Program EVALPLOT
(Version 2018-1)
by
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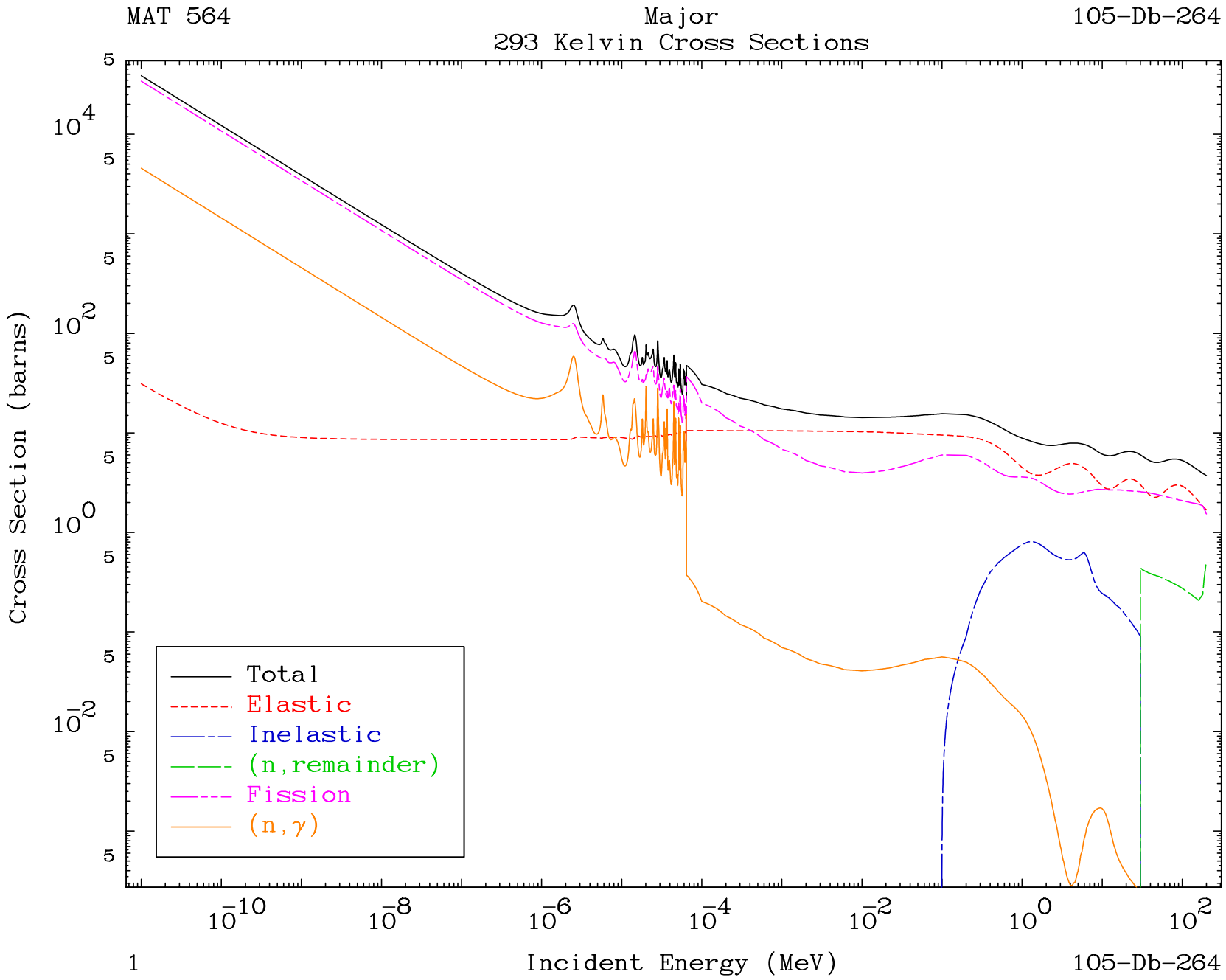
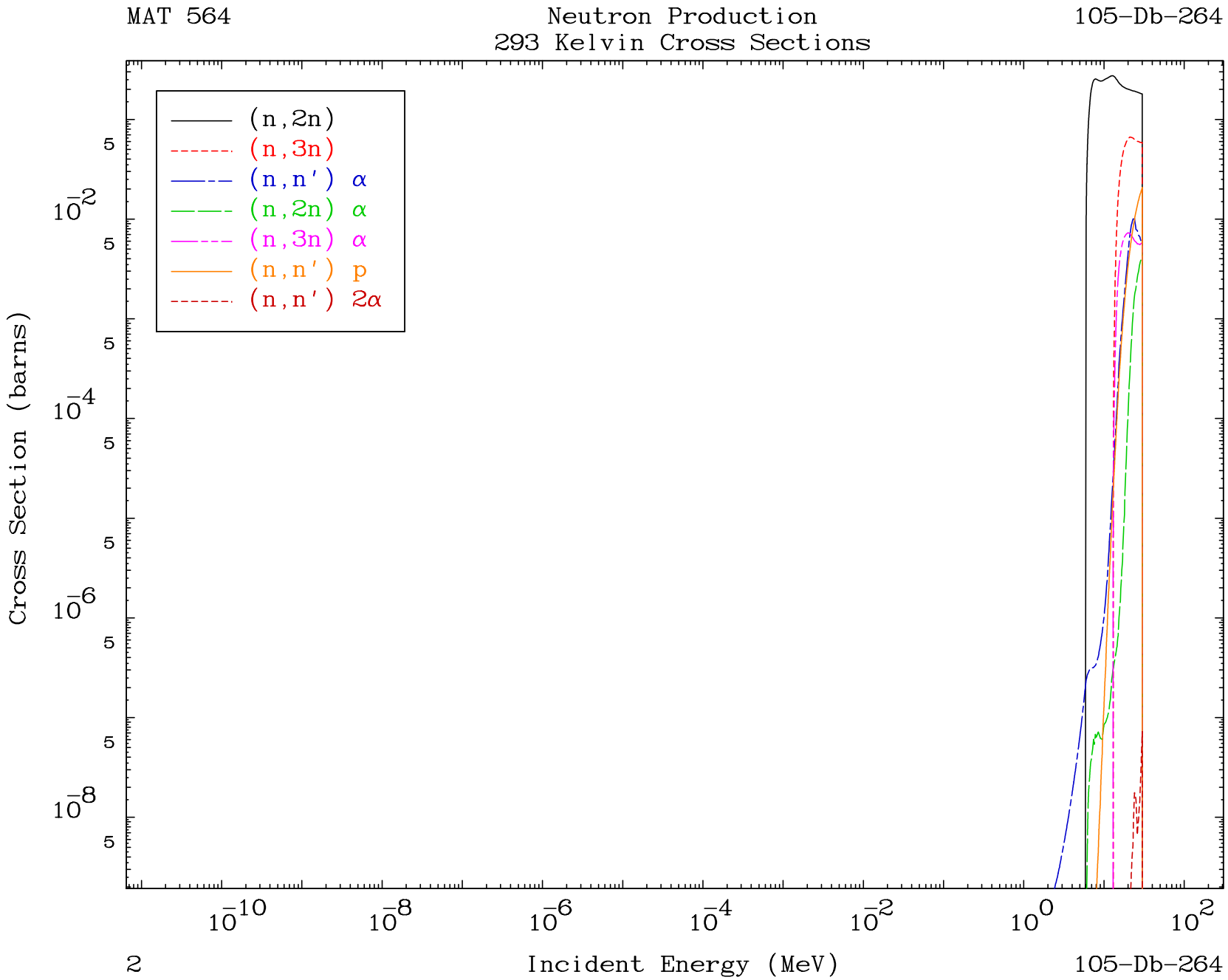
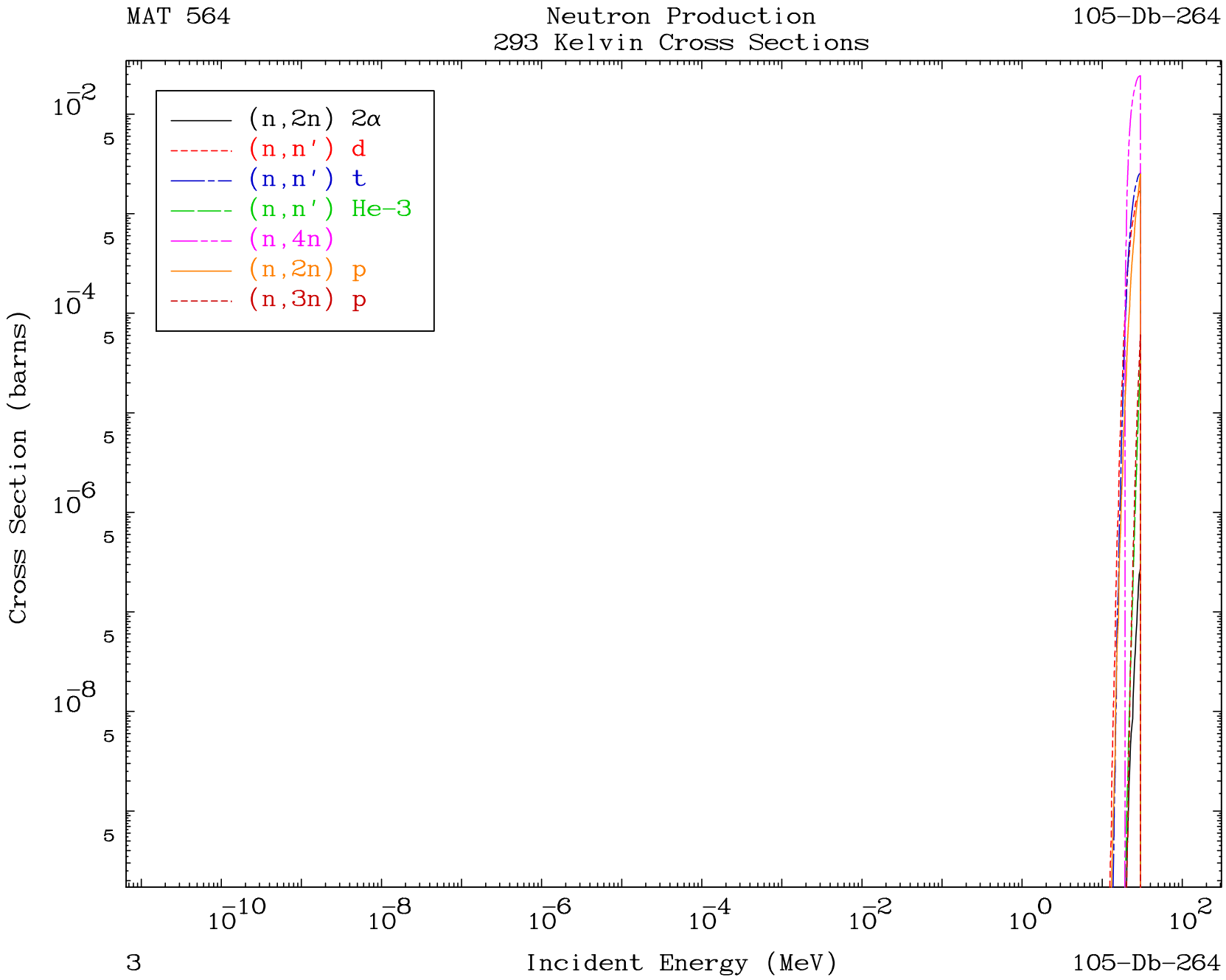
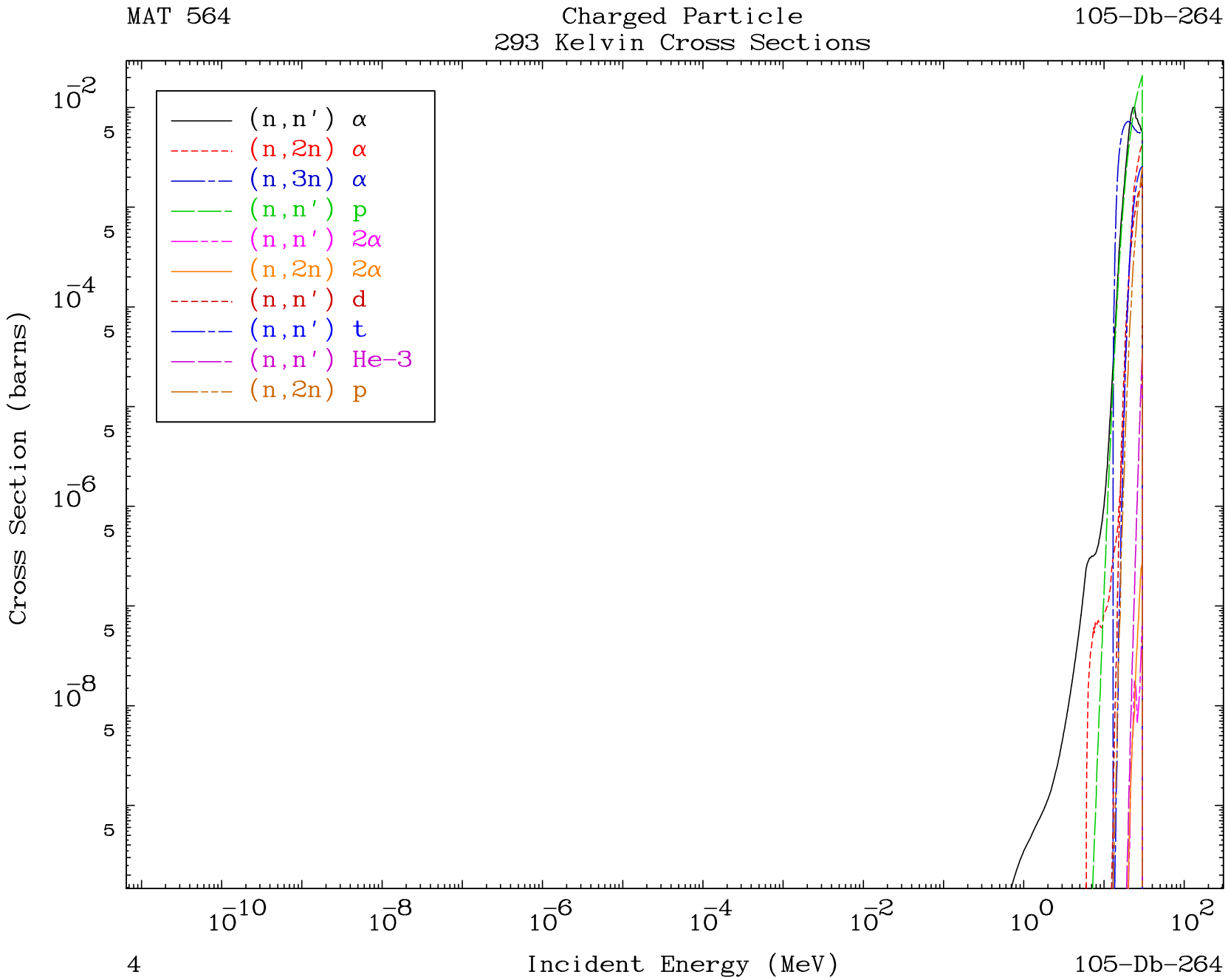
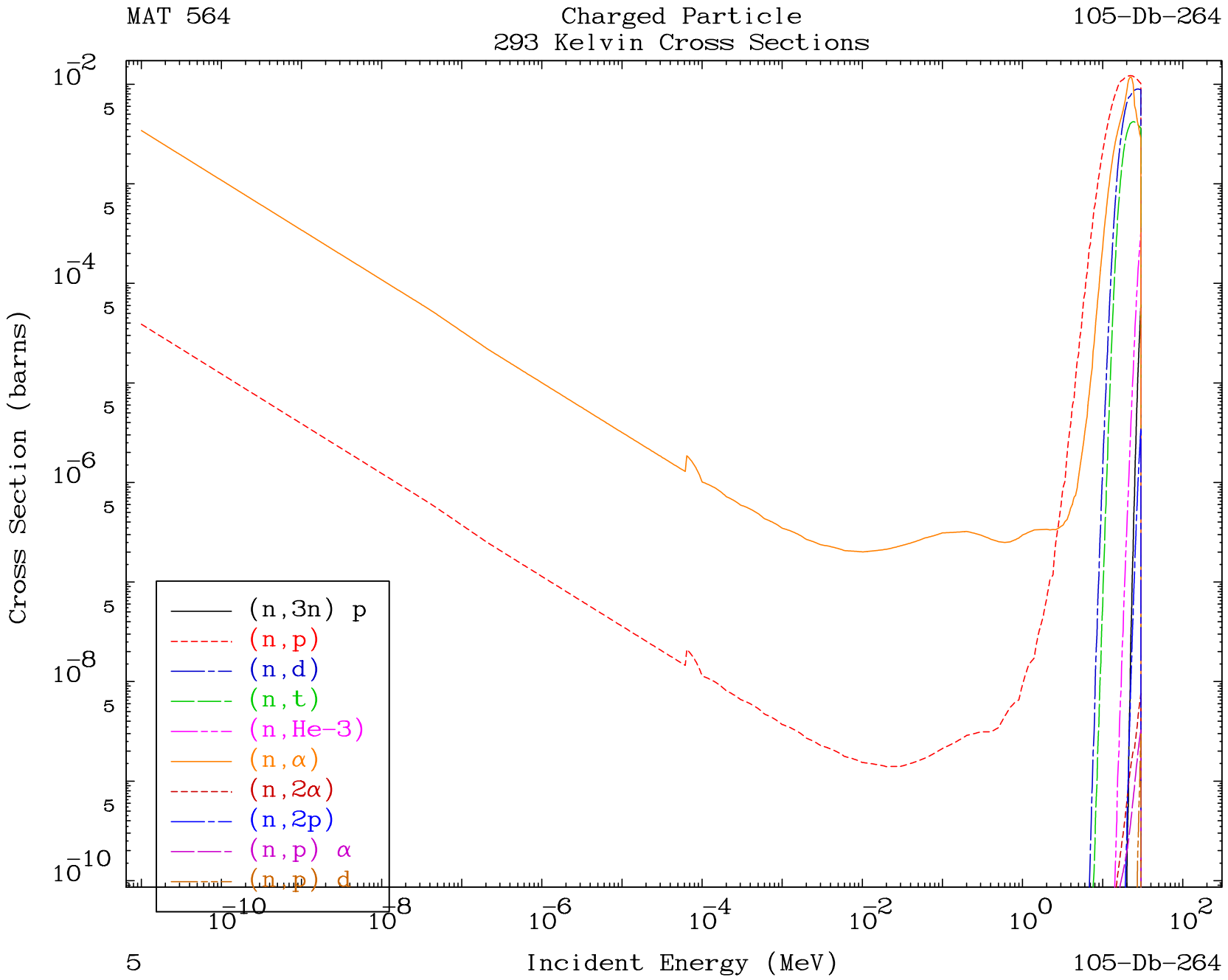
Press Mouse Button to Start

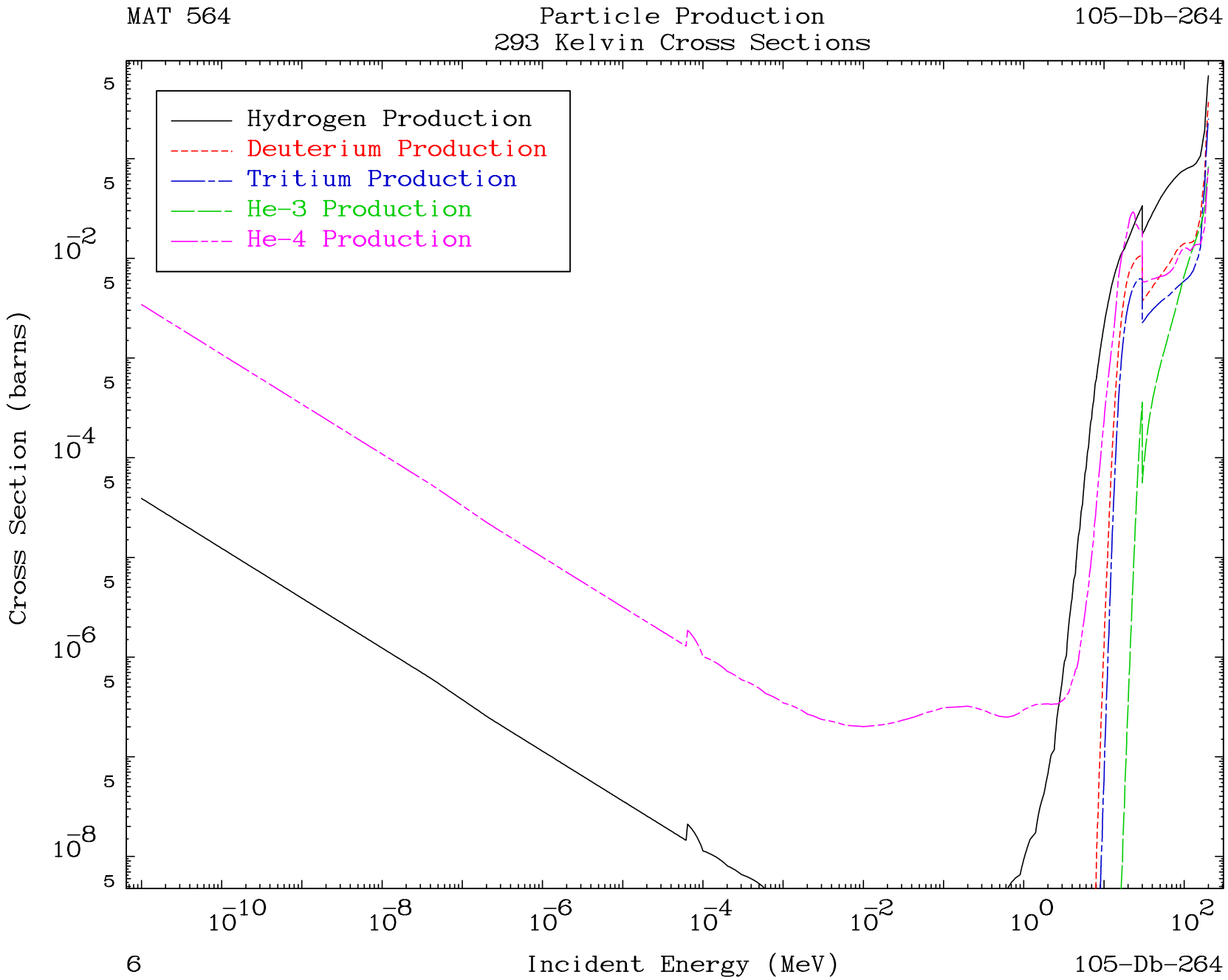

MAT 564
Major
105-Db-264
293 Kelvin Cross Sections
Cross Section (barns)
Incident Energy (MeV)
Total
Elastic
Inelastic
(n,remainder)
Fission
(n,γ)
105-Db-264
1

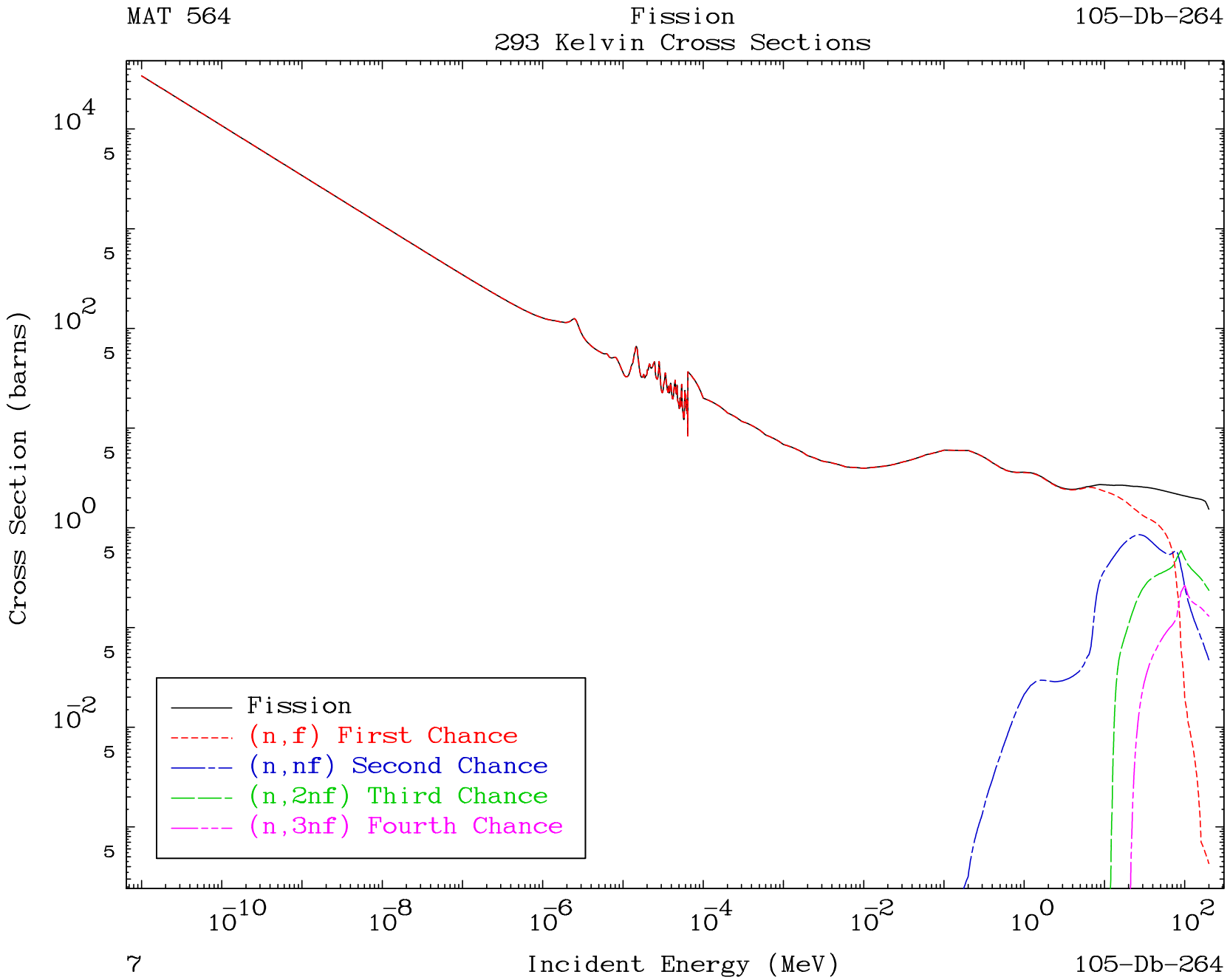

MAT 564
Neutron Production
293 Kelvin Cross Sections
105-Db-264
(n,2n)
(n,3n)
(n,n') α
(n,2n) α
(n,3n) α
(n,n') p
(n,n') 2α
Cross Section (barns)
Incident Energy (MeV)
2
105-Db-264

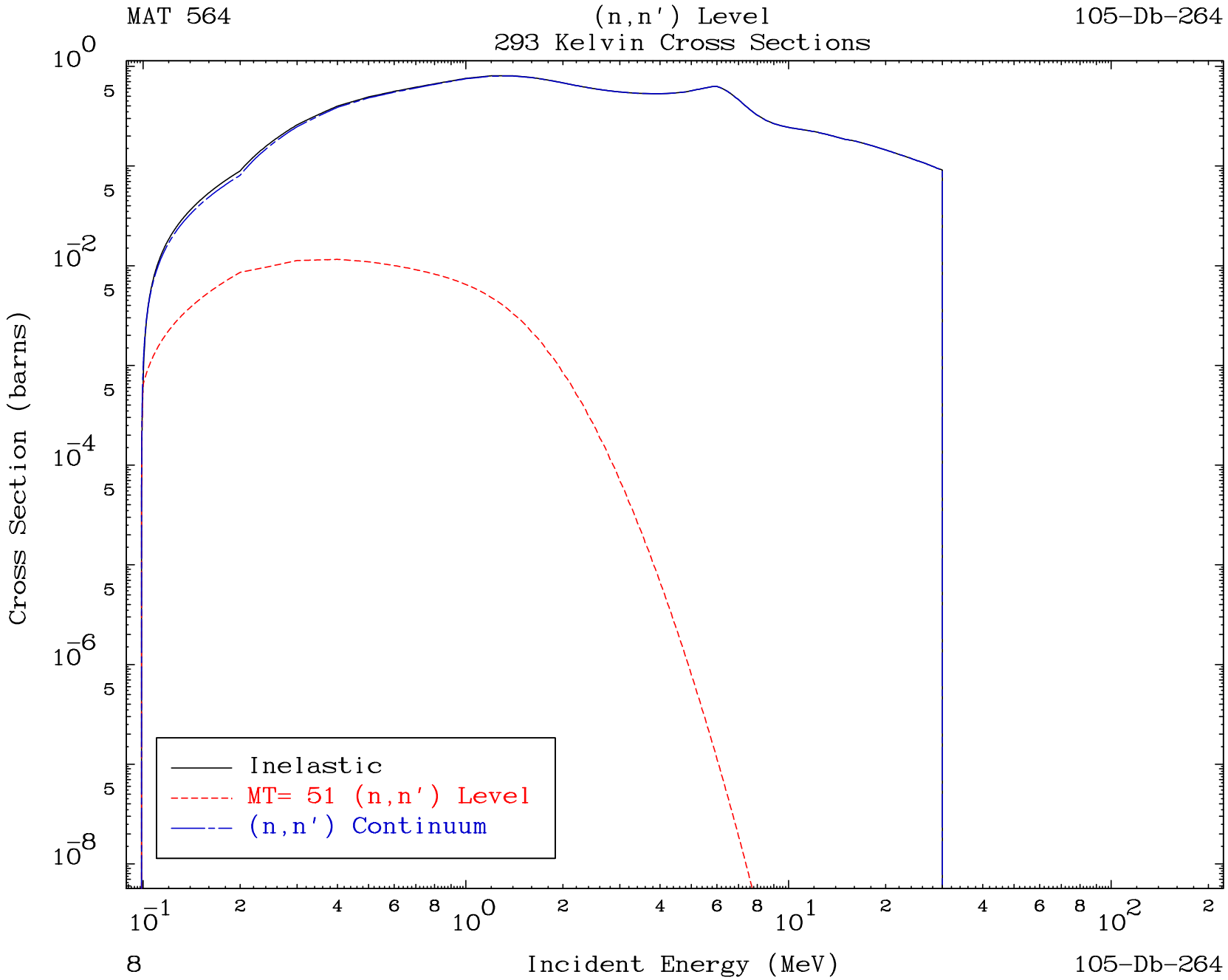

MAT 564
Neutron Production
293 Kelvin Cross Sections
105-Db-264
(n,2n) 2α
(n,n') d
(n,n') t
(n,n') He-3
(n,4n)
(n,2n) p
(n,3n) p
Cross Section (barns)
Incident Energy (MeV)
3
105-Db-264

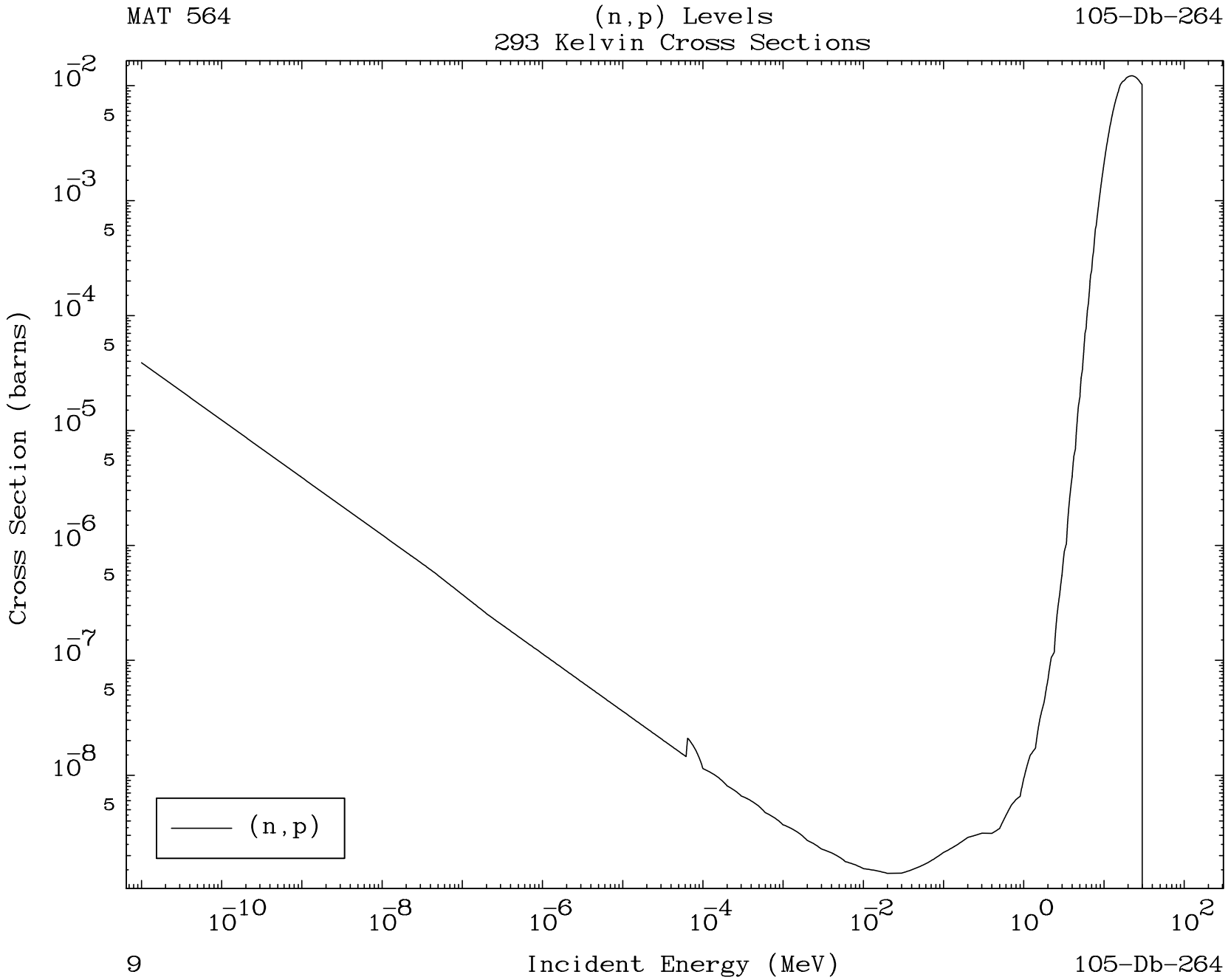

MAT 564
Charged Particle
293 Kelvin Cross Sections
105-Db-264
(n,n') α
(n,2n) α
(n,3n) α
(n,n') p
(n,n') 2α
(n,2n) 2α
(n,n') d
(n,n') t
(n,n') He-3
(n,2n) p
Cross Section (barns)
Incident Energy (MeV)
4
105-Db-264

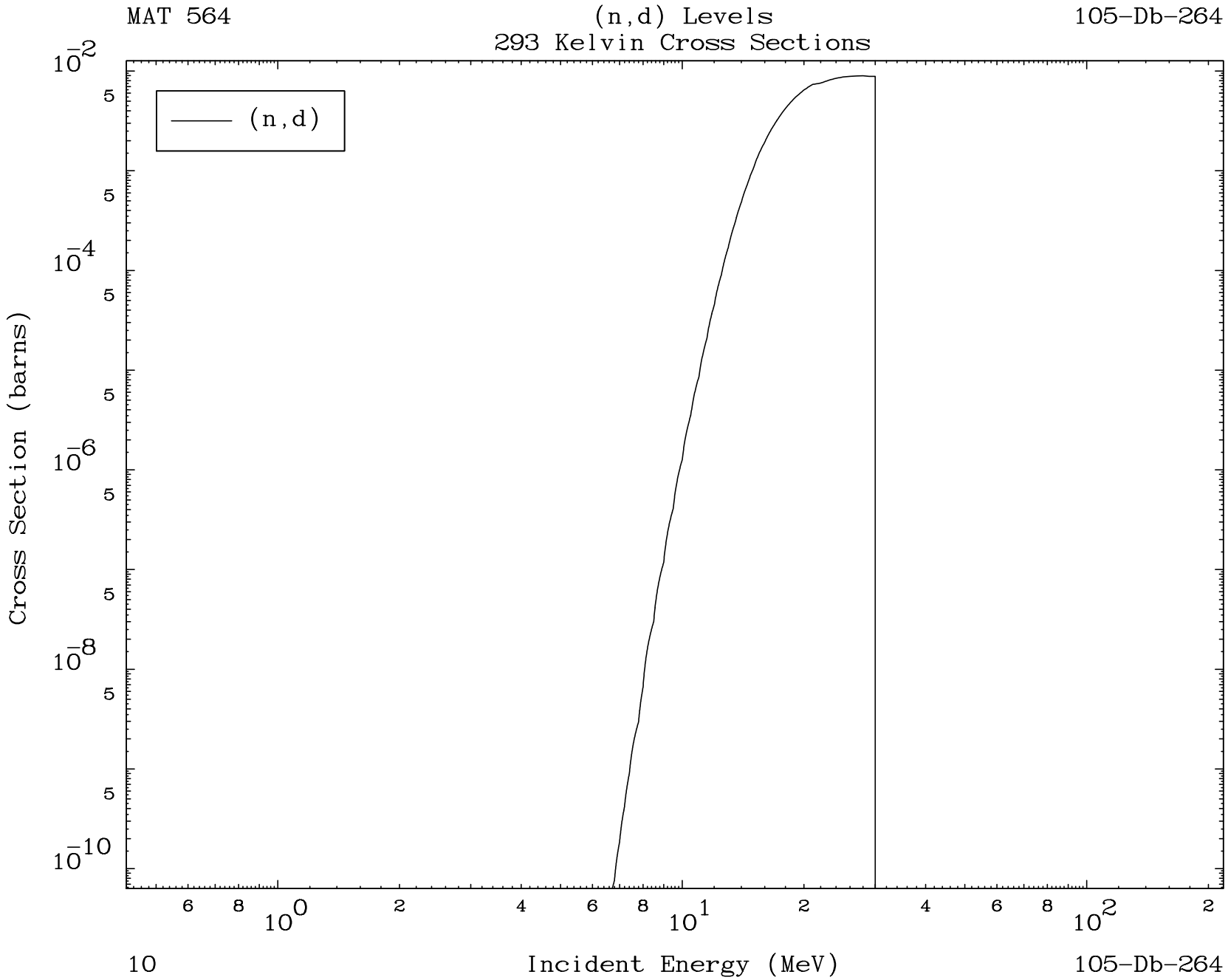

MAT 564
Charged Particle
293 Kelvin Cross Sections
105-Db-264
Cross Section (barns)
Incident Energy (MeV)
105-Db-264
(n,3n) p
(n,p)
(n,d)
(n,t)
(n,He-3)
(n,α)
(n,2α)
(n,2p)
(n,p) α
(n,p) d

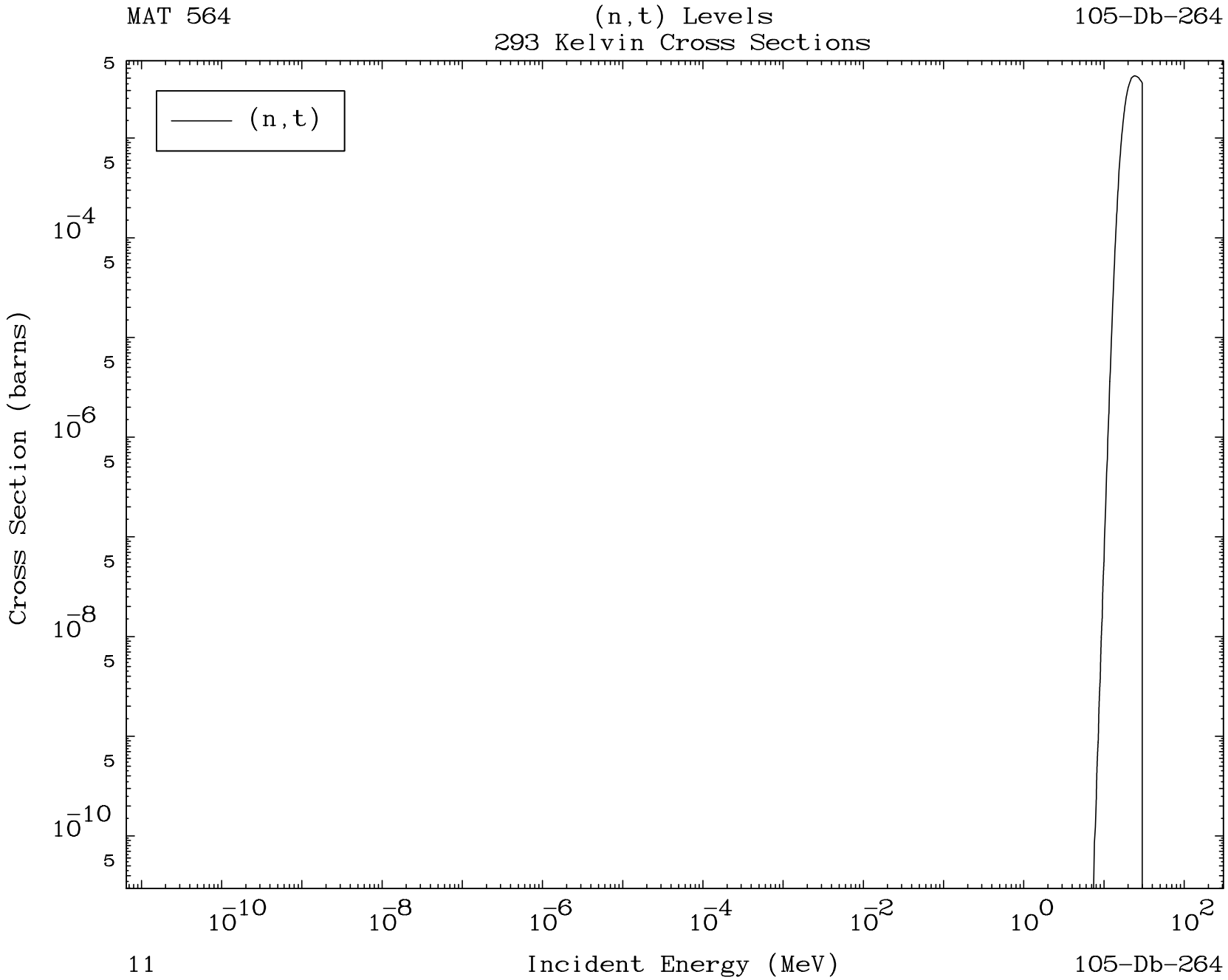

MAT 564
Particle Production
293 Kelvin Cross Sections
105-Db-264
Hydrogen Production
Deuterium Production
Tritium Production
He-3 Production
He-4 Production
Cross Section (barns)
Incident Energy (MeV)
105-Db-264
6


MAT 564
Fission
105-Db-264
293 Kelvin Cross Sections
Cross Section (barns)
Incident Energy (MeV)
Fission
(n,f) First Chance
(n,nf) Second Chance
(n,2nf) Third Chance
(n,3nf) Fourth Chance
7
105-Db-264

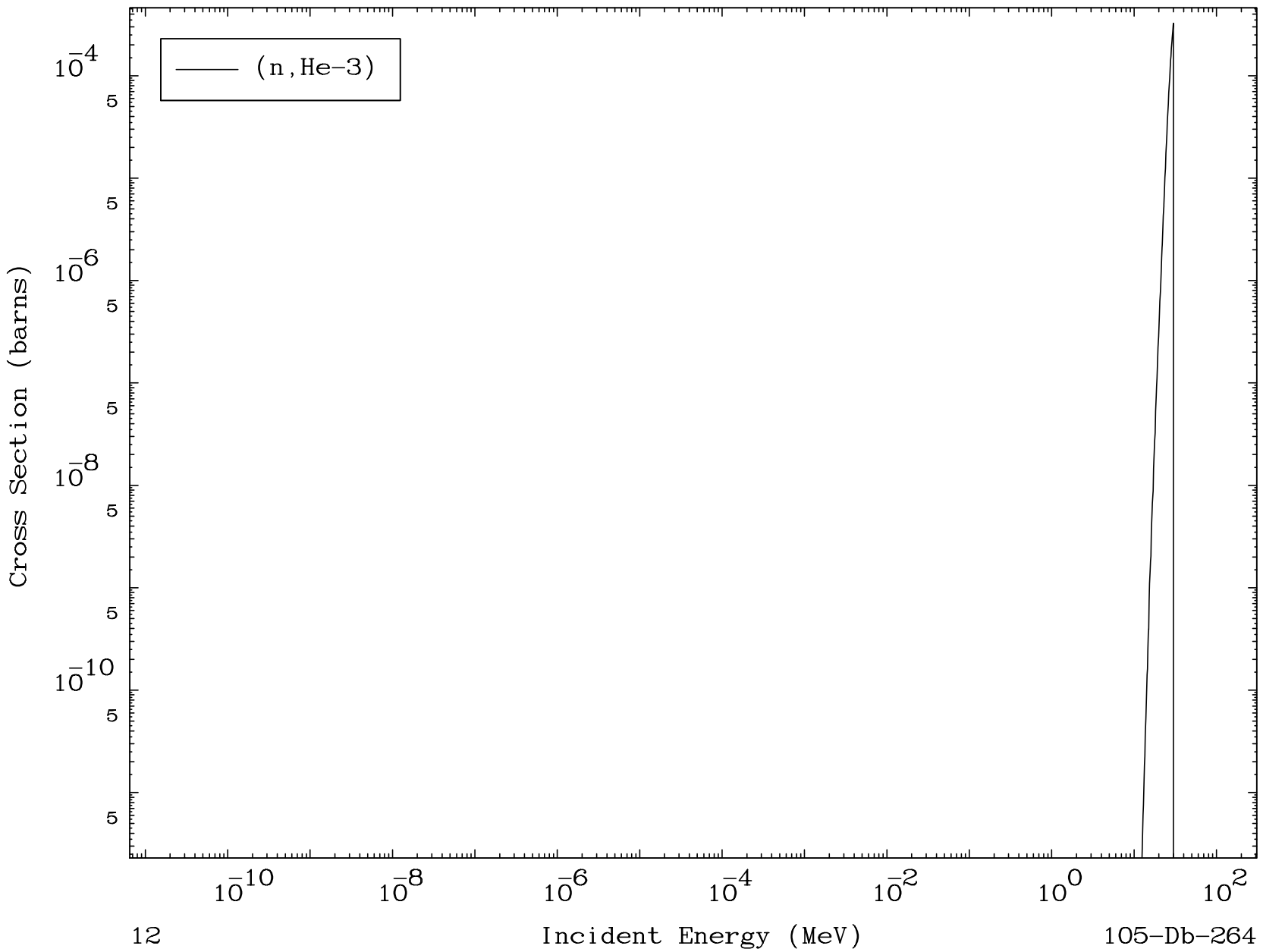

MAT 564
(n,n') Level
105-Db-264
293 Kelvin Cross Sections
Cross Section (barns)
Incident Energy (MeV)
Inelastic
MT= 51 (n,n') Level
(n,n') Continuum
8
105-Db-264

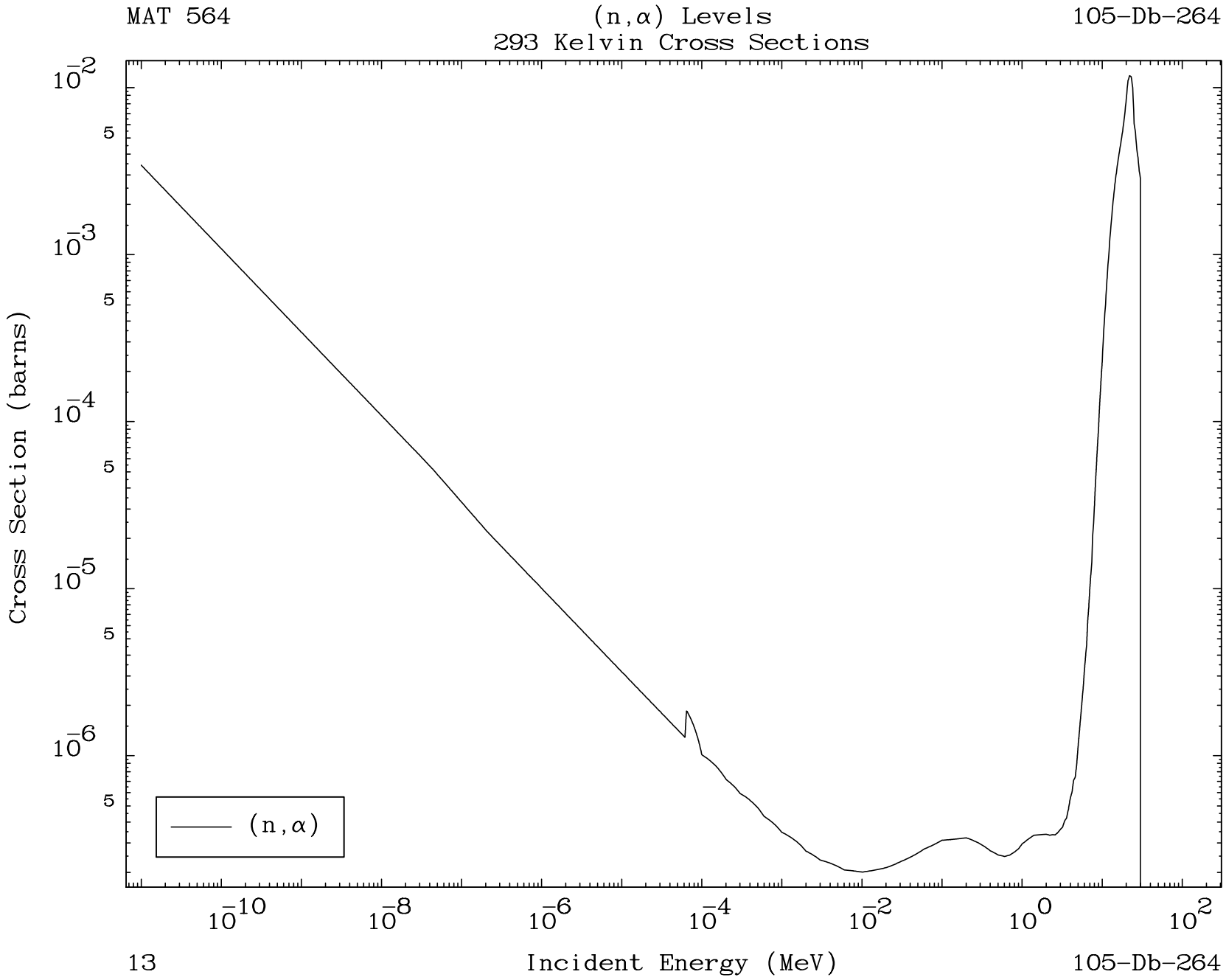

MAT 564
(n,p) Levels
105-Db-264
293 Kelvin Cross Sections
Cross Section (barns)
10-2
5
10-3
5
10-4
5
10-5
5
10-6
5
10-7
5
10-8
5
(n,p)
10-10
10-8
10-6
10-4
10-2
100
102
9
Incident Energy (MeV)
105-Db-264

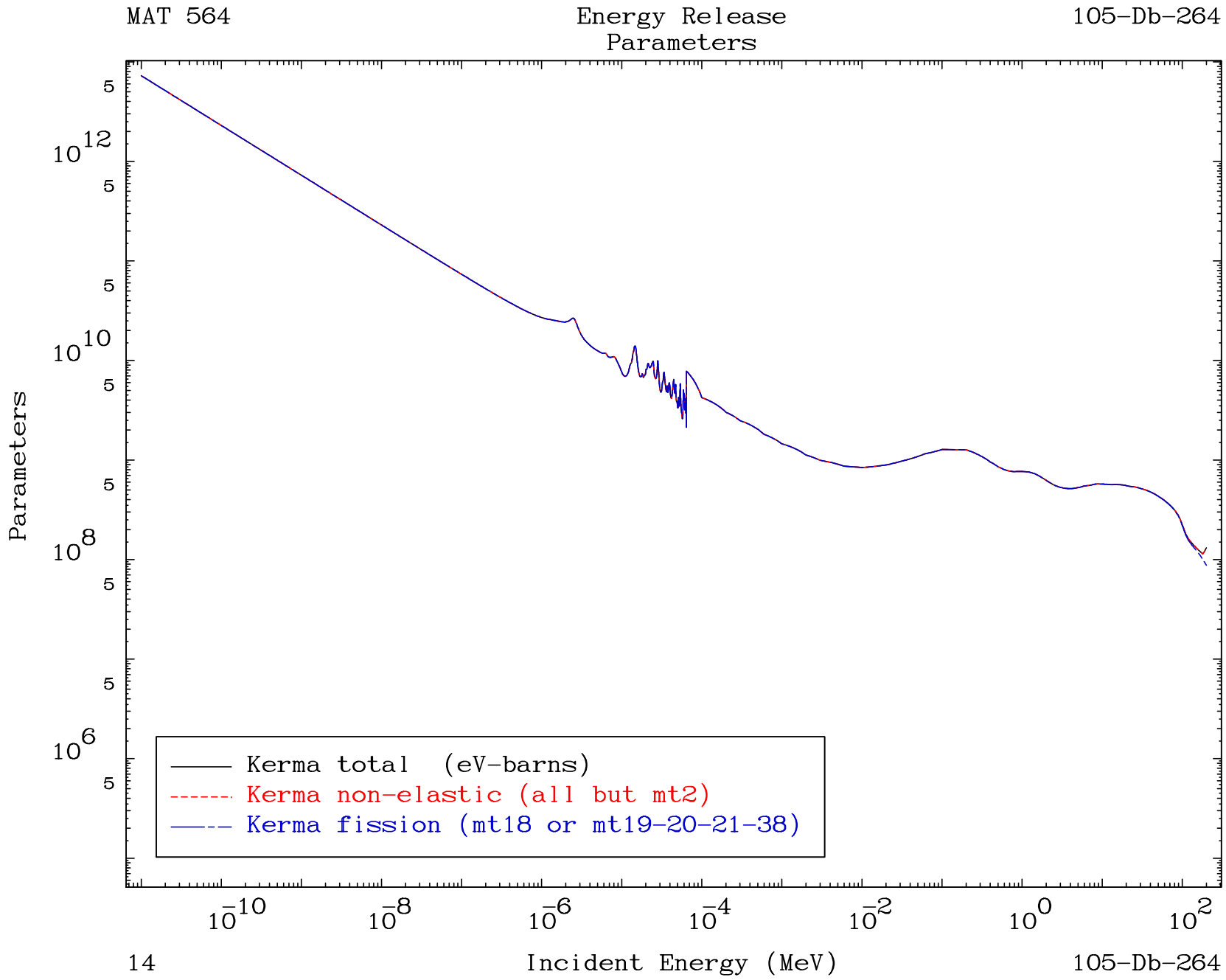

MAT 564
(n,d) Levels
105-Db-264
293 Kelvin Cross Sections
(n,d)
Cross Section (barns)
Incident Energy (MeV)
105-Db-264

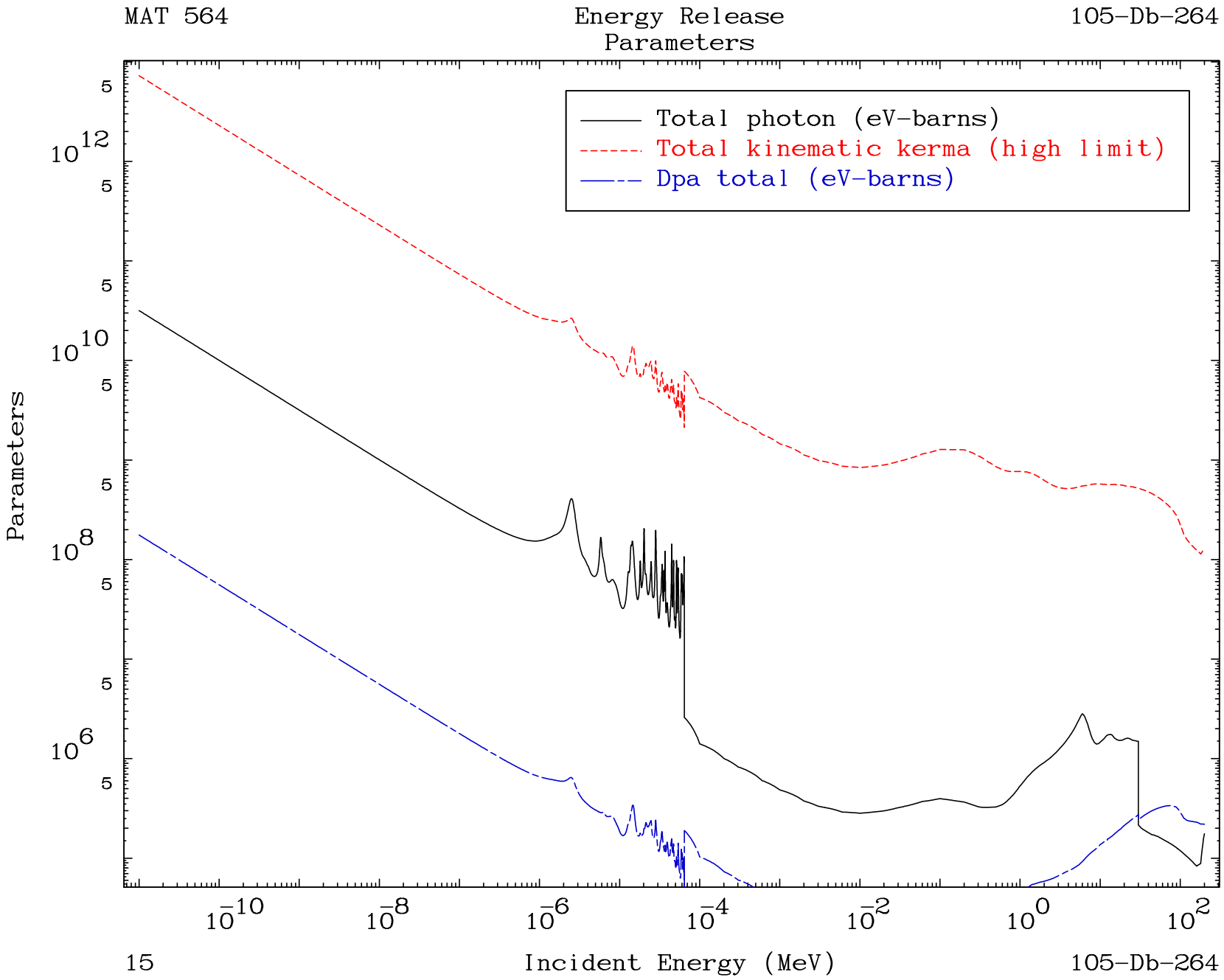

MAT 564
(n,t) Levels
105-Db-264
293 Kelvin Cross Sections
(n,t)
Cross Section (barns)
Incident Energy (MeV)
11
105-Db-264

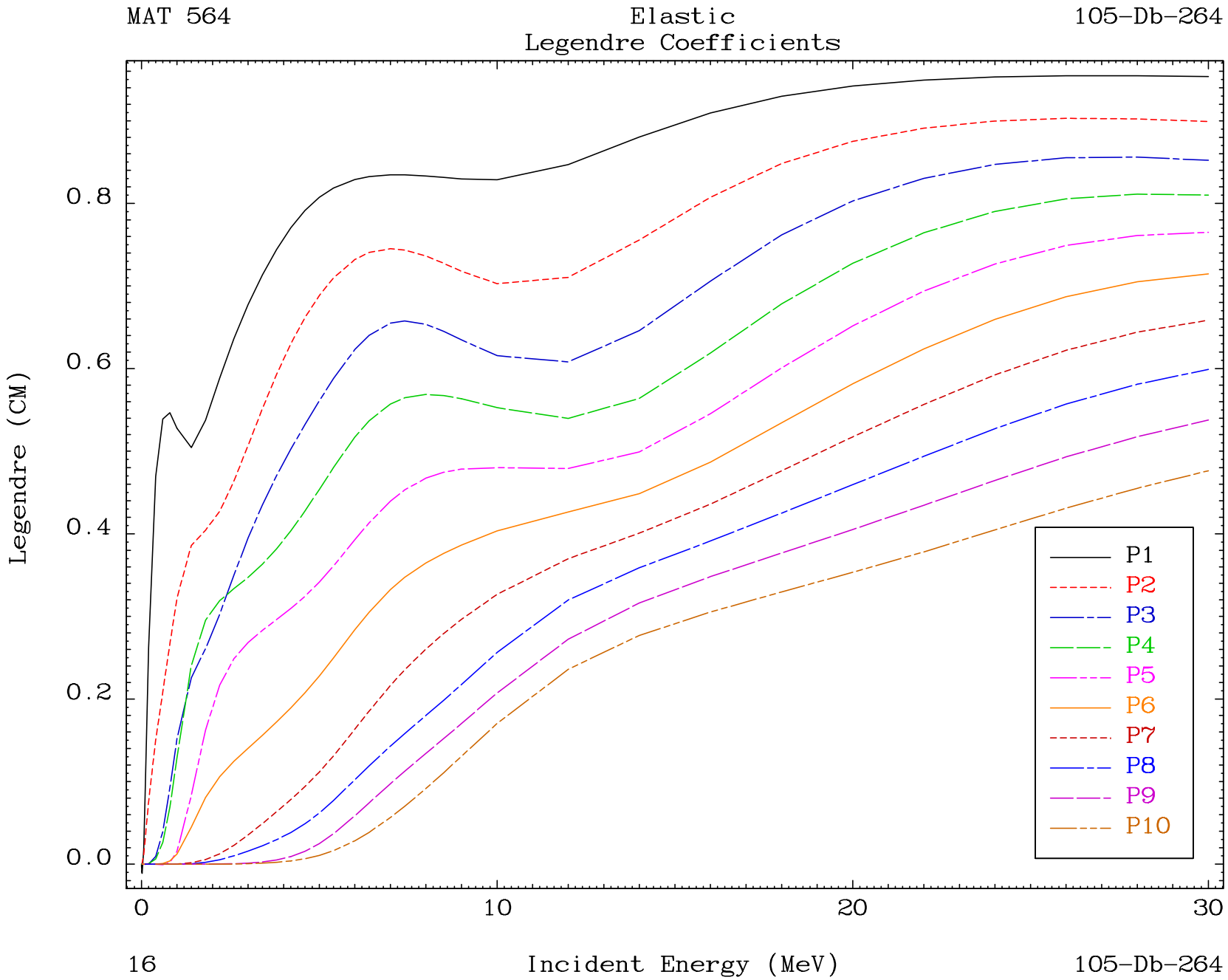
293 Kelvin Cross Sections

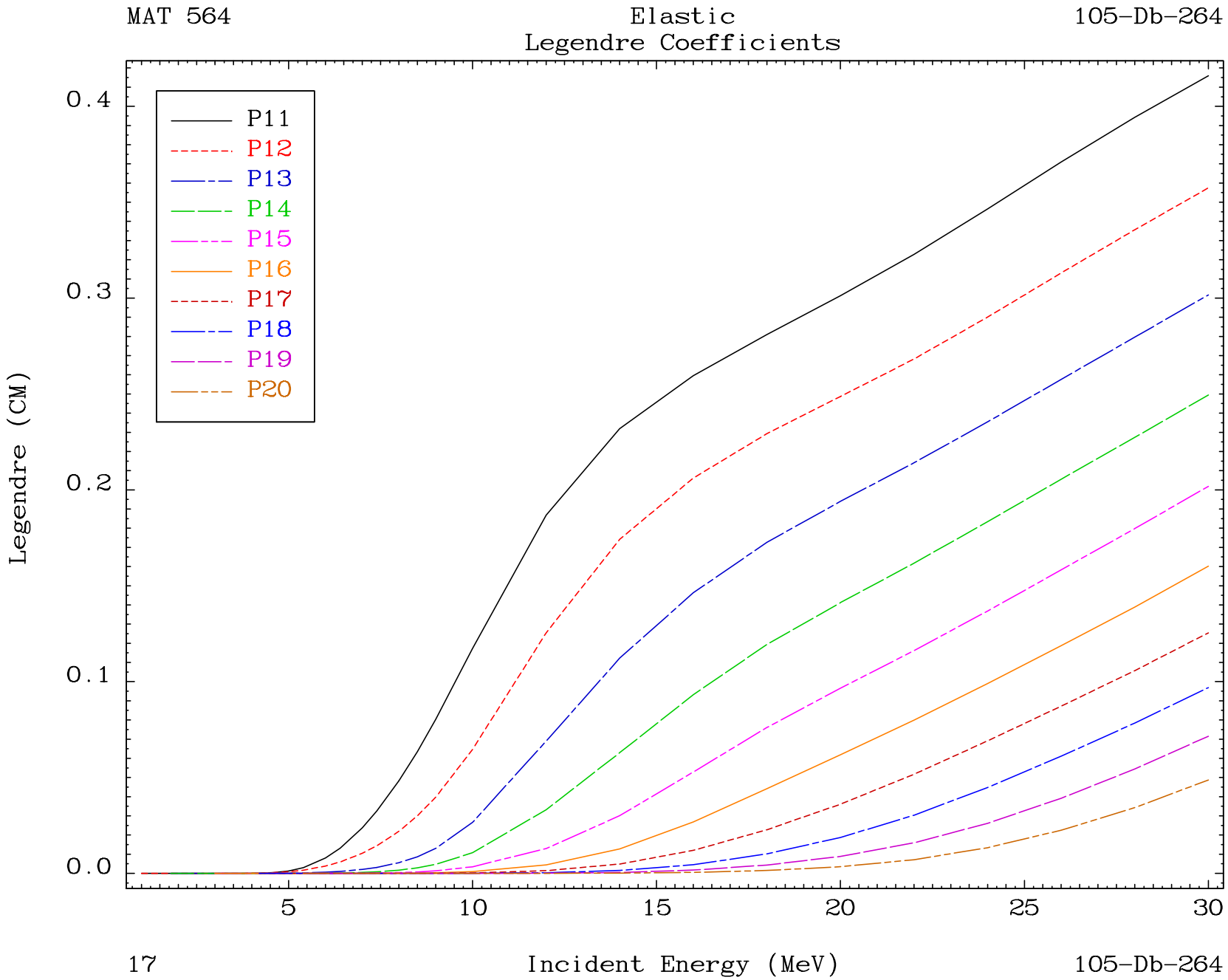


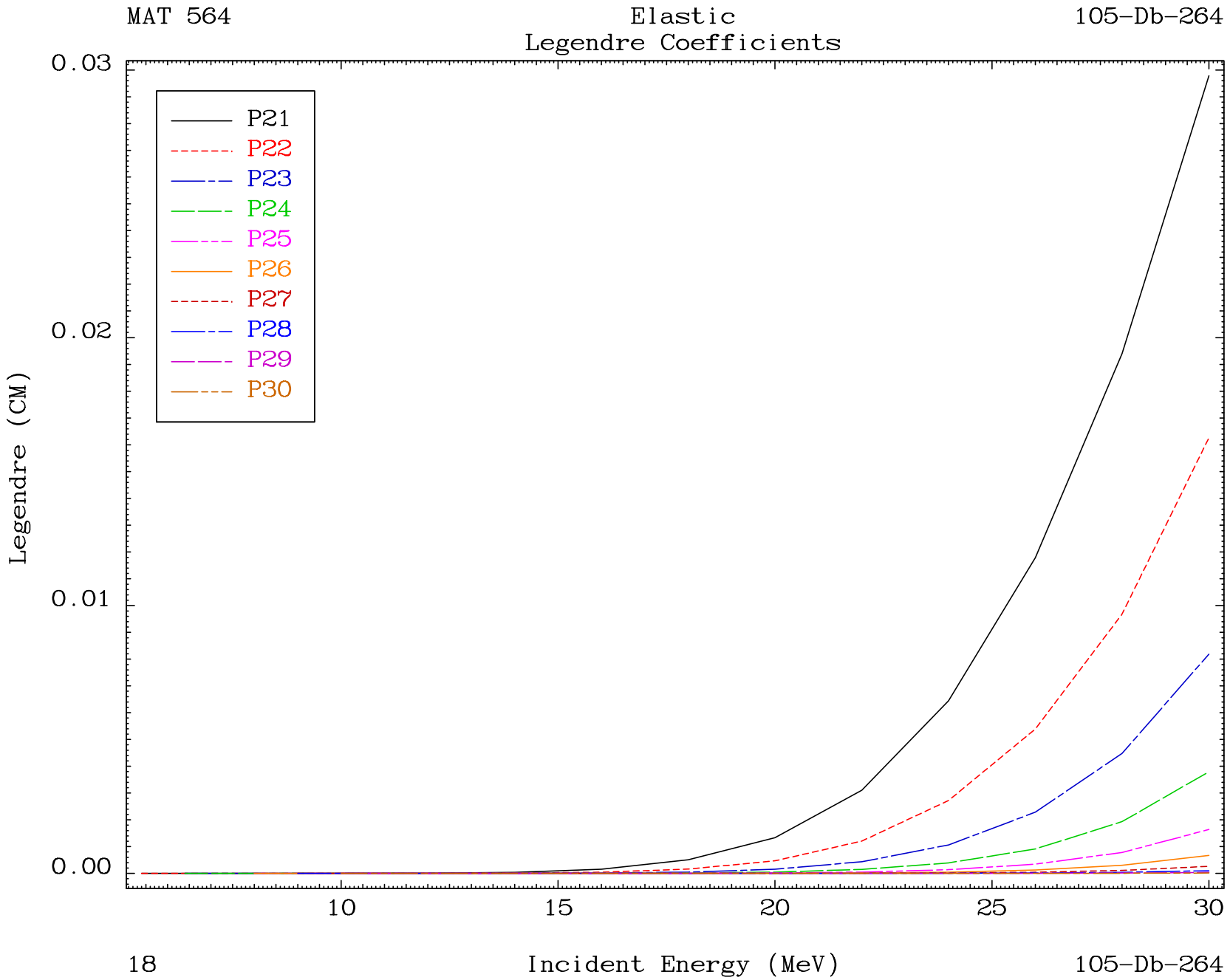

MAT 564
(n,α) Levels
105-Db-264
293 Kelvin Cross Sections
Cross Section (barns)
10-2
5
10-3
5
10-4
5
10-5
5
10-6
5
(n,α)
10-10
10-8
10-6
10-4
10-2
100
102
13
Incident Energy (MeV)
105-Db-264

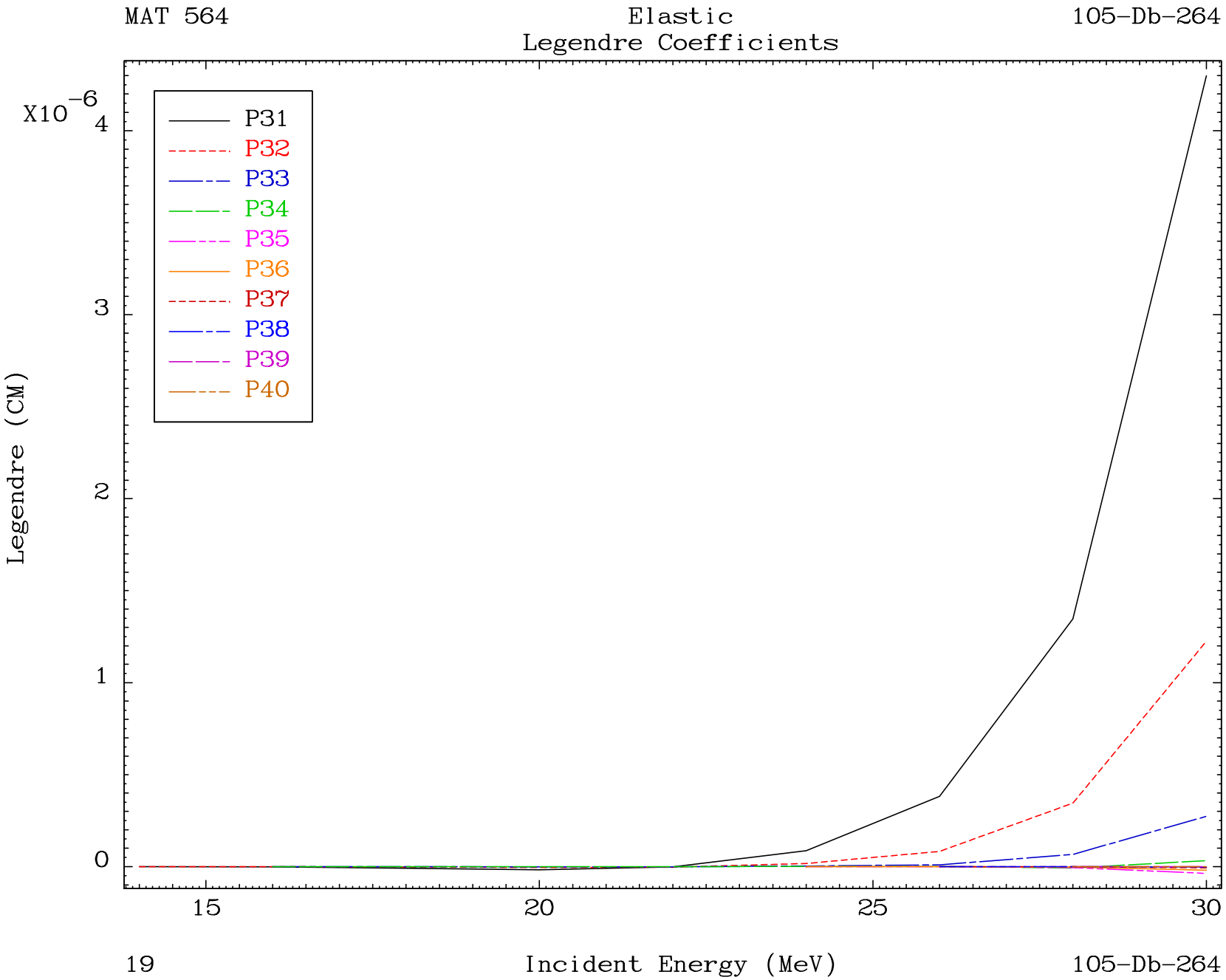

MAT 564
Energy Release
Parameters
105-Db-264
Parameters
$10^{12}$
$10^{10}$
$10^{8}$
$10^{6}$
5
Kerma total (eV-barns)
Kerma non-elastic (all but mt2)
Kerma fission (mt18 or mt19-20-21-38)
$10^{-10}$
$10^{-8}$
$10^{-6}$
$10^{-4}$
$10^{-2}$
$10^{0}$
$10^{2}$
14
Incident Energy (MeV)
105-Db-264

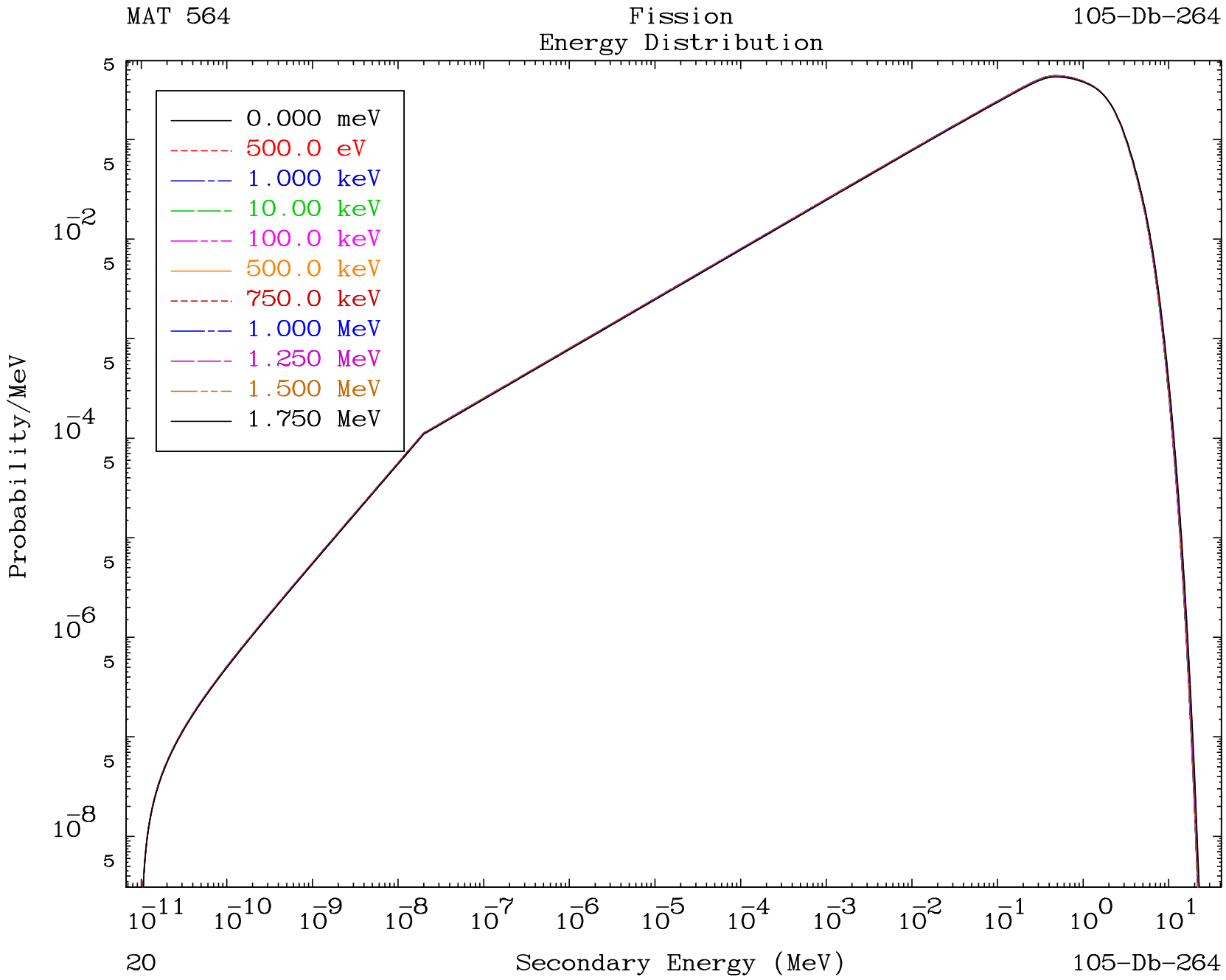

MAT 564
Energy Release
Parameters
105-Db-264
Total photon (eV-barns)
Total kinematic kerma (high limit)
Dpa total (eV-barns)
Parameters
Incident Energy (MeV)
15
105-Db-264

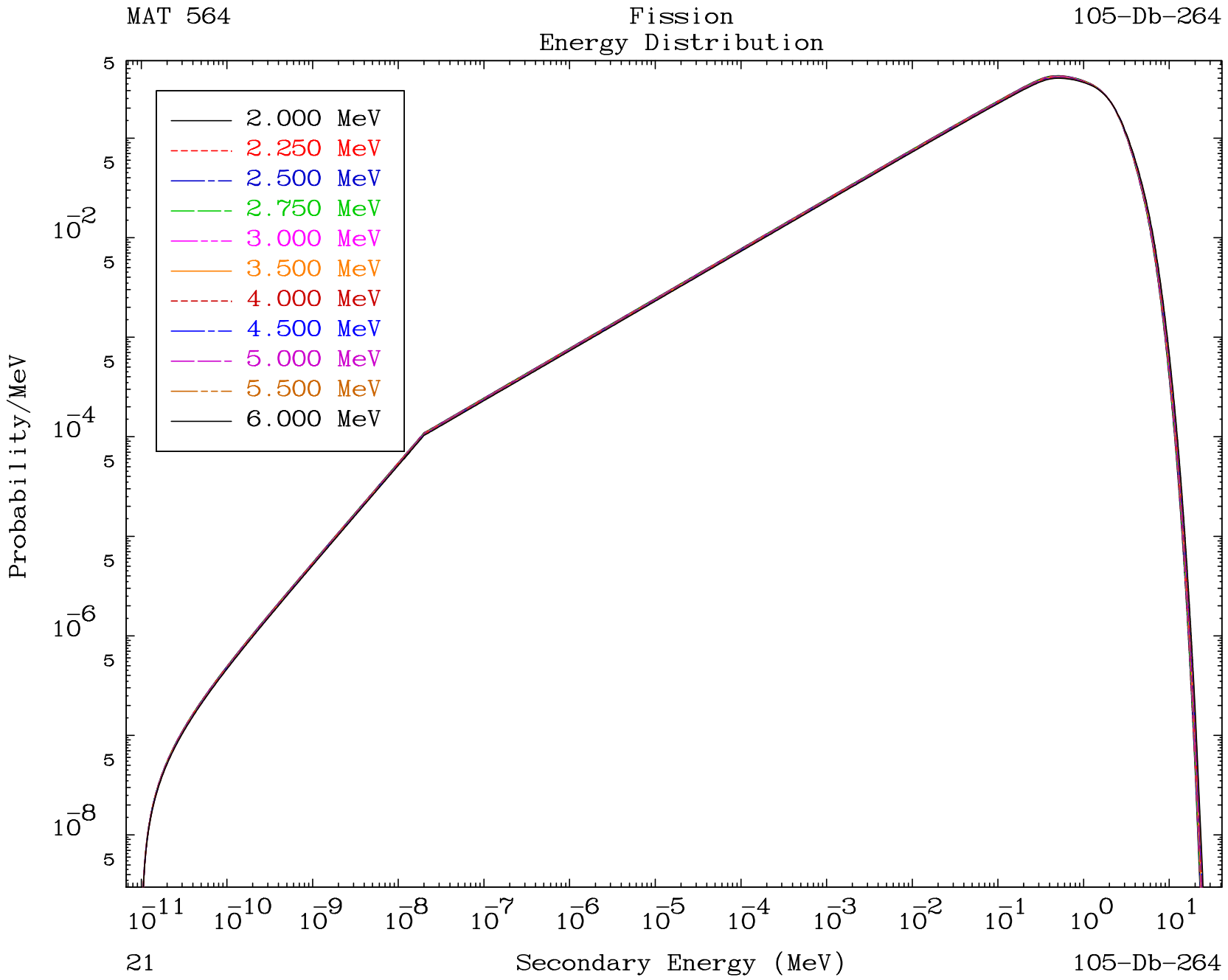

MAT 564
Elastic
Legendre Coefficients
105-Db-264
Legendre (CM)
0.0
0.2
0.4
0.6
0.8
0
10
20
30
Incident Energy (MeV)
16
105-Db-264
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10

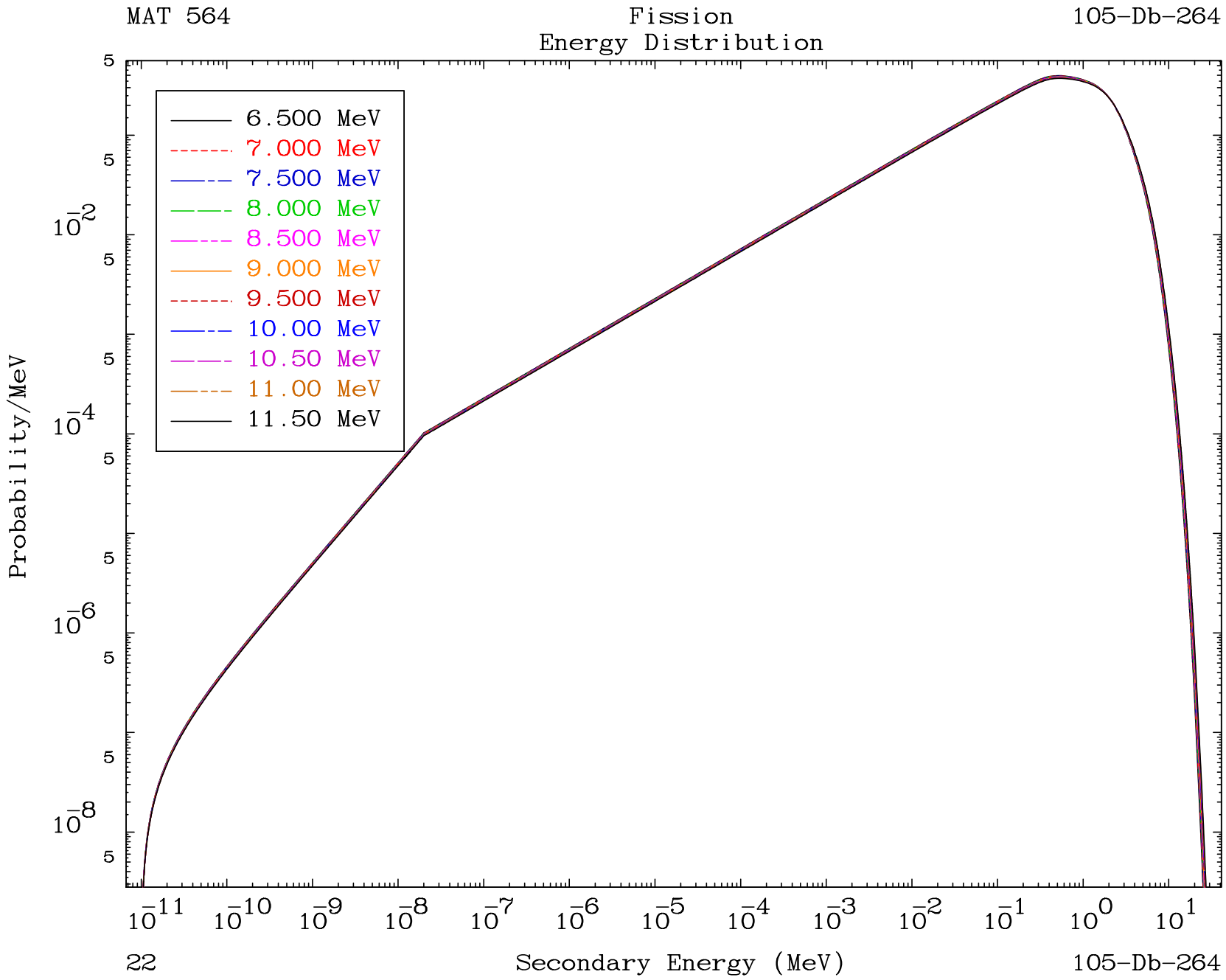

MAT 564
Elastic
Legendre Coefficients
105-Db-264
P11
P12
P13
P14
P15
P16
P17
P18
P19
P20
Legendre (CM)
0.0
0.1
0.2
0.3
0.4
5
10
15
20
25
30
17
Incident Energy (MeV)
105-Db-264

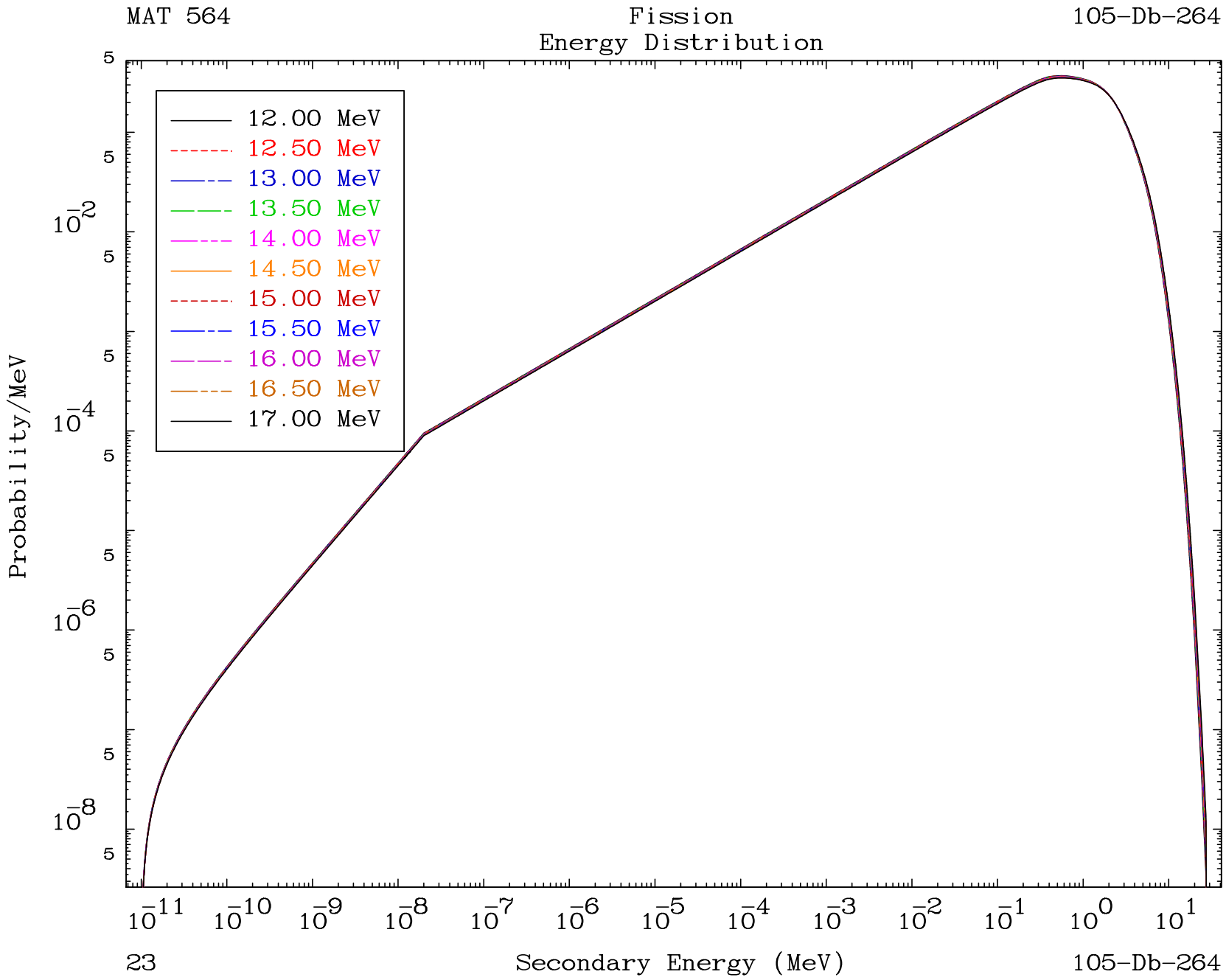

MAT 564
Elastic
Legendre Coefficients
105-Db-264
0.03
0.02
0.01
0.00
Legendre (CM)
P21
P22
P23
P24
P25
P26
P27
P28
P29
P30
10
15
20
25
30
18
Incident Energy (MeV)
105-Db-264

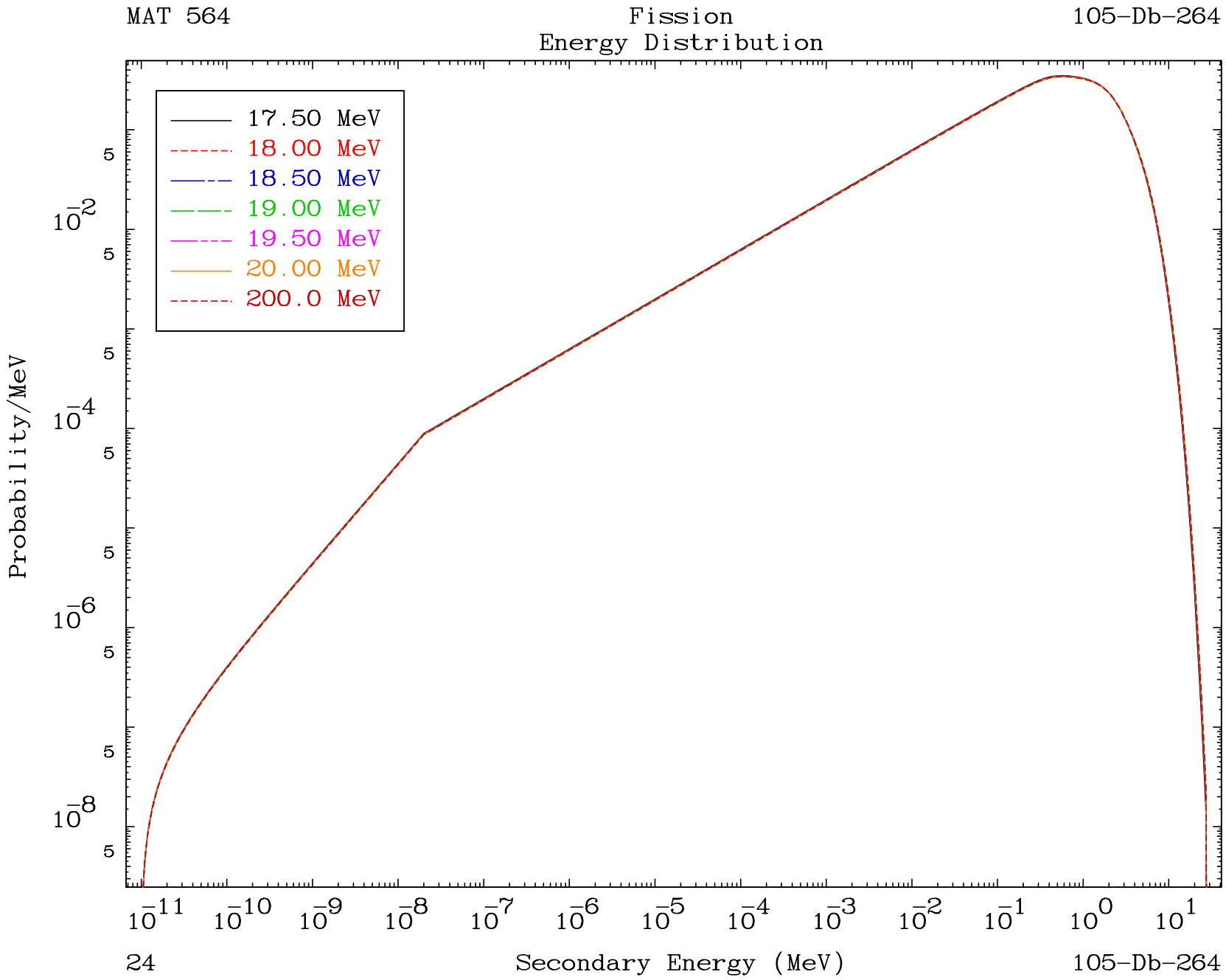

MAT 564
Elastic
Legendre Coefficients
105-Db-264
X10 -6
4
3
2
1
0
Legendre (CM)
P31
P32
P33
P34
P35
P36
P37
P38
P39
P40
15
20
25
30
19
Incident Energy (MeV)
105-Db-264

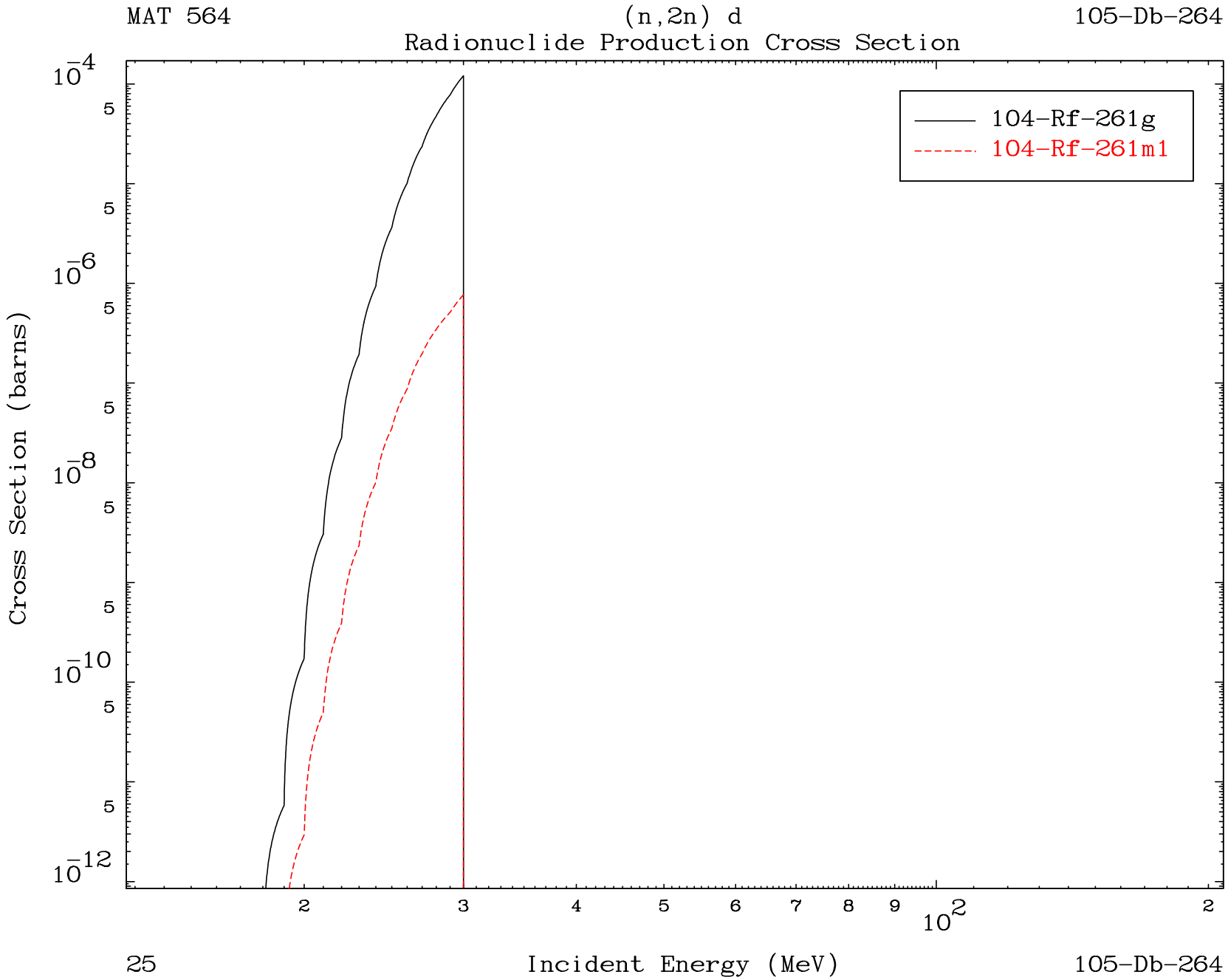

MAT 564
Fission
Energy Distribution
105-Db-264
0.000 meV
500.0 eV
1.000 keV
10.00 keV
100.0 keV
500.0 keV
750.0 keV
1.000 MeV
1.250 MeV
1.500 MeV
1.750 MeV
Probability/MeV
Secondary Energy (MeV)
20
105-Db-264

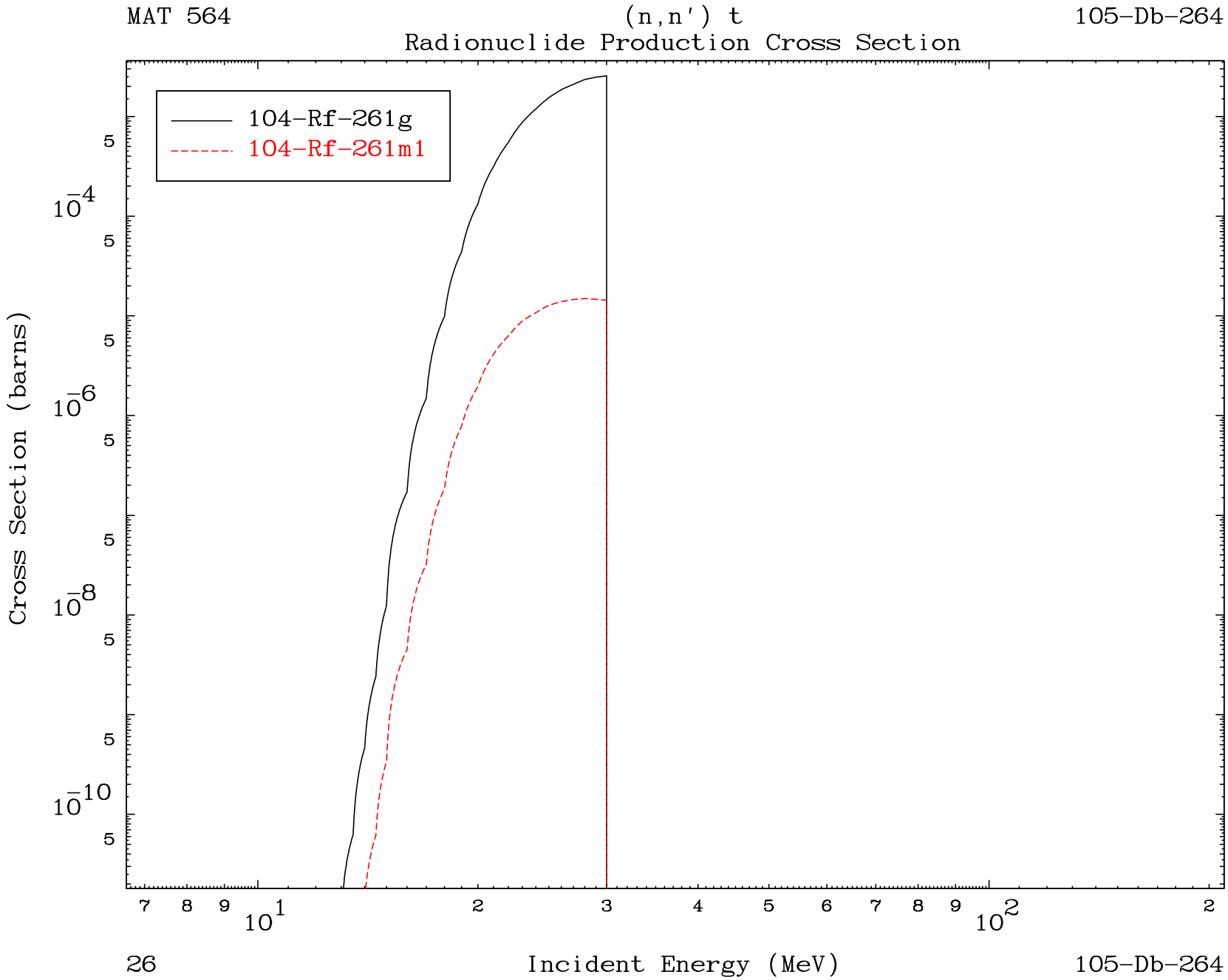

MAT 564
Fission
Energy Distribution
105-Db-264
2.000 MeV
2.250 MeV
2.500 MeV
2.750 MeV
3.000 MeV
3.500 MeV
4.000 MeV
4.500 MeV
5.000 MeV
5.500 MeV
6.000 MeV
Probability/MeV
Secondary Energy (MeV)
21
105-Db-264

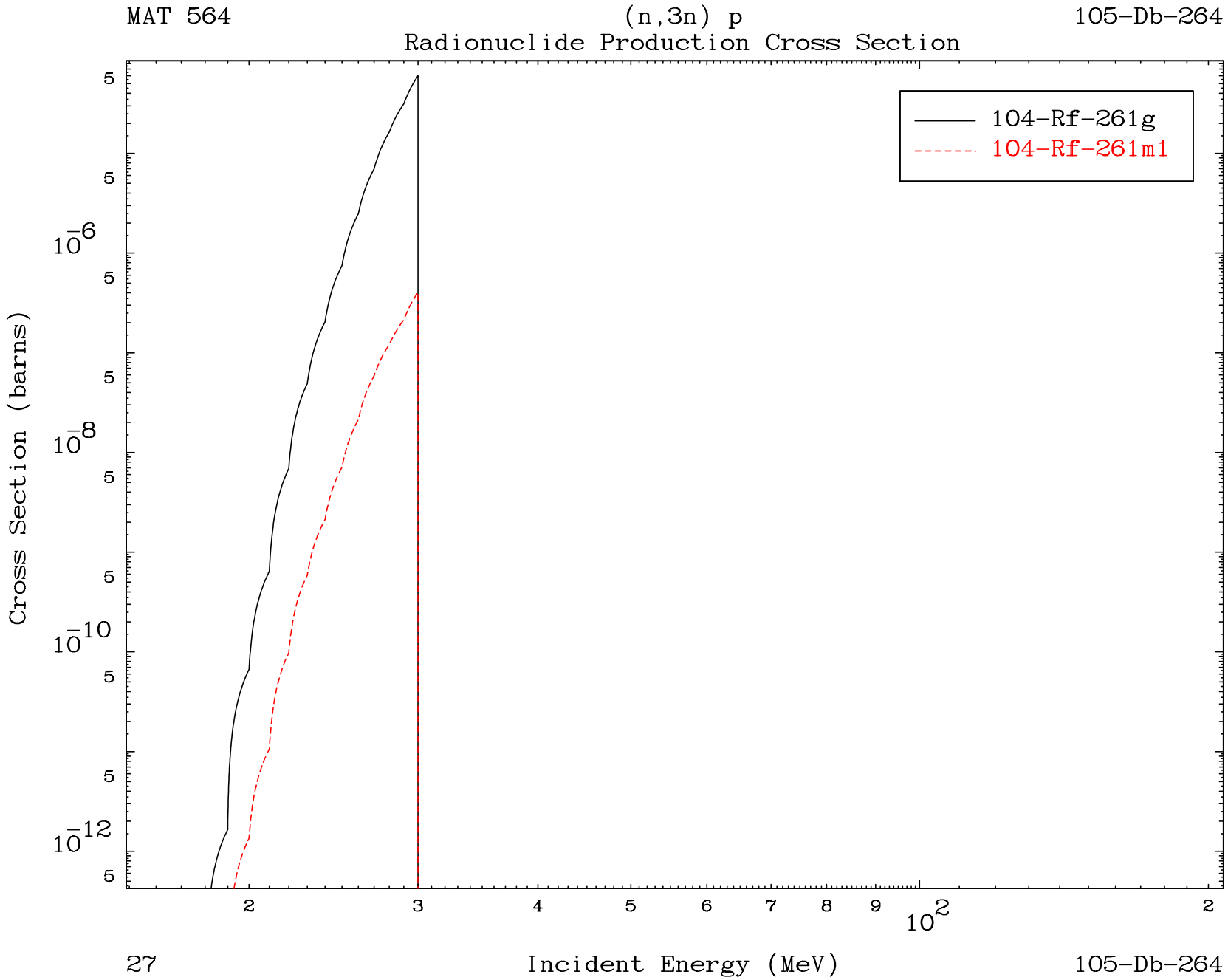

MAT 564
Fission
Energy Distribution
105-Db-264
6.500 MeV
7.000 MeV
7.500 MeV
8.000 MeV
8.500 MeV
9.000 MeV
9.500 MeV
10.00 MeV
10.50 MeV
11.00 MeV
11.50 MeV
Probability/MeV
Secondary Energy (MeV)
22
105-Db-264


MAT 564
Fission
Energy Distribution
105-Db-264
12.00 MeV
12.50 MeV
13.00 MeV
13.50 MeV
14.00 MeV
14.50 MeV
15.00 MeV
15.50 MeV
16.00 MeV
16.50 MeV
17.00 MeV
Probability/MeV
Secondary Energy (MeV)
23
105-Db-264


MAT 564
Fission
Energy Distribution
105-Db-264
17.50 MeV
18.00 MeV
18.50 MeV
19.00 MeV
19.50 MeV
20.00 MeV
200.0 MeV
Probability/MeV
Secondary Energy (MeV)
24
105-Db-264


MAT 564
(n,2n) d
105-Db-264
Radionuclide Production Cross Section
104-Rf-261g
104-Rf-261m1
Cross Section (barns)
Incident Energy (MeV)
25
105-Db-264


MAT 564
(n,n') t
105-Db-264
Radionuclide Production Cross Section
104-Rf-261g
104-Rf-261m1
Cross Section (barns)
Incident Energy (MeV)
26
105-Db-264


MAT 564
(n,3n) p
105-Db-264
Radionuclide Production Cross Section
104-Rf-261g
104-Rf-261m1
Cross Section (barns)
Incident Energy (MeV)
27
105-Db-264