ENDF/B-VII.1 MN-55
Principal cross sections

Energy (MeV)

Cross section (barns)

- total
- absorption
- elastic
- gamma production
ENDF/B-VII.1 MN-55
resonance total cross section
ENDF/B-VII.1 MN-55
resonance total cross section

Cross section (barns)

Energy (MeV)
ENDF/B-VII.1 MN-55
resonance total cross section
ENDF/B-VII.1 MN-55
resonance total cross section
ENDF/B-VII.1 MN-55
resonance absorption cross sections

Cross section (barns) vs. Energy (MeV)

- Capture cross section
ENDF/B-VII.1 MN-55
resonance absorption cross sections

Cross section (barns)

Energy (MeV)
ENDF/B-VII.1 MN-55
resonance absorption cross sections

Energy (MeV)

Cross section (barns)

capture
ENDF/B-VII.1 MN-55
resonance absorption cross sections

Cross section (barns)

Energy (MeV)
ENDF/B-VII.1 MN-55

Heating

Energy (MeV)

Heating (MeV/reaction)
Damage

Energy (MeV) vs. Damage (MeV-barns) graph

- Damage scale on the y-axis
- Energy scale on the x-axis

The graph shows the damage as a function of energy, with a logarithmic scale for both axes.
ENDF/B-VII.1 MN-55
Principal cross sections

Energy (MeV)

Cross section (barns)

total
absorption
elastic
gamma production

Energy (MeV)
ENDF/B-VII.1 MN-55
Damage

![Graph showing the relationship between Energy (MeV) and Damage (MeV-barns). The x-axis represents Energy in MeV, ranging from 0 to 60, and the y-axis represents Damage in MeV-barns, ranging from 0 to 3.5 * 10^-3. The graph shows a curve indicating how damage increases with energy.]
ENDF/B-VII.1 MN-55
Non-threshold reactions

Energy (MeV) vs. Cross section (barns)

(n,gma)
ENDF/B-VII.1 MN-55
Inelastic levels

Energy (MeV)

Cross section (barns)

(n,n*1)
(n,n*2)
(n,n*3)
(n,n*4)
(n,n*5)

Energy (MeV)
ENDF/B-VII.1 MN-55
Inelastic levels

Energy (MeV)

Cross section (barns)

- (n,n*16)
- (n,n*17)
- (n,n*18)
- (n,n*19)
- (n,n*20)
ENDF/B-VII.1 MN-55
Inelastic levels

Cross section (barns) vs. Energy (MeV)

- (n,n*31)
- (n,n*32)
- (n,n*33)
- (n,n*34)
- (n,n*35)
ENDF/B-VII.1 MN-55
Inelastic levels

Energy (MeV)

Cross section (barns)

*(n,n*36)
*(n,n*37)
*(n,n*38)
*(n,n*39)
ENDF/B-VII.1 MN-55
Threshold reactions

Energy (MeV)

Cross section (barns)

- $(n,x)$
- $(n,2n)$
- $(n,3n)$
- $(n,4n)$
- $(n,n^*c)$
ENDF/B-VII.1 MN-55
Threshold reactions

Cross section (barns) vs. Energy (MeV)

- (n,p)
- (n,a)
ENDF/B-VII.1 MN-55
Threshold reactions

Cross section (barns)

Energy (MeV)
ENDF/B-VII.1 MN-55
Threshold reactions

Cross section (barns) vs. Energy (MeV)
ENDF/B-VII.1 MN-55
Threshold reactions

Cross section (barns)

Energy (MeV)
ENDF/B-VII.1 MN-55
Threshold reactions

Cross section (barns)

Energy (MeV)
ENDF/B-VII.1 MN-55
Threshold reactions

Cross section (barns) vs. Energy (MeV) graph with a peak at around 10 MeV.
ENDF/B-VII.1 MN-55
angular distribution for elastic

Prob/Cos

10^1

10^0

10^-1

10^-2

10^-3

Cosine

1.0 0.5 0.0 -0.5 -1.0 0

Energy (MeV)

1.0 5 10 15 20
ENDF/B-VII.1 MN-55
angular distribution for elastic
ENDF/B-VII.1 MN-55
angular distribution for (n,n*1)
ENO/D/B-VII.1 MN-55
angular distribution for (n,n^*)
ENDF/B-VII.1 MN-55
angular distribution for (n,n*2)
ENDF/B-VII.1 MN-55
angular distribution for (n,n*2)
ENDF/B-VII.1 MN-55
angular distribution for (n,n*3)
ENDF/B-VII.1 MN-55
angular distribution for (n,n*3)
ENDF/B-VII.1 MN-55
angular distribution for (n,n*4)
ENDF/B-VII.1 MN-55
angular distribution for \((n, n^*4)\)
ENDF/B-VII.1 MN-55
angular distribution for (n,n*5)
ENDF/B-VII.1 MN-55
angular distribution for (n,n\*6)
ENDF/B-VII.1 MN-55
angular distribution for \((n,n^6)\)
ENDF/B-VII.1 MN-55
angular distribution for (n,n*7)
ENDF/B-VII.1 MN-55
angular distribution for \((n,n^7)\)
ENDF/B-VII.1 MN-55
angular distribution for (n,n*8)
ENDF/B-VII.1 MN-55
angular distribution for (n,n*8)
ENDF/B-VII.1 MN-55
angular distribution for (n,n*9)
ENDF/B-VII.1 MN-55 angular distribution for (n,n*9)
ENDF/B-VII.1 MN-55
angular distribution for (n,n*10)
ENDF/B-VII.1 MN-55
angular distribution for (n,n*10)
ENDF/B-VII.1 MN-55
angular distribution for (n,n*11)
ENDF/B-VII.1 MN-55
angular distribution for (n,n^11)
ENDF/B-VII.1 MN-55
angular distribution for (n,n*12)
ENDF/B-VII.1 MN-55
angular distribution for (n,n*12)
ENDF/B-VII.1 MN-55
angular distribution for (n,n*13)
ENDF/B-VII.1 MN-55
angular distribution for (n,n*13)
ENDF/B-VII.1 MN-55
angular distribution for (n,n\*14)
ENDF/B-VII.1 MN-55
angular distribution for (n,n*14)
ENDF/B-VII.1 MN-55
angular distribution for (n,n*15)
ENDF/B-VII.1 MN-55
angular distribution for (n,n*16)
ENDF/B-VII.1 MN-55 angular distribution for (n,n*16)
ENDF/B-VII.1 MN-55
angular distribution for (n,n*17)
ENDF/B-VII.1 MN-55
angular distribution for (n,n^17)
ENDF/B-VII.1 MN-55
angular distribution for (n,n*18)
ENDF/B-VII.1 MN-55
angular distribution for (n,n*18)
ENDF/B-VII.1 MN-55
angular distribution for (n,n*19)
ENDF/B-VII.1 MN-55
angular distribution for (n,n*19)
ENDF/B-VII.1 MN-55
angular distribution for (n,n*20)
ENDF/B-VII.1 MN-55
angular distribution for (n,n*20)
ENDF/B-VII.1 MN-55
angular distribution for \((n,n^*21)\)
ENDF/B-VII.1 MN-55
angular distribution for (n,n*21)
ENDF/B-VII.1 MN-55
angular distribution for (n,n*22)
ENDF/B-VII.1 MN-55
angular distribution for (n,n*22)
ENDF/B-VII.1 MN-55
angular distribution for (n,n*23)
ENDF/B-VII.1 MN-55
angular distribution for (n,n*23)
ENDF/B-VII.1 MN-55
angular distribution for (n,n*24)
ENDF/B-VII.1 MN-55
angular distribution for (n,n*24)
ENDF/B-VII.1 MN-55
angular distribution for (n,n*25)
ENDF/B-VII.1 MN-55
angular distribution for (n,n*25)
ENDF/B-VII.1 MN-55
angular distribution for (n,n*26)
ENDF/B-VII.1 MN-55
angular distribution for (n,n*26)
ENDF/B-VII.1 MN-55
angular distribution for (n,n*27)
ENDF/B-VII.1 MN-55
angular distribution for (n,n*27)
ENDF/B-VII.1 MN-55
angular distribution for (n,n*28)
ENDF/B-VII.1 MN-55
angular distribution for (n,n*28)
ENDF/B-VII.1 MN-55
angular distribution for (n,n*29)
ENDF/B-VII.1 MN-55
angular distribution for (n,n*29)
ENDF/B-VII.1 MN-55
angular distribution for (n,n*30)
ENDF/B-VII.1 MN-55
angular distribution for (n,n*30)
ENDF/B-VII.1 MN-55
angular distribution for (n,n*31)
ENDF/B-VII.1 MN-55
angular distribution for (n,n*31)
ENDF/B-VII.1 MN-55
angular distribution for (n,n*32)
ENDF/B-VII.1 MN-55
angular distribution for (n,n*33)
ENDF/B-VII.1 MN-55
angular distribution for (n,n*33)
ENDF/B-VII.1 MN-55
angular distribution for (n,n*34)
ENDF/B-VII.1 MN-55
angular distribution for (n,n*34)
ENDF/B-VII.1 MN-55
angular distribution for (n,n*35)
ENDF/B-VII.1 MN-55
angular distribution for (n,n*35)
ENDF/B-VII.1 MN-55
angular distribution for \((n,n^*36)\)
ENDF/B-VII.1 MN-55
angular distribution for (n,n*36)
ENDF/B-VII.1 MN-55
angular distribution for (n,n*37)
ENDF/B-VII.1 MN-55
angular distribution for \( (n,n^*37) \)
ENDF/B-VII.1 MN-55
angular distribution for (n,n*38)
ENDF/B-VII.1 MN-55
angular distribution for (n,n*38)
ENDF/B-VII.1 MN-55
angular distribution for (n,n*39)
ENDF/B-VII.1 MN-55
angular distribution for (n,n*39)
ENDF/B-VII.1 MN-55
Neutron emission for (n,x)
ENDF/B-VII.1 MN-55
Neutron emission for (n,2n)
ENDF/B-VII.1 MN-55
Neutron emission for (n,3n)
ENDF/B-VII.1 MN-55
Neutron emission for (n,4n)
ENDF/B-VII.1 MN-55
Neutron emission for (n,n*c)
ENDF/B-VII.1 MN-55
Photon emission for (n,x)
ENDF/B-VII.1 MN-55
Photon emission for (n,2n)
ENDF/B-VII.1 MN-55
Photon emission for (n,3n)
ENDF/B-VII.1 MN-55
Photon emission for (n,4n)
ENDF/B-VII.1 MN-55
Photon emission for (n,n*\text{c})
ENDF/B-VII.1 MN-55
Photon emission for (n,gma)
ENDF/B-VII.1 MN-55
Photon emission for (n,p^*c)
ENDF/B-VII.1 MN-55
thermal capture photon spectrum
ENDF/B-VII.1 MN-55
14 MeV photon spectrum

Gamma Energy (MeV)

Gamma Prod (barns/MeV)

Gamma Energy (MeV)
ENDF/B-VII.1 MN-55
Particle heating contributions

Energy (MeV)

MeV/collision

protons
deuterons
tritons
he-3
alphas

Energy (MeV)
Recoil Heating

Energy (MeV) vs Heating (MeV/reaction)

- Energy (MeV) range: 0 to 60
- Heating (MeV/reaction) range: 0 to 1.4

The graph shows the variation of recoil heating with energy.
ENDF/B-VII.1 MN-55
protons from (n,x)
ENDF/B-VII.1 MN-55
angular distribution for (n,p*0) proton

Prob/Cos

10^0

10^-1

10^-2

10^-3

Cosine

Energy (MeV)

1.0 0.5 0.0 -0.5 -1.0 2 4 6 8 10 12 14 16 18 20
ENDF/B-VII.1 MN-55
angular distribution for (n,p*0) proton
ENDF/B-VII.1 MN-55
angular distribution for (n,p*1) proton
ENDF/B-VII.1 MN-55
angular distribution for (n,p*1) proton
ENDF/B-VII.1 MN-55
general distribution for (n,p*2) proton

Prob/Cos

10^0

10^{-1}

Cosine

Energy (MeV)

1.0 0.5 0.0 -0.5 -1.0 20 25 30 35 40 45 50 55 60
ENDF/B-VII.1 MN-55
angular distribution for (n,p*3) proton
ENDF/B-VII.1 MN-55
angular distribution for (n,p*3) proton
ENDF/B-VII.1 MN-55
angular distribution for (n,p*4) proton
ENDF/B-VII.1 MN-55
angular distribution for (n,p*4) proton
ENDF/B-VII.1 MN-55
angular distribution for \((n,p^*5)\) proton
ENDF/B-VII.1 MN-55
angular distribution for \((n, p^*5)\) proton

[Graph showing the angular distribution with axes labeled for 'cosine', 'energy (MeV)', and 'prob/cos'.]
ENDF/B-VII.1 MN-55
angular distribution for (n,p*6) proton
ENDF/B-VII.1 MN-55
angular distribution for (n,p*7) proton
ENDF/B-VII.1 MN-55
angular distribution for (n,p*7) proton
ENDF/B-VII.1 MN-55
angular distribution for (n,p*8) proton
ENDF/B-VII.1 MN-55
angular distribution for (n,p*8) proton

[3D diagram showing the angular distribution with energy and cosine parameters]
ENDF/B-VII.1 MN-55
angular distribution for (n,p*9) proton

Energy (MeV)

Cosine

Prob/Cos
ENDF/B-VII.1 MN-55
angular distribution for \((n,p^9)\) proton
ENDF/B-VII.1 MN-55
angular distribution for (n,p*10) proton
ENDF/B-VII.1 MN-55
angular distribution for (n,p*10) proton
ENDF/B-VII.1 MN-55
angular distribution for (n,p*11) proton
ENDF/B-VII.1 MN-55
angular distribution for (n,p*11) proton
ENDF/B-VII.1 MN-55
angular distribution for (n,p*12) proton
ENDF/B-VII.1 MN-55
angular distribution for \( (n,p^{*12}) \) proton
ENDF/B-VII.1 MN-55
angular distribution for (n,p*13) proton
ENDF/B-VII.1 MN-55
angular distribution for (n,p*13) proton
ENDF/B-VII.1 MN-55
angular distribution for (n,p*14) proton
ENDF/B-VII.1 MN-55
angular distribution for (n,p*15) proton
ENDF/B-VII.1 MN-55
angular distribution for (n,p*15) proton
ENDF/B-VII.1 MN-55
angular distribution for (n,p^16) proton
ENDF/B-VII.1 MN-55
angular distribution for (n,p*16) proton
ENDF/B-VII.1 MN-55
angular distribution for (n,p*17) proton
ENDF/B-VII.1 MN-55
angular distribution for (n,p*17) proton
ENDF/B-VII.1 MN-55
angular distribution for (n,p*18) proton
ENDF/B-VII.1 MN-55
angular distribution for (n,p*18) proton

EN
E3
E4
E5
E6

Cosine

1.0 0.5 0.0 -0.5 -1.0 20 25 30 35 40 45 50 55 60

Energy (MeV)

Prob/Cos

1.0 1.0 -1.0 1.0 -1.0 1.0 -1.0 1.0 -1.0 1.0 -1.0 1.0 -1.0 1.0 -1.0 1.0 -1.0 1.0 -1.0 1.0 -1.0 1.0 -1.0 1.0 -1.0 1.0 -1.0 1.0 -1.0 1.0 -1.0
ENDF/B-VII.1 MN-55
angular distribution for (n,p*19) proton
ENDF/B-VII.1 MN-55
angular distribution for (n,p*19) proton
ENDF/B-VII.1 MN-55
angular distribution for (n,p*20) proton
ENDF/B-VII.1 MN-55
angular distribution for (n,p*21) proton
ENDF/B-VII.1 MN-55
angular distribution for (n,p*21) proton
ENDF/B-VII.1 MN-55
angular distribution for (n,p*22) proton
ENDF/B-VII.1 MN-55
angular distribution for (n,p*22) proton
ENDF/B-VII.1 MN-55
angular distribution for (n,p\textsuperscript{23}) proton
ENDF/B-VII.1 MN-55
angular distribution for (n,p*23) proton
ENDF/B-VII.1 MN-55
angular distribution for (n,p*24) proton
ENDF/B-VII.1 MN-55
angular distribution for (n,p*24) proton
ENDF/B-VII.1 MN-55
angular distribution for (n,p*25) proton
ENDF/B-VII.1 MN-55
angular distribution for (n,p*25) proton
ENDF/B-VII.1 MN-55
angular distribution for (n,p*26) proton
ENDF/B-VII.1 MN-55
angular distribution for (n,p*26) proton
ENDF/B-VII.1 MN-55
angular distribution for (n,p*27) proton
ENDF/B-VII.1 MN-55
angular distribution for \((n,p^*27)\) proton
ENDF/B-VII.1 MN-55
angular distribution for (n,p*28) proton
ENDF/B-VII.1 MN-55
angular distribution for (n,p*28) proton
ENDF/B-VII.1 MN-55
angular distribution for (n,p*29) proton
ENDF/B-VII.1 MN-55
angular distribution for (n,p*29) proton
ENDF/B-VII.1 MN-55
angular distribution for (n,p^30) proton
ENDF/B-VII.1 MN-55
angular distribution for (n,p*30) proton
ENDF/B-VII.1 MN-55
angular distribution for (n,p*31) proton
ENDF/B-VII.1 MN-55
angular distribution for (n,p*31) proton
ENDF/B-VII.1 MN-55
angular distribution for (n,p*32) proton
ENDF/B-VII.1 MN-55
angular distribution for (n,p*32) proton
ENDF/B-VII.1 MN-55
protons from (n,p*c)
ENDF/B-VII.1 MN-55
deuterons from (n,x)
ENDF/B-VII.1 MN-55
tritons from (n,x)
ENDF/B-VII.1 MN-55
alphas from (n,x)