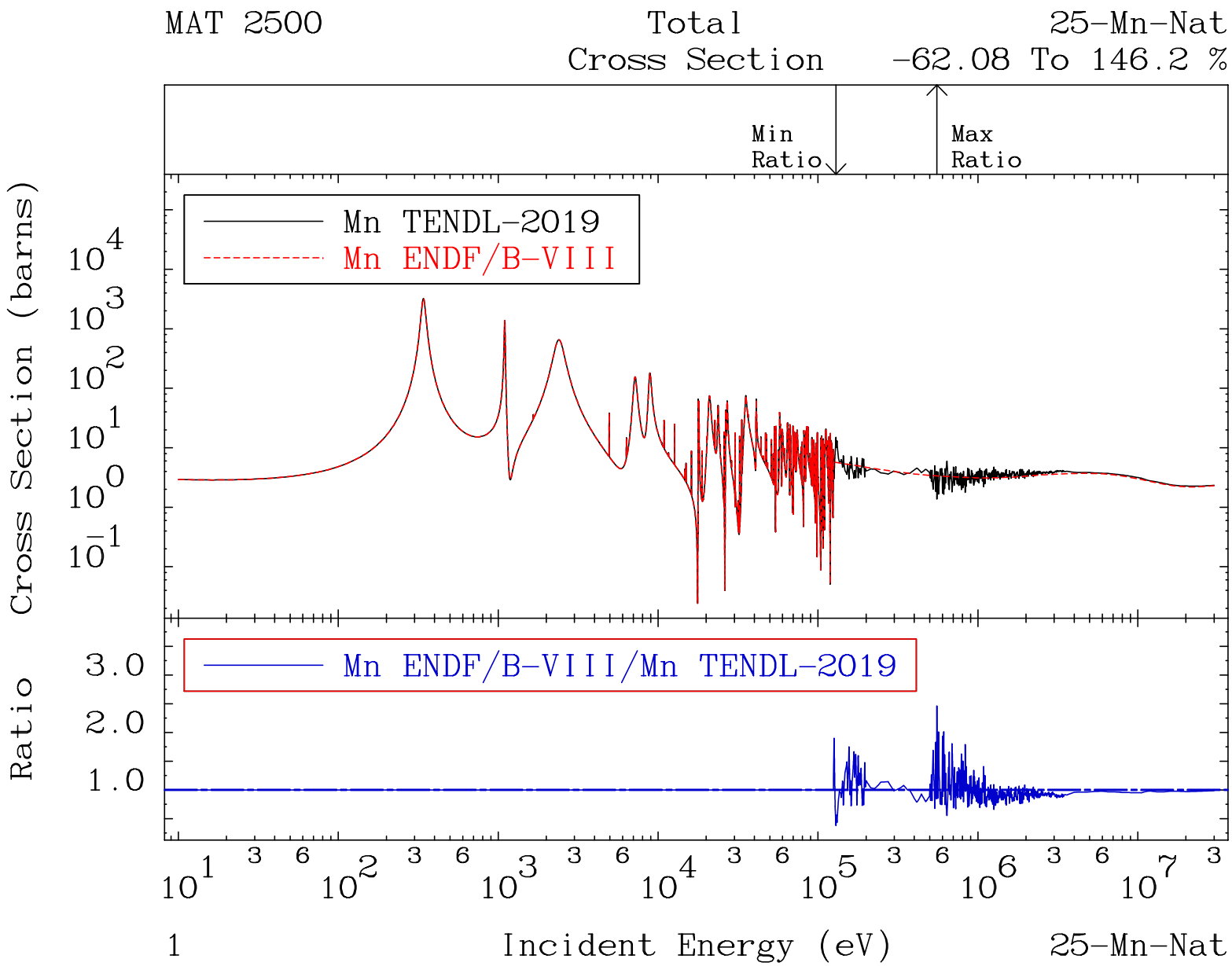
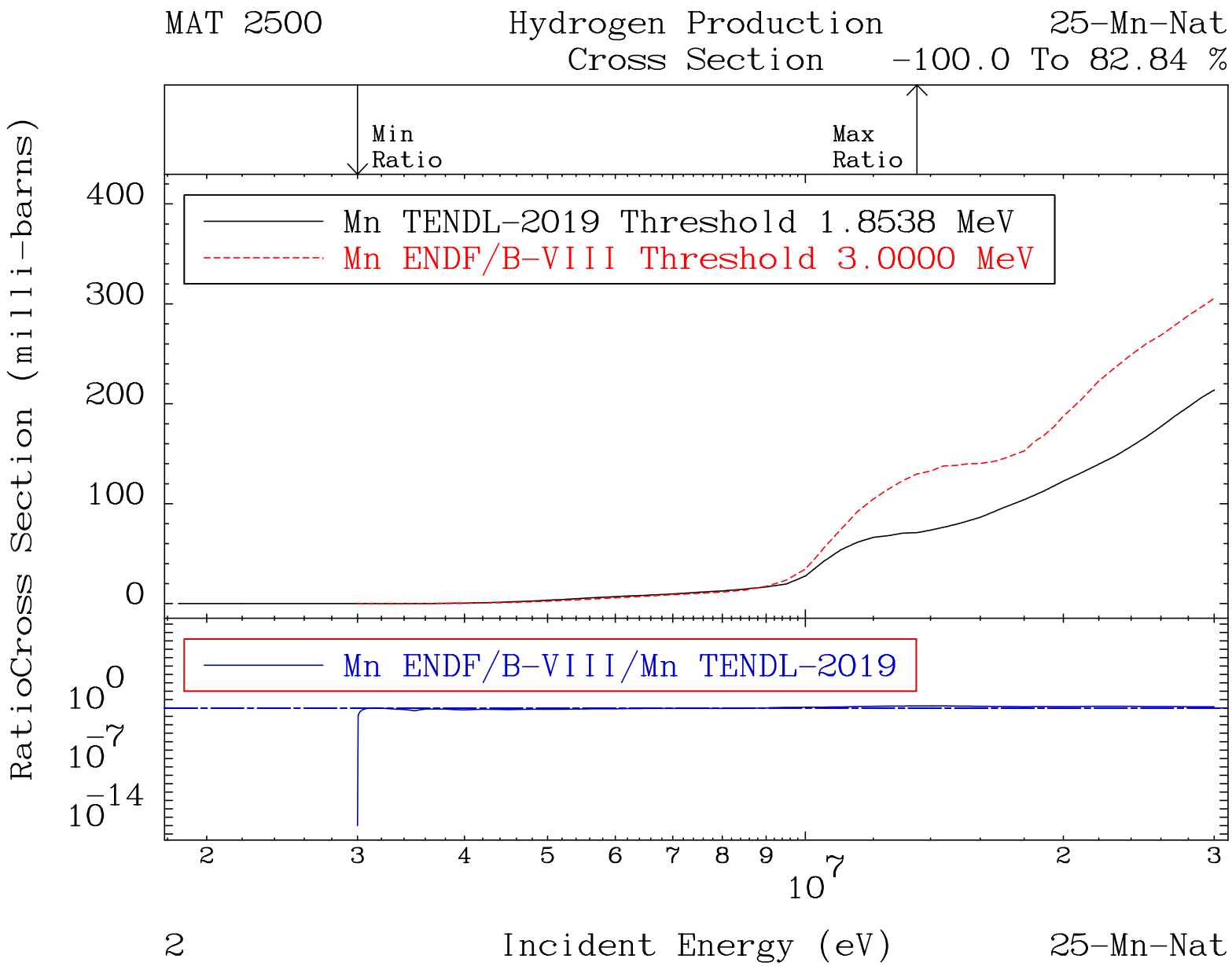
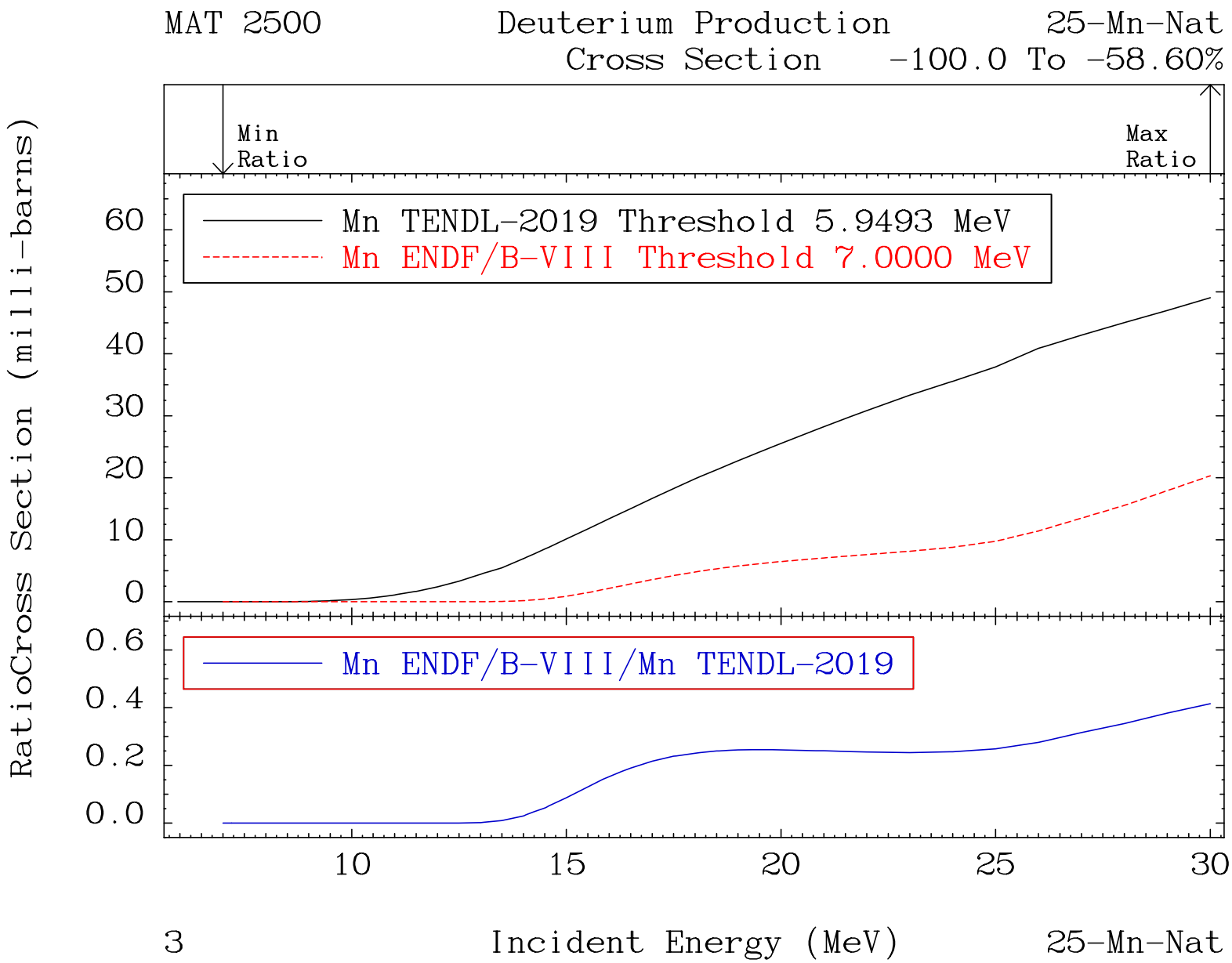
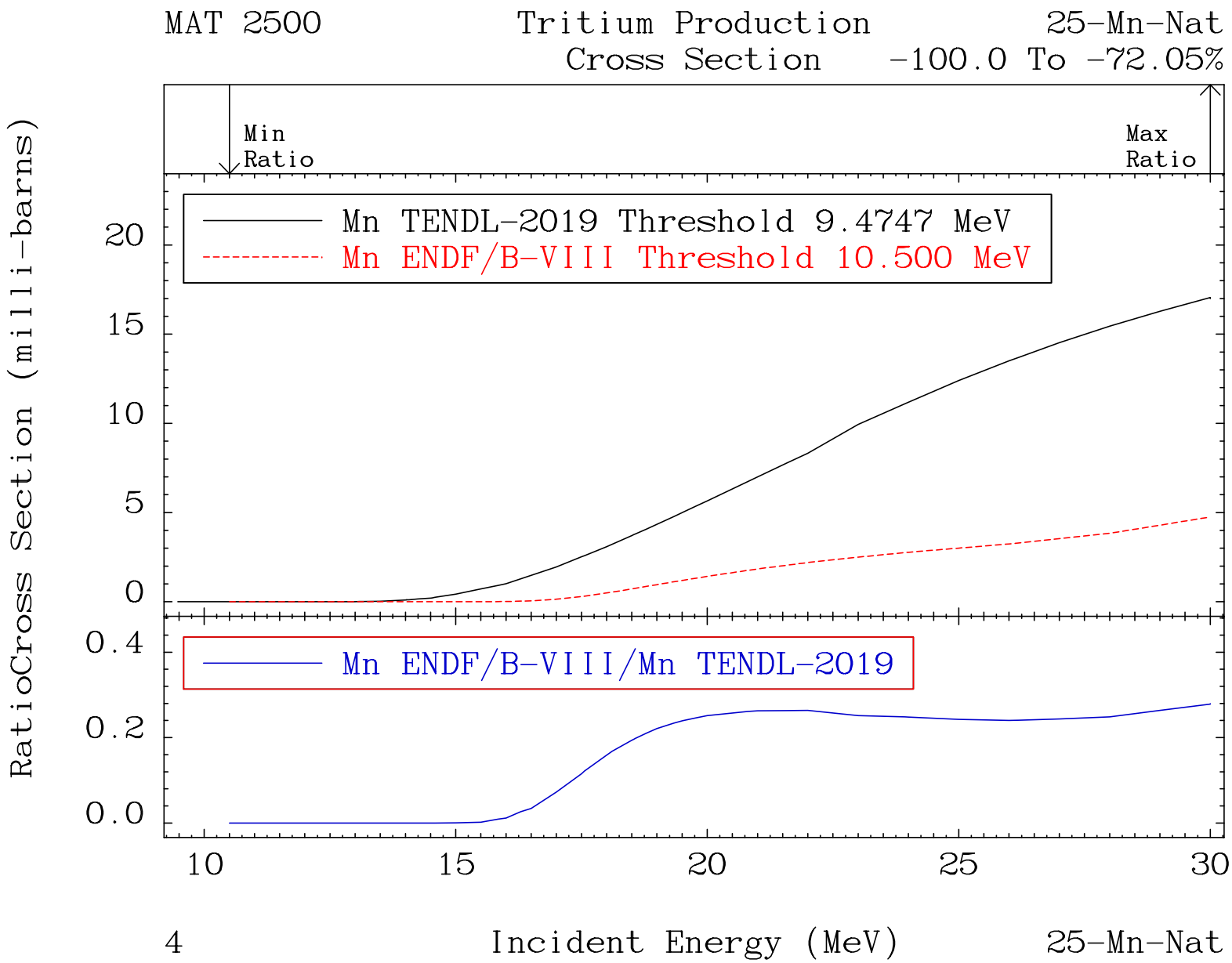
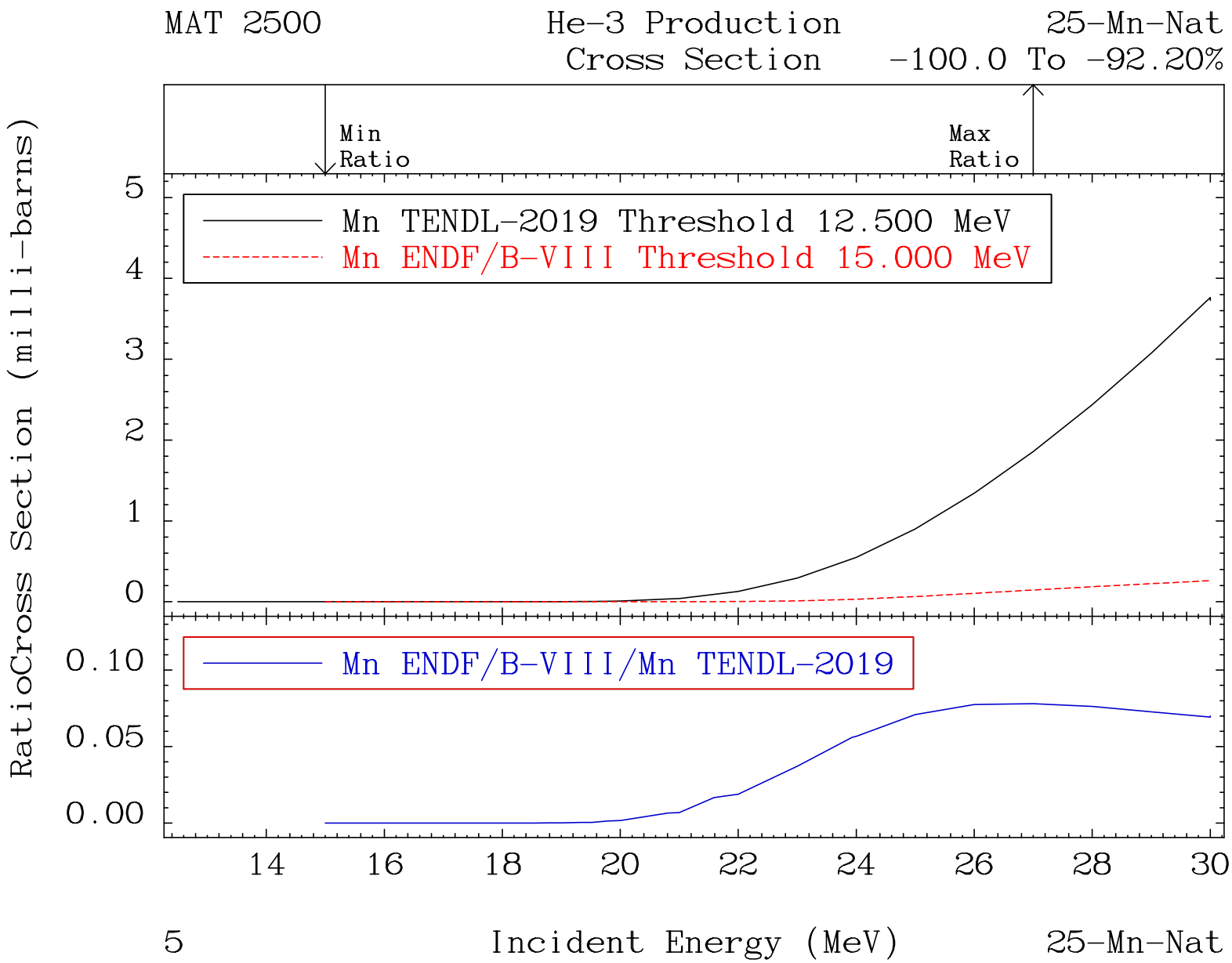
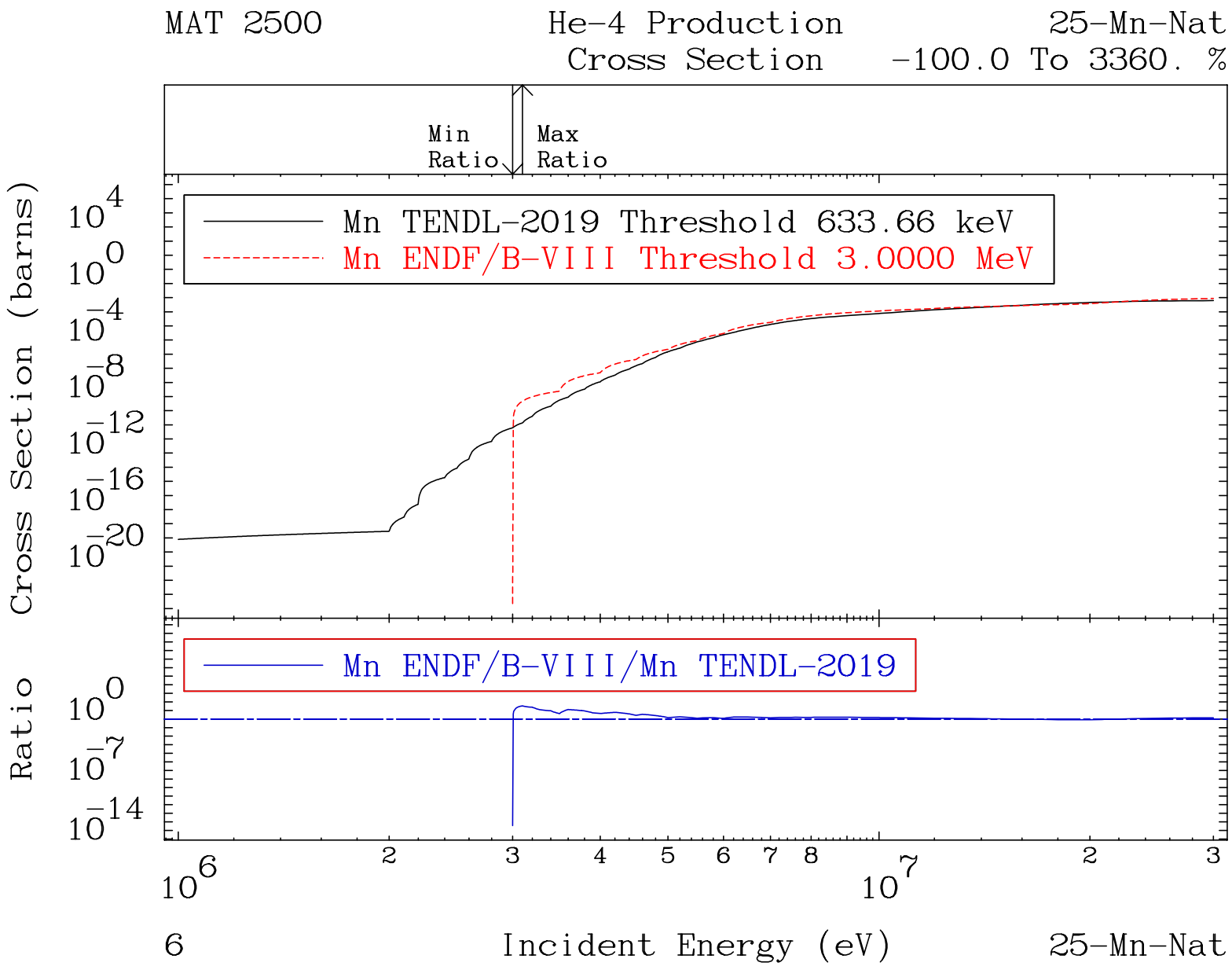

MAT 2500
Total
Cross Section
25-Mn-Nat
-62.08 To 146.2 %
Min
Ratio
Max
Ratio
Mn TENDL-2019
Mn ENDF/B-VIII
Cross Section (barns)
Mn ENDF/B-VIII/Mn TENDL-2019
Ratio
Incident Energy (eV)
1
25-Mn-Nat

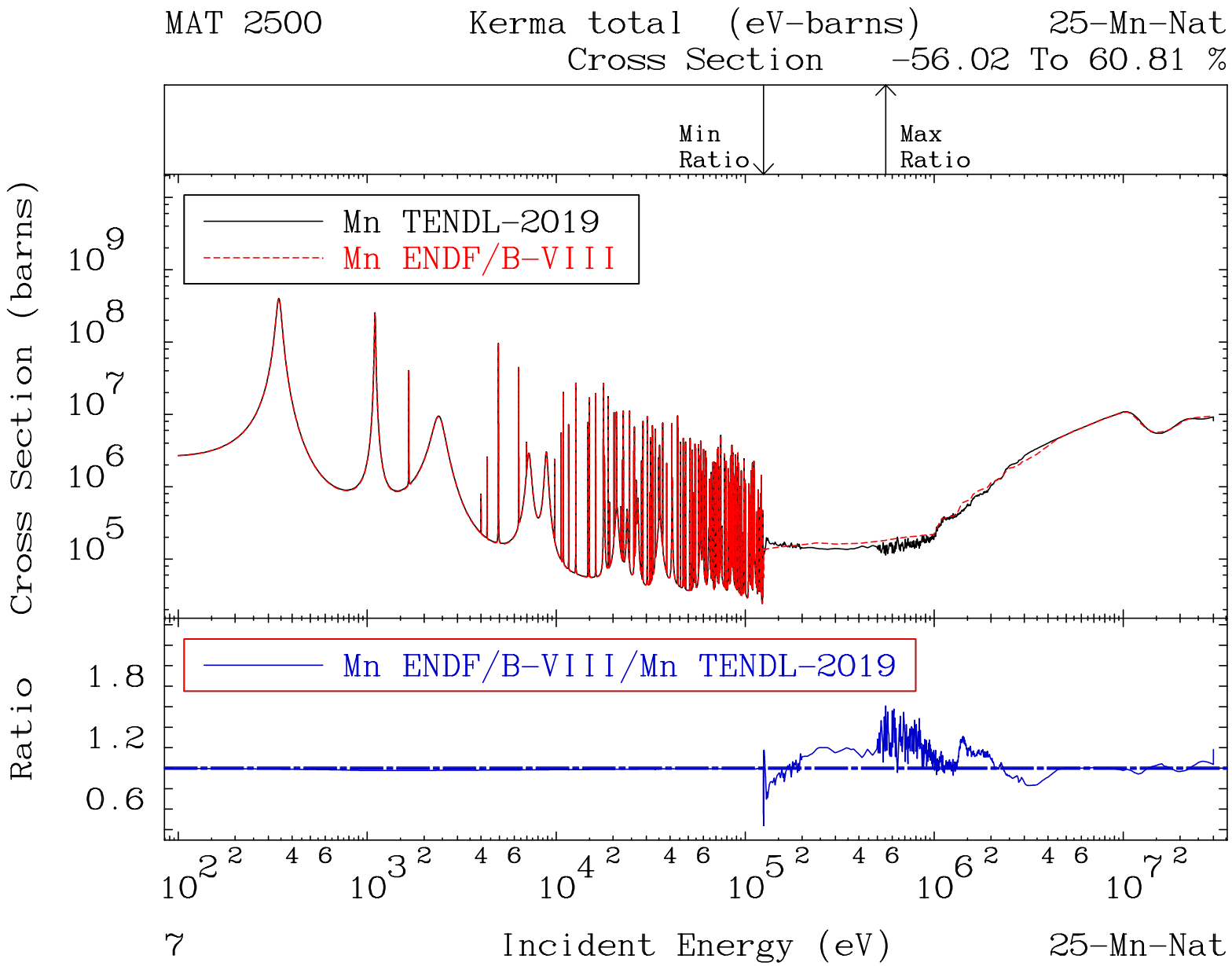

MAT 2500
Hydrogen Production
Cross Section
25-Mn-Nat
-100.0 To 82.84 %
Min Ratio
Max Ratio
Mn TENDL-2019 Threshold 1.8538 MeV
Mn ENDF/B-VIII Threshold 3.0000 MeV
Mn ENDF/B-VIII/Mn TENDL-2019
RatioCross Section (milli-barns)
400
300
200
100
0
10^{0}
10^{-7}
10^{-14}
2
3
4
5
6
7
8
9
10^{7}
2
3
2
Incident Energy (eV)
25-Mn-Nat

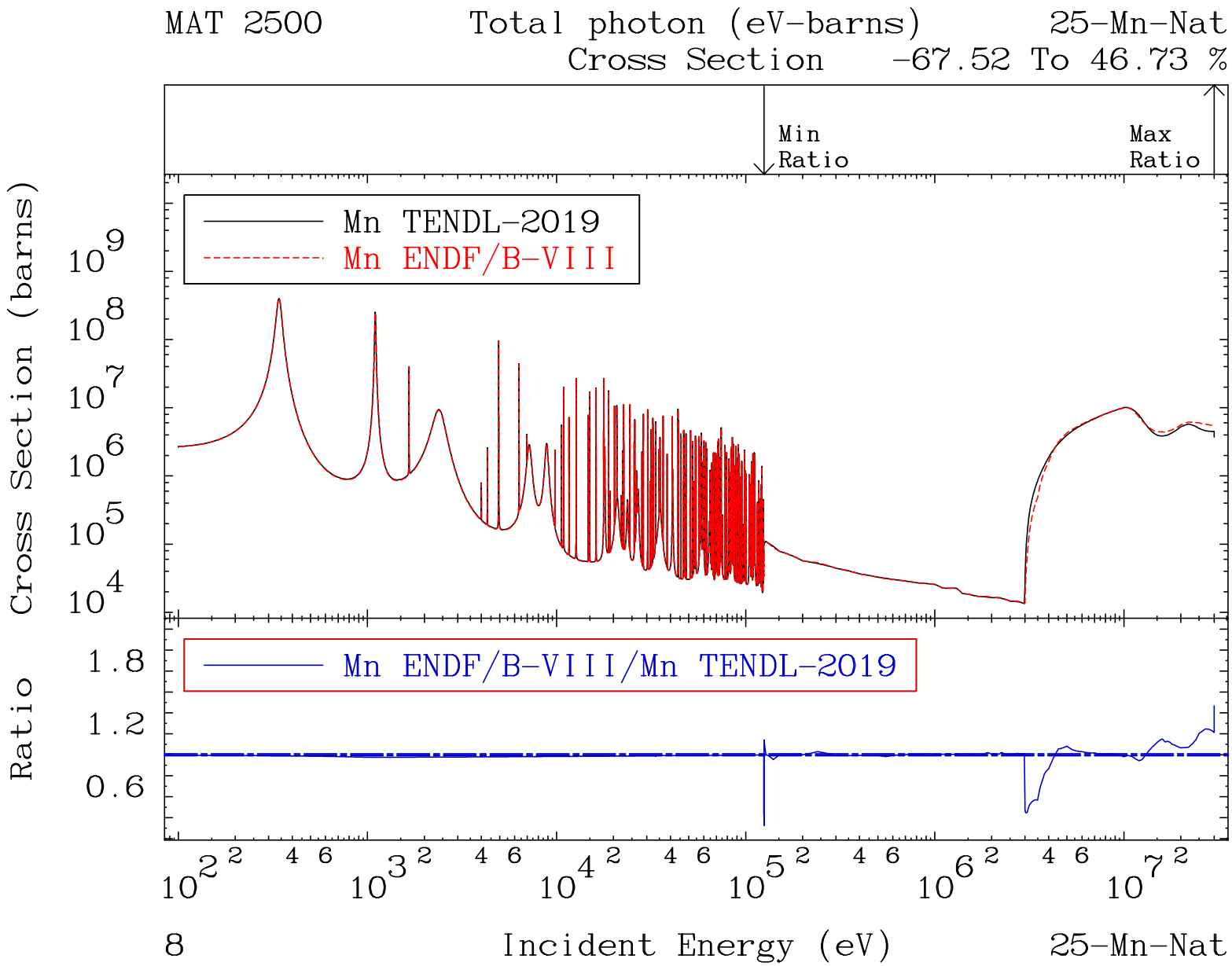

MAT 2500
Deuterium Production
Cross Section
25-Mn-Nat
-100.0 To -58.60%
Min Ratio
Max Ratio
Mn TENDL-2019 Threshold 5.9493 MeV
Mn ENDF/B-VIII Threshold 7.0000 MeV
Mn ENDF/B-VIII/Mn TENDL-2019
RatioCross Section (milli-barns)
0
10
20
30
40
50
60
0.0
0.2
0.4
0.6
10
15
20
25
30
Incident Energy (MeV)
3
25-Mn-Nat

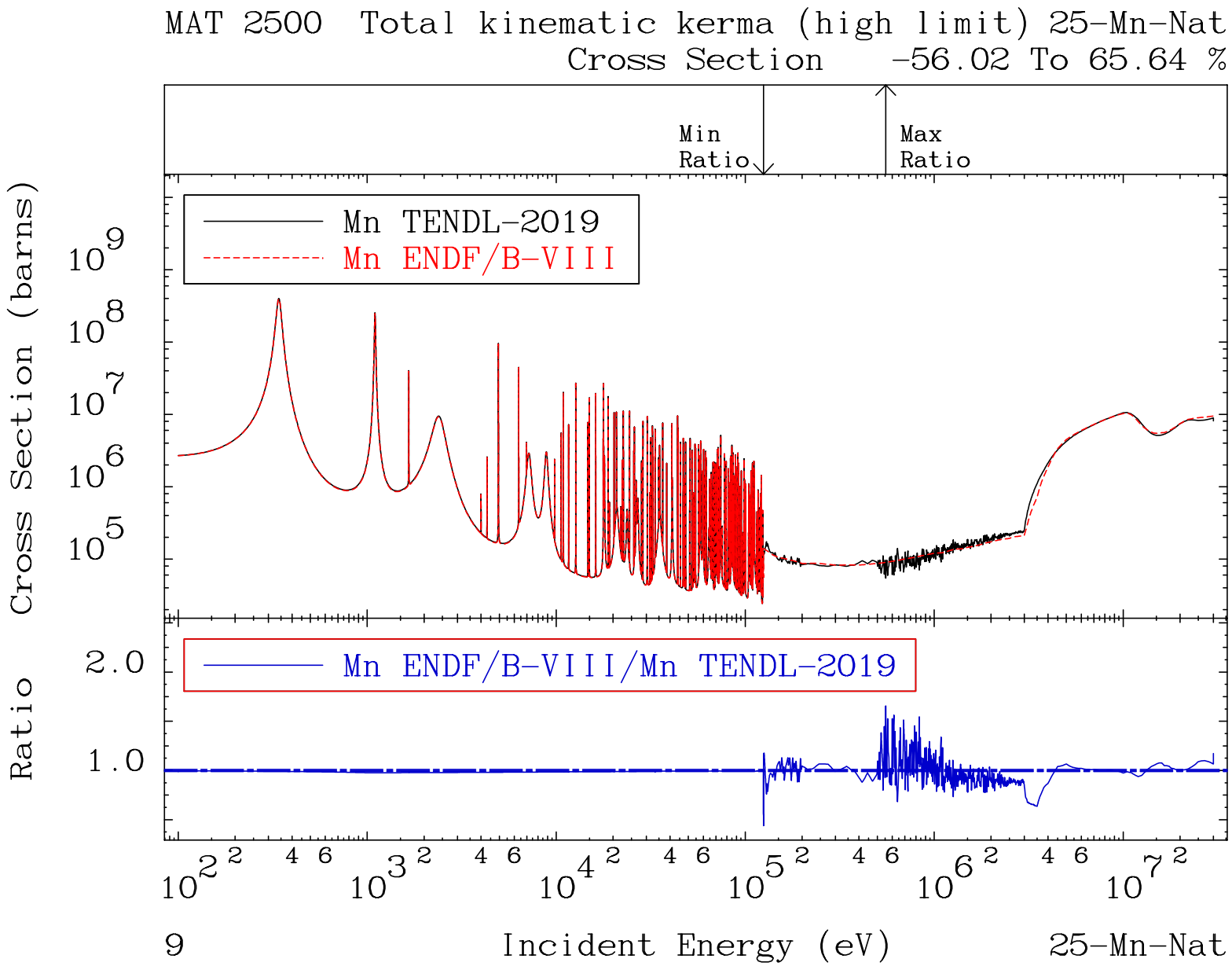

MAT 2500
Tritium Production
Cross Section
25-Mn-Nat
-100.0 To -72.05%
Min
Ratio
Max
Ratio
Mn TENDL-2019 Threshold 9.4747 MeV
Mn ENDF/B-VIII Threshold 10.500 MeV
Mn ENDF/B-VIII/Mn TENDL-2019
RatioCross Section (milli-barns)
0
5
10
15
20
0.0
0.2
0.4
10
15
20
25
30
Incident Energy (MeV)
25-Mn-Nat

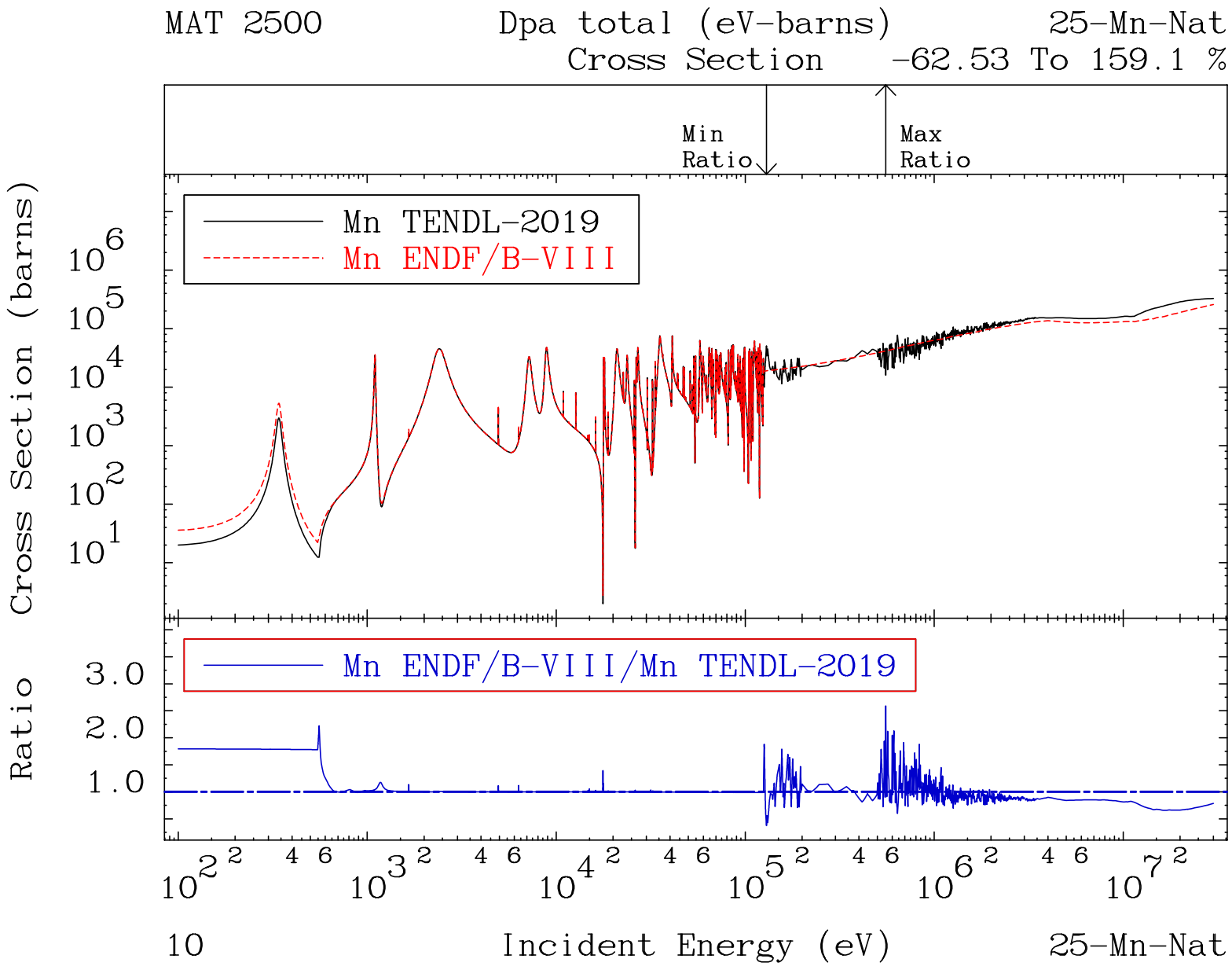

MAT 2500
He-3 Production
Cross Section
25-Mn-Nat
-100.0 To -92.20%
Min
Ratio
Max
Ratio
Mn TENDL-2019 Threshold 12.500 MeV
Mn ENDF/B-VIII Threshold 15.000 MeV
Mn ENDF/B-VIII/Mn TENDL-2019
RatioCross Section (milli-barns)
0
1
2
3
4
5
0.00
0.05
0.10
14
16
18
20
22
24
26
28
30
Incident Energy (MeV)
5
25-Mn-Nat

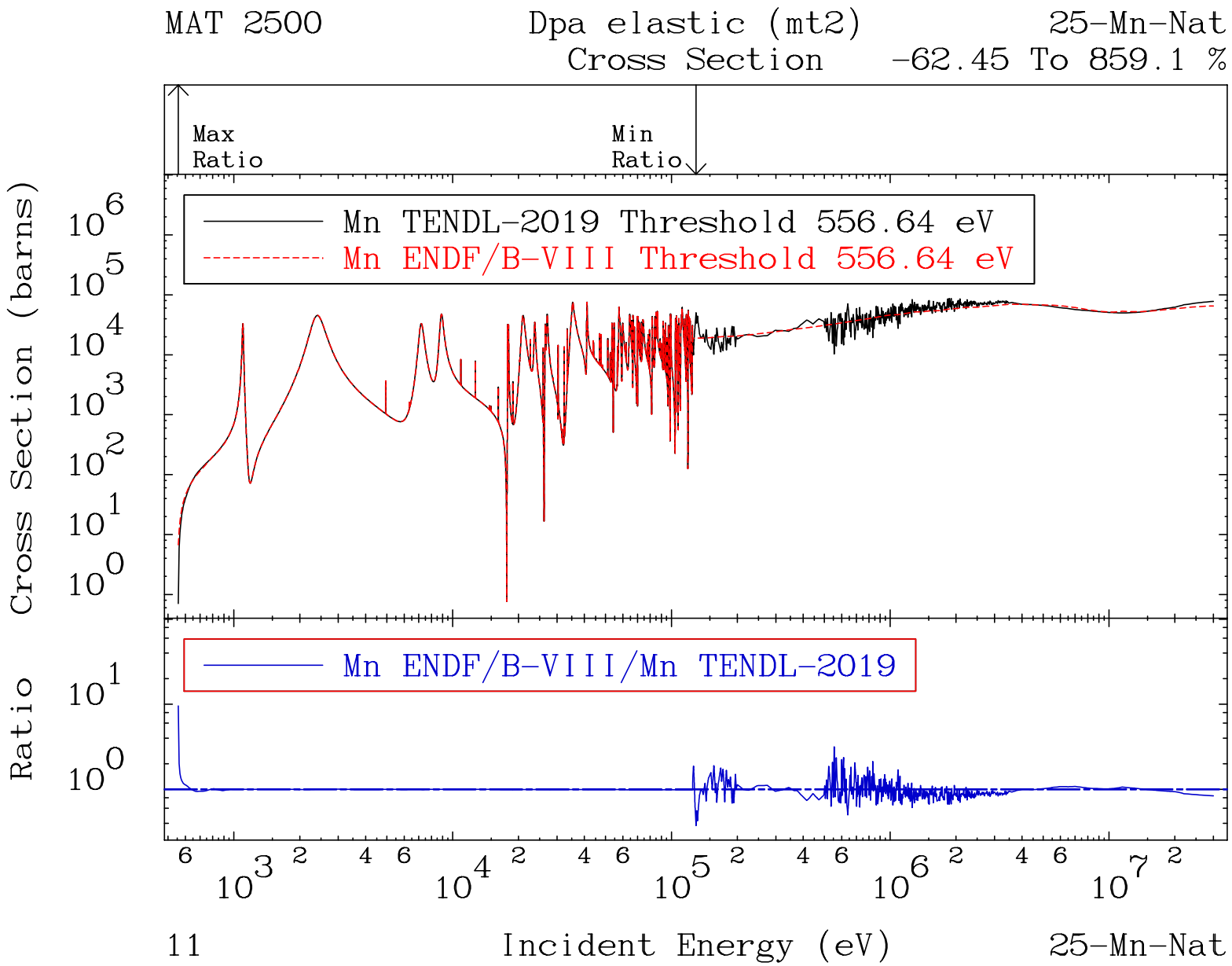

MAT 2500
He-4 Production
Cross Section
25-Mn-Nat
-100.0 To 3360. %
Min Ratio
Max Ratio
Mn TENDL-2019 Threshold 633.66 keV
Mn ENDF/B-VIII Threshold 3.0000 MeV
Cross Section (barns)
Mn ENDF/B-VIII/Mn TENDL-2019
Ratio
Incident Energy (eV)
6
25-Mn-Nat

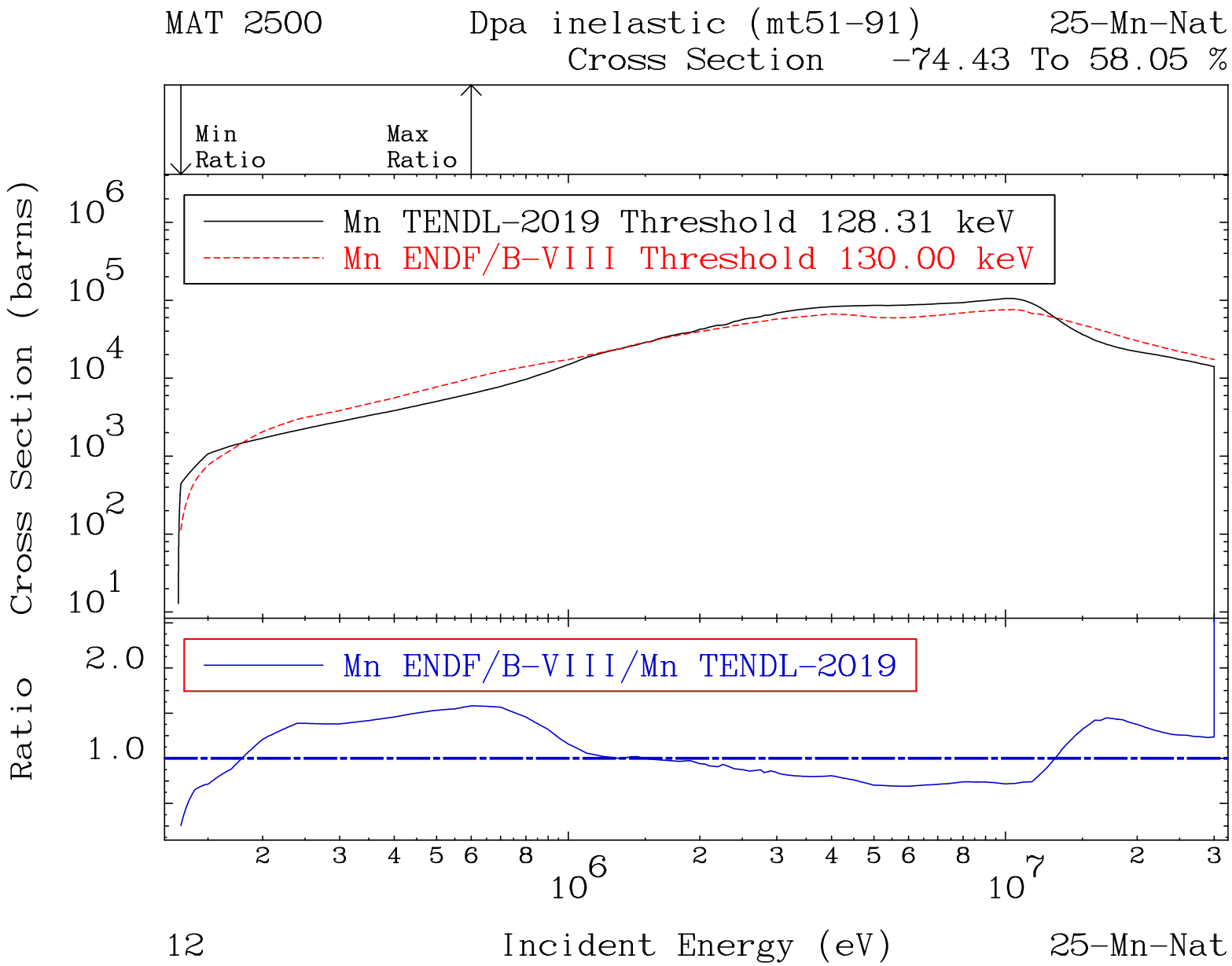

MAT 2500
Kerma total (eV-barns)
25-Mn-Nat
Cross Section -56.02 To 60.81 %
Min Ratio
Max Ratio
Mn TENDL-2019
Mn ENDF/B-VIII
Cross Section (barns)
Mn ENDF/B-VIII/Mn TENDL-2019
Ratio
Incident Energy (eV)
7
25-Mn-Nat

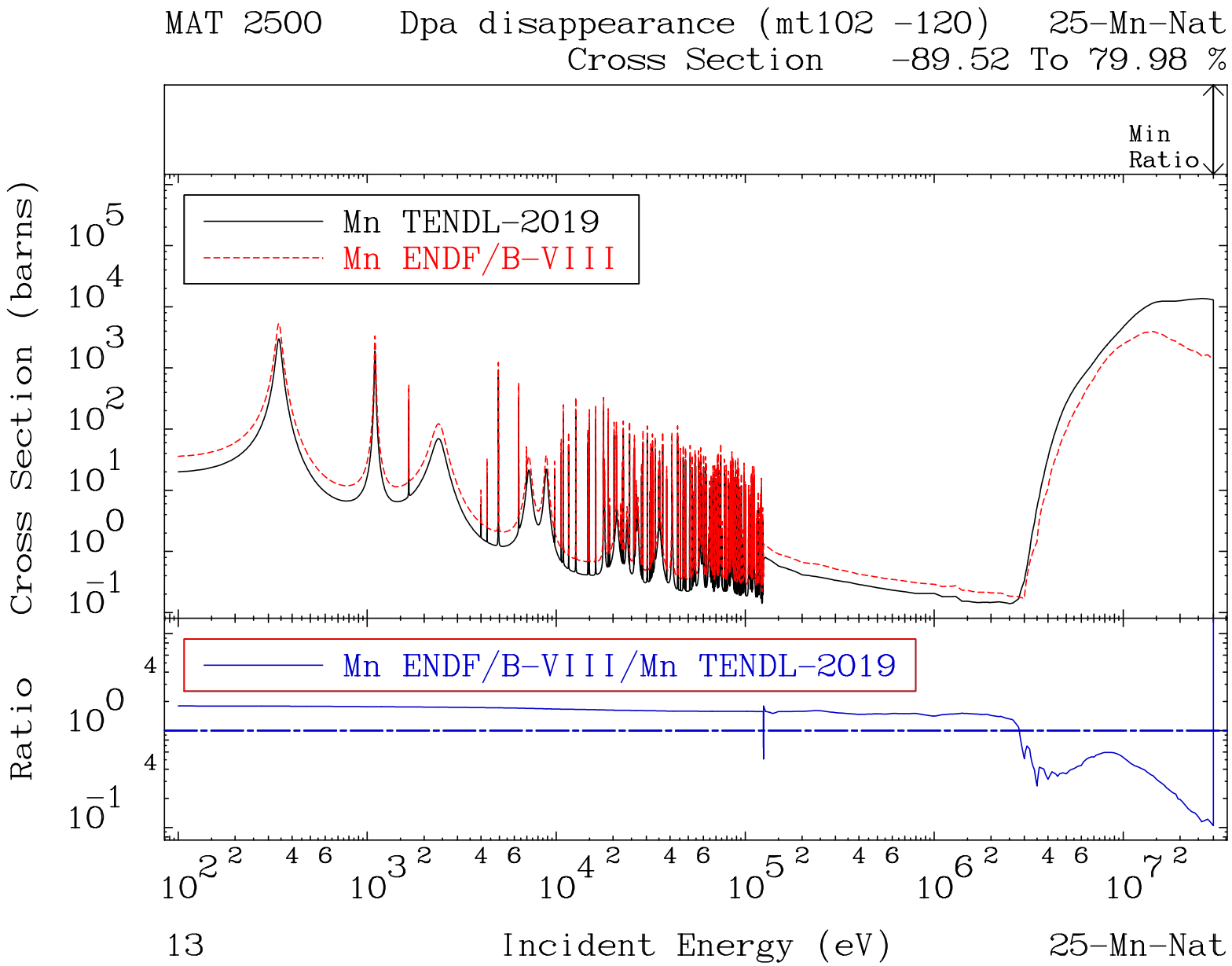

MAT 2500
Total photon (eV-barns)
Cross Section
25-Mn-Nat
-67.52 To 46.73 %
Min Ratio
Max Ratio
Mn TENDL-2019
Mn ENDF/B-VIII
Cross Section (barns)
Mn ENDF/B-VIII/Mn TENDL-2019
Ratio
Incident Energy (eV)
8
25-Mn-Nat


MAT 2500 Total kinematic kerma (high limit) 25-Mn-Nat
Cross Section -56.02 To 65.64 %
Min Ratio
Max Ratio
Mn TENDL-2019
Mn ENDF/B-VIII
Cross Section (barns)
Mn ENDF/B-VIII/Mn TENDL-2019
Ratio
Incident Energy (eV)
9
25-Mn-Nat


MAT 2500
Dpa total (eV-barns)
Cross Section
25-Mn-Nat
-62.53 To 159.1 %
Min Ratio
Max Ratio
Mn TENDL-2019
Mn ENDF/B-VIII
Cross Section (barns)
Mn ENDF/B-VIII/Mn TENDL-2019
Ratio
Incident Energy (eV)
25-Mn-Nat


MAT 2500
Dpa elastic (mt2)
Cross Section
25-Mn-Nat
-62.45 To 859.1 %
Max Ratio
Min Ratio
Mn TENDL-2019 Threshold 556.64 eV
Mn ENDF/B-VIII Threshold 556.64 eV
Cross Section (barns)
Mn ENDF/B-VIII/Mn TENDL-2019
Ratio
Incident Energy (eV)
11
25-Mn-Nat


MAT 2500
Dpa inelastic (mt51-91)
25-Mn-Nat
Cross Section
-74.43 To 58.05 %
Min Ratio
Max Ratio
Mn TENDL-2019 Threshold 128.31 keV
Mn ENDF/B-VIII Threshold 130.00 keV
Cross Section (barns)
Mn ENDF/B-VIII/Mn TENDL-2019
Ratio
Incident Energy (eV)
12
25-Mn-Nat


MAT 2500 Dpa disappearance (mt102 -120) 25-Mn-Nat
Cross Section -89.52 To 79.98 %
Min
Ratio
Mn TENDL-2019
Mn ENDF/B-VIII
Cross Section (barns)
Mn ENDF/B-VIII/Mn TENDL-2019
Ratio
Incident Energy (eV)
13
25-Mn-Nat