

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

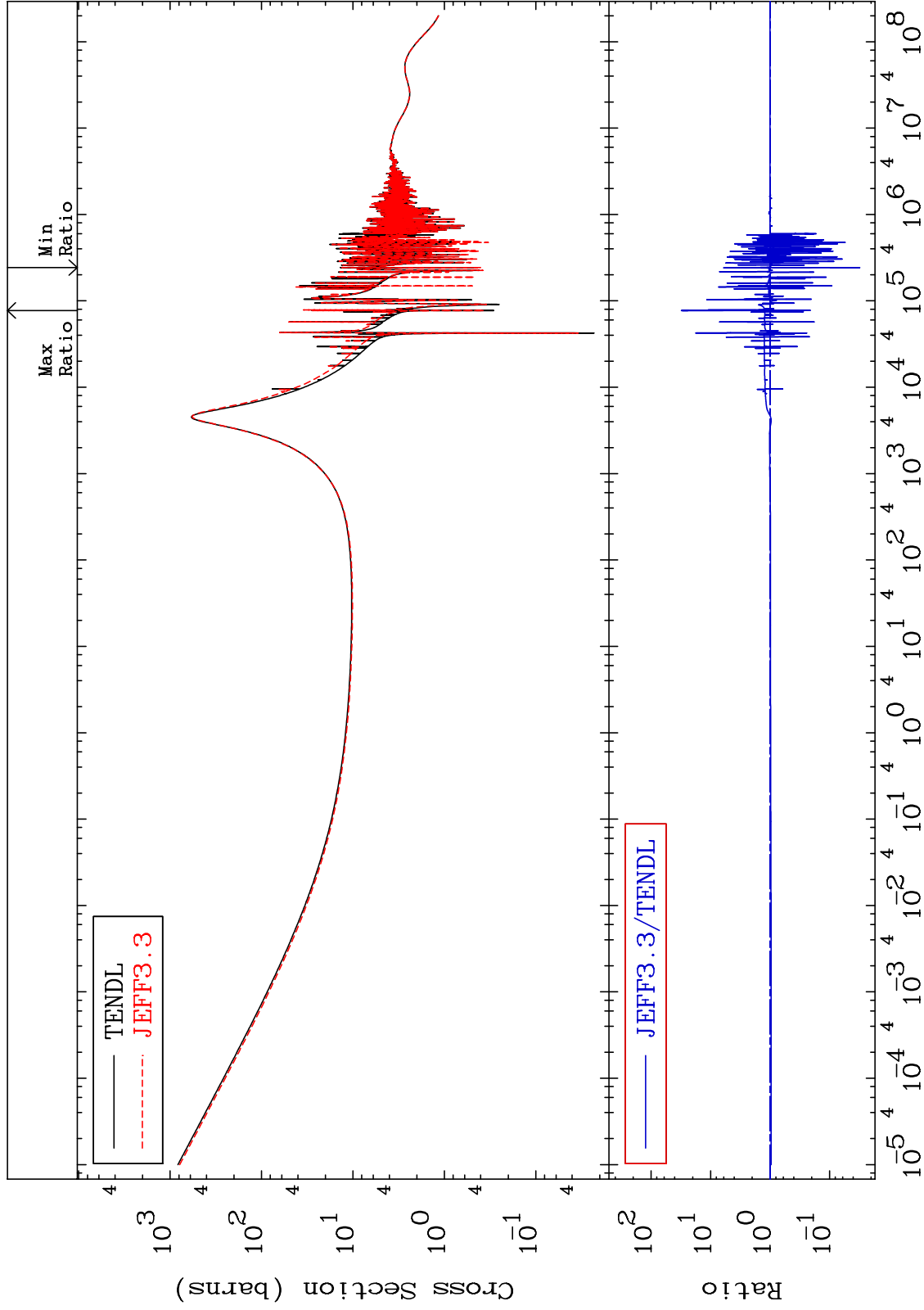
E.Mail: redcullen1@comcast.net
Web: redcullen1.net/HOMEPAGE.NEW

Press Mouse Button to Start

MAT 2837

Total
Cross Section

28-Ni-62
-96.90 To 3009. %



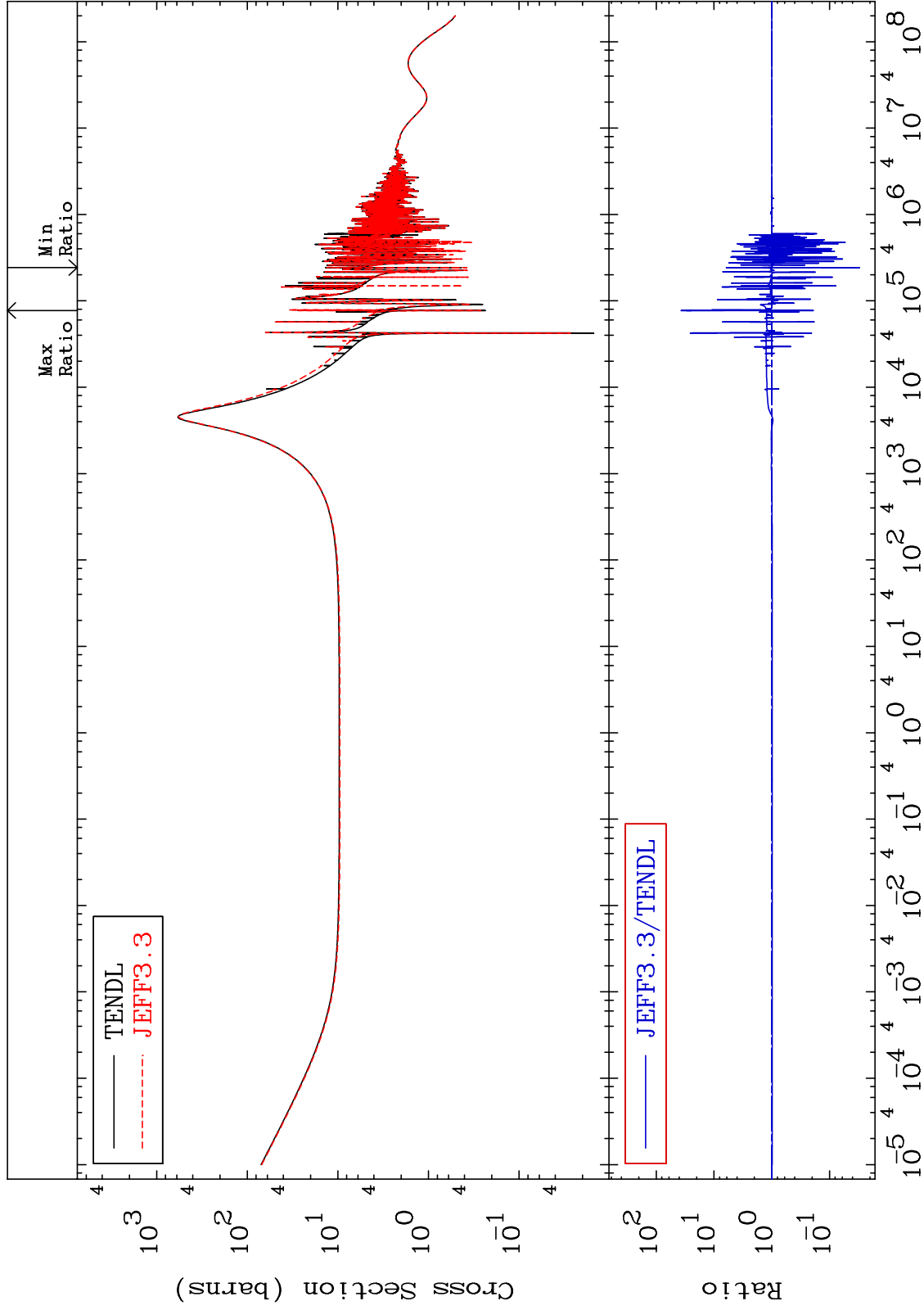
Incident Energy (eV)

28-Ni-62

MAT 2837

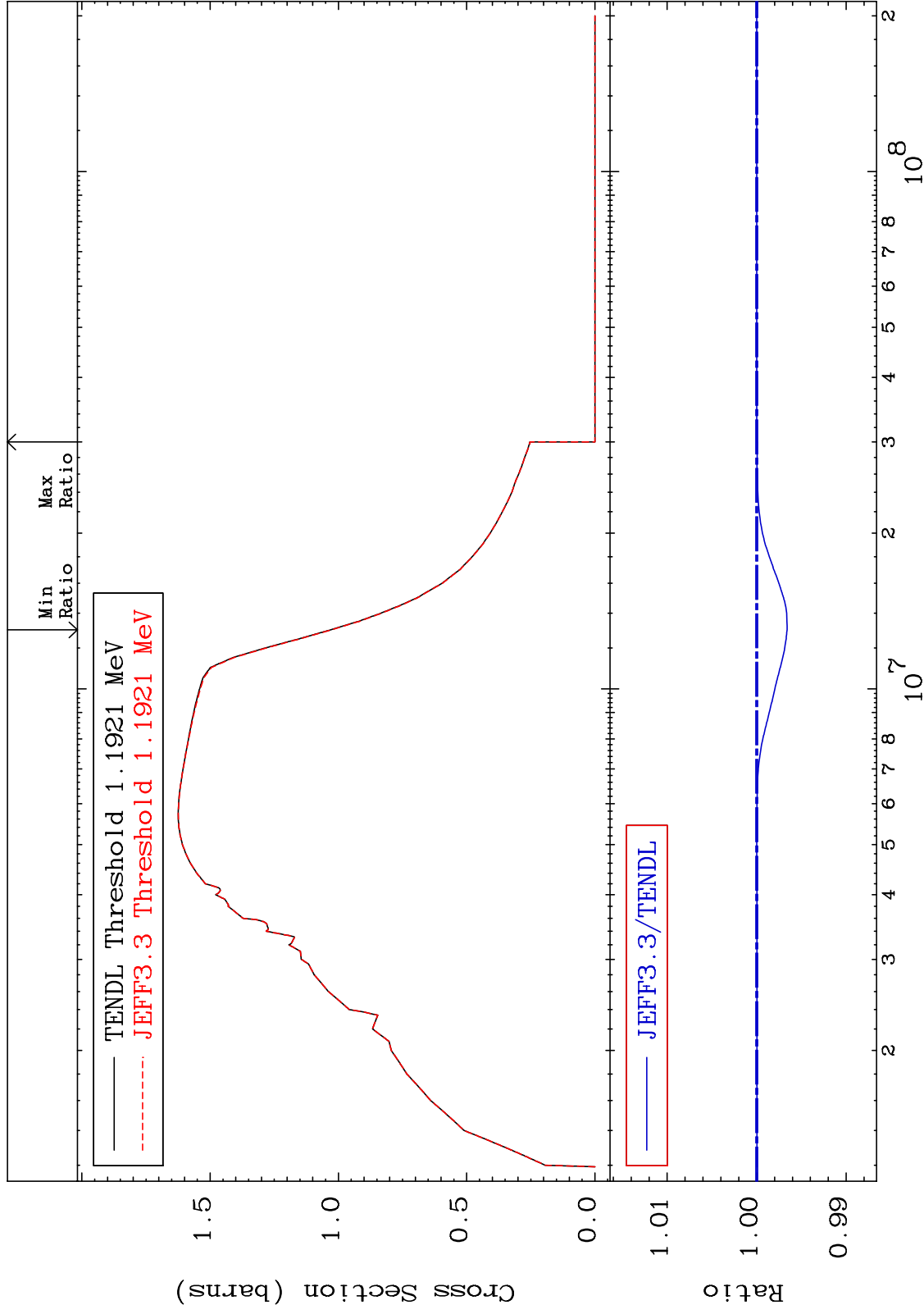
Elastic
Cross Section

28-Ni-62
-97.01 To 3589. %



MAT 2837

Inelastic Cross Section
28-Ni-62
-0.340 To 0.000 %

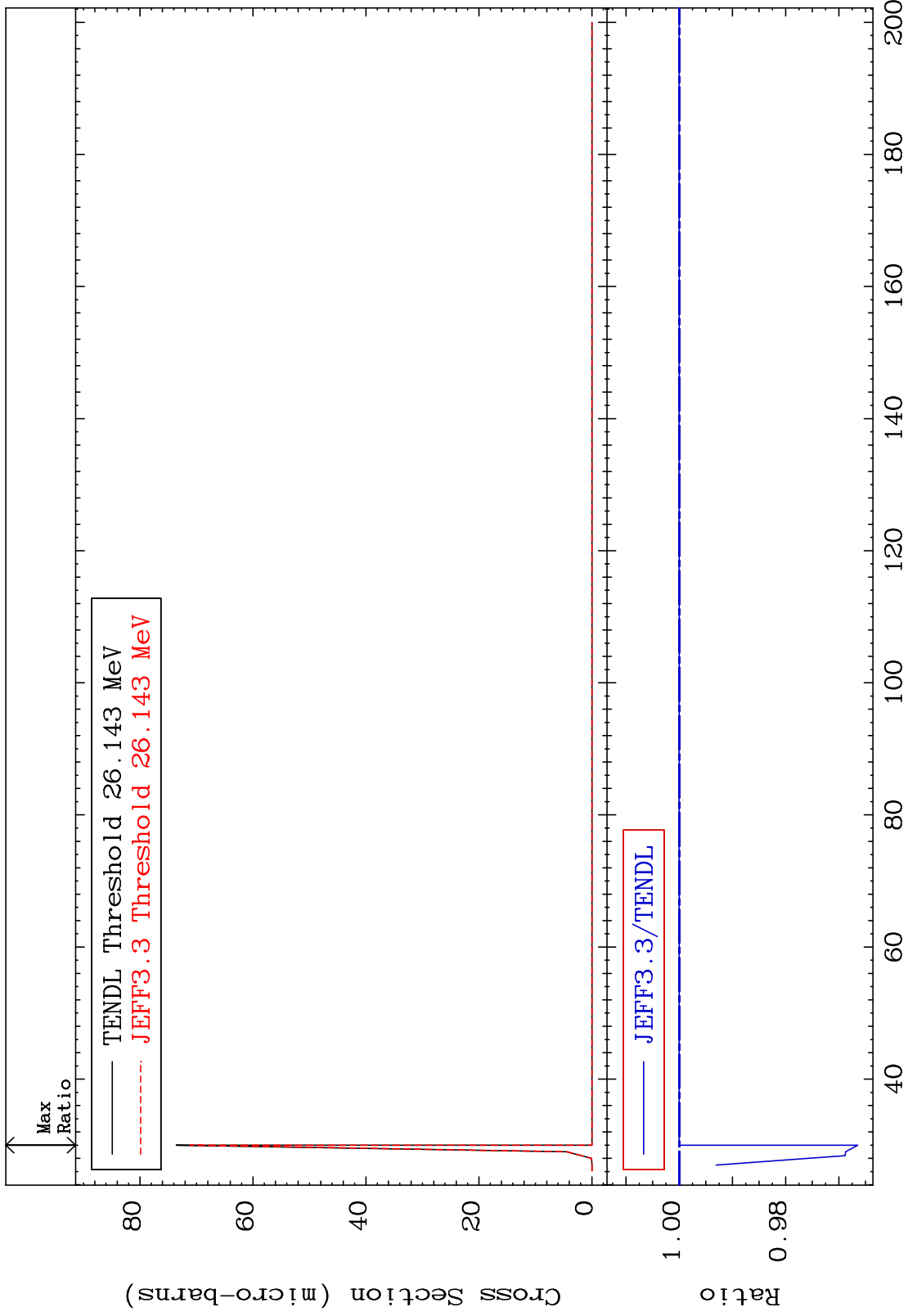


3

Incident Energy (eV)

28-Ni-62

MAT 2837 (n,2n) d 28-Ni-62
Cross Section -3.352 To 0.000 %



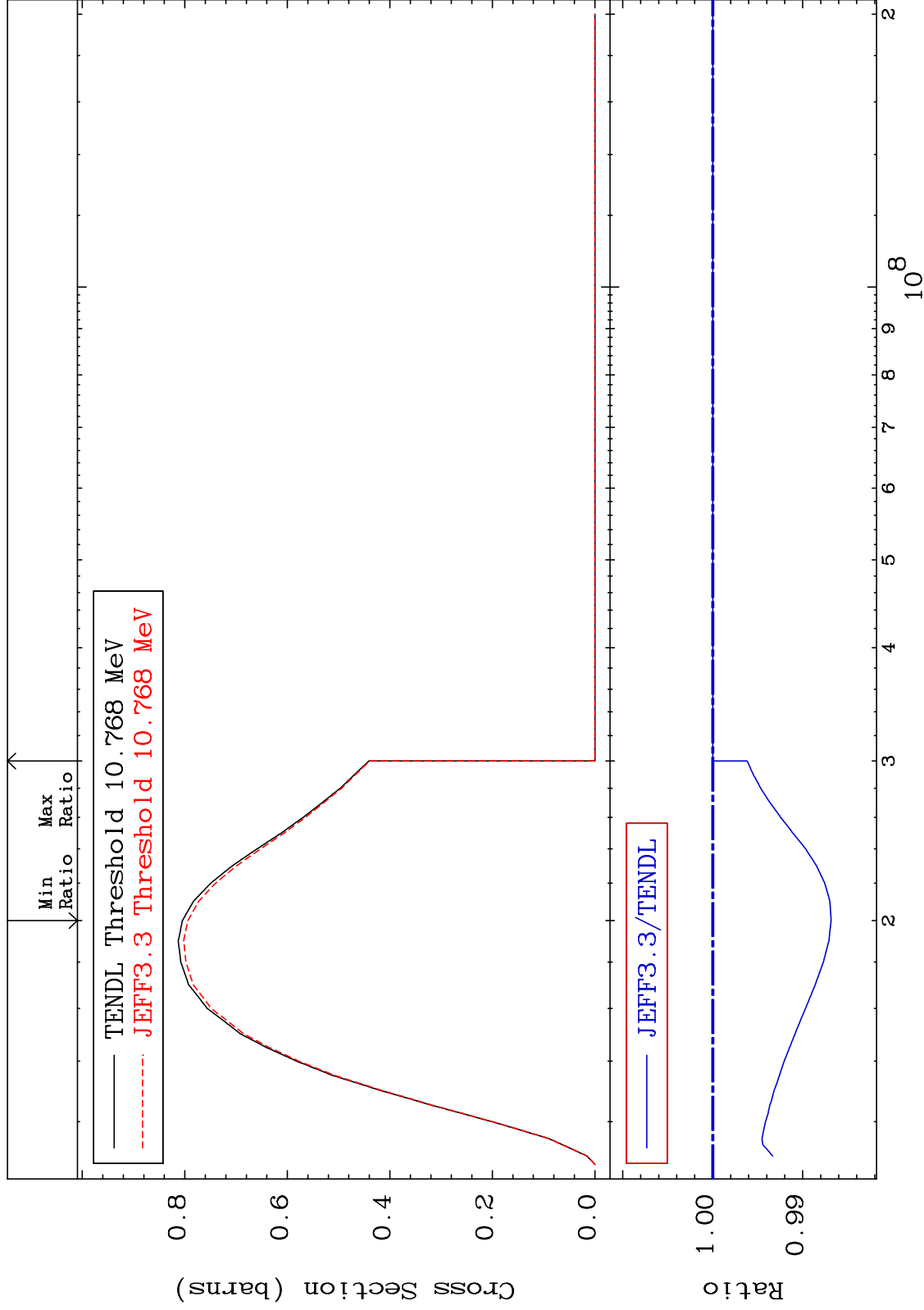
MAT 2837

(n,2n)

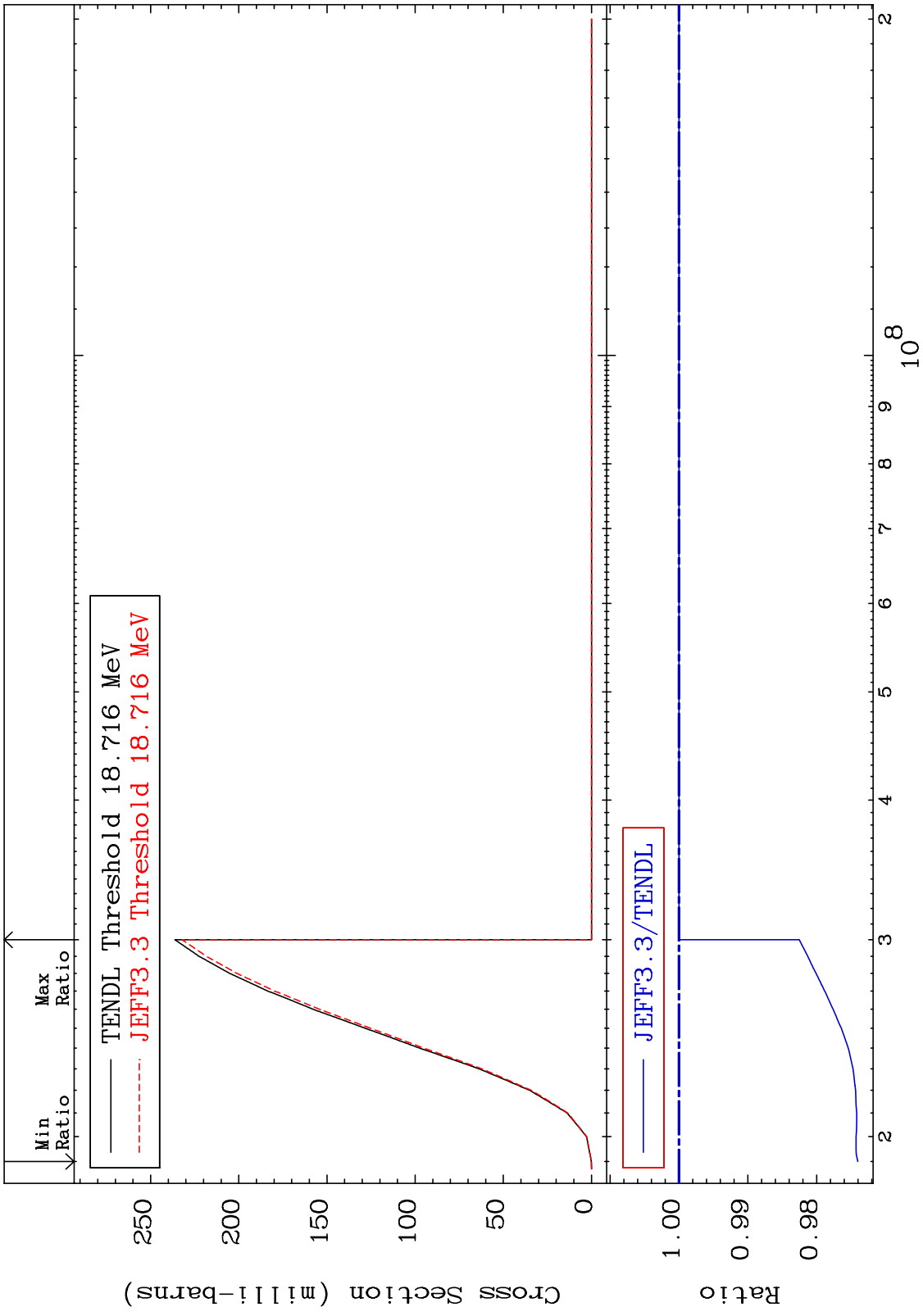
28-Ni-62

-1.314 To 0.000 %

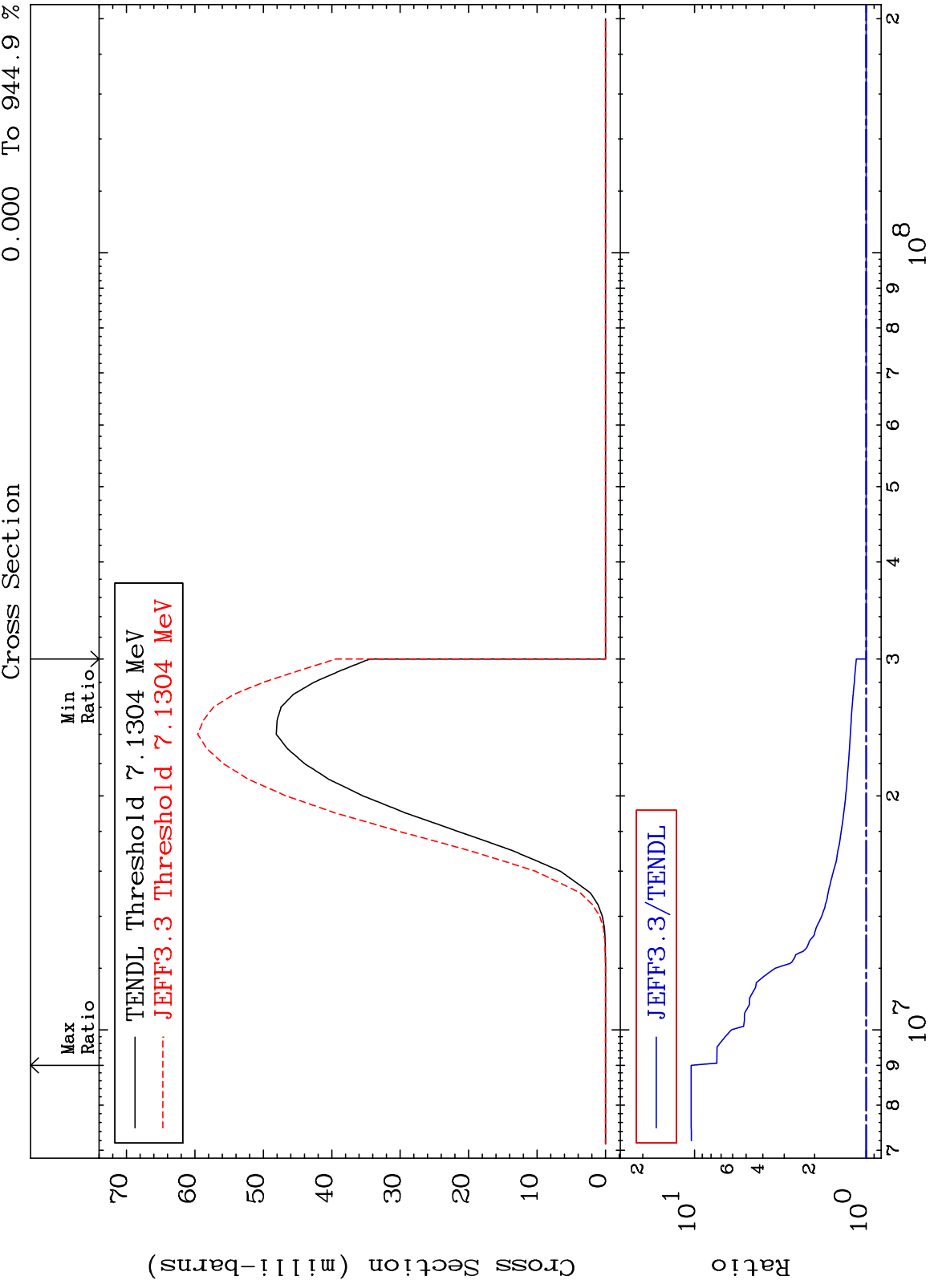
Cross Section



MAT 2837 (n,3n) 28-Ni-62
 Cross Section -2.596 To 0.000 %

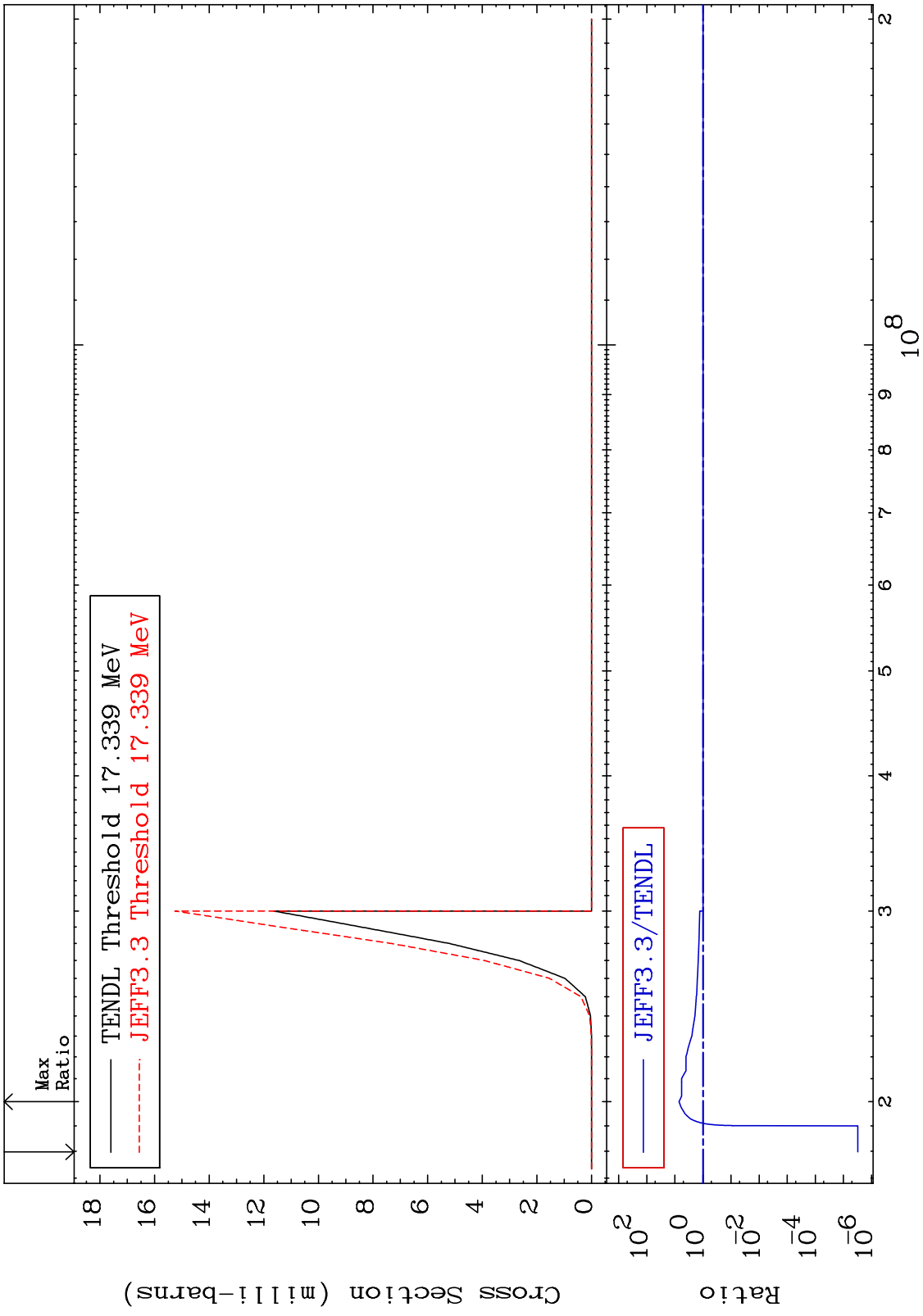


MAT 2837 $(n, n') \alpha$ 28-Ni-62 To 944.9 %

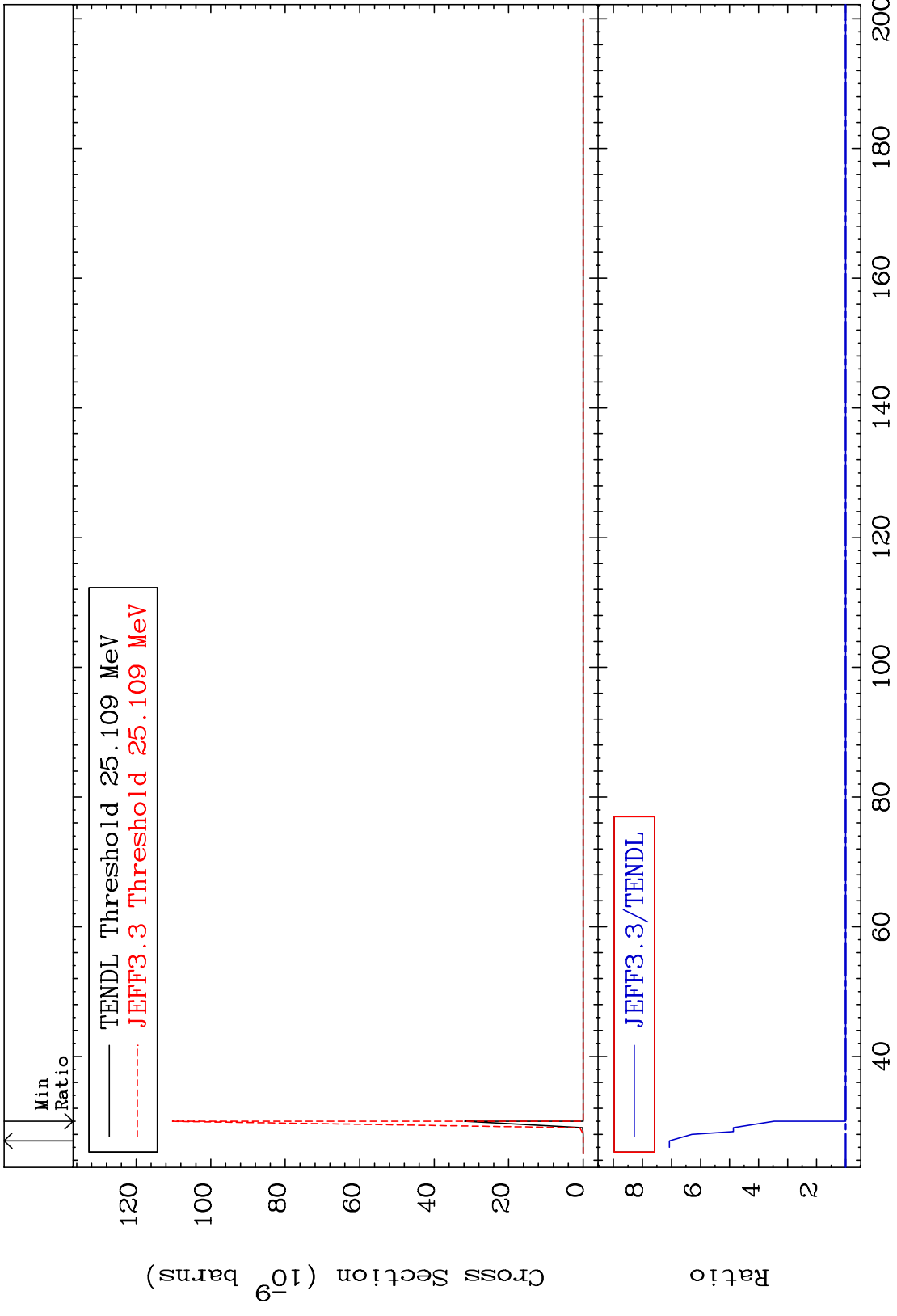


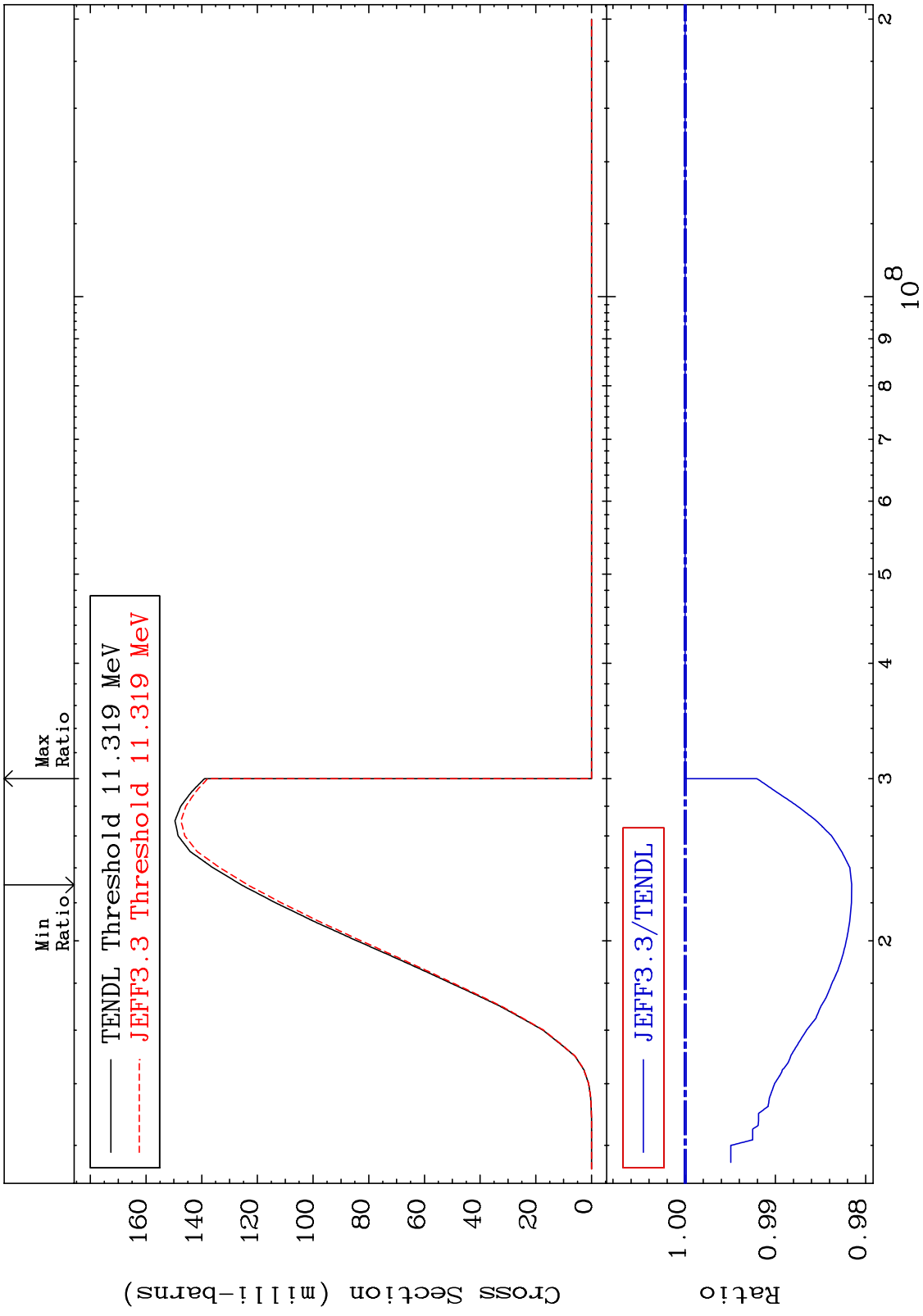
28-Ni-62

MAT 2837 (n,2n) α 28-Ni-62
 Cross Section -100.0 To 609.4 %

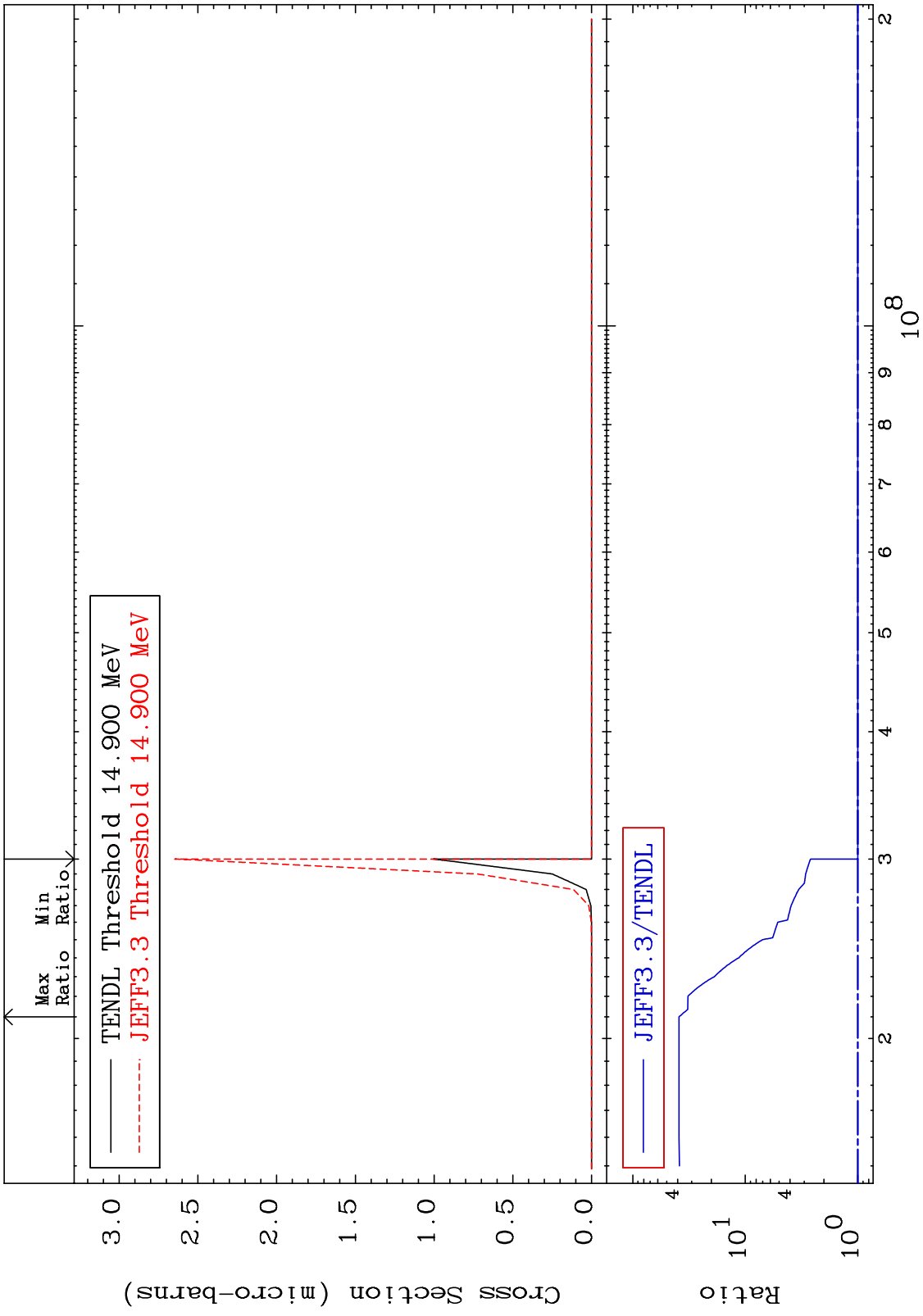


MAT 2837 (n,3n) α 28-Ni-62
Cross Section 0.000 To 607.1 %





MAT 2837 (n,n') 2α Cross Section 28-Ni-62 To 3781. %



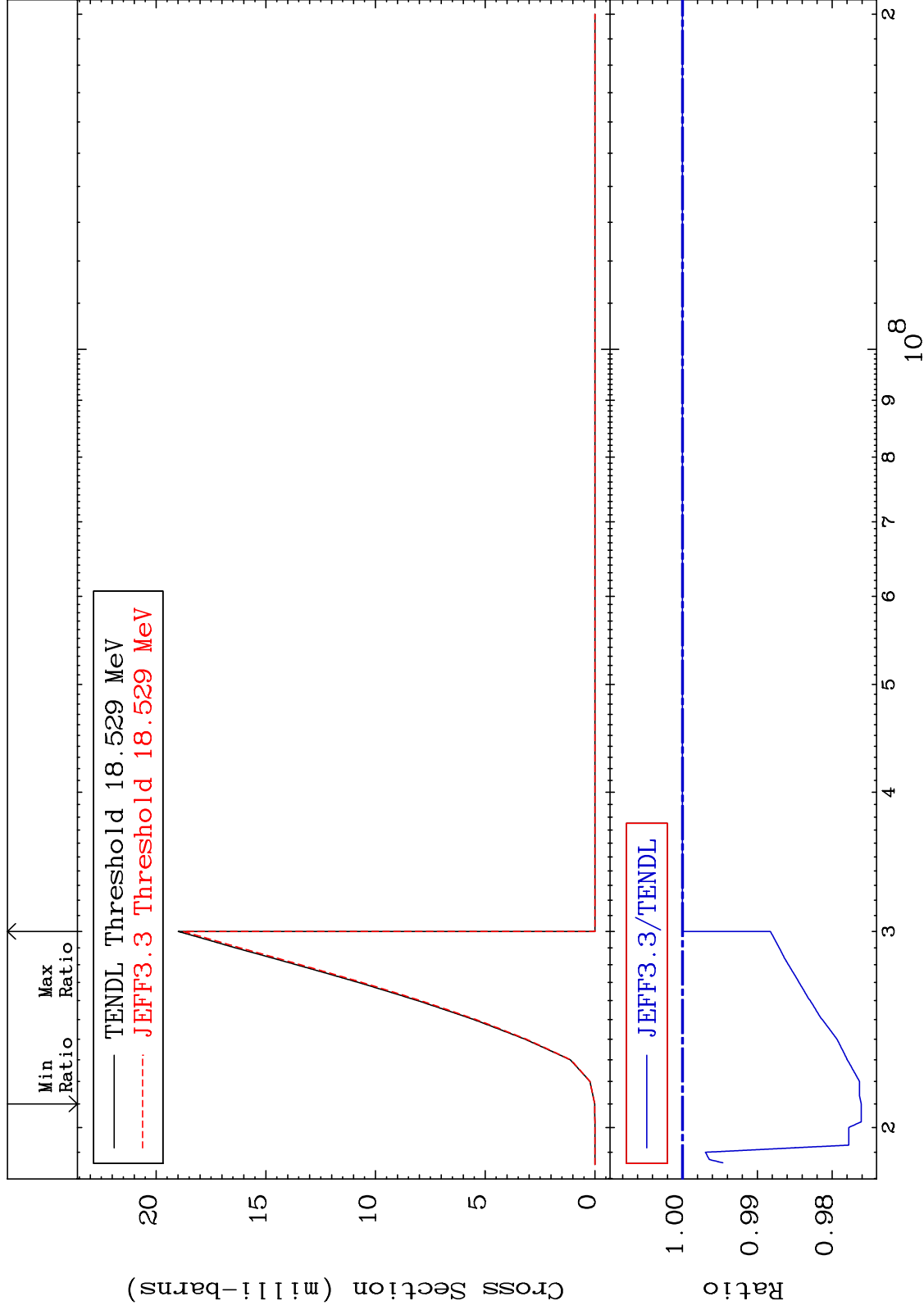
MAT 2837

(n,n') d

28-Ni-62

Cross Section

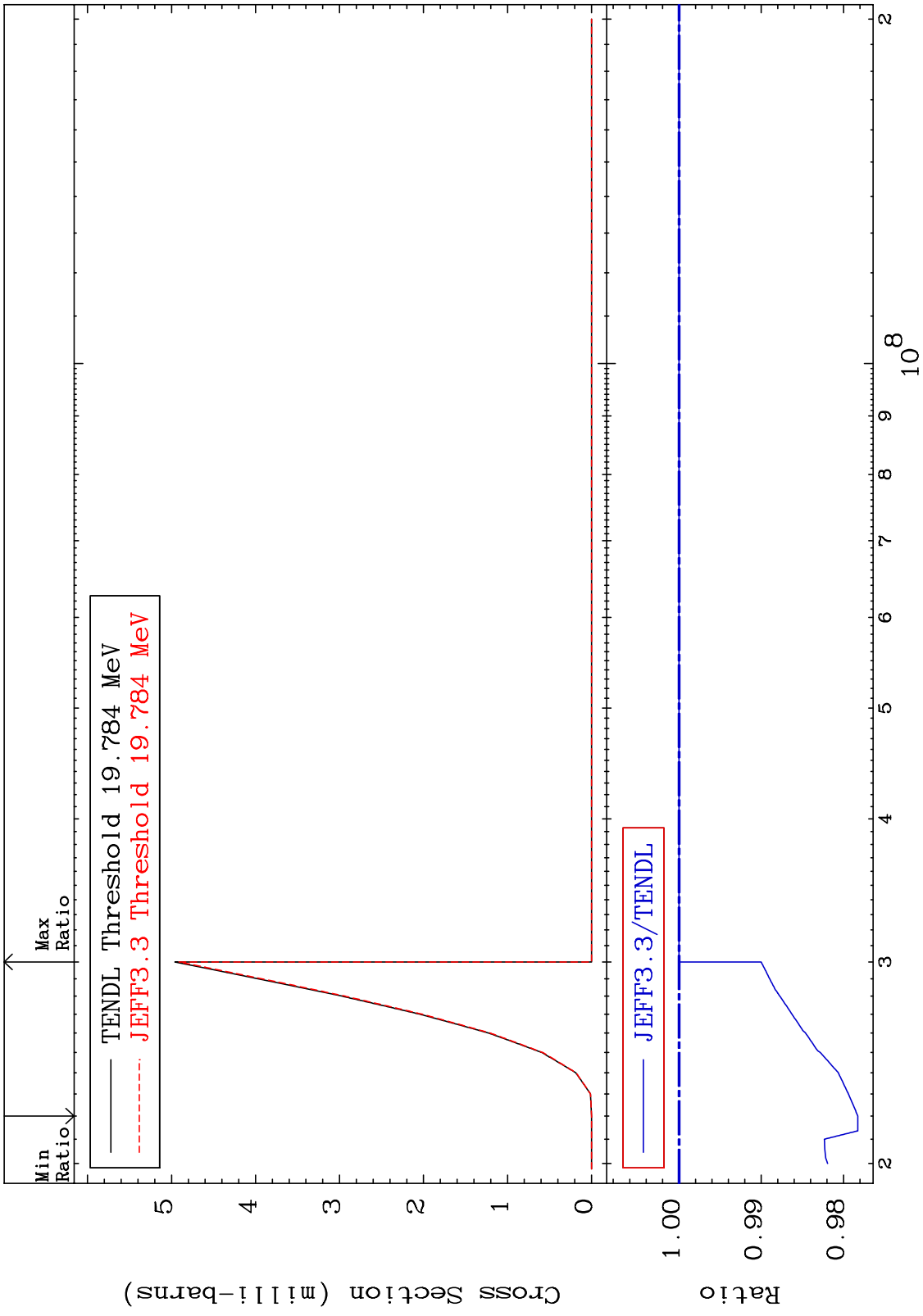
-2.390 To 0.000 %



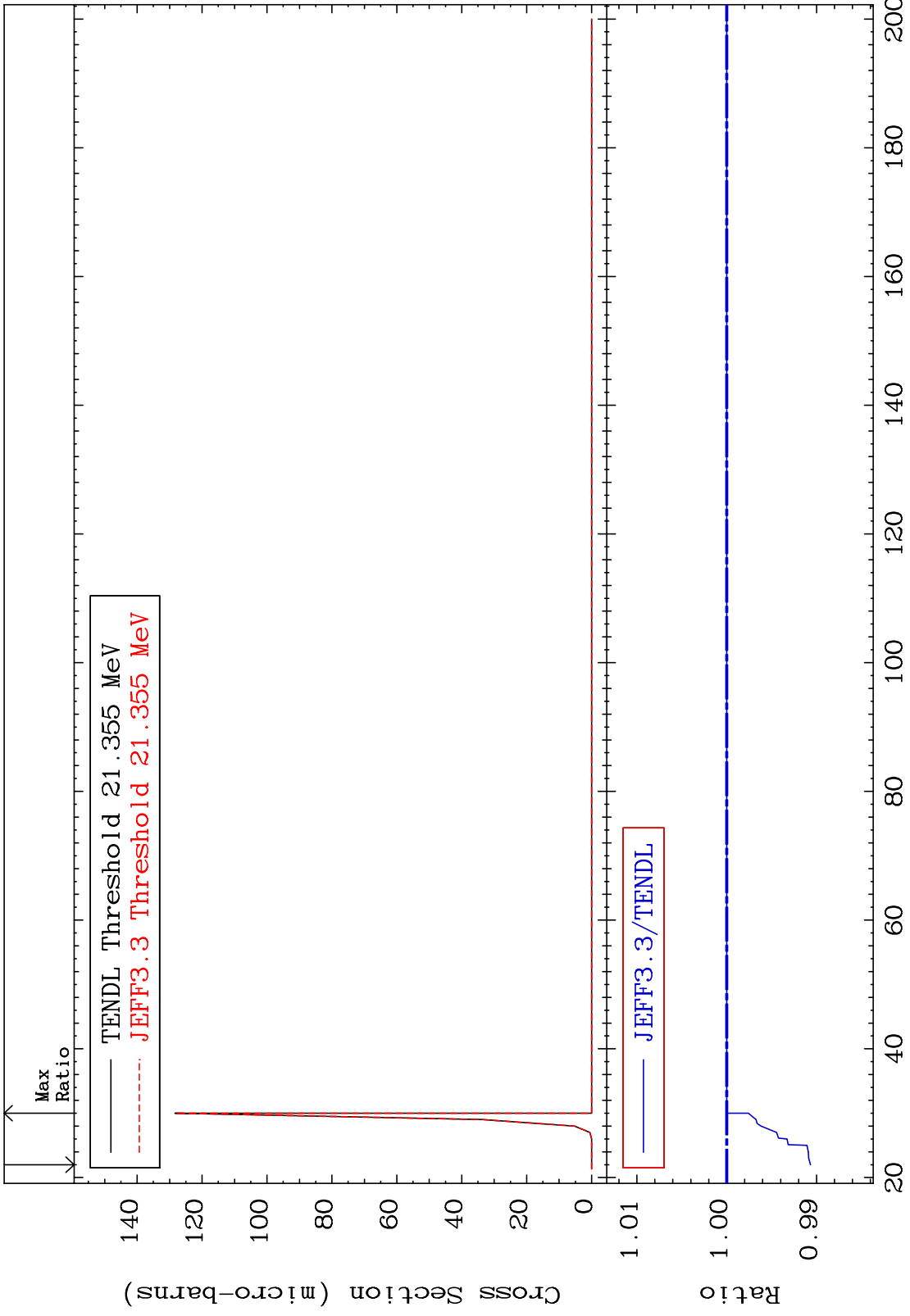
12

Incident Energy (eV)

28-Ni-62



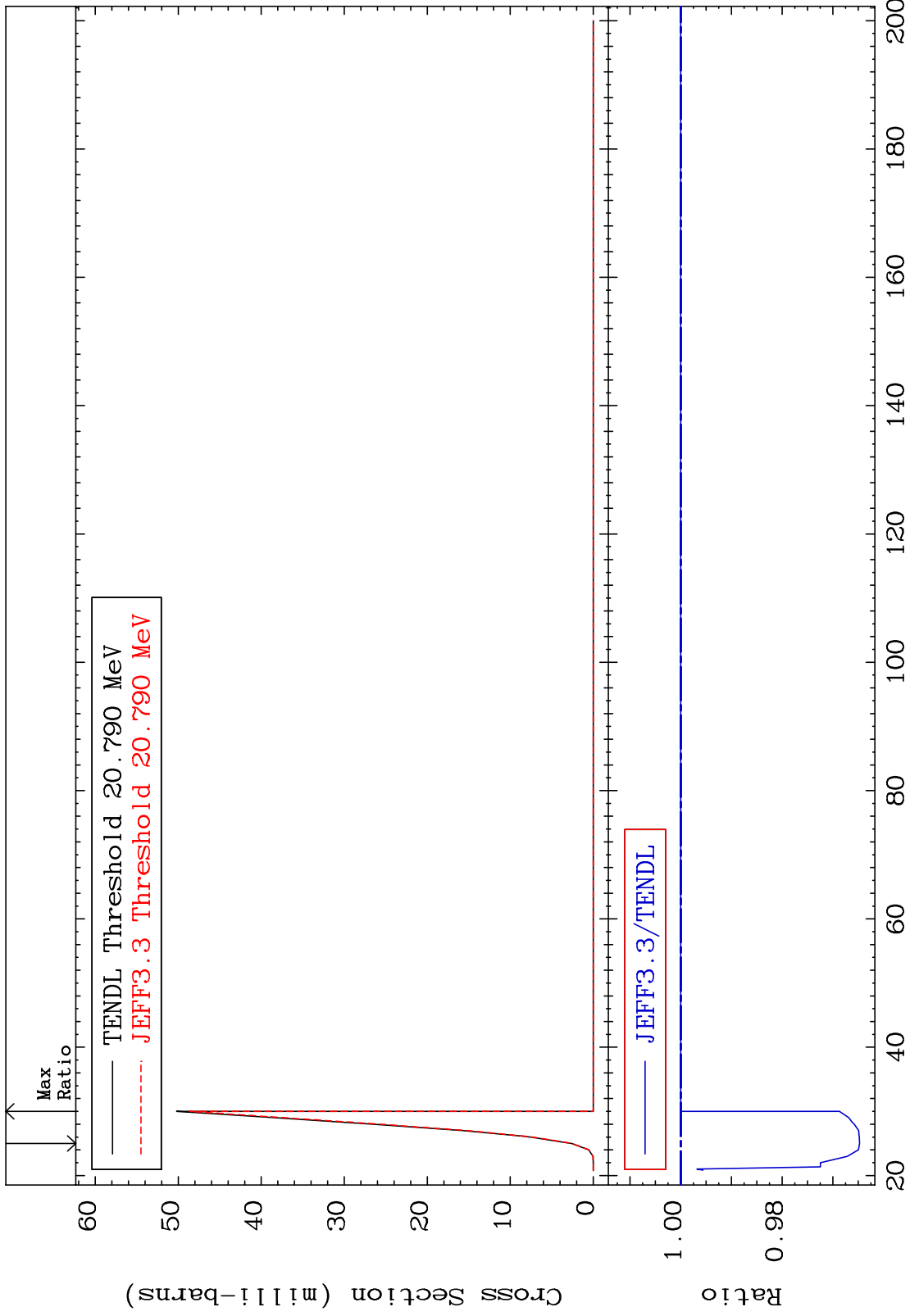
MAT 2837 (n,n') He-3 28-Ni-62
 Cross Section -0.931 To 0.000 %



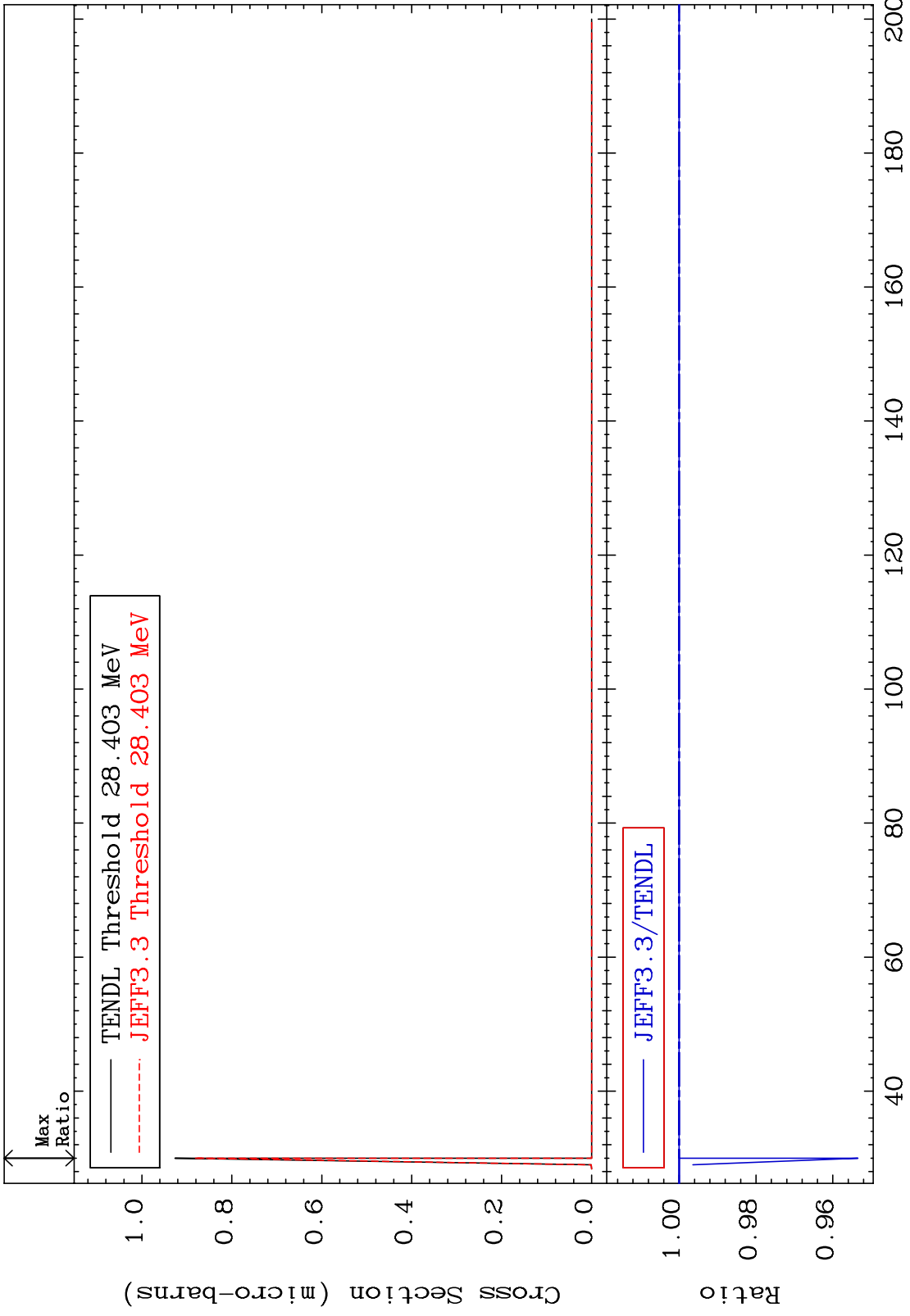
MAT 2837

(n,2n) p
Cross Section

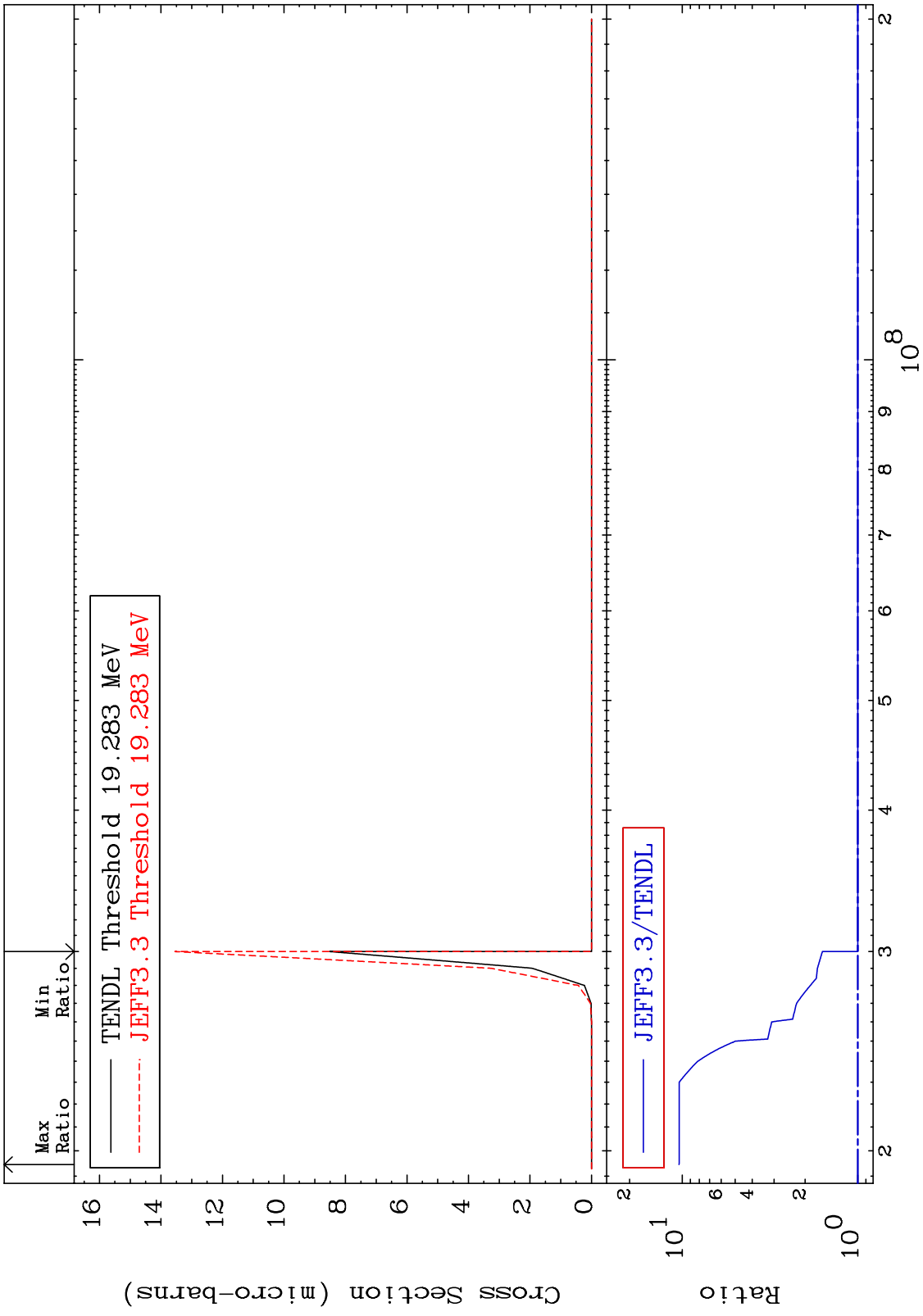
28-Ni-62
-3.525 To 0.000 %



MAT 2837 (n,3n) p 28-Ni-62
 Cross Section -4.653 To 0.000 %



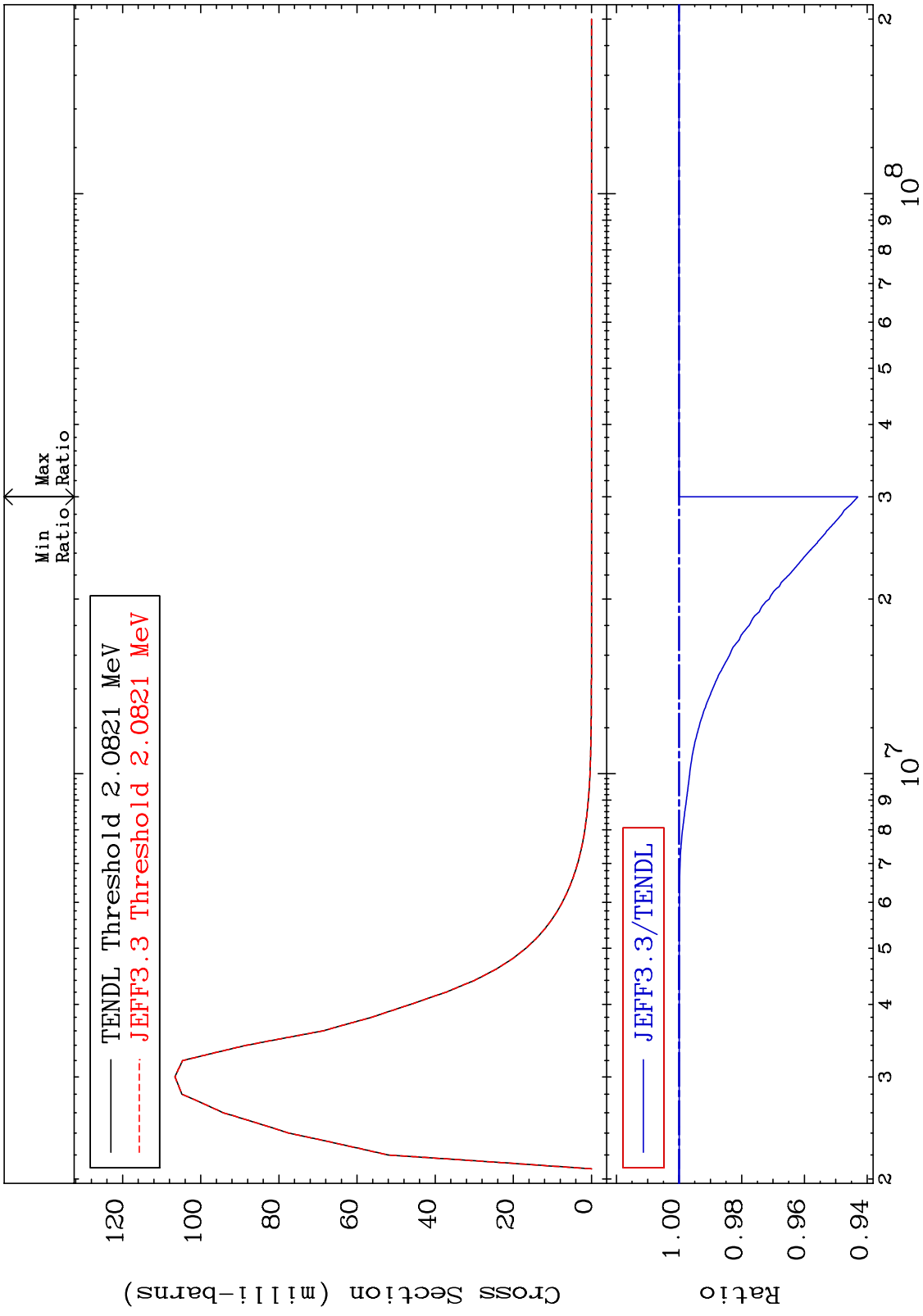
MAT 2837 (n,n') p α 28-Ni-62
 Cross Section 0.000 To 944.1 %



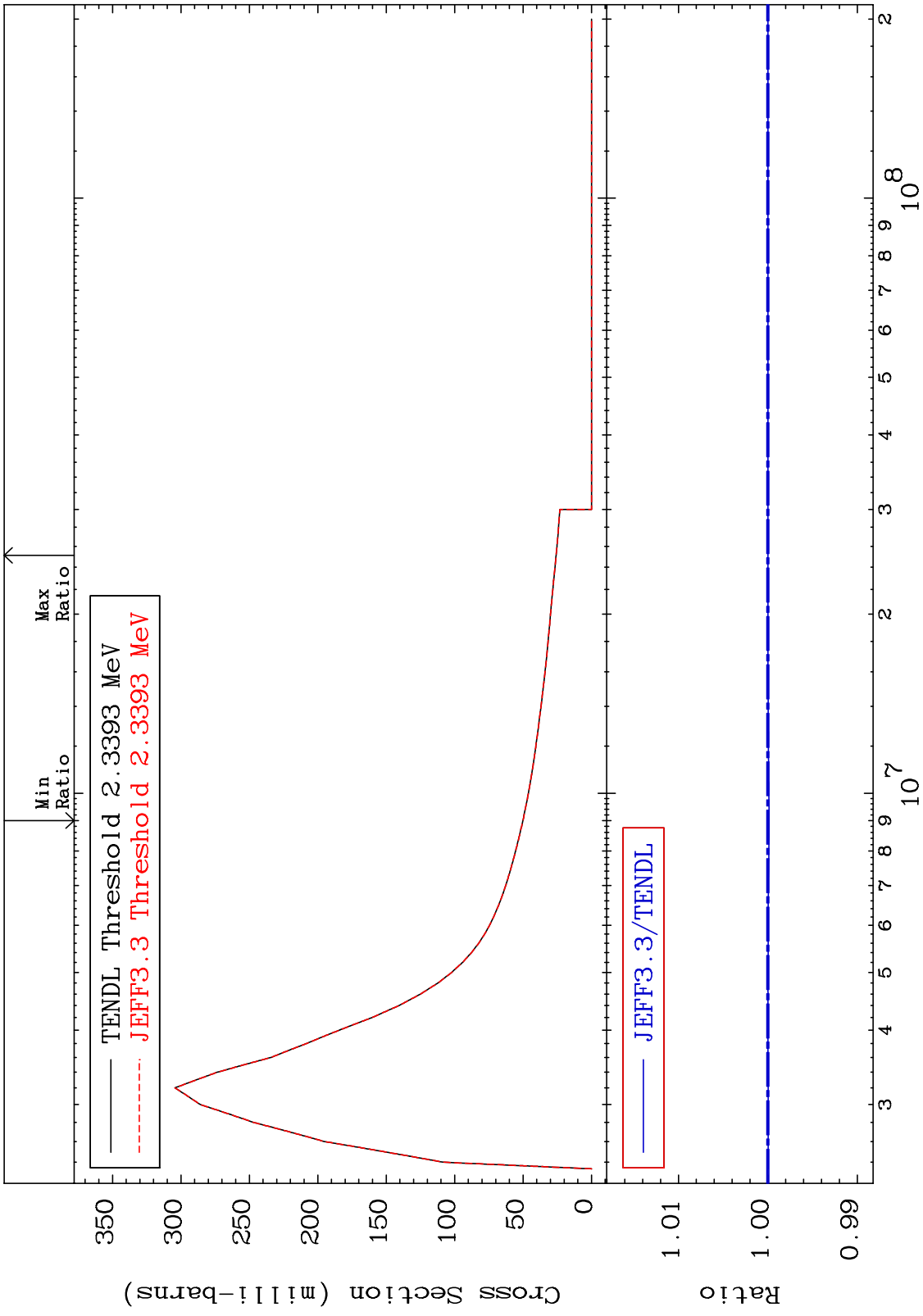
28-Ni-62

Incident Energy (eV)

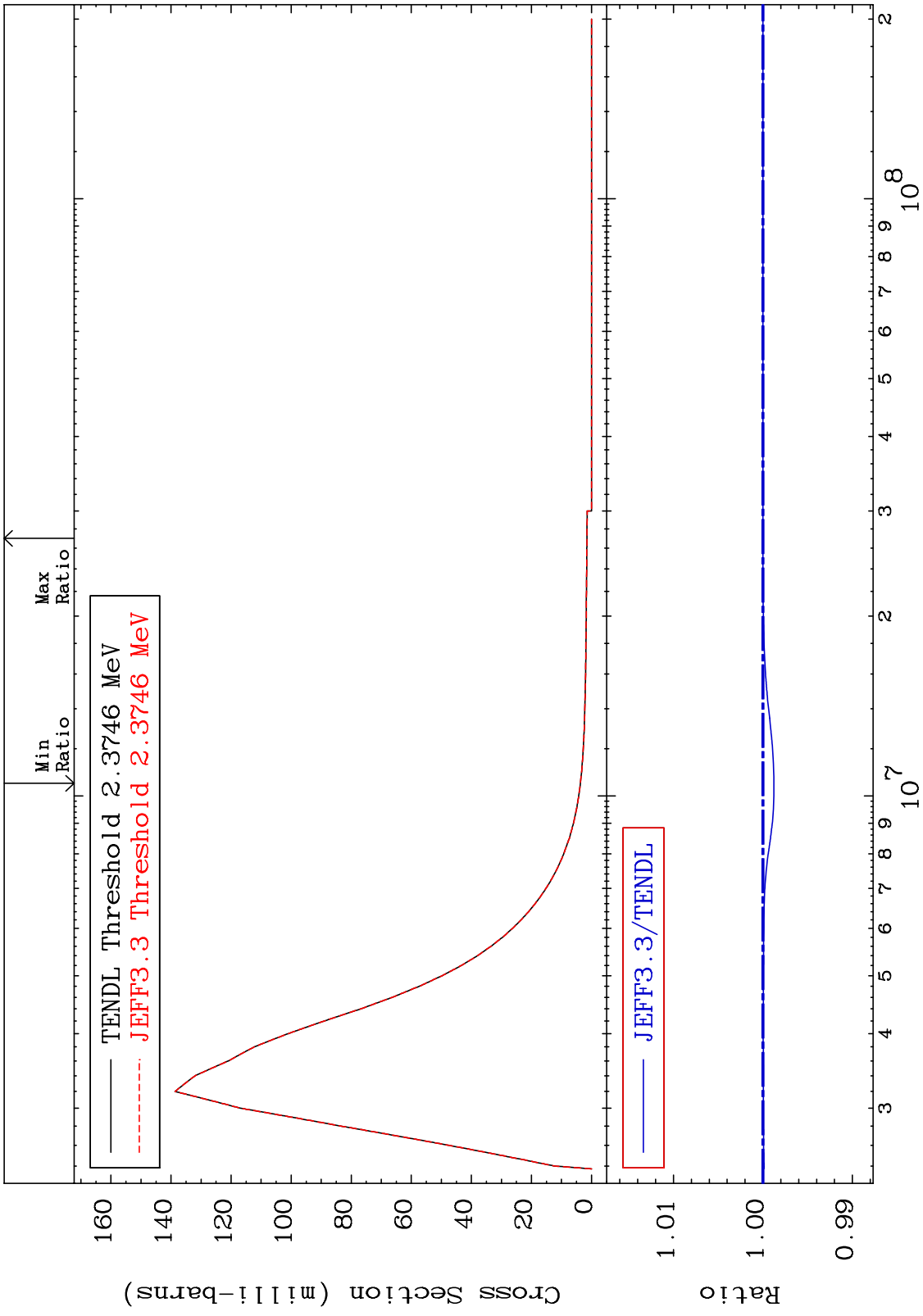
MAT 2837 MT= 52 (n,n') Level Cross Section 28-Ni-62 -5.705 To 0.000 %



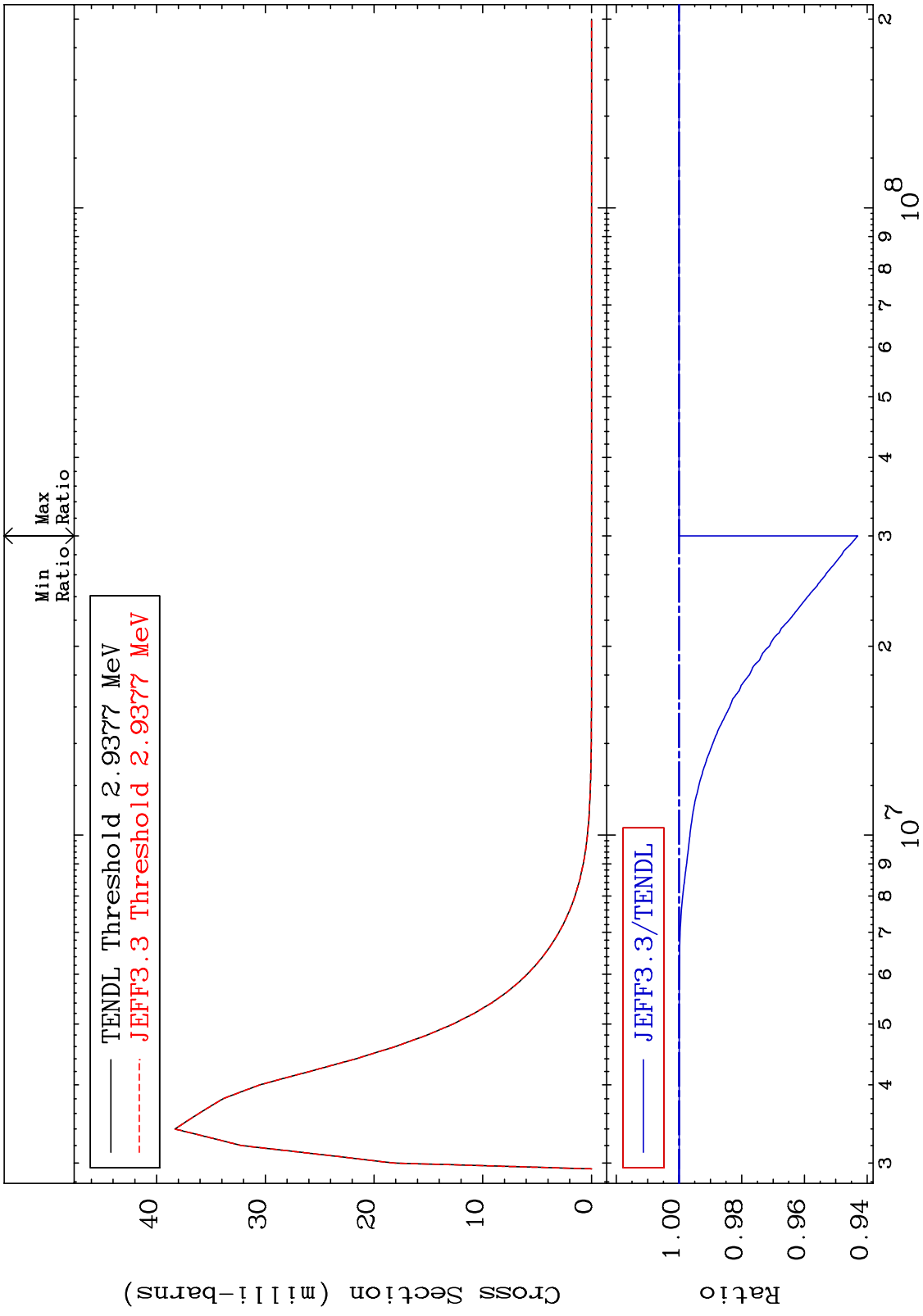
MAT 2837 MT= 53 (n,n') Level Cross Section 28-Ni-62 -0.013 To 0.000 %



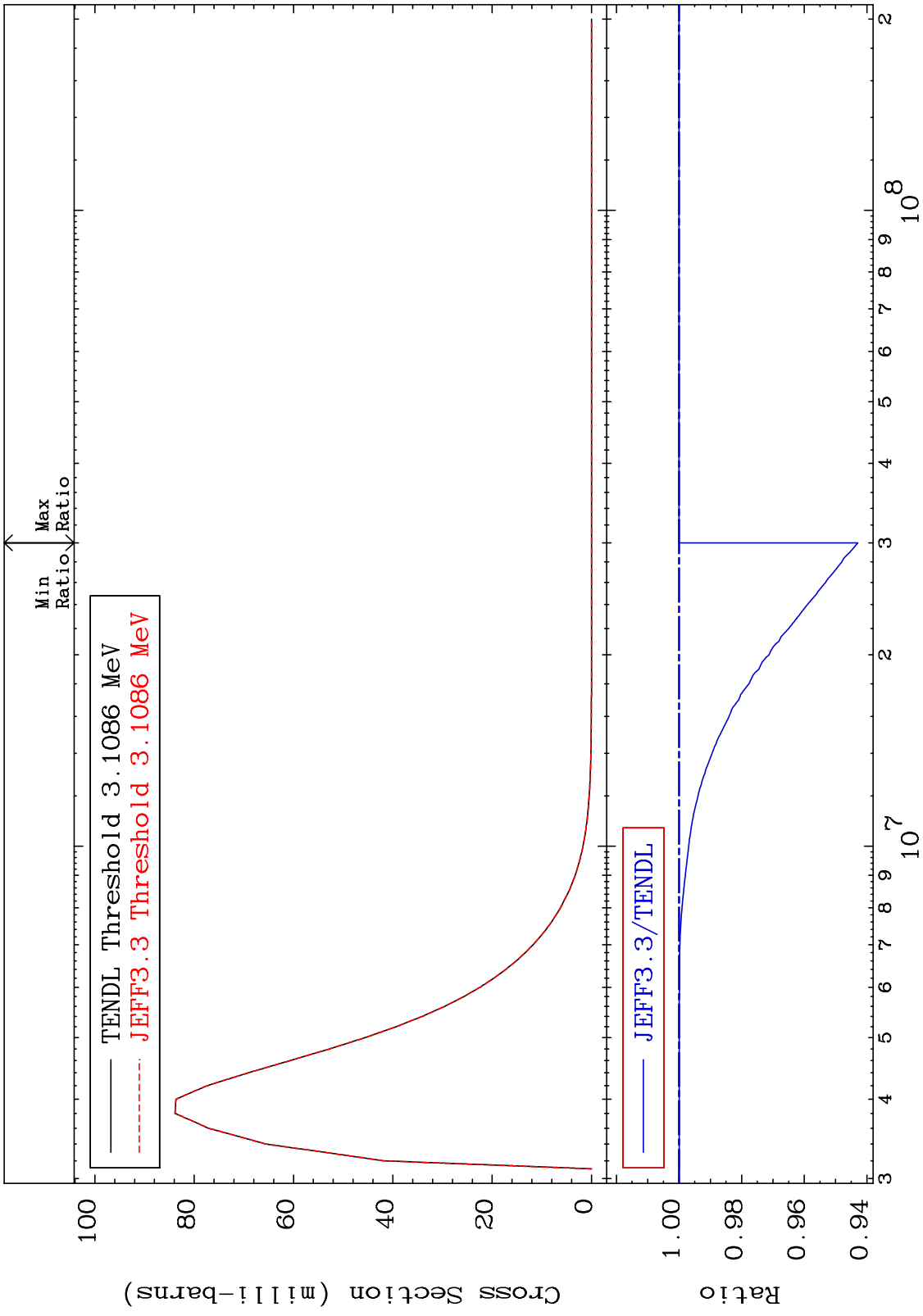
MAT 2837 MT= 54 (n,n') Level Cross Section -0.123 To 0.000 % 28-Ni-62



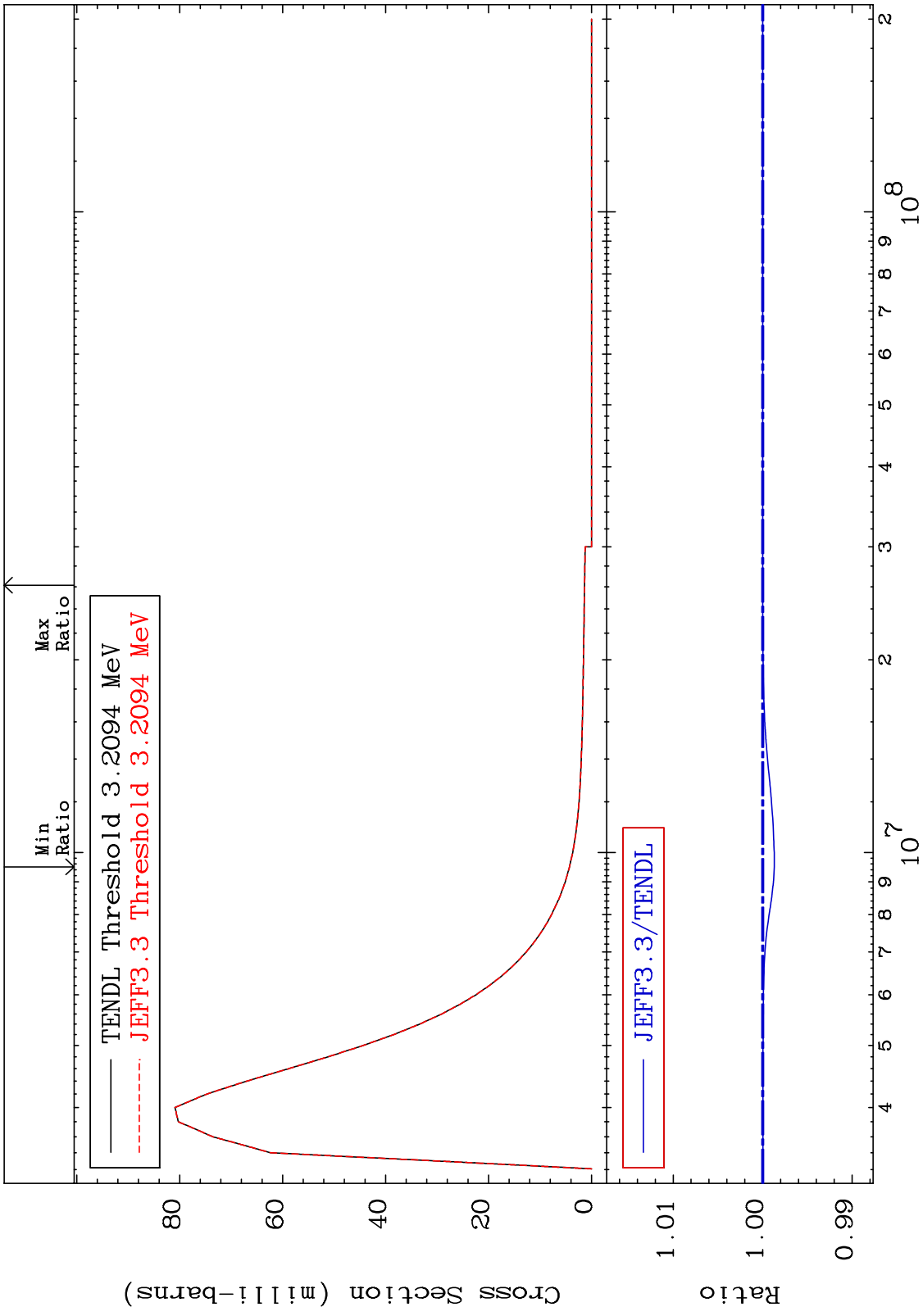
MAT 2837 MT= 55 (n,n') Level Cross Section 28-Ni-62 -5.703 To 0.000 %



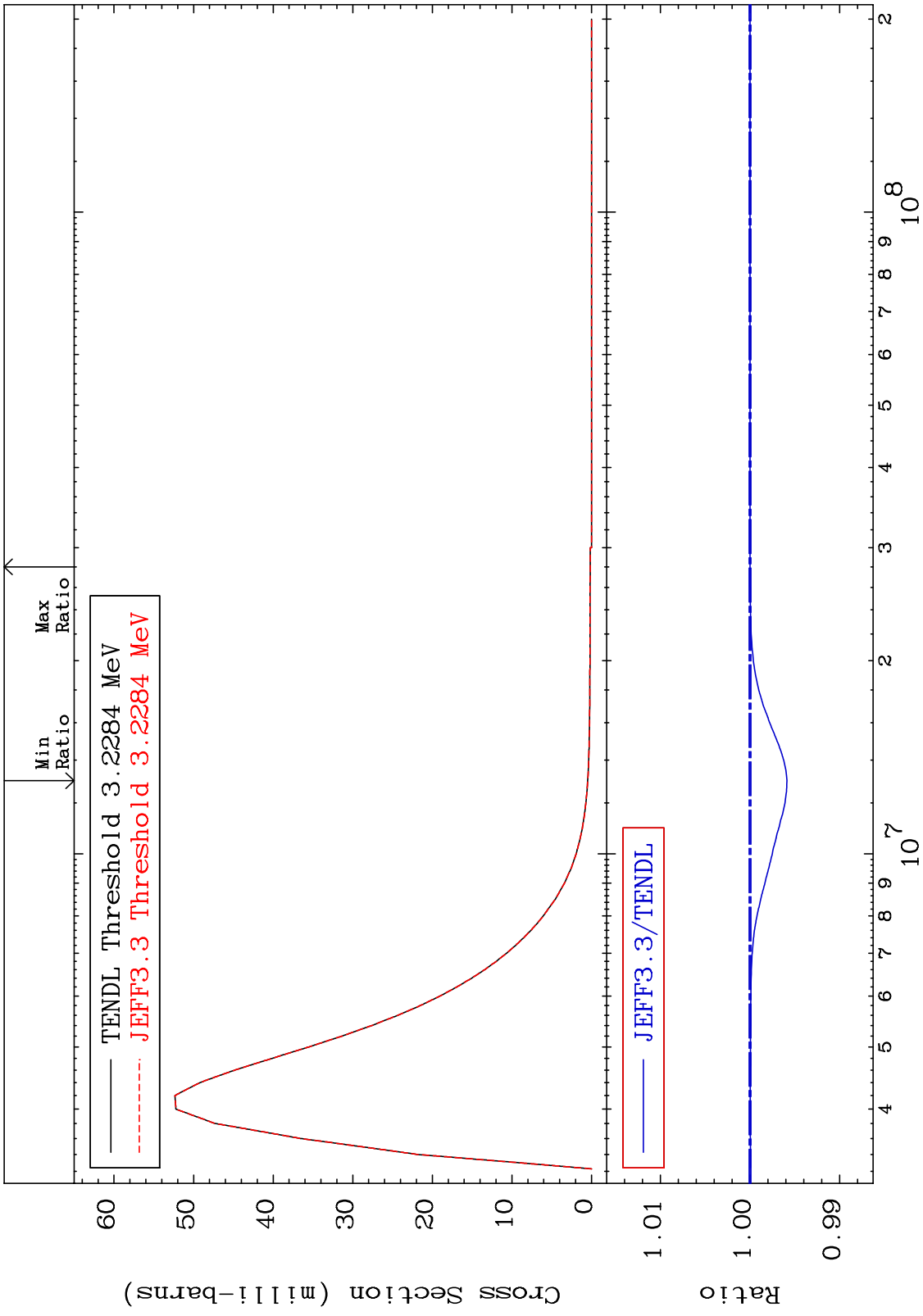
MAT 2837 MT= 56 (n,n') Level Cross Section -5.711 To 0.000 % 28-Ni-62



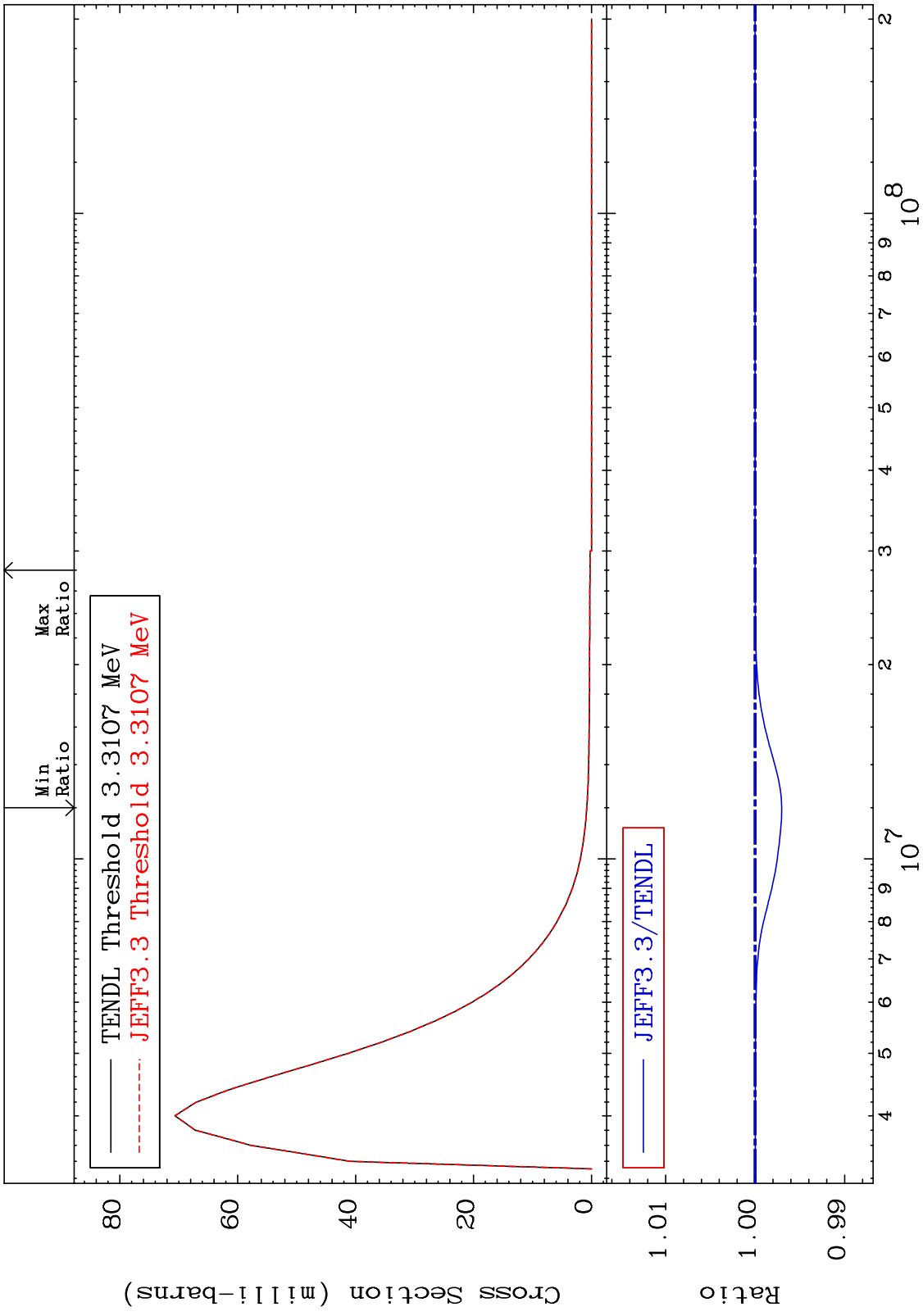
MAT 2837 MT= 57 (n,n') Level Cross Section -0.129 To 0.000 % 28-Ni-62



MAT 2837 MT= 58 (n,n') Level Cross Section -0.412 To 0.000 % 28-Ni-62



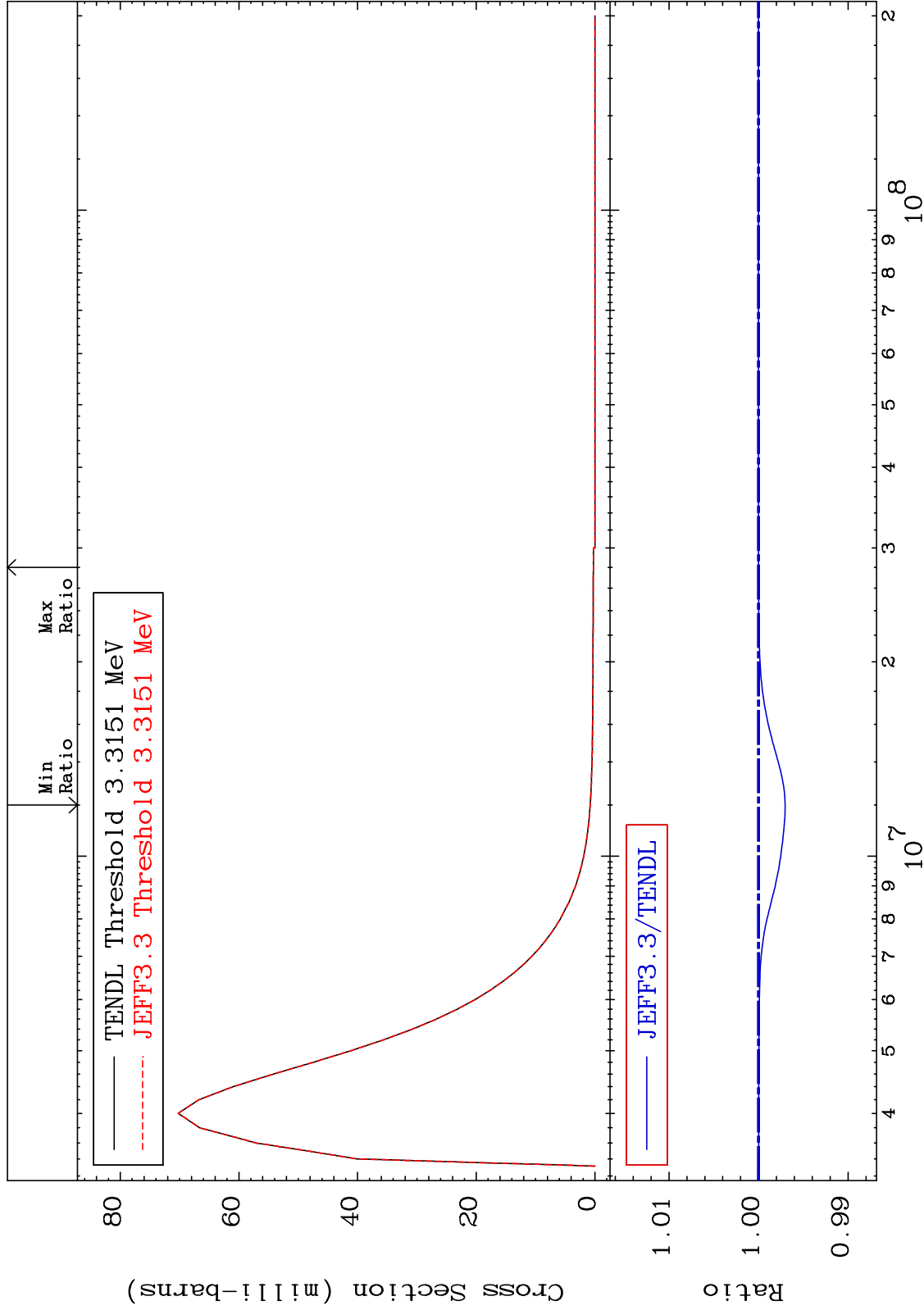
MAT 2837 MT= 59 (n,n') Level Cross Section -0.298 To 0.000 % 28-Ni-62



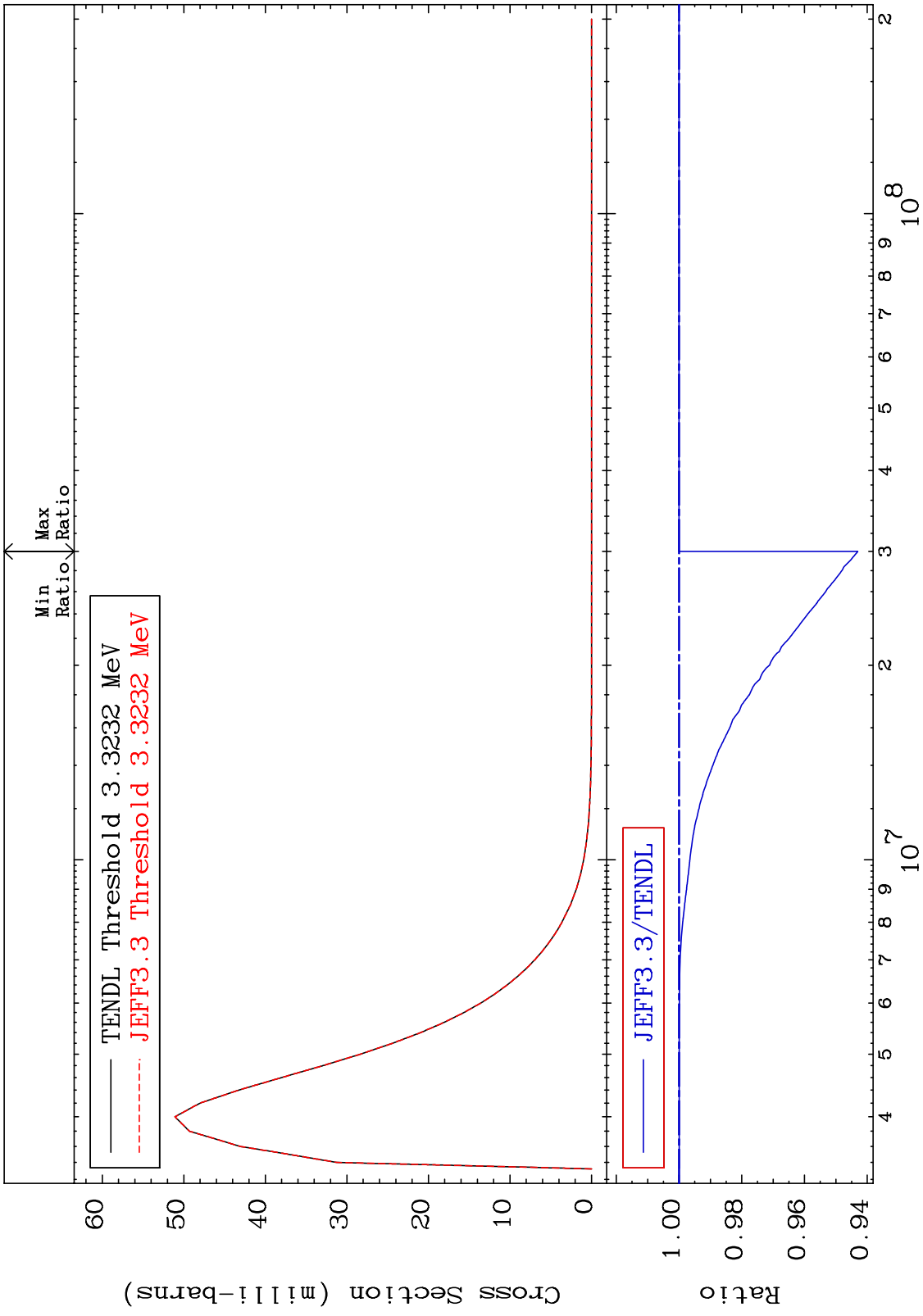
MAT 2837

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

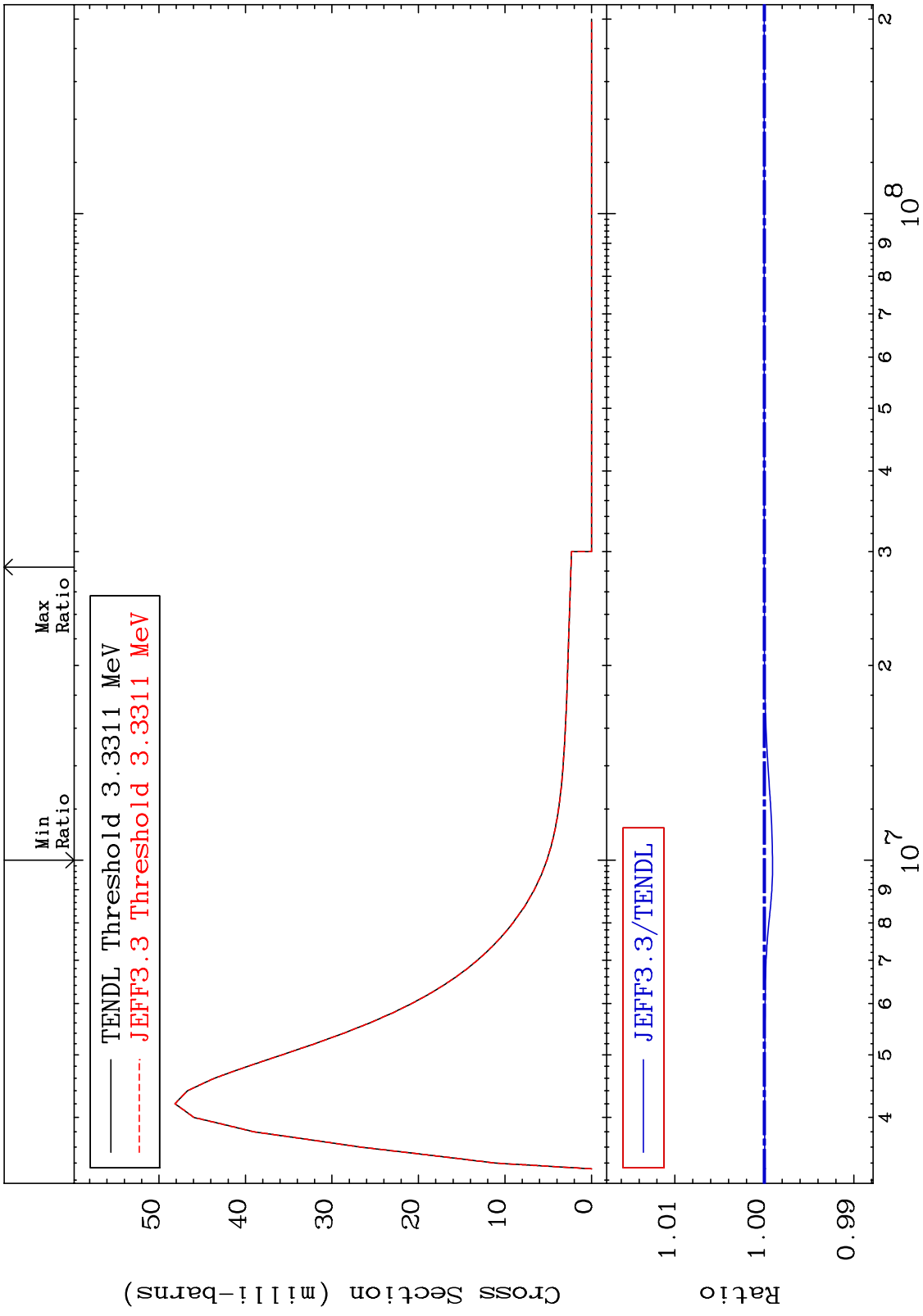
28-Ni-62
-0.298 To 0.000 %



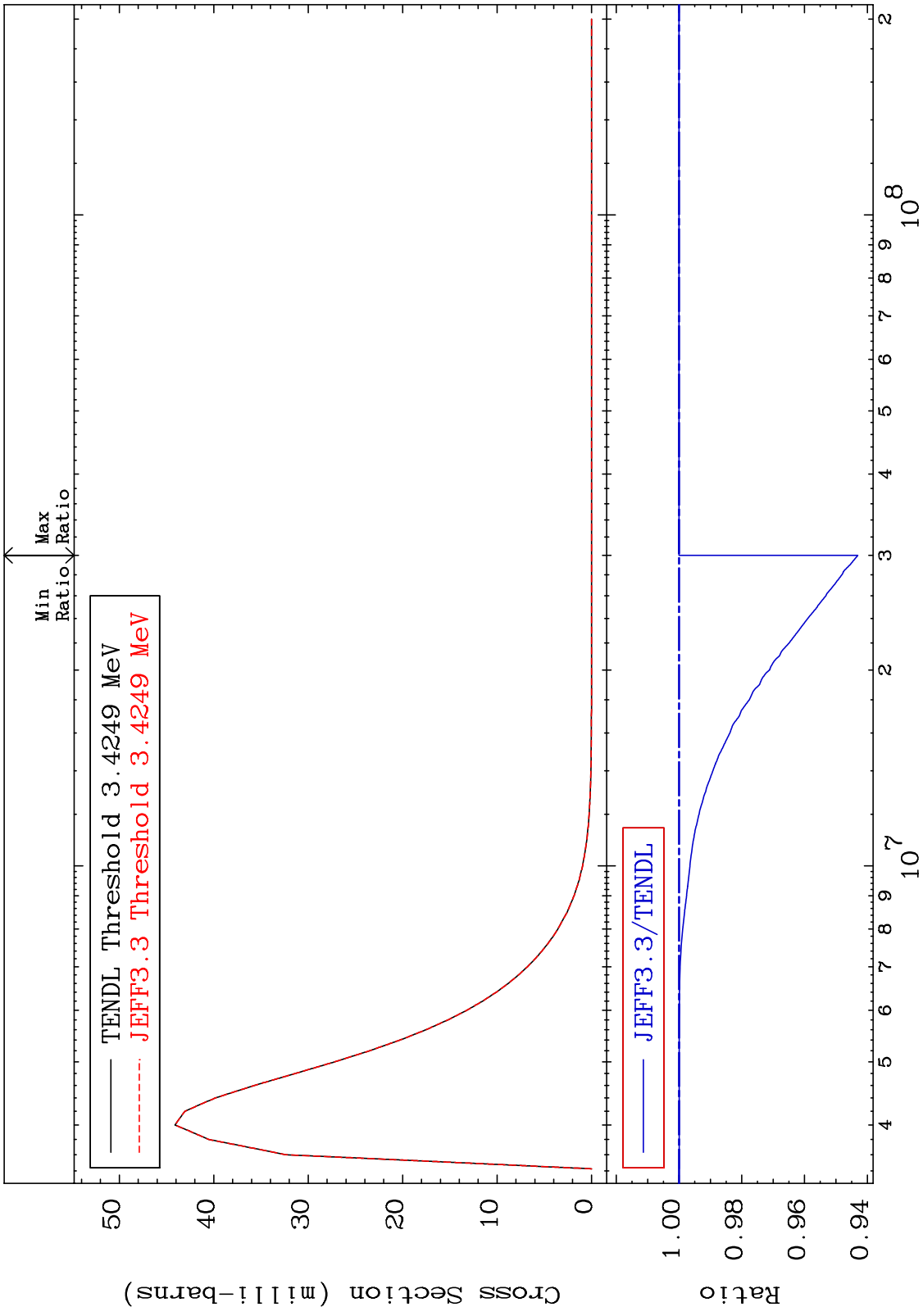
MAT 2837 MT= 61 (n,n') Level Cross Section 28-Ni-62 -5.699 To 0.000 %



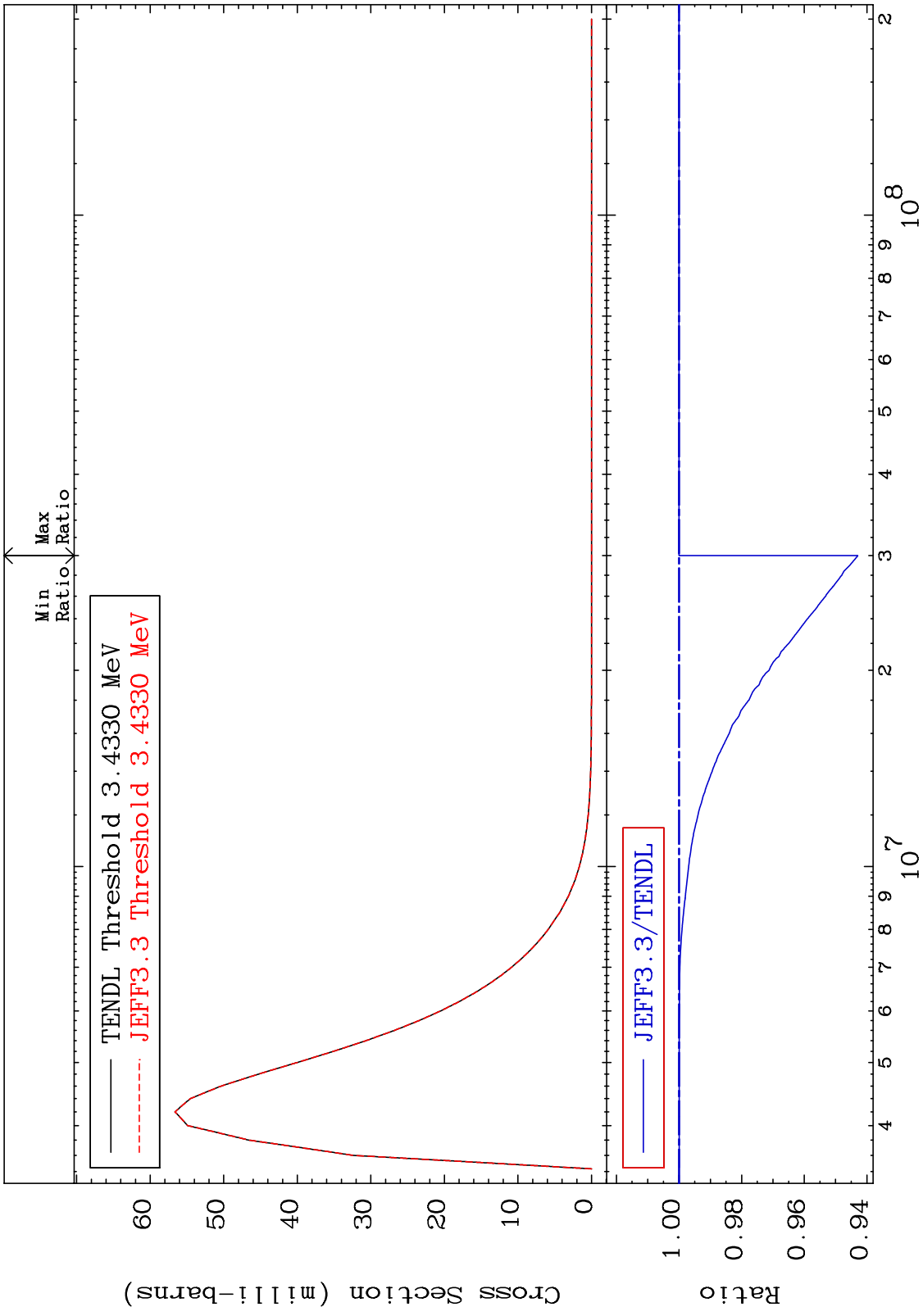
MAT 2837 MT= 62 (n,n') Level Cross Section 28-Ni-62
 -0.092 To 0.000 %



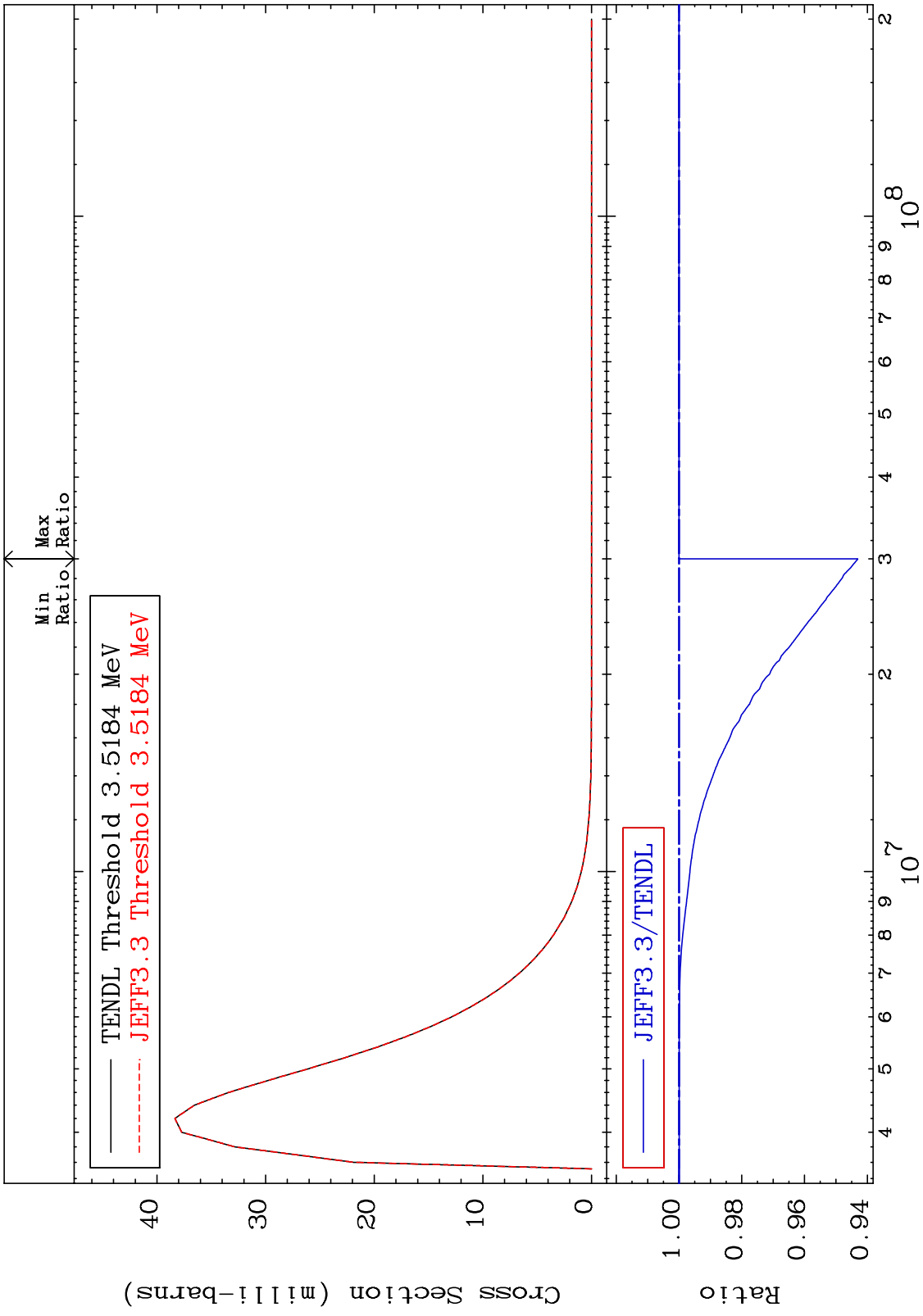
MAT 2837 MT= 63 (n,n') Level Cross Section 28-Ni-62 -5.698 To 0.000 %



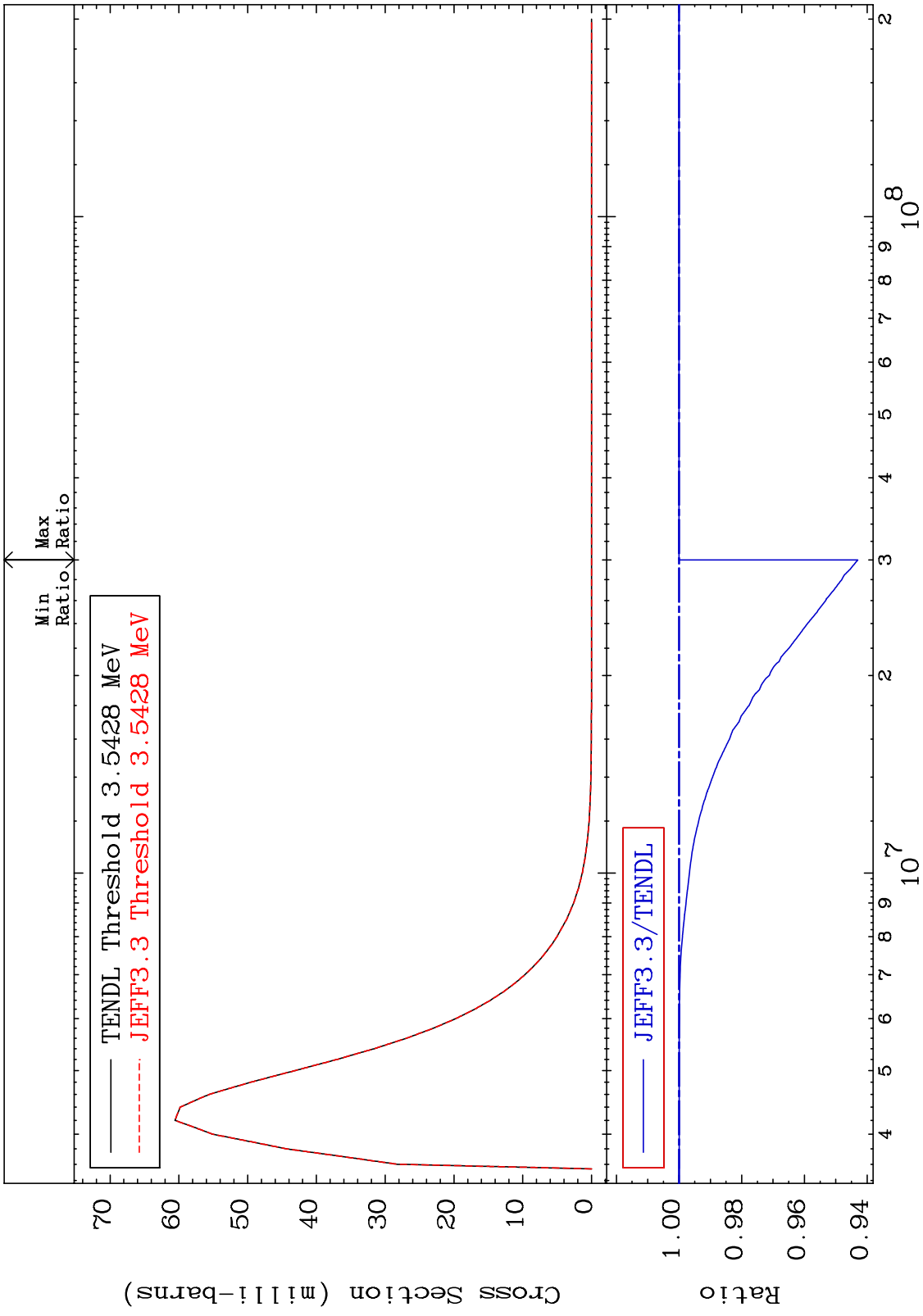
MAT 2837 MT= 64 (n,n') Level Cross Section -5.710 To 0.000 % 28-Ni-62



MAT 2837 MT= 65 (n,n') Level 28-Ni-62
 Cross Section -5.698 To 0.000 %



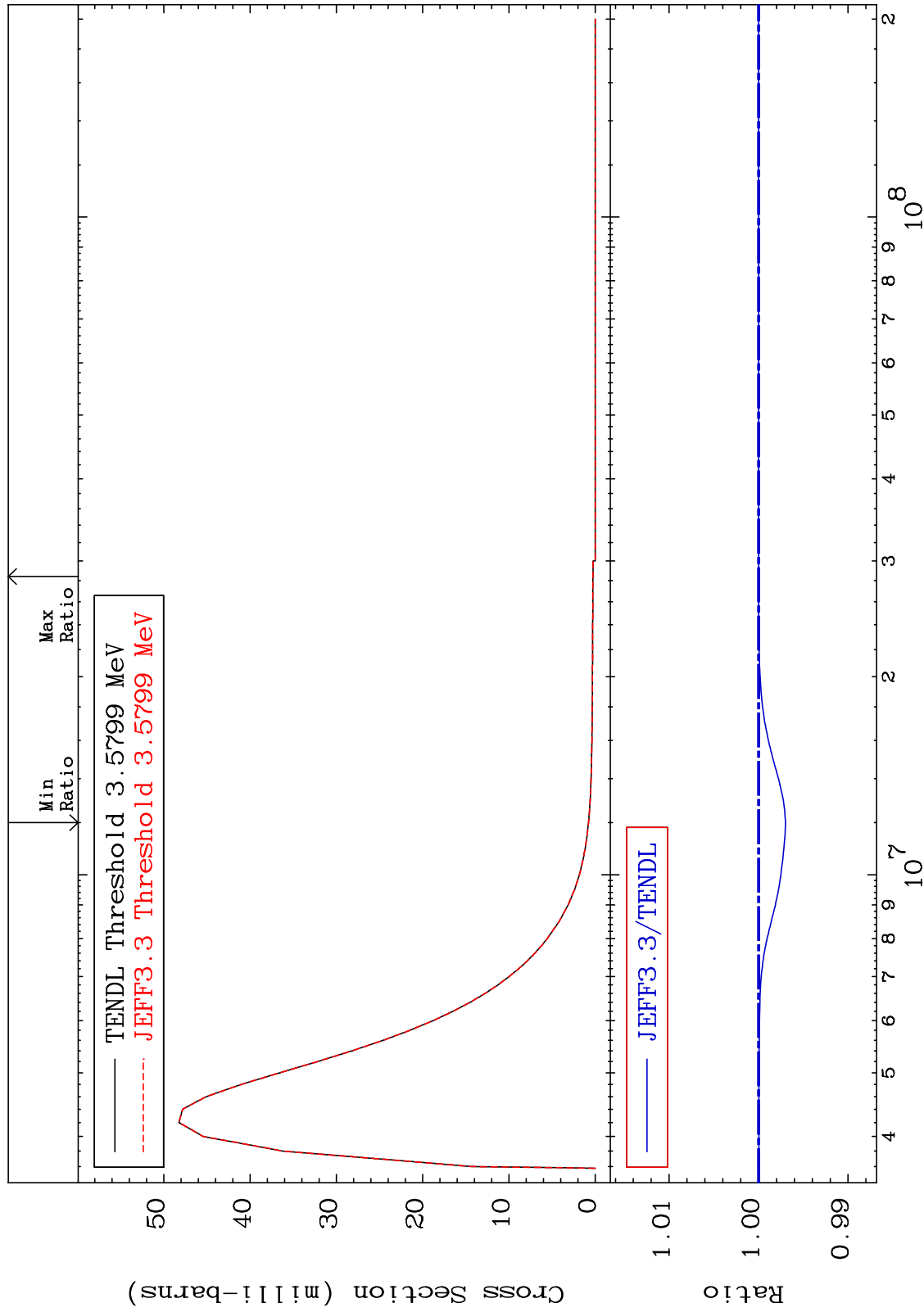
MAT 2837 MT= 66 (n,n') Level Cross Section -5.704 To 0.000 % 28-Ni-62



MAT 2837

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

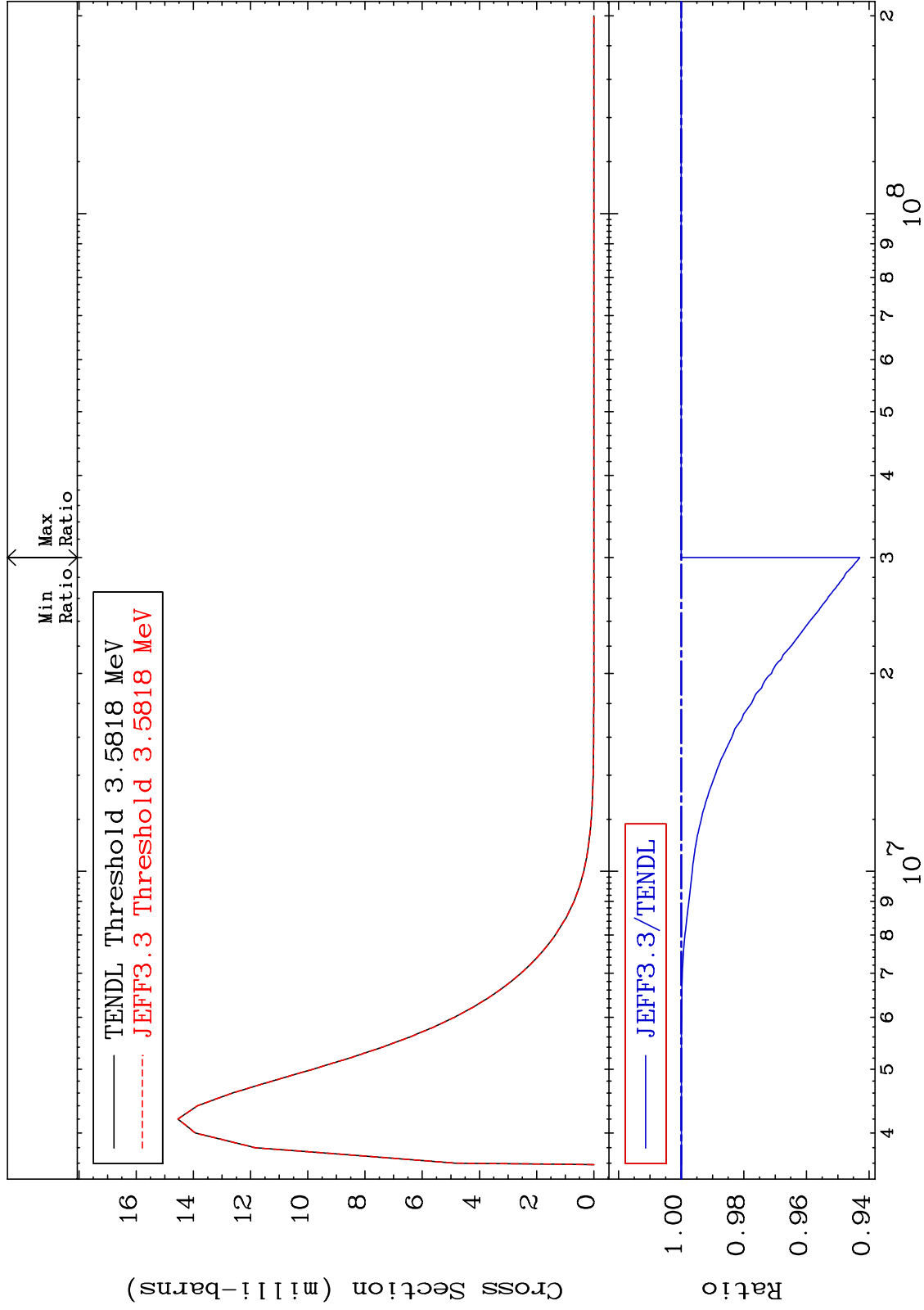
28-Ni-62
-0.300 To 0.000 %



MAT 2837

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

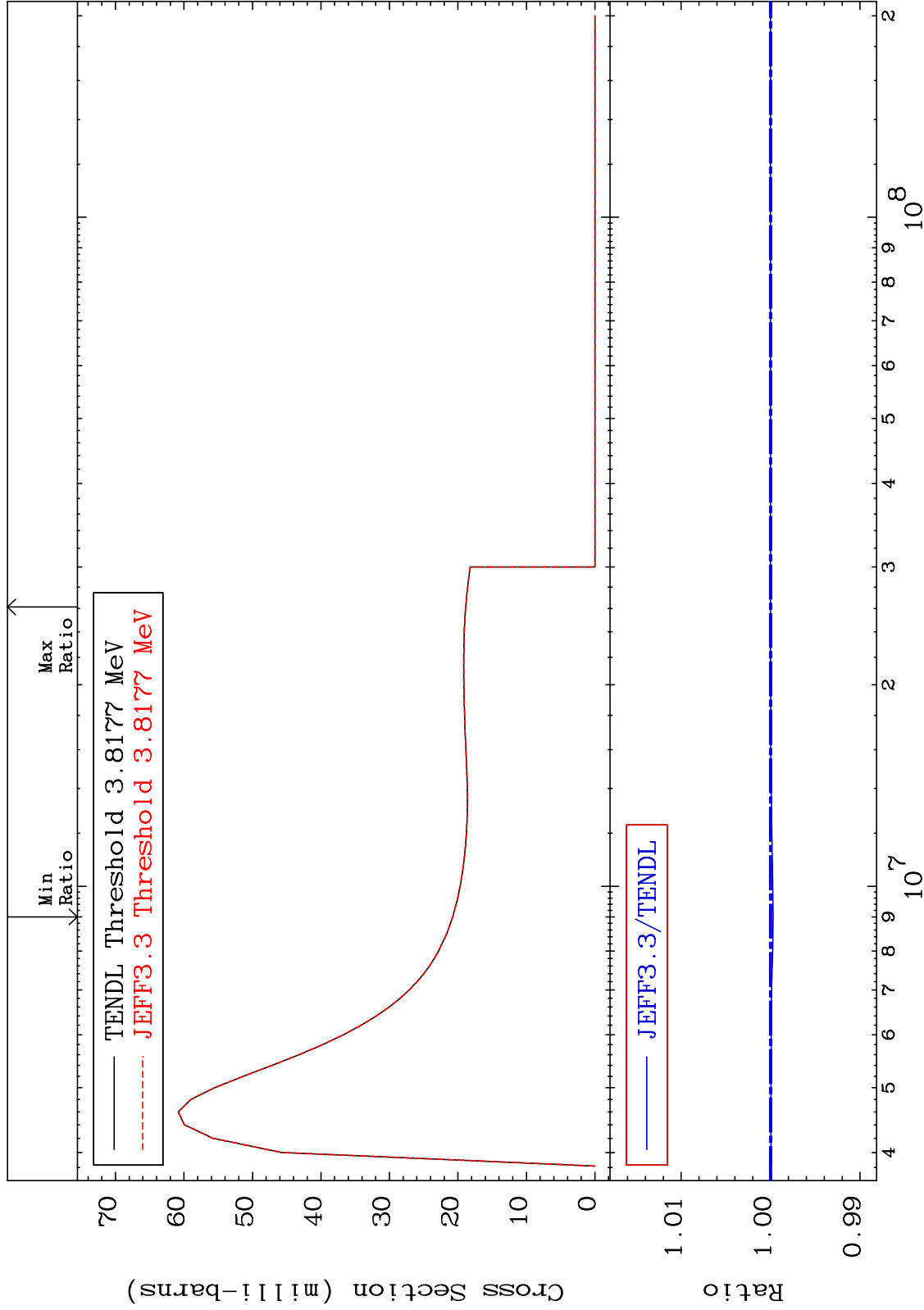
28-Ni-62
-5.702 To 0.000 %



MAT 2837

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

28-Ni-62
-0.028 To 0.000 %



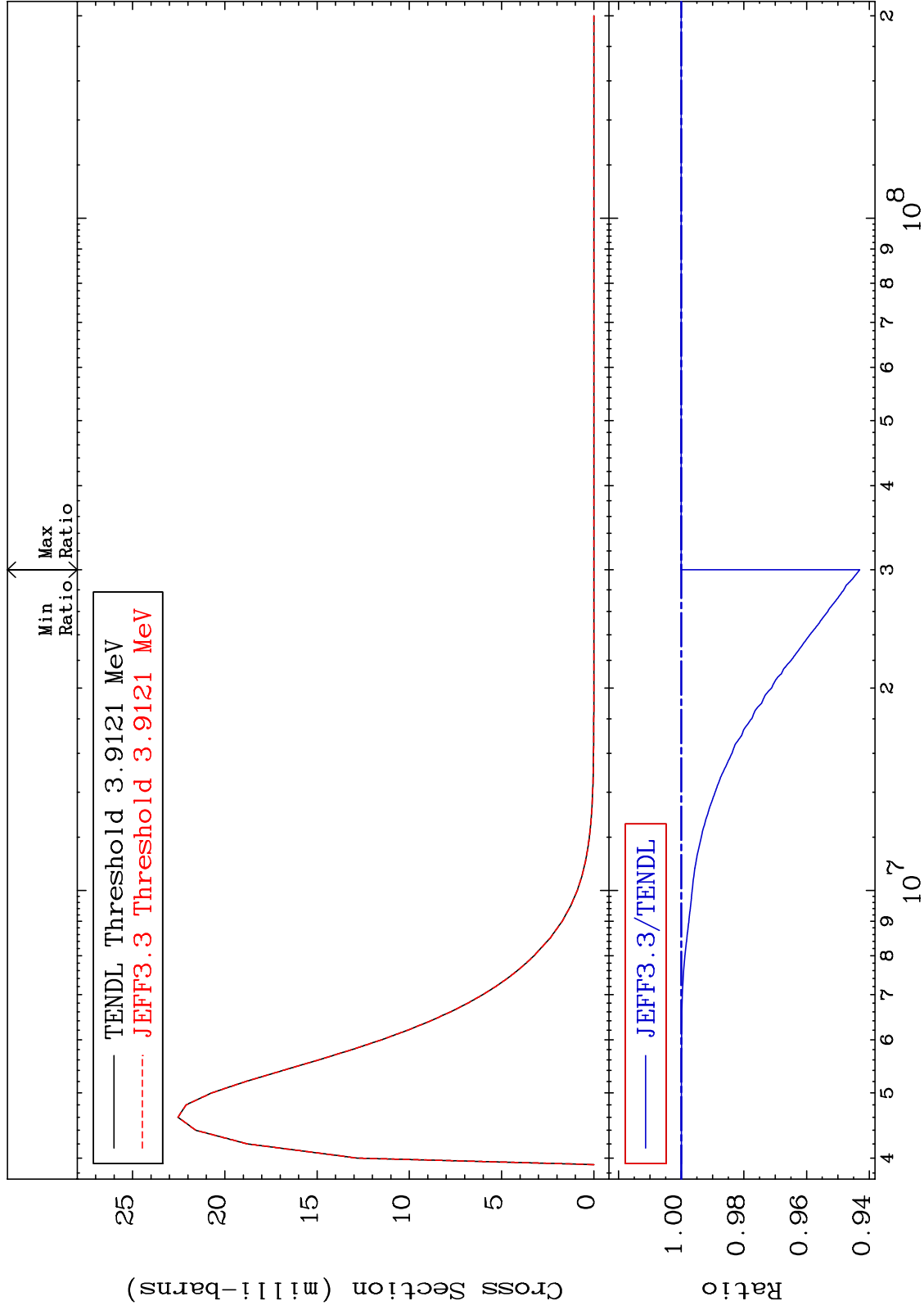
37

28-Ni-62

MAT 2837

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

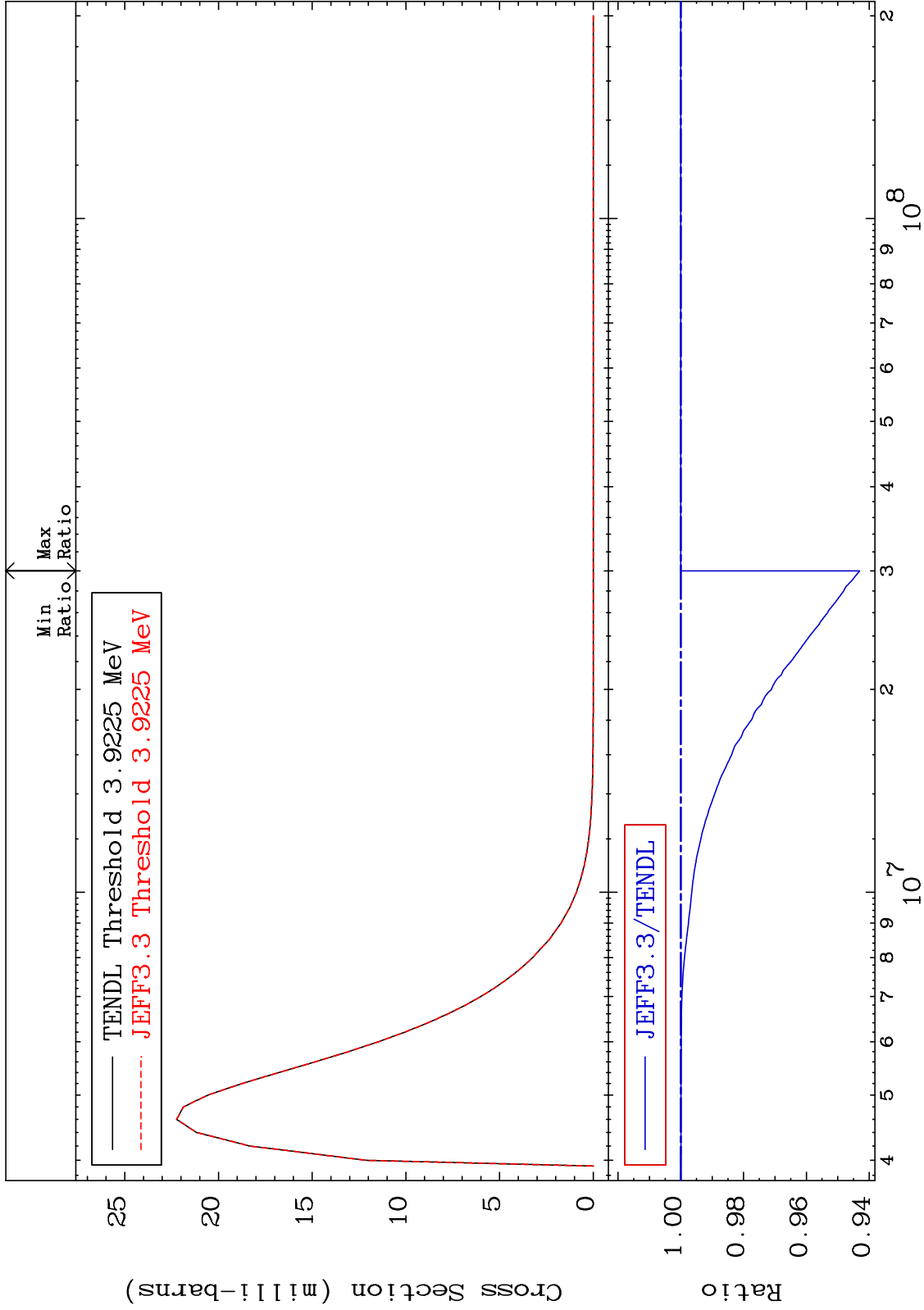
28-Ni-62
-5.697 To 0.000 %



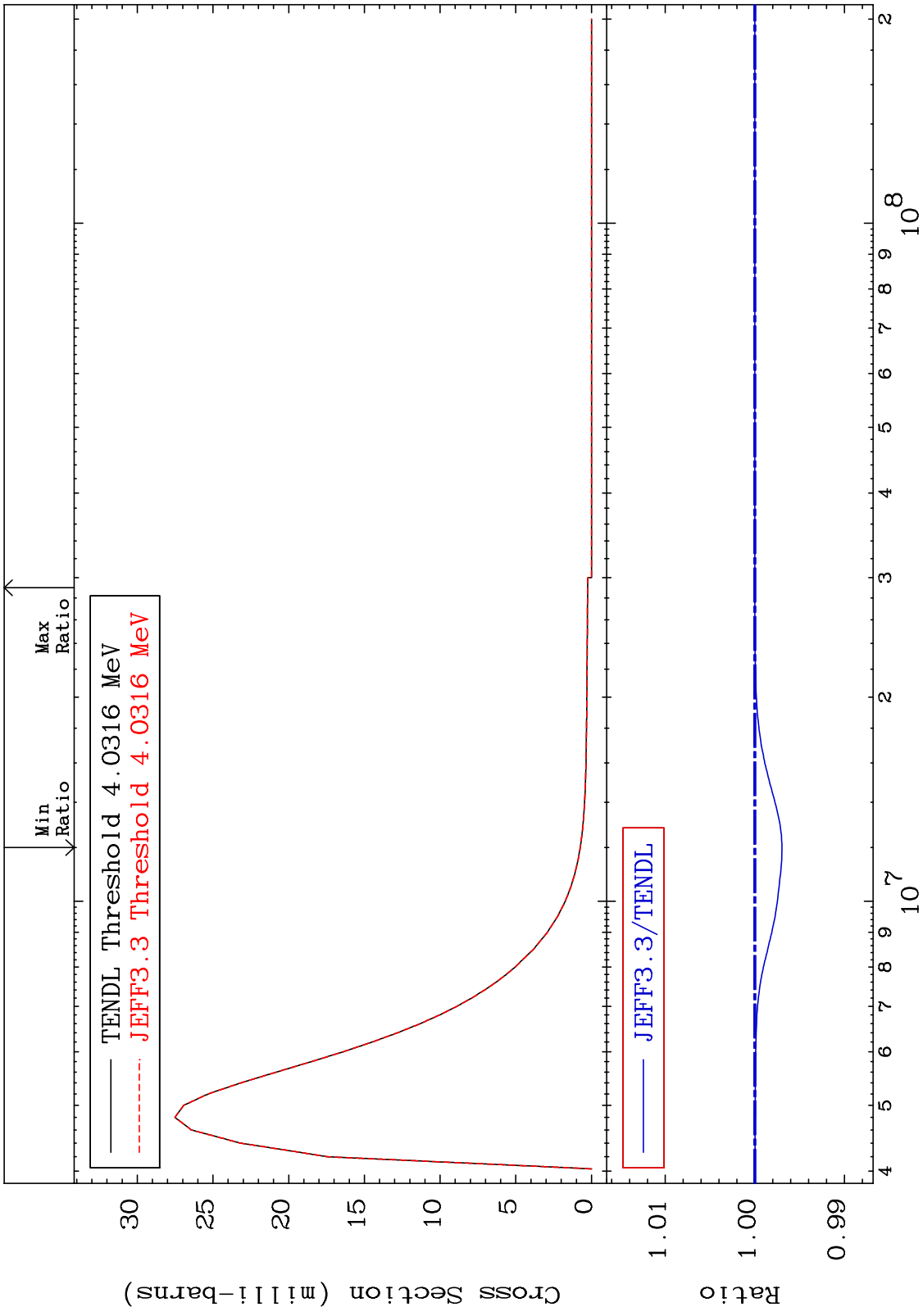
MAT 2837

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

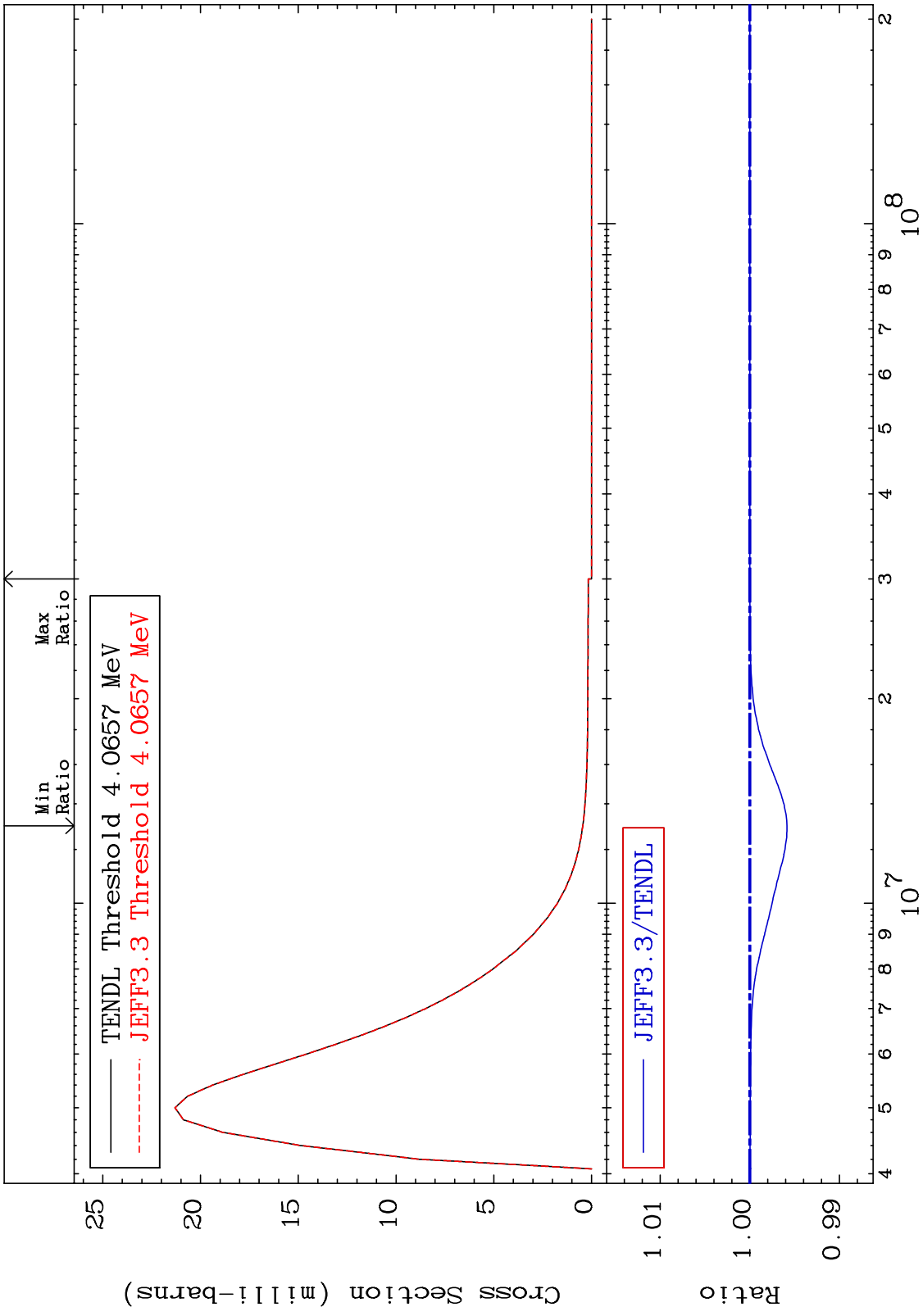
28-Ni-62
-5.697 To 0.000 %



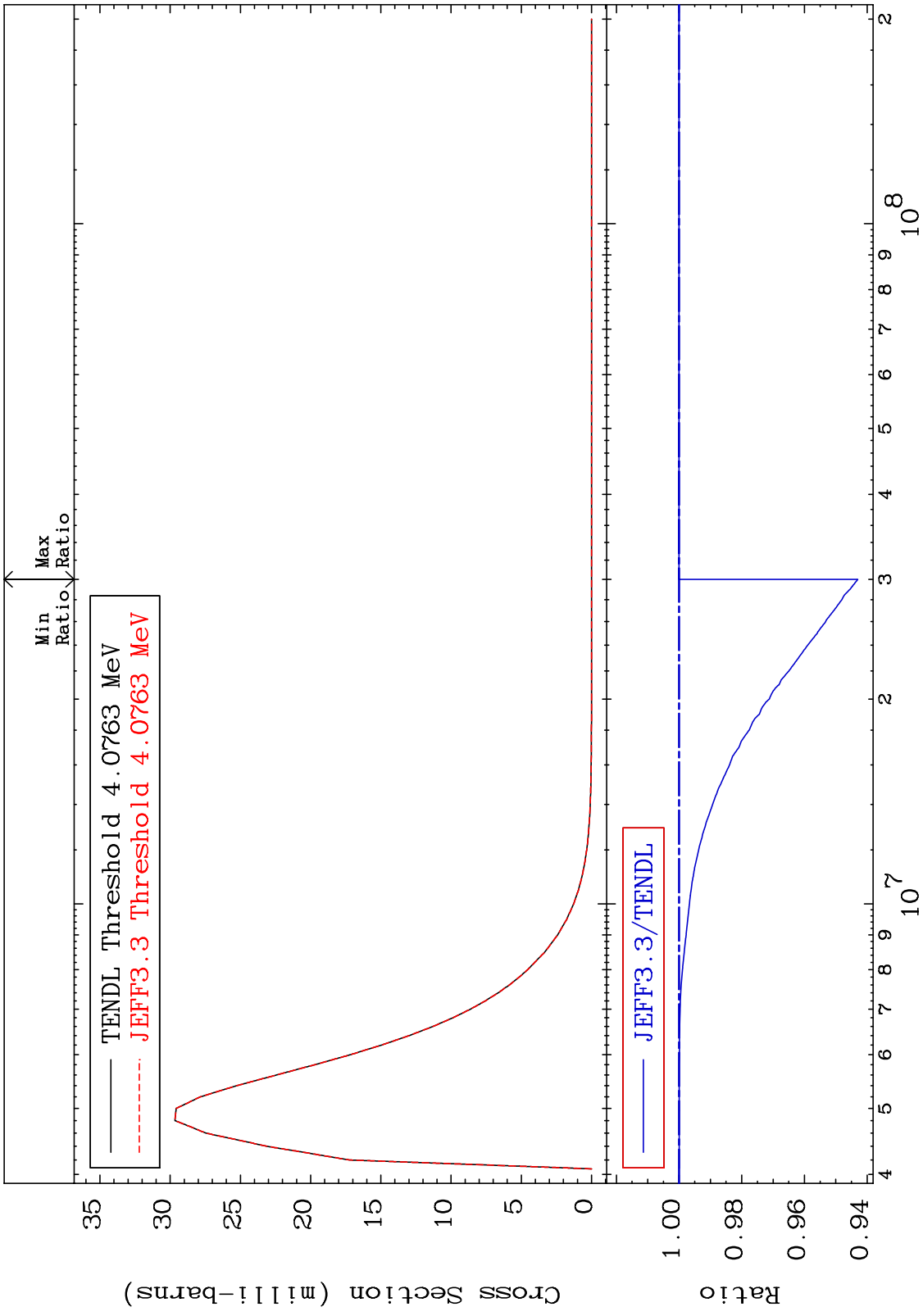
MAT 2837 MT= 73 (n,n') Level Cross Section 28-Ni-62
 -0.304 To 0.000 %



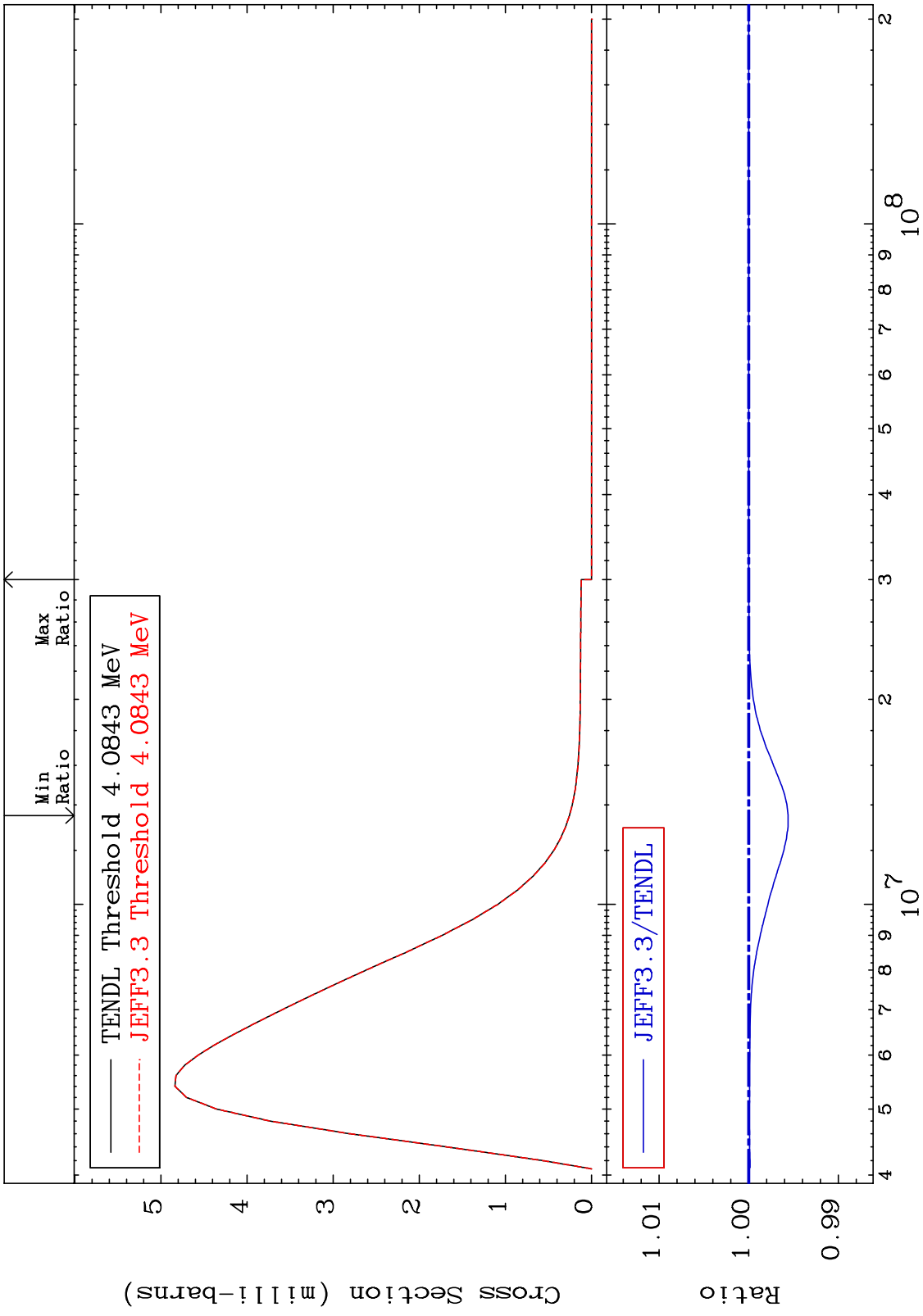
MAT 2837 MT= 75 (n,n') Level Cross Section -0.416 To 0.000 % 28-Ni-62



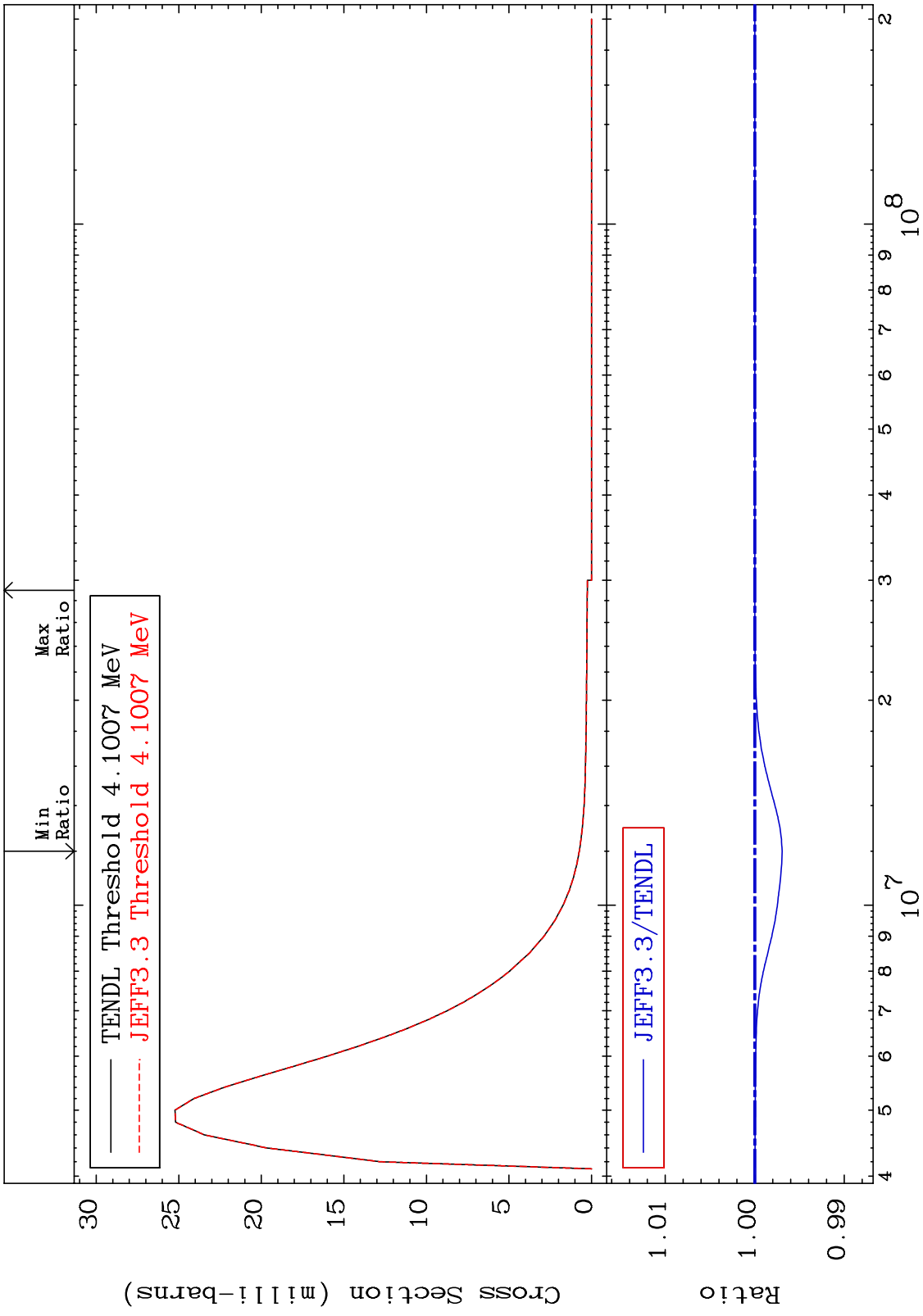
MAT 2837 MT= 76 (n,n') Level Cross Section 28-Ni-62
 -5.704 To 0.000 %



MAT 2837 MT= 77 (n,n') Level Cross Section 28-Ni-62
 -0.440 To 0.000 %

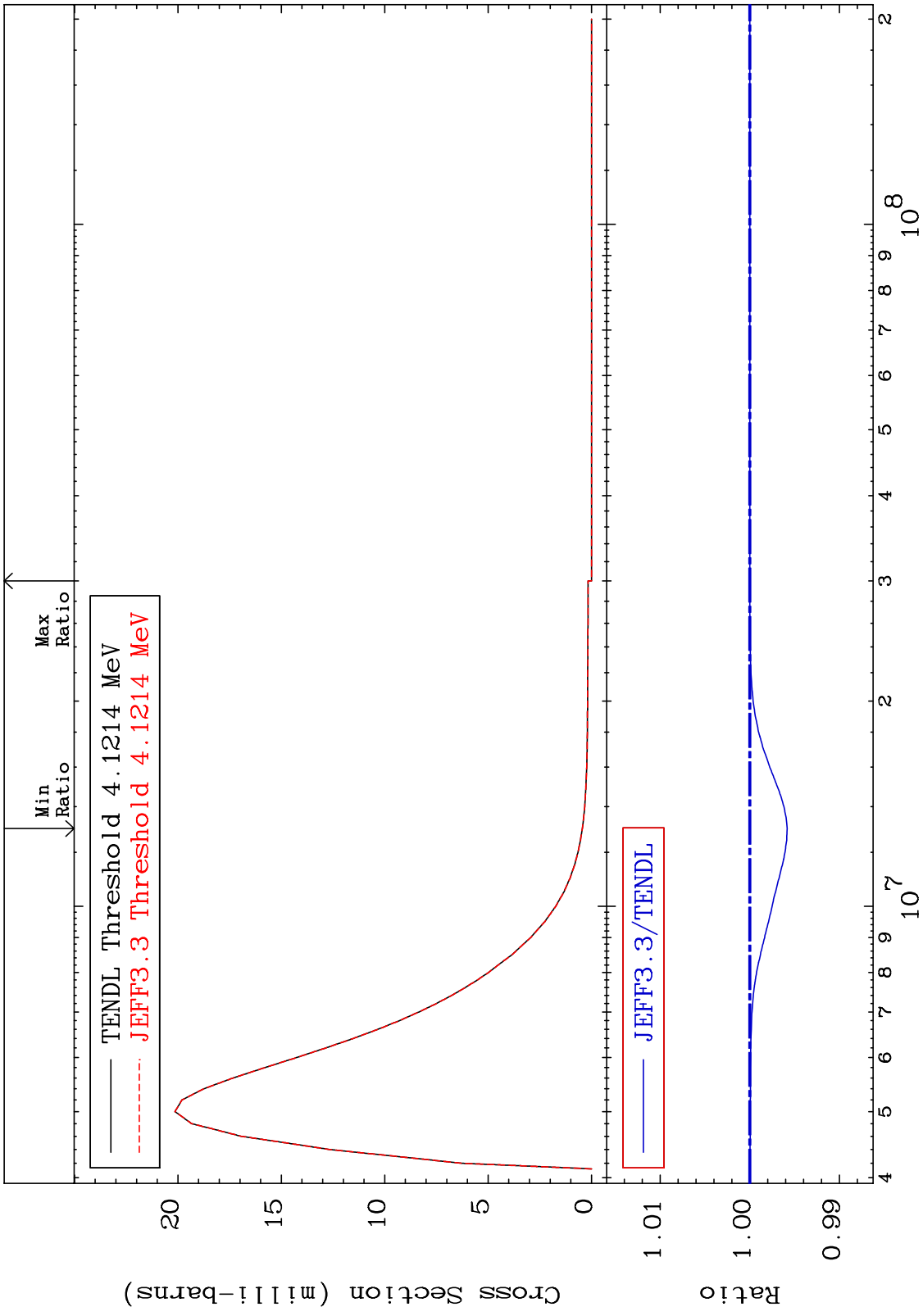


MAT 2837 MT= 78 (n,n') Level Cross Section -0.304 To 0.000 % 28-Ni-62

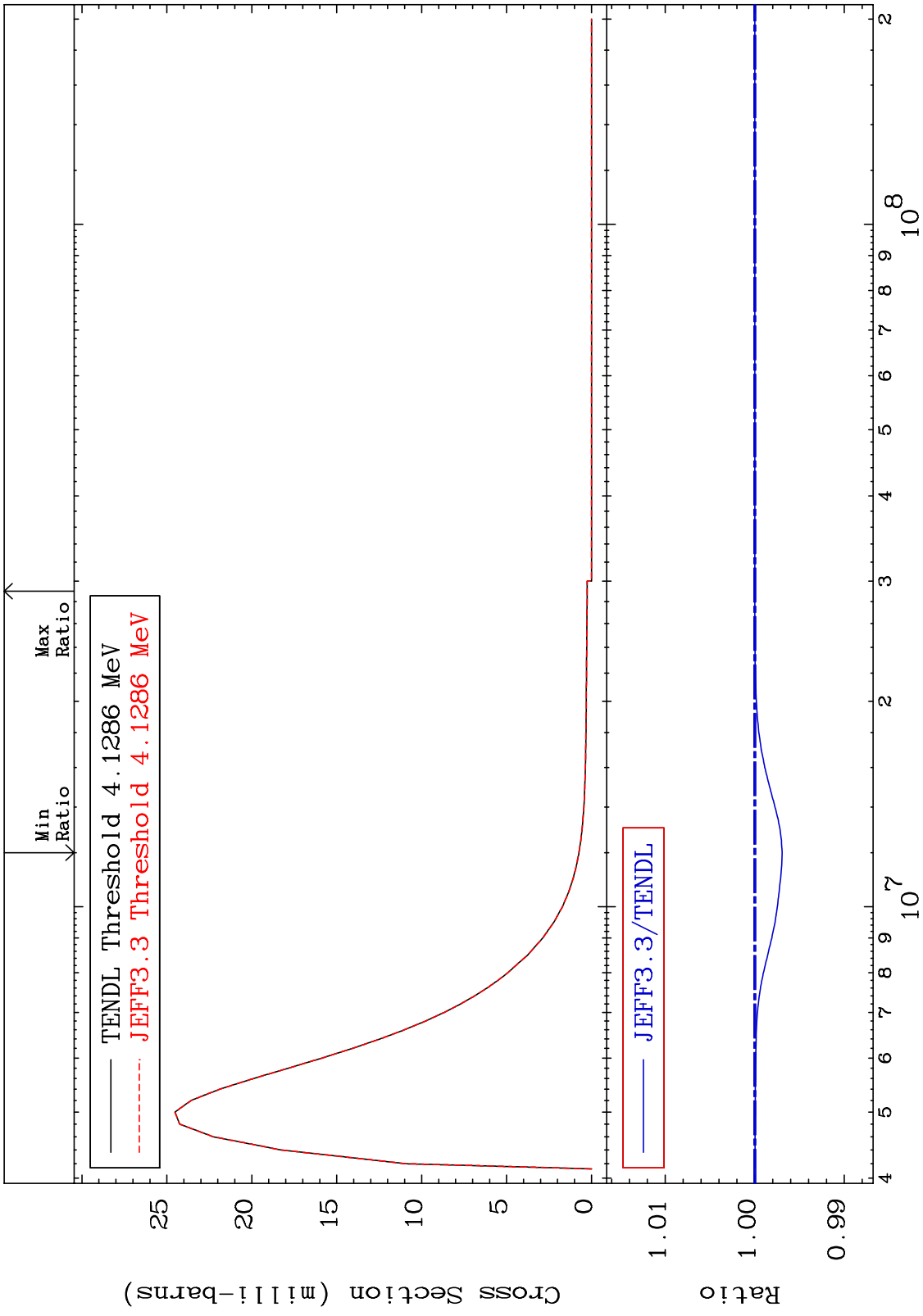


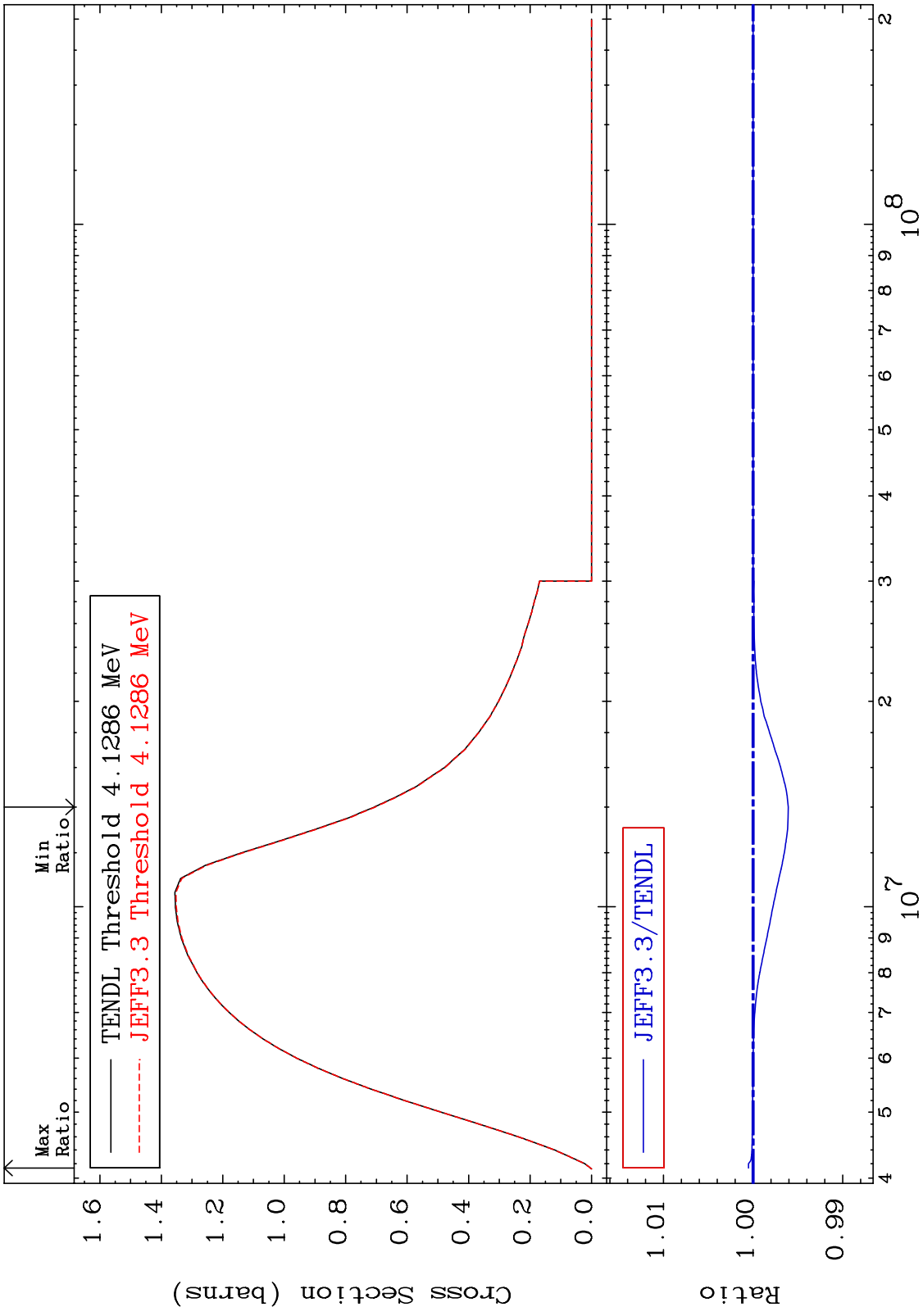
45 Incident Energy (eV) 28-Ni-62

MAT 2837 MT= 79 (n,n') Level Cross Section -0.416 To 0.000 % 28-Ni-62



MAT 2837 MT= 80 (n,n') Level Cross Section -0.305 To 0.000 % 28-Ni-62





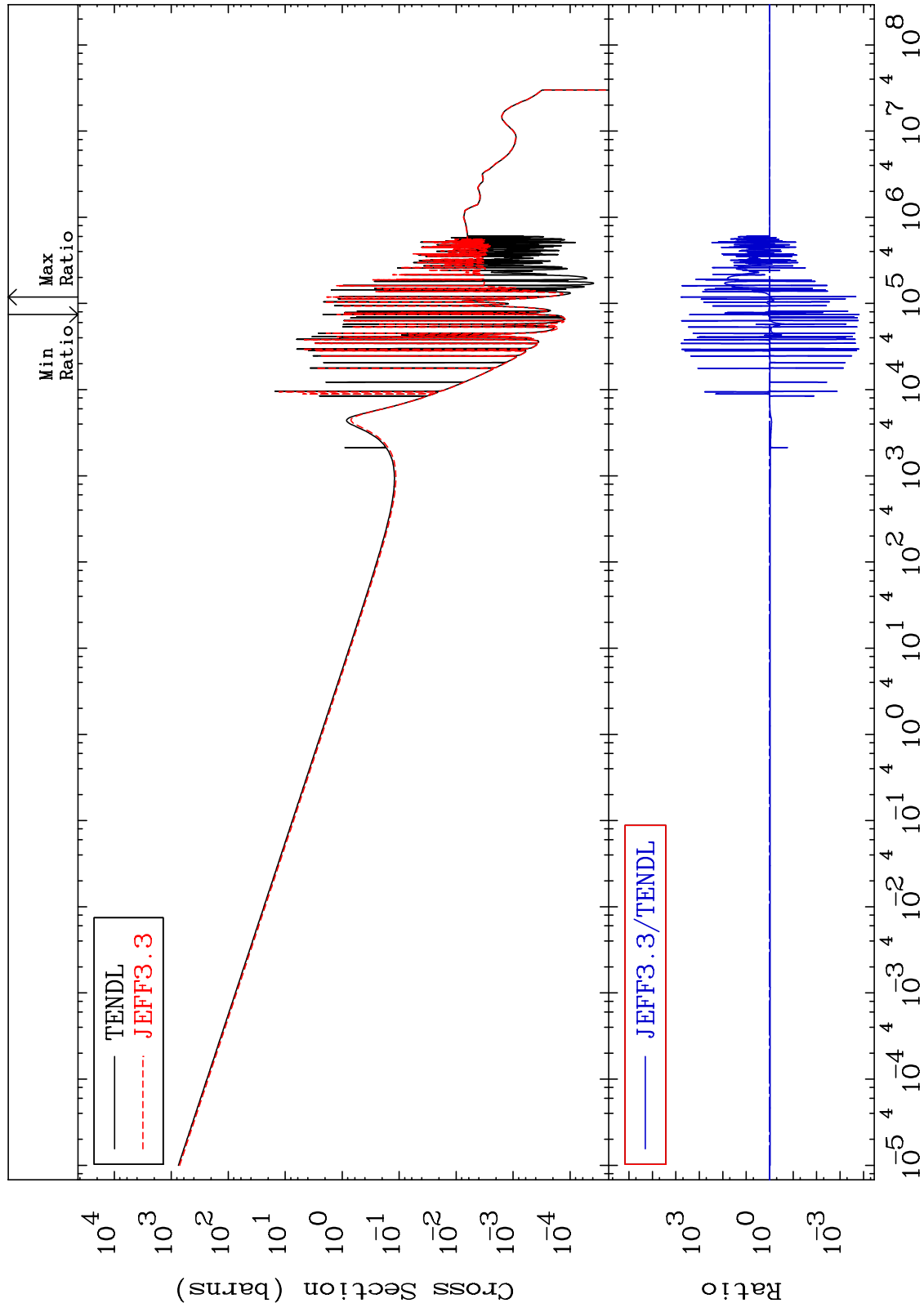
MAT 2837

(n, γ)

28-Ni-62

Cross Section

-99.98 To 9999. %



MAT 2837

(n,p)

28-Ni-62

-0.715 To 0.014 %

Cross Section

Min Ratio

Max Ratio

TENDL Threshold 4.6136 MeV
JEFF3.3 Threshold 4.6136 MeV

Cross Section (milli-barns)

50

40

30

20

10

0

1.01

Ratio

1.00

0.99

JEFF3.3/TENDL

10⁷

2

4

6

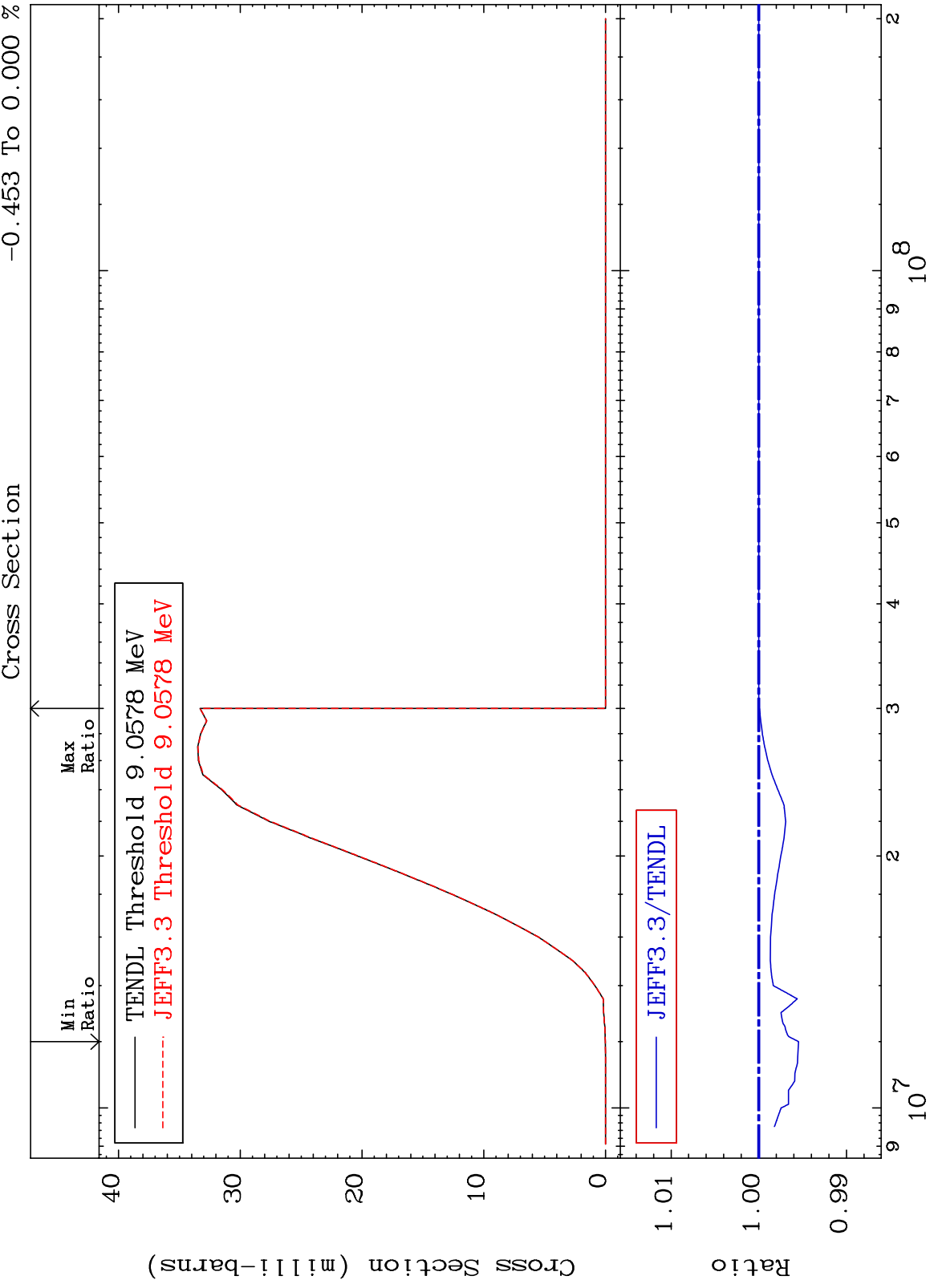
8

10⁸

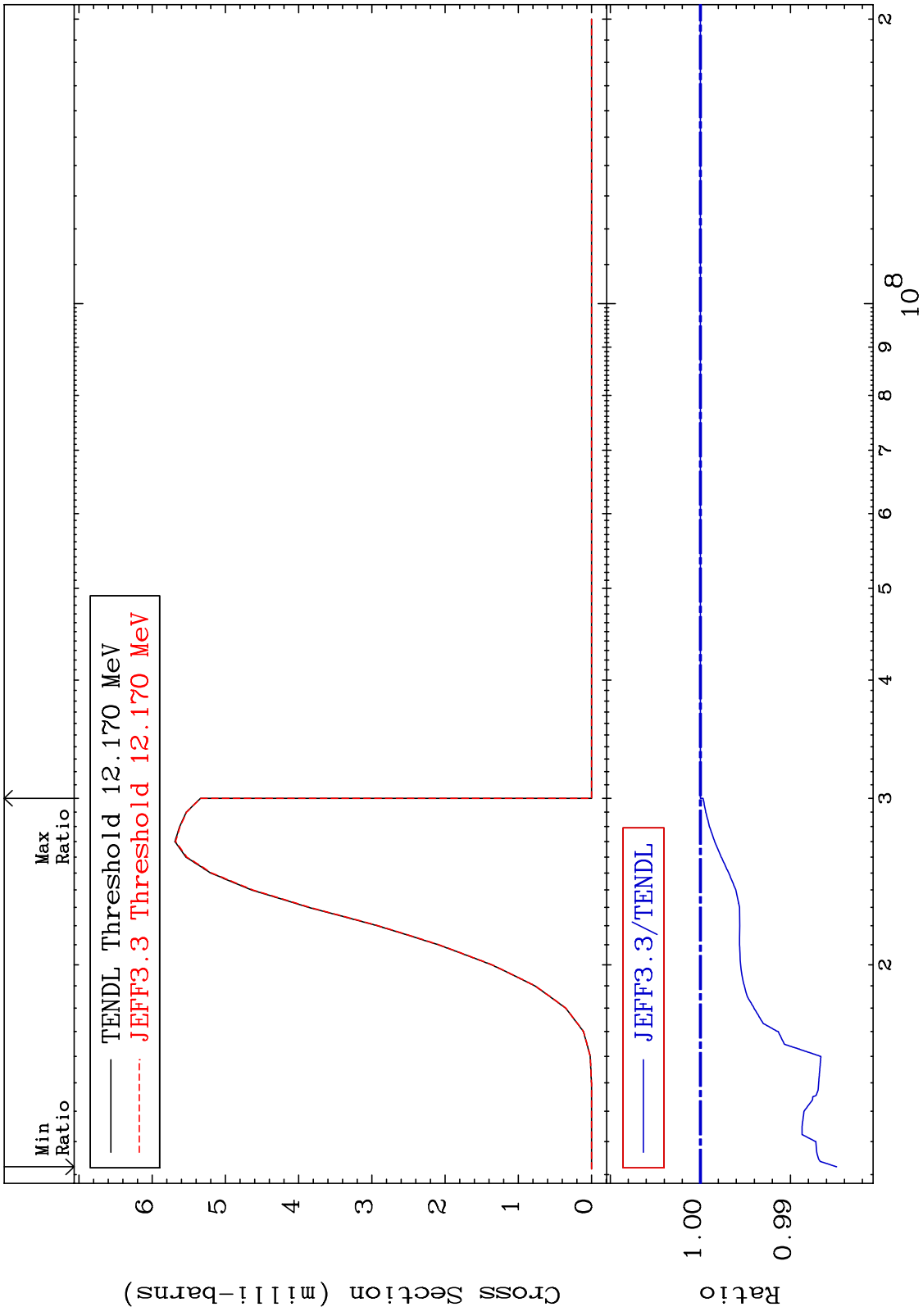
50

Incident Energy (eV)

28-Ni-62



MAT 2837 (n,t) 28-Ni-62
Cross Section -1.512 To 0.000 %



52 28-Ni-62

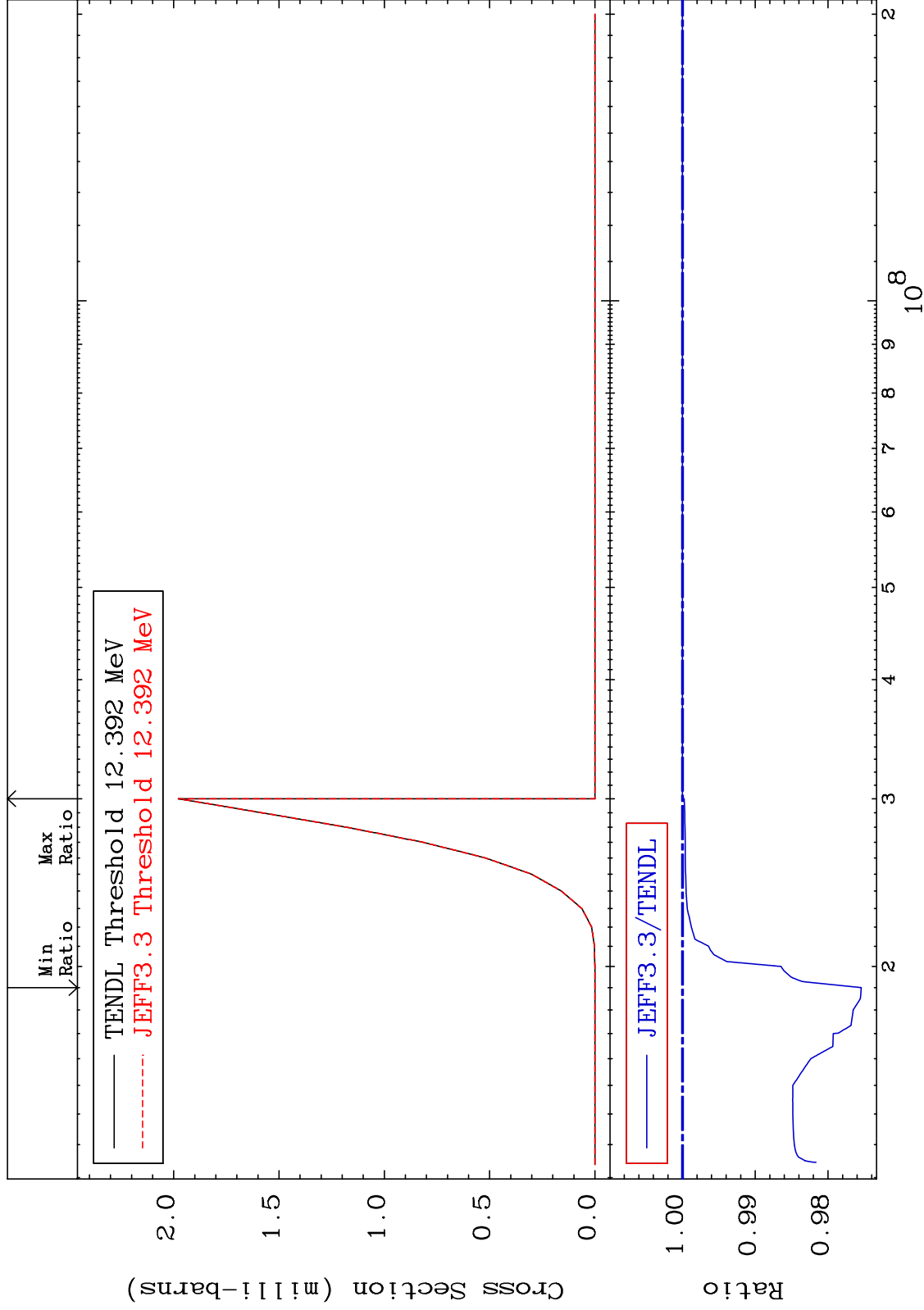
MAT 2837

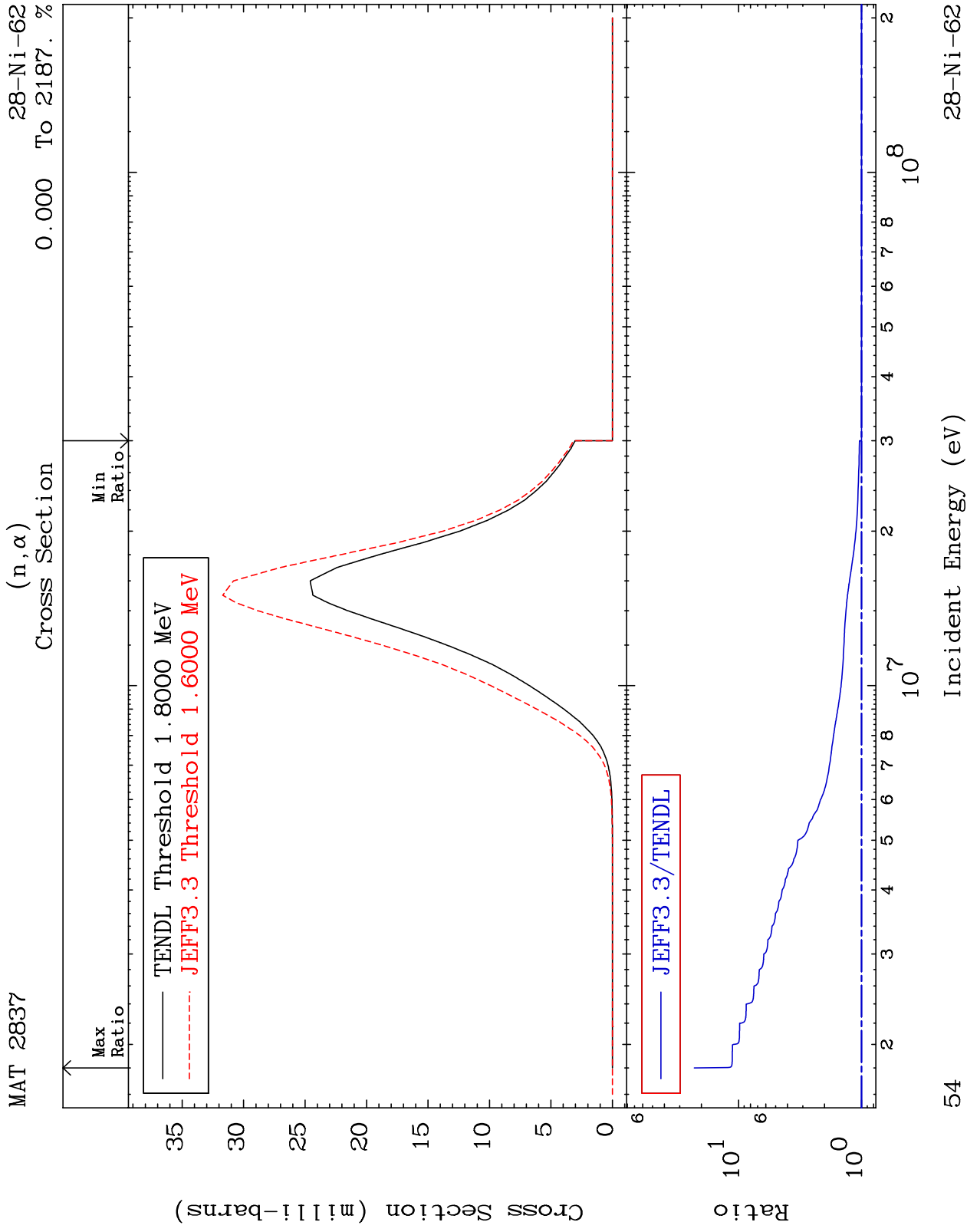
(n, He-3)

28-Ni-62

Cross Section

-2.457 To 0.000 %





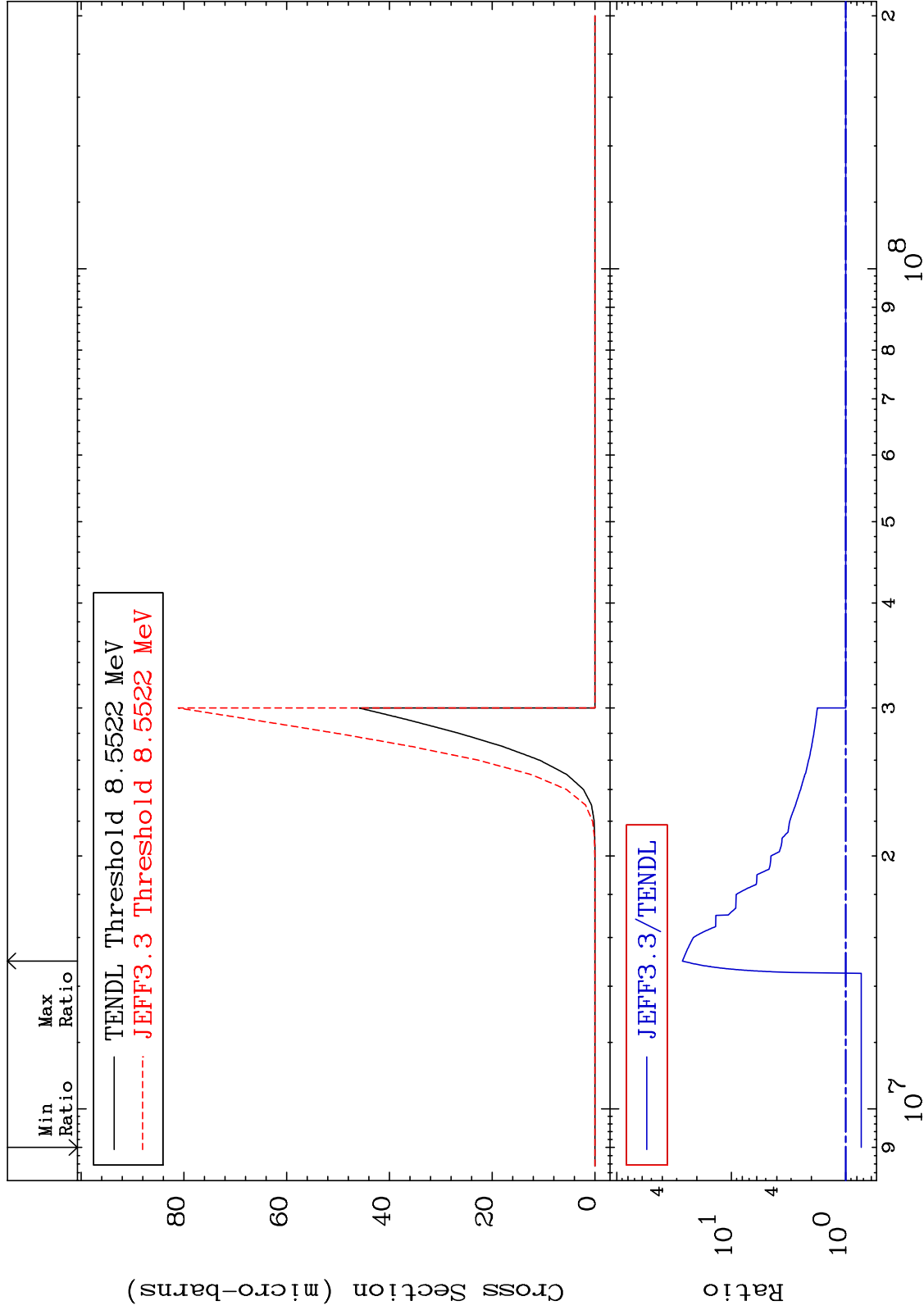
MAT 2837

(n,2α)

28-Ni-62

Cross Section

-26.78 To 2569. %

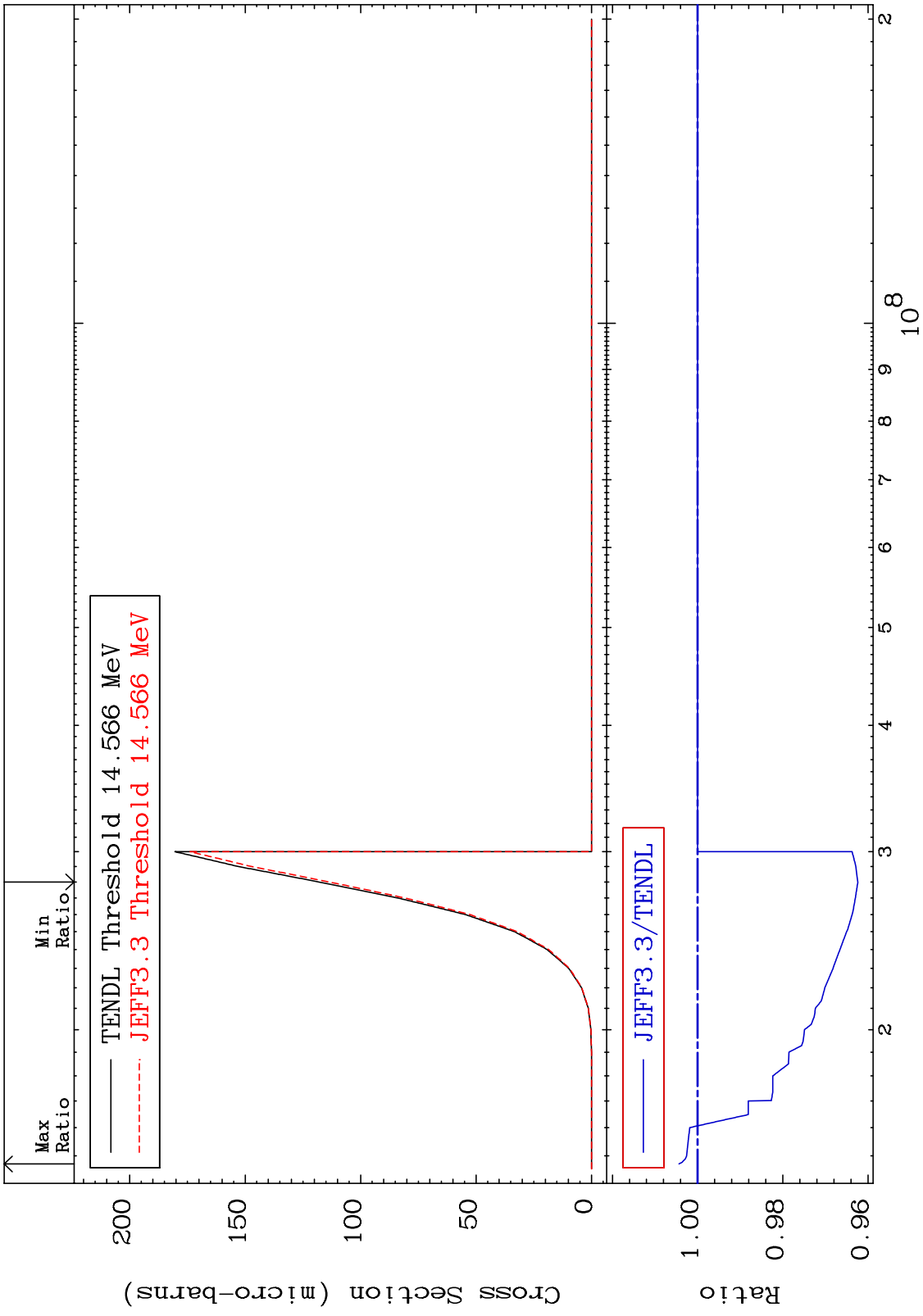


55

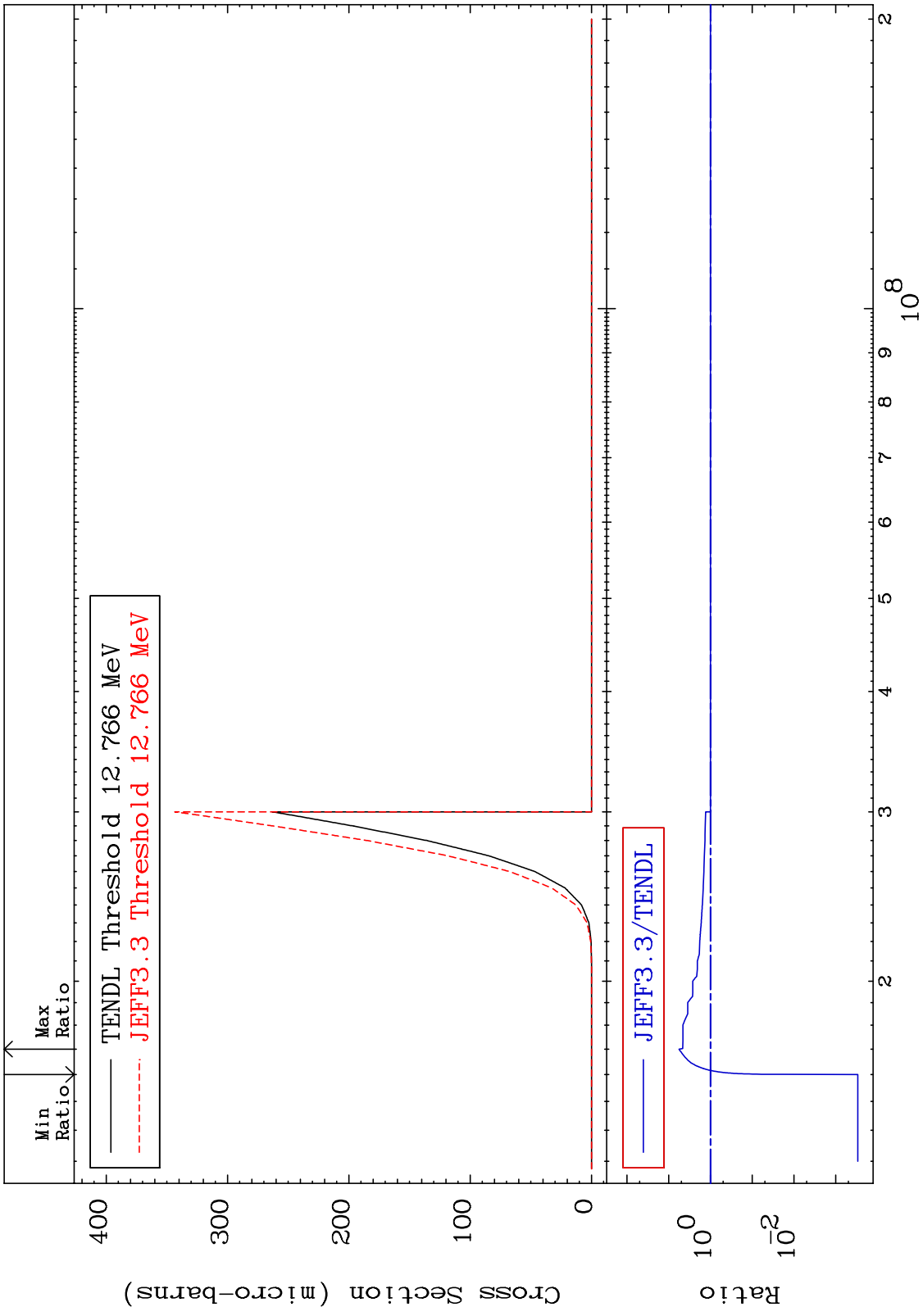
Incident Energy (eV)

28-Ni-62

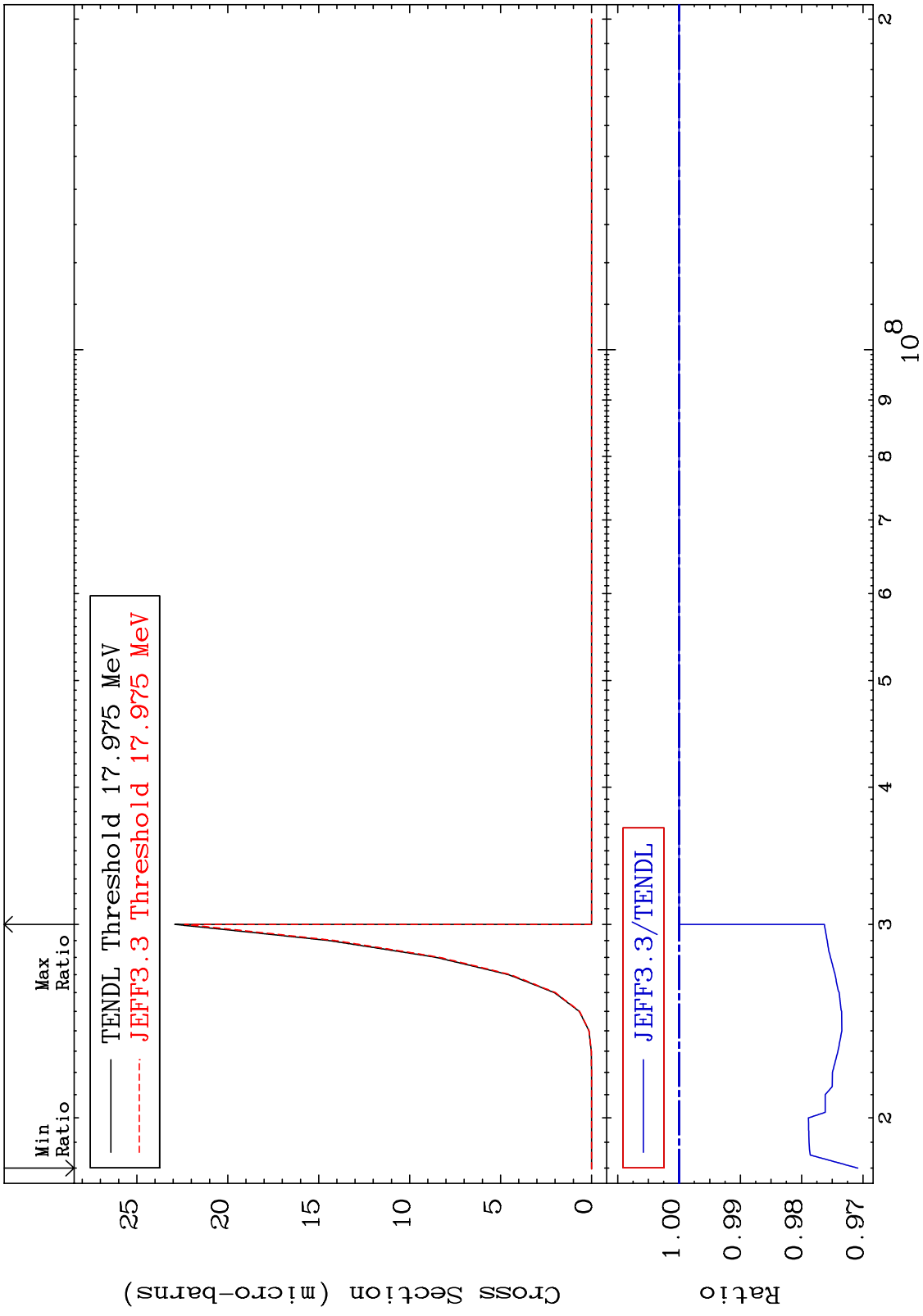
MAT 2837 (n,2p) 28-Ni-62
 Cross Section -3.761 To 0.436 %



MAT 2837 $(n,p) \alpha$ 28-Ni-62
 Cross Section -99.97 To 467.4 %



MAT 2837 (n,p) d 28-Ni-62
 Cross Section -2.917 To 0.000 %



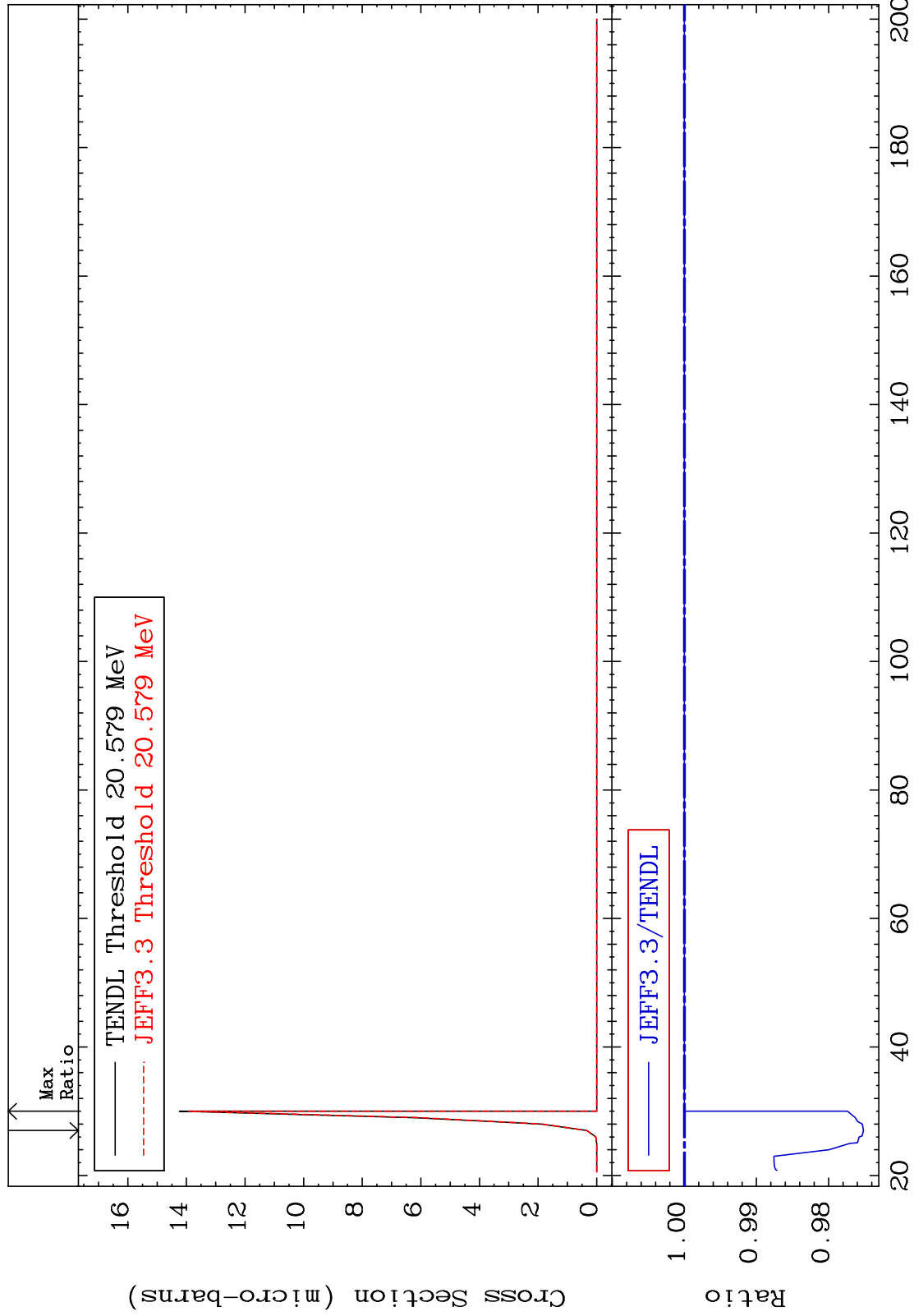
MAT 2837

(n,p) t

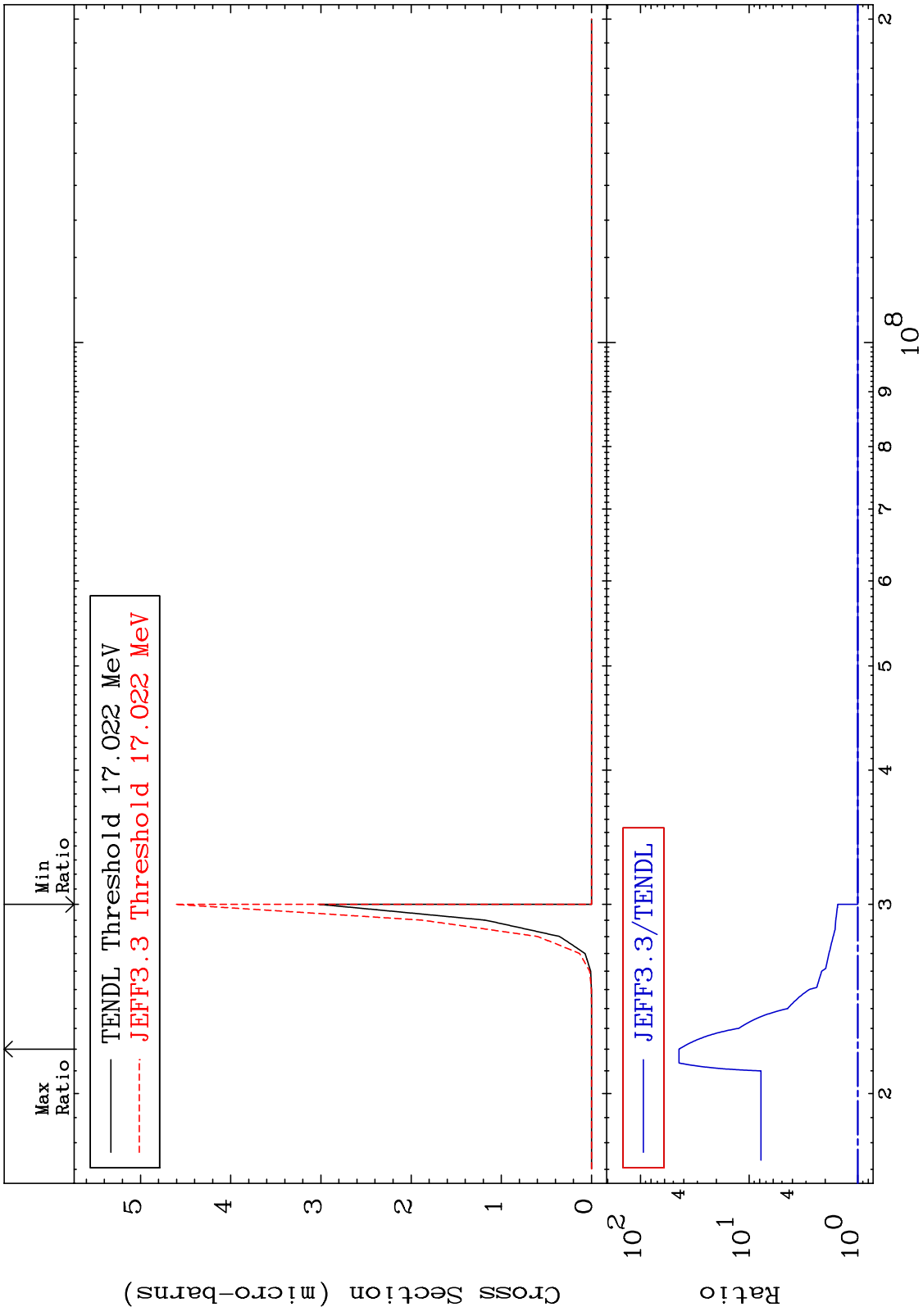
28-Ni-62

Cross Section

-2.485 To 0.000 %



MAT 2837 (n,d) α 28-Ni-62
 Cross Section 0.000 To 4317. %

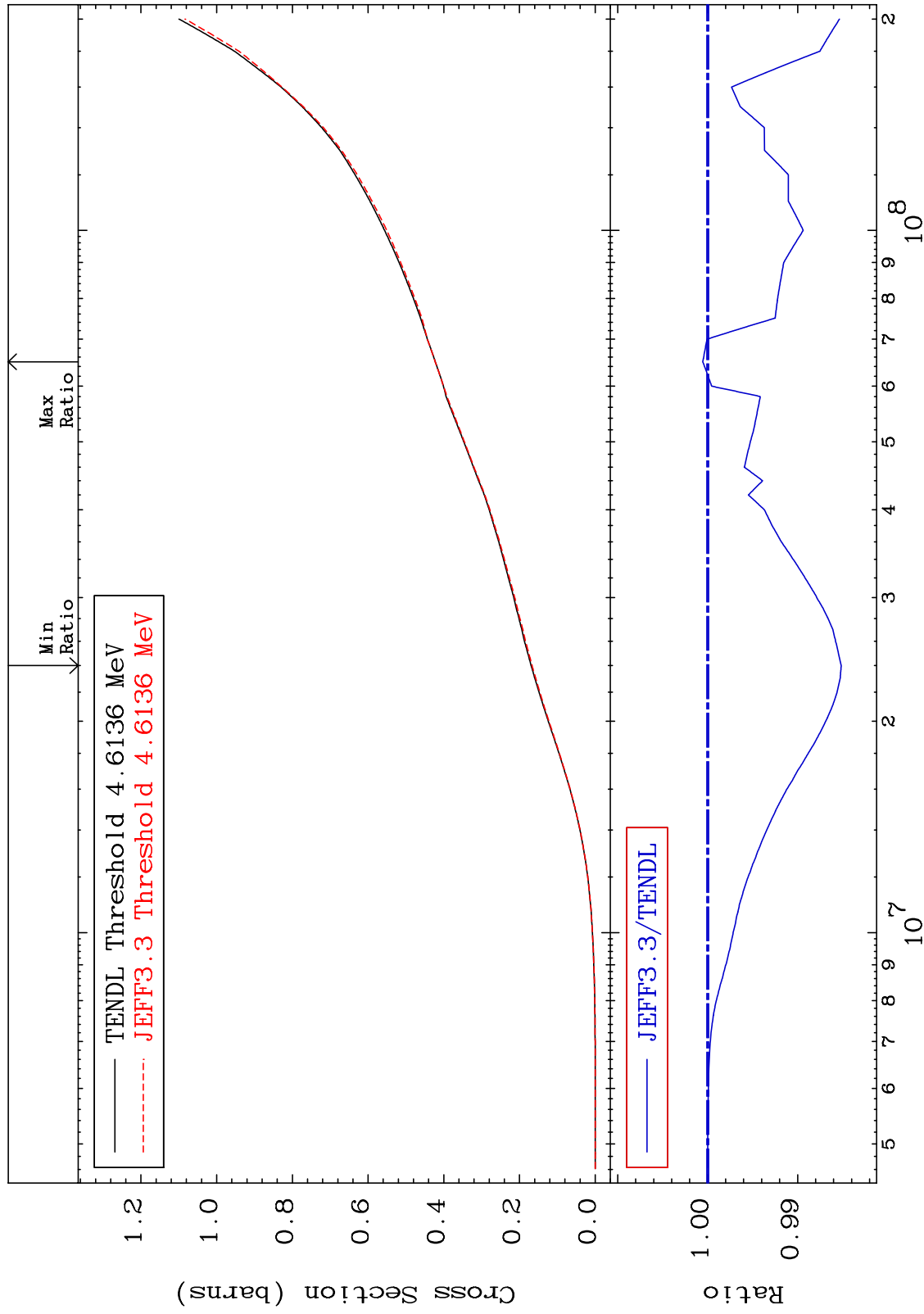


60 28-Ni-62

MAT 2837

Hydrogen Production
Cross Section

28-Ni-62
-1.484 To 0.054 %

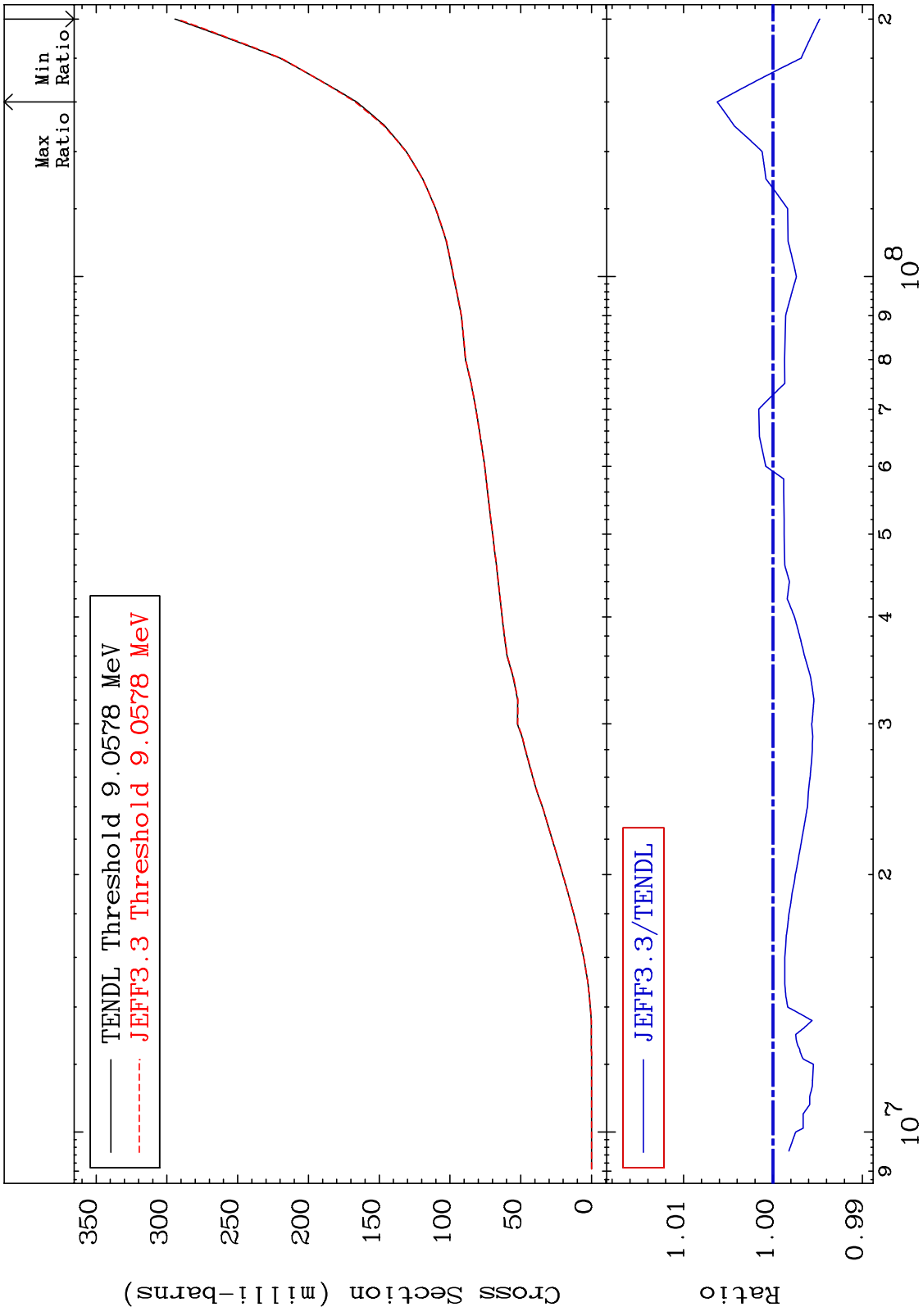


61

Incident Energy (eV)

28-Ni-62

MAT 2837 Deuterium Production Cross Section 28-Ni-62 -0.523 To 0.624 %

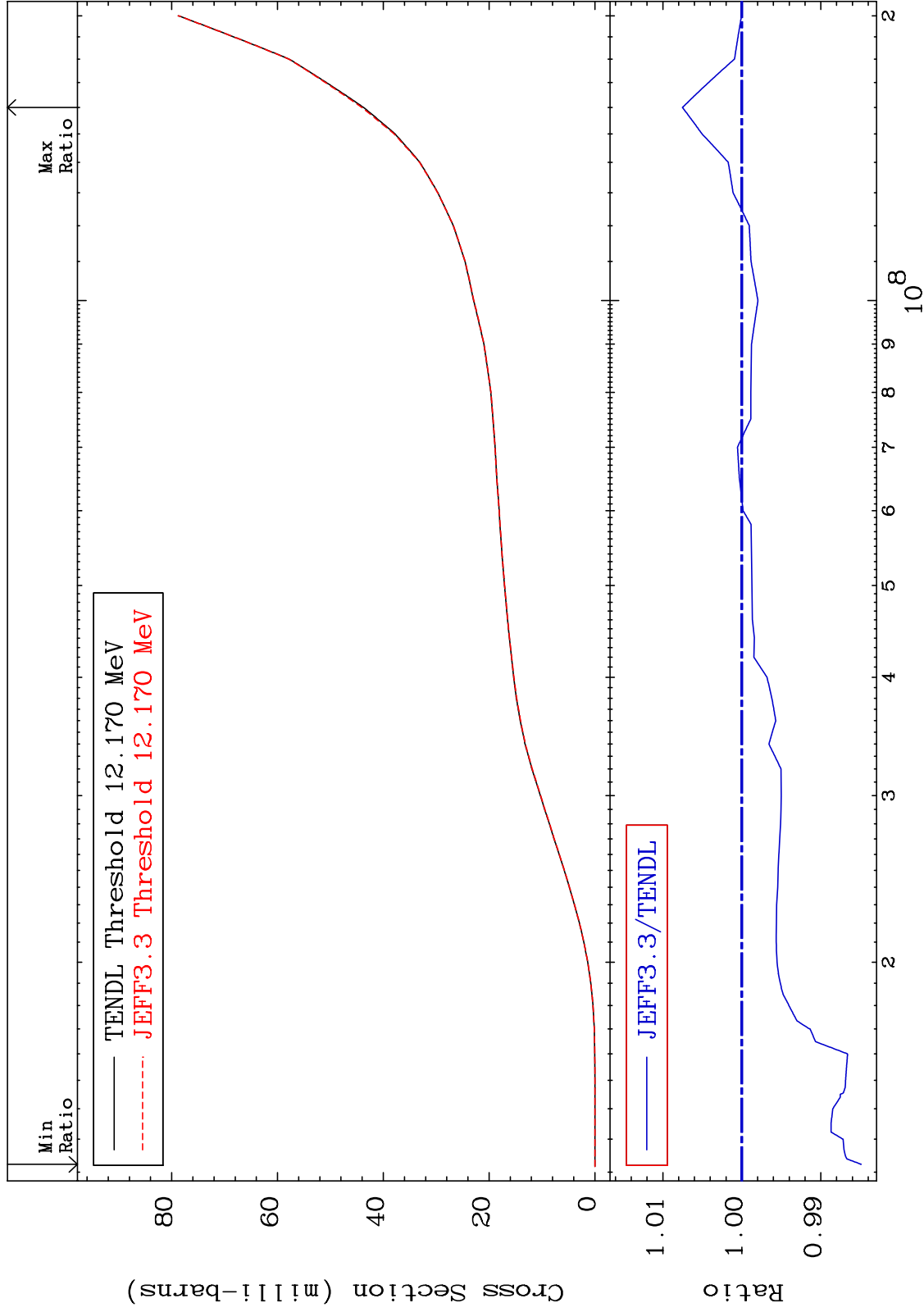


62 Incident Energy (eV) 28-Ni-62

MAT 2837

Tritium Production
Cross Section

28-Ni-62
-1.512 To 0.752 %

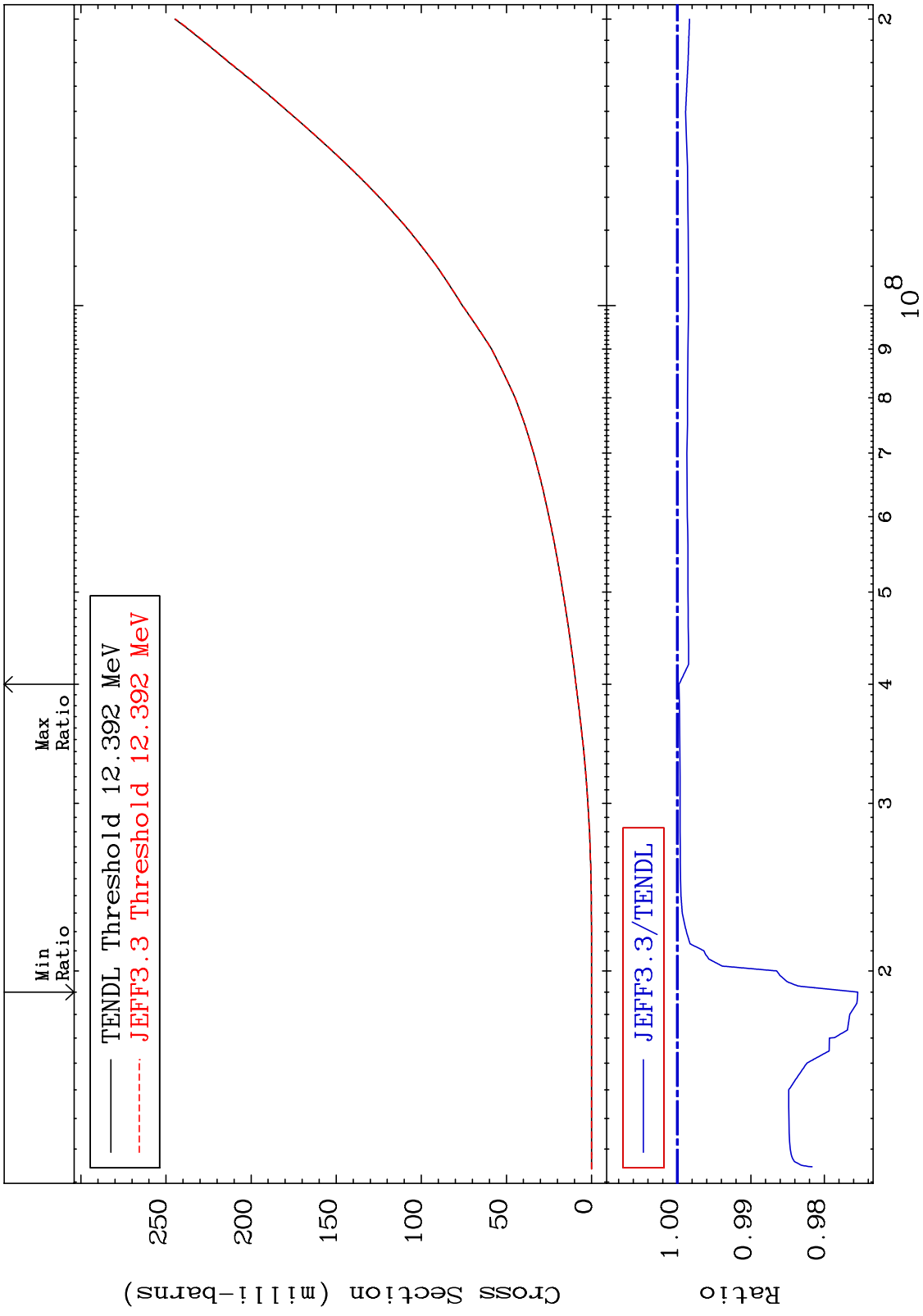


63

Incident Energy (eV)

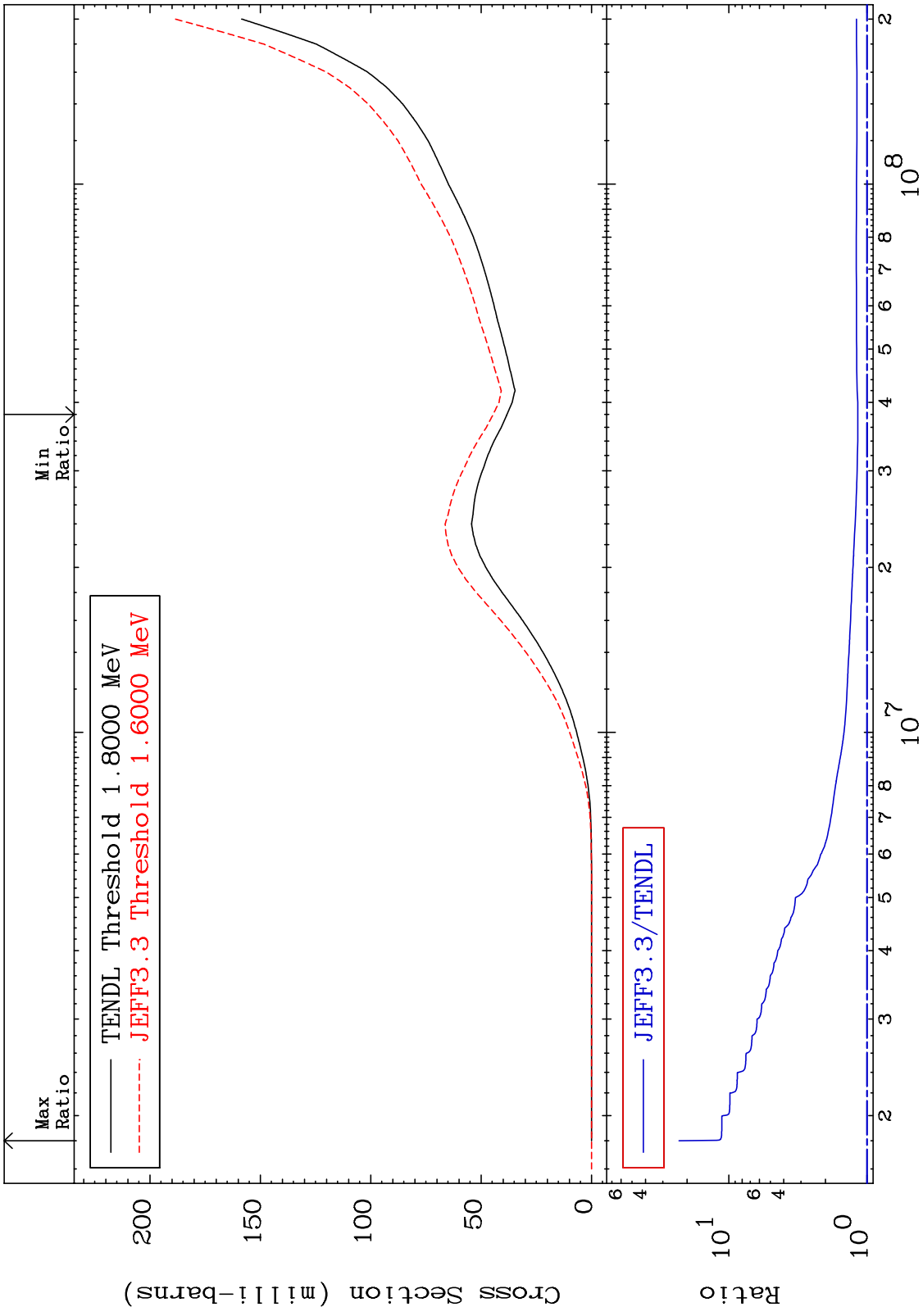
28-Ni-62

MAT 2837 He-3 Production Cross Section 28-Ni-62 -2.457 To -0.022%

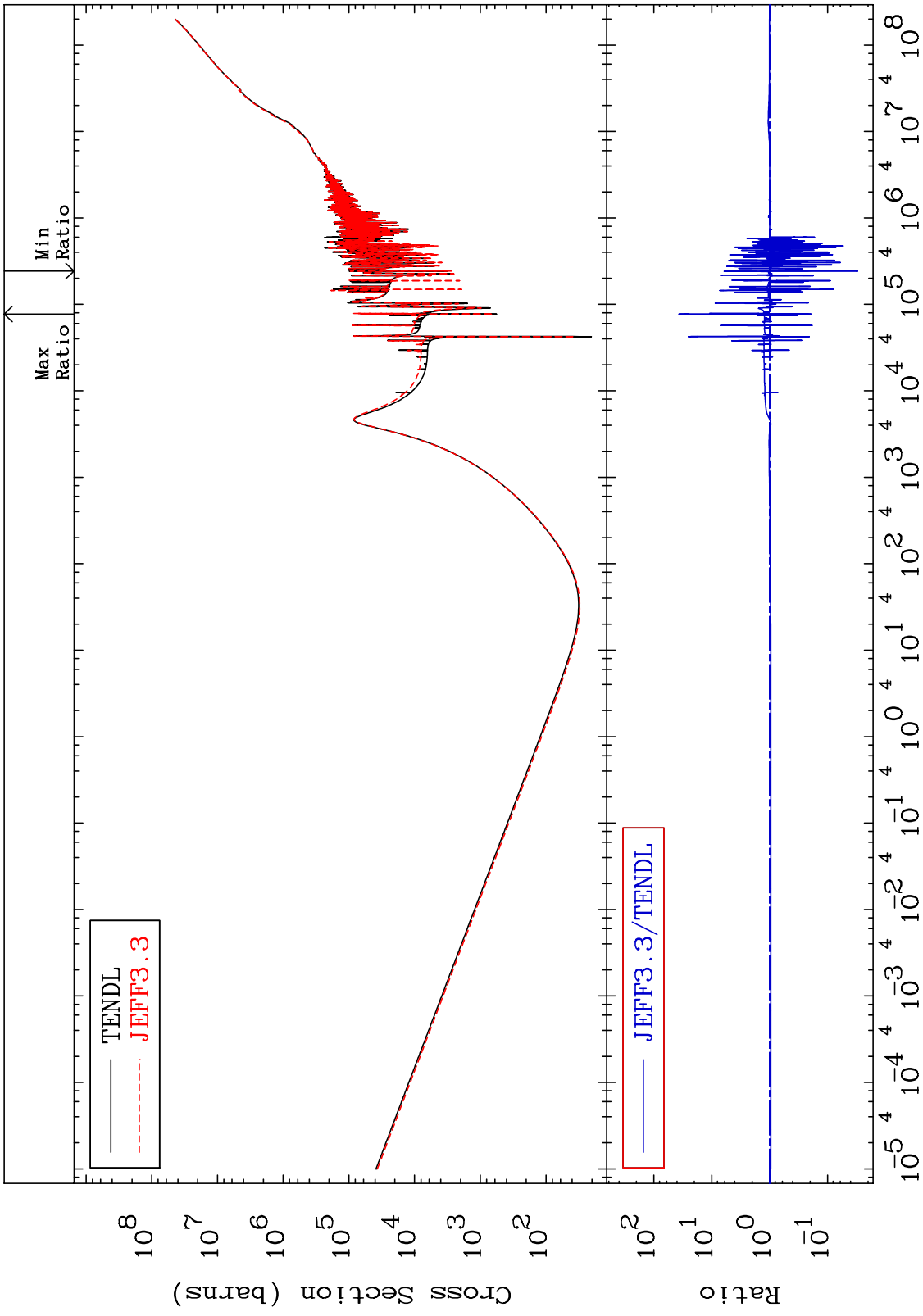


64 28-Ni-62

MAT 2837 He-4 Production Cross Section 28-Ni-62 To 2187. %
 16.46



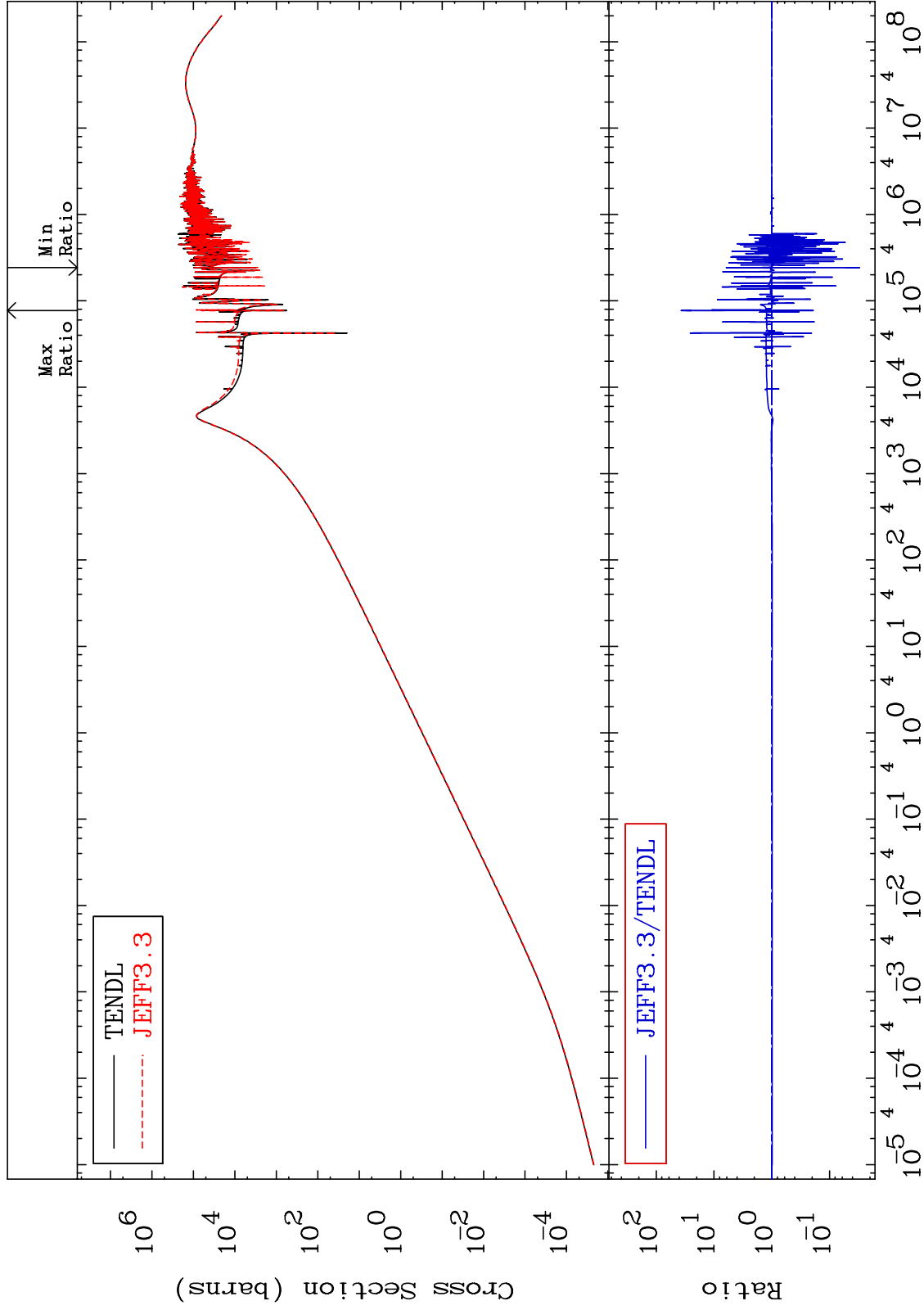
MAT 2837 Kerma total (eV-barns) Cross Section 28-Ni-62 -97.01 To 3575. %



MAT 2837

Kerma elastic
Cross Section

28-Ni-62
-97.01 To 3589. %



67

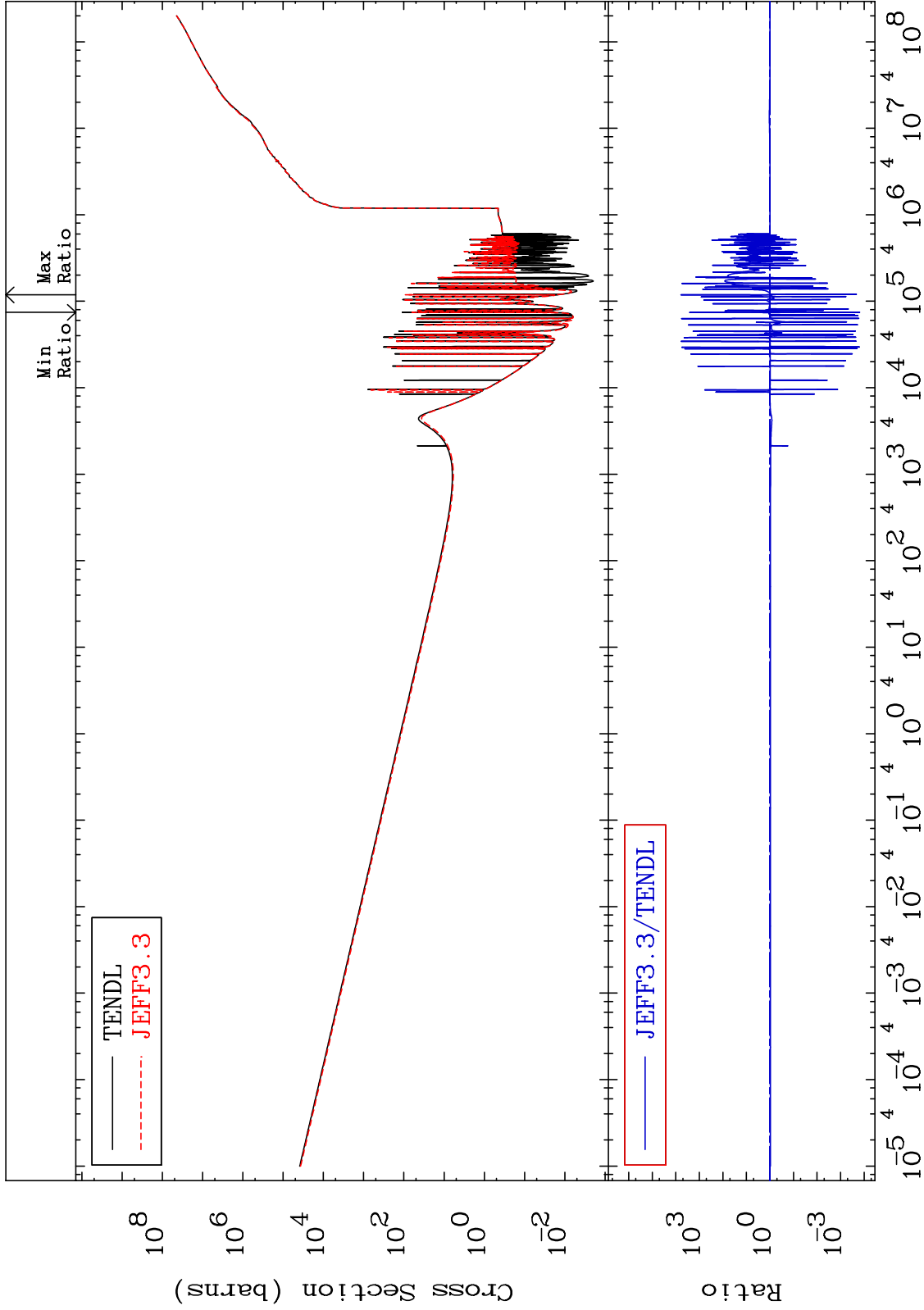
Incident Energy (eV)

28-Ni-62

MAT 2837

Kerma non-elastic (all but mt2)
Cross Section

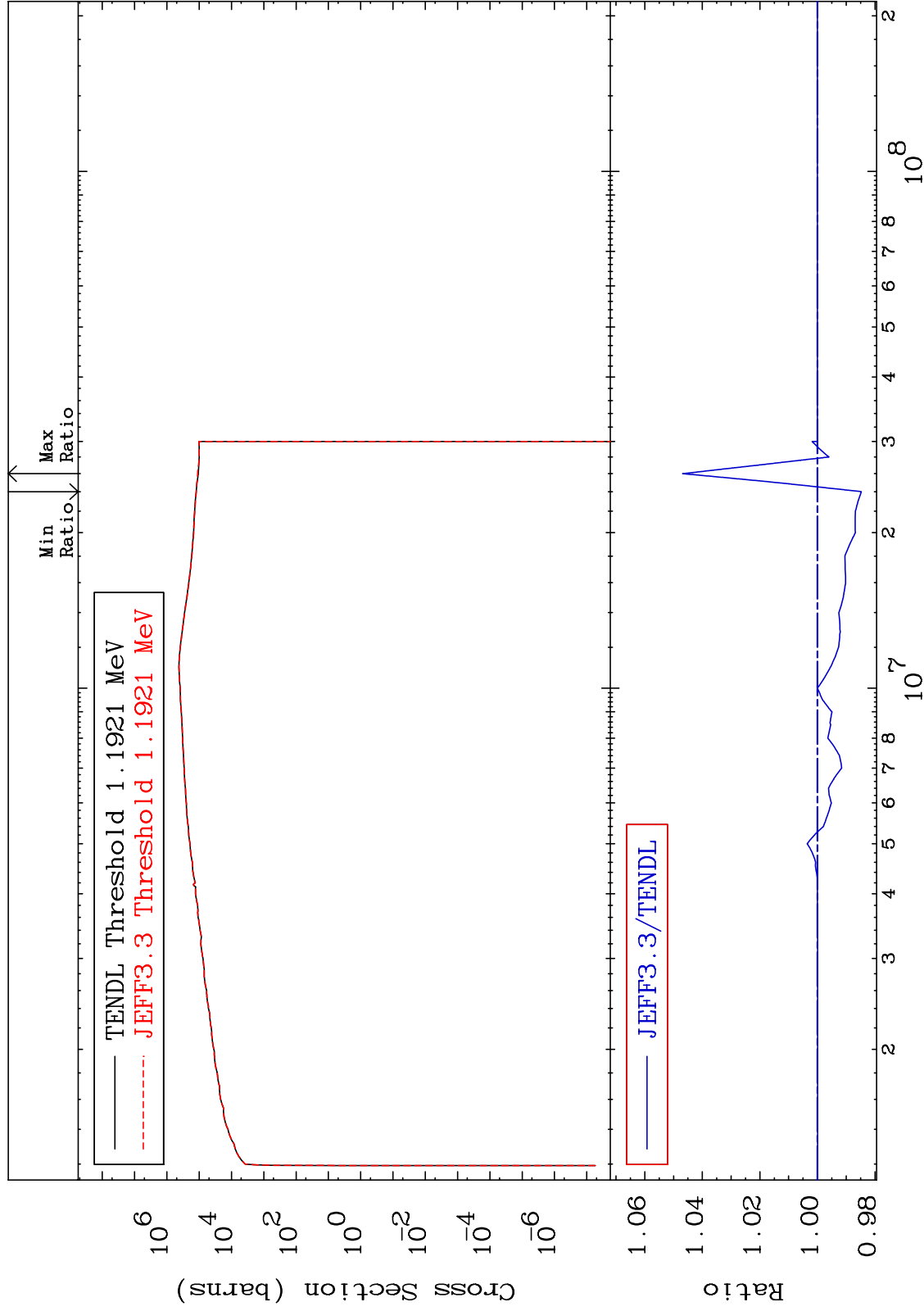
28-Ni-62
-99.98 To 9999. %



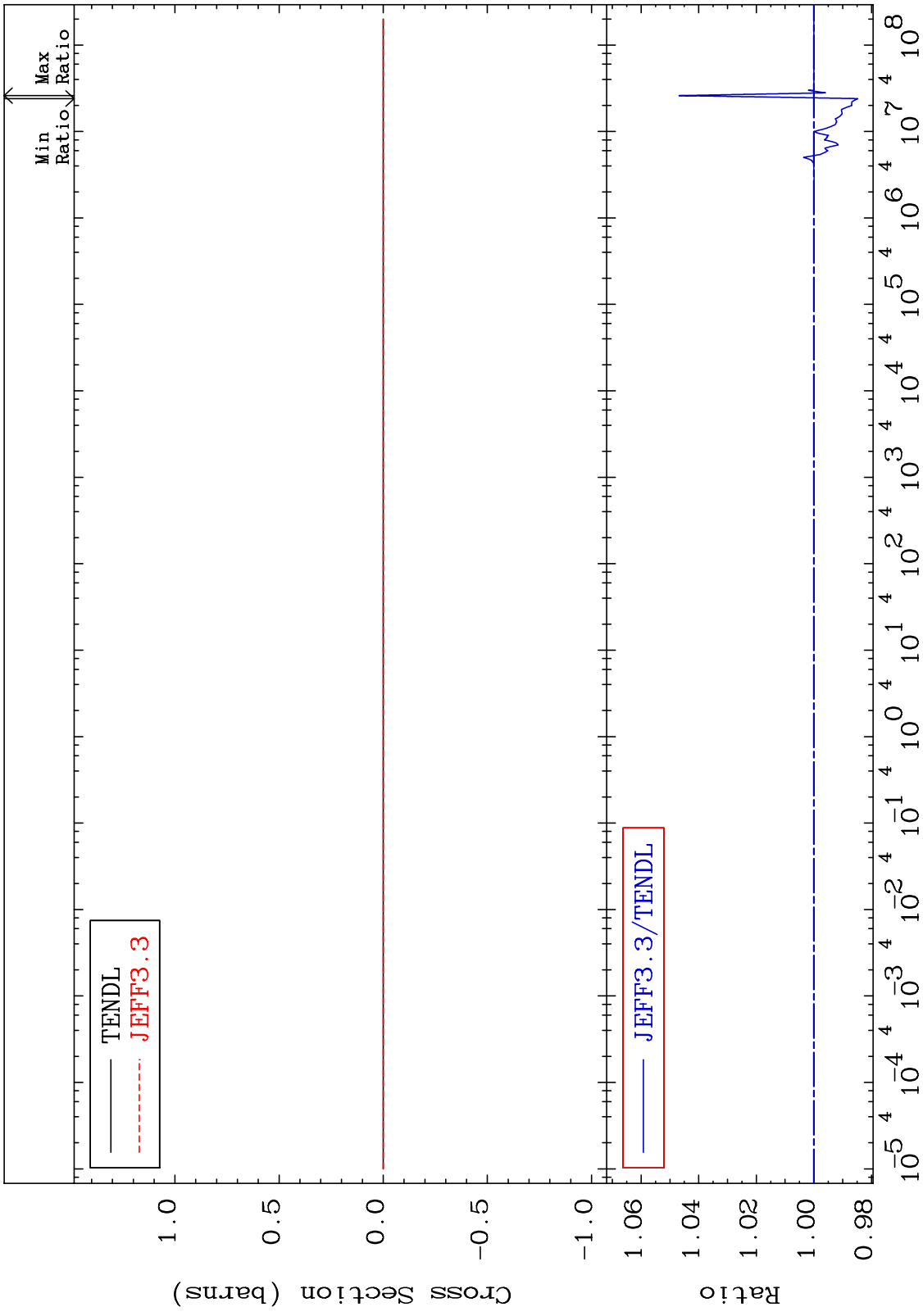
MAT 2837

Kerma inelastic (mt51-91)
Cross Section

28-Ni-62
-1.526 To 4.683 %



MAT 2837 Kerma fission (mt18 or mt19-20-21-38) 28-Ni-62
 Cross Section -1.526 To 4.683 %

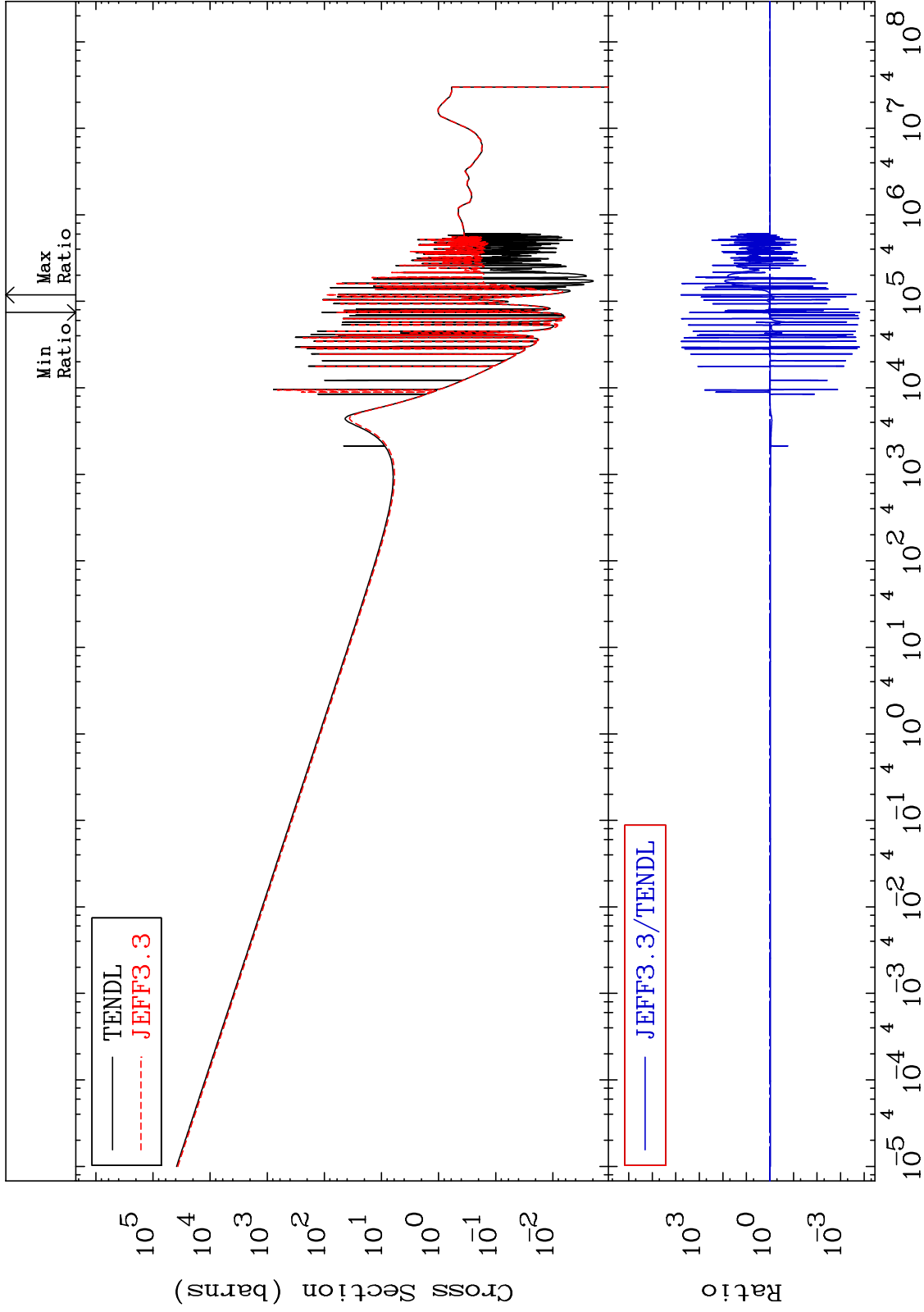


70 Incident Energy (eV) 28-Ni-62

MAT 2837

Kerma capture (mt102)
Cross Section

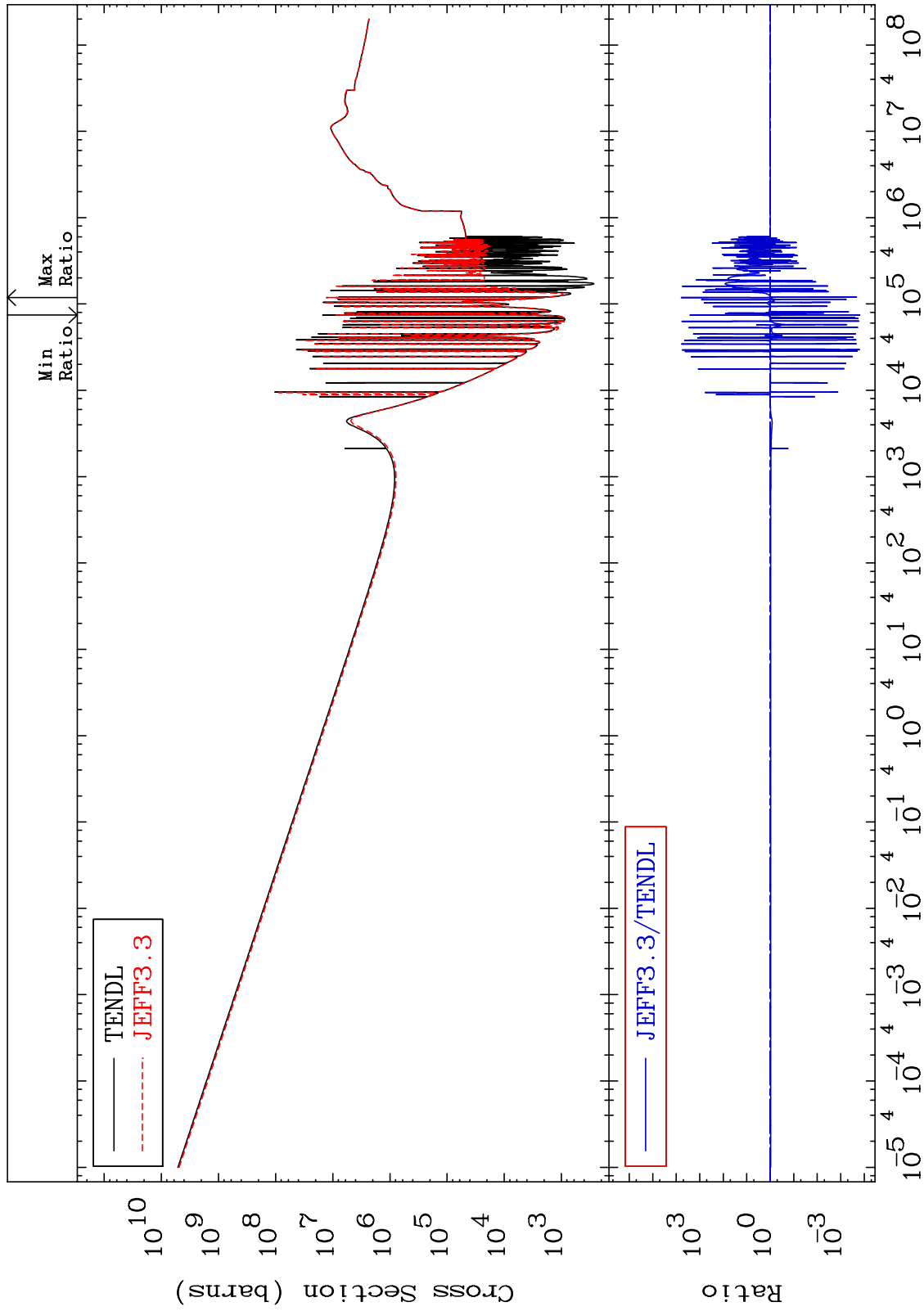
28-Ni-62
-99.98 To 9999. %



MAT 2837

Total photon (eV-barns)
Cross Section

28-Ni-62
-99.98 To 9999. %



72

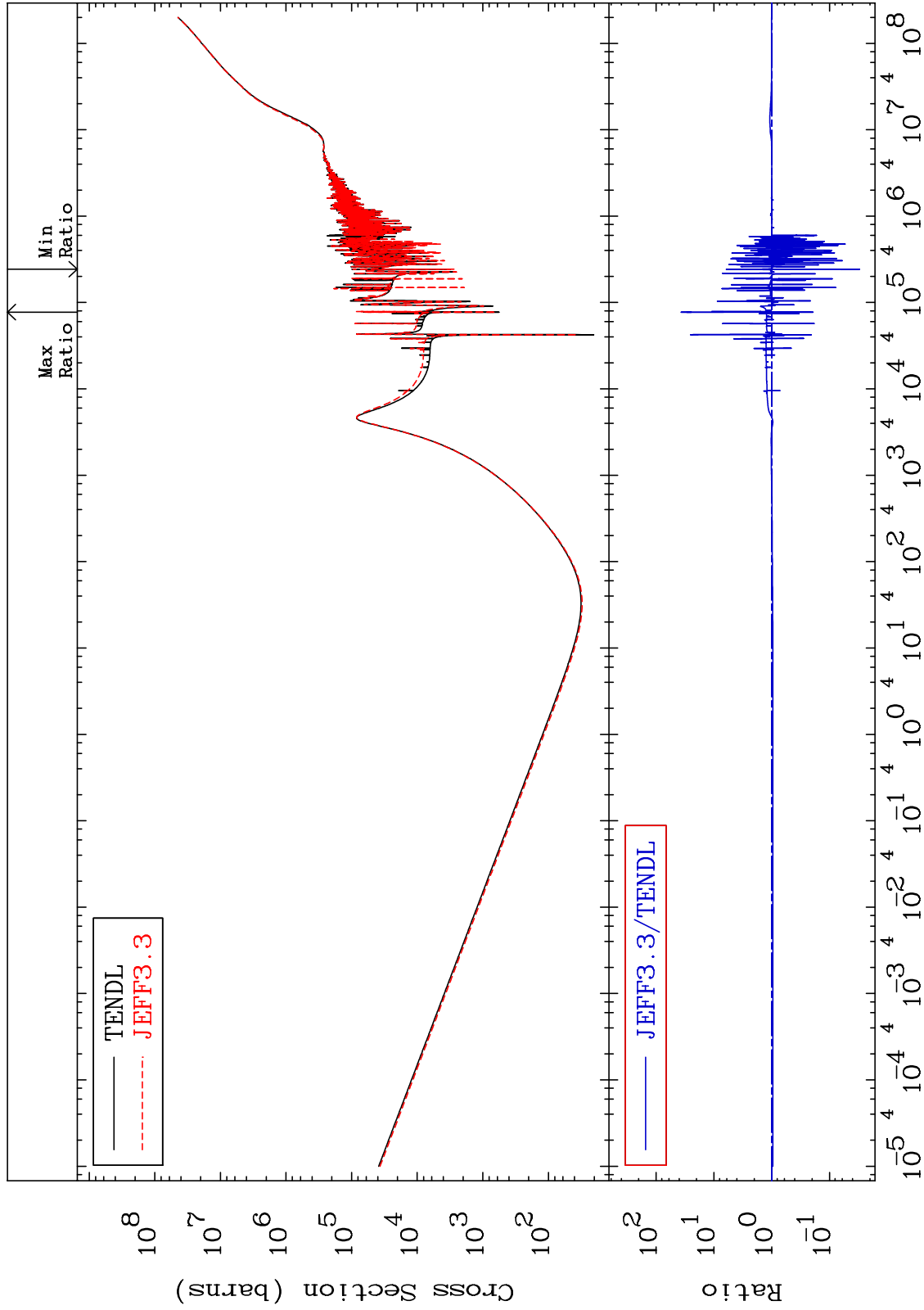
Incident Energy (eV)

28-Ni-62

MAT 2837

Total kinematic kerma (high limit)
Cross Section

28-Ni-62
-97.01 To 3575. %



73

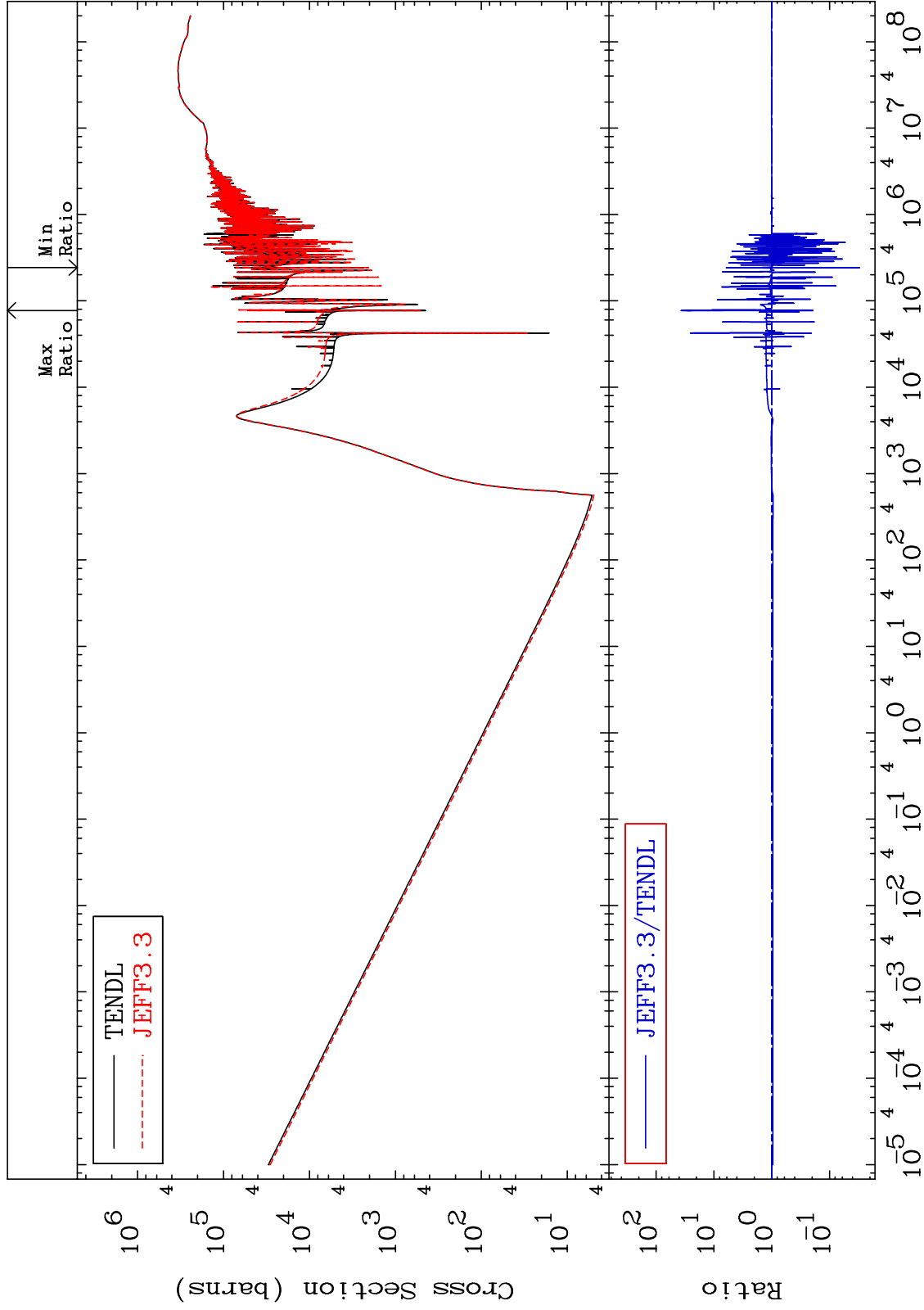
Incident Energy (eV)

28-Ni-62

MAT 2837

Dpa total (eV-barns)
Cross Section

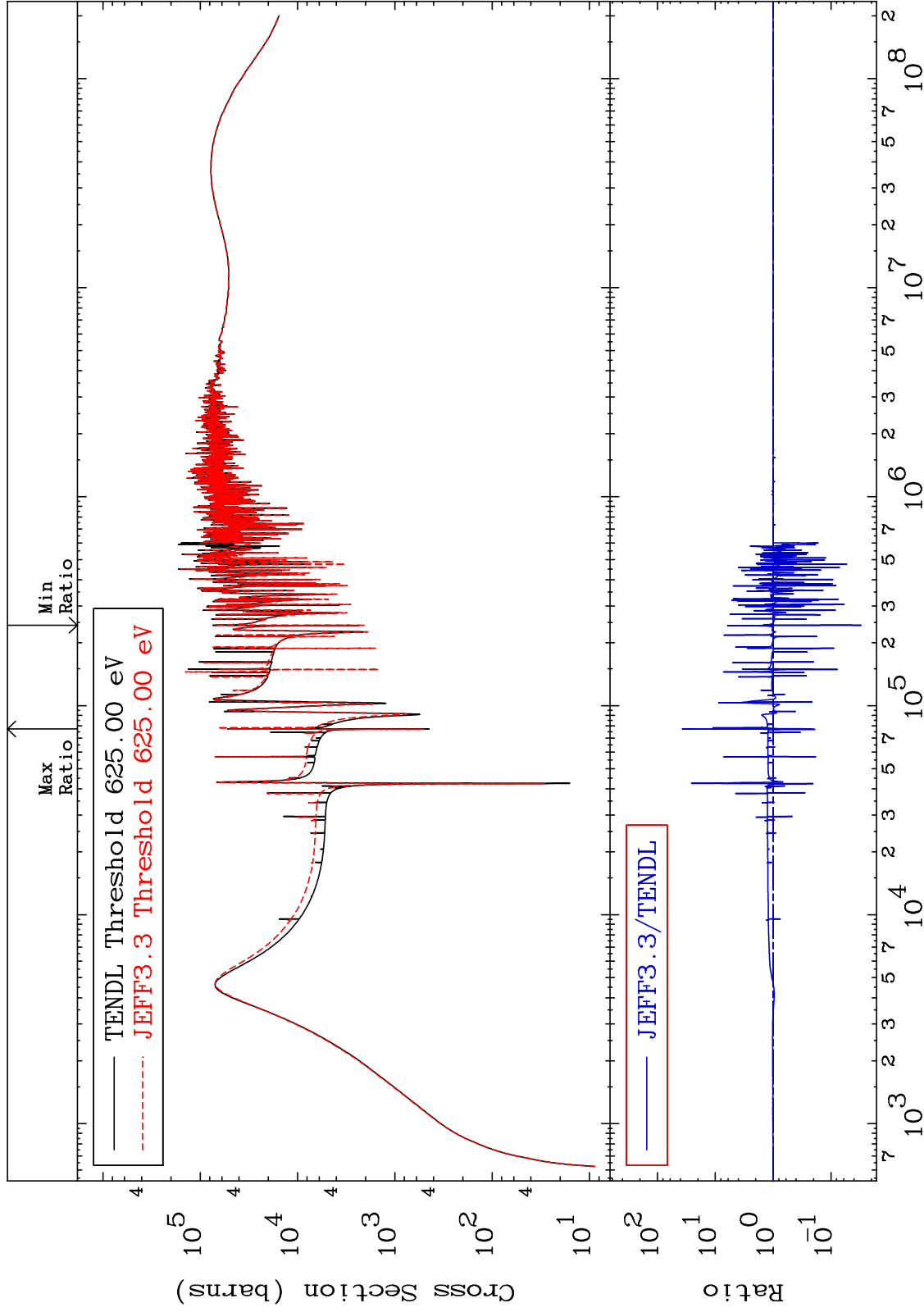
28-Ni-62
-97.01 To 3575. %



MAT 2837

Dpa elastic (mt2)
Cross Section

28-Ni-62
-97.01 To 3589. %



75

Incident Energy (eV)

28-Ni-62

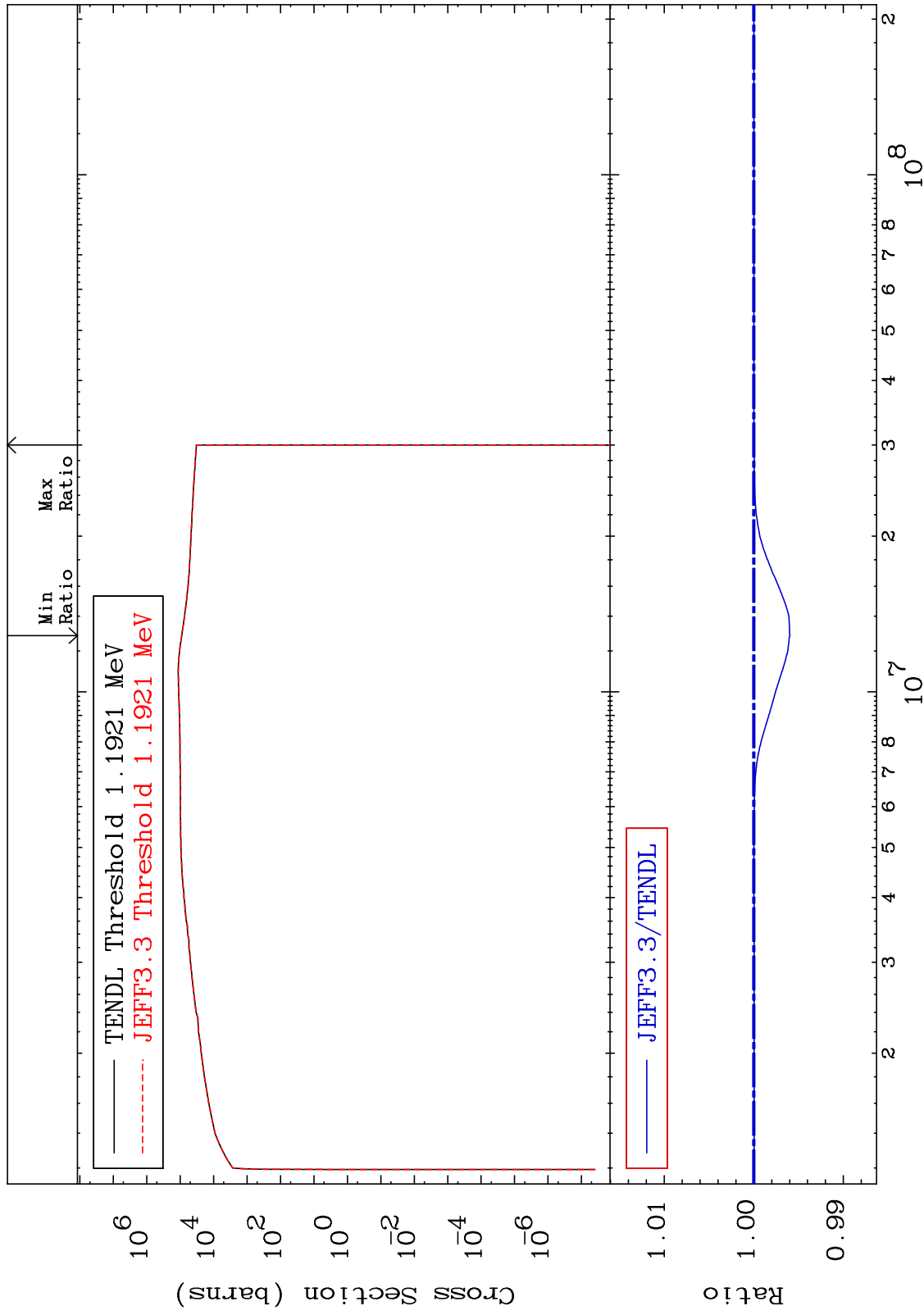
MAT 2837

Dpa inelastic (mt51-91)

28-Ni-62

-0.403 To 0.000 %

Cross Section



76

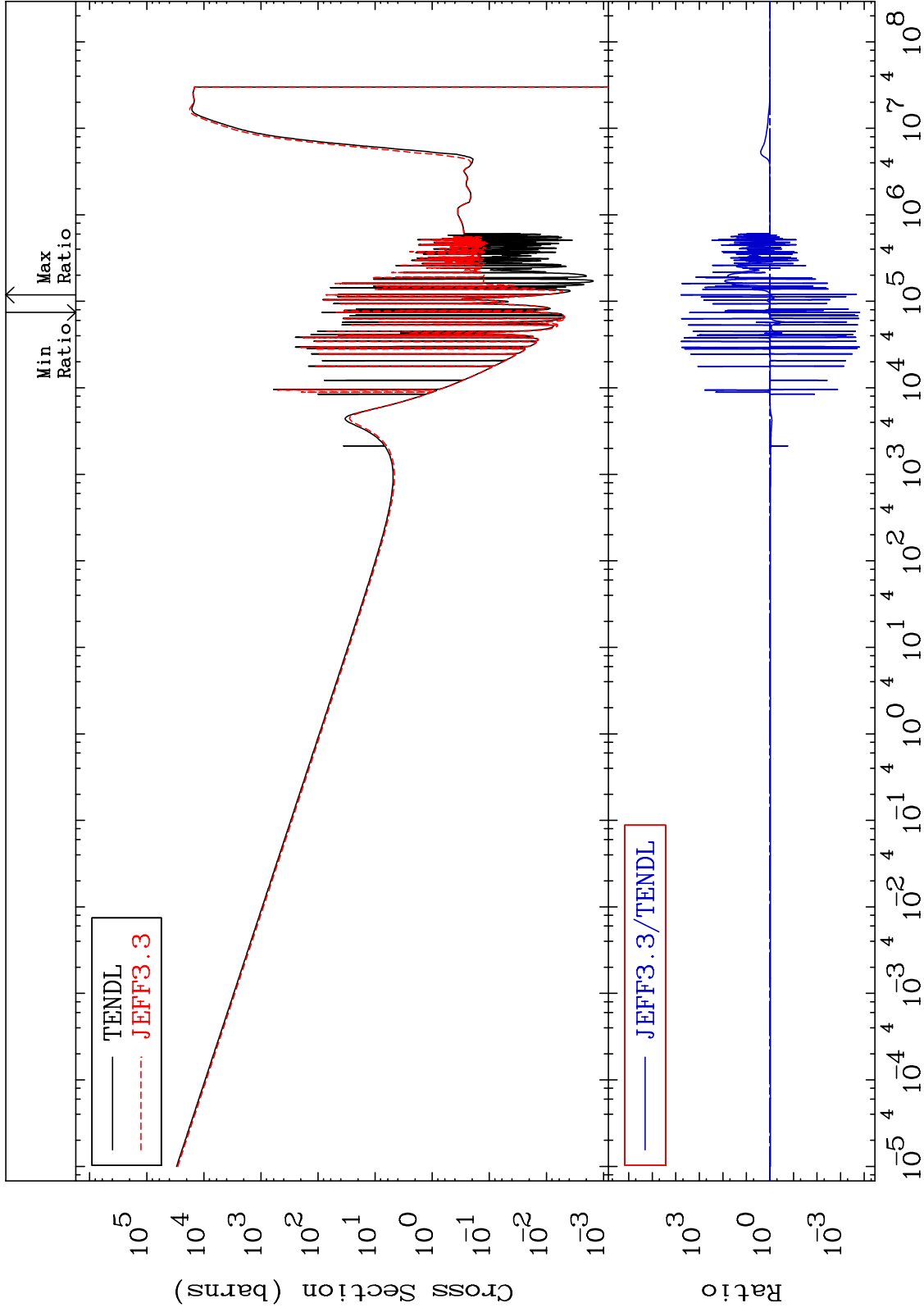
Incident Energy (eV)

28-Ni-62

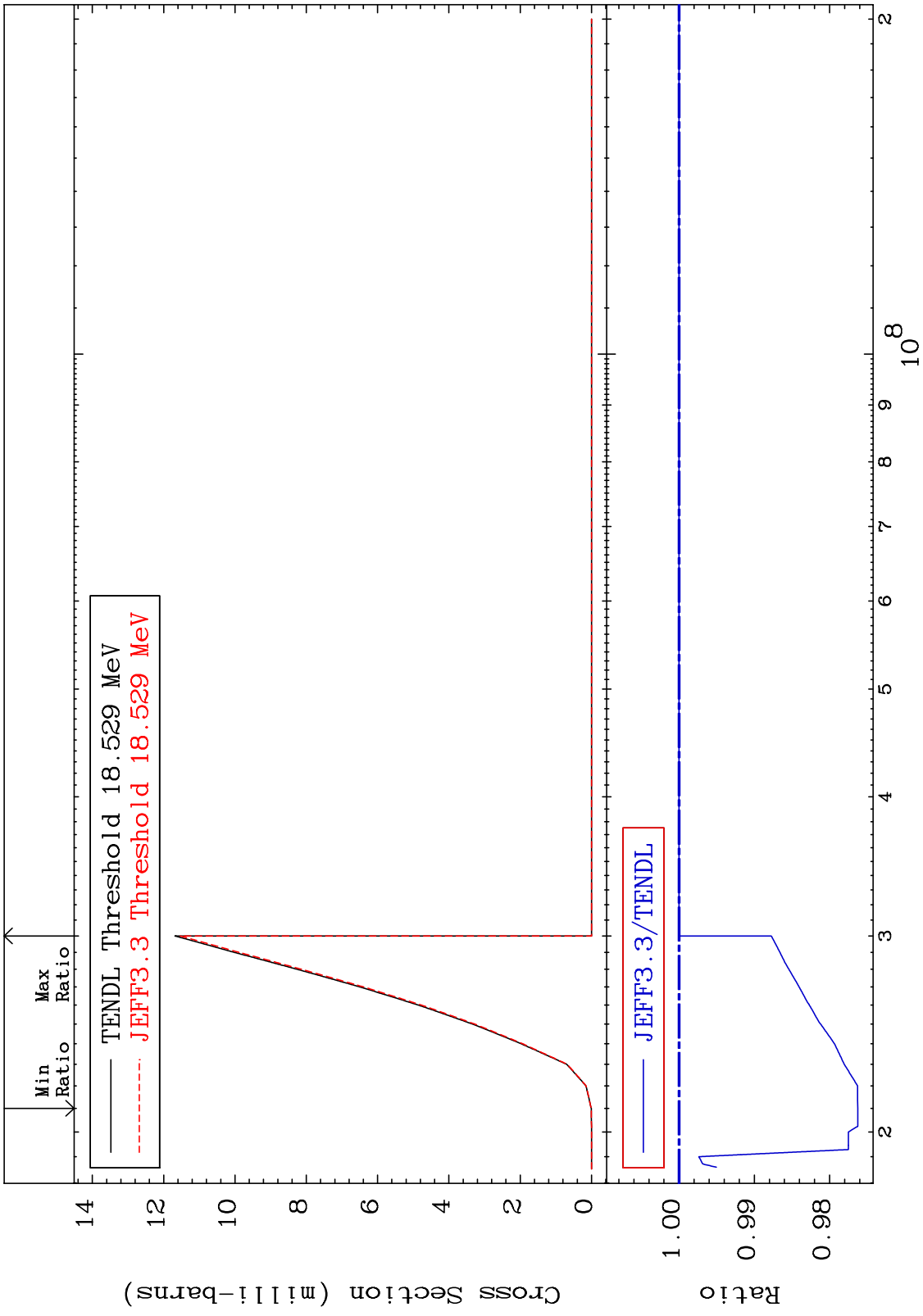
MAT 2837

Dpa disappearance (mt102 -120)
Cross Section

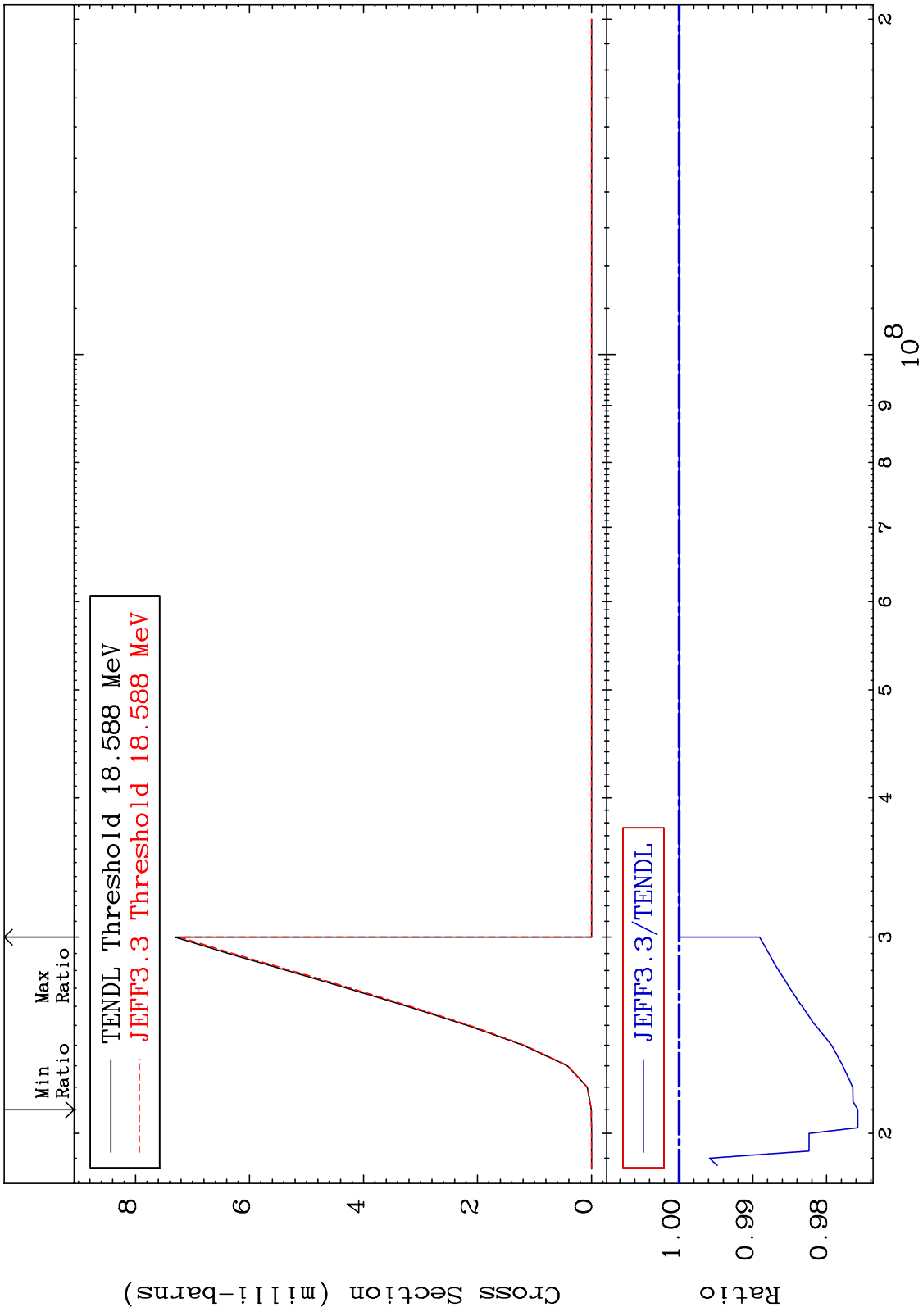
28-Ni-62
-99.98 To 9999. %



MAT 2837 (n,n') d:27-Co-60g 28-Ni-62
 Radionuclide Production Cross Section -2.375 To 0.000 %



MAT 2837 (n,n') d:27-Co-60m1 28-Ni-62
 Radionuclide Production Cross Section -2.424 To 0.000 %

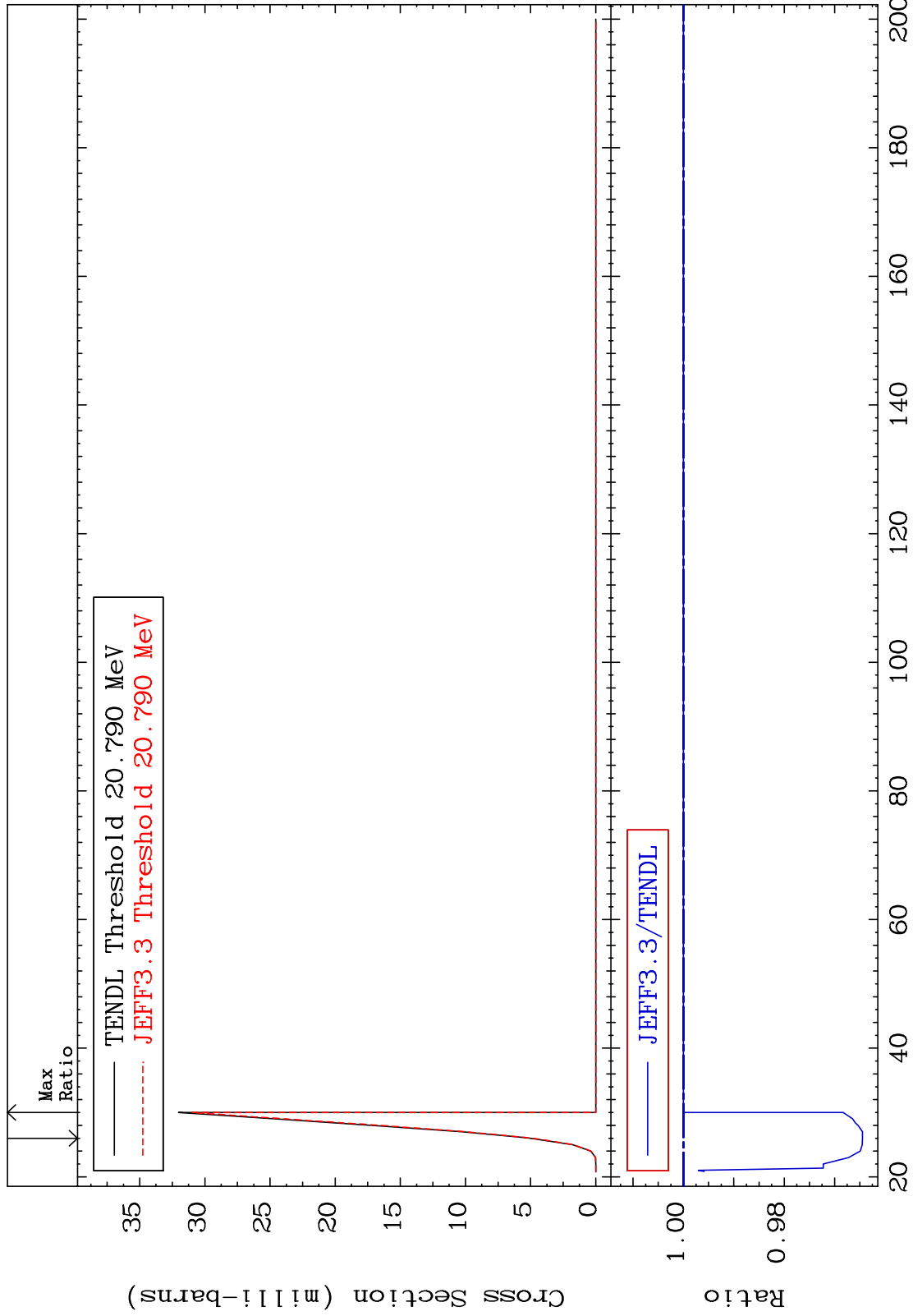


MAT 2837

(n,2n) p:27-Co-60g

28-Ni-62

Radionuclide Production Cross Section -3.554 To 0.000 %



80

Incident Energy (MeV)

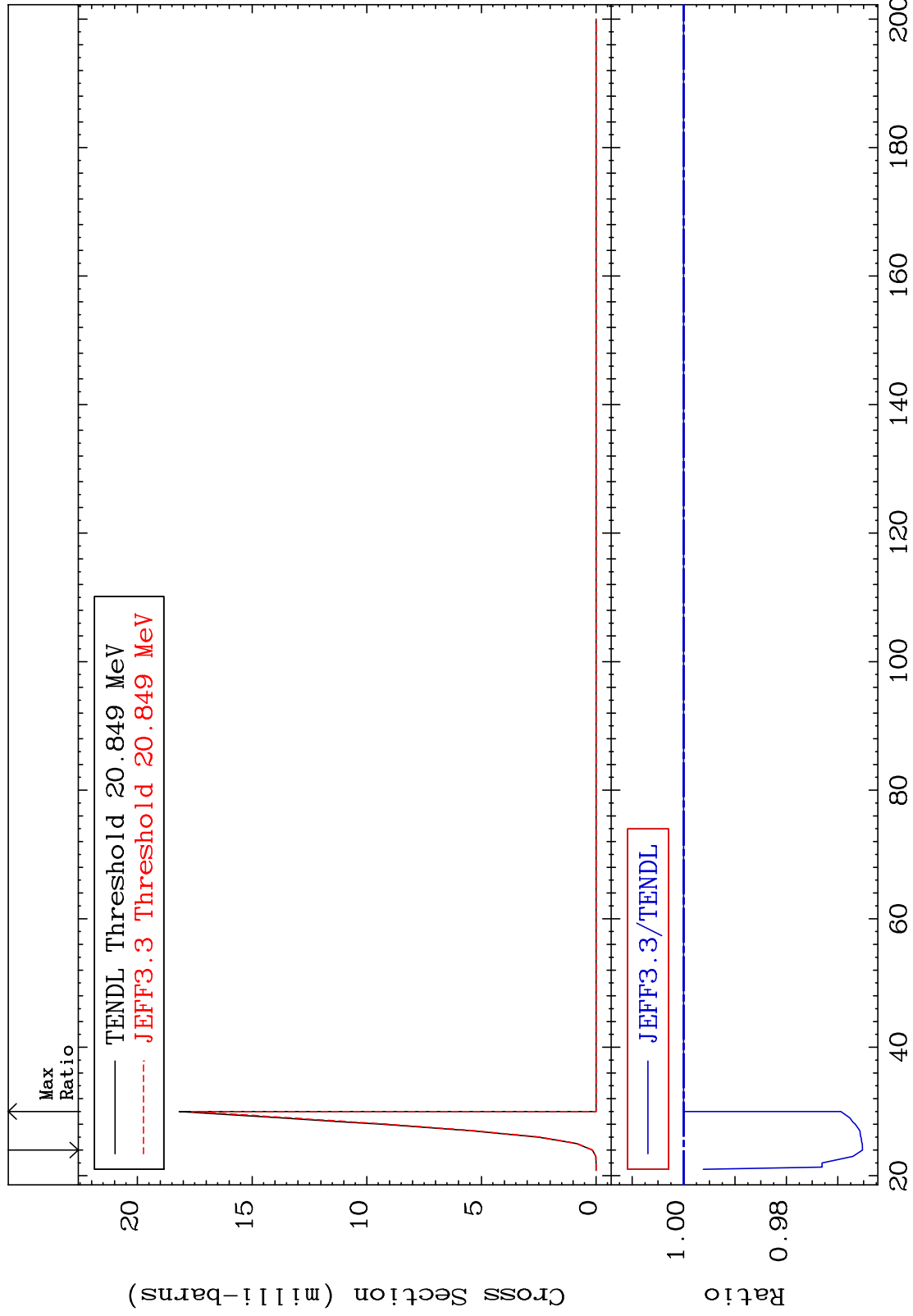
28-Ni-62

MAT 2837

(n,2n) p:27-Co-60m1

28-Ni-62

Radionuclide Production Cross Section -3.481 To 0.000 %

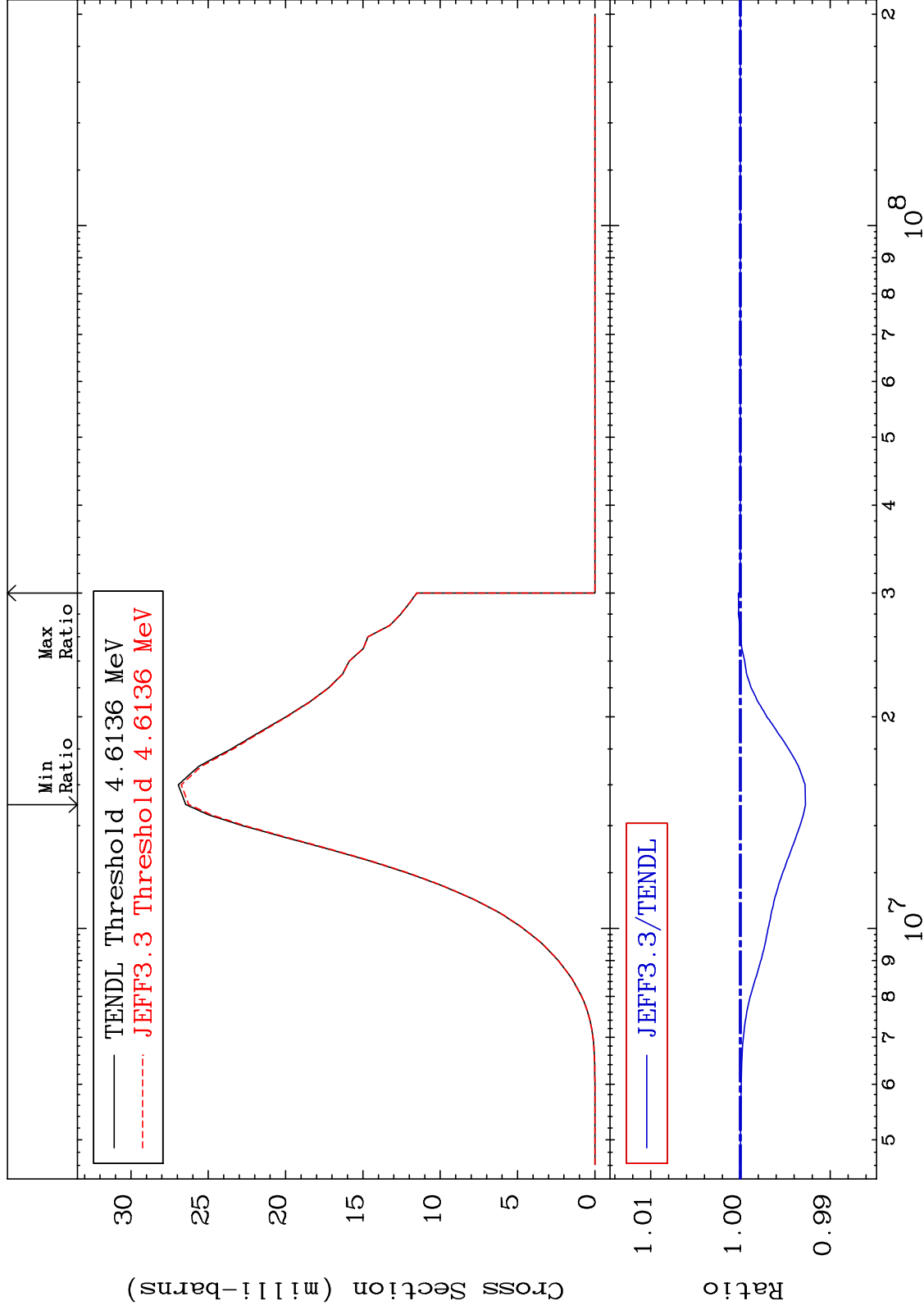


MAT 2837

(n,p):27-Co-62g

28-Ni-62

Radionuclide Production Cross Section -0.725 To 0.023 %



82

Incident Energy (eV)

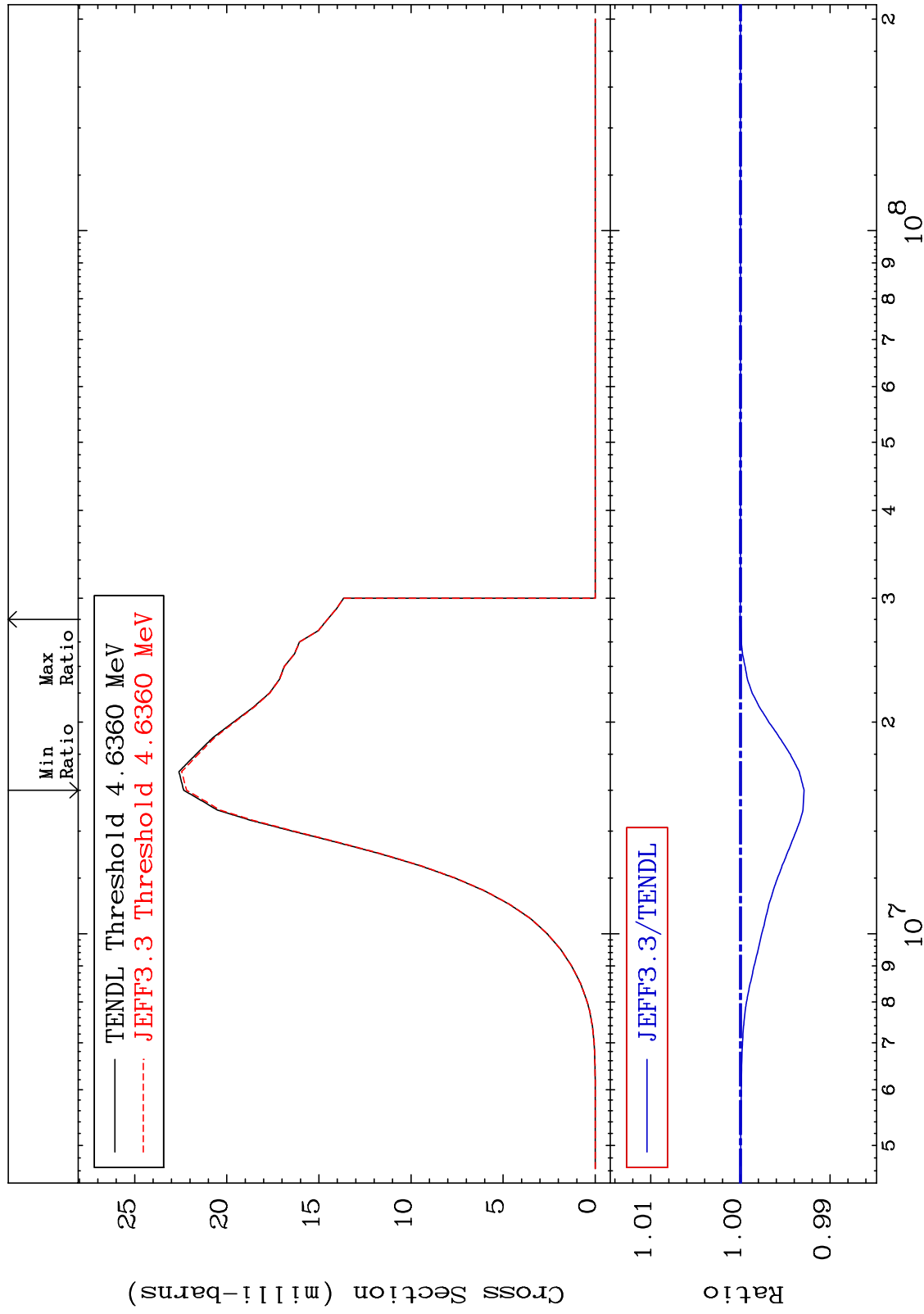
28-Ni-62

MAT 2837

(n,p):27-Co-62m1

28-Ni-62

Radionuclide Production Cross Section -0.709 To 0.006 %

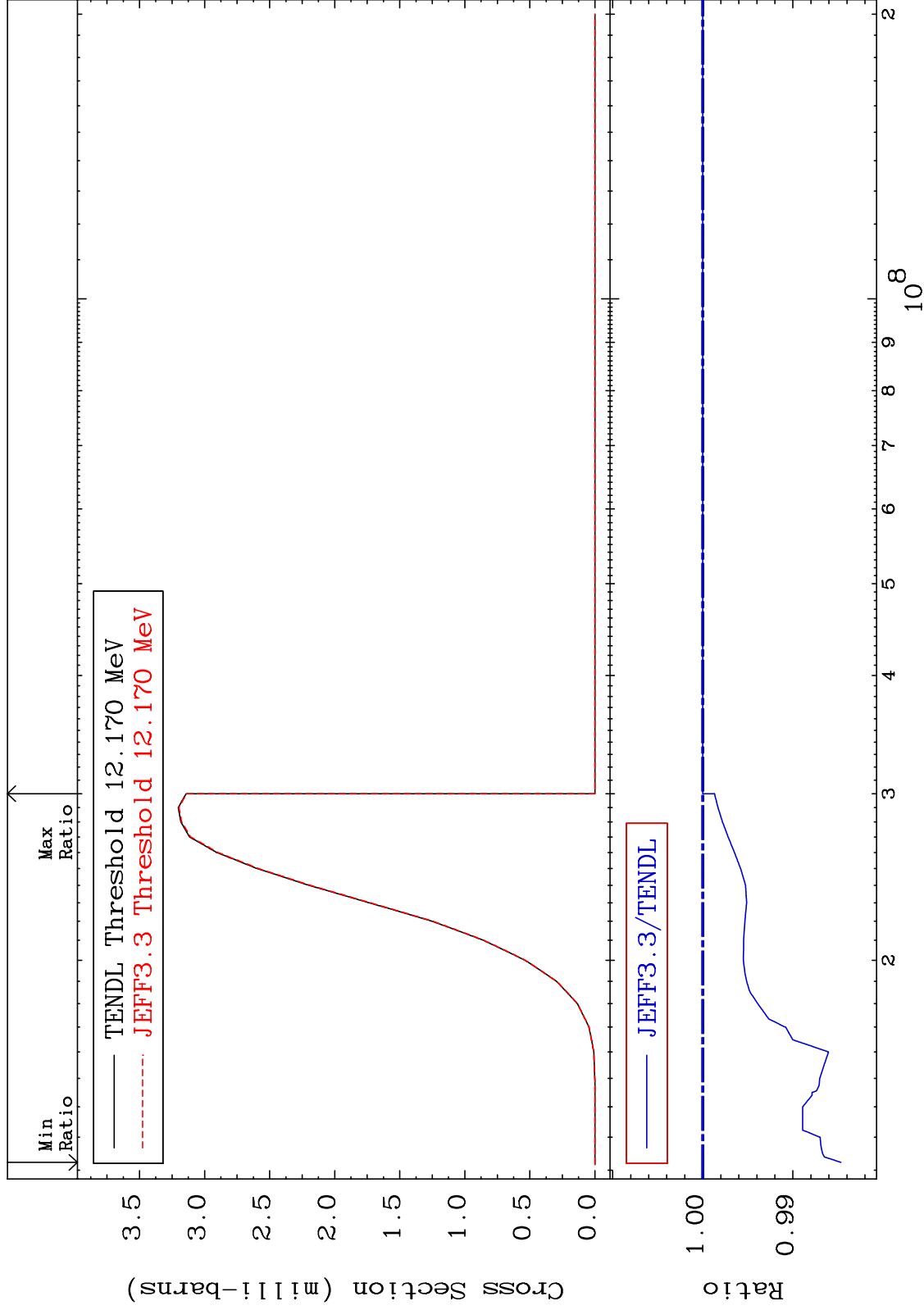


MAT 2837

(n,t):27-Co-60g

28-Ni-62

Radionuclide Production Cross Section -1.534 To 0.000 %

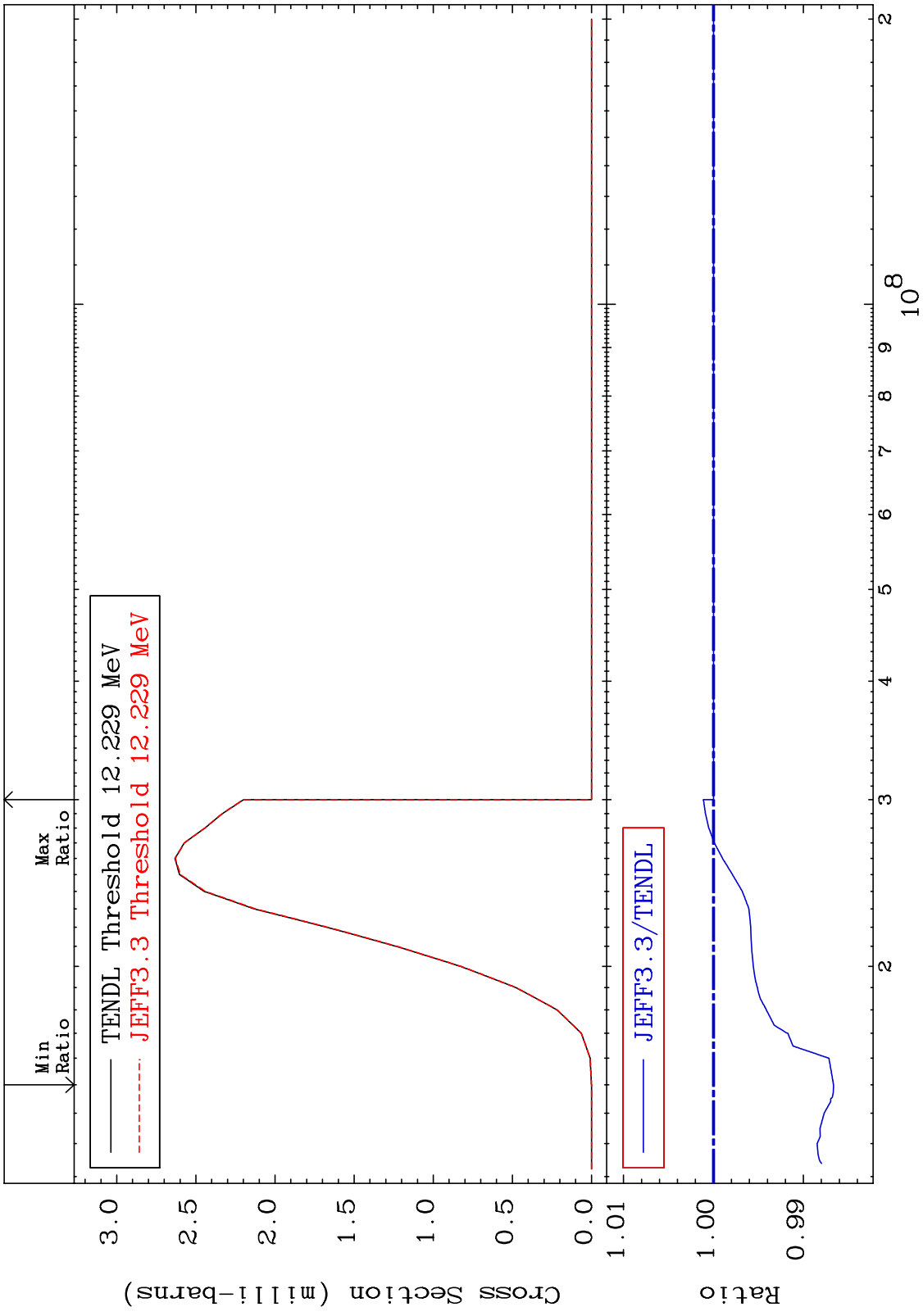


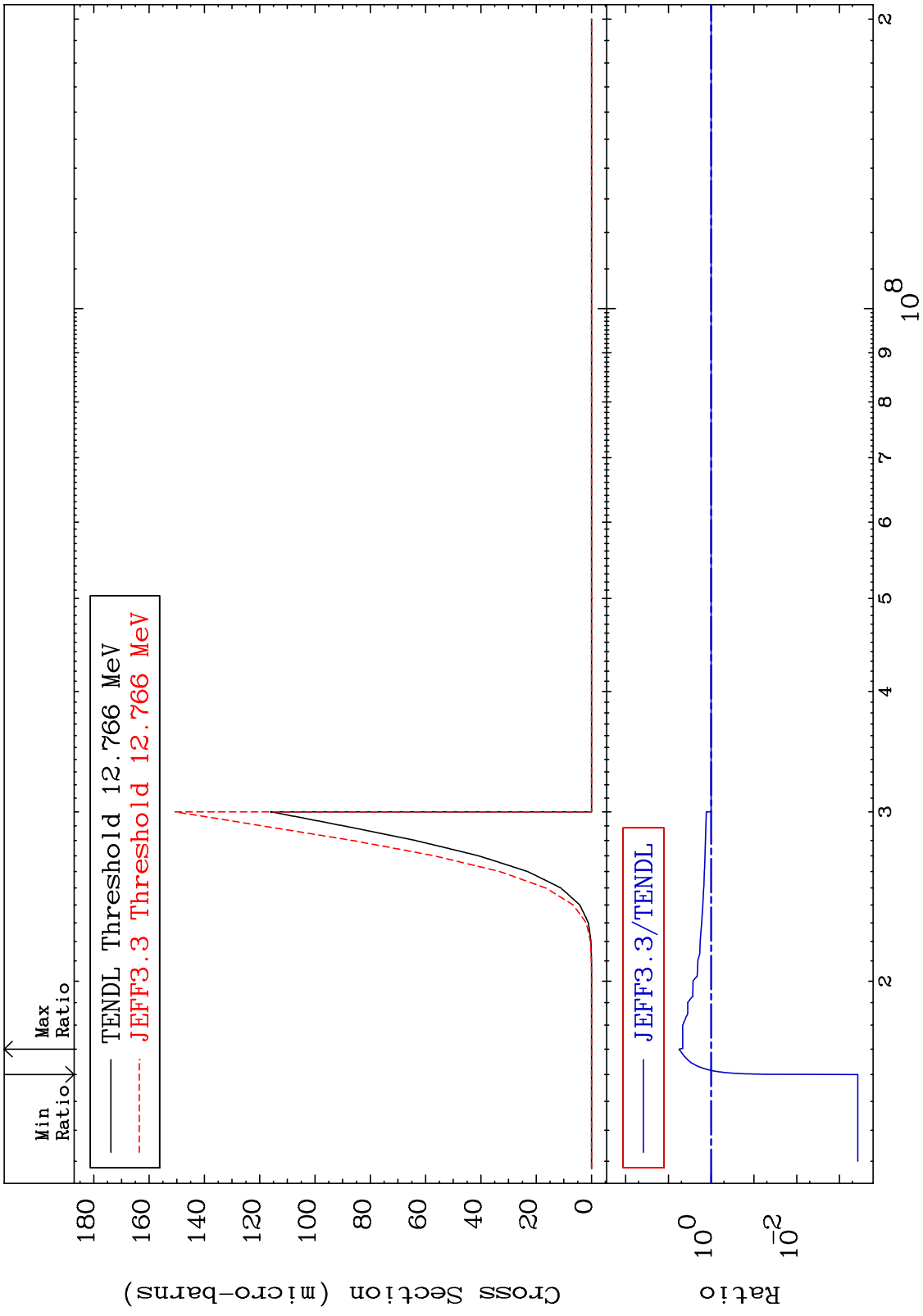
84

Incident Energy (eV)

28-Ni-62

MAT 2837 (n,t):27-Co-60m1 28-Ni-62
 Radionuclide Production Cross Section -1.335 To 0.112 %





MAT 2837 (n,p) α :25-Mn-58m1 28-Ni-62
Radionuclide Production Cross Section 0.000 To 469.8 %

