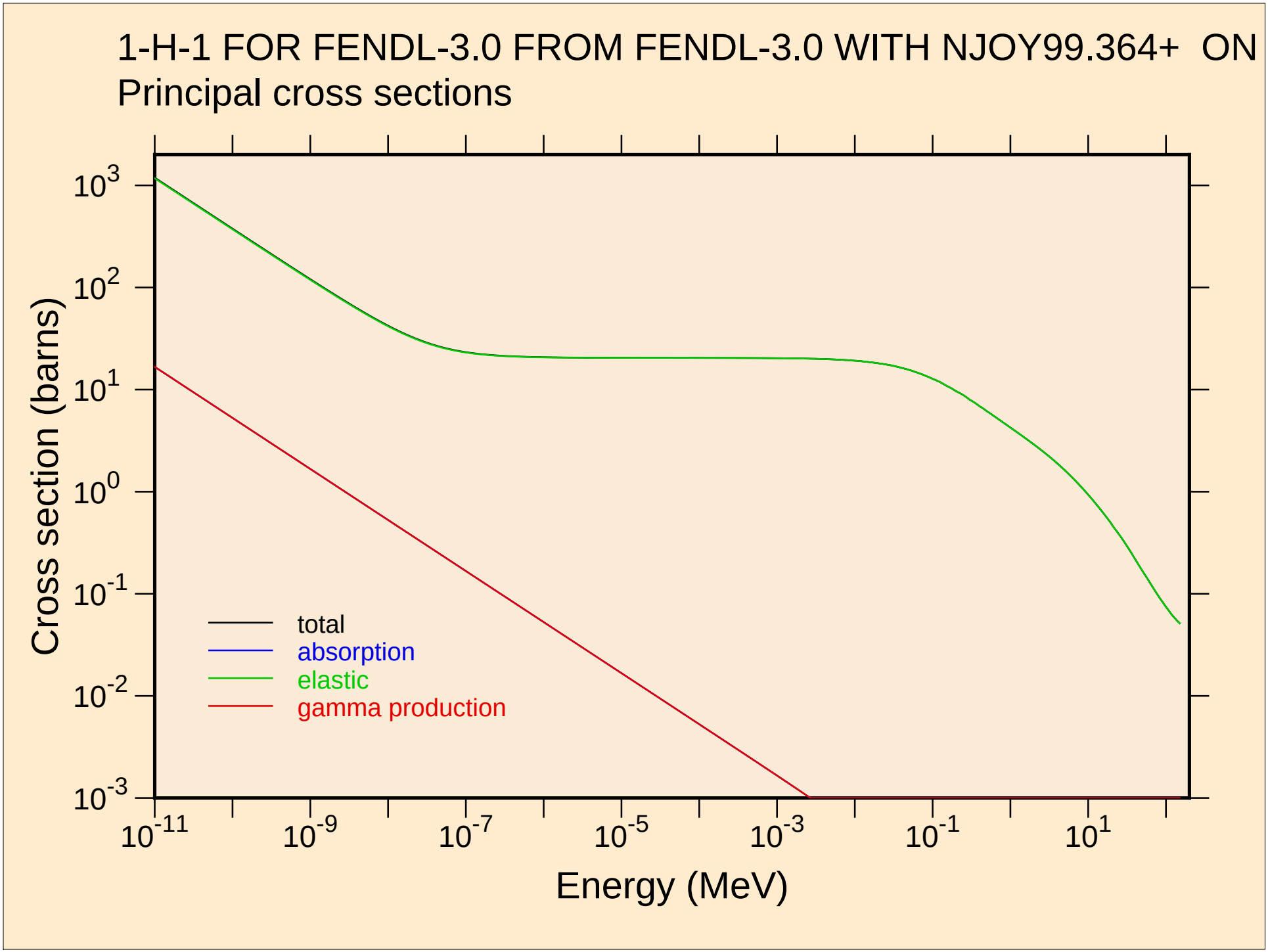
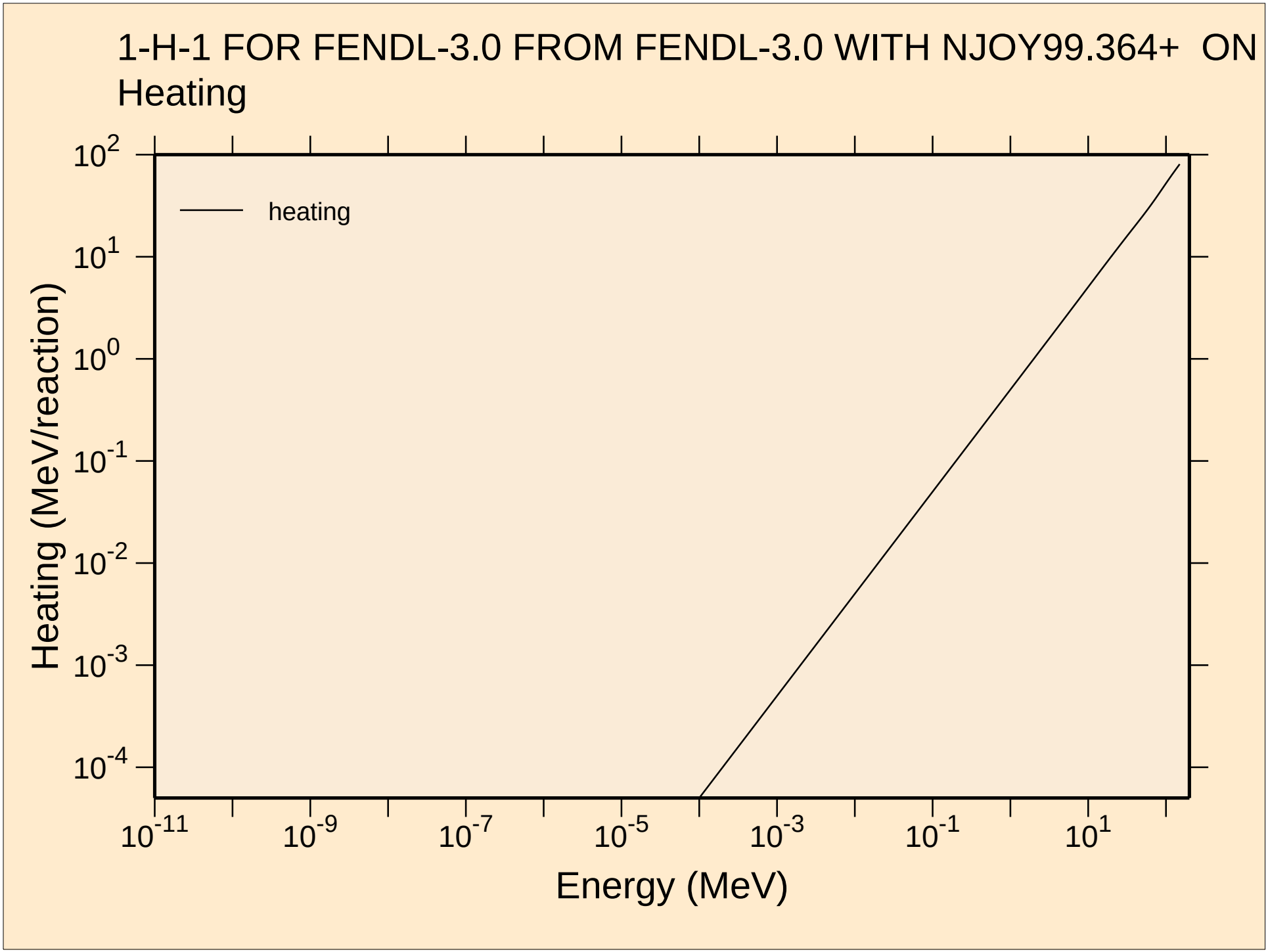
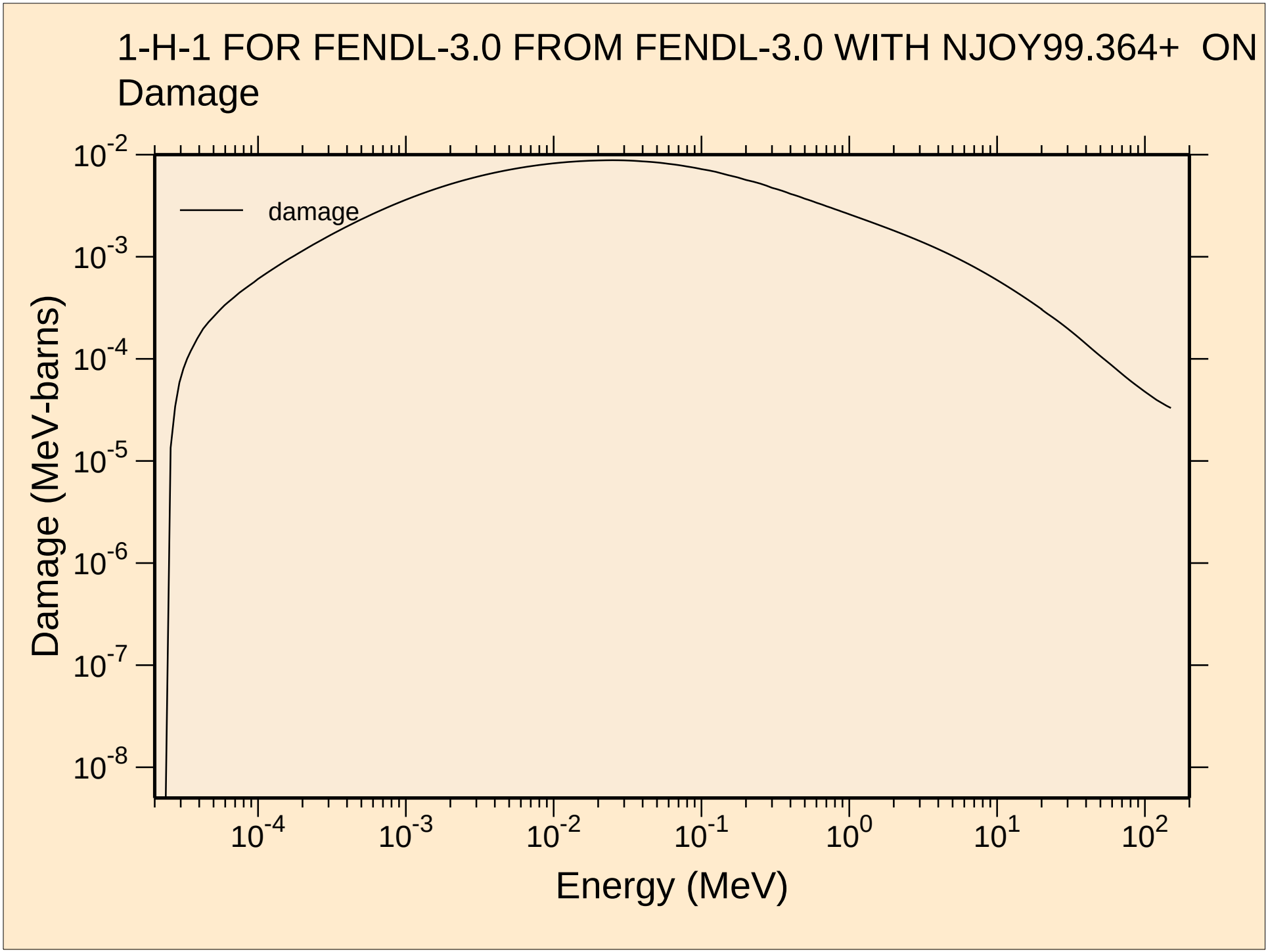
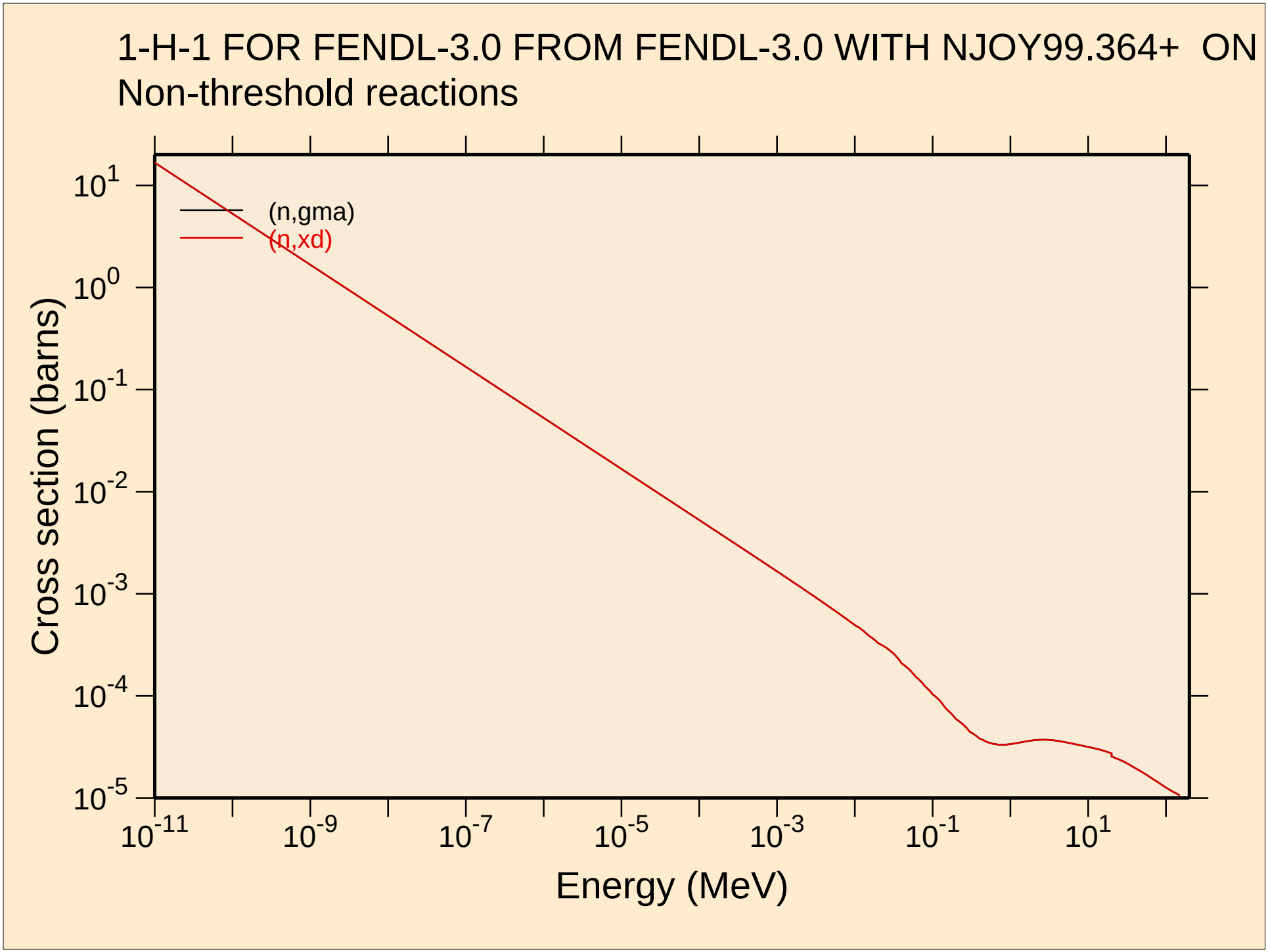
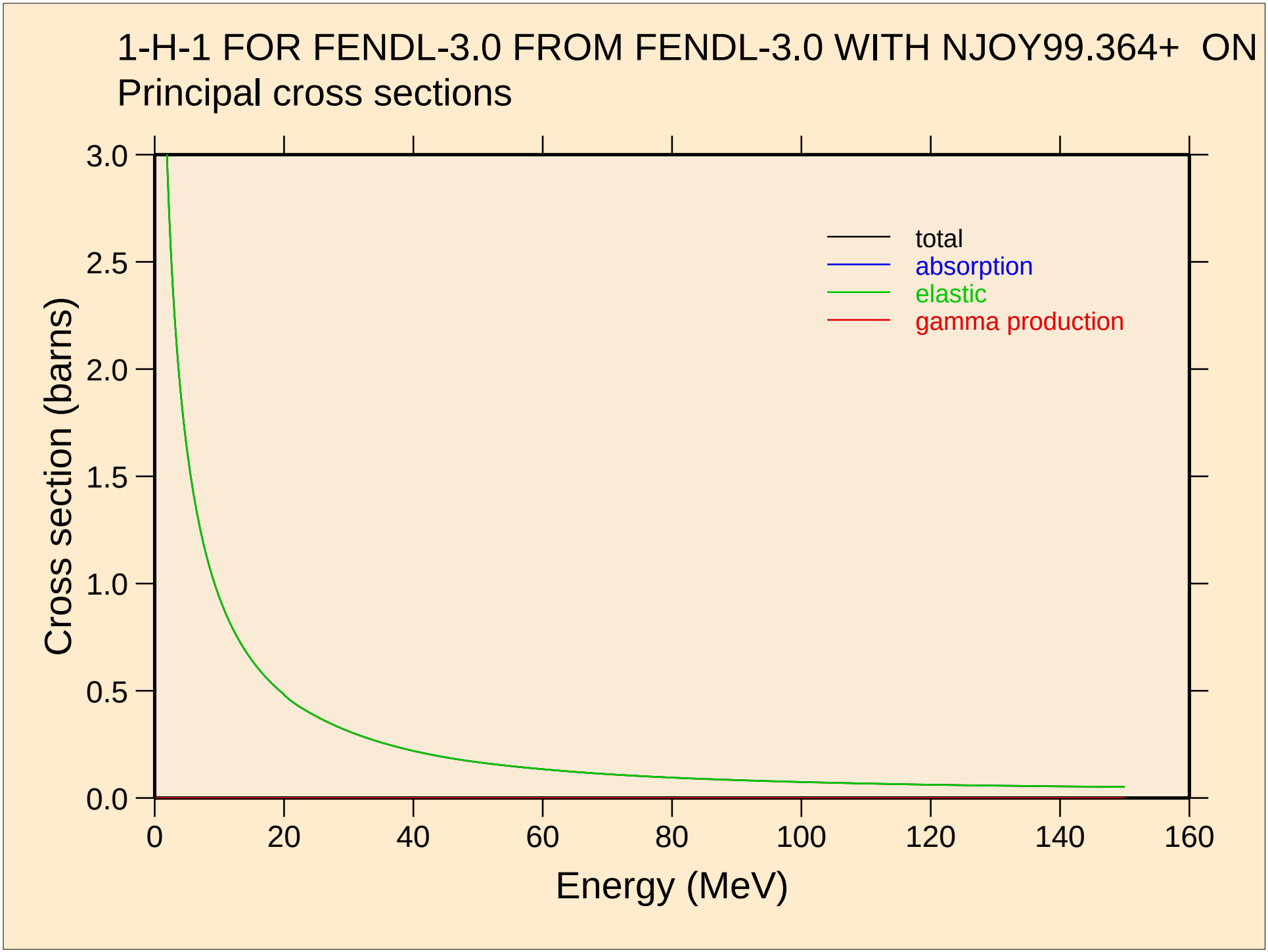
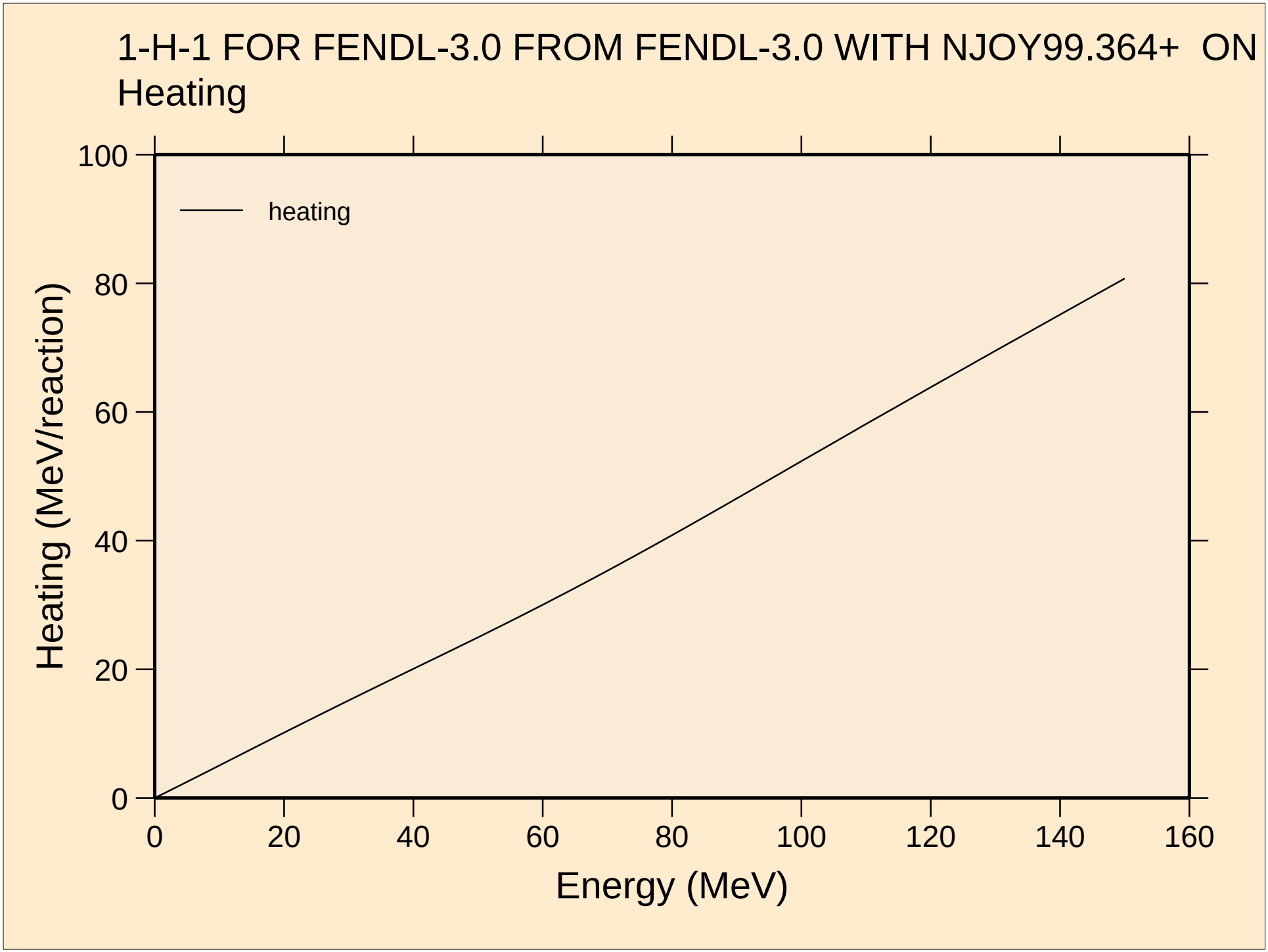

1-H-1 FOR FENDL-3.0 FROM FENDL-3.0 WITH NJOY99.364+ ON
Principal cross sections
Cross section (barns)
10^{3}
10^{2}
10^{1}
10^{0}
10^{-1}
10^{-2}
10^{-3}
total
absorption
elastic
gamma production
10^{-11}
10^{-9}
10^{-7}
10^{-5}
10^{-3}
10^{-1}
10^{1}
Energy (MeV)

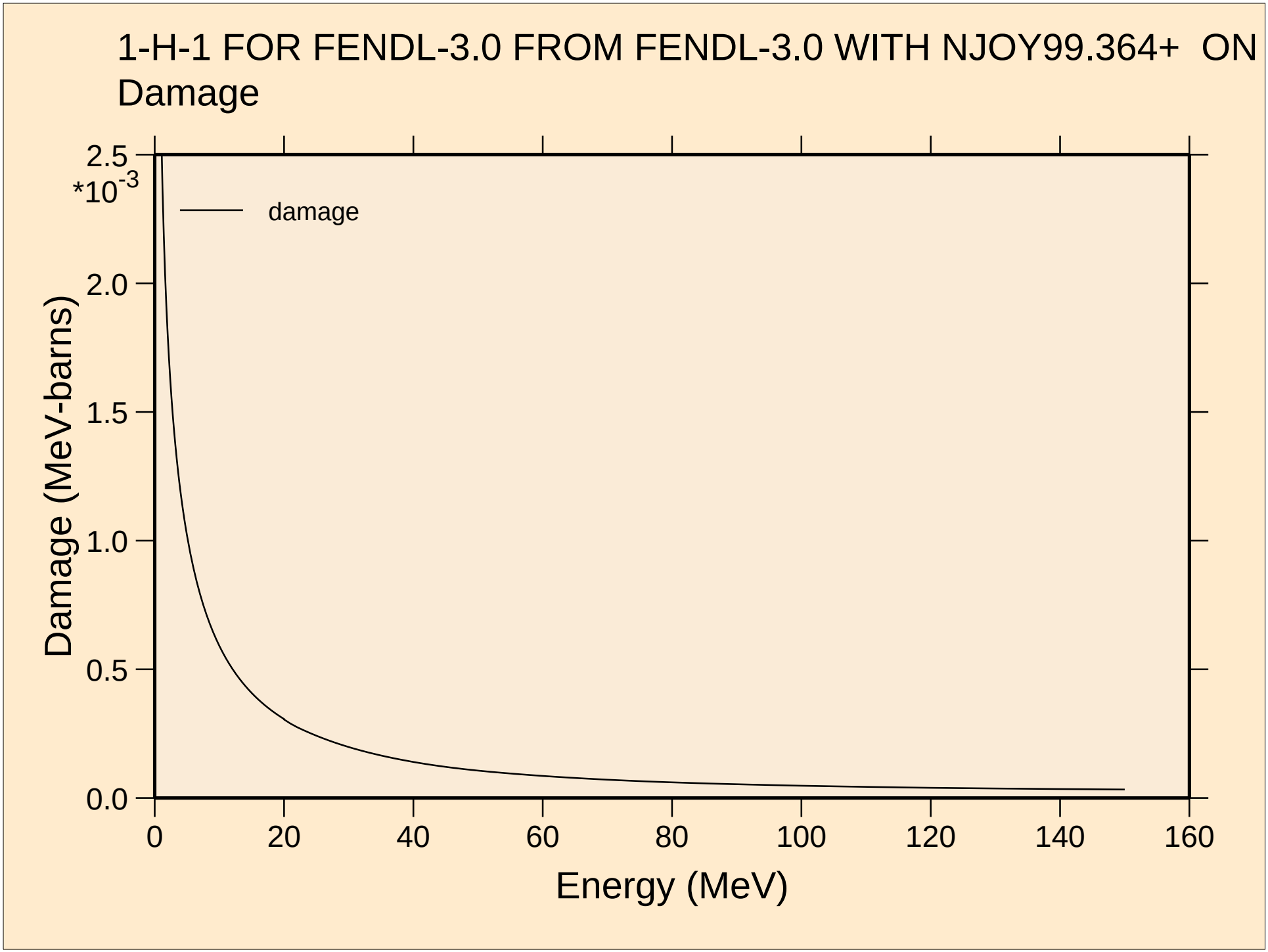

1-H-1 FOR FENDL-3.0 FROM FENDL-3.0 WITH NJOY99.364+ ON
Heating
heating
Heating (MeV/reaction)
Energy (MeV)
10^2
10^1
10^0
10^-1
10^-2
10^-3
10^-4
10^-11
10^-9
10^-7
10^-5
10^-3
10^-1
10^1

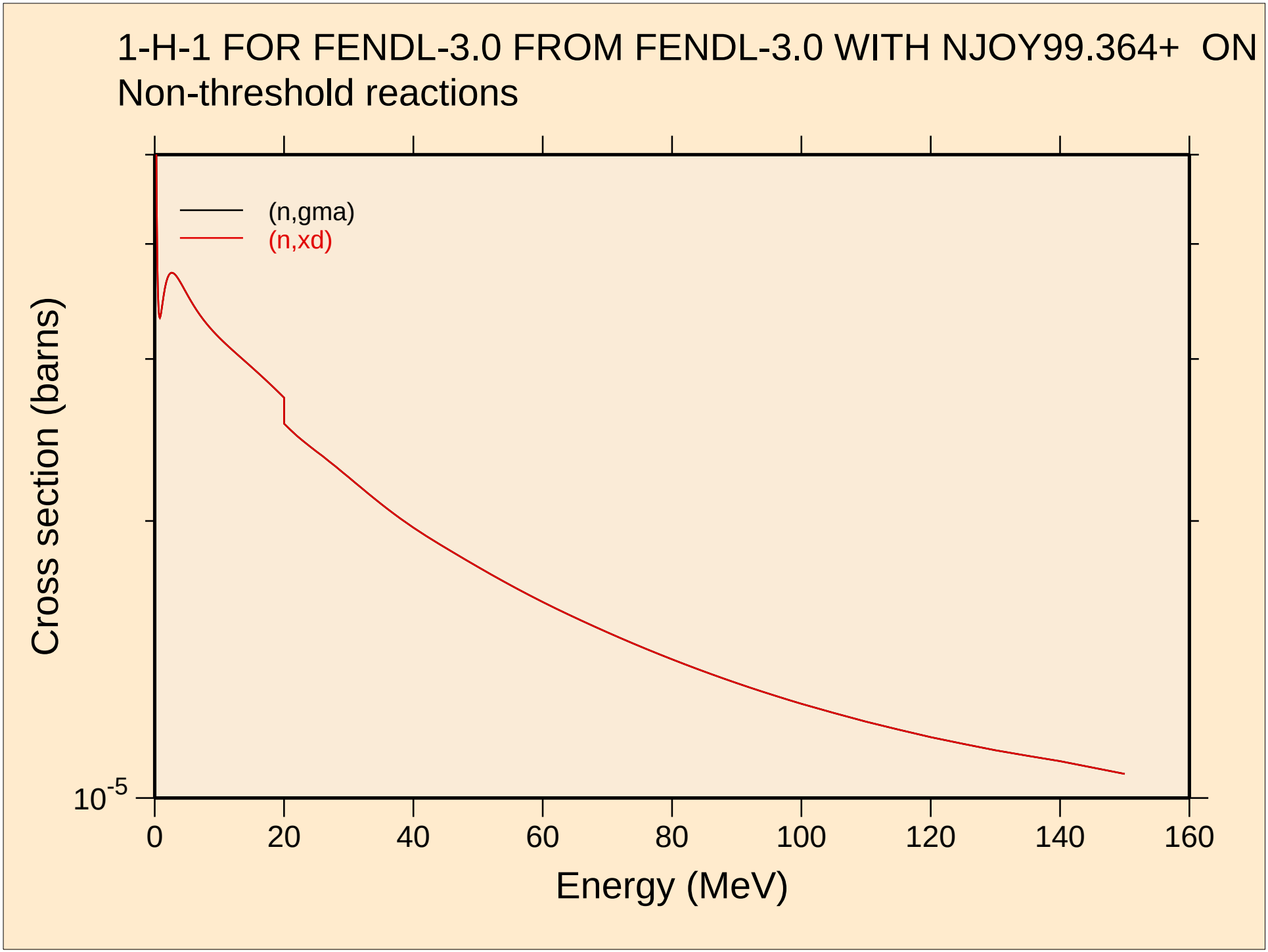

1-H-1 FOR FENDL-3.0 FROM FENDL-3.0 WITH NJOY99.364+ ON
Damage
damage
Damage (MeV-barns)
Energy (MeV)
10-2
10-3
10-4
10-5
10-6
10-7
10-8
10-4
10-3
10-2
10-1
100
101
102

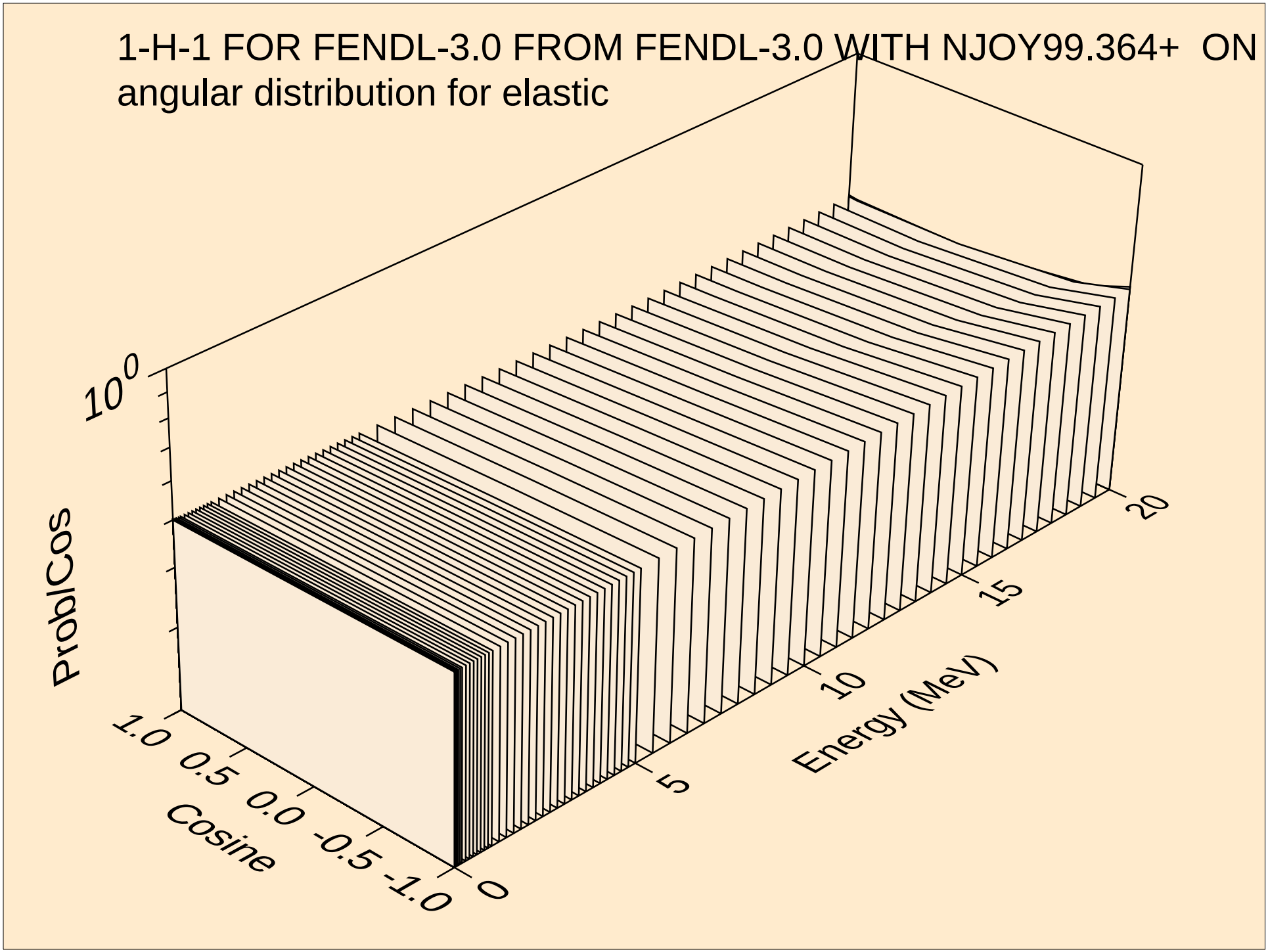

1-H-1 FOR FENDL-3.0 FROM FENDL-3.0 WITH NJOY99.364+ ON
Non-threshold reactions
(n,gma)
(n,xd)
Cross section (barns)
Energy (MeV)
10^1
10^0
10^-1
10^-2
10^-3
10^-4
10^-5
10^-11
10^-9
10^-7
10^-5
10^-3
10^-1
10^1

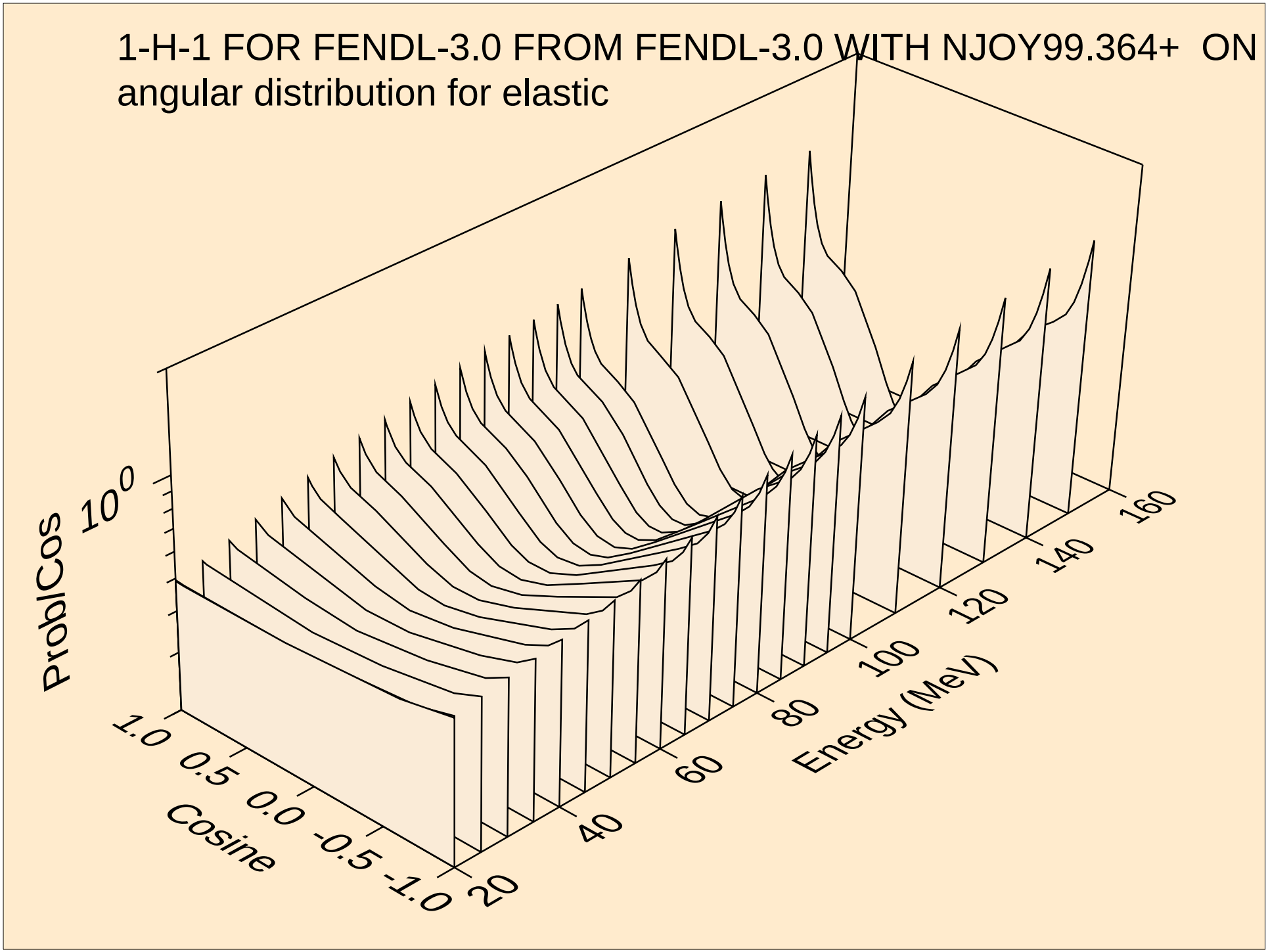

1-H-1 FOR FENDL-3.0 FROM FENDL-3.0 WITH NJOY99.364+ ON
Principal cross sections
Cross section (barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
0
20
40
60
80
100
120
140
160
Energy (MeV)
total
absorption
elastic
gamma production

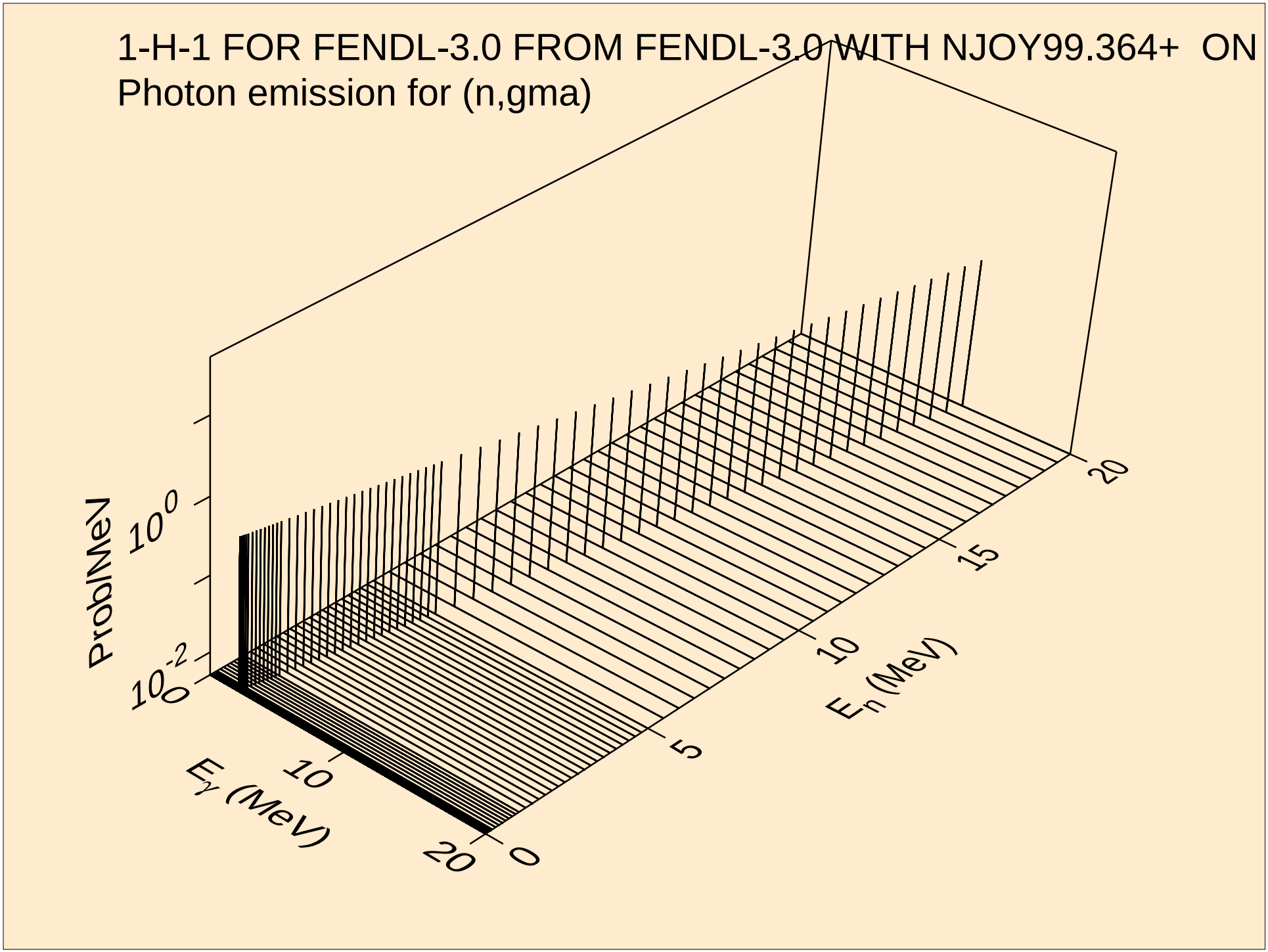

1-H-1 FOR FENDL-3.0 FROM FENDL-3.0 WITH NJOY99.364+ ON
Heating
heating
Heating (MeV/reaction)
Energy (MeV)
0
20
40
60
80
100
120
140
160

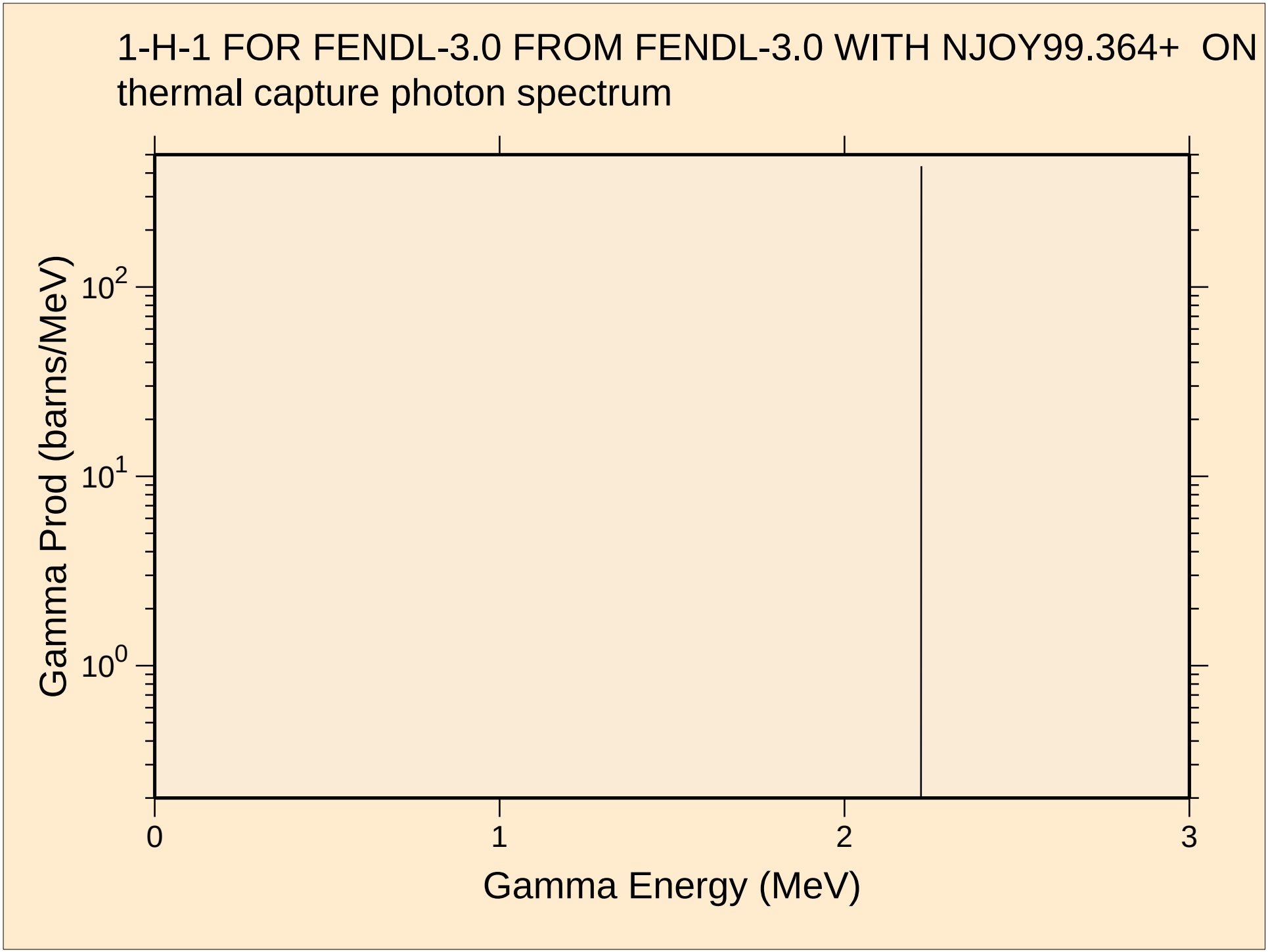

1-H-1 FOR FENDL-3.0 FROM FENDL-3.0 WITH NJOY99.364+ ON
Damage
2.5
*10-3
damage
2.0
1.5
1.0
0.5
0.0
Damage (MeV-barns)
0
20
40
60
80
100
120
140
160
Energy (MeV)

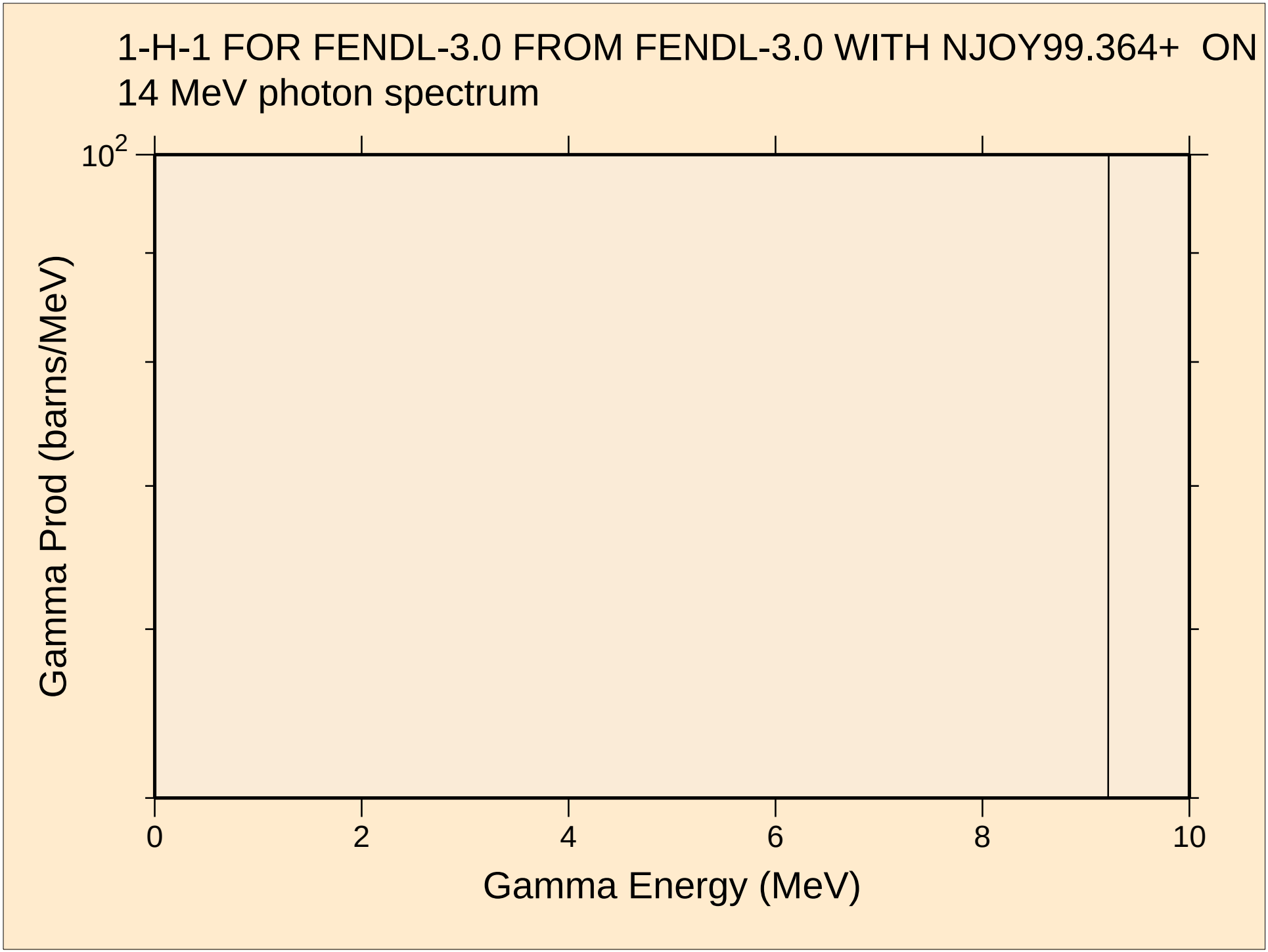

1-H-1 FOR FENDL-3.0 FROM FENDL-3.0 WITH NJOY99.364+ ON
Non-threshold reactions
(n,gma)
(n,xd)
Cross section (barns)
10-5
0
20
40
60
80
100
120
140
160
Energy (MeV)

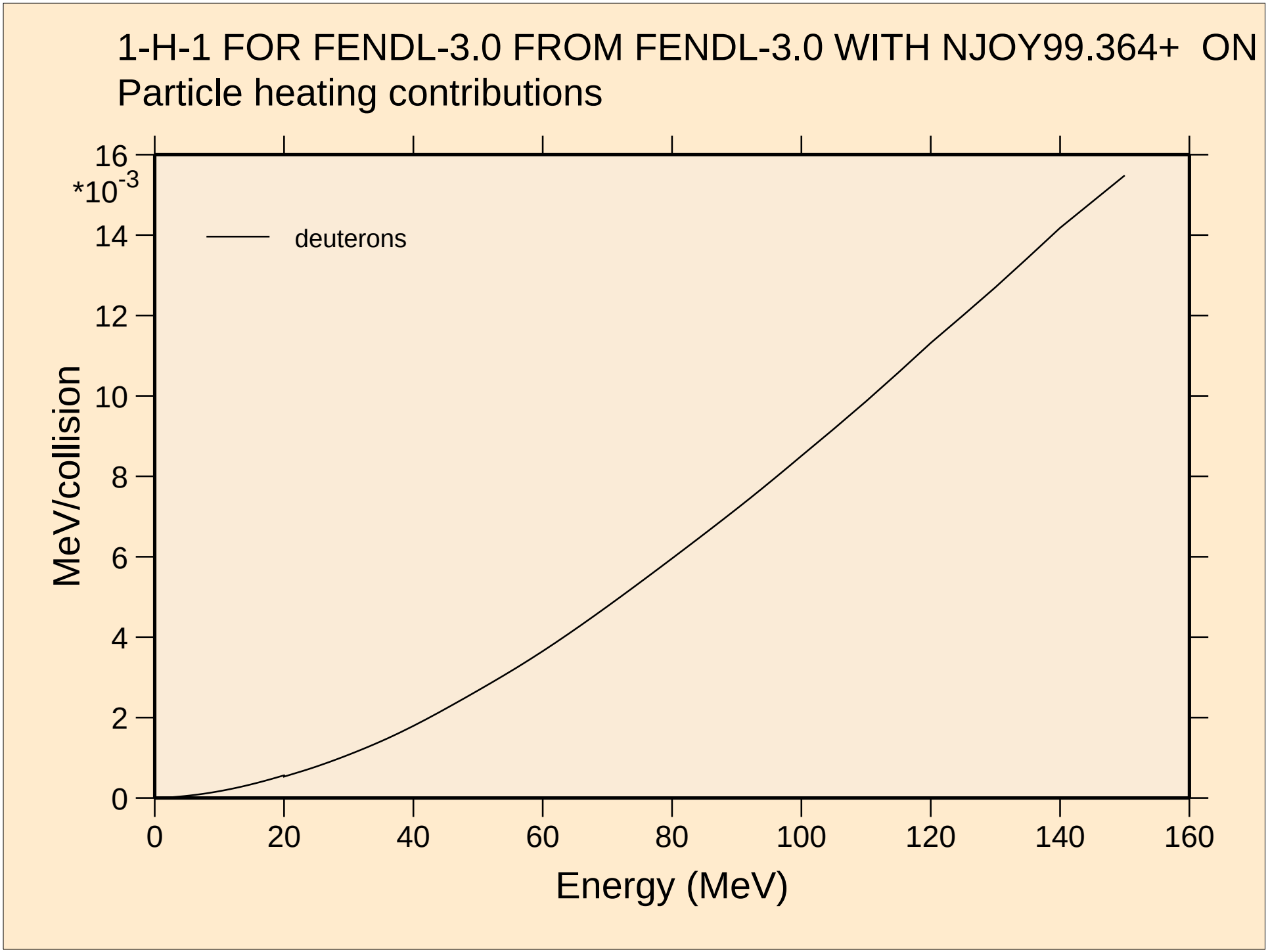

1-H-1 FOR FENDL-3.0 FROM FENDL-3.0 WITH NJOY99.364+ ON
angular distribution for elastic
10^0
Prob\Cos
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
Energy (MeV)

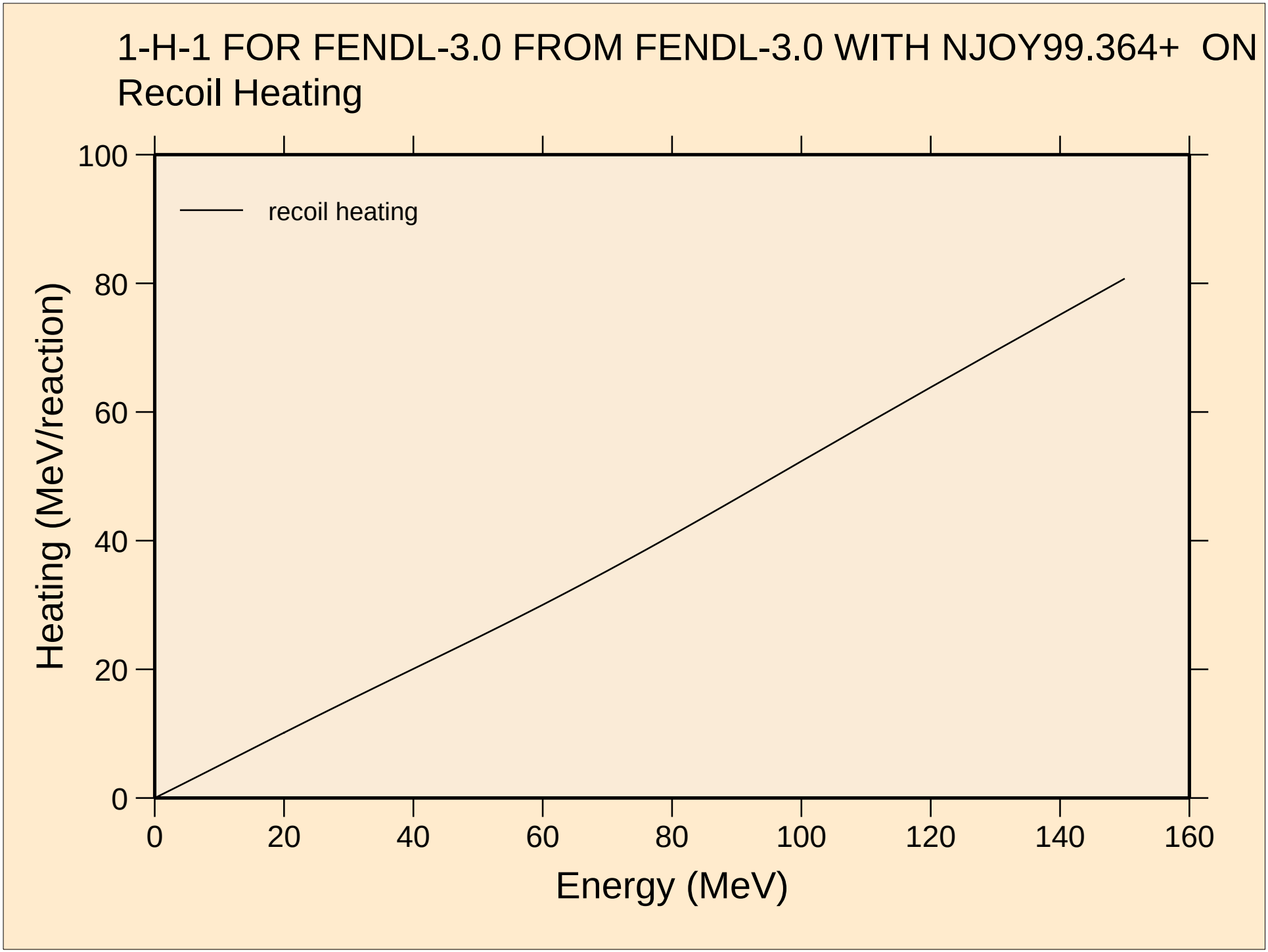

1-H-1 FOR FENDL-3.0 FROM FENDL-3.0 WITH NJOY99.364+ ON
angular distribution for elastic
ProblCos
10^0
1.0
0.5
0.0
-0.5
-1.0
Cosine
20
40
60
80
100
120
140
160
Energy (MeV)

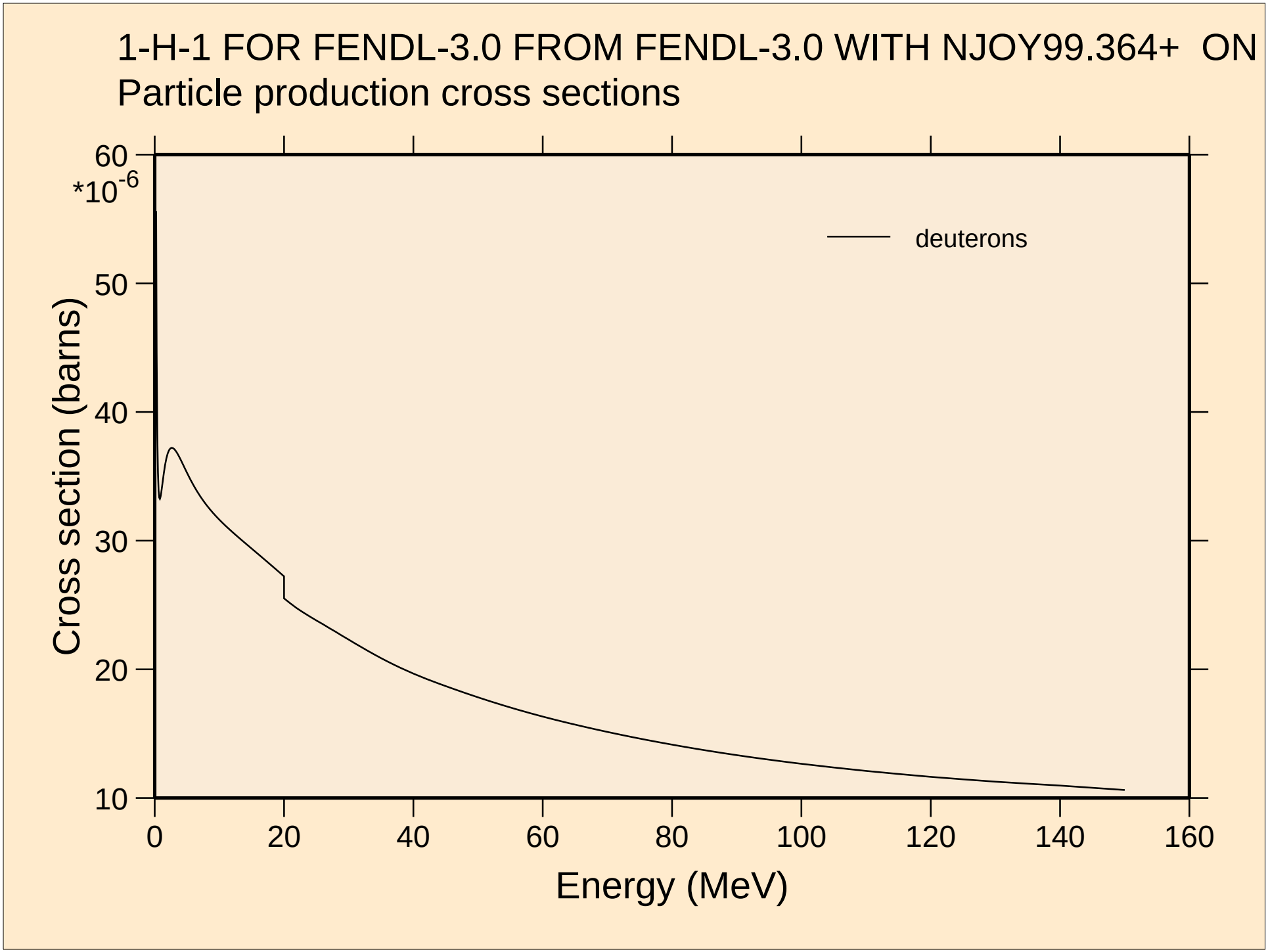

1-H-1 FOR FENDL-3.0 FROM FENDL-3.0 WITH NJOY99.364+ ON
Photon emission for (n,gma)
Prob/MeV
10^{0}
10^{-2}
0
10
20
E_γ (MeV)
0
5
10
15
20
E_n (MeV)

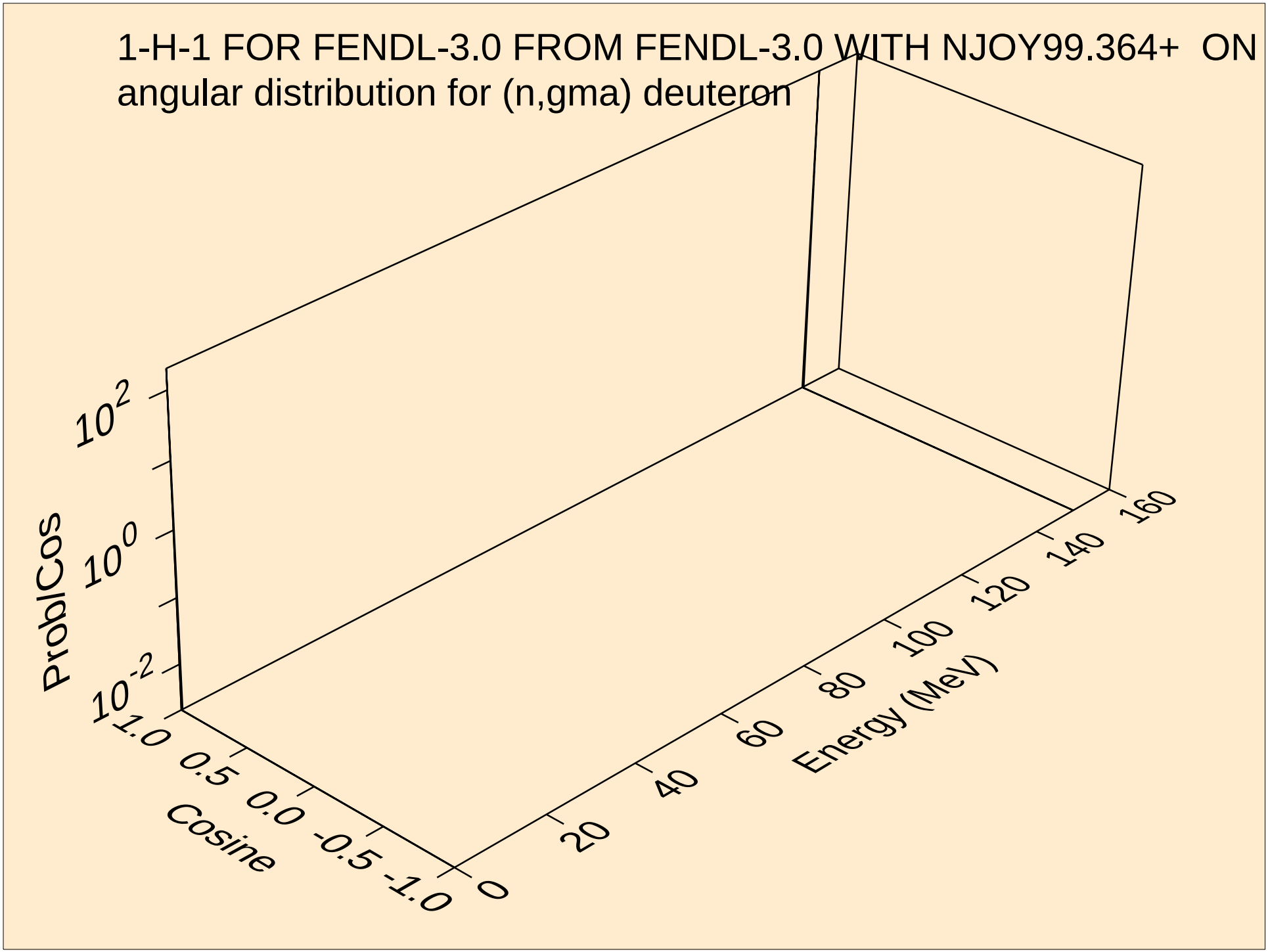

1-H-1 FOR FENDL-3.0 FROM FENDL-3.0 WITH NJOY99.364+ ON
thermal capture photon spectrum
Gamma Prod (barns/MeV)
10^2
10^1
10^0
0
1
2
3
Gamma Energy (MeV)


1-H-1 FOR FENDL-3.0 FROM FENDL-3.0 WITH NJOY99.364+ ON
14 MeV photon spectrum
10^2
Gamma Prod (barns/MeV)
0
2
4
6
8
10
Gamma Energy (MeV)


1-H-1 FOR FENDL-3.0 FROM FENDL-3.0 WITH NJOY99.364+ ON
Particle heating contributions
*10-3
deuterons
MeV/collision
Energy (MeV)
0
2
4
6
8
10
12
14
16
0
20
40
60
80
100
120
140
160


1-H-1 FOR FENDL-3.0 FROM FENDL-3.0 WITH NJOY99.364+ ON
Recoil Heating
recoil heating
Heating (MeV/reaction)
Energy (MeV)
0
20
40
60
80
100
120
140
160


1-H-1 FOR FENDL-3.0 FROM FENDL-3.0 WITH NJOY99.364+ ON
Particle production cross sections
*10-6
60
50
40
30
20
10
Cross section (barns)
deuterons
0
20
40
60
80
100
120
140
160
Energy (MeV)


1-H-1 FOR FENDL-3.0 FROM FENDL-3.0 WITH NJOY99.364+ ON
angular distribution for (n,gma) deuteron
ProblCos
10^{2}
10^{0}
10^{-2}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
20
40
60
80
100
120
140
160
Energy (MeV)