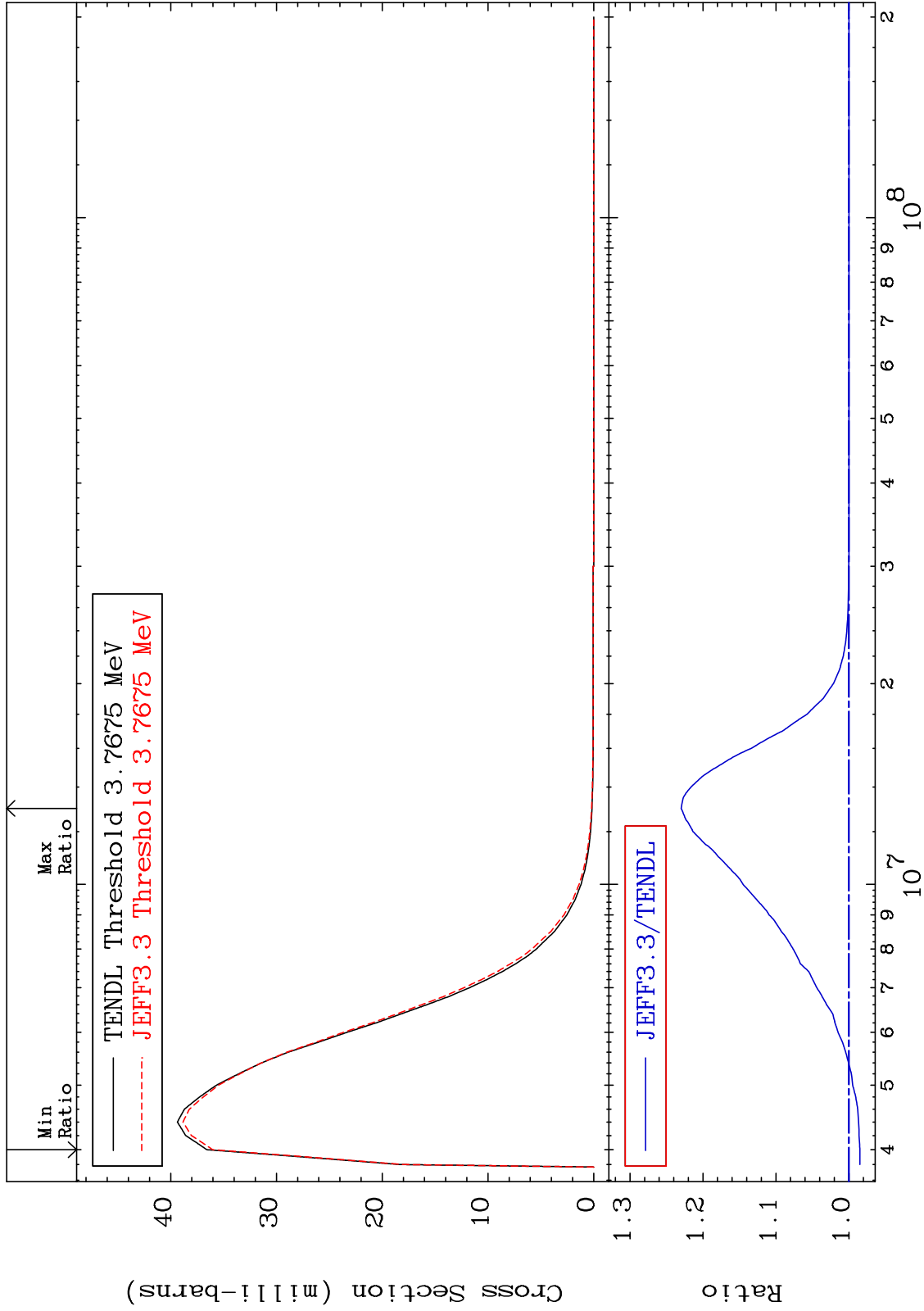
20-Ca-41  
-1.984 To 9999. %



MAT 2028

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

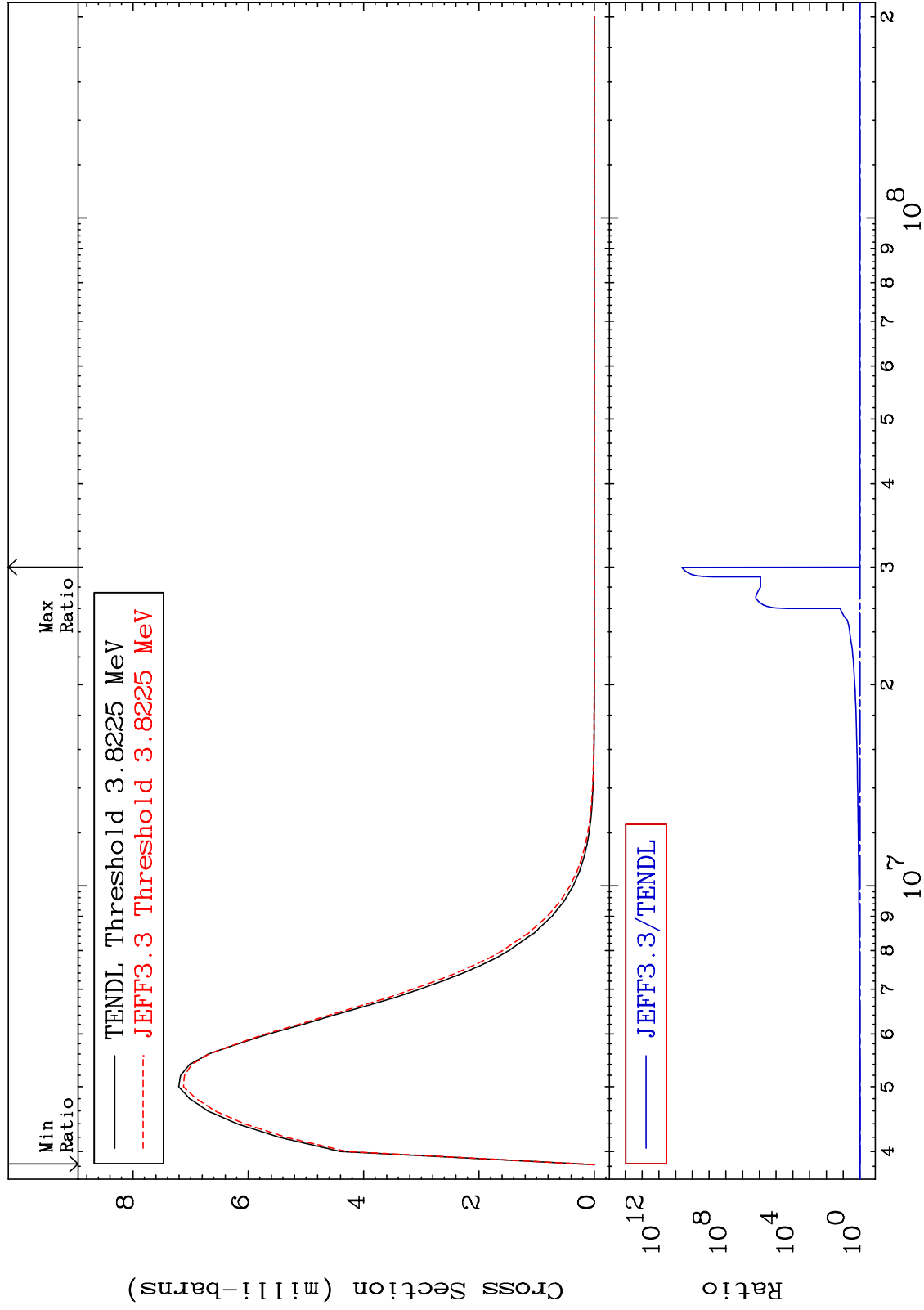
20-Ca-41  
-1.517 To 22.98 %



MAT 2028

MT= 69 (n,n') Level  
Cross Section

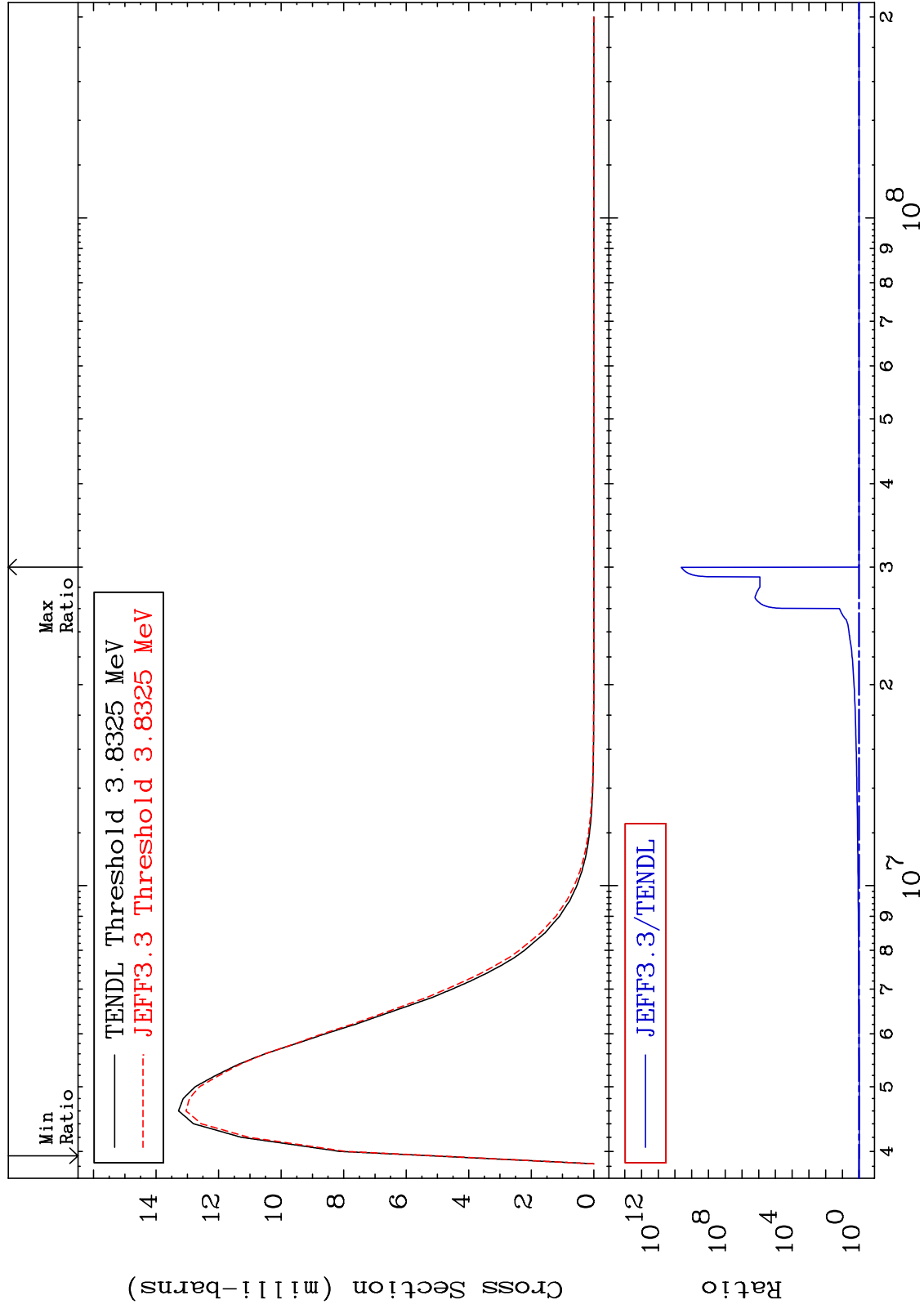
20-Ca-41  
-2.428 To 9999. %

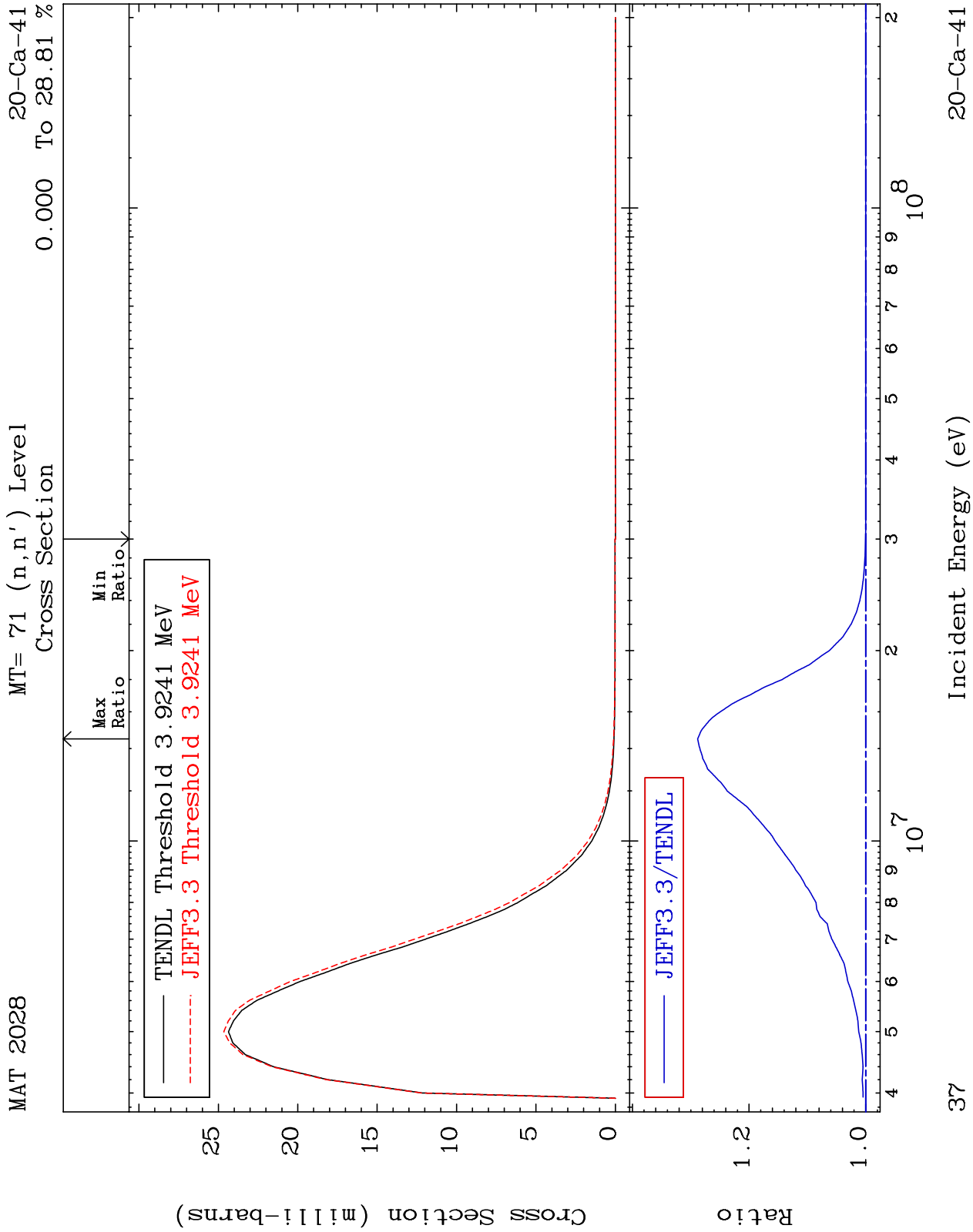


MAT 2028

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

20-Ca-41  
-2.245 To 9999. %

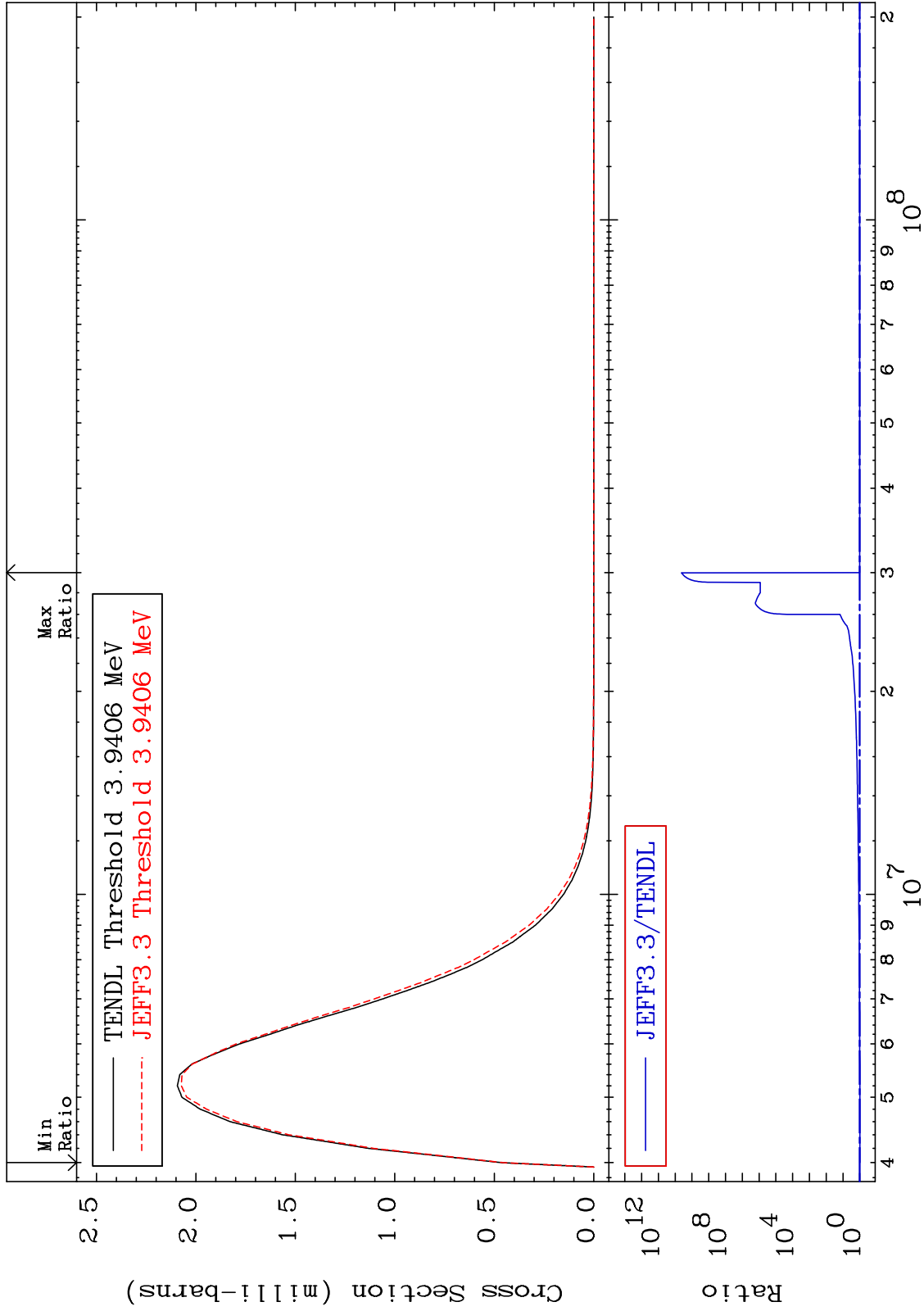




MAT 2028

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

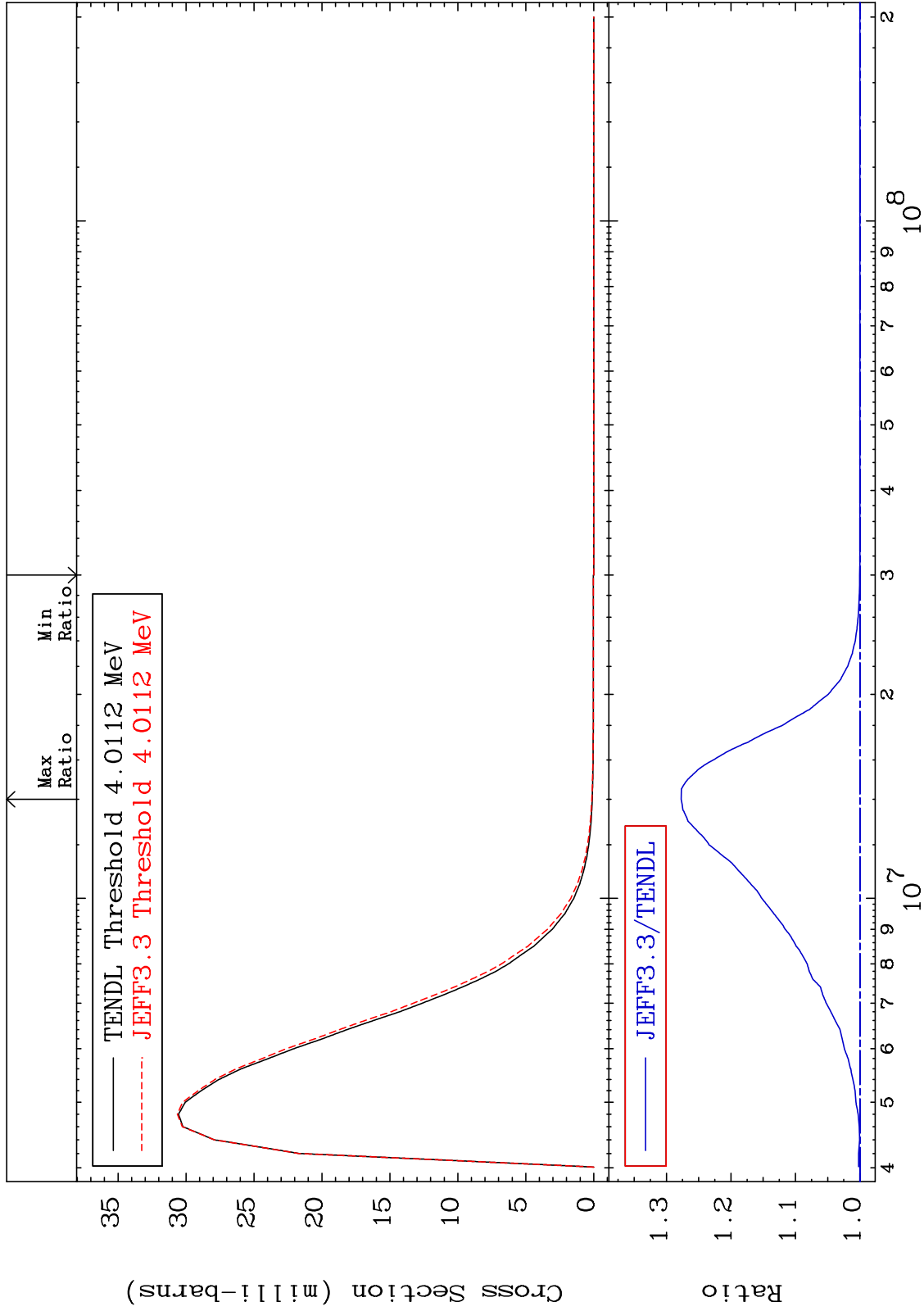
20-Ca-41  
-2.231 To 9999. %



MAT 2028

MT= 73 (n,n') Level  
Cross Section

20-Ca-41  
0.000 To 27.71 %



39

Incident Energy (eV)

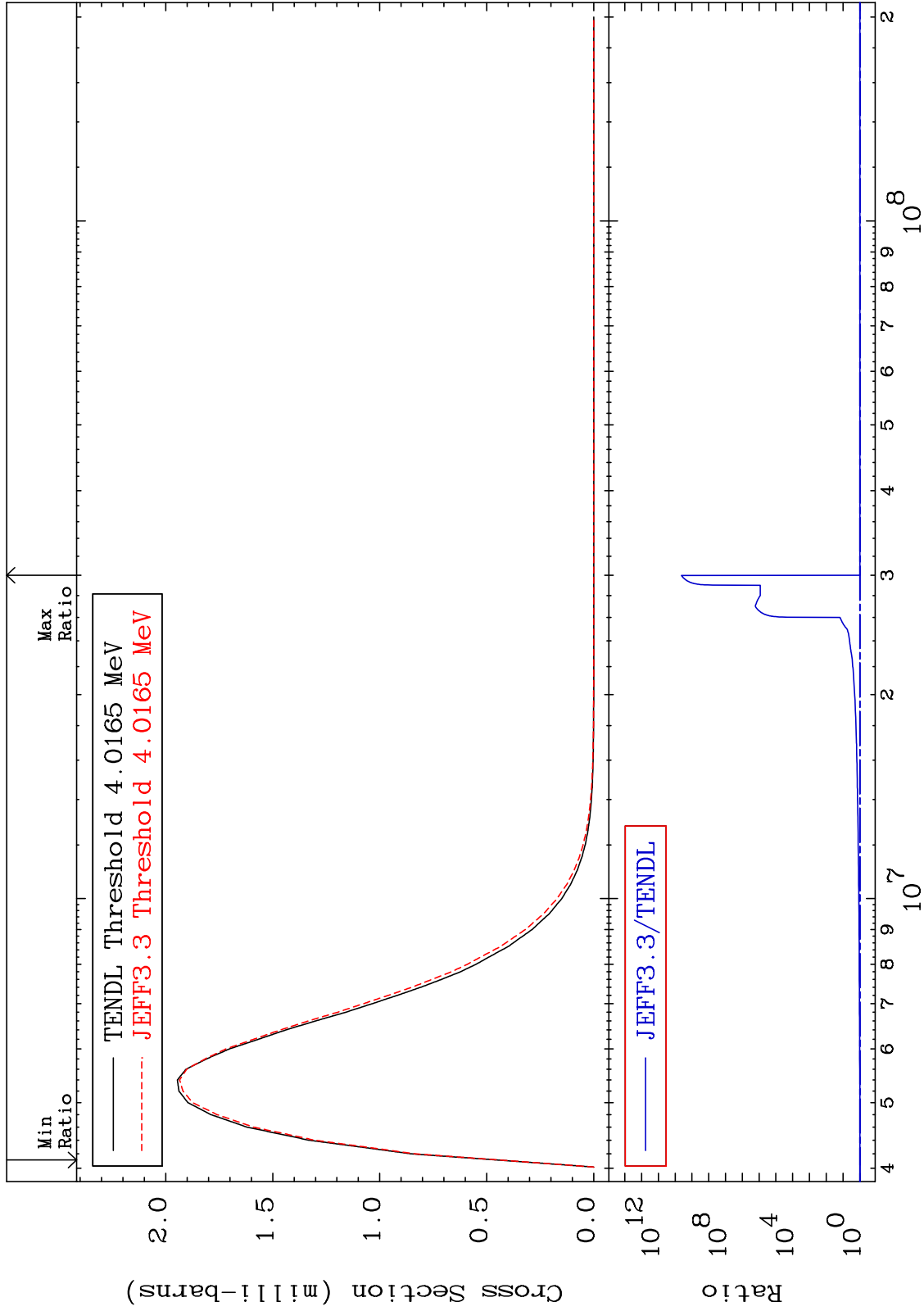
20-Ca-41



MAT 2028

MT= 74 (n,n') Level  
Cross Section

20-Ca-41  
-2.105 To 9999. %



40

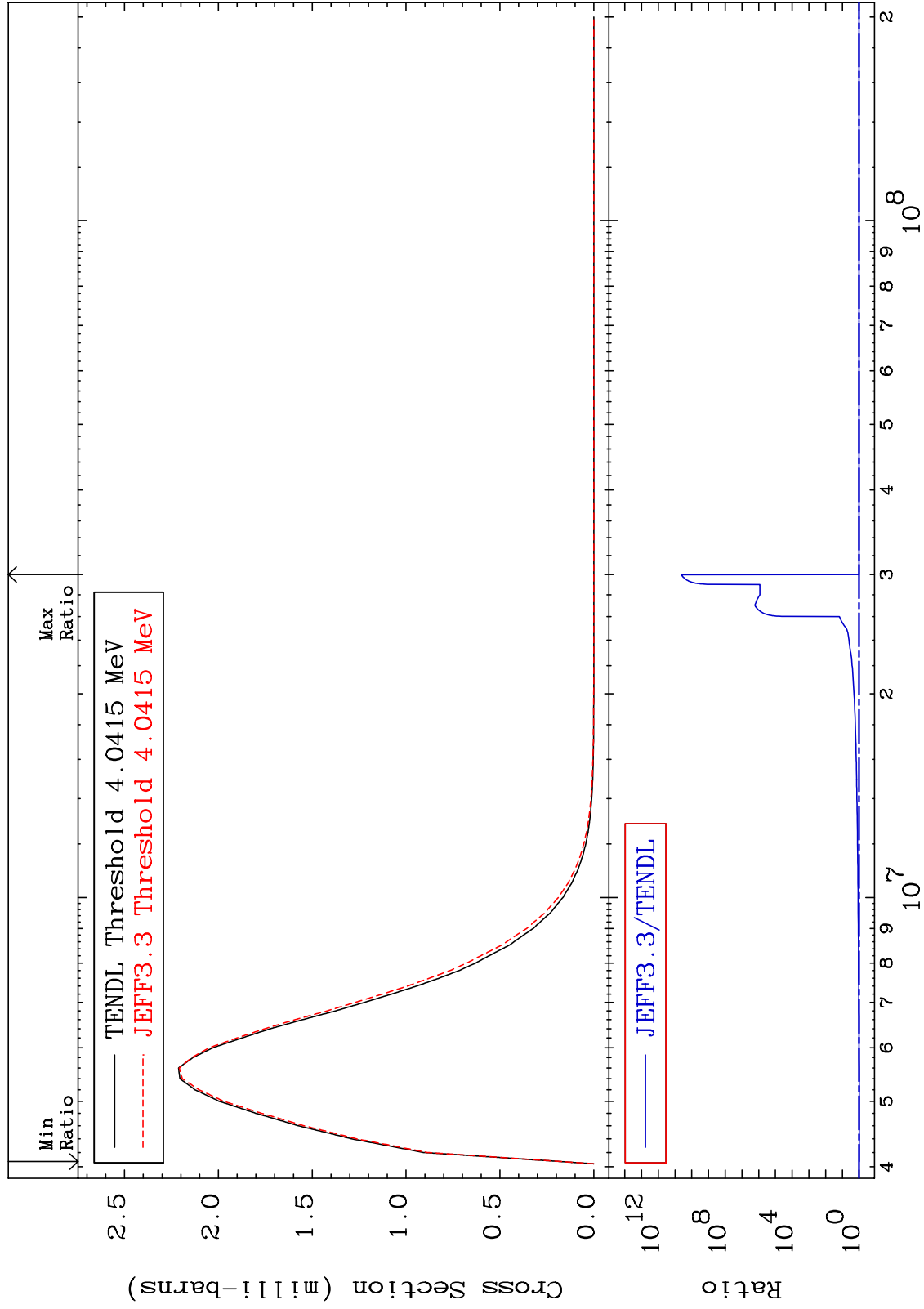
Incident Energy (eV)

20-Ca-41

MAT 2028

MT= 75 (n,n') Level  
Cross Section

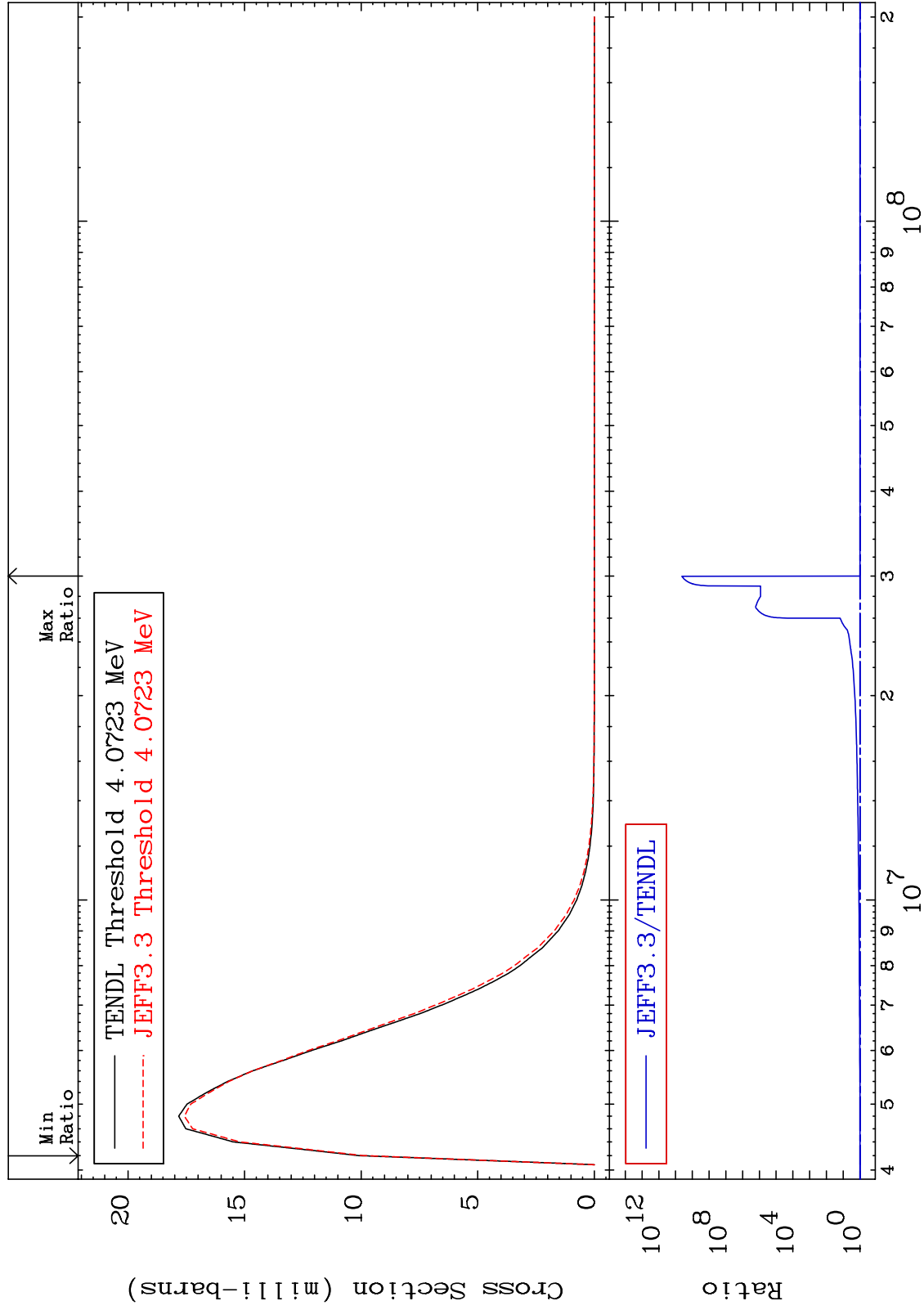
20-Ca-41  
-2.211 To 9999. %



MAT 2028

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

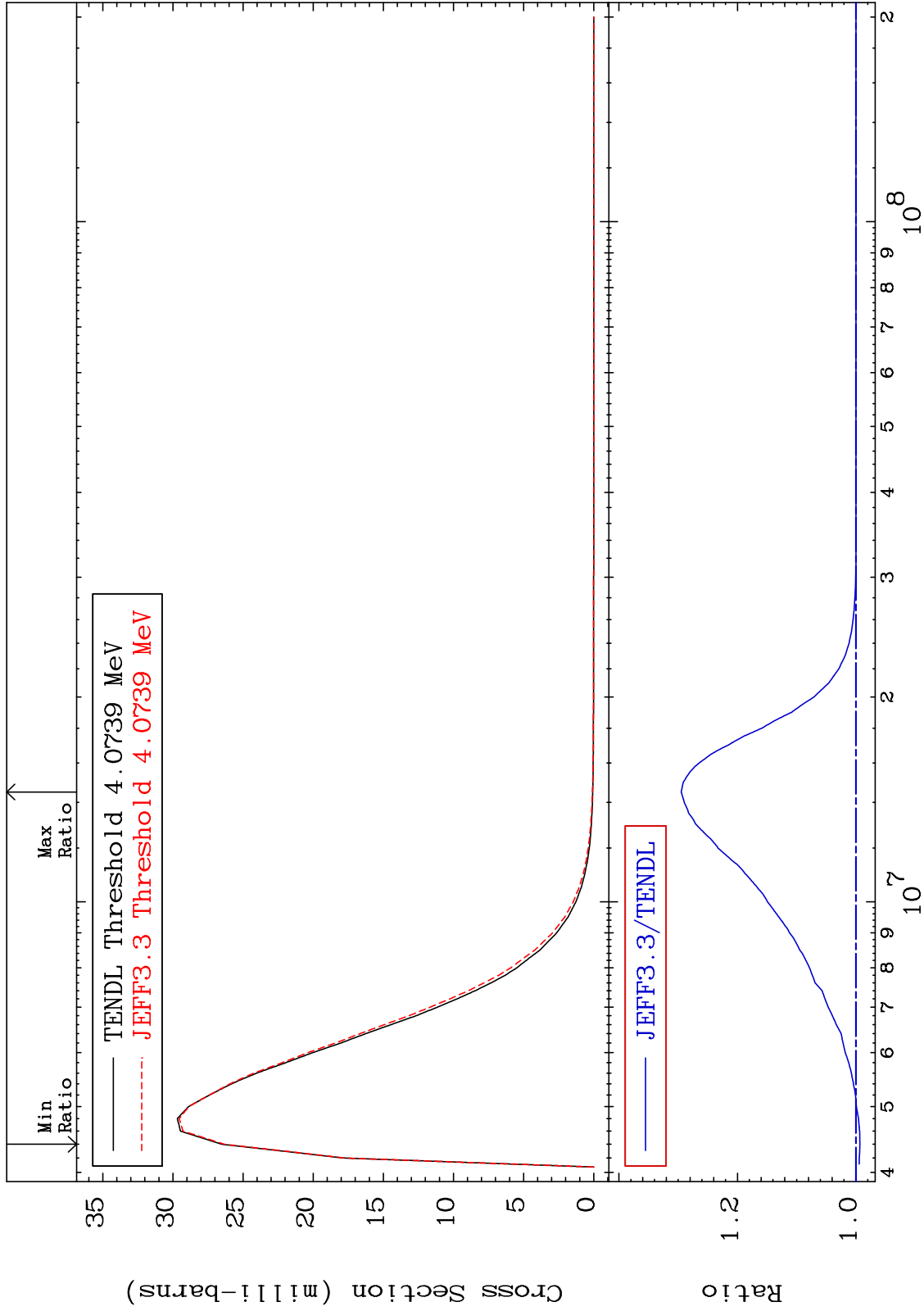
20-Ca-41  
-1.901 To 9999. %



MAT 2028

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

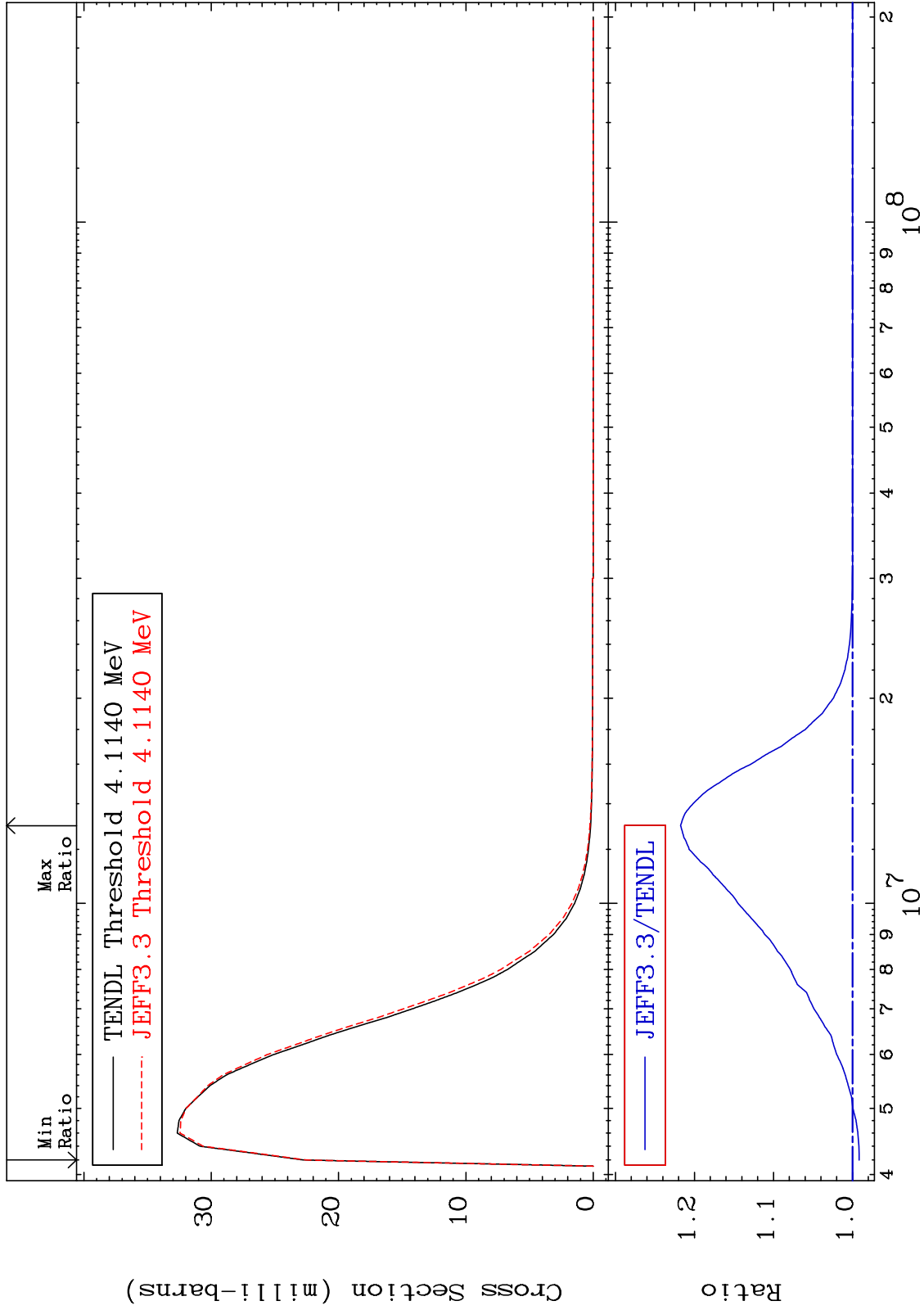
20-Ca-41  
-0.687 To 29.49 %



MAT 2028

MT= 78 (n,n') Level  
Cross Section

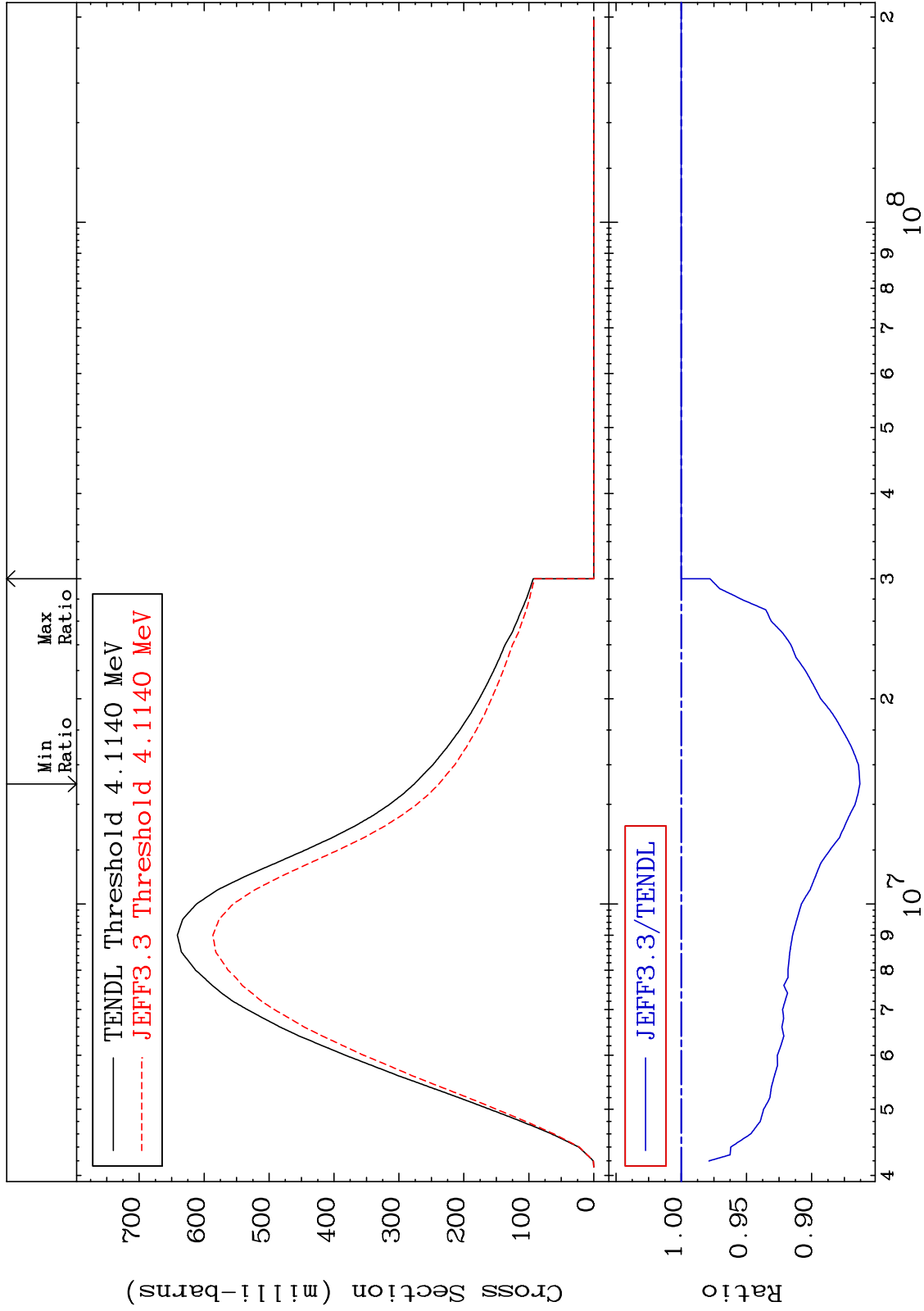
20-Ca-41  
-0.841 To 21.75 %



MAT 2028

(n, n') Continuum  
Cross Section

20-Ca-41  
-13.70 To 0.000 %



45

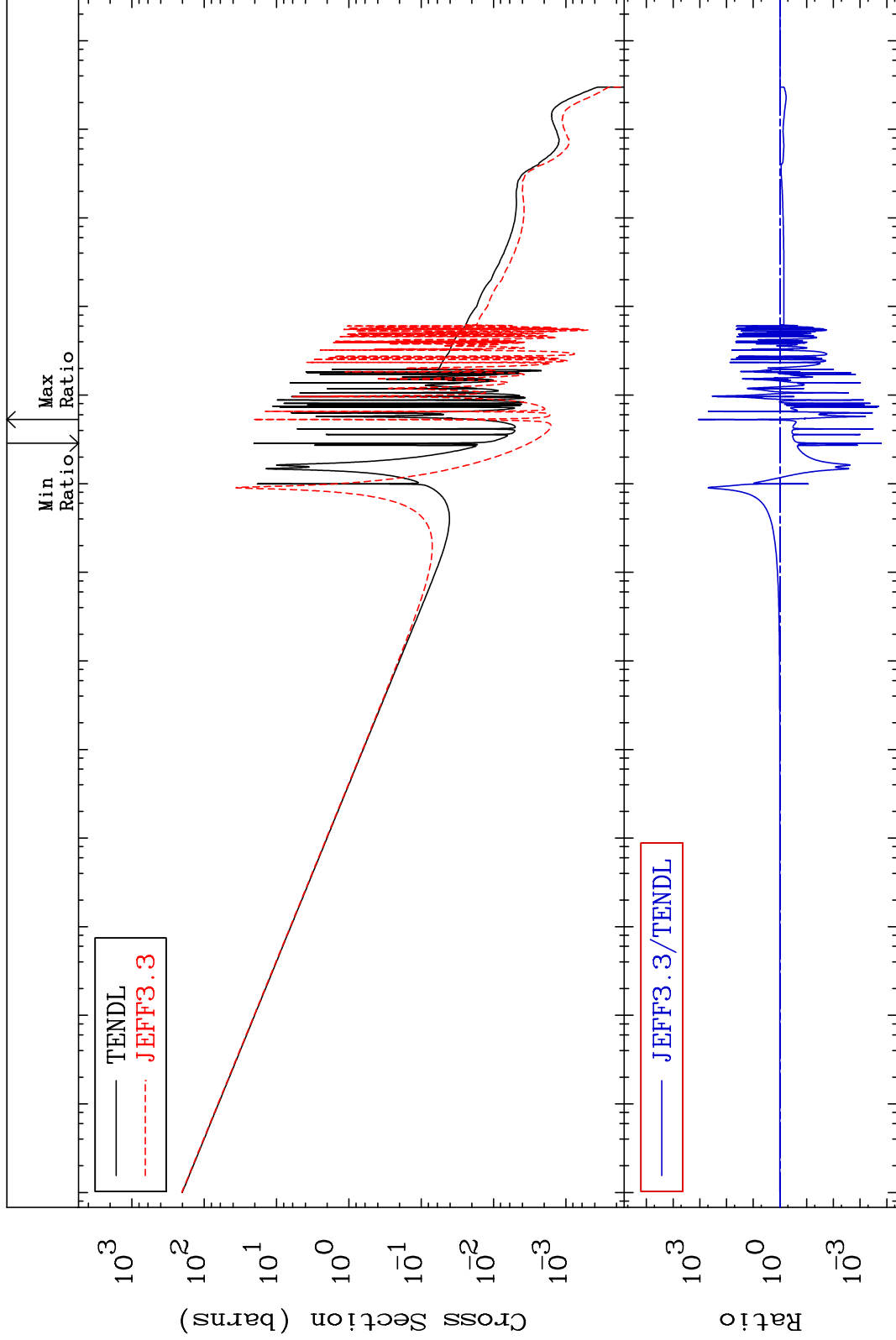
MAT 2028

(n,  $\gamma$ )

20-Ca-41

Cross Section

-99.98 To 9999. %



46

Incident Energy (eV)

20-Ca-41

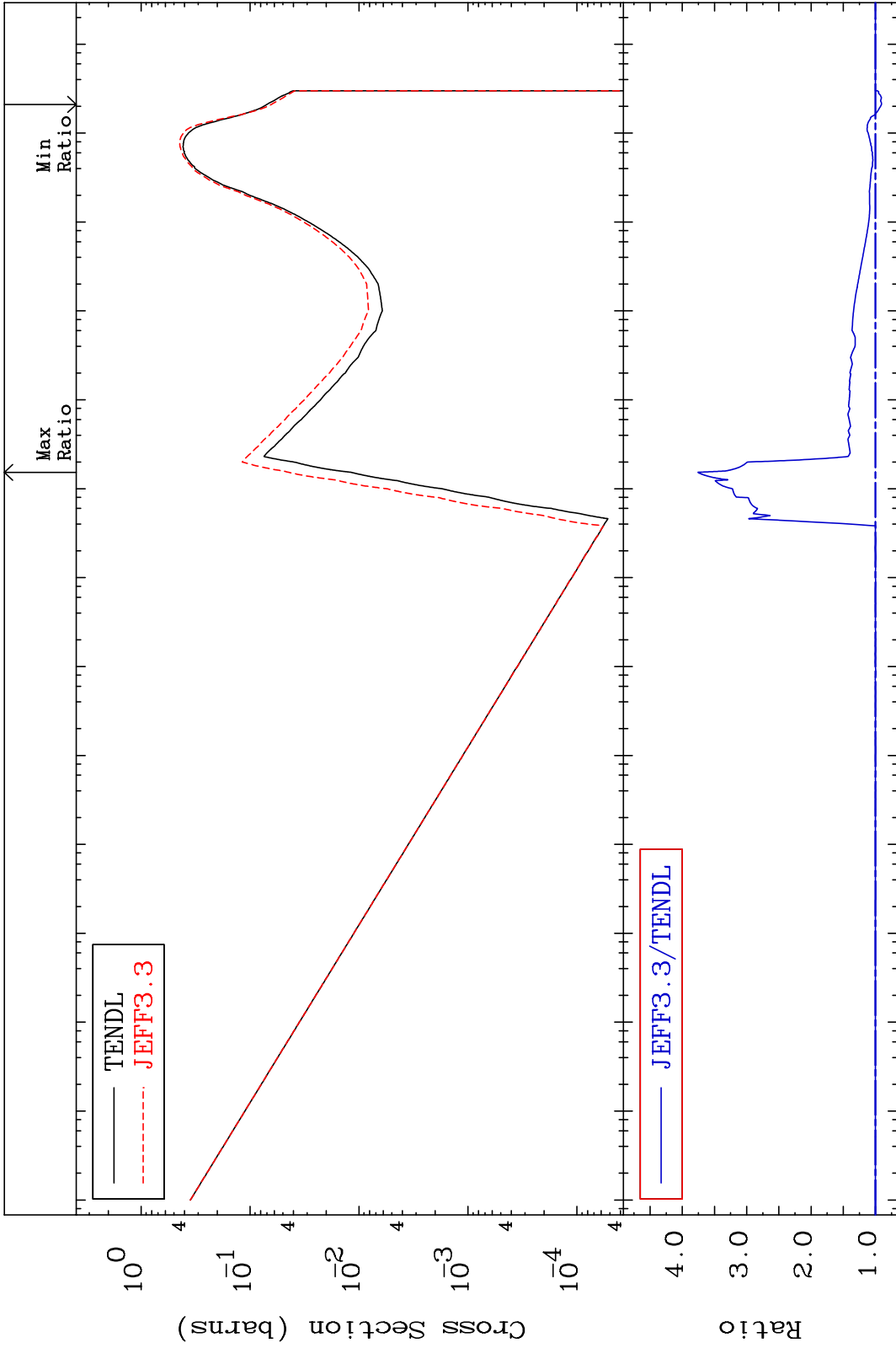
MAT 2028

(n,p)

20-Ca-41

Cross Section

-9.341 To 276.0 %



Incident Energy (eV) 20-Ca-41



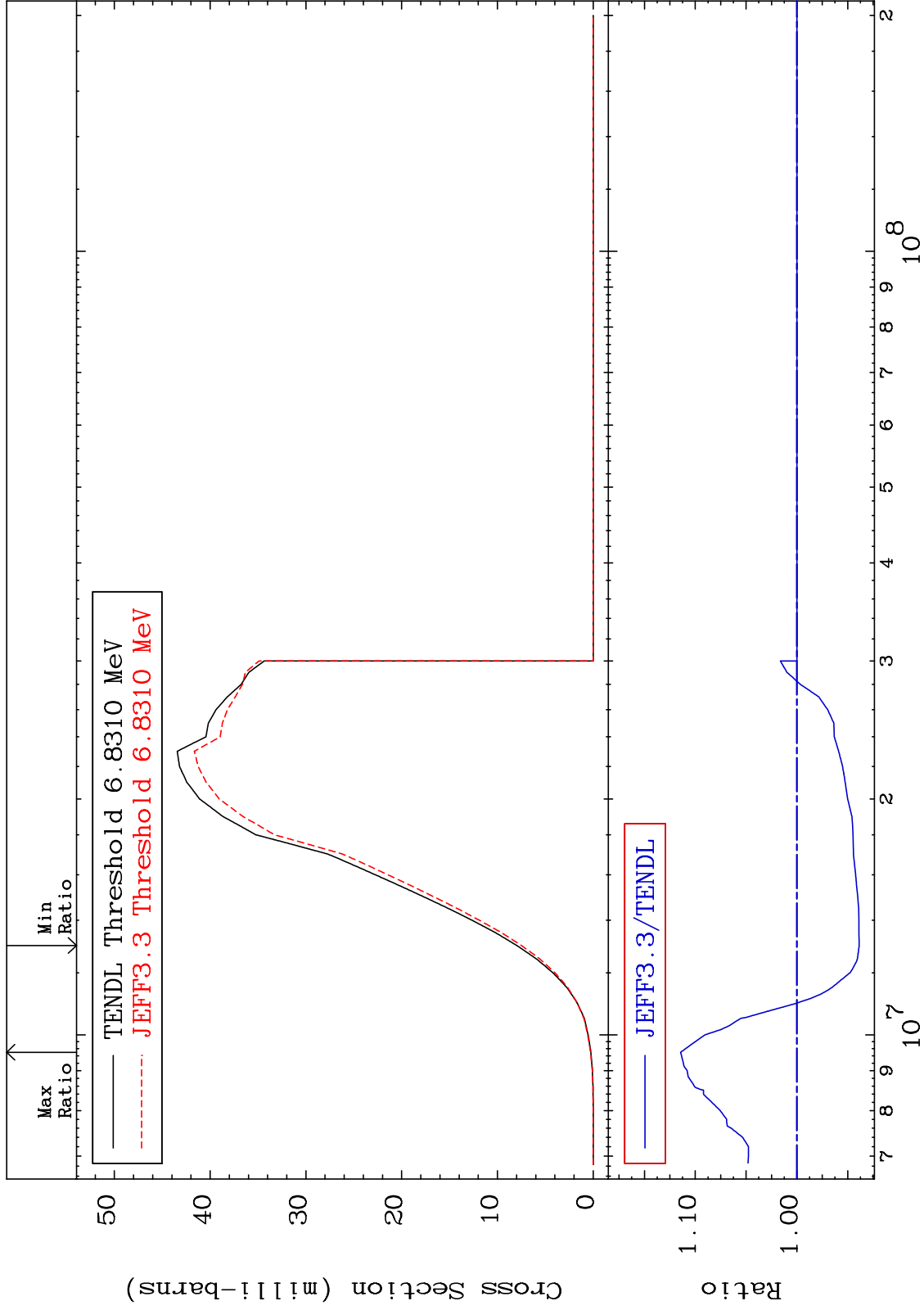
MAT 2028

(n, d)

20-Ca-41

Cross Section

-6.129 To 11.44 %



48

Incident Energy (eV)

20-Ca-41

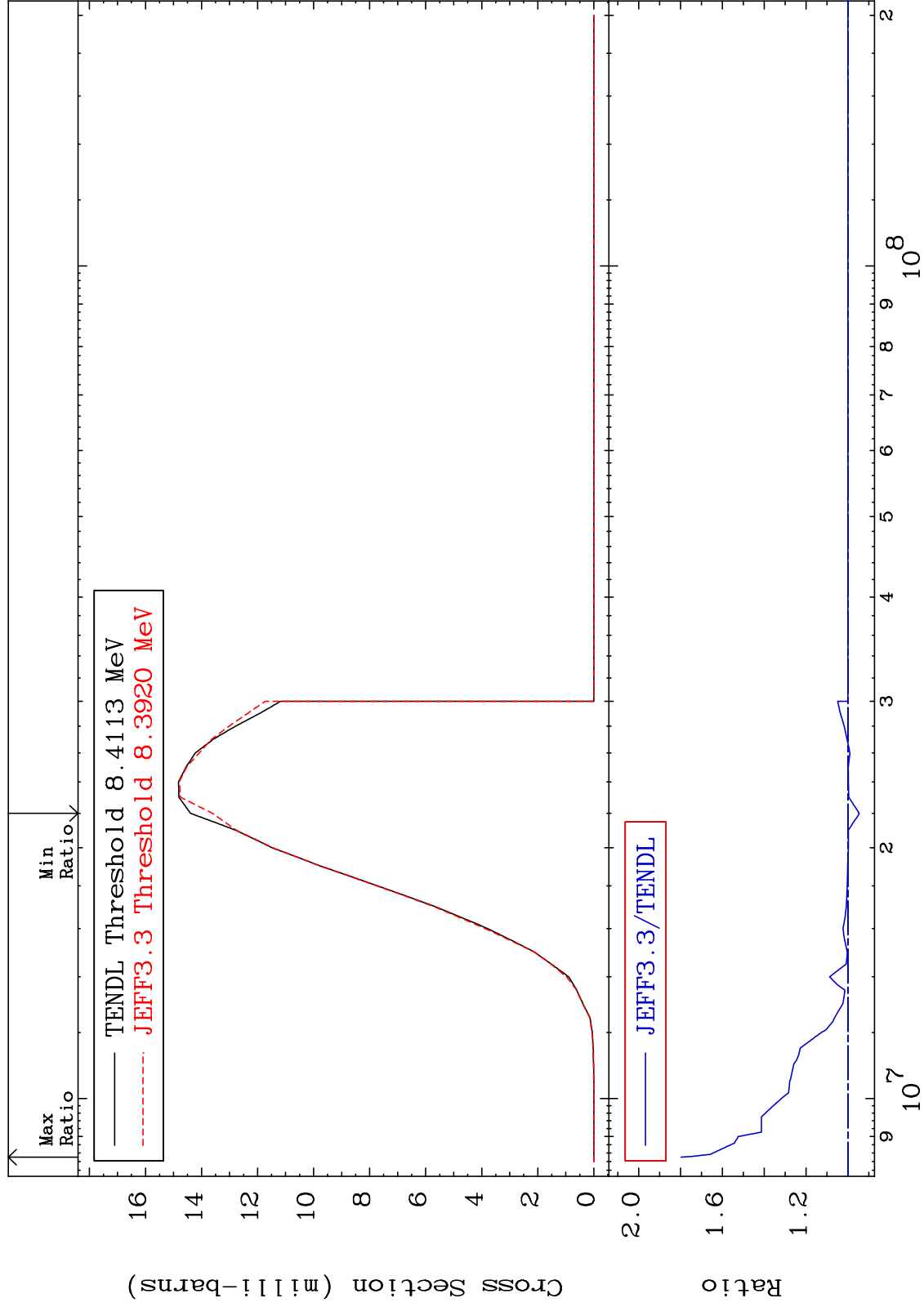
MAT 2028

(n, t)

20-Ca-41

Cross Section

-5.422 To 79.76 %



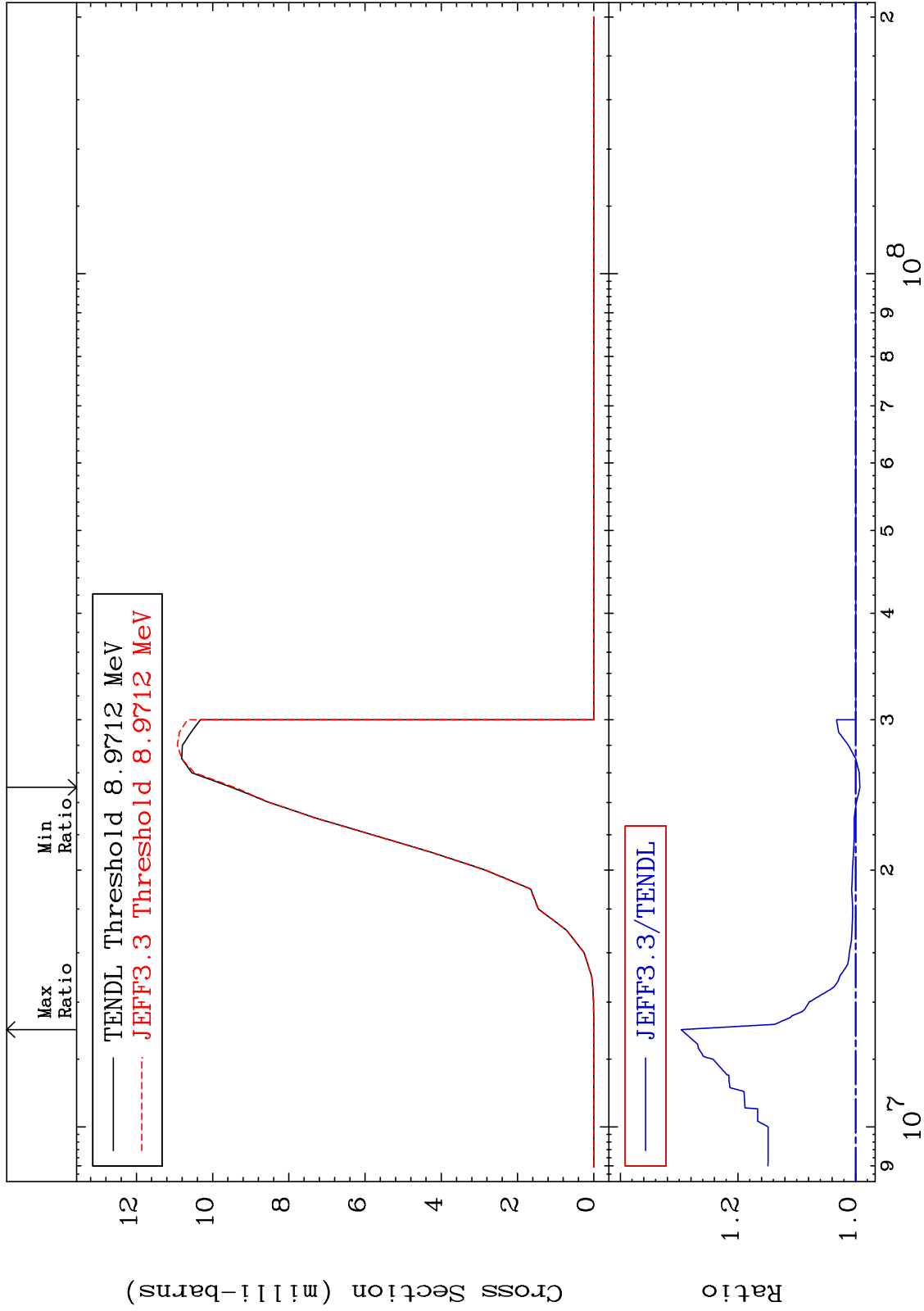
MAT 2028

(n, He-3)

20-Ca-41

Cross Section

-0.730 To 29.65 %



50

Incident Energy (eV)

20-Ca-41

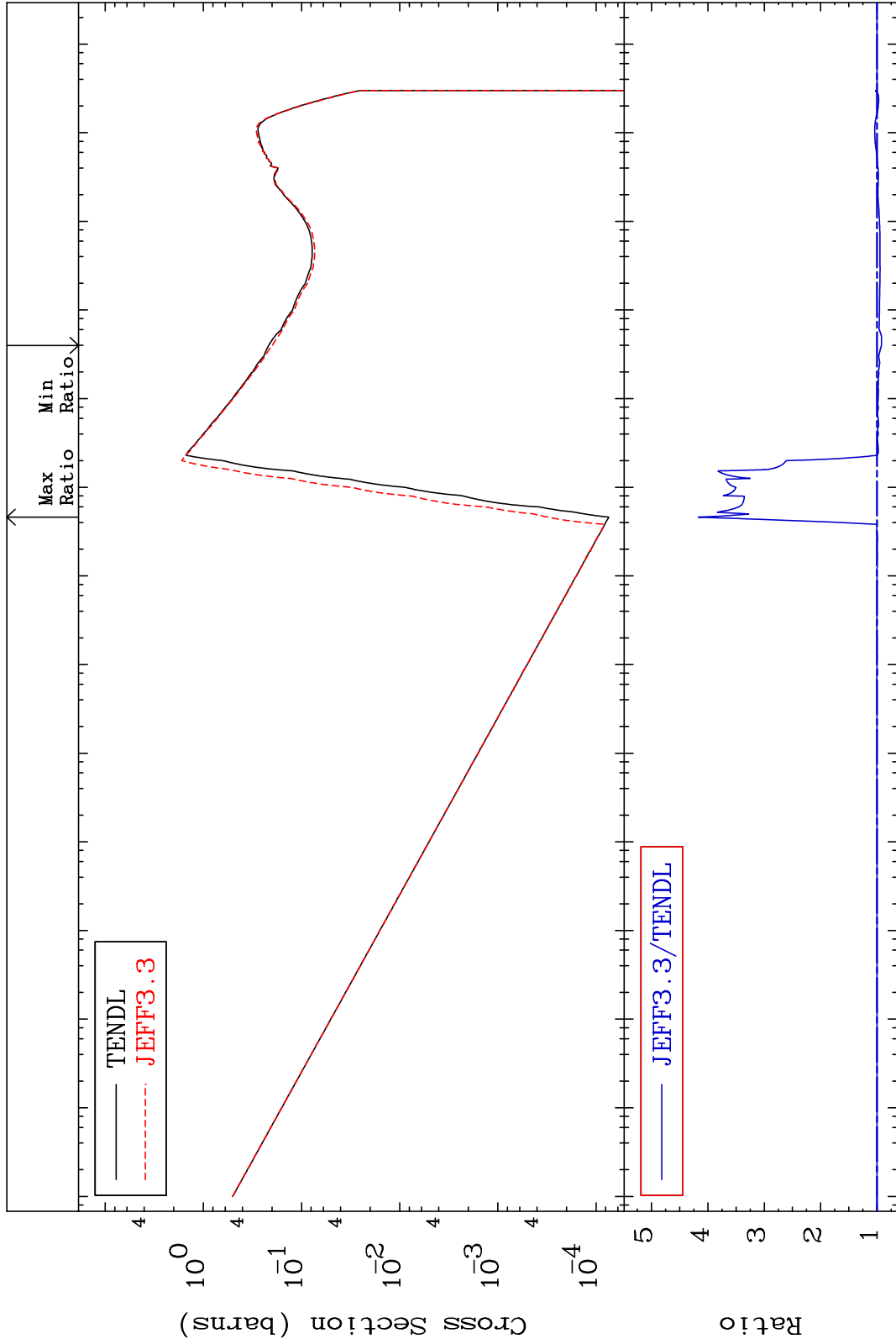
MAT 2028

(n,  $\alpha$ )

20-Ca-41

Cross Section

-8.099 To 317.0 %



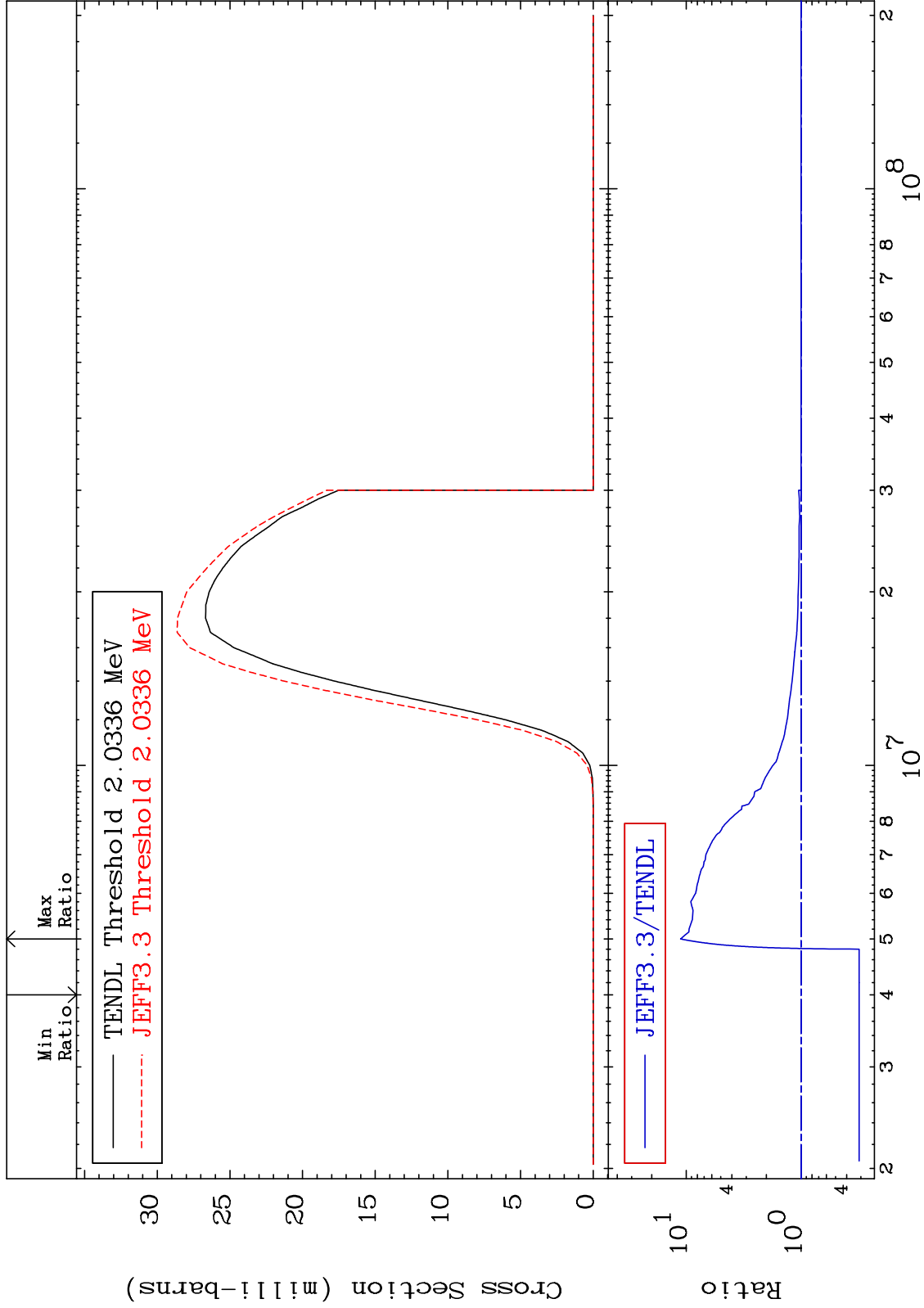
Incident Energy (eV)

20-Ca-41

51

Cross Section

-68.93 To 1020. %



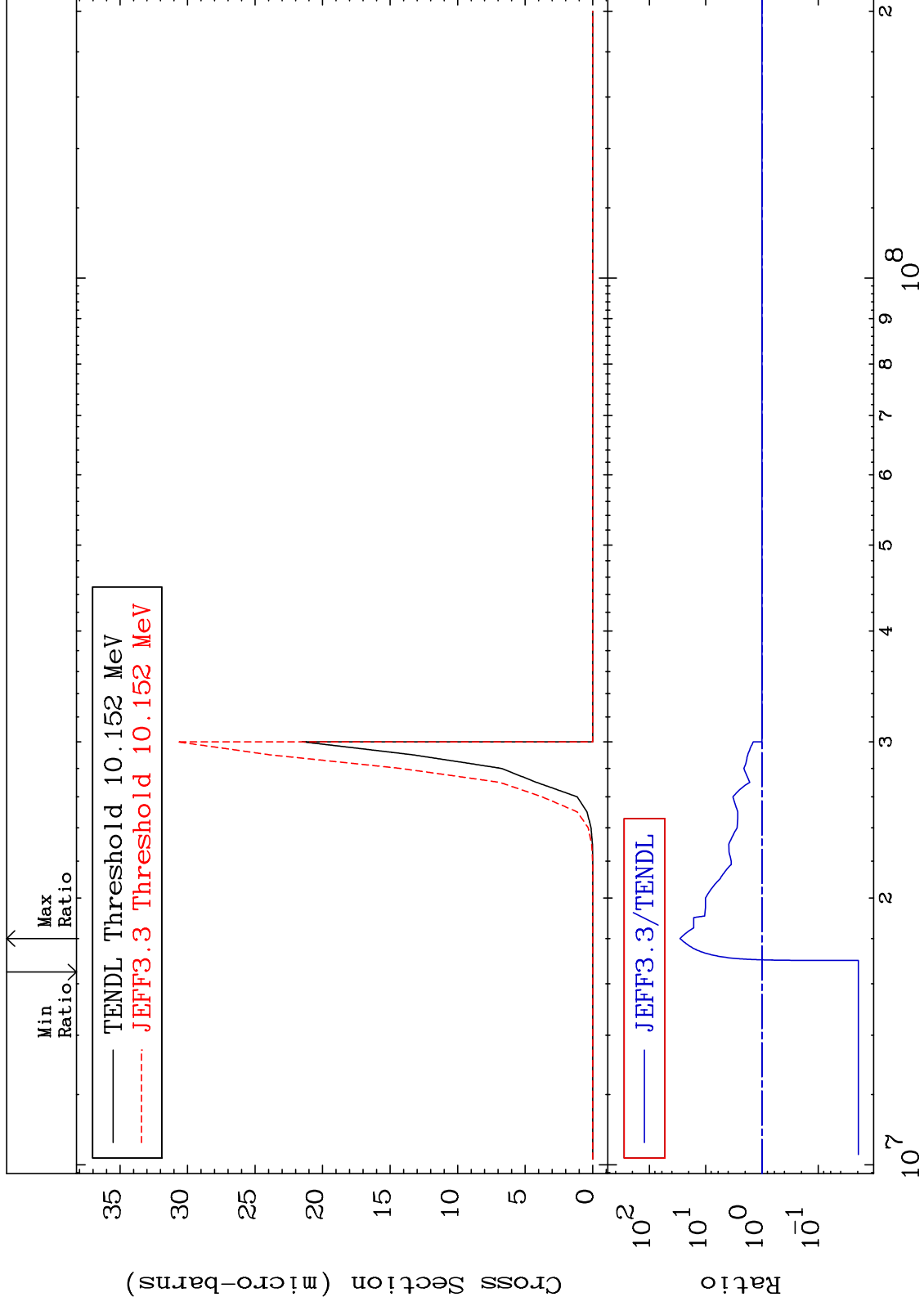
MAT 2028

(n, 3α)

20-Ca-41

Cross Section

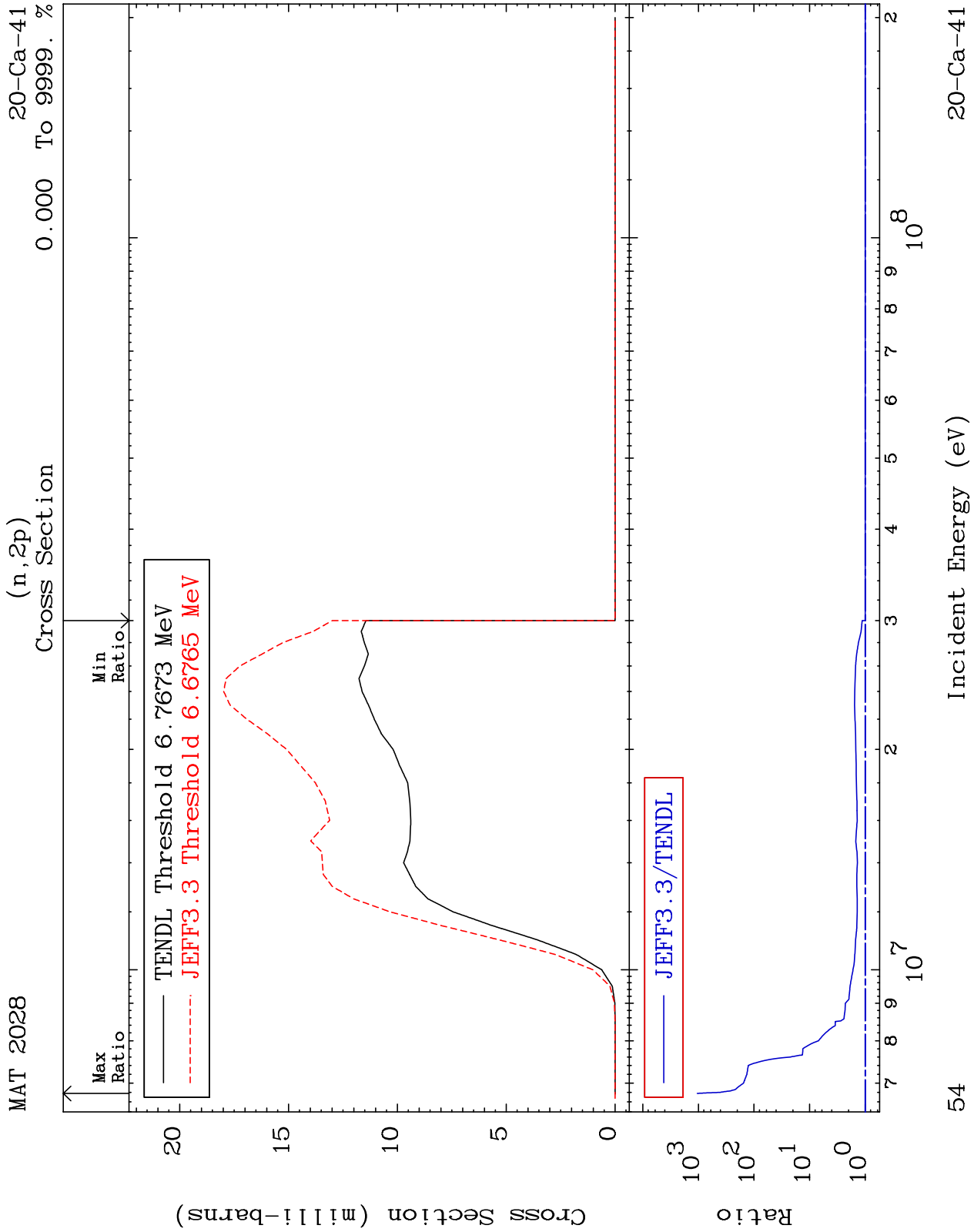
-98.06 To 2762. %



20-Ca-41

Incident Energy (eV)

53



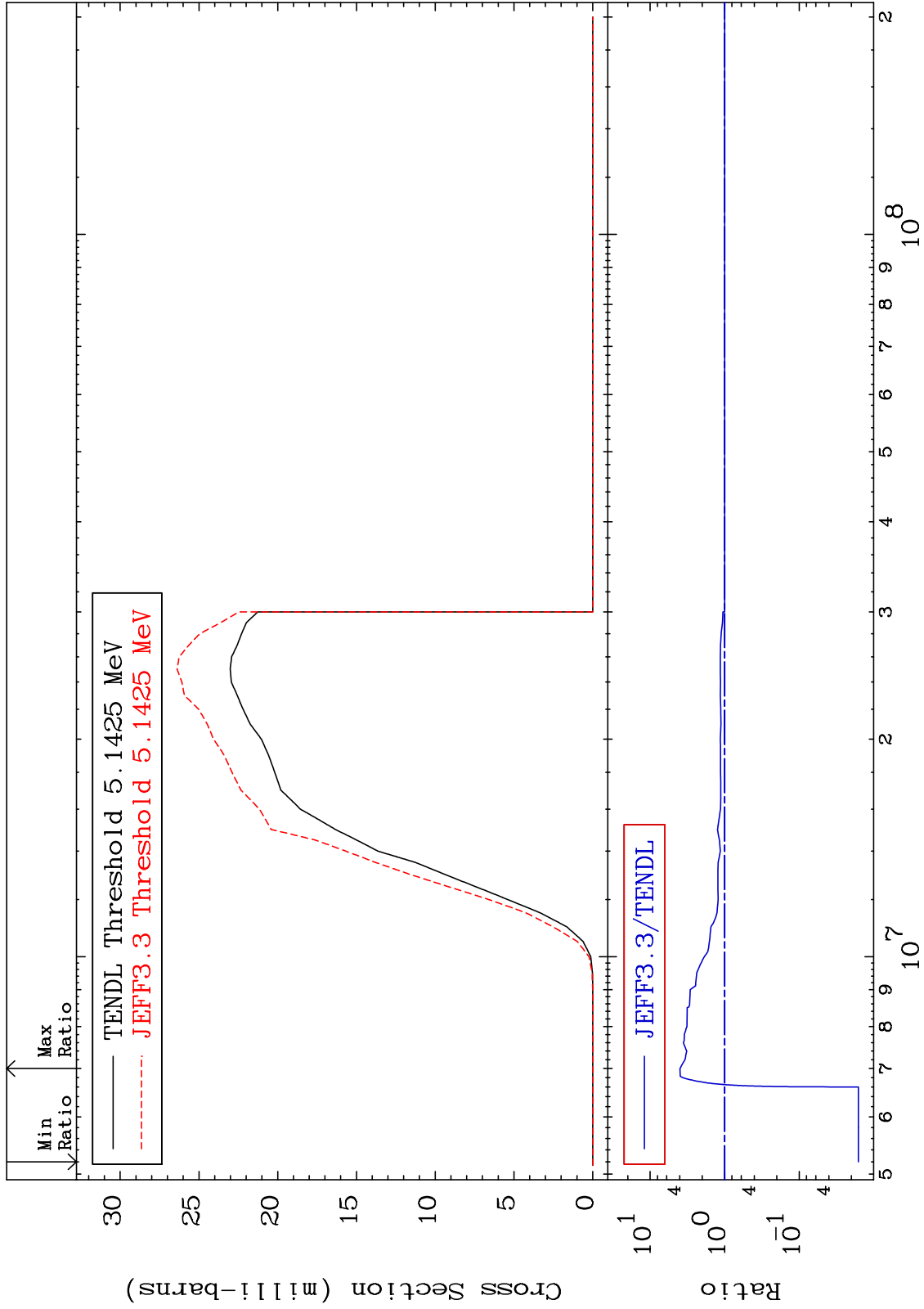
MAT 2028

(n,p)  $\alpha$

20-Ca-41

Cross Section

-98.39 To 297.6 %



55

Incident Energy (eV)

20-Ca-41



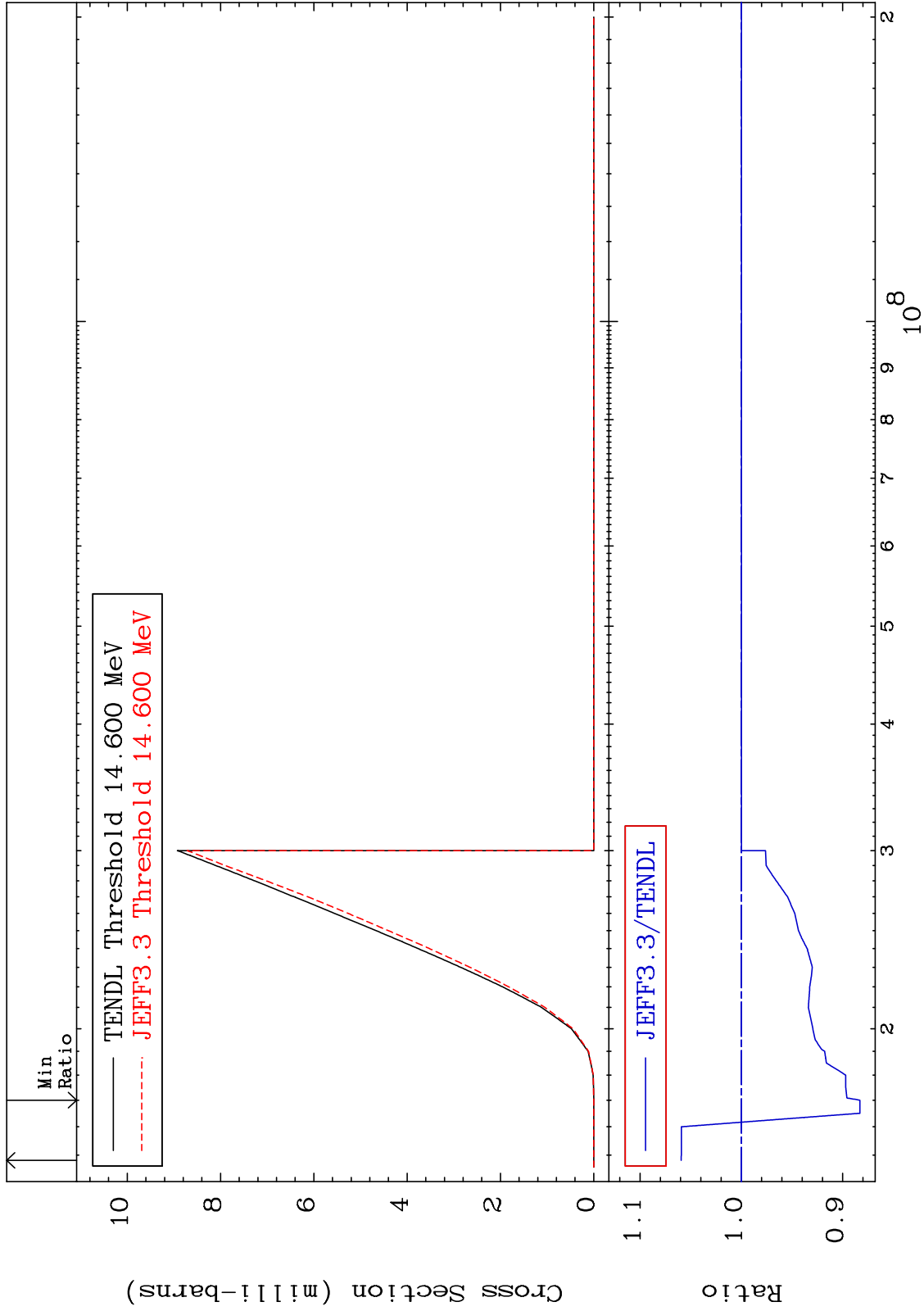
MAT 2028

(n,p) d

20-Ca-41

Cross Section

-11.70 To 5.936 %



56

Incident Energy (eV)

20-Ca-41

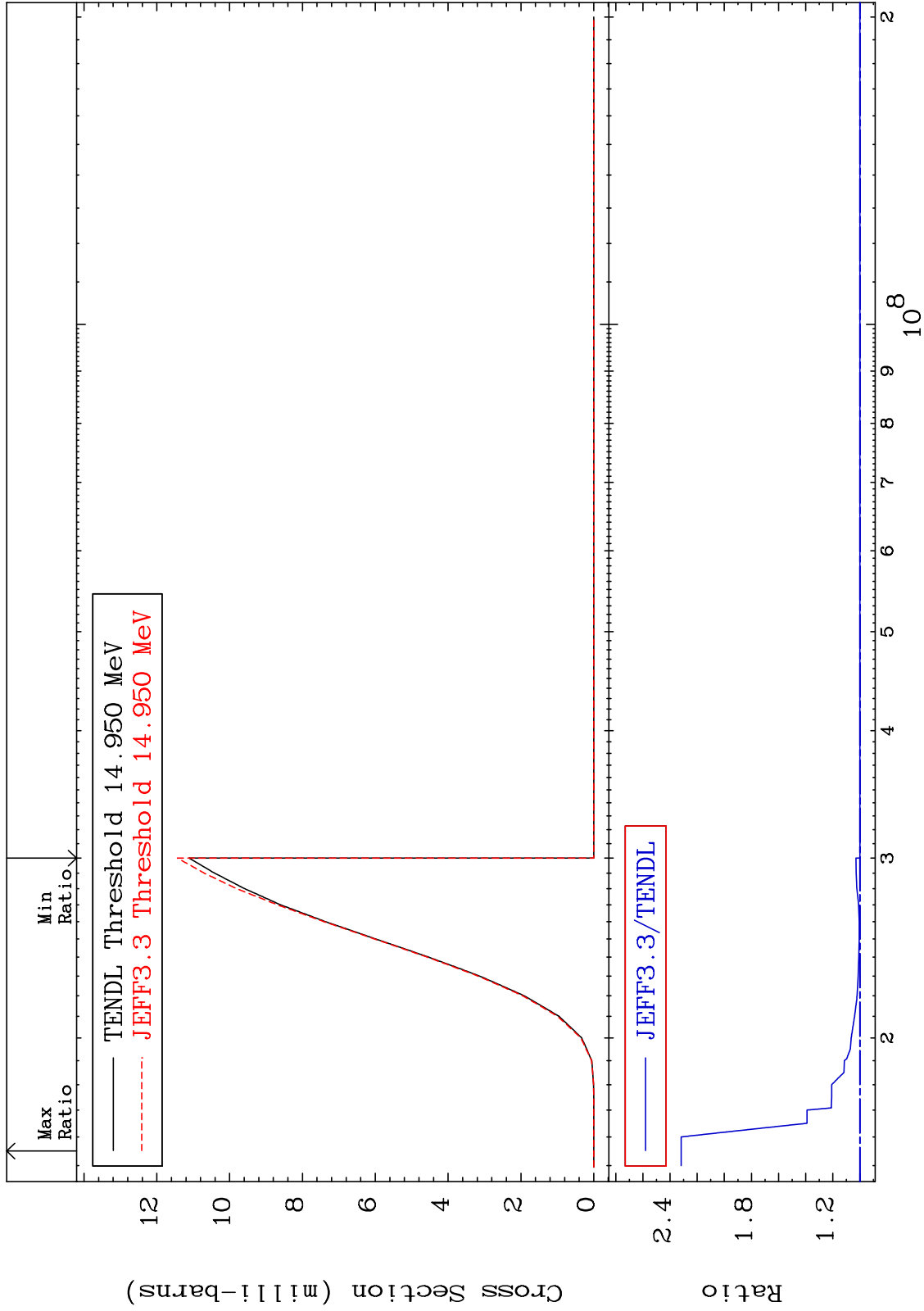
MAT 2028

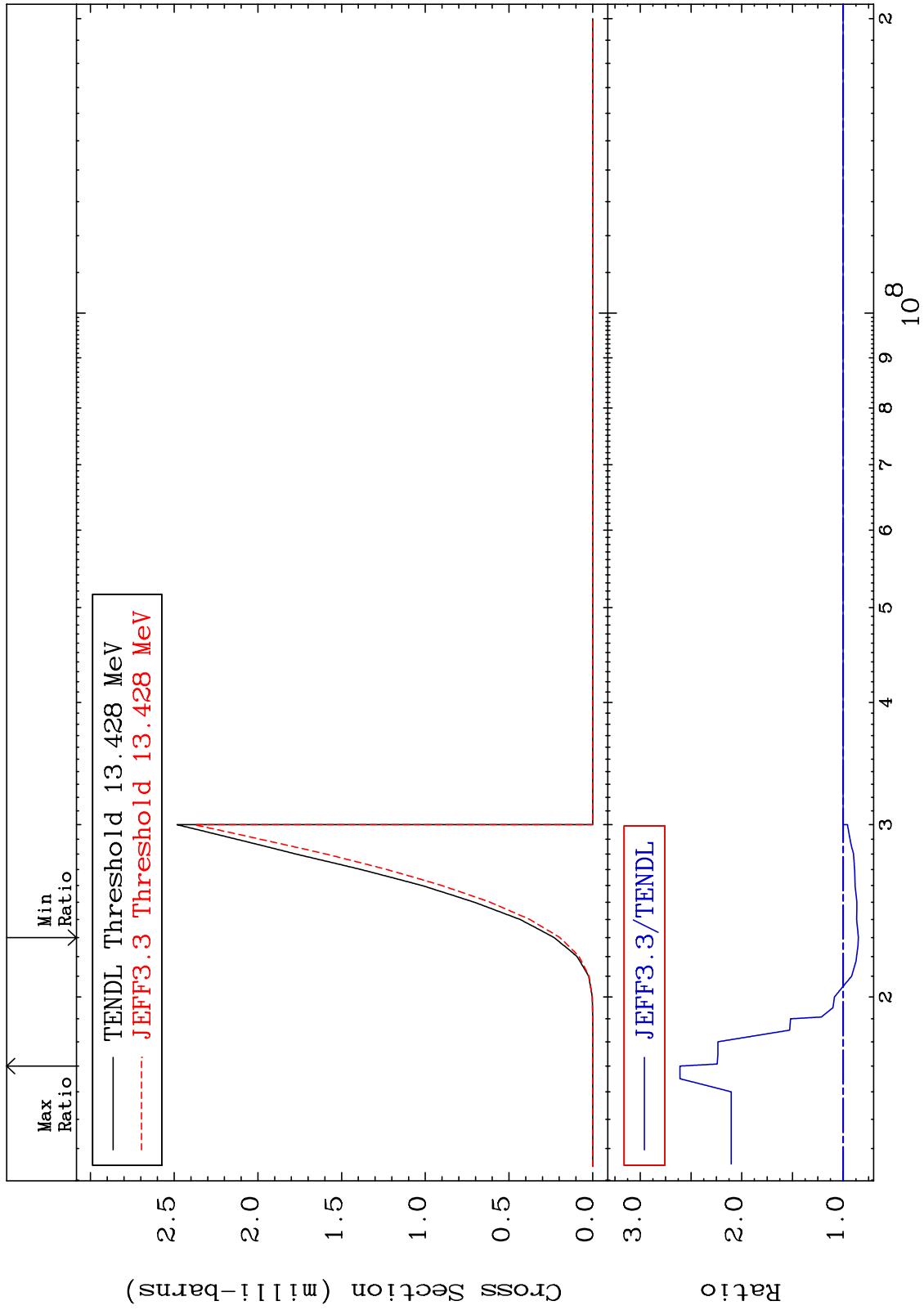
(n,p) t

20-Ca-41

Cross Section

0.000 To 131.8 %

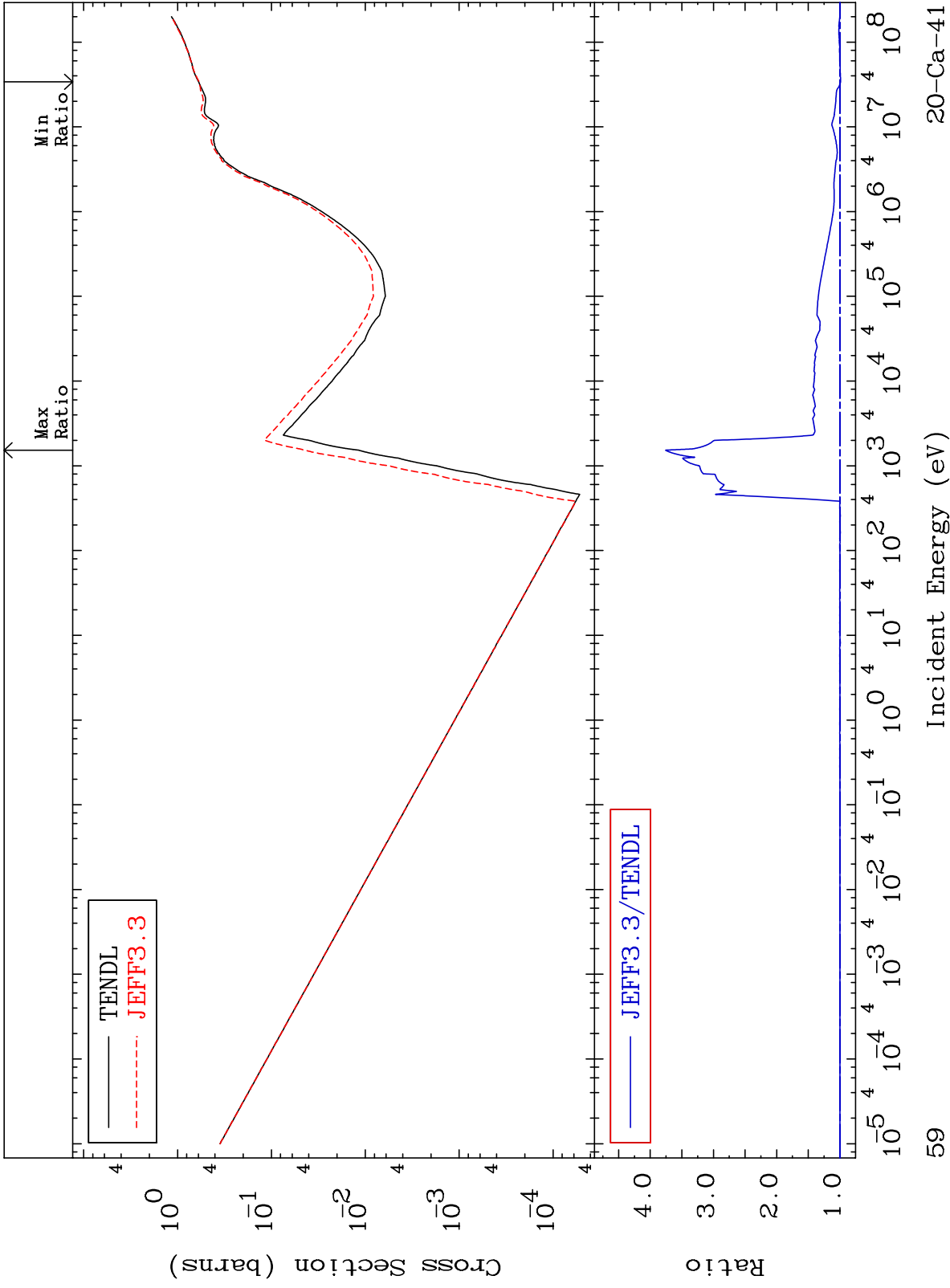




MAT 2028

Hydrogen Production  
Cross Section

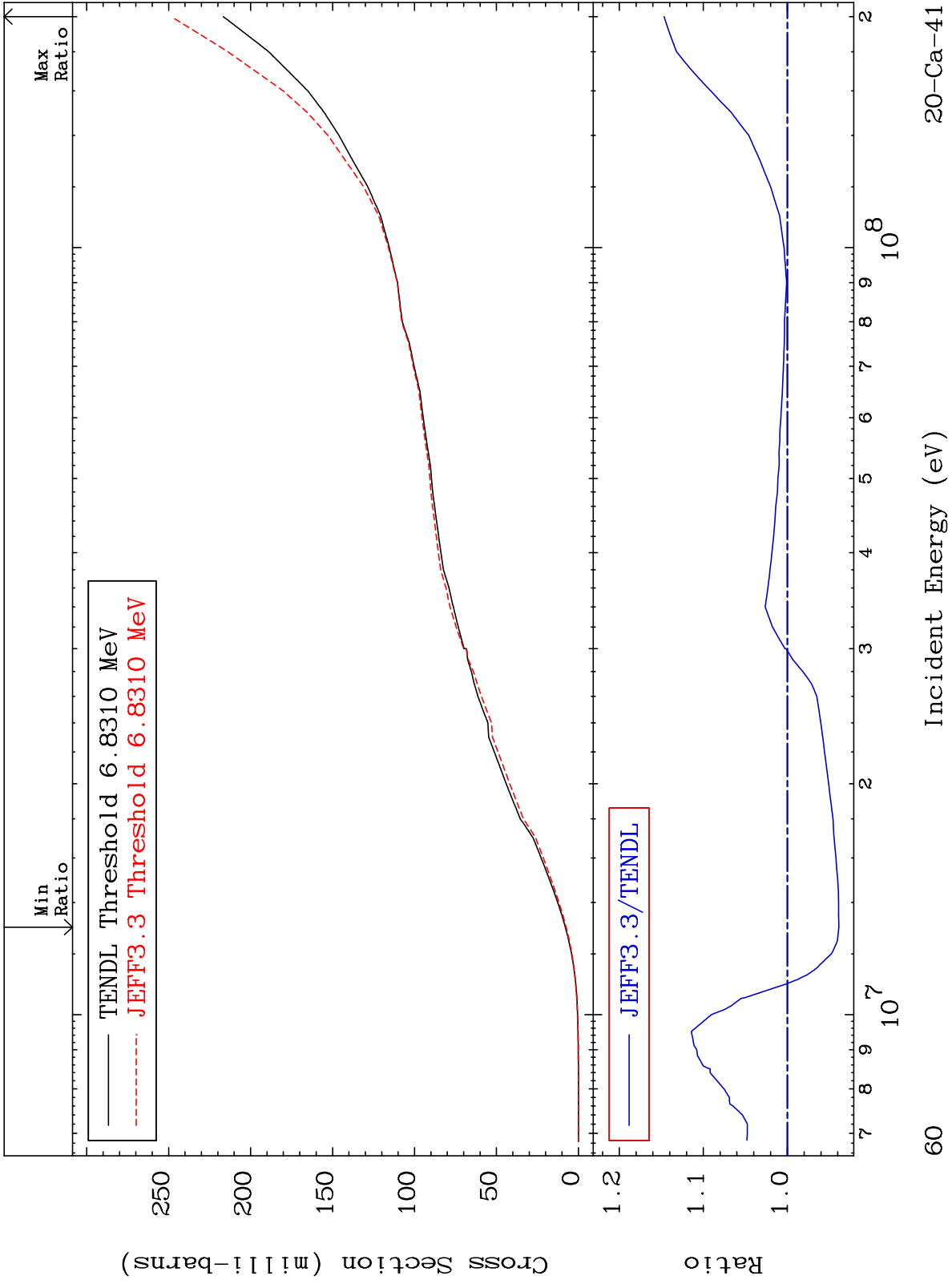
20-Ca-41  
-1.185 To 276.0 %



MAT 2028

Deuterium Production  
Cross Section

20-Ca-41  
-6.129 To 14.68 %

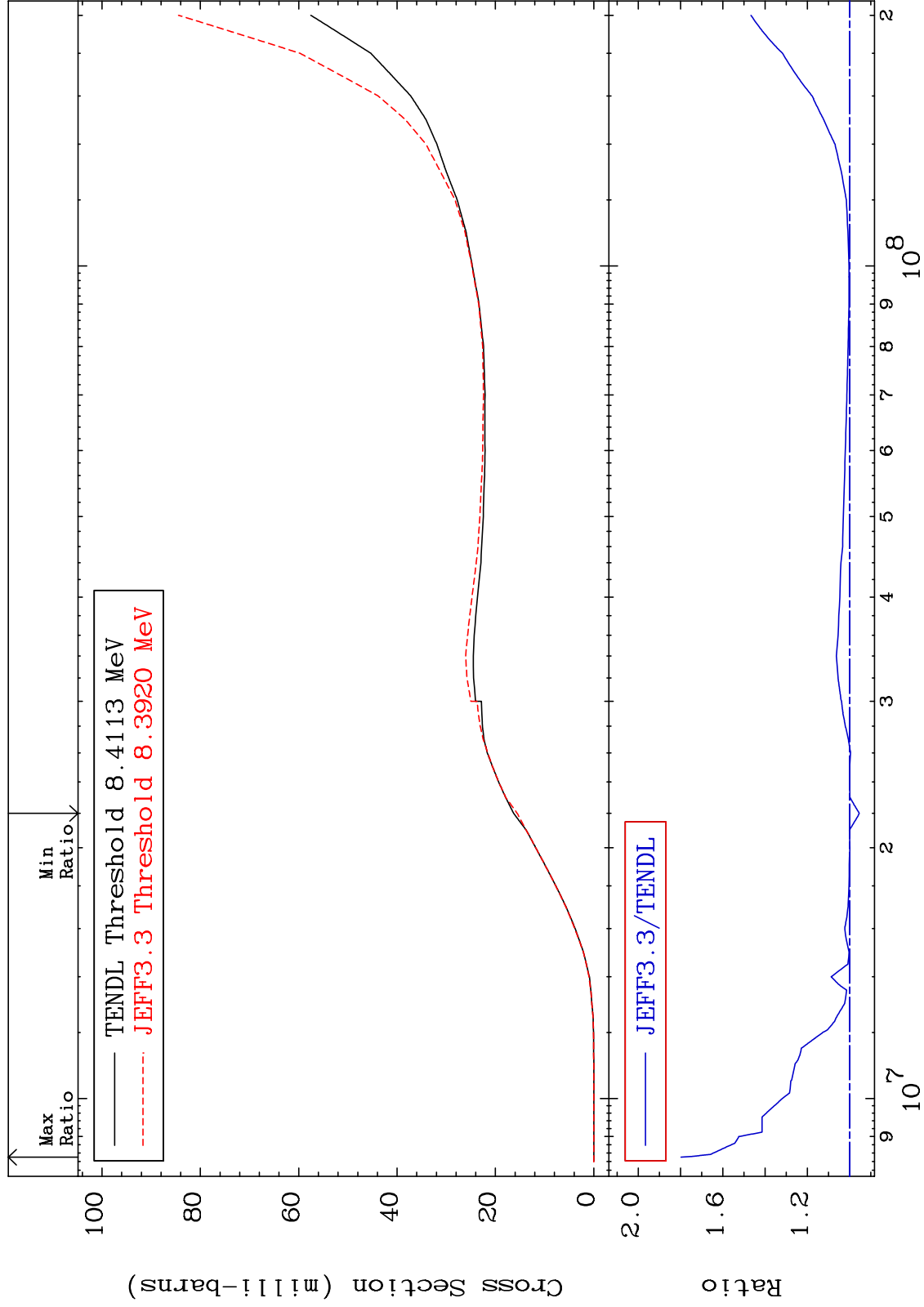


60

MAT 2028

Tritium Production  
Cross Section

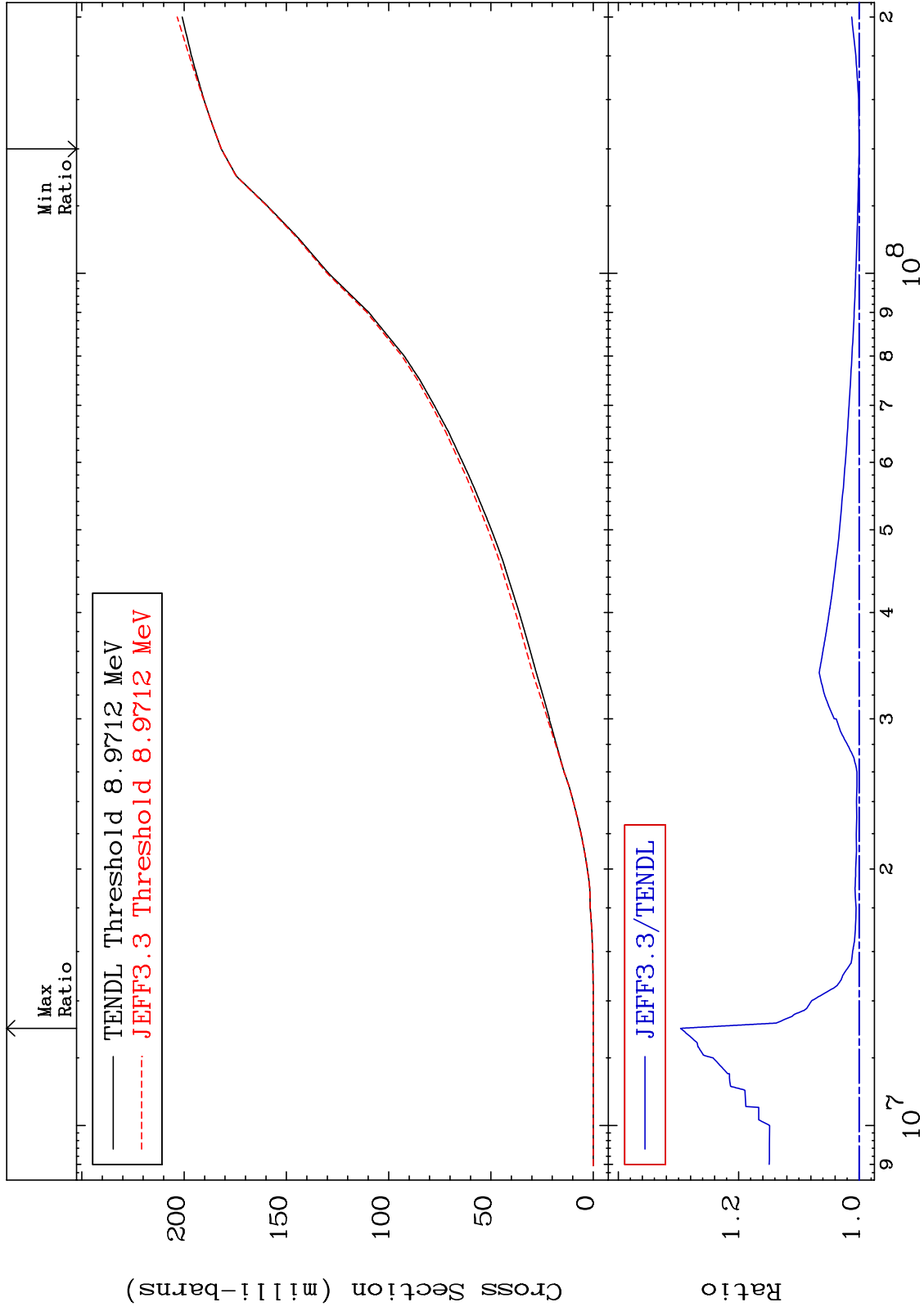
$^{20}\text{Ca-41}$   
-4.530 To 79.76 %



MAT 2028

He-3 Production  
Cross Section

20-Ca-41  
-0.015 To 29.65 %



62

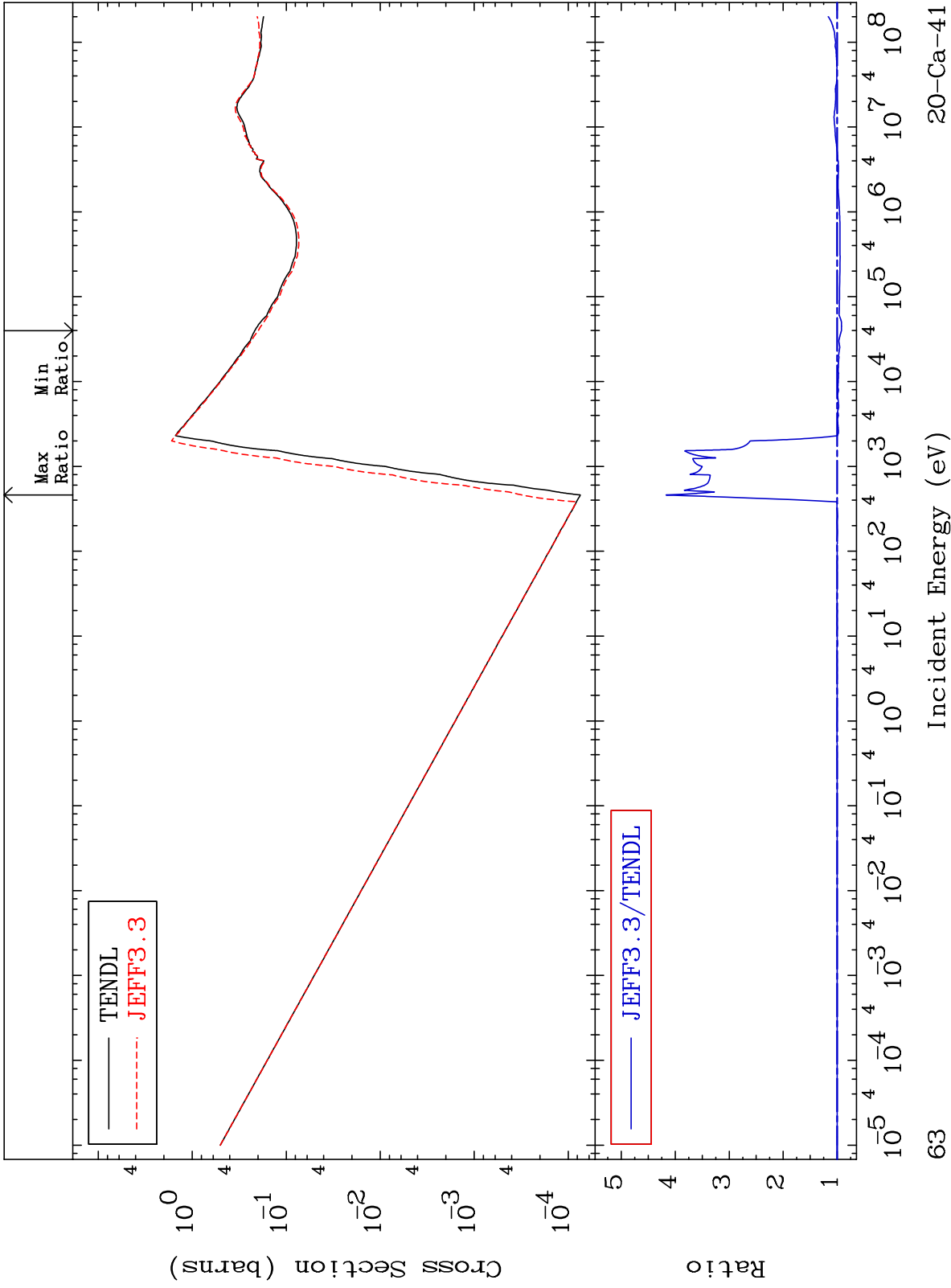
Incident Energy (eV)

20-Ca-41

MAT 2028

He-4 Production  
Cross Section

20-Ca-41  
-8.099 To 317.0 %



63

20-Ca-41

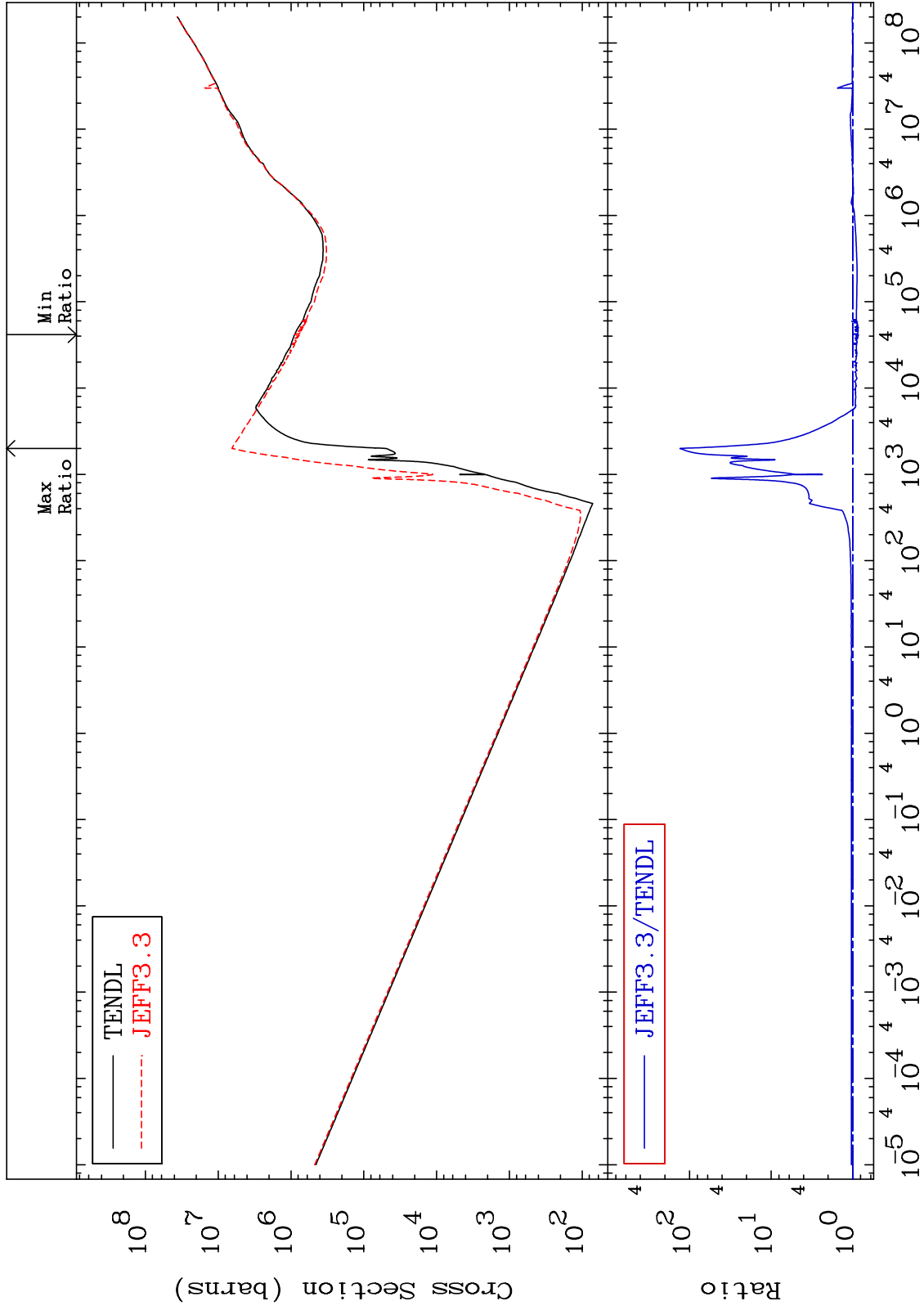


MAT 2028

Kerma total (eV-barns)  
Cross Section

20-Ca-41

-14.83 To 9999. %



64

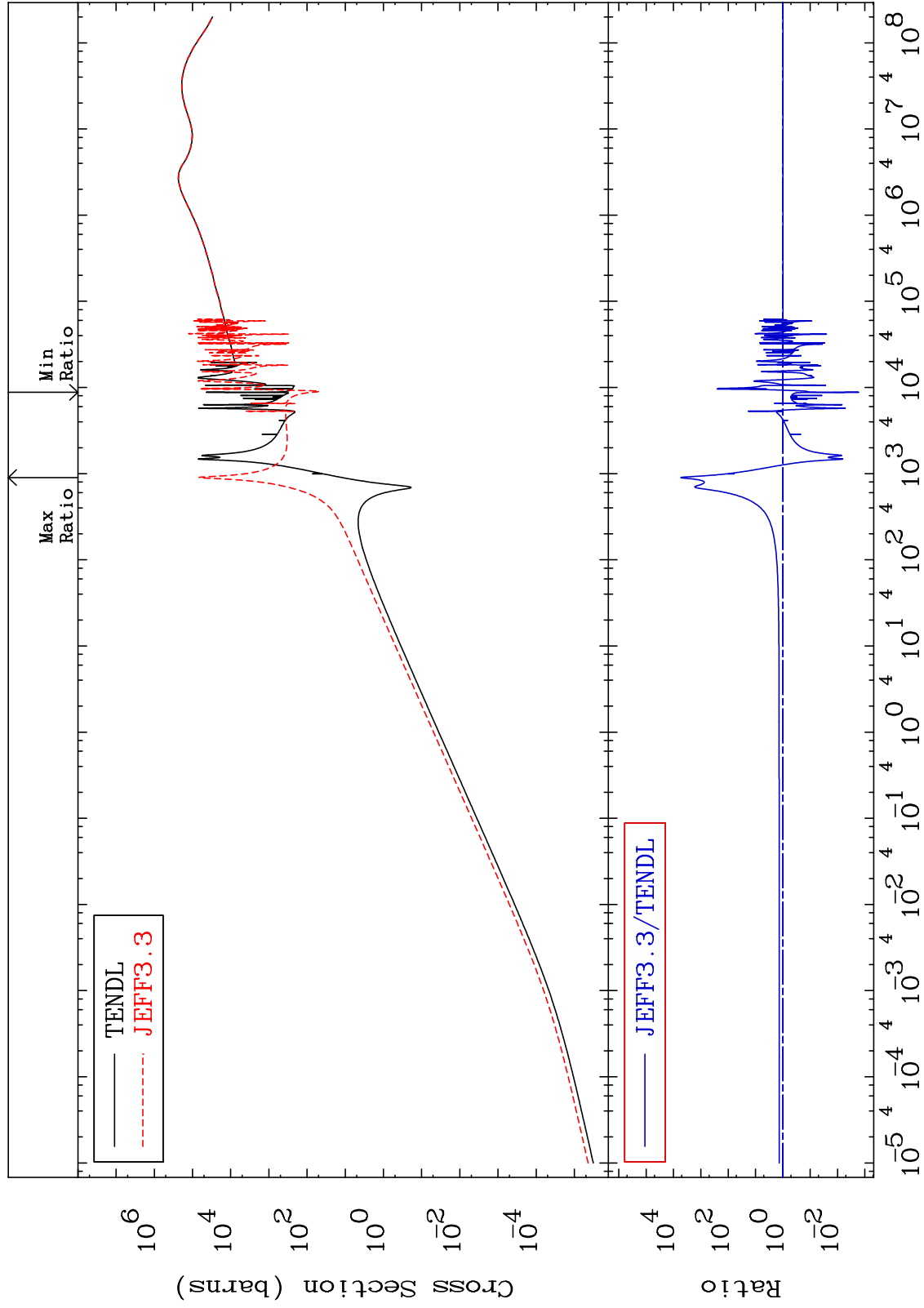
Incident Energy (eV)

20-Ca-41

MAT 2028

Kerma elastic  
Cross Section

20-Ca-41  
-99.83 To 9999. %



65

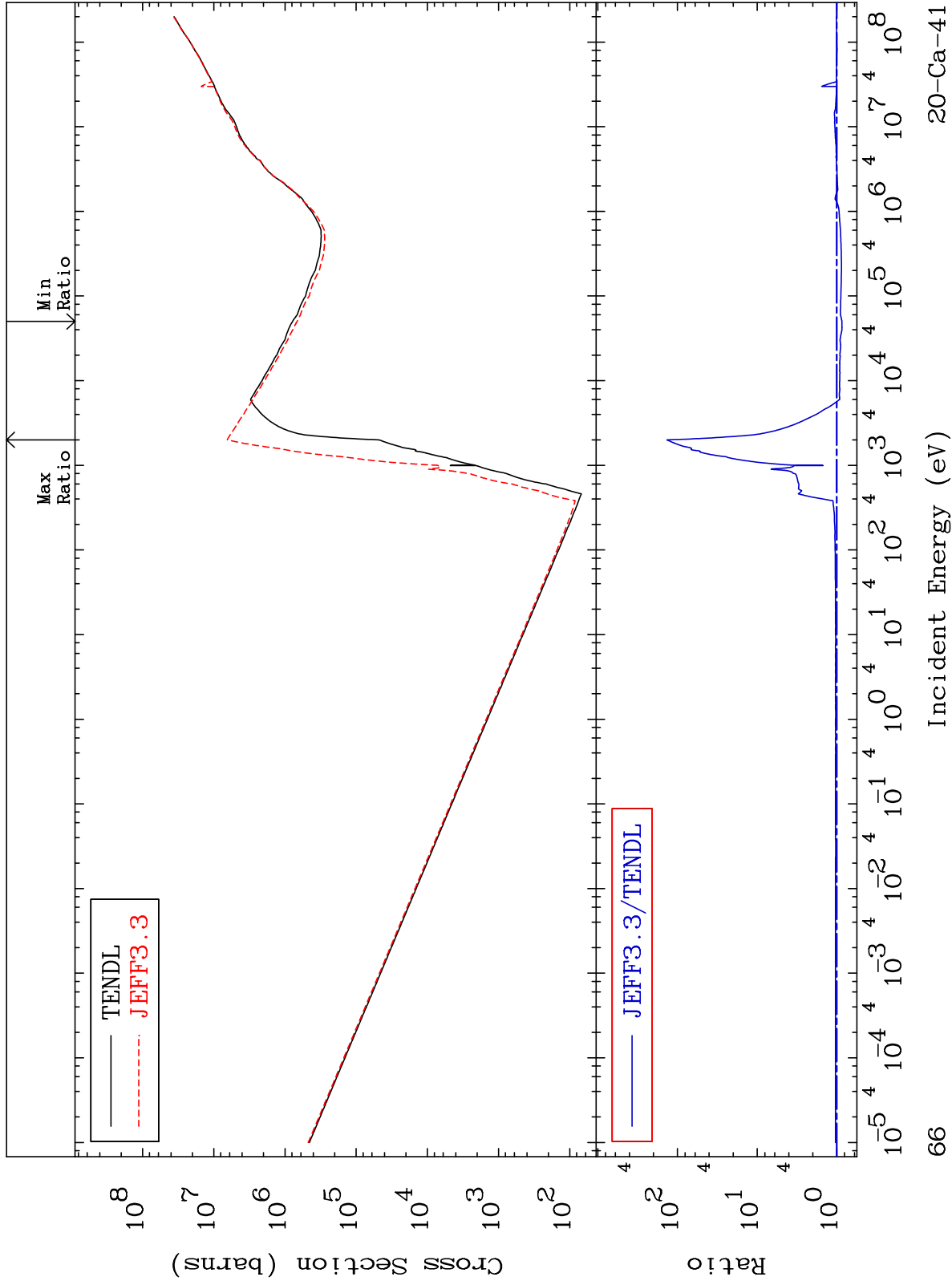
Incident Energy (eV)

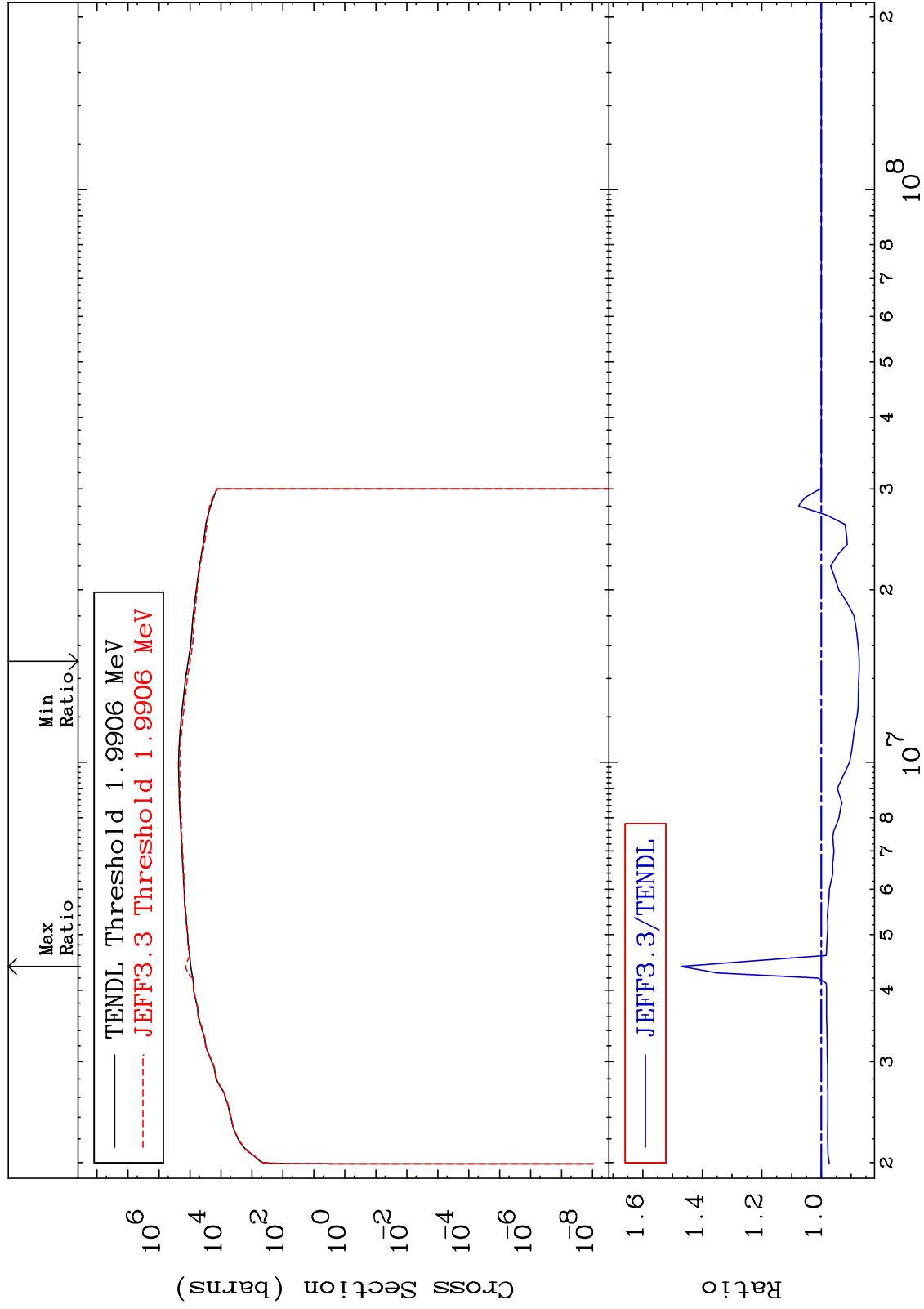
20-Ca-41

MAT 2028

Kerma non-elastic (all but mt2)  
Cross Section

20-Ca-41  
-13.74 To 9999. %

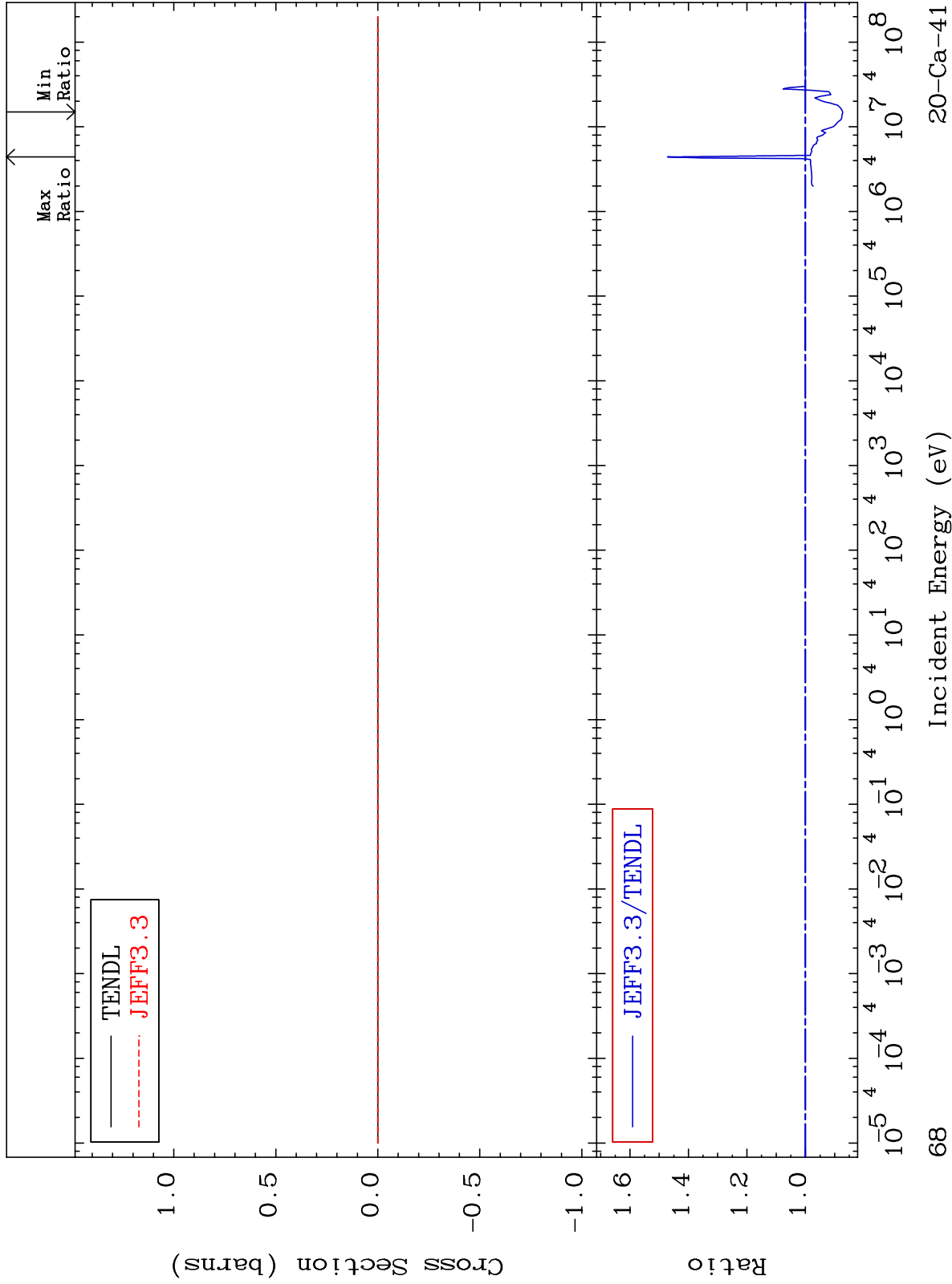




MAT 2028

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

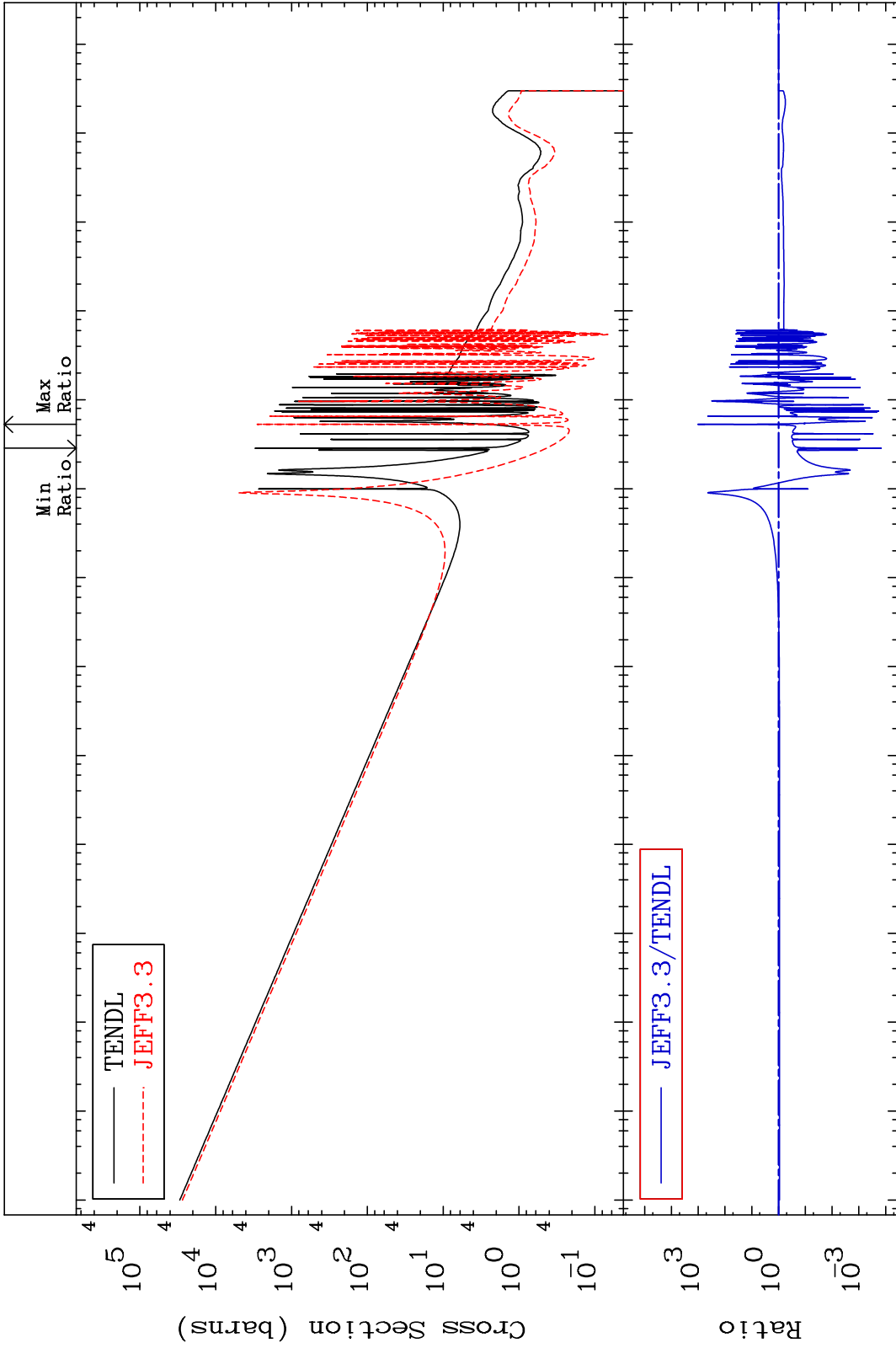
20-Ca-41  
-12.73 To 47.14 %



MAT 2028

Kerma capture (mt102)  
Cross Section

20-Ca-41  
-99.99 To 9999. %



69

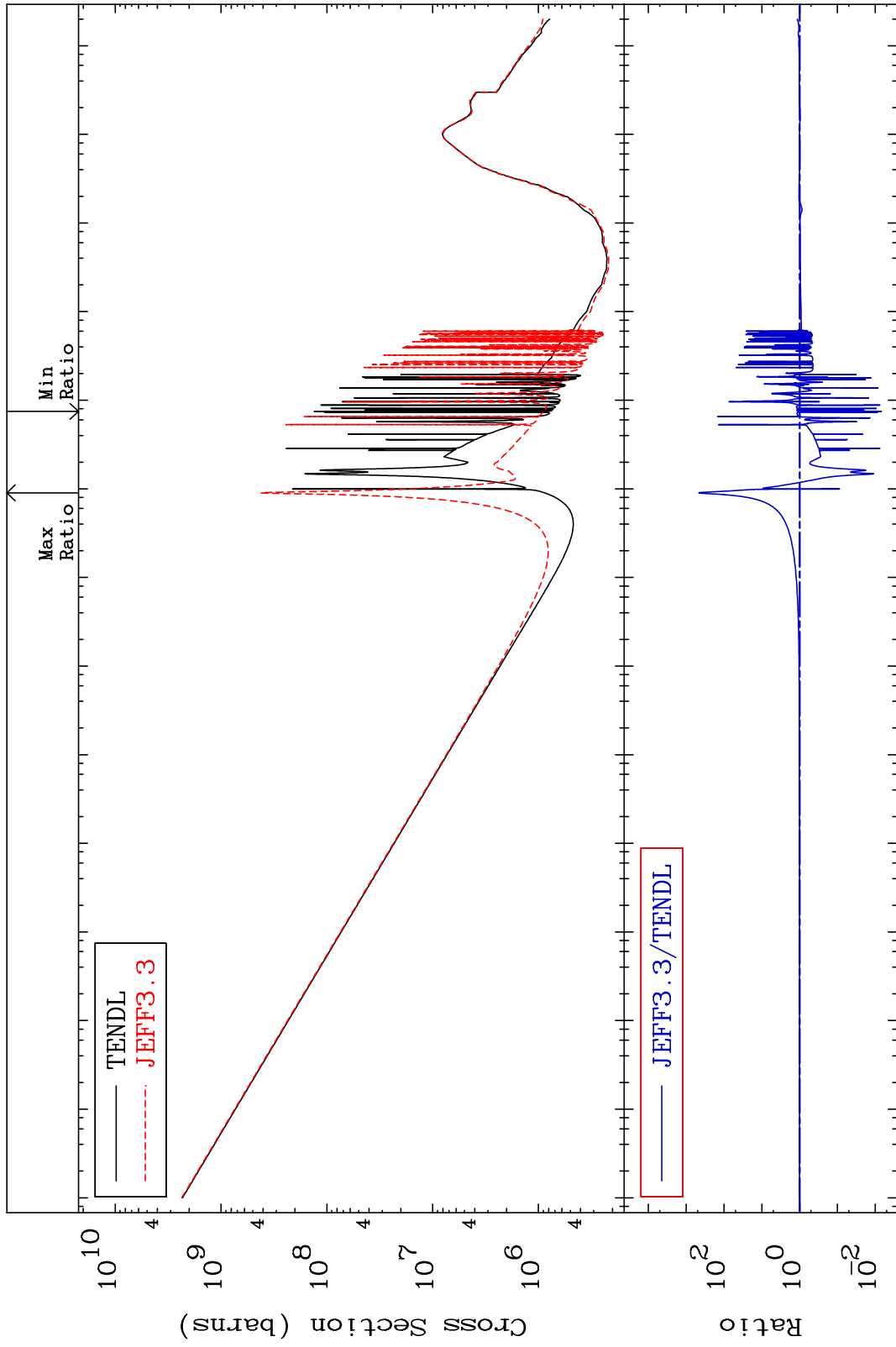
Incident Energy (eV)

20-Ca-41

MAT 2028

Total photon (eV-barns)  
Cross Section

20-Ca-41  
-99.32 To 9999. %



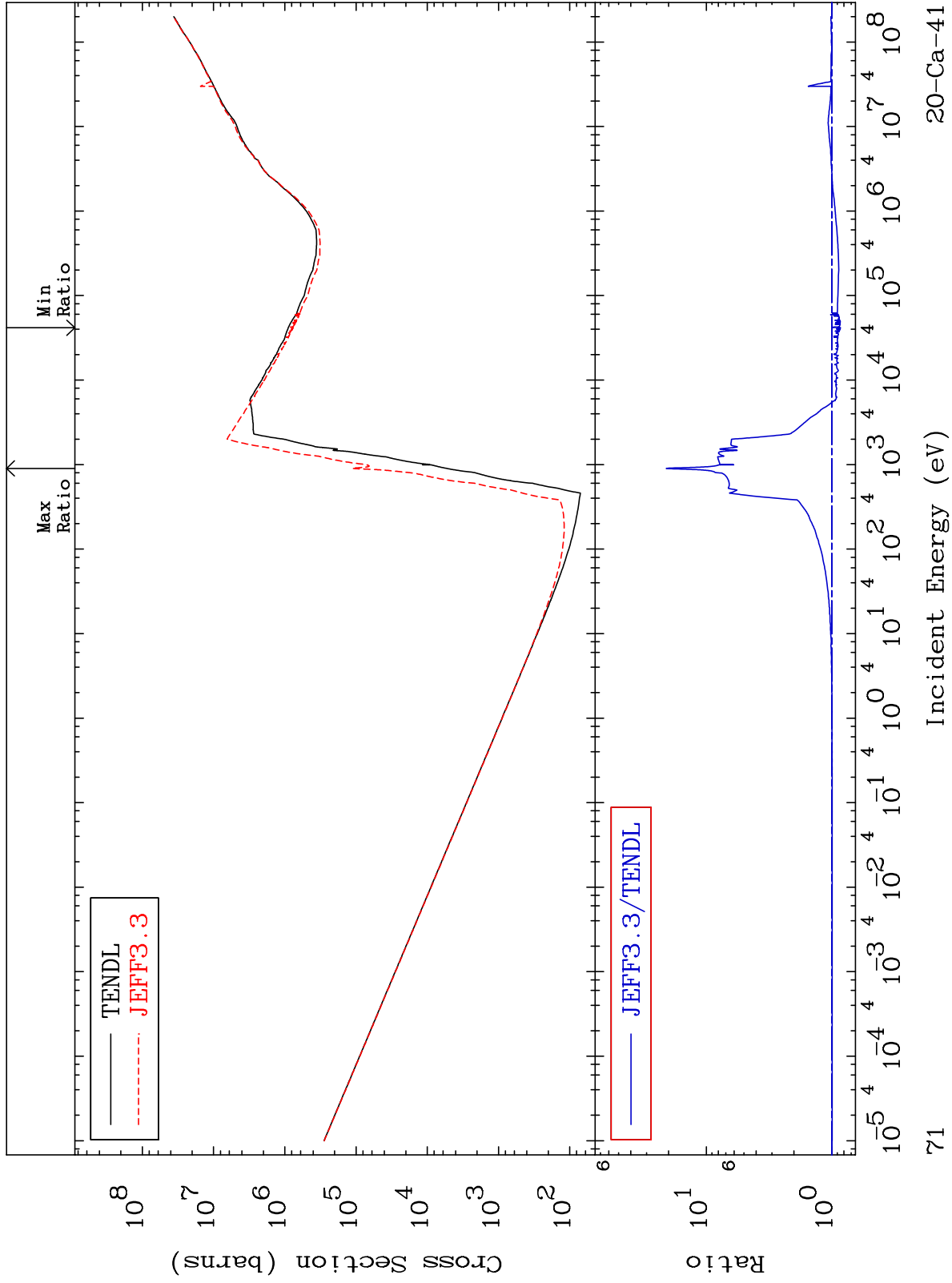
Incident Energy (eV) 20-Ca-41

70

MAT 2028

Total kinematic kerma (high limit)  
Cross Section

20-Ca-41  
-15.05 To 2001. %



71

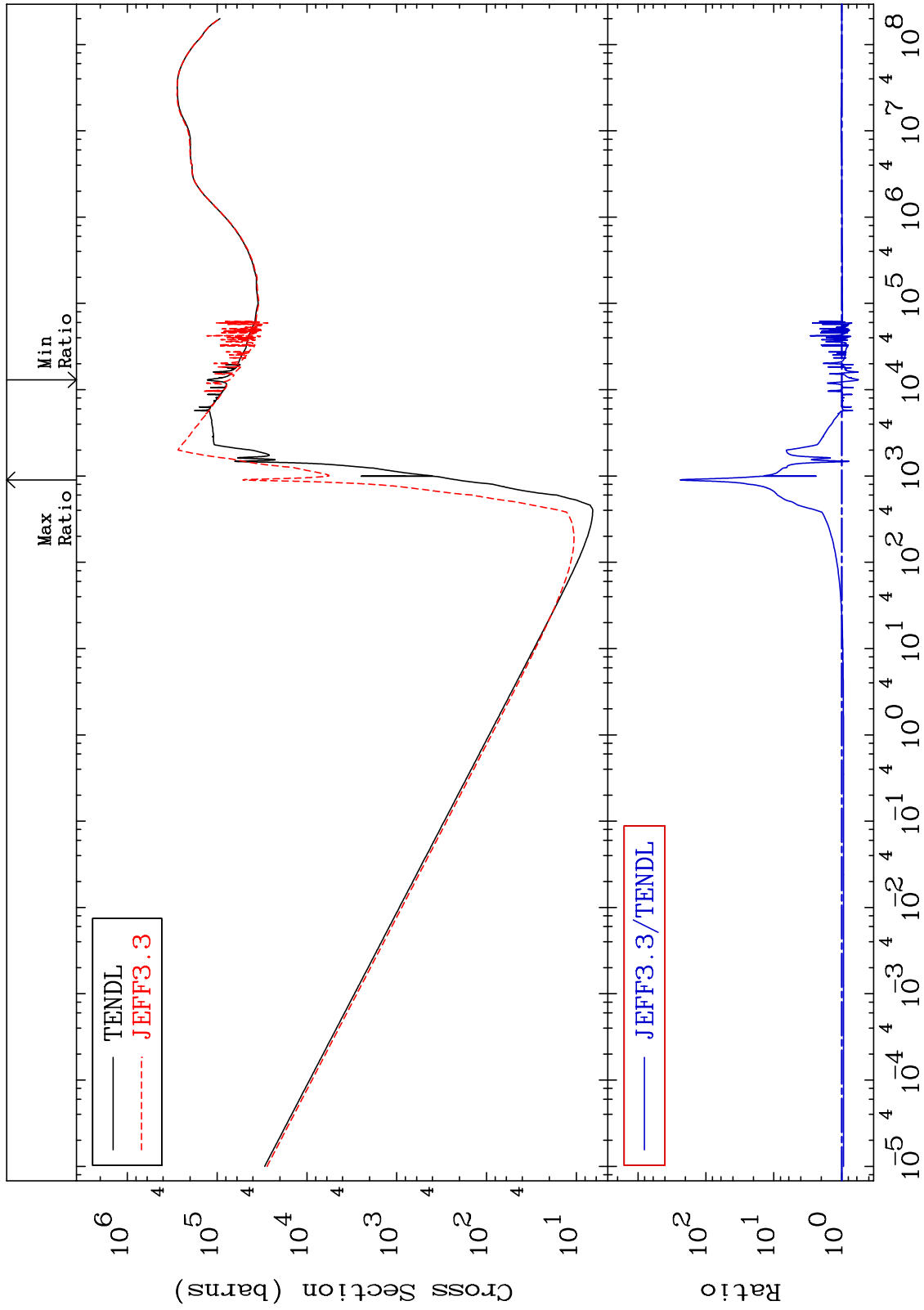
20-Ca-41



MAT 2028

Dpa total (eV-barns)  
Cross Section

20-Ca-41  
-43.21 To 9999. %



72

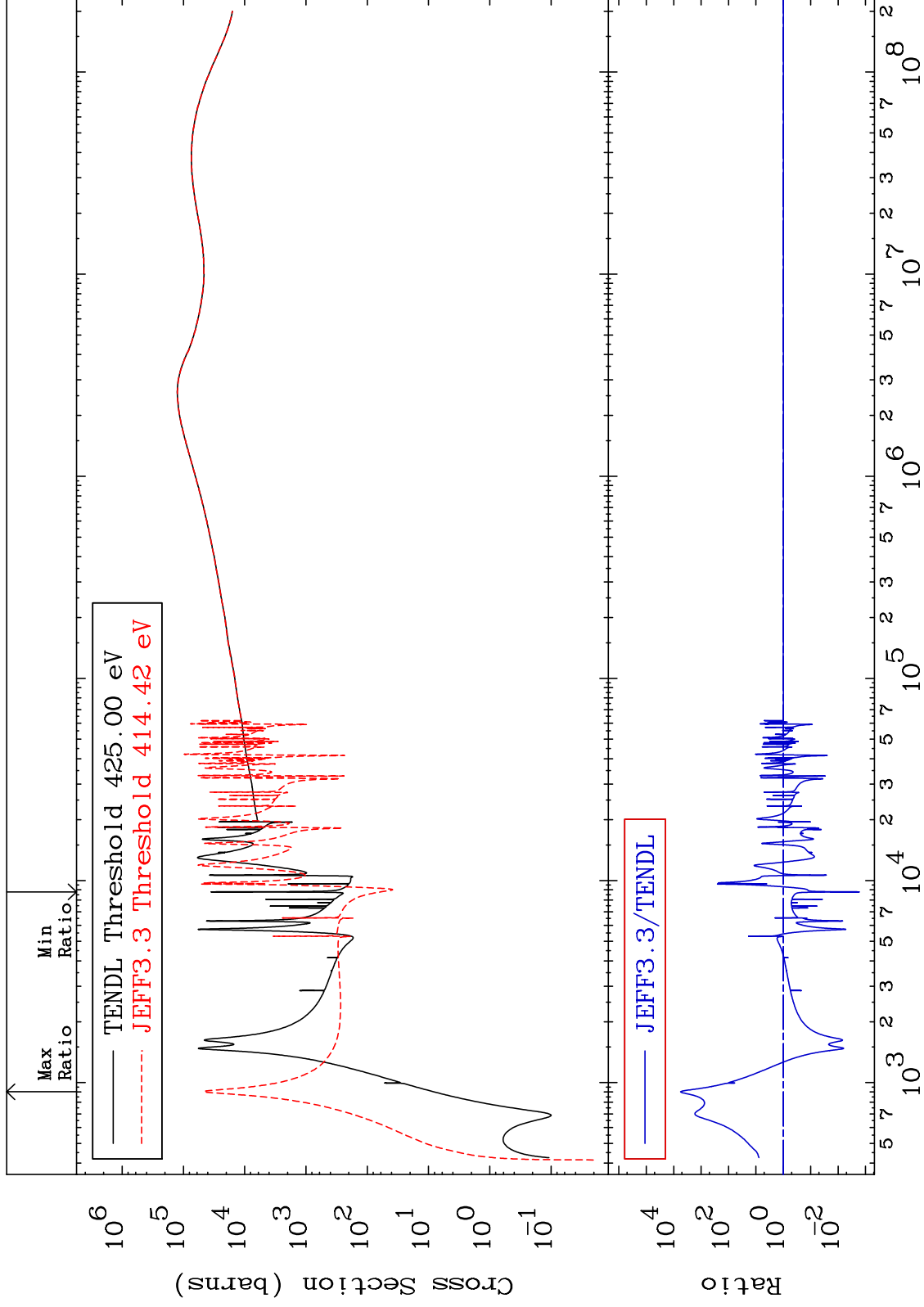
Incident Energy (eV)

20-Ca-41

MAT 2028

Dpa elastic (mt2)  
Cross Section

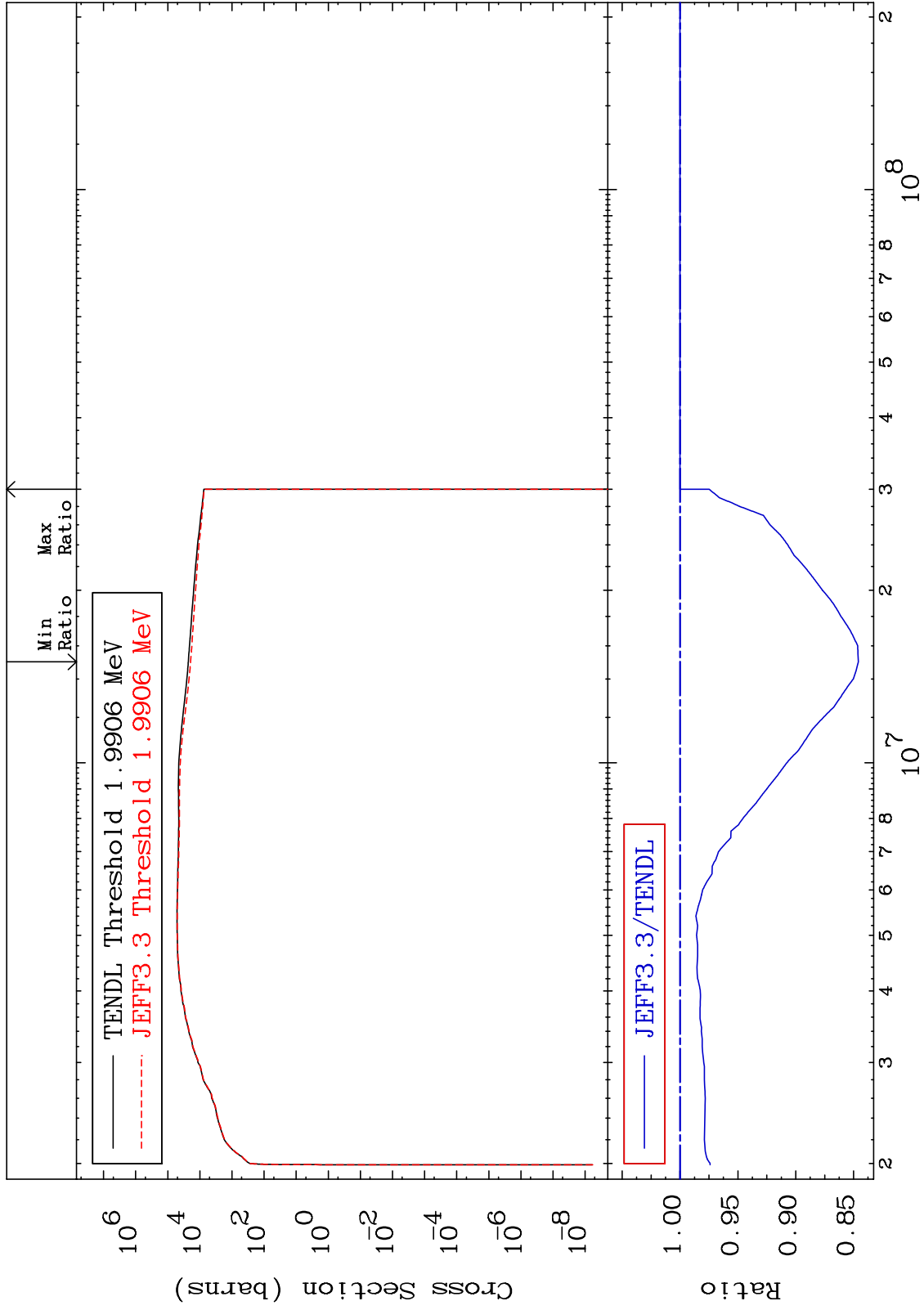
20-Ca-41  
-99.83 To 9999. %



73

Incident Energy (eV)

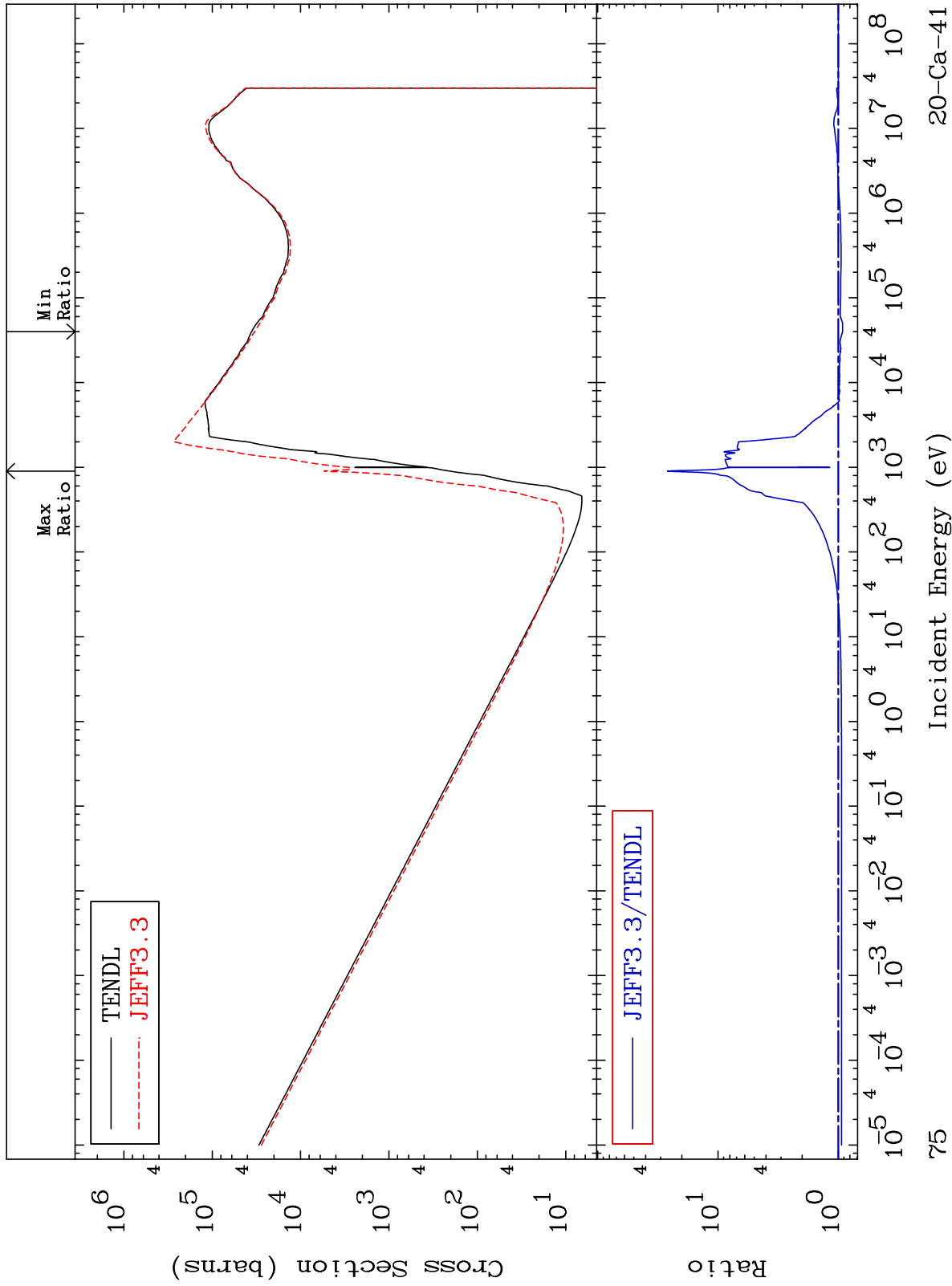
20-Ca-41



MAT 2028

Dpa disappearance (mt102 -120)  
Cross Section

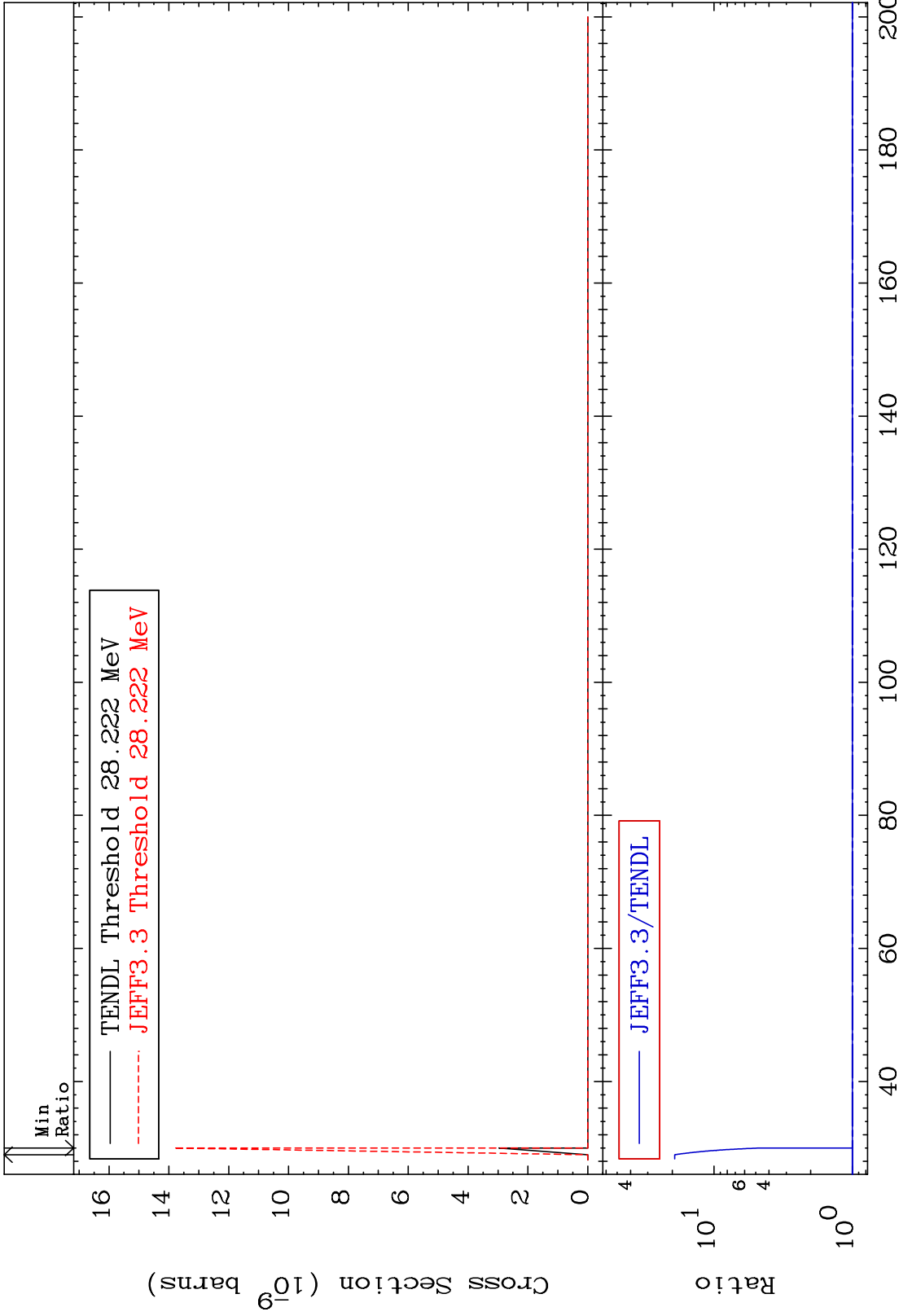
20-Ca-41  
-7.978 To 2529. %



75

20-Ca-41

Radionuclide Production Cross Section 0.000 To 1817. %

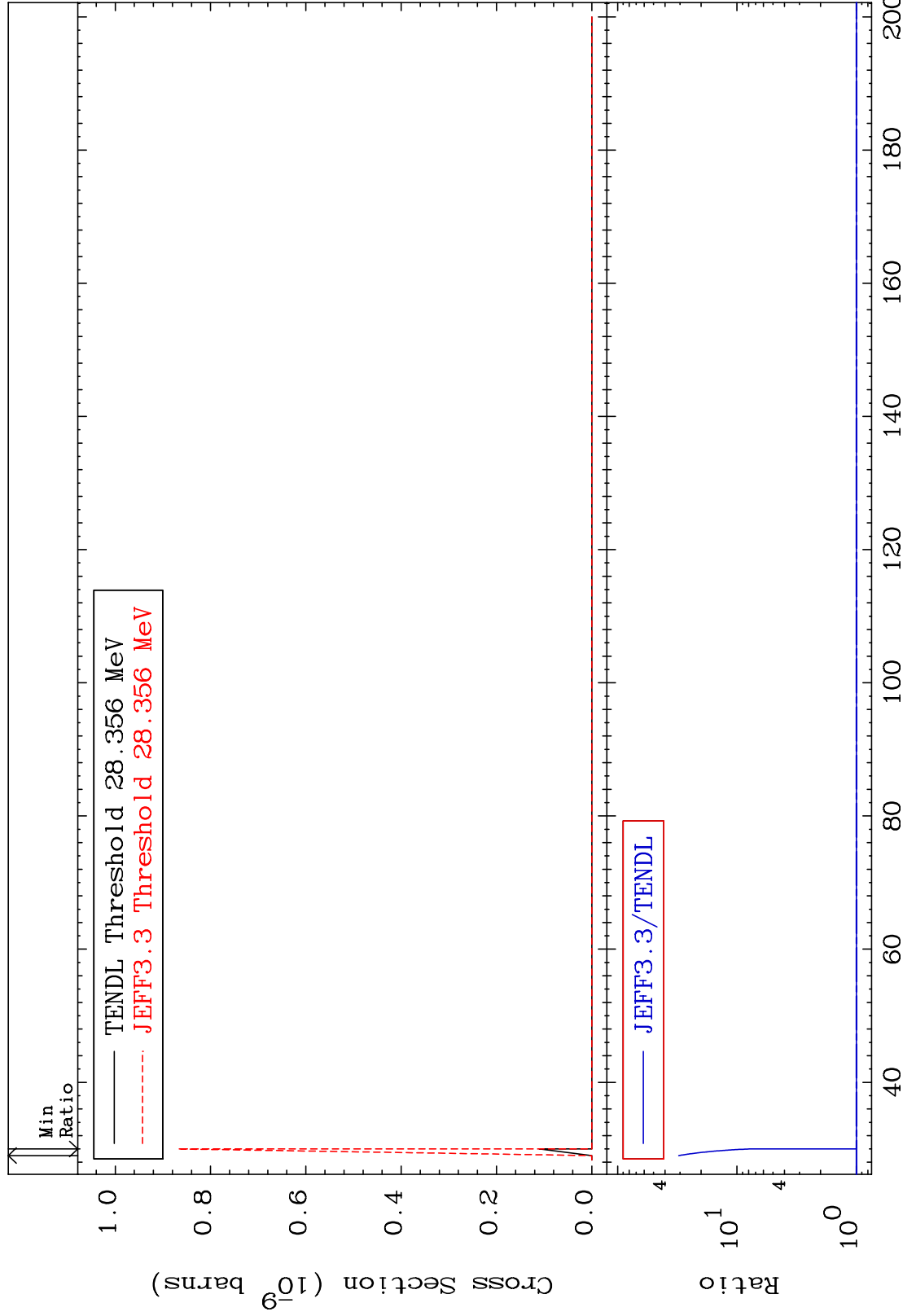


MAT 2028

(n,2n) d:19-K -38m1

20-Ca-41

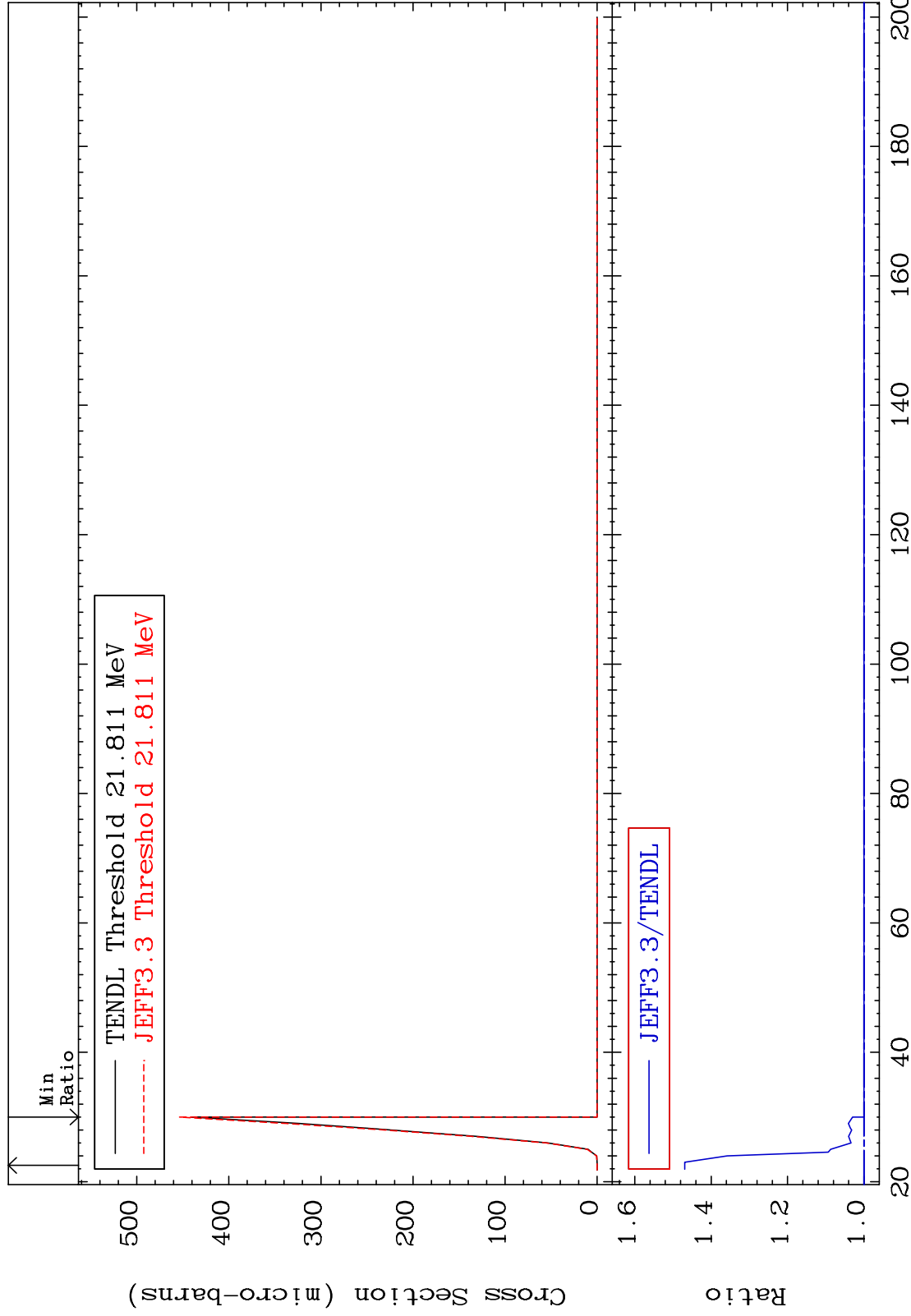
Radionuclide Production Cross Section 0.000 To 2974. %



MAT 2028

(n,n') t: 19-K -38g  
Radionuclide Production Cross Section 0.000 To 46.90 %

20-Ca-41



20-Ca-41

Incident Energy (MeV)

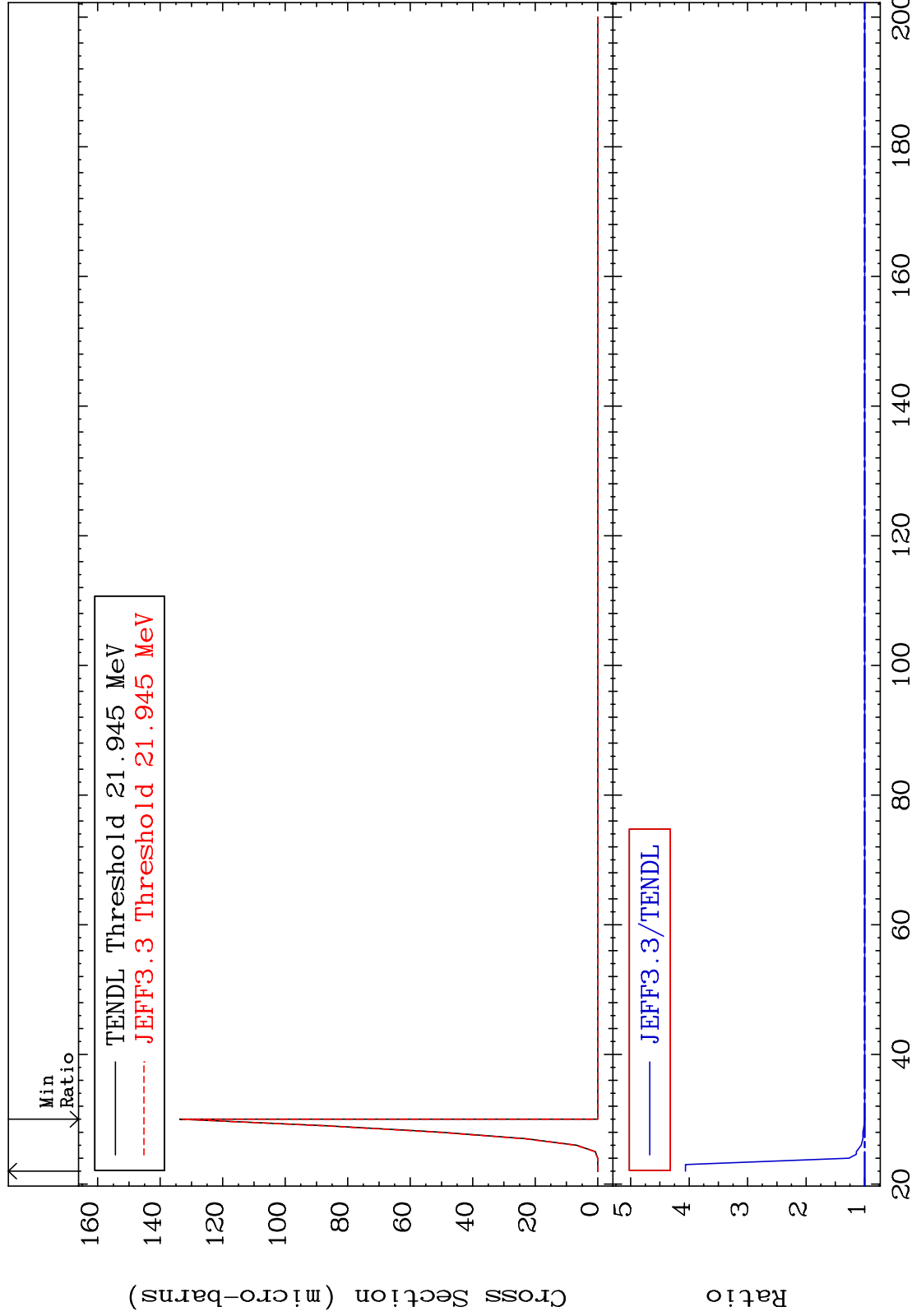
78

MAT 2028

(n, n') t:19-K -38m1

20-Ca-41

Radionuclide Production Cross Section -0.590 To 306.2 %



79