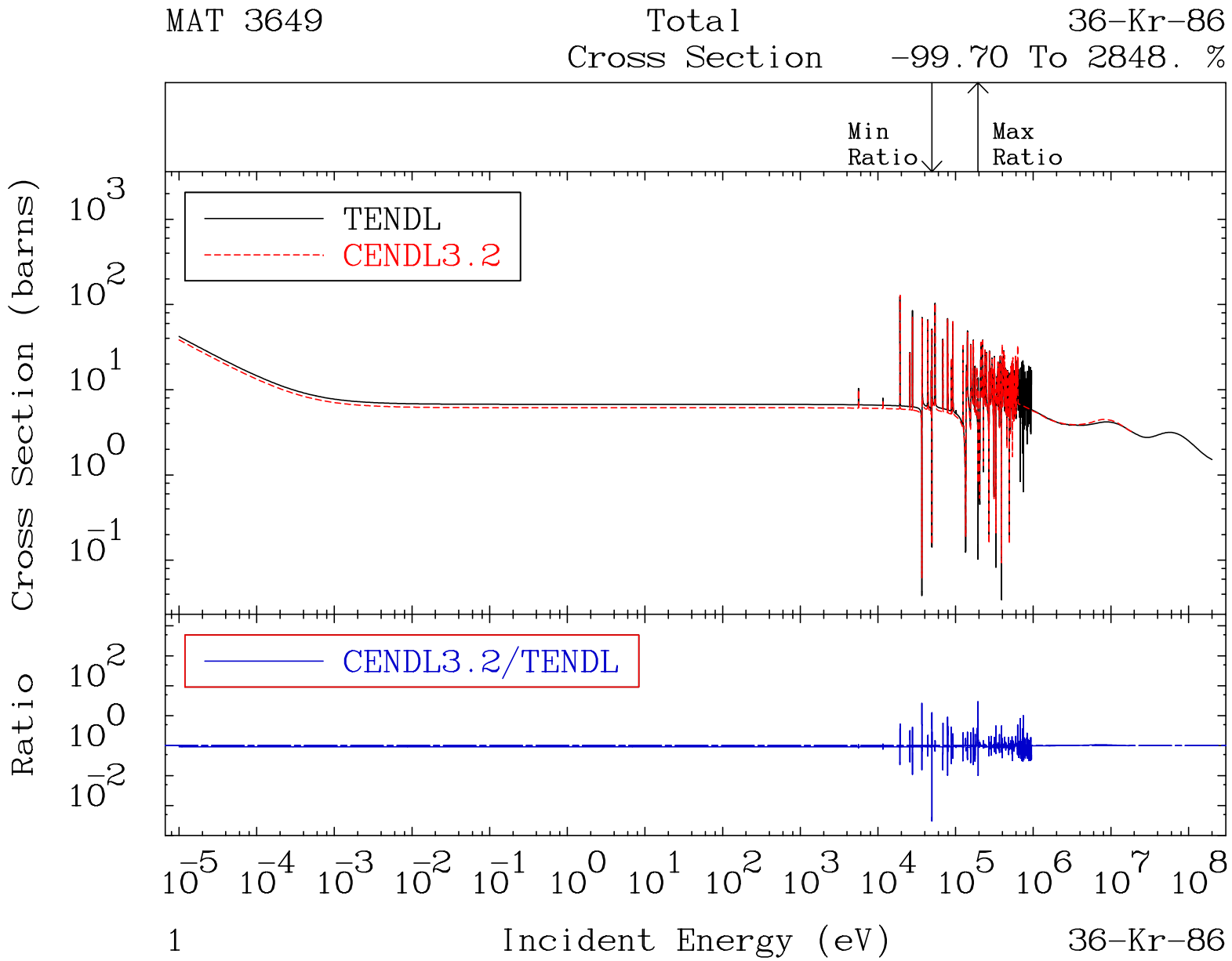
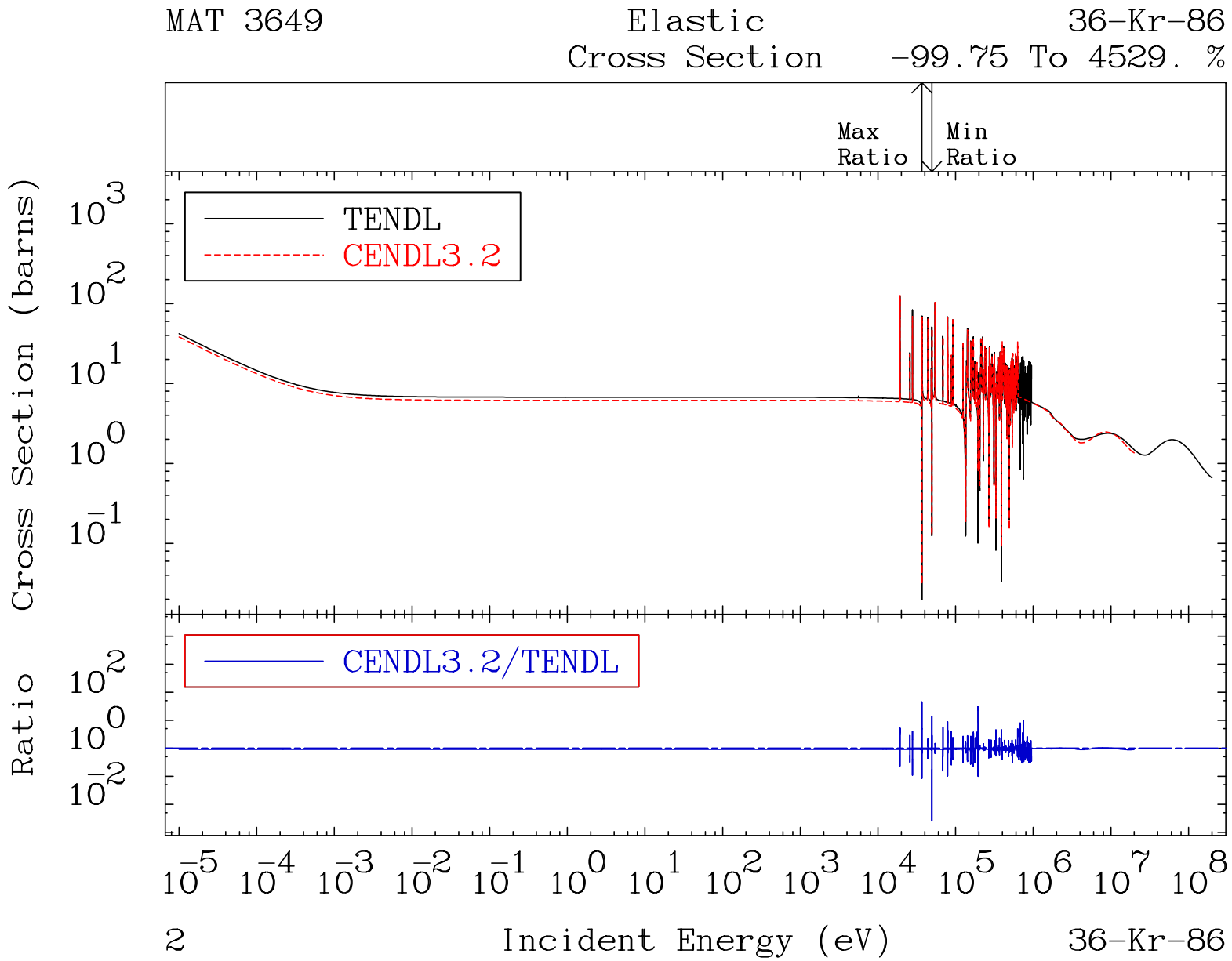
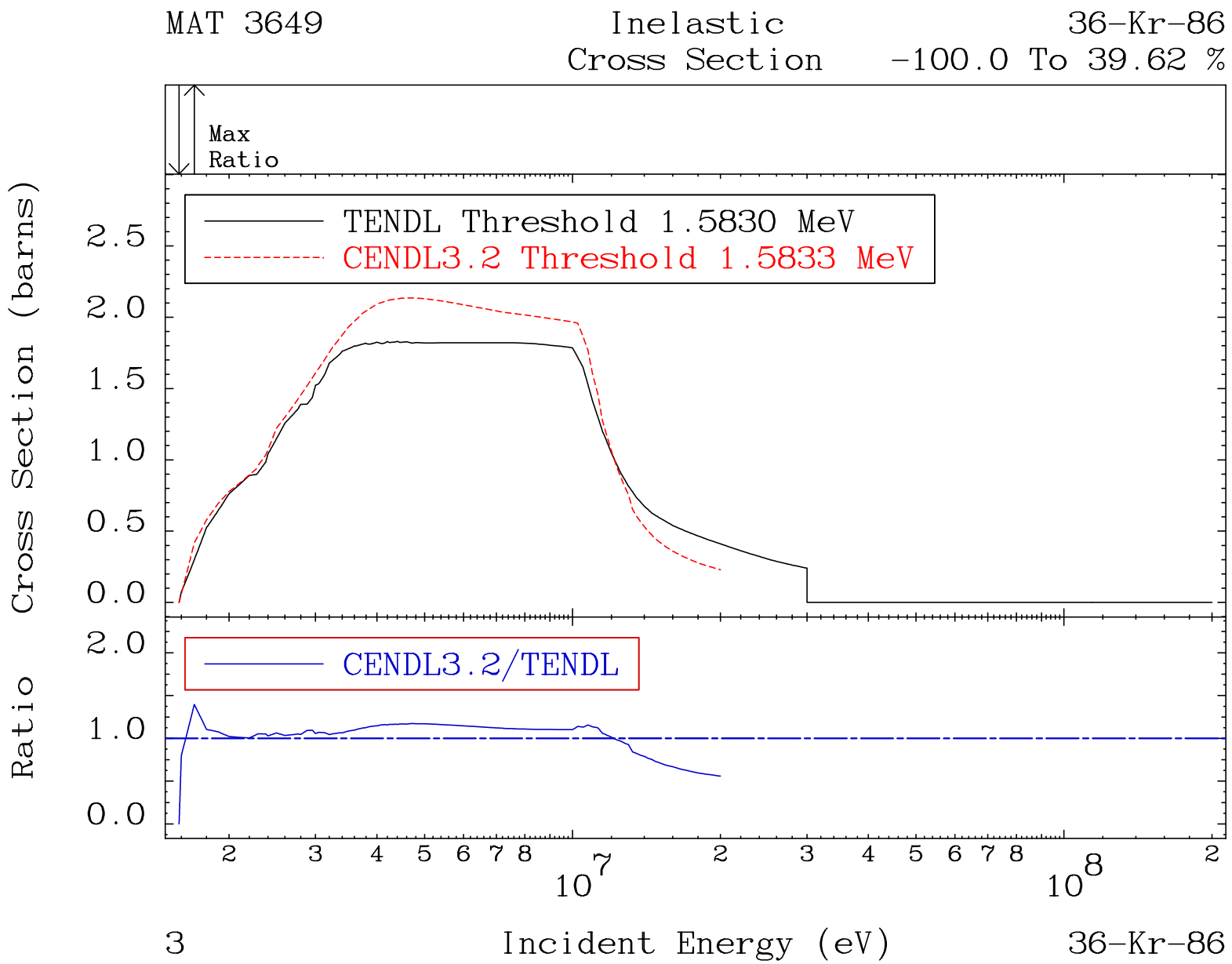
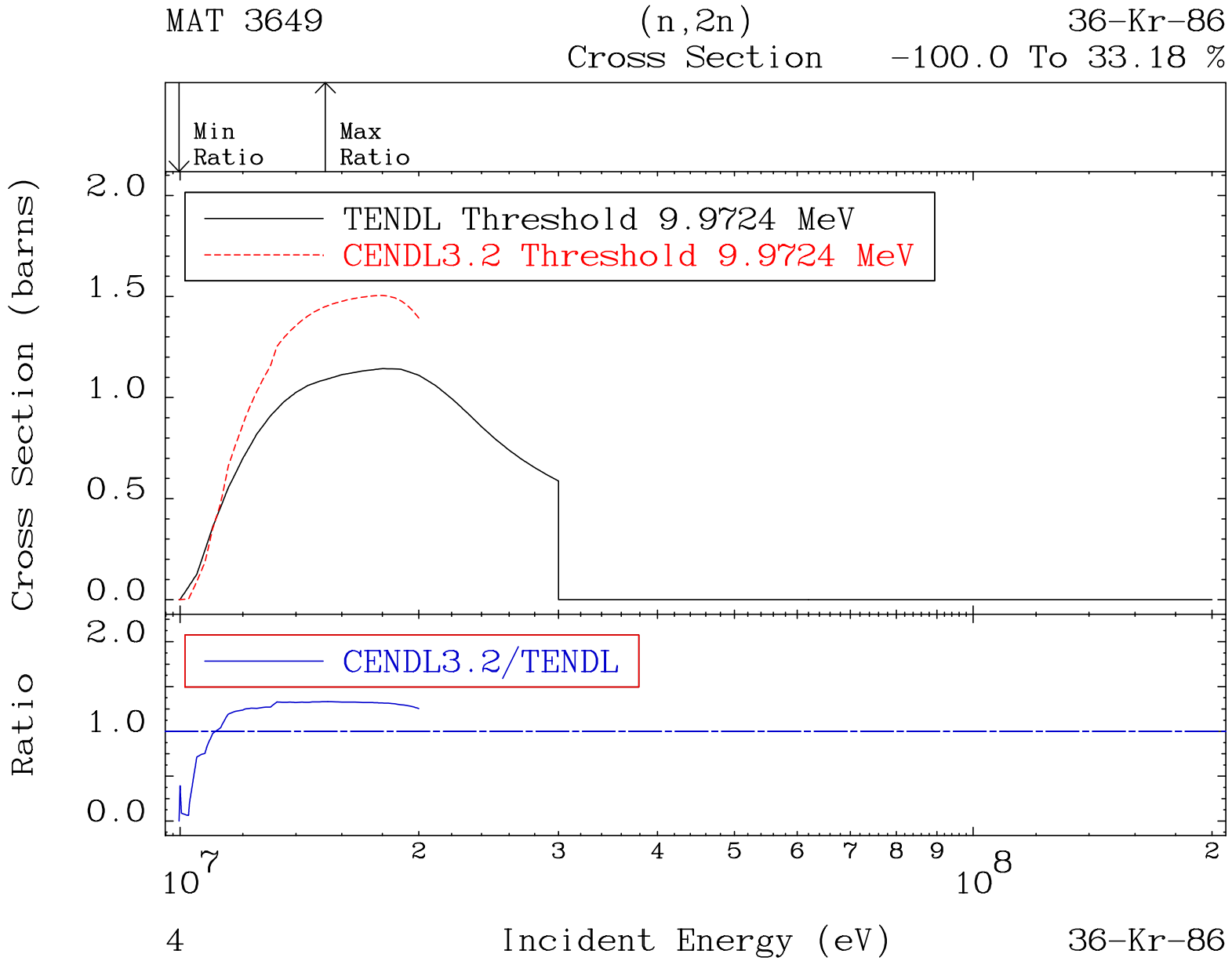
Program Complot
(Version 2021-1)
by
Dermott E. Cullen
(Present Contact Information)
Dermott E. Cullen
1466 Hudson Way
Livermore, CA 94550
U.S.A.
Tele: 925-443-1911
E.Mail:redcullen1@comcast.net
Web:redcullen1.net/HOMEPAGE.NEW

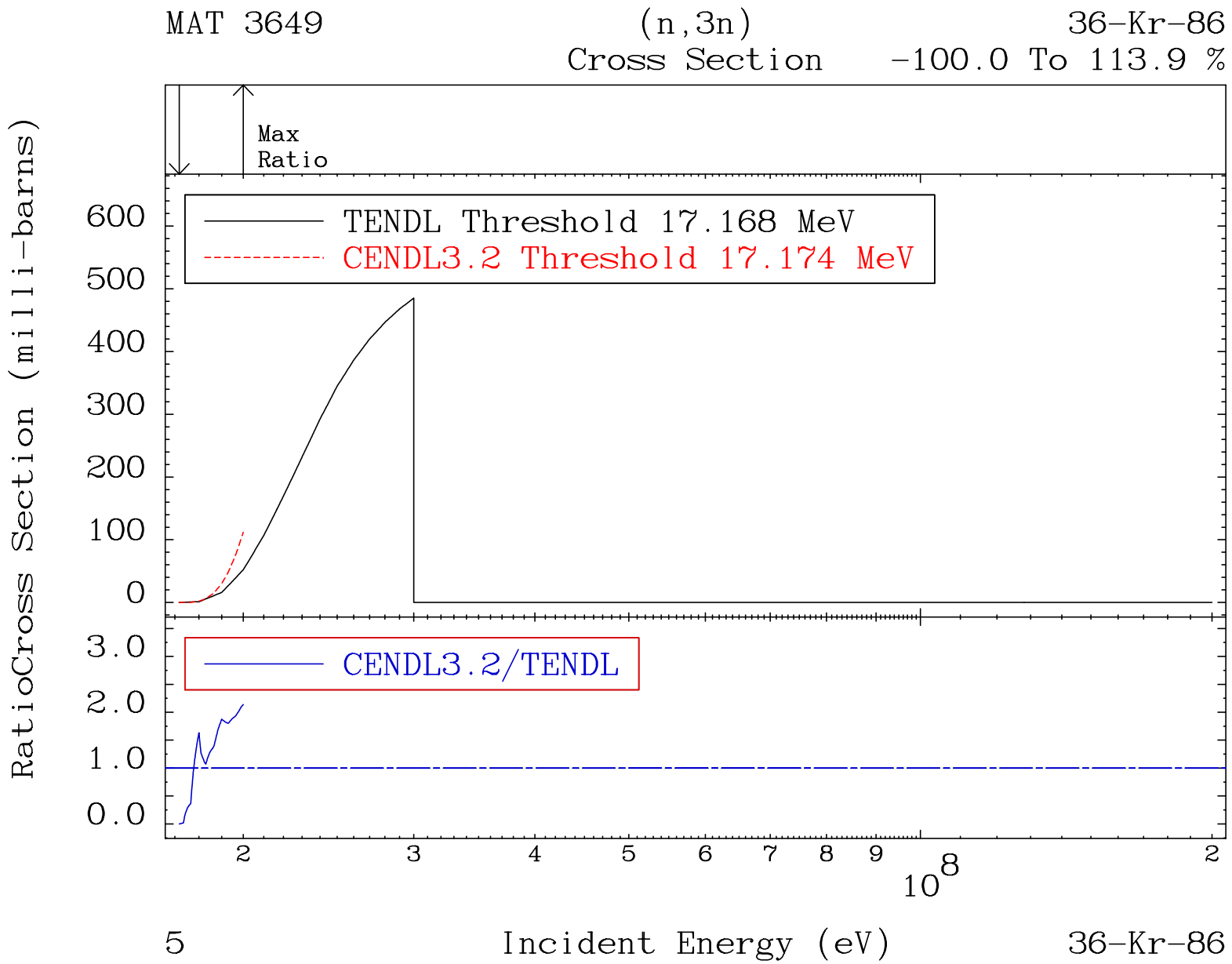
Press Mouse Button to Start

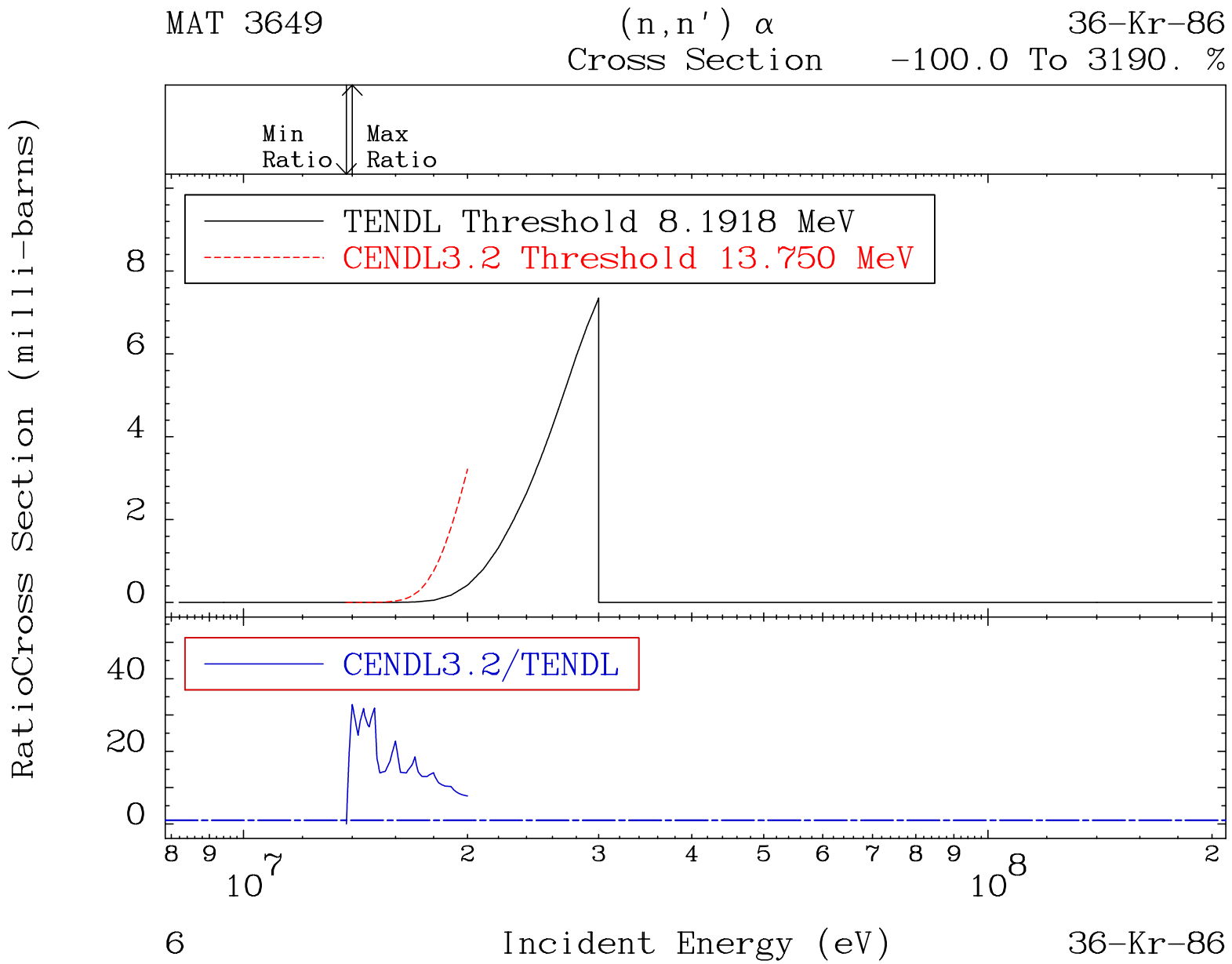

MAT 3649
Total
Cross Section
36-Kr-86
-99.70 To 2848. %
Min Ratio
Max Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
1
36-Kr-86

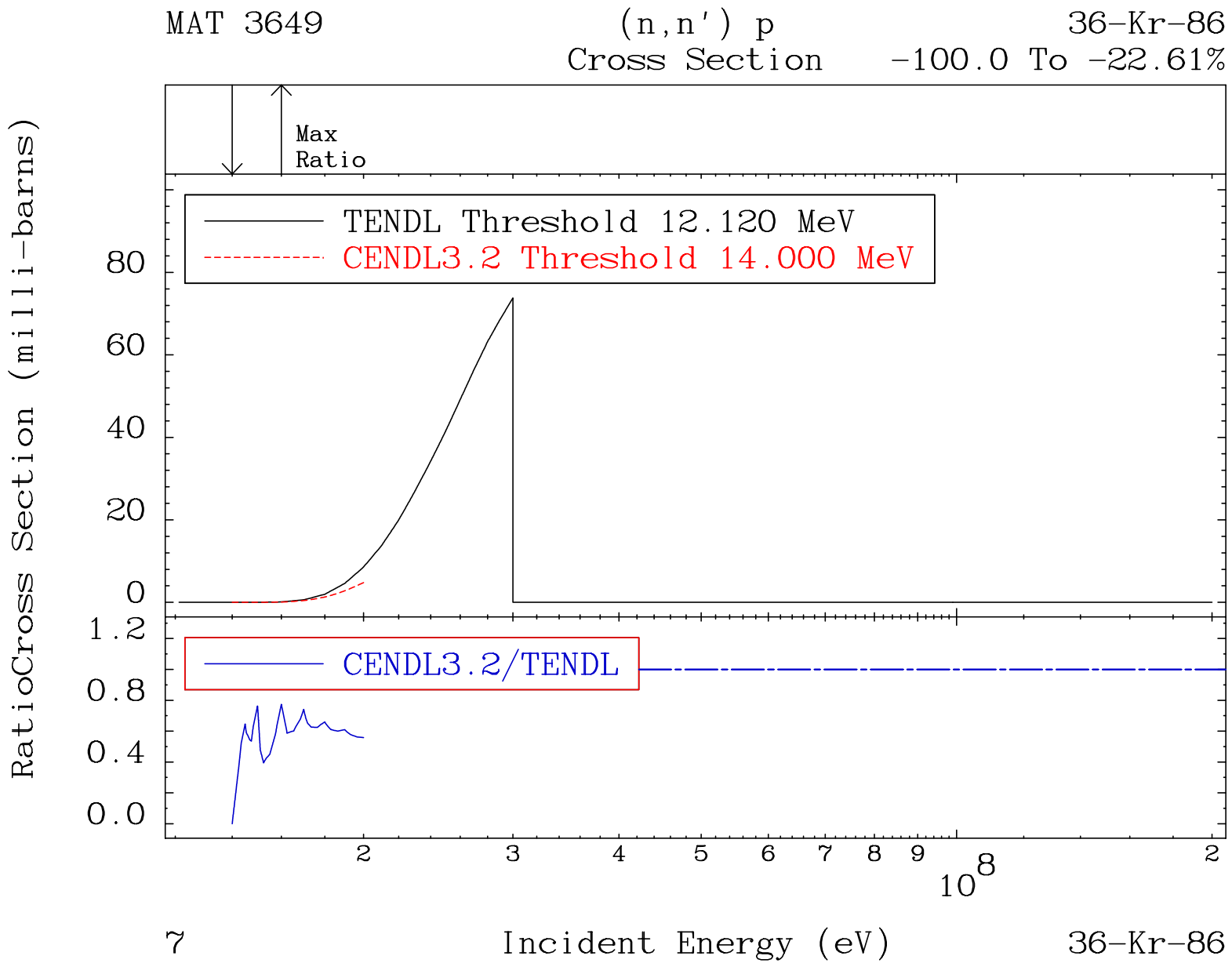

MAT 3649
Elastic
Cross Section
36-Kr-86
-99.75 To 4529. %
Max Ratio
Min Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
2
36-Kr-86

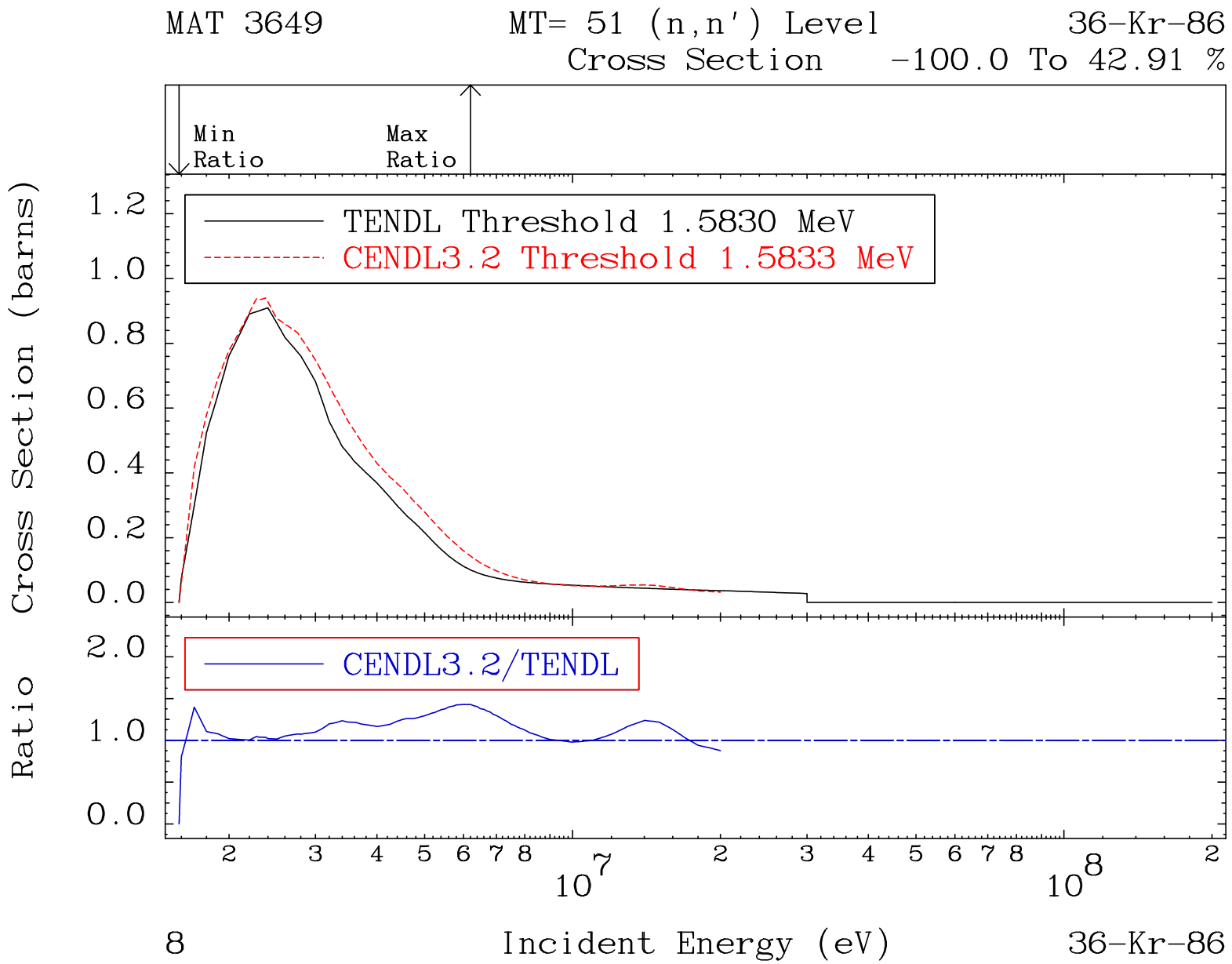

MAT 3649
Inelastic
Cross Section
36-Kr-86
-100.0 To 39.62 %
Max
Ratio
TENDL Threshold 1.5830 MeV
CENDL3.2 Threshold 1.5833 MeV
CENDL3.2/TENDL
Cross Section (barns)
Ratio
2.5
2.0
1.5
1.0
0.5
0.0
2.0
1.0
0.0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
Incident Energy (eV)
3
36-Kr-86

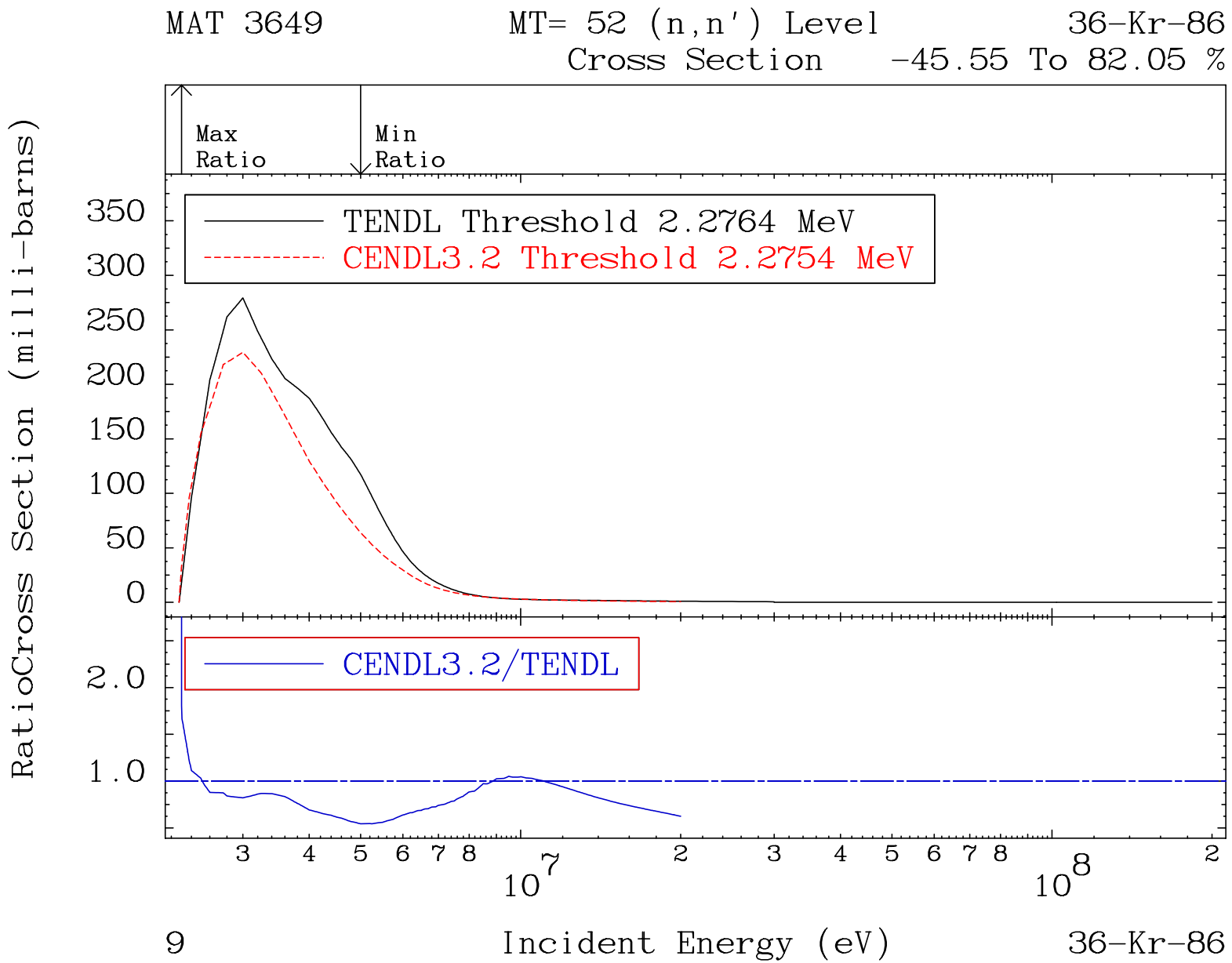

MAT 3649
(n,2n)
Cross Section
36-Kr-86
-100.0 To 33.18 %
Min Ratio
Max Ratio
TENDL Threshold 9.9724 MeV
CENDL3.2 Threshold 9.9724 MeV
CENDL3.2/TENDL
Cross Section (barns)
Ratio
2.0
1.5
1.0
0.5
0.0
10^7
10^8
2 3 4 5 6 7 8 9 2
Incident Energy (eV)
4
36-Kr-86

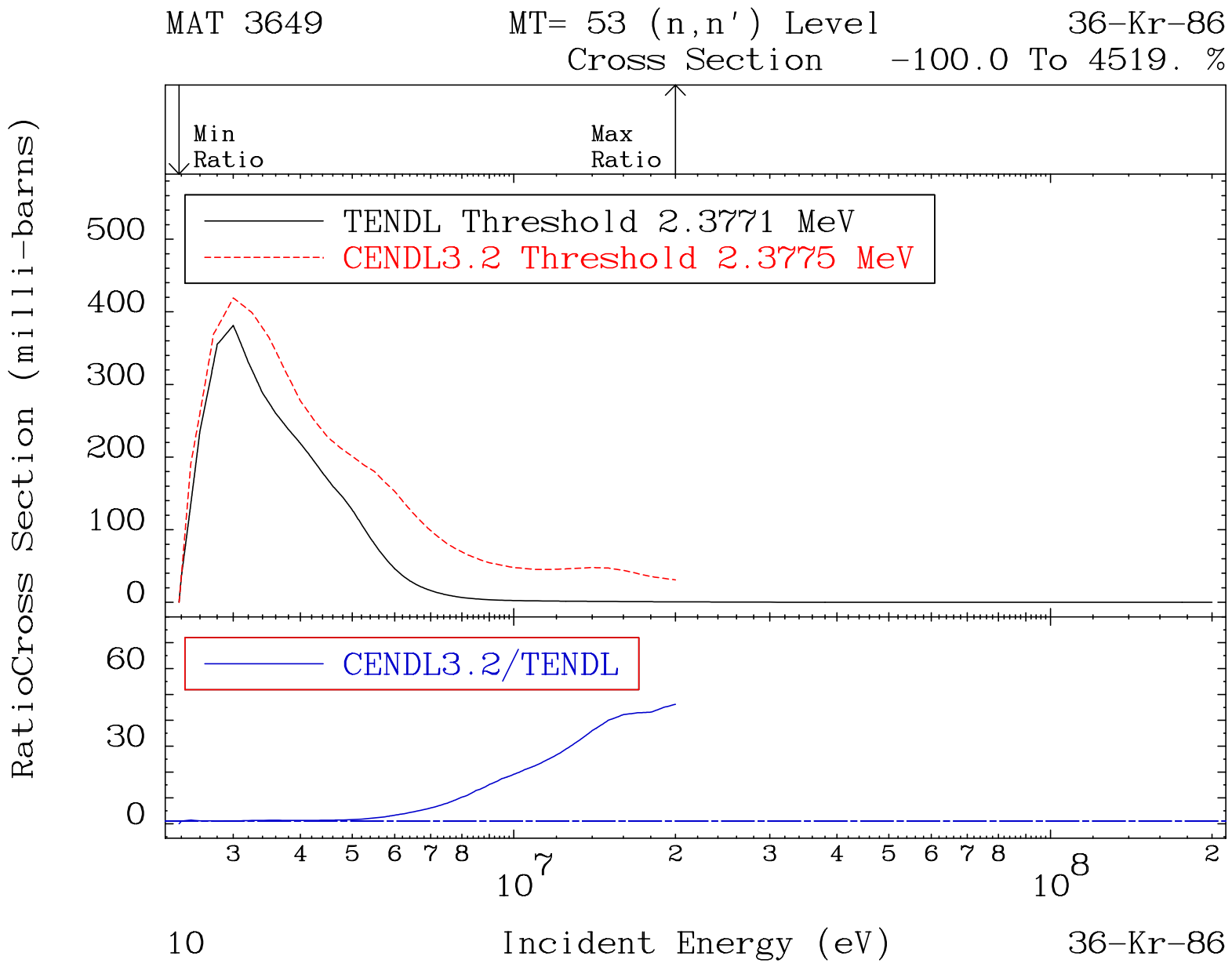

MAT 3649
(n,3n)
36-Kr-86
Cross Section
-100.0 To 113.9 %
Max
Ratio
TENDL Threshold 17.168 MeV
CENDL3.2 Threshold 17.174 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
600
500
400
300
200
100
0
3.0
2.0
1.0
0.0
2
3
4
5
6
7
8
9
10^8
2
5
Incident Energy (eV)
36-Kr-86

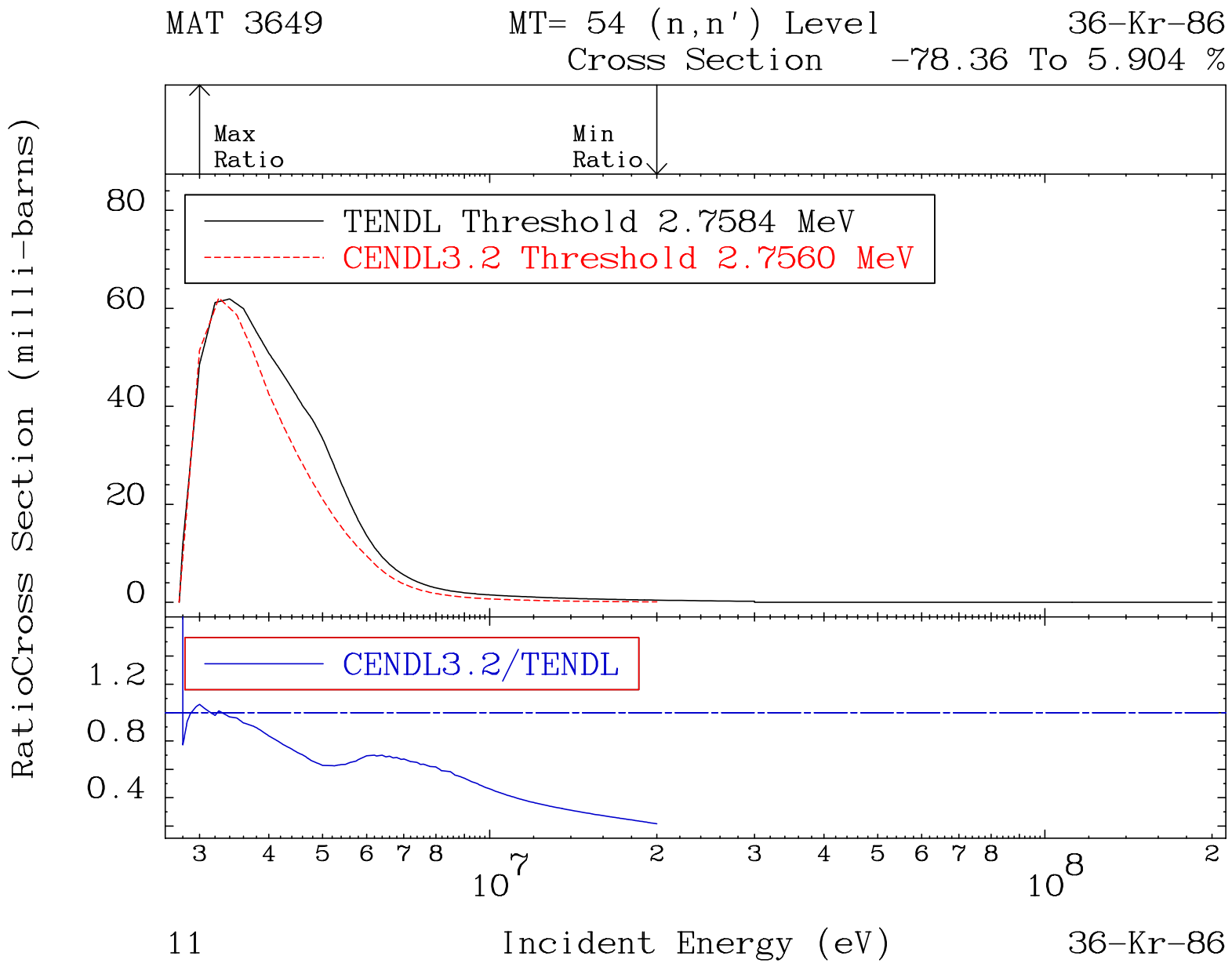

MAT 3649
(n,n') α
Cross Section
36-Kr-86
-100.0 To 3190. %
Min Ratio
Max Ratio
TENDL Threshold 8.1918 MeV
CENDL3.2 Threshold 13.750 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
6
36-Kr-86

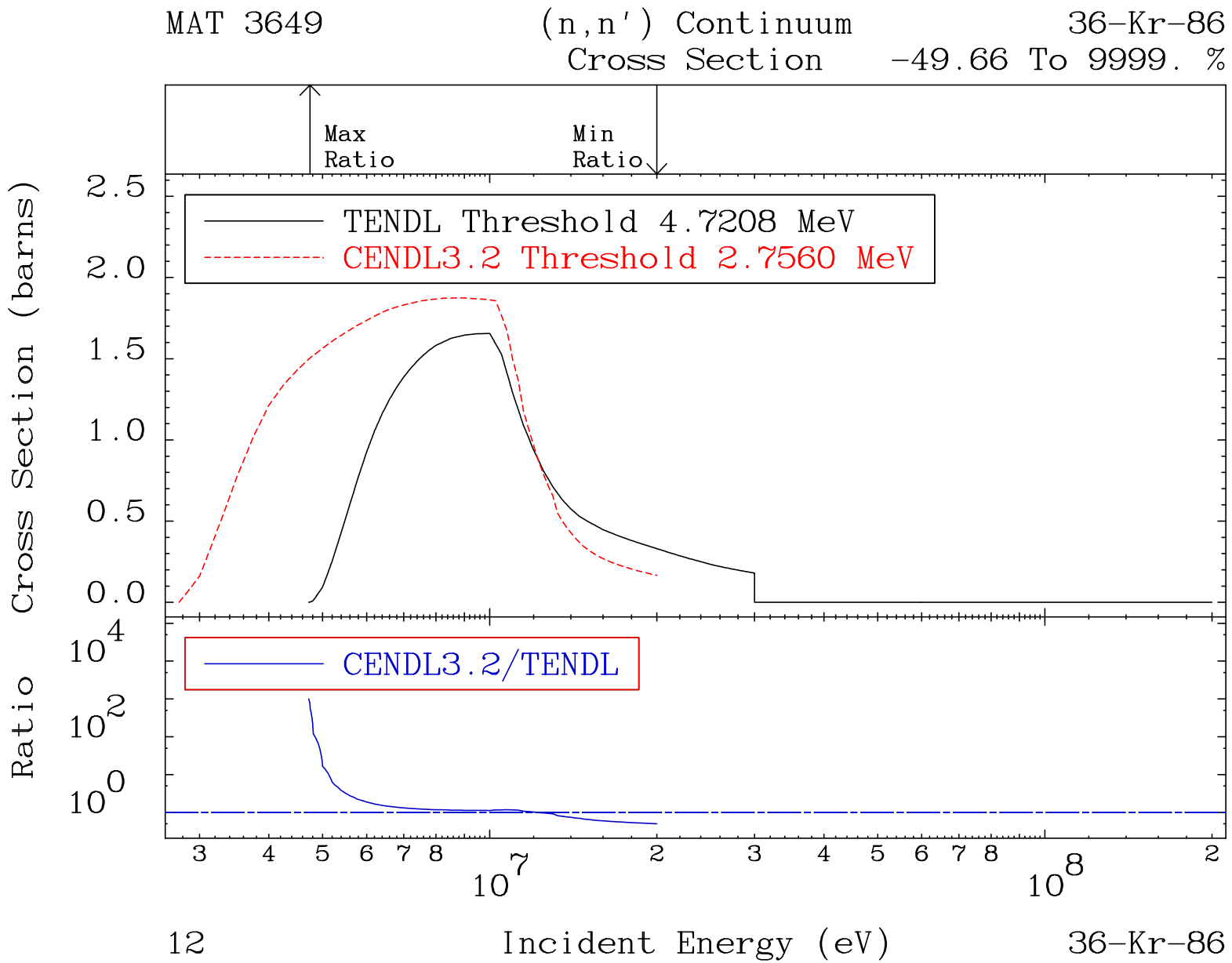

MAT 3649
(n,n') p
Cross Section
36-Kr-86
-100.0 To -22.61%
Max
Ratio
TENDL Threshold 12.120 MeV
CENDL3.2 Threshold 14.000 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
1.2
0.8
0.4
0.0
2
3
4
5
6
7
8
9
10^8
2
7
Incident Energy (eV)
36-Kr-86

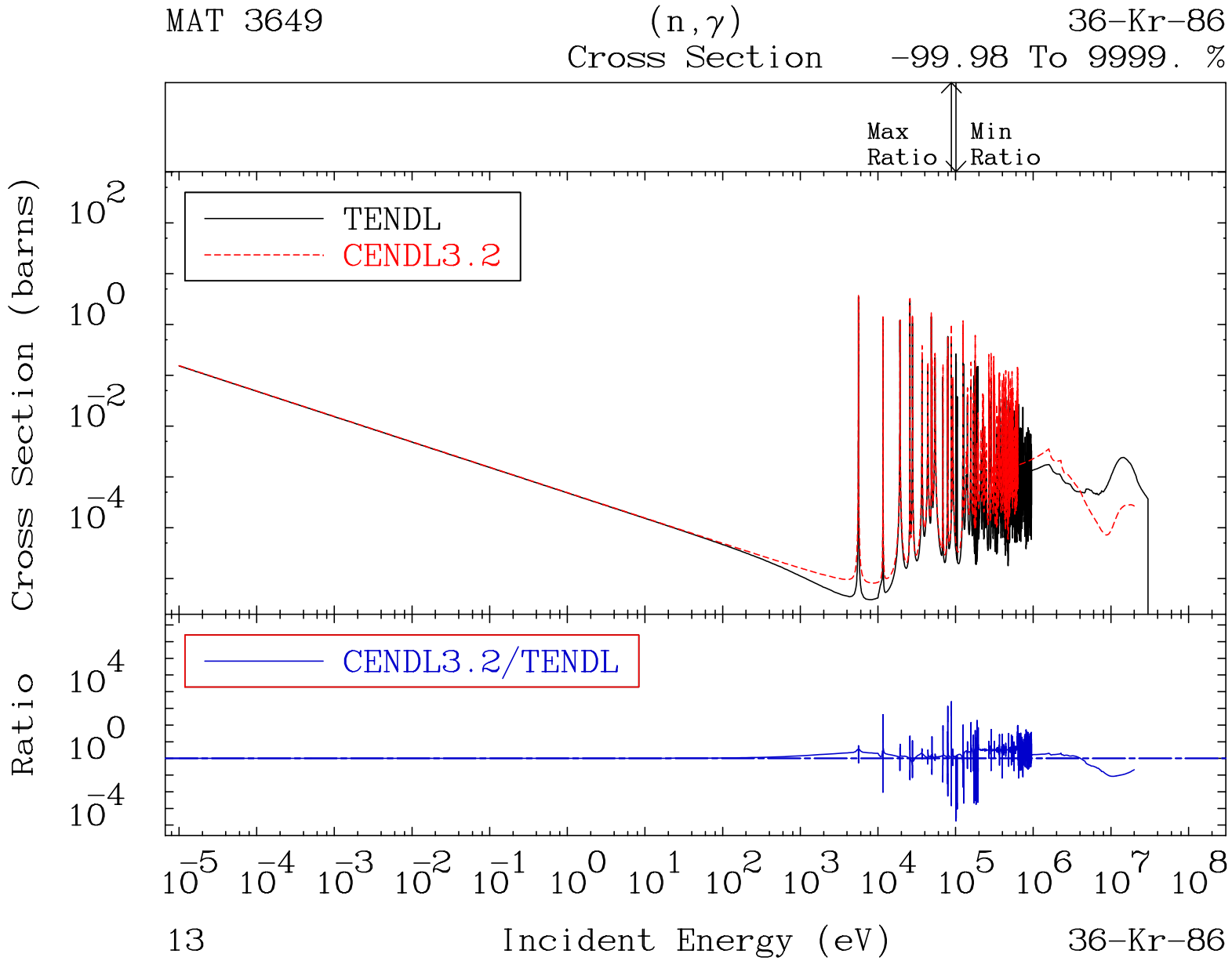

MAT 3649
MT= 51 (n,n') Level
36-Kr-86
Cross Section -100.0 To 42.91 %
Min Ratio
Max Ratio
TENDL Threshold 1.5830 MeV
CENDL3.2 Threshold 1.5833 MeV
CENDL3.2/TENDL
Cross Section (barns)
Ratio
1.2
1.0
0.8
0.6
0.4
0.2
0.0
2.0
1.0
0.0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
8
Incident Energy (eV)
36-Kr-86

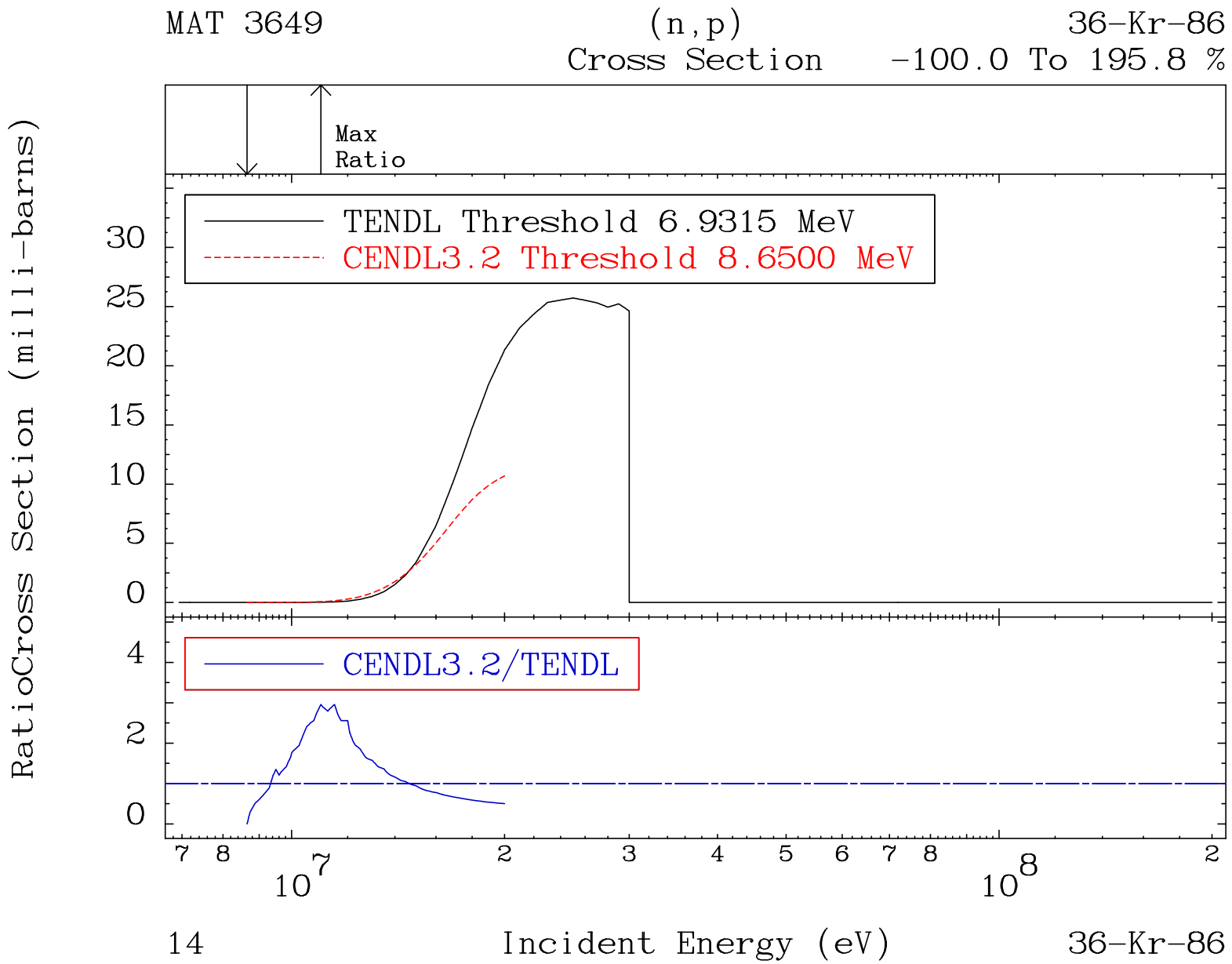

MAT 3649
MT= 52 (n,n') Level
Cross Section
36-Kr-86
-45.55 To 82.05 %
Max Ratio
Min Ratio
TENDL Threshold 2.2764 MeV
CENDL3.2 Threshold 2.2754 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
350
300
250
200
150
100
50
0
2.0
1.0
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
9
Incident Energy (eV)
36-Kr-86

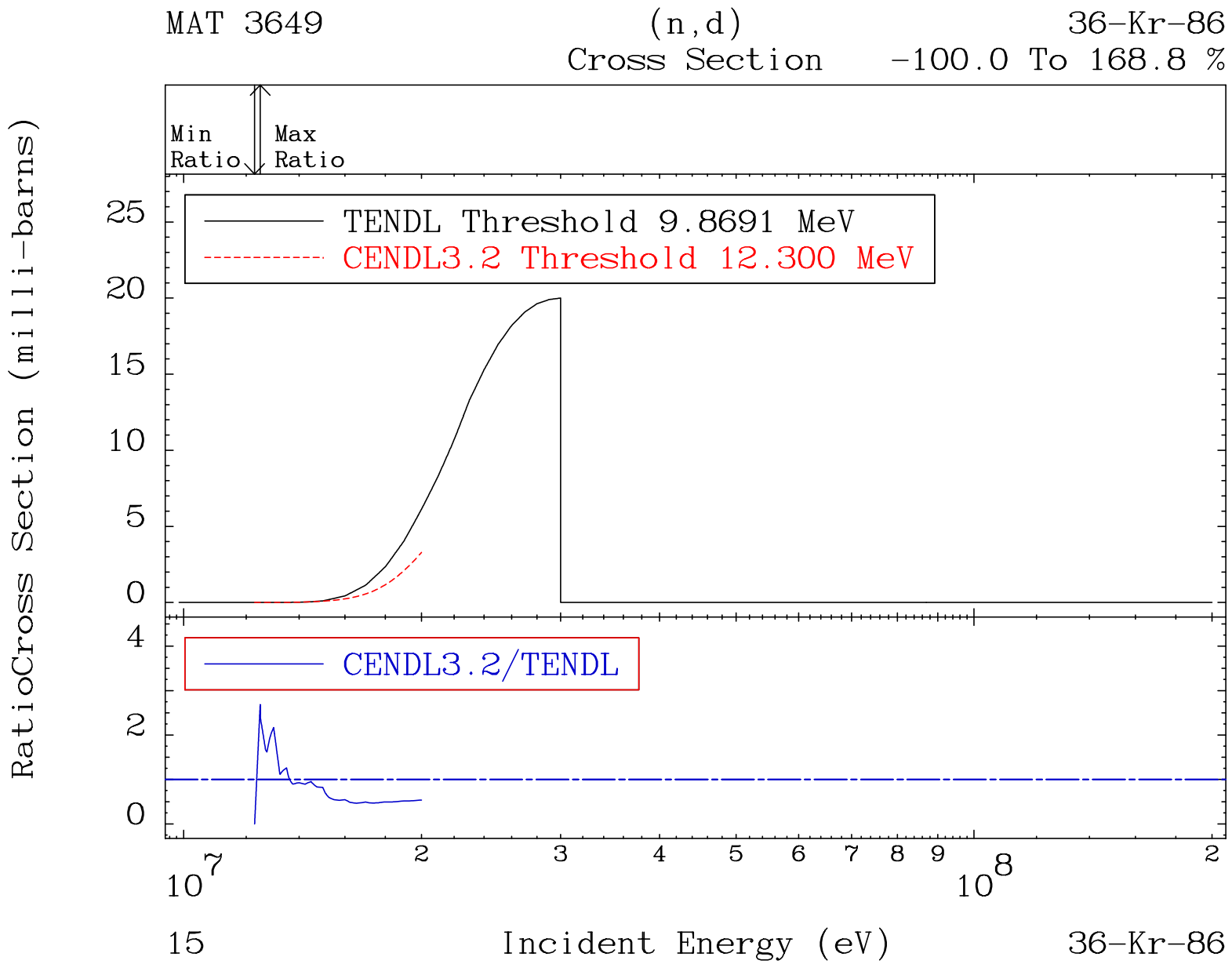

MAT 3649
MT= 53 (n,n') Level
36-Kr-86
Cross Section -100.0 To 4519. %
Min Ratio
Max Ratio
TENDL Threshold 2.3771 MeV
CENDL3.2 Threshold 2.3775 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
500
400
300
200
100
0
60
30
0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
10
Incident Energy (eV)
36-Kr-86

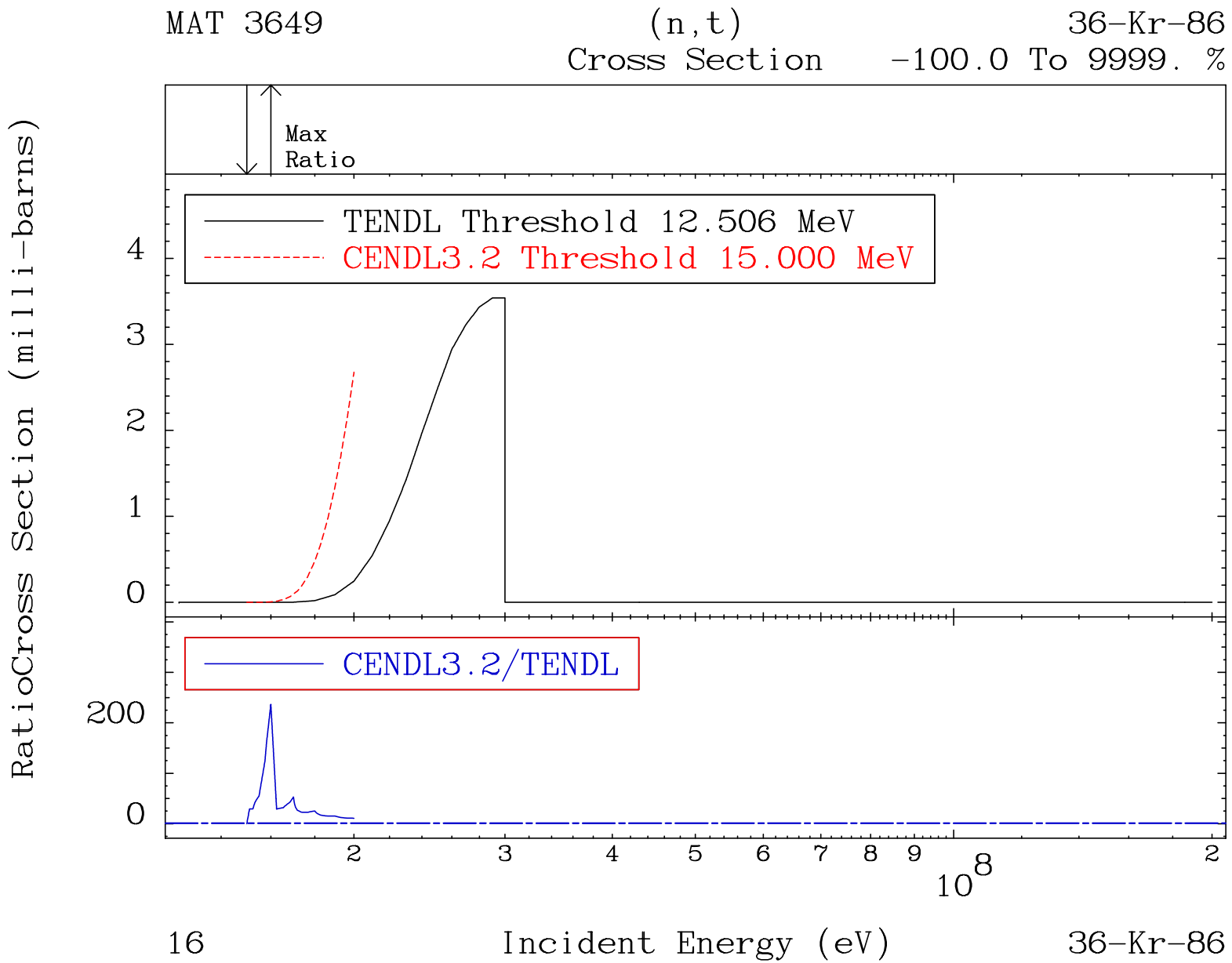

MAT 3649
MT= 54 (n,n') Level
36-Kr-86
Cross Section
-78.36 To 5.904 %
Max Ratio
Min Ratio
TENDL Threshold 2.7584 MeV
CENDL3.2 Threshold 2.7560 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
1.2
0.8
0.4
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
11
Incident Energy (eV)
36-Kr-86

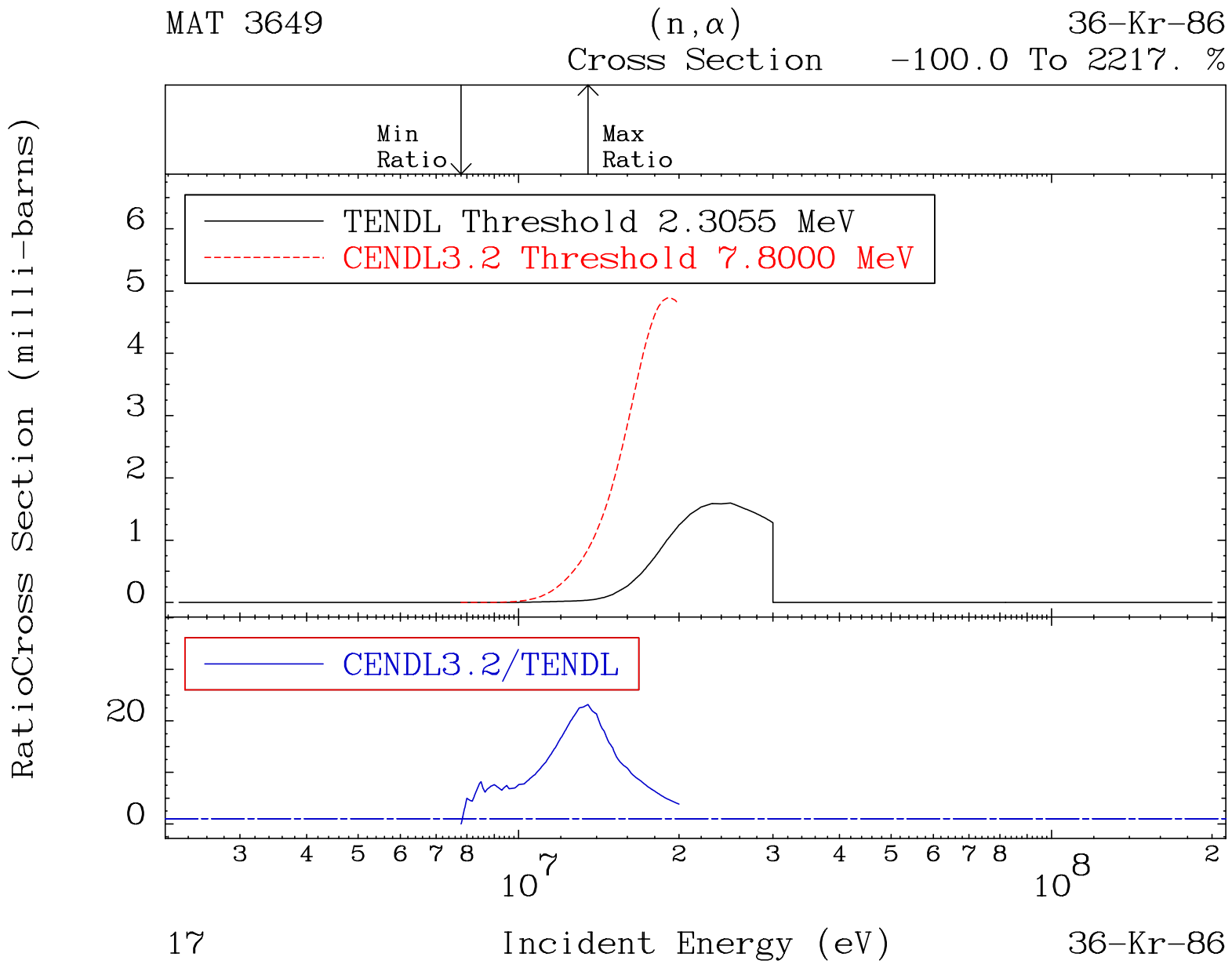

MAT 3649
(n,n') Continuum
Cross Section
36-Kr-86
-49.66 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 4.7208 MeV
CENDL3.2 Threshold 2.7560 MeV
CENDL3.2/TENDL
Cross Section (barns)
Ratio
2.5
2.0
1.5
1.0
0.5
0.0
10^4
10^2
10^0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
Incident Energy (eV)
12
36-Kr-86

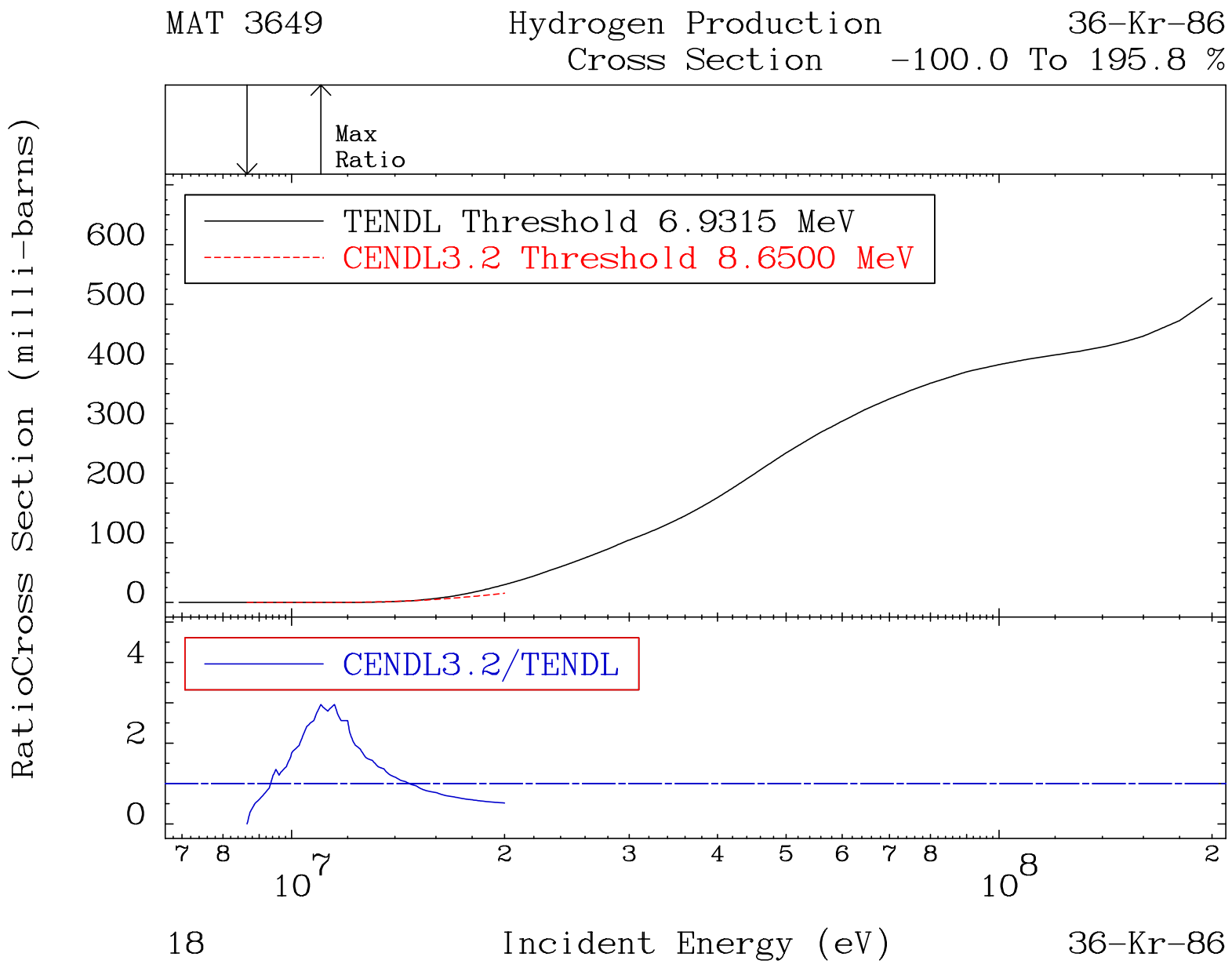

MAT 3649
(n,γ)
Cross Section
36-Kr-86
-99.98 To 9999. %
Max Ratio
Min Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
13
36-Kr-86

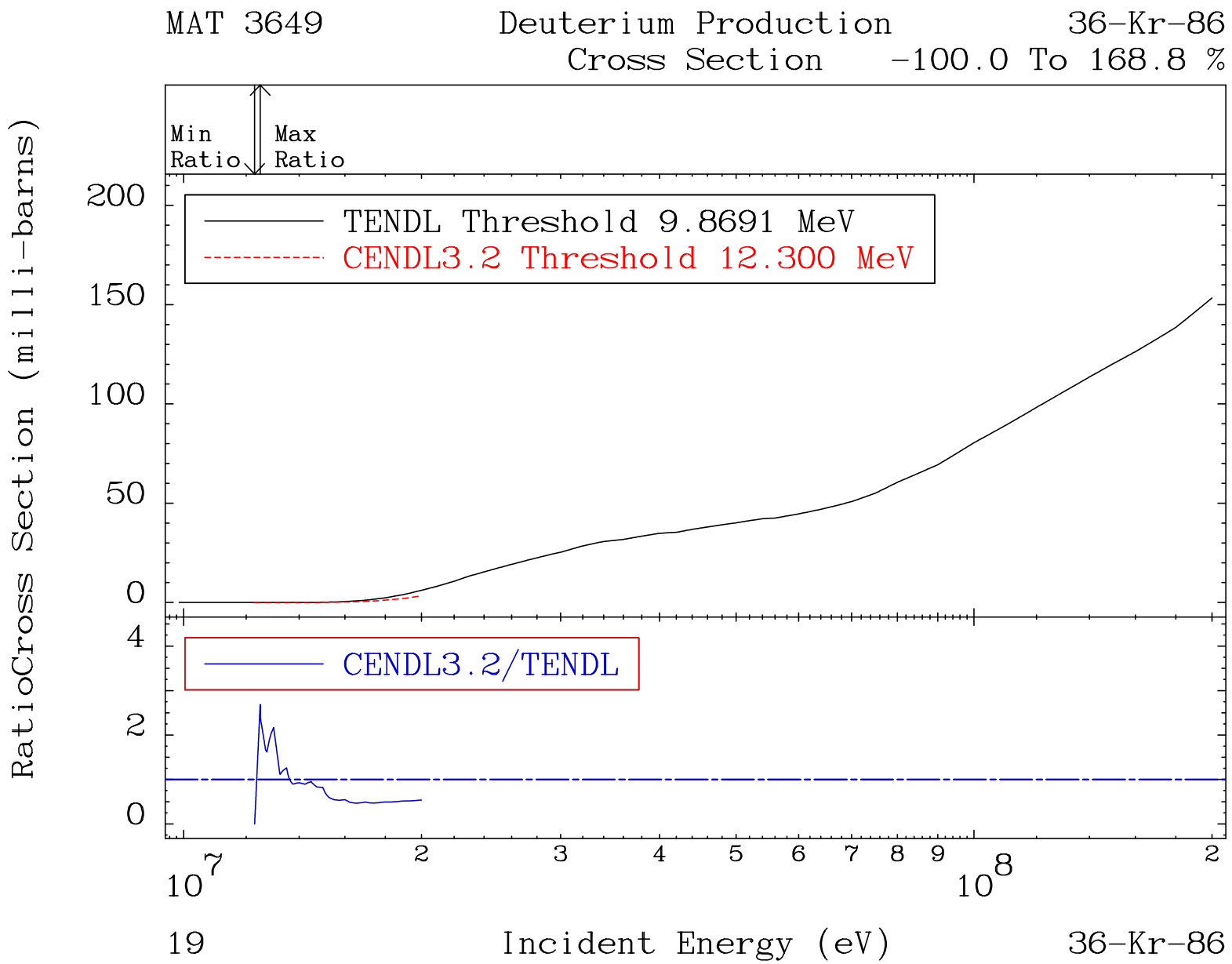

MAT 3649
(n,p)
36-Kr-86
Cross Section
-100.0 To 195.8 %
Max
Ratio
TENDL Threshold 6.9315 MeV
CENDL3.2 Threshold 8.6500 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
30
25
20
15
10
5
0
4
2
0
7 8
10^7
2 3 4 5 6 7 8
10^8
2
14
Incident Energy (eV)
36-Kr-86

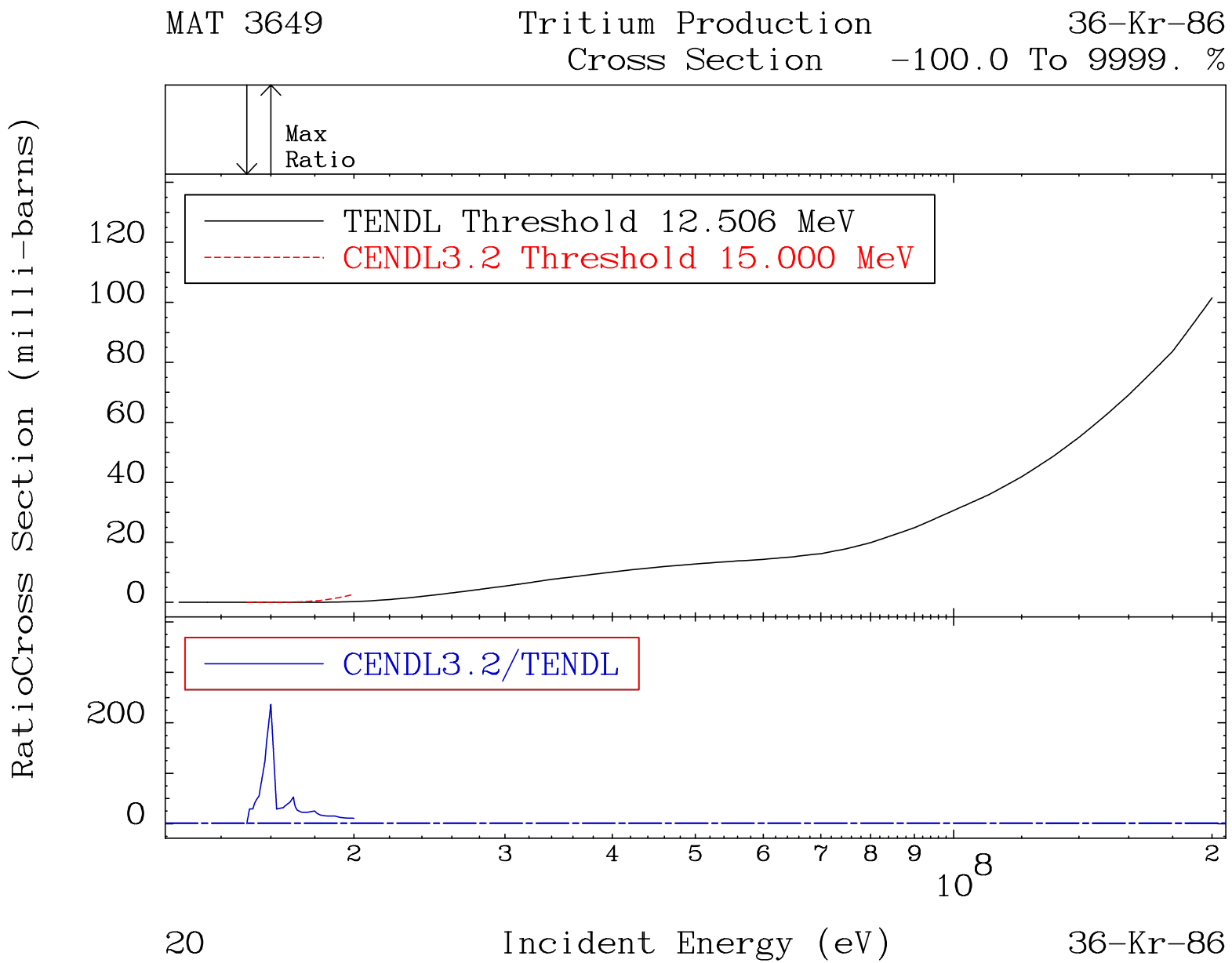

MAT 3649
(n,d)
Cross Section
36-Kr-86
-100.0 To 168.8 %
Min Ratio
Max Ratio
TENDL Threshold 9.8691 MeV
CENDL3.2 Threshold 12.300 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
25
20
15
10
5
0
4
2
0
10^7
2
3
4
5
6
7
8
9
10^8
2
15
Incident Energy (eV)
36-Kr-86

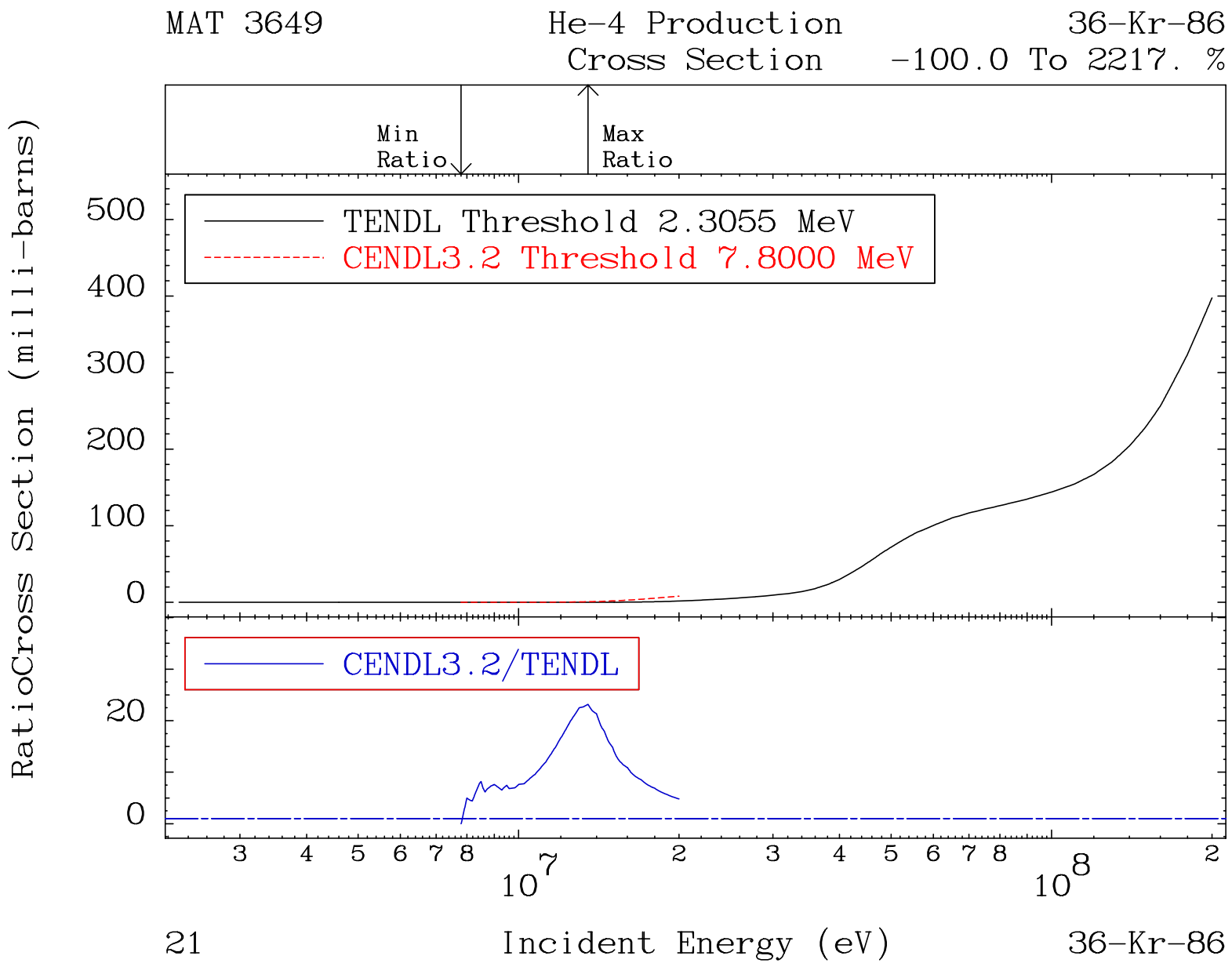

MAT 3649
(n,t)
36-Kr-86
Cross Section
-100.0 To 9999. %
Max
Ratio
TENDL Threshold 12.506 MeV
CENDL3.2 Threshold 15.000 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
4
3
2
1
0
200
0
2
3
4
5
6
7
8
9
10^8
2
16
Incident Energy (eV)
36-Kr-86

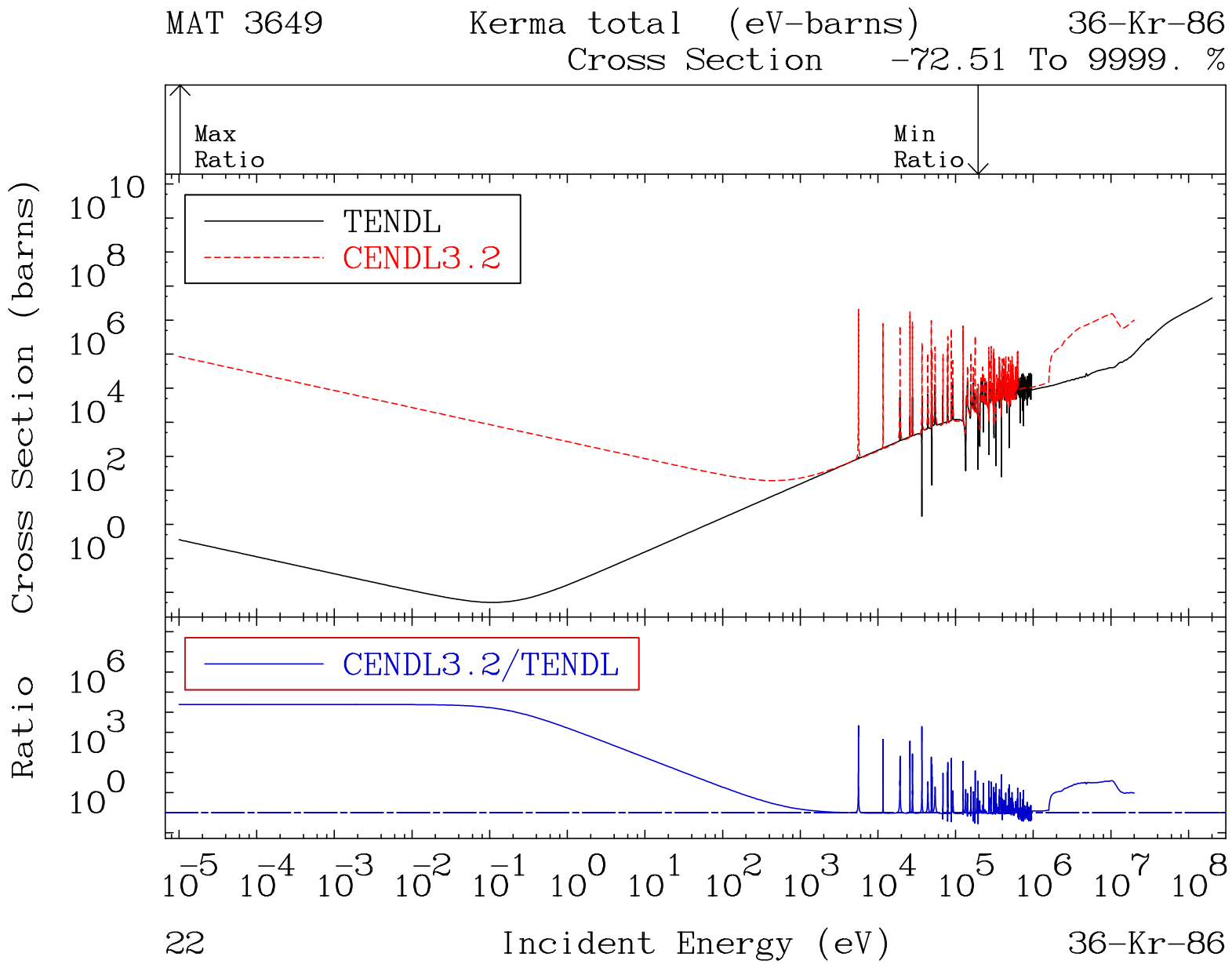

MAT 3649
(n,α)
Cross Section
36-Kr-86
-100.0 To 2217. %
Min Ratio
Max Ratio
TENDL Threshold 2.3055 MeV
CENDL3.2 Threshold 7.8000 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
17
36-Kr-86

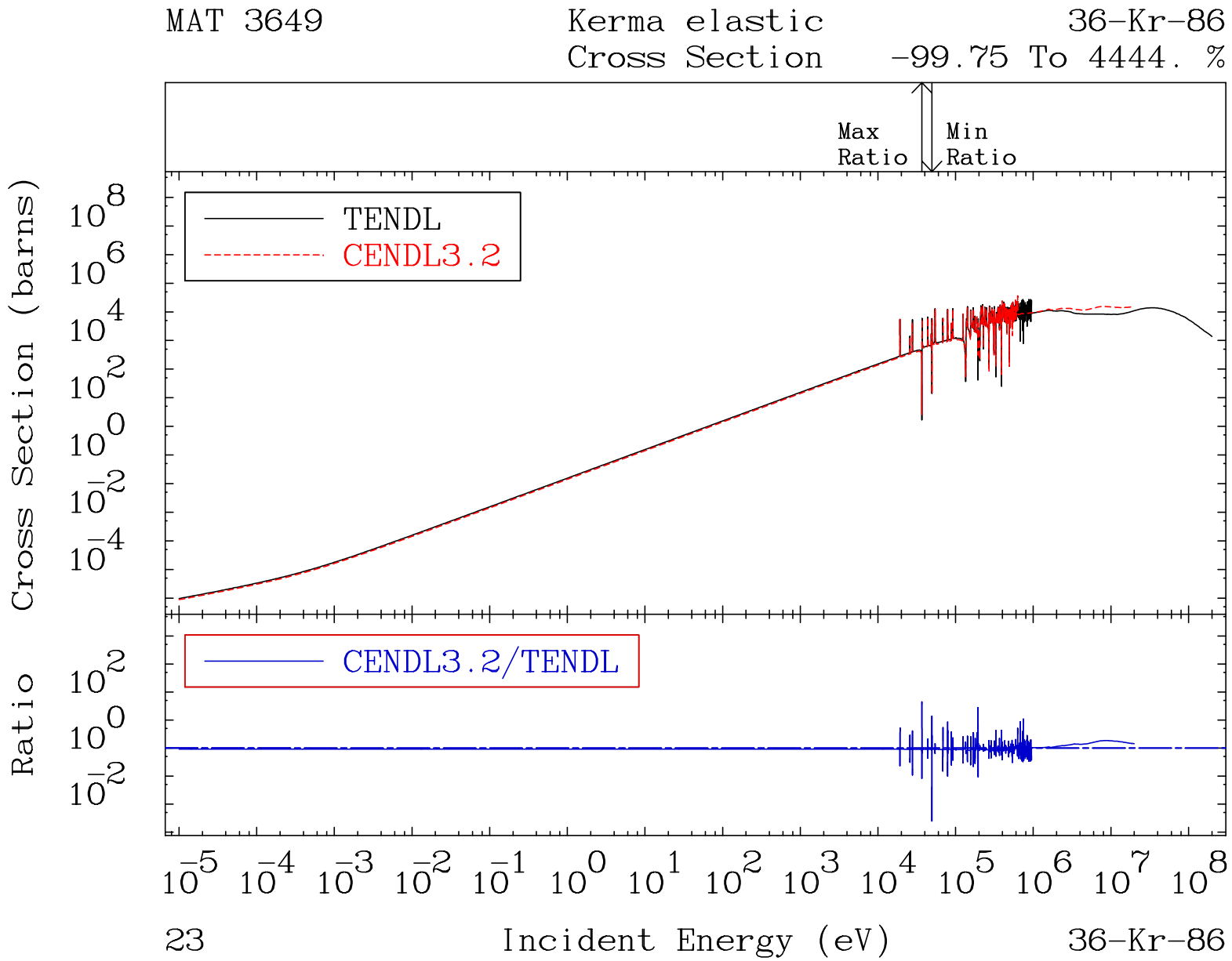

MAT 3649
Hydrogen Production
36-Kr-86
Cross Section -100.0 To 195.8 %
Max
Ratio
TENDL Threshold 6.9315 MeV
CENDL3.2 Threshold 8.6500 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
600
500
400
300
200
100
0
4
2
0
7 8 10^7 2 3 4 5 6 7 8 10^8 2
18
Incident Energy (eV)
36-Kr-86

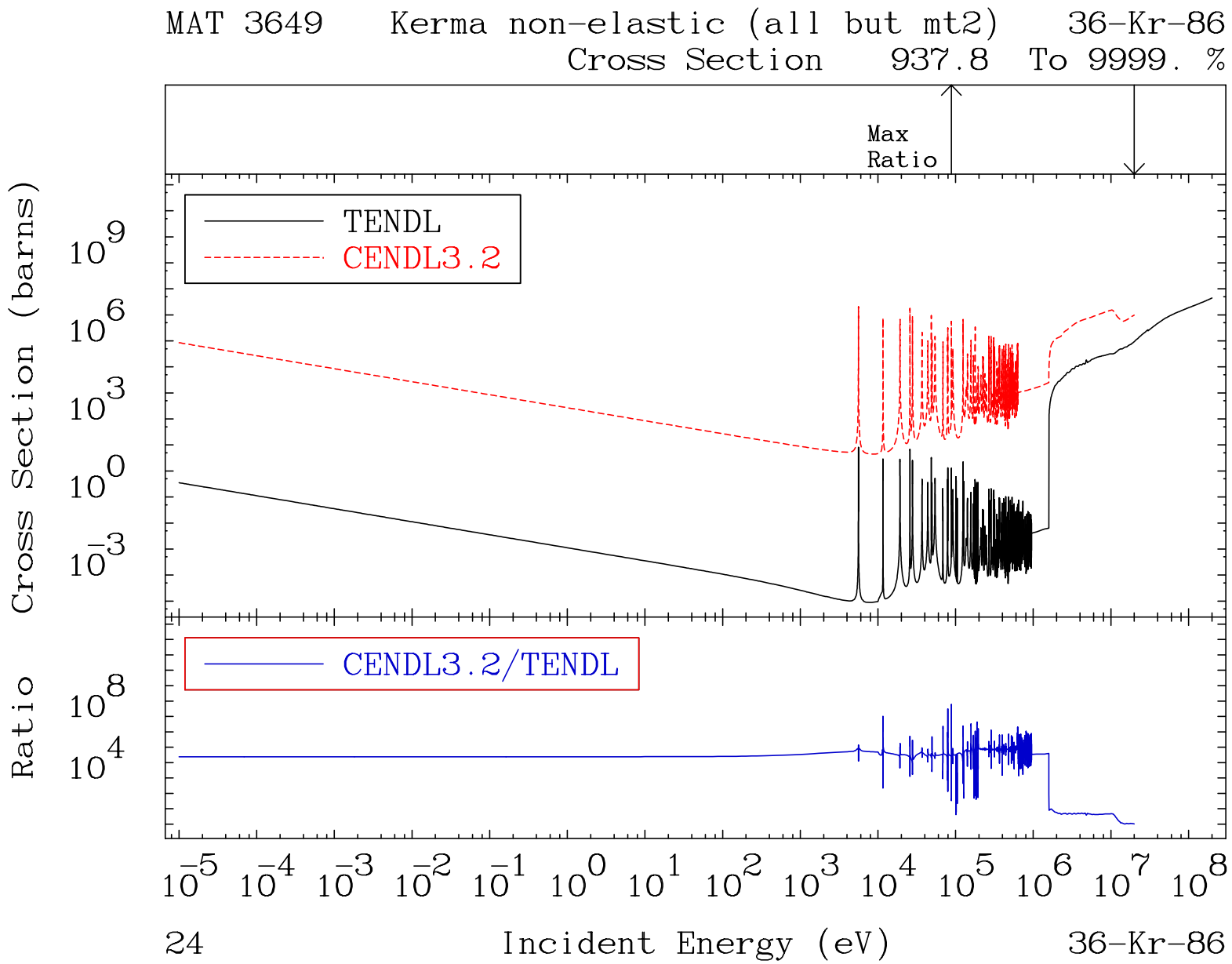

MAT 3649
Deuterium Production
36-Kr-86
Cross Section -100.0 To 168.8 %
Min Ratio
Max Ratio
TENDL Threshold 9.8691 MeV
CENDL3.2 Threshold 12.300 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
200
150
100
50
0
4
2
0
10^7
2
3
4
5
6
7
8
9
10^8
2
19
Incident Energy (eV)
36-Kr-86

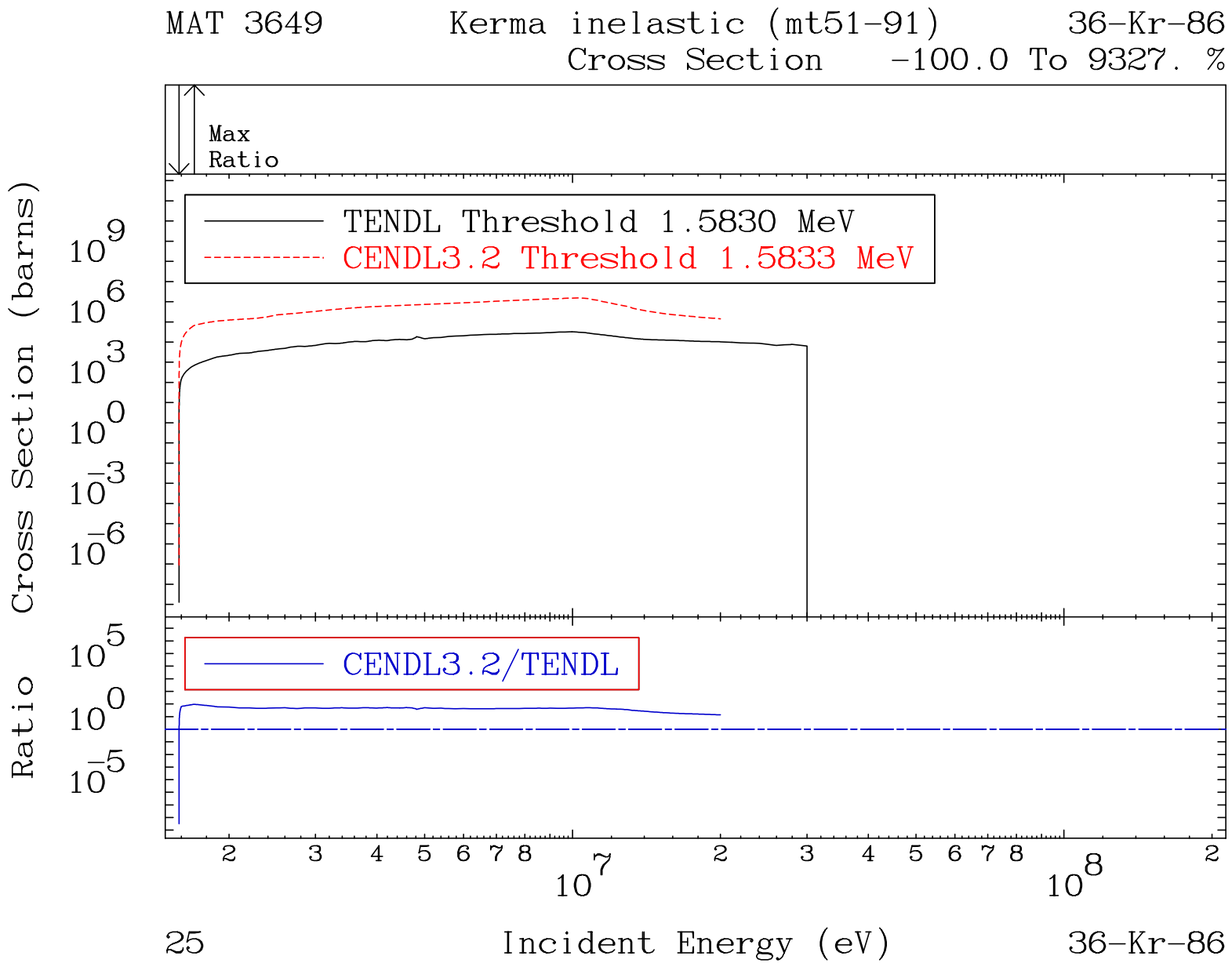

MAT 3649
Tritium Production
36-Kr-86
Cross Section
-100.0 To 9999. %
Max
Ratio
TENDL Threshold 12.506 MeV
CENDL3.2 Threshold 15.000 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
120
100
80
60
40
20
0
200
0
2
3
4
5
6
7
8
9
10^8
2
20
Incident Energy (eV)
36-Kr-86

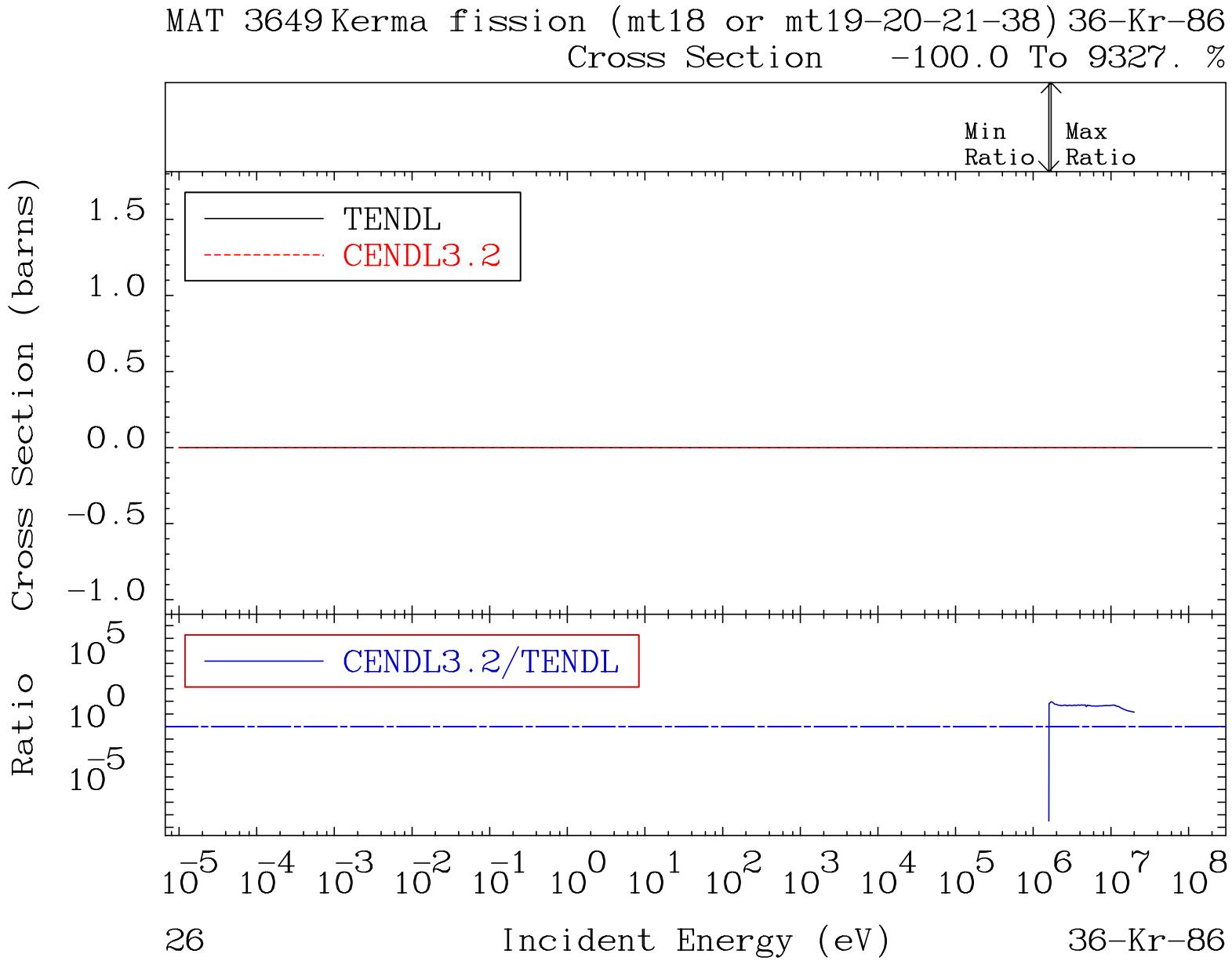

MAT 3649
He-4 Production
Cross Section
36-Kr-86
-100.0 To 2217. %
Min Ratio
Max Ratio
TENDL Threshold 2.3055 MeV
CENDL3.2 Threshold 7.8000 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
500
400
300
200
100
0
20
0
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
21
Incident Energy (eV)
36-Kr-86

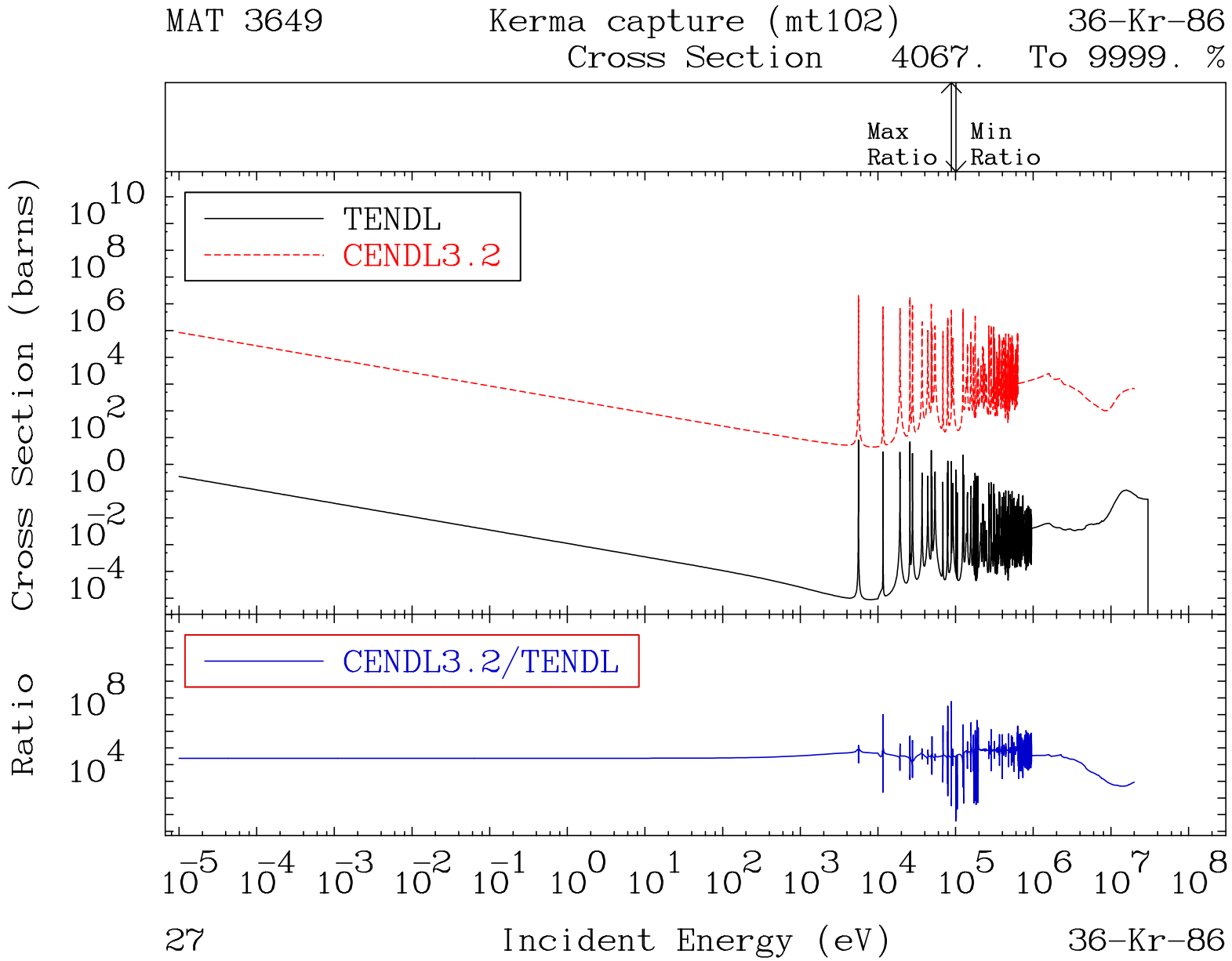

MAT 3649
Kerma total (eV-barns)
36-Kr-86
Cross Section -72.51 To 9999. %
Max Ratio
Min Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
22
36-Kr-86

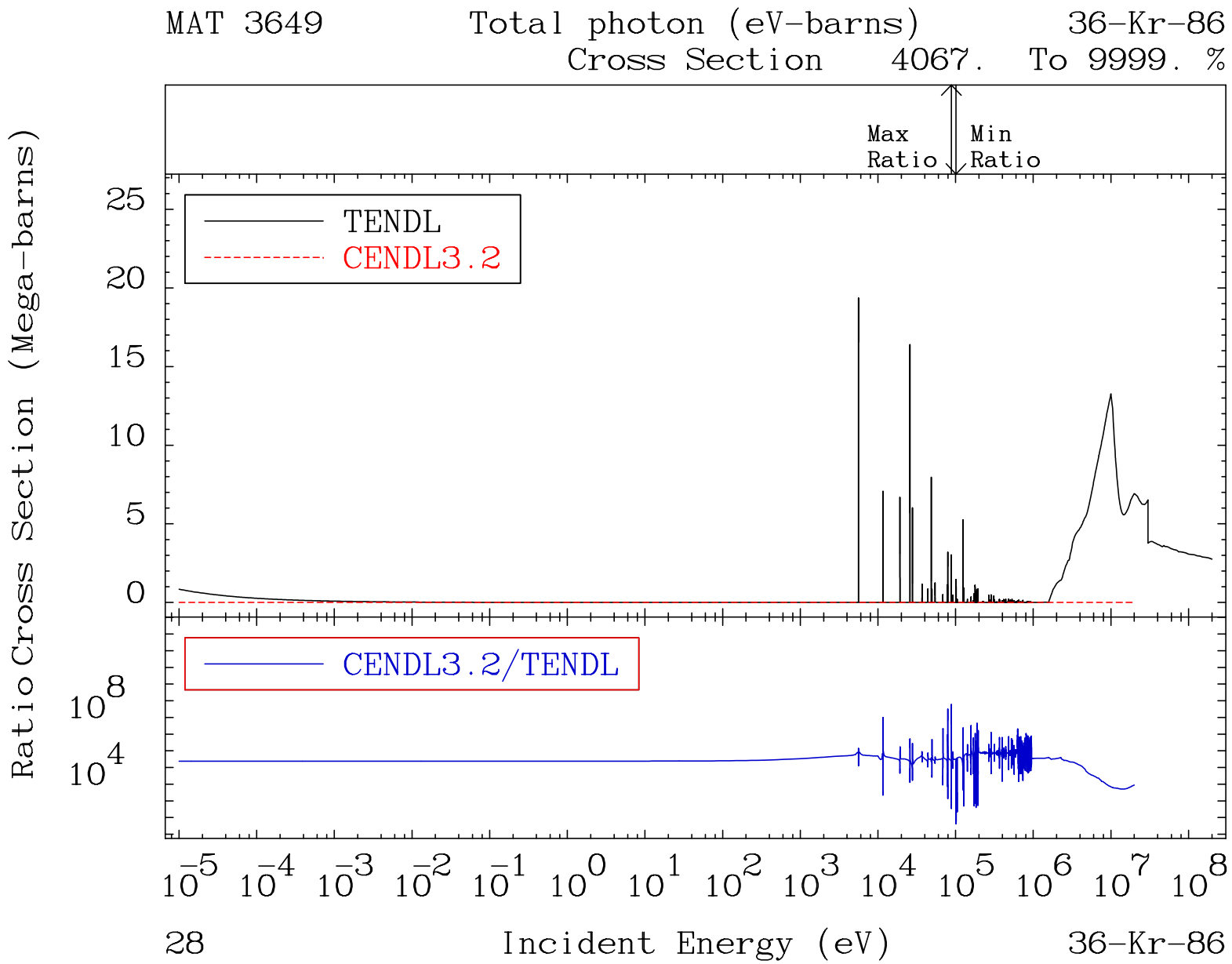

MAT 3649
Kerma elastic
Cross Section
36-Kr-86
-99.75 To 4444. %
Max Ratio
Min Ratio
TENDL
CENDL3.2
Cross Section (barns)
CENDL3.2/TENDL
Ratio
Incident Energy (eV)
23
36-Kr-86

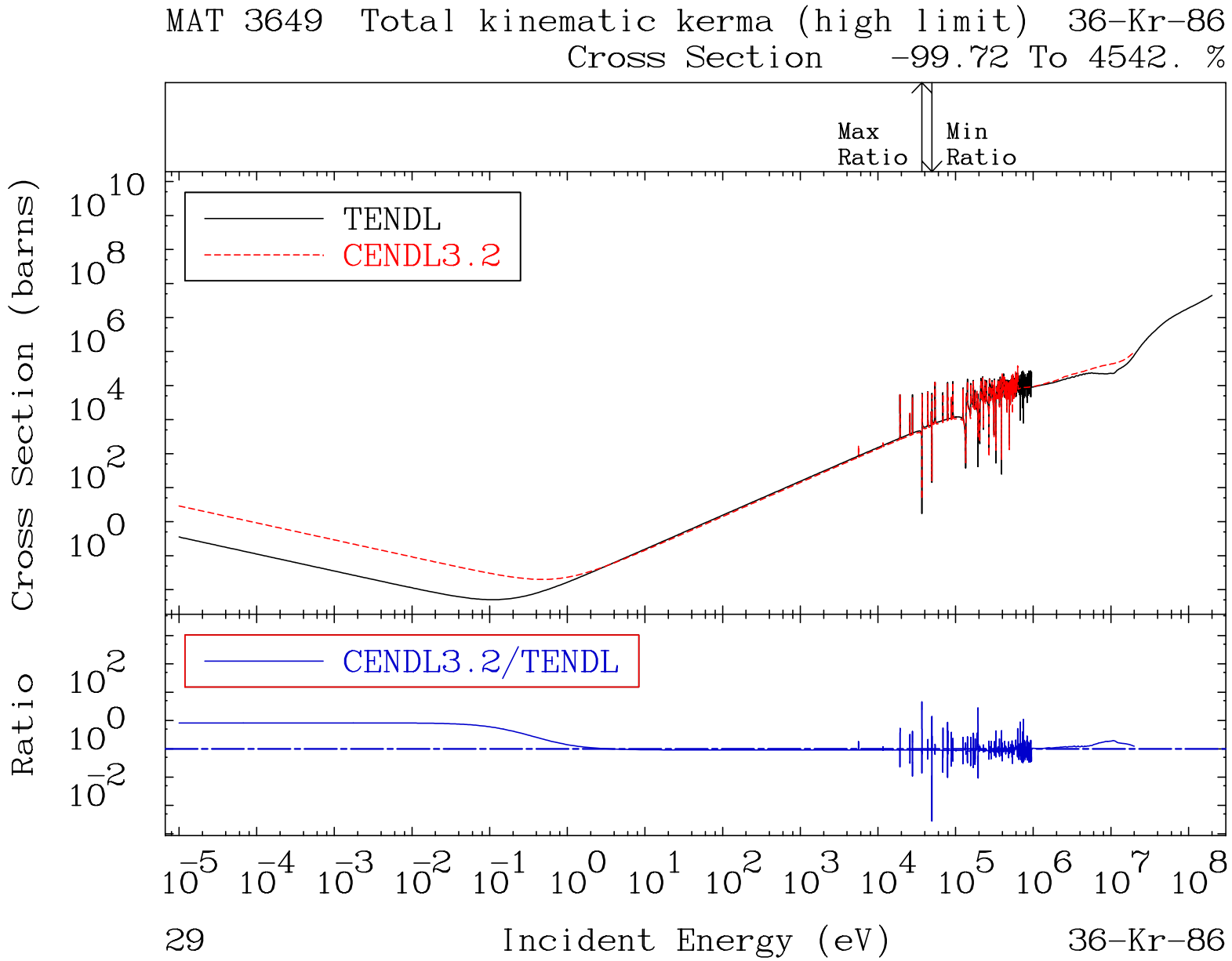

MAT 3649 Kerma non-elastic (all but mt2) 36-Kr-86
Cross Section 937.8 To 9999. %
Max
Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
24
36-Kr-86

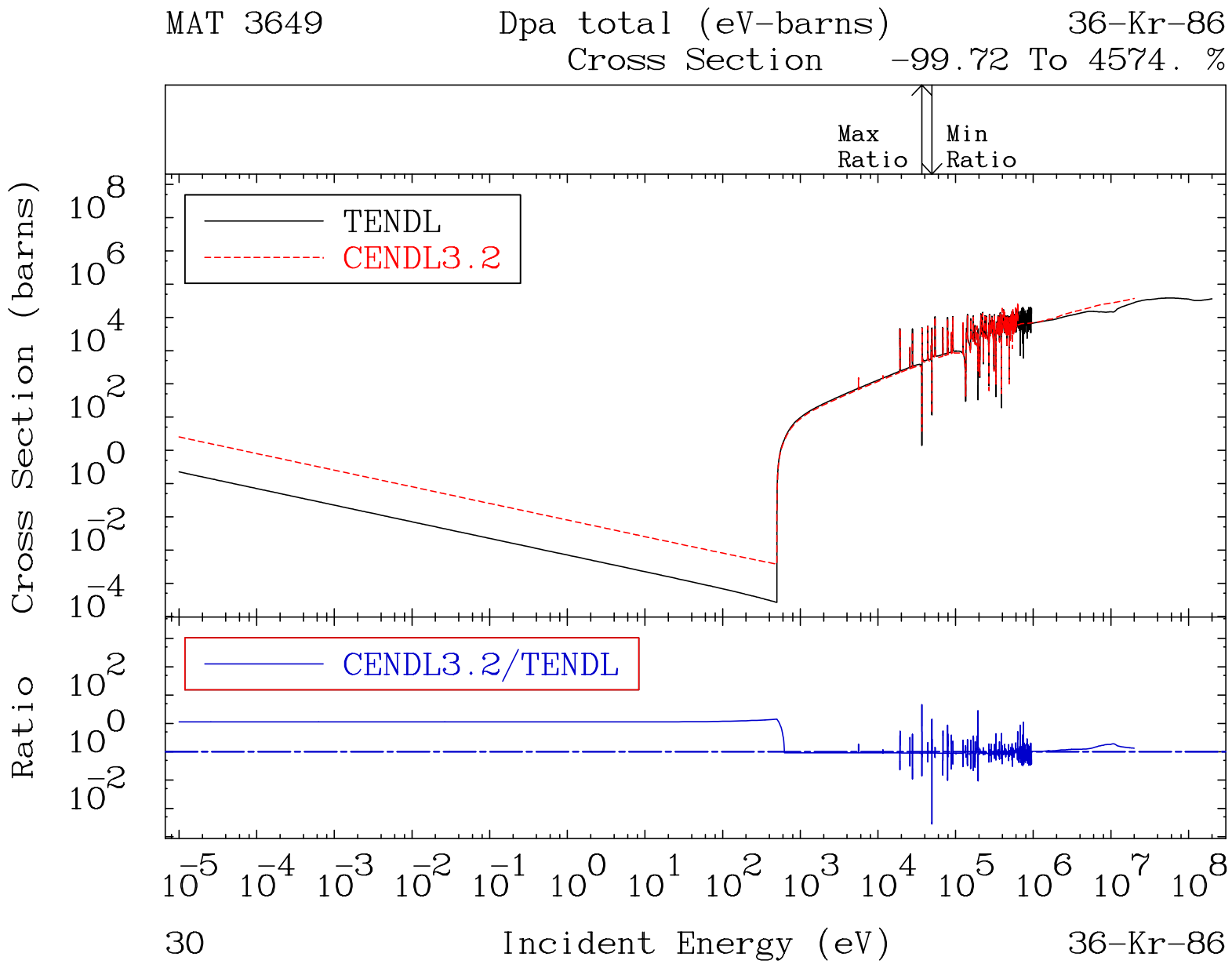

MAT 3649 Kerma inelastic (mt51-91) 36-Kr-86
Cross Section -100.0 To 9327. %
Max
Ratio
TENDL Threshold 1.5830 MeV
CENDL3.2 Threshold 1.5833 MeV
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
25
36-Kr-86

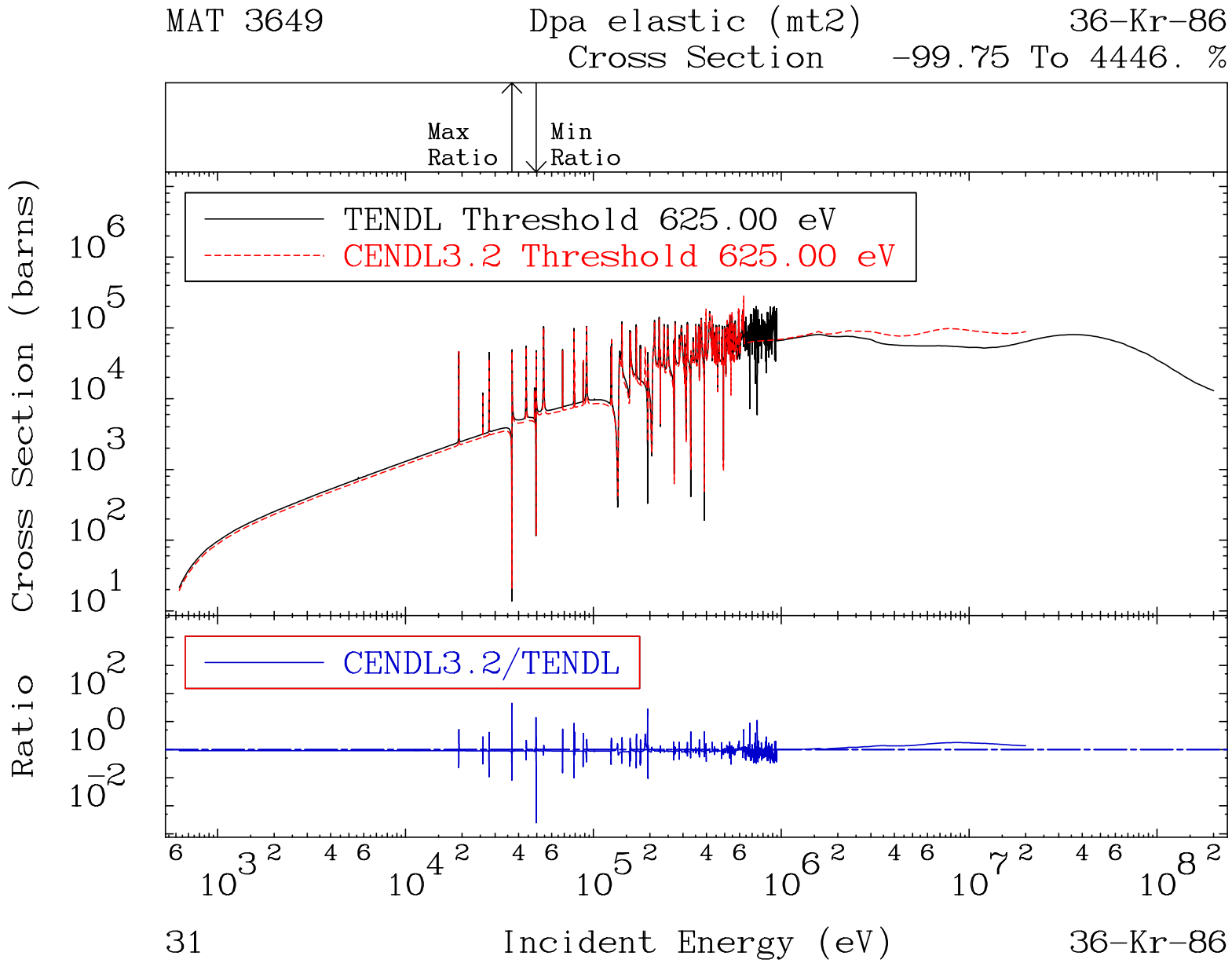

MAT 3649 Kerma fission (mt18 or mt19-20-21-38) 36-Kr-86
Cross Section -100.0 To 9327. %
Min Ratio
Max Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
1.5
1.0
0.5
0.0
-0.5
-1.0
10^{5}
10^{0}
10^{-5}
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2} 10^{3} 10^{4} 10^{5} 10^{6} 10^{7} 10^{8}
26
Incident Energy (eV)
36-Kr-86

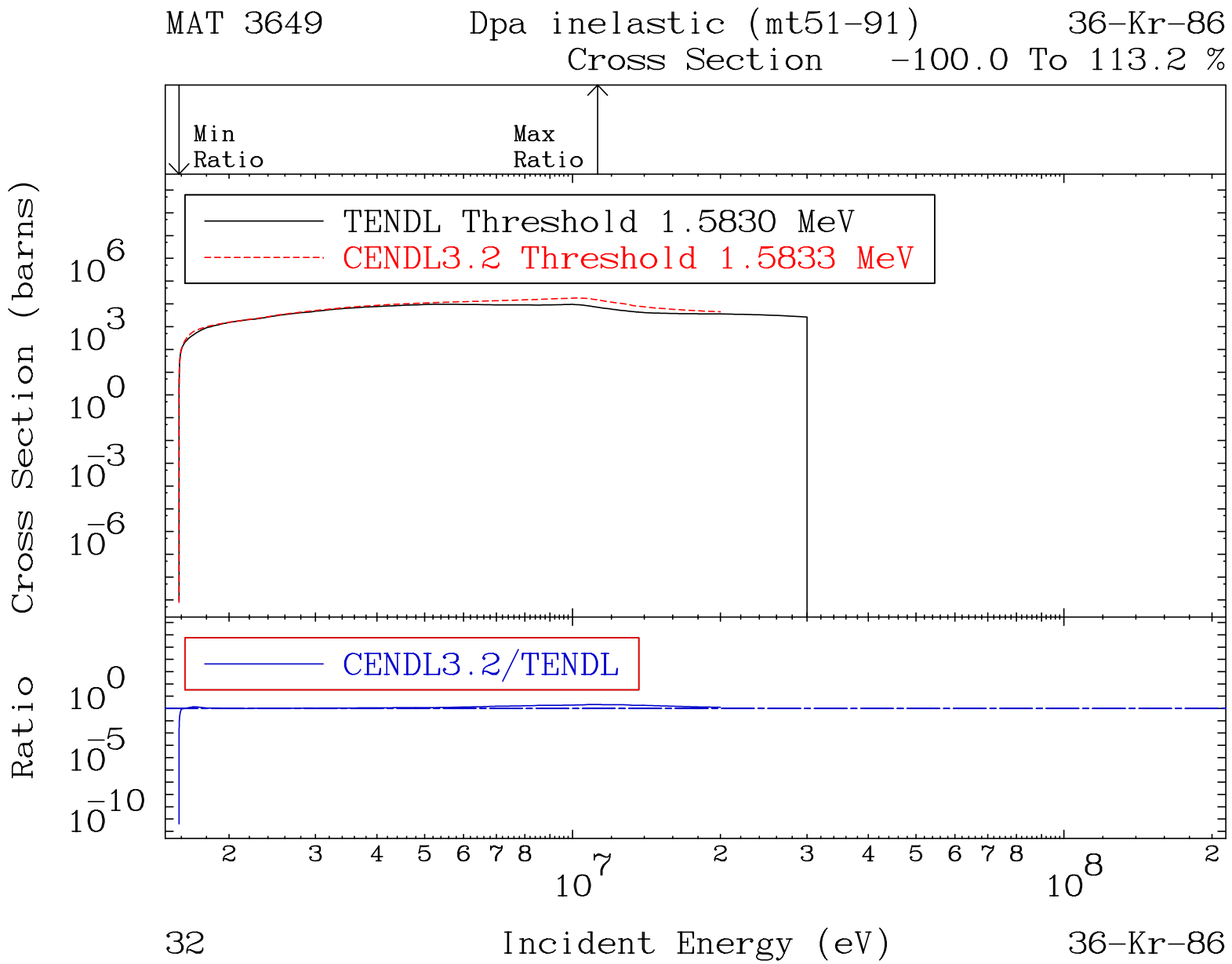

MAT 3649
Kerma capture (mt102)
36-Kr-86
Cross Section 4067. To 9999. %
Max Ratio
Min Ratio
TENDL
CENDL3.2
Cross Section (barns)
CENDL3.2/TENDL
Ratio
Incident Energy (eV)
27
36-Kr-86

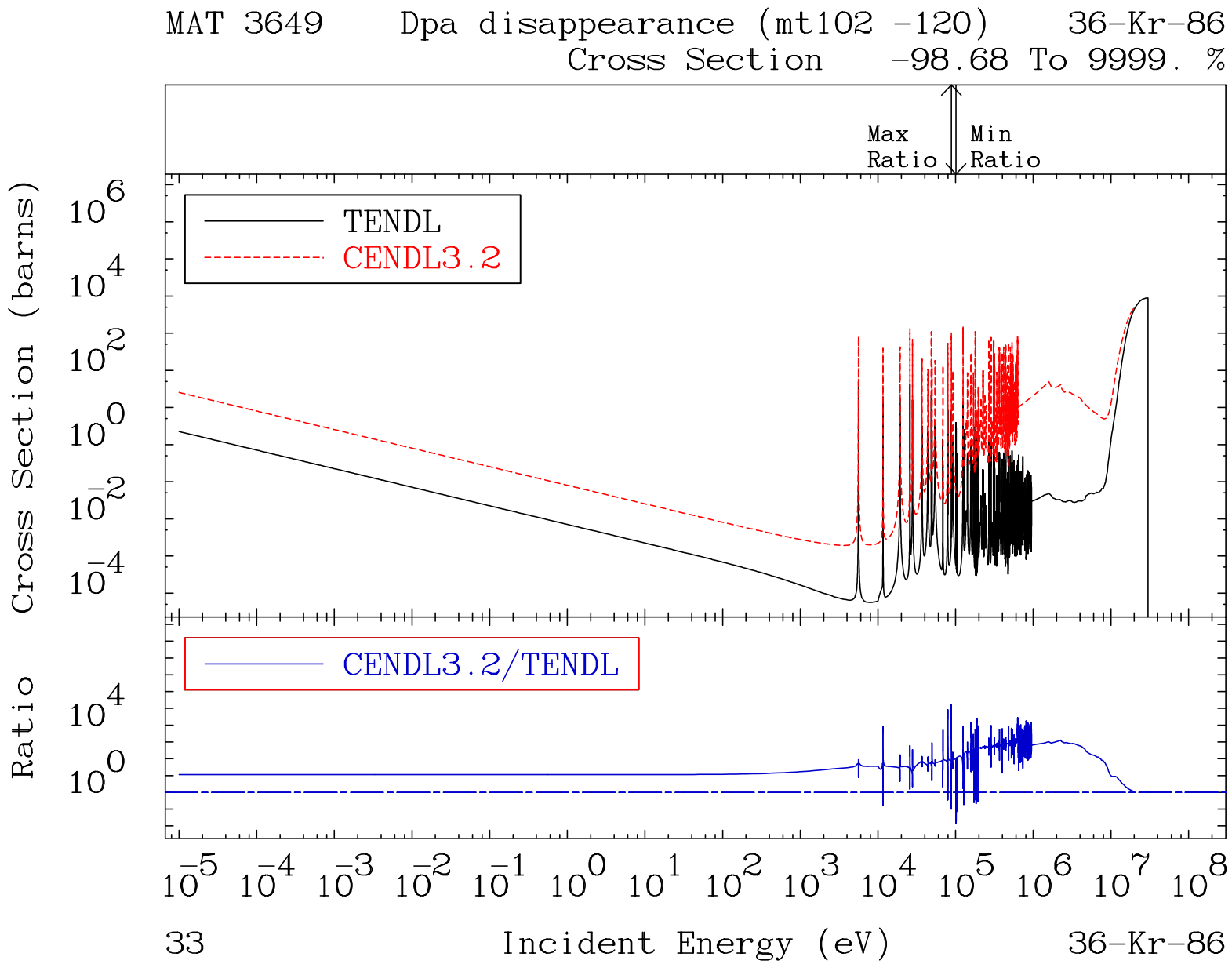

MAT 3649
Total photon (eV-barns)
36-Kr-86
Cross Section 4067. To 9999. %
Max Ratio
Min Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Ratio Cross Section (Mega-barns)
25
20
15
10
5
0
10^{8}
10^{4}
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2} 10^{3} 10^{4} 10^{5} 10^{6} 10^{7} 10^{8}
28
Incident Energy (eV)
36-Kr-86

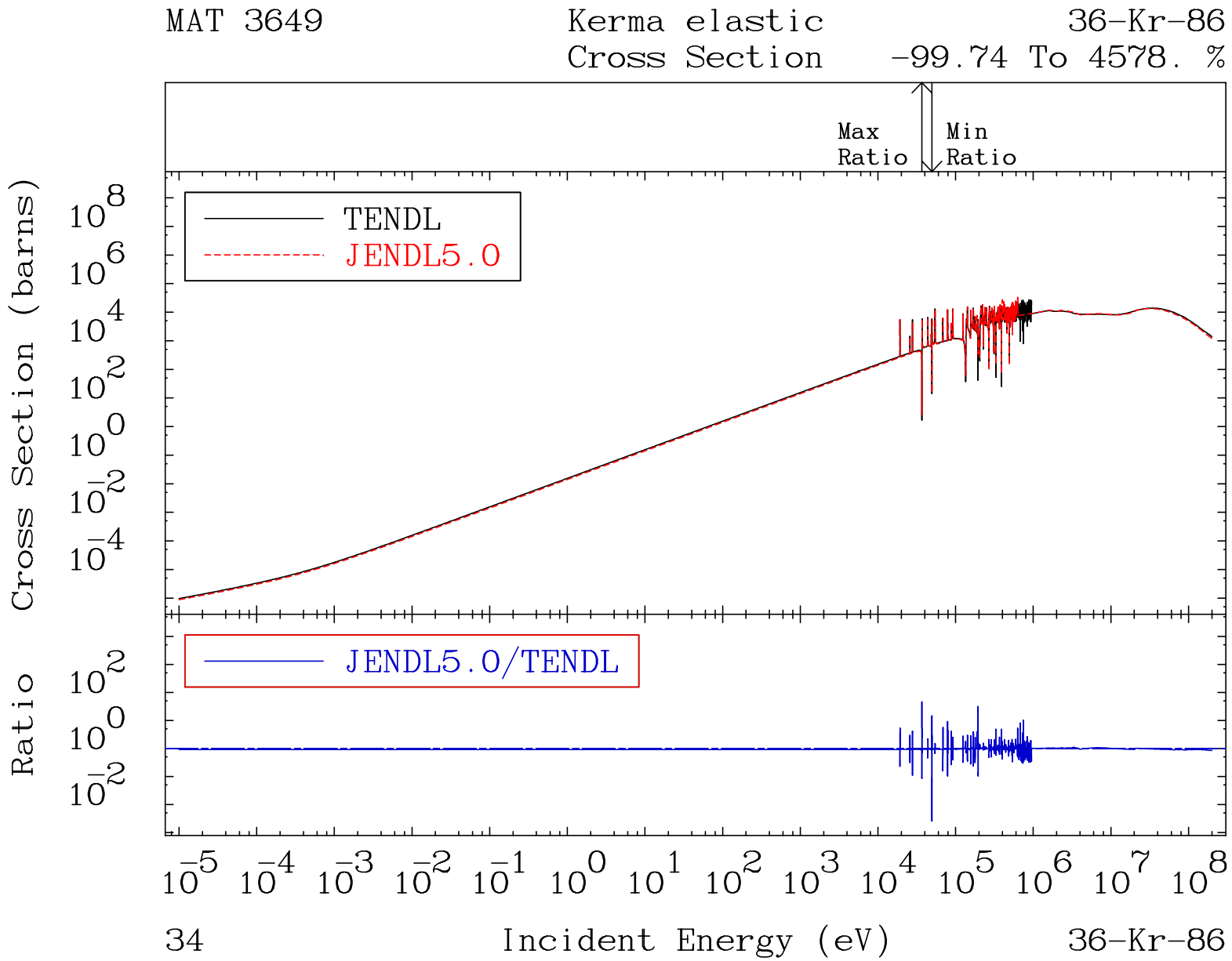

MAT 3649 Total kinematic kerma (high limit) 36-Kr-86
Cross Section -99.72 To 4542. %
Max Ratio
Min Ratio
TENDL
CENDL3.2
Cross Section (barns)
CENDL3.2/TENDL
Ratio
Incident Energy (eV)
29
36-Kr-86

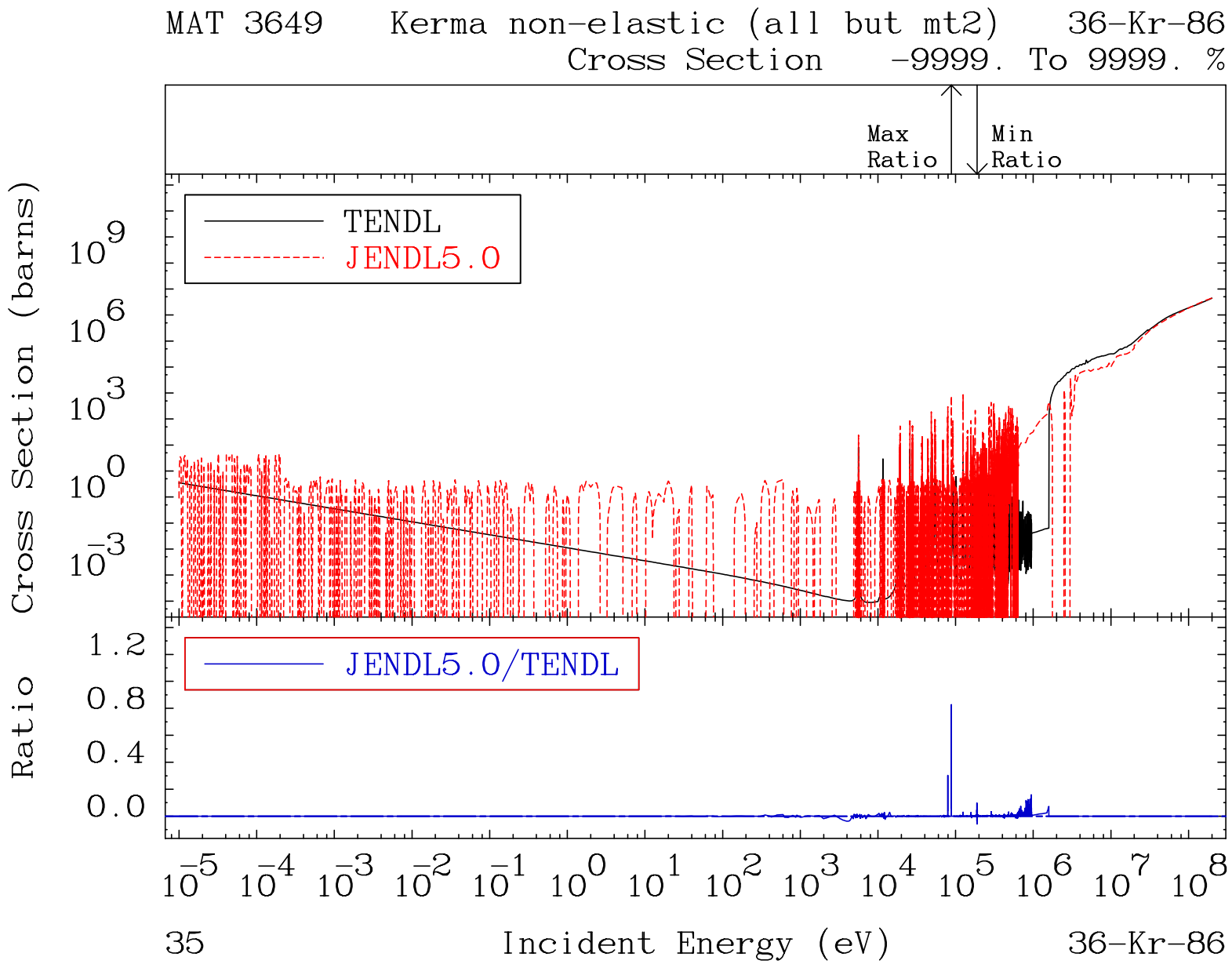

MAT 3649
Dpa total (eV-barns)
36-Kr-86
Cross Section -99.72 To 4574. %
Max Ratio
Min Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
30
36-Kr-86

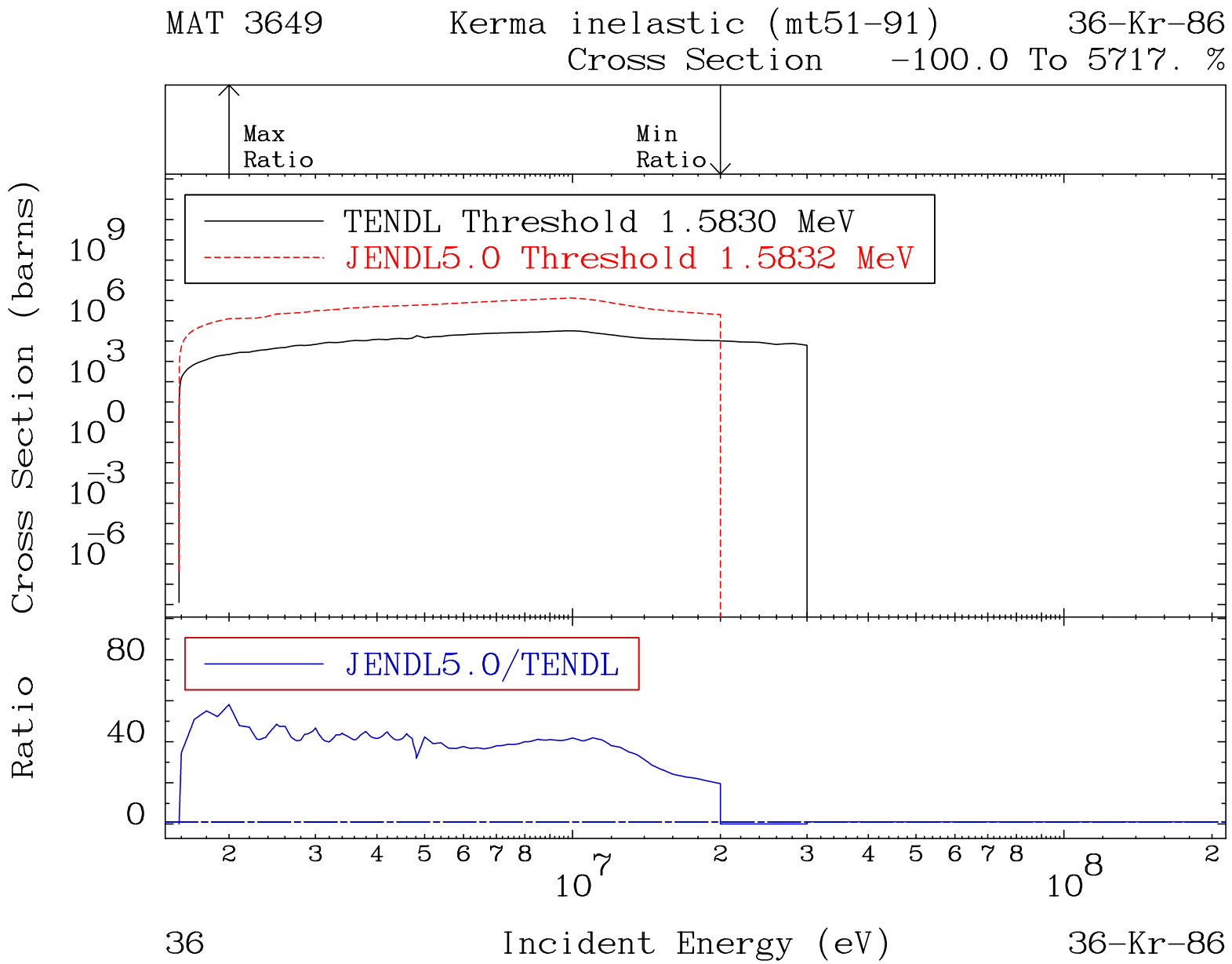

MAT 3649
Dpa elastic (mt2)
Cross Section
36-Kr-86
-99.75 To 4446. %
Max Ratio
Min Ratio
TENDL Threshold 625.00 eV
CENDL3.2 Threshold 625.00 eV
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
31
36-Kr-86

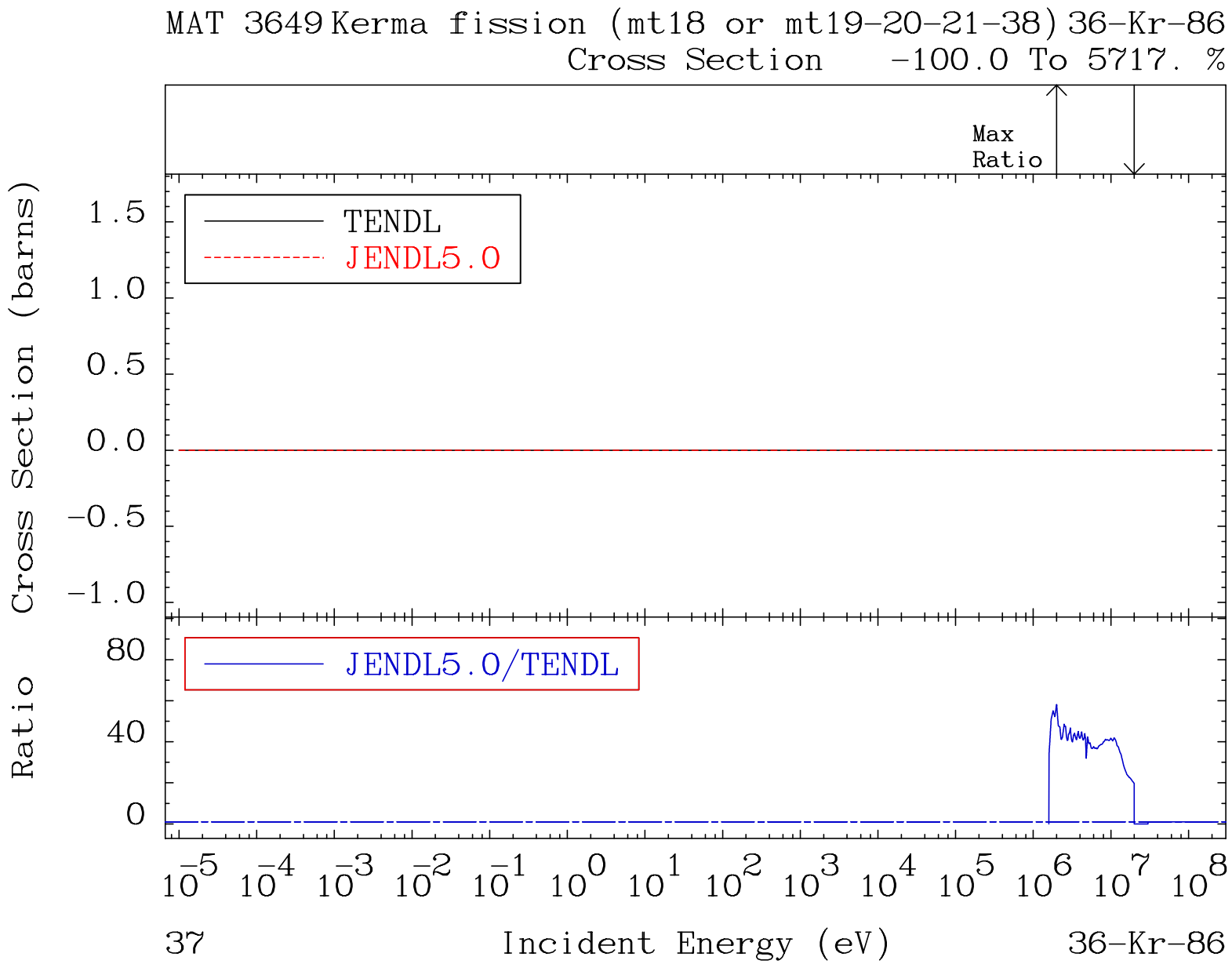

MAT 3649
Dpa inelastic (mt51-91)
36-Kr-86
Cross Section -100.0 To 113.2 %
Min Ratio
Max Ratio
TENDL Threshold 1.5830 MeV
CENDL3.2 Threshold 1.5833 MeV
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
32
36-Kr-86

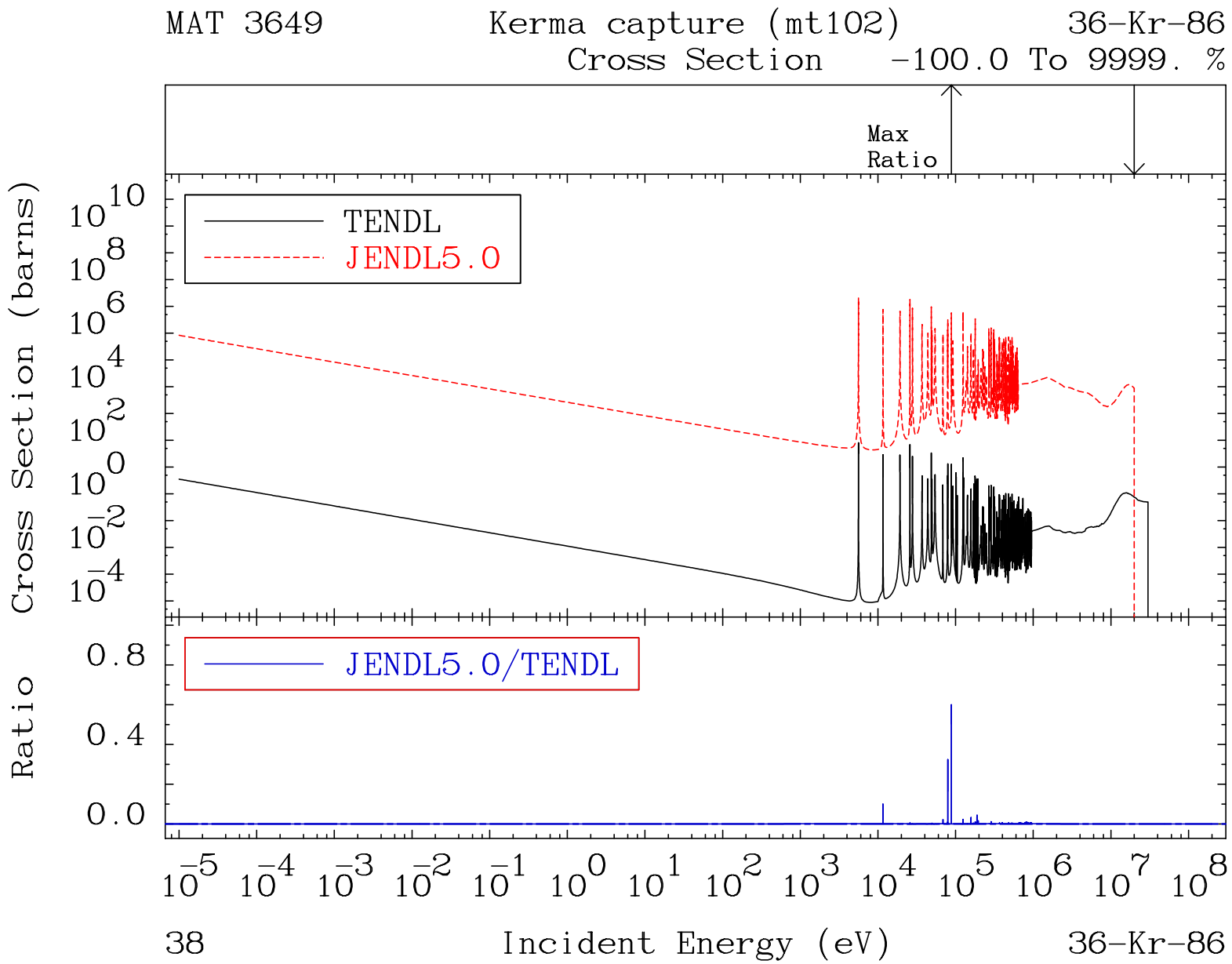

MAT 3649 Dpa disappearance (mt102 -120) 36-Kr-86
Cross Section -98.68 To 9999. %
Max Ratio
Min Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
33
36-Kr-86

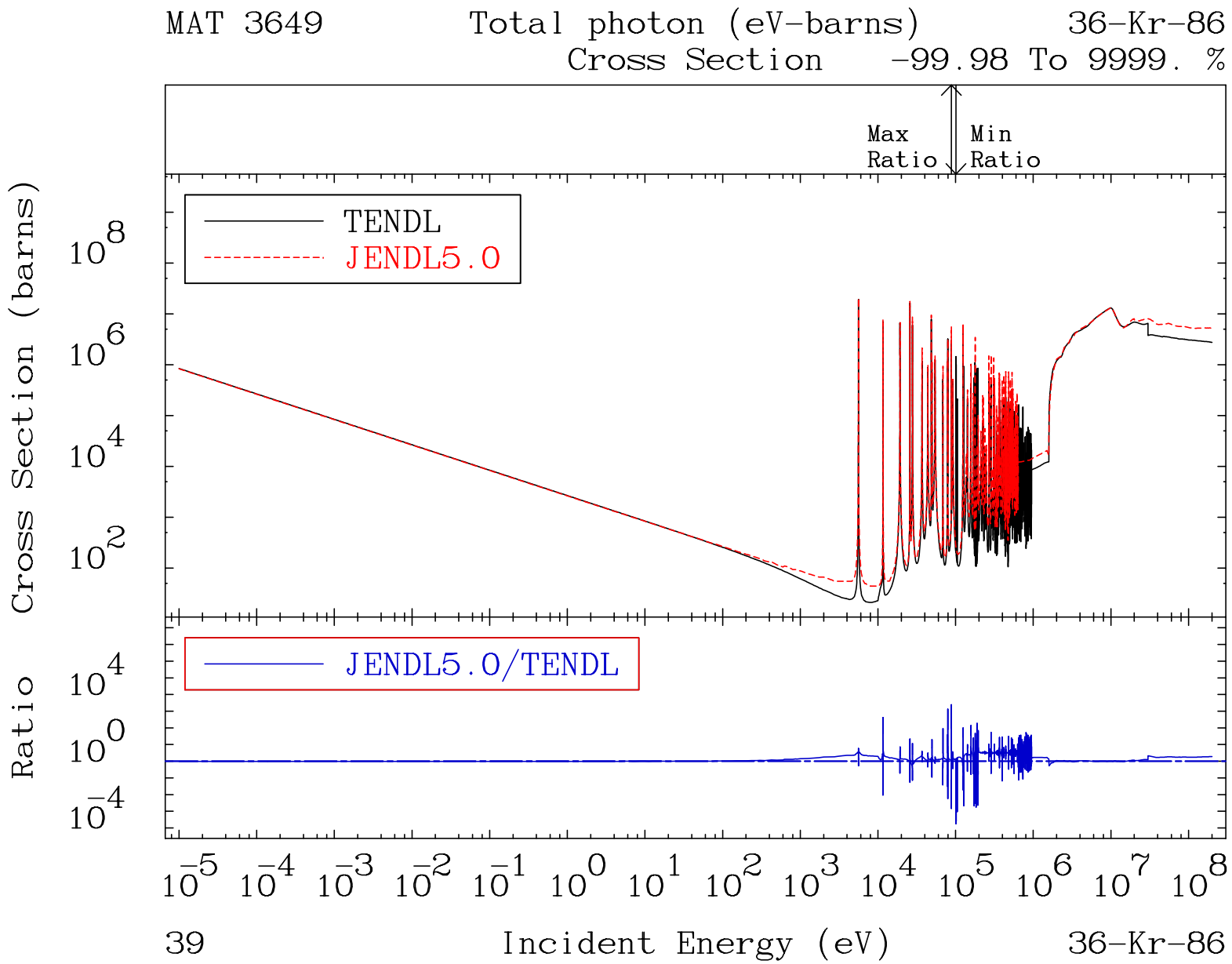

MAT 3649
Kerma elastic
Cross Section
36-Kr-86
-99.74 To 4578. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
34
36-Kr-86

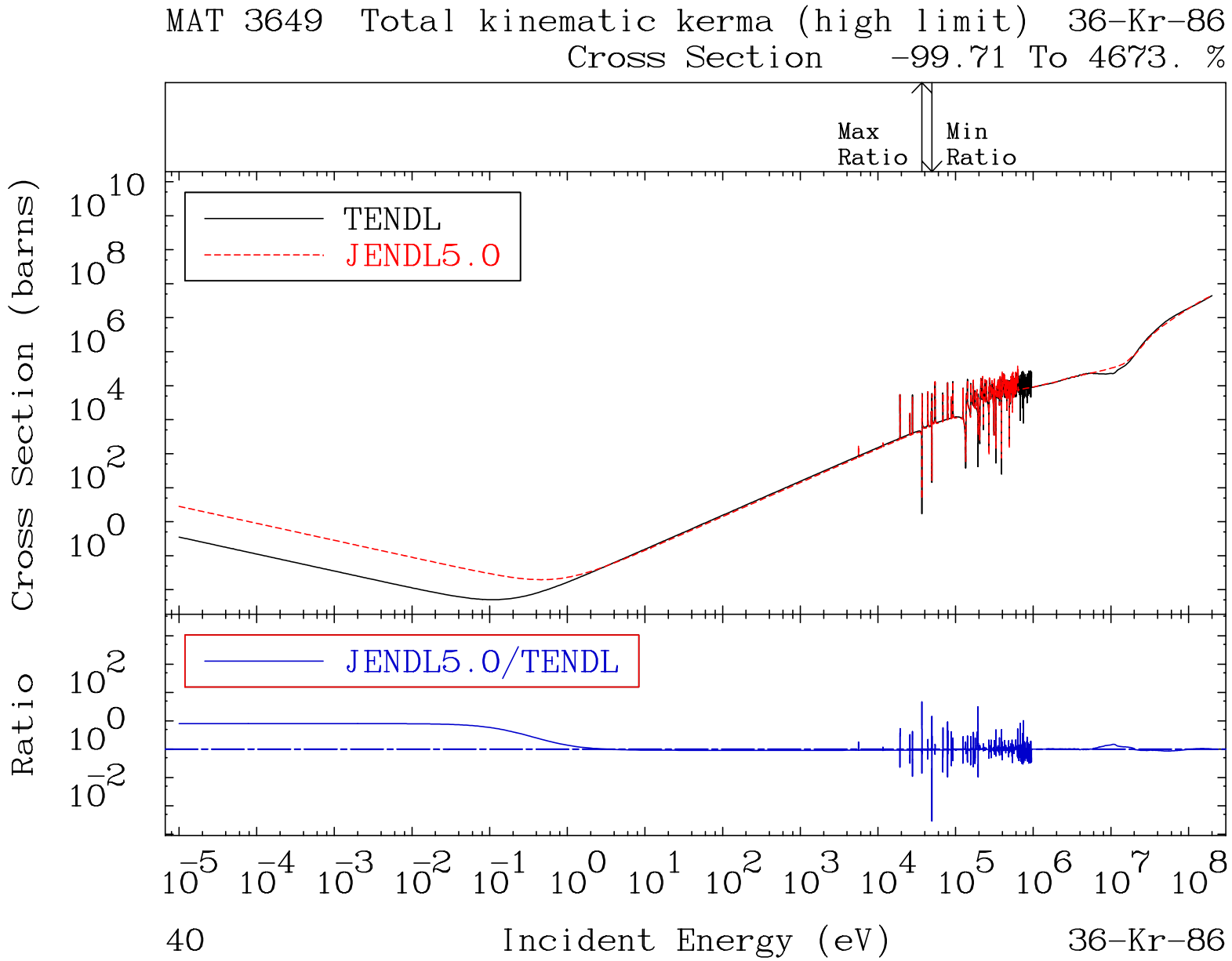

MAT 3649 Kerma non-elastic (all but mt2) 36-Kr-86
Cross Section -9999. To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
35
36-Kr-86

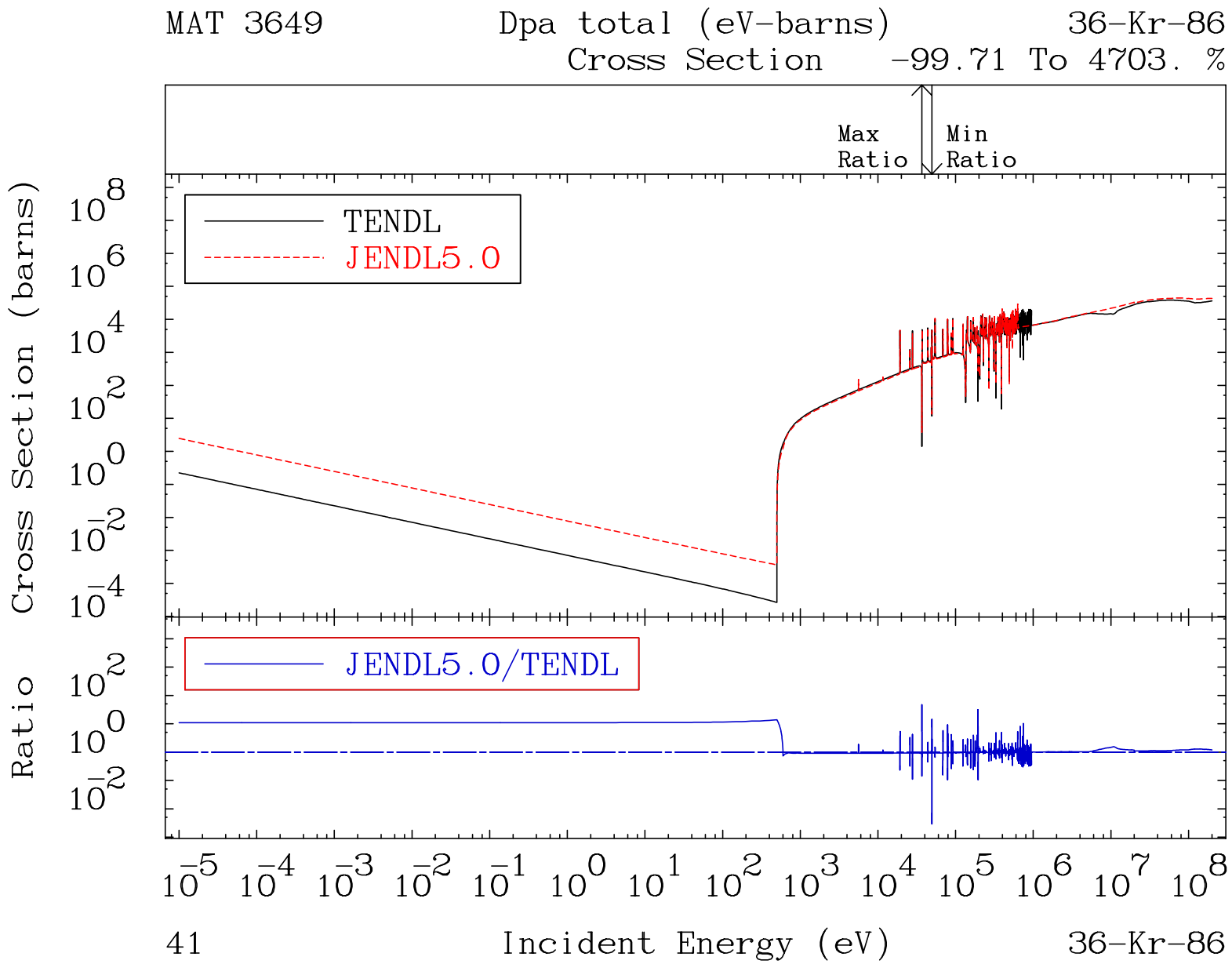

MAT 3649
Kerma inelastic (mt51-91)
36-Kr-86
Cross Section -100.0 To 5717. %
Max Ratio
Min Ratio
TENDL Threshold 1.5830 MeV
JENDL5.0 Threshold 1.5832 MeV
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
36
36-Kr-86

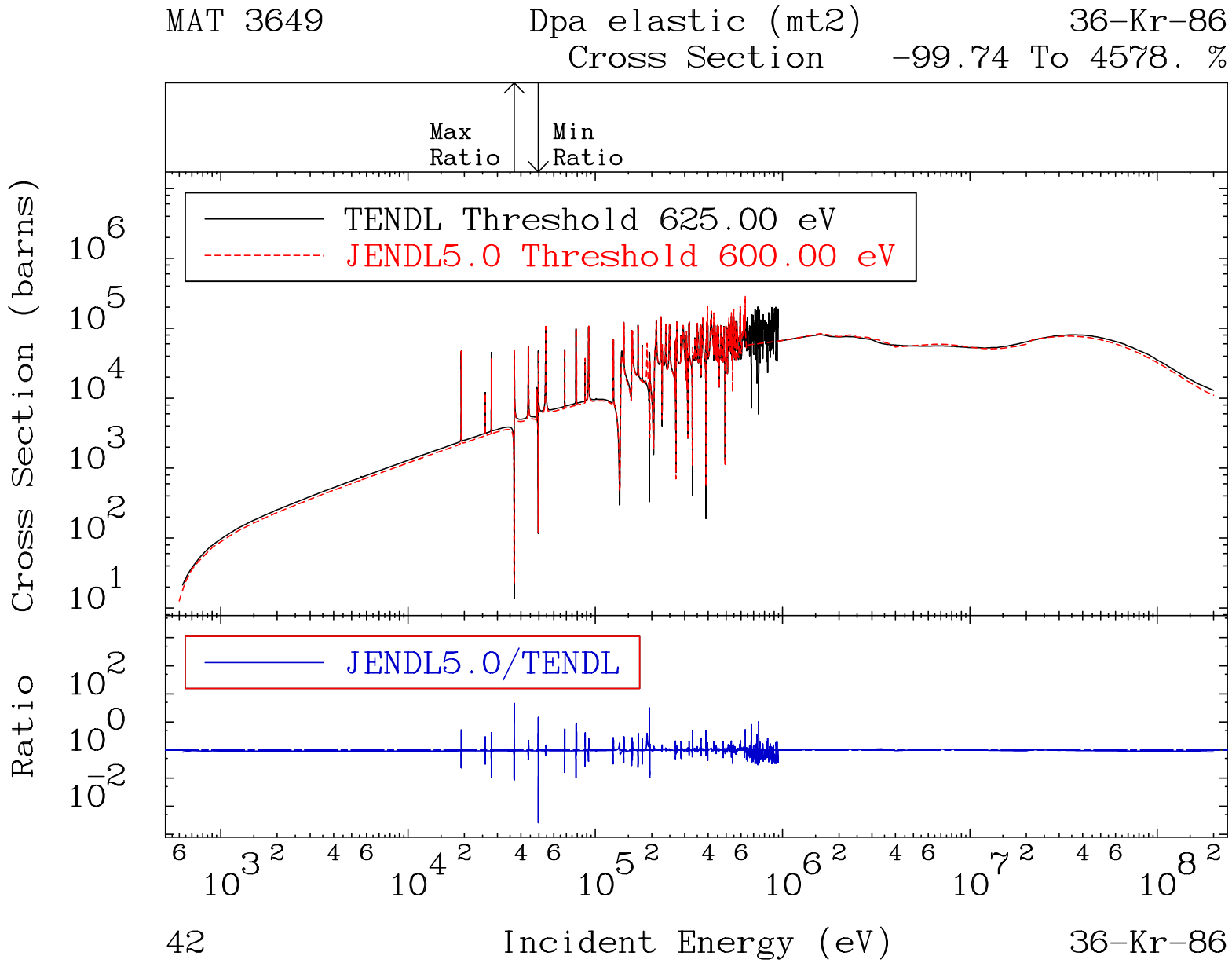

MAT 3649 Kerma fission (mt18 or mt19-20-21-38) 36-Kr-86
Cross Section -100.0 To 5717. %
Max
Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
1.5
1.0
0.5
0.0
-0.5
-1.0
80
40
0
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2} 10^{3} 10^{4} 10^{5} 10^{6} 10^{7} 10^{8}
37
Incident Energy (eV)
36-Kr-86

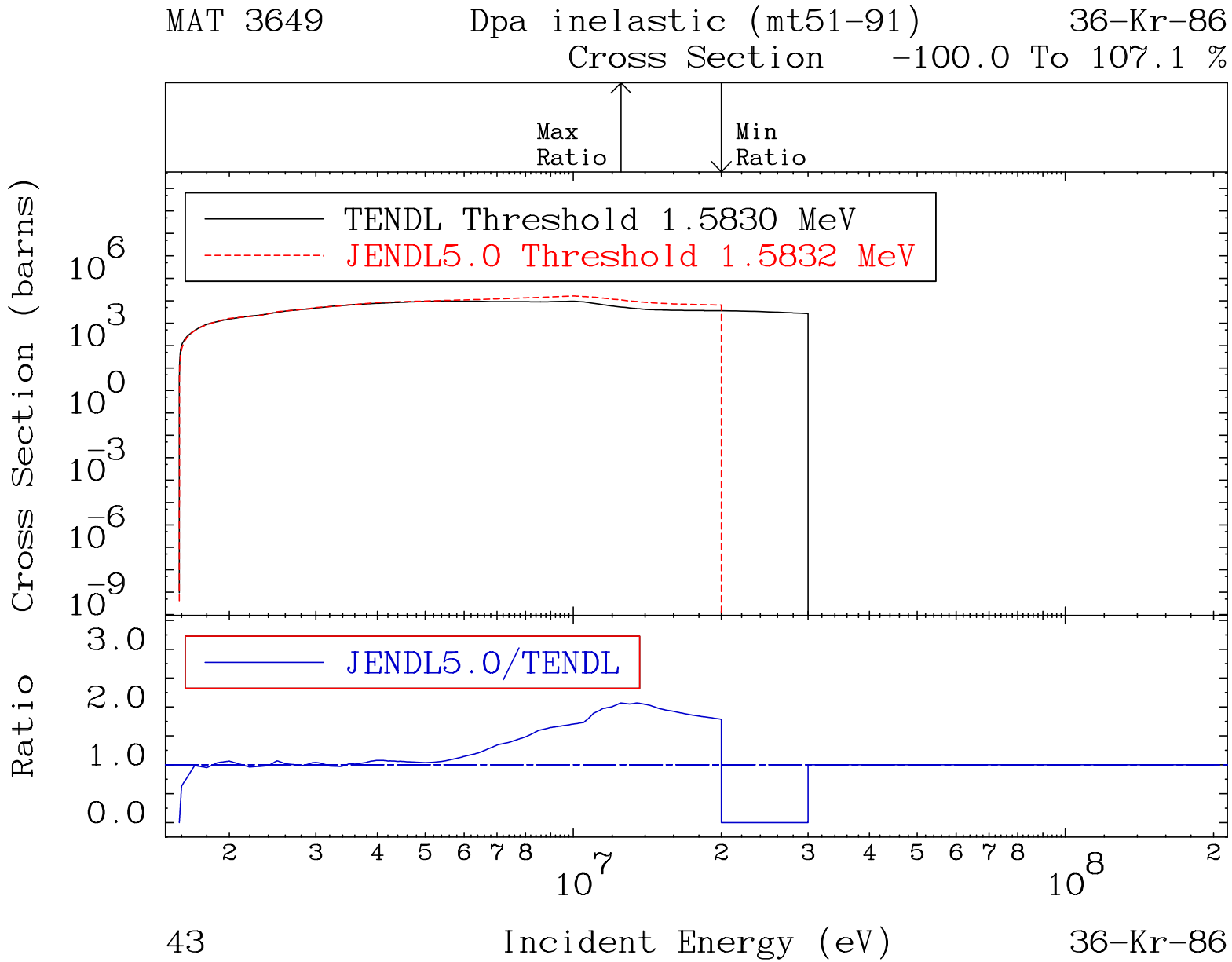

MAT 3649
Kerma capture (mt102)
36-Kr-86
Cross Section -100.0 To 9999. %
Max
Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
38
36-Kr-86

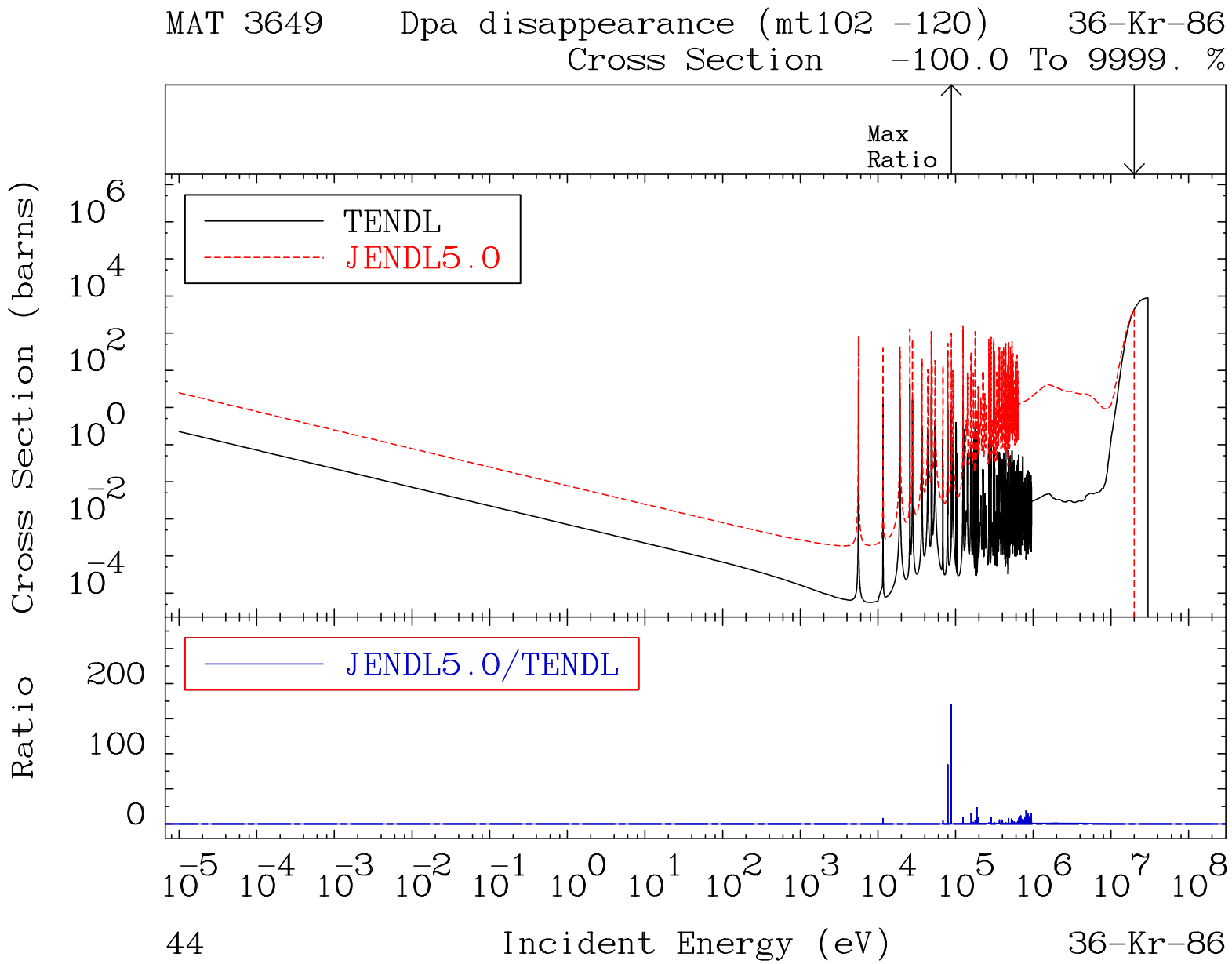

MAT 3649
Total photon (eV-barns)
36-Kr-86
Cross Section -99.98 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
39
36-Kr-86

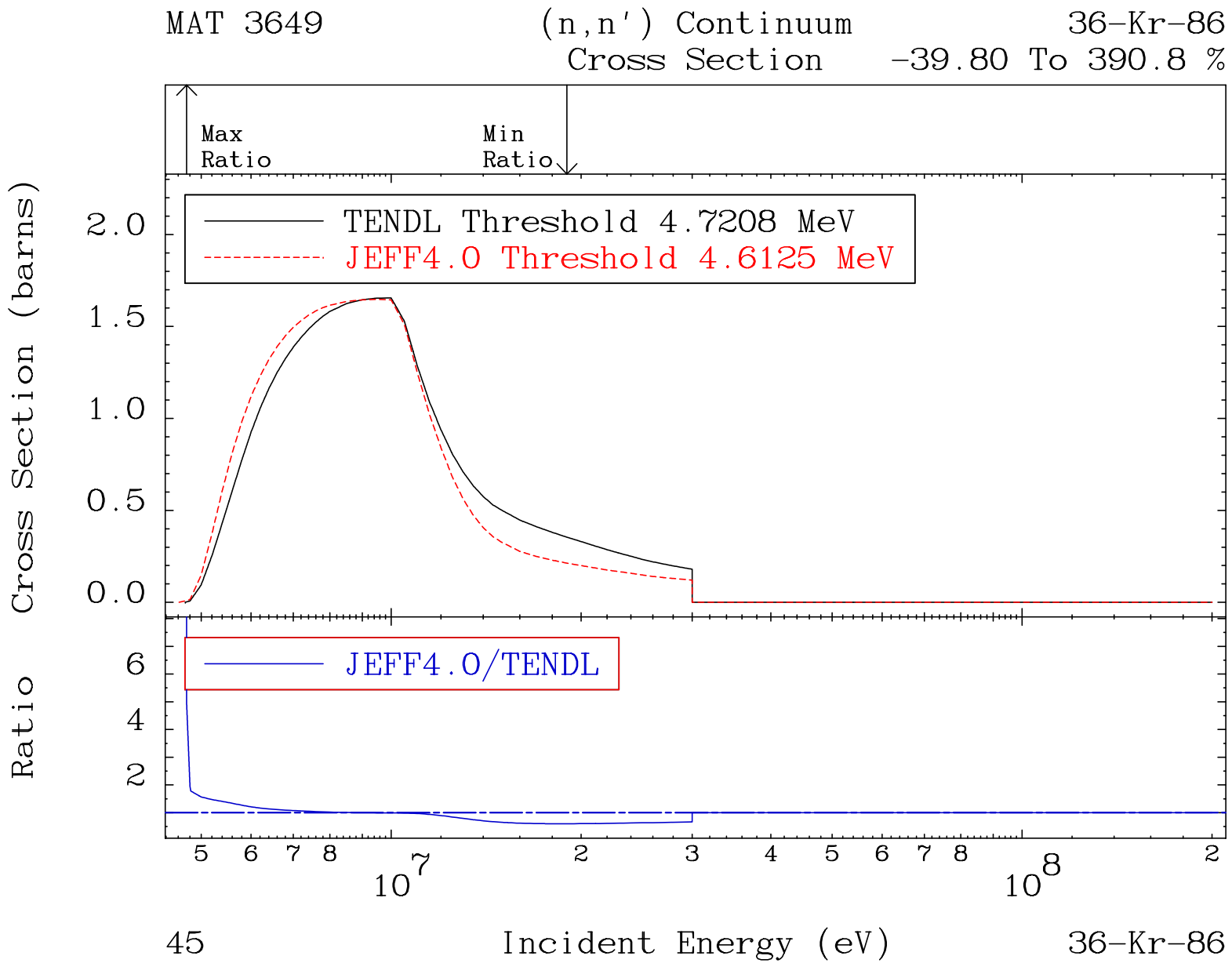

MAT 3649 Total kinematic kerma (high limit) 36-Kr-86
Cross Section -99.71 To 4673. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
40
36-Kr-86

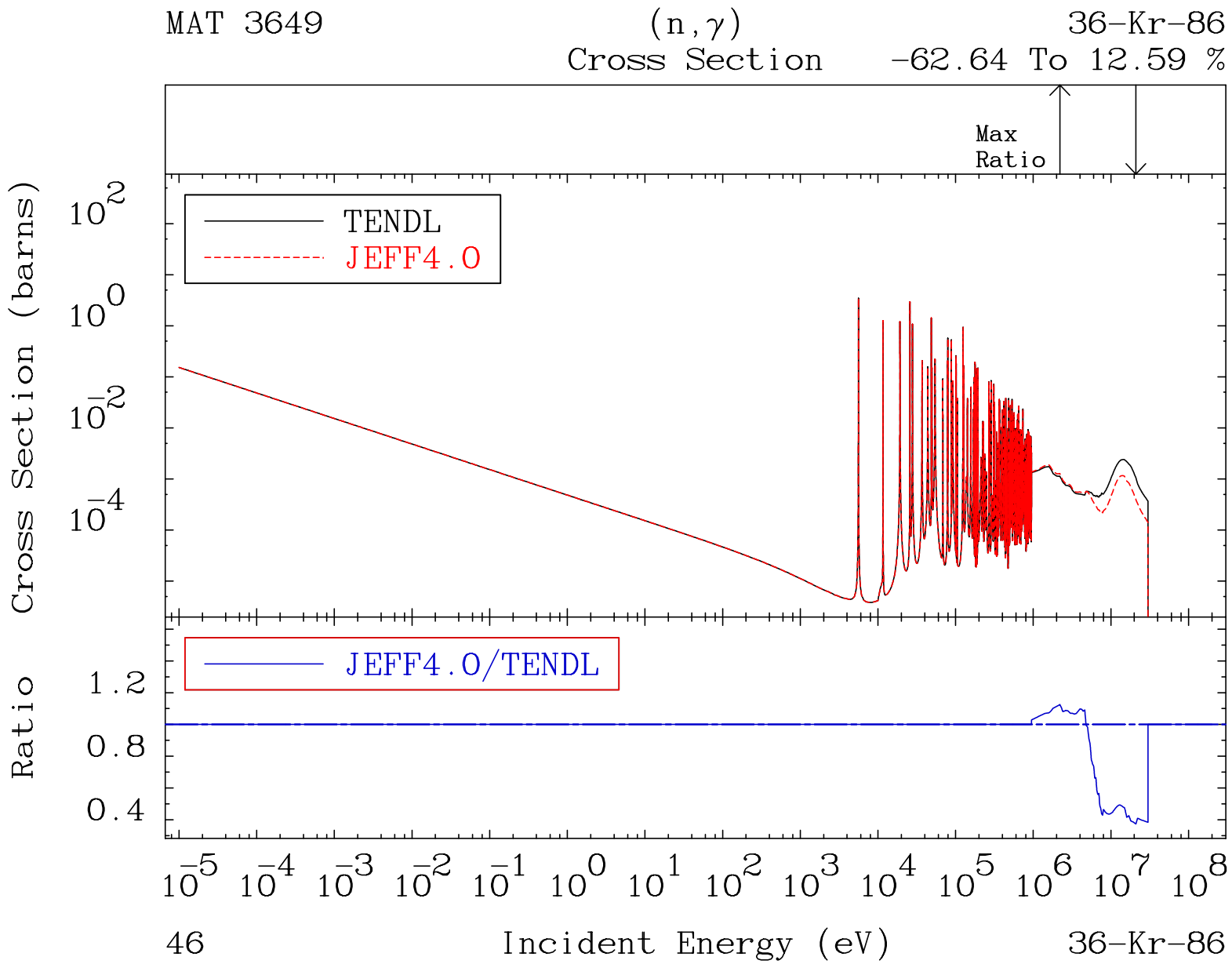

MAT 3649
Dpa total (eV-barns)
36-Kr-86
Cross Section -99.71 To 4703. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
41
36-Kr-86

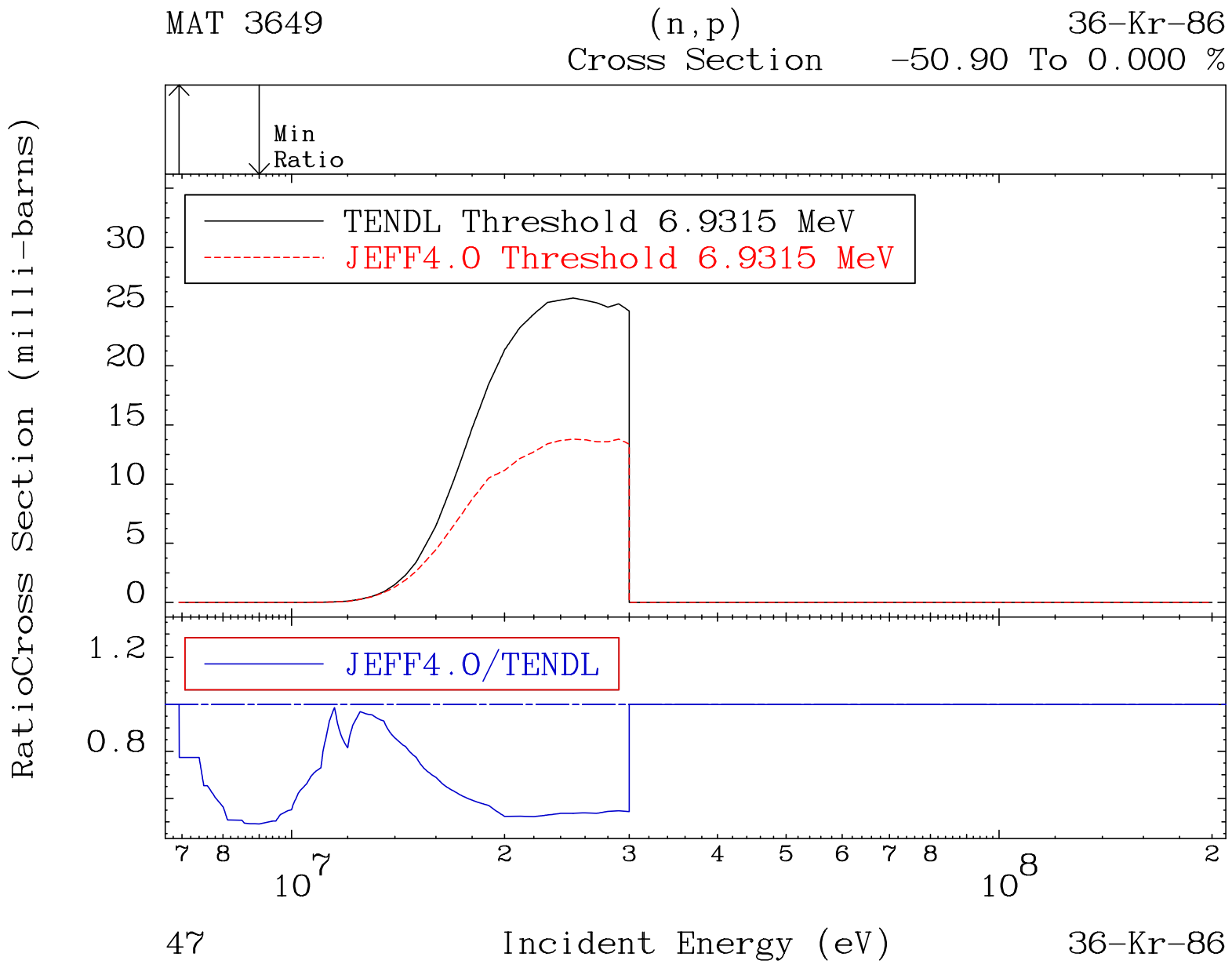

MAT 3649
Dpa elastic (mt2)
Cross Section
36-Kr-86
-99.74 To 4578. %
Max Ratio
Min Ratio
TENDL Threshold 625.00 eV
JENDL5.0 Threshold 600.00 eV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
42
36-Kr-86

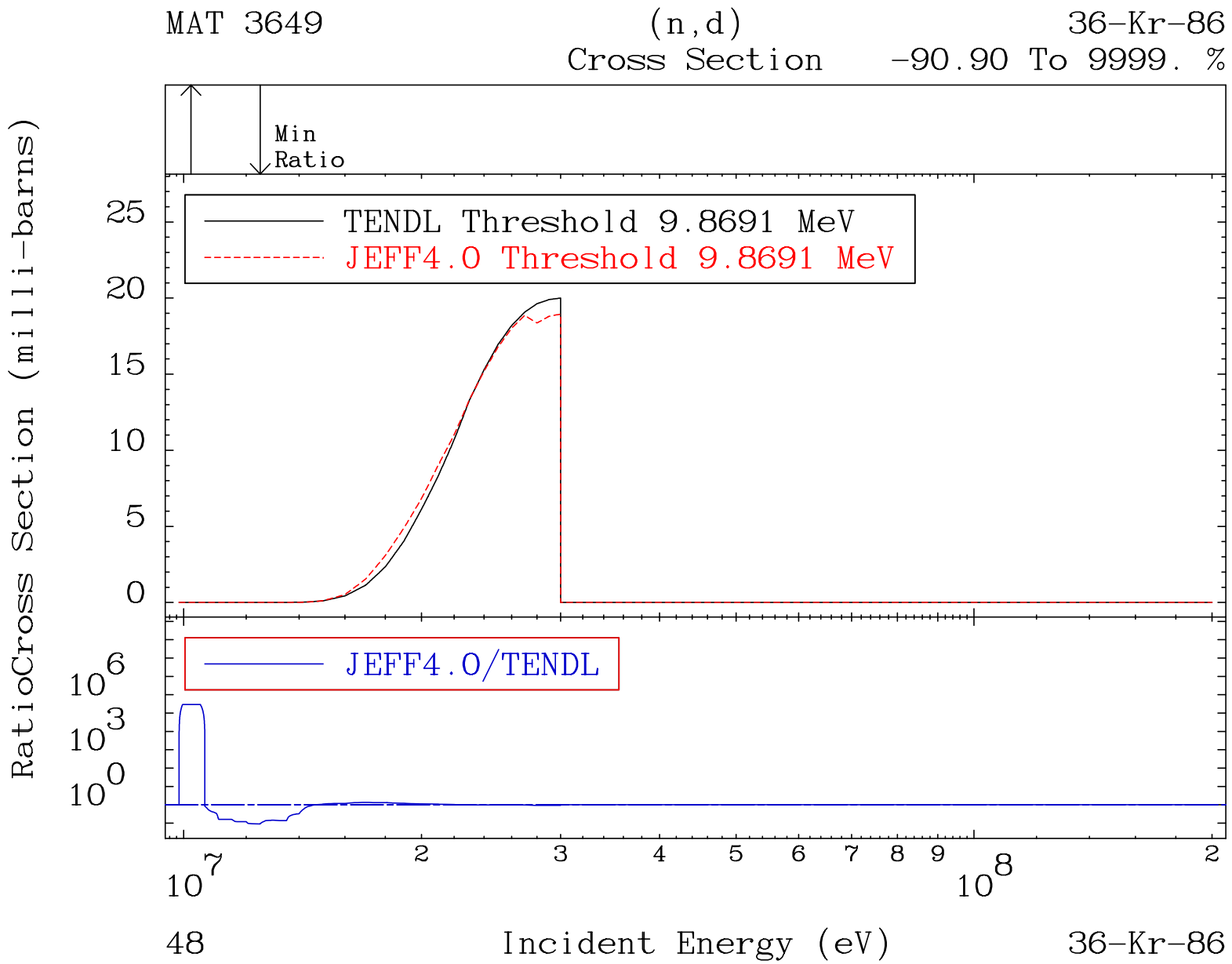

MAT 3649
Dpa inelastic (mt51-91)
36-Kr-86
Cross Section -100.0 To 107.1 %
Max Ratio
Min Ratio
TENDL Threshold 1.5830 MeV
JENDL5.0 Threshold 1.5832 MeV
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
43
36-Kr-86

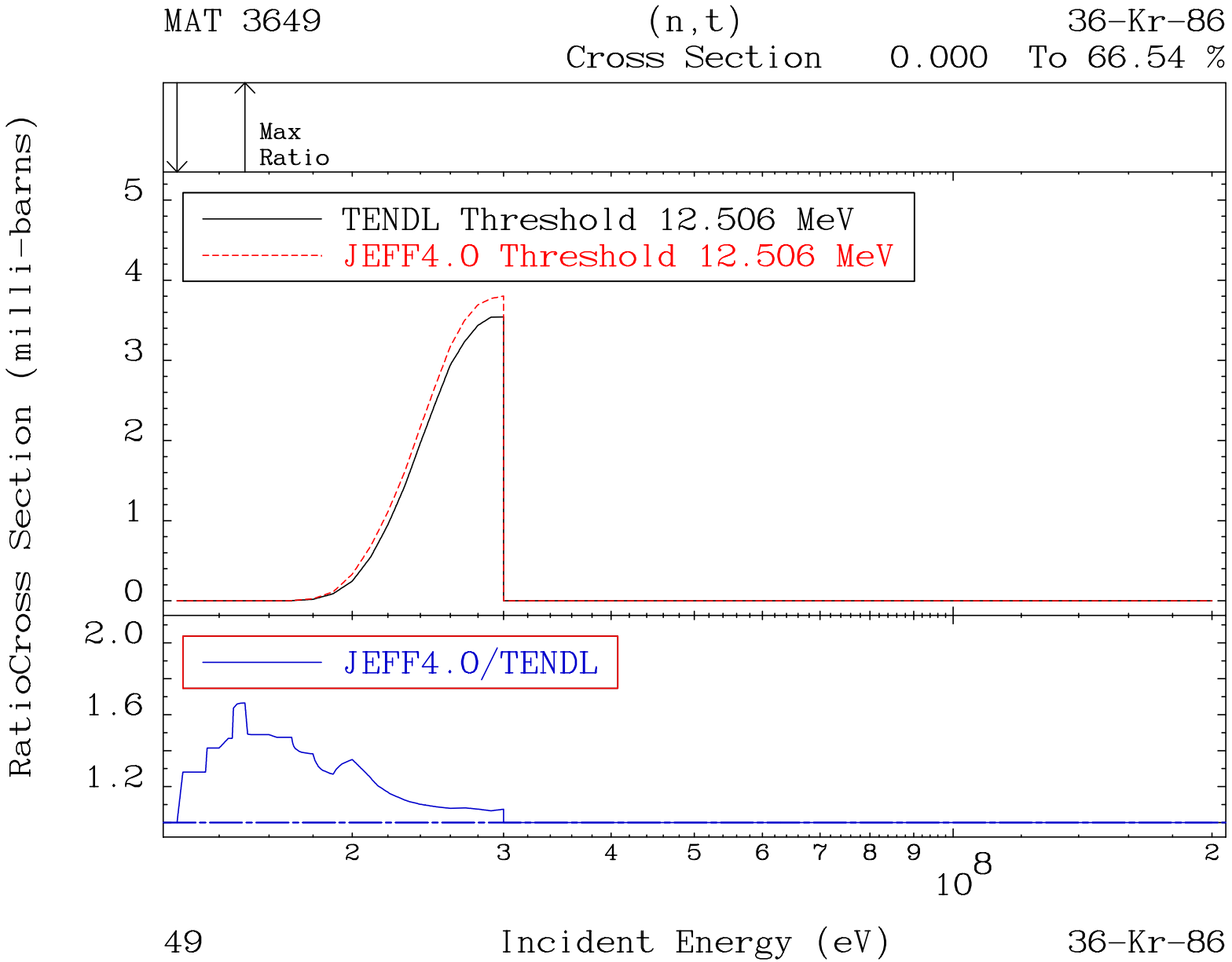

MAT 3649 Dpa disappearance (mt102 -120) 36-Kr-86
Cross Section -100.0 To 9999. %
Max
Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
44
36-Kr-86

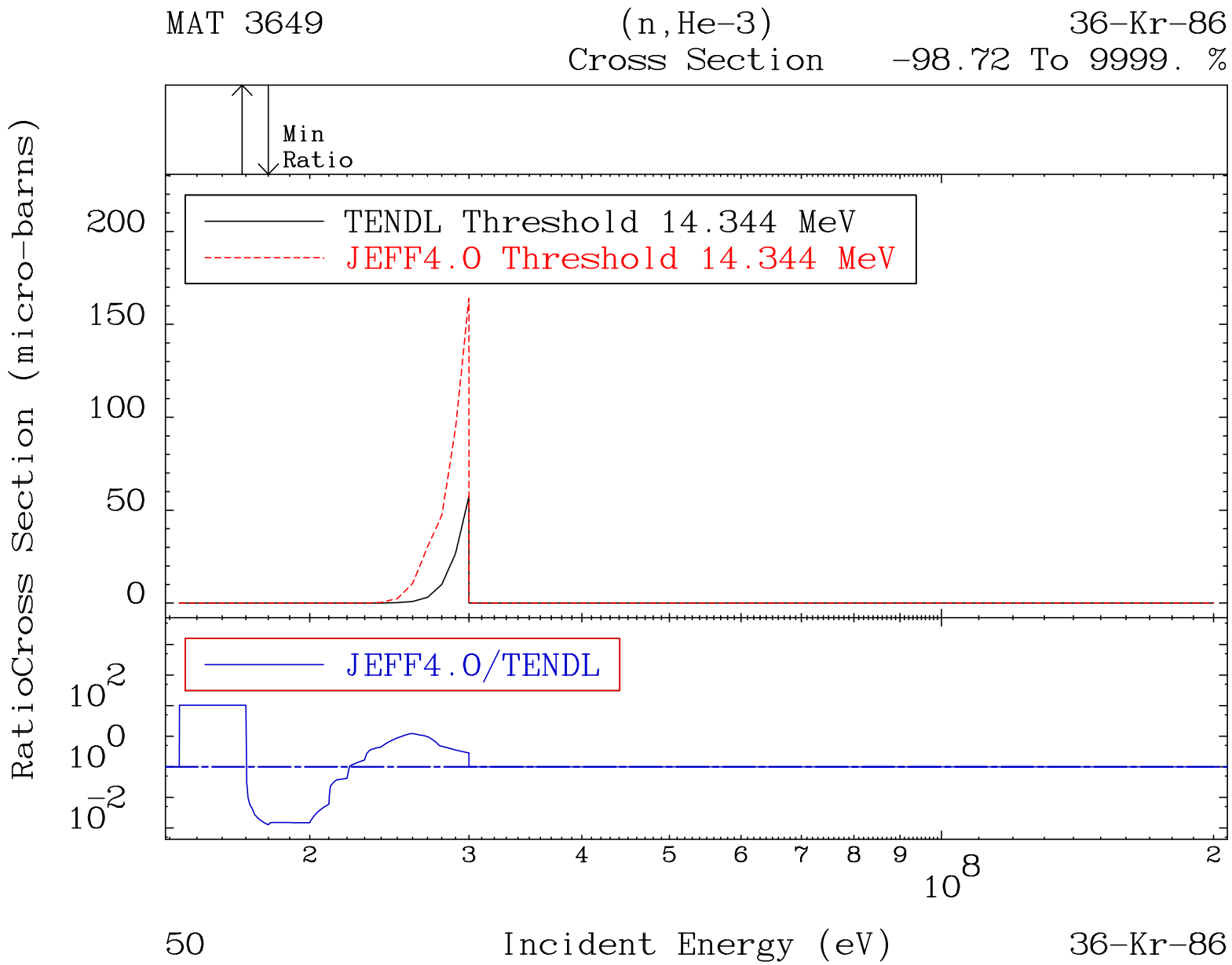

MAT 3649
(n,n') Continuum
Cross Section
36-Kr-86
-39.80 To 390.8 %
Max Ratio
Min Ratio
TENDL Threshold 4.7208 MeV
JEFF4.0 Threshold 4.6125 MeV
JEFF4.0/TENDL
Cross Section (barns)
Ratio
2.0
1.5
1.0
0.5
0.0
6
4
2
5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
45
Incident Energy (eV)
36-Kr-86

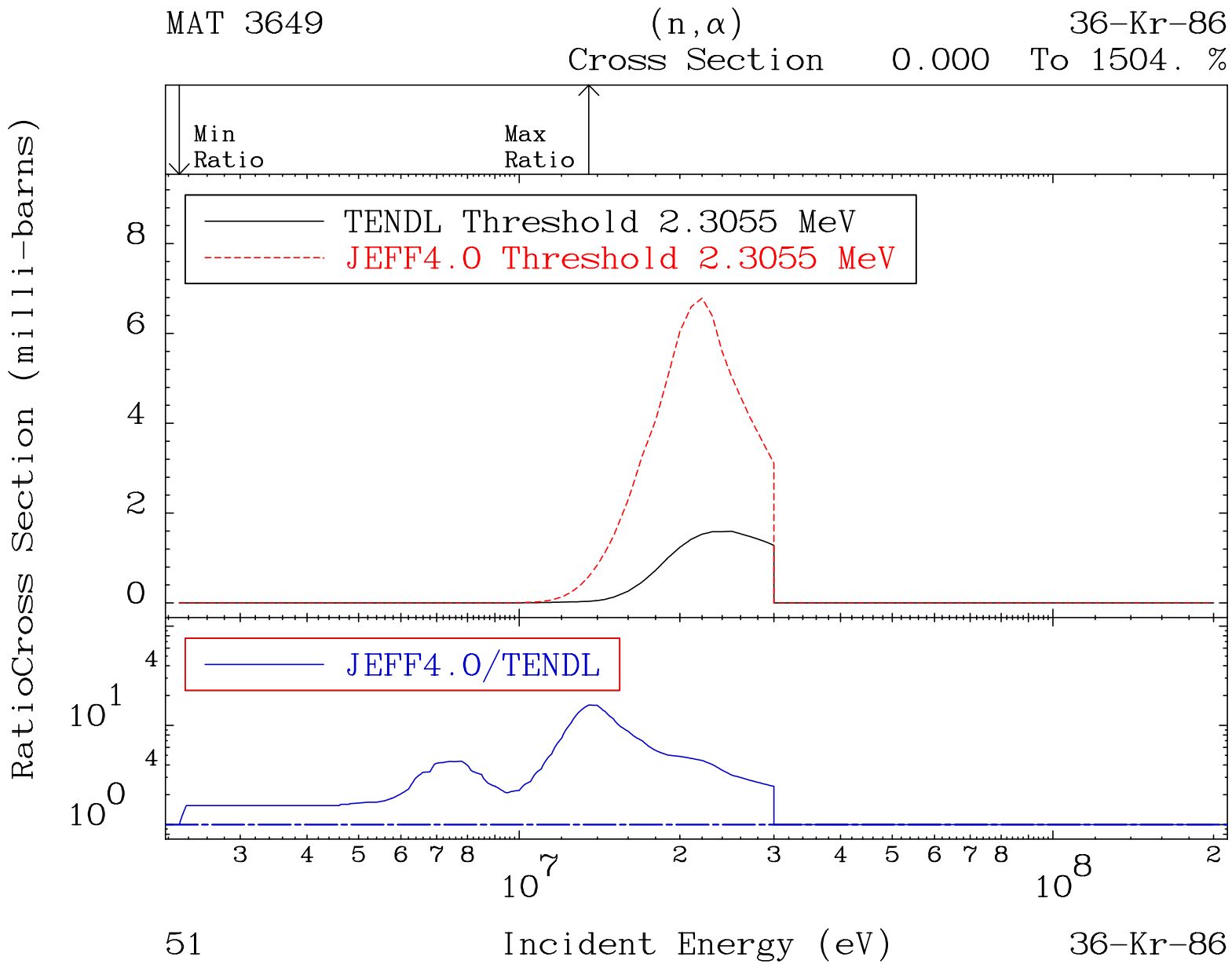

MAT 3649
(n,γ)
Cross Section
36-Kr-86
-62.64 To 12.59 %
Max
Ratio
TENDL
JEFF4.0
JEFF4.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
46
36-Kr-86

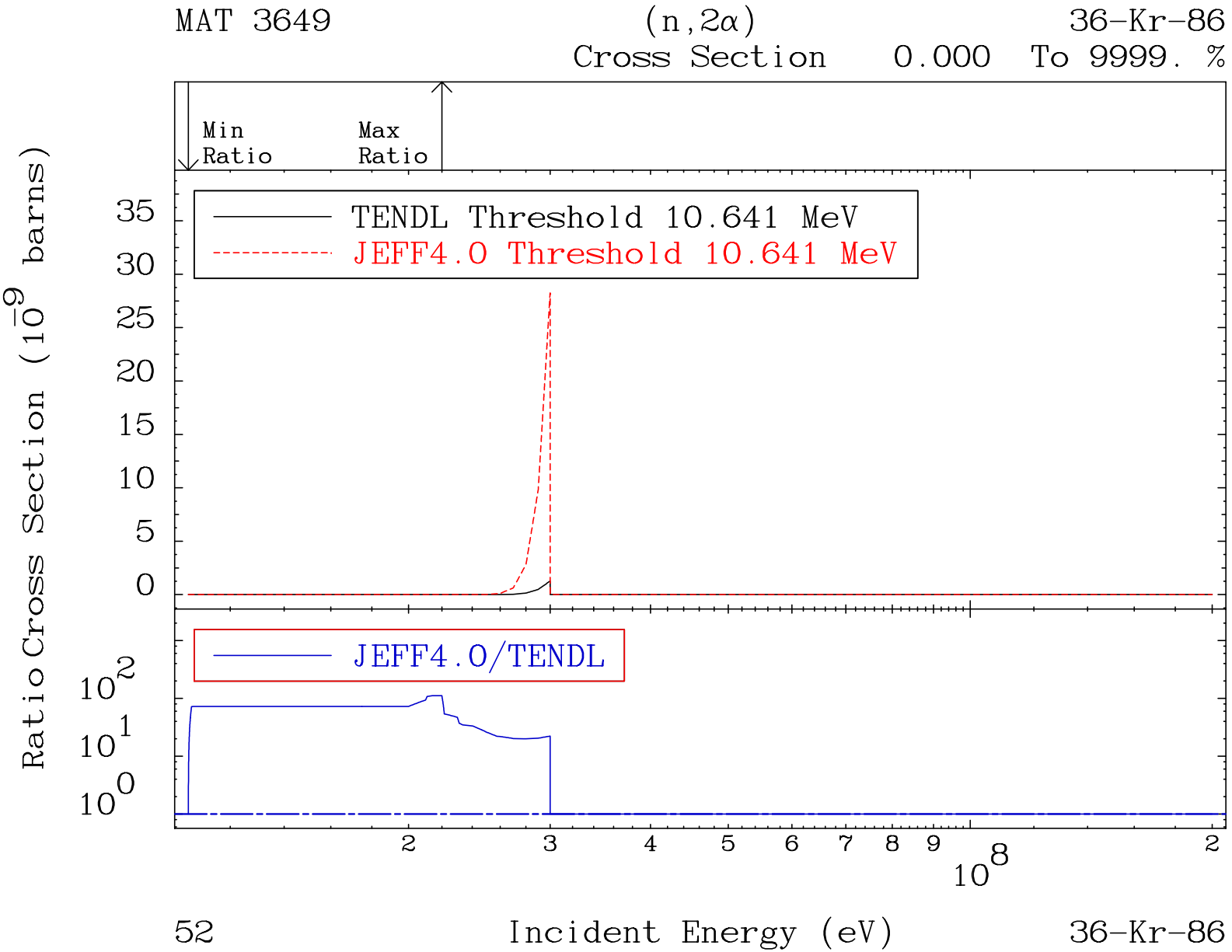

MAT 3649
(n,p)
Cross Section
36-Kr-86
-50.90 To 0.000 %
Min
Ratio
TENDL Threshold 6.9315 MeV
JEFF4.0 Threshold 6.9315 MeV
JEFF4.0/TENDL
RatioCross Section (milli-barns)
30
25
20
15
10
5
0
1.2
0.8
7 8 10^7 2 3 4 5 6 7 8 10^8 2
47
Incident Energy (eV)
36-Kr-86

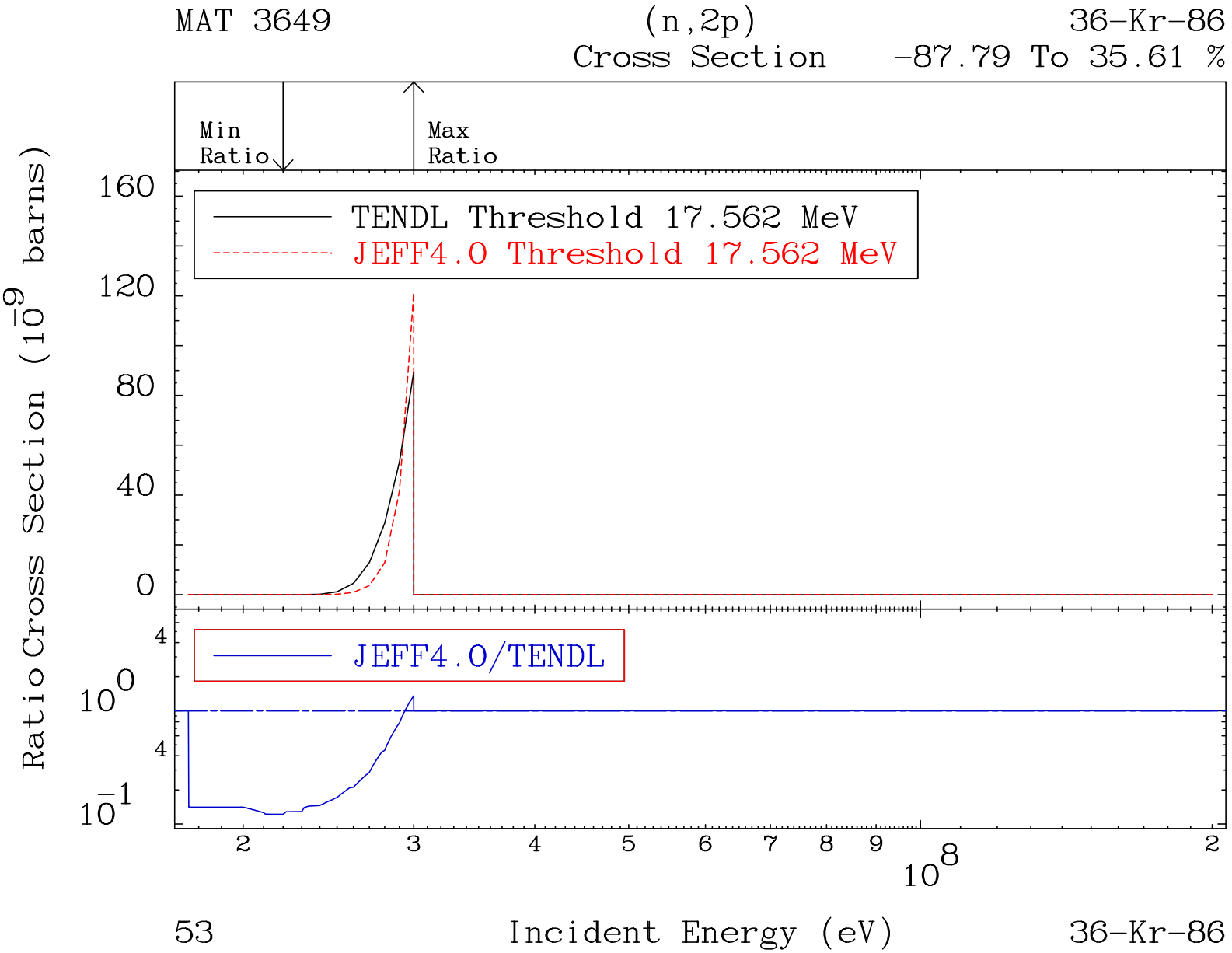

MAT 3649
(n,d)
36-Kr-86
Cross Section
-90.90 To 9999. %
Min
Ratio
TENDL Threshold 9.8691 MeV
JEFF4.0 Threshold 9.8691 MeV
JEFF4.0/TENDL
RatioCross Section (milli-barns)
25
20
15
10
5
0
10^6
10^3
10^0
10^7
2
3
4
5
6
7
8
9
10^8
2
48
Incident Energy (eV)
36-Kr-86

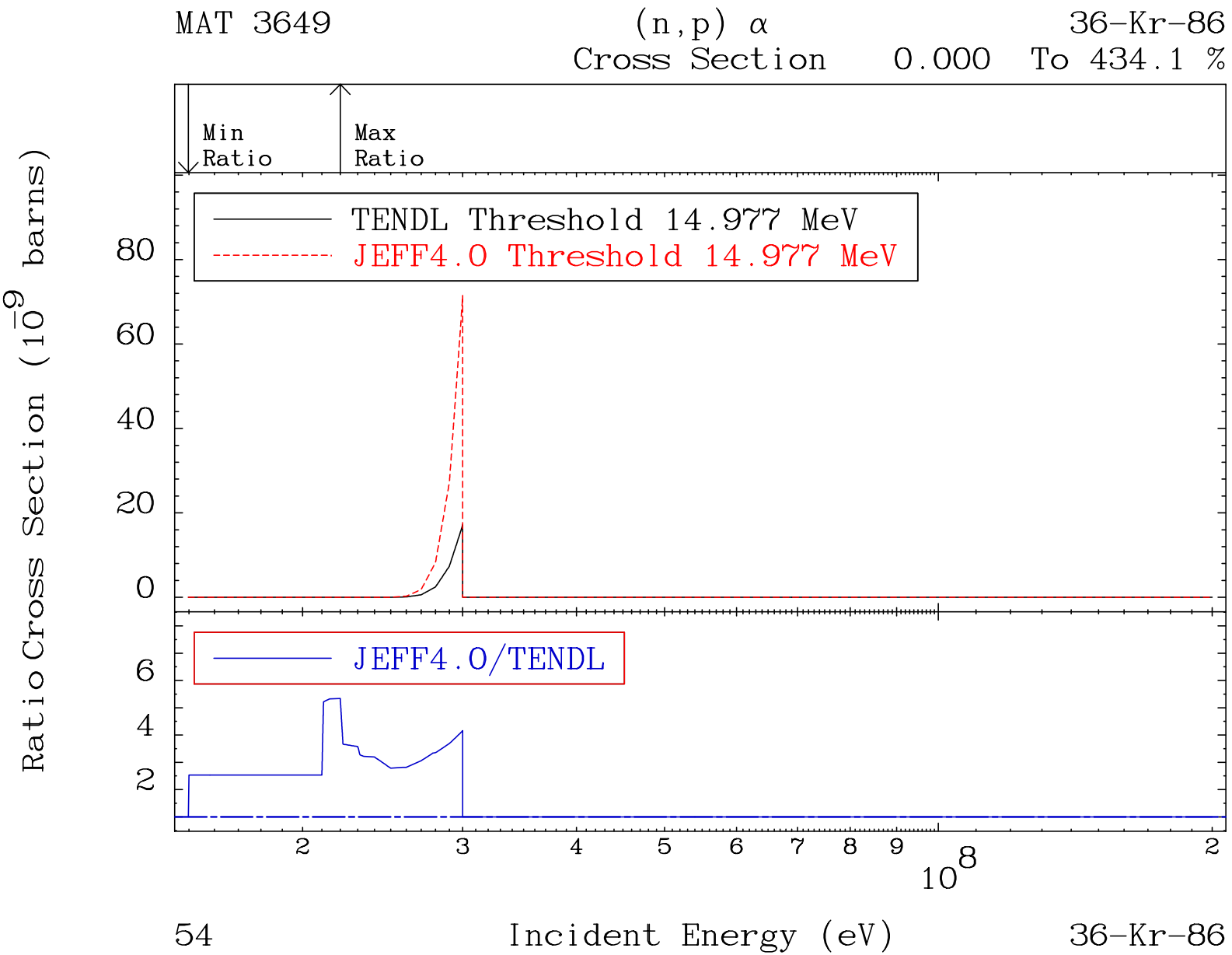

MAT 3649
(n,t)
36-Kr-86
Cross Section
0.000
To 66.54 %
Max
Ratio
TENDL Threshold 12.506 MeV
JEFF4.0 Threshold 12.506 MeV
JEFF4.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
49
36-Kr-86

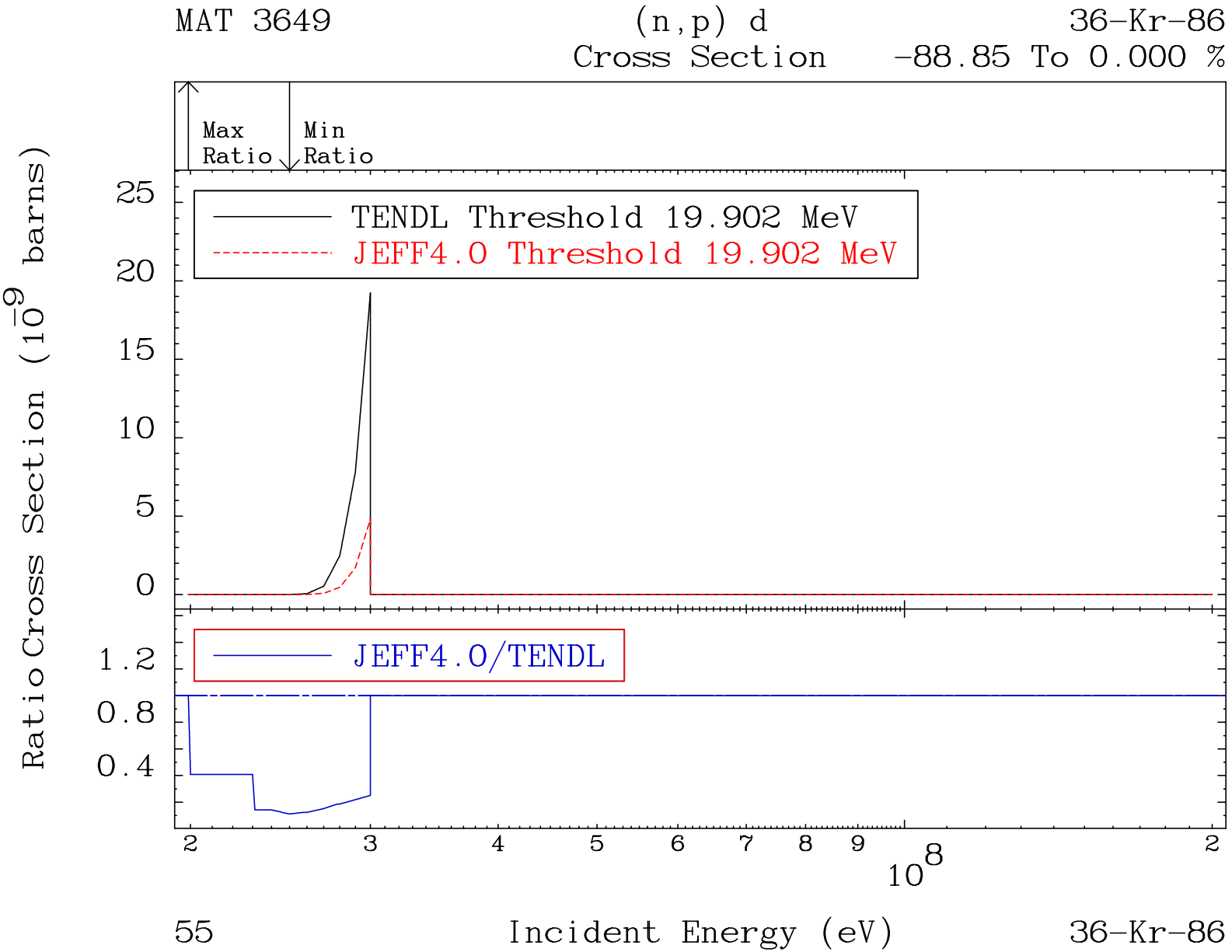

MAT 3649
(n,He-3)
Cross Section
36-Kr-86
-98.72 To 9999. %
Min
Ratio
TENDL Threshold 14.344 MeV
JEFF4.0 Threshold 14.344 MeV
JEFF4.0/TENDL
RatioCross Section (micro-barns)
200
150
100
50
0
10^2
10^0
10^-2
2
3
4
5
6
7
8
9
10^8
2
50
Incident Energy (eV)
36-Kr-86

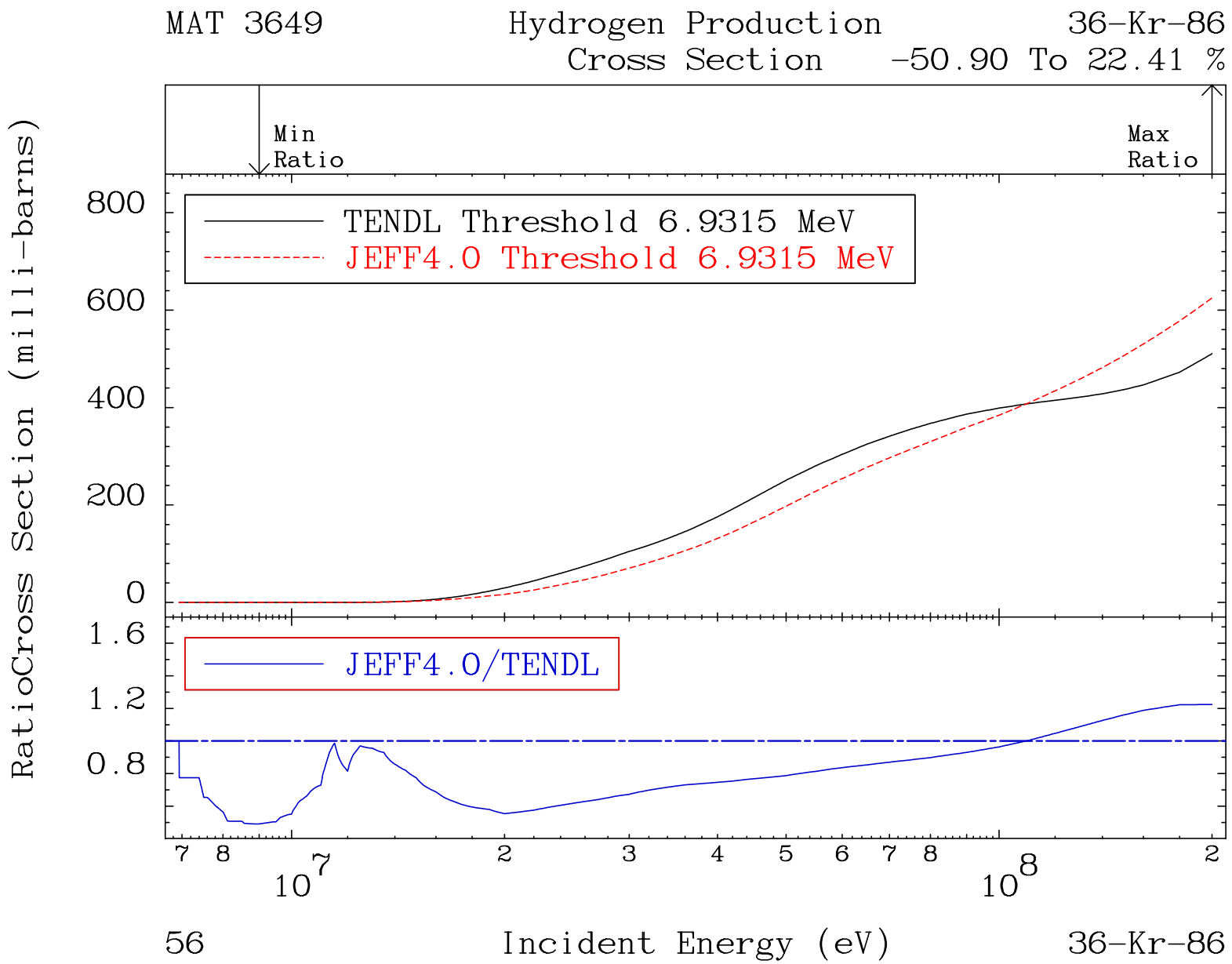

MAT 3649
(n,α)
36-Kr-86
Cross Section 0.000 To 1504. %
Min Ratio
Max Ratio
TENDL Threshold 2.3055 MeV
JEFF4.0 Threshold 2.3055 MeV
JEFF4.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
51
36-Kr-86

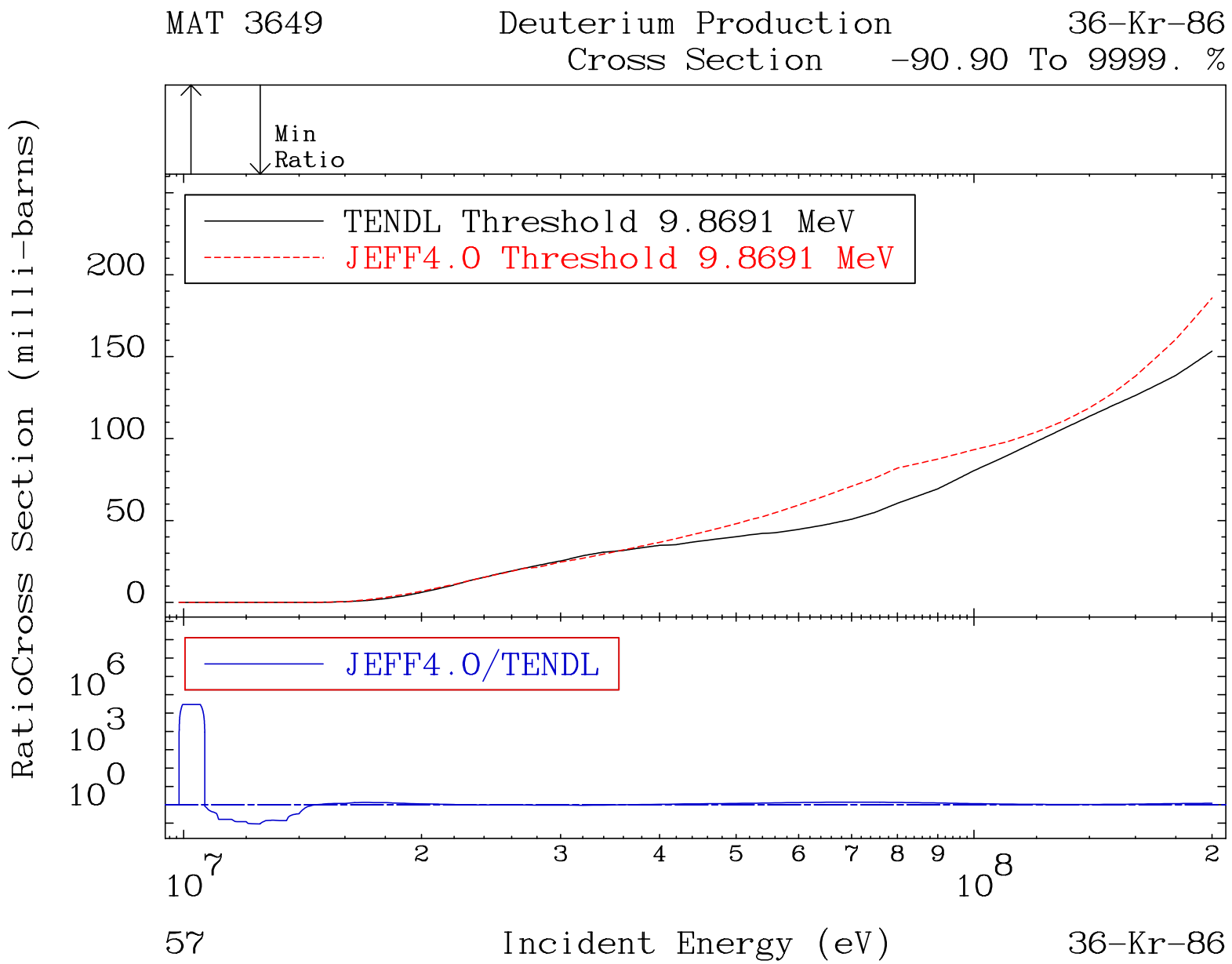

MAT 3649
(n,2α)
36-Kr-86
Cross Section 0.000 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 10.641 MeV
JEFF4.0 Threshold 10.641 MeV
JEFF4.0/TENDL
Ratio Cross Section (10^{-9} barns)
35
30
25
20
15
10
5
0
10^2
10^1
10^0
2
3
4
5
6
7
8
9
10^8
2
52
Incident Energy (eV)
36-Kr-86

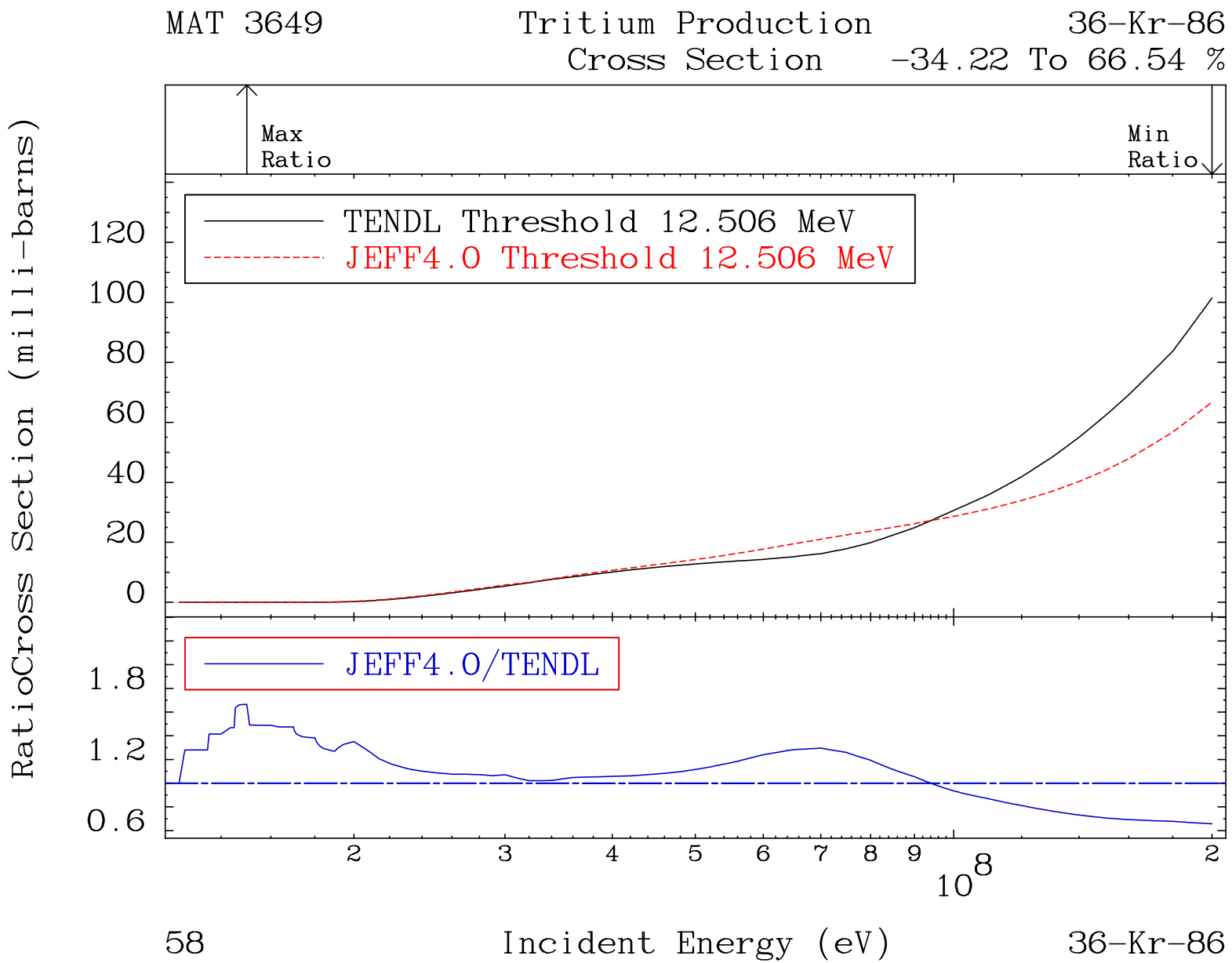

MAT 3649
(n,2p)
36-Kr-86
Cross Section
-87.79 To 35.61 %
Min Ratio
Max Ratio
TENDL Threshold 17.562 MeV
JEFF4.0 Threshold 17.562 MeV
JEFF4.0/TENDL
Ratio Cross Section (10^{-9} barns)
160
120
80
40
0
4
10^{0}
4
10^{-1}
2
3
4
5
6
7
8
9
10^{8}
2
53
Incident Energy (eV)
36-Kr-86

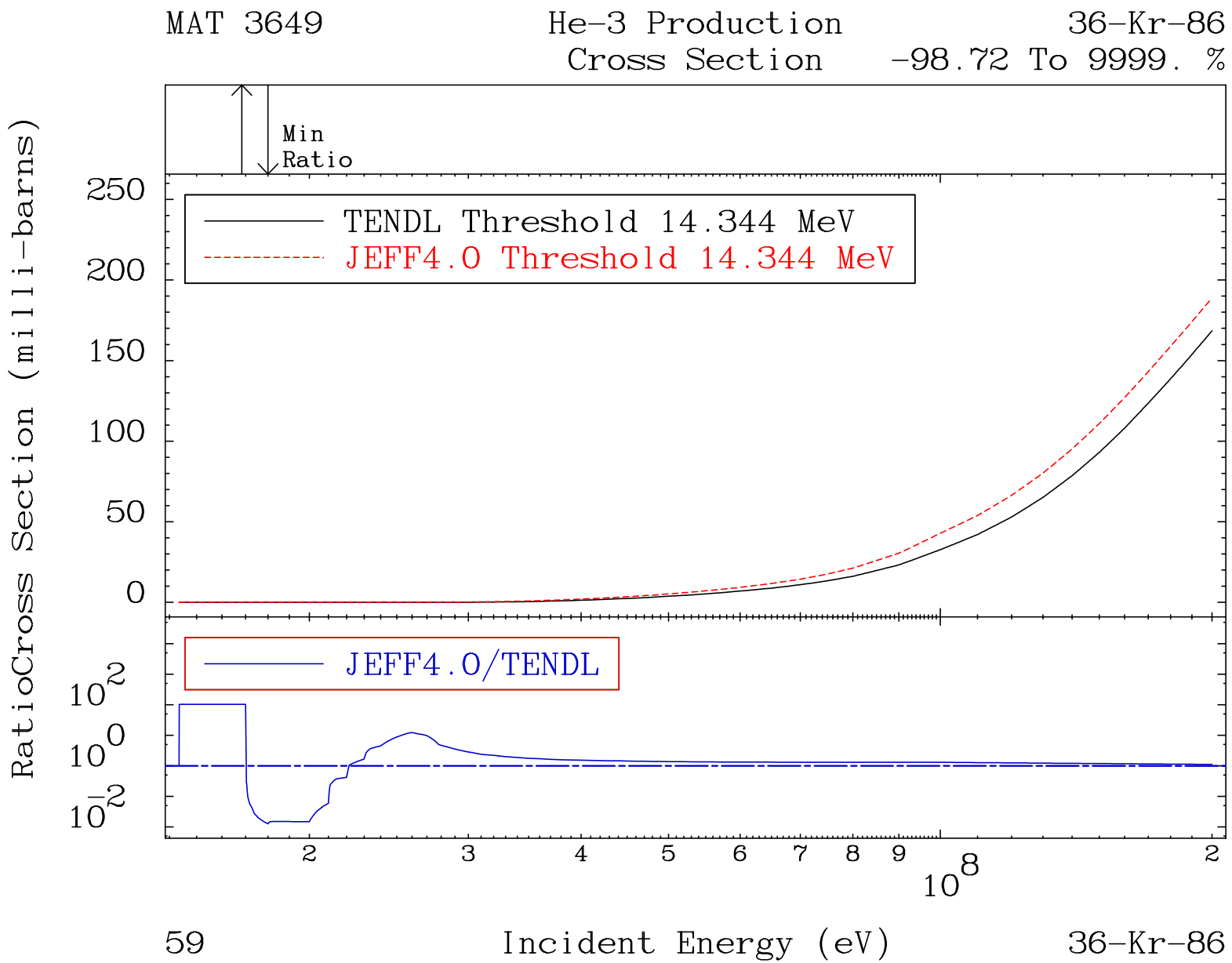

MAT 3649
(n,p) α
36-Kr-86
Cross Section 0.000 To 434.1 %
Min Ratio
Max Ratio
TENDL Threshold 14.977 MeV
JEFF4.0 Threshold 14.977 MeV
JEFF4.0/TENDL
Ratio Cross Section (10^{-9} barns)
80
60
40
20
0
6
4
2
2
3
4
5
6
7
8
9
10^8
2
54
Incident Energy (eV)
36-Kr-86

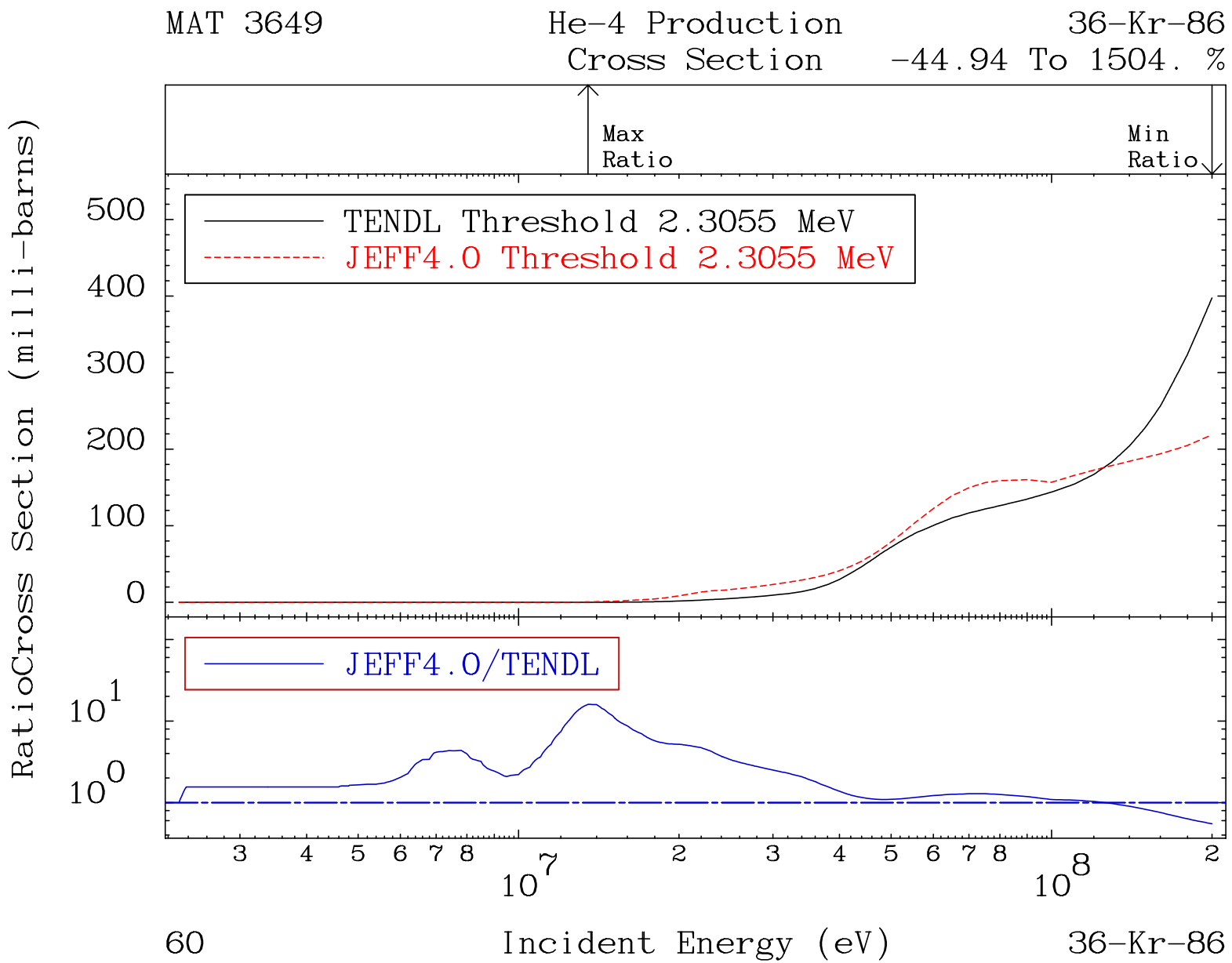

MAT 3649
(n,p) d
Cross Section
36-Kr-86
-88.85 To 0.000 %
Max Ratio
Min Ratio
TENDL Threshold 19.902 MeV
JEFF4.0 Threshold 19.902 MeV
JEFF4.0/TENDL
Ratio Cross Section (10^{-9} barns)
25
20
15
10
5
0
1.2
0.8
0.4
2
3
4
5
6
7
8
9
10^{8}
2
55
Incident Energy (eV)
36-Kr-86

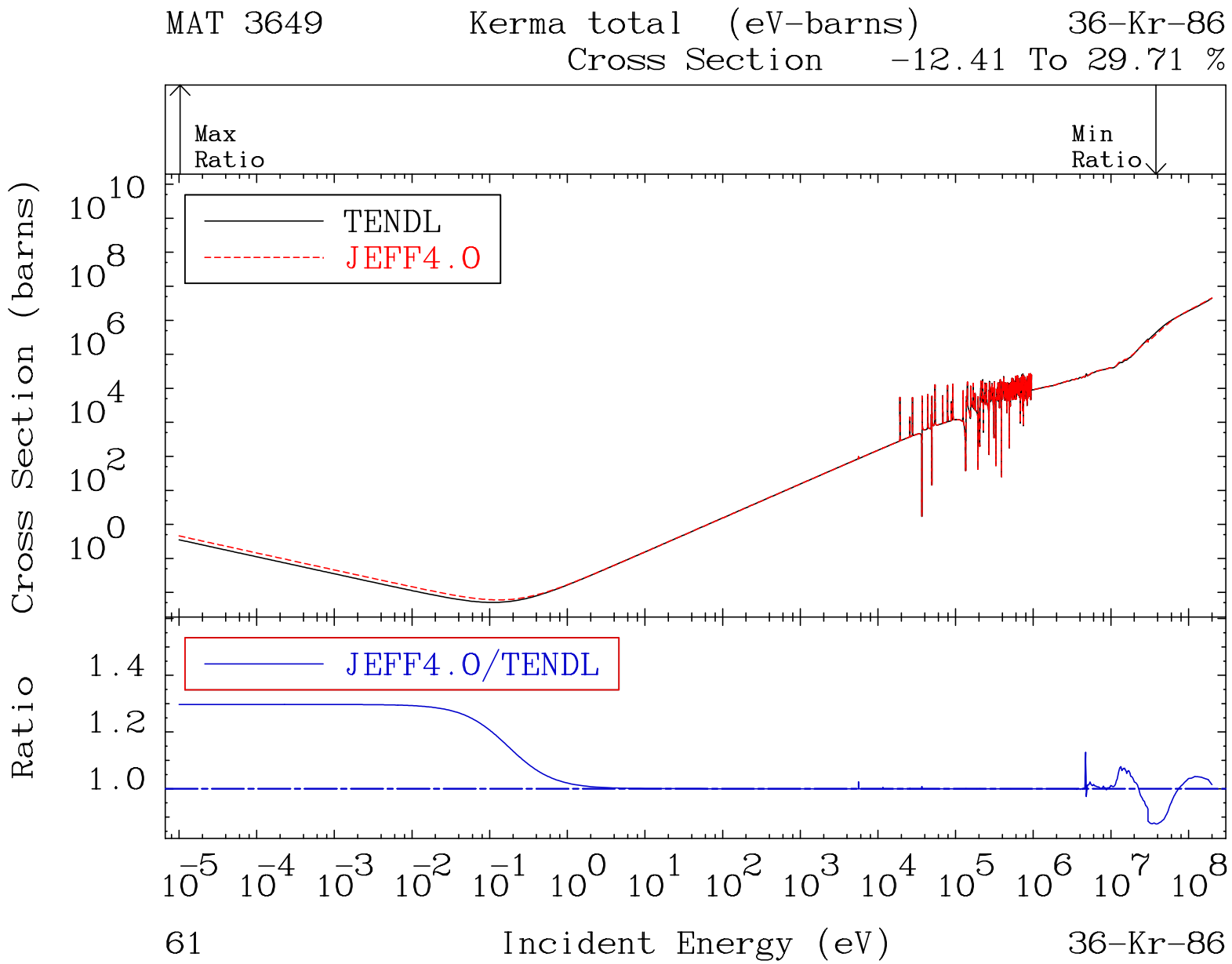

MAT 3649
Hydrogen Production
36-Kr-86
Cross Section
-50.90 To 22.41 %
Min Ratio
Max Ratio
TENDL Threshold 6.9315 MeV
JEFF4.0 Threshold 6.9315 MeV
JEFF4.0/TENDL
RatioCross Section (milli-barns)
800
600
400
200
0
1.6
1.2
0.8
7 8 10^7 2 3 4 5 6 7 8 10^8 2
56
Incident Energy (eV)
36-Kr-86

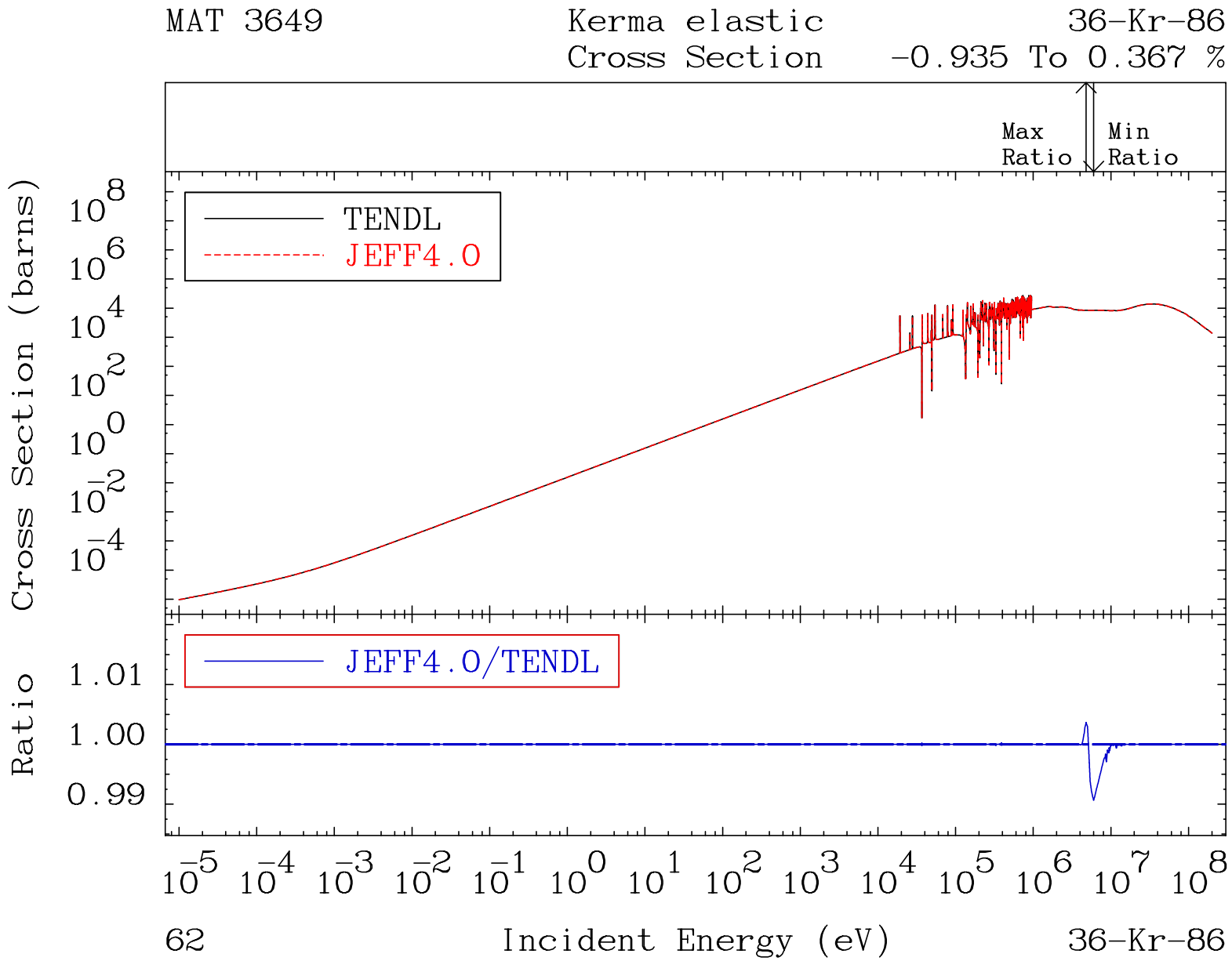

MAT 3649
Deuterium Production
36-Kr-86
Cross Section -90.90 To 9999. %
Min
Ratio
TENDL Threshold 9.8691 MeV
JEFF4.0 Threshold 9.8691 MeV
200
150
100
50
0
JEFF4.0/TENDL
10^6
10^3
10^0
10^7
2
3
4
5
6
7
8
9
10^8
2
RatioCross Section (milli-barns)
57
Incident Energy (eV)
36-Kr-86

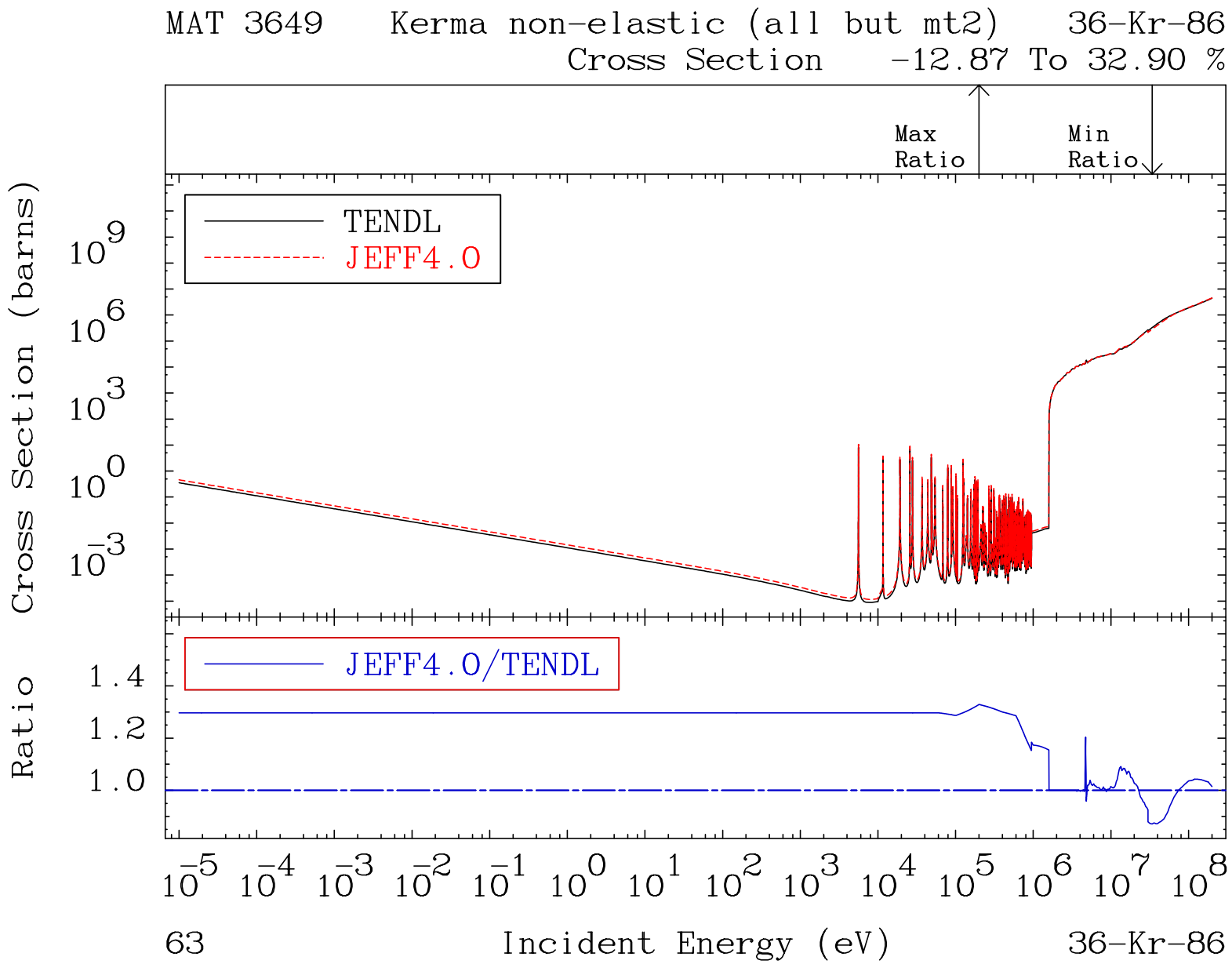

MAT 3649
Tritium Production
Cross Section
36-Kr-86
-34.22 To 66.54 %
Max Ratio
Min Ratio
TENDL Threshold 12.506 MeV
JEFF4.0 Threshold 12.506 MeV
JEFF4.0/TENDL
RatioCross Section (milli-barns)
120
100
80
60
40
20
0
1.8
1.2
0.6
2
3
4
5
6
7
8
9
10^8
2
58
Incident Energy (eV)
36-Kr-86

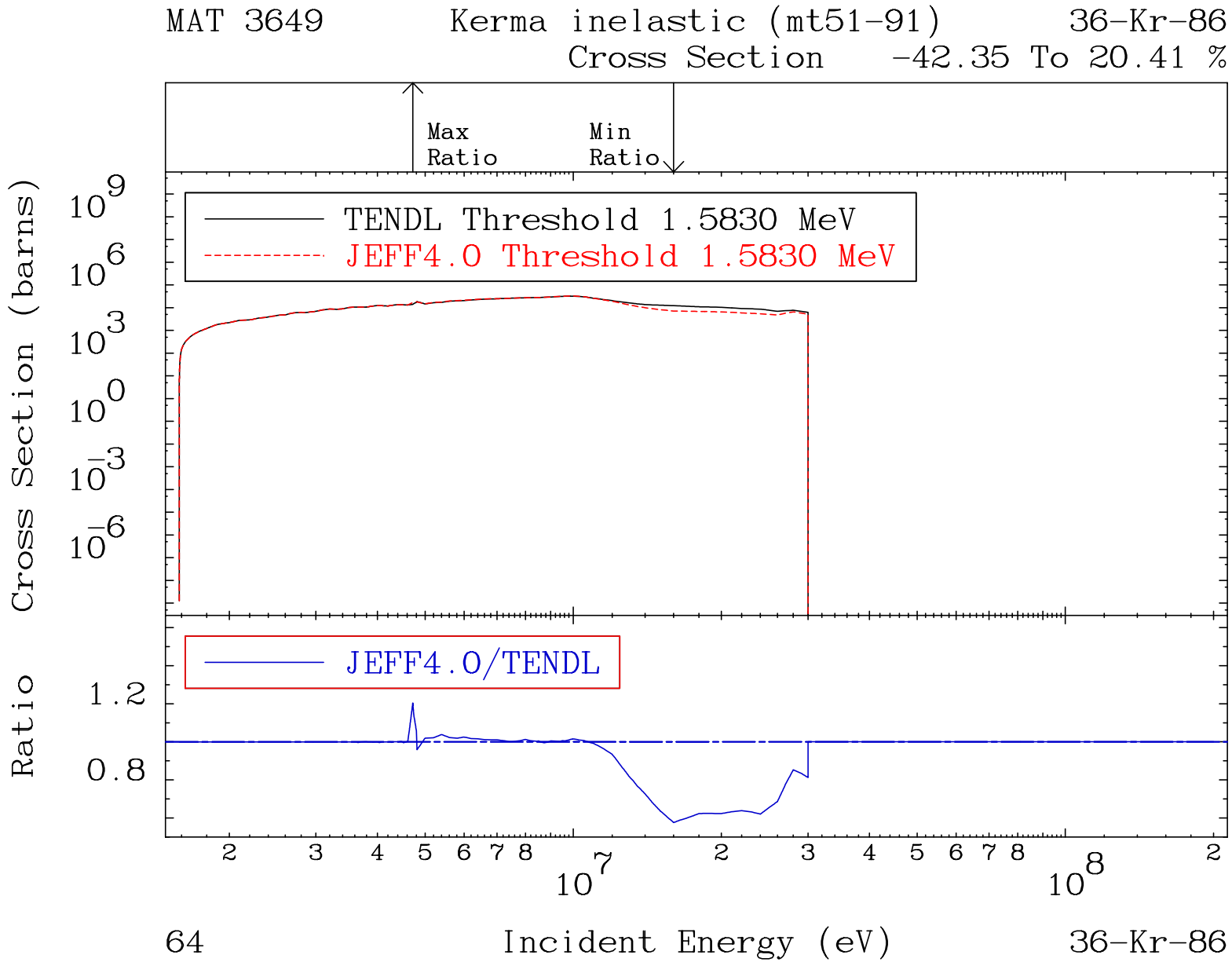

MAT 3649
He-3 Production
Cross Section
36-Kr-86
-98.72 To 9999. %
Min
Ratio
TENDL Threshold 14.344 MeV
JEFF4.0 Threshold 14.344 MeV
JEFF4.0/TENDL
RatioCross Section (milli-barns)
250
200
150
100
50
0
10^2
10^0
10^-2
2
3
4
5
6
7
8
9
10^8
2
59
Incident Energy (eV)
36-Kr-86

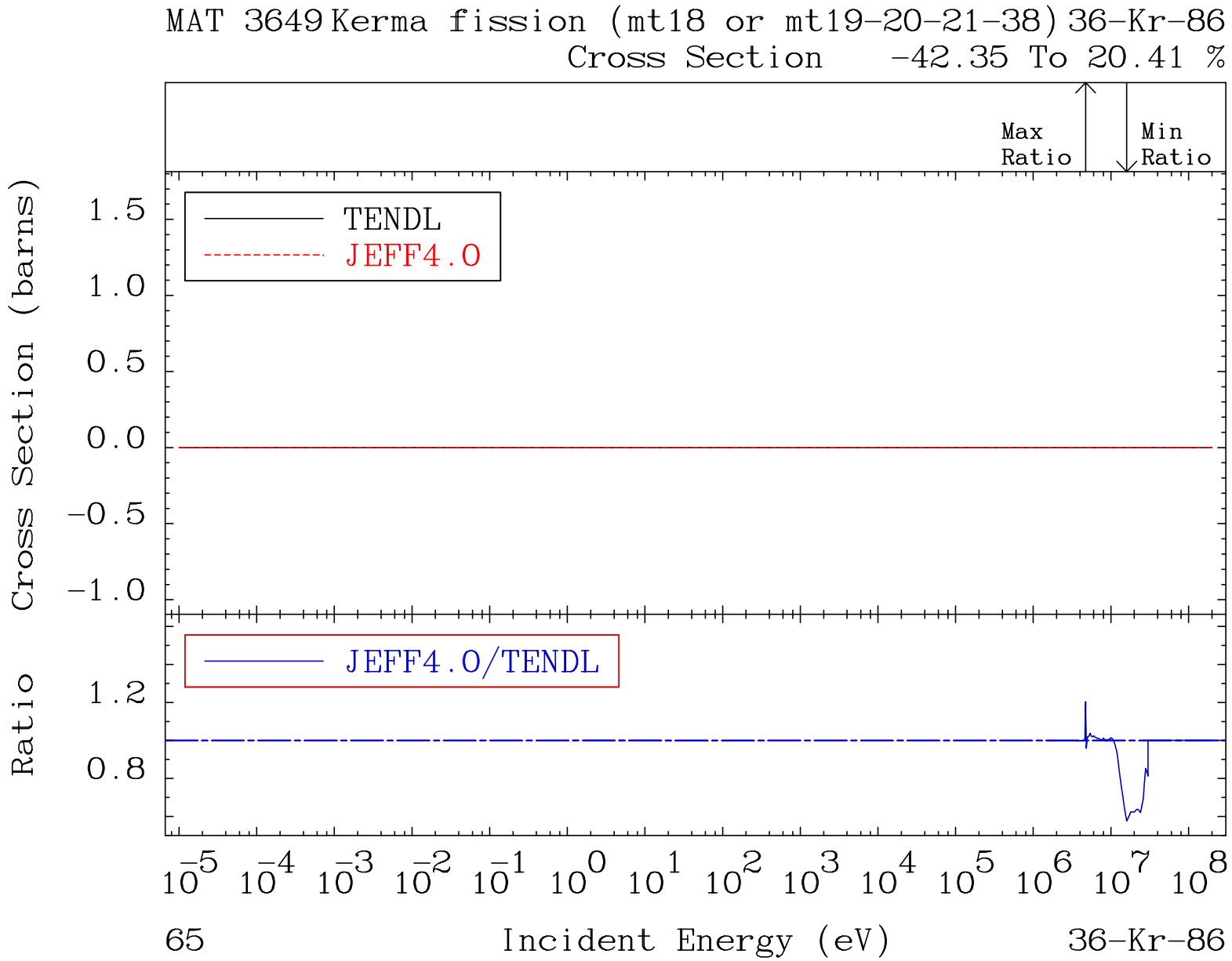

MAT 3649
He-4 Production
Cross Section
36-Kr-86
-44.94 To 1504. %
Max Ratio
Min Ratio
TENDL Threshold 2.3055 MeV
JEFF4.0 Threshold 2.3055 MeV
JEFF4.0/TENDL
RatioCross Section (milli-barns)
500
400
300
200
100
0
10^1
10^0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
60
Incident Energy (eV)
36-Kr-86

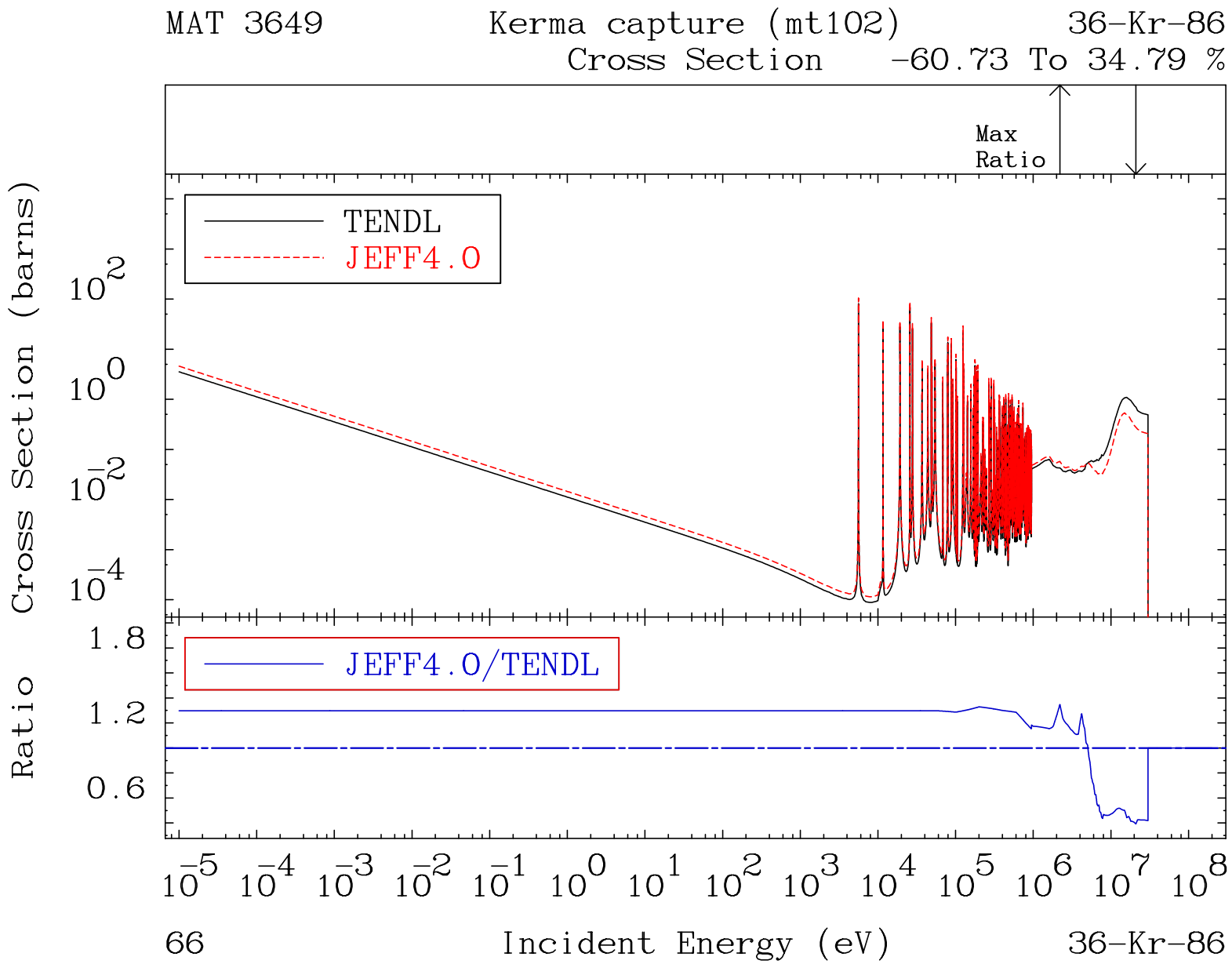

MAT 3649
Kerma total (eV-barns)
36-Kr-86
Cross Section -12.41 To 29.71 %
Max Ratio
Min Ratio
TENDL
JEFF4.0
Cross Section (barns)
JEFF4.0/TENDL
Ratio
Incident Energy (eV)
61
36-Kr-86

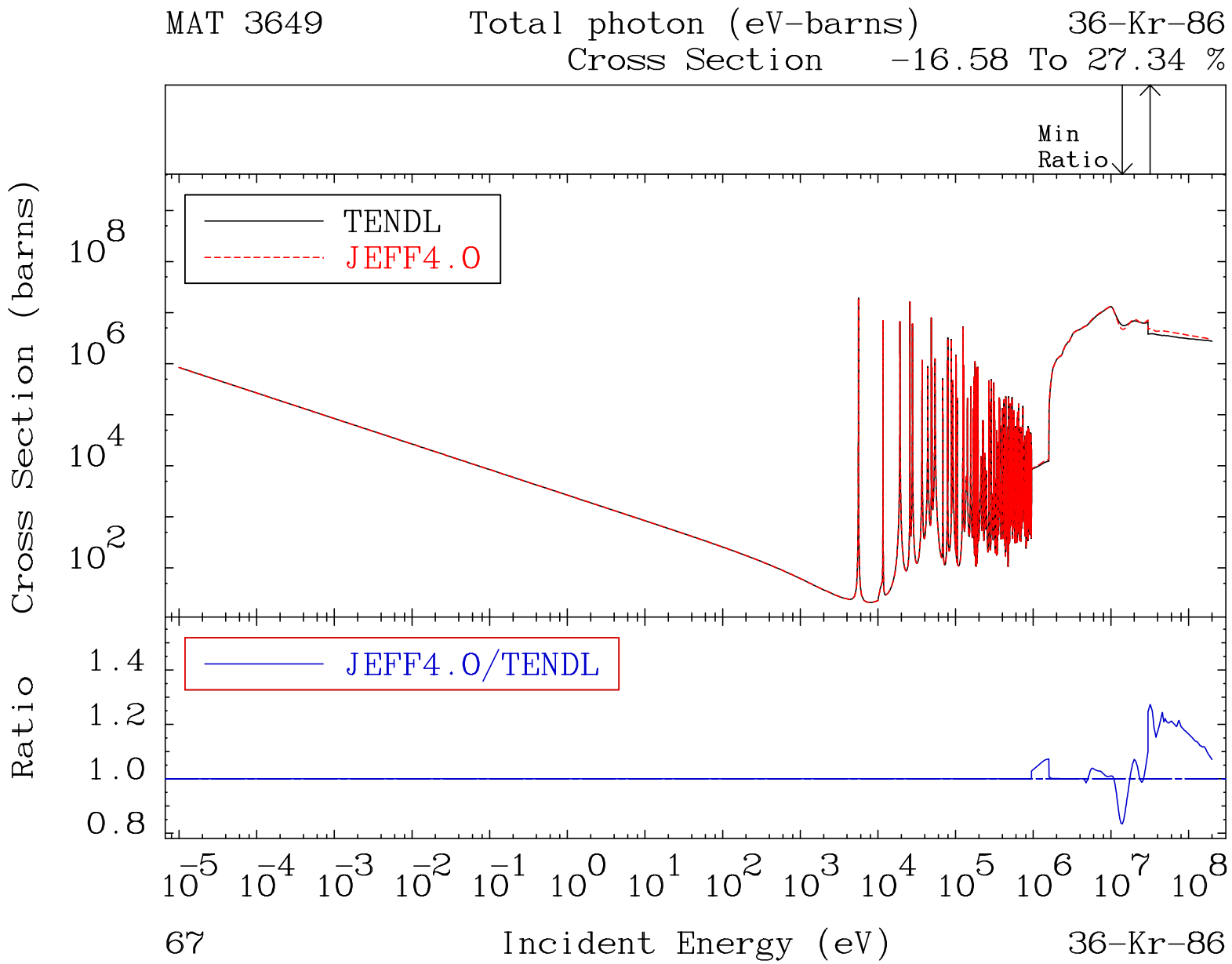

MAT 3649
Kerma elastic
Cross Section
36-Kr-86
-0.935 To 0.367 %
Max Ratio
Min Ratio
TENDL
JEFF4.0
Cross Section (barns)
JEFF4.0/TENDL
Ratio
Incident Energy (eV)
62
36-Kr-86

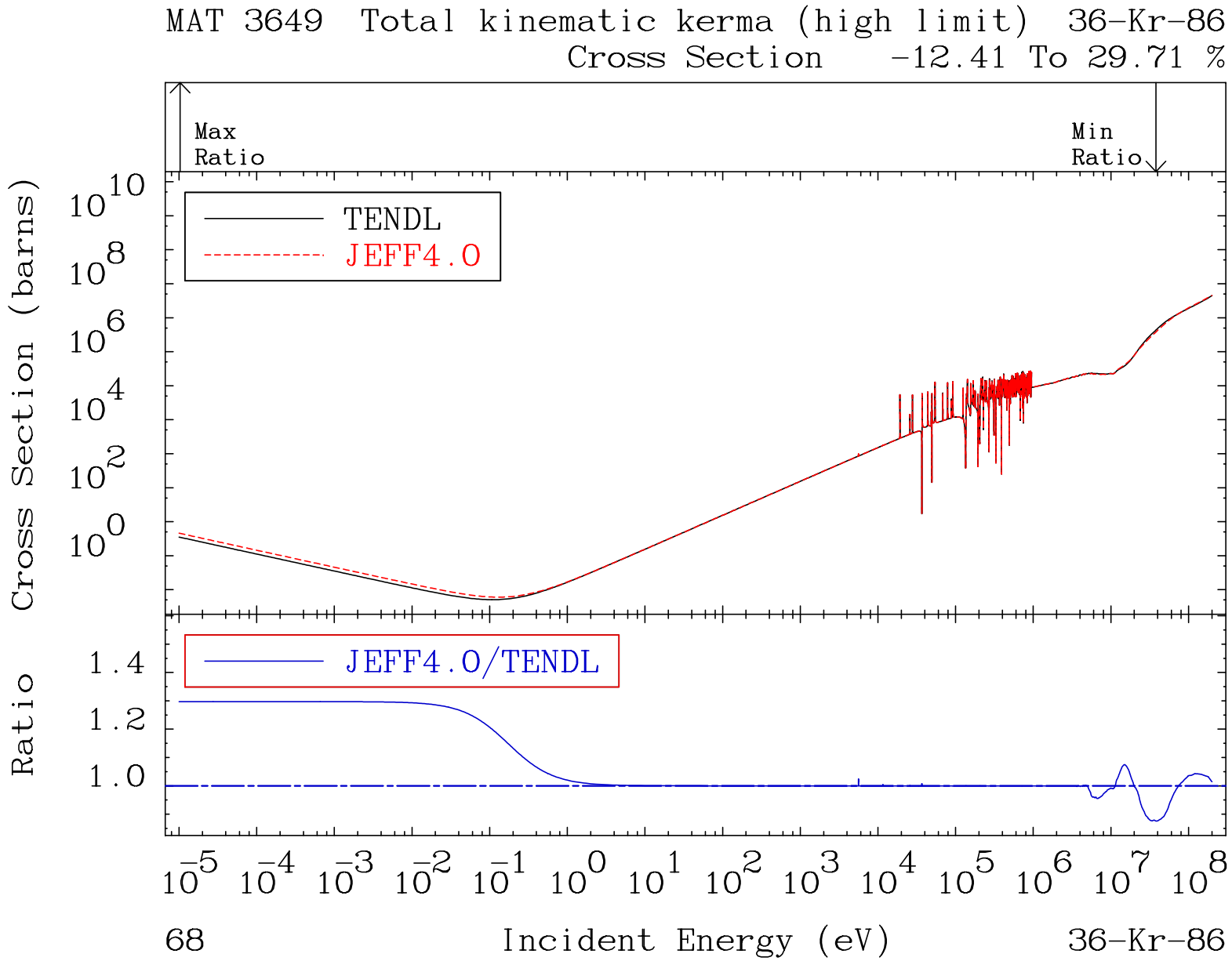

MAT 3649 Kerma non-elastic (all but mt2) 36-Kr-86
Cross Section -12.87 To 32.90 %
Max Ratio
Min Ratio
TENDL
JEFF4.0
Cross Section (barns)
10^9
10^6
10^3
10^0
10^-3
JEFF4.0/TENDL
Ratio
1.4
1.2
1.0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
63
Incident Energy (eV)
36-Kr-86

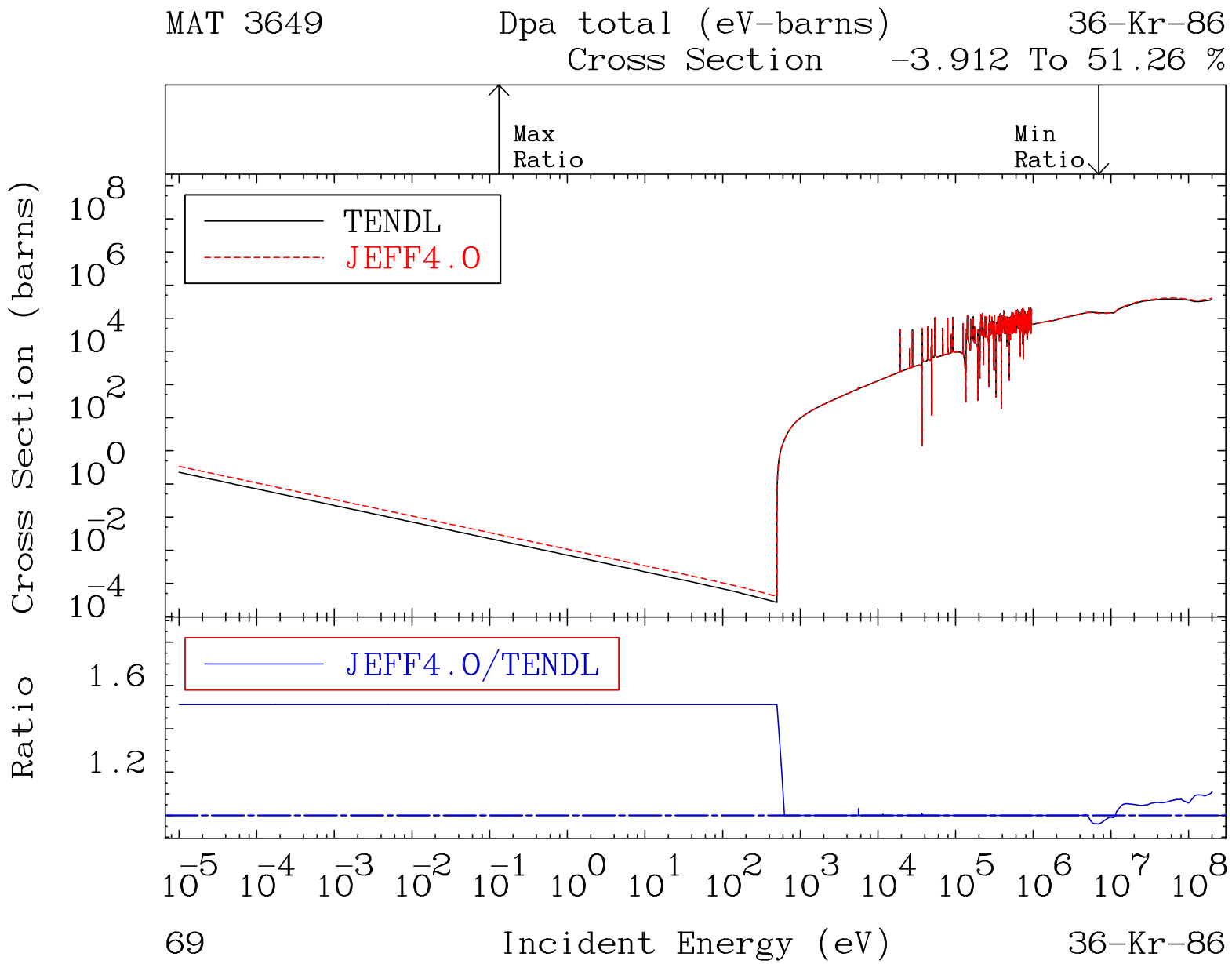

MAT 3649
Kerma inelastic (mt51-91)
36-Kr-86
Cross Section -42.35 To 20.41 %
Max Ratio
Min Ratio
TENDL Threshold 1.5830 MeV
JEFF4.0 Threshold 1.5830 MeV
Cross Section (barns)
JEFF4.0/TENDL
Ratio
Incident Energy (eV)
64
36-Kr-86

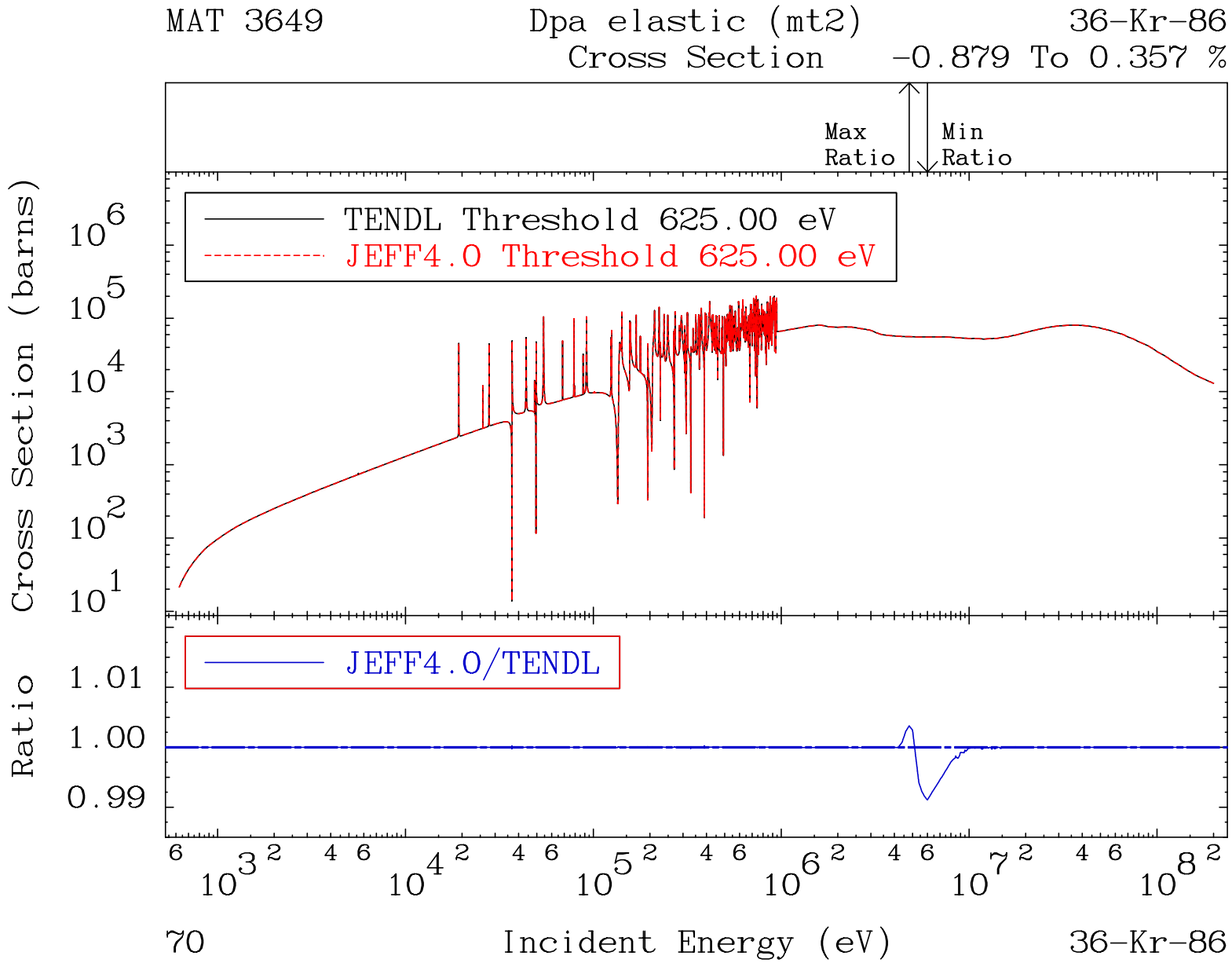

MAT 3649 Kerma fission (mt18 or mt19-20-21-38) 36-Kr-86
Cross Section -42.35 To 20.41 %
Max Ratio
Min Ratio
TENDL
JEFF4.0
JEFF4.0/TENDL
Cross Section (barns)
Ratio
1.5
1.0
0.5
0.0
-0.5
-1.0
1.2
0.8
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
65
Incident Energy (eV)
36-Kr-86

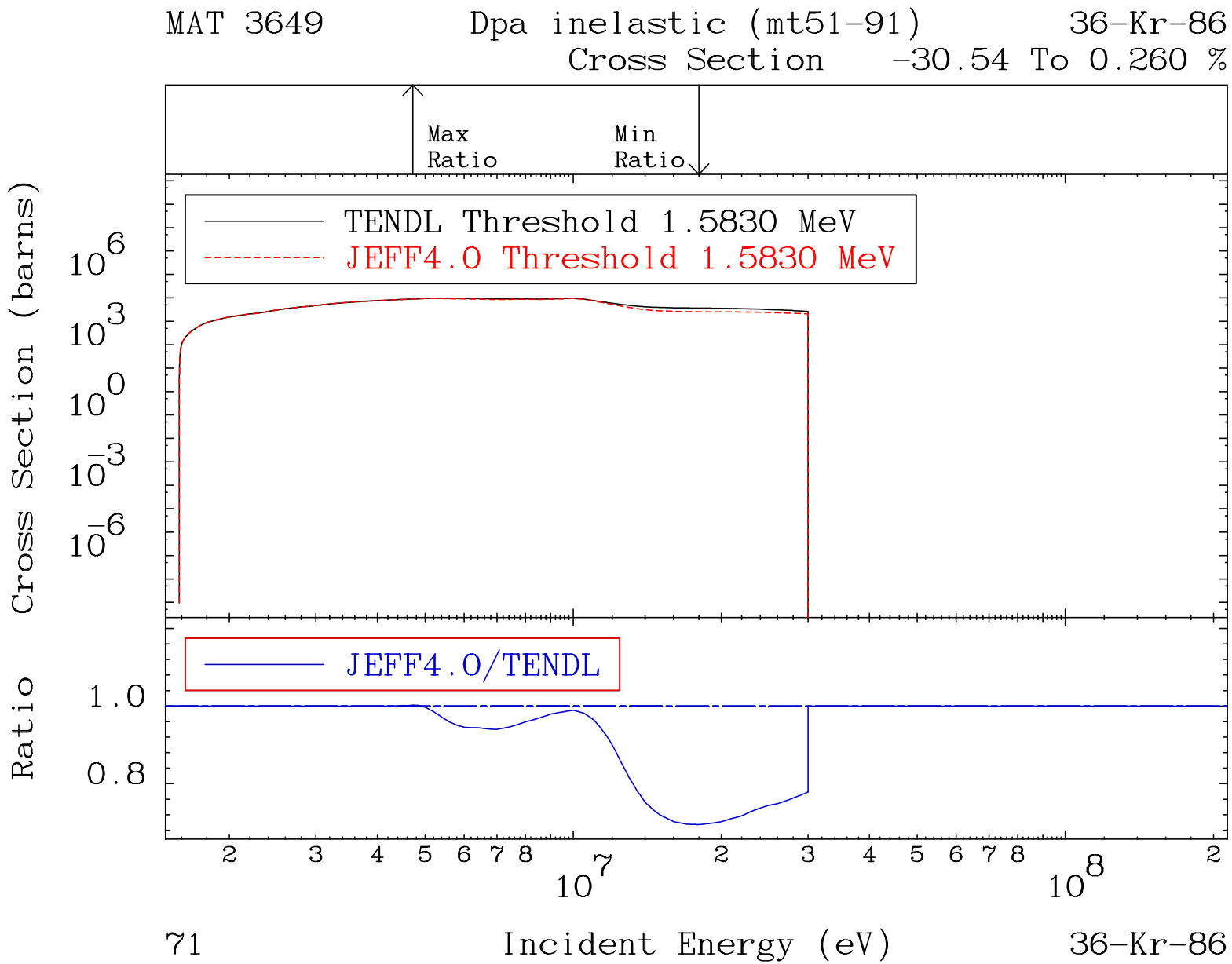

MAT 3649
Kerma capture (mt102)
36-Kr-86
Cross Section -60.73 To 34.79 %
Max
Ratio
TENDL
JEFF4.0
Cross Section (barns)
10^2
10^0
10^-2
10^-4
JEFF4.0/TENDL
Ratio
1.8
1.2
0.6
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
66
Incident Energy (eV)
36-Kr-86

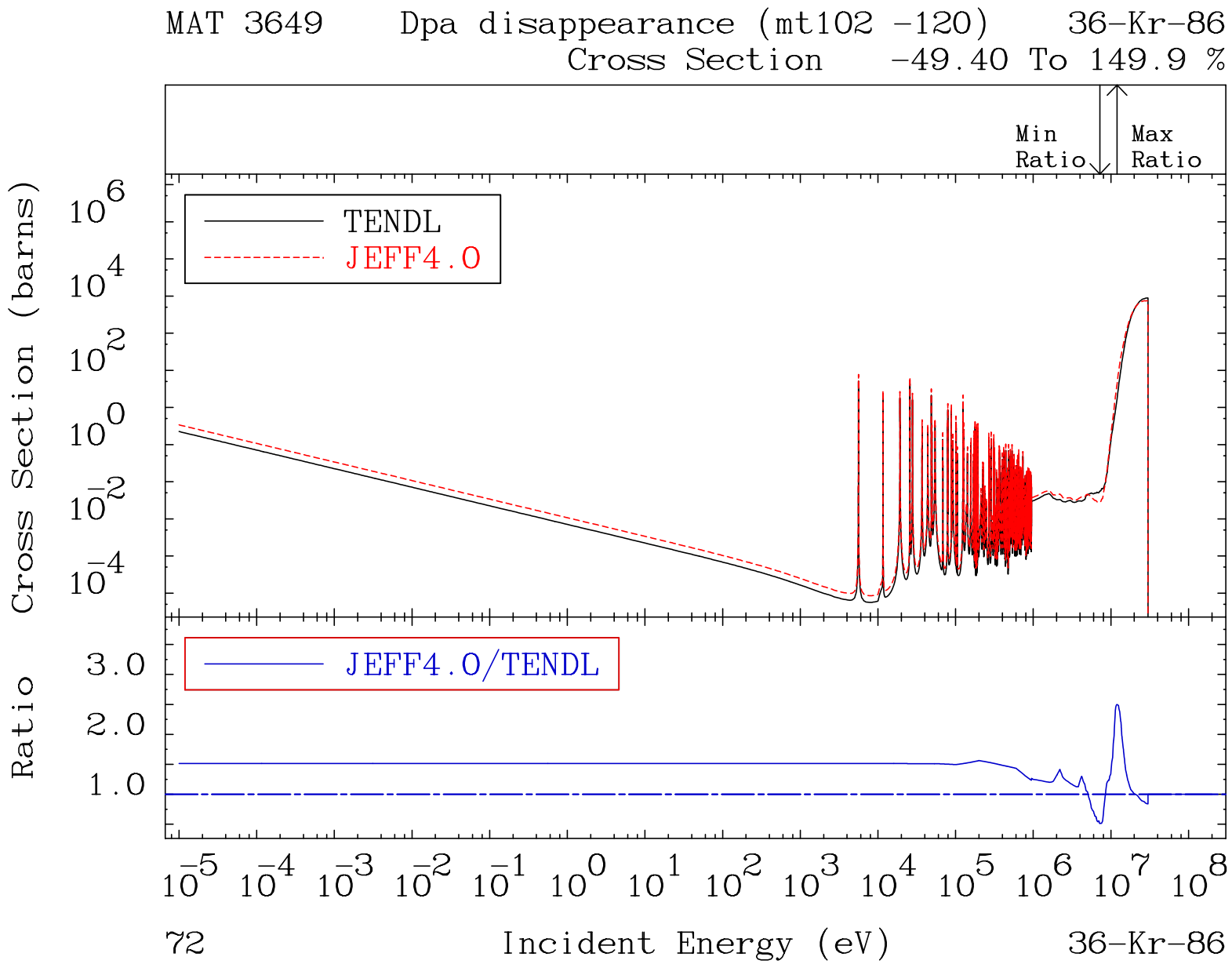

MAT 3649
Total photon (eV-barns)
36-Kr-86
Cross Section -16.58 To 27.34 %
Min
Ratio
TENDL
JEFF4.0
Cross Section (barns)
10^8
10^6
10^4
10^2
JEFF4.0/TENDL
Ratio
1.4
1.2
1.0
0.8
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
67
Incident Energy (eV)
36-Kr-86

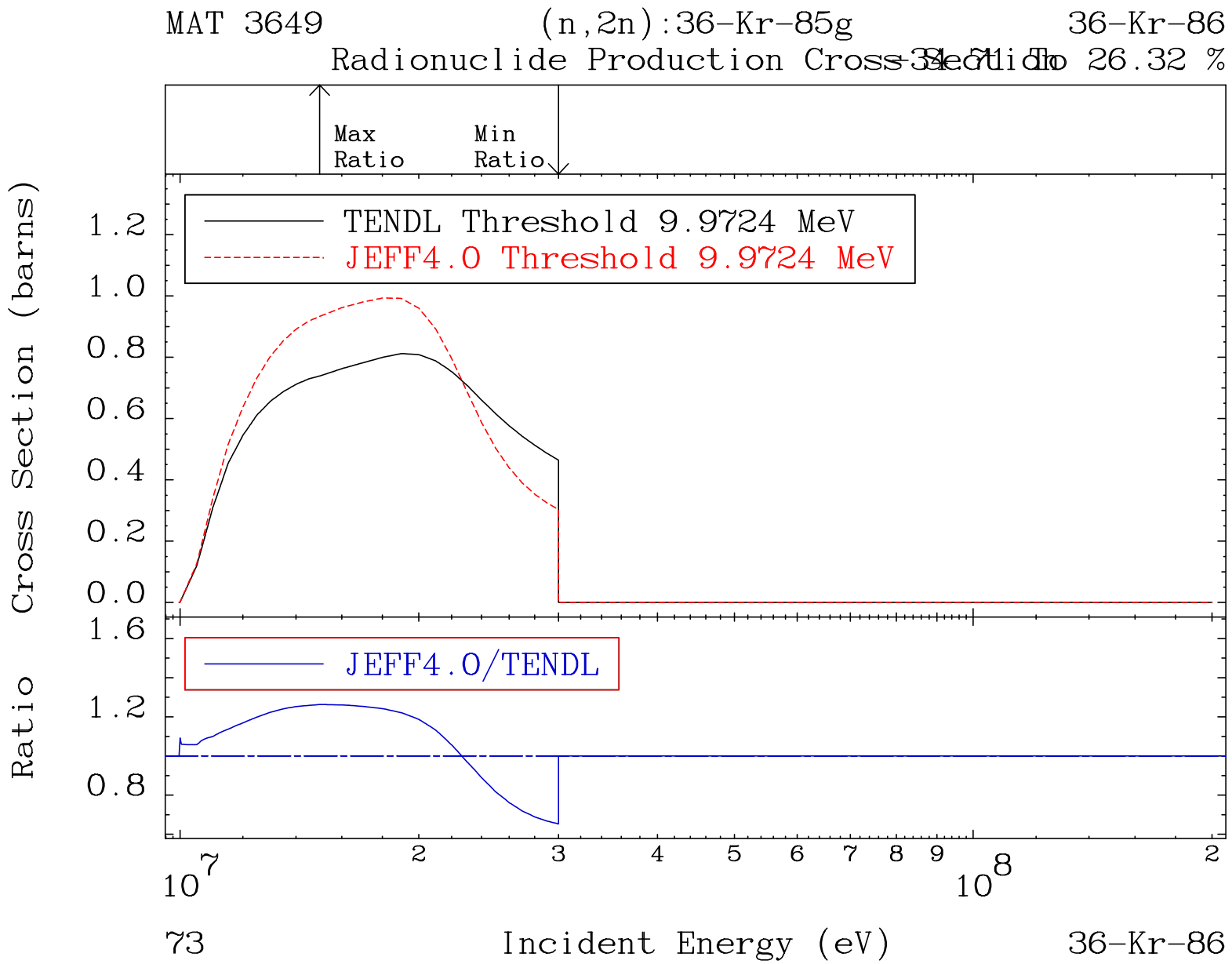

MAT 3649 Total kinematic kerma (high limit) 36-Kr-86
Cross Section -12.41 To 29.71 %
Max Ratio
Min Ratio
TENDL
JEFF4.0
Cross Section (barns)
JEFF4.0/TENDL
Ratio
Incident Energy (eV)
68
36-Kr-86

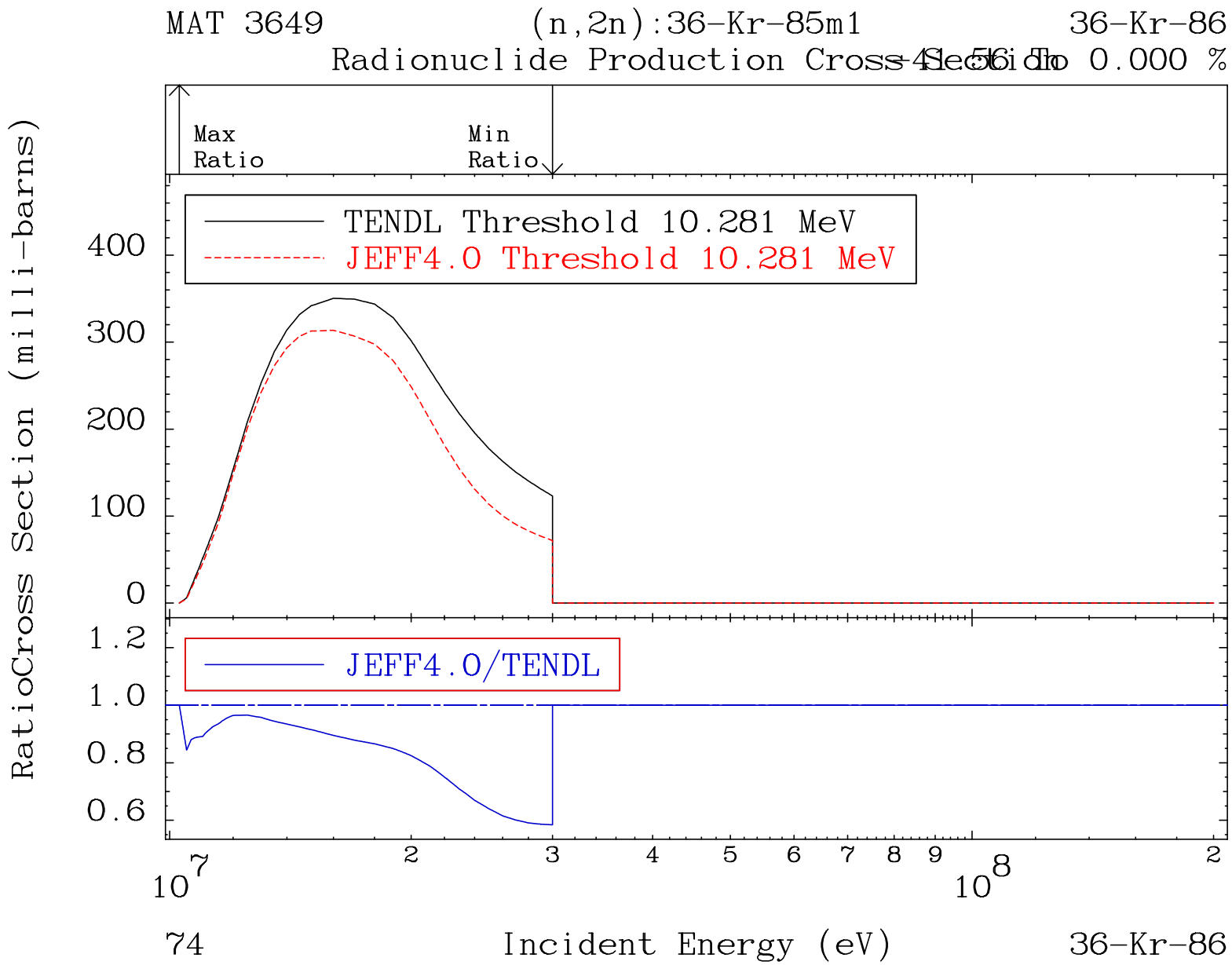

MAT 3649
Dpa total (eV-barns)
36-Kr-86
Cross Section -3.912 To 51.26 %
Max Ratio
Min Ratio
TENDL
JEFF4.0
Cross Section (barns)
JEFF4.0/TENDL
Ratio
Incident Energy (eV)
69
36-Kr-86

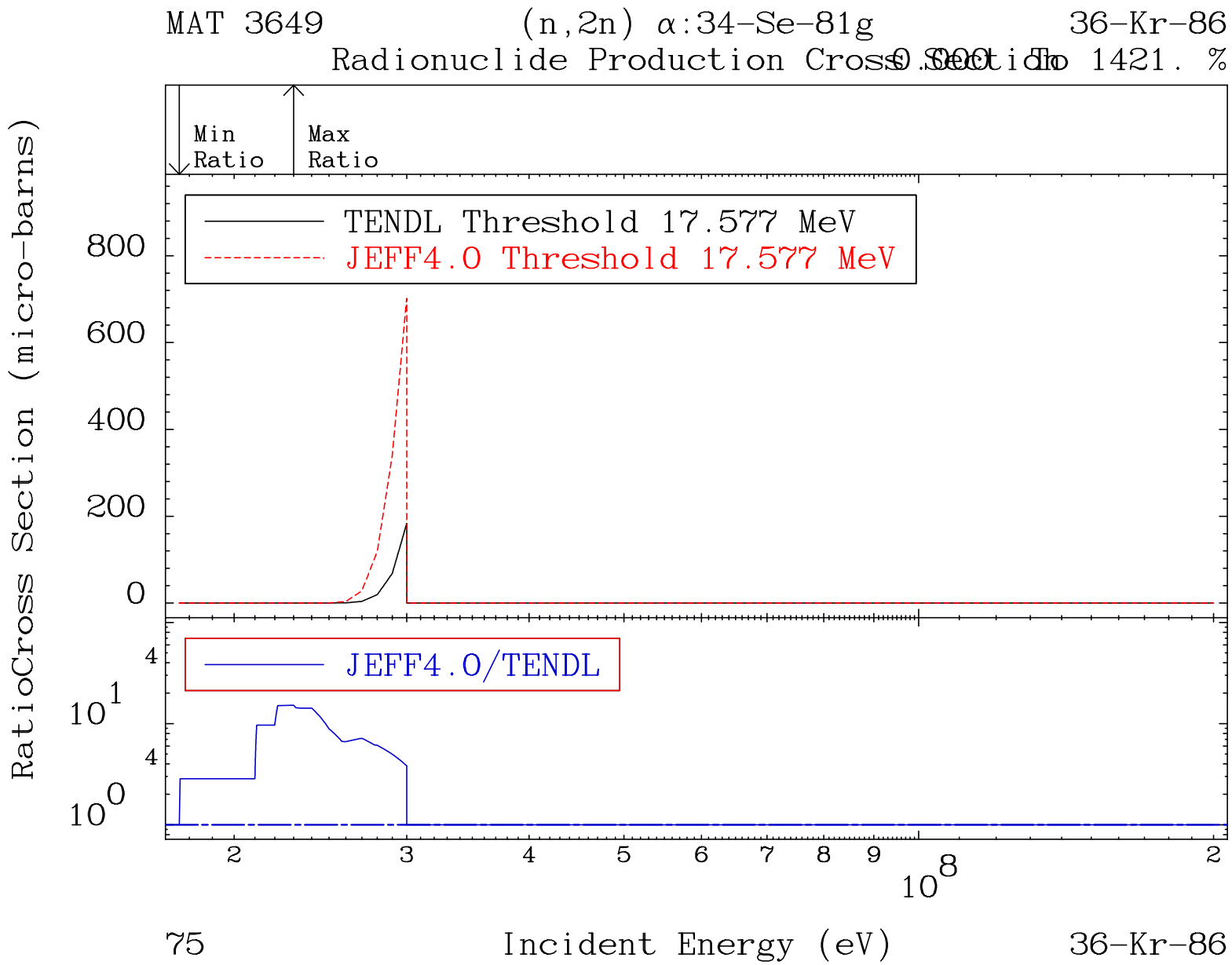

MAT 3649
Dpa elastic (mt2)
Cross Section
36-Kr-86
-0.879 To 0.357 %
Max Ratio
Min Ratio
TENDL Threshold 625.00 eV
JEFF4.0 Threshold 625.00 eV
Cross Section (barns)
10^6
10^5
10^4
10^3
10^2
10^1
JEFF4.0/TENDL
Ratio
1.01
1.00
0.99
10^3 2 4 6 10^4 2 4 6 10^5 2 4 6 10^6 2 4 6 10^7 2 4 6 10^8 2
70
Incident Energy (eV)
36-Kr-86

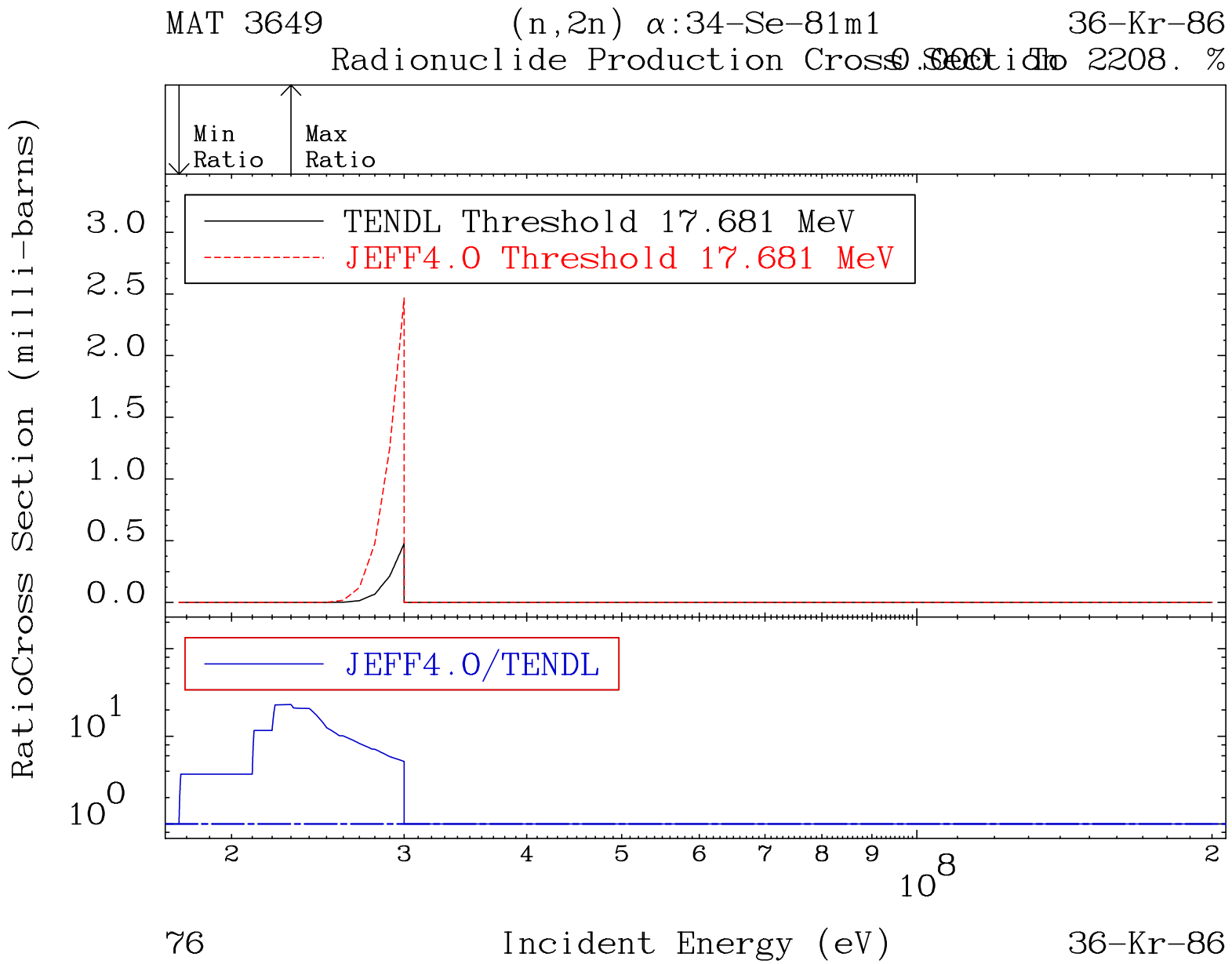

MAT 3649
Dpa inelastic (mt51-91)
36-Kr-86
Cross Section
-30.54 To 0.260 %
Max Ratio
Min Ratio
TENDL Threshold 1.5830 MeV
JEFF4.0 Threshold 1.5830 MeV
Cross Section (barns)
10^6
10^3
10^0
10^-3
10^-6
JEFF4.0/TENDL
Ratio
1.0
0.8
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
71
Incident Energy (eV)
36-Kr-86

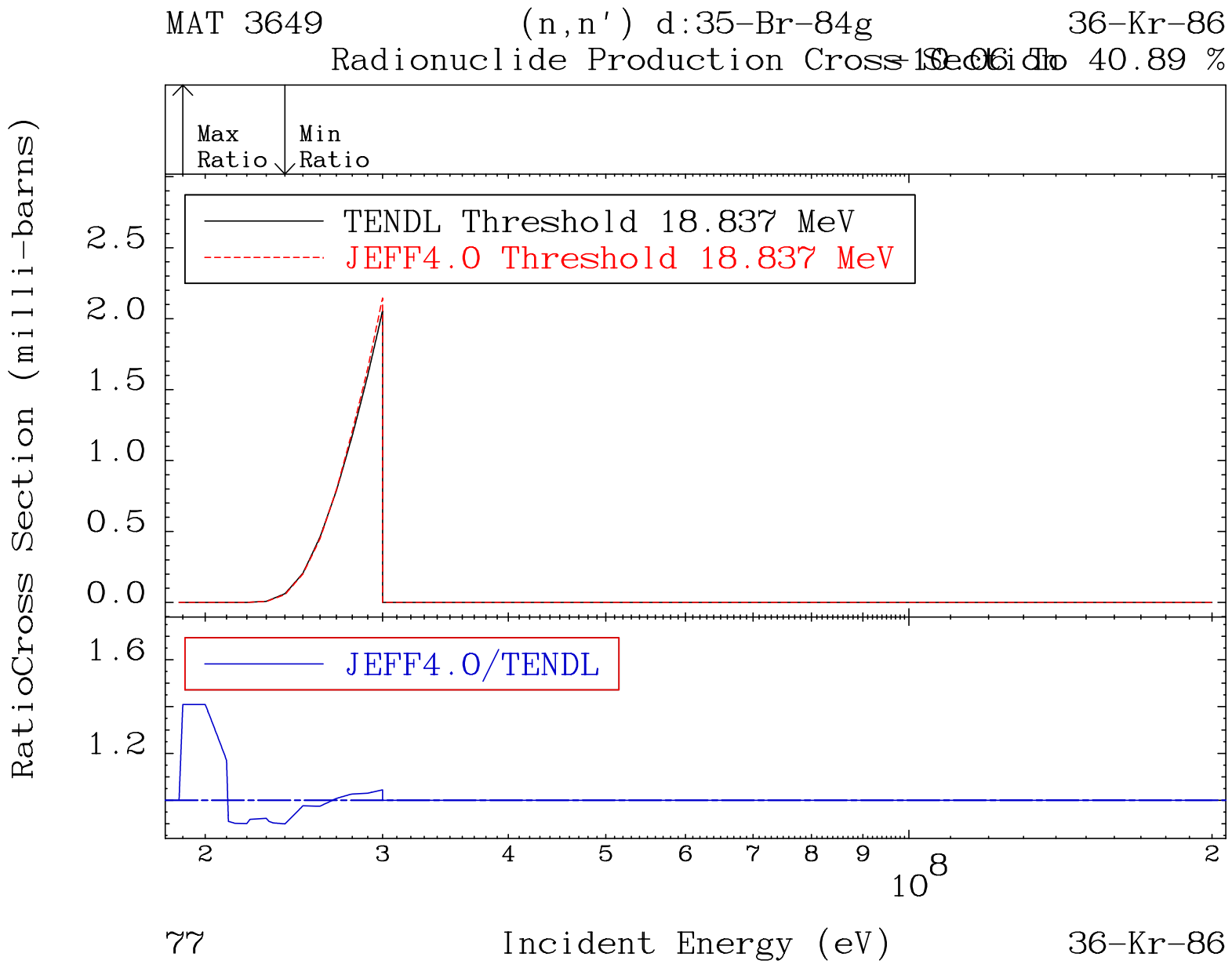

MAT 3649 Dpa disappearance (mt102 -120) 36-Kr-86
Cross Section -49.40 To 149.9 %
Min Ratio
Max Ratio
TENDL
JEFF4.0
JEFF4.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
72
36-Kr-86

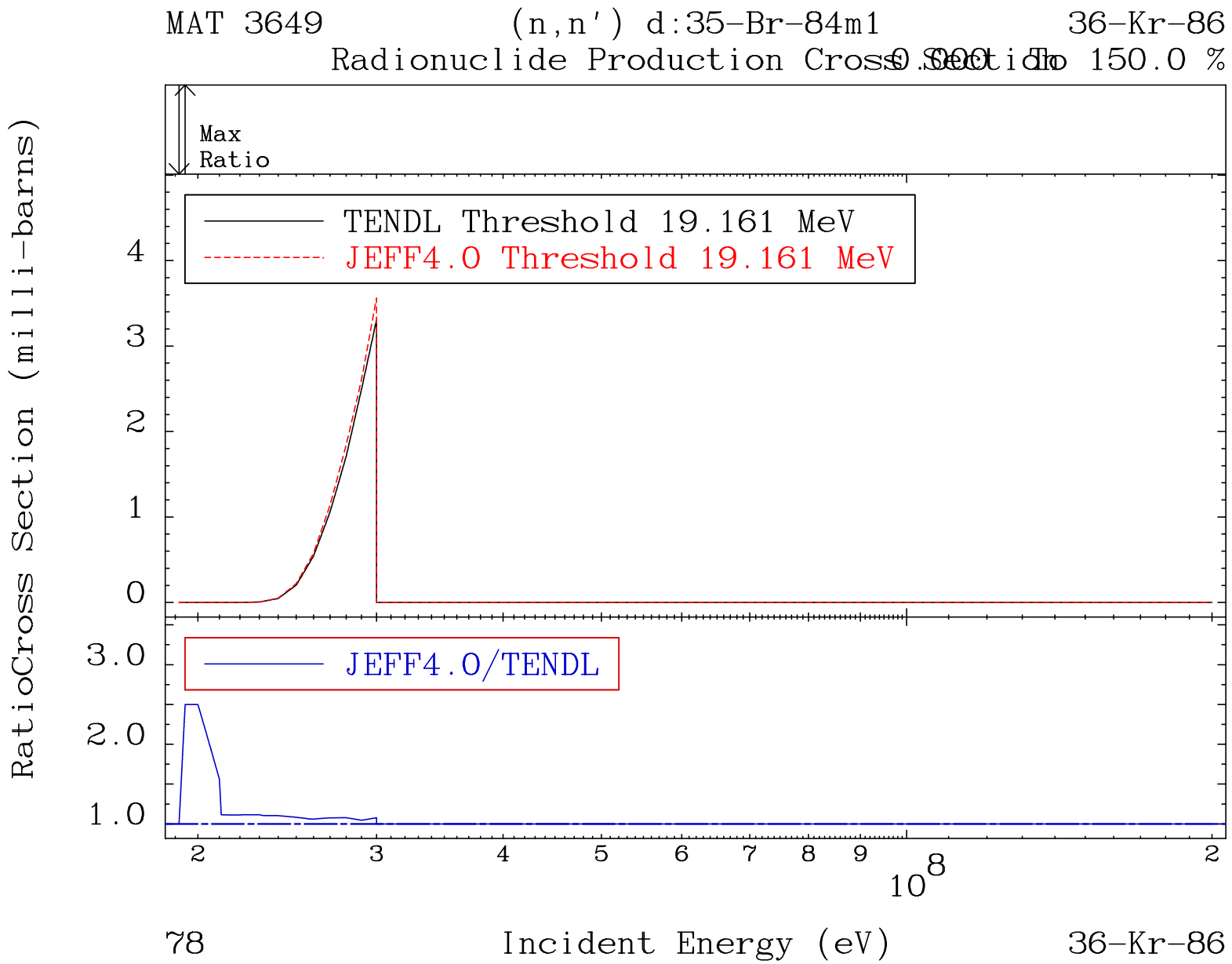

MAT 3649
(n,2n):36-Kr-85g
36-Kr-86
Radionuclide Production Cross Section To 26.32 %
Max Ratio
Min Ratio
TENDL Threshold 9.9724 MeV
JEFF4.0 Threshold 9.9724 MeV
JEFF4.0/TENDL
Cross Section (barns)
Ratio
1.2
1.0
0.8
0.6
0.4
0.2
0.0
1.6
1.2
0.8
10^7
2
3
4
5
6
7
8
9
10^8
2
73
Incident Energy (eV)
36-Kr-86

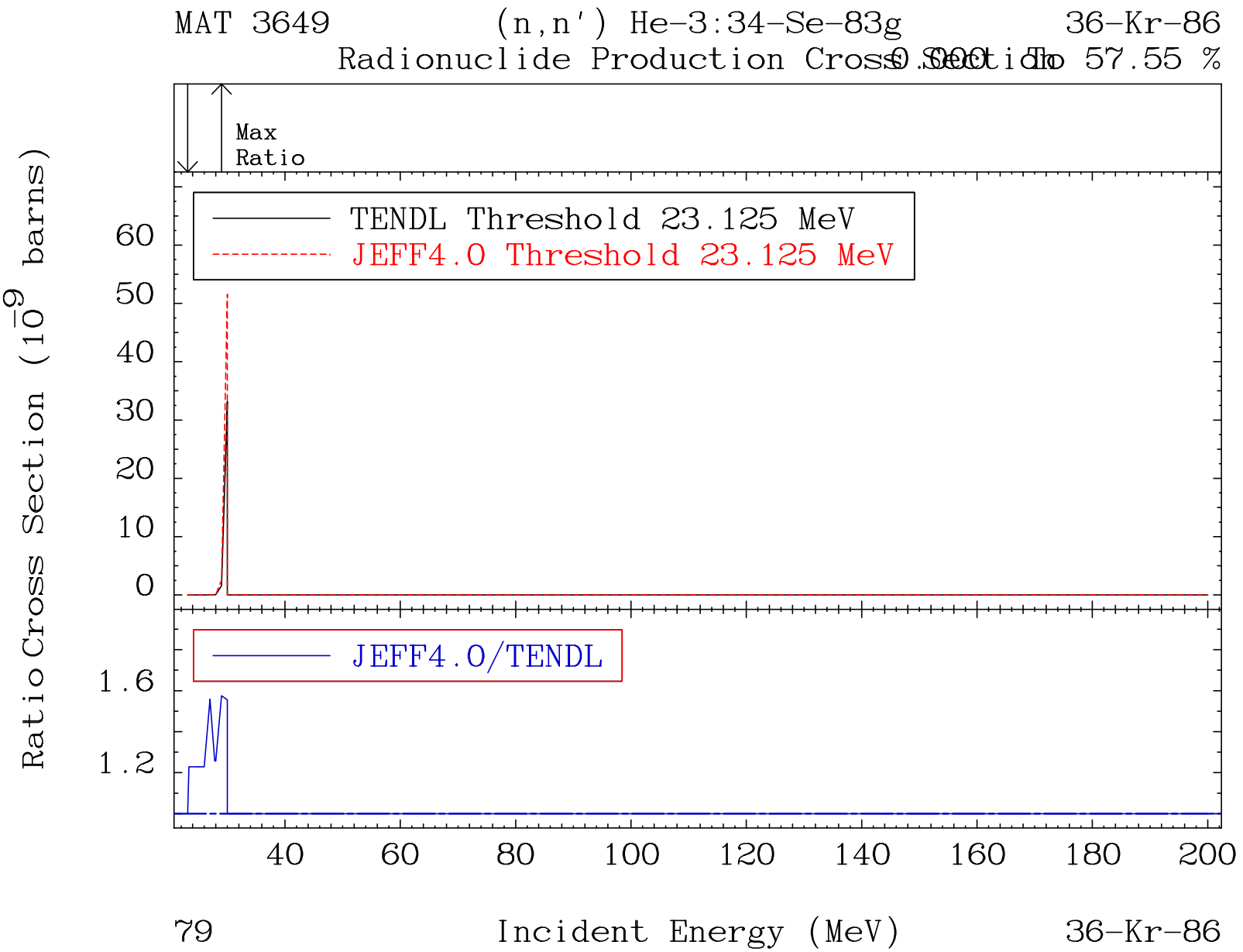

MAT 3649
(n,2n):36-Kr-85m1
36-Kr-86
Radionuclide Production Cross Section To 0.000 %
Max Ratio
Min Ratio
TENDL Threshold 10.281 MeV
JEFF4.0 Threshold 10.281 MeV
JEFF4.0/TENDL
RatioCross Section (milli-barns)
400
300
200
100
0
1.2
1.0
0.8
0.6
10^7
2
3
4
5
6
7
8
9
10^8
2
74
Incident Energy (eV)
36-Kr-86

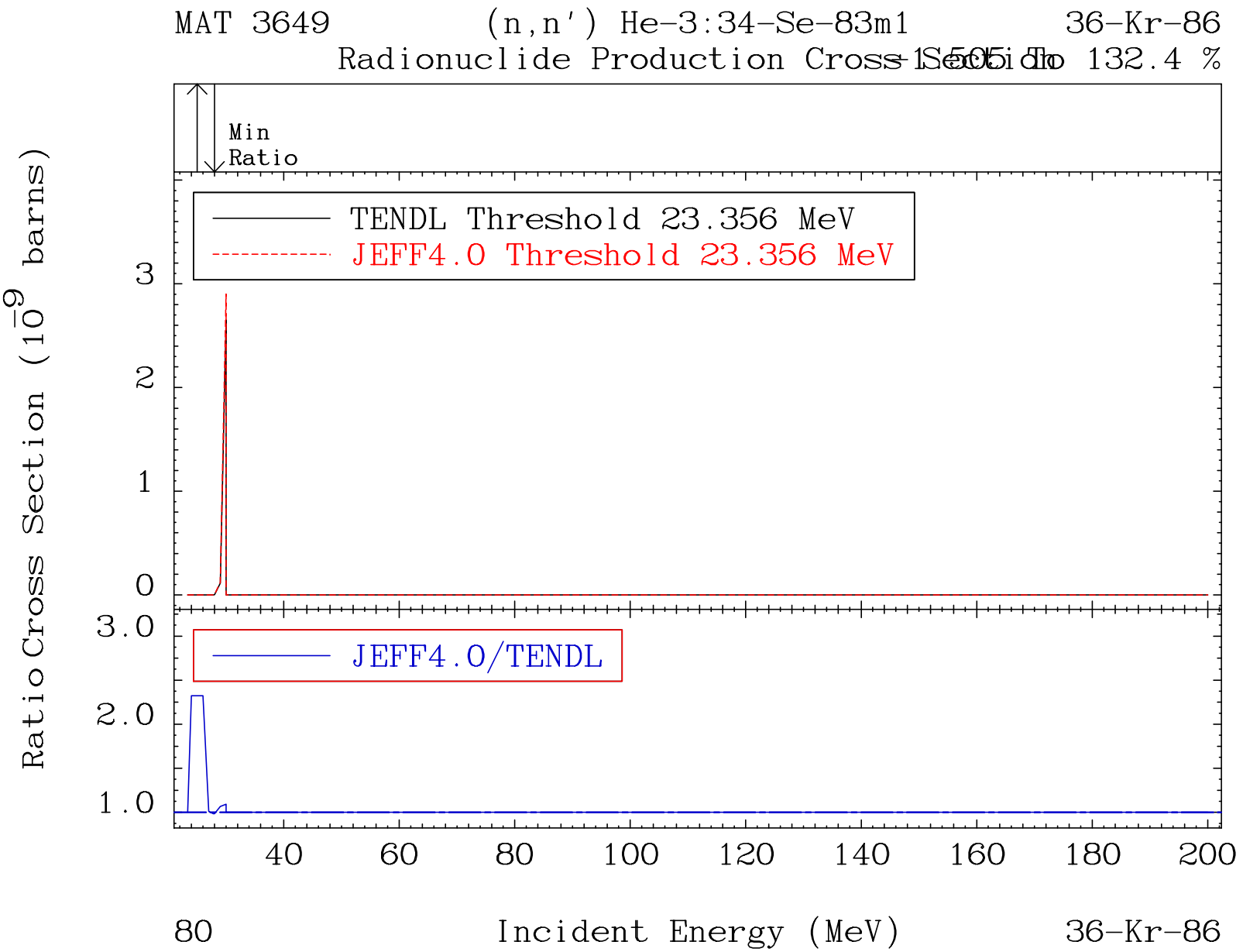

MAT 3649
(n,2n) α:34-Se-81g
36-Kr-86
Radionuclide Production Cross Section
0.000 To 1421. %
Min Ratio
Max Ratio
TENDL Threshold 17.577 MeV
JEFF4.0 Threshold 17.577 MeV
JEFF4.0/TENDL
RatioCross Section (micro-barns)
800
600
400
200
0
4
10^1
4
10^0
2
3
4
5
6
7
8
9
10^8
2
75
Incident Energy (eV)
36-Kr-86

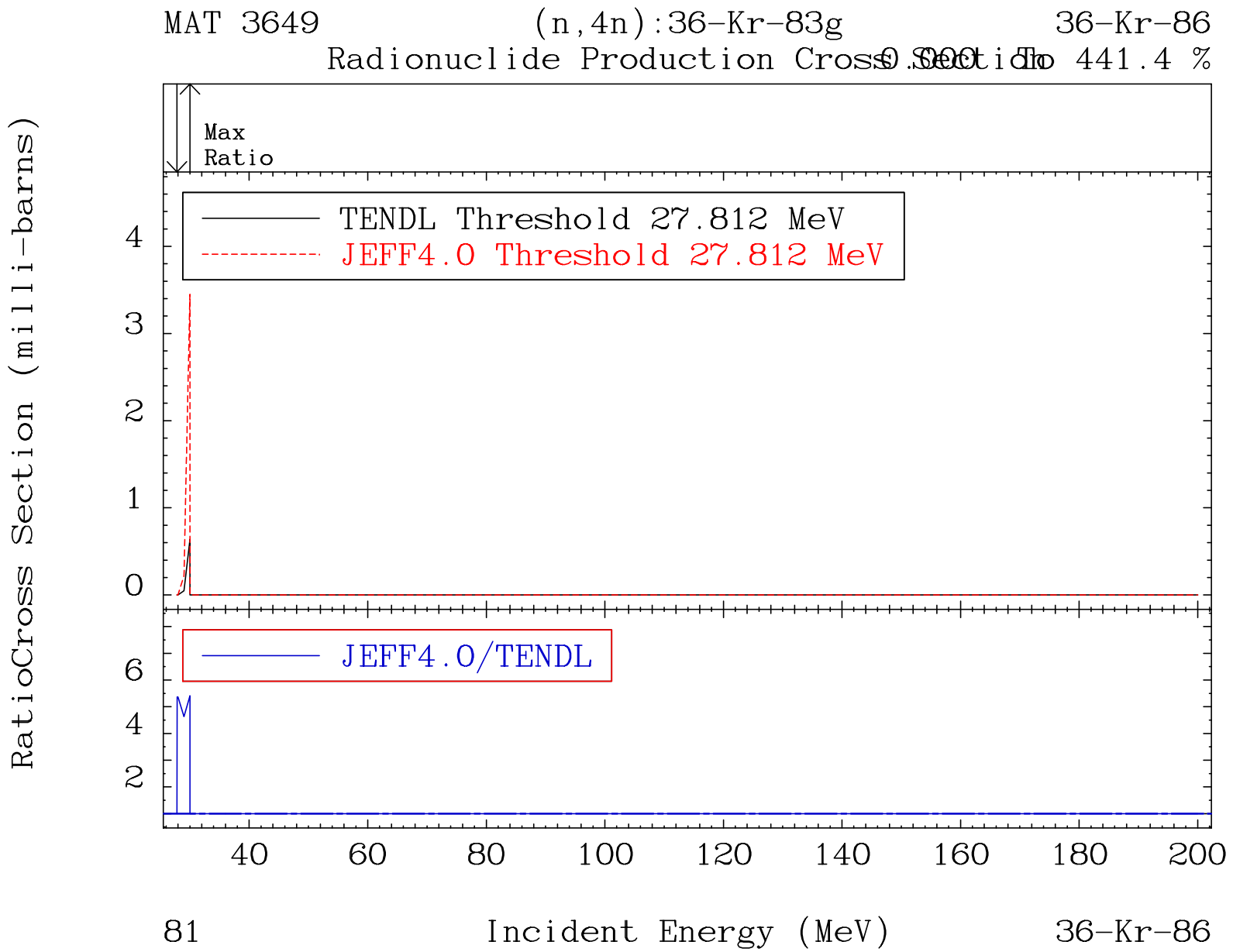

MAT 3649
(n,2n) α:34-Se-81m1
36-Kr-86
Radionuclide Production Cross Section
0.000 To 2208. %
Min Ratio
Max Ratio
TENDL Threshold 17.681 MeV
JEFF4.0 Threshold 17.681 MeV
JEFF4.0/TENDL
RatioCross Section (milli-barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
10^1
10^0
2
3
4
5
6
7
8
9
10^8
2
76
Incident Energy (eV)
36-Kr-86

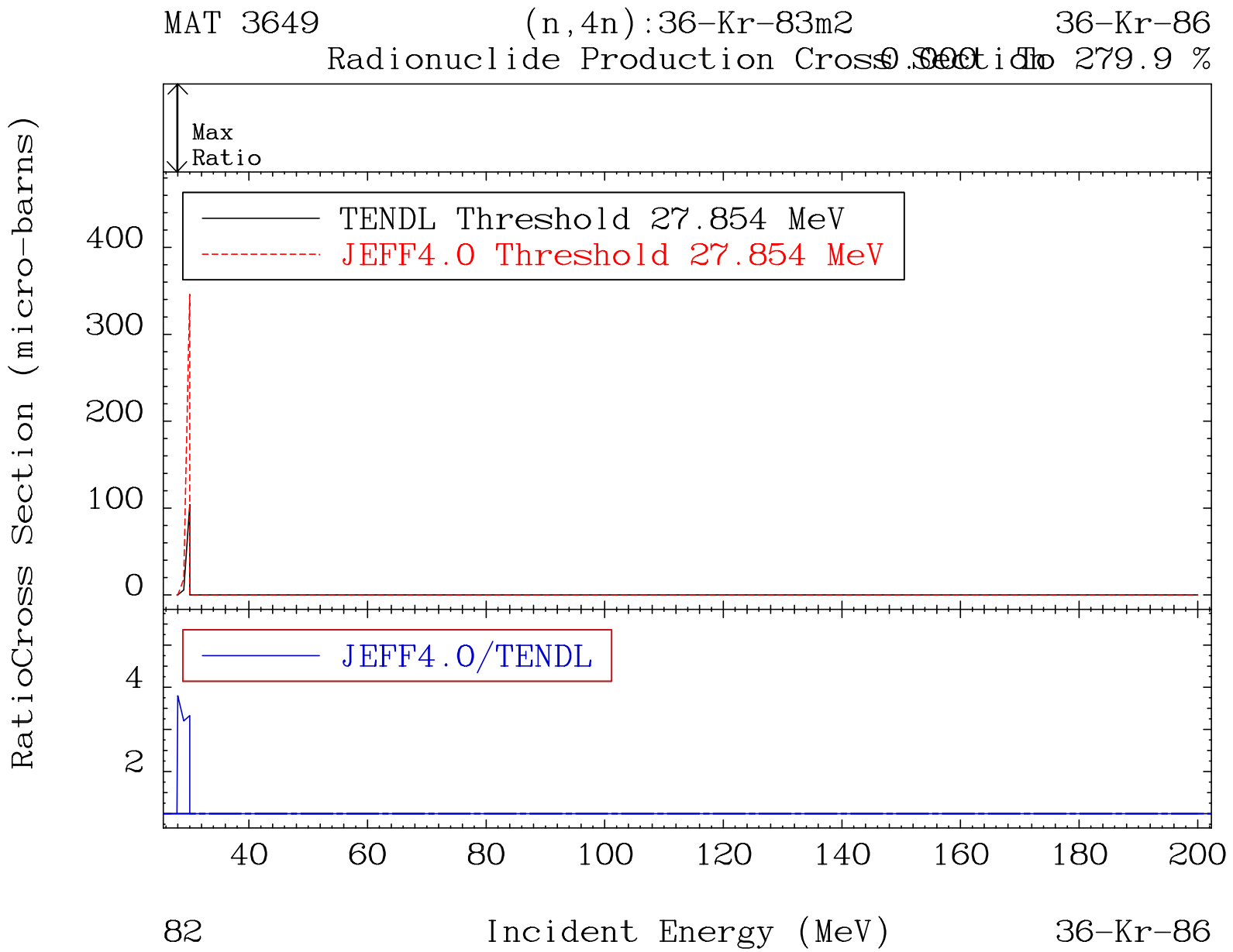

MAT 3649
(n,n') d:35-Br-84g
36-Kr-86
Radionuclide Production Cross Section To 40.89 %
Max Ratio
Min Ratio
TENDL Threshold 18.837 MeV
JEFF4.0 Threshold 18.837 MeV
JEFF4.0/TENDL
RatioCross Section (milli-barns)
2.5
2.0
1.5
1.0
0.5
0.0
1.6
1.2
2
3
4
5
6
7
8
9
10^8
2
77
Incident Energy (eV)
36-Kr-86

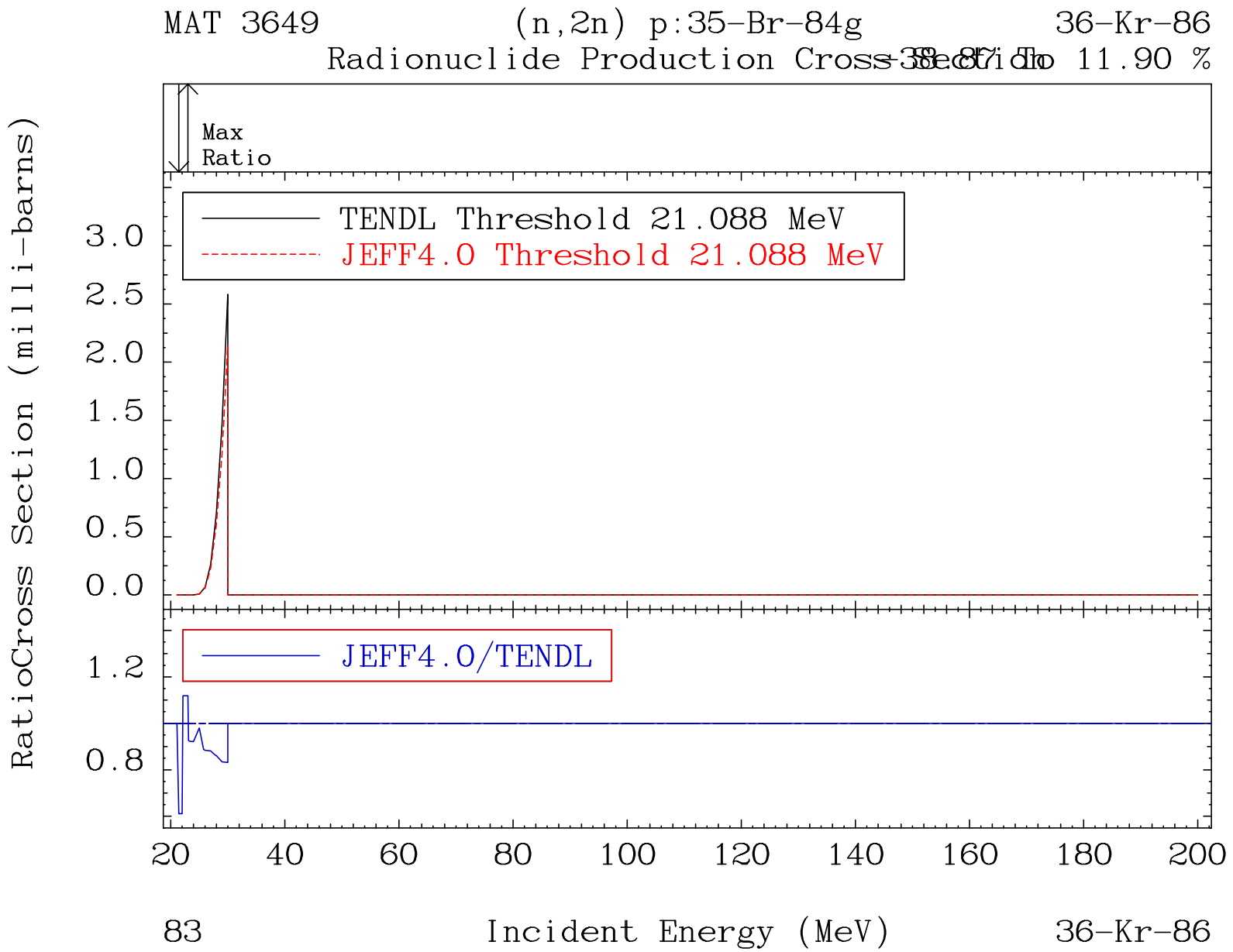

MAT 3649
(n,n') d:35-Br-84m1
36-Kr-86
Radionuclide Production Cross Section
0.000 To 150.0 %
Max
Ratio
TENDL Threshold 19.161 MeV
JEFF4.0 Threshold 19.161 MeV
JEFF4.0/TENDL
RatioCross Section (milli-barns)
0
1
2
3
4
1.0
2.0
3.0
2
3
4
5
6
7
8
9
10^8
2
78
Incident Energy (eV)
36-Kr-86

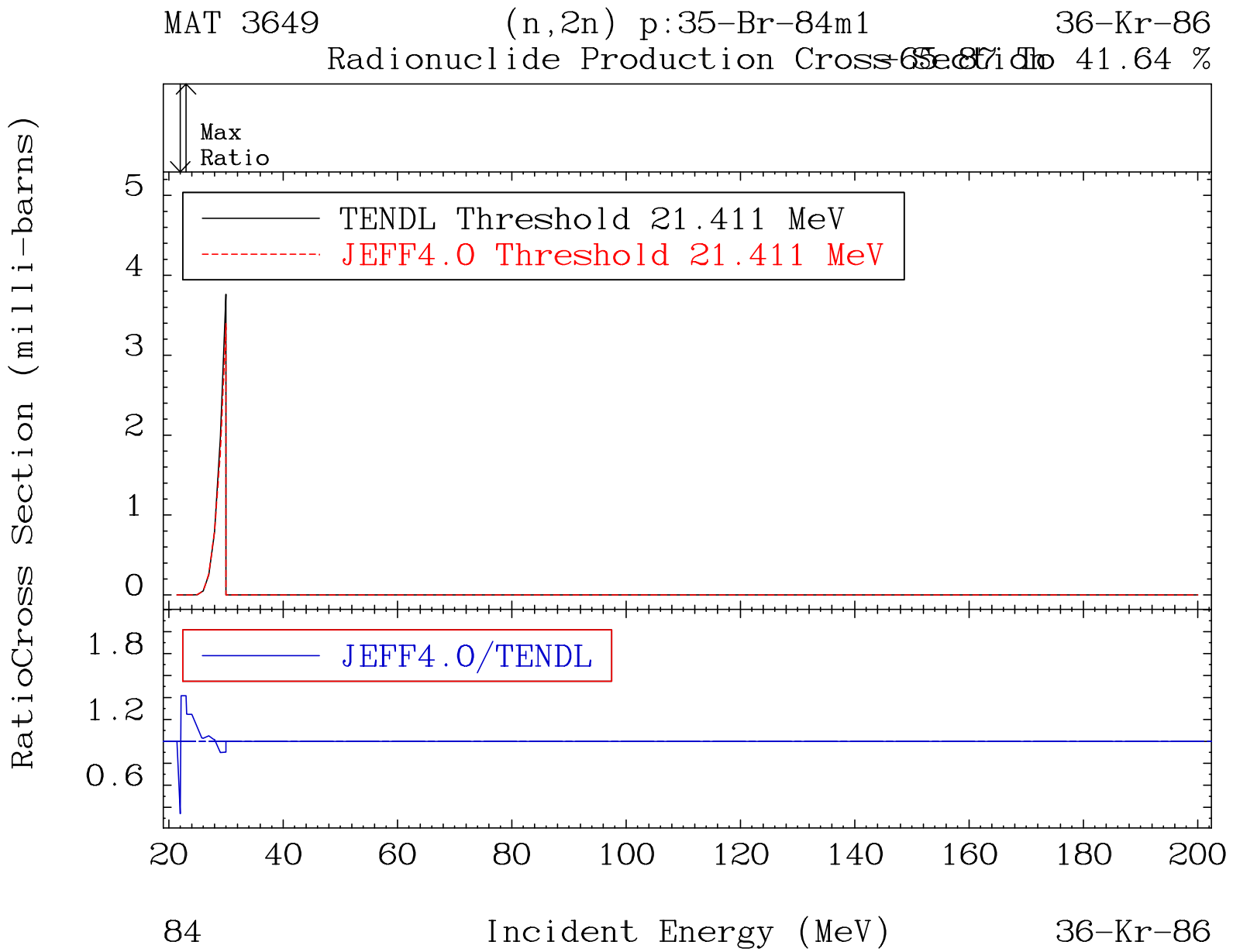

MAT 3649 (n,n') He-3:34-Se-83g 36-Kr-86
Radionuclide Production Cross Section
0.000 To 57.55 %
Max
Ratio
TENDL Threshold 23.125 MeV
JEFF4.0 Threshold 23.125 MeV
JEFF4.0/TENDL
Ratio Cross Section (10^{-9} barns)
60
50
40
30
20
10
0
1.6
1.2
40
60
80
100
120
140
160
180
200
79
Incident Energy (MeV)
36-Kr-86

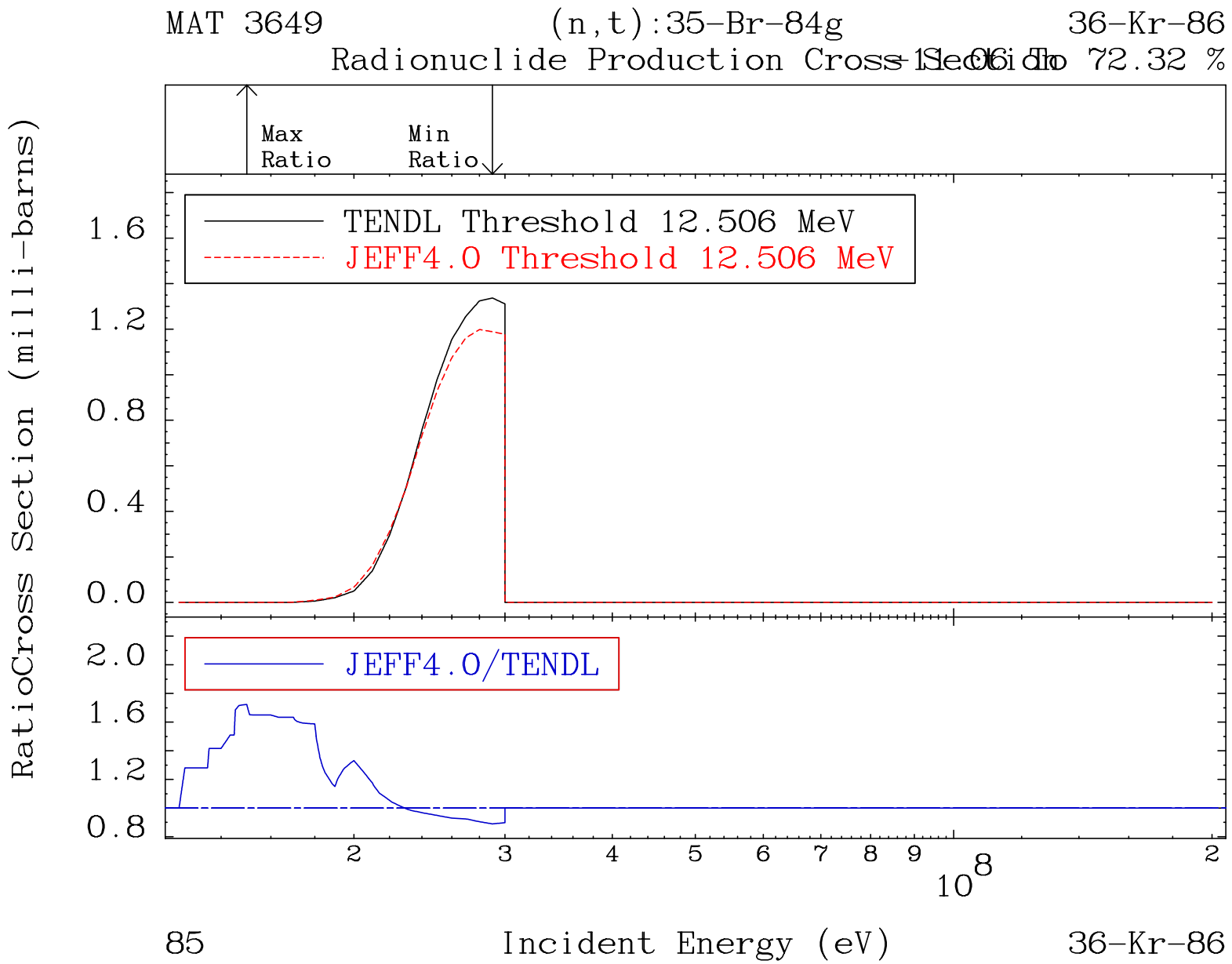

MAT 3649 (n,n') He-3:34-Se-83m1 36-Kr-86
Radionuclide Production Cross Section To 132.4 %
Min
Ratio
TENDL Threshold 23.356 MeV
JEFF4.0 Threshold 23.356 MeV
JEFF4.0/TENDL
Ratio Cross Section (10^{-9} barns)
0
1
2
3
1.0
2.0
3.0
40
60
80
100
120
140
160
180
200
80 Incident Energy (MeV) 36-Kr-86

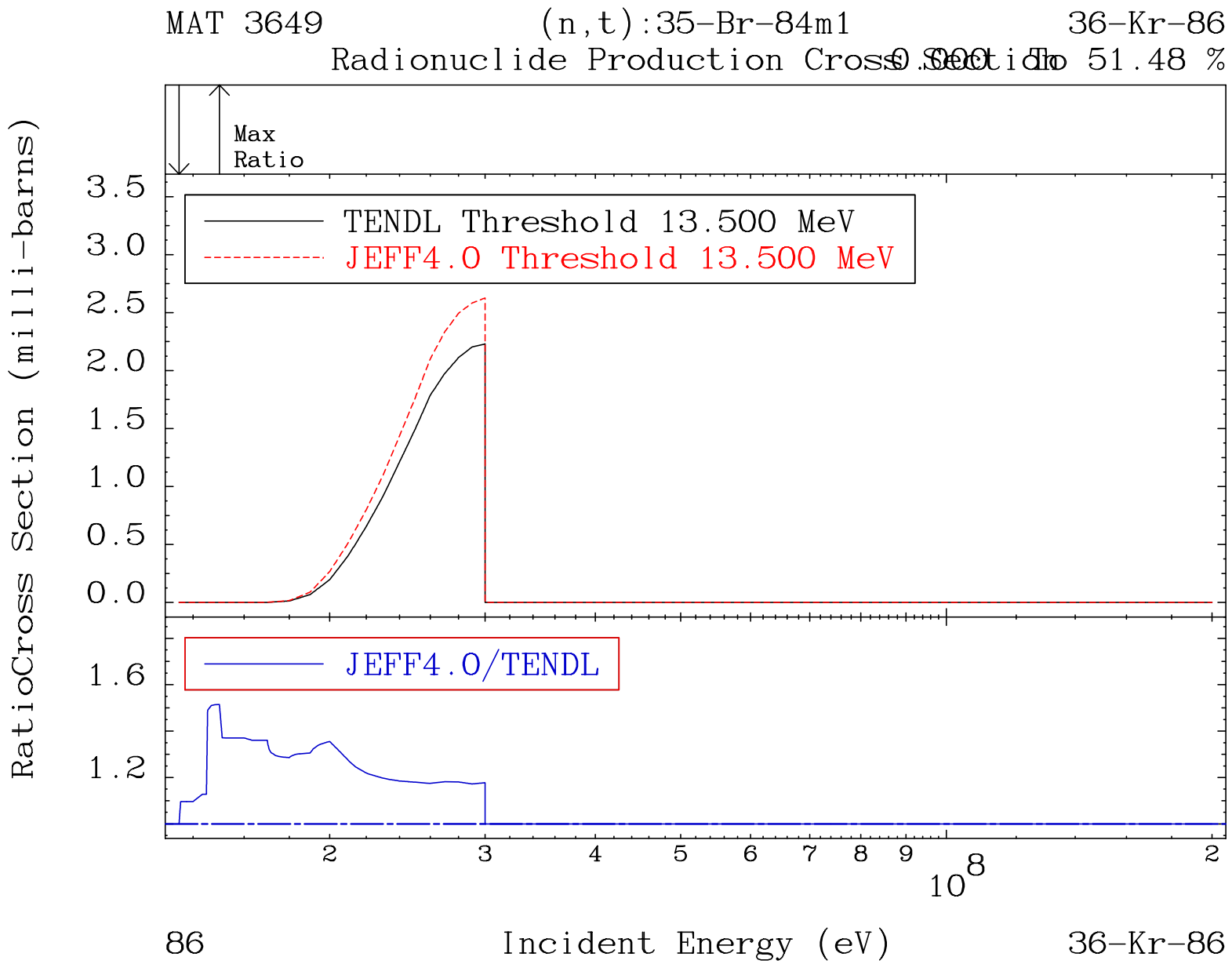

MAT 3649
(n,4n):36-Kr-83g
36-Kr-86
Radionuclide Production Cross Section
0.000 To 441.4 %
Max
Ratio
TENDL Threshold 27.812 MeV
JEFF4.0 Threshold 27.812 MeV
JEFF4.0/TENDL
RatioCross Section (milli-barns)
0
1
2
3
4
2
4
6
40
60
80
100
120
140
160
180
200
81
Incident Energy (MeV)
36-Kr-86

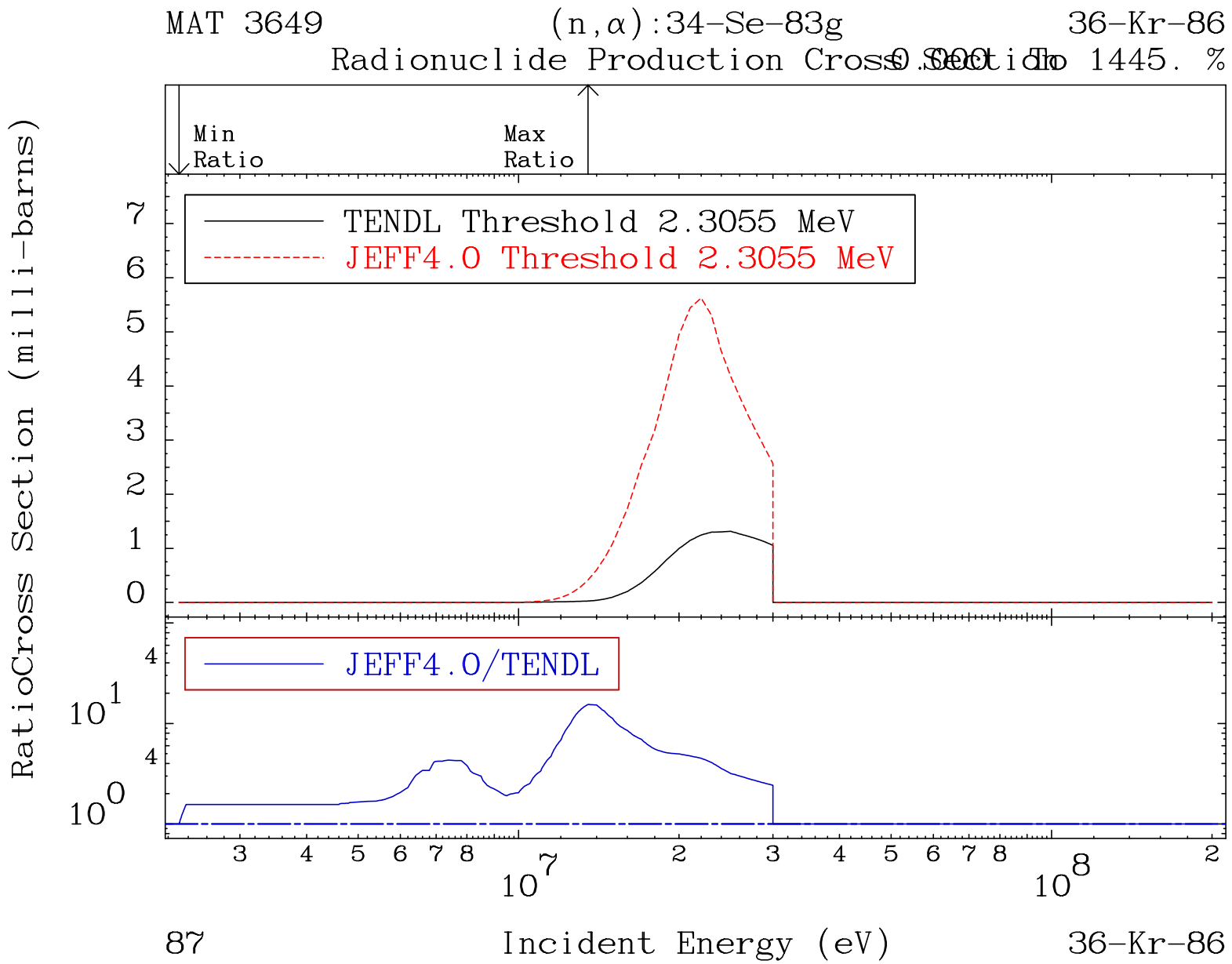

MAT 3649
(n,4n):36-Kr-83m2
36-Kr-86
Radionuclide Production Cross Section
0.000 To 279.9 %
Max
Ratio
TENDL Threshold 27.854 MeV
JEFF4.0 Threshold 27.854 MeV
JEFF4.0/TENDL
RatioCross Section (micro-barns)
400
300
200
100
0
4
2
40
60
80
100
120
140
160
180
200
82
Incident Energy (MeV)
36-Kr-86

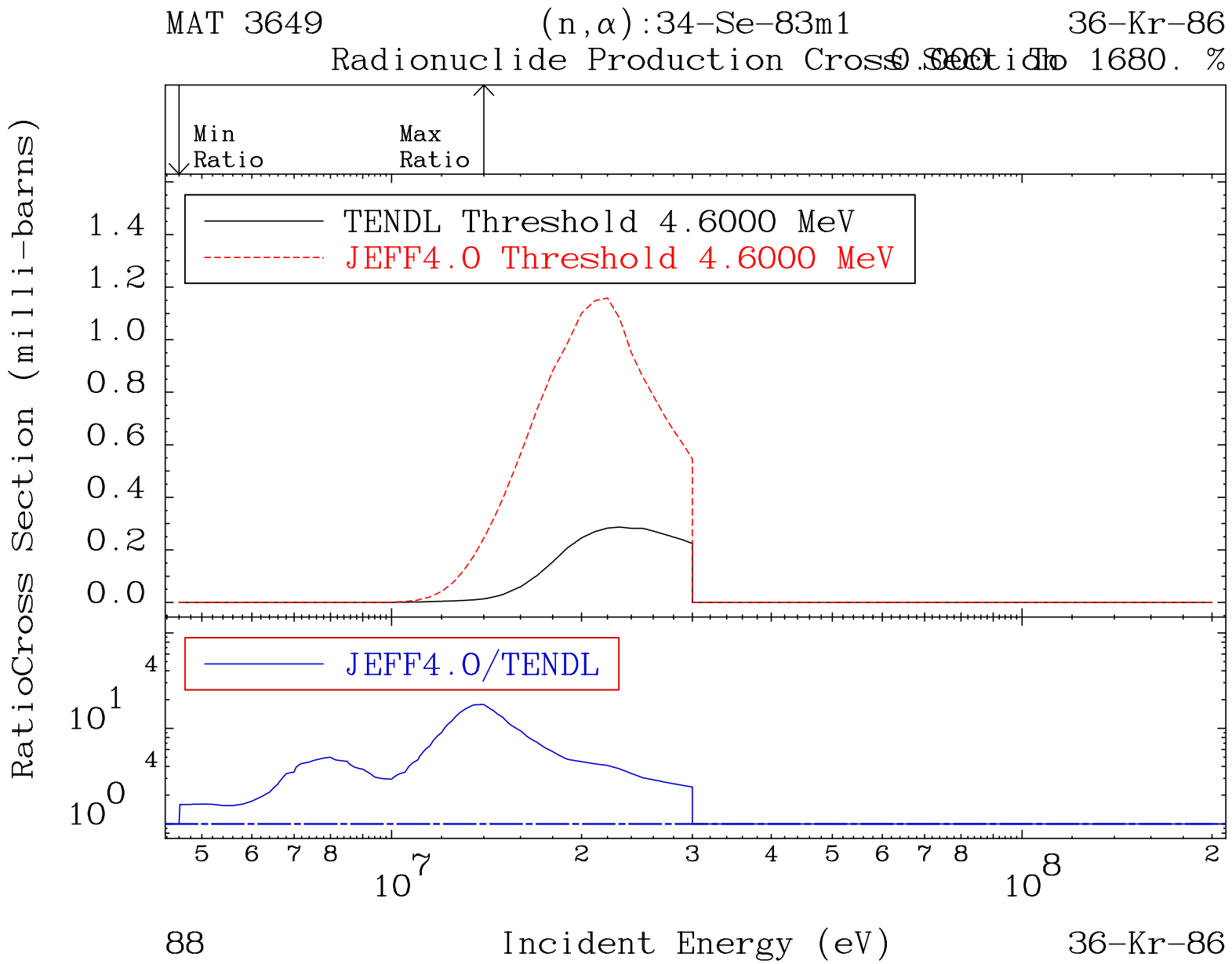

MAT 3649
(n,2n) p:35-Br-84g
36-Kr-86
Radionuclide Production Cross Section
Max
Ratio
TENDL Threshold 21.088 MeV
JEFF4.0 Threshold 21.088 MeV
JEFF4.0/TENDL
RatioCross Section (milli-barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1.2
0.8
20
40
60
80
100
120
140
160
180
200
83
Incident Energy (MeV)
36-Kr-86

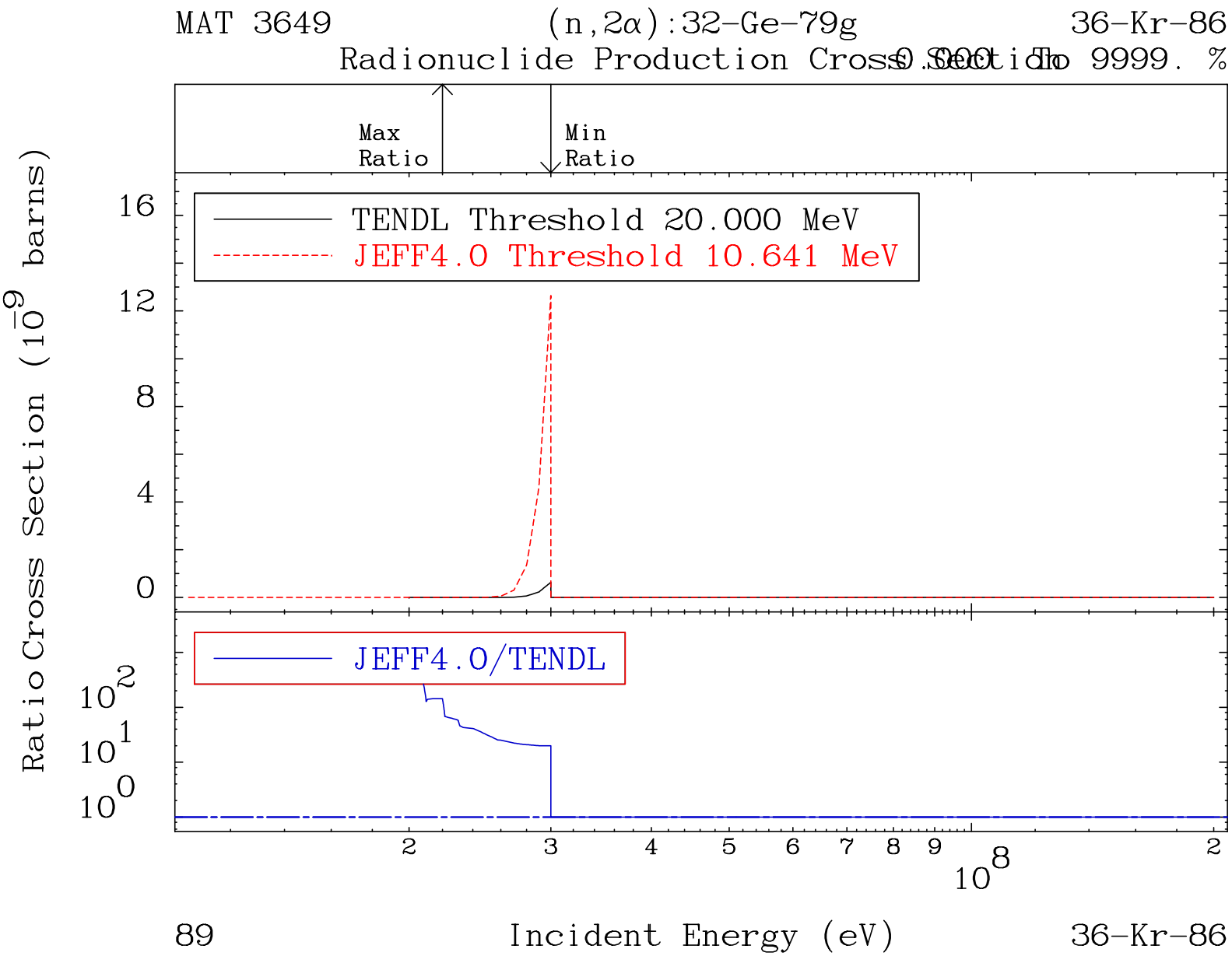

MAT 3649
(n,2n) p:35-Br-84m1
36-Kr-86
Radionuclide Production Cross Section To 41.64 %
Max
Ratio
TENDL Threshold 21.411 MeV
JEFF4.0 Threshold 21.411 MeV
JEFF4.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (MeV)
84
36-Kr-86

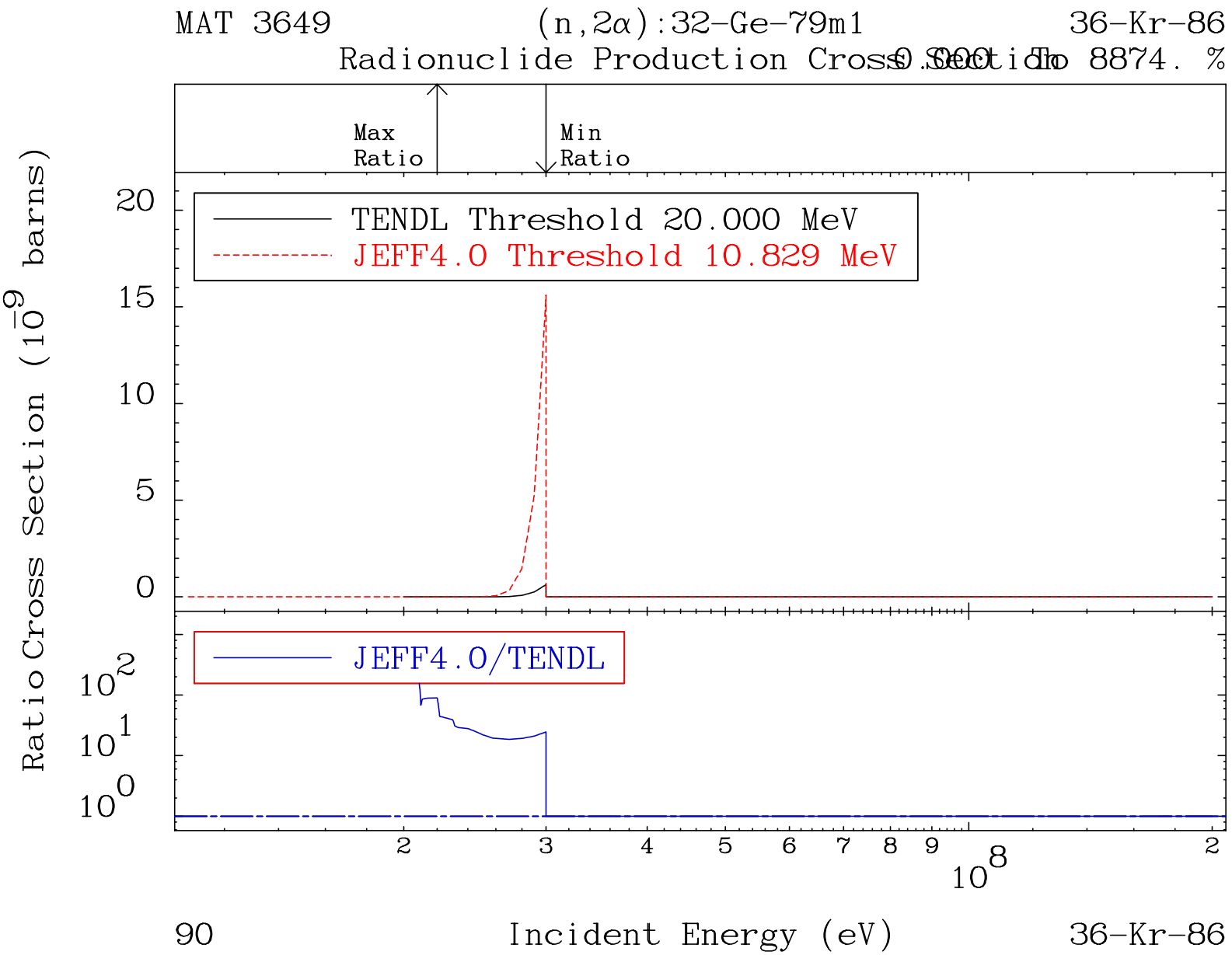

MAT 3649
(n,t):35-Br-84g
36-Kr-86
Radionuclide Production Cross Section To 72.32 %
Max Ratio
Min Ratio
TENDL Threshold 12.506 MeV
JEFF4.0 Threshold 12.506 MeV
JEFF4.0/TENDL
RatioCross Section (milli-barns)
1.6
1.2
0.8
0.4
0.0
2.0
1.6
1.2
0.8
2
3
4
5
6
7
8
9
2
10^8
85
Incident Energy (eV)
36-Kr-86

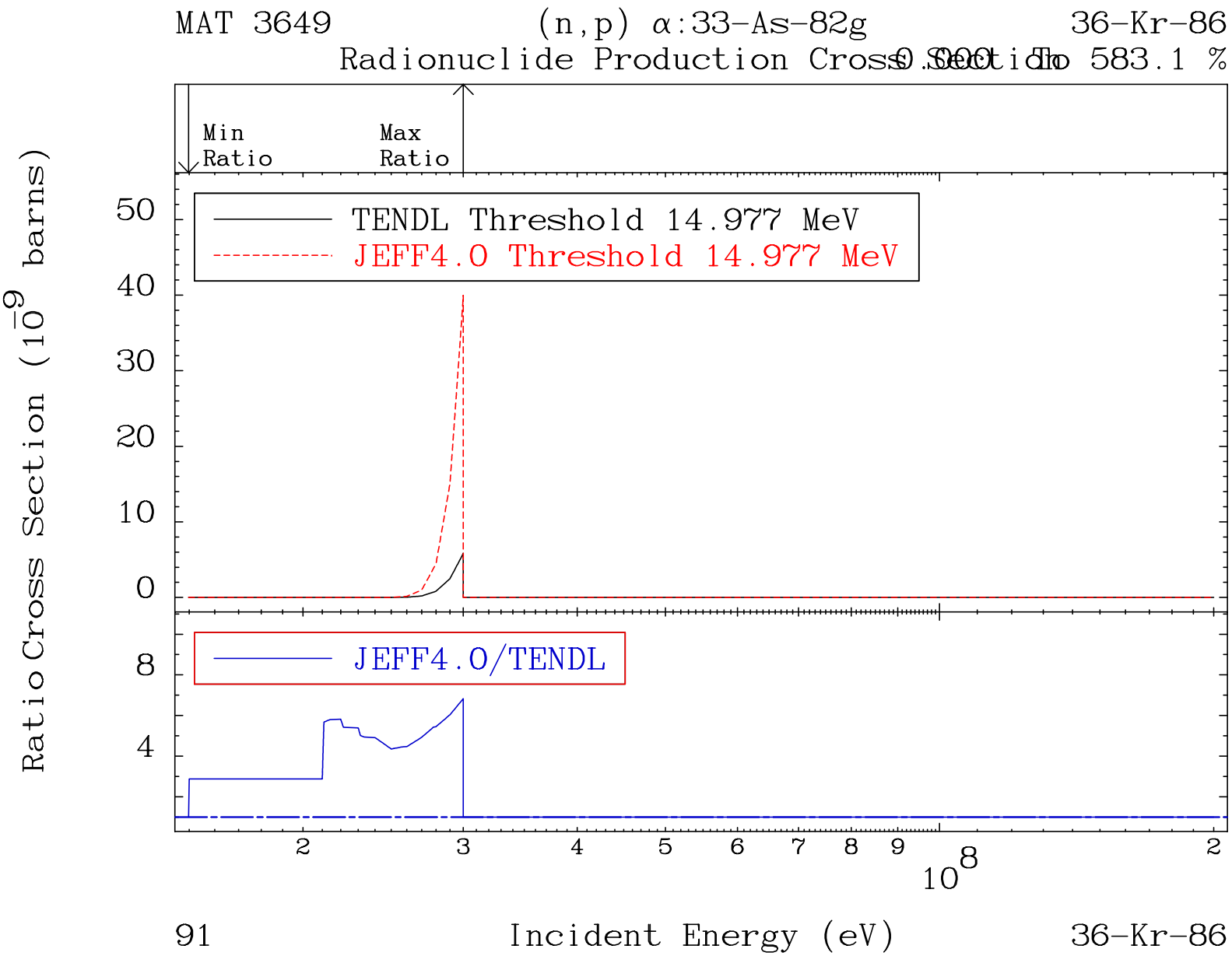

MAT 3649
(n,t):35-Br-84m1
36-Kr-86
Radionuclide Production Cross Section
0.000 To 51.48 %
Max
Ratio
TENDL Threshold 13.500 MeV
JEFF4.0 Threshold 13.500 MeV
JEFF4.0/TENDL
RatioCross Section (milli-barns)
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1.6
1.2
2
3
4
5
6
7
8
9
10^8
2
86
Incident Energy (eV)
36-Kr-86

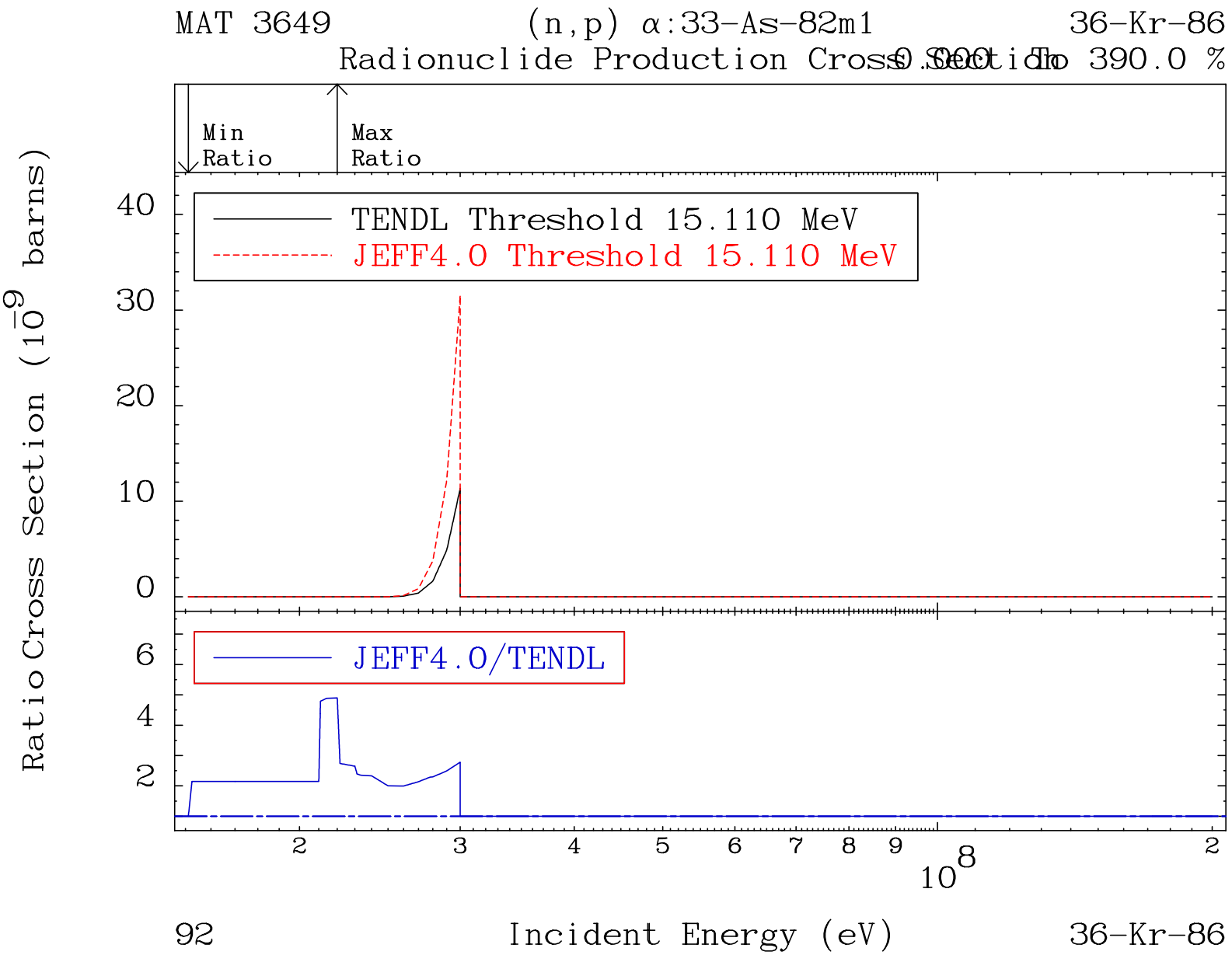

MAT 3649
(n,α):34-Se-83g
36-Kr-86
Radionuclide Production Cross Section
0.000 To 1445. %
Min Ratio
Max Ratio
TENDL Threshold 2.3055 MeV
JEFF4.0 Threshold 2.3055 MeV
JEFF4.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
87
36-Kr-86


MAT 3649
(n,α):34-Se-83m1
36-Kr-86
Radionuclide Production Cross Section
0.000 To 1680. %
Min Ratio
Max Ratio
TENDL Threshold 4.6000 MeV
JEFF4.0 Threshold 4.6000 MeV
JEFF4.0/TENDL
RatioCross Section (milli-barns)
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
10^1
10^0
5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
88
Incident Energy (eV)
36-Kr-86


MAT 3649
(n,2α):32-Ge-79g
36-Kr-86
Radionuclide Production Cross Section
0.000 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 20.000 MeV
JEFF4.0 Threshold 10.641 MeV
JEFF4.0/TENDL
Ratio Cross Section (10^{-9} barns)
16
12
8
4
0
10^{2}
10^{1}
10^{0}
2
3
4
5
6
7
8
9
10^{8}
2
89
Incident Energy (eV)
36-Kr-86


MAT 3649
(n,2α):32-Ge-79m1
36-Kr-86
Radionuclide Production Cross Section
0.000 To 8874. %
Max Ratio
Min Ratio
TENDL Threshold 20.000 MeV
JEFF4.0 Threshold 10.829 MeV
JEFF4.0/TENDL
Ratio Cross Section (10^{-9} barns)
20
15
10
5
0
10^2
10^1
10^0
2
3
4
5
6
7
8
9
10^8
2
90
Incident Energy (eV)
36-Kr-86


MAT 3649
(n,p) α:33-As-82g
36-Kr-86
Radionuclide Production Cross Section
0.000 To 583.1 %
Min Ratio
Max Ratio
TENDL Threshold 14.977 MeV
JEFF4.0 Threshold 14.977 MeV
JEFF4.0/TENDL
Ratio Cross Section (10^-9 barns)
50
40
30
20
10
0
8
4
2
3
4
5
6
7
8
9
10^8
2
91
Incident Energy (eV)
36-Kr-86


MAT 3649
(n,p) α:33-As-82m1
36-Kr-86
Radionuclide Production Cross Section
0.900 To 390.0 %
Min Ratio
Max Ratio
TENDL Threshold 15.110 MeV
JEFF4.0 Threshold 15.110 MeV
JEFF4.0/TENDL
Ratio Cross Section (10^-9 barns)
40
30
20
10
0
6
4
2
2
3
4
5
6
7
8
9
10^8
2
92
Incident Energy (eV)
36-Kr-86