

Program EVALPLOT  
(Version 2018-1)

by

Dermott E. Cullen  
(Present Contact Information)

Dermott E. Cullen  
1466 Hudson Way  
Livermore, CA 94550  
U.S.A.

Tele: 925-443-1911

E.Mail:redcullen1@comcast.net

Web:redcullen1.net/HOMEPAGE.NEW

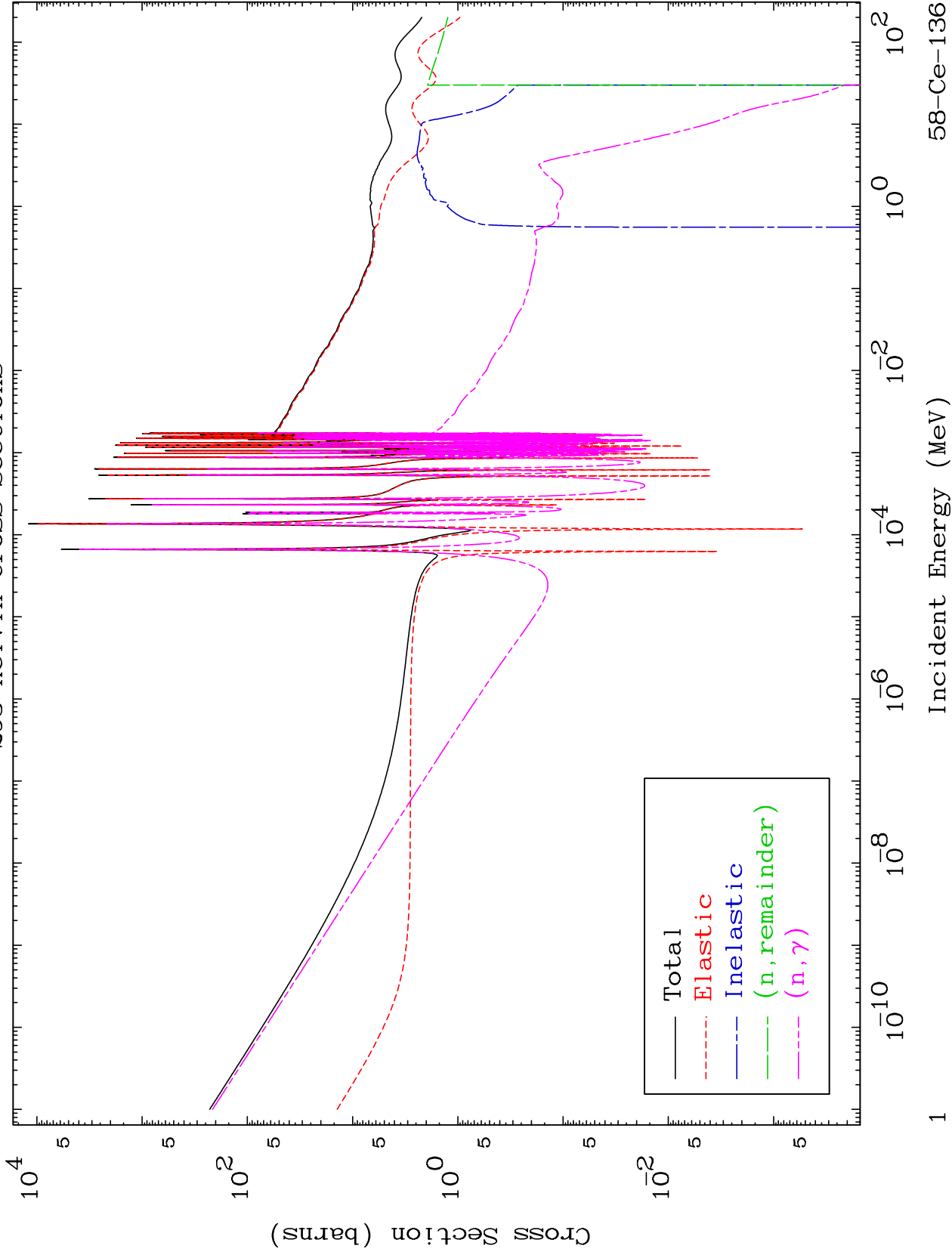
Press Mouse Button to Start

MAT 5825

Major

293 Kelvin Cross Sections

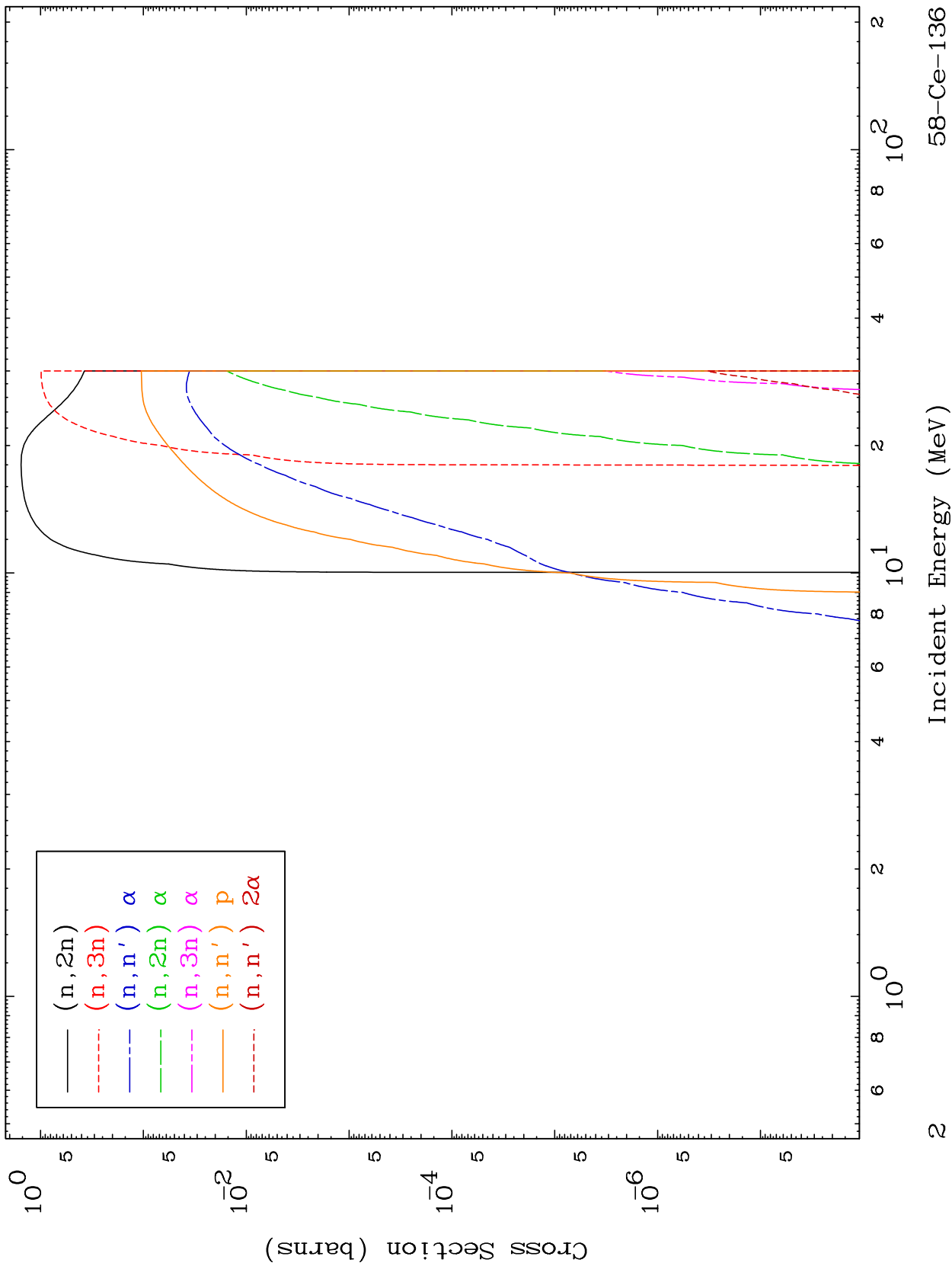
58-Ce-136

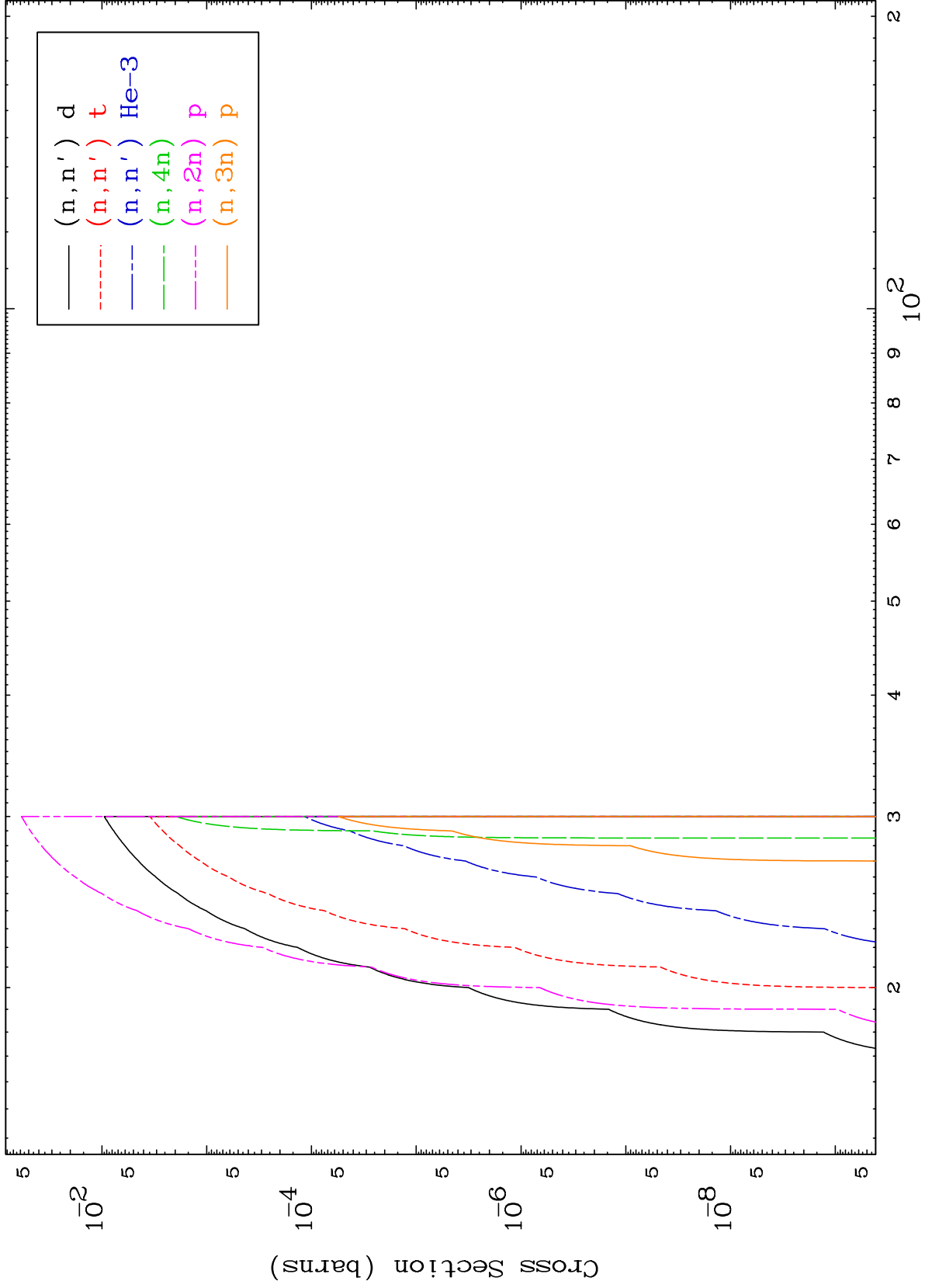


MAT 5825

Neutron Production  
293 Kelvin Cross Sections

58-Ce-136

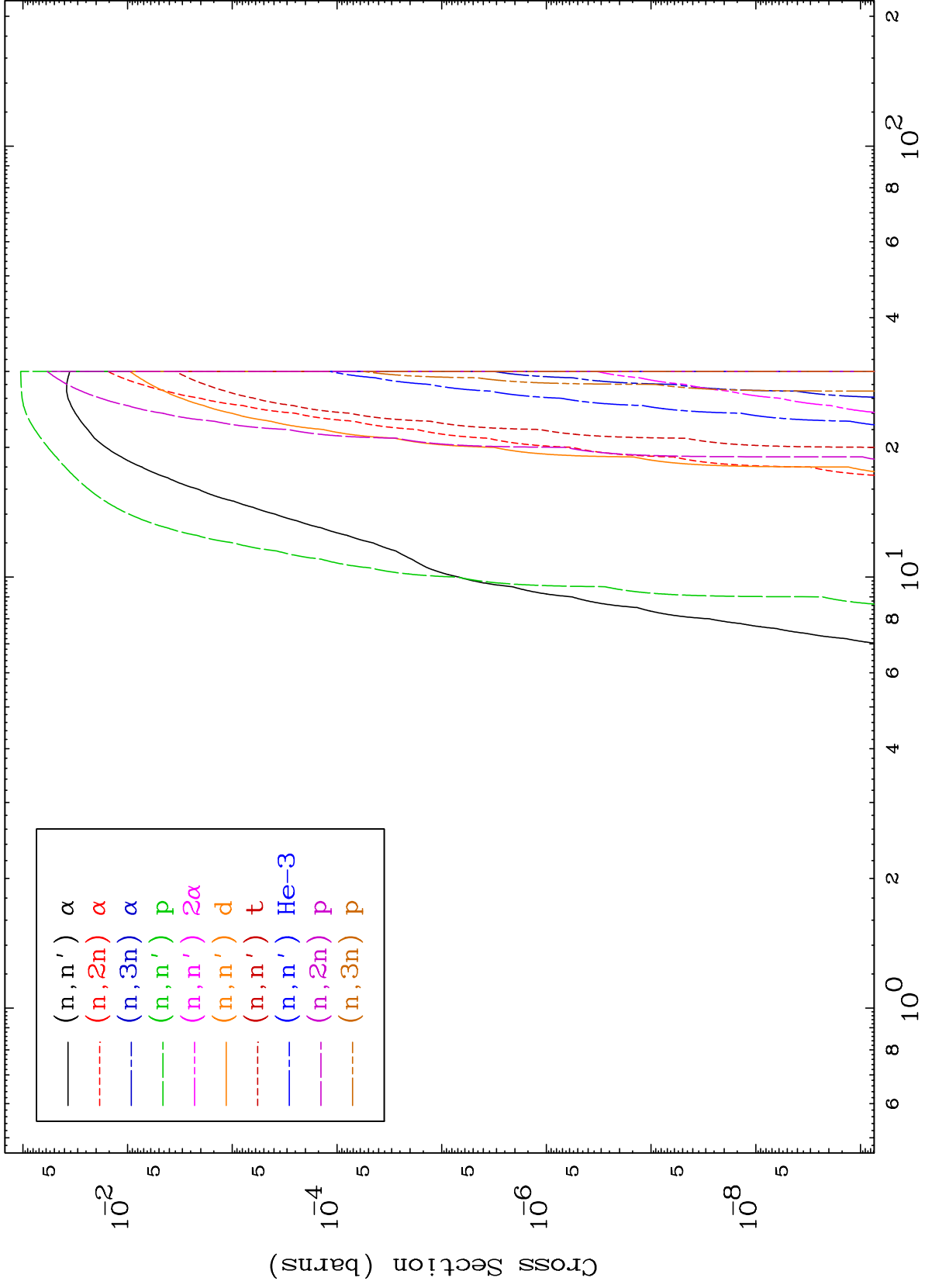




MAT 5825

Charged Particle  
293 Kelvin Cross Sections

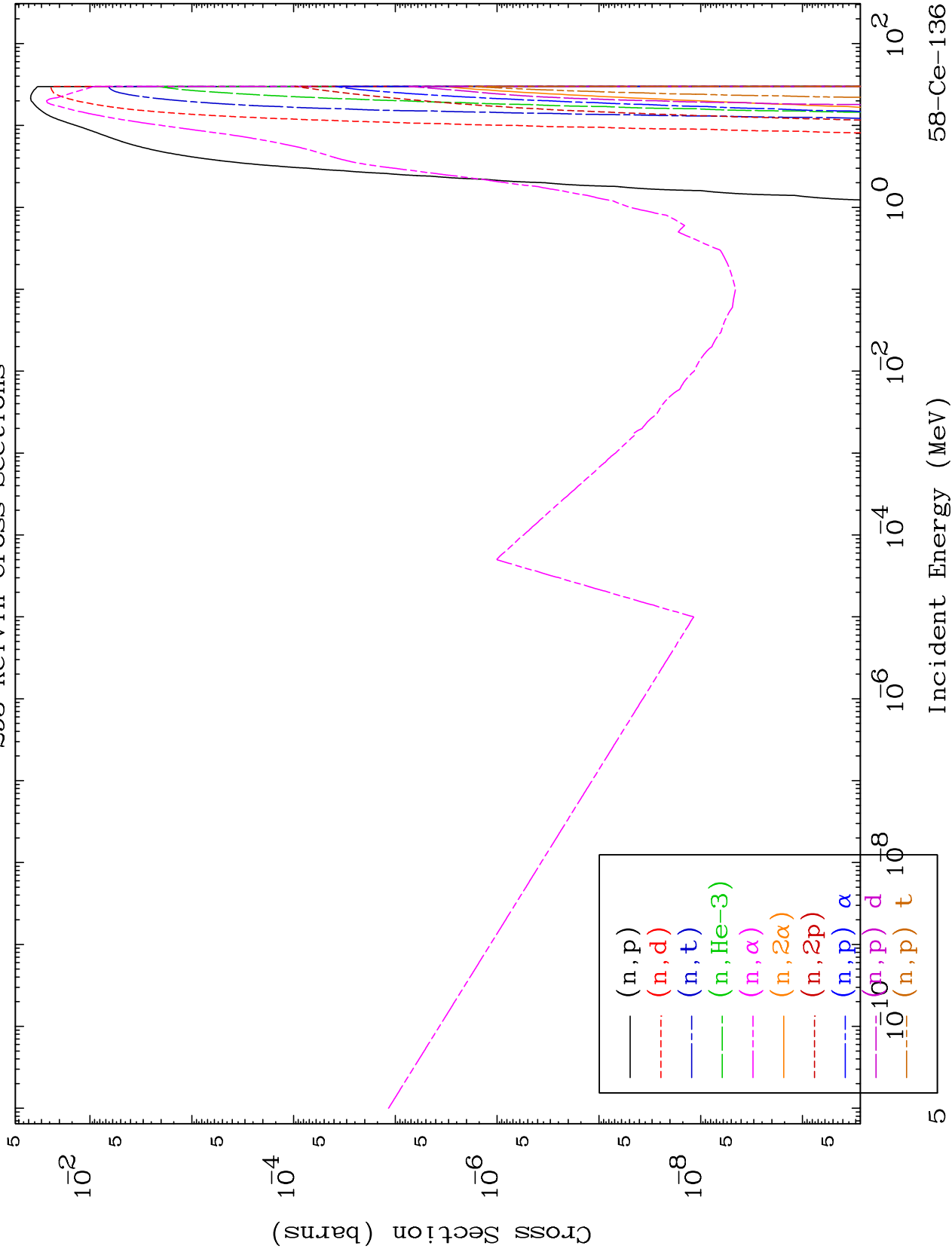
58-Ce-136



MAT 5825

Charged Particle  
293 Kelvin Cross Sections

58-Ce-136

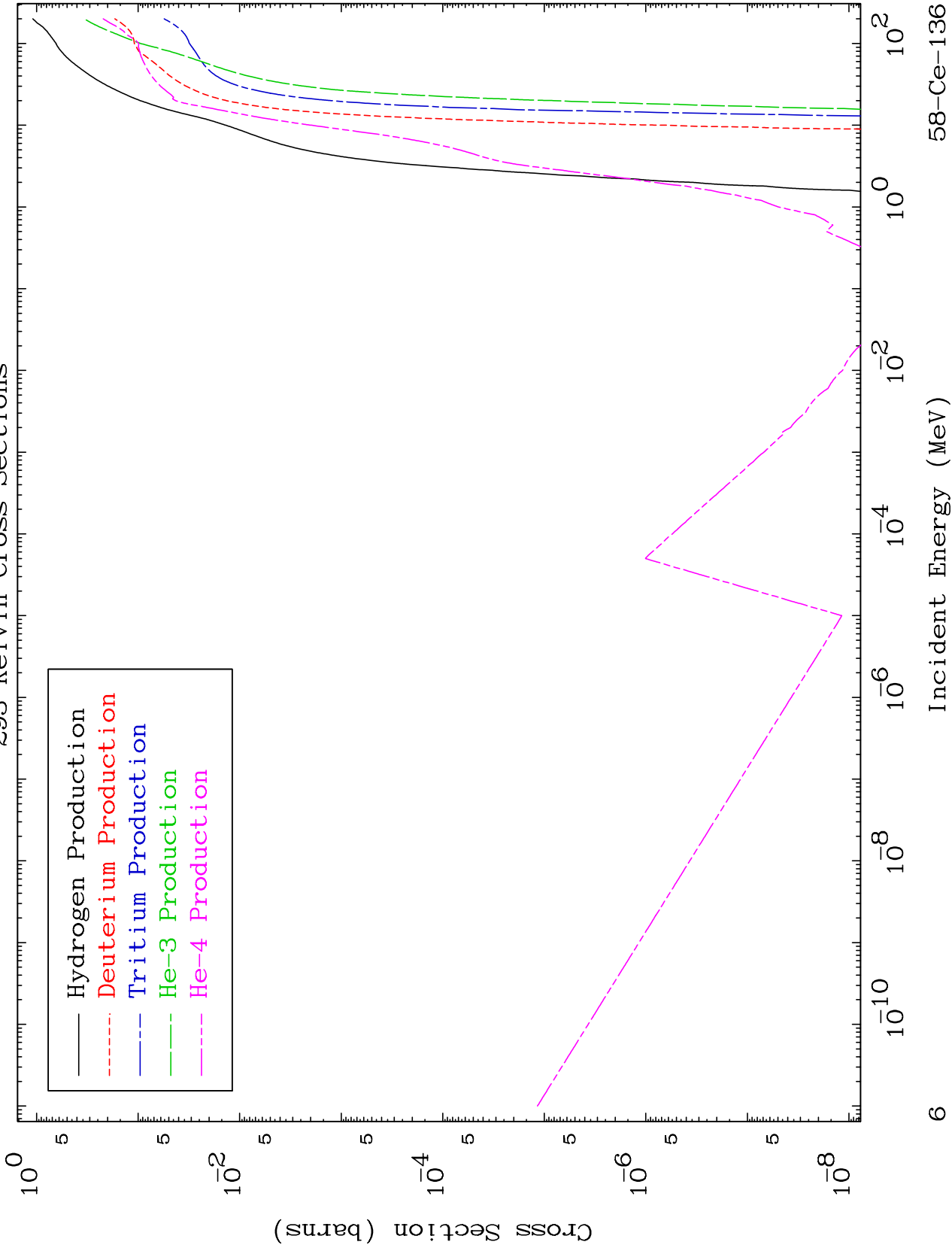


58-Ce-136

MAT 5825

Particle Production  
293 Kelvin Cross Sections

58-Ce-136

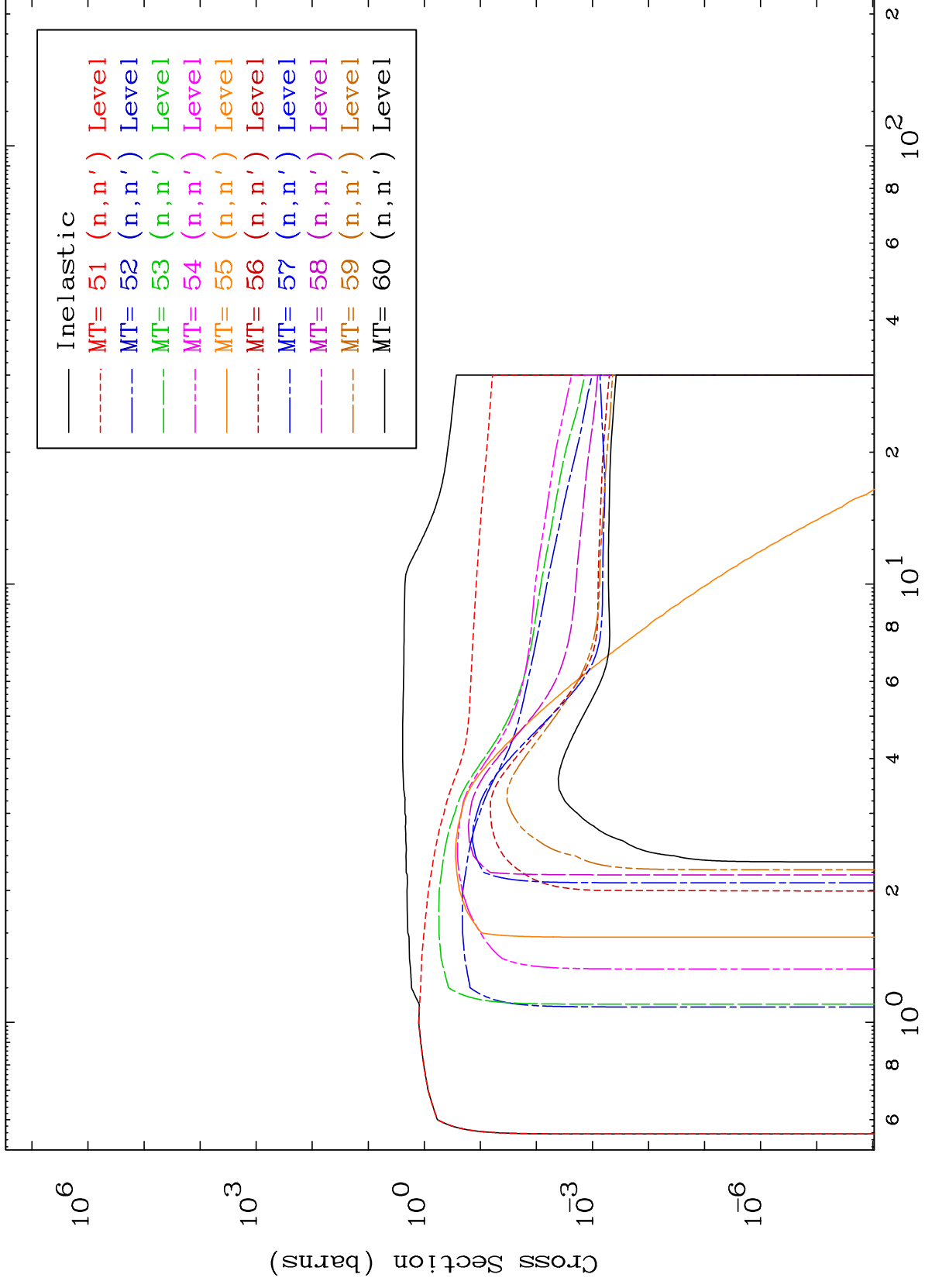


MAT 5825

(n,n') Level

58-Ce-136

293 Kelvin Cross Sections



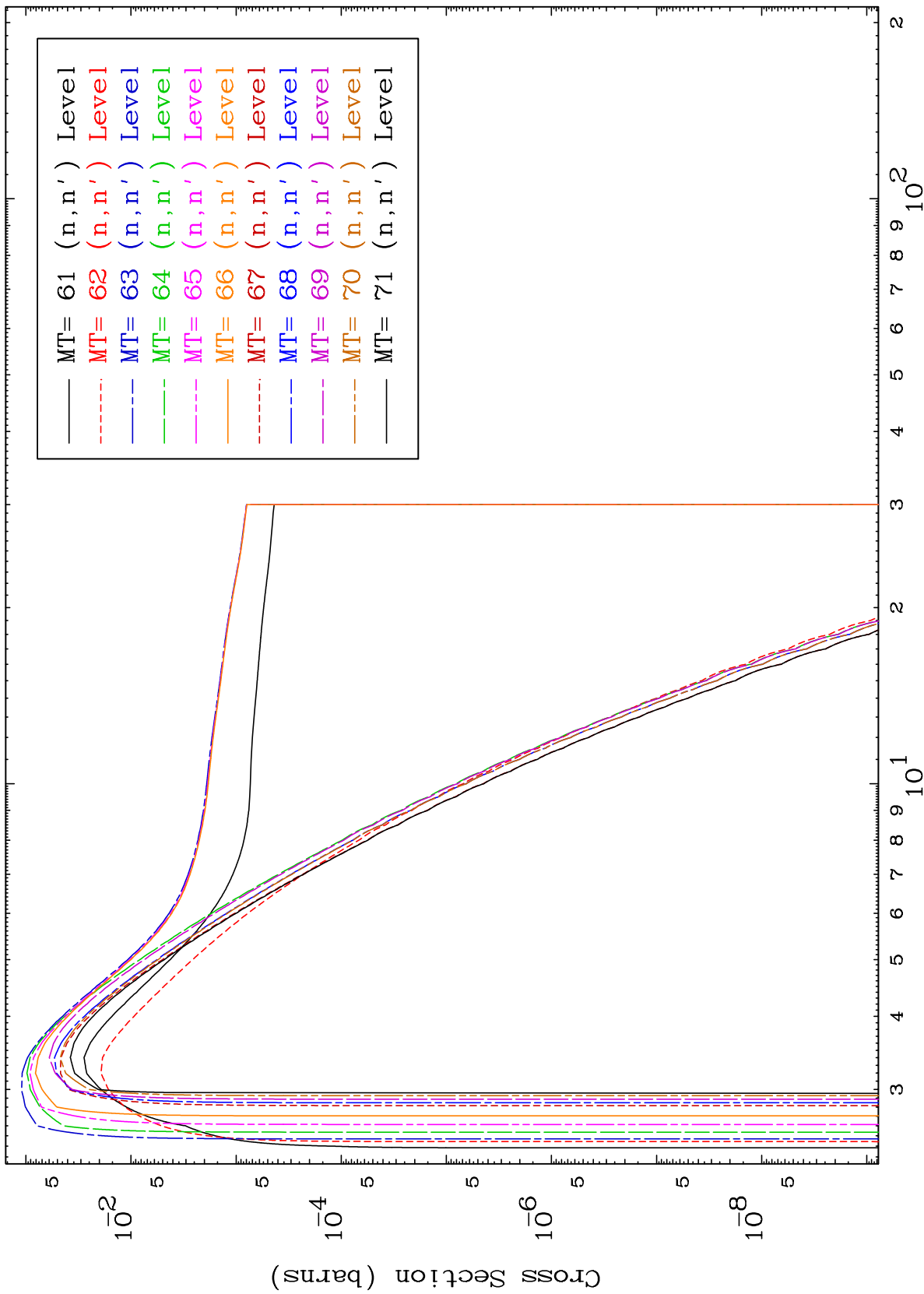


MAT 5825

(n,n') Level

58-Ce-136

293 Kelvin Cross Sections

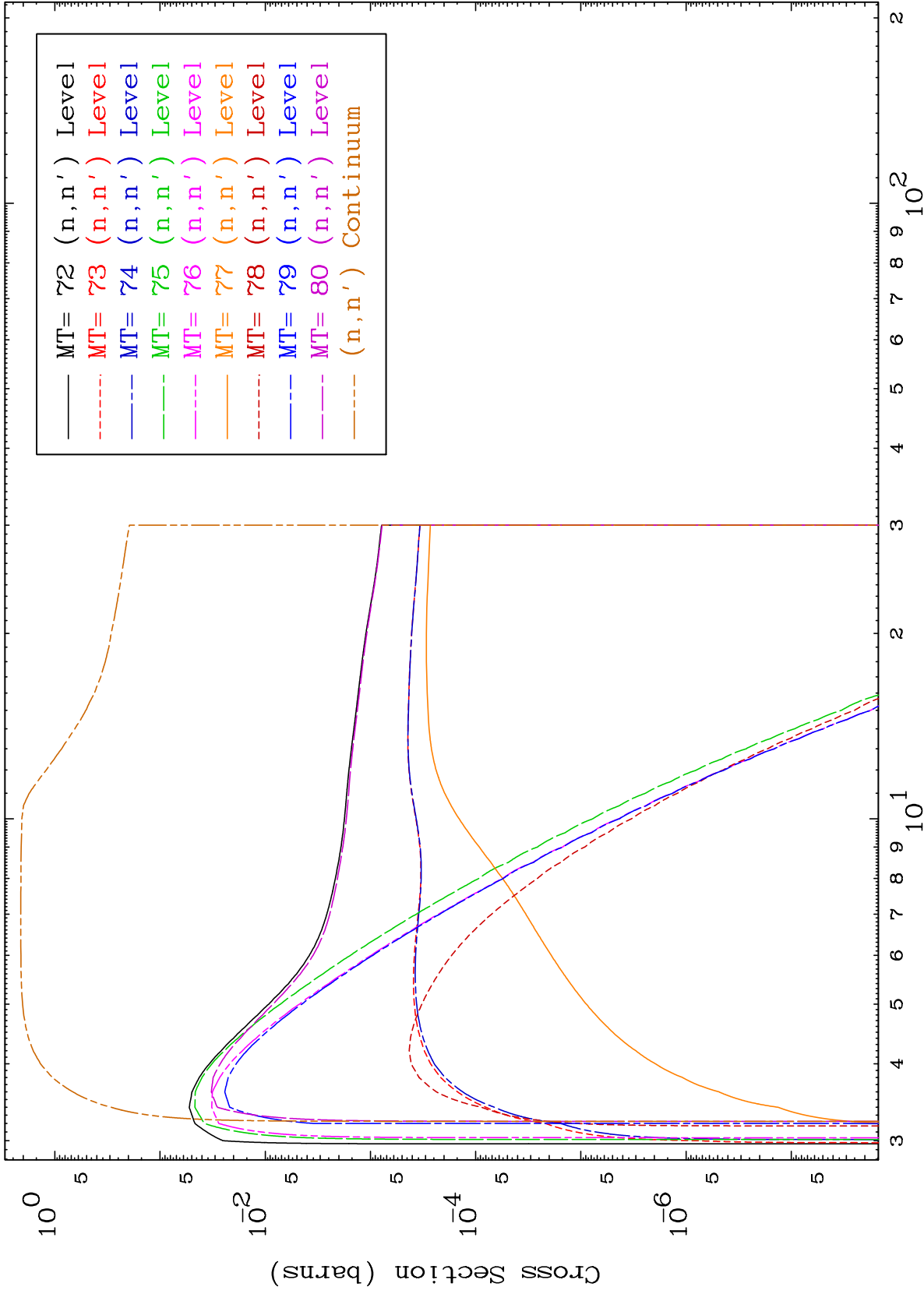


8

Incident Energy (MeV)

58-Ce-136

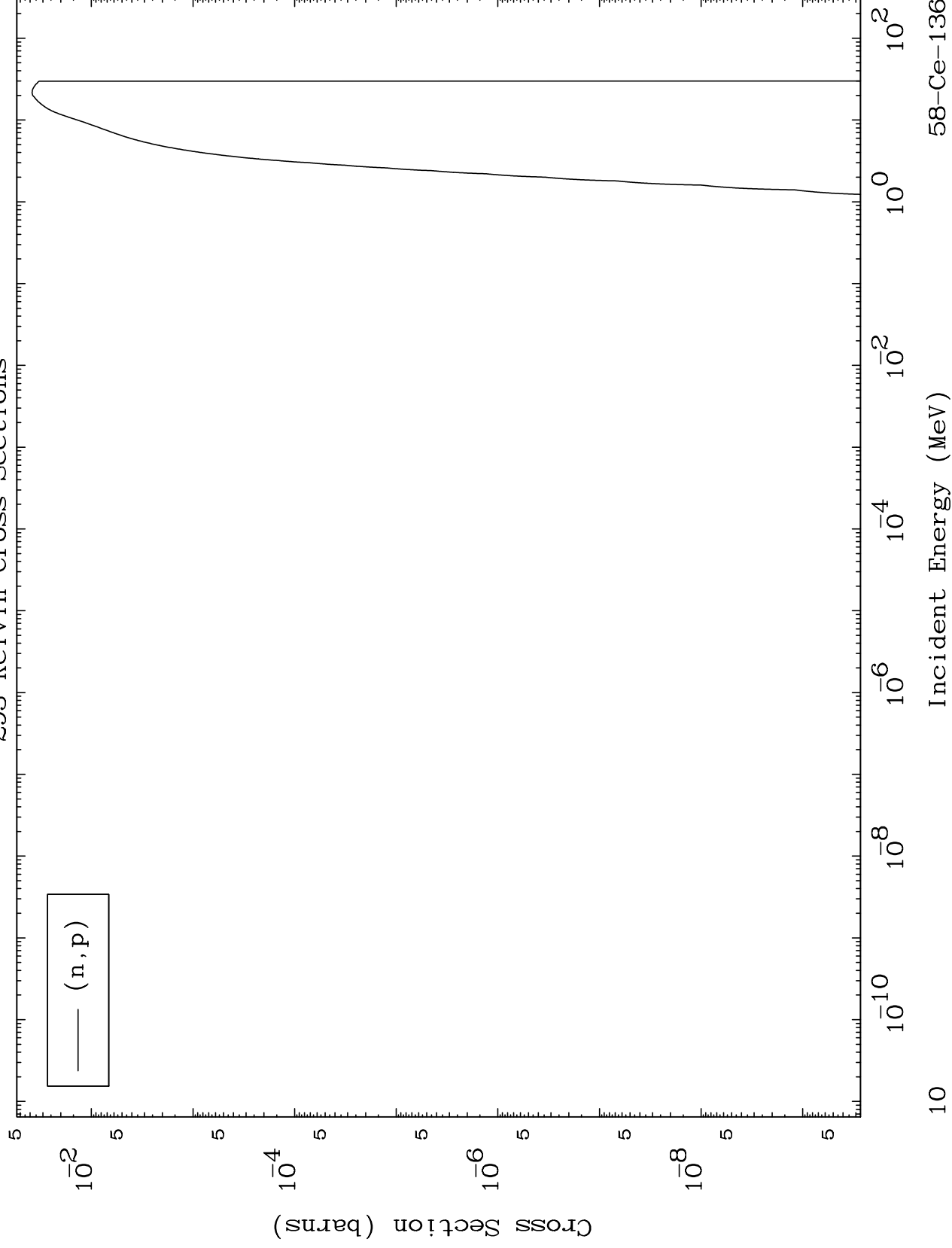
293 Kelvin Cross Sections



MAT 5825

(n,p) Levels  
293 Kelvin Cross Sections

58-Ce-136



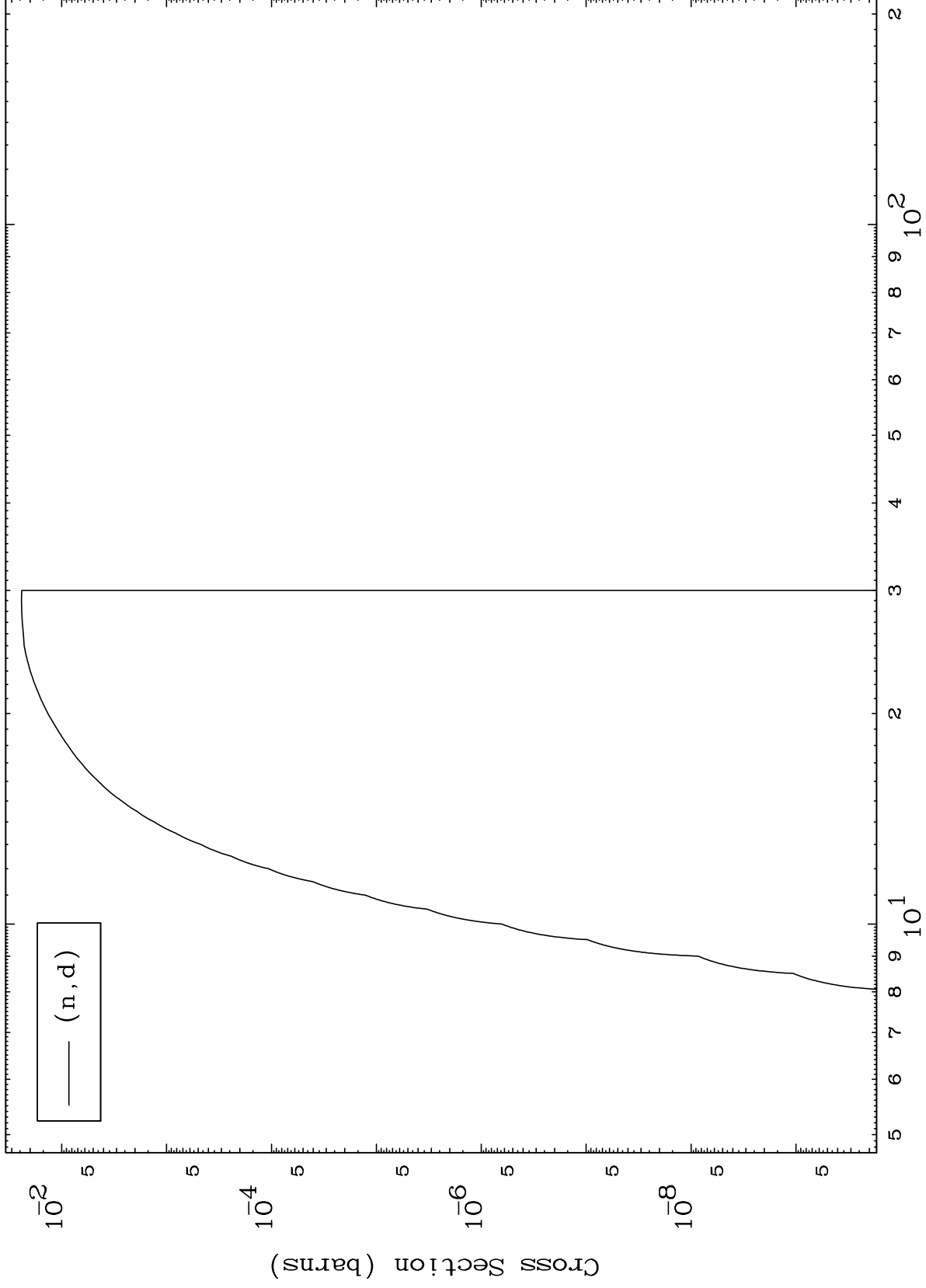
10

58-Ce-136

MAT 5825

(n,d) Levels  
293 Kelvin Cross Sections

58-Ce-136



11

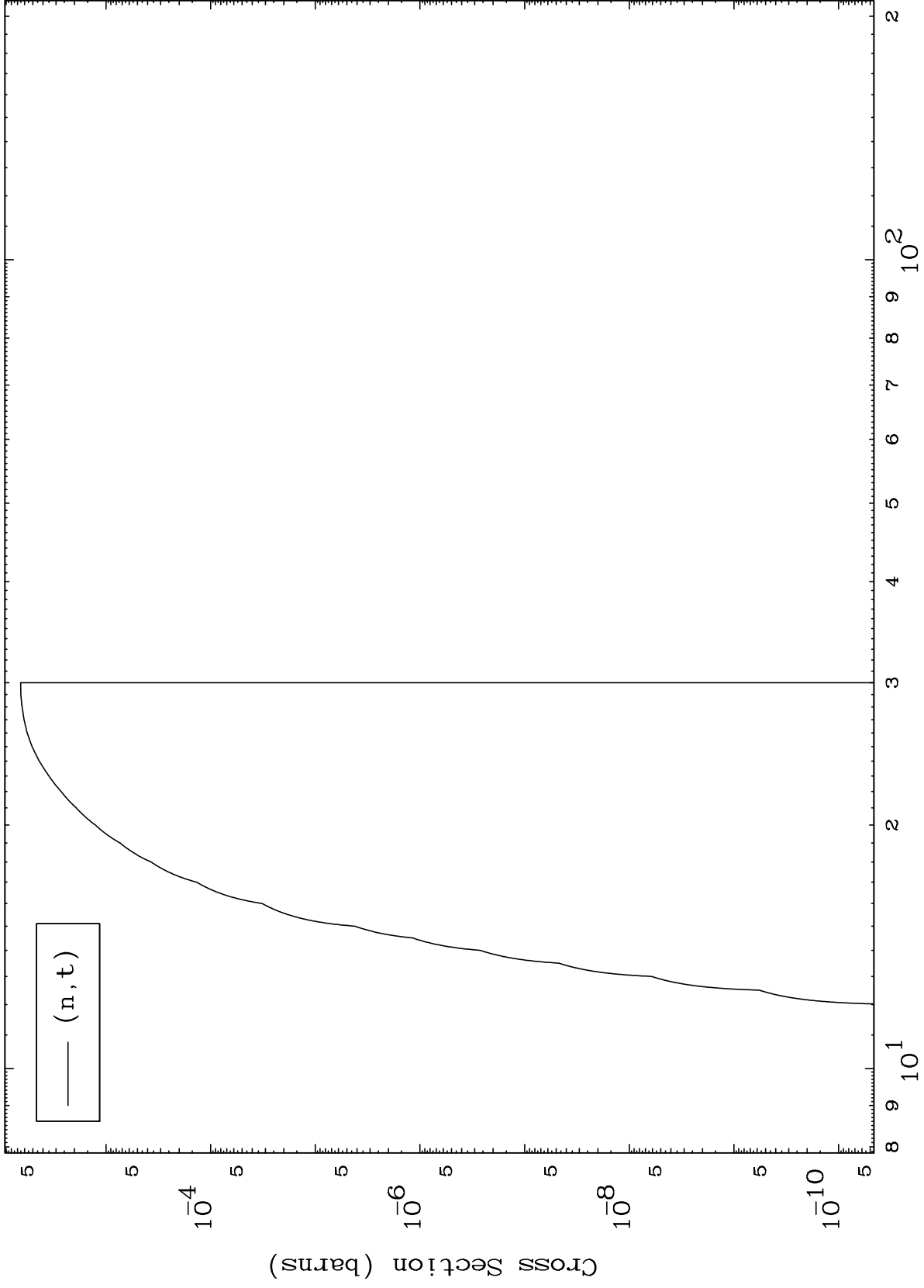
Incident Energy (MeV)

58-Ce-136

MAT 5825

(n,t) Levels  
293 Kelvin Cross Sections

58-Ce-136



12

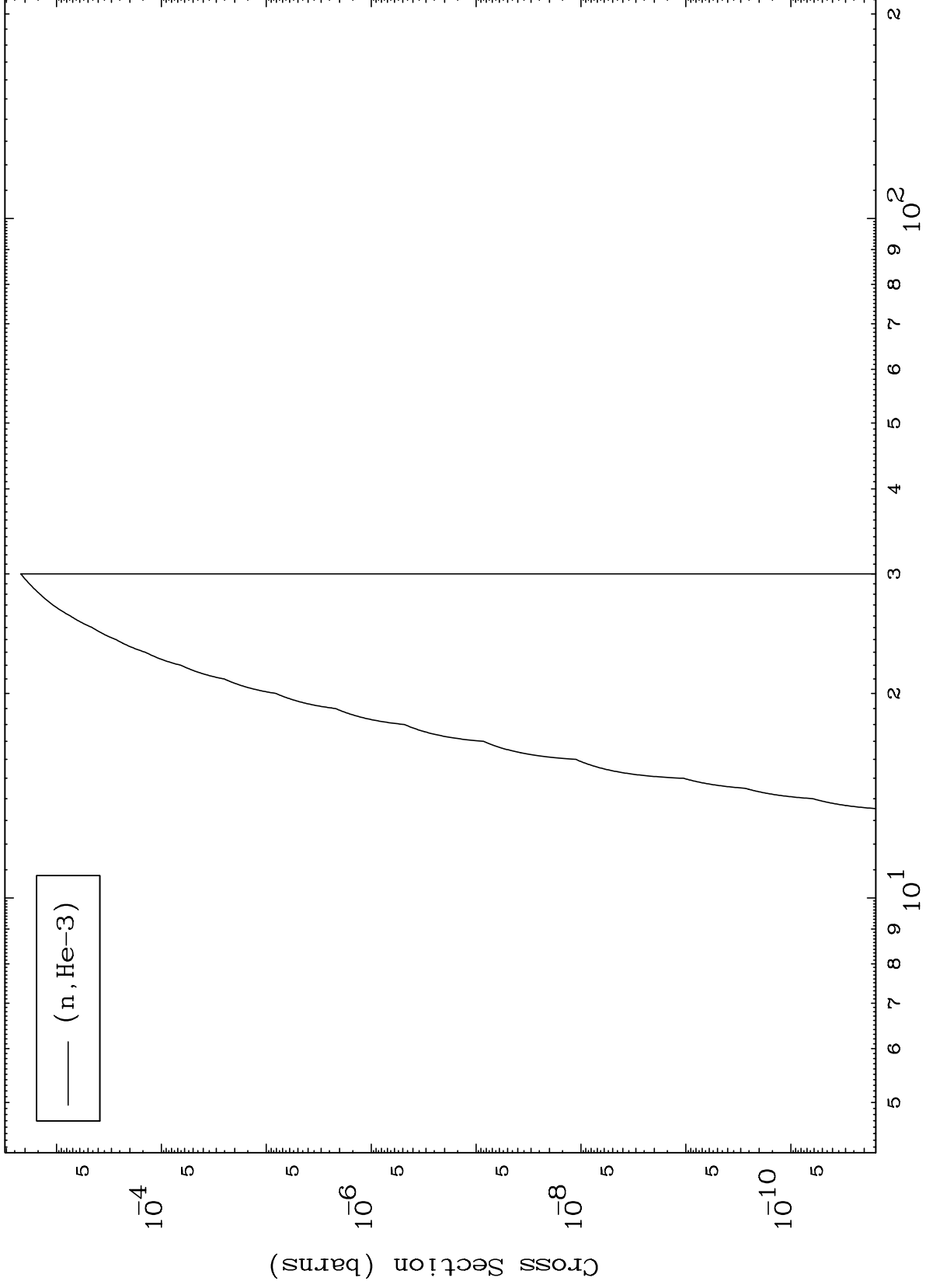
Incident Energy (MeV)

58-Ce-136

MAT 5825

(n,He3) Levels  
293 Kelvin Cross Sections

58-Ce-136



13

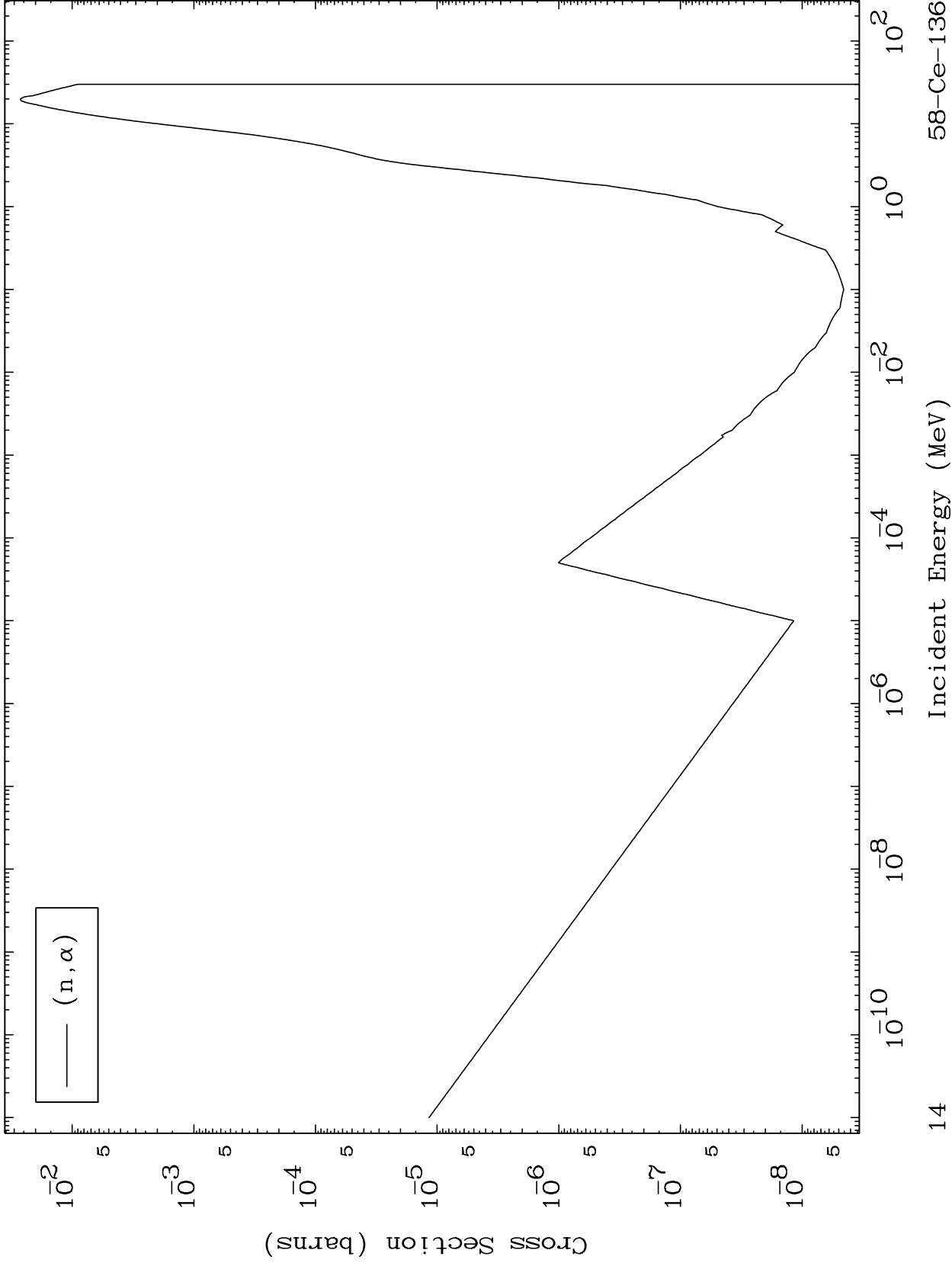
Incident Energy (MeV)

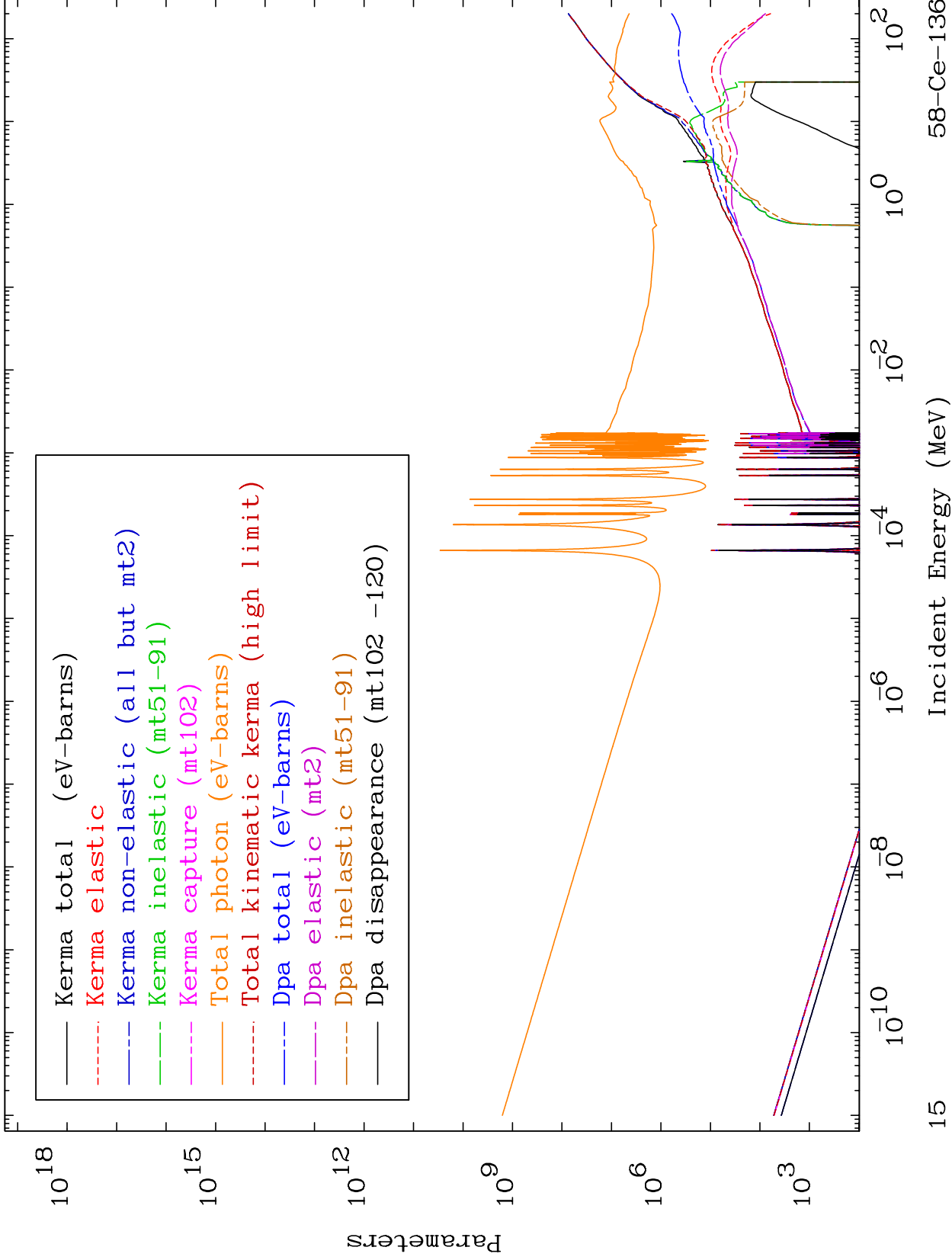
58-Ce-136

MAT 5825

(n,  $\alpha$ ) Levels  
293 Kelvin Cross Sections

58-Ce-136



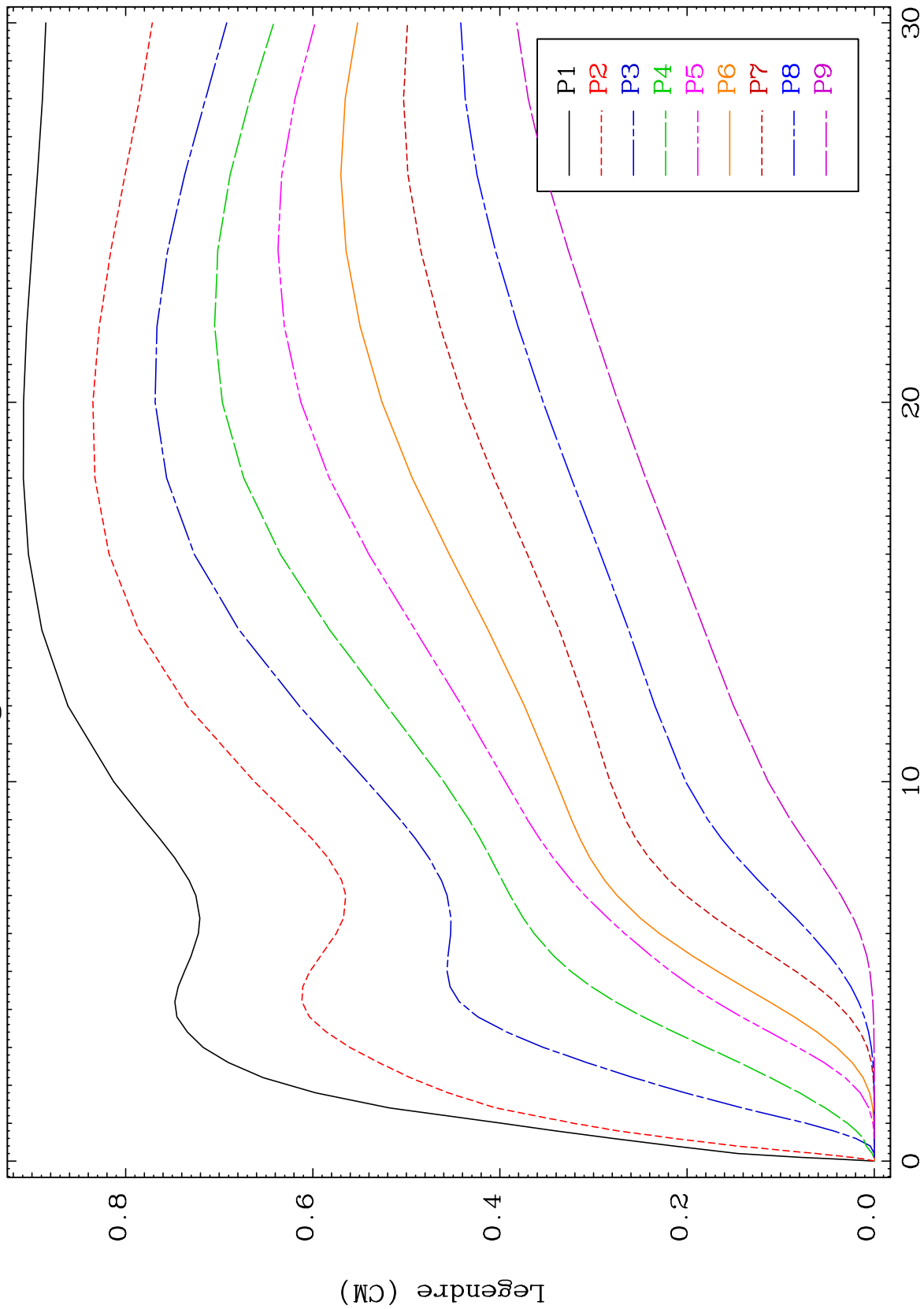




MAT 5825

Elastic Legendre Coefficients

58-Ce-136



16

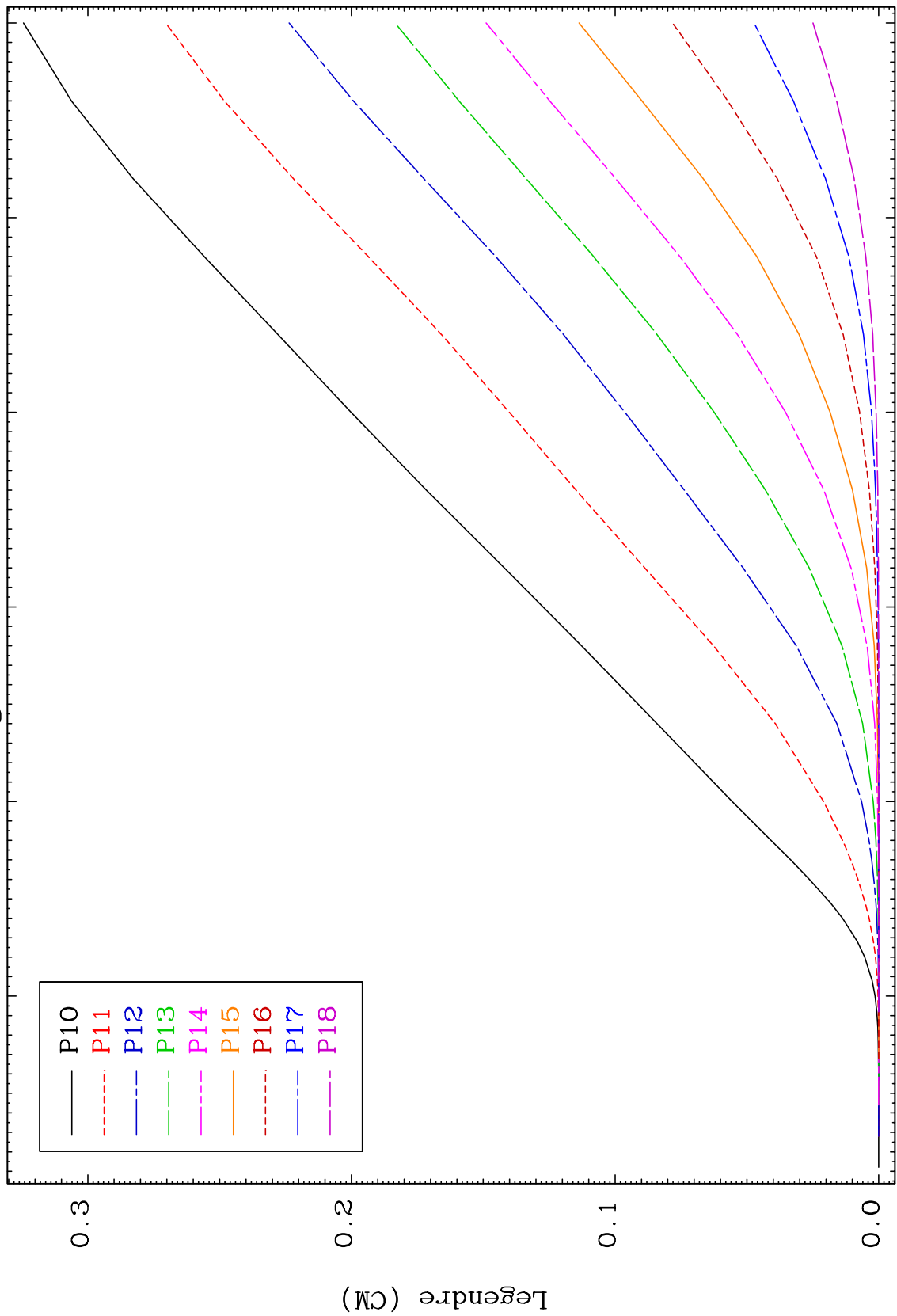
Incident Energy (MeV)

58-Ce-136

MAT 5825

Elastic Legendre Coefficients

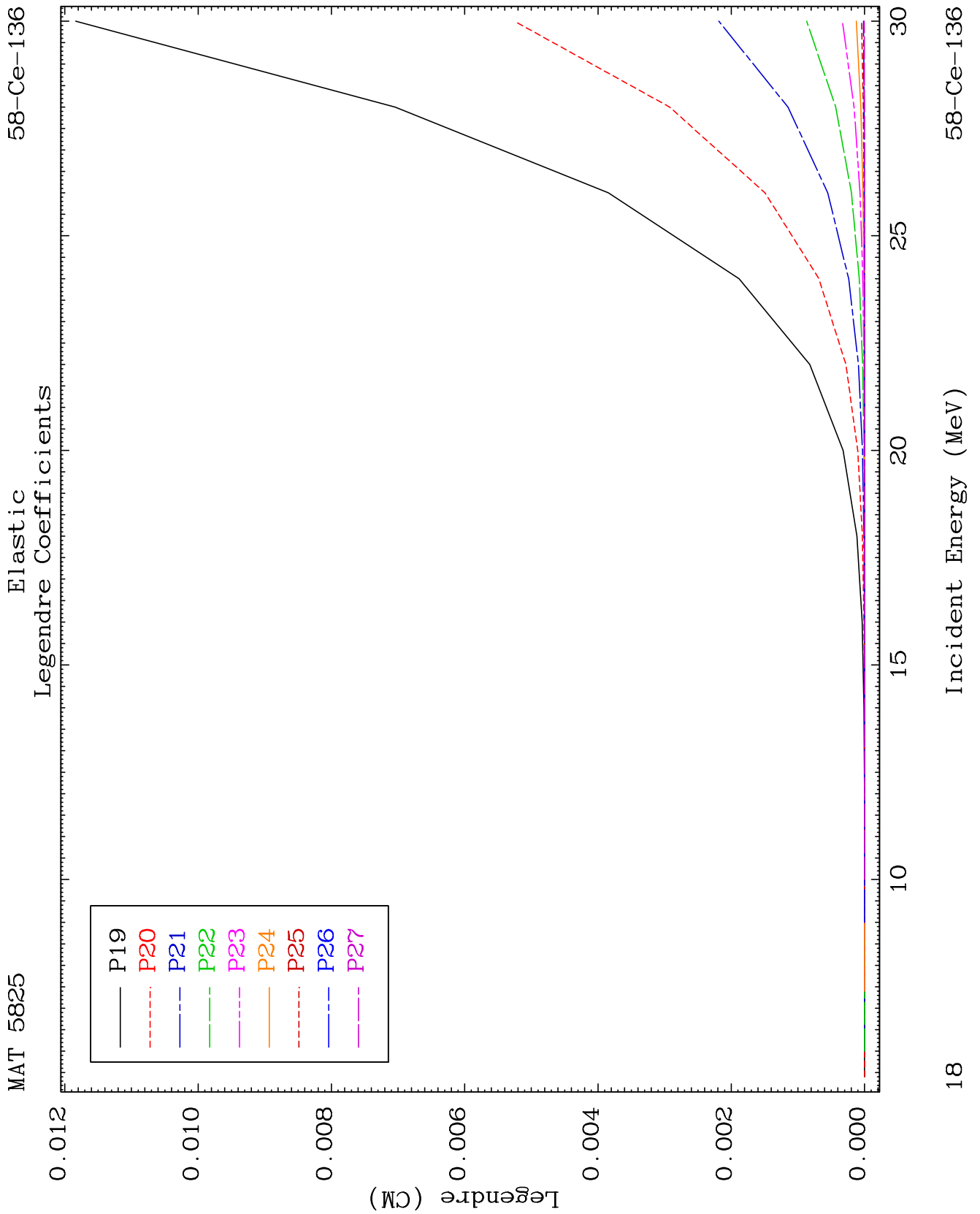
58-Ce-136



17

Incident Energy (MeV)

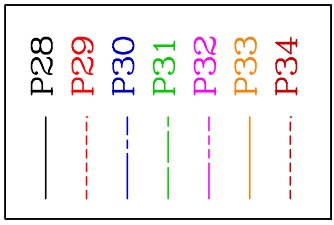
58-Ce-136



MAT 5825

Elastic Legendre Coefficients

58-Ce-136



$\times 10^{-6}$

1.2

0.8

0.4

0.0

Legendre (CM)

15

20

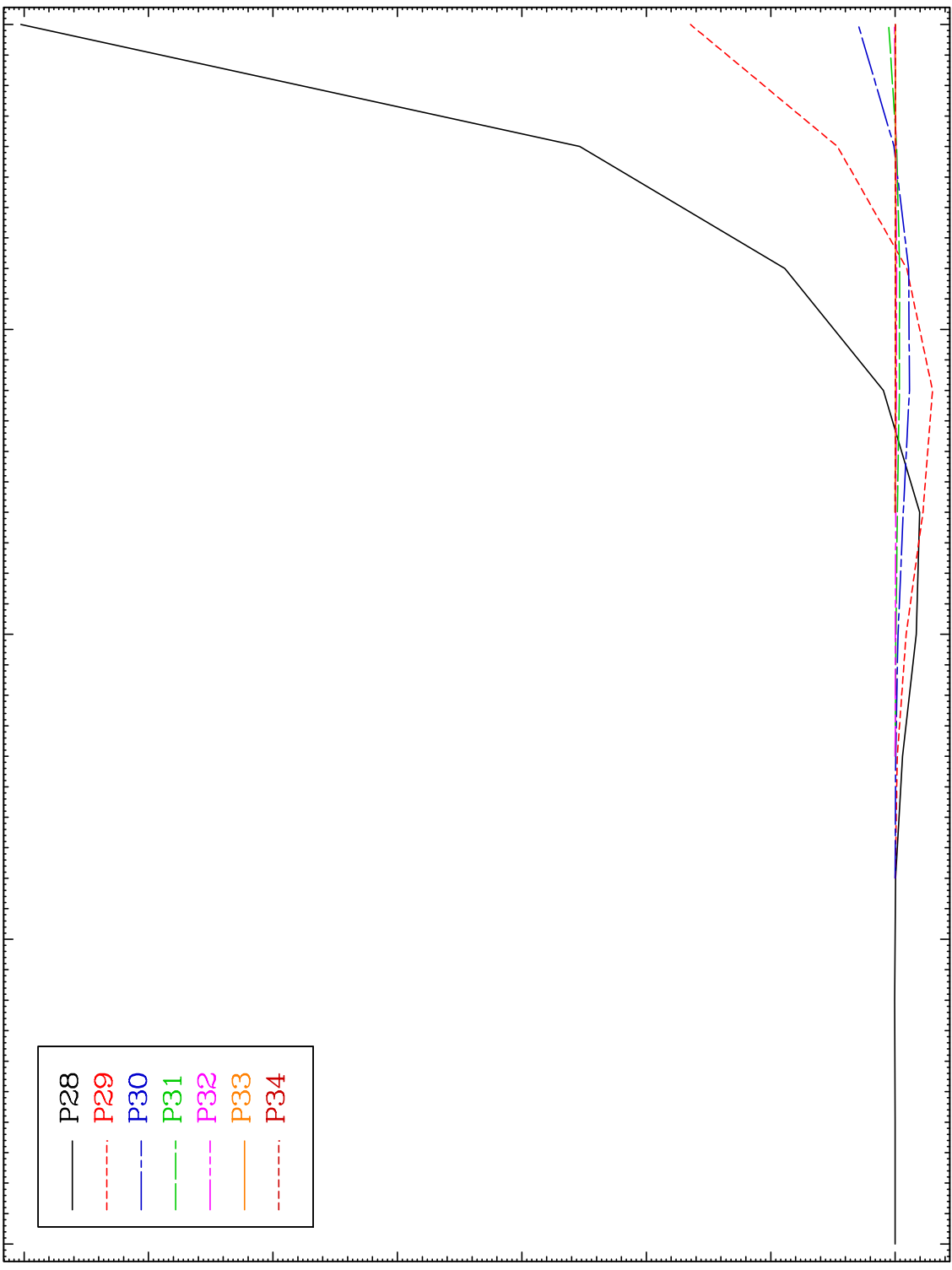
25

30

19

Incident Energy (MeV)

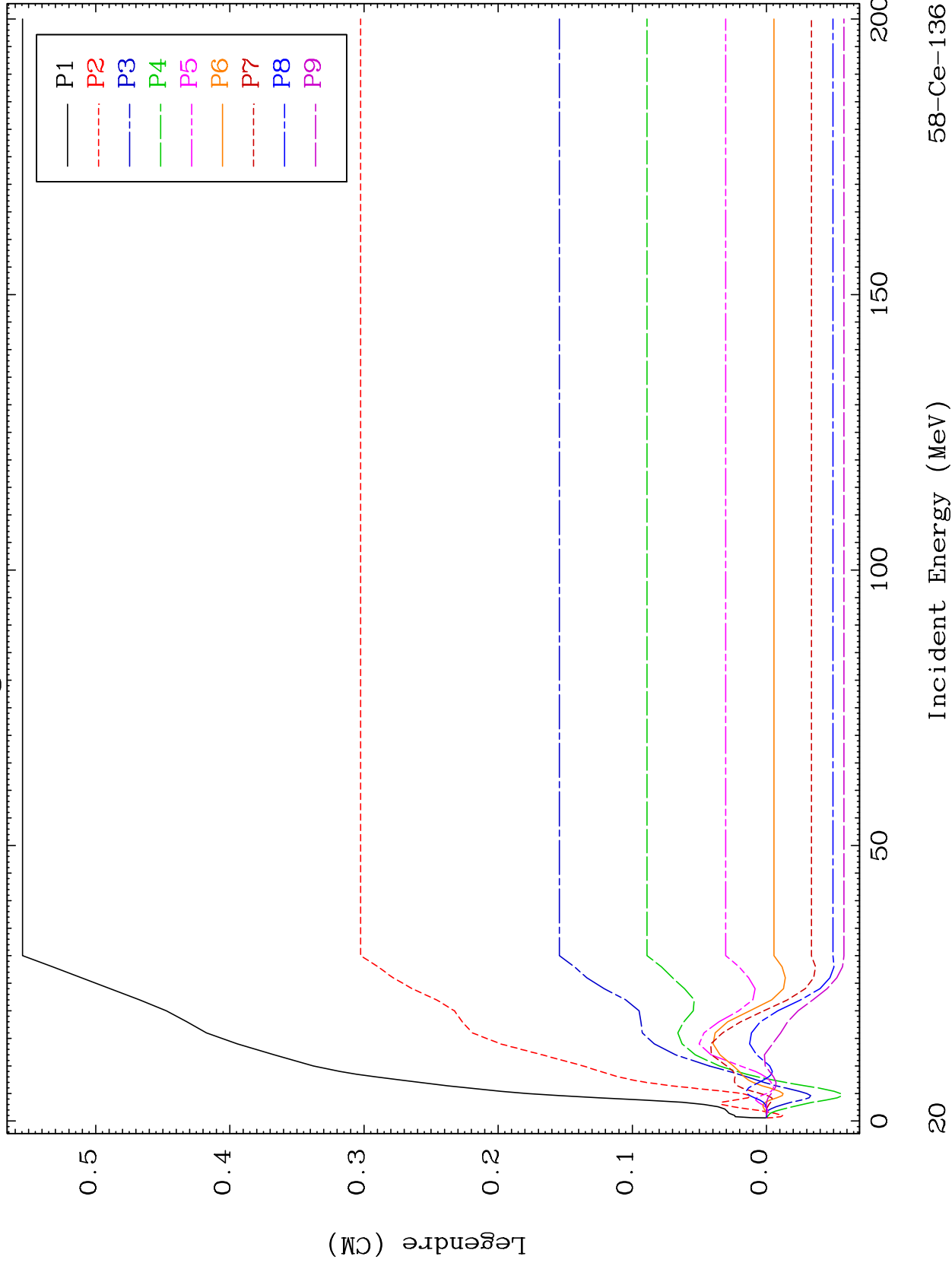
58-Ce-136



MAT 5825

MT= 51 (n,n') Level  
Legendre Coefficients

58-Ce-136



58-Ce-136

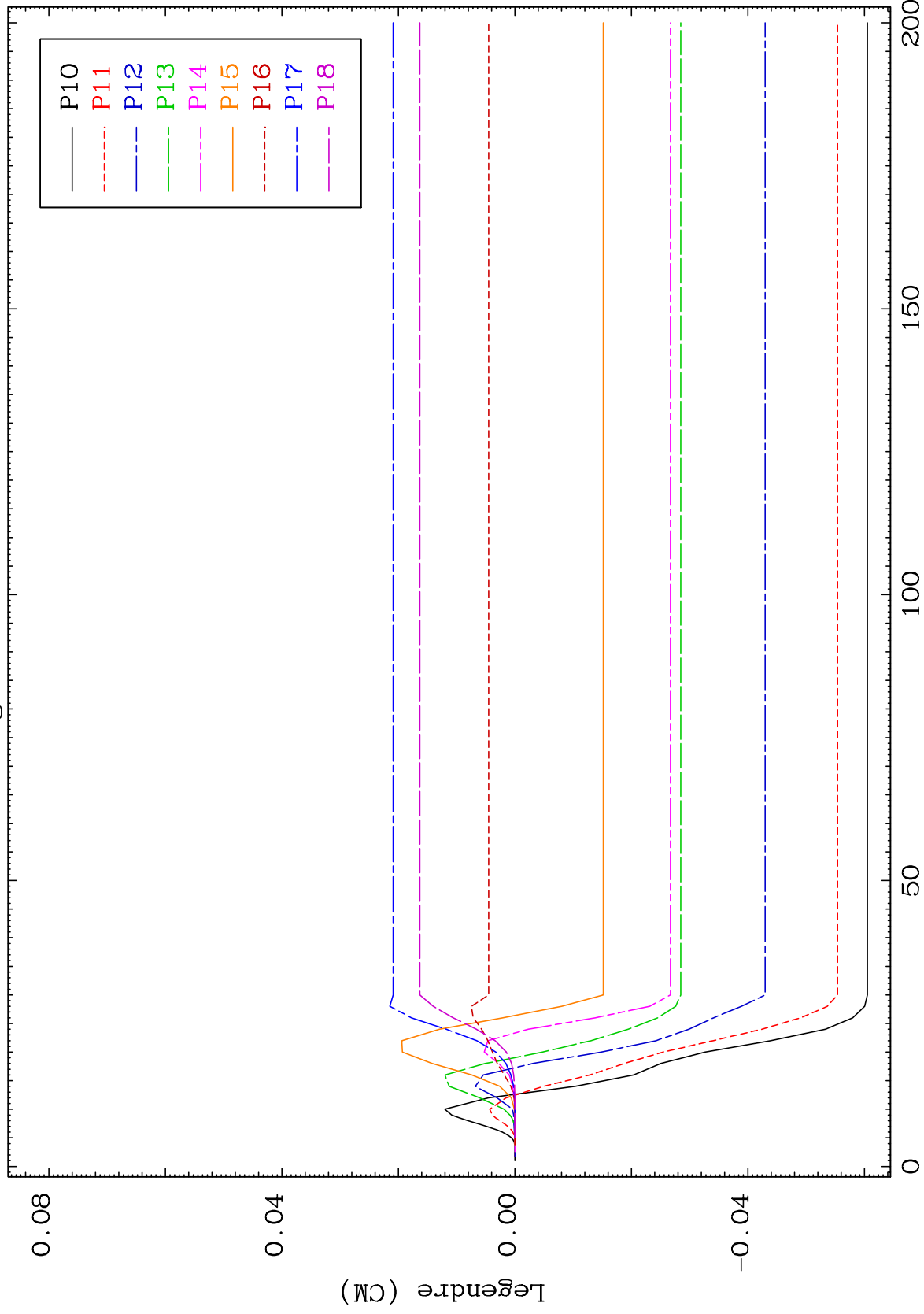
Incident Energy (MeV)

0

MAT 5825

MT= 51 (n,n') Level  
Legendre Coefficients

58-Ce-136



21

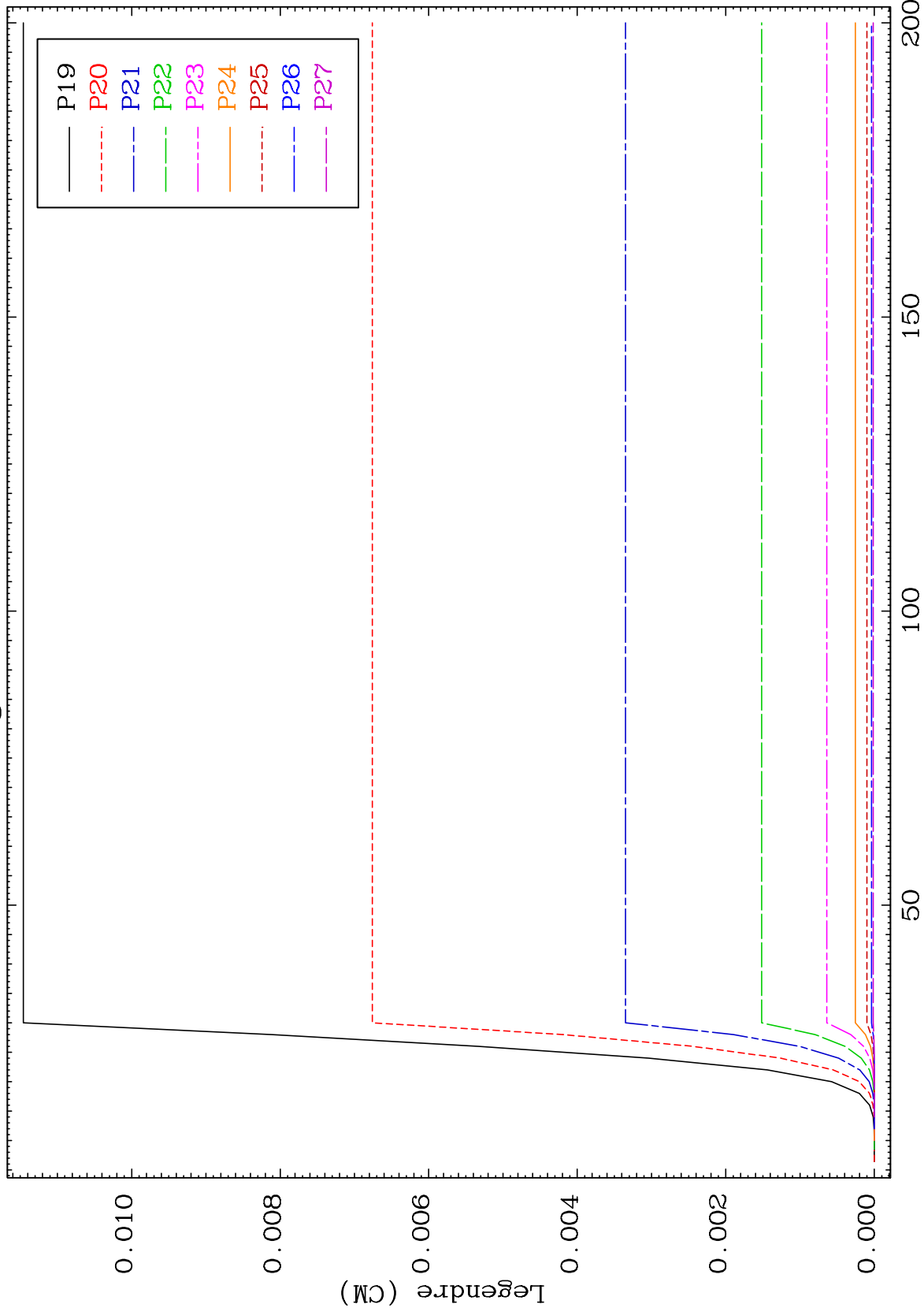
Incident Energy (MeV)

58-Ce-136

MAT 5825

MT= 51 (n,n') Level  
Legendre Coefficients

58-Ce-136



22

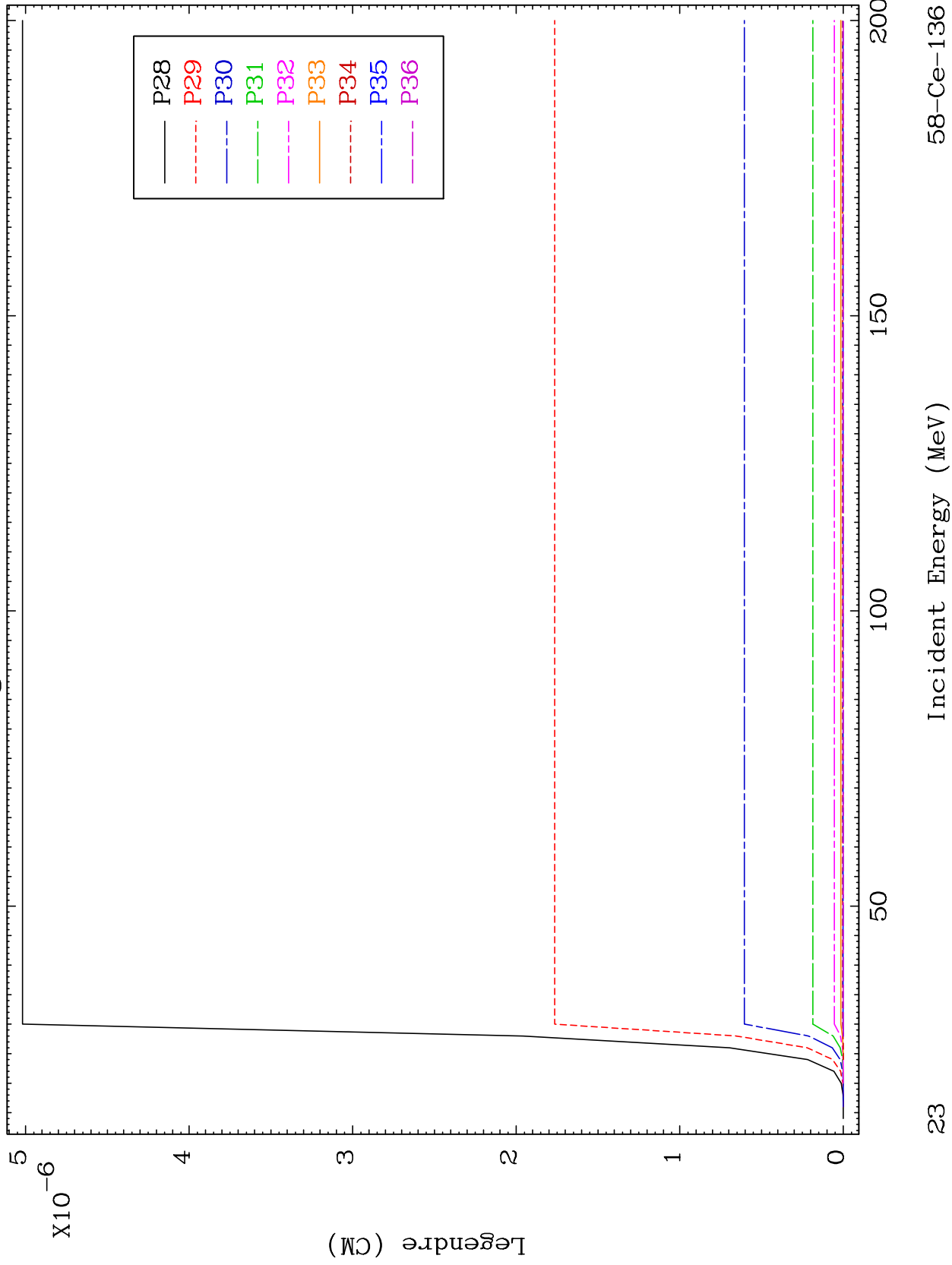
Incident Energy (MeV)

58-Ce-136

MAT 5825

MT= 51 (n,n') Level  
Legendre Coefficients

58-Ce-136

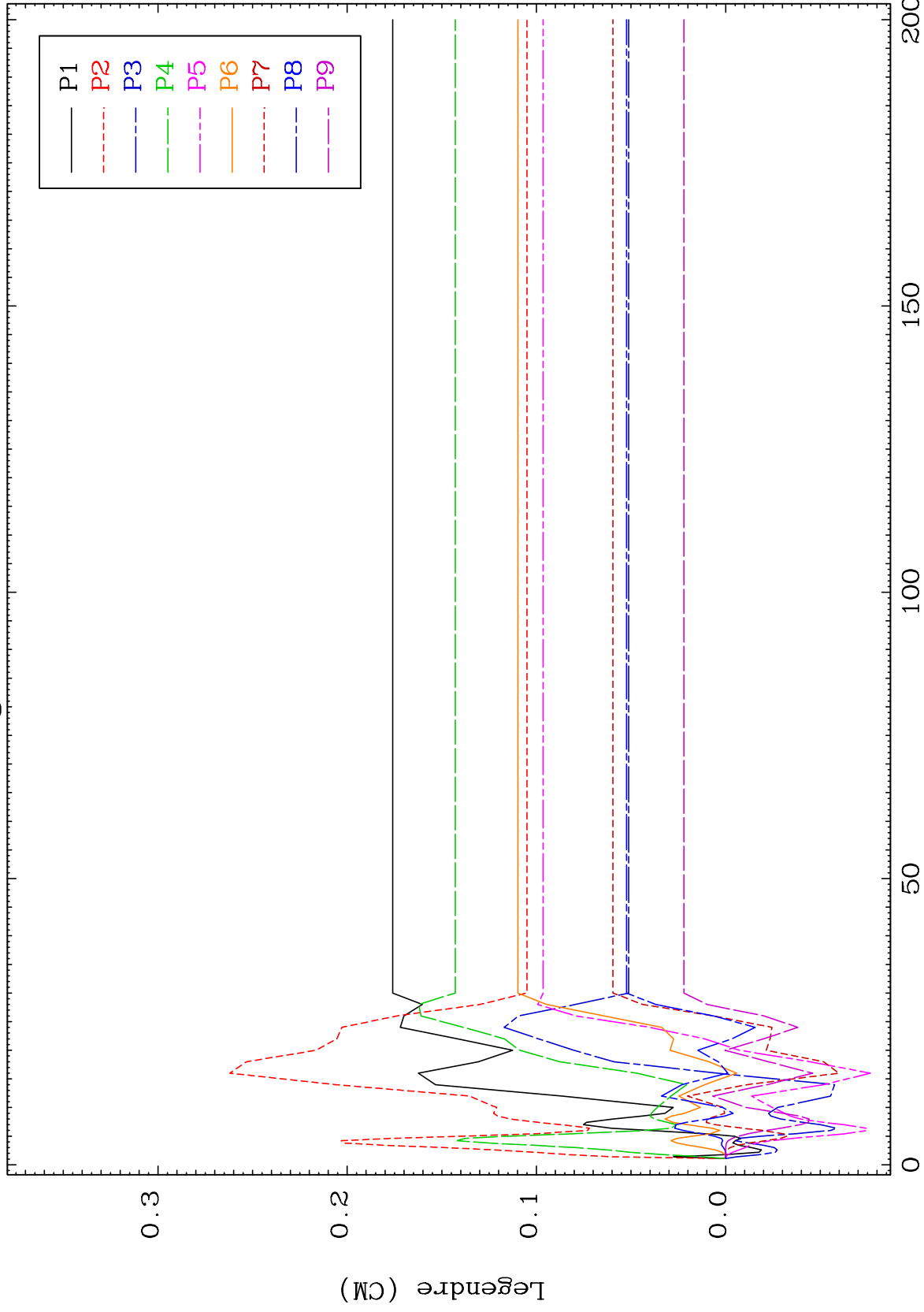




MAT 5825

MT= 52 (n,n') Level  
Legendre Coefficients

58-Ce-136



24

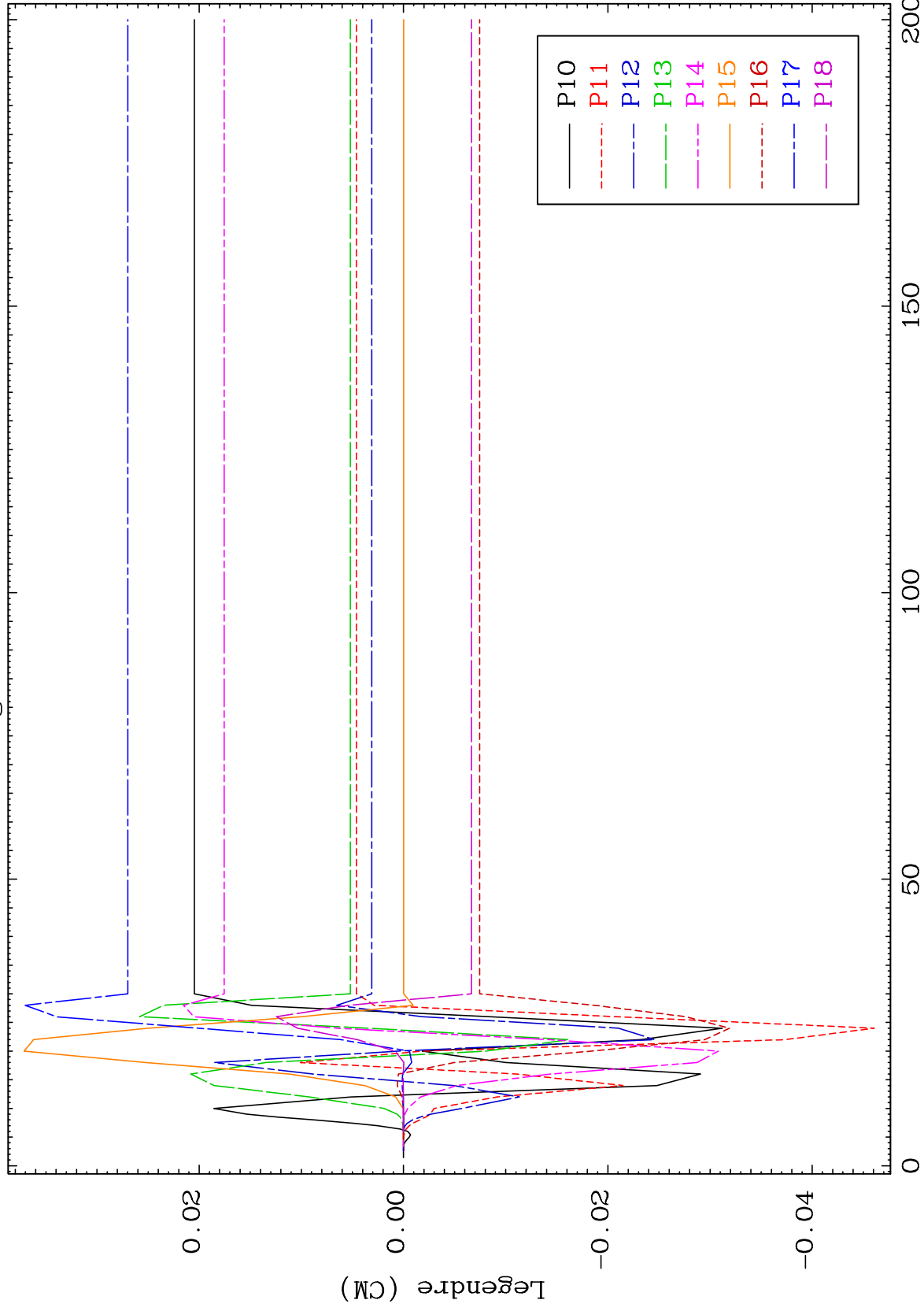
Incident Energy (MeV)

58-Ce-136

MAT 5825

MT= 52 (n,n') Level  
Legendre Coefficients

58-Ce-136



25

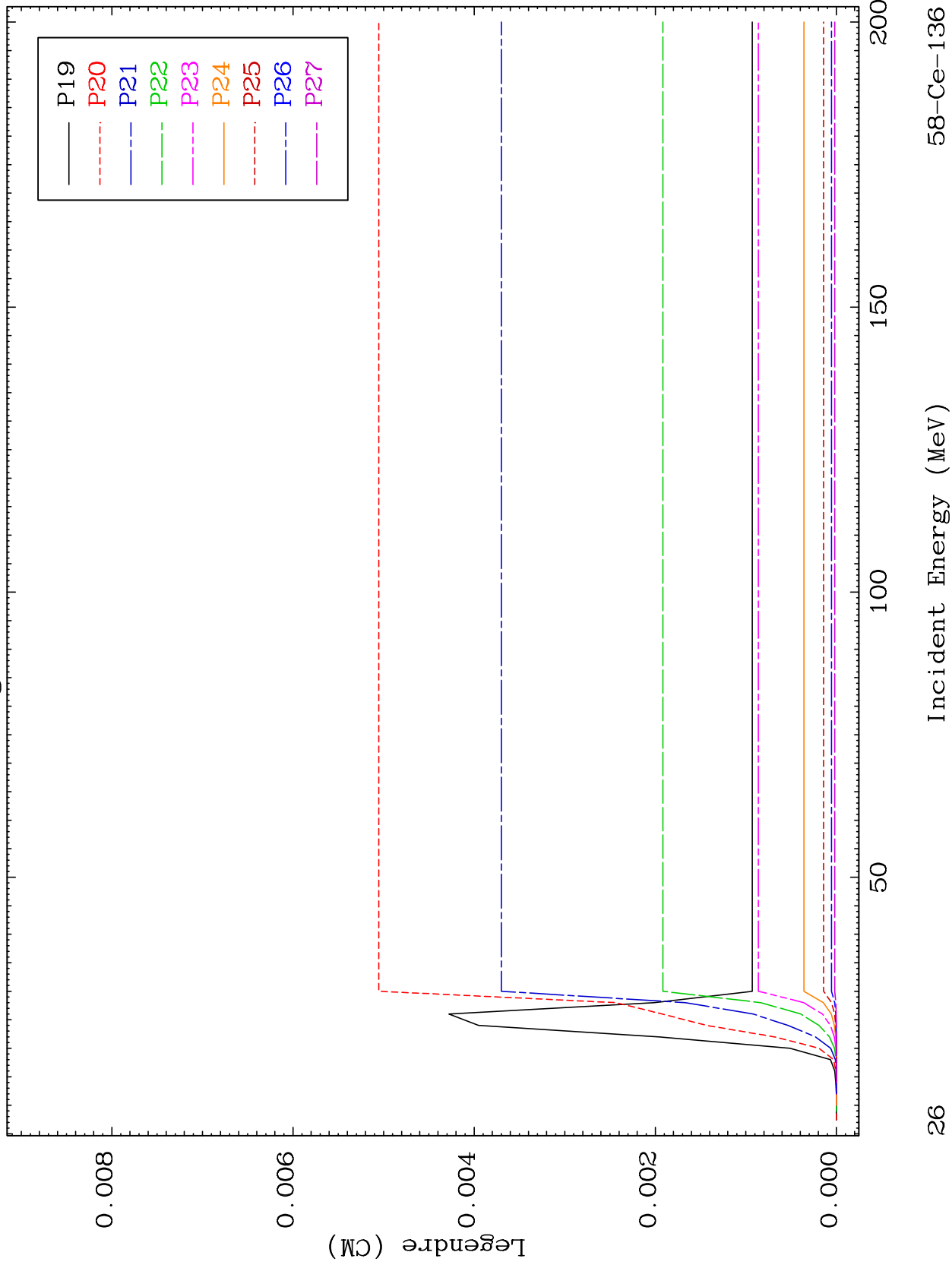
Incident Energy (MeV)

58-Ce-136

MAT 5825

MT= 52 (n,n') Level  
Legendre Coefficients

58-Ce-136



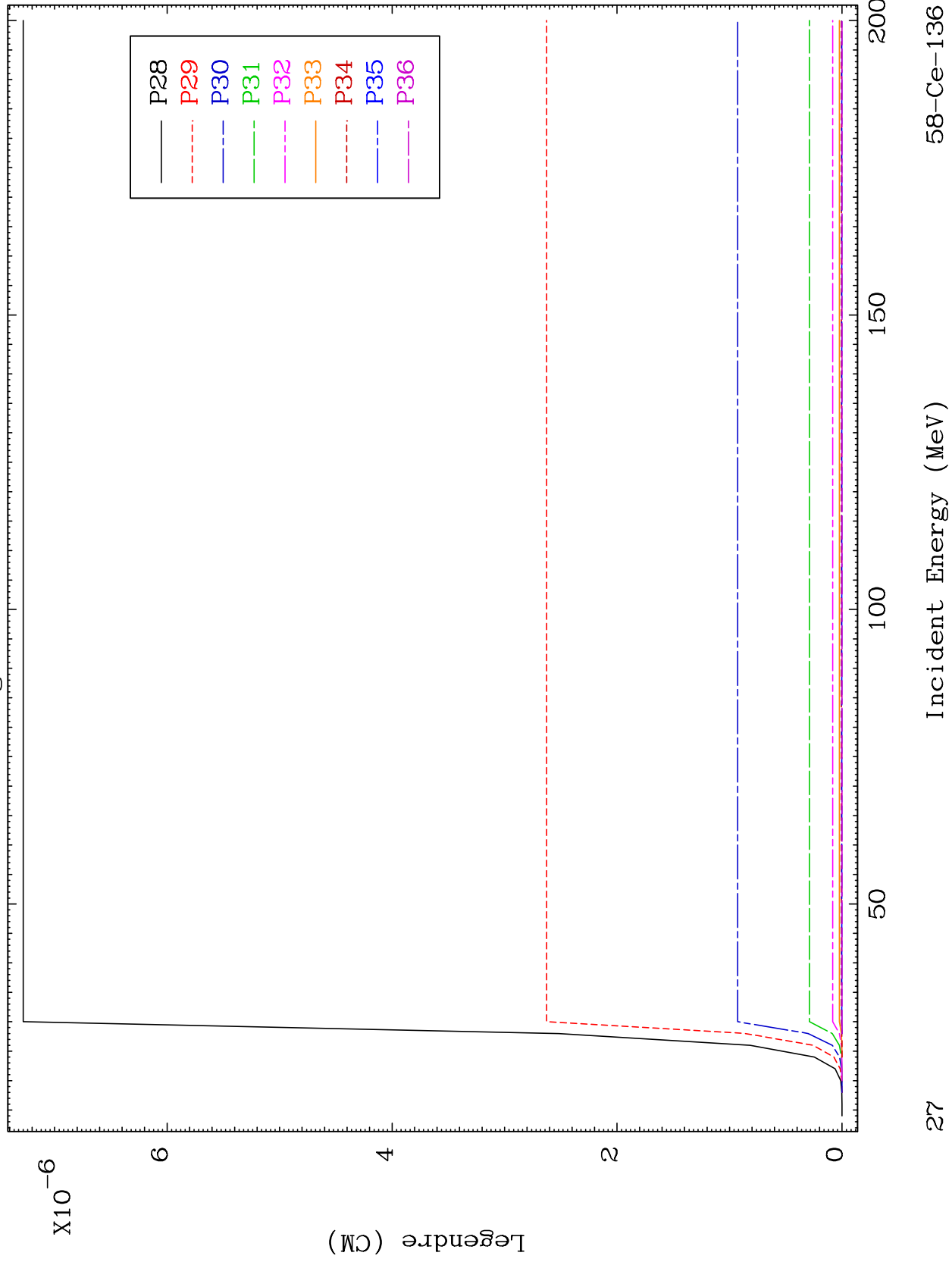
26

58-Ce-136

MAT 5825

MT= 52 (n,n') Level  
Legendre Coefficients

58-Ce-136

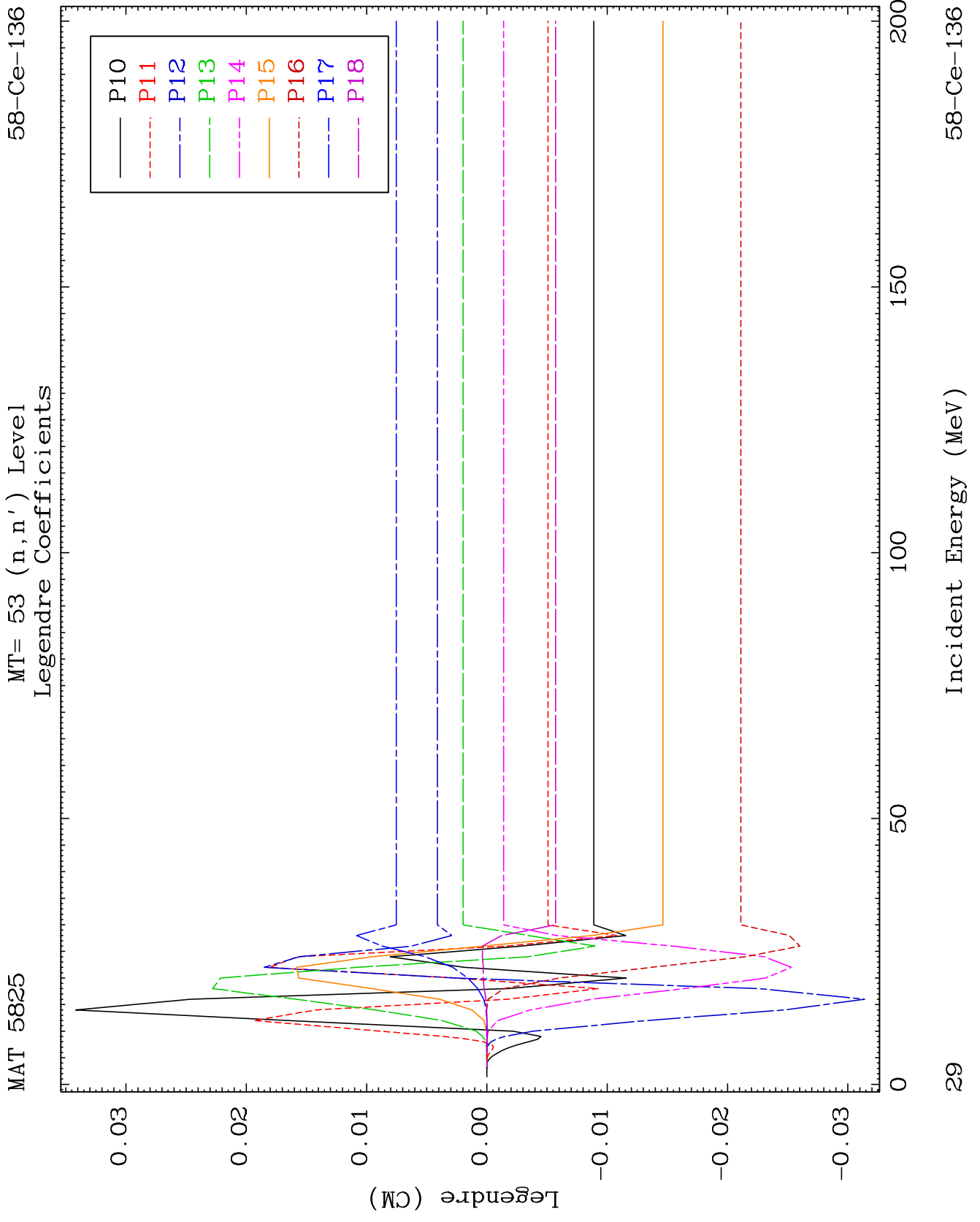


27

Incident Energy (MeV)

58-Ce-136

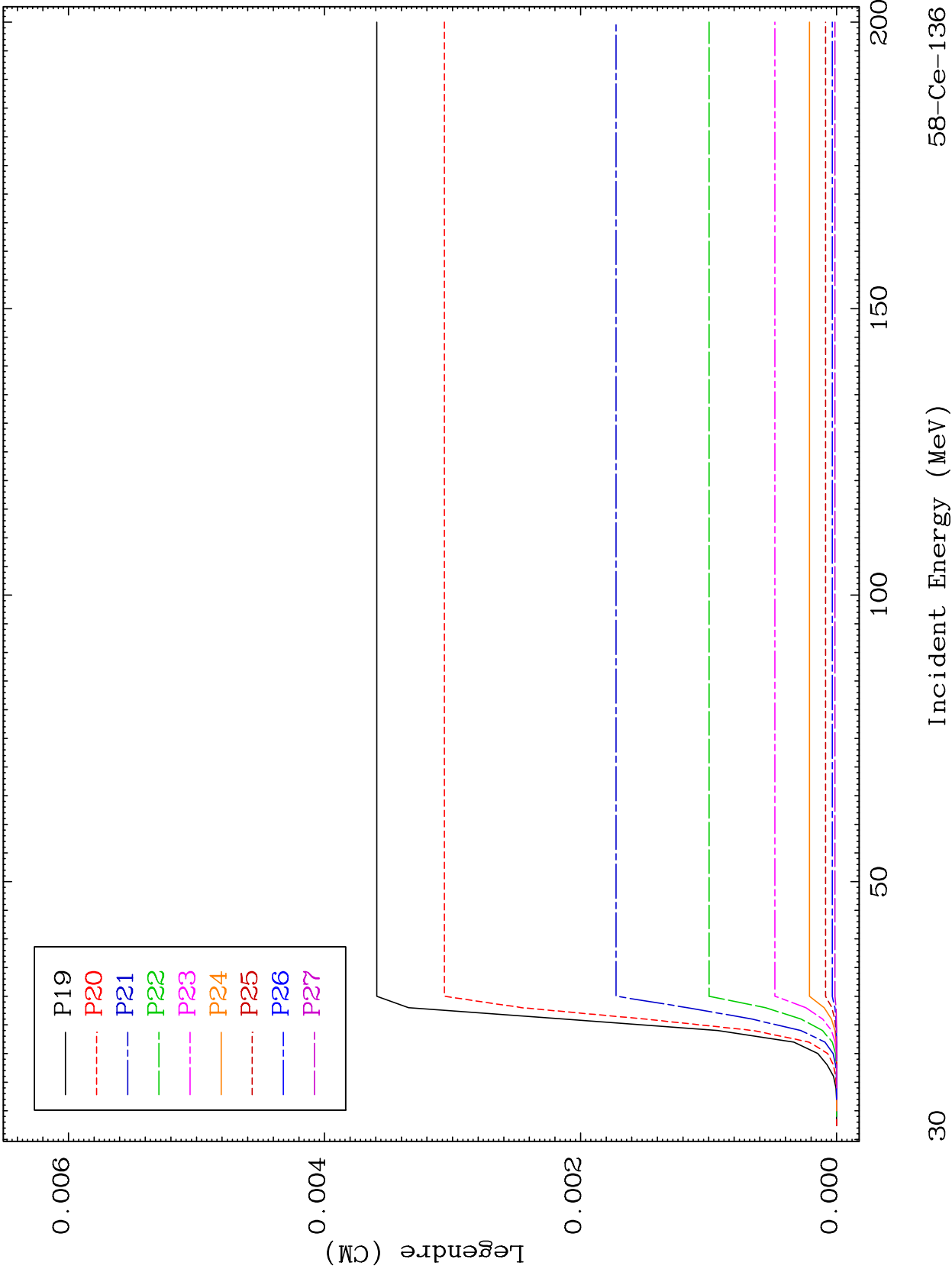




MAT 5825

MT= 53 (n,n') Level  
Legendre Coefficients

58-Ce-136



30

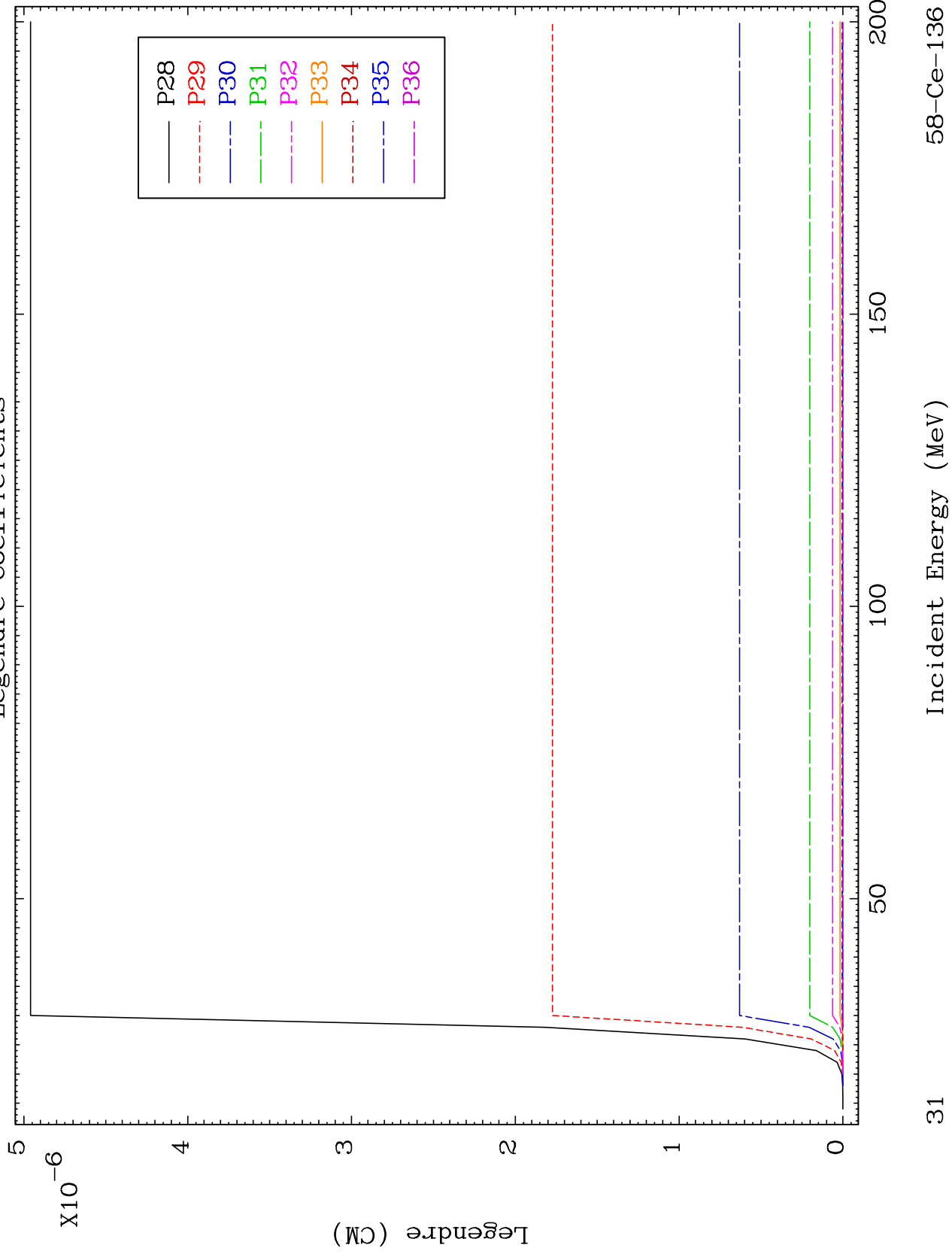
Incident Energy (MeV)

58-Ce-136

MAT 5825

MT= 53 (n,n') Level  
Legendre Coefficients

58-Ce-136



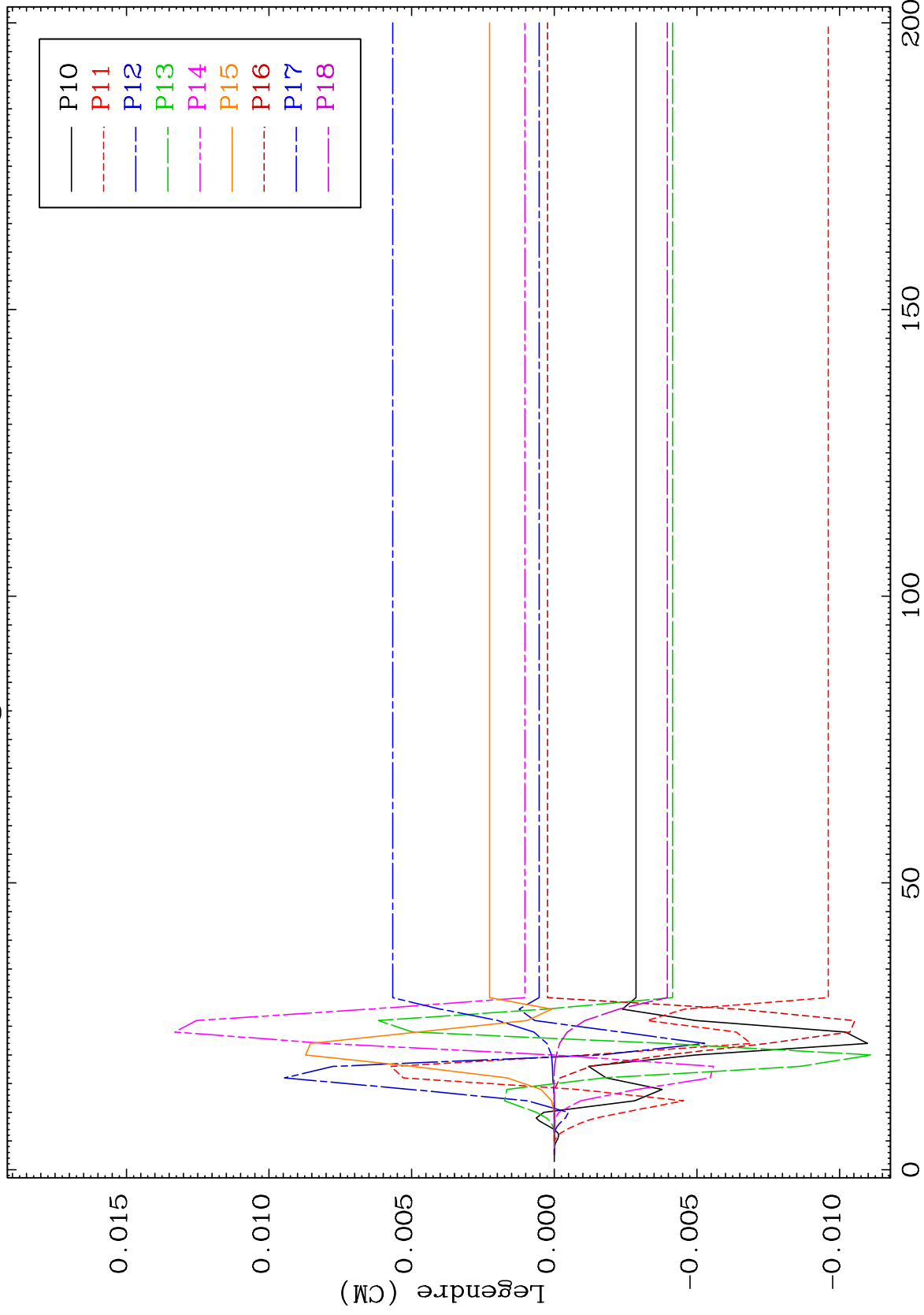




MAT 5825

MT= 54 (n,n') Level  
Legendre Coefficients

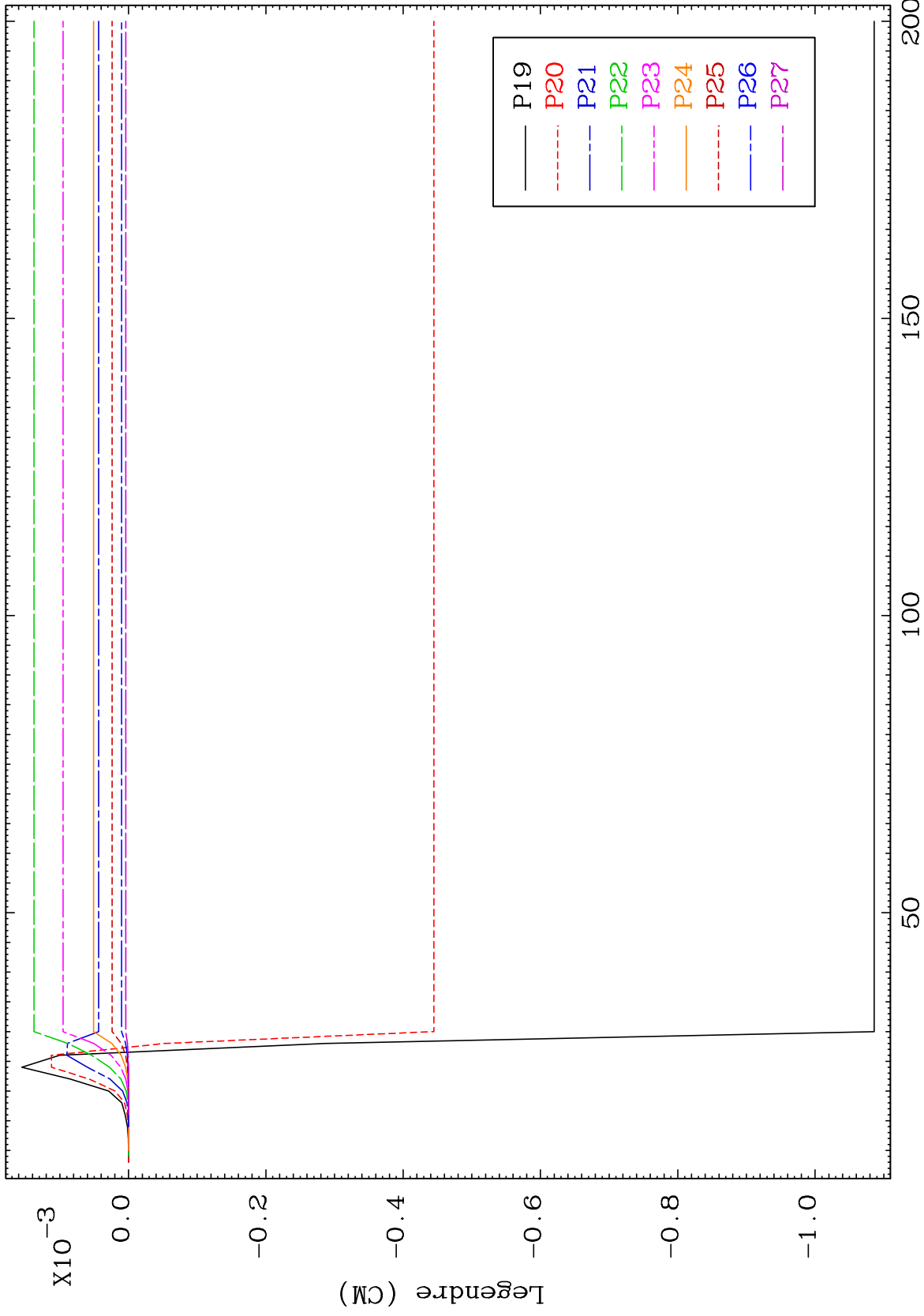
58-Ce-136



33

Incident Energy (MeV)

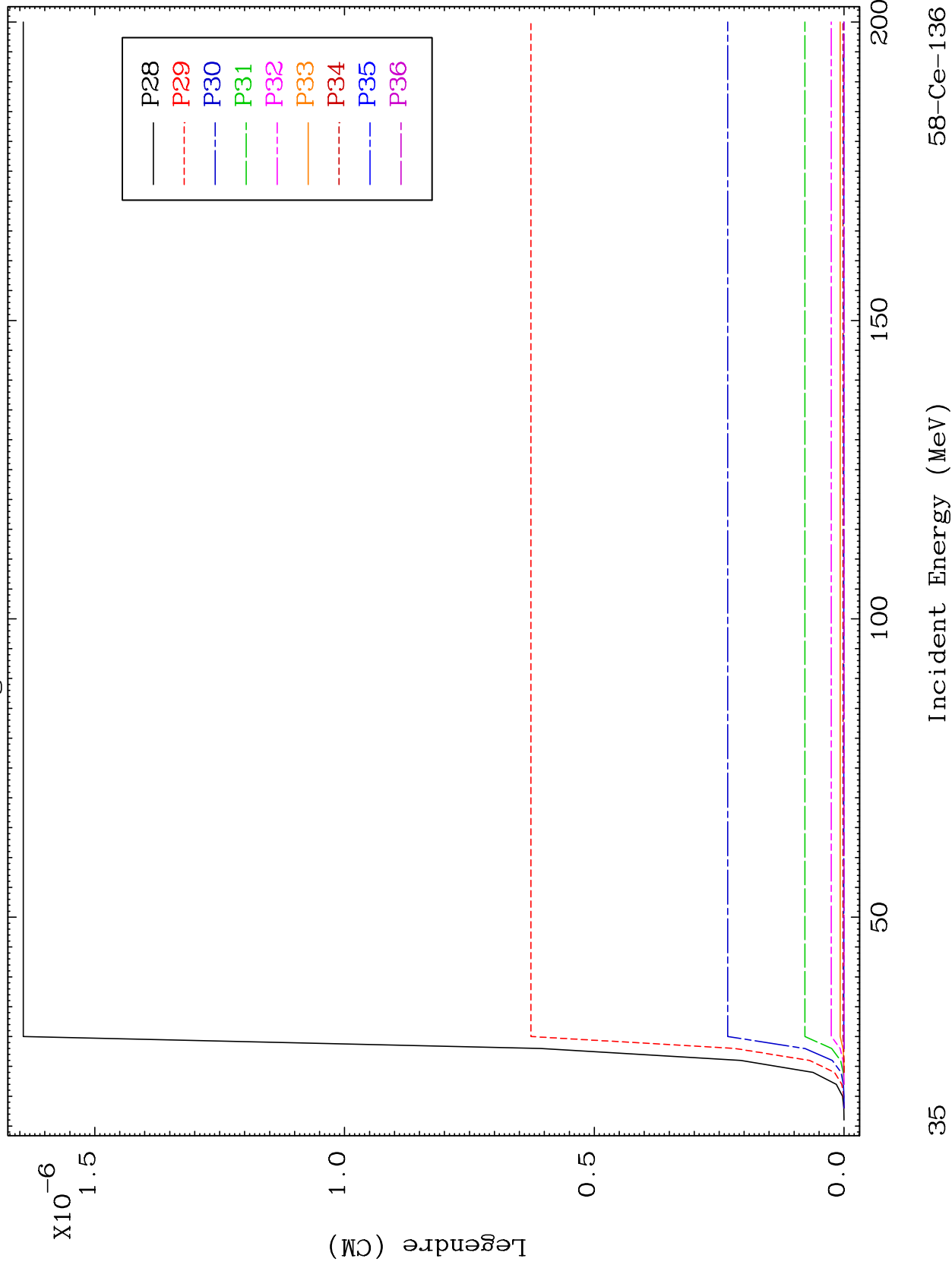
58-Ce-136

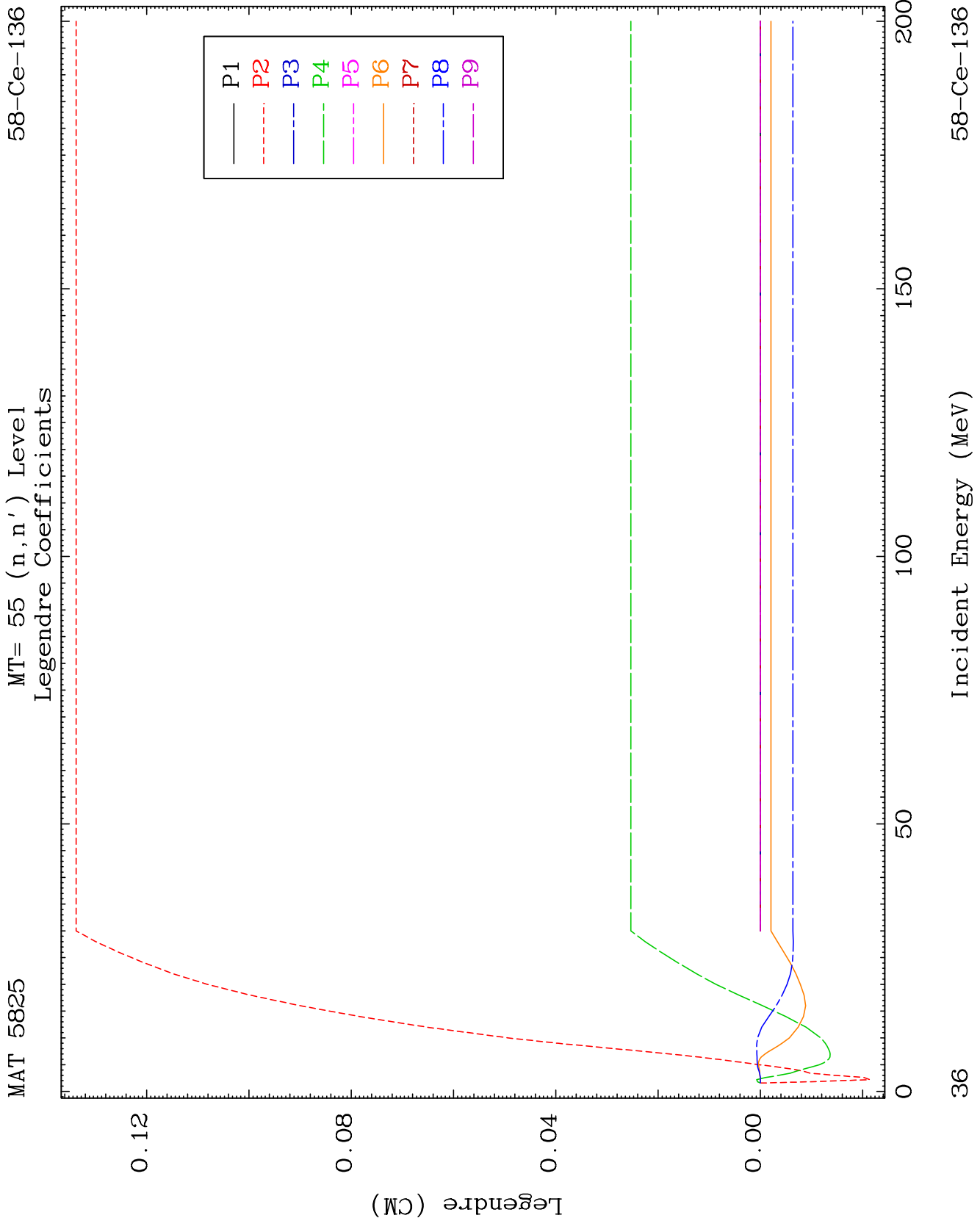


MAT 5825

MT= 54 (n,n') Level  
Legendre Coefficients

58-Ce-136





58-Ce-136

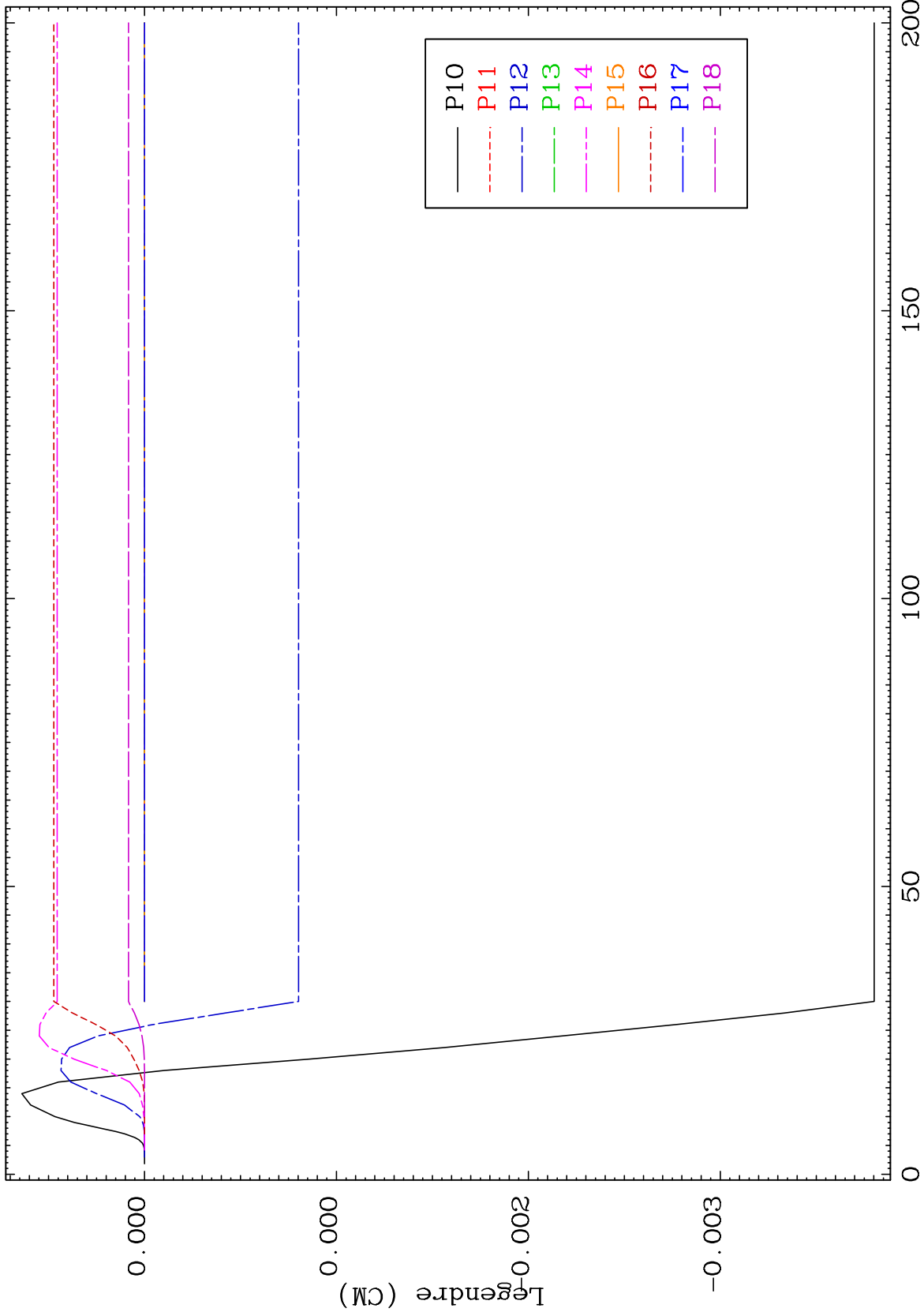
Incident Energy (MeV)

36

MAT 5825

MT= 55 (n,n') Level  
Legendre Coefficients

58-Ce-136



37

Incident Energy (MeV)

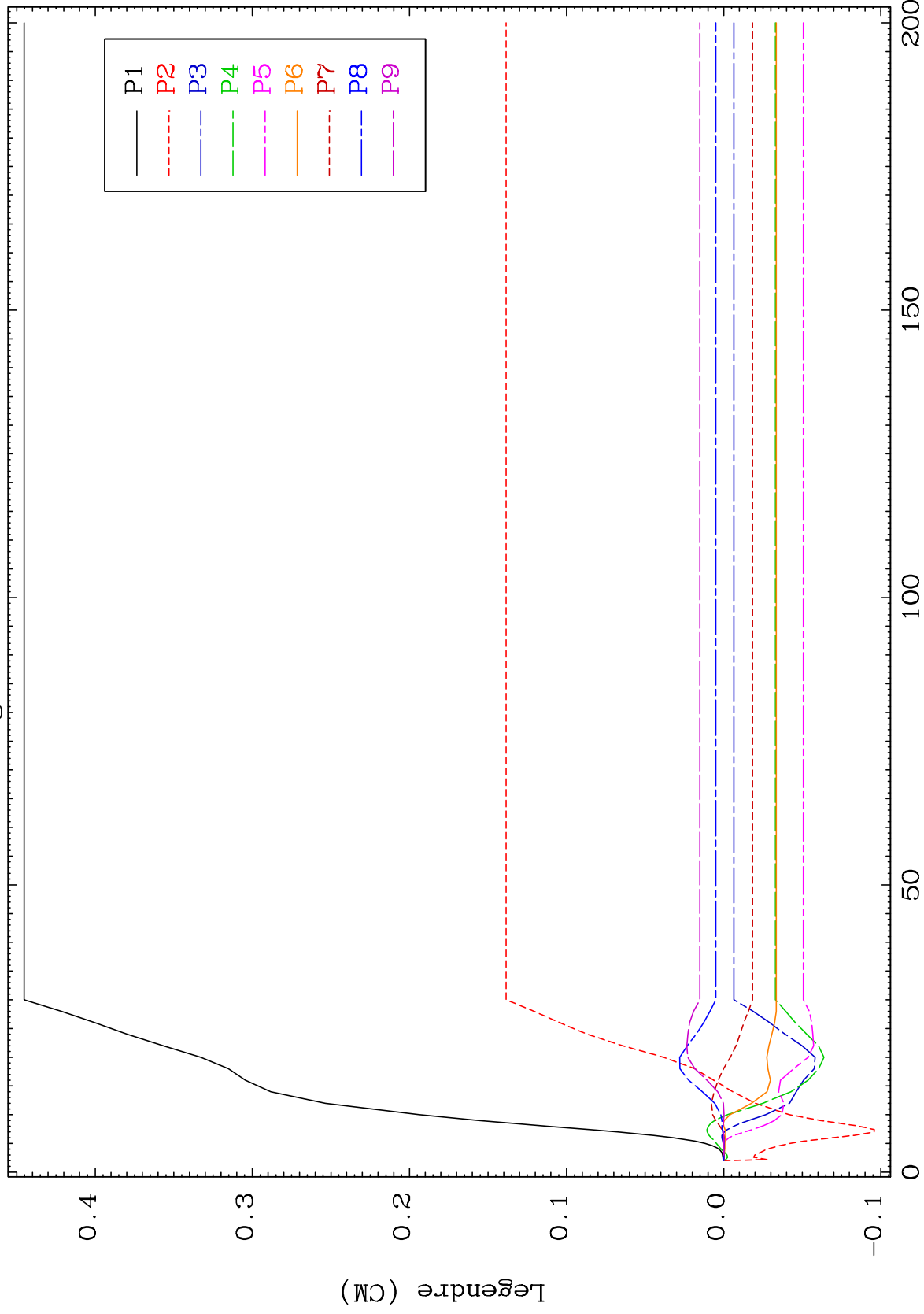
58-Ce-136



MAT 5825

MT= 56 (n,n') Level  
Legendre Coefficients

58-Ce-136



39

Incident Energy (MeV)

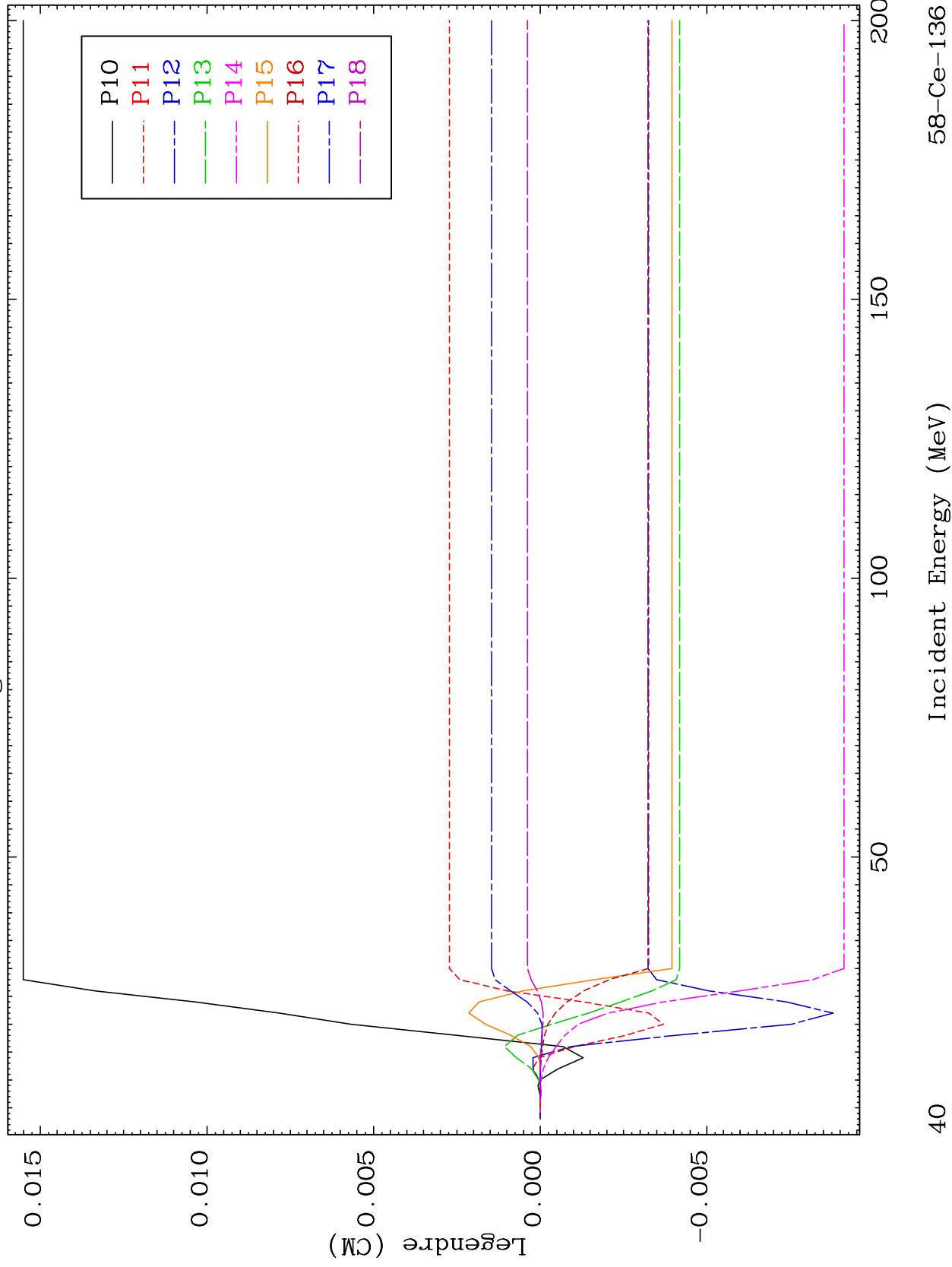
58-Ce-136

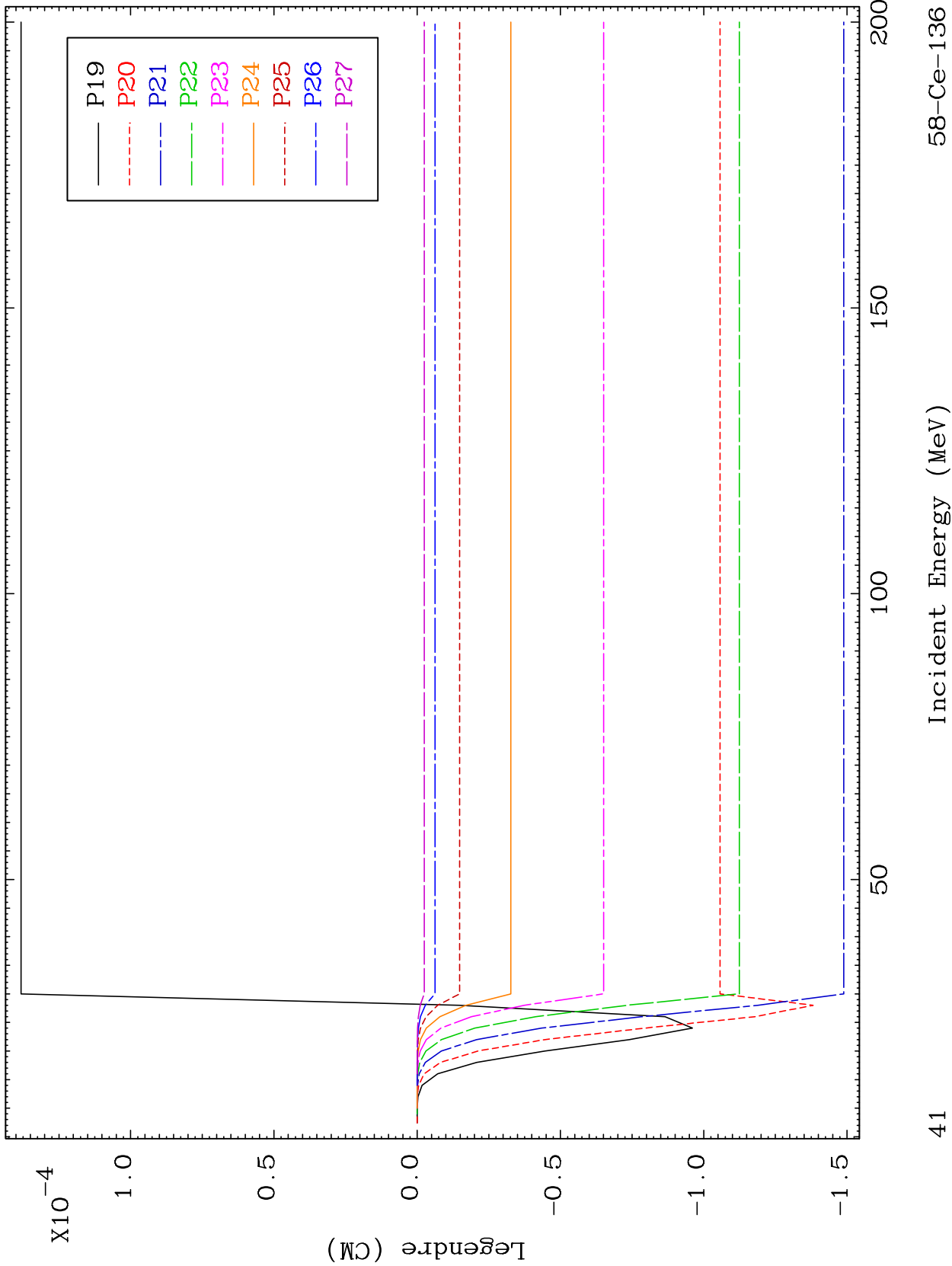


MAT 5825

MT= 56 (n,n') Level  
Legendre Coefficients

58-Ce-136

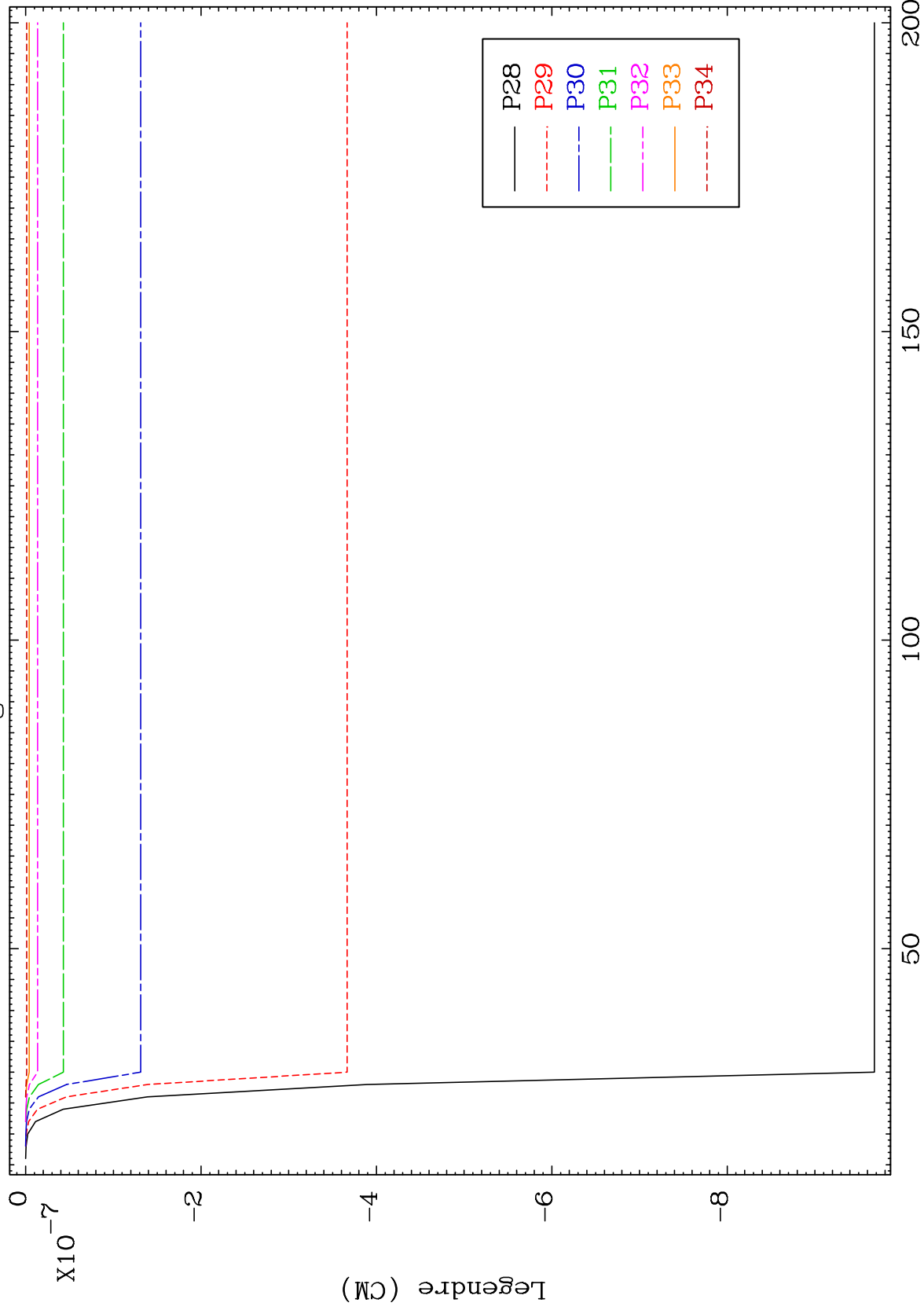




MAT 5825

MT= 56 (n,n') Level  
Legendre Coefficients

58-Ce-136



42

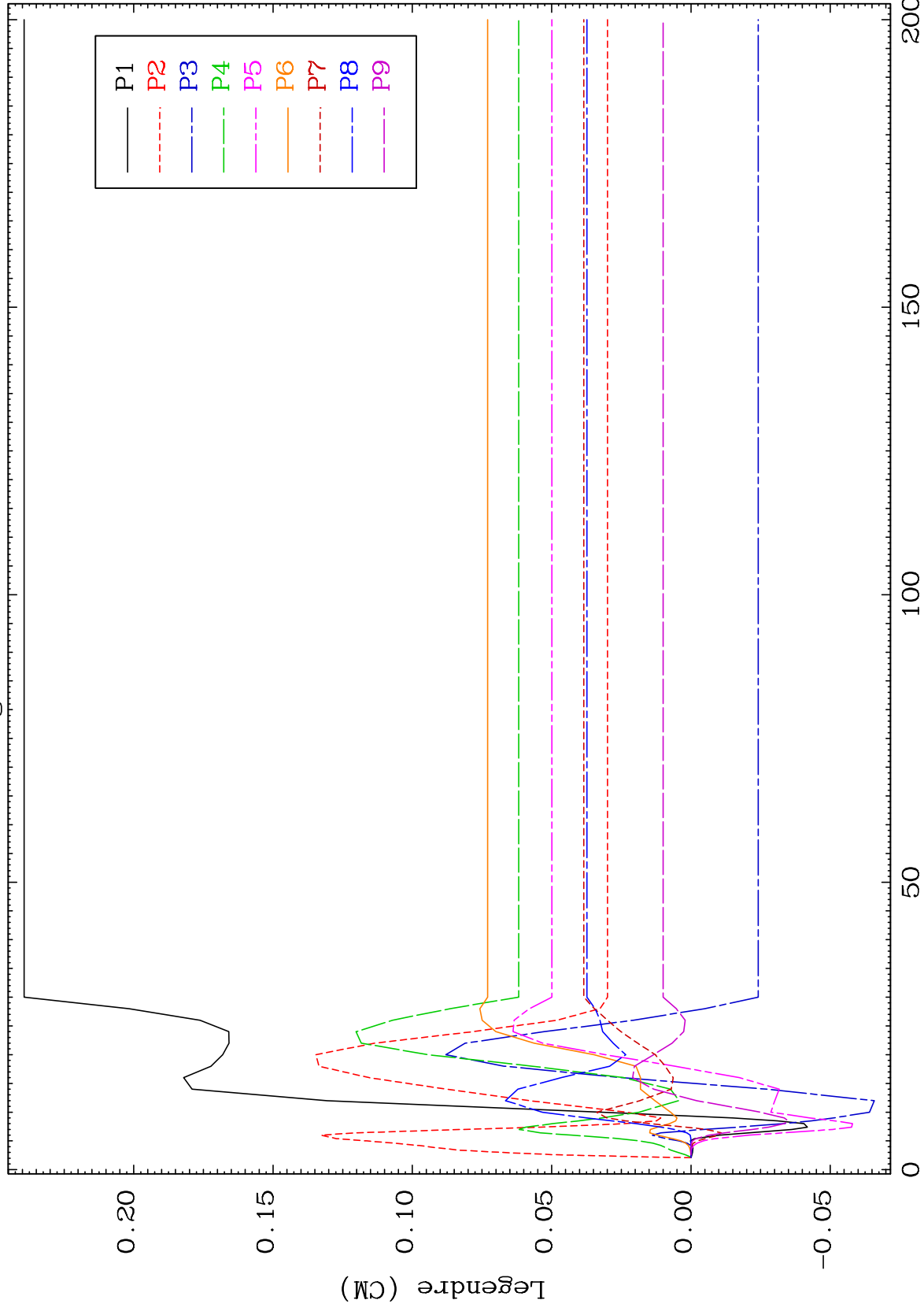
Incident Energy (MeV)

58-Ce-136

MAT 5825

MT= 57 (n,n') Level  
Legendre Coefficients

58-Ce-136



43

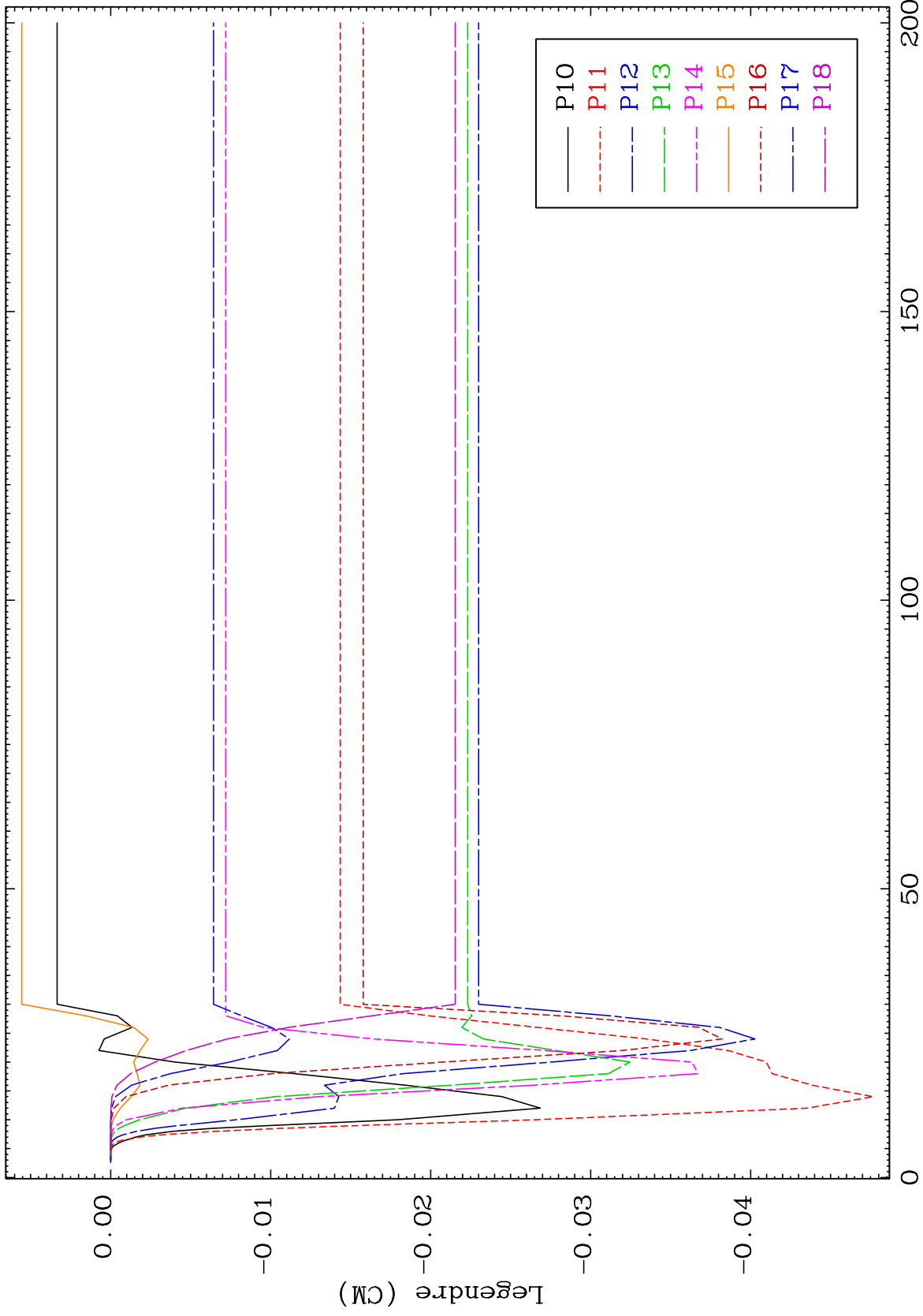
Incident Energy (MeV)

58-Ce-136

MAT 5825

MT= 57 (n,n') Level  
Legendre Coefficients

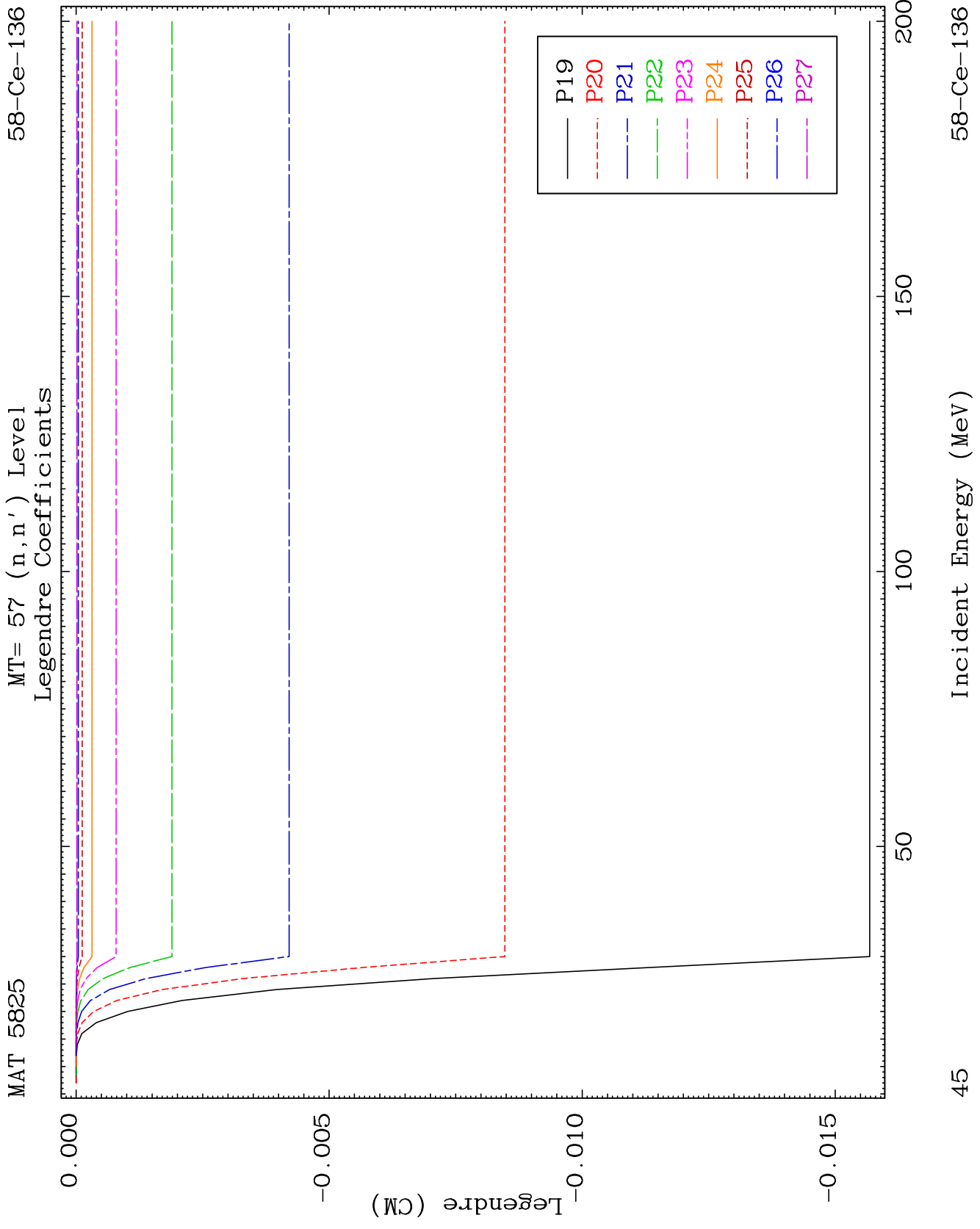
58-Ce-136

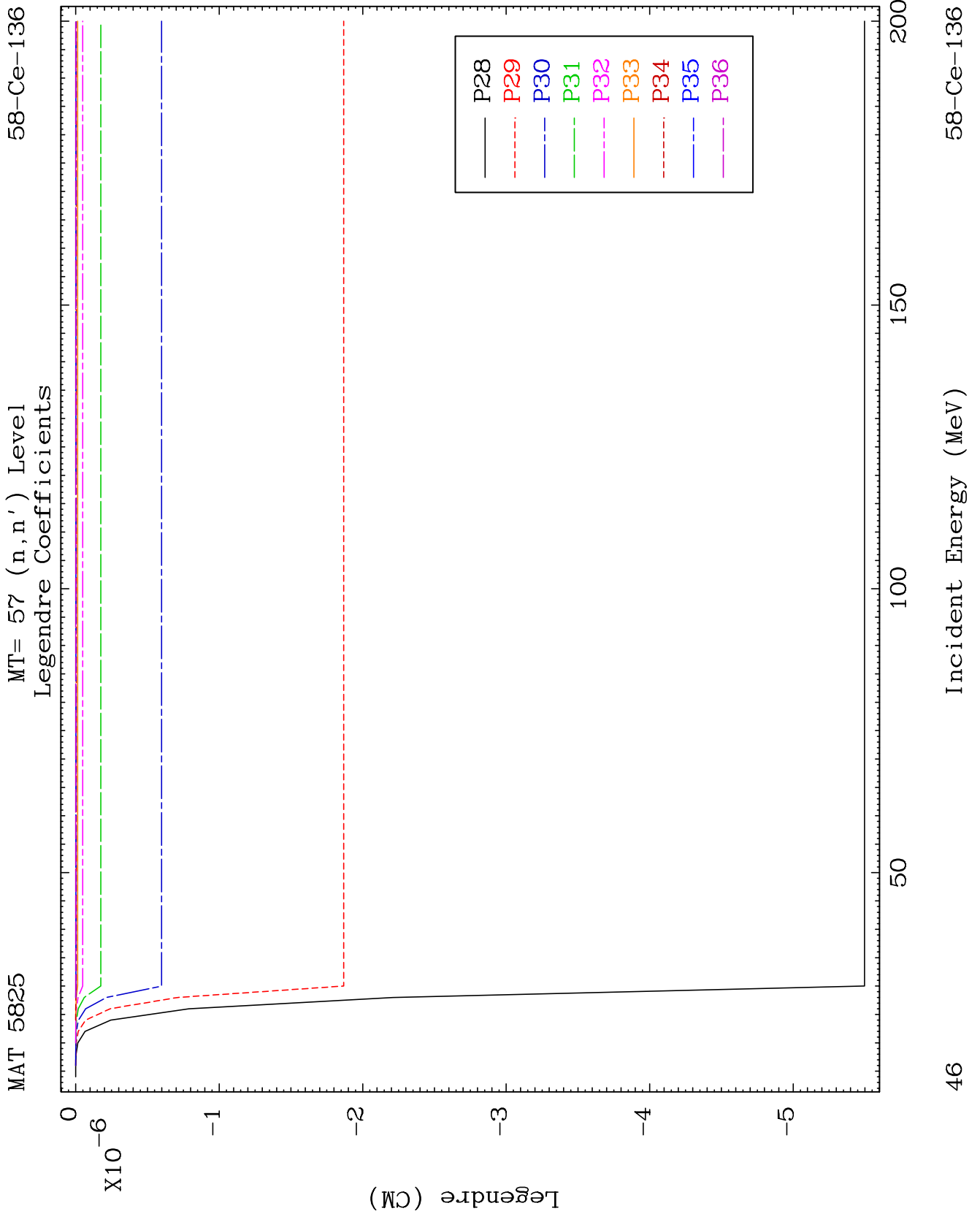


44

Incident Energy (MeV)

58-Ce-136

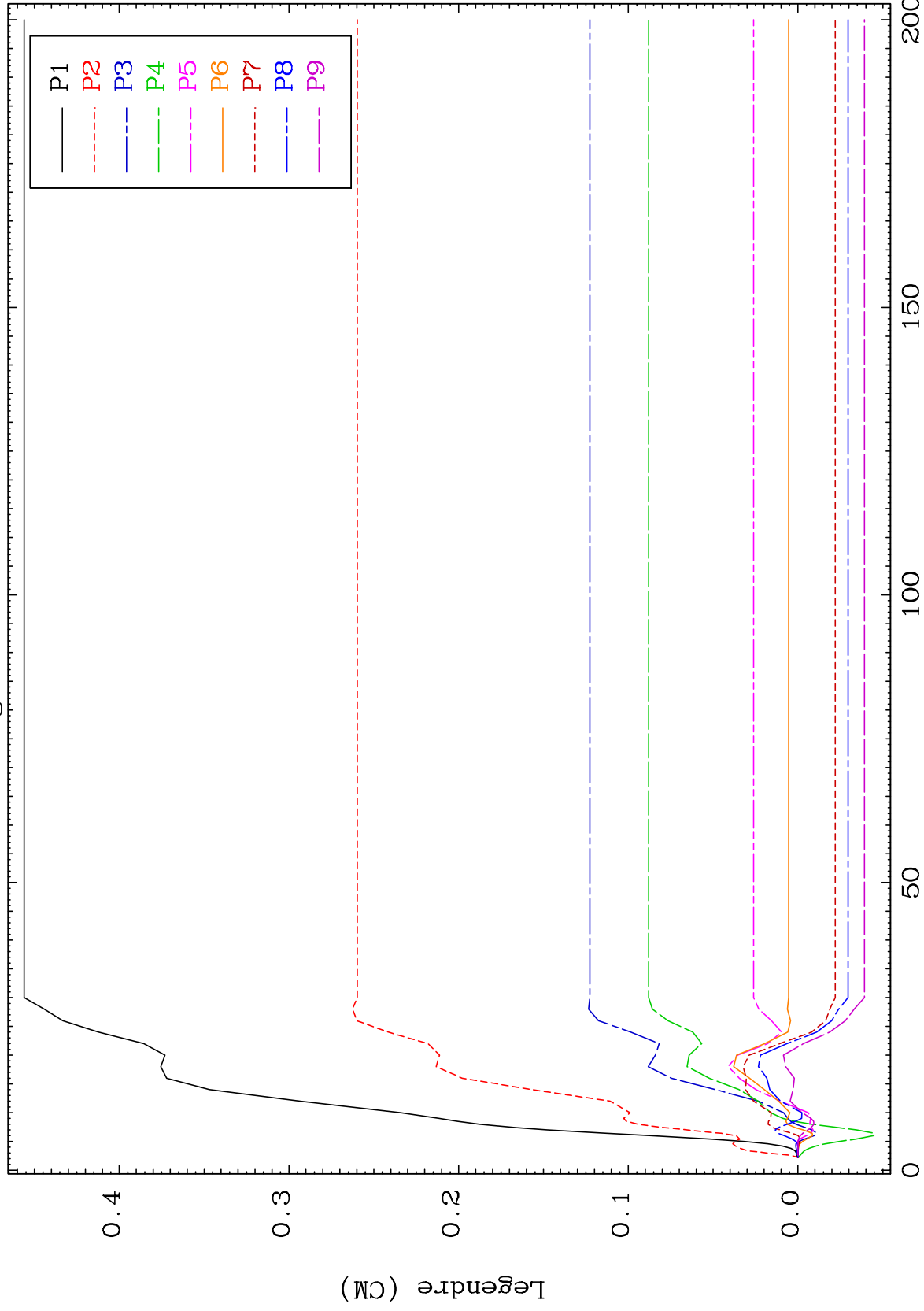




MAT 5825

MT= 58 (n,n') Level  
Legendre Coefficients

58-Ce-136



47

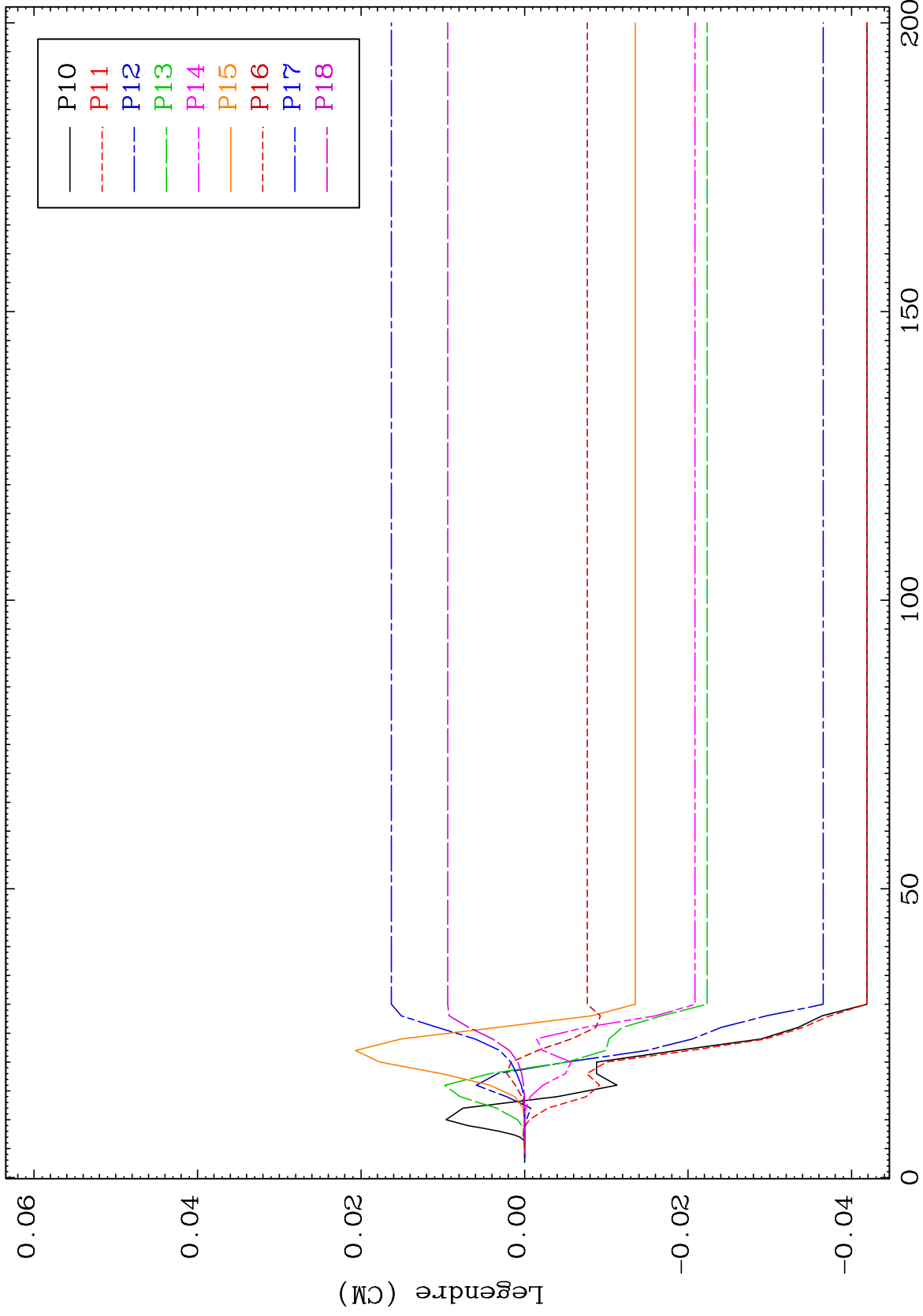
58-Ce-136



MAT 5825

MT= 58 (n,n') Level  
Legendre Coefficients

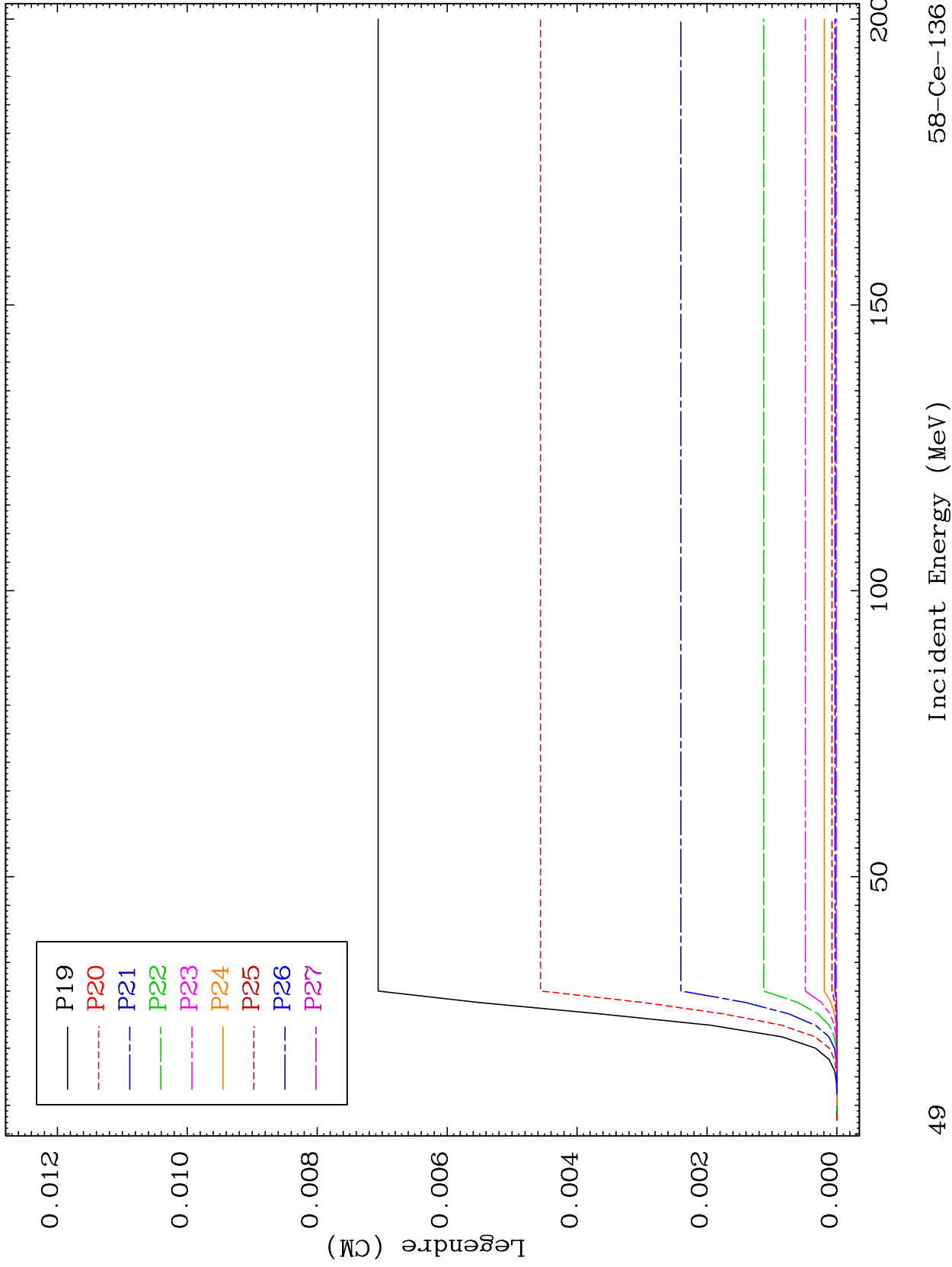
58-Ce-136



48

Incident Energy (MeV)

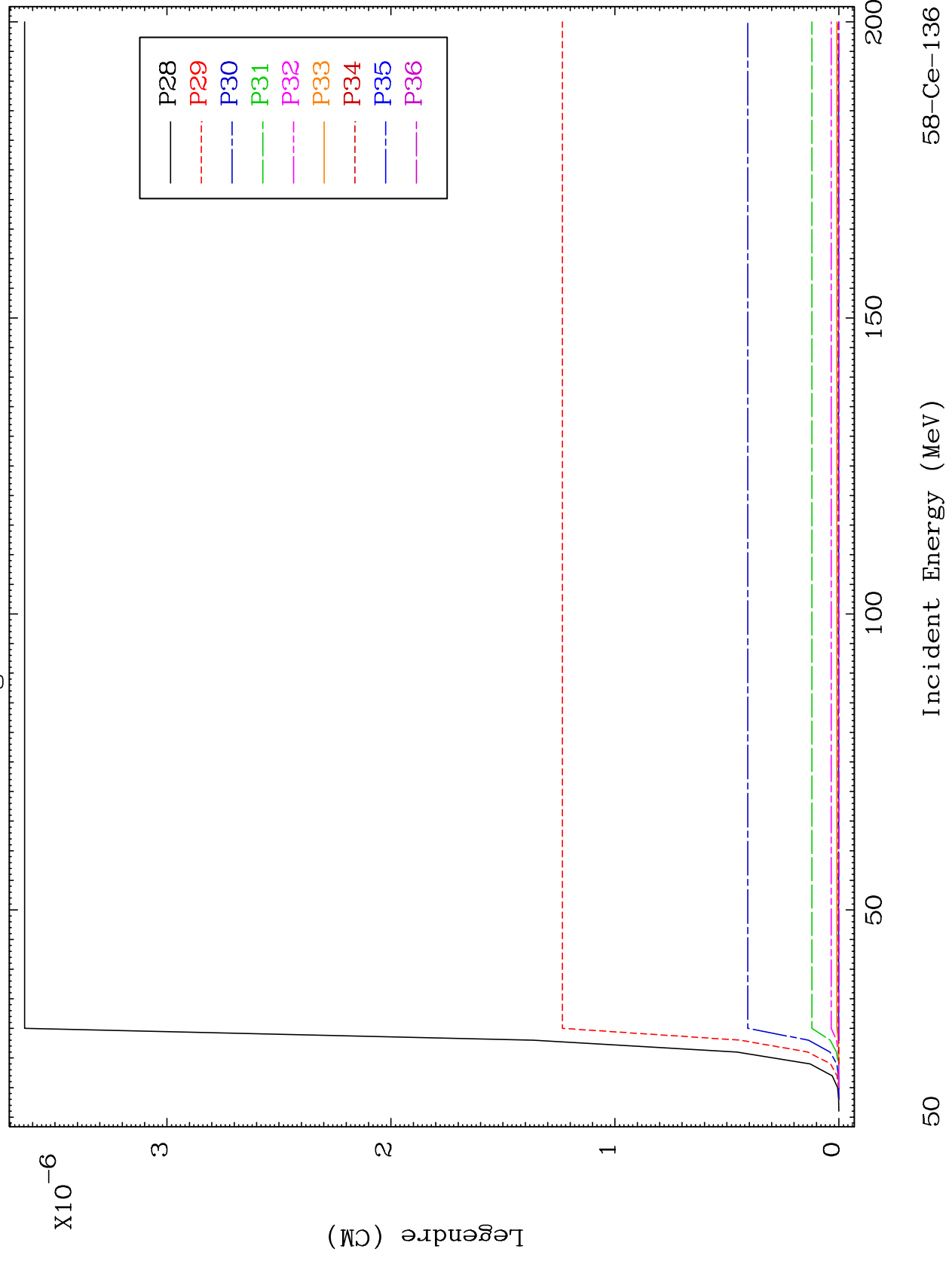
58-Ce-136



MAT 5825

MT= 58 (n,n') Level  
Legendre Coefficients

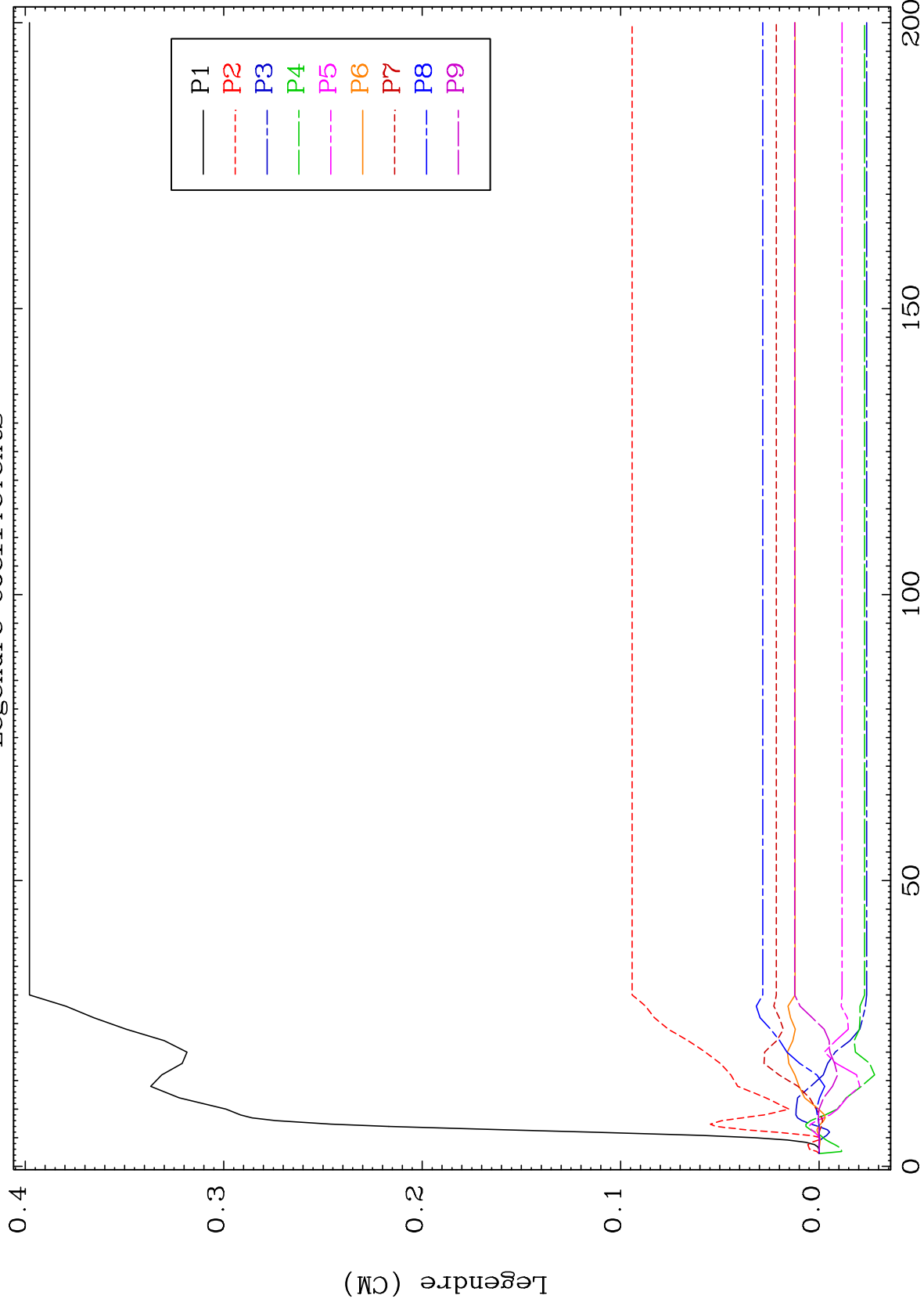
58-Ce-136



MAT 5825

MT= 59 (n,n') Level  
Legendre Coefficients

58-Ce-136



51

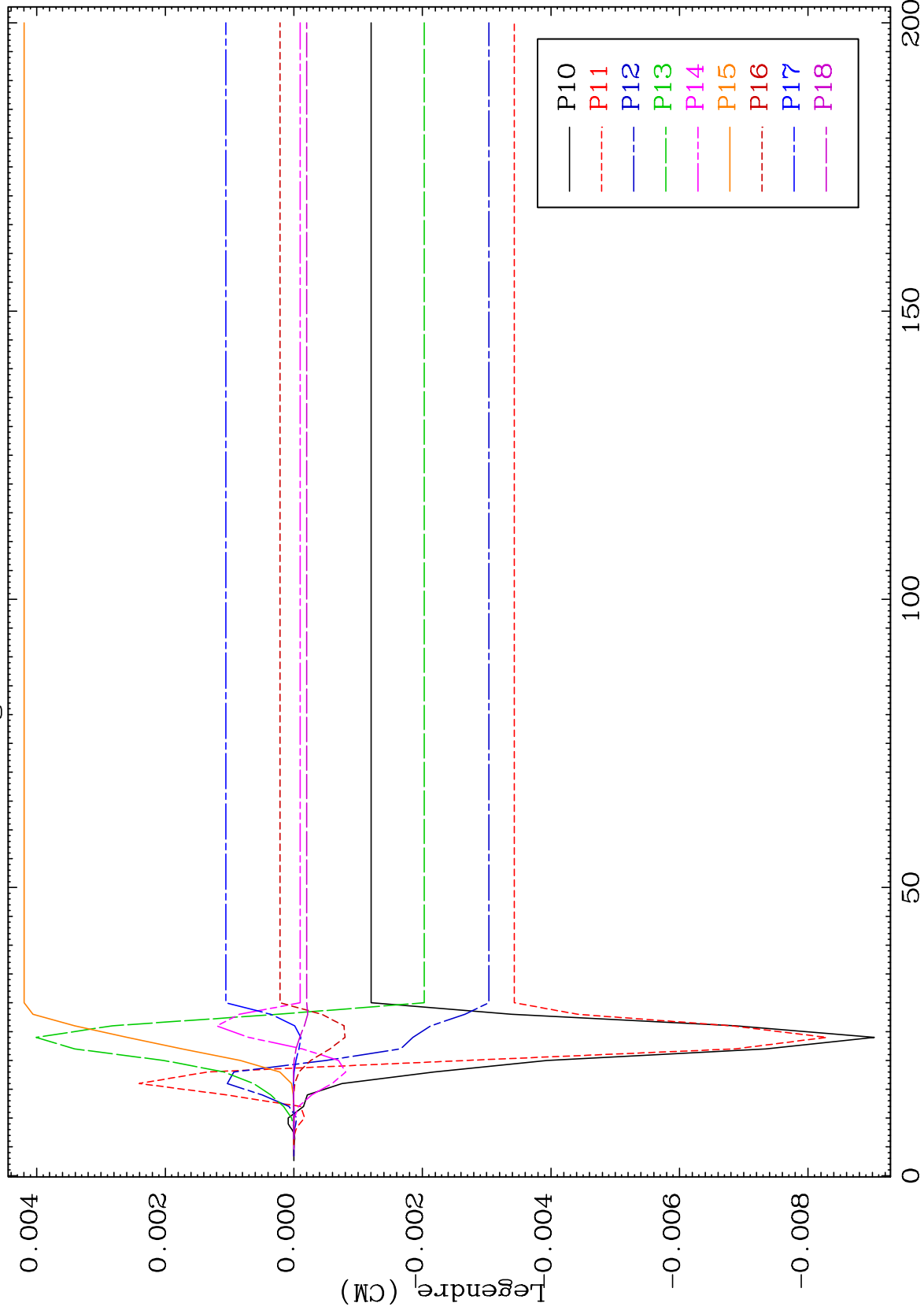
Incident Energy (MeV)

58-Ce-136

MAT 5825

MT= 59 (n,n') Level  
Legendre Coefficients

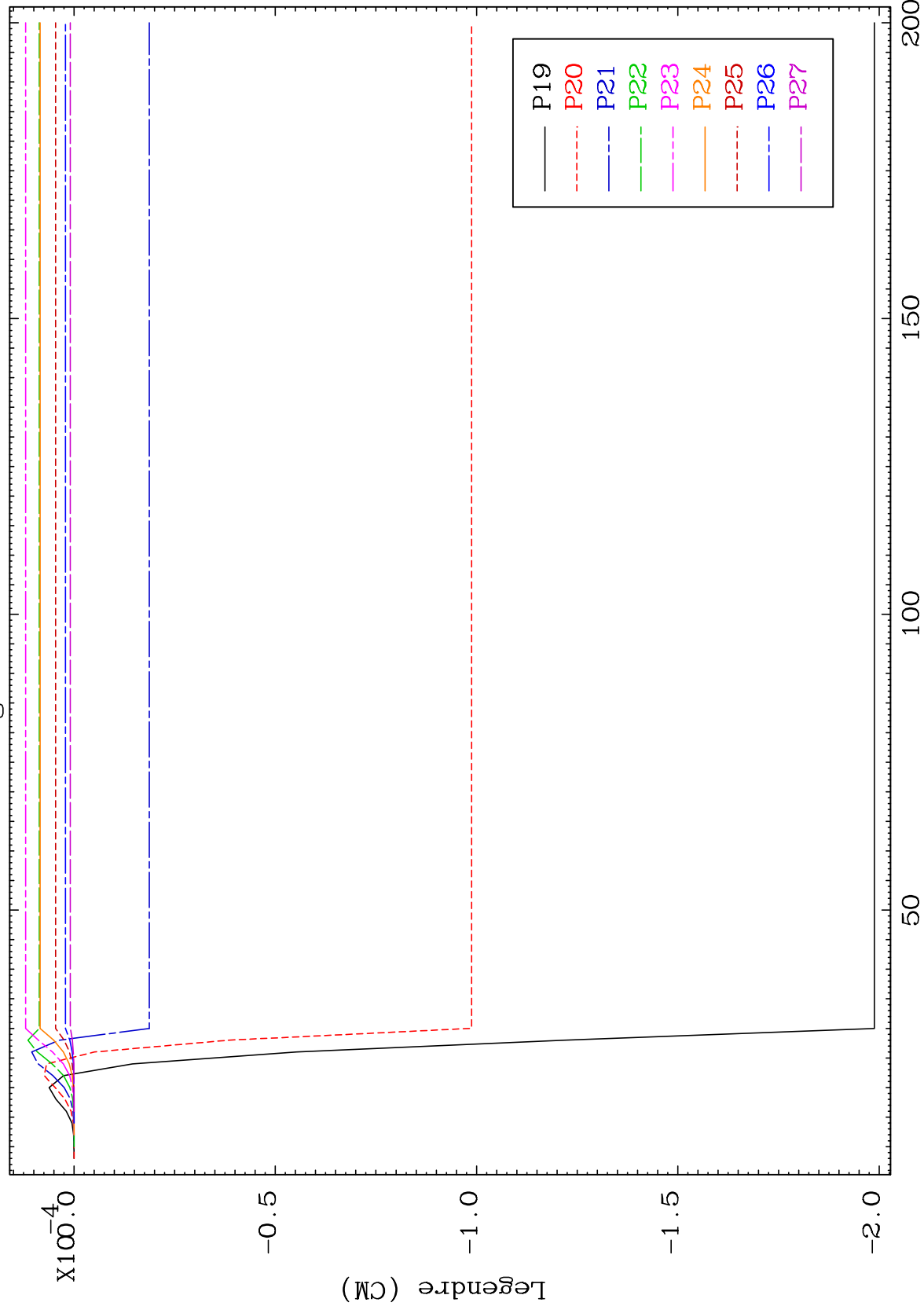
58-Ce-136



52

Incident Energy (MeV)

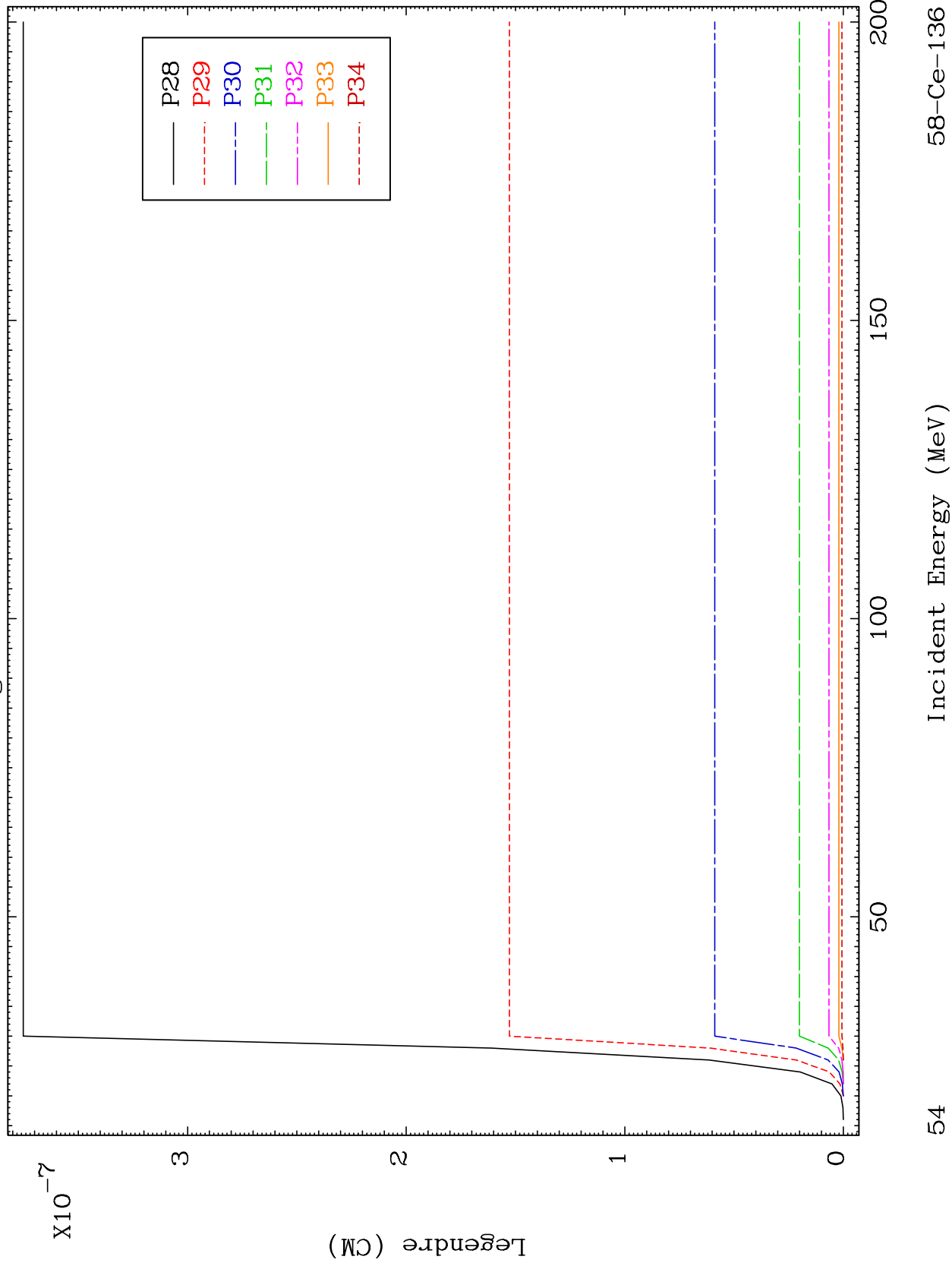
58-Ce-136



MAT 5825

MT= 59 (n,n') Level  
Legendre Coefficients

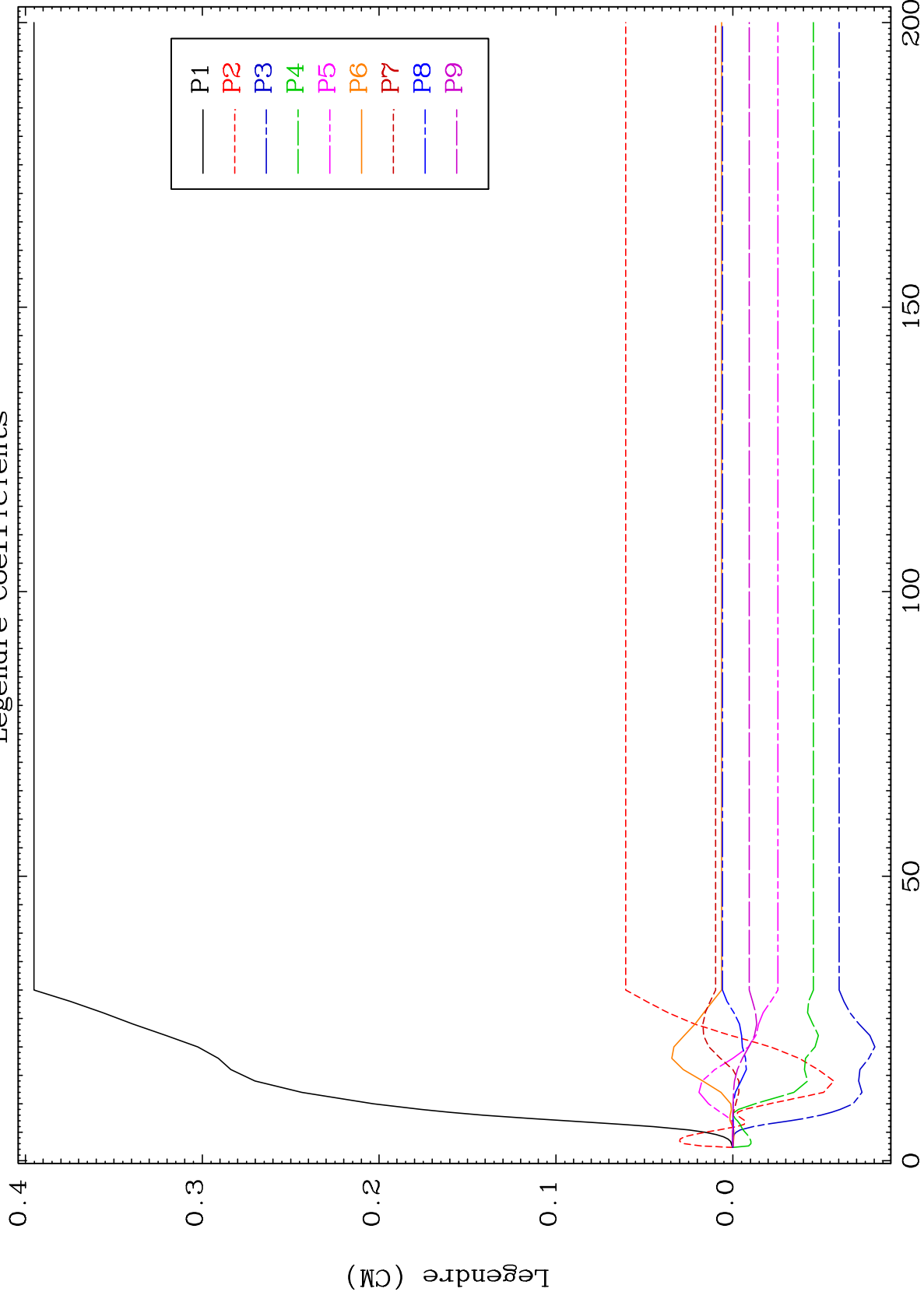
58-Ce-136



MAT 5825

MT= 60 (n,n') Level  
Legendre Coefficients

58-Ce-136



58-Ce-136

Incident Energy (MeV)

55

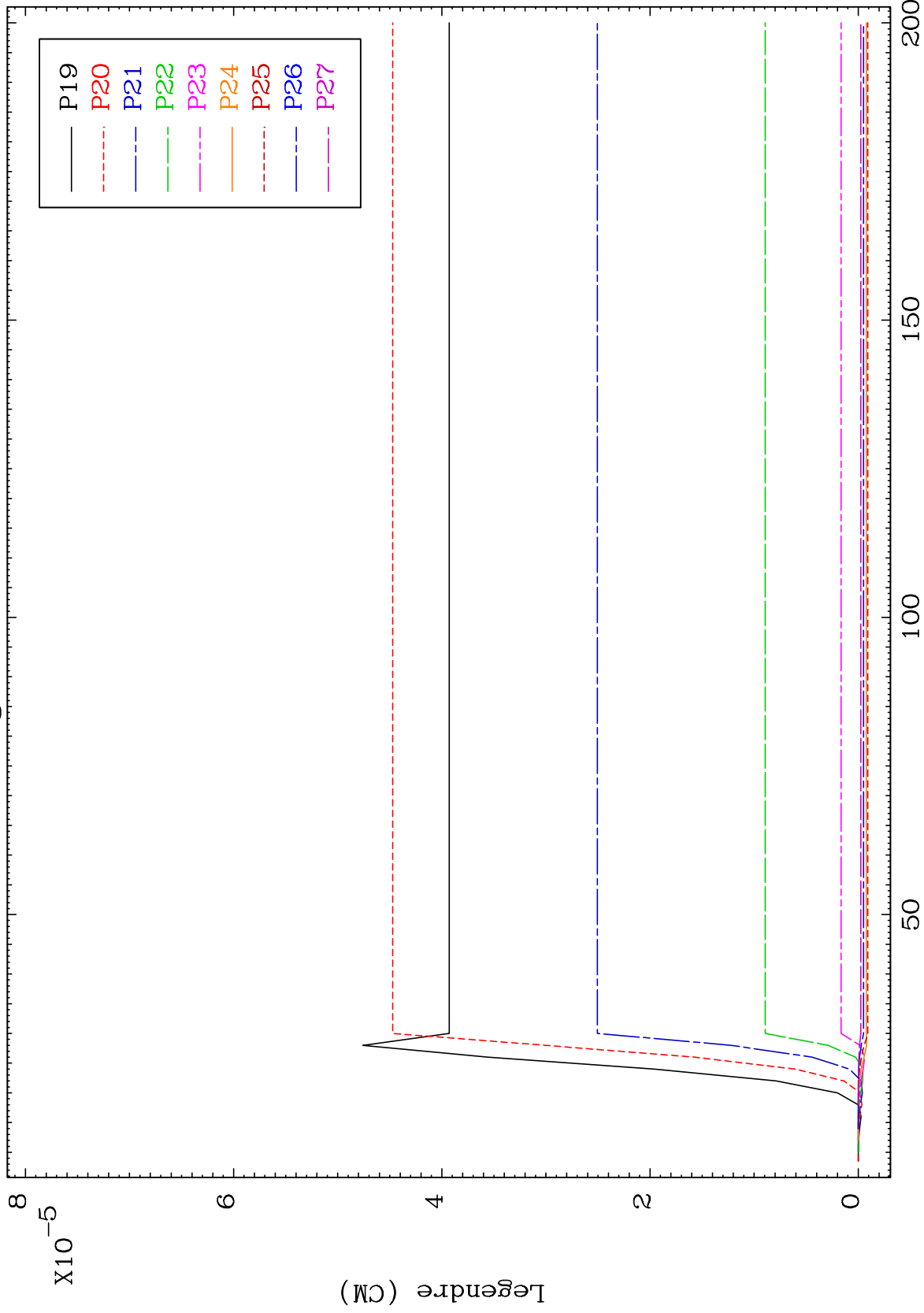




MAT 5825

MT= 60 (n,n') Level  
Legendre Coefficients

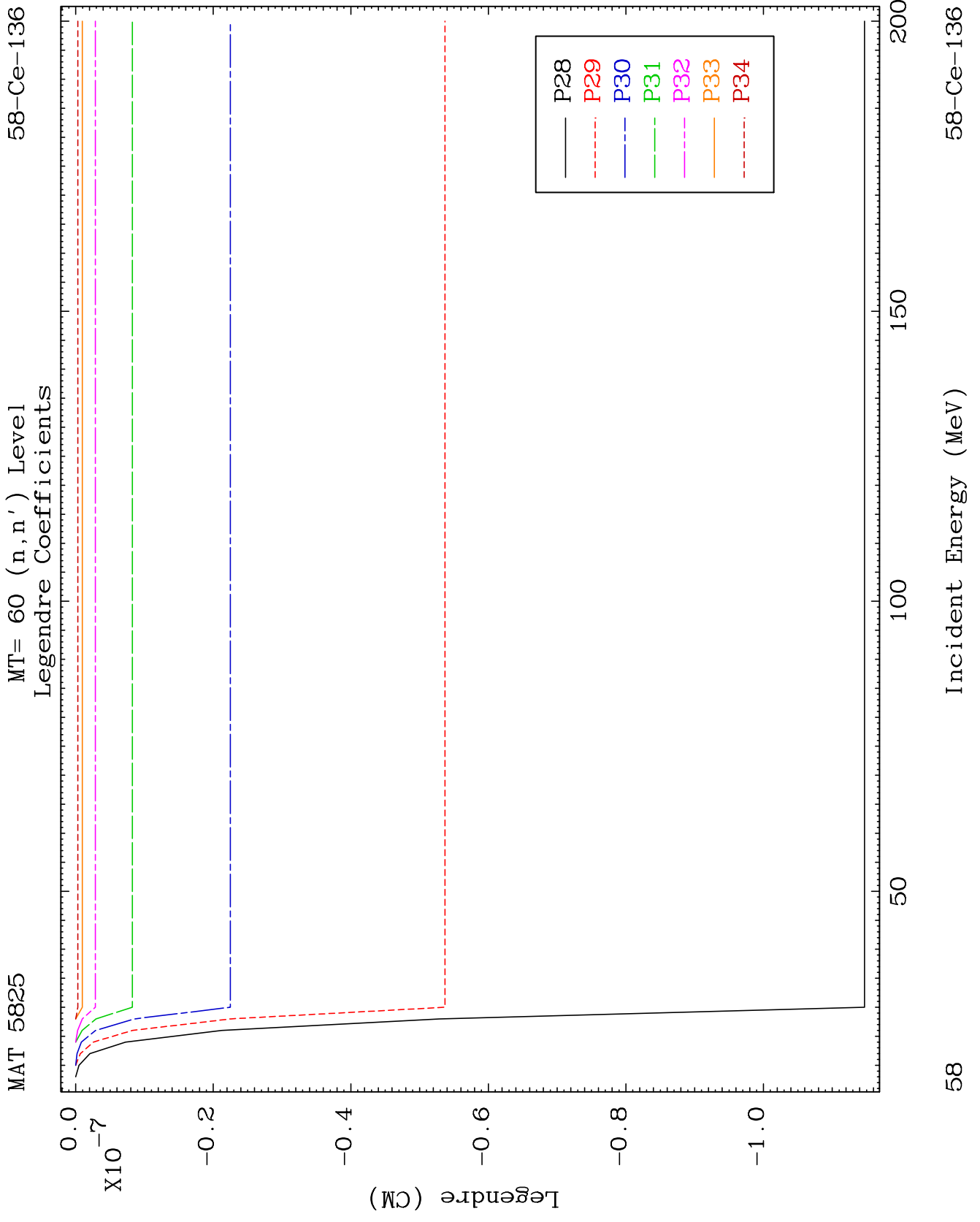
58-Ce-136



57

Incident Energy (MeV)

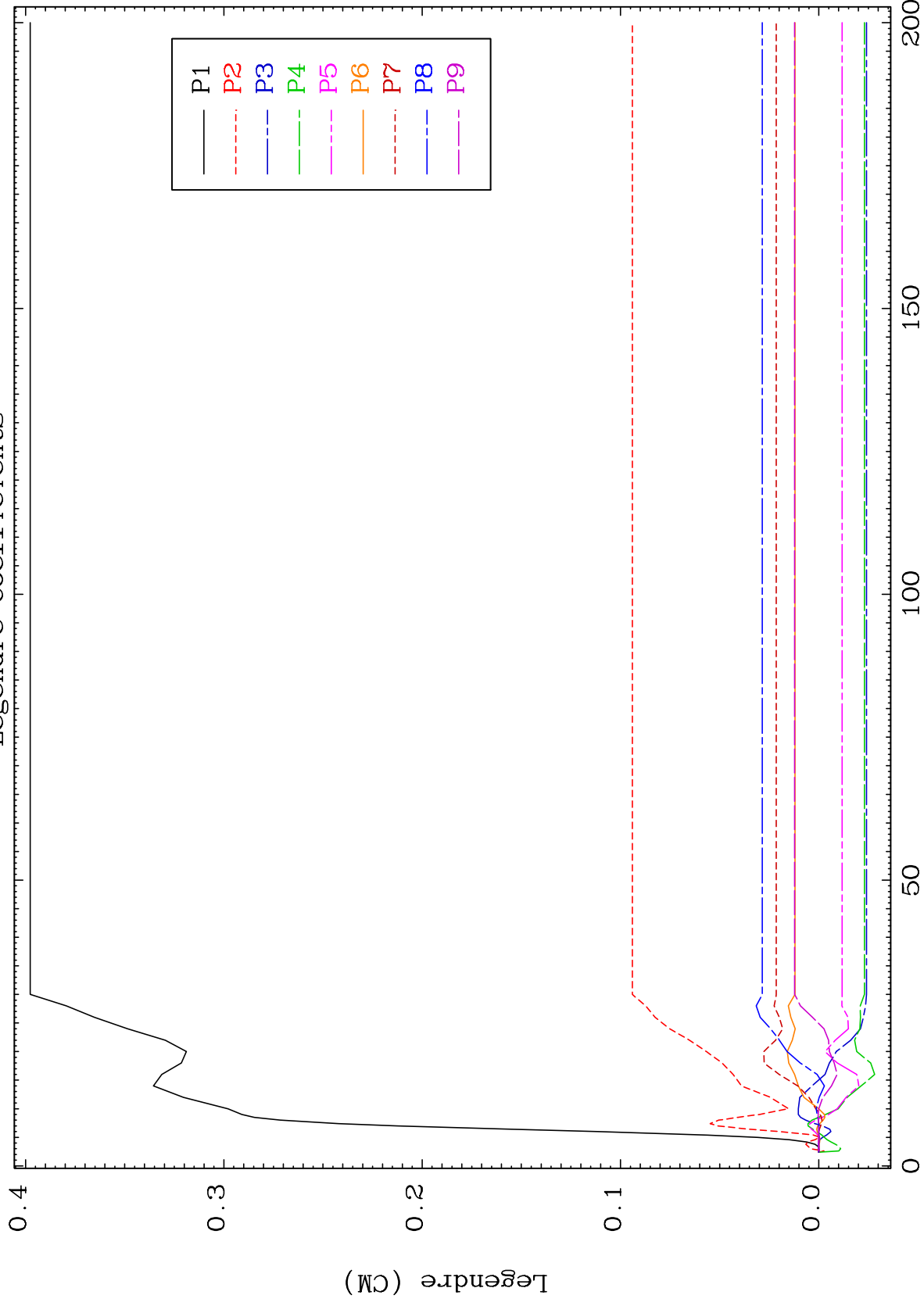
58-Ce-136



MAT 5825

MT= 61 (n,n') Level  
Legendre Coefficients

58-Ce-136



59

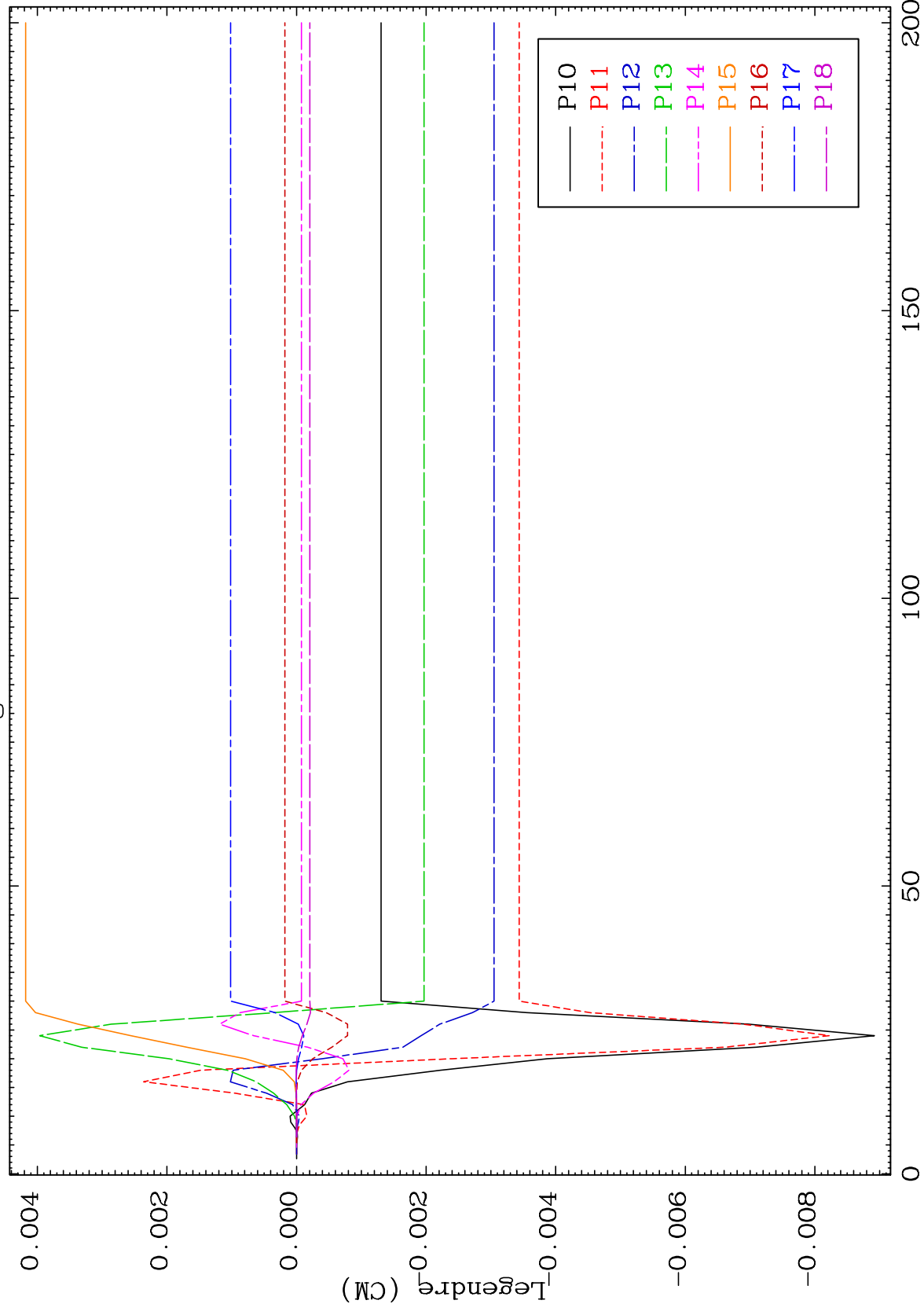
Incident Energy (MeV)

58-Ce-136

MAT 5825

MT= 61 (n,n') Level  
Legendre Coefficients

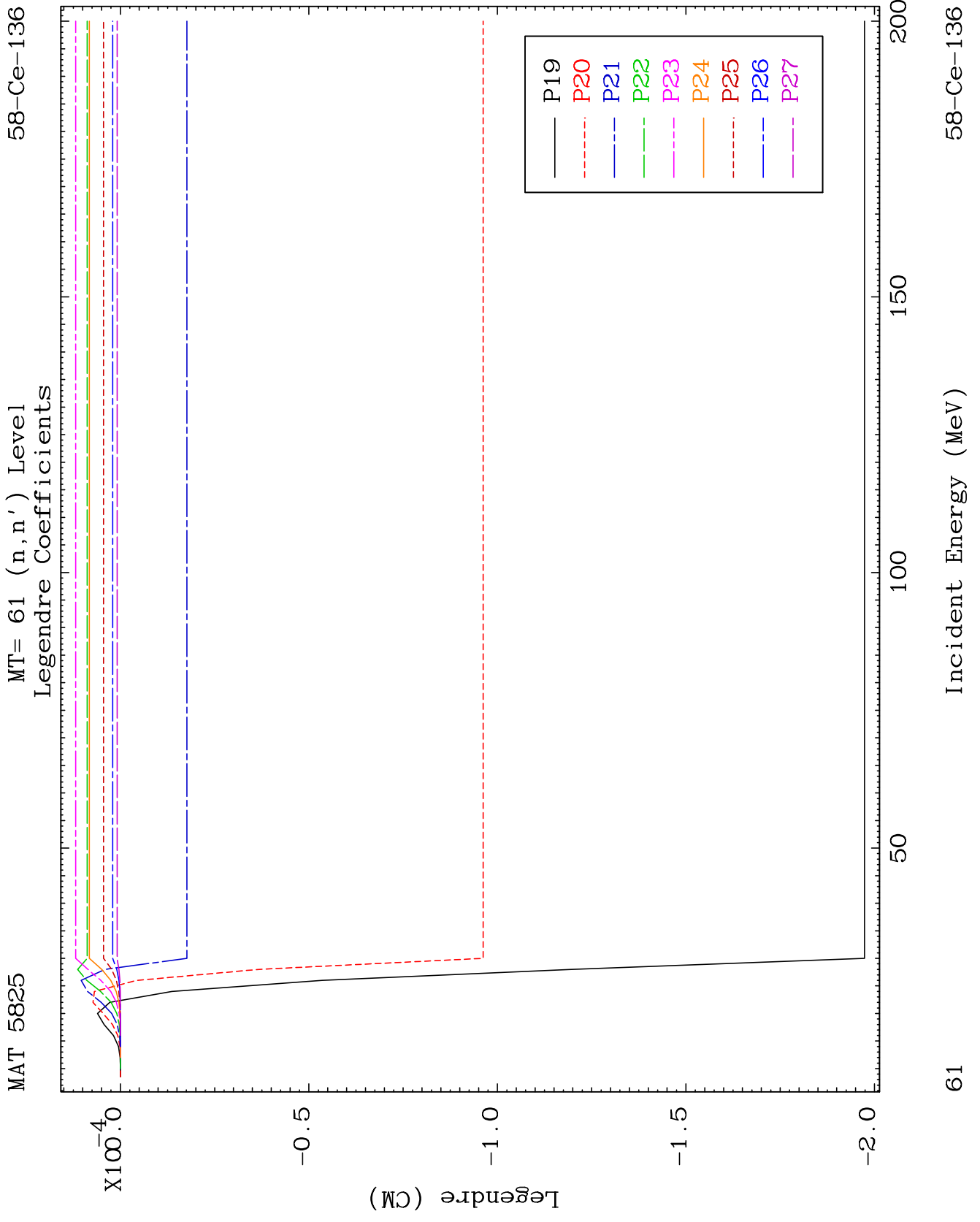
58-Ce-136



58-Ce-136

Incident Energy (MeV)

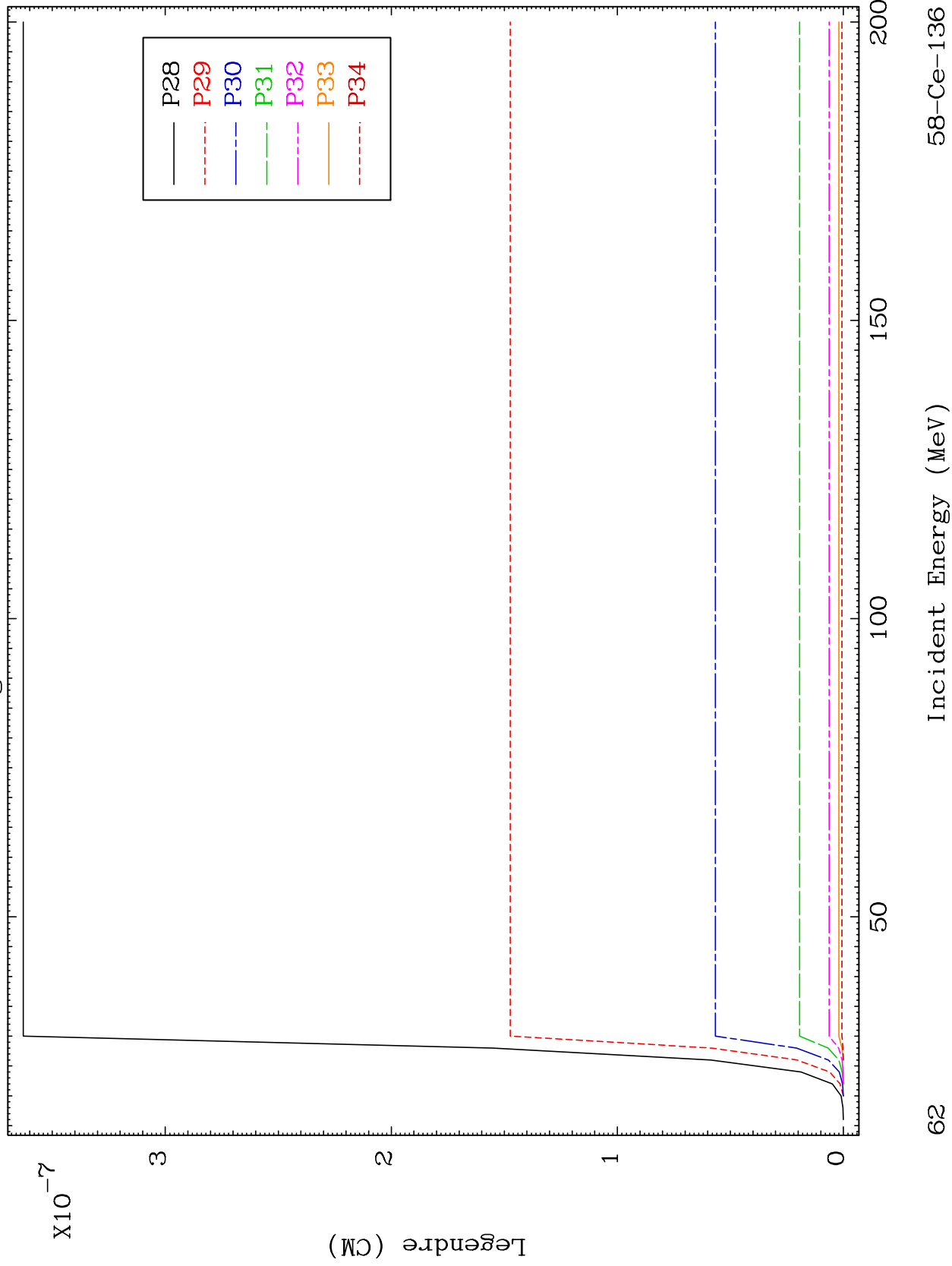
60



MAT 5825

MT= 61 (n,n') Level  
Legendre Coefficients

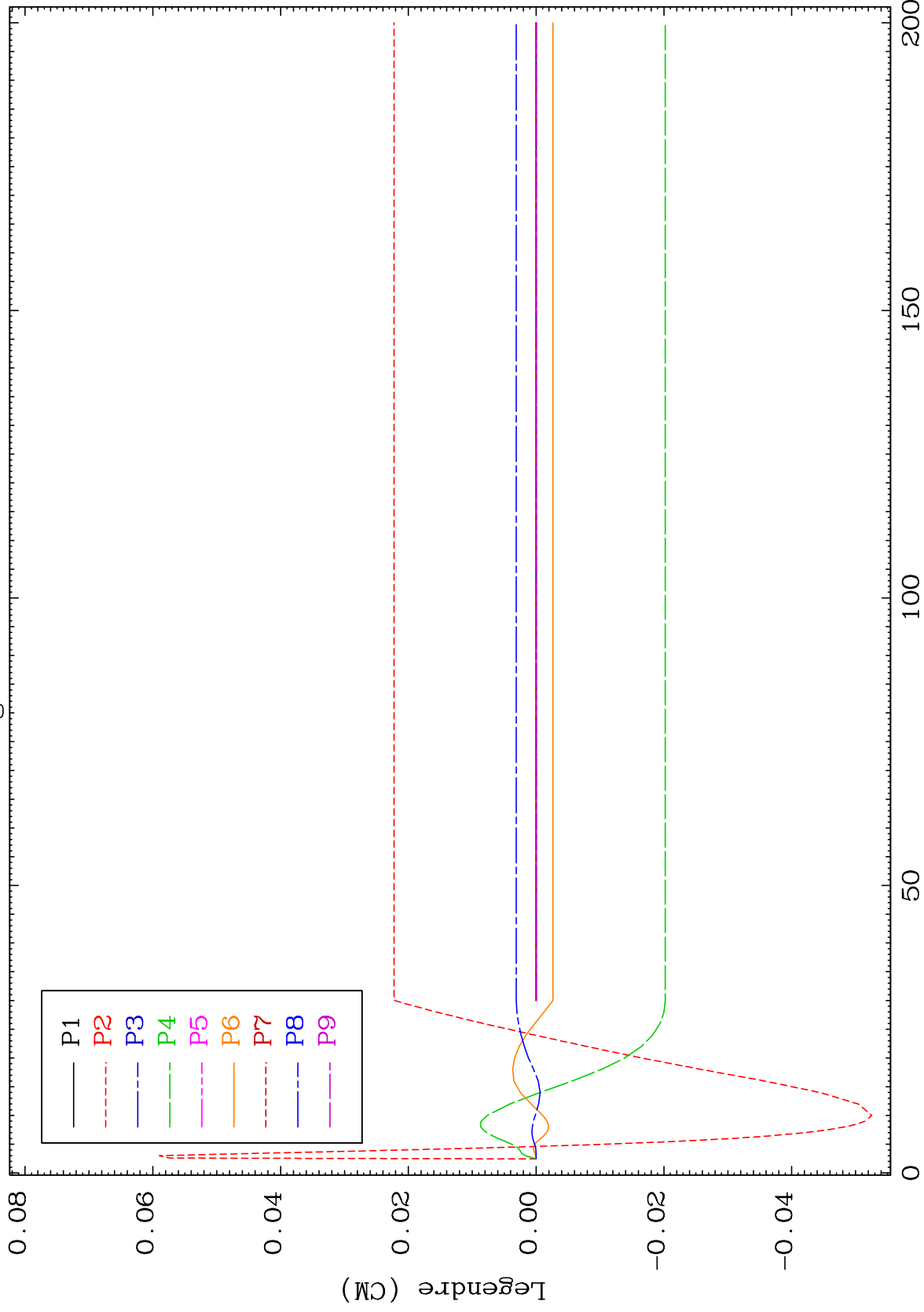
58-Ce-136



MAT 5825

MT= 62 (n,n') Level  
Legendre Coefficients

58-Ce-136



63

Incident Energy (MeV)

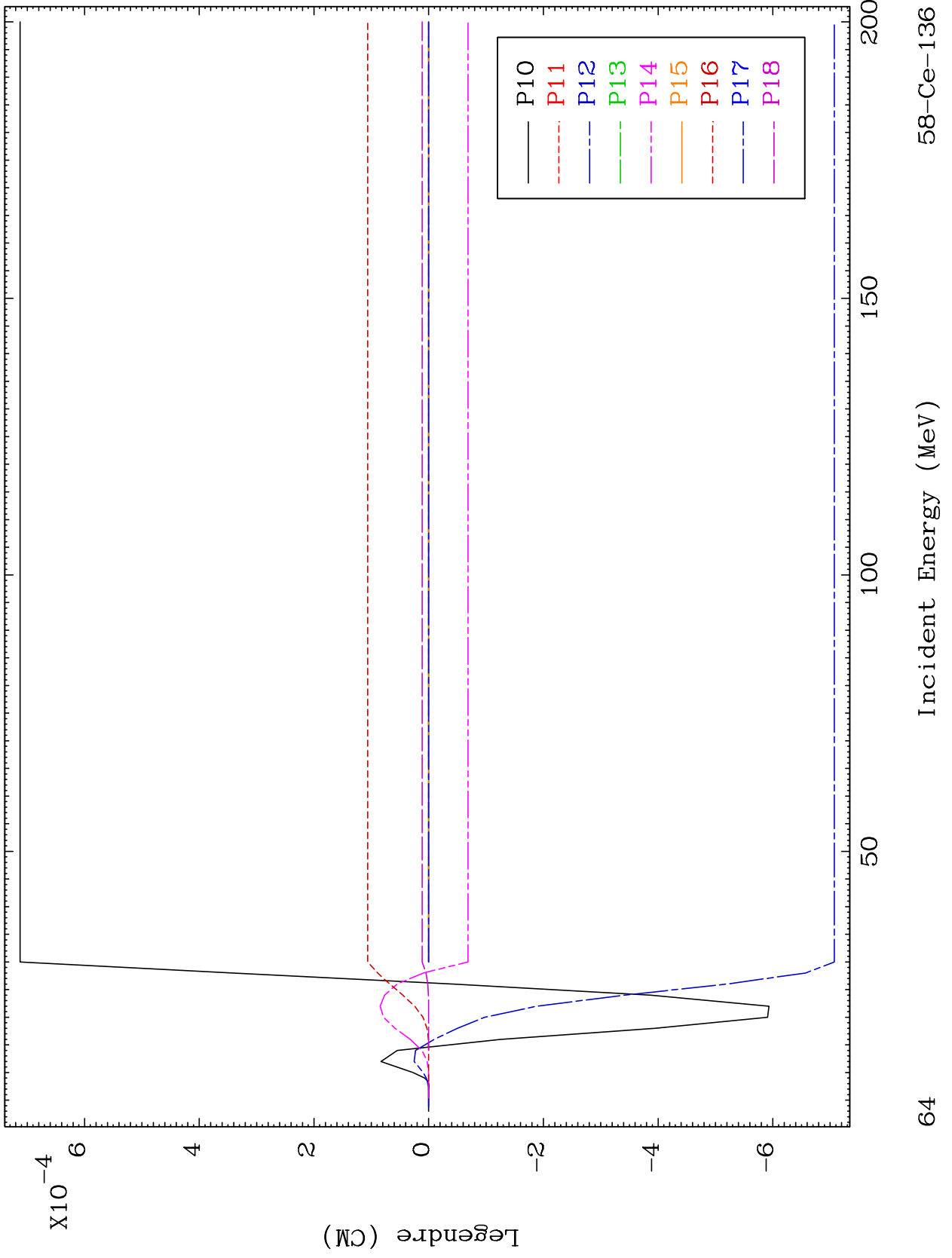
58-Ce-136



MAT 5825

MT= 62 (n,n') Level  
Legendre Coefficients

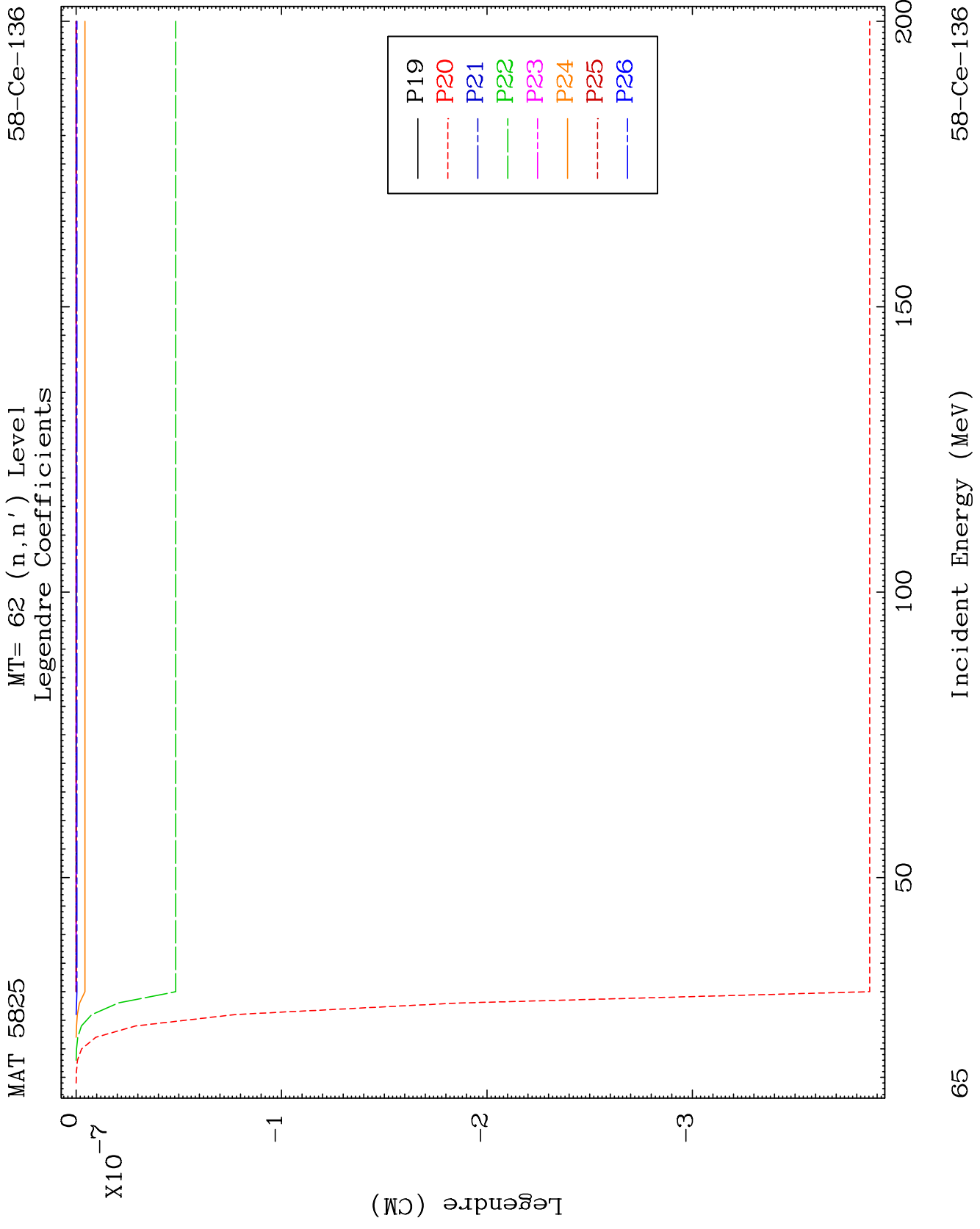
58-Ce-136



64

Incident Energy (MeV)

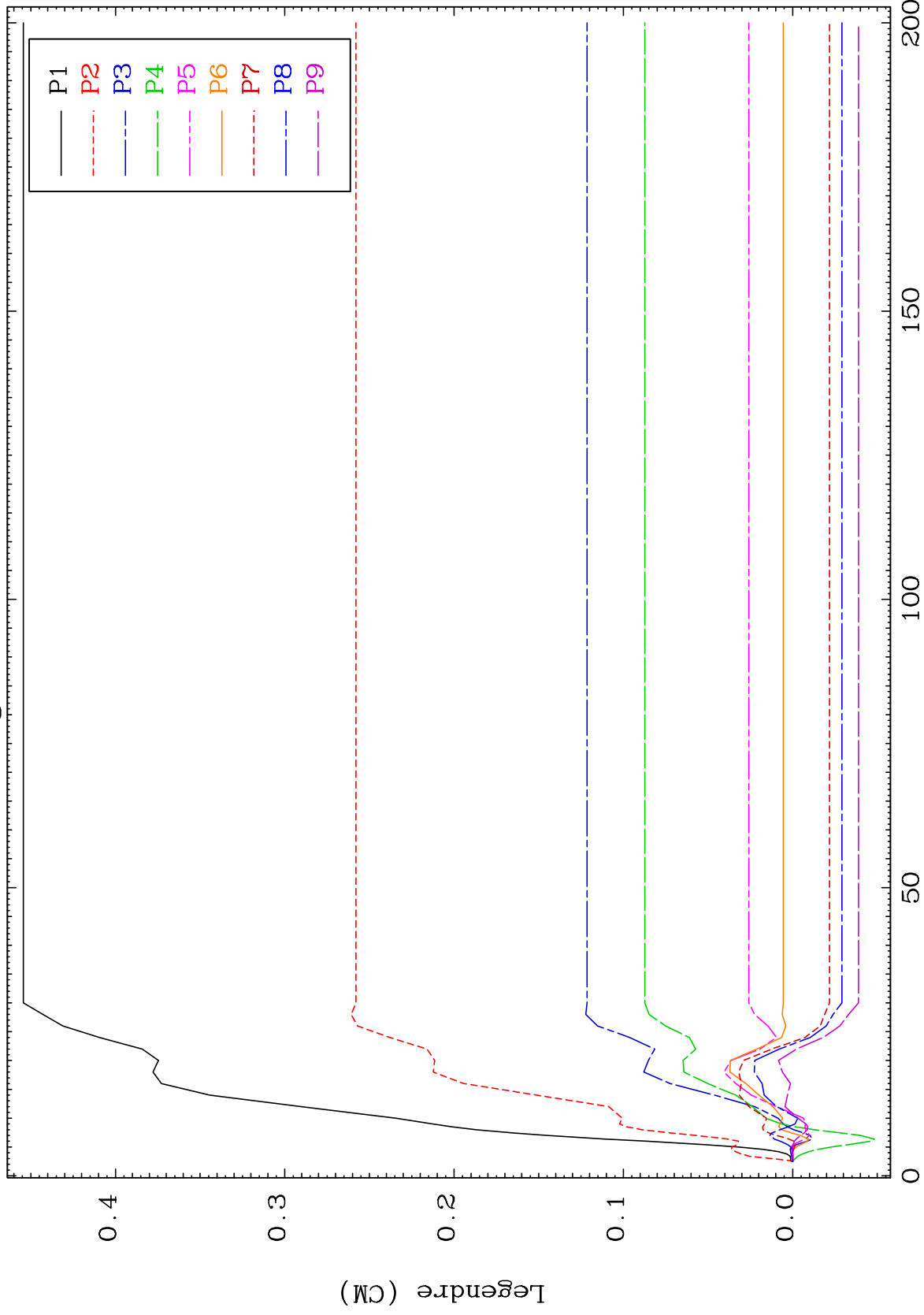
58-Ce-136



MAT 5825

MT= 63 (n,n') Level  
Legendre Coefficients

58-Ce-136



66

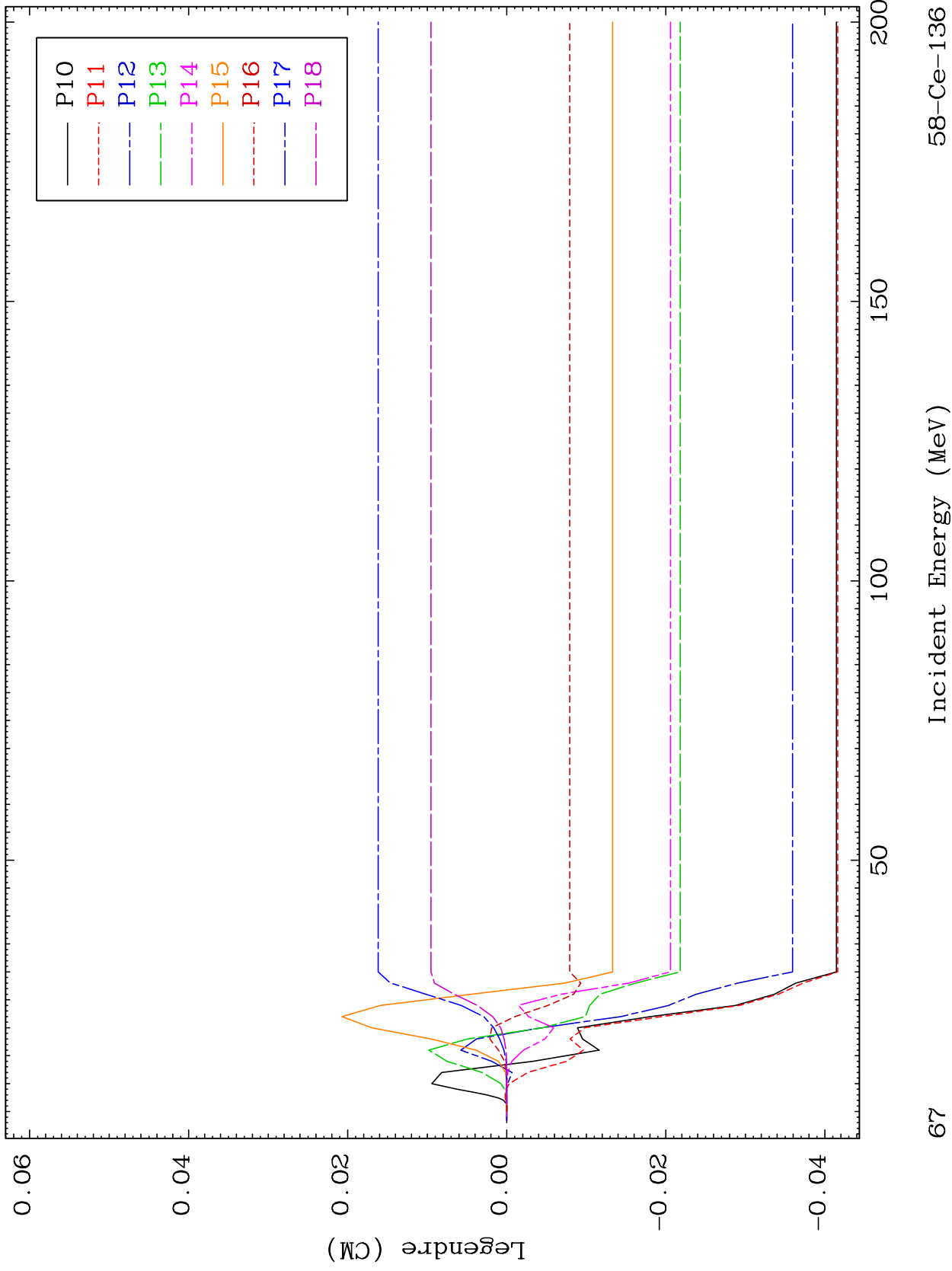
Incident Energy (MeV)

58-Ce-136

MAT 5825

MT= 63 (n,n') Level  
Legendre Coefficients

58-Ce-136



67

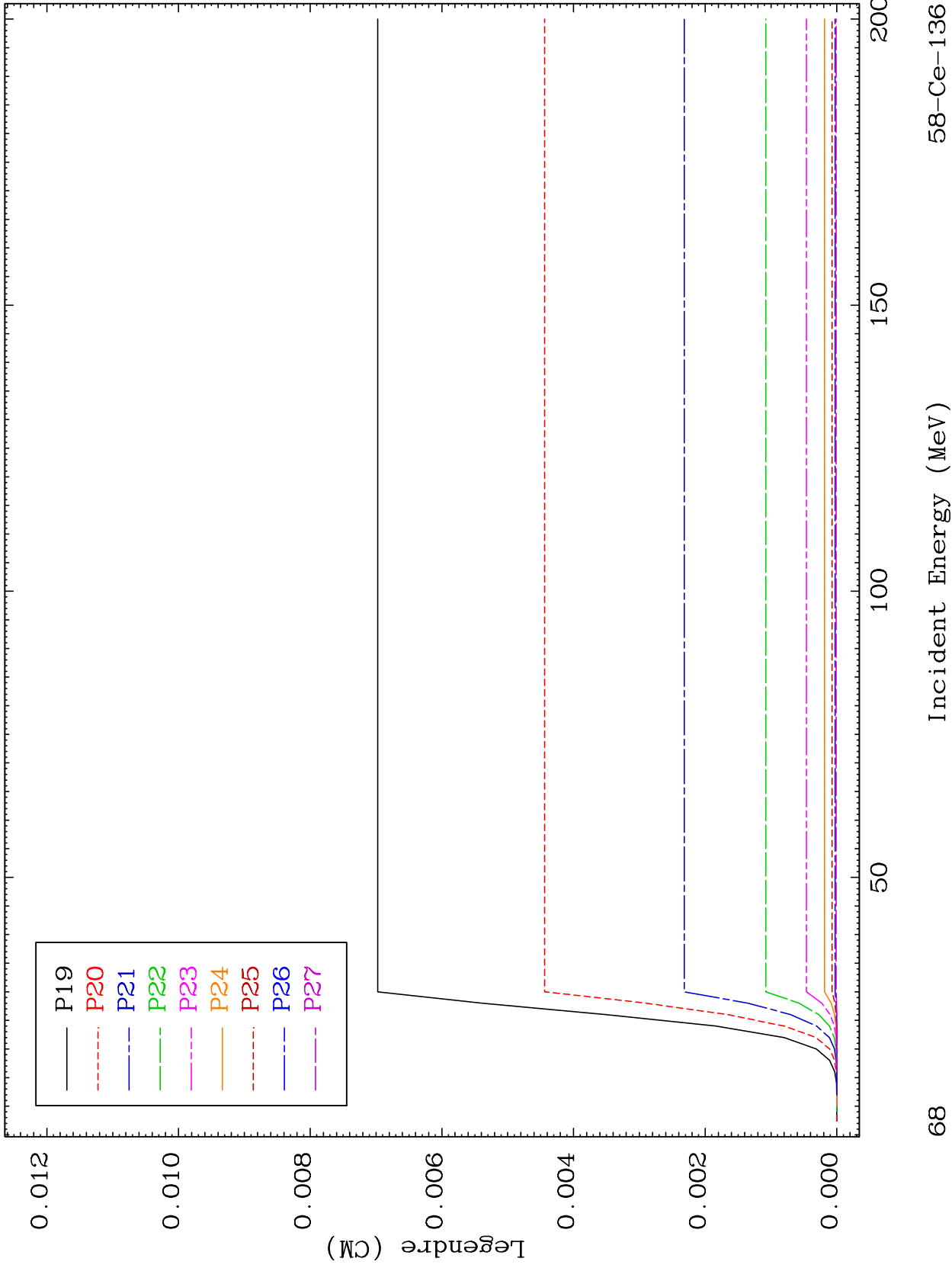
Incident Energy (MeV)

58-Ce-136

MAT 5825

MT= 63 (n,n') Level  
Legendre Coefficients

58-Ce-136

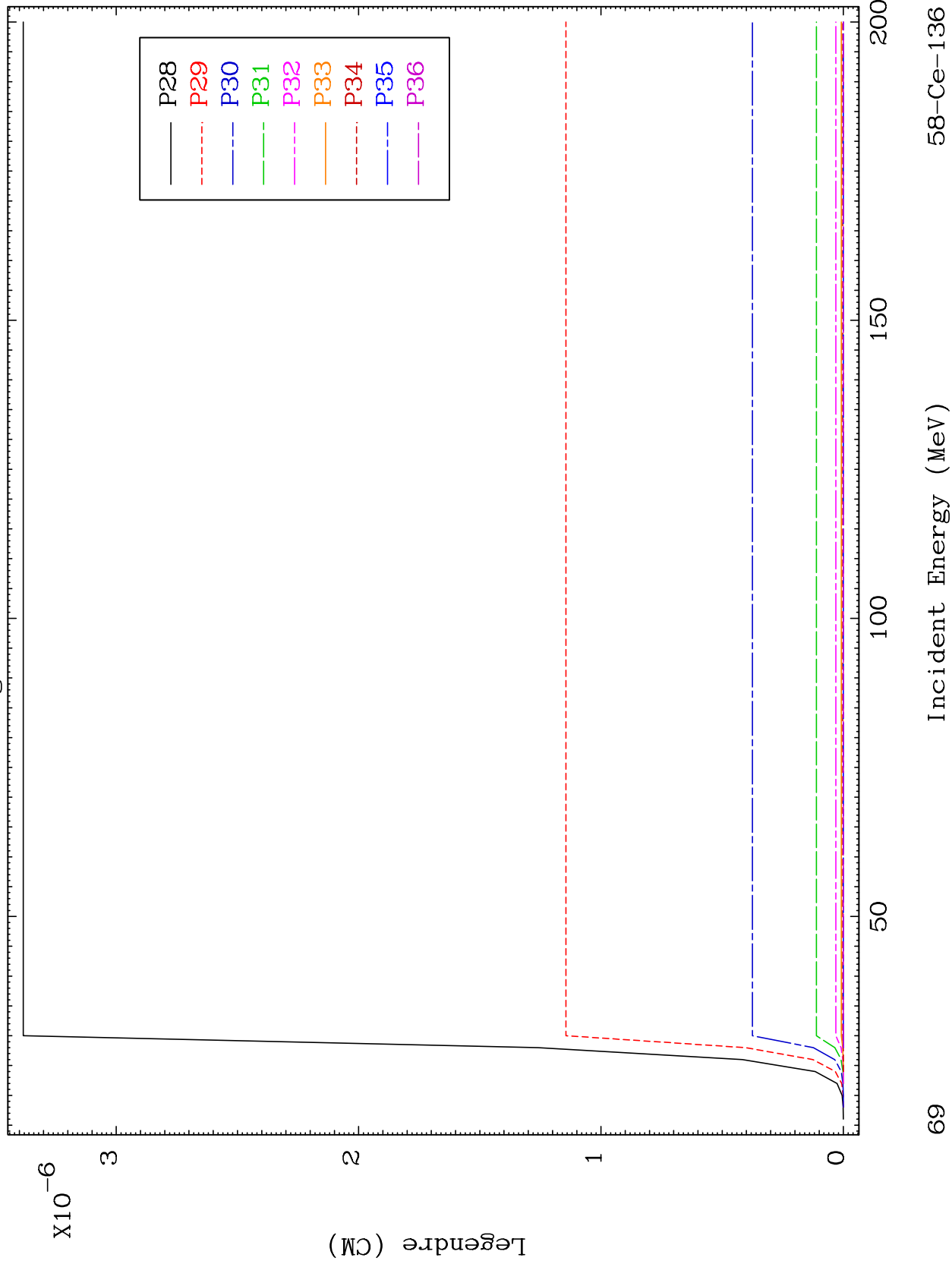


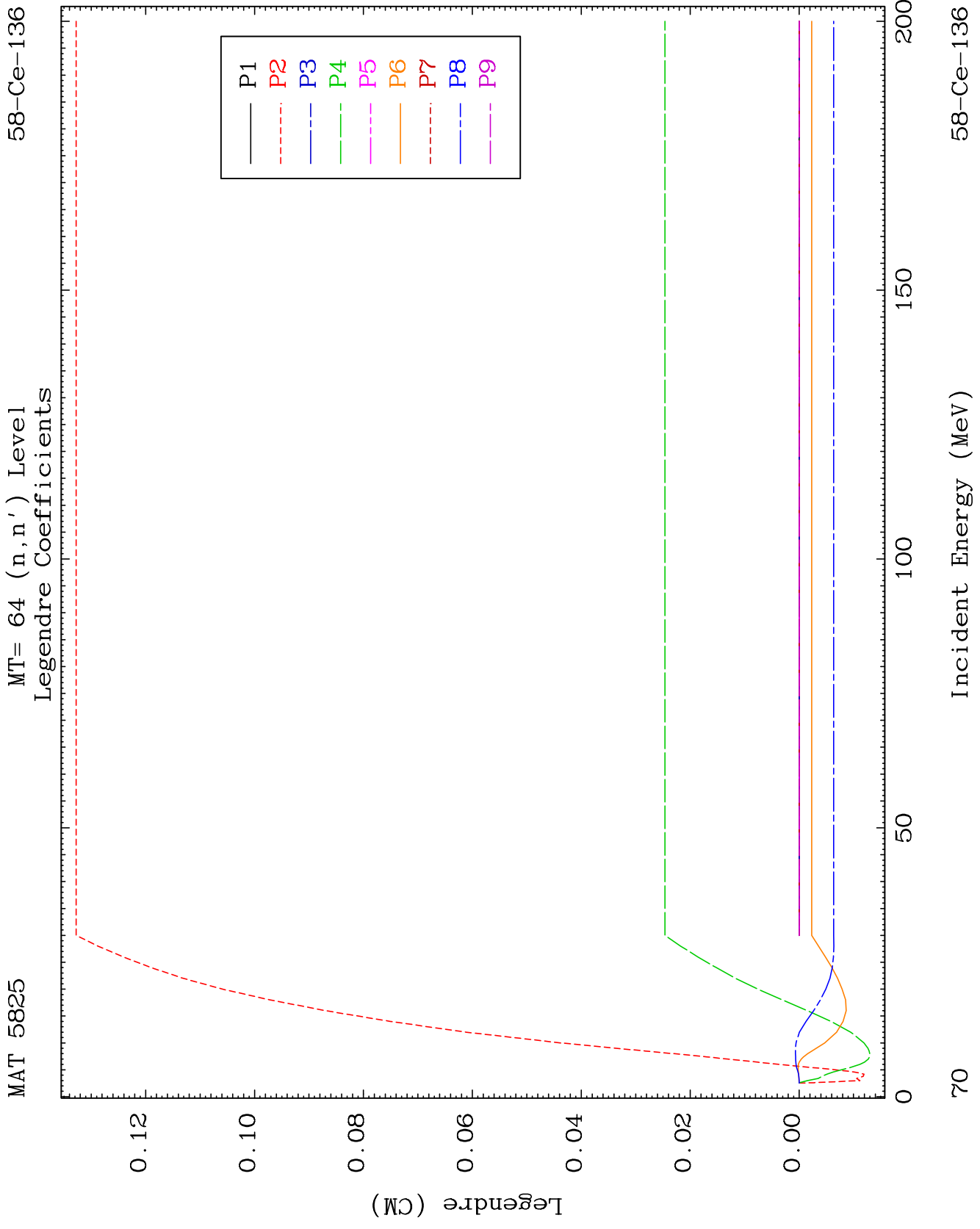
68

MAT 5825

MT= 63 (n,n') Level  
Legendre Coefficients

58-Ce-136

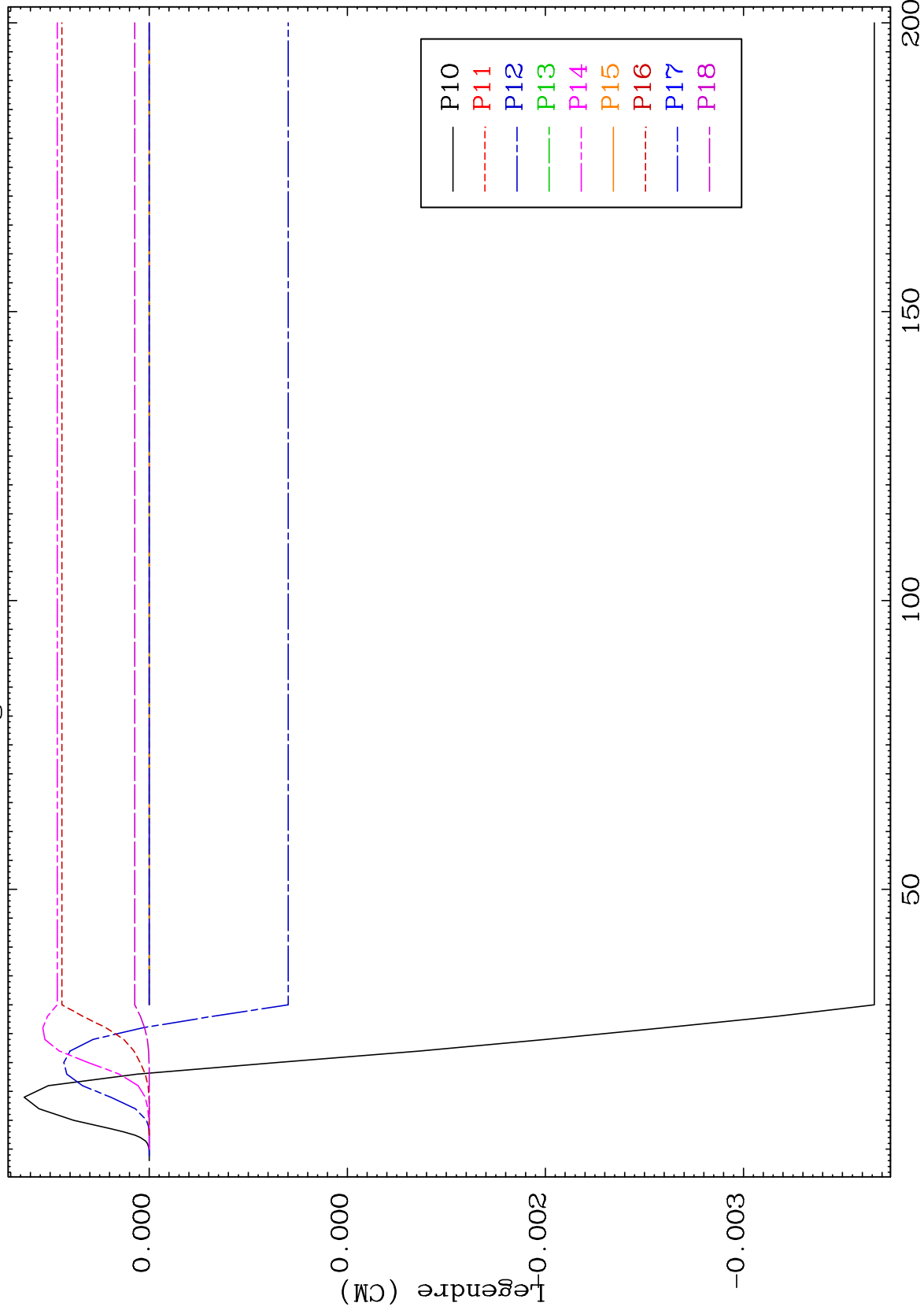




MAT 5825

MT= 64 (n,n') Level  
Legendre Coefficients

58-Ce-136



71

Incident Energy (MeV)

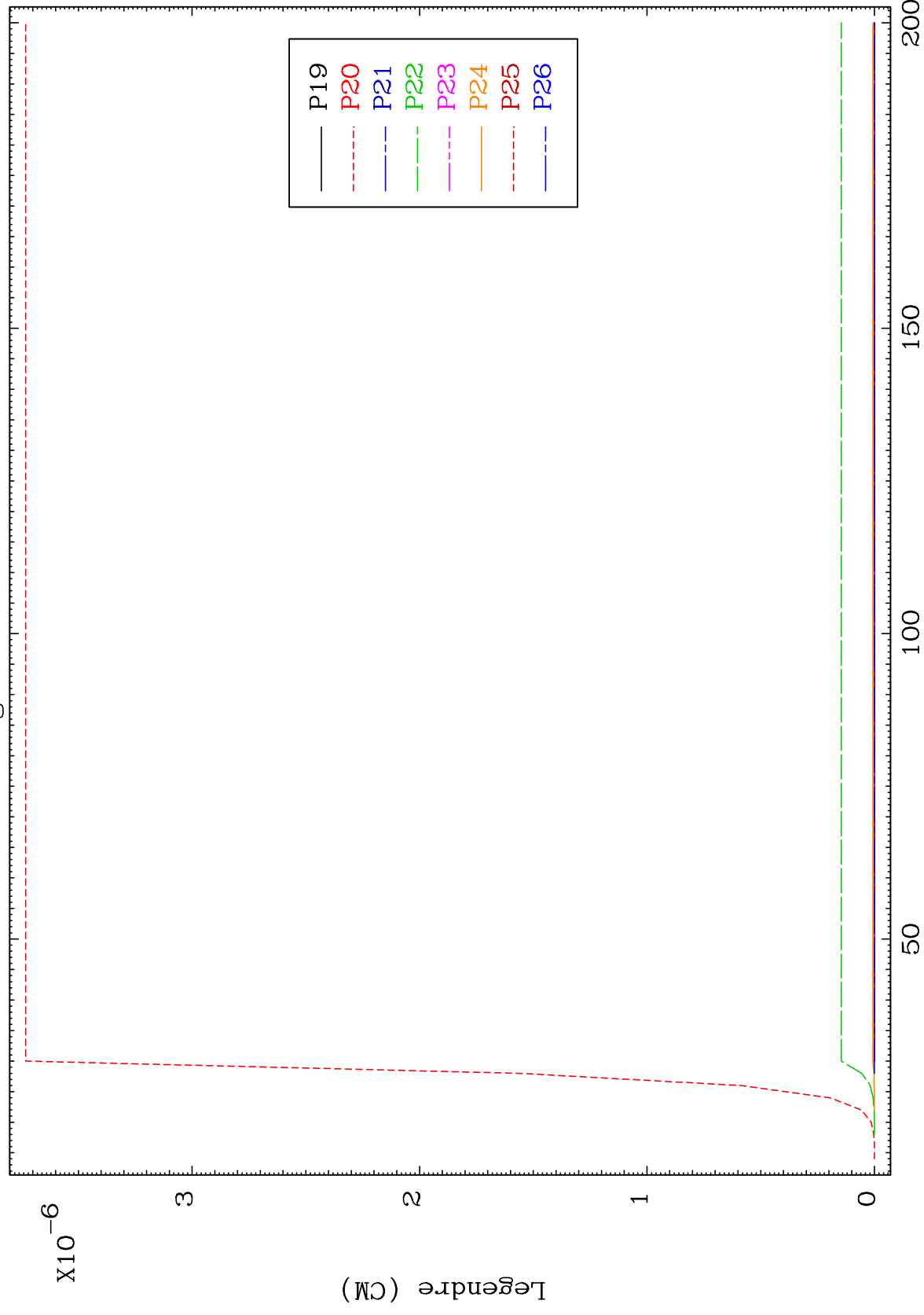
58-Ce-136



MAT 5825

MT= 64 (n,n') Level  
Legendre Coefficients

58-Ce-136



72

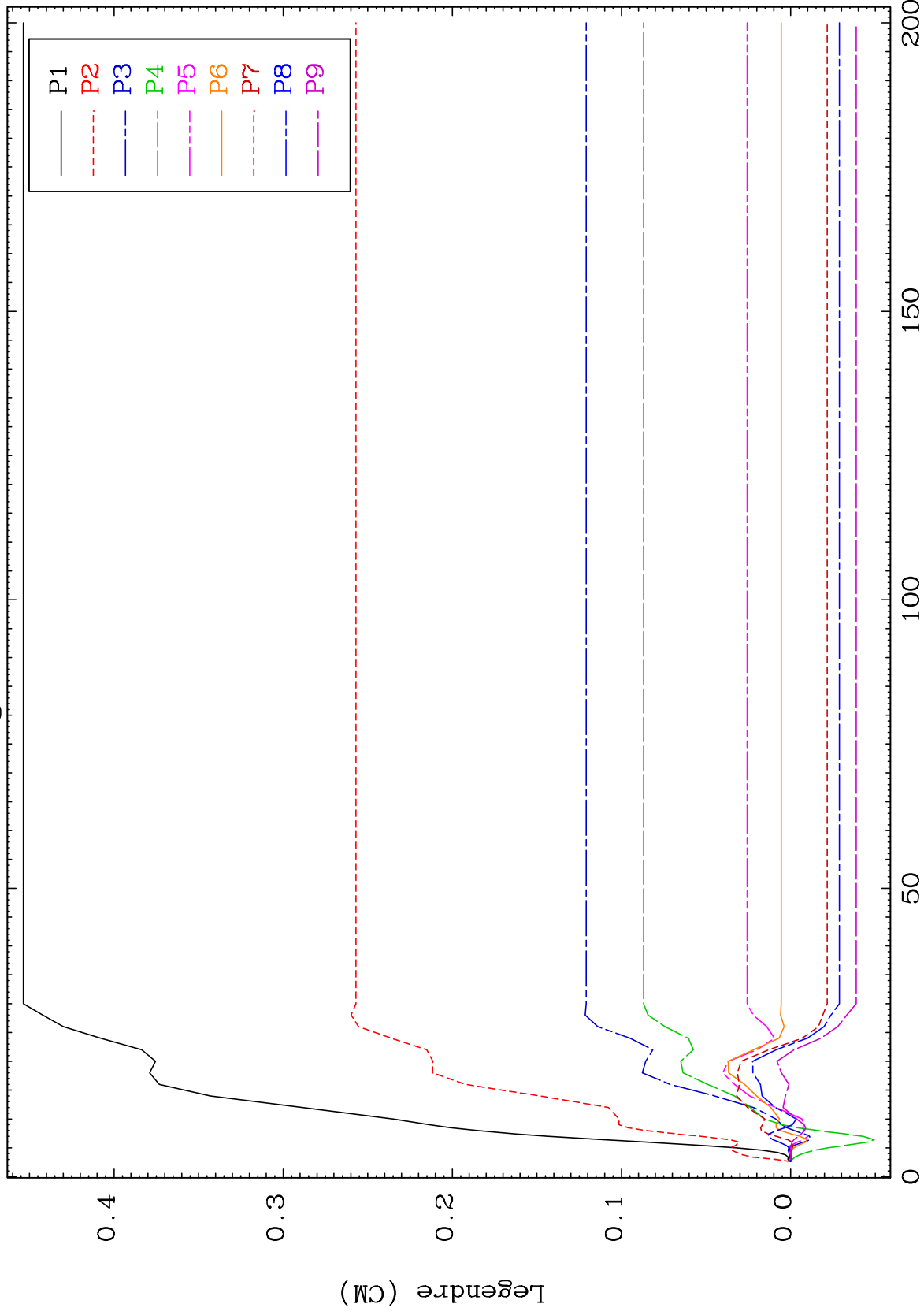
Incident Energy (MeV)

58-Ce-136

MAT 5825

MT= 65 (n,n') Level  
Legendre Coefficients

58-Ce-136



73

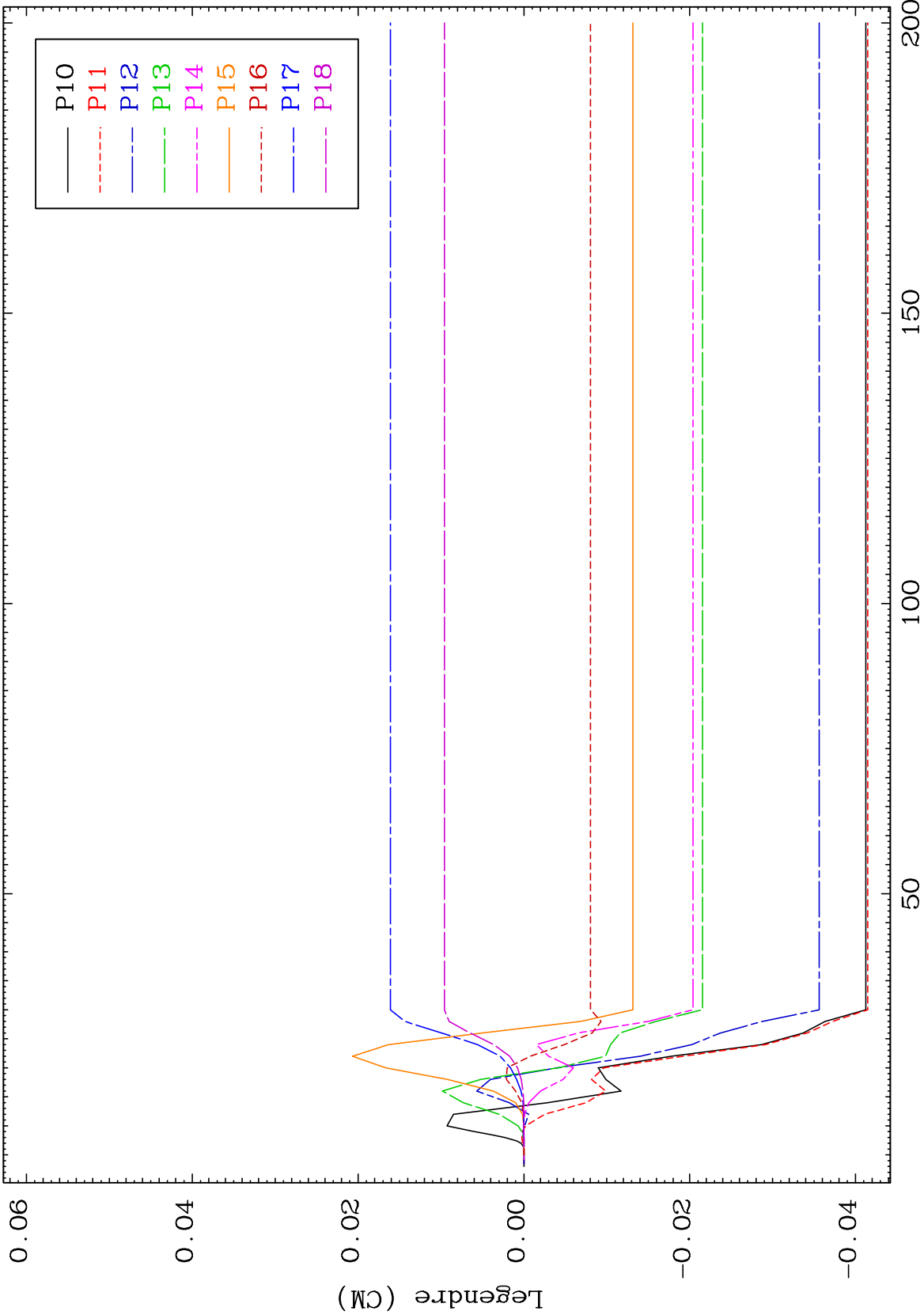
Incident Energy (MeV)

58-Ce-136

MAT 5825

MT= 65 (n,n') Level  
Legendre Coefficients

58-Ce-136



74

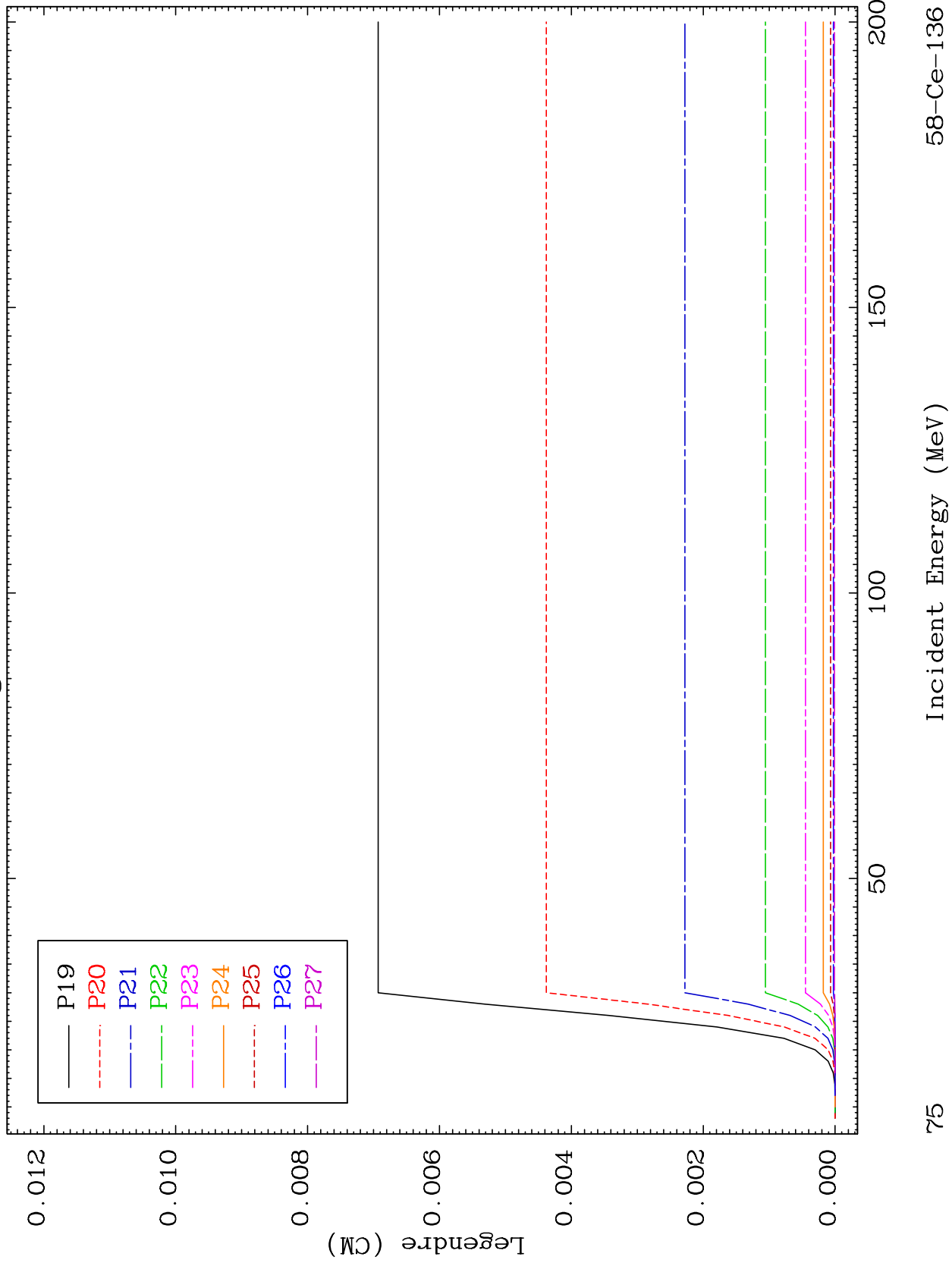
Incident Energy (MeV)

58-Ce-136

MAT 5825

MT= 65 (n,n') Level  
Legendre Coefficients

58-Ce-136



75

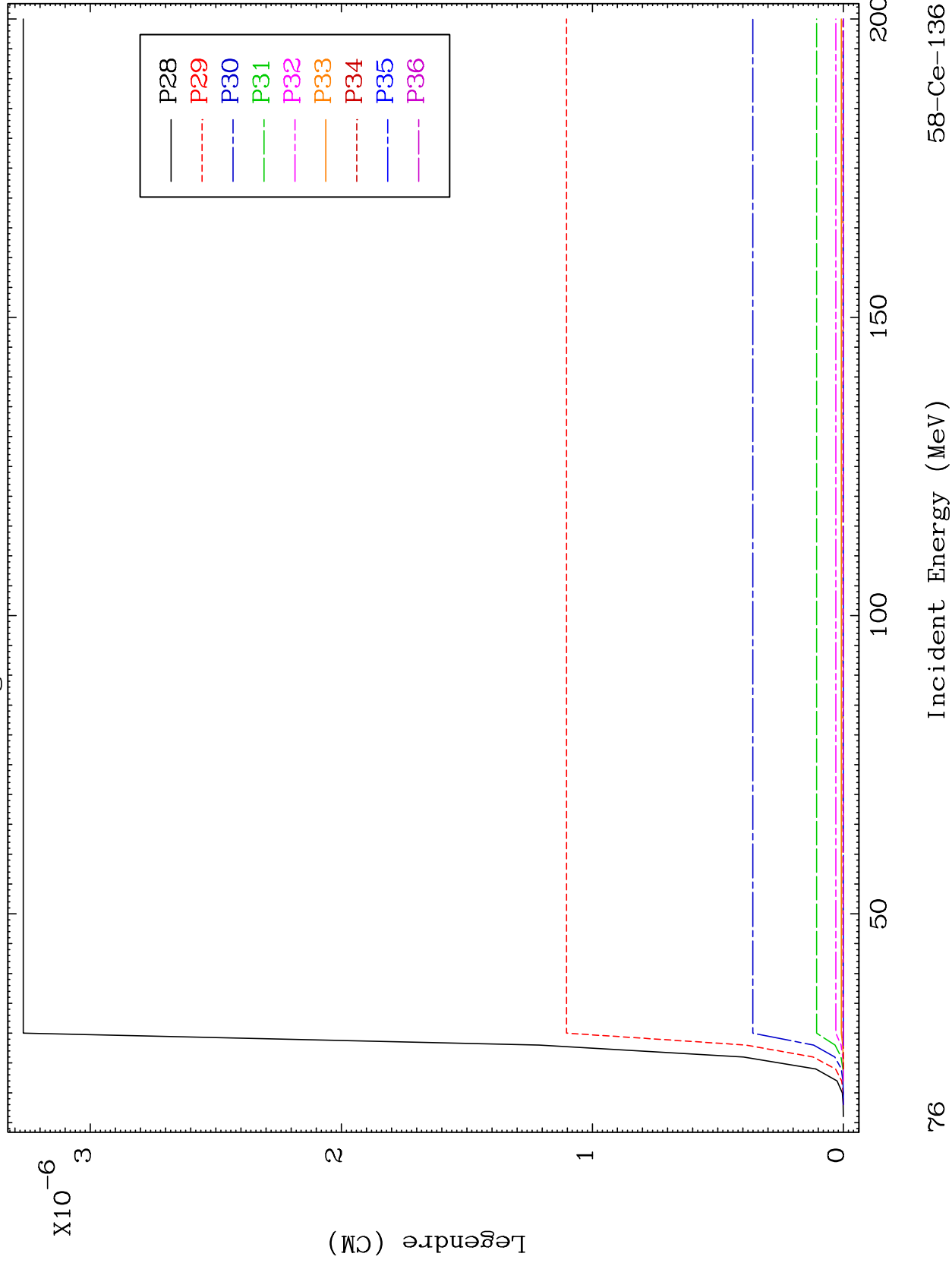
Incident Energy (MeV)

58-Ce-136

MAT 5825

MT= 65 (n,n') Level  
Legendre Coefficients

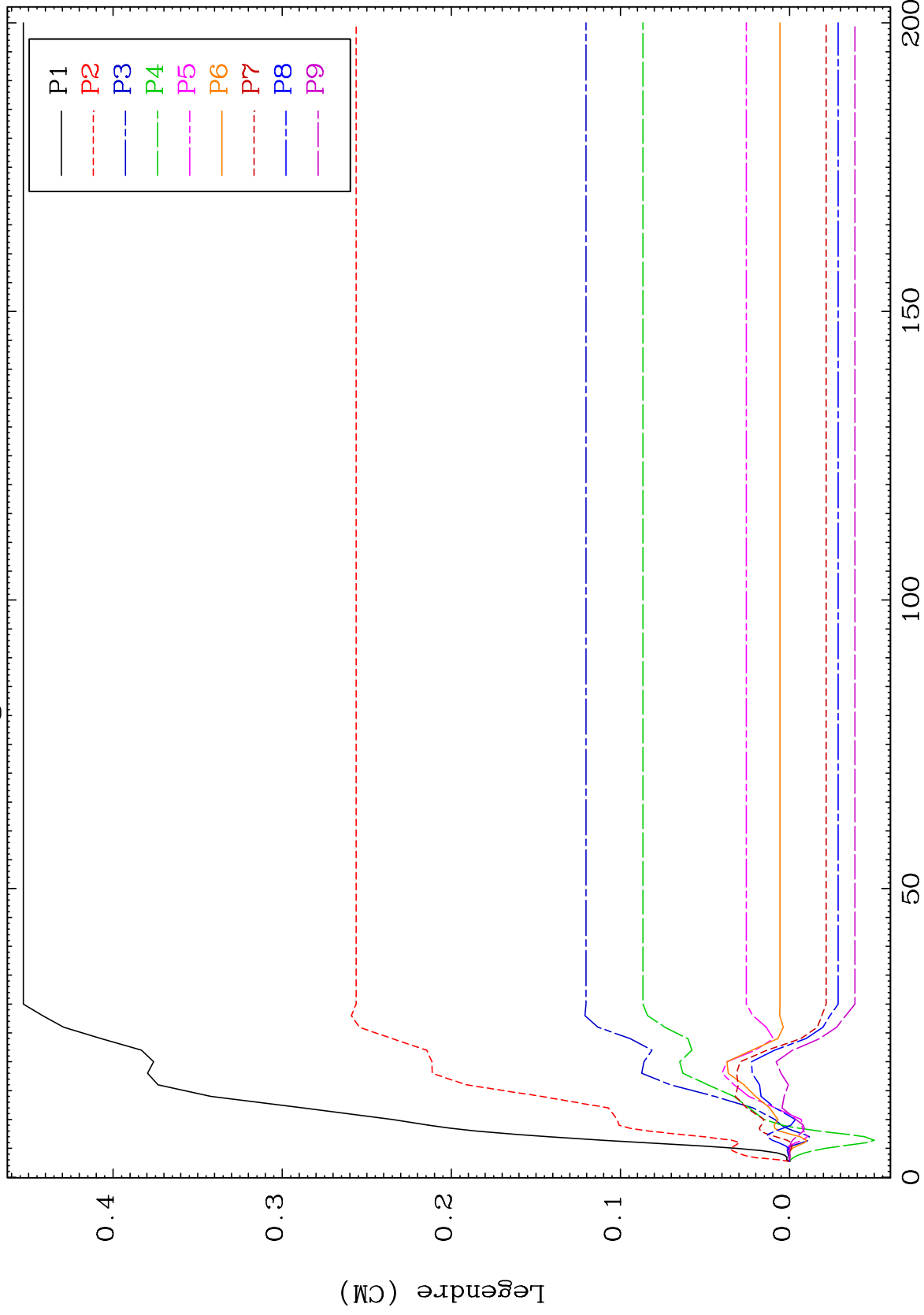
58-Ce-136



MAT 5825

MT= 66 (n,n') Level  
Legendre Coefficients

58-Ce-136



77

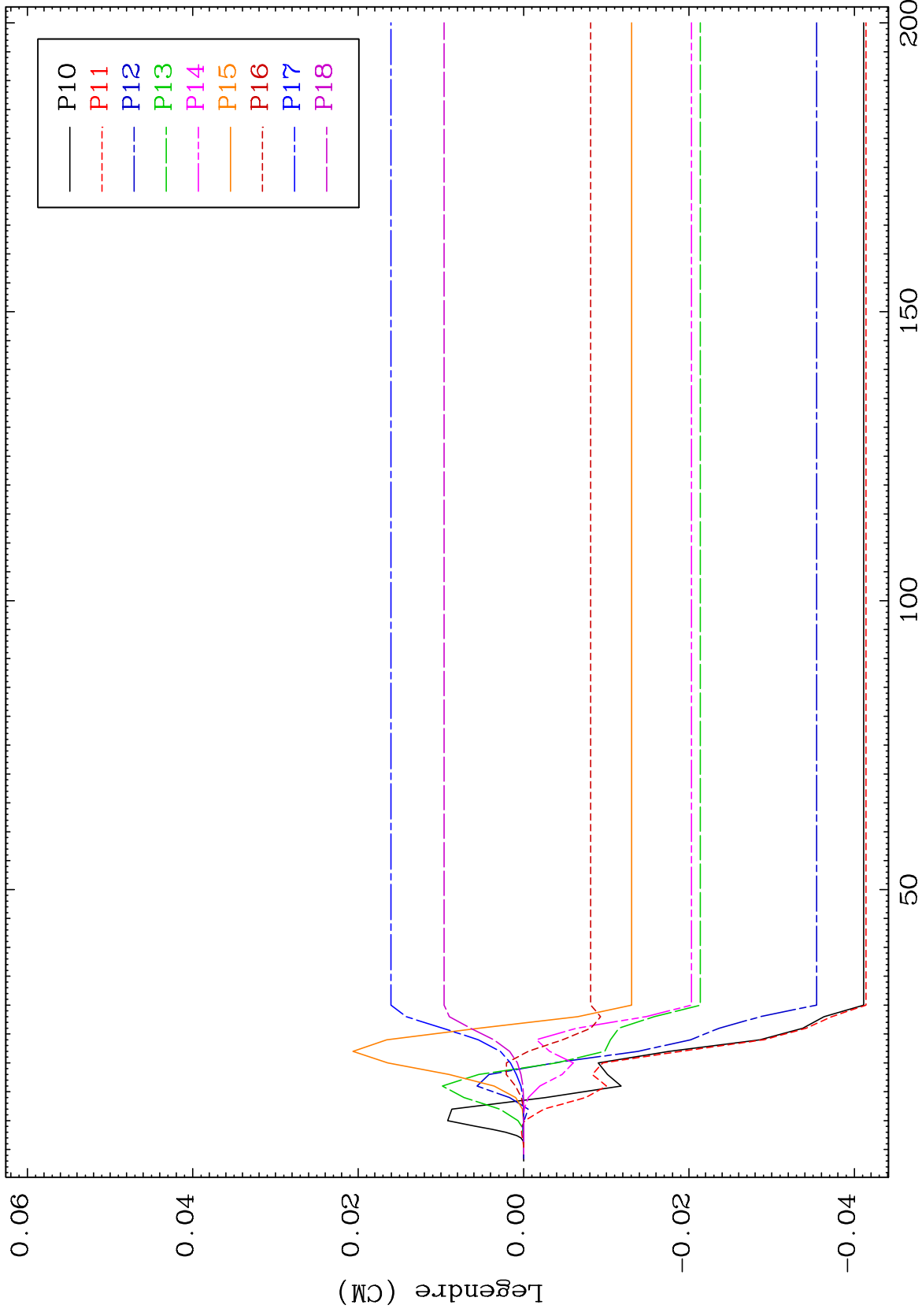
Incident Energy (MeV)

58-Ce-136

MAT 5825

MT= 66 (n,n') Level  
Legendre Coefficients

58-Ce-136



78

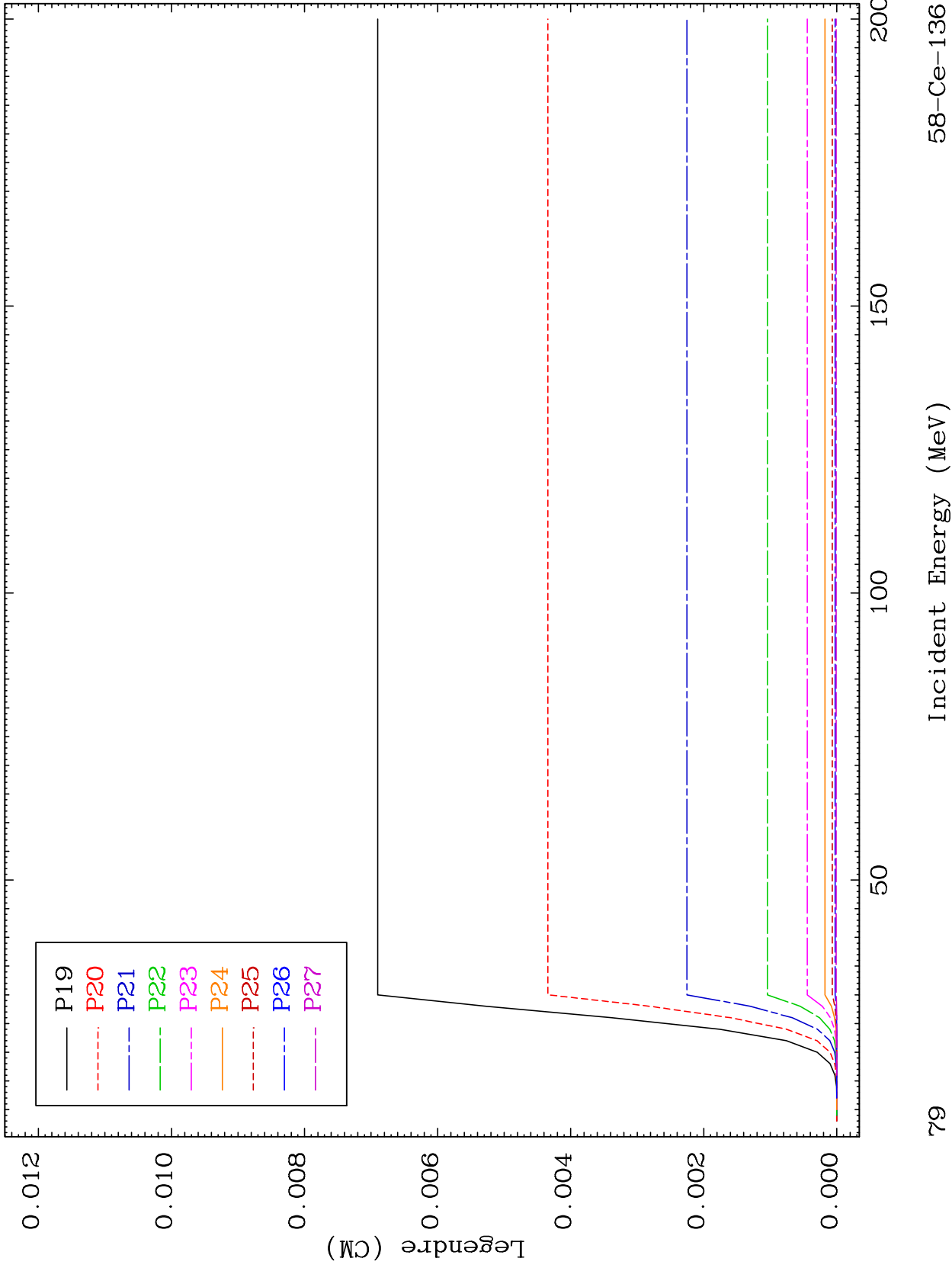
Incident Energy (MeV)

58-Ce-136

MAT 5825

MT= 66 (n,n') Level  
Legendre Coefficients

58-Ce-136



79

Incident Energy (MeV)

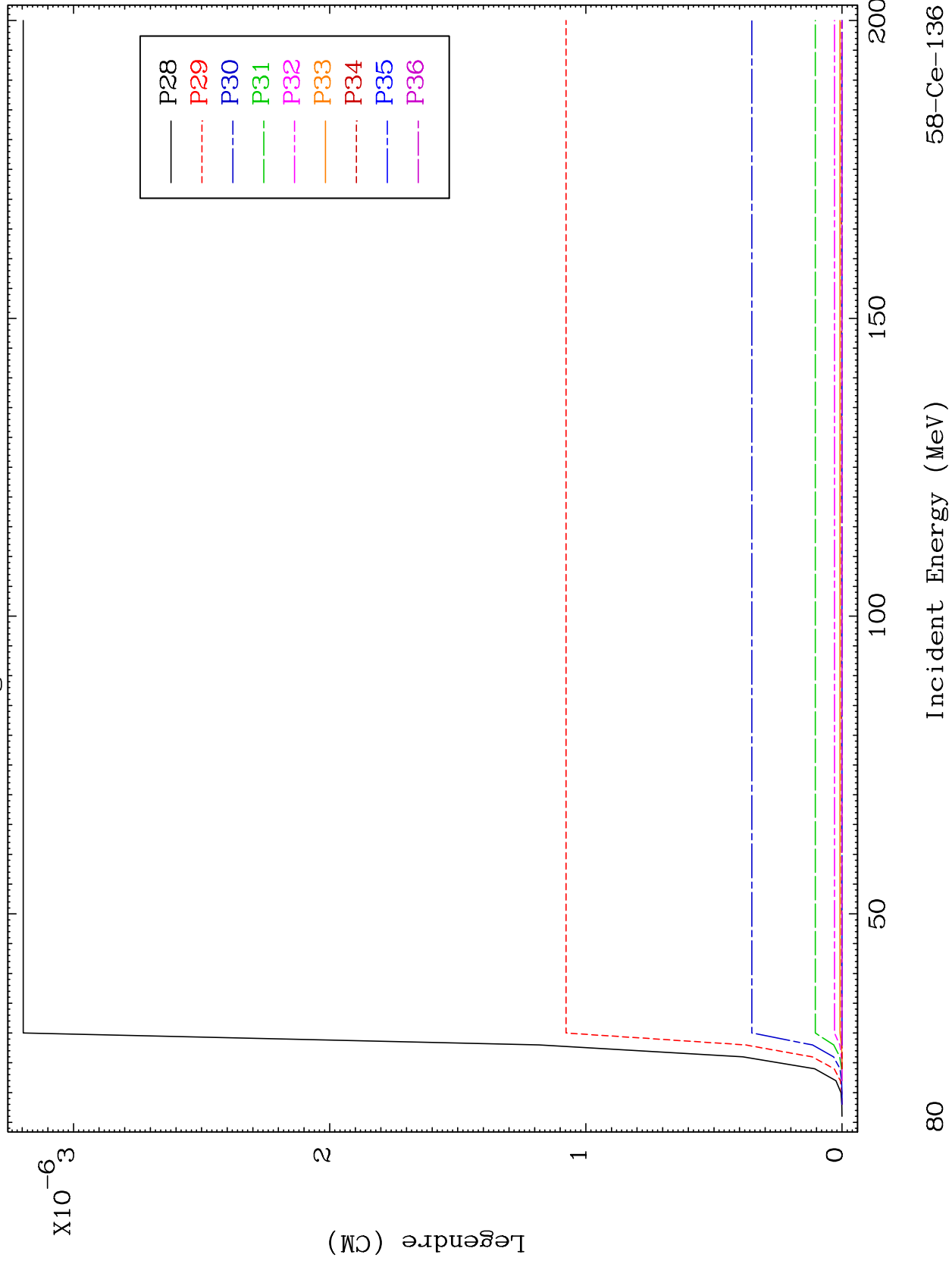
58-Ce-136

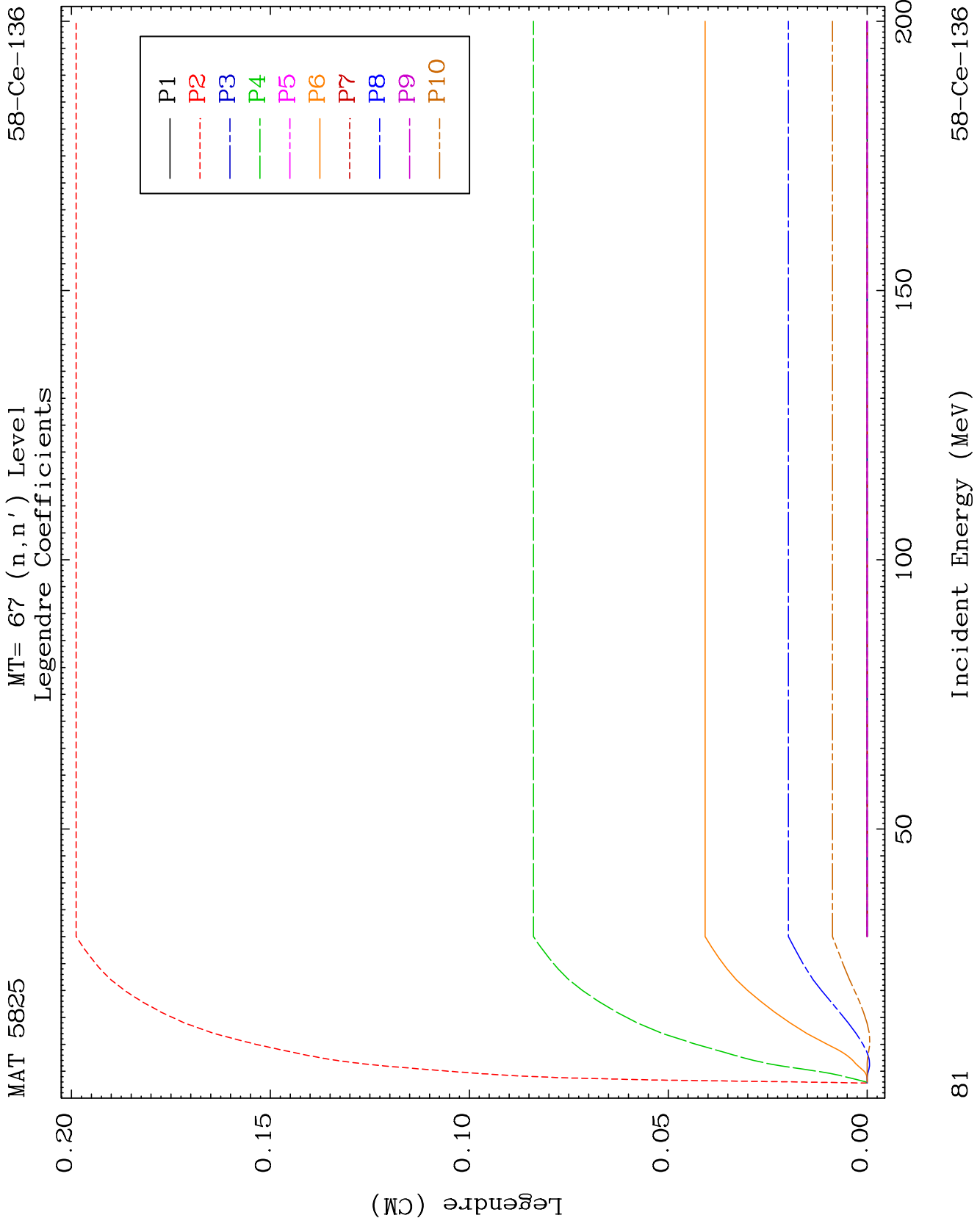


MAT 5825

MT= 66 (n,n') Level  
Legendre Coefficients

58-Ce-136

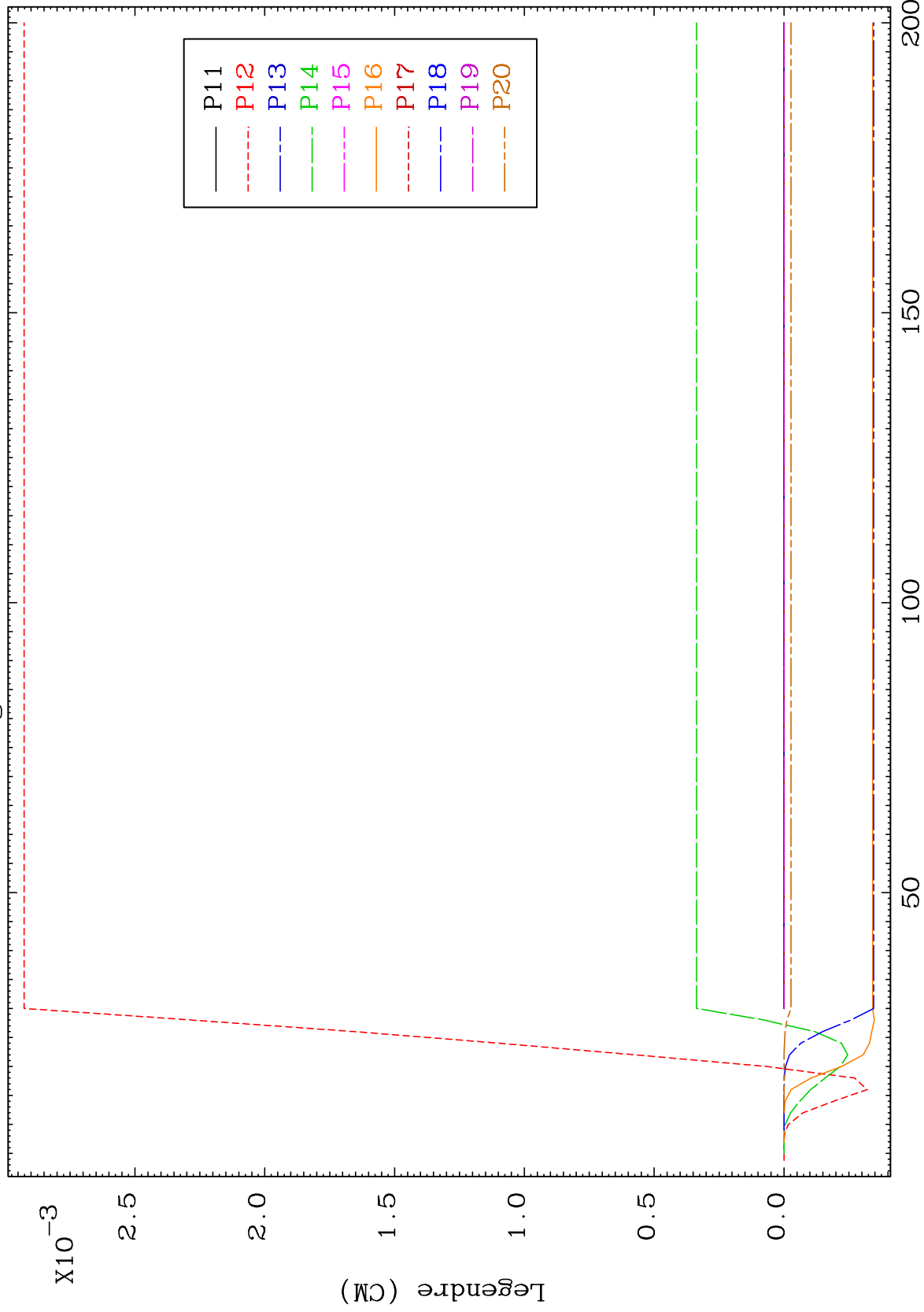




MAT 5825

MT= 67 (n,n') Level  
Legendre Coefficients

58-Ce-136



82

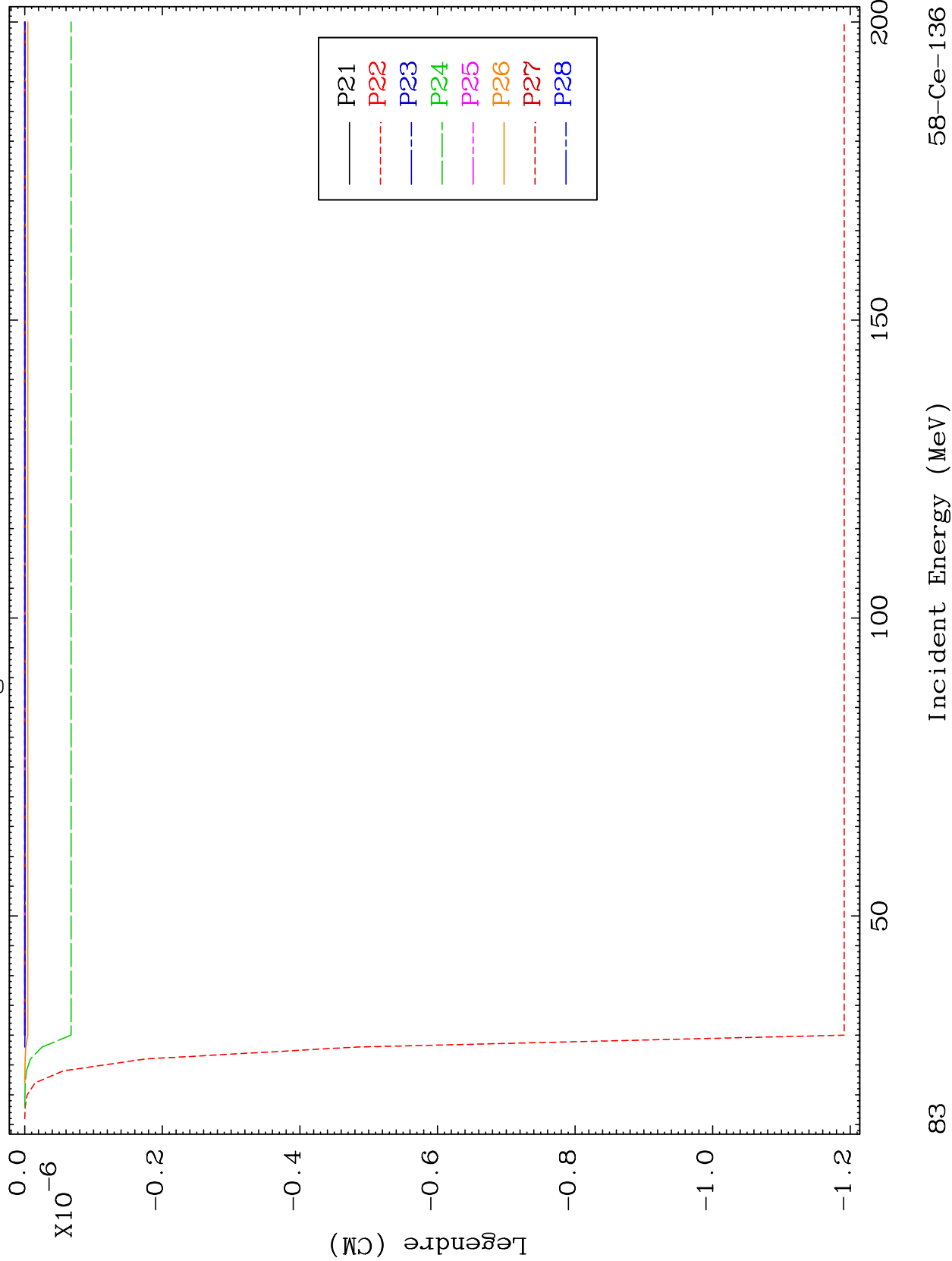
Incident Energy (MeV)

58-Ce-136

MAT 5825

MT= 67 (n,n') Level  
Legendre Coefficients

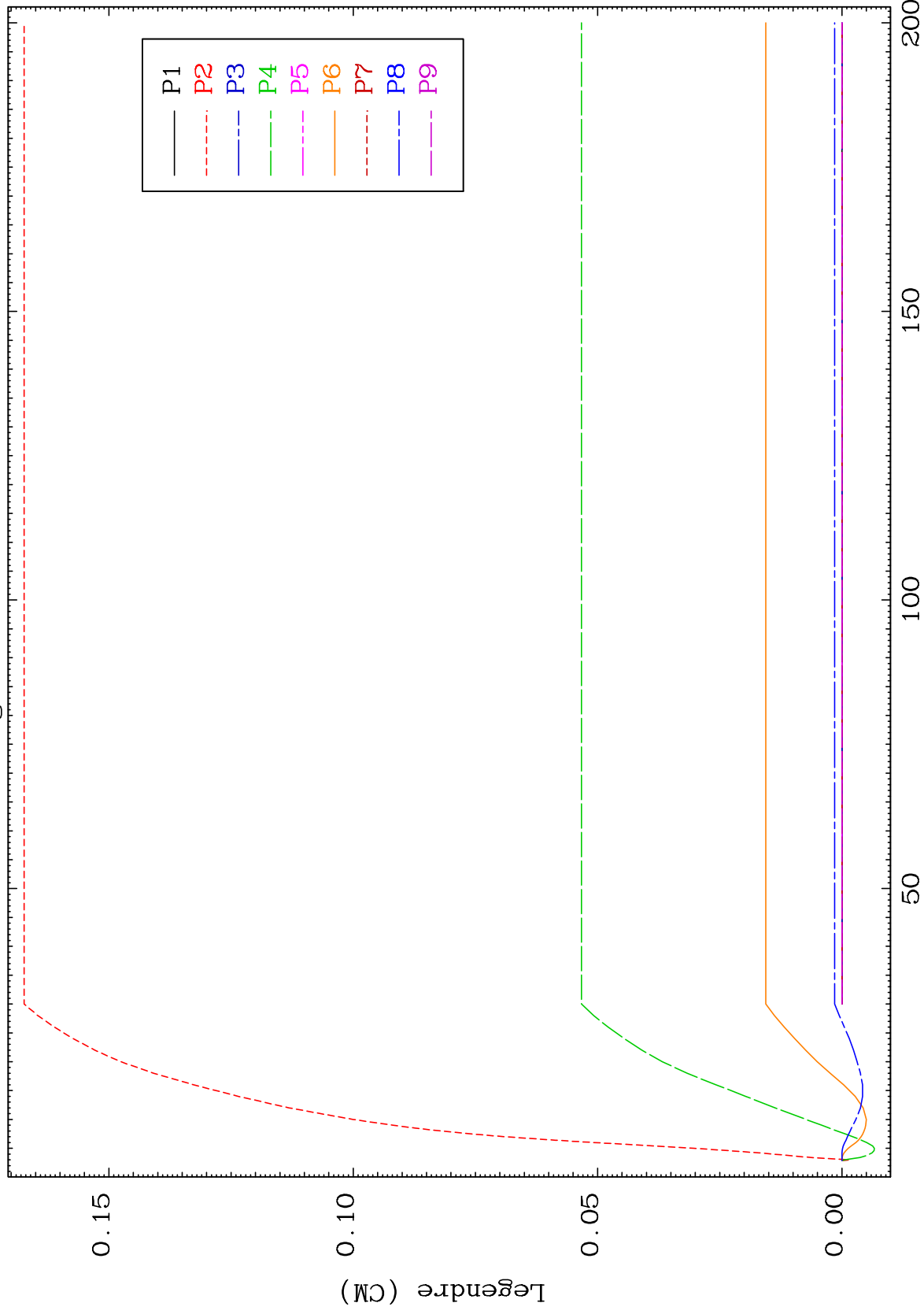
58-Ce-136



MAT 5825

MT= 68 (n,n') Level  
Legendre Coefficients

58-Ce-136



84

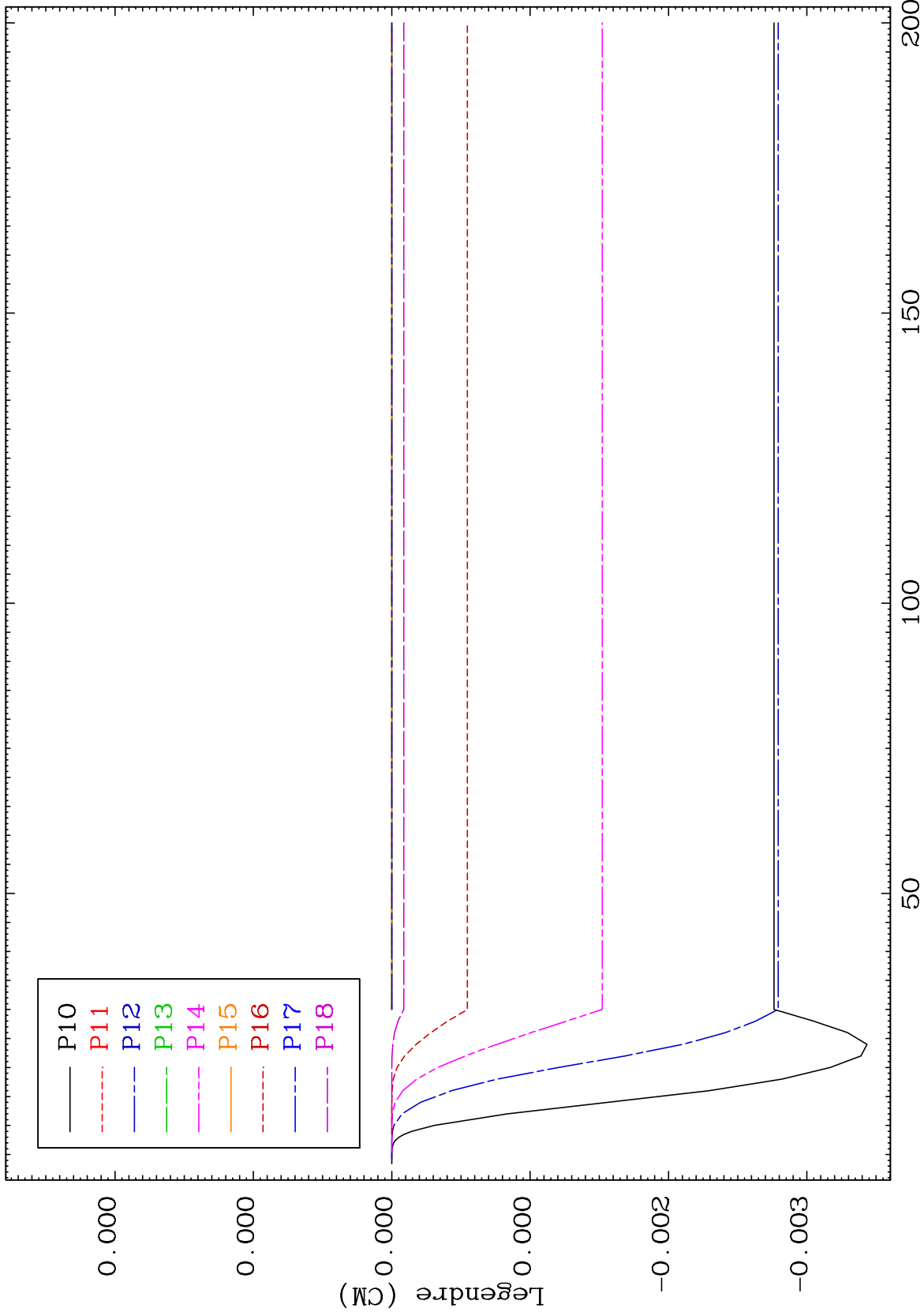
Incident Energy (MeV)

58-Ce-136

MAT 5825

MT= 68 (n,n') Level  
Legendre Coefficients

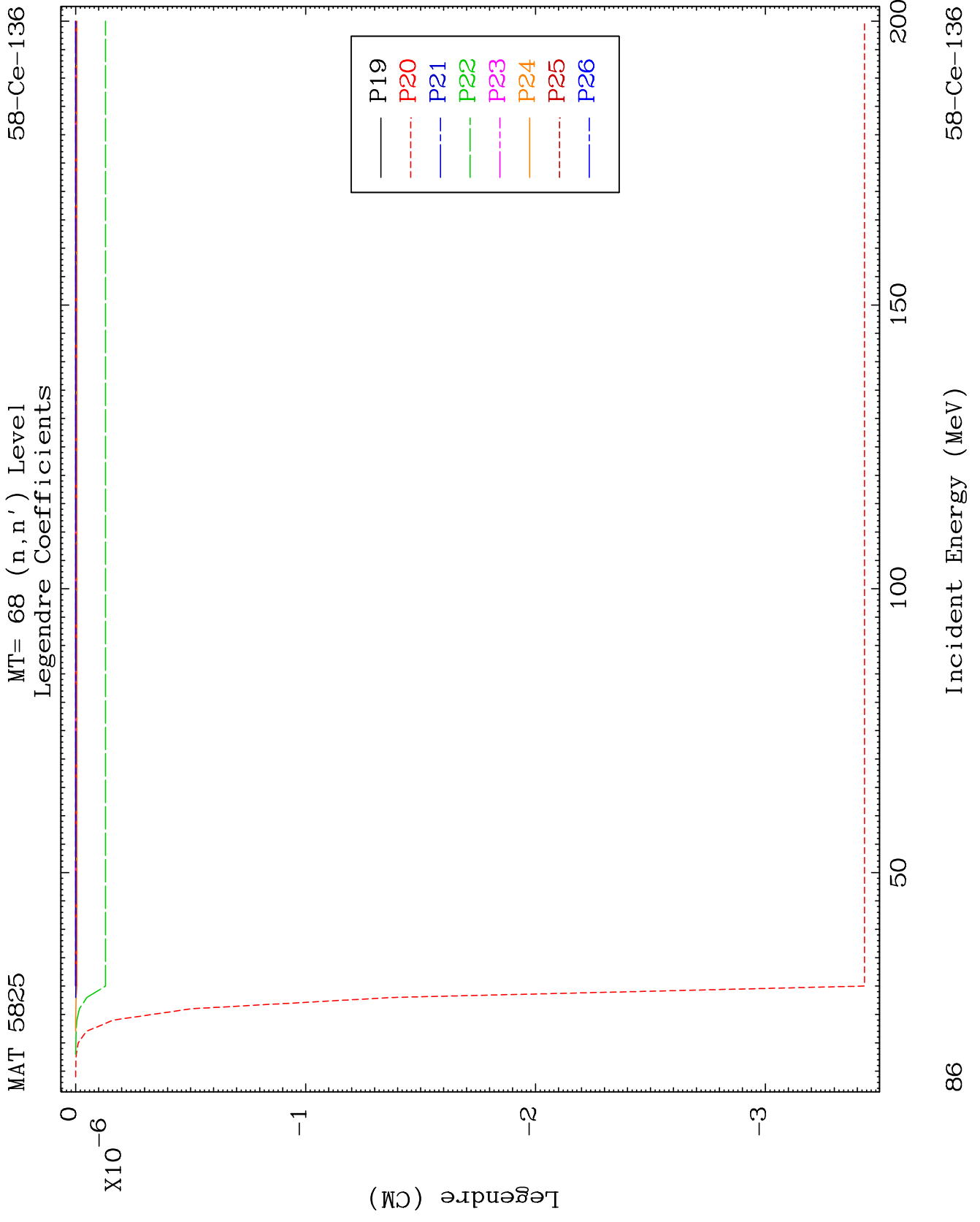
58-Ce-136

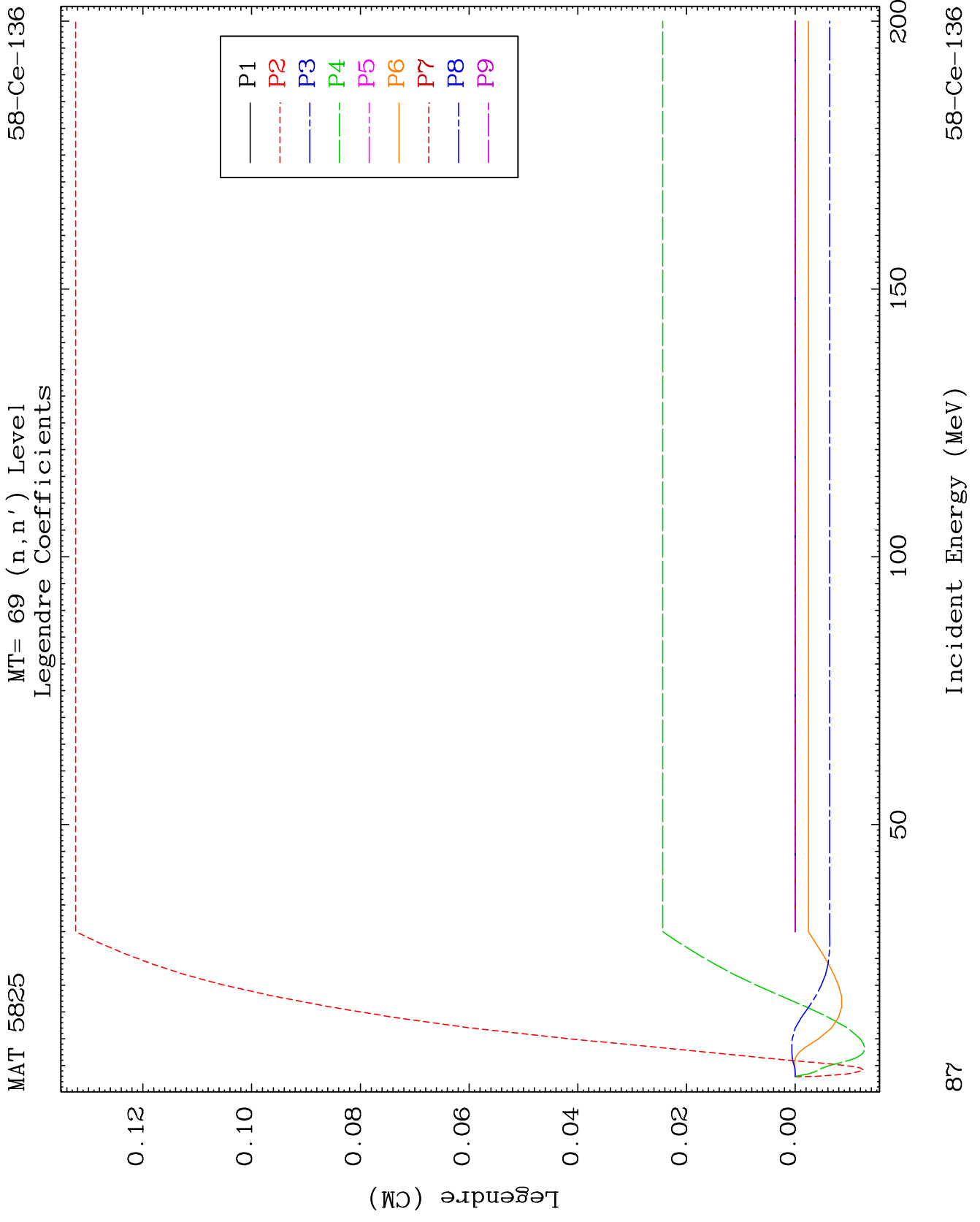


85

Incident Energy (MeV)

58-Ce-136



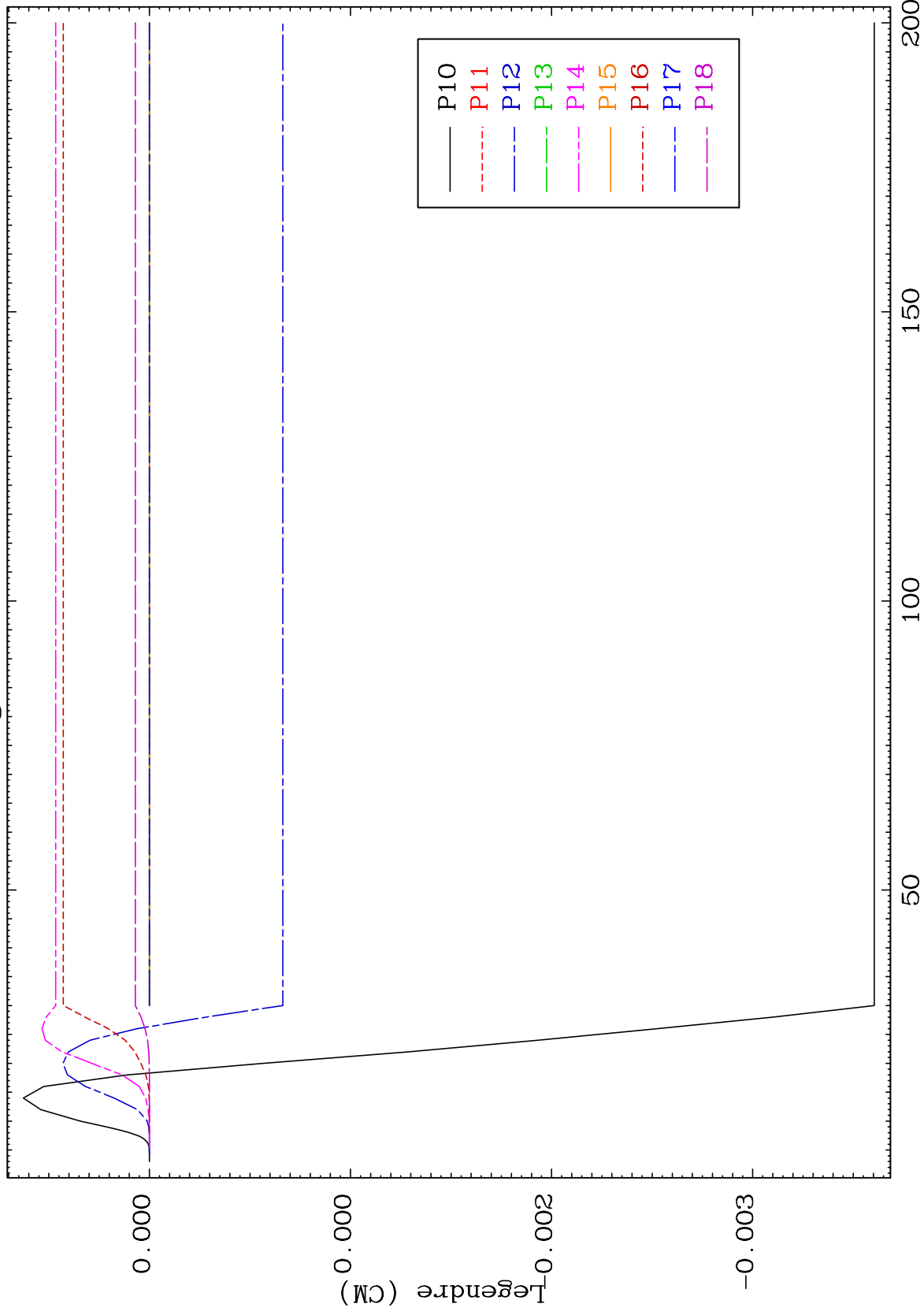




MAT 5825

MT= 69 (n,n') Level  
Legendre Coefficients

58-Ce-136



88

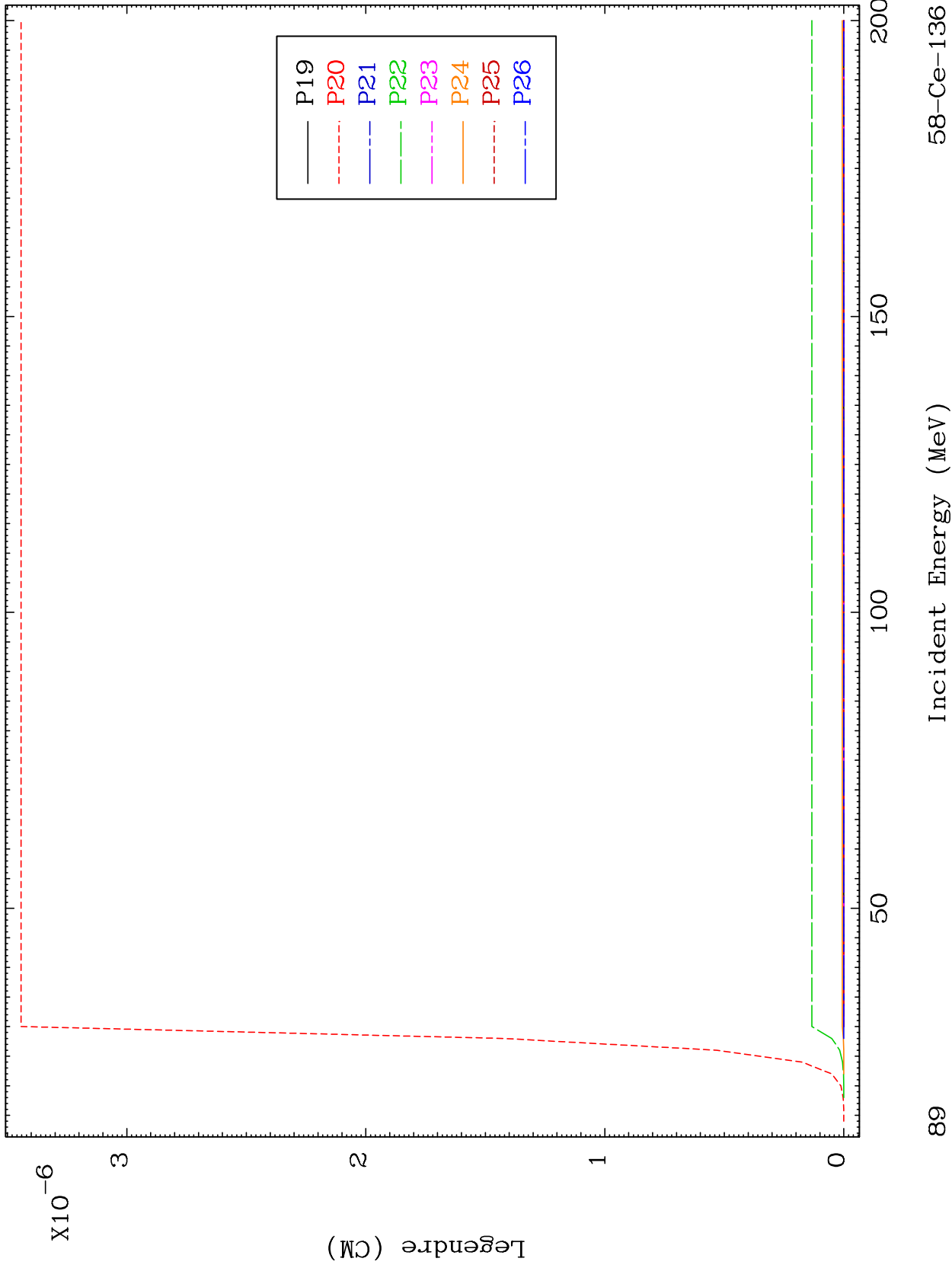
Incident Energy (MeV)

58-Ce-136

MAT 5825

MT= 69 (n,n') Level  
Legendre Coefficients

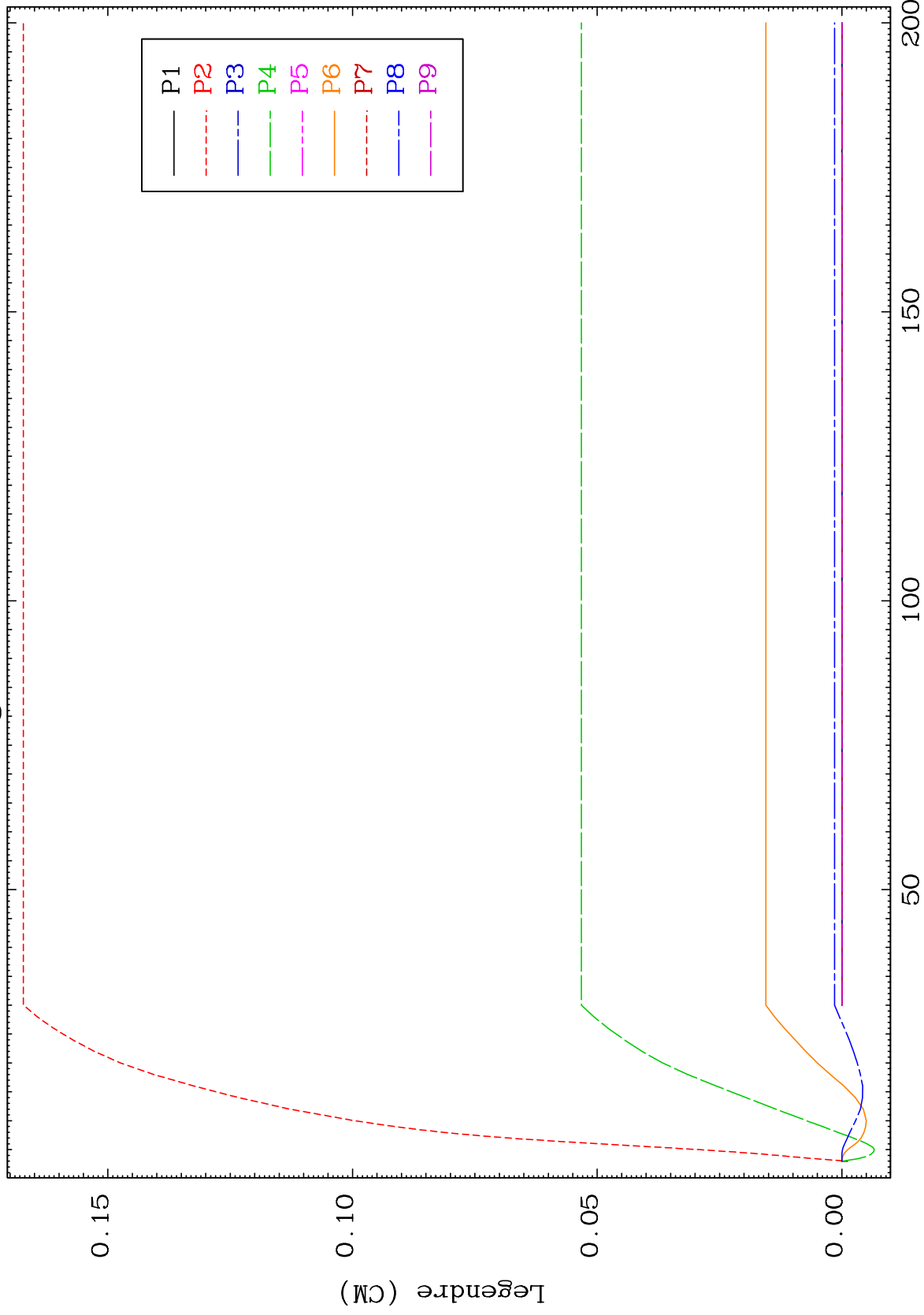
58-Ce-136



MAT 5825

MT= 70 (n,n') Level  
Legendre Coefficients

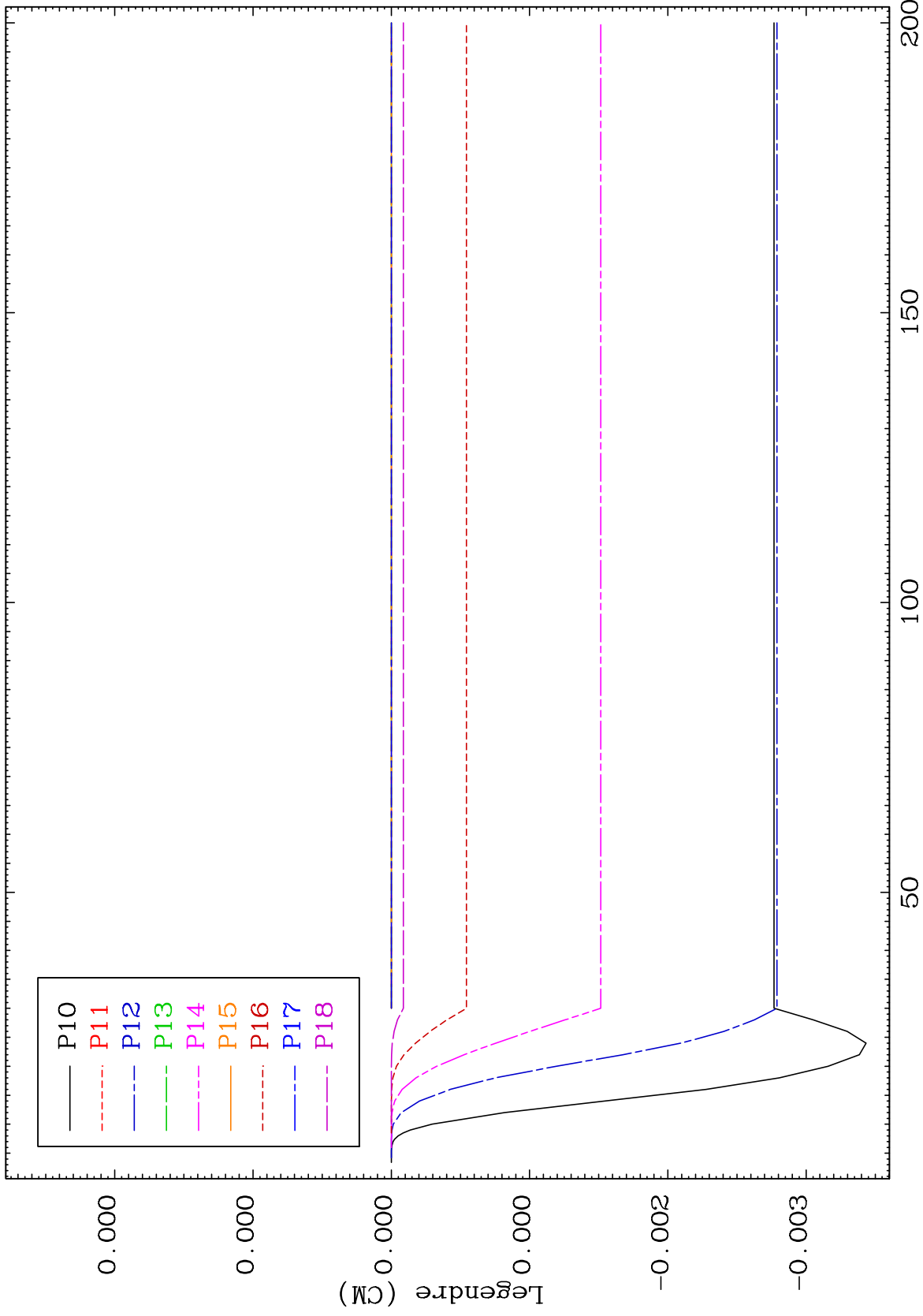
58-Ce-136

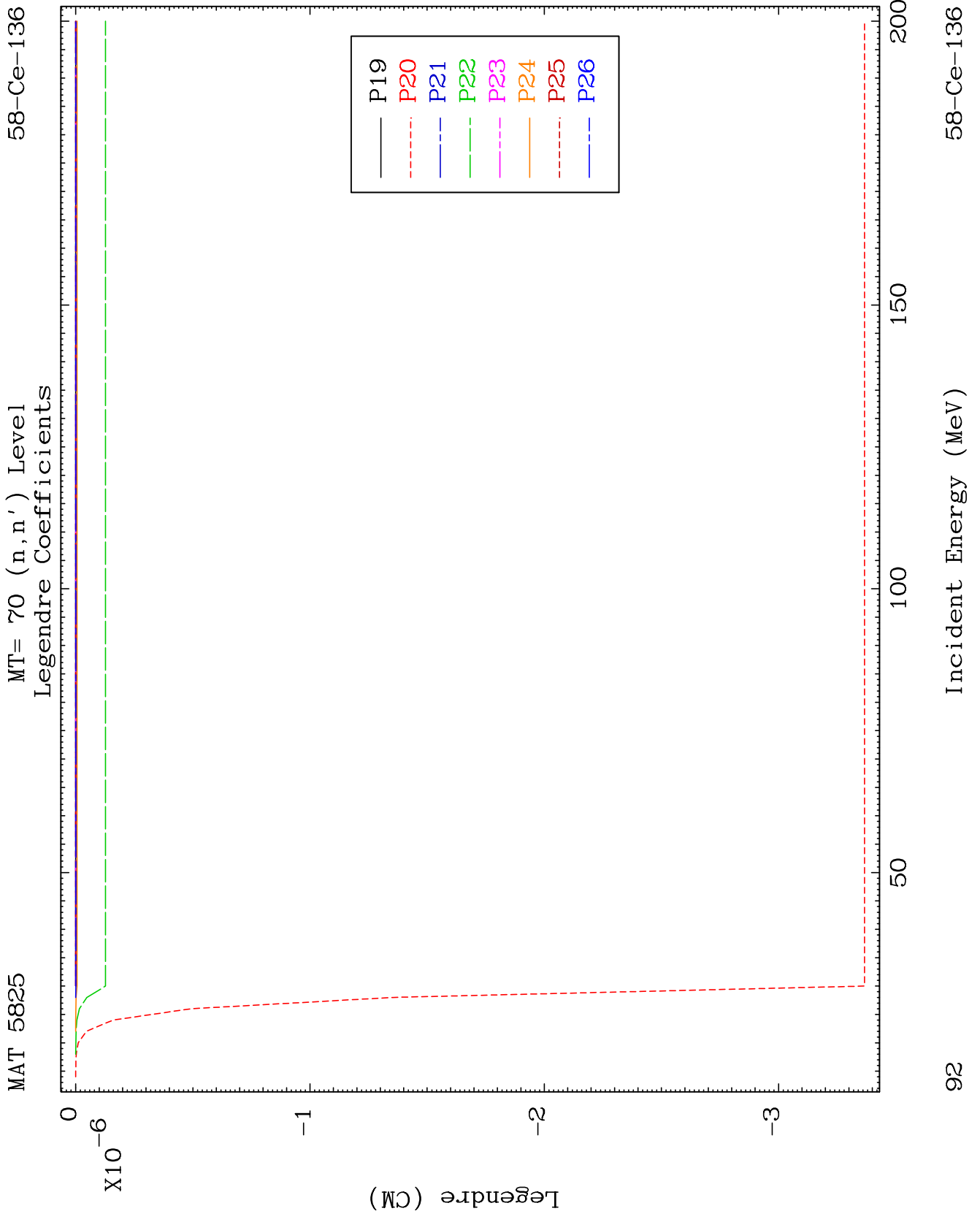


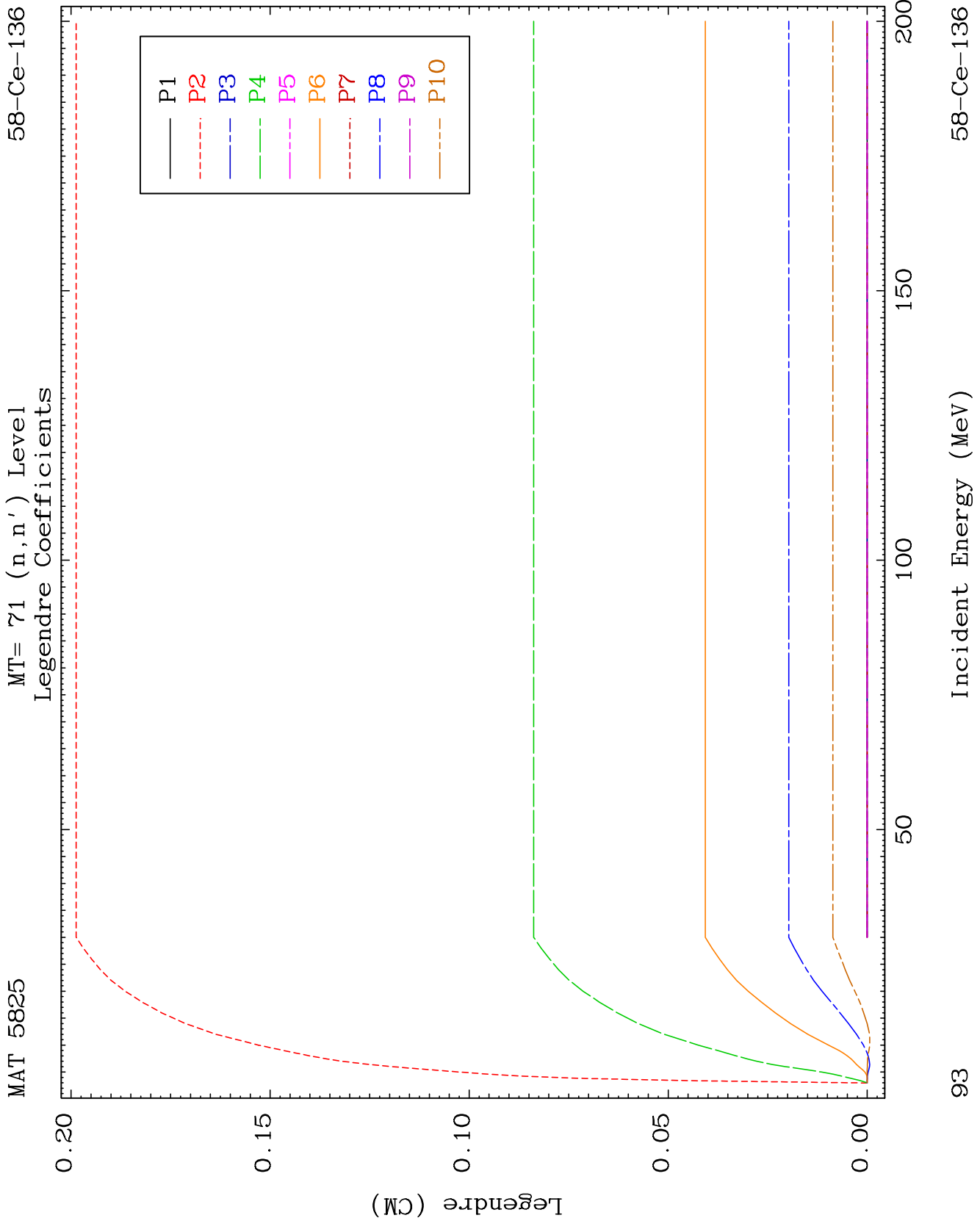
90

Incident Energy (MeV)

58-Ce-136



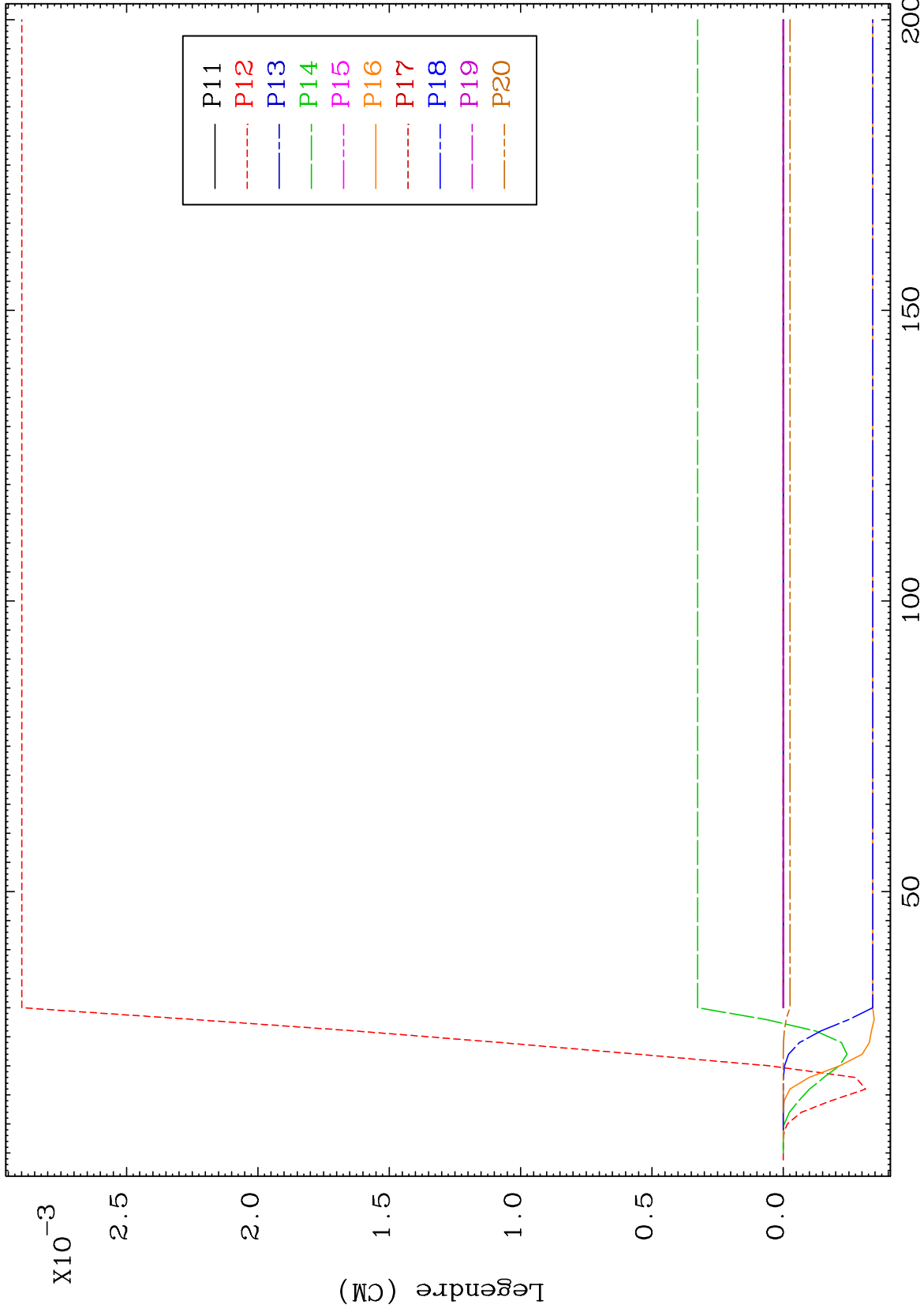




MAT 5825

MT= 71 (n,n') Level  
Legendre Coefficients

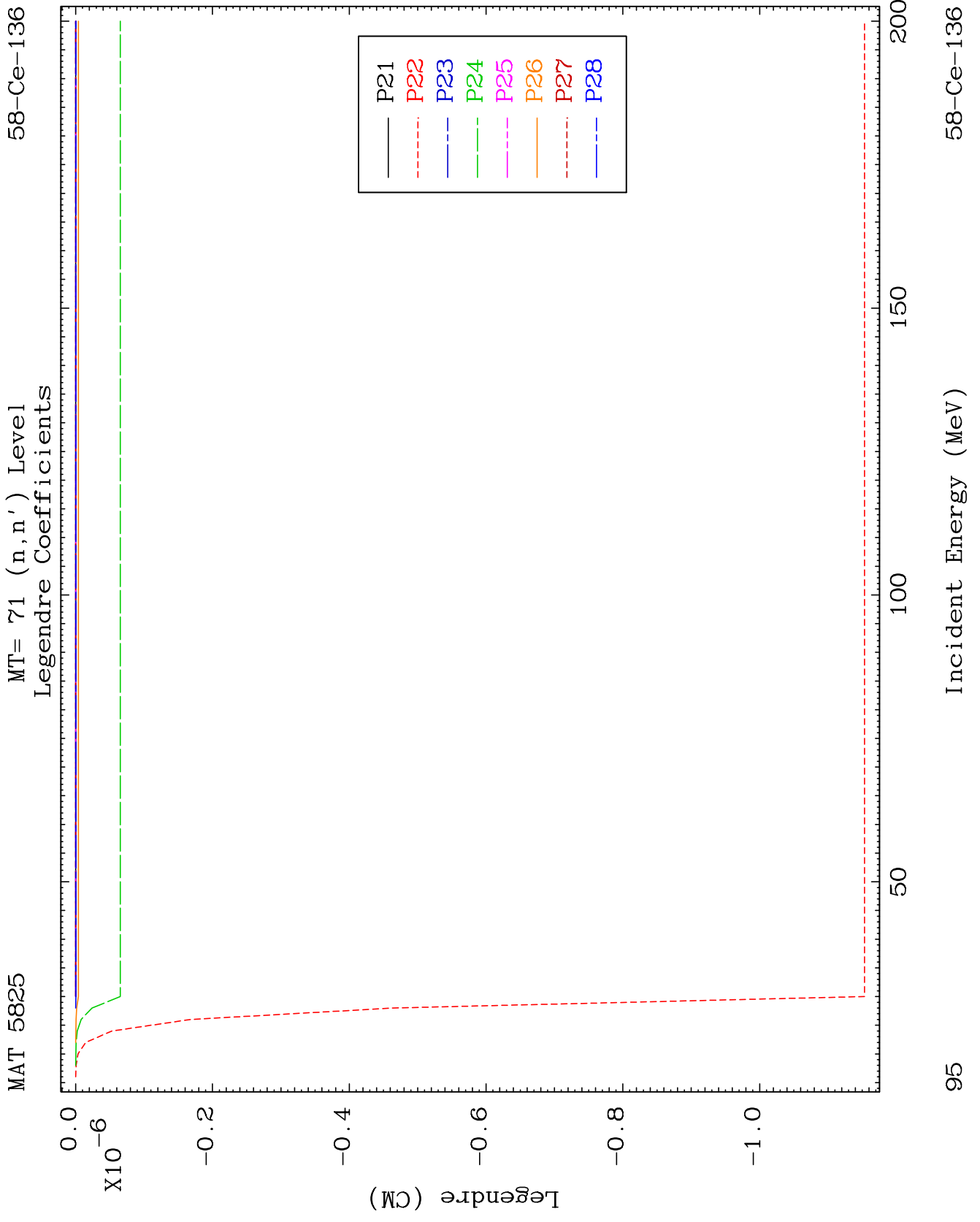
58-Ce-136



94

Incident Energy (MeV)

58-Ce-136

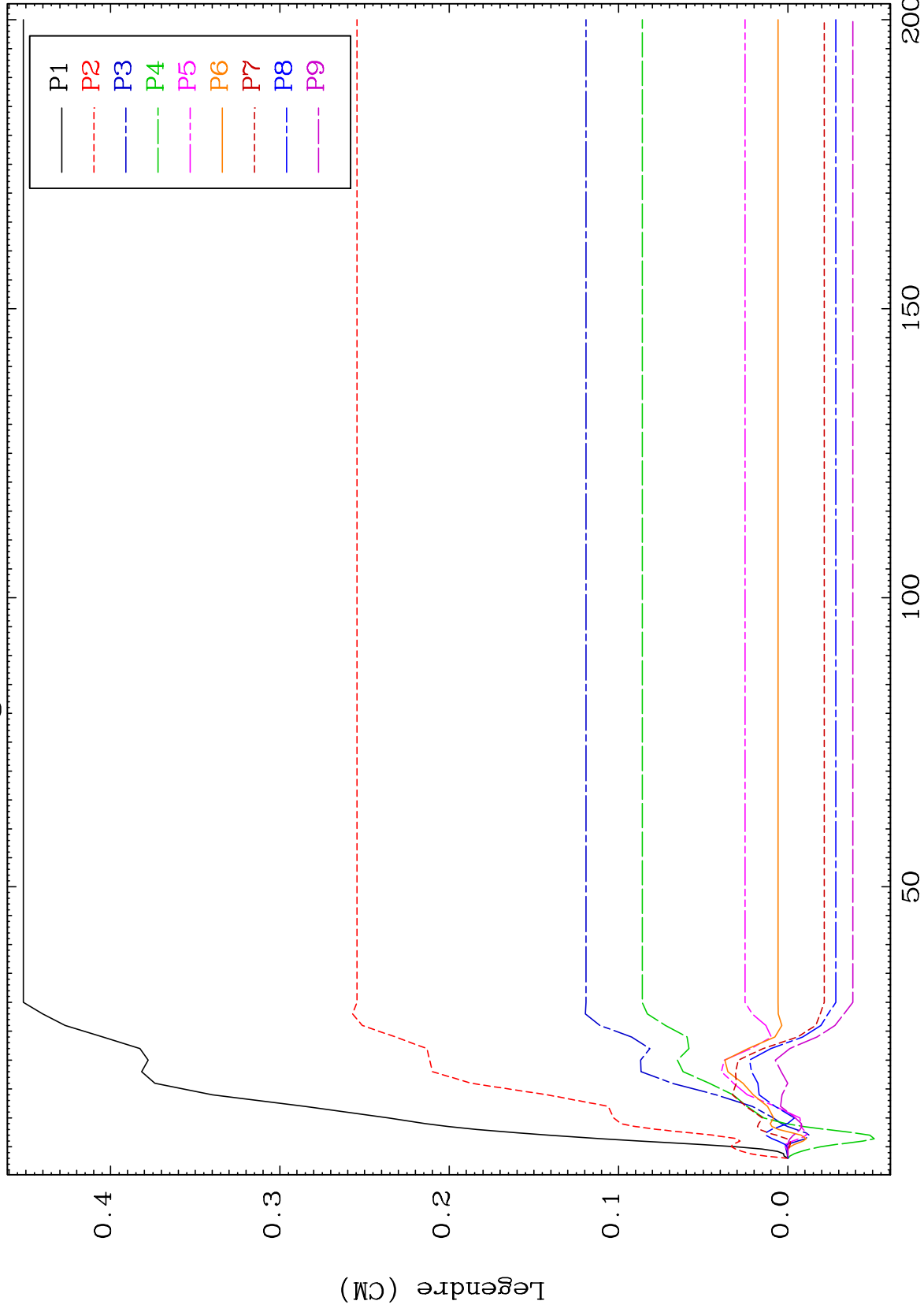




MAT 5825

MT= 72 (n,n') Level  
Legendre Coefficients

58-Ce-136



96

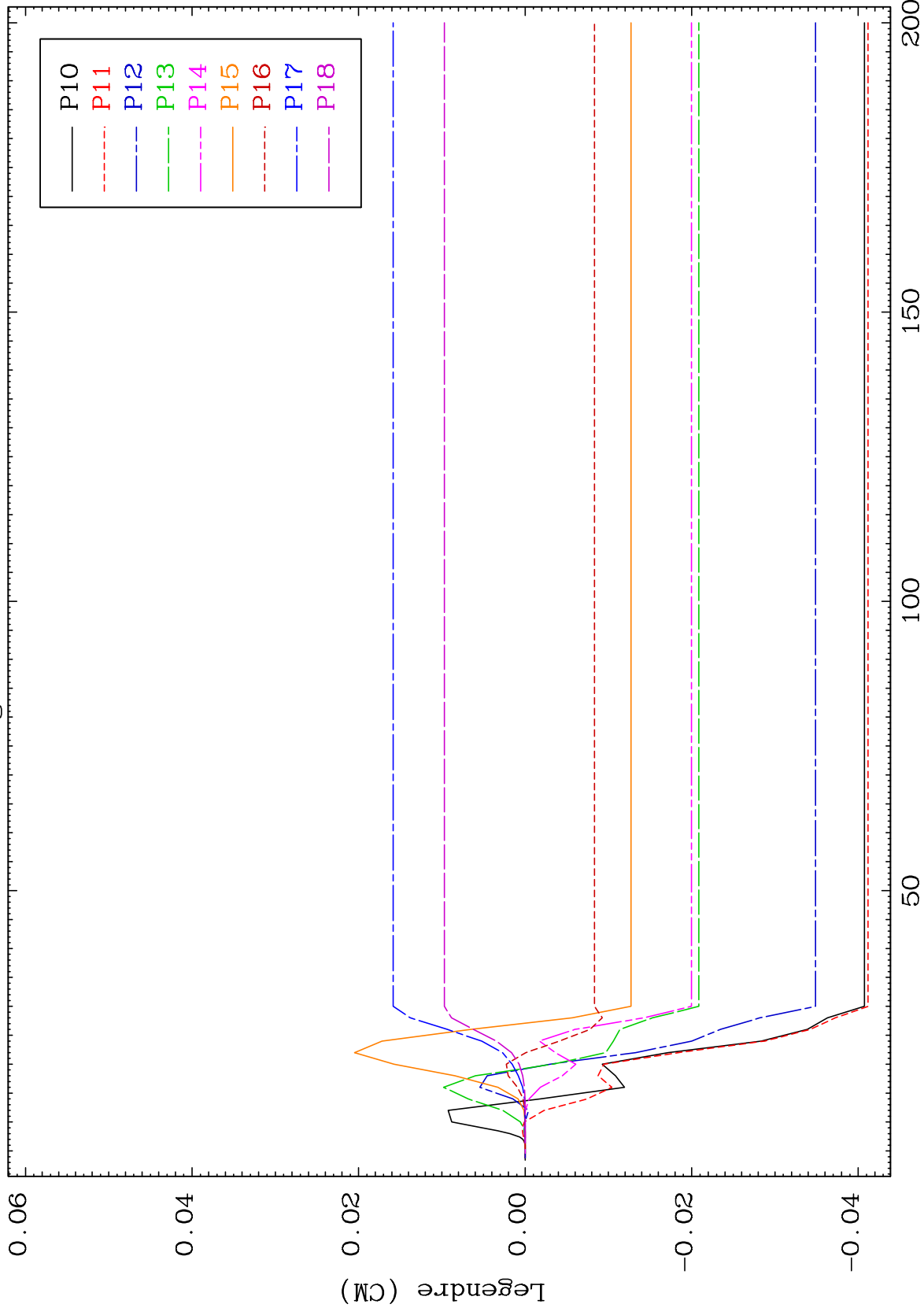
Incident Energy (MeV)

58-Ce-136

MAT 5825

MT= 72 (n,n') Level  
Legendre Coefficients

58-Ce-136



97

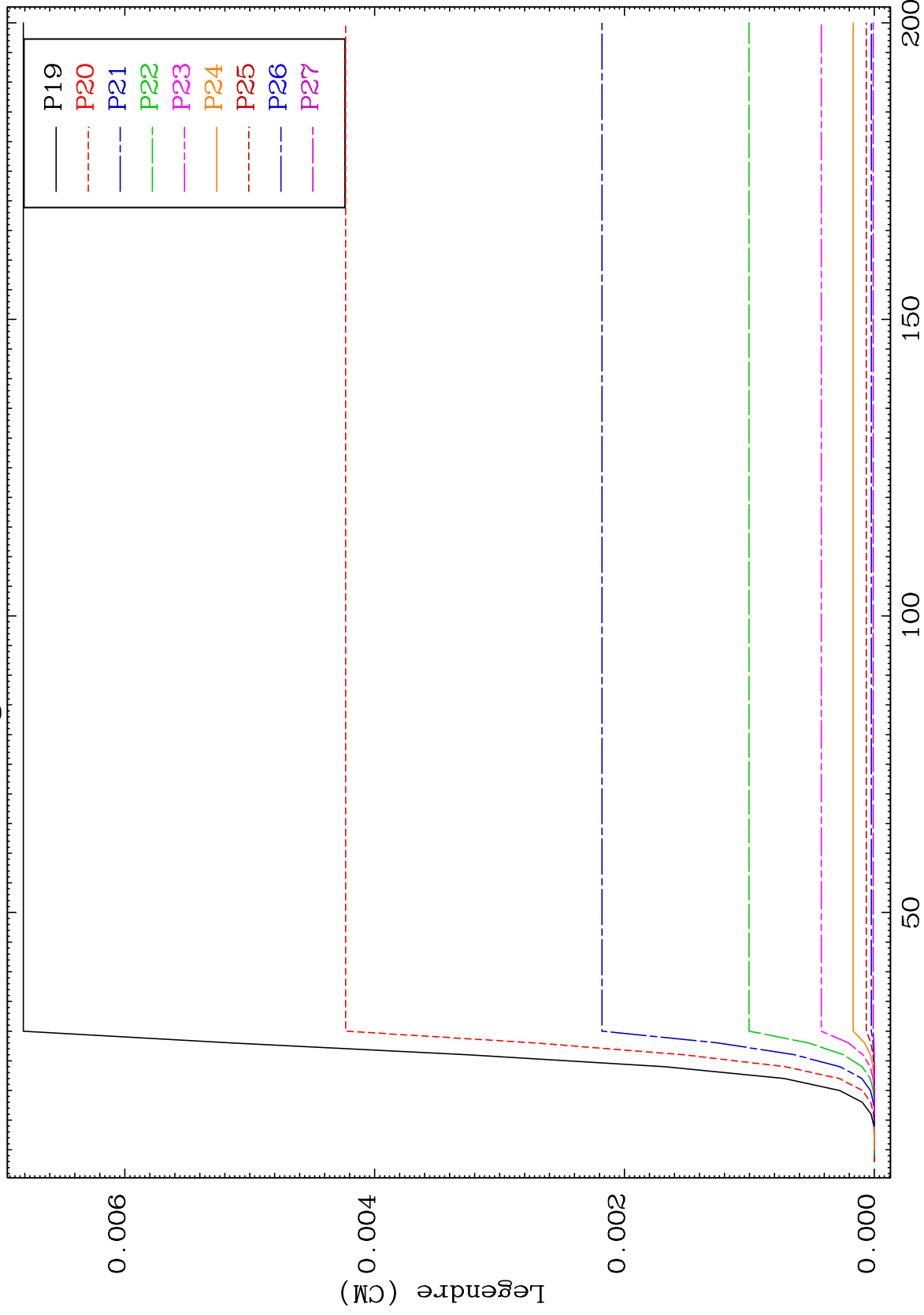
Incident Energy (MeV)

58-Ce-136

MAT 5825

MT= 72 (n,n') Level  
Legendre Coefficients

58-Ce-136



98

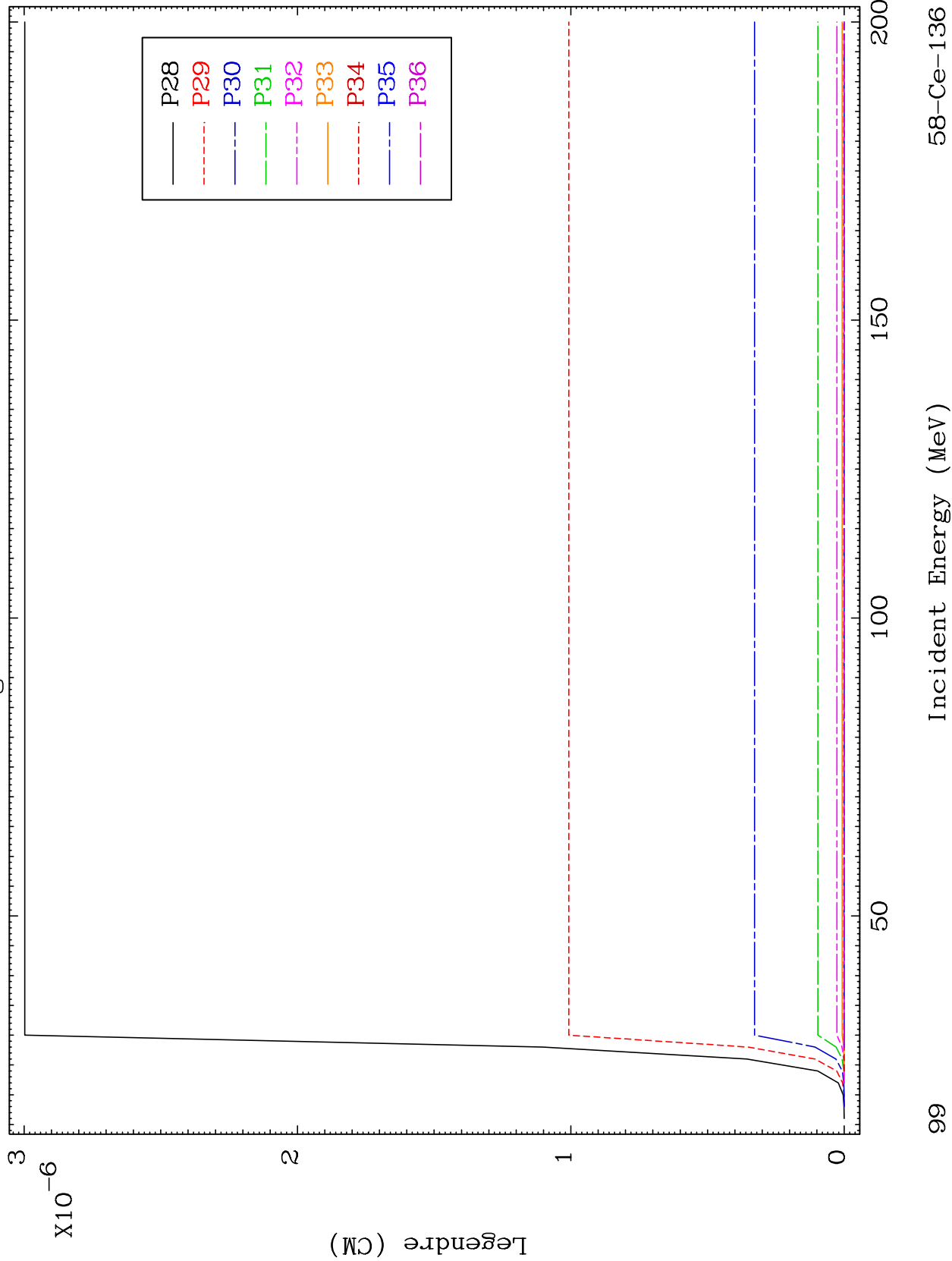
Incident Energy (MeV)

58-Ce-136

MAT 5825

MT= 72 (n,n') Level  
Legendre Coefficients

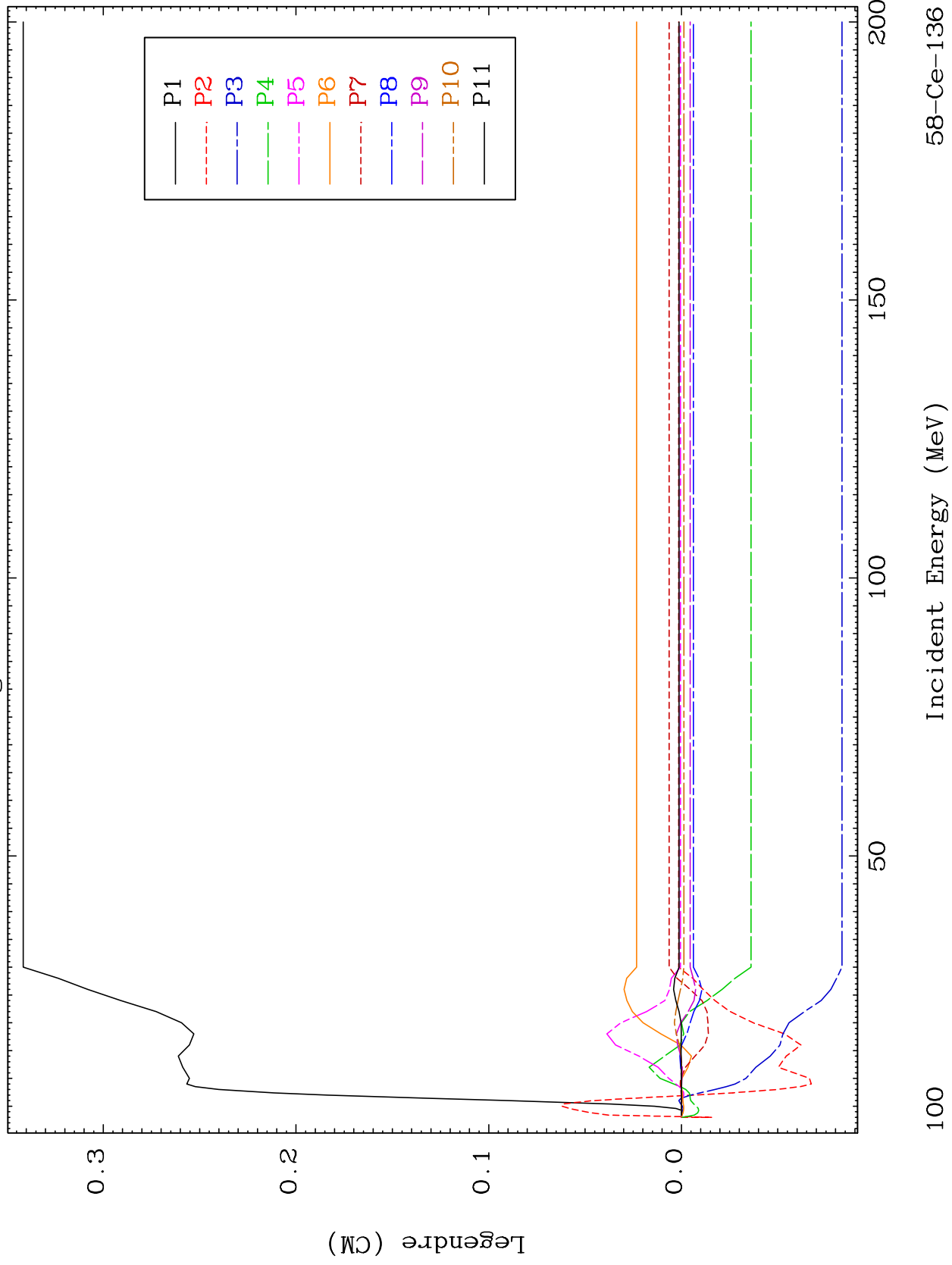
58-Ce-136



MAT 5825

MT= 73 (n,n') Level  
Legendre Coefficients

58-Ce-136

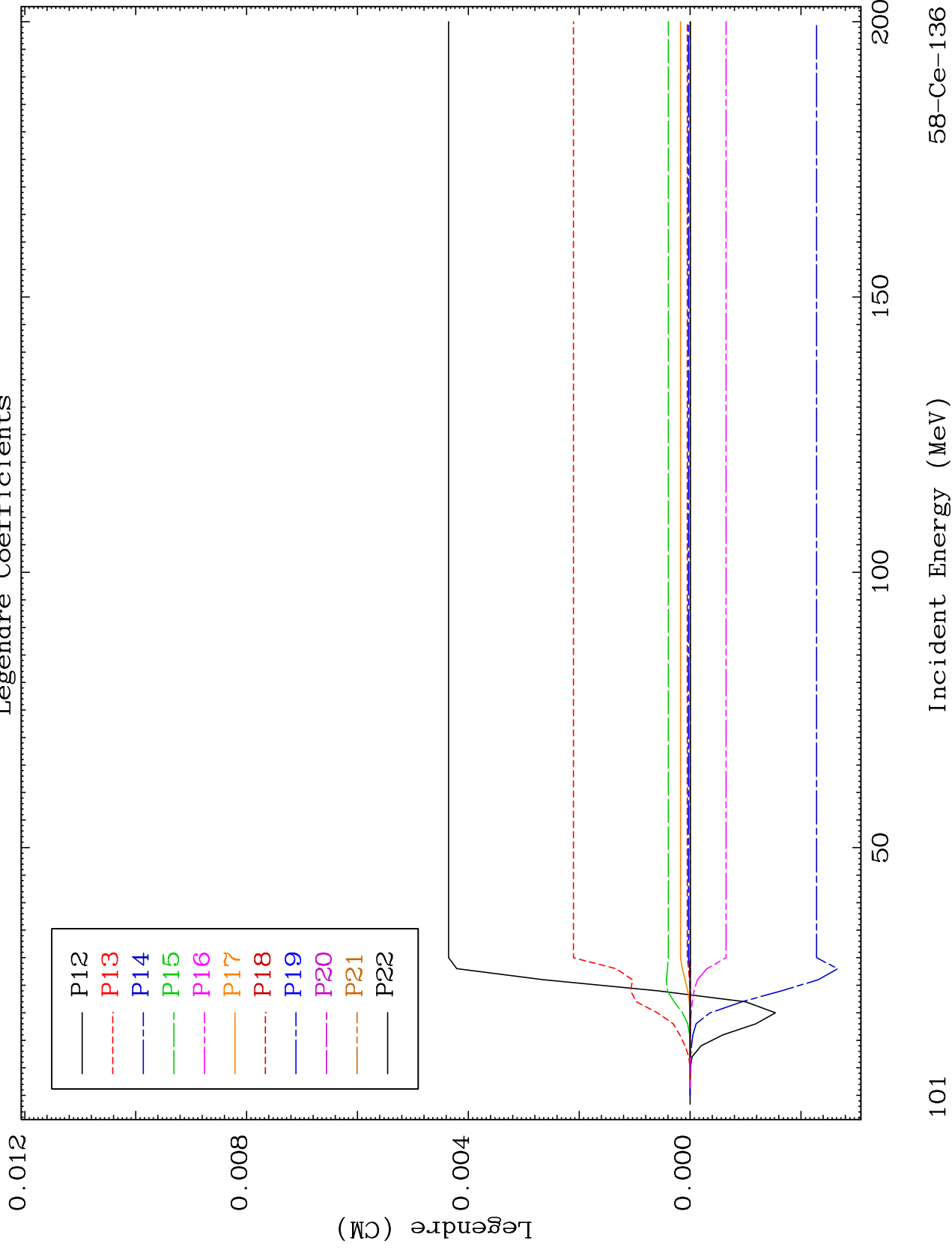


58-Ce-136

MAT 5825

MT= 73 (n,n') Level  
Legendre Coefficients

58-Ce-136



101

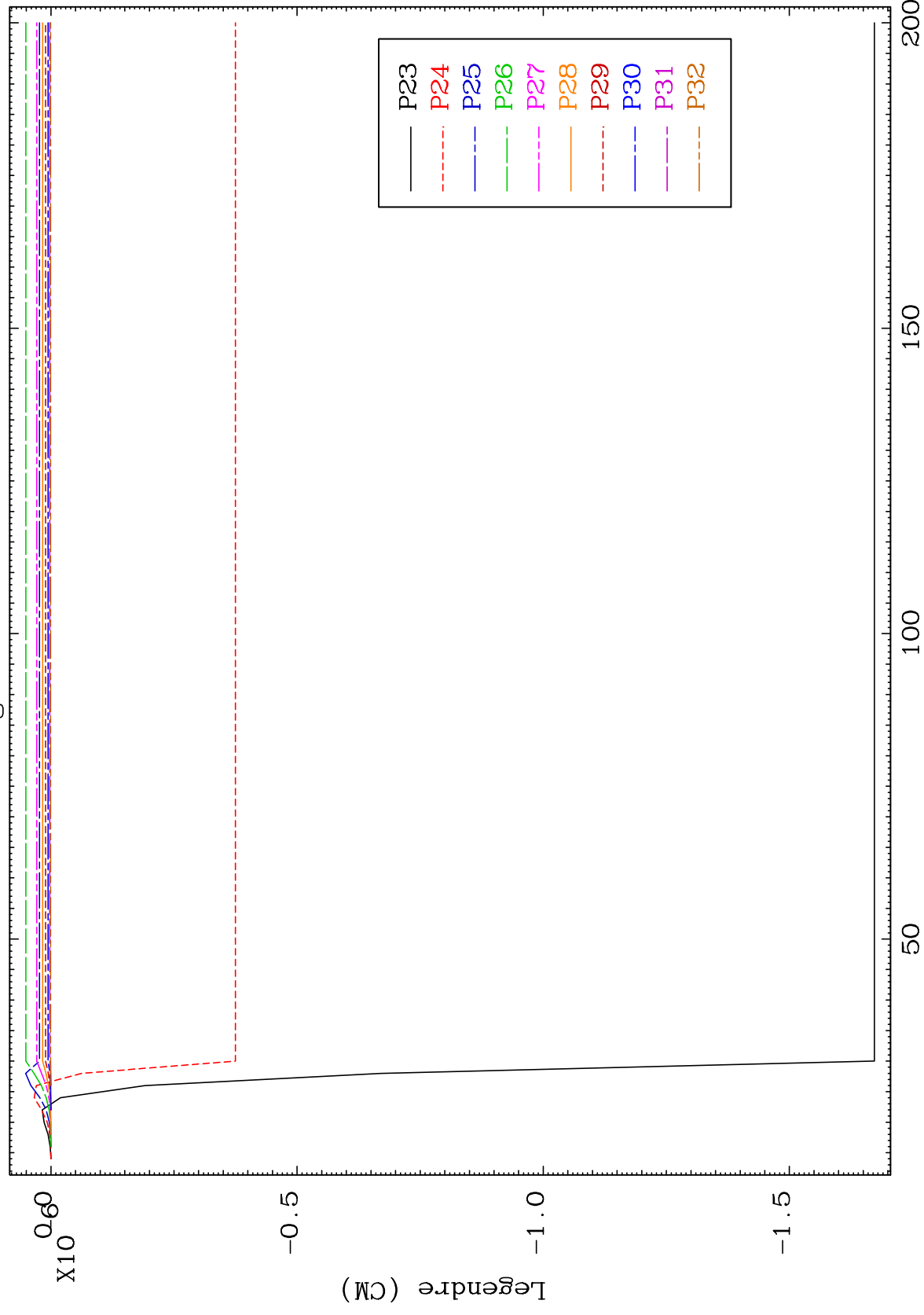
Incident Energy (MeV)

58-Ce-136

MAT 5825

MT= 73 (n,n') Level  
Legendre Coefficients

58-Ce-136



102

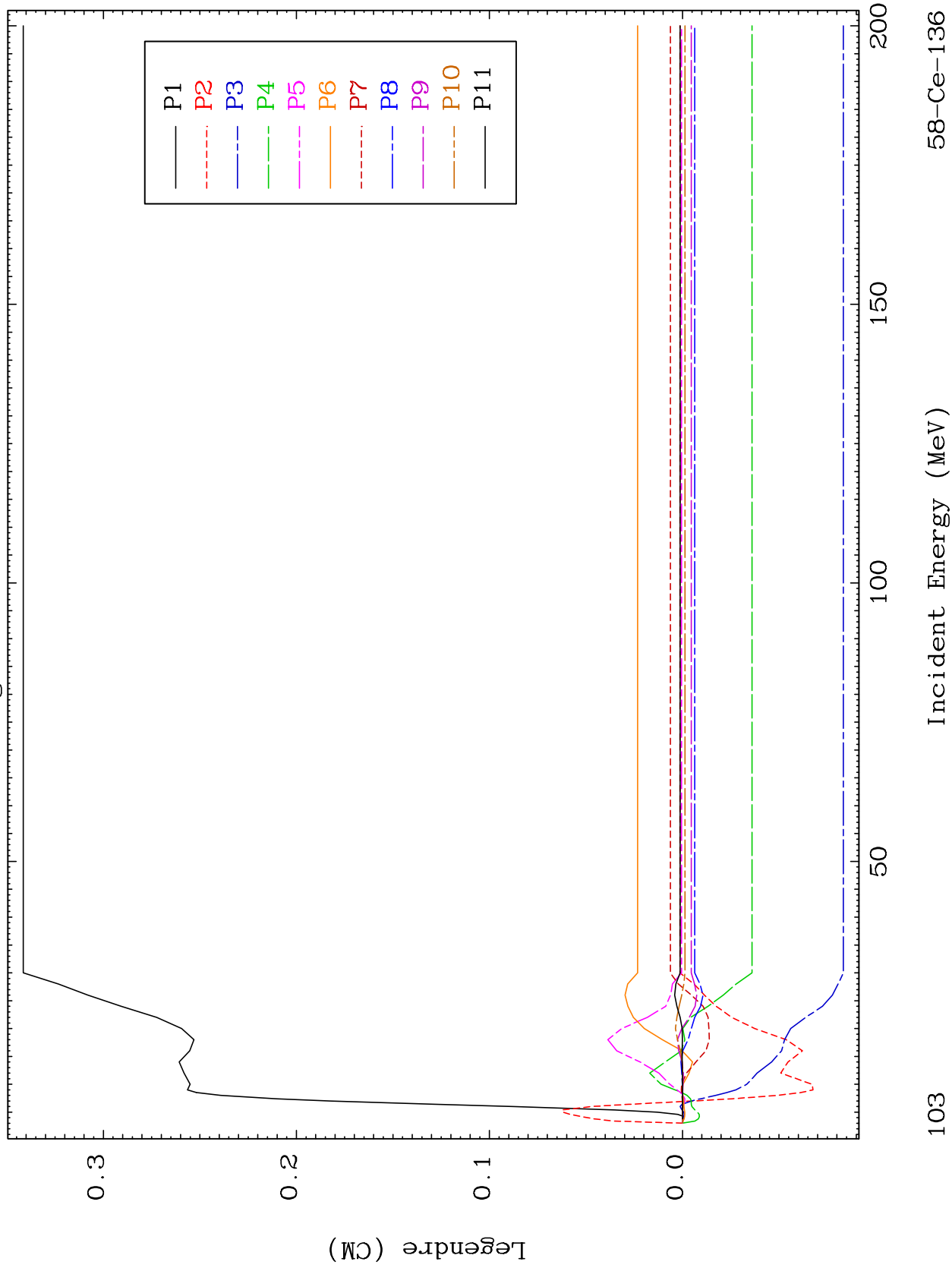
Incident Energy (MeV)

58-Ce-136

MAT 5825

MT= 74 (n,n') Level  
Legendre Coefficients

58-Ce-136



103

Incident Energy (MeV)

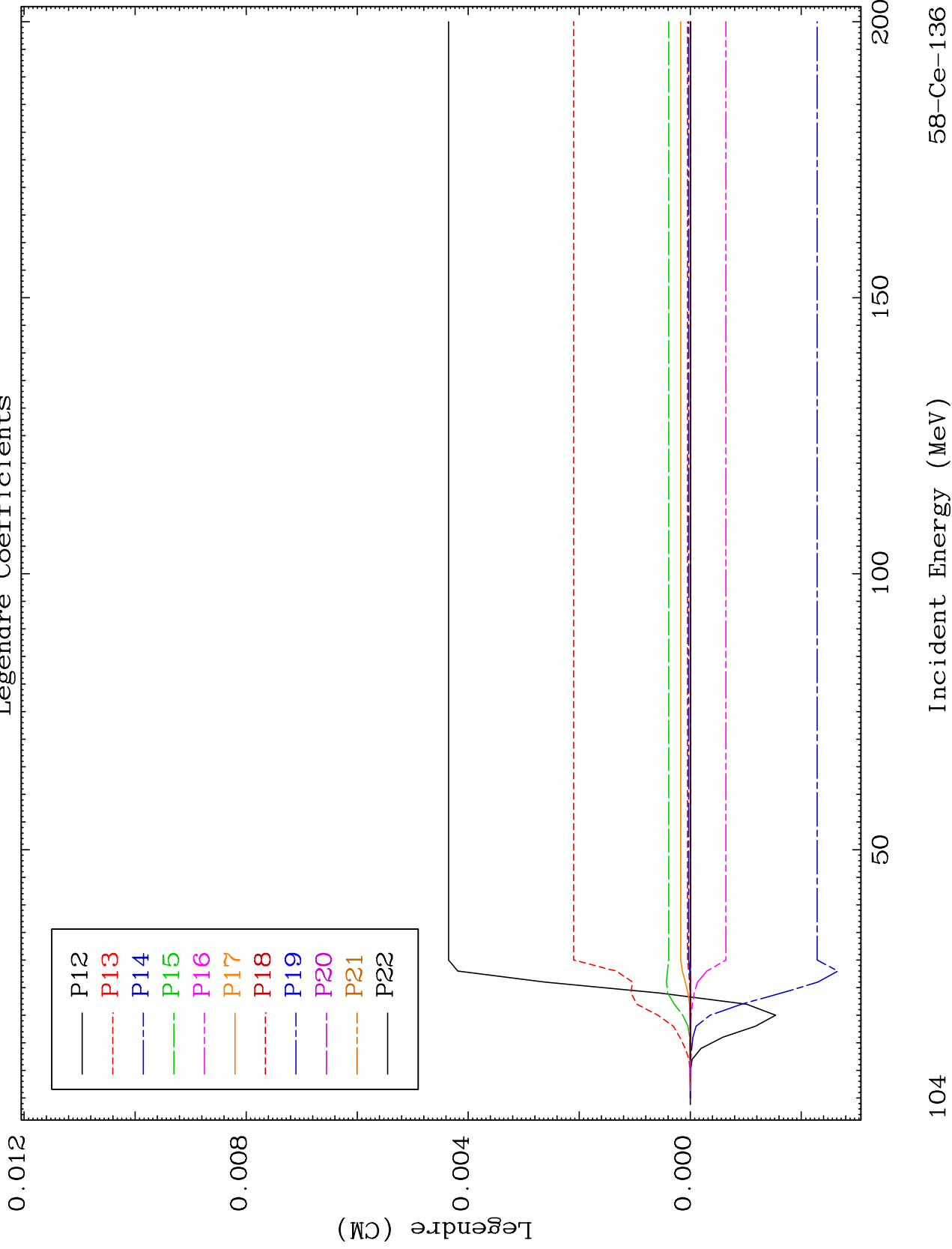
58-Ce-136



MAT 5825

MT= 74 (n,n') Level  
Legendre Coefficients

58-Ce-136

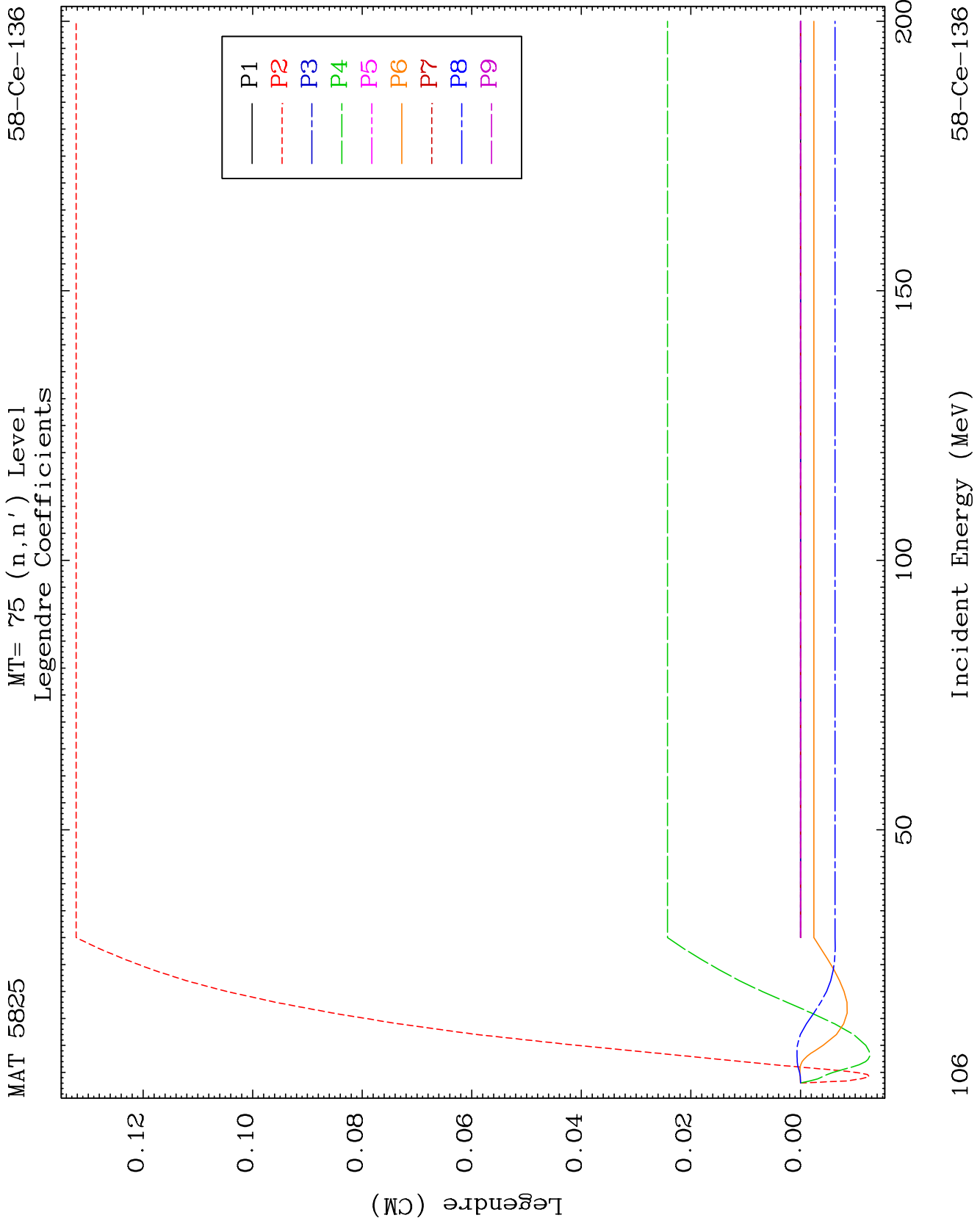


104

Incident Energy (MeV)

58-Ce-136

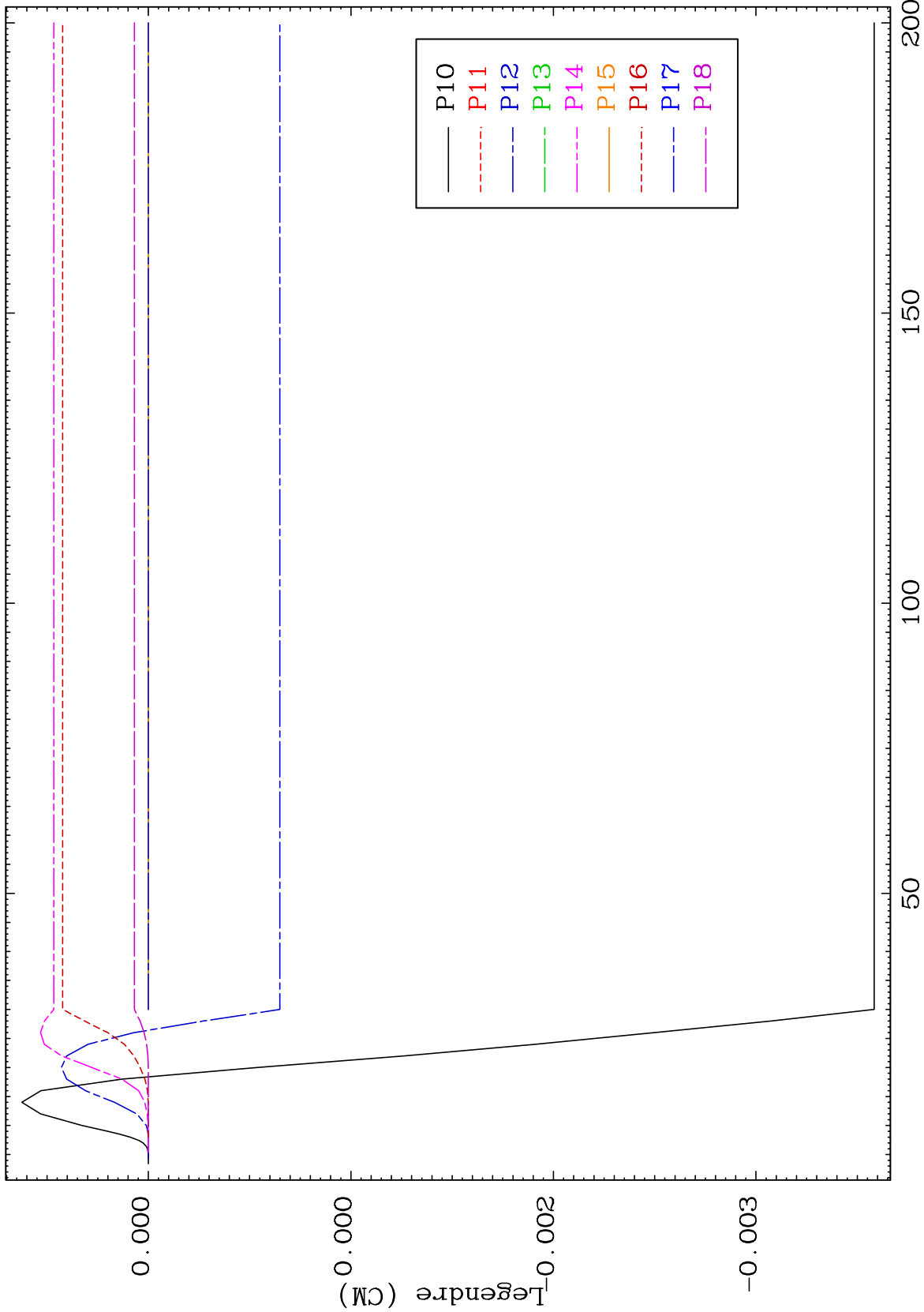




MAT 5825

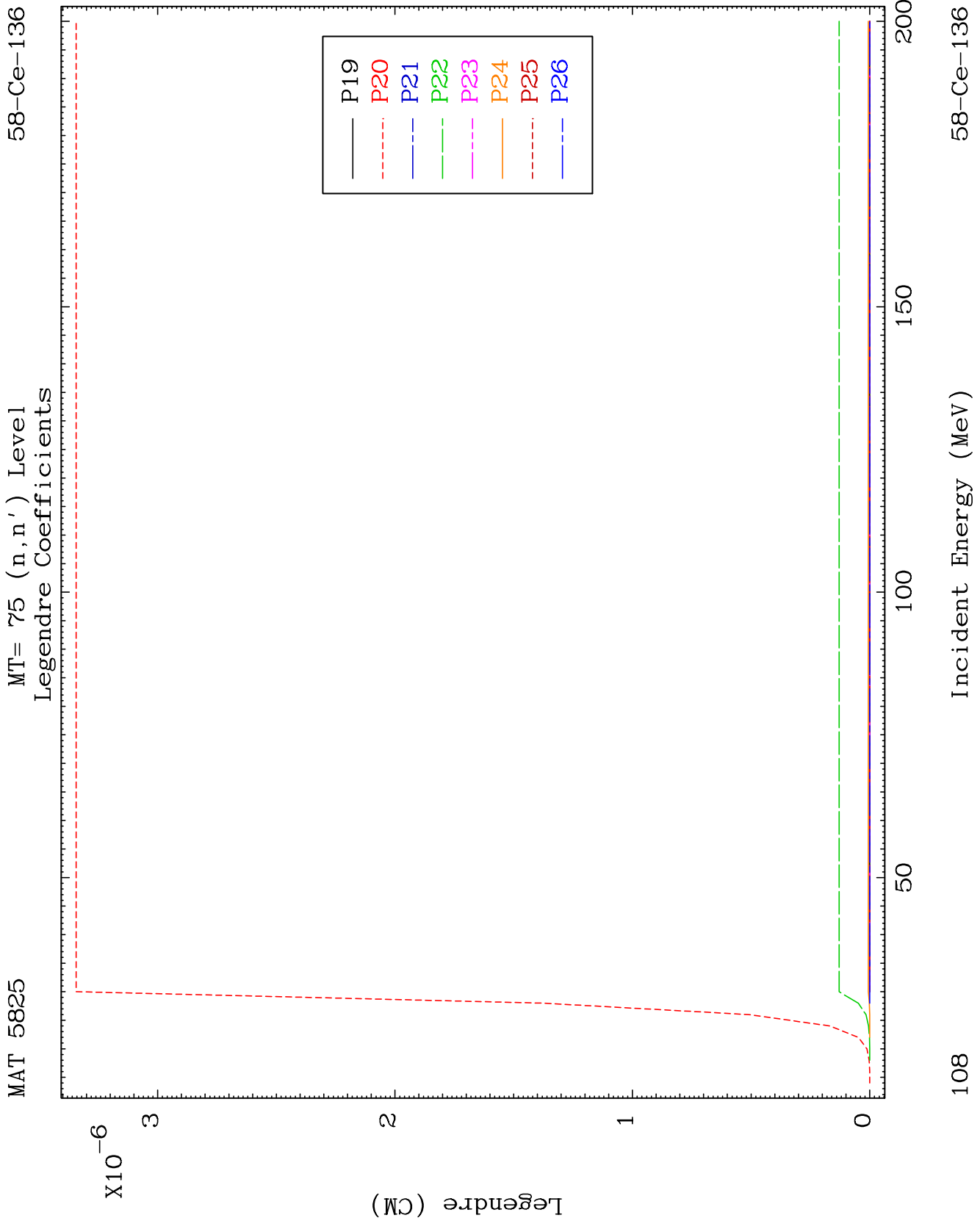
MT= 75 (n,n') Level  
Legendre Coefficients

58-Ce-136



107

58-Ce-136

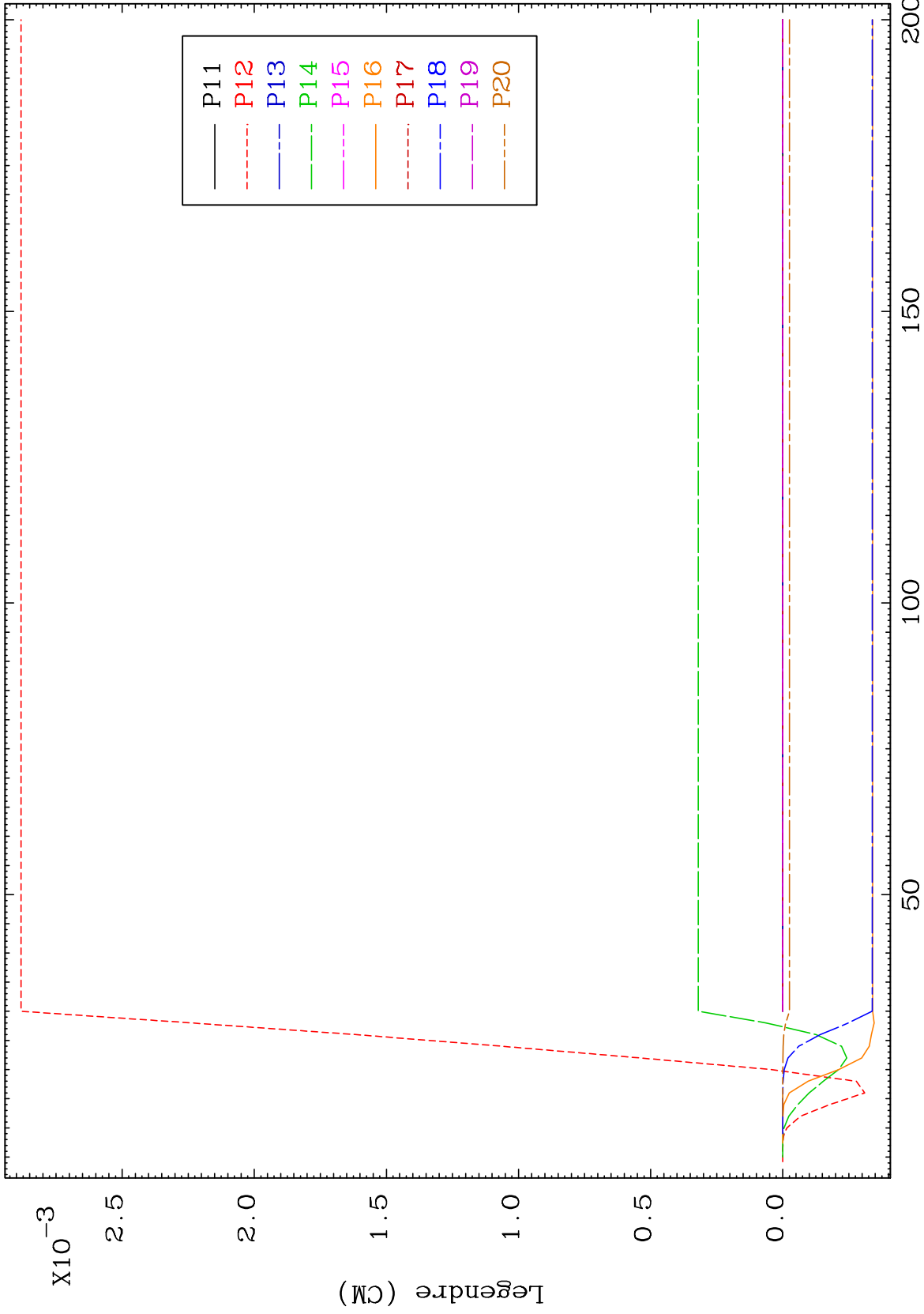




MAT 5825

MT= 76 (n,n') Level  
Legendre Coefficients

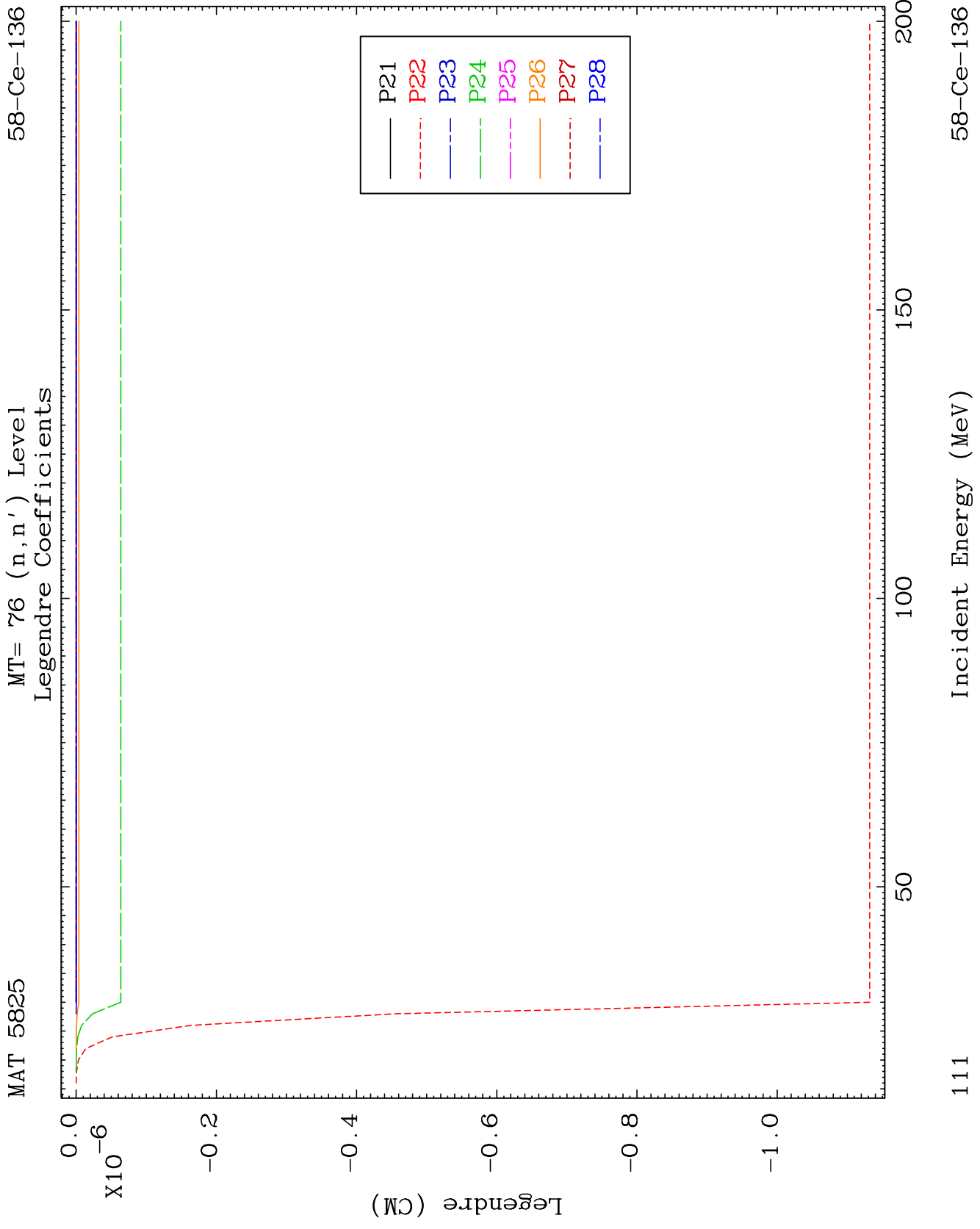
58-Ce-136



110

Incident Energy (MeV)

58-Ce-136

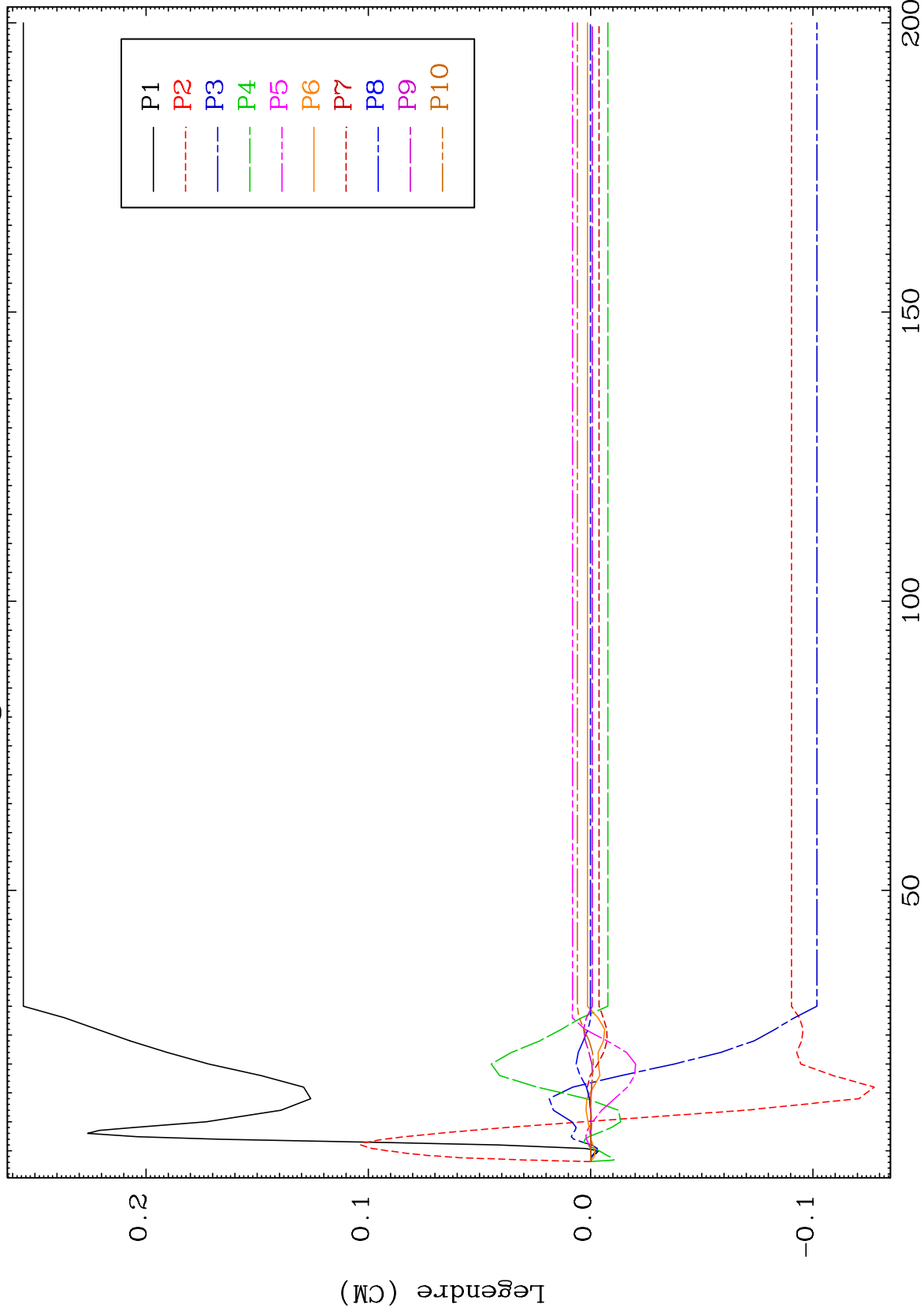




MAT 5825

MT= 77 (n,n') Level  
Legendre Coefficients

58-Ce-136



112

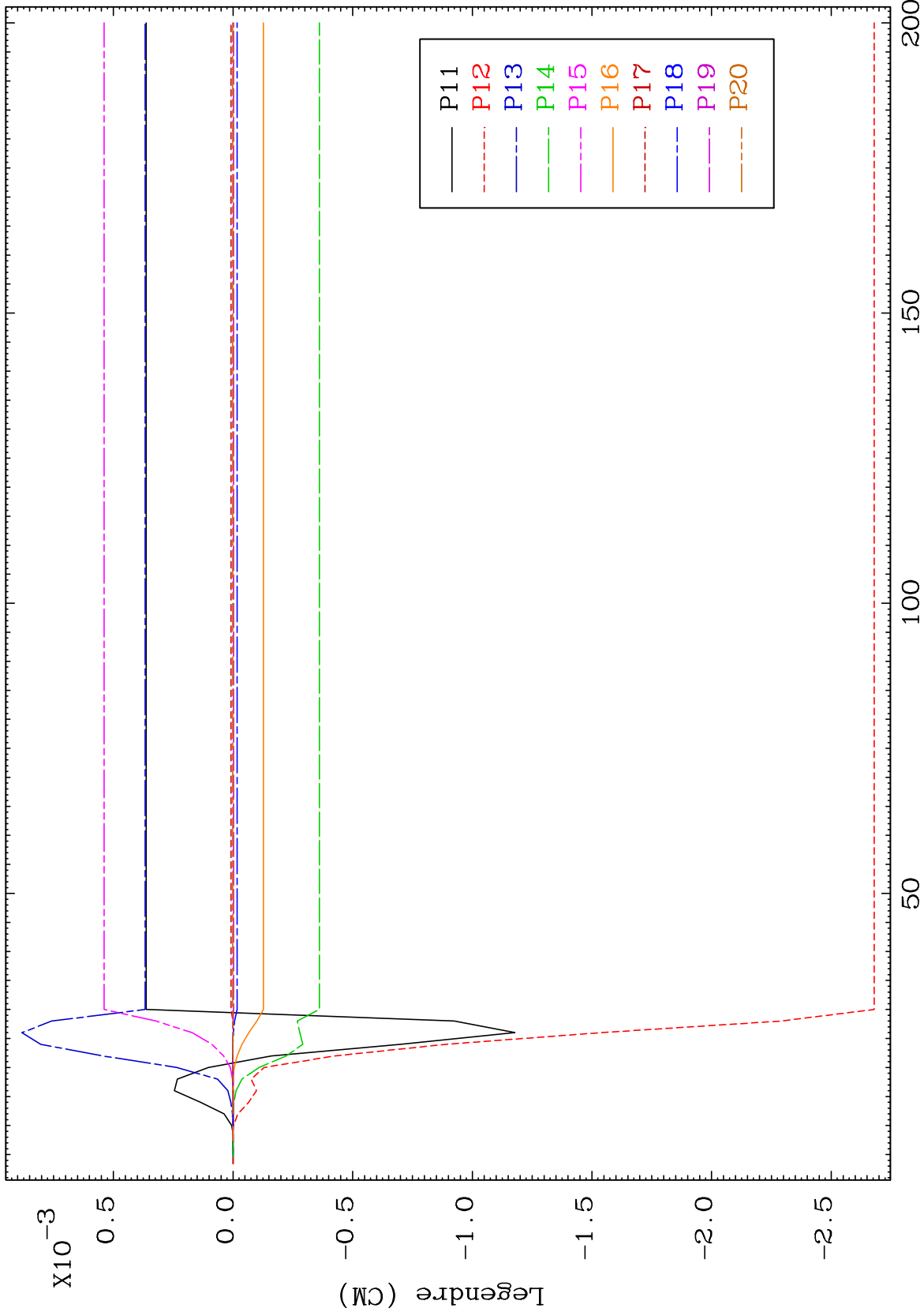
Incident Energy (MeV)

58-Ce-136

MAT 5825

MT= 77 (n,n') Level  
Legendre Coefficients

58-Ce-136



113

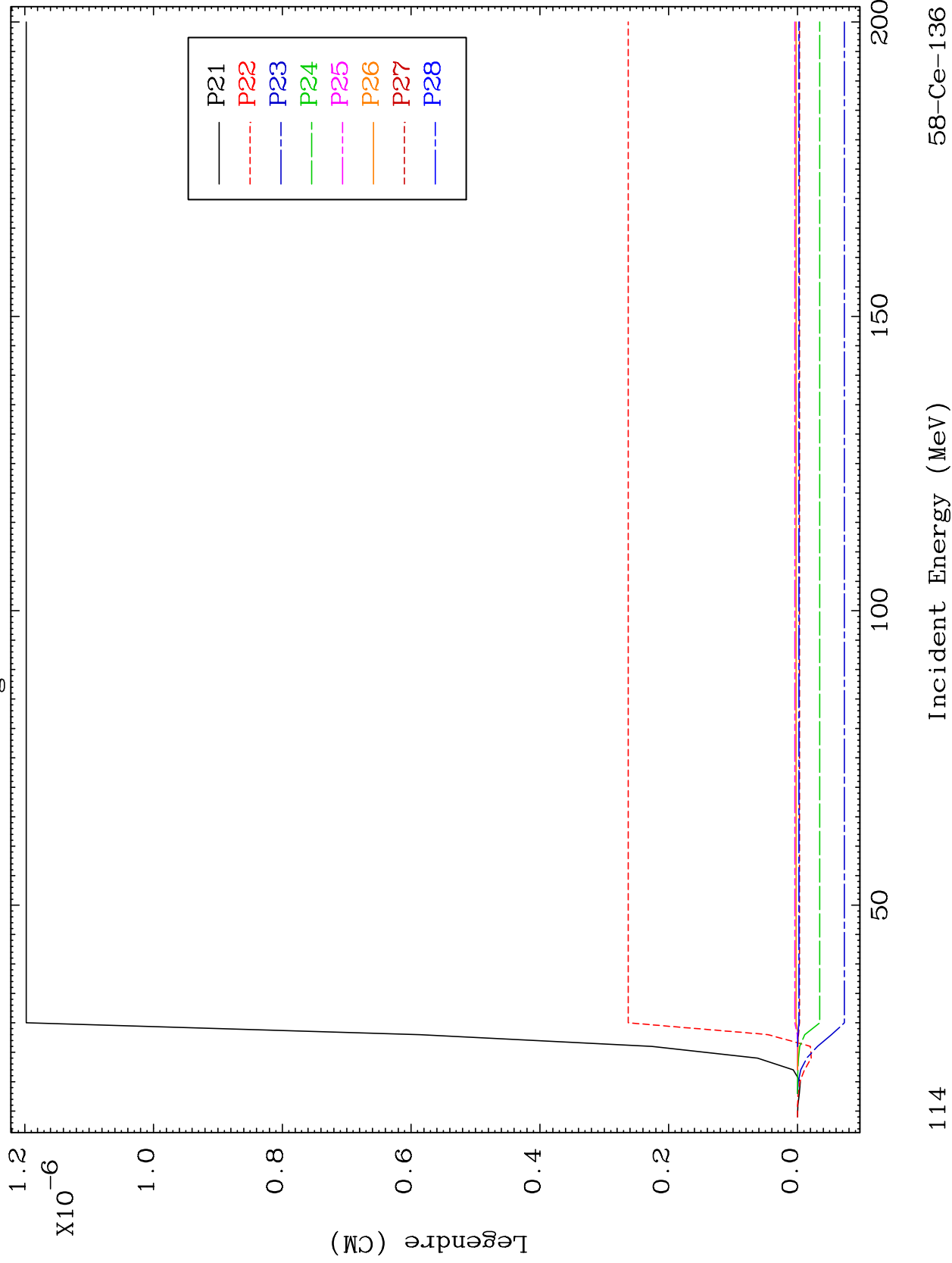
Incident Energy (MeV)

58-Ce-136

MAT 5825

MT= 77 (n,n') Level  
Legendre Coefficients

58-Ce-136



114

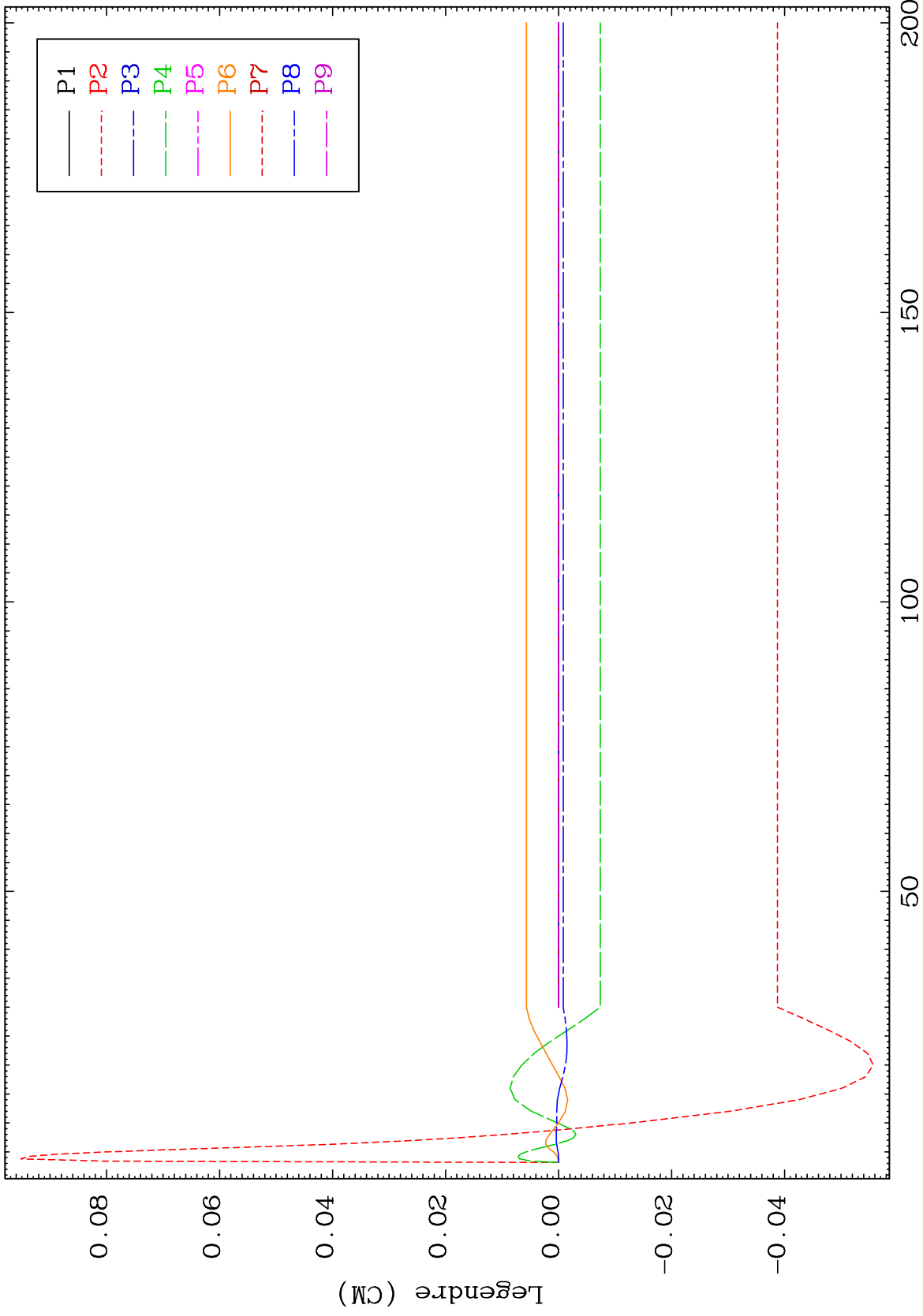
Incident Energy (MeV)

58-Ce-136

MAT 5825

MT= 78 (n,n') Level  
Legendre Coefficients

58-Ce-136



58-Ce-136

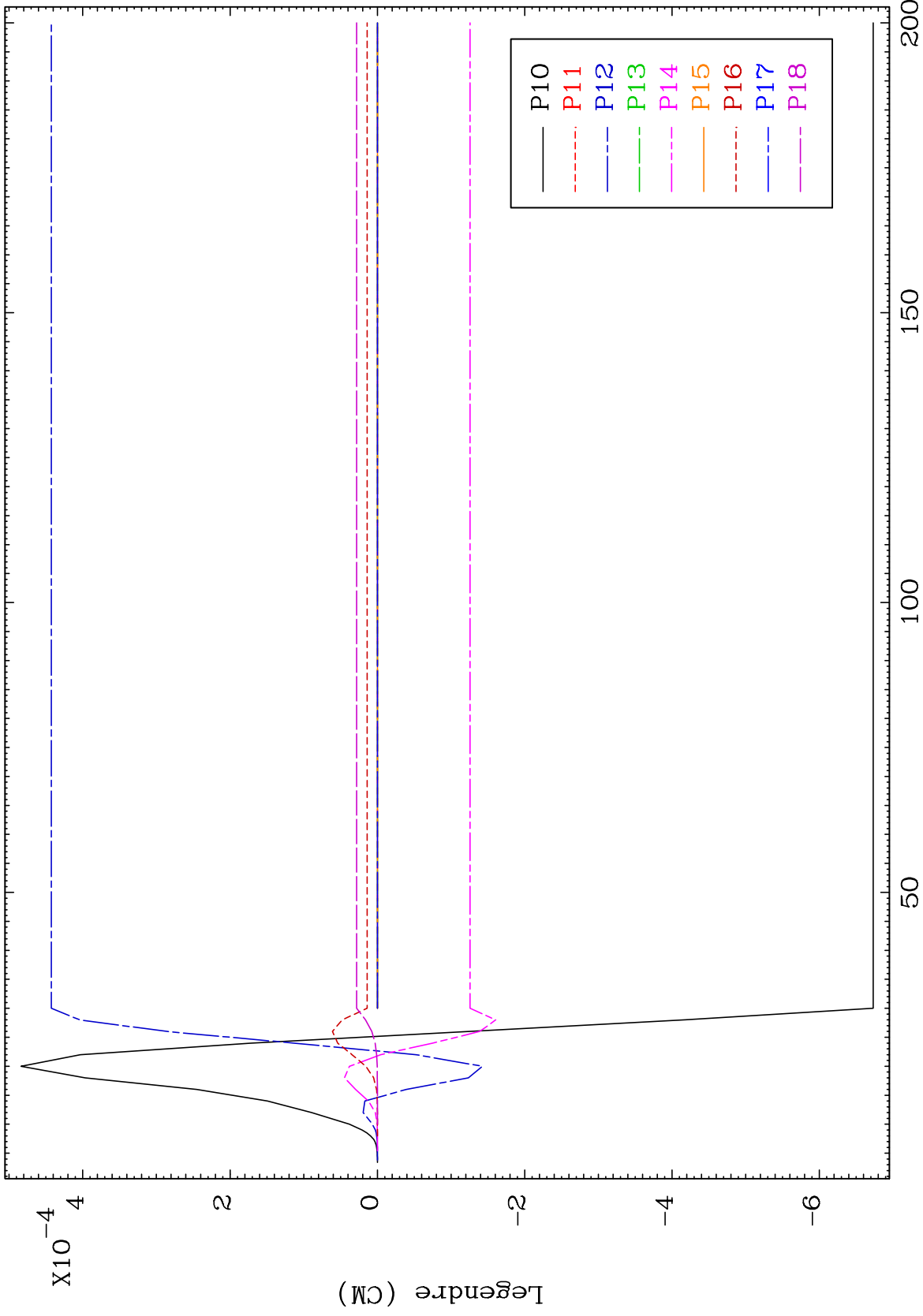
Incident Energy (MeV)

115

MAT 5825

MT= 78 (n,n') Level  
Legendre Coefficients

58-Ce-136



116

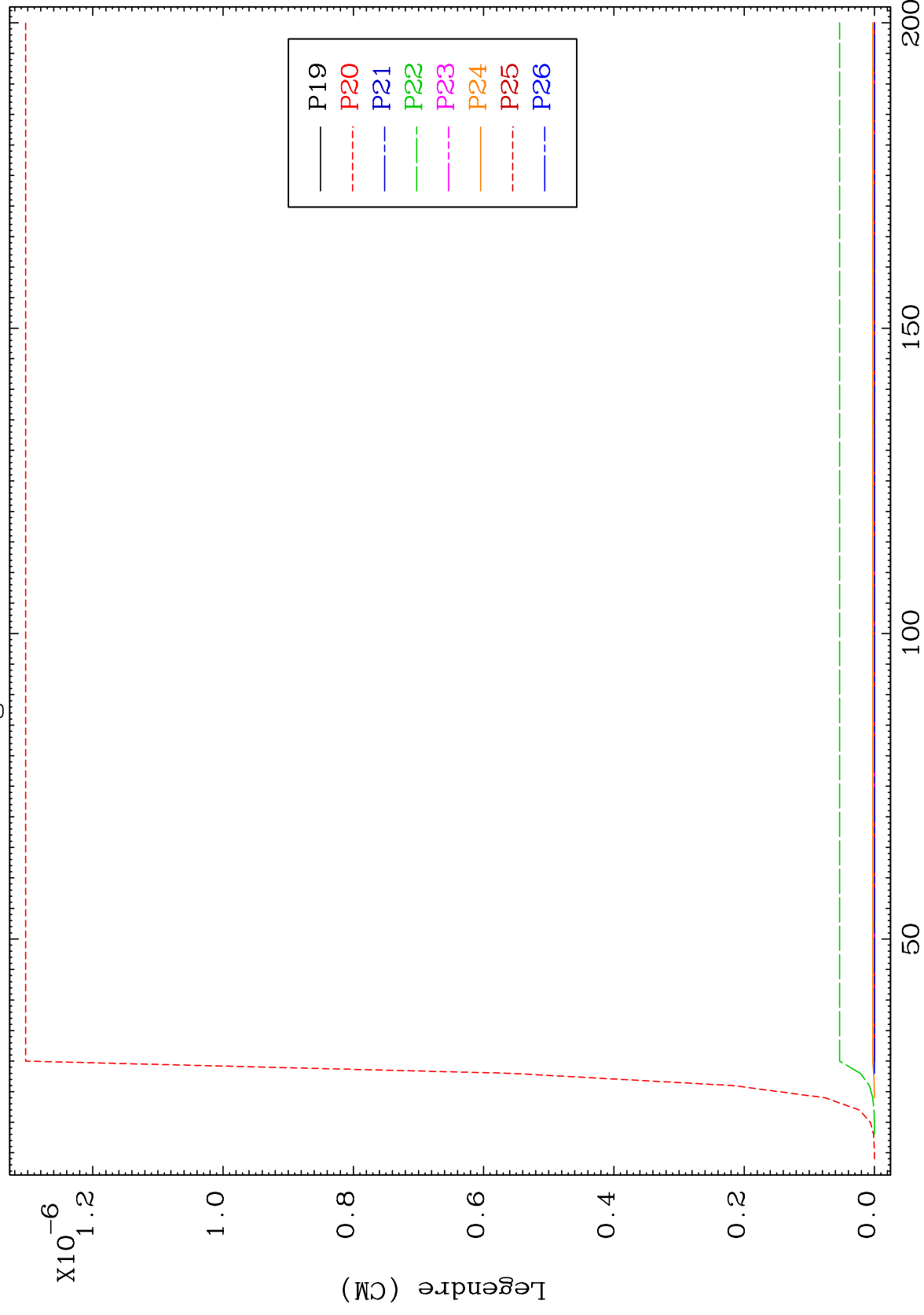
Incident Energy (MeV)

58-Ce-136

MAT 5825

MT= 78 (n,n') Level  
Legendre Coefficients

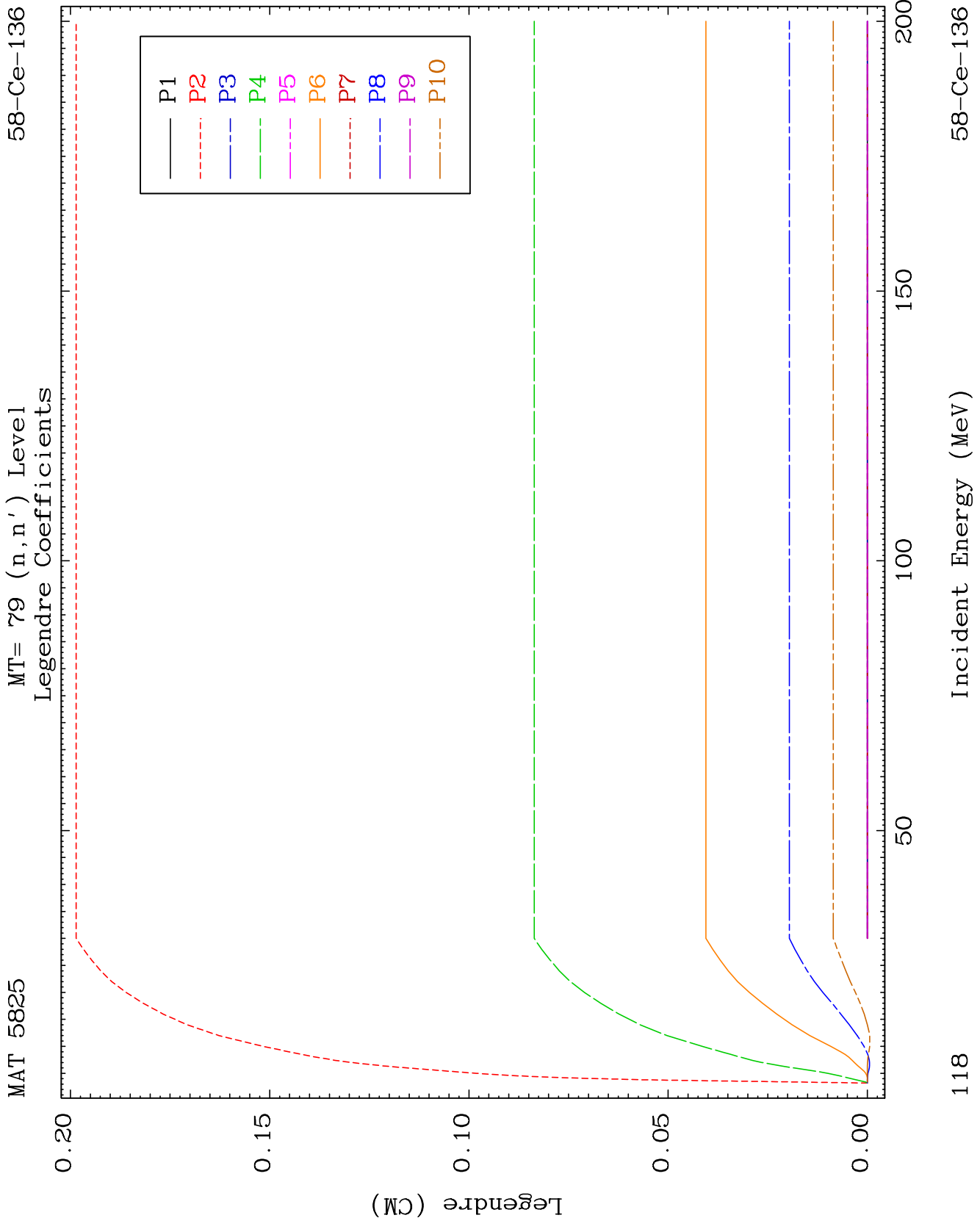
58-Ce-136



117

Incident Energy (MeV)

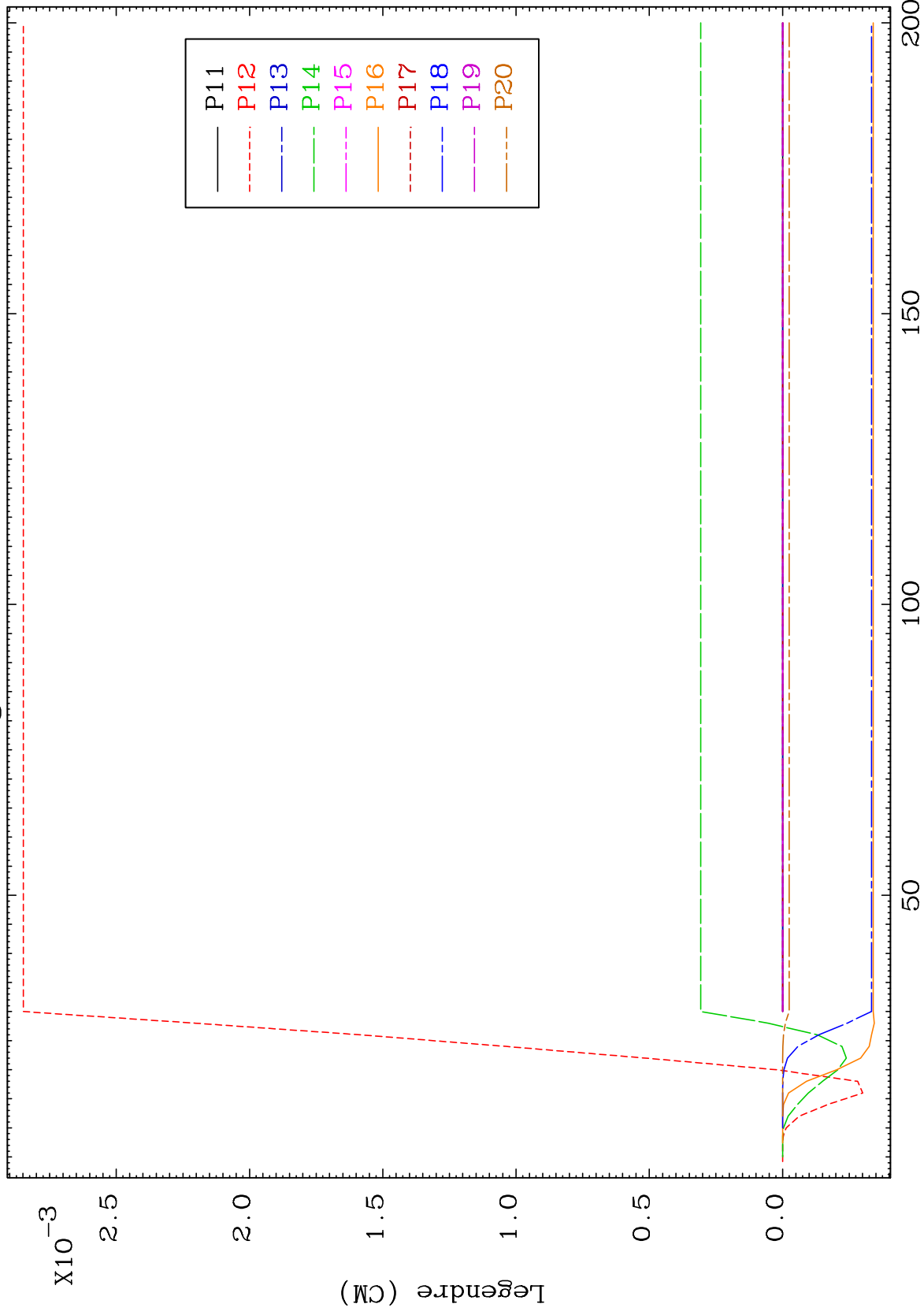
58-Ce-136



MAT 5825

MT= 79 (n,n') Level  
Legendre Coefficients

58-Ce-136

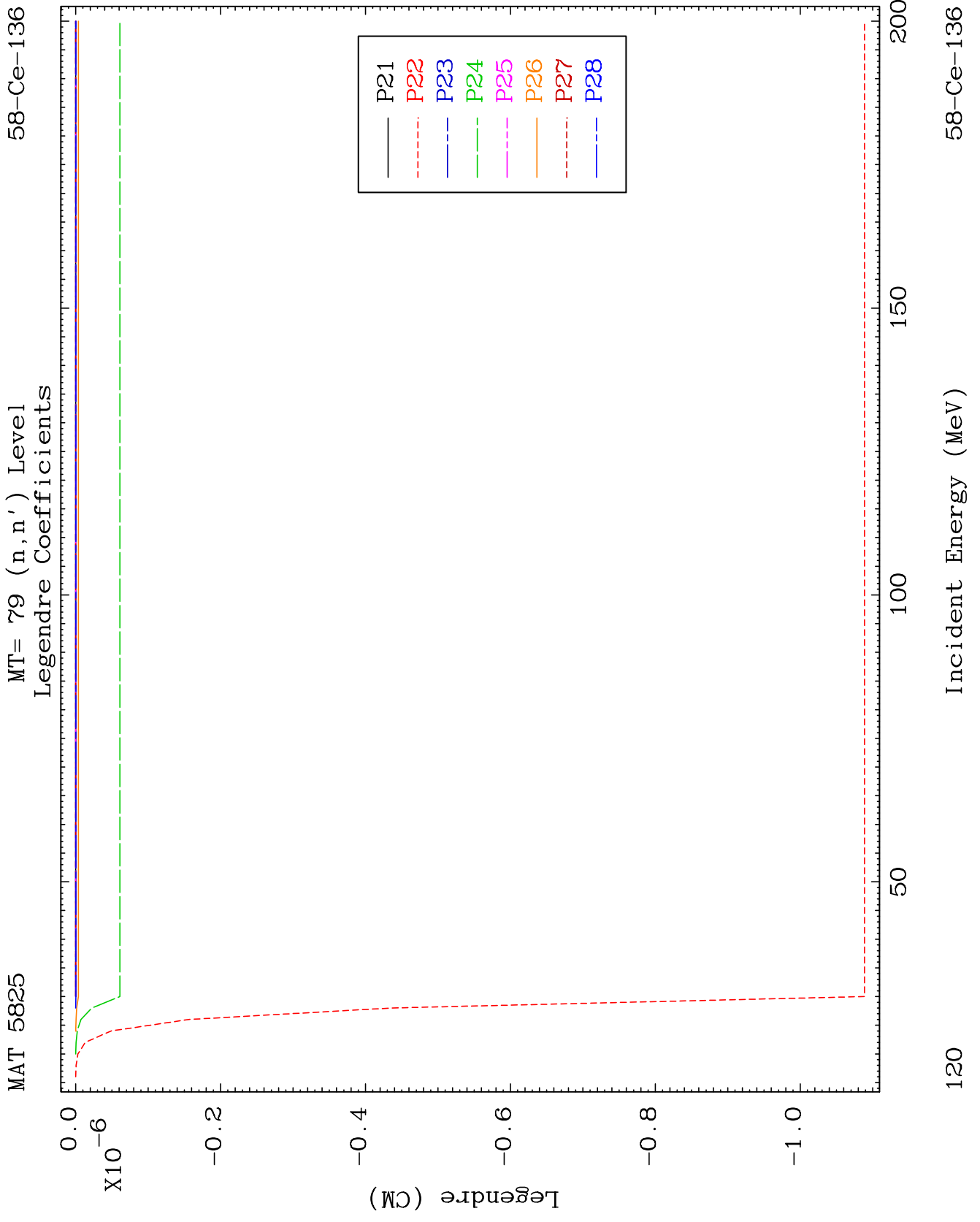


119

Incident Energy (MeV)

58-Ce-136

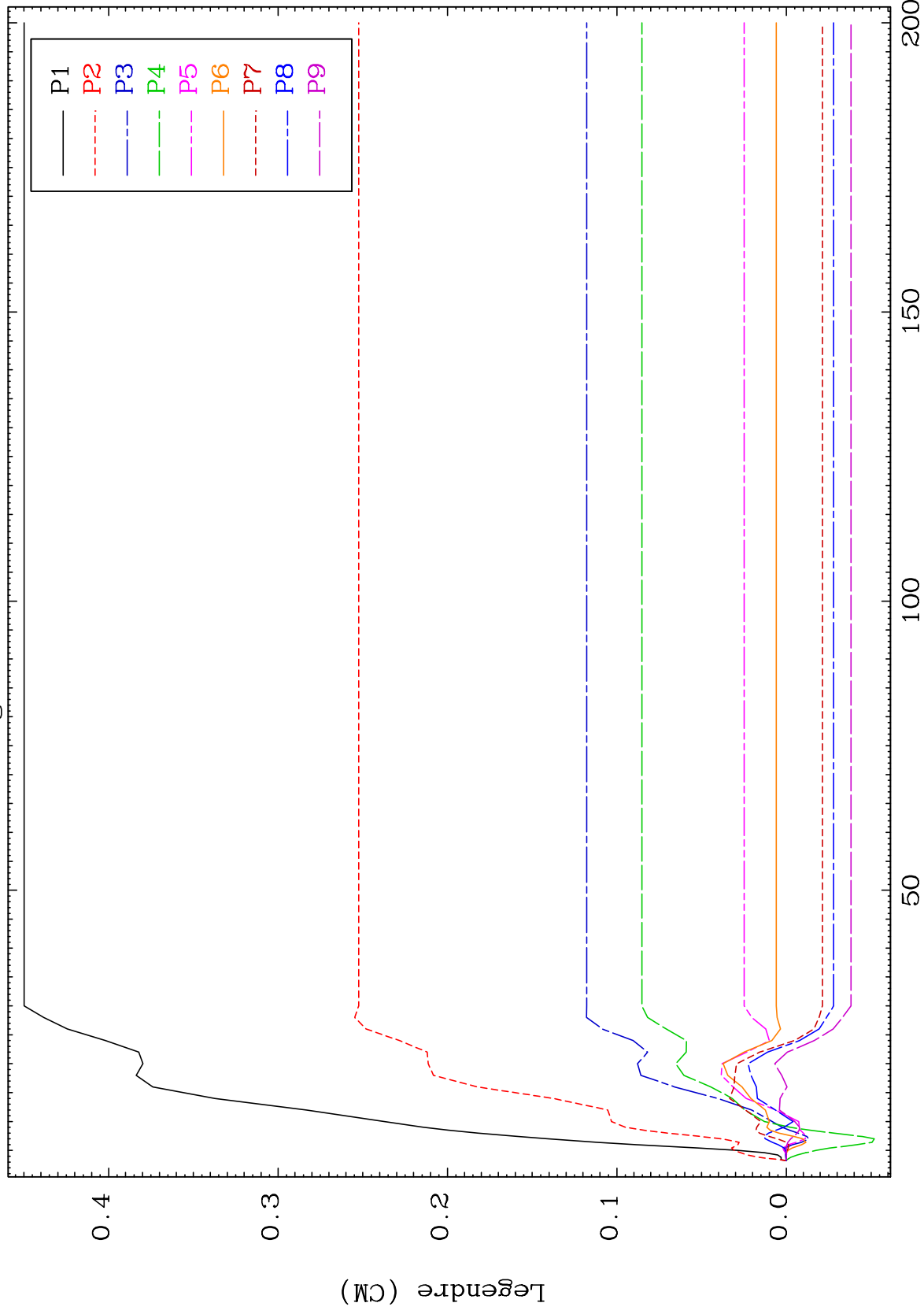




MAT 5825

MT= 80 (n,n') Level  
Legendre Coefficients

58-Ce-136



121

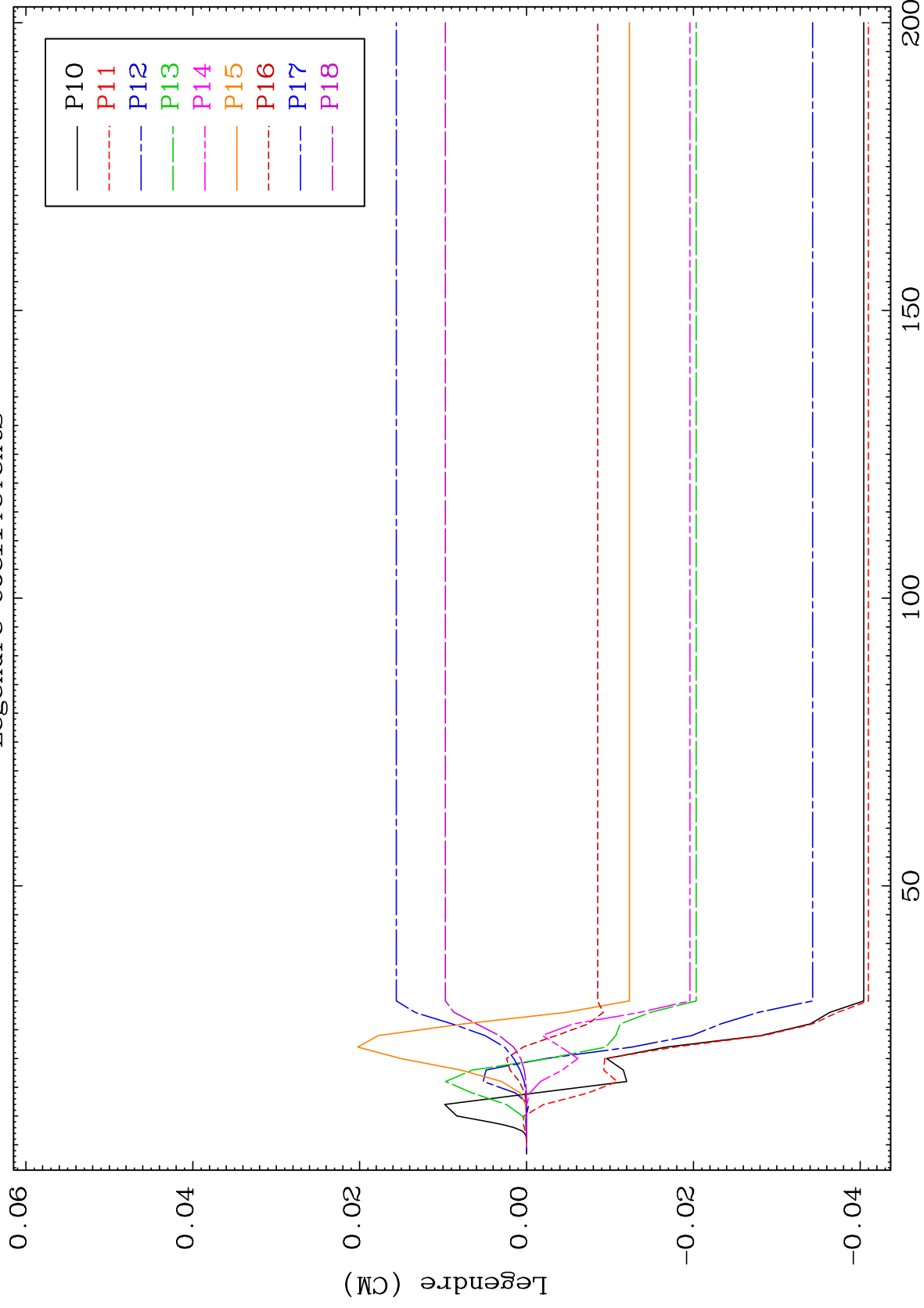
Incident Energy (MeV)

58-Ce-136

MAT 5825

MT= 80 (n,n') Level  
Legendre Coefficients

58-Ce-136



122

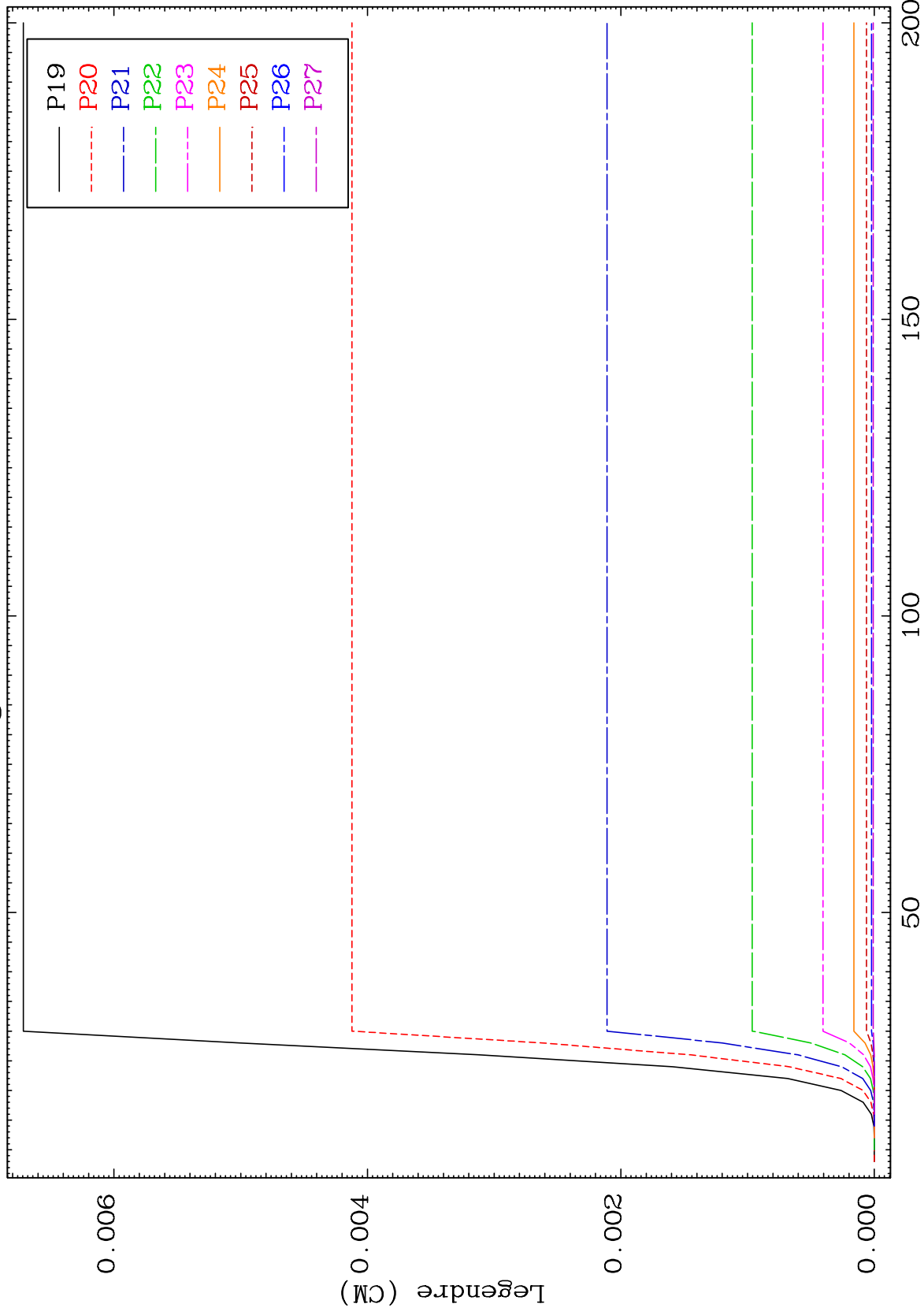
Incident Energy (MeV)

58-Ce-136

MAT 5825

MT= 80 (n,n') Level  
Legendre Coefficients

58-Ce-136



123

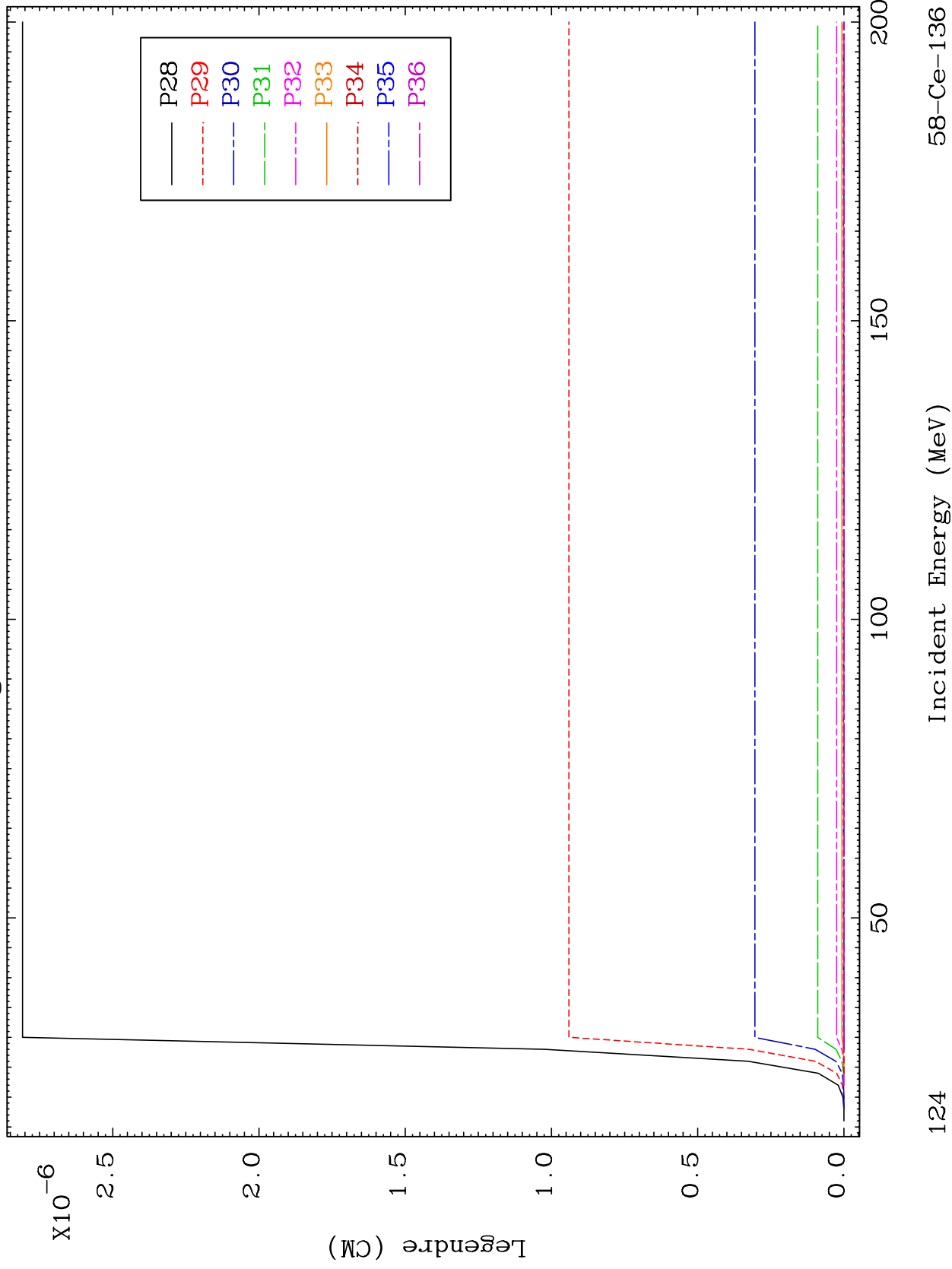
Incident Energy (MeV)

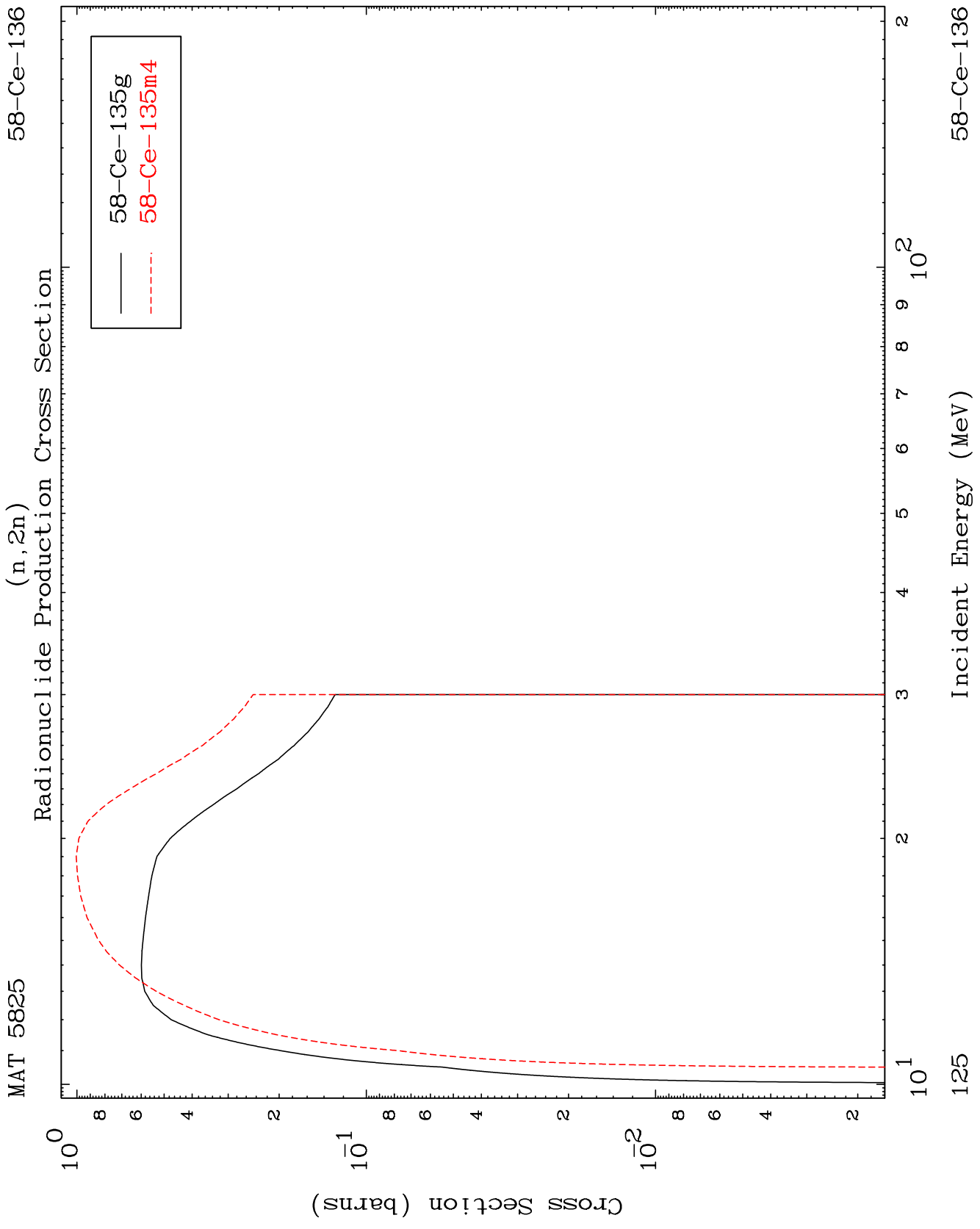
58-Ce-136

MAT 5825

MT= 80 (n,n') Level  
Legendre Coefficients

58-Ce-136



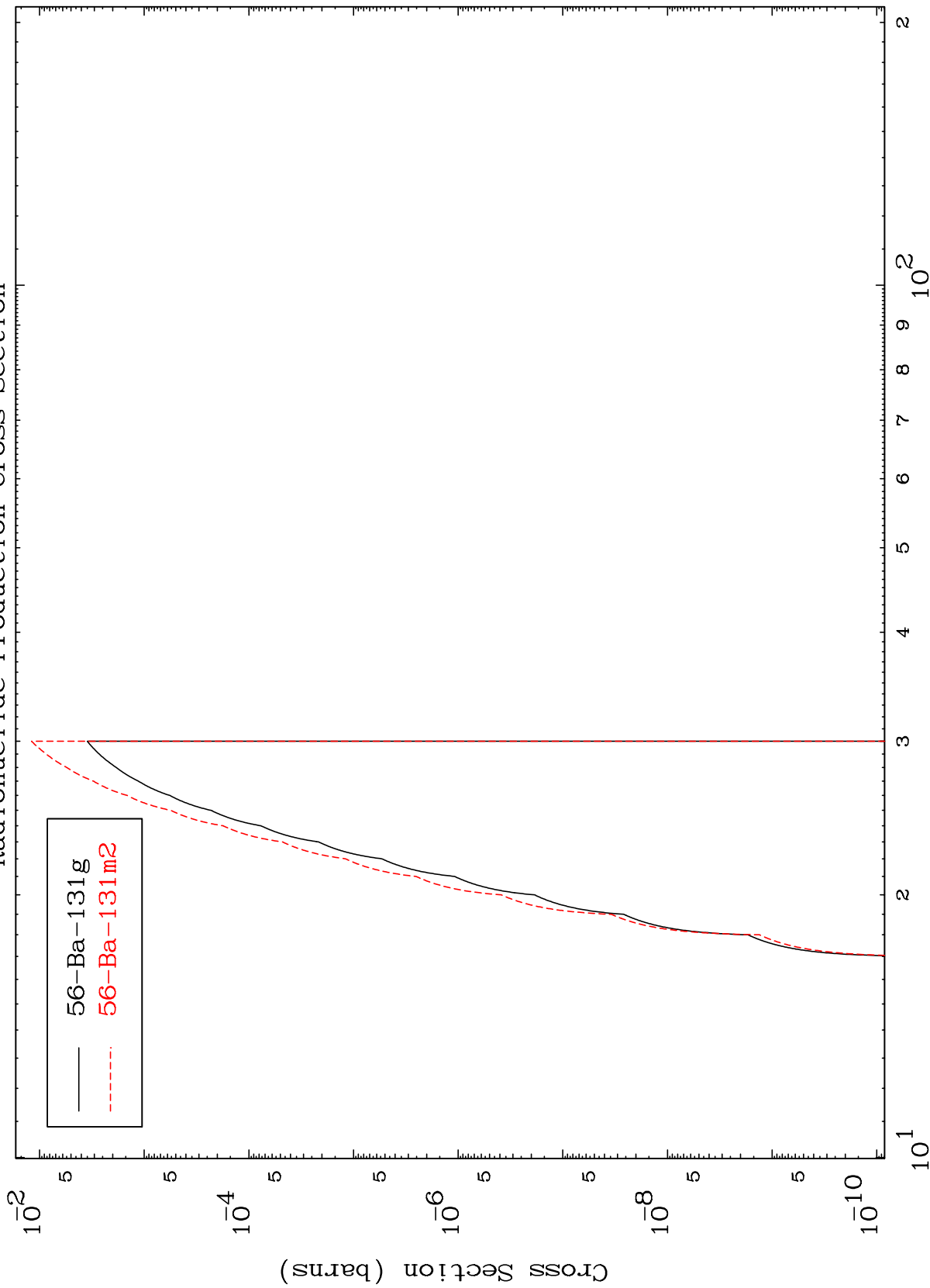


MAT 5825

(n,2n)  $\alpha$

58-Ce-136

Radionuclide Production Cross Section



56-Ba-131g  
56-Ba-131m2

Incident Energy (MeV)

58-Ce-136

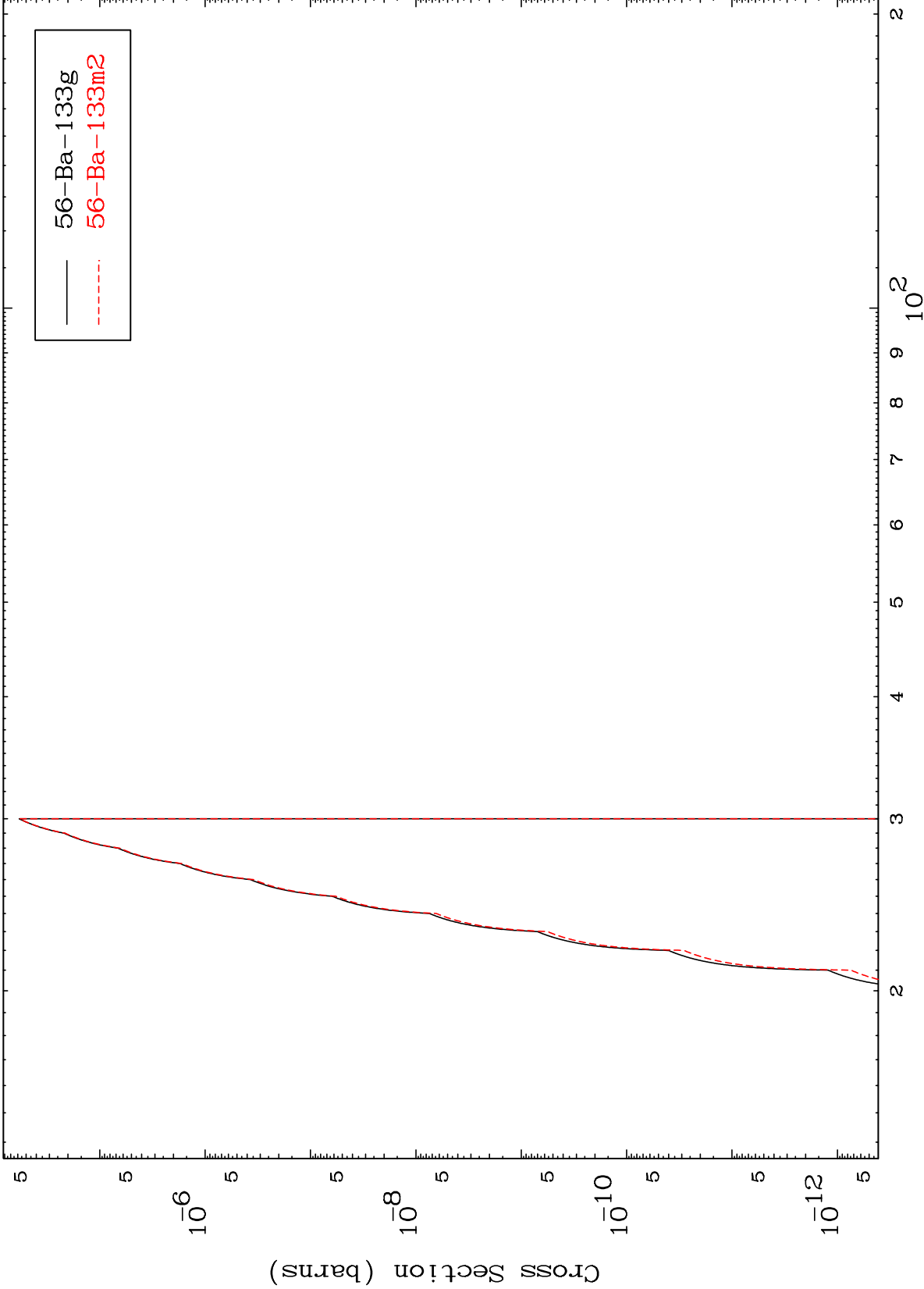
126

MAT 5825

(n,n') He-3

58-Ce-136

Radionuclide Production Cross Section



127

Incident Energy (MeV)

58-Ce-136

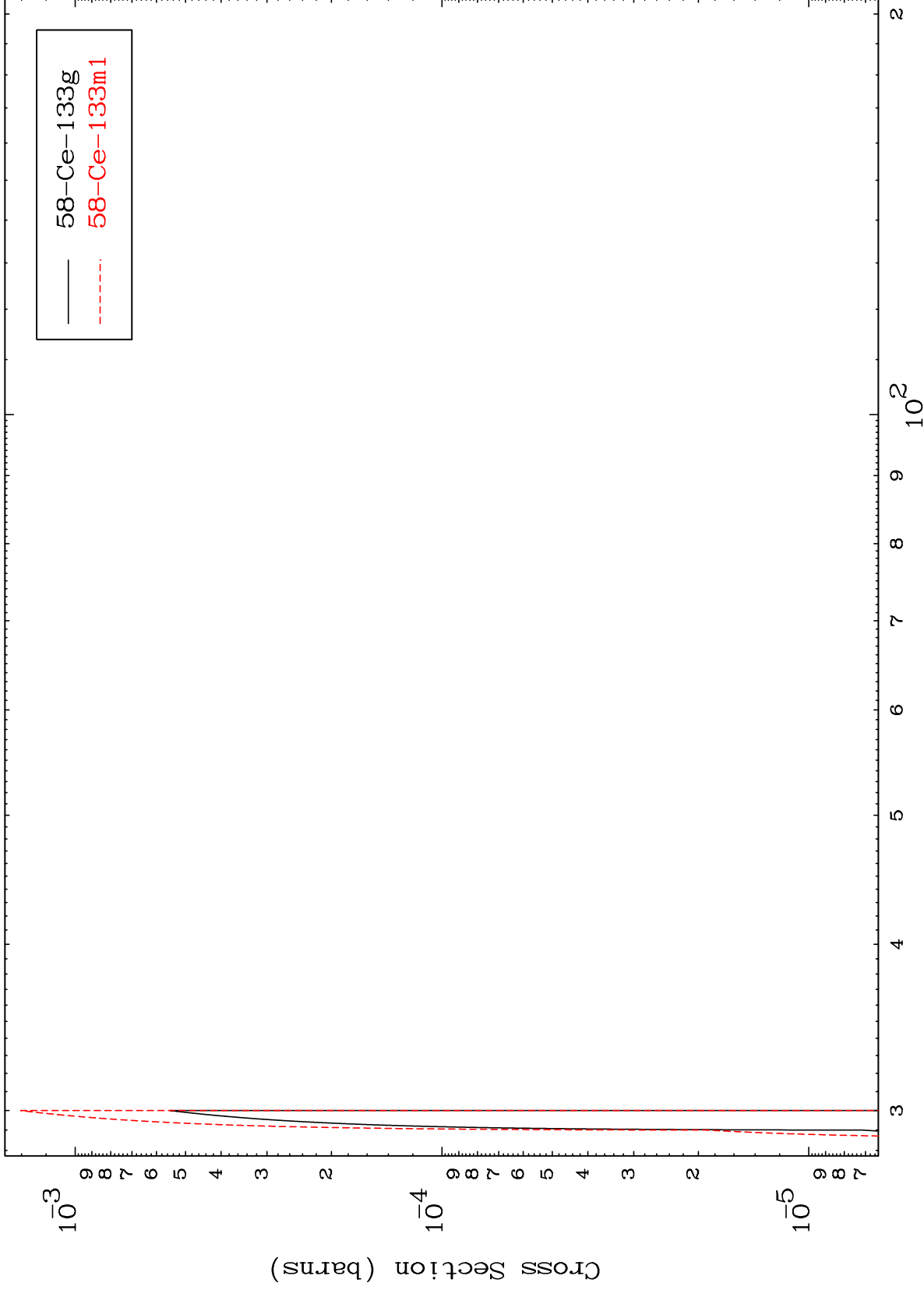


MAT 5825

(n,4n)

58-Ce-136

Radionuclide Production Cross Section



128

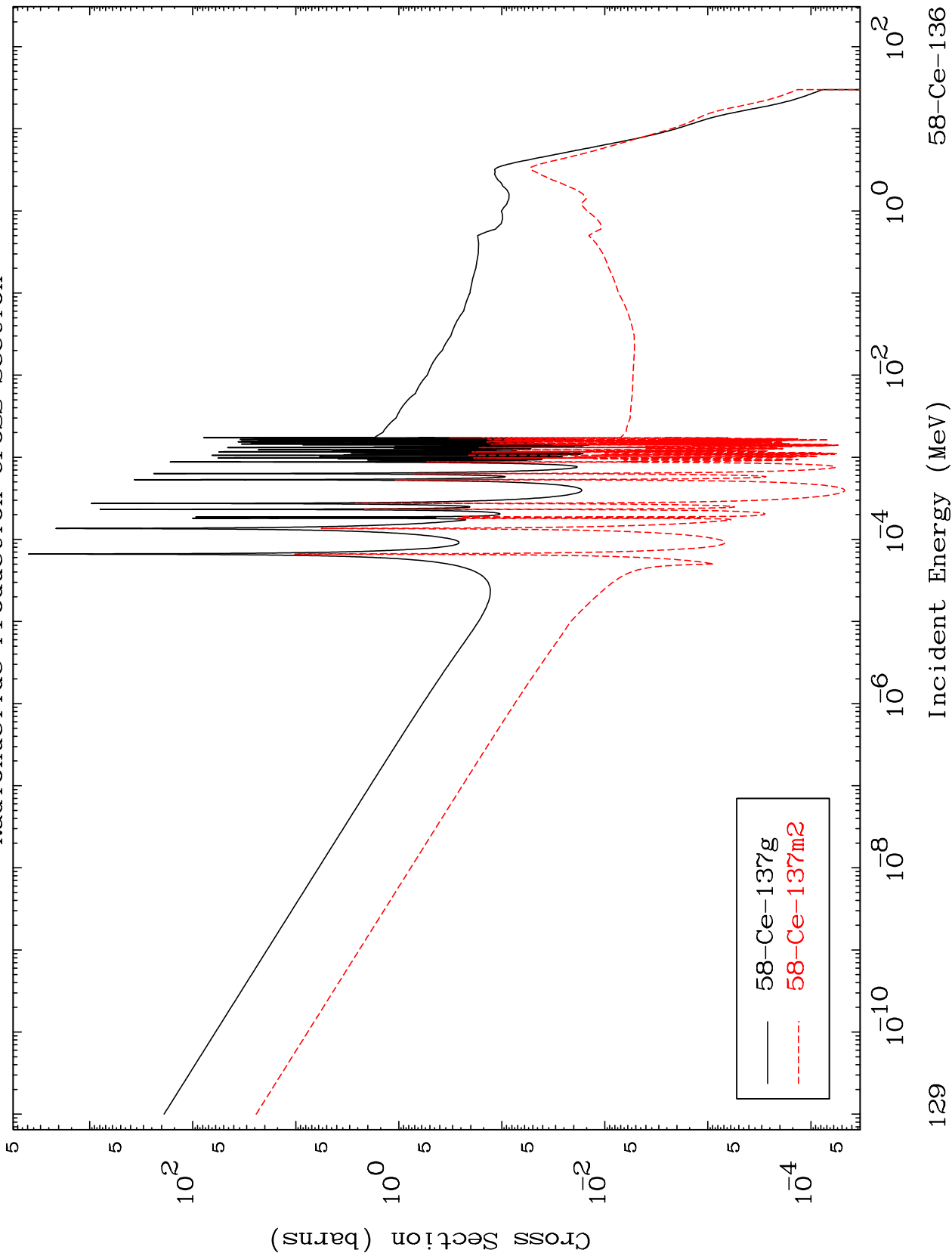
Incident Energy (MeV)

58-Ce-136

MAT 5825

58-Ce-136

$(n, \gamma)$   
Radionuclide Production Cross Section

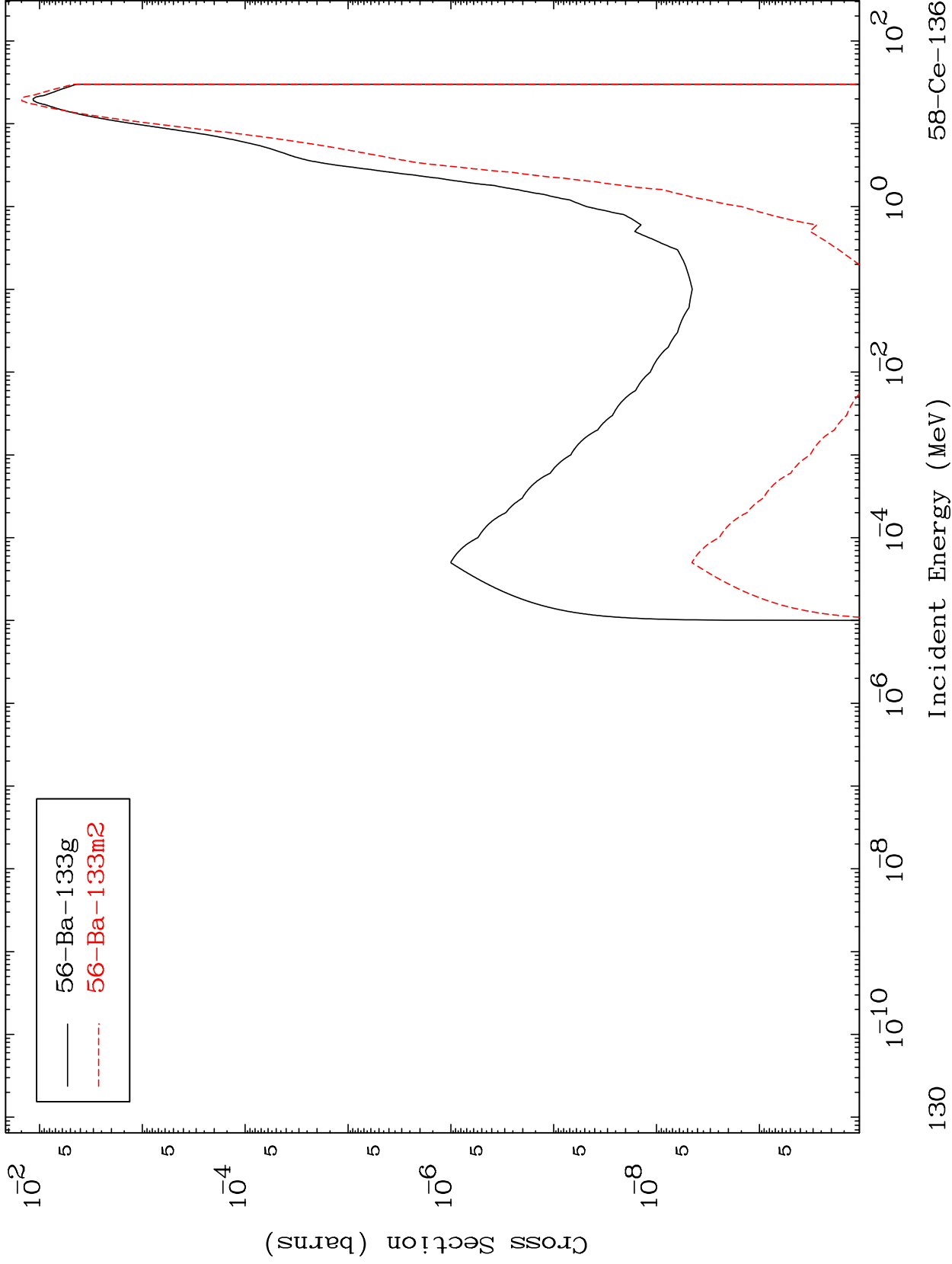


MAT 5825

(n,  $\alpha$ )

58-Ce-136

Radionuclide Production Cross Section



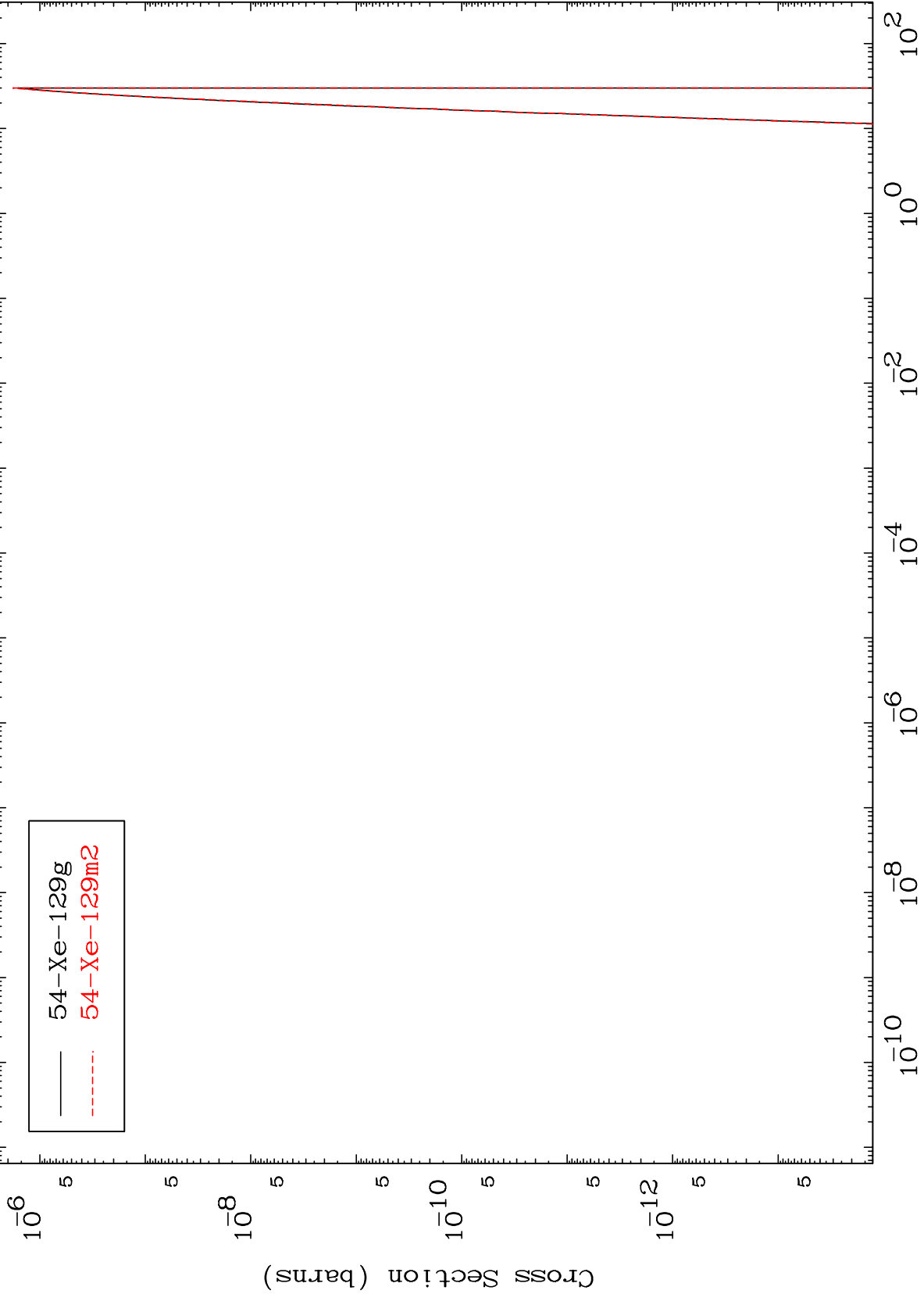
130

MAT 5825

(n,2α)

58-Ce-136

Radionuclide Production Cross Section

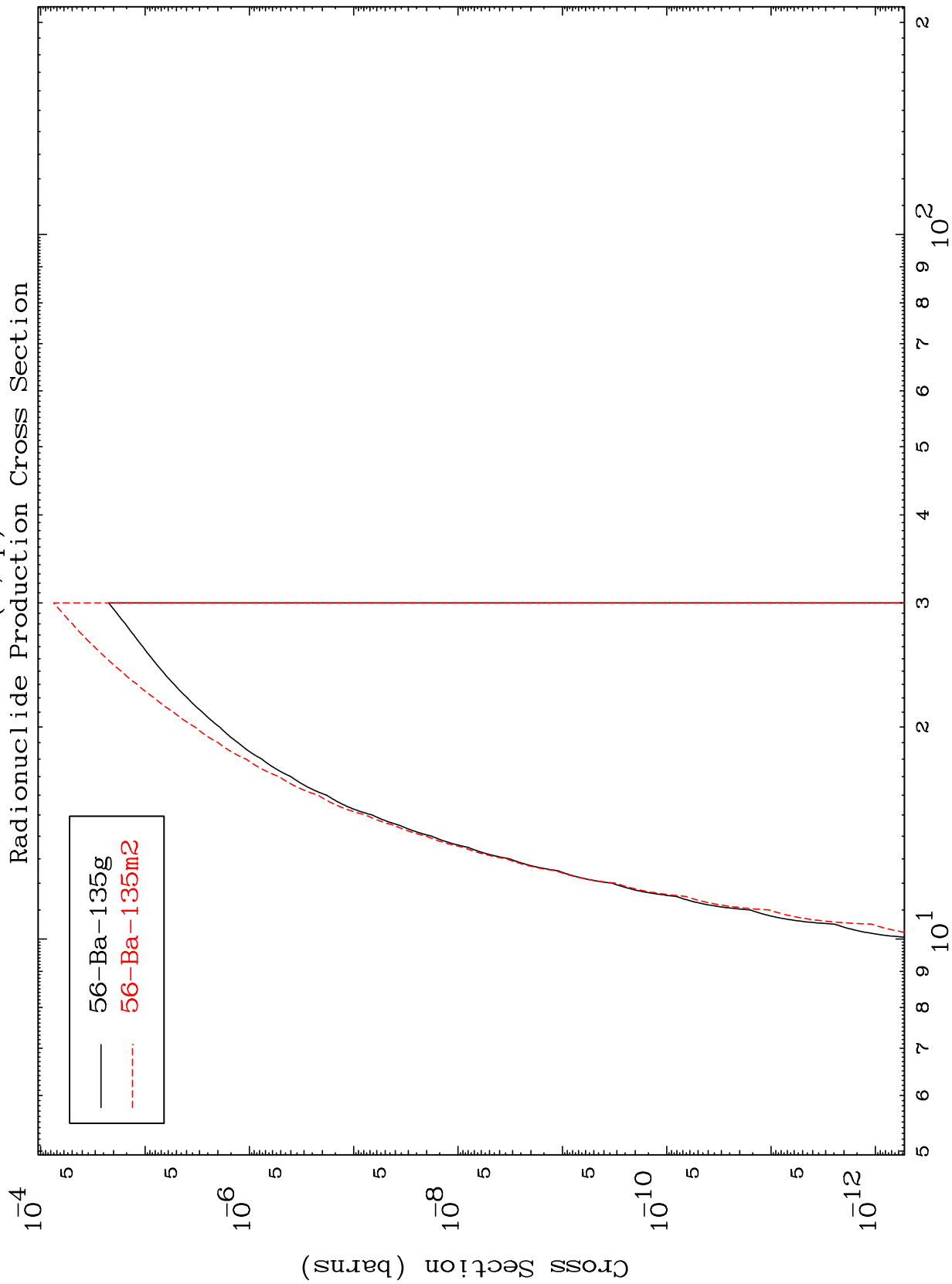


54-Xe-129g  
54-Xe-129m2

MAT 5825

58-Ce-136

(n,2p)  
Radionuclide Production Cross Section



132

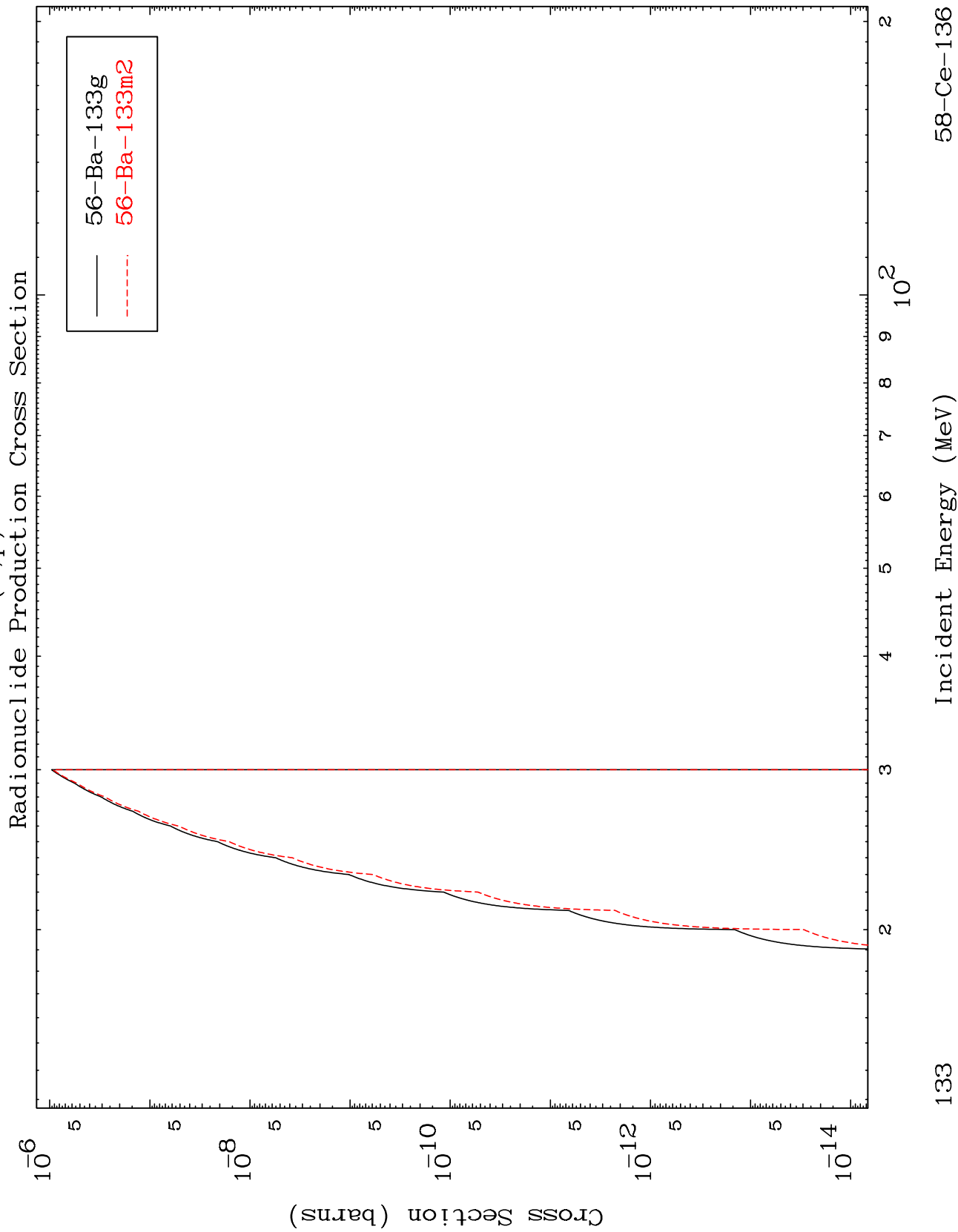
Incident Energy (MeV)

58-Ce-136

MAT 5825

(n,p) t

58-Ce-136



133

58-Ce-136