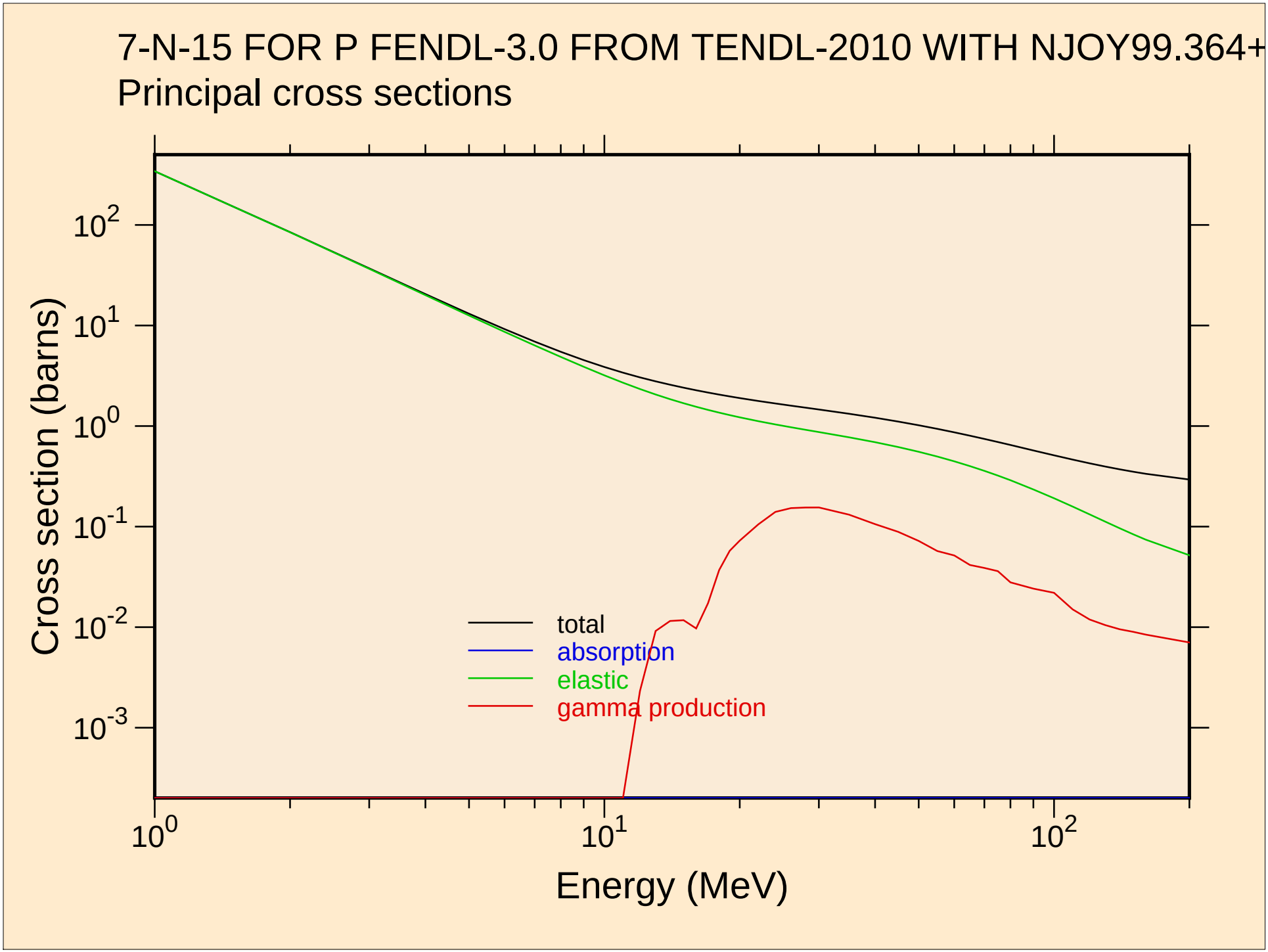
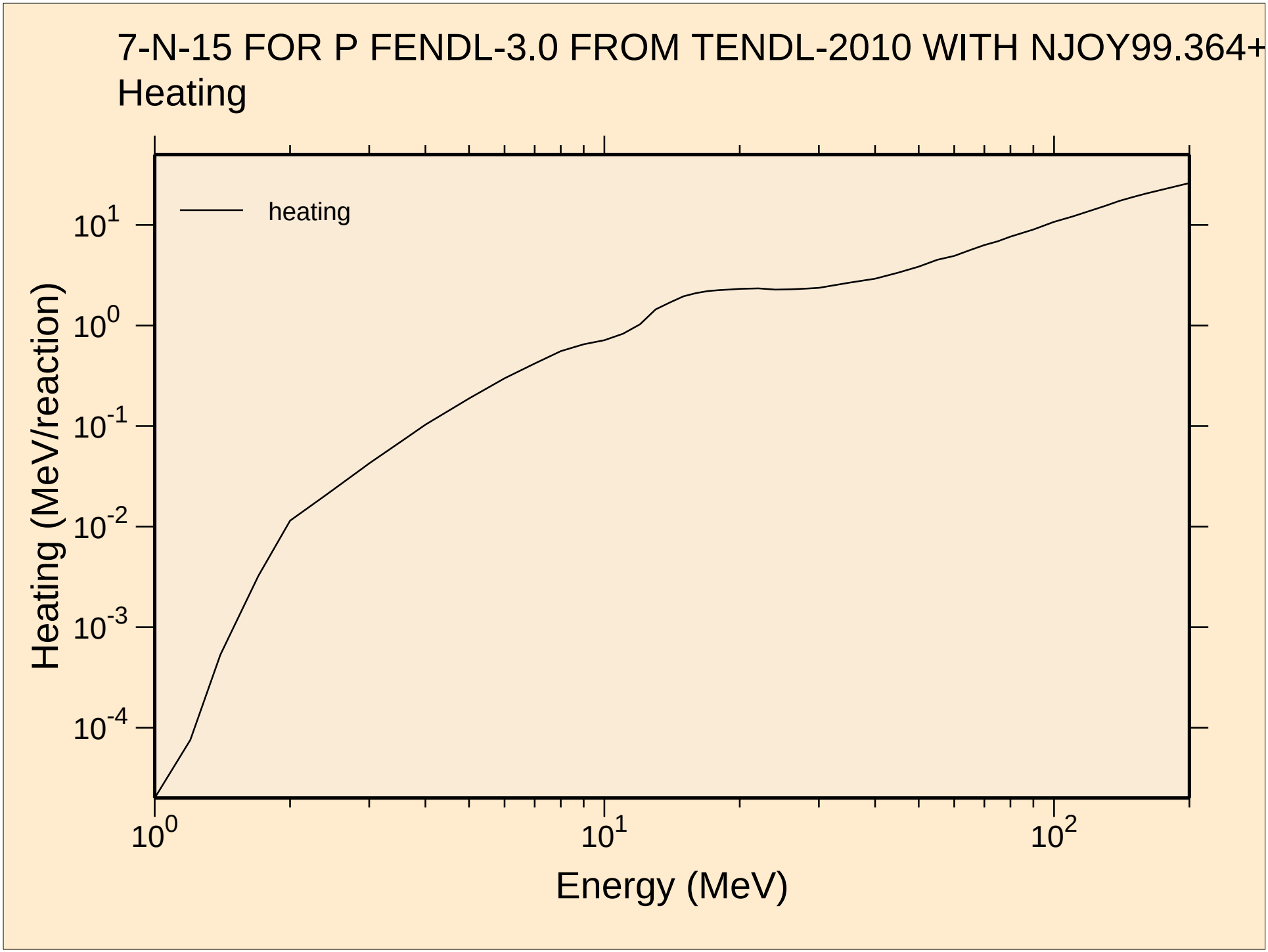
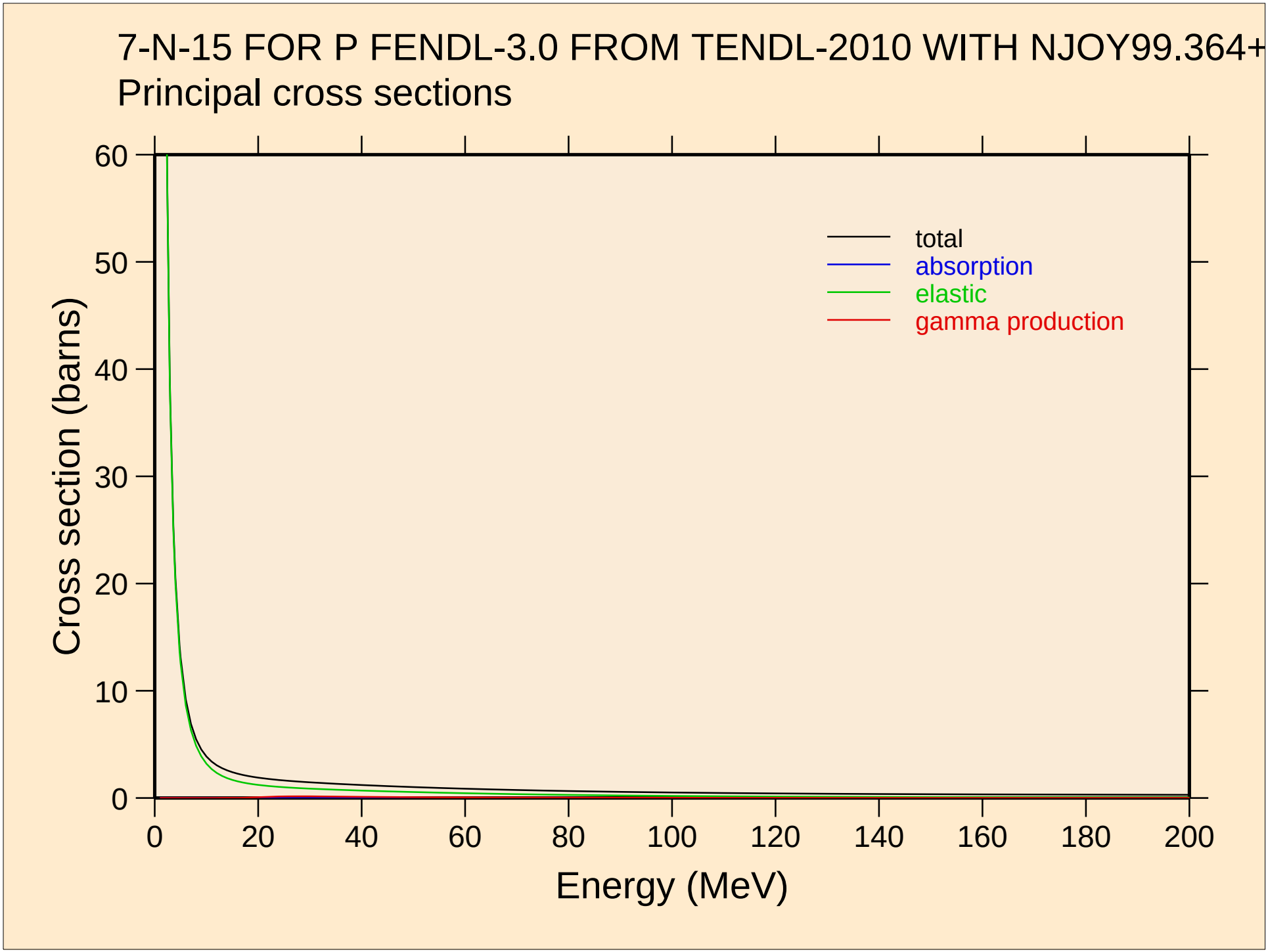
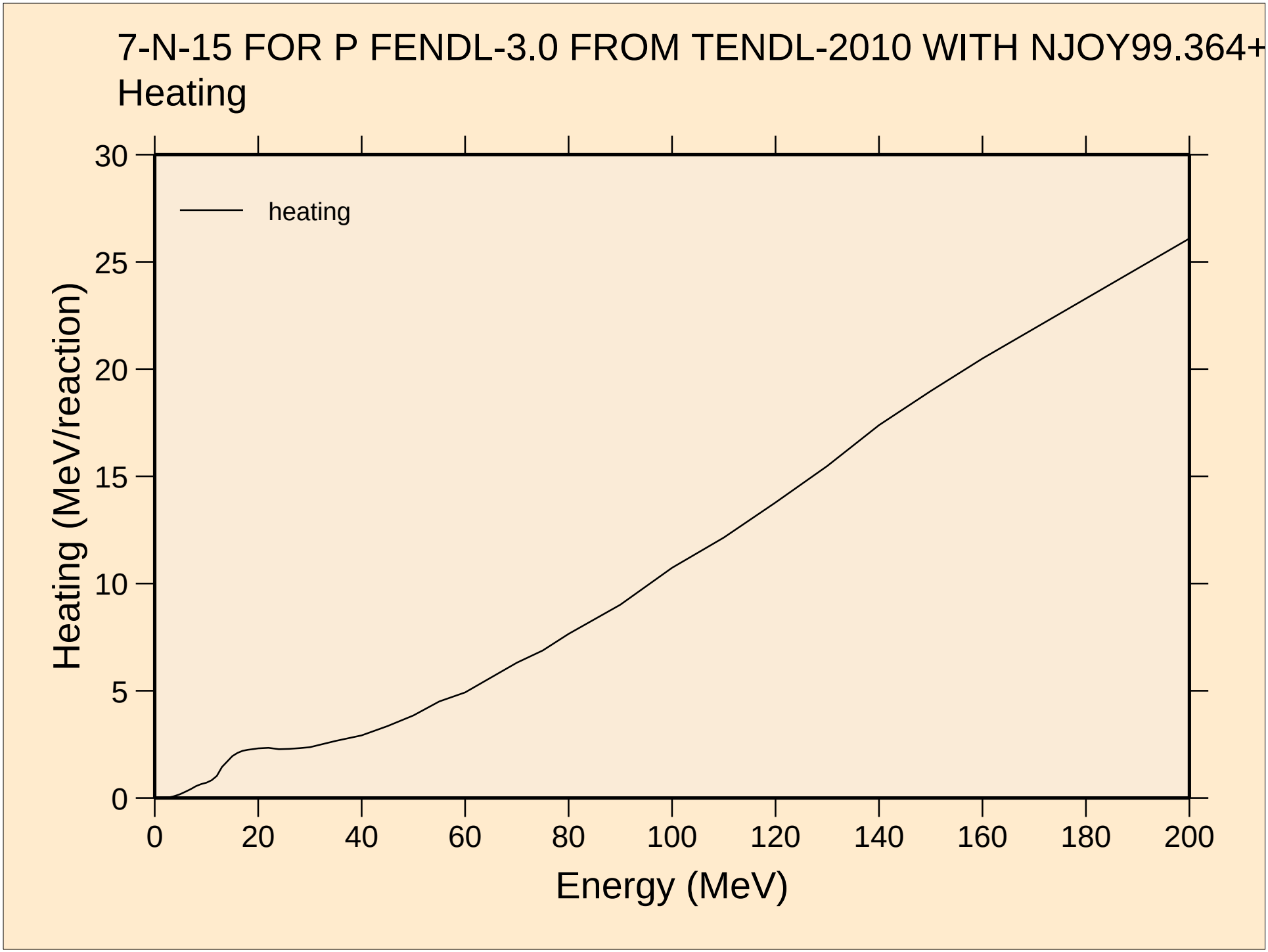
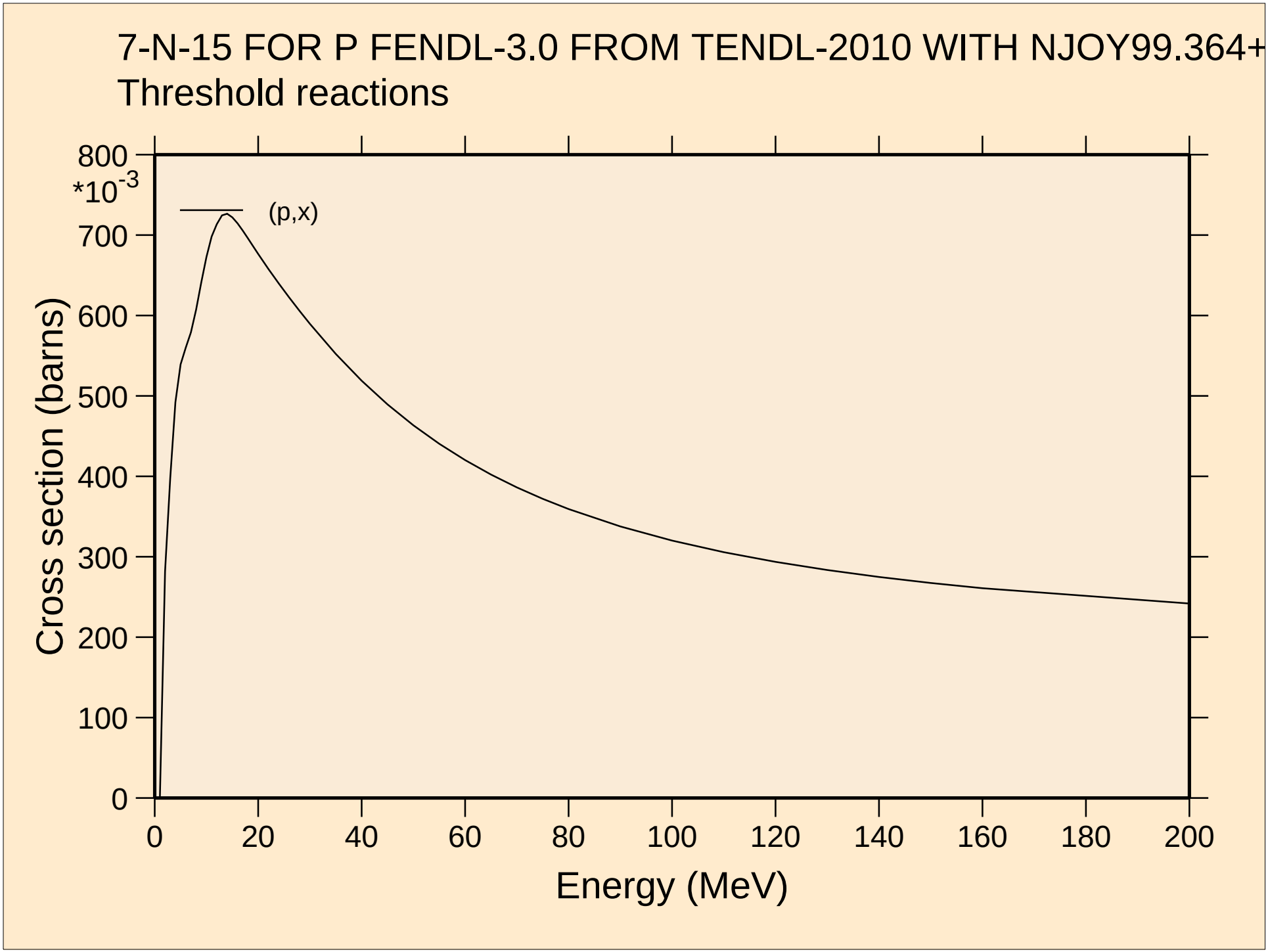
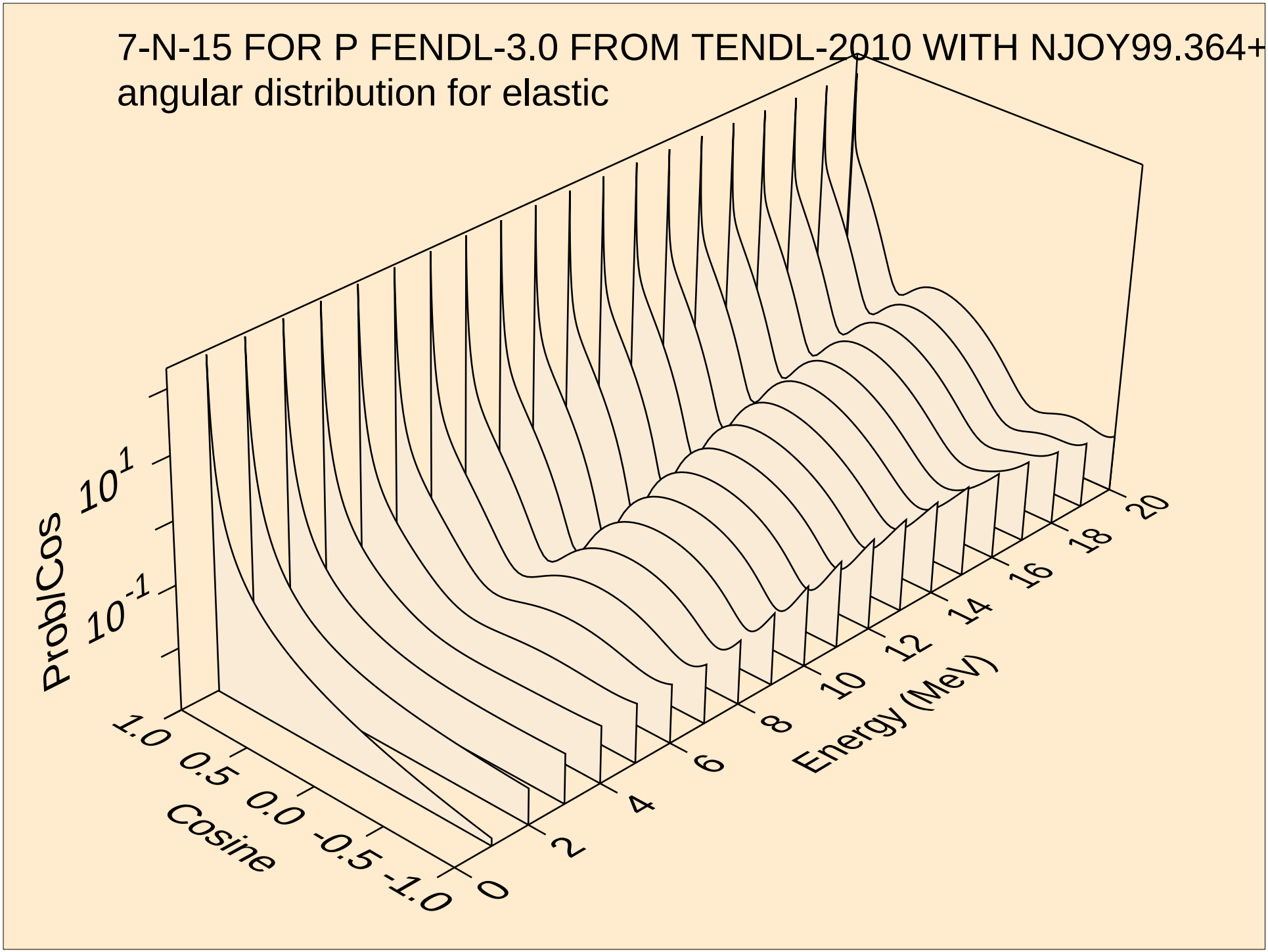

7-N-15 FOR P FENDL-3.0 FROM TENDL-2010 WITH NJOY99.364+
Principal cross sections
Cross section (barns)
10^{2}
10^{1}
10^{0}
10^{-1}
10^{-2}
10^{-3}
total
absorption
elastic
gamma production
10^{0}
10^{1}
10^{2}
Energy (MeV)

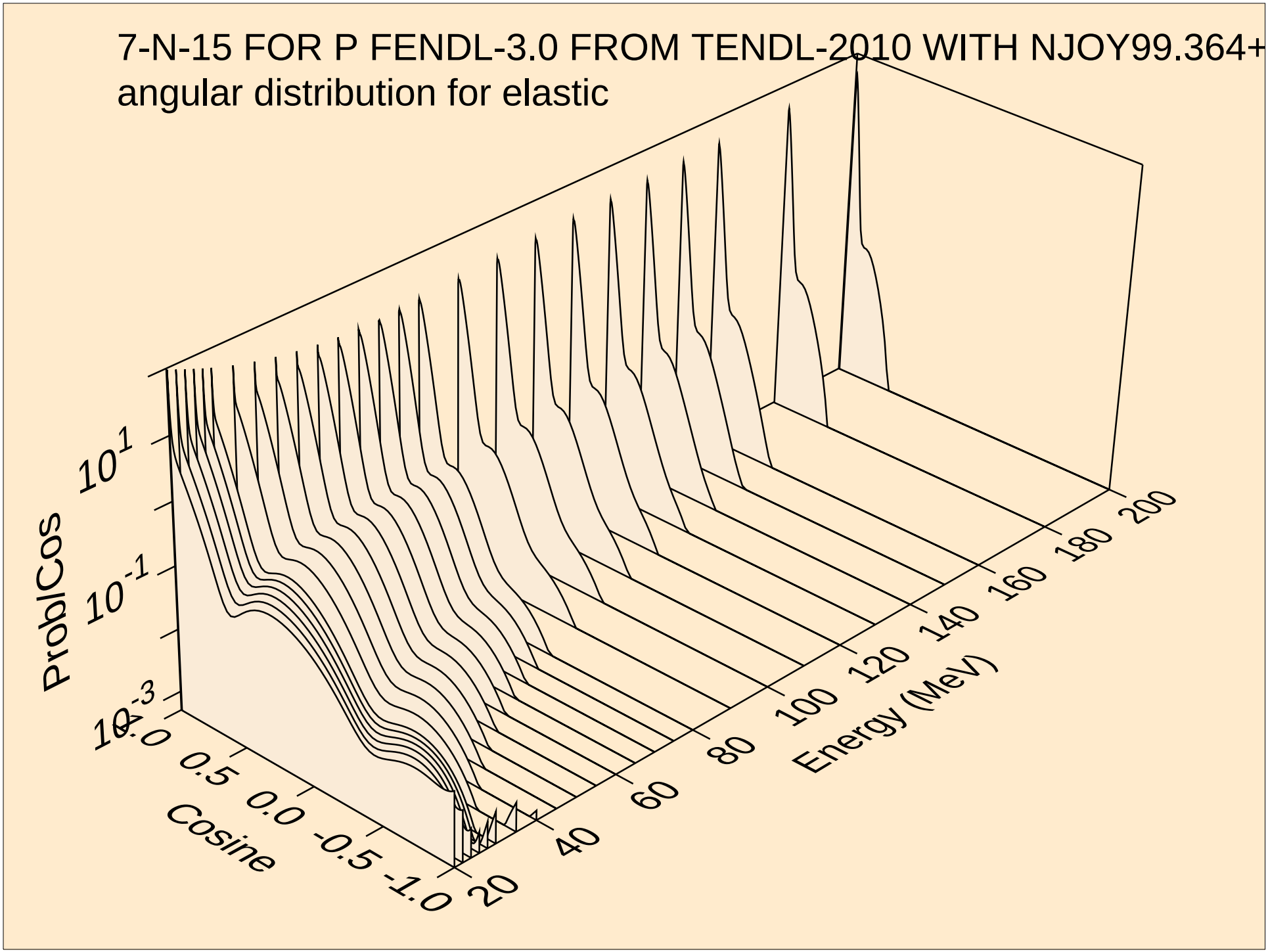

7-N-15 FOR P FENDL-3.0 FROM TENDL-2010 WITH NJOY99.364+
Heating
heating
Heating (MeV/reaction)
Energy (MeV)
10^1
10^0
10^-1
10^-2
10^-3
10^-4
10^0
10^1
10^2

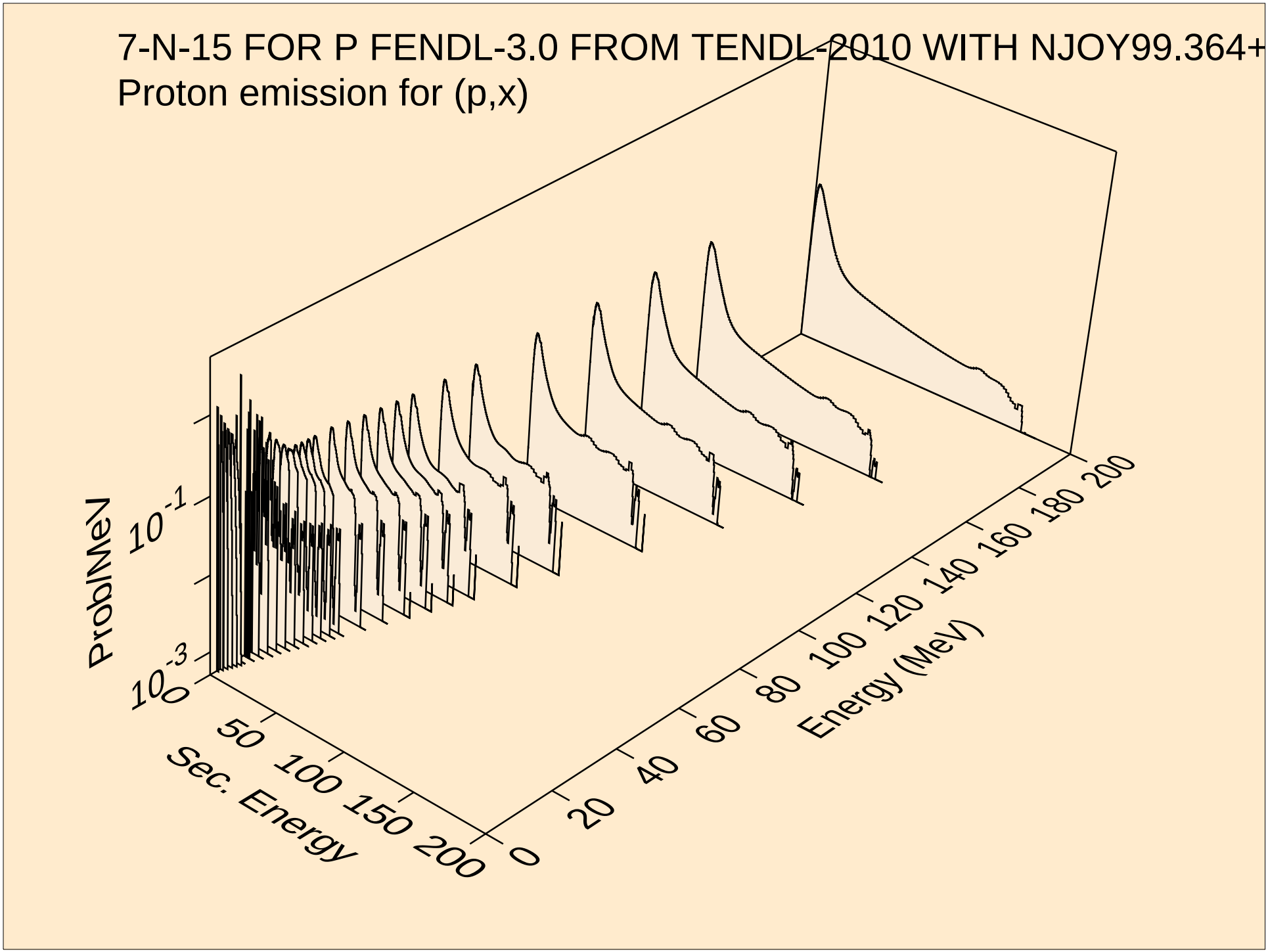

7-N-15 FOR P FENDL-3.0 FROM TENDL-2010 WITH NJOY99.364+
Principal cross sections
Cross section (barns)
Energy (MeV)
0
10
20
30
40
50
60
0
20
40
60
80
100
120
140
160
180
200
total
absorption
elastic
gamma production

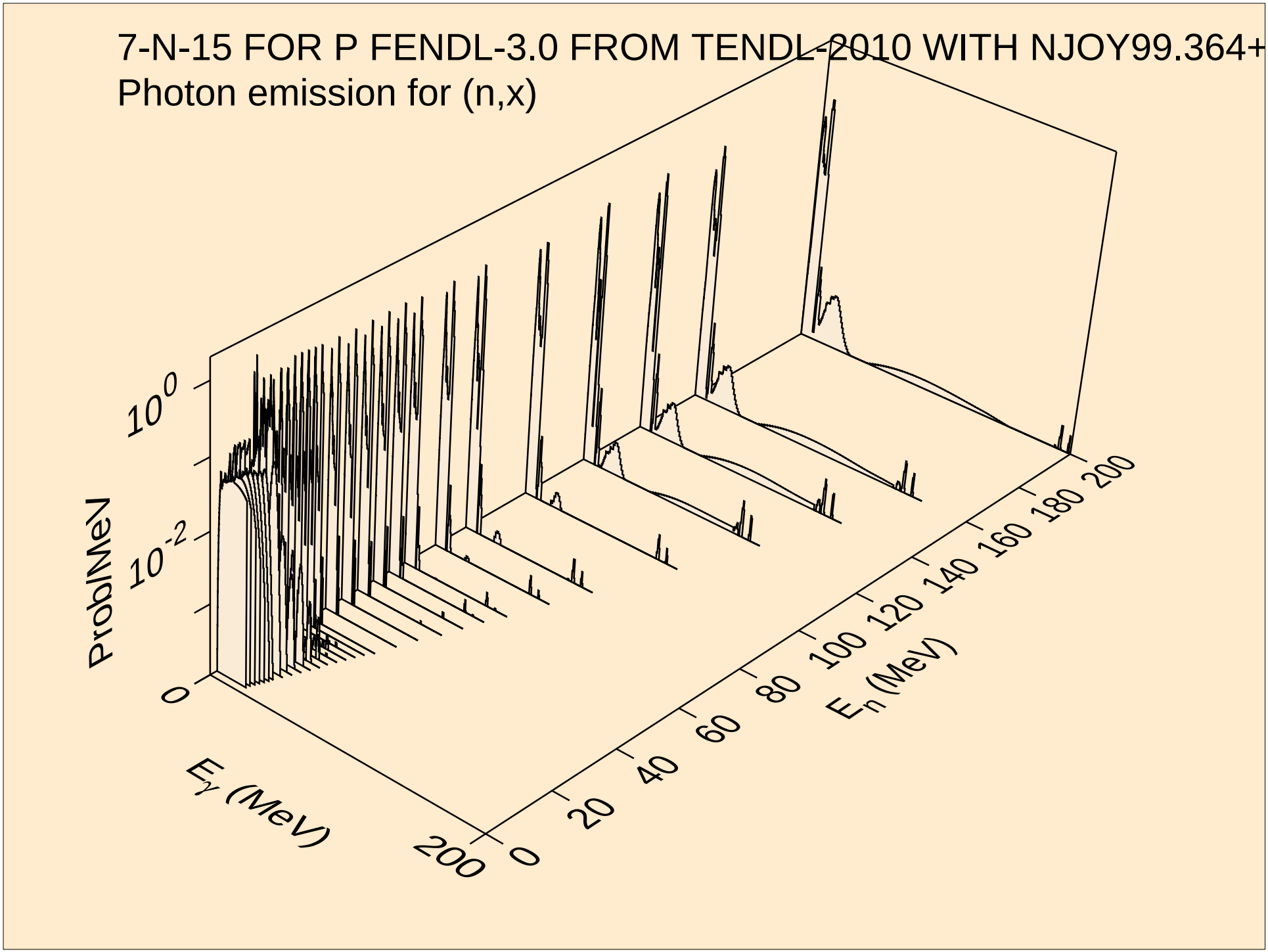

7-N-15 FOR P FENDL-3.0 FROM TENDL-2010 WITH NJOY99.364+
Heating
heating
Heating (MeV/reaction)
Energy (MeV)
0
5
10
15
20
25
30
0
20
40
60
80
100
120
140
160
180
200

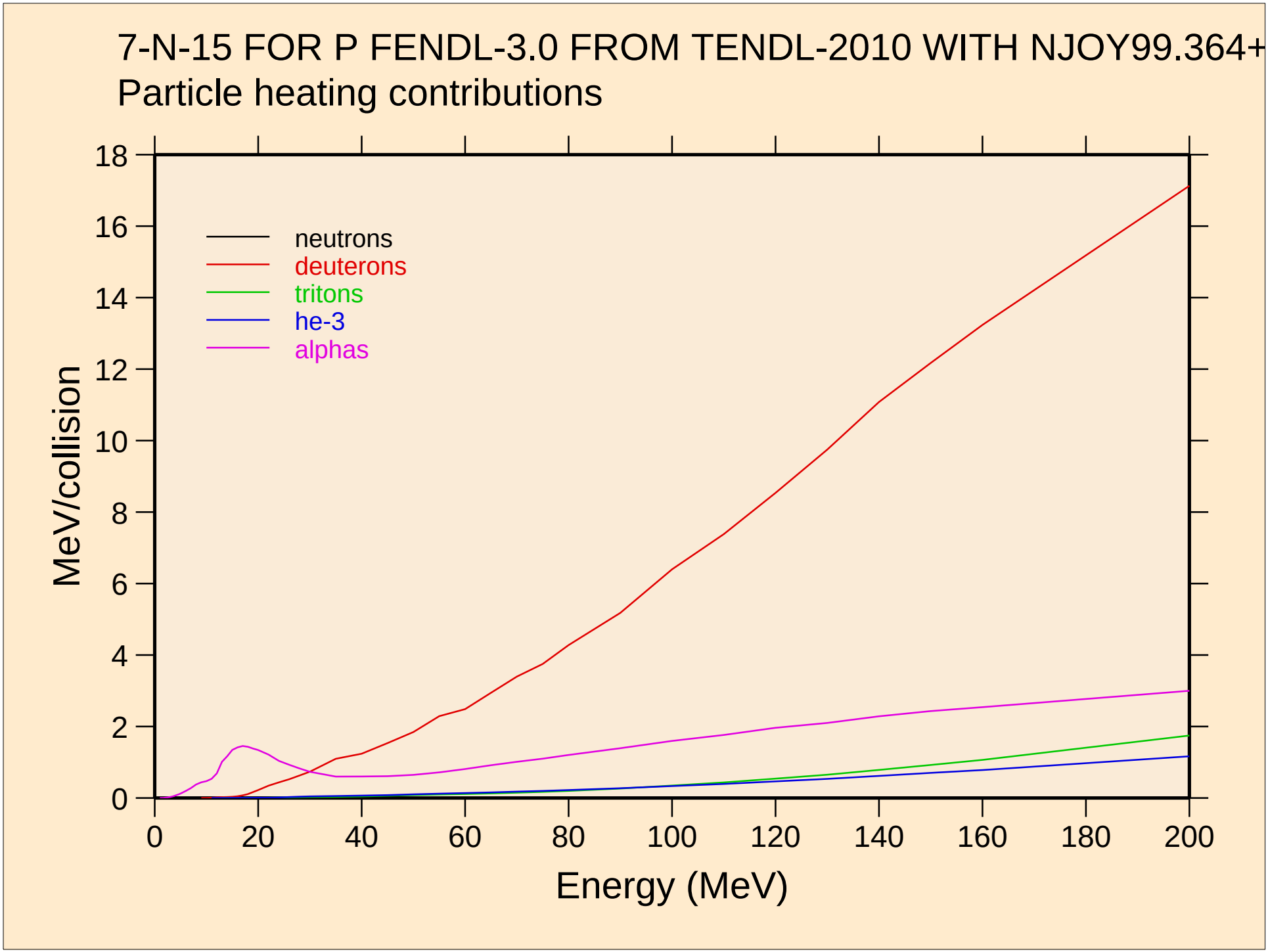

7-N-15 FOR P FENDL-3.0 FROM TENDL-2010 WITH NJOY99.364+
Threshold reactions
800
*10-3
700
600
500
400
300
200
100
0
(p,x)
Cross section (barns)
0
20
40
60
80
100
120
140
160
180
200
Energy (MeV)

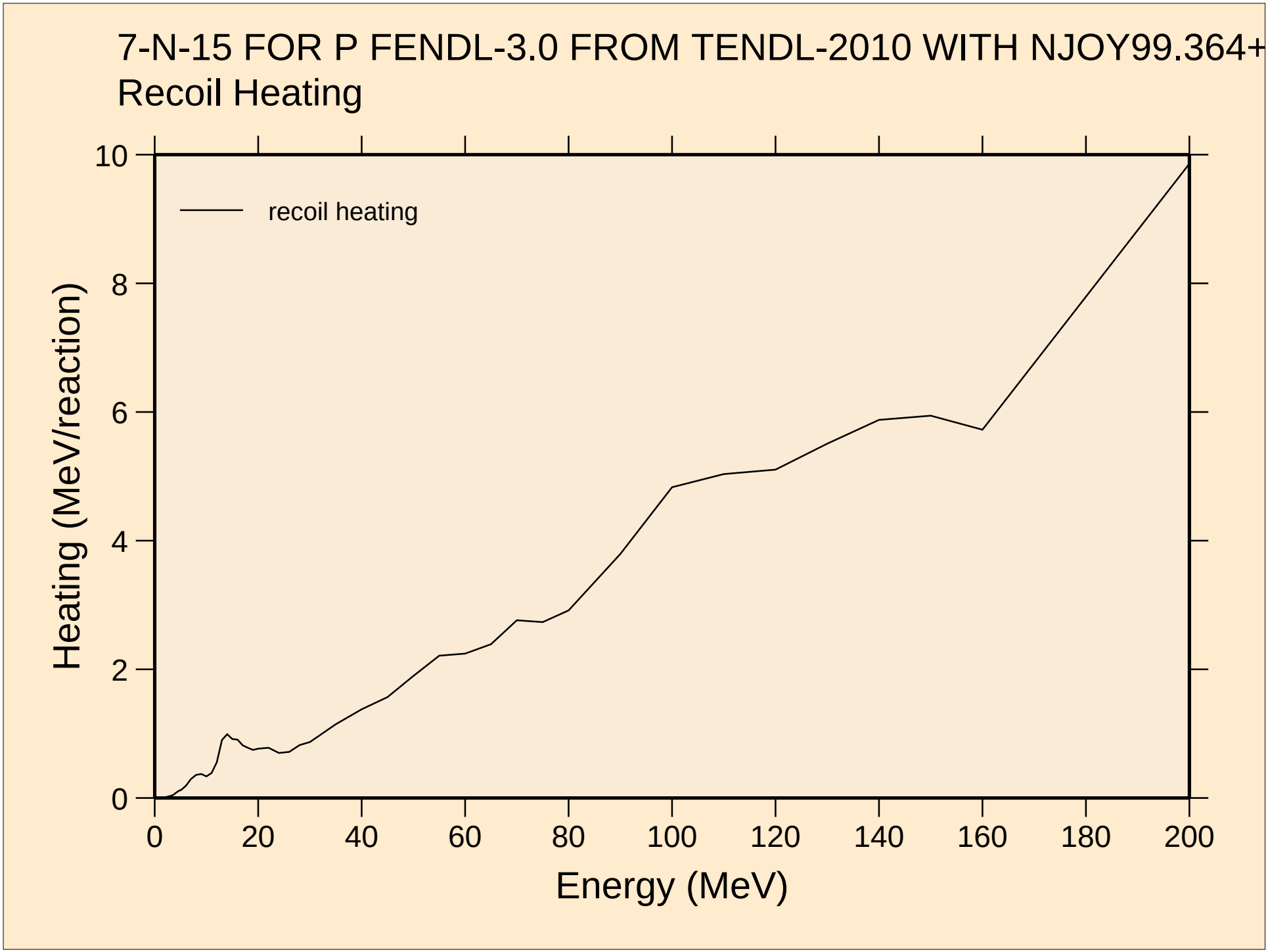

7-N-15 FOR P FENDL-3.0 FROM TENDL-2010 WITH NJOY99.364+
angular distribution for elastic
ProbICos
10^1
10^-1
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
2
4
6
8
10
12
14
16
18
20
Energy (MeV)

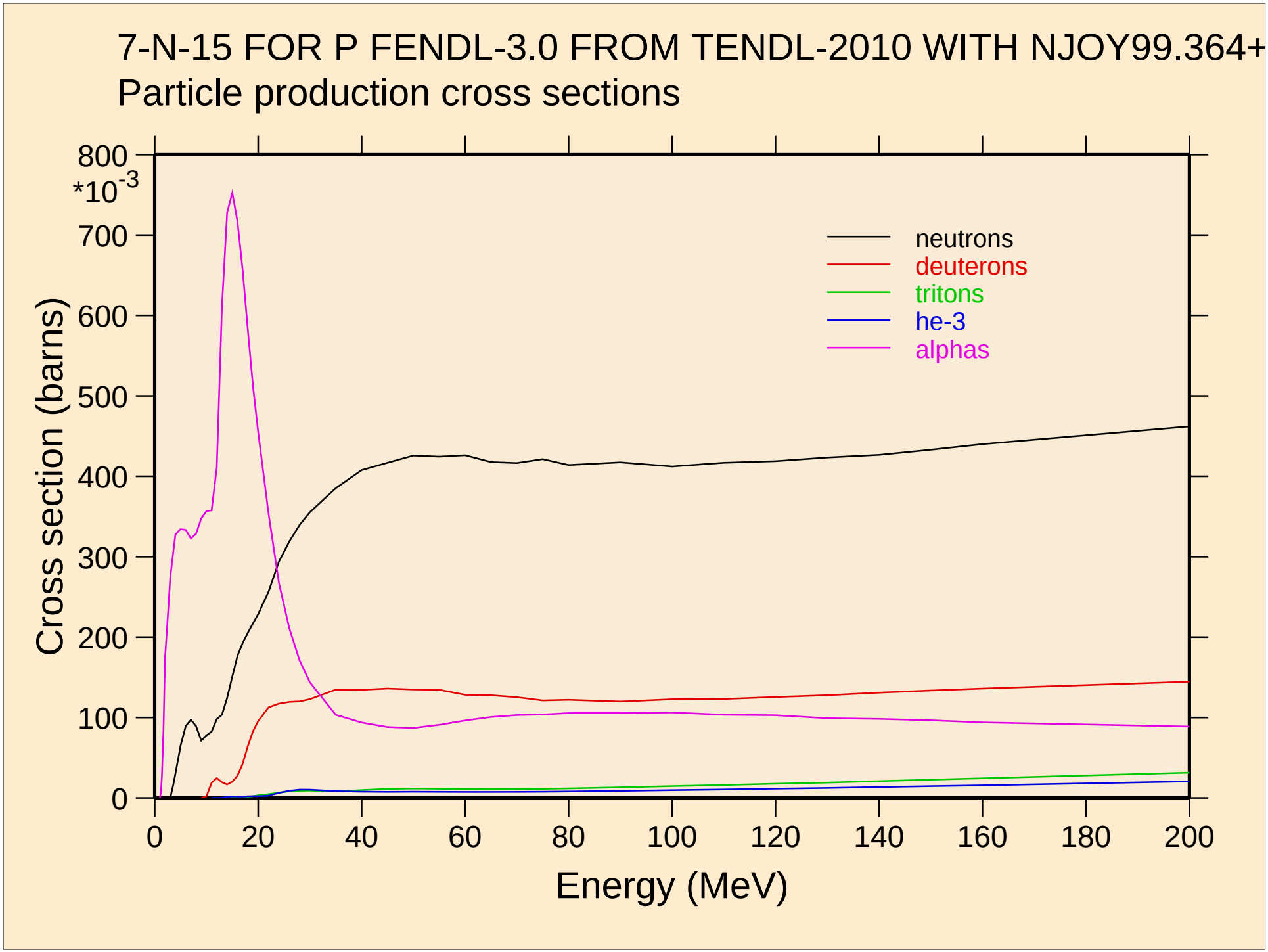

7-N-15 FOR P FENDL-3.0 FROM TENDL-2010 WITH NJOY99.364+
angular distribution for elastic
ProbICos
10^1
10^-1
10^-3
1.0
0.5
0.0
-0.5
-1.0
Cosine
20
40
60
80
100
120
140
160
180
200
Energy (MeV)

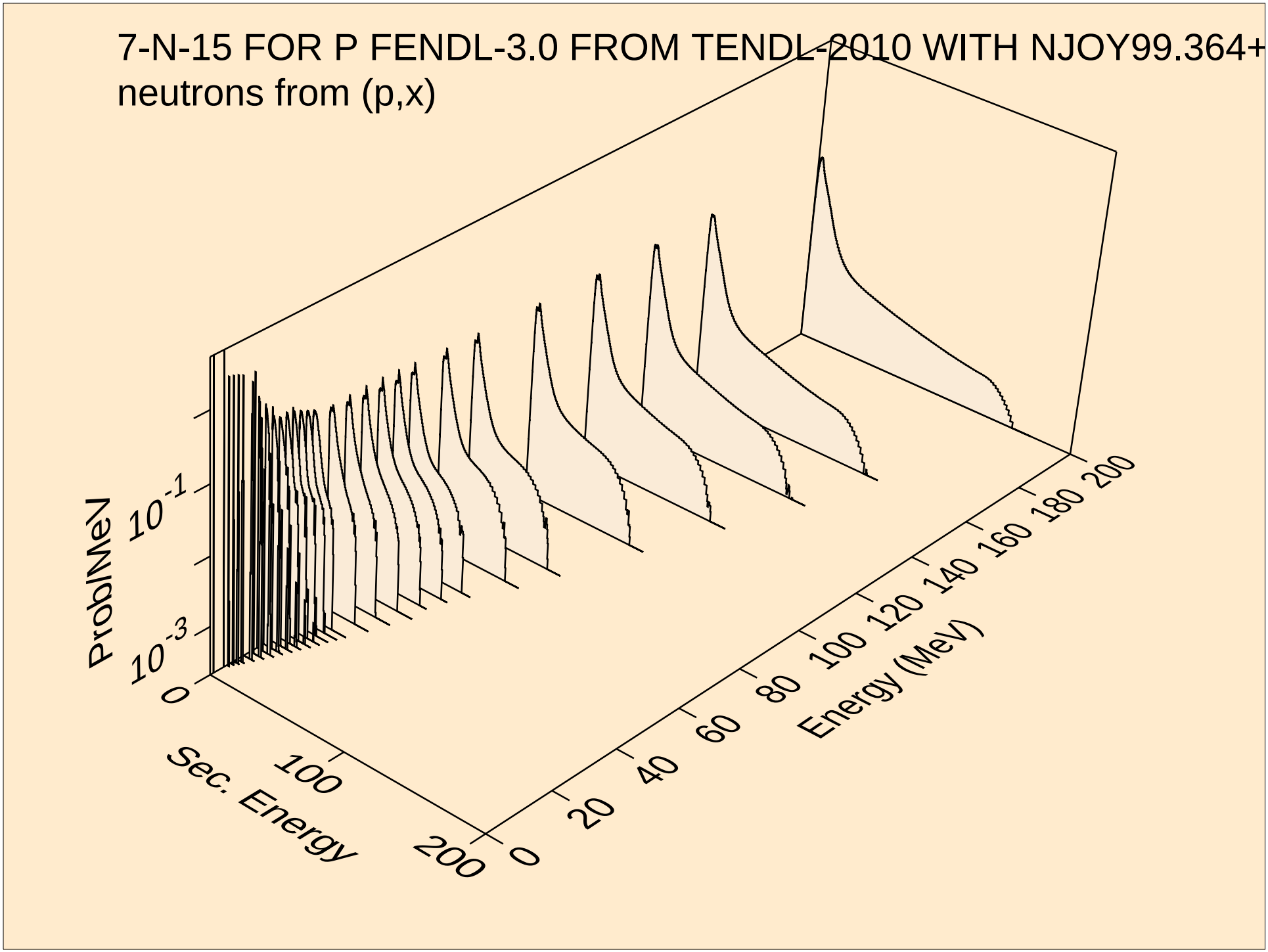

7-N-15 FOR P FENDL-3.0 FROM TENDL-2010 WITH NJOY99.364+
Proton emission for (p,x)
Prob/MeV
10-1
10-3
0
50
100
150
200
Sec. Energy
0
20
40
60
80
100
120
140
160
180
200
Energy (MeV)

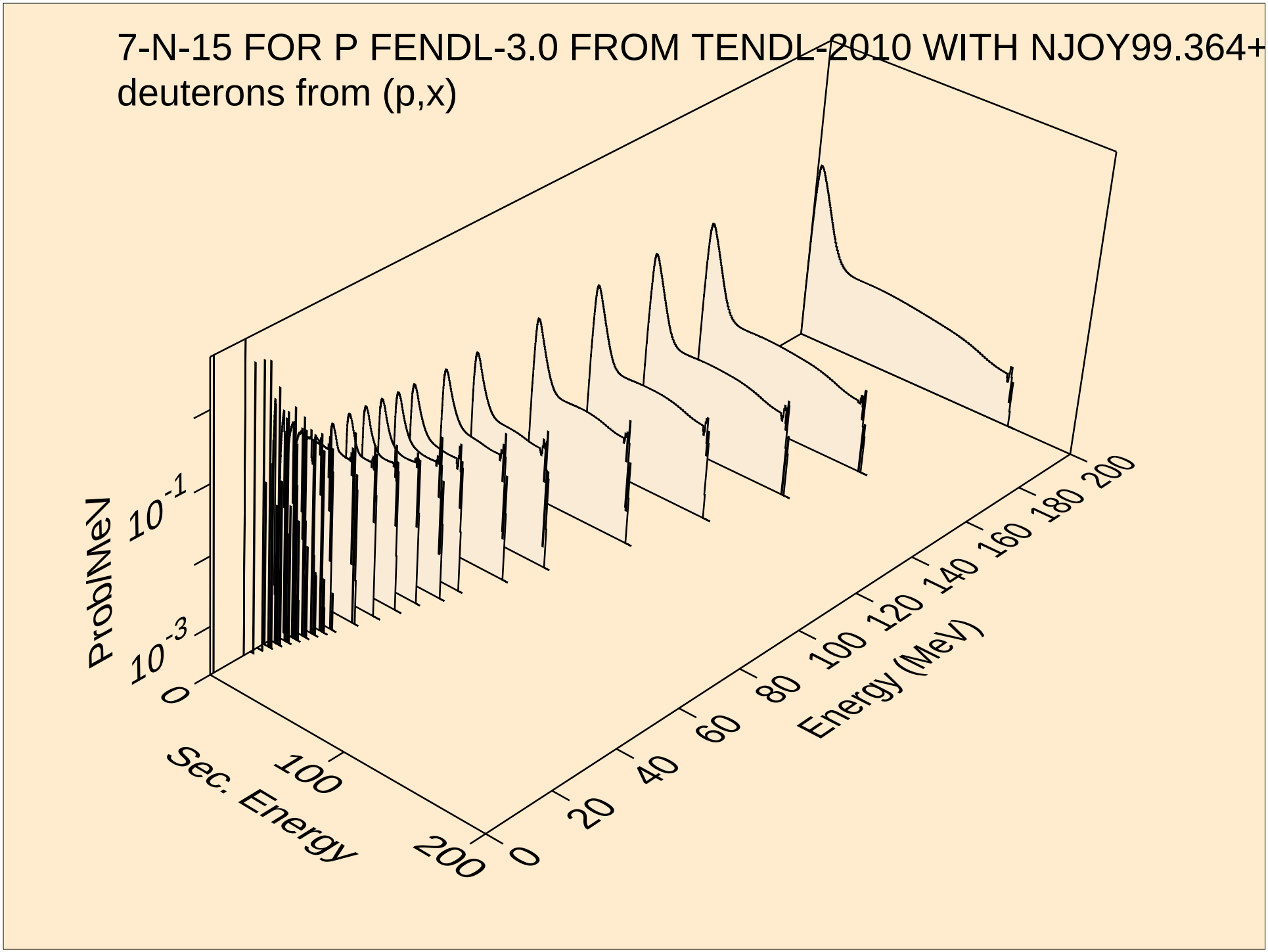

7-N-15 FOR P FENDL-3.0 FROM TENDL-2010 WITH NJOY99.364+
Photon emission for (n,x)
Prob/MeV
10^{0}
10^{-2}
0
E_γ (MeV)
200
0
20
40
60
80
100
120
140
160
180
200
E_n (MeV)

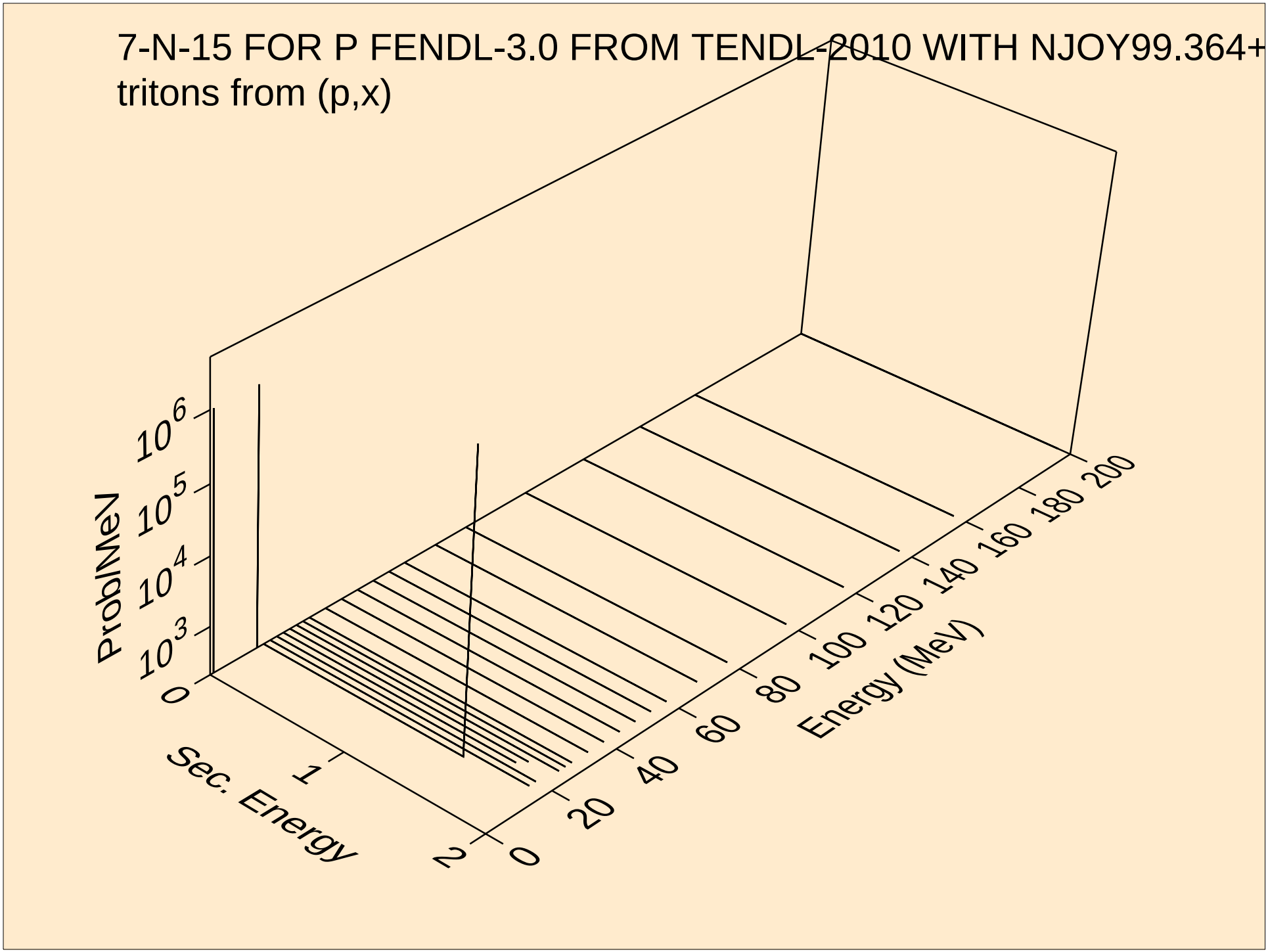

7-N-15 FOR P FENDL-3.0 FROM TENDL-2010 WITH NJOY99.364+
Particle heating contributions
neutrons
deuterons
tritons
he-3
alphas
MeV/collision
Energy (MeV)
0
2
4
6
8
10
12
14
16
18
0
20
40
60
80
100
120
140
160
180
200

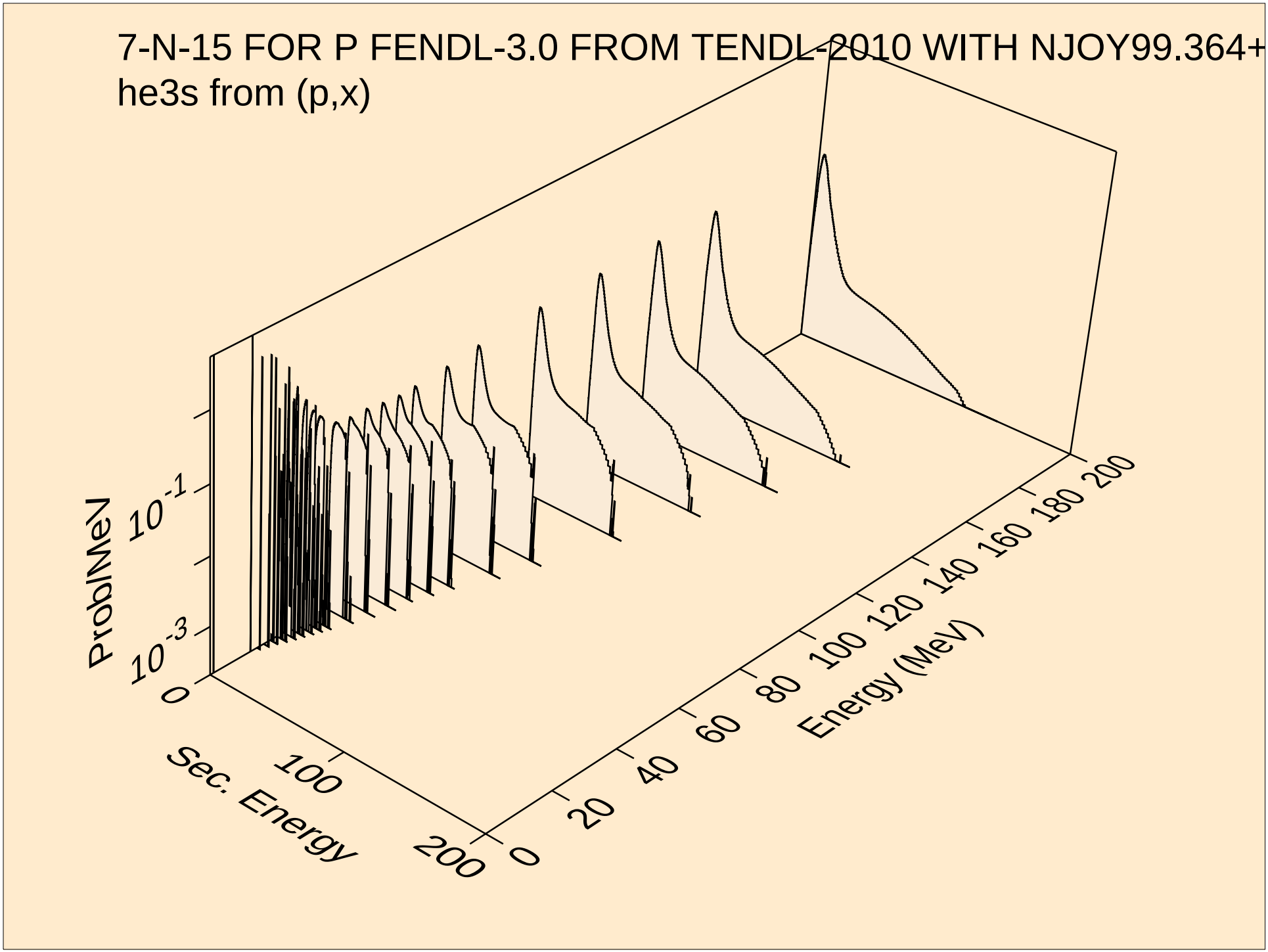

7-N-15 FOR P FENDL-3.0 FROM TENDL-2010 WITH NJOY99.364+
Recoil Heating
recoil heating
Heating (MeV/reaction)
Energy (MeV)
0
2
4
6
8
10
0
20
40
60
80
100
120
140
160
180
200

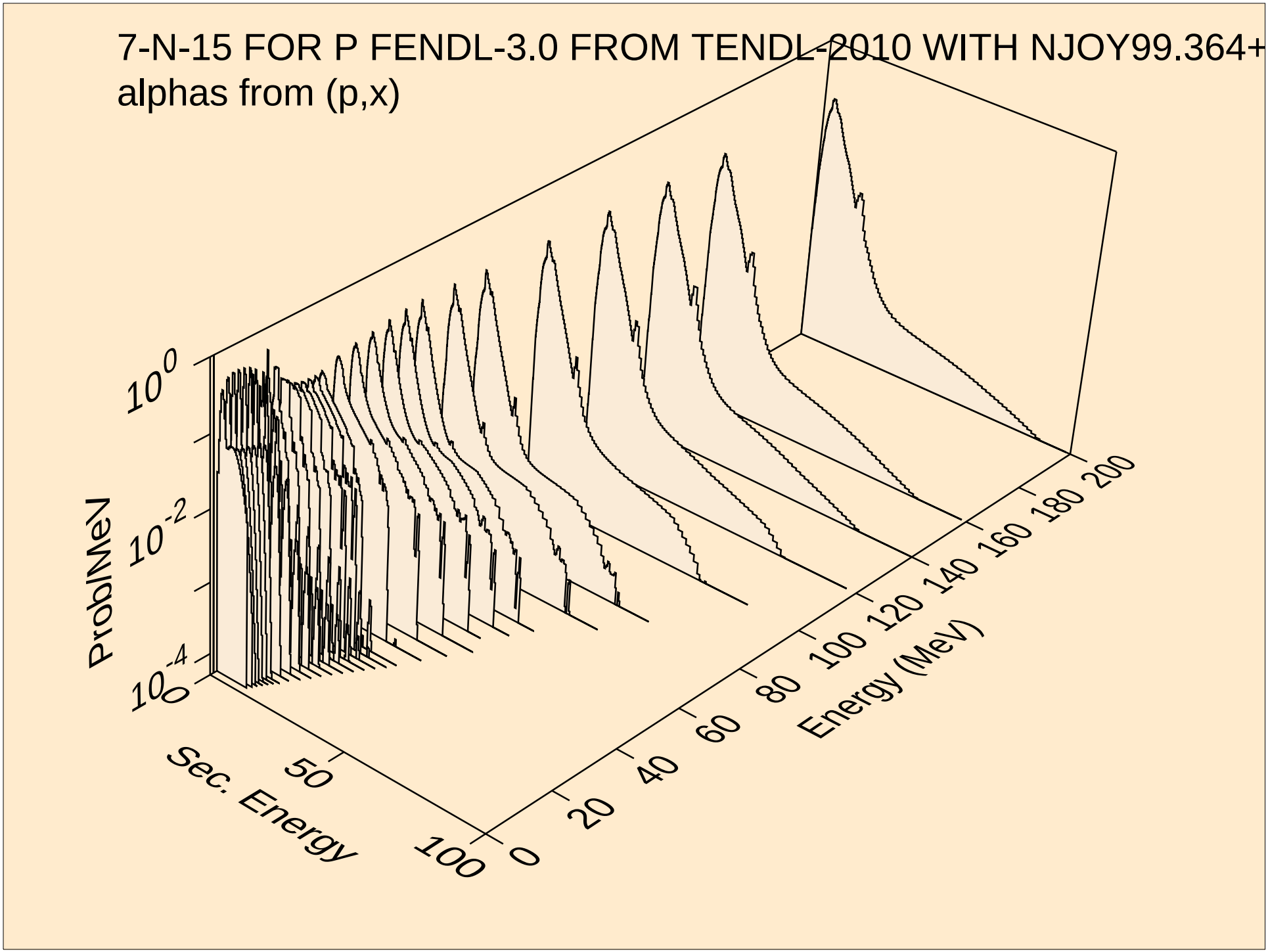

7-N-15 FOR P FENDL-3.0 FROM TENDL-2010 WITH NJOY99.364+
Particle production cross sections
Cross section (barns)
*10-3
800
700
600
500
400
300
200
100
0
0
20
40
60
80
100
120
140
160
180
200
Energy (MeV)
neutrons
deuterons
tritons
he-3
alphas


7-N-15 FOR P FENDL-3.0 FROM TENDL-2010 WITH NJOY99.364+
neutrons from (p,x)
Prob/MeV
10-1
10-3
0
Sec. Energy
100
200
0
20
40
60
80
100
120
140
160
180
200
Energy (MeV)


7-N-15 FOR P FENDL-3.0 FROM TENDL-2010 WITH NJOY99.364+
deuterons from (p,x)
Prob/MeV
10-1
10-3
0
Sec. Energy
100
200
0
20
40
60
80
100
120
140
160
180
200
Energy (MeV)


7-N-15 FOR P FENDL-3.0 FROM TENDL-2010 WITH NJOY99.364+
tritons from (p,x)
Prob/MeV
10^6
10^5
10^4
10^3
0
Sec. Energy
1
2
0
20
40
60
80
100
120
140
160
180
200
Energy (MeV)


7-N-15 FOR P FENDL-3.0 FROM TENDL-2010 WITH NJOY99.364+
he3s from (p,x)
Prob/MeV
10-1
10-3
0
Sec. Energy
100
200
0
20
40
60
80
100
120
140
160
180
200
Energy (MeV)


7-N-15 FOR P FENDL-3.0 FROM TENDL-2010 WITH NJOY99.364+
alphas from (p,x)
Prob/MeV
10^0
10^-2
10^-4
0
50
100
Sec. Energy
0
20
40
60
80
100
120
140
160
180
200
Energy (MeV)