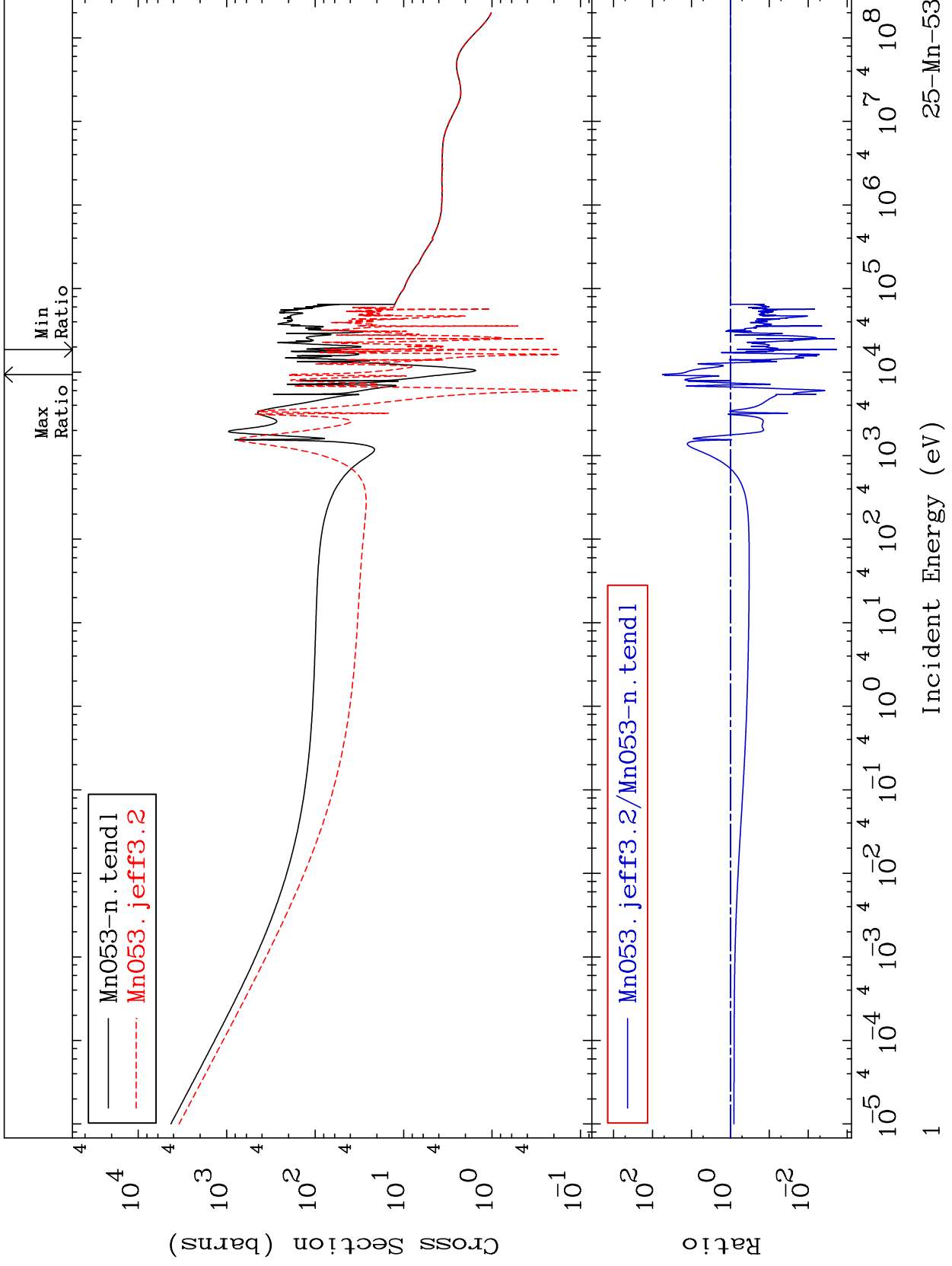


MAT 2519

Total
Cross Section

25-Mn-53
-99.81 To 5481. %

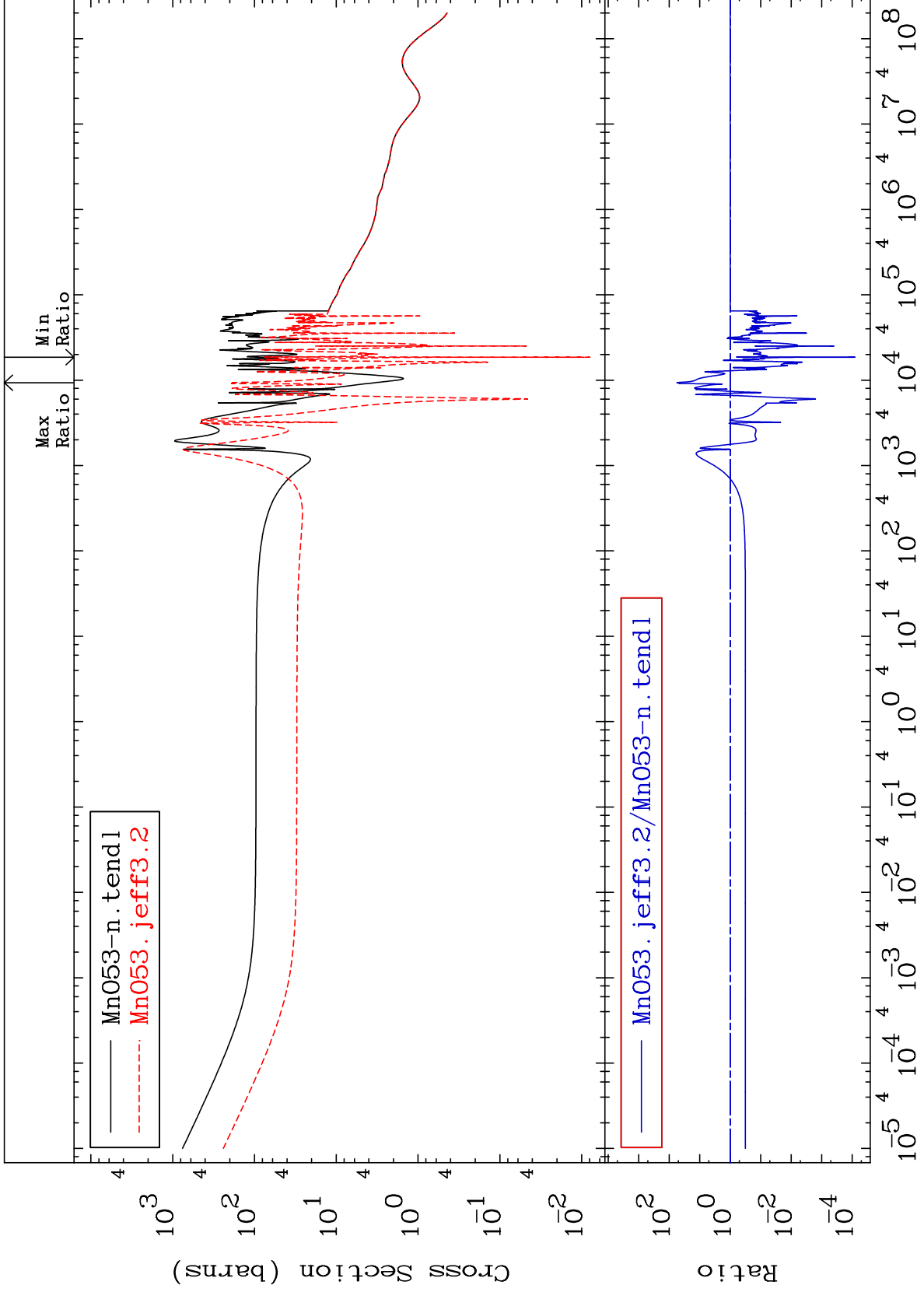


25-Mn-53

MAT 2519

Elastic
Cross Section

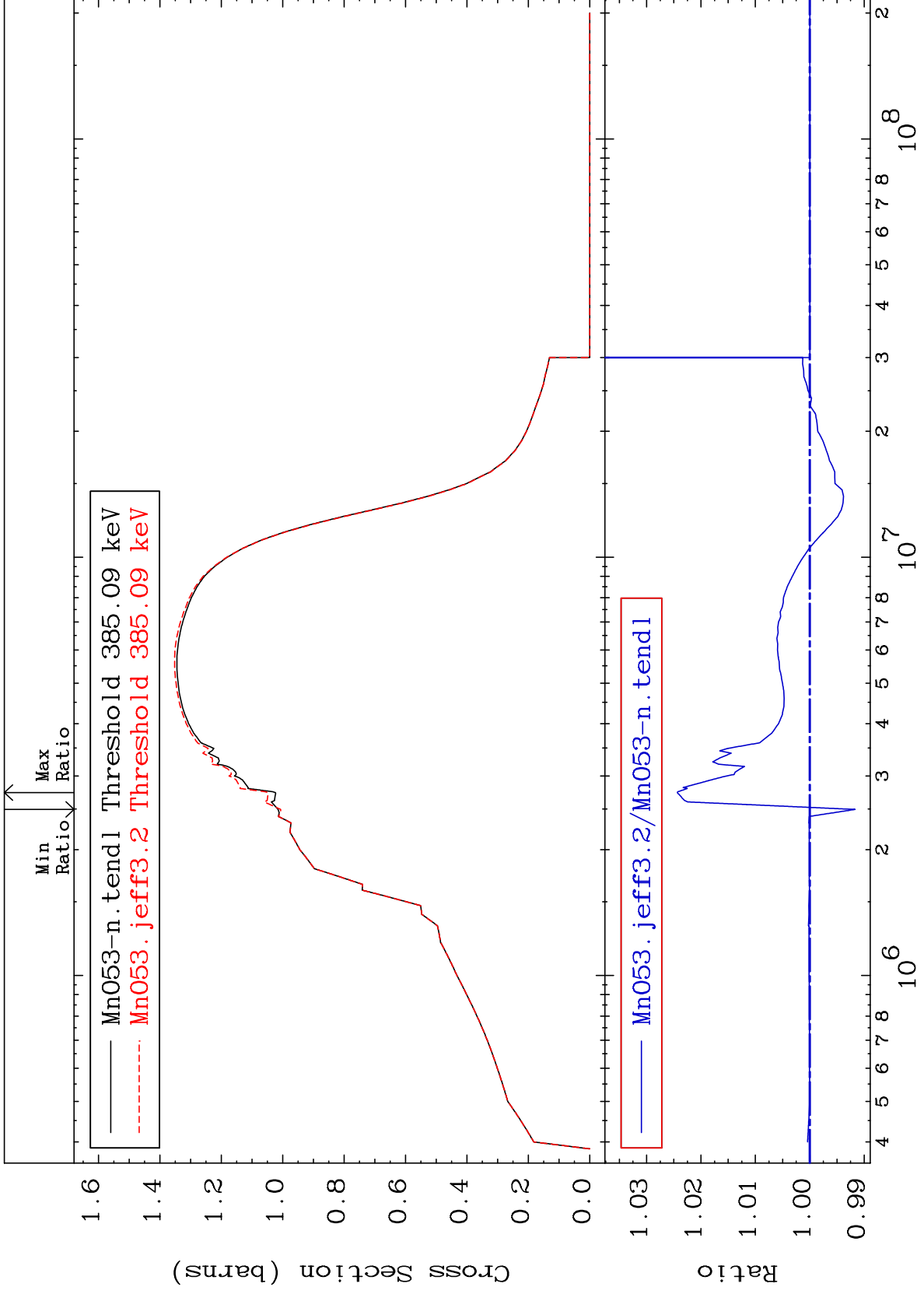
25-Mn-53
-99.99 To 5481. %



MAT 2519

Inelastic
Cross Section

25-Mn-53
-0.833 To 2.442 %



3

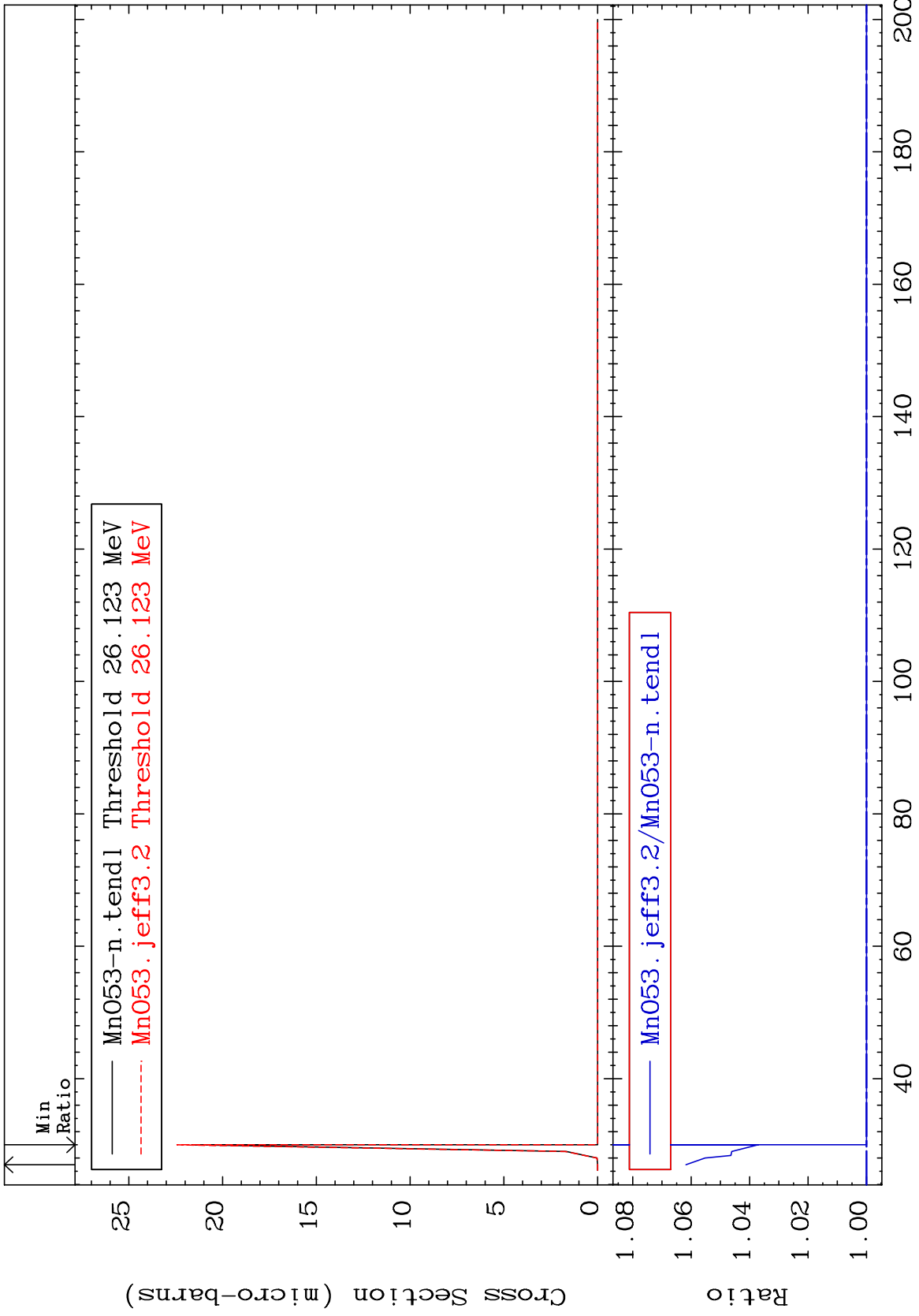
Incident Energy (eV)

25-Mn-53

MAT 2519

(n,2n) d
Cross Section

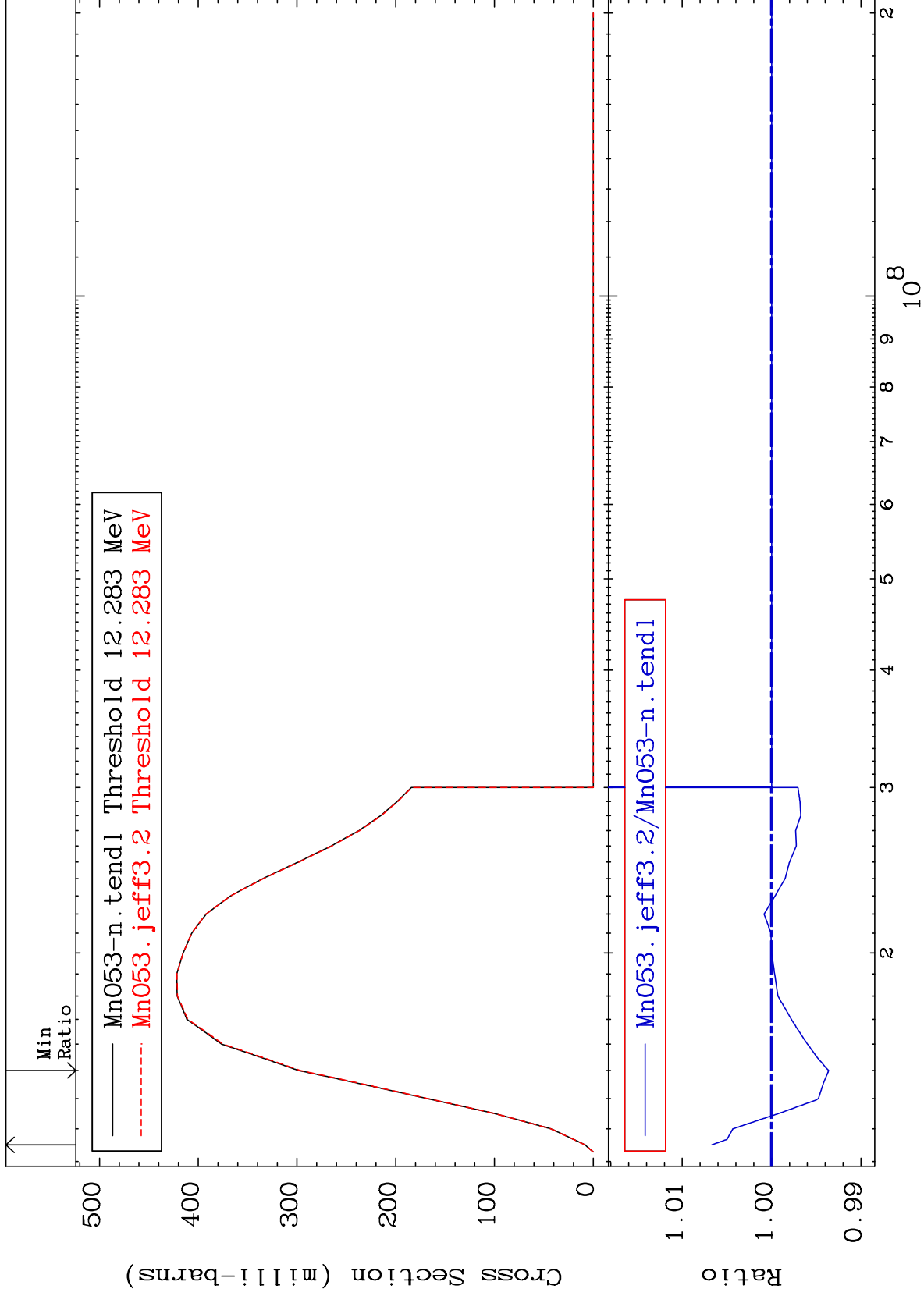
25-Mn-53
0.000 To 6.180 %



MAT 2519

(n,2n)
Cross Section

²⁵Mn-53
-0.638 To 0.671 %



5

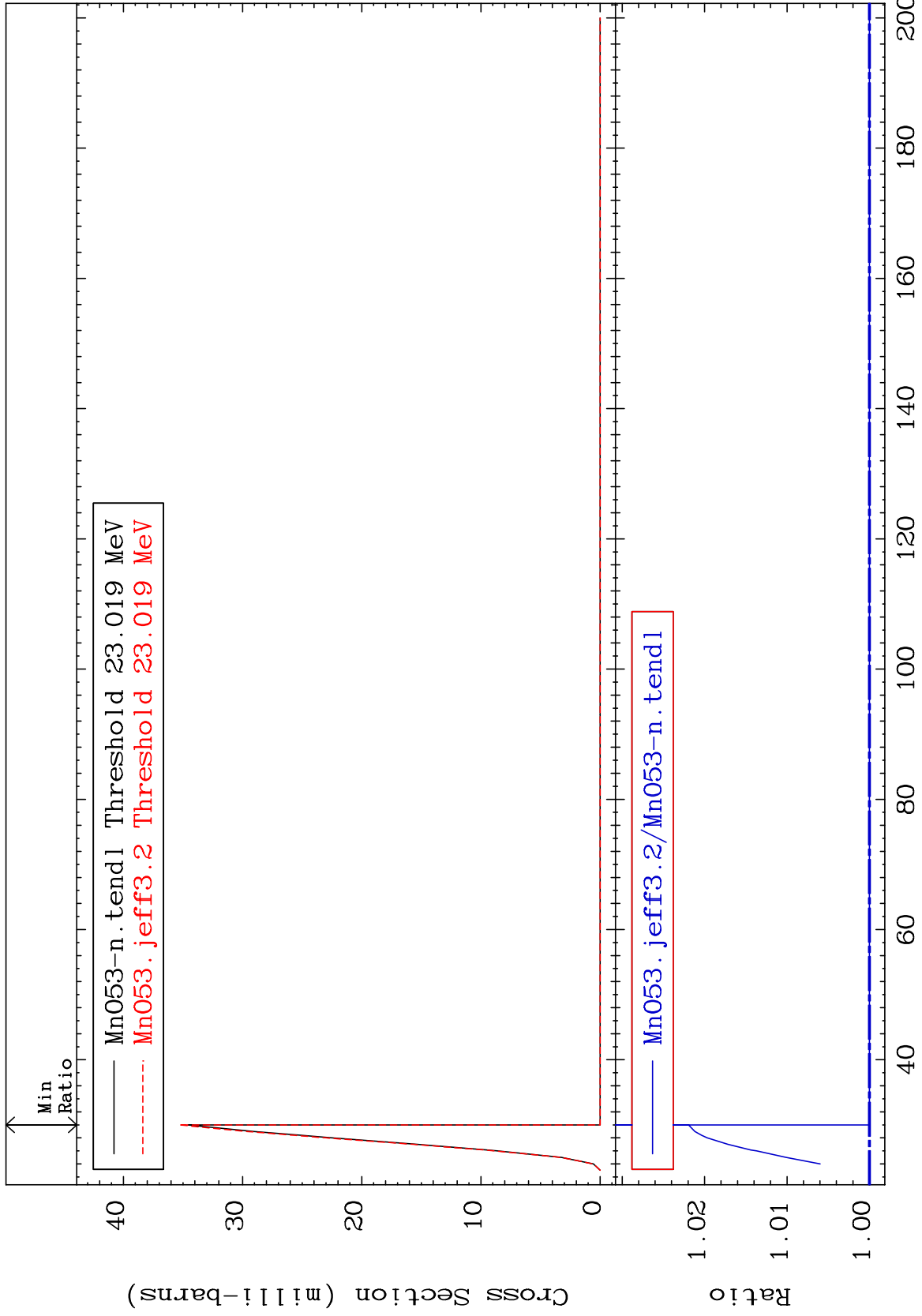
Incident Energy (eV)

²⁵Mn-53

MAT 2519

(n,3n)
Cross Section

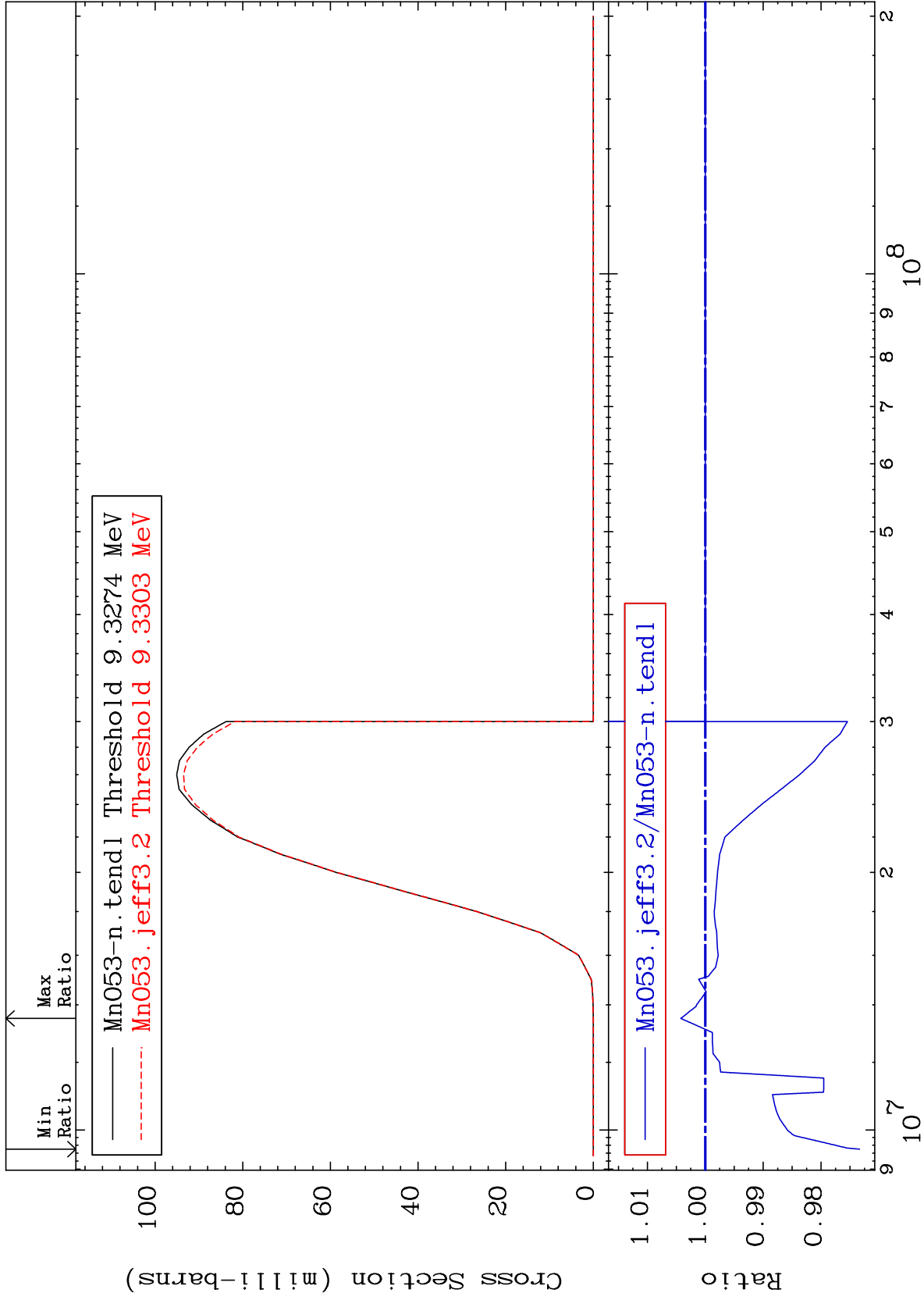
25-Mn-53
0.000 To 2.194 %



MAT 2519

(n, n') α
Cross Section

²⁵Mn-53
-2.665 To 0.423 %



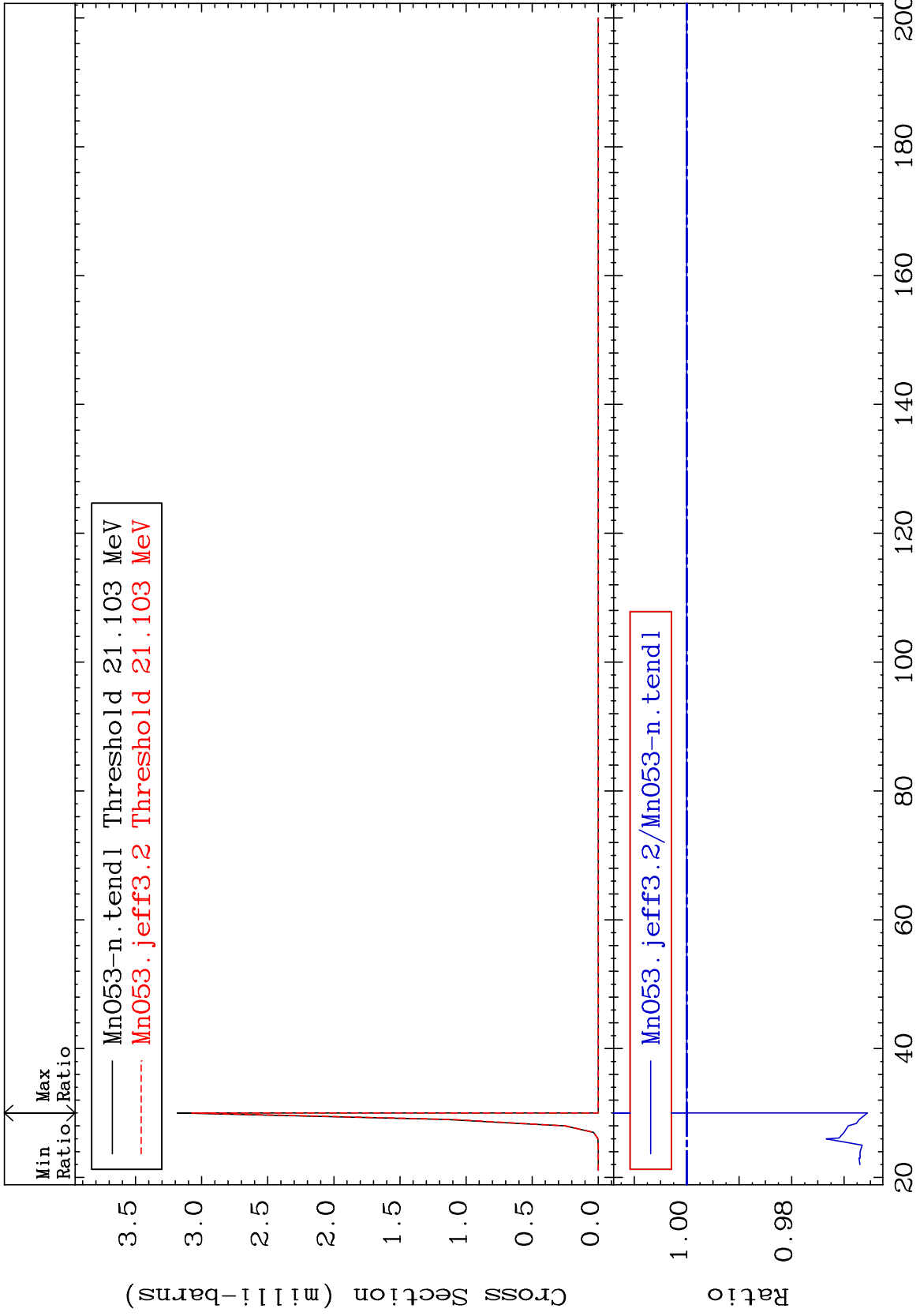
Incident Energy (eV)

²⁵Mn-53

MAT 2519

(n,2n) α
Cross Section

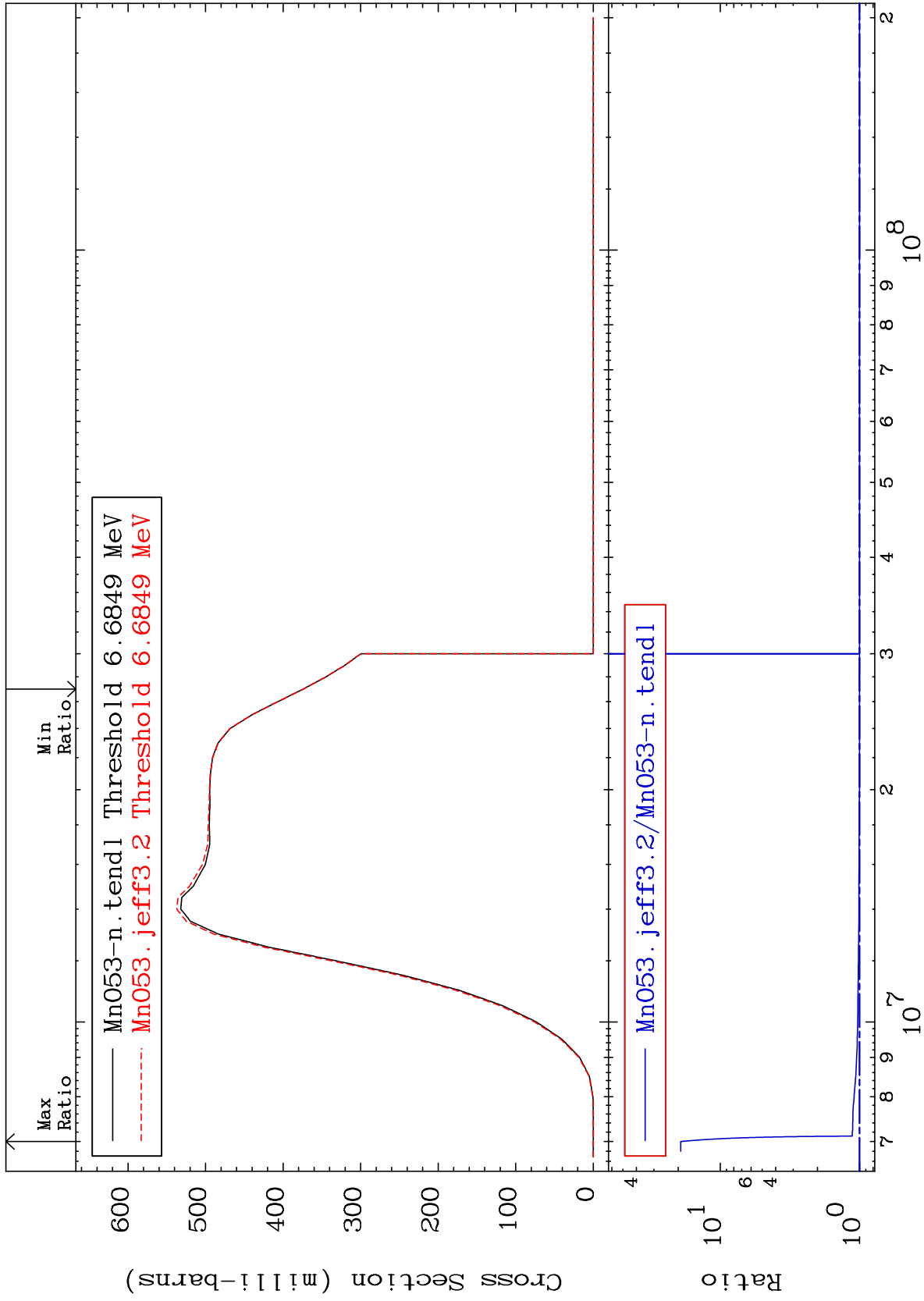
²⁵Mn-53
-3.446 To 0.000 %



MAT 2519

(n,n') p
Cross Section

²⁵Mn-53
-0.104 To 1820. %



9

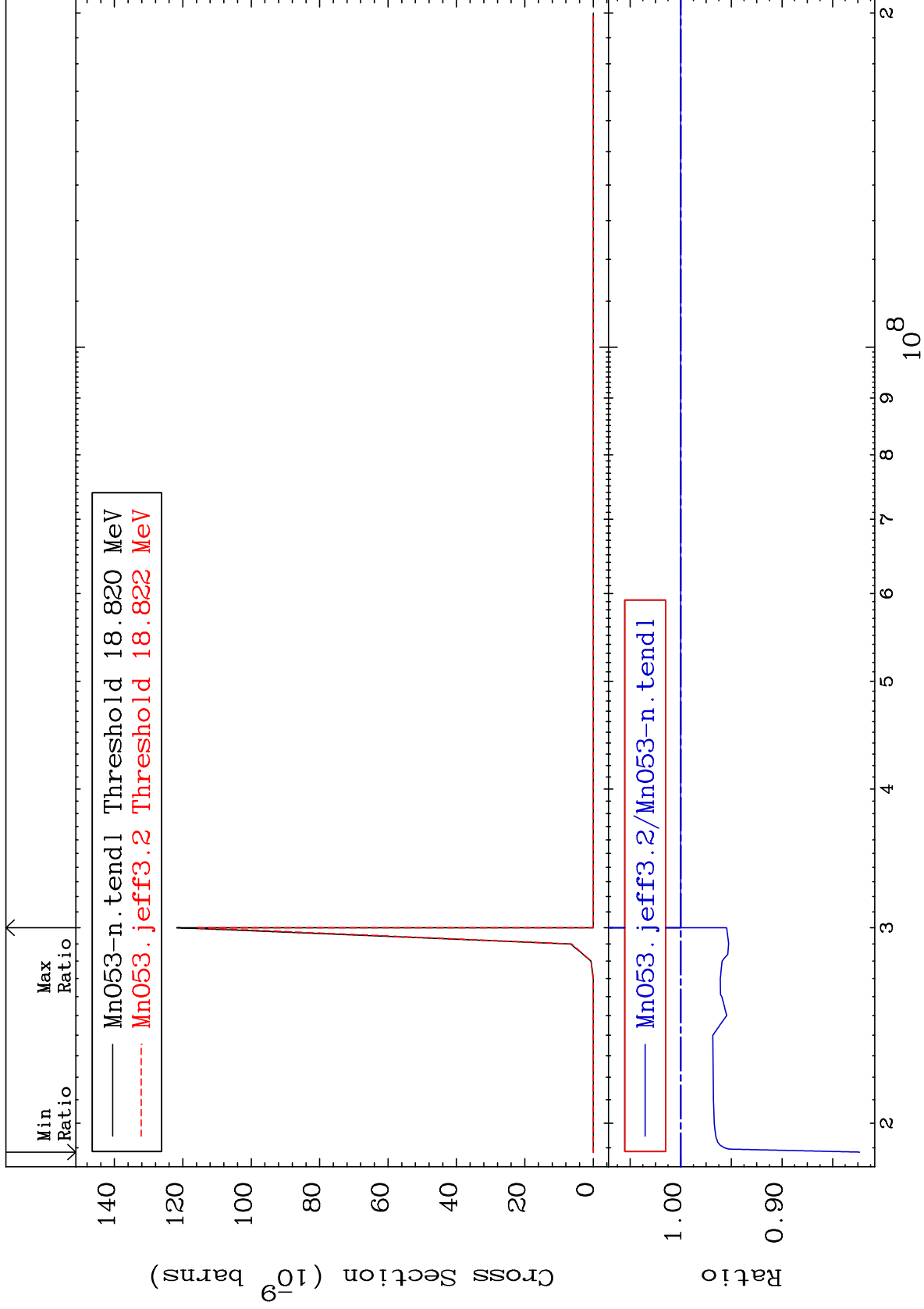
Incident Energy (eV)

²⁵Mn-53

MAT 2519

(n, n') 2α
Cross Section

$^{25}\text{Mn-53}$
-17.66 To 0.000 %



10

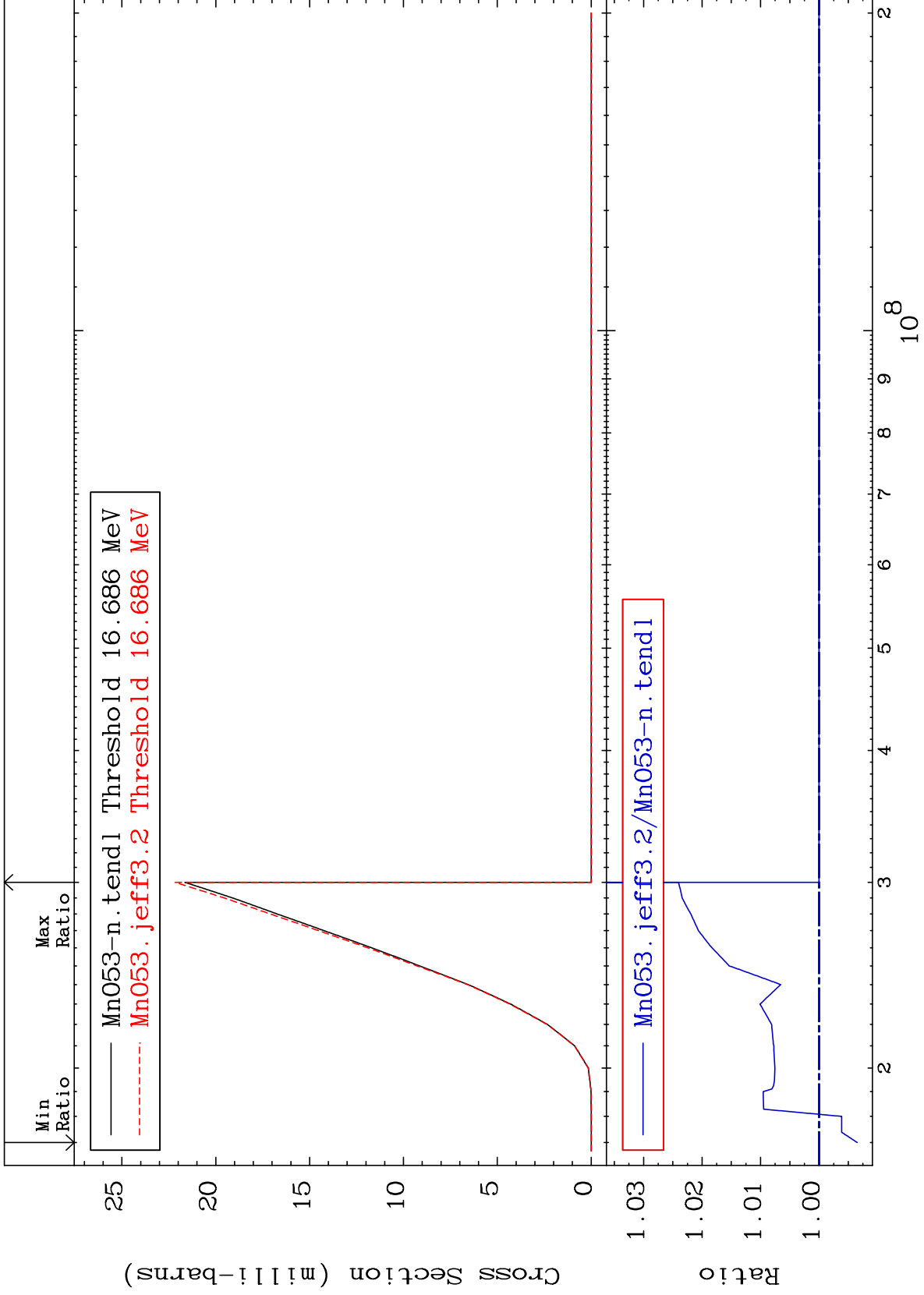
Incident Energy (eV)

$^{25}\text{Mn-53}$

MAT 2519

(n,n') d
Cross Section

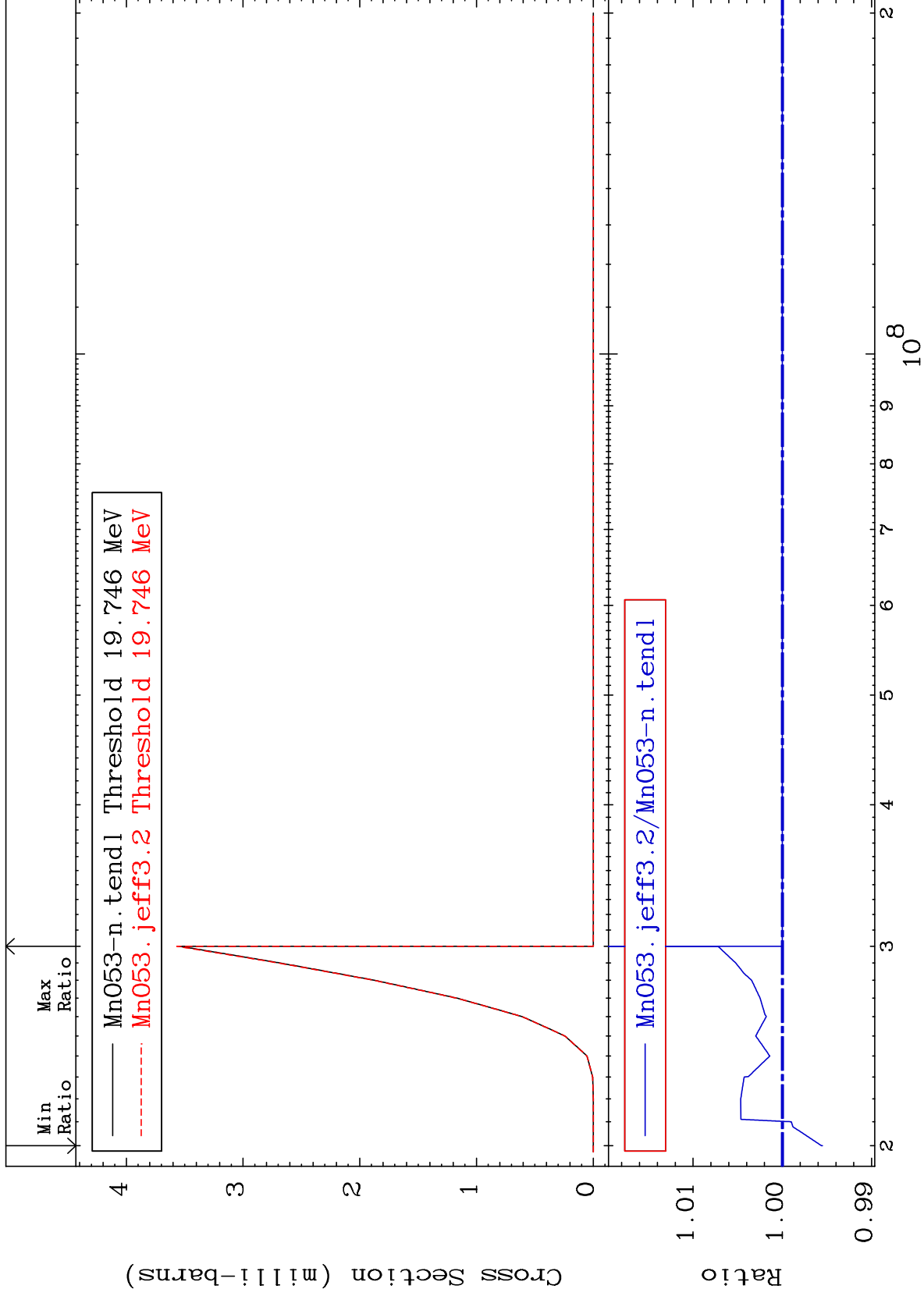
25-Mn-53
-0.653 To 2.400 %



MAT 2519

(n,n') t
Cross Section

25-Mn-53
-0.449 To 0.722 %



12

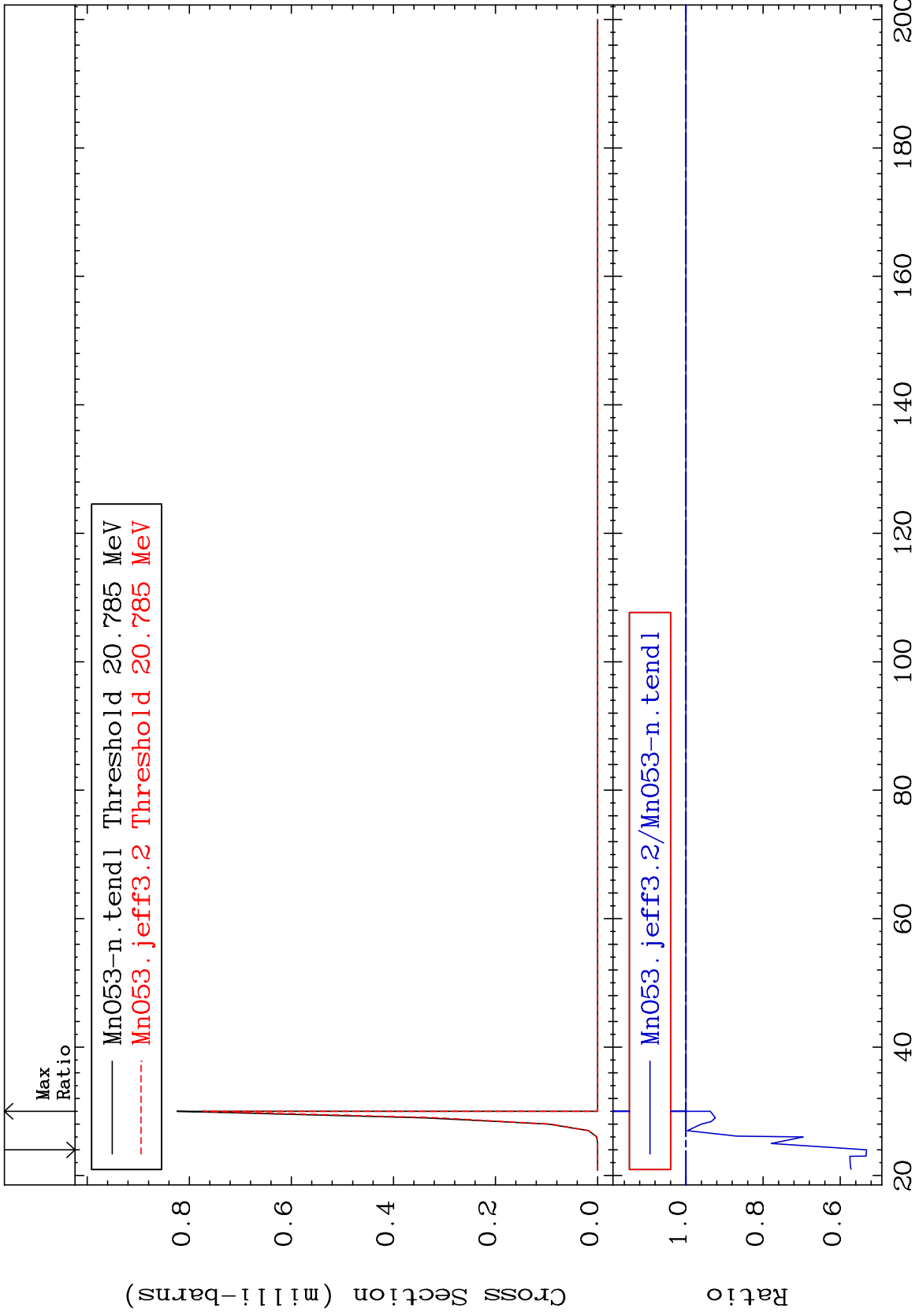
Incident Energy (eV)

25-Mn-53

MAT 2519

(n, n') He-3
Cross Section

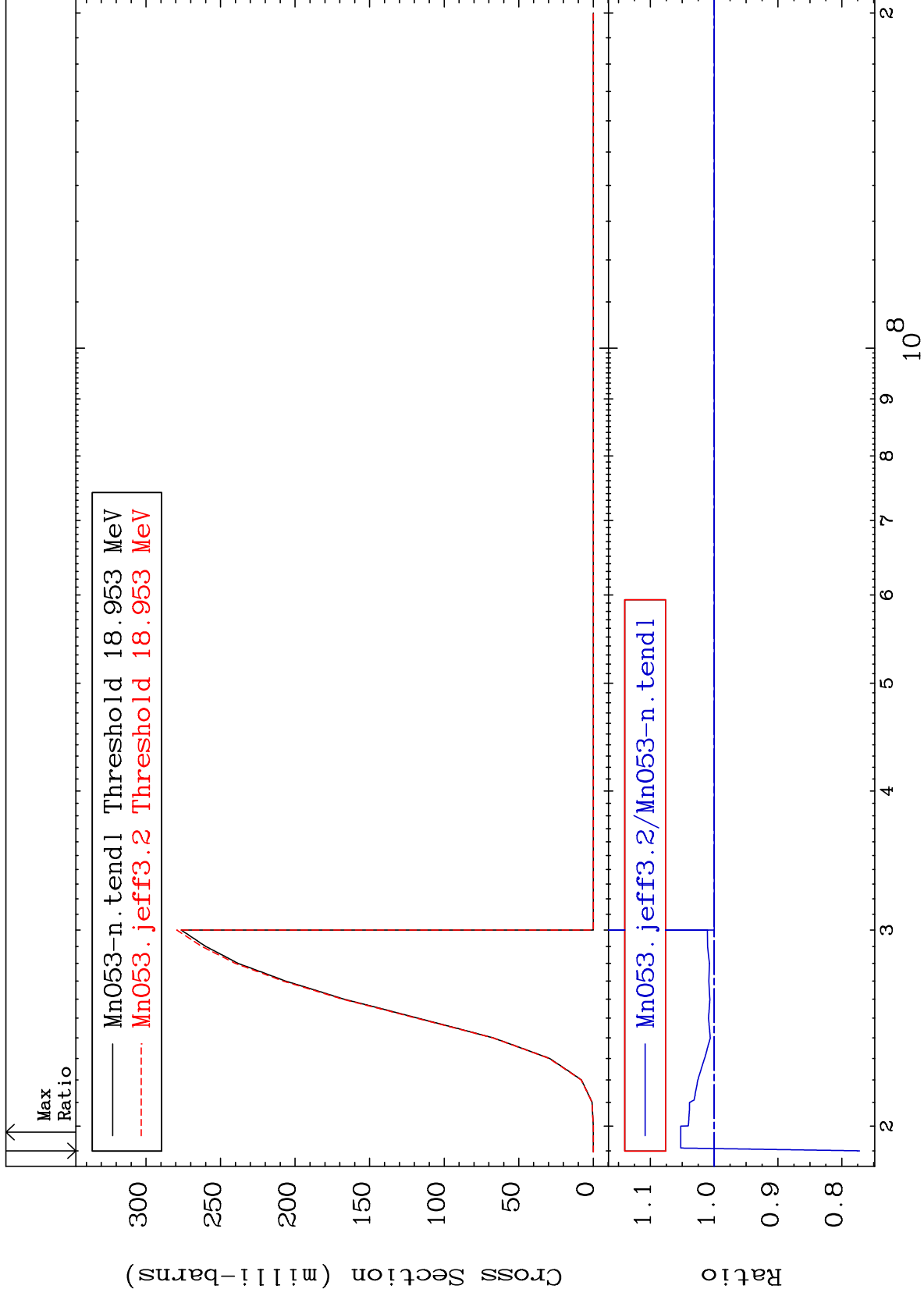
²⁵Mn-53
-46.80 To 0.000 %



MAT 2519

(n,2n) p
Cross Section

²⁵Mn-53
-22.78 To 5.236 %



14

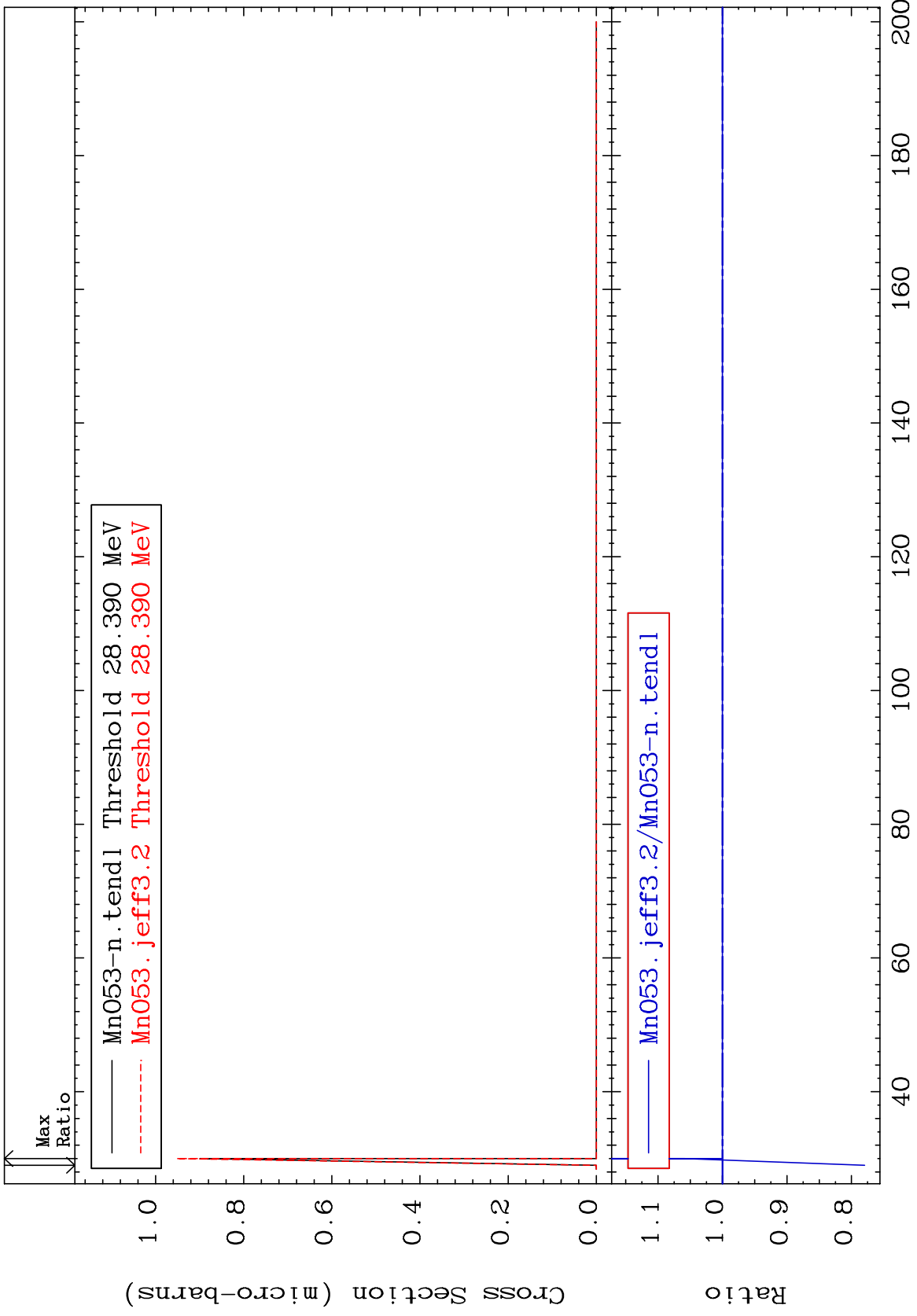
Incident Energy (eV)

²⁵Mn-53

MAT 2519

(n,3n) p
Cross Section

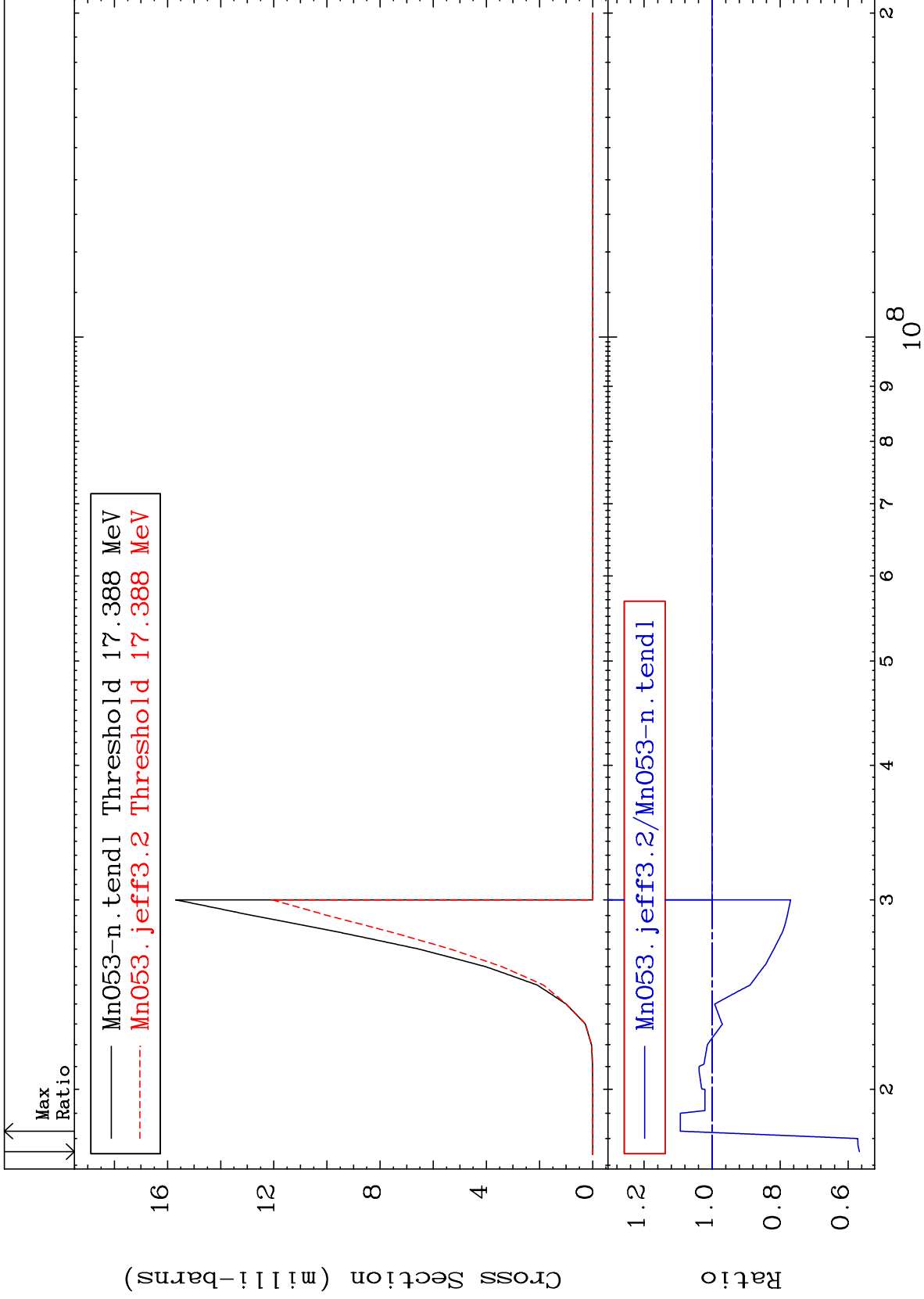
²⁵Mn-53
-22.03 To 5.895 %



MAT 2519

(n,2n) p
Cross Section

²⁵Mn-53
-43.32 To 9.337 %



16

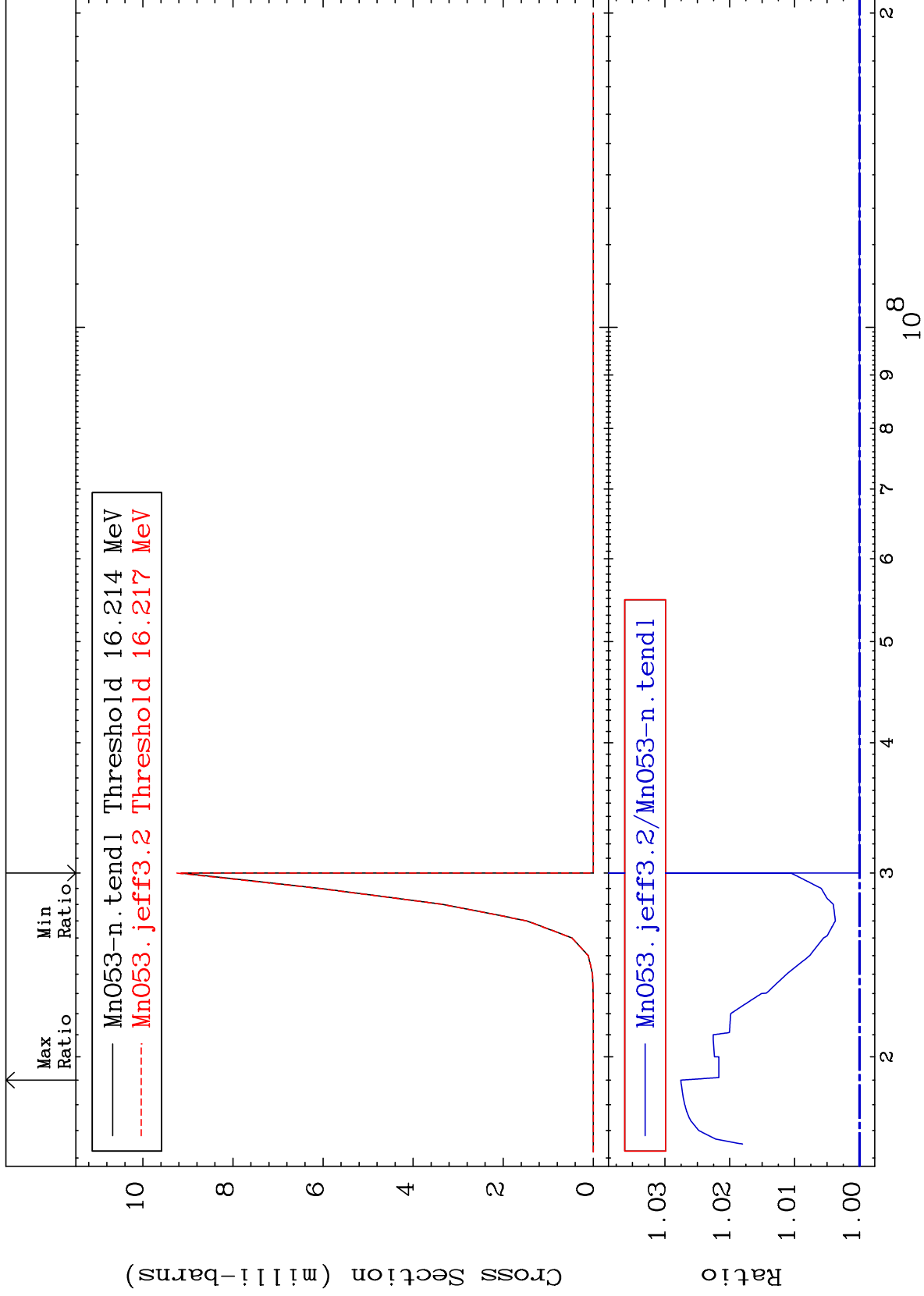
Incident Energy (eV)

²⁵Mn-53

MAT 2519

(n,n') p α
Cross Section

25-Mn-53
0.000 To 2.754 %



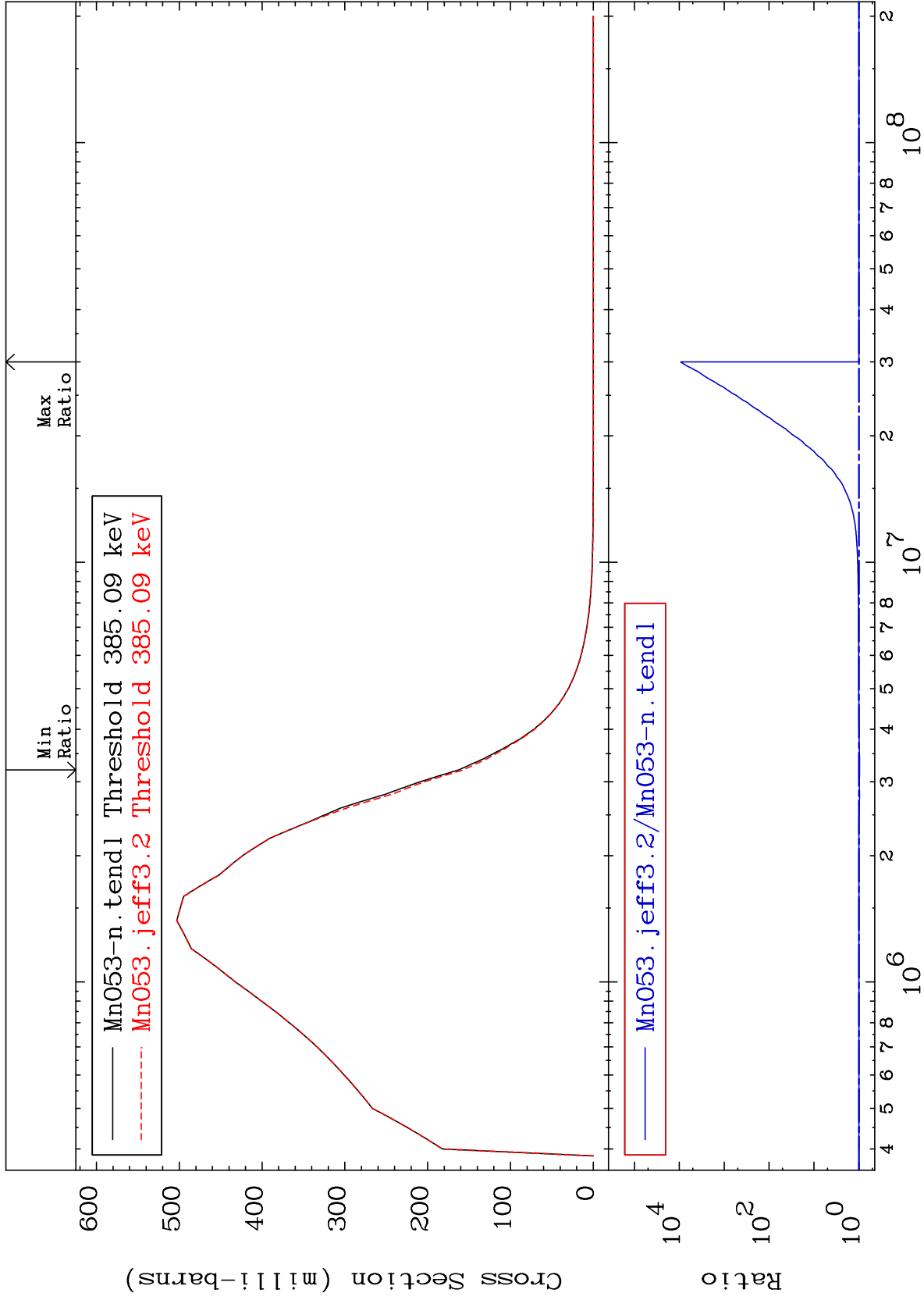
MAT 2519

377.9 keV (n,n') Level

²⁵Mn-53

-3.419 To 9999. %

Cross Section



18

Incident Energy (eV)

²⁵Mn-53

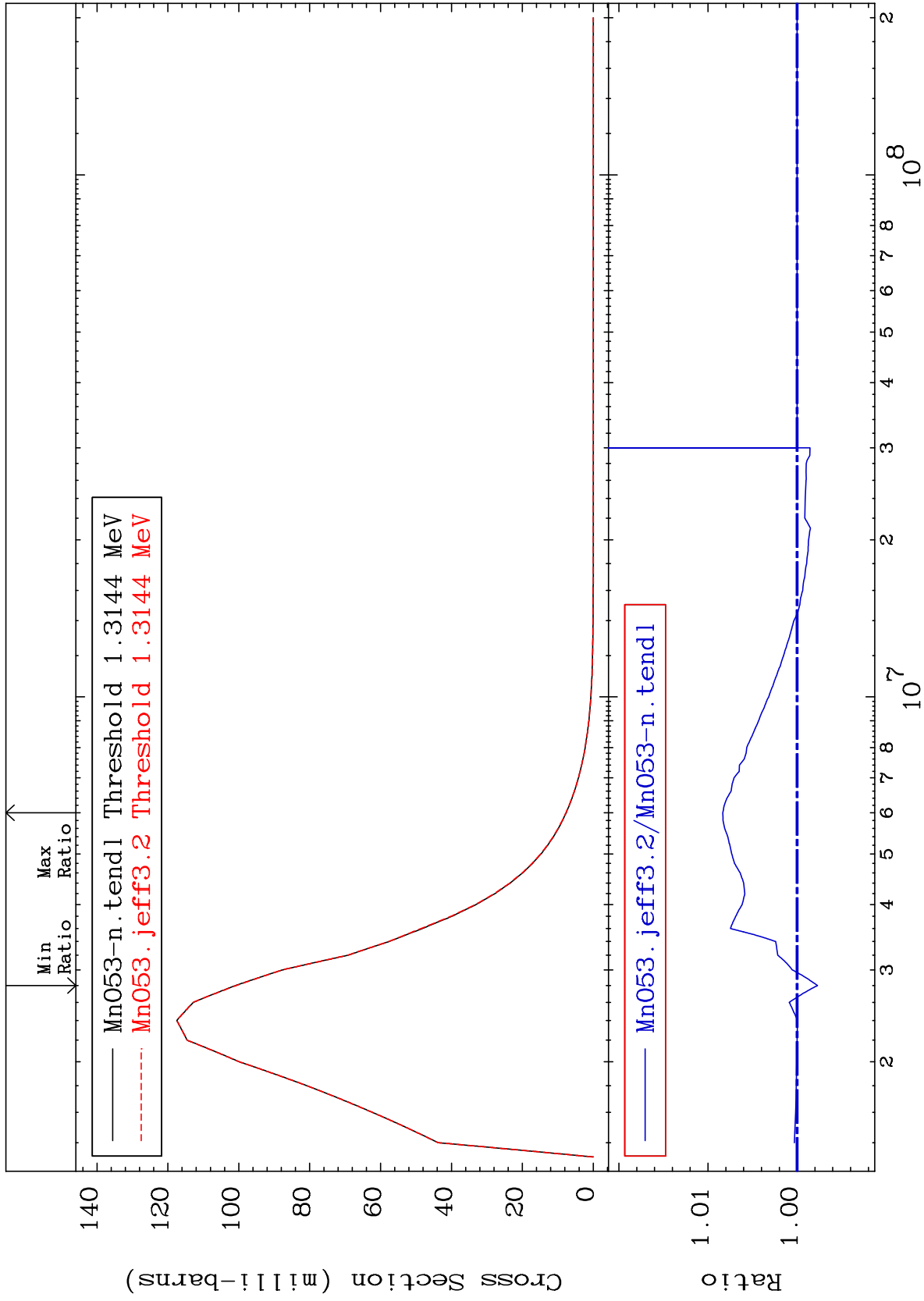
MAT 2519

1.290 MeV (n,n') Level

25-Mn-53

-0.228 To 0.833 %

Cross Section



19

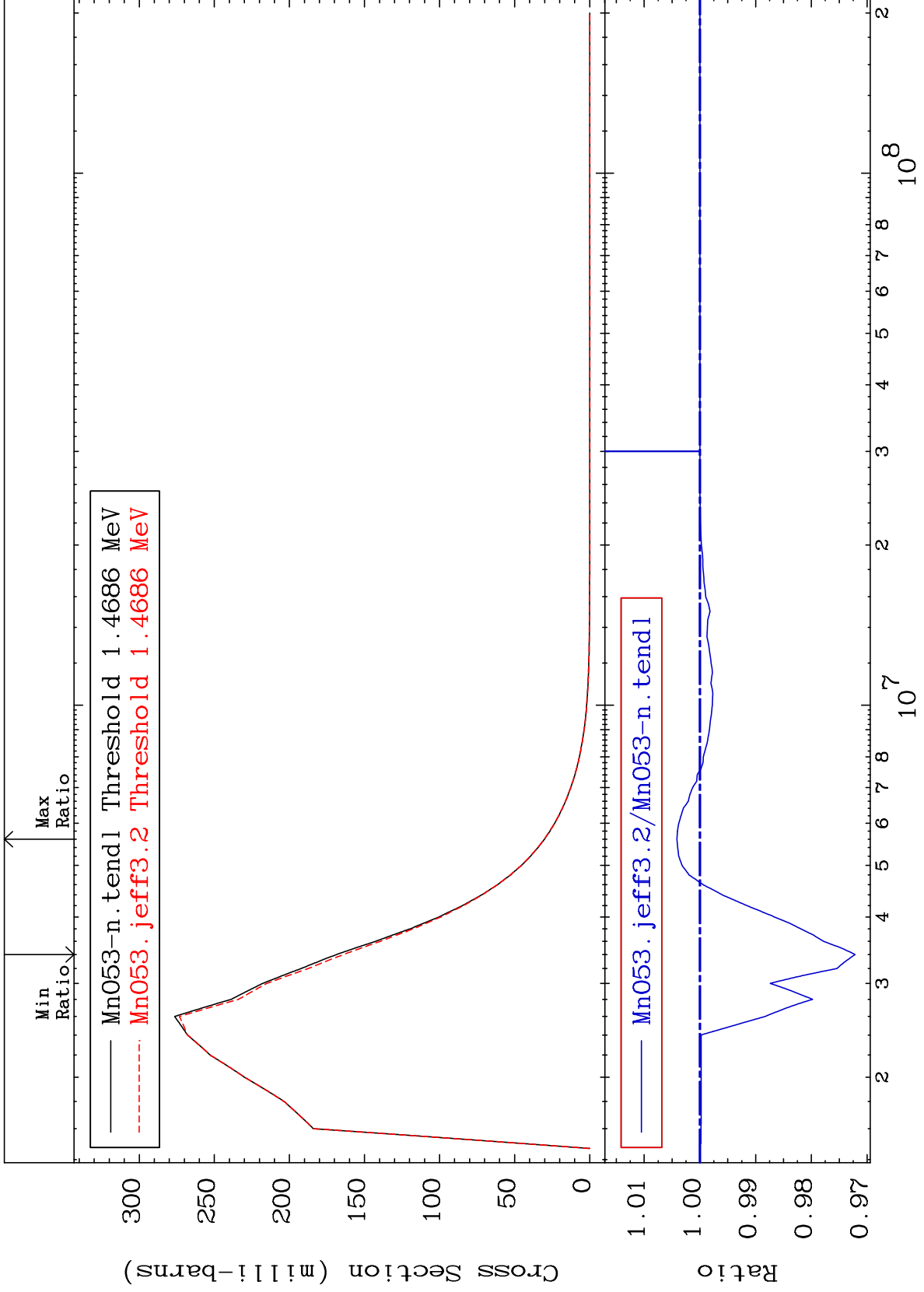
Incident Energy (eV)

25-Mn-53

MAT 2519

1.441 MeV (n,n') Level
Cross Section

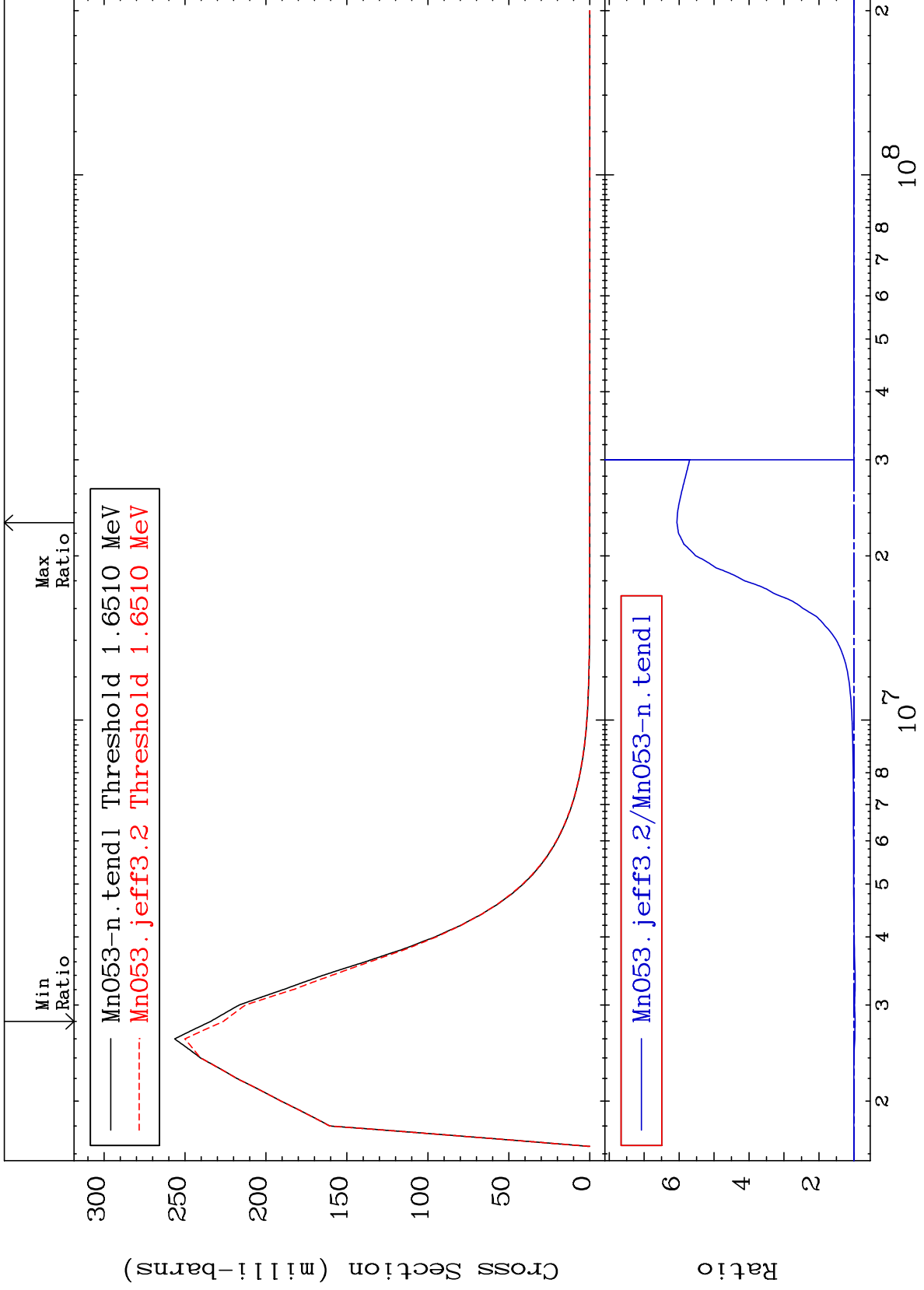
²⁵Mn-53
-2.785 To 0.413 %



MAT 2519

1.620 MeV (n,n') Level
Cross Section

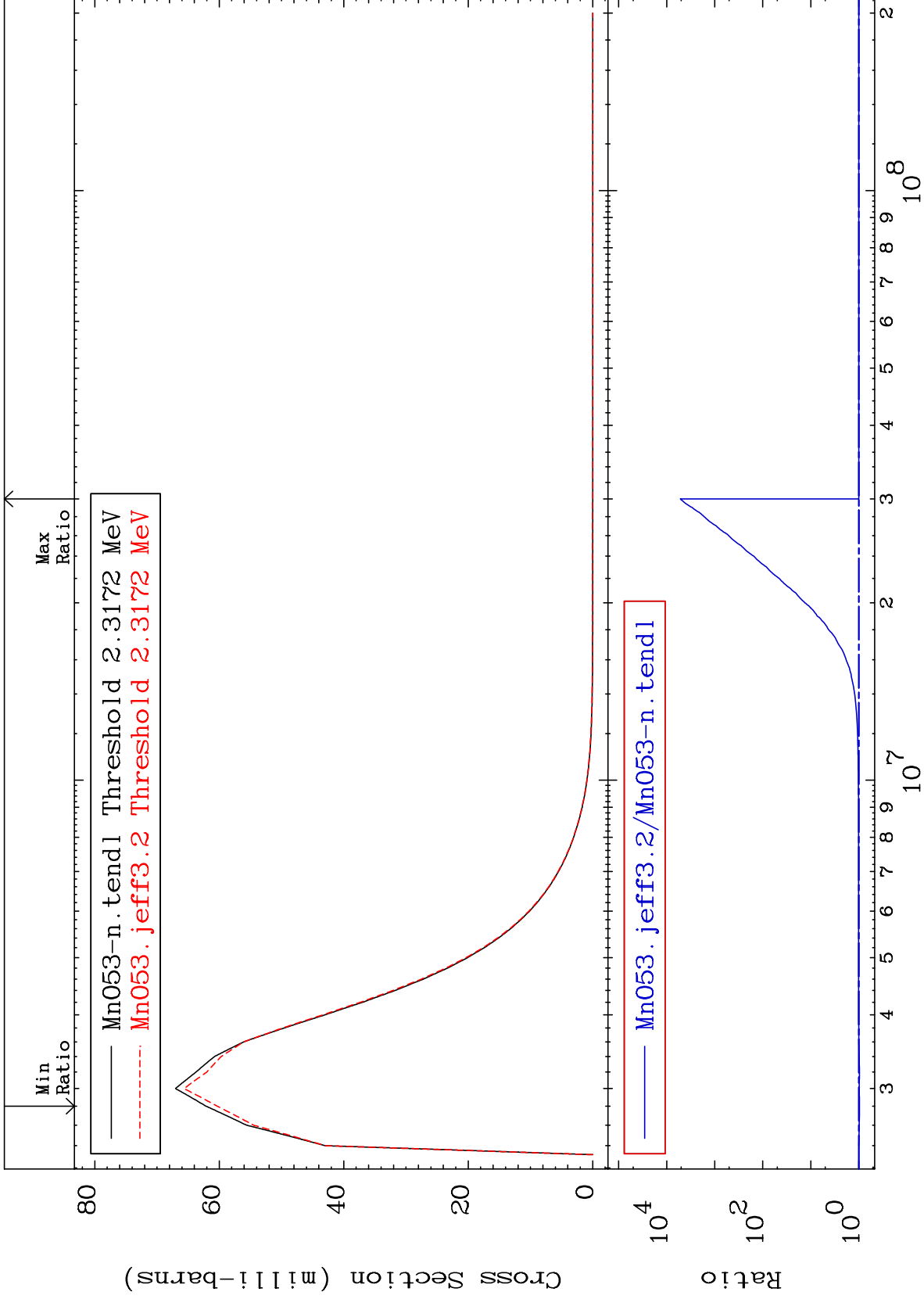
25-Mn-53
-3.351 To 506.2 %



MAT 2519

2.274 MeV (n,n') Level
Cross Section

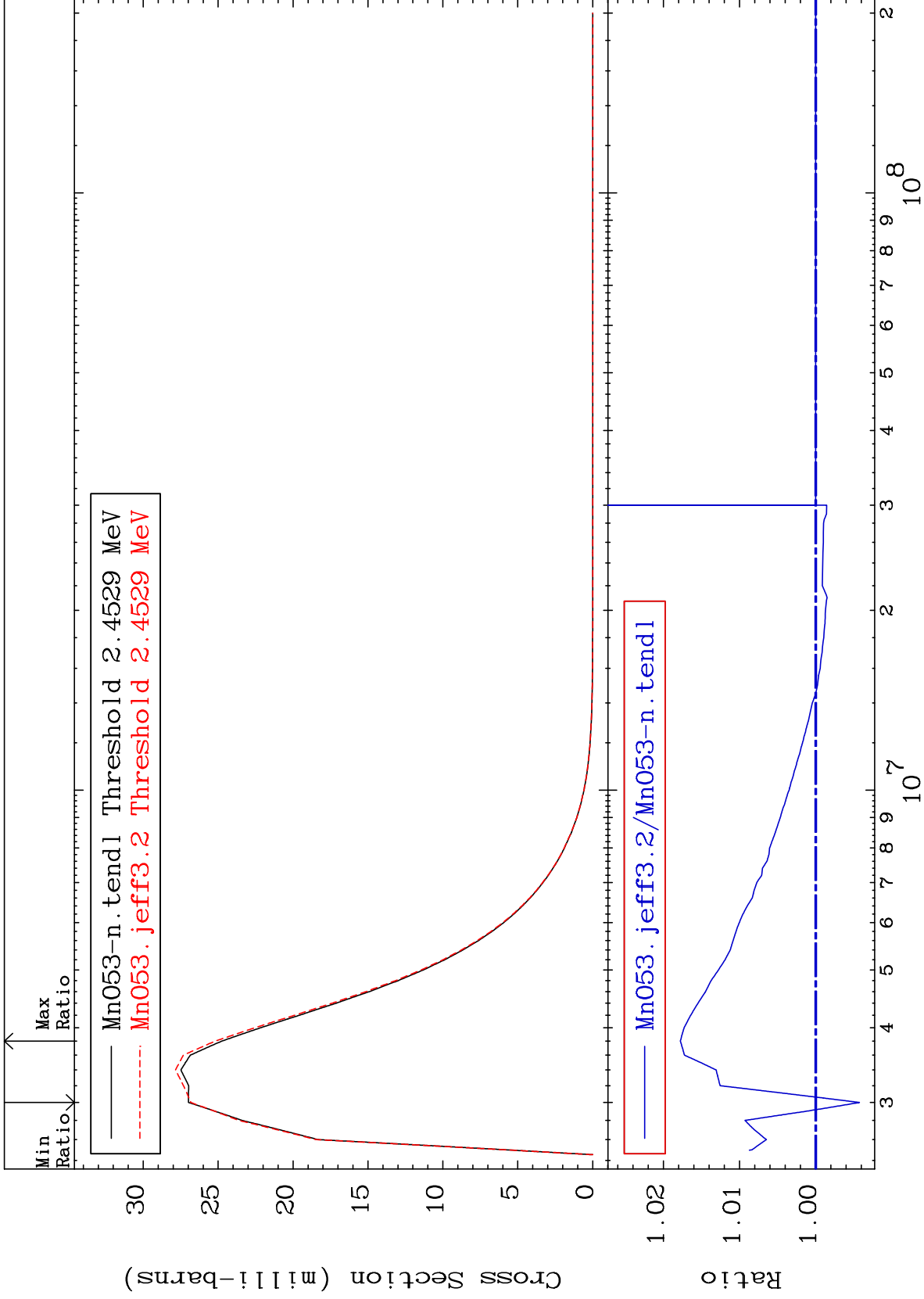
25-Mn-53
-2.911 To 9999. %



MAT 2519

2.407 MeV (n,n') Level
Cross Section

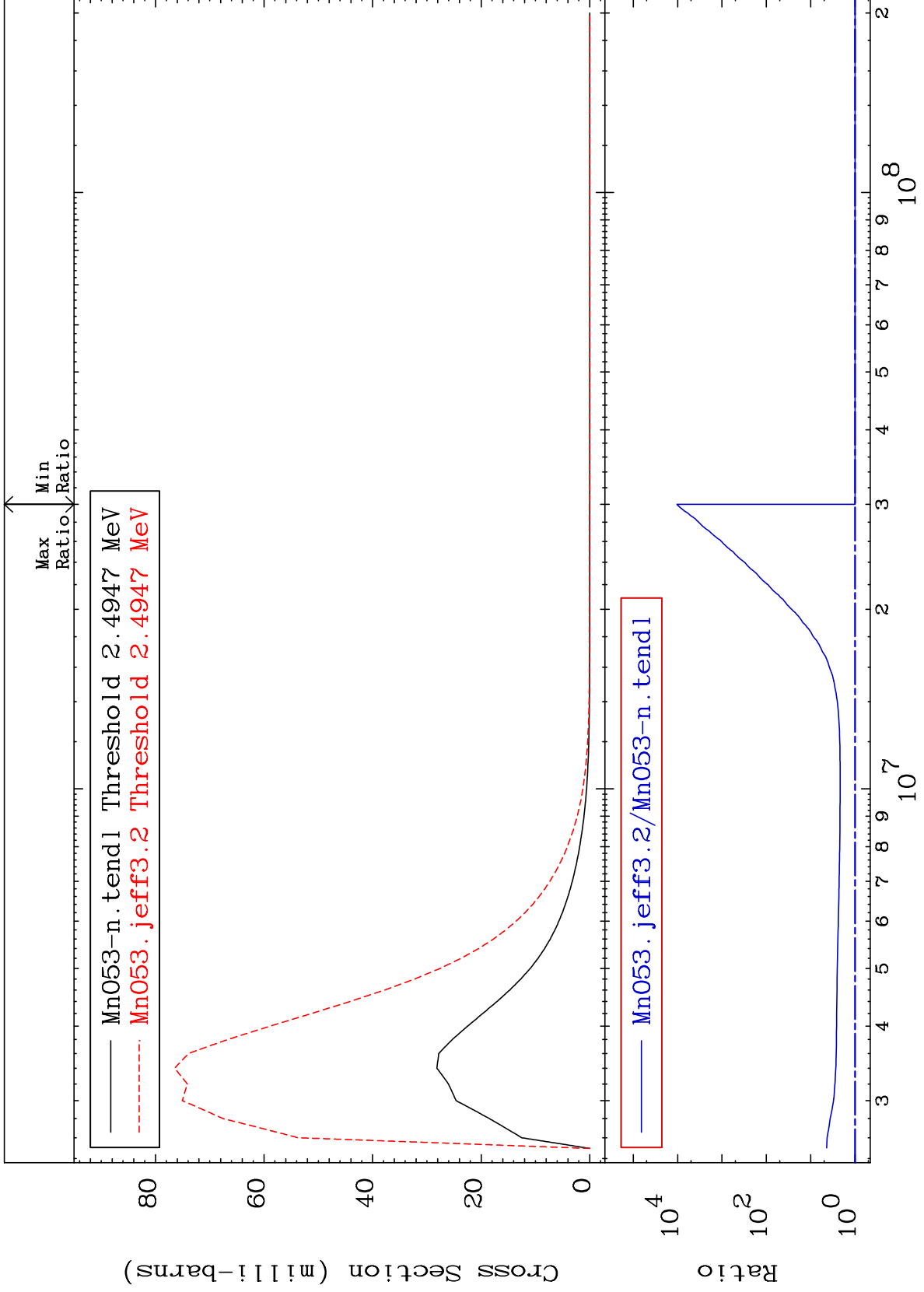
²⁵Mn-53
-0.574 To 1.778 %



MAT 2519

2.448 MeV (n,n') Level
Cross Section

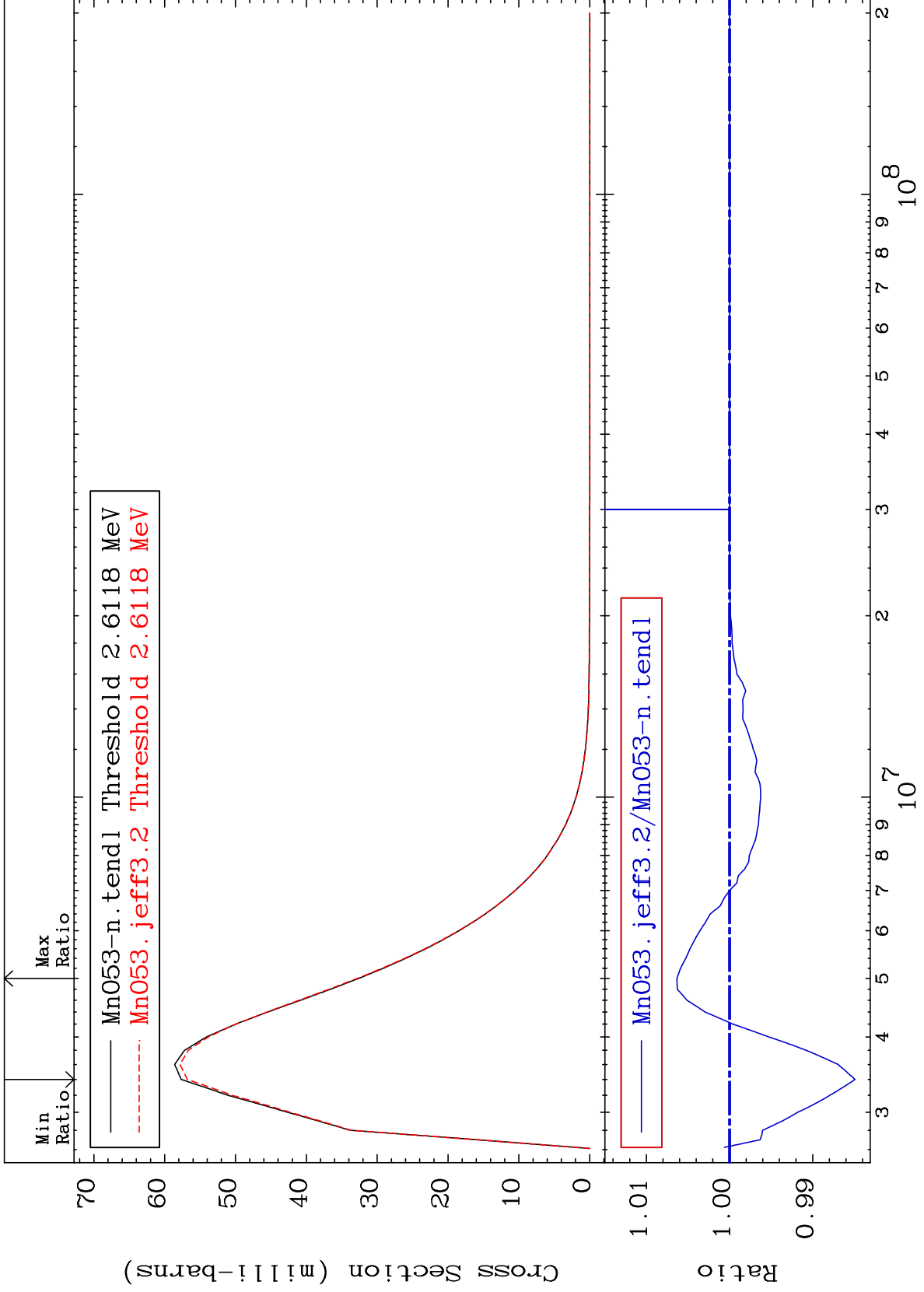
25-Mn-53
To 9999. %
0.000



MAT 2519

2.563 MeV (n,n') Level
Cross Section

25-Mn-53
-1.510 To 0.632 %



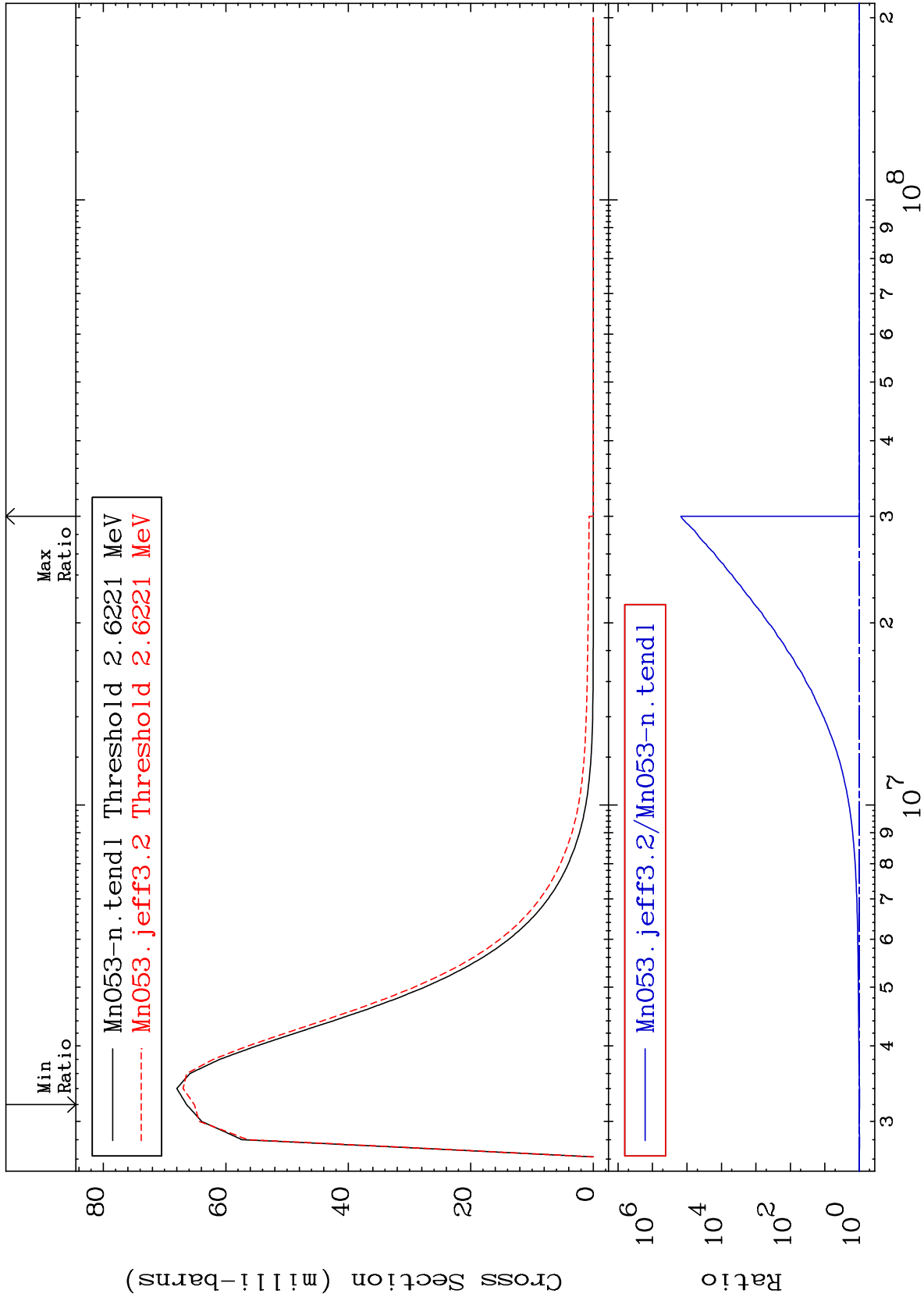
MAT 2519

2.573 MeV (n,n') Level

²⁵Mn-53

-1.923 To 9999. %

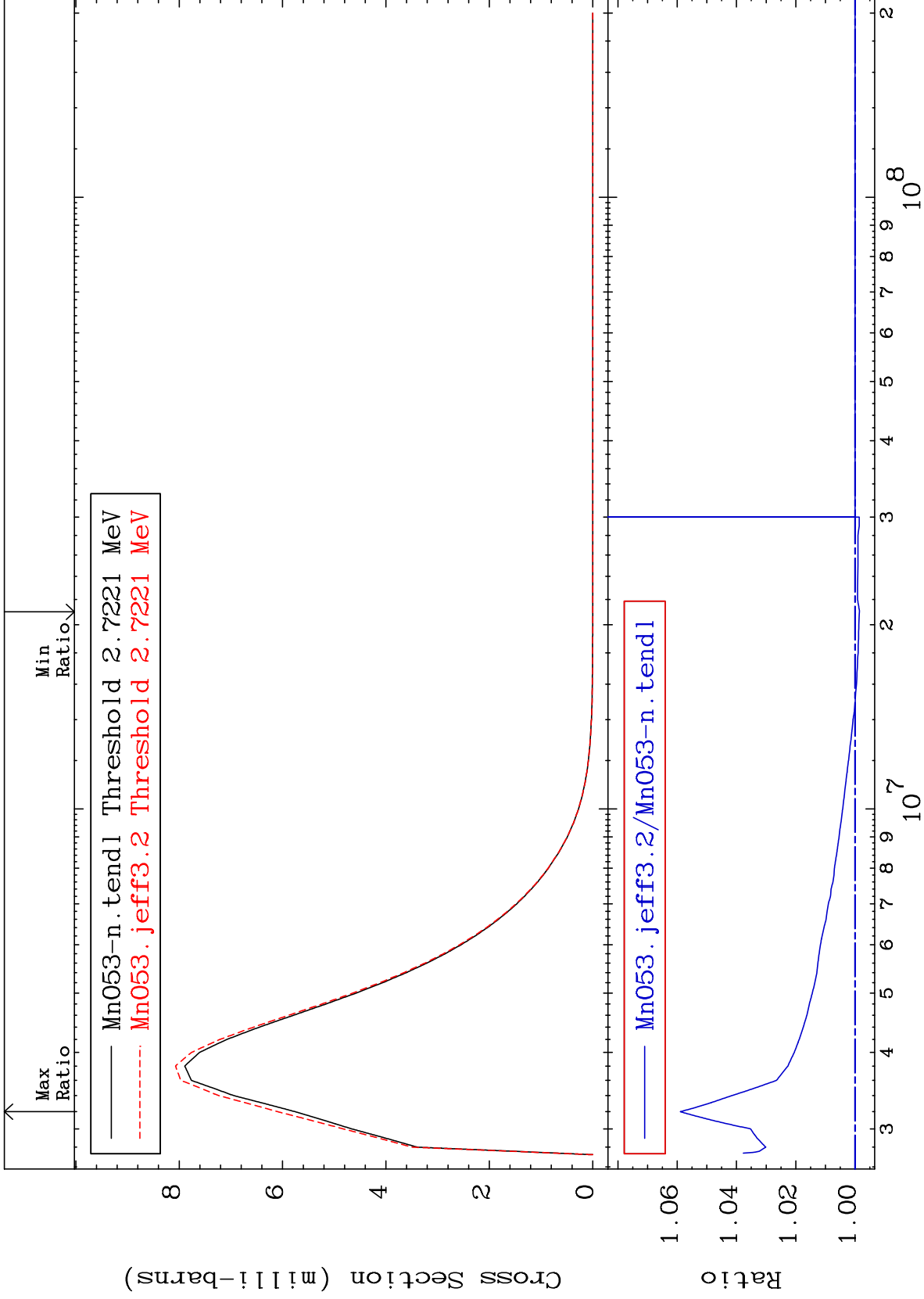
Cross Section



MAT 2519

2.671 MeV (n,n') Level
Cross Section

²⁵Mn-53
-0.148 To 5.893 %



27

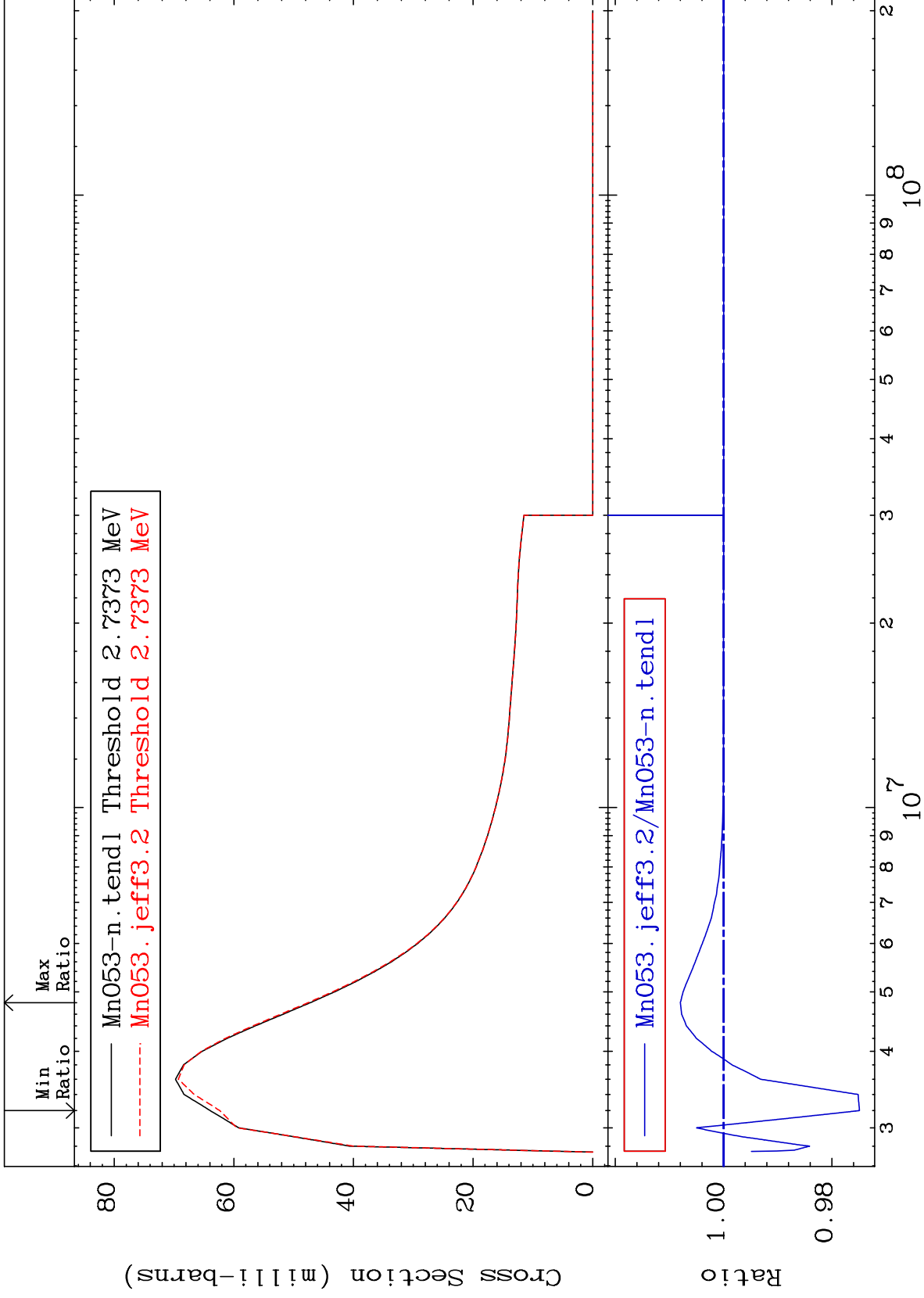
Incident Energy (eV)

²⁵Mn-53

MAT 2519

2.686 MeV (n,n') Level
Cross Section

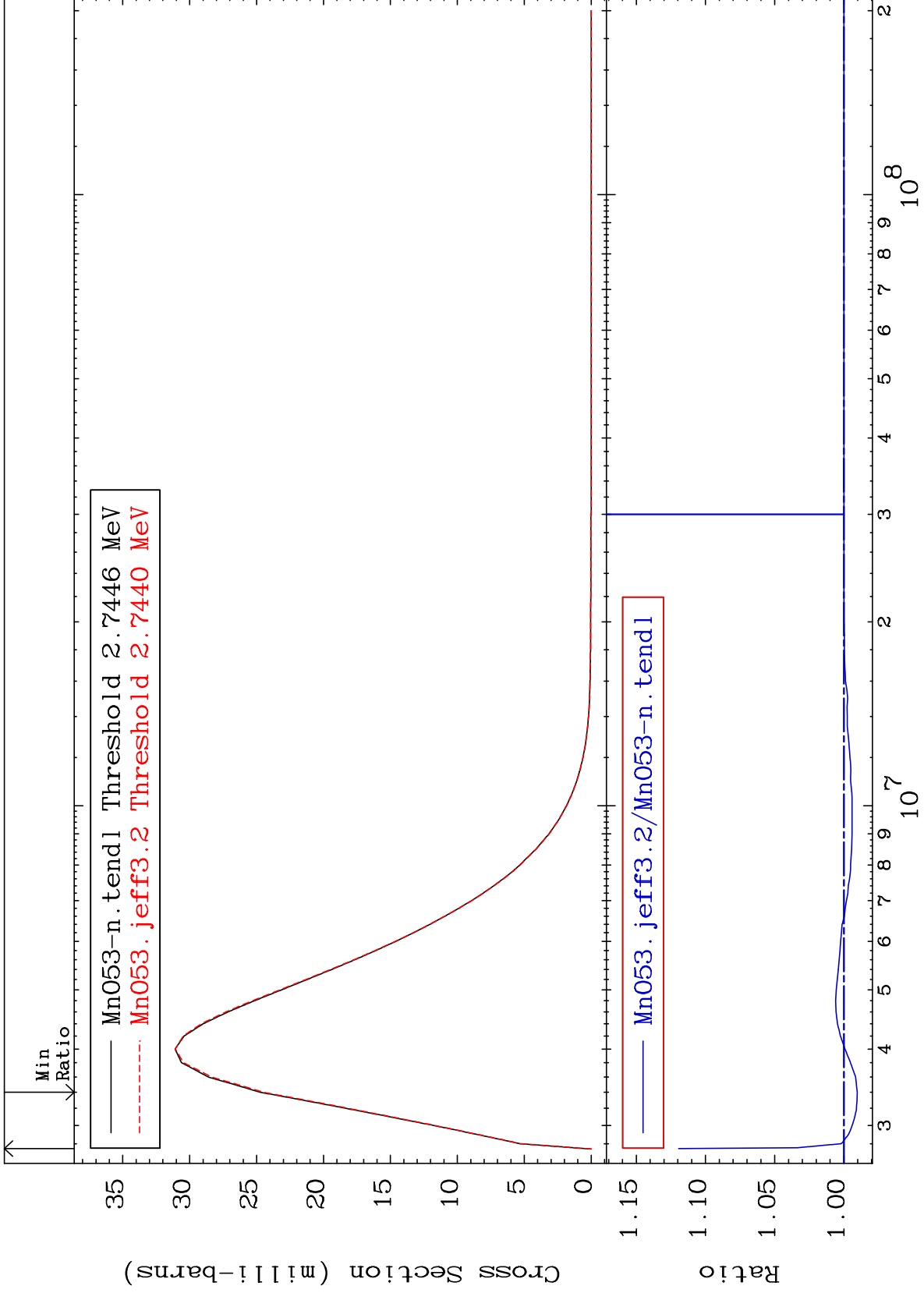
25-Mn-53
-2.509 To 0.799 %



MAT 2519

2.693 MeV (n,n') Level
Cross Section

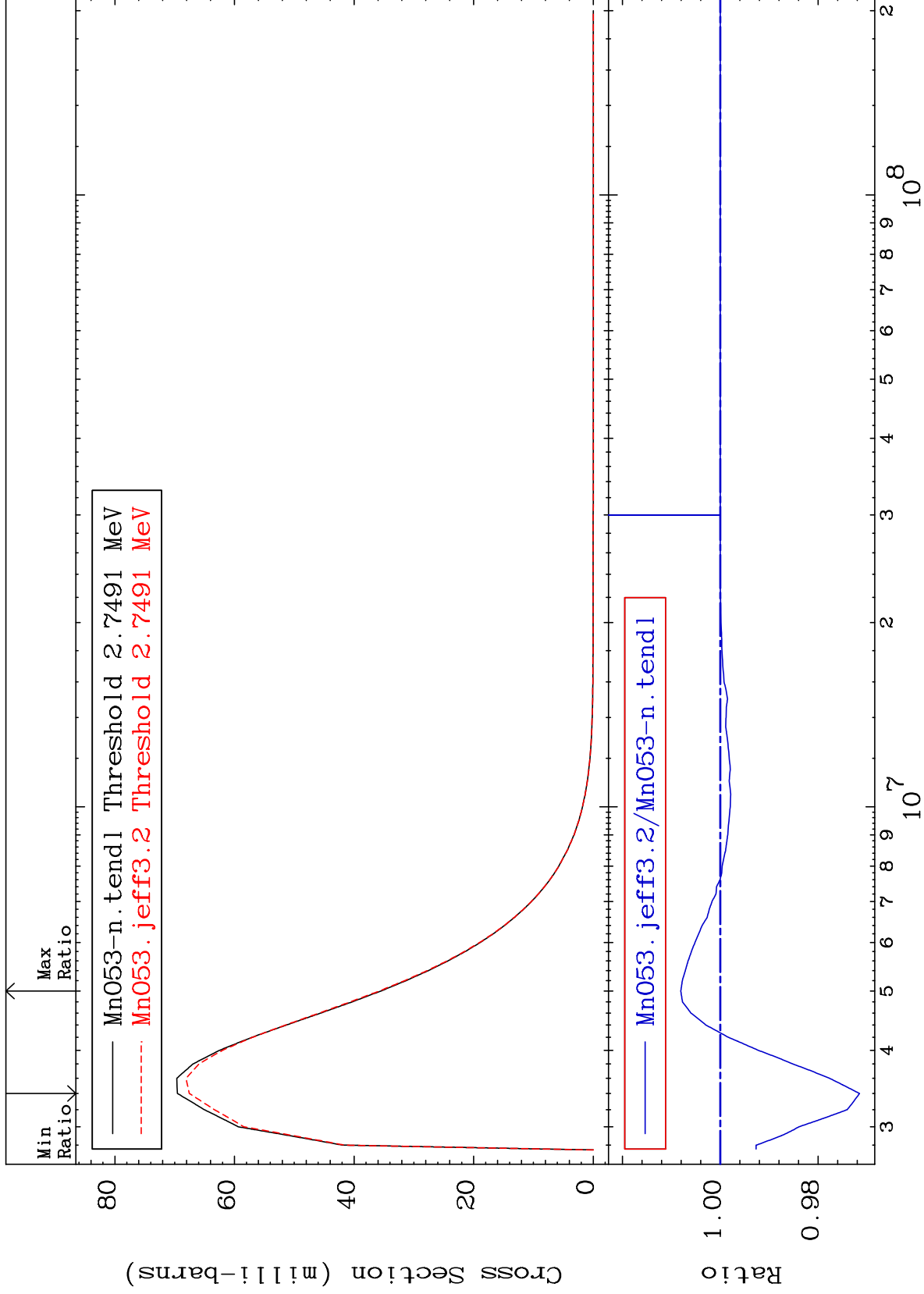
25-Mn-53
-0.964 To 11.94 %



MAT 2519

2.698 MeV (n,n') Level
Cross Section

25-Mn-53
-2.846 To 0.808 %



30

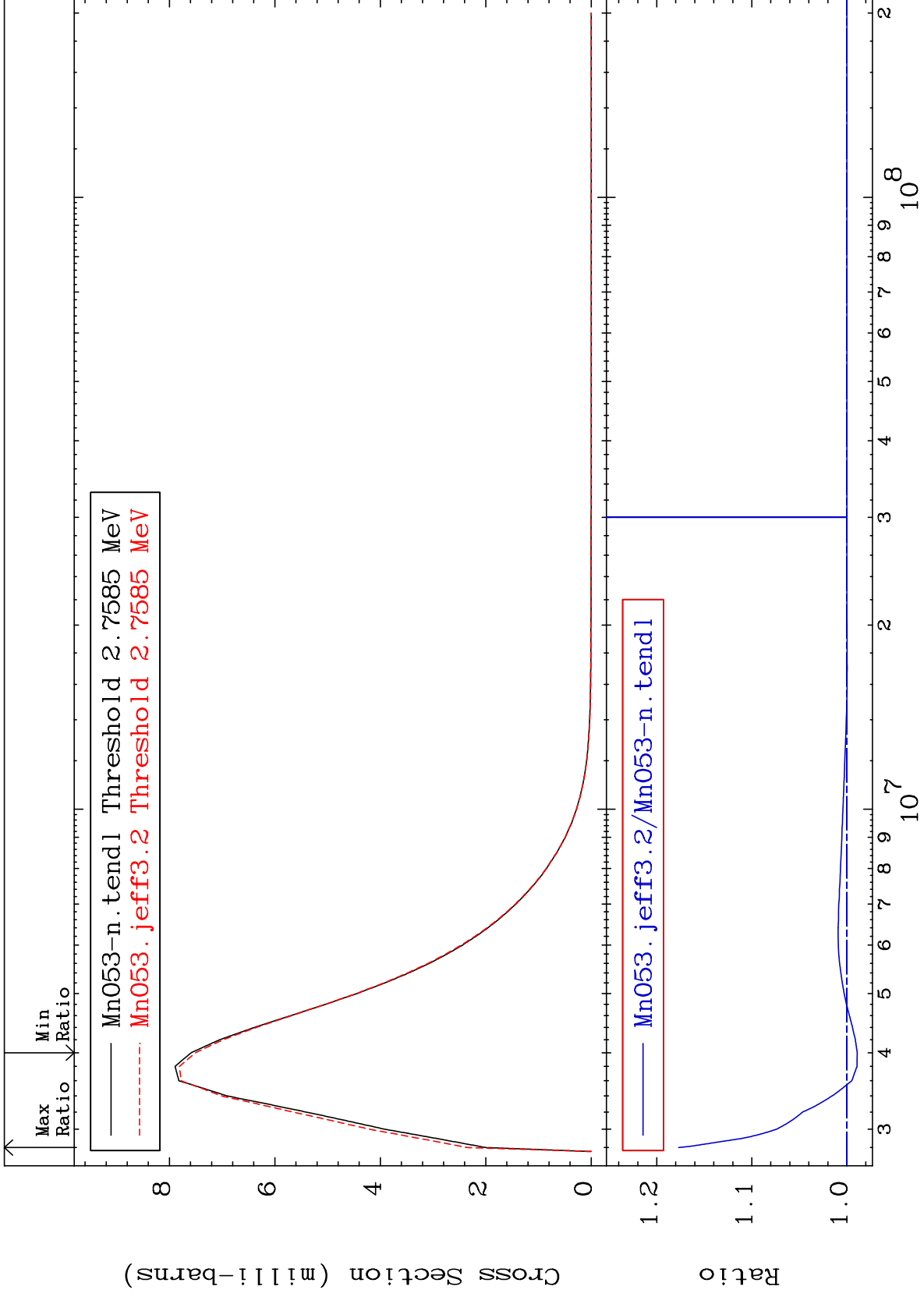
Incident Energy (eV)

25-Mn-53

MAT 2519

2.707 MeV (n,n') Level
Cross Section

²⁵Mn-53
-1.094 To 17.70 %



31

Incident Energy (eV)

²⁵Mn-53

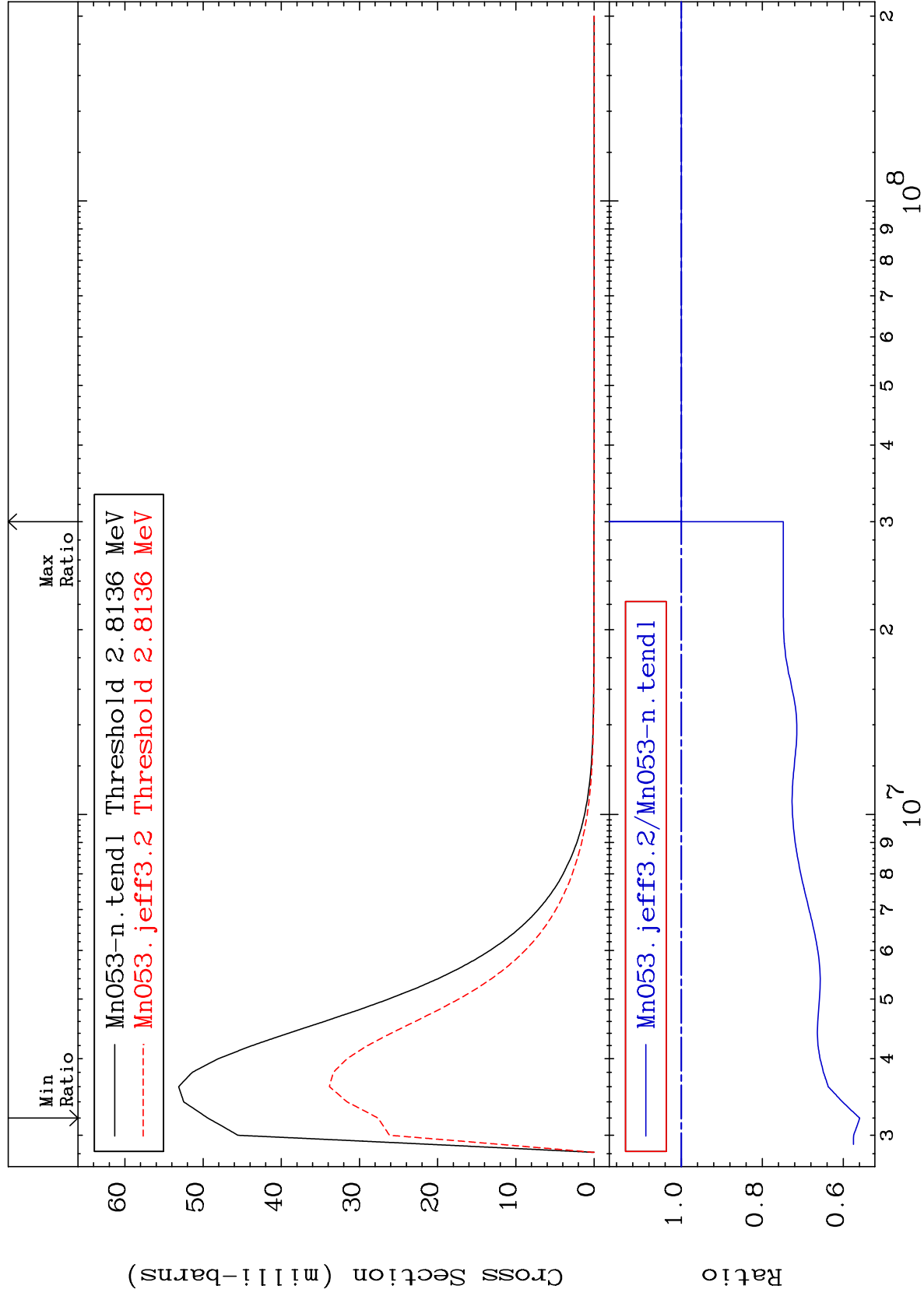
MAT 2519

2.761 MeV (n,n') Level

²⁵Mn-53

-44.06 To 0.000 %

Cross Section



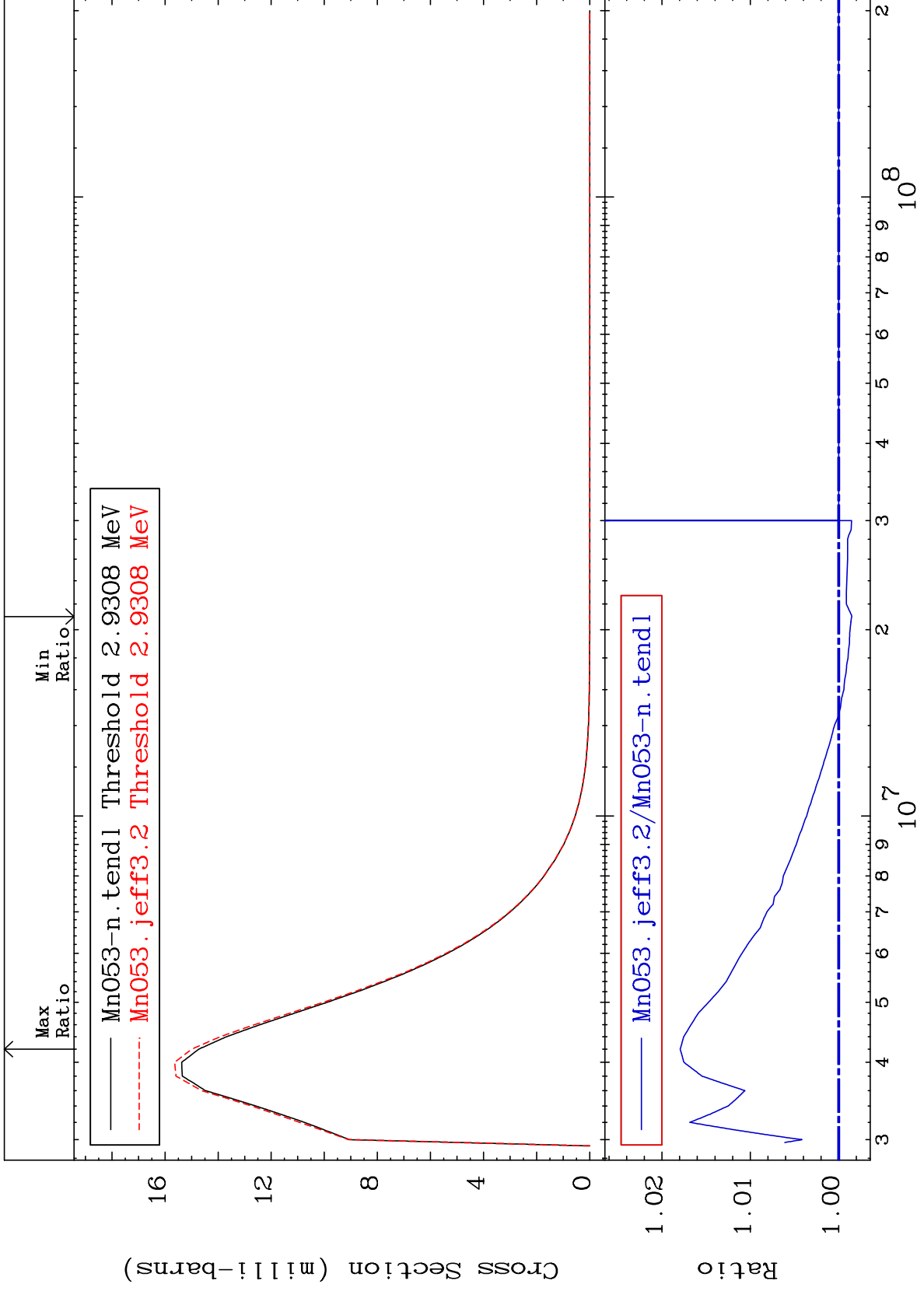
32

²⁵Mn-53

MAT 2519

2.876 MeV (n,n') Level
Cross Section

25-Mn-53
-0.149 To 1.794 %



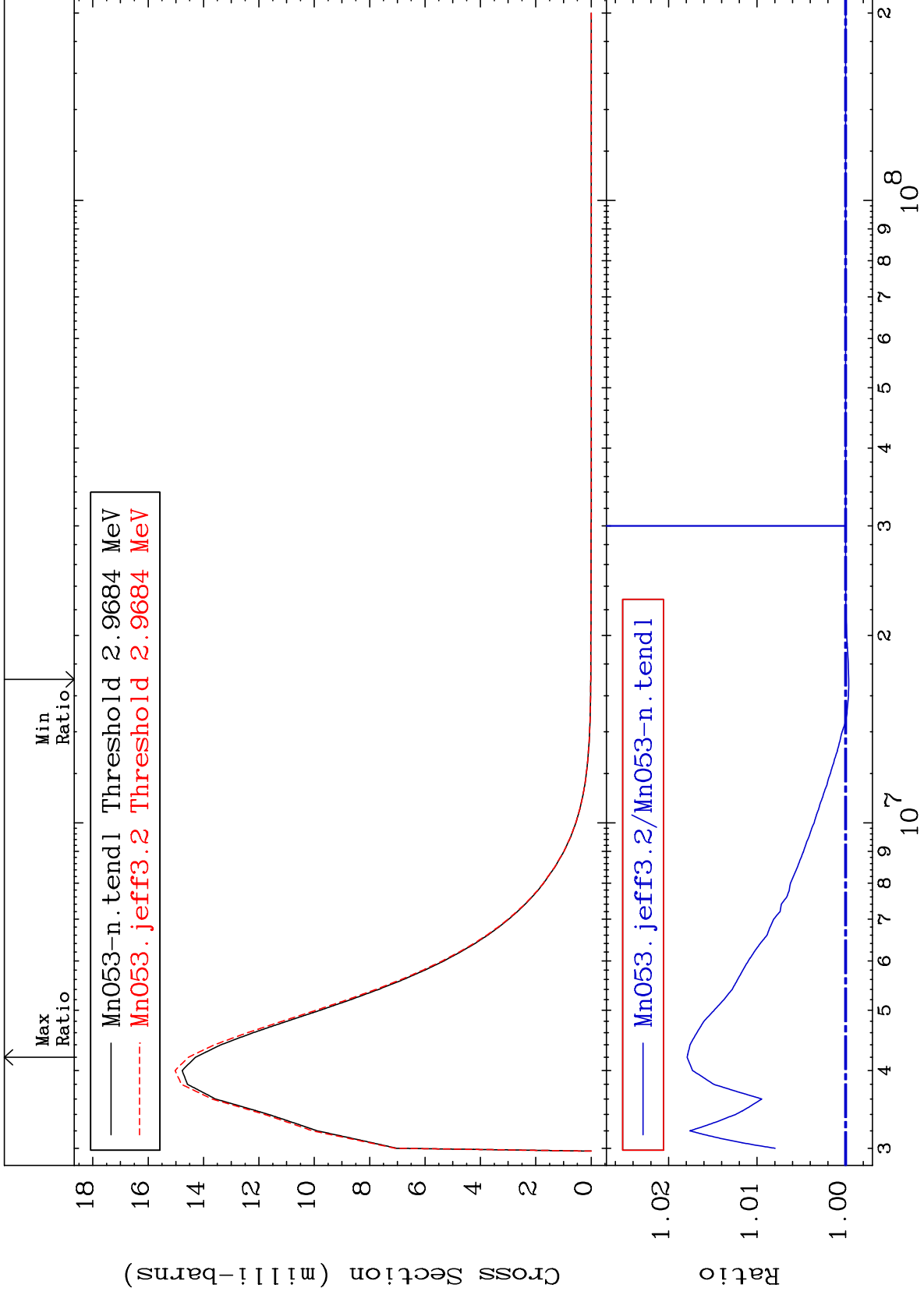
33

25-Mn-53

MAT 2519

2.913 MeV (n,n') Level
Cross Section

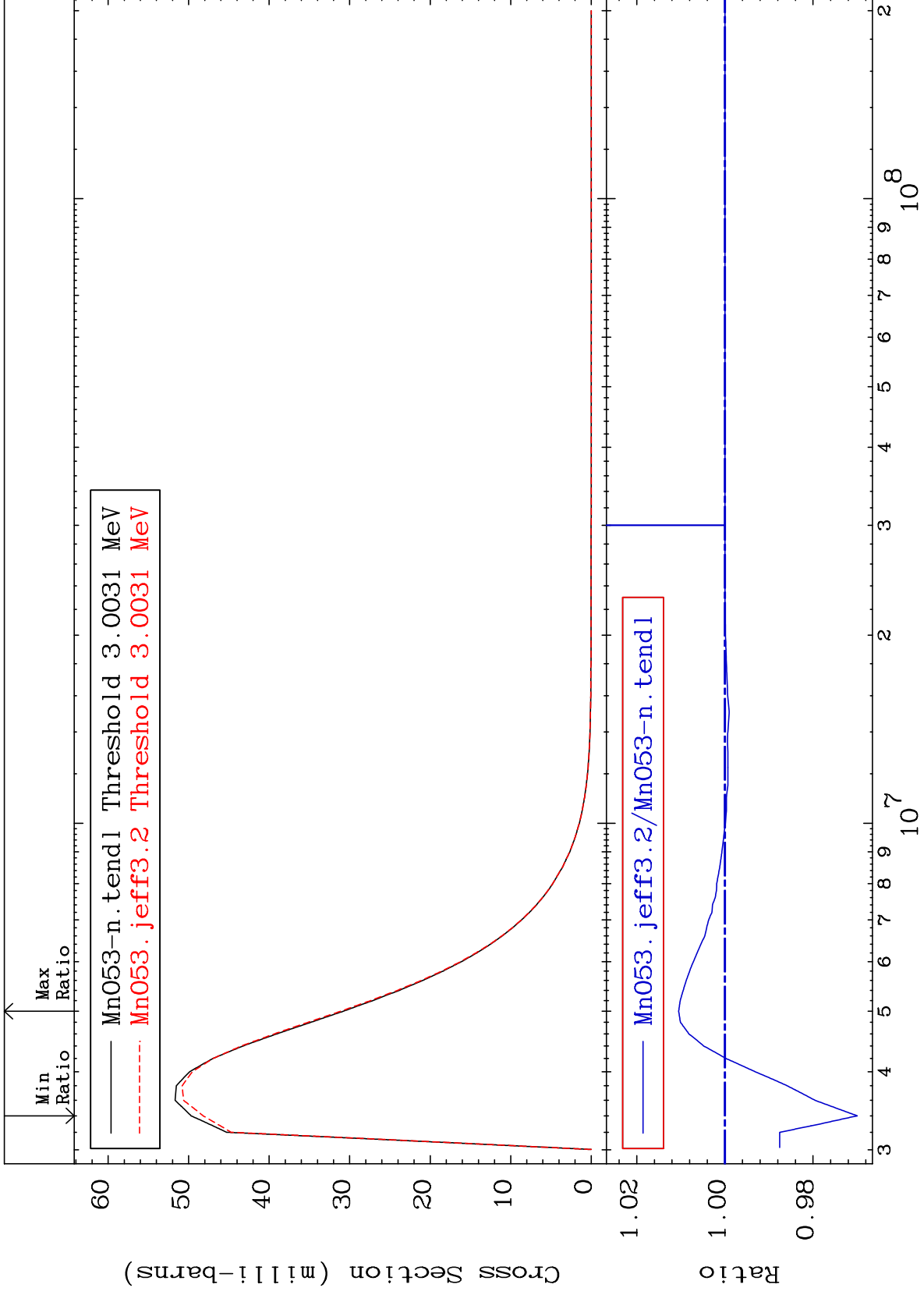
25-Mn-53
-0.035 To 1.790 %



MAT 2519

2.947 MeV (n,n') Level
Cross Section

25-Mn-53
-3.004 To 1.050 %



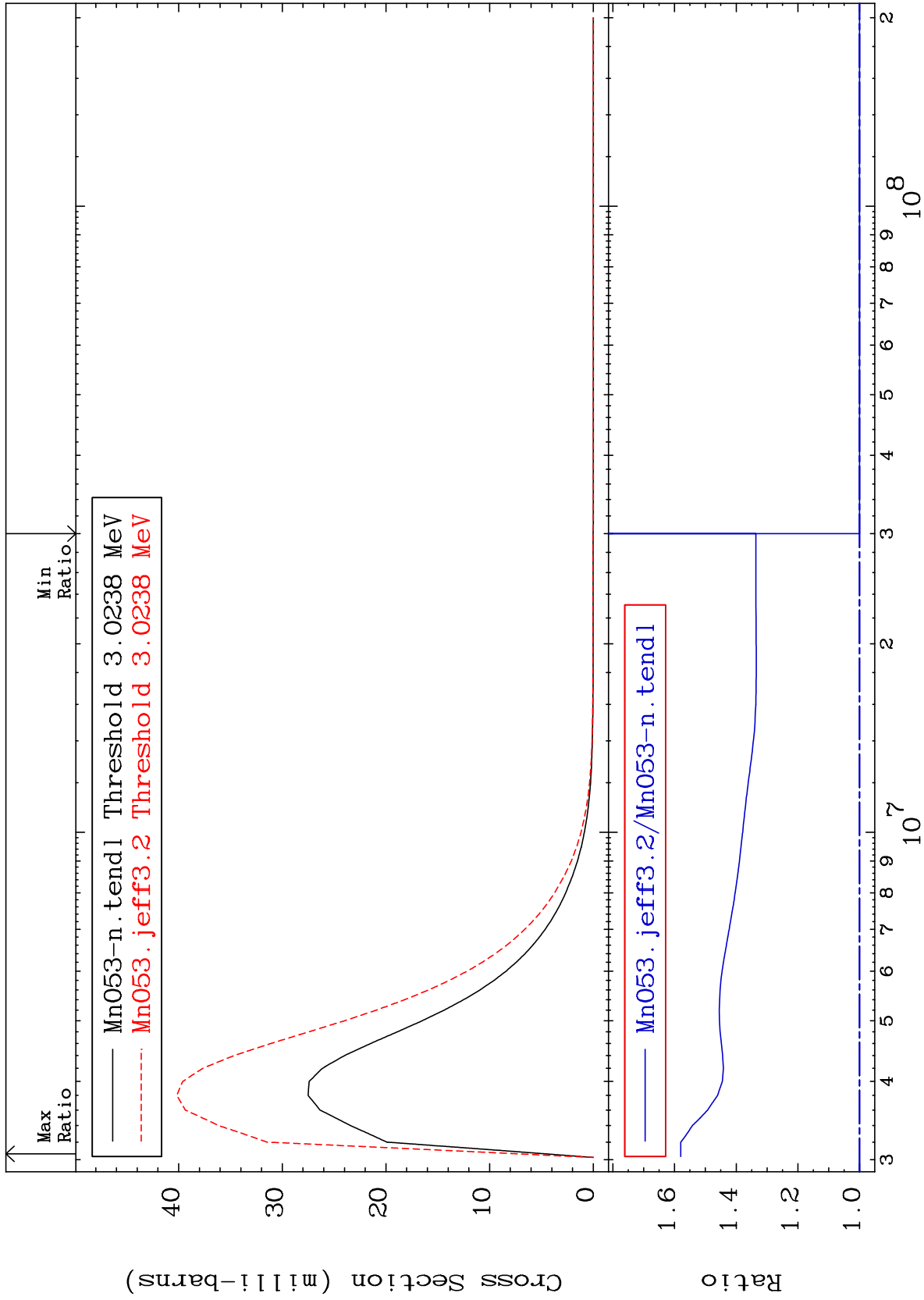
35

25-Mn-53

MAT 2519

2.967 MeV (n,n') Level
Cross Section

25-Mn-53
0.000 To 57.98 %



36

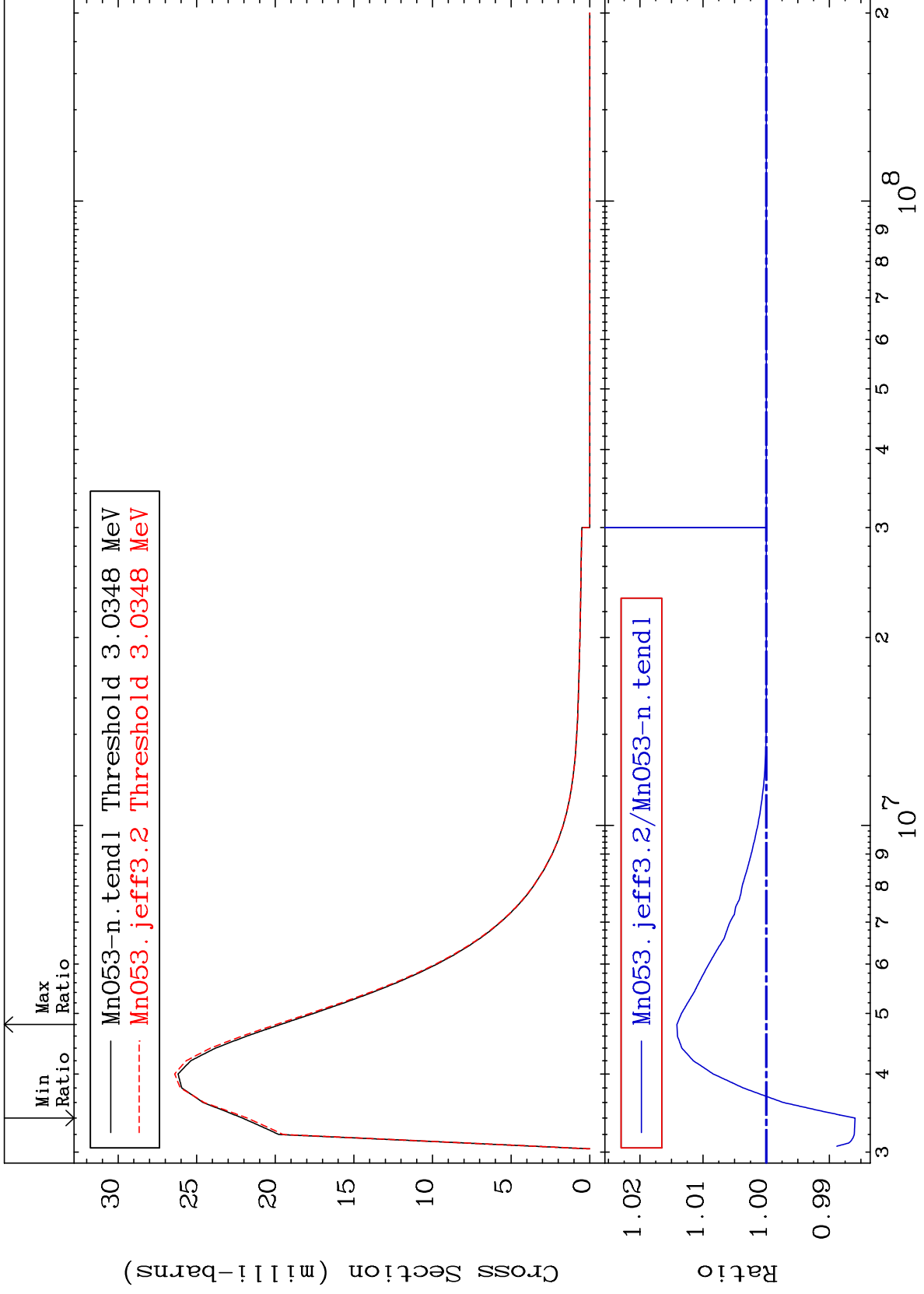
Incident Energy (eV)

25-Mn-53

MAT 2519

2.978 MeV (n,n') Level
Cross Section

25-Mn-53
-1.407 To 1.414 %



37

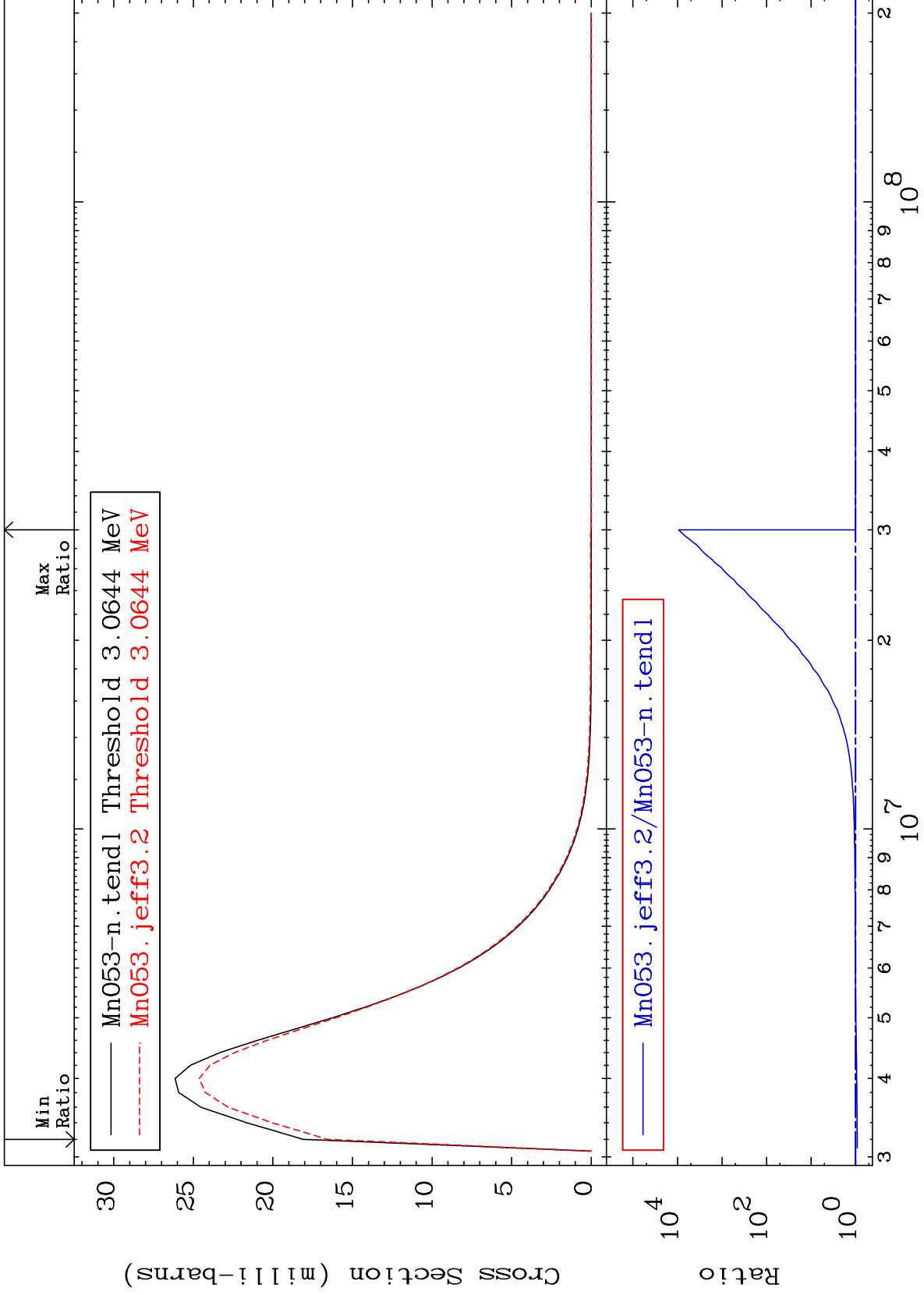
Incident Energy (eV)

25-Mn-53

MAT 2519

3.007 MeV (n,n') Level
Cross Section

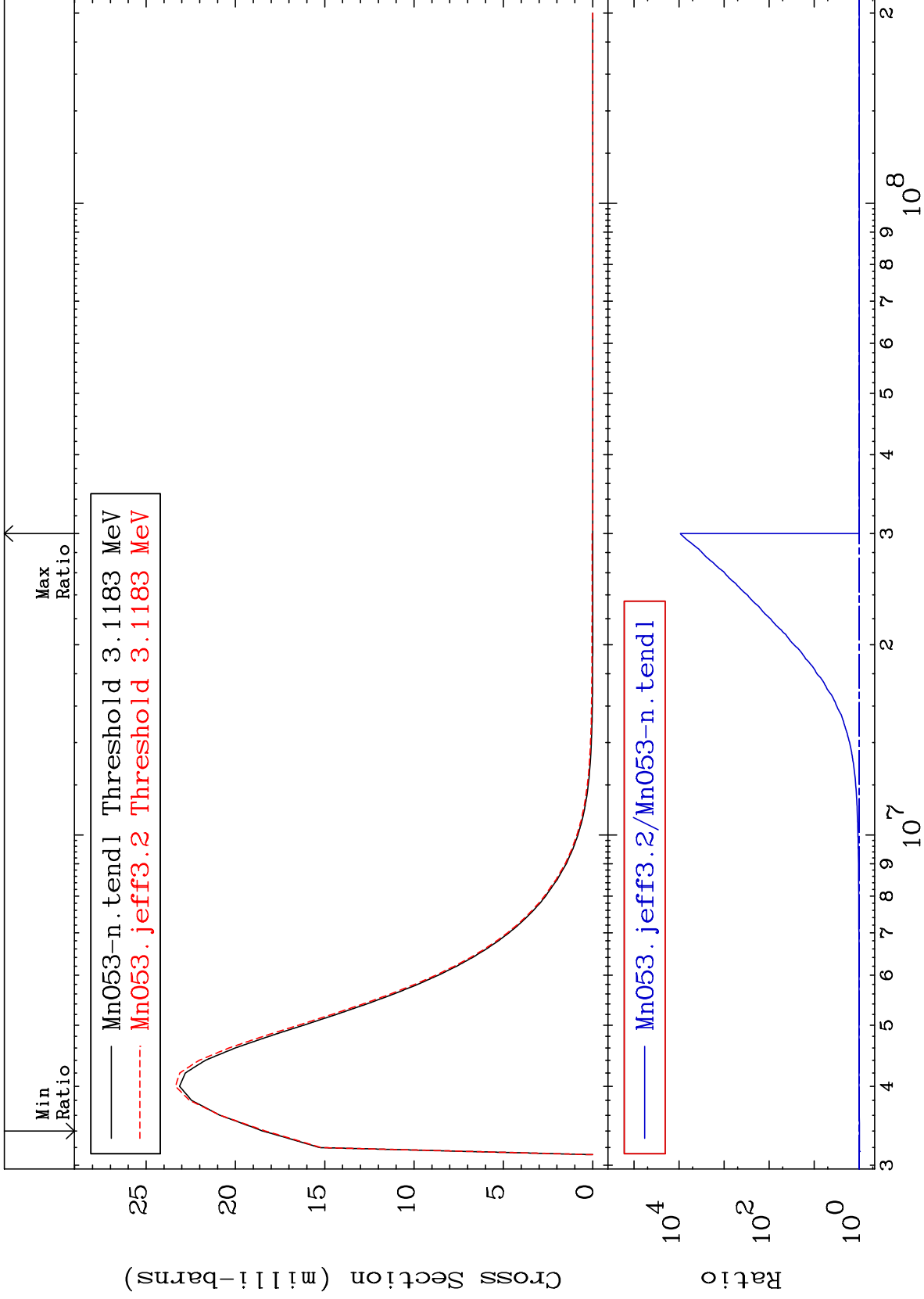
25-Mn-53
-8.412 To 9999. %



38

Incident Energy (eV)

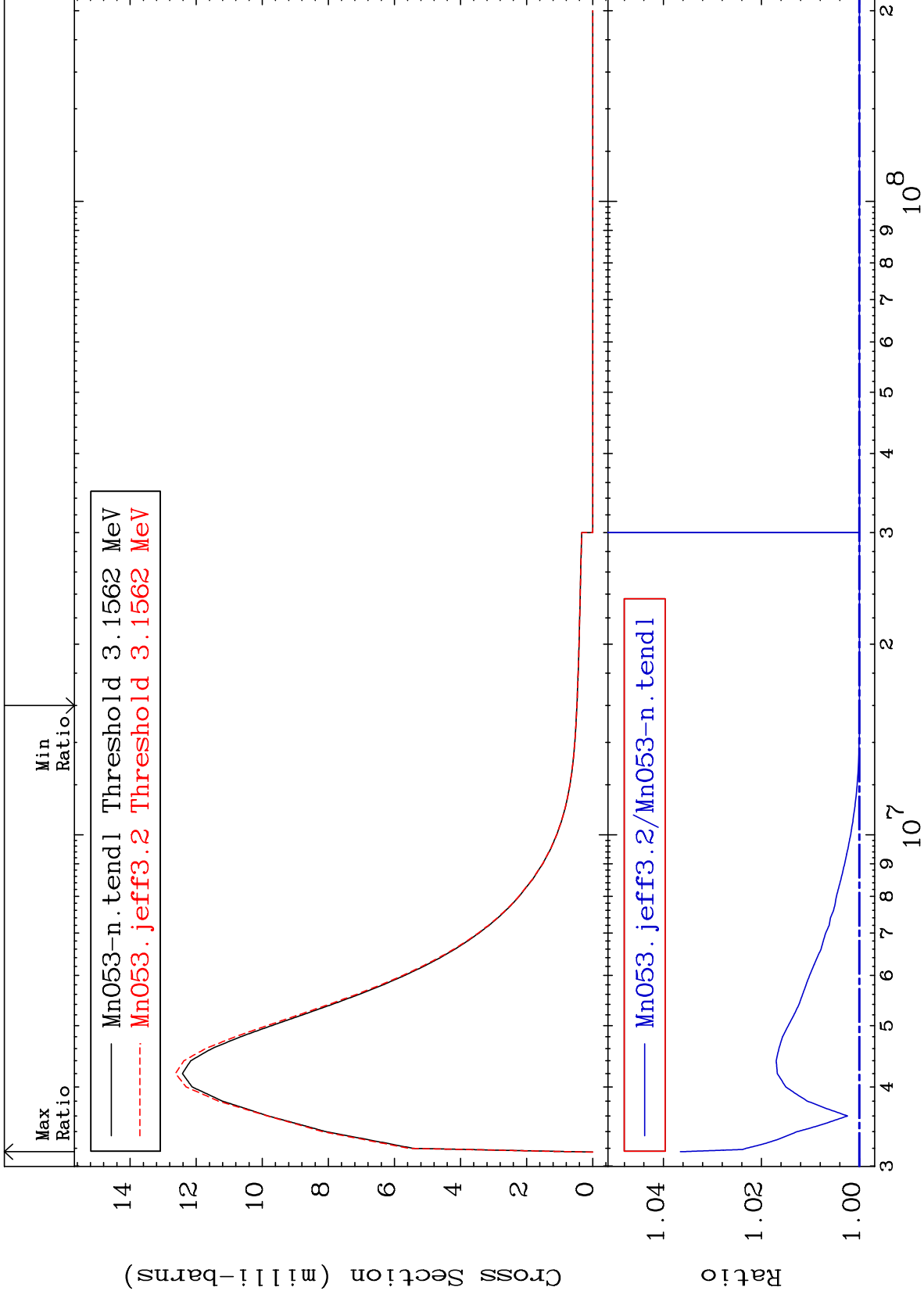
25-Mn-53



MAT 2519

3.097 MeV (n,n') Level
Cross Section

25-Mn-53
-0.001 To 3.656 %



40

Incident Energy (eV)

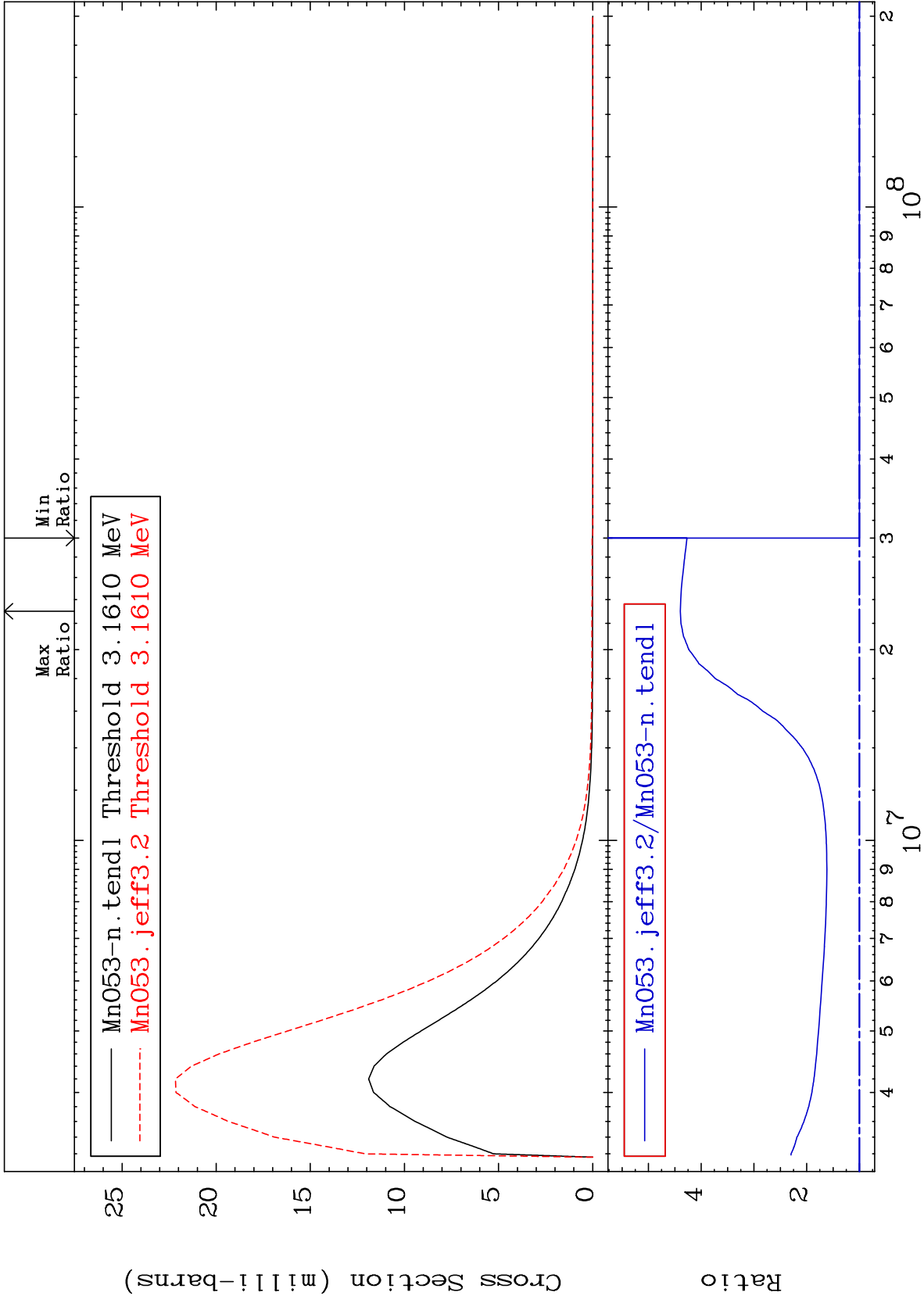
25-Mn-53

MAT 2519

3.102 MeV (n,n') Level

²⁵Mn-53

Cross Section To 339.5 %



41

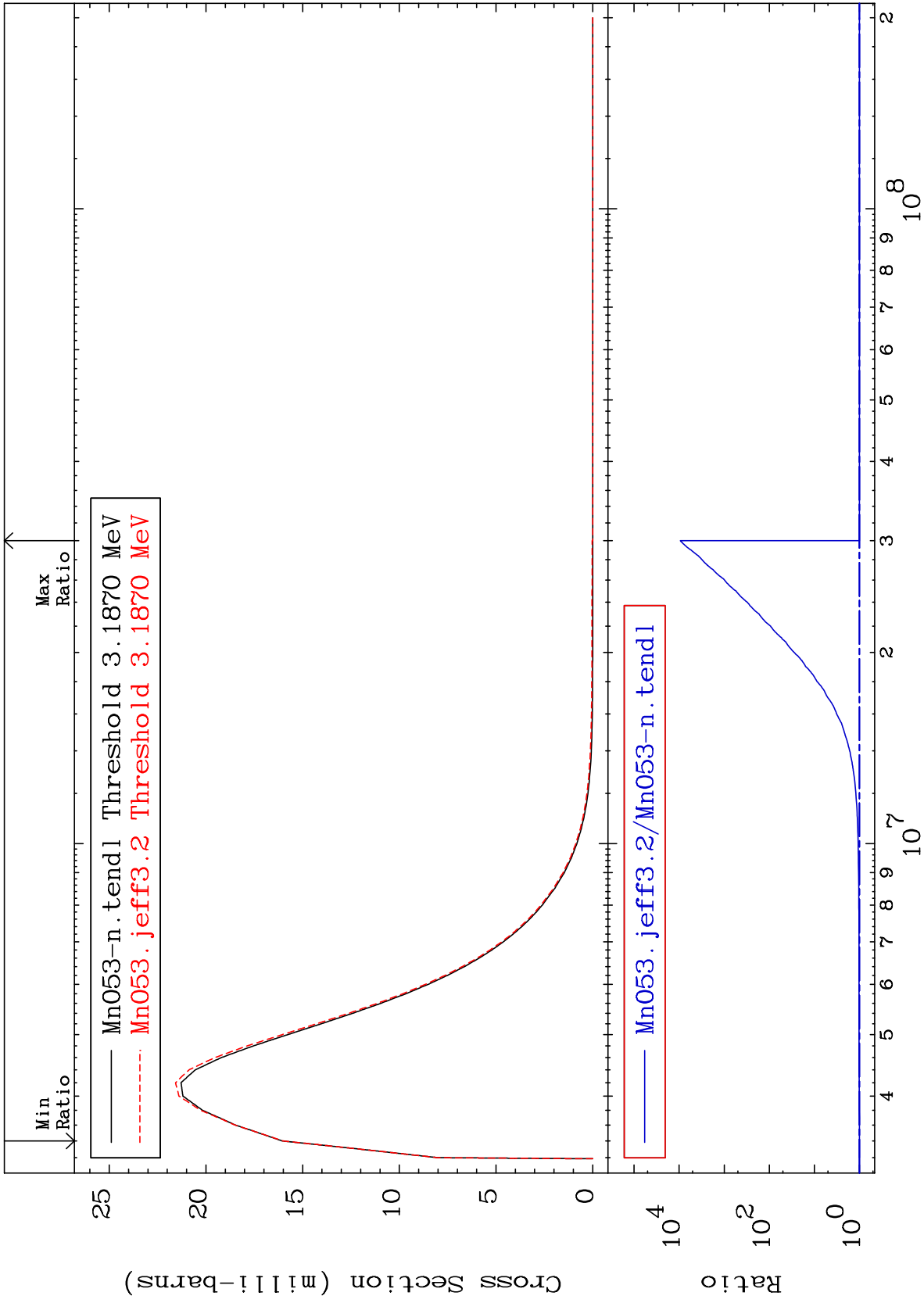
Incident Energy (eV)

²⁵Mn-53

MAT 2519

3.127 MeV (n,n') Level
Cross Section

25-Mn-53
-0.234 To 9999. %



42

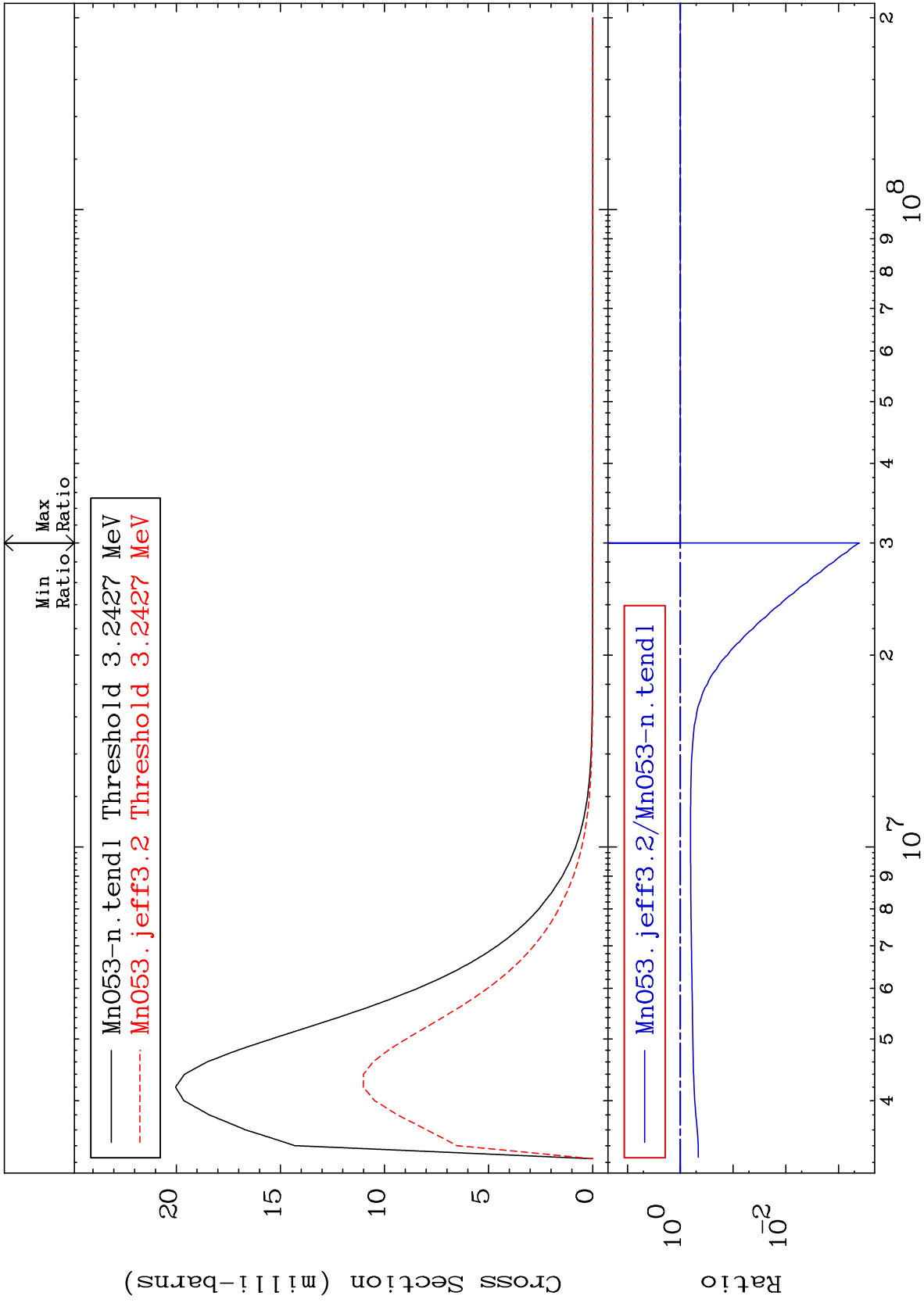
25-Mn-53

MAT 2519

3.182 MeV (n,n') Level

²⁵Mn-53

-99.96 To 0.000 %



43

Incident Energy (eV)

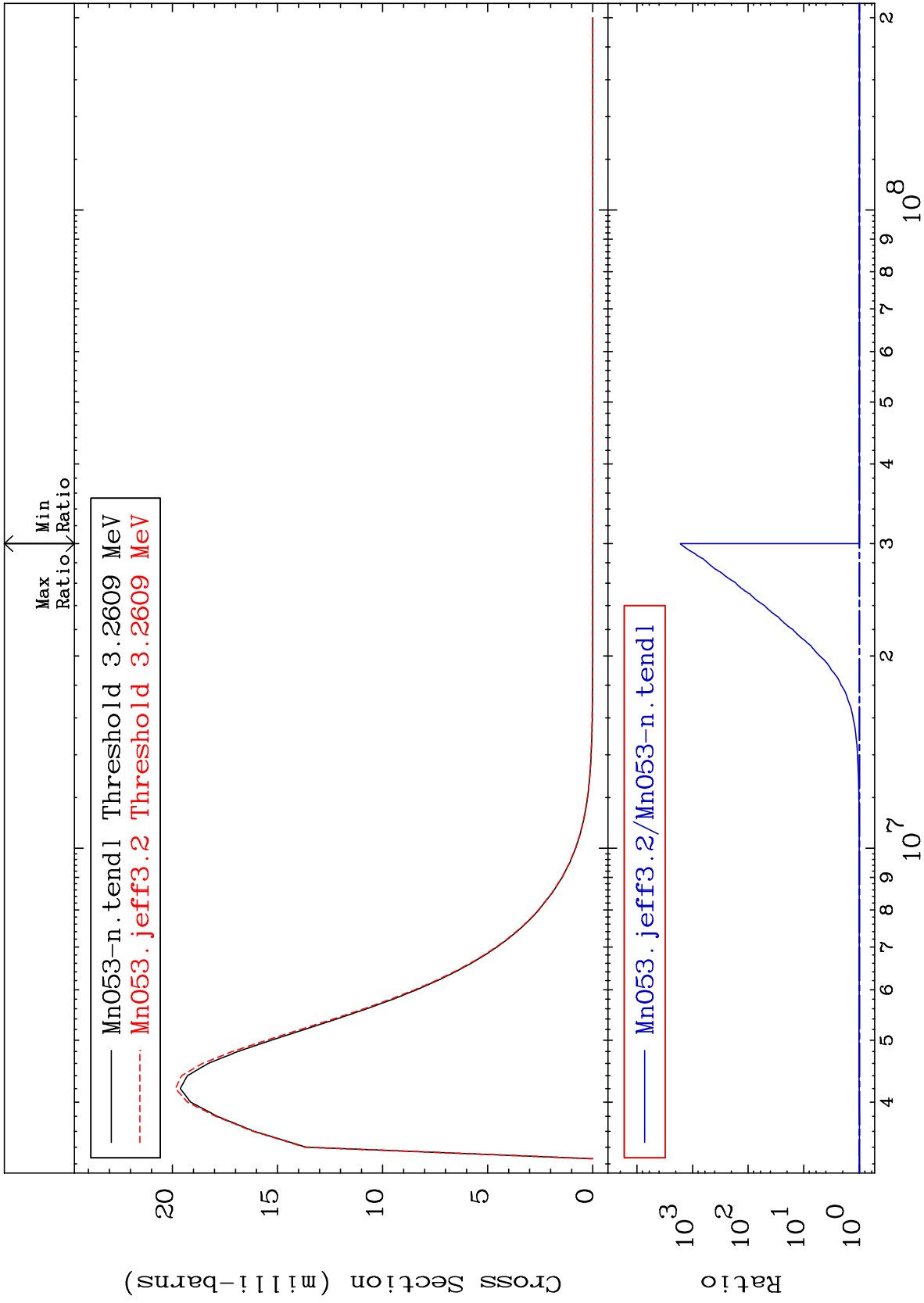
²⁵Mn-53

MAT 2519

3.200 MeV (n,n') Level

²⁵Mn-53

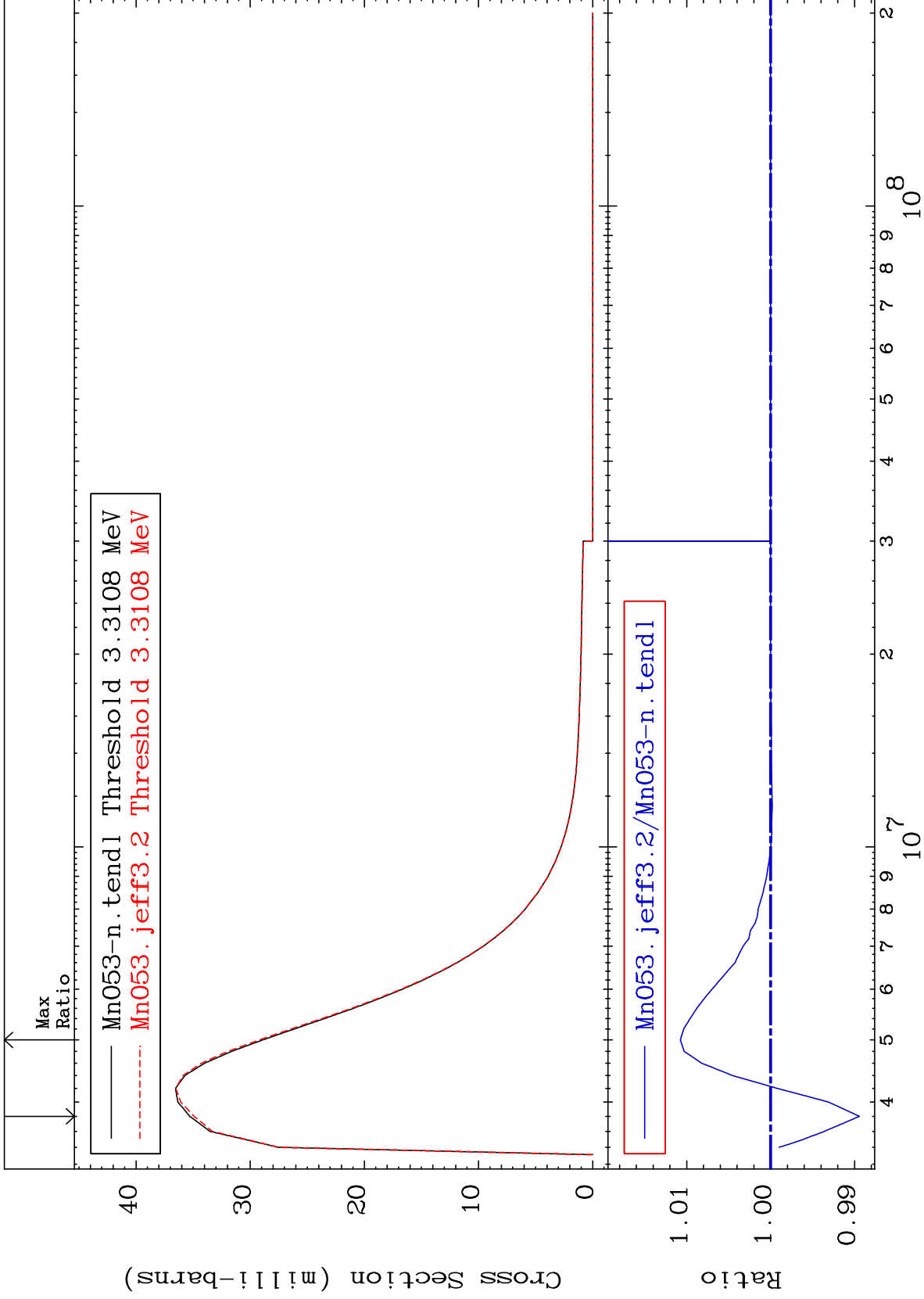
Cross Section To 9999. %



MAT 2519

3.249 MeV (n,n') Level
Cross Section

25-Mn-53
-1.058 To 1.076 %



45

Incident Energy (eV)

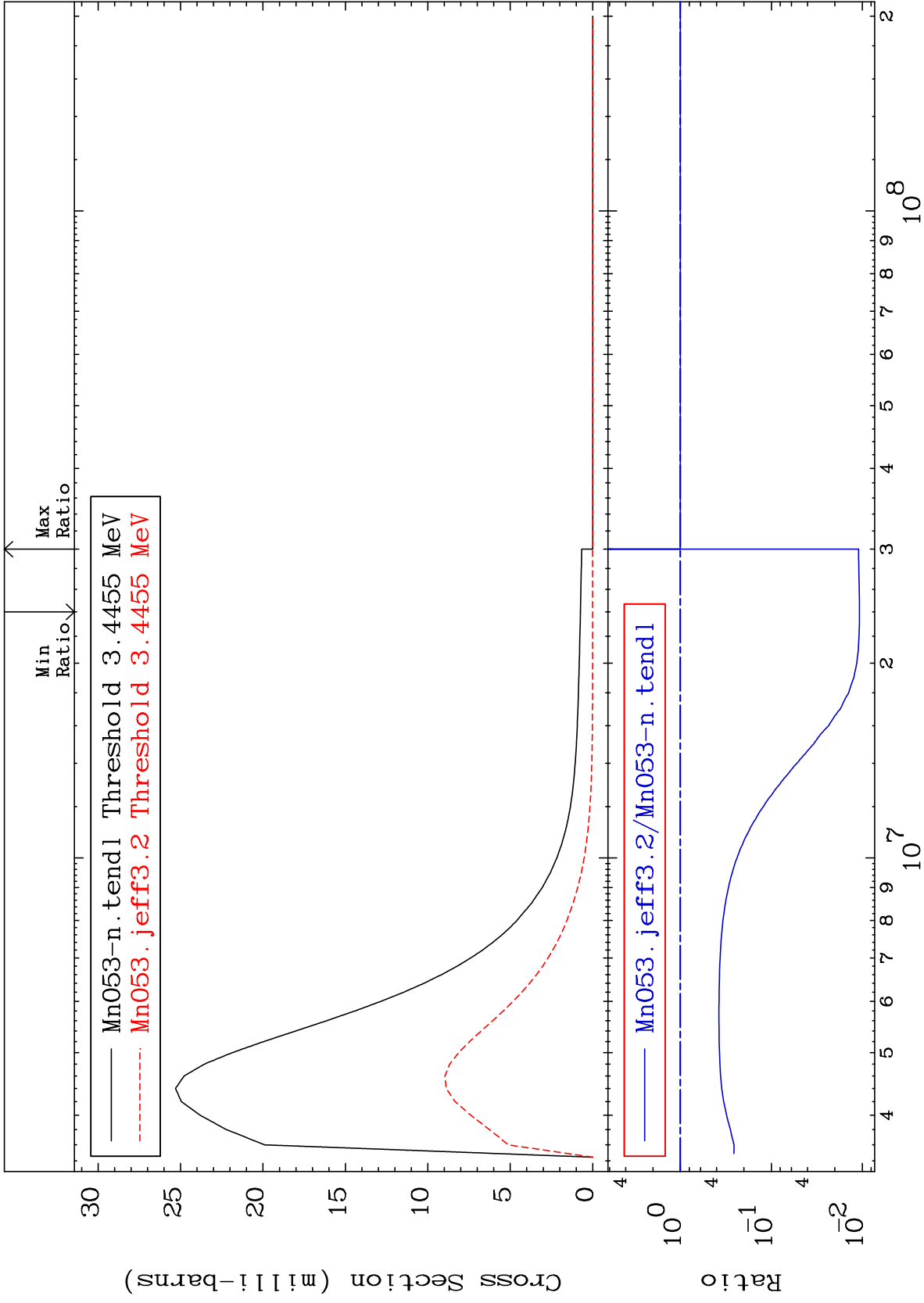
25-Mn-53

MAT 2519

3.381 MeV (n,n') Level

²⁵Mn-53

-98.92 To 0.000 %



46

Incident Energy (eV)

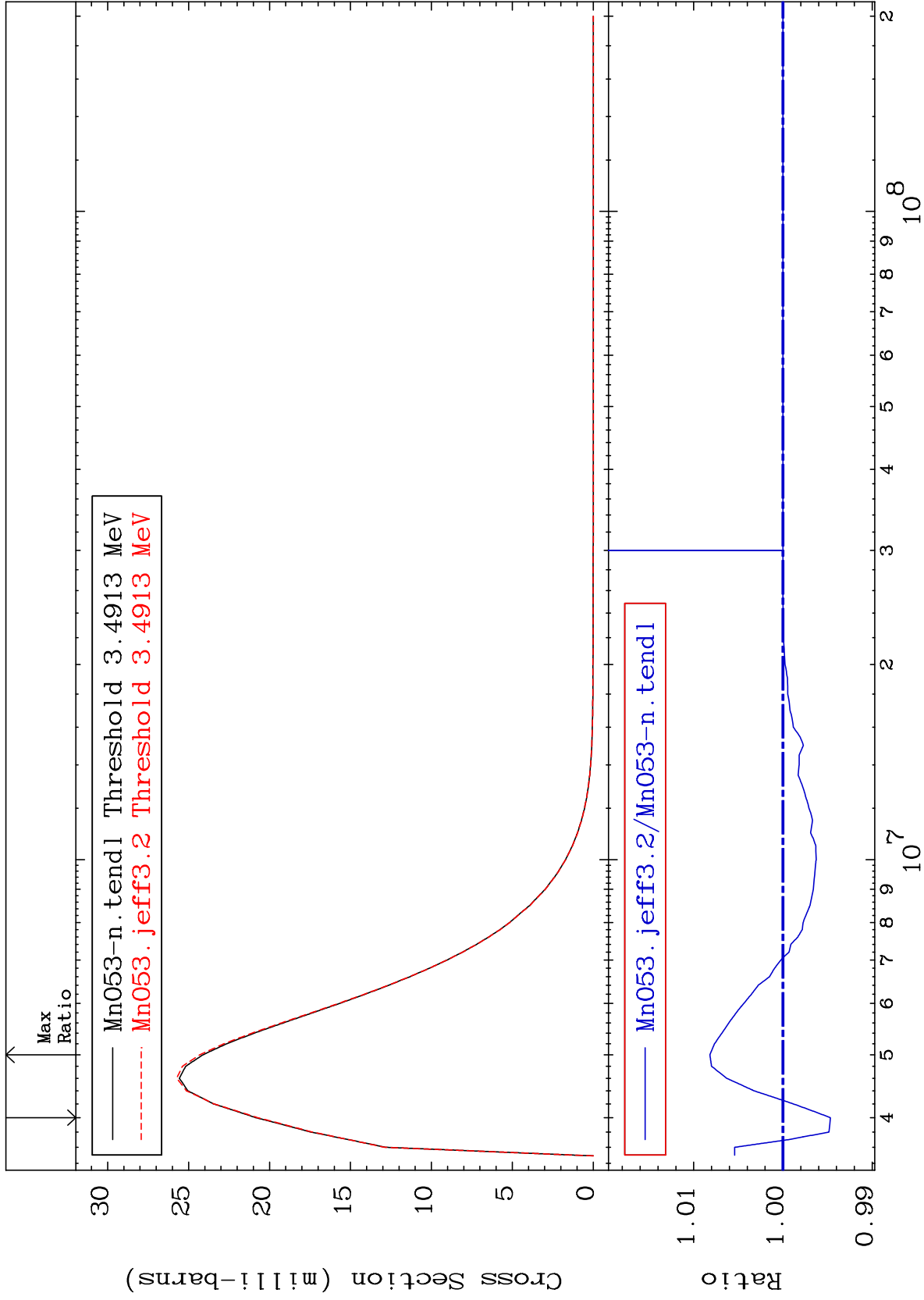
²⁵Mn-53

MAT 2519

3.426 MeV (n,n') Level

²⁵Mn-53

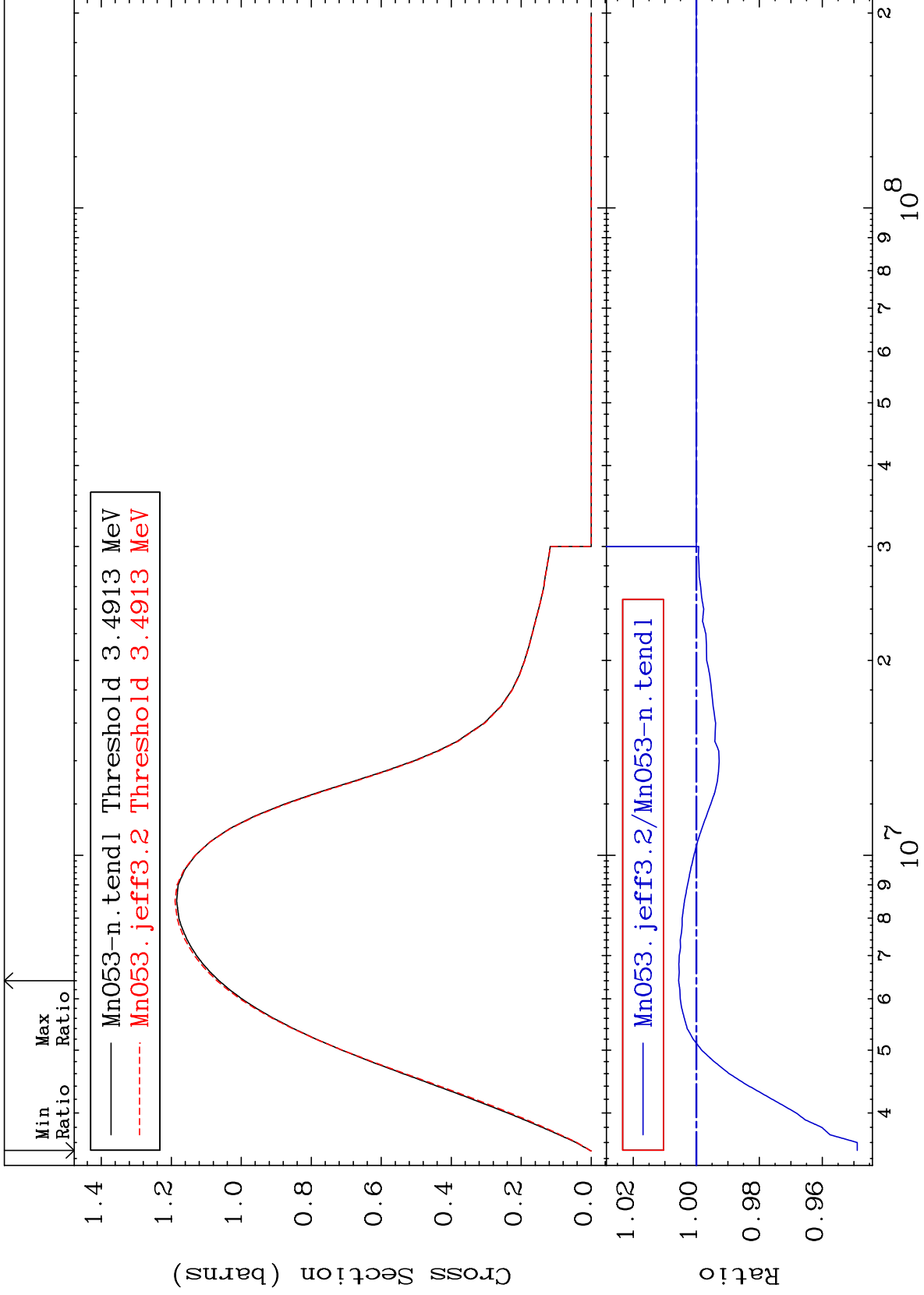
-0.532 To 0.819 %



47

Incident Energy (eV)

²⁵Mn-53



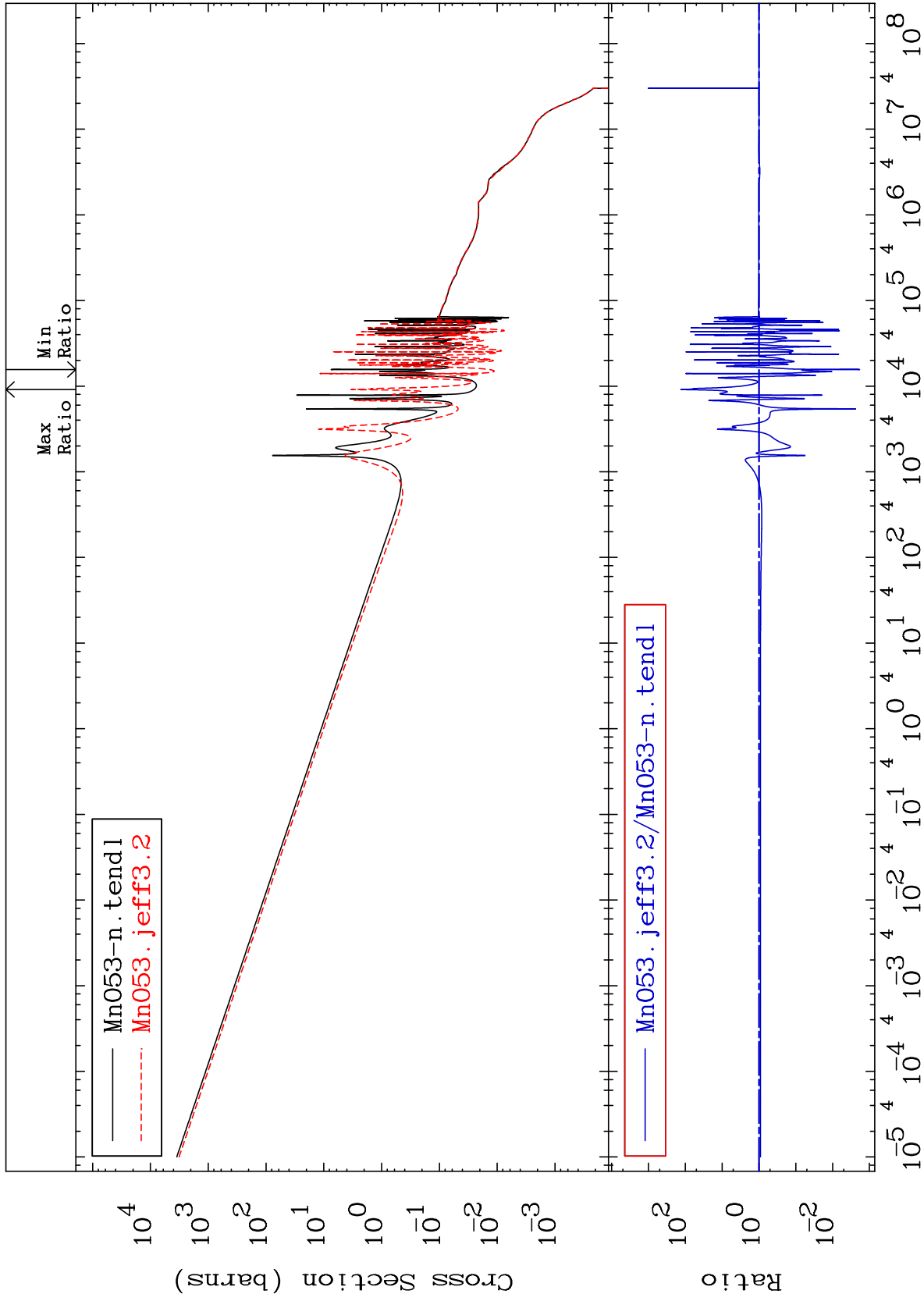
MAT 2519

(n, γ)

25-Mn-53

Cross Section

-99.81 To 9999. %



49

Incident Energy (eV)

25-Mn-53

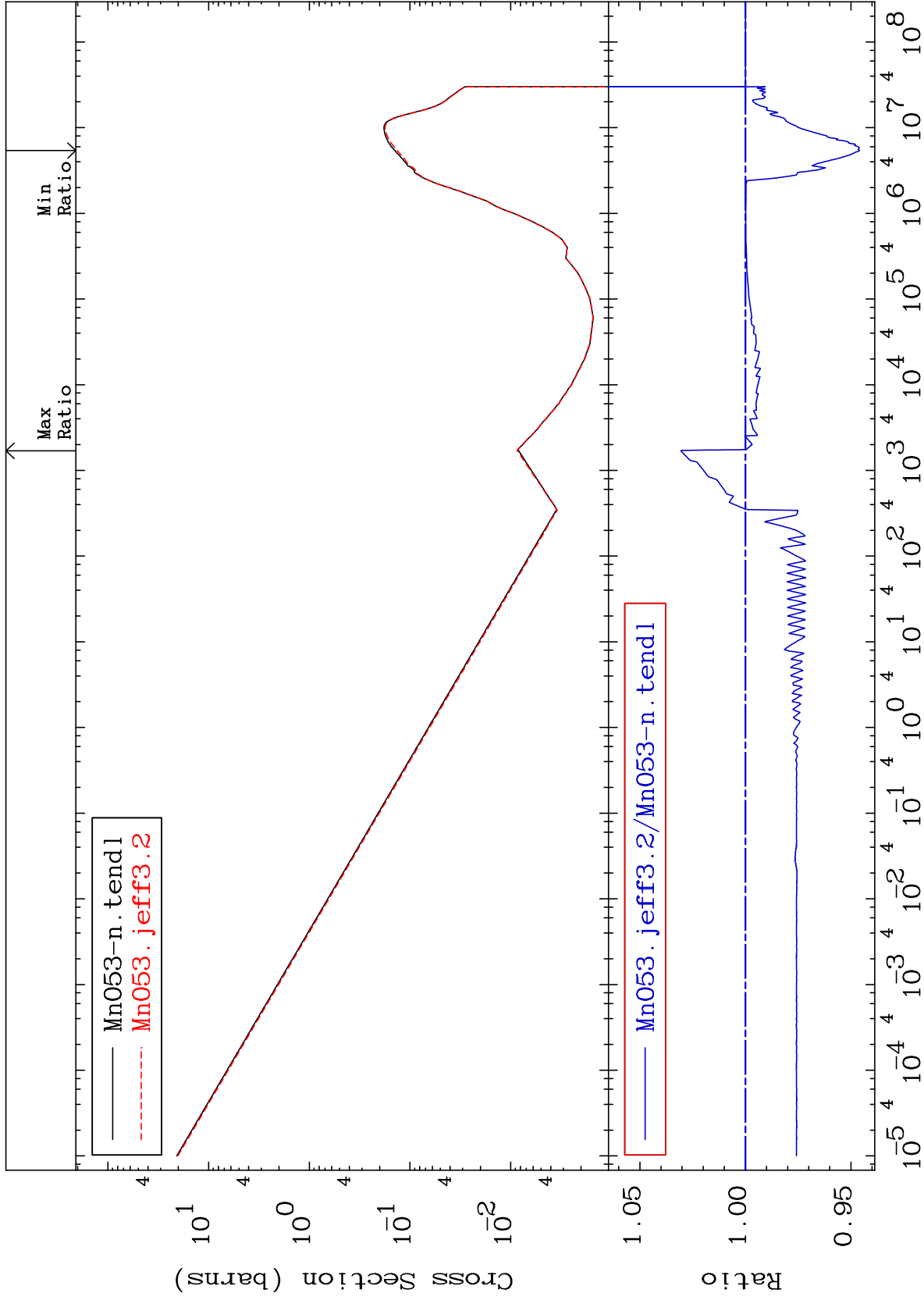
MAT 2519

(n, p)

25-Mn-53

Cross Section

-5.407 To 3.062 %



50

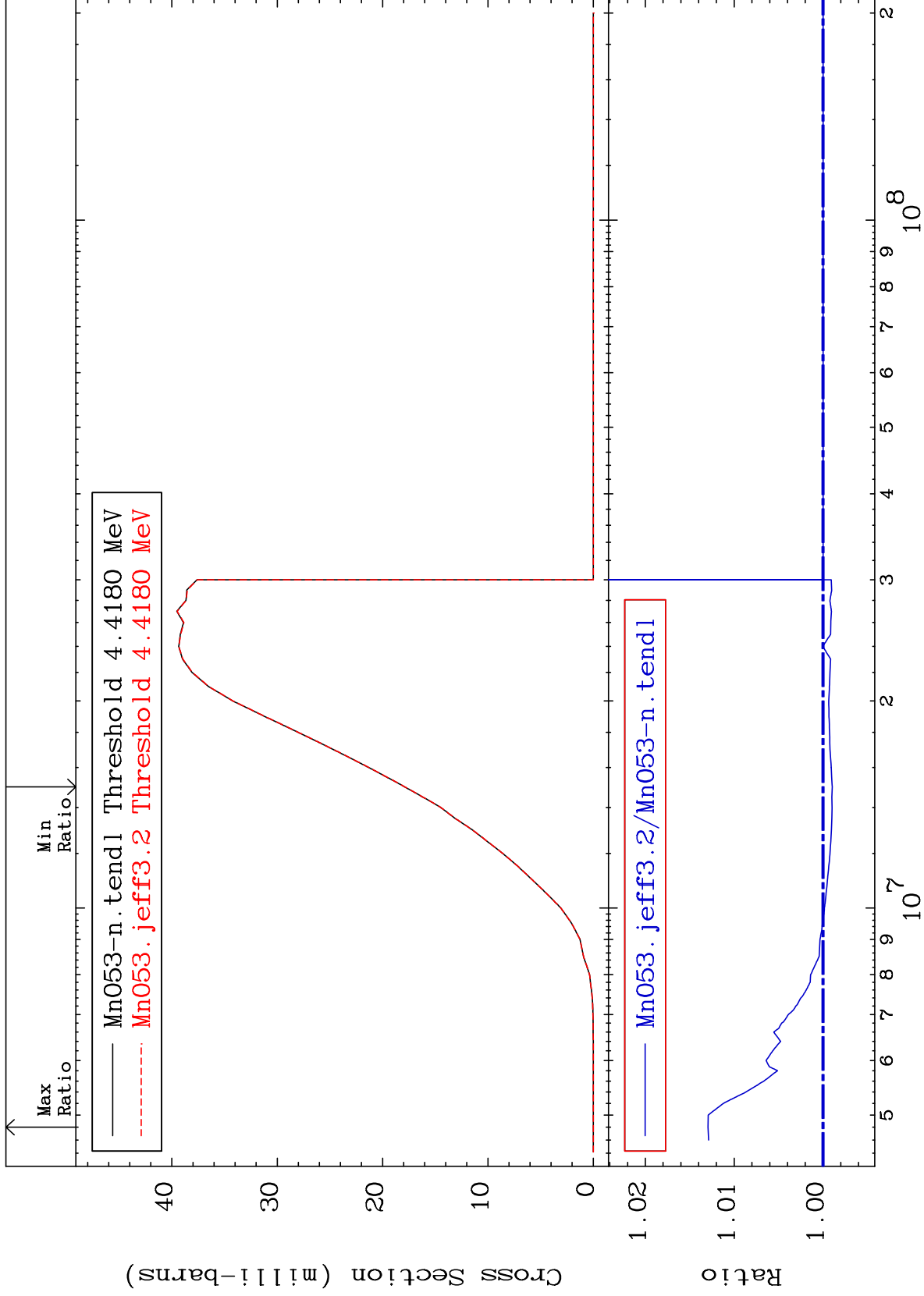
Incident Energy (eV)

25-Mn-53

MAT 2519

(n, d)
Cross Section

²⁵Mn-53
-0.103 To 1.294 %



51

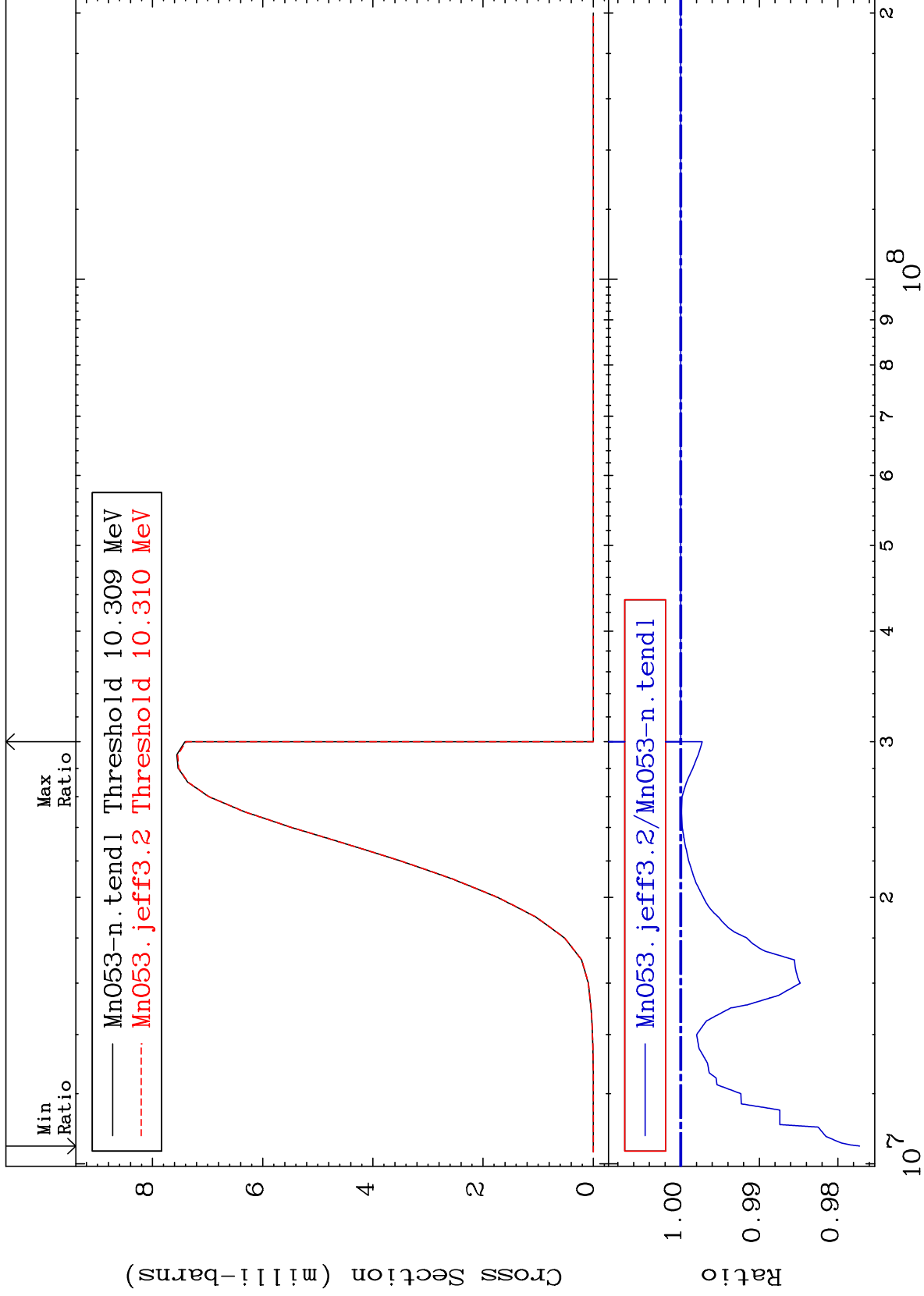
Incident Energy (eV)

²⁵Mn-53

MAT 2519

(n, t)
Cross Section

²⁵Mn-53
-2.276 To 0.000 %



52

Incident Energy (eV)

²⁵Mn-53

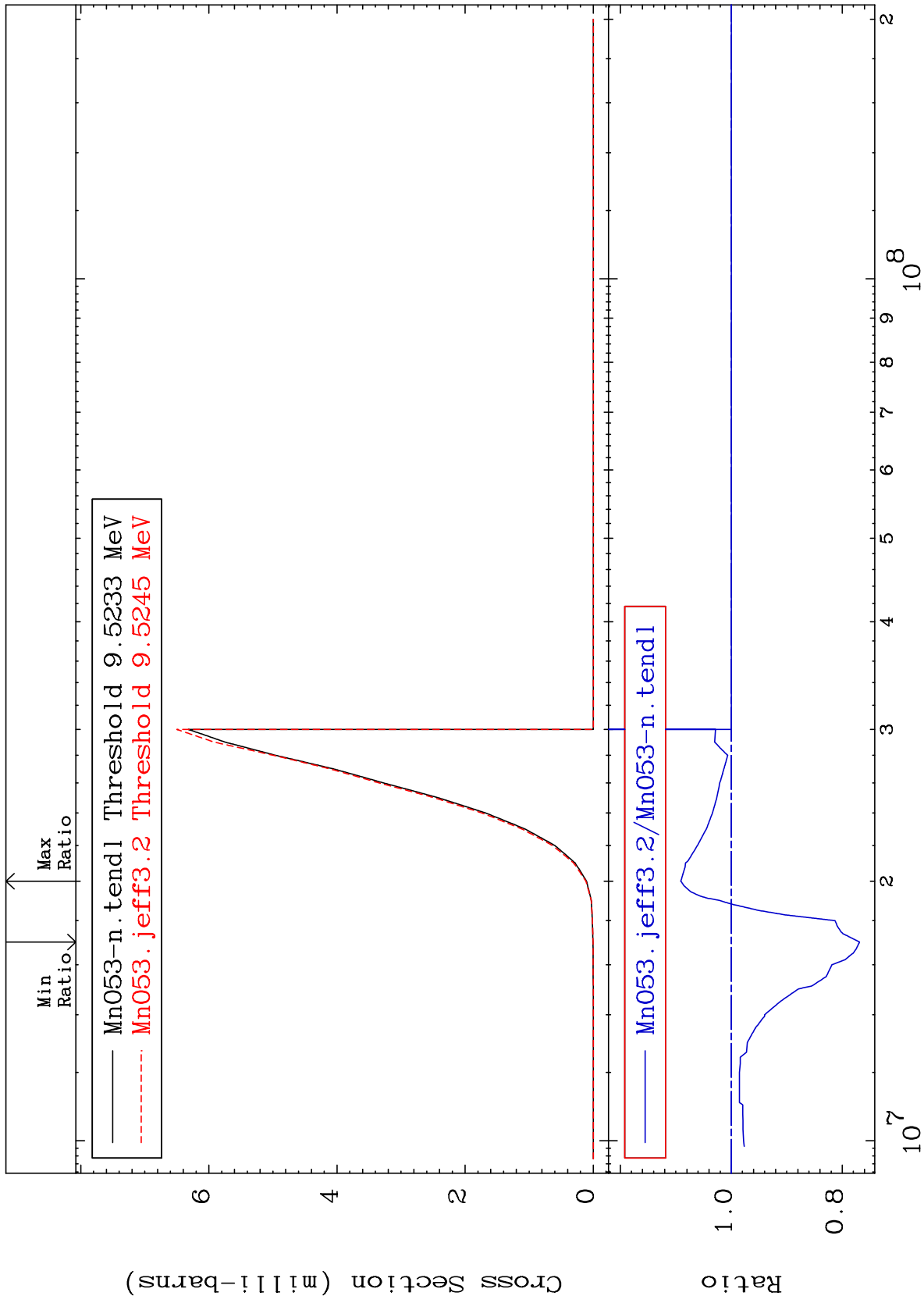
MAT 2519

(n, He-3)

²⁵Mn-53

Cross Section

-23.12 To 9.106 %



MAT 2519

(n, α)

²⁵Mn-53

-7.881 To 3.702 %

Cross Section

Min Ratio

Max Ratio

Mn053-n.tendl Threshold 64.718 keV
Mn053.jeff3.2 Threshold 59.249 keV

Cross Section (milli-barns)

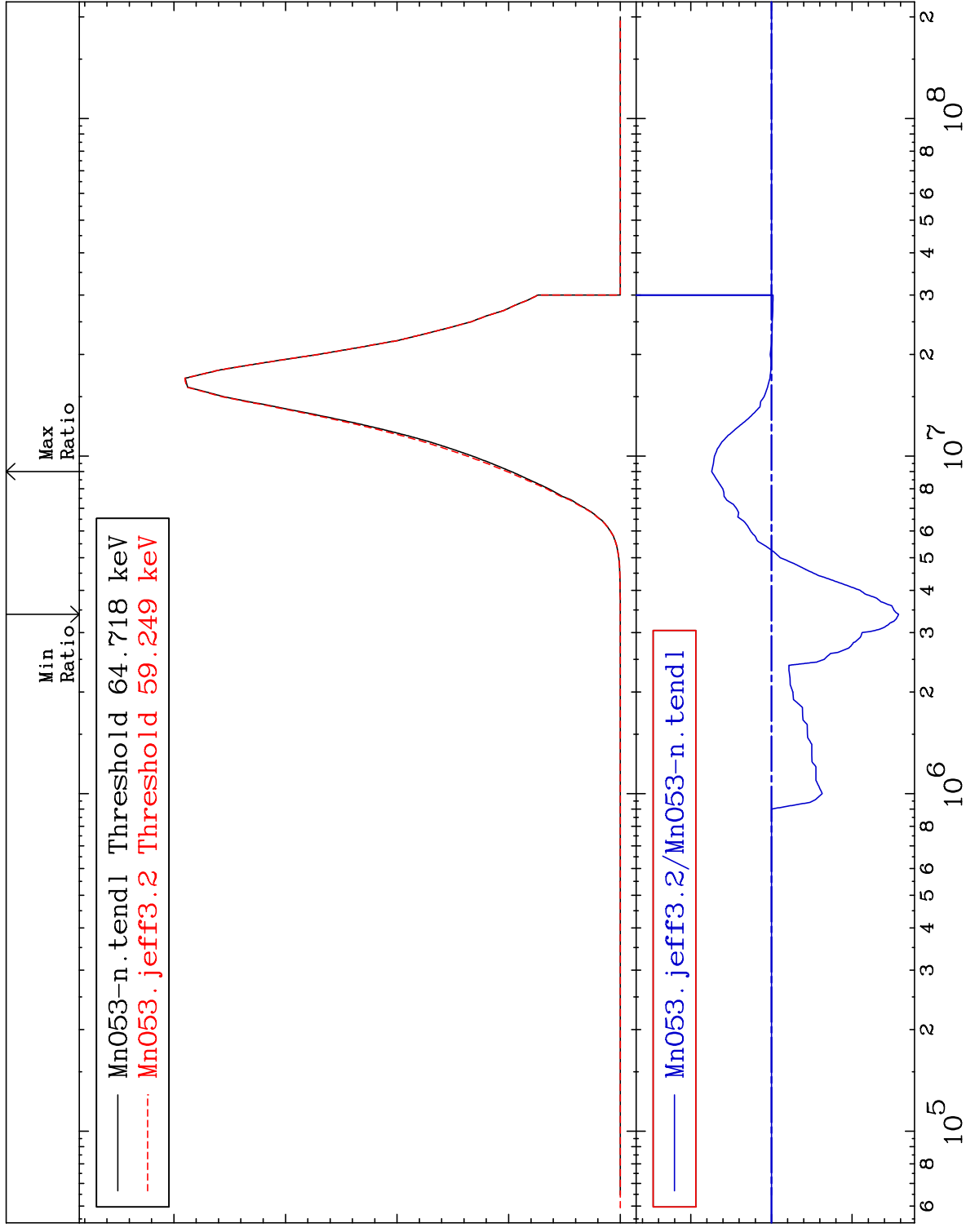
Mn053.jeff3.2/Mn053-n.tendl

Ratio

54

Incident Energy (eV)

²⁵Mn-53



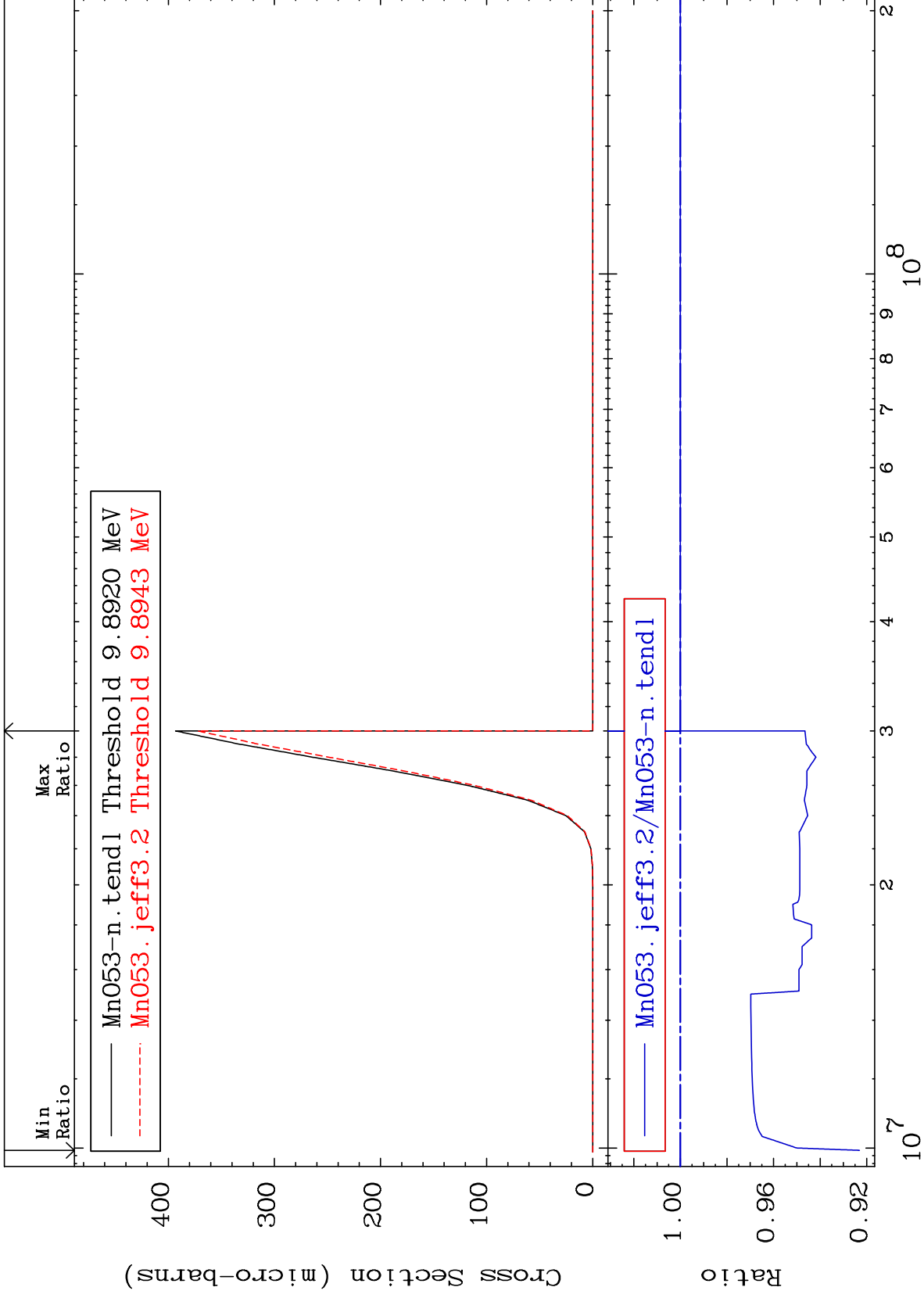
MAT 2519

(n,2α)

²⁵Mn-53

Cross Section

-7.687 To 0.000 %



55

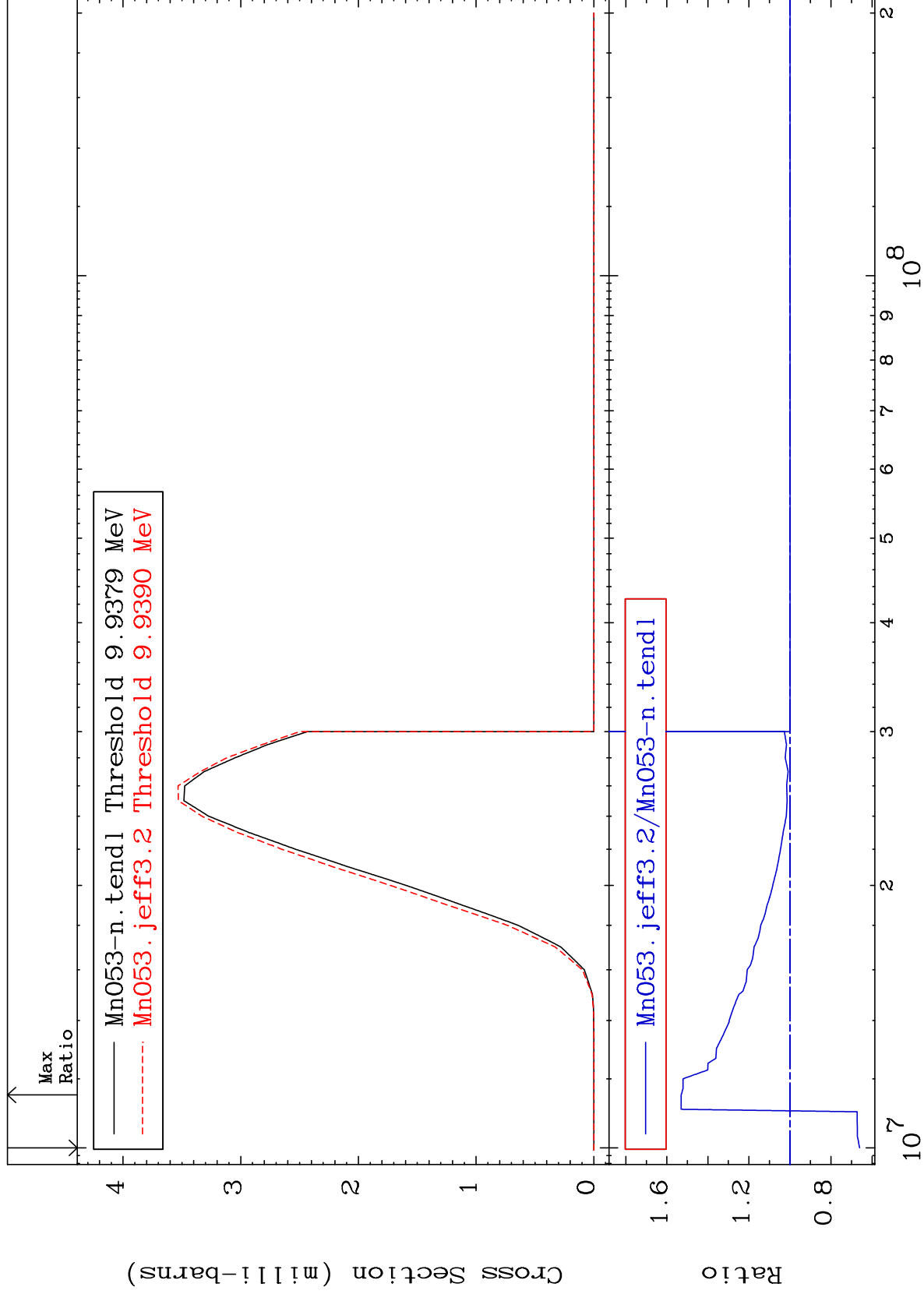
Incident Energy (eV)

²⁵Mn-53

MAT 2519

(n,2p)
Cross Section

²⁵Mn-53
-33.97 To 53.01 %



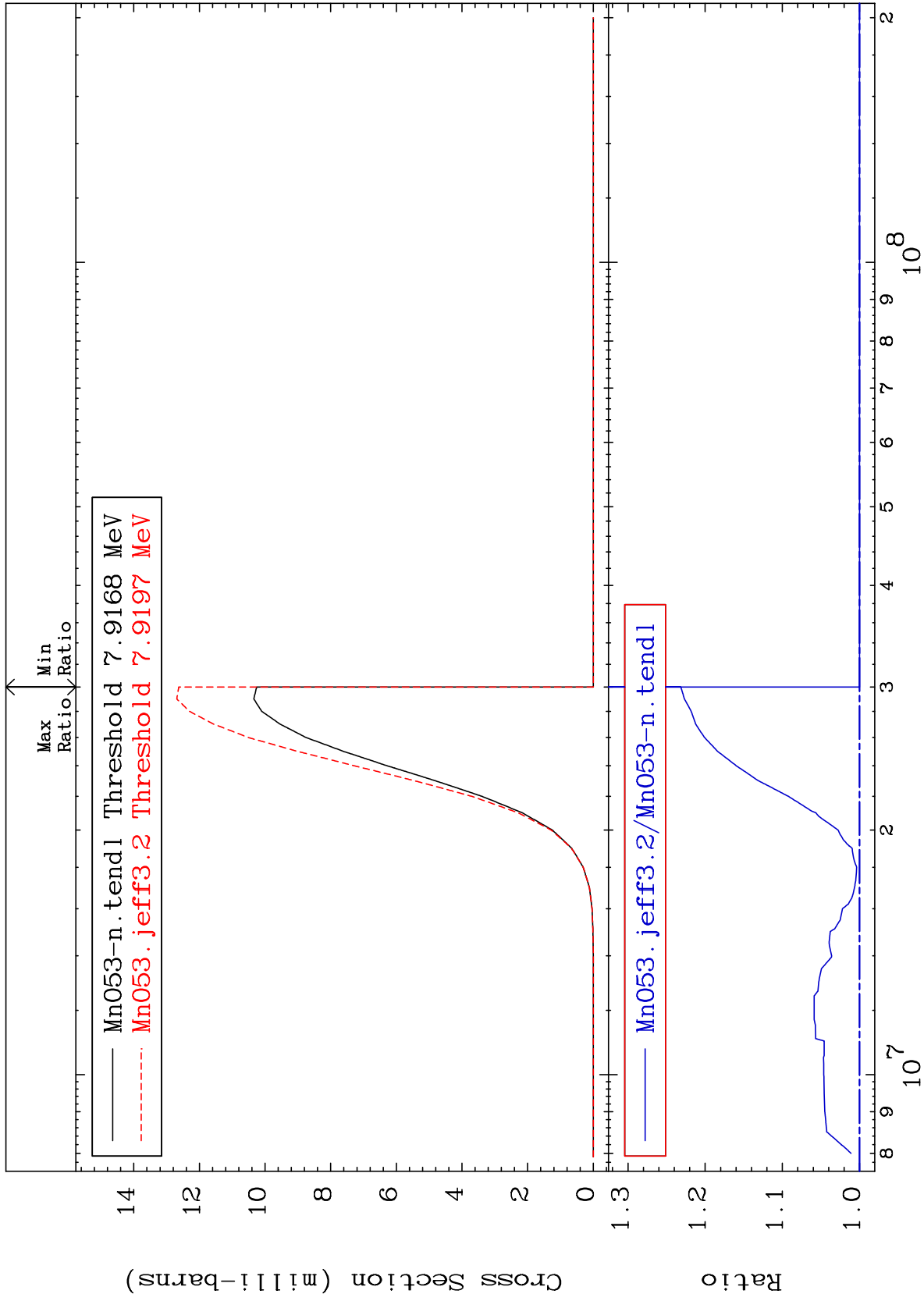
56

Incident Energy (eV)

²⁵Mn-53

MAT 2519

(n,p) α Cross Section
0.000 To 23.16 %
25-Mn-53



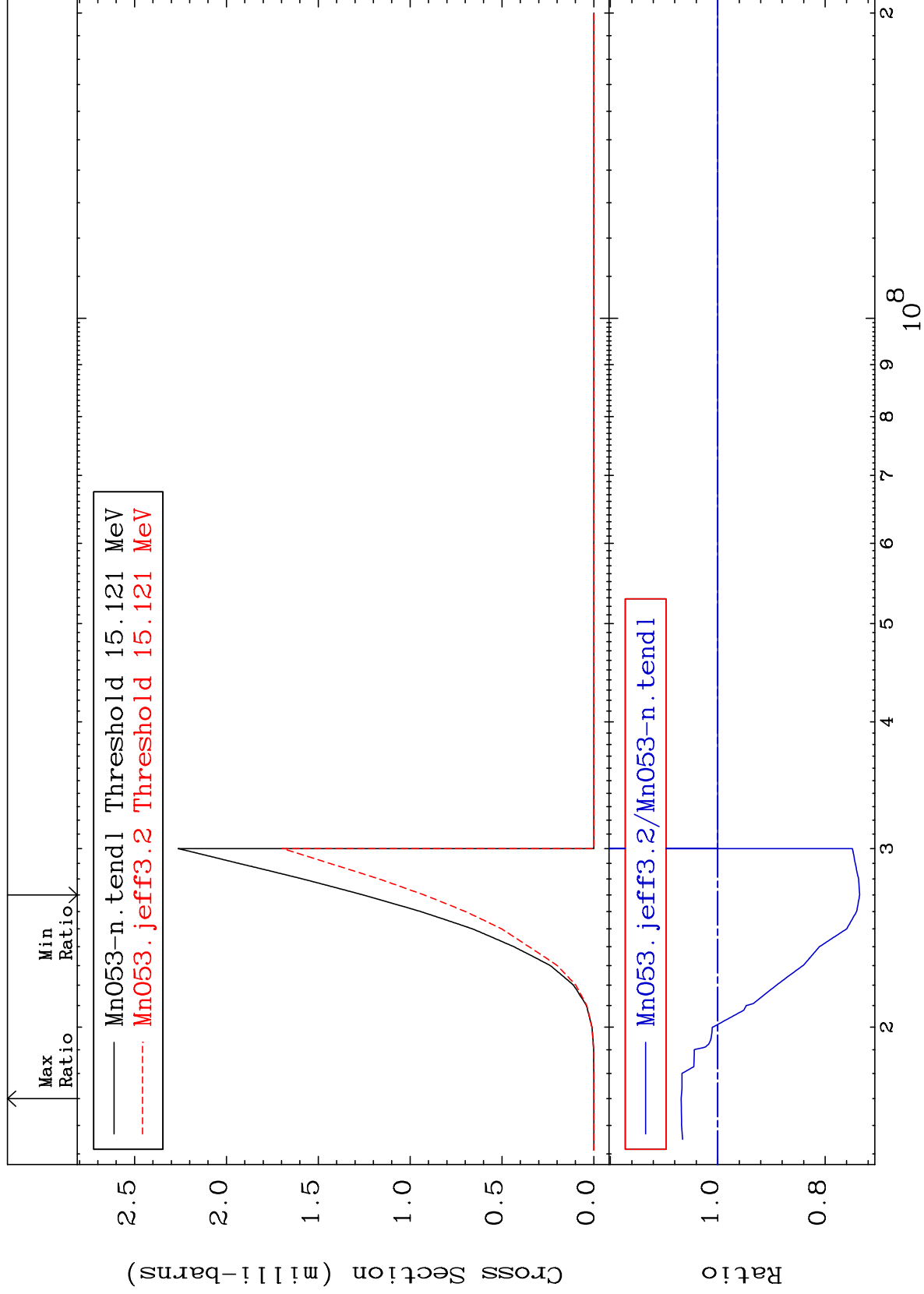
57

25-Mn-53

MAT 2519

(n, p) d
Cross Section

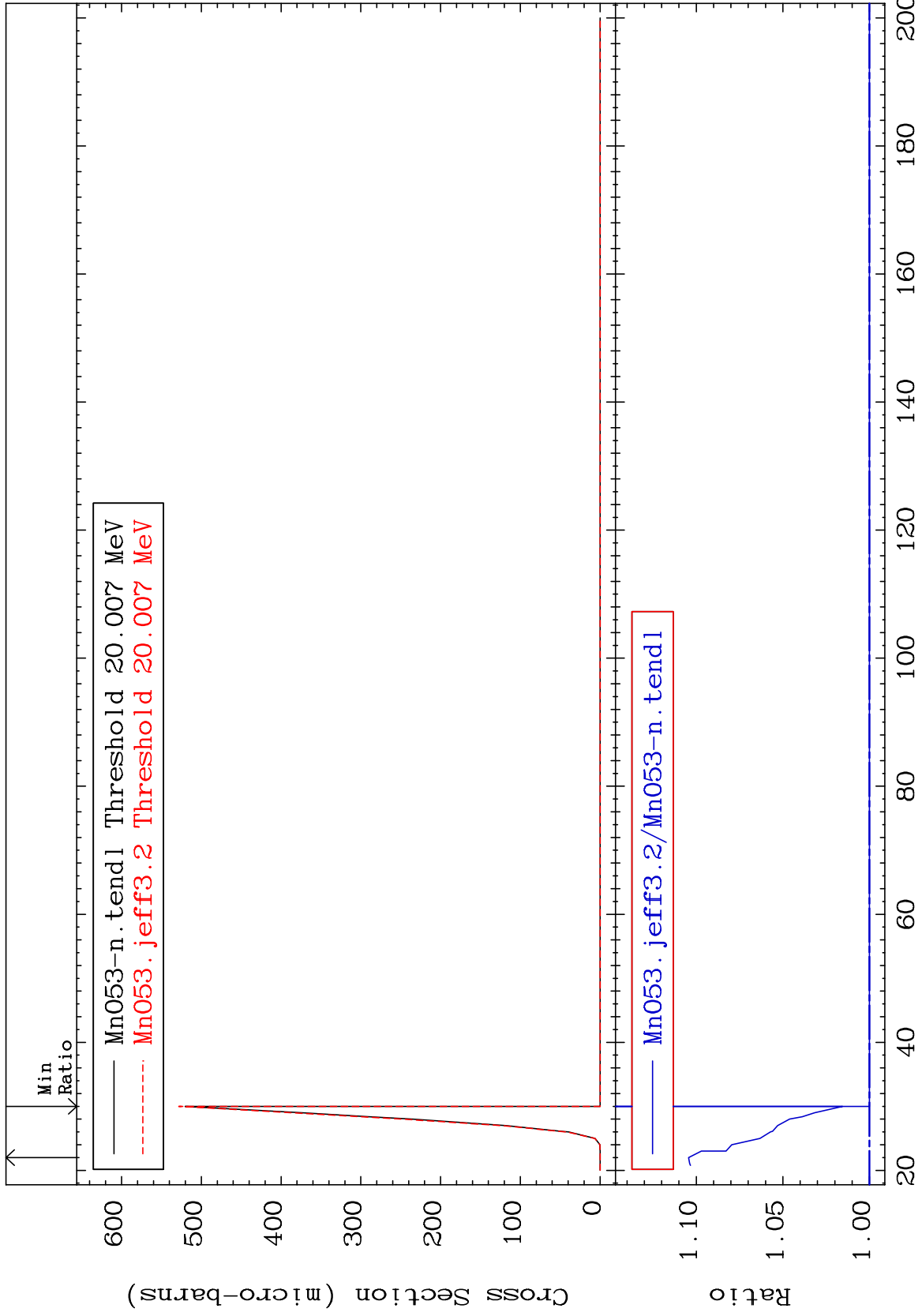
²⁵Mn-53
-26.43 To 6.809 %



MAT 2519

(n,p) t
Cross Section

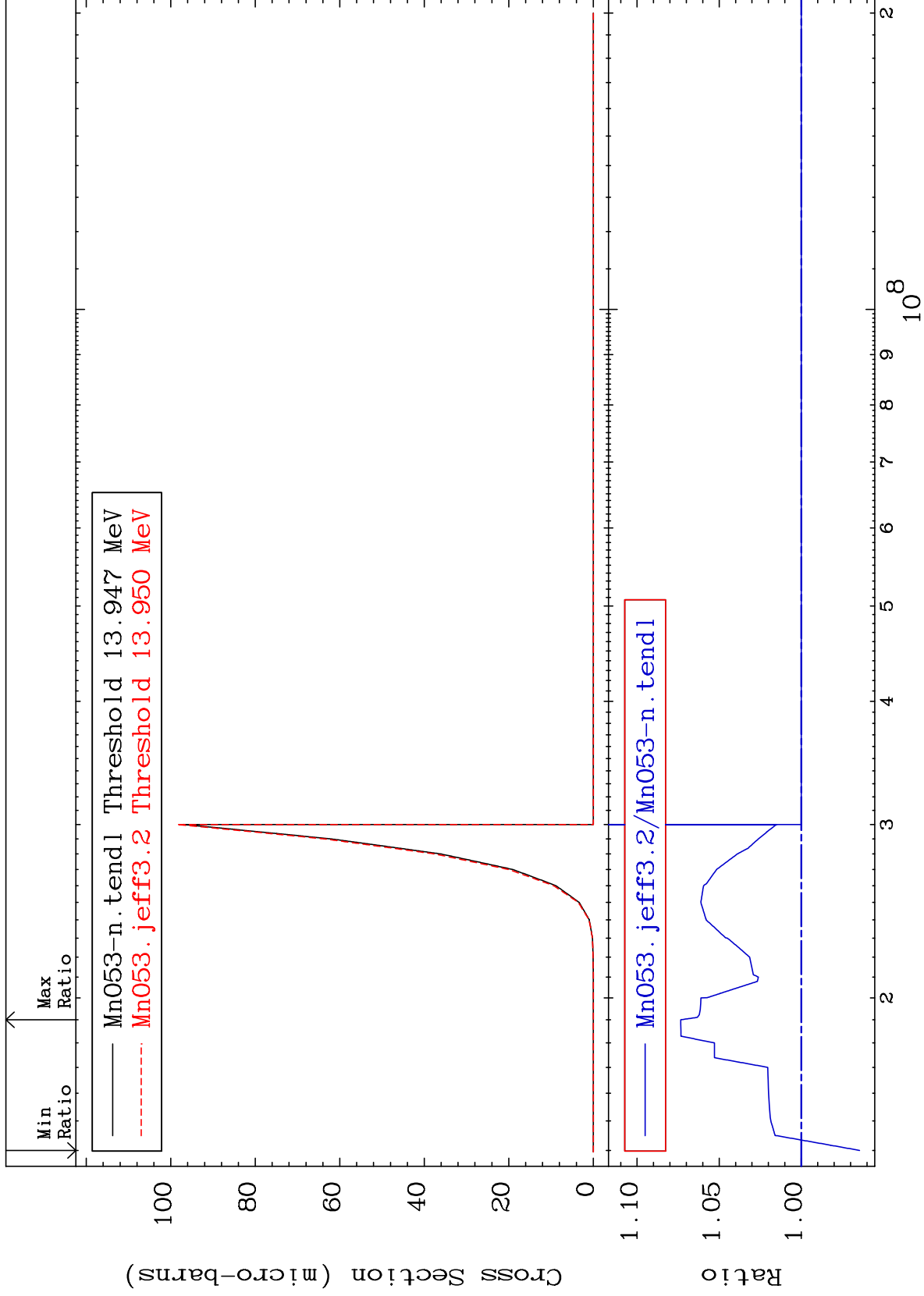
25-Mn-53
0.000 To 10.44 %

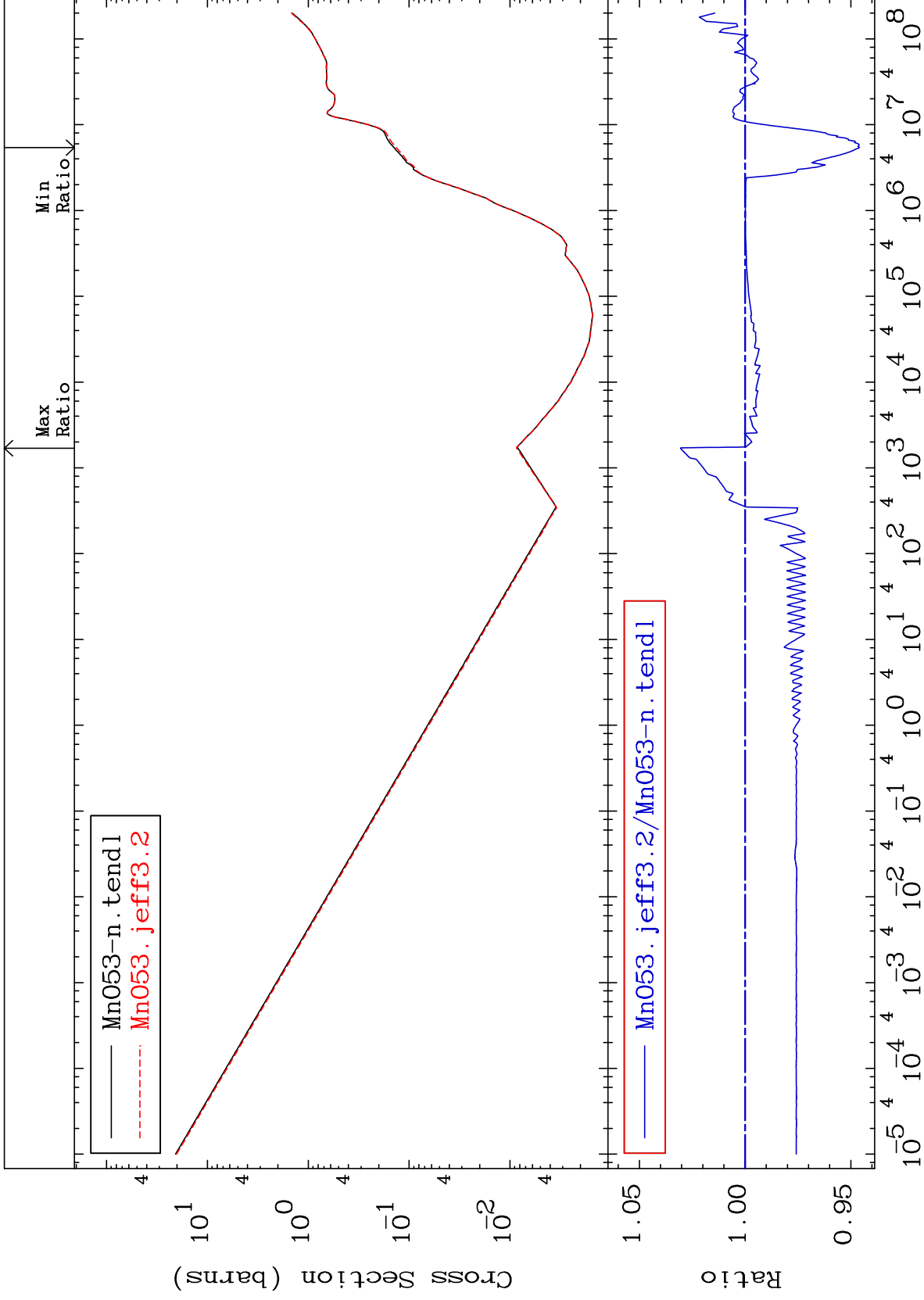


59

Incident Energy (MeV)

25-Mn-53

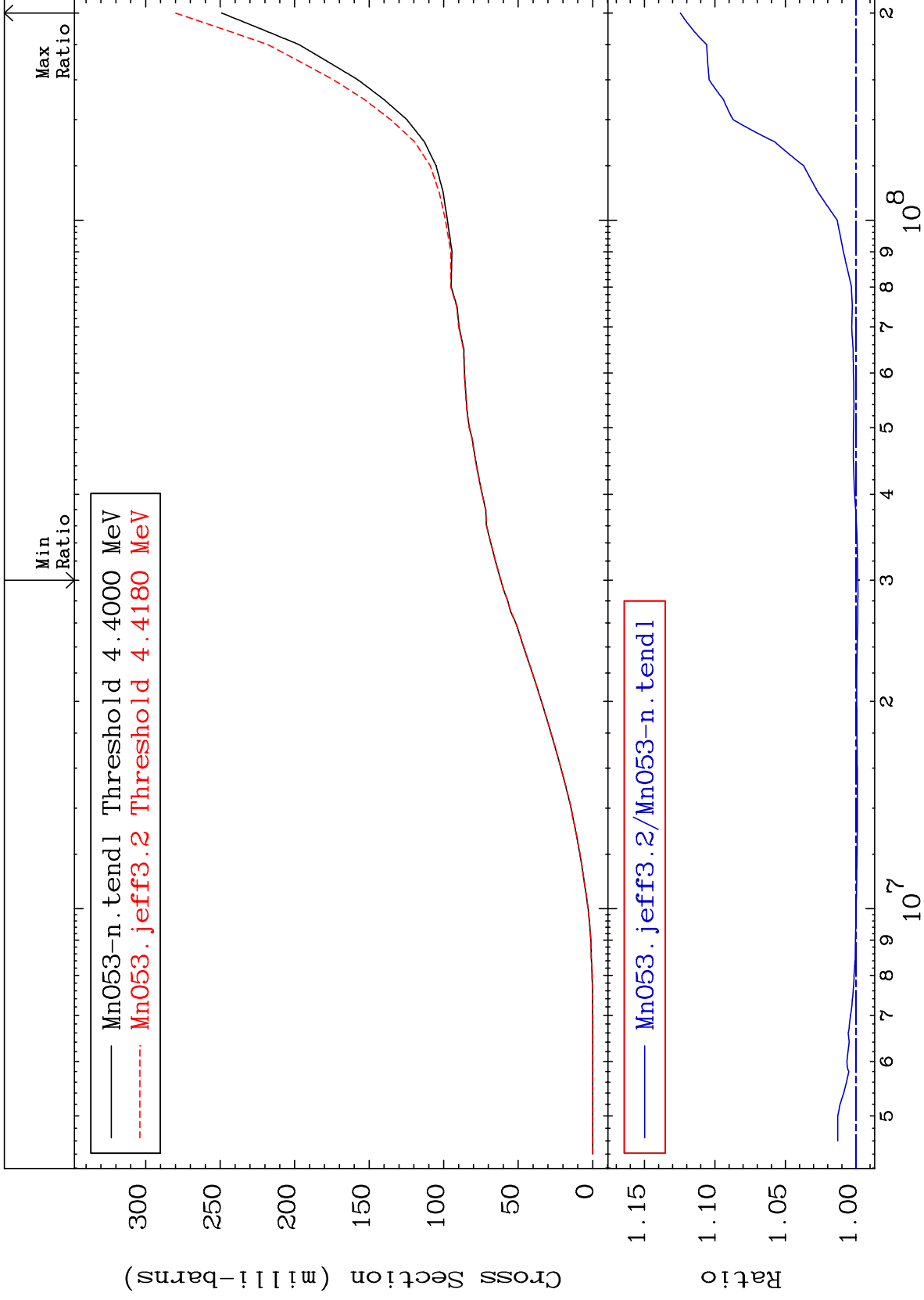




MAT 2519

Deuterium Production
Cross Section

²⁵Mn-53
-0.248 To 12.45 %



62

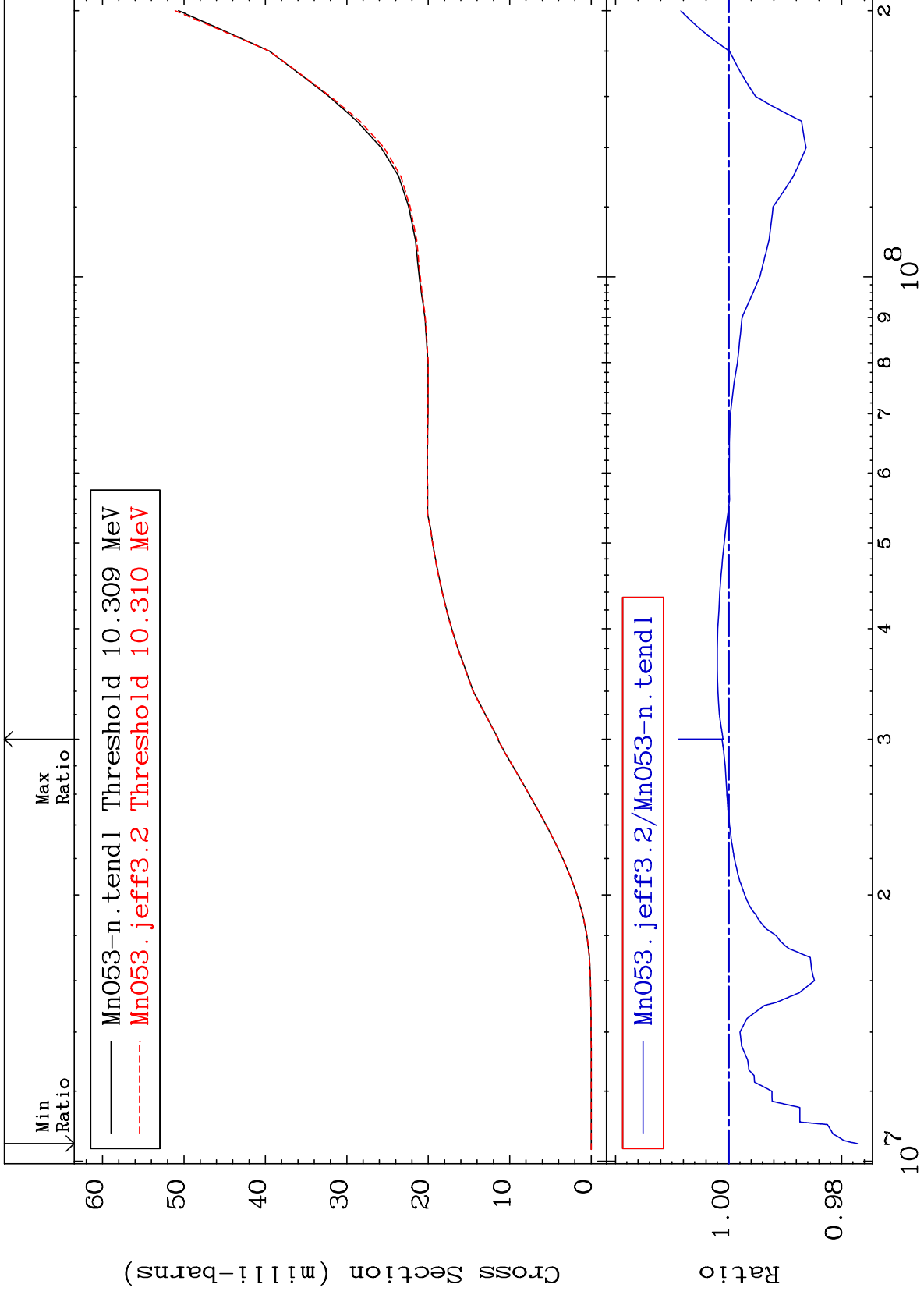
Incident Energy (eV)

²⁵Mn-53

MAT 2519

Tritium Production
Cross Section

²⁵Mn-53
-2.276 To 0.883 %



63

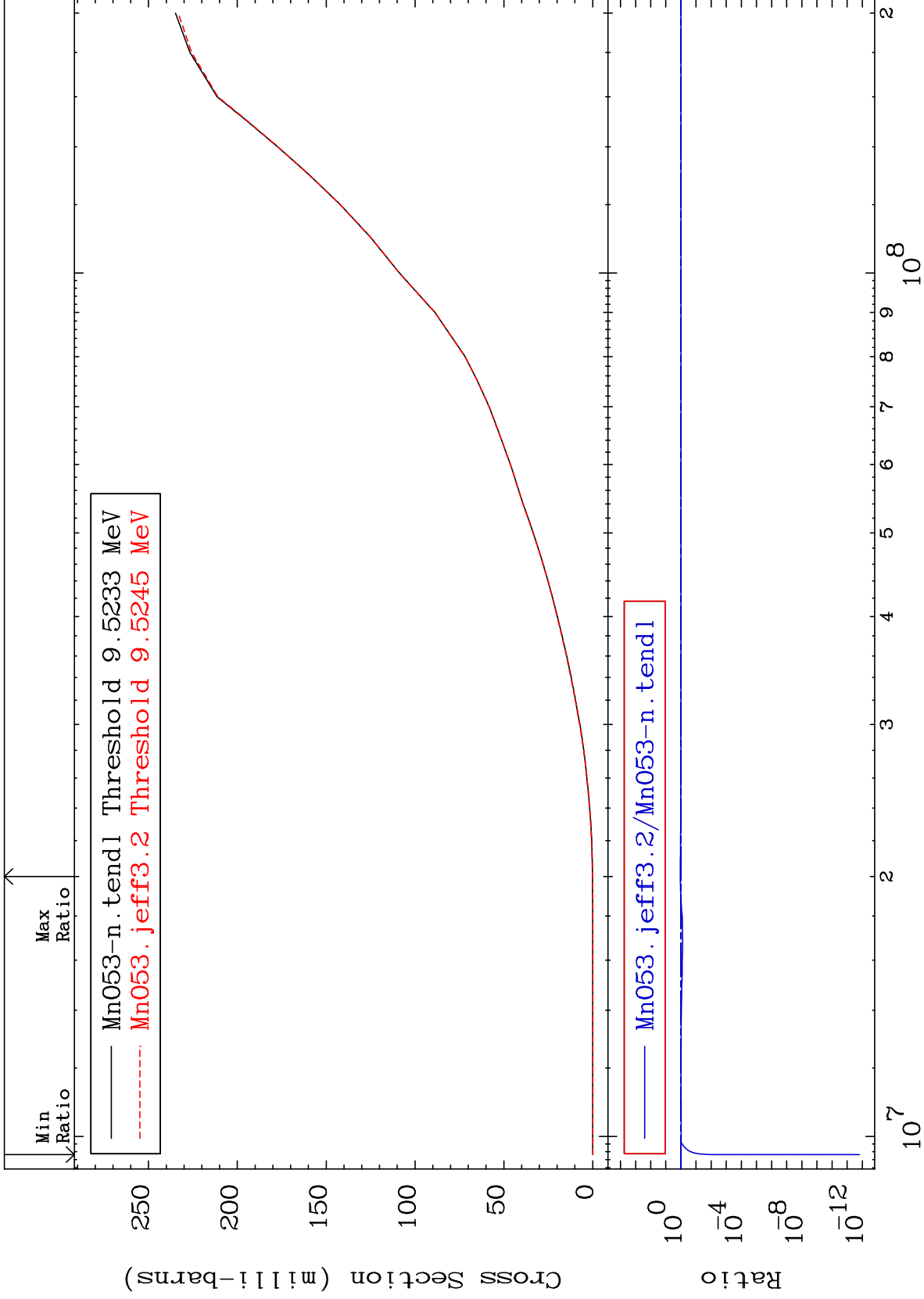
Incident Energy (eV)

²⁵Mn-53

MAT 2519

He-3 Production
Cross Section

²⁵Mn-53
-100.0 To 9.106 %



64

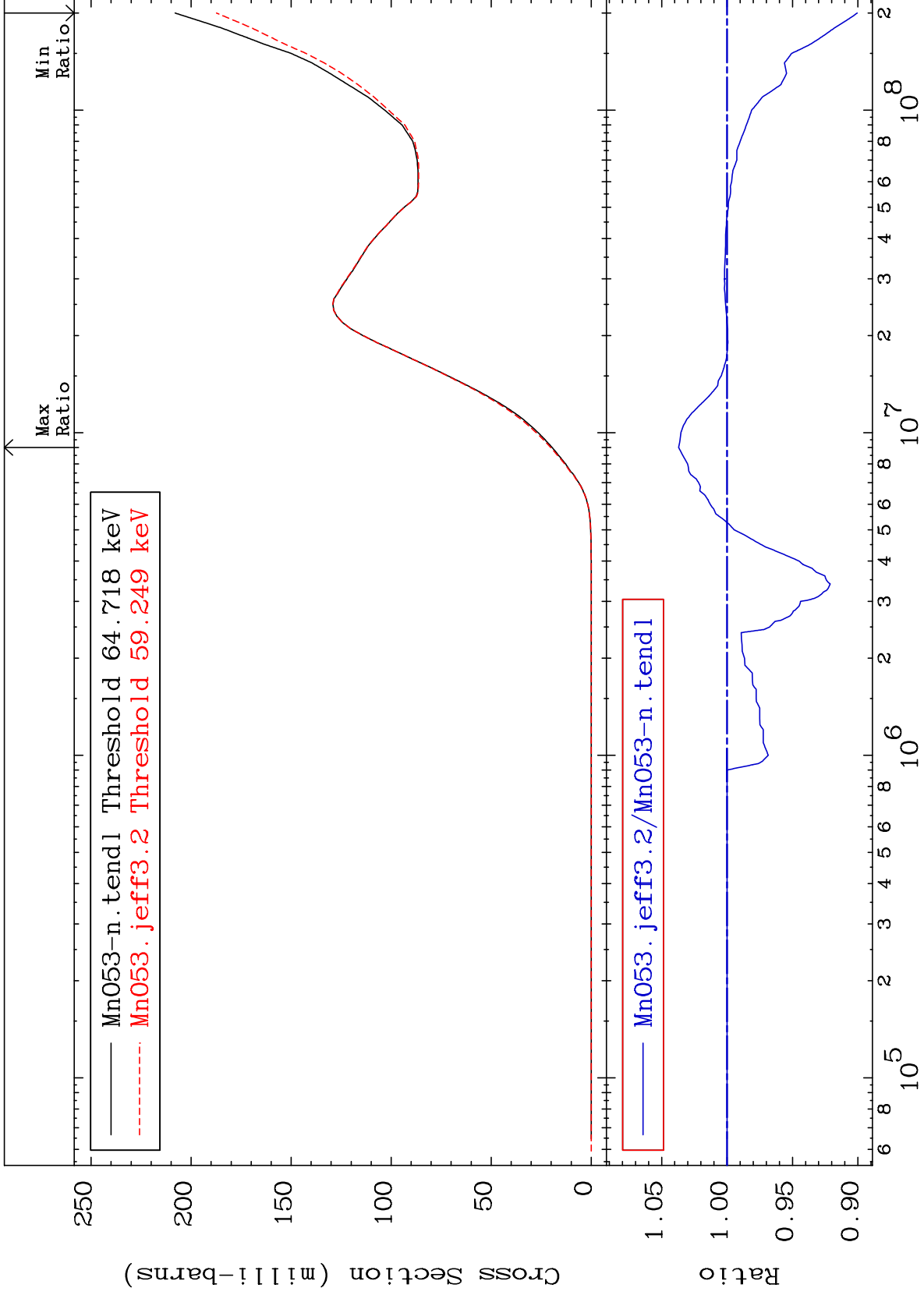
Incident Energy (eV)

²⁵Mn-53

MAT 2519

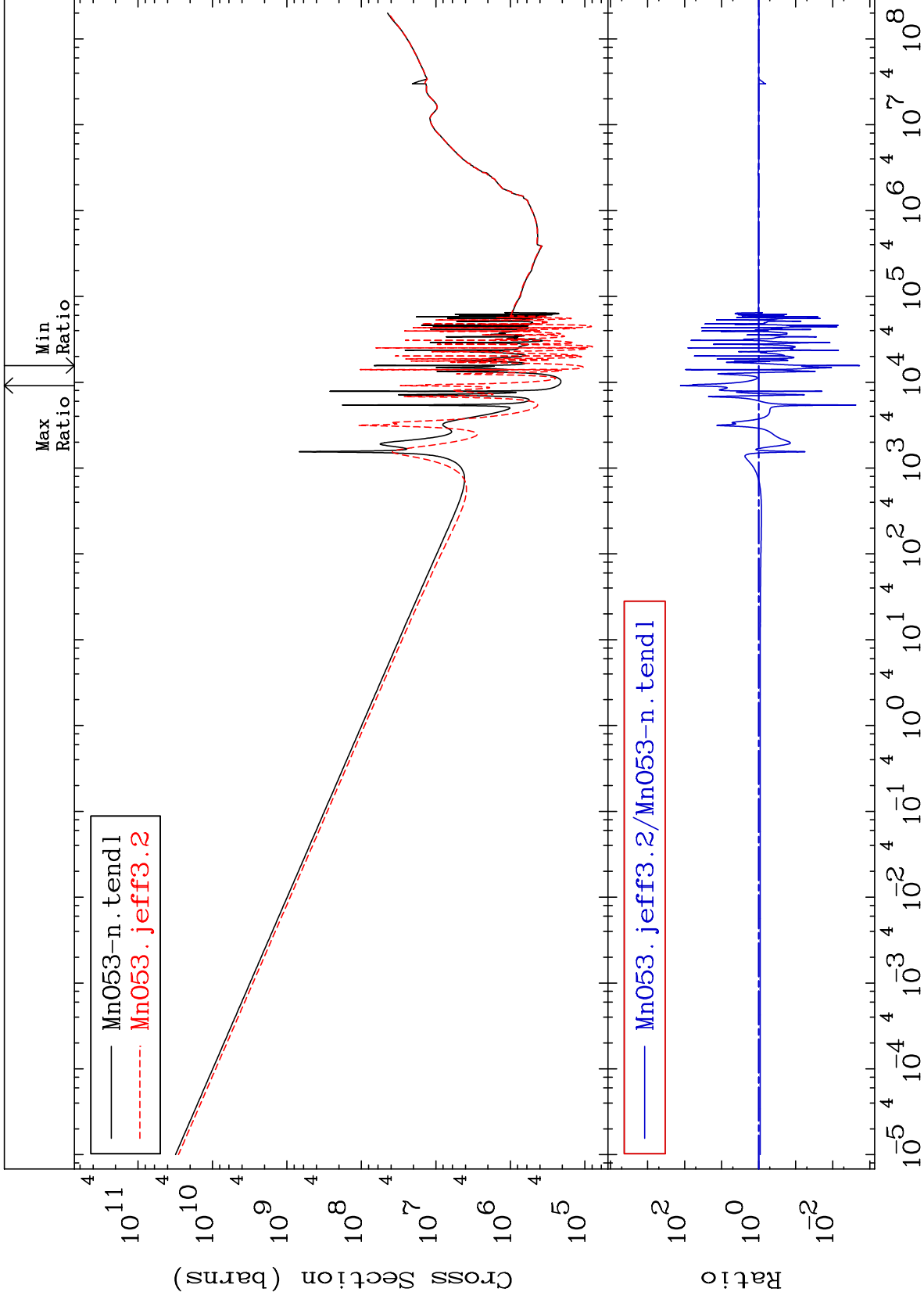
He-4 Production
Cross Section

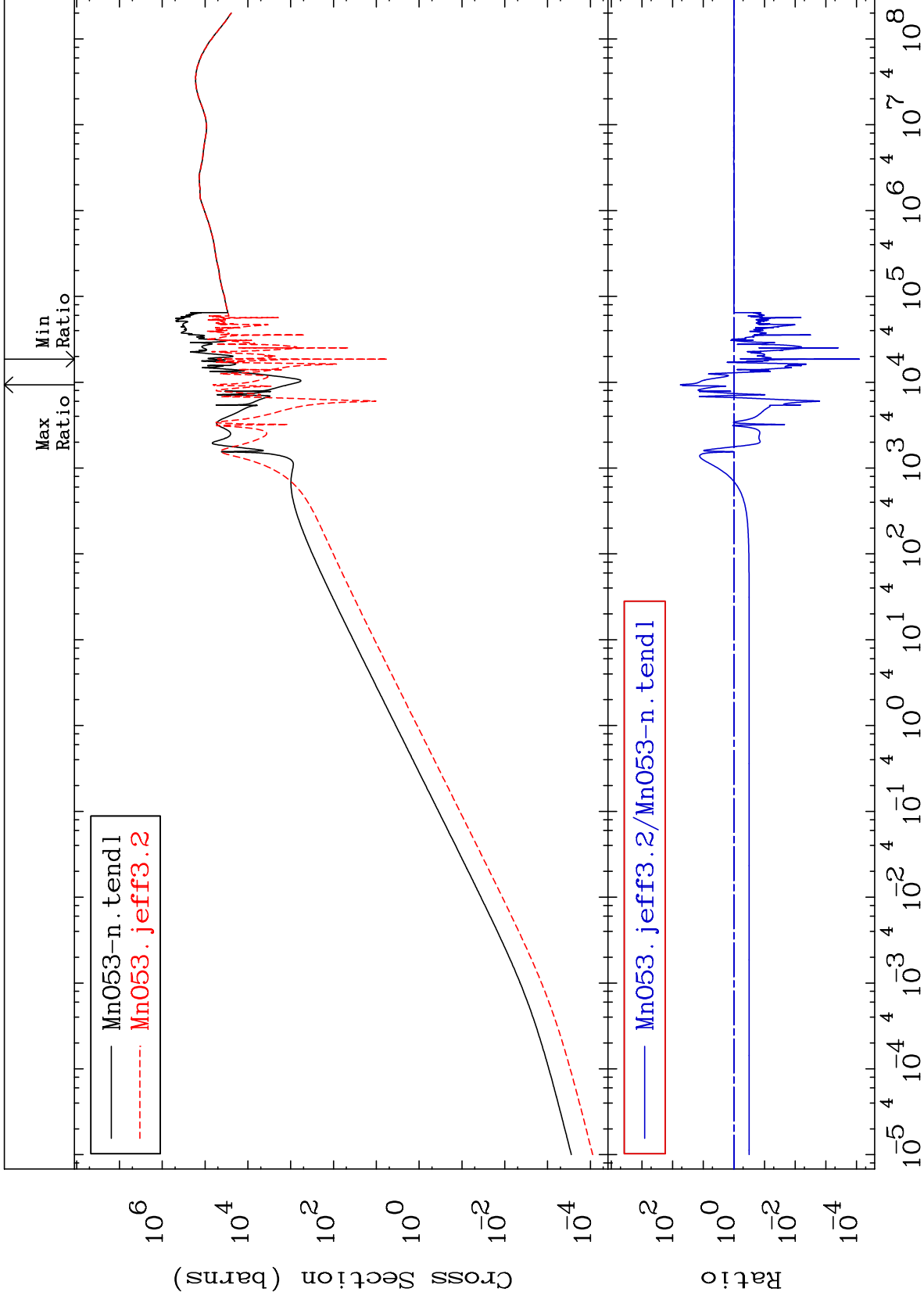
²⁵Mn-53
-9.950 To 3.702 %

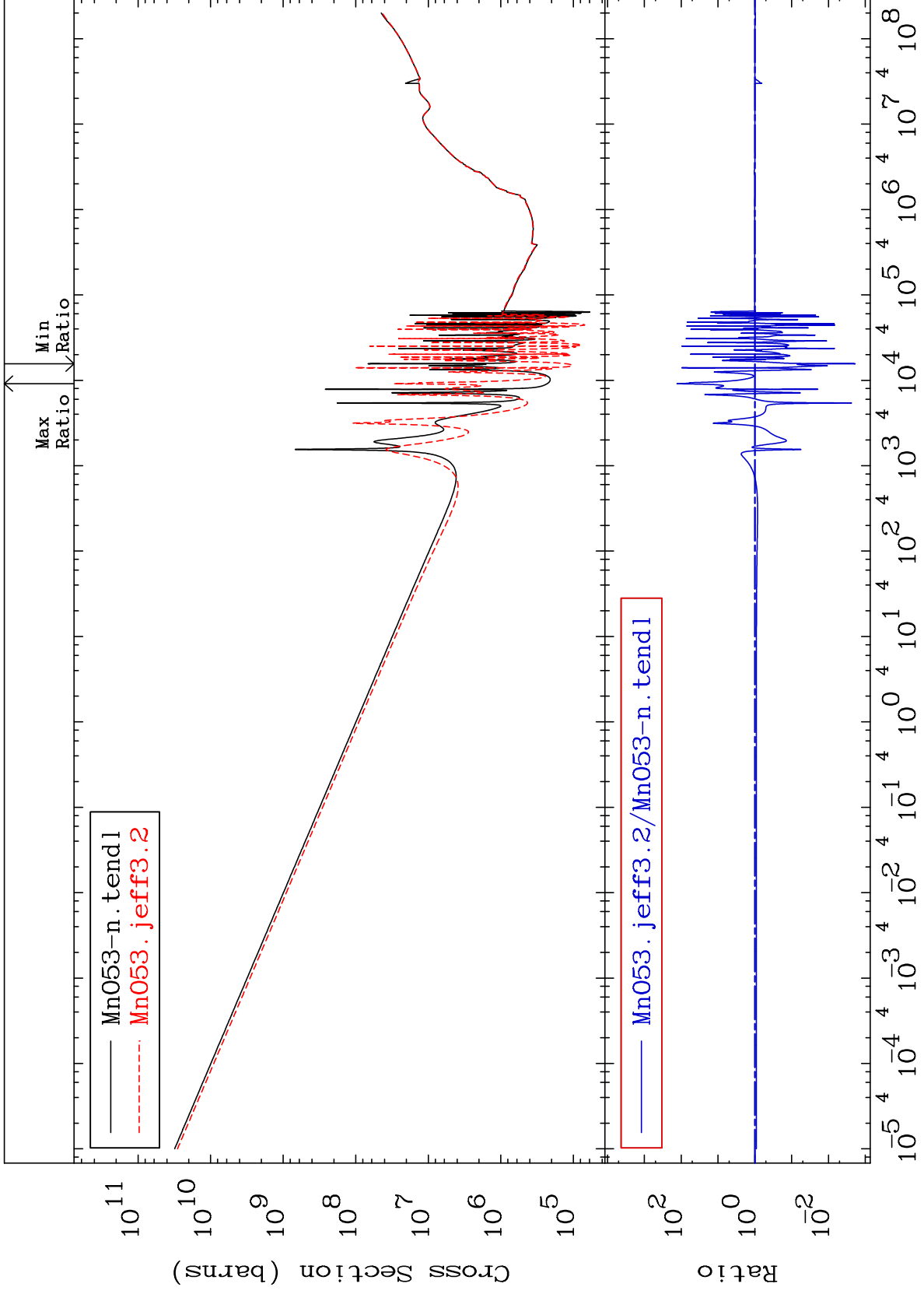


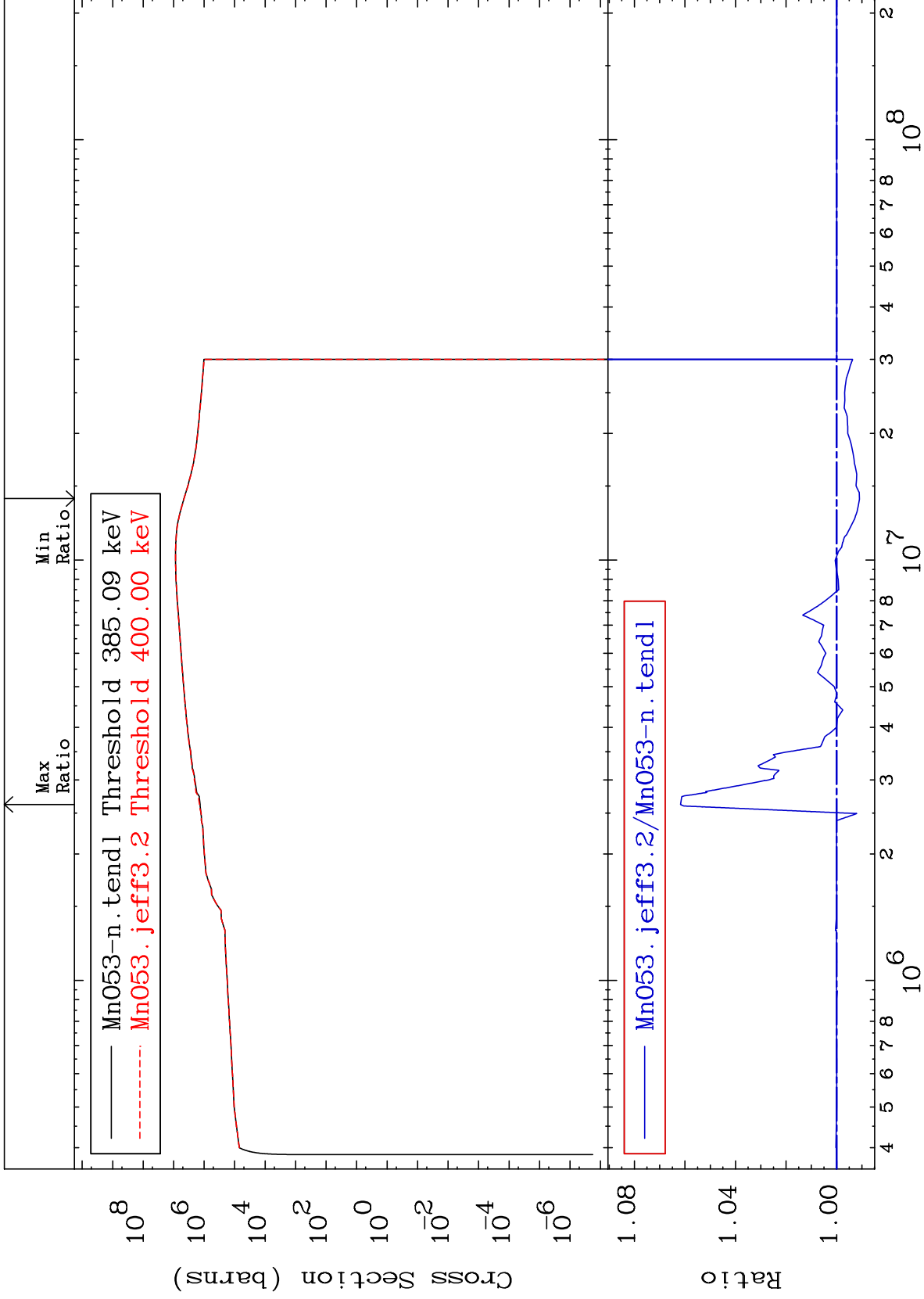
65

²⁵Mn-53





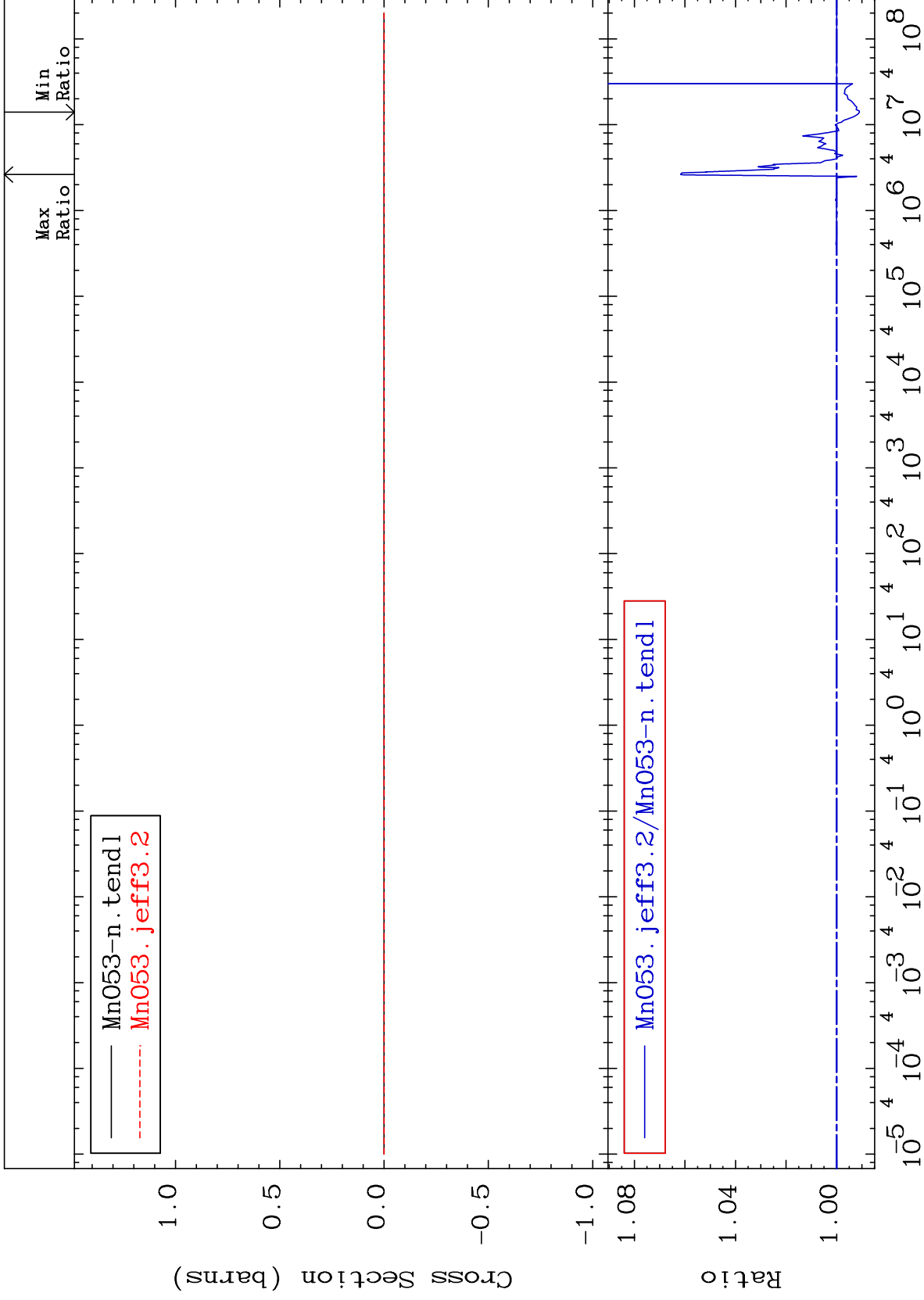




MAT 2519

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

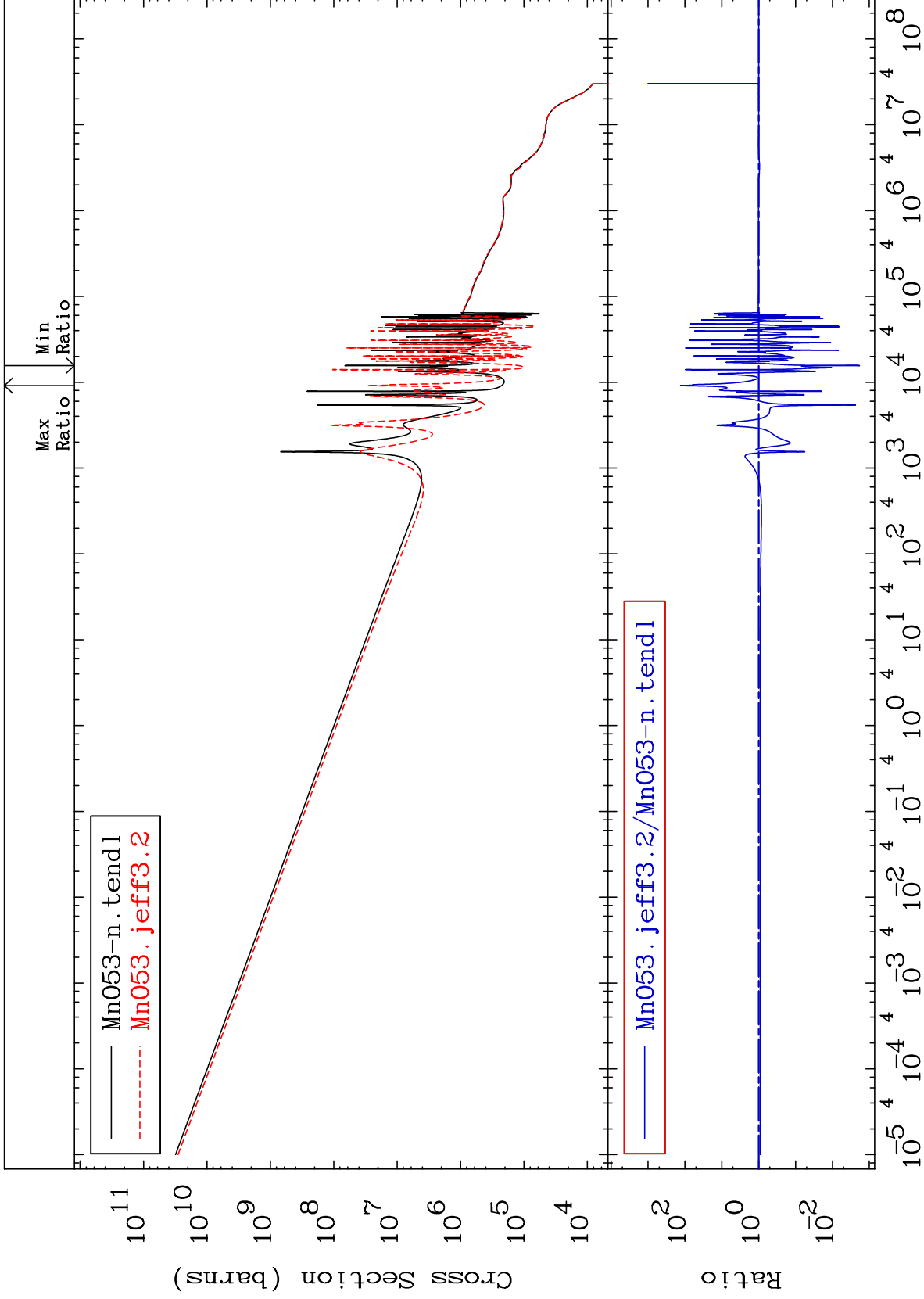
25-Mn-53
-0.903 To 6.182 %

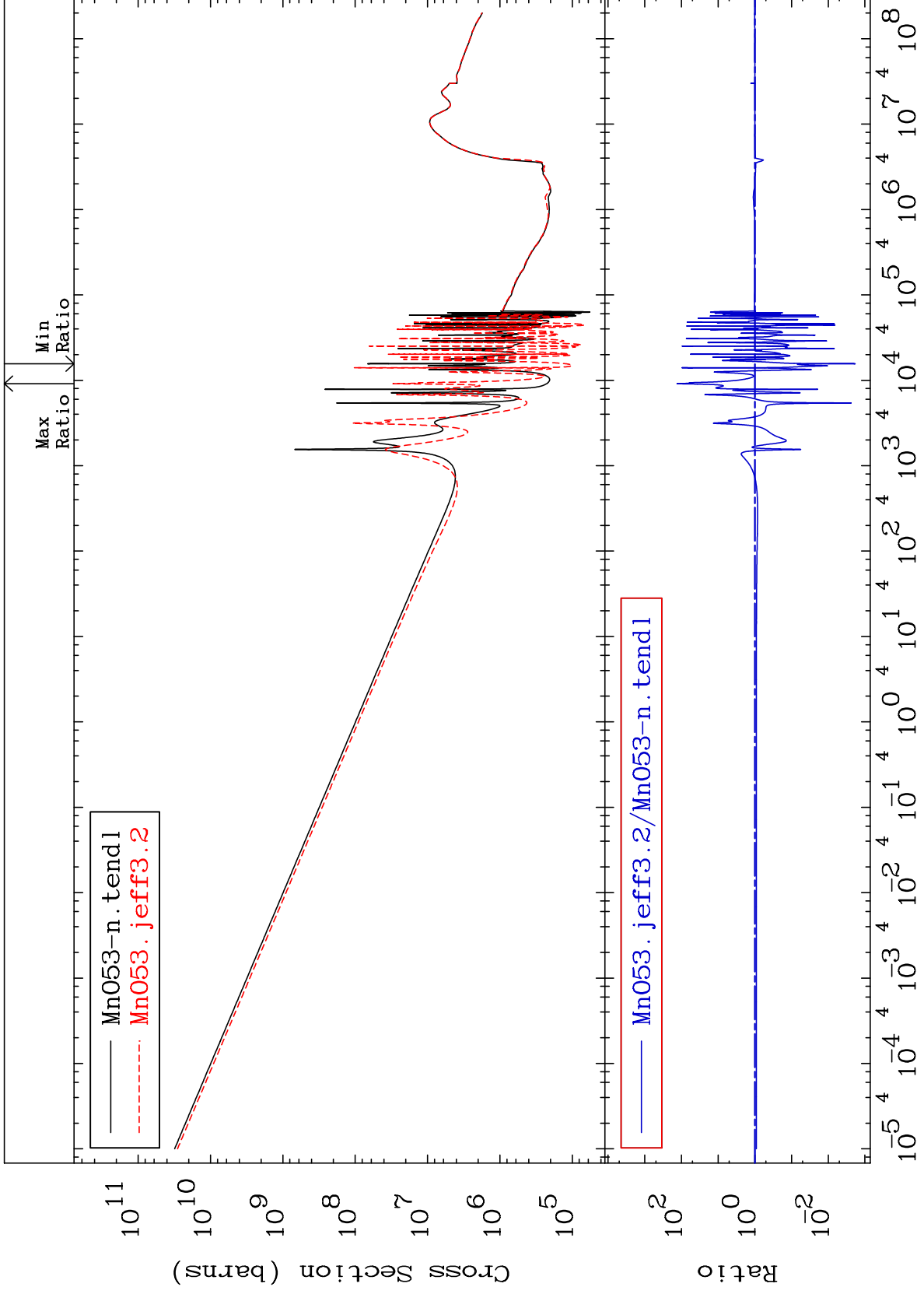


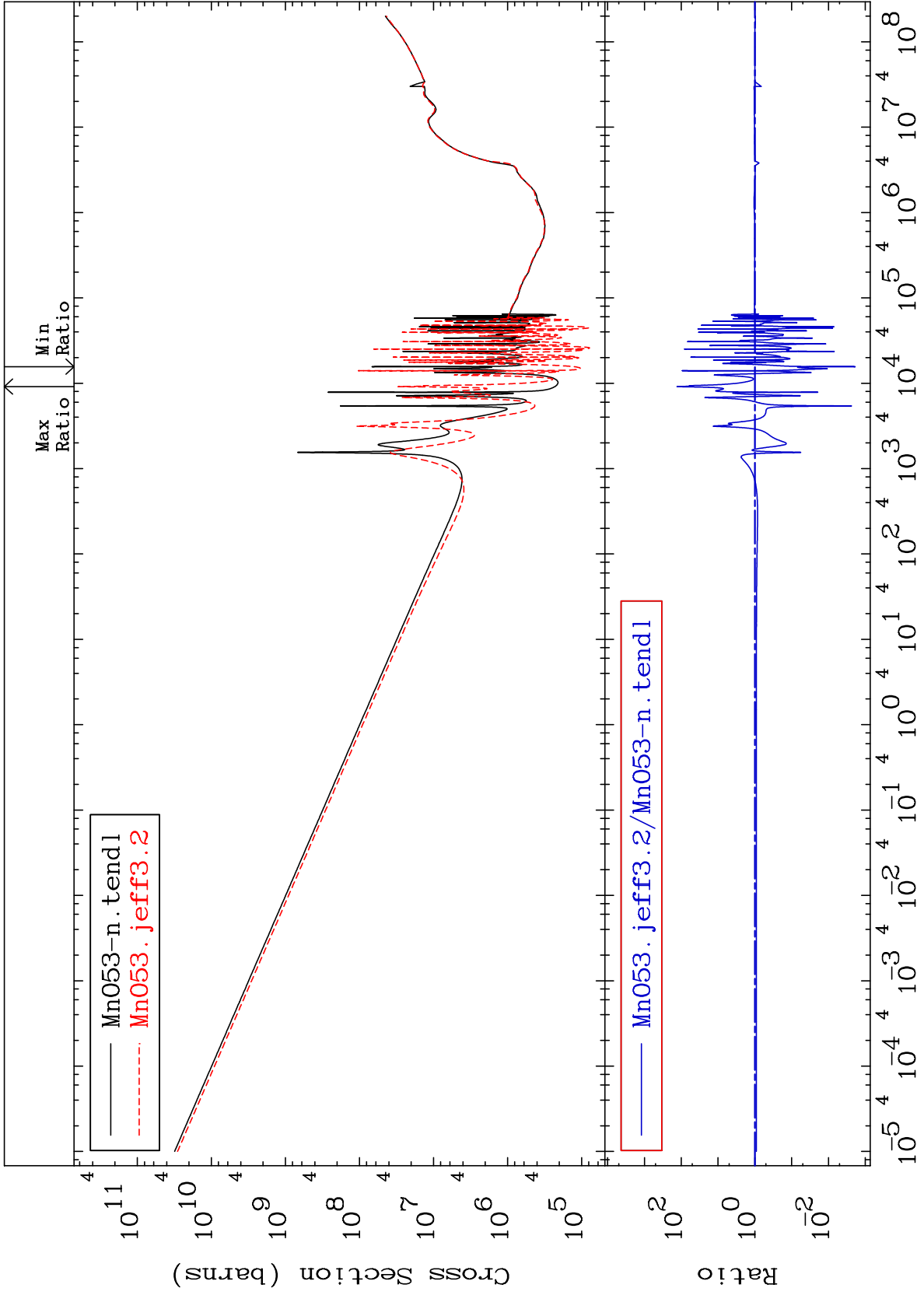
70

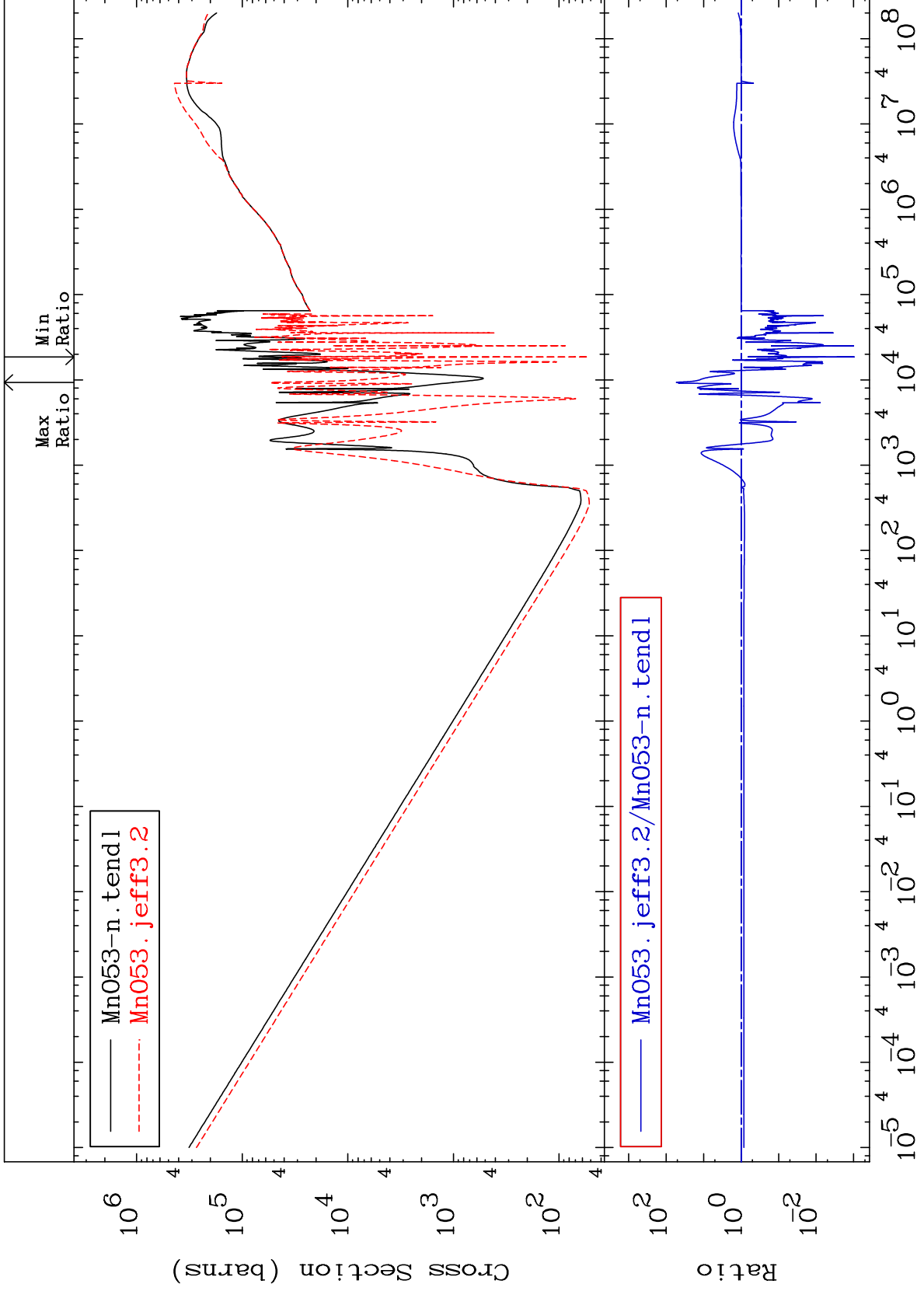
Incident Energy (eV)

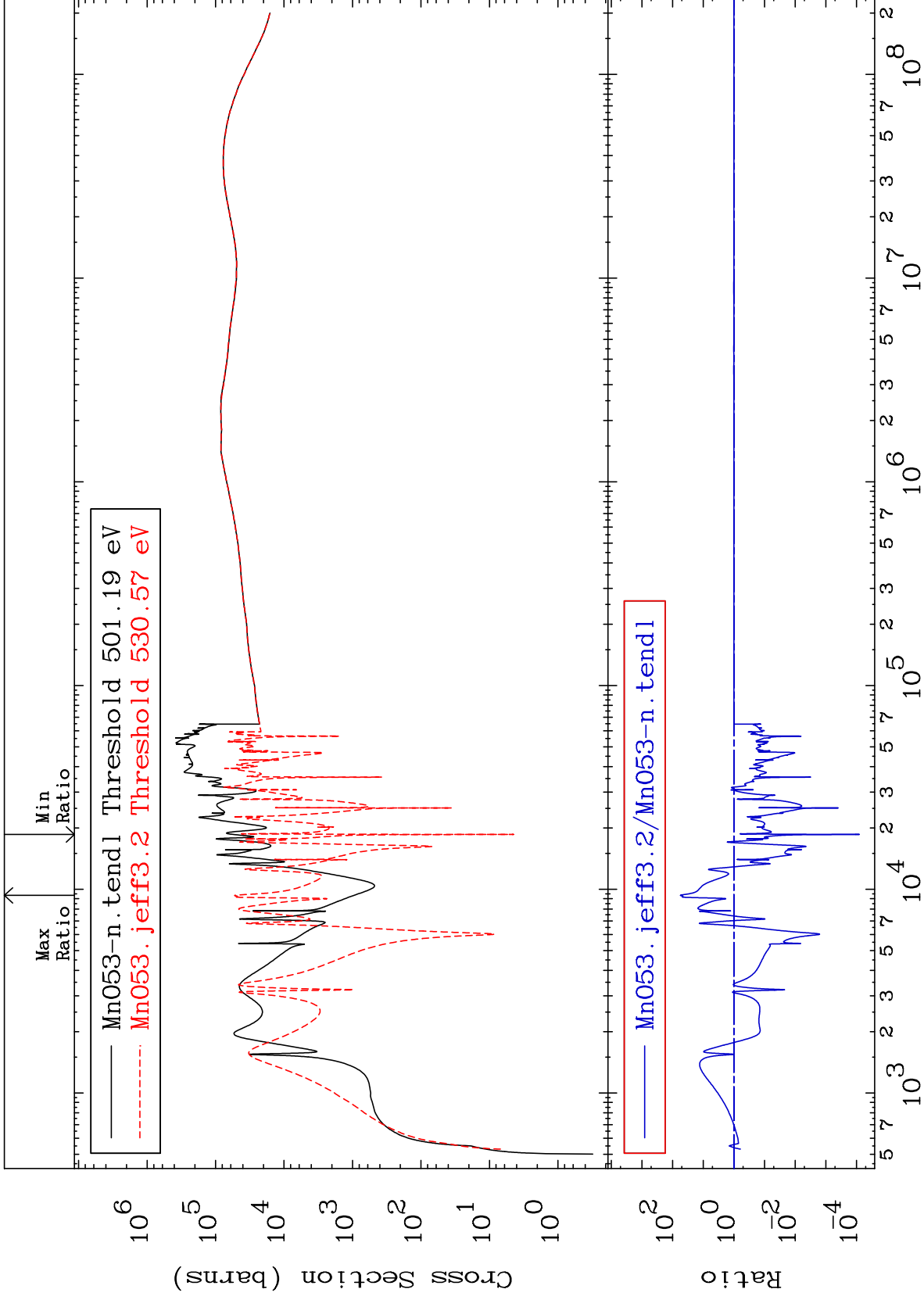
25-Mn-53

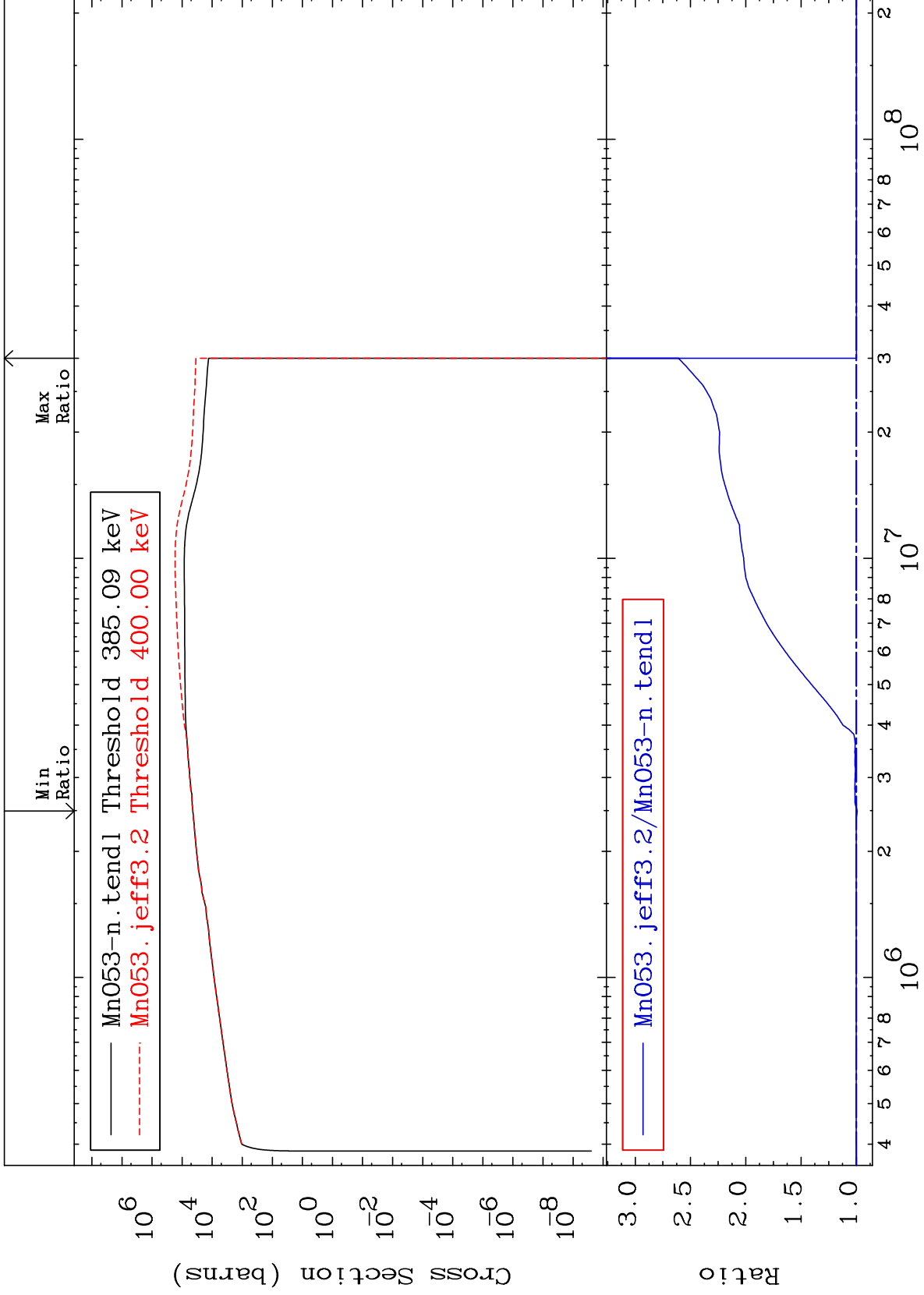


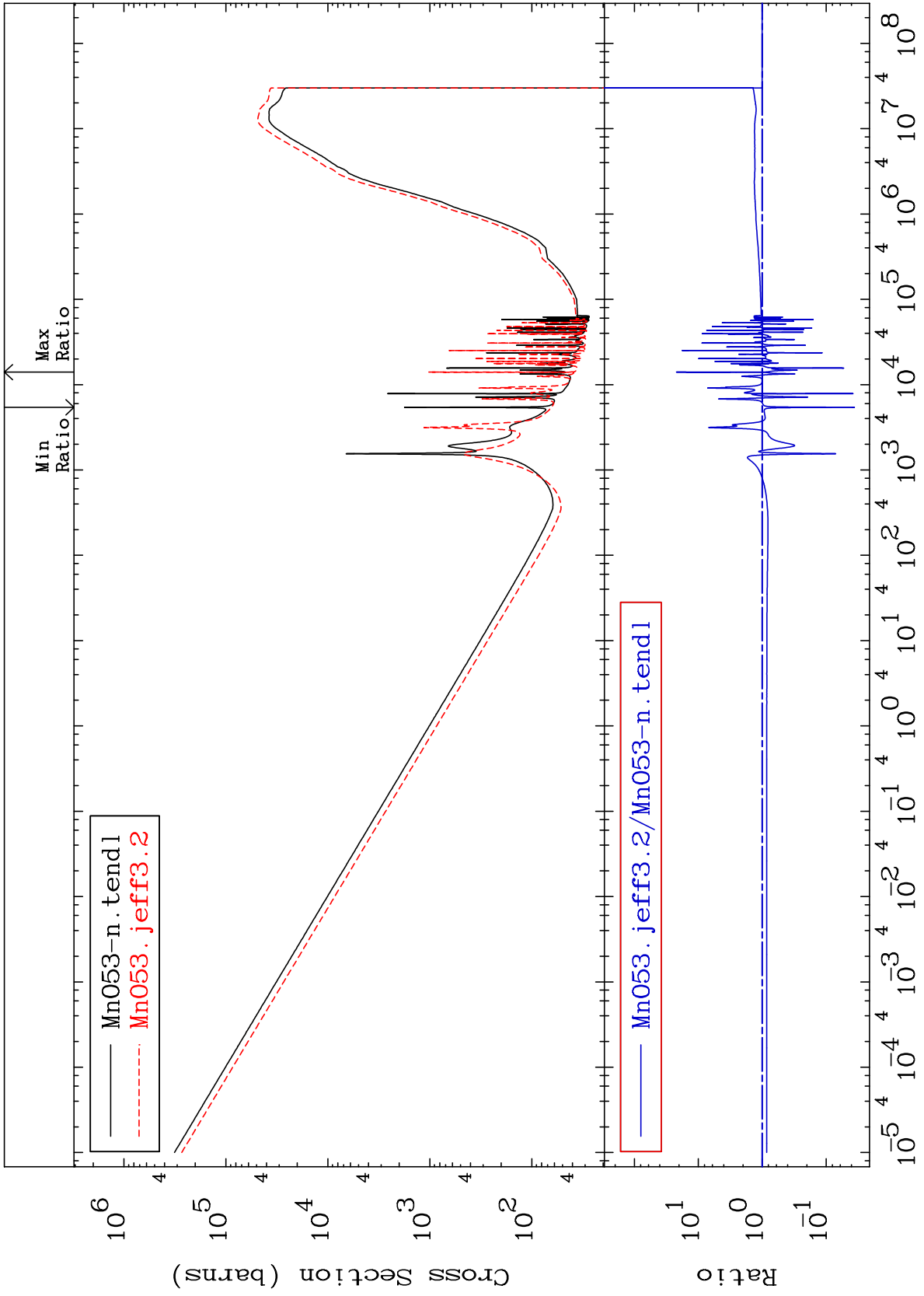


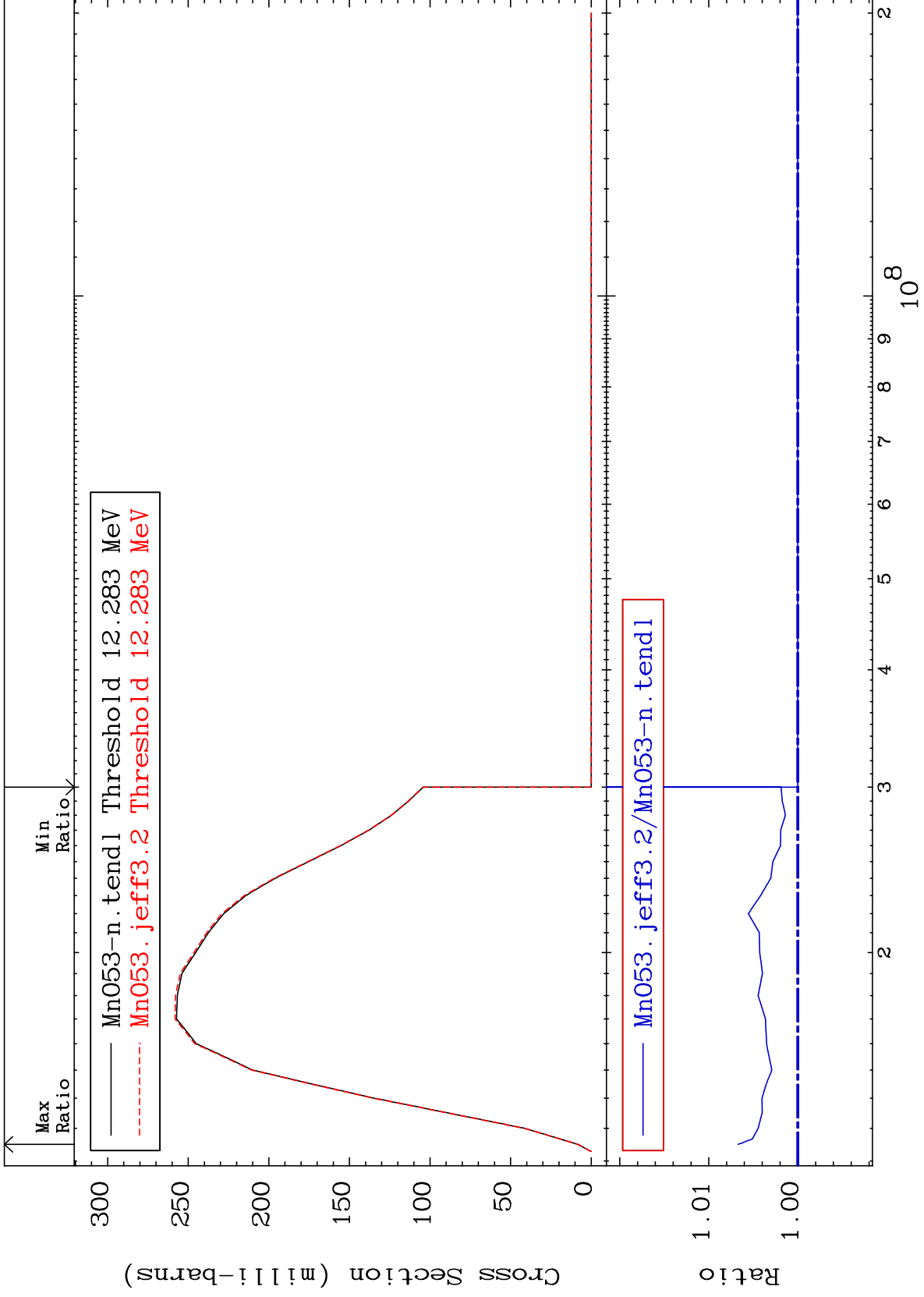




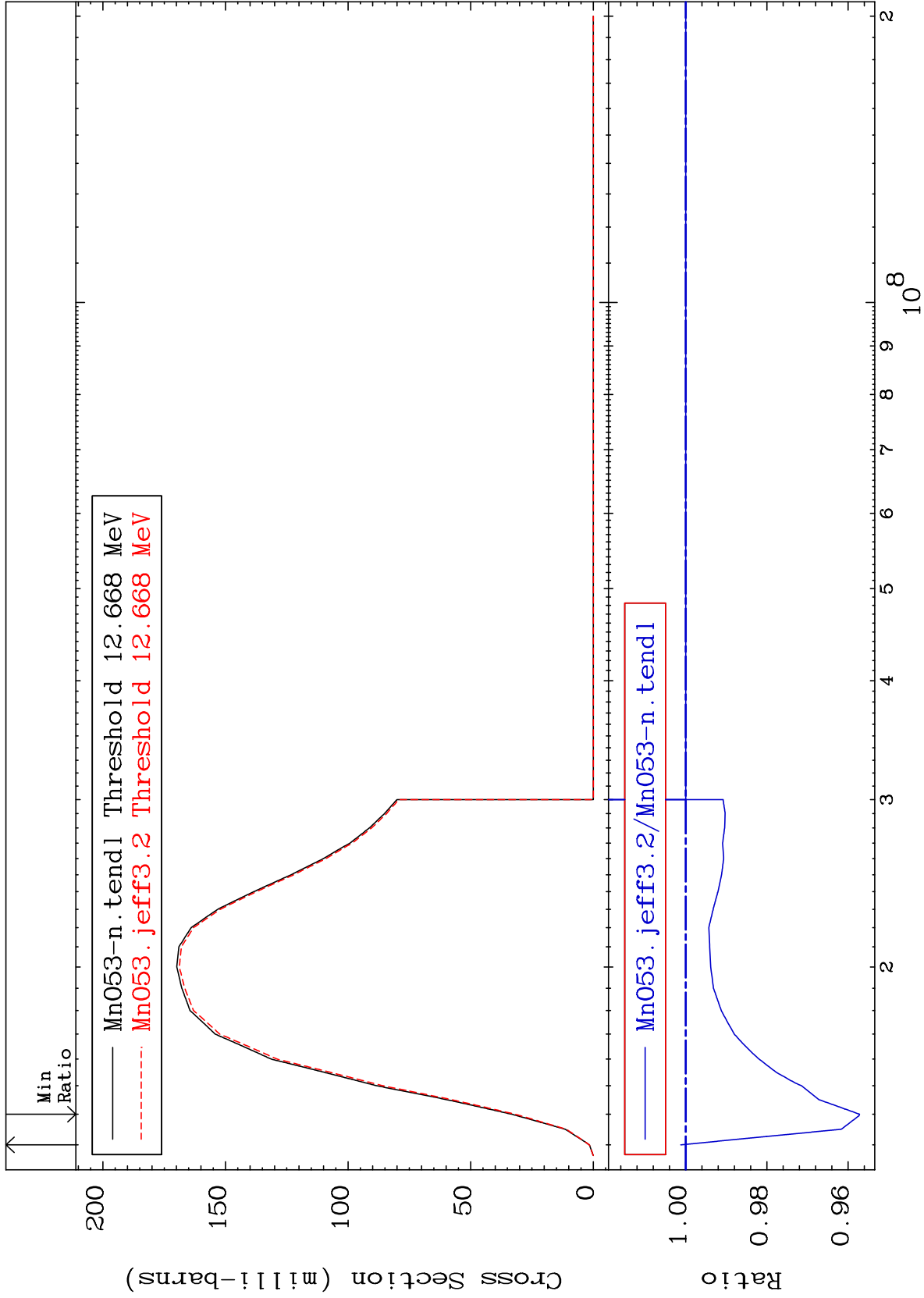




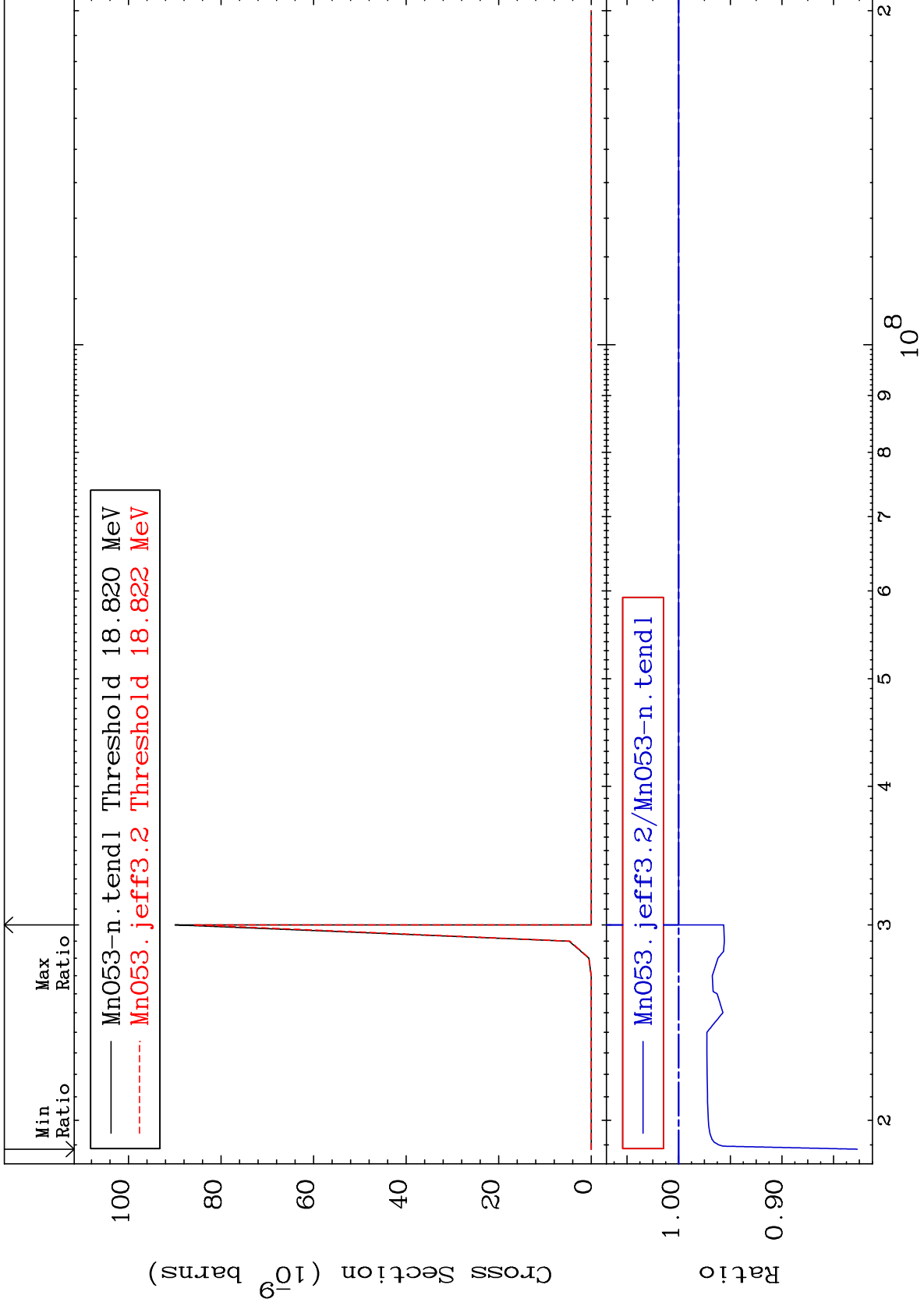




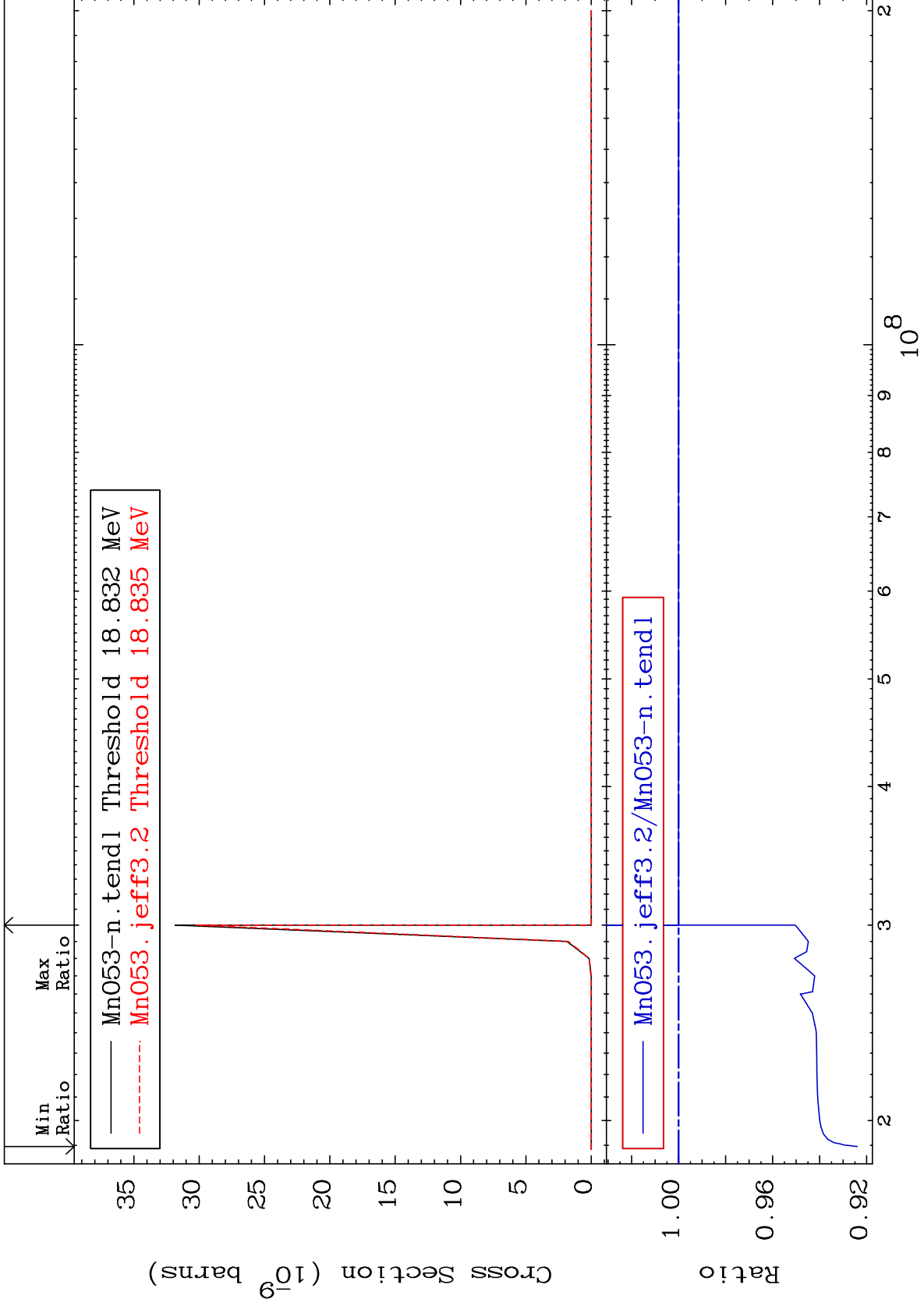
Radionuclide Production Cross Section -4.280 To 0.121 %



Radionuclide Production Cross Section -17.29 To 0.000 %



Radionuclide Production Cross Section -7.598 To 0.000 %



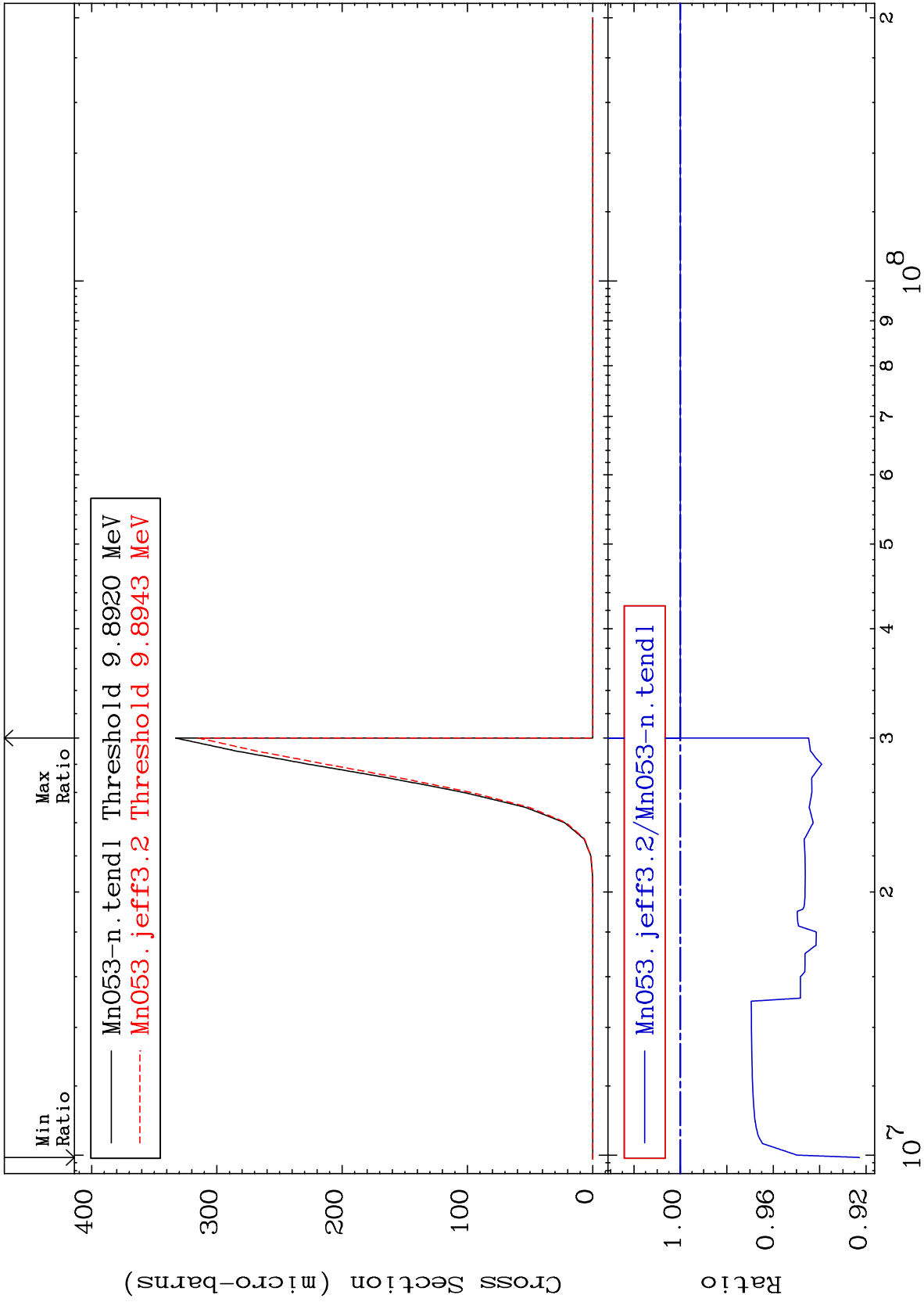
MAT 2519

(n,2α):21-Sc-46g

25-Mn-53

Radionuclide Production Cross Section

-7.714 To 0.000 %



82

Incident Energy (eV)

25-Mn-53

Radionuclide Production Cross Section -4.362 To 0.000 %

