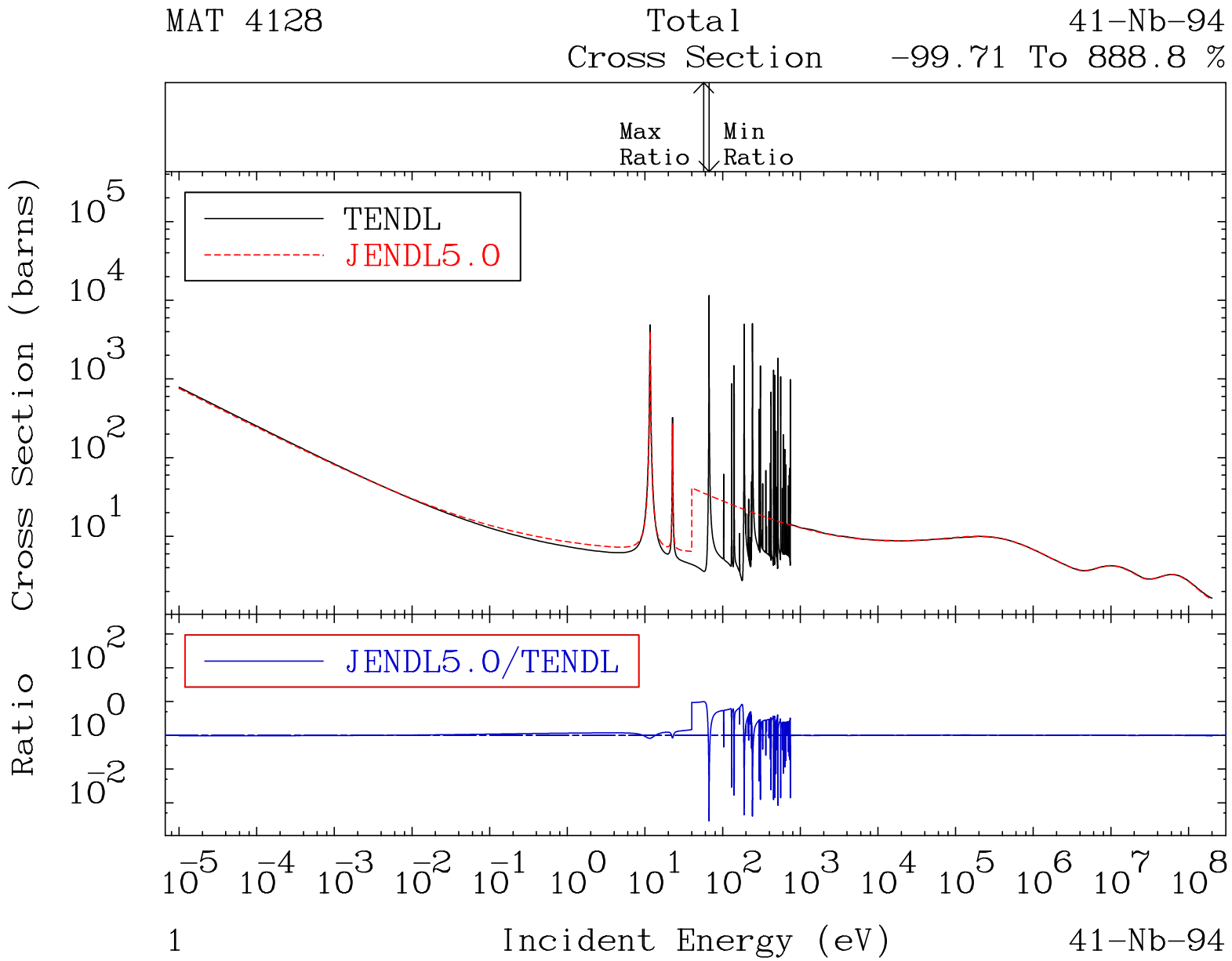
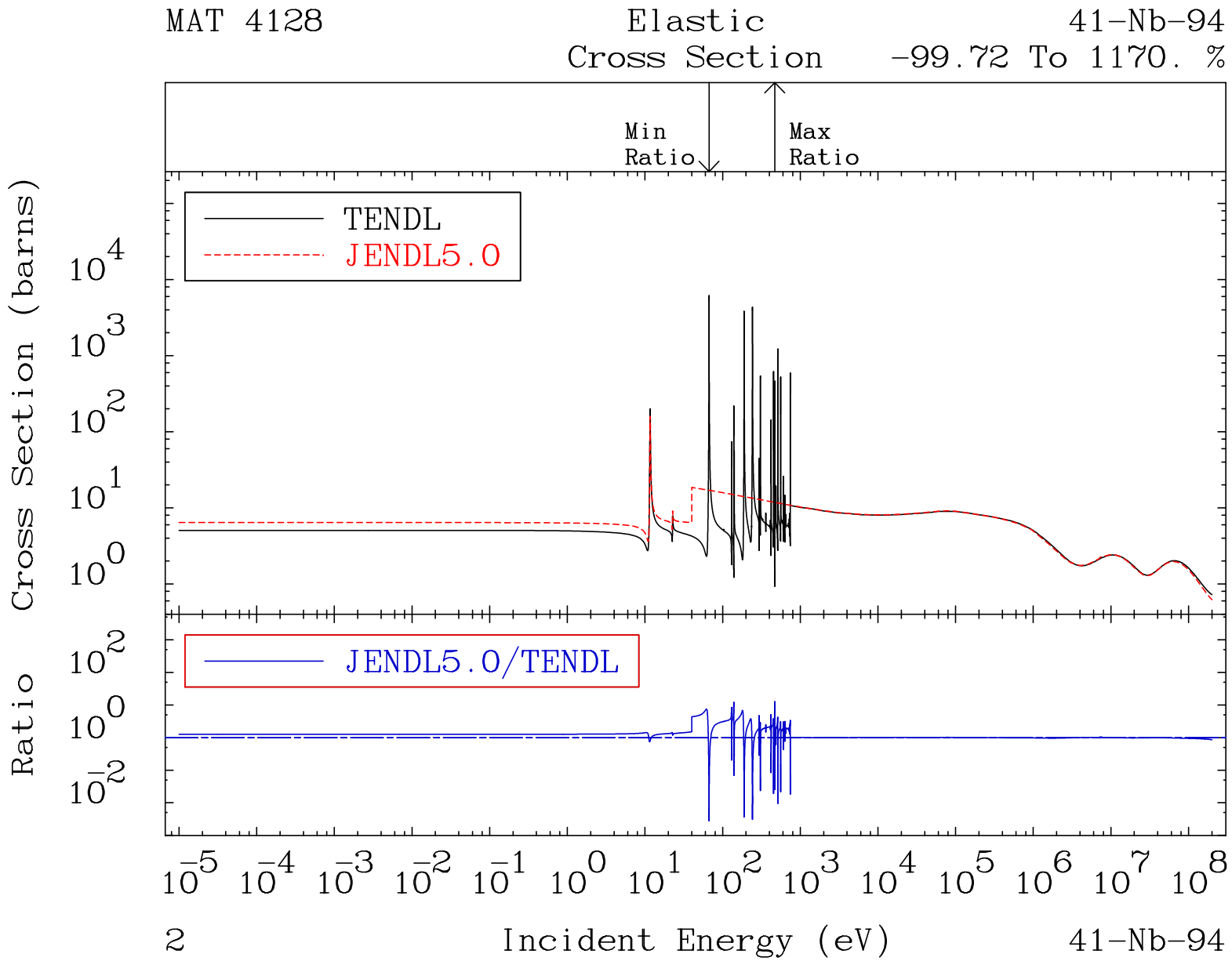
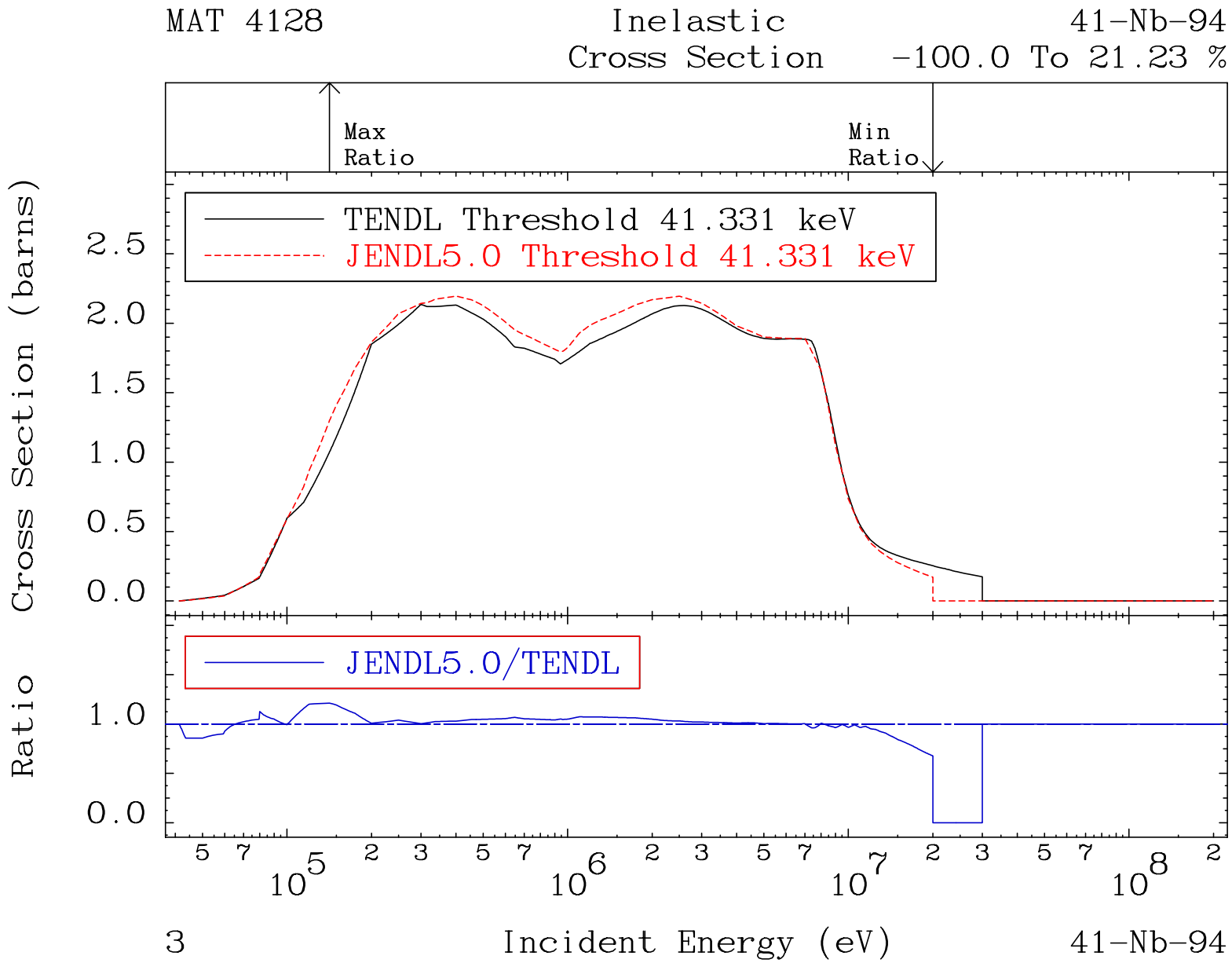
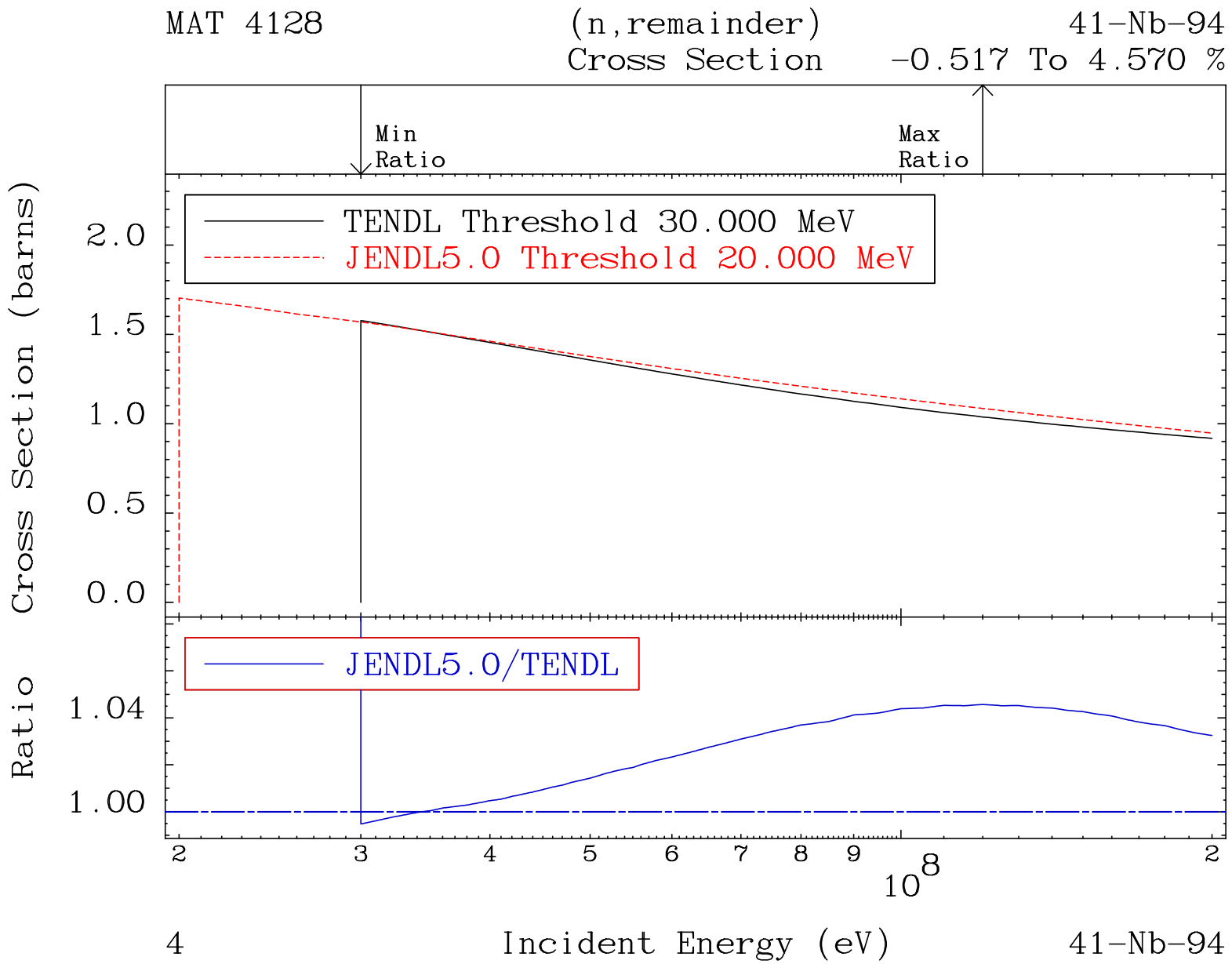
Program Complot
(Version 2021-1)
by
Dermott E. Cullen
(Present Contact Information)
Dermott E. Cullen
1466 Hudson Way
Livermore, CA 94550
U.S.A.
Tele: 925-443-1911
E.Mail:redcullen1@comcast.net
Web:redcullen1.net/HOMEPAGE.NEW

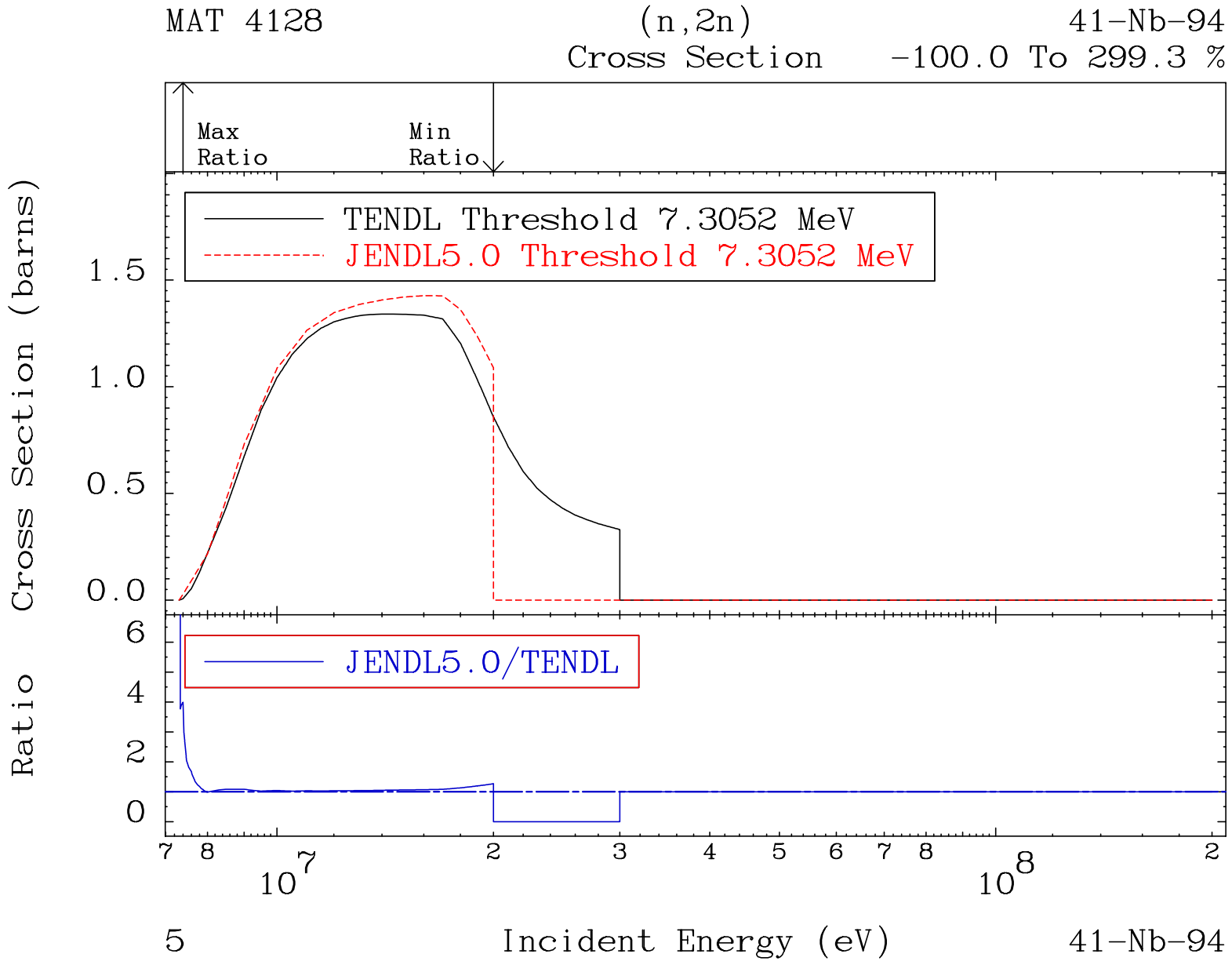
Press Mouse Button to Start

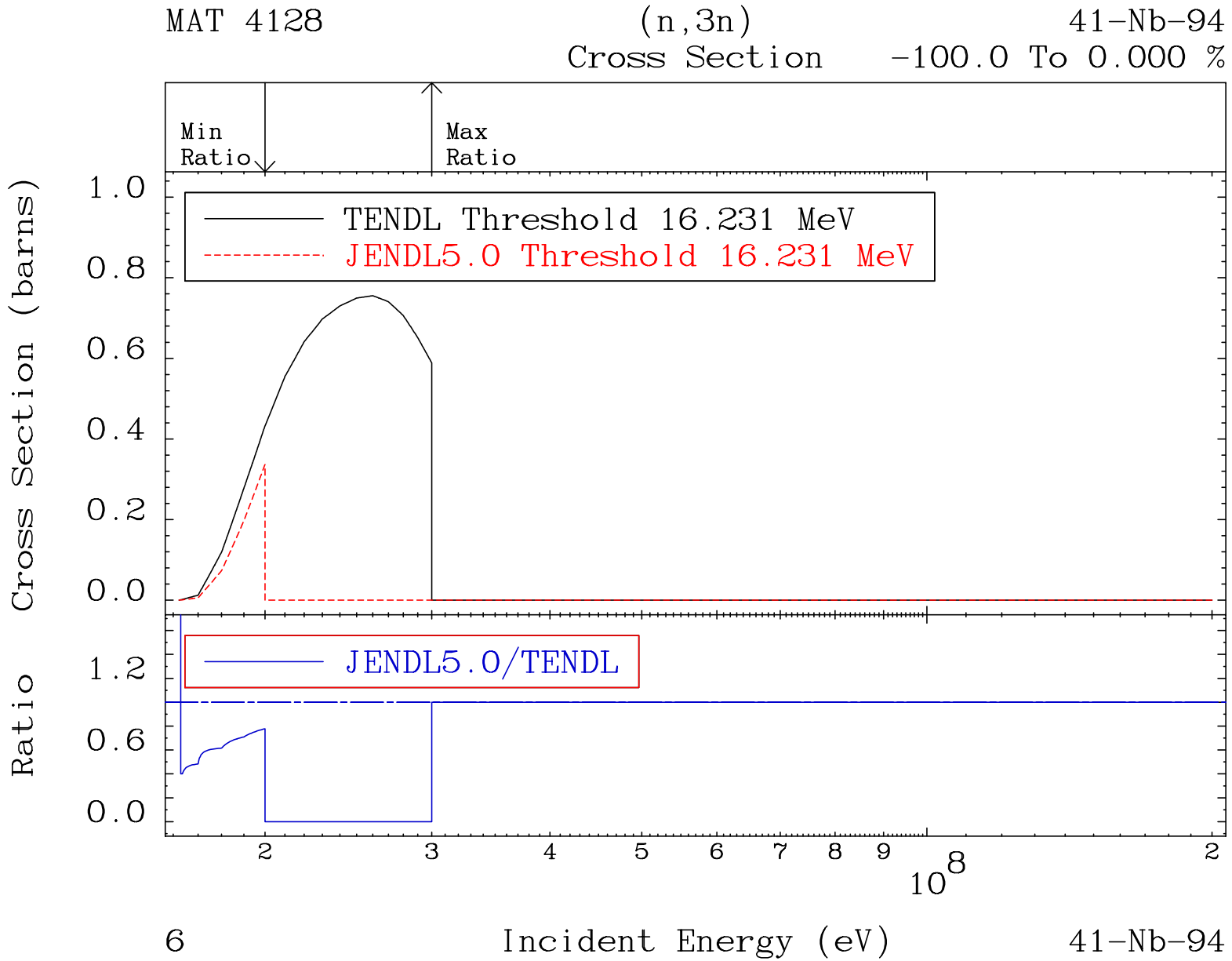

MAT 4128
Total
Cross Section
41-Nb-94
-99.71 To 888.8 %
Max
Ratio
Min
Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
1
41-Nb-94

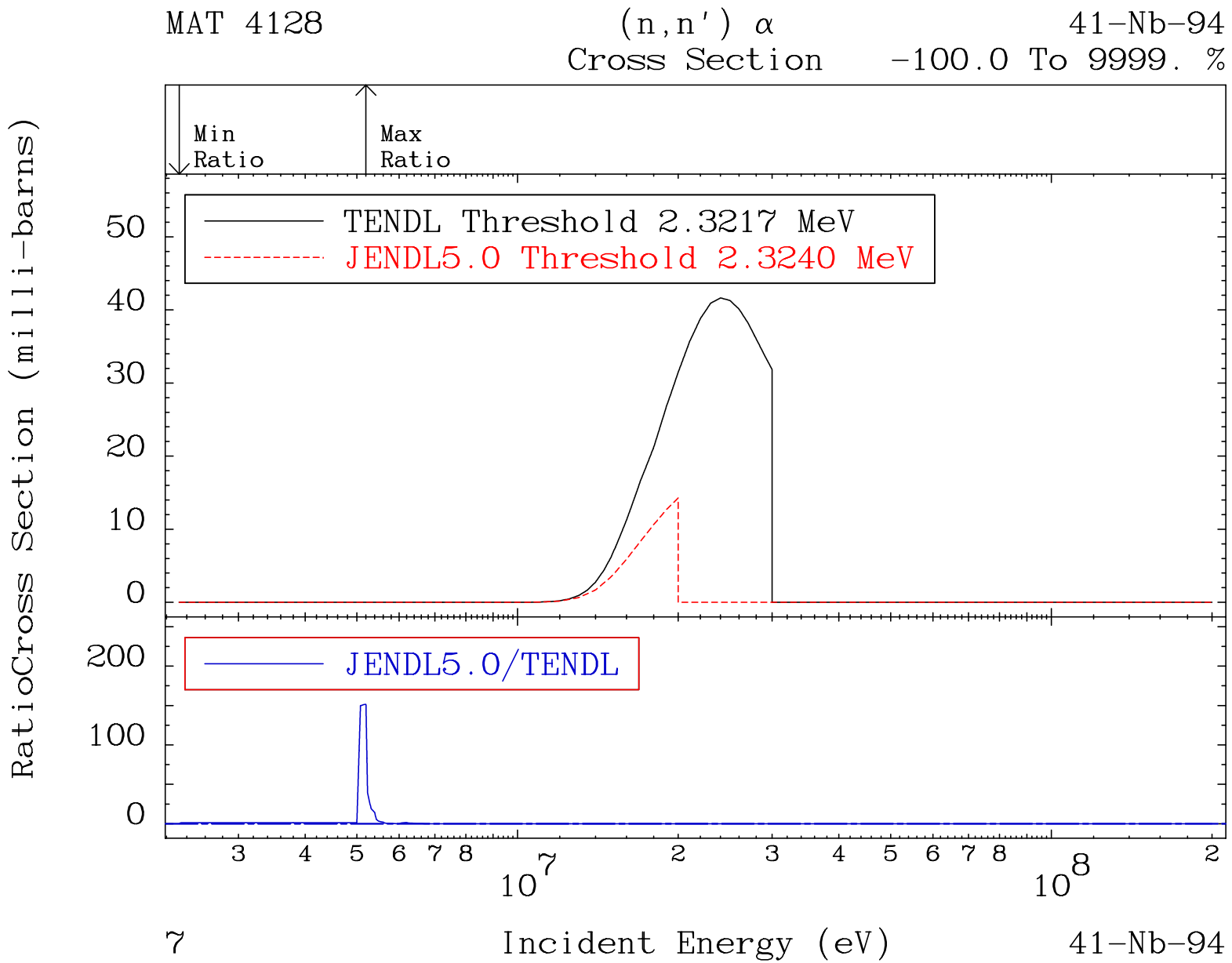

MAT 4128
Elastic
Cross Section
41-Nb-94
-99.72 To 1170. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
2
41-Nb-94

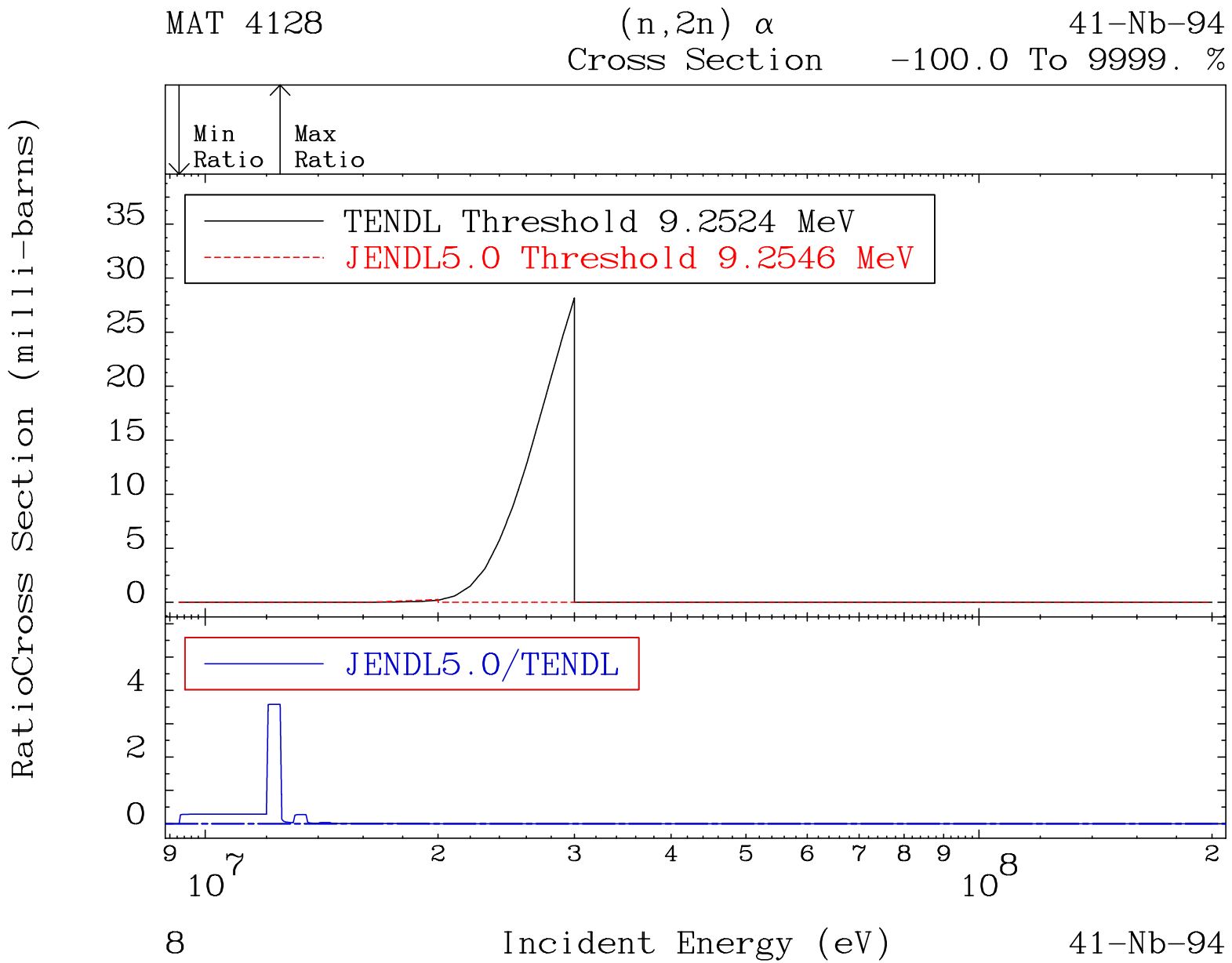

MAT 4128
Inelastic
Cross Section
41-Nb-94
-100.0 To 21.23 %
Max
Ratio
Min
Ratio
TENDL Threshold 41.331 keV
JENDL5.0 Threshold 41.331 keV
Cross Section (barns)
2.5
2.0
1.5
1.0
0.5
0.0
JENDL5.0/TENDL
Ratio
1.0
0.0
5 7 10^5 2 3 5 7 10^6 2 3 5 7 10^7 2 3 5 7 10^8 2
3
Incident Energy (eV)
41-Nb-94

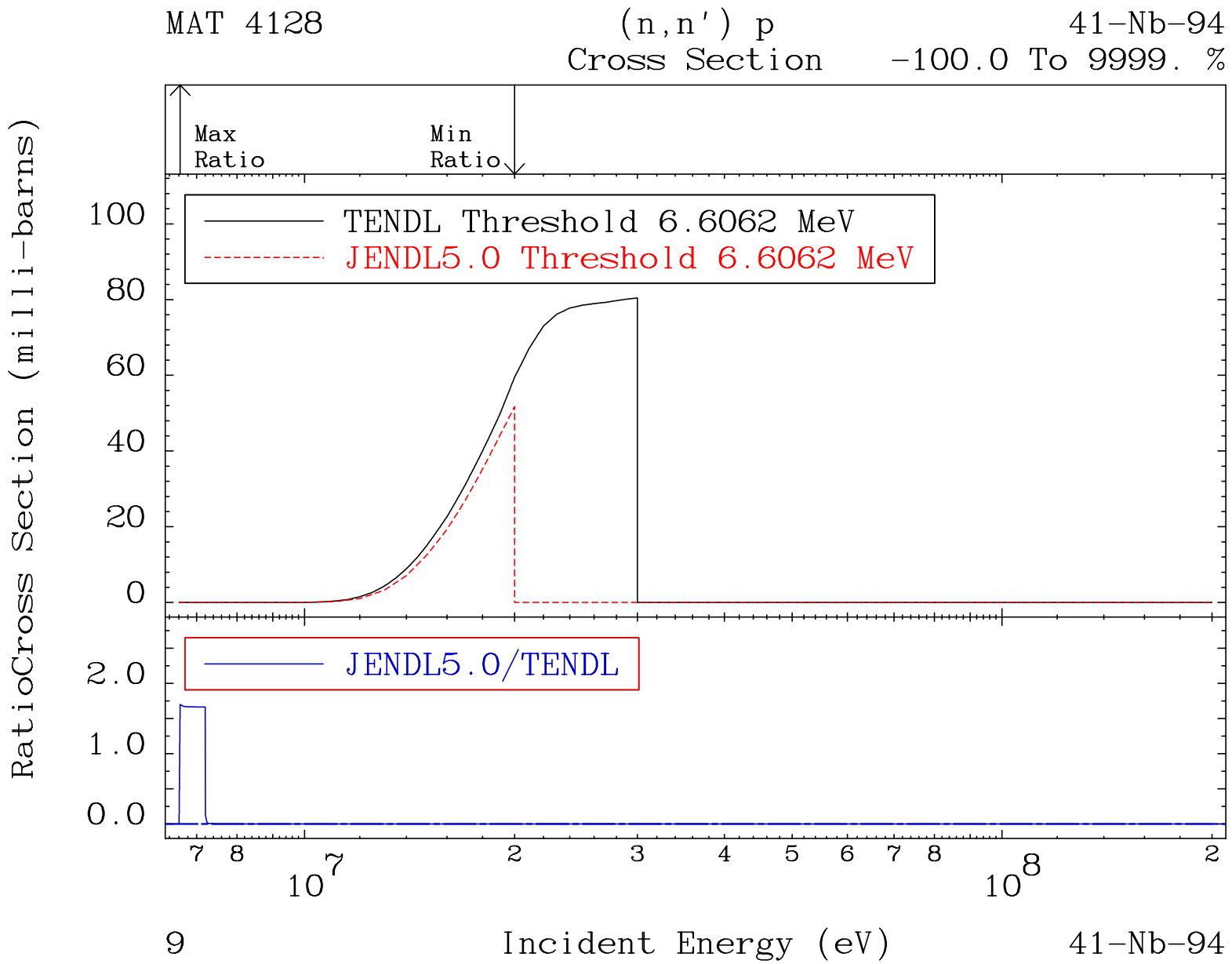

MAT 4128
(n,remainder)
Cross Section
41-Nb-94
-0.517 To 4.570 %
Min
Ratio
Max
Ratio
TENDL Threshold 30.000 MeV
JENDL5.0 Threshold 20.000 MeV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
2.0
1.5
1.0
0.5
0.0
1.04
1.00
2
3
4
5
6
7
8
9
2
10^8
4
Incident Energy (eV)
41-Nb-94

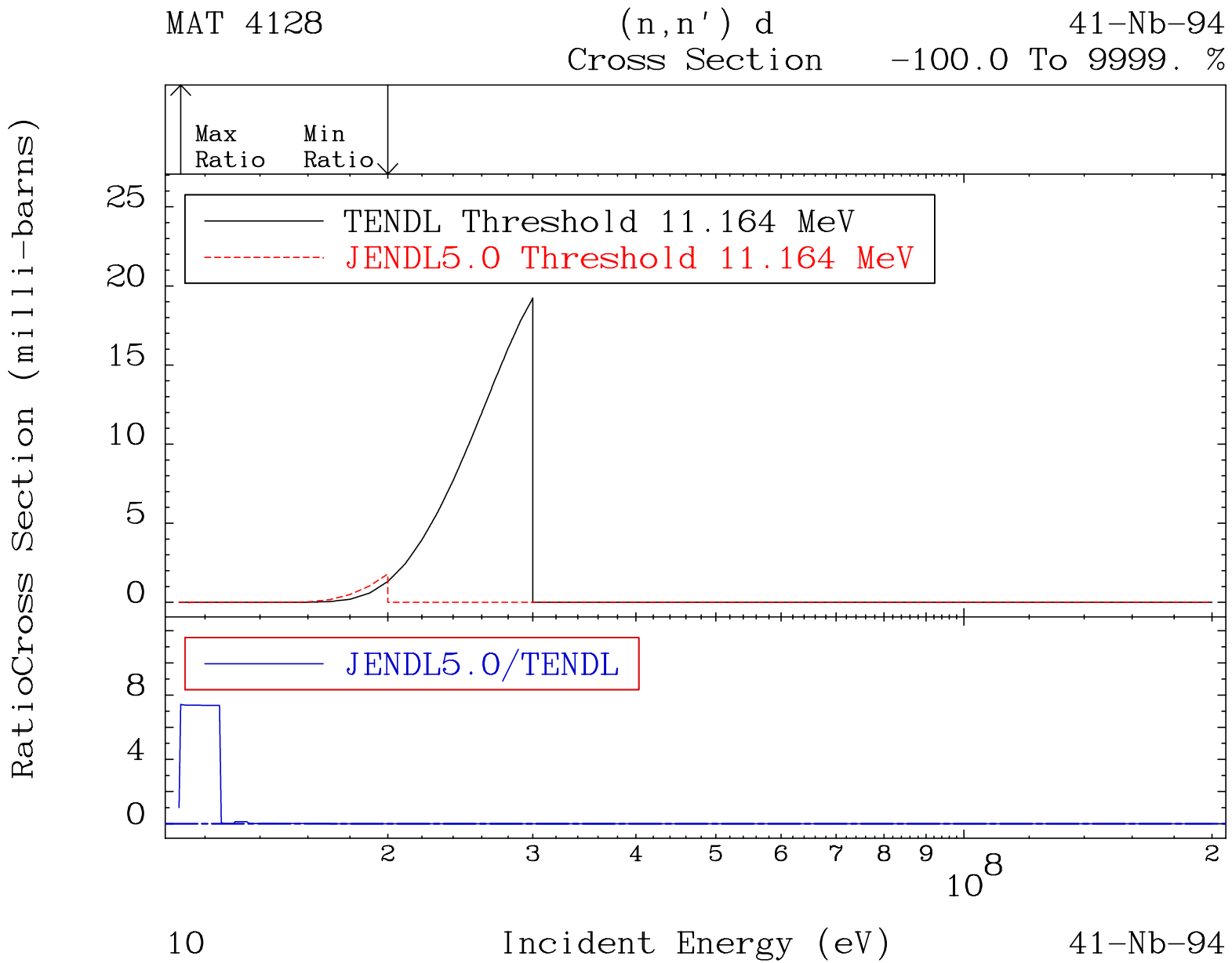

MAT 4128
(n,2n)
Cross Section
41-Nb-94
-100.0 To 299.3 %
Max Ratio
Min Ratio
TENDL Threshold 7.3052 MeV
JENDL5.0 Threshold 7.3052 MeV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
1.5
1.0
0.5
0.0
6
4
2
0
7 8 10^7 2 3 4 5 6 7 8 10^8 2
Incident Energy (eV)
5
41-Nb-94

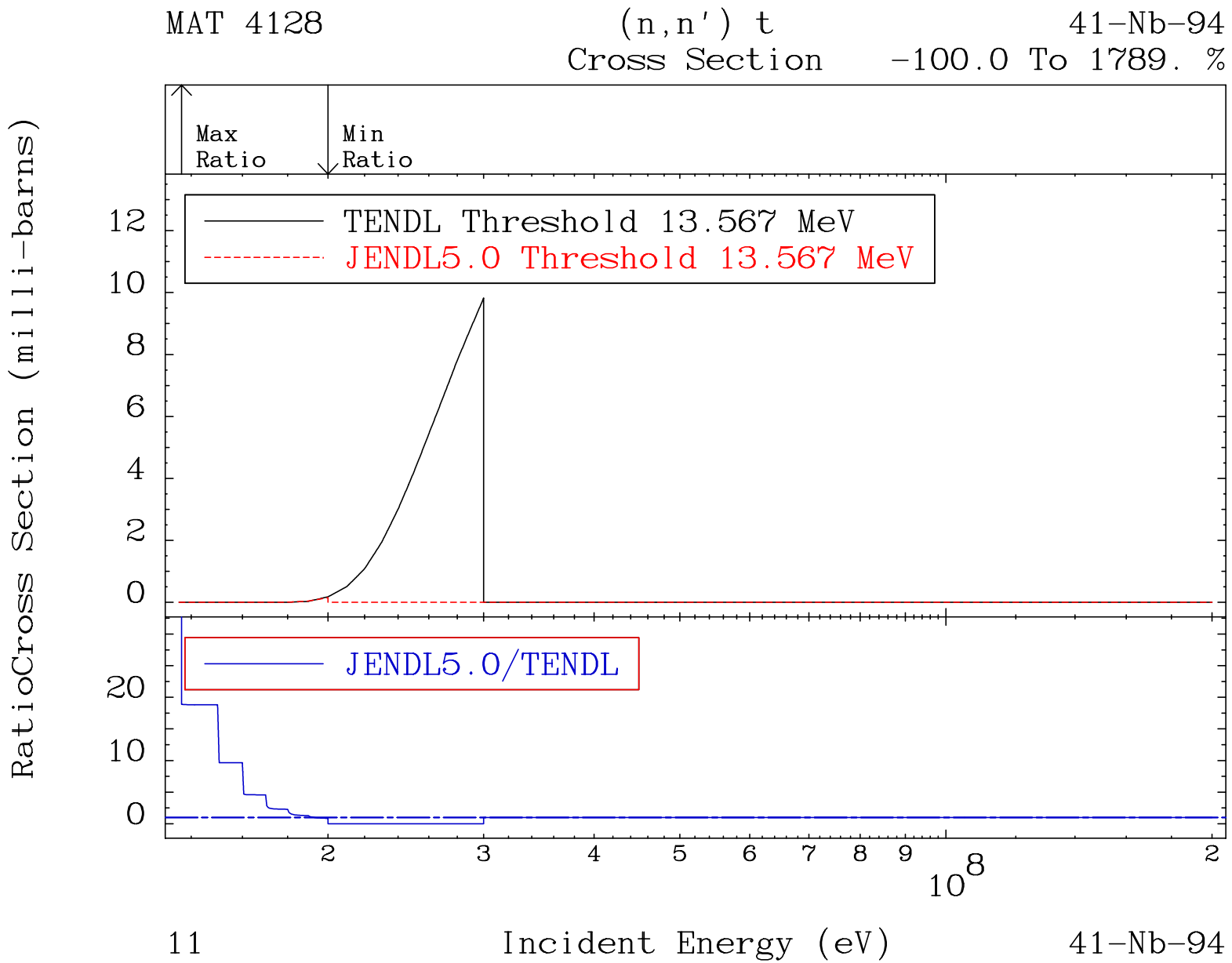

MAT 4128
(n,3n)
41-Nb-94
Cross Section
-100.0 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 16.231 MeV
JENDL5.0 Threshold 16.231 MeV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
1.0
0.8
0.6
0.4
0.2
0.0
1.2
0.6
0.0
2
3
4
5
6
7
8
9
10^8
2
6
Incident Energy (eV)
41-Nb-94

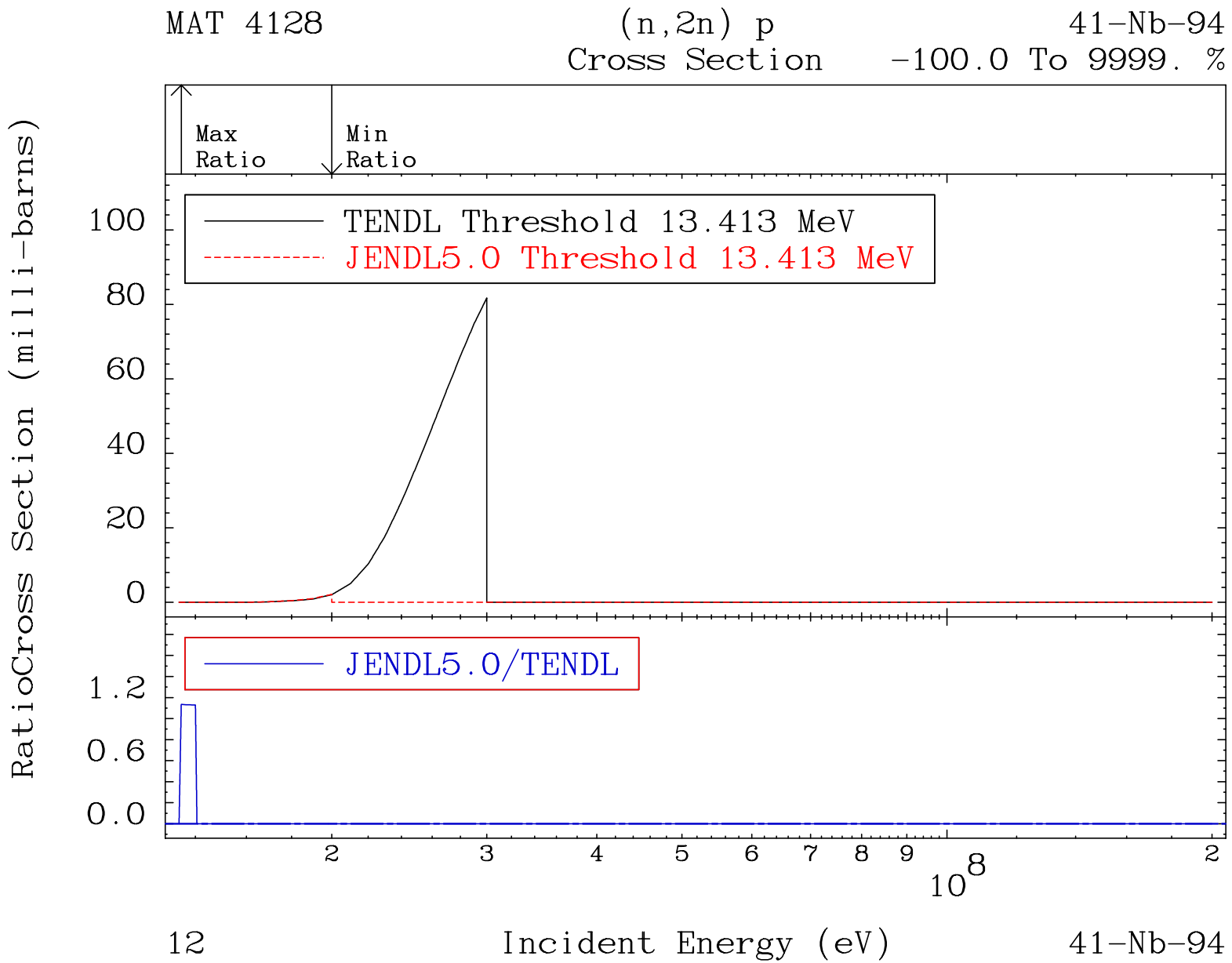

MAT 4128
(n,n') α
Cross Section
41-Nb-94
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 2.3217 MeV
JENDL5.0 Threshold 2.3240 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
50
40
30
20
10
0
200
100
0
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
7
Incident Energy (eV)
41-Nb-94

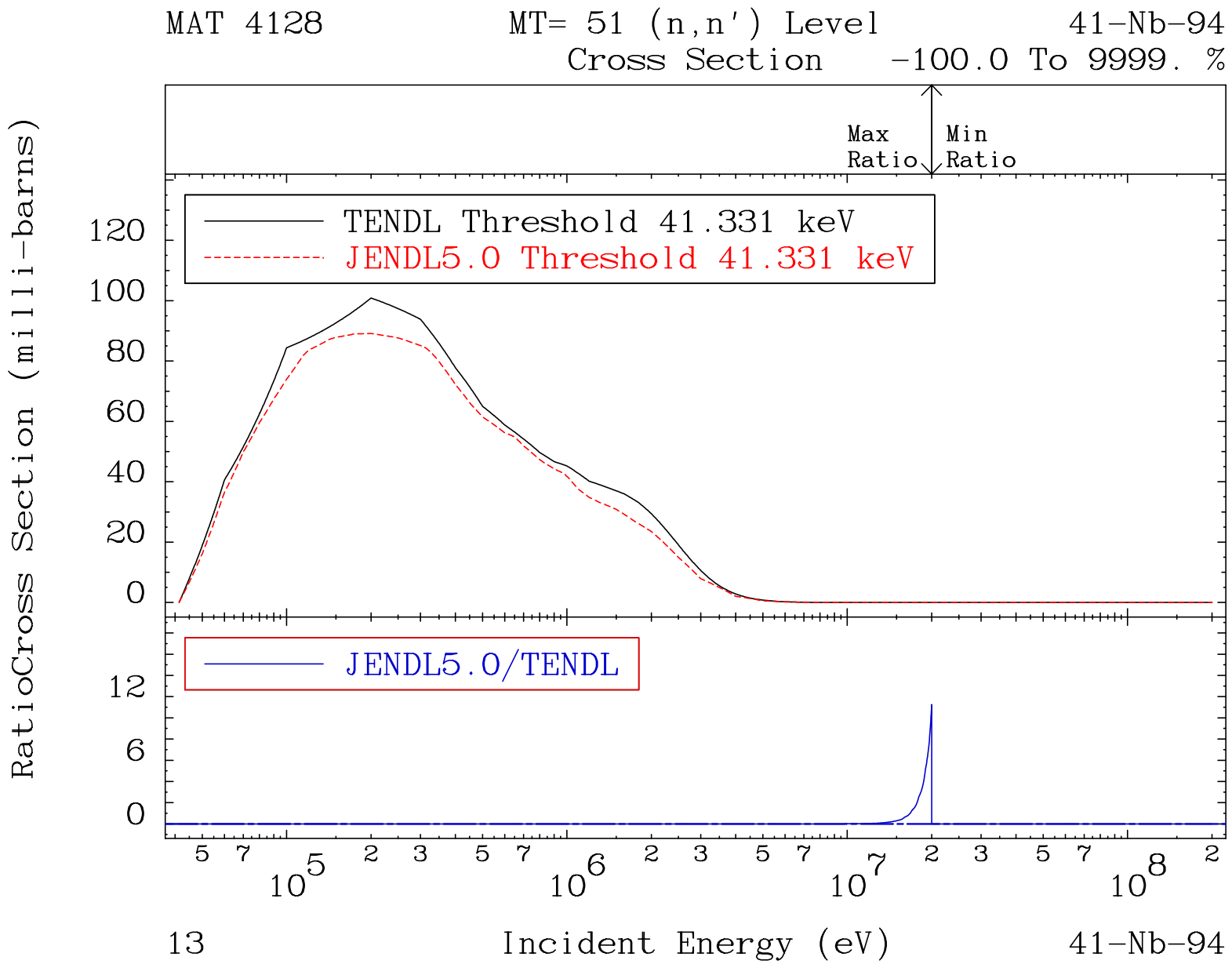

MAT 4128
(n,2n) α
41-Nb-94
Cross Section
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 9.2524 MeV
JENDL5.0 Threshold 9.2546 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
35
30
25
20
15
10
5
0
4
2
0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
8
Incident Energy (eV)
41-Nb-94

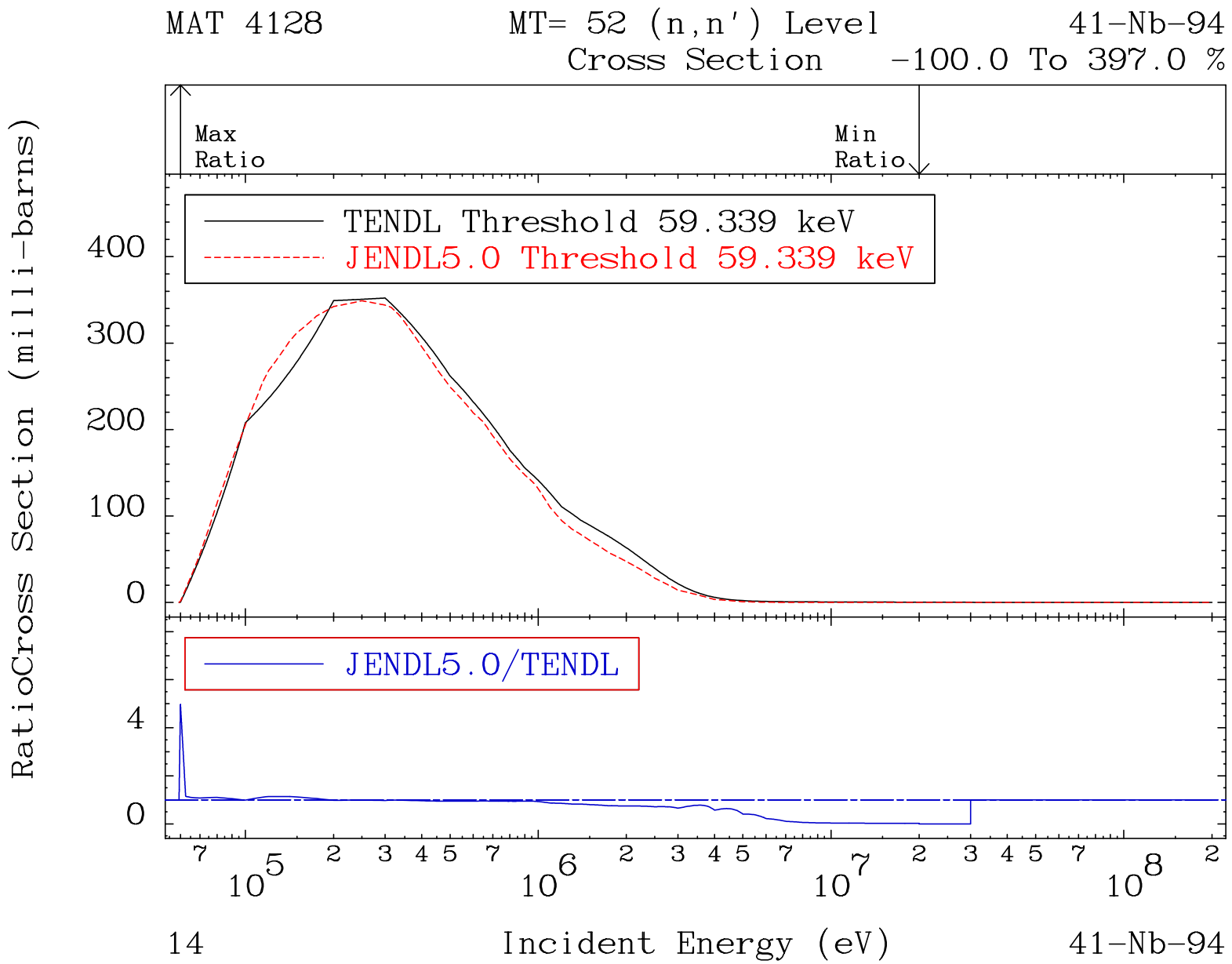

MAT 4128
(n,n') p
Cross Section
41-Nb-94
-100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 6.6062 MeV
JENDL5.0 Threshold 6.6062 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
100
80
60
40
20
0
2.0
1.0
0.0
7 8 10^7 2 3 4 5 6 7 8 10^8 2
Incident Energy (eV)
9
41-Nb-94

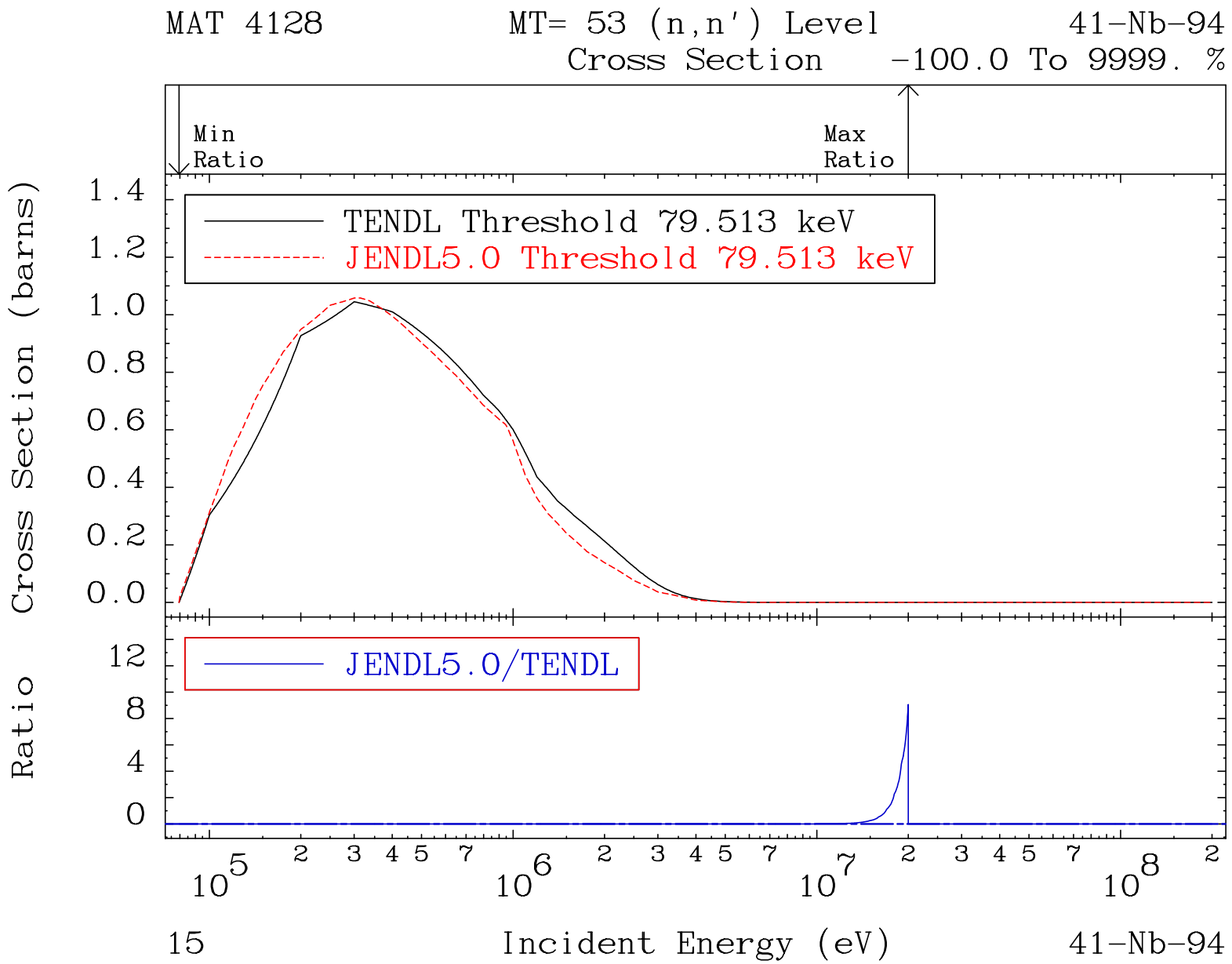

MAT 4128
(n,n') d
Cross Section
41-Nb-94
-100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 11.164 MeV
JENDL5.0 Threshold 11.164 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
25
20
15
10
5
0
8
4
0
2
3
4
5
6
7
8
9
2
10^8
10
Incident Energy (eV)
41-Nb-94

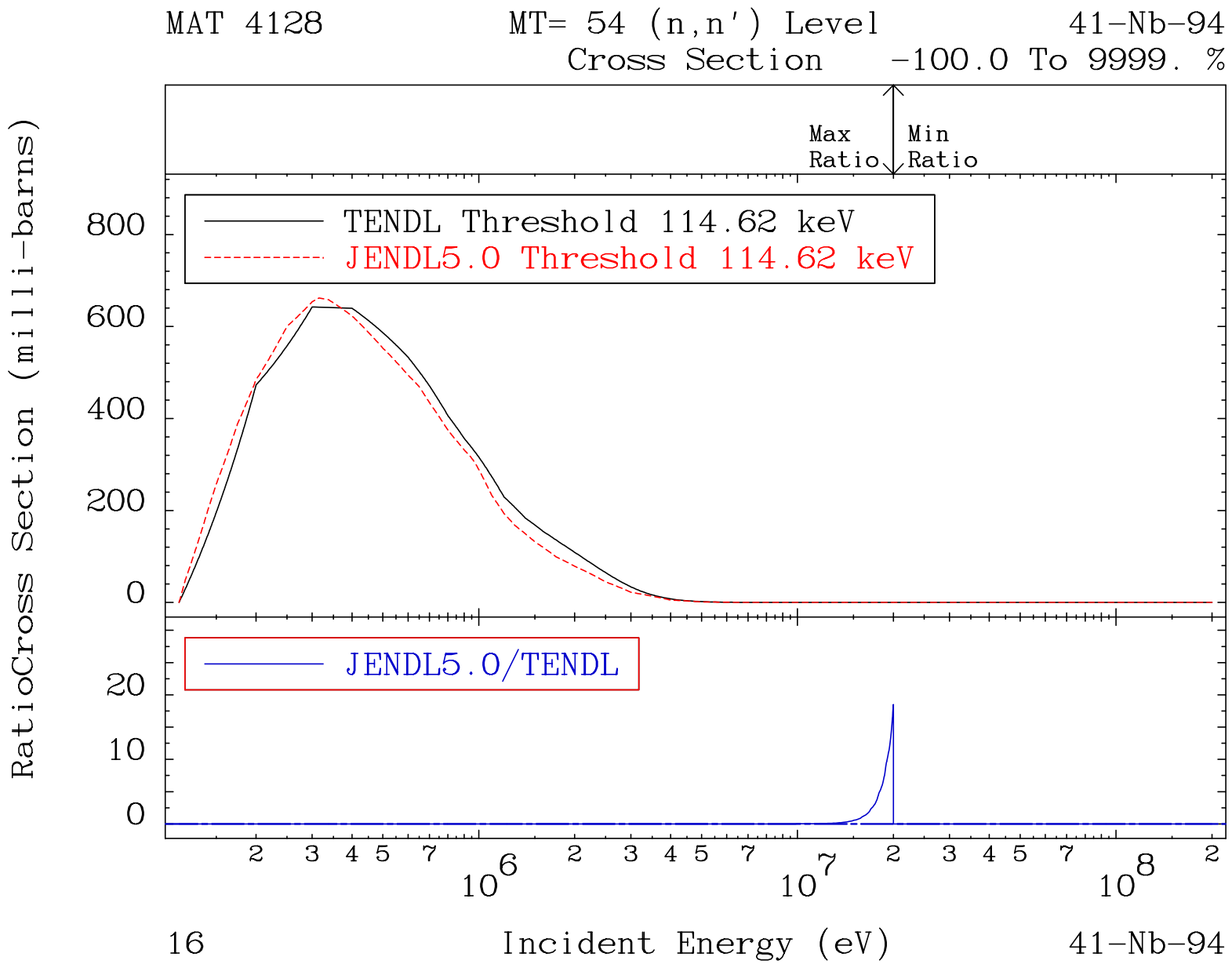

MAT 4128
(n,n') t
Cross Section
41-Nb-94
-100.0 To 1789. %
Max Ratio
Min Ratio
TENDL Threshold 13.567 MeV
JENDL5.0 Threshold 13.567 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
12
10
8
6
4
2
0
20
10
0
2
3
4
5
6
7
8
9
10^8
2
11
Incident Energy (eV)
41-Nb-94

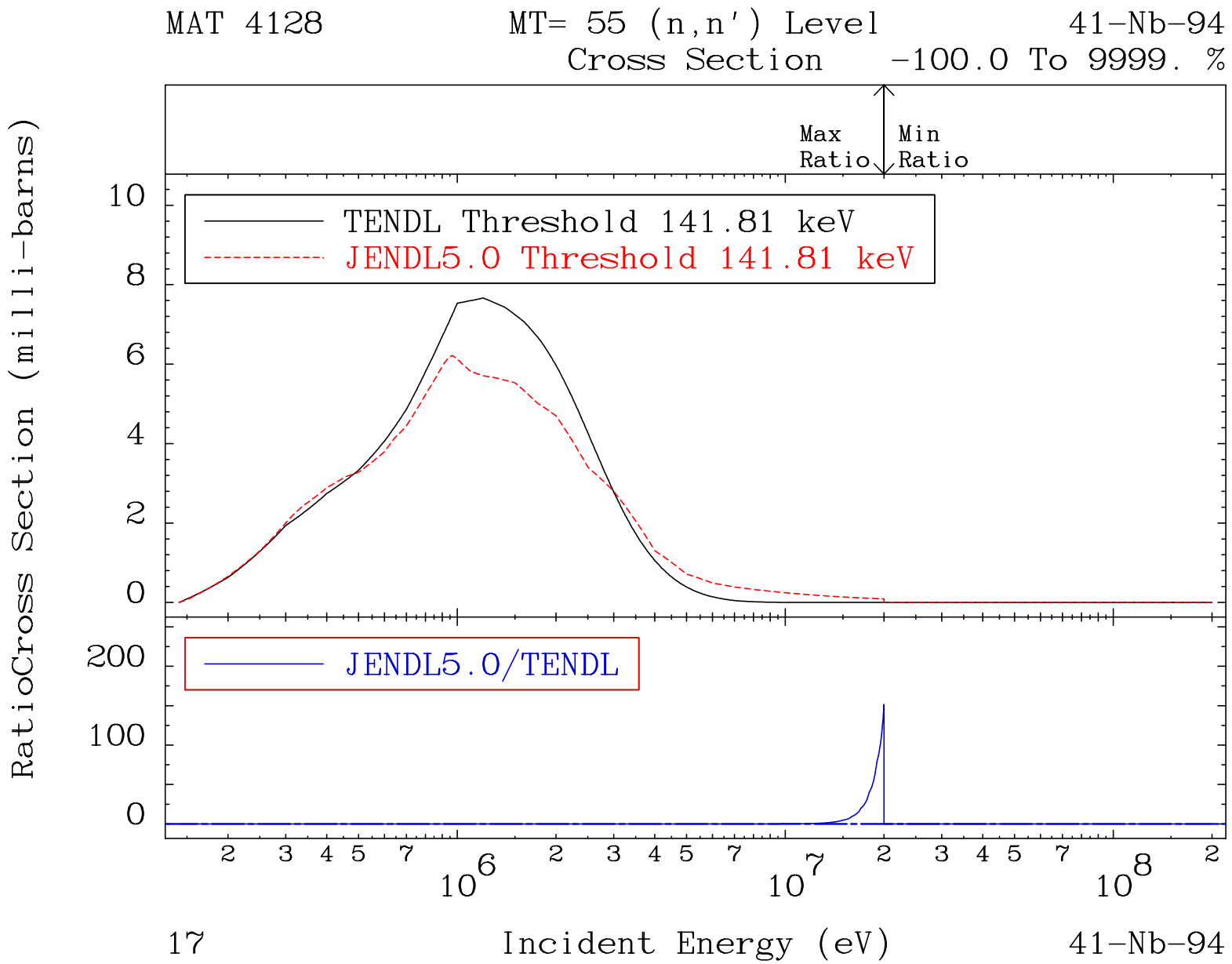

MAT 4128
(n,2n) p
Cross Section
41-Nb-94
-100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 13.413 MeV
JENDL5.0 Threshold 13.413 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
100
80
60
40
20
0
1.2
0.6
0.0
2
3
4
5
6
7
8
9
10^8
2
12
Incident Energy (eV)
41-Nb-94

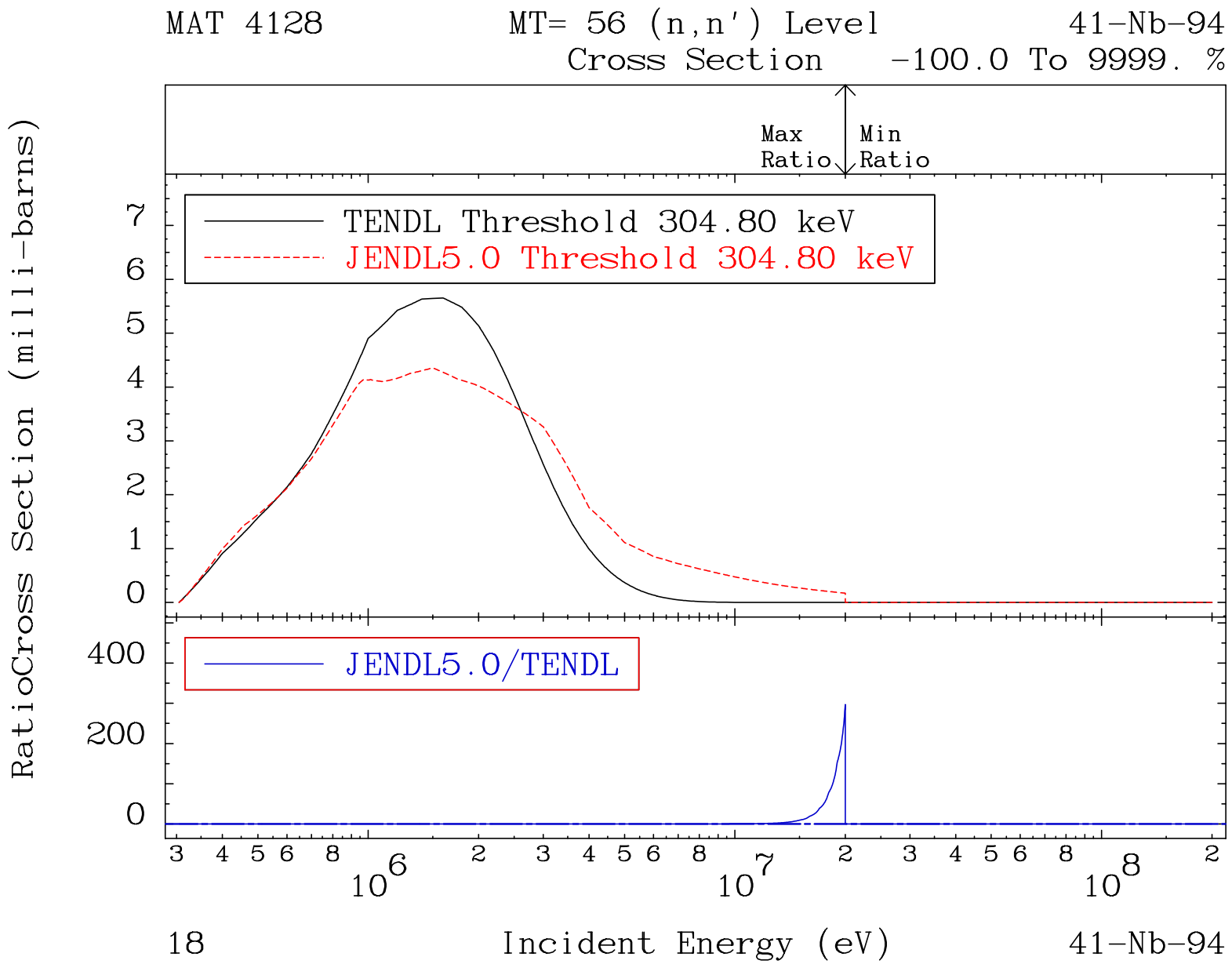

MAT 4128
MT= 51 (n,n') Level
41-Nb-94
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 41.331 keV
JENDL5.0 Threshold 41.331 keV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
120
100
80
60
40
20
0
12
6
0
5 7 10^5 2 3 5 7 10^6 2 3 5 7 10^7 2 3 5 7 10^8 2
13
Incident Energy (eV)
41-Nb-94

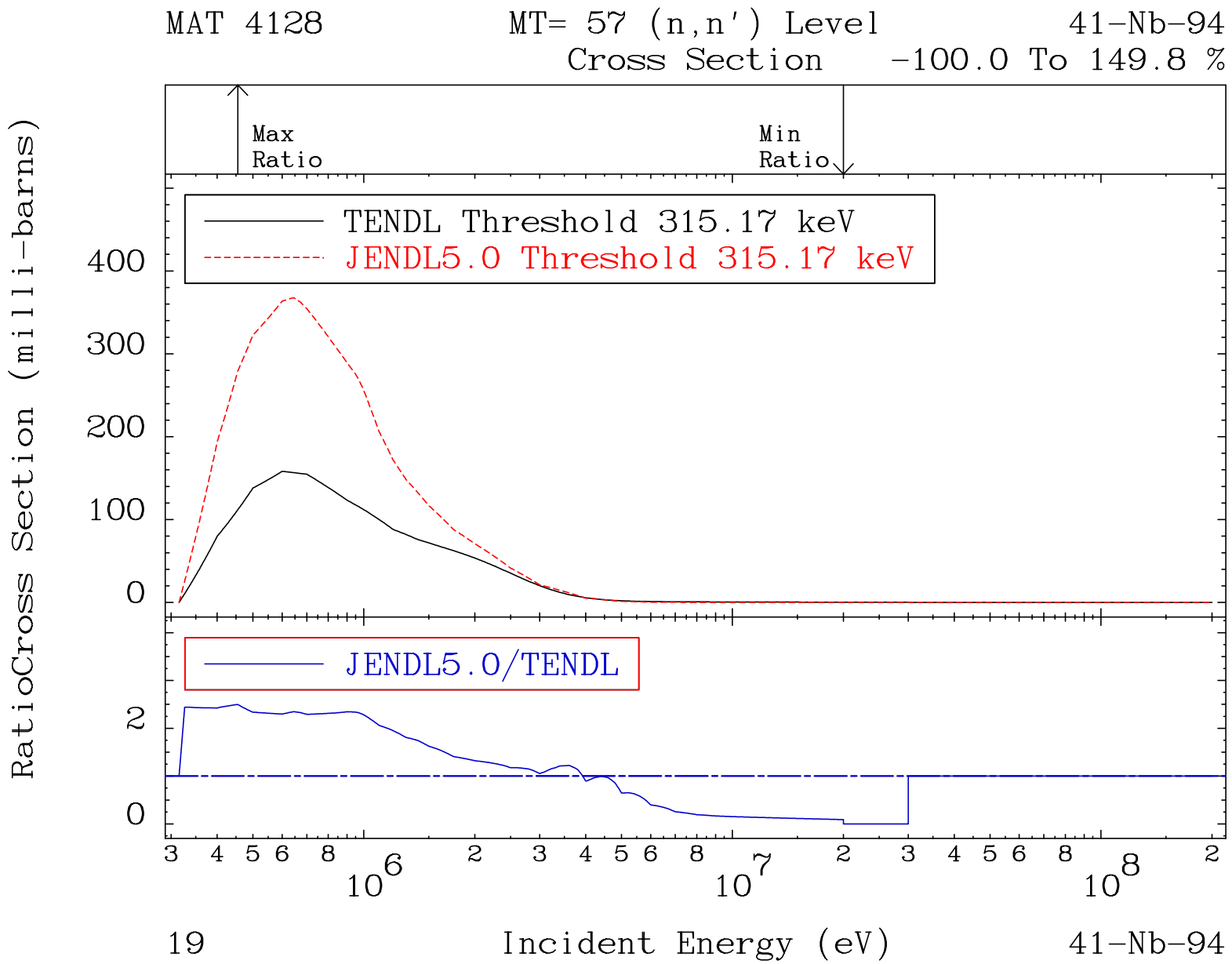

MAT 4128
MT= 52 (n,n') Level
41-Nb-94
Cross Section
-100.0 To 397.0 %
Max Ratio
Min Ratio
TENDL Threshold 59.339 keV
JENDL5.0 Threshold 59.339 keV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
400
300
200
100
0
4
0
7
2
3
4
5
7
$10^5$
$10^6$
$10^7$
$10^8$
14
Incident Energy (eV)
41-Nb-94

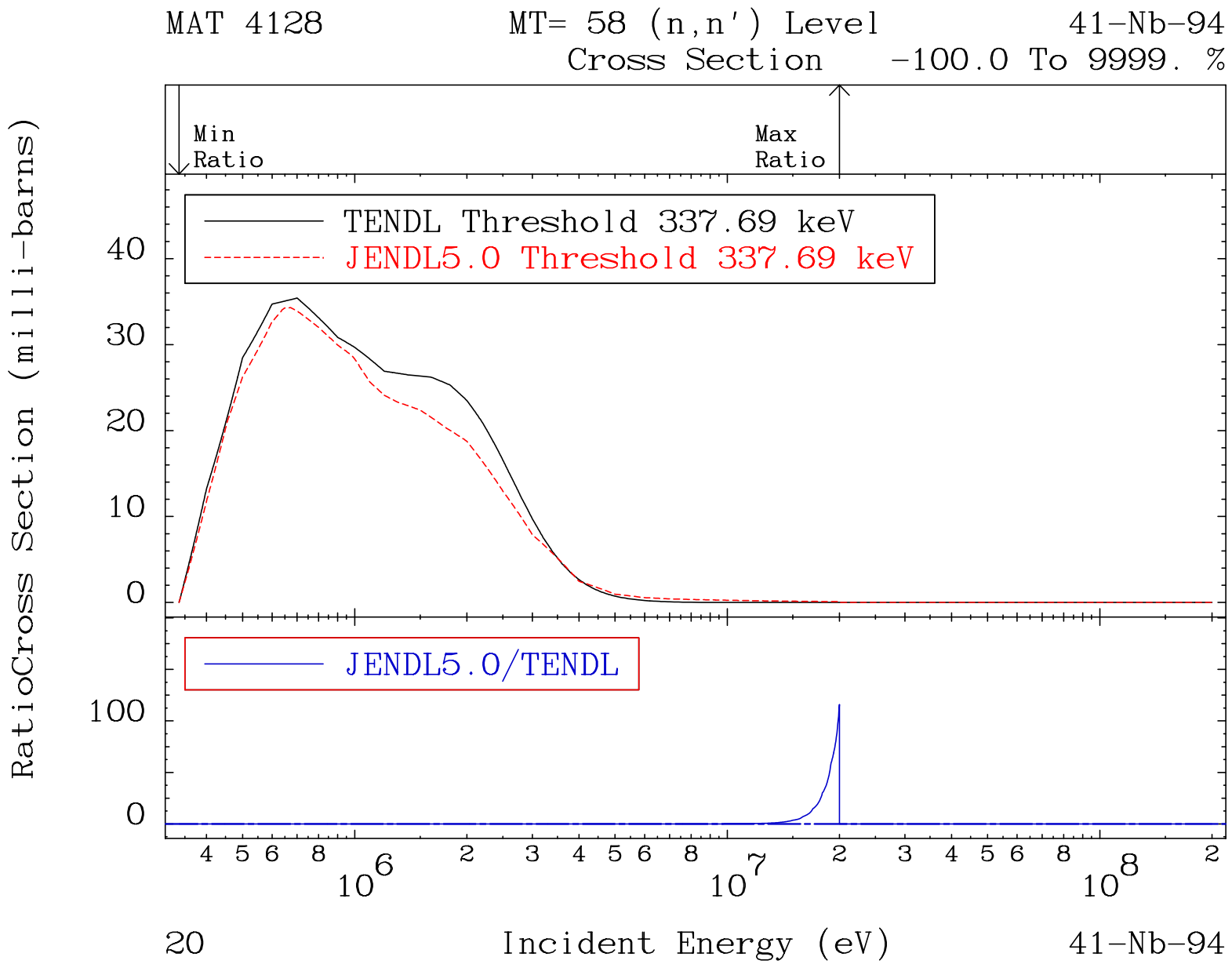

MAT 4128
MT= 53 (n,n') Level
41-Nb-94
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 79.513 keV
JENDL5.0 Threshold 79.513 keV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
15
41-Nb-94

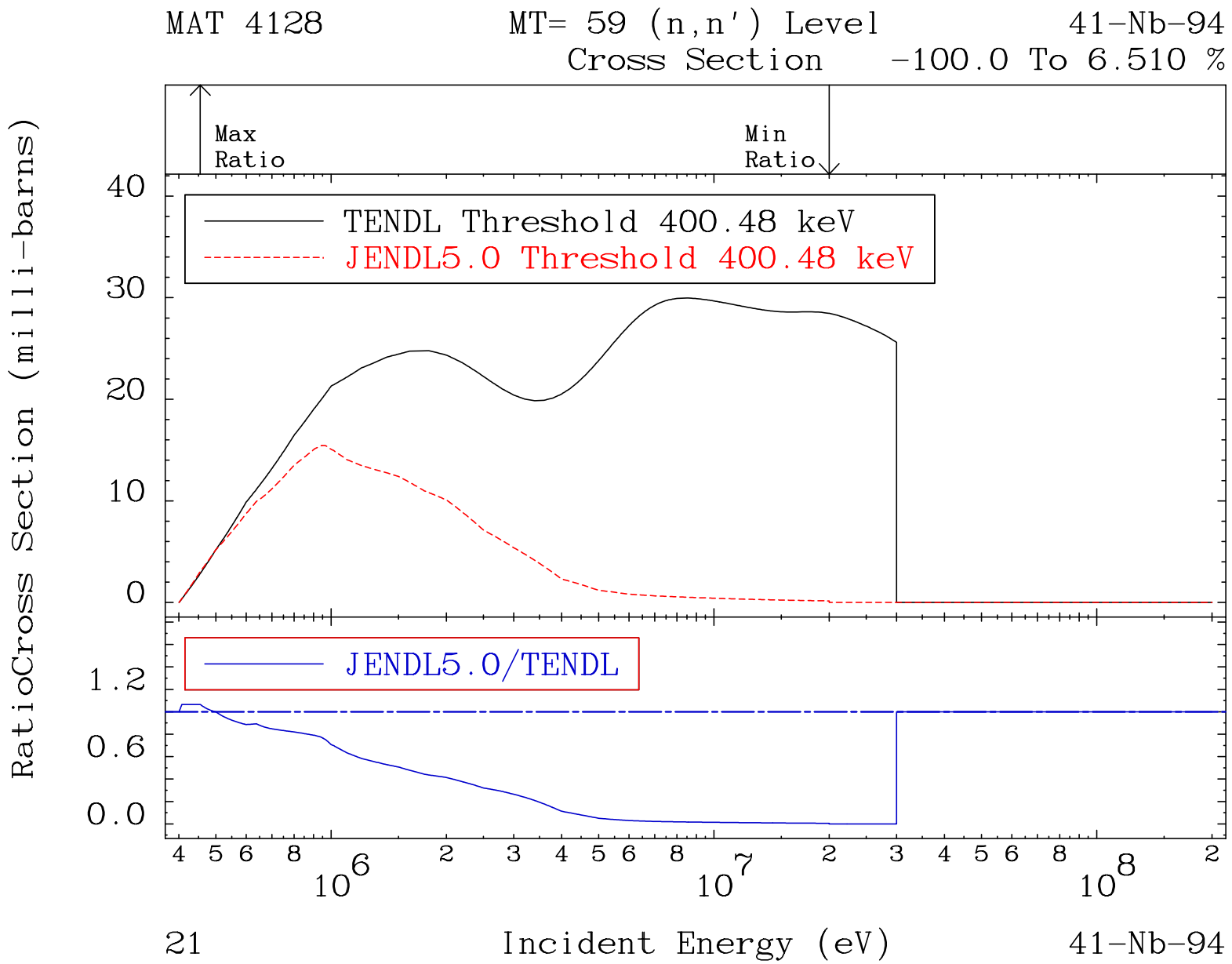

MAT 4128
MT= 54 (n,n') Level
41-Nb-94
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 114.62 keV
JENDL5.0 Threshold 114.62 keV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
800
600
400
200
0
20
10
0
2 3 4 5 7 10^6 2 3 4 5 7 10^7 2 3 4 5 7 10^8 2
16
Incident Energy (eV)
41-Nb-94

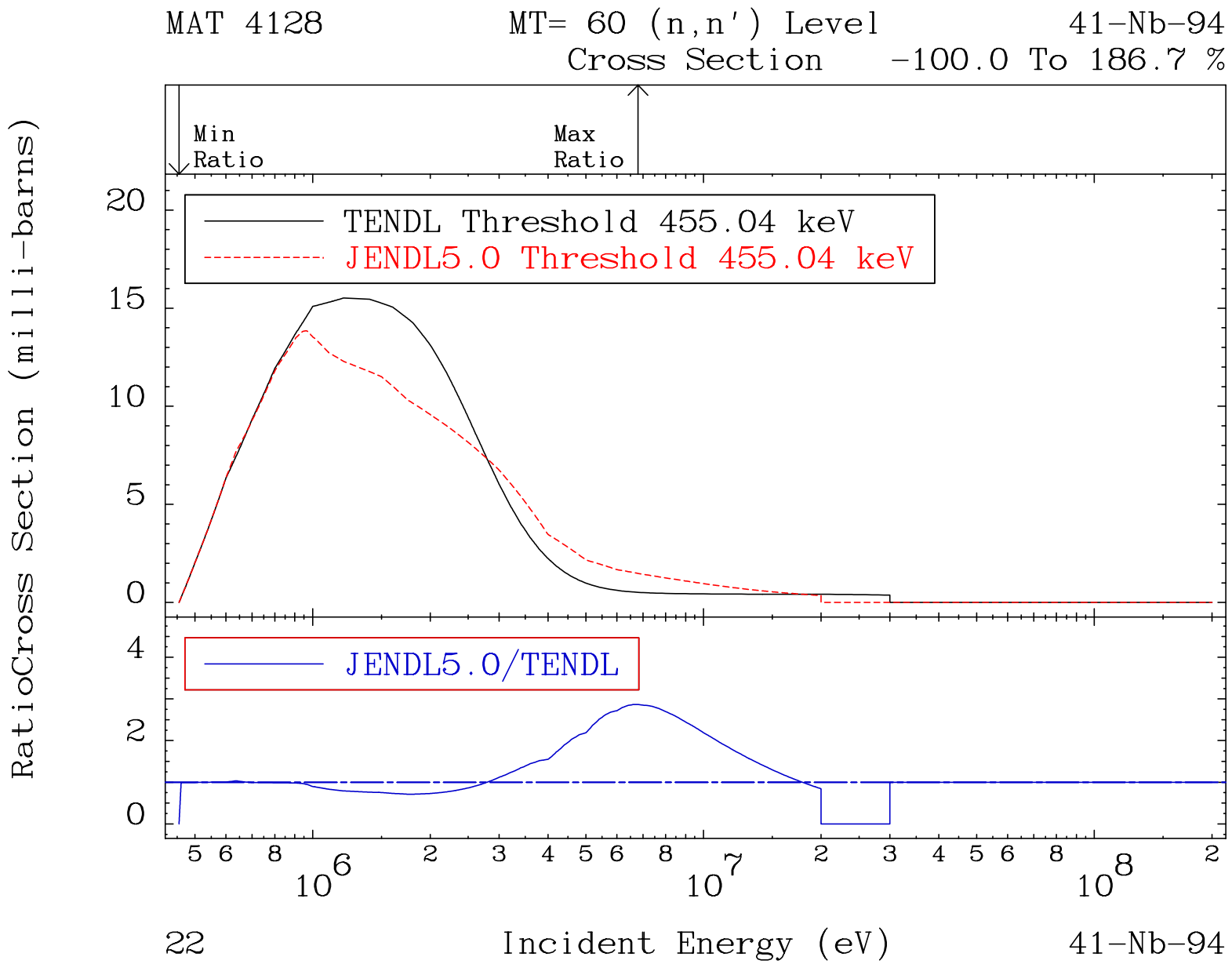

MAT 4128
MT= 55 (n,n') Level
41-Nb-94
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 141.81 keV
JENDL5.0 Threshold 141.81 keV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
17
41-Nb-94

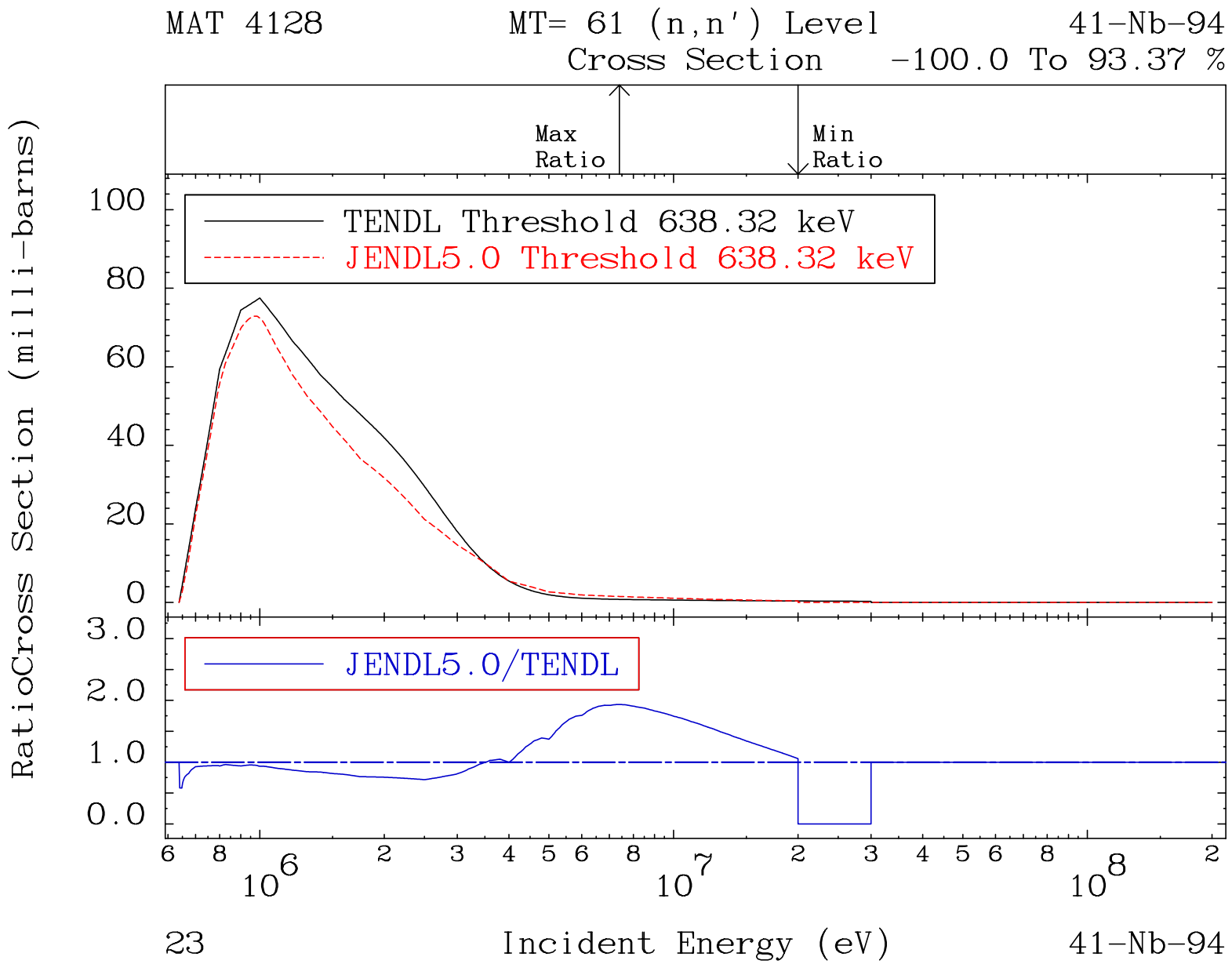

MAT 4128
MT= 56 (n,n') Level
41-Nb-94
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 304.80 keV
JENDL5.0 Threshold 304.80 keV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
18
41-Nb-94

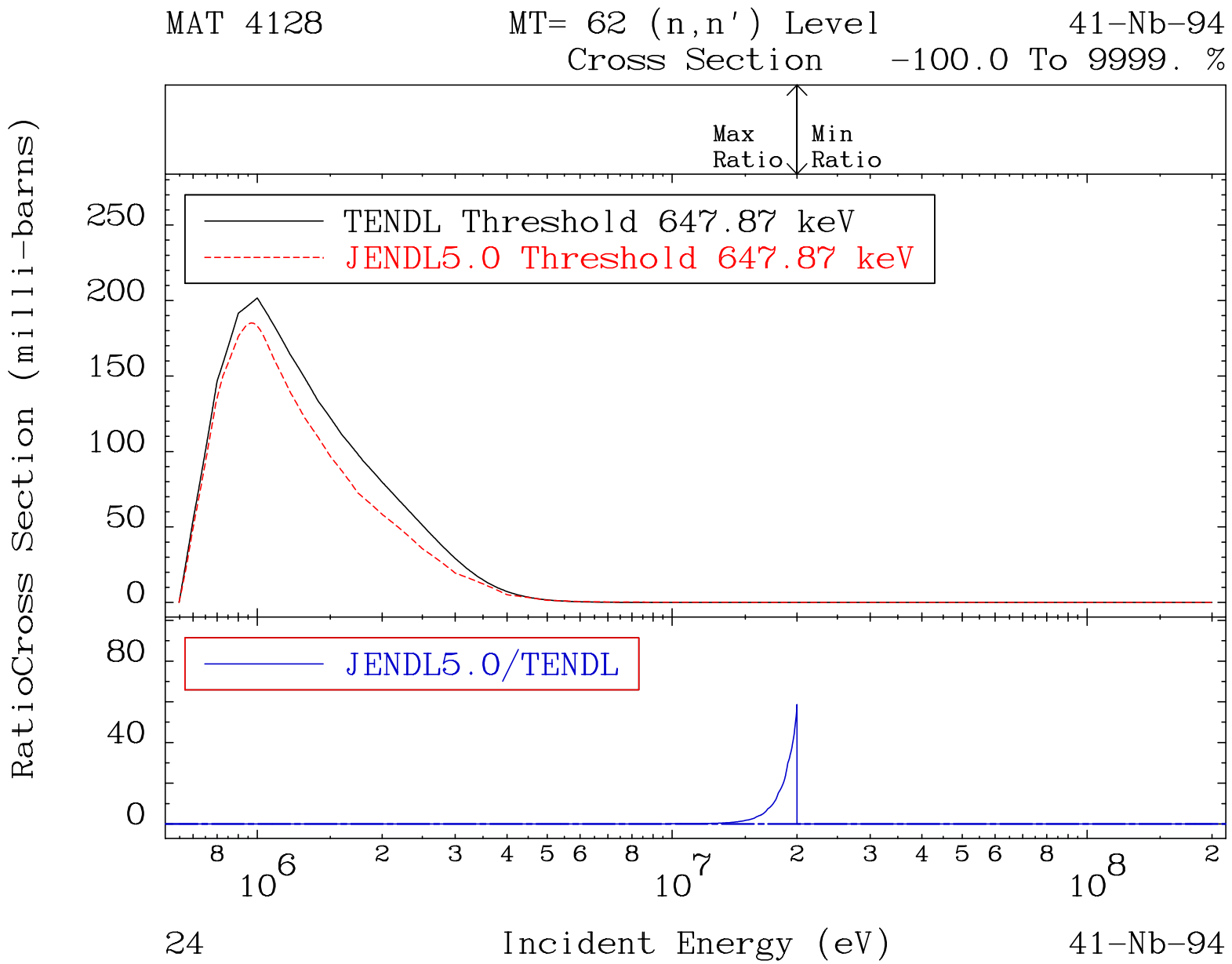

MAT 4128
MT= 57 (n,n') Level
41-Nb-94
Cross Section
-100.0 To 149.8 %
Max Ratio
Min Ratio
TENDL Threshold 315.17 keV
JENDL5.0 Threshold 315.17 keV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
400
300
200
100
0
2
0
3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
19
Incident Energy (eV)
41-Nb-94

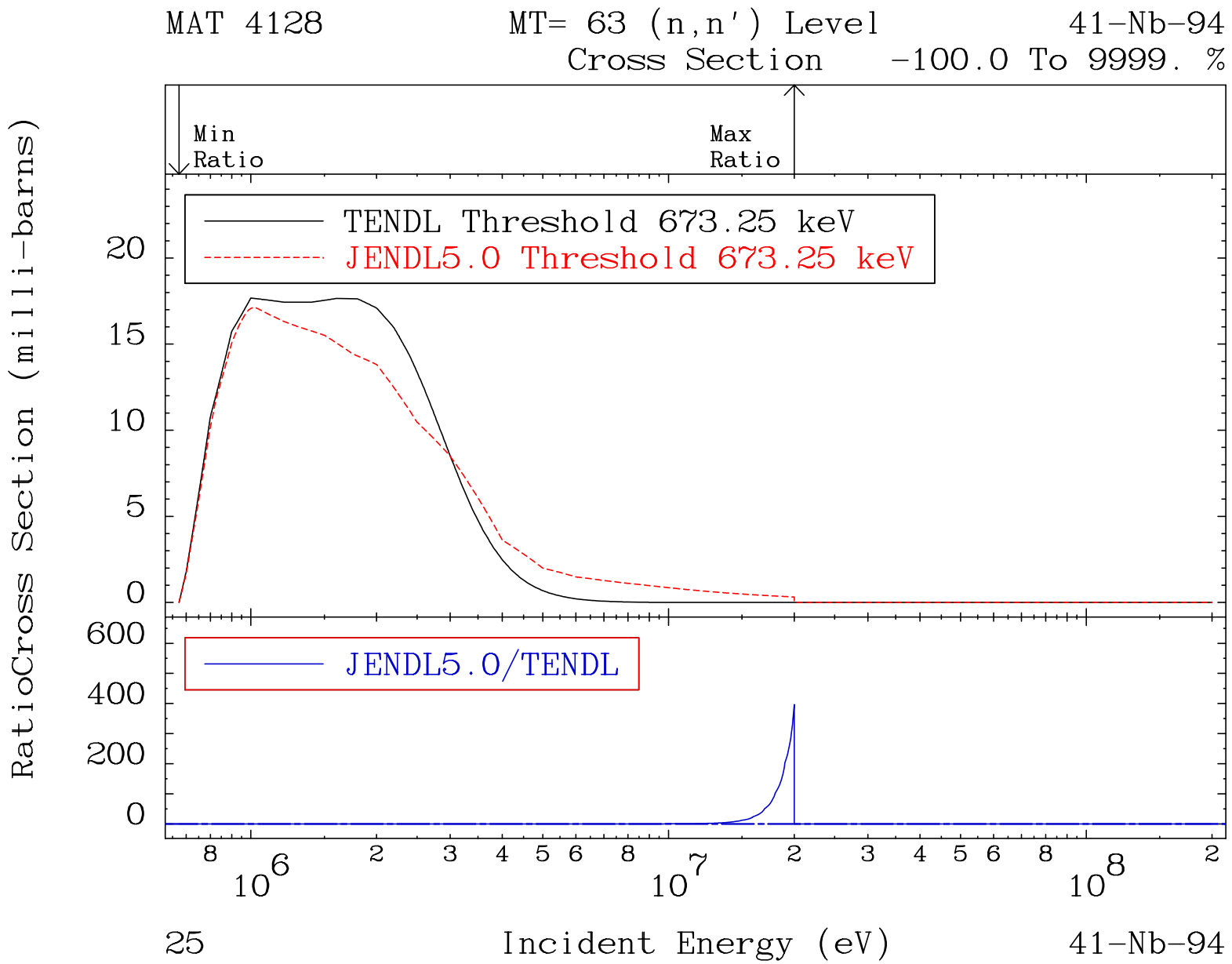

MAT 4128
MT= 58 (n,n') Level
41-Nb-94
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 337.69 keV
JENDL5.0 Threshold 337.69 keV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
40
30
20
10
0
100
0
4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
20
Incident Energy (eV)
41-Nb-94

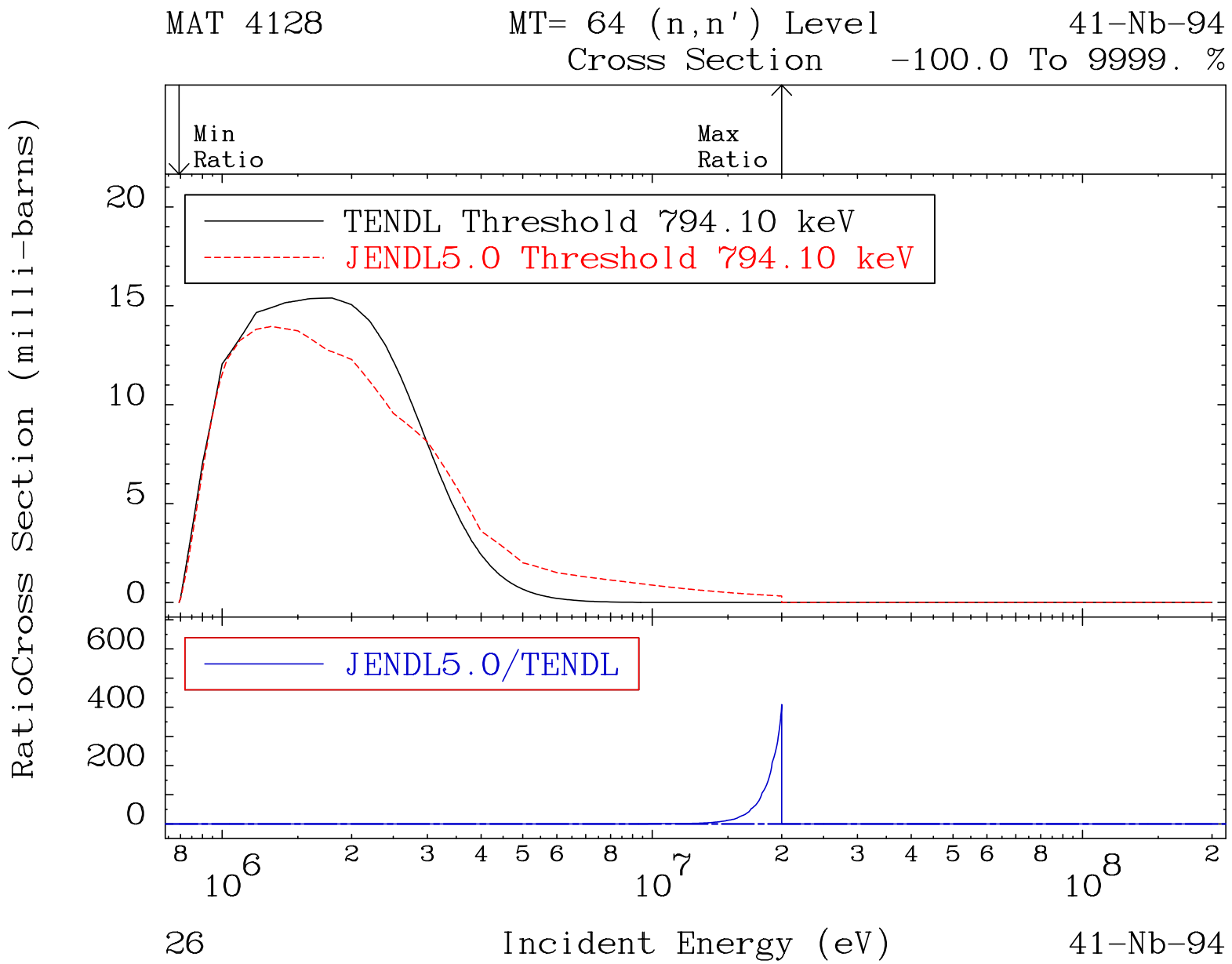

MAT 4128
MT= 59 (n,n') Level
41-Nb-94
Cross Section
-100.0 To 6.510 %
Max Ratio
Min Ratio
TENDL Threshold 400.48 keV
JENDL5.0 Threshold 400.48 keV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
40
30
20
10
0
1.2
0.6
0.0
4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
21
Incident Energy (eV)
41-Nb-94

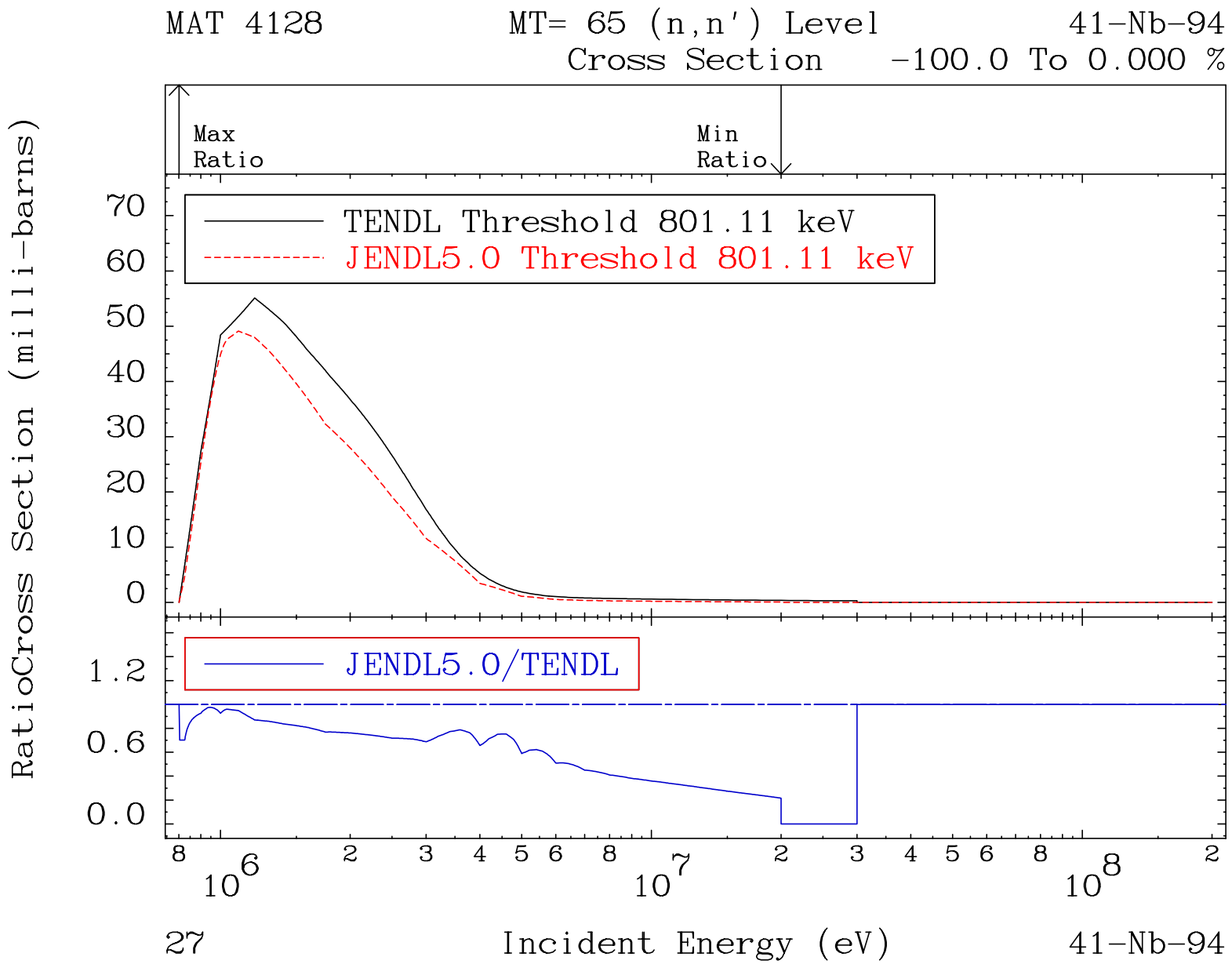

MAT 4128
MT= 60 (n,n') Level
41-Nb-94
Cross Section -100.0 To 186.7 %
Min Ratio
Max Ratio
TENDL Threshold 455.04 keV
JENDL5.0 Threshold 455.04 keV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
22
41-Nb-94

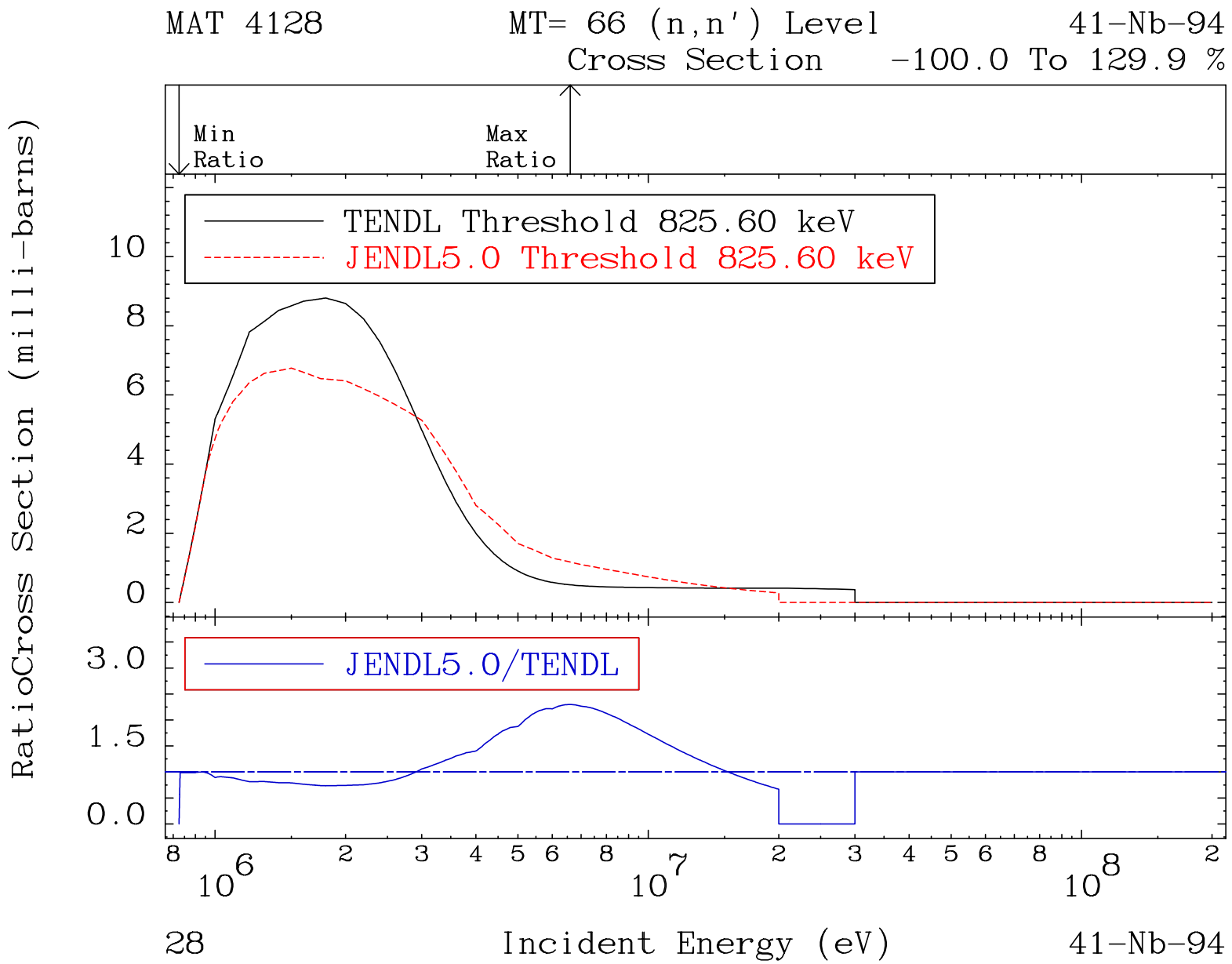

MAT 4128
MT= 61 (n,n') Level
41-Nb-94
Cross Section -100.0 To 93.37 %
Max Ratio
Min Ratio
TENDL Threshold 638.32 keV
JENDL5.0 Threshold 638.32 keV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
100
80
60
40
20
0
3.0
2.0
1.0
0.0
6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
23
Incident Energy (eV)
41-Nb-94

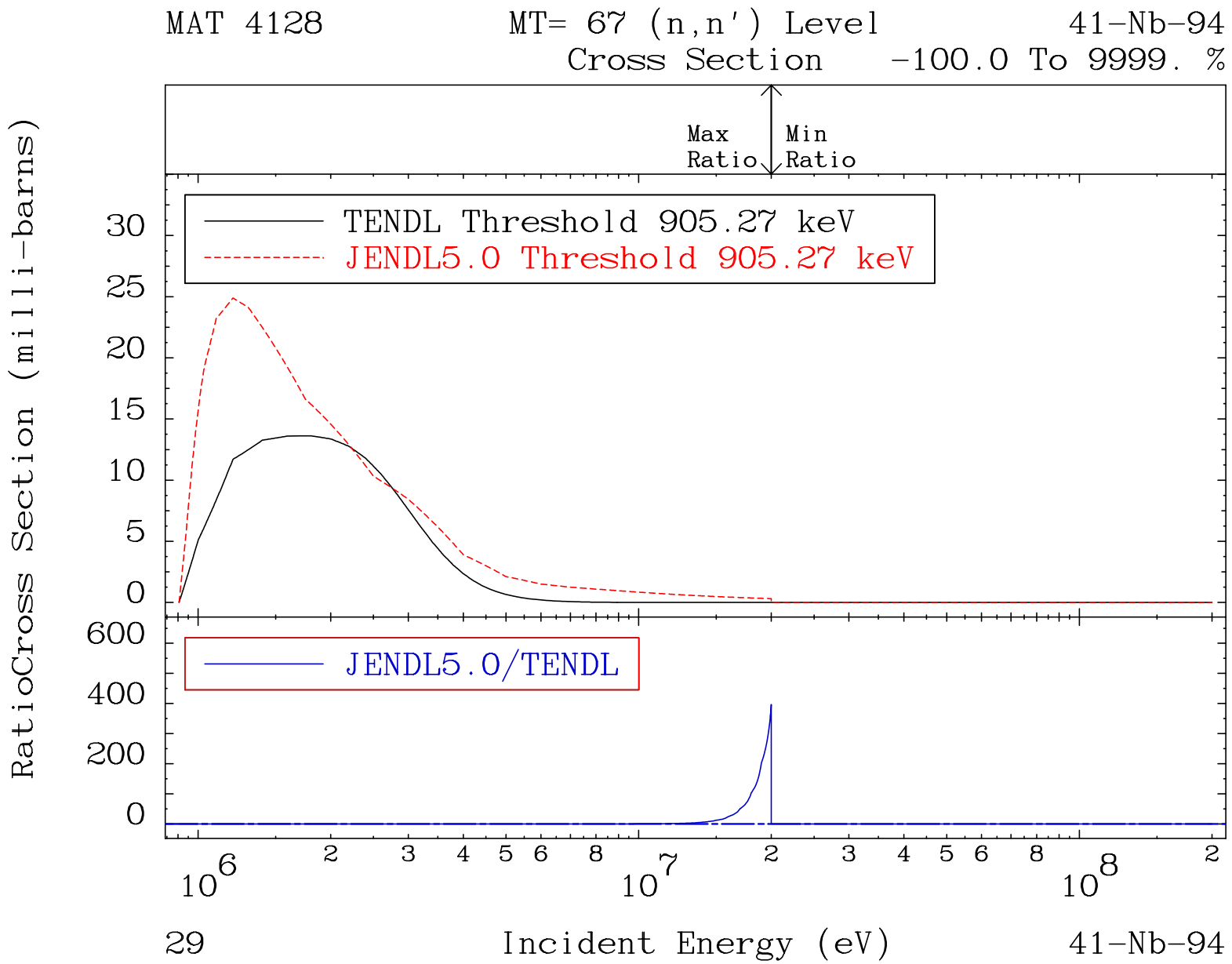

MAT 4128
MT= 62 (n,n') Level
41-Nb-94
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 647.87 keV
JENDL5.0 Threshold 647.87 keV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
250
200
150
100
50
0
80
40
0
8
2
3
4
5
6
8
2
3
4
5
6
8
2
10^6
10^7
10^8
24
Incident Energy (eV)
41-Nb-94

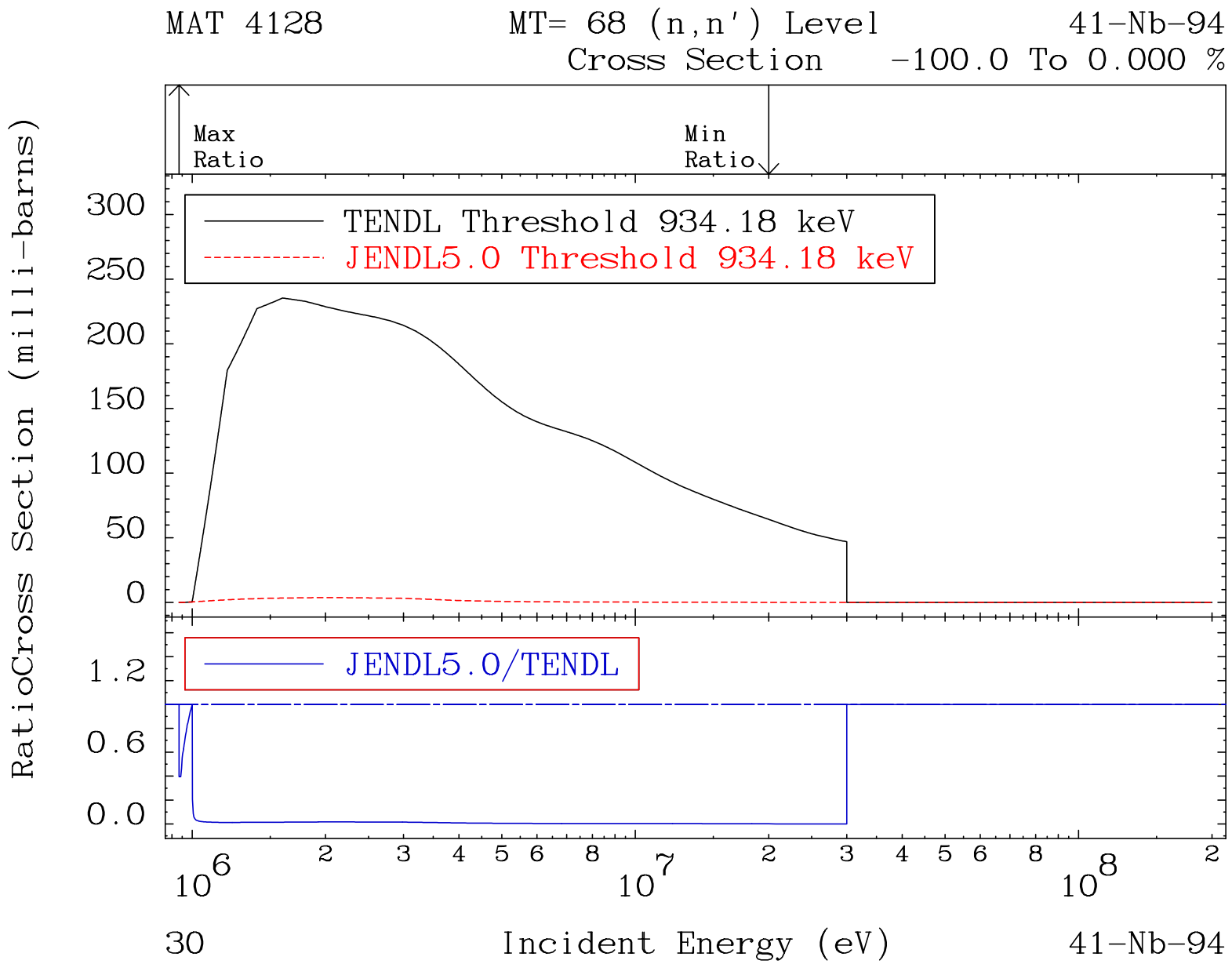

MAT 4128
MT= 63 (n,n') Level
41-Nb-94
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 673.25 keV
JENDL5.0 Threshold 673.25 keV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
25
41-Nb-94

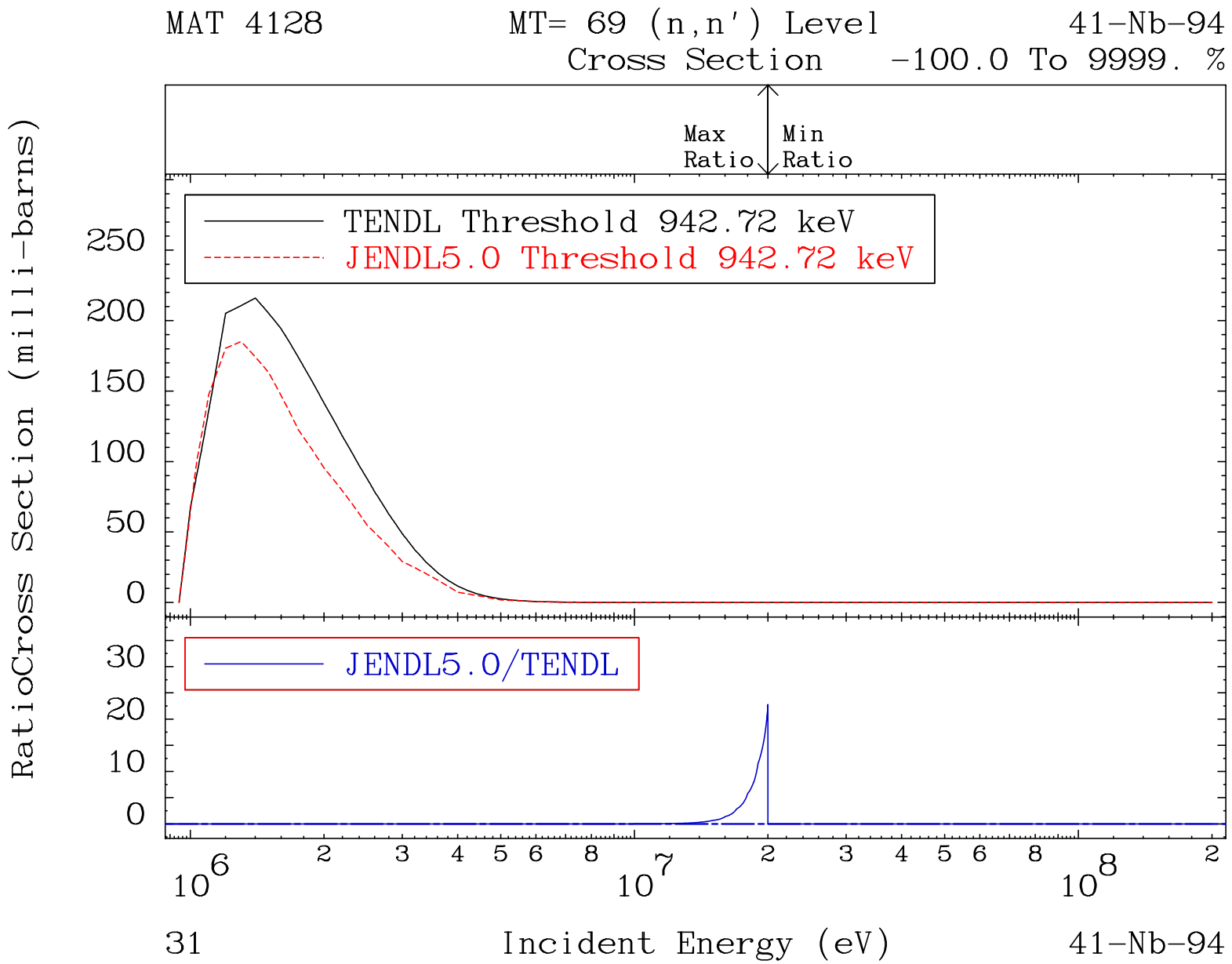

MAT 4128
MT= 64 (n,n') Level
41-Nb-94
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 794.10 keV
JENDL5.0 Threshold 794.10 keV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
26
41-Nb-94

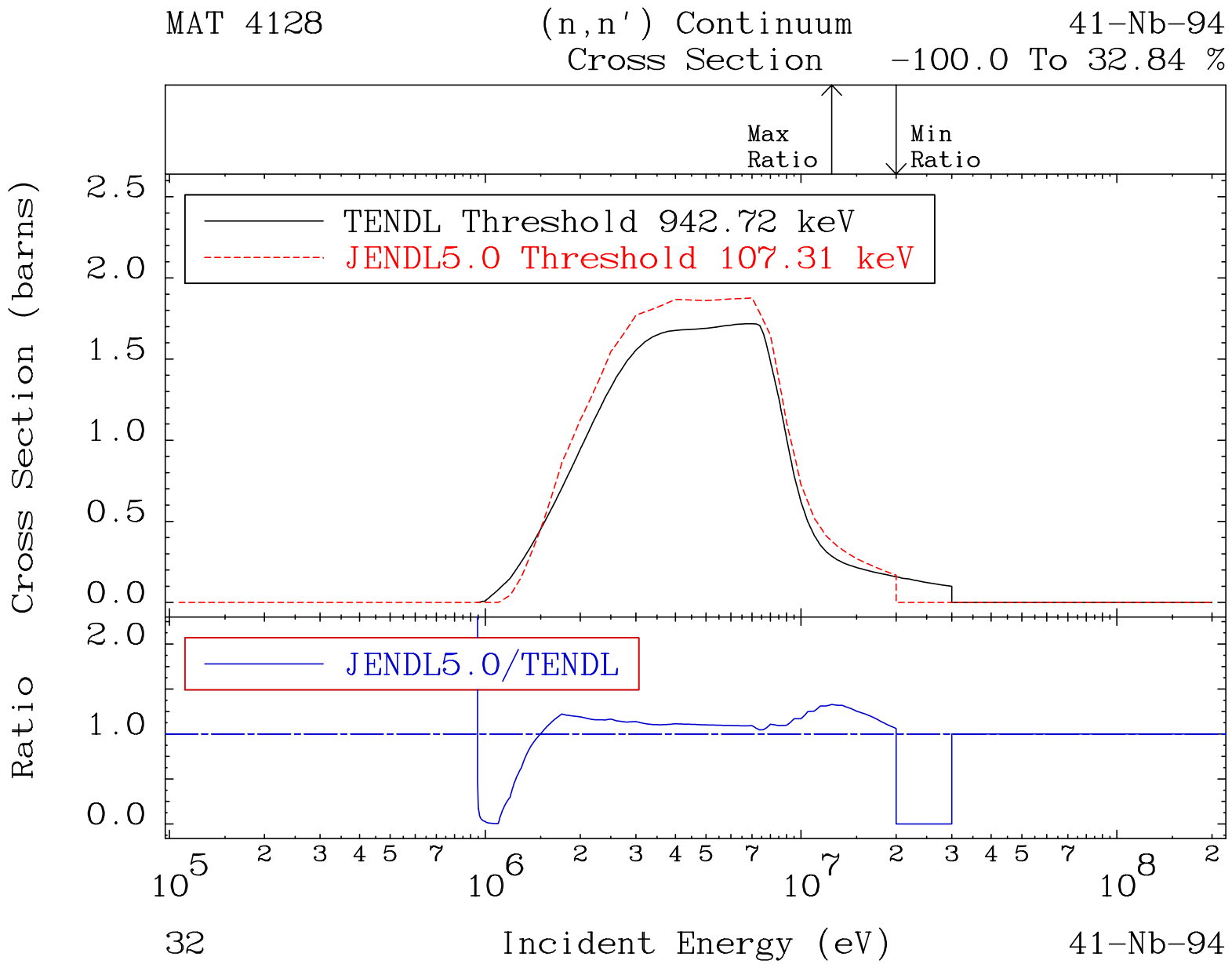

MAT 4128
MT= 65 (n,n') Level
41-Nb-94
Cross Section -100.0 To 0.000 %
Max Ratio
Min Ratio
TENDL Threshold 801.11 keV
JENDL5.0 Threshold 801.11 keV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
70
60
50
40
30
20
10
0
1.2
0.6
0.0
8
10^6
2
3
4
5
6
8
10^7
2
3
4
5
6
8
10^8
2
27
Incident Energy (eV)
41-Nb-94

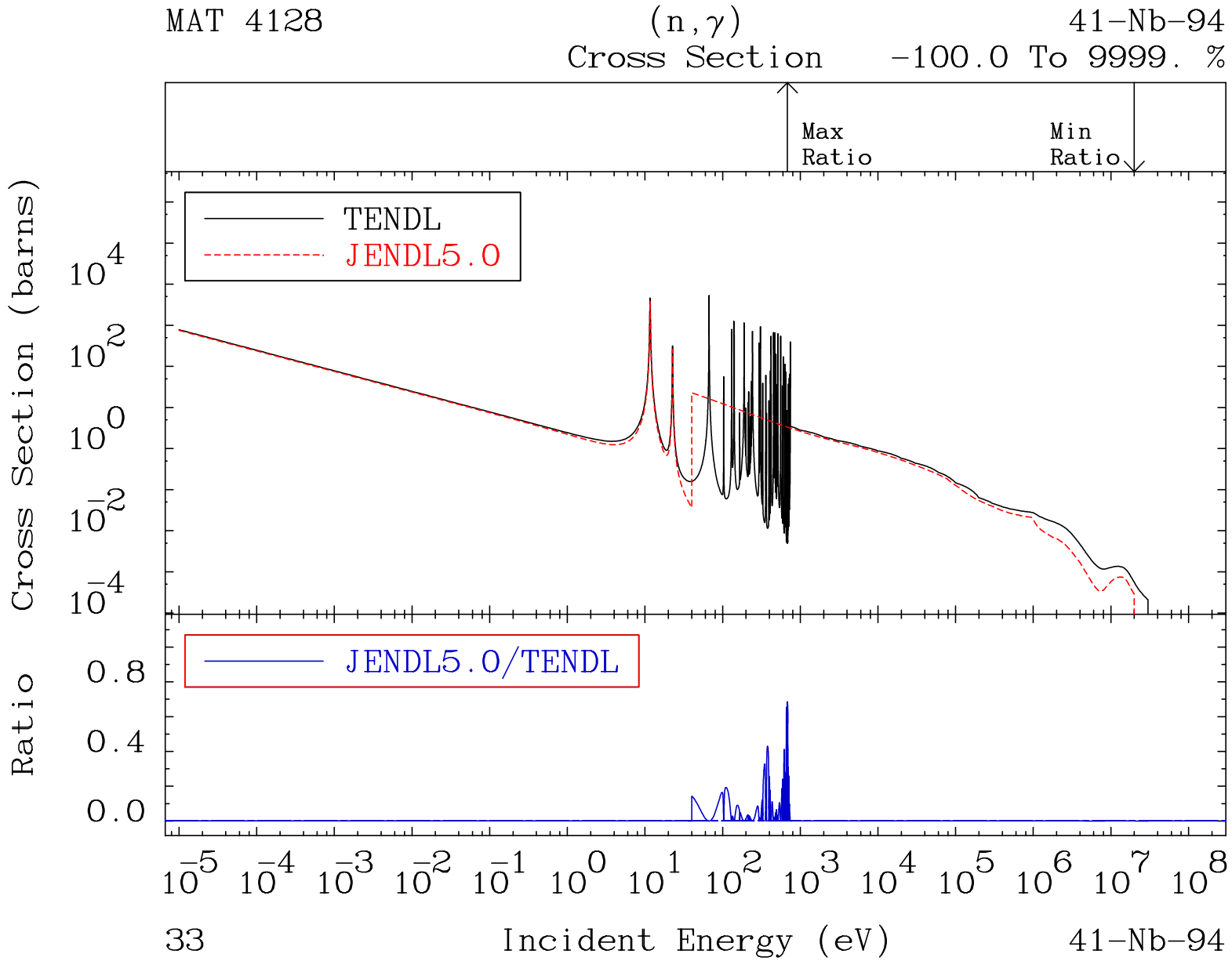

MAT 4128
MT= 66 (n,n') Level
41-Nb-94
Cross Section
-100.0 To 129.9 %
Min Ratio
Max Ratio
TENDL Threshold 825.60 keV
JENDL5.0 Threshold 825.60 keV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
10
8
6
4
2
0
3.0
1.5
0.0
8
2
3
4
5
6
8
10^6
10^7
10^8
28
Incident Energy (eV)
41-Nb-94

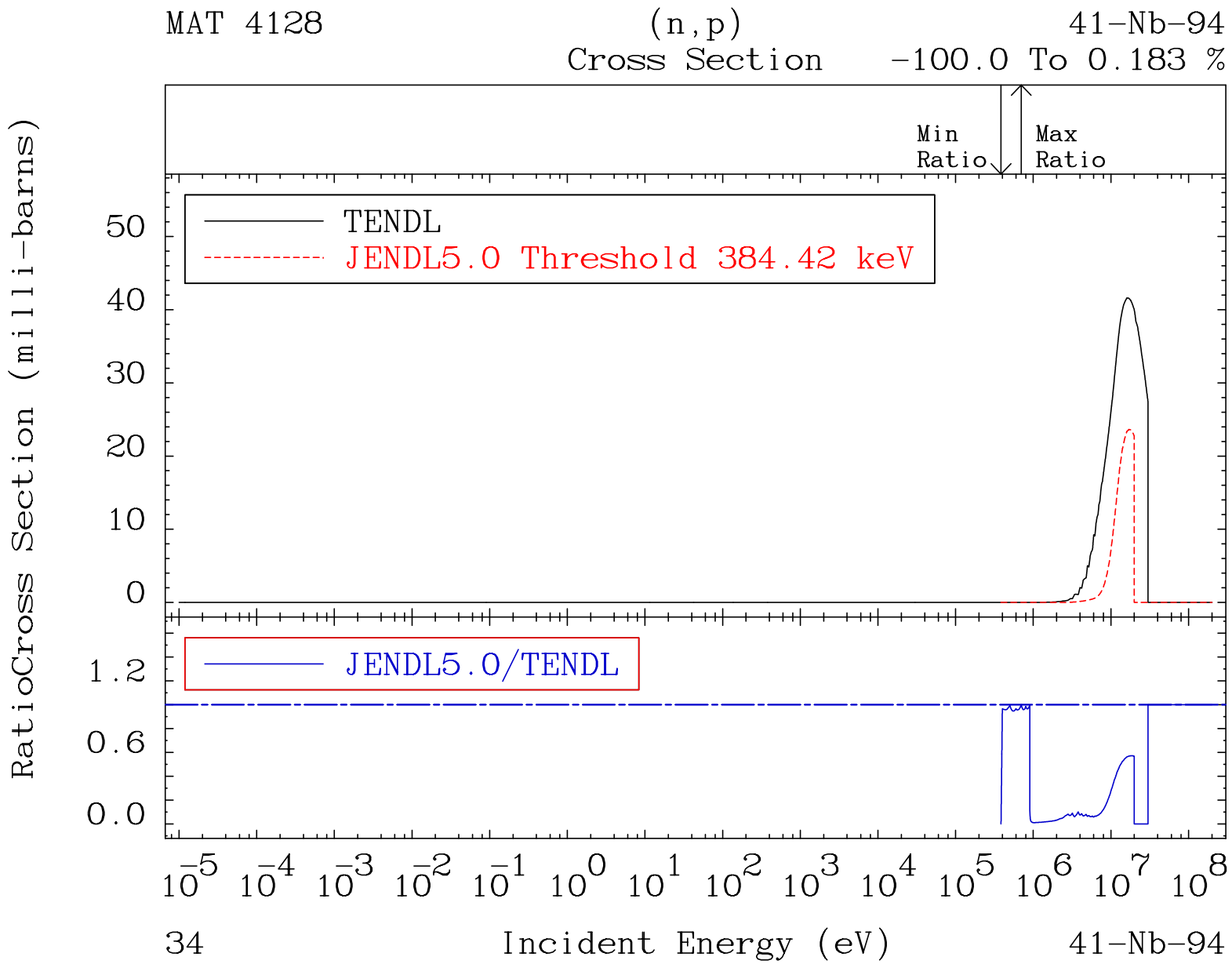

MAT 4128
MT= 67 (n,n') Level
41-Nb-94
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 905.27 keV
JENDL5.0 Threshold 905.27 keV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
30
25
20
15
10
5
0
600
400
200
0
10^6
2
3
4
5
6
8
10^7
2
3
4
5
6
8
10^8
2
29
Incident Energy (eV)
41-Nb-94

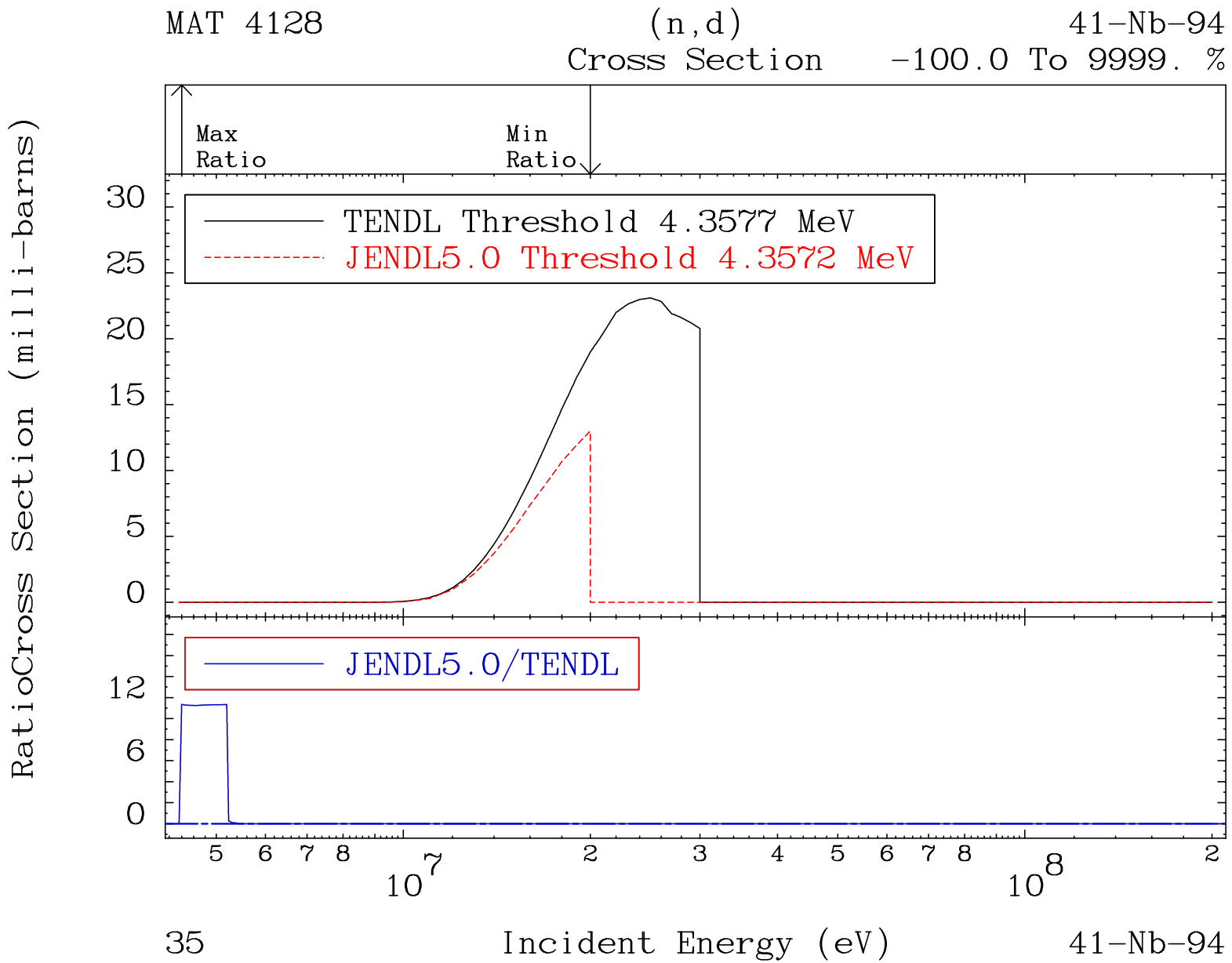

MAT 4128
MT= 68 (n,n') Level
41-Nb-94
Cross Section
-100.0 To 0.000 %
Max Ratio
Min Ratio
TENDL Threshold 934.18 keV
JENDL5.0 Threshold 934.18 keV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
300
250
200
150
100
50
0
1.2
0.6
0.0
10^6
10^7
10^8
Incident Energy (eV)
30
41-Nb-94

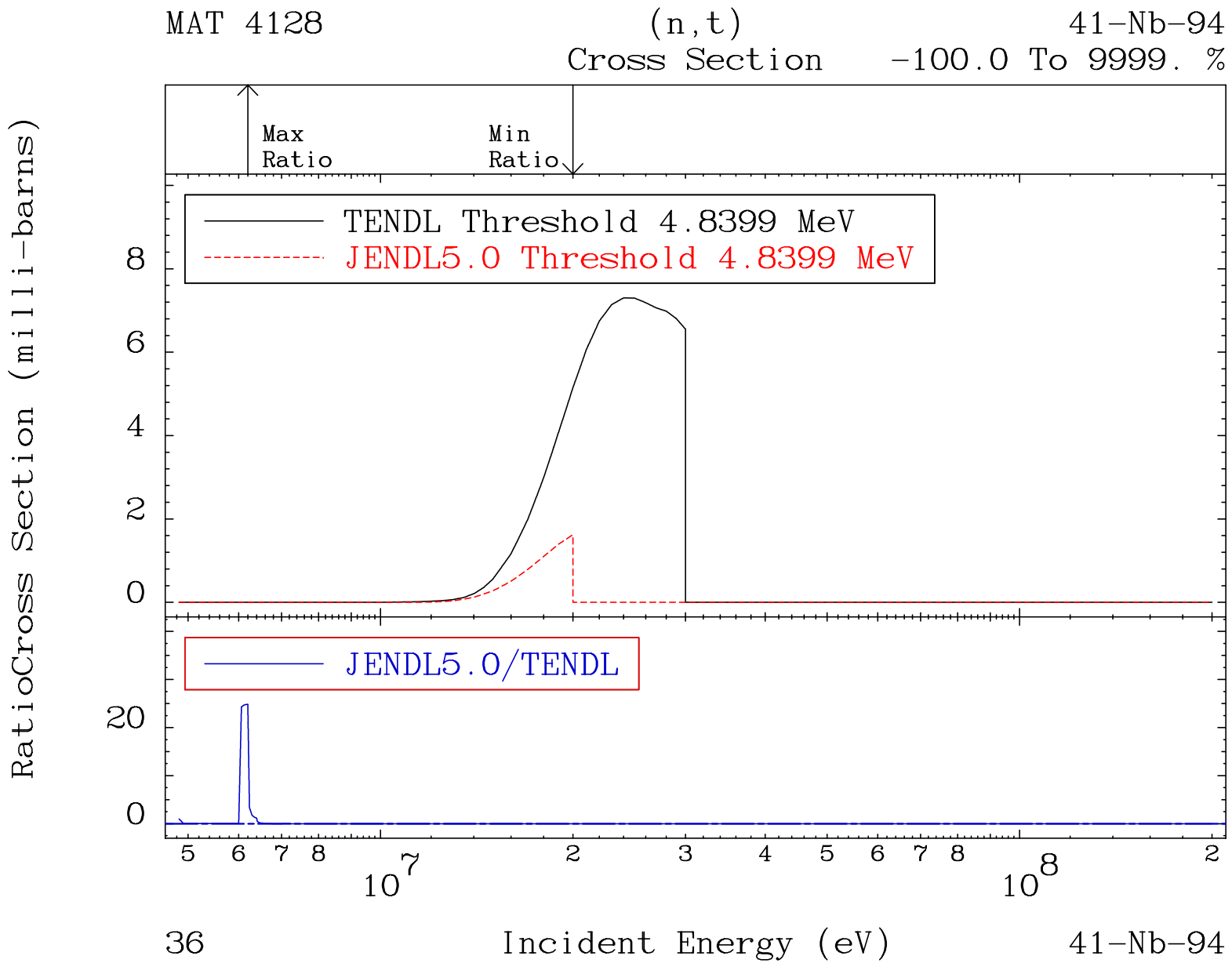

MAT 4128
MT= 69 (n,n') Level
41-Nb-94
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 942.72 keV
JENDL5.0 Threshold 942.72 keV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
250
200
150
100
50
0
30
20
10
0
10^6
10^7
10^8
2 3 4 5 6 8
Incident Energy (eV)
31
41-Nb-94

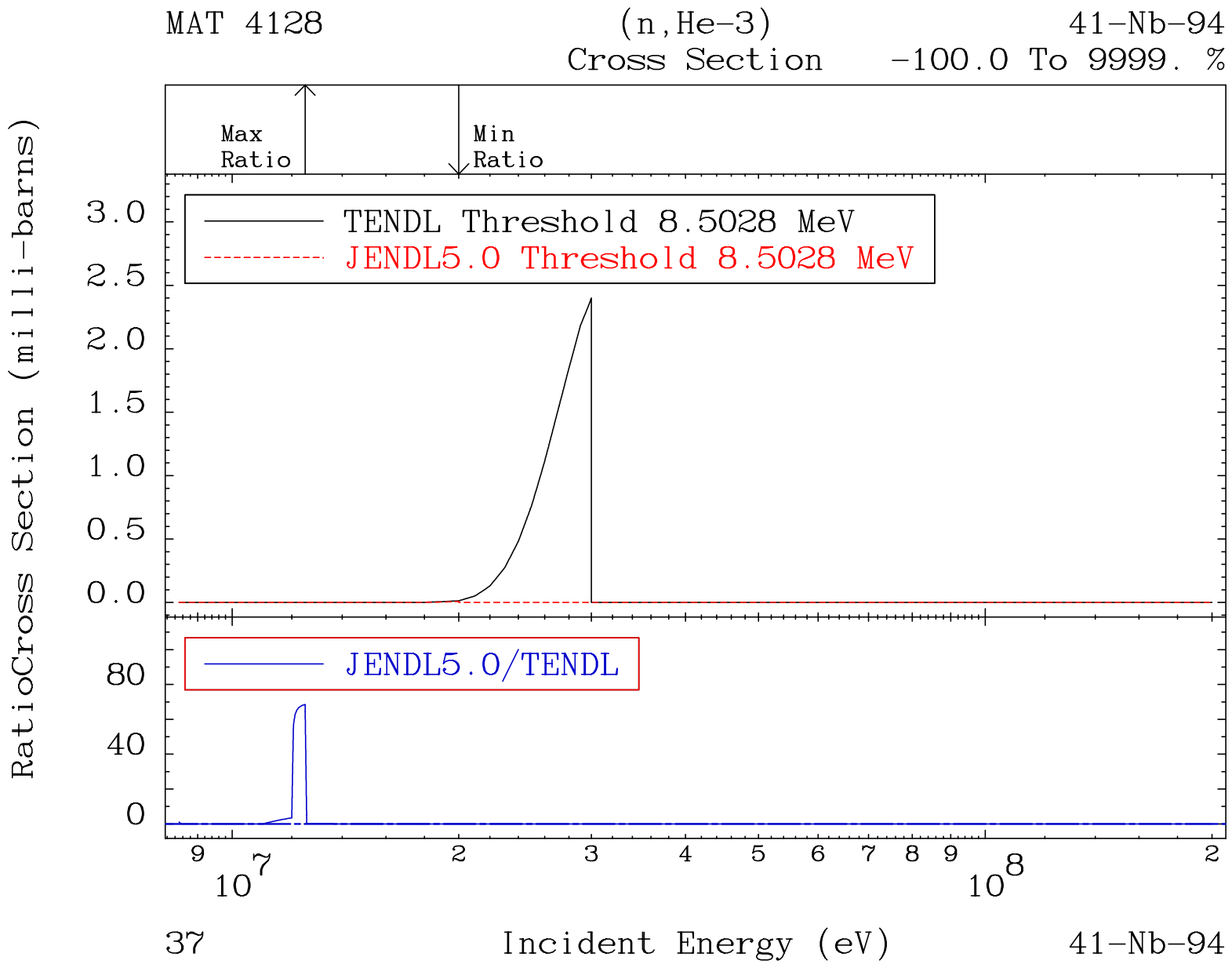

MAT 4128
(n,n') Continuum
Cross Section
41-Nb-94
-100.0 To 32.84 %
Max Ratio
Min Ratio
TENDL Threshold 942.72 keV
JENDL5.0 Threshold 107.31 keV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
2.5
2.0
1.5
1.0
0.5
0.0
2.0
1.0
0.0
10^5
10^6
10^7
10^8
Incident Energy (eV)
32
41-Nb-94

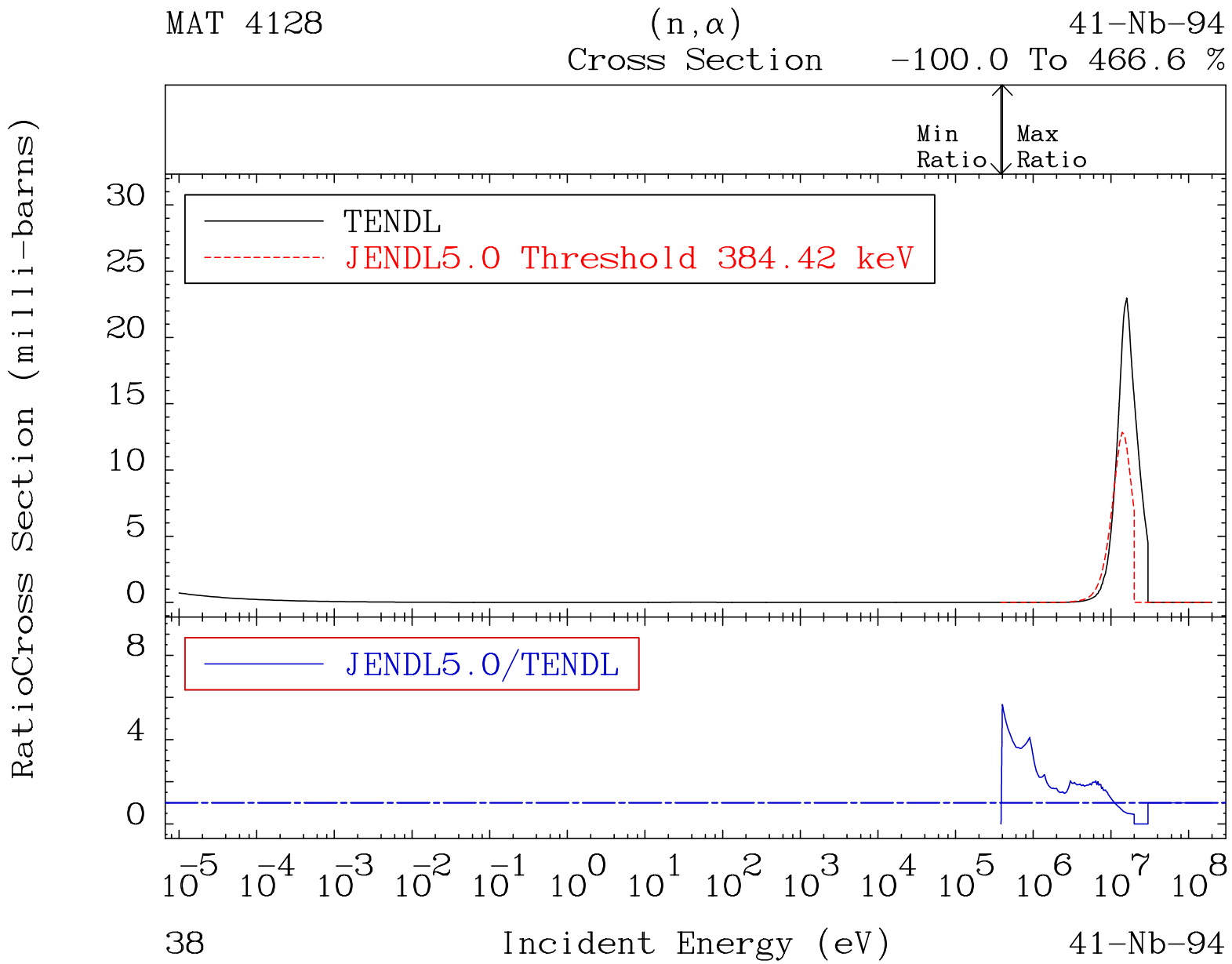

MAT 4128
(n,γ)
Cross Section
41-Nb-94
-100.0 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
Cross Section (barns)
10^4
10^2
10^0
10^-2
10^-4
JENDL5.0/TENDL
Ratio
0.8
0.4
0.0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
33
Incident Energy (eV)
41-Nb-94

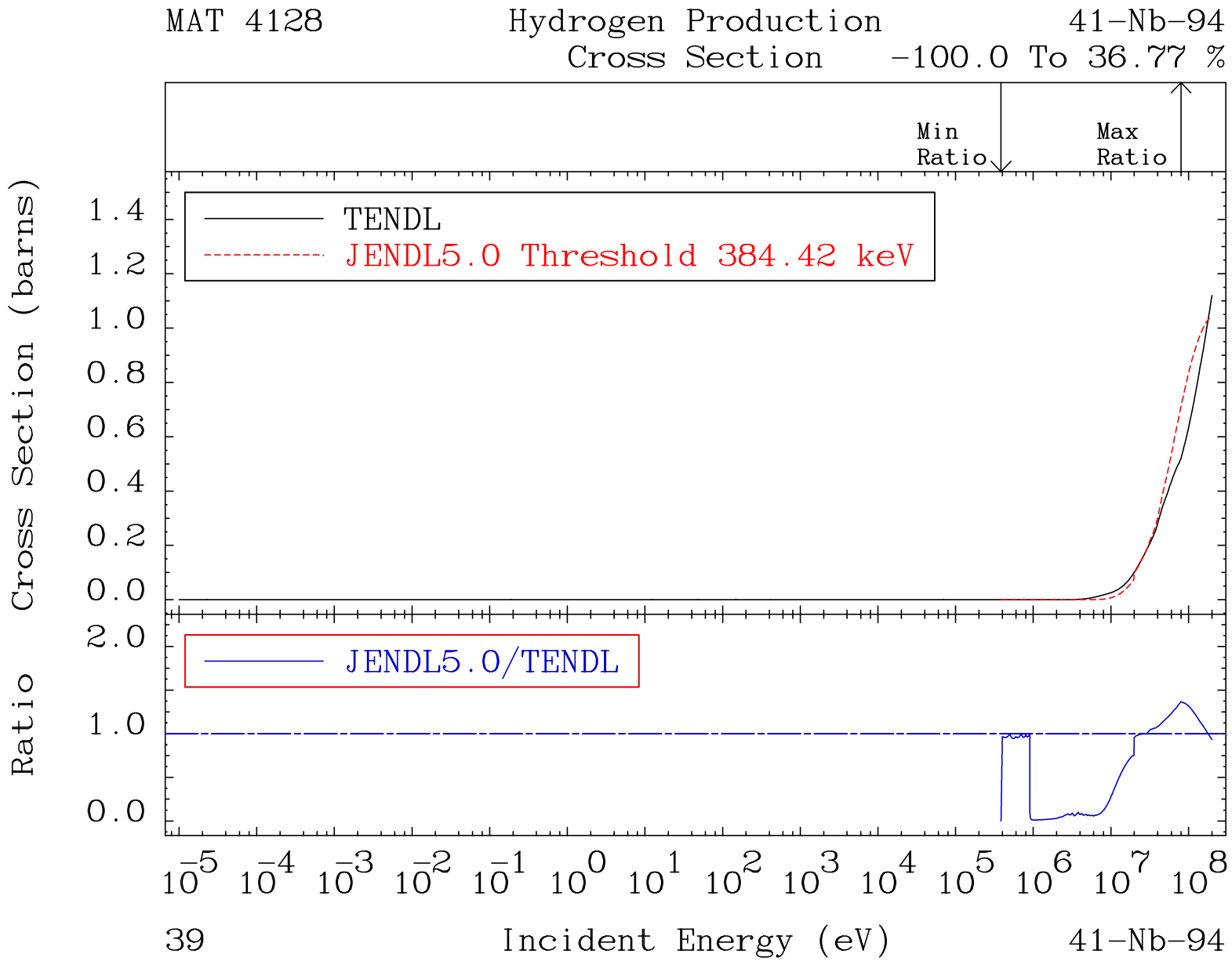

MAT 4128
(n,p)
Cross Section
41-Nb-94
-100.0 To 0.183 %
Min Ratio
Max Ratio
TENDL
JENDL5.0 Threshold 384.42 keV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
50
40
30
20
10
0
1.2
0.6
0.0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
34
Incident Energy (eV)
41-Nb-94

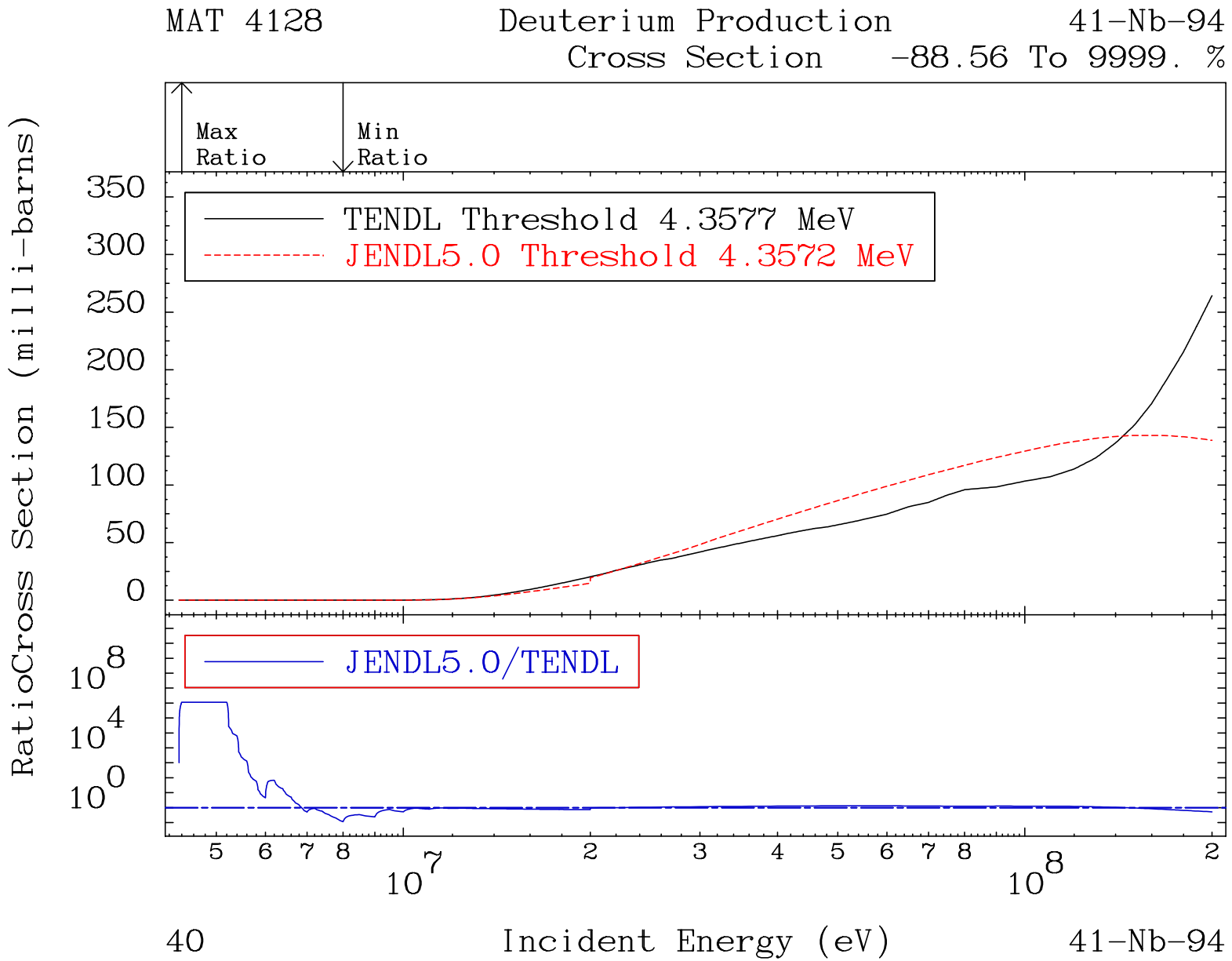

MAT 4128
(n,d)
Cross Section
41-Nb-94
-100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 4.3577 MeV
JENDL5.0 Threshold 4.3572 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
30
25
20
15
10
5
0
12
6
0
5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
35
Incident Energy (eV)
41-Nb-94

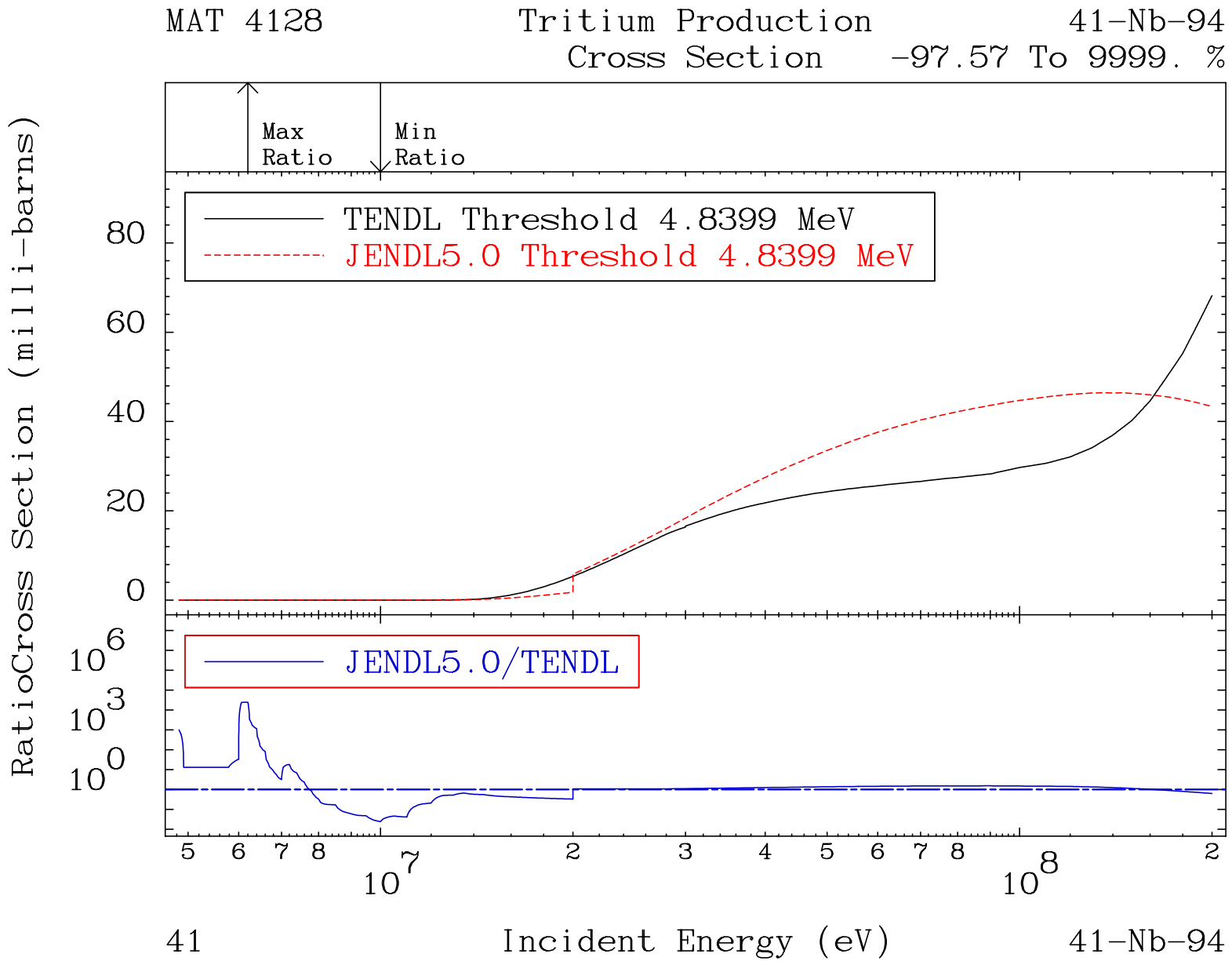

MAT 4128
(n,t)
Cross Section
41-Nb-94
-100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 4.8399 MeV
JENDL5.0 Threshold 4.8399 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
8
6
4
2
0
20
0
5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
36
Incident Energy (eV)
41-Nb-94

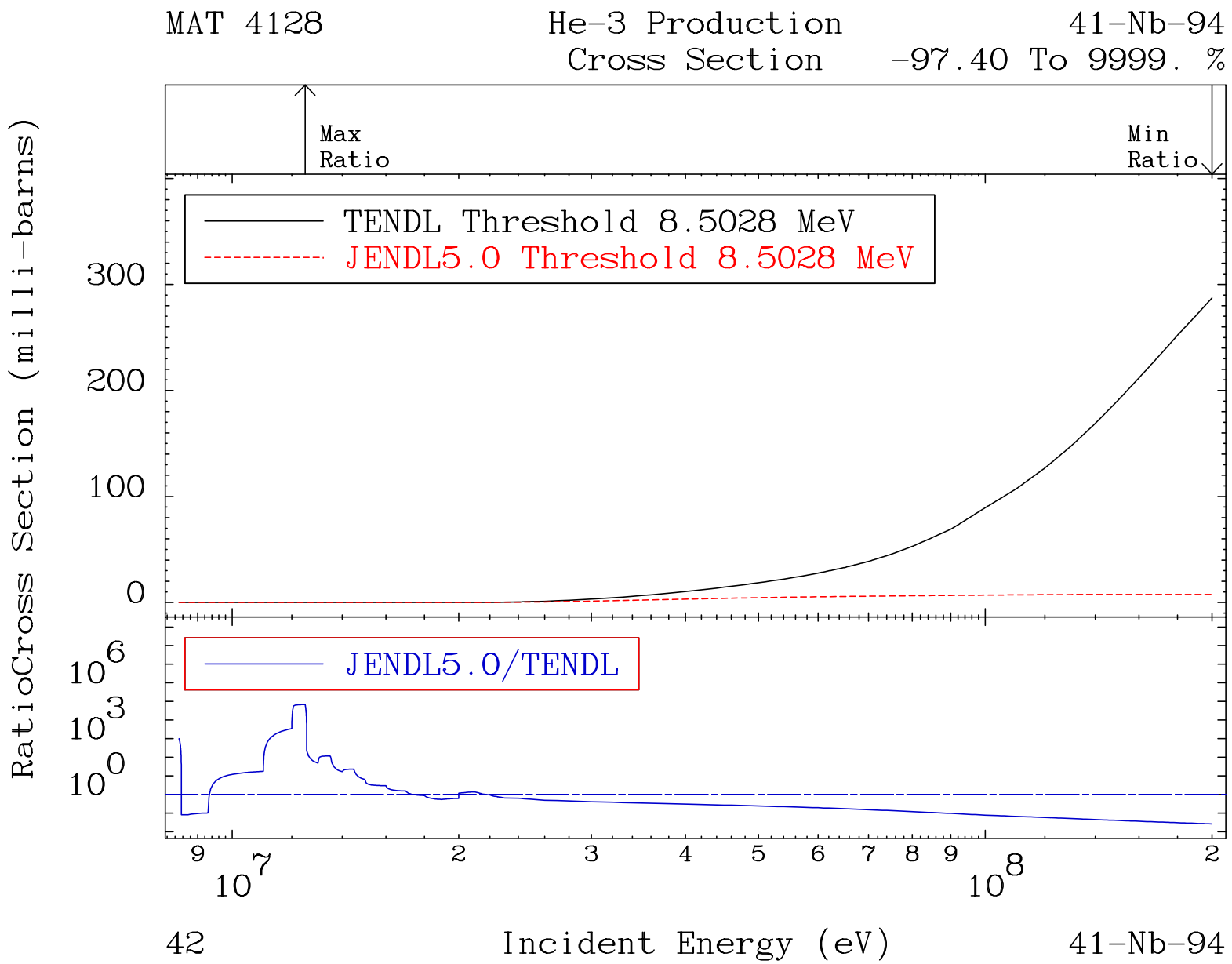

MAT 4128
(n,He-3)
Cross Section
41-Nb-94
-100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 8.5028 MeV
JENDL5.0 Threshold 8.5028 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
80
40
0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
37
Incident Energy (eV)
41-Nb-94

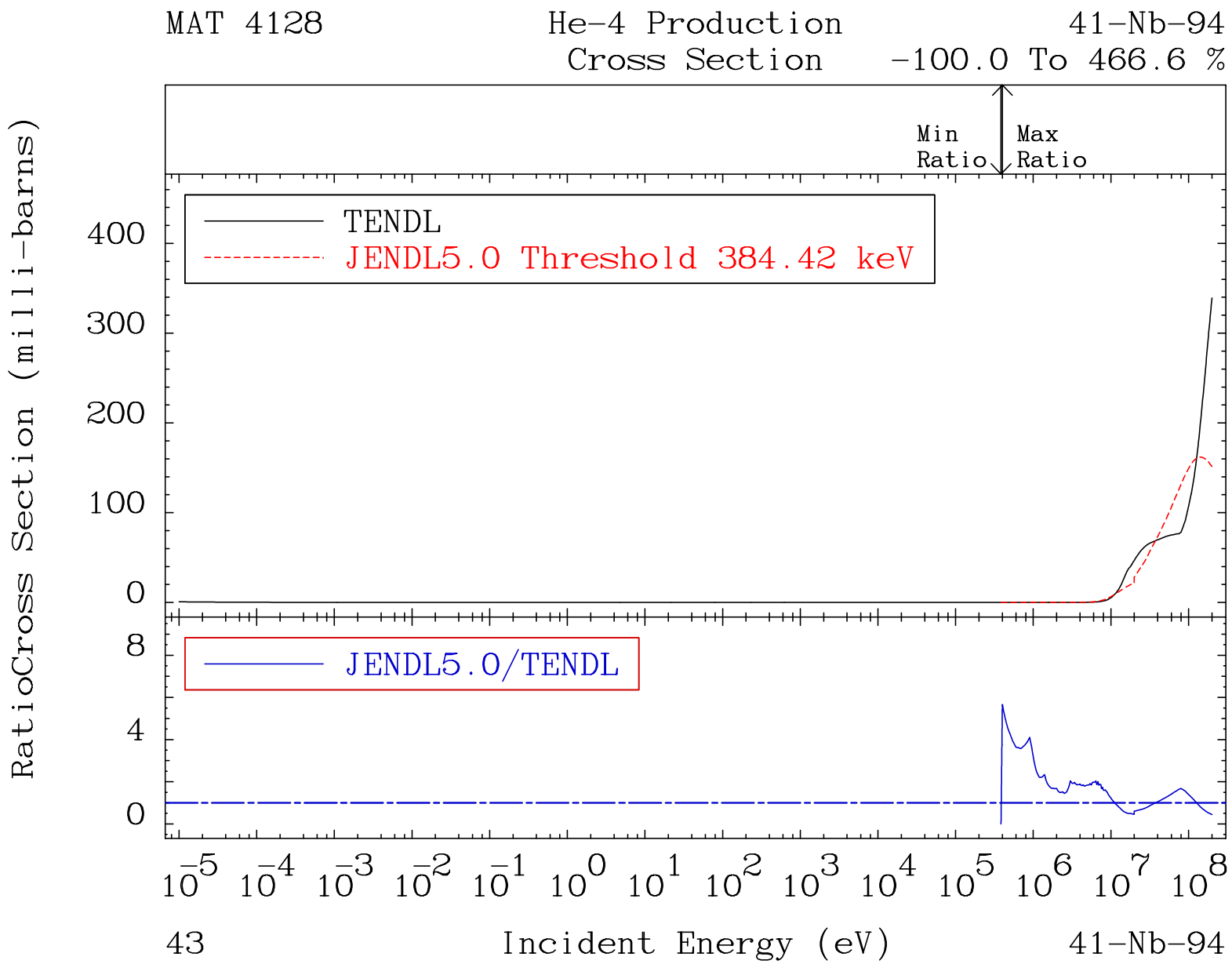

MAT 4128
(n,α)
Cross Section
41-Nb-94
-100.0 To 466.6 %
Min Ratio
Max Ratio
TENDL
JENDL5.0 Threshold 384.42 keV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
30
25
20
15
10
5
0
8
4
0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
38
Incident Energy (eV)
41-Nb-94

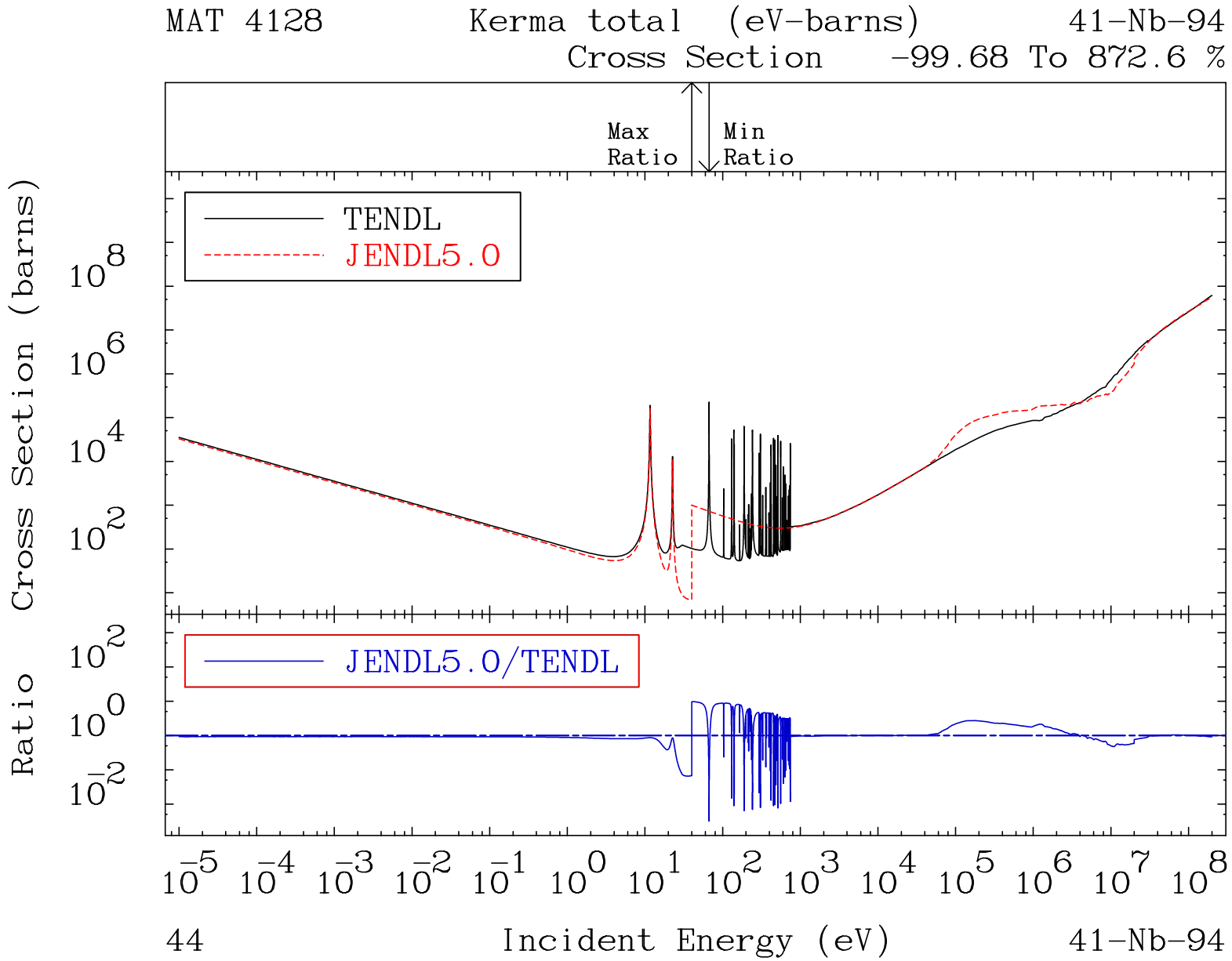

MAT 4128
Hydrogen Production
41-Nb-94
Cross Section -100.0 To 36.77 %
Min Ratio
Max Ratio
TENDL
JENDL5.0 Threshold 384.42 keV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
2.0
1.0
0.0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
39
Incident Energy (eV)
41-Nb-94

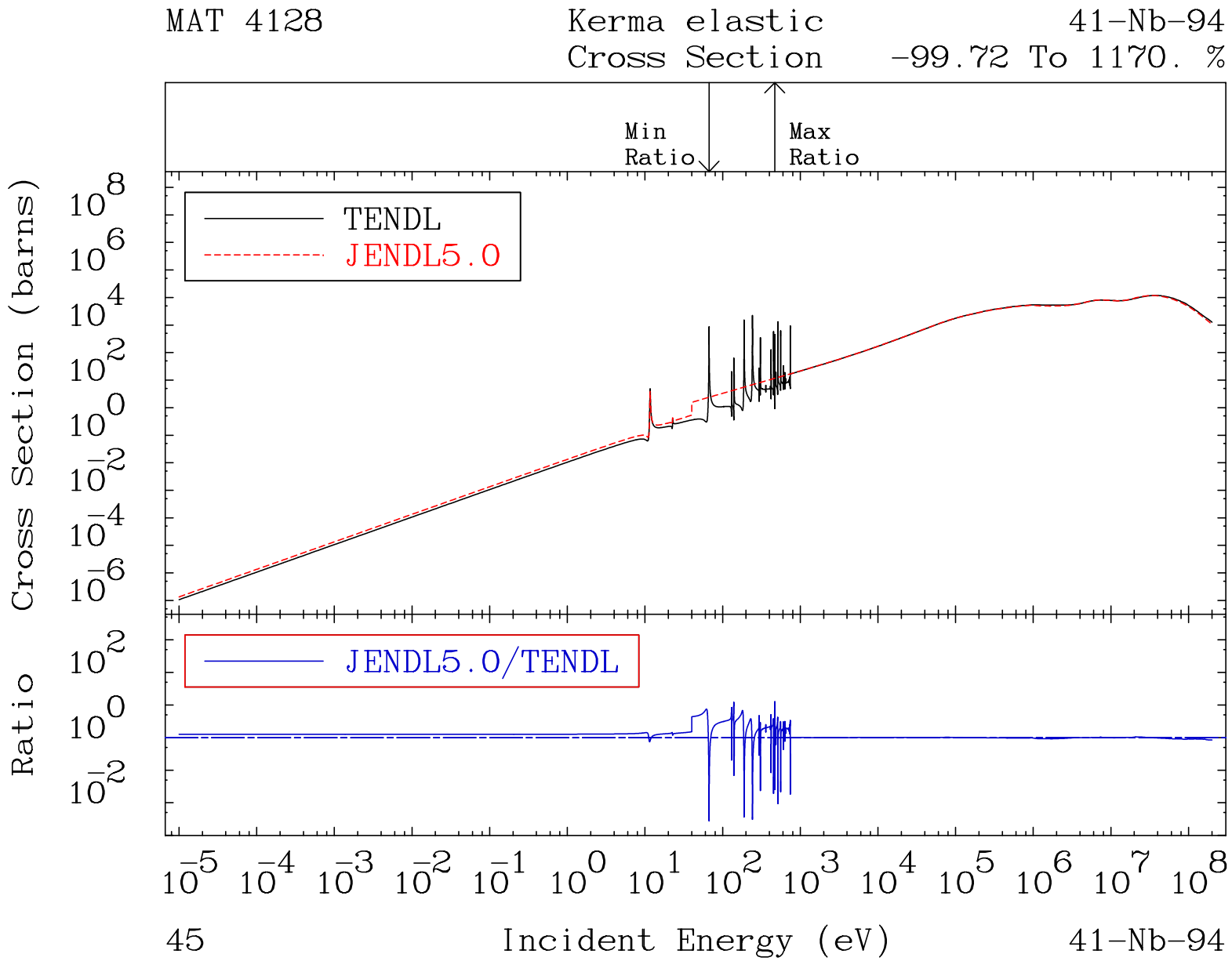

MAT 4128
Deuterium Production
41-Nb-94
Cross Section -88.56 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 4.3577 MeV
JENDL5.0 Threshold 4.3572 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
350
300
250
200
150
100
50
0
10^8
10^4
10^0
5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
40
Incident Energy (eV)
41-Nb-94

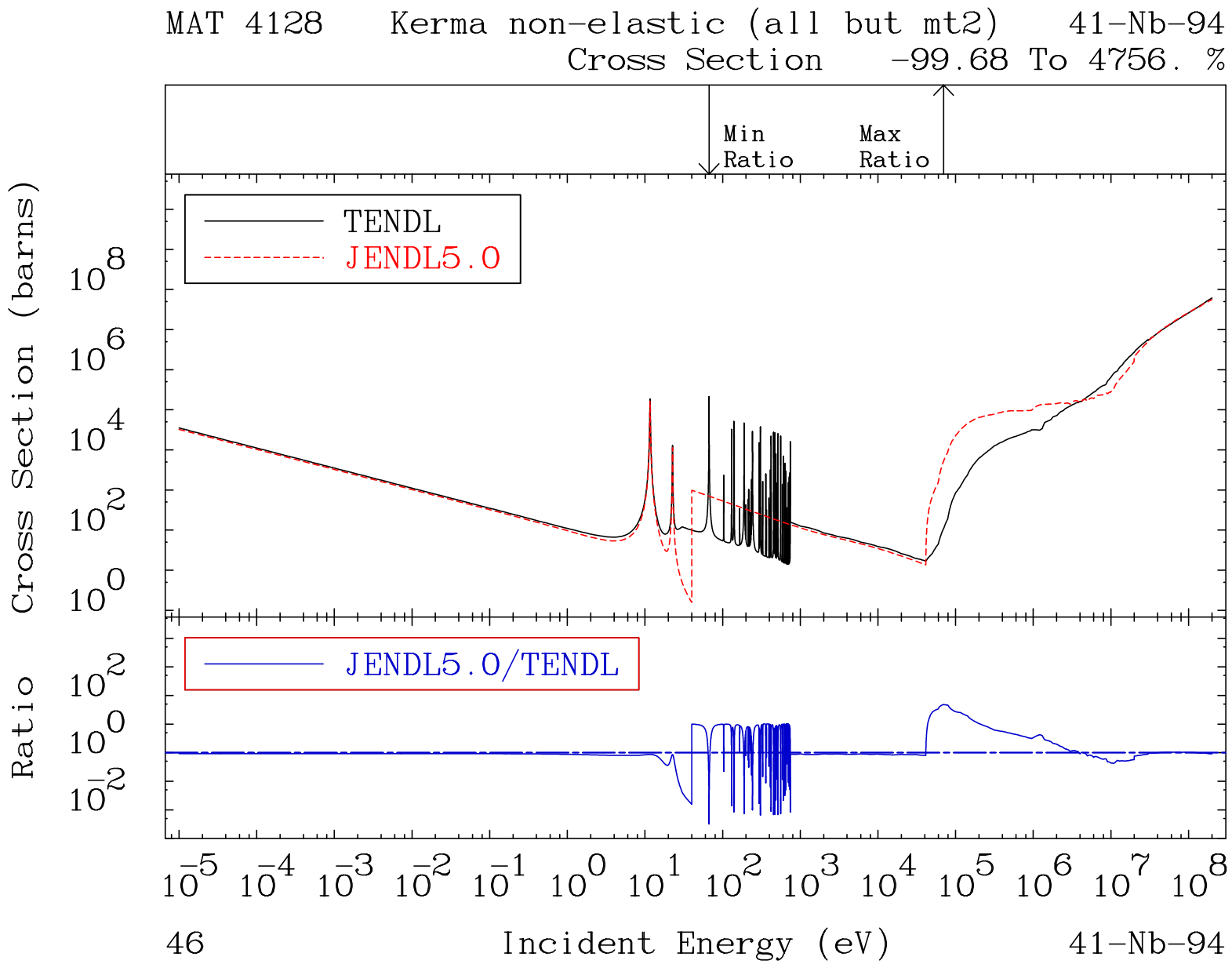

MAT 4128
Tritium Production
41-Nb-94
Cross Section
-97.57 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 4.8399 MeV
JENDL5.0 Threshold 4.8399 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
10^6
10^3
10^0
5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
41
Incident Energy (eV)
41-Nb-94

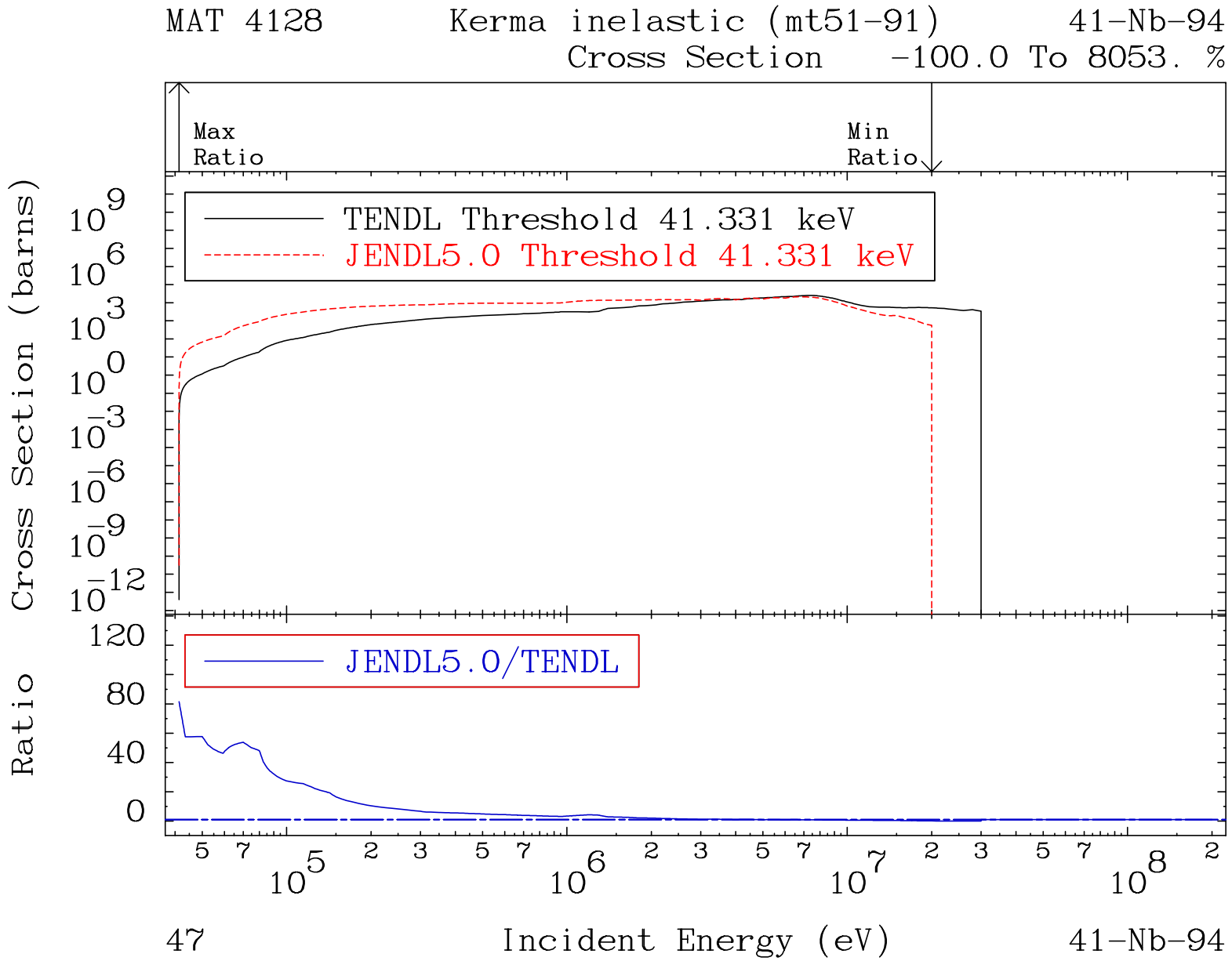

MAT 4128
He-3 Production
Cross Section
41-Nb-94
-97.40 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 8.5028 MeV
JENDL5.0 Threshold 8.5028 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
300
200
100
0
10^6
10^3
10^0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
42
Incident Energy (eV)
41-Nb-94

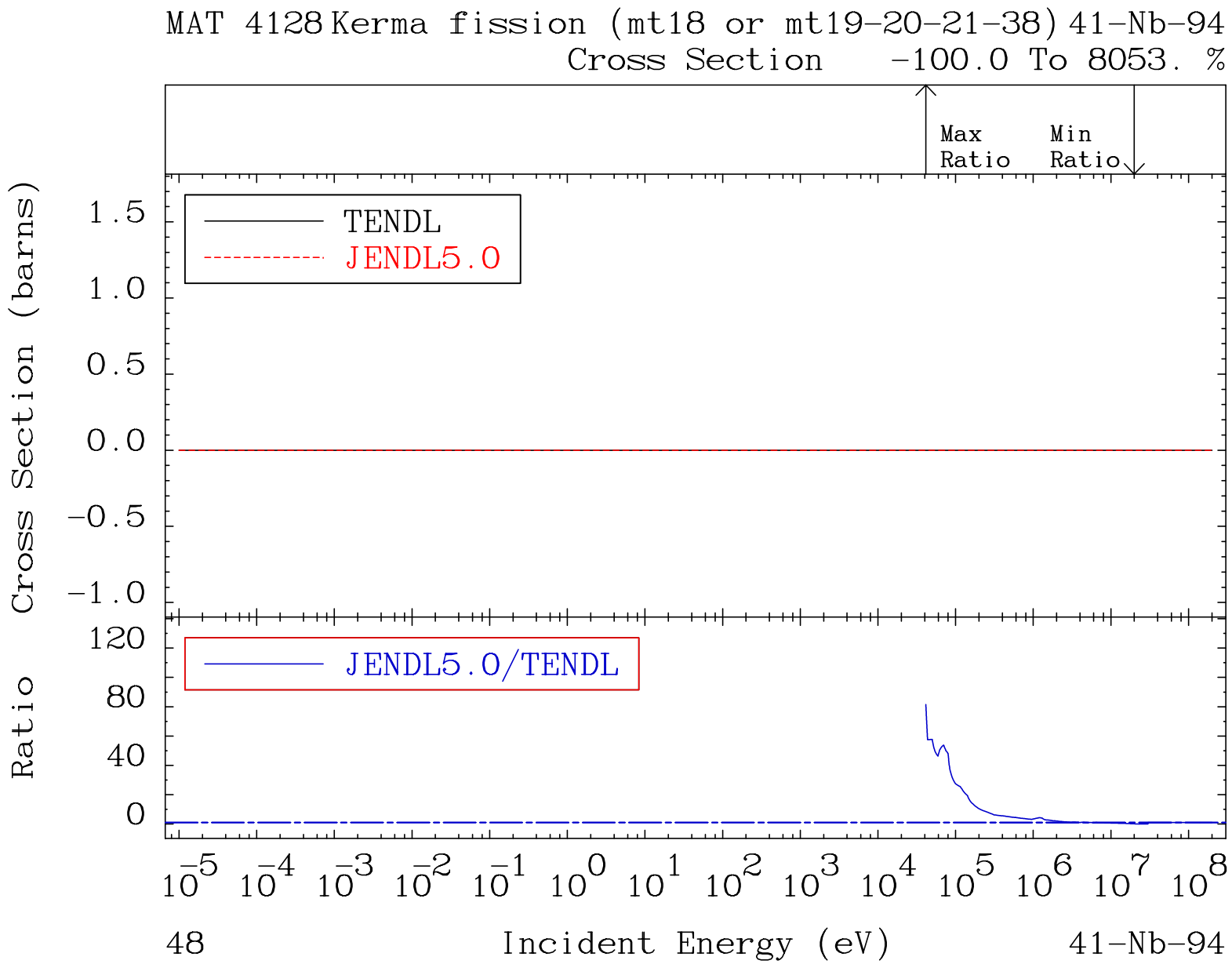

MAT 4128
He-4 Production
Cross Section
41-Nb-94
-100.0 To 466.6 %
Min Ratio
Max Ratio
TENDL
JENDL5.0 Threshold 384.42 keV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
400
300
200
100
0
8
4
0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
43
Incident Energy (eV)
41-Nb-94

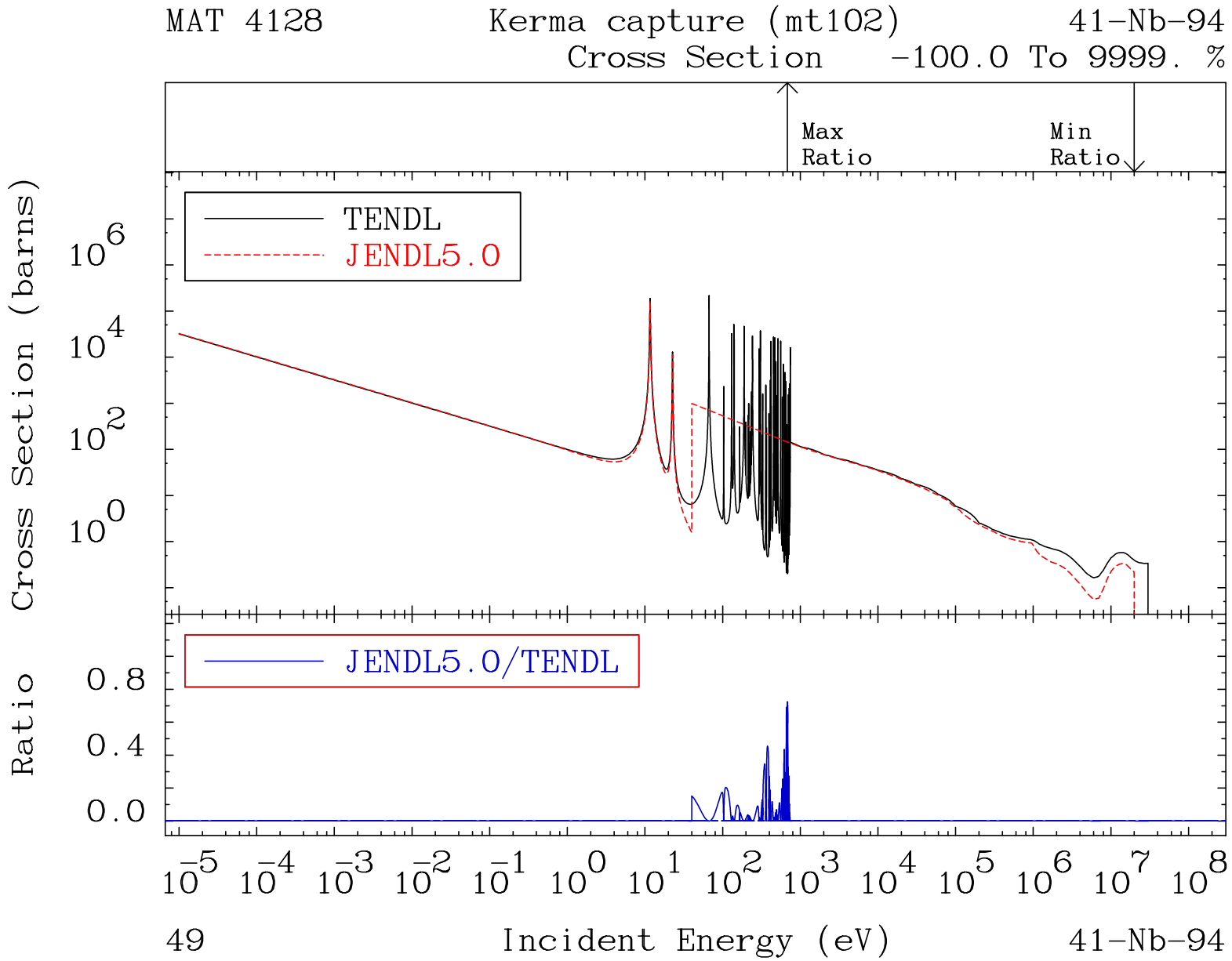

MAT 4128
Kerma total (eV-barns)
41-Nb-94
Cross Section -99.68 To 872.6 %
Max Ratio
Min Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
44
41-Nb-94

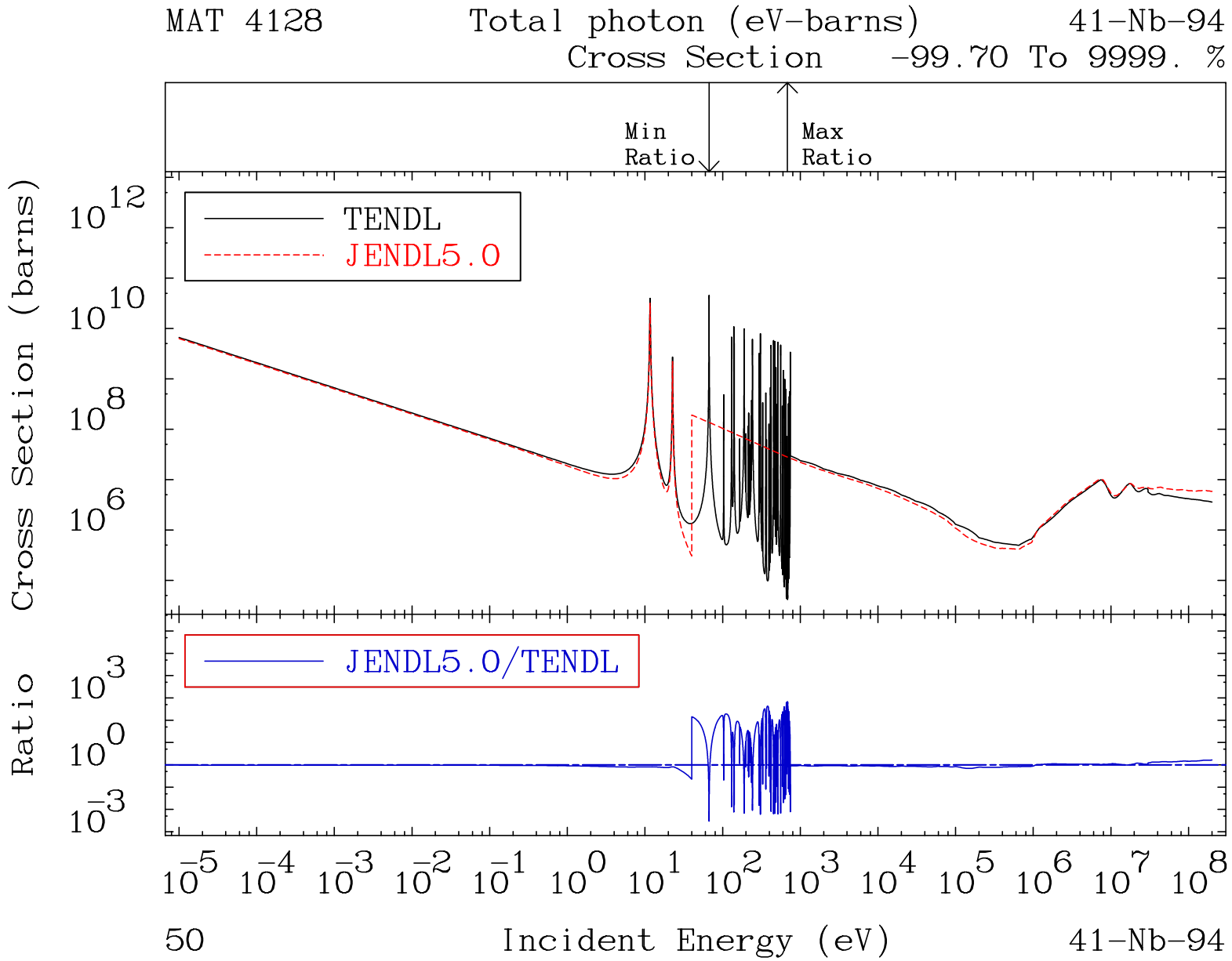

MAT 4128
Kerma elastic
Cross Section
41-Nb-94
-99.72 To 1170. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
45
41-Nb-94

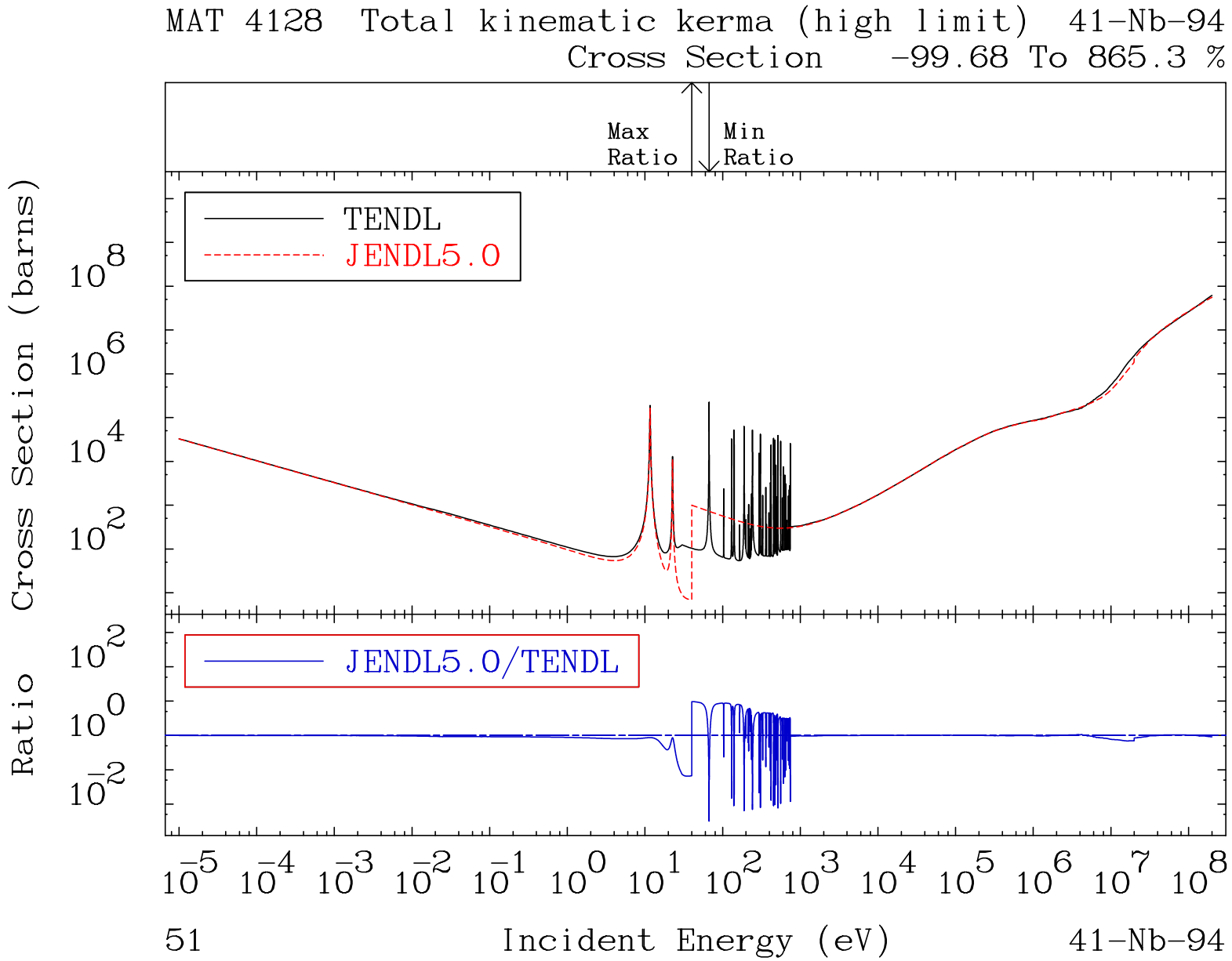

MAT 4128 Kerma non-elastic (all but mt2) 41-Nb-94
Cross Section -99.68 To 4756. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
46
41-Nb-94

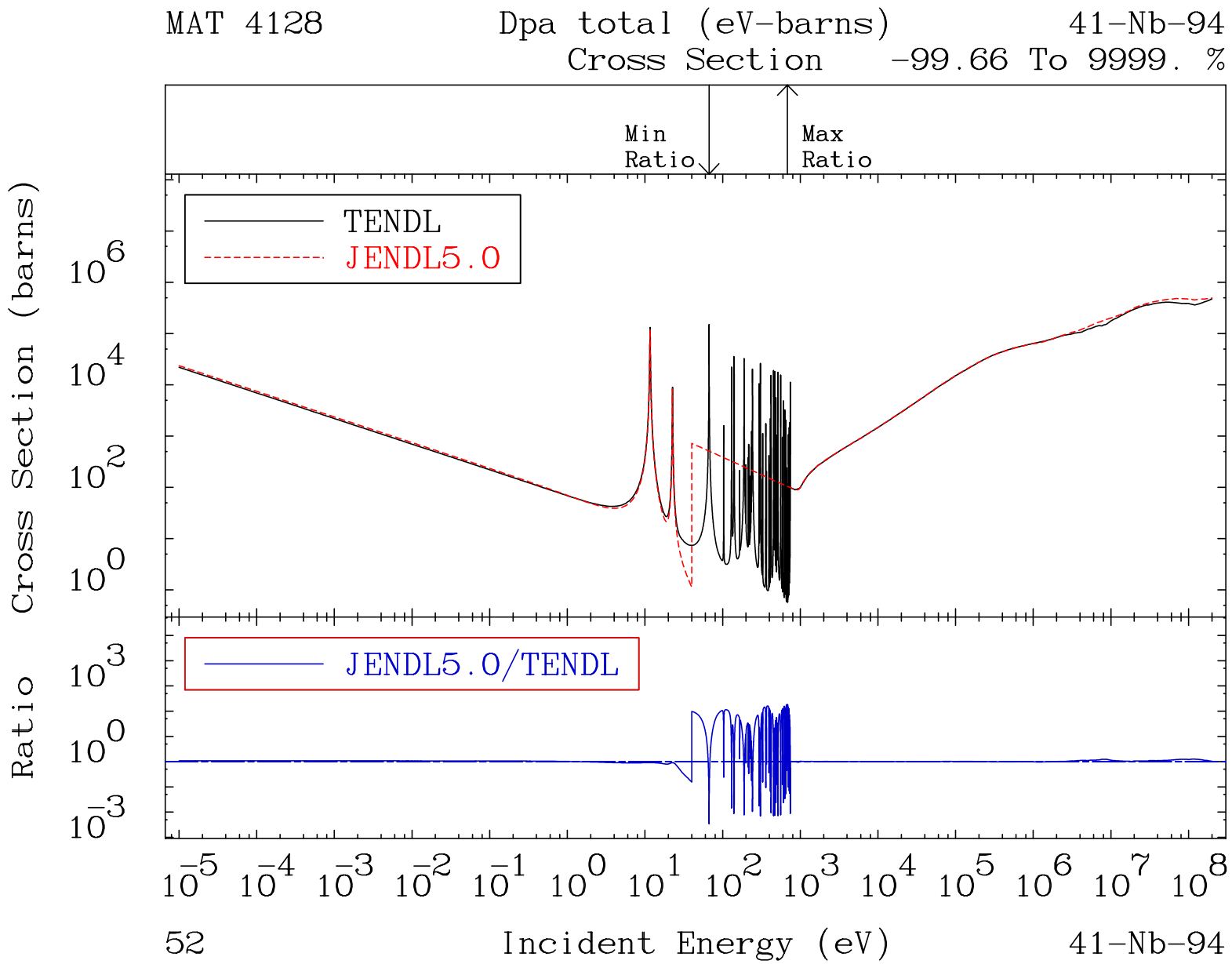

MAT 4128
Kerma inelastic (mt51-91)
41-Nb-94
Cross Section -100.0 To 8053. %
Max Ratio
Min Ratio
TENDL Threshold 41.331 keV
JENDL5.0 Threshold 41.331 keV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
47
41-Nb-94

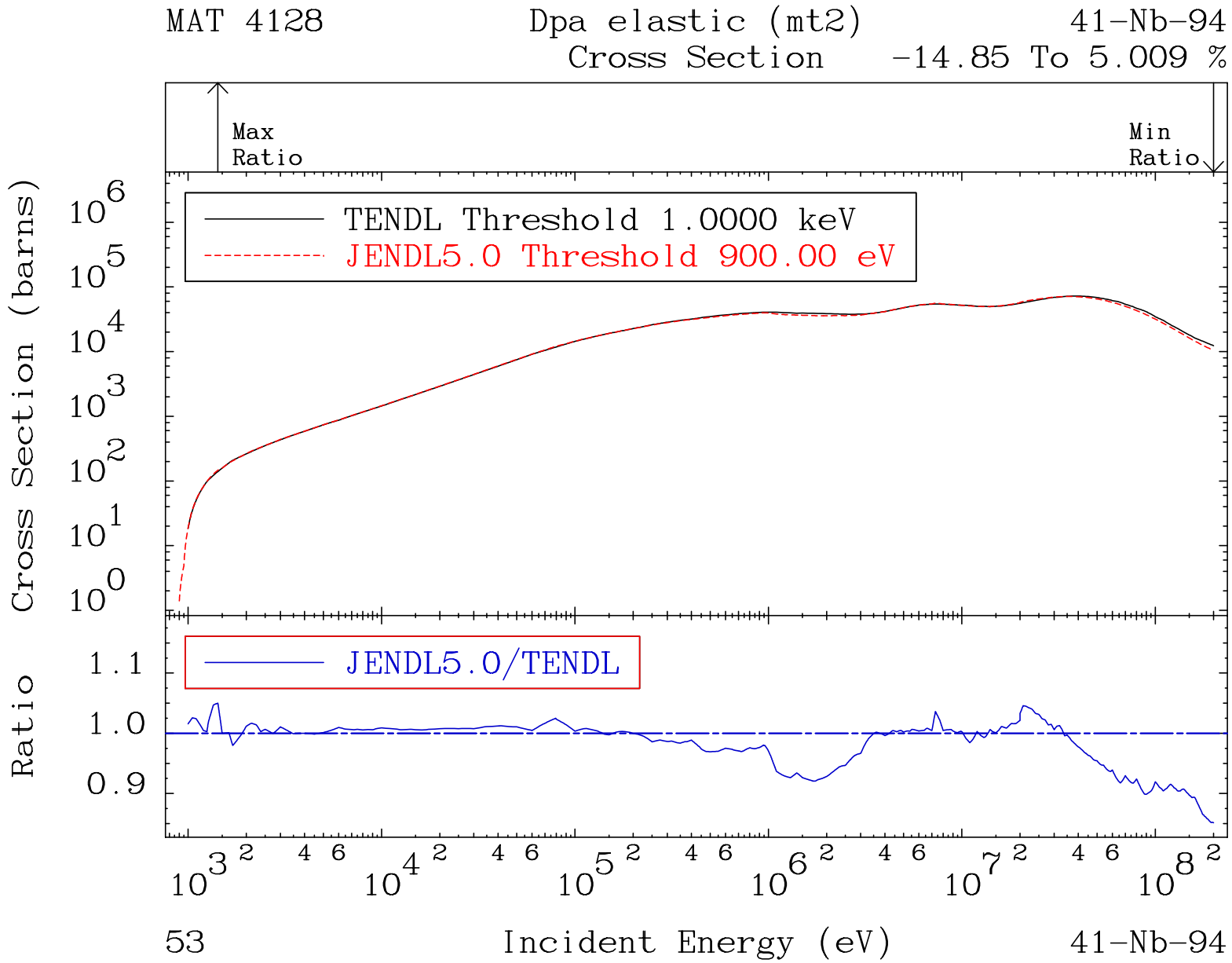

MAT 4128 Kerma fission (mt18 or mt19-20-21-38) 41-Nb-94
Cross Section -100.0 To 8053. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Ratio Cross Section (barns)
1.5
1.0
0.5
0.0
-0.5
-1.0
120
80
40
0
$10^{-5}$ $10^{-4}$ $10^{-3}$ $10^{-2}$ $10^{-1}$ $10^{0}$ $10^{1}$ $10^{2}$ $10^{3}$ $10^{4}$ $10^{5}$ $10^{6}$ $10^{7}$ $10^{8}$
48
Incident Energy (eV)
41-Nb-94

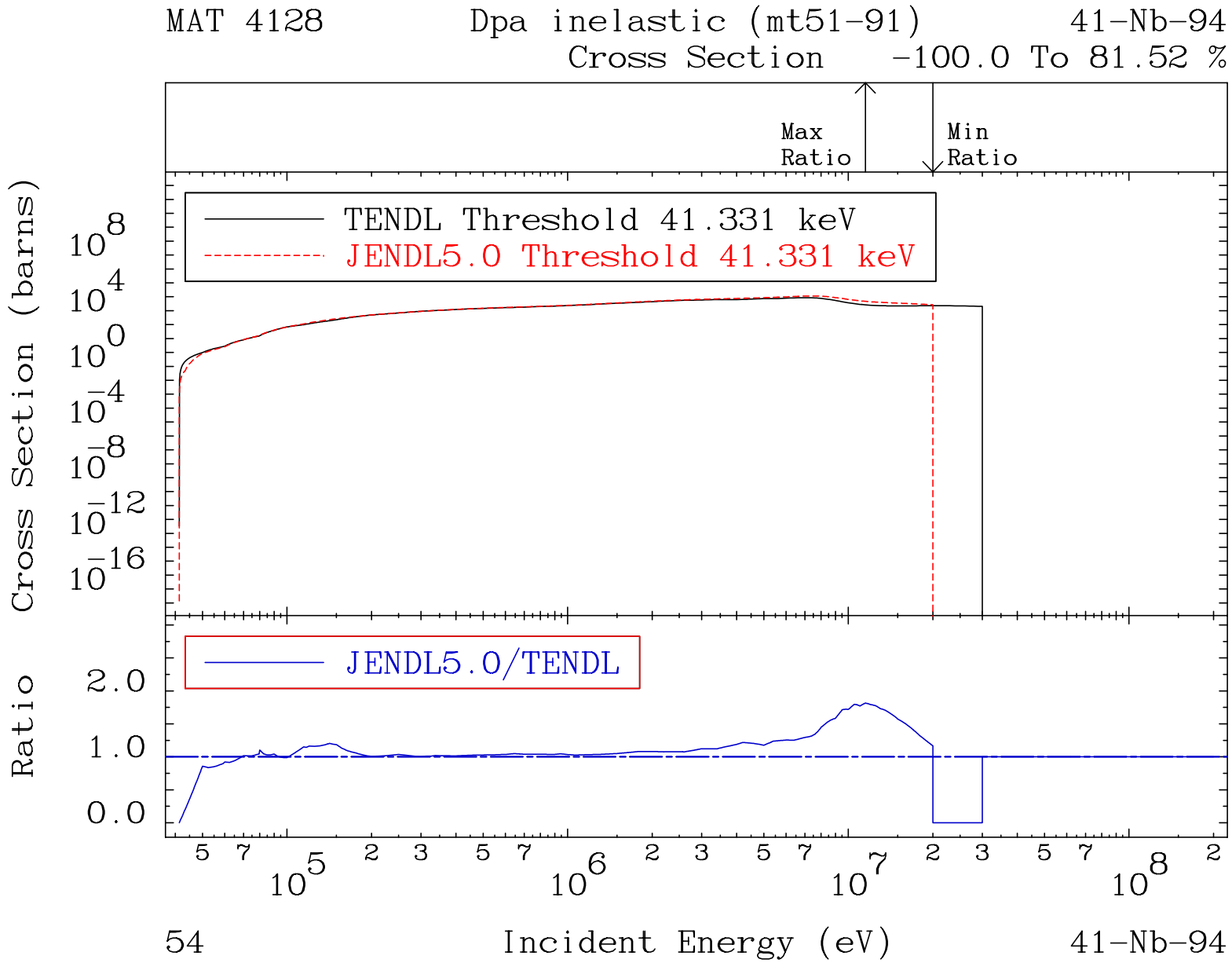

MAT 4128
Kerma capture (mt102)
41-Nb-94
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
49
41-Nb-94

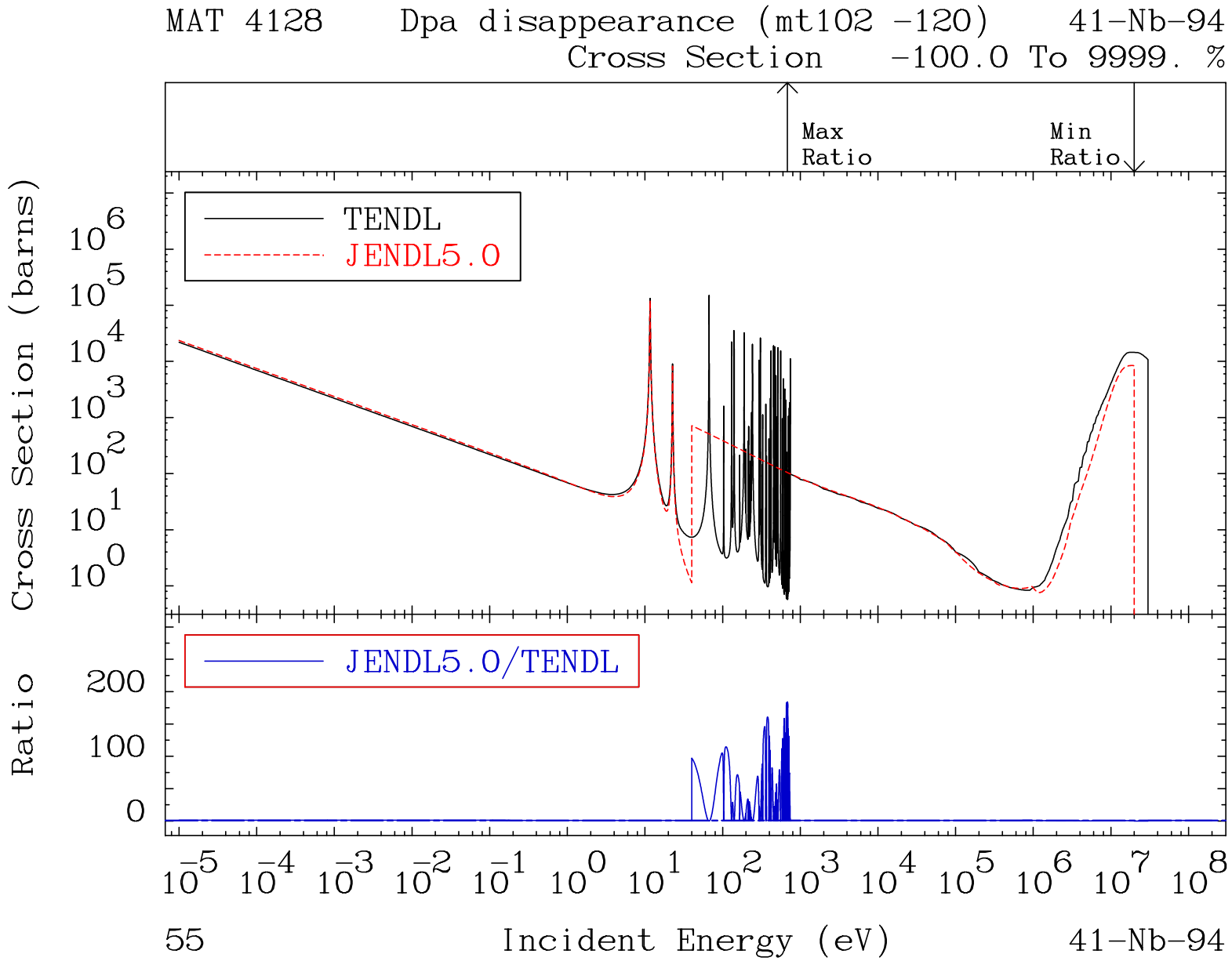

MAT 4128
Total photon (eV-barns)
41-Nb-94
Cross Section -99.70 To 9999. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
50
41-Nb-94

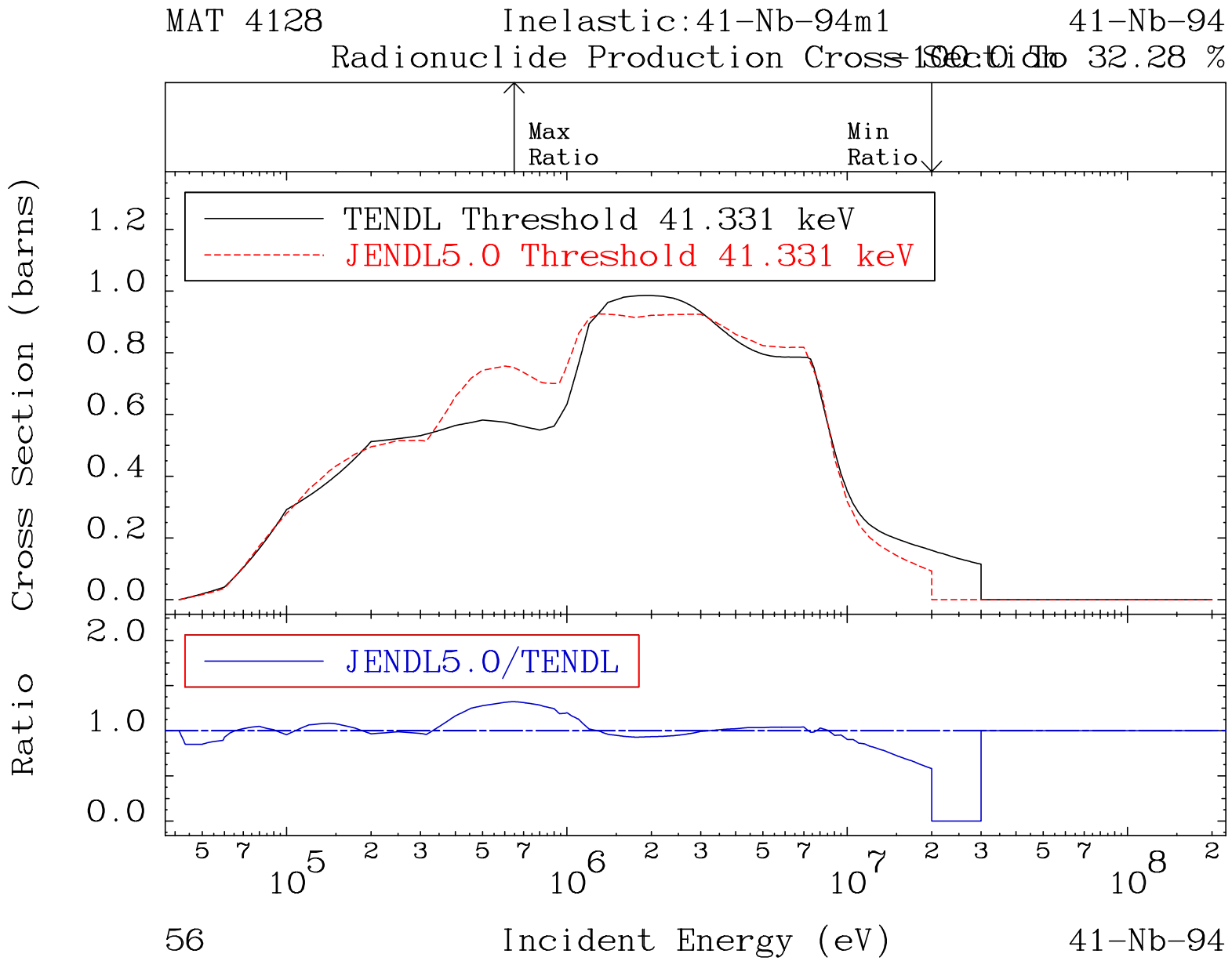

MAT 4128 Total kinematic kerma (high limit) 41-Nb-94
Cross Section -99.68 To 865.3 %
Max Ratio
Min Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
51
41-Nb-94

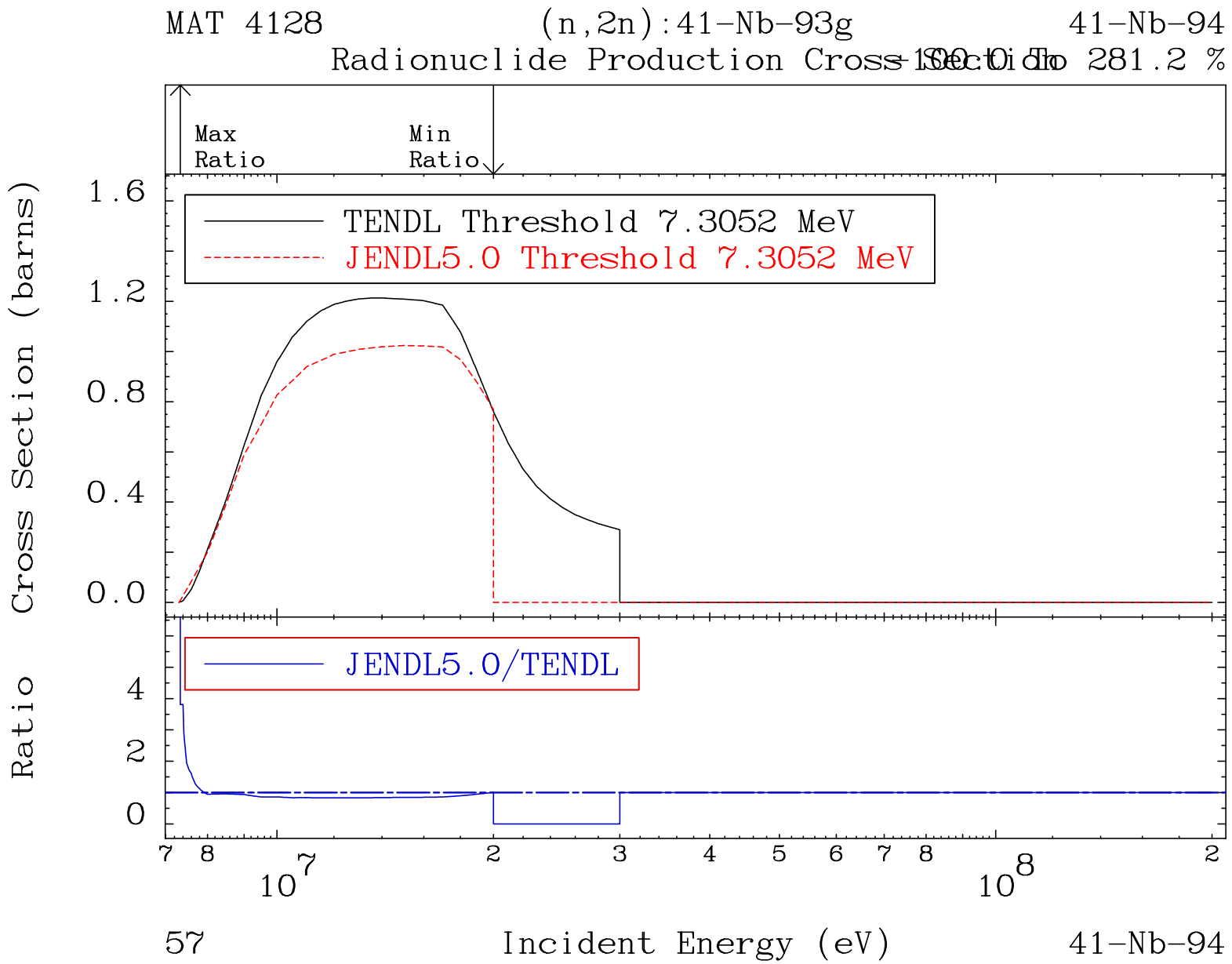

MAT 4128
Dpa total (eV-barns)
41-Nb-94
Cross Section -99.66 To 9999. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
52
41-Nb-94

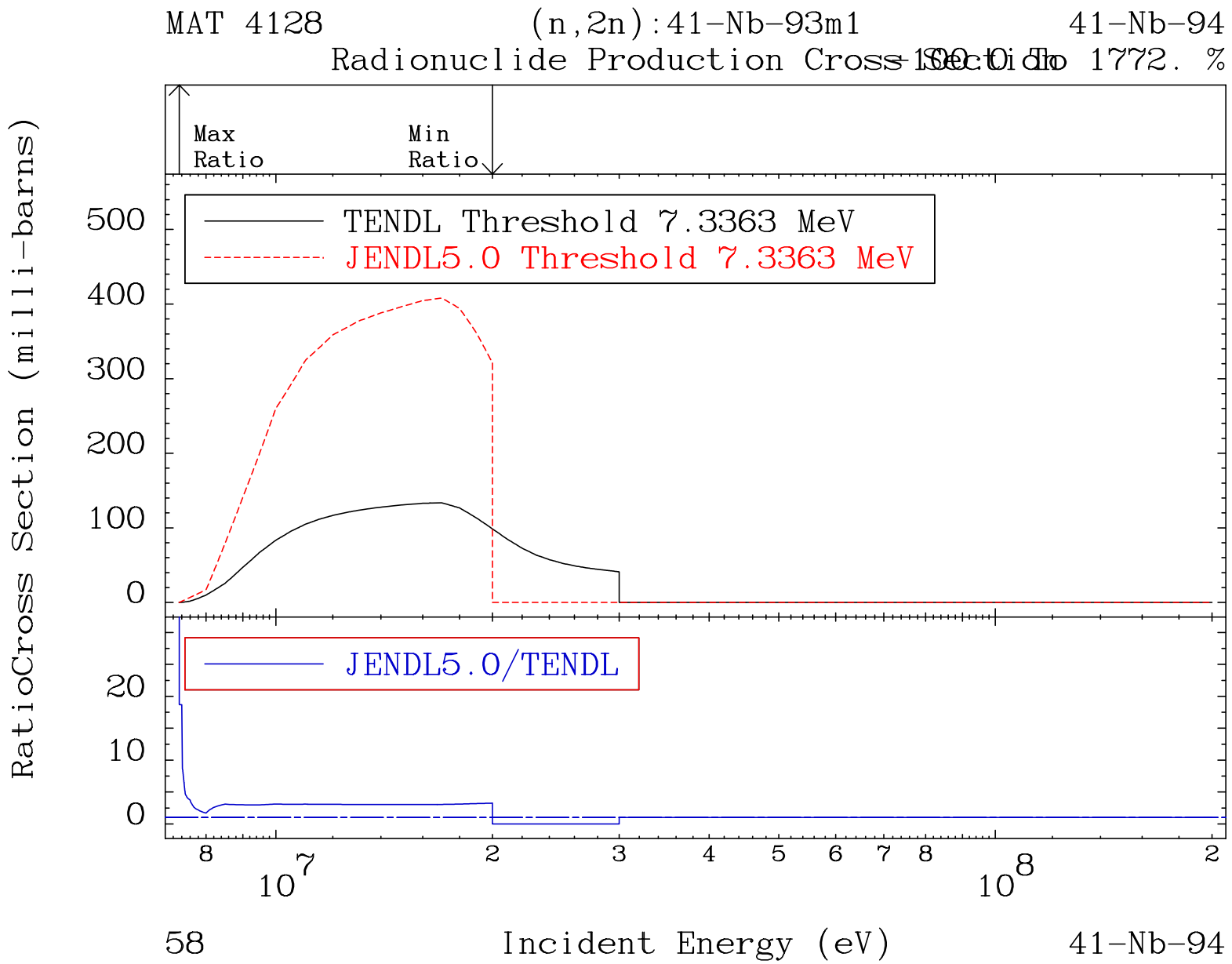

MAT 4128
Dpa elastic (mt2)
Cross Section
41-Nb-94
-14.85 To 5.009 %
Max Ratio
Min Ratio
TENDL Threshold 1.0000 keV
JENDL5.0 Threshold 900.00 eV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
53
41-Nb-94

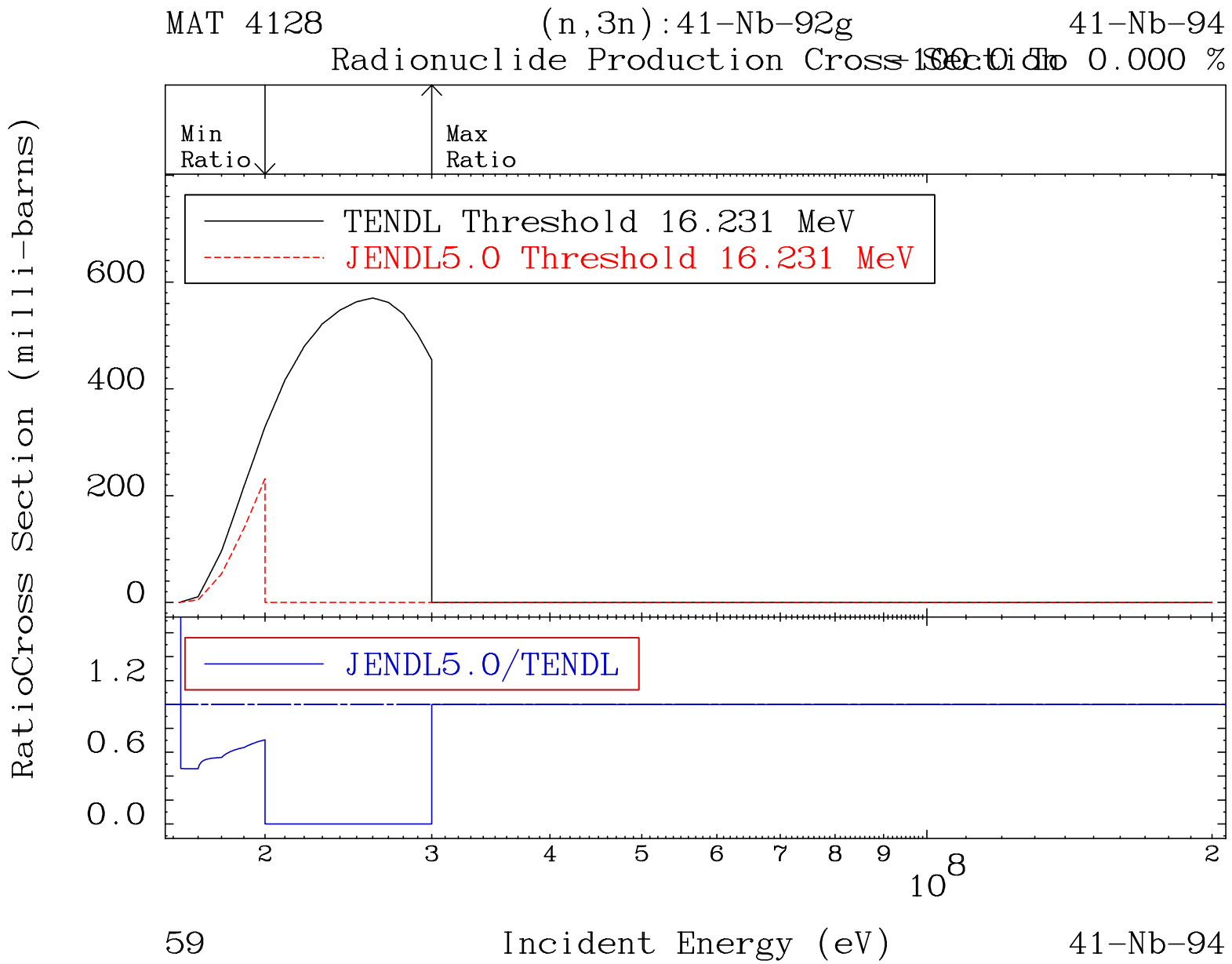

MAT 4128
Dpa inelastic (mt51-91)
41-Nb-94
Cross Section
-100.0 To 81.52 %
Max Ratio
Min Ratio
TENDL Threshold 41.331 keV
JENDL5.0 Threshold 41.331 keV
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
54
41-Nb-94

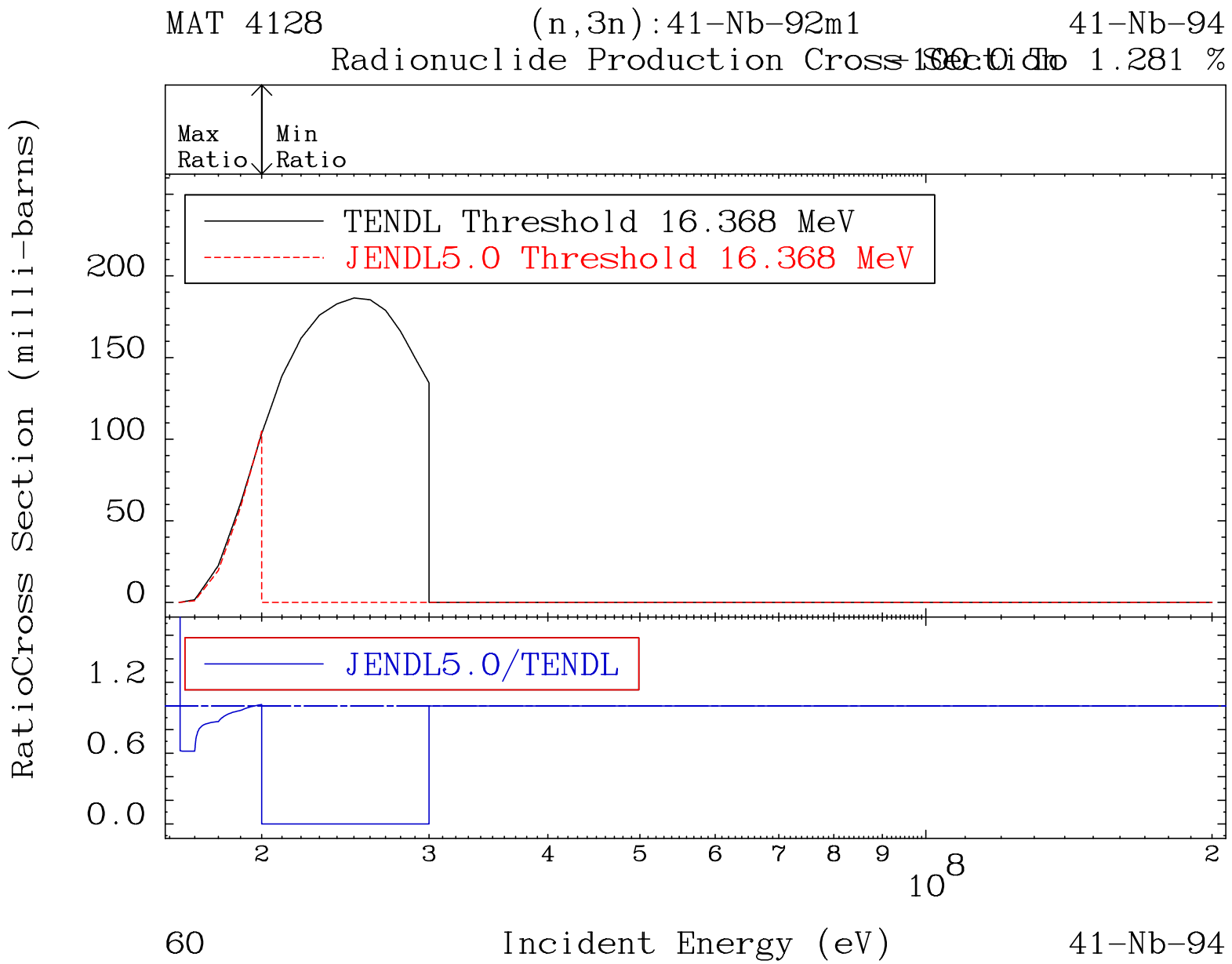

MAT 4128 Dpa disappearance (mt102 -120) 41-Nb-94
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
55
41-Nb-94

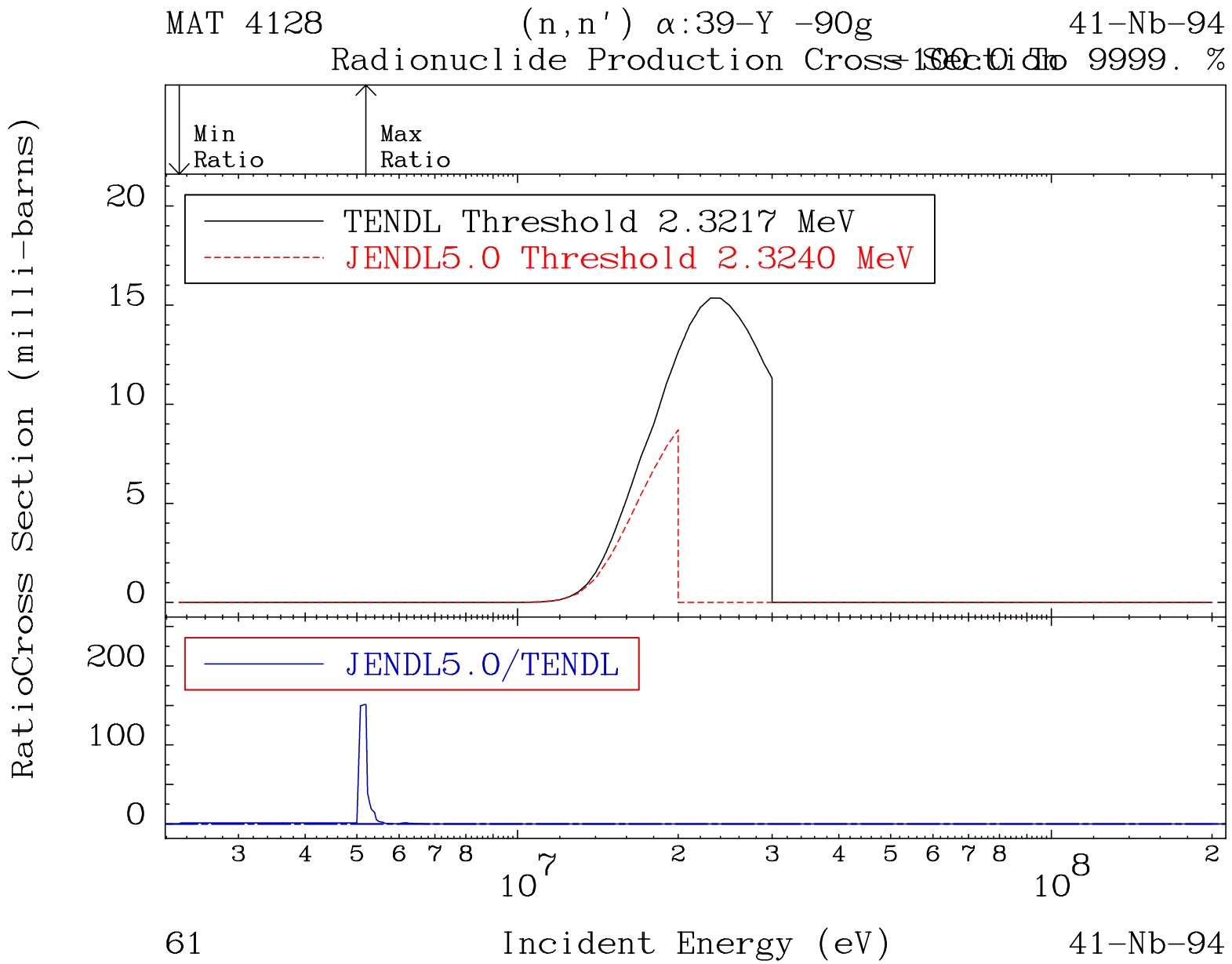

MAT 4128
Inelastic:41-Nb-94m1
41-Nb-94
Radionuclide Production Cross Section To
Max Ratio
Min Ratio
TENDL Threshold 41.331 keV
JENDL5.0 Threshold 41.331 keV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
1.2
1.0
0.8
0.6
0.4
0.2
0.0
2.0
1.0
0.0
5 7 10^5 2 3 5 7 10^6 2 3 5 7 10^7 2 3 5 7 10^8 2
56
Incident Energy (eV)
41-Nb-94

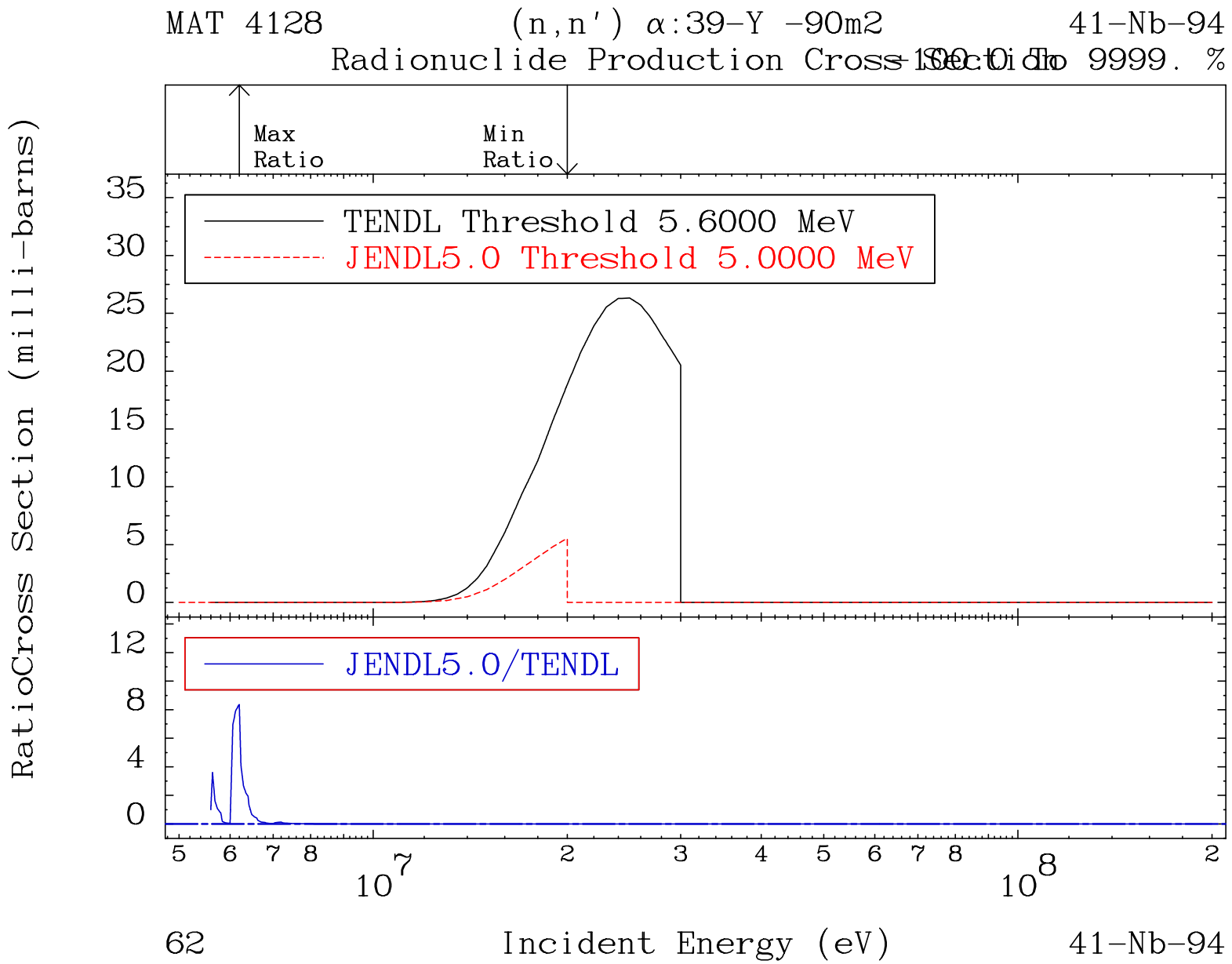

MAT 4128
(n,2n):41-Nb-93g
41-Nb-94
Radionuclide Production Cross Section
Max Ratio
Min Ratio
TENDL Threshold 7.3052 MeV
JENDL5.0 Threshold 7.3052 MeV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
57
41-Nb-94

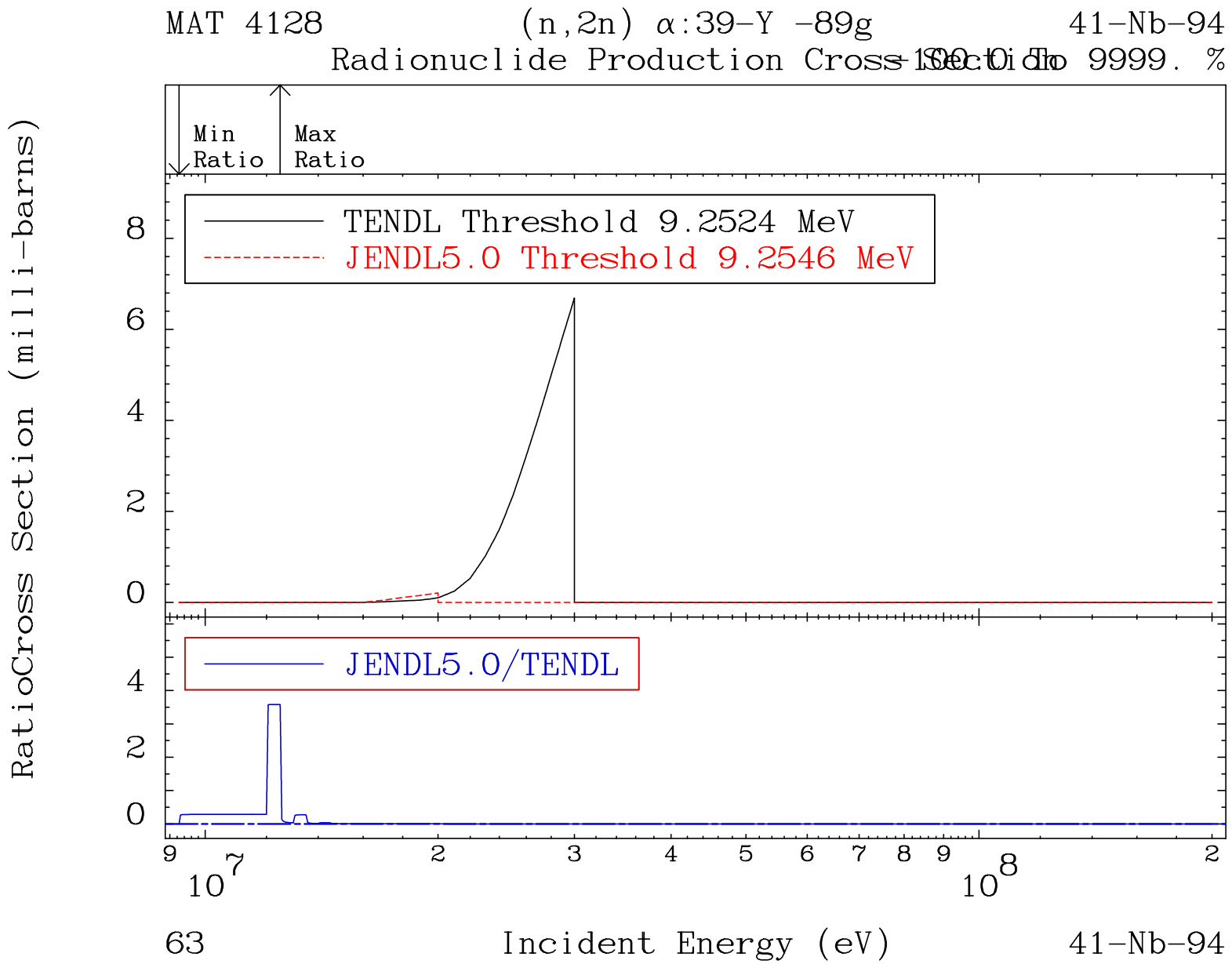

MAT 4128
(n,2n):41-Nb-93m1
41-Nb-94
Radionuclide Production Cross Section
Max Ratio
Min Ratio
TENDL Threshold 7.3363 MeV
JENDL5.0 Threshold 7.3363 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
58
41-Nb-94

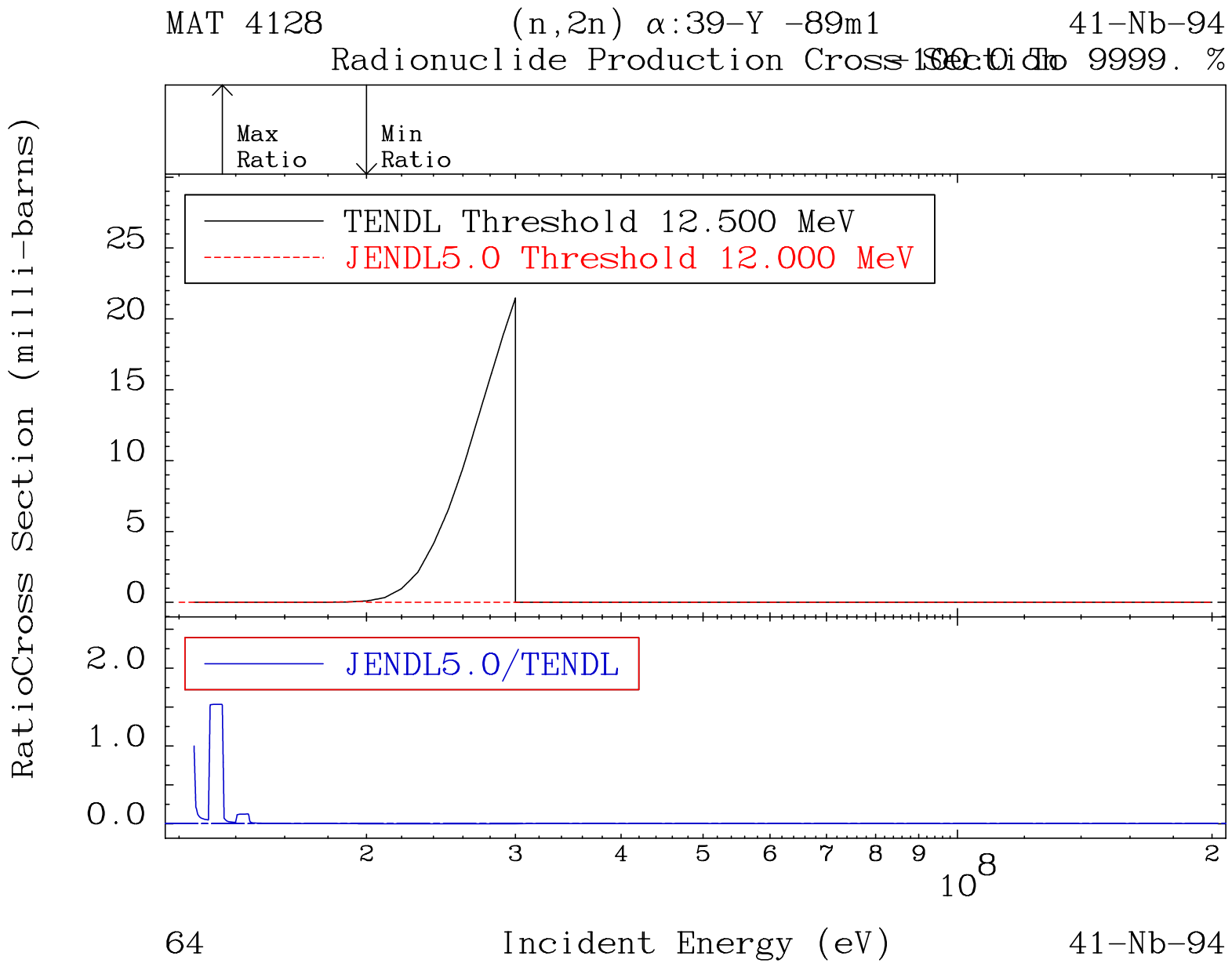

MAT 4128
(n,3n):41-Nb-92g
41-Nb-94
Radionuclide Production Cross Section
Uncertainty 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 16.231 MeV
JENDL5.0 Threshold 16.231 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
600
400
200
0
1.2
0.6
0.0
2
3
4
5
6
7
8
9
10^8
2
59
Incident Energy (eV)
41-Nb-94


MAT 4128
(n,3n):41-Nb-92m1
41-Nb-94
Radionuclide Production Cross Section
Max Ratio
Min Ratio
TENDL Threshold 16.368 MeV
JENDL5.0 Threshold 16.368 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
200
150
100
50
0
1.2
0.6
0.0
2
3
4
5
6
7
8
9
2
10^8
60
Incident Energy (eV)
41-Nb-94


MAT 4128
(n,n') α:39-Y -90g
41-Nb-94
Radionuclide Production Cross Section To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 2.3217 MeV
JENDL5.0 Threshold 2.3240 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
20
15
10
5
0
200
100
0
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
61
Incident Energy (eV)
41-Nb-94


MAT 4128
(n,n') α:39-Y -90m2
41-Nb-94
Radionuclide Production Cross Section To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 5.6000 MeV
JENDL5.0 Threshold 5.0000 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
35
30
25
20
15
10
5
0
12
8
4
0
5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
62
Incident Energy (eV)
41-Nb-94


MAT 4128
(n,2n) α:39-Y -89g
41-Nb-94
Radionuclide Production Cross Section To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 9.2524 MeV
JENDL5.0 Threshold 9.2546 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
63
41-Nb-94


MAT 4128
(n,2n) α:39-Y -89m1
41-Nb-94
Radionuclide Production Cross Section To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 12.500 MeV
JENDL5.0 Threshold 12.000 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
25
20
15
10
5
0
2.0
1.0
0.0
2
3
4
5
6
7
8
9
2
10^8
64
Incident Energy (eV)
41-Nb-94