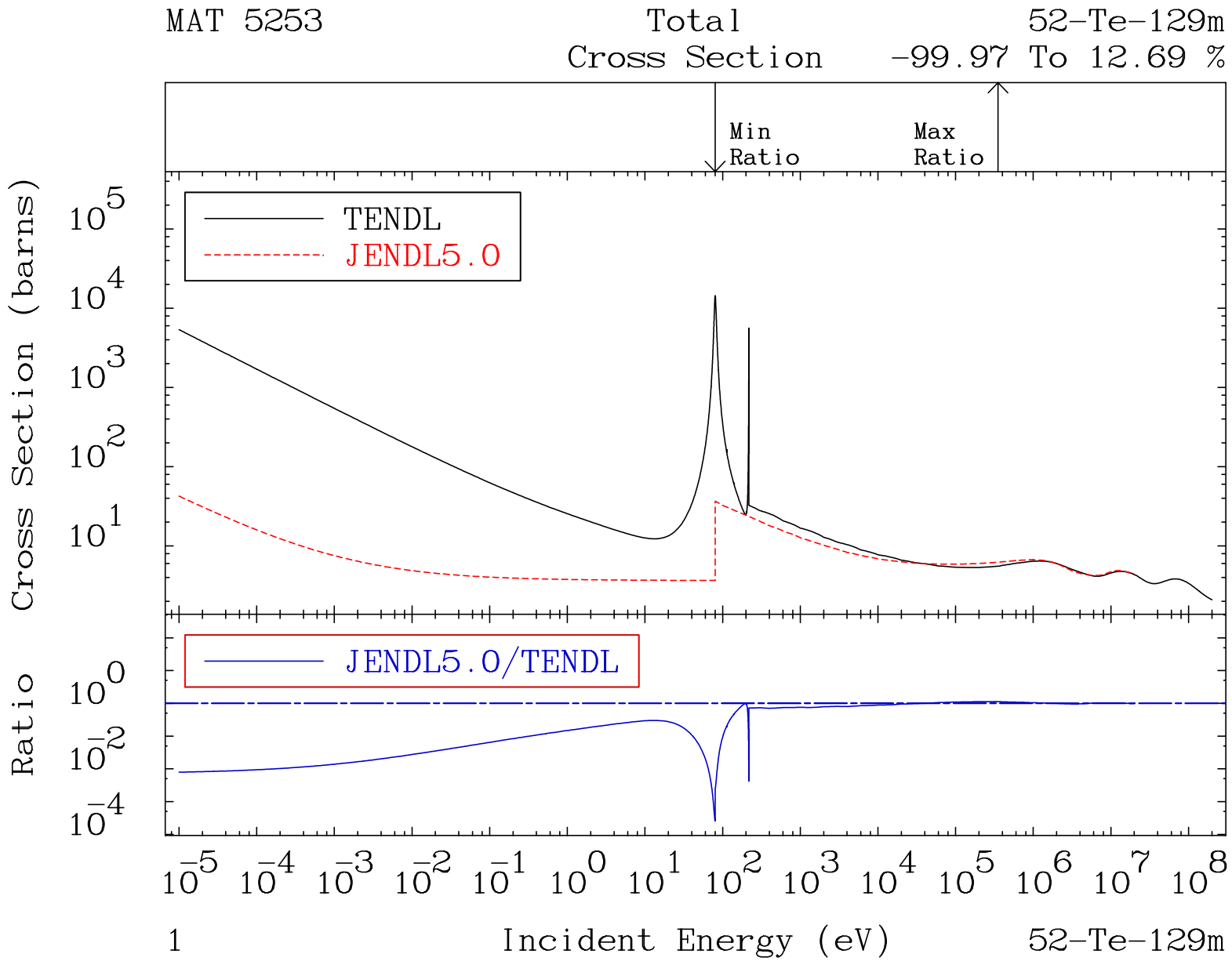
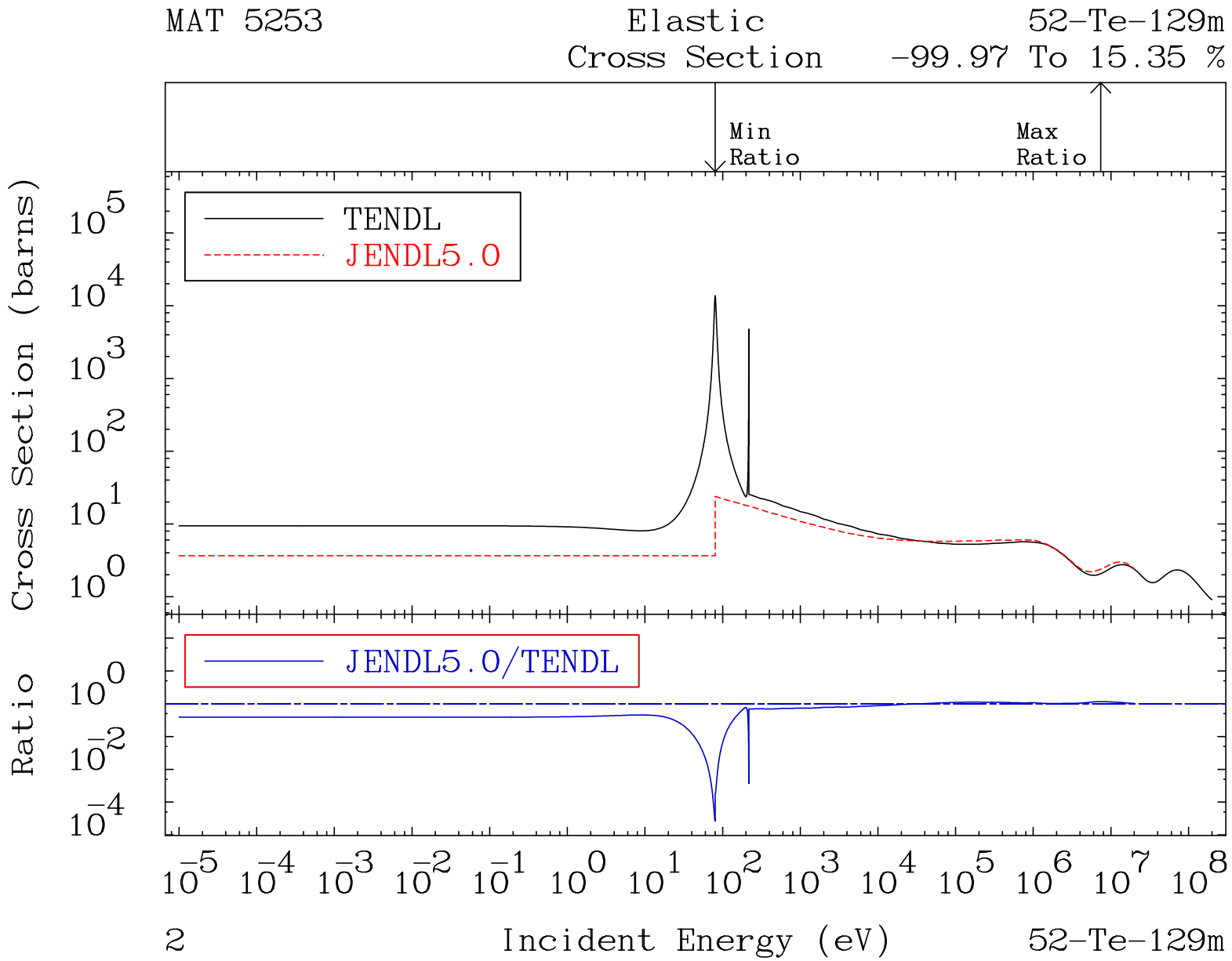
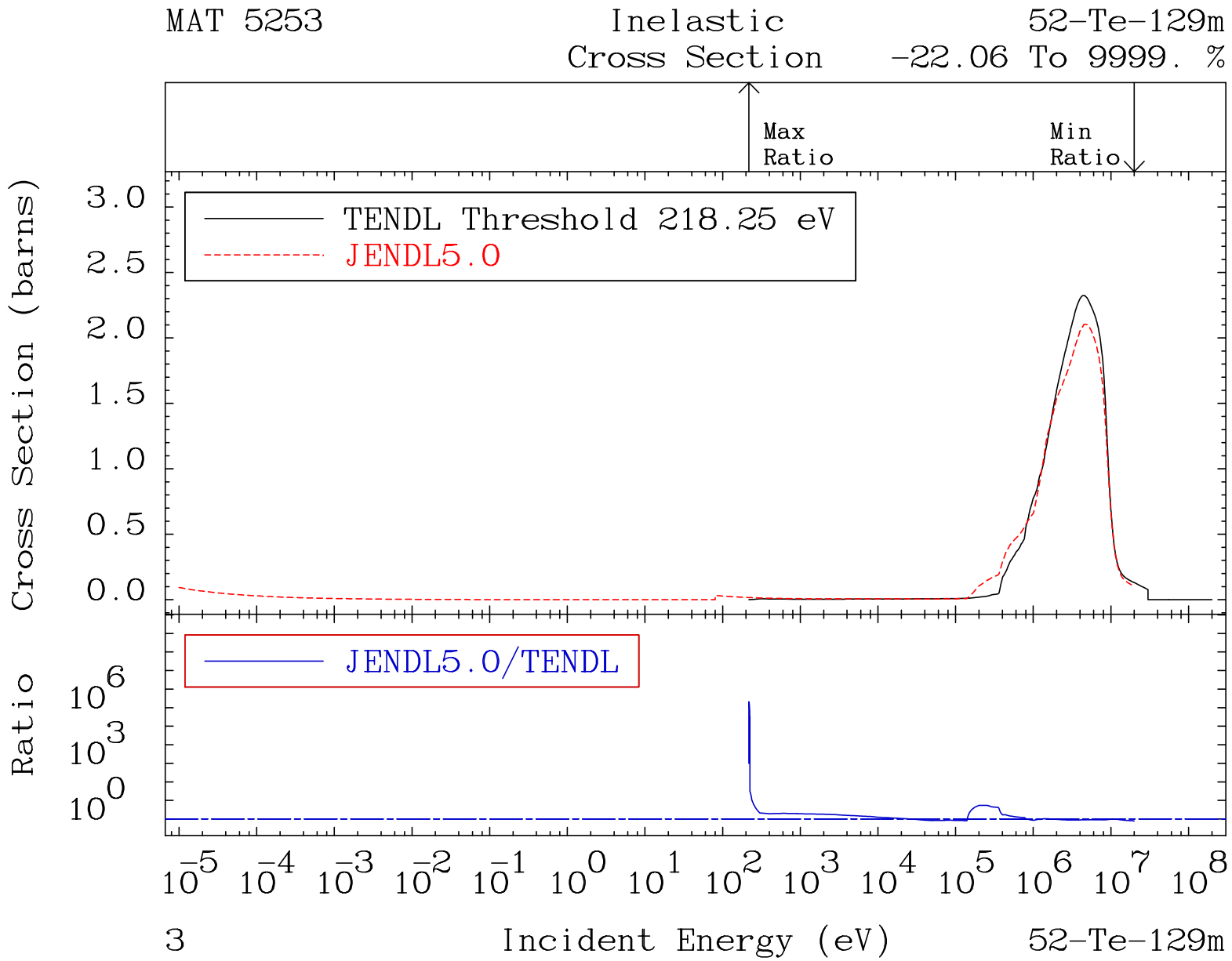
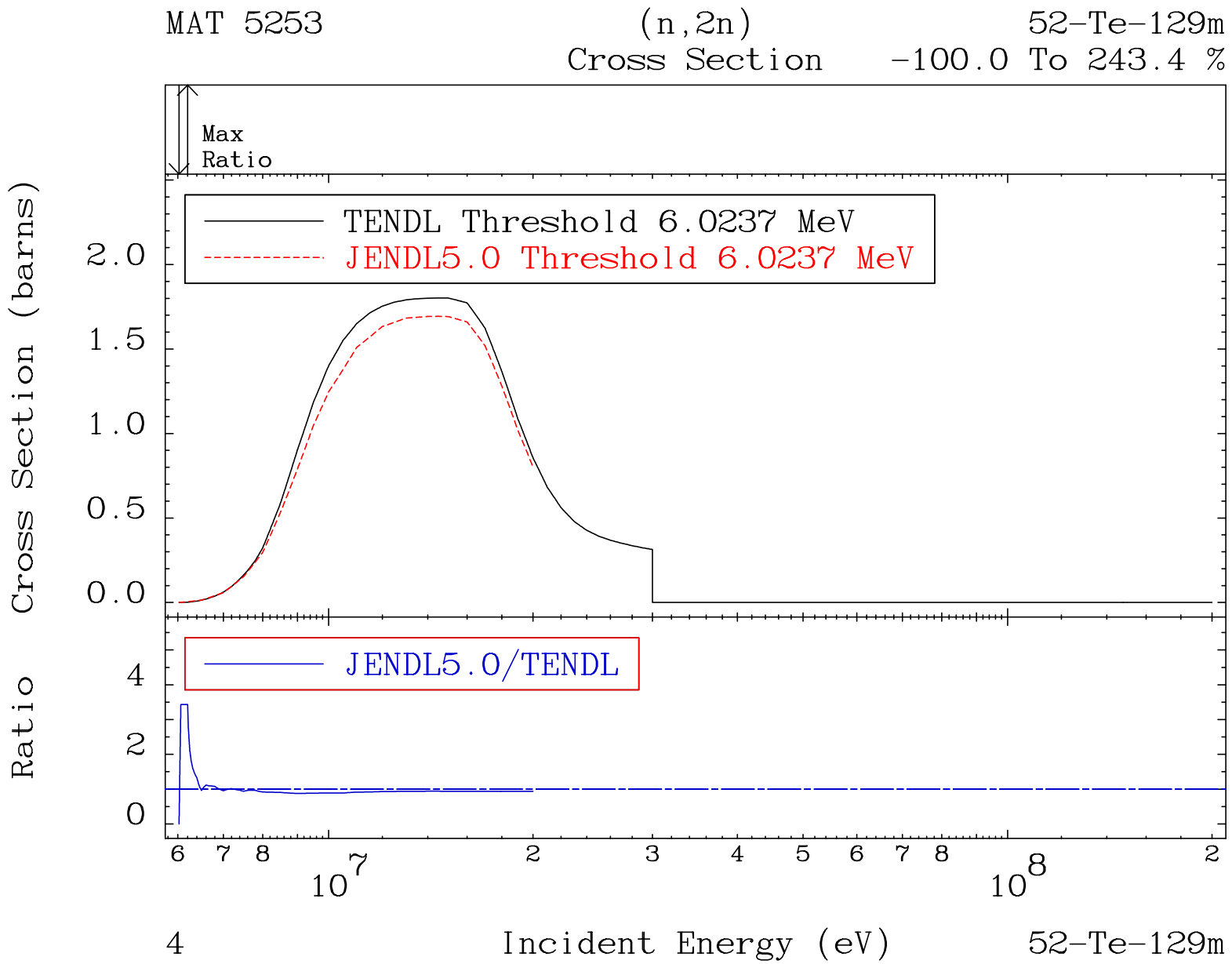
Program Complot
(Version 2021-1)
by
Dermott E. Cullen
(Present Contact Information)
Dermott E. Cullen
1466 Hudson Way
Livermore, CA 94550
U.S.A.
Tele: 925-443-1911
E.Mail:redcullen1@comcast.net
Web:redcullen1.net/HOMEPAGE.NEW

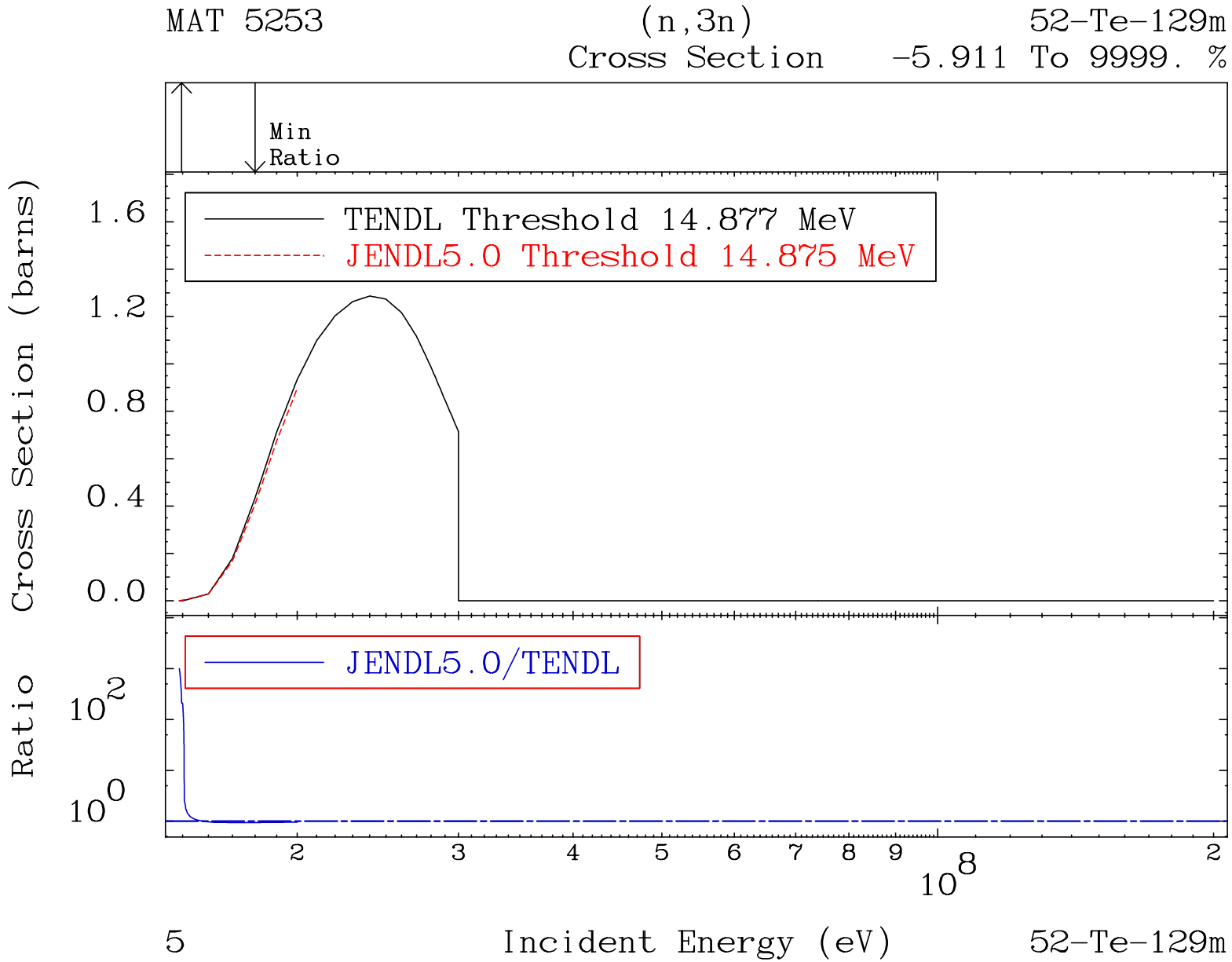
Press Mouse Button to Start

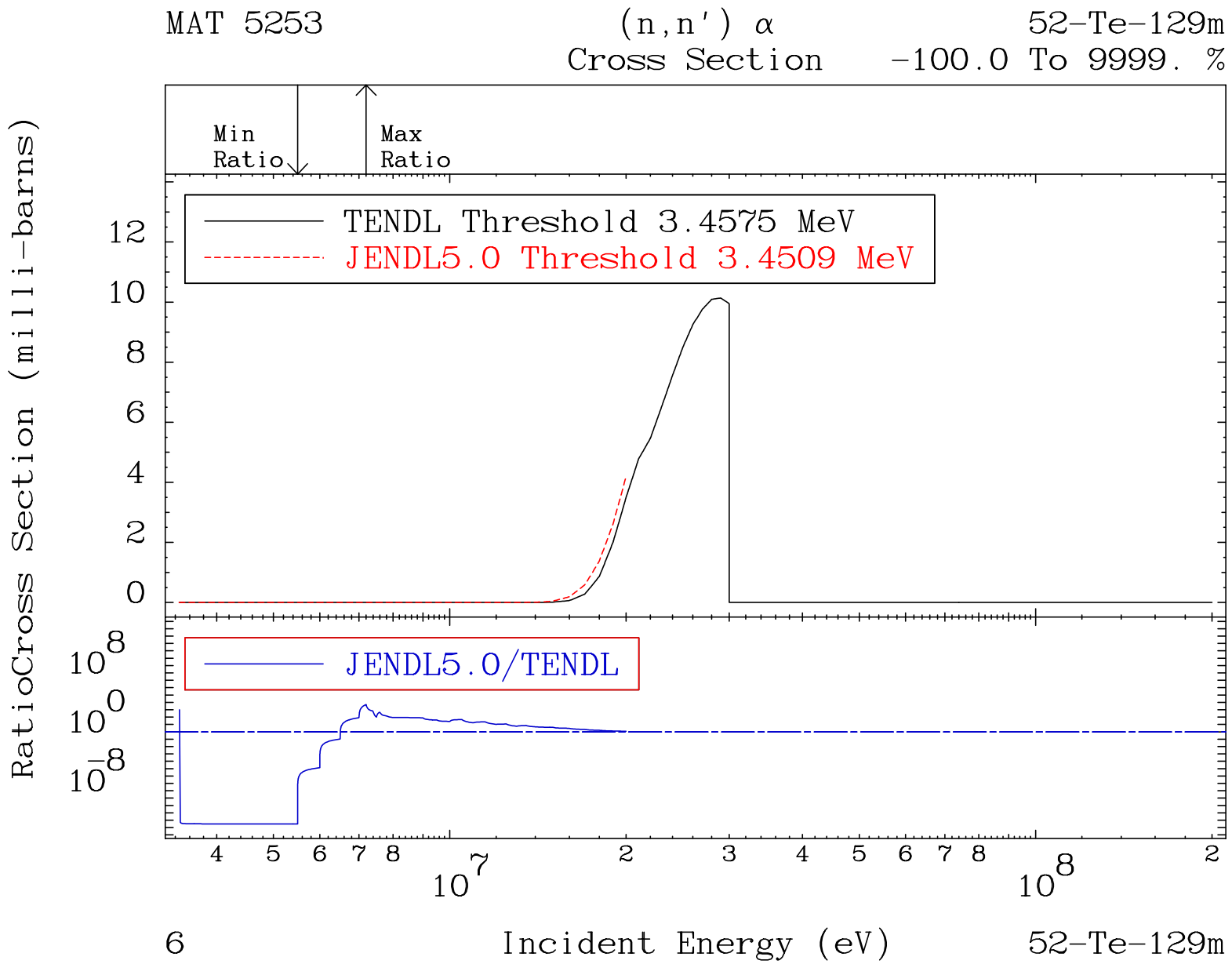

MAT 5253
Total
Cross Section
52-Te-129m
-99.97 To 12.69 %
Min
Ratio
Max
Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
1
52-Te-129m

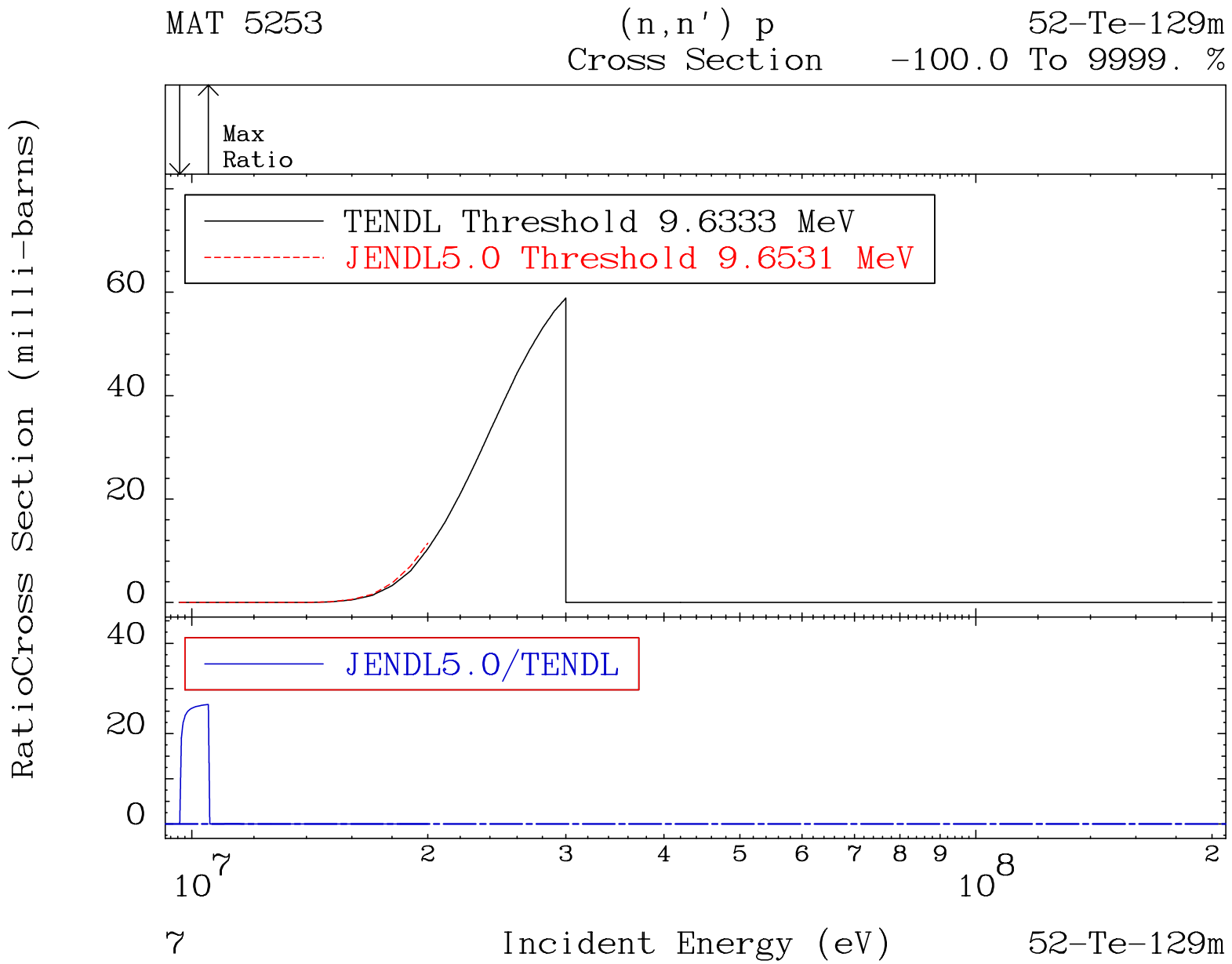

MAT 5253
Elastic
Cross Section
52-Te-129m
-99.97 To 15.35 %
Min
Ratio
Max
Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
2
52-Te-129m

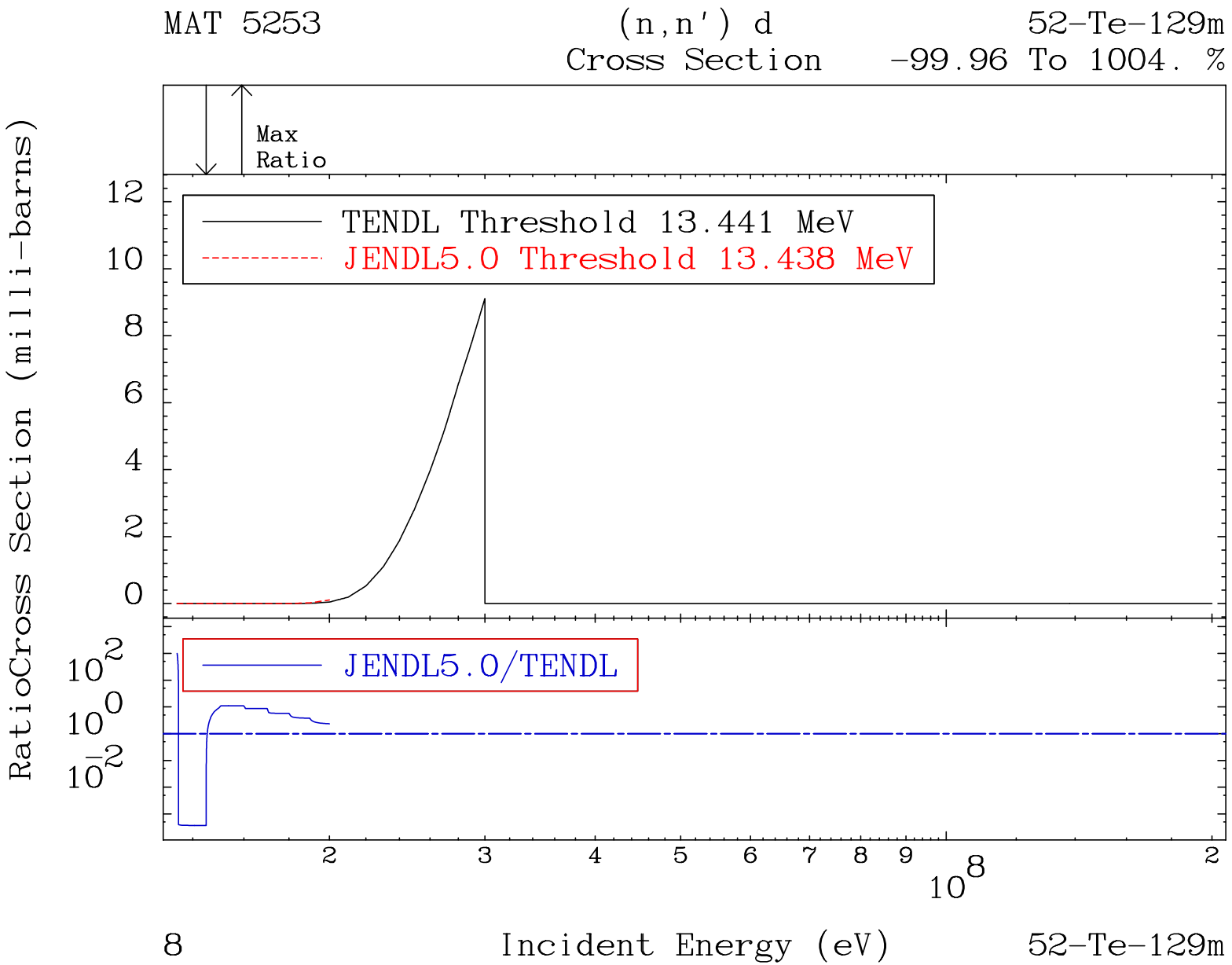

MAT 5253
Inelastic
Cross Section
52-Te-129m
-22.06 To 9999. %
Max
Ratio
Min
Ratio
TENDL Threshold 218.25 eV
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
3.0
2.5
2.0
1.5
1.0
0.5
0.0
10^6
10^3
10^0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
Incident Energy (eV)
3
52-Te-129m

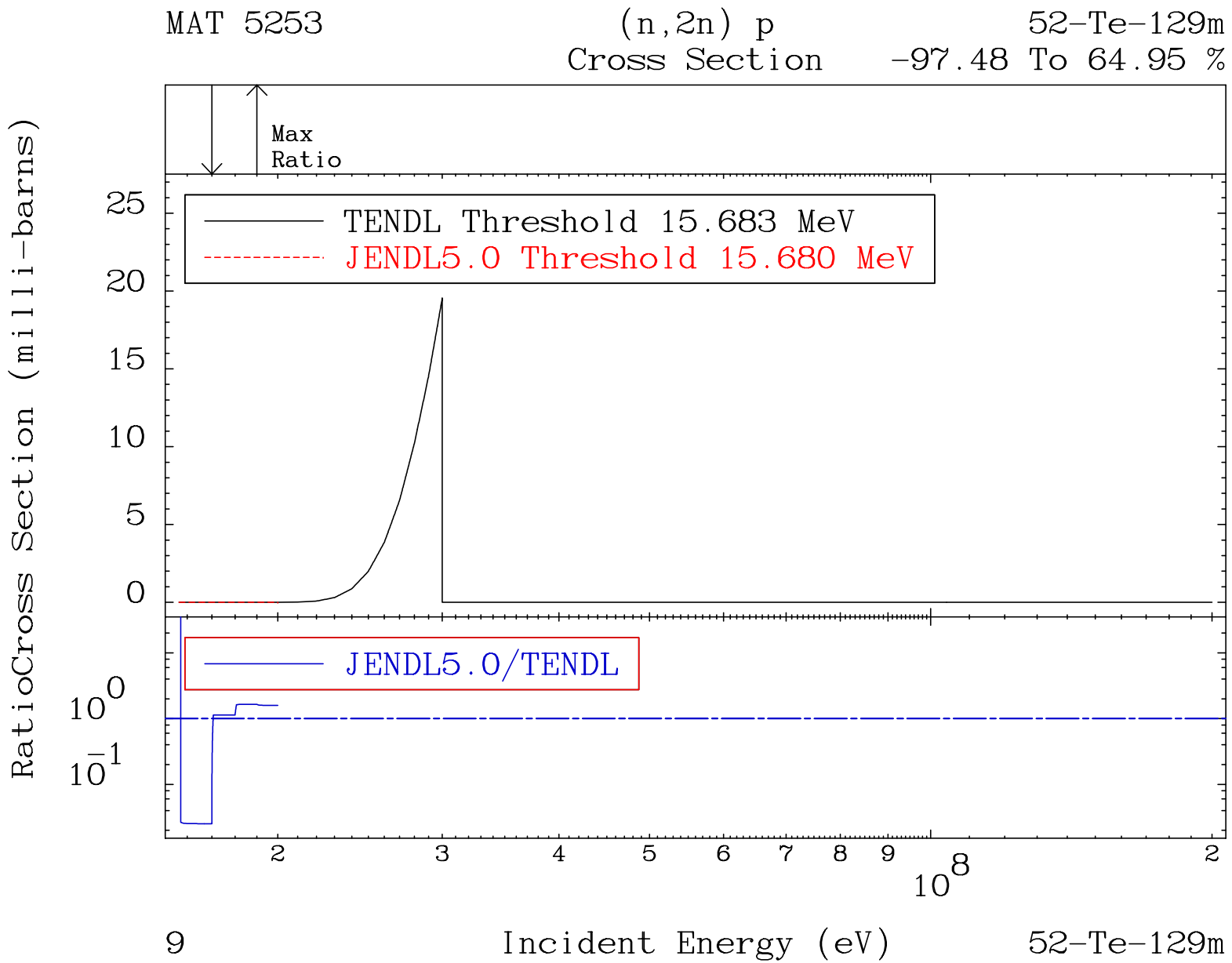

MAT 5253
(n,2n)
Cross Section
52-Te-129m
-100.0 To 243.4 %
Max
Ratio
TENDL Threshold 6.0237 MeV
JENDL5.0 Threshold 6.0237 MeV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
2.0
1.5
1.0
0.5
0.0
4
2
0
6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
Incident Energy (eV)
52-Te-129m

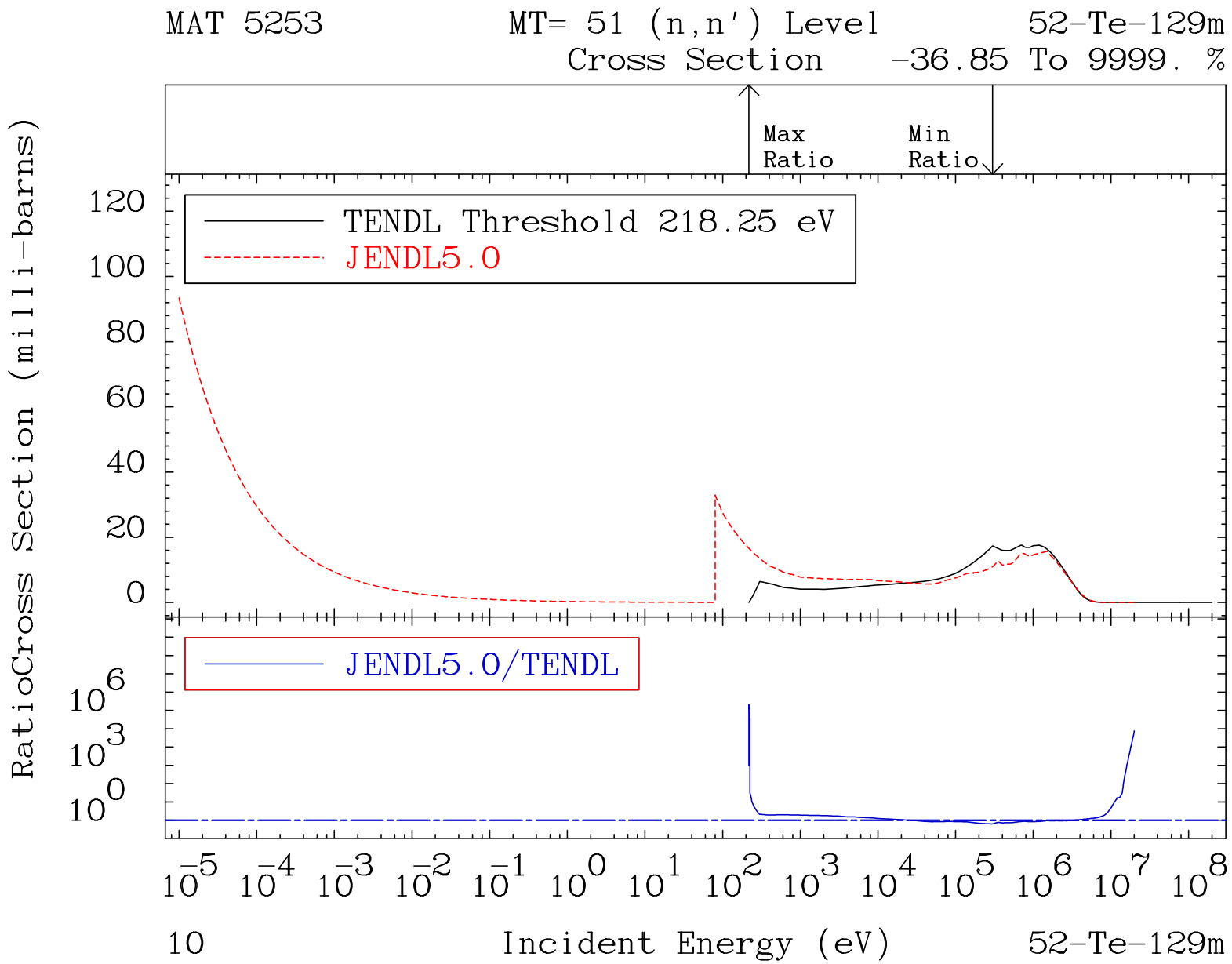

MAT 5253
(n,3n)
Cross Section
52-Te-129m
-5.911 To 9999. %
Min
Ratio
TENDL Threshold 14.877 MeV
JENDL5.0 Threshold 14.875 MeV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
1.6
1.2
0.8
0.4
0.0
10^2
10^0
2
3
4
5
6
7
8
9
10^8
2
5
Incident Energy (eV)
52-Te-129m

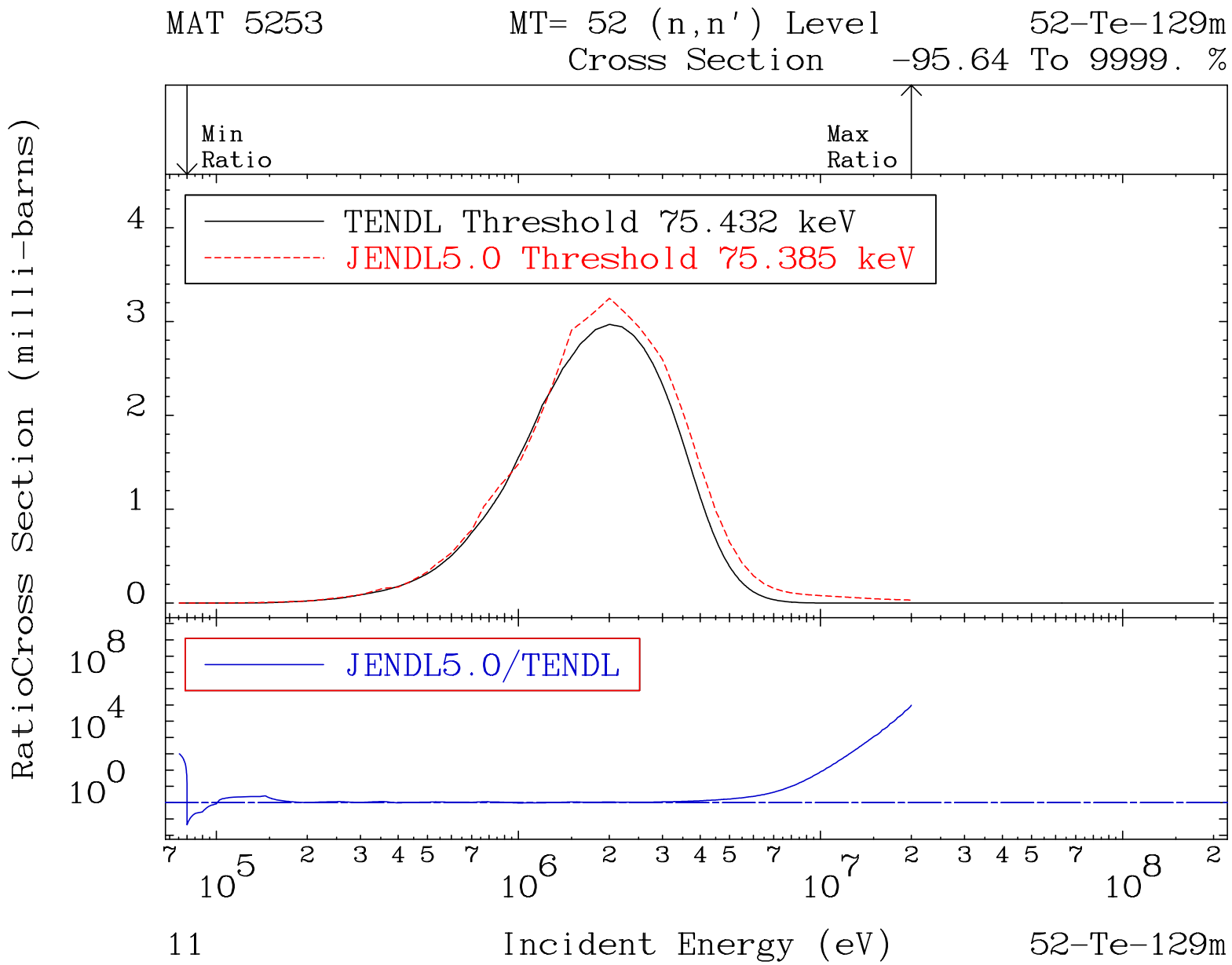

MAT 5253
(n,n') α
Cross Section
52-Te-129m
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 3.4575 MeV
JENDL5.0 Threshold 3.4509 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
6
52-Te-129m

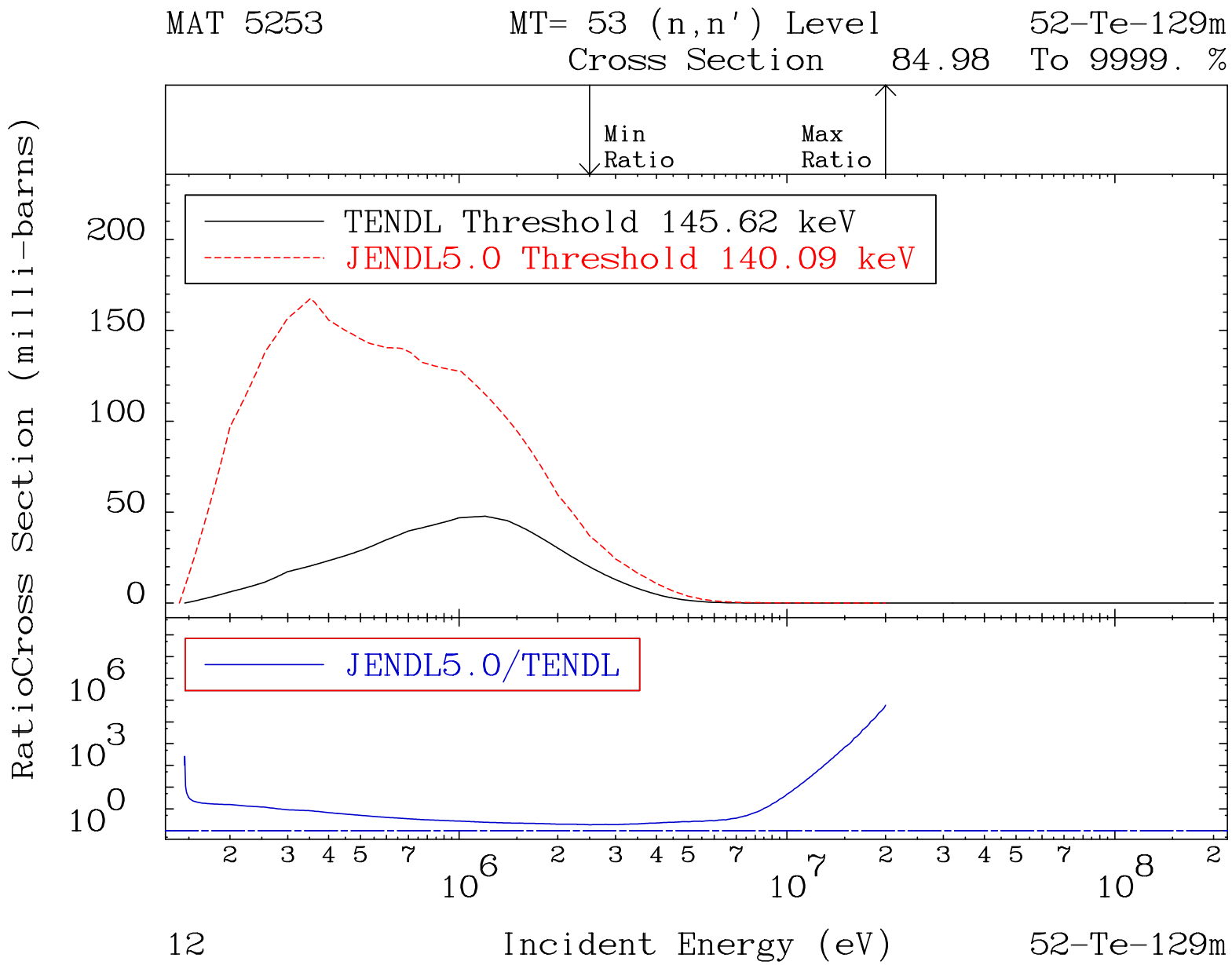

MAT 5253
(n,n') p
Cross Section
52-Te-129m
-100.0 To 9999. %
Max
Ratio
TENDL Threshold 9.6333 MeV
JENDL5.0 Threshold 9.6531 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
60
40
20
0
40
20
0
10^7
2
3
4
5
6
7
8
9
10^8
2
7
Incident Energy (eV)
52-Te-129m

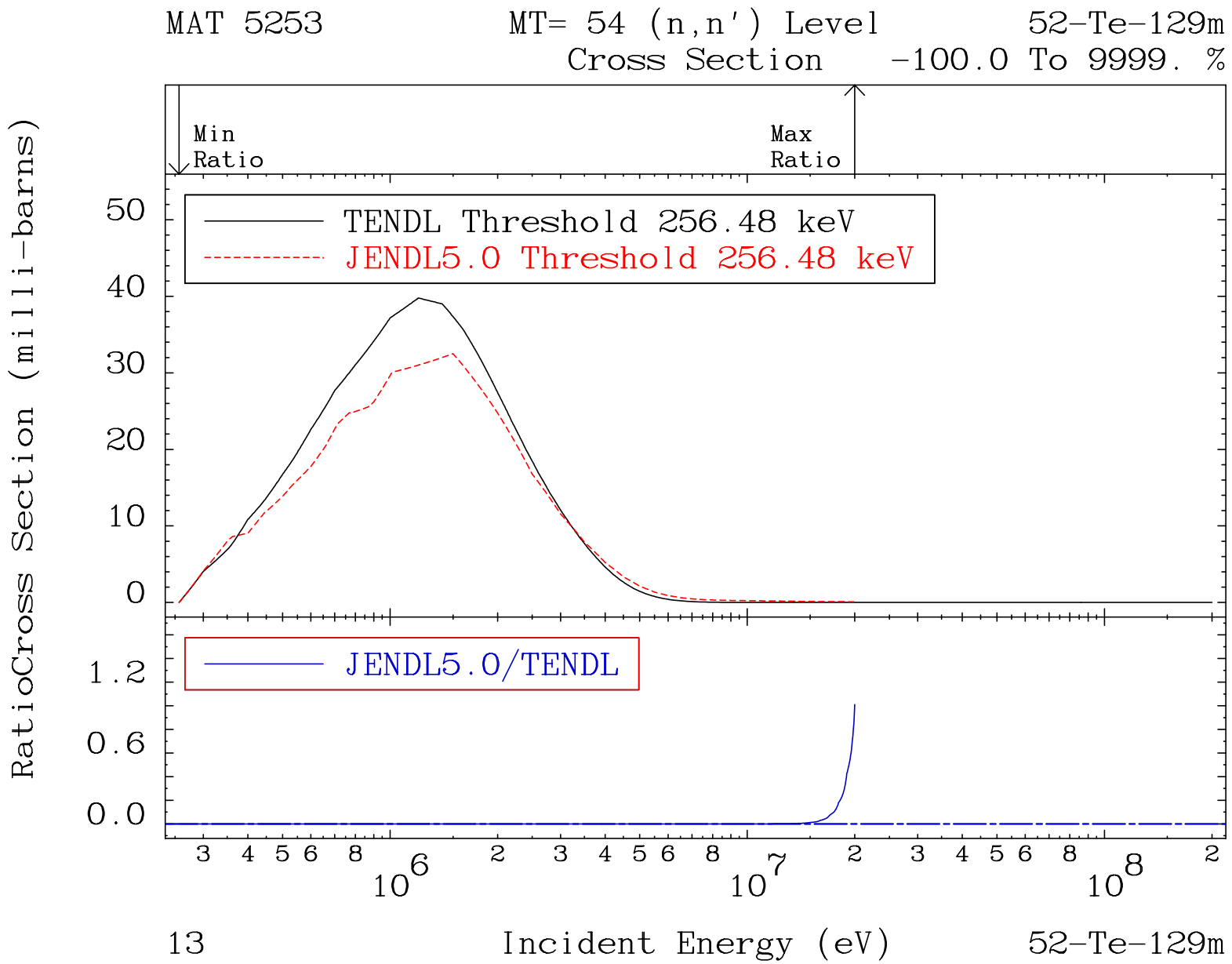

MAT 5253
(n,n') d
Cross Section
52-Te-129m
-99.96 To 1004. %
Max
Ratio
TENDL Threshold 13.441 MeV
JENDL5.0 Threshold 13.438 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
8
52-Te-129m

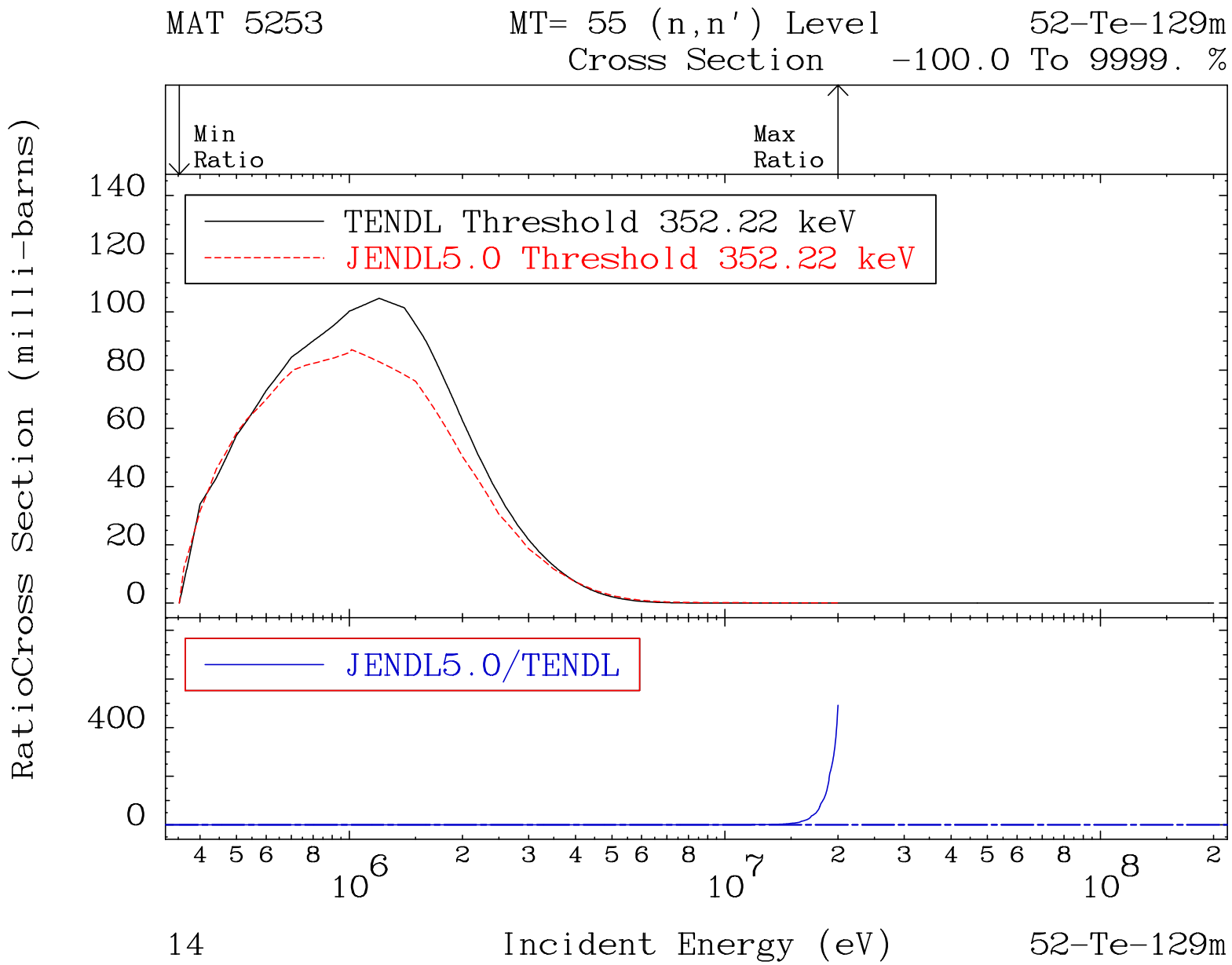

MAT 5253
(n,2n) p
Cross Section
52-Te-129m
-97.48 To 64.95 %
Max
Ratio
TENDL Threshold 15.683 MeV
JENDL5.0 Threshold 15.680 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
25
20
15
10
5
0
10^{0}
10^{-1}
2
3
4
5
6
7
8
9
10^{8}
2
9
Incident Energy (eV)
52-Te-129m

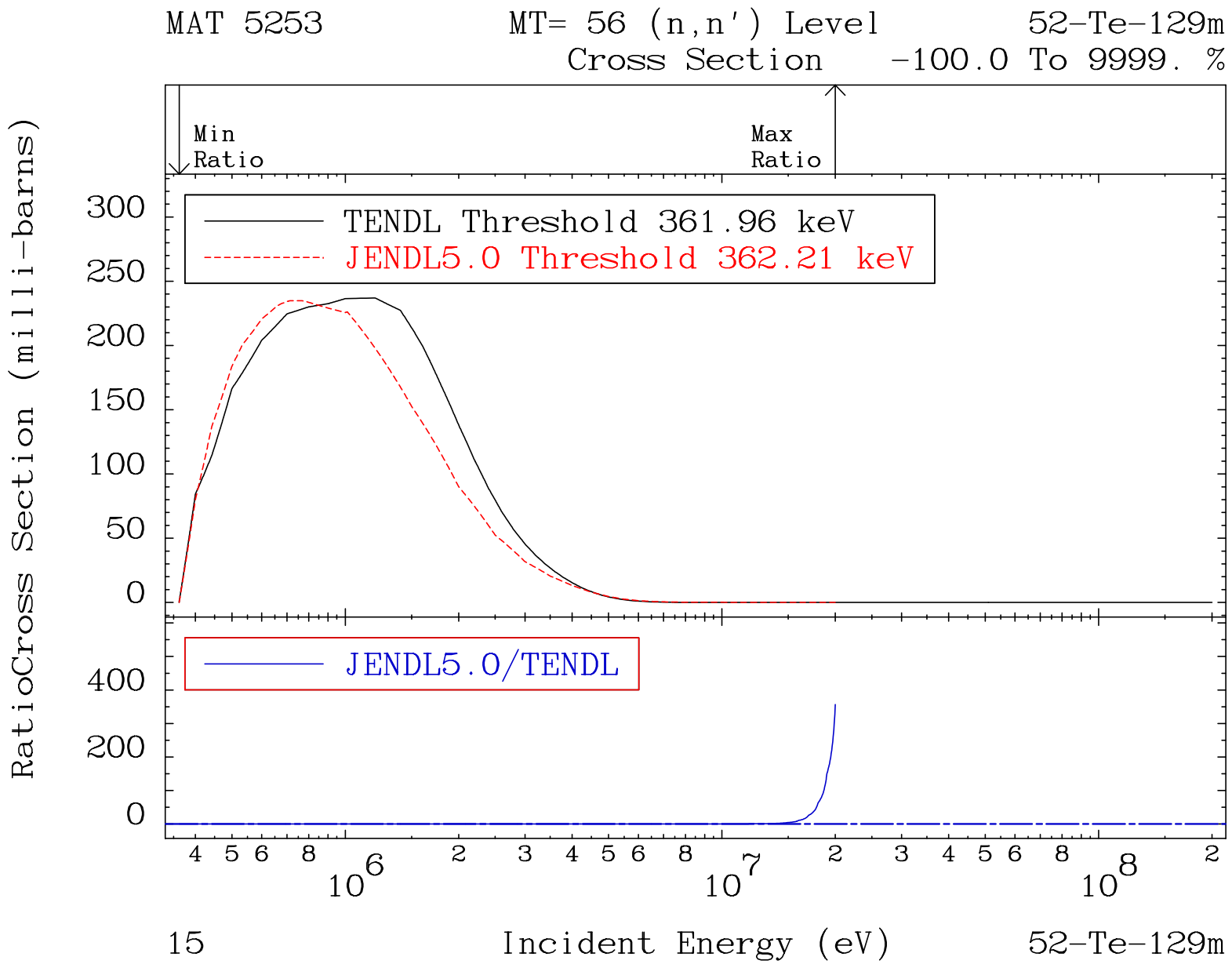

MAT 5253
MT= 51 (n,n') Level
52-Te-129m
Cross Section -36.85 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 218.25 eV
JENDL5.0
JENDL5.0/TENDL
RatioCross Section (milli-barns)
120
100
80
60
40
20
0
10^6
10^3
10^0
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
10
Incident Energy (eV)
52-Te-129m

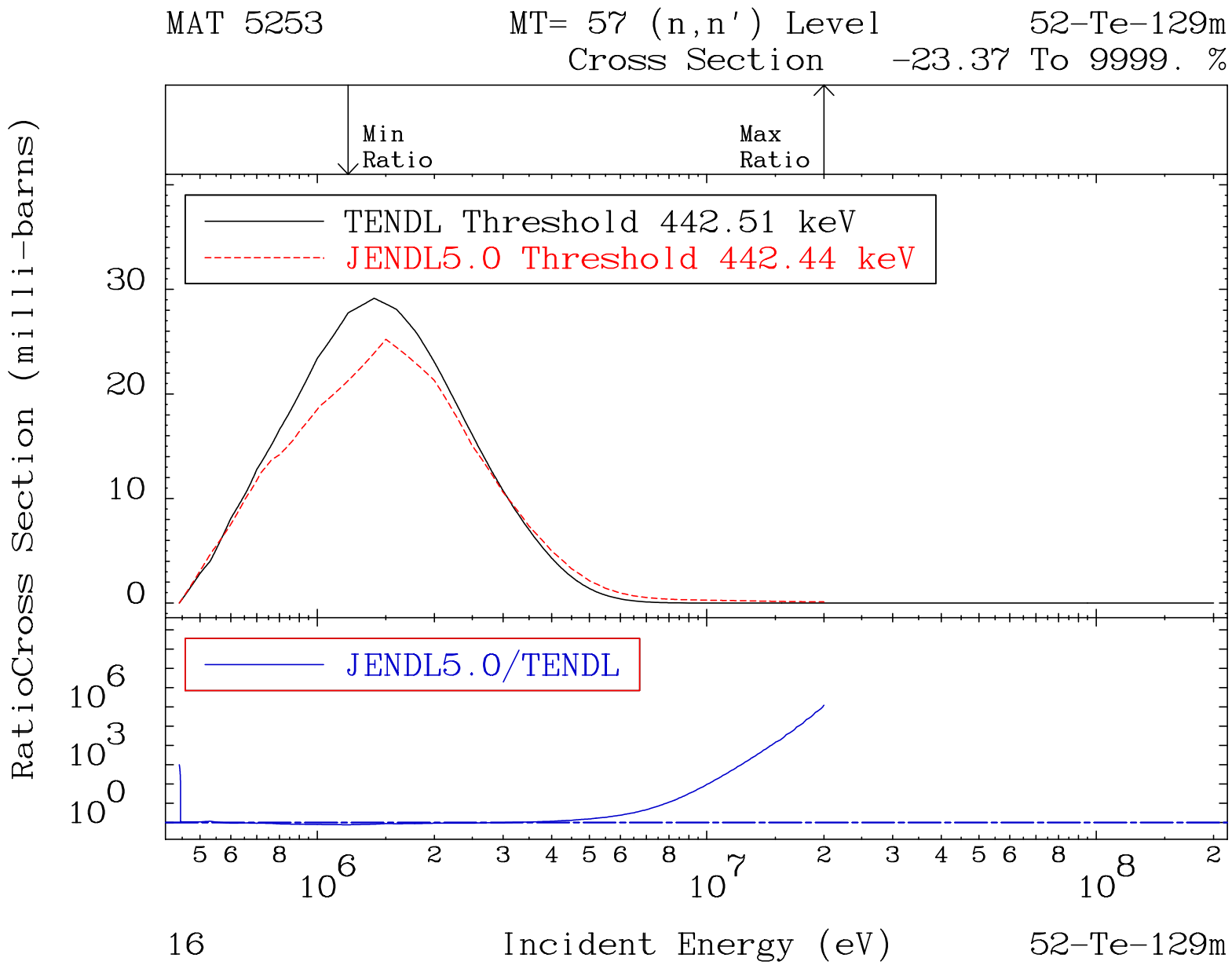

MAT 5253
MT= 52 (n,n') Level
52-Te-129m
Cross Section -95.64 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 75.432 keV
JENDL5.0 Threshold 75.385 keV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
11
52-Te-129m

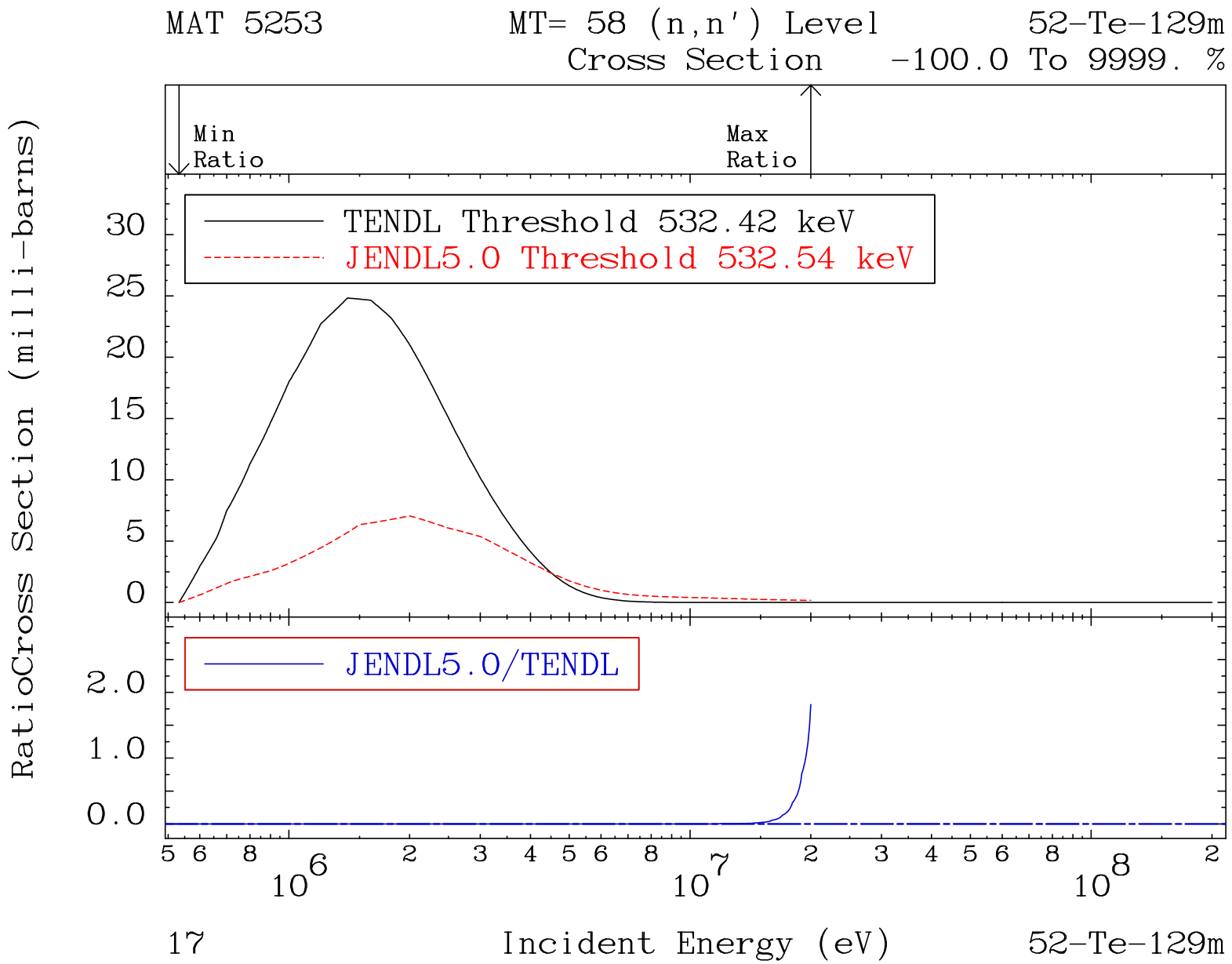

MAT 5253
MT= 53 (n,n') Level
52-Te-129m
Cross Section 84.98 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 145.62 keV
JENDL5.0 Threshold 140.09 keV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
200
150
100
50
0
10^6
10^3
10^0
2 3 4 5 7 10^6 2 3 4 5 7 10^7 2 3 4 5 7 10^8 2
12
Incident Energy (eV)
52-Te-129m

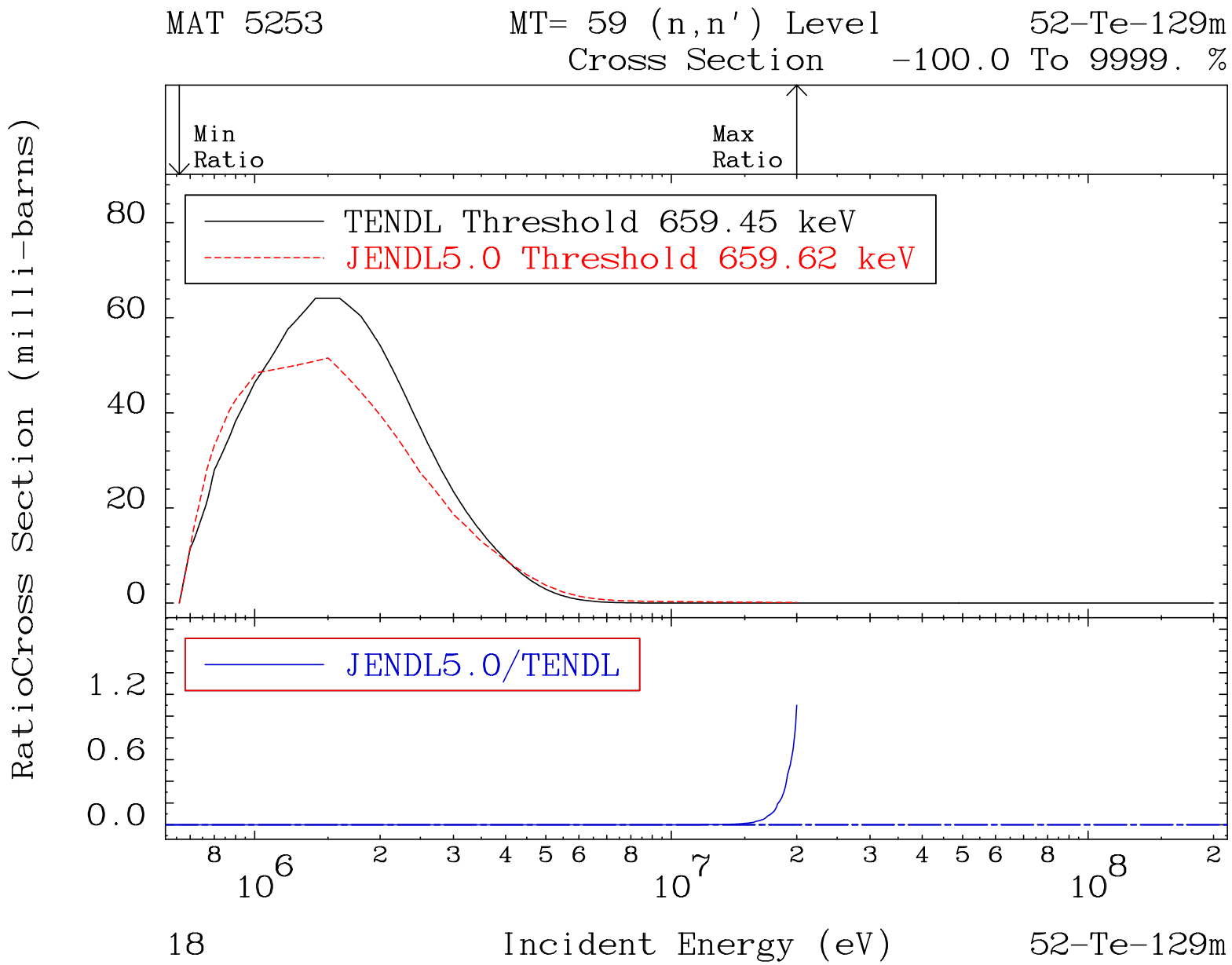

MAT 5253
MT= 54 (n,n') Level
52-Te-129m
Cross Section
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 256.48 keV
JENDL5.0 Threshold 256.48 keV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
50
40
30
20
10
0
1.2
0.6
0.0
3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
13
Incident Energy (eV)
52-Te-129m

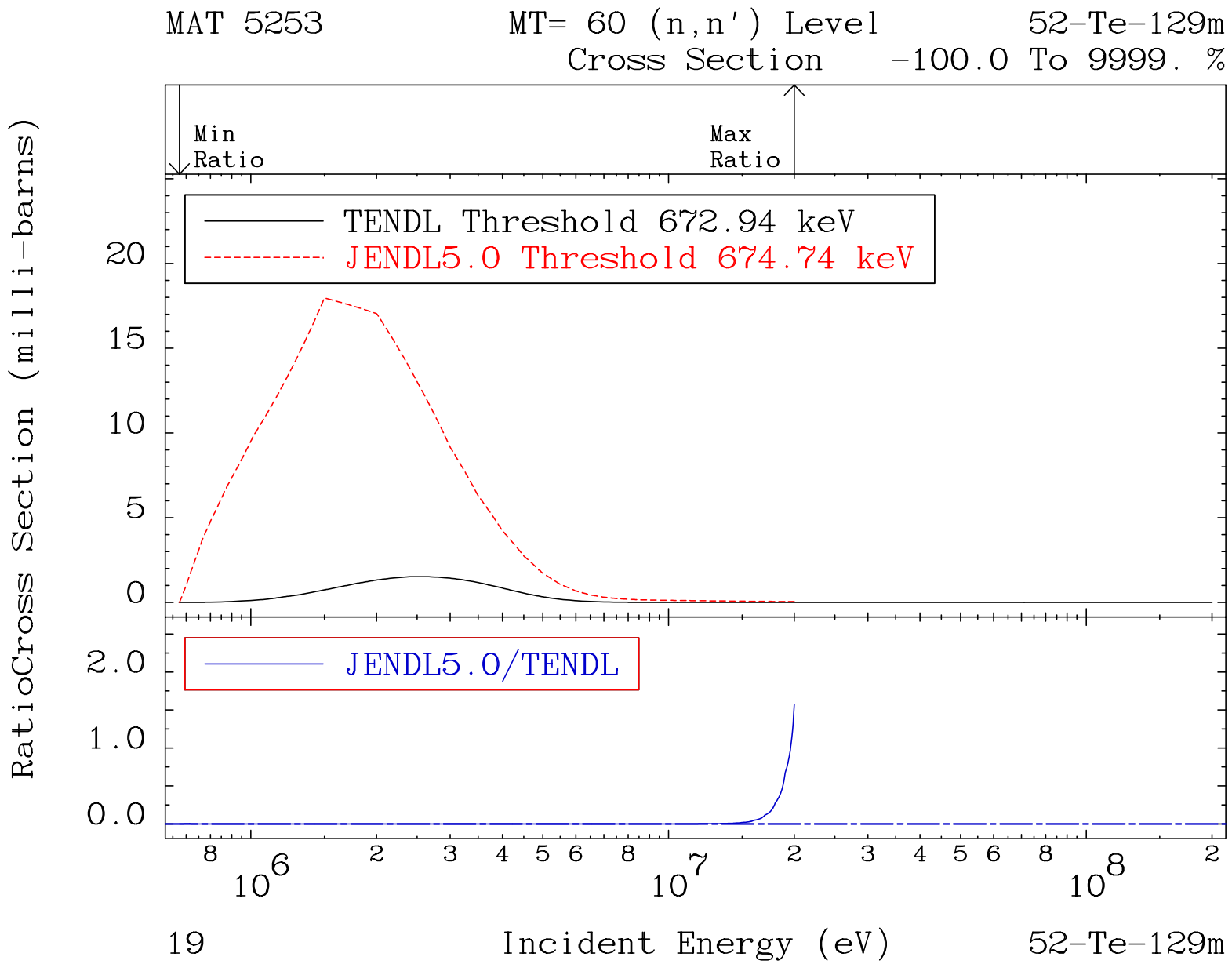

MAT 5253
MT= 55 (n,n') Level
52-Te-129m
Cross Section
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 352.22 keV
JENDL5.0 Threshold 352.22 keV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
14
52-Te-129m

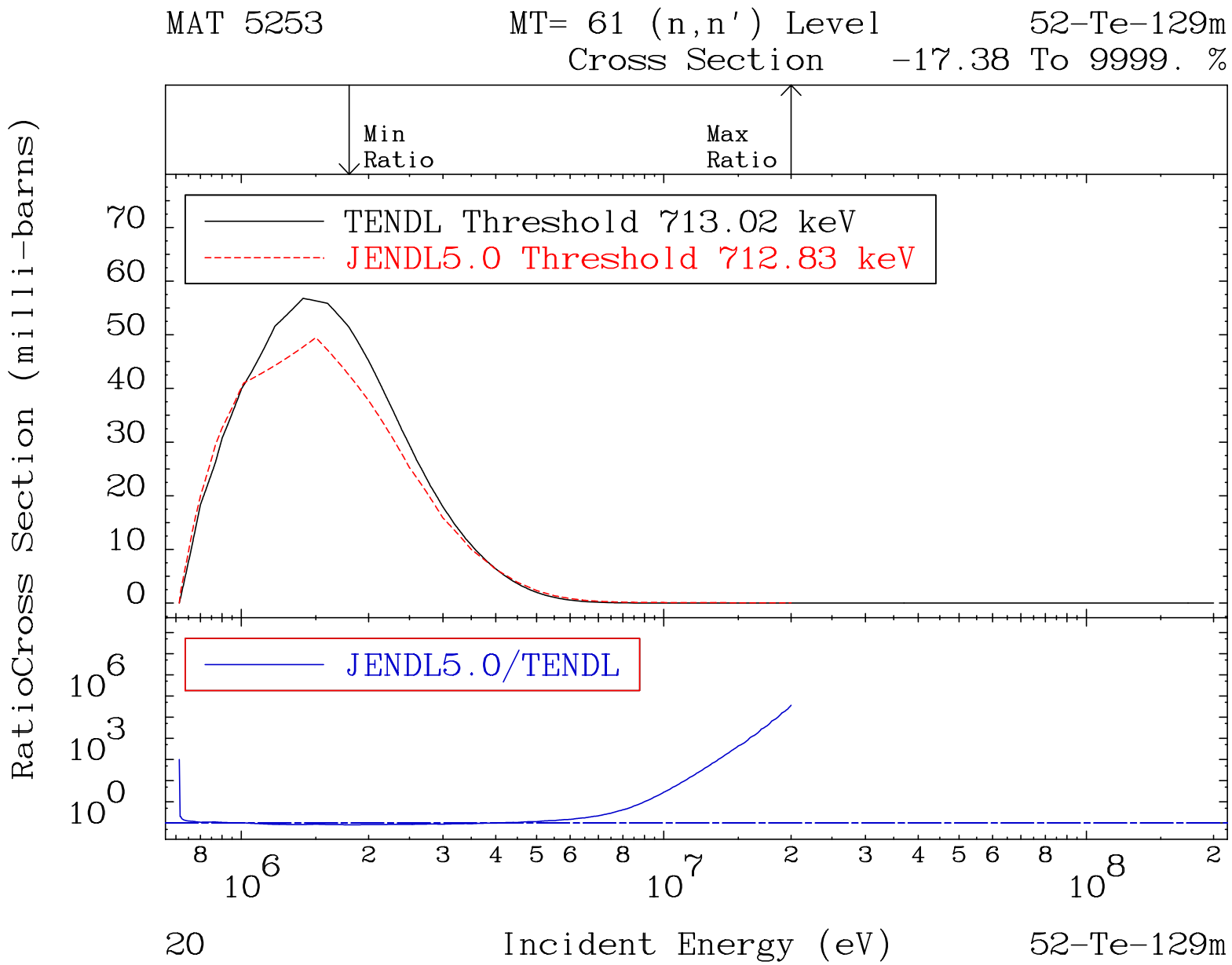

MAT 5253
MT= 56 (n,n') Level
52-Te-129m
Cross Section
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 361.96 keV
JENDL5.0 Threshold 362.21 keV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
300
250
200
150
100
50
0
400
200
0
4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
15
Incident Energy (eV)
52-Te-129m

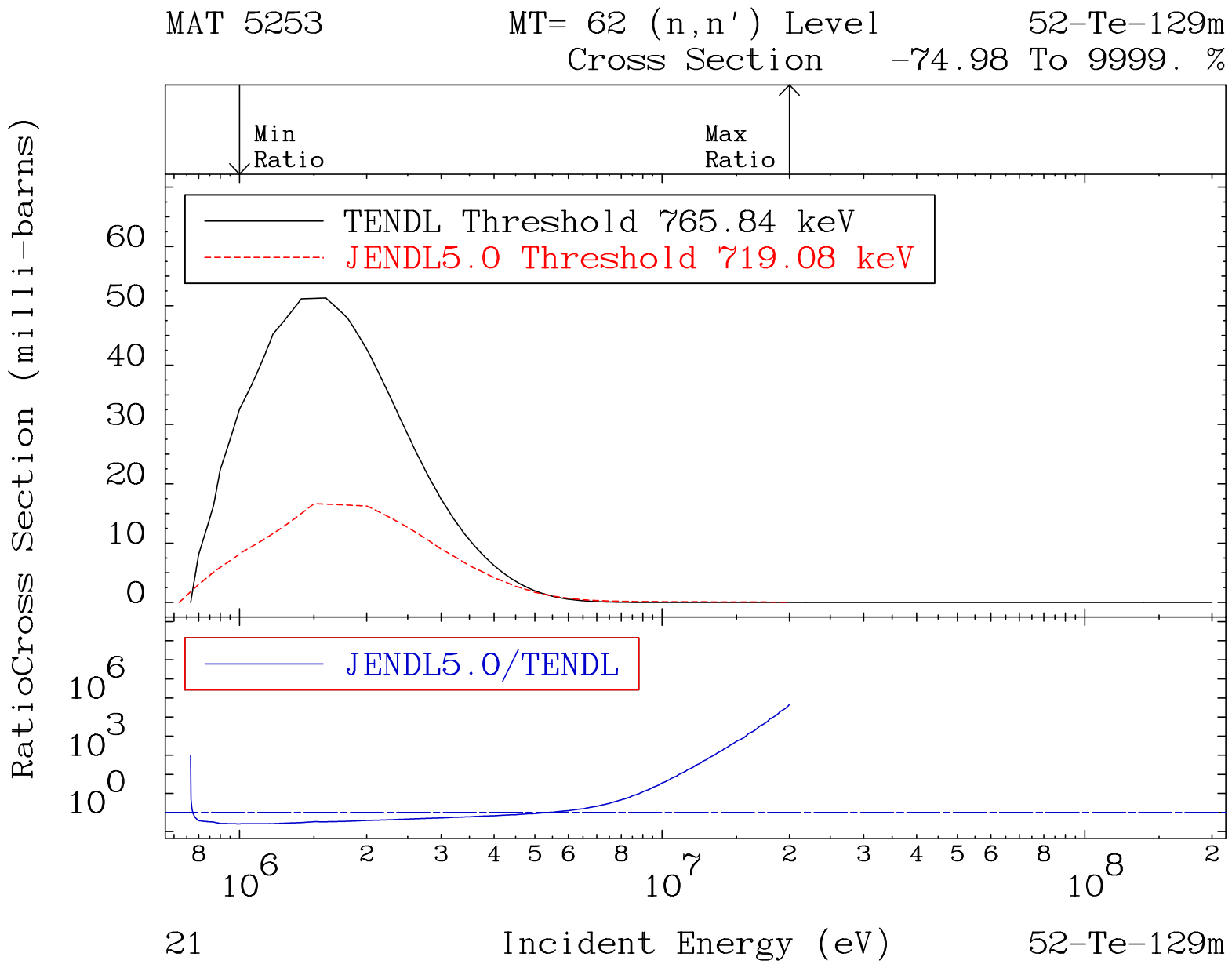

MAT 5253
MT= 57 (n,n') Level
52-Te-129m
Cross Section
-23.37 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 442.51 keV
JENDL5.0 Threshold 442.44 keV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
16
52-Te-129m

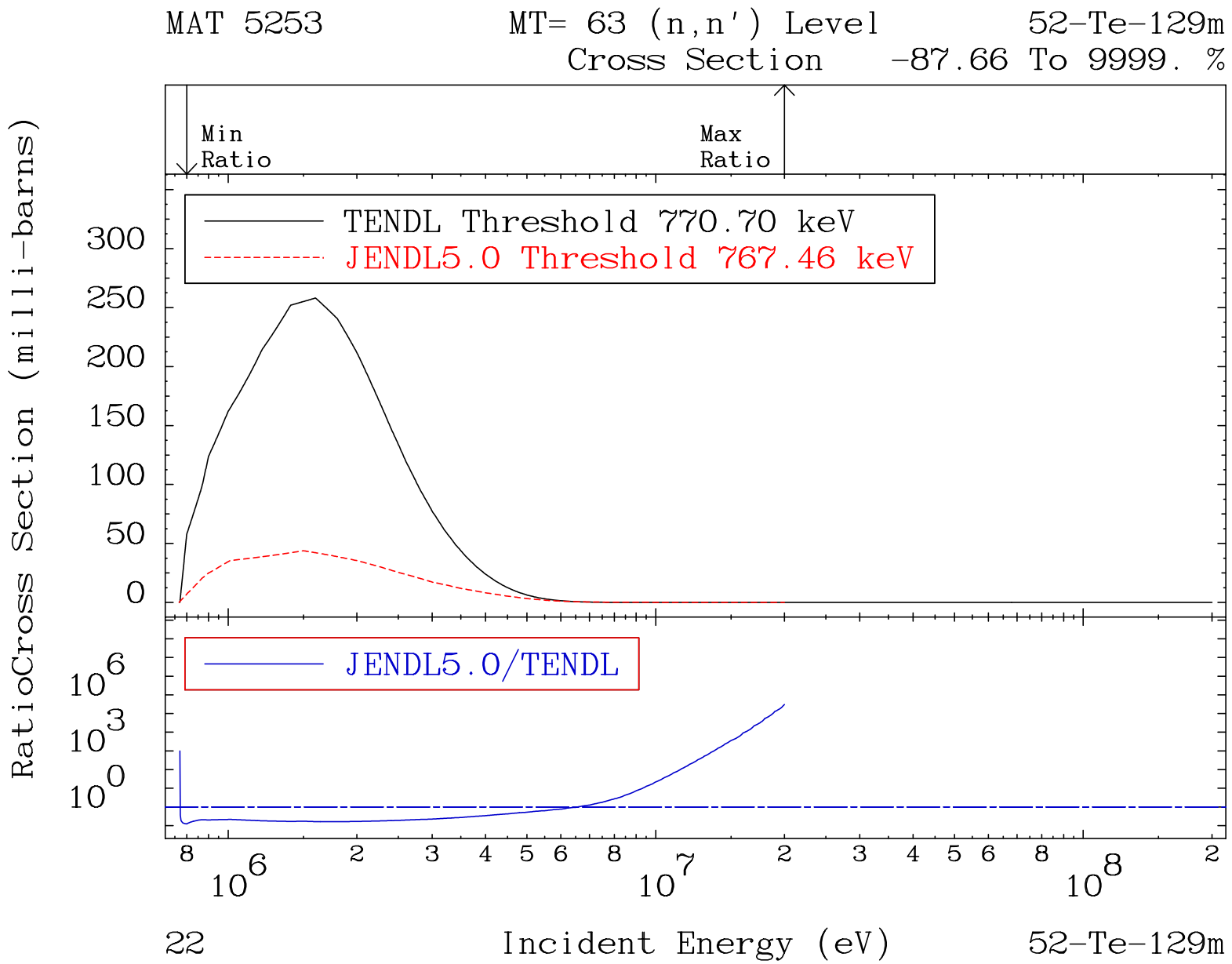

MAT 5253
MT= 58 (n,n') Level
52-Te-129m
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 532.42 keV
JENDL5.0 Threshold 532.54 keV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
30
25
20
15
10
5
0
2.0
1.0
0.0
5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
17
Incident Energy (eV)
52-Te-129m

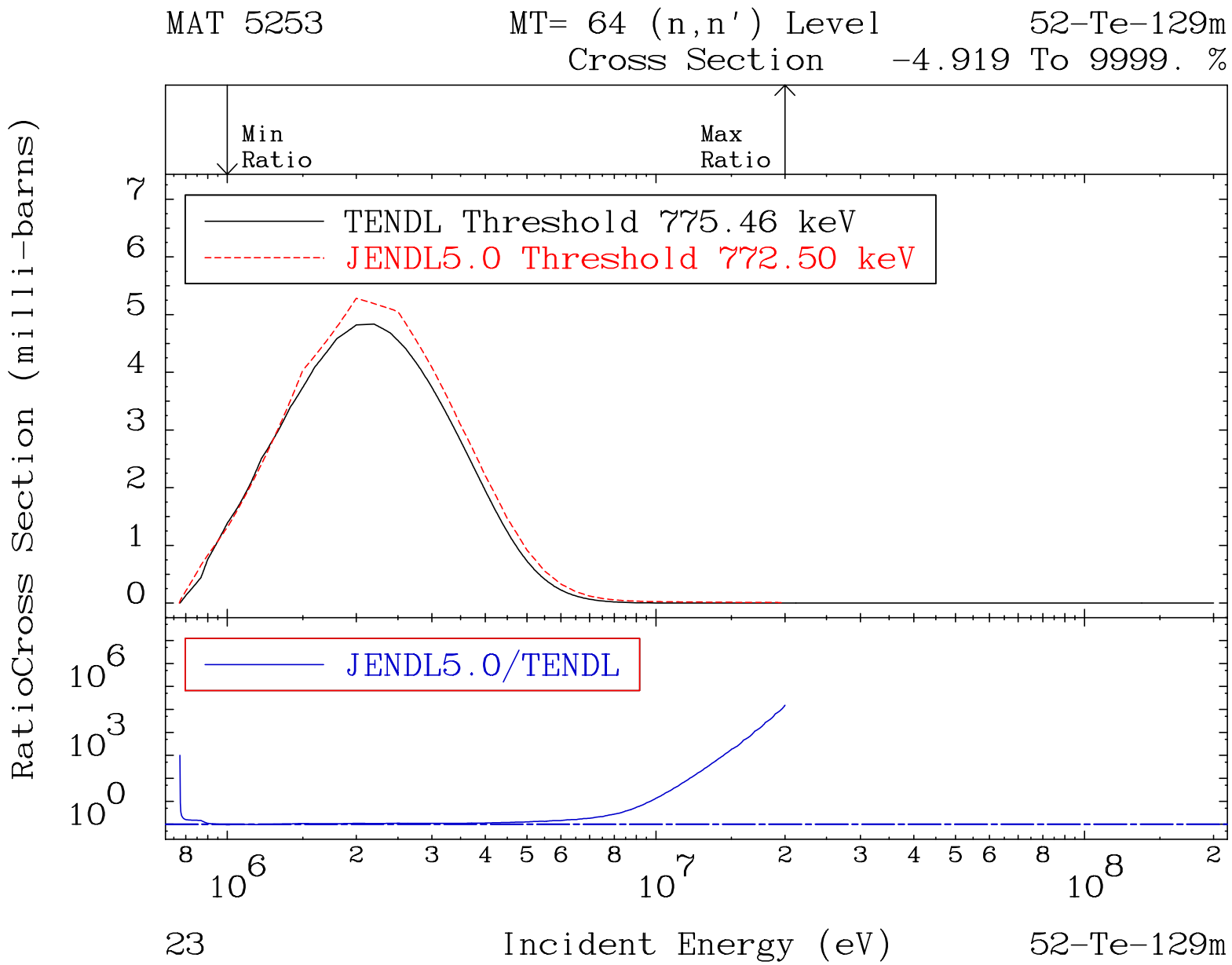

MAT 5253
MT= 59 (n,n') Level
52-Te-129m
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 659.45 keV
JENDL5.0 Threshold 659.62 keV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
1.2
0.6
0.0
8
10^6
2
3
4
5
6
8
10^7
2
3
4
5
6
8
10^8
2
18
Incident Energy (eV)
52-Te-129m

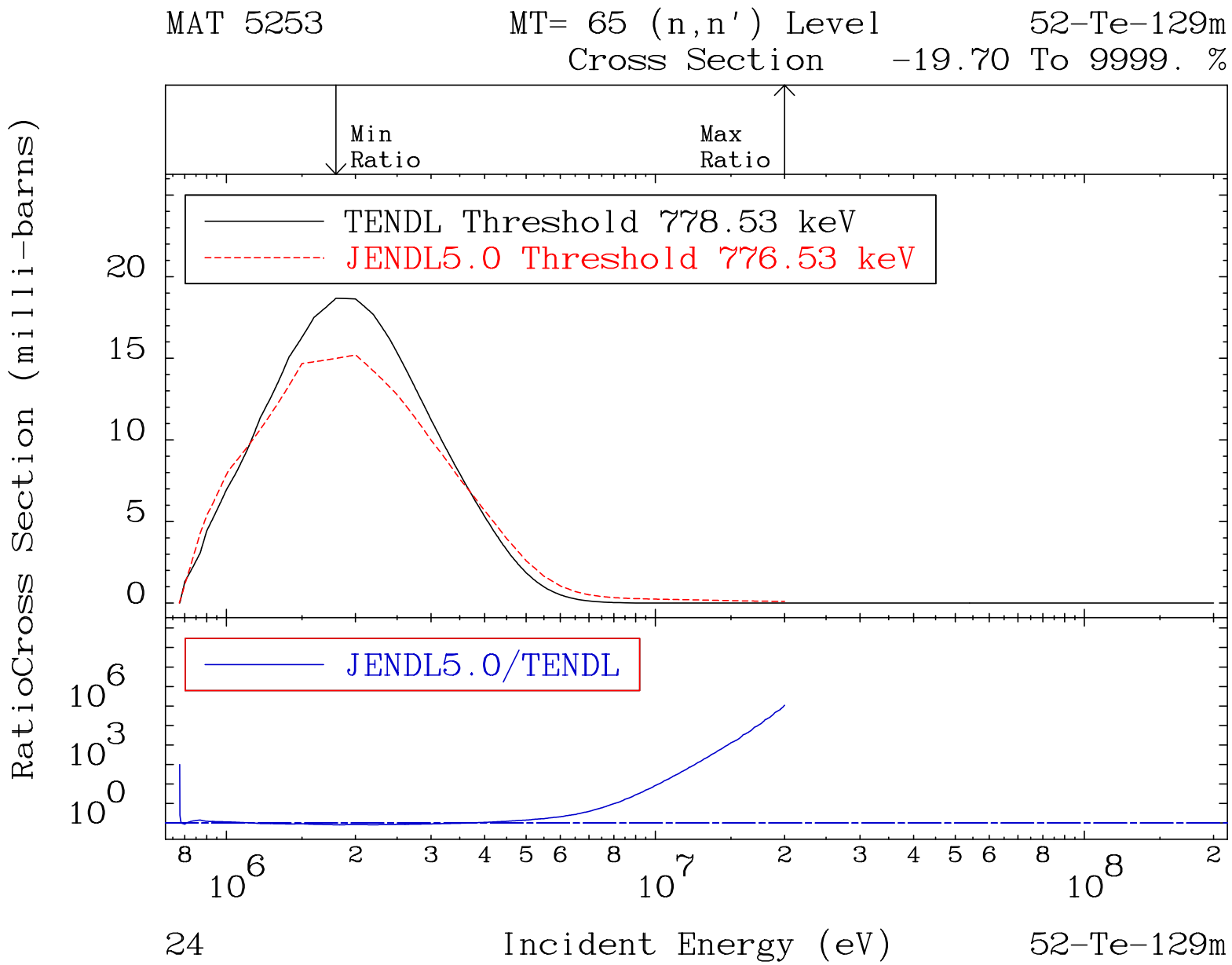

MAT 5253
MT= 60 (n,n') Level
52-Te-129m
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 672.94 keV
JENDL5.0 Threshold 674.74 keV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
20
15
10
5
0
2.0
1.0
0.0
8
10^6
2
3
4
5
6
8
10^7
2
3
4
5
6
8
10^8
2
19
Incident Energy (eV)
52-Te-129m

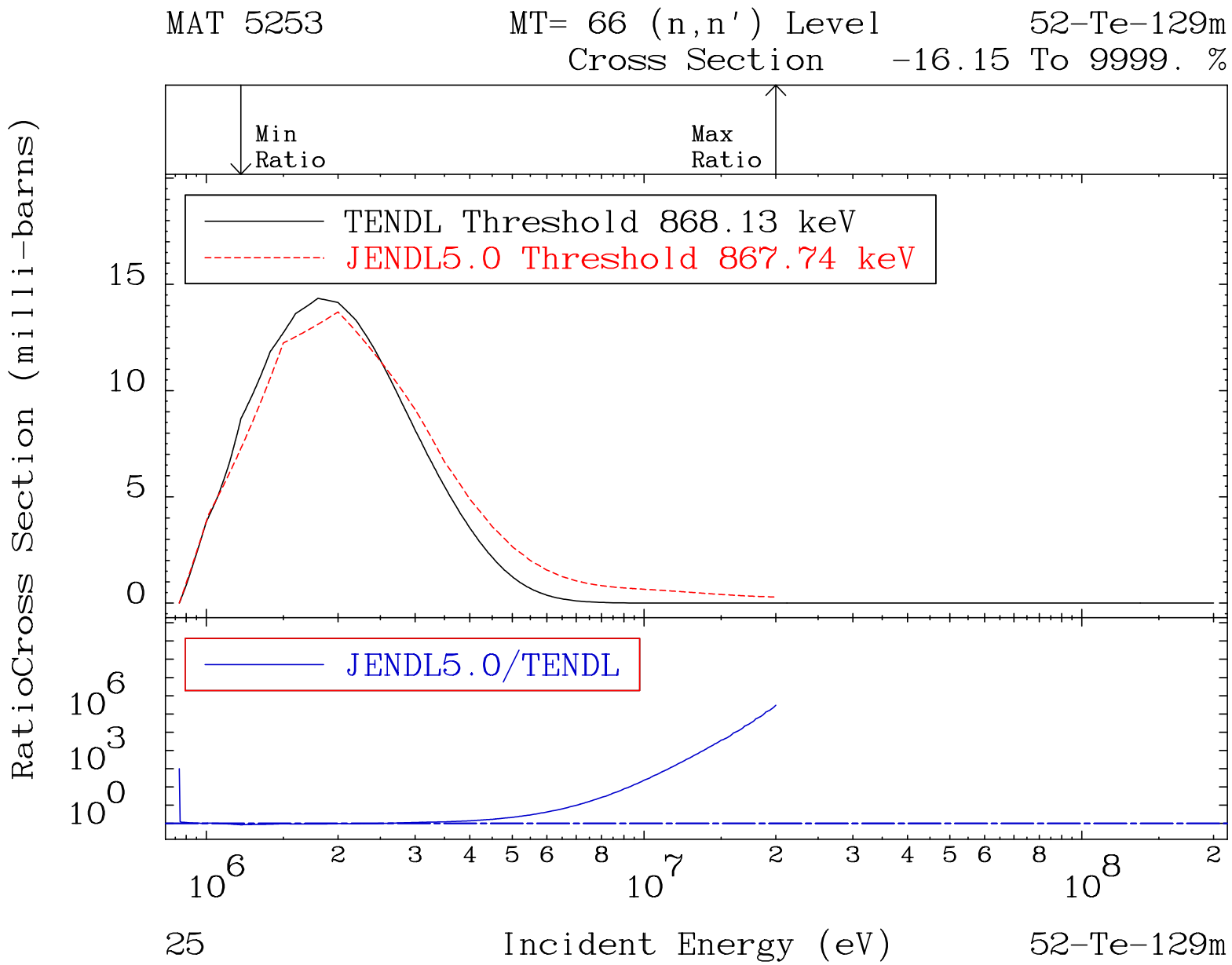

MAT 5253
MT= 61 (n,n') Level
52-Te-129m
Cross Section -17.38 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 713.02 keV
JENDL5.0 Threshold 712.83 keV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
20
52-Te-129m

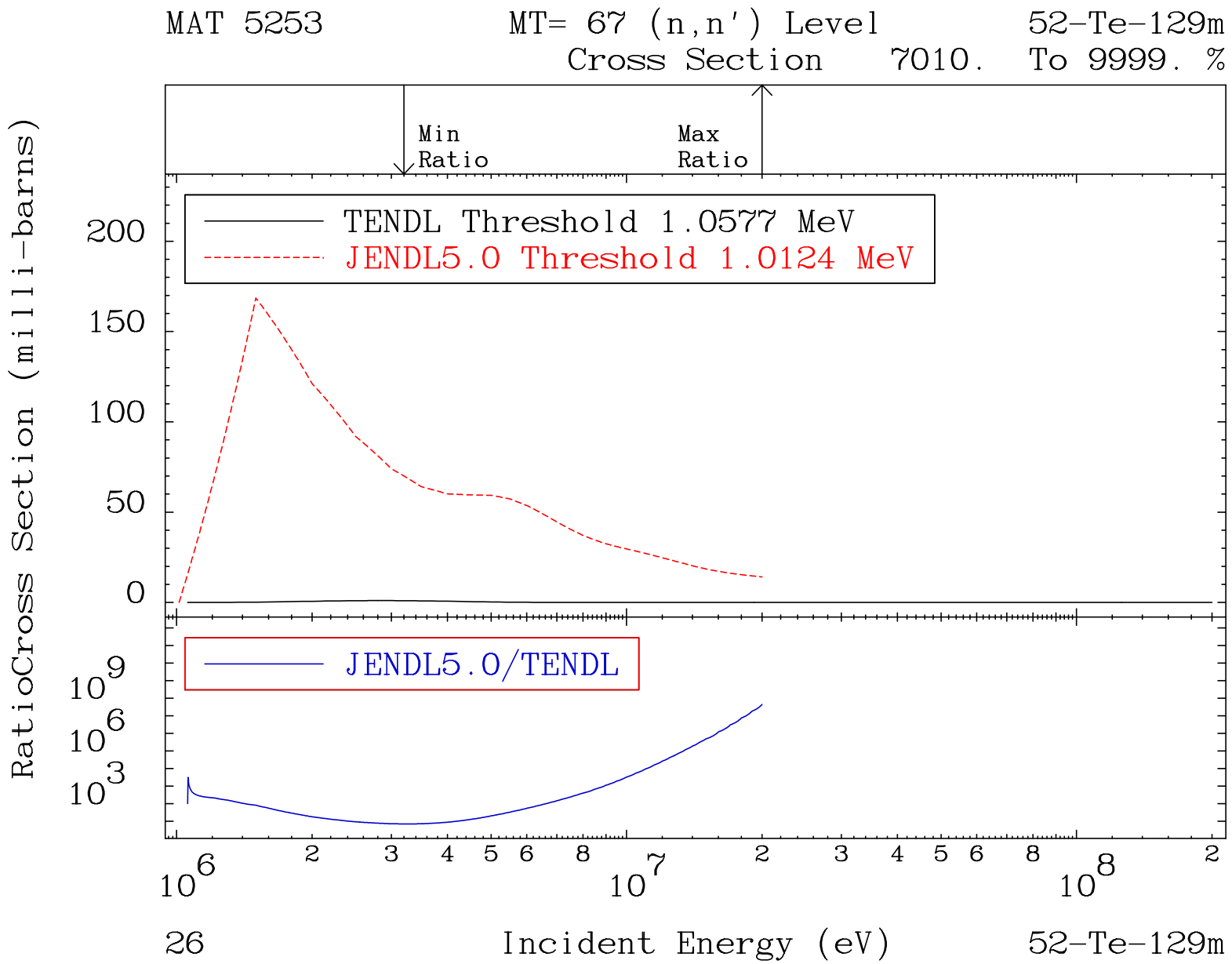

MAT 5253
MT= 62 (n,n') Level
52-Te-129m
Cross Section -74.98 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 765.84 keV
JENDL5.0 Threshold 719.08 keV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
21
52-Te-129m

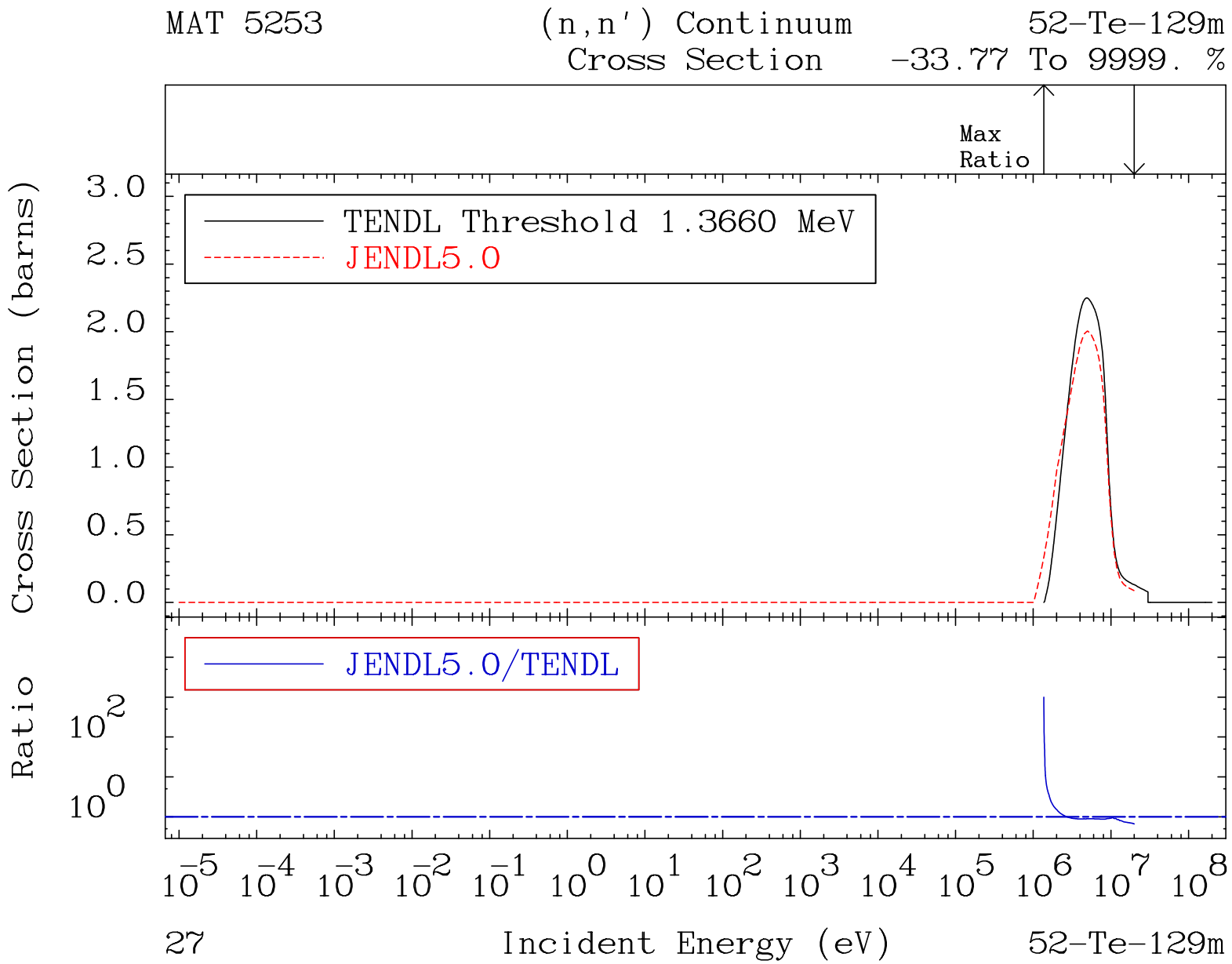

MAT 5253
MT= 63 (n,n') Level
52-Te-129m
Cross Section -87.66 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 770.70 keV
JENDL5.0 Threshold 767.46 keV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
300
250
200
150
100
50
0
10^6
10^3
10^0
8
2
3
4
5
6
8
10^6
10^7
10^8
22
Incident Energy (eV)
52-Te-129m

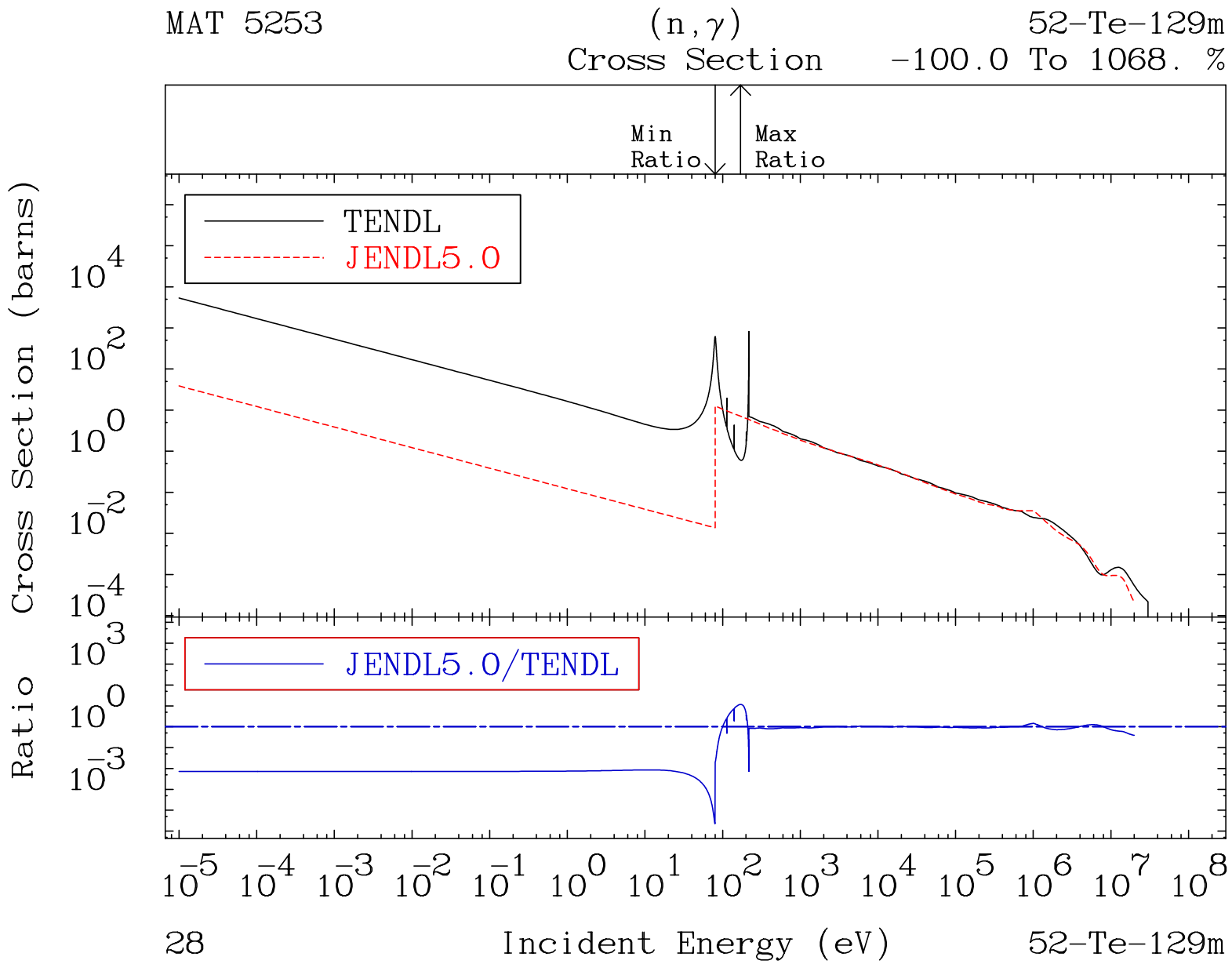

MAT 5253
MT= 64 (n,n') Level
52-Te-129m
Cross Section -4.919 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 775.46 keV
JENDL5.0 Threshold 772.50 keV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
23
52-Te-129m

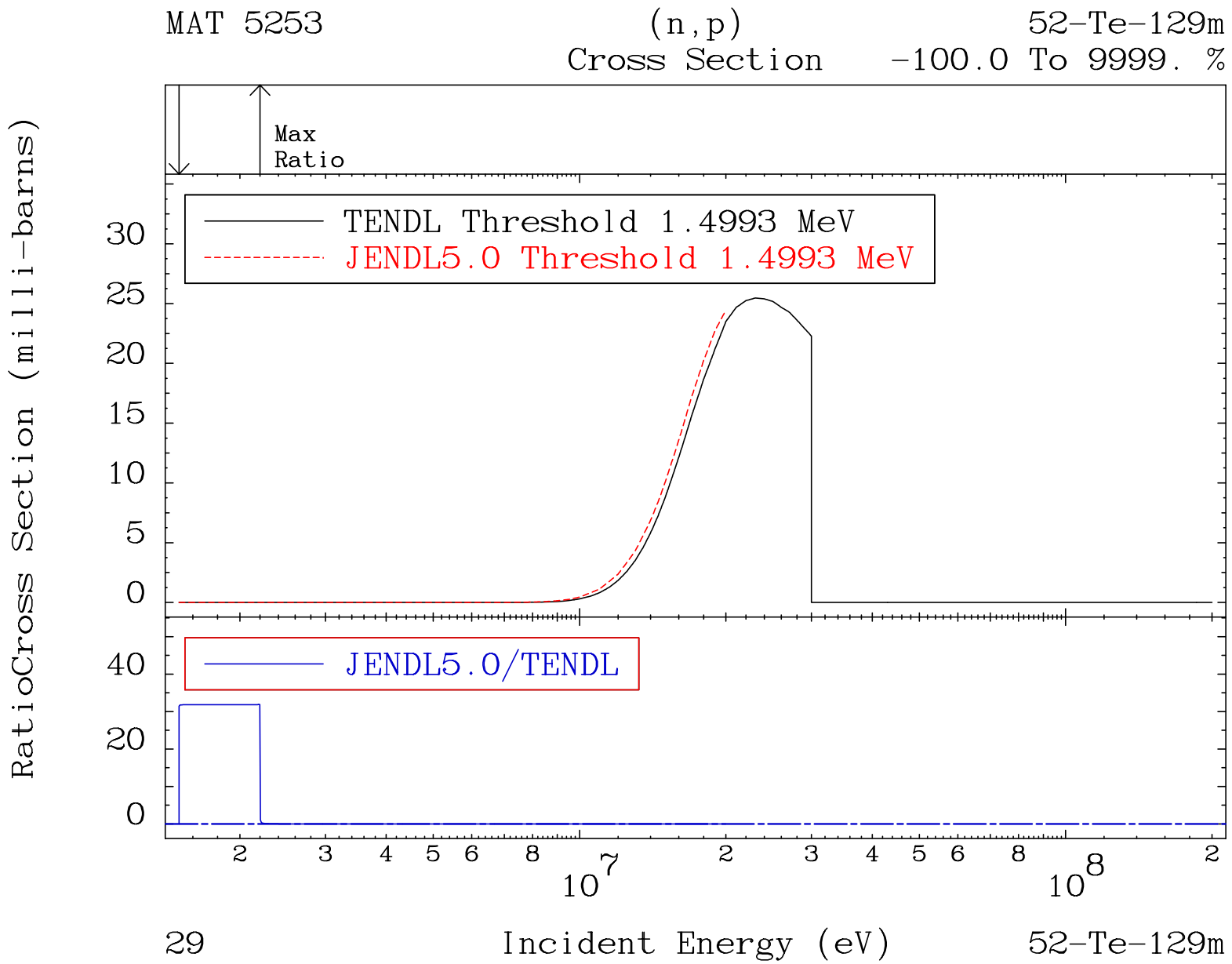

MAT 5253
MT= 65 (n,n') Level
52-Te-129m
Cross Section -19.70 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 778.53 keV
JENDL5.0 Threshold 776.53 keV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
24
52-Te-129m

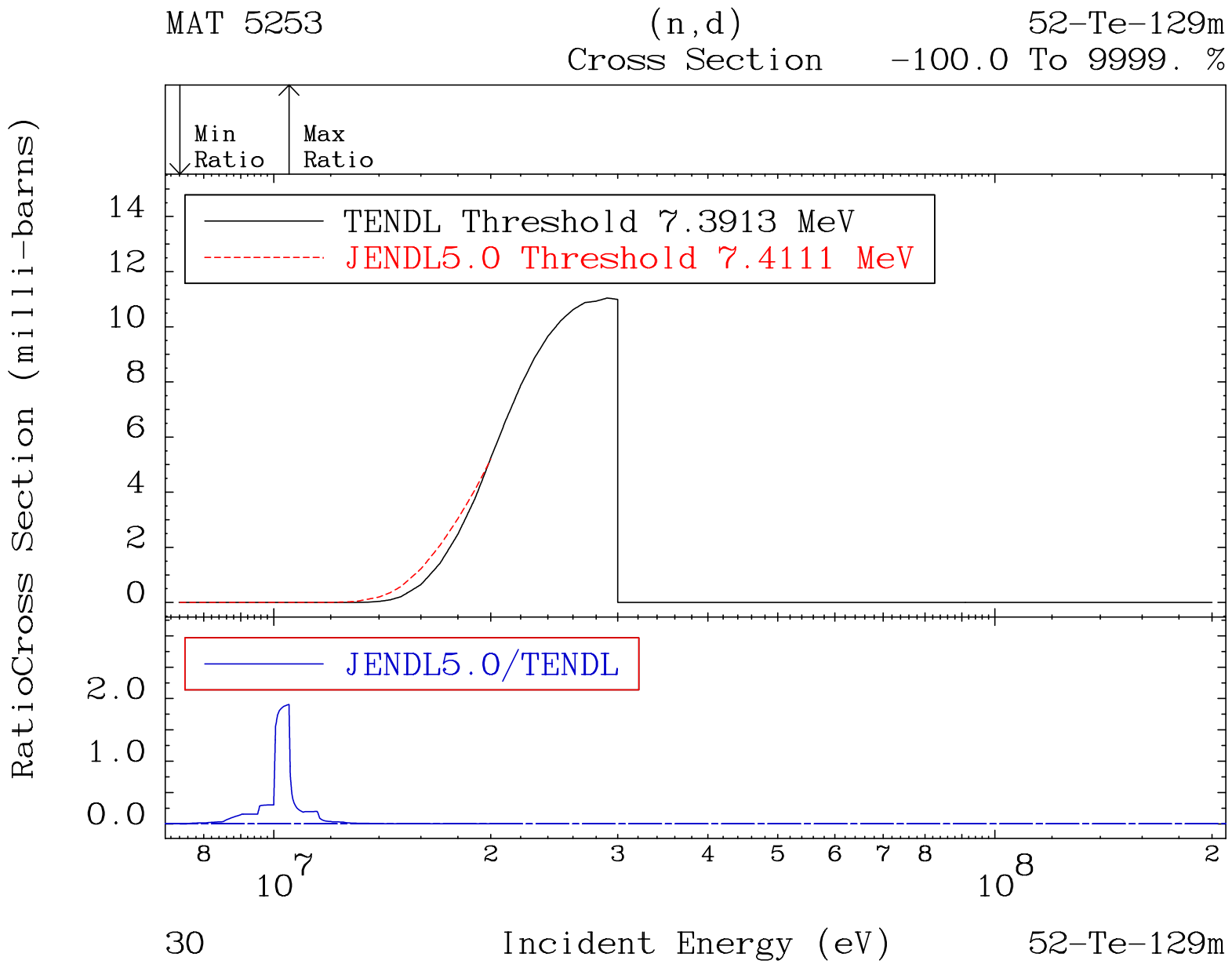

MAT 5253
MT= 66 (n,n') Level
52-Te-129m
Cross Section -16.15 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 868.13 keV
JENDL5.0 Threshold 867.74 keV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
15
10
5
0
10^6
10^3
10^0
2 3 4 5 6 8
10^6
10^7
10^8
25
Incident Energy (eV)
52-Te-129m

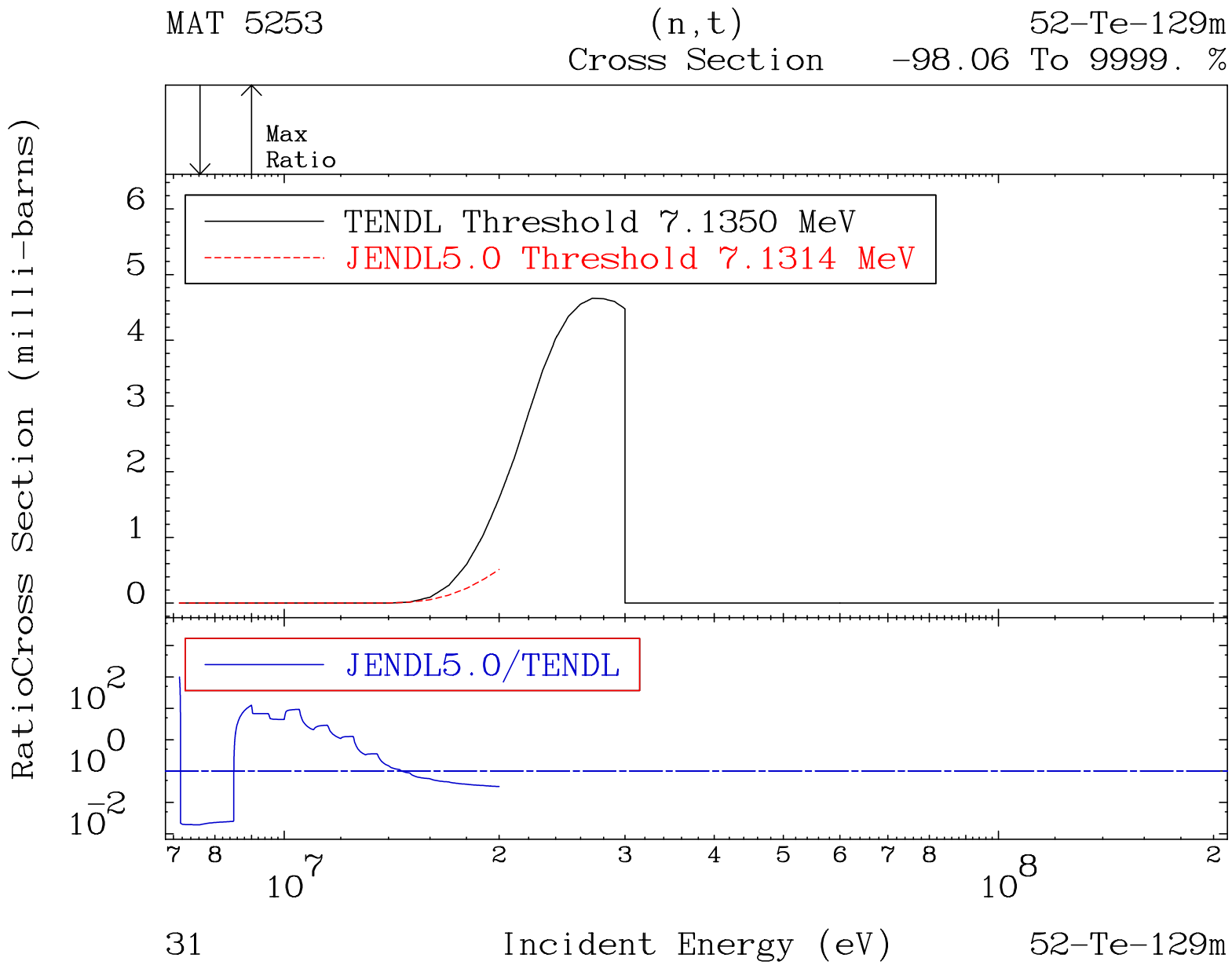

MAT 5253
MT= 67 (n,n') Level
52-Te-129m
Cross Section 7010. To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 1.0577 MeV
JENDL5.0 Threshold 1.0124 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
200
150
100
50
0
10^9
10^6
10^3
10^6
2 3 4 5 6 8
10^7
2 3 4 5 6 8
10^8
2
26
Incident Energy (eV)
52-Te-129m

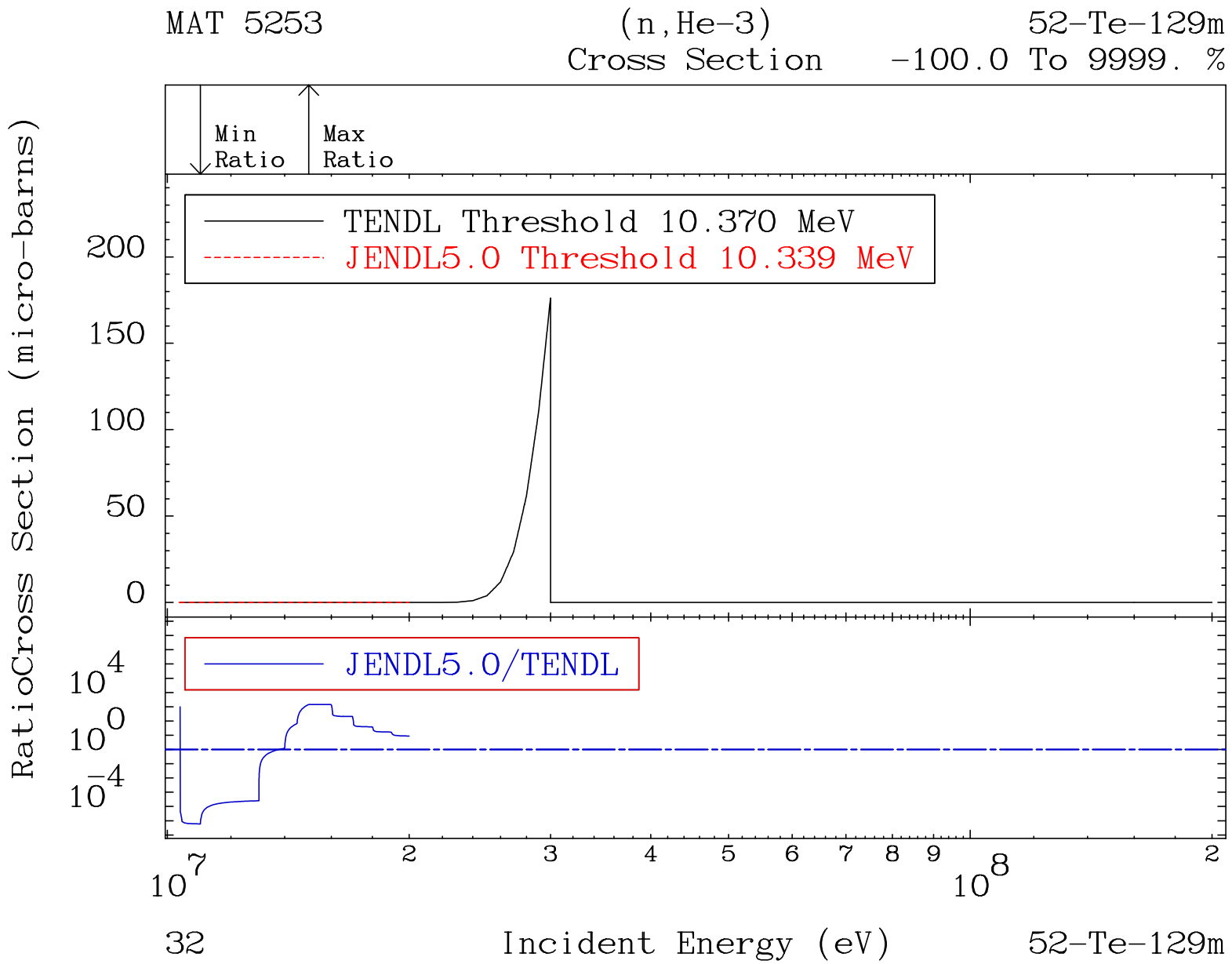

MAT 5253
(n,n') Continuum
Cross Section
52-Te-129m
-33.77 To 9999. %
Max
Ratio
TENDL Threshold 1.3660 MeV
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
3.0
2.5
2.0
1.5
1.0
0.5
0.0
10^2
10^0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
27
Incident Energy (eV)
52-Te-129m

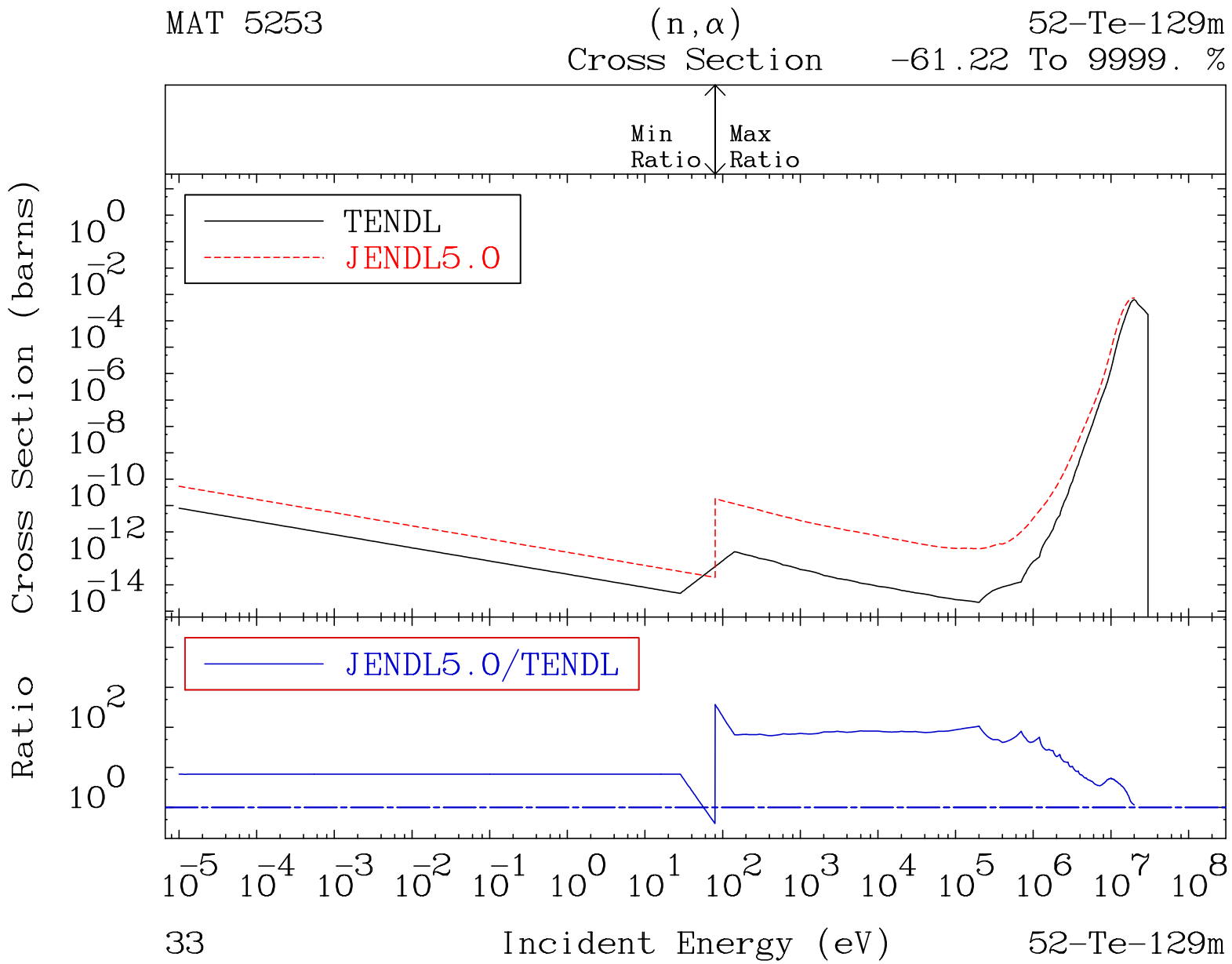

MAT 5253
(n,γ)
Cross Section
52-Te-129m
-100.0 To 1068. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
28
52-Te-129m

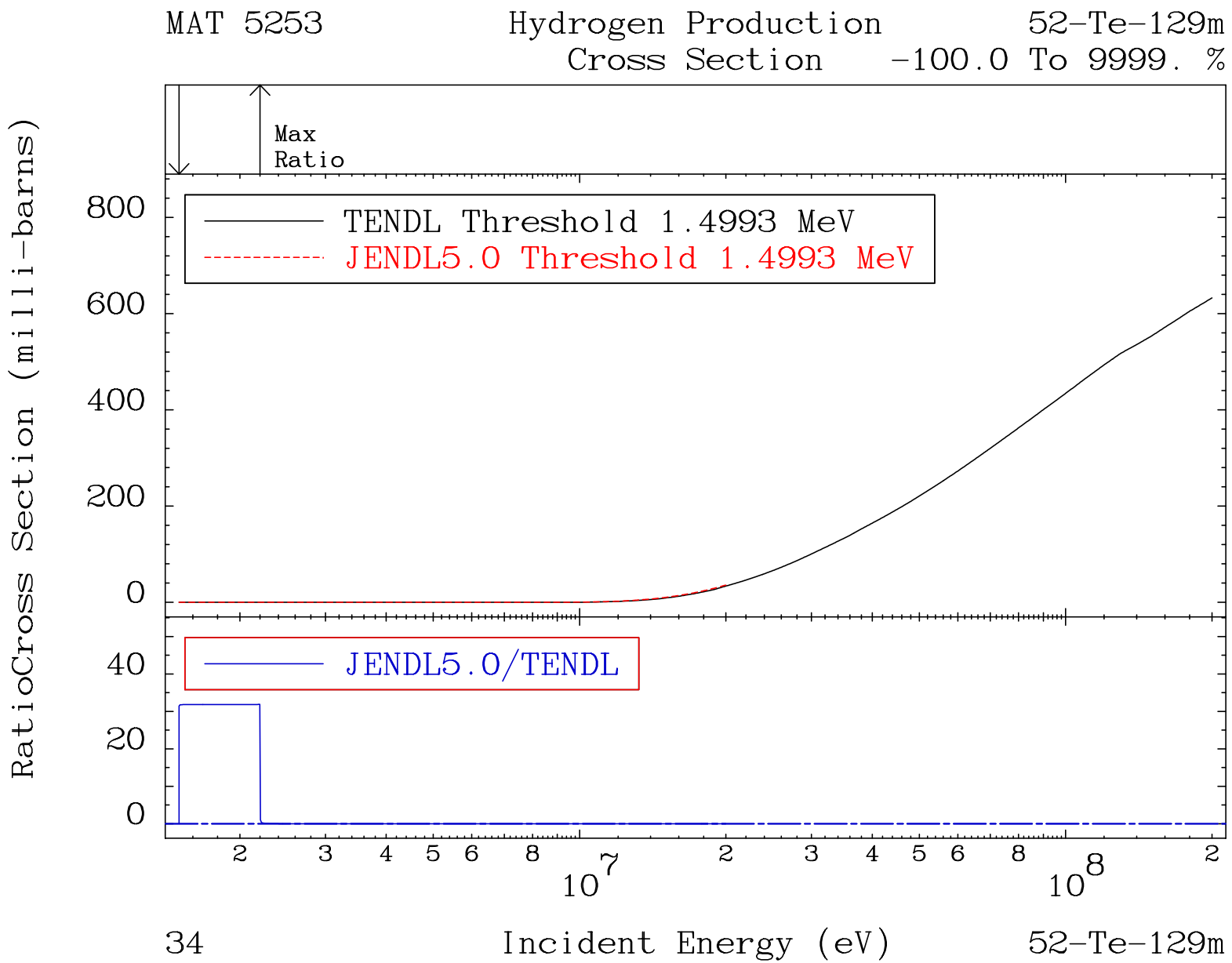

MAT 5253
(n,p)
52-Te-129m
Cross Section
-100.0 To 9999. %
Max
Ratio
TENDL Threshold 1.4993 MeV
JENDL5.0 Threshold 1.4993 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
30
25
20
15
10
5
0
40
20
0
2
3
4
5
6
8
10^7
2
3
4
5
6
8
10^8
2
29
Incident Energy (eV)
52-Te-129m

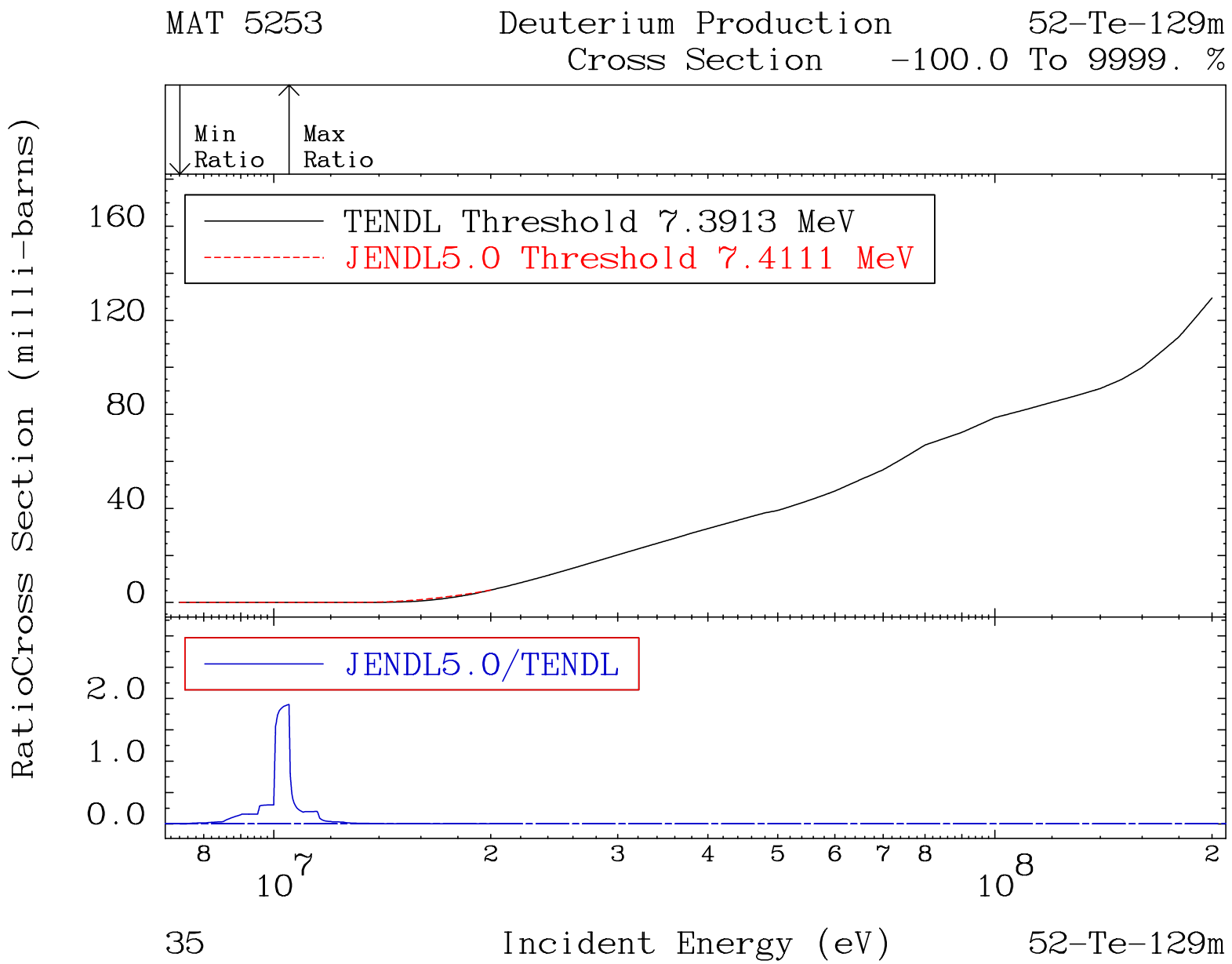

MAT 5253
(n,d)
Cross Section
52-Te-129m
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 7.3913 MeV
JENDL5.0 Threshold 7.4111 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
14
12
10
8
6
4
2
0
2.0
1.0
0.0
8
10^7
2
3
4
5
6
7
8
10^8
2
30
Incident Energy (eV)
52-Te-129m

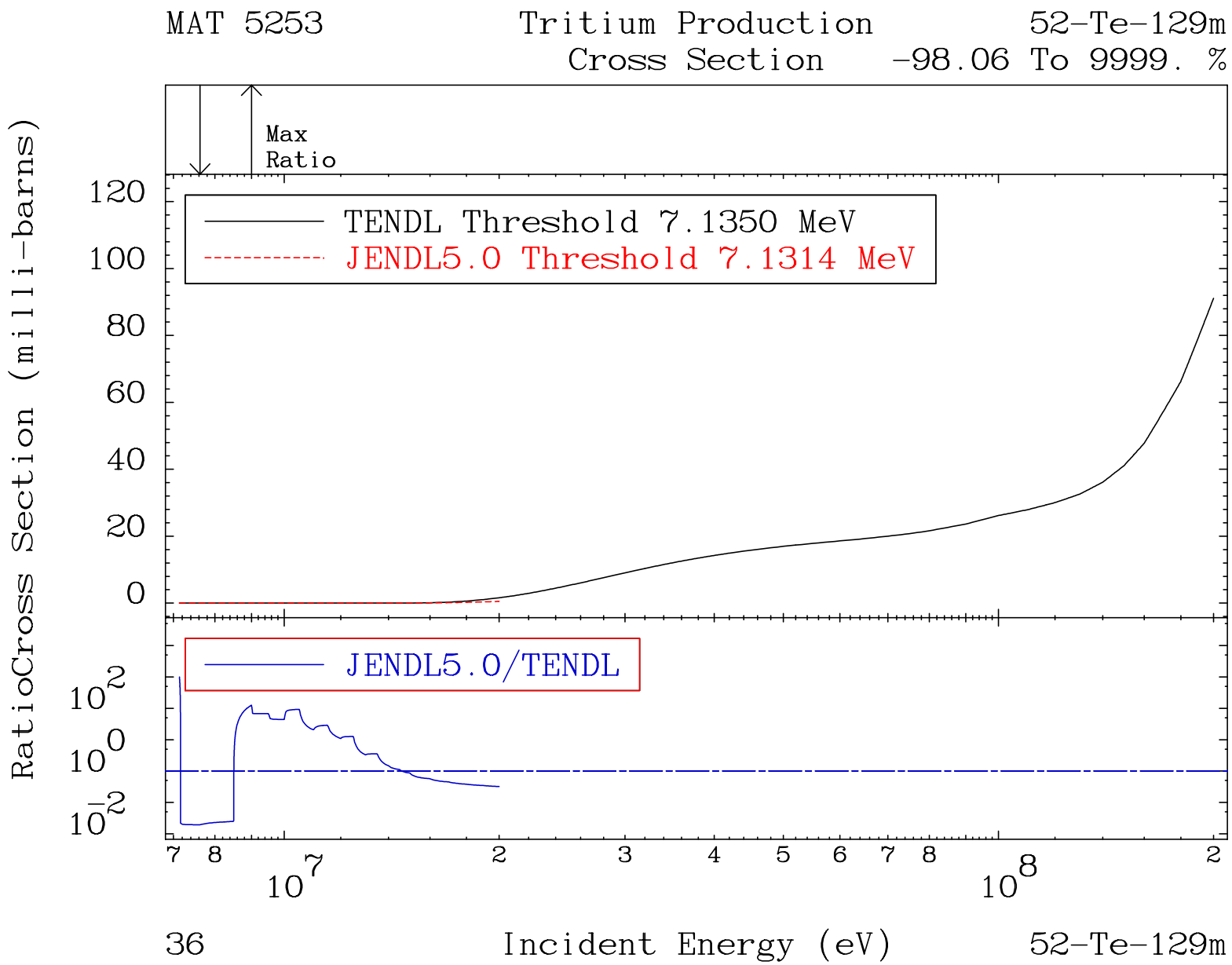

MAT 5253
(n,t)
52-Te-129m
Cross Section
-98.06 To 9999. %
Max
Ratio
TENDL Threshold 7.1350 MeV
JENDL5.0 Threshold 7.1314 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
31
52-Te-129m

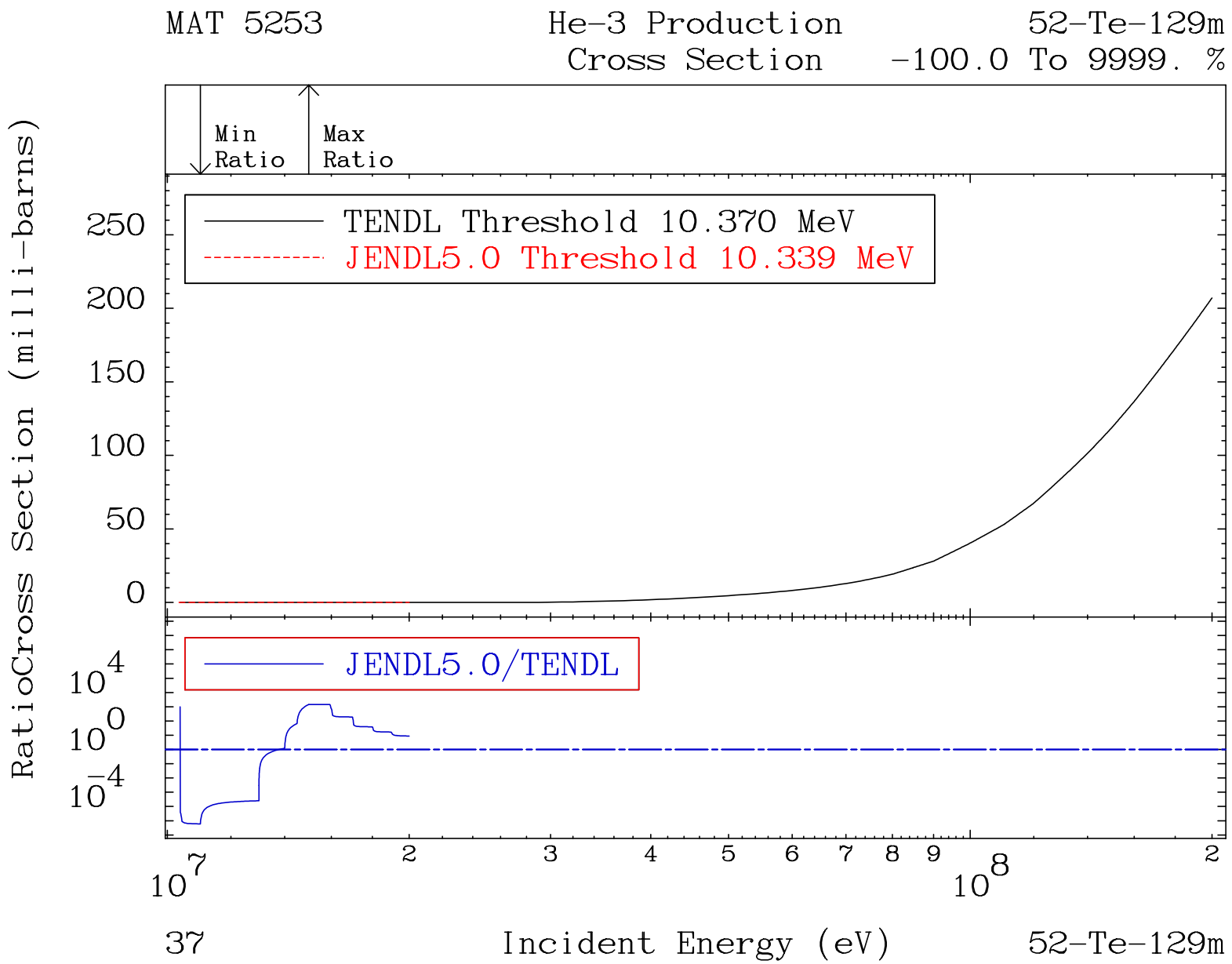

MAT 5253
(n,He-3)
Cross Section
52-Te-129m
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 10.370 MeV
JENDL5.0 Threshold 10.339 MeV
JENDL5.0/TENDL
RatioCross Section (micro-barns)
200
150
100
50
0
10^4
10^0
10^-4
10^7
2
3
4
5
6
7
8
9
10^8
2
32
Incident Energy (eV)
52-Te-129m

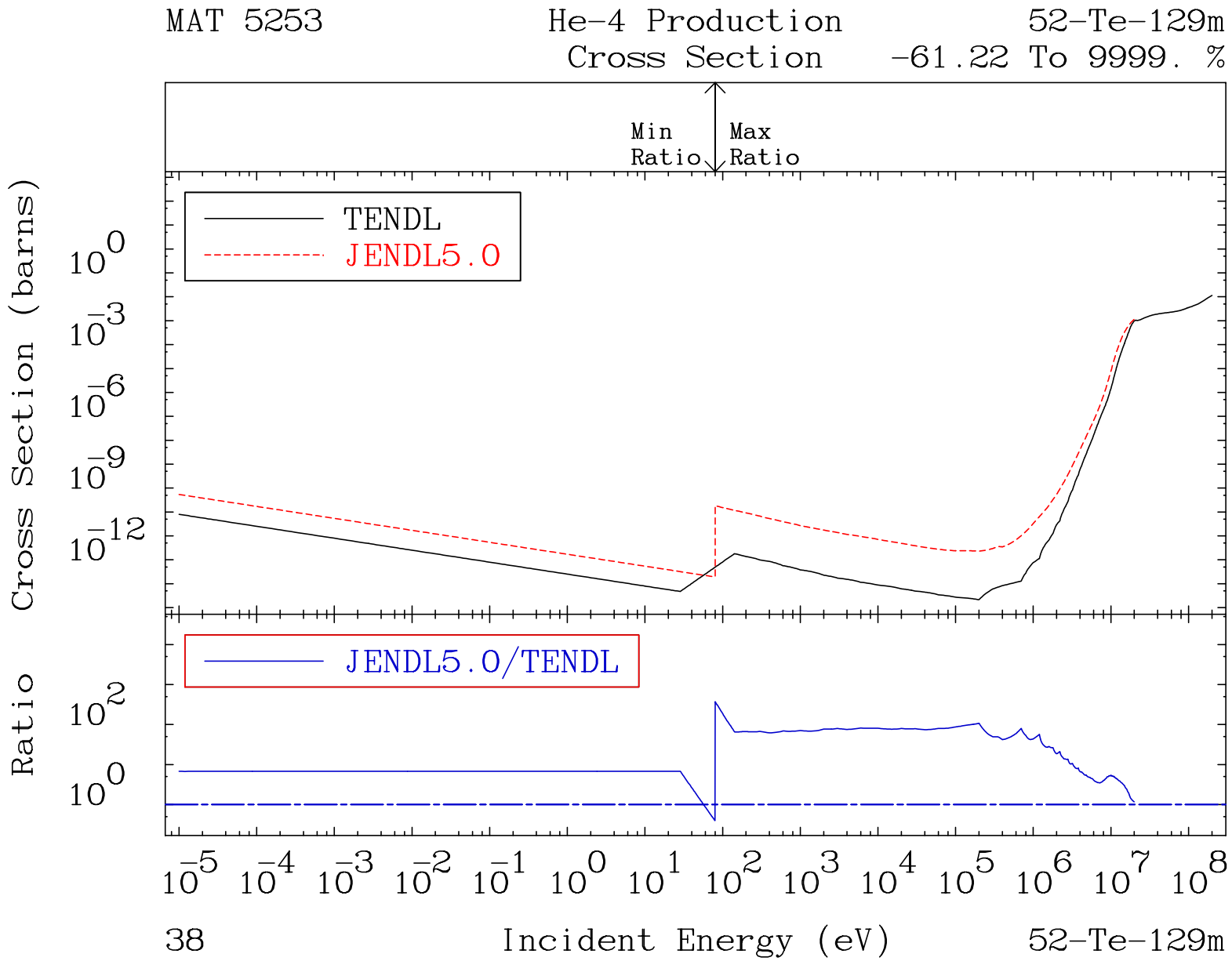

MAT 5253
(n,α)
Cross Section
52-Te-129m
-61.22 To 9999. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
33
52-Te-129m

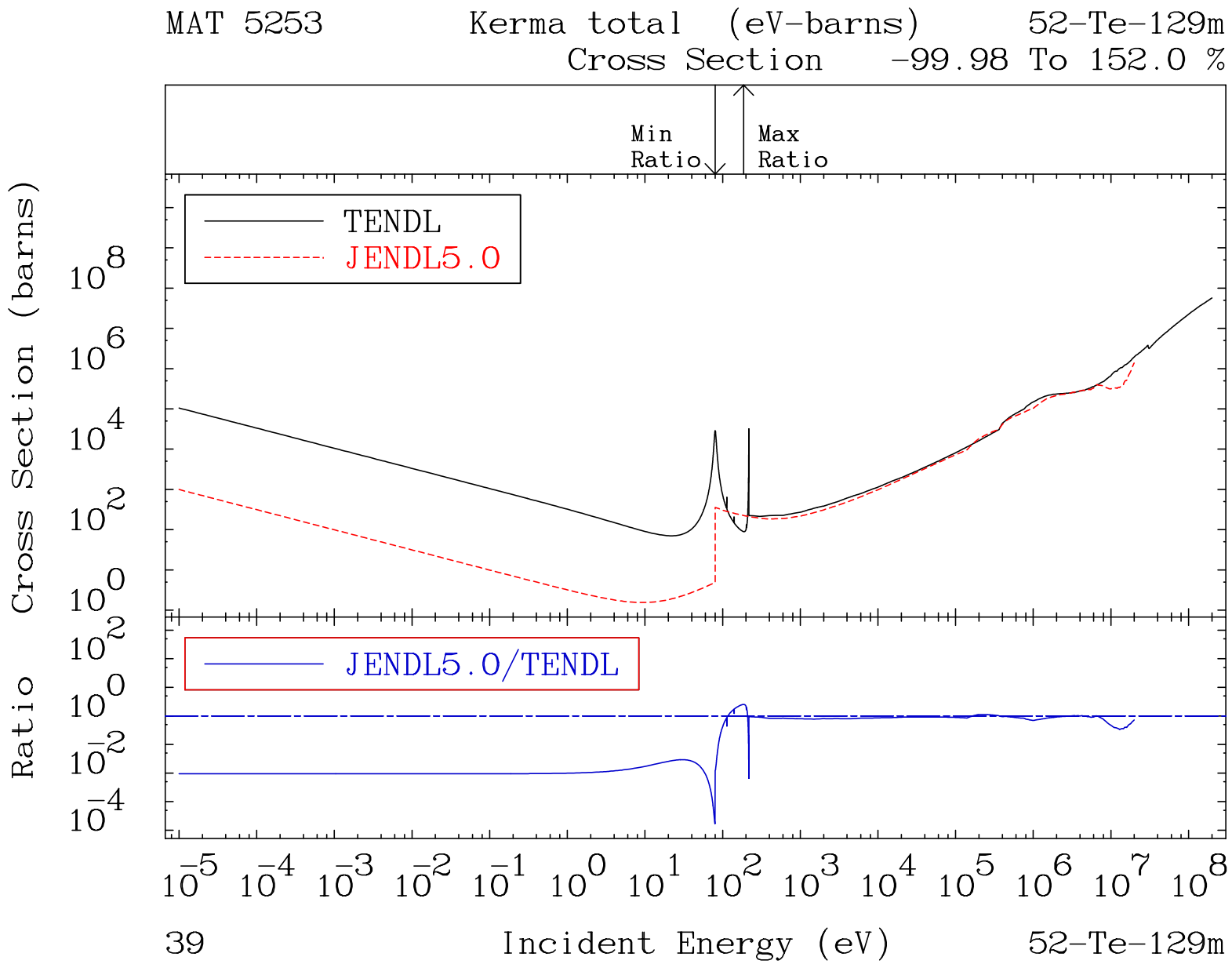

MAT 5253
Hydrogen Production
52-Te-129m
Cross Section -100.0 To 9999. %
Max
Ratio
TENDL Threshold 1.4993 MeV
JENDL5.0 Threshold 1.4993 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
800
600
400
200
0
40
20
0
2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
34
Incident Energy (eV)
52-Te-129m

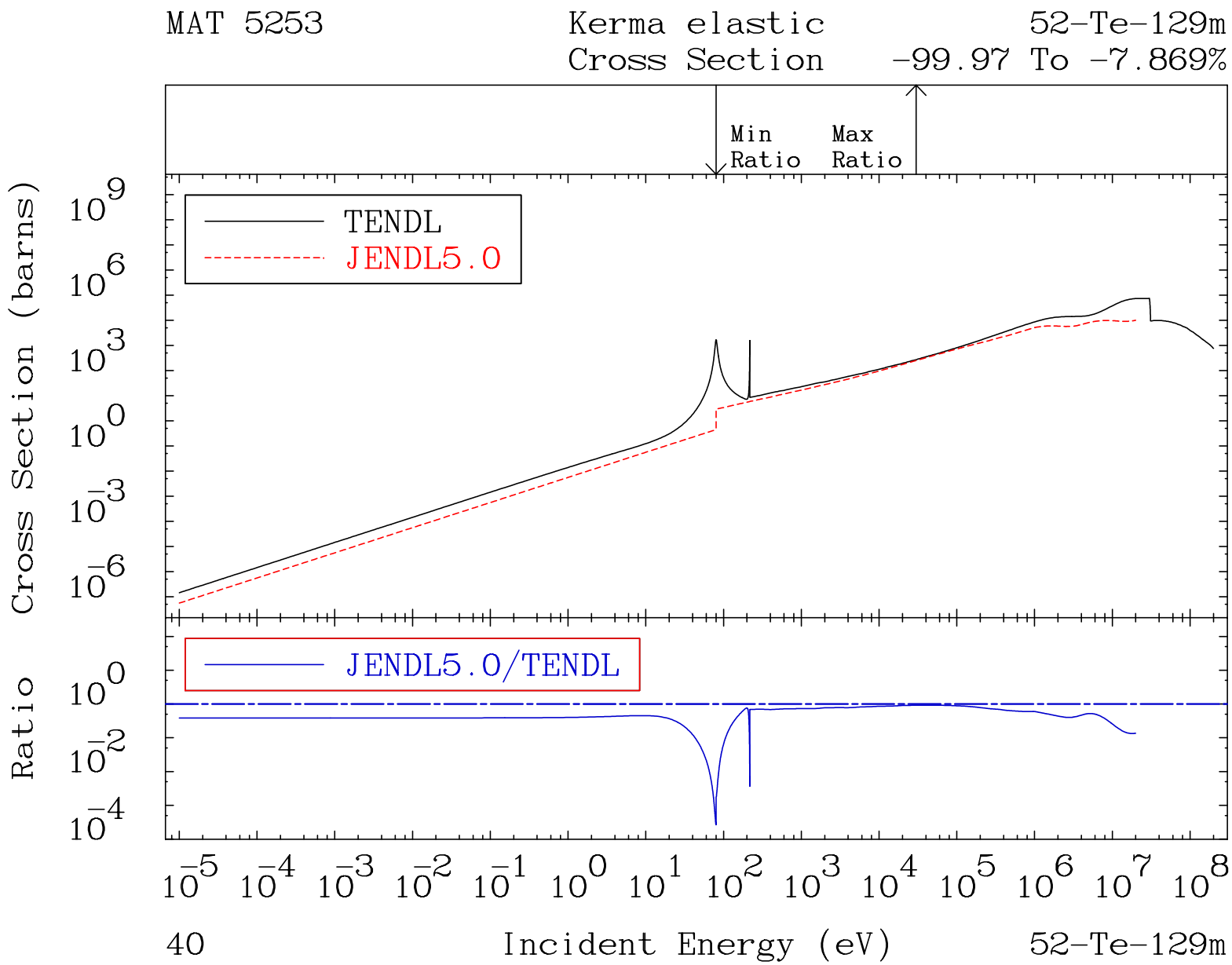

MAT 5253
Deuterium Production
52-Te-129m
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 7.3913 MeV
JENDL5.0 Threshold 7.4111 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
160
120
80
40
0
2.0
1.0
0.0
8
10^7
2
3
4
5
6
7
8
10^8
2
35
Incident Energy (eV)
52-Te-129m

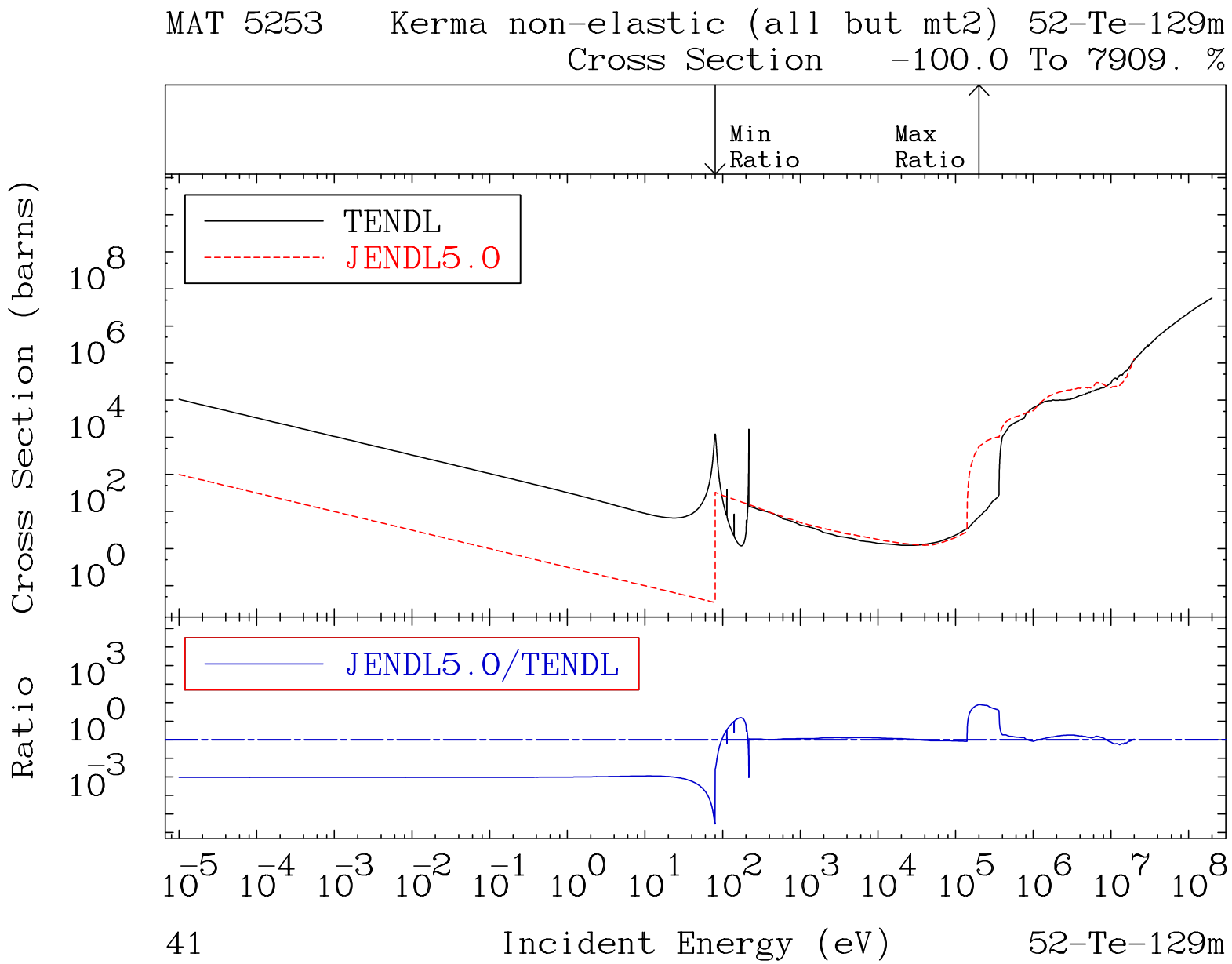

MAT 5253
Tritium Production
Cross Section
52-Te-129m
-98.06 To 9999. %
Max
Ratio
TENDL Threshold 7.1350 MeV
JENDL5.0 Threshold 7.1314 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
120
100
80
60
40
20
0
10^2
10^0
10^-2
7 8 10^7 2 3 4 5 6 7 8 10^8 2
36
Incident Energy (eV)
52-Te-129m

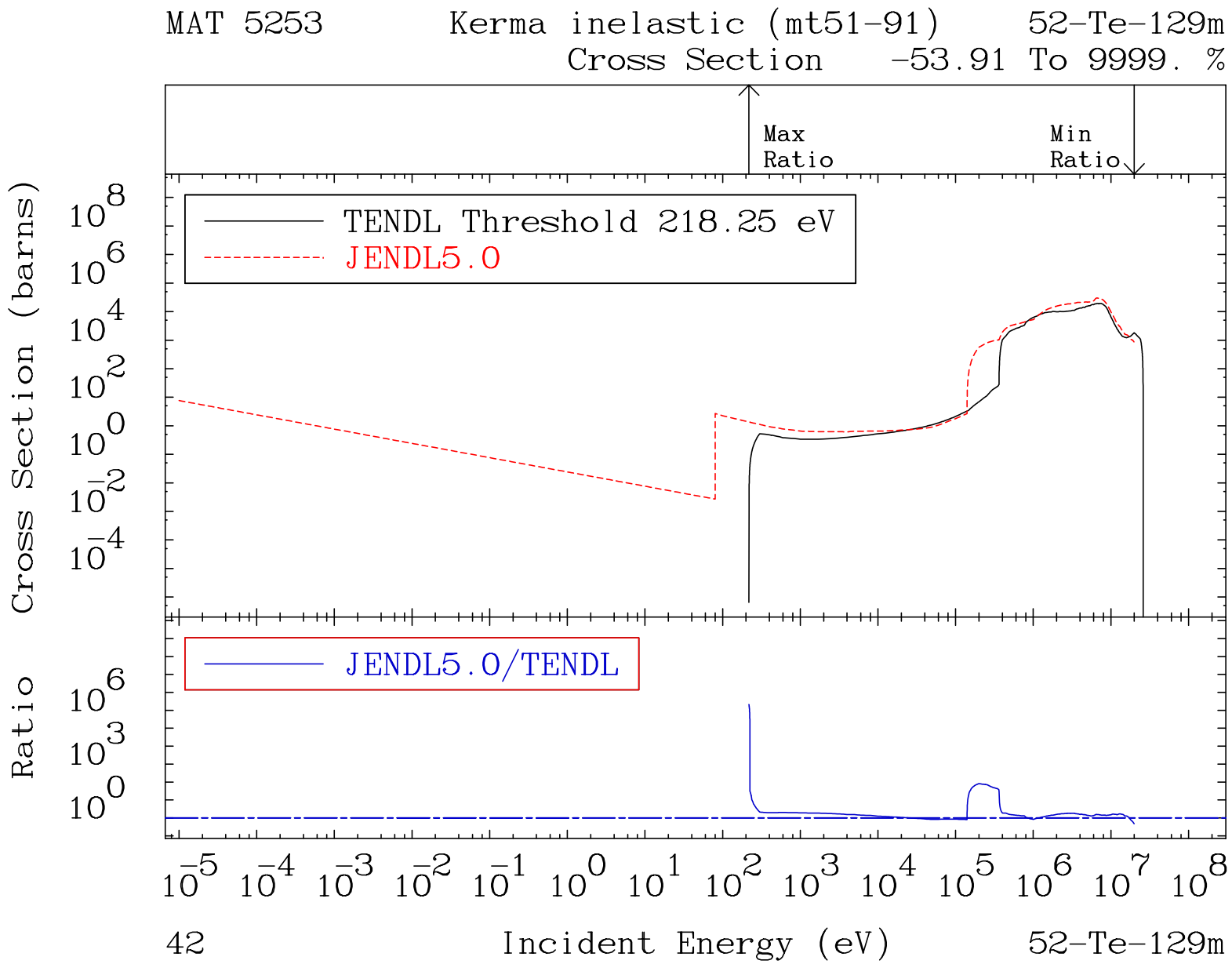

MAT 5253
He-3 Production
Cross Section
52-Te-129m
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 10.370 MeV
JENDL5.0 Threshold 10.339 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
250
200
150
100
50
0
10^4
10^0
10^-4
10^7
2
3
4
5
6
7
8
9
10^8
2
37
Incident Energy (eV)
52-Te-129m

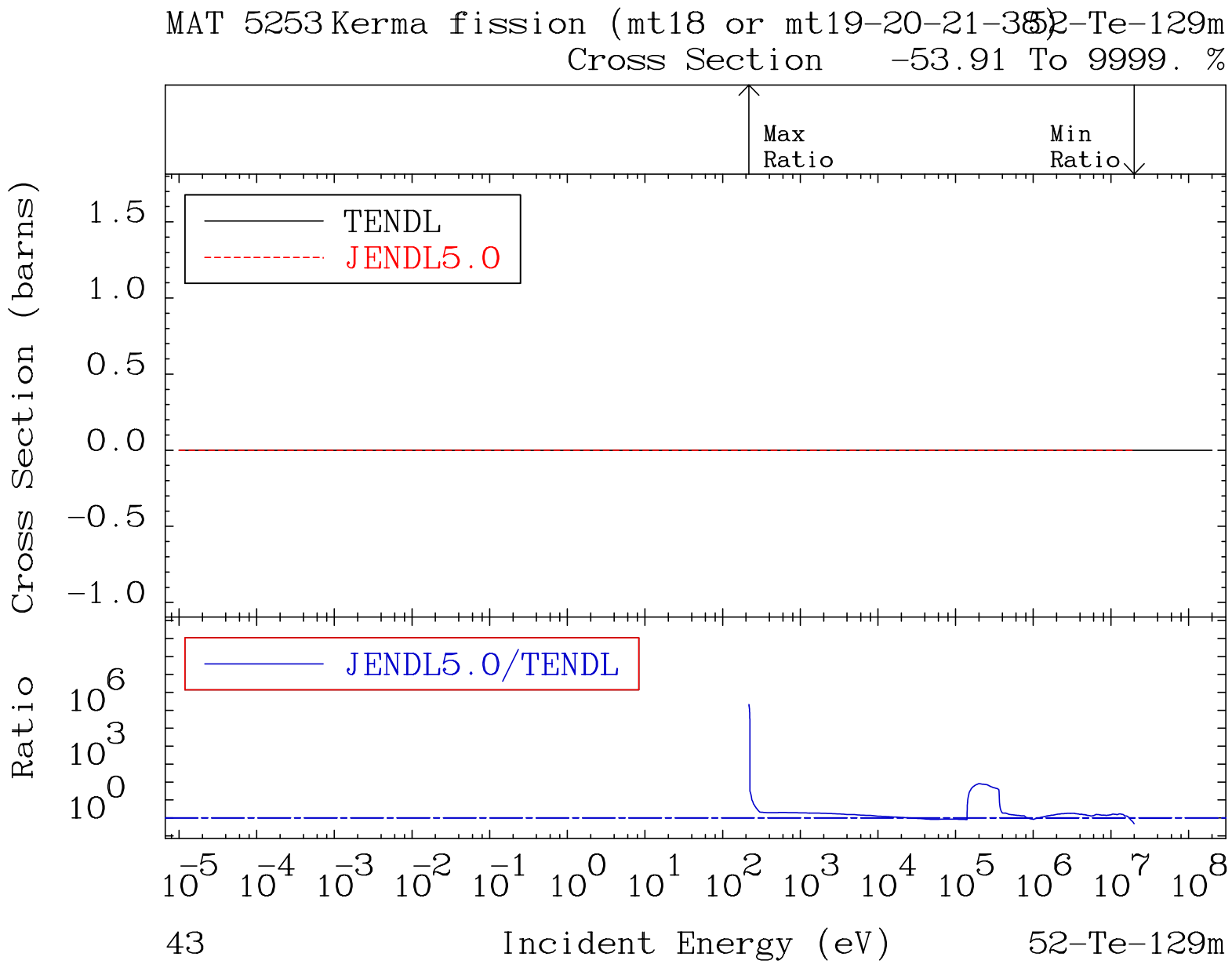

MAT 5253
He-4 Production
Cross Section
52-Te-129m
-61.22 To 9999. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
38
52-Te-129m

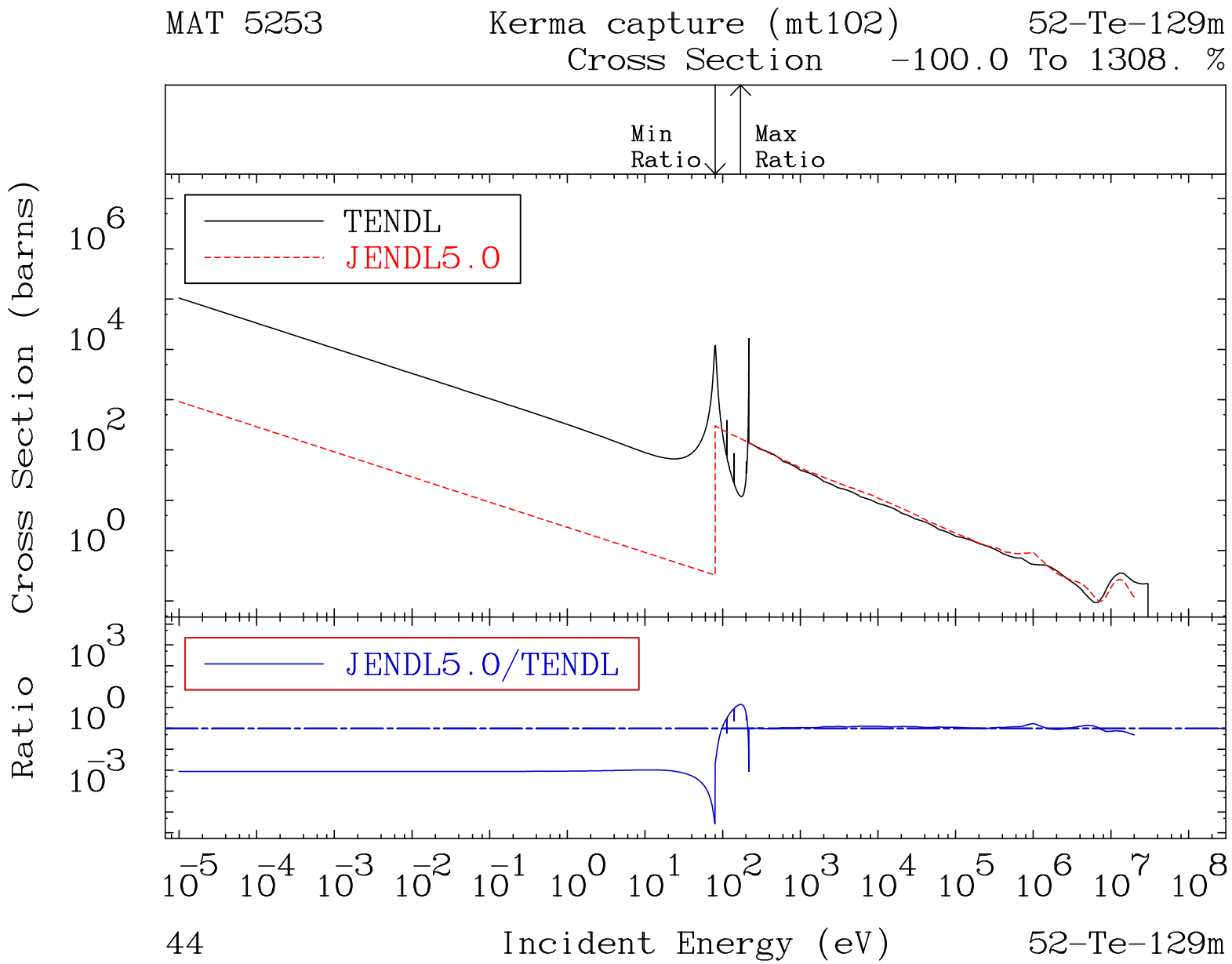

MAT 5253
Kerma total (eV-barns)
52-Te-129m
Cross Section -99.98 To 152.0 %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
39
52-Te-129m

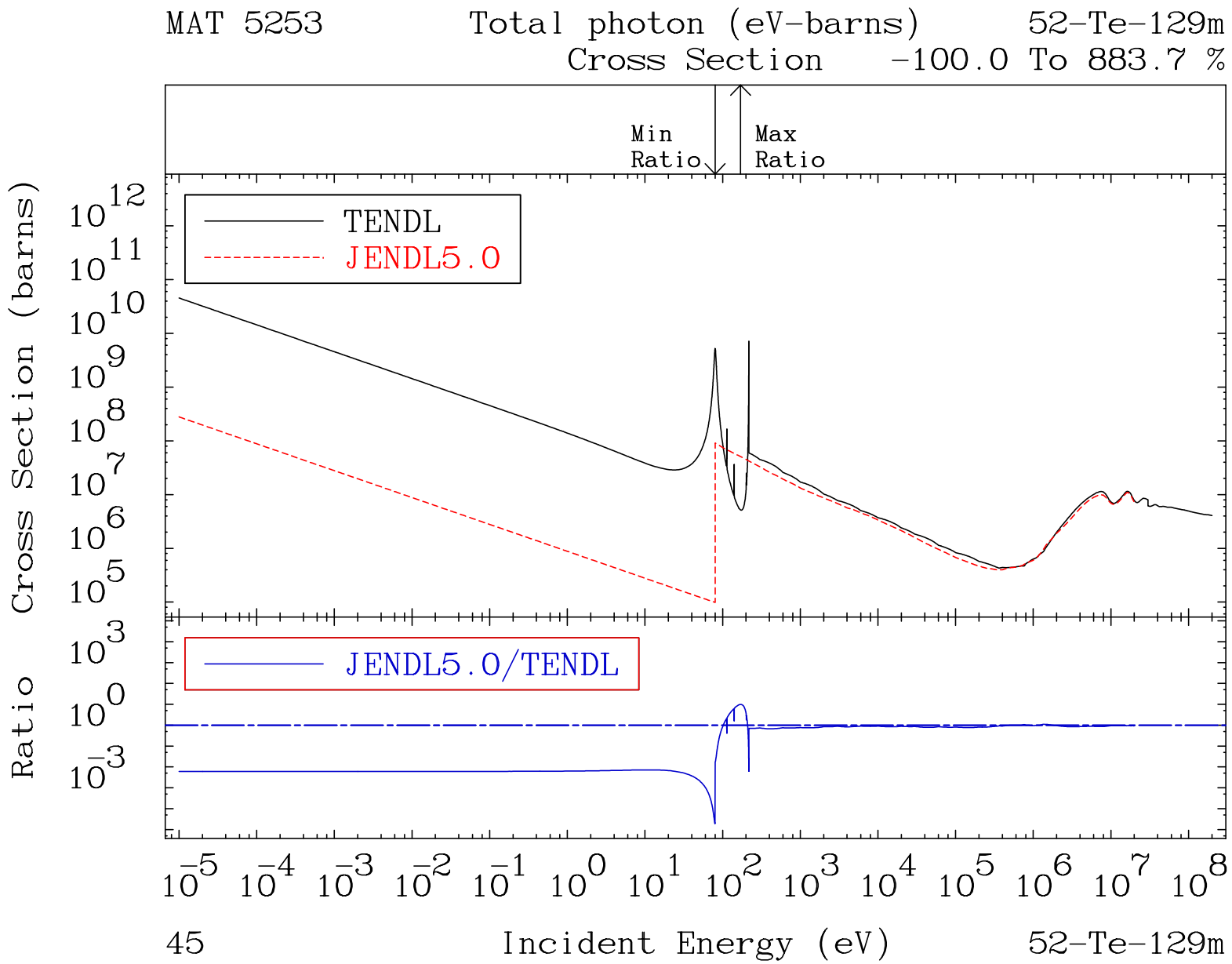

MAT 5253
Kerma elastic
Cross Section
52-Te-129m
-99.97 To -7.869%
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
40
52-Te-129m

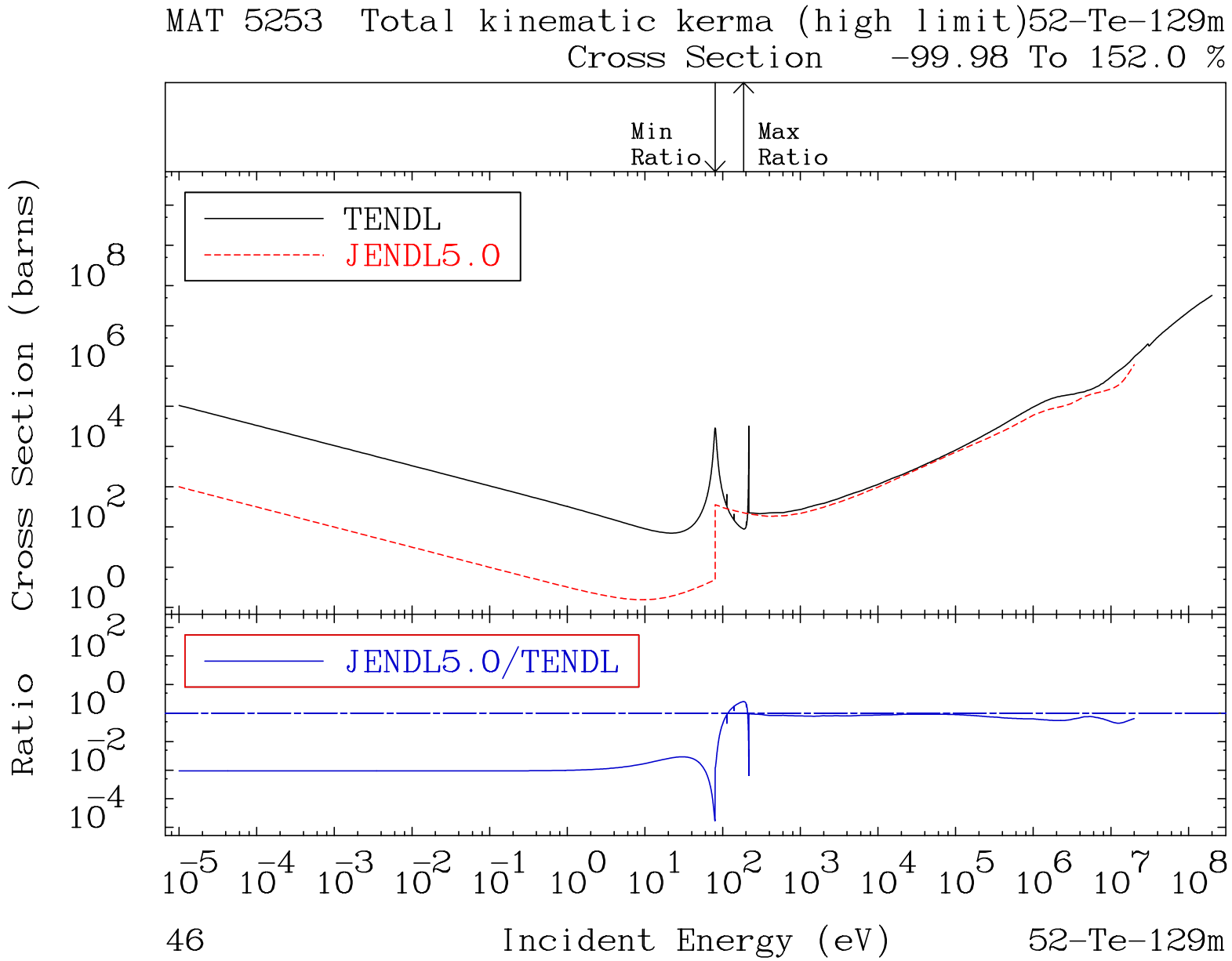

MAT 5253 Kerma non-elastic (all but mt2) 52-Te-129m
Cross Section -100.0 To 7909. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
41
52-Te-129m

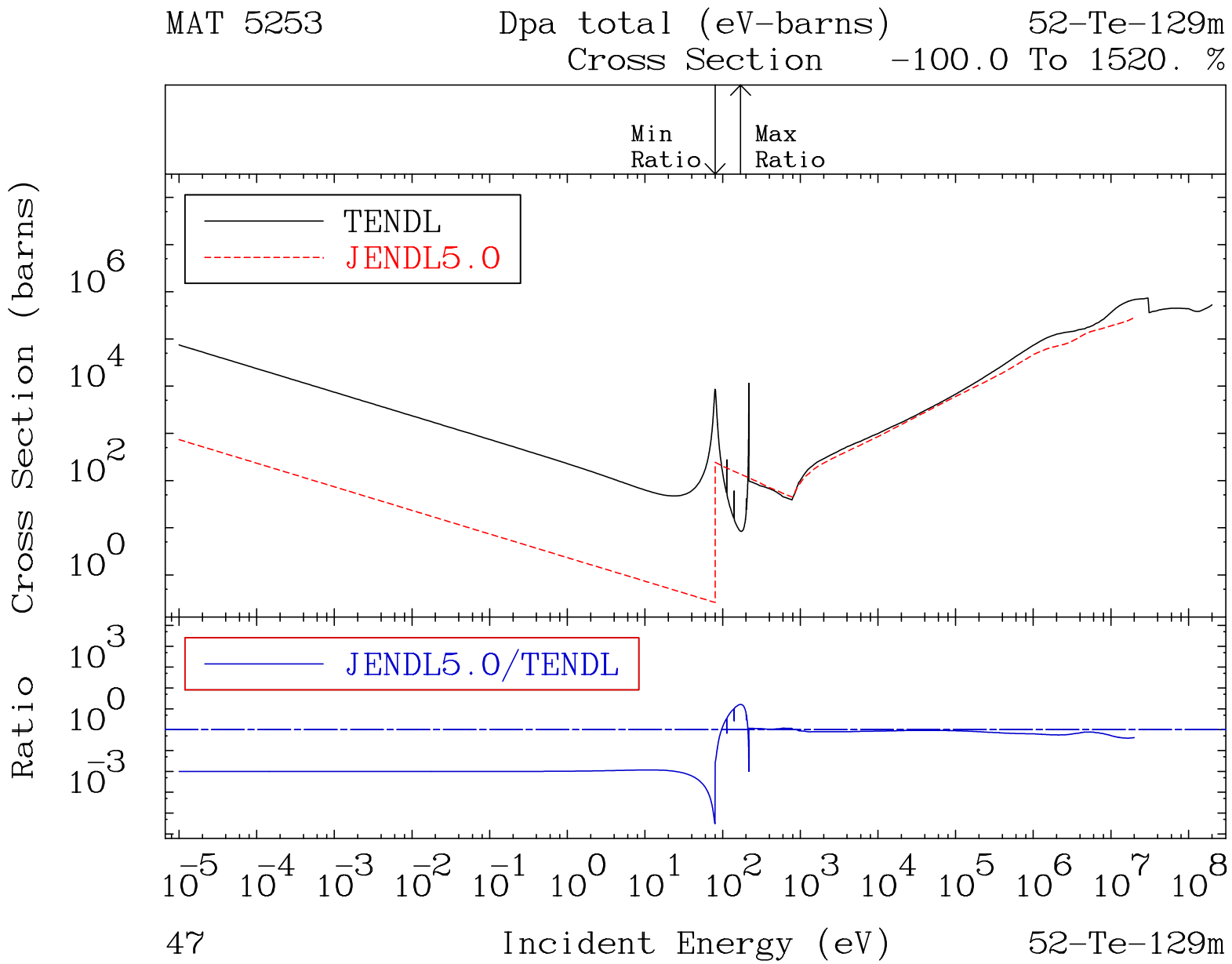

MAT 5253
Kerma inelastic (mt51-91)
52-Te-129m
Cross Section -53.91 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 218.25 eV
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
42
52-Te-129m

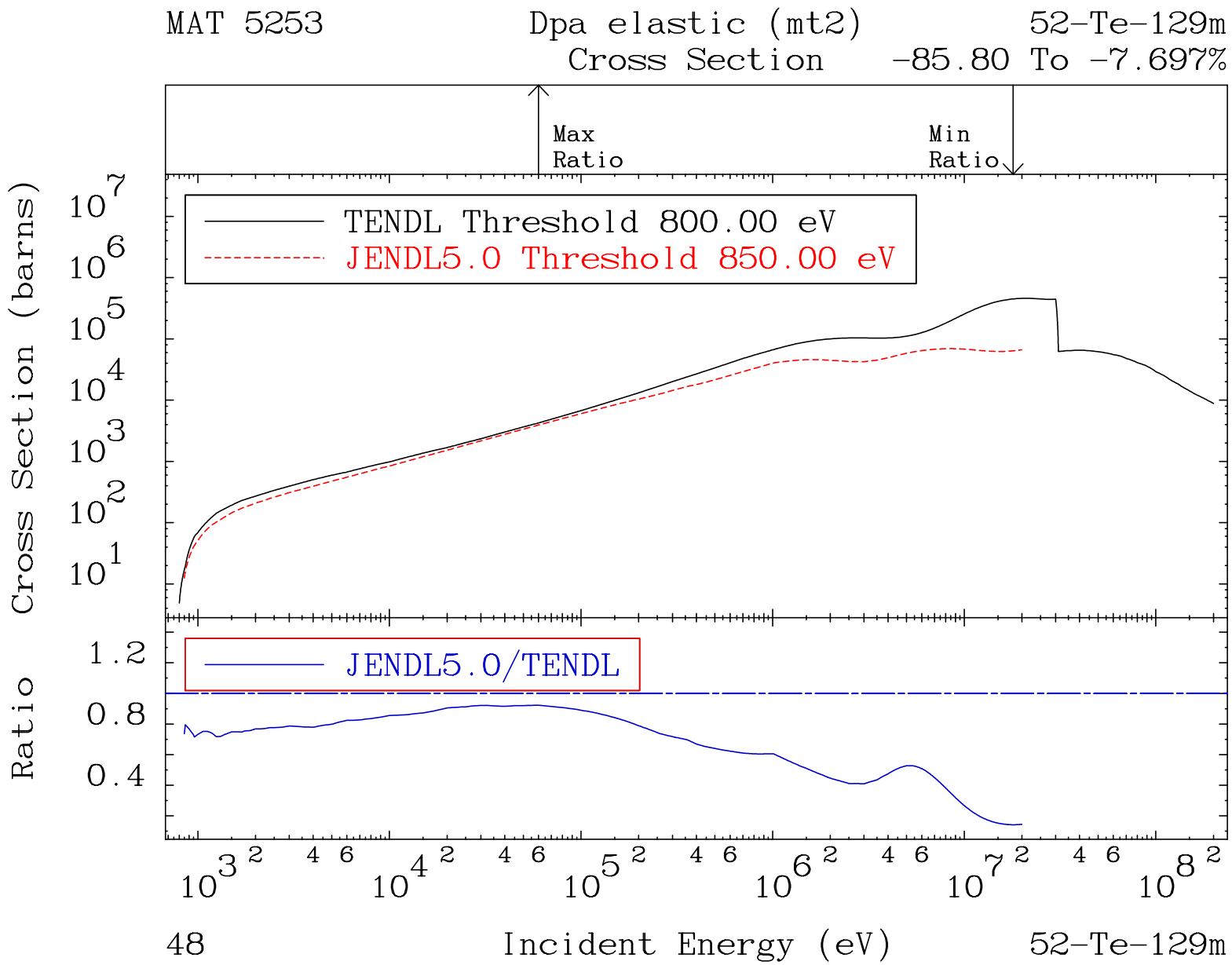

MAT 5253 Kerma fission (mt18 or mt19-20-21-38)
52-Te-129m
Cross Section -53.91 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
1.5
1.0
0.5
0.0
-0.5
-1.0
10^6
10^3
10^0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
43
Incident Energy (eV)
52-Te-129m

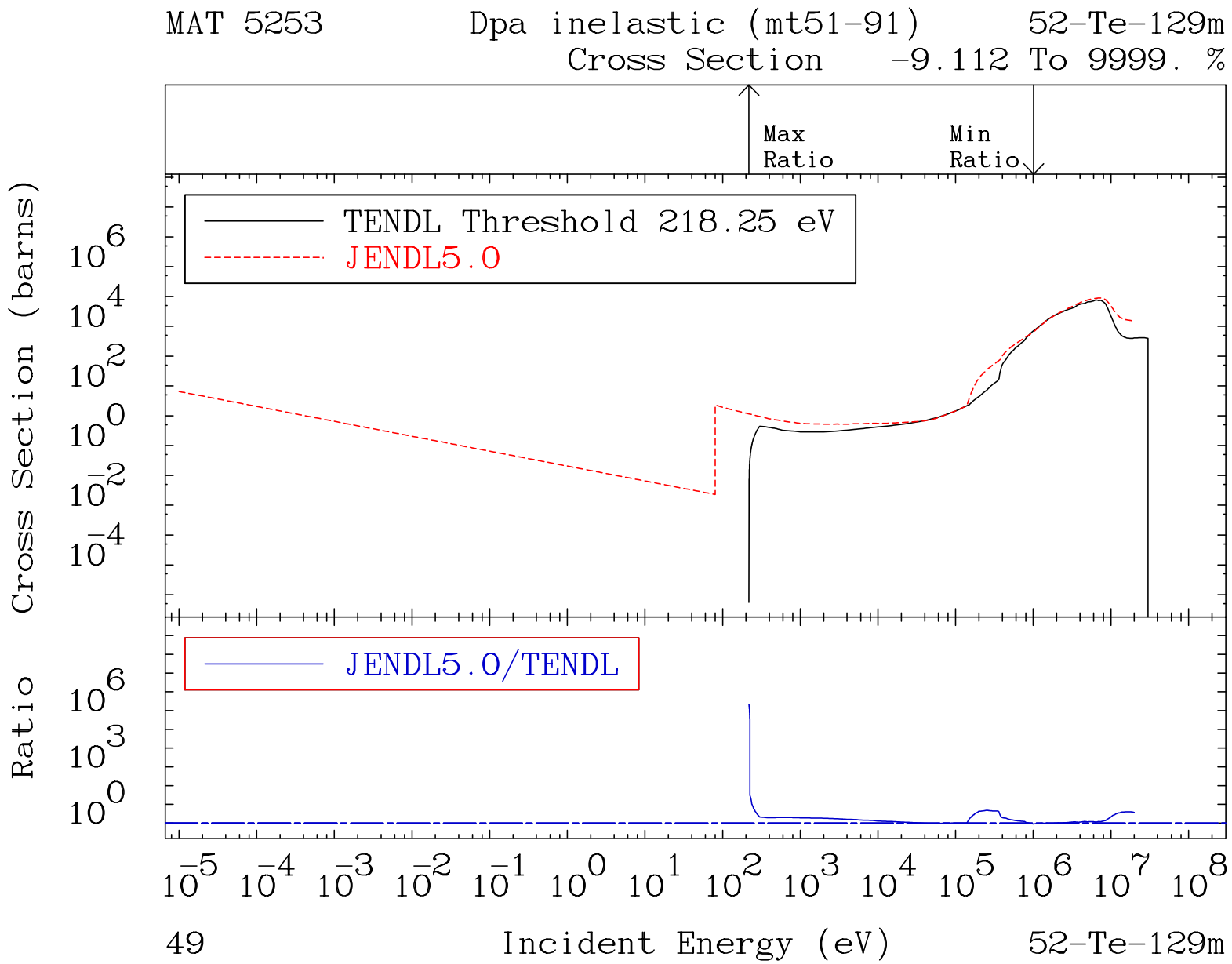

MAT 5253
Kerma capture (mt102)
52-Te-129m
Cross Section -100.0 To 1308. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
44
52-Te-129m

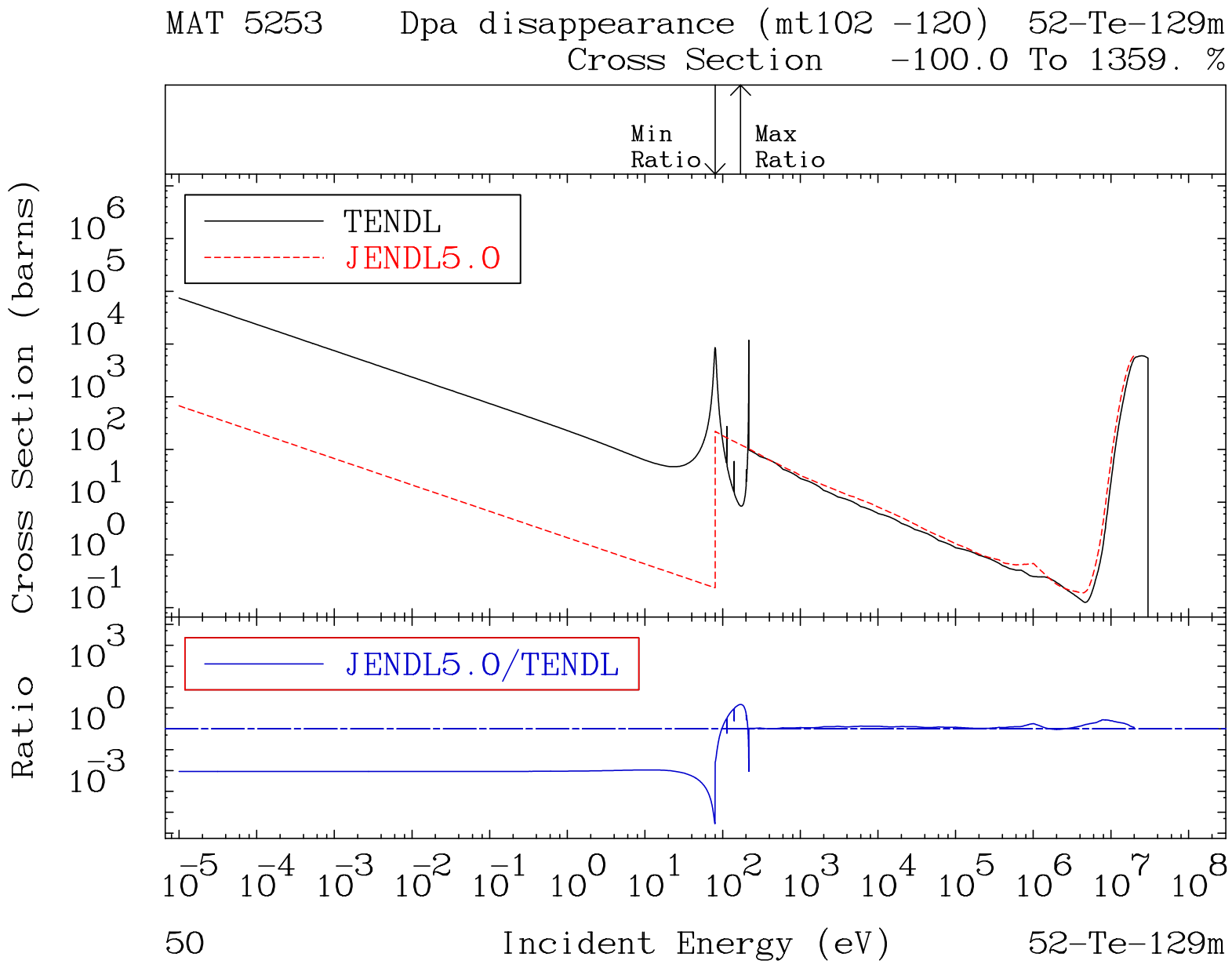

MAT 5253
Total photon (eV-barns)
52-Te-129m
Cross Section -100.0 To 883.7 %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
45
52-Te-129m

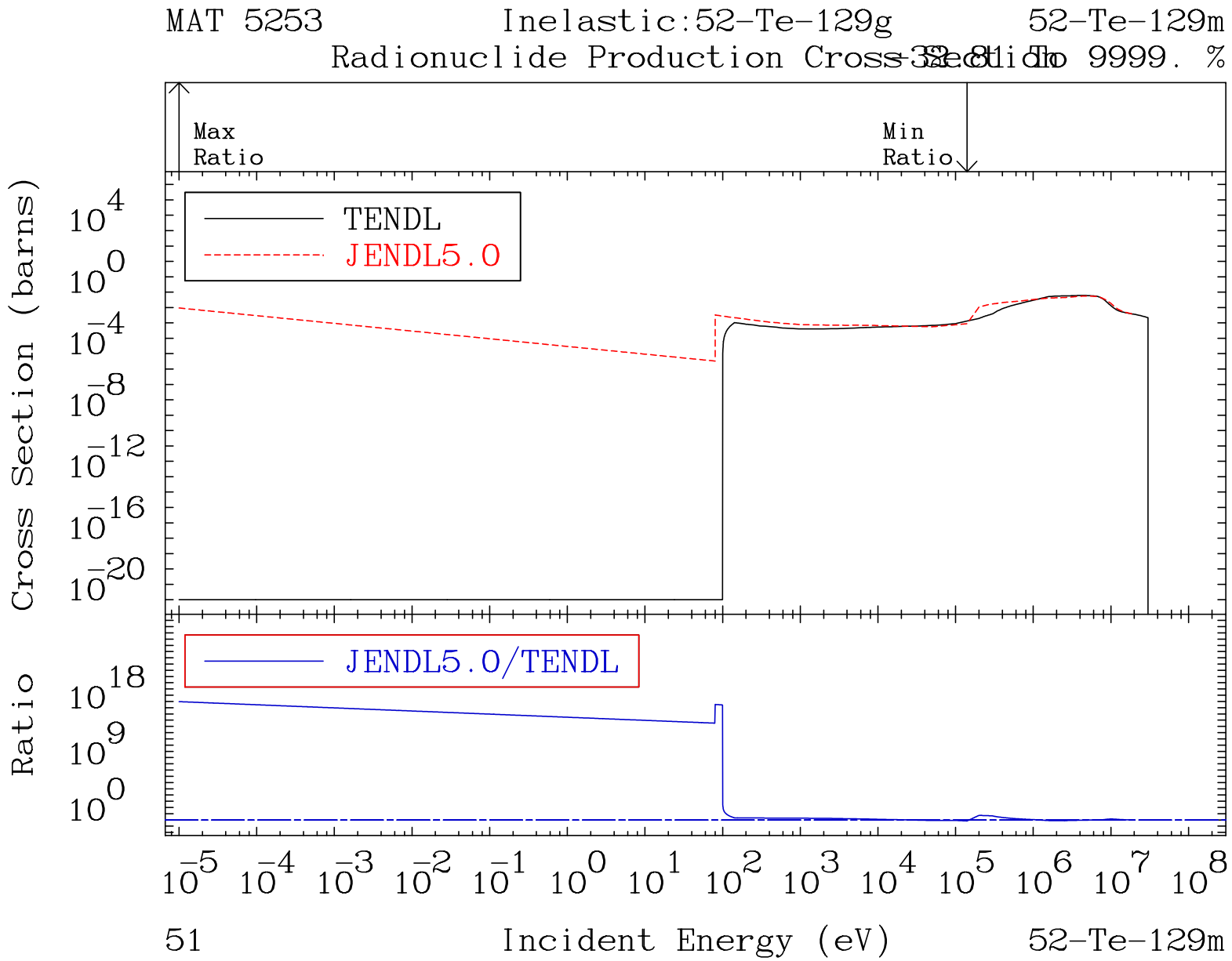

MAT 5253 Total kinematic kerma (high limit)52-Te-129m
Cross Section -99.98 To 152.0 %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
46
52-Te-129m

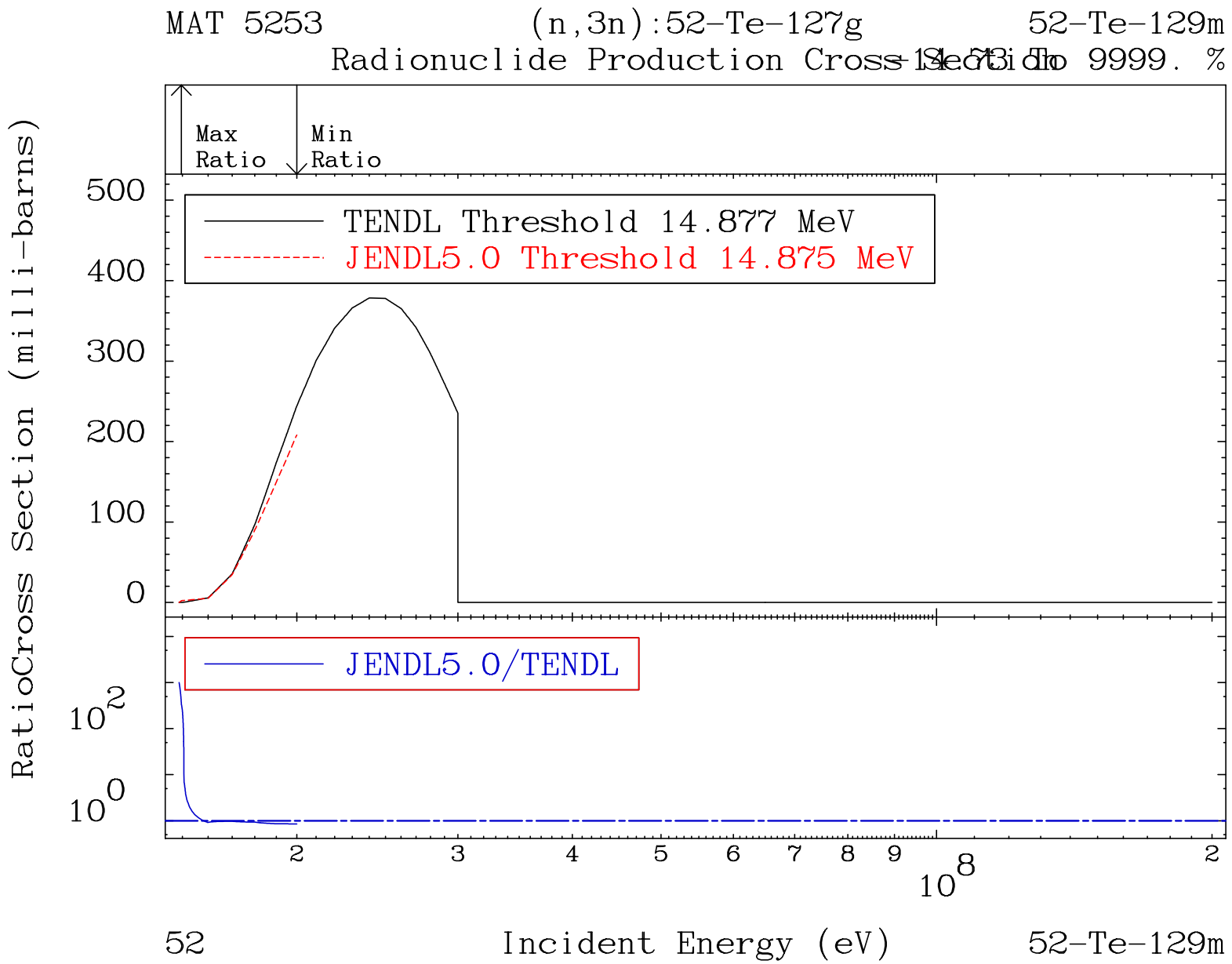

MAT 5253
Dpa total (eV-barns)
52-Te-129m
Cross Section -100.0 To 1520. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
47
52-Te-129m

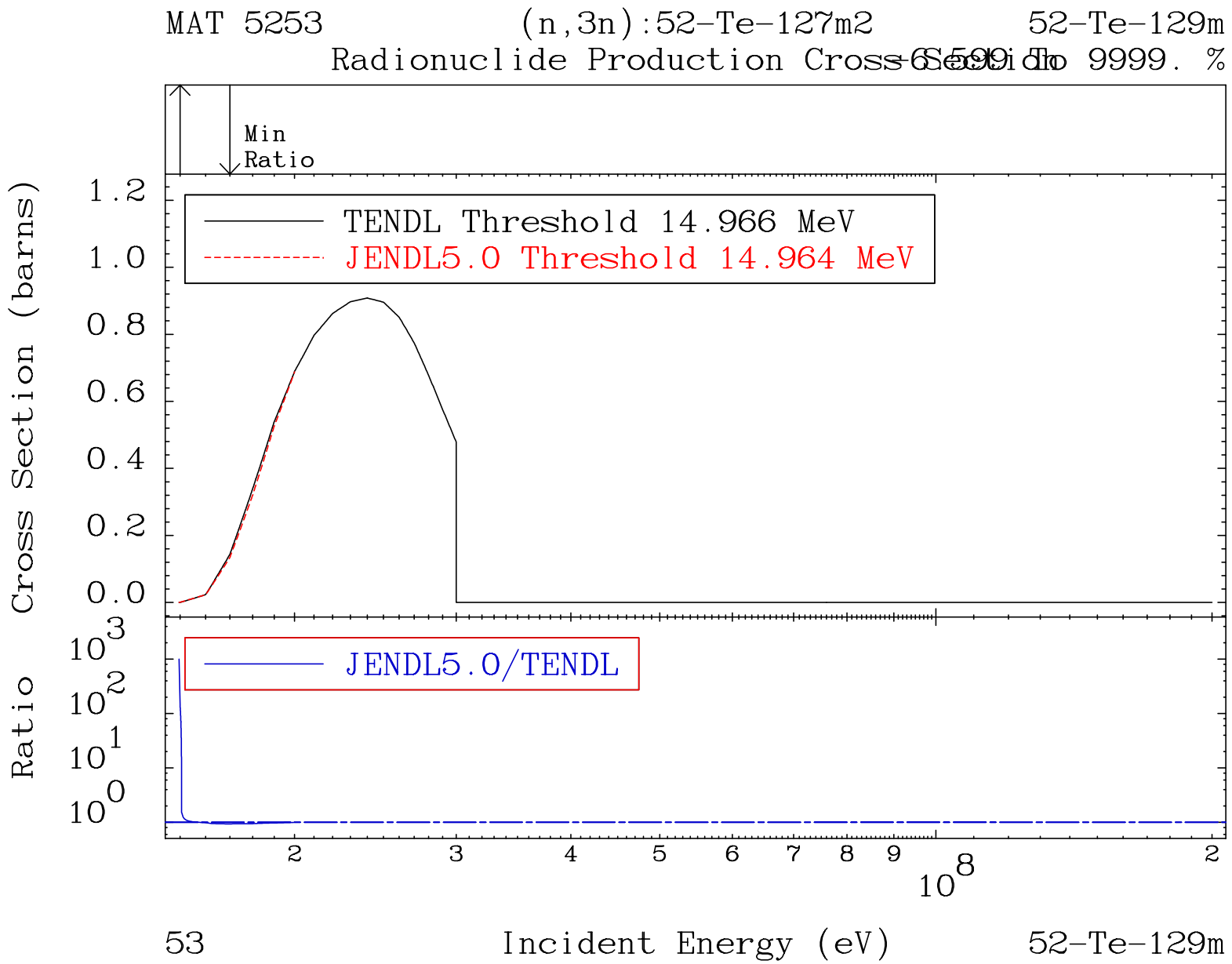

MAT 5253
Dpa elastic (mt2)
Cross Section
52-Te-129m
-85.80 To -7.697%
Max
Ratio
Min
Ratio
TENDL Threshold 800.00 eV
JENDL5.0 Threshold 850.00 eV
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
48
52-Te-129m

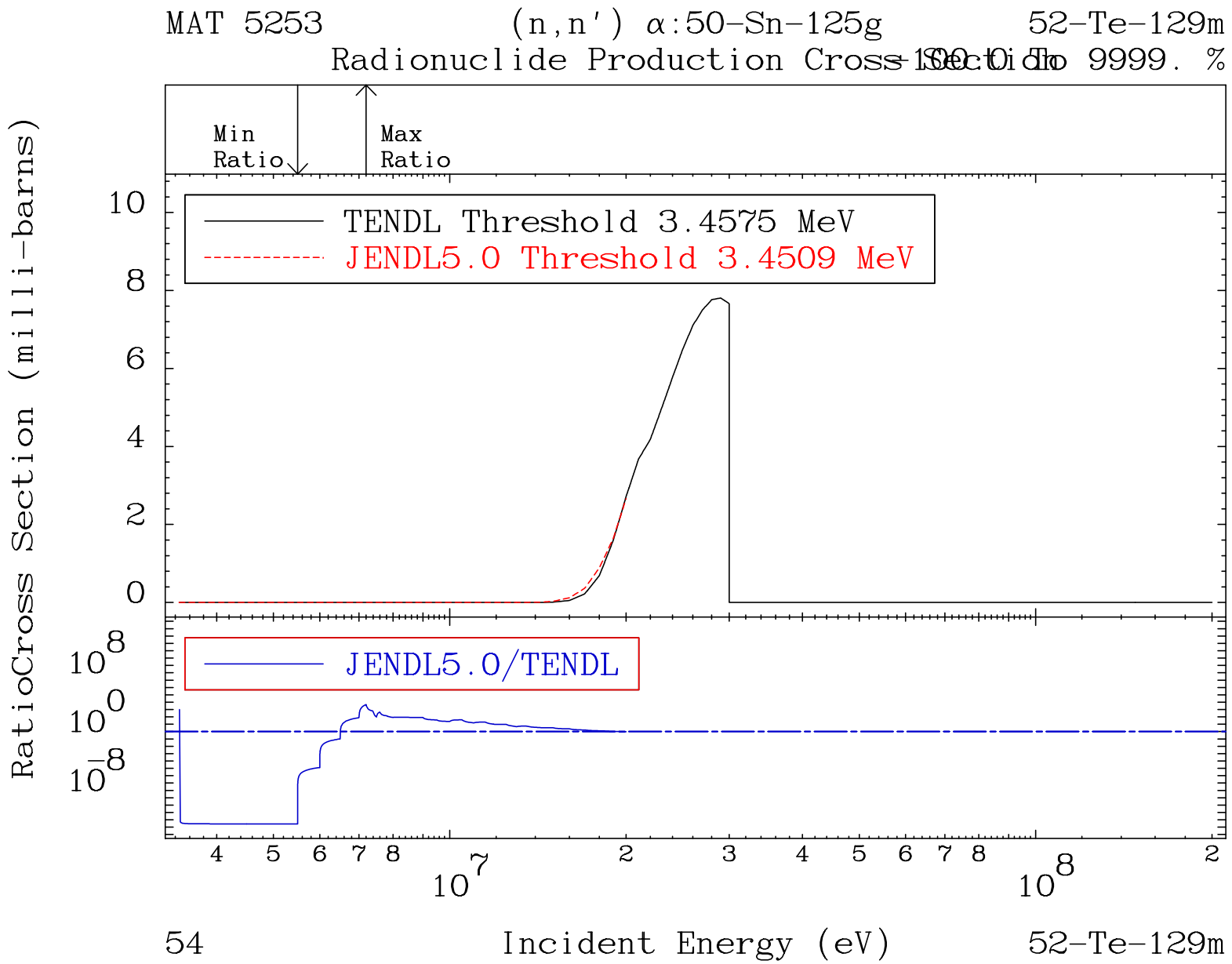

MAT 5253
Dpa inelastic (mt51-91)
52-Te-129m
Cross Section
-9.112 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 218.25 eV
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
49
52-Te-129m

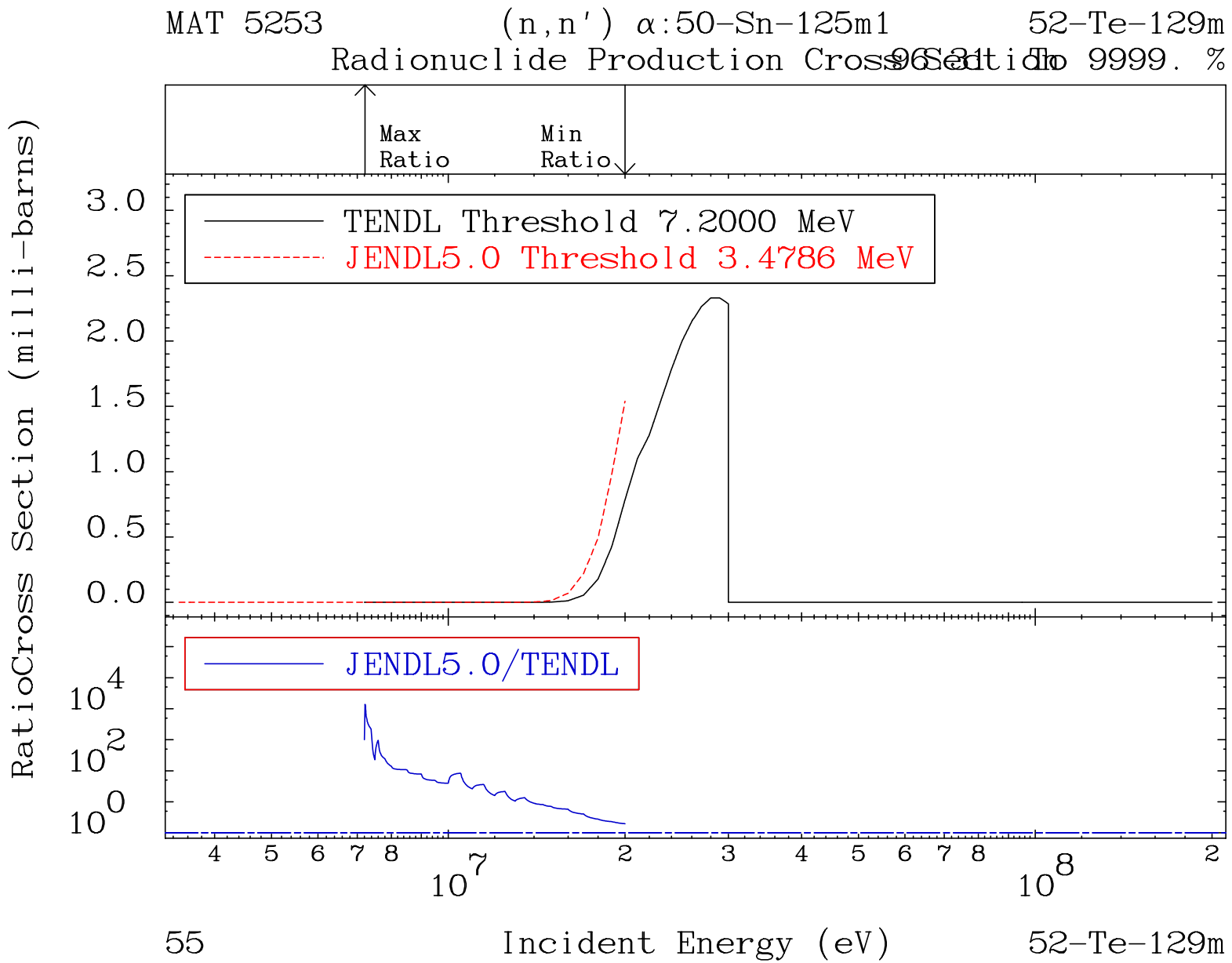

MAT 5253 Dpa disappearance (mt102 -120) 52-Te-129m
Cross Section -100.0 To 1359. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
50
52-Te-129m

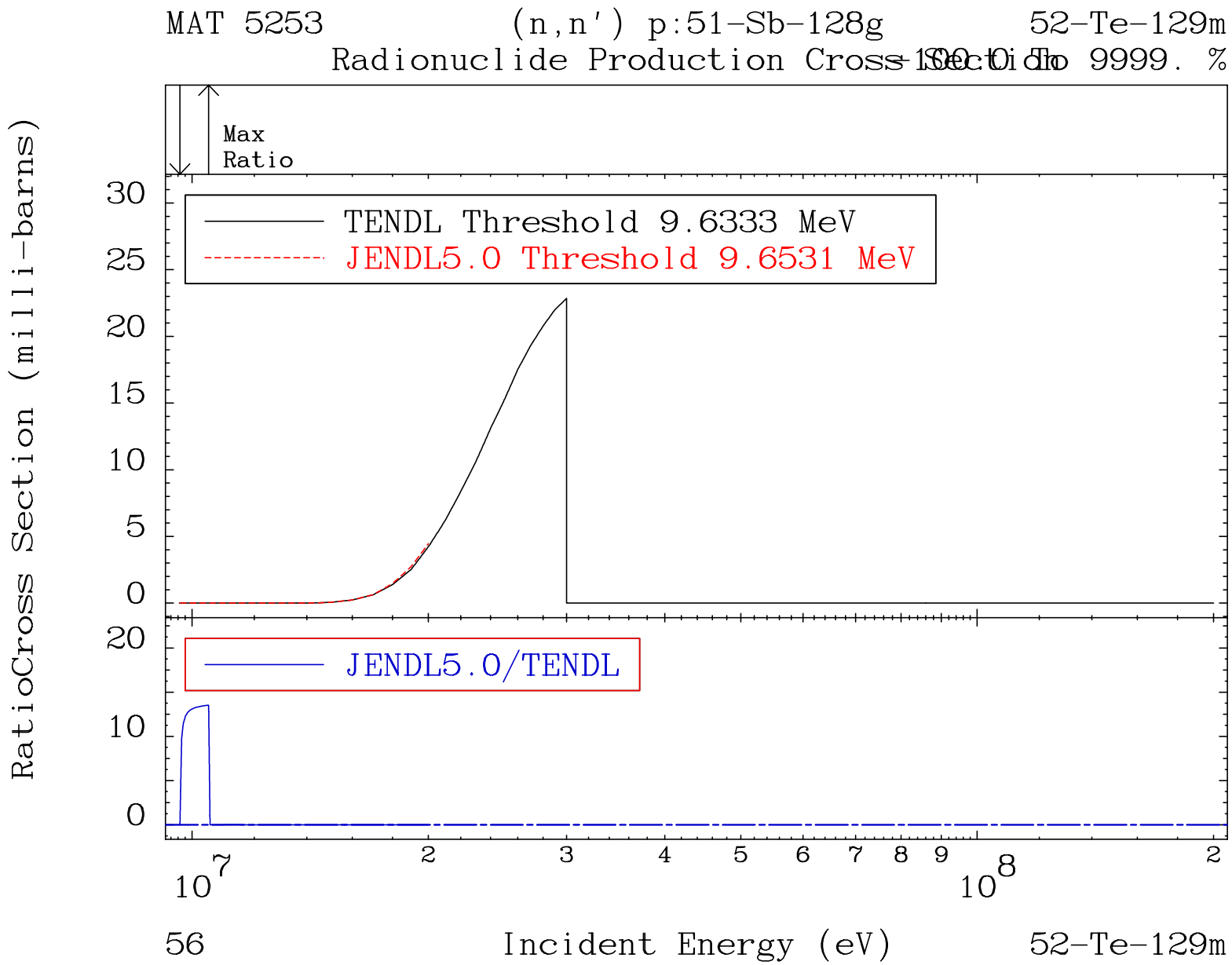

MAT 5253
Inelastic:52-Te-129g
52-Te-129m
Radionuclide Production Cross Section To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
51
52-Te-129m

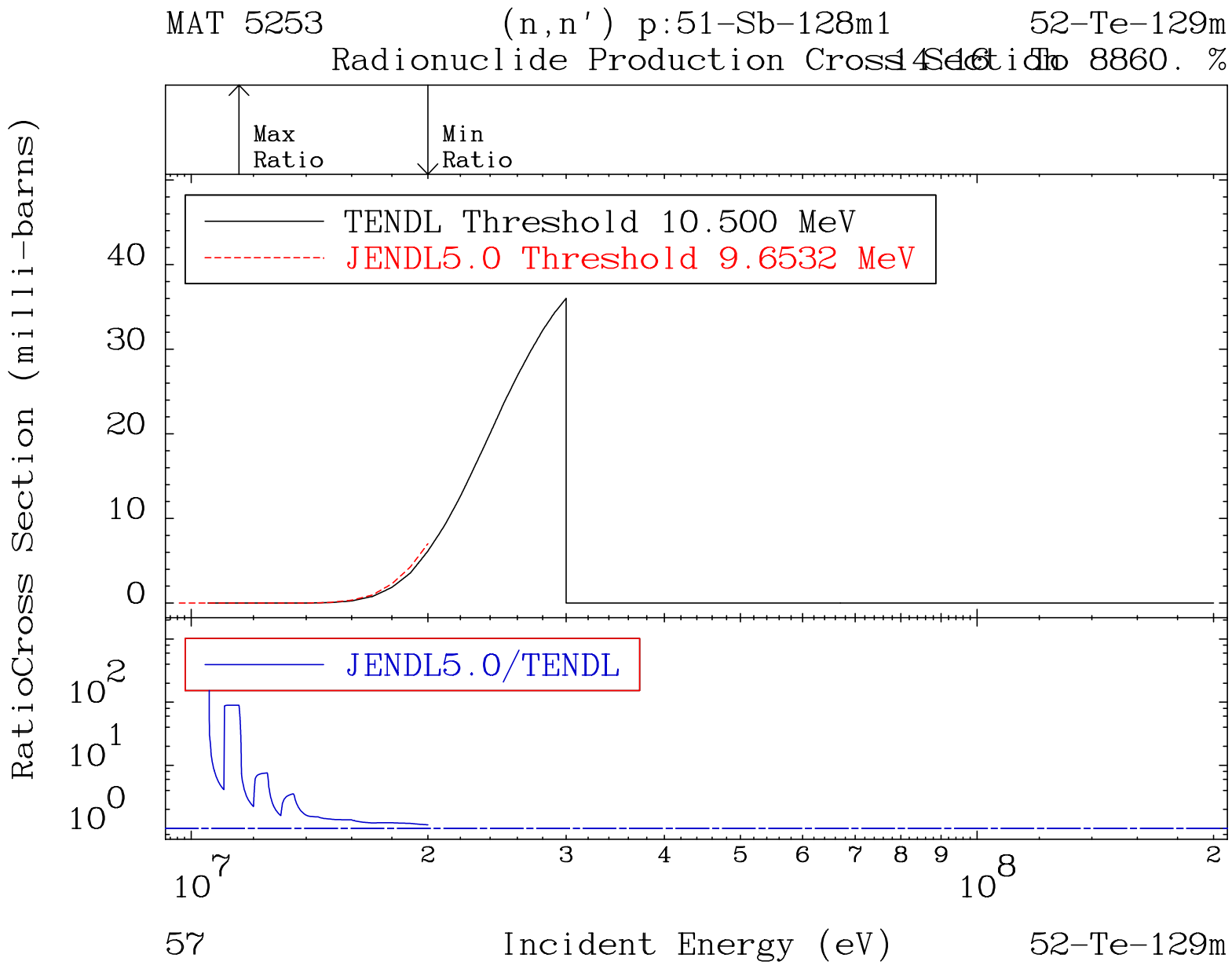

MAT 5253
(n,3n):52-Te-127g
52-Te-129m
Radionuclide Production Cross Section
14.73 to 9999. %
Max Ratio
Min Ratio
TENDL Threshold 14.877 MeV
JENDL5.0 Threshold 14.875 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
500
400
300
200
100
0
10^2
10^0
2
3
4
5
6
7
8
9
10^8
2
52
Incident Energy (eV)
52-Te-129m

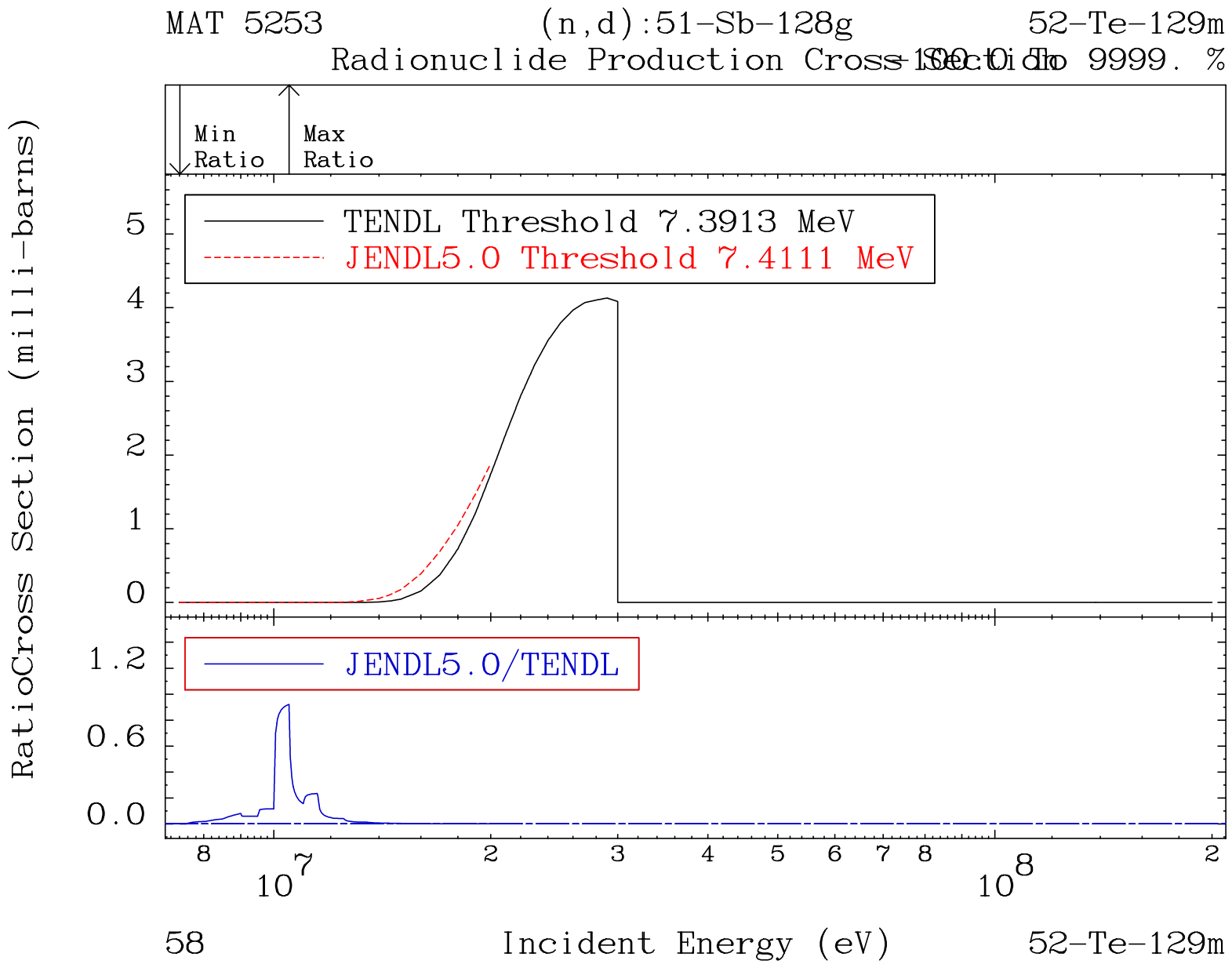

MAT 5253
(n,3n):52-Te-127m2
52-Te-129m
Radionuclide Production Cross Section
Min
Ratio
TENDL Threshold 14.966 MeV
JENDL5.0 Threshold 14.964 MeV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
1.2
1.0
0.8
0.6
0.4
0.2
0.0
10^3
10^2
10^1
10^0
2
3
4
5
6
7
8
9
10^8
2
53
Incident Energy (eV)
52-Te-129m

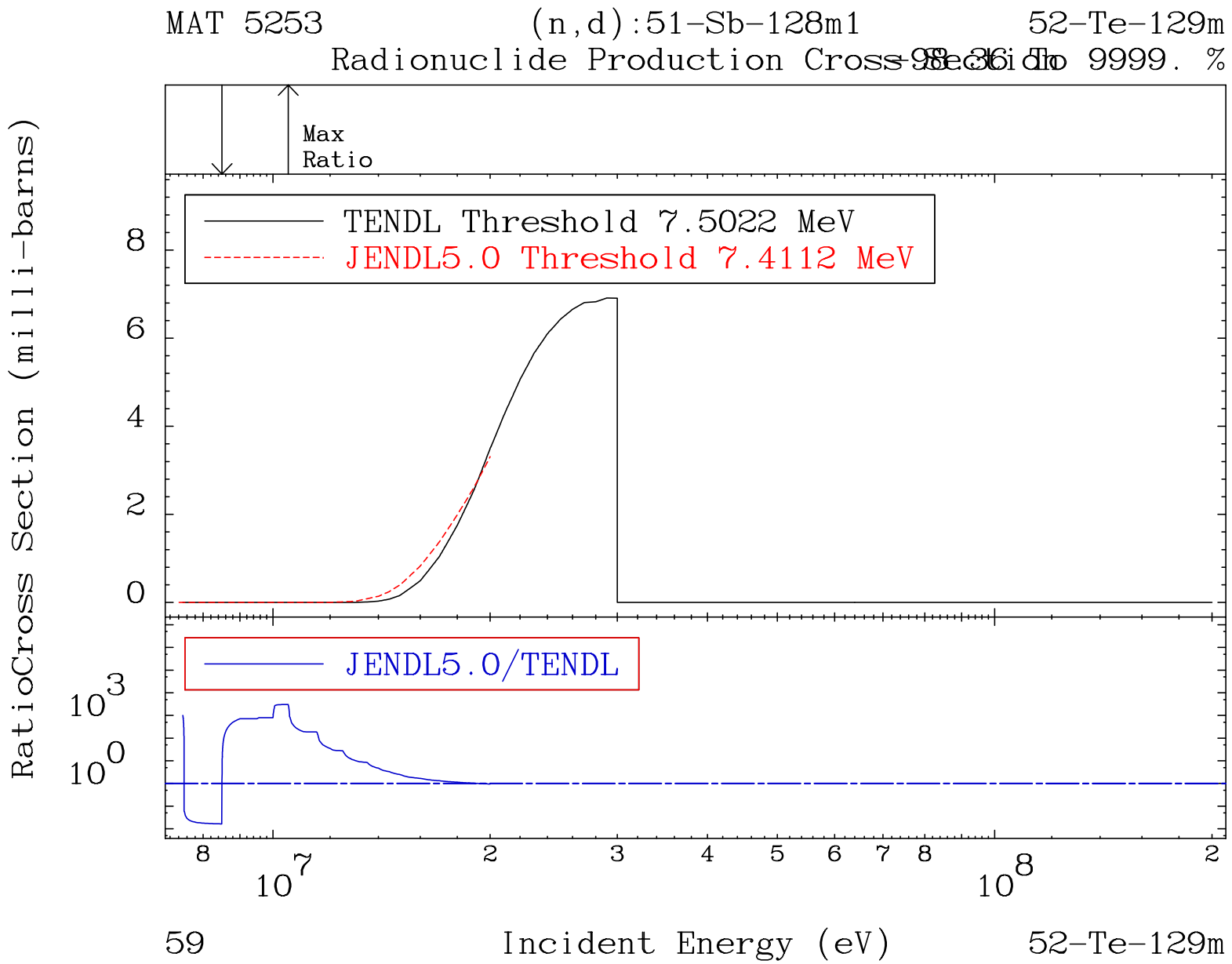

MAT 5253
(n,n') α:50-Sn-125g
52-Te-129m
Radionuclide Production Cross Section
Min Ratio
Max Ratio
TENDL Threshold 3.4575 MeV
JENDL5.0 Threshold 3.4509 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
54
52-Te-129m

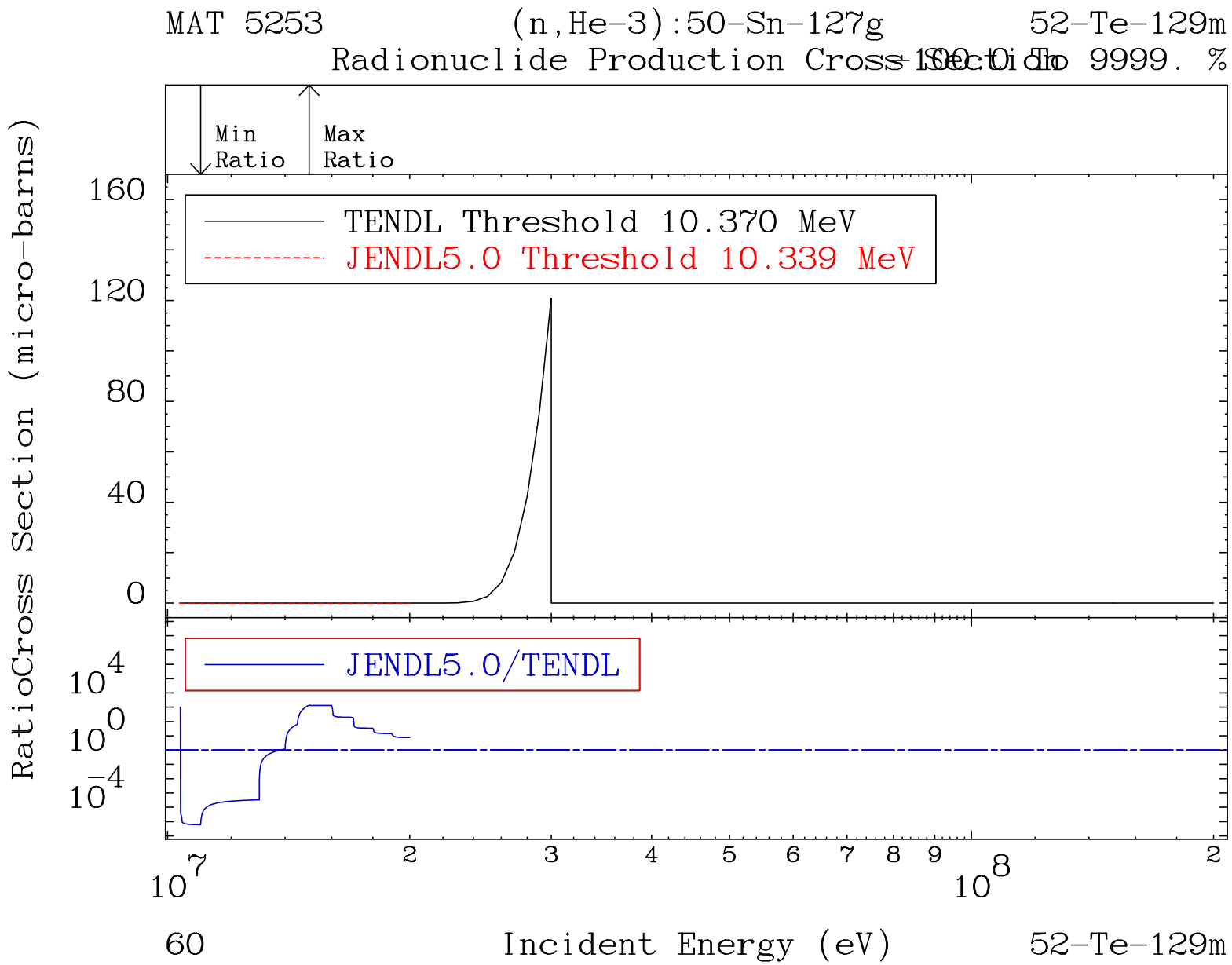

MAT 5253
(n,n') α:50-Sn-125m1
52-Te-129m
Radionuclide Production Cross Section
96.31 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 7.2000 MeV
JENDL5.0 Threshold 3.4786 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
10^4
10^2
10^0
4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
55
Incident Energy (eV)
52-Te-129m

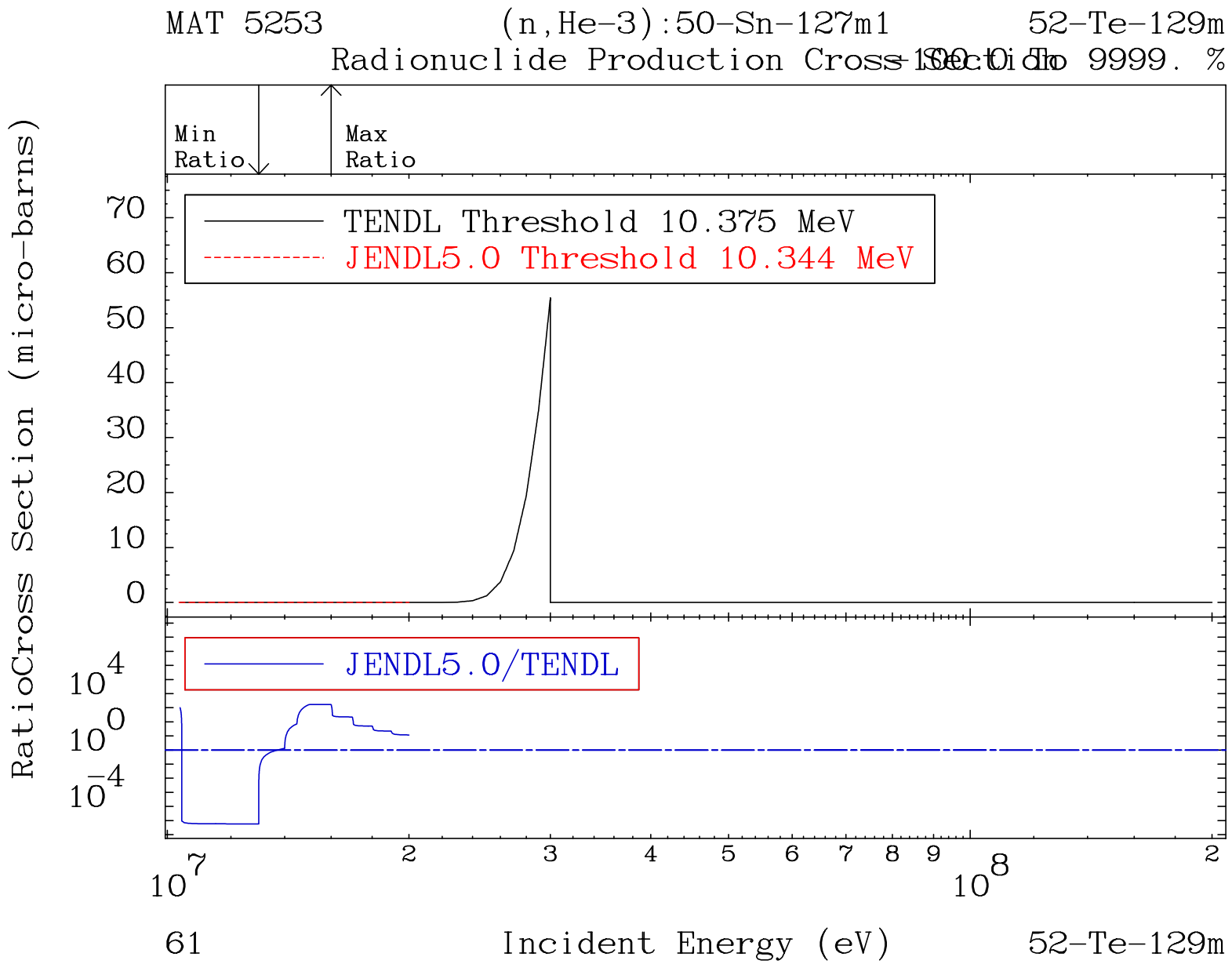

MAT 5253
(n,n') p:51-Sb-128g
52-Te-129m
Radionuclide Production Cross Section To 9999. %
Max
Ratio
TENDL Threshold 9.6333 MeV
JENDL5.0 Threshold 9.6531 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
56
52-Te-129m

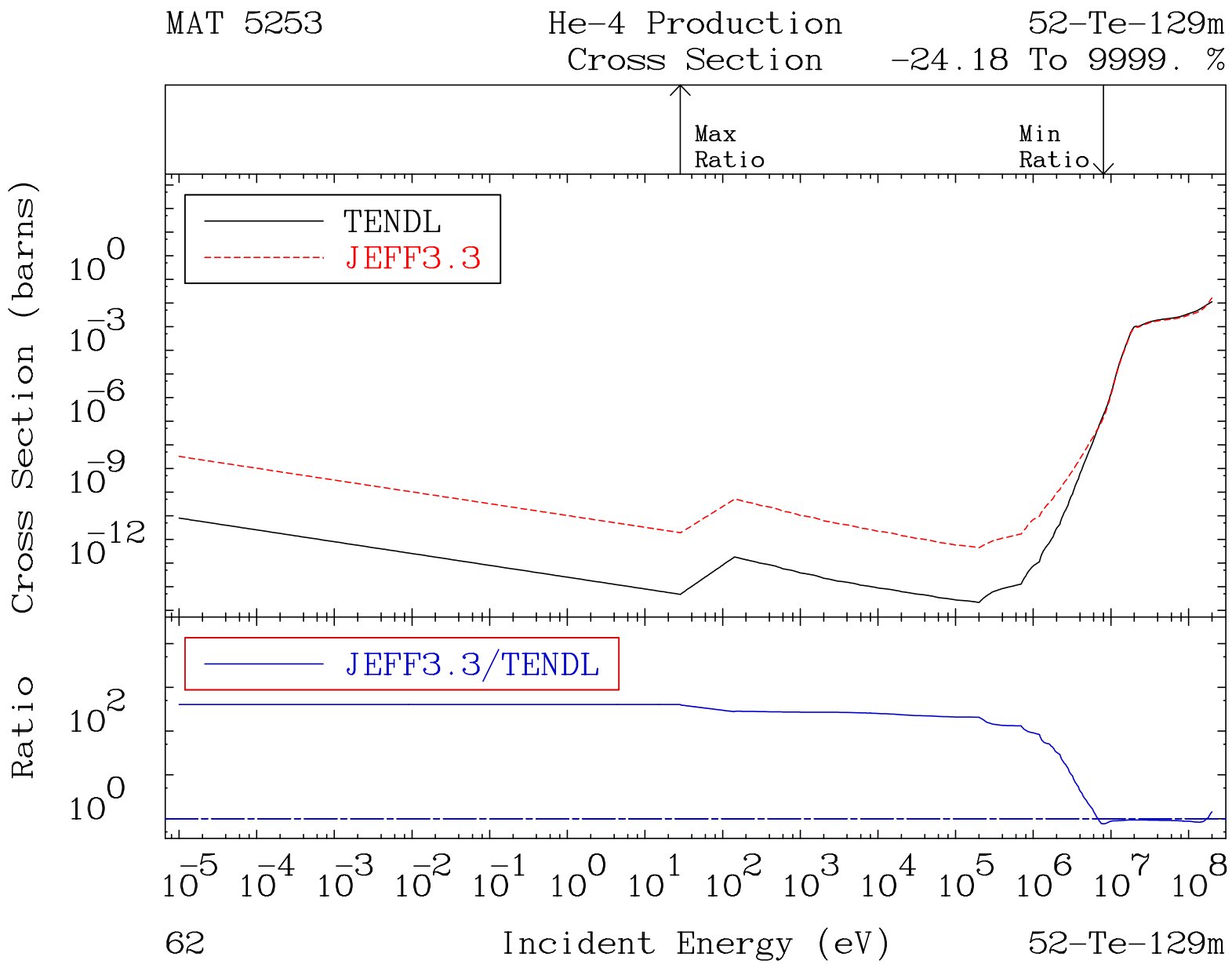

MAT 5253 (n,n') p:51-Sb-128m1 52-Te-129m
Radionuclide Production Cross Section To 8860. %
Max Ratio
Min Ratio
TENDL Threshold 10.500 MeV
JENDL5.0 Threshold 9.6532 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
40
30
20
10
0
10^2
10^1
10^0
10^7
2
3
4
5
6
7
8
9
10^8
2
57
Incident Energy (eV)
52-Te-129m

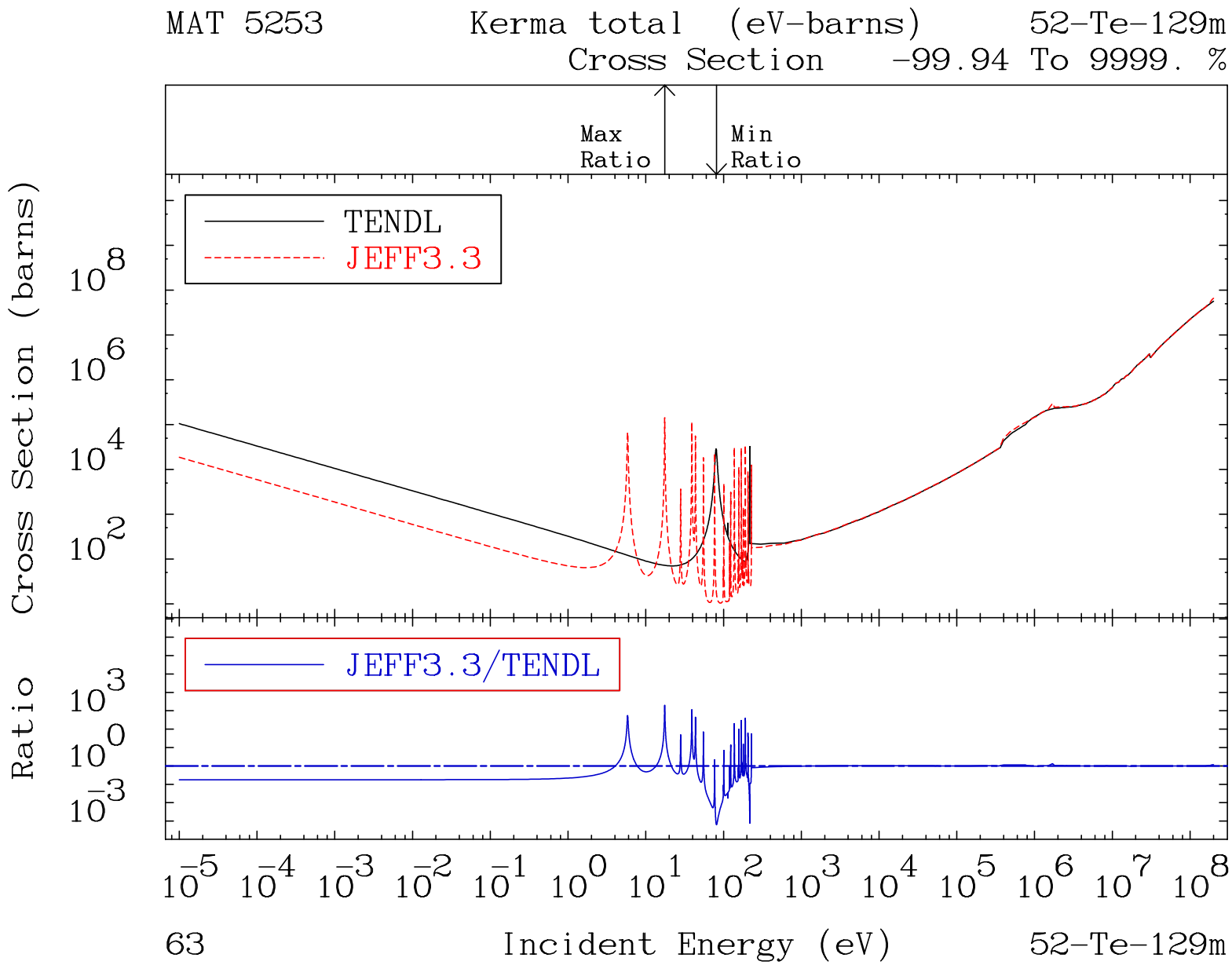

MAT 5253
(n,d):51-Sb-128g
52-Te-129m
Radionuclide Production Cross Section To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 7.3913 MeV
JENDL5.0 Threshold 7.4111 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
58
52-Te-129m

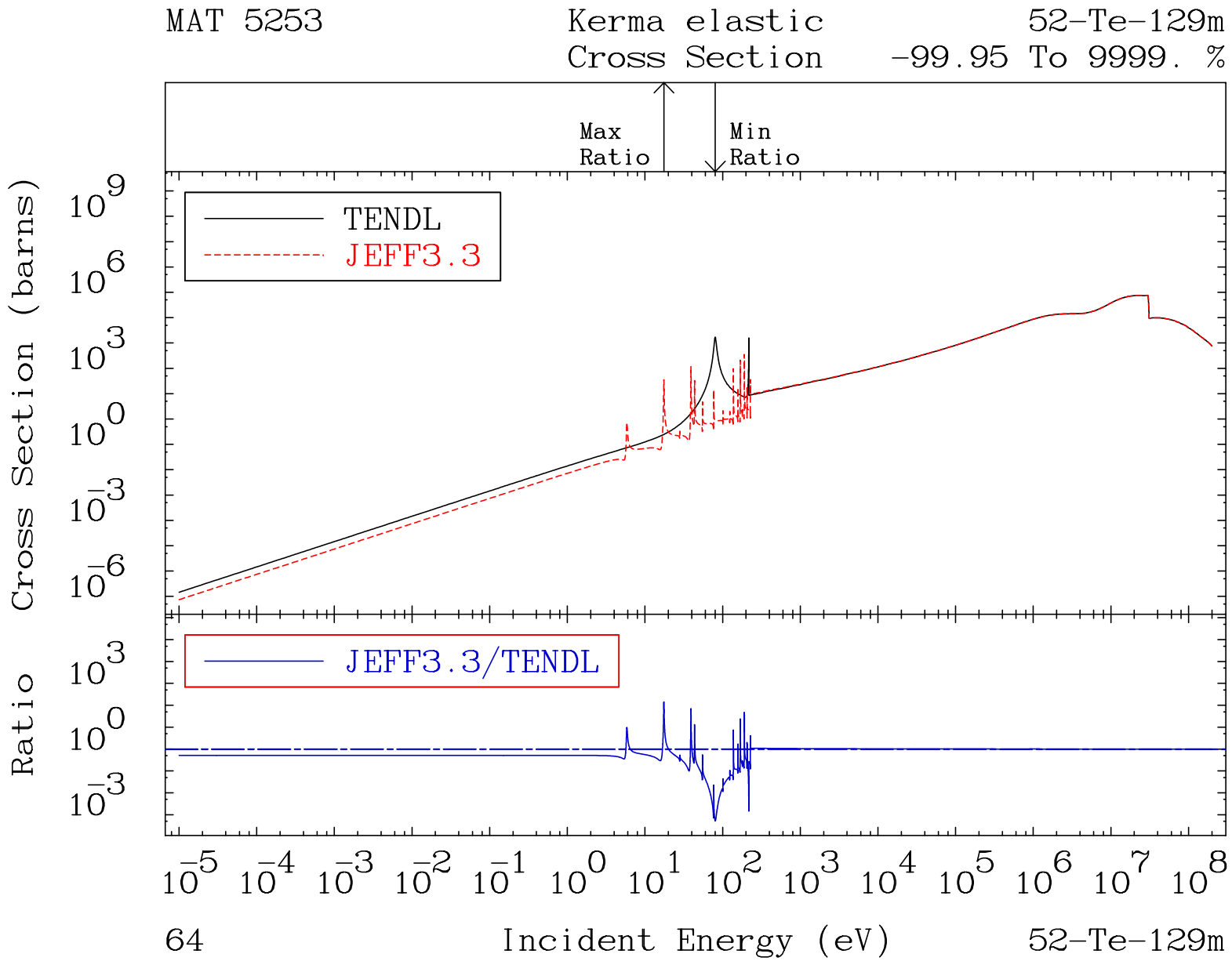

MAT 5253
(n,d):51-Sb-128m1
52-Te-129m
Radionuclide Production Cross Section To 9999. %
Max
Ratio
TENDL Threshold 7.5022 MeV
JENDL5.0 Threshold 7.4112 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
59
52-Te-129m

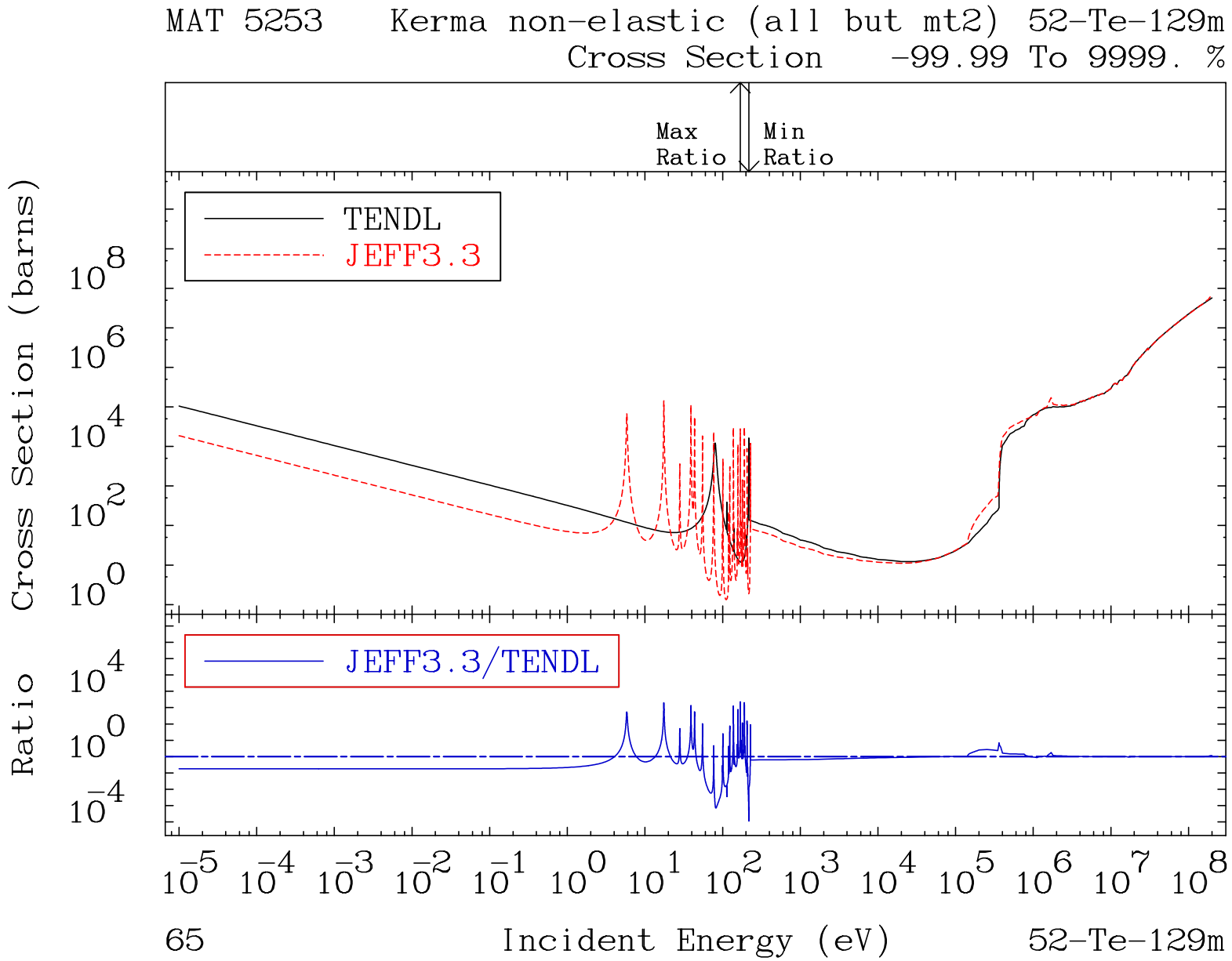

MAT 5253
(n,He-3):50-Sn-127g
52-Te-129m
Radionuclide Production Cross Section To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 10.370 MeV
JENDL5.0 Threshold 10.339 MeV
JENDL5.0/TENDL
RatioCross Section (micro-barns)
160
120
80
40
0
10^4
10^0
10^-4
10^7
2
3
4
5
6
7
8
9
10^8
2
60
Incident Energy (eV)
52-Te-129m

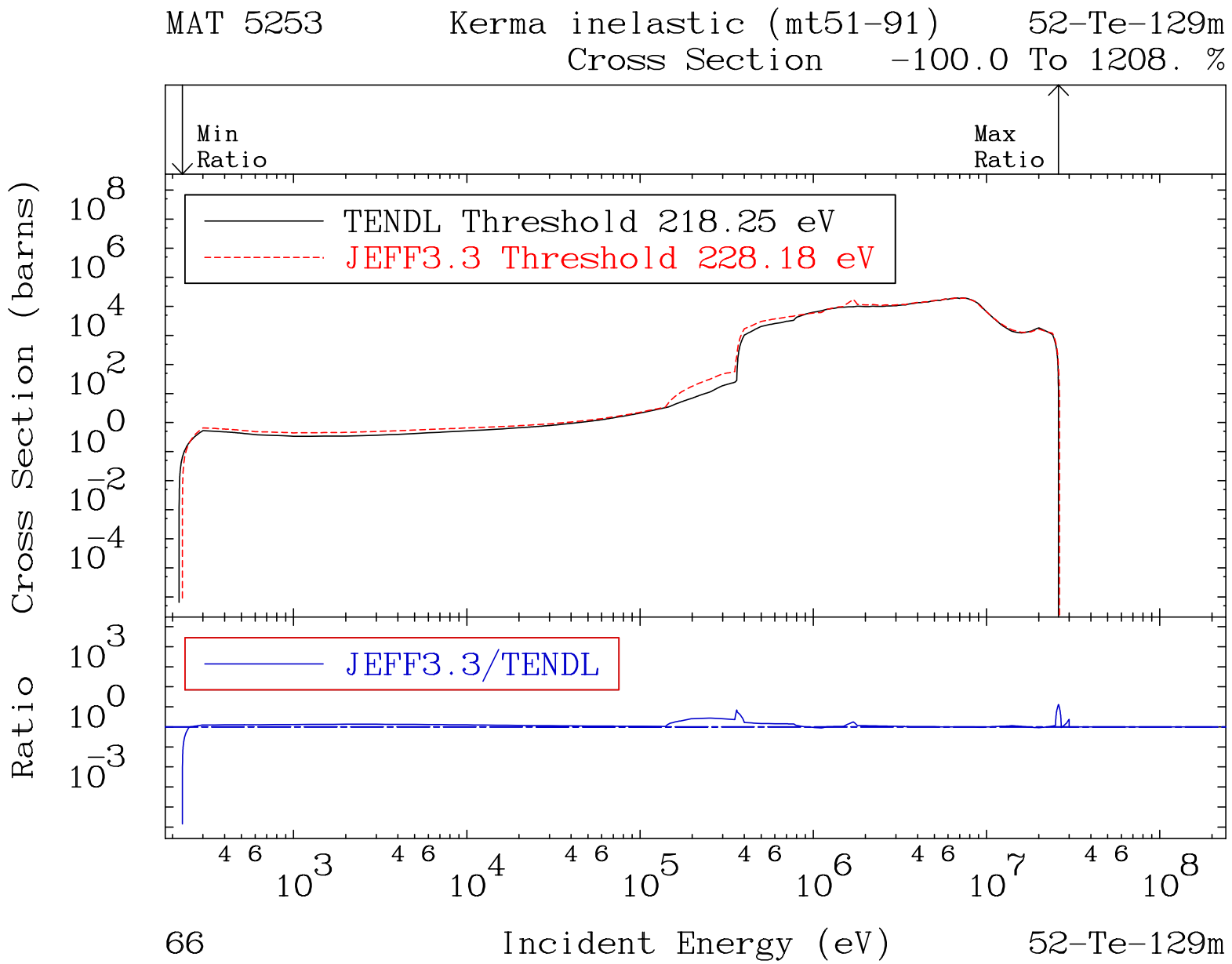

MAT 5253
(n,He-3):50-Sn-127m1
52-Te-129m
Radionuclide Production Cross Section To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 10.375 MeV
JENDL5.0 Threshold 10.344 MeV
JENDL5.0/TENDL
RatioCross Section (micro-barns)
70
60
50
40
30
20
10
0
10^4
10^0
10^-4
10^7
2
3
4
5
6
7
8
9
10^8
2
61
Incident Energy (eV)
52-Te-129m

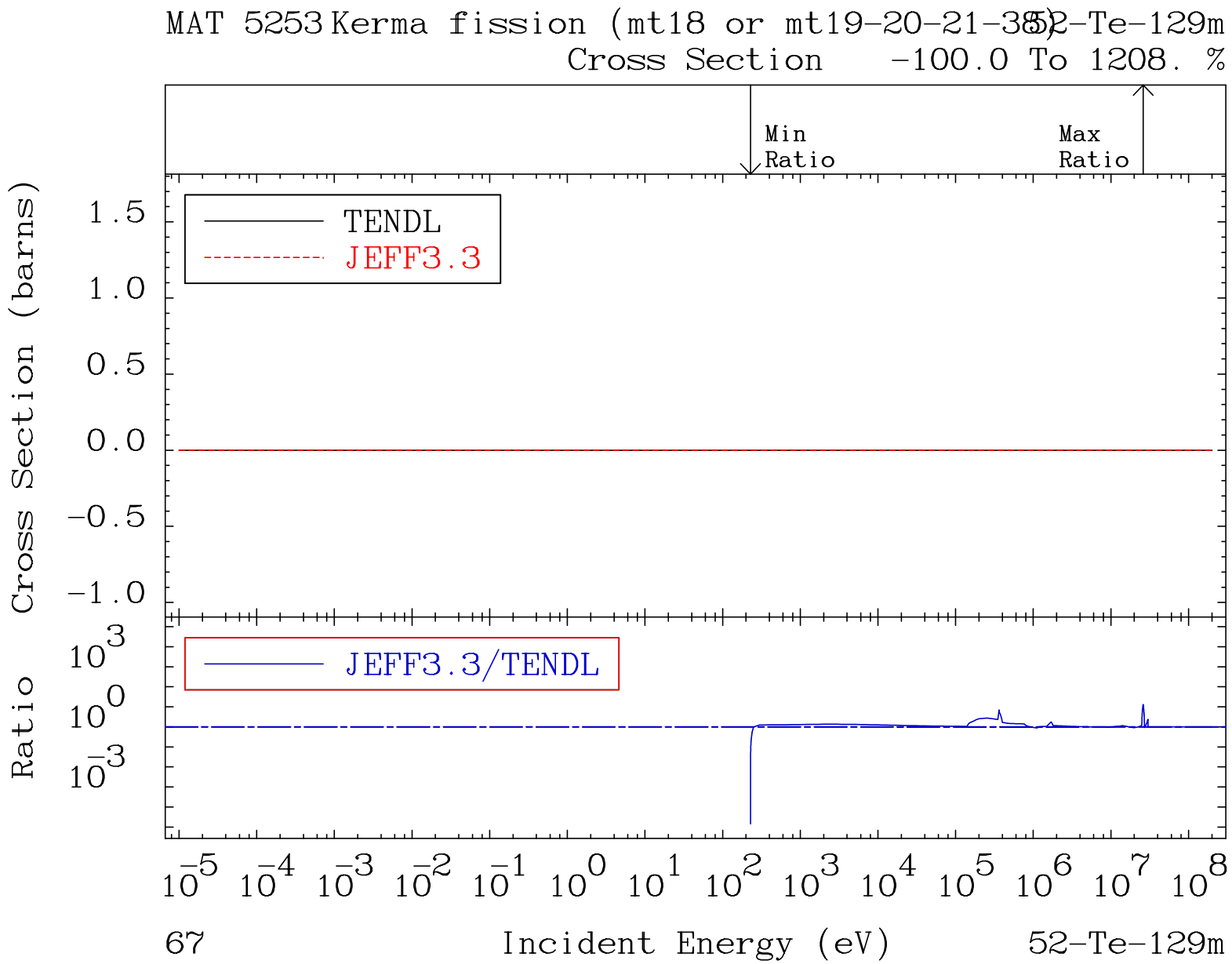

MAT 5253
He-4 Production
Cross Section
52-Te-129m
-24.18 To 9999. %
Max
Ratio
Min
Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
62
52-Te-129m

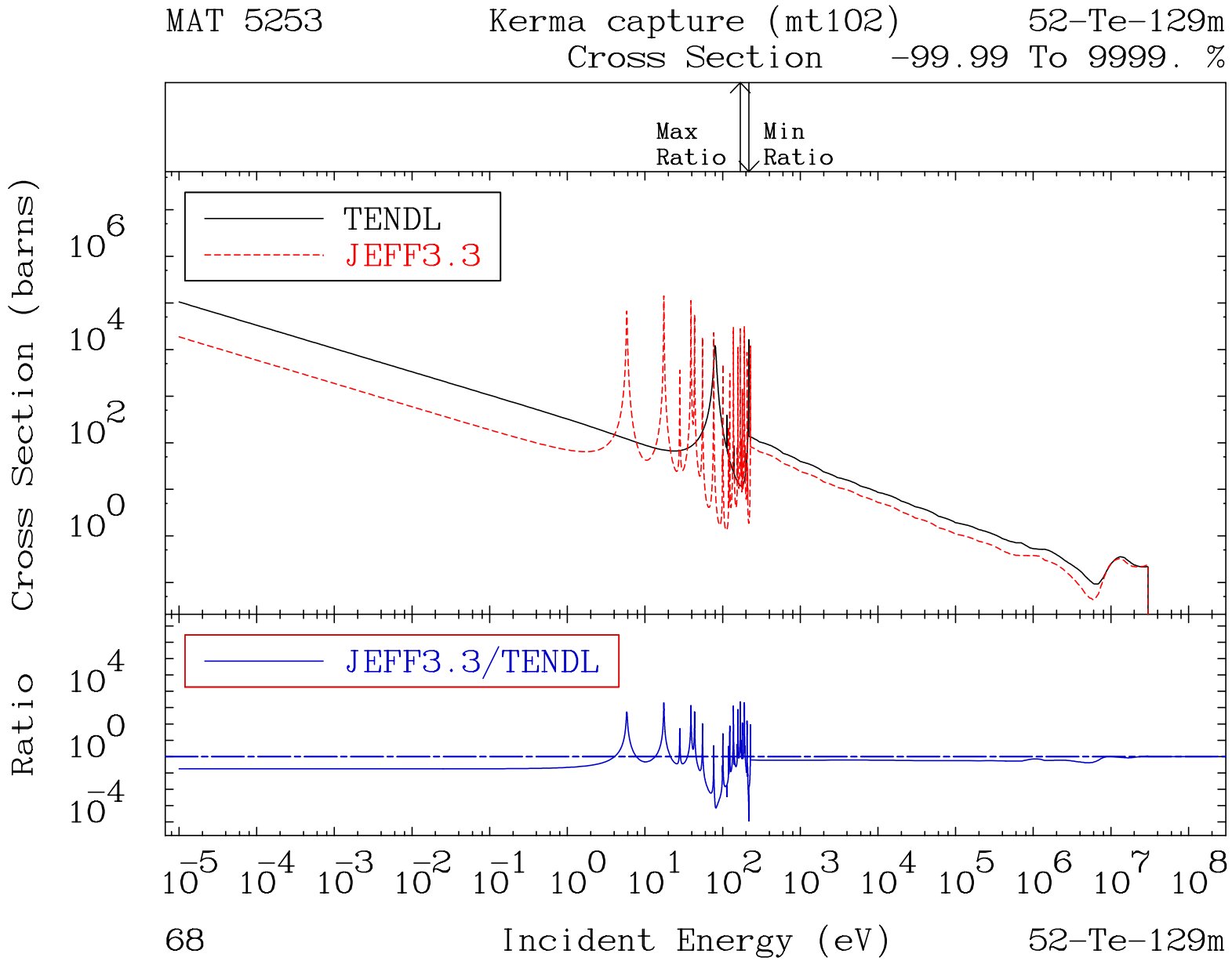

MAT 5253
Kerma total (eV-barns)
52-Te-129m
Cross Section -99.94 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
63
52-Te-129m

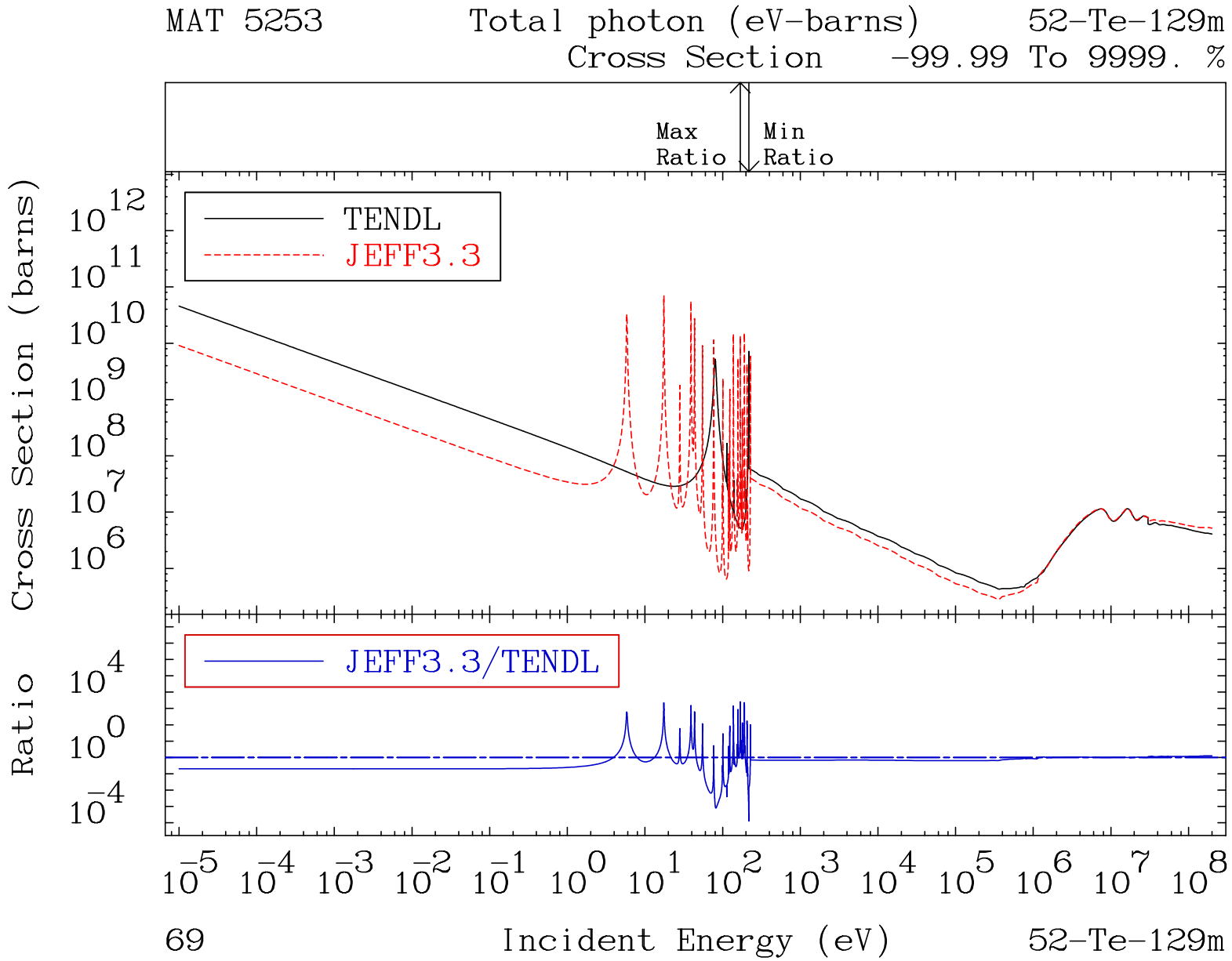

MAT 5253
Kerma elastic
Cross Section
52-Te-129m
-99.95 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
64
52-Te-129m

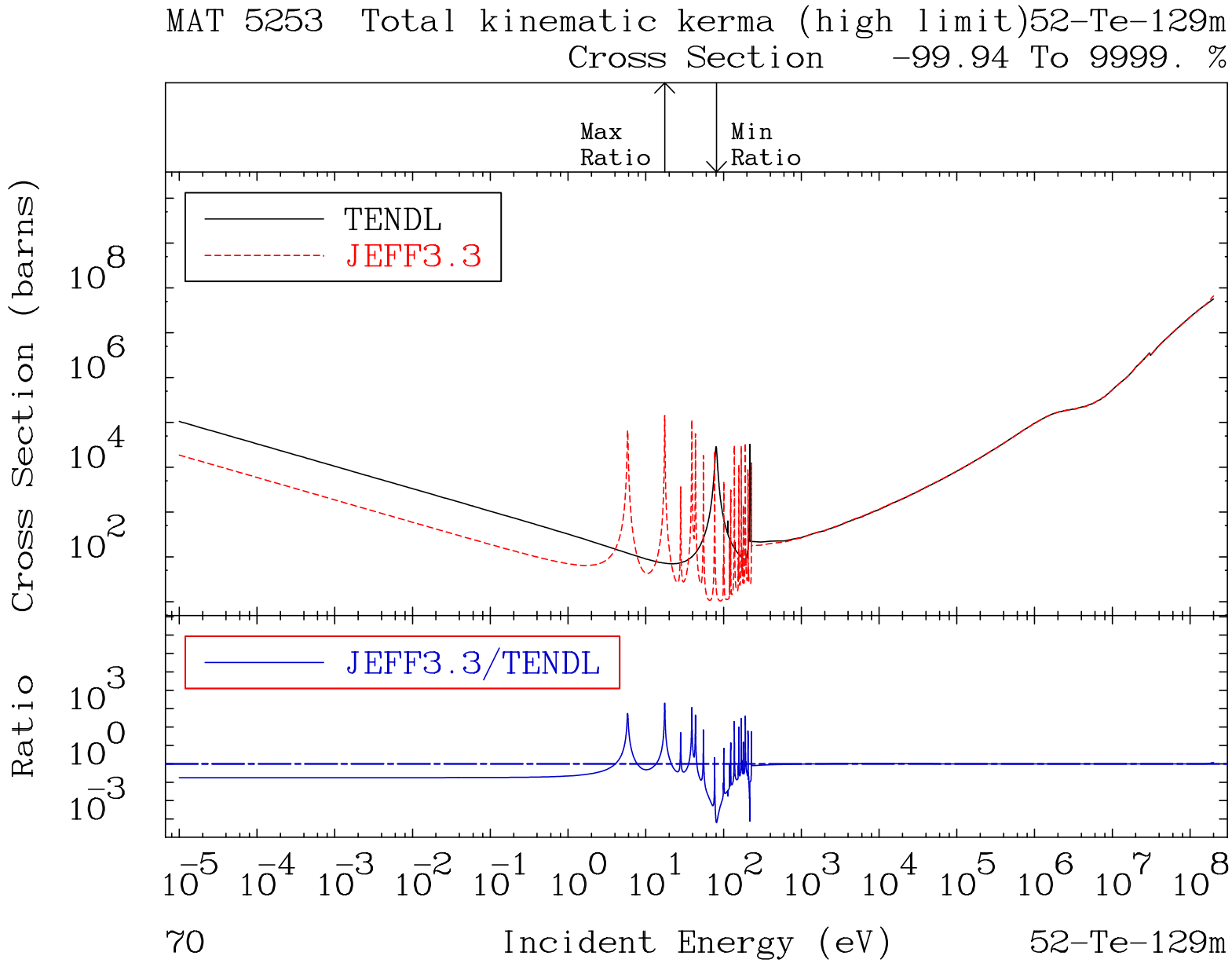

MAT 5253 Kerma non-elastic (all but mt2) 52-Te-129m
Cross Section -99.99 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
65
52-Te-129m

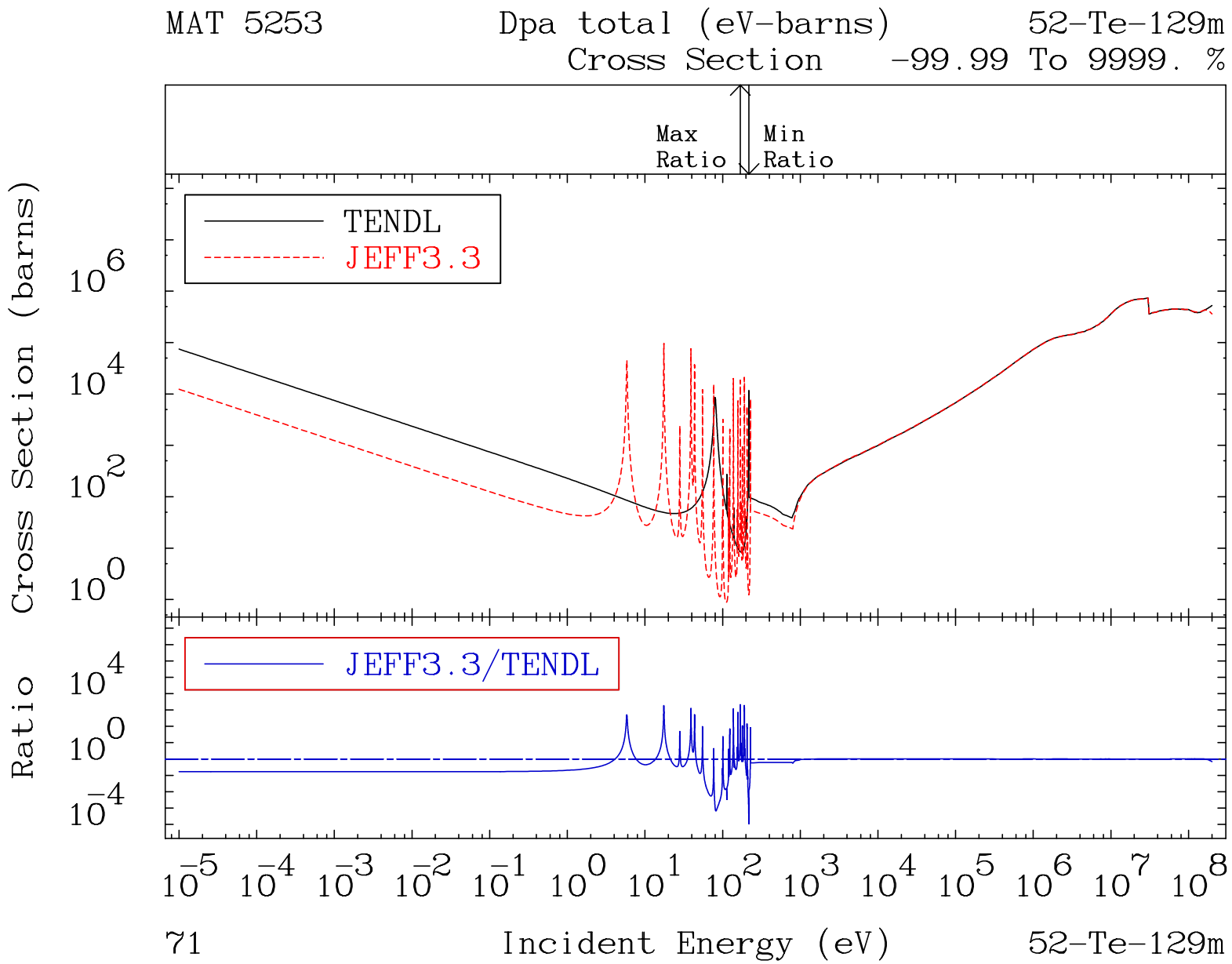

MAT 5253
Kerma inelastic (mt51-91)
52-Te-129m
Cross Section -100.0 To 1208. %
Min Ratio
Max Ratio
TENDL Threshold 218.25 eV
JEFF3.3 Threshold 228.18 eV
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
66
52-Te-129m

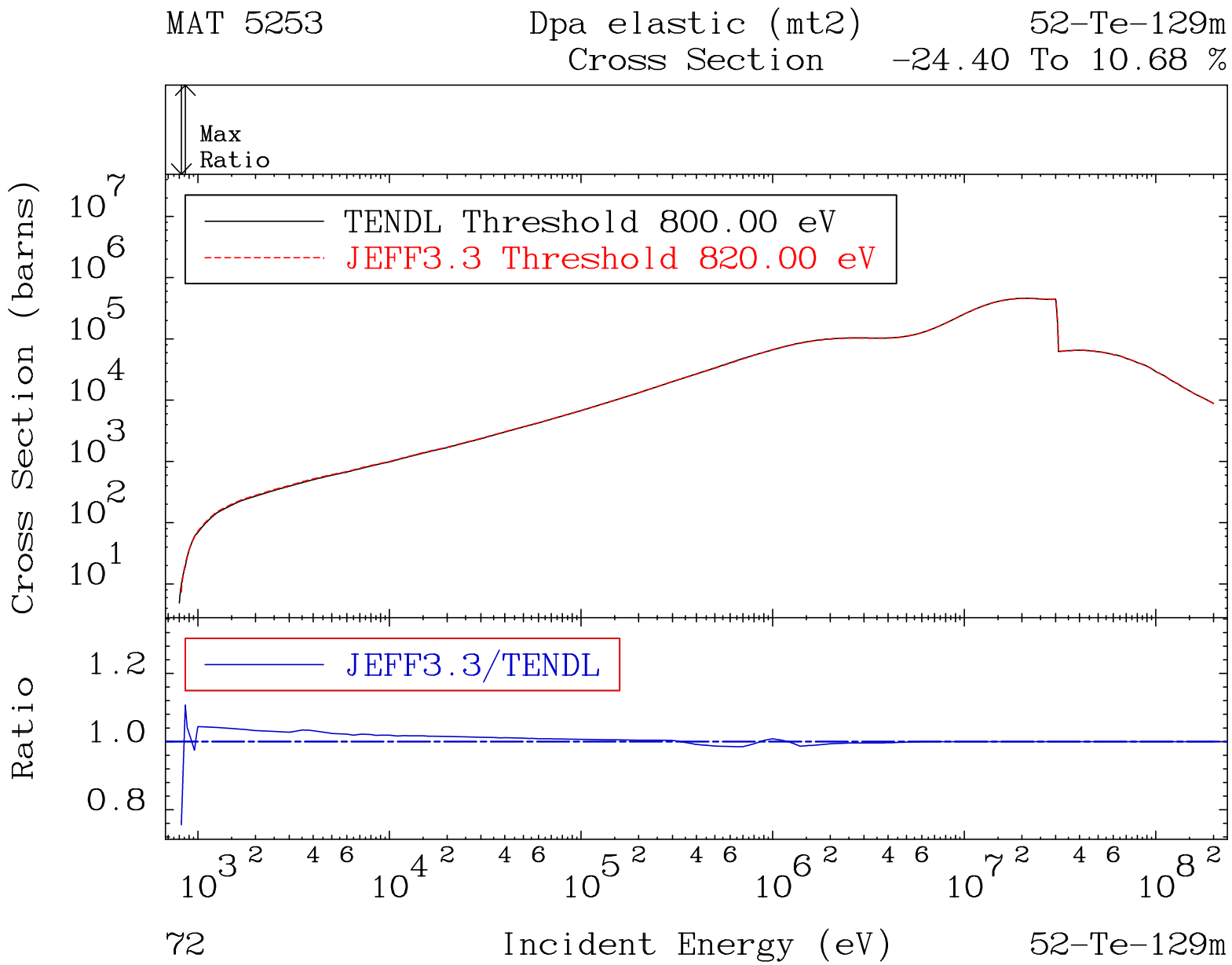

MAT 5253 Kerma fission (mt18 or mt19-20-21-38) 52-Te-129m
Cross Section -100.0 To 1208. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
1.5
1.0
0.5
0.0
-0.5
-1.0
10^{3}
10^{0}
10^{-3}
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2} 10^{3} 10^{4} 10^{5} 10^{6} 10^{7} 10^{8}
67
Incident Energy (eV)
52-Te-129m

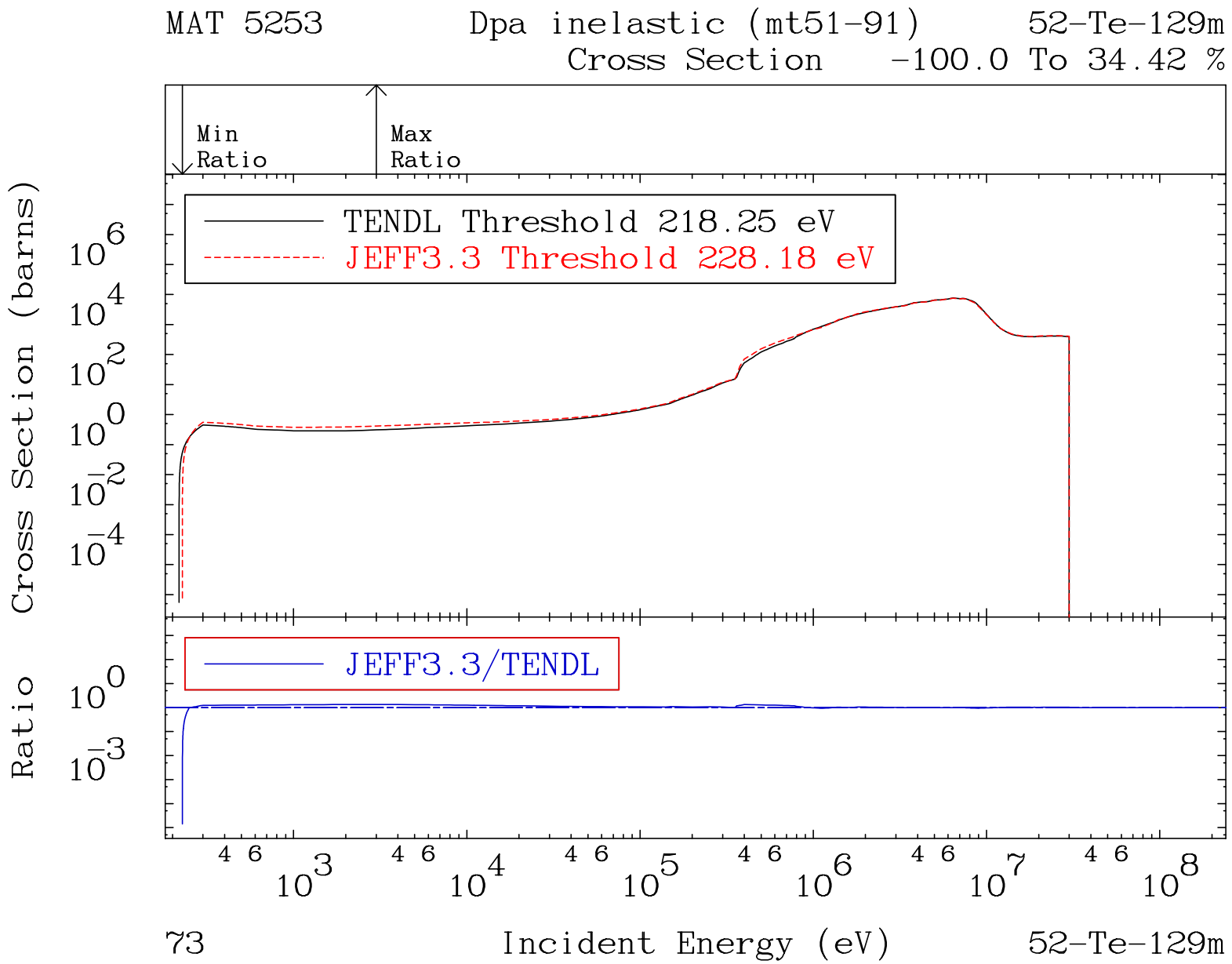

MAT 5253
Kerma capture (mt102)
52-Te-129m
Cross Section -99.99 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
68
52-Te-129m

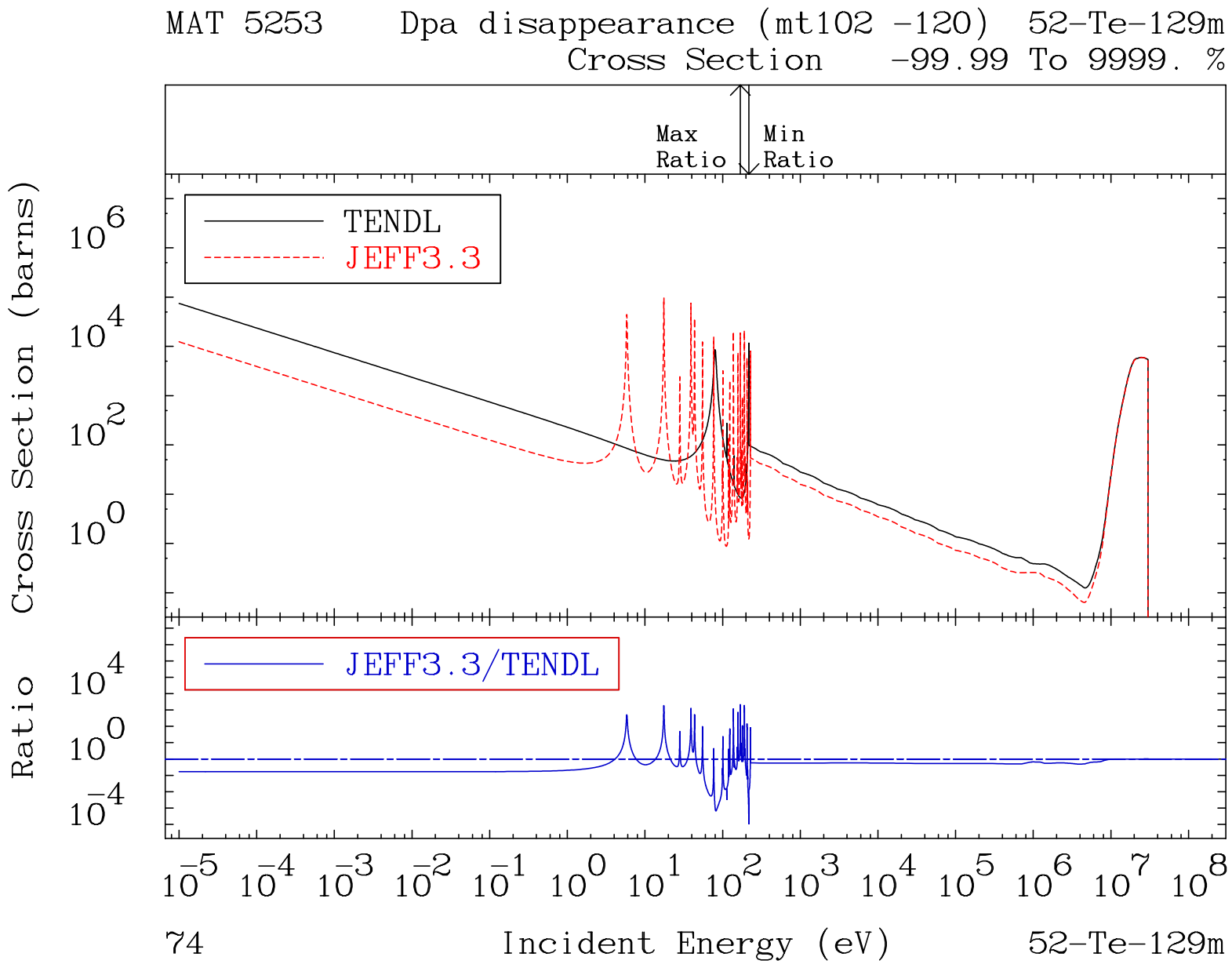

MAT 5253
Total photon (eV-barns)
52-Te-129m
Cross Section -99.99 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
69
52-Te-129m

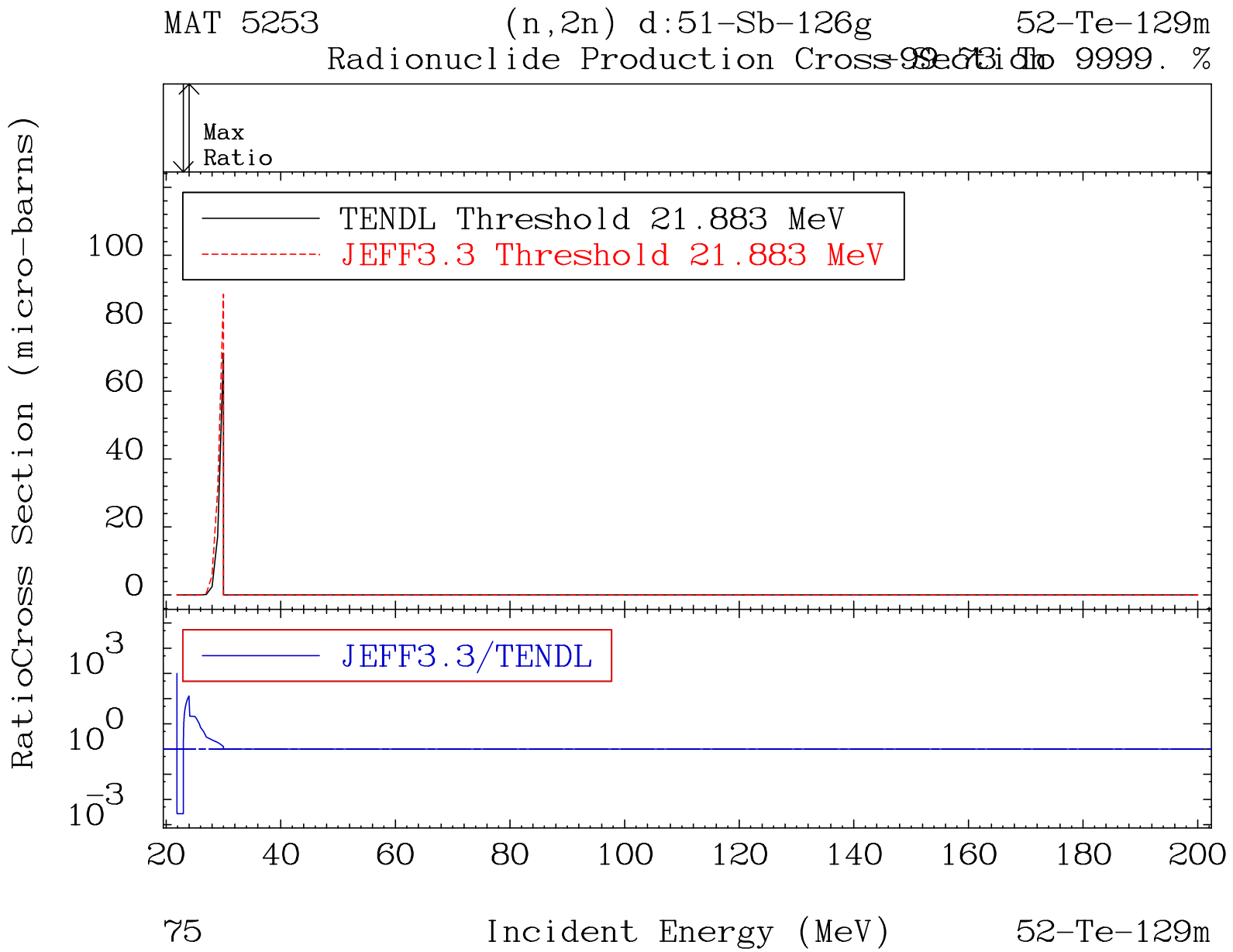

MAT 5253 Total kinematic kerma (high limit)52-Te-129m
Cross Section -99.94 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
70
52-Te-129m

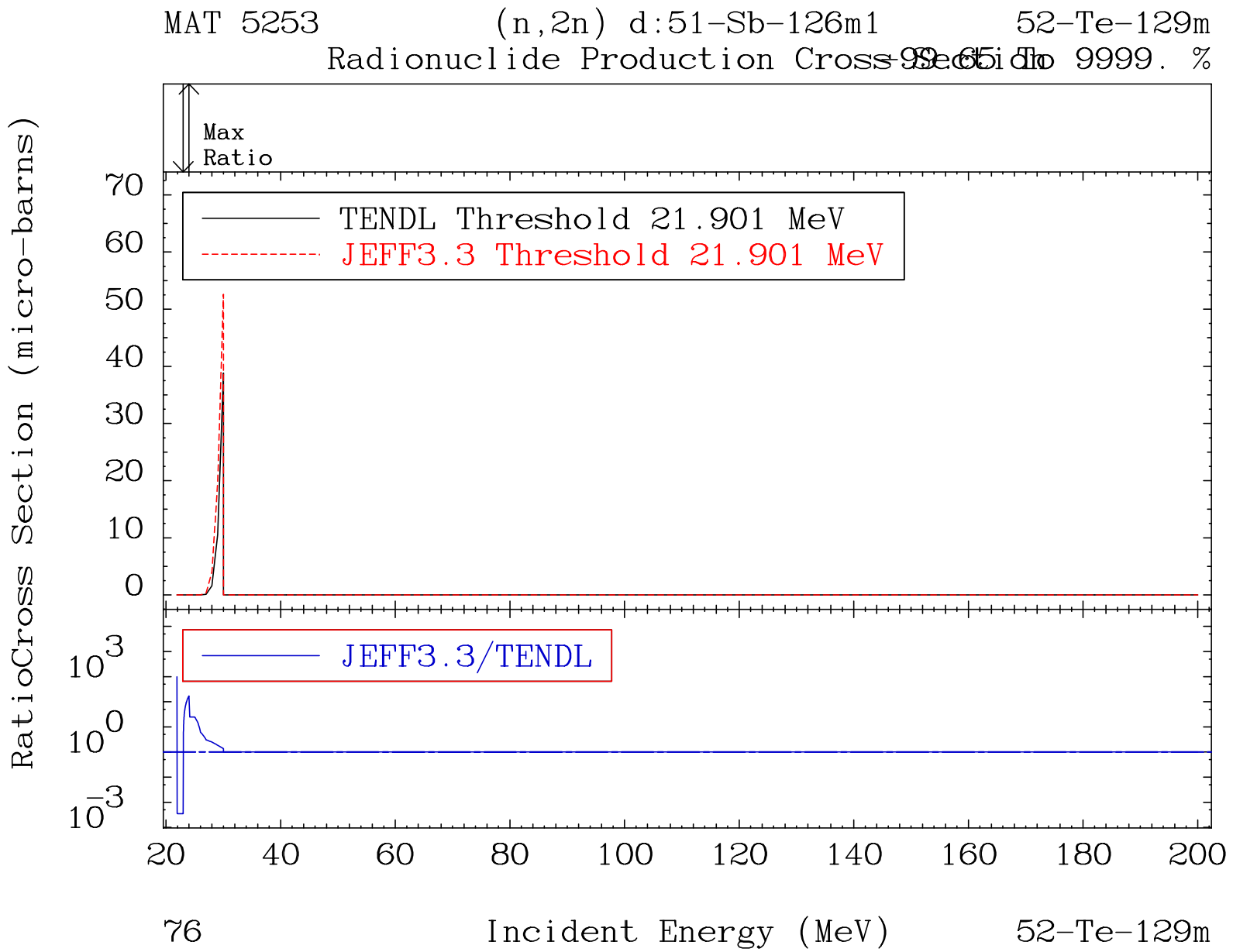

MAT 5253
Dpa total (eV-barns)
52-Te-129m
Cross Section -99.99 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
71
52-Te-129m

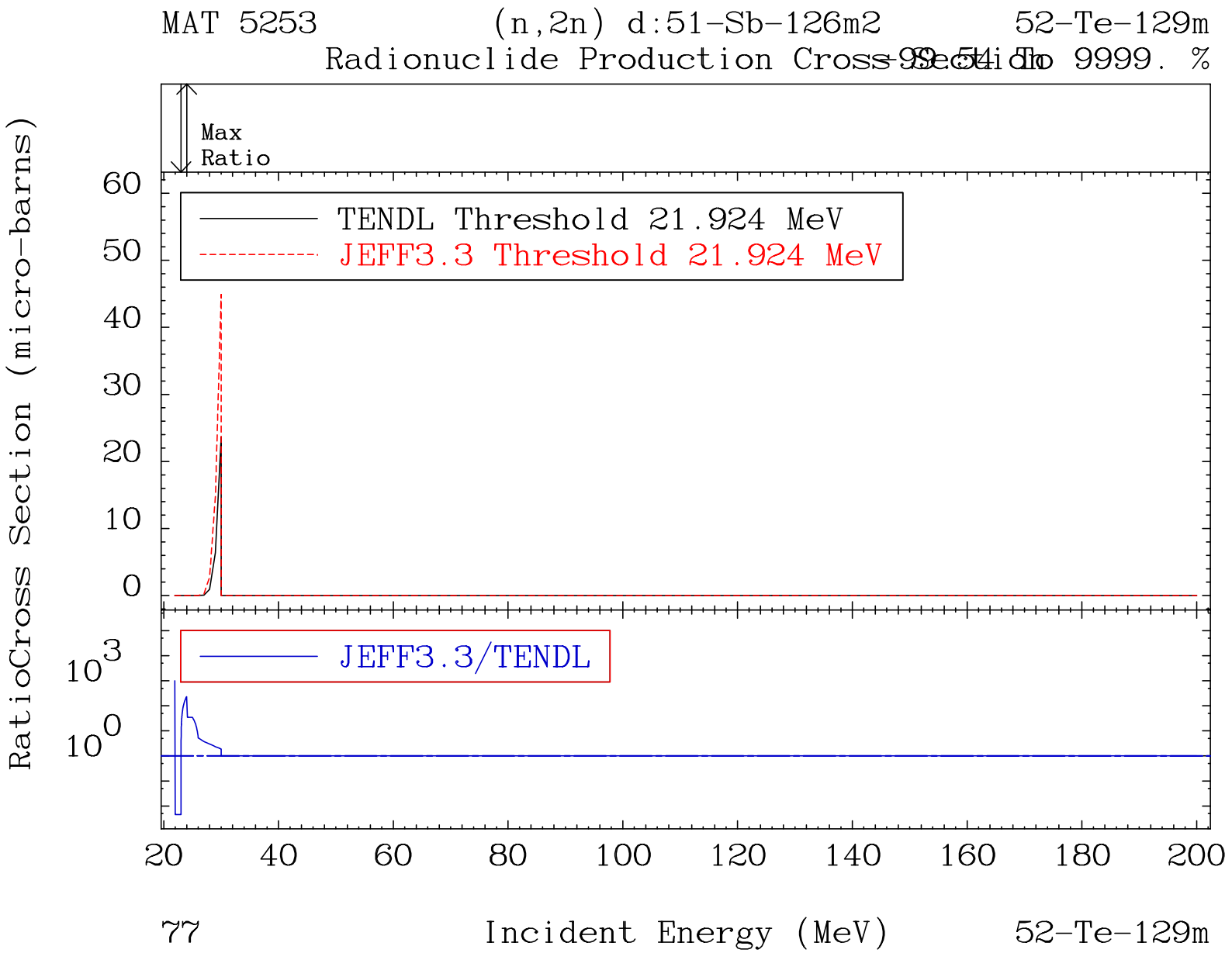

MAT 5253
Dpa elastic (mt2)
Cross Section
52-Te-129m
-24.40 To 10.68 %
Max
Ratio
TENDL Threshold 800.00 eV
JEFF3.3 Threshold 820.00 eV
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
72
52-Te-129m

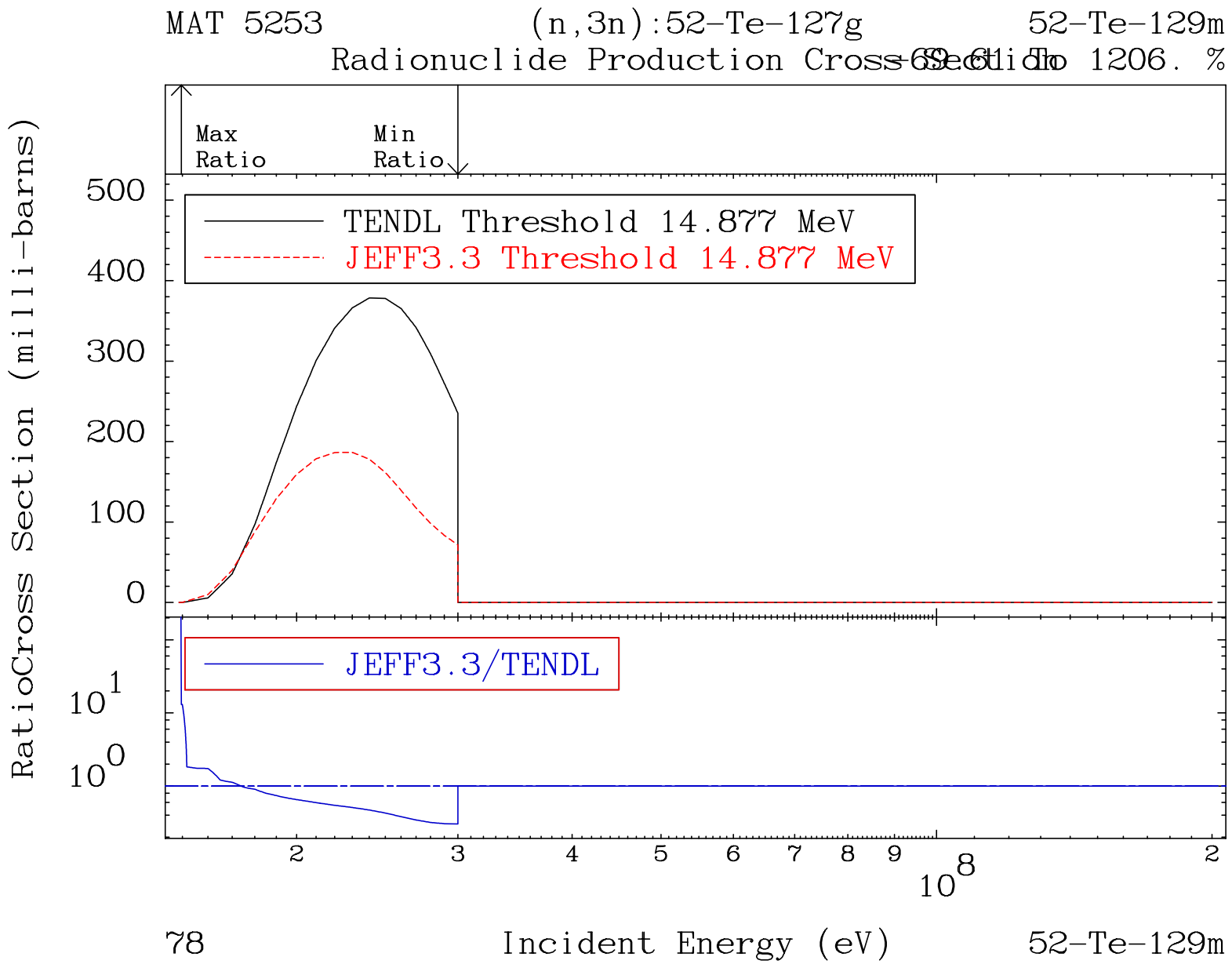

MAT 5253
Dpa inelastic (mt51-91)
52-Te-129m
Cross Section -100.0 To 34.42 %
Min Ratio
Max Ratio
TENDL Threshold 218.25 eV
JEFF3.3 Threshold 228.18 eV
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
73
52-Te-129m

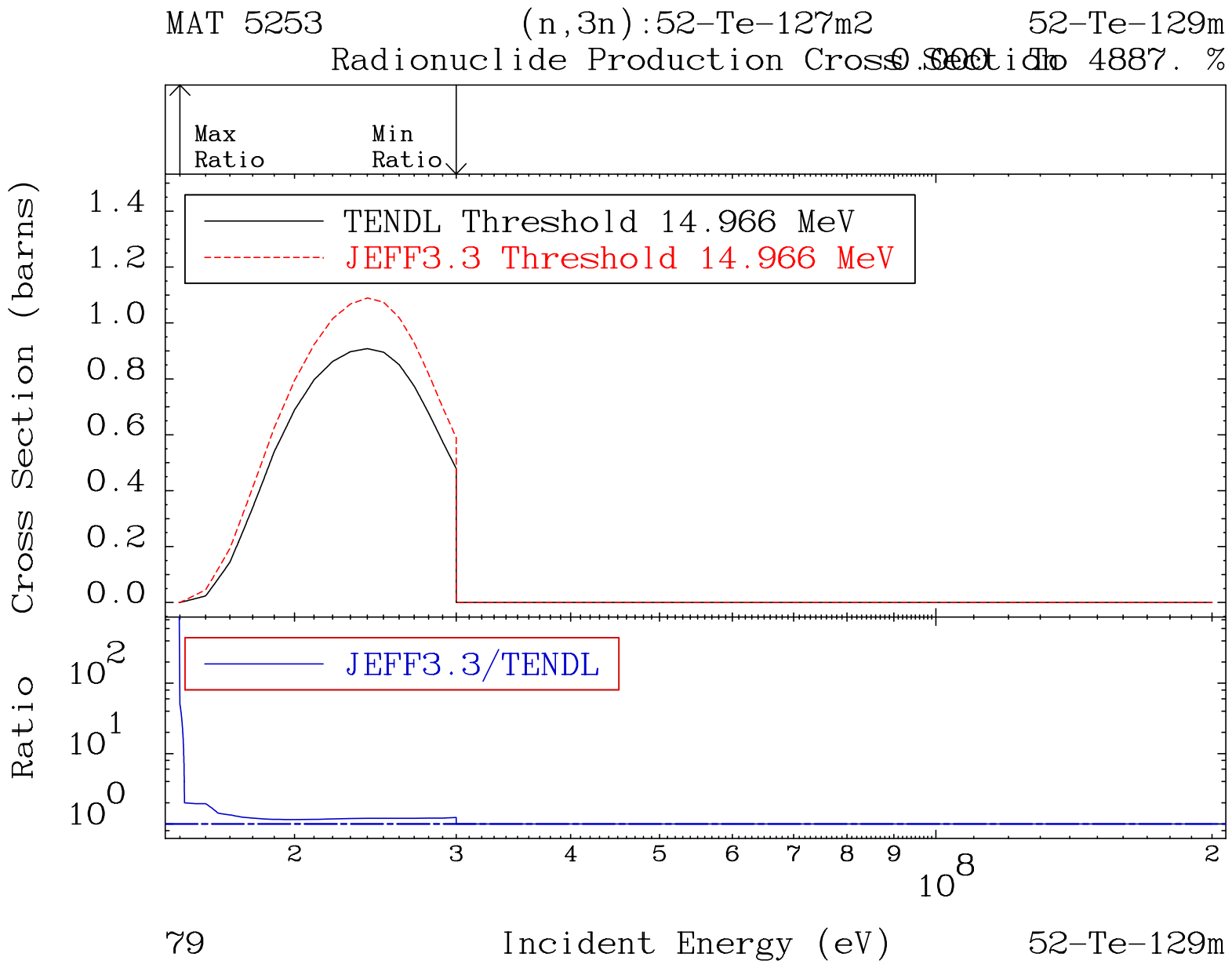

MAT 5253 Dpa disappearance (mt102 -120) 52-Te-129m
Cross Section -99.99 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
74
52-Te-129m

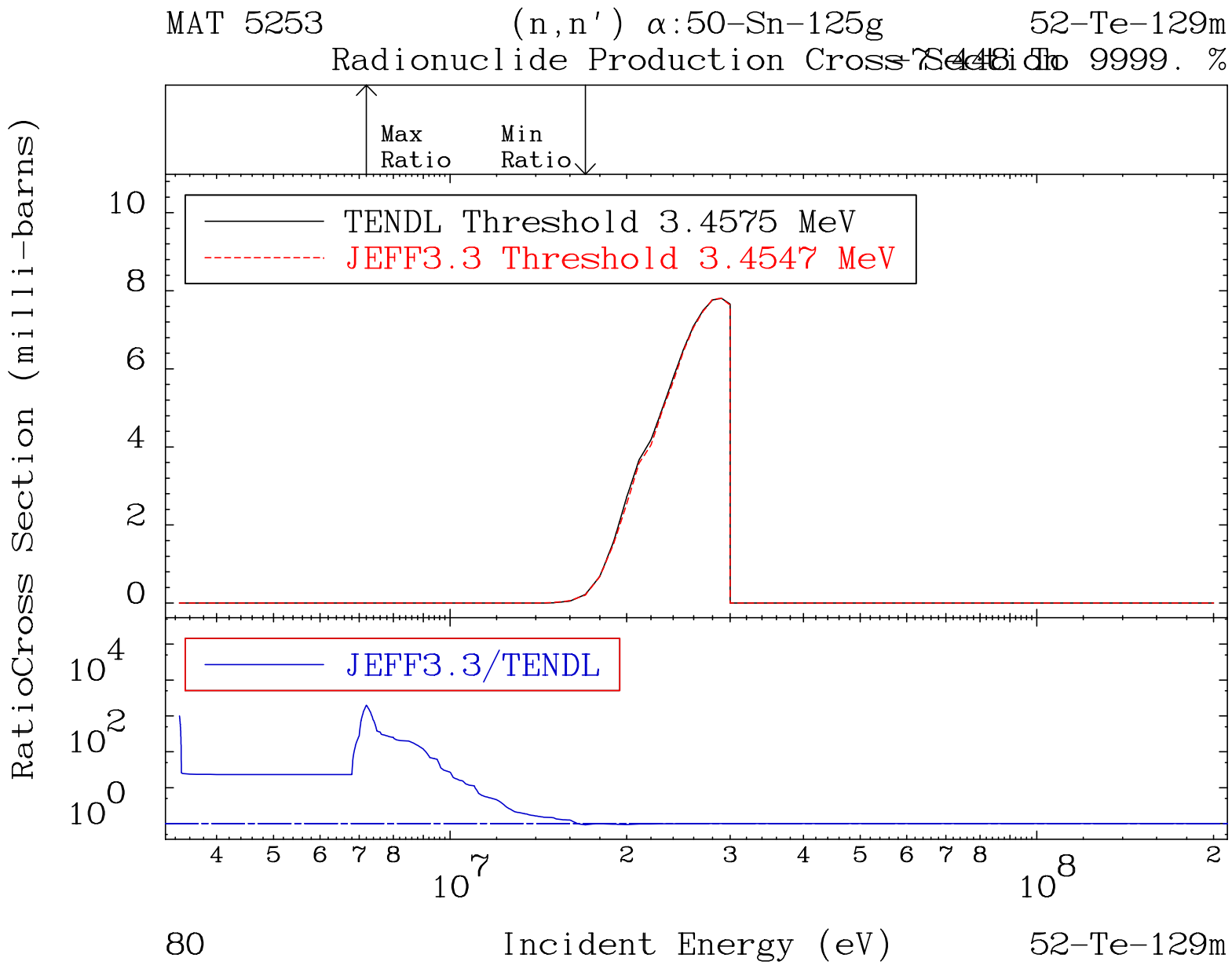

MAT 5253 (n,2n) d:51-Sb-126g 52-Te-129m
Radionuclide Production Cross-Section To 9999. %
Max
Ratio
TENDL Threshold 21.883 MeV
JEFF3.3 Threshold 21.883 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
100
80
60
40
20
0
10^3
10^0
10^-3
20
40
60
80
100
120
140
160
180
200
75
Incident Energy (MeV)
52-Te-129m

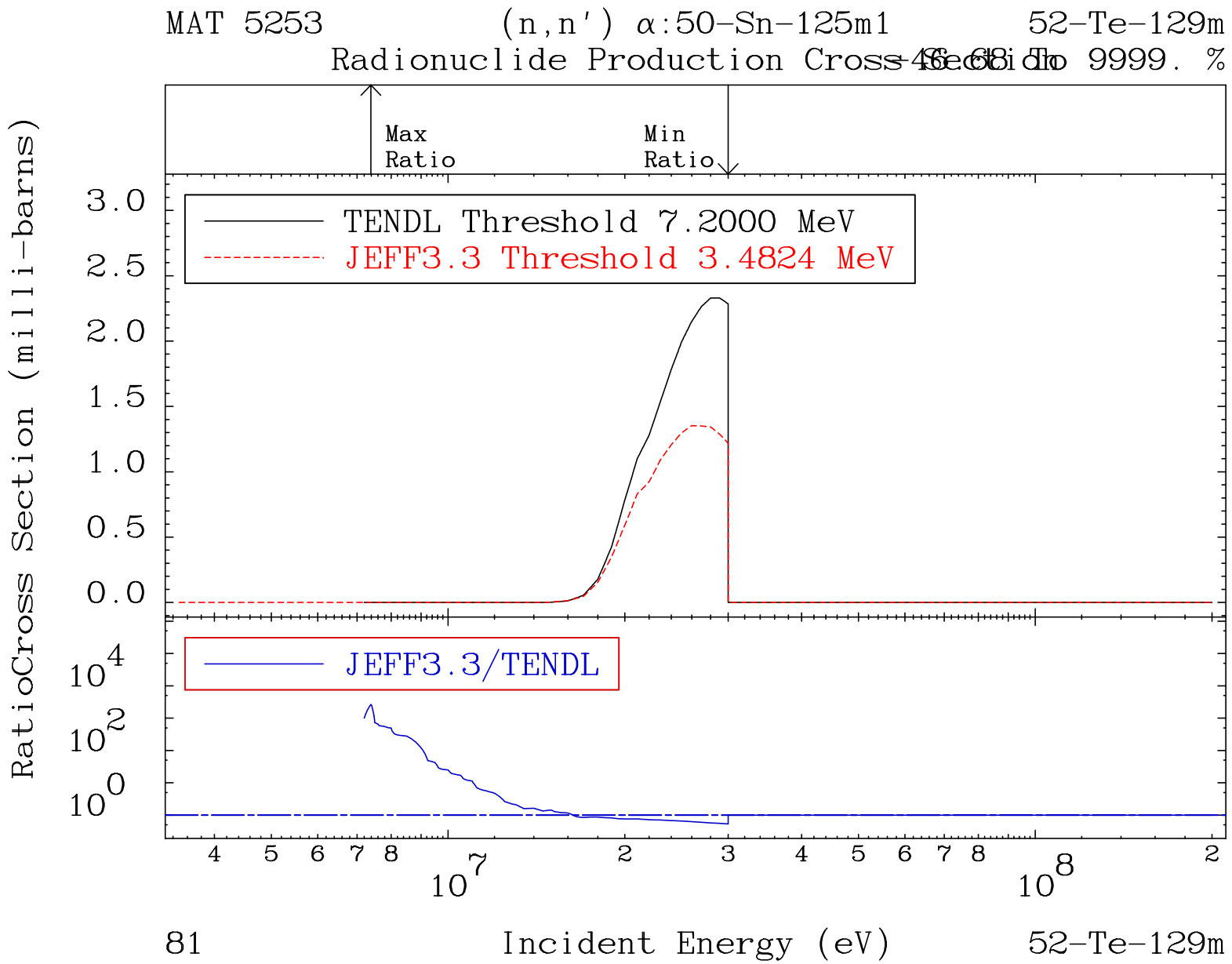

MAT 5253
(n,2n) d:51-Sb-126m1
52-Te-129m
Radionuclide Production Cross Section
Max
Ratio
TENDL Threshold 21.901 MeV
JEFF3.3 Threshold 21.901 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
Incident Energy (MeV)
76
52-Te-129m

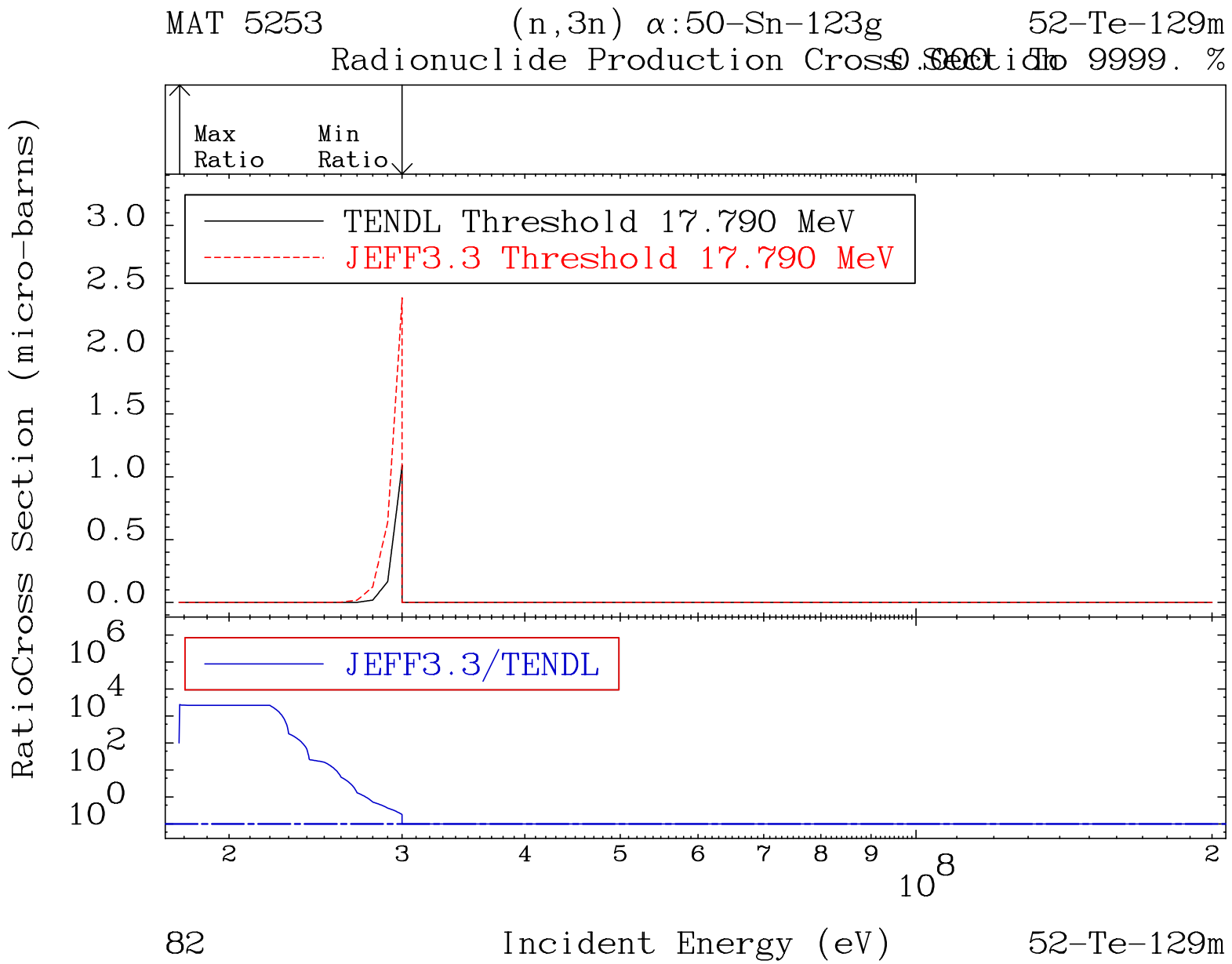

MAT 5253
(n,2n) d:51-Sb-126m2
52-Te-129m
Radionuclide Production Cross Section To 9999. %
Max
Ratio
TENDL Threshold 21.924 MeV
JEFF3.3 Threshold 21.924 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
60
50
40
30
20
10
0
10^3
10^0
20
40
60
80
100
120
140
160
180
200
77
Incident Energy (MeV)
52-Te-129m

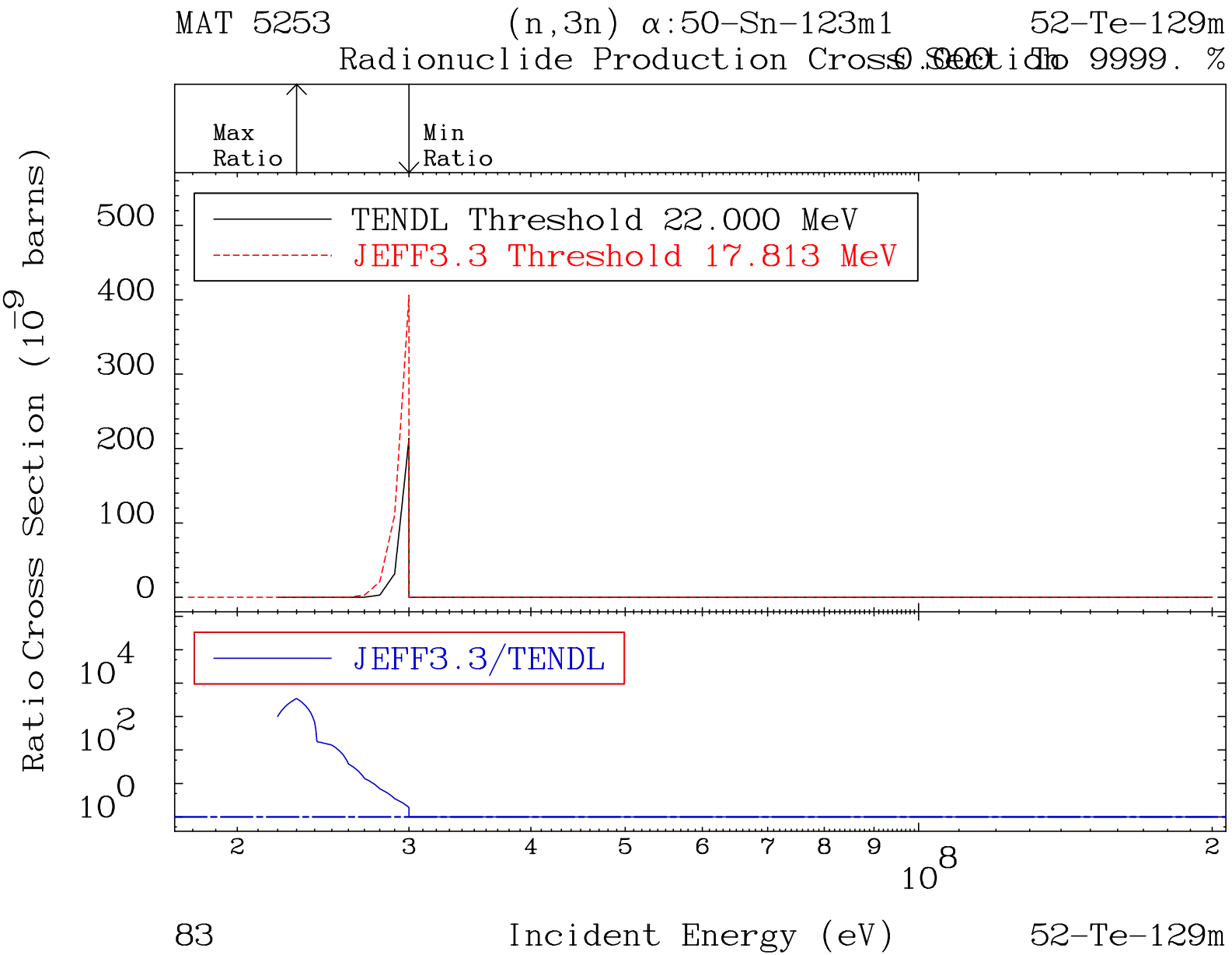

MAT 5253
(n,3n):52-Te-127g
52-Te-129m
Radionuclide Production Cross Section To 1206. %
Max Ratio
Min Ratio
TENDL Threshold 14.877 MeV
JEFF3.3 Threshold 14.877 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
500
400
300
200
100
0
10^1
10^0
2
3
4
5
6
7
8
9
10^8
2
78
Incident Energy (eV)
52-Te-129m

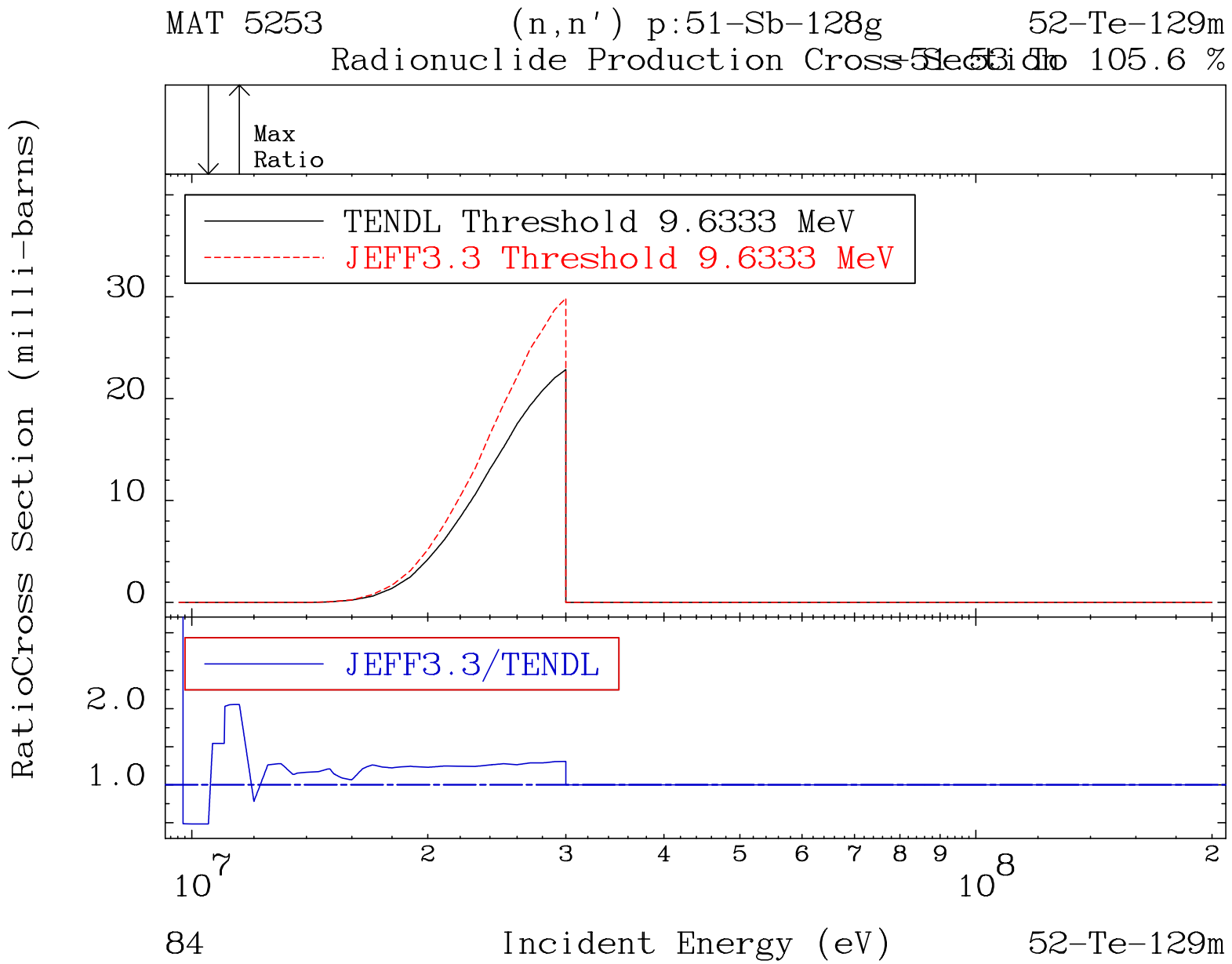

MAT 5253
(n,3n):52-Te-127m2
52-Te-129m
Radionuclide Production Cross Section
0.000 To 4887. %
Max Ratio
Min Ratio
TENDL Threshold 14.966 MeV
JEFF3.3 Threshold 14.966 MeV
JEFF3.3/TENDL
Cross Section (barns)
Ratio
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
10^2
10^1
10^0
2
3
4
5
6
7
8
9
10^8
2
79
Incident Energy (eV)
52-Te-129m

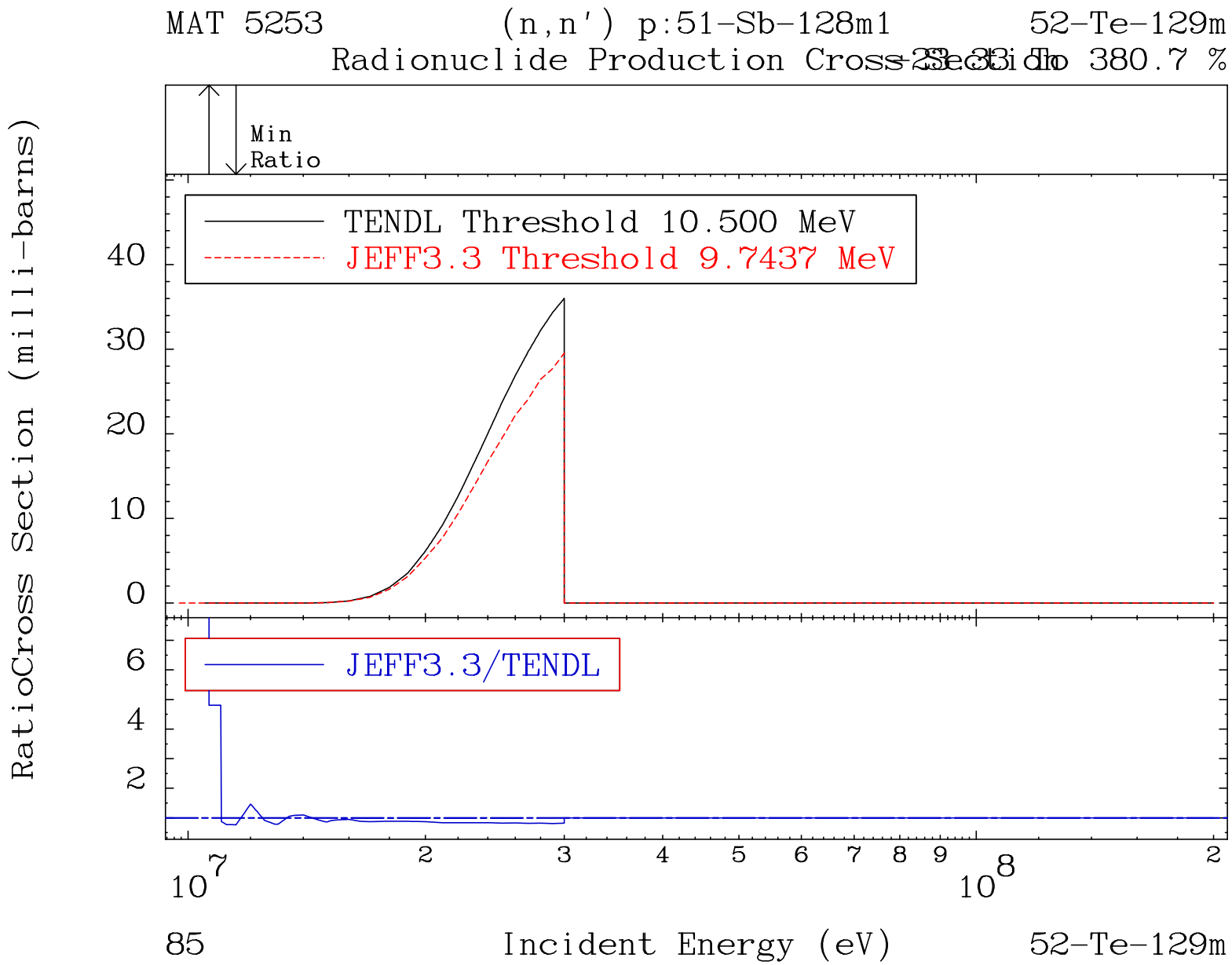

MAT 5253
(n,n') α:50-Sn-125g
52-Te-129m
Radionuclide Production Cross Section
Max Ratio
Min Ratio
TENDL Threshold 3.4575 MeV
JEFF3.3 Threshold 3.4547 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
80
52-Te-129m

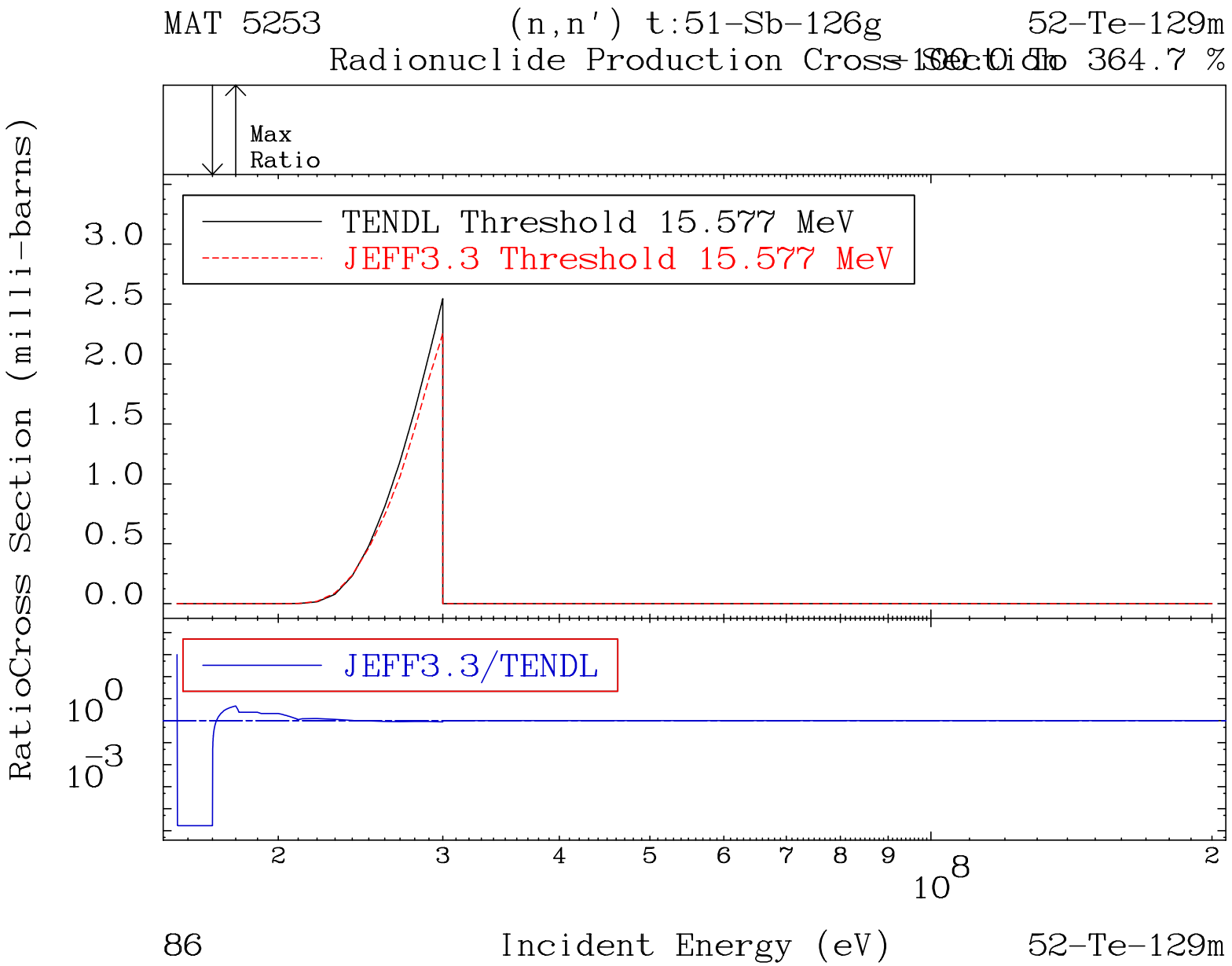

MAT 5253
(n,n') α:50-Sn-125m1
52-Te-129m
Radionuclide Production Cross-Section To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 7.2000 MeV
JEFF3.3 Threshold 3.4824 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
81
52-Te-129m

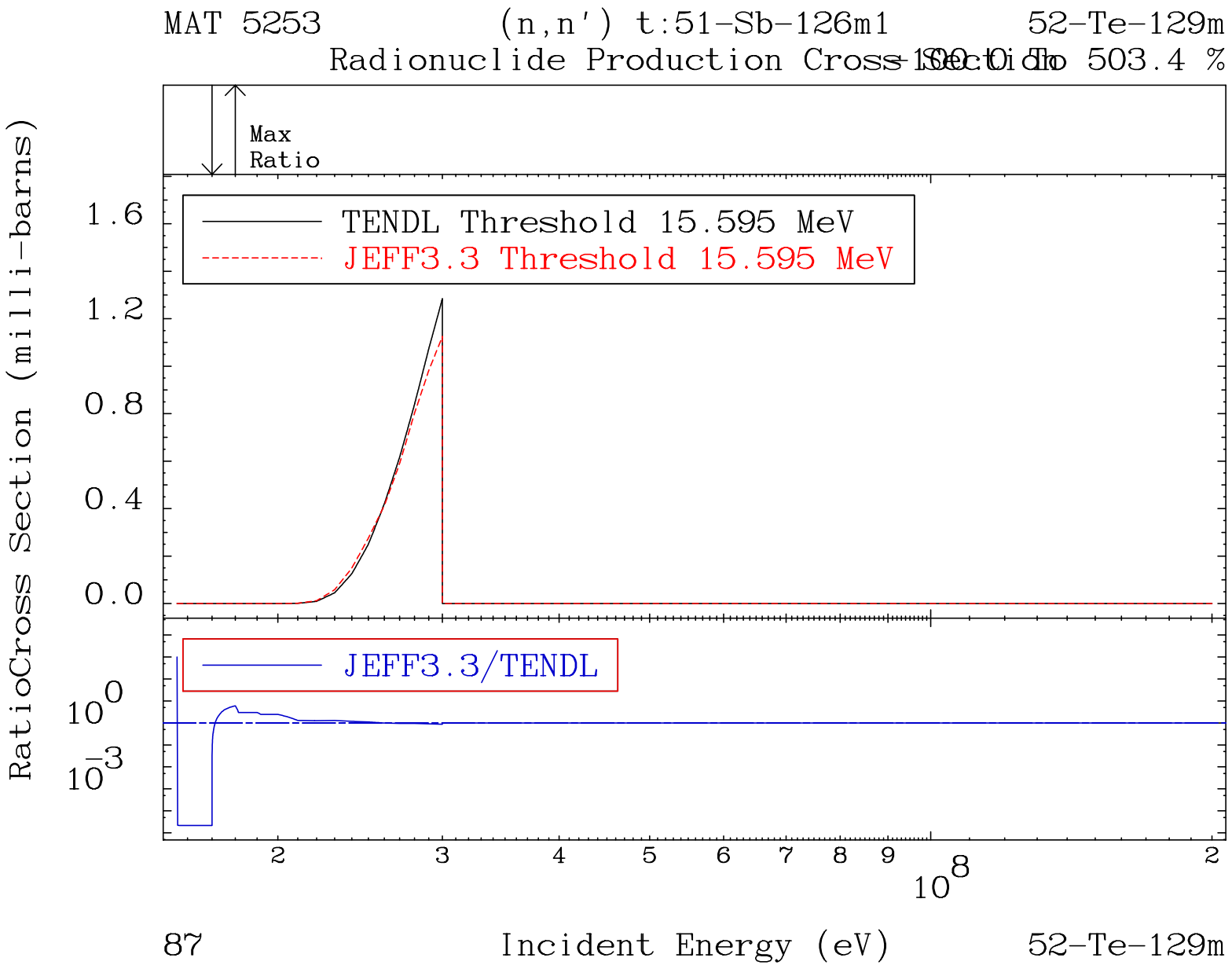

MAT 5253
(n,3n) α:50-Sn-123g
52-Te-129m
Radionuclide Production Cross Section
0.000 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 17.790 MeV
JEFF3.3 Threshold 17.790 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
10^6
10^4
10^2
10^0
2
3
4
5
6
7
8
9
10^8
2
82
Incident Energy (eV)
52-Te-129m

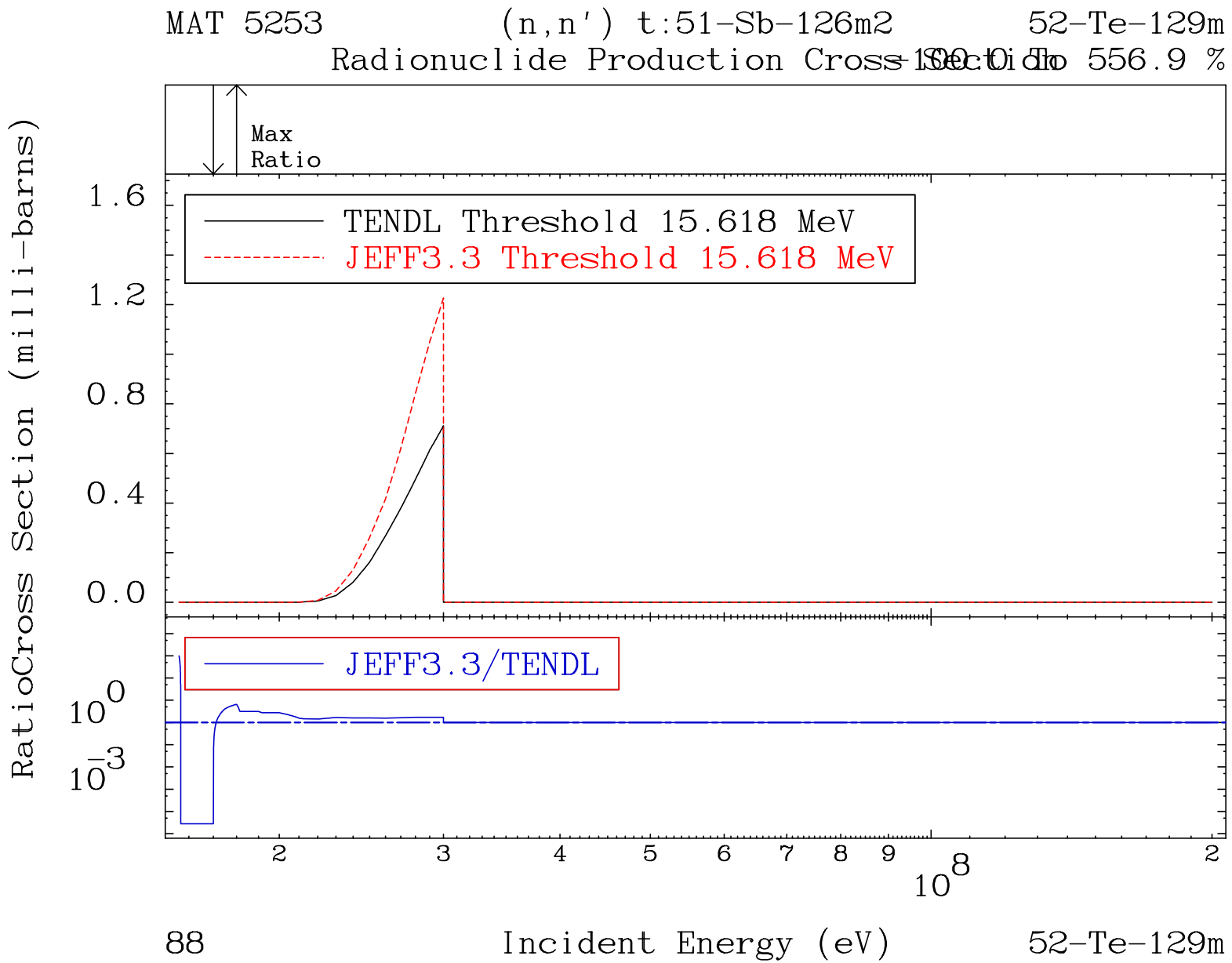

MAT 5253
(n,3n) α:50-Sn-123m1
52-Te-129m
Radionuclide Production Cross Section
0.000 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 22.000 MeV
JEFF3.3 Threshold 17.813 MeV
JEFF3.3/TENDL
Ratio Cross Section (10^{-9} barns)
500
400
300
200
100
0
10^4
10^2
10^0
2
3
4
5
6
7
8
9
10^8
2
83
Incident Energy (eV)
52-Te-129m

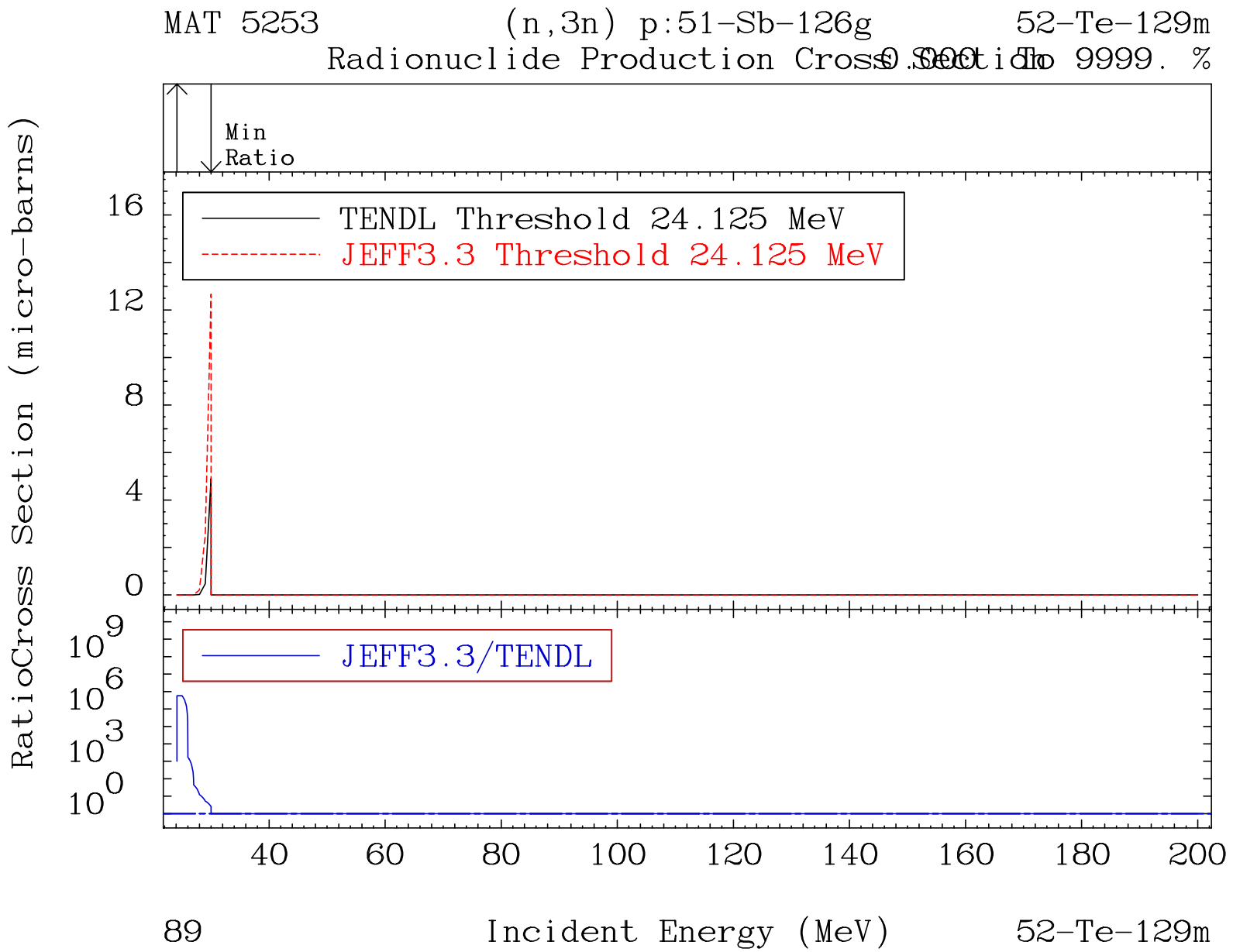

MAT 5253
(n,n') p:51-Sb-128g
52-Te-129m
Radionuclide Production Cross-Section to 105.6 %
Max
Ratio
TENDL Threshold 9.6333 MeV
JEFF3.3 Threshold 9.6333 MeV
30
20
10
0
JEFF3.3/TENDL
2.0
1.0
RatioCross Section (milli-barns)
10^7
2
3
4
5
6
7
8
9
10^8
2
84
Incident Energy (eV)
52-Te-129m

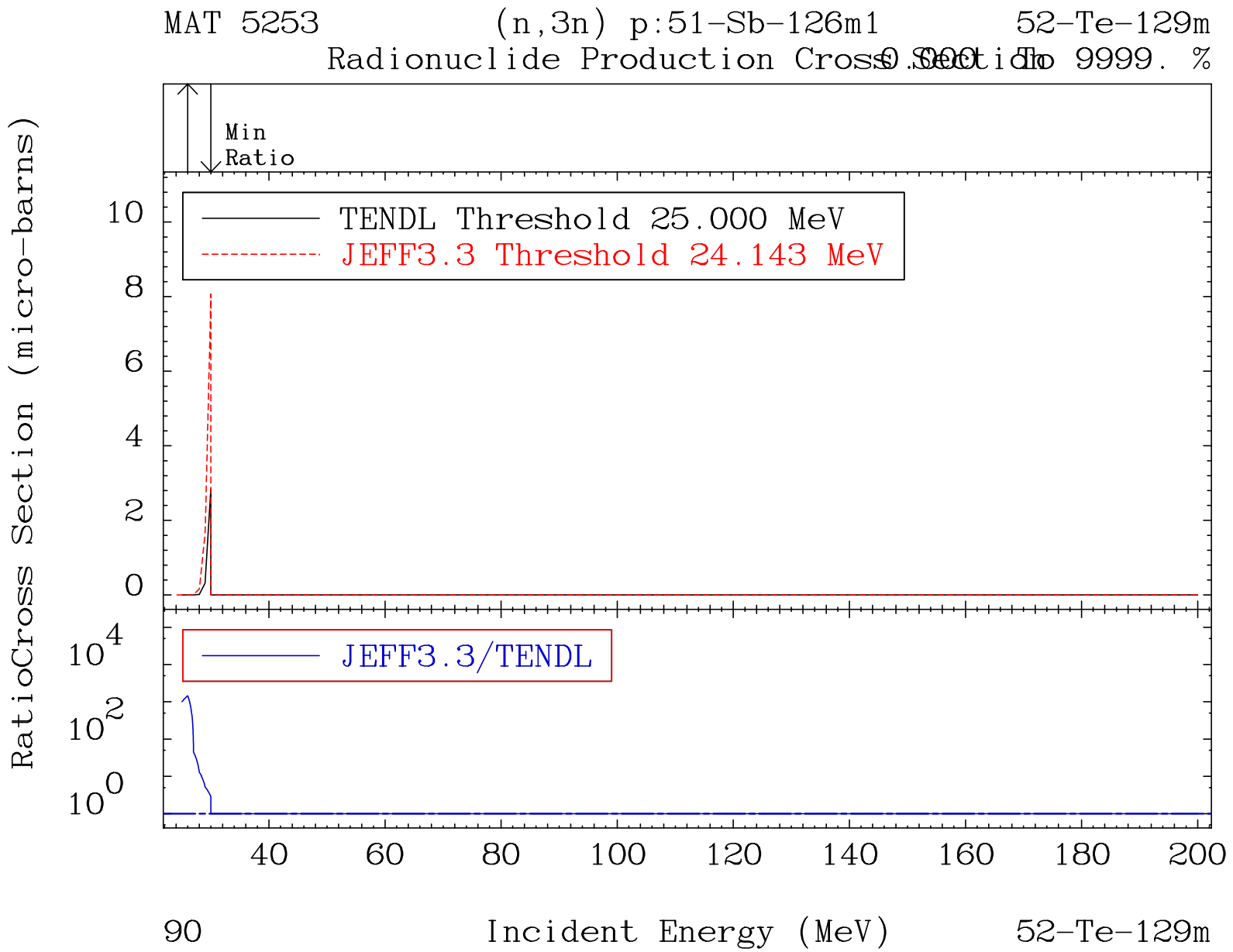

MAT 5253
(n,n') p:51-Sb-128m1
52-Te-129m
Radionuclide Production Cross Section To 380.7 %
Min
Ratio
TENDL Threshold 10.500 MeV
JEFF3.3 Threshold 9.7437 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
40
30
20
10
0
6
4
2
10^7
2
3
4
5
6
7
8
9
10^8
2
85
Incident Energy (eV)
52-Te-129m

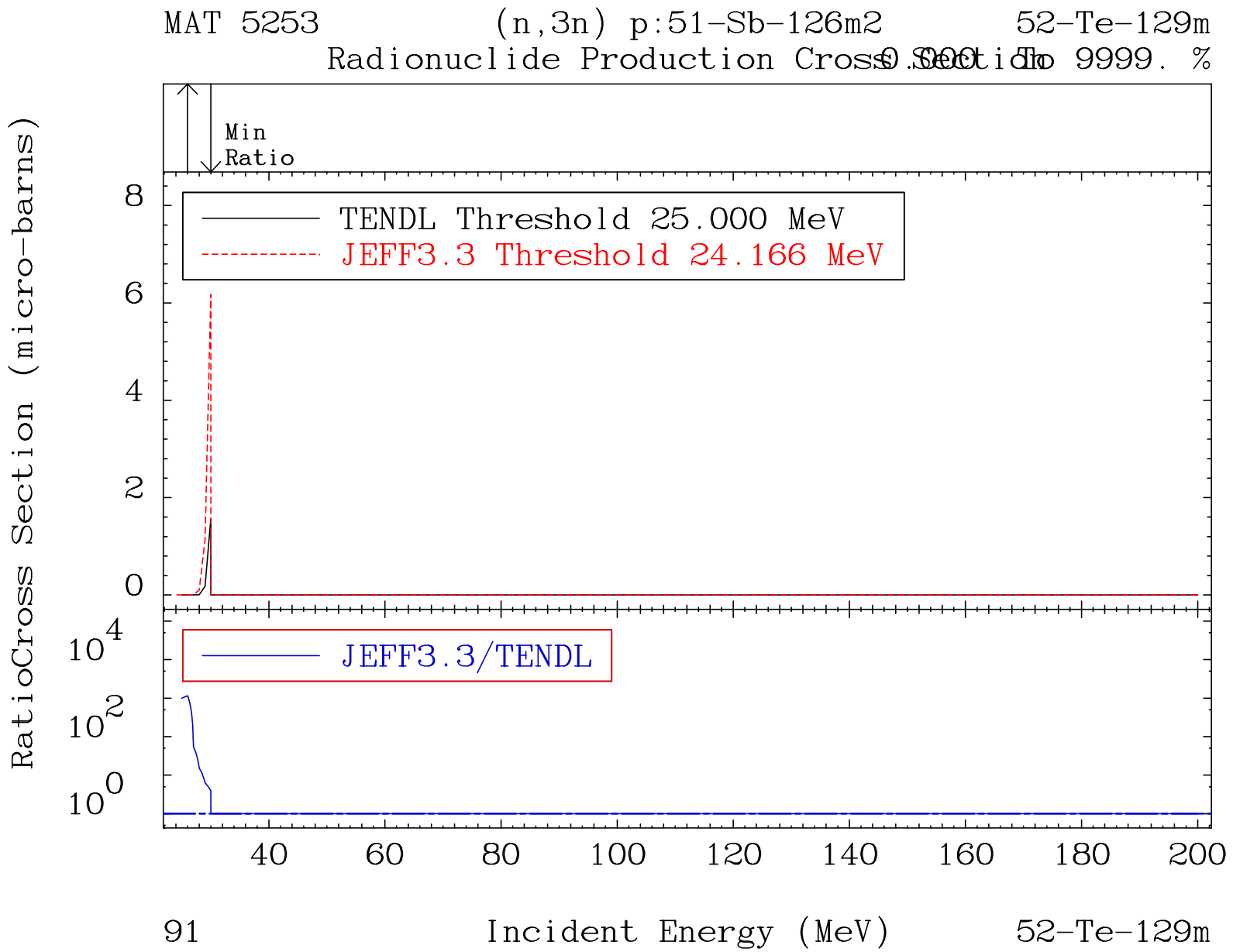

MAT 5253
(n,n') t:51-Sb-126g
52-Te-129m
Radionuclide Production Cross Section To 364.7 %
Max
Ratio
TENDL Threshold 15.577 MeV
JEFF3.3 Threshold 15.577 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
10^0
10^-3
2
3
4
5
6
7
8
9
10^8
2
86
Incident Energy (eV)
52-Te-129m

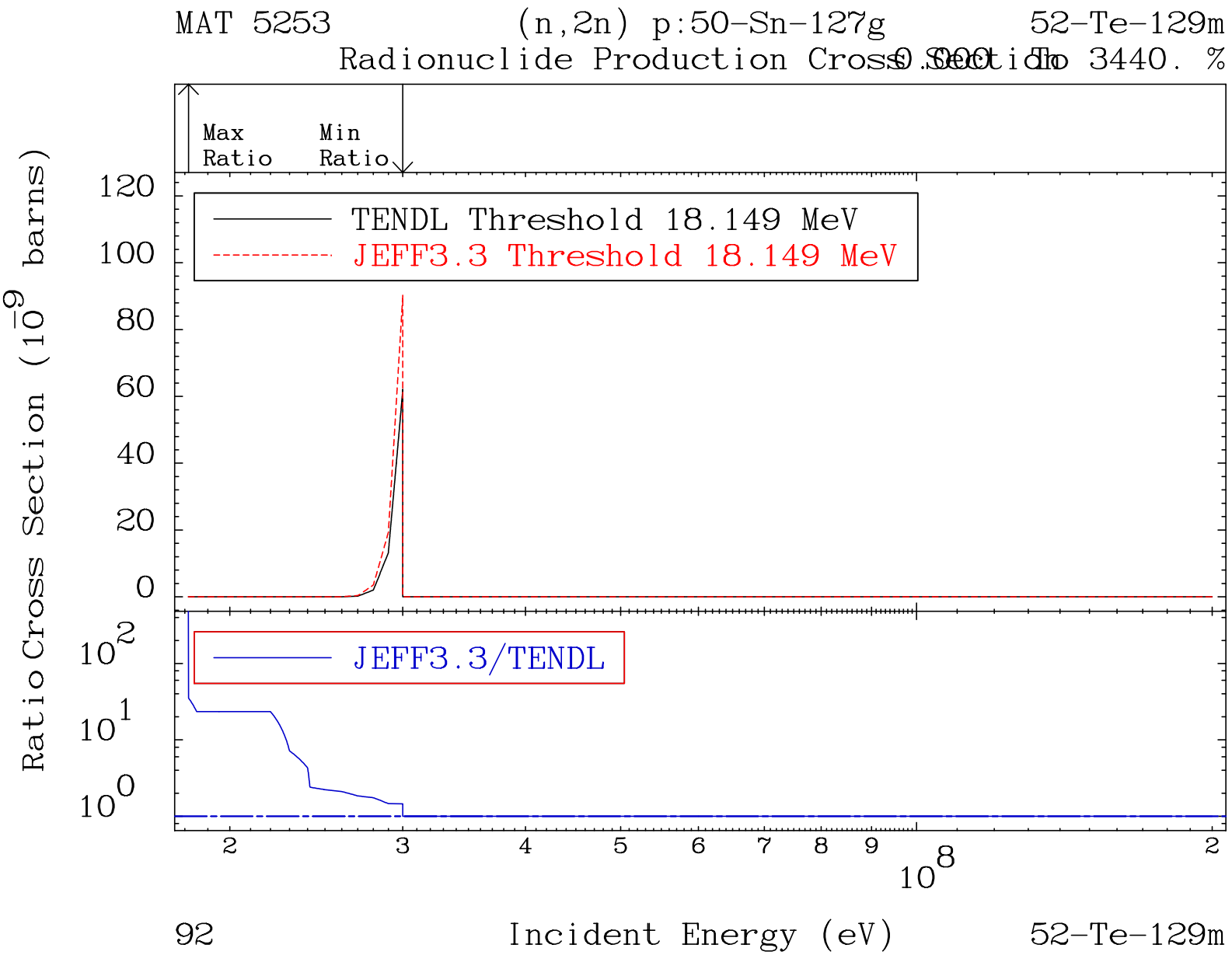

MAT 5253
(n,n') t:51-Sb-126m1
52-Te-129m
Radionuclide Production Cross Section To 503.4 %
Max
Ratio
TENDL Threshold 15.595 MeV
JEFF3.3 Threshold 15.595 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
1.6
1.2
0.8
0.4
0.0
10^0
10^-3
2
3
4
5
6
7
8
9
10^8
2
87
Incident Energy (eV)
52-Te-129m

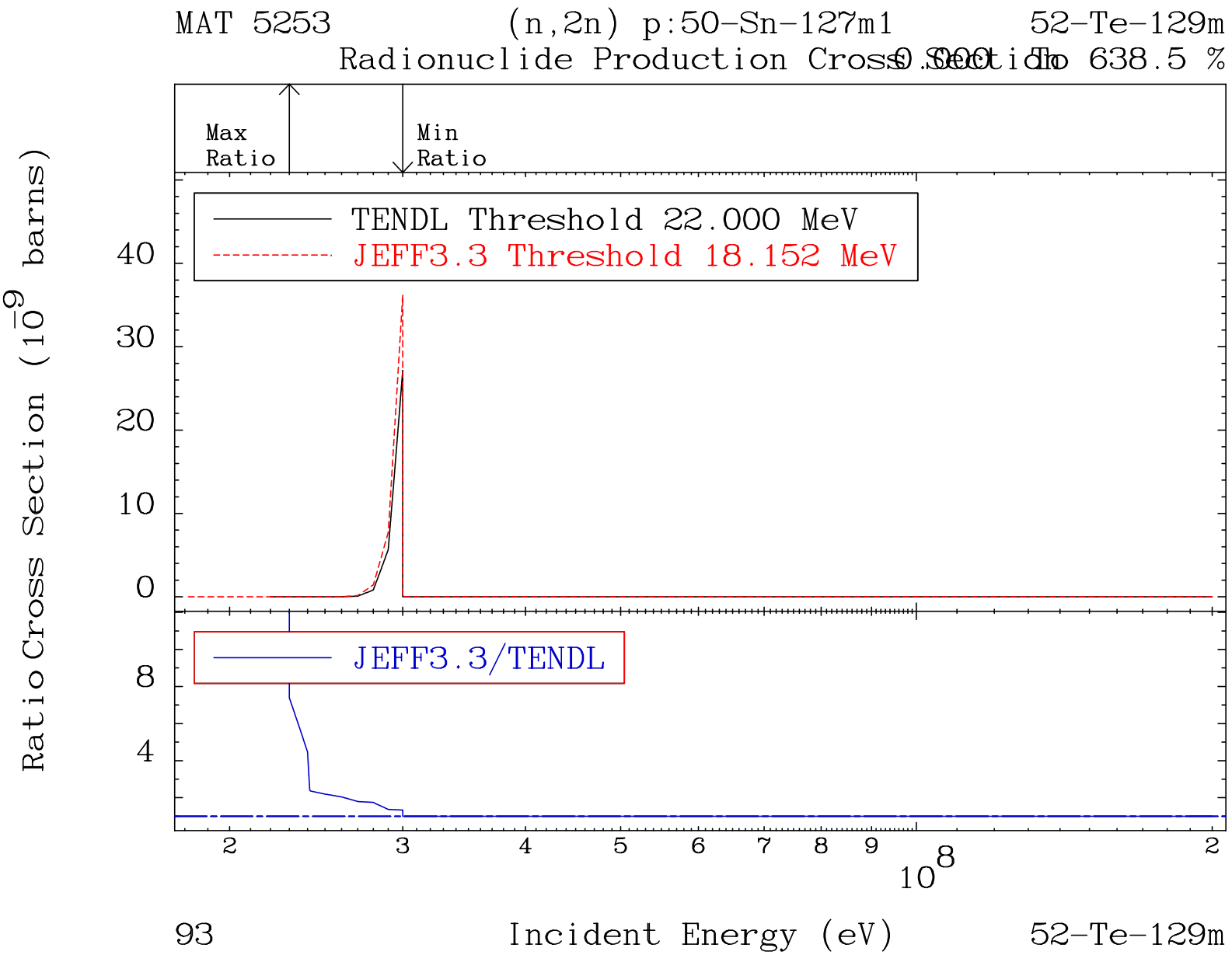

MAT 5253
(n,n') t:51-Sb-126m2
52-Te-129m
Radionuclide Production Cross Section To 556.9 %
Max
Ratio
TENDL Threshold 15.618 MeV
JEFF3.3 Threshold 15.618 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
1.6
1.2
0.8
0.4
0.0
10^0
10^-3
2
3
4
5
6
7
8
9
10^8
2
88
Incident Energy (eV)
52-Te-129m

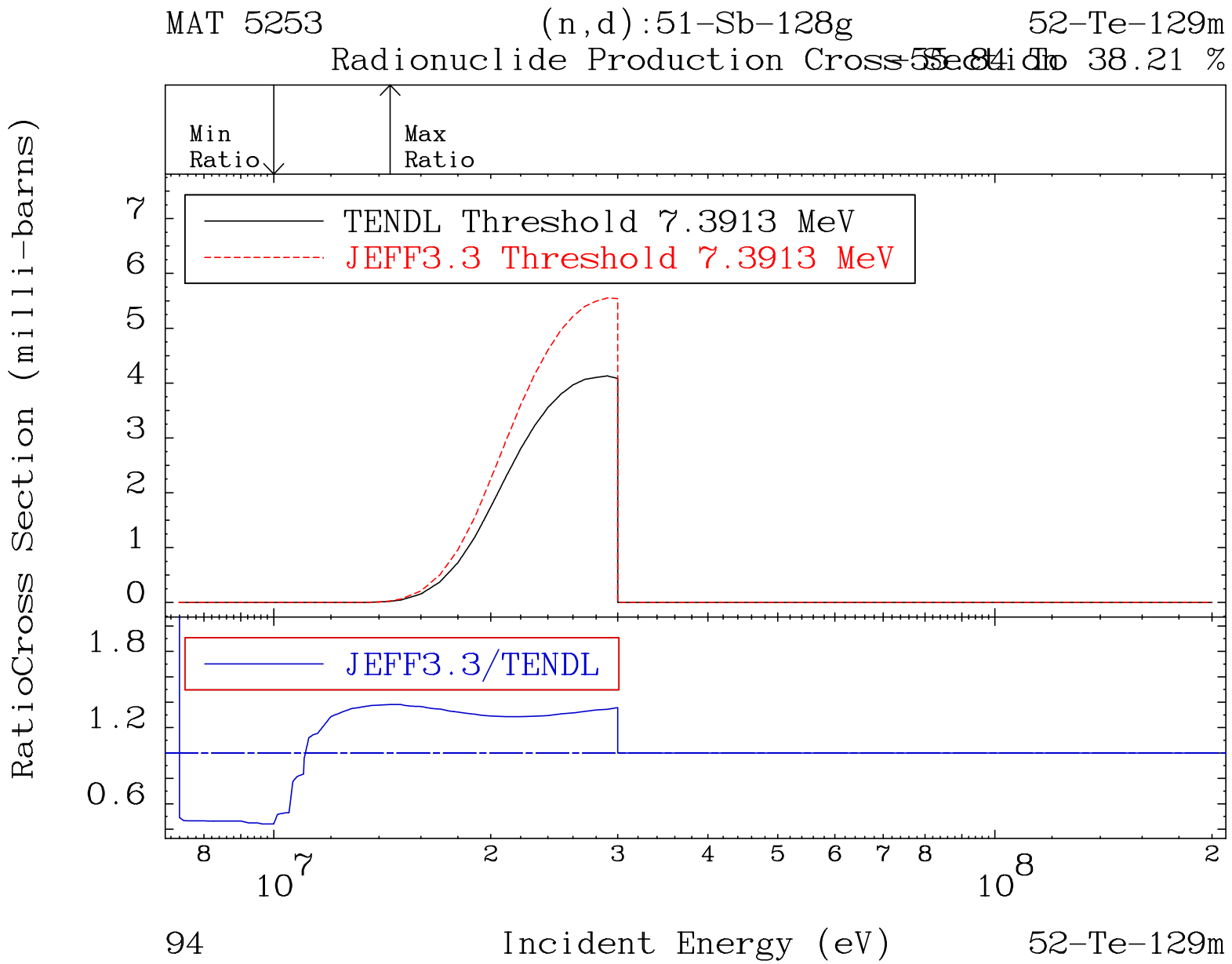

MAT 5253
(n,3n) p:51-Sb-126g
52-Te-129m
Radionuclide Production Cross Section
0.000 To 9999. %
Min
Ratio
TENDL Threshold 24.125 MeV
JEFF3.3 Threshold 24.125 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
16
12
8
4
0
10^9
10^6
10^3
10^0
40
60
80
100
120
140
160
180
200
89
Incident Energy (MeV)
52-Te-129m

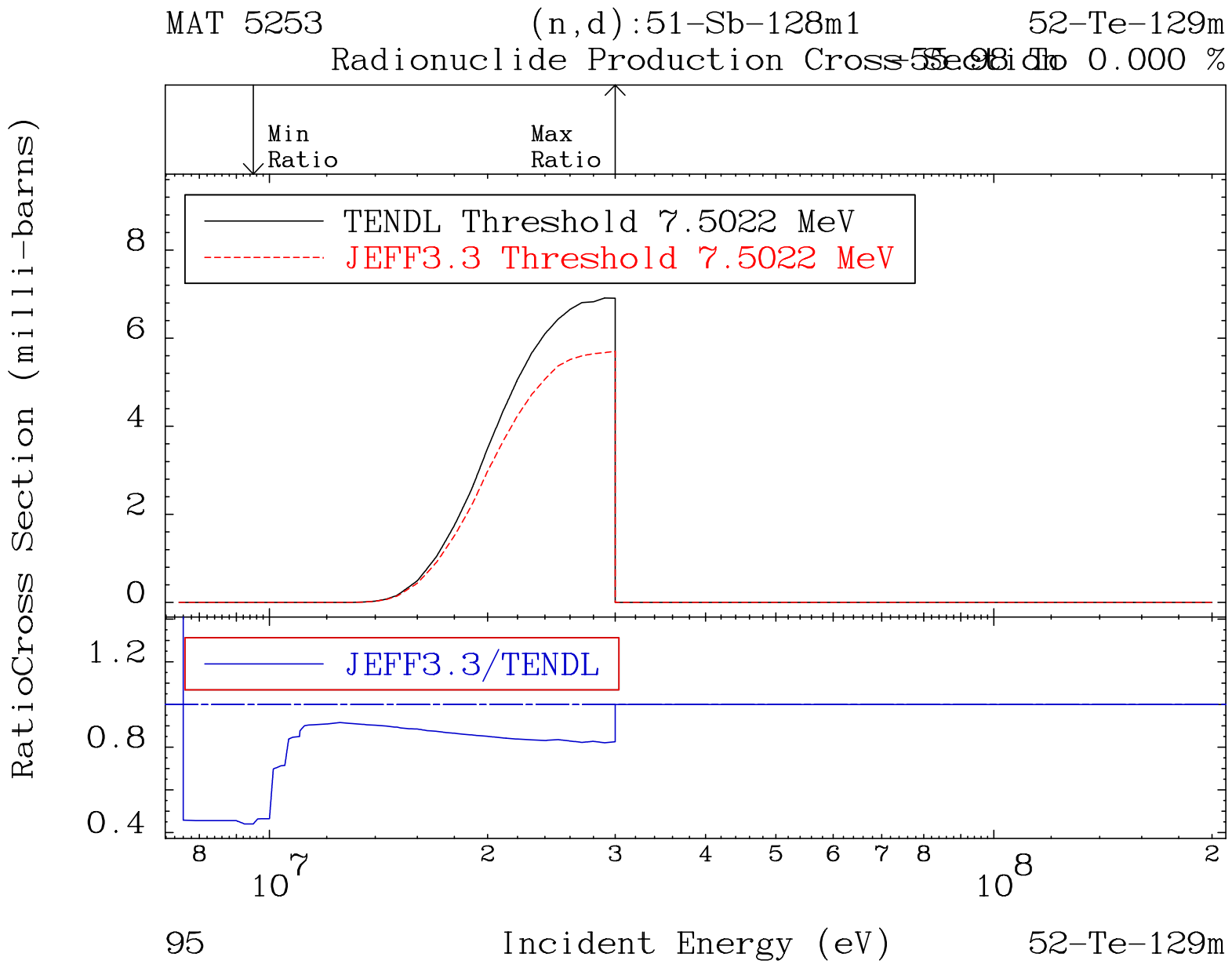

MAT 5253
(n,3n) p:51-Sb-126m1
52-Te-129m
Radionuclide Production Cross Section
0.000 To 9999. %
Min
Ratio
TENDL Threshold 25.000 MeV
JEFF3.3 Threshold 24.143 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
10
8
6
4
2
0
10^4
10^2
10^0
40
60
80
100
120
140
160
180
200
90
Incident Energy (MeV)
52-Te-129m

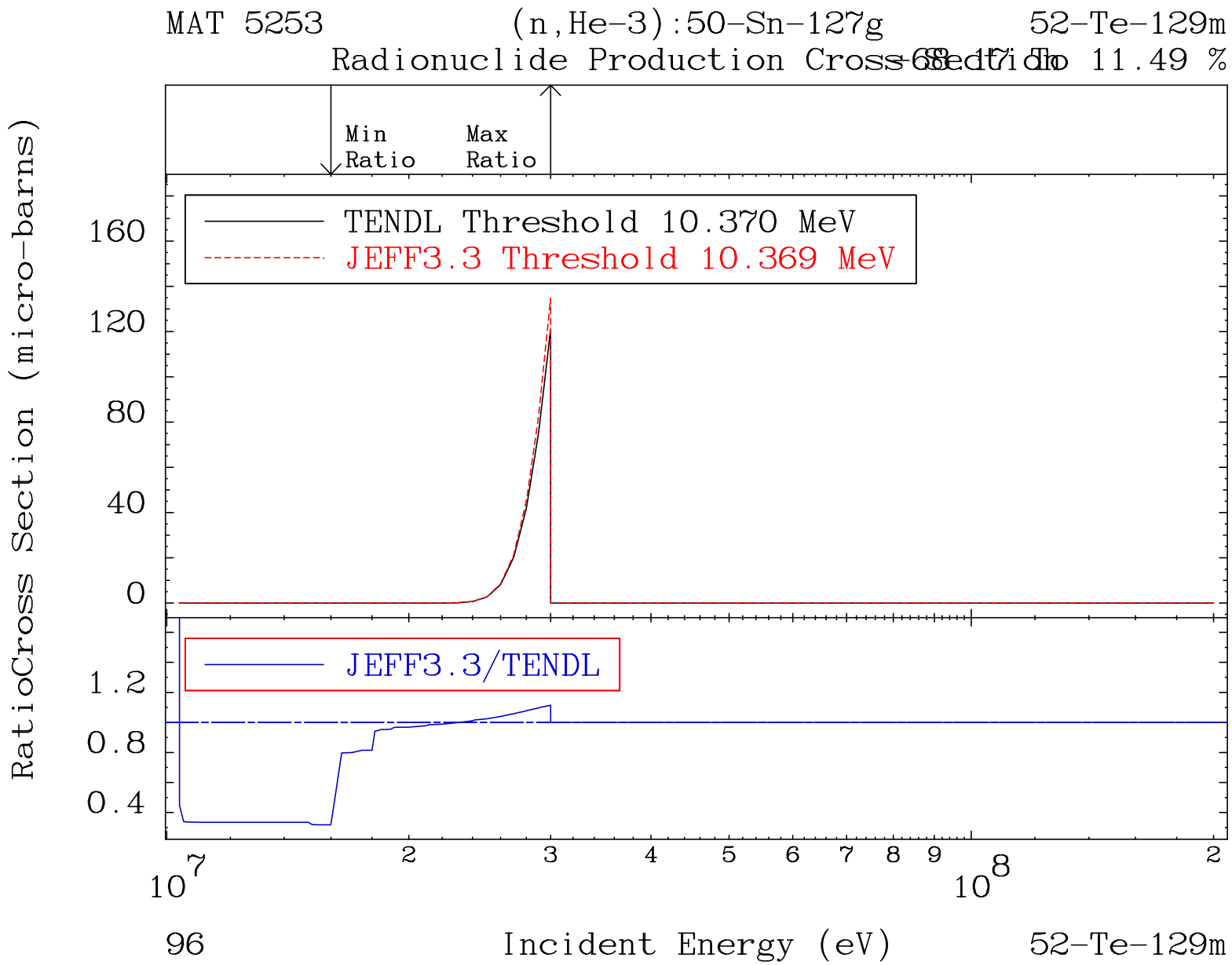

MAT 5253
(n,3n) p:51-Sb-126m2
52-Te-129m
Radionuclide Production Cross Section
0.000 To 9999. %
Min
Ratio
TENDL Threshold 25.000 MeV
JEFF3.3 Threshold 24.166 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
8
6
4
2
0
10^4
10^2
10^0
40
60
80
100
120
140
160
180
200
91
Incident Energy (MeV)
52-Te-129m

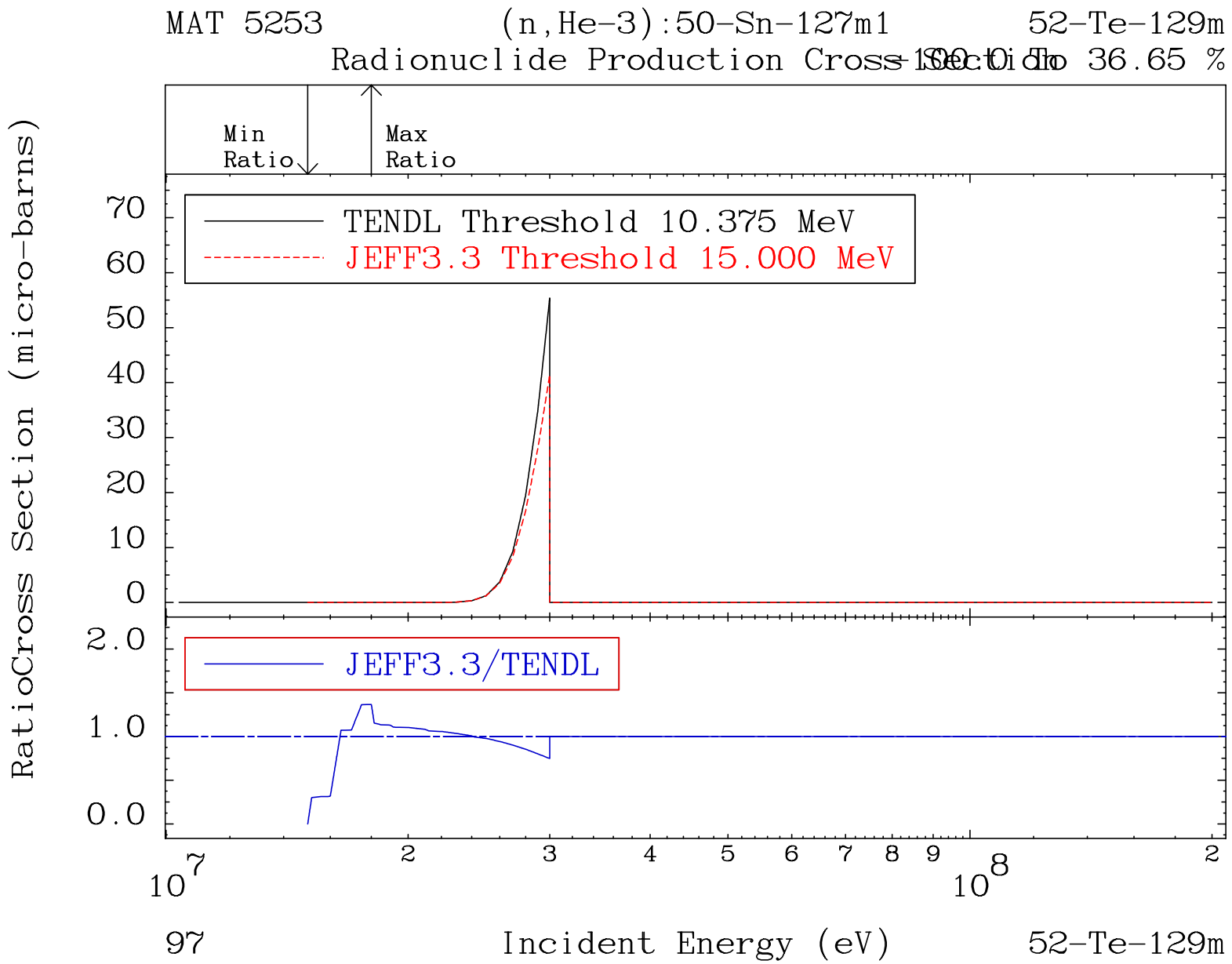

MAT 5253
(n,2n) p:50-Sn-127g
52-Te-129m
Radionuclide Production Cross Section
0.000 To 3440. %
Max Ratio
Min Ratio
TENDL Threshold 18.149 MeV
JEFF3.3 Threshold 18.149 MeV
JEFF3.3/TENDL
Ratio Cross Section (10^{-9} barns)
120
100
80
60
40
20
0
10^2
10^1
10^0
2
3
4
5
6
7
8
9
10^8
2
92
Incident Energy (eV)
52-Te-129m

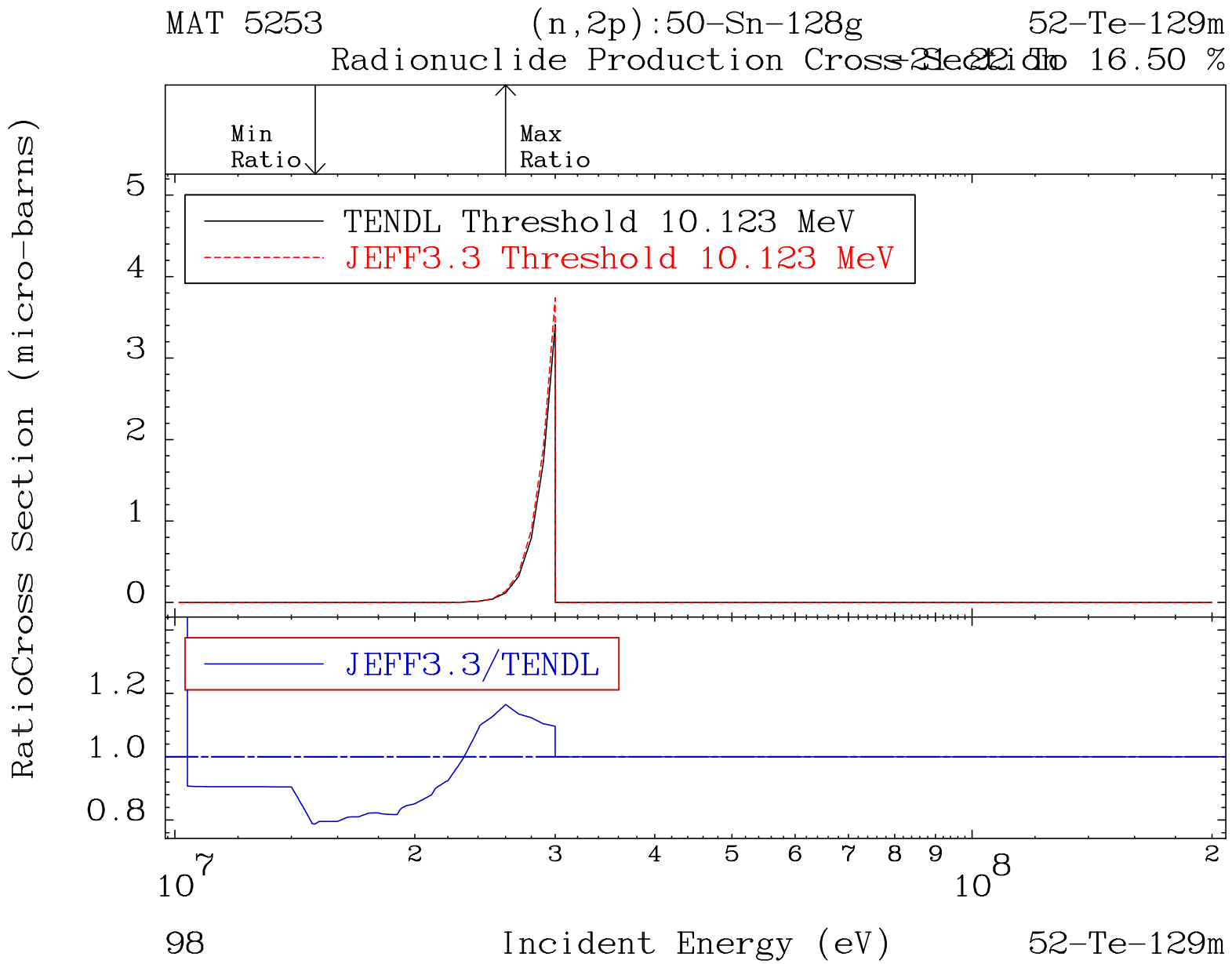

MAT 5253
(n,2n) p:50-Sn-127m1
52-Te-129m
Radionuclide Production Cross Section
0.000 To 638.5 %
Max Ratio
Min Ratio
TENDL Threshold 22.000 MeV
JEFF3.3 Threshold 18.152 MeV
JEFF3.3/TENDL
Ratio Cross Section (10^{-9} barns)
40
30
20
10
0
8
4
2
3
4
5
6
7
8
9
2
10^{8}
93
Incident Energy (eV)
52-Te-129m

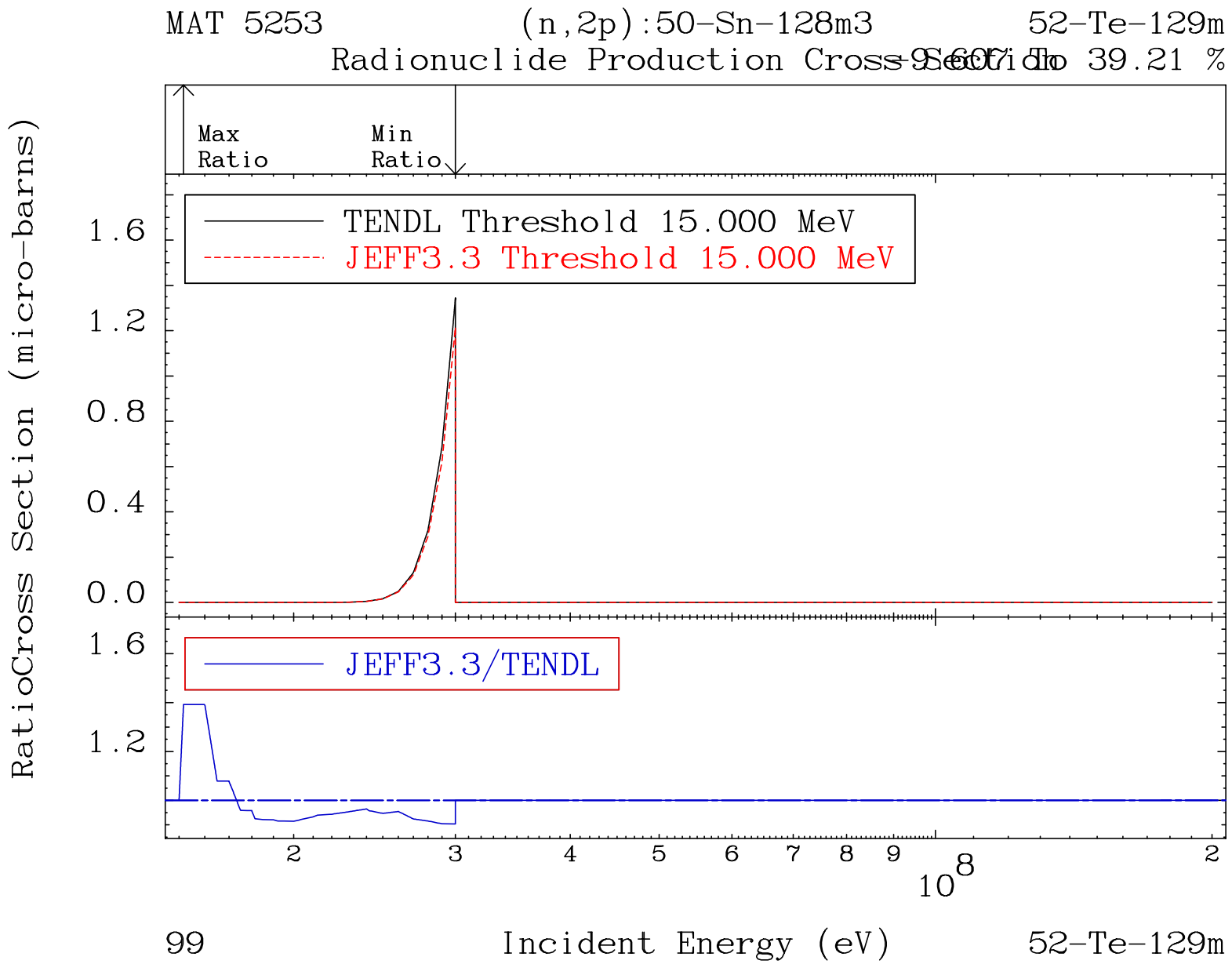

MAT 5253
(n,d):51-Sb-128g
52-Te-129m
Radionuclide Production Cross-Section
Min Ratio
Max Ratio
TENDL Threshold 7.3913 MeV
JEFF3.3 Threshold 7.3913 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
94
52-Te-129m

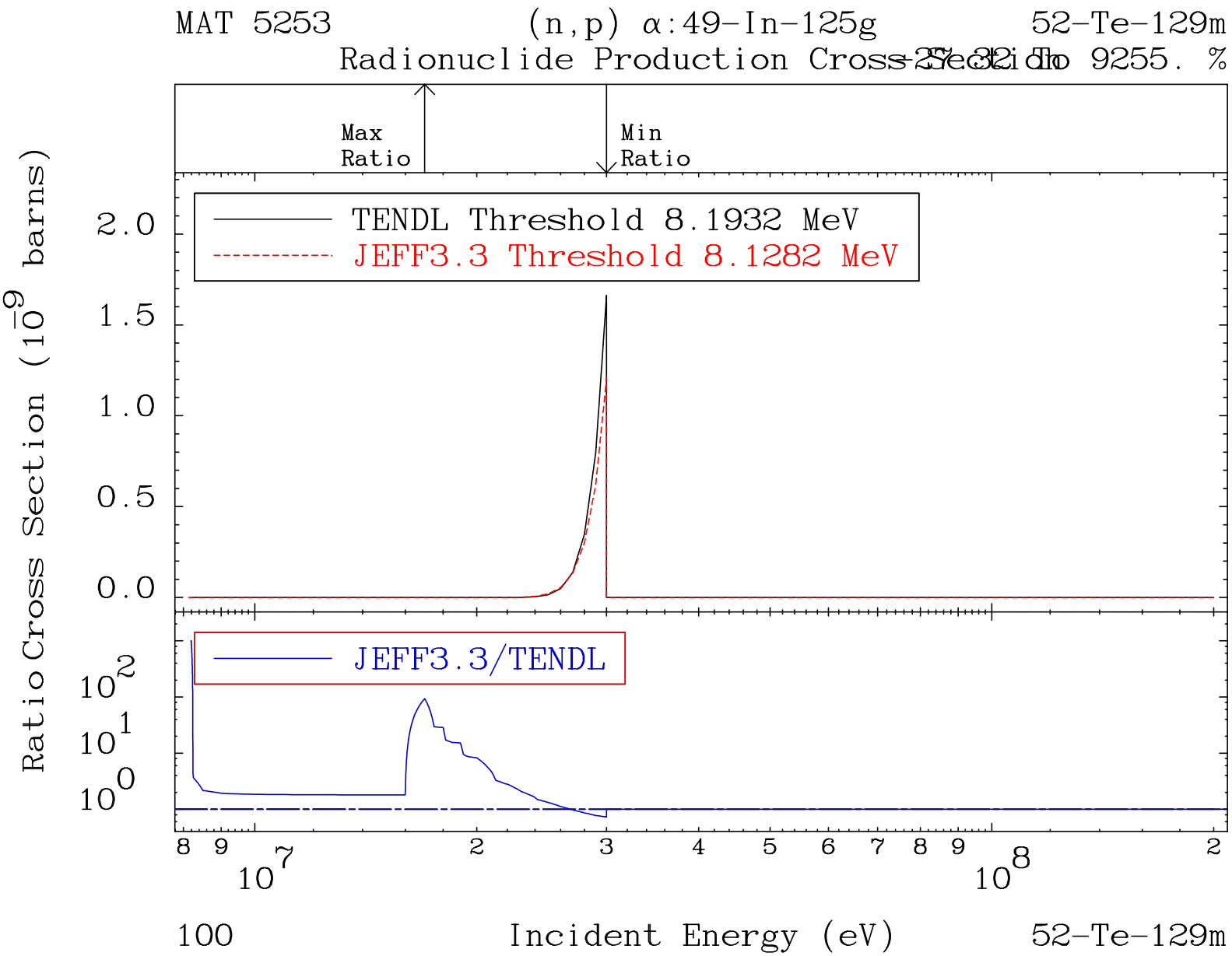

MAT 5253
(n,d):51-Sb-128m1
52-Te-129m
Radionuclide Production Cross Section
Min Ratio
Max Ratio
TENDL Threshold 7.5022 MeV
JEFF3.3 Threshold 7.5022 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
95
52-Te-129m

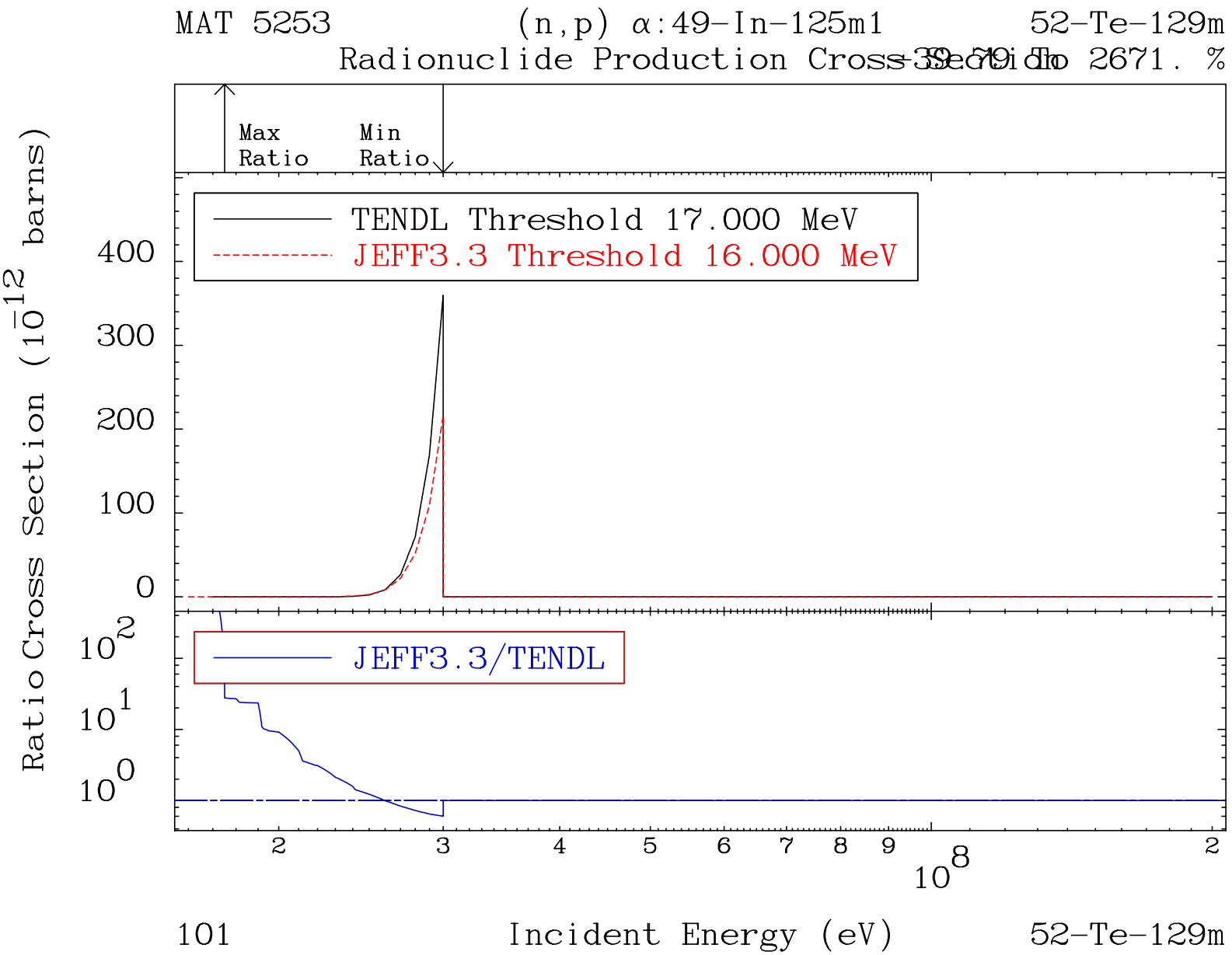

MAT 5253
(n,He-3):50-Sn-127g
52-Te-129m
Radionuclide Production Cross Section
Min Ratio
Max Ratio
TENDL Threshold 10.370 MeV
JEFF3.3 Threshold 10.369 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
160
120
80
40
0
1.2
0.8
0.4
10^7
2
3
4
5
6
7
8
9
10^8
2
96
Incident Energy (eV)
52-Te-129m

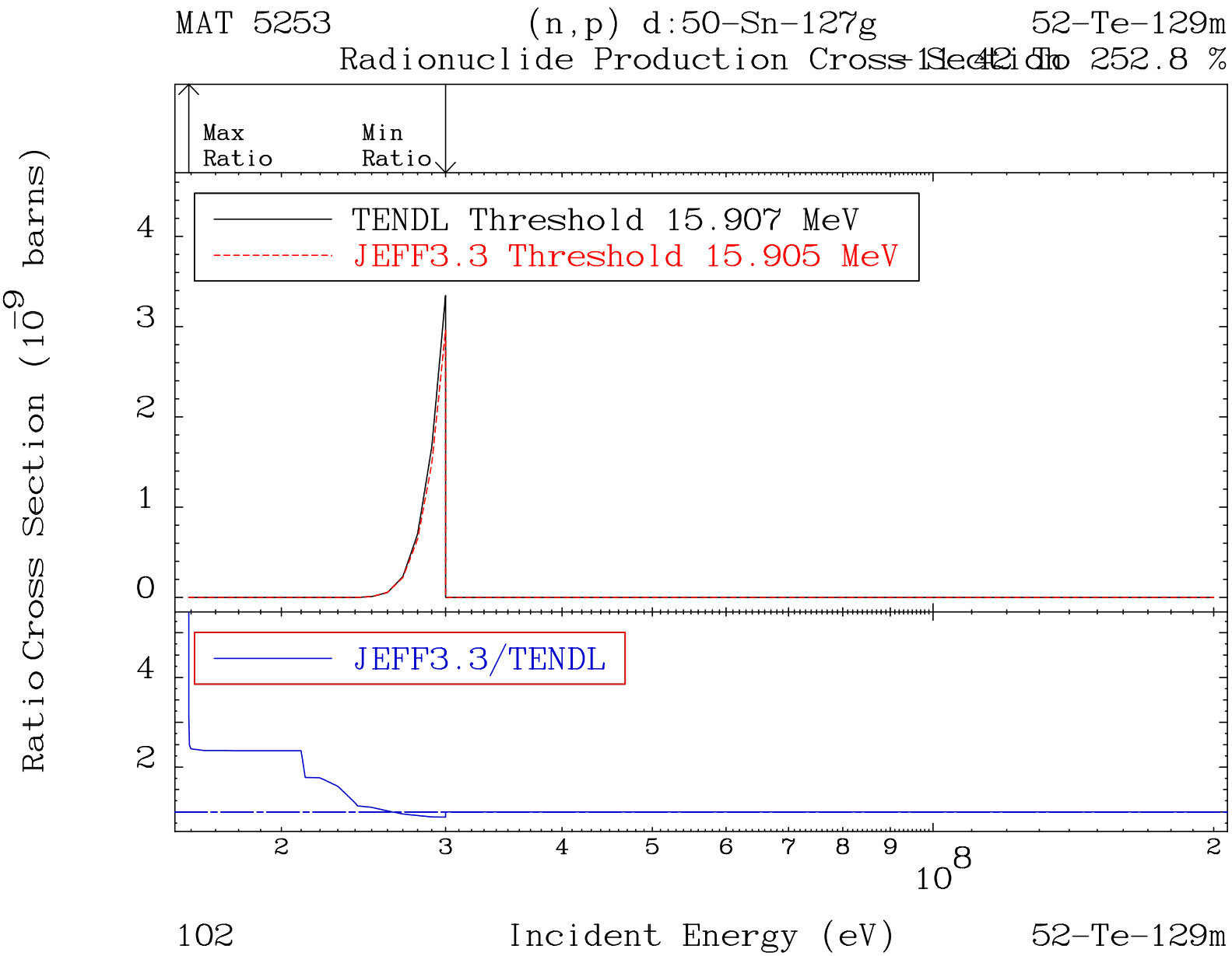

MAT 5253
(n,He-3):50-Sn-127m1
52-Te-129m
Radionuclide Production Cross Section To 36.65 %
Min Ratio
Max Ratio
TENDL Threshold 10.375 MeV
JEFF3.3 Threshold 15.000 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
Incident Energy (eV)
97
52-Te-129m

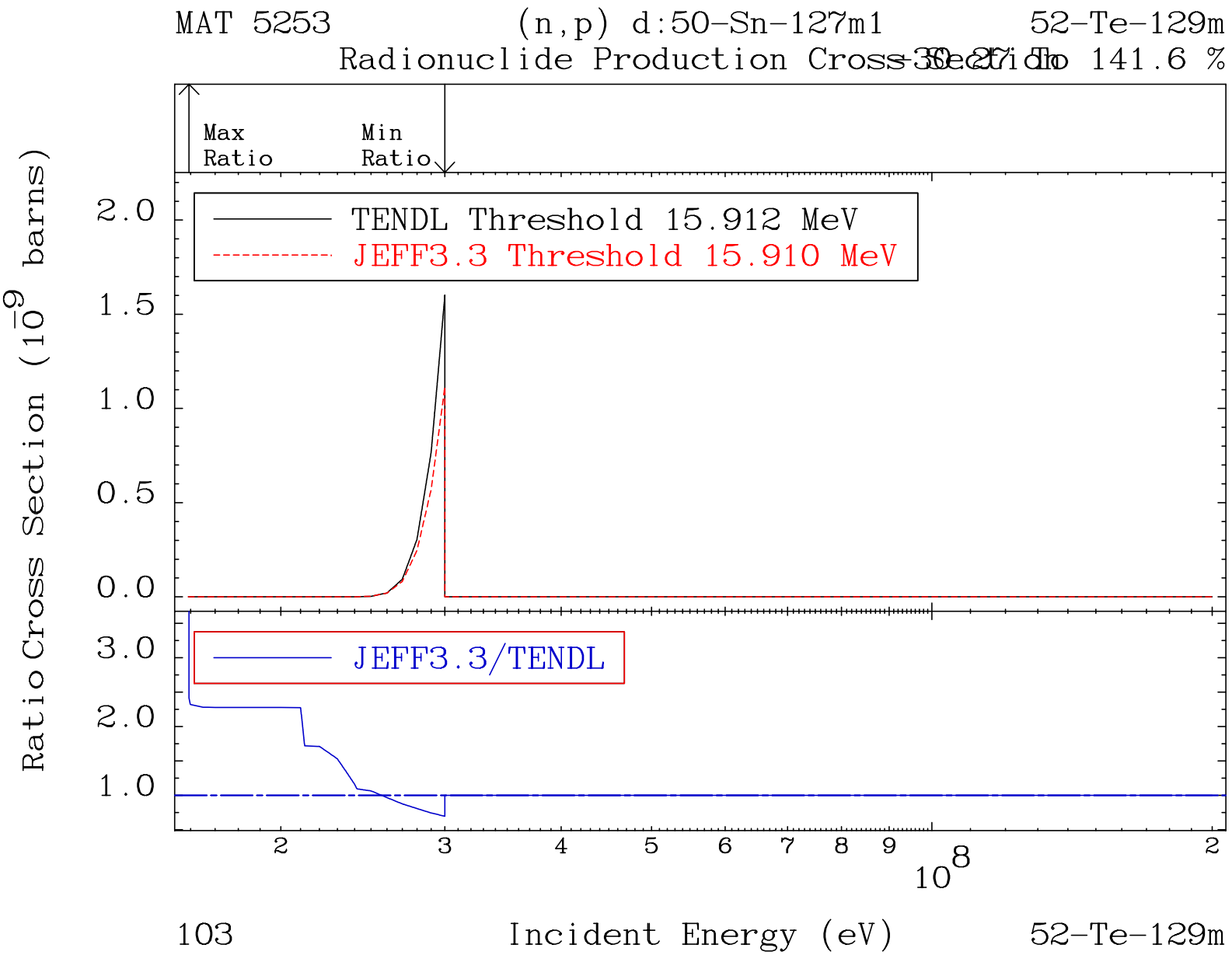

MAT 5253
(n,2p):50-Sn-128g
52-Te-129m
Radionuclide Production Cross Section To 16.50 %
Min Ratio
Max Ratio
TENDL Threshold 10.123 MeV
JEFF3.3 Threshold 10.123 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
Incident Energy (eV)
98
52-Te-129m


MAT 5253
(n,2p):50-Sn-128m3
52-Te-129m
Radionuclide Production Cross Section
-9.60% To 39.21 %
Max Ratio
Min Ratio
TENDL Threshold 15.000 MeV
JEFF3.3 Threshold 15.000 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
1.6
1.2
0.8
0.4
0.0
2
3
4
5
6
7
8
9
10^8
2
99
Incident Energy (eV)
52-Te-129m


MAT 5253
(n,p) α:49-In-125g
52-Te-129m
Radionuclide Production Cross Section To 9255. %
Max Ratio
Min Ratio
TENDL Threshold 8.1932 MeV
JEFF3.3 Threshold 8.1282 MeV
JEFF3.3/TENDL
Ratio Cross Section (10^-9 barns)
2.0
1.5
1.0
0.5
0.0
10^2
10^1
10^0
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
100
Incident Energy (eV)
52-Te-129m


MAT 5253
(n,p) α:49-In-125m1
52-Te-129m
Radionuclide Production Cross Section
Max Ratio
Min Ratio
TENDL Threshold 17.000 MeV
JEFF3.3 Threshold 16.000 MeV
JEFF3.3/TENDL
Ratio Cross Section (10^-12 barns)
400
300
200
100
0
10^2
10^1
10^0
2
3
4
5
6
7
8
9
10^8
2
101
Incident Energy (eV)
52-Te-129m


MAT 5253
(n,p) d:50-Sn-127g
52-Te-129m
Radionuclide Production Cross Section To 252.8 %
Max Ratio
Min Ratio
TENDL Threshold 15.907 MeV
JEFF3.3 Threshold 15.905 MeV
JEFF3.3/TENDL
Ratio Cross Section (10^{-9} barns)
Incident Energy (eV)
10^8
102
52-Te-129m


MAT 5253
(n,p) d:50-Sn-127m1
52-Te-129m
Radionuclide Production Cross Section
Max Ratio
Min Ratio
TENDL Threshold 15.912 MeV
JEFF3.3 Threshold 15.910 MeV
JEFF3.3/TENDL
Ratio Cross Section (10^{-9} barns)
2.0
1.5
1.0
0.5
0.0
3.0
2.0
1.0
2
3
4
5
6
7
8
9
10^{8}
2
103
Incident Energy (eV)
52-Te-129m