

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

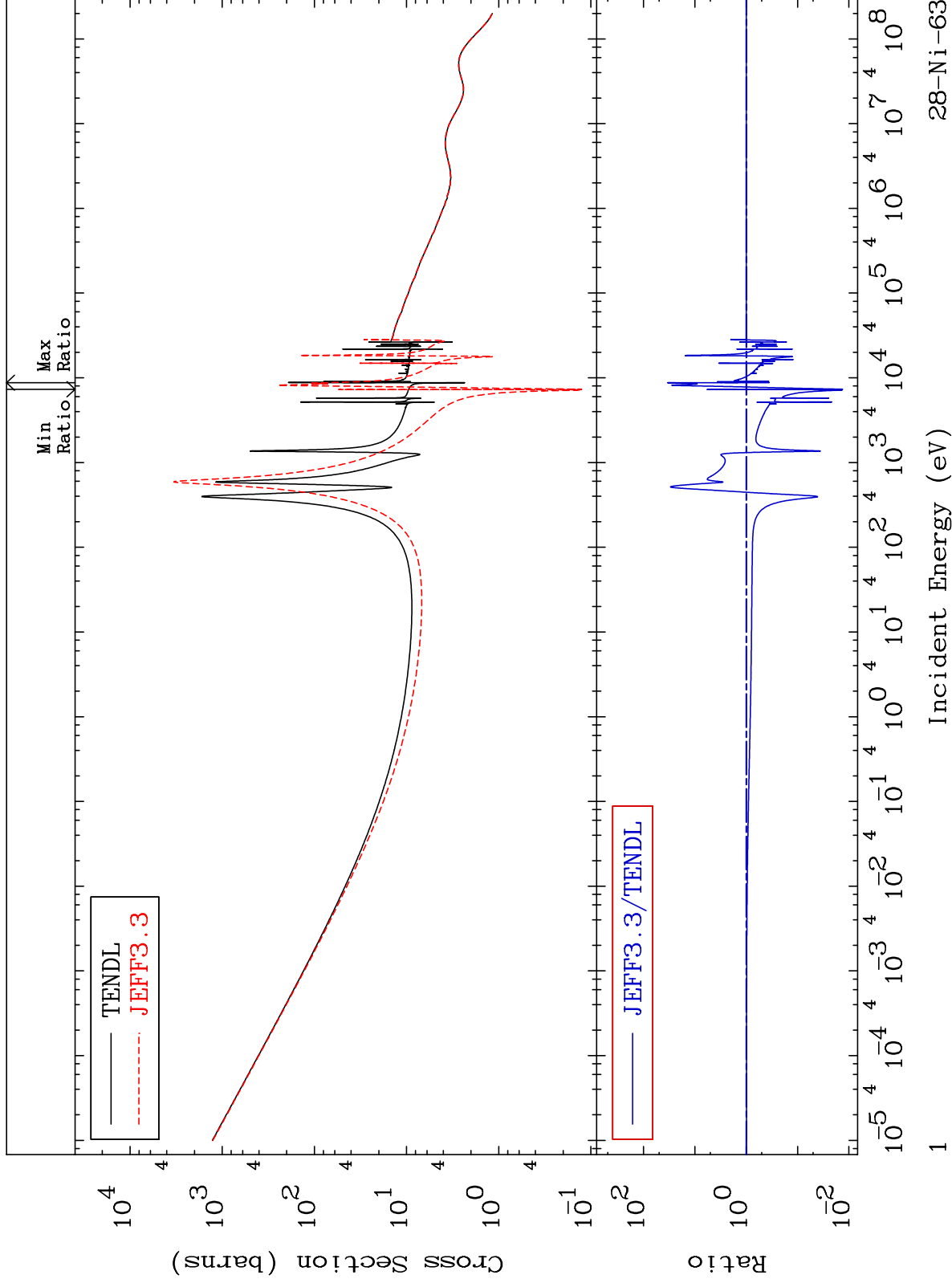
MAT 2840

Total

28-Ni-63

Cross Section

-98.68 To 3315. %



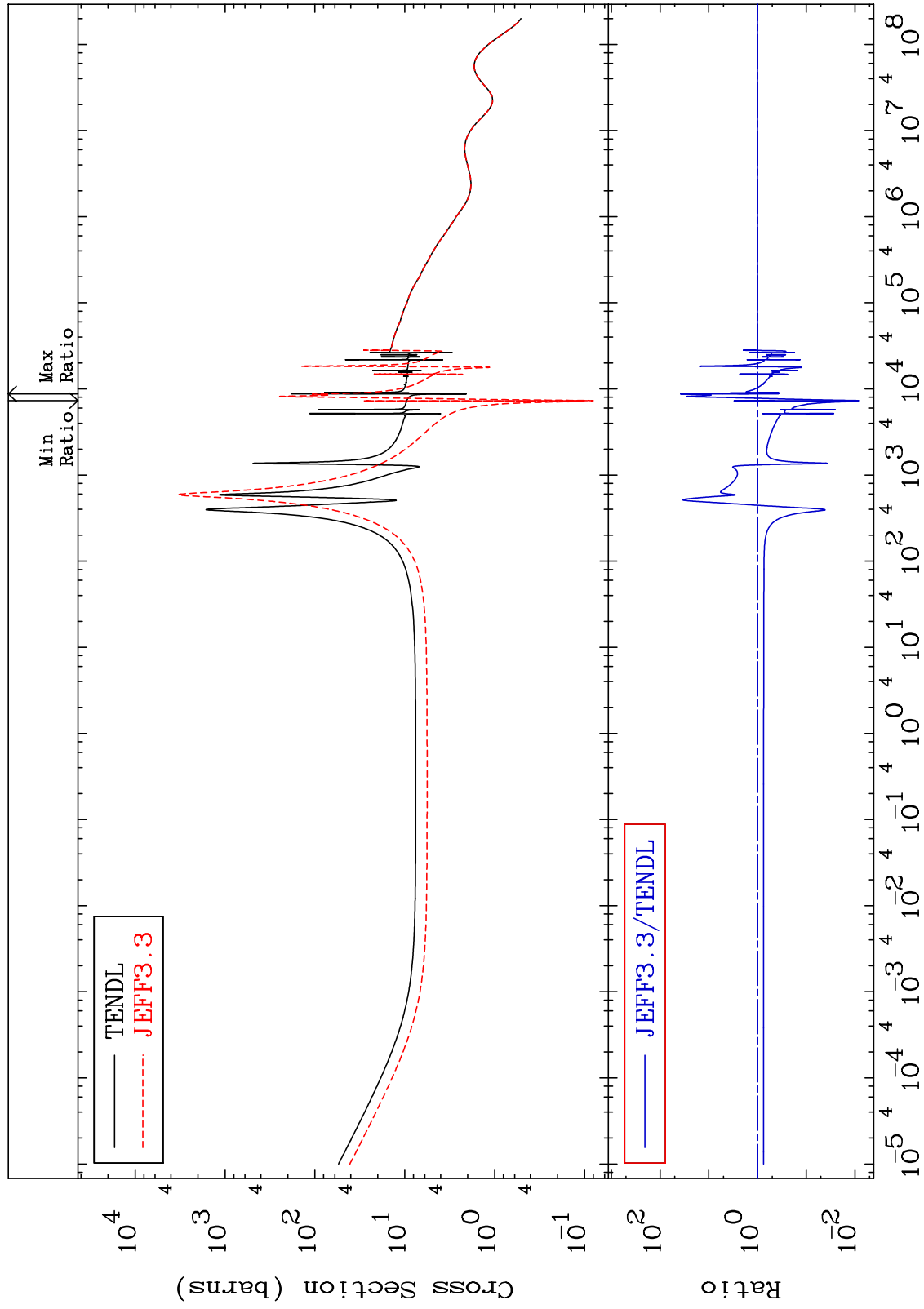
Incident Energy (eV)

28-Ni-63

MAT 2840

Elastic
Cross Section

28-Ni-63
-99.16 To 3715. %

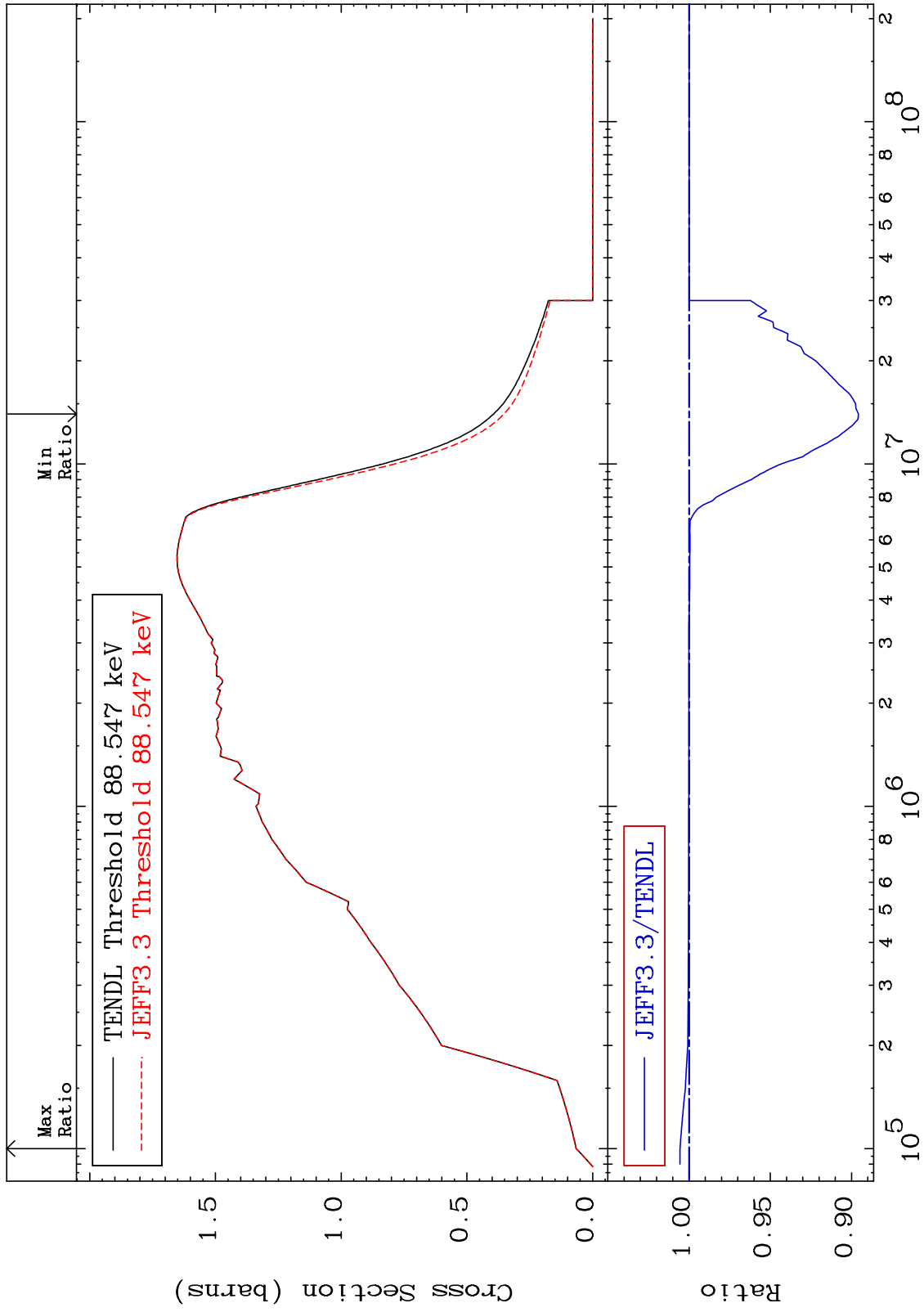


2

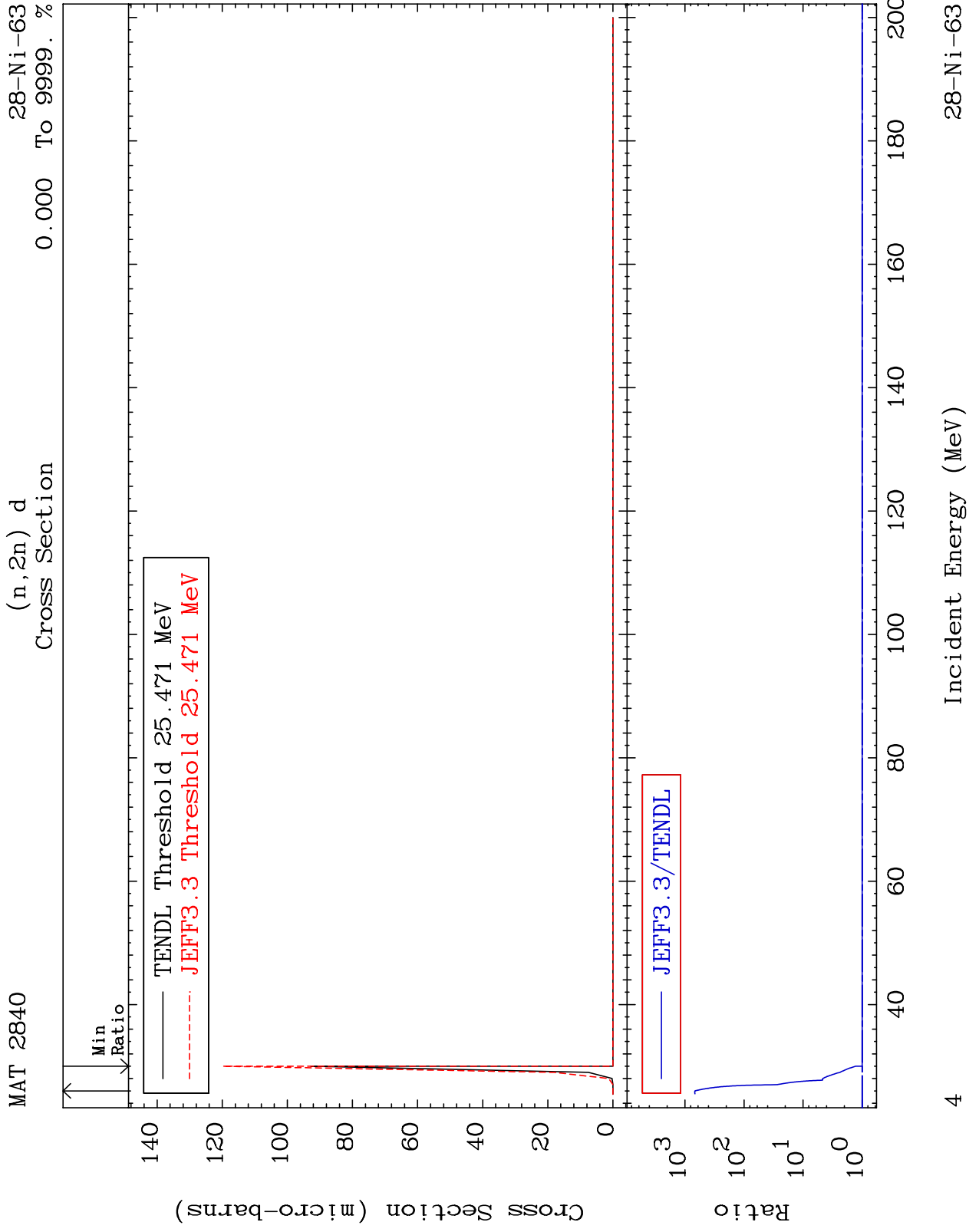
Incident Energy (eV)

28-Ni-63

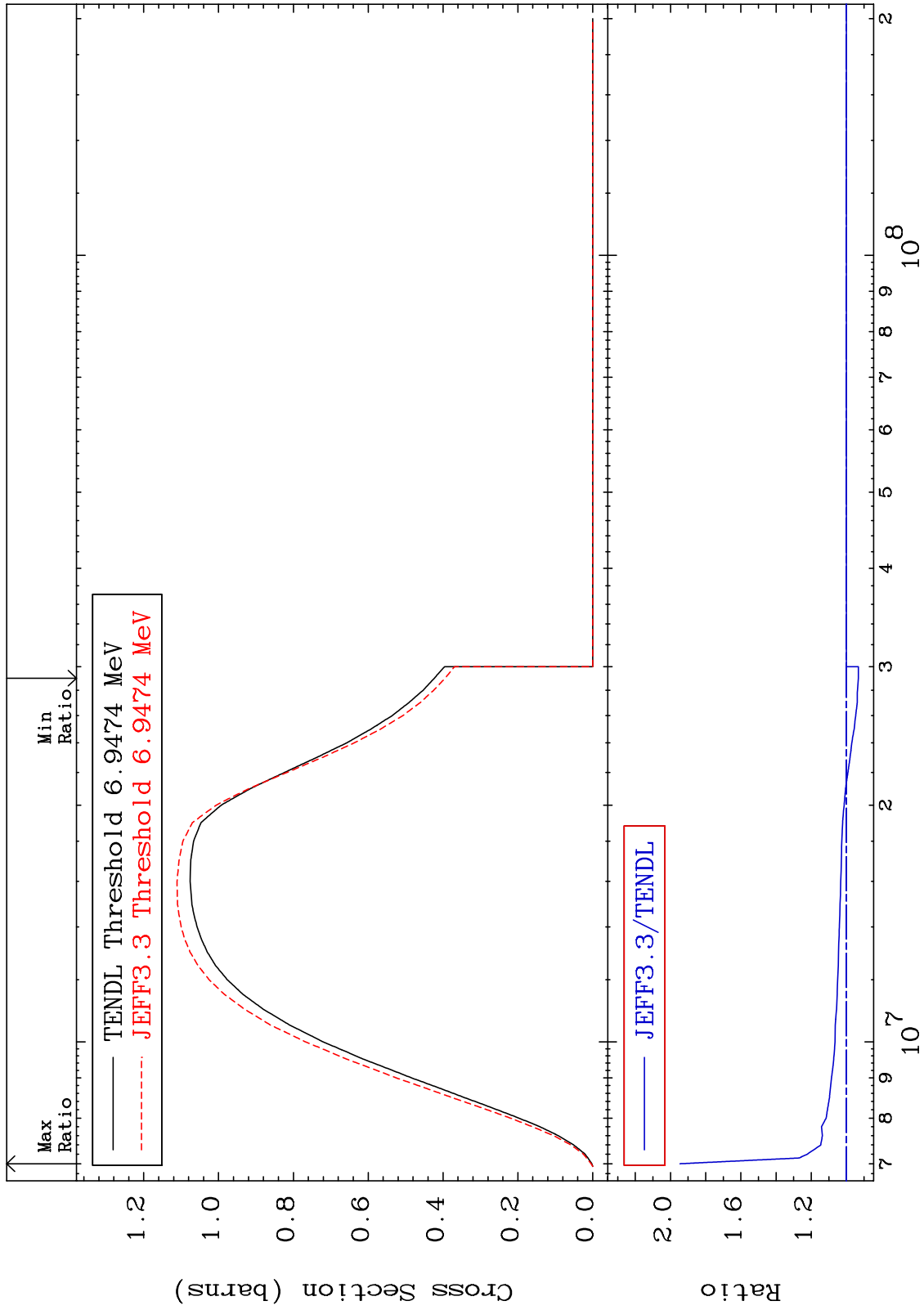
MAT 2840 Inelastic Cross Section 28-Ni-63 -10.42 To 0.559 %

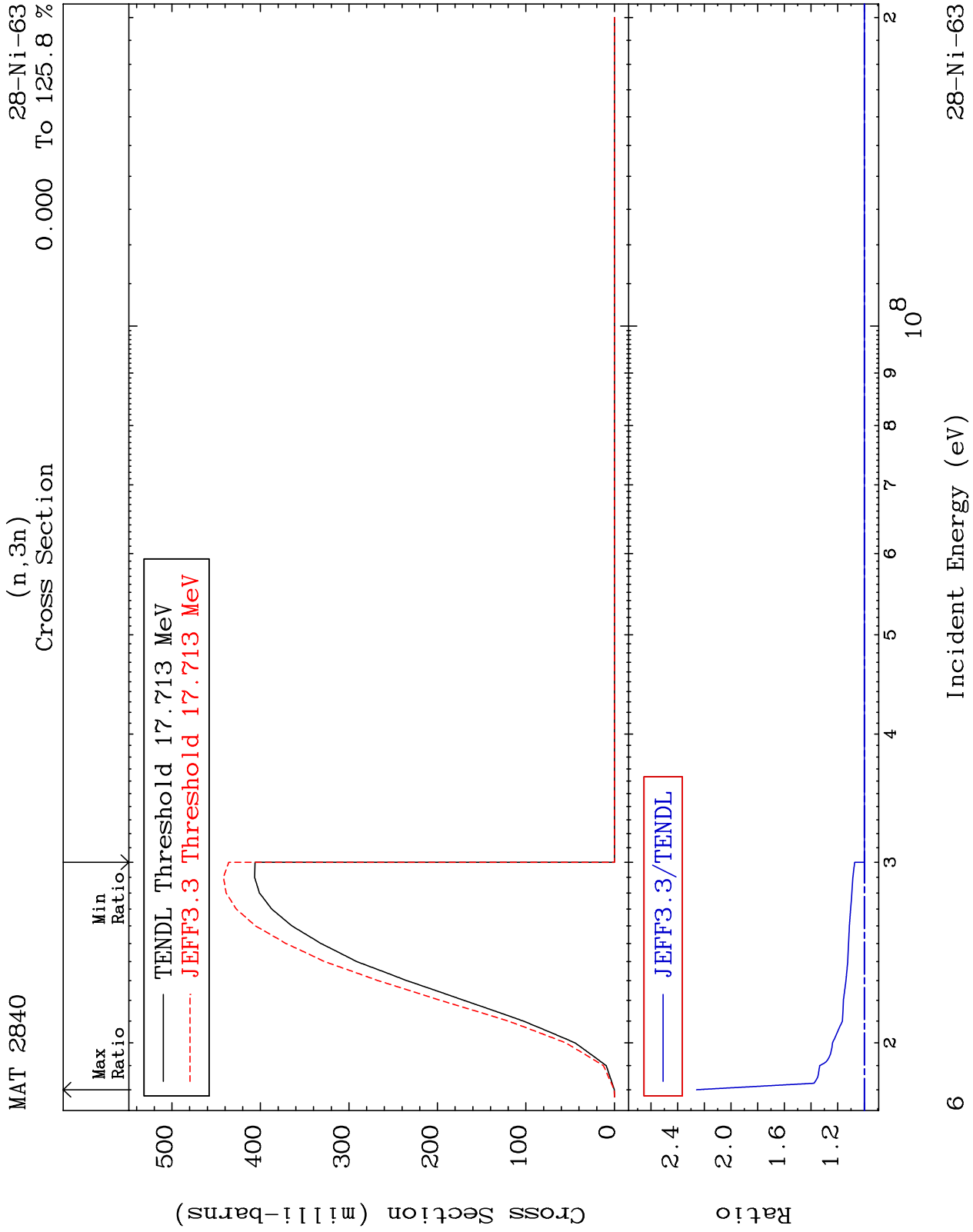


3 Incident Energy (eV) 28-Ni-63

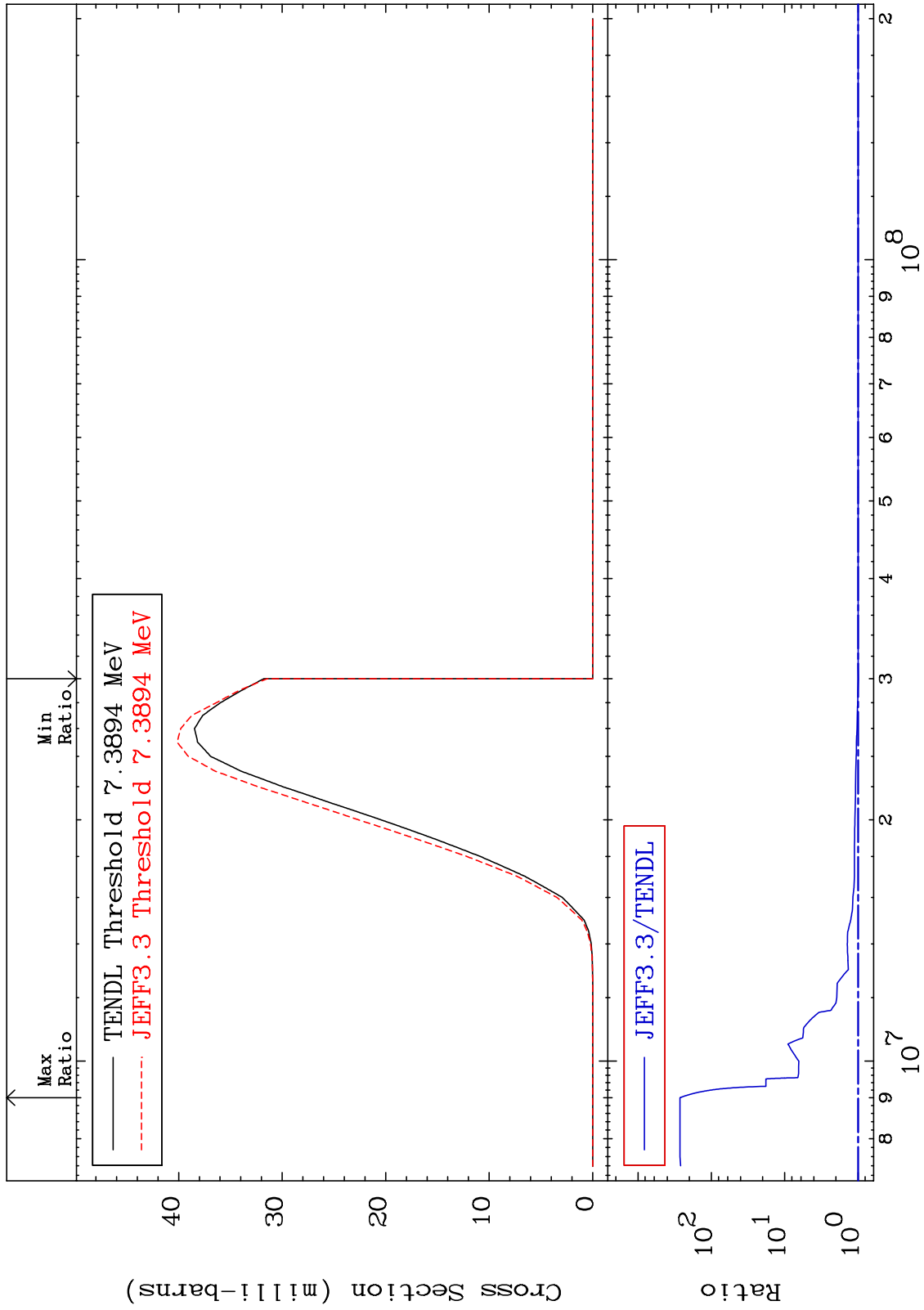


MAT 2840 (n,2n) Cross Section 28-Ni-63 -6.804 To 94.58 %



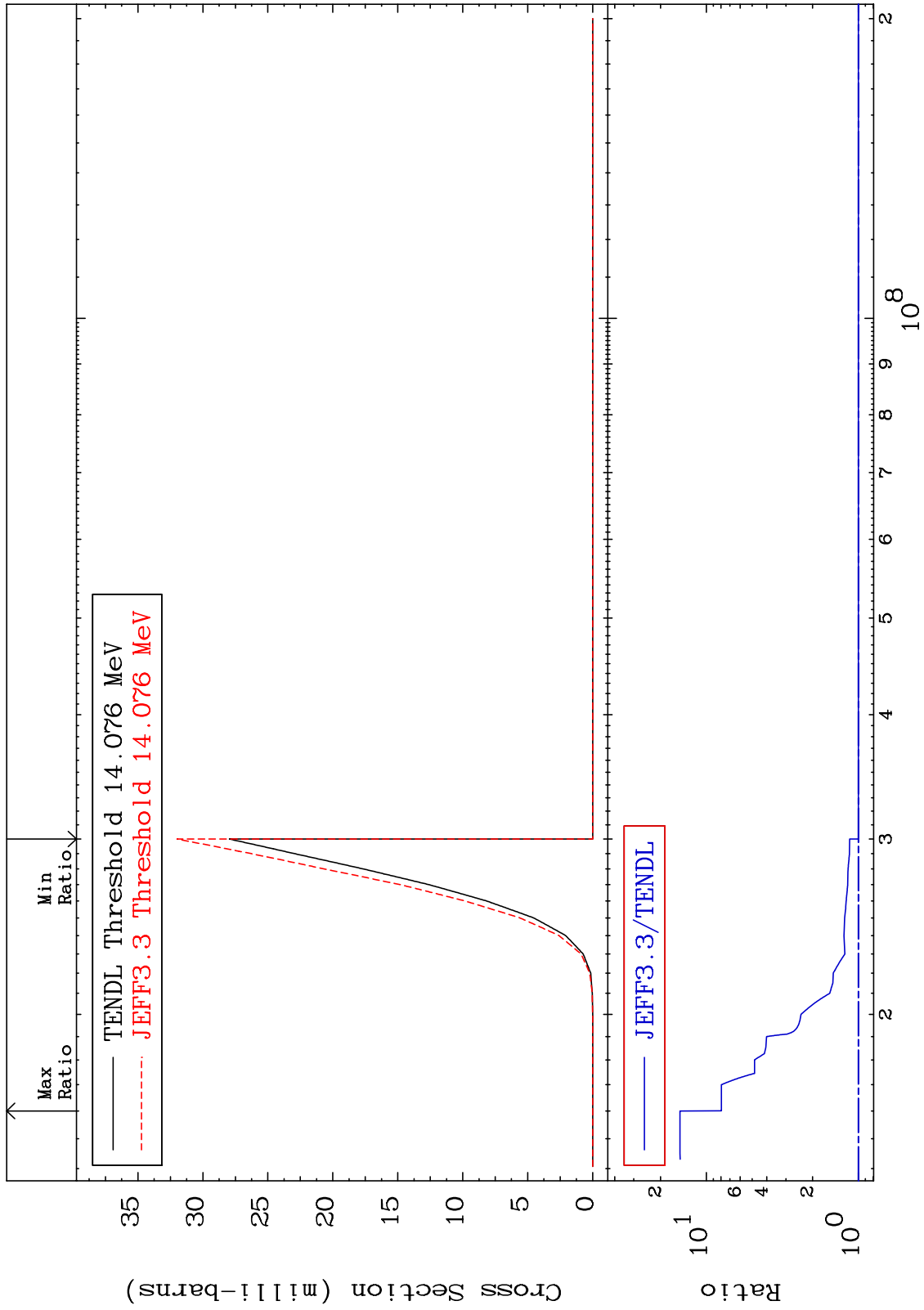


MAT 2840 $(n, n') \alpha$ Cross Section 28-Ni-63
-1.016 To 9999. %



7 Incident Energy (eV) 28-Ni-63

MAT 2840 (n,2n) α 28-Ni-63
 Cross Section 0.000 To 1389. %



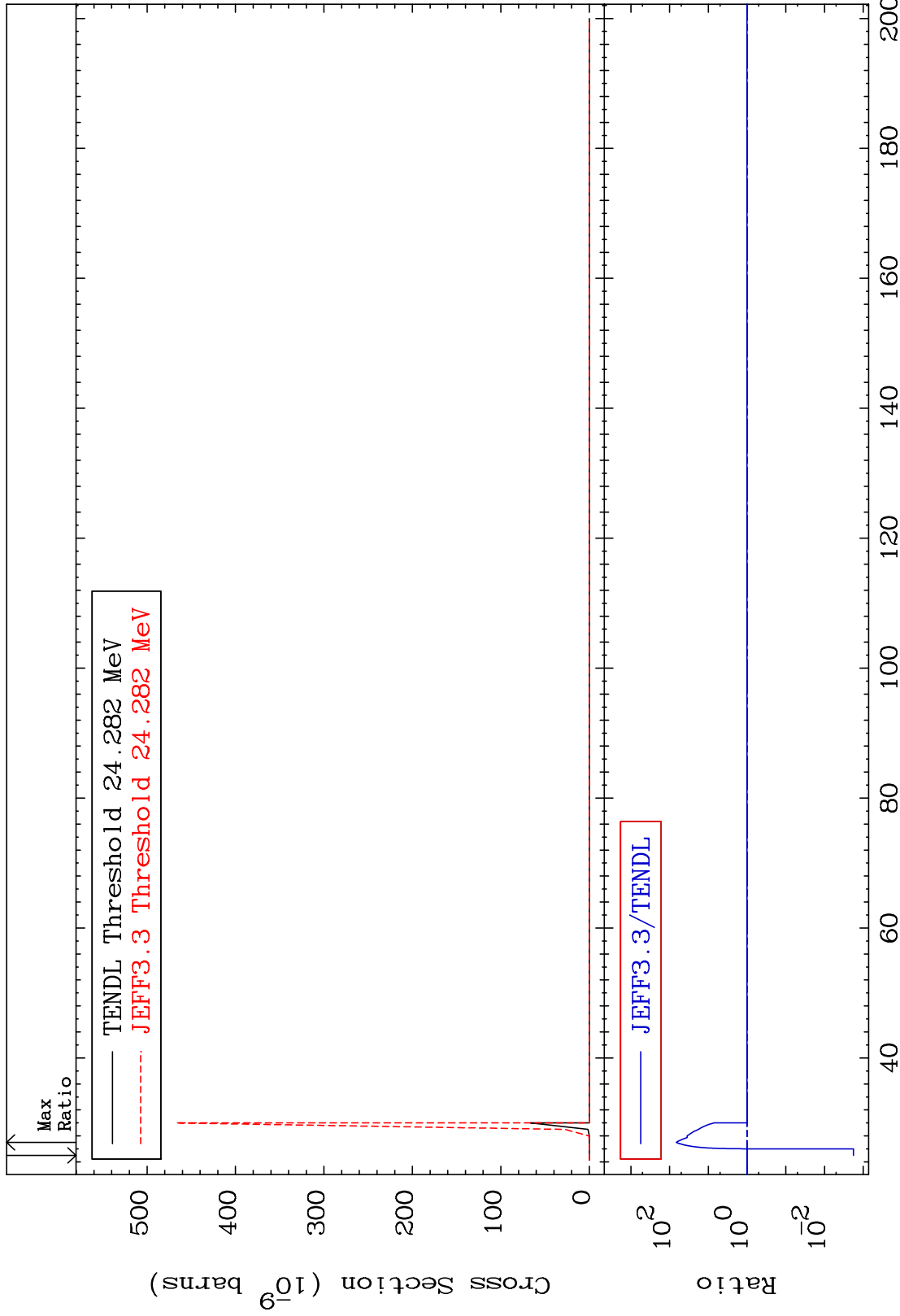
28-Ni-63

Incident Energy (eV)

MAT 2840

(n,3n) α
Cross Section

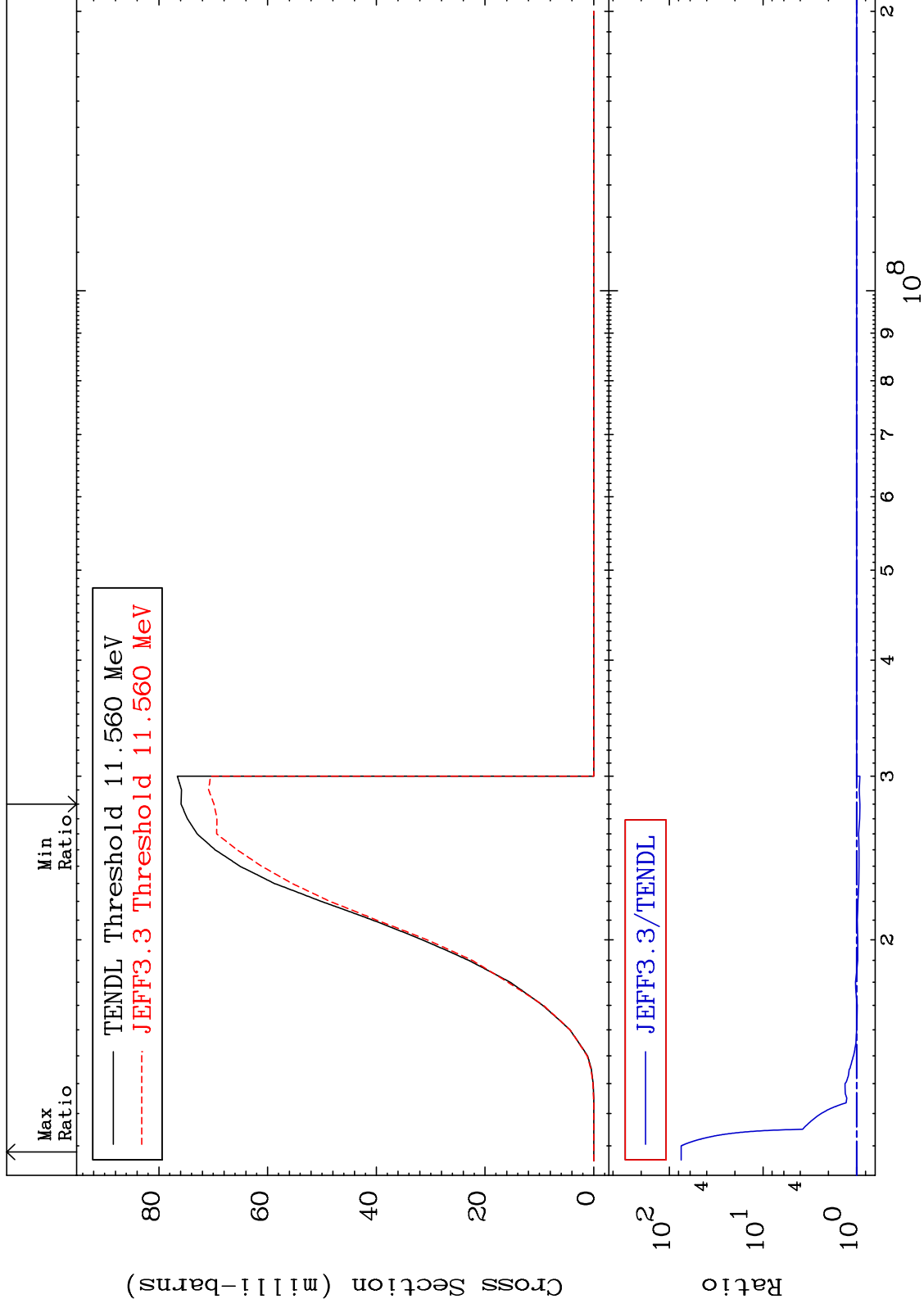
28-Ni-63
-99.82 To 6686. %



MAT 2840

(n,n') p
Cross Section

28-Ni-63
-7.977 To 7380. %

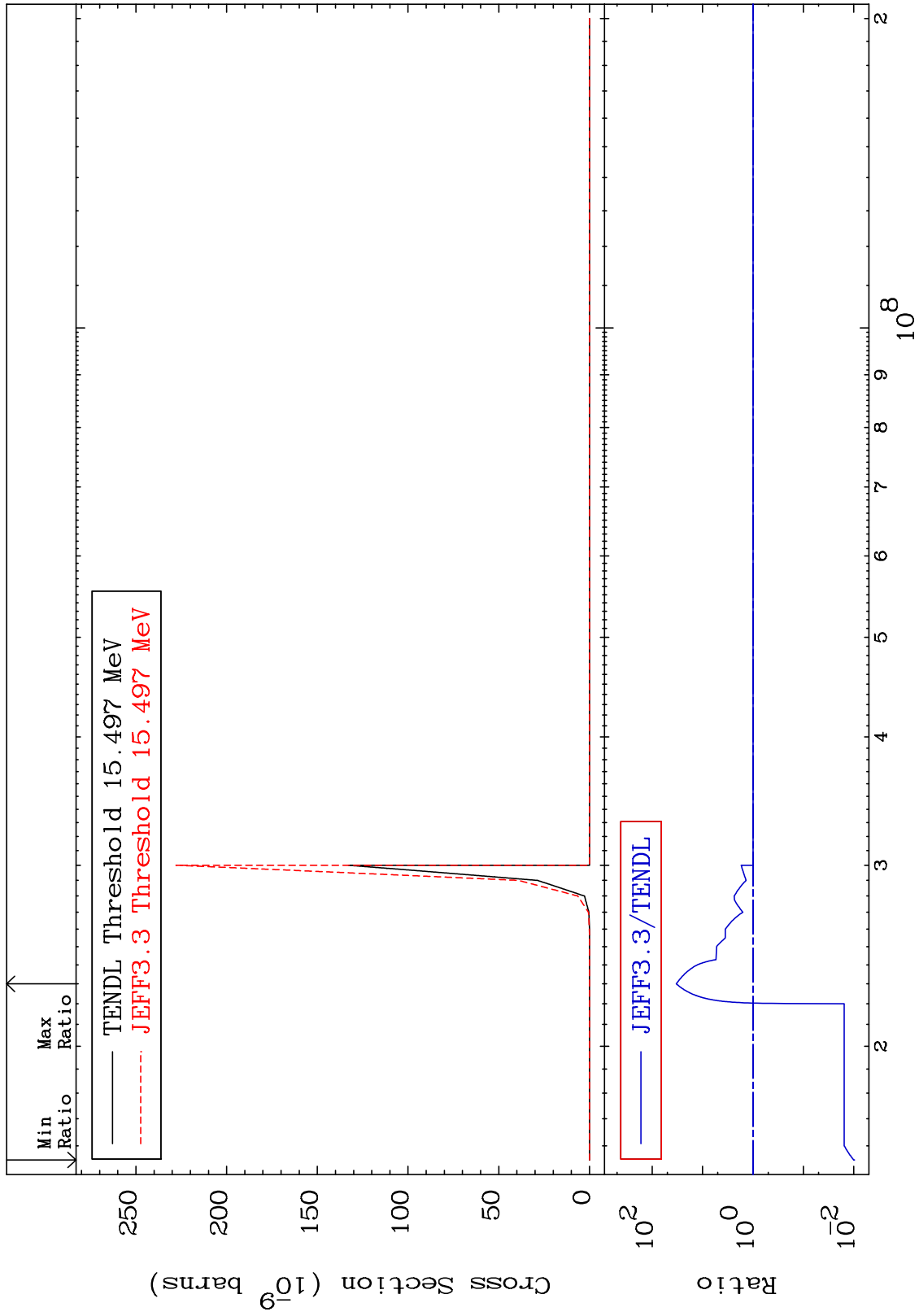


10

Incident Energy (eV)

28-Ni-63

MAT 2840 (n, n') 2α Cross Section 28-Ni-63 -99.00 To 3225. %



11 28-Ni-63 Incident Energy (eV)

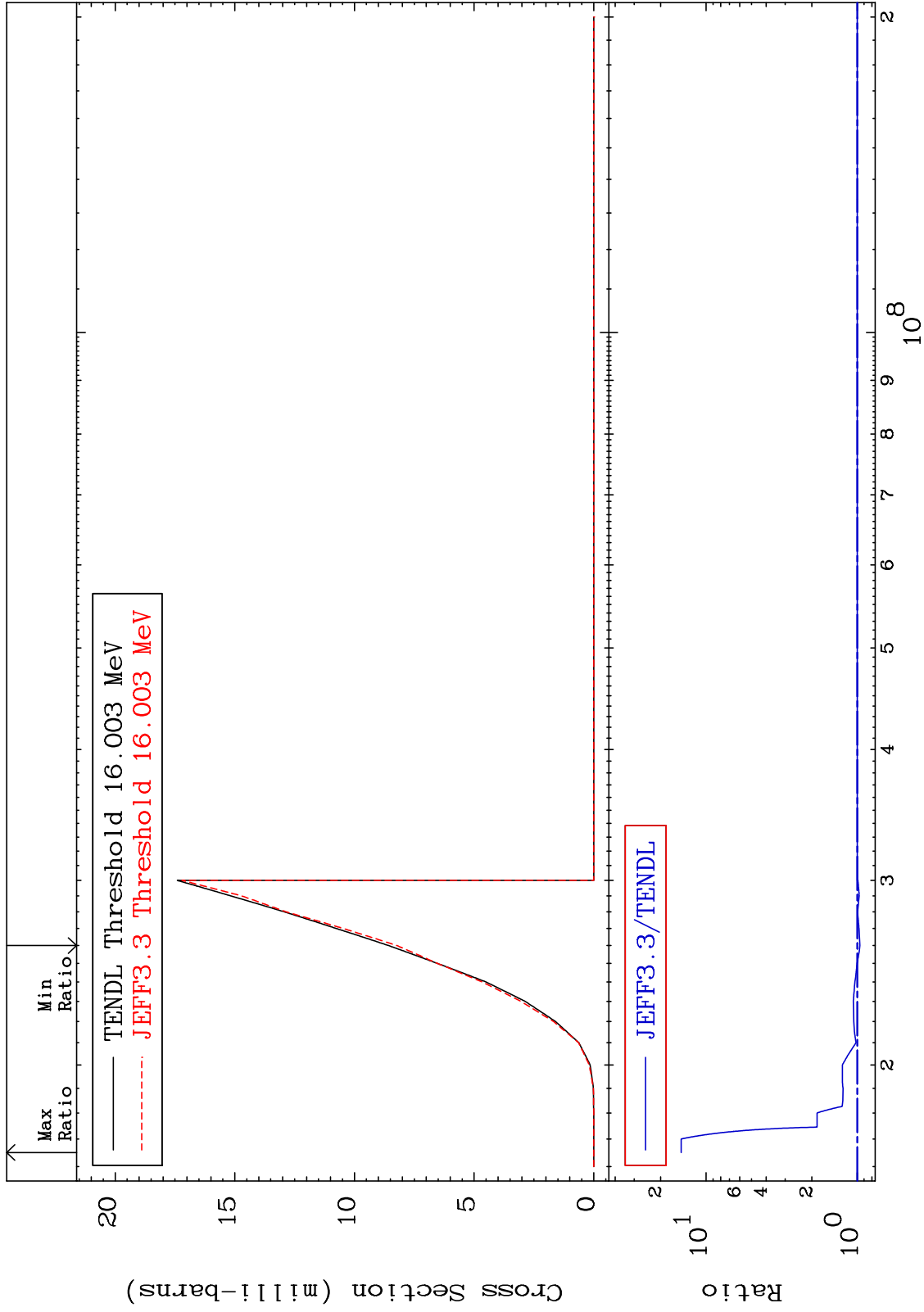
MAT 2840

(n,n') d

²⁸Ni-63

Cross Section

-4.102 To 1362. %



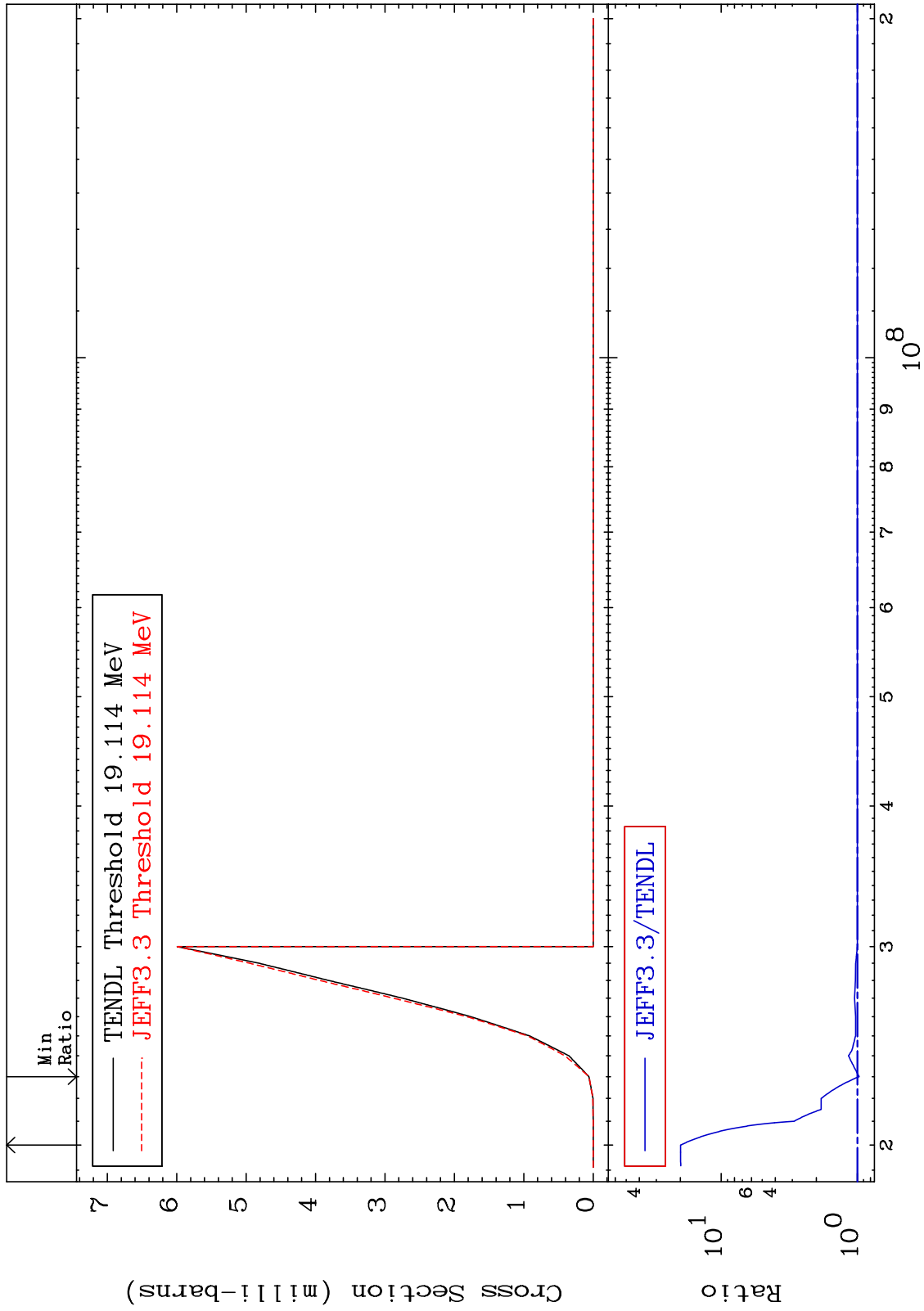
MAT 2840

(n,n') t

28-Ni-63

Cross Section

-3.071 To 1889. %



13

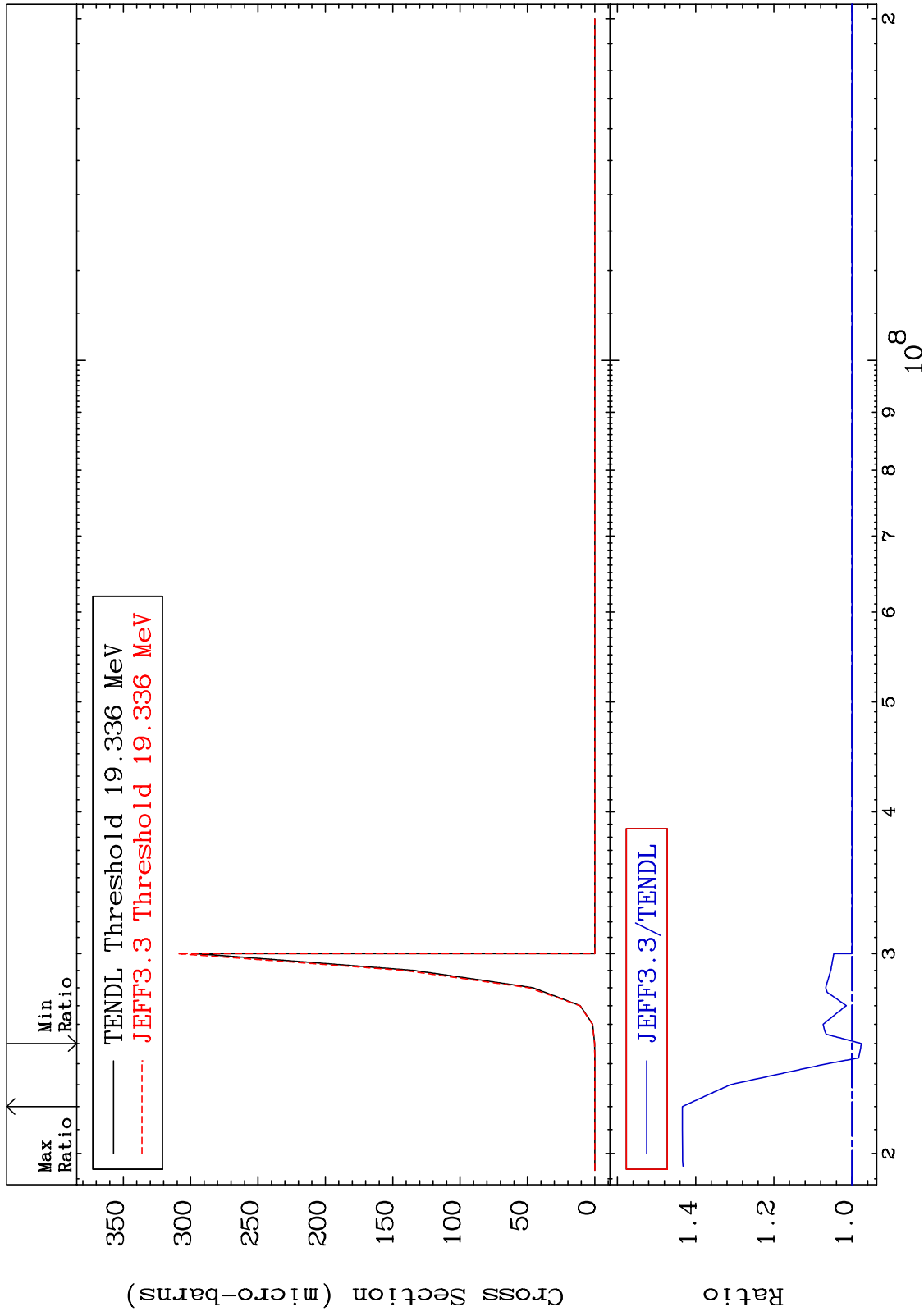
Incident Energy (eV)

28-Ni-63

MAT 2840

(n,n') He-3
Cross Section

28-Ni-63
-2.407 To 43.38 %



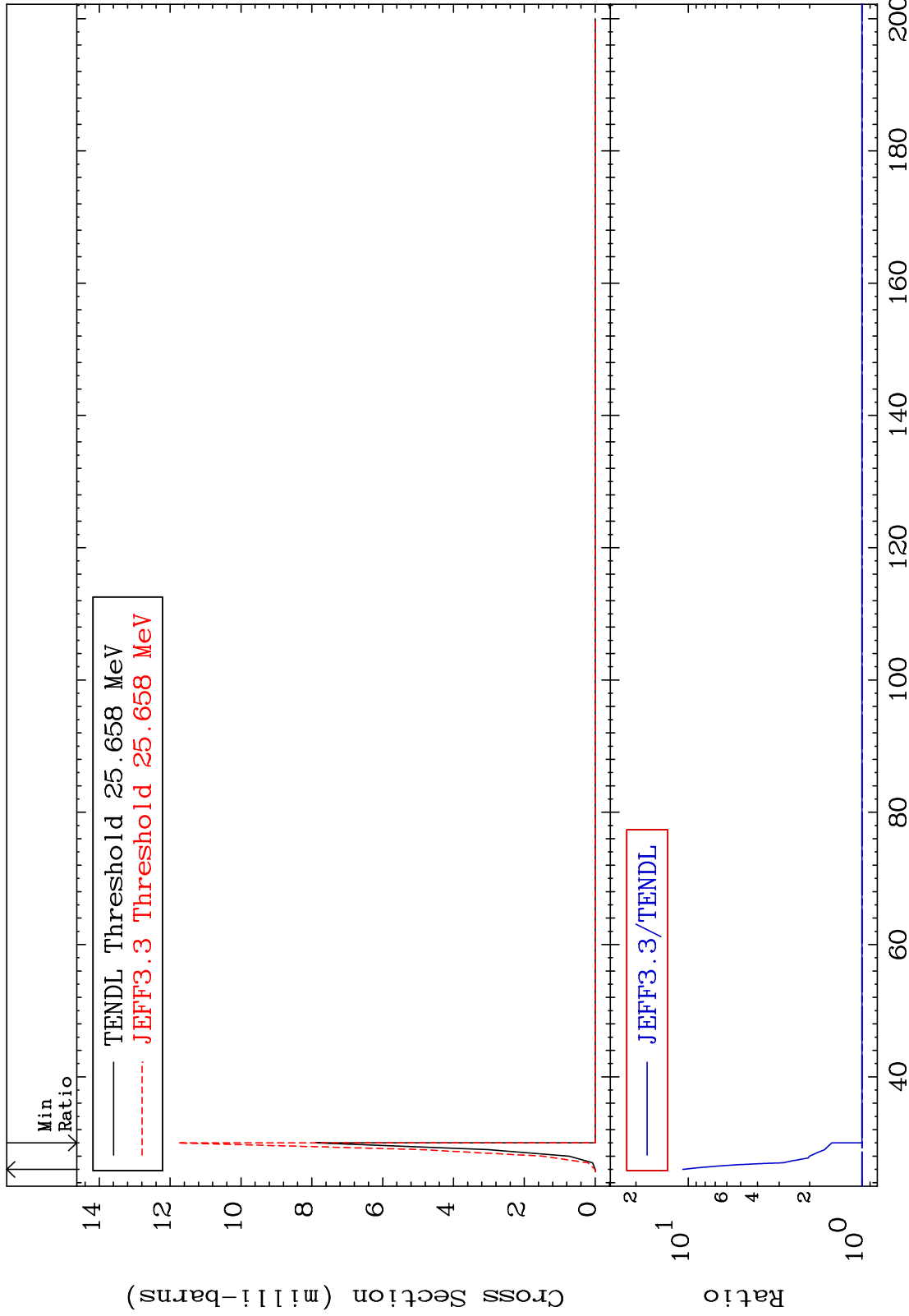
MAT 2840

(n, 4n)

28-Ni-63

Cross Section

0.000 To 974.0 %



28-Ni-63

Incident Energy (MeV)

15

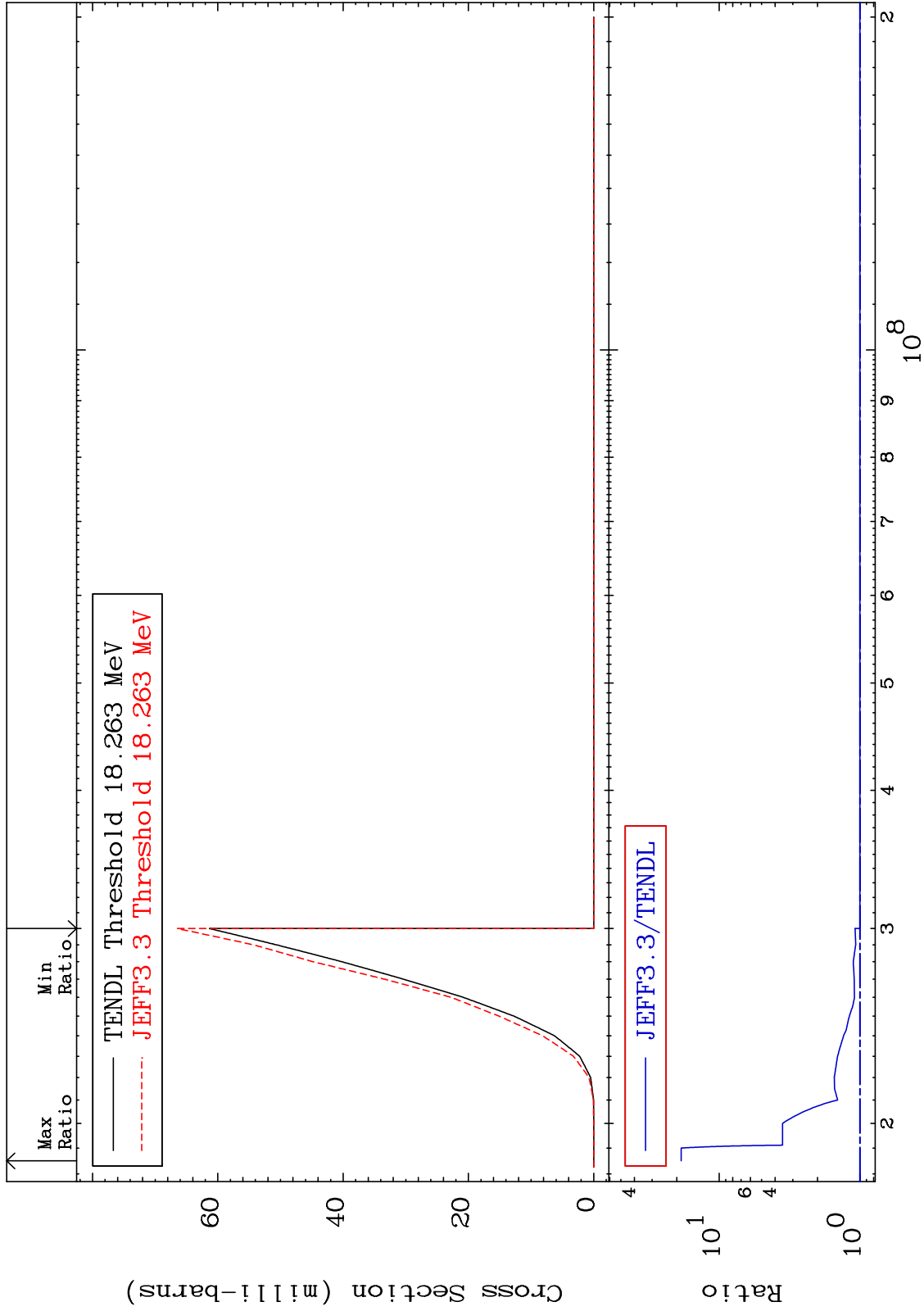
MAT 2840

(n,2n) p

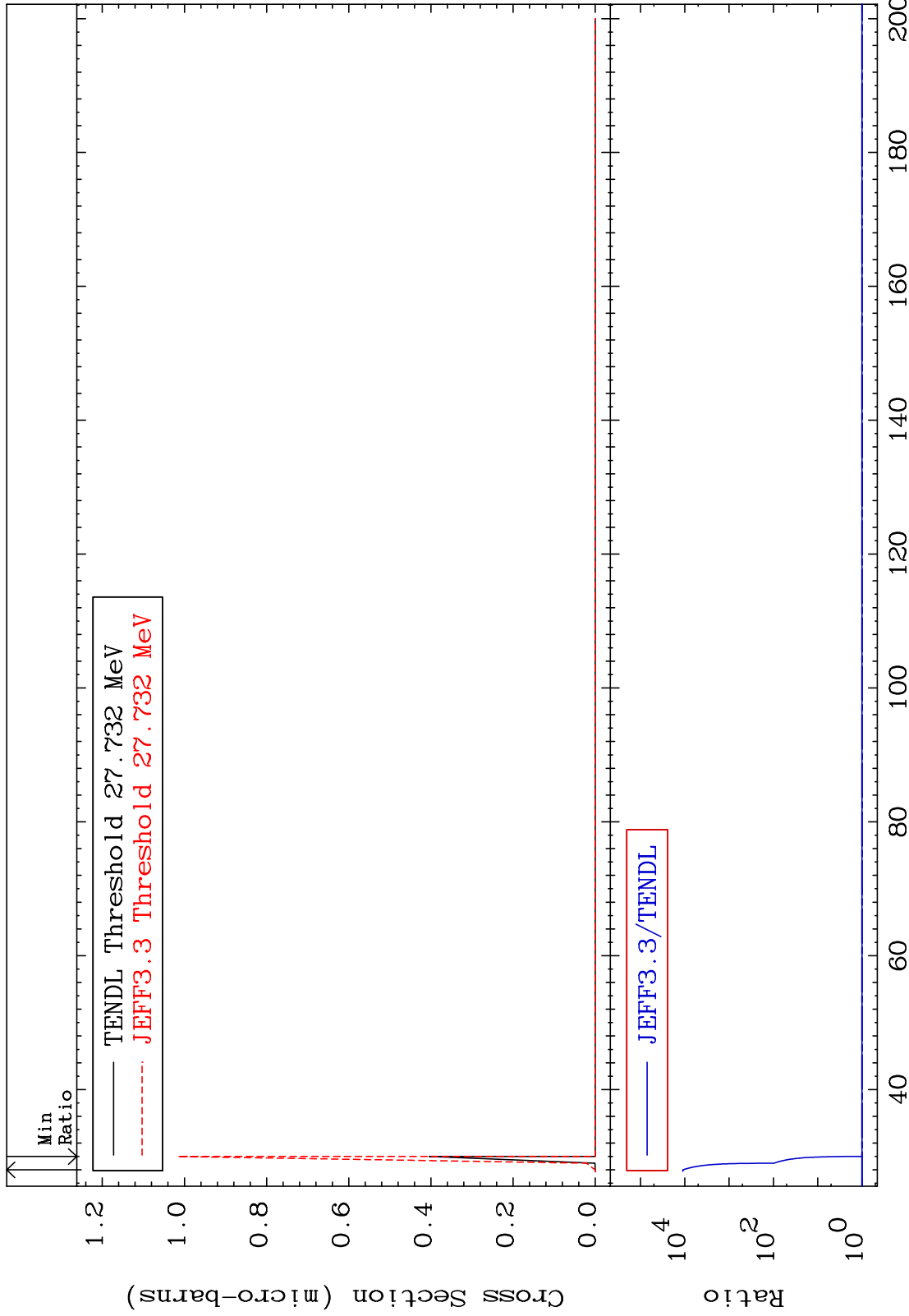
28-Ni-63

Cross Section

0.000 To 1761. %



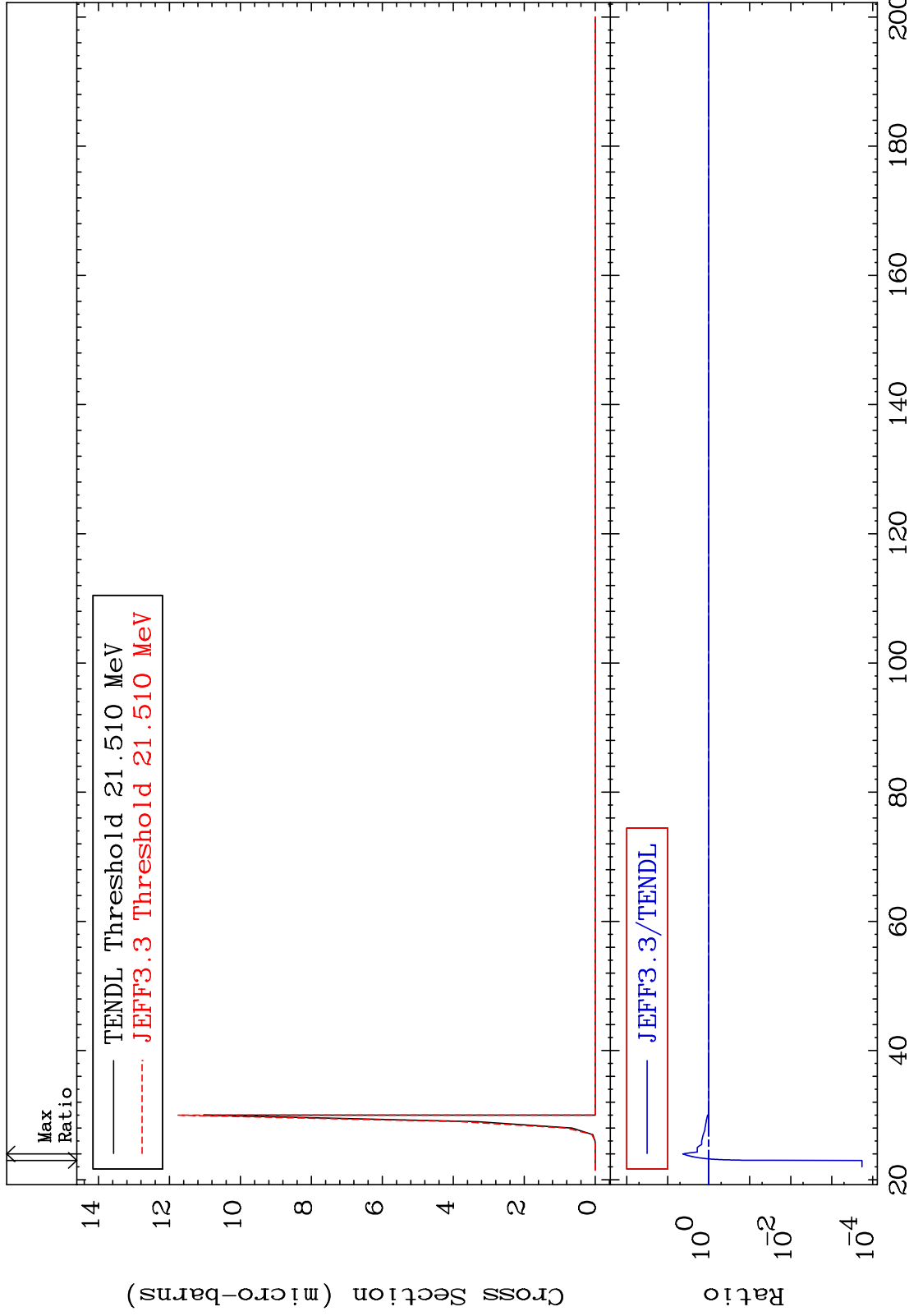
MAT 2840 (n,3n) p 28-Ni-63
 Cross Section 0.000 To 9999. %



MAT 2840

(n,2n) p
Cross Section

28-Ni-63
-99.98 To 326.9 %



18

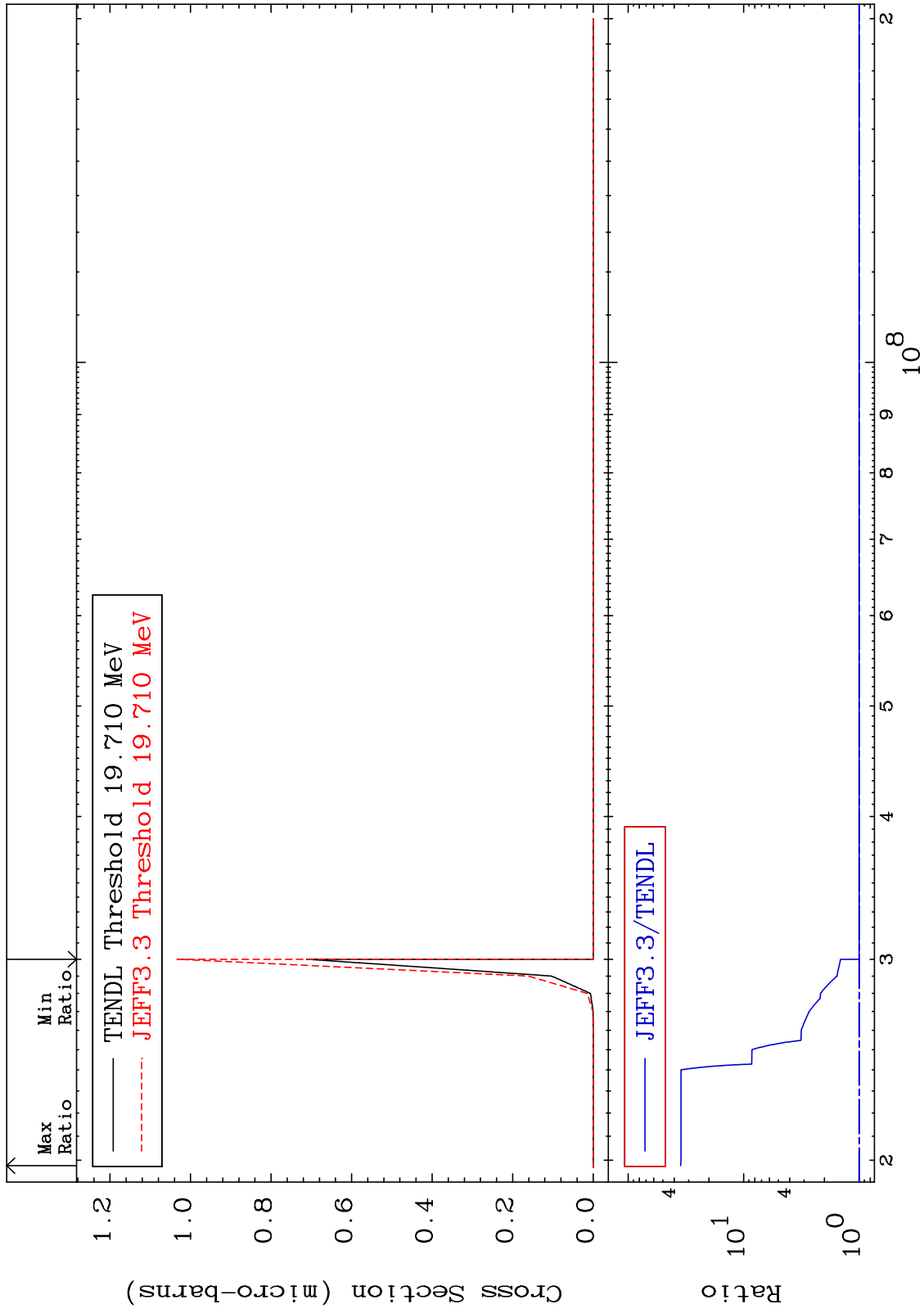
Incident Energy (MeV)

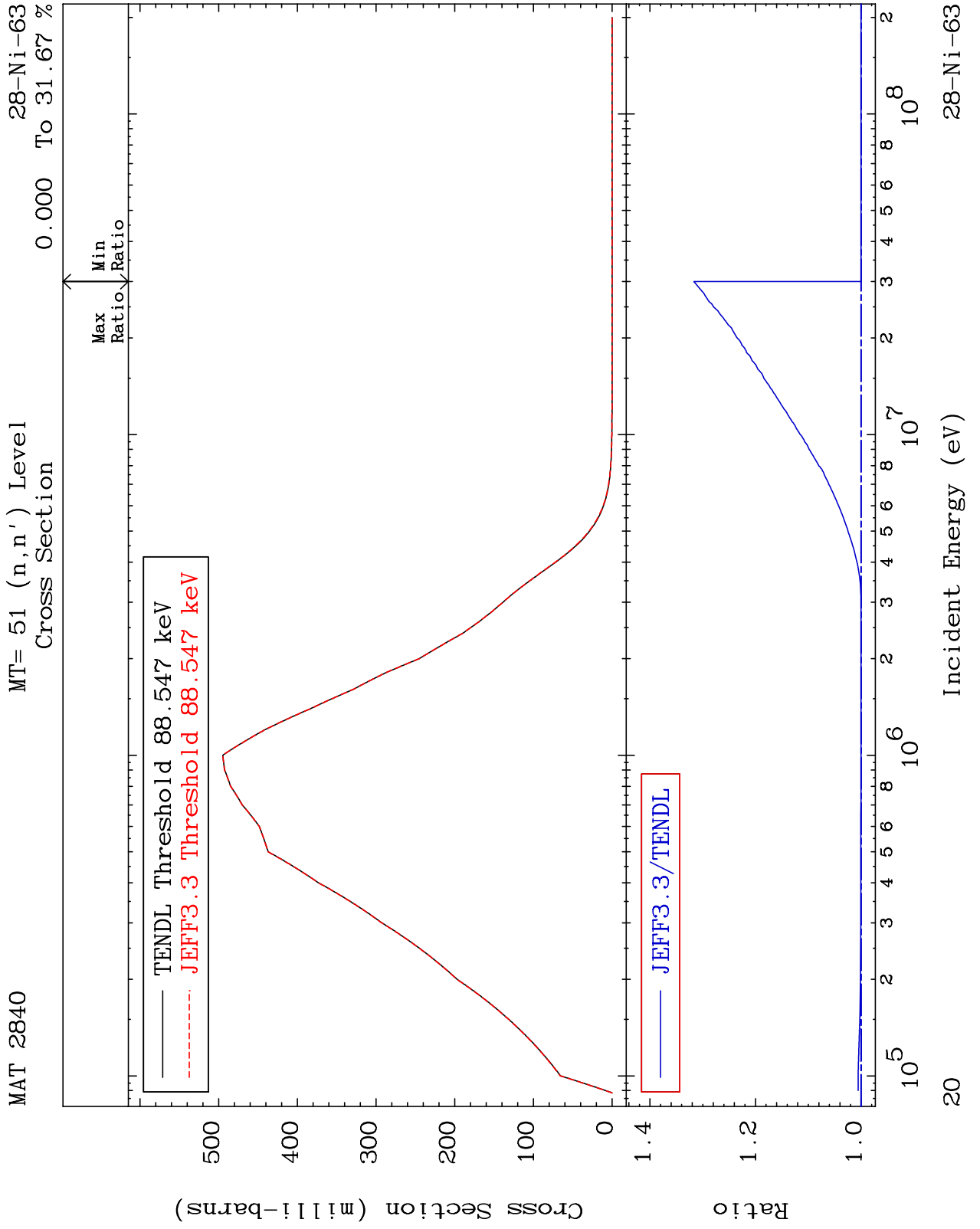
28-Ni-63

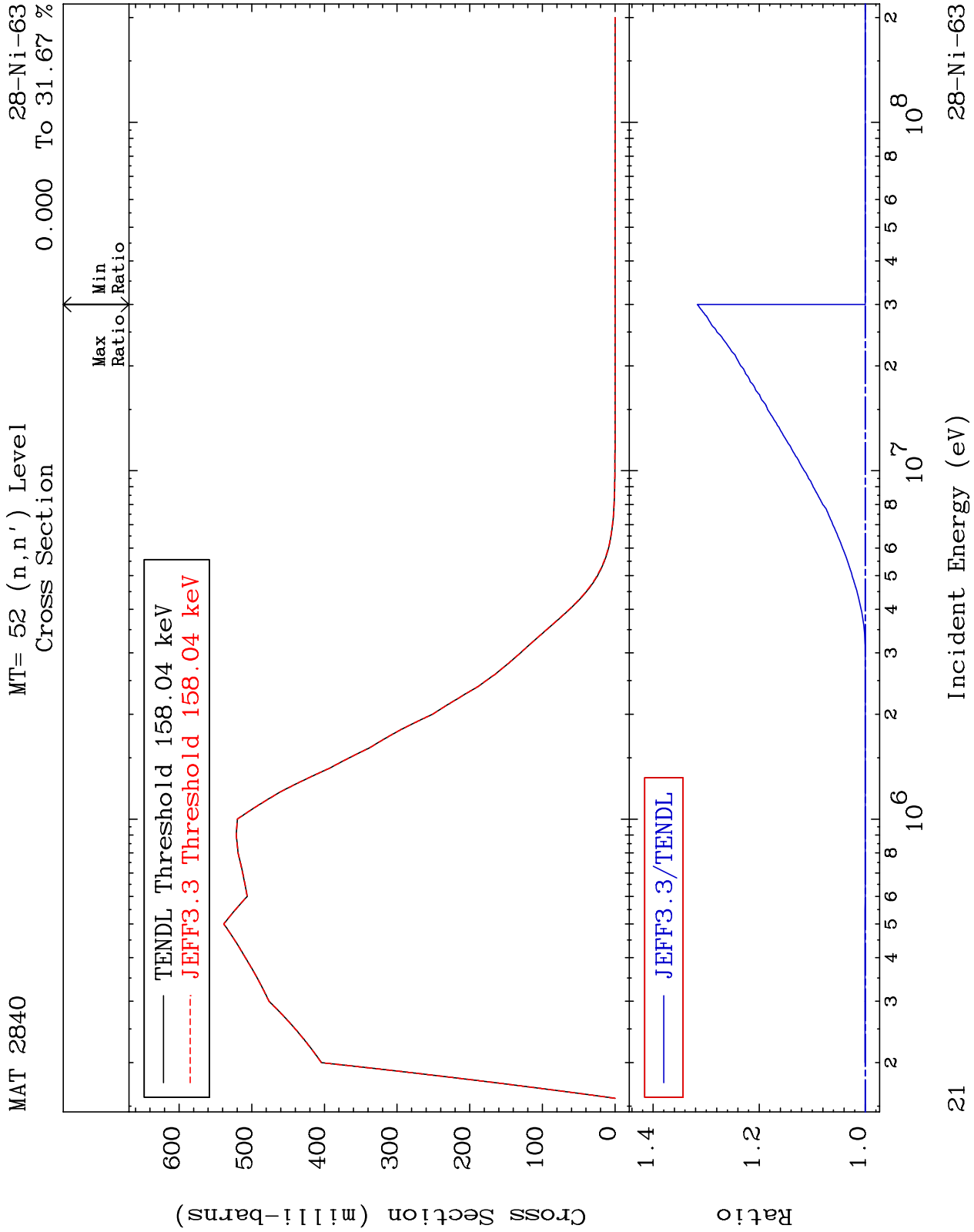
MAT 2840

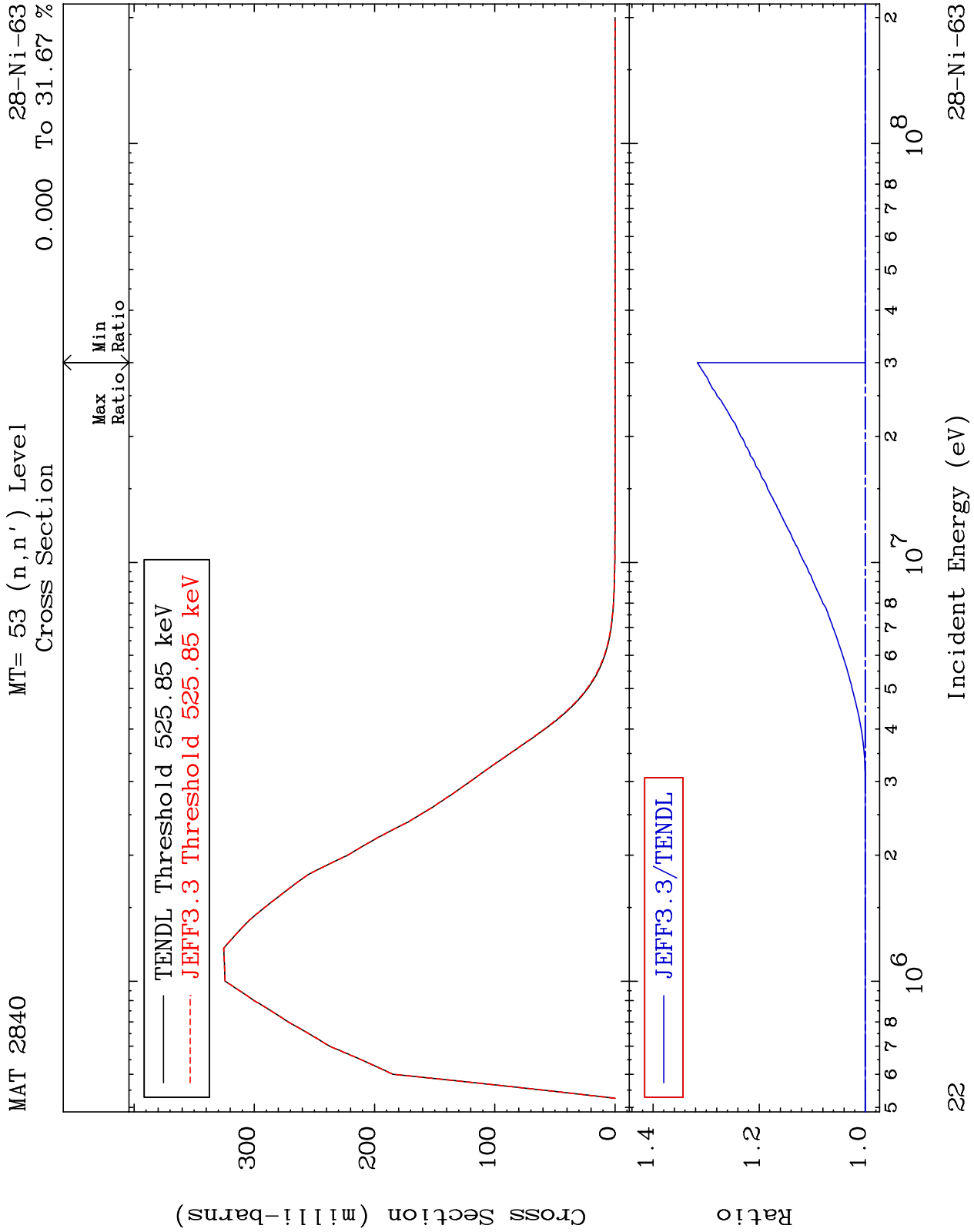
(n,n') p α
Cross Section

28-Ni-63
0.000 To 3415. %

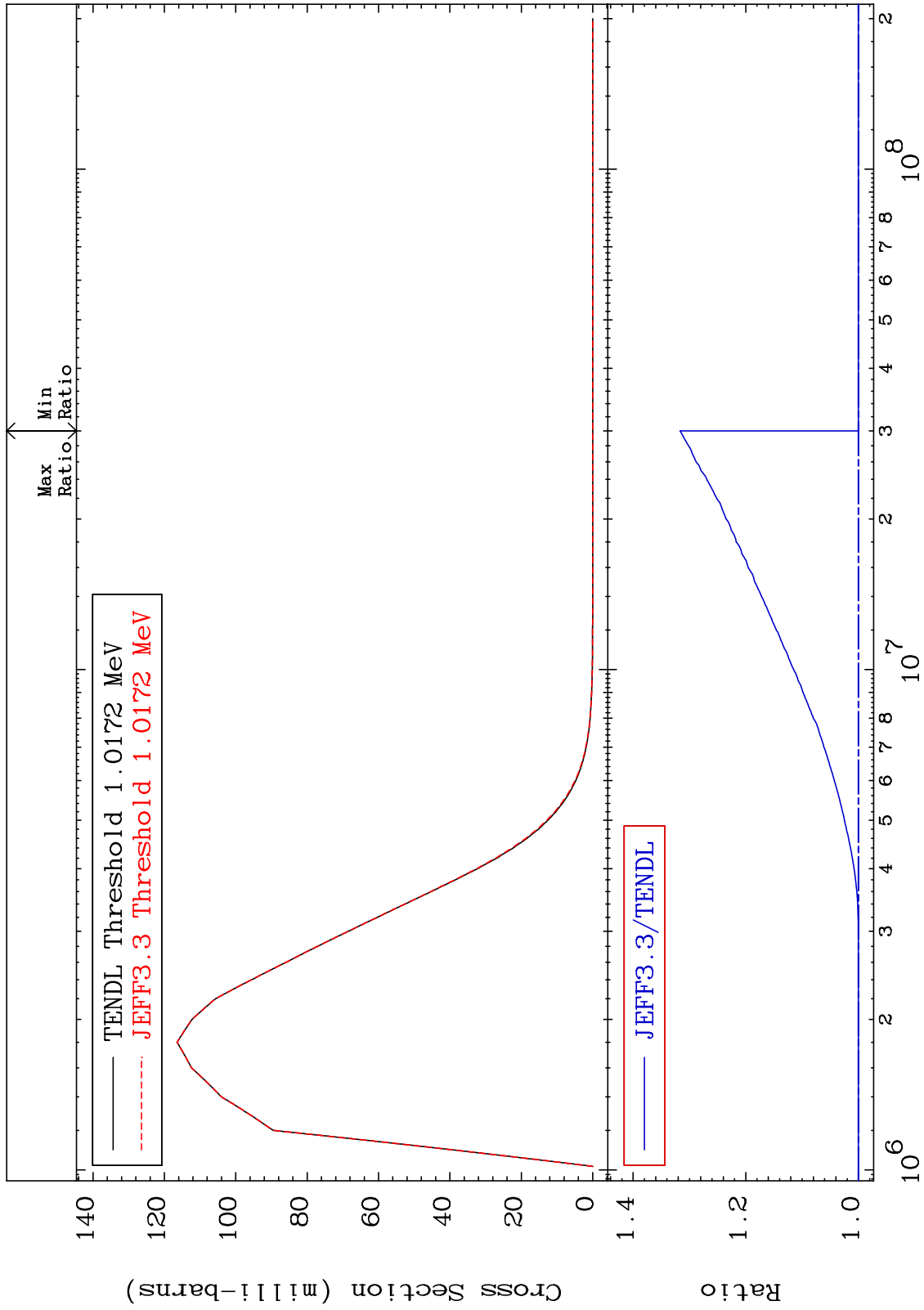




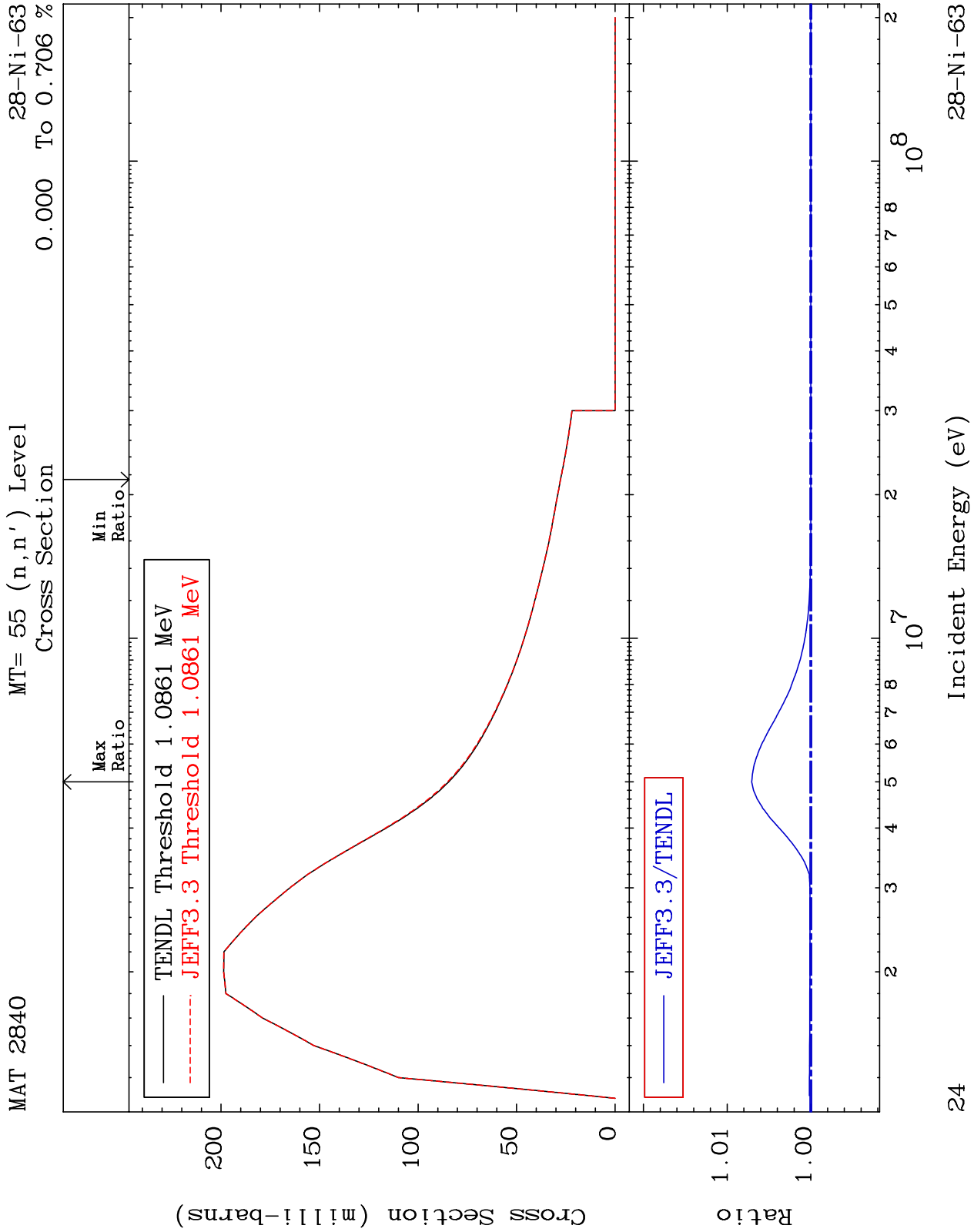


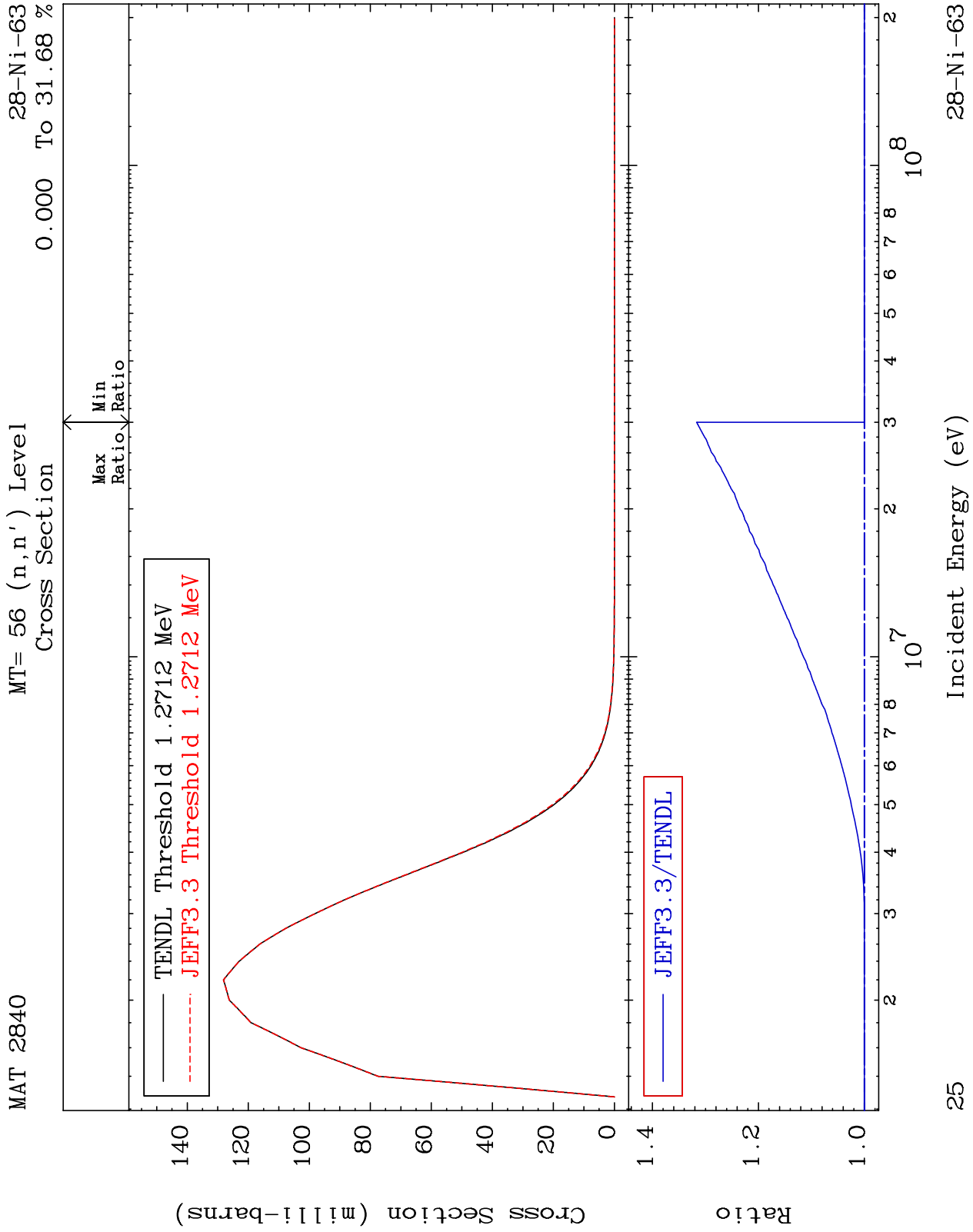


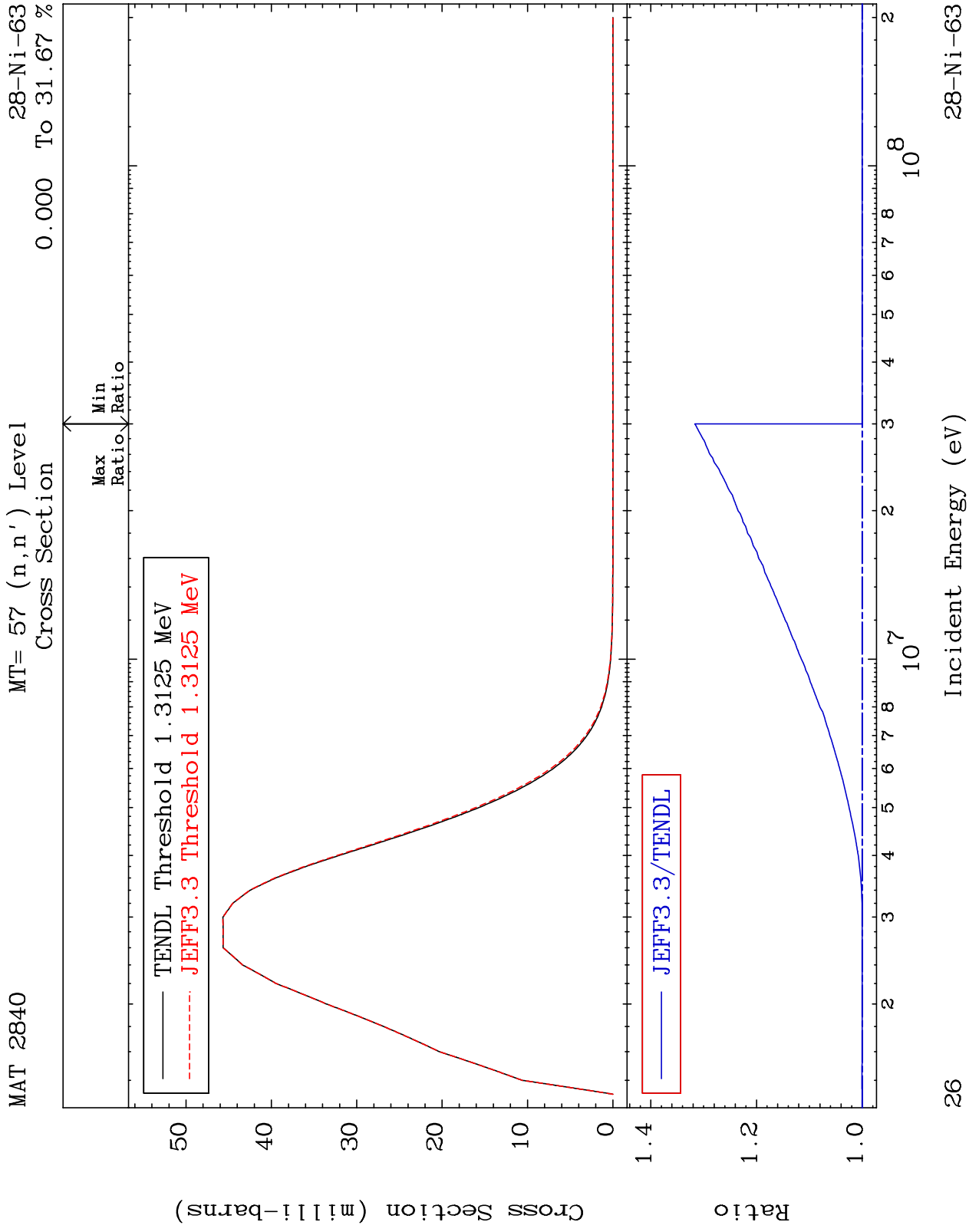
MAT 2840 MT= 54 (n,n') Level Cross Section 28-Ni-63 To 31.68 %
 0.000

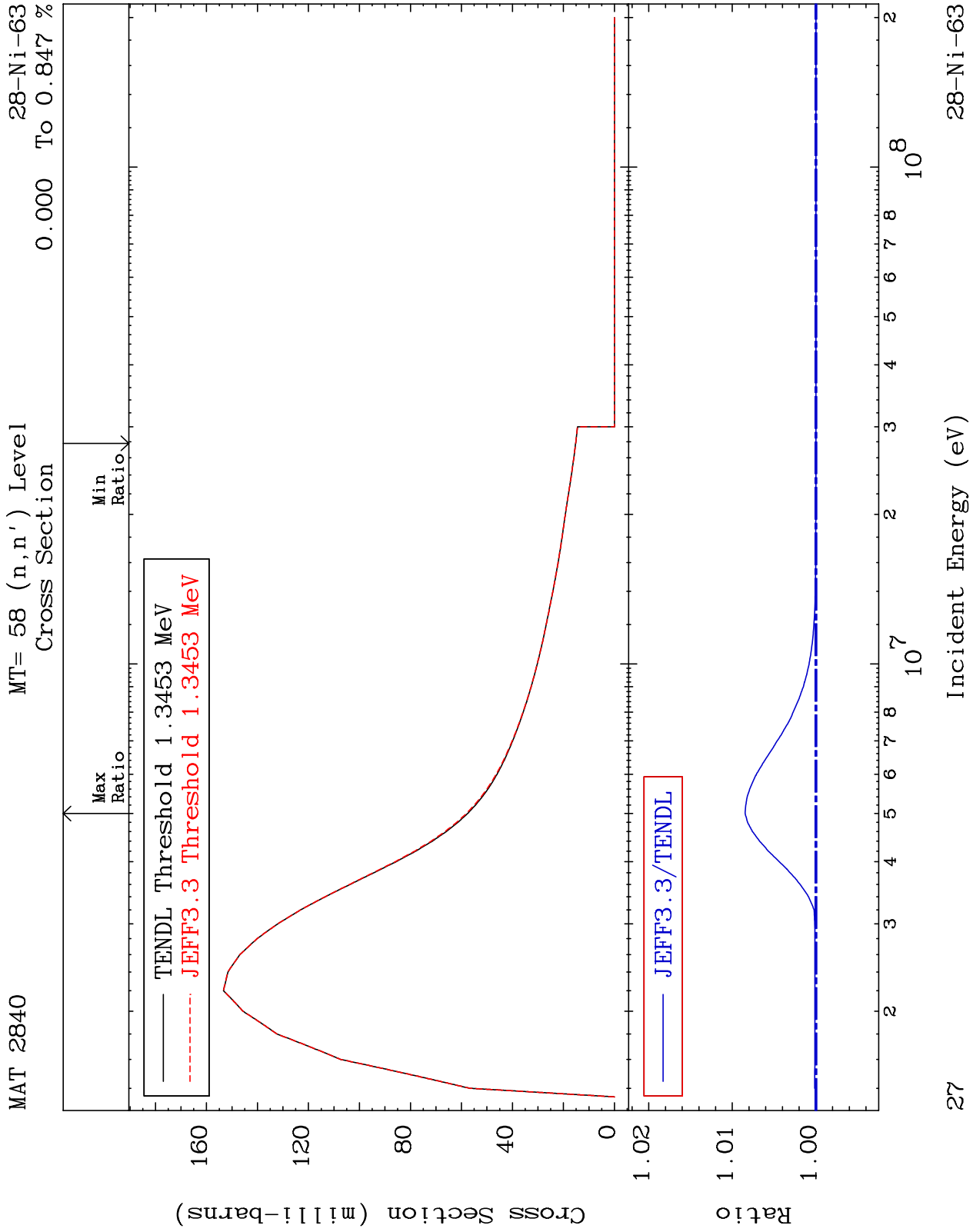


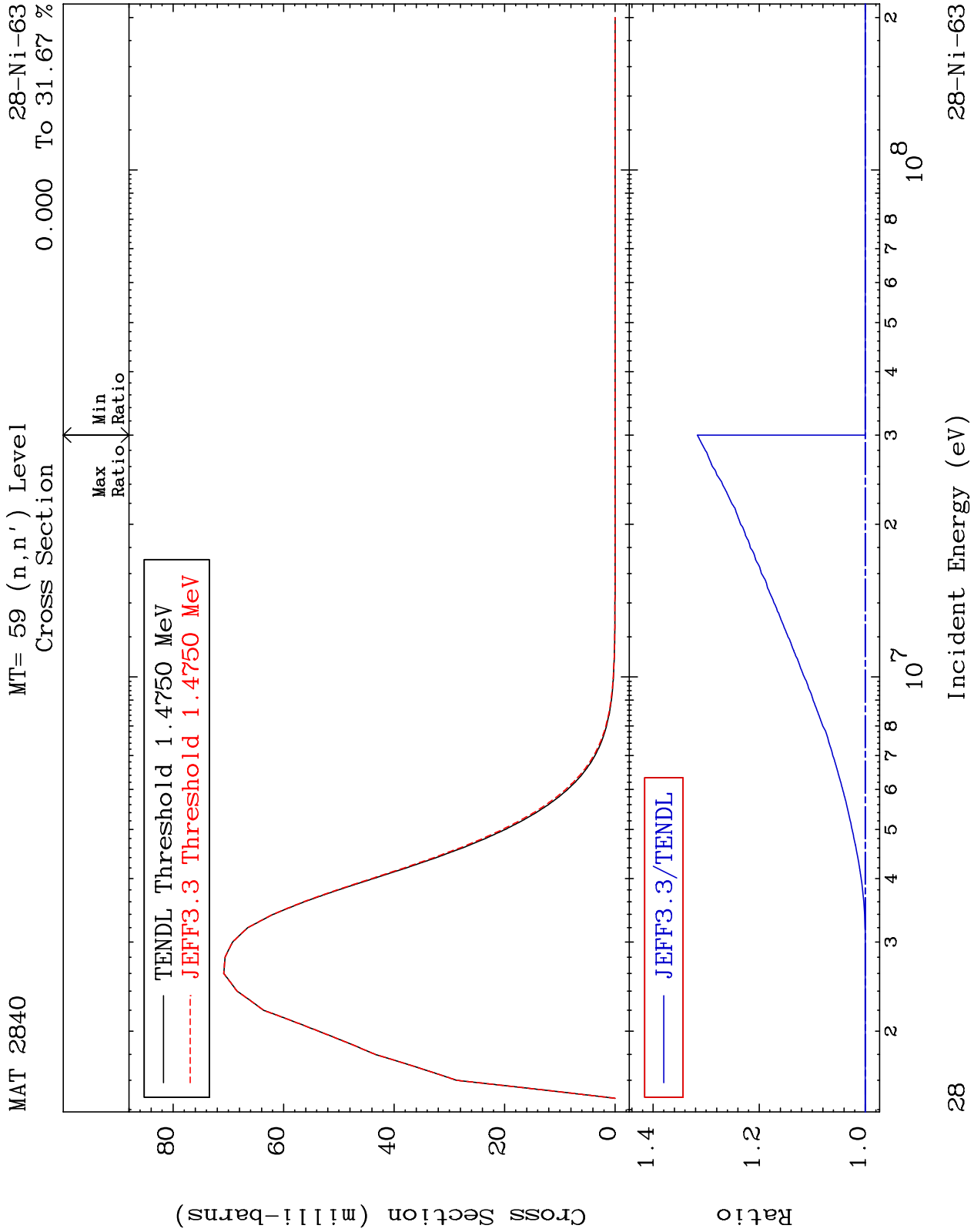
23 Incident Energy (eV) 28-Ni-63



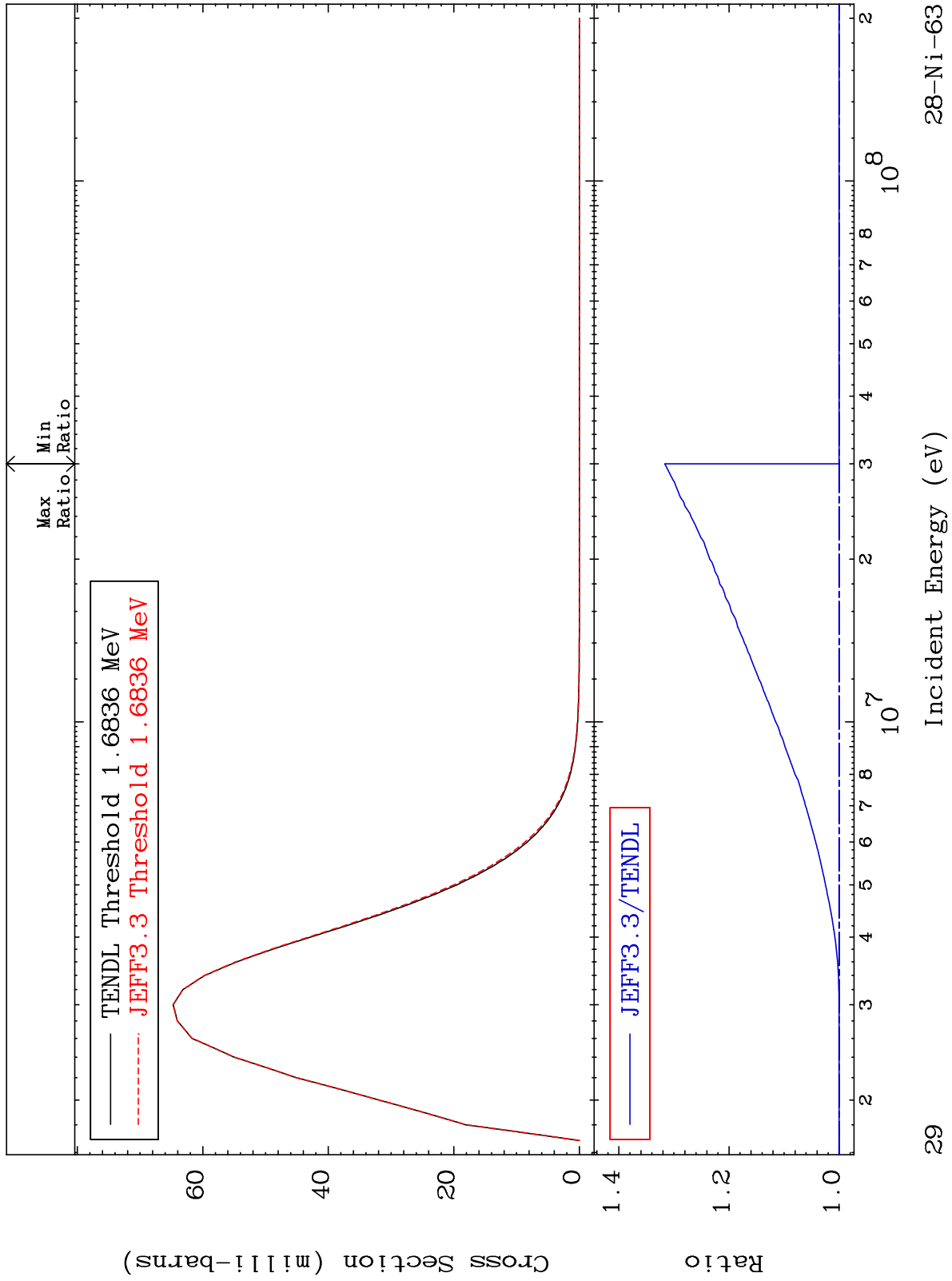


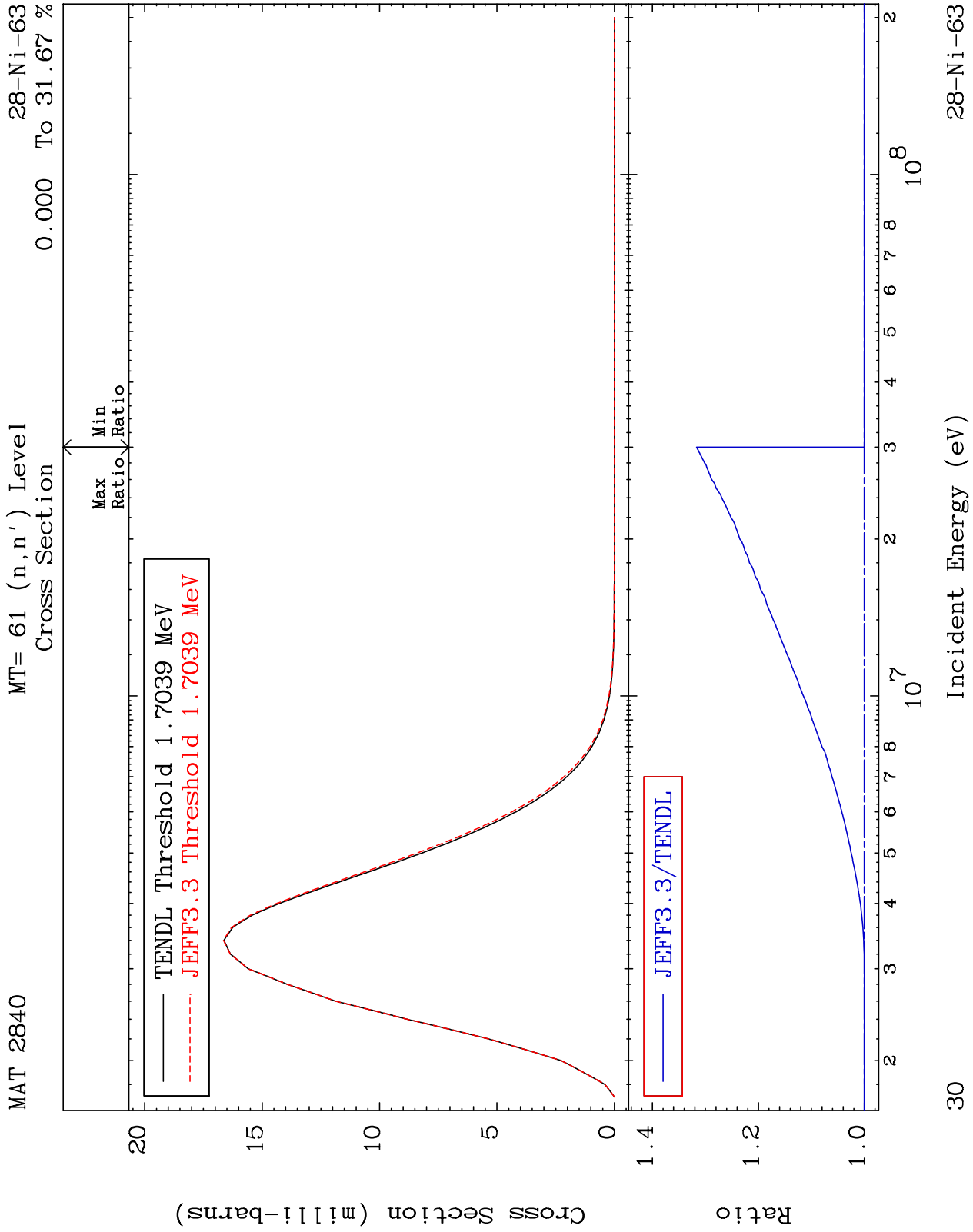


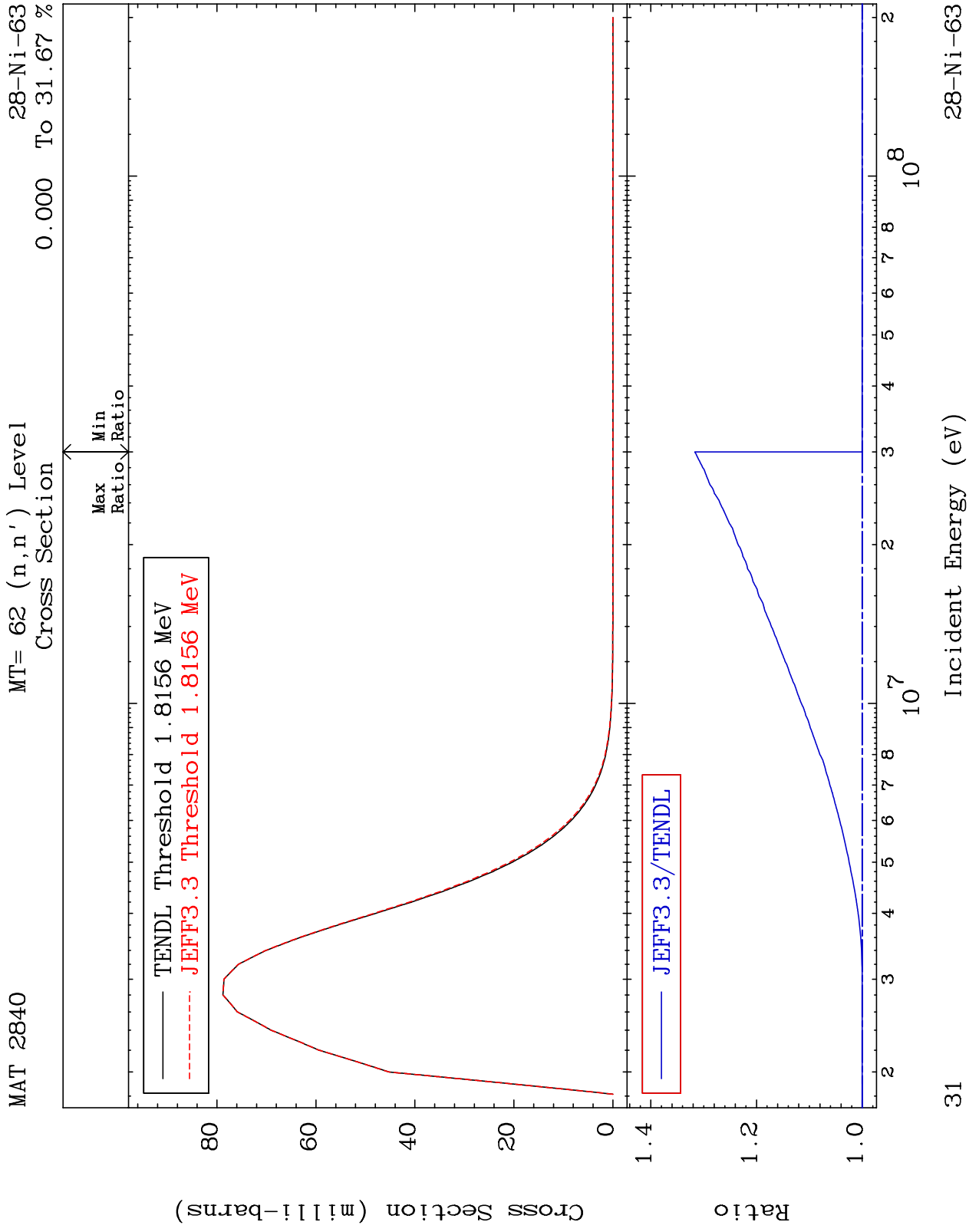




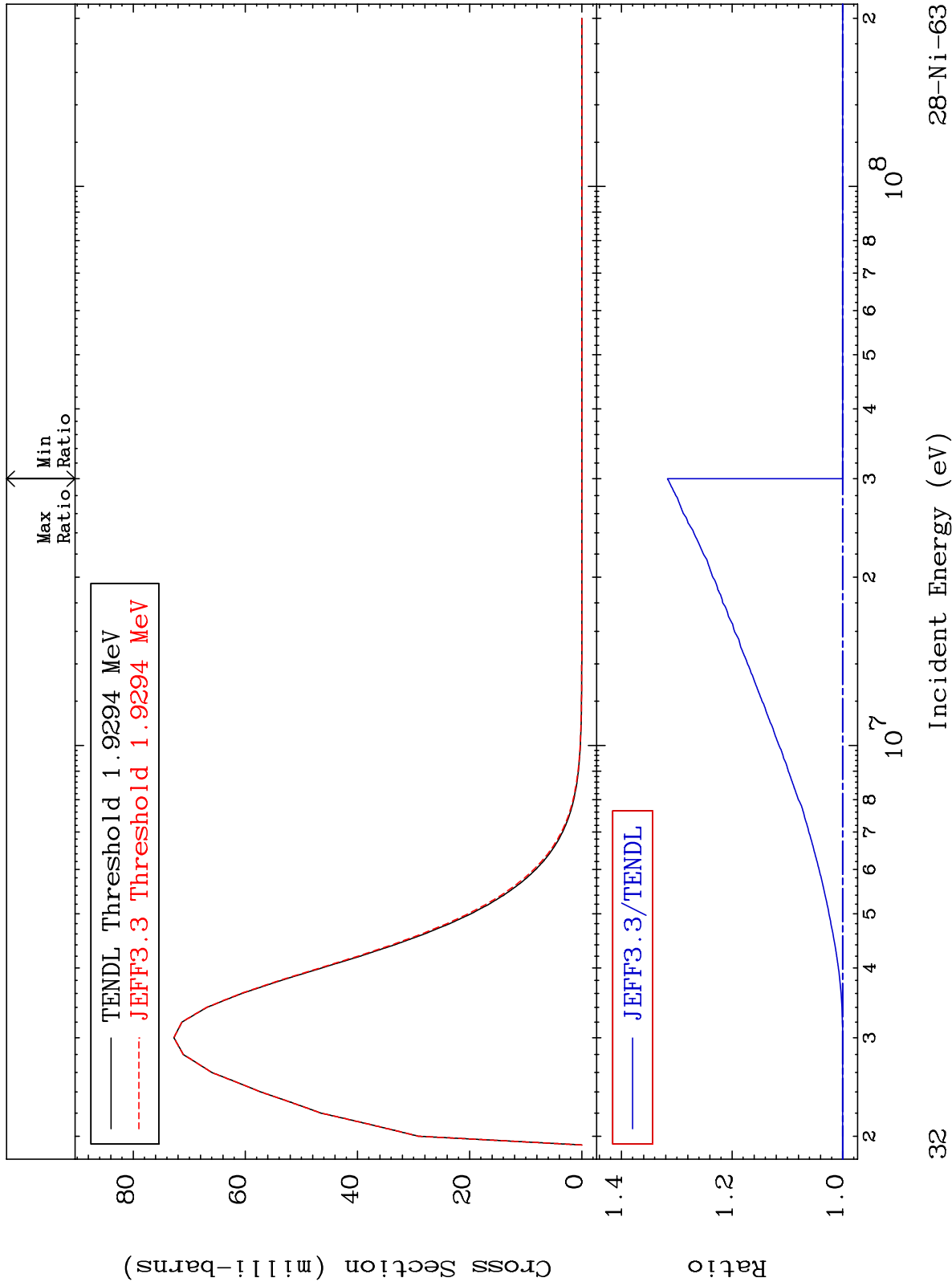
MAT 2840 MT= 60 (n,n') Level Cross Section 28-Ni-63 To 31.67 %

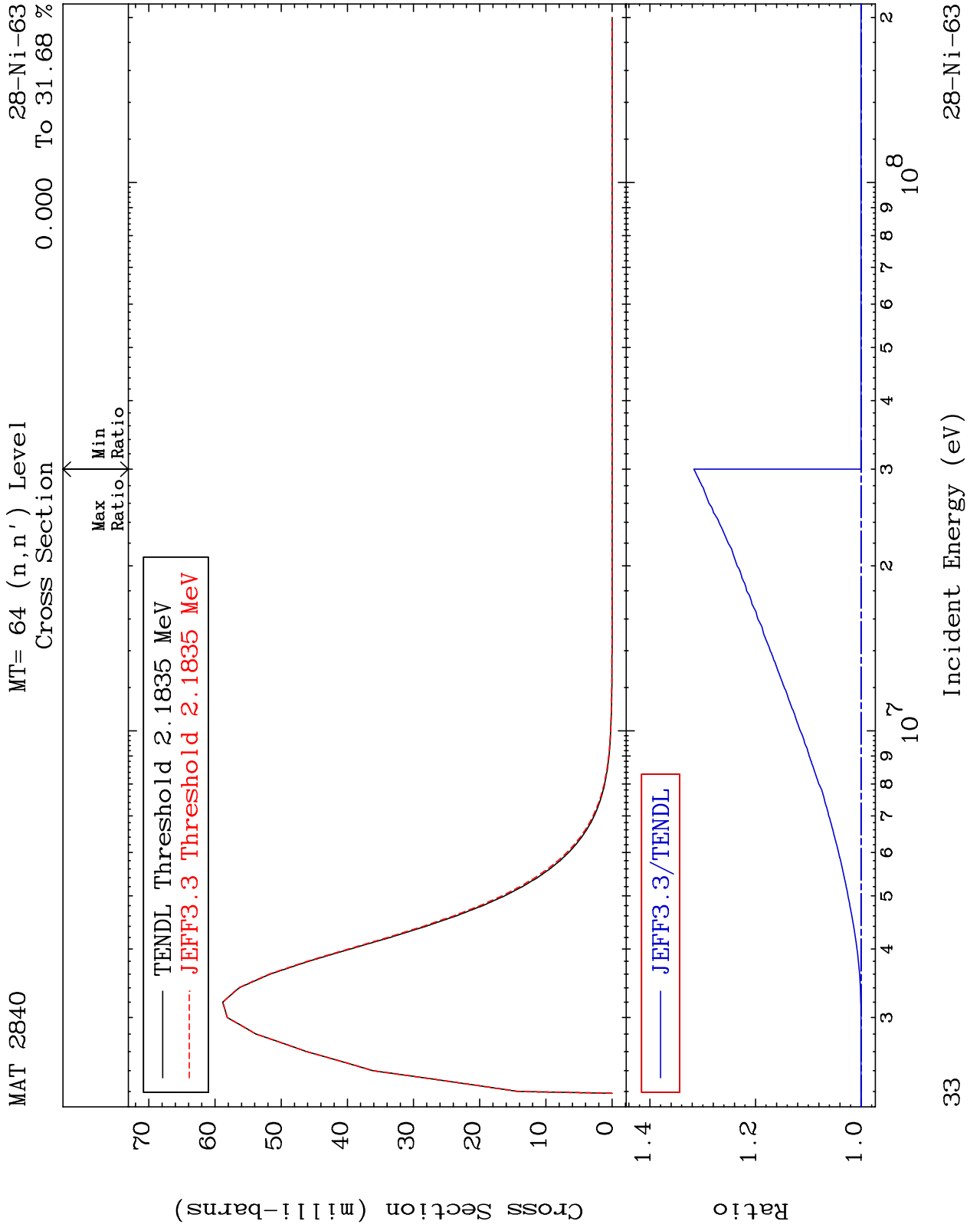


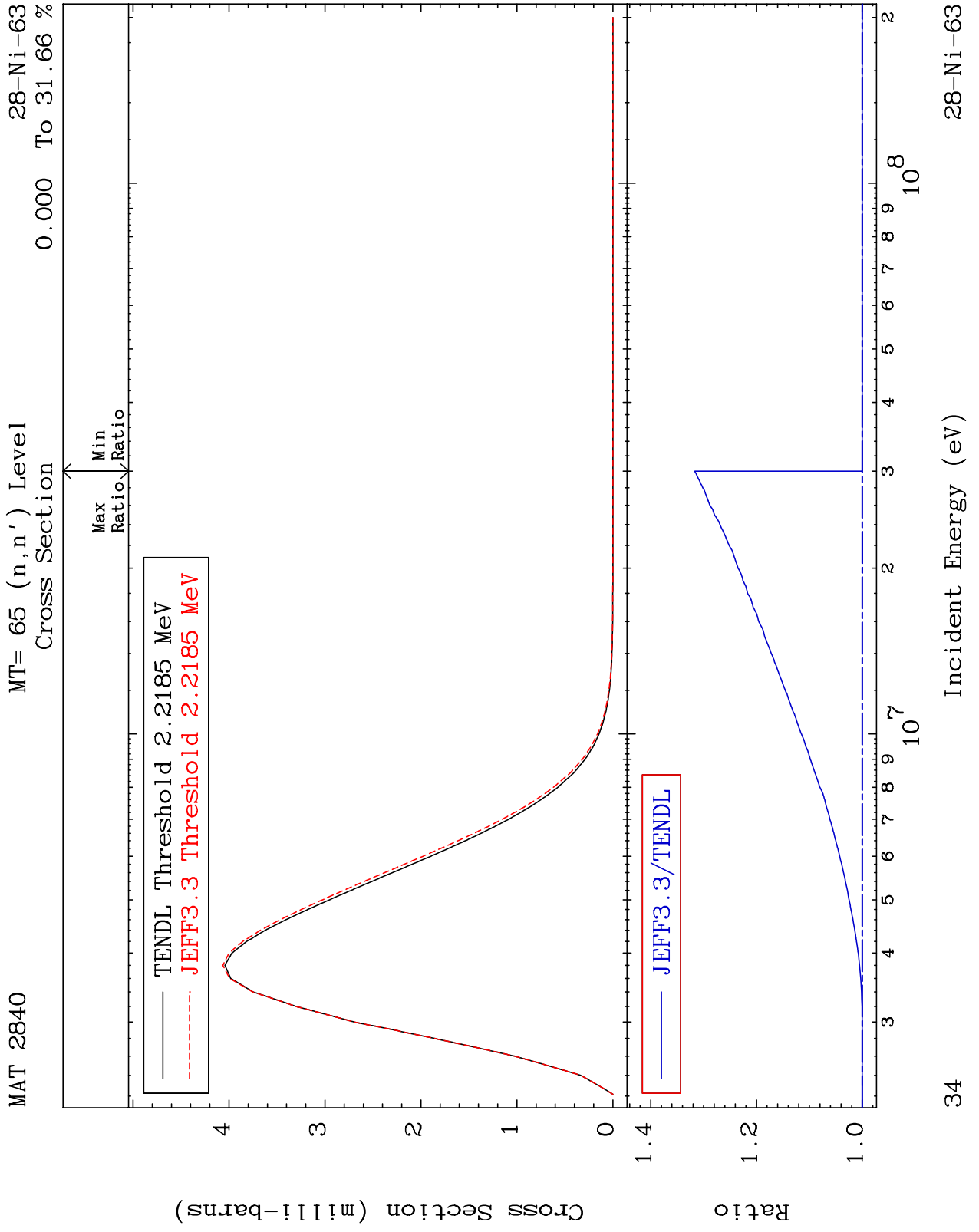


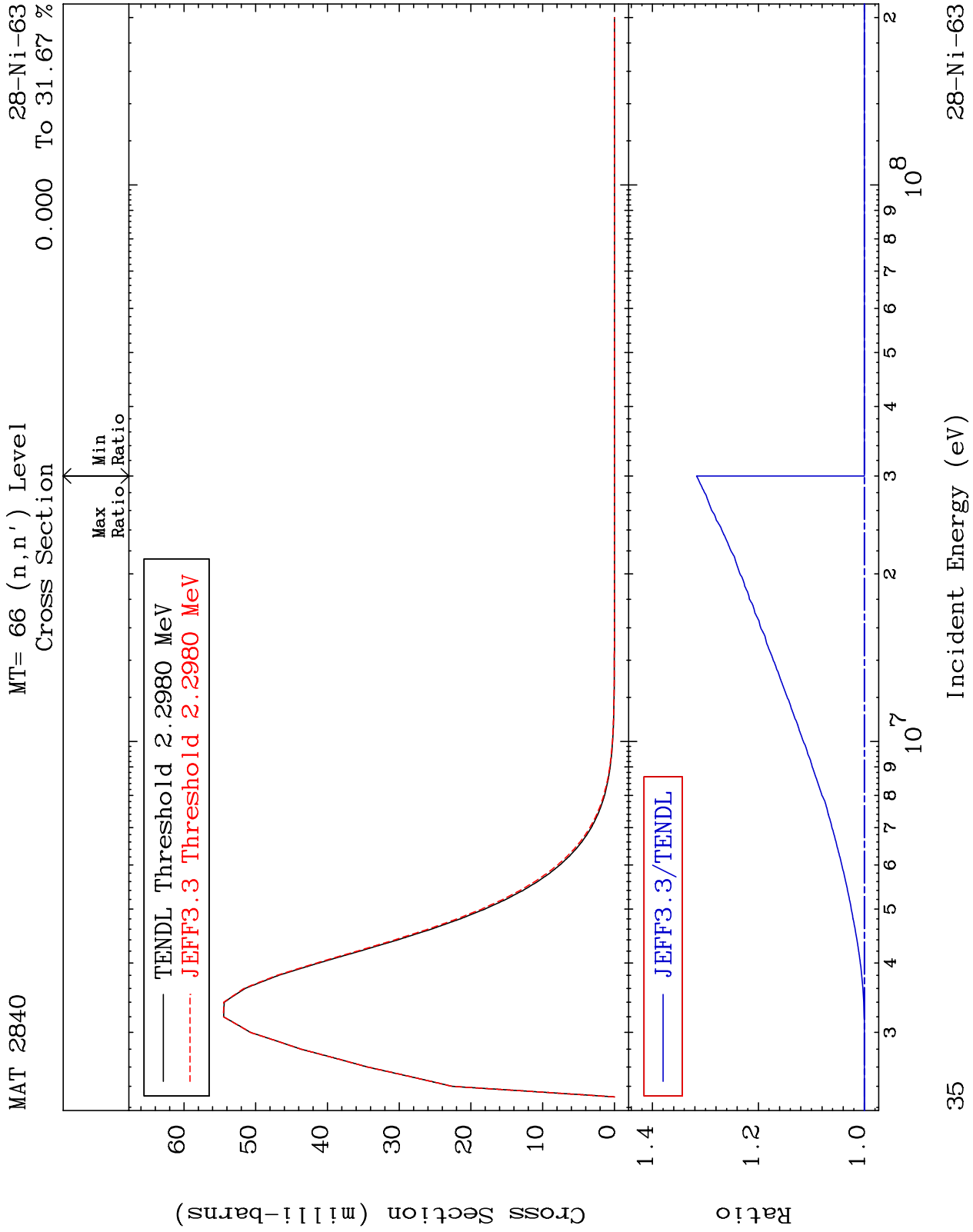


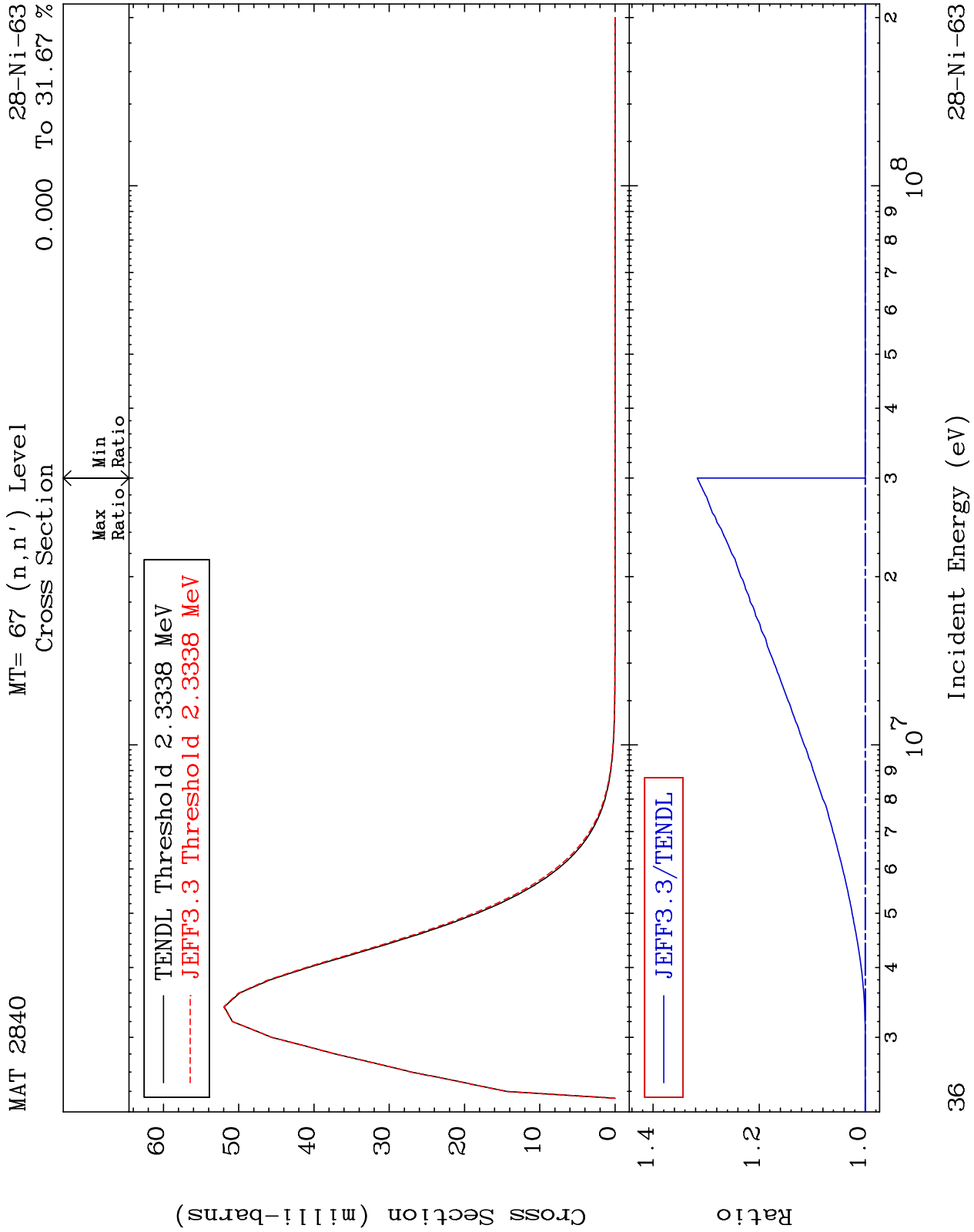
MAT 2840 MT= 63 (n,n') Level Cross Section 28-Ni-63 To 31.67 %

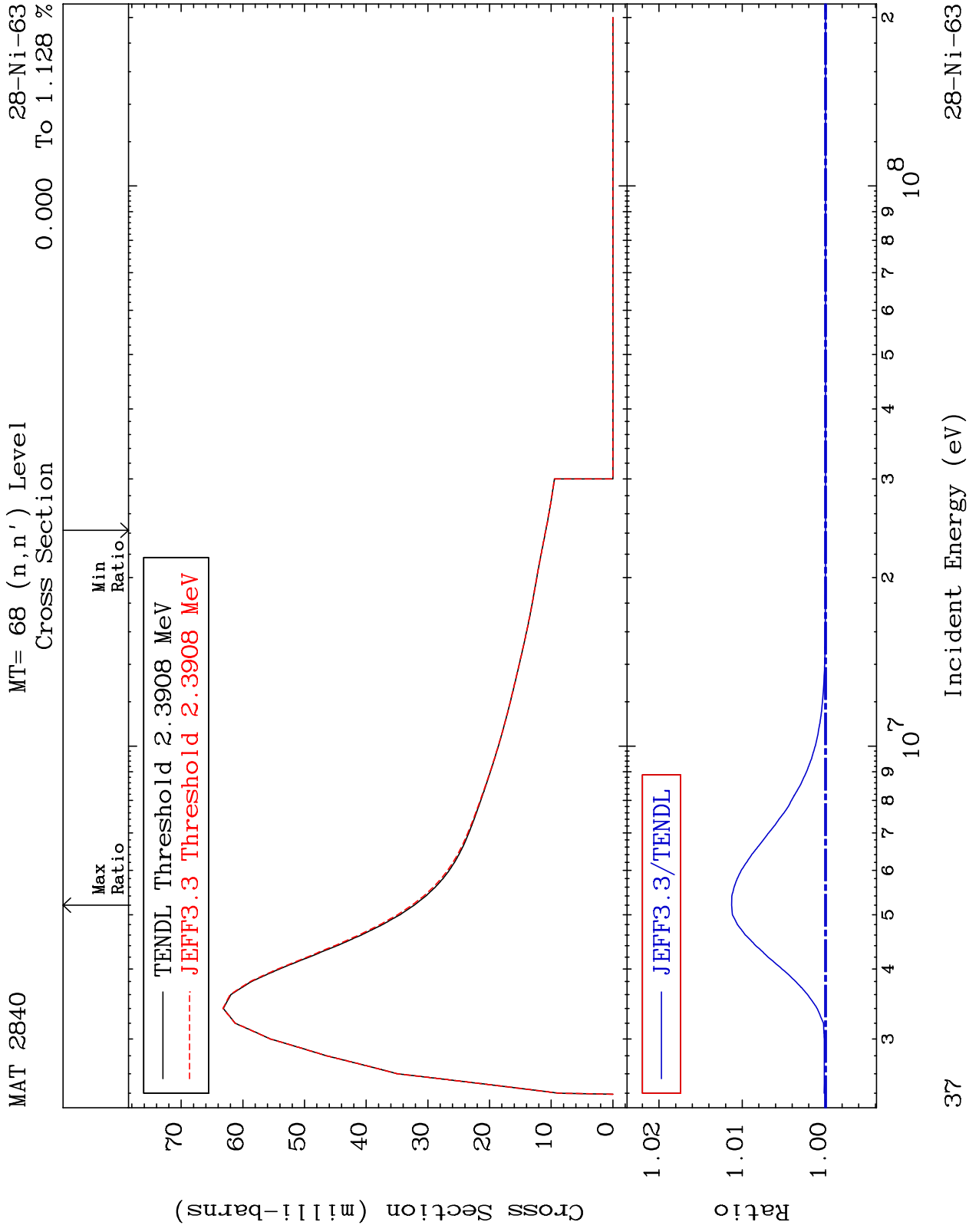


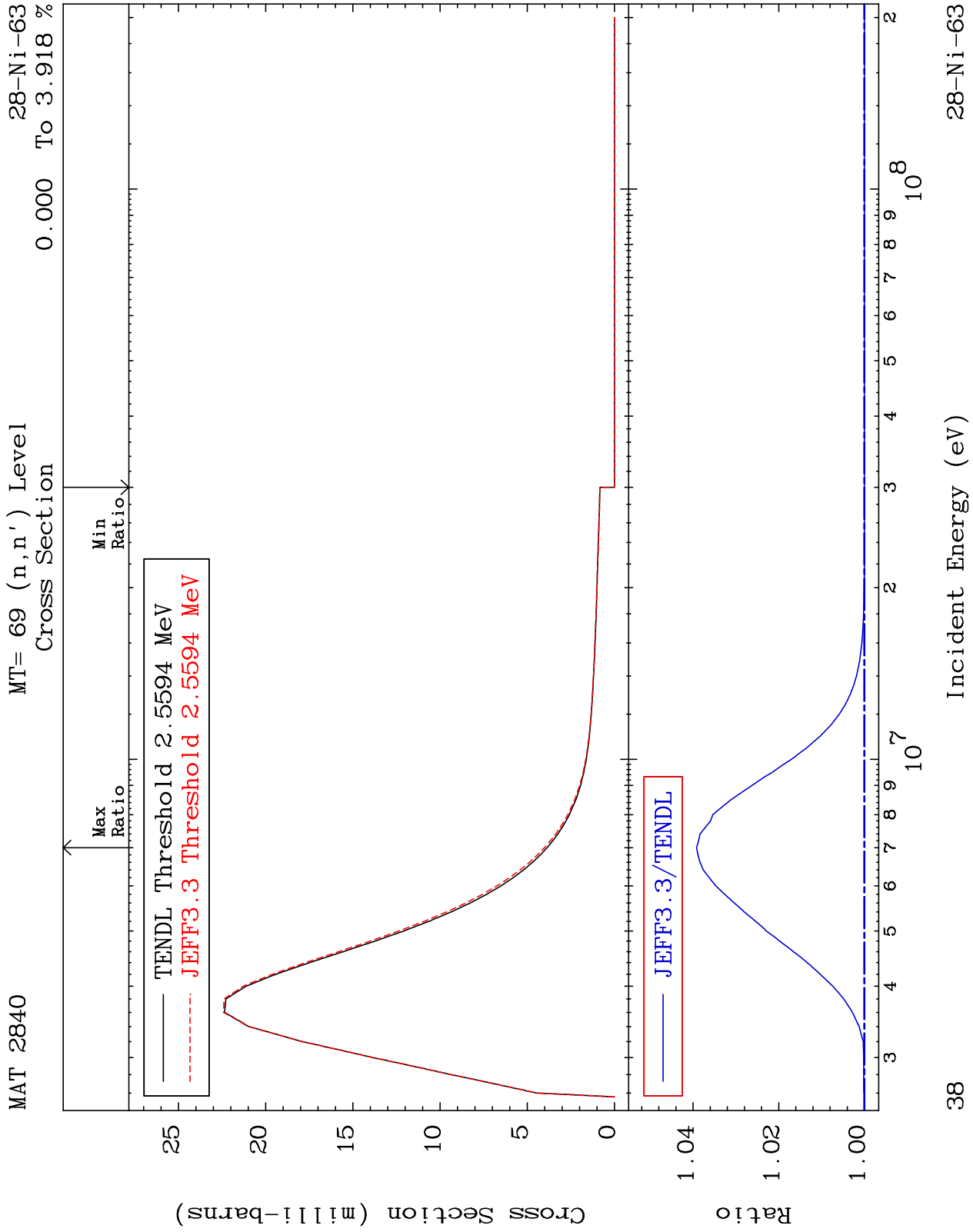


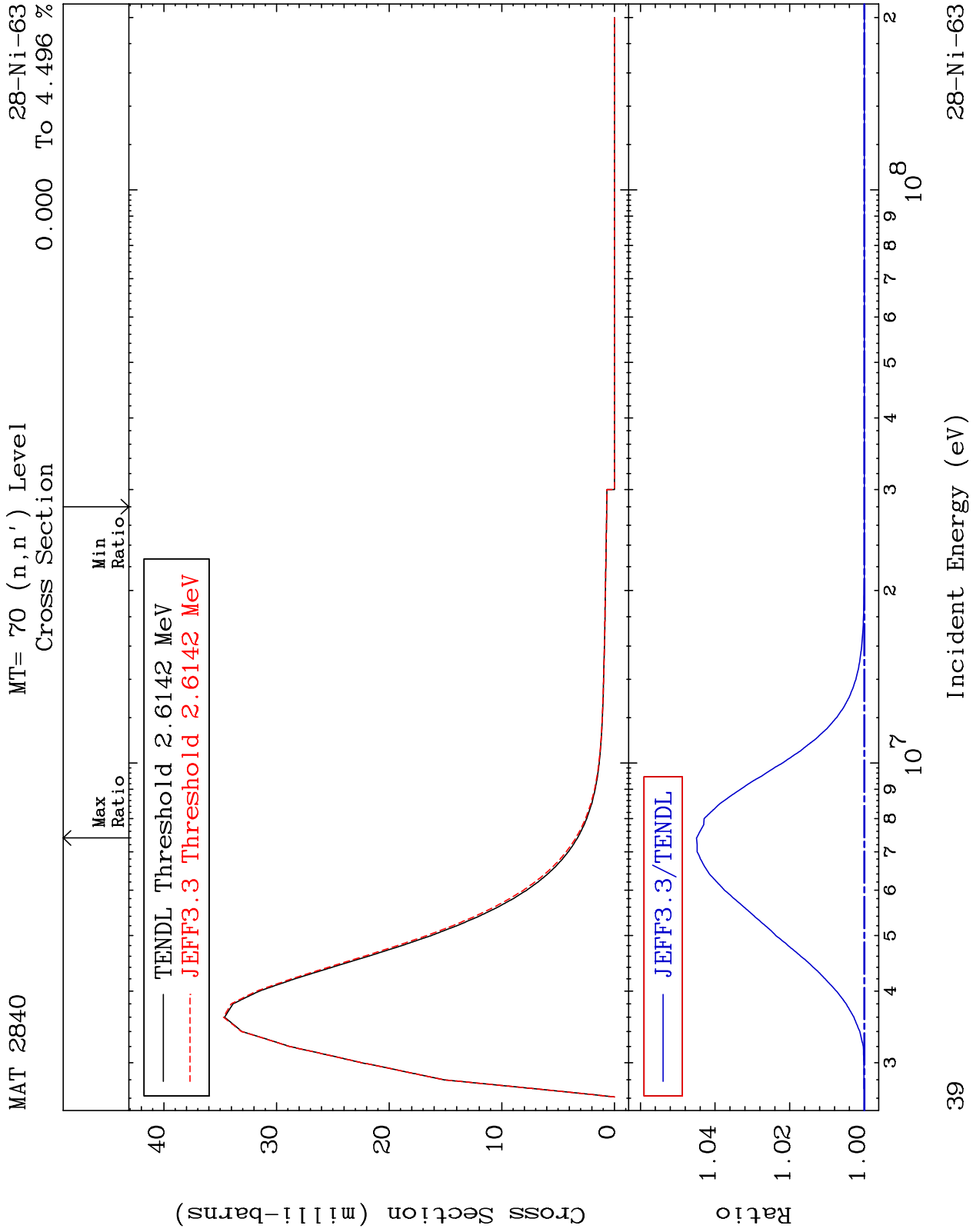


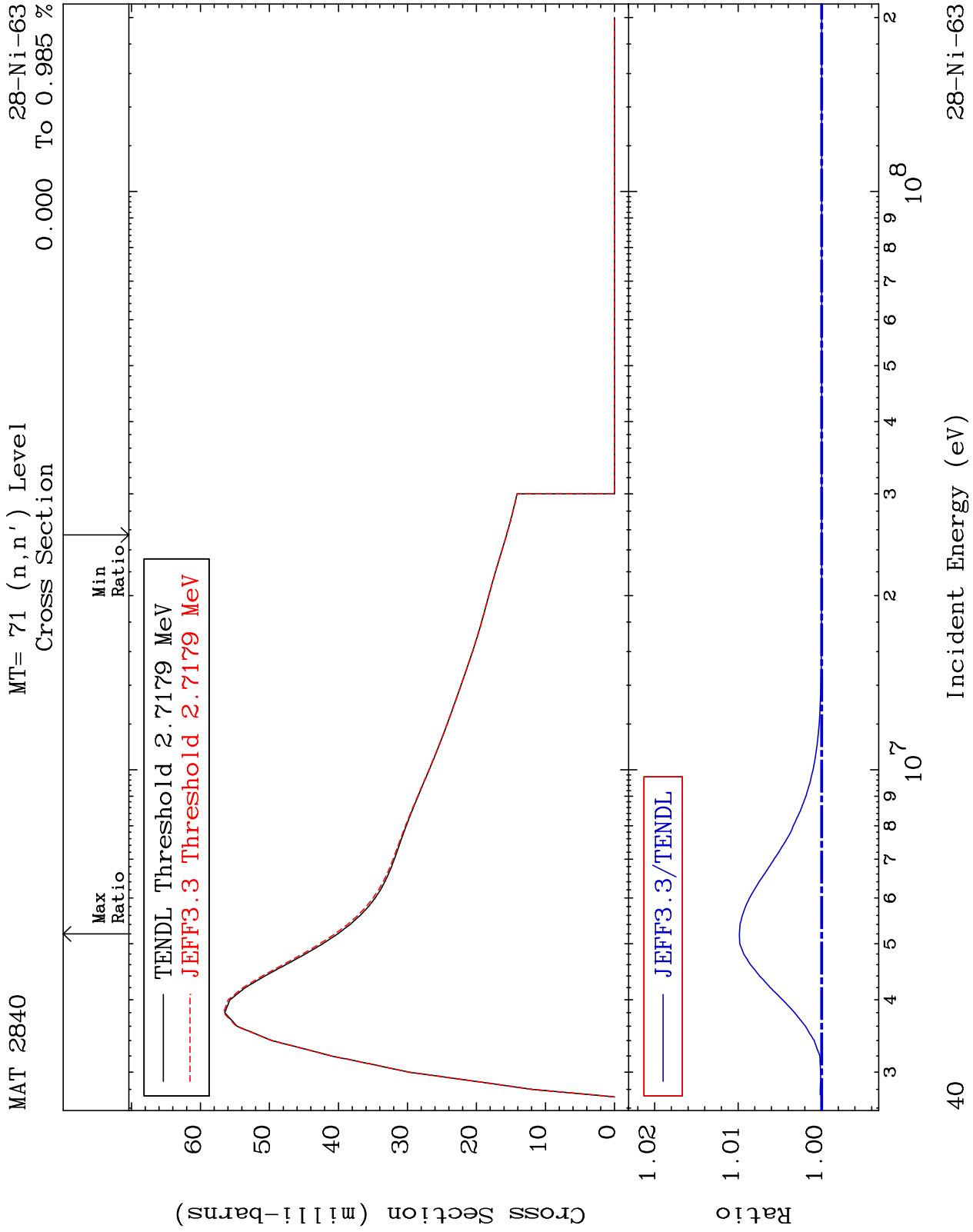




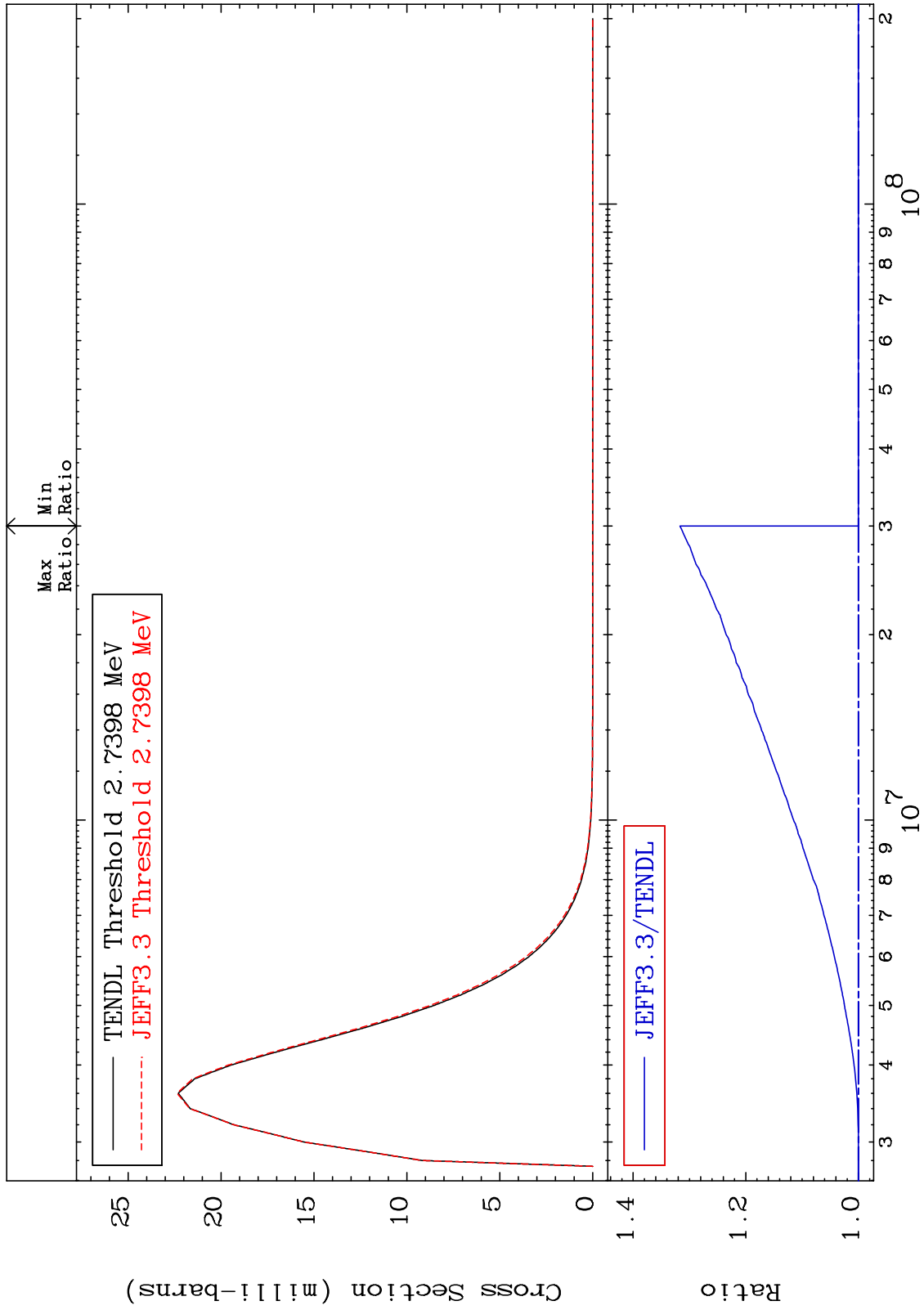




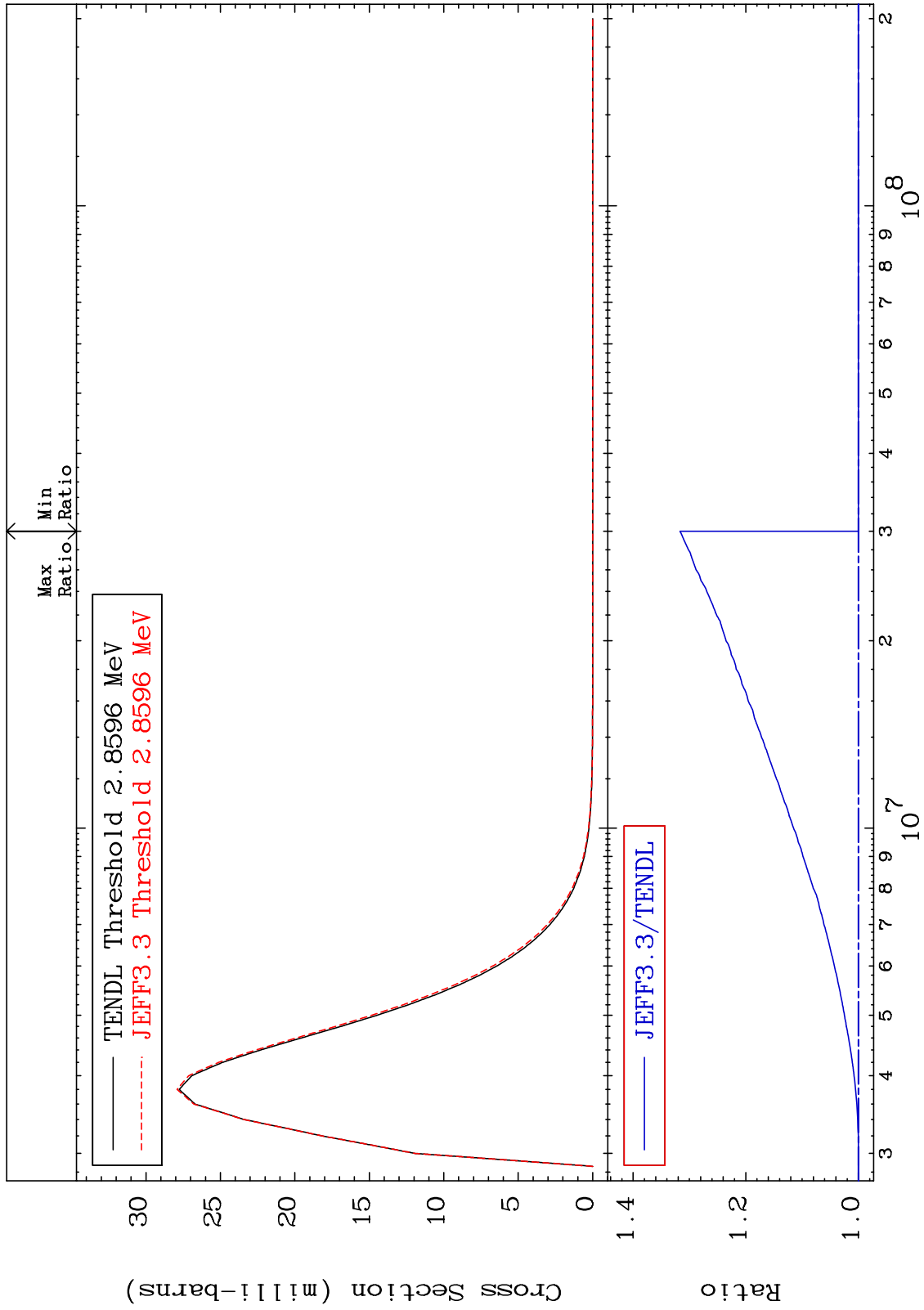




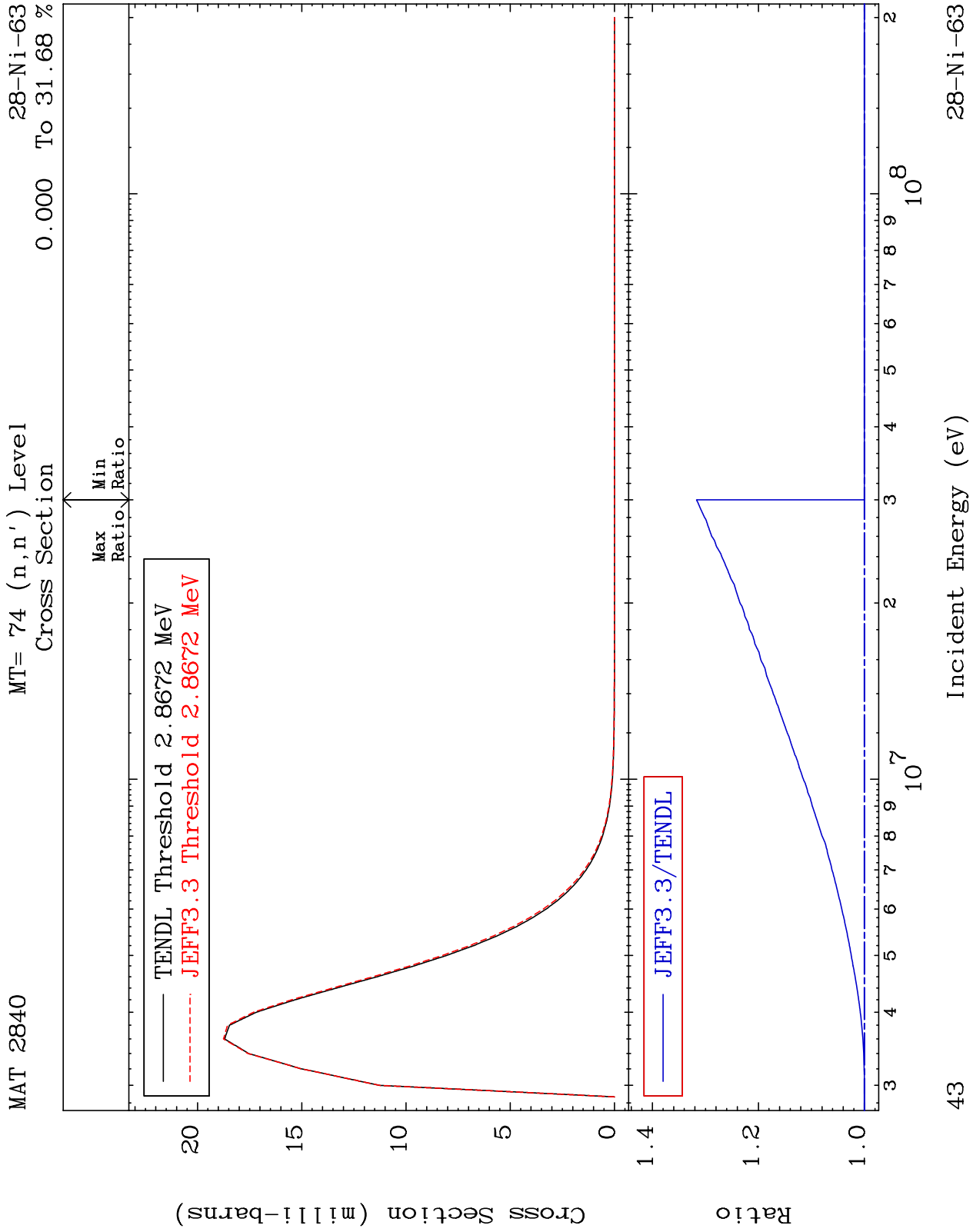
MAT 2840 MT= 72 (n, n') Level Cross Section 28-Ni-63 To 31.68 %



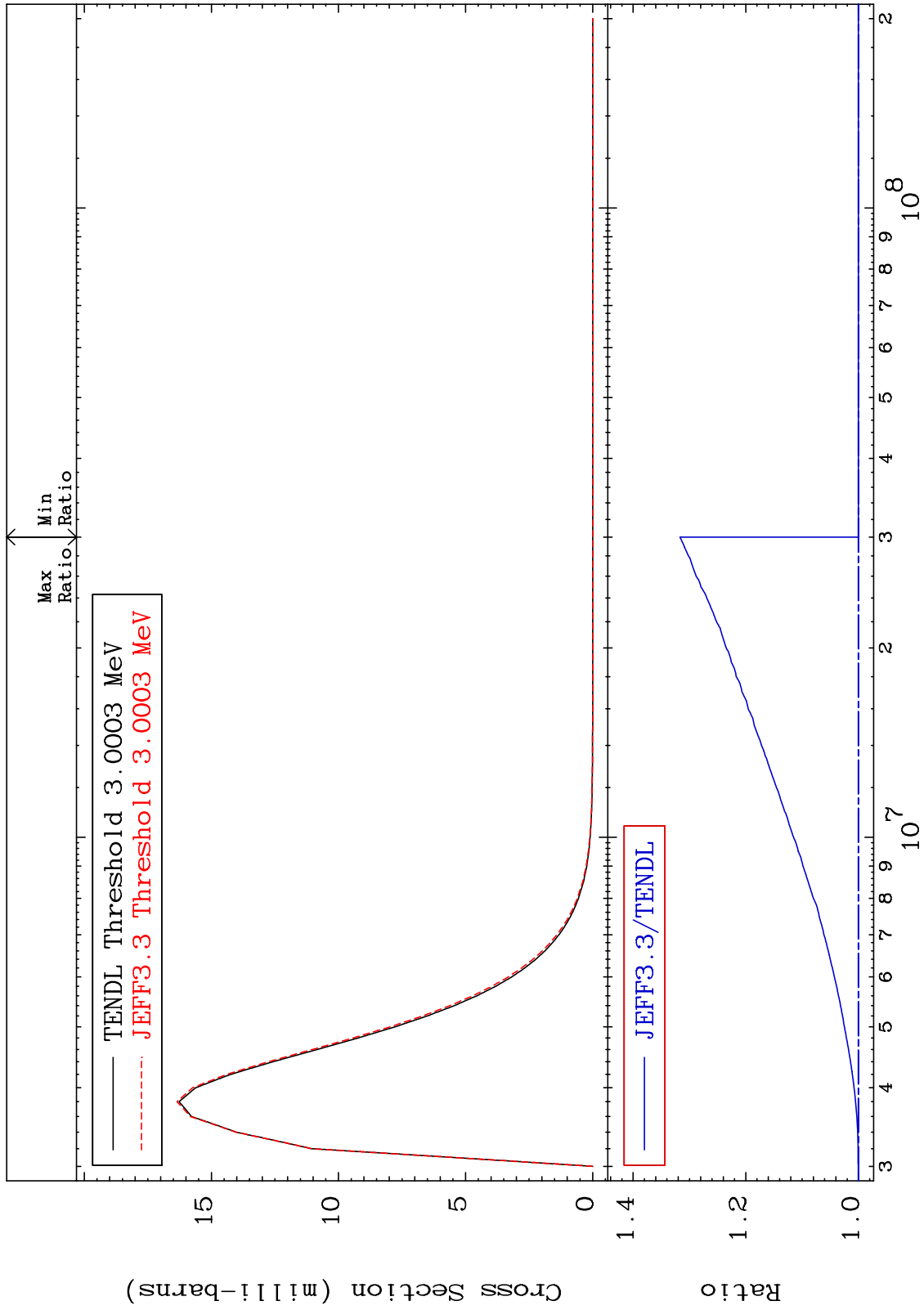
MAT 2840 MT= 73 (n, n') Level Cross Section 28-Ni-63 To 31.67 %



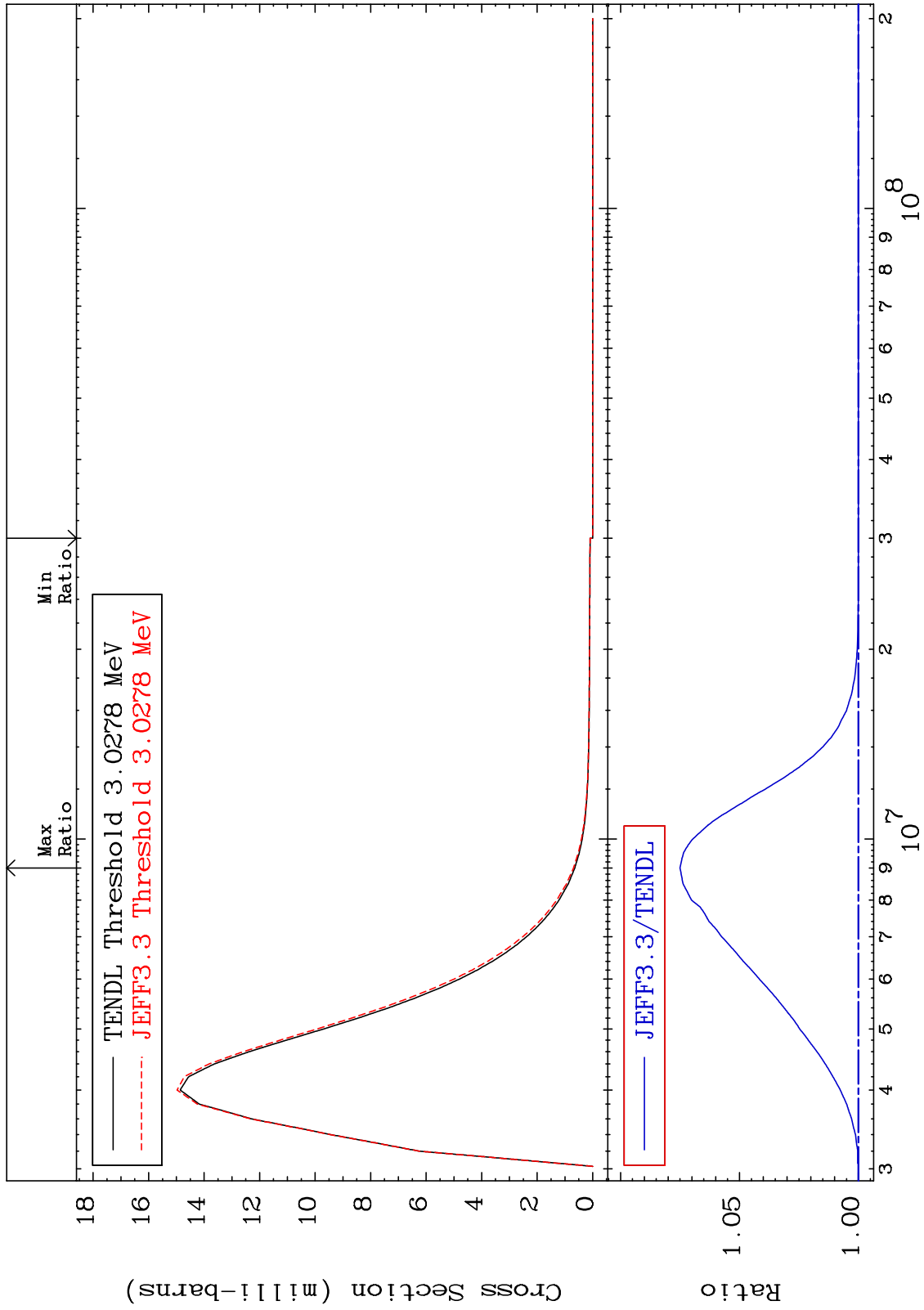
42 Incident Energy (eV) 28-Ni-63

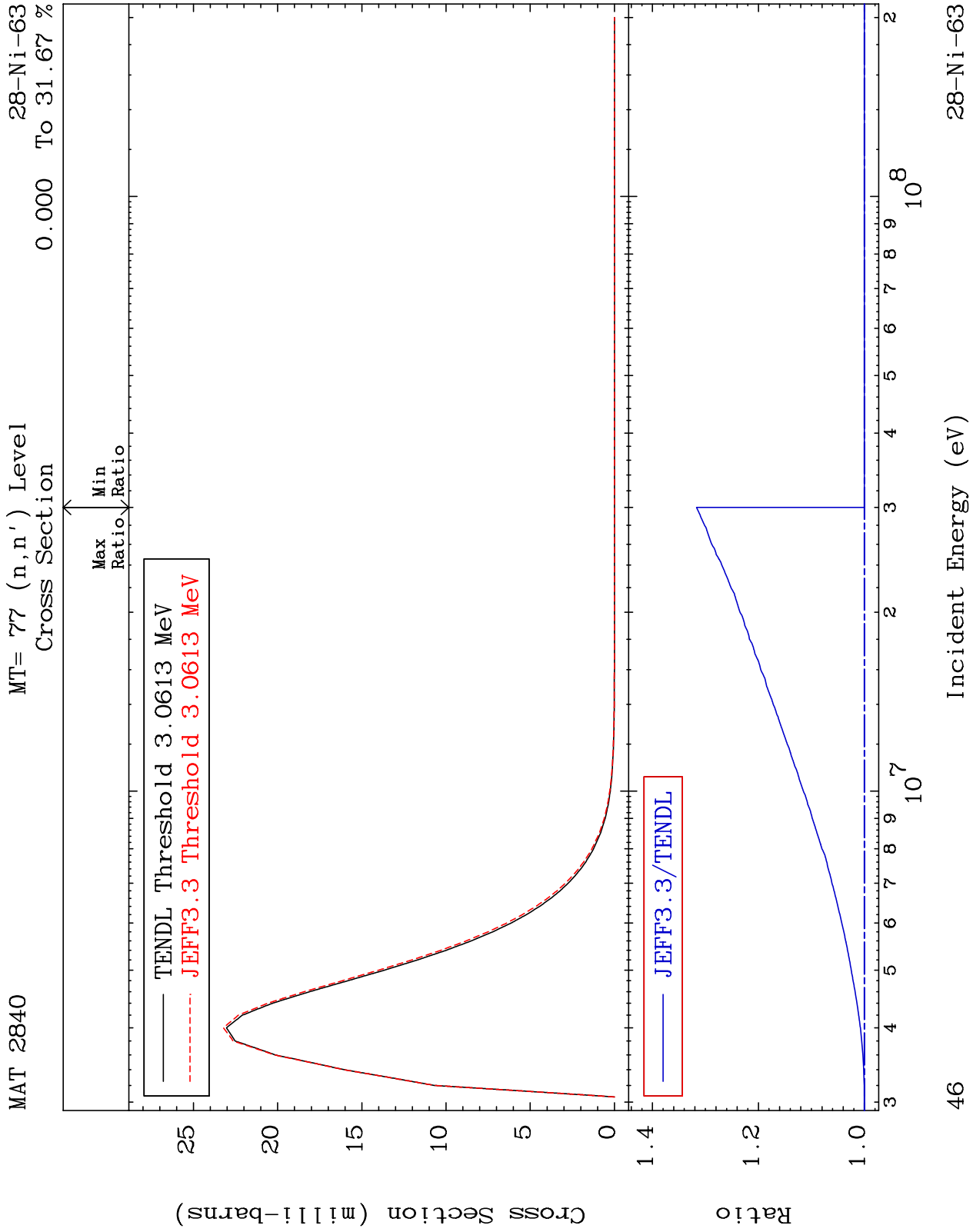


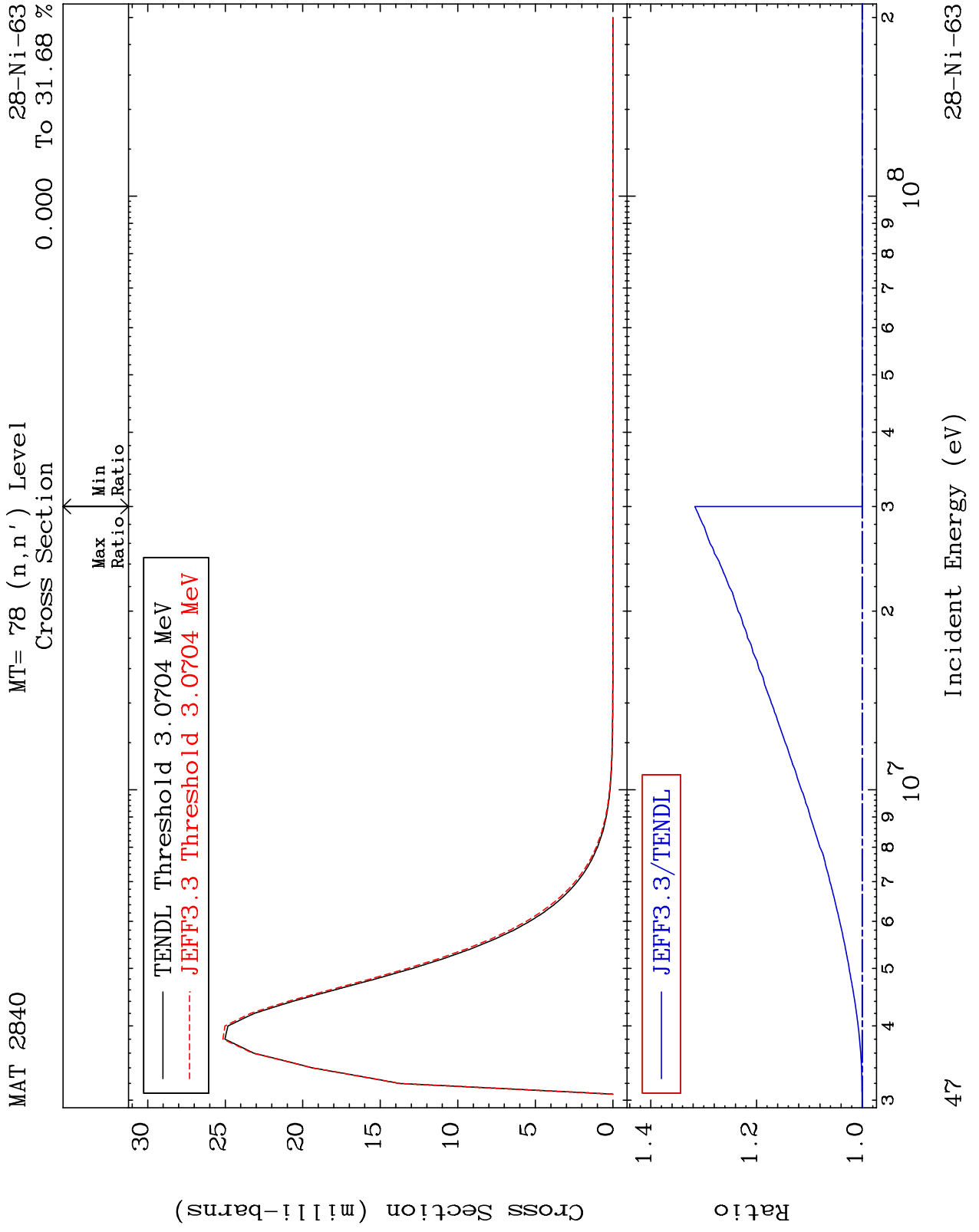
MAT 2840 MT= 75 (n,n') Level Cross Section 28-Ni-63 To 31.68 %



MAT 2840 MT= 76 (n,n') Level Cross Section 28-Ni-63 To 7.501 %



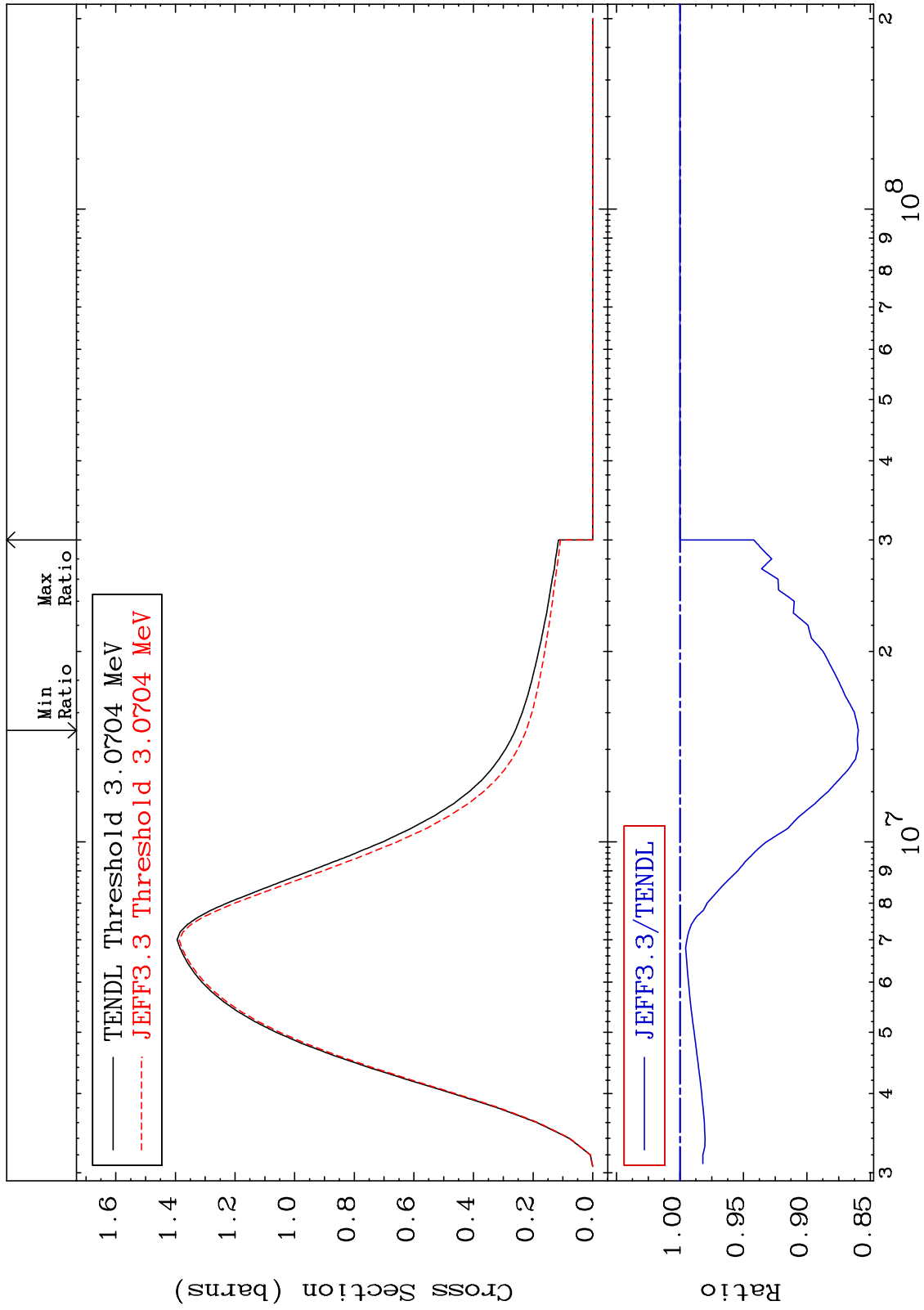




MAT 2840

(n, n') Continuum
Cross Section

28-Ni-63
-14.06 To 0.000 %



48

Incident Energy (eV)

28-Ni-63

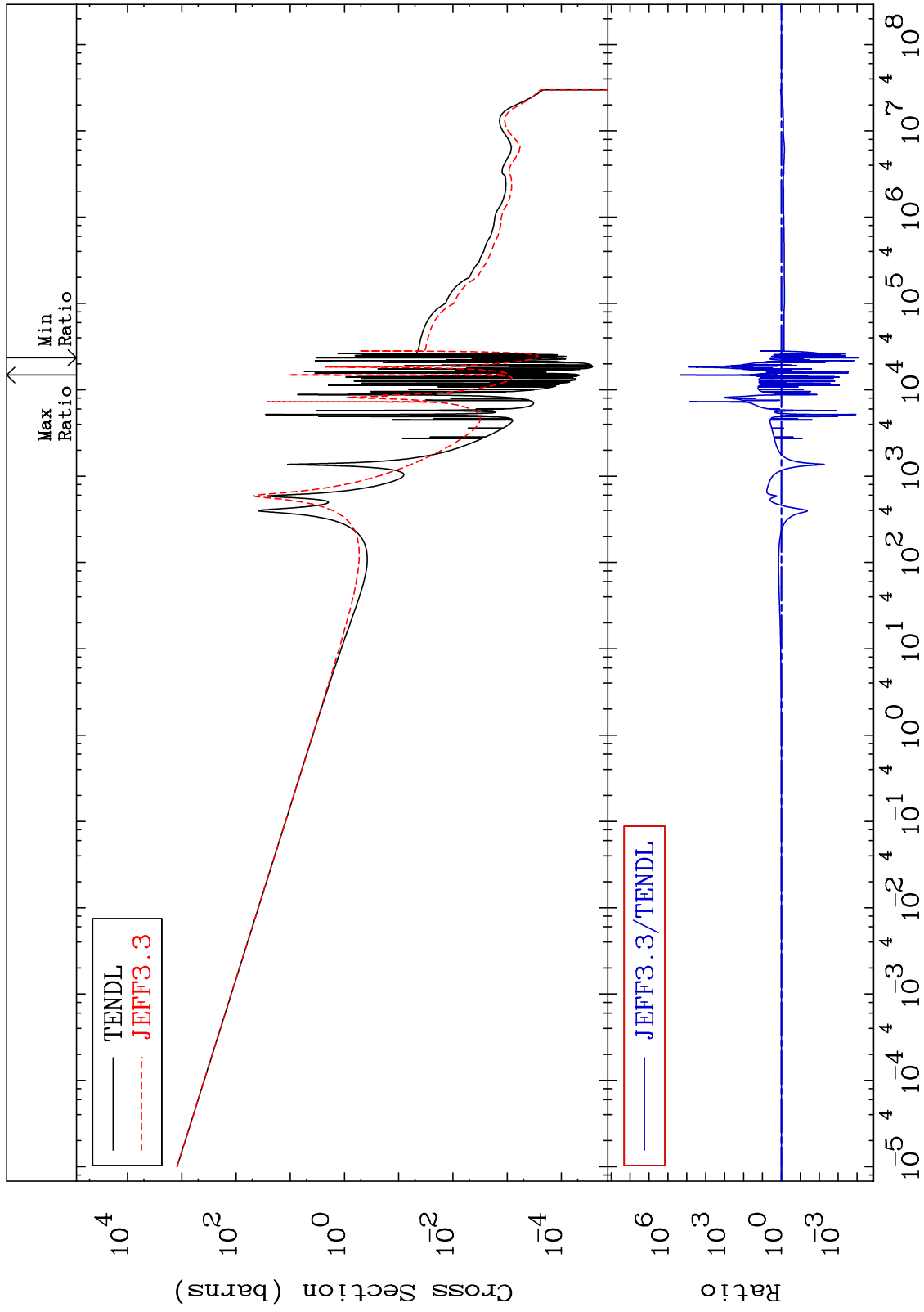
MAT 2840

(n, γ)

28-Ni-63

Cross Section

-99.99 To 9999. %

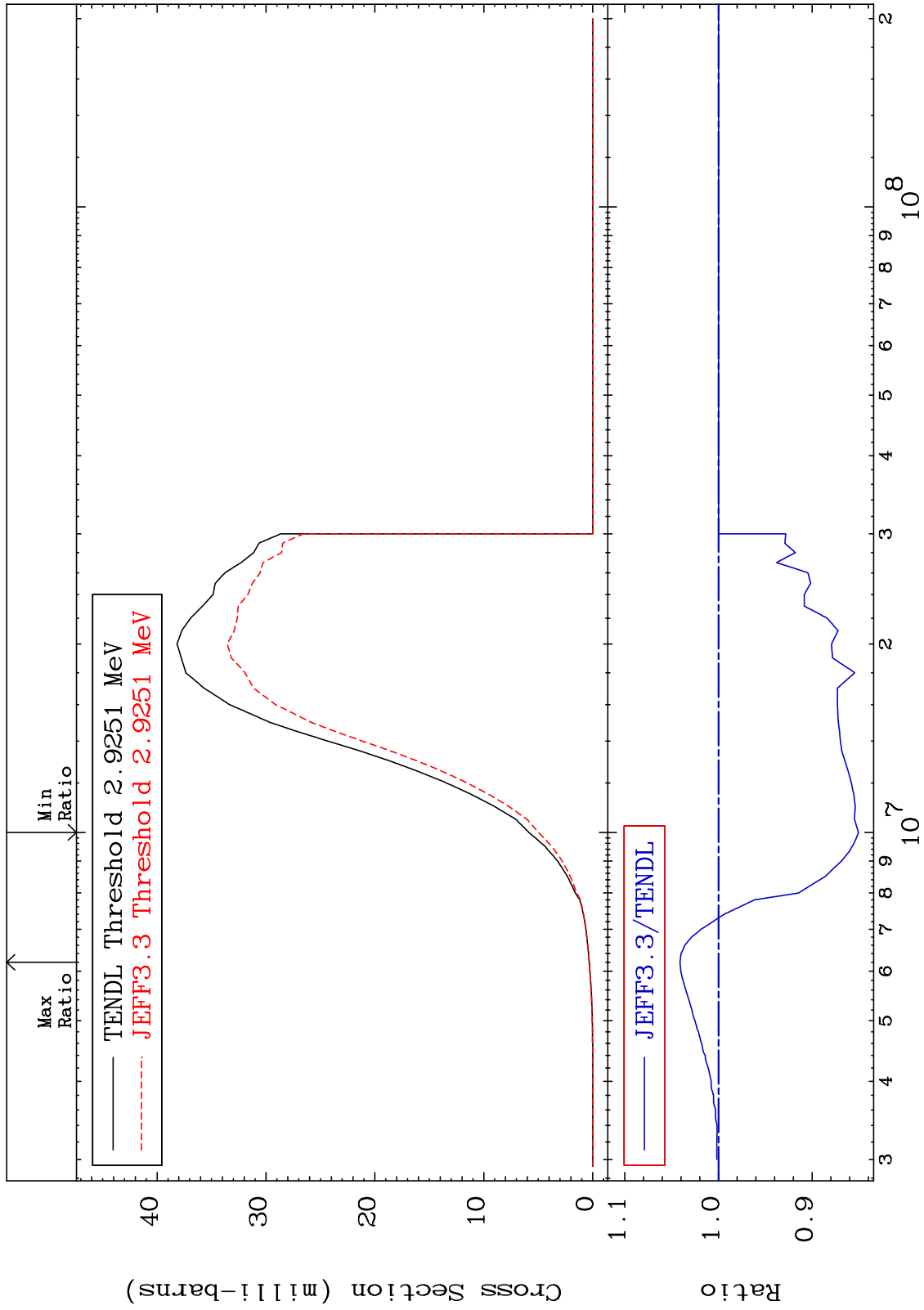


49

Incident Energy (eV)

28-Ni-63

MAT 2840 (n,p) Cross Section 28-Ni-63 -14.94 To 4.104 %



50 Incident Energy (eV) 28-Ni-63

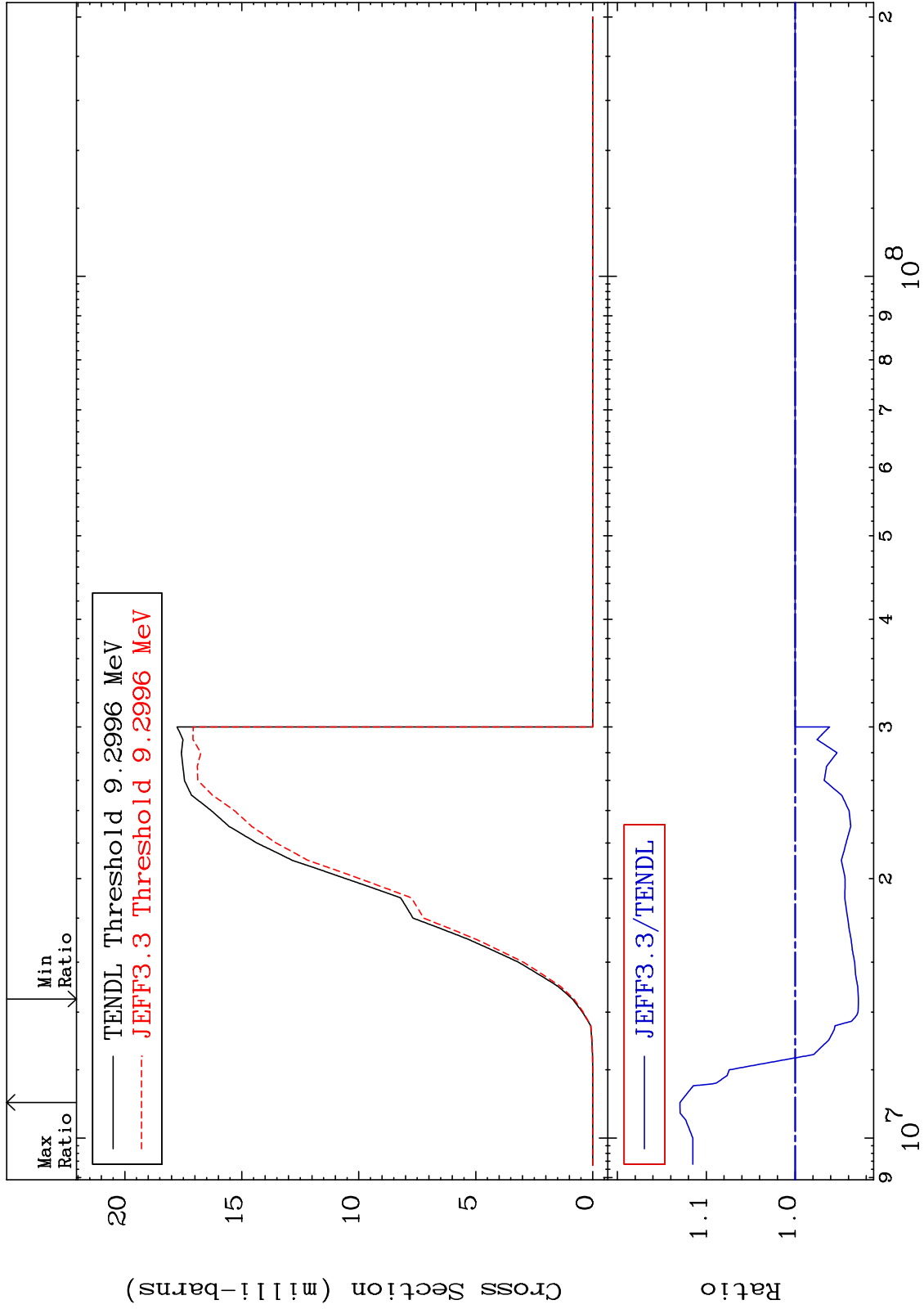
MAT 2840

(n, d)

28-Ni-63

Cross Section

-7.117 To 12.95 %



51

28-Ni-63

28-Ni-63

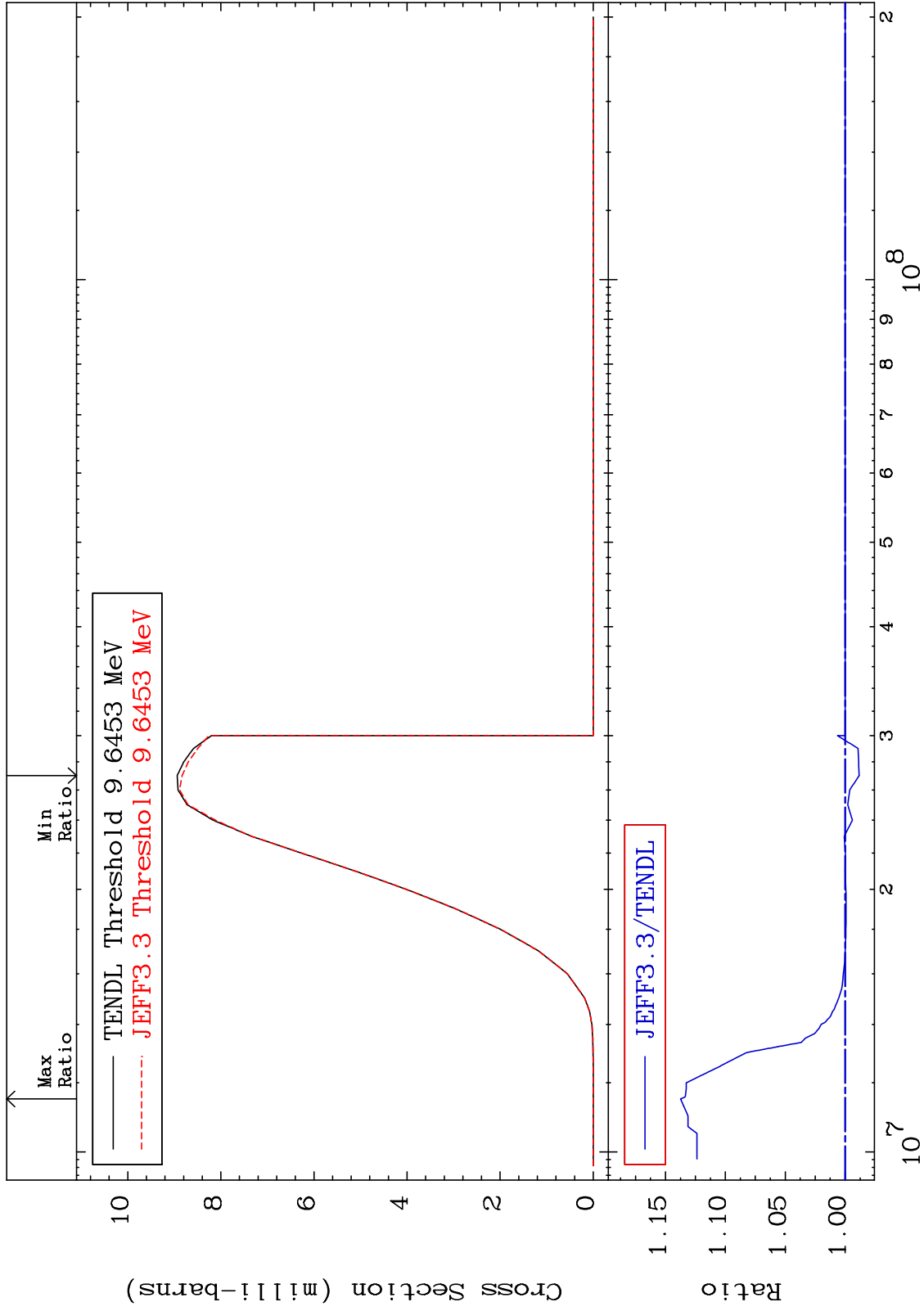
MAT 2840

(n, t)

28-Ni-63

Cross Section

-1.170 To 13.74 %

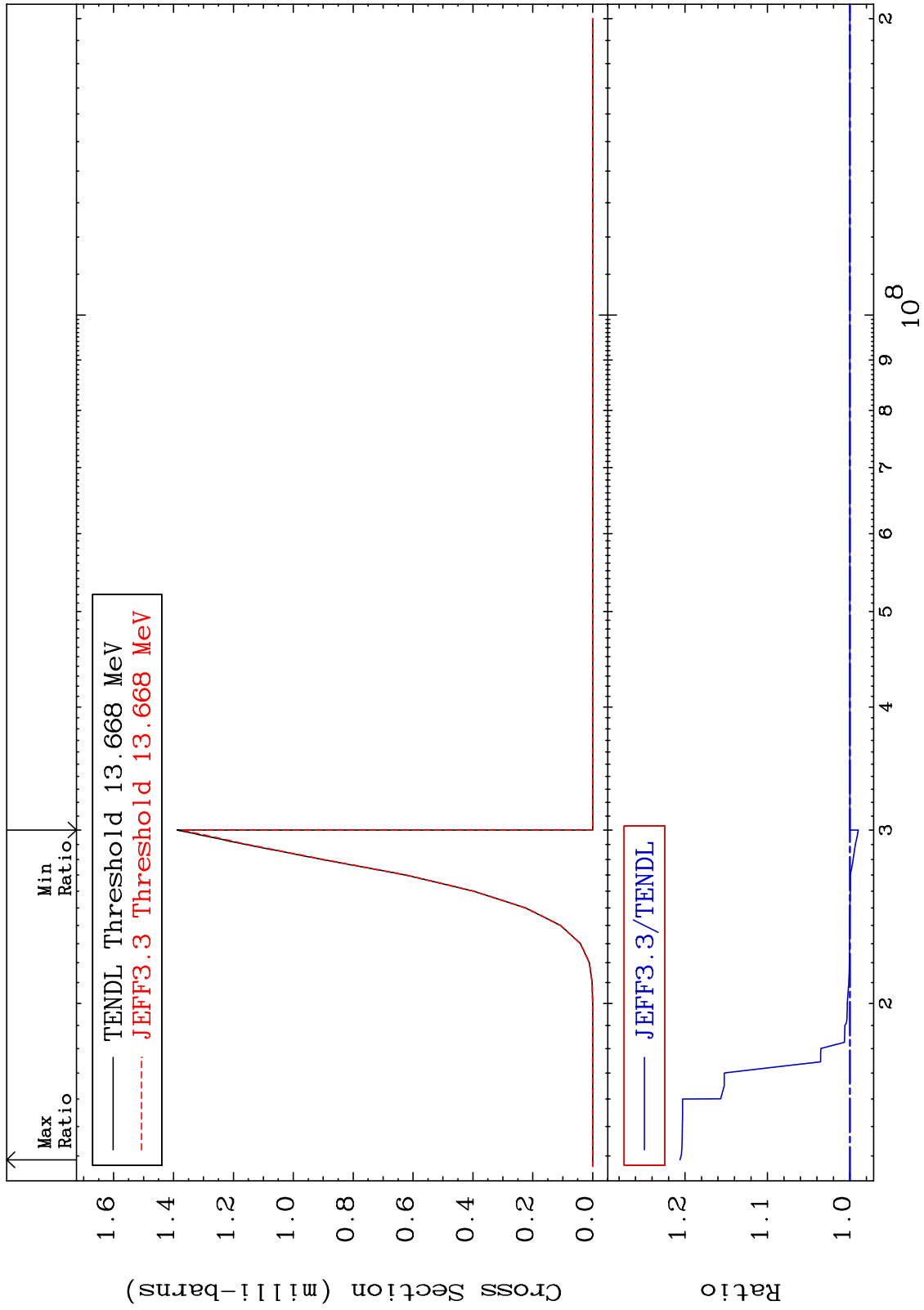


Incident Energy (eV)

28-Ni-63

52

MAT 2840 (n, He-3) 28-Ni-63
 Cross Section -1.031 To 20.61 %



MAT 2840

(n, α)

28-Ni-63

-100.0 To 1169. %

Cross Section

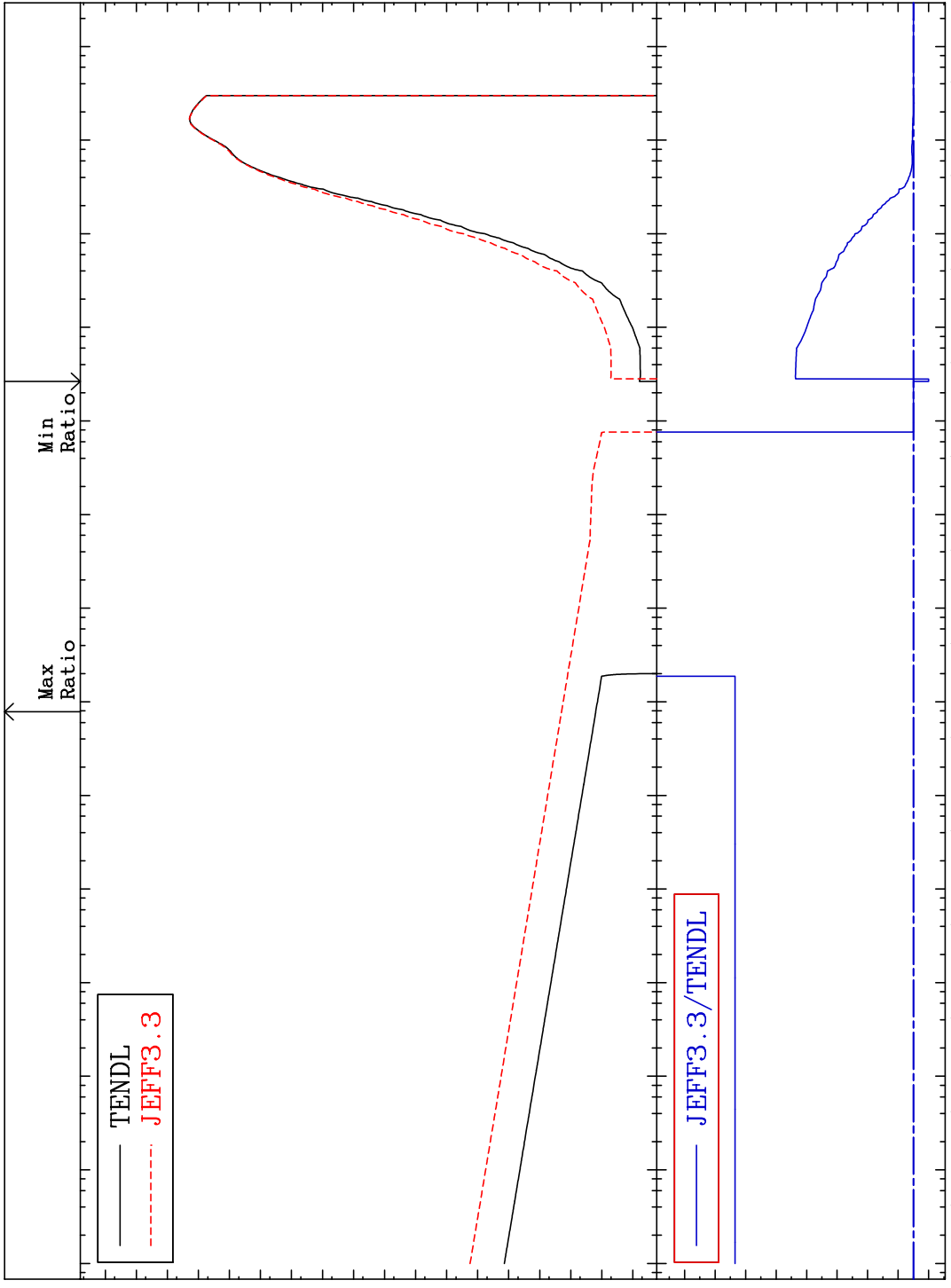
Max Ratio

Min Ratio

TENDL
JEFF3.3

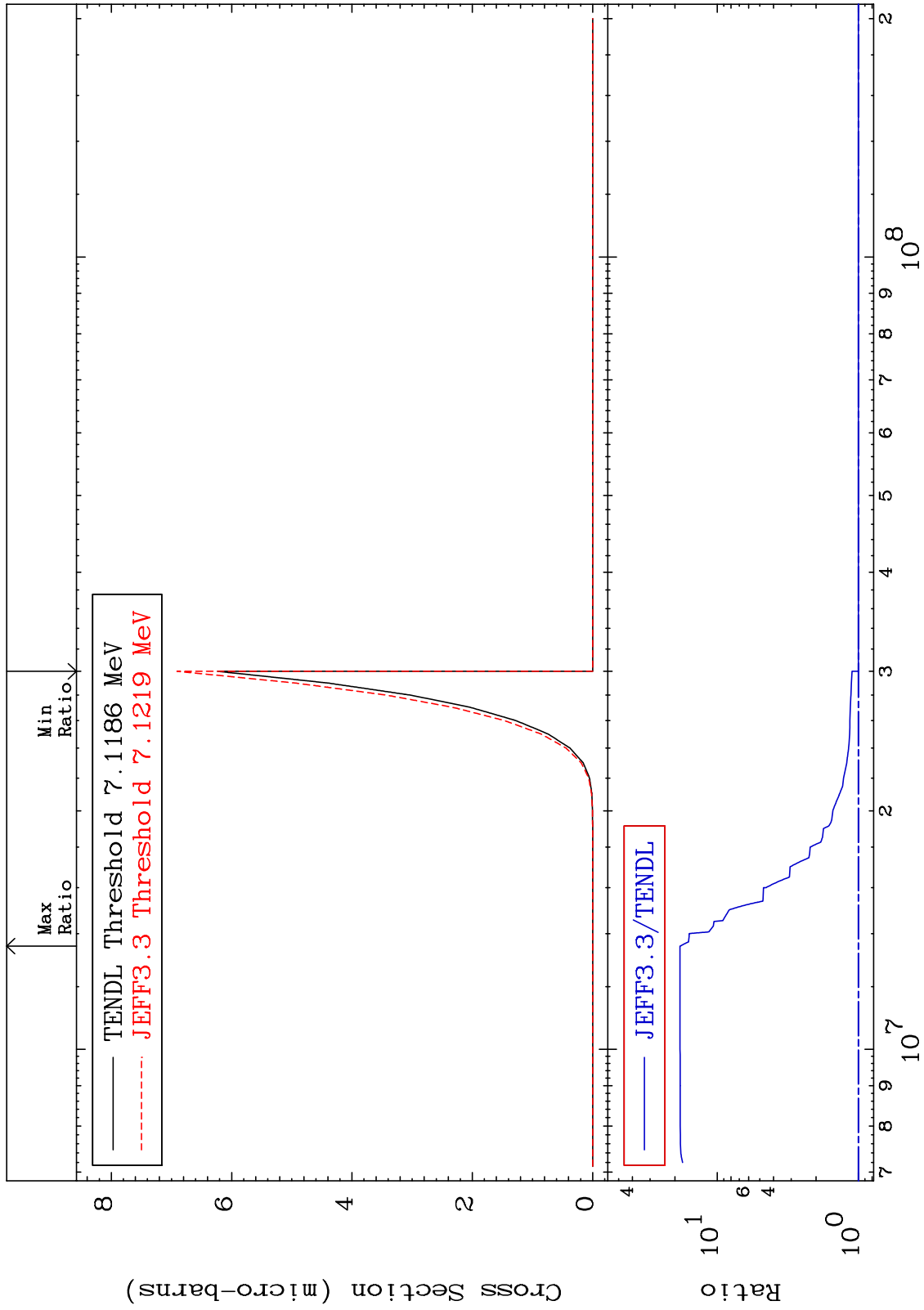
JEFF3.3/TENDL

Cross Section (barns)
Ratio



Incident Energy (eV)
28-Ni-63

MAT 2840 $(n, 2\alpha)$ Cross Section 28-Ni-63 To 1739. %



55 Incident Energy (eV) 28-Ni-63

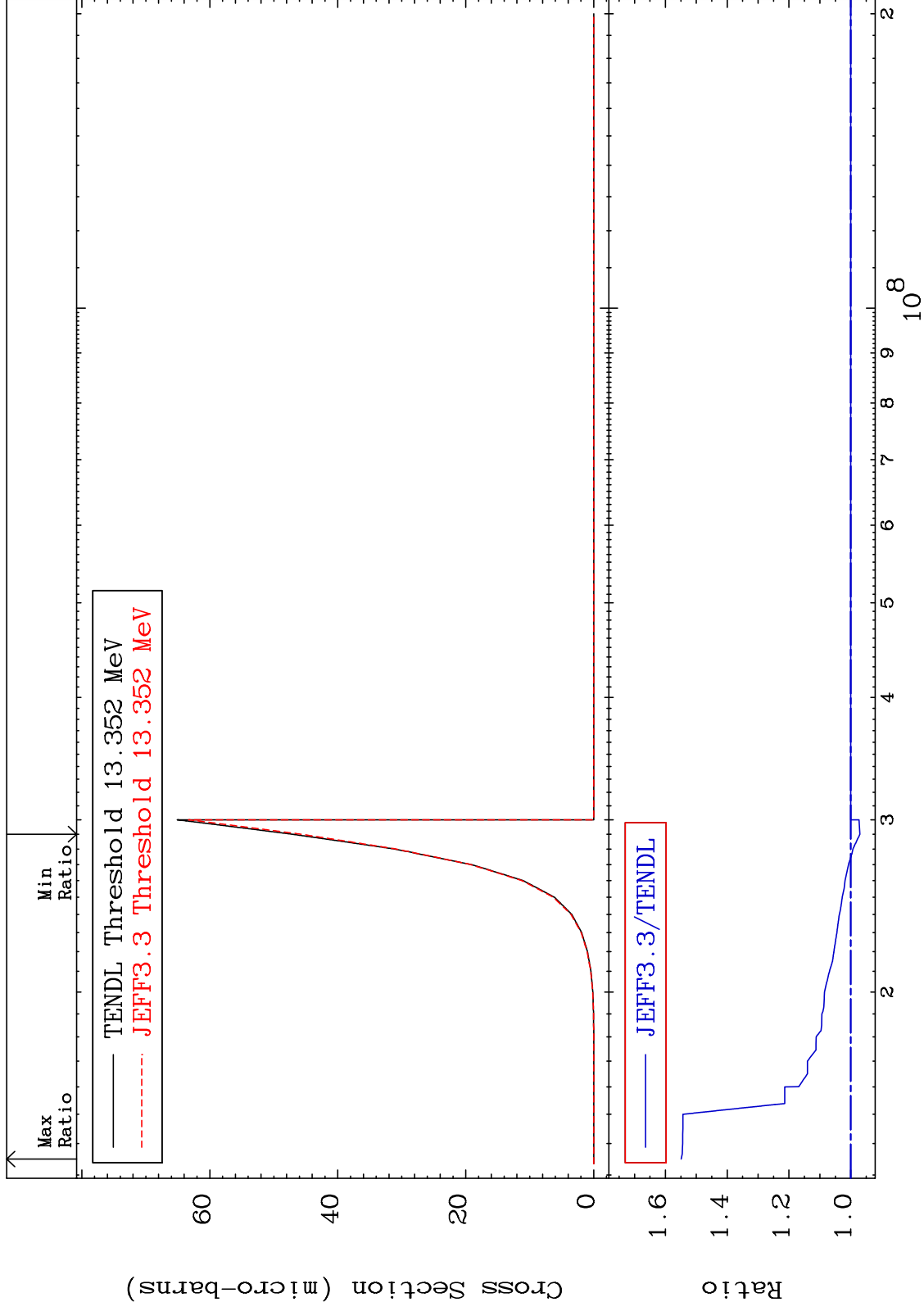
MAT 2840

(n,2p)

28-Ni-63

Cross Section

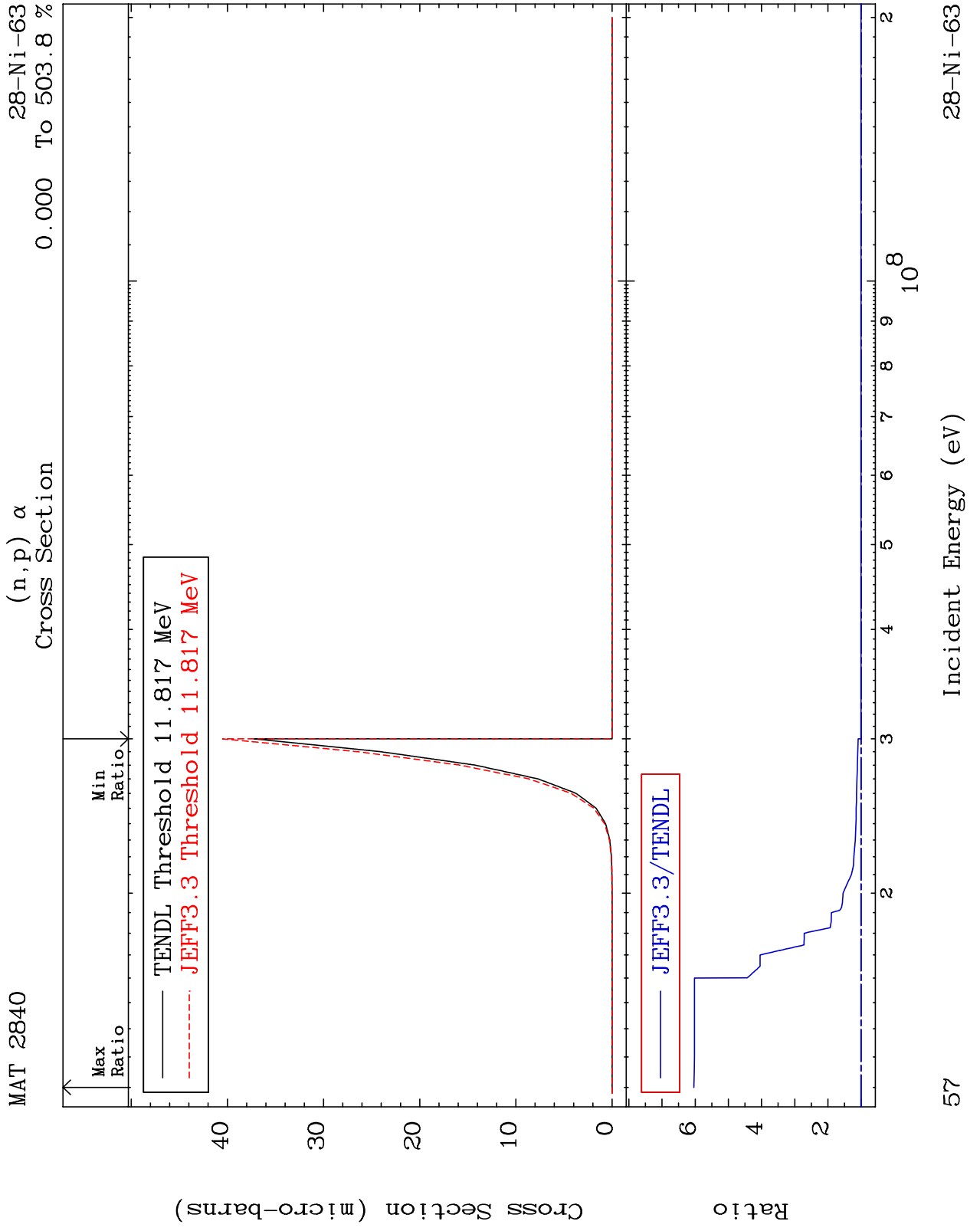
-2.971 To 54.89 %



56

Incident Energy (eV)

28-Ni-63



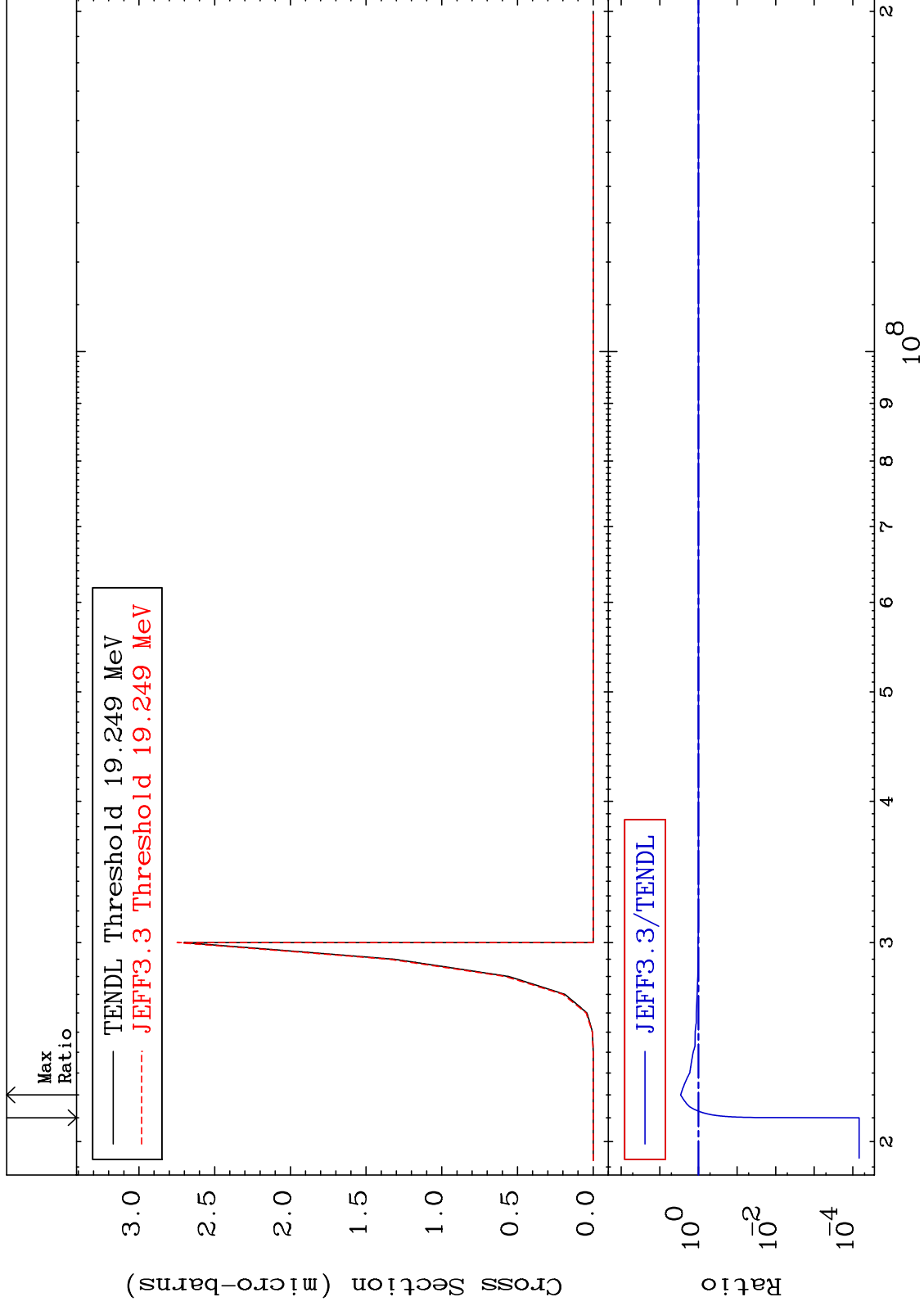
MAT 2840

(n,p) d

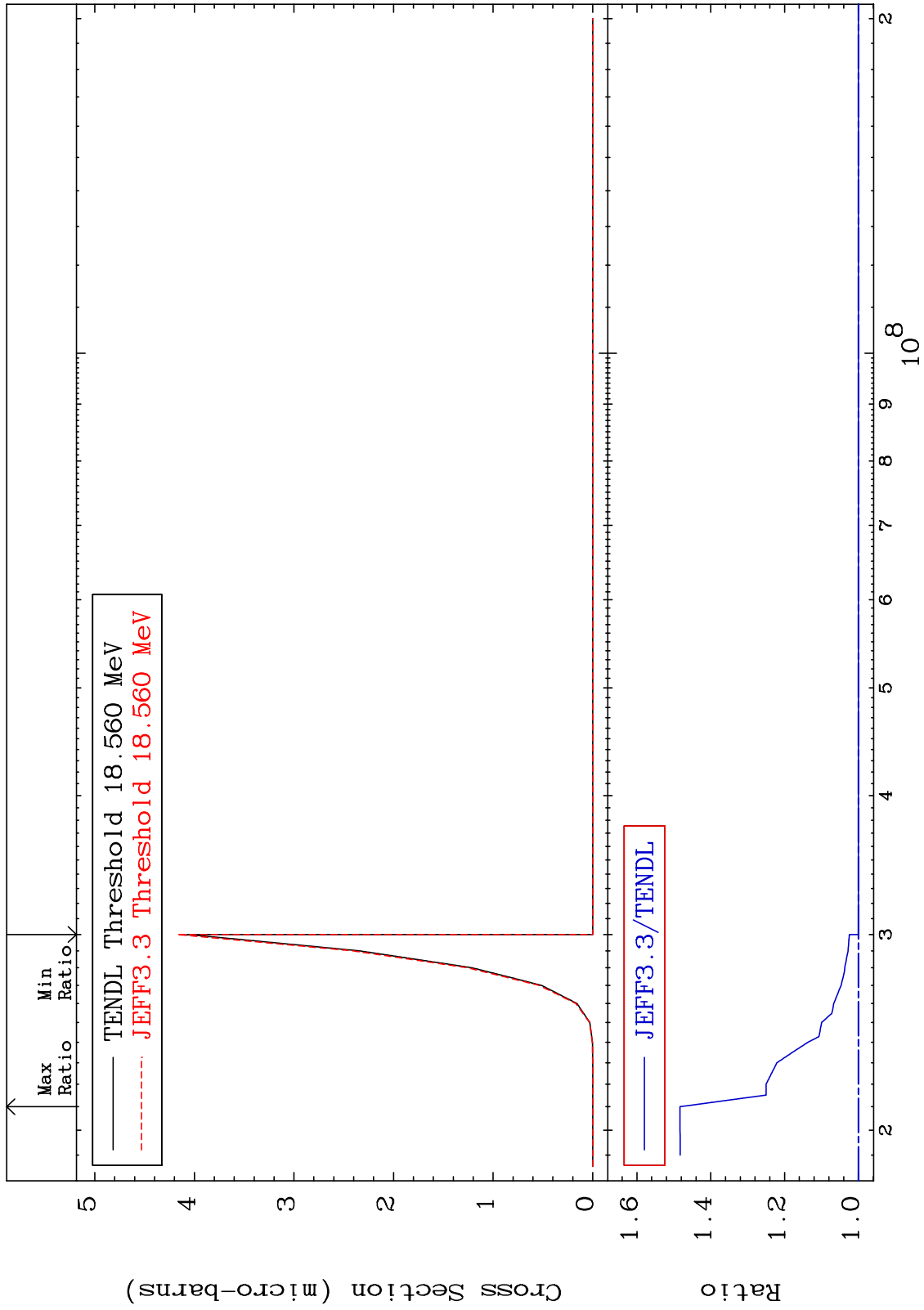
28-Ni-63

Cross Section

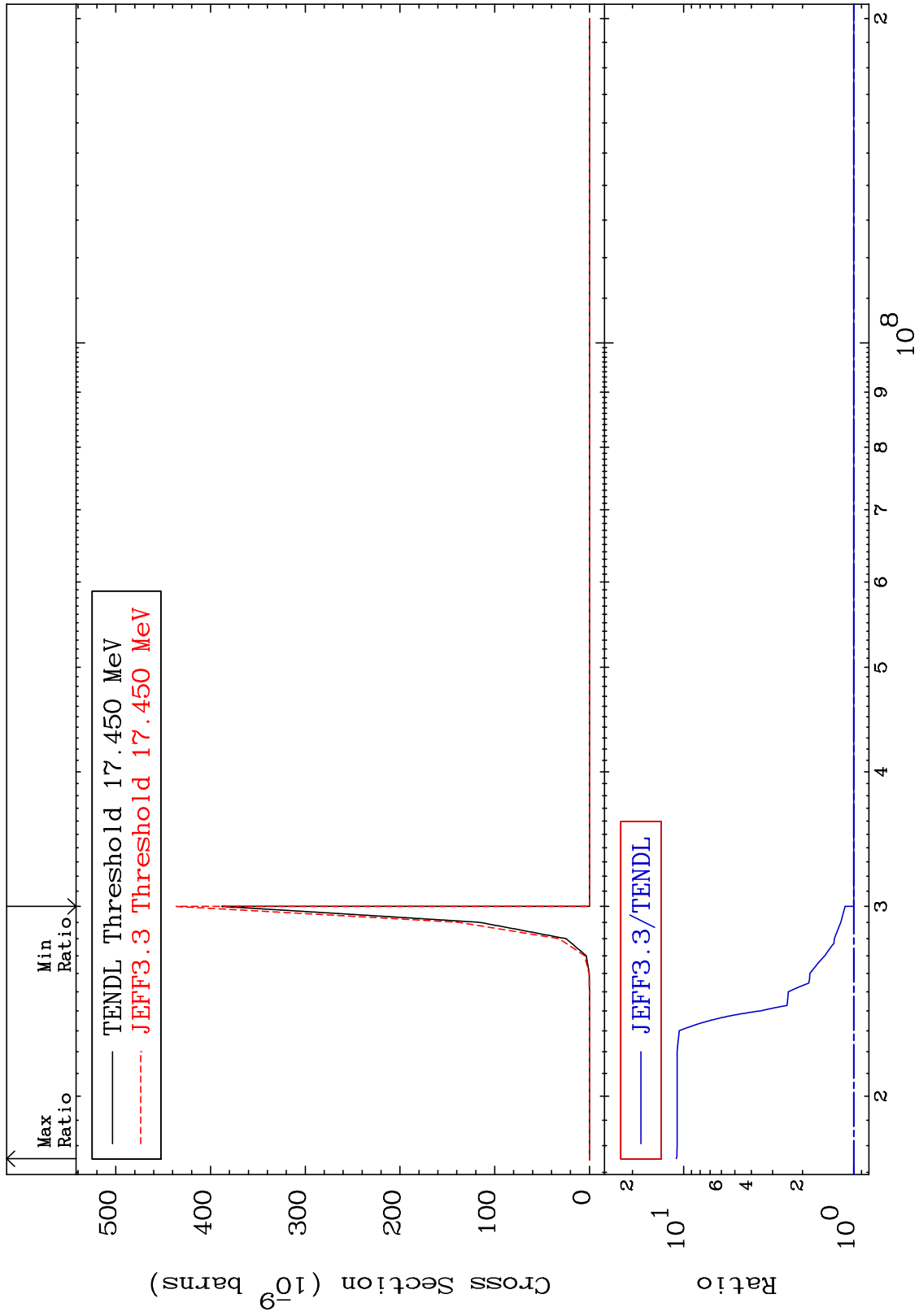
-99.99 To 188.5 %



MAT 2840 (n,p) t 28-Ni-63
 Cross Section 0.000 To 48.33 %



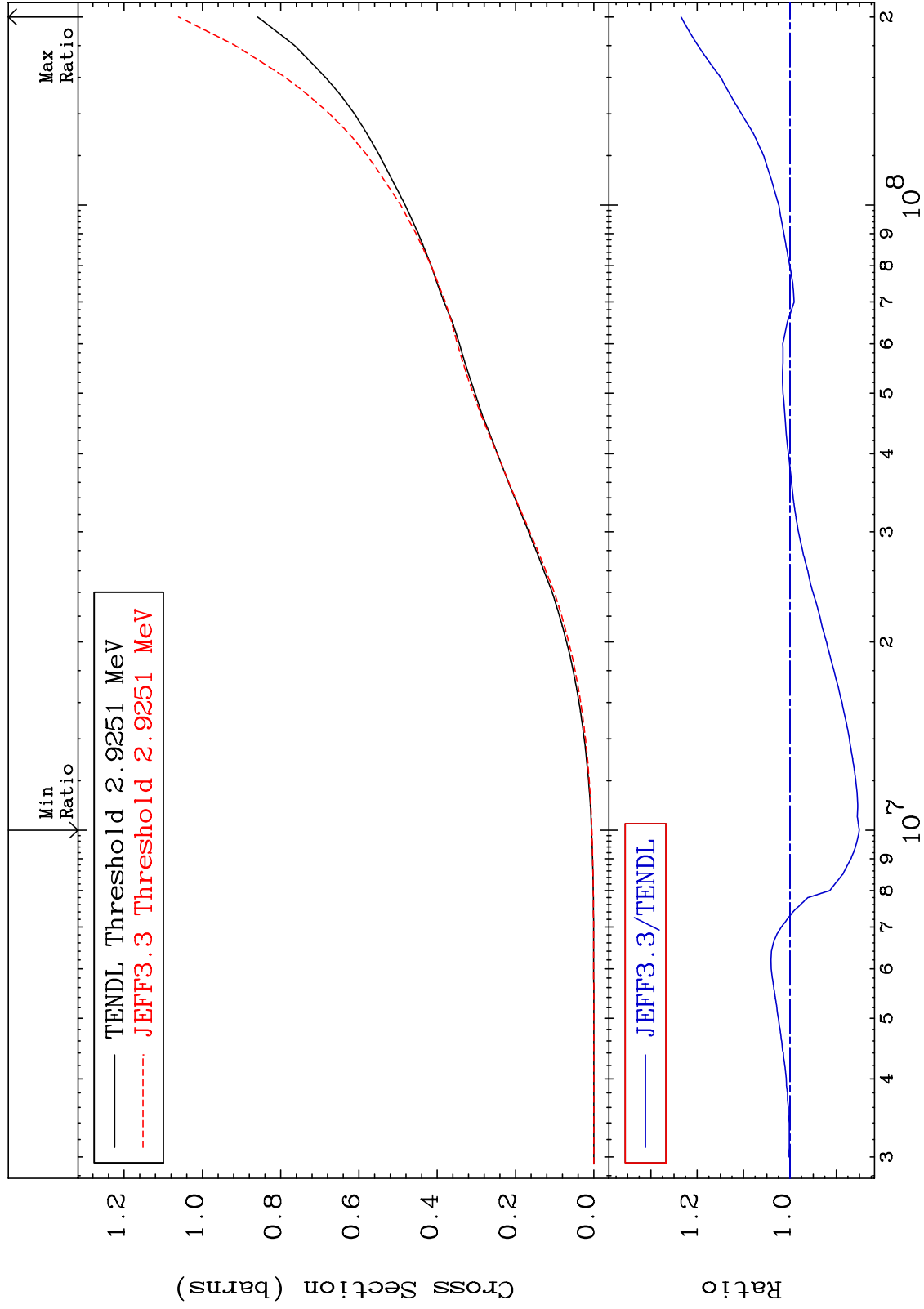
MAT 2840 (n,d) α 28-Ni-63
 Cross Section 0.000 To 1005. %



MAT 2840

Hydrogen Production
Cross Section

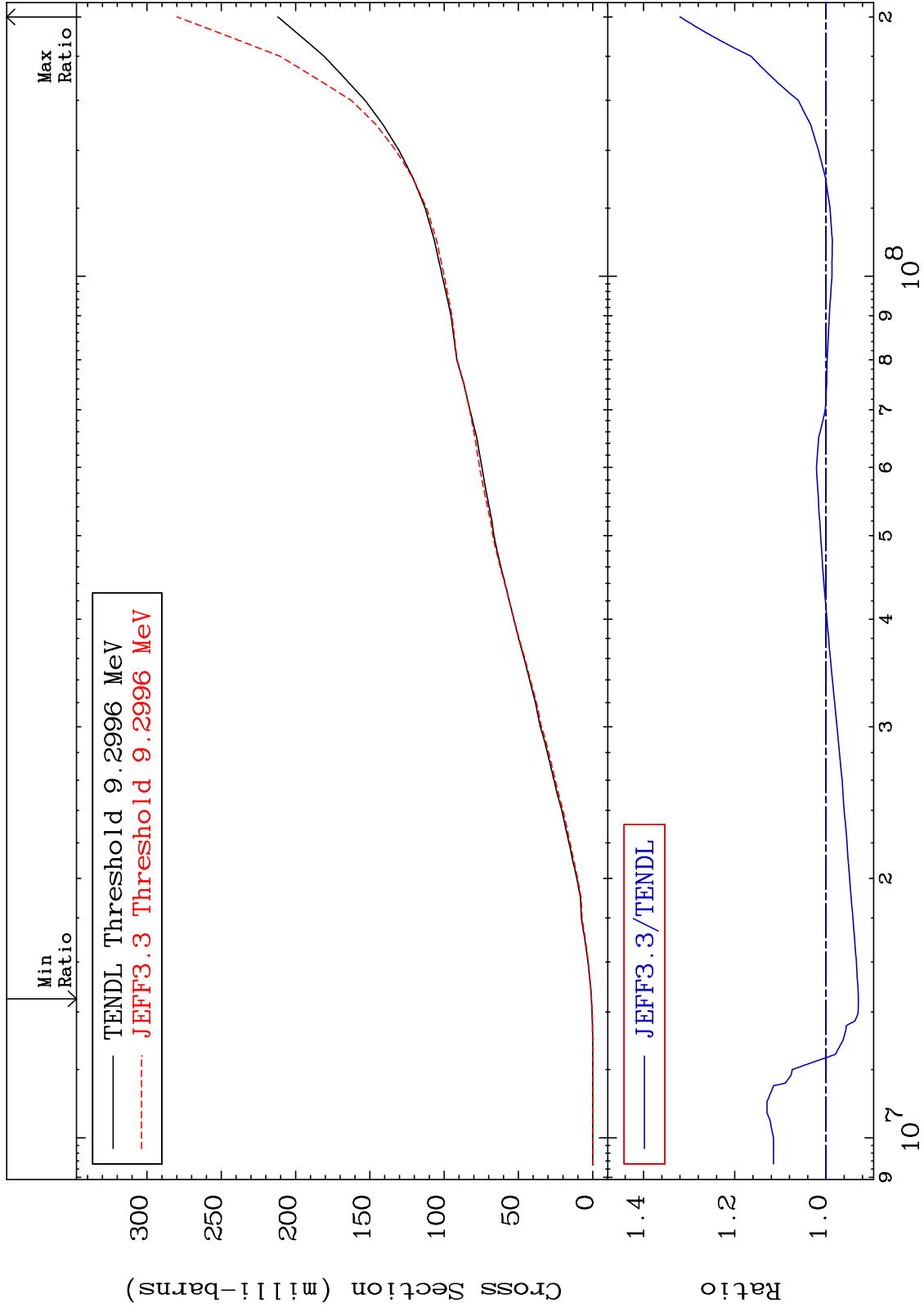
28-Ni-63
-14.94 To 23.48 %



MAT 2840

Deuterium Production
Cross Section

28-Ni-63
-7.117 To 32.00 %



62

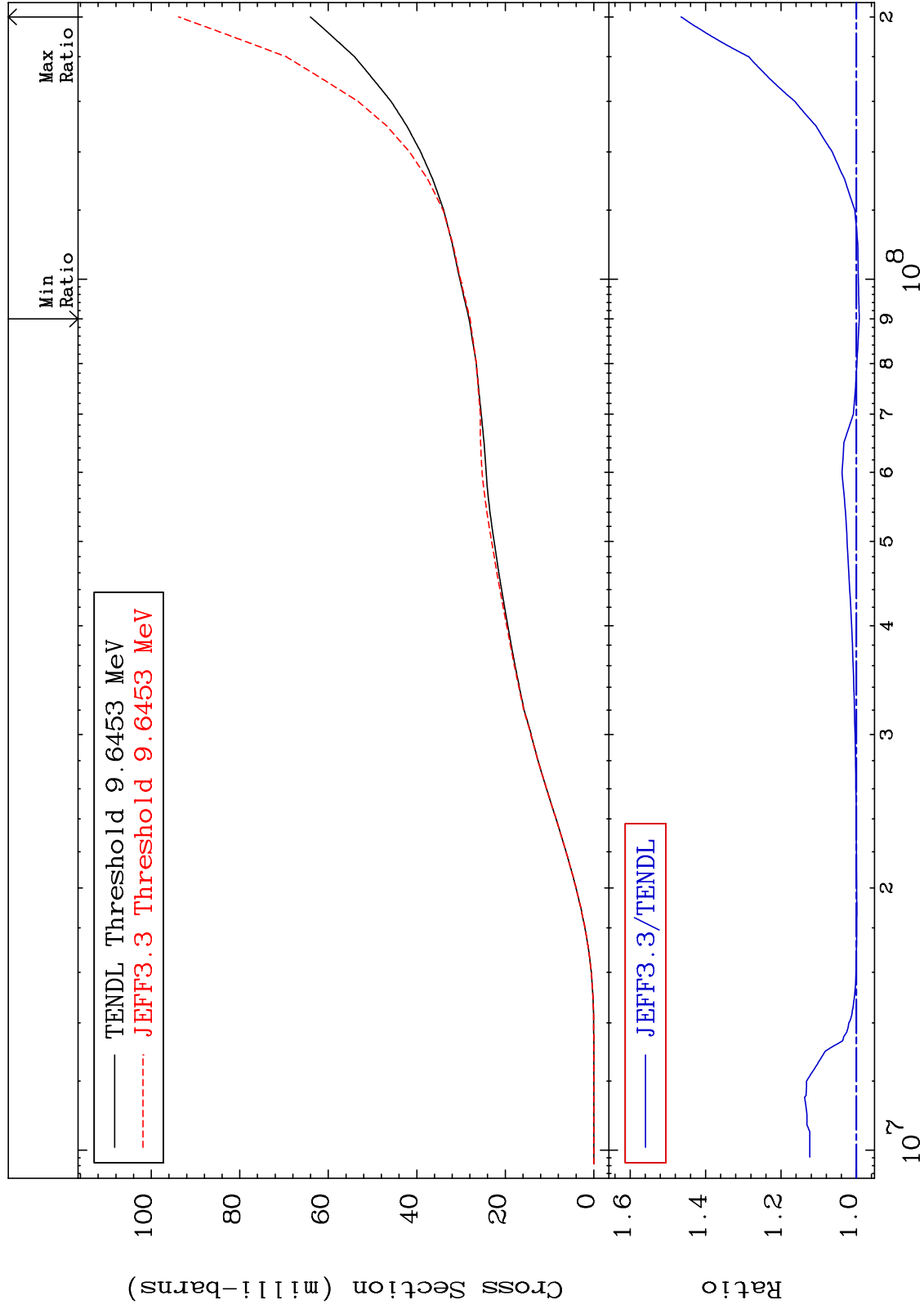
Incident Energy (eV)

28-Ni-63

MAT 2840

Tritium Production
Cross Section

28-Ni-63
-0.751 To 46.50 %



63

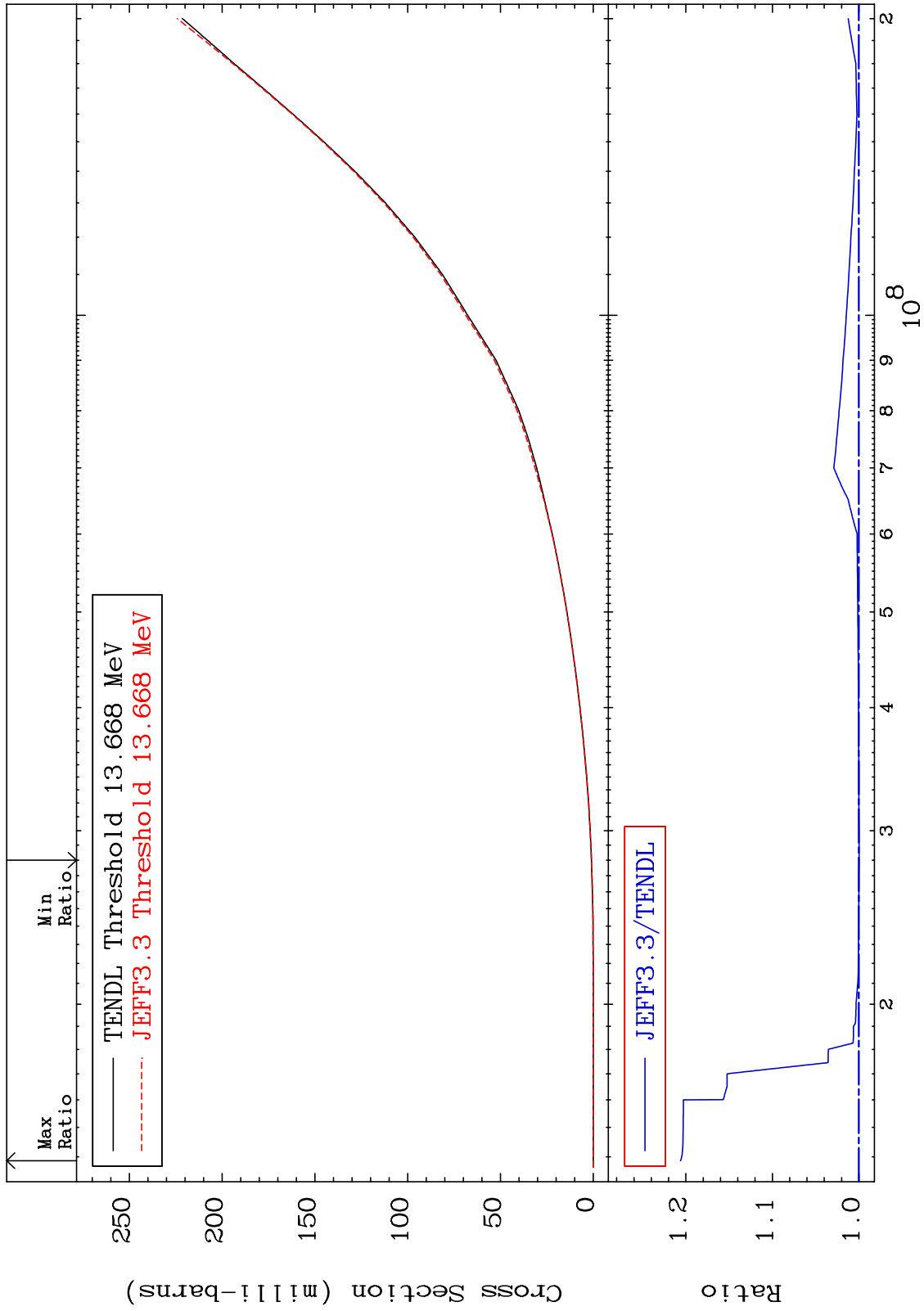
Incident Energy (eV)

28-Ni-63

MAT 2840

He-3 Production
Cross Section

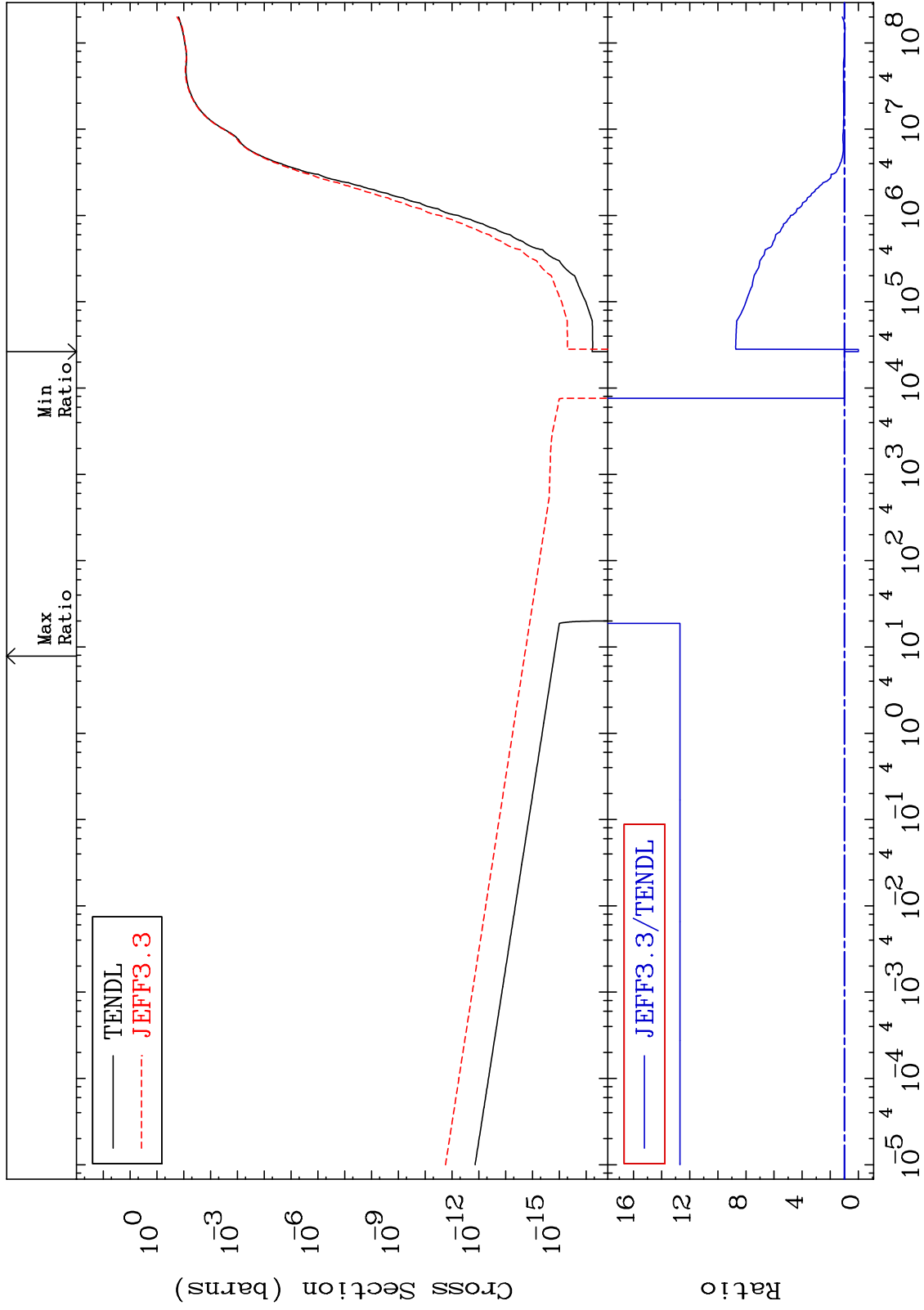
28-Ni-63
-0.036 To 20.61 %



MAT 2840

He-4 Production
Cross Section

28-Ni-63
-100.0 To 1169. %



65

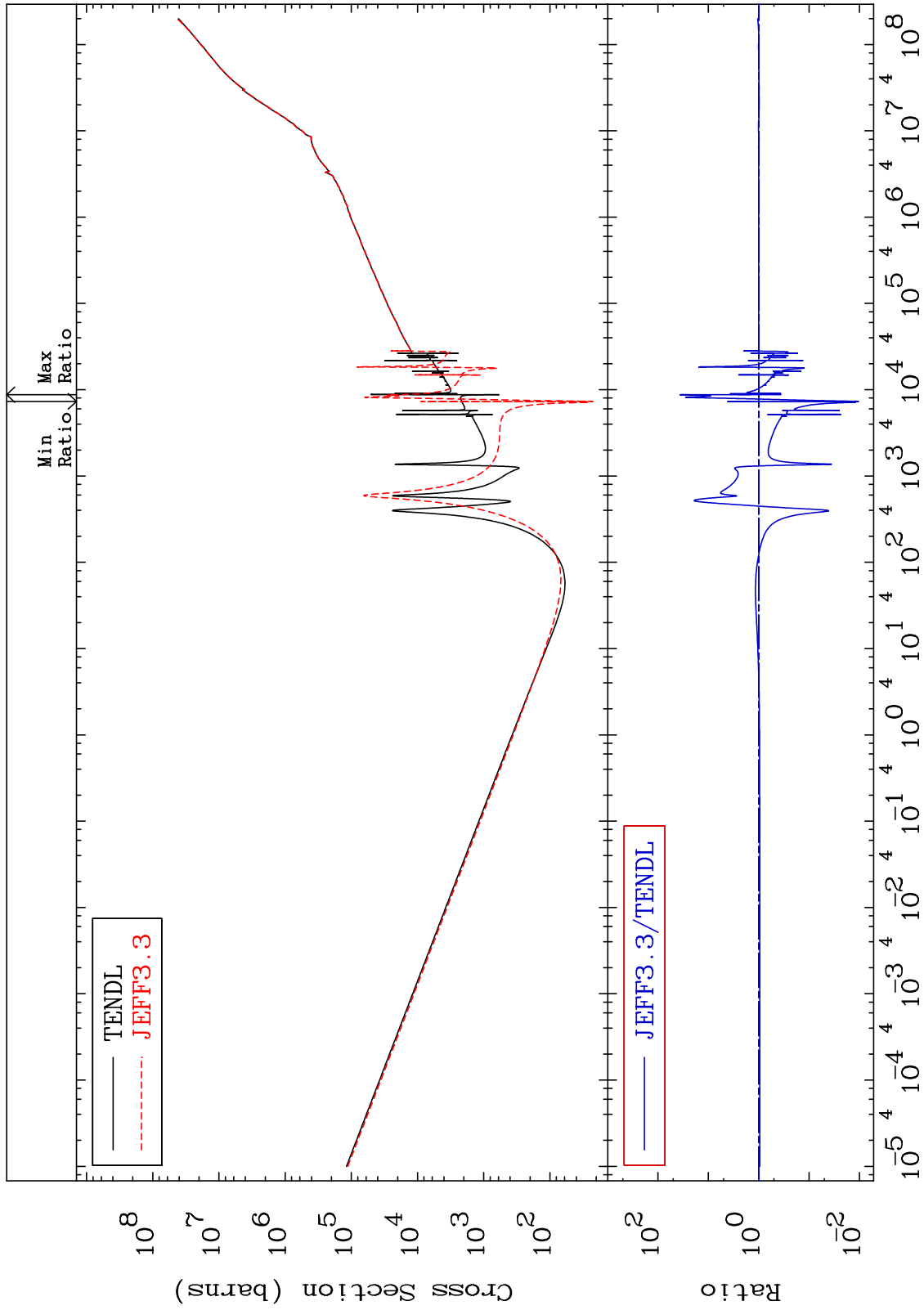
Incident Energy (eV)

28-Ni-63

MAT 2840

Kerma total (eV-barns)
Cross Section

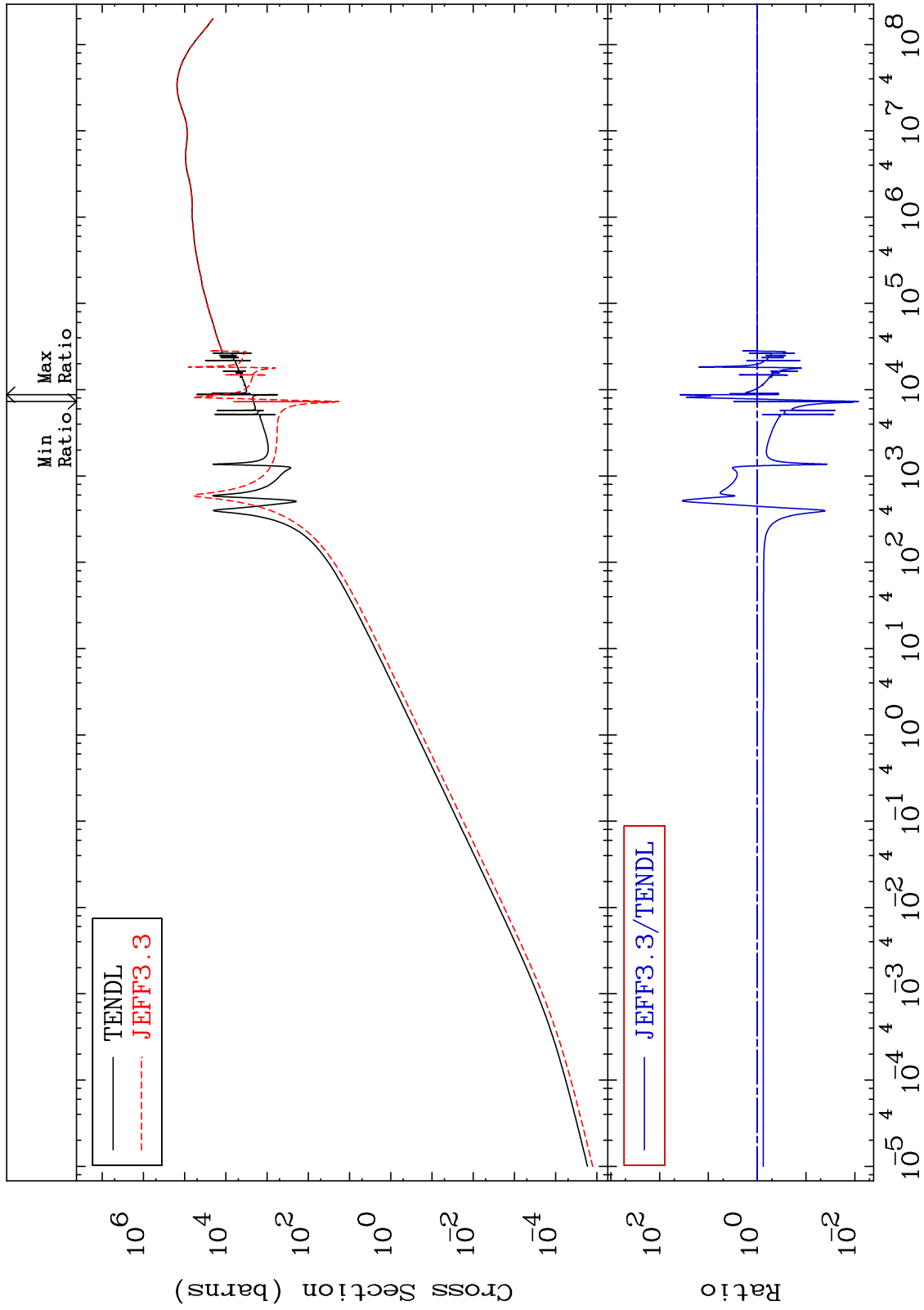
28-Ni-63
-98.95 To 3556. %



MAT 2840

Kerma elastic
Cross Section

28-Ni-63
-99.16 To 3715. %



67

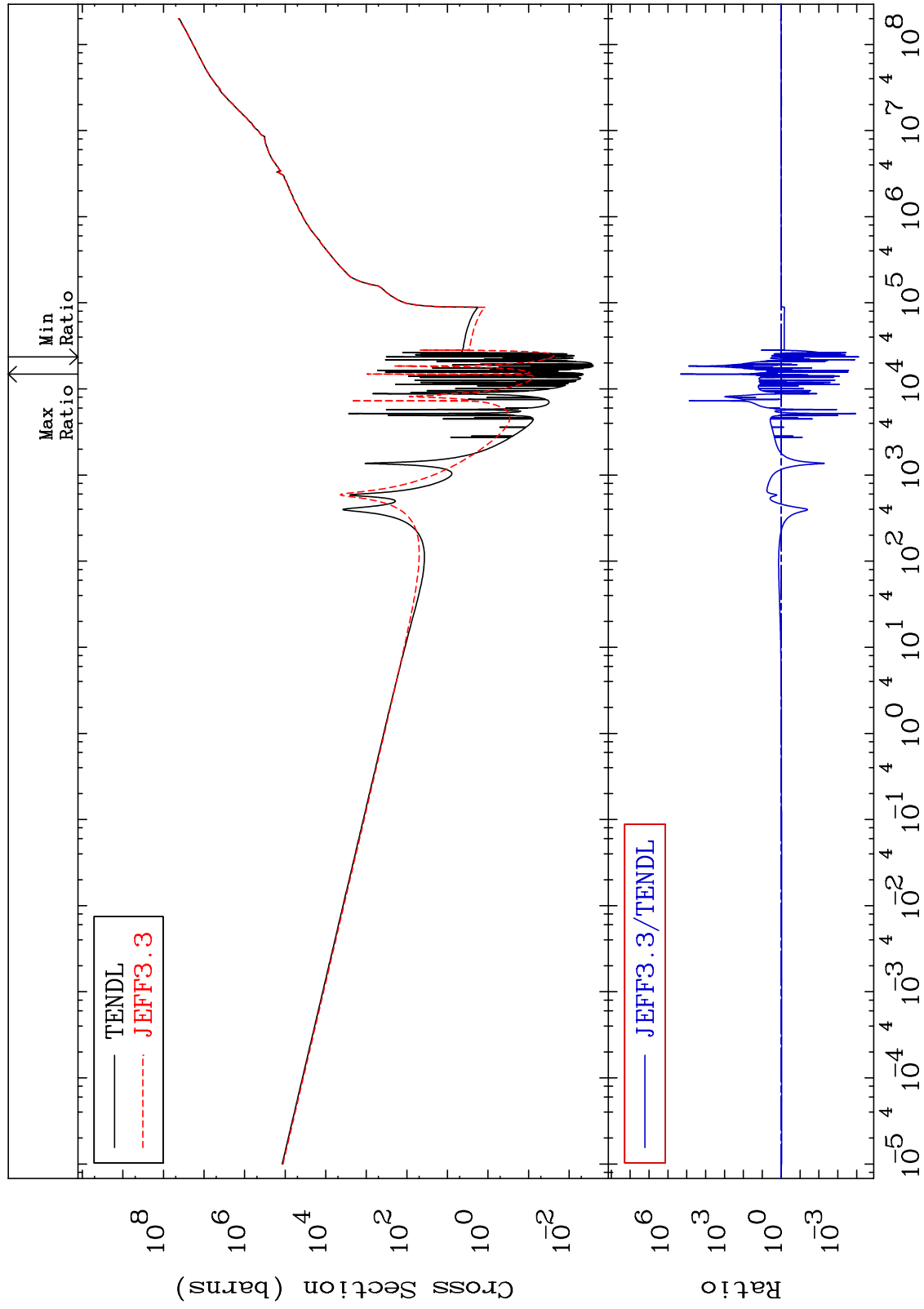
Incident Energy (eV)

28-Ni-63

MAT 2840

Kerma non-elastic (all but mt2)
Cross Section

28-Ni-63
-99.99 To 9999. %



68

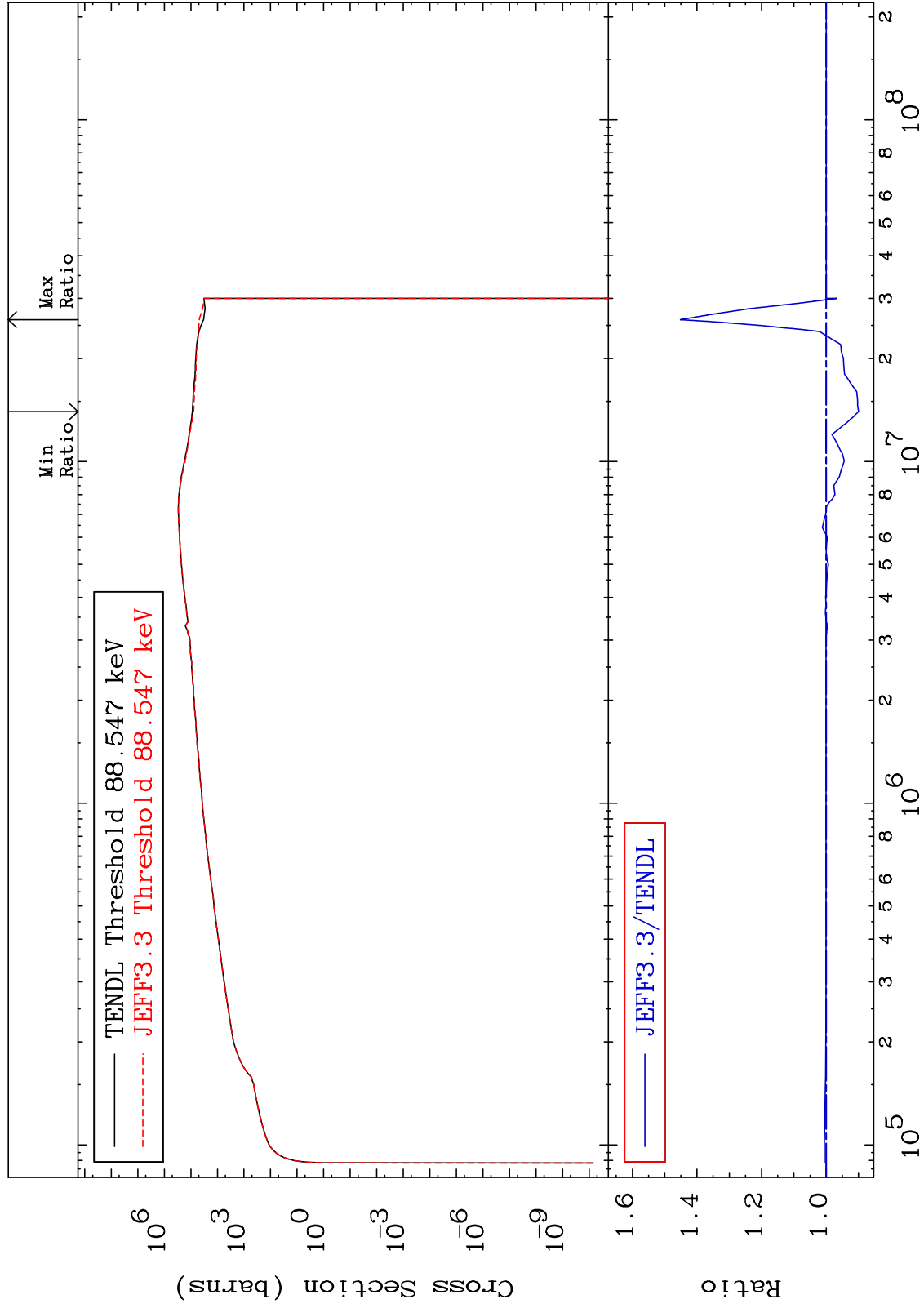
Incident Energy (eV)

28-Ni-63

MAT 2840

Kerma inelastic (mt51-91)
Cross Section

28-Ni-63
-10.01 To 45.12 %



69

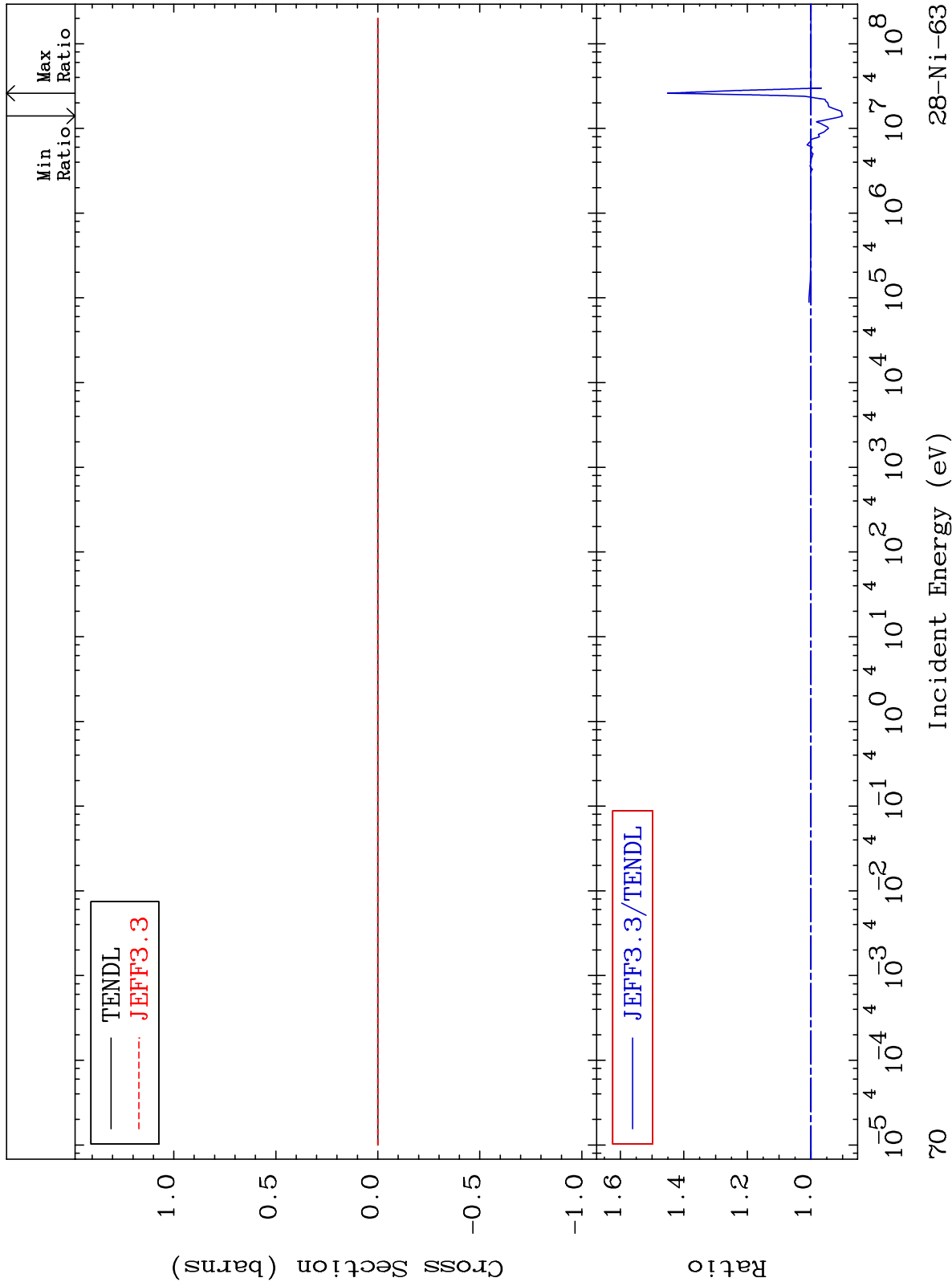
Incident Energy (eV)

28-Ni-63

MAT 2840

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

28-Ni-63
-10.01 To 45.12 %



70

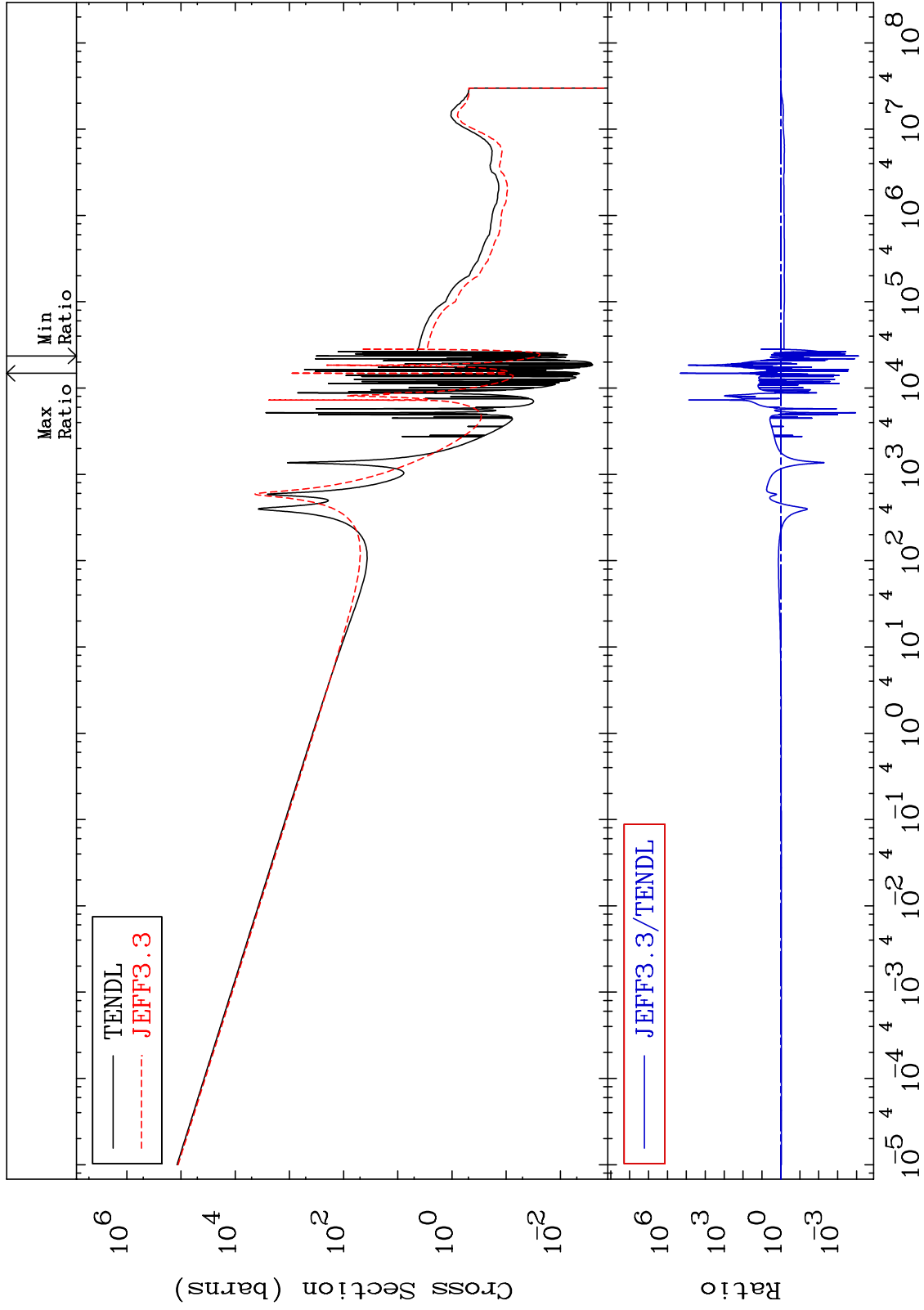
Incident Energy (eV)

28-Ni-63

MAT 2840

Kerma capture (mt102)
Cross Section

28-Ni-63
-99.99 To 9999. %



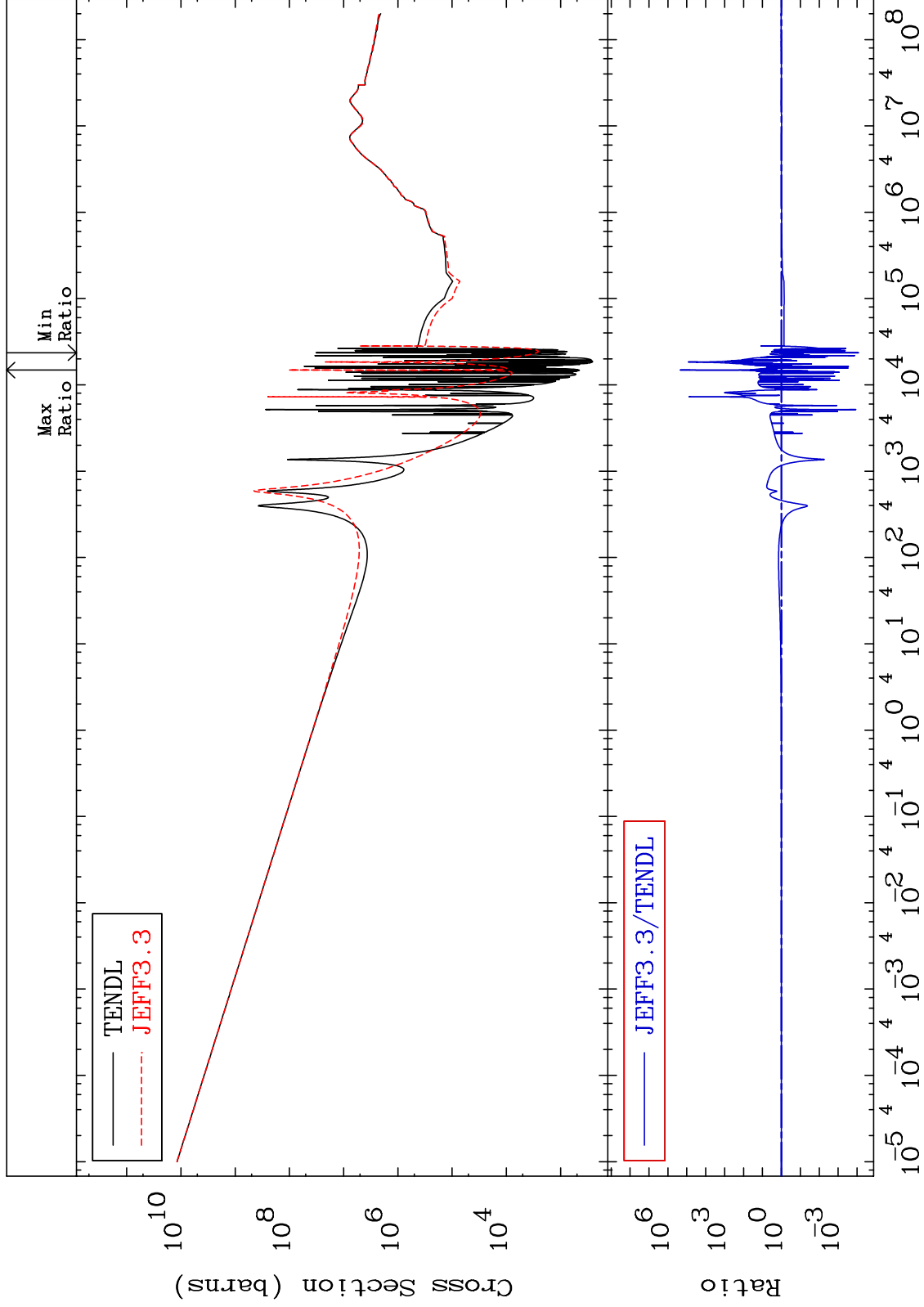
— TENDL
- - - JEFF3.3

— JEFF3.3/TENDL

MAT 2840

Total photon (eV-barns)
Cross Section

28-Ni-63
-99.99 To 9999. %



72

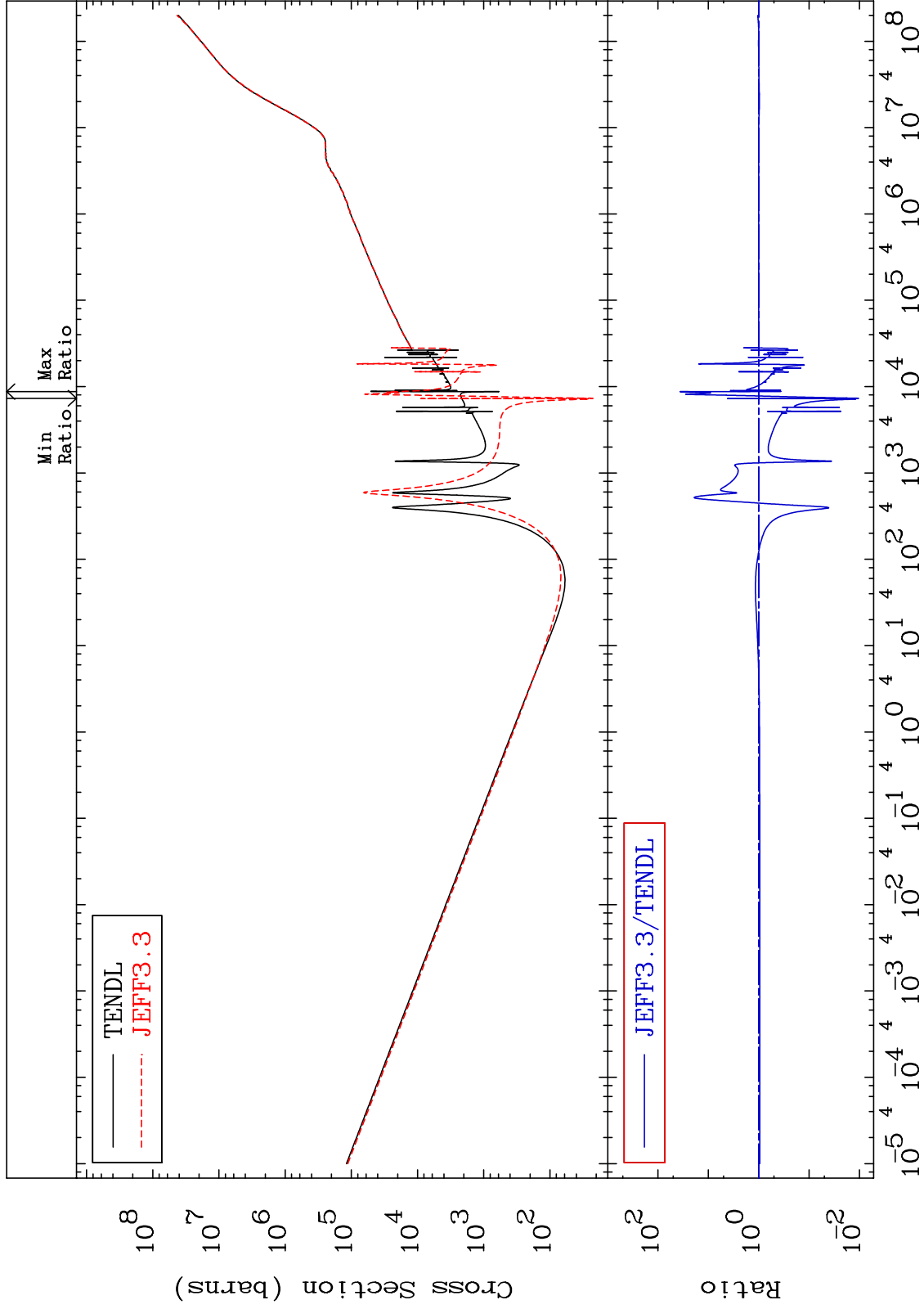
Incident Energy (eV)

28-Ni-63

MAT 2840

Total kinematic kerma (high limit)
Cross Section

28-Ni-63
-98.95 To 3556. %



73

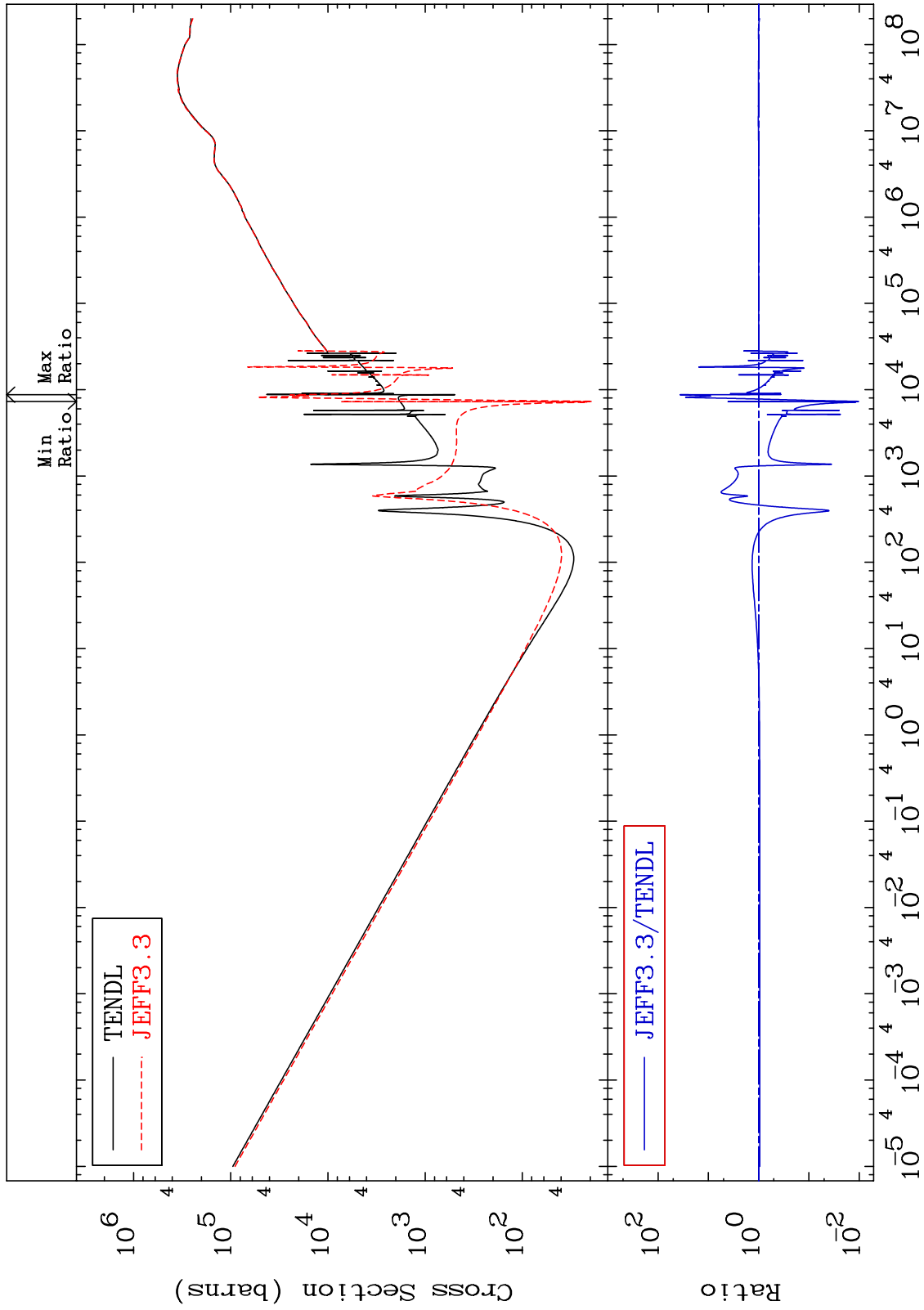
Incident Energy (eV)

28-Ni-63

MAT 2840

Dpa total (eV-barns)
Cross Section

28-Ni-63
-98.96 To 3563. %



74

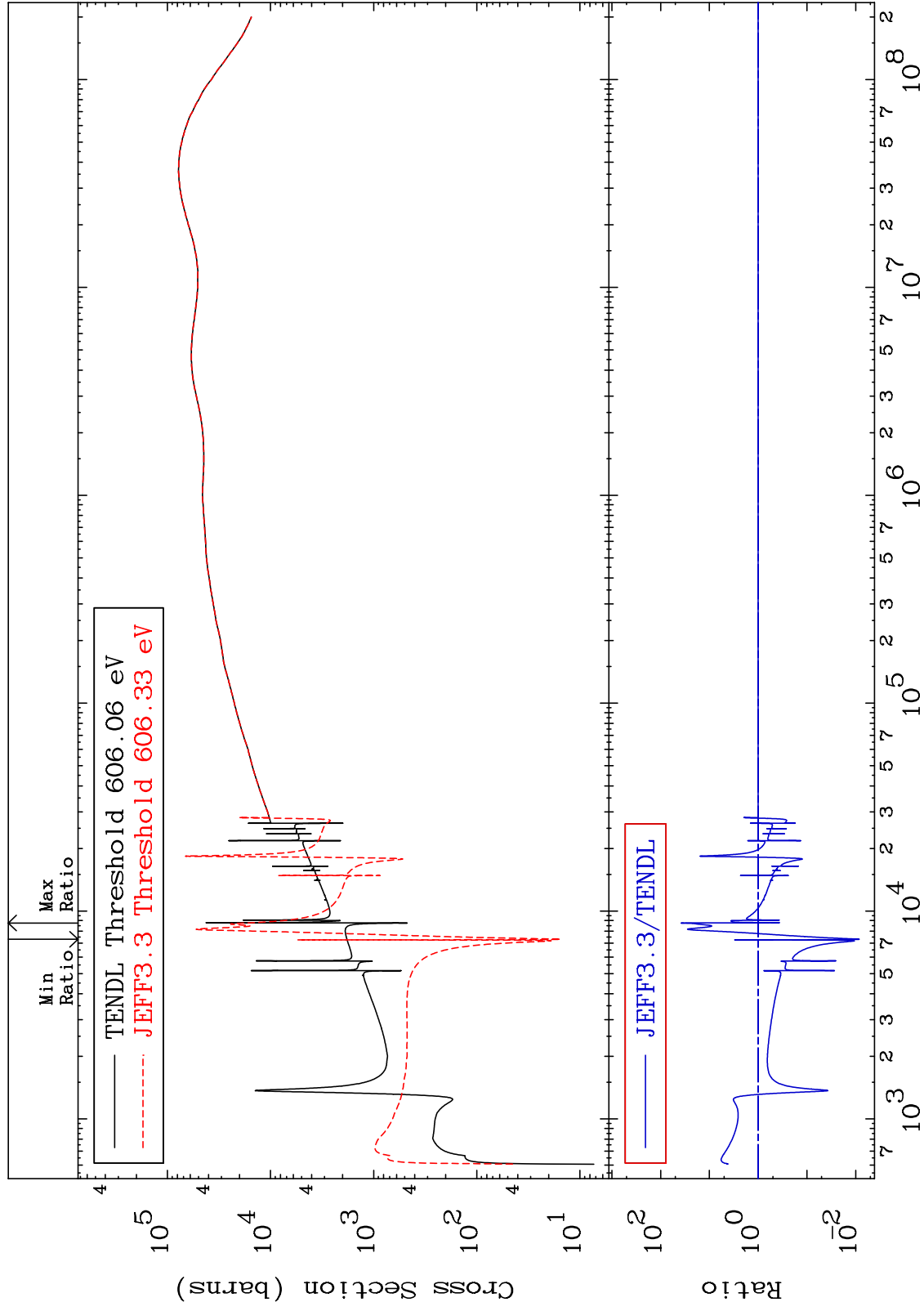
Incident Energy (eV)

28-Ni-63

MAT 2840

Dpa elastic (mt2)
Cross Section

28-Ni-63
-99.16 To 3715. %



75

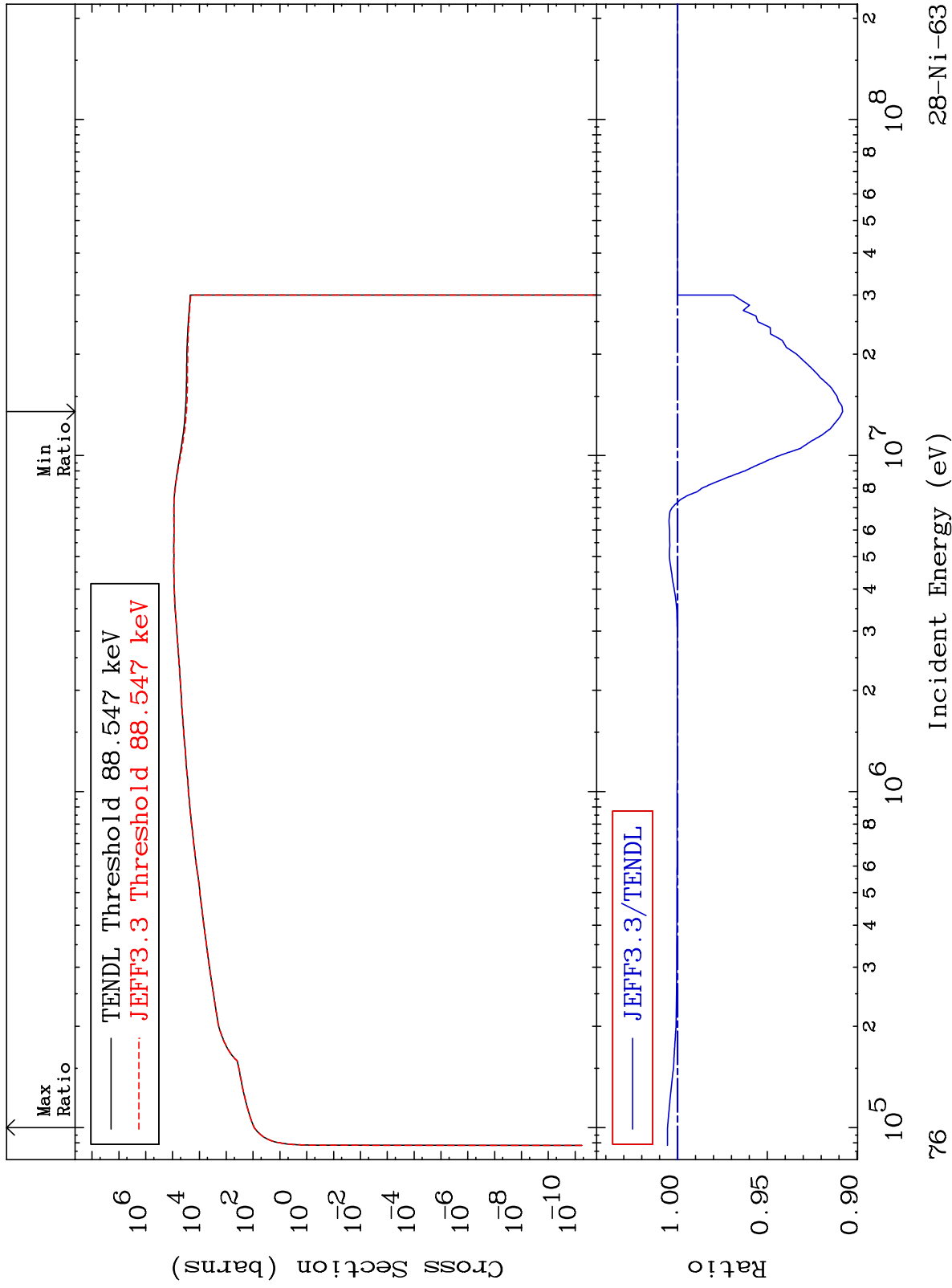
Incident Energy (eV)

28-Ni-63

MAT 2840

Dpa inelastic (mt51-91)
Cross Section

28-Ni-63
-9.200 To 0.559 %



76

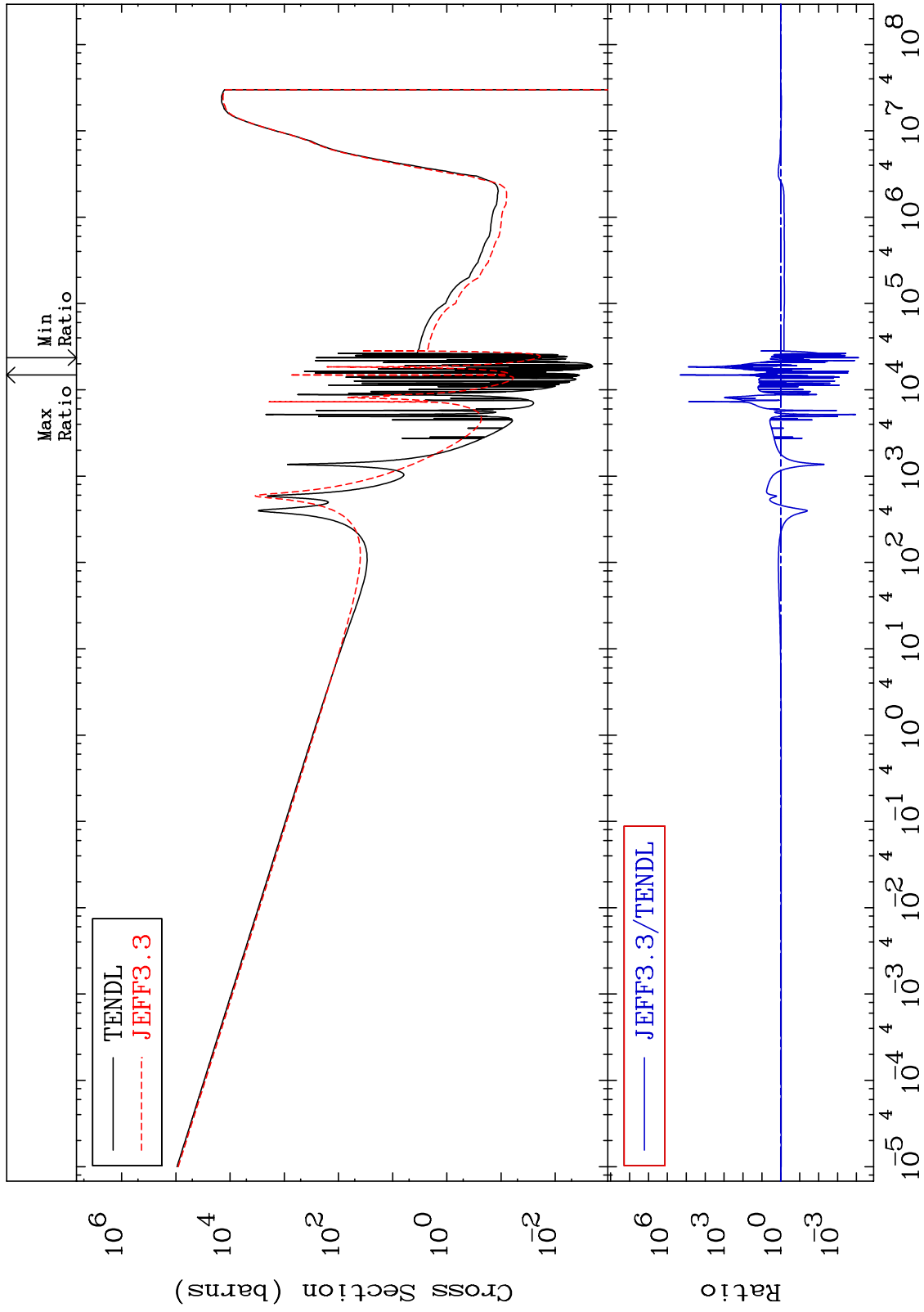
Incident Energy (eV)

28-Ni-63

MAT 2840

Dpa disappearance (mt102 -120)
Cross Section

28-Ni-63
-99.99 To 9999. %



77

Incident Energy (eV)

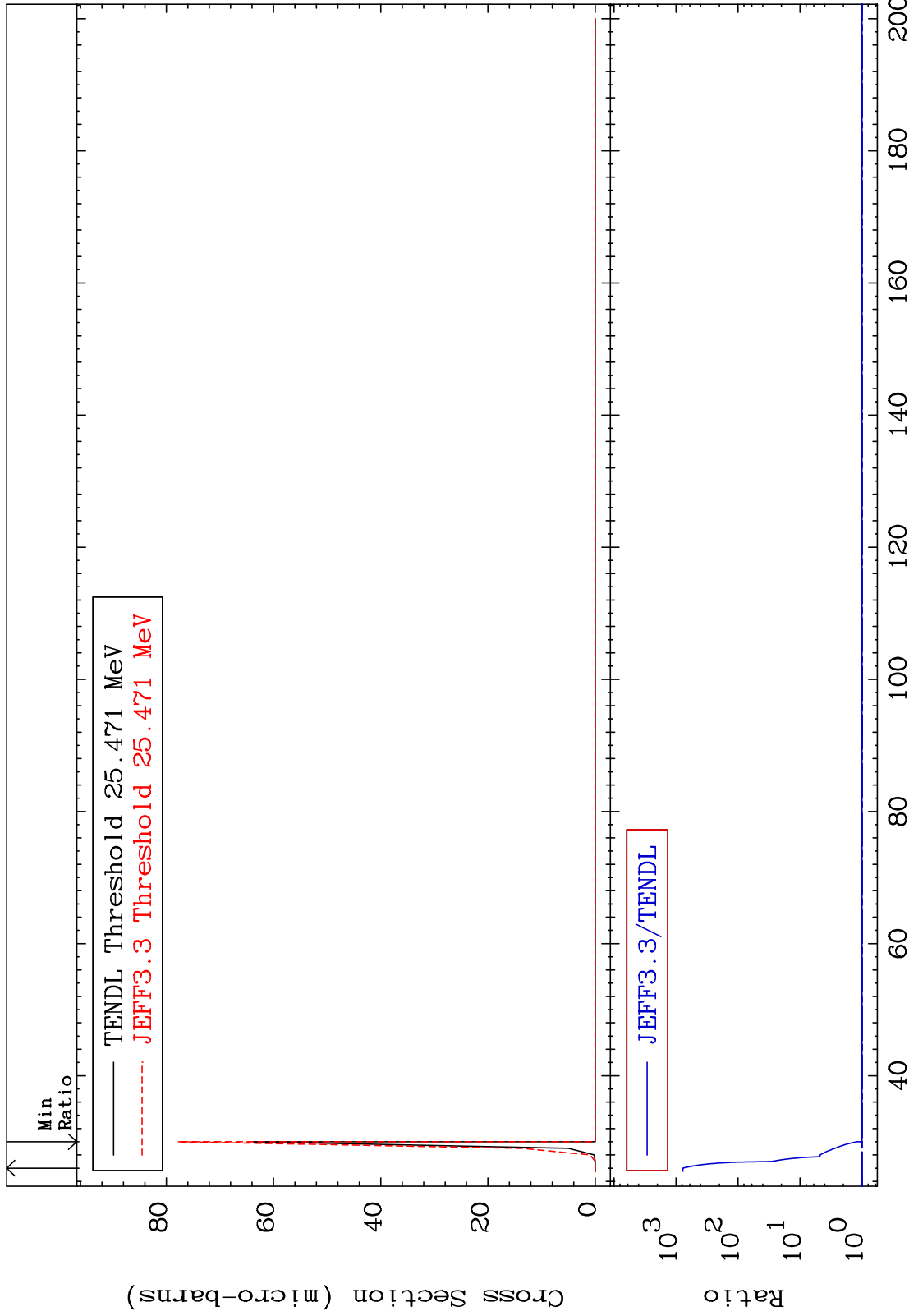
28-Ni-63

MAT 2840

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

28-Ni-63

Radionuclide Production Cross Section 0.000 To 9999. %



78

Incident Energy (MeV)

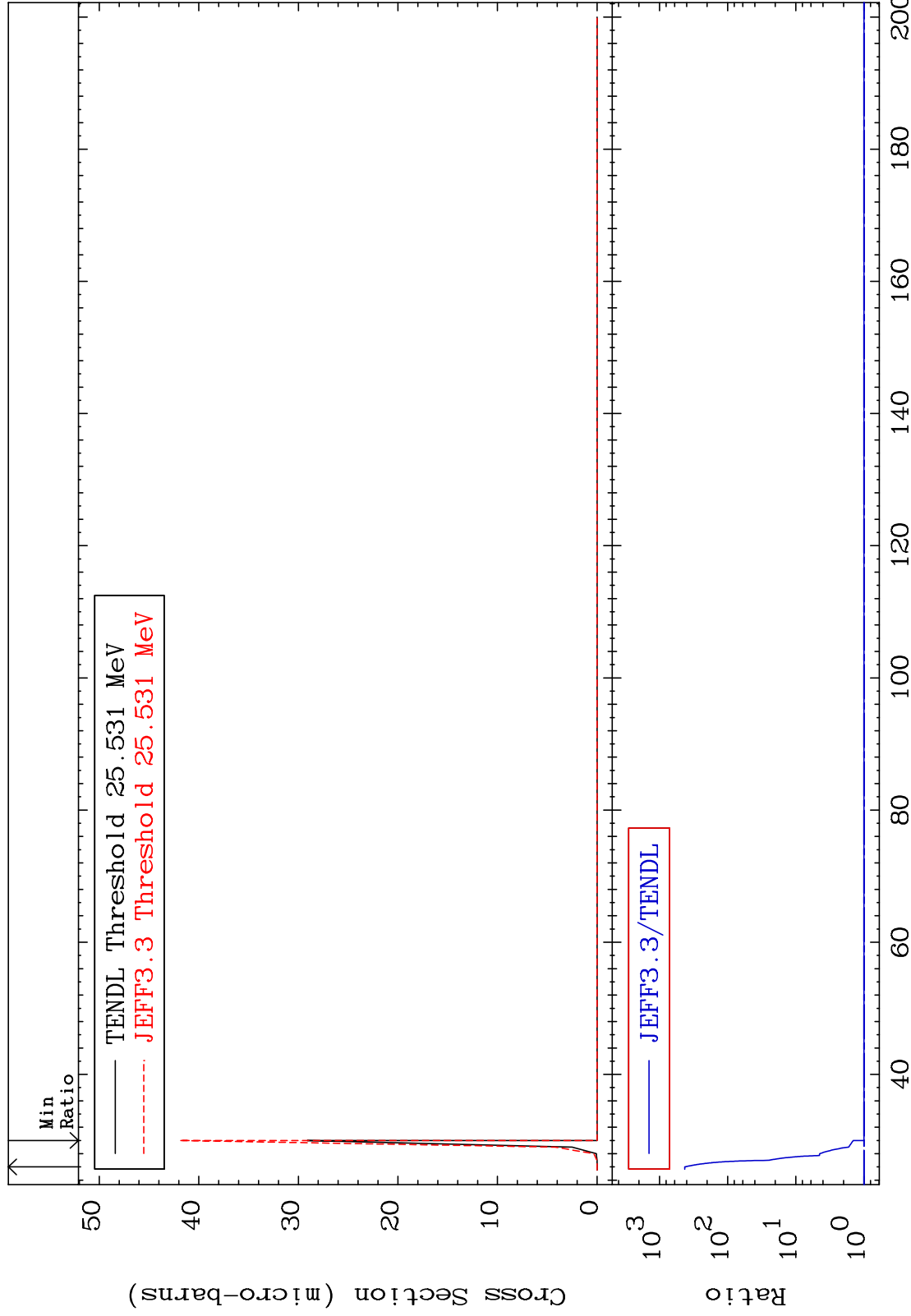
28-Ni-63

MAT 2840

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

28-Ni-63

Radionuclide Production Cross Section 0.000 To 9999. %

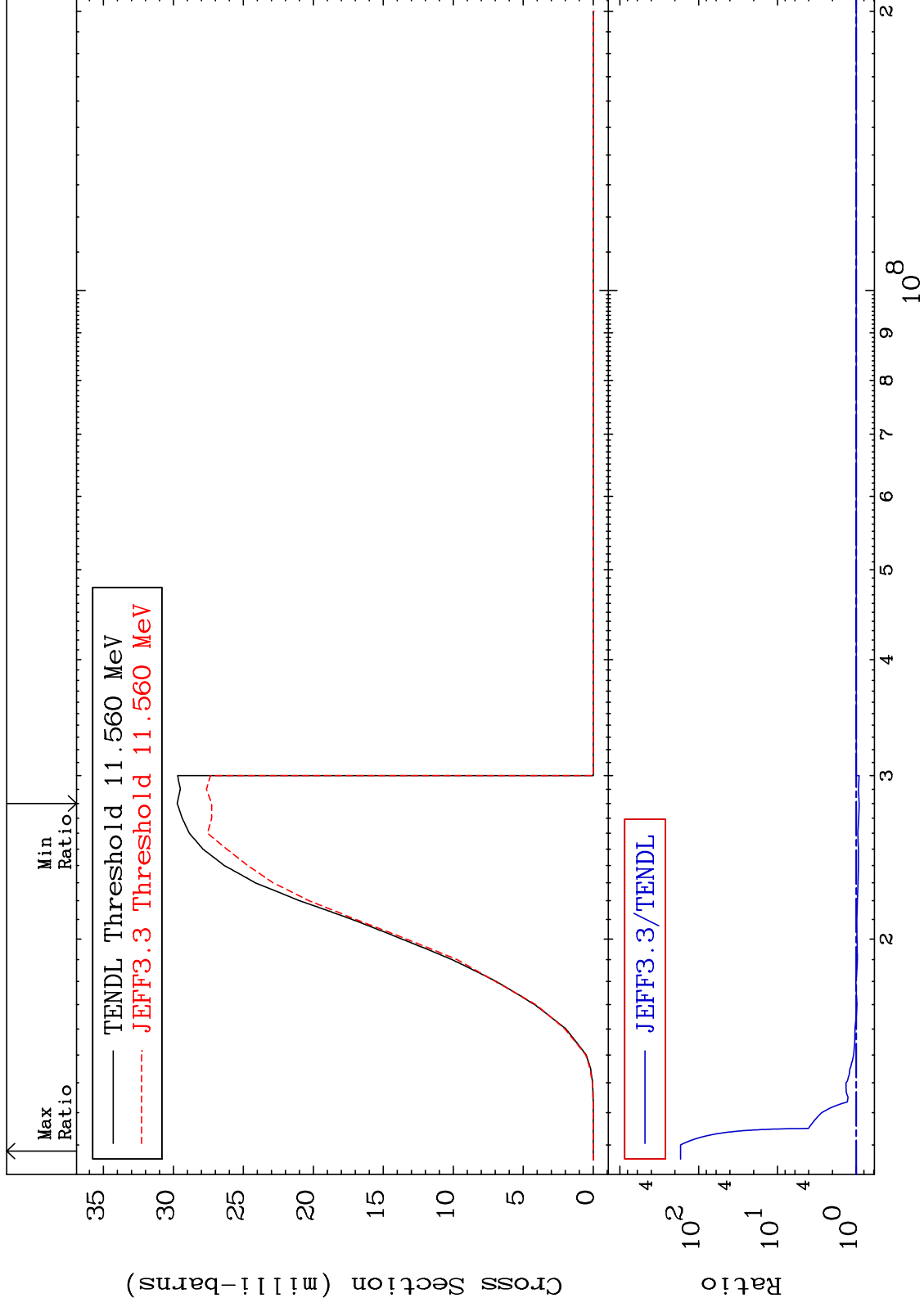


MAT 2840

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

28-Ni-63

Radionuclide Production Cross Section -8.264 To 9999. %



80

Incident Energy (eV)

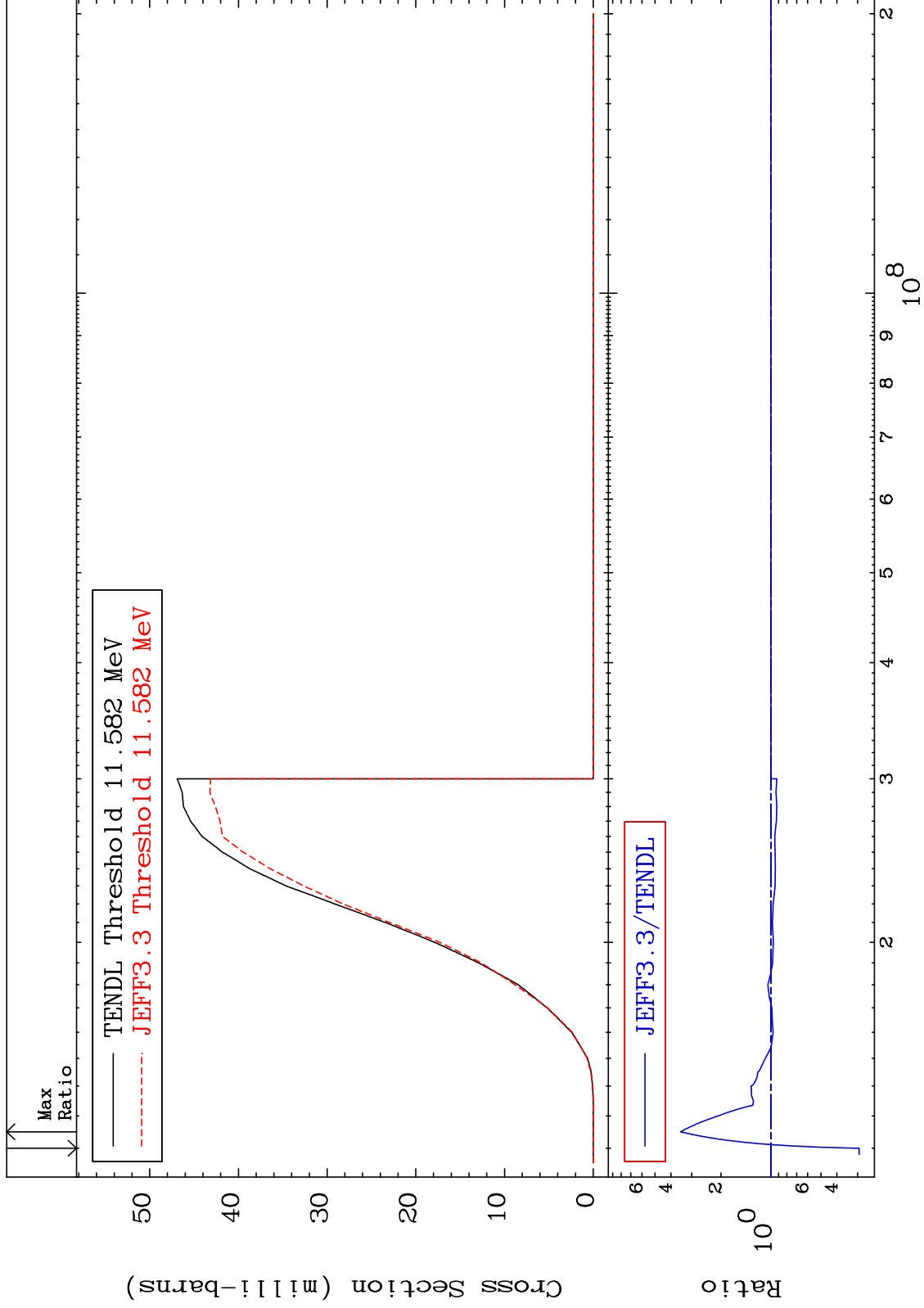
28-Ni-63

MAT 2840

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

28-Ni-63

Radionuclide Production Cross Section -70.64 To 250.2 %

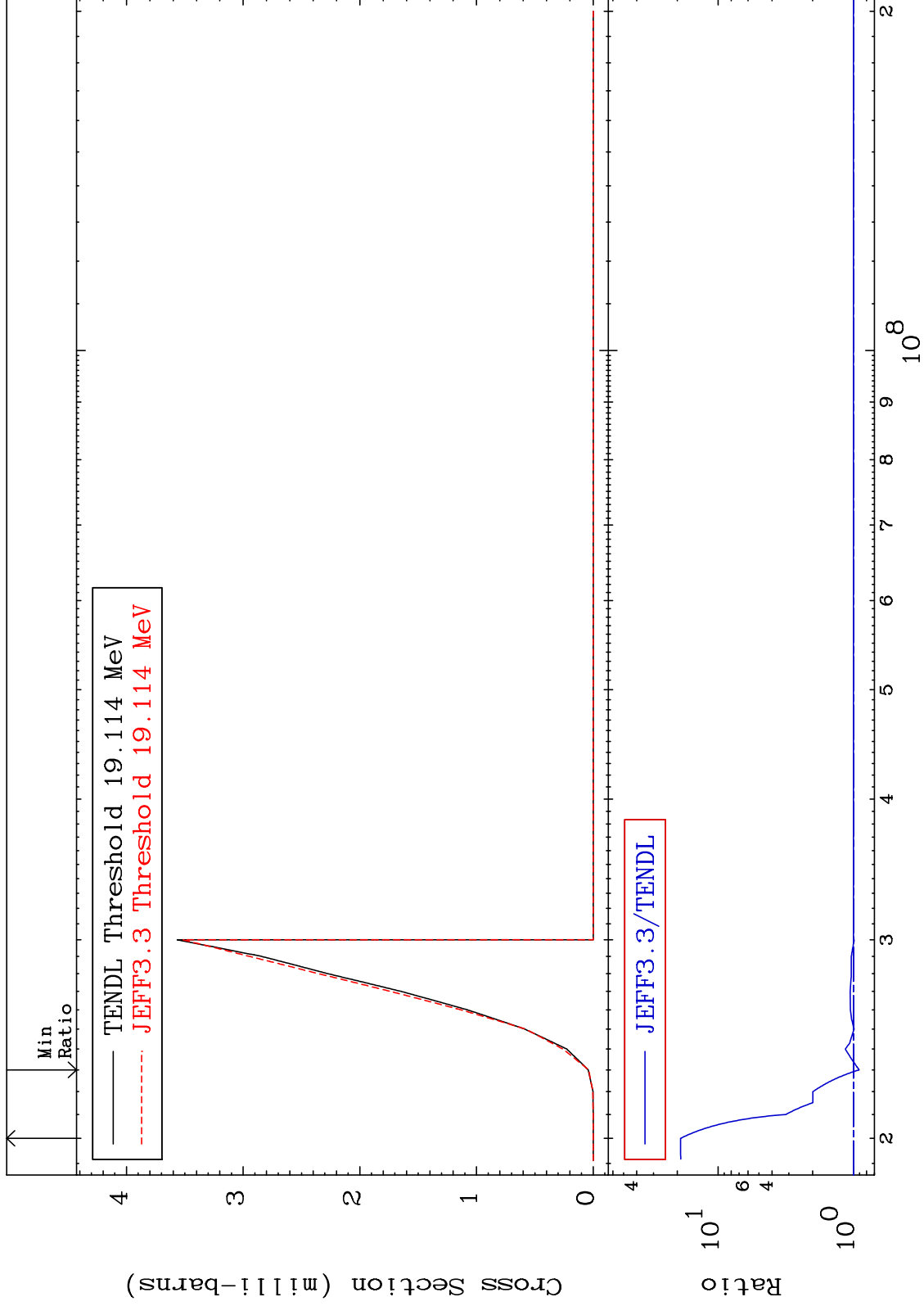


MAT 2840

(n, n') t:27-Co-60g

28-Ni-63

Radionuclide Production Cross Section -9.371 To 1792. %



82

Incident Energy (eV)

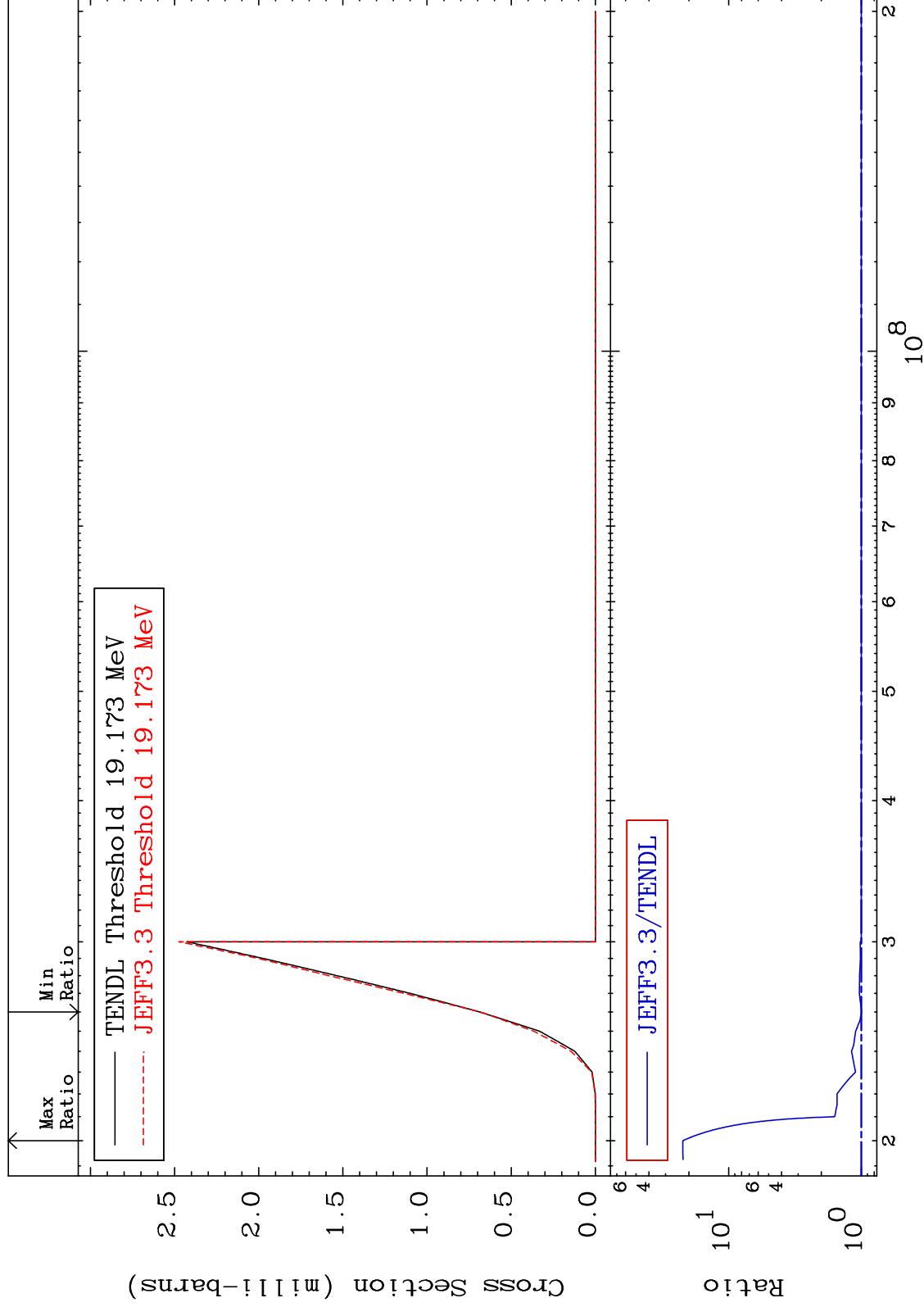
28-Ni-63

MAT 2840

(n, n') t:27-Co-60m1

28-Ni-63

Radionuclide Production Cross Section -0.487 To 2119. %



83

Incident Energy (eV)

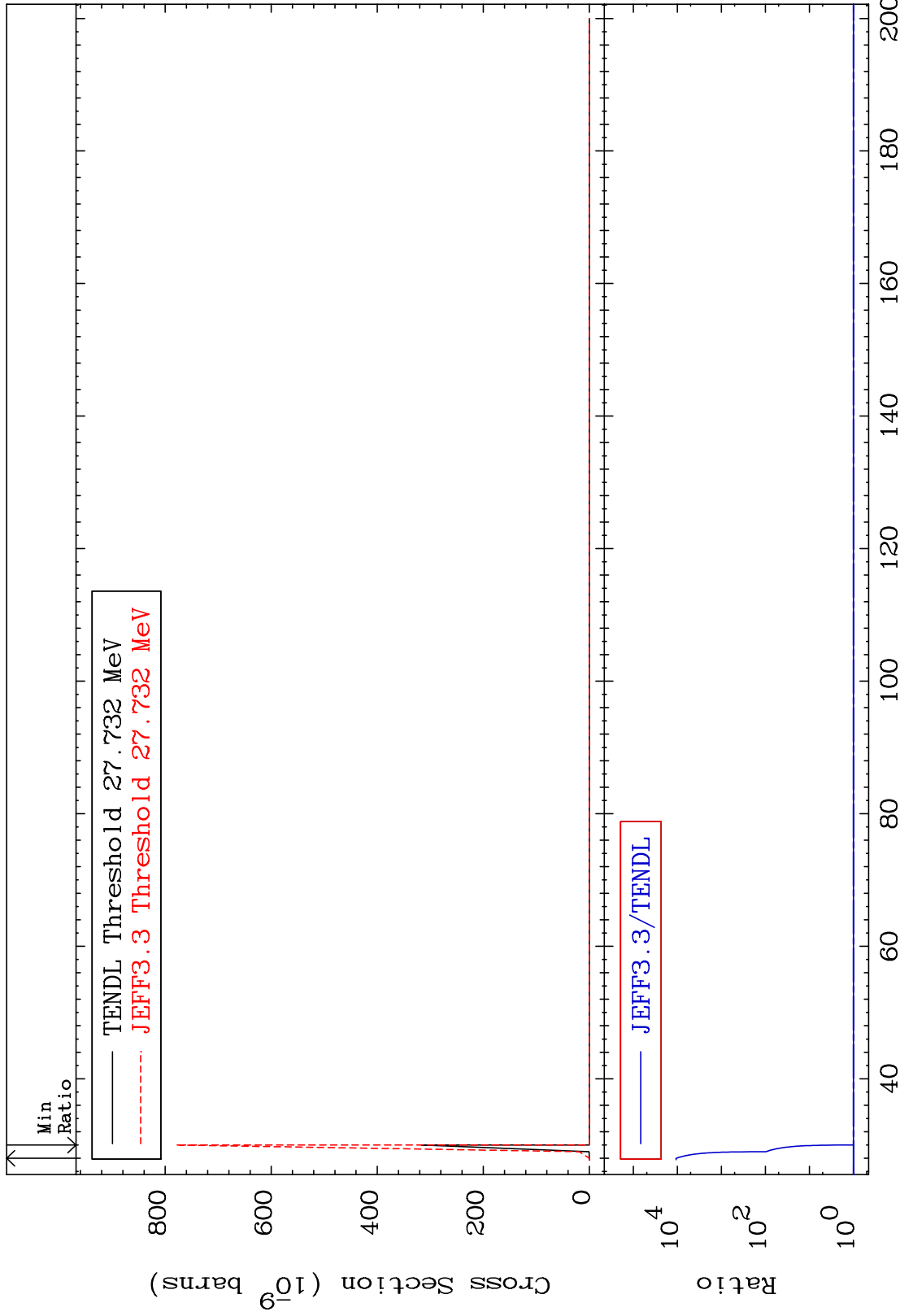
28-Ni-63

MAT 2840

(n,3n) p:27-Co-60g

28-Ni-63

Radionuclide Production Cross Section 0.000 To 9999. %

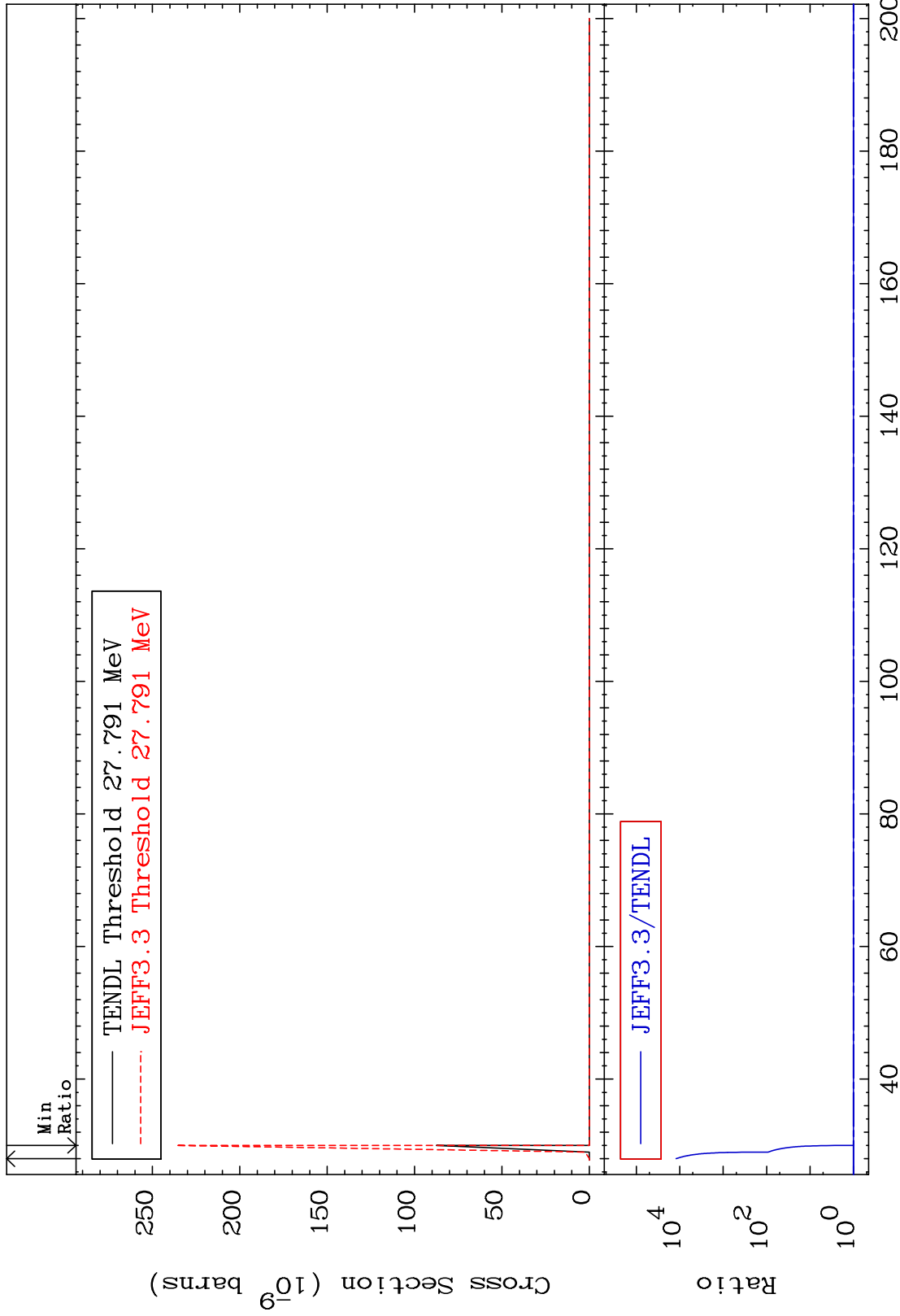


MAT 2840

(n,3n) p:27-Co-60m1

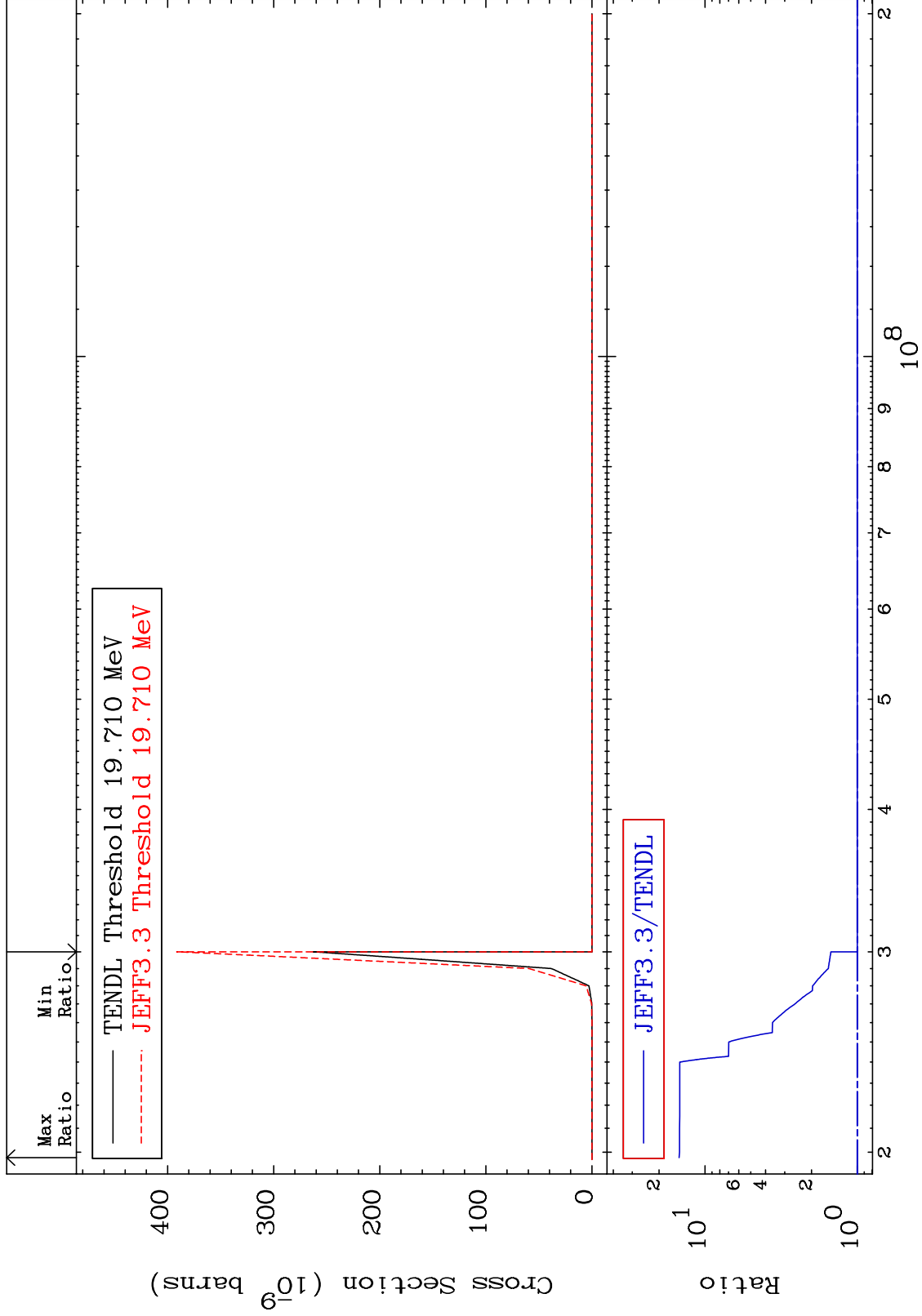
28-Ni-63

Radionuclide Production Cross Section 0.000 To 9999. %



MAT 2840

(n,n') p α :25-Mn-58g 28-Ni-63
Radionuclide Production Cross Section 0.000 To 1378. %

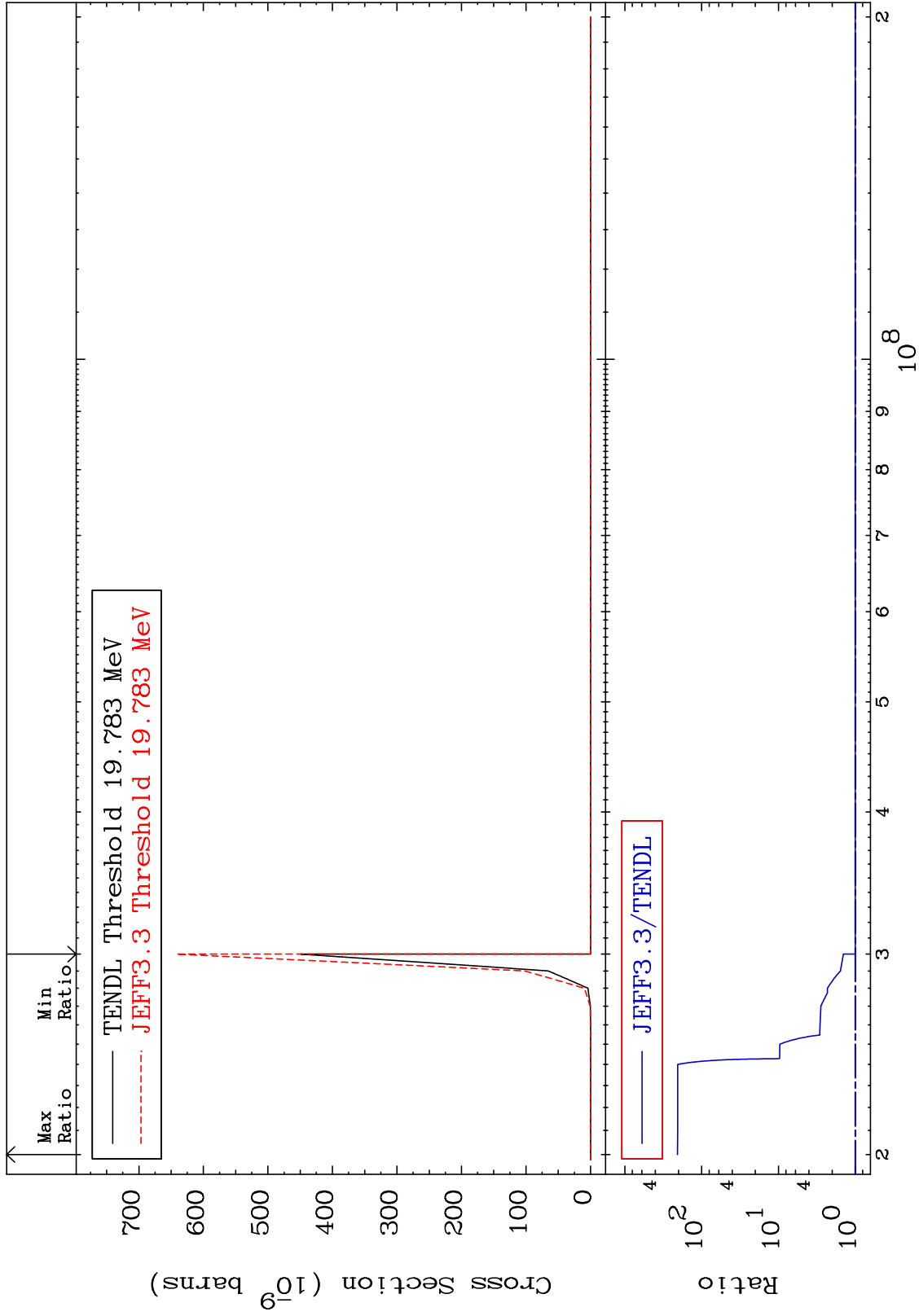


MAT 2840

(n, n') p α :25-Mn-58m1

28-Ni-63

Radionuclide Production Cross Section 0.000 To 9999. %



28-Ni-63

Incident Energy (eV)

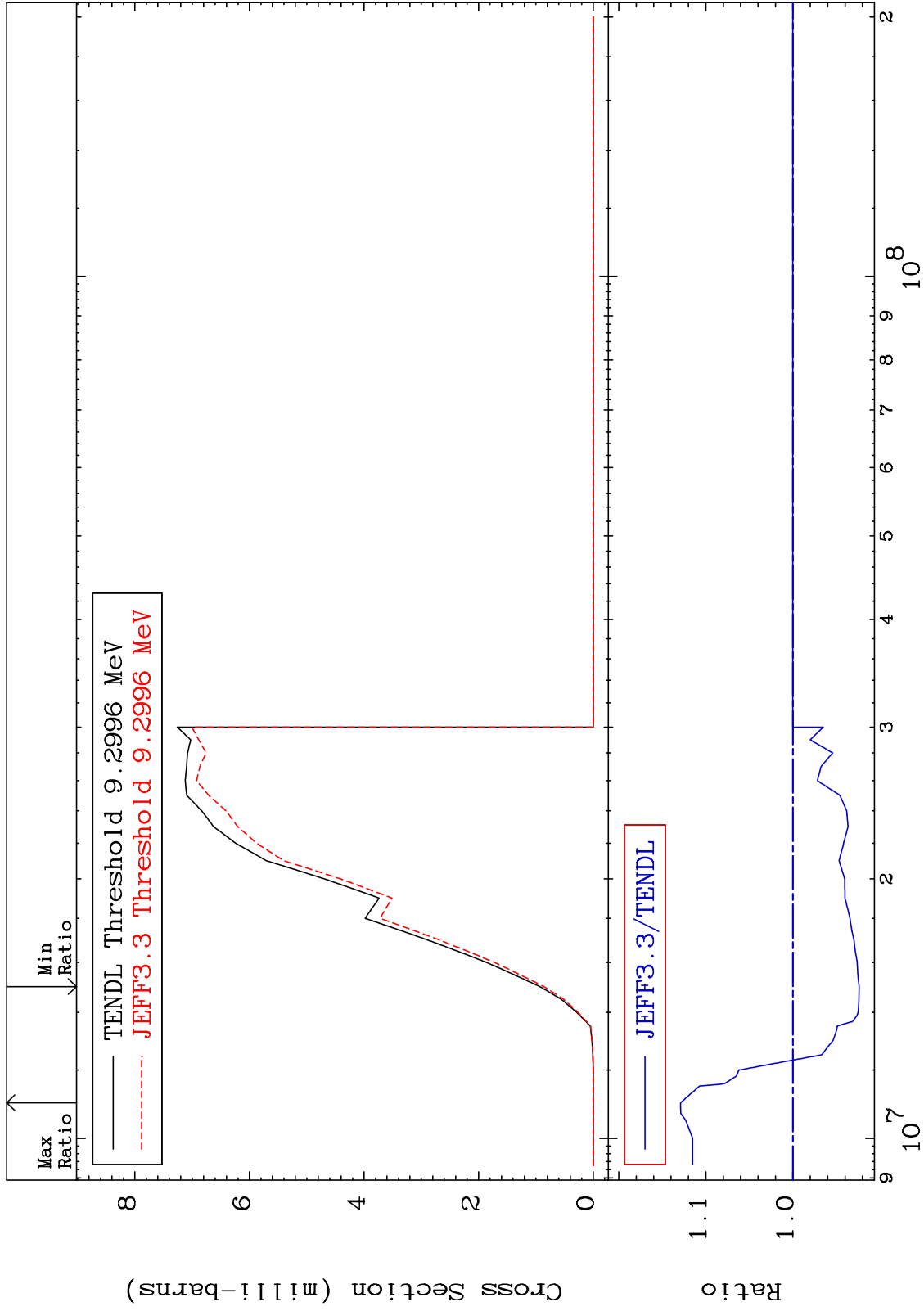
87

MAT 2840

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

28-Ni-63

Radionuclide Production Cross Section -7.623 To 12.90 %



88

Incident Energy (eV)

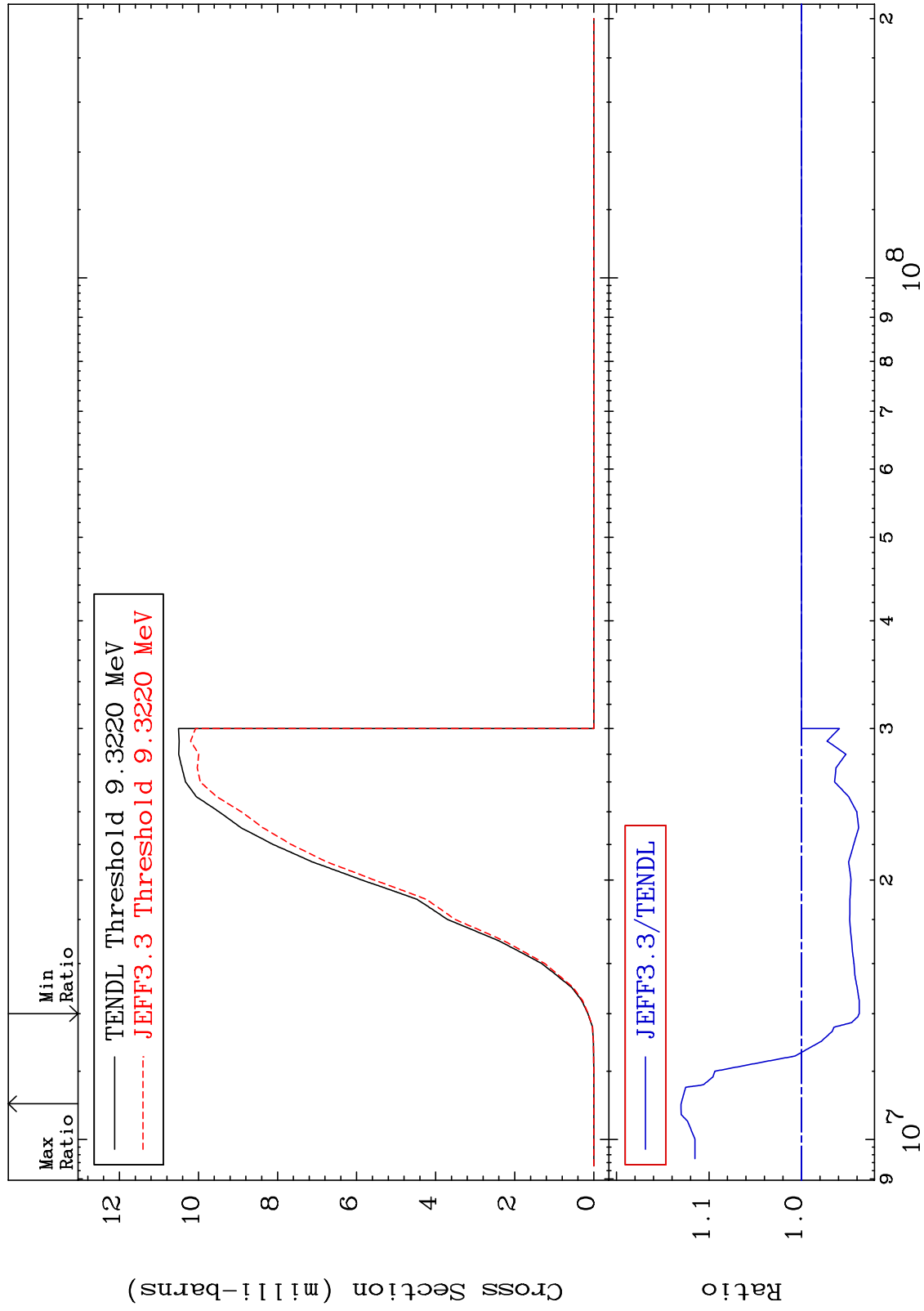
28-Ni-63

MAT 2840

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

28-Ni-63

Radionuclide Production Cross Section -6.252 To 13.02 %

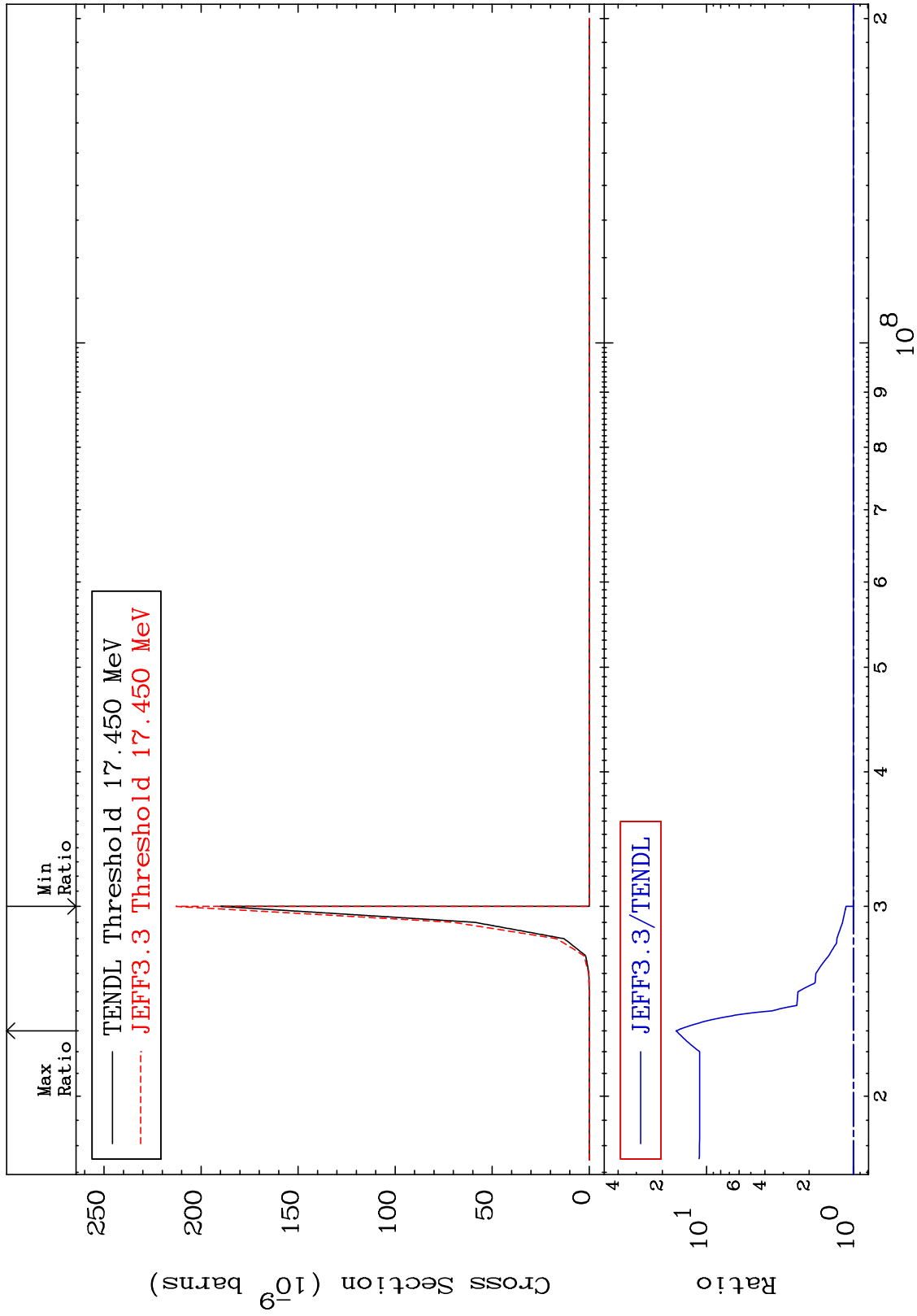


MAT 2840

(n, d) α :25-Mn-58g

28-Ni-63

Radionuclide Production Cross Section 0.000 To 1511. %



90

Incident Energy (eV)

28-Ni-63

MAT 2840

(n, d) α :25-Mn-58m1

28-Ni-63

Radionuclide Production Cross Section 0.000 To 988.6 %

