

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

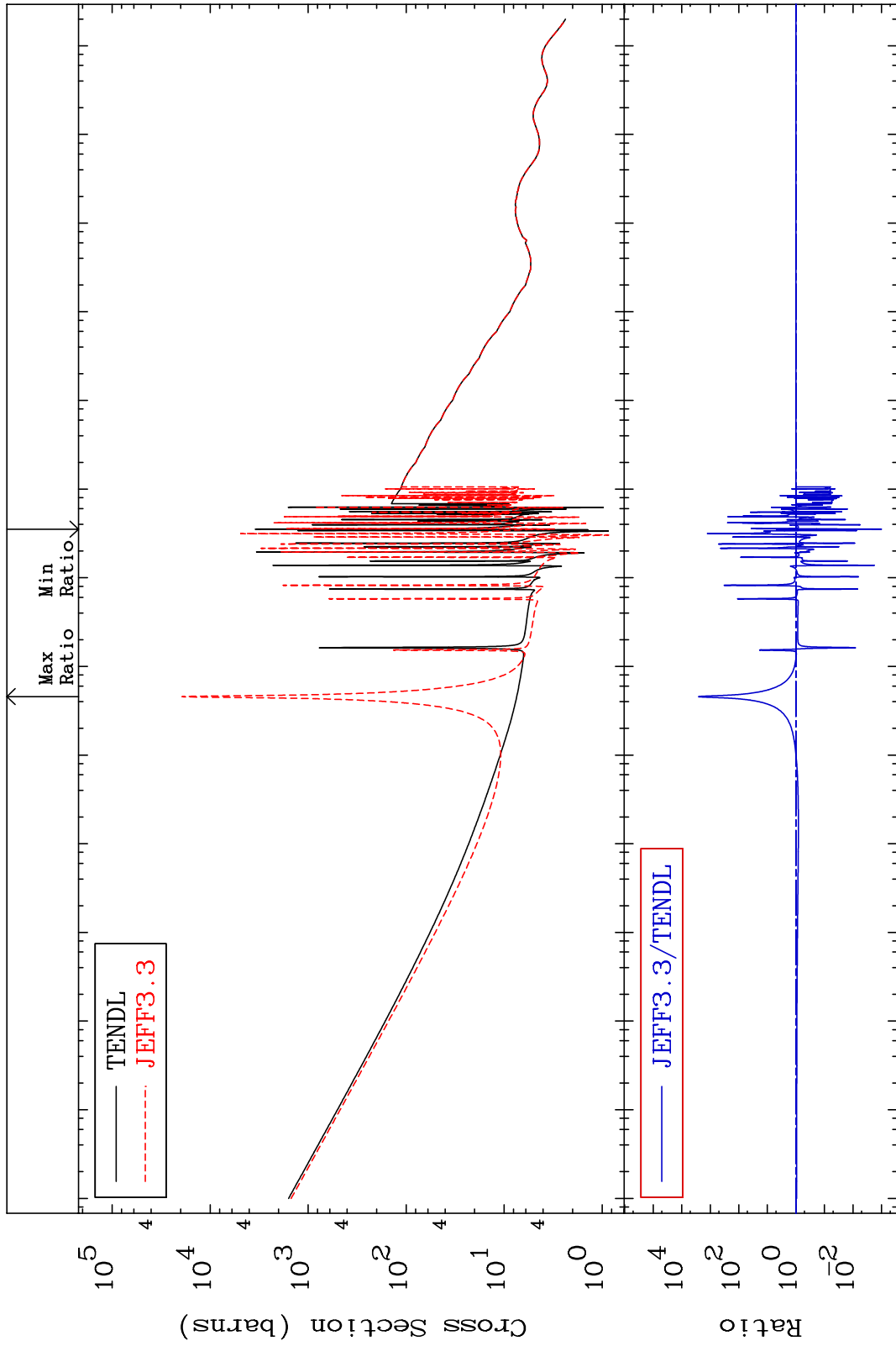
MAT 6419

Total

64-Gd-150

-99.90 To 9999. %

Cross Section



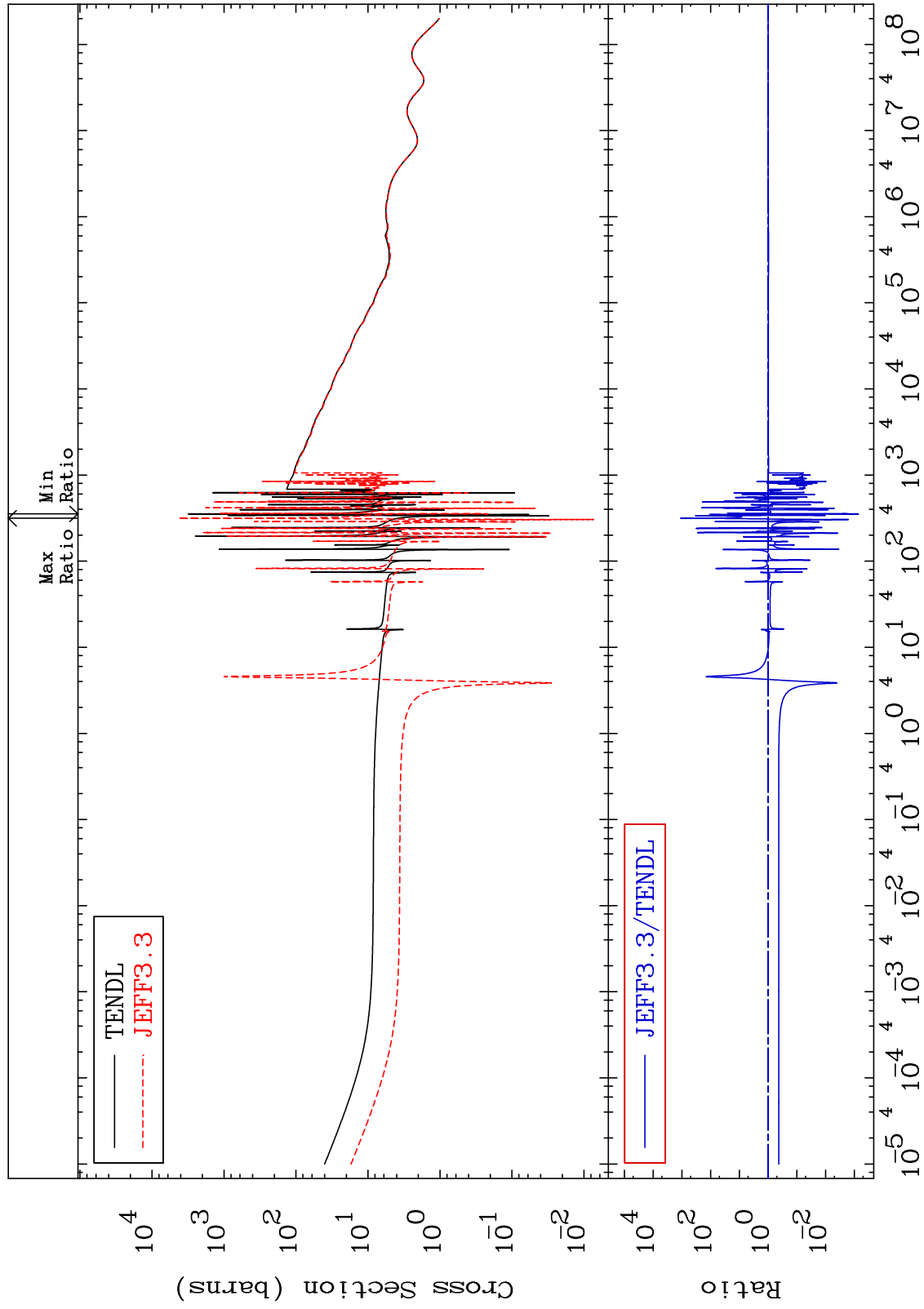
Incident Energy (eV)

64-Gd-150

MAT 6419

Elastic
Cross Section

64-Gd-150
-99.93 To 9999. %

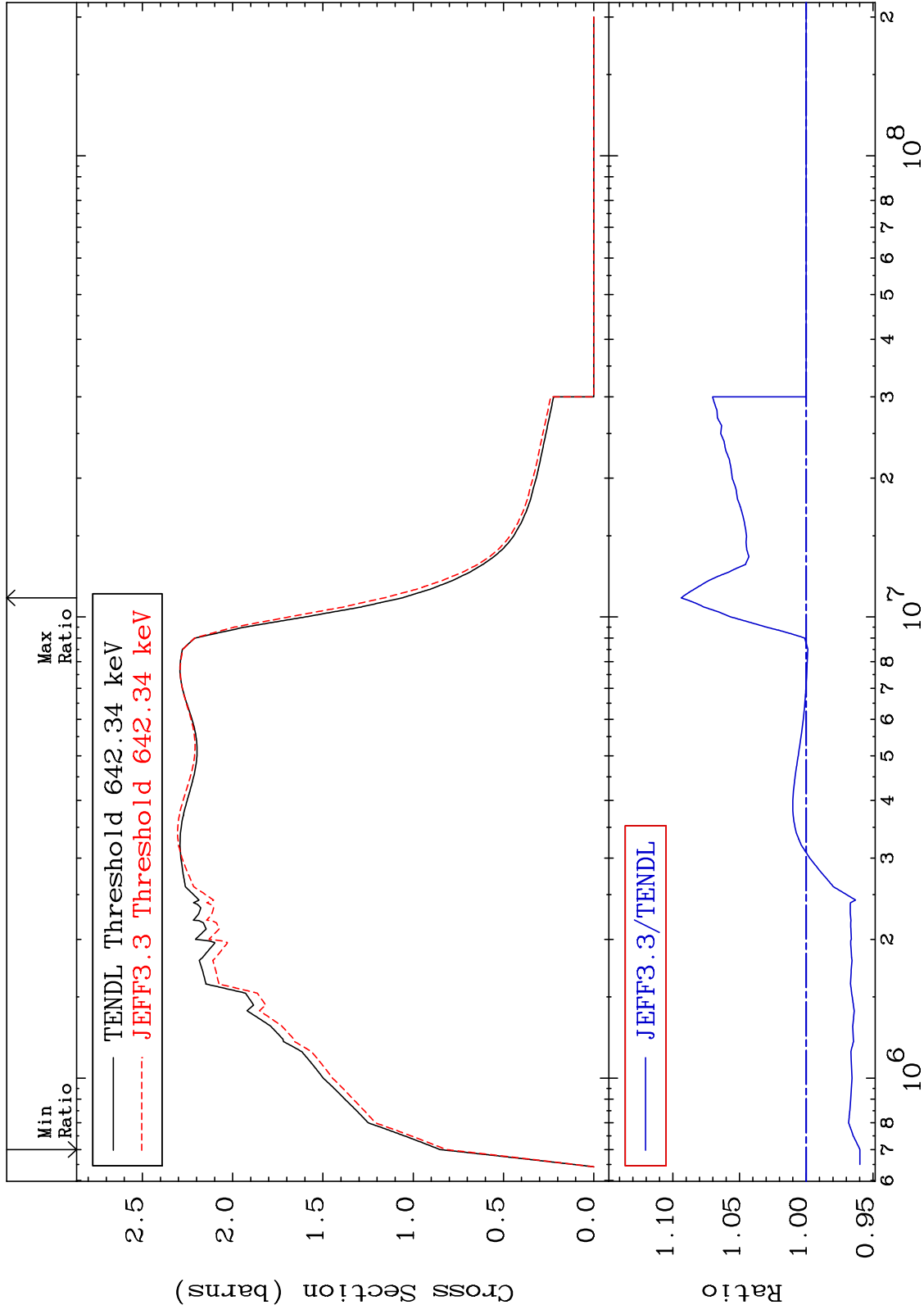


MAT 6419

Inelastic
Cross Section

64-Gd-150

-4.026 To 9.372 %



3

Incident Energy (eV)

64-Gd-150

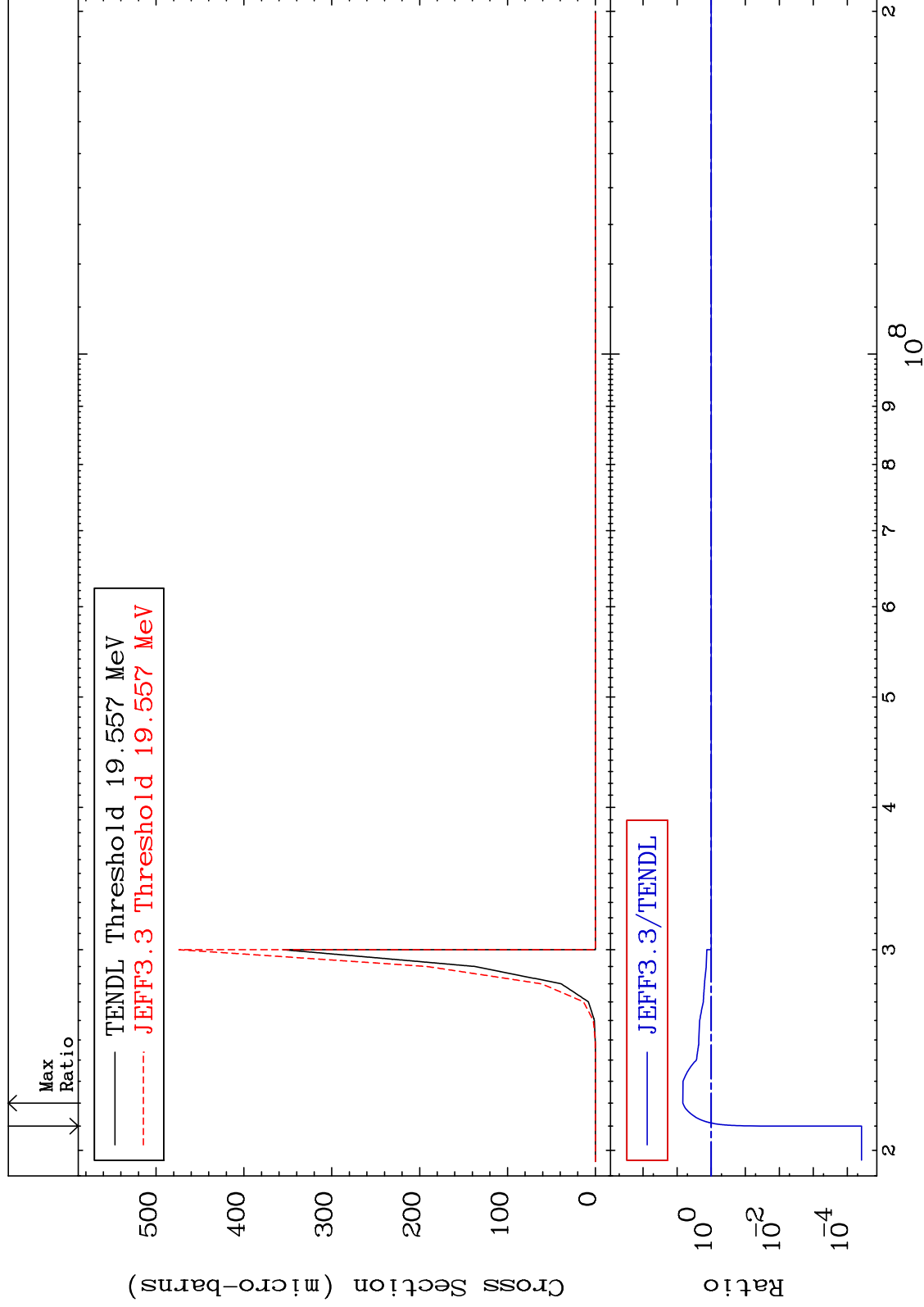
MAT 6419

(n,2n) d

64-Gd-150

Cross Section

-100.0 To 577.1 %



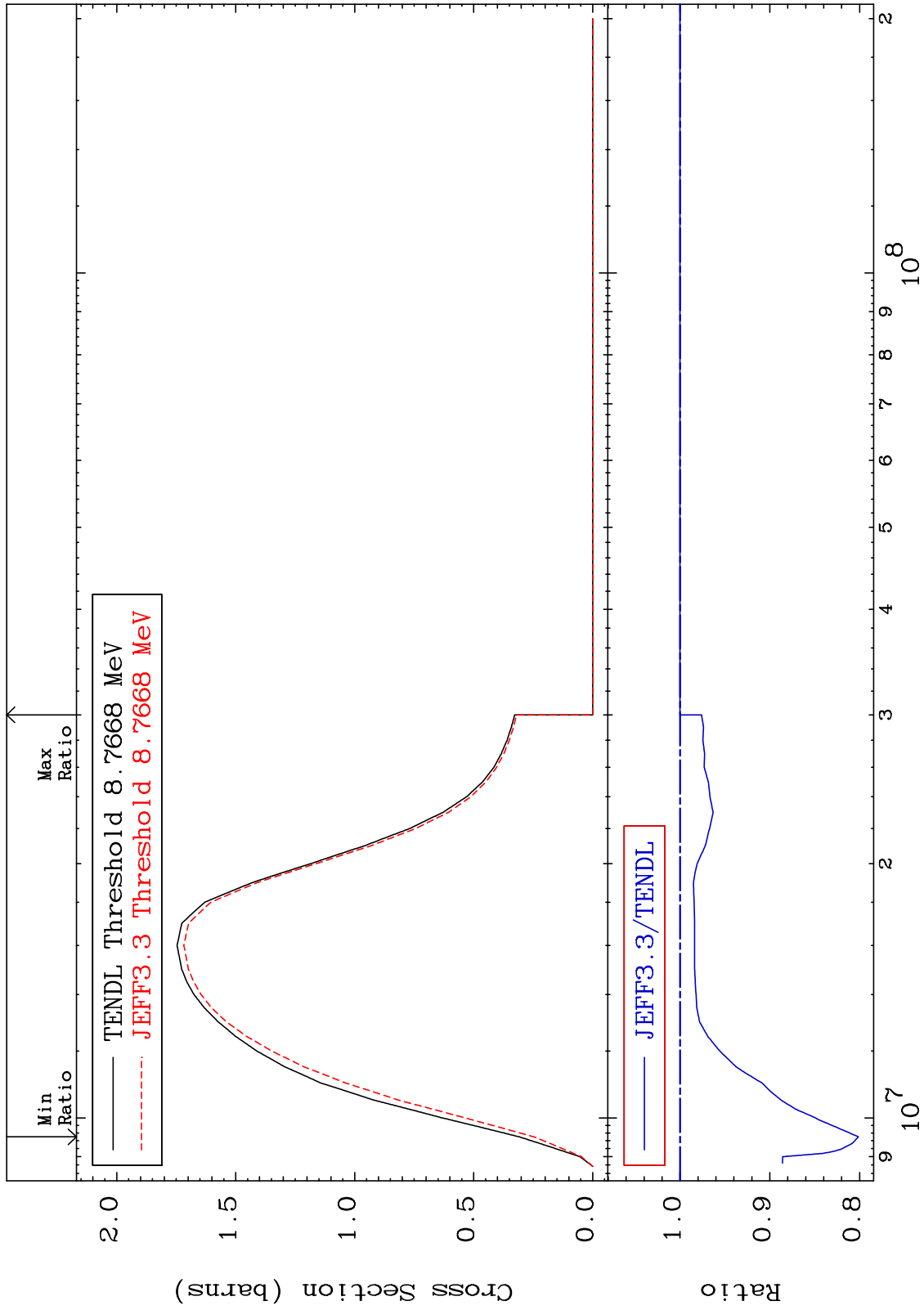
MAT 6419

(n,2n)

64-Gd-150

Cross Section

-19.87 To 0.000 %



5

Incident Energy (eV)

64-Gd-150

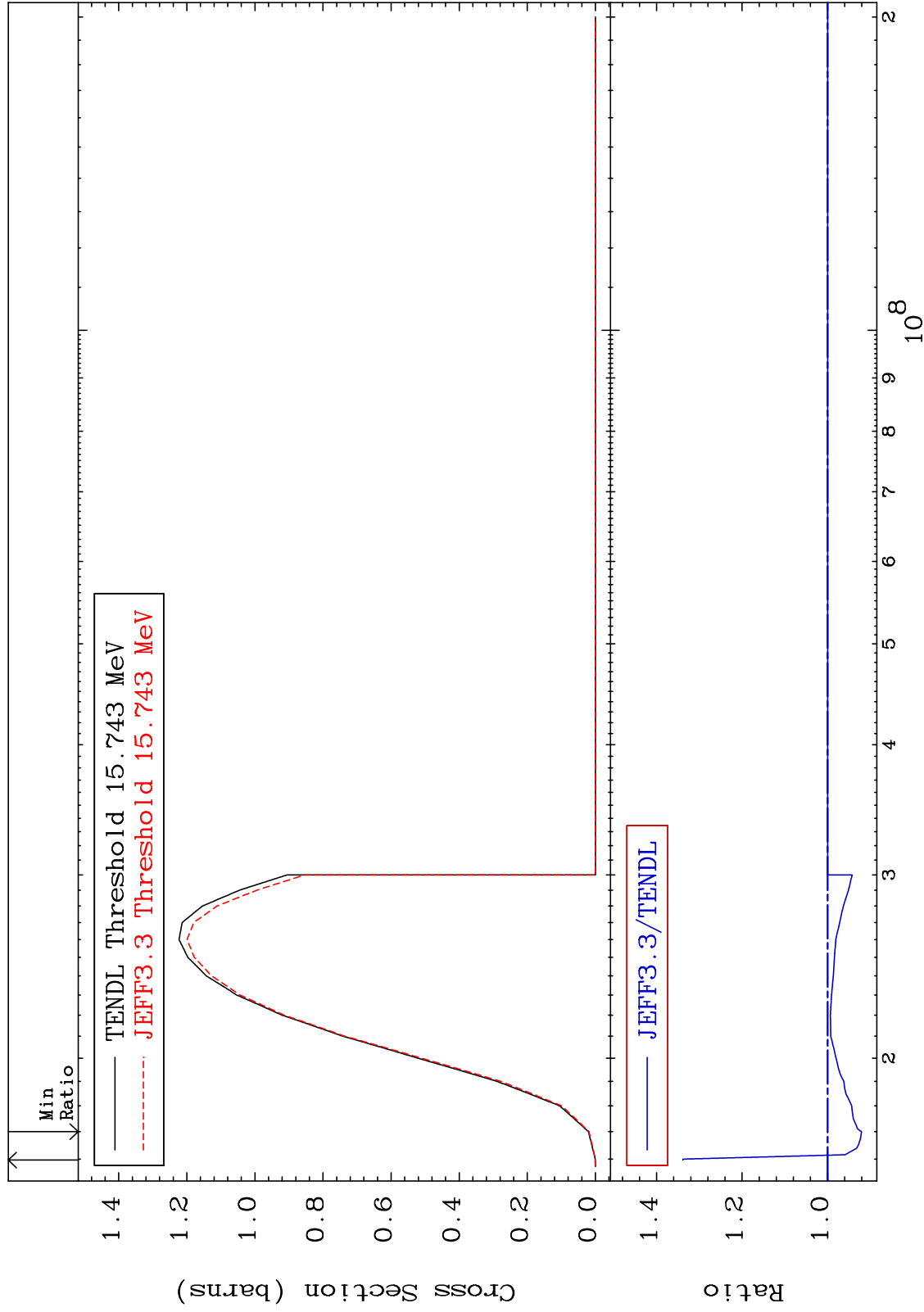
MAT 6419

(n,3n)

64-Gd-150

Cross Section

-7.947 To 33.85 %



6

Incident Energy (eV)

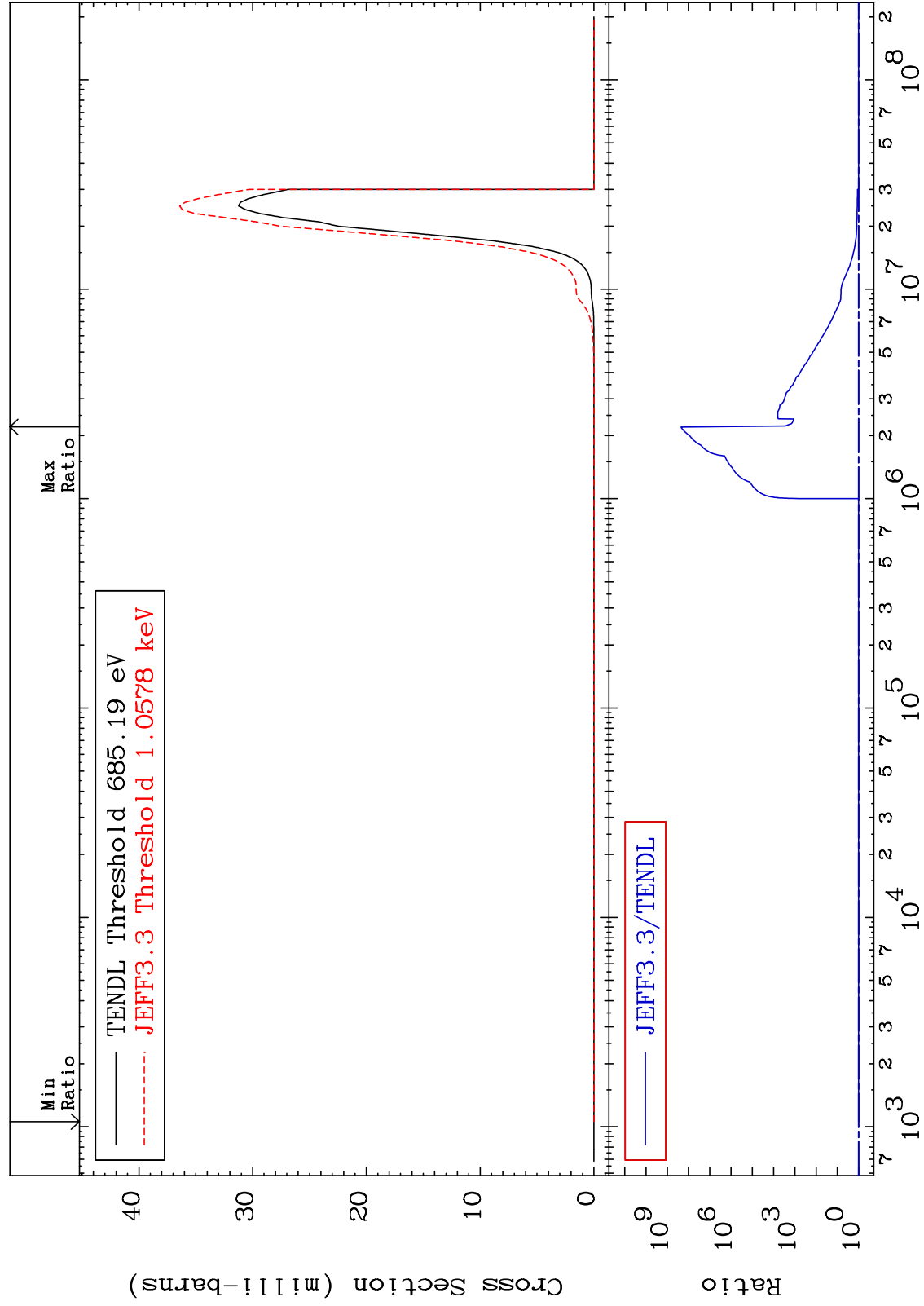
64-Gd-150

MAT 6419

$(n, n') \alpha$

64-Gd-150

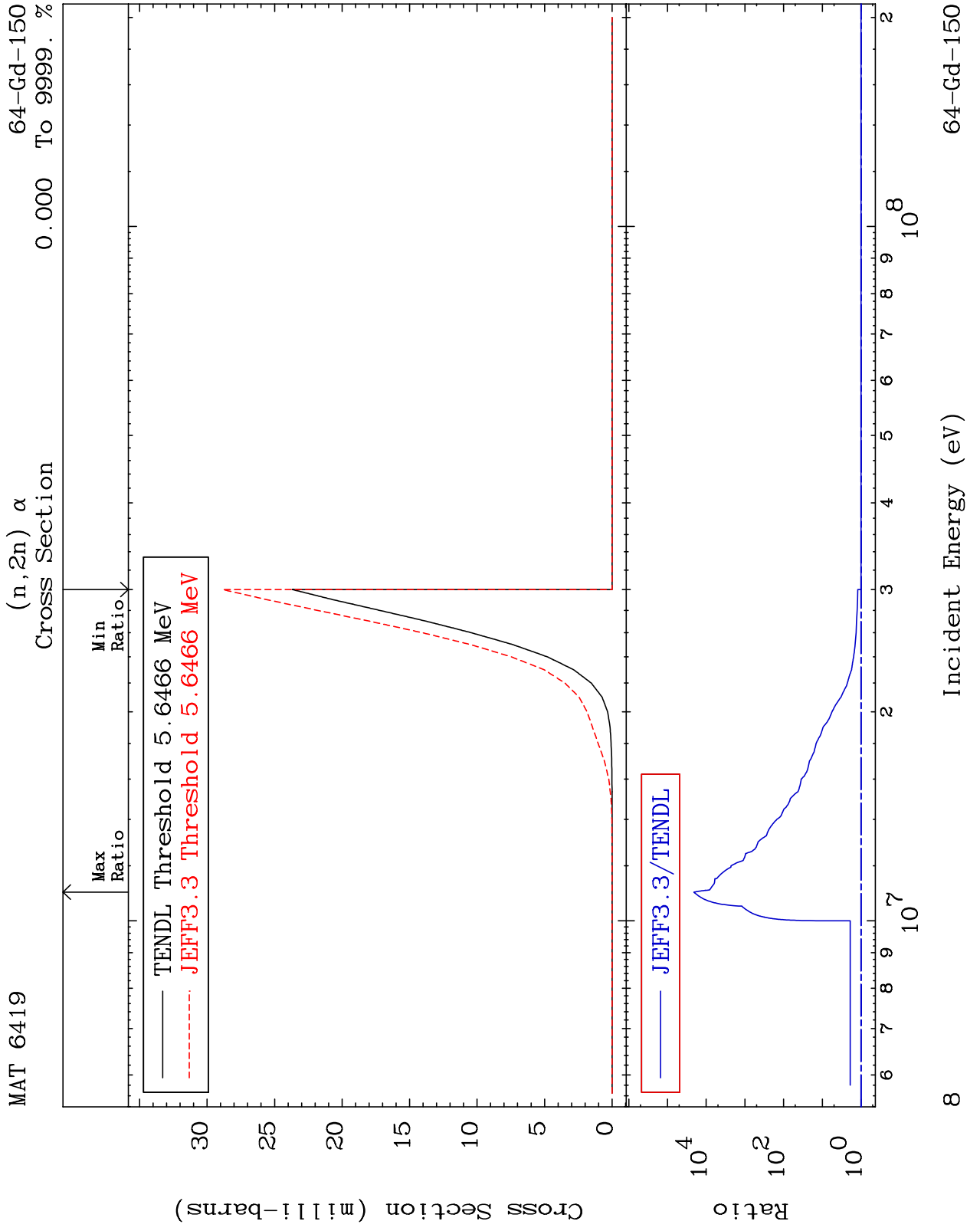
Cross Section To 9999. %



Incident Energy (eV)

64-Gd-150

7



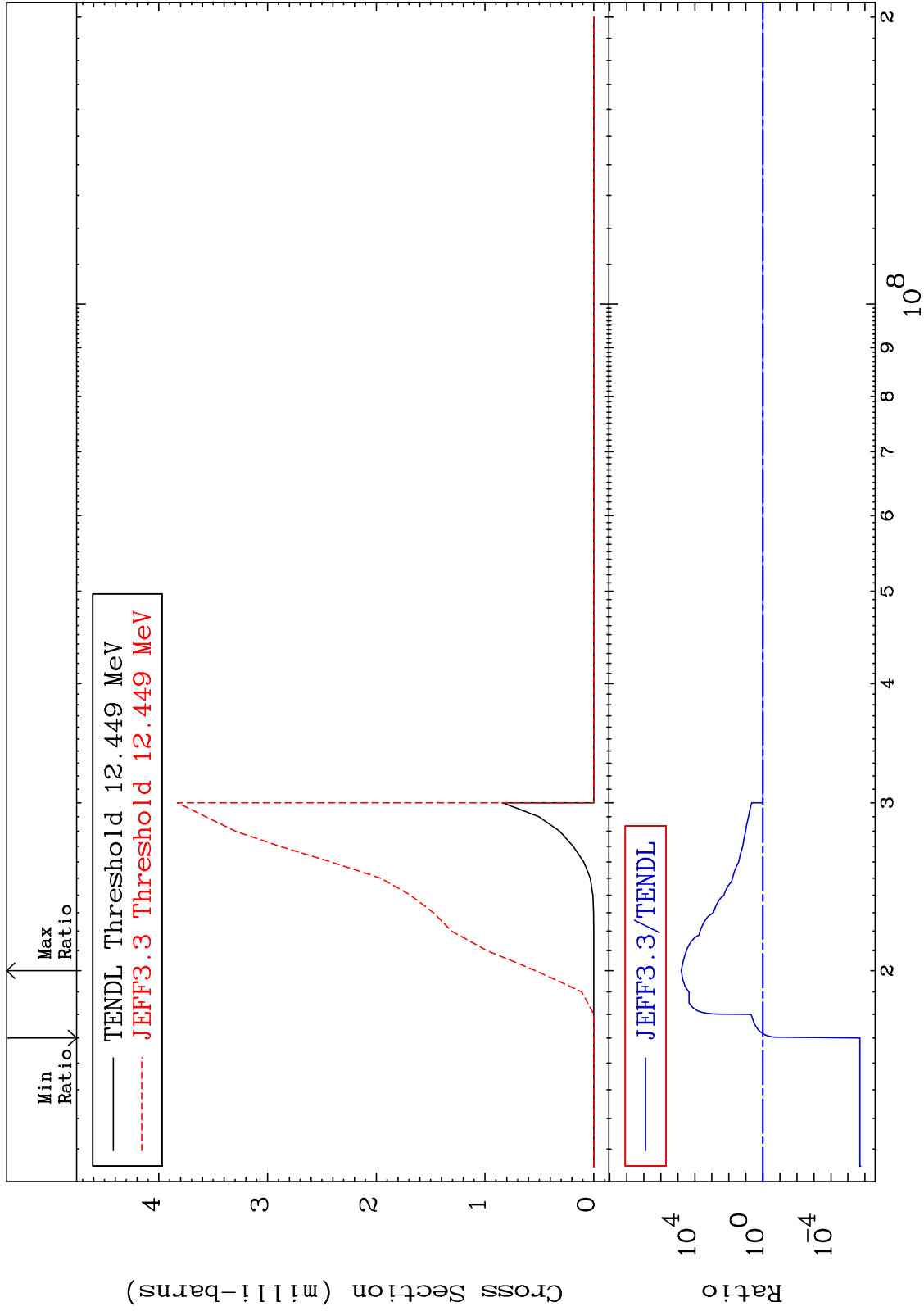
MAT 6419

(n,3n) α

64-Gd-150

Cross Section

-100.0 To 9999. %



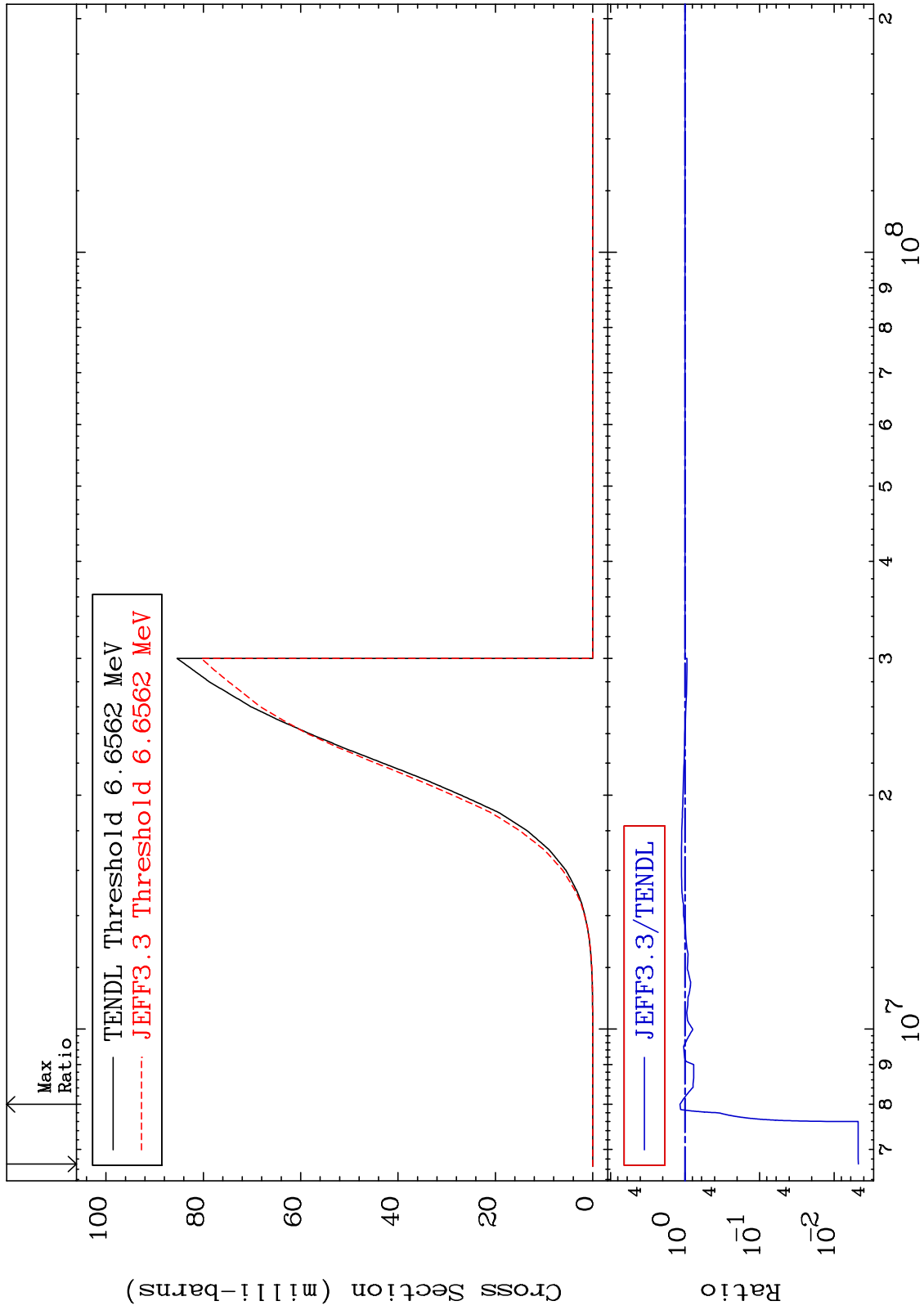
MAT 6419

(n,n') p

64-Gd-150

Cross Section

-99.53 To 16.87 %



10

Incident Energy (eV)

64-Gd-150

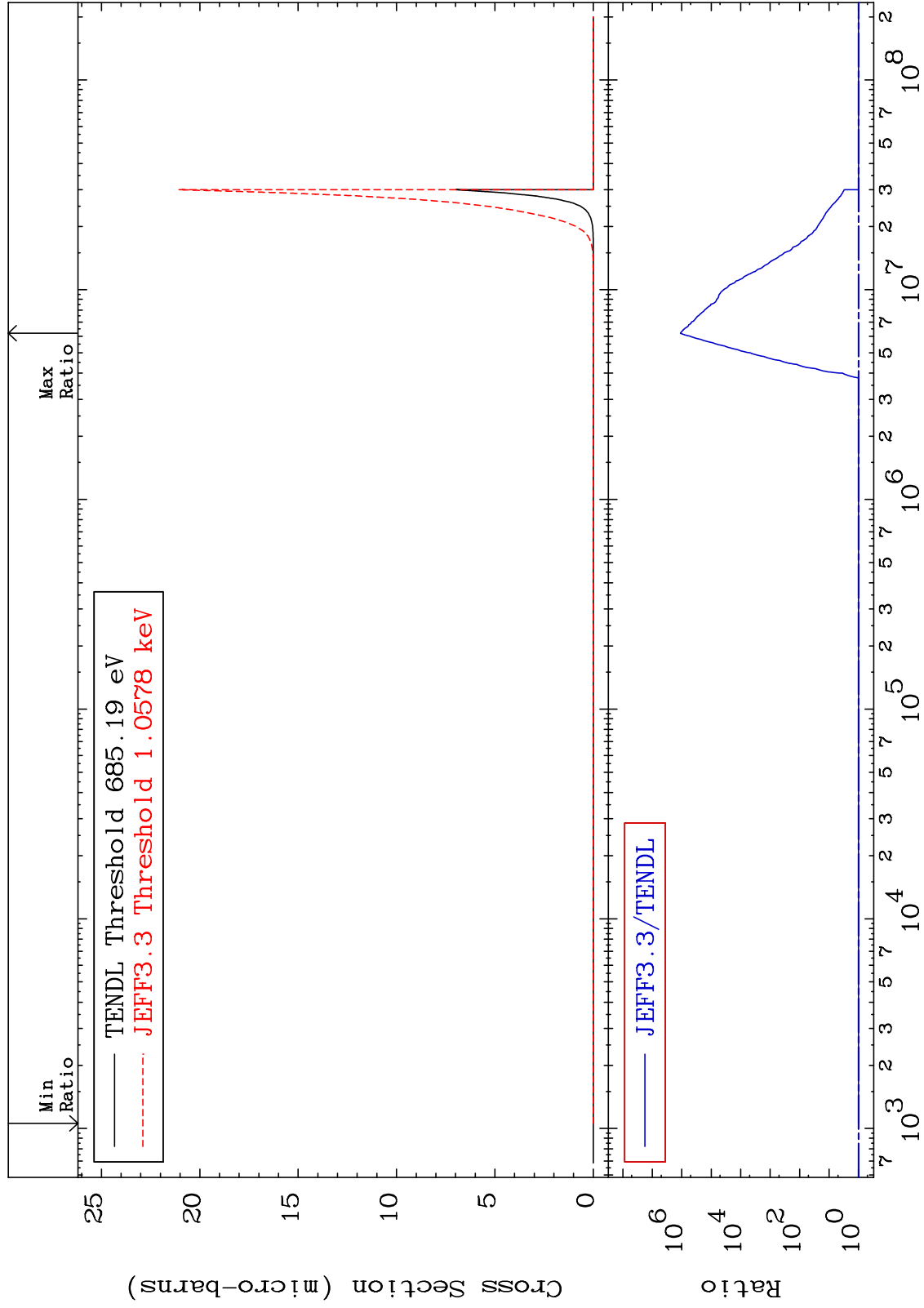
MAT 6419

(n,n') 2α

64-Gd-150

Cross Section

0.000 To 9999. %



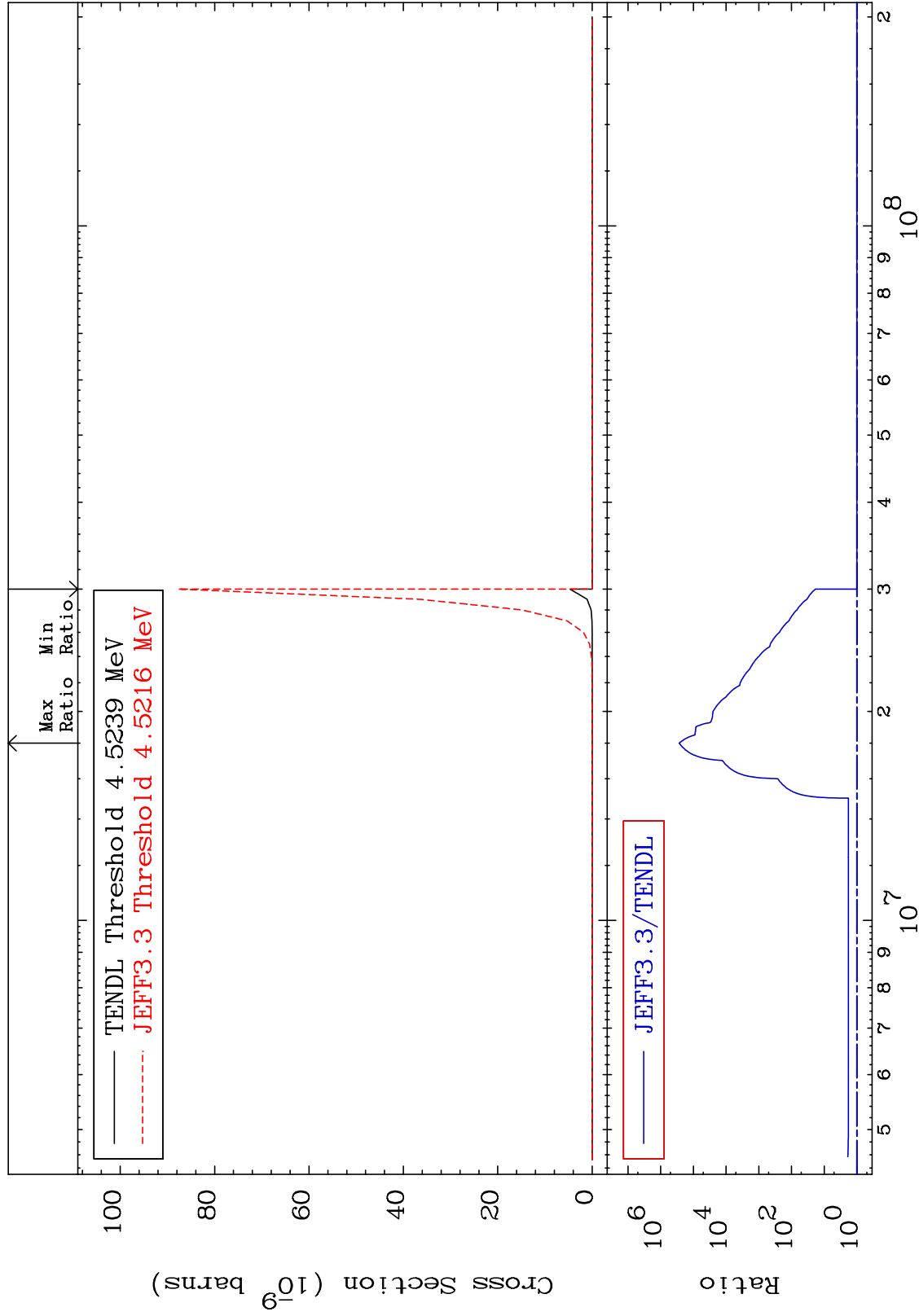
MAT 6419

(n,2n) 2α

64-Gd-150

Cross Section

0.000 To 9999. %



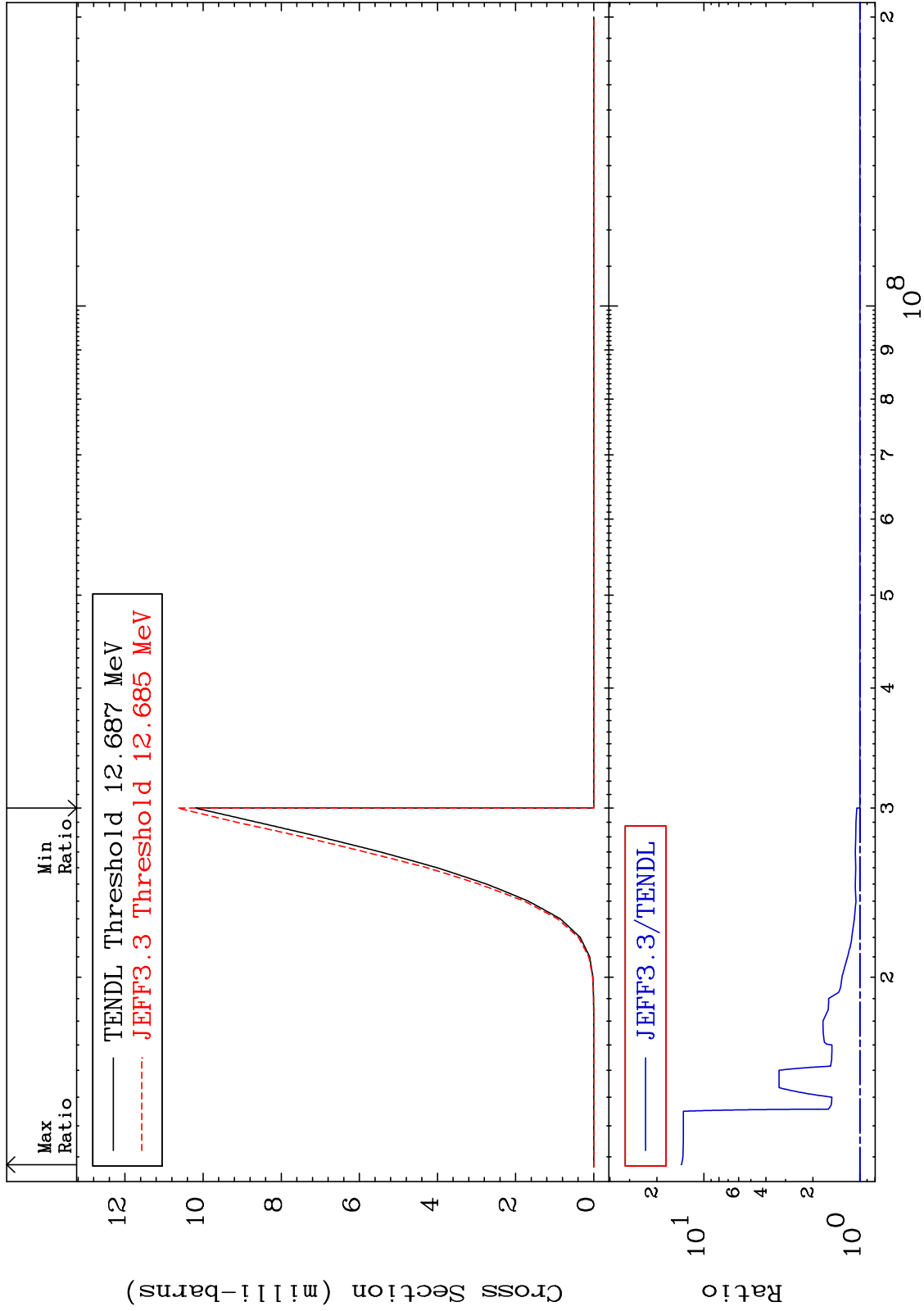
MAT 6419

(n, n') d

64-Gd-150

Cross Section

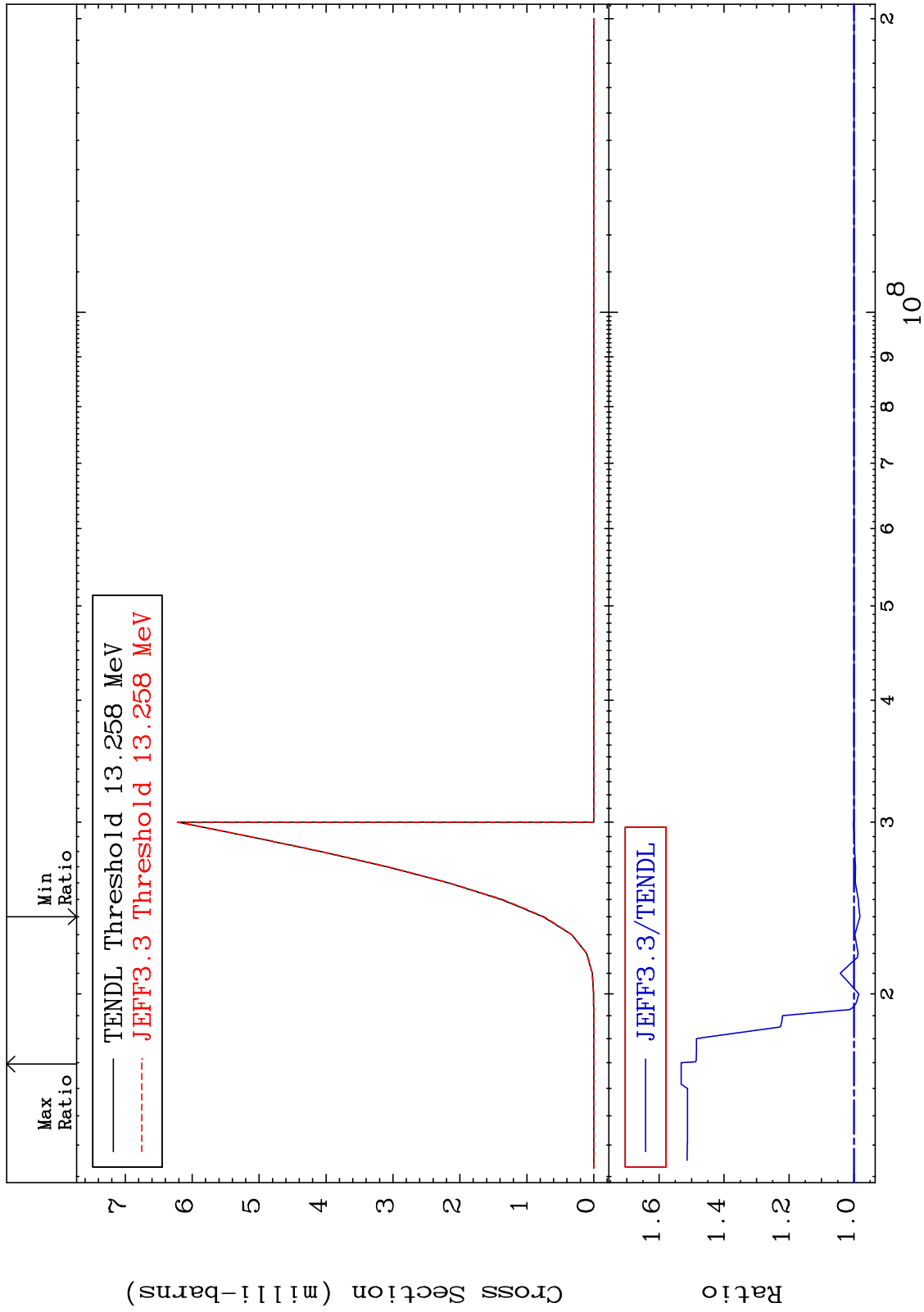
0.000 To 1298. %



Incident Energy (eV)

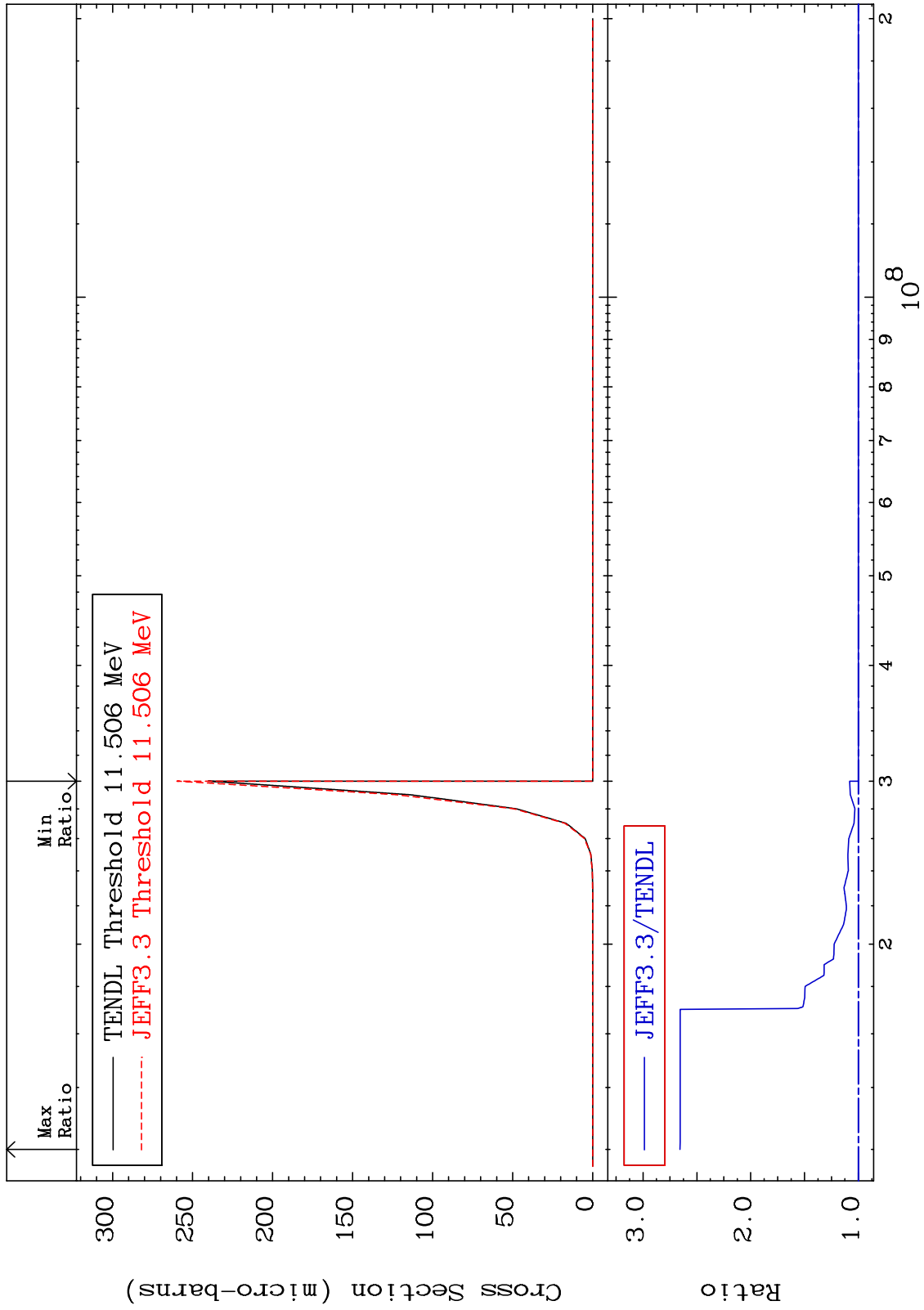
64-Gd-150

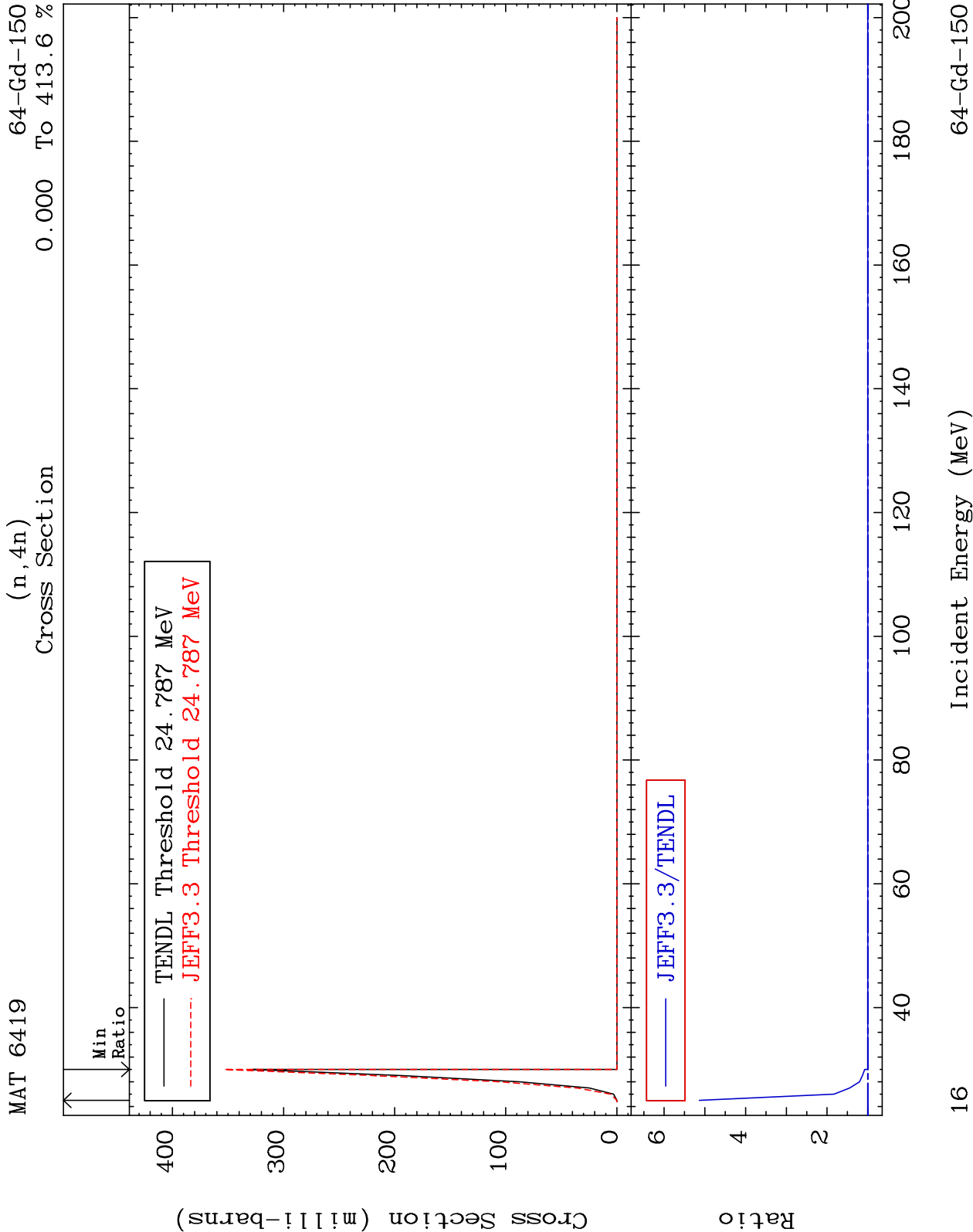
MAT 6419 (n, n') t 64-Gd-150
 Cross Section -1.840 To 53.19 %



64-Gd-150 Incident Energy (eV)

MAT 6419 (n,n') He-3 Cross Section 64-Gd-150 To 165.6 %

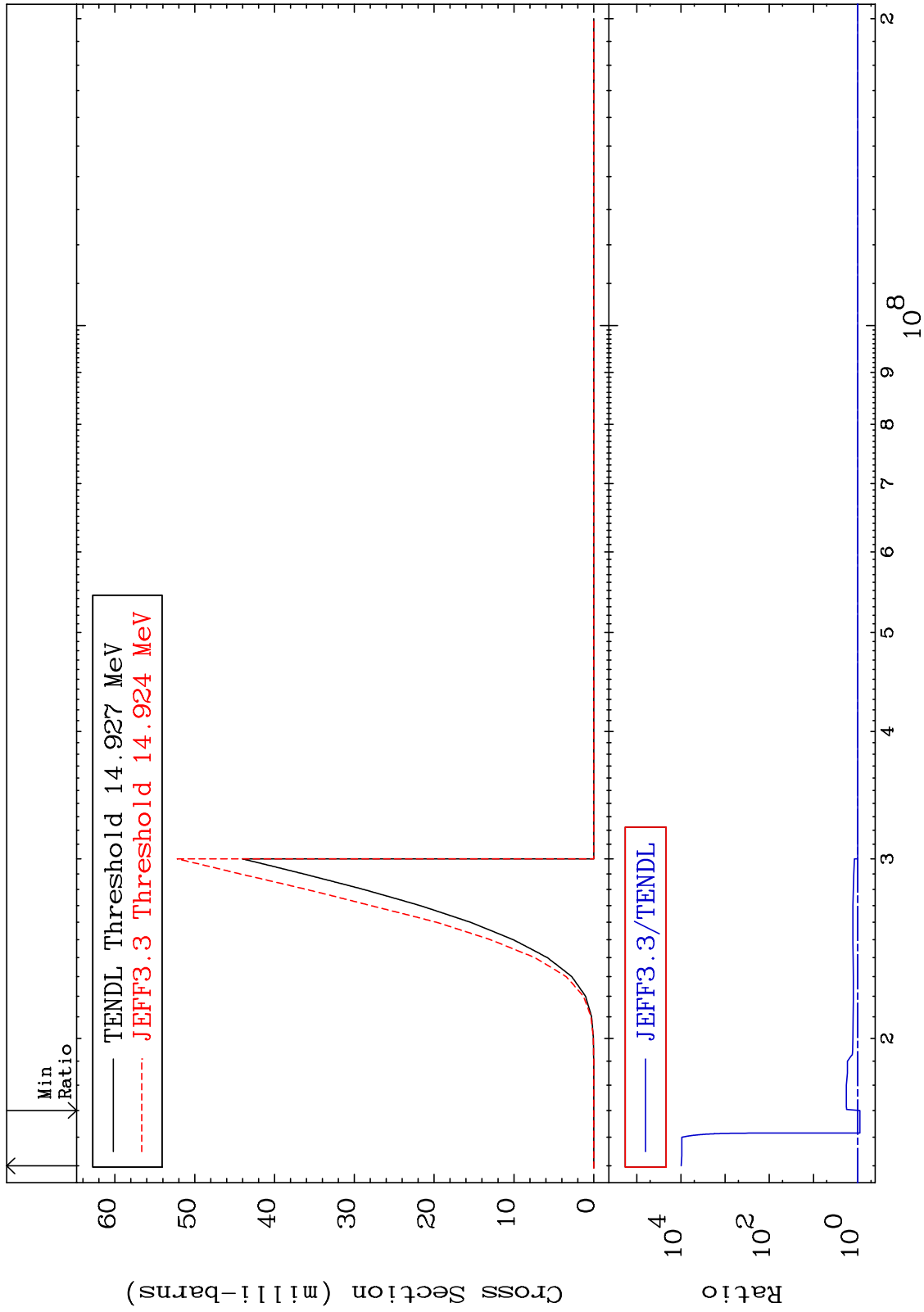




MAT 6419

(n,2n) p
Cross Section

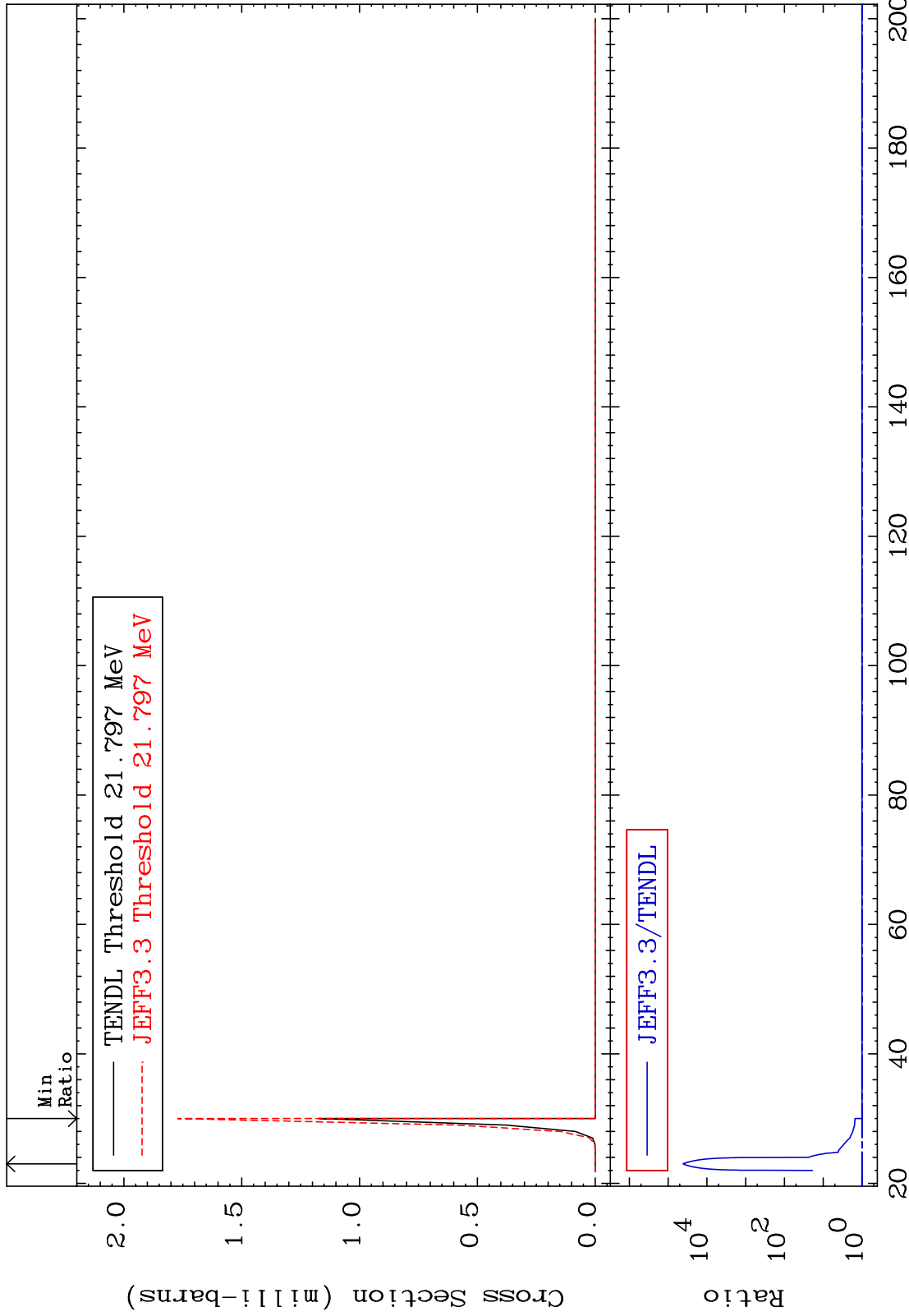
64-Gd-150
-11.24 To 9999. %



MAT 6419

(n,3n) p
Cross Section

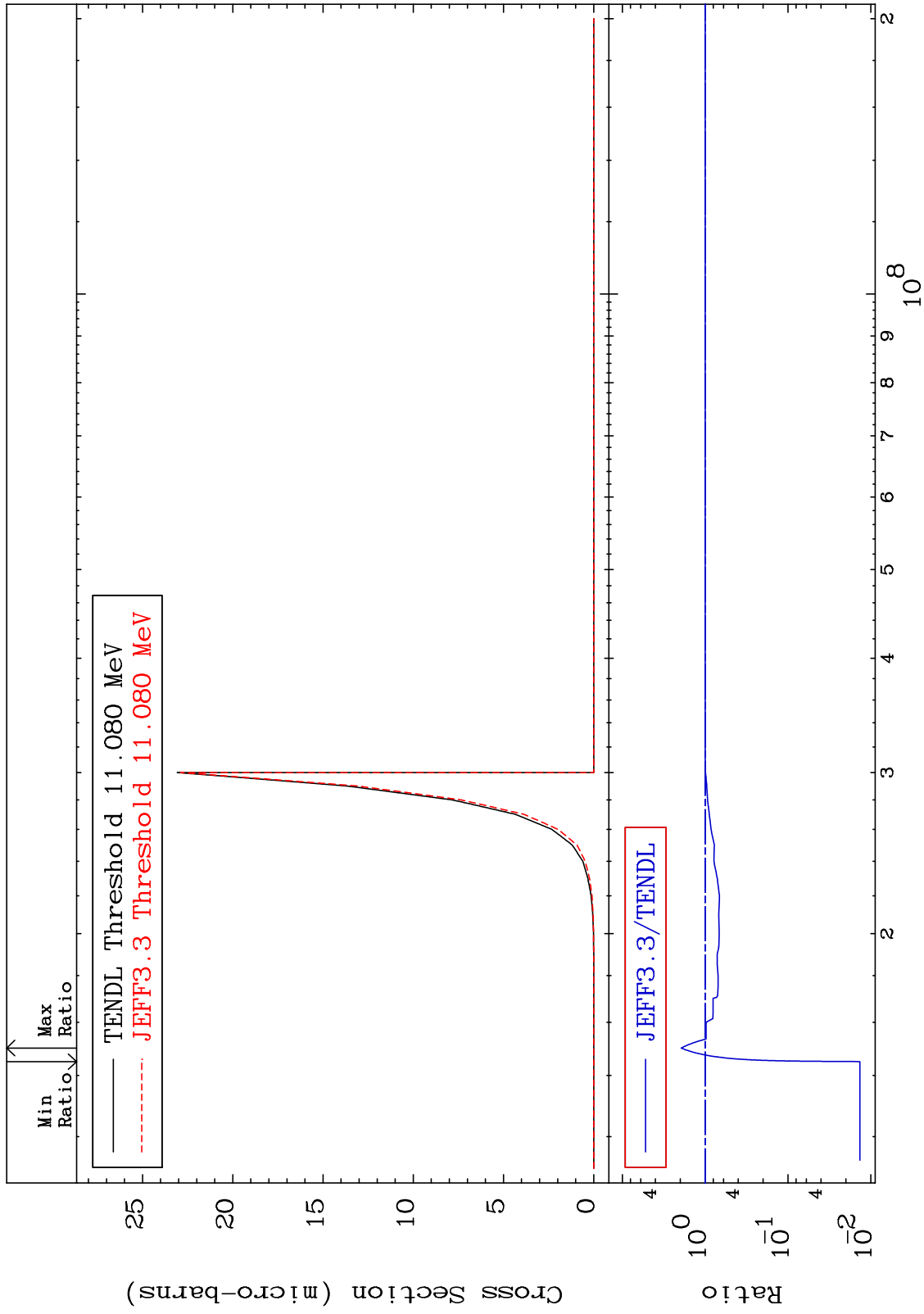
64-Gd-150
0.000 To 9999. %



MAT 6419

(n,2n) p
Cross Section

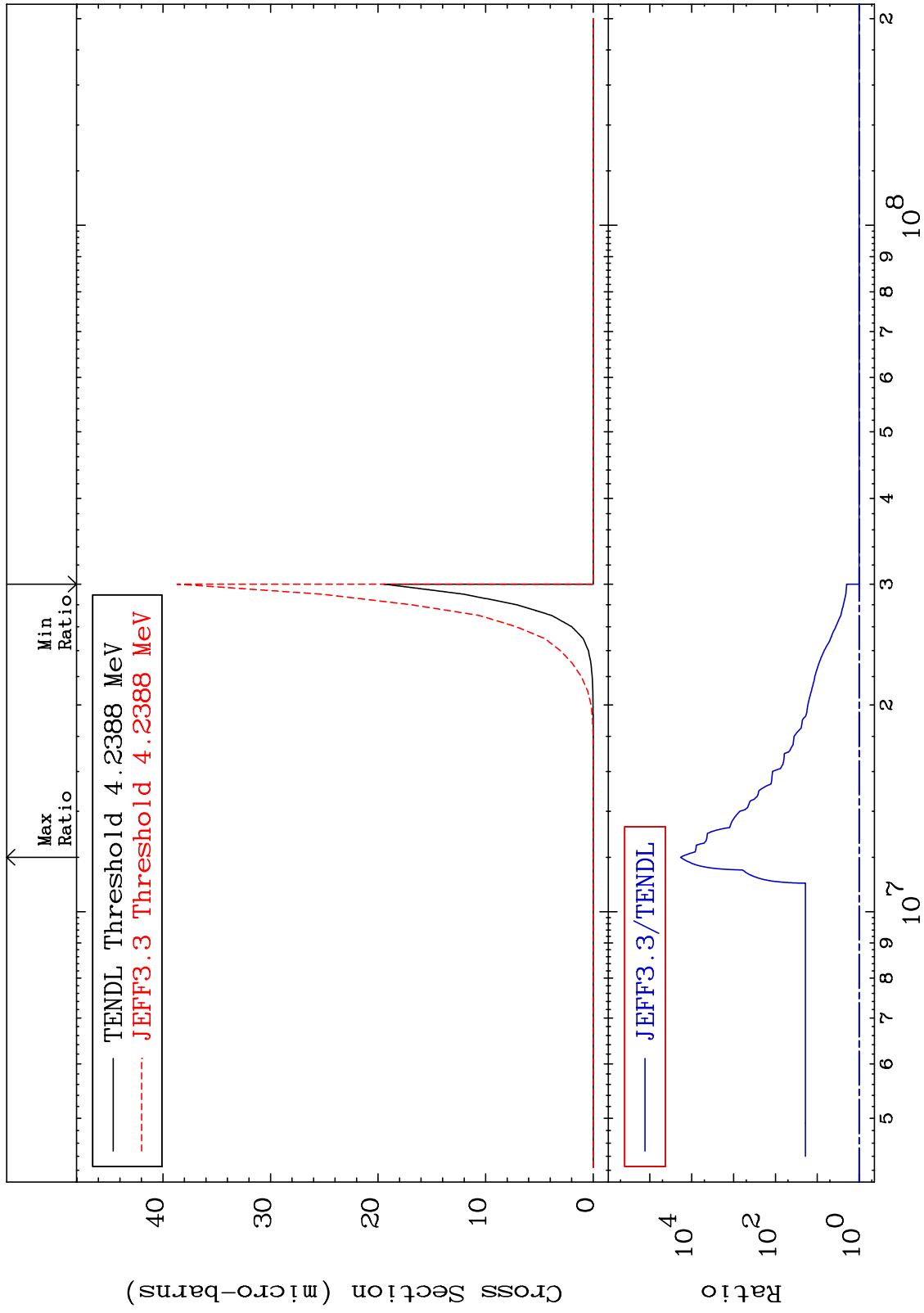
64-Gd-150
-98.65 To 94.79 %

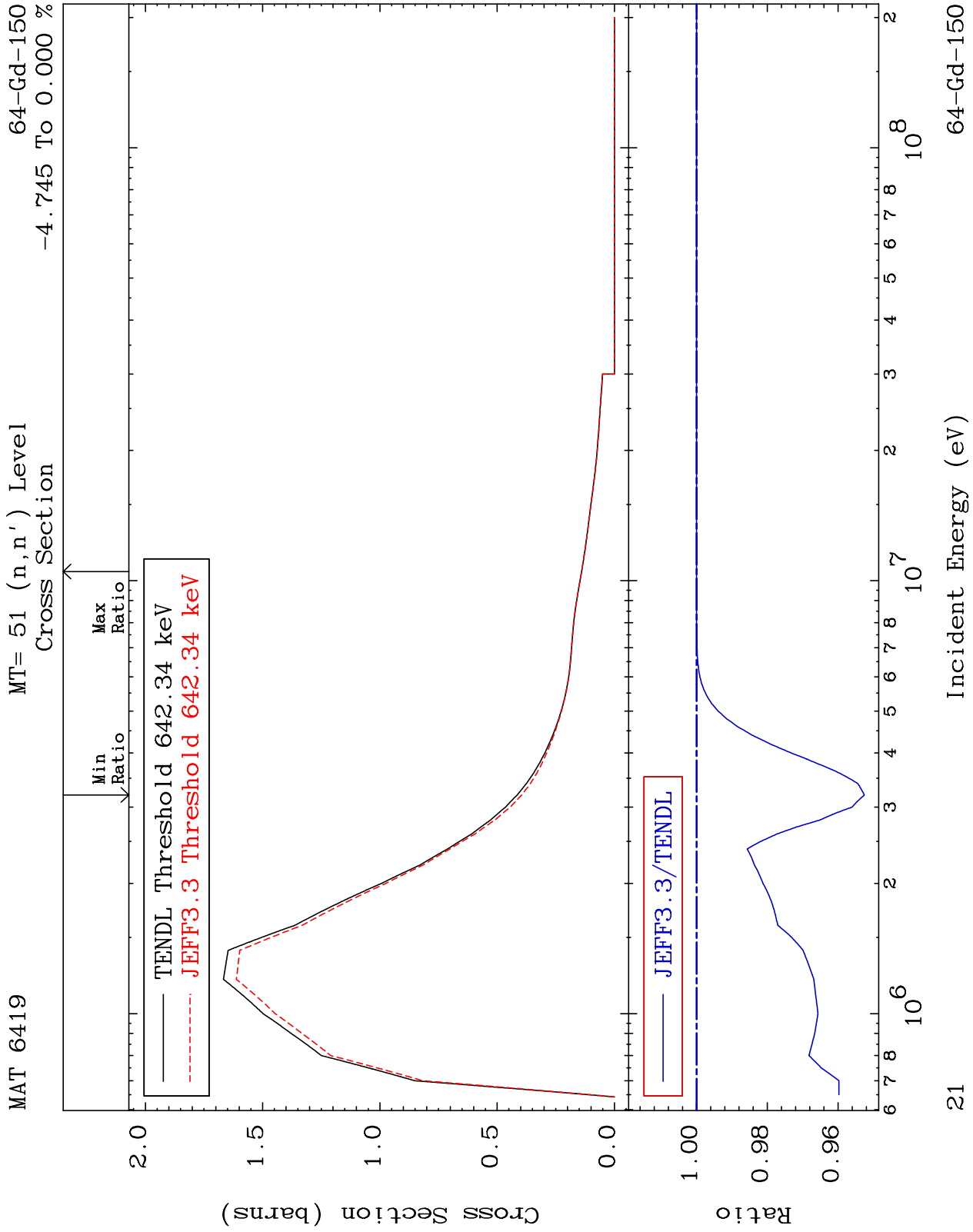


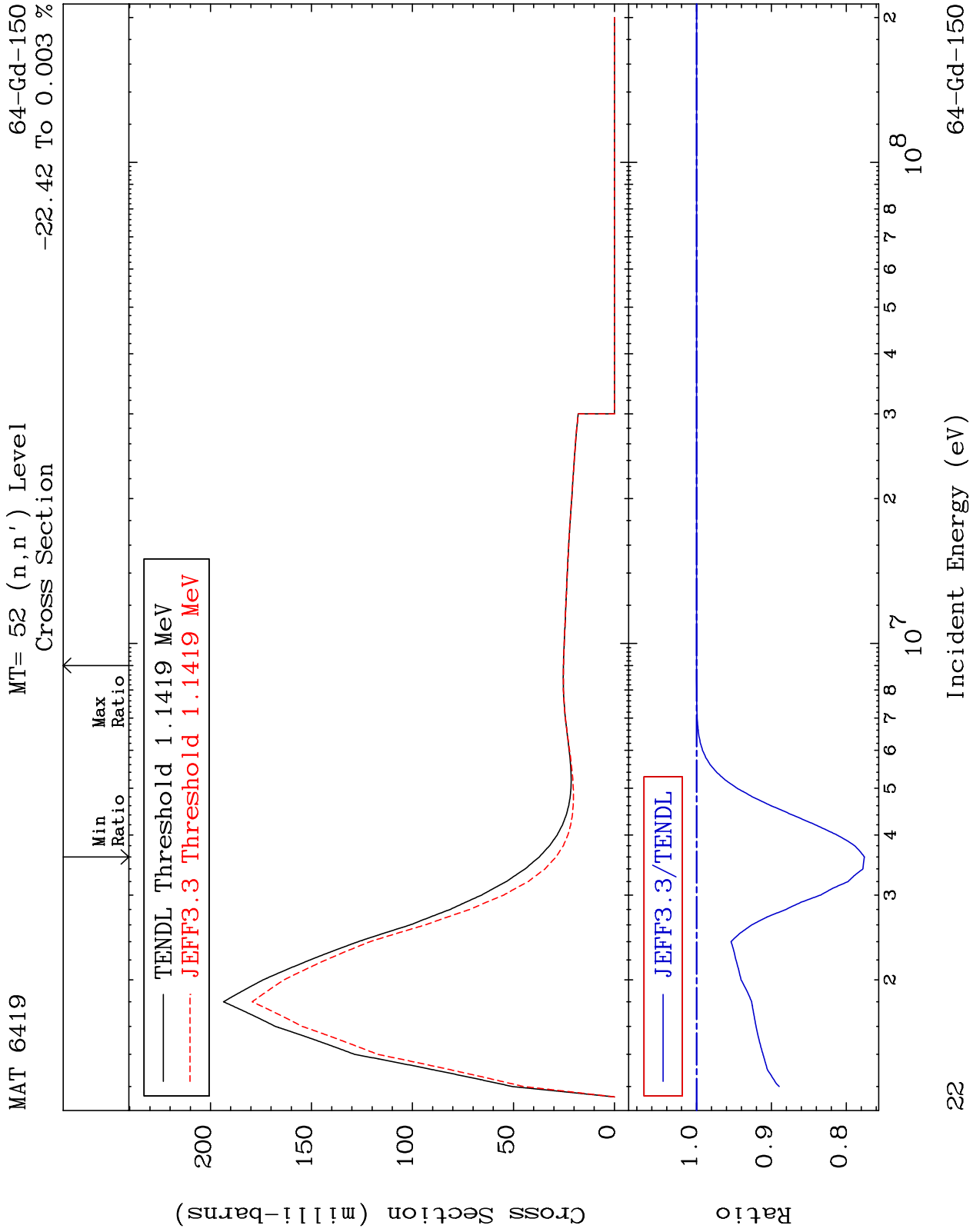
MAT 6419

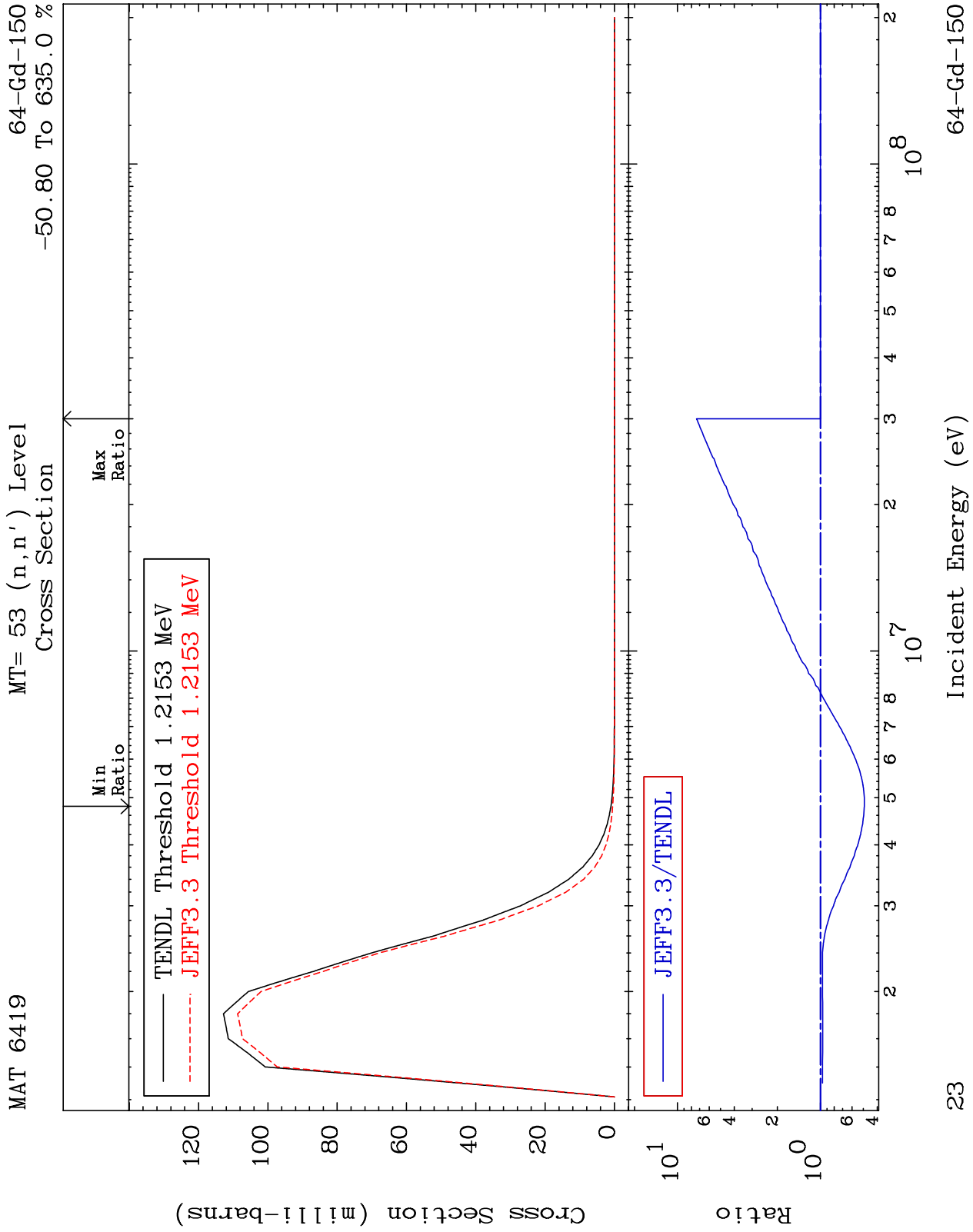
(n,n') p α
Cross Section

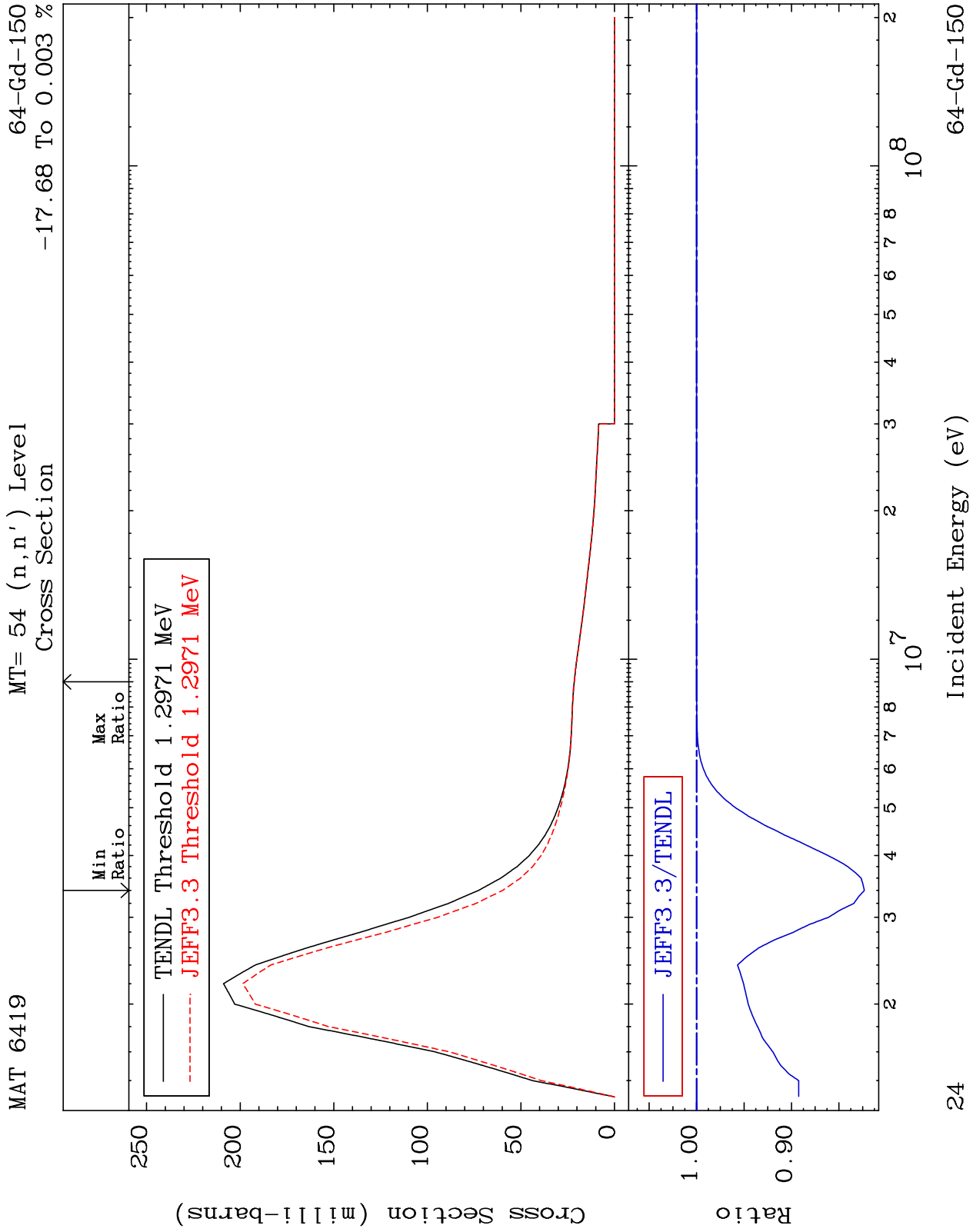
64-Gd-150
0.000 To 9999. %







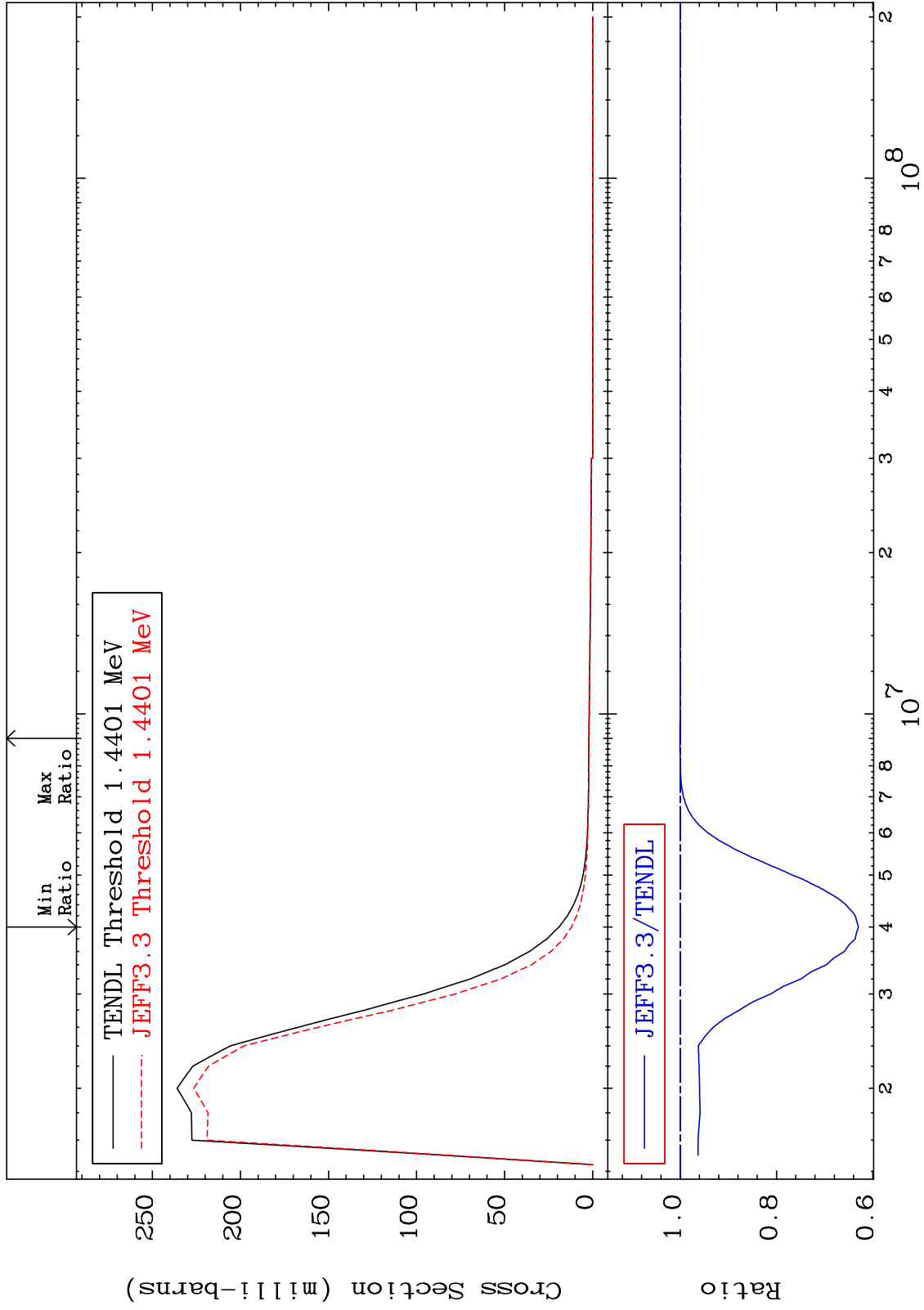




MAT 6419

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

64-Gd-150
-37.00 To 0.025 %



25

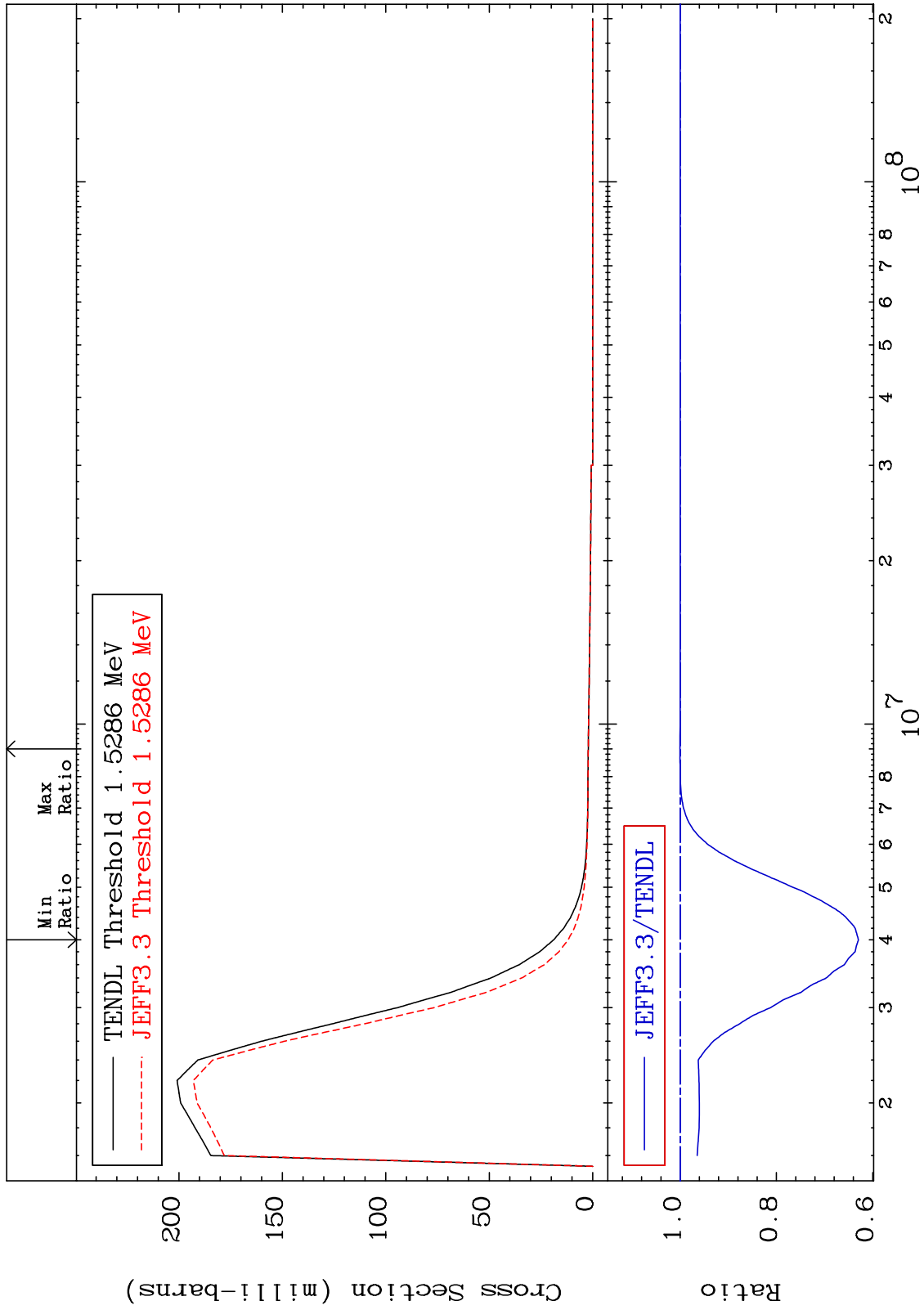
Incident Energy (eV)

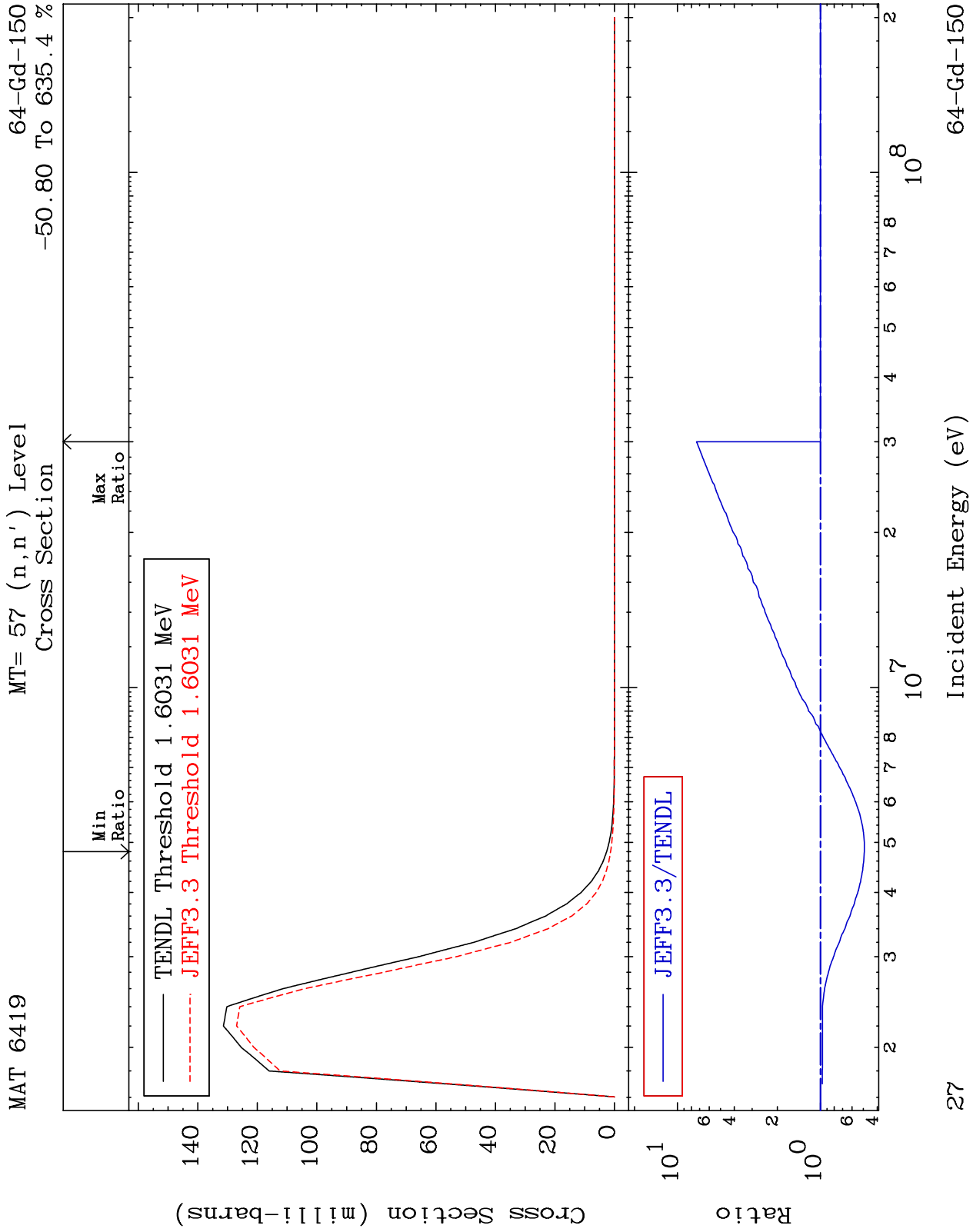
64-Gd-150

MAT 6419

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

64-Gd-150
-37.03 To 0.025 %

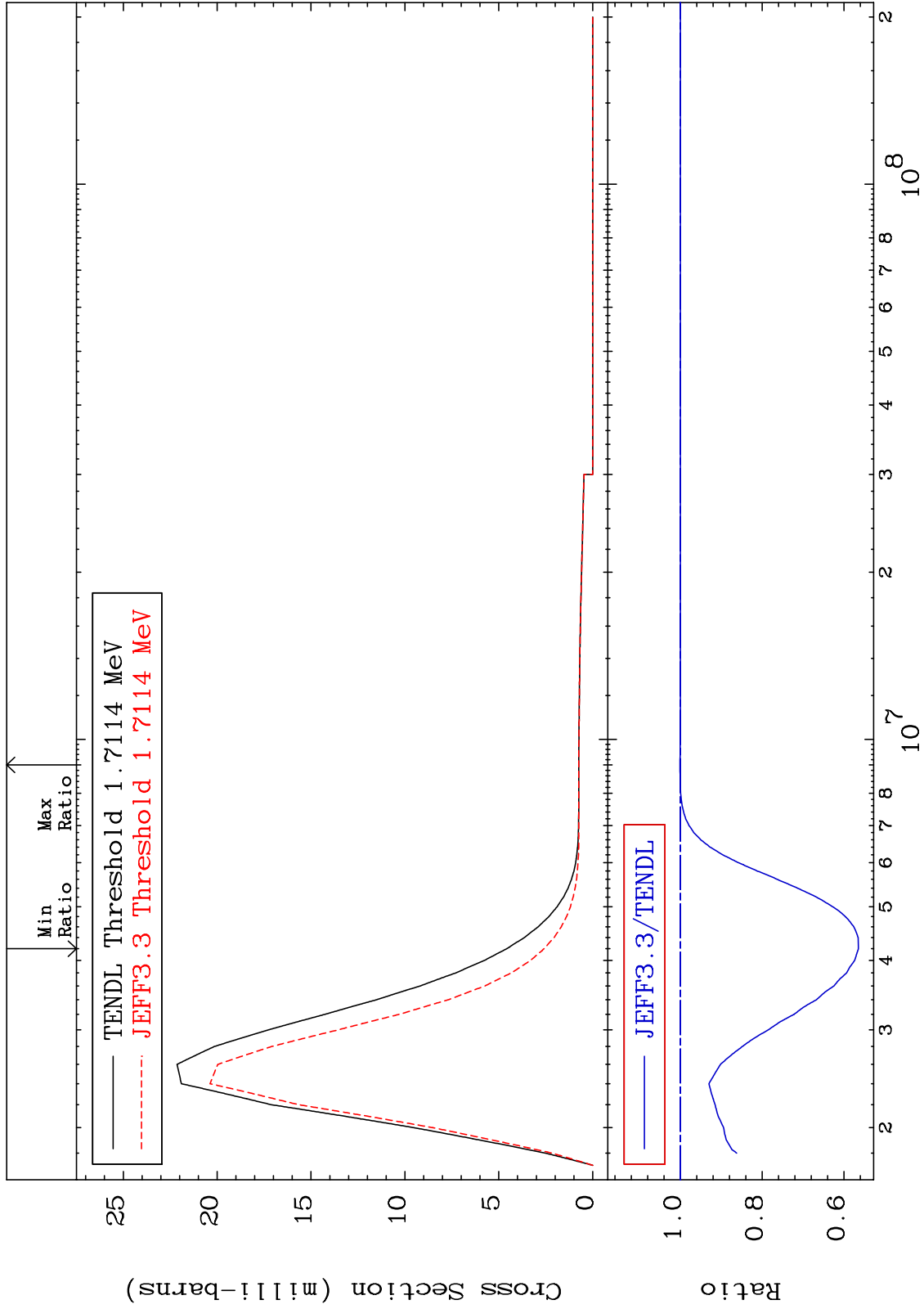




MAT 6419

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

64-Gd-150
-43.53 To 0.081 %



28

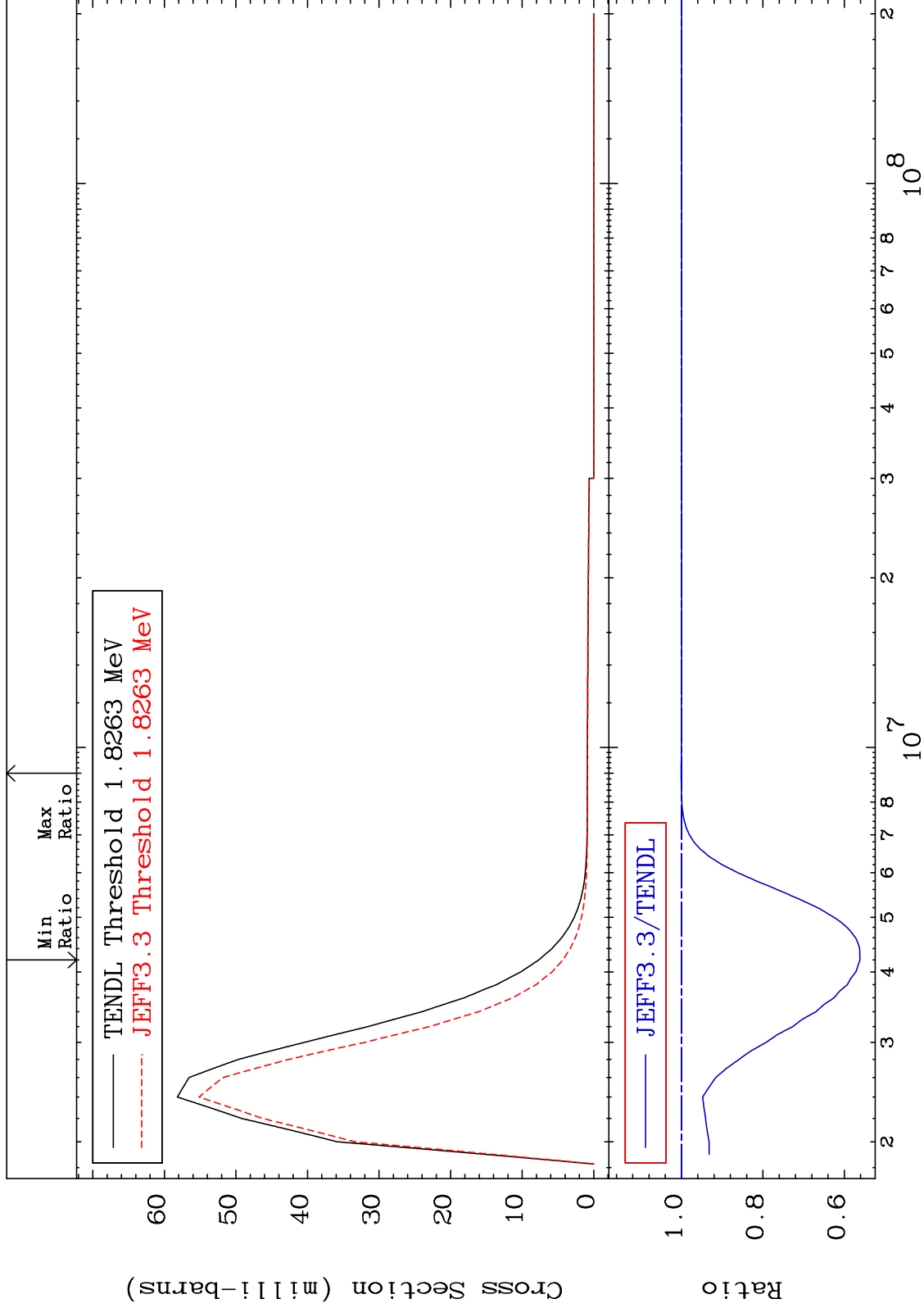
Incident Energy (eV)

64-Gd-150

MAT 6419

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

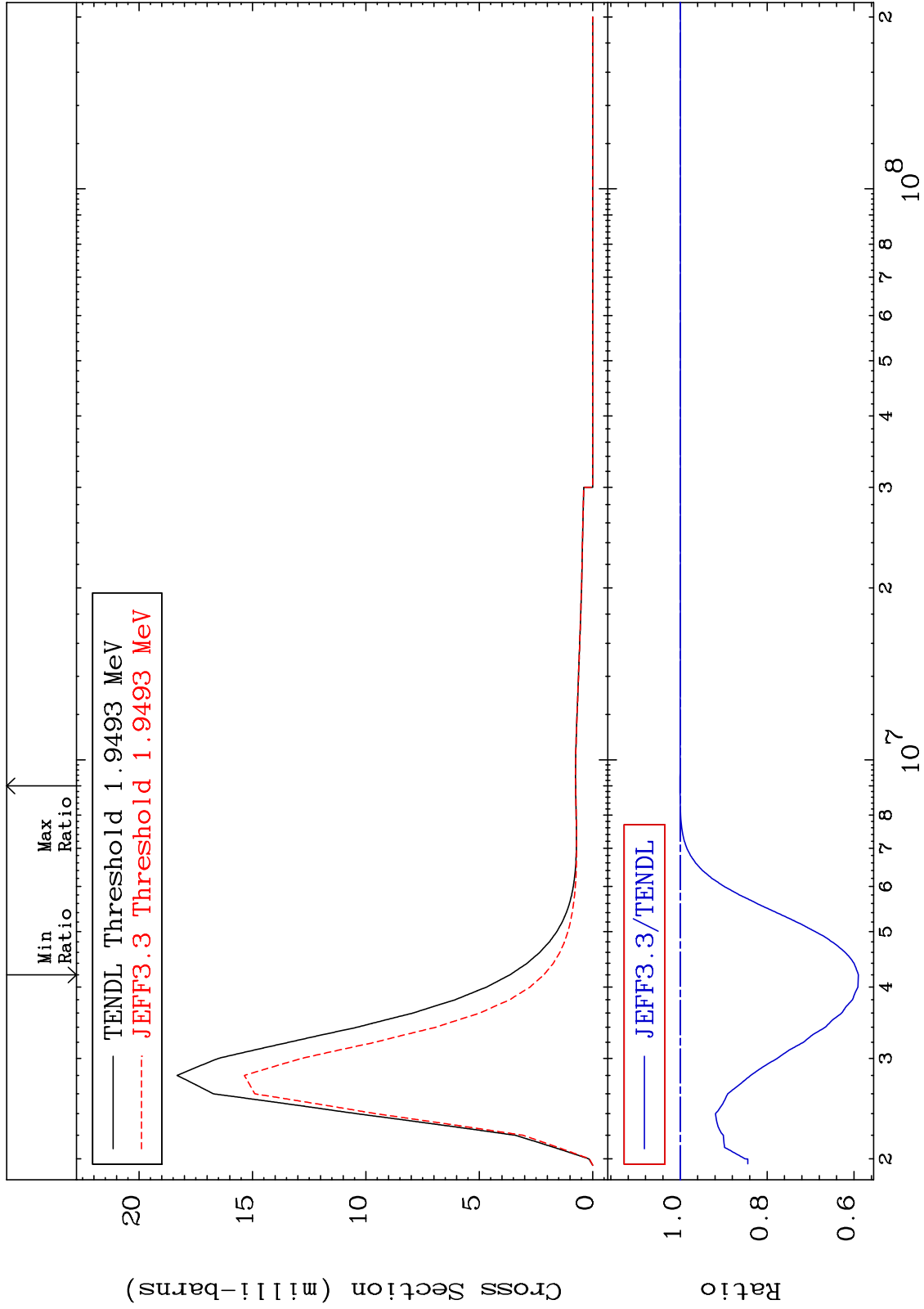
64-Gd-150
-43.85 To 0.068 %



MAT 6419

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

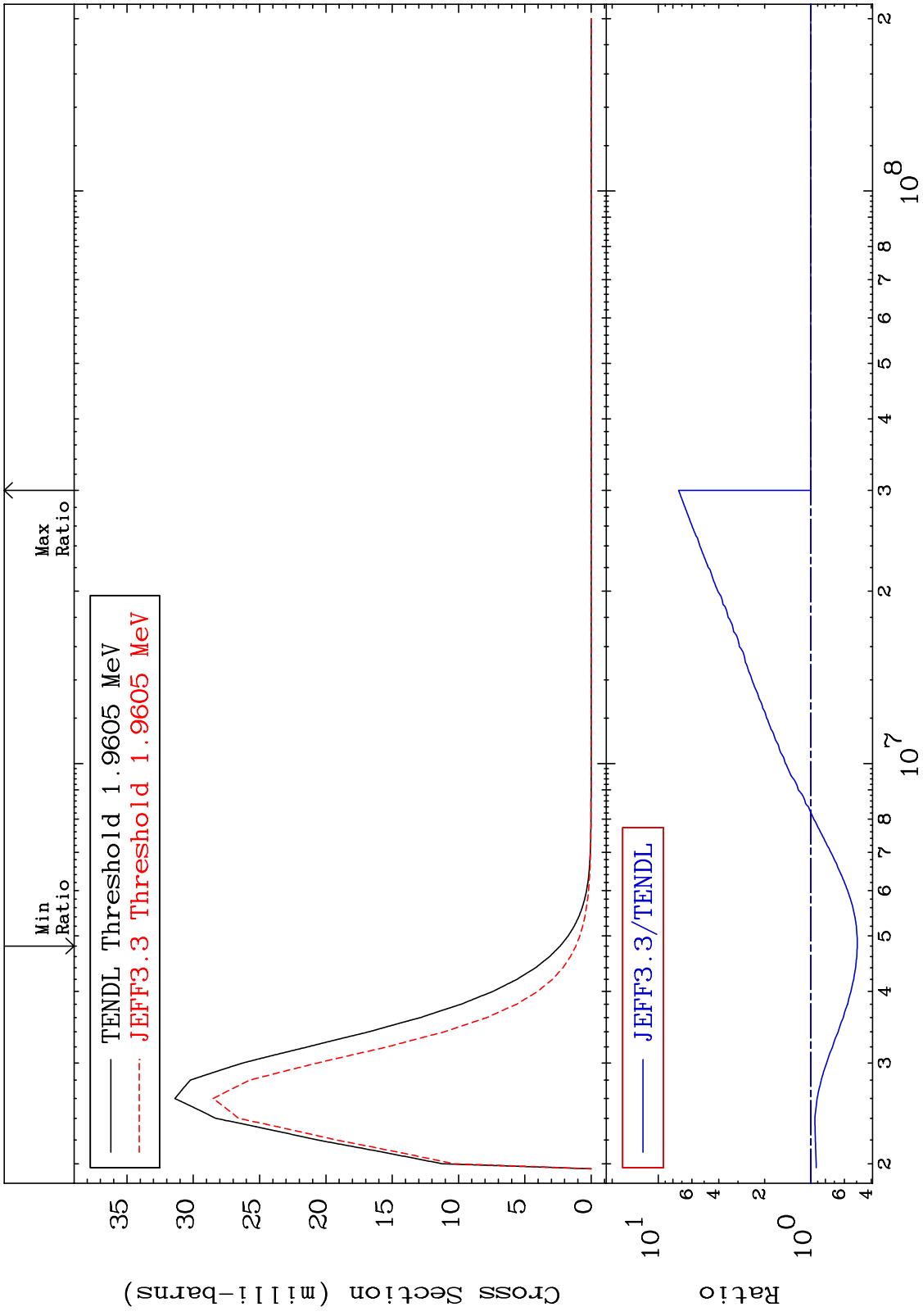
64-Gd-150
-41.02 To 0.063 %



30

64-Gd-150

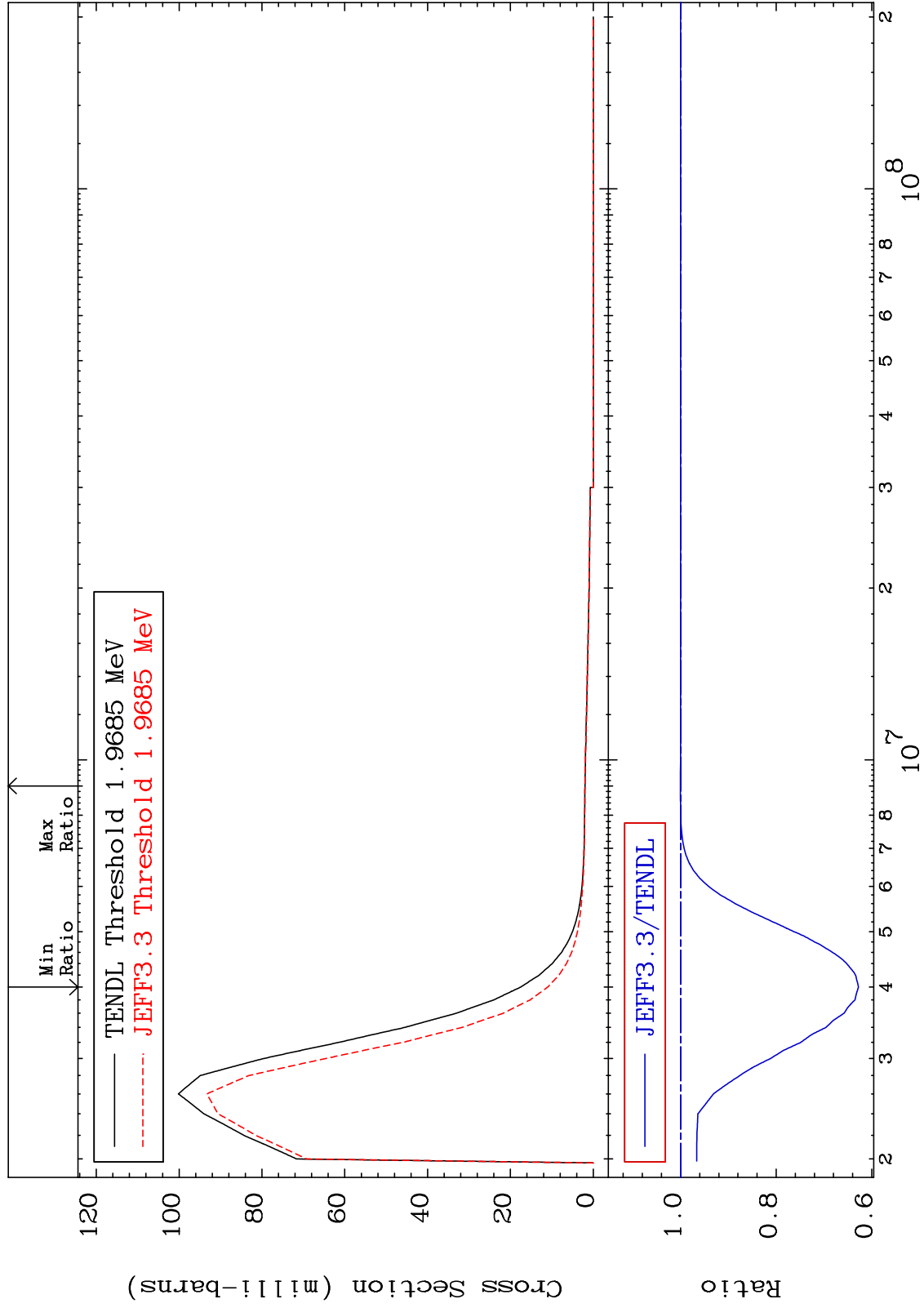
MAT 6419
MT= 61 (n,n') Level
Cross Section
64-Gd-150
-50.58 To 634.0 %



MAT 6419

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

64-Gd-150
-37.23 To 0.026 %



32

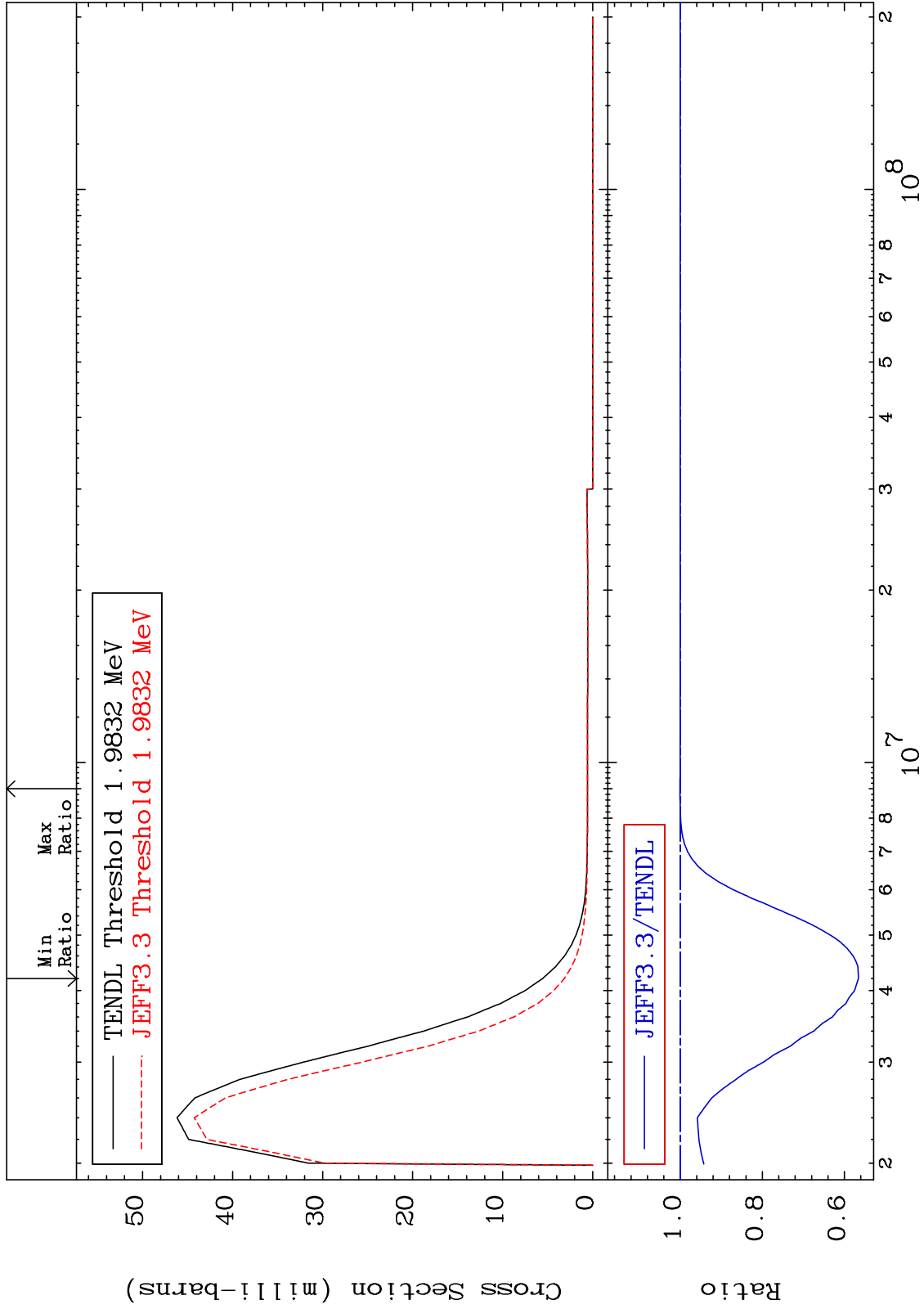
Incident Energy (eV)

64-Gd-150

MAT 6419

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

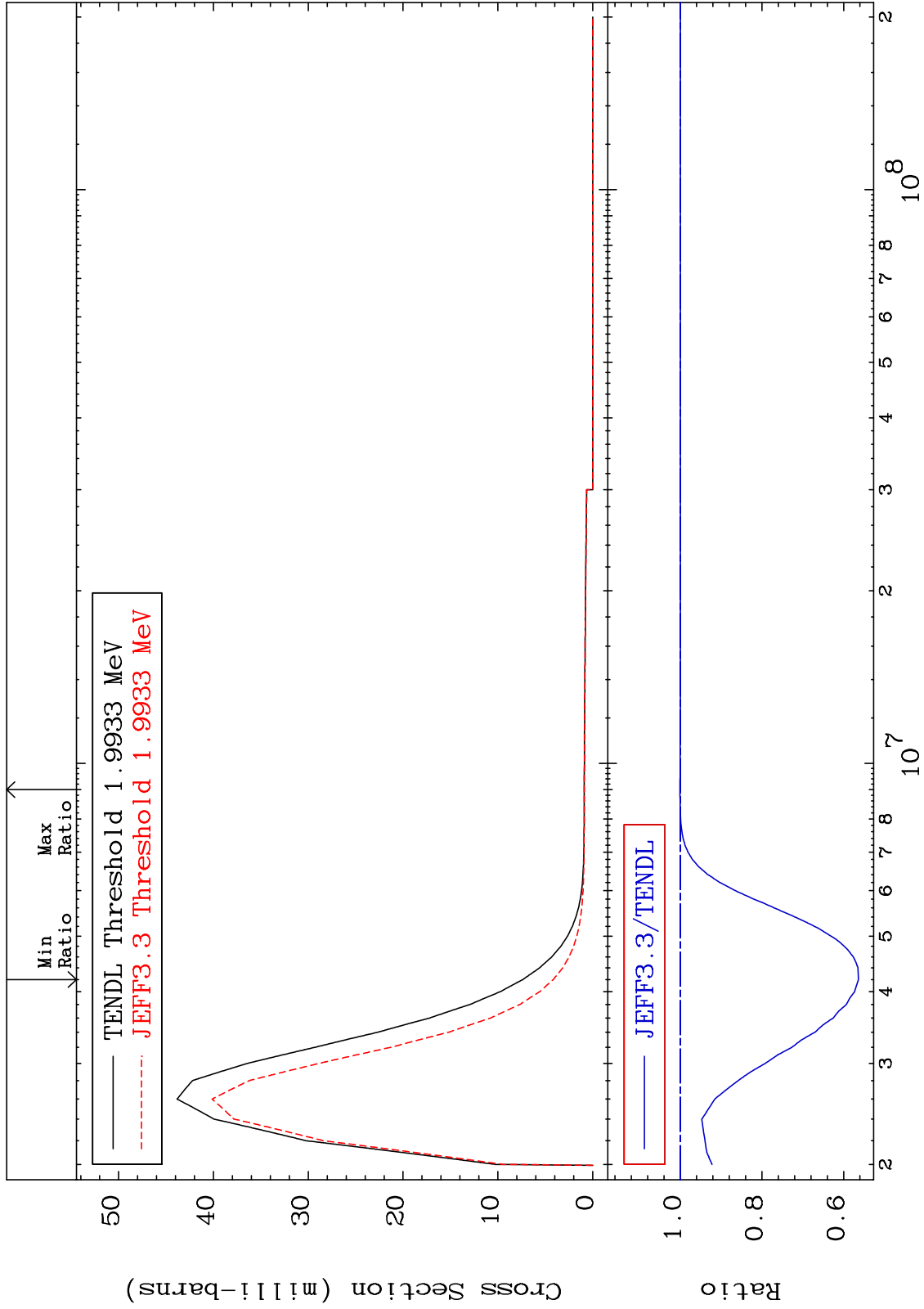
64-Gd-150
-43.40 To 0.059 %



MAT 6419

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

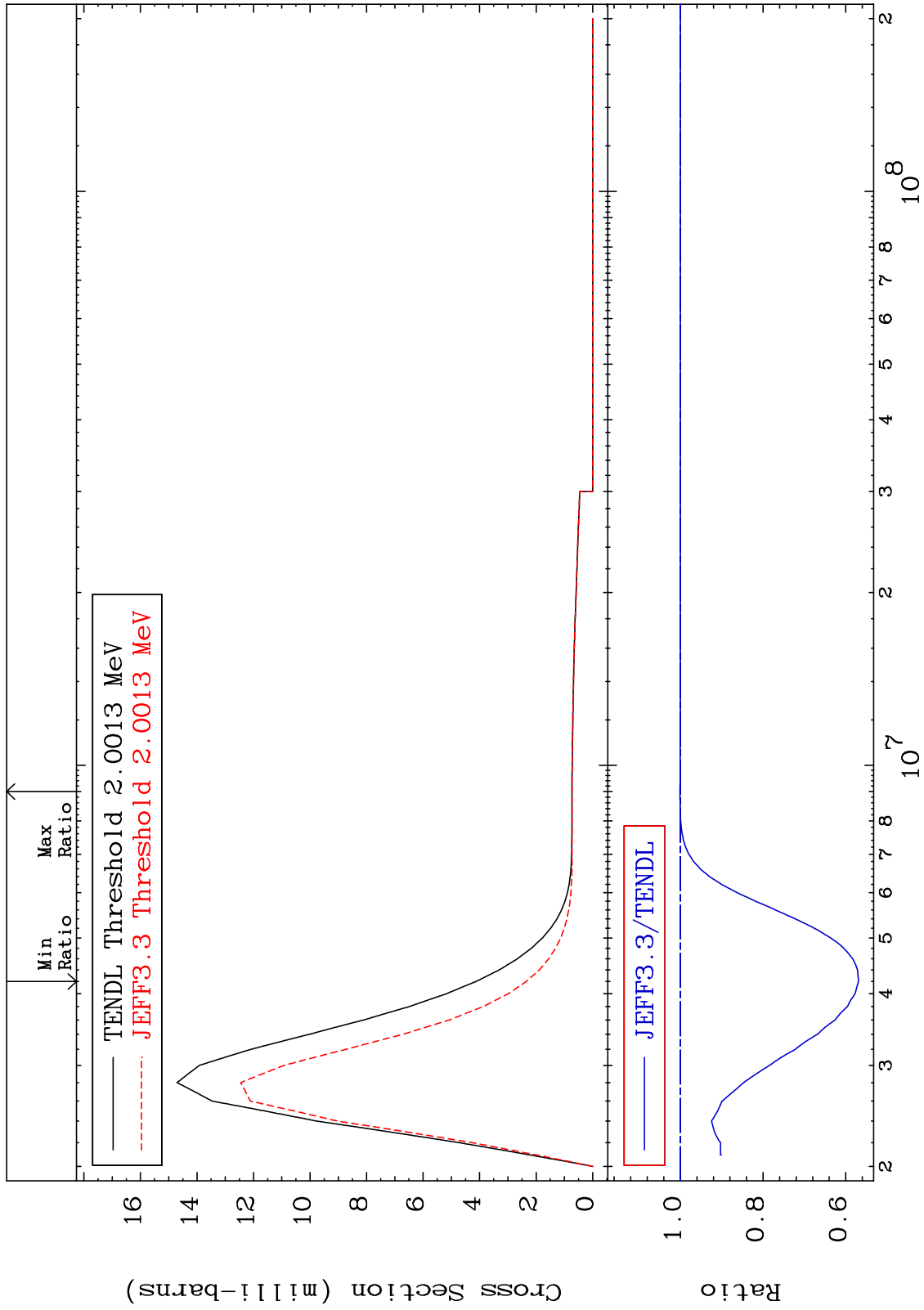
64-Gd-150
-43.62 To 0.067 %



MAT 6419

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

64-Gd-150
-43.05 To 0.079 %



35

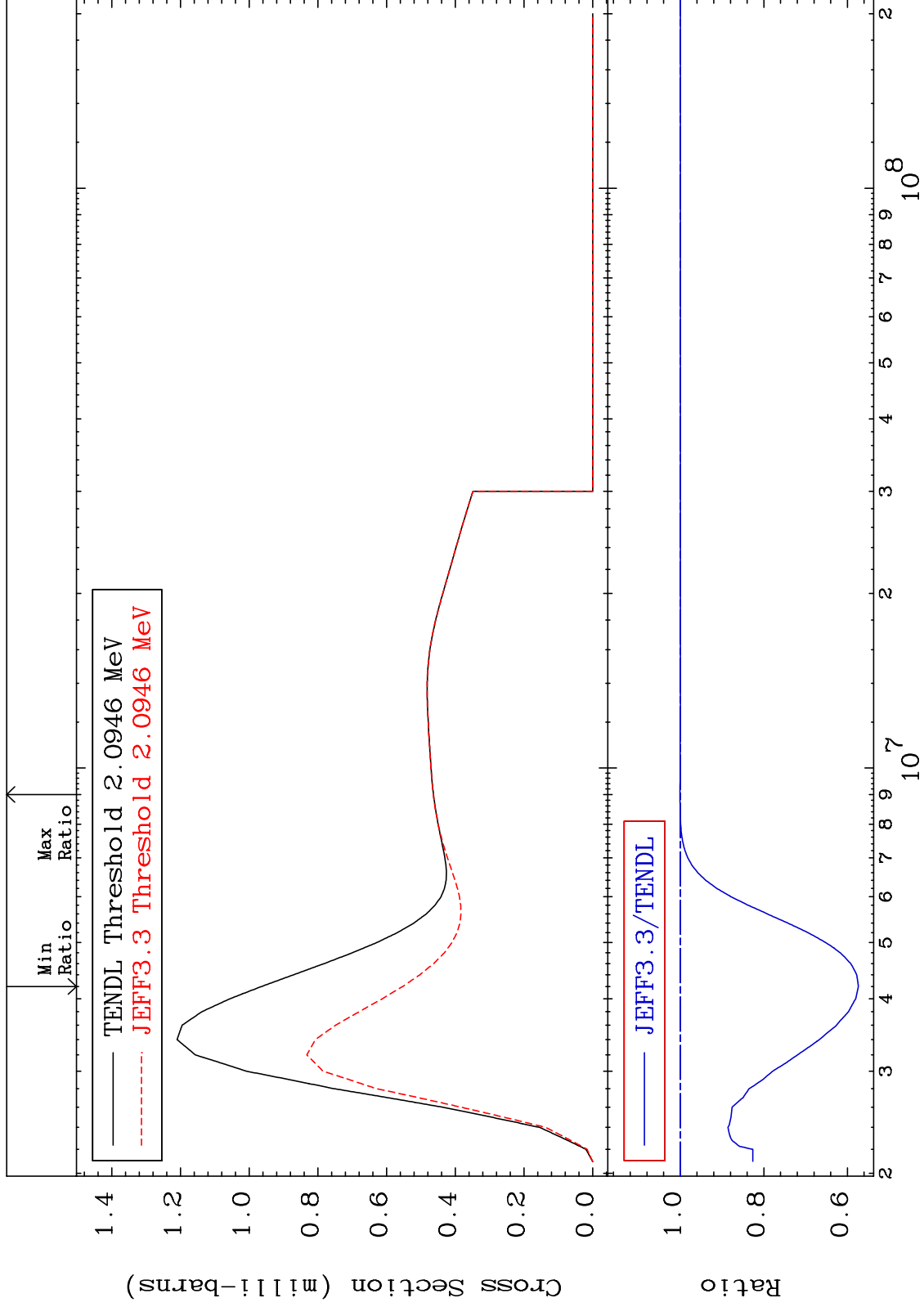
Incident Energy (eV)

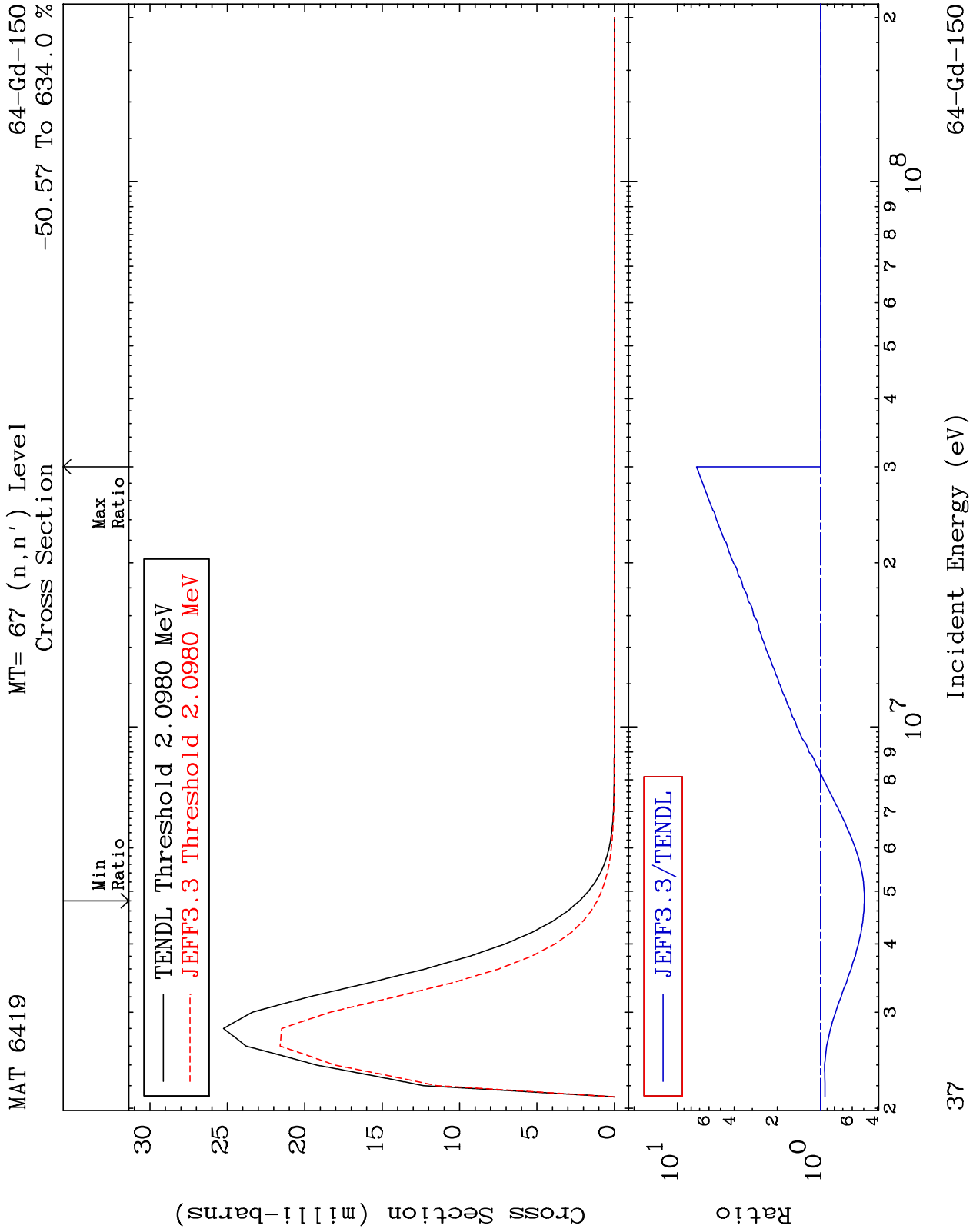
64-Gd-150

MAT 6419

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

64-Gd-150
-42.63 To 0.074 %

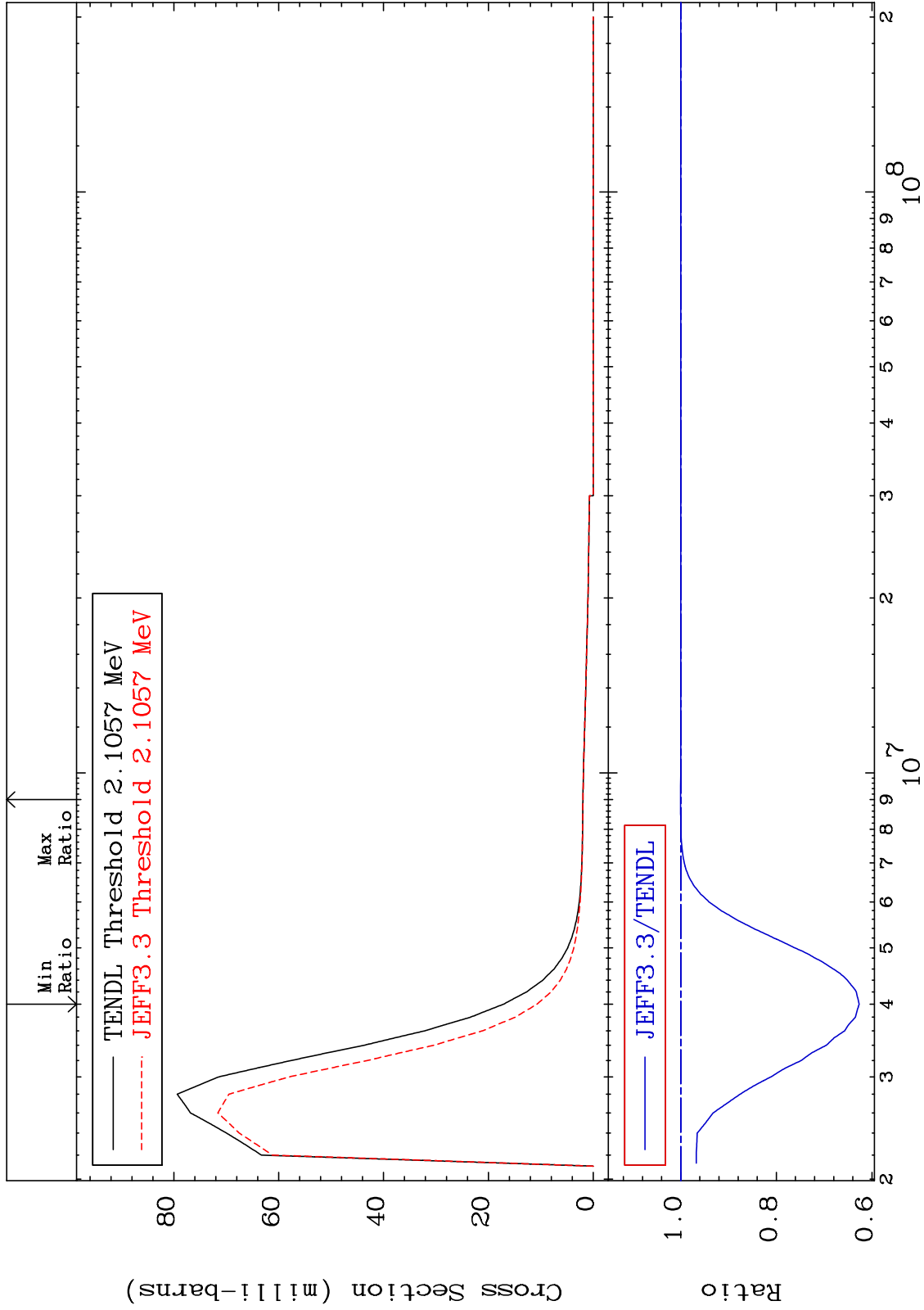




MAT 6419

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

64-Gd-150
-37.32 To 0.026 %



38

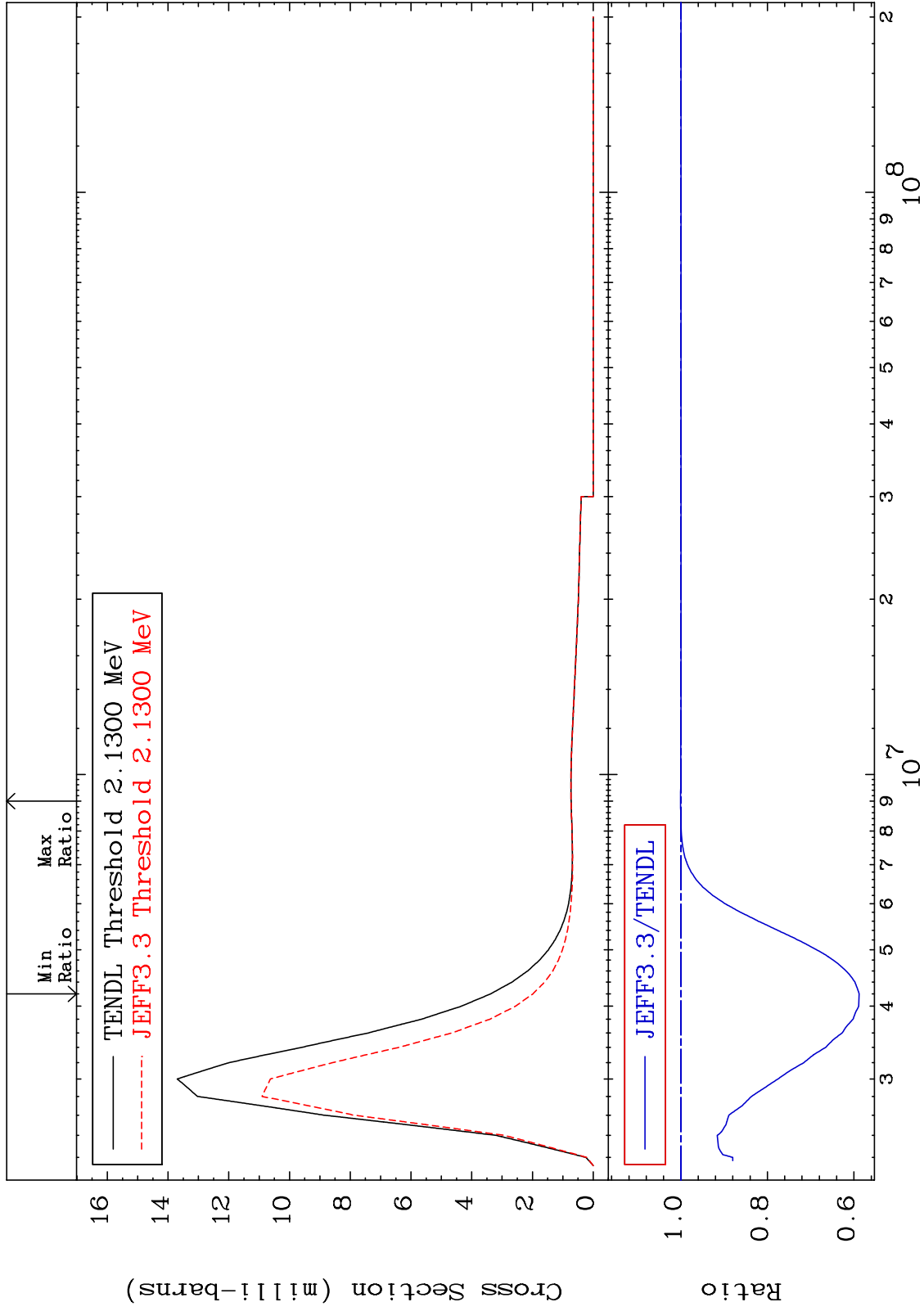
Incident Energy (eV)

64-Gd-150

MAT 6419

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

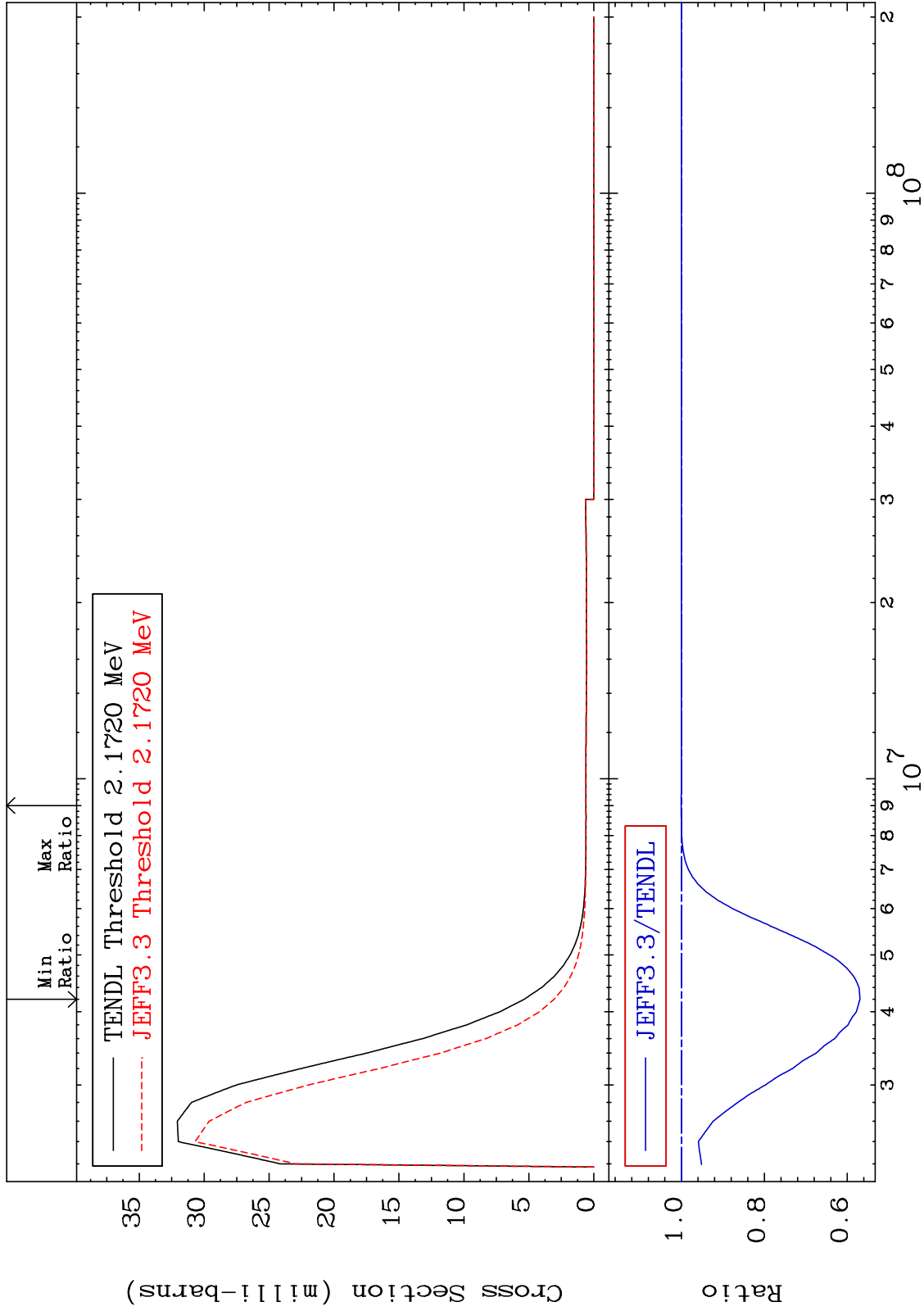
64-Gd-150
-41.21 To 0.063 %



MAT 6419

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

64-Gd-150
-43.04 To 0.056 %

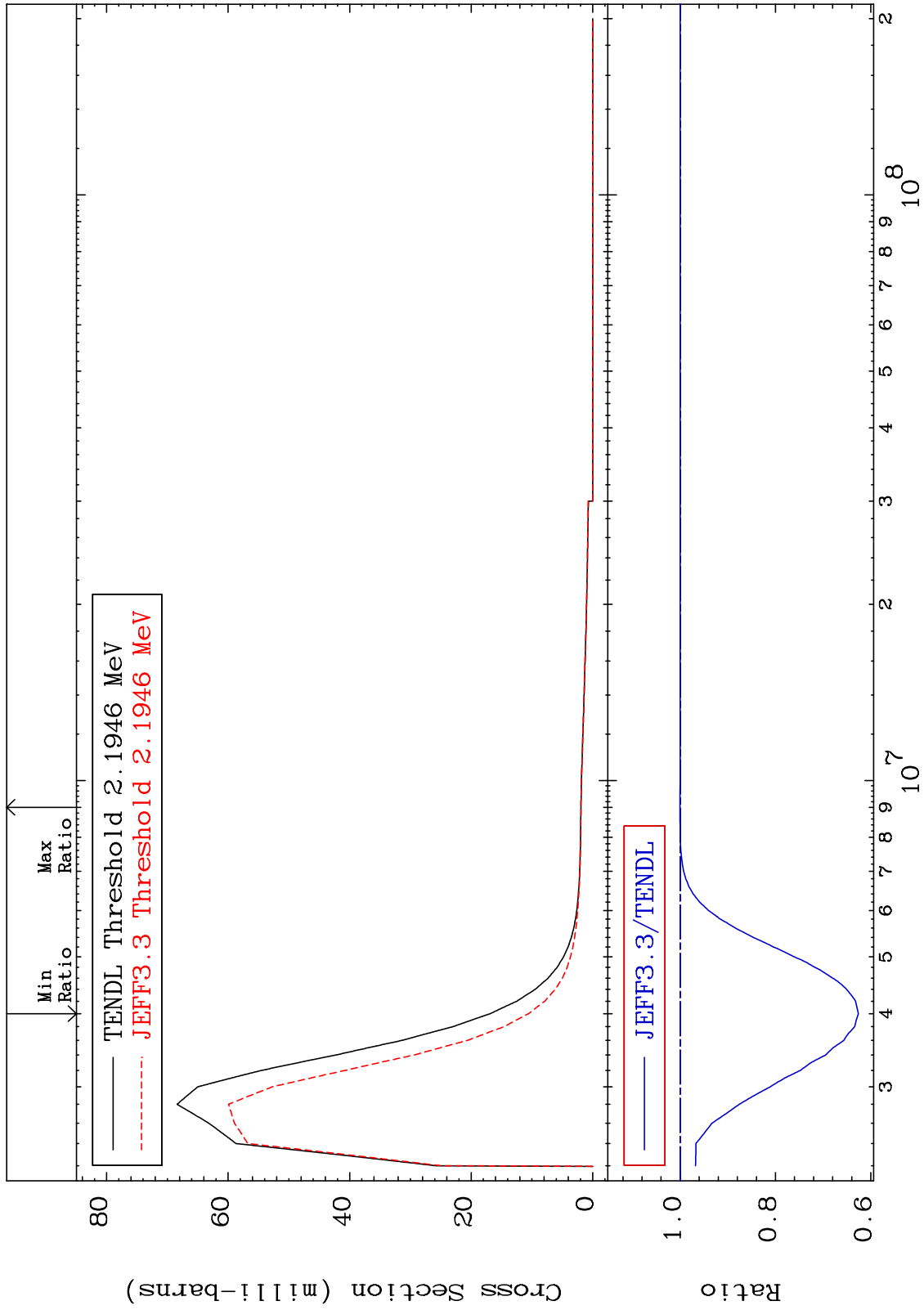


40

Incident Energy (eV)

64-Gd-150

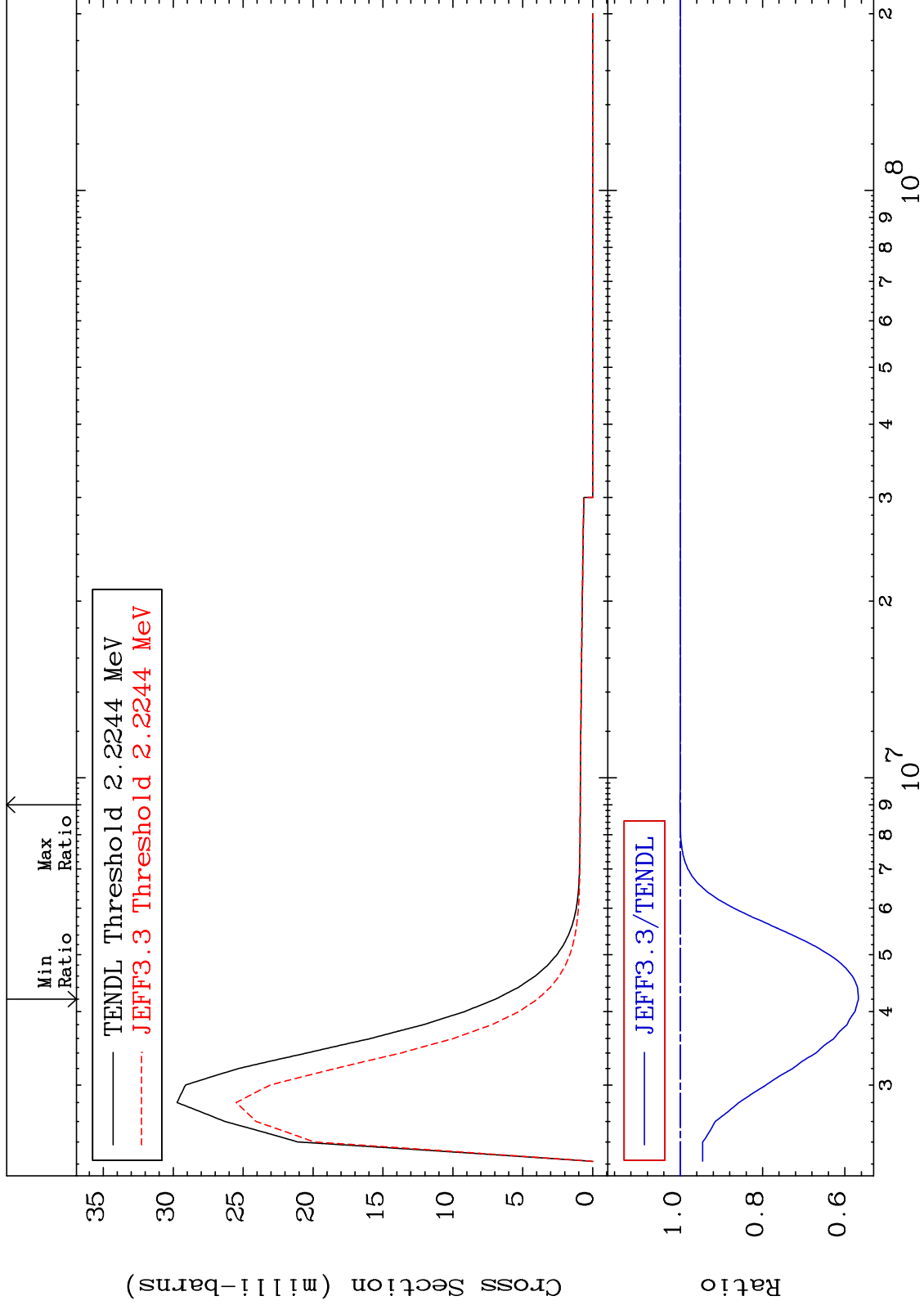
MAT 6419 MT= 71 (n, n') Level
 Cross Section 64-Gd-150
 -37.39 To 0.026 %



MAT 6419

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

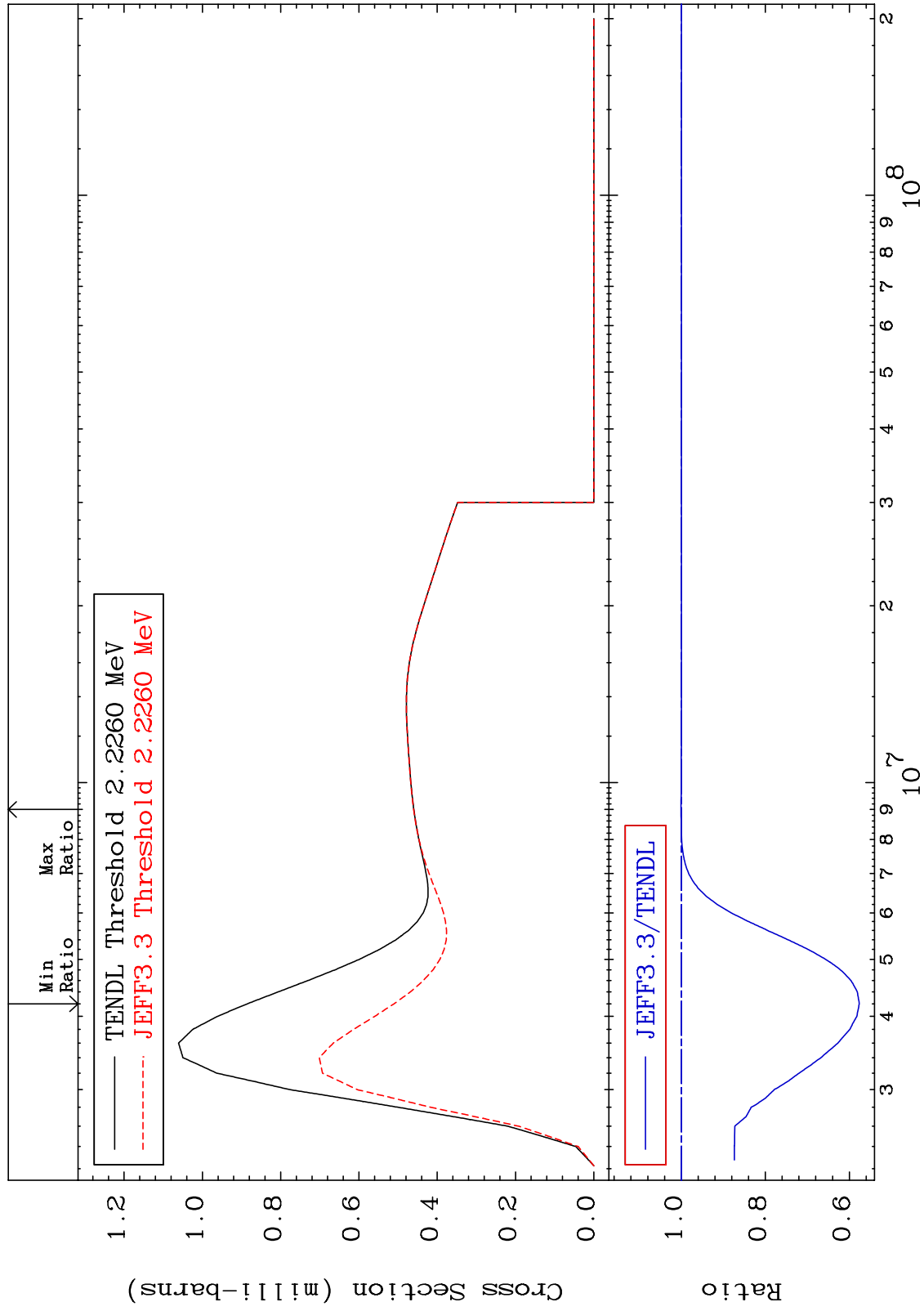
64-Gd-150
-43.27 To 0.066 %



MAT 6419

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

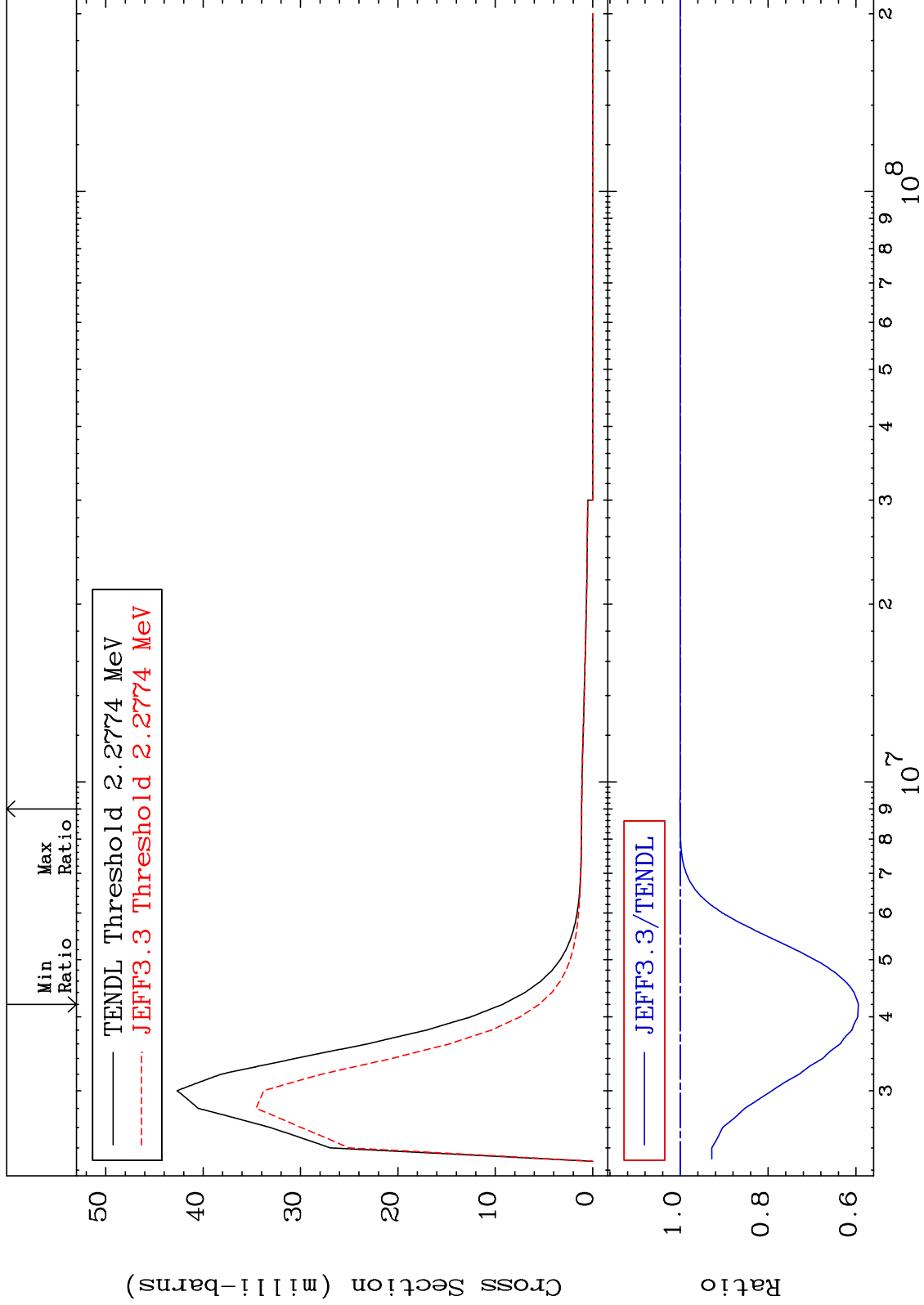
64-Gd-150
-42.36 To 0.073 %



MAT 6419

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

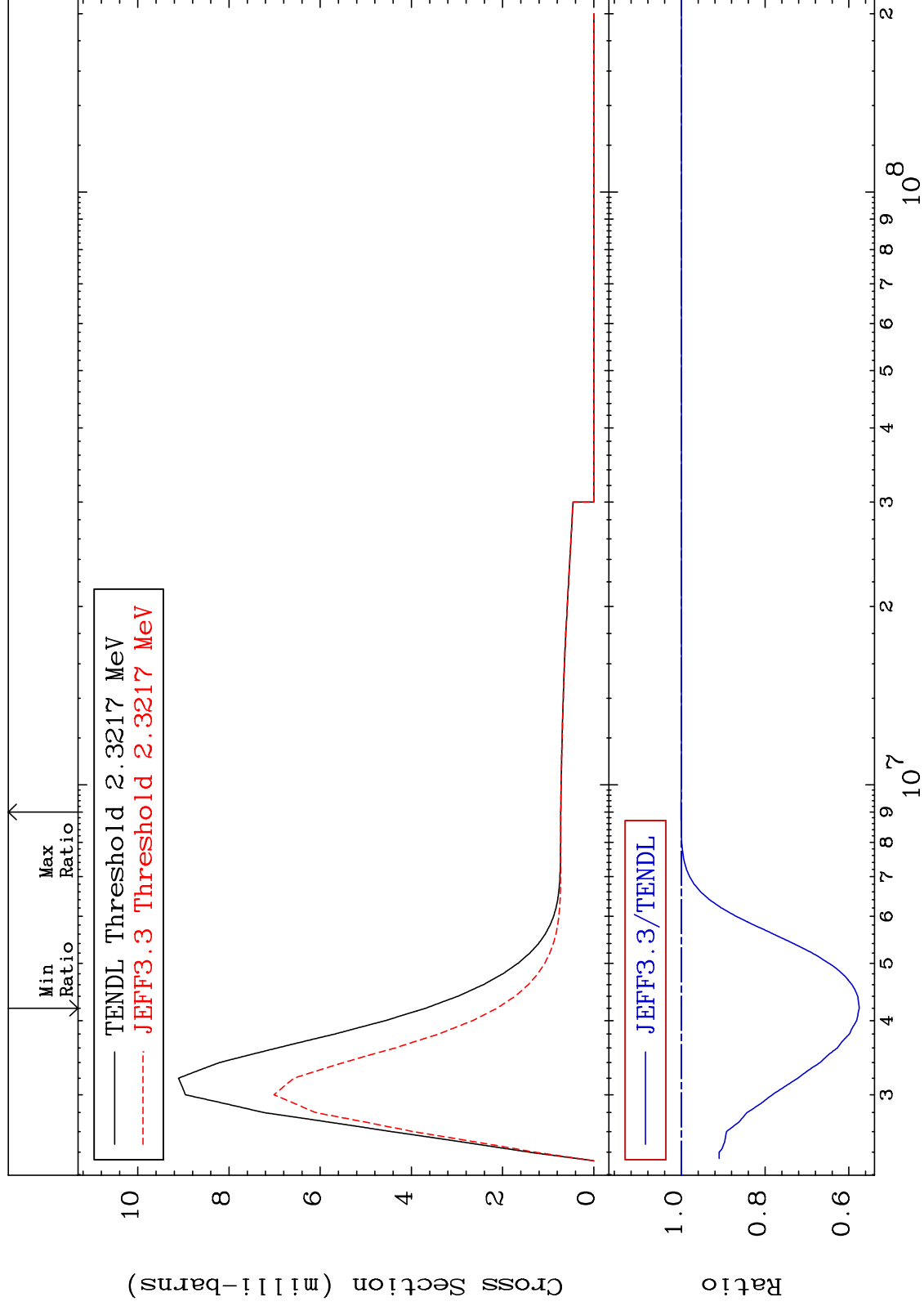
64-Gd-150
-40.54 To 0.053 %



MAT 6419

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

64-Gd-150
-42.49 To 0.077 %

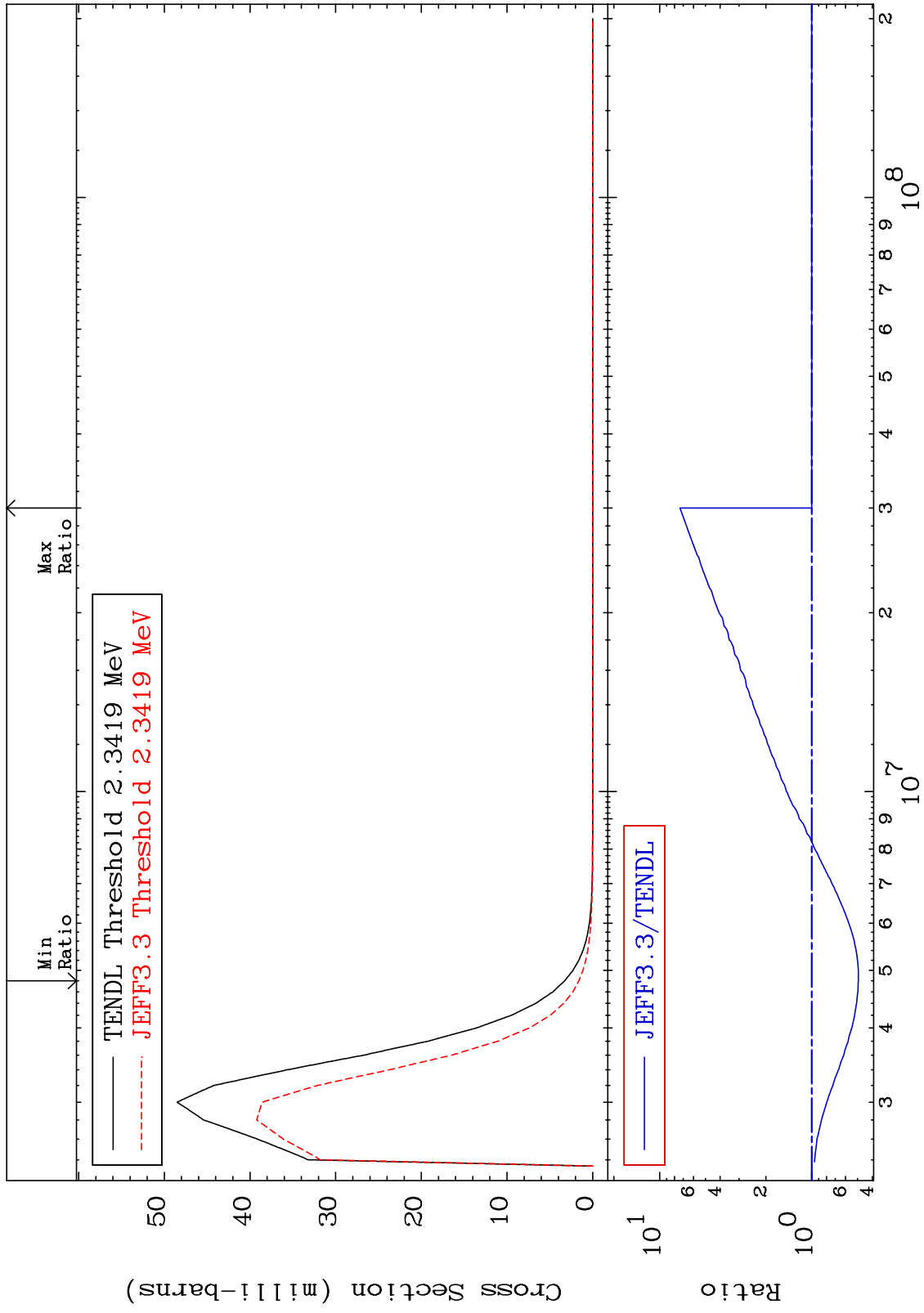


45

Incident Energy (eV)

64-Gd-150

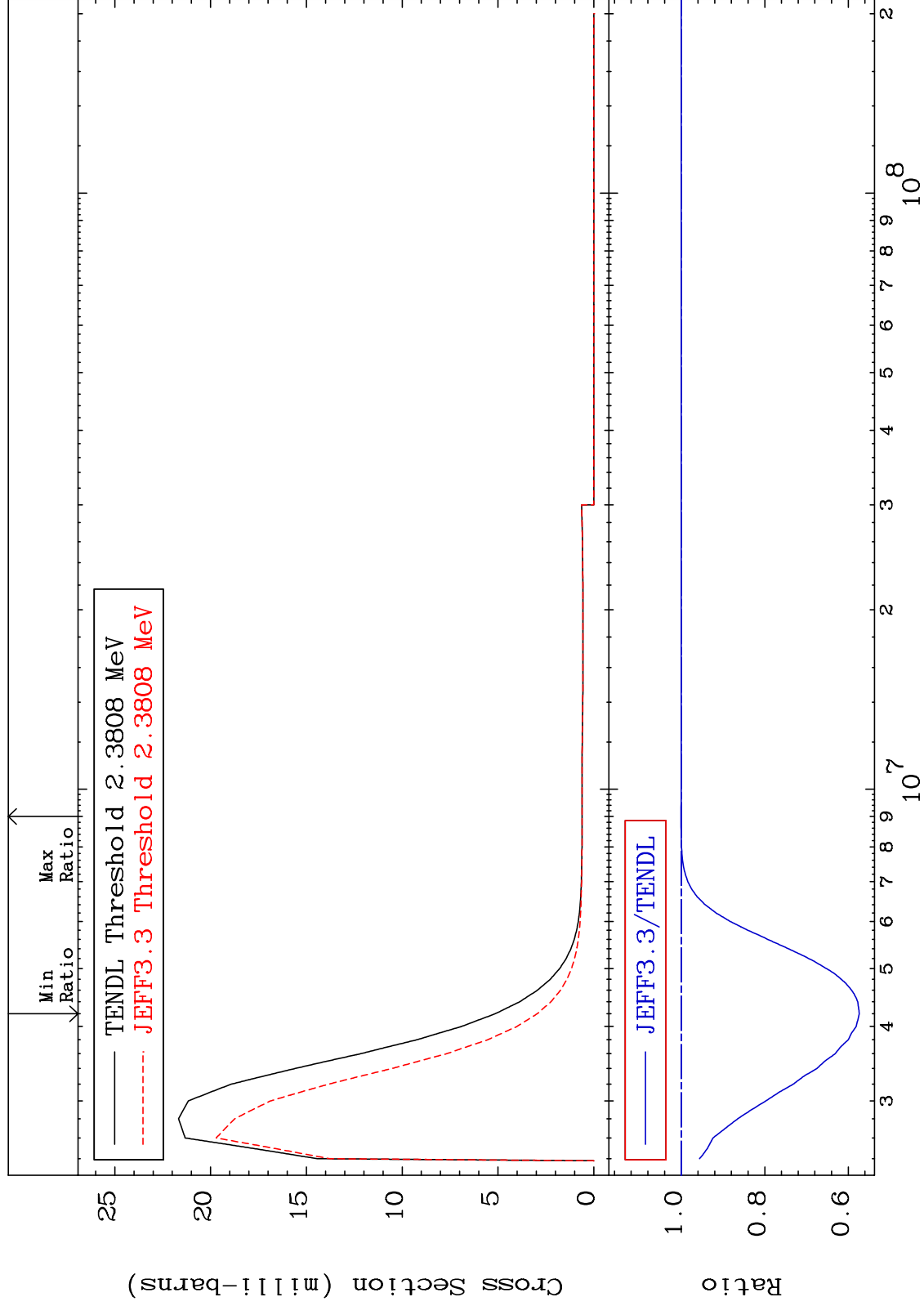
MAT 6419 MT= 76 (n, n') Level 64-Gd-150
 Cross Section -50.69 To 634.7 %

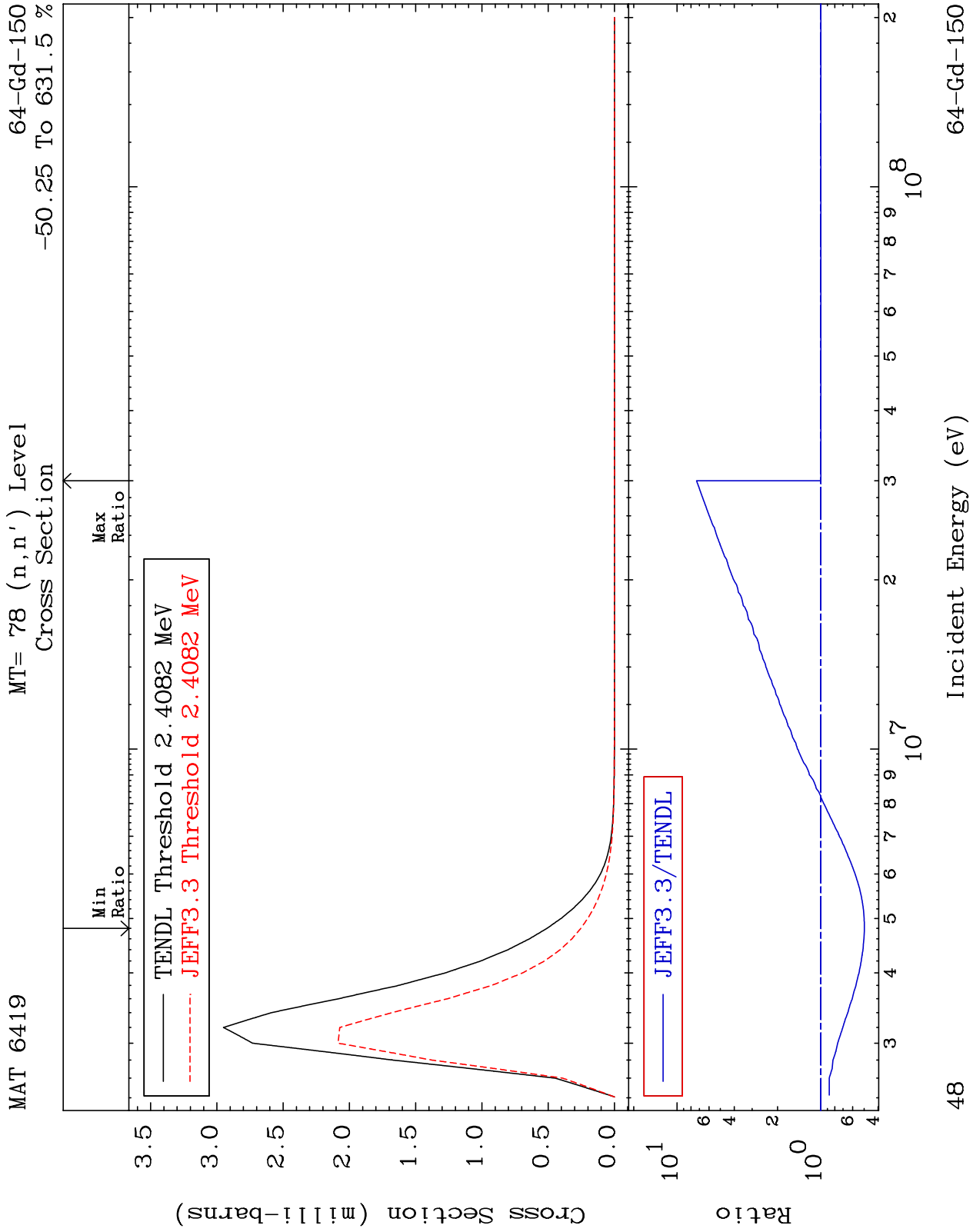


MAT 6419

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

64-Gd-150
-42.63 To 0.054 %

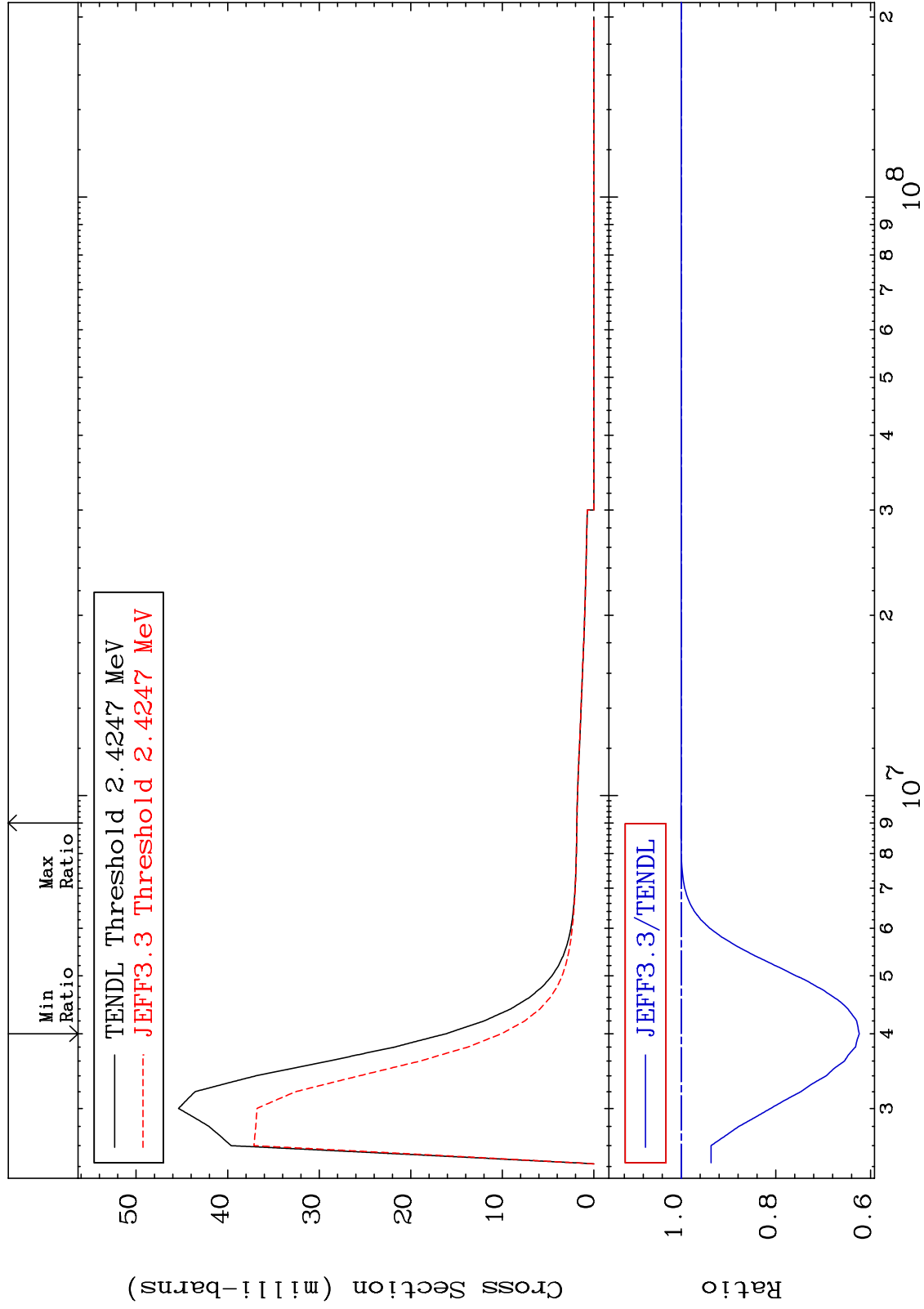




MAT 6419

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

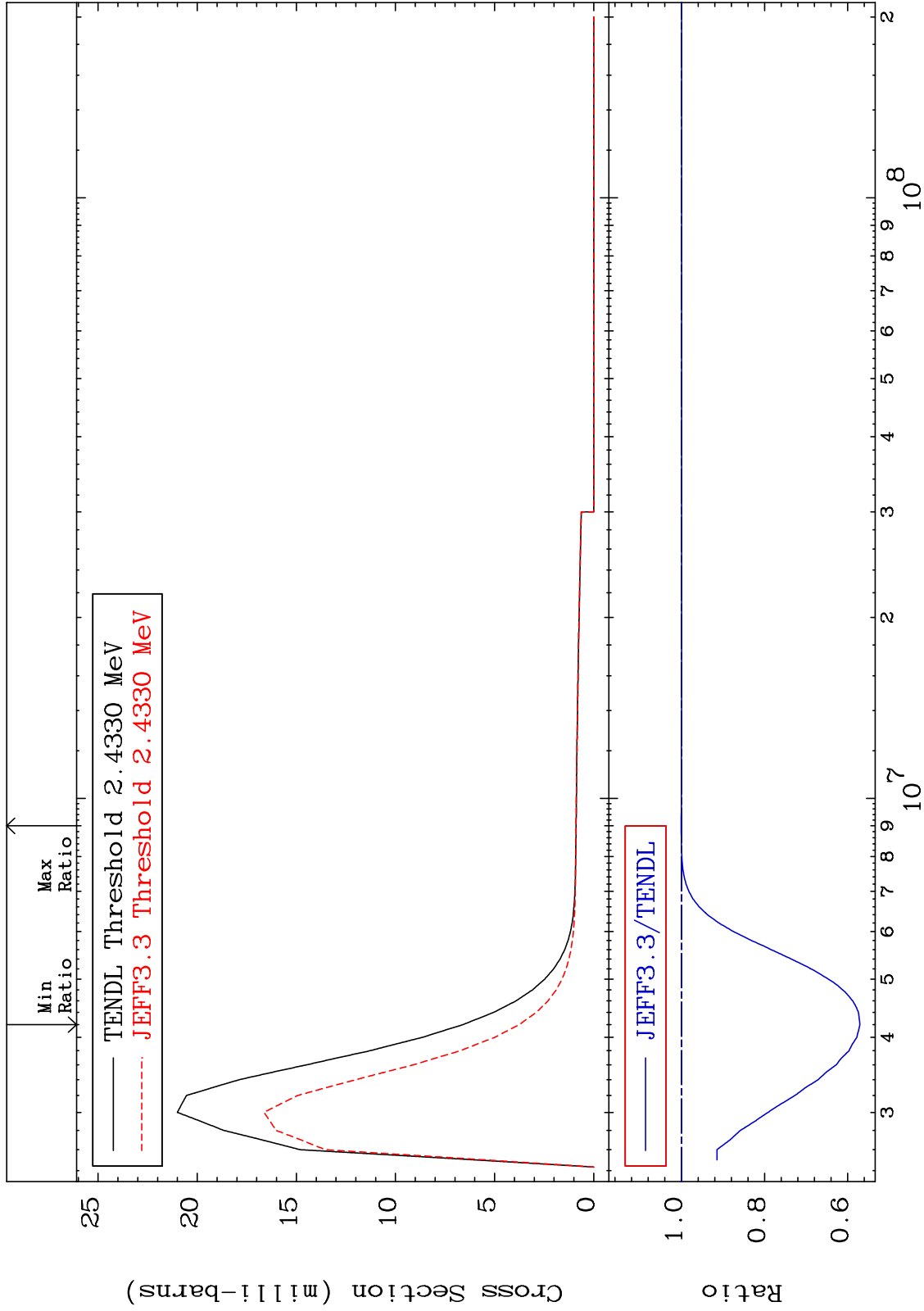
64-Gd-150
-37.61 To 0.027 %



MAT 6419

MT= 80 (n, n') Level
Cross Section

64-Gd-150
-42.96 To 0.065 %



50

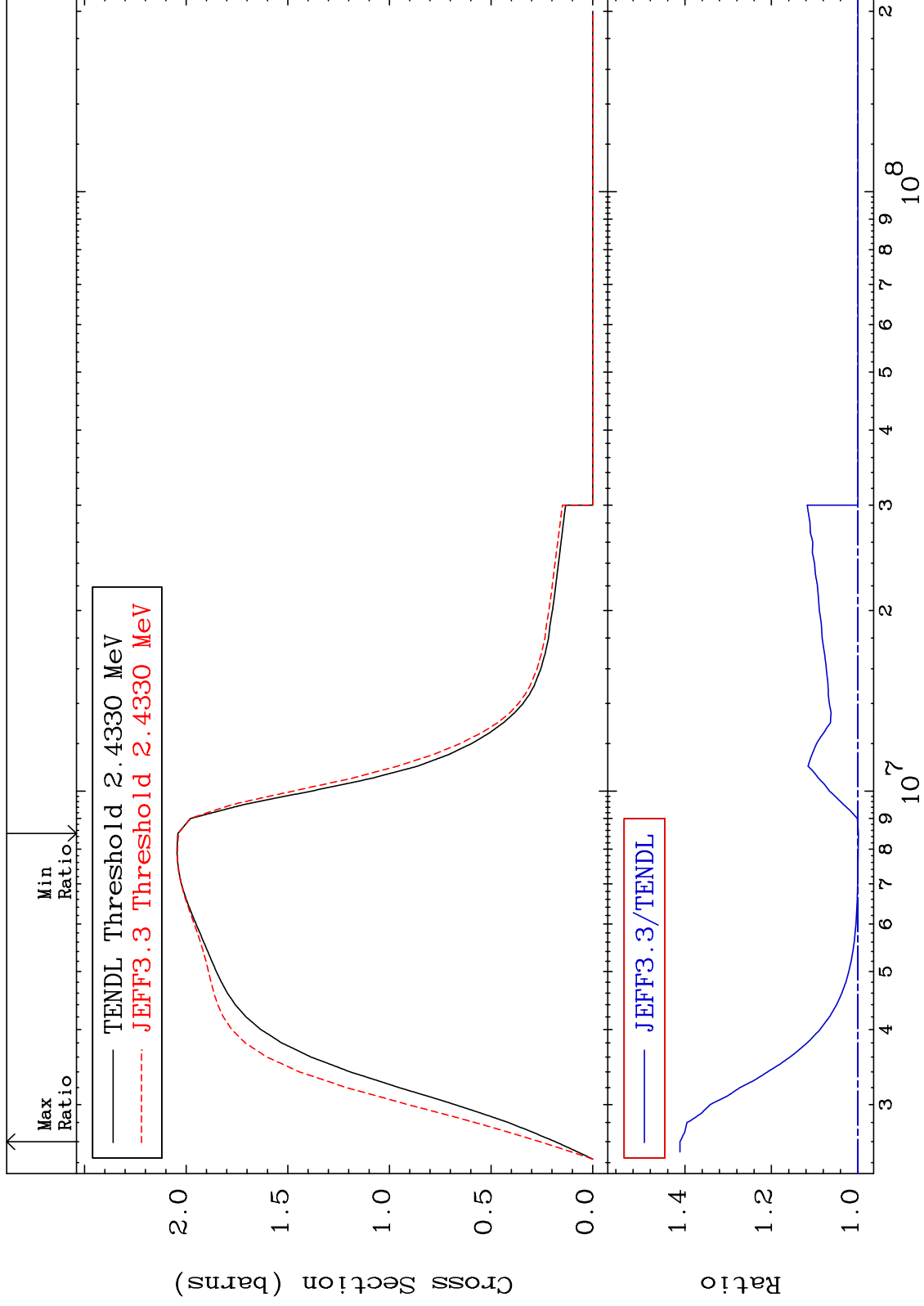
Incident Energy (eV)

64-Gd-150

MAT 6419

(n, n') Continuum
Cross Section

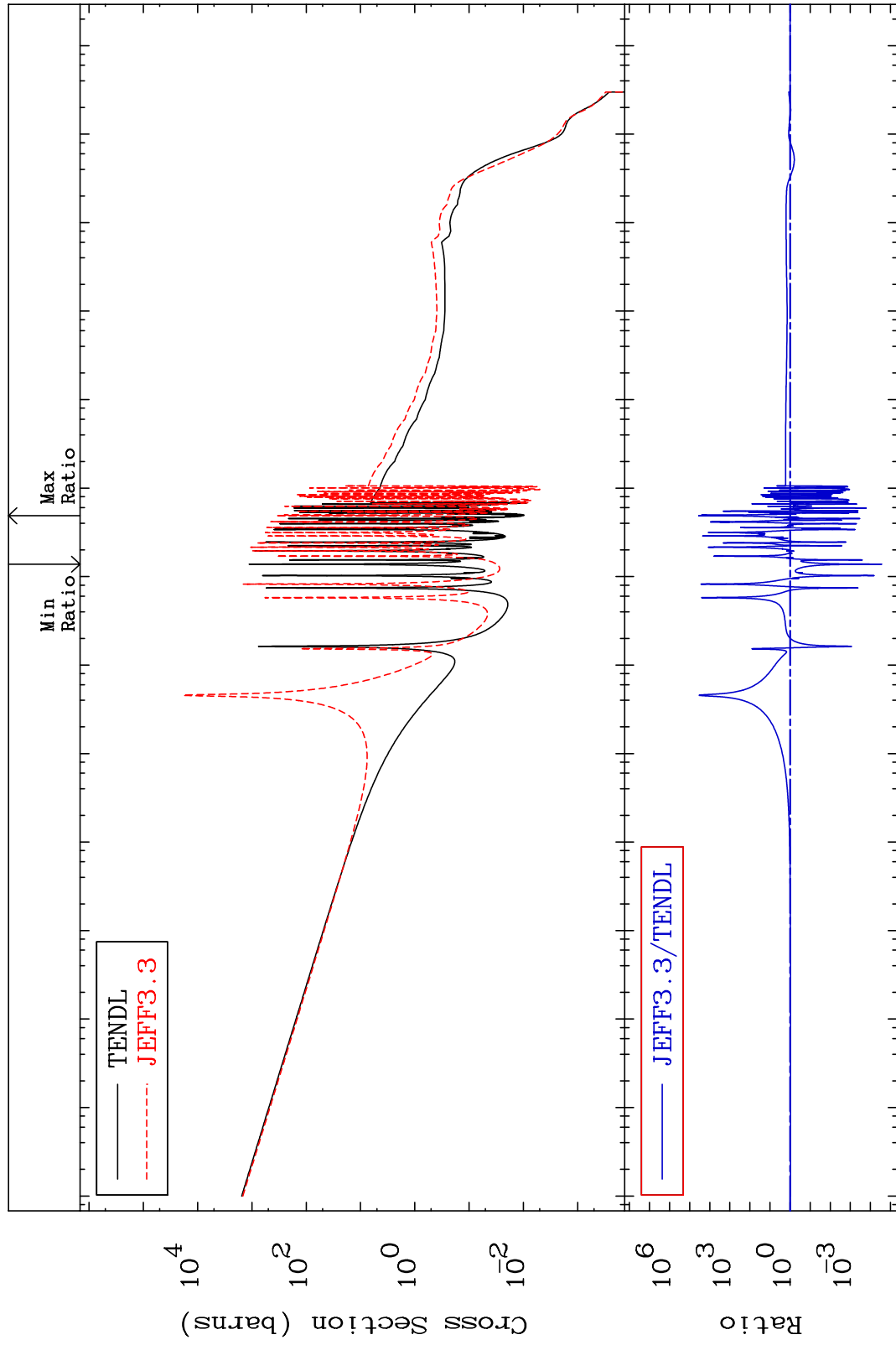
64-Gd-150
-0.132 To 41.14 %



MAT 6419

(n, γ)
Cross Section

64-Gd-150
-100.0 To 9999. %



52

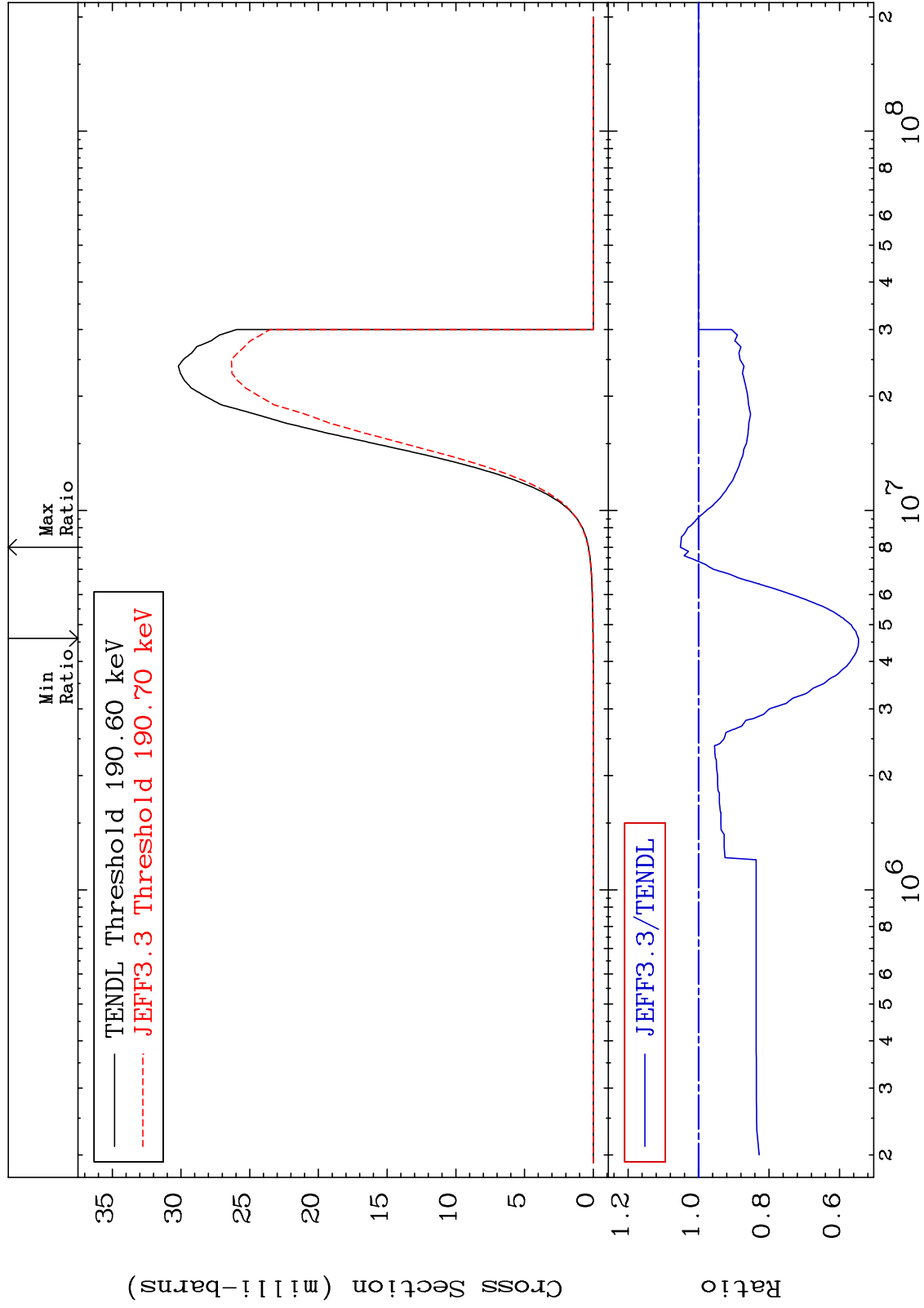
Incident Energy (eV)

64-Gd-150

MAT 6419

(n, p)
Cross Section

64-Gd-150
-45.38 To 5.130 %



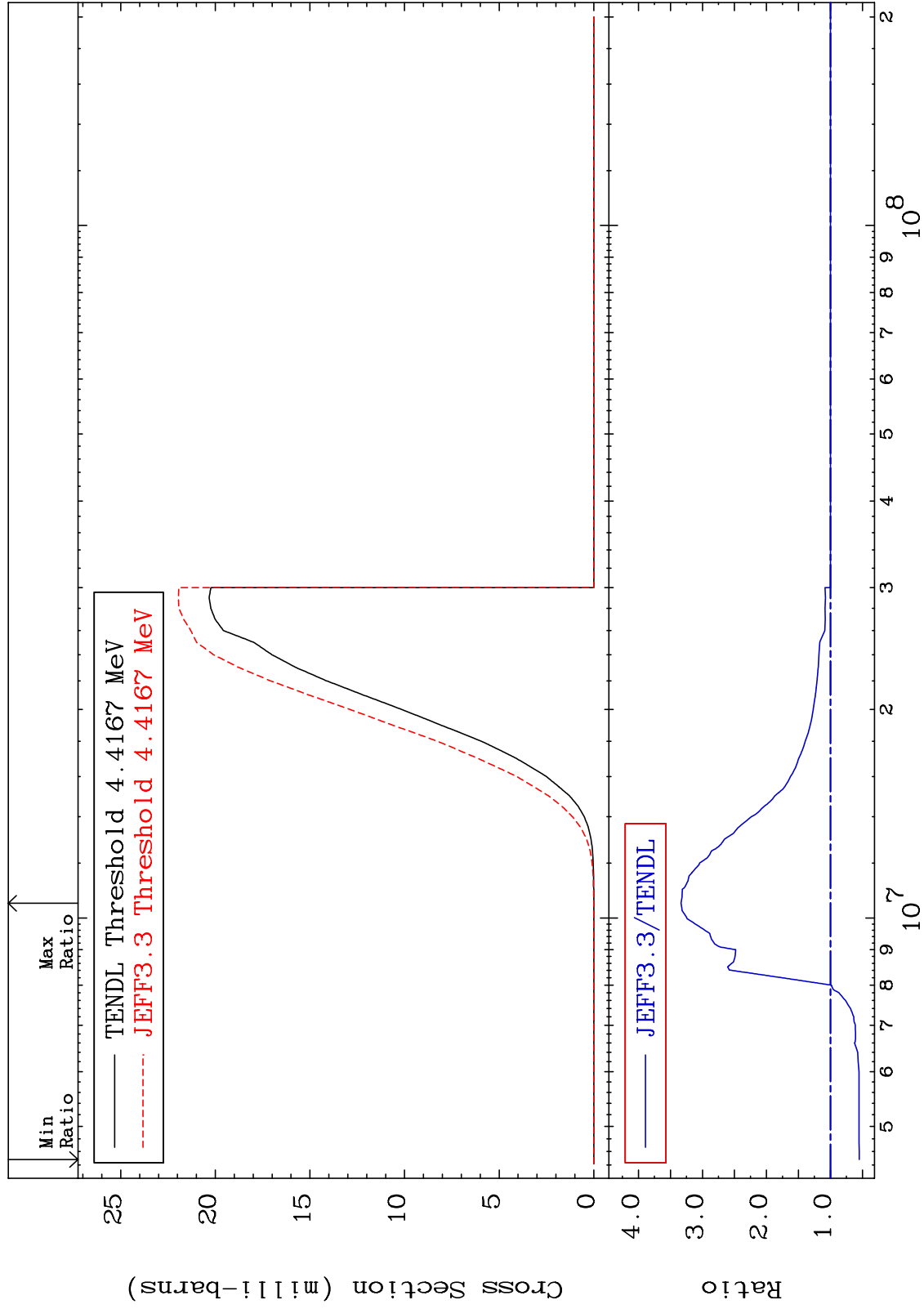
MAT 6419

(n, d)

64-Gd-150

Cross Section

-45.04 To 233.4 %



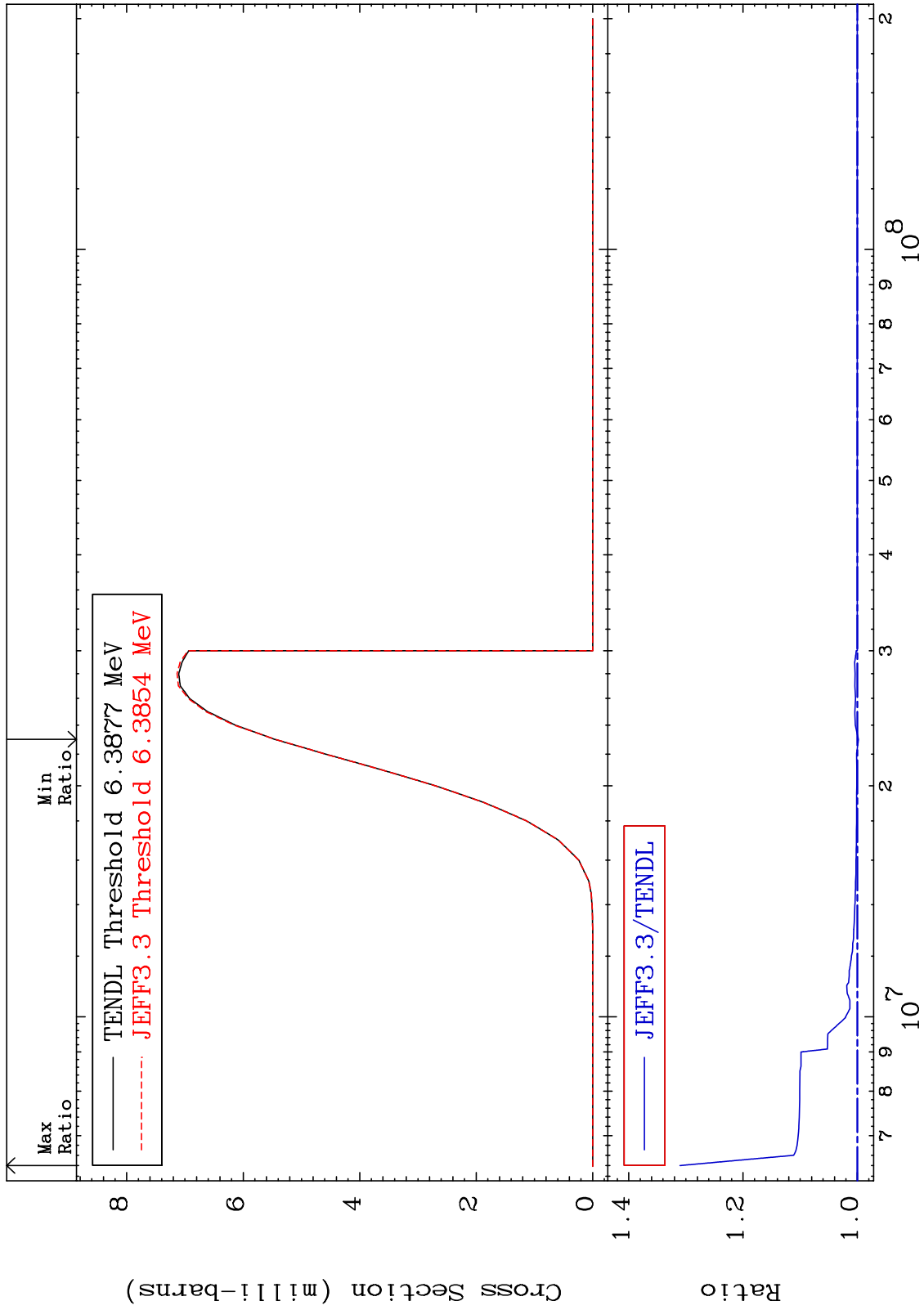
MAT 6419

(n, t)

64-Gd-150

Cross Section

-0.181 To 31.03 %



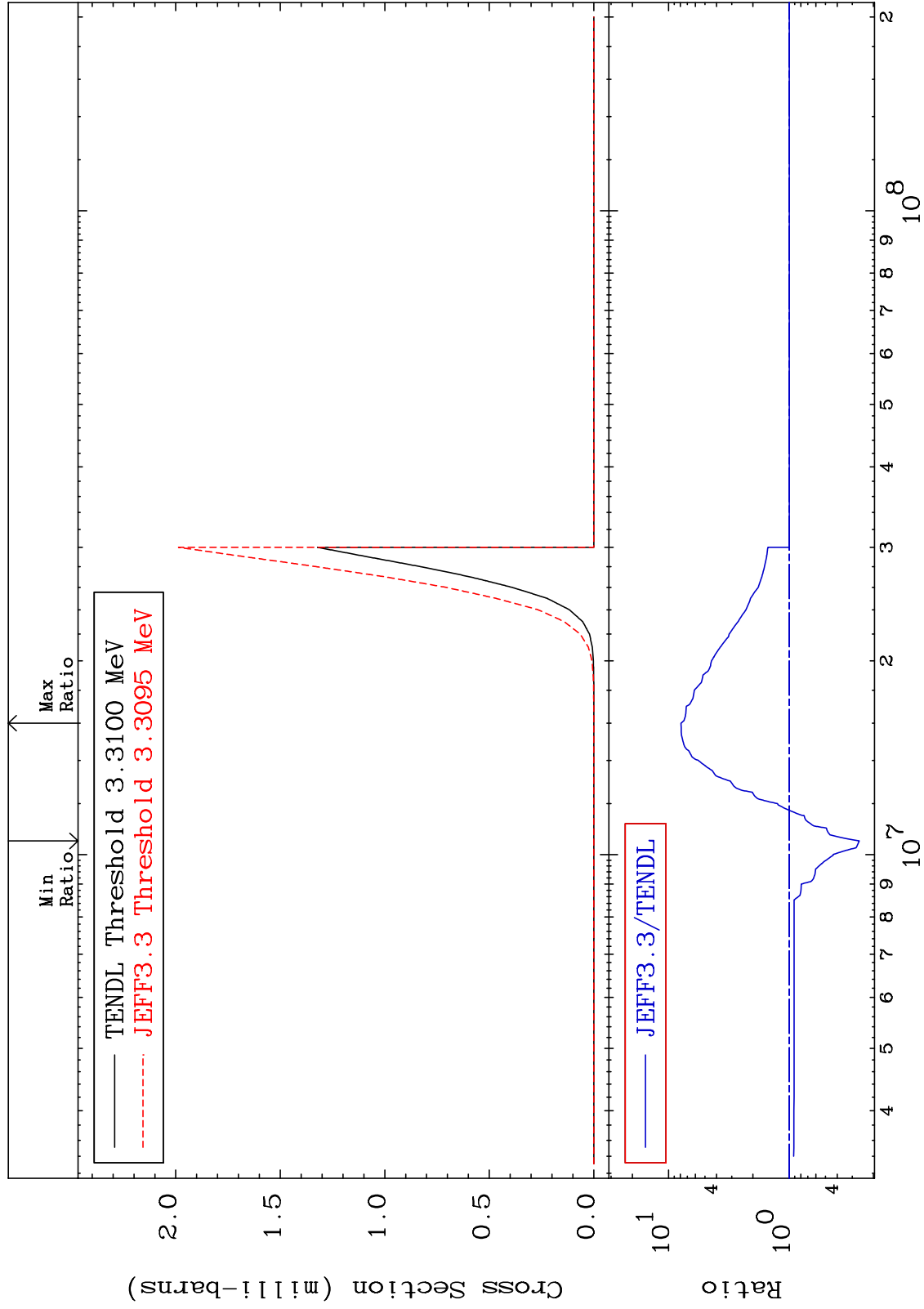
MAT 6419

(n, He-3)

64-Gd-150

-73.77 To 688.7 %

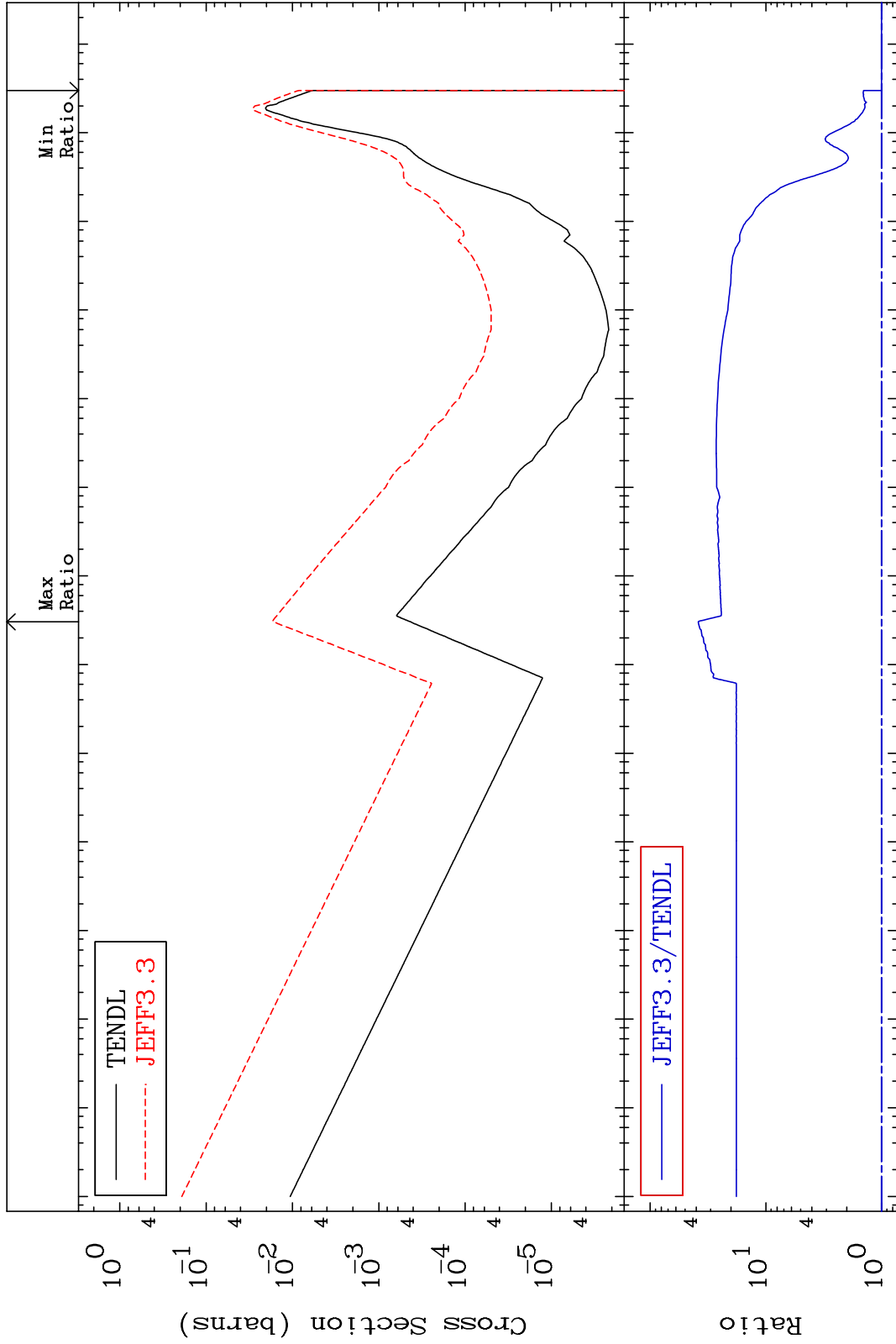
Cross Section



MAT 6419

(n, α)
Cross Section

64-Gd-150
To 3735. %



Incident Energy (eV)

64-Gd-150

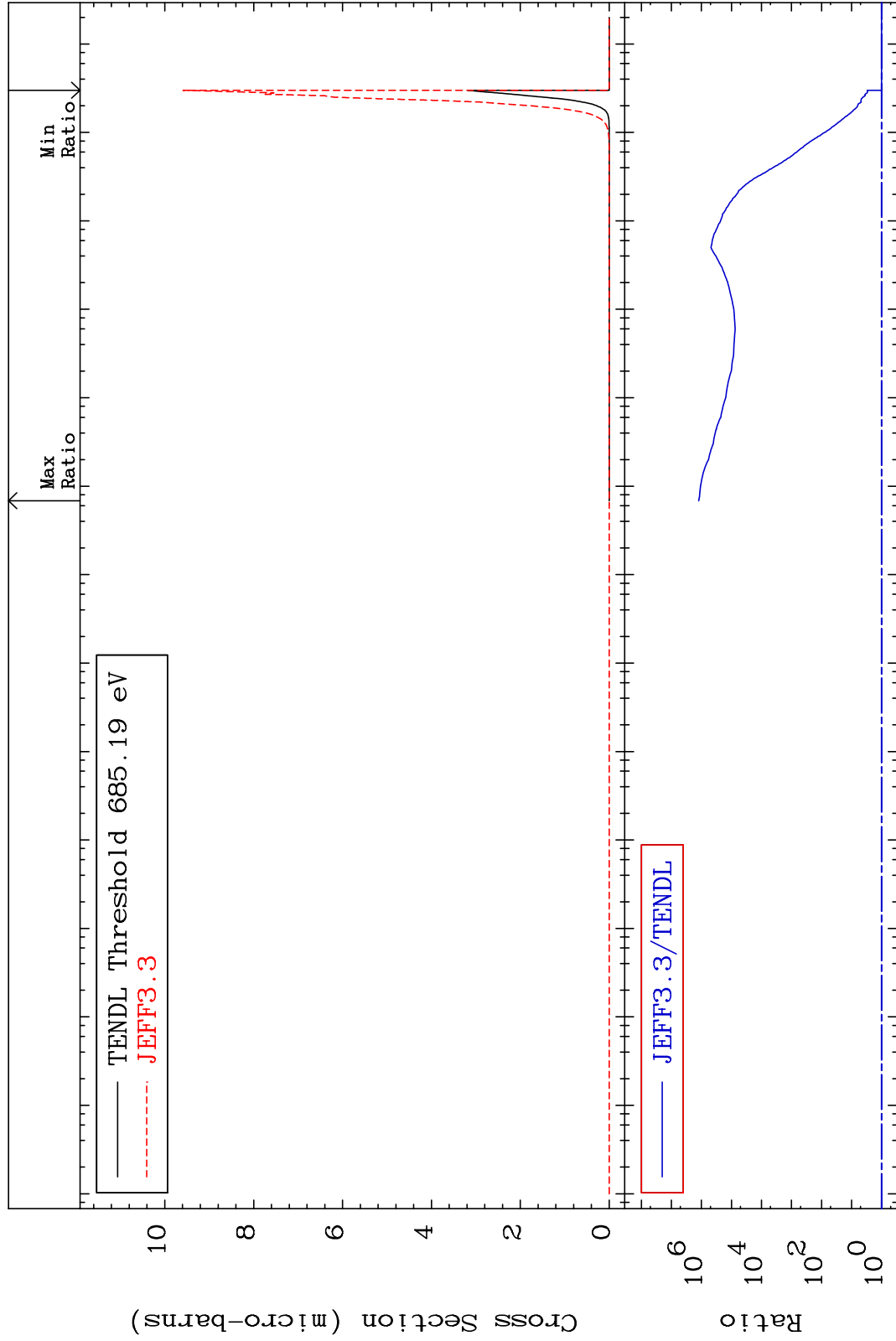
MAT 6419

(n,2α)

64-Gd-150

Cross Section

0.000 To 9999. %



10⁶
10⁴
10²
10⁰
10⁻²
10⁻⁴
10⁻⁵

10⁻⁵ 10⁻⁴ 10⁻³ 10⁻² 10⁻¹ 10⁰ 10¹ 10² 10³ 10⁴ 10⁵ 10⁶ 10⁷ 10⁸

Incident Energy (eV)

64-Gd-150

58

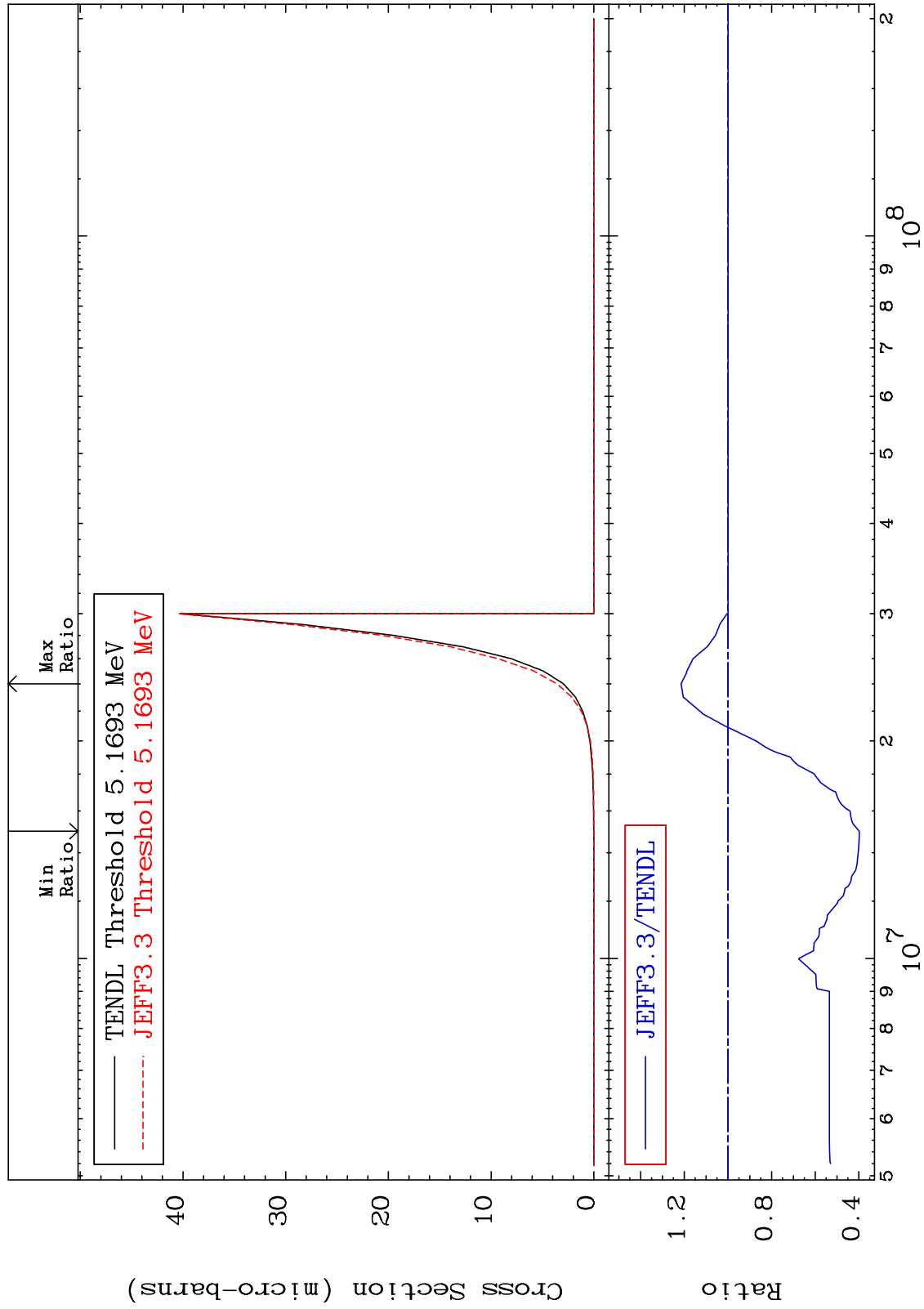
MAT 6419

(n,2p)

64-Gd-150

-60.19 To 21.49 %

Cross Section



59

Incident Energy (eV)

64-Gd-150

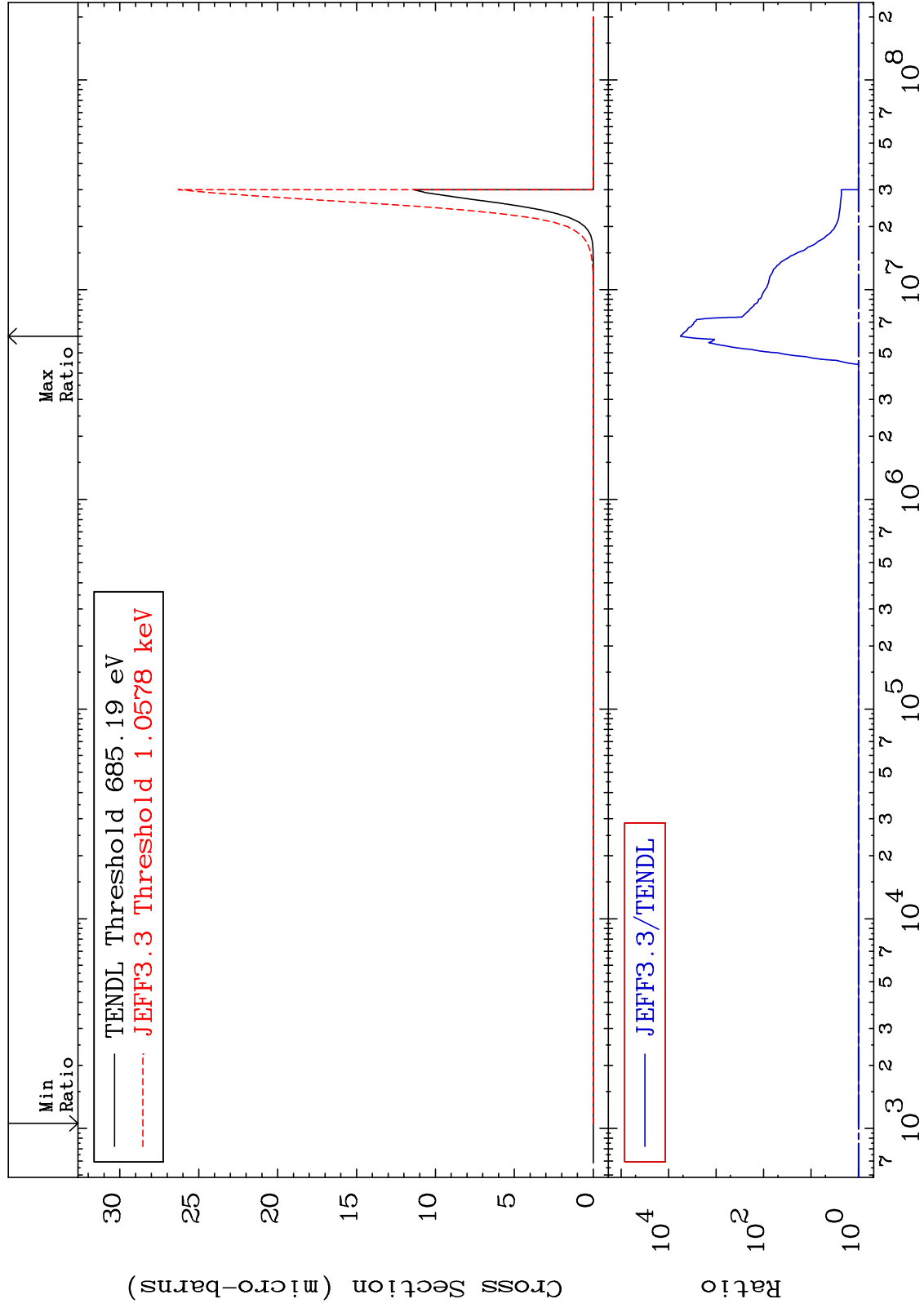
MAT 6419

(n,p) α

64-Gd-150

Cross Section

0.000 To 9999. %



60

Incident Energy (eV)

64-Gd-150

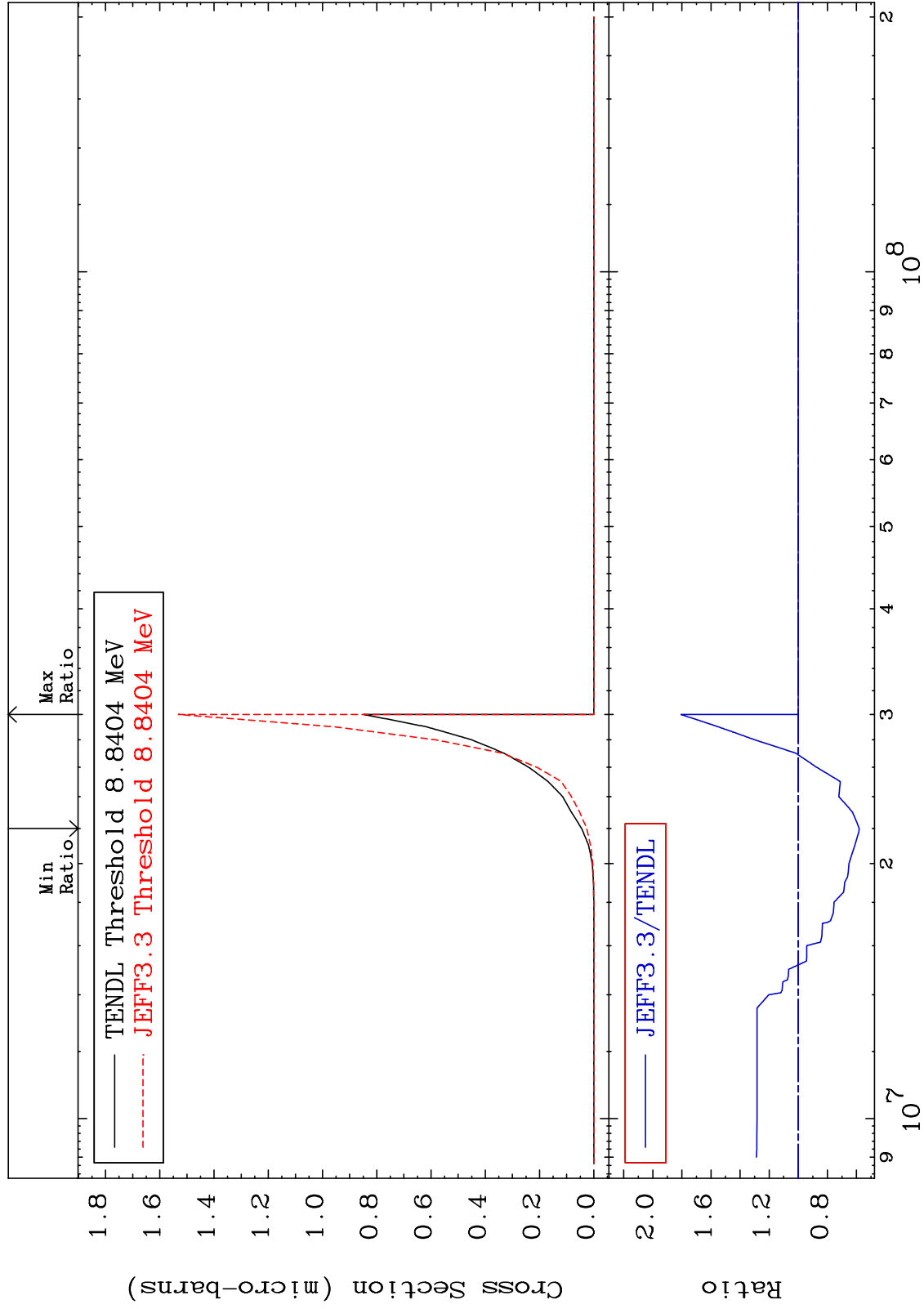
MAT 6419

(n,p) d

64-Gd-150

Cross Section

-41.94 To 80.57 %



61

Incident Energy (eV)

64-Gd-150

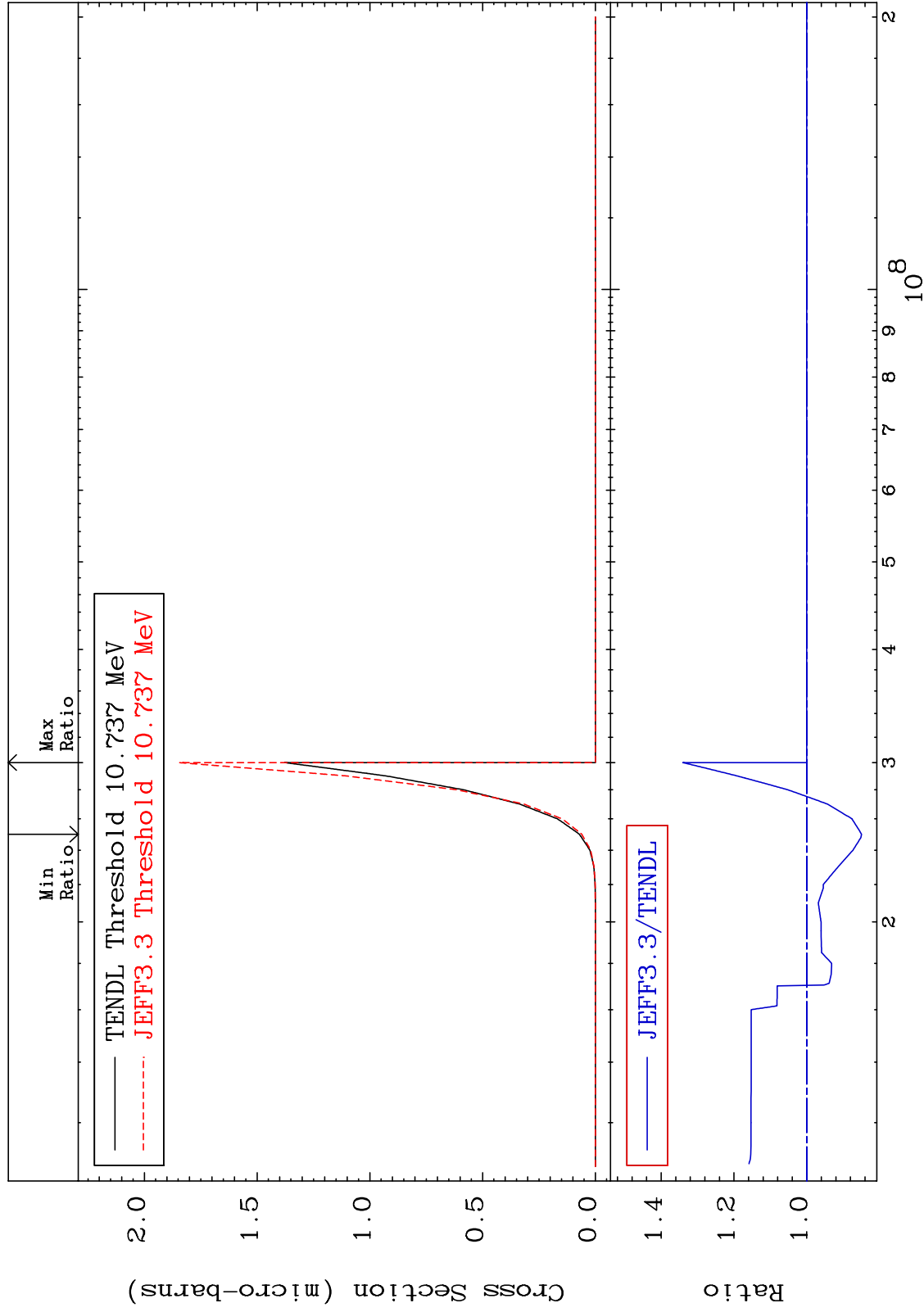
MAT 6419

(n,p) t

64-Gd-150

Cross Section

-15.05 To 34.04 %



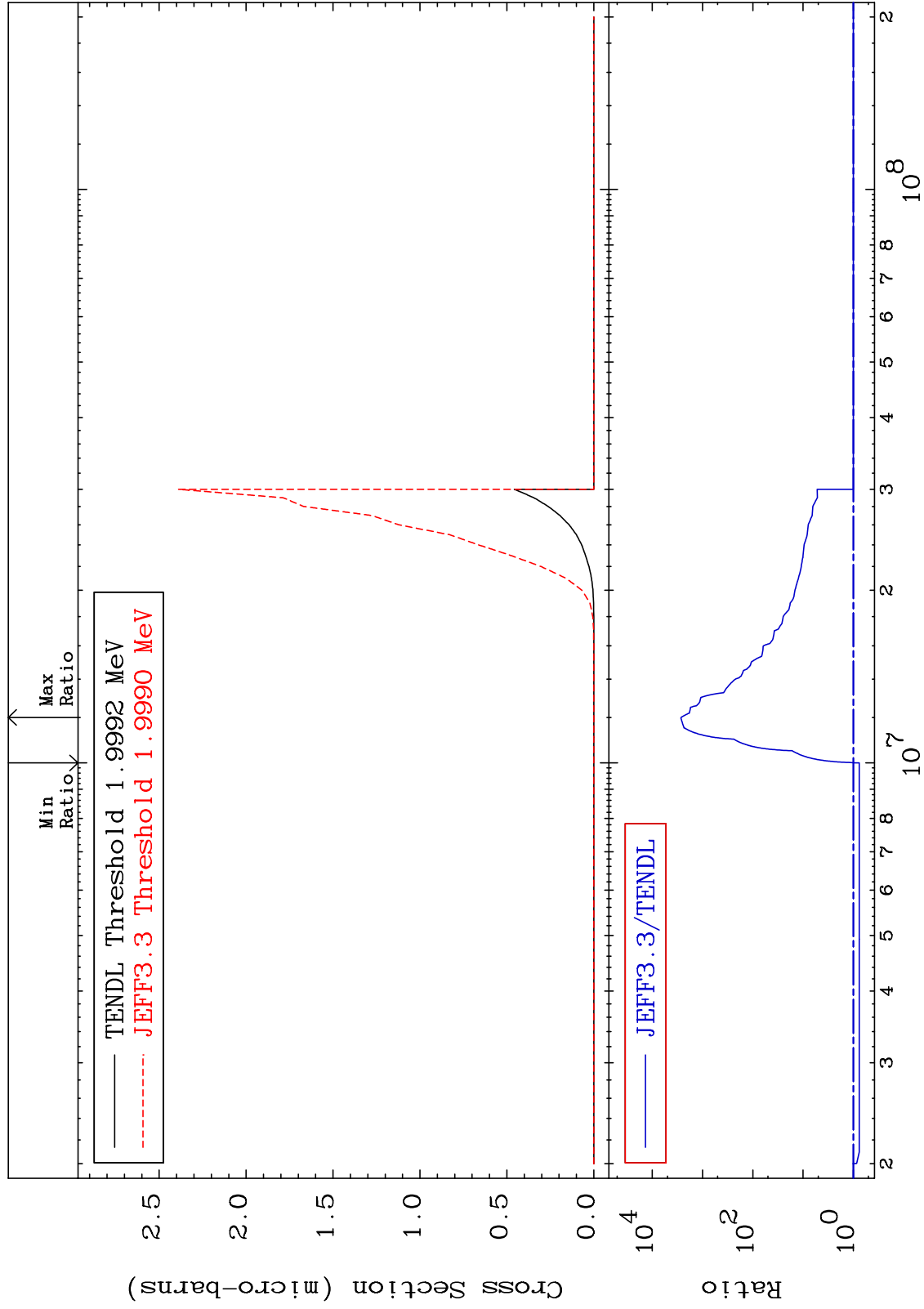
MAT 6419

(n,d) α

64-Gd-150

-23.88 To 9999. %

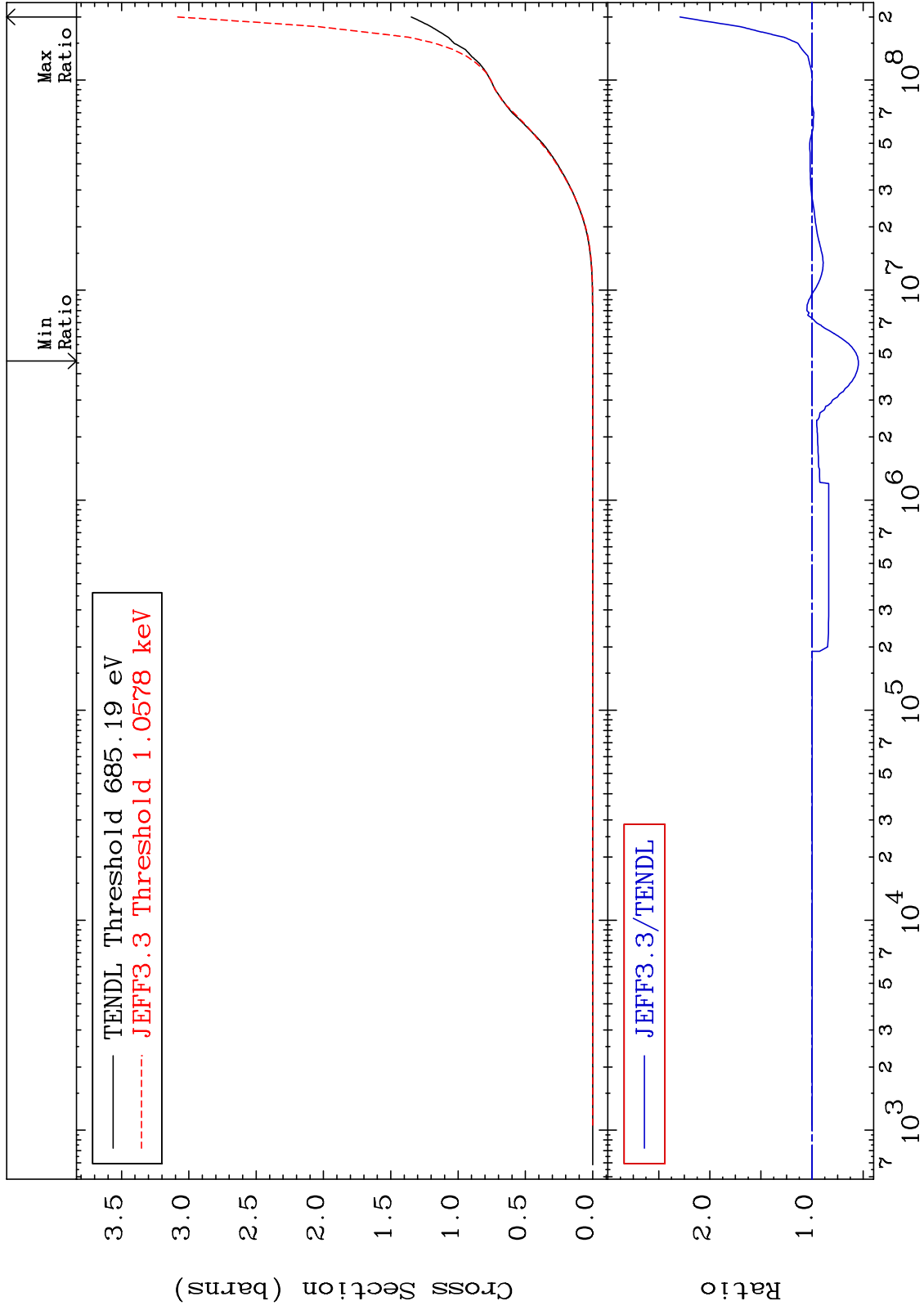
Cross Section



MAT 6419

Hydrogen Production
Cross Section

64-Gd-150
-45.38 To 129.2 %



64

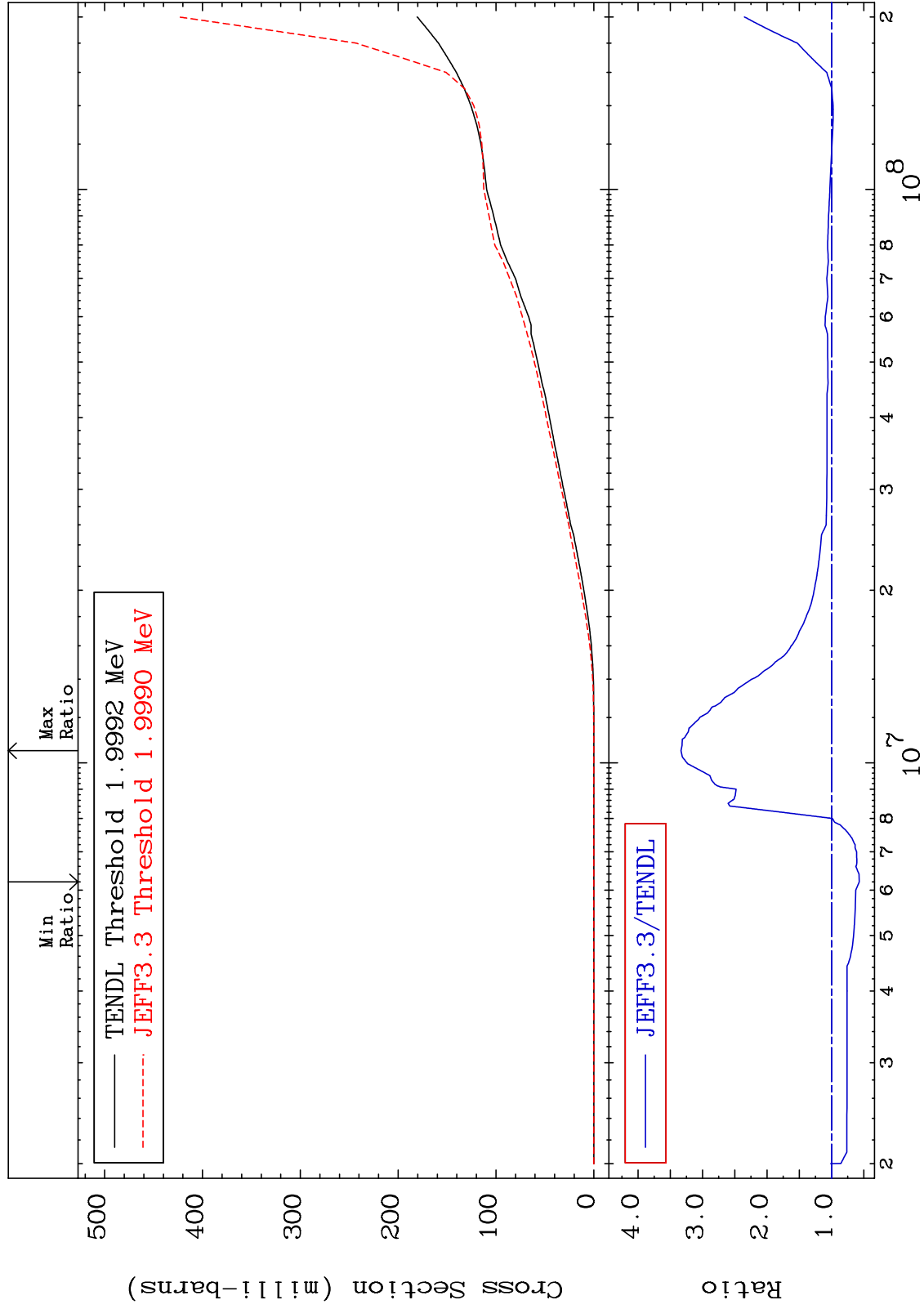
Incident Energy (eV)

64-Gd-150

MAT 6419

Deuterium Production
Cross Section

64-Gd-150
-43.01 To 233.4 %



65

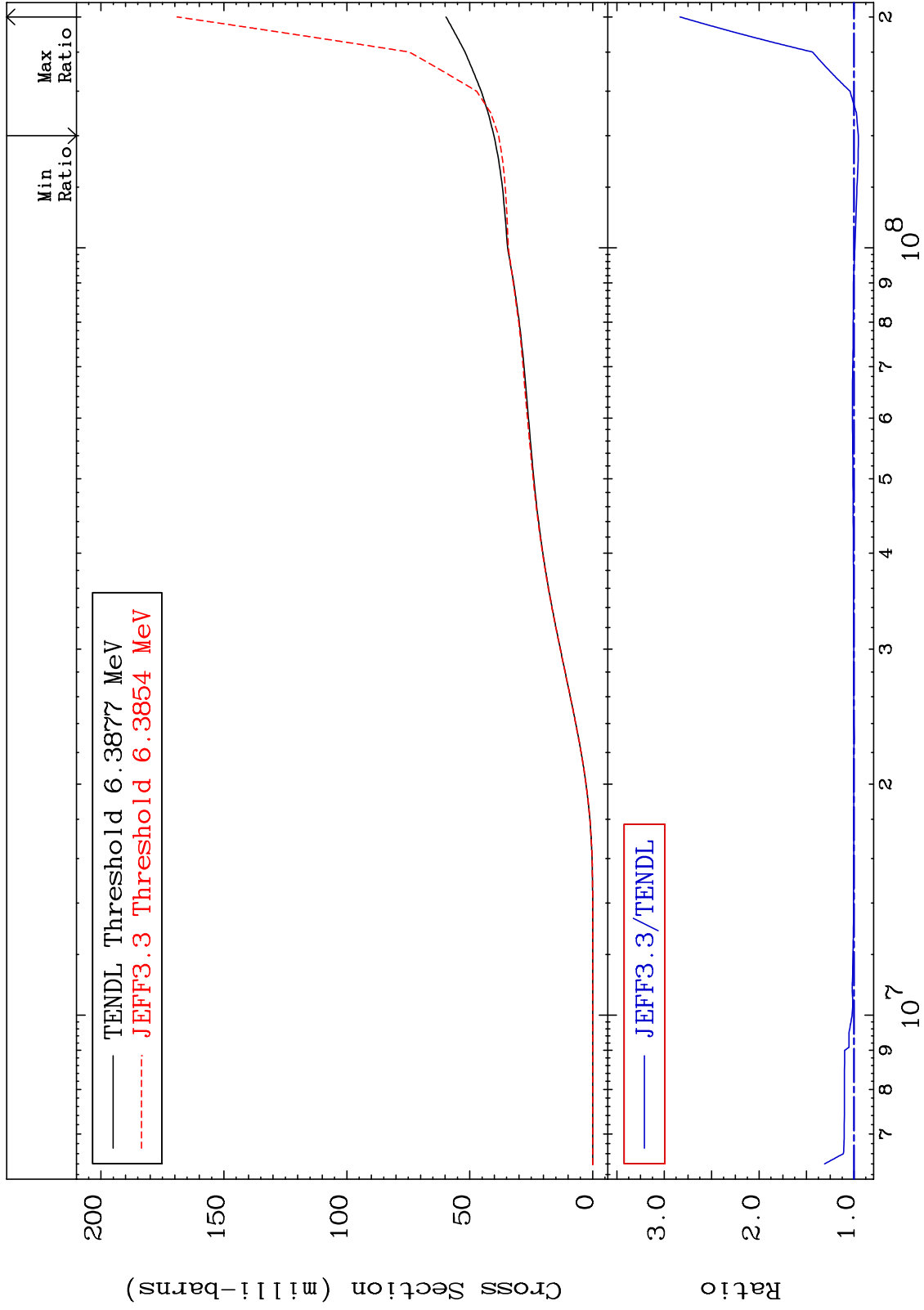
Incident Energy (eV)

64-Gd-150

MAT 6419

Tritium Production
Cross Section

64-Gd-150
-4.668 To 183.4 %



66

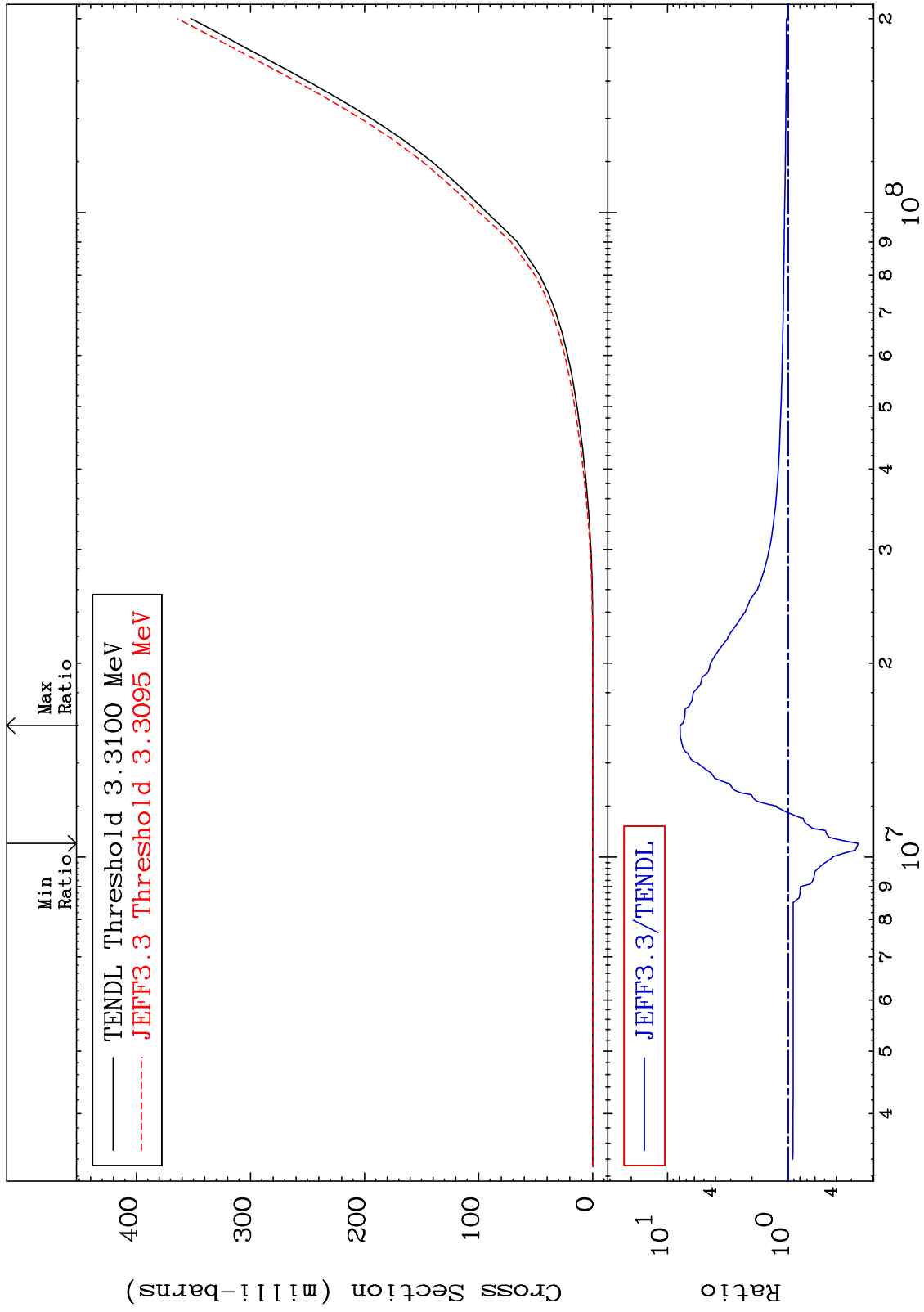
Incident Energy (eV)

64-Gd-150

MAT 6419

He-3 Production
Cross Section

64-Gd-150
-73.77 To 688.7 %



67

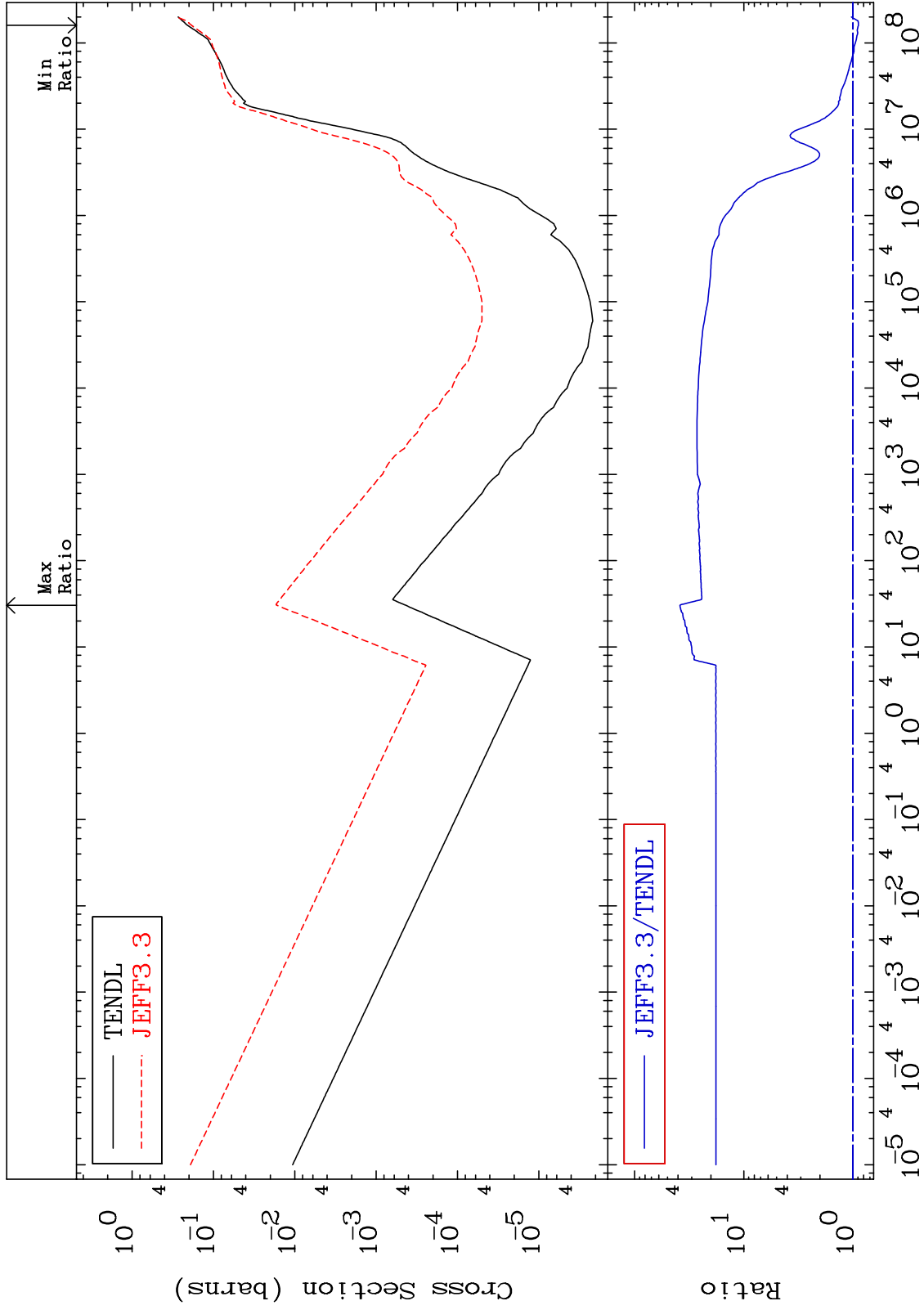
Incident Energy (eV)

64-Gd-150

MAT 6419

He-4 Production
Cross Section

64-Gd-150
-10.89 To 3735. %



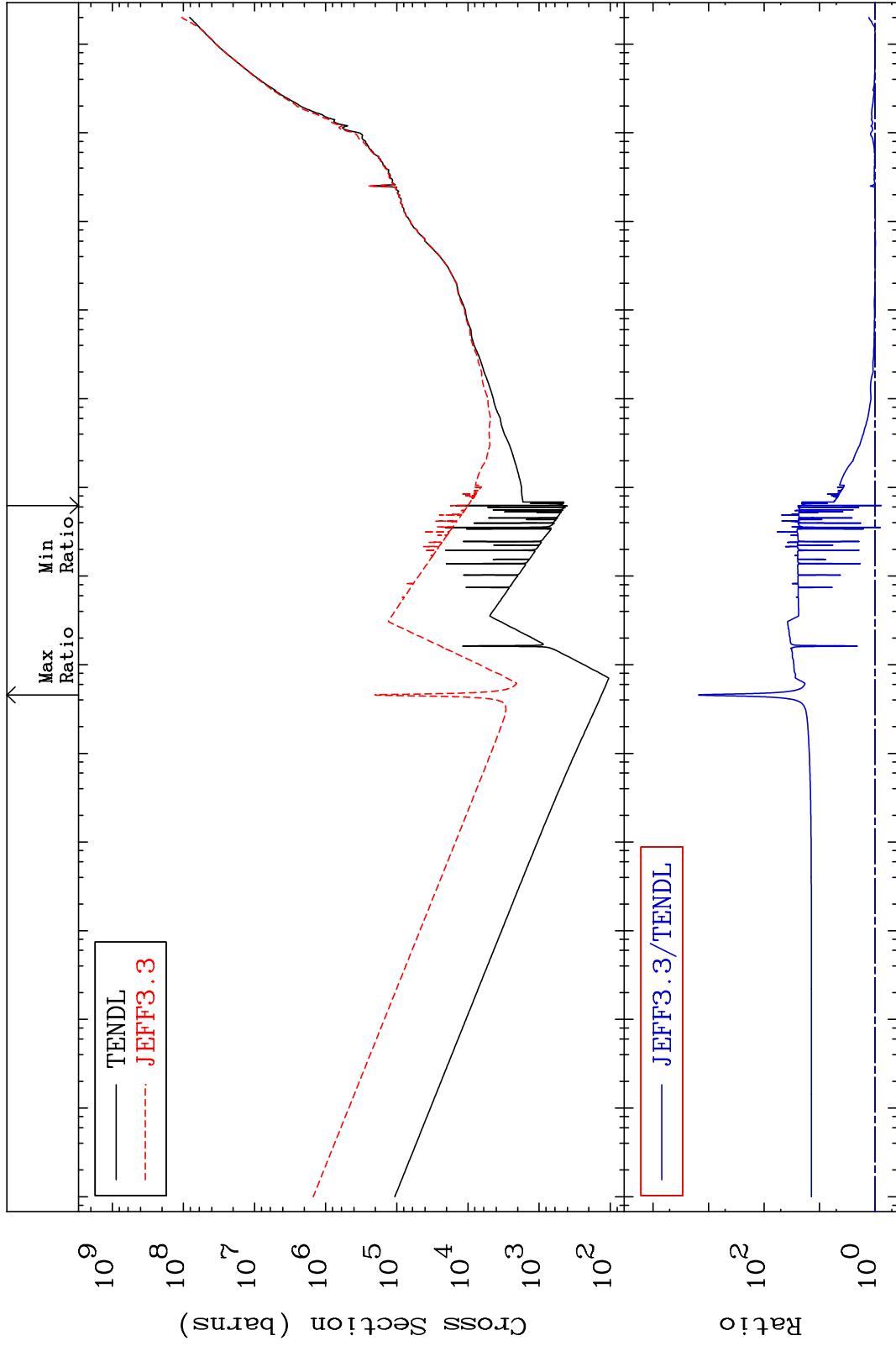
MAT 6419

Kerma total (eV-barns)

64-Gd-150

-23.58 To 9999. %

Cross Section



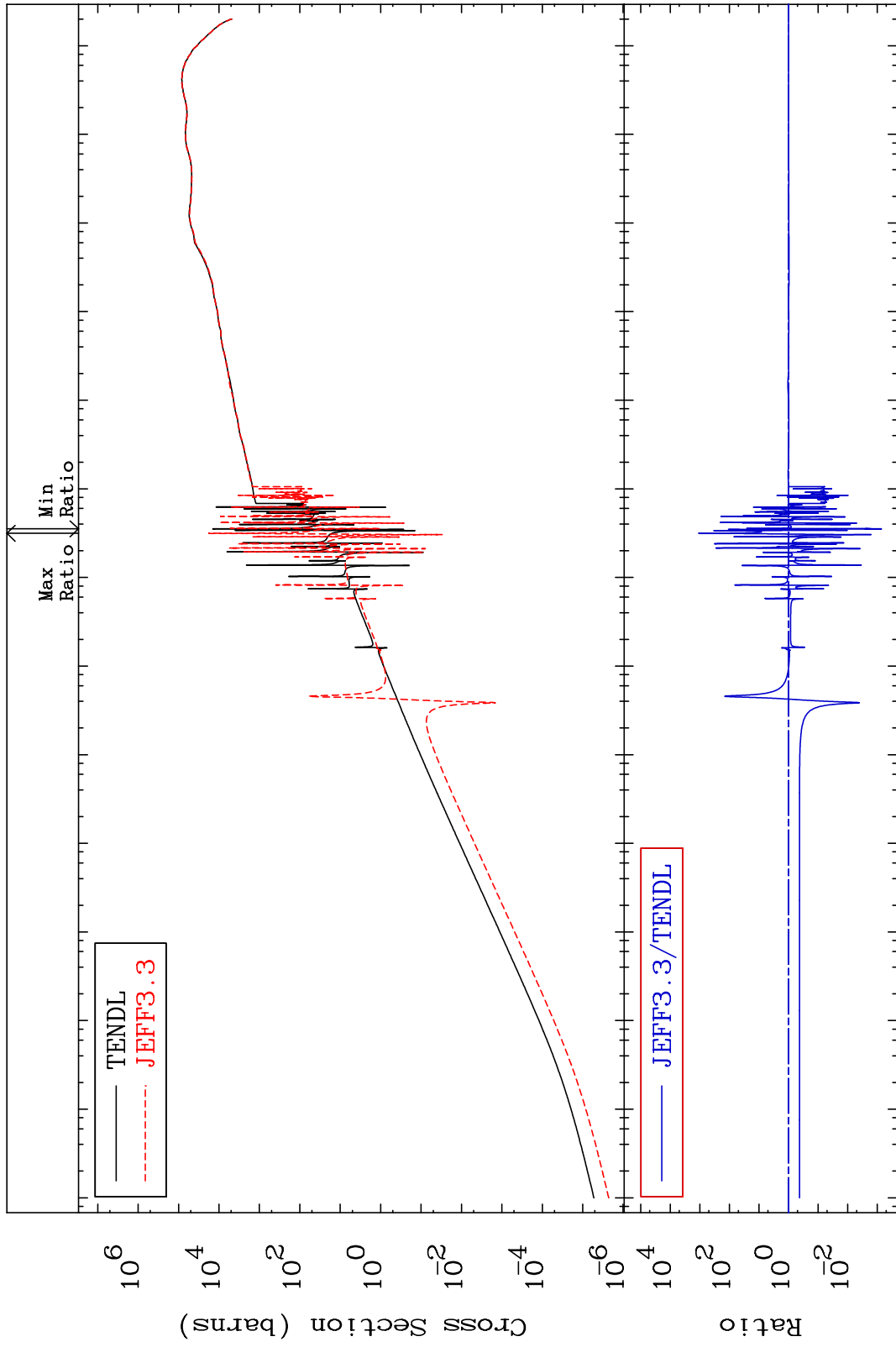
69

64-Gd-150

MAT 6419

Kerma elastic
Cross Section

64-Gd-150
-99.93 To 9999. %



70

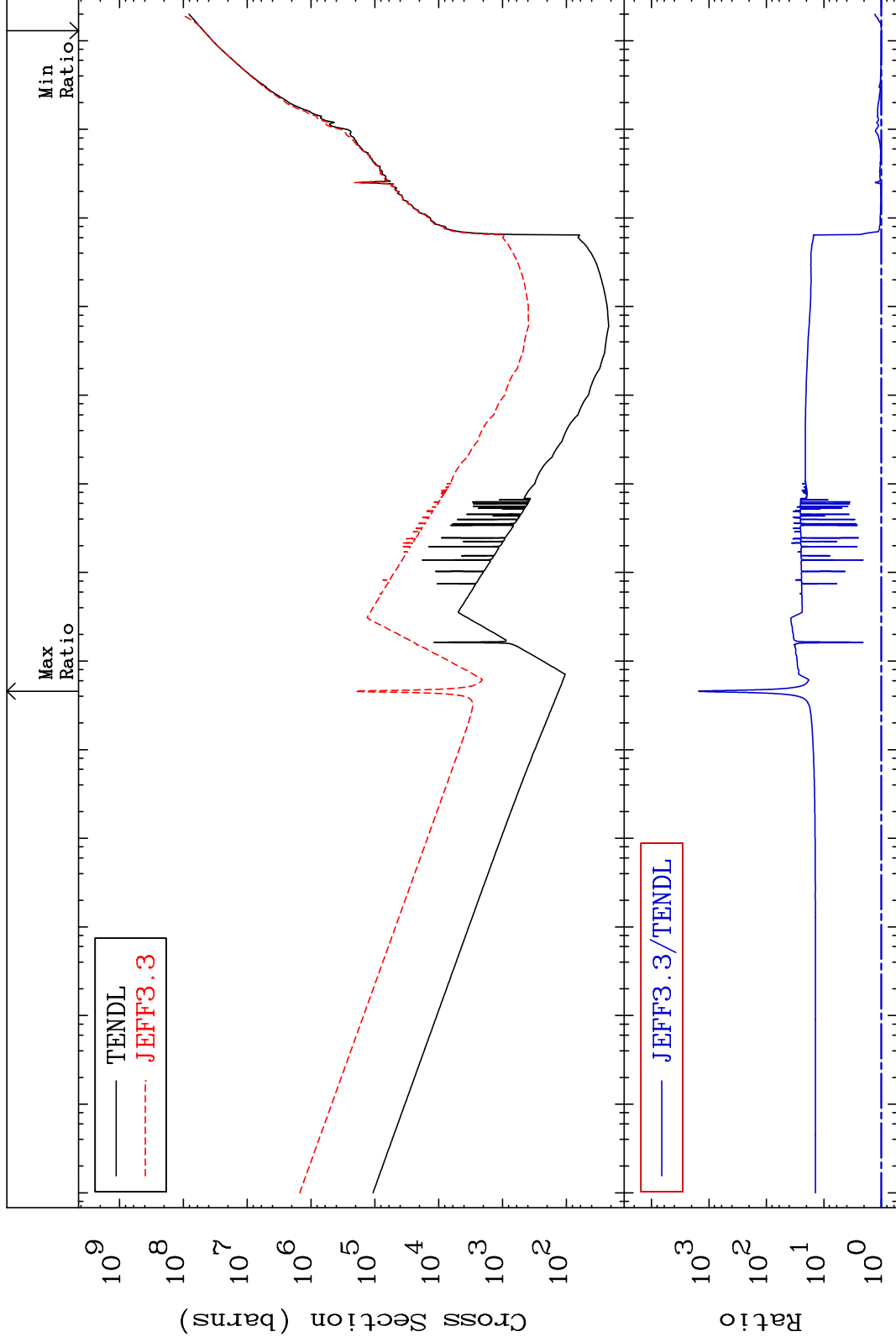
Incident Energy (eV)

64-Gd-150

MAT 6419

Kerma non-elastic (all but mt2)
Cross Section

64-Gd-150
-0.949 To 9999. %



71

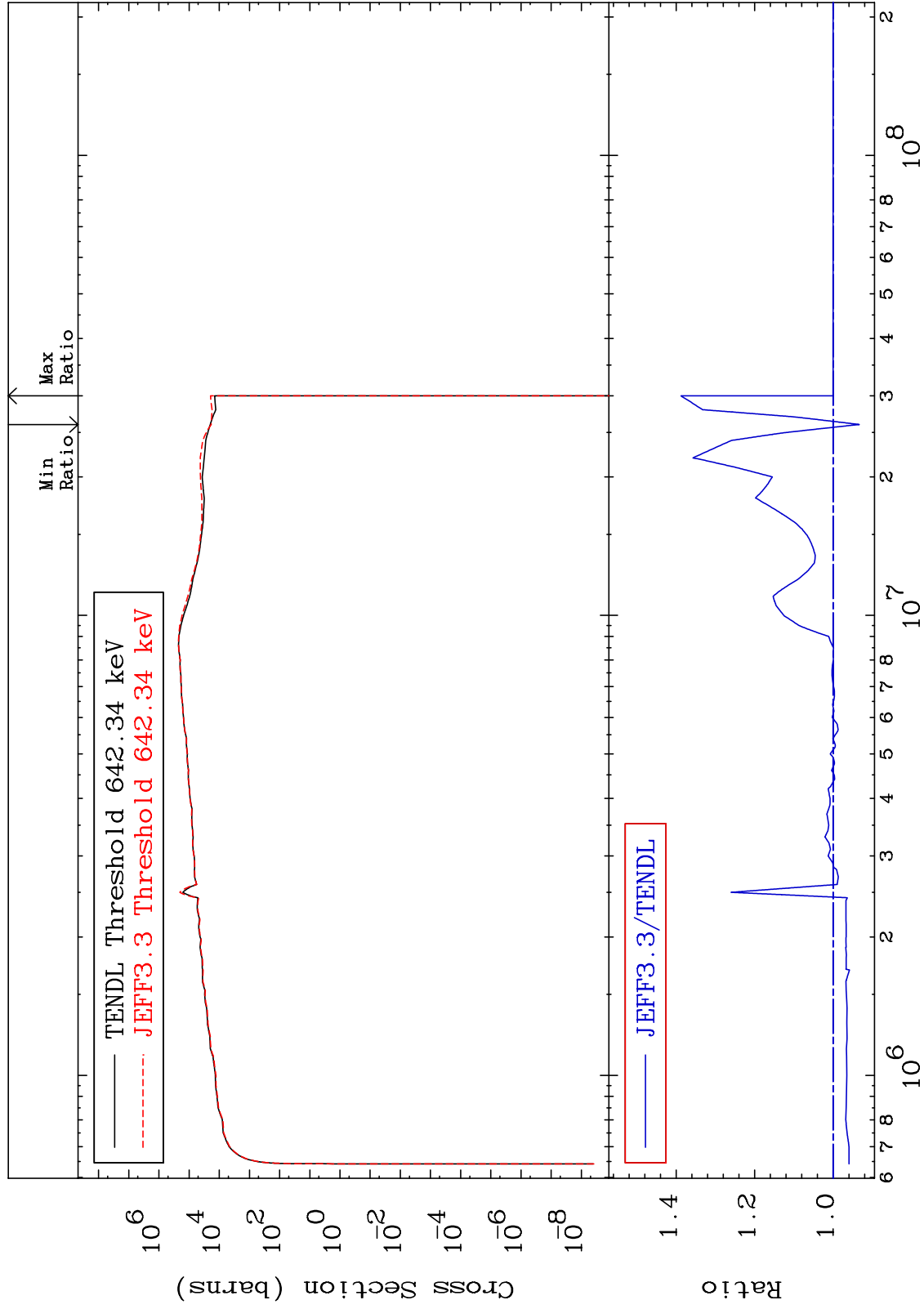
Incident Energy (eV)

64-Gd-150

MAT 6419

Kerma inelastic (mt51-91)
Cross Section

64-Gd-150
-6.648 To 38.75 %



72

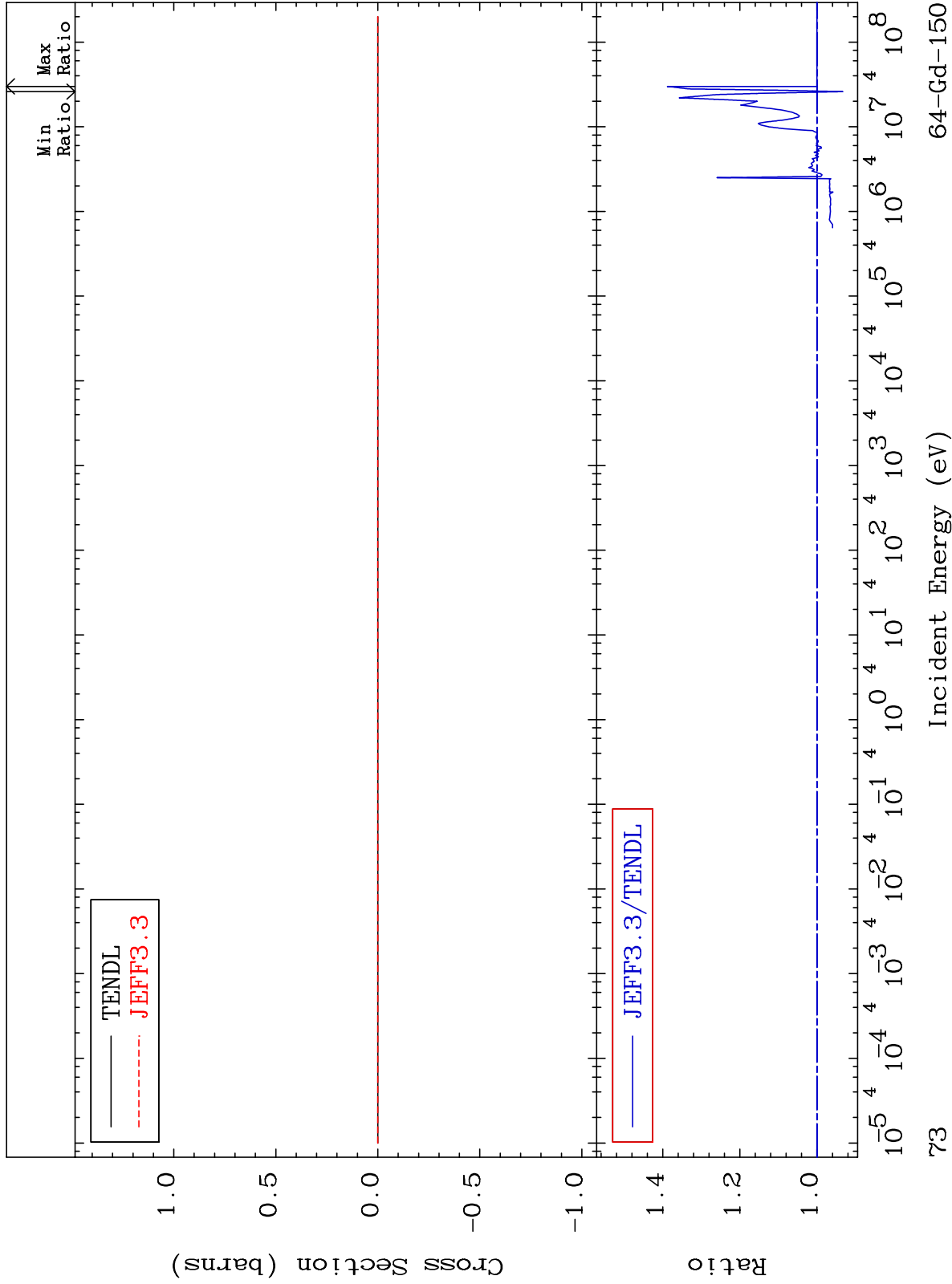
Incident Energy (eV)

64-Gd-150

MAT 6419

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

64-Gd-150
-6.648 To 38.75 %



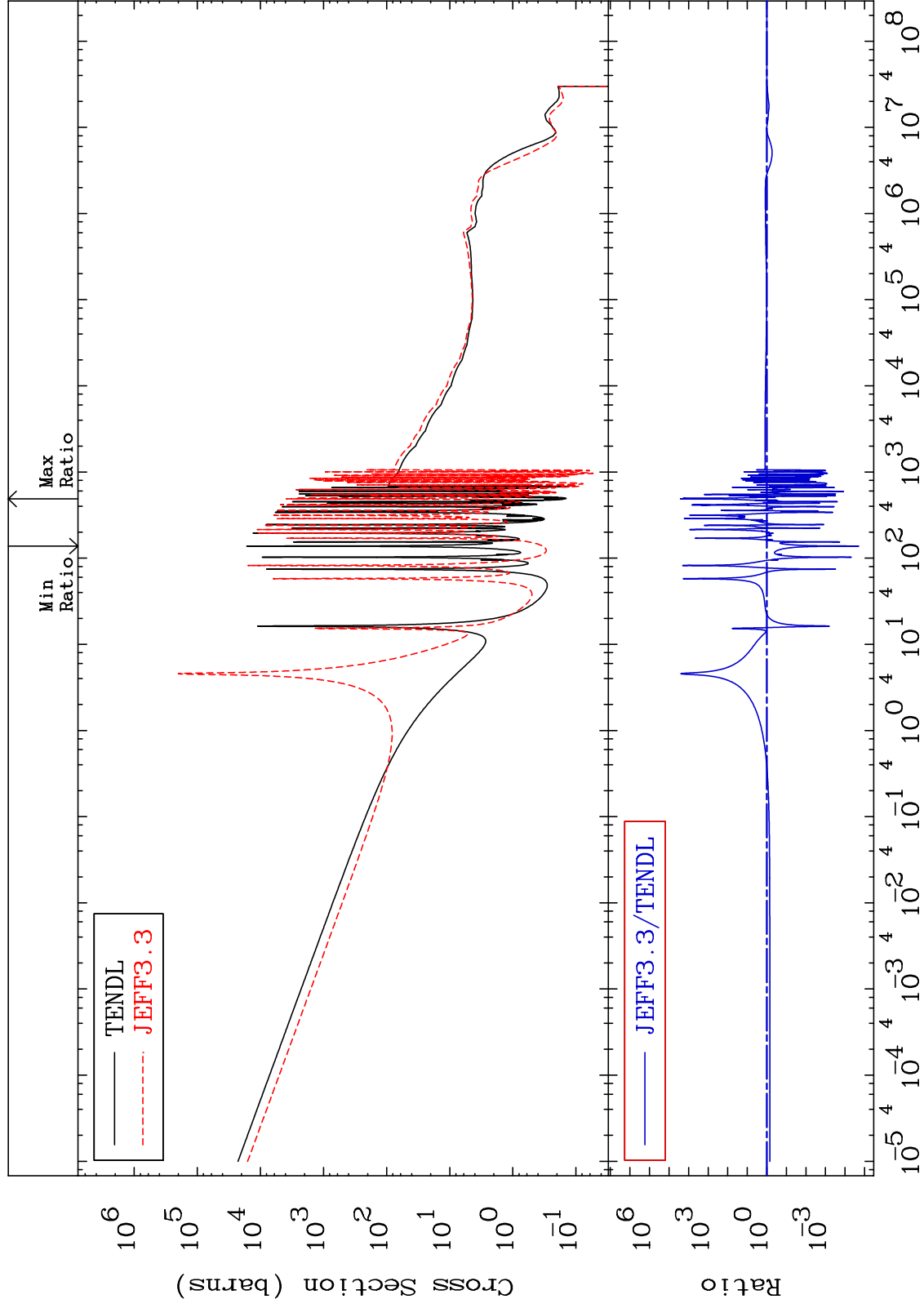
73

64-Gd-150

MAT 6419

Kerma capture (mt102)
Cross Section

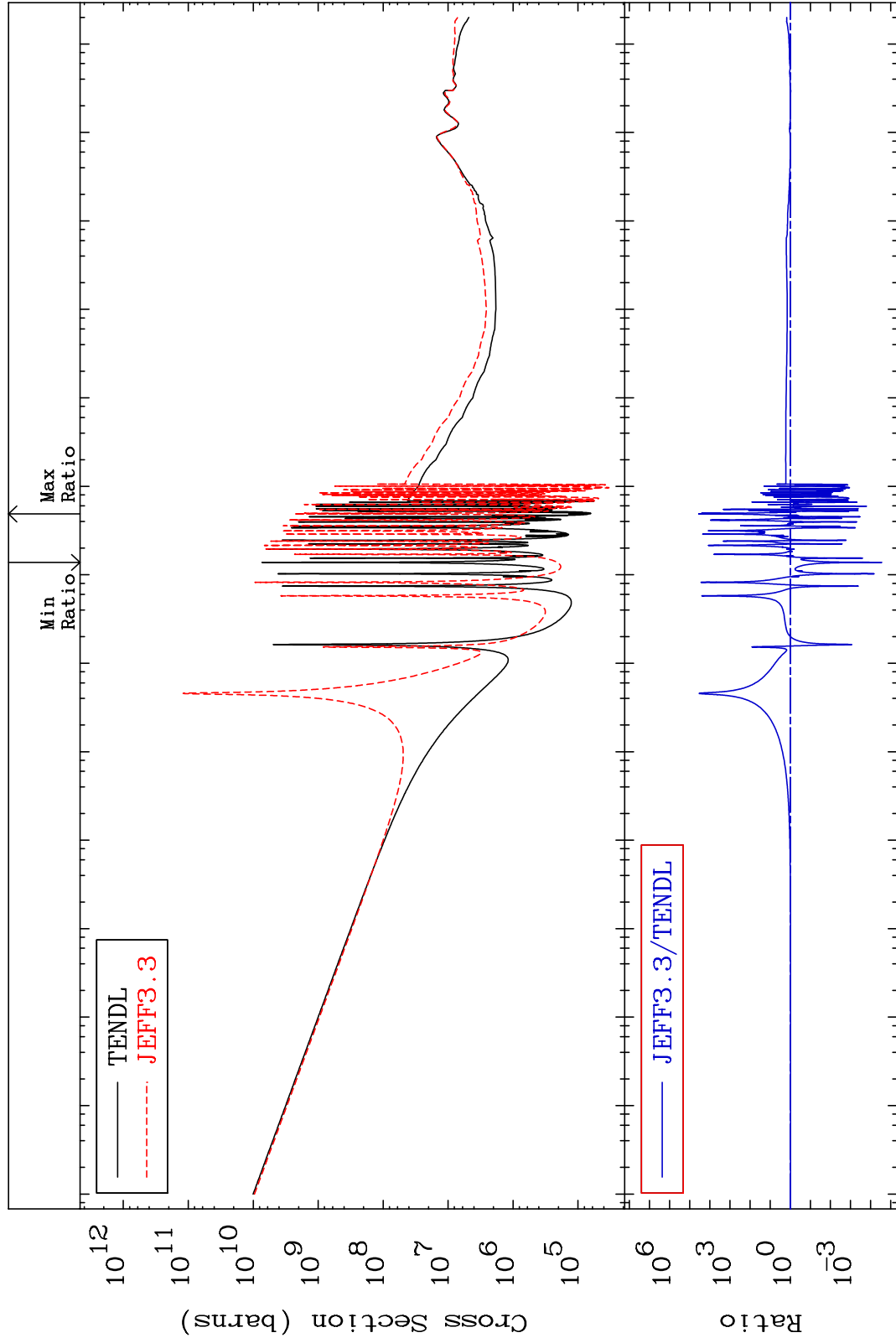
64-Gd-150
-100.0 To 9999. %



MAT 6419

Total photon (eV-barns)
Cross Section

64-Gd-150
-100.0 To 9999. %

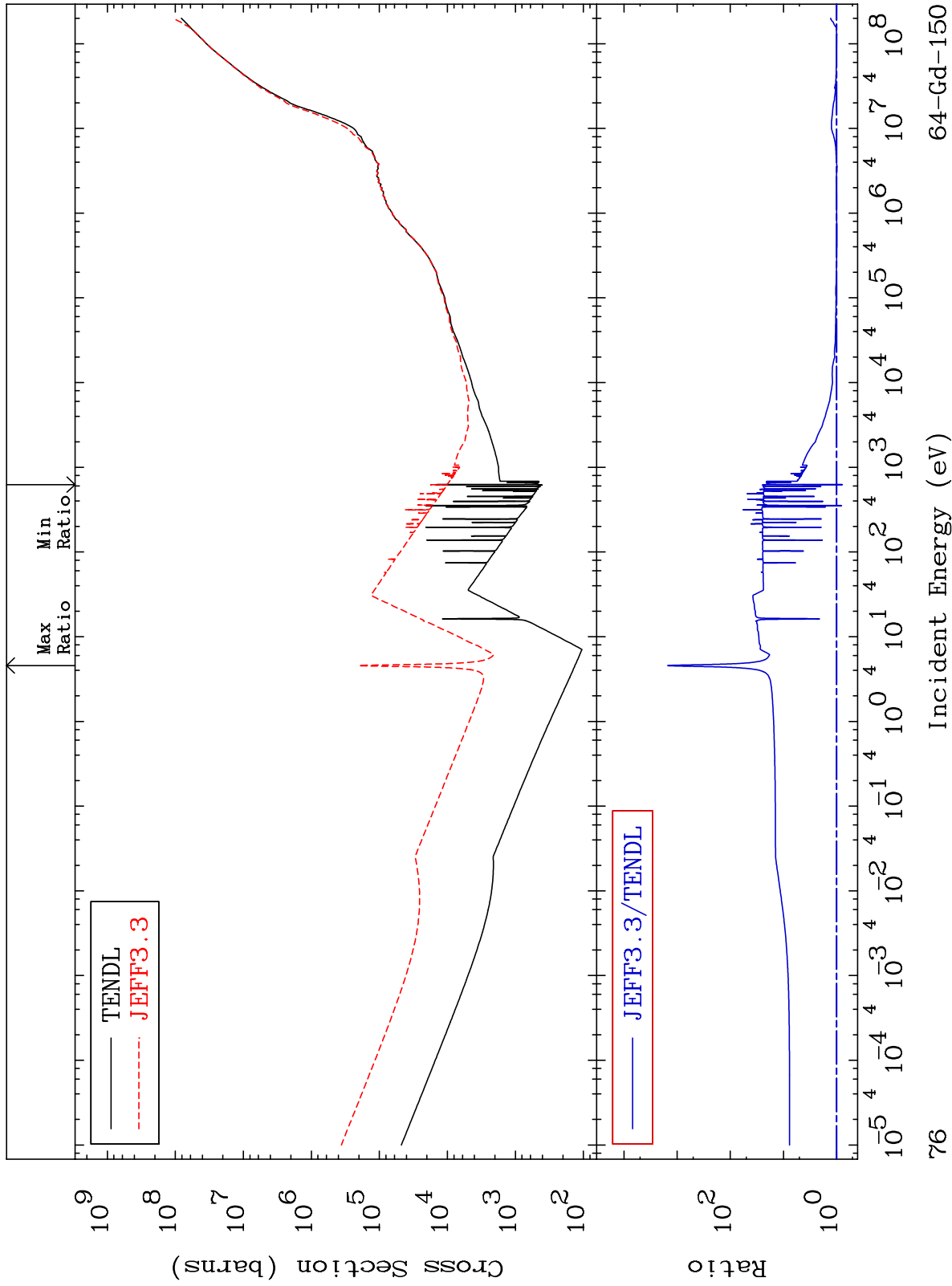


75

Incident Energy (eV)

64-Gd-150

MAT 6419 Total kinematic kerma (high limit) 64-Gd-150
Cross Section -23.26 To 9999. %



64-Gd-150

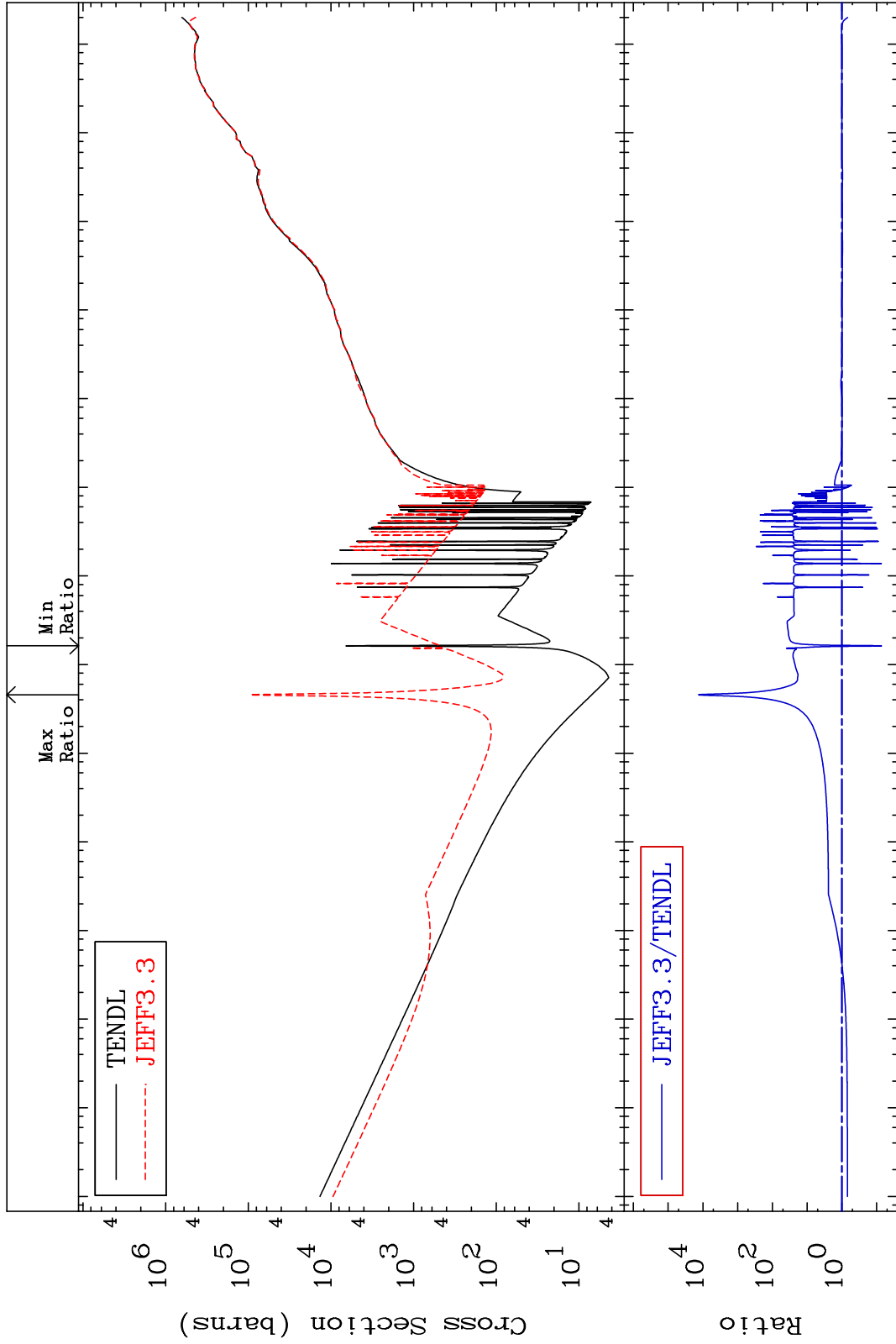
MAT 6419

Dpa total (eV-barns)

64-Gd-150

-92.77 To 9999. %

Cross Section



77

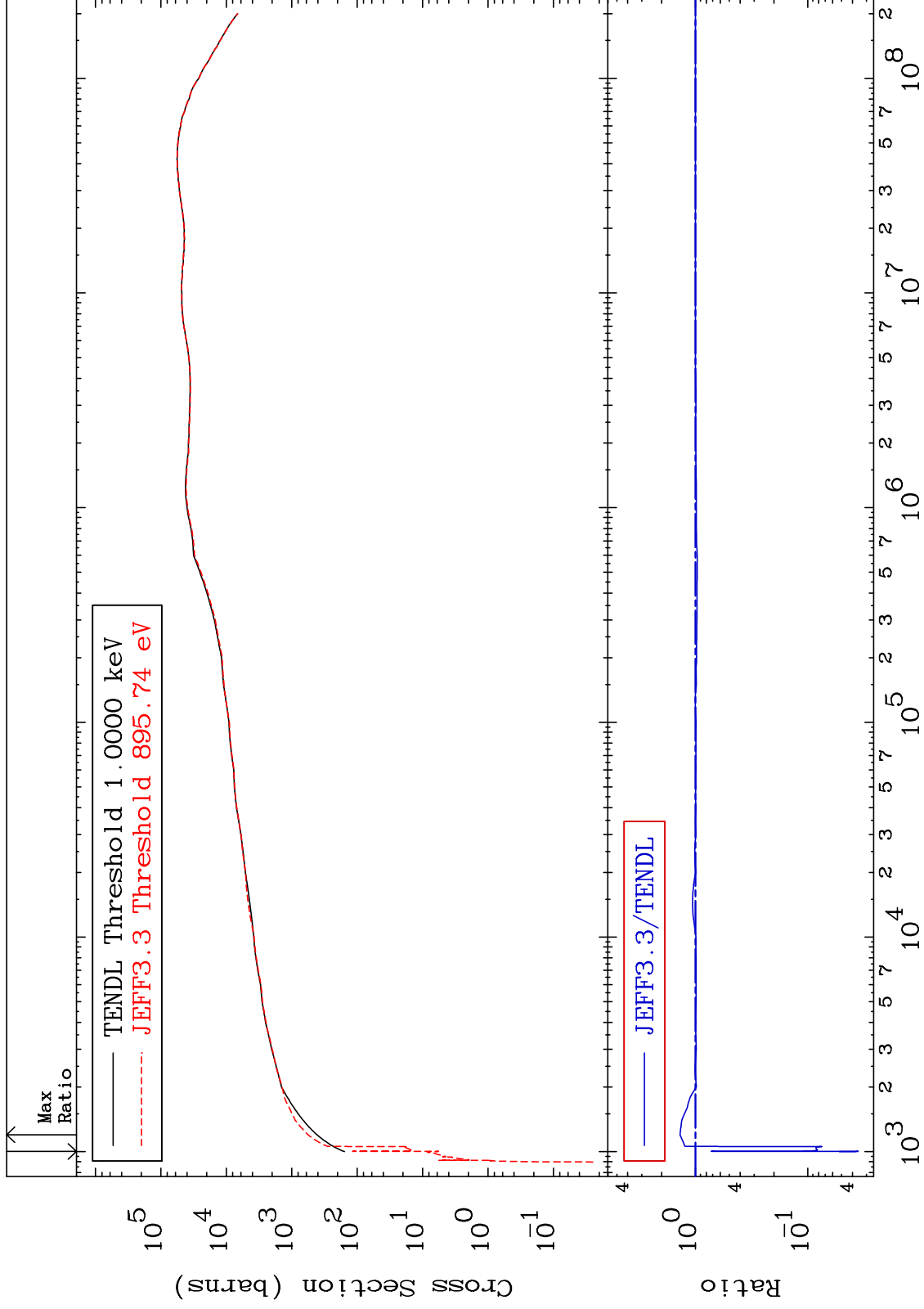
Incident Energy (eV)

64-Gd-150

MAT 6419

Dpa elastic (mt2)
Cross Section

64-Gd-150
-96.46 To 36.93 %



78

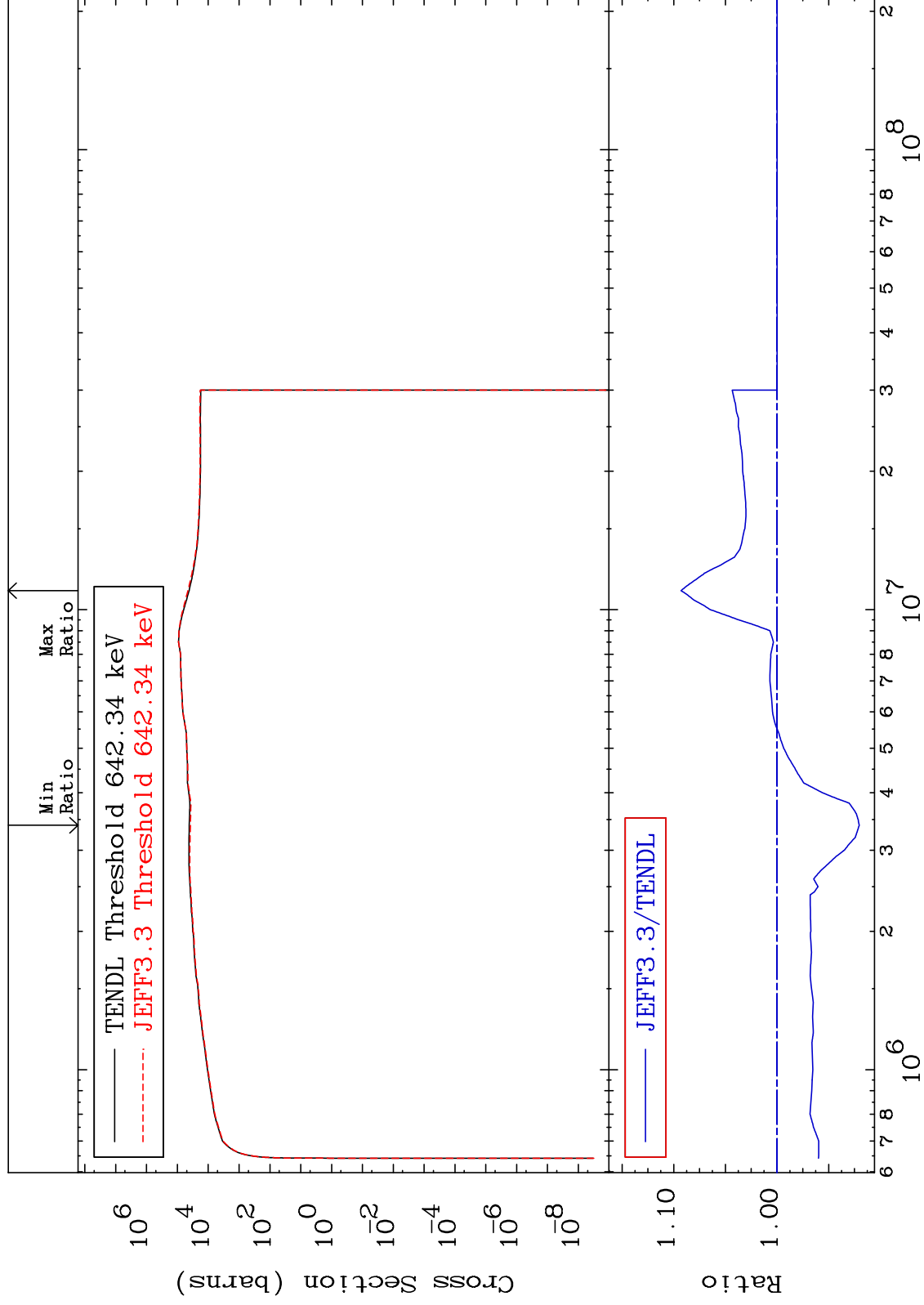
Incident Energy (eV)

64-Gd-150

MAT 6419

Dpa inelastic (mt51-91)
Cross Section

64-Gd-150
-7.966 To 9.291 %



79

Incident Energy (eV)

64-Gd-150

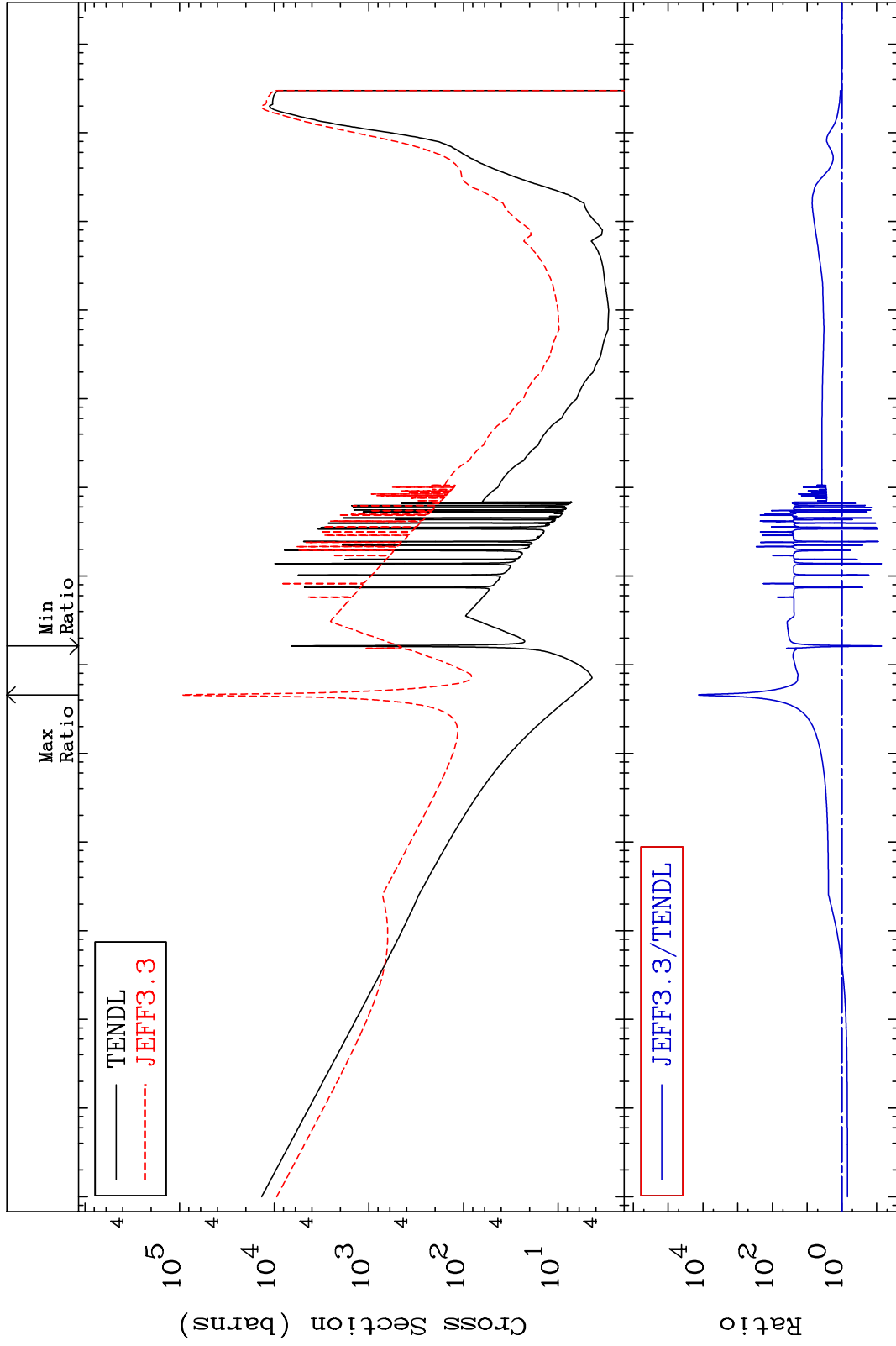
MAT 6419

Dpa disappearance (mt102 -120)

64-Gd-150

-92.77 To 9999. %

Cross Section



80

Incident Energy (eV)

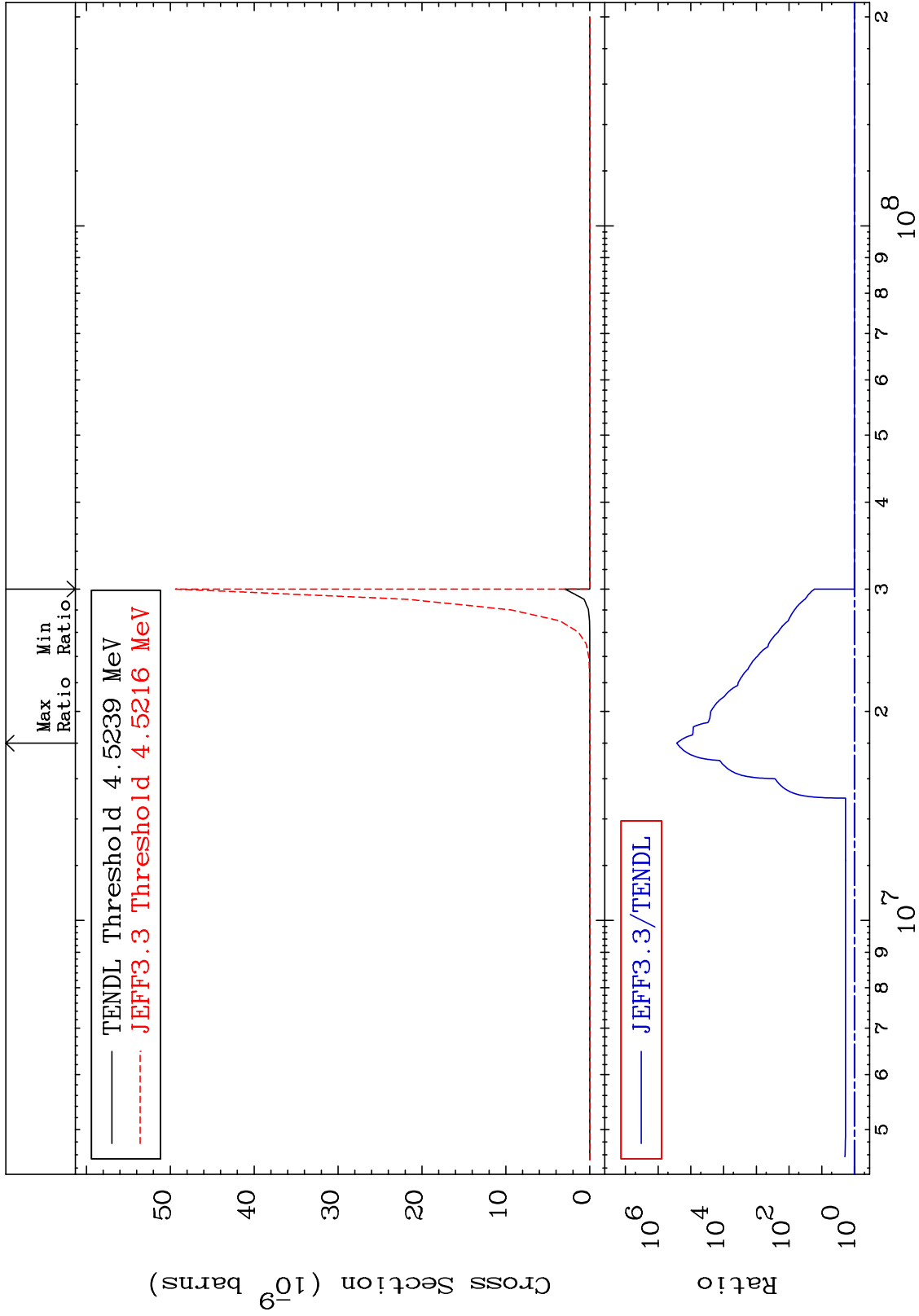
64-Gd-150

MAT 6419

(n,2n) 2α:60-Nd-141g

64-Gd-150

Radionuclide Production Cross Section 0.000 To 9999. %

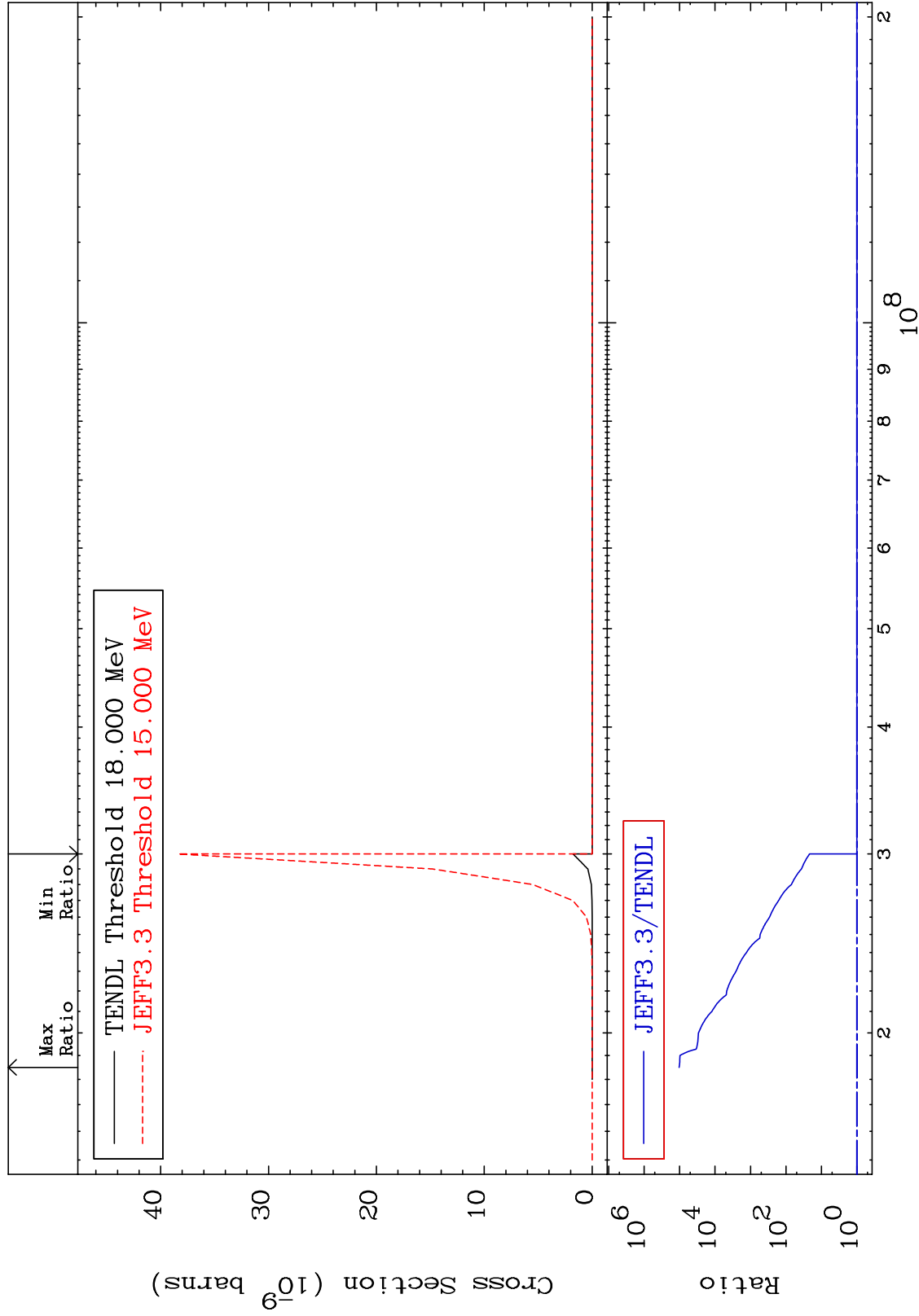


MAT 6419

(n,2n) $^{2\alpha}$:60-Nd-141m2

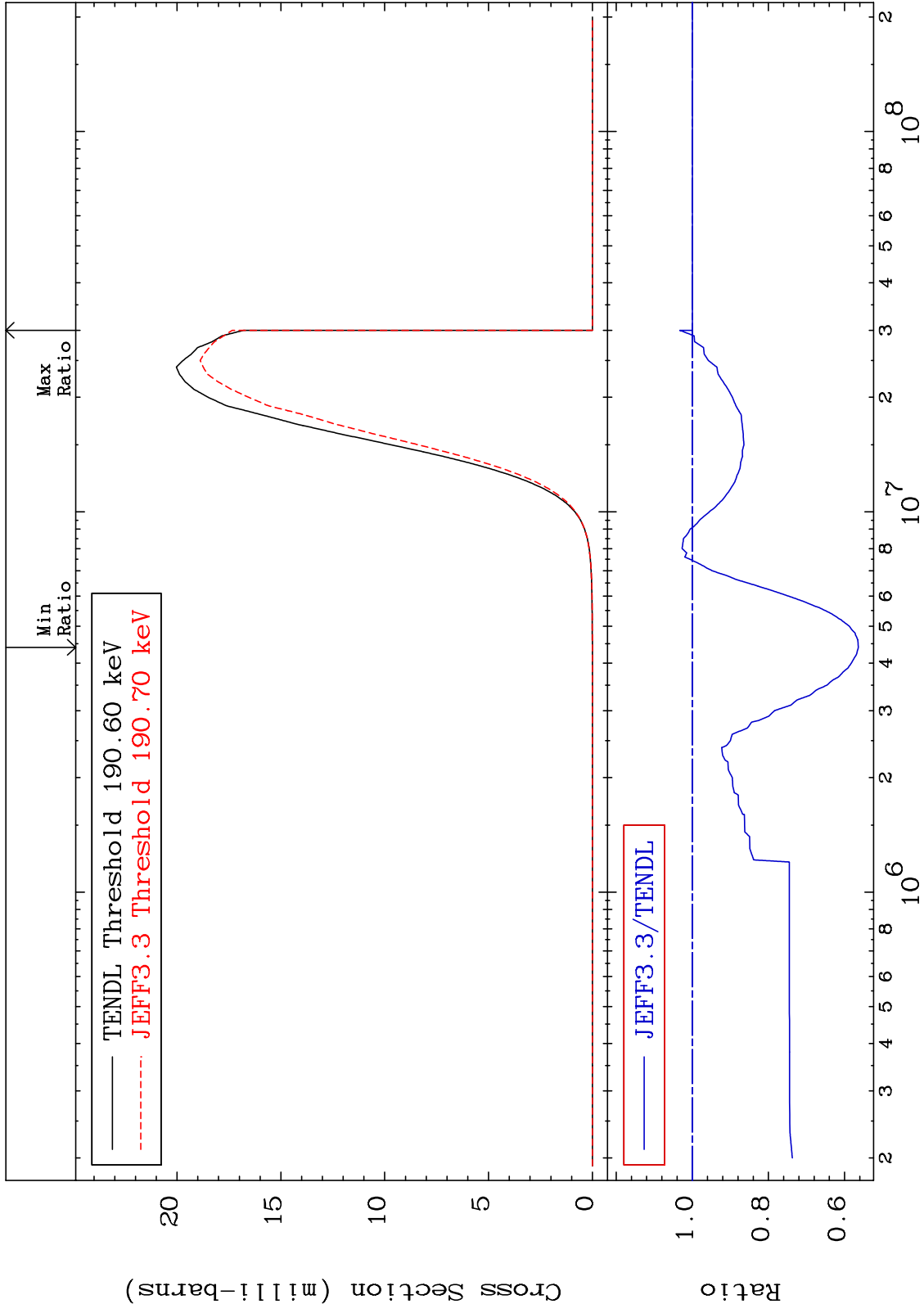
64-Gd-150

Radionuclide Production Cross Section 0.000 To 9999. %



MAT 6419

(n,p): 63-Eu-150g 64-Gd-150
Radionuclide Production Cross Section -43.61 To 3.288 %



MAT 6419

(n, p) : 63-Eu-150m1

64-Gd-150

Radionuclide Production Cross Section -45.91 To 7.076 %

