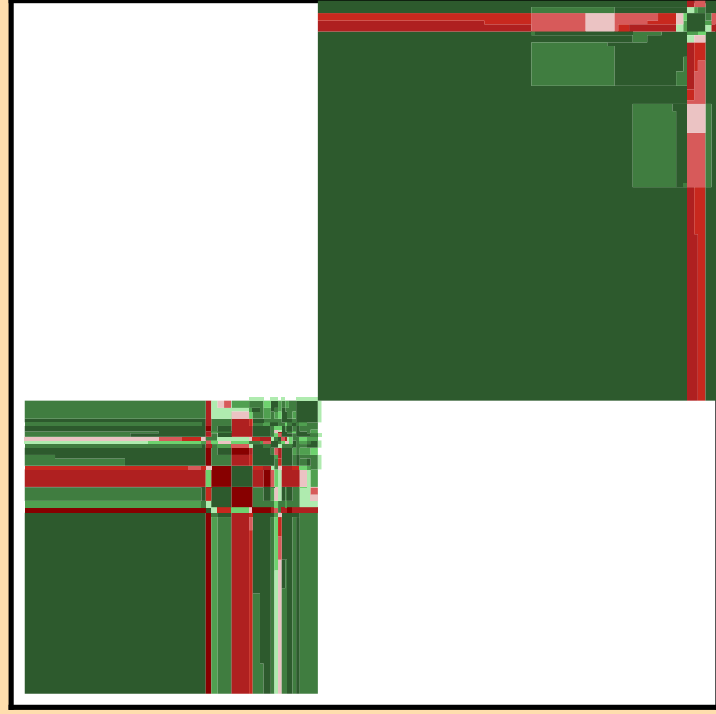
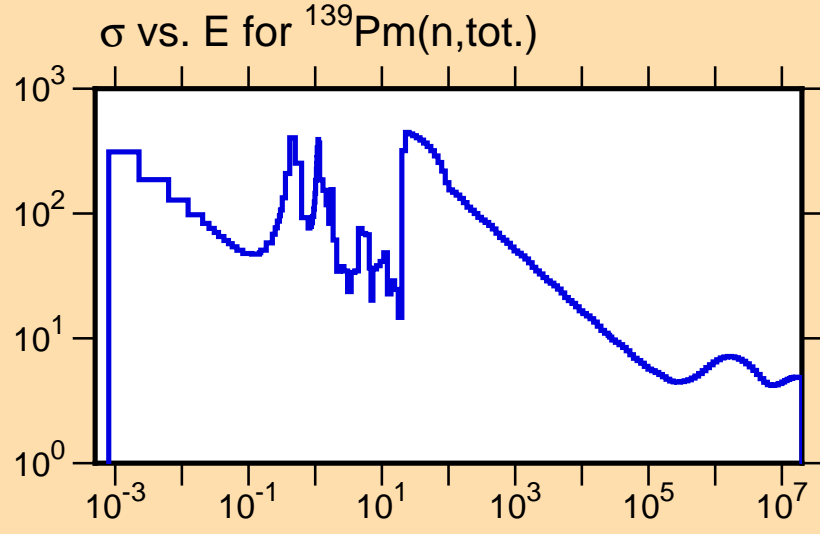


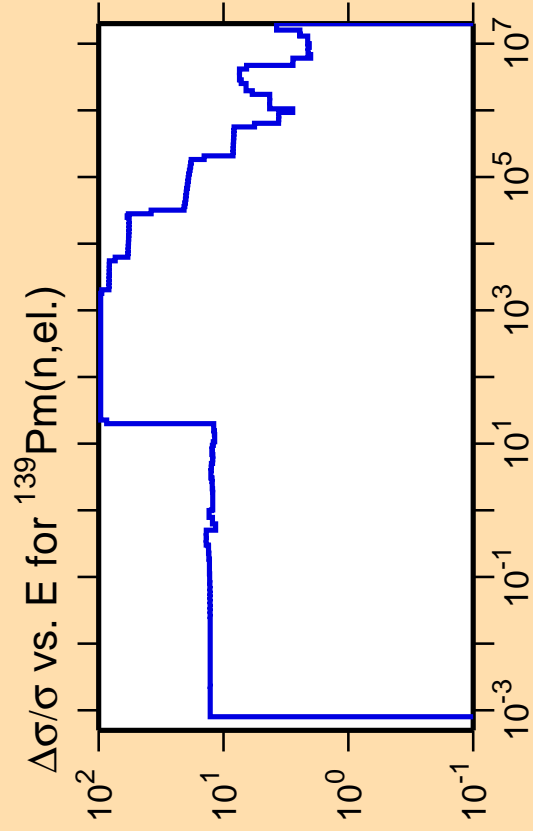
Ordinate scales are % relative standard deviation and barns.

Abscissa scales are energy (eV).



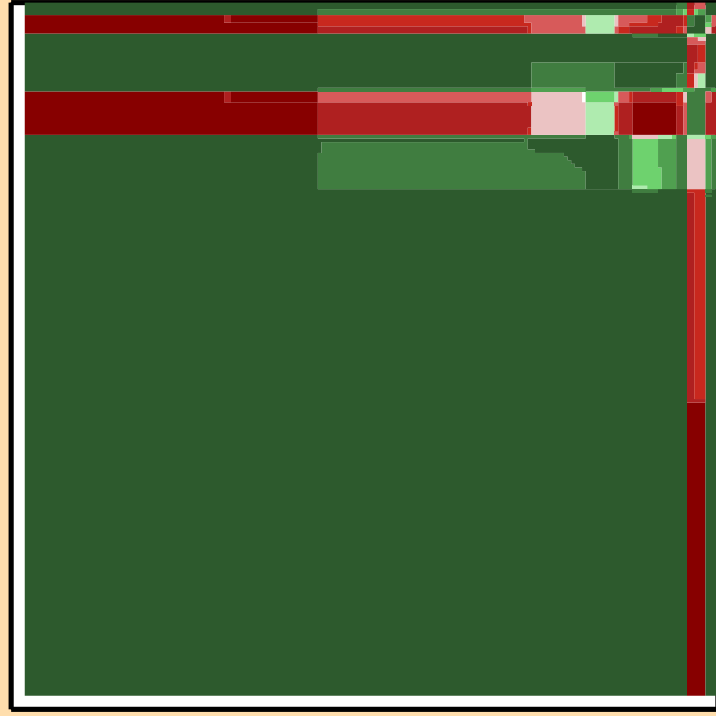
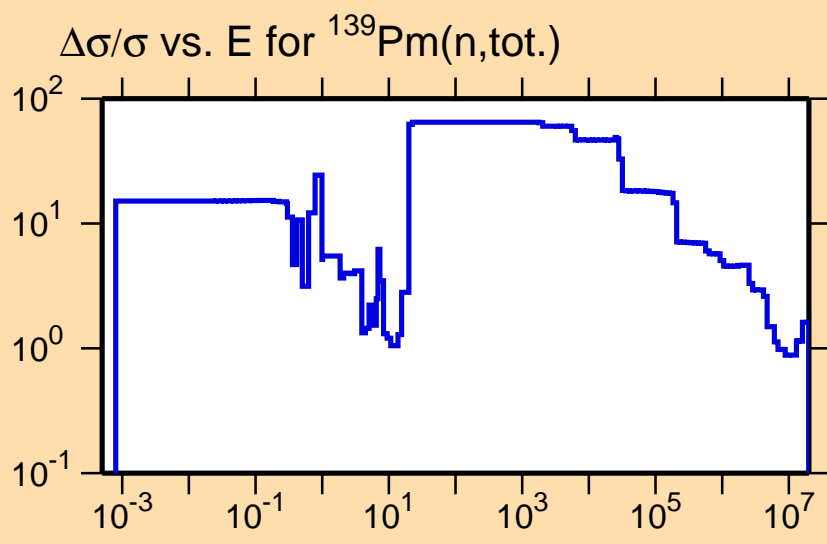
Correlation Matrix





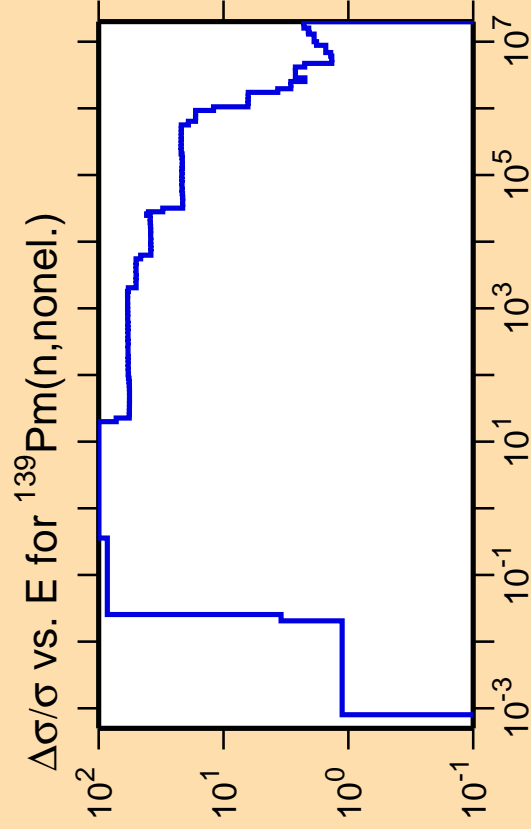
Ordinate scale is %  
relative standard deviation.

Abcissa scales are energy (eV).



Correlation Matrix



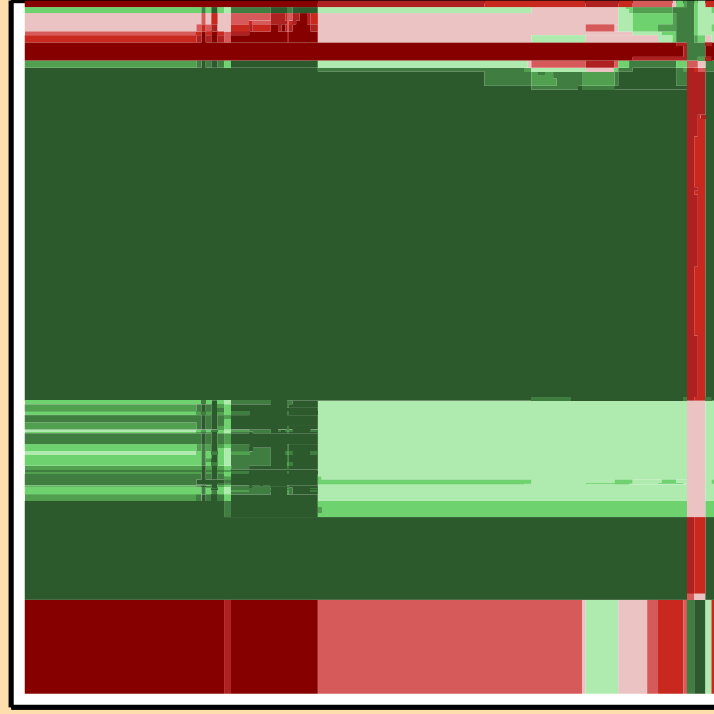
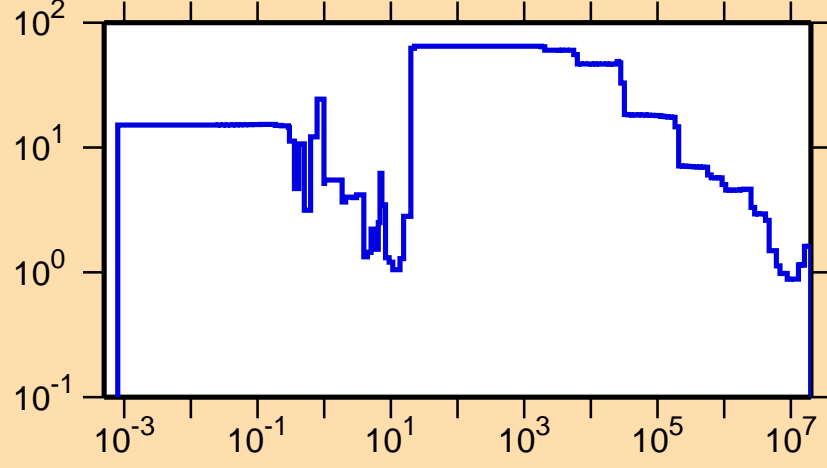


Ordinate scale is %  
relative standard deviation.

Abscissa scales are energy (eV).

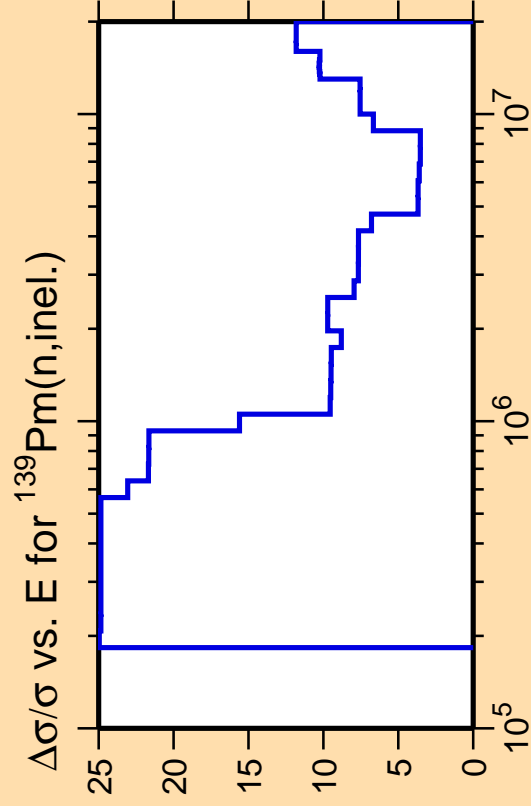
Warning: some uncertainty  
data were suppressed.

$\Delta\sigma/\sigma$  vs. E for  $^{139}\text{Pm}(n,\text{tot.})$



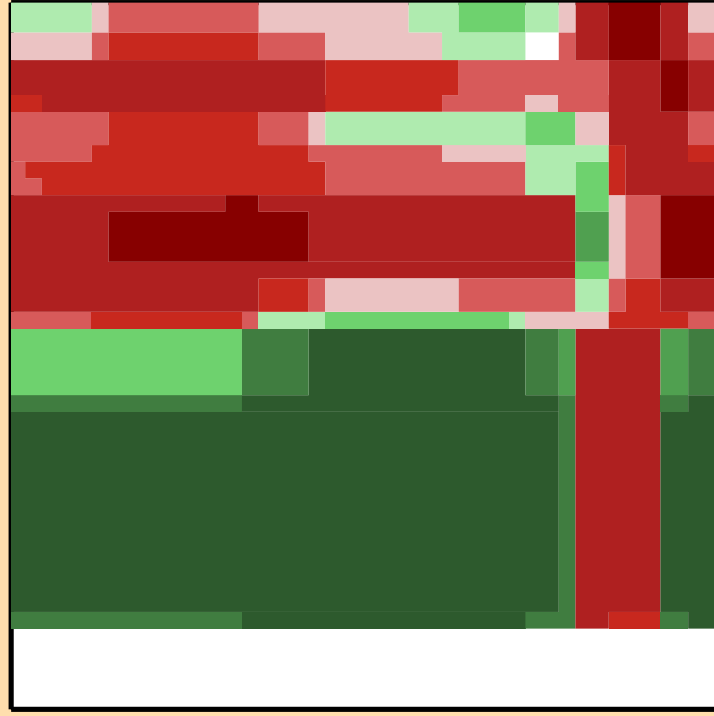
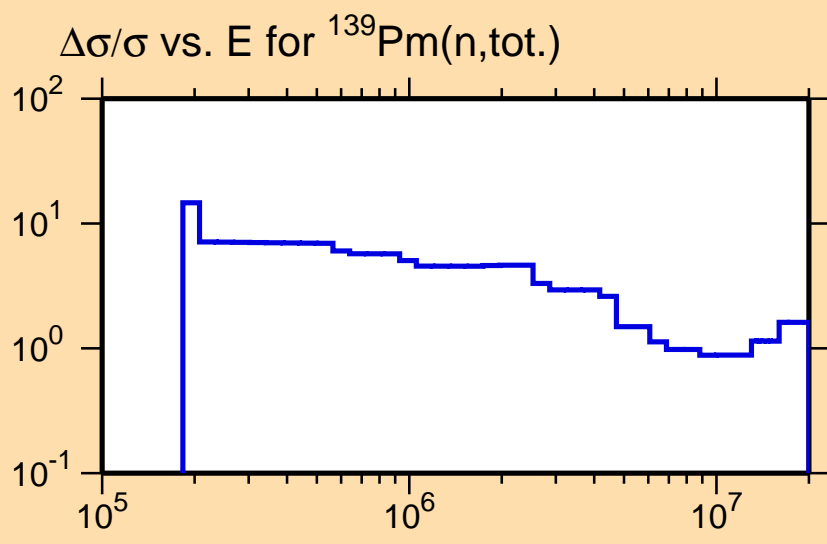
Correlation Matrix





Ordinate scale is %  
relative standard deviation.

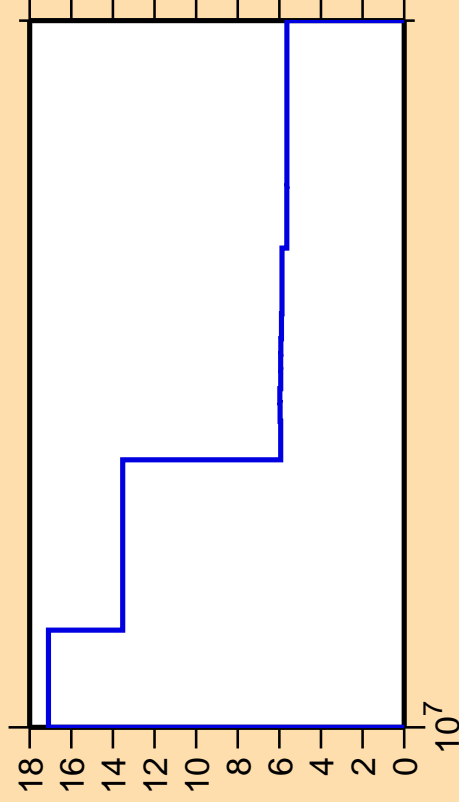
Abscissa scales are energy (eV).



Correlation Matrix



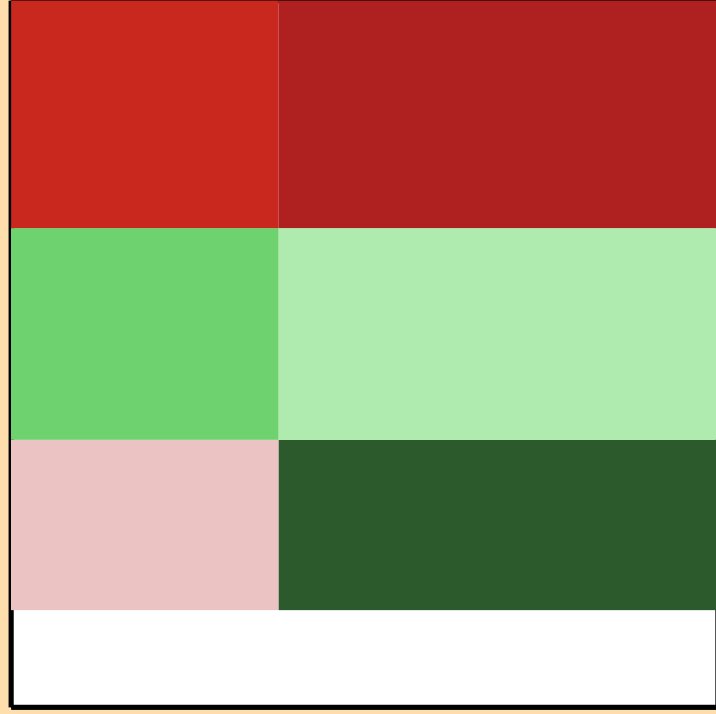
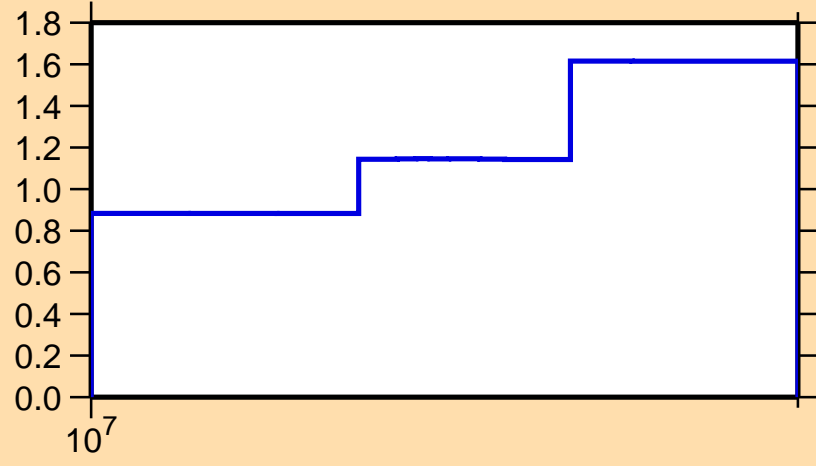
$\Delta\sigma/\sigma$  vs. E for  $^{139}\text{Pm}(n,2n)$



Ordinate scale is %  
relative standard deviation.

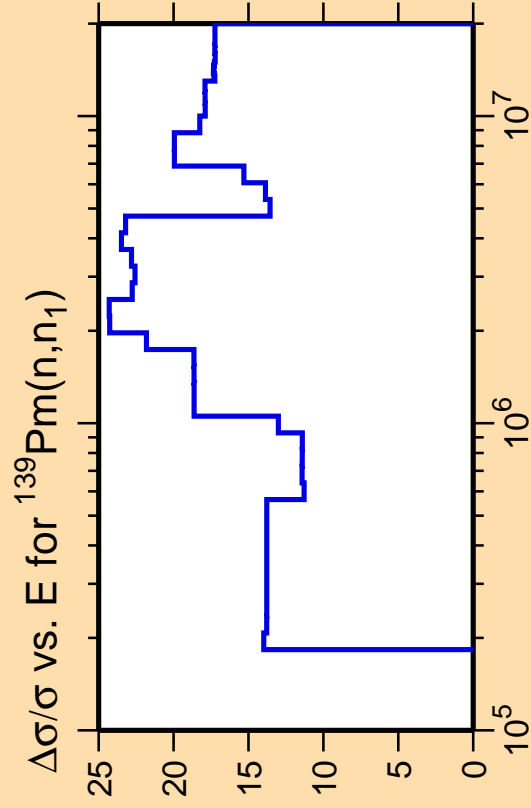
Abscissa scales are energy (eV).

$\Delta\sigma/\sigma$  vs. E for  $^{139}\text{Pm}(n,\text{tot.})$



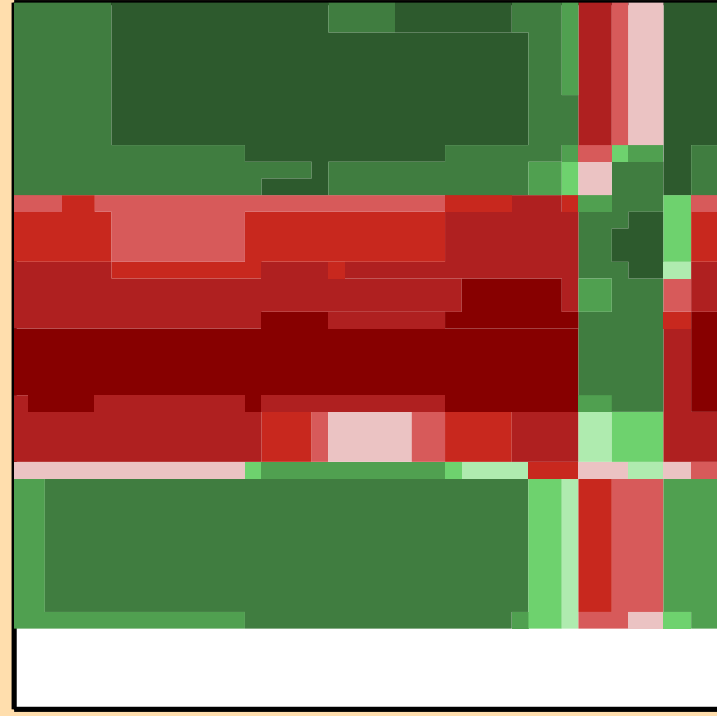
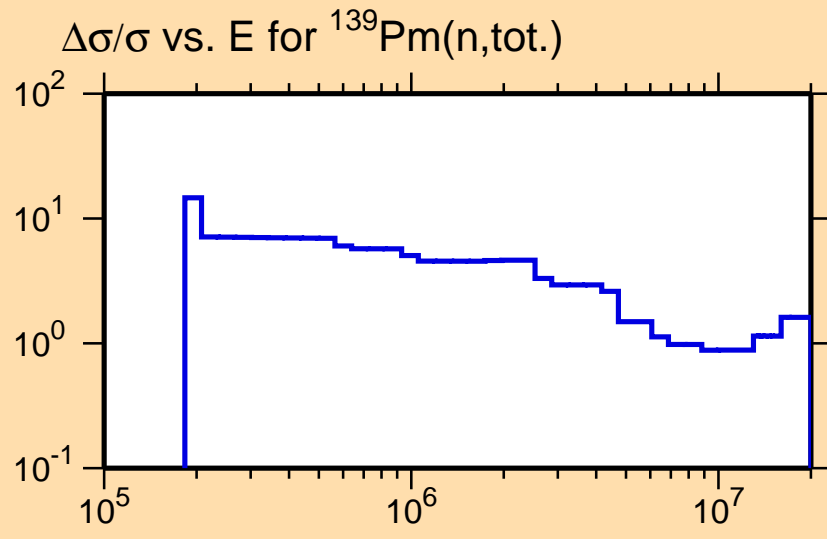
Correlation Matrix





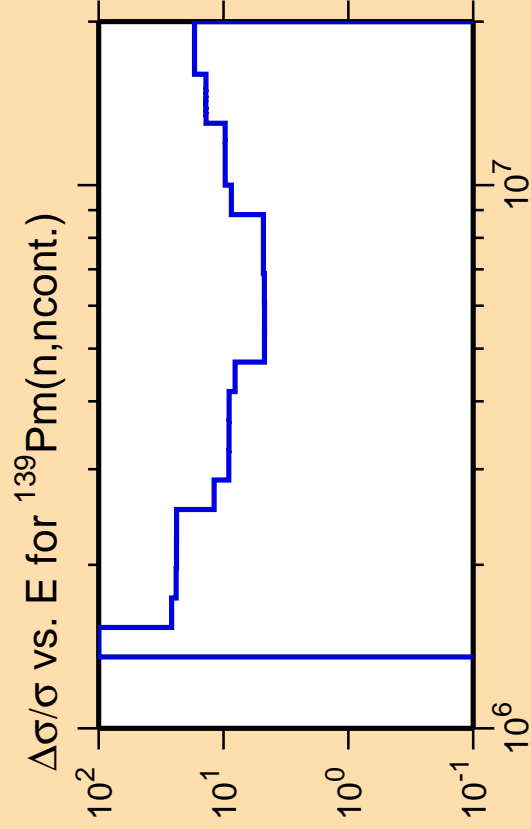
Ordinate scale is %  
relative standard deviation.

Abscissa scales are energy (eV).



Correlation Matrix



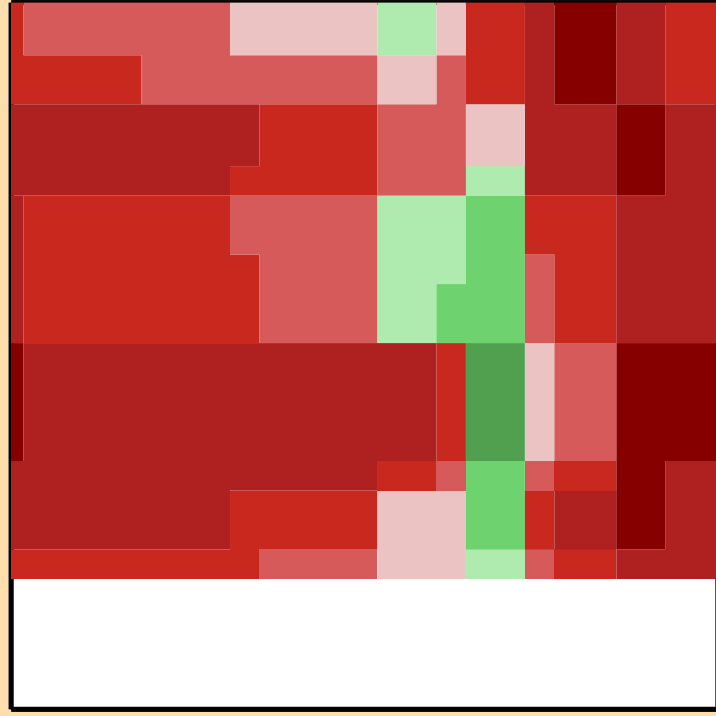
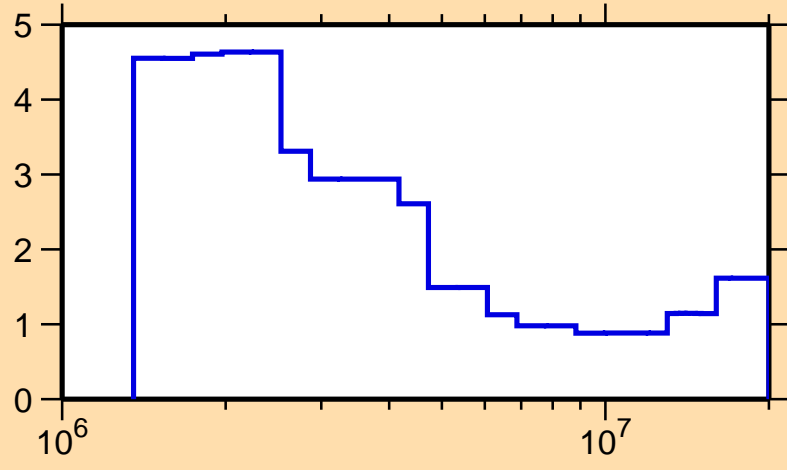


Ordinate scale is %  
relative standard deviation.

Abscissa scales are energy (eV).

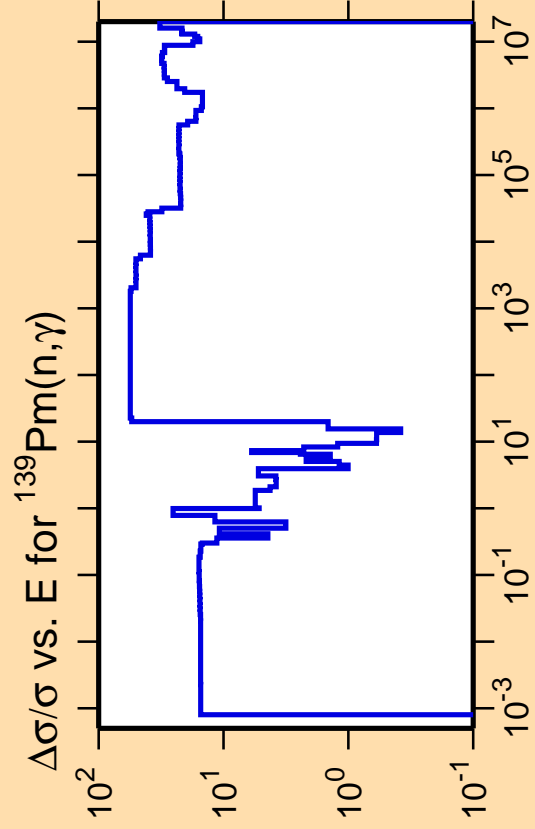
Warning: some uncertainty  
data were suppressed.

$\Delta\sigma/\sigma$  vs. E for  $^{139}\text{Pm}(n,\text{tot.})$



Correlation Matrix

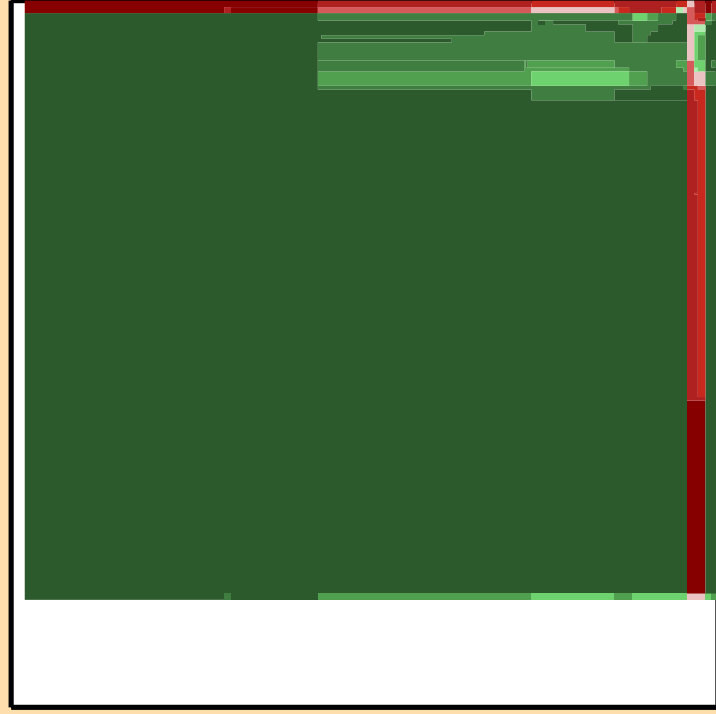
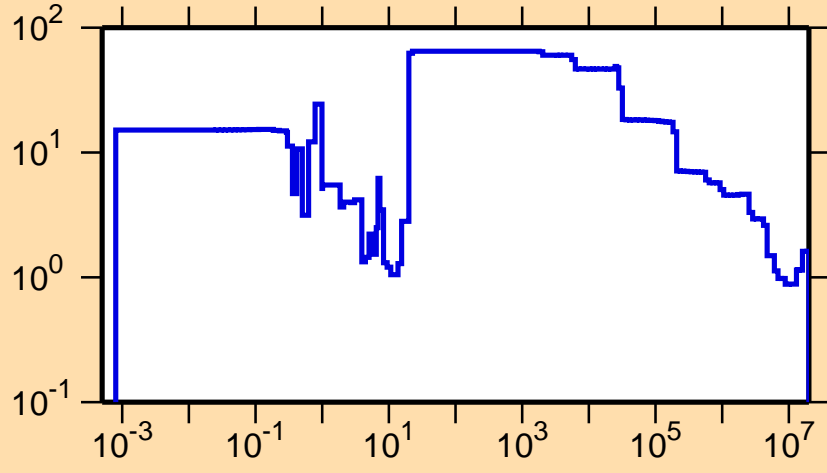




Ordinate scale is %  
relative standard deviation.

Abscissa scales are energy (eV).

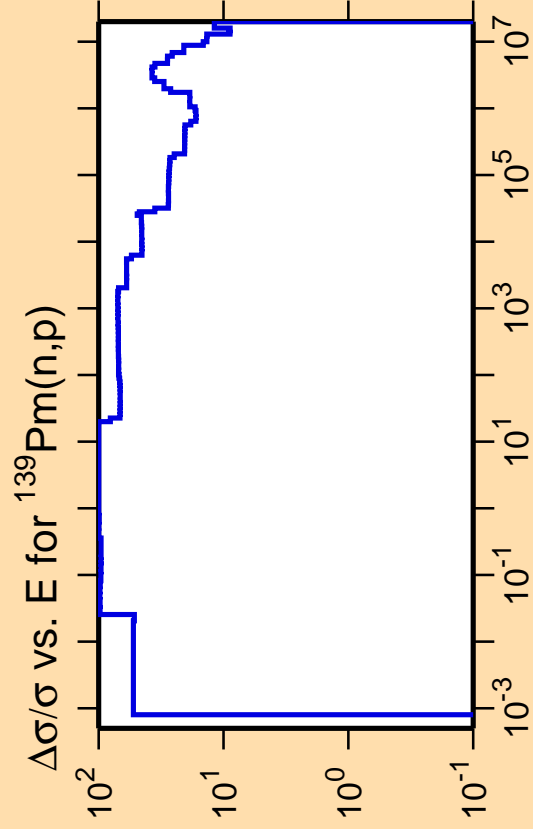
$\Delta\sigma/\sigma$  vs. E for  $^{139}\text{Pm}(n,\text{tot.})$



Correlation Matrix





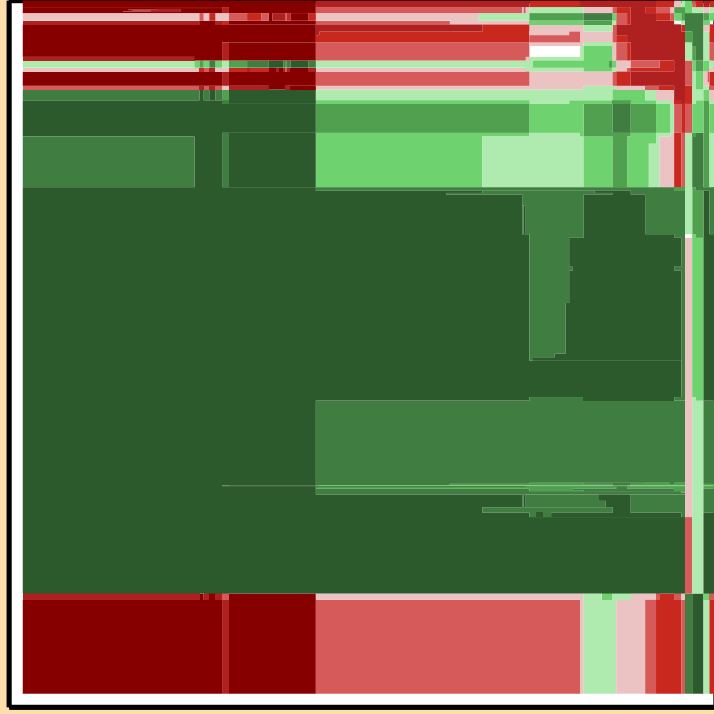
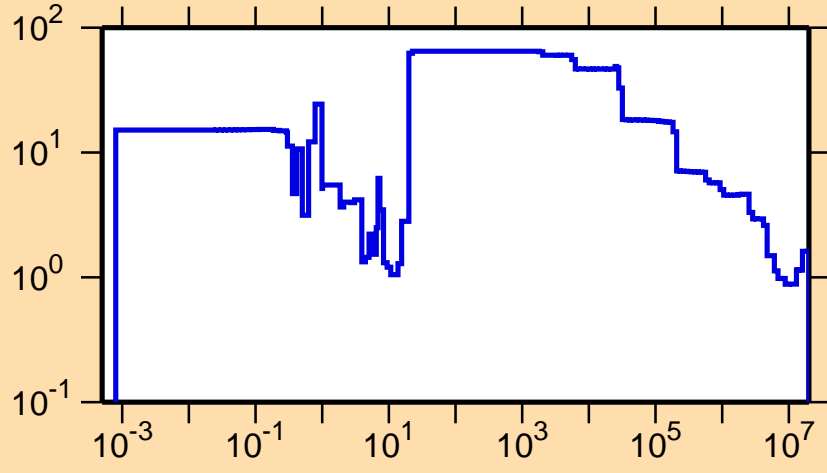


Ordinate scale is %  
relative standard deviation.

Abscissa scales are energy (eV).

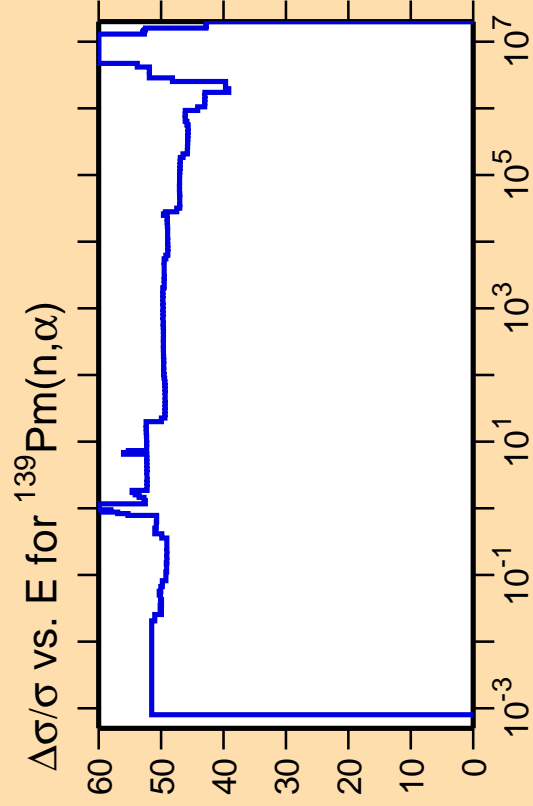
Warning: some uncertainty  
data were suppressed.

$\Delta\sigma/\sigma$  vs. E for  $^{139}\text{Pm}(n,\text{tot.})$



Correlation Matrix



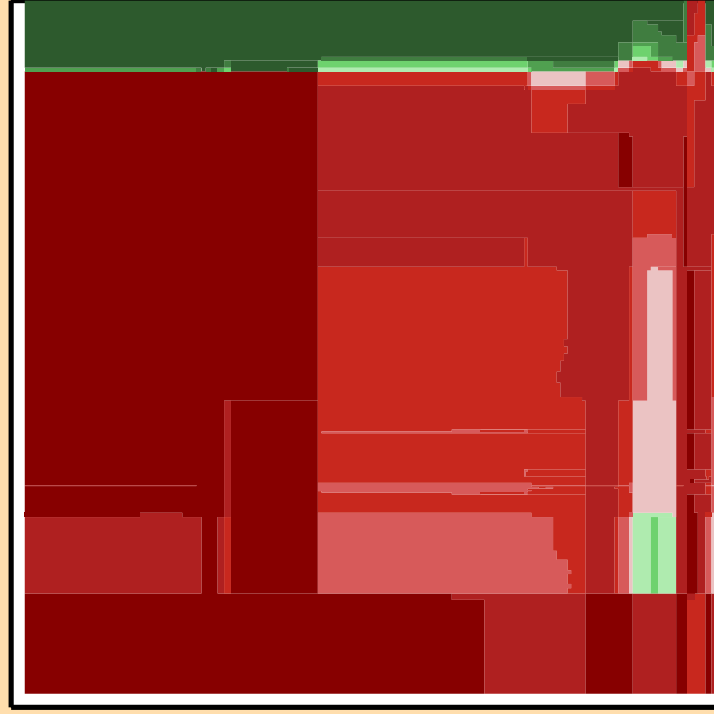
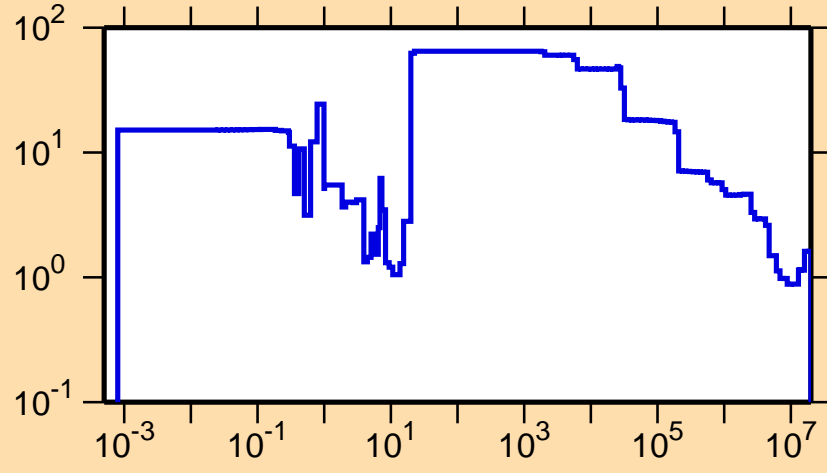


Ordinate scale is %  
relative standard deviation.

Abscissa scales are energy (eV).

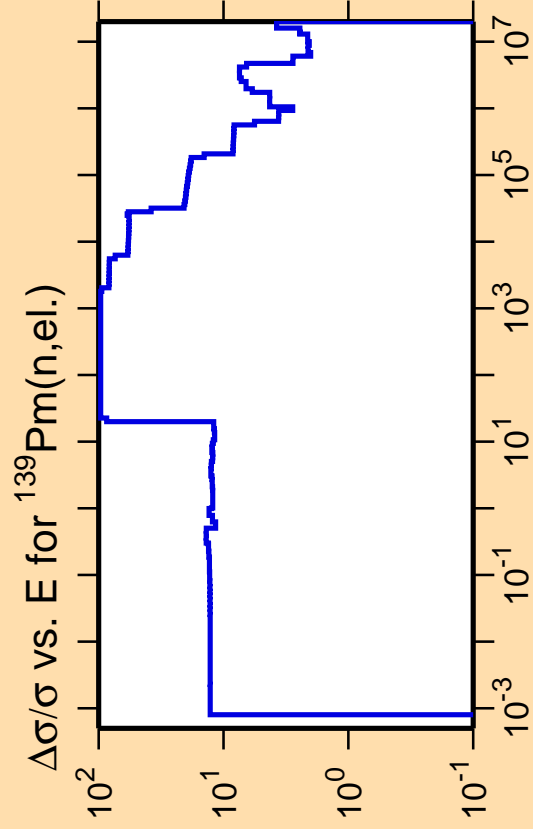
Warning: some uncertainty  
data were suppressed.

$\Delta\sigma/\sigma$  vs. E for  $^{139}\text{Pm}(n,\text{tot.})$



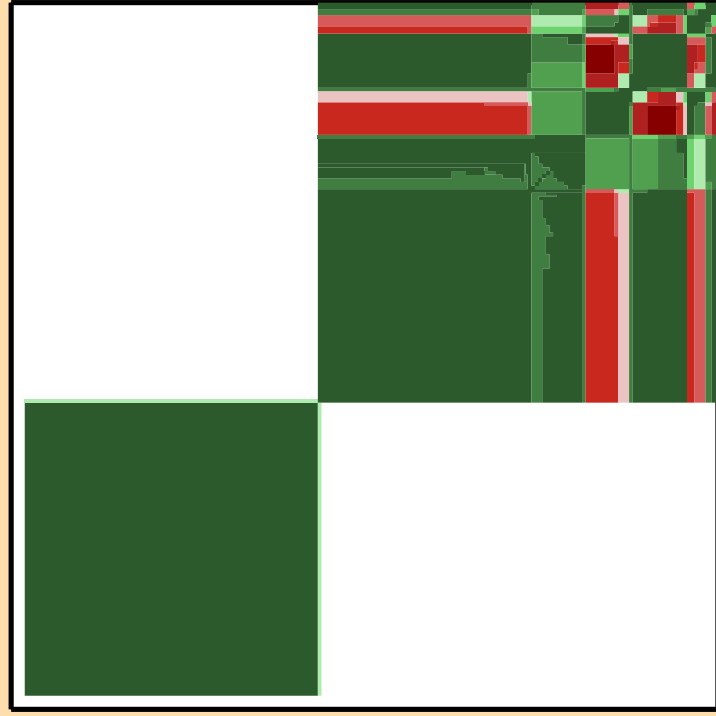
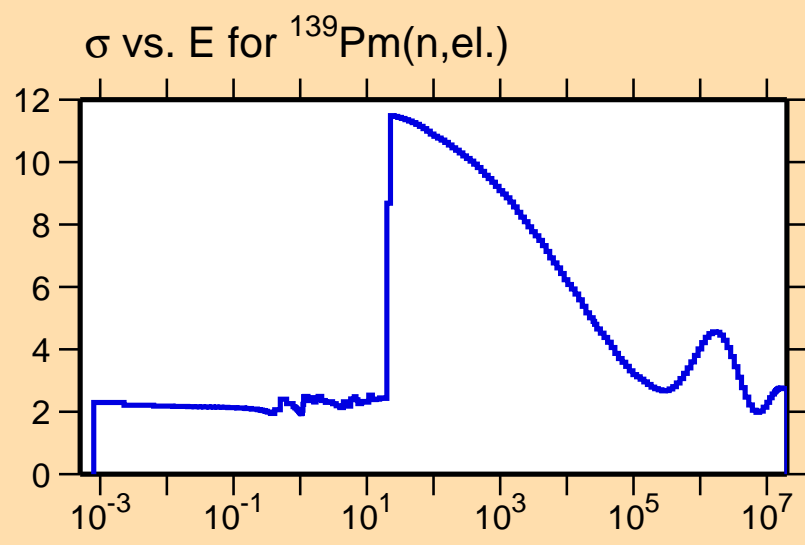
Correlation Matrix





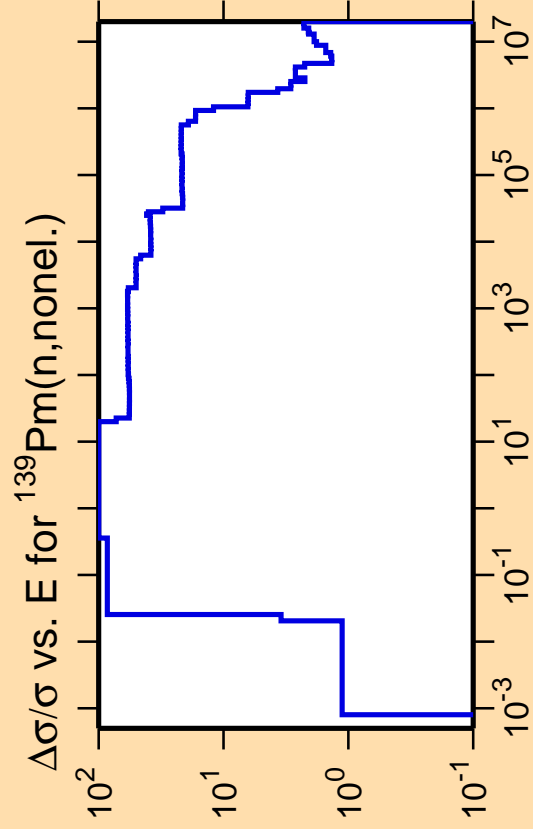
Ordinate scales are % relative standard deviation and barns.

Abscissa scales are energy (eV).



Correlation Matrix



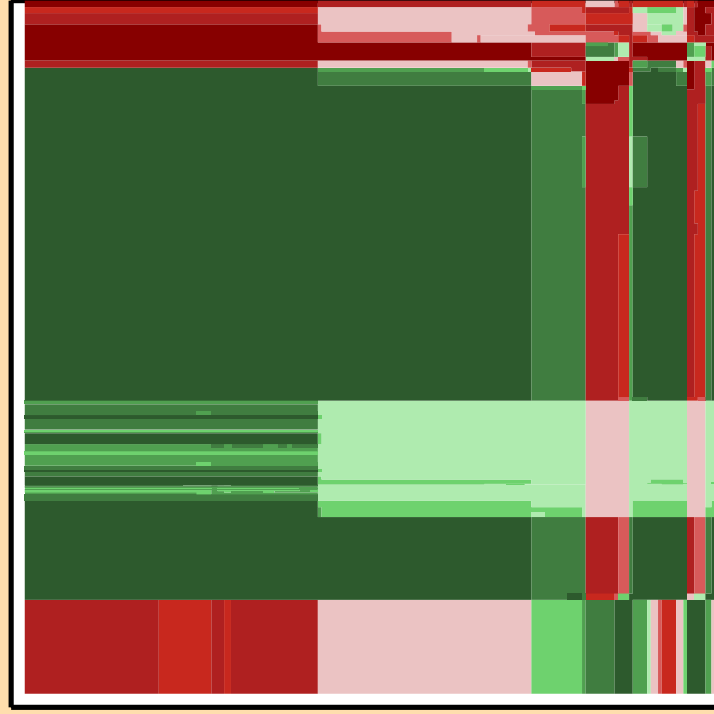
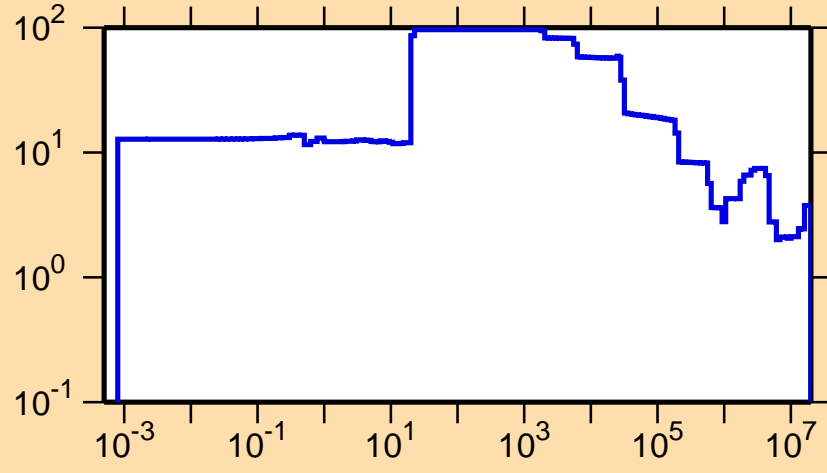


Ordinate scale is %  
relative standard deviation.

Abscissa scales are energy (eV).

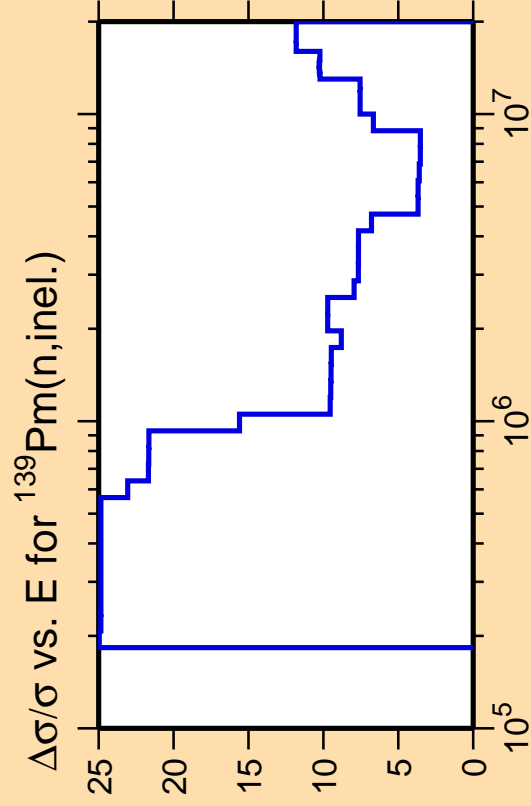
Warning: some uncertainty  
data were suppressed.

$\Delta\sigma/\sigma$  vs. E for  $^{139}\text{Pm}(n,\text{el.})$



Correlation Matrix

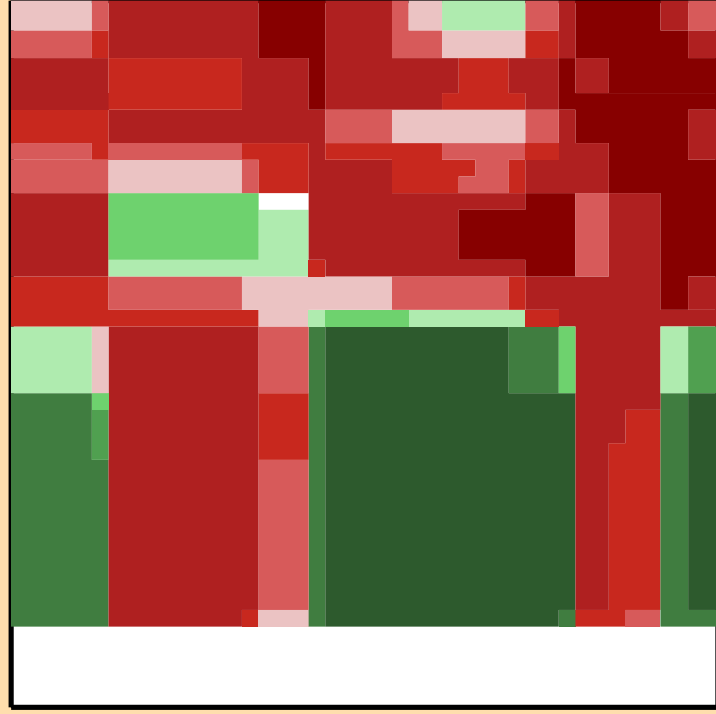
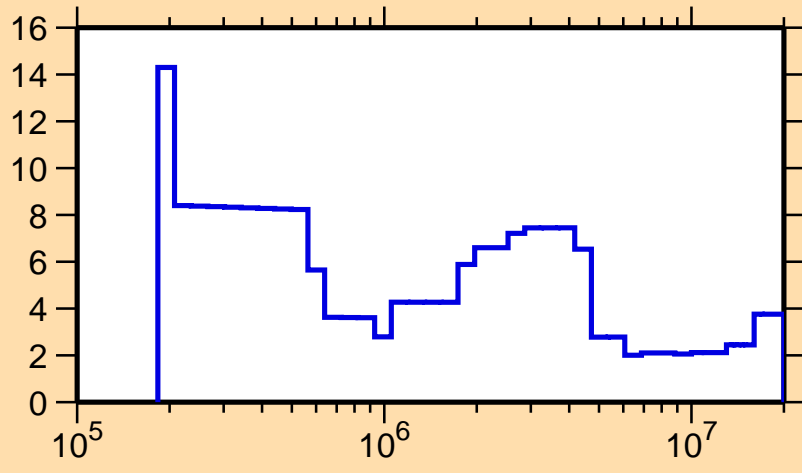




Ordinate scale is %  
relative standard deviation.

Abscissa scales are energy (eV).

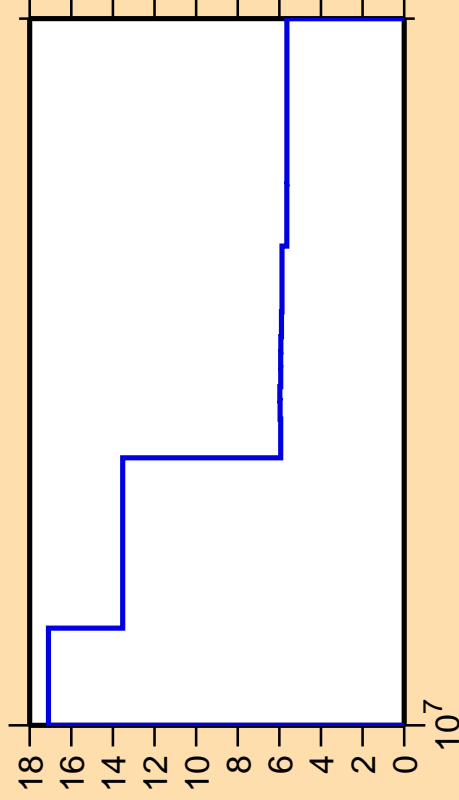
$\Delta\sigma/\sigma$  vs. E for  $^{139}\text{Pm}(n,\text{el.})$



Correlation Matrix



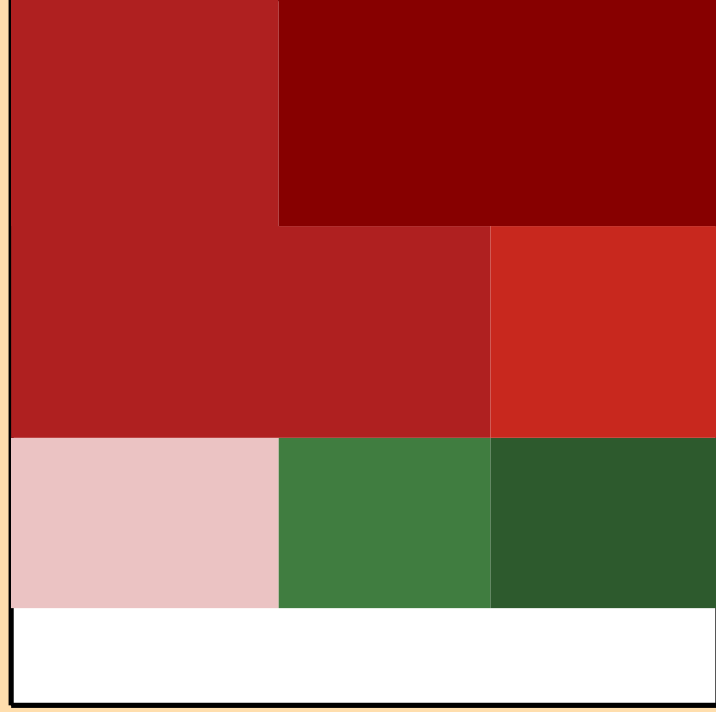
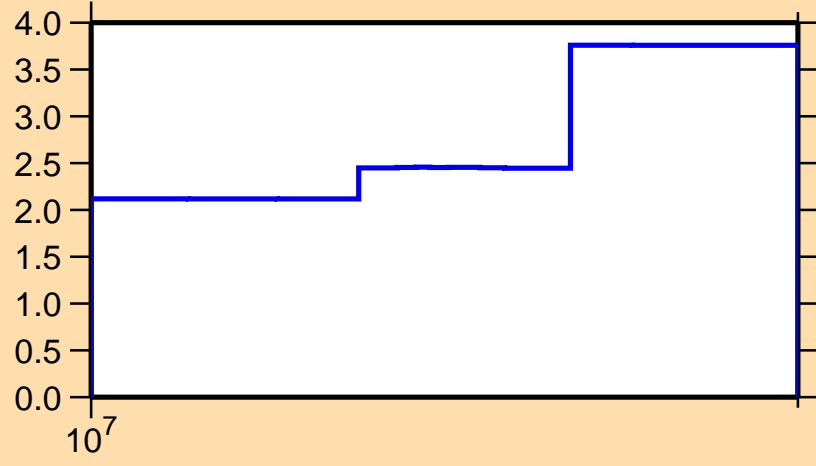
$\Delta\sigma/\sigma$  vs. E for  $^{139}\text{Pm}(n,2n)$



Ordinate scale is %  
relative standard deviation.

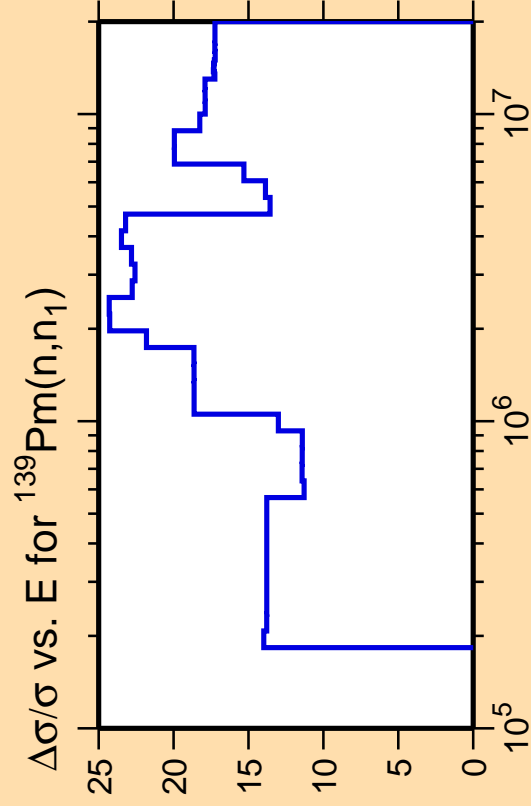
Abscissa scales are energy (eV).

$\Delta\sigma/\sigma$  vs. E for  $^{139}\text{Pm}(n,el.)$



Correlation Matrix

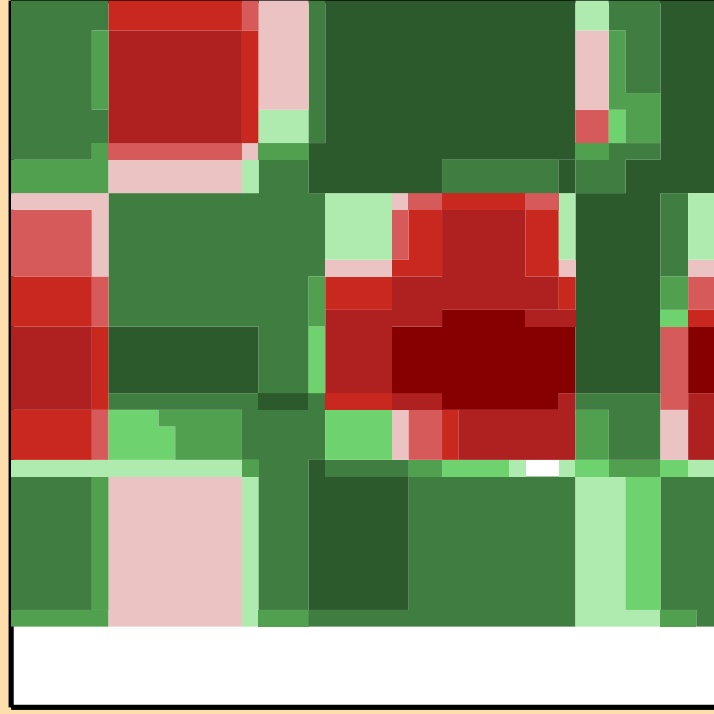
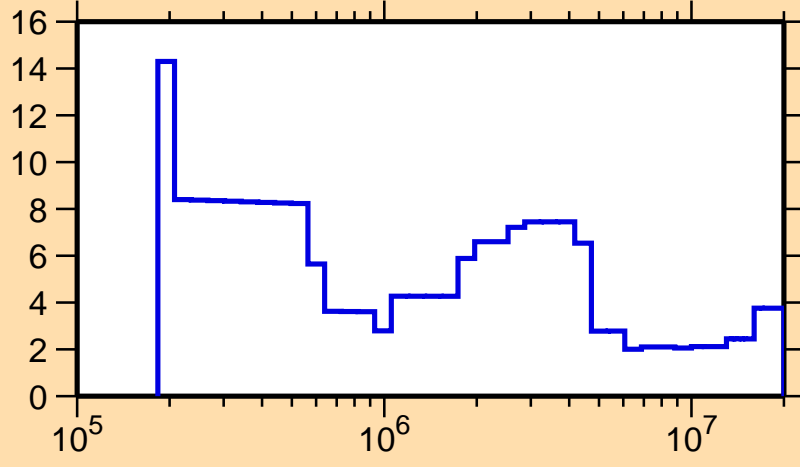




Ordinate scale is %  
relative standard deviation.

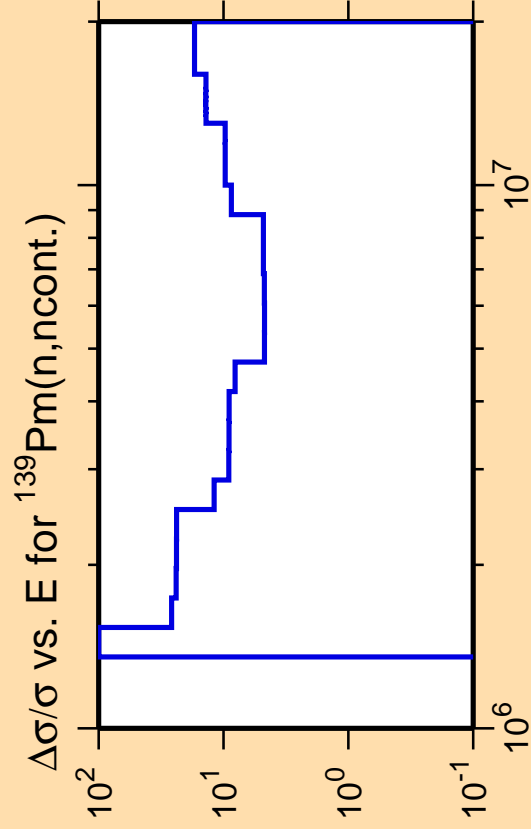
Abscissa scales are energy (eV).

$\Delta\sigma/\sigma$  vs. E for  $^{139}\text{Pm}(n,\text{el.})$



Correlation Matrix



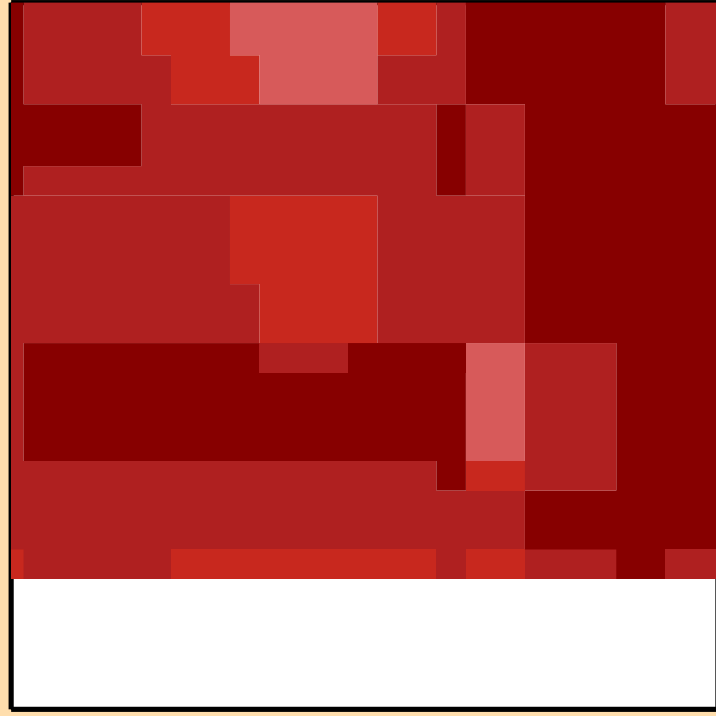
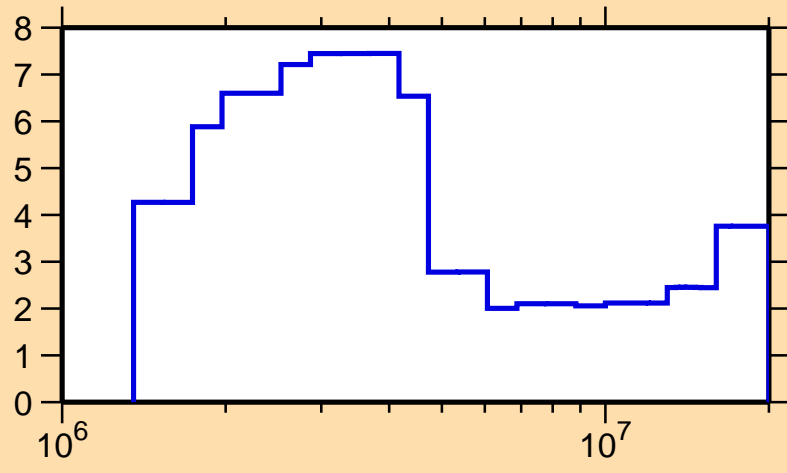


Ordinate scale is %  
relative standard deviation.

Abscissa scales are energy (eV).

Warning: some uncertainty  
data were suppressed.

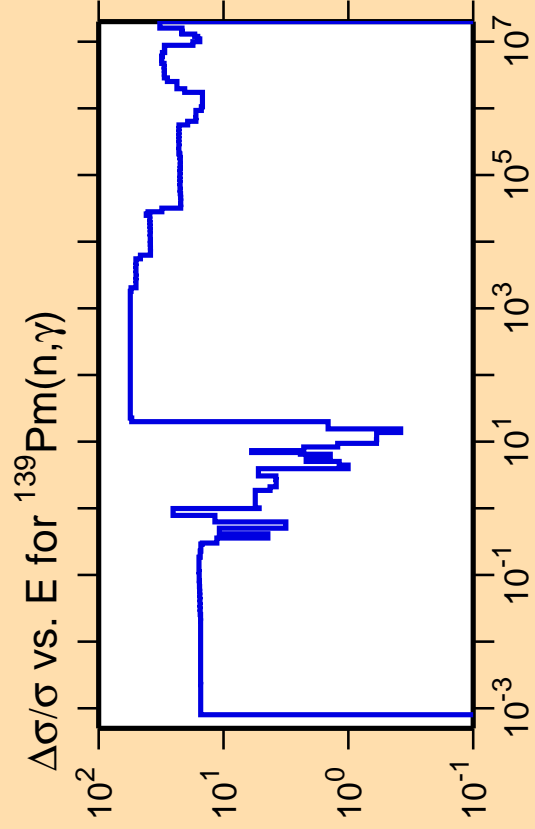
$\Delta\sigma/\sigma$  vs. E for  $^{139}\text{Pm}(n,\text{el.})$



Correlation Matrix

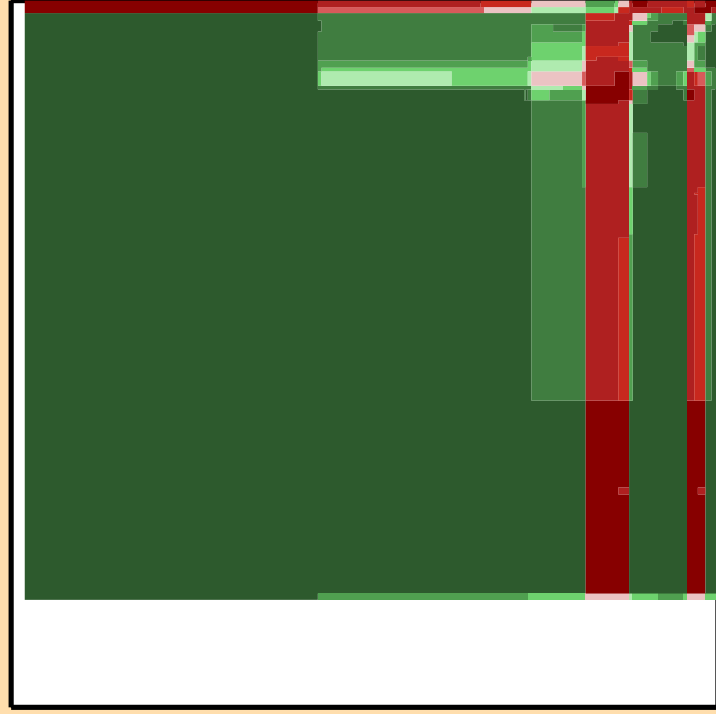
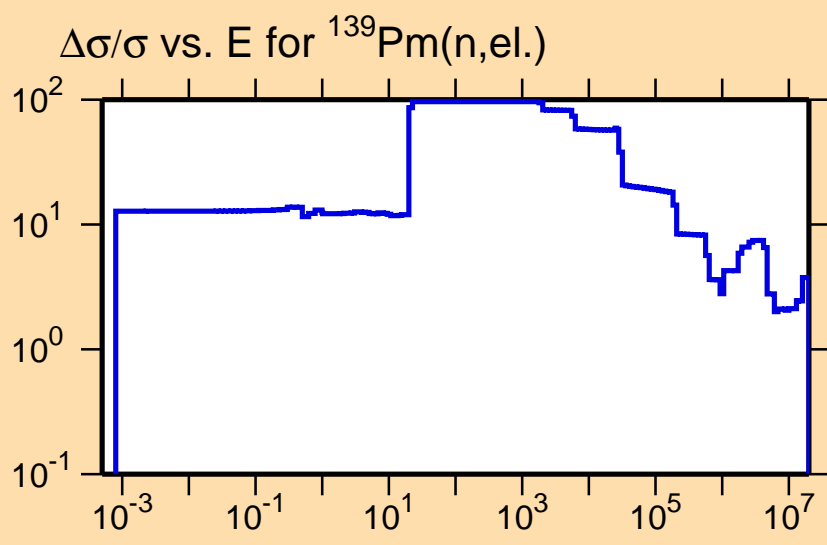






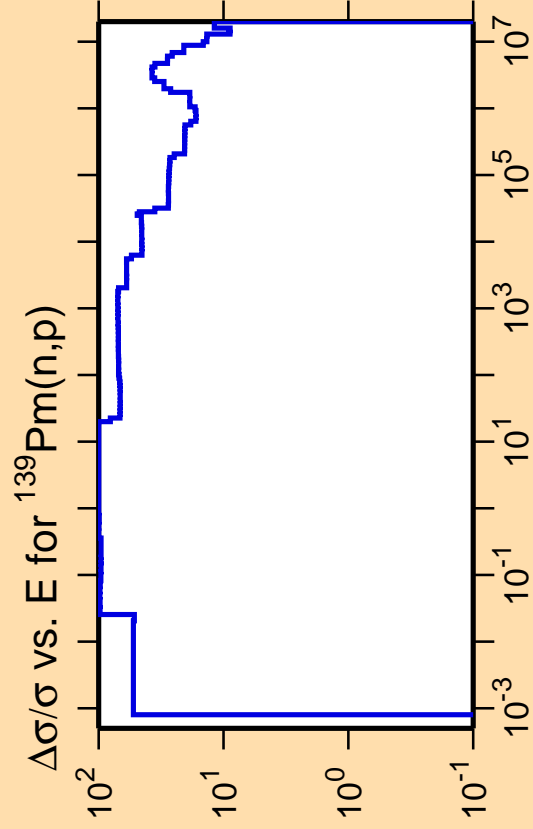
Ordinate scale is %  
relative standard deviation.

Abscissa scales are energy (eV).



Correlation Matrix



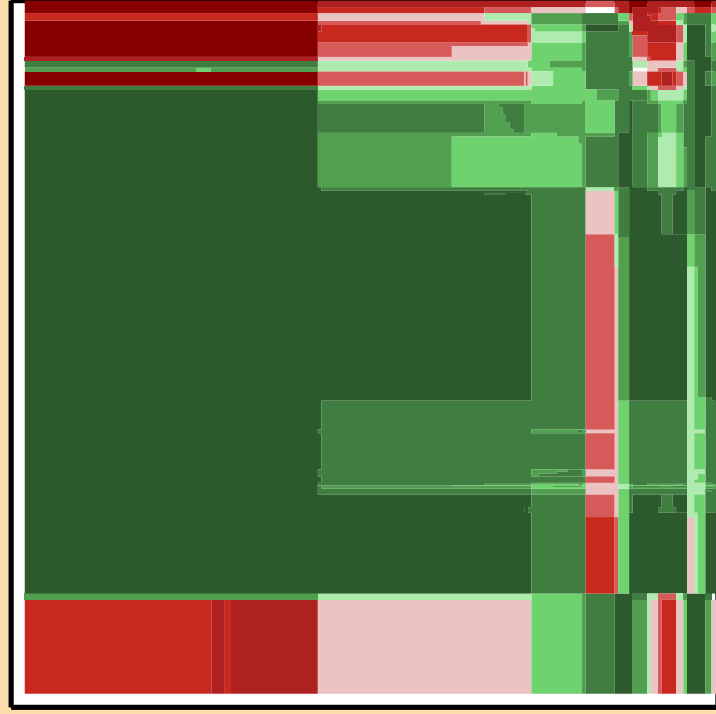
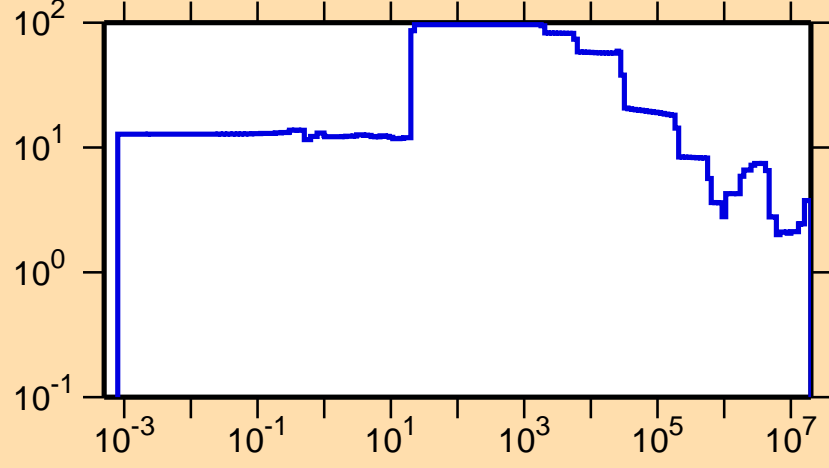


Ordinate scale is %  
relative standard deviation.

Abscissa scales are energy (eV).

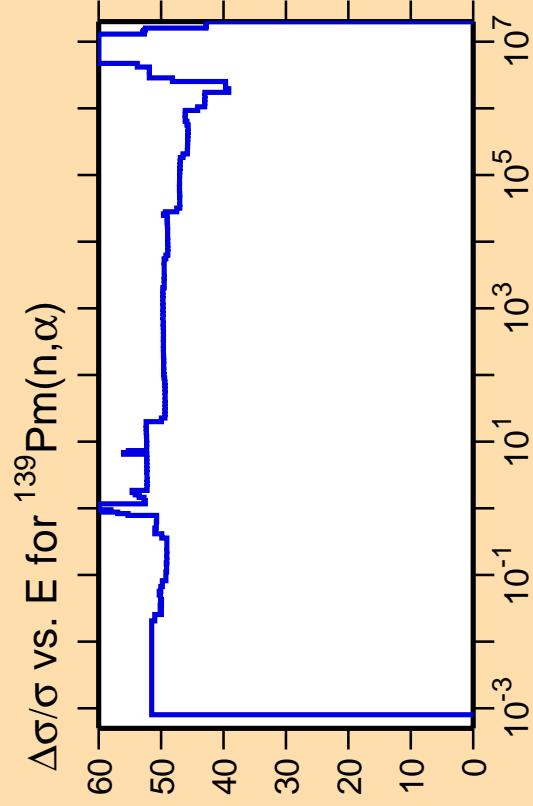
Warning: some uncertainty  
data were suppressed.

$\Delta\sigma/\sigma$  vs. E for  $^{139}\text{Pm}(n,el.)$



Correlation Matrix

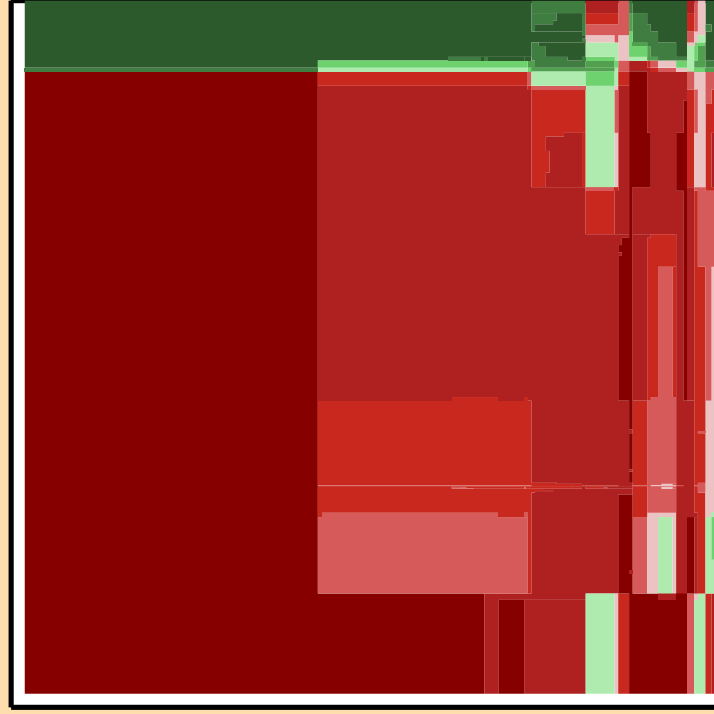
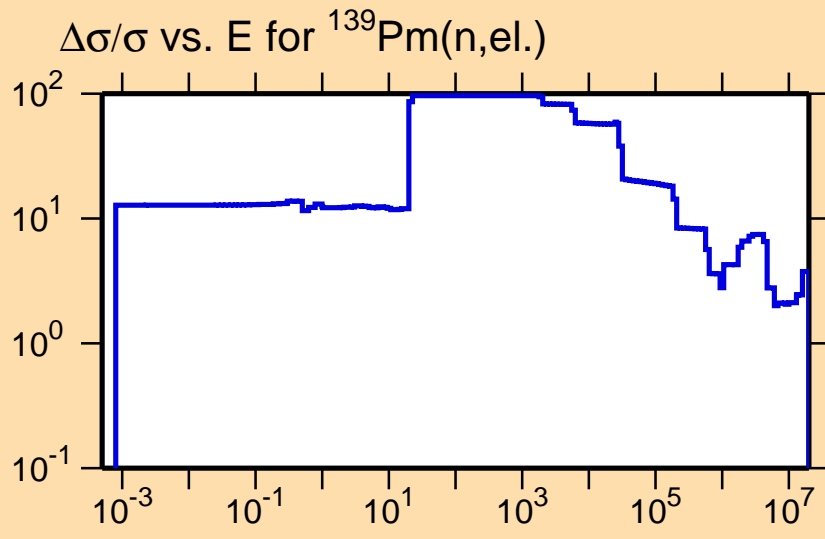




Ordinate scale is %  
relative standard deviation.

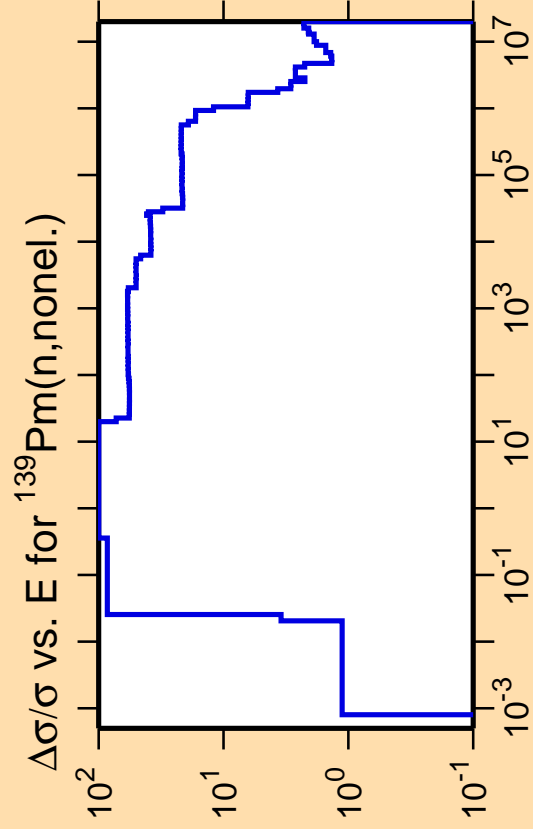
Abscissa scales are energy (eV).

Warning: some uncertainty  
data were suppressed.



Correlation Matrix

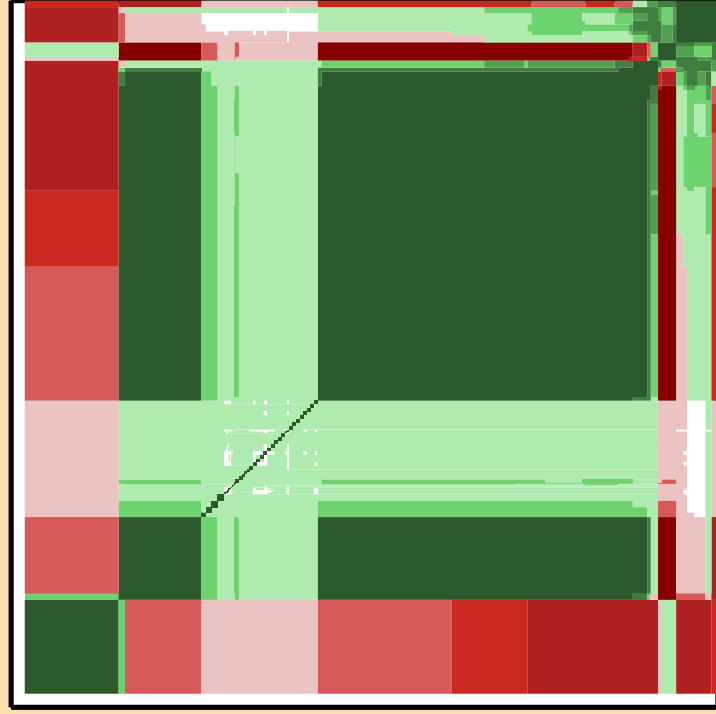
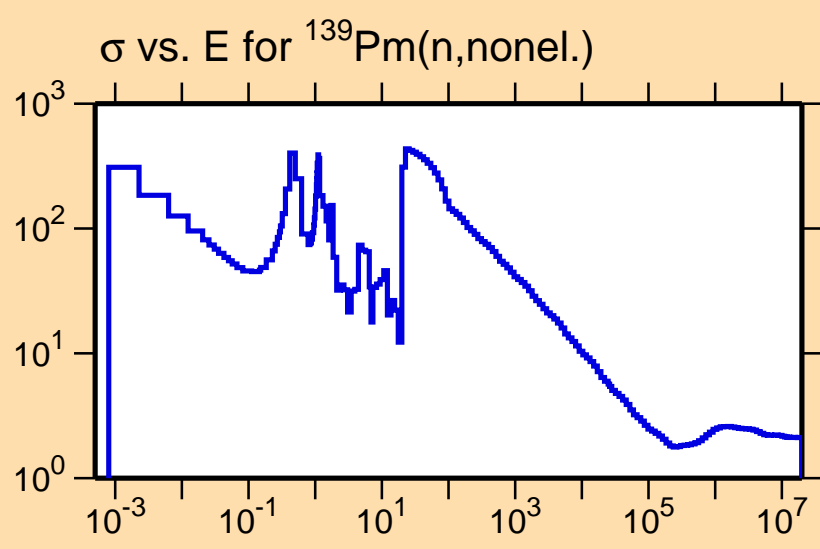




Ordinate scales are % relative standard deviation and barns.

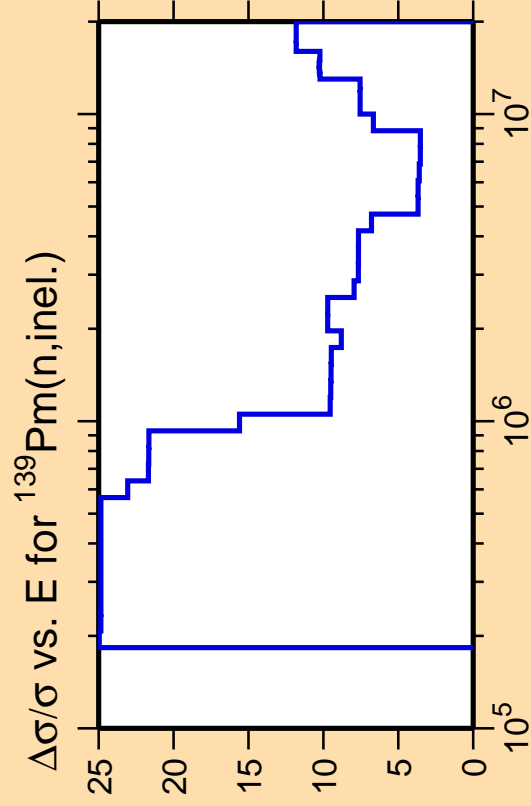
Abscissa scales are energy (eV).

Warning: some uncertainty data were suppressed.



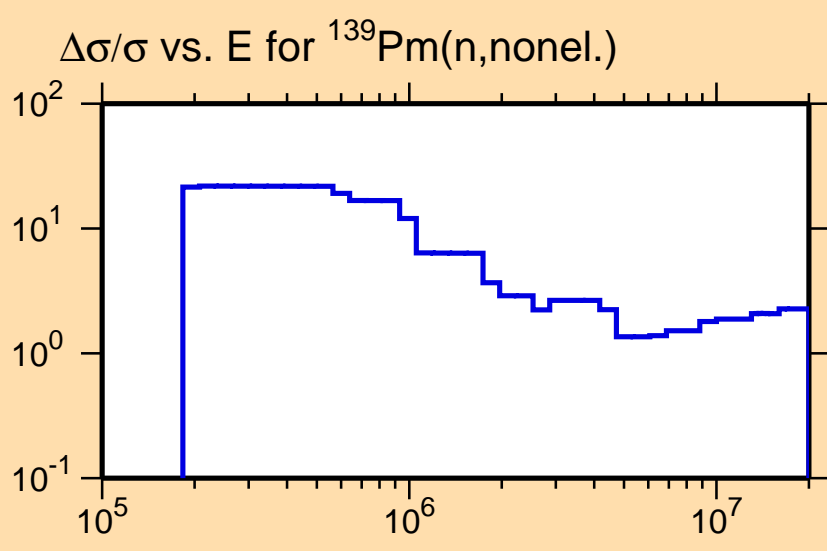
Correlation Matrix



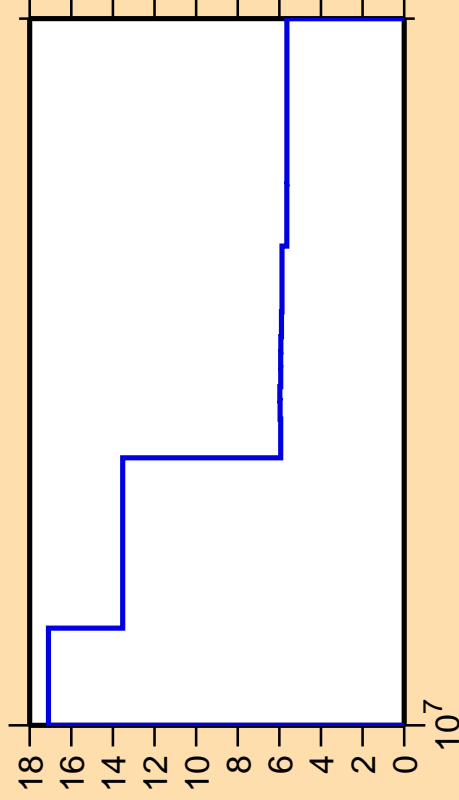


Ordinate scale is %  
relative standard deviation.

Abscissa scales are energy (eV).



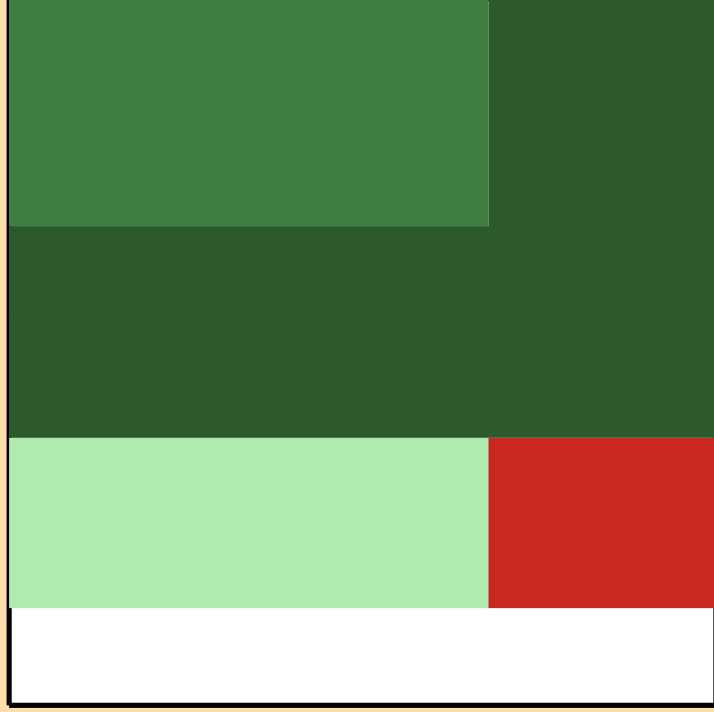
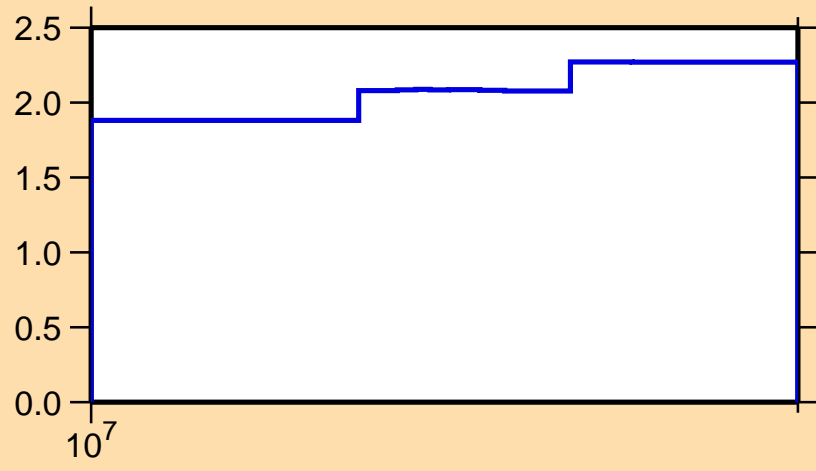
$\Delta\sigma/\sigma$  vs. E for  $^{139}\text{Pm}(n,2n)$



Ordinate scale is %  
relative standard deviation.

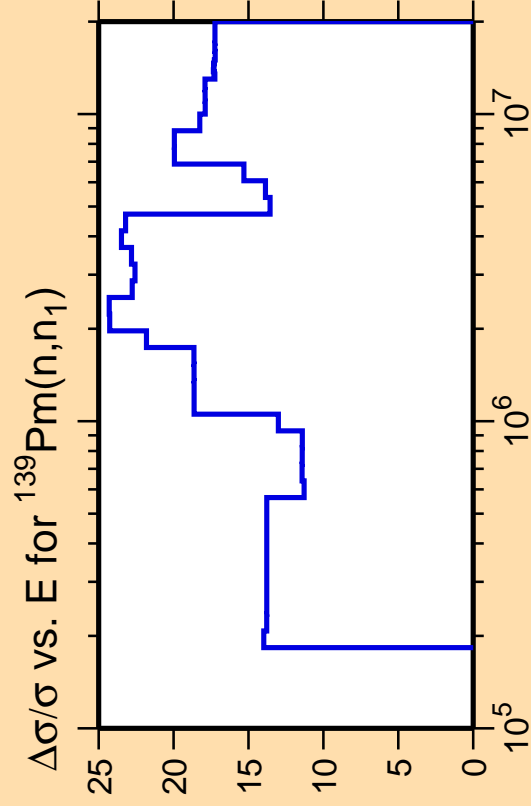
Abscissa scales are energy (eV).

$\Delta\sigma/\sigma$  vs. E for  $^{139}\text{Pm}(n,\text{nonel.})$



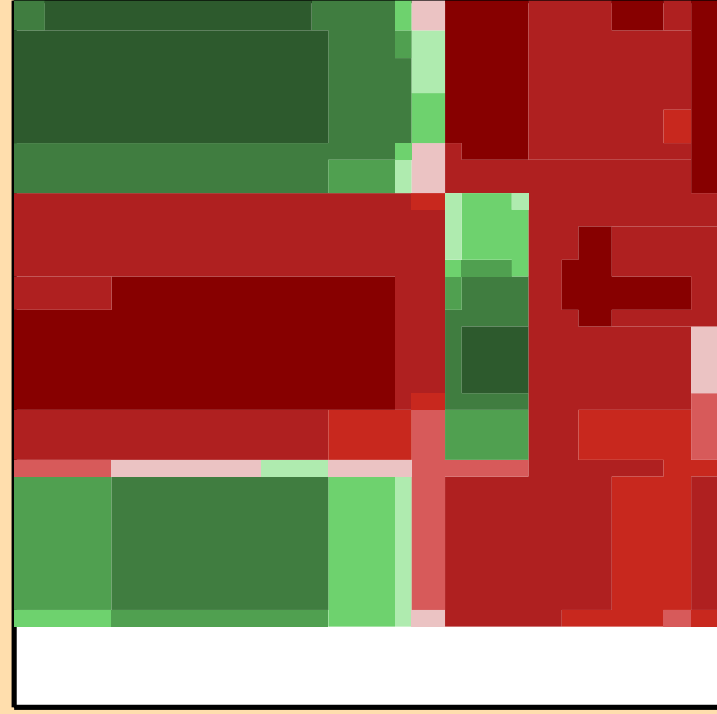
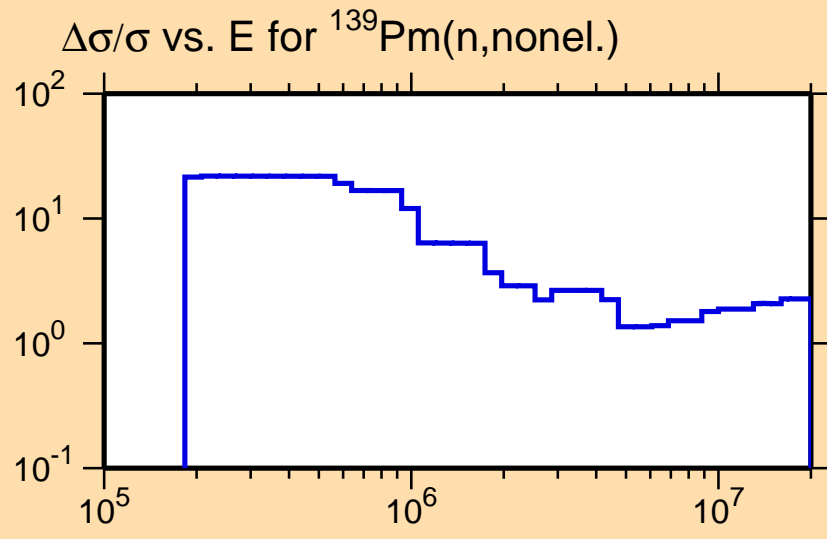
Correlation Matrix





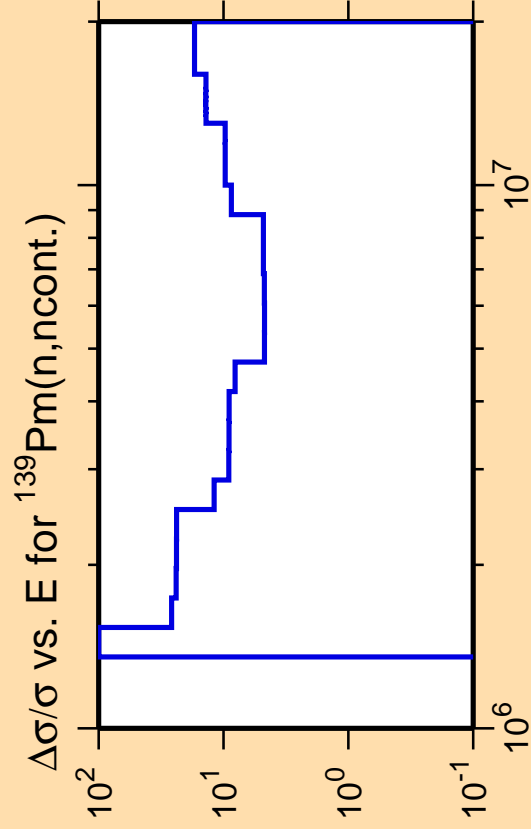
Ordinate scale is %  
relative standard deviation.

Abcissa scales are energy (eV).



Correlation Matrix



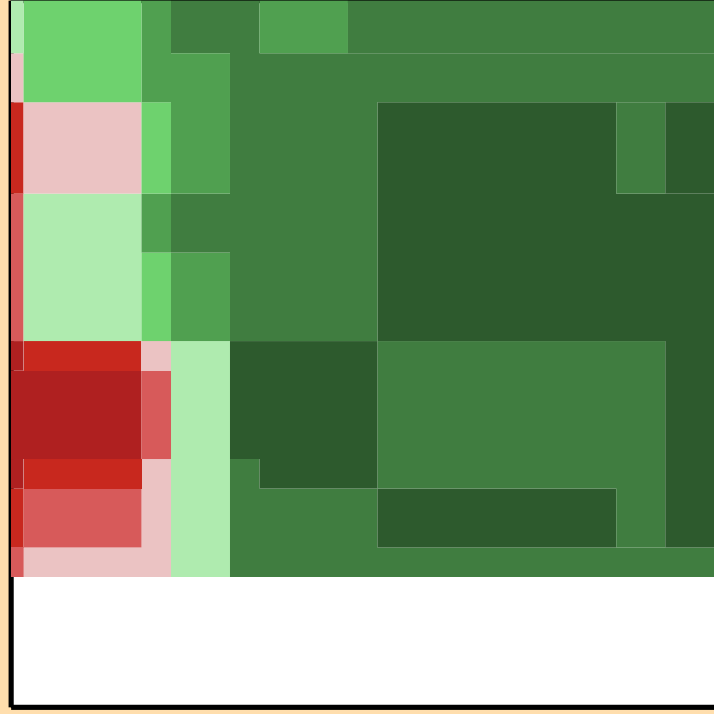
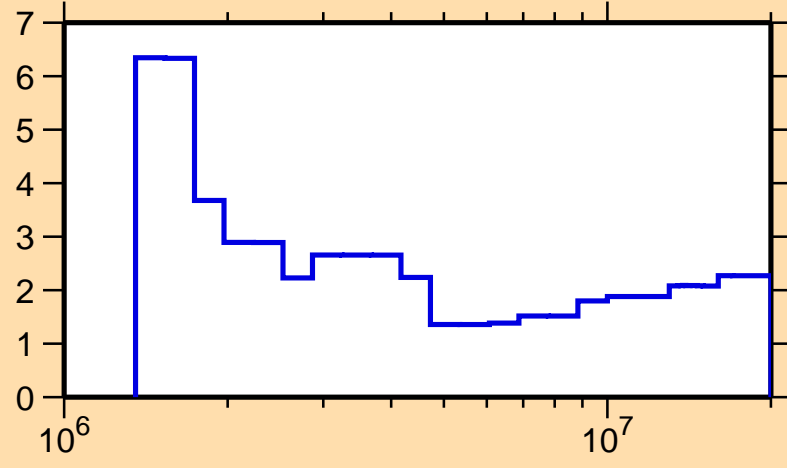


Ordinate scale is %  
relative standard deviation.

Abscissa scales are energy (eV).

Warning: some uncertainty  
data were suppressed.

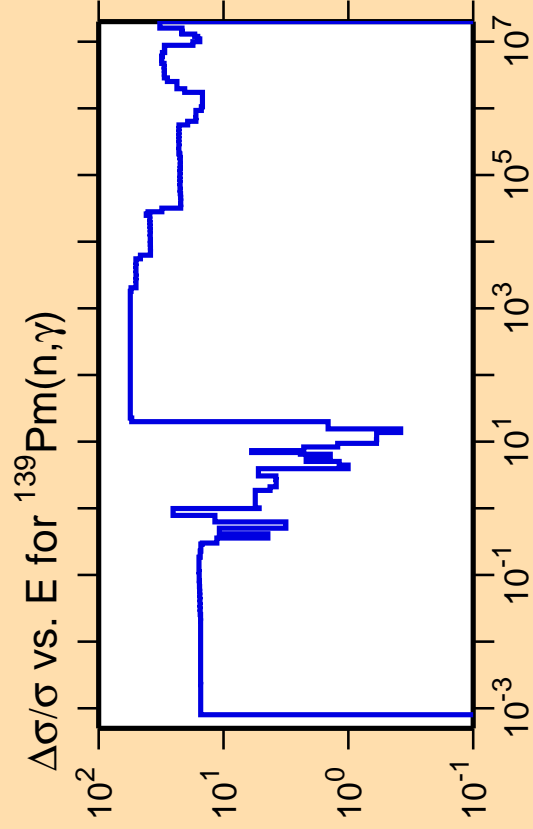
$\Delta\sigma/\sigma$  vs. E for  $^{139}\text{Pm}(n,\text{nonel.})$



Correlation Matrix





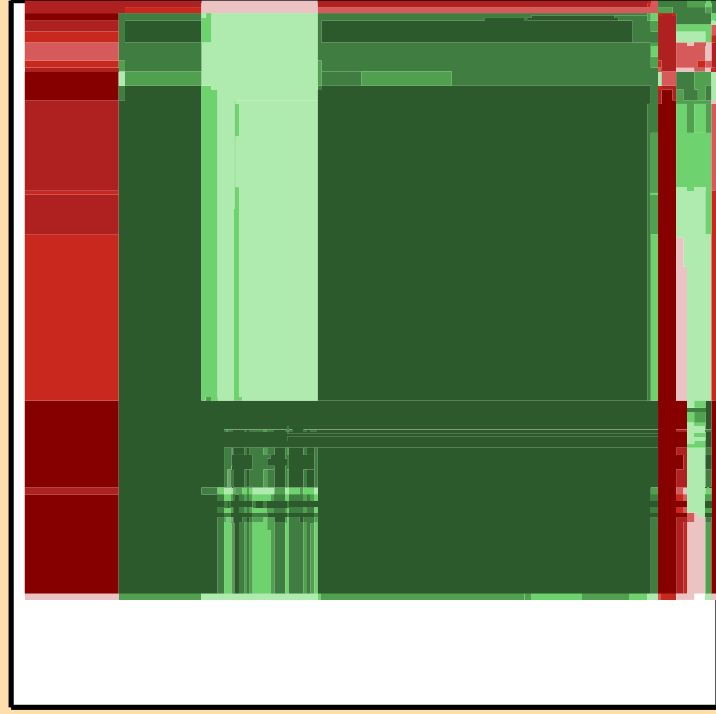
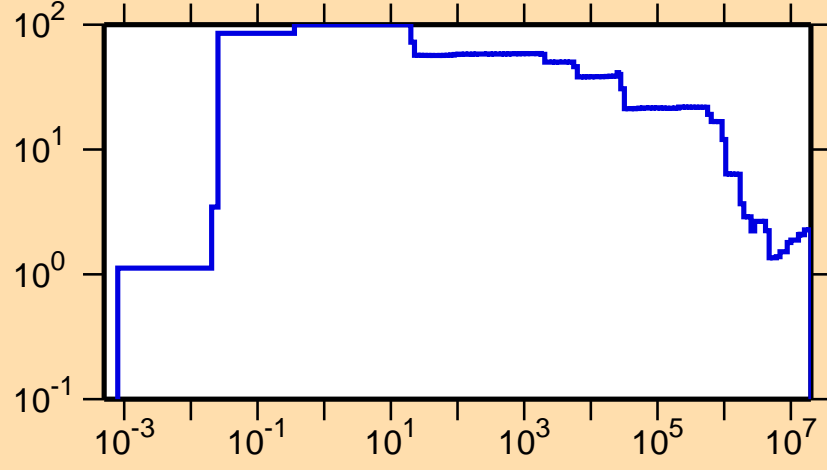


Ordinate scale is %  
relative standard deviation.

Abscissa scales are energy (eV).

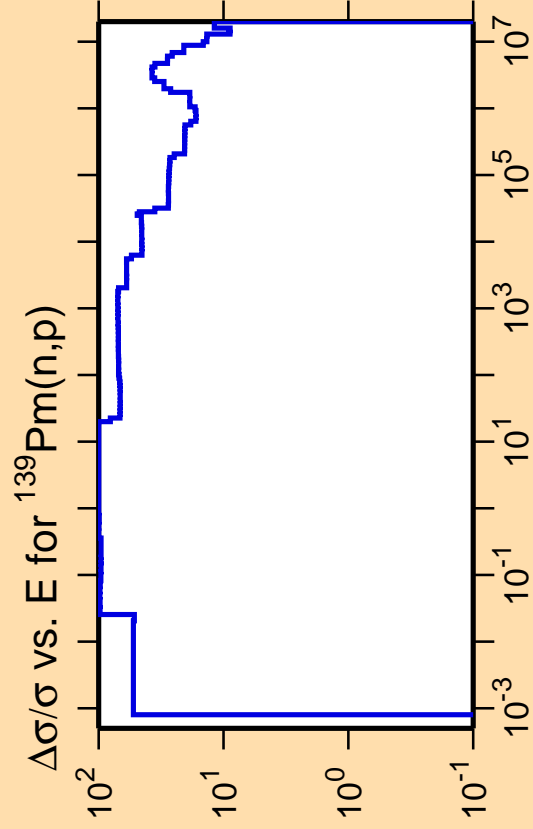
Warning: some uncertainty  
data were suppressed.

$\Delta\sigma/\sigma$  vs. E for  $^{139}\text{Pm}(n,\text{nonel.})$



Correlation Matrix



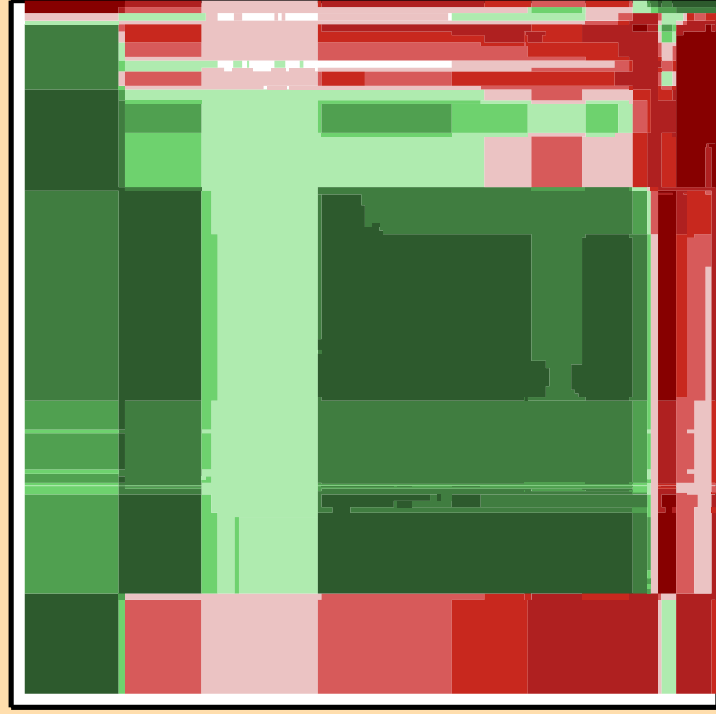
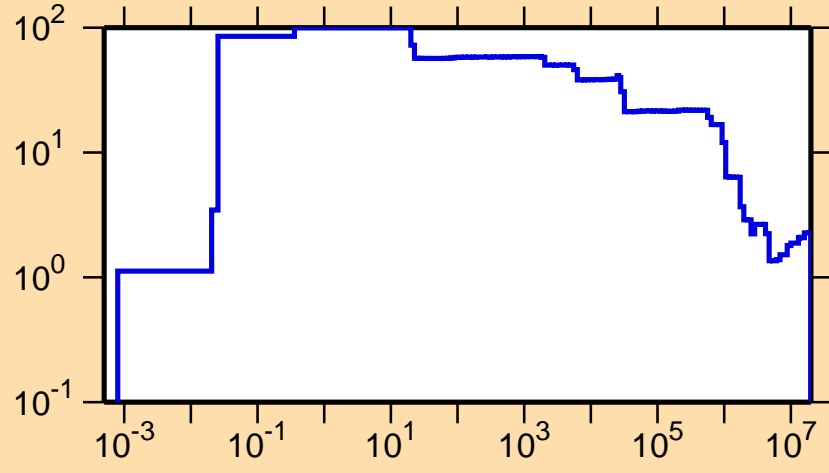


Ordinate scale is %  
relative standard deviation.

Abscissa scales are energy (eV).

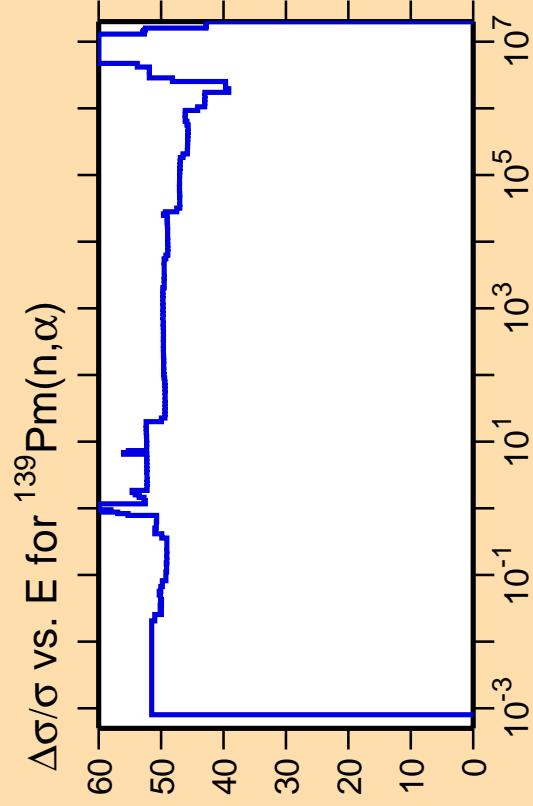
Warning: some uncertainty  
data were suppressed.

$\Delta\sigma/\sigma$  vs. E for  $^{139}\text{Pm}(n,\text{nonel.})$



Correlation Matrix



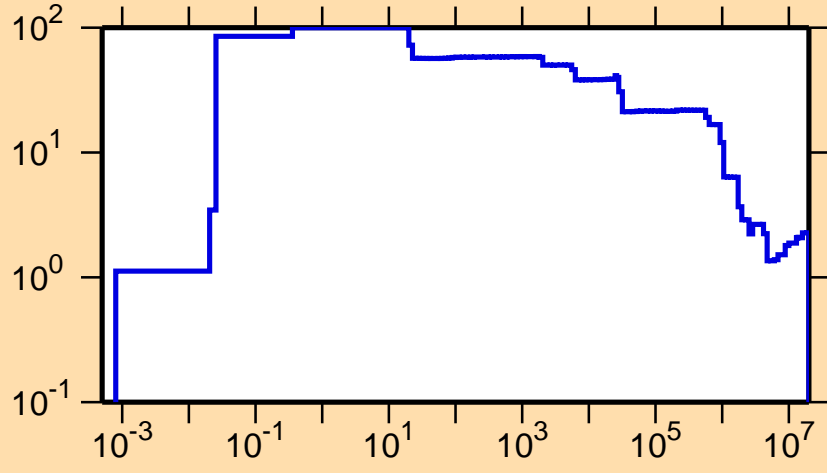


Ordinate scale is %  
relative standard deviation.

Abscissa scales are energy (eV).

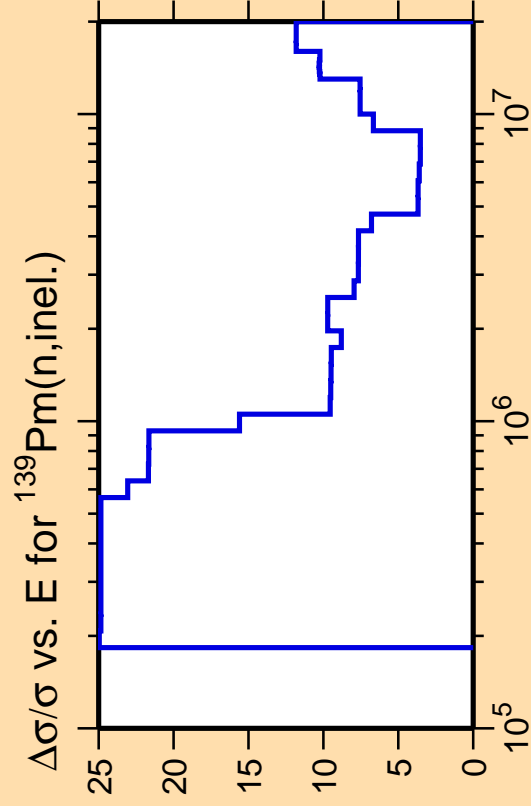
Warning: some uncertainty  
data were suppressed.

$\Delta\sigma/\sigma$  vs. E for  $^{139}\text{Pm}(n,\text{nonel.})$



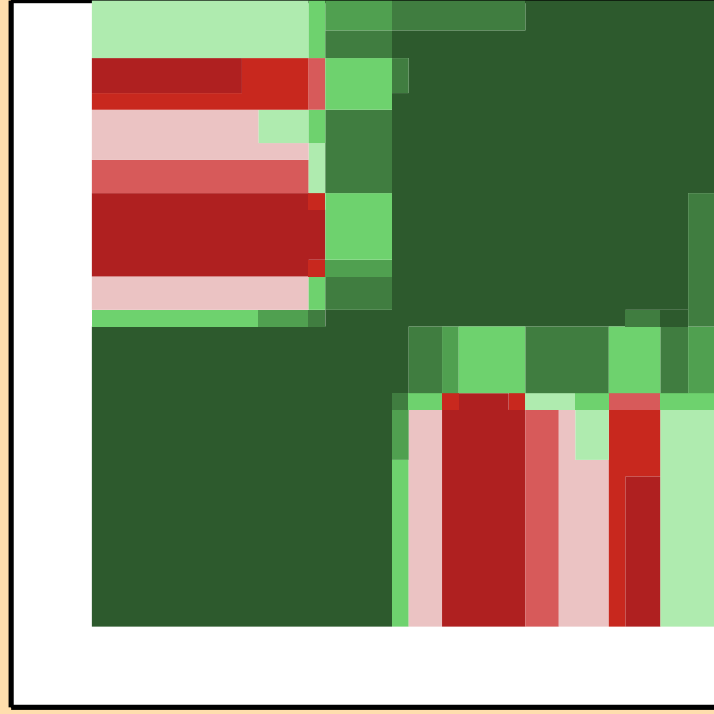
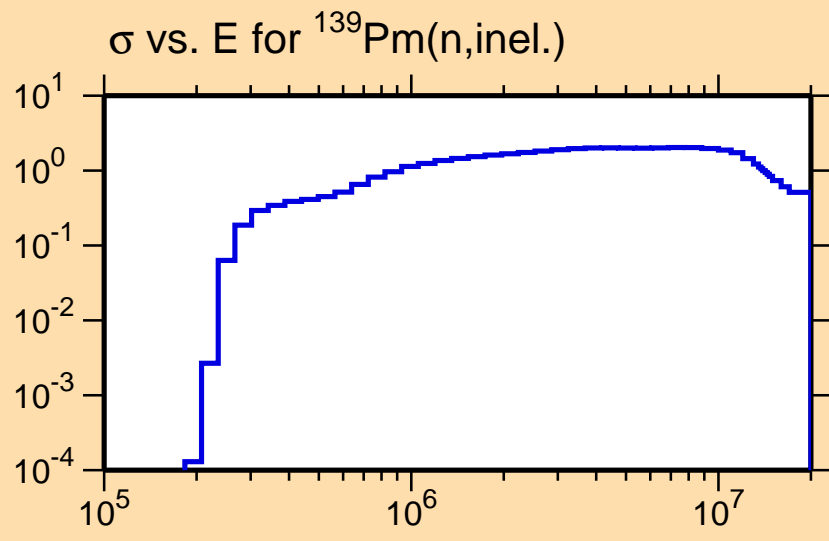
Correlation Matrix





Ordinate scales are % relative standard deviation and barns.

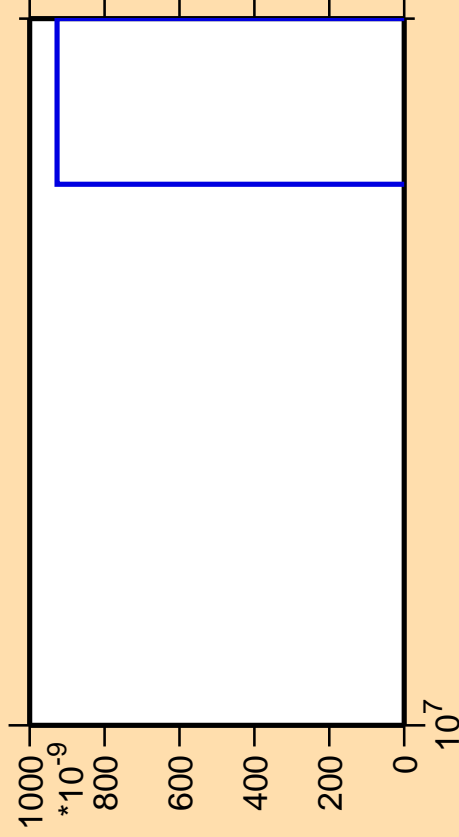
Abscissa scales are energy (eV).



Correlation Matrix



$\Delta\sigma/\sigma$  vs. E for  $^{139}\text{Pm}$ (mt 11)



Ordinate scales are % relative standard deviation and barns.

Abscissa scales are energy (eV).

$\sigma$  vs. E for  $^{139}\text{Pm}$ (mt 11)



$10^7$

$10^{-21}$

0

100

200

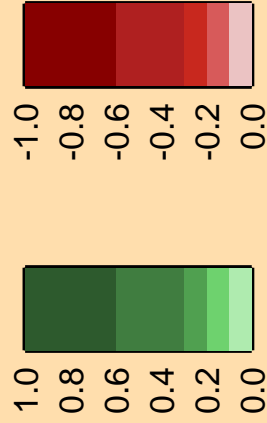
300

400

500

600

Correlation Matrix



1.0

0.8

0.6

0.4

0.2

0.0

-1.0

-0.8

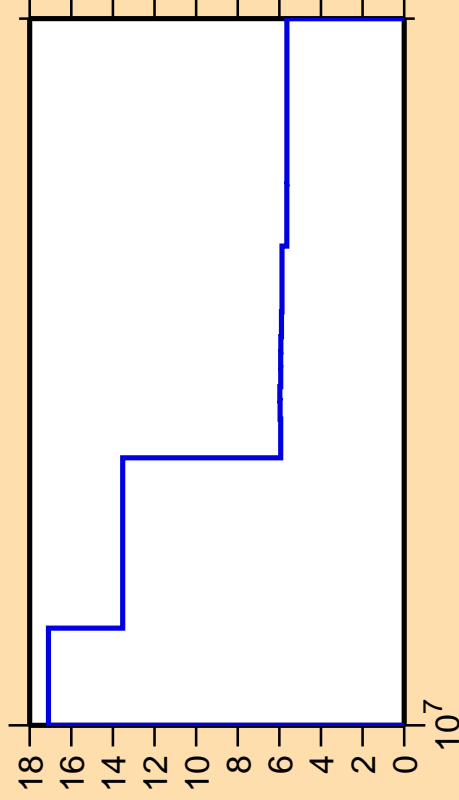
-0.6

-0.4

-0.2

0.0

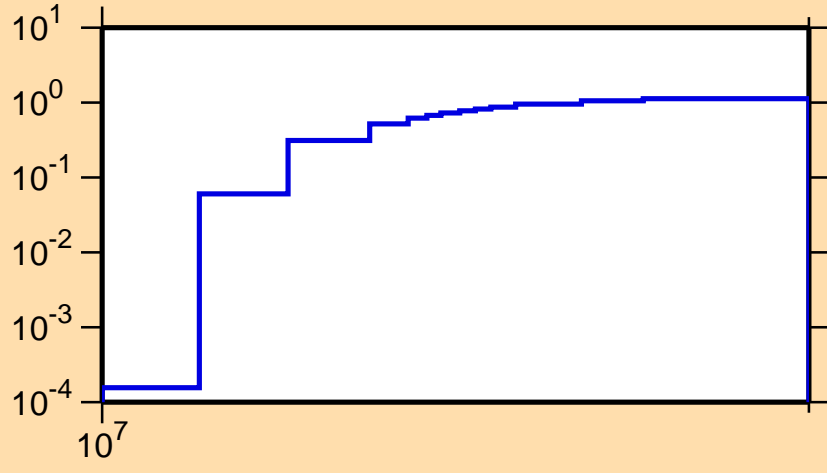
$\Delta\sigma/\sigma$  vs. E for  $^{139}\text{Pm}(n,2n)$



Ordinate scales are % relative standard deviation and barns.

Abscissa scales are energy (eV).

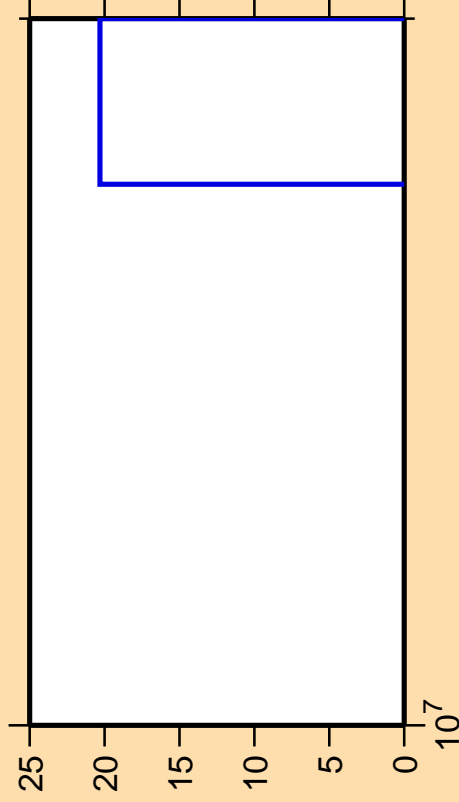
$\sigma$  vs. E for  $^{139}\text{Pm}(n,2n)$



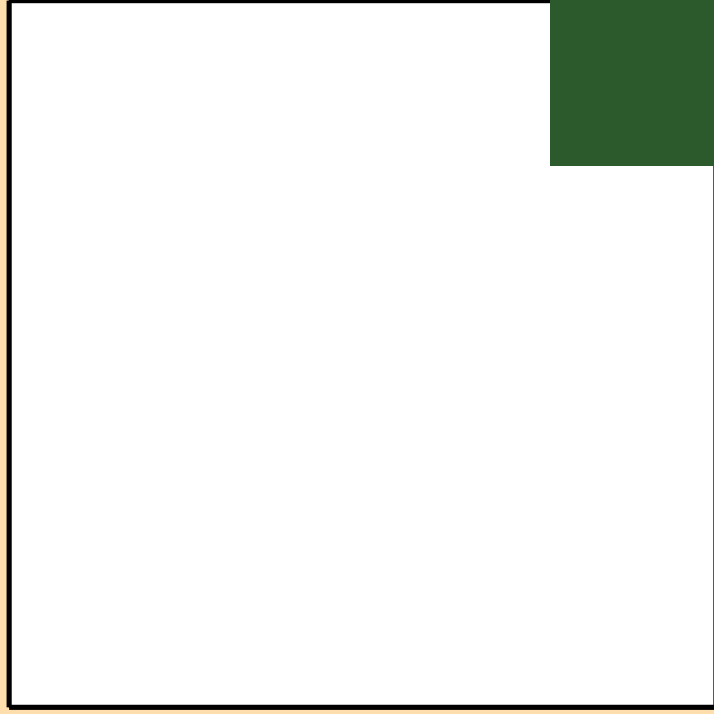
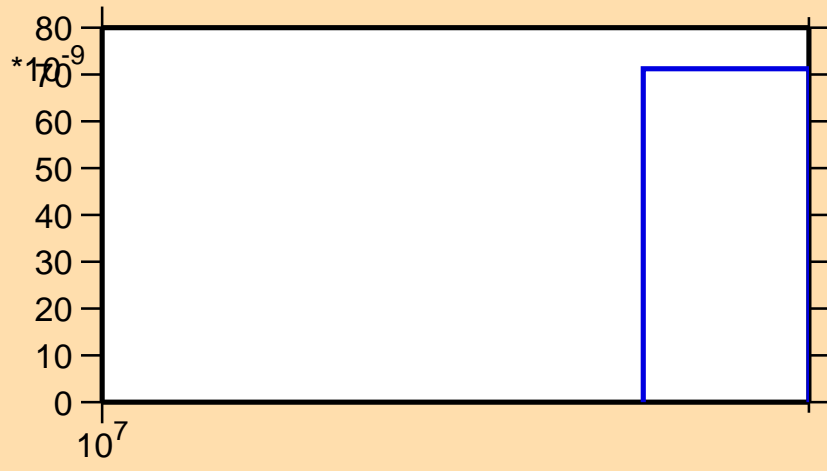
Correlation Matrix



$\Delta\sigma/\sigma$  vs. E for  $^{139}\text{Pm}(n,3n)$

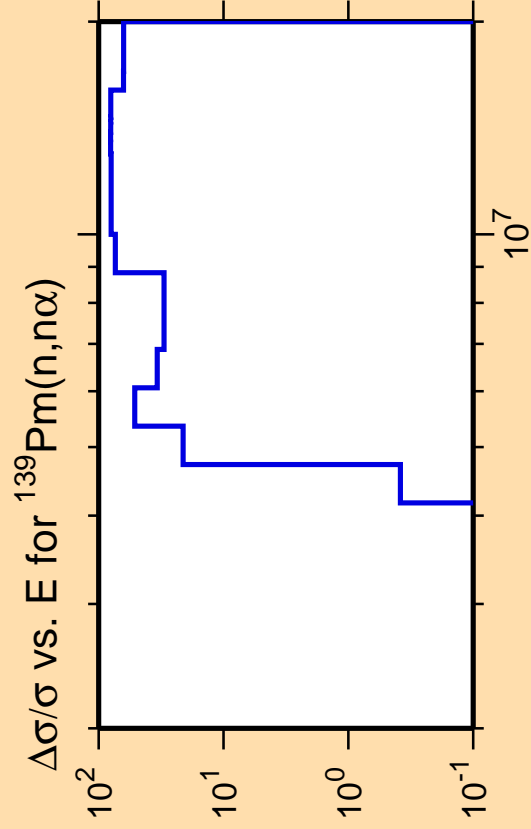


$\sigma$  vs. E for  $^{139}\text{Pm}(n,3n)$



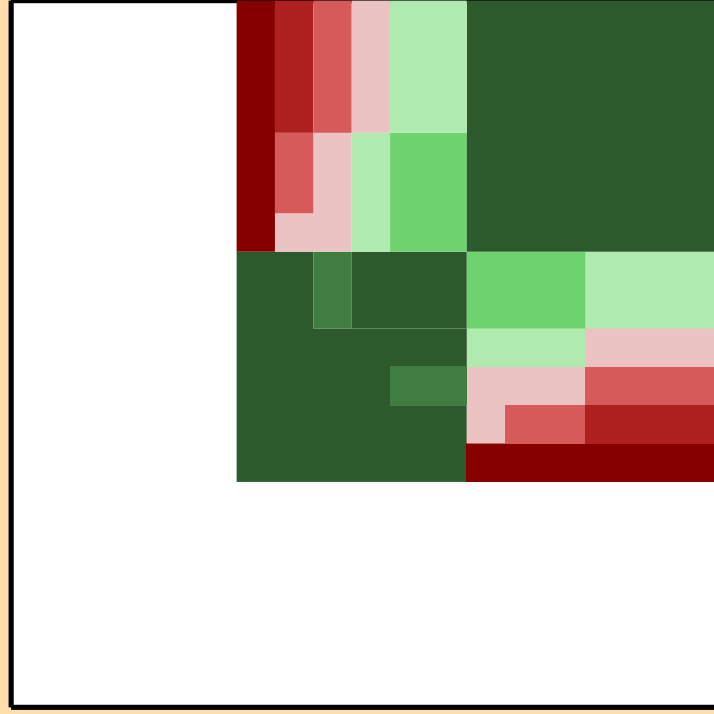
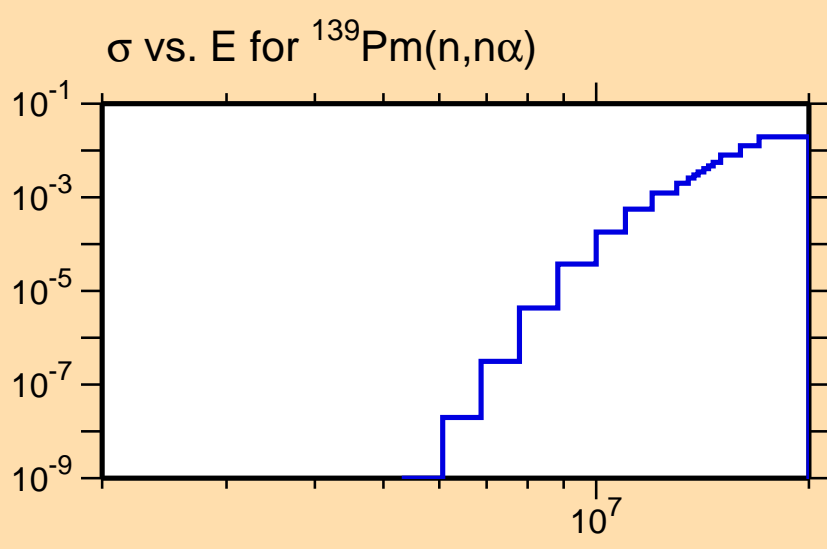
Correlation Matrix





Ordinate scales are % relative standard deviation and barns.

Abscissa scales are energy (eV).



Correlation Matrix





$\Delta\sigma/\sigma$  vs. E for  $^{139}\text{Pm}(n,2n\alpha)$

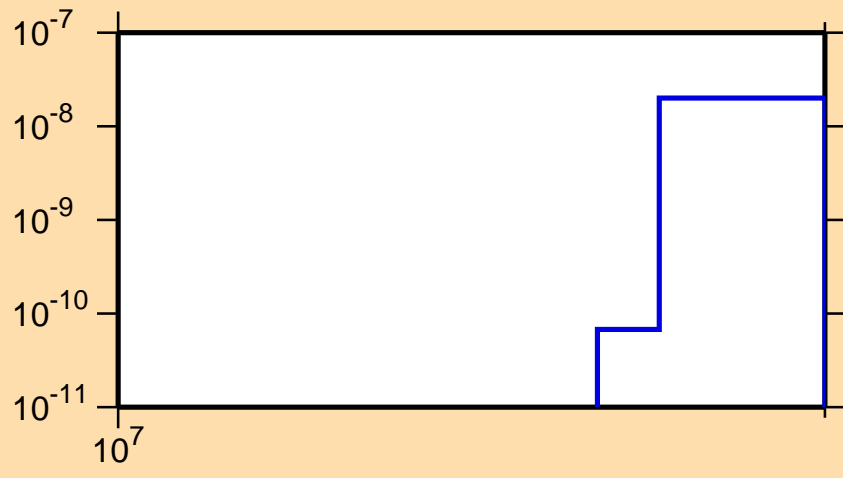


Ordinate scales are % relative standard deviation and barns.

Abscissa scales are energy (eV).

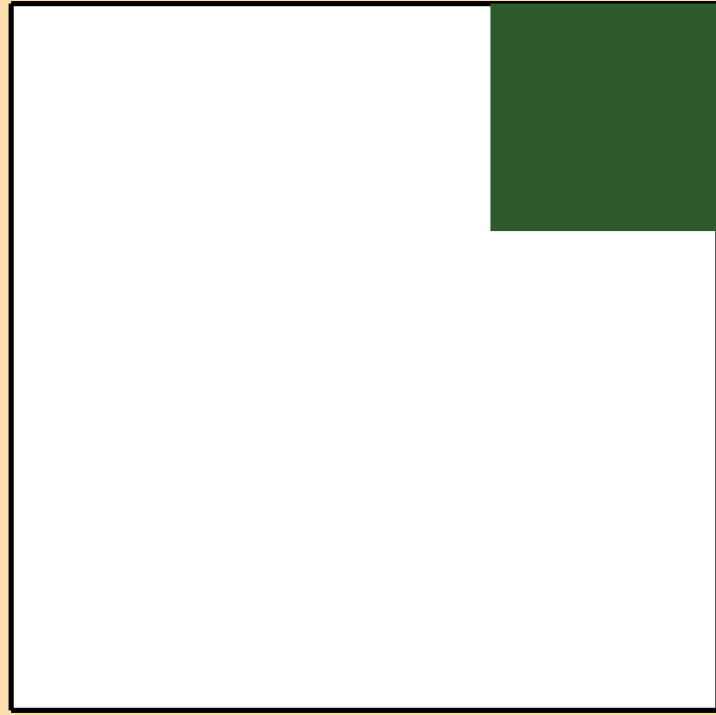
Warning: some uncertainty data were suppressed.

$\sigma$  vs. E for  $^{139}\text{Pm}(n,2n\alpha)$



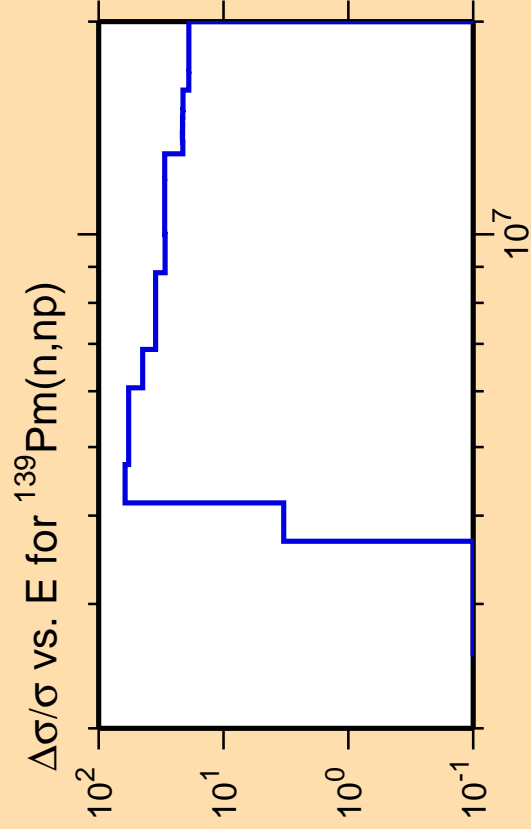
10<sup>7</sup>

10<sup>7</sup>



Correlation Matrix

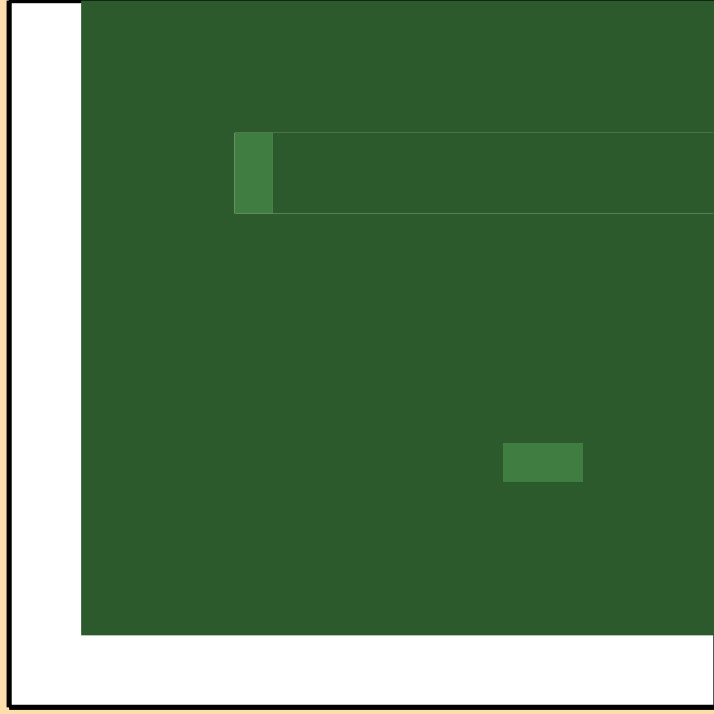
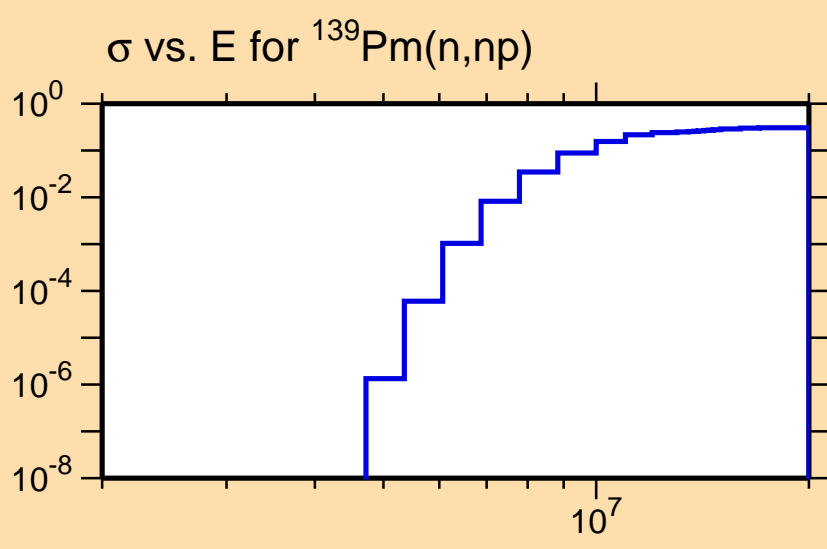




Ordinate scales are % relative standard deviation and barns.

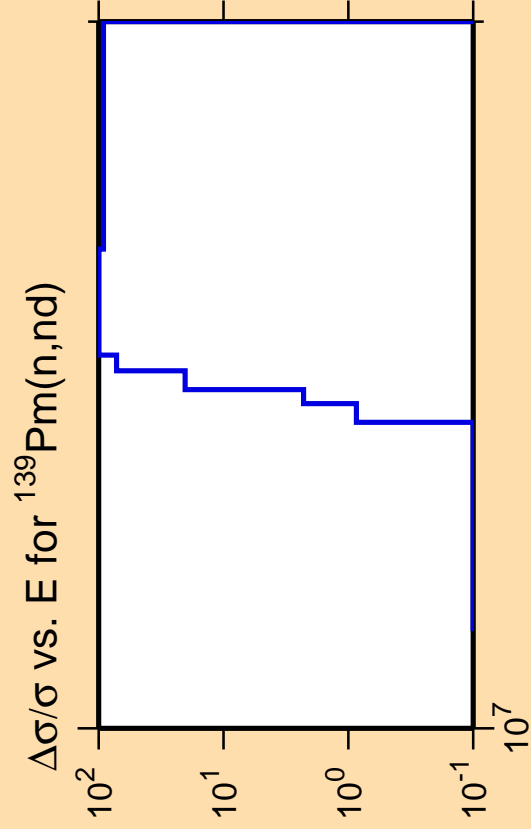
Abscissa scales are energy (eV).

Warning: some uncertainty data were suppressed.



Correlation Matrix

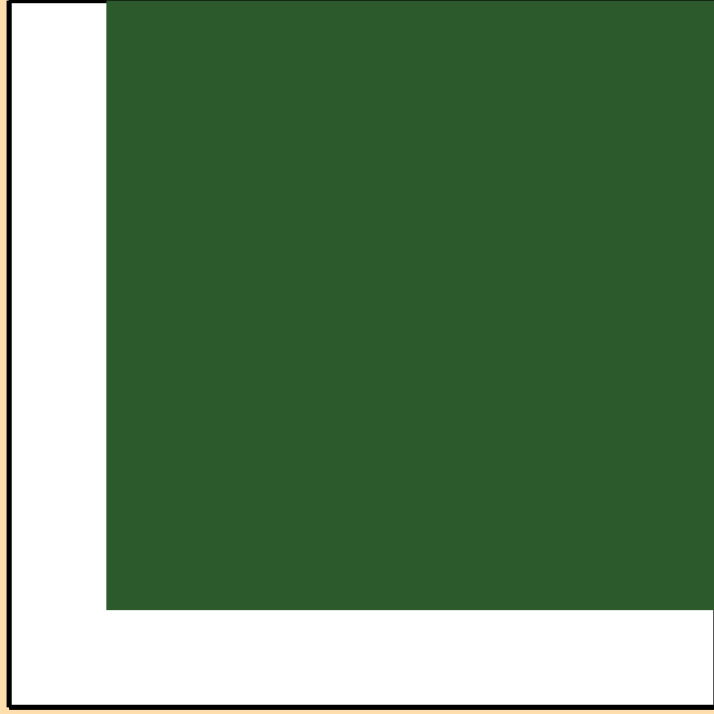
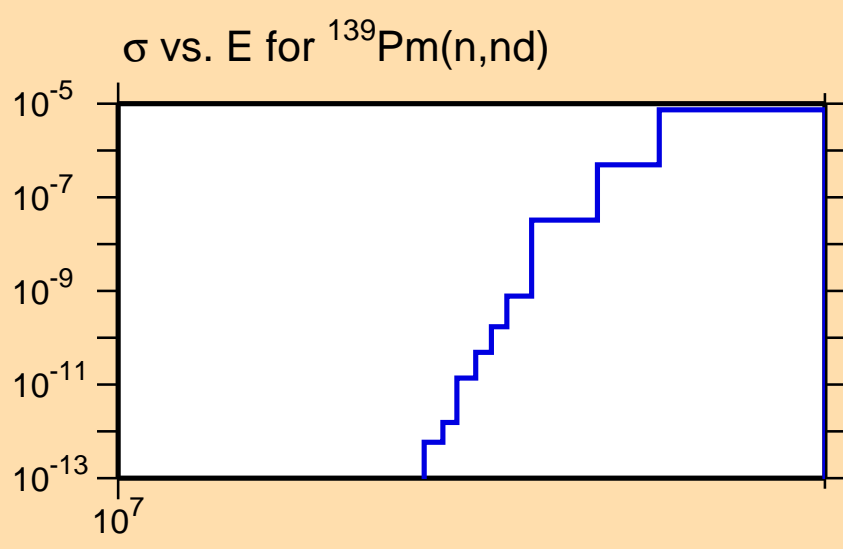




Ordinate scales are % relative standard deviation and barns.

Abscissa scales are energy (eV).

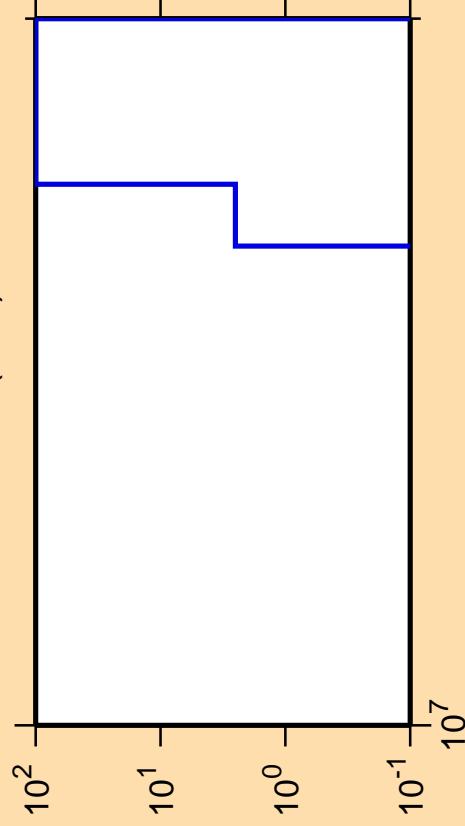
Warning: some uncertainty data were suppressed.



Correlation Matrix



$\Delta\sigma/\sigma$  vs. E for  $^{139}\text{Pm}(n,nt)$

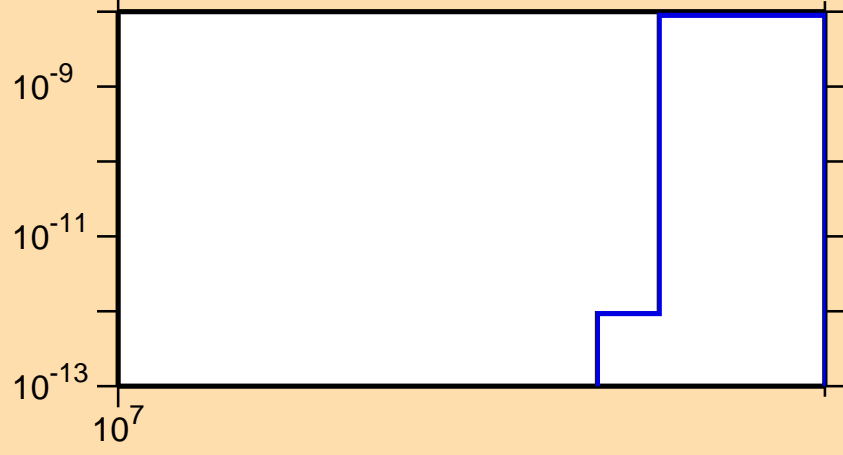


Ordinate scales are % relative standard deviation and barns.

Abscissa scales are energy (eV).

Warning: some uncertainty data were suppressed.

$\sigma$  vs. E for  $^{139}\text{Pm}(n,nt)$



$10^7$

$10^{-13}$

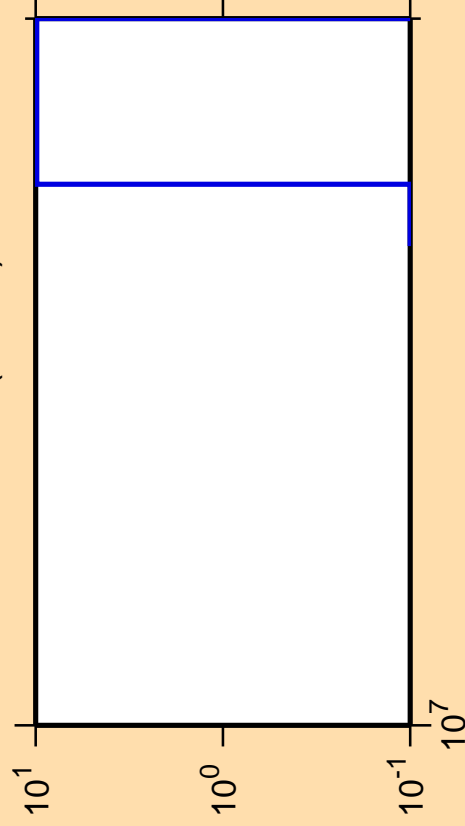
$10^{-11}$

$10^{-9}$

Correlation Matrix



$\Delta\sigma/\sigma$  vs. E for  $^{139}\text{Pm}$ (mt 34)

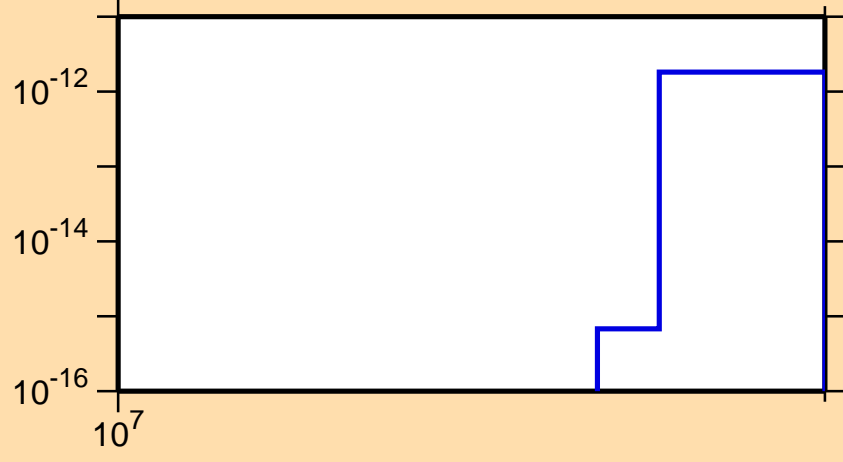


Ordinate scales are % relative standard deviation and barns.

Abscissa scales are energy (eV).

Warning: some uncertainty data were suppressed.

$\sigma$  vs. E for  $^{139}\text{Pm}$ (mt 34)



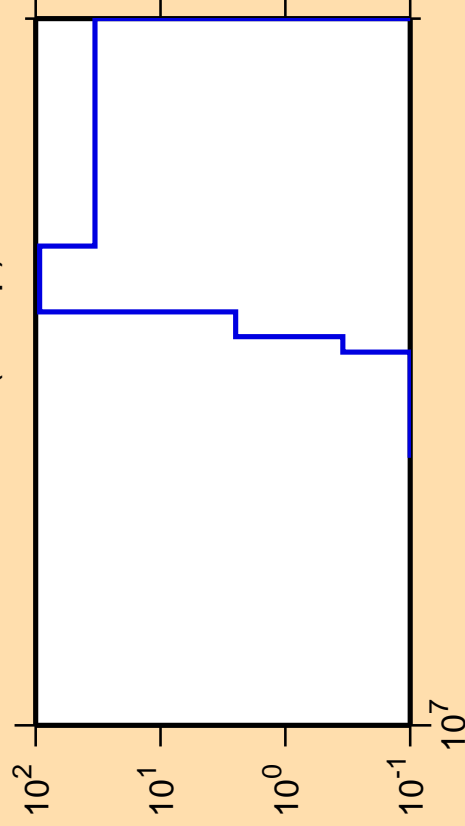
$10^7$

$10^{-16}$   
 $10^{-14}$   
 $10^{-12}$

Correlation Matrix



$\Delta\sigma/\sigma$  vs. E for  $^{139}\text{Pm}(n,2np)$

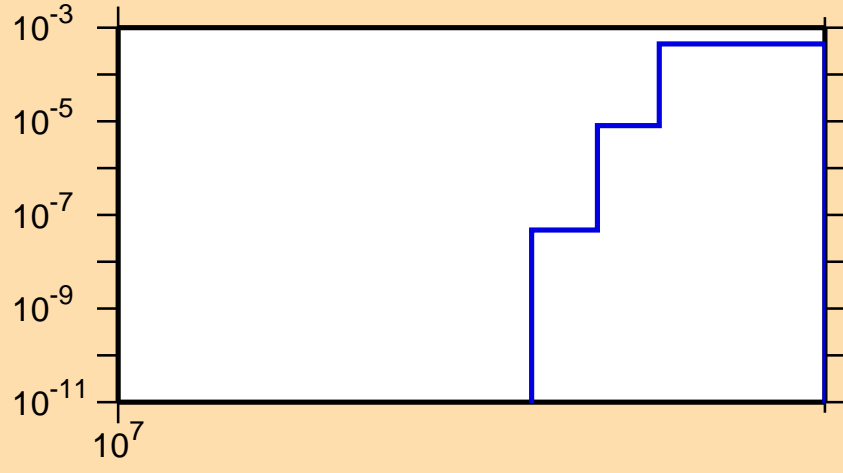


Ordinate scales are % relative standard deviation and barns.

Abscissa scales are energy (eV).

Warning: some uncertainty data were suppressed.

$\sigma$  vs. E for  $^{139}\text{Pm}(n,2np)$



$10^7$

$10^{-11}$

$10^{-9}$

$10^{-7}$

$10^{-5}$

$10^{-3}$

Correlation Matrix



1.0

0.8

0.6

0.4

0.2

0.0

-1.0

-0.8

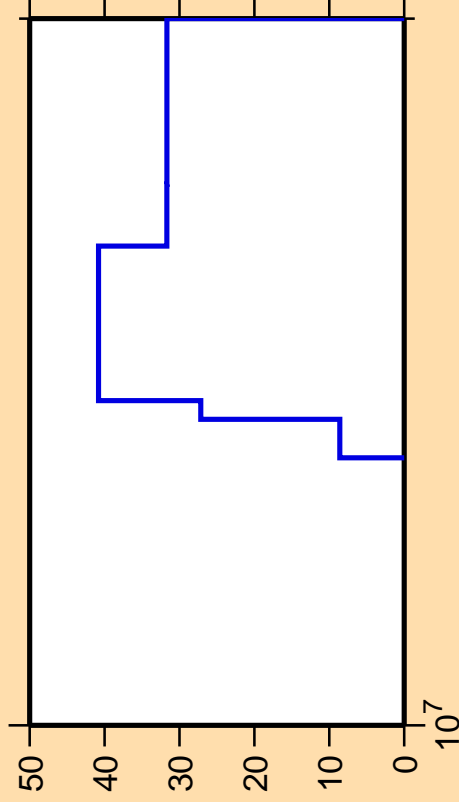
-0.6

-0.4

-0.2

0.0

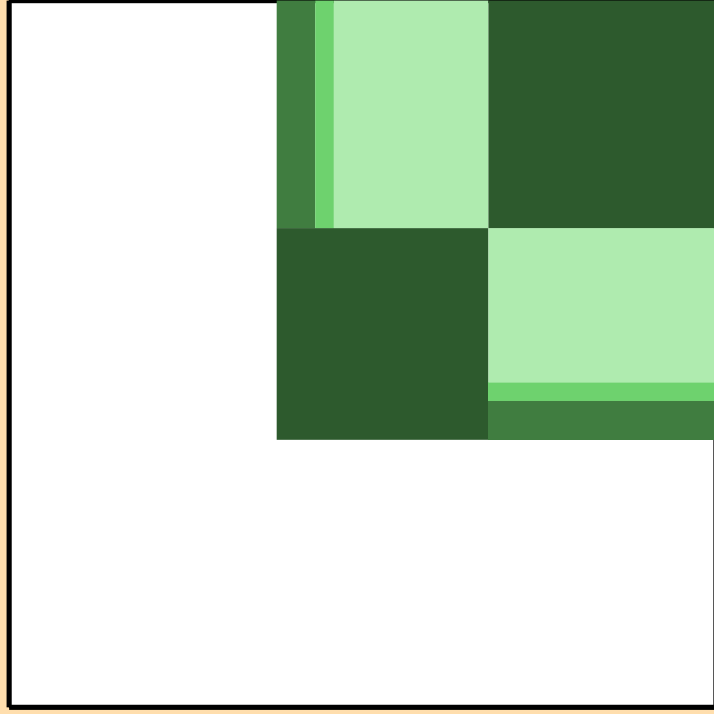
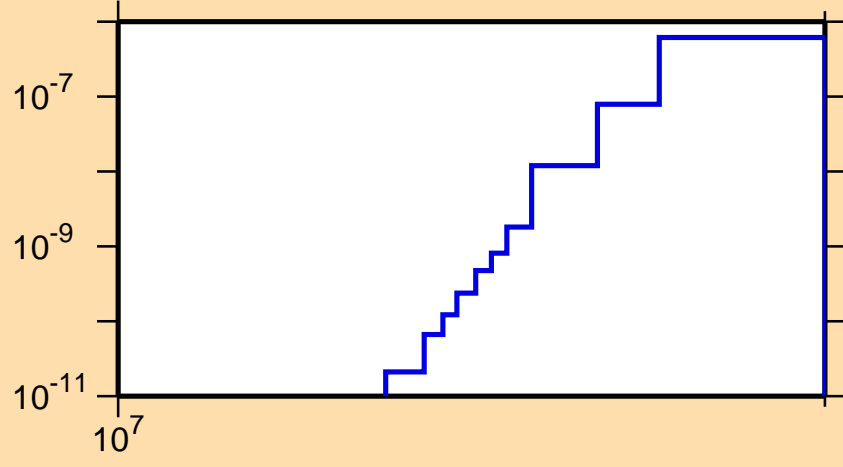
$\Delta\sigma/\sigma$  vs. E for  $^{139}\text{Pm}$ (mt 45)



Ordinate scales are % relative standard deviation and barns.

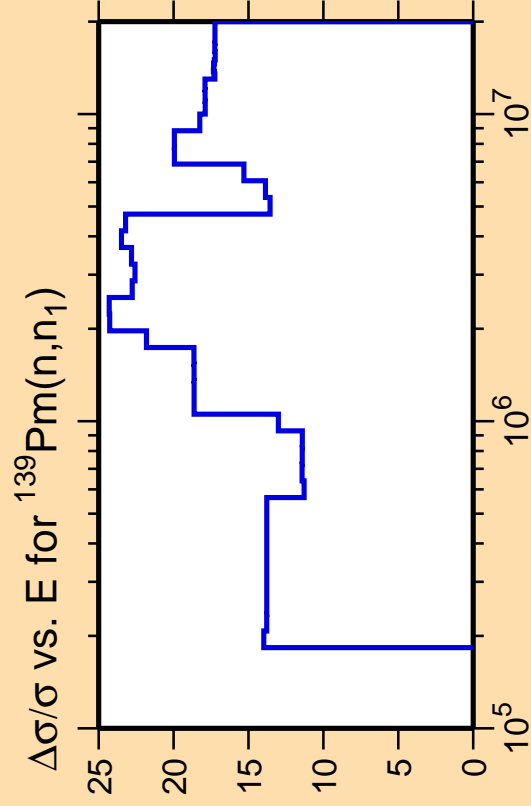
Abscissa scales are energy (eV).

$\sigma$  vs. E for  $^{139}\text{Pm}$ (mt 45)



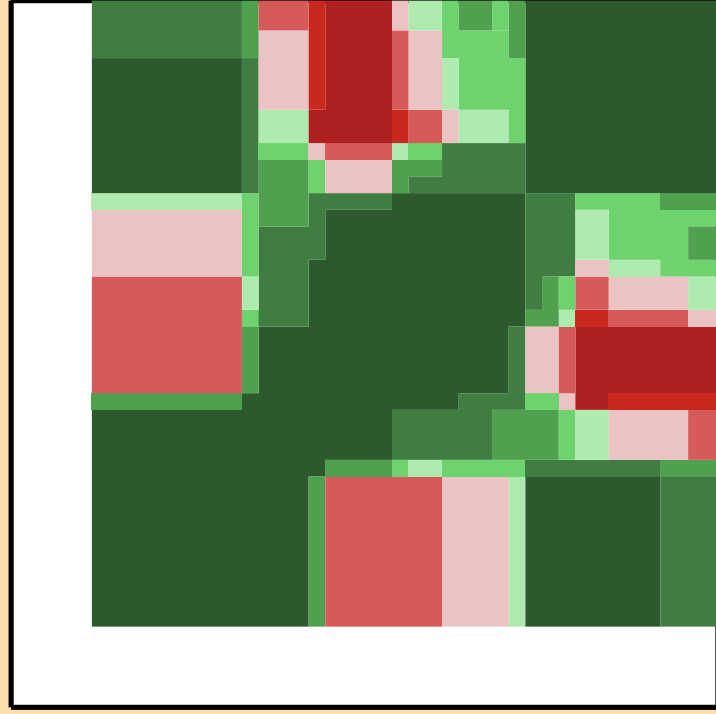
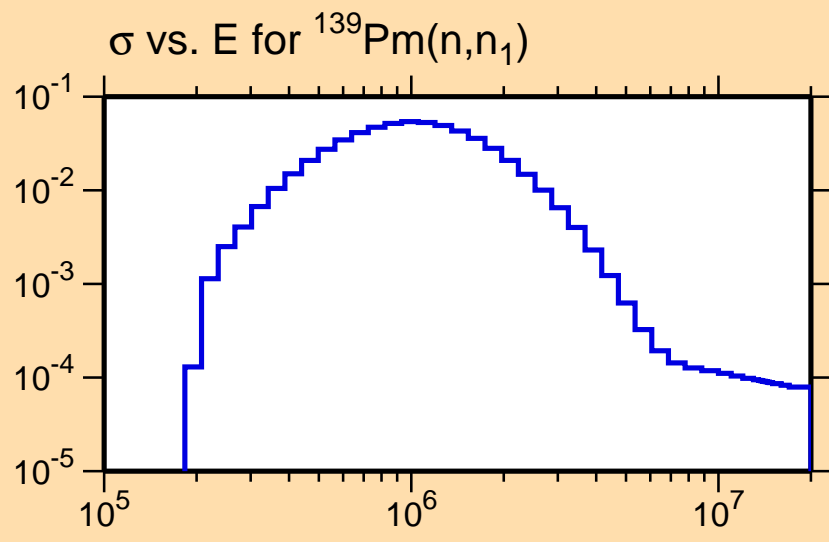
Correlation Matrix





Ordinate scales are % relative standard deviation and barns.

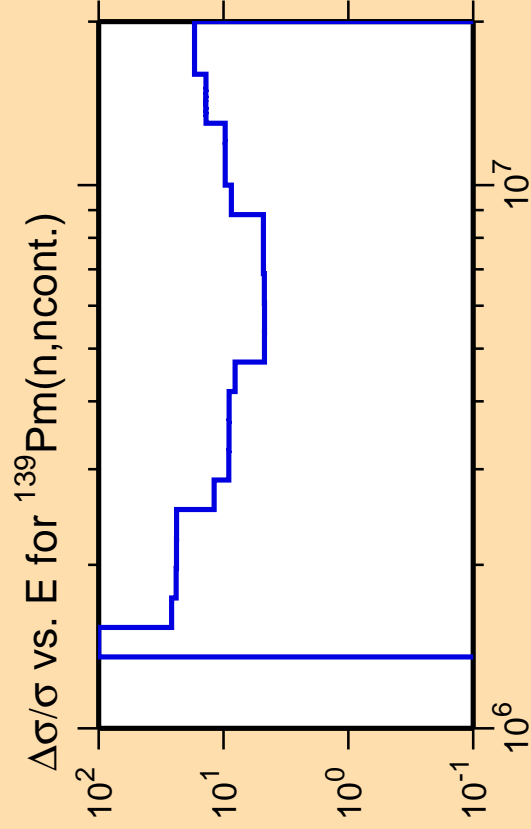
Abscissa scales are energy (eV).



Correlation Matrix





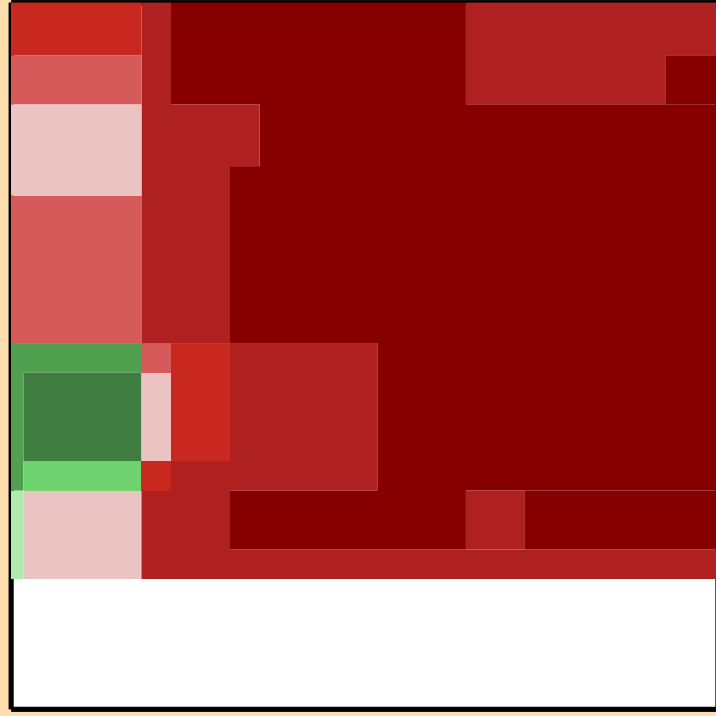
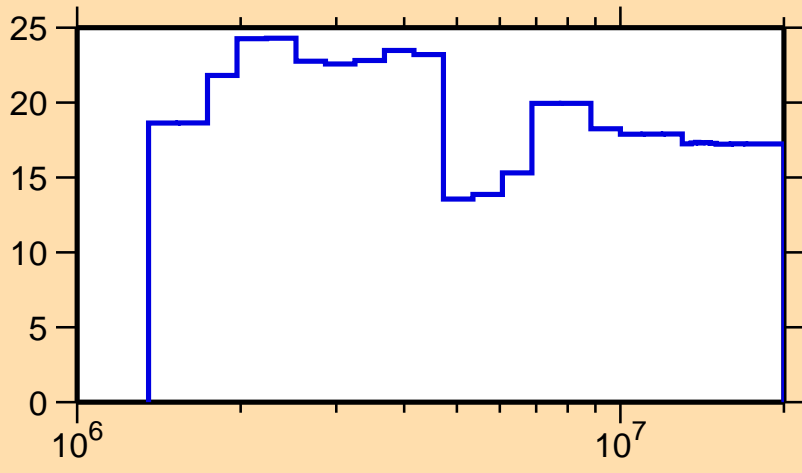


Ordinate scale is %  
relative standard deviation.

Abscissa scales are energy (eV).

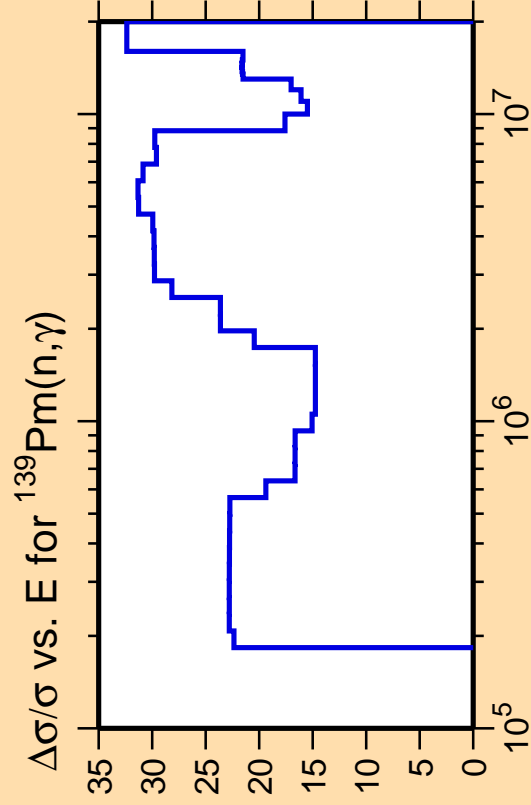
Warning: some uncertainty  
data were suppressed.

$\Delta\sigma/\sigma$  vs. E for  $^{139}\text{Pm}(n,n_1)$



Correlation Matrix

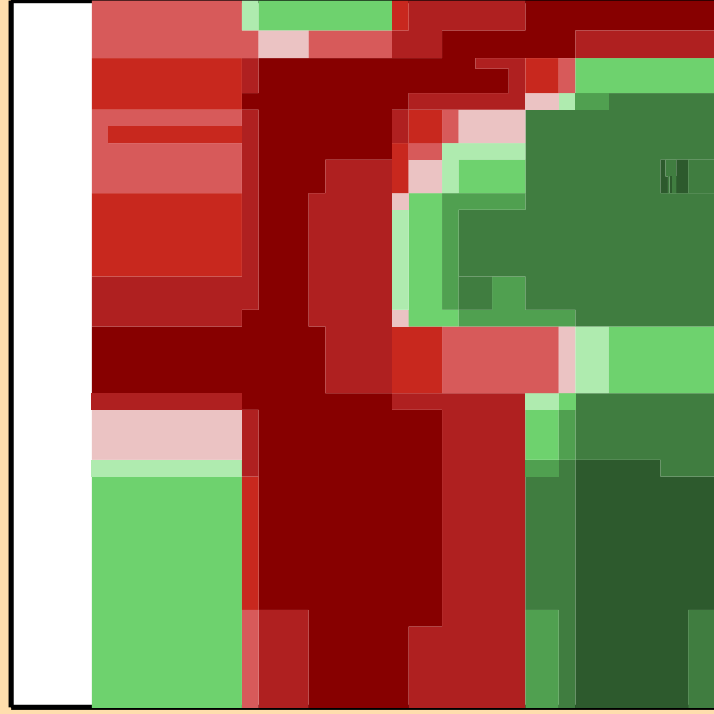
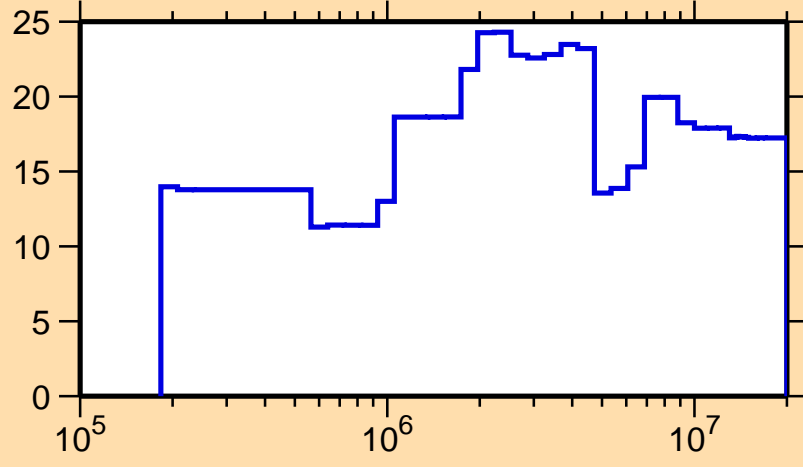




Ordinate scale is %  
relative standard deviation.

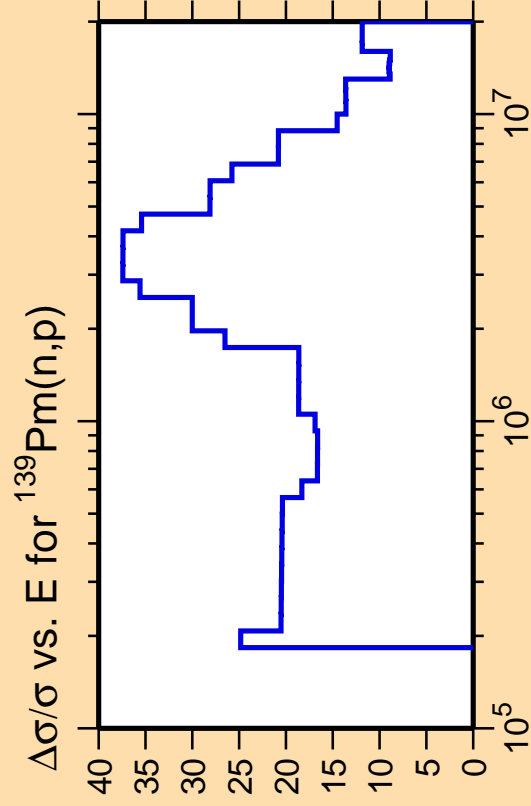
Abscissa scales are energy (eV).

$\Delta\sigma/\sigma$  vs. E for  $^{139}\text{Pm}(n,n_1)$



Correlation Matrix

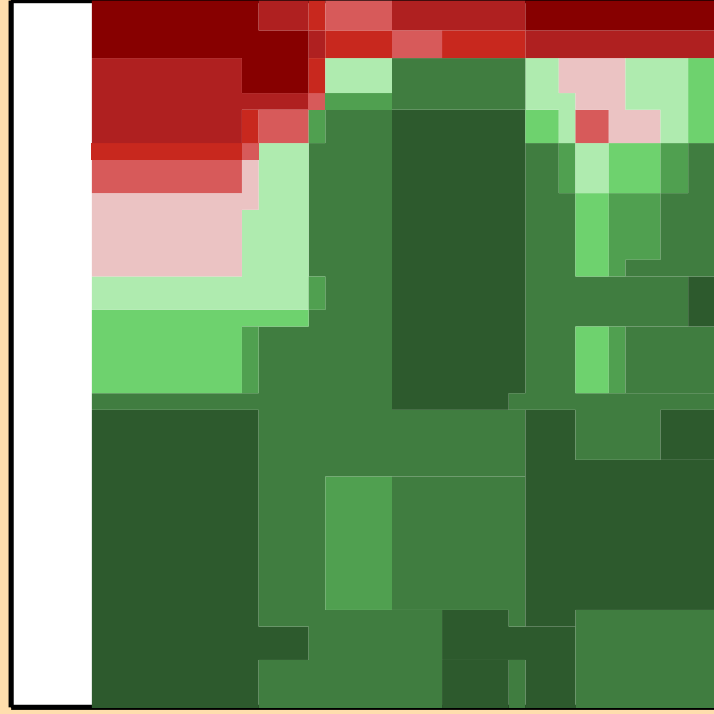
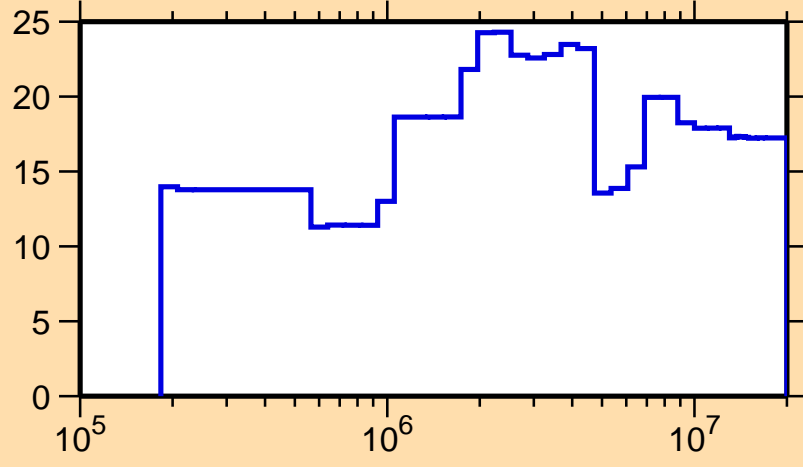




Ordinate scale is %  
relative standard deviation.

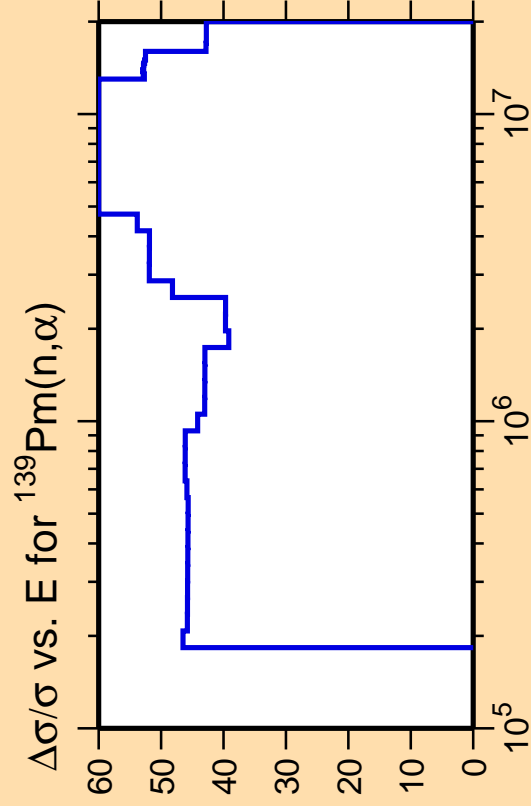
Abscissa scales are energy (eV).

$\Delta\sigma/\sigma$  vs. E for  $^{139}\text{Pm}(n,n_1)$



Correlation Matrix



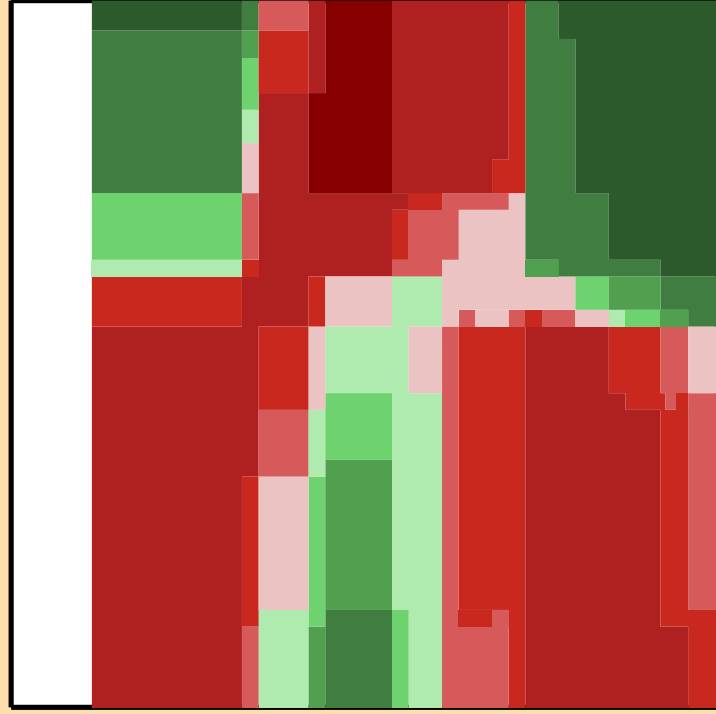
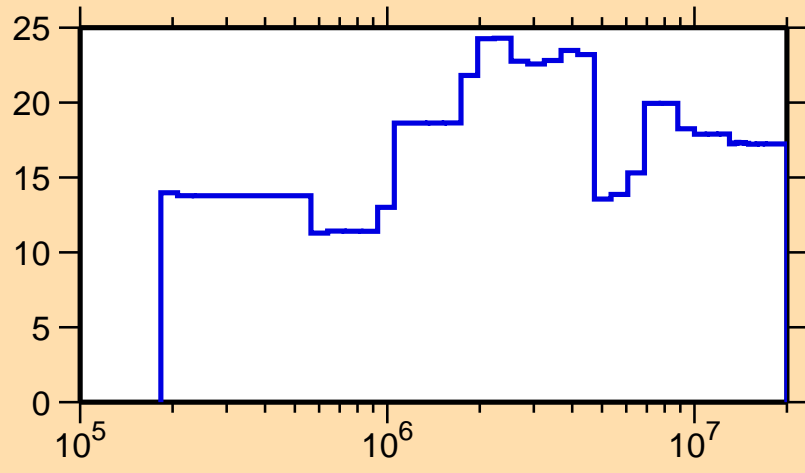


Ordinate scale is %  
relative standard deviation.

Abscissa scales are energy (eV).

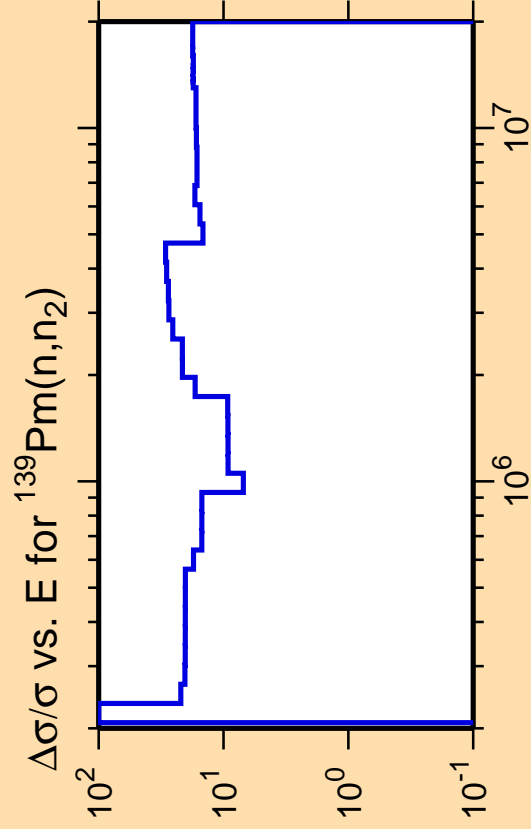
Warning: some uncertainty  
data were suppressed.

$\Delta\sigma/\sigma$  vs. E for  $^{139}\text{Pm}(n,n_1)$



Correlation Matrix

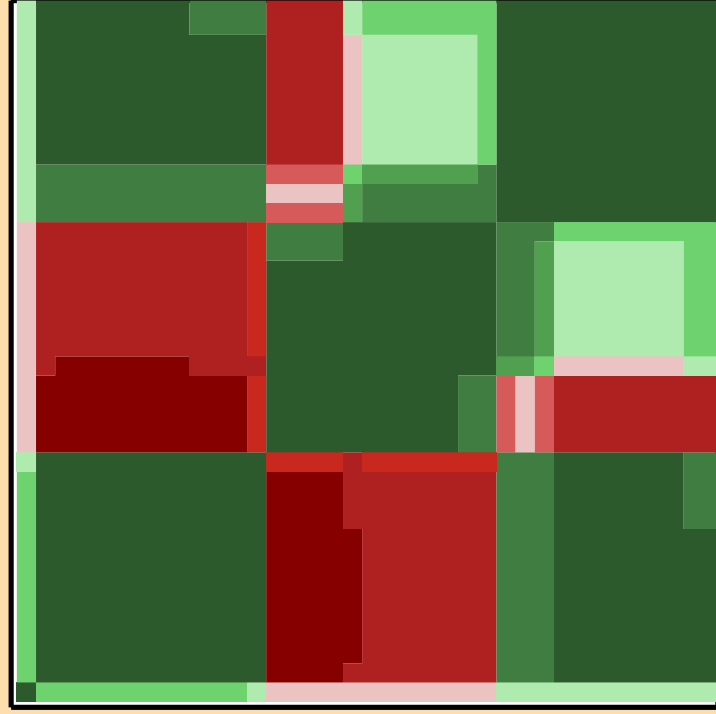
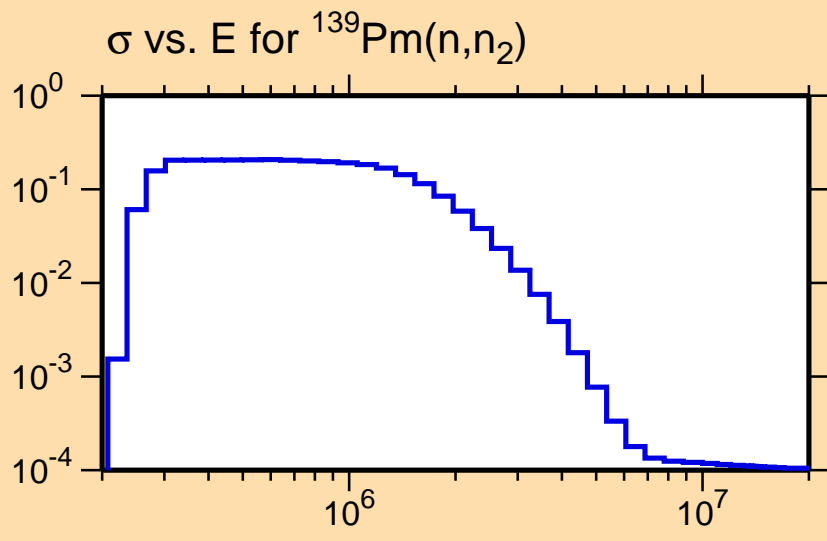




Ordinate scales are % relative standard deviation and barns.

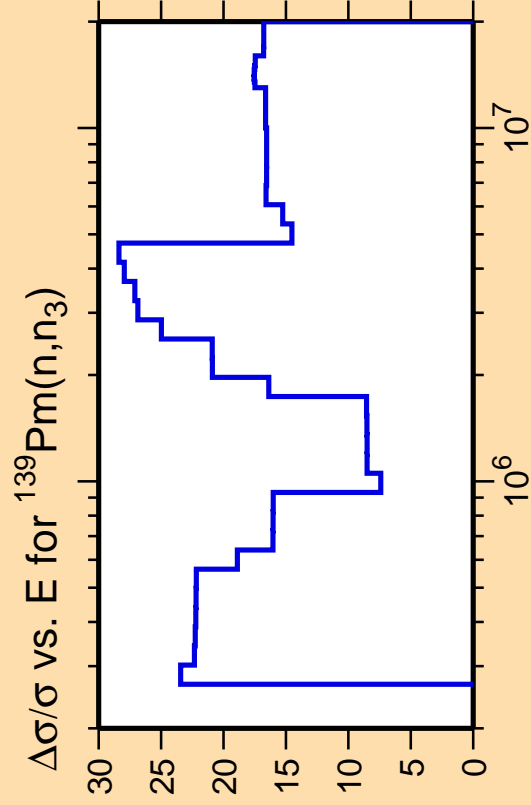
Abscissa scales are energy (eV).

Warning: some uncertainty data were suppressed.



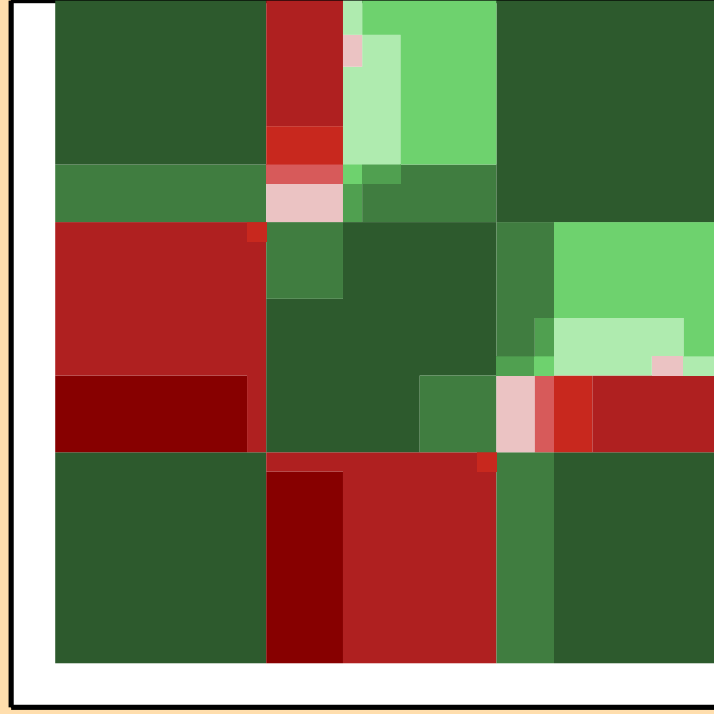
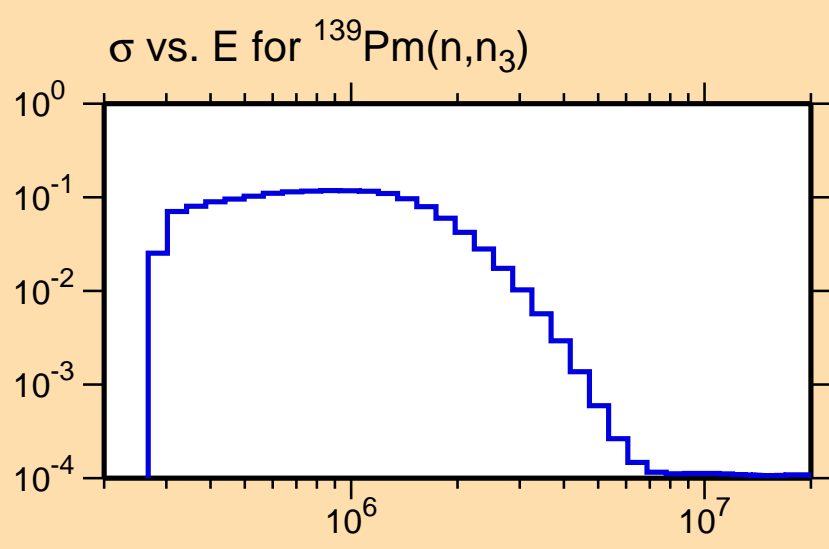
Correlation Matrix





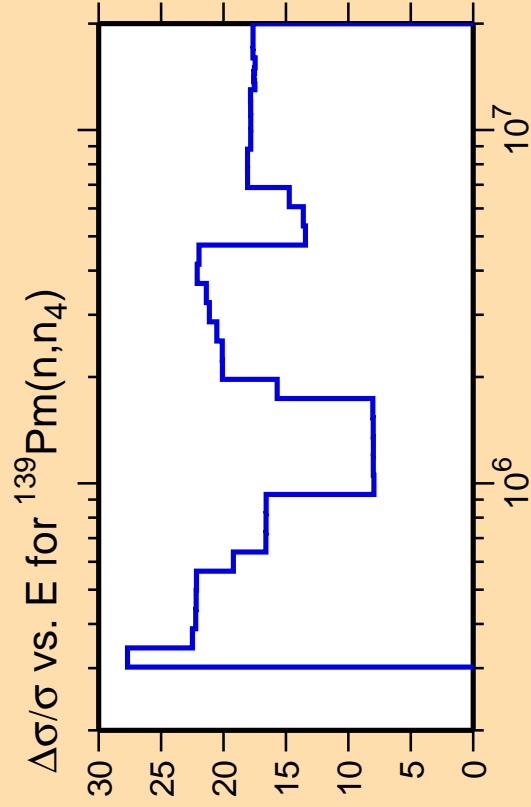
Ordinate scales are % relative standard deviation and barns.

Abscissa scales are energy (eV).



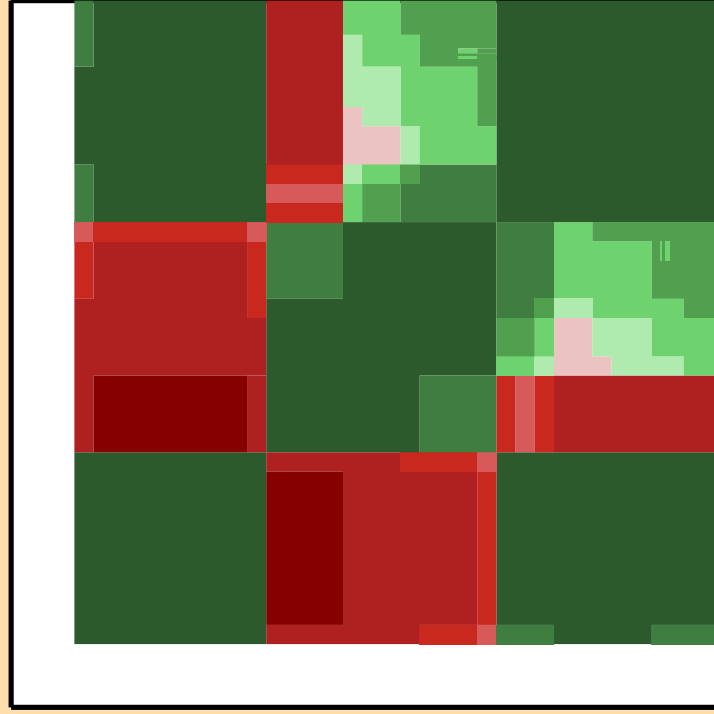
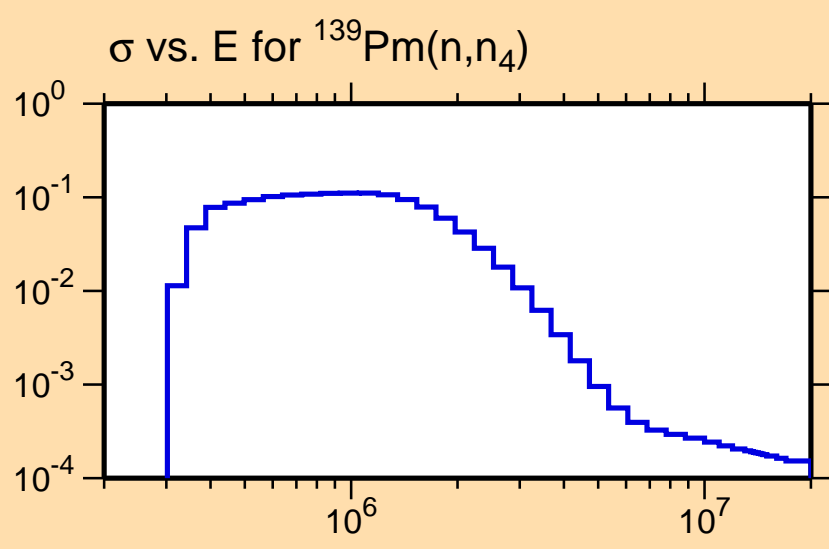
Correlation Matrix





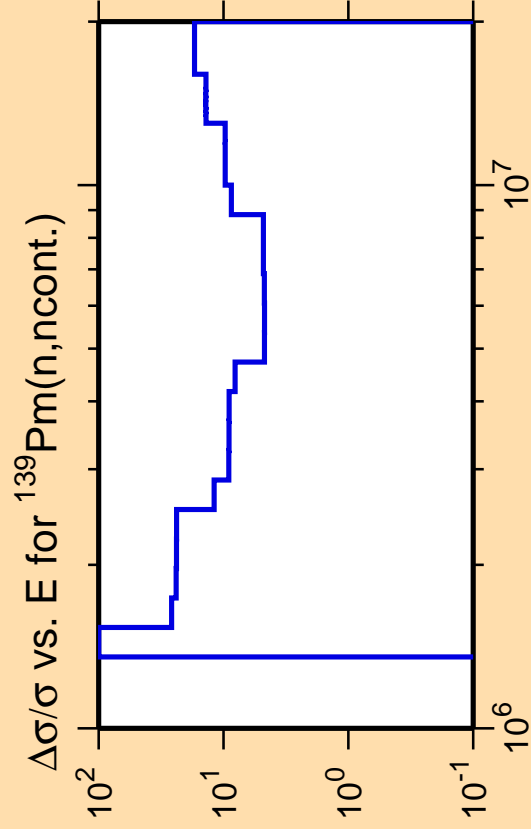
Ordinate scales are % relative standard deviation and barns.

Abscissa scales are energy (eV).



Correlation Matrix

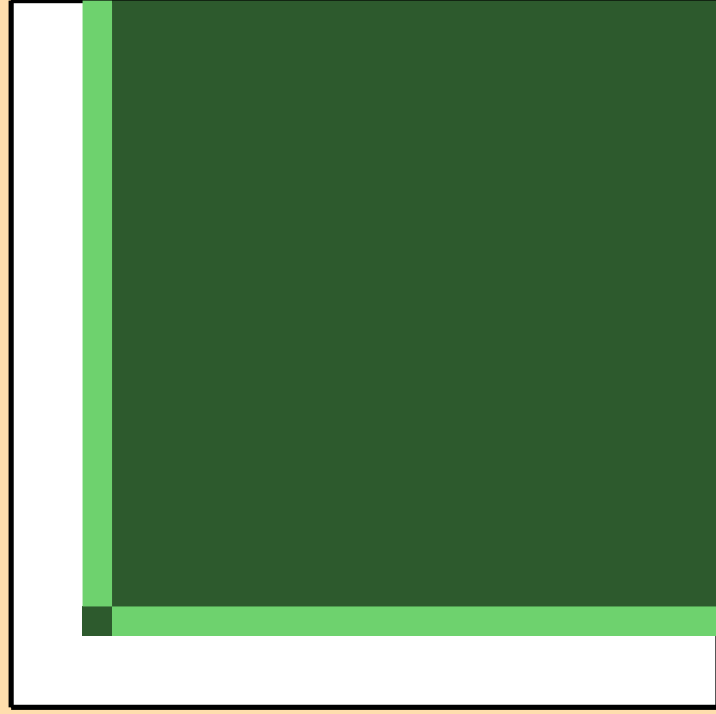
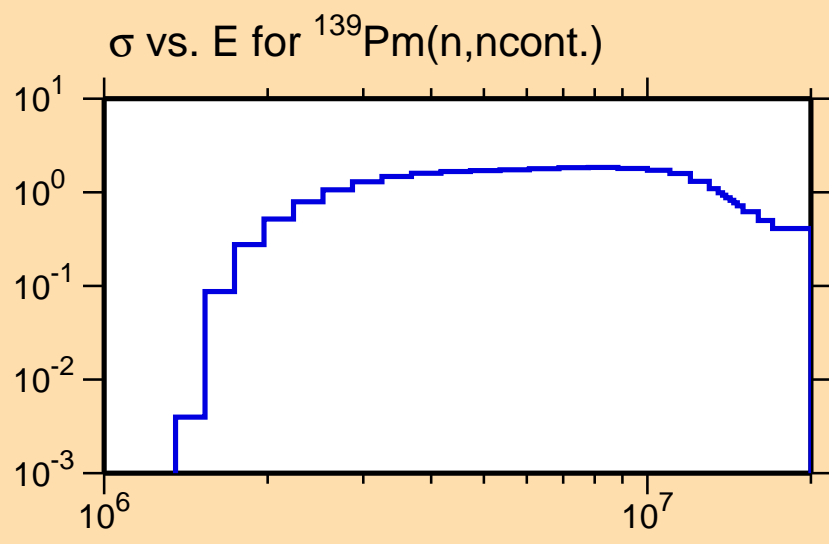




Ordinate scales are % relative standard deviation and barns.

Abscissa scales are energy (eV).

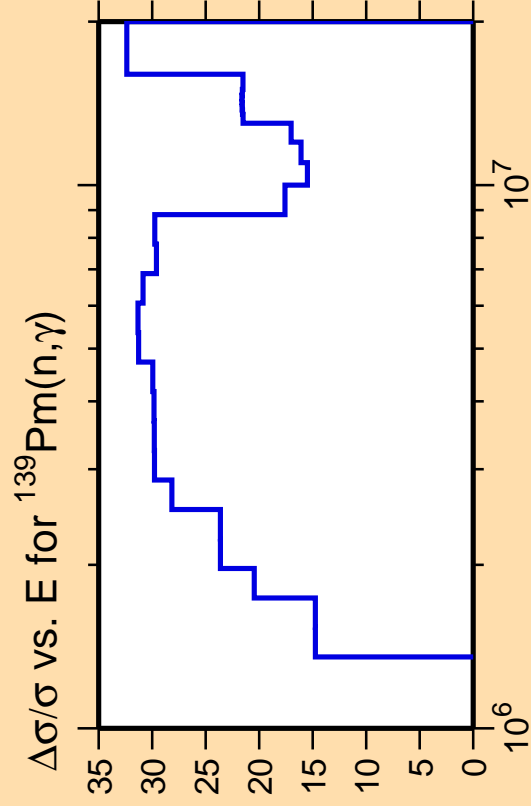
Warning: some uncertainty data were suppressed.



Correlation Matrix



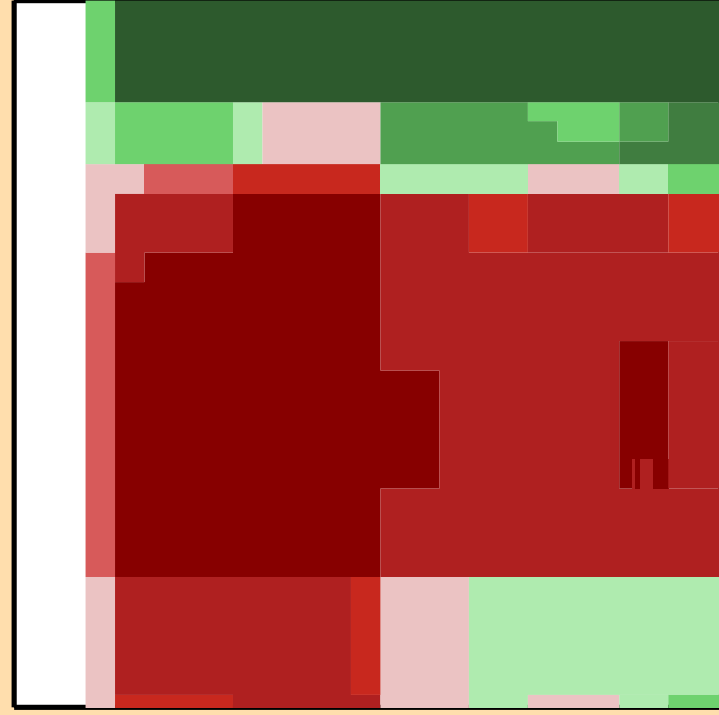
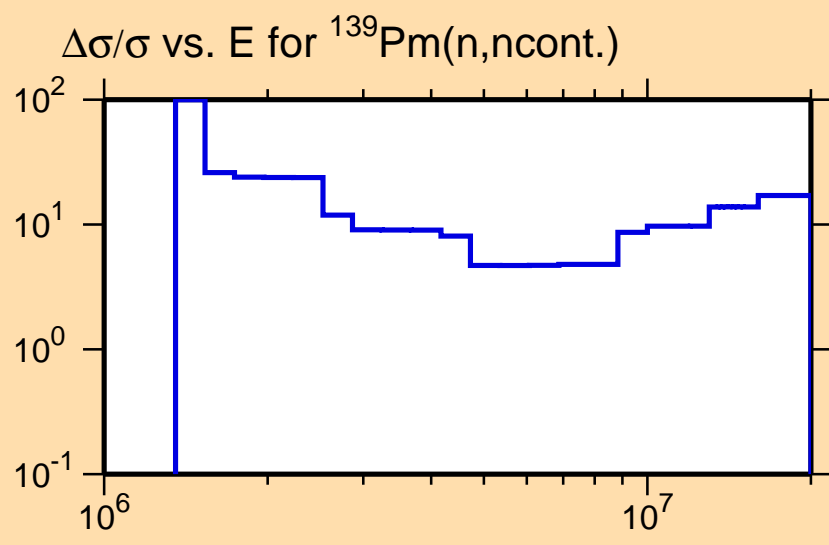




Ordinate scale is %  
relative standard deviation.

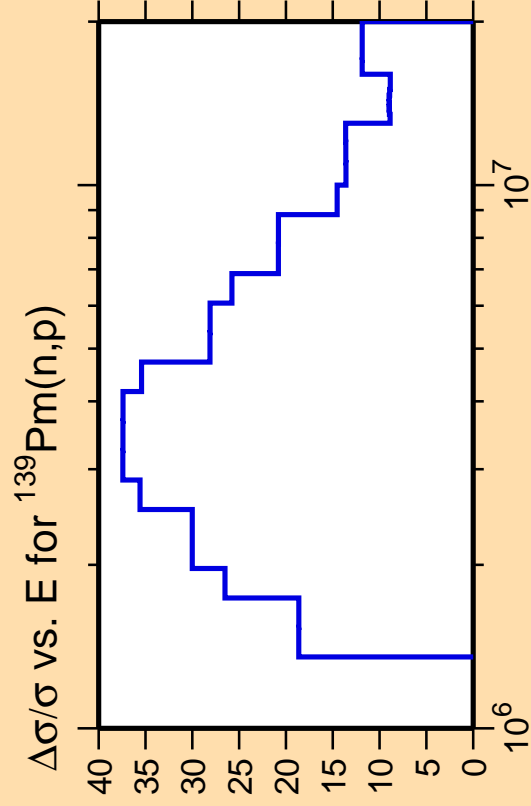
Abscissa scales are energy (eV).

Warning: some uncertainty  
data were suppressed.



Correlation Matrix

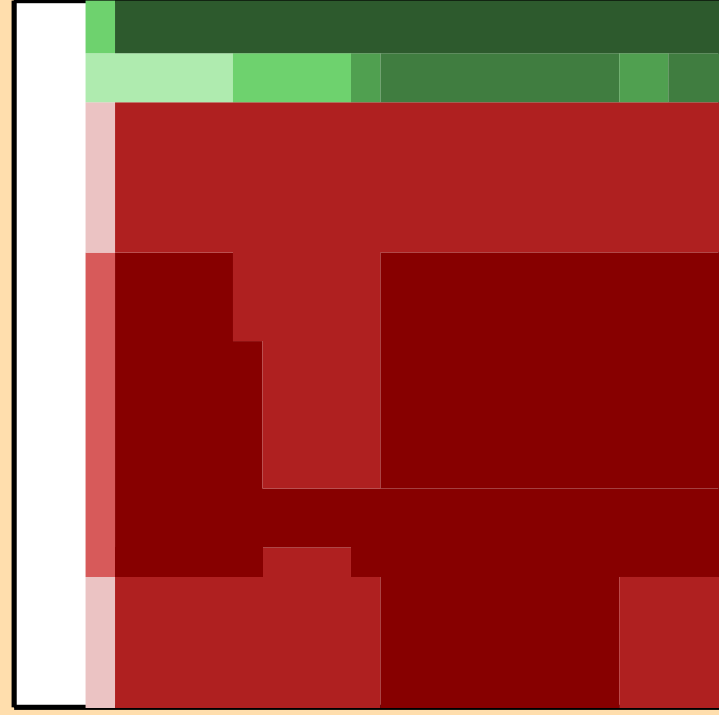
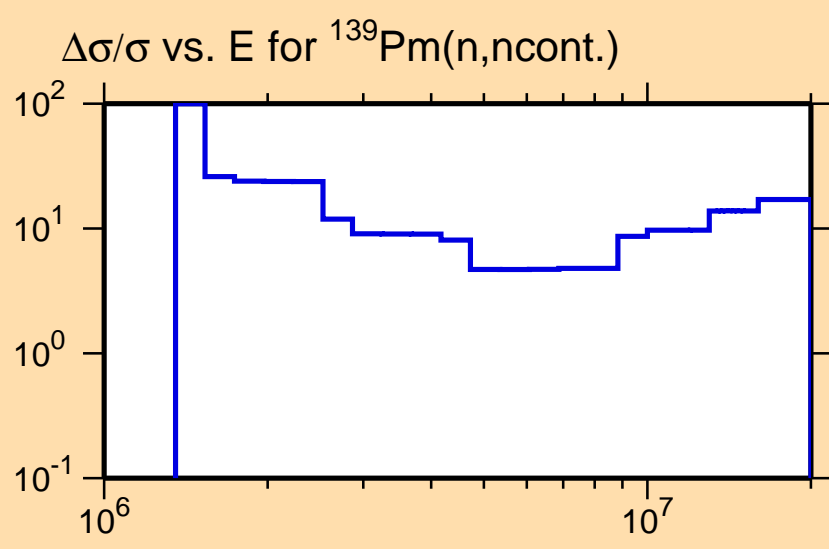




Ordinate scale is %  
relative standard deviation.

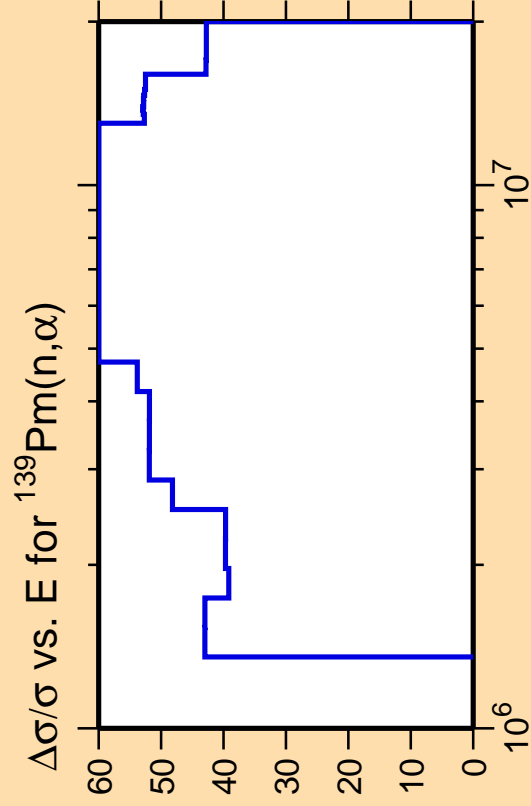
Abscissa scales are energy (eV).

Warning: some uncertainty  
data were suppressed.



Correlation Matrix

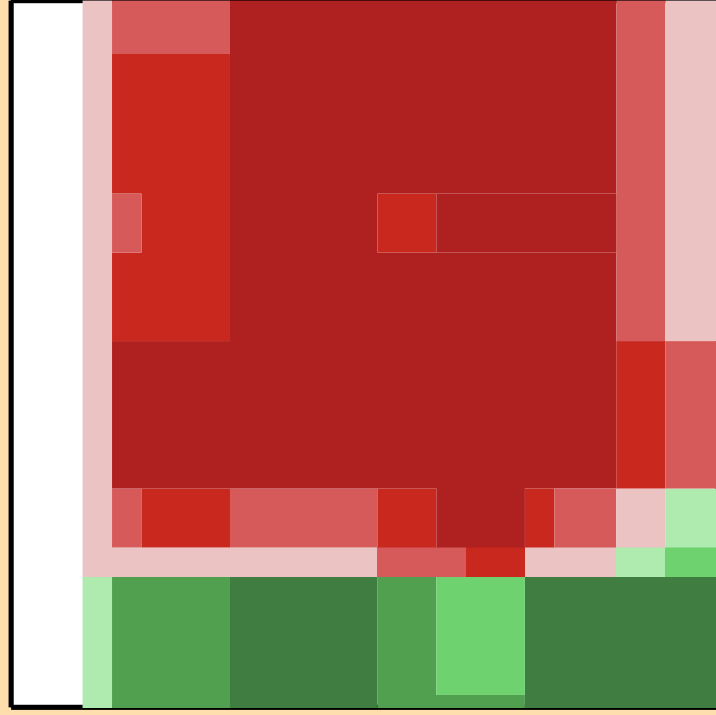
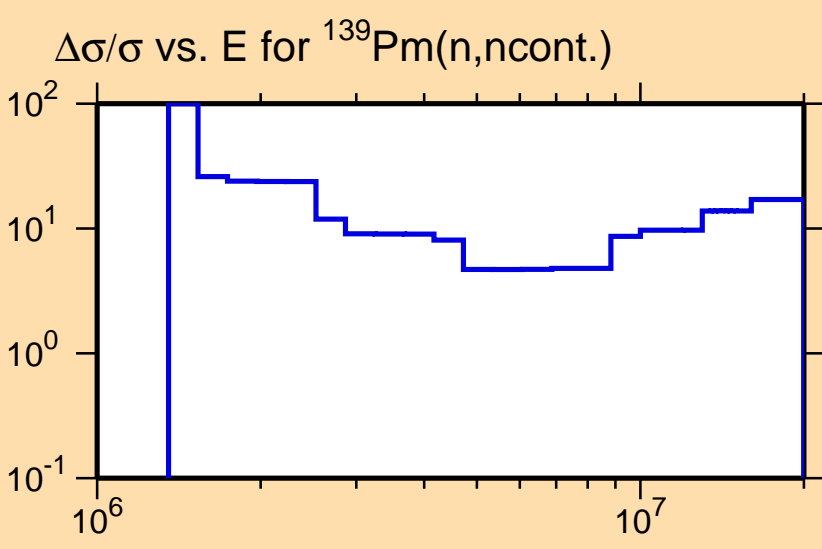




Ordinate scale is %  
relative standard deviation.

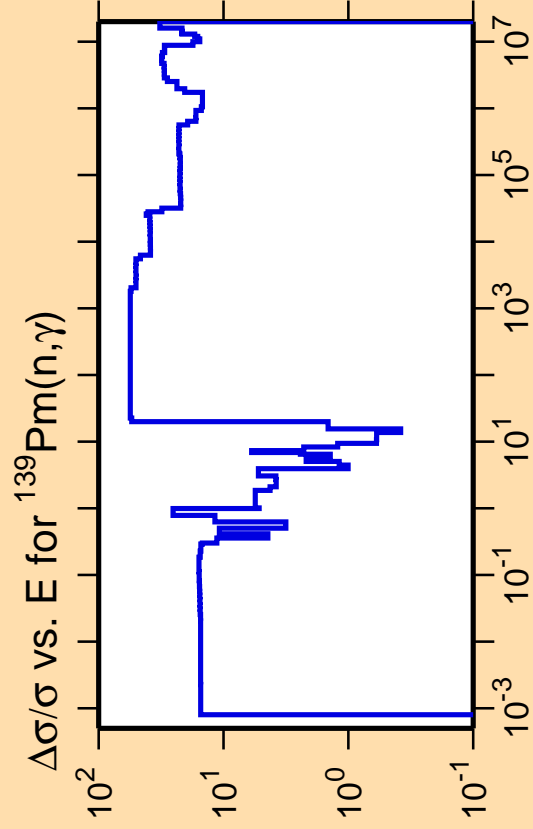
Abscissa scales are energy (eV).

Warning: some uncertainty  
data were suppressed.



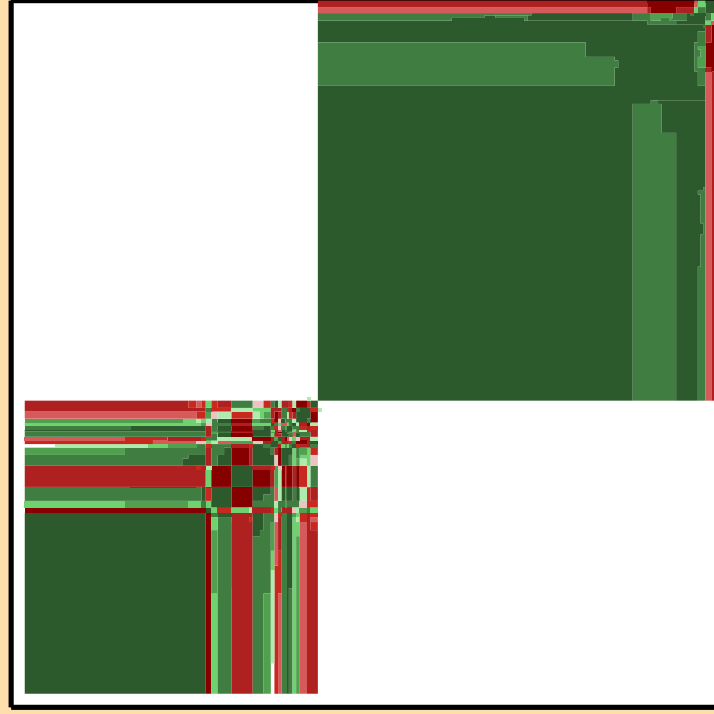
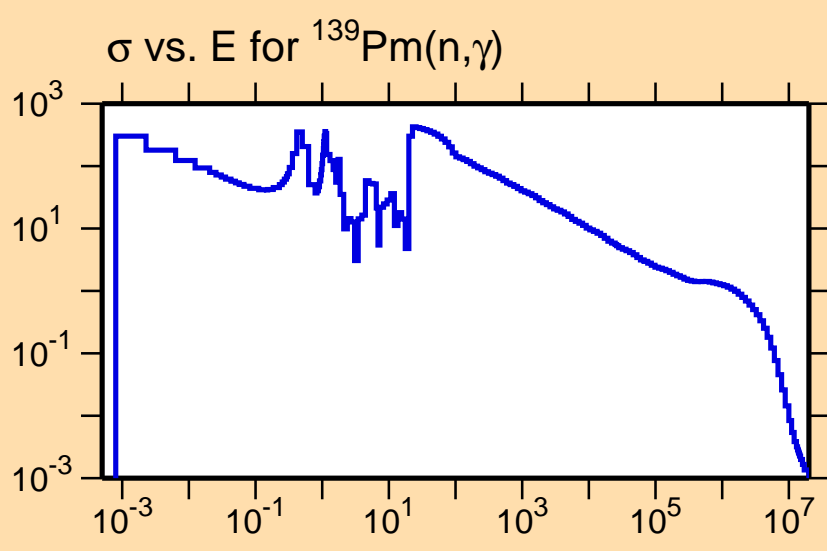
Correlation Matrix





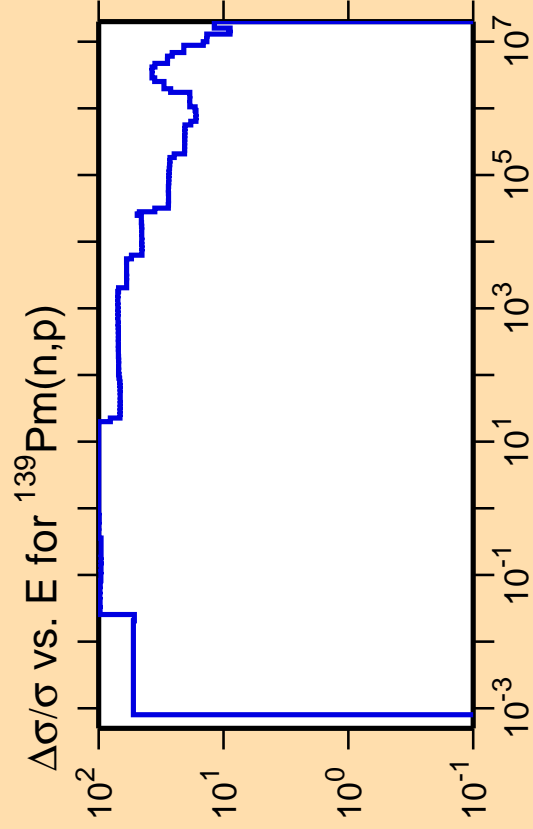
Ordinate scales are % relative standard deviation and barns.

Abscissa scales are energy (eV).



Correlation Matrix

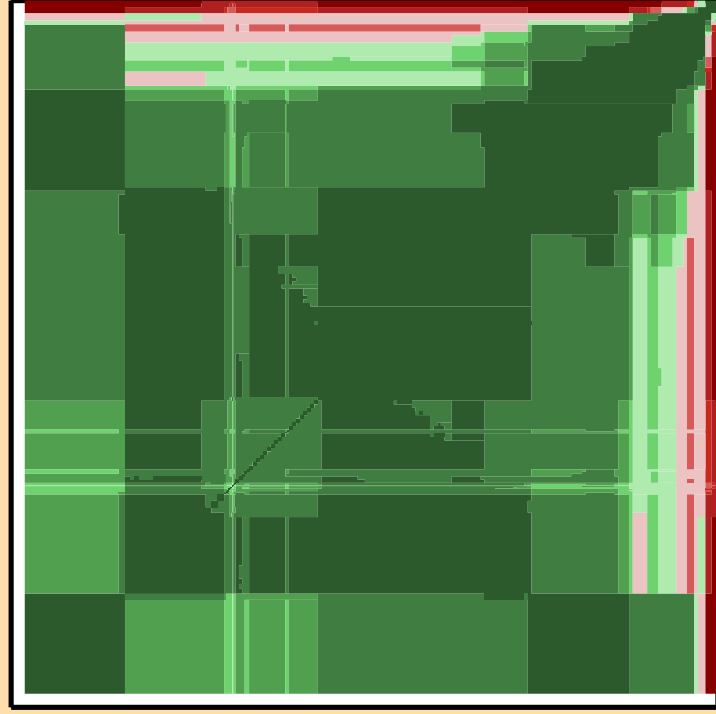
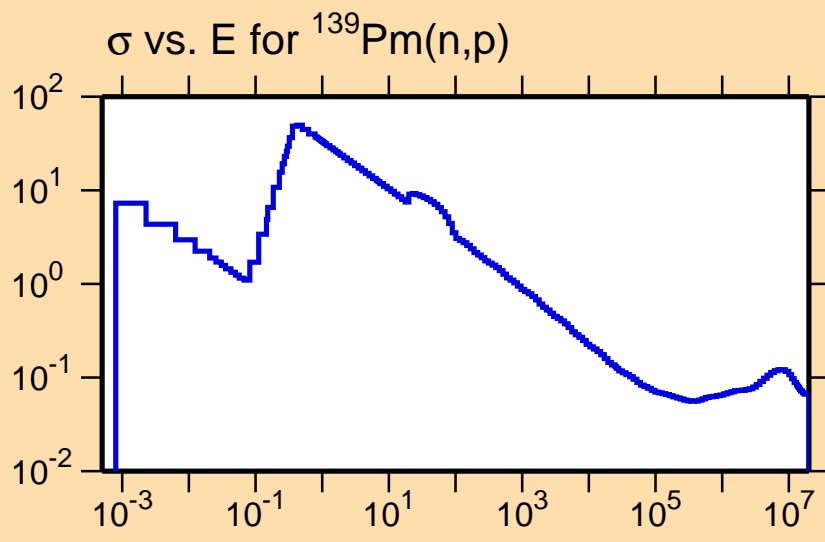




Ordinate scales are % relative standard deviation and barns.

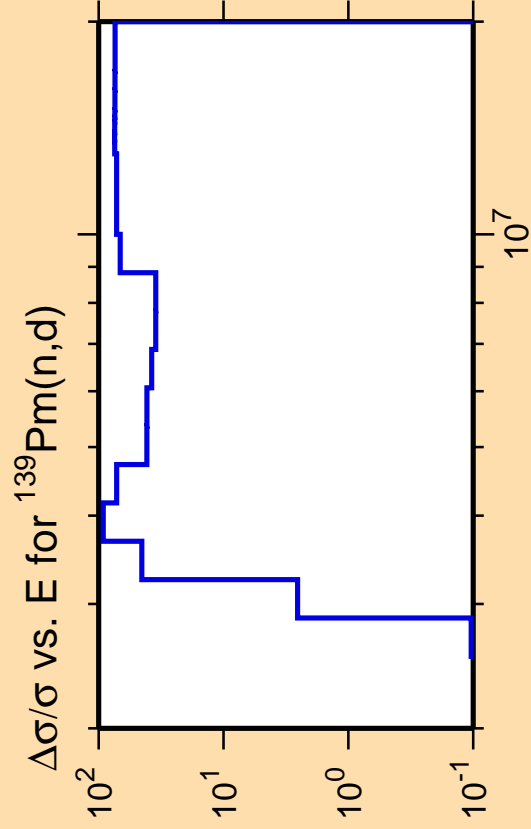
Abscissa scales are energy (eV).

Warning: some uncertainty data were suppressed.



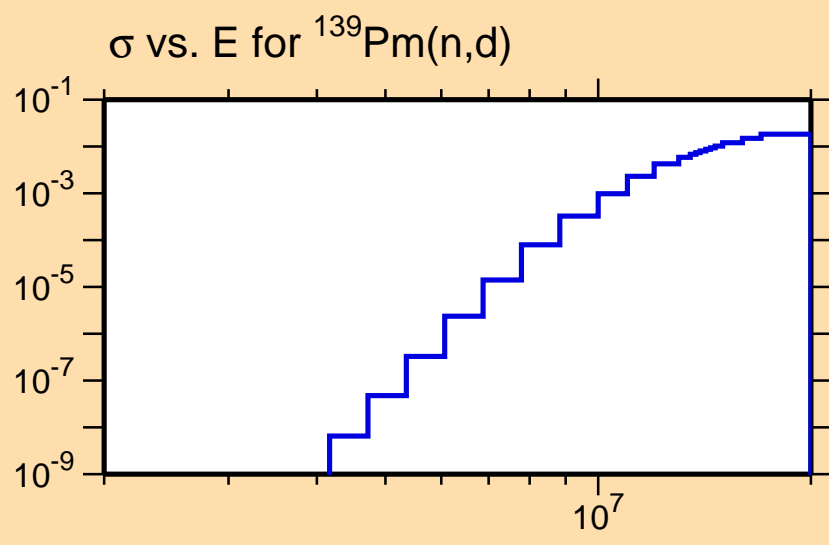
Correlation Matrix



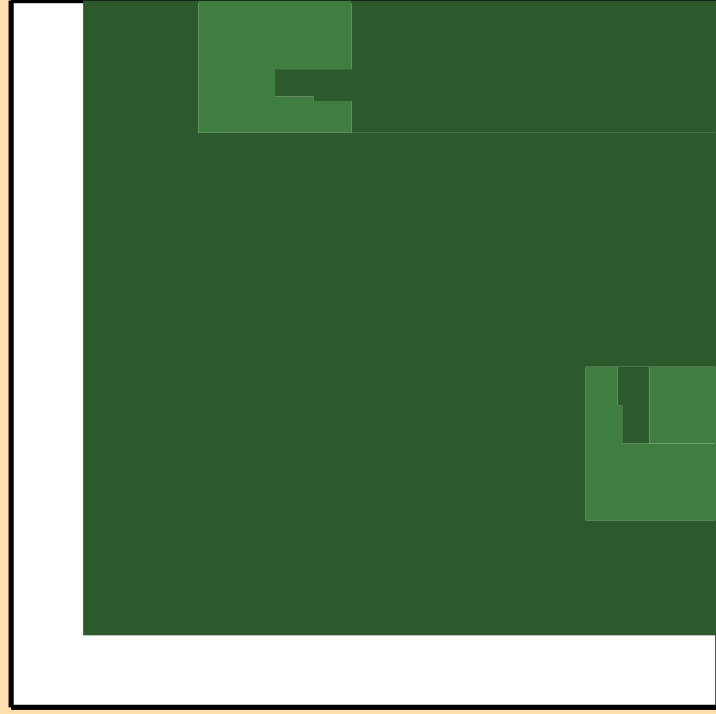


Ordinate scales are % relative standard deviation and barns.

Abscissa scales are energy (eV).

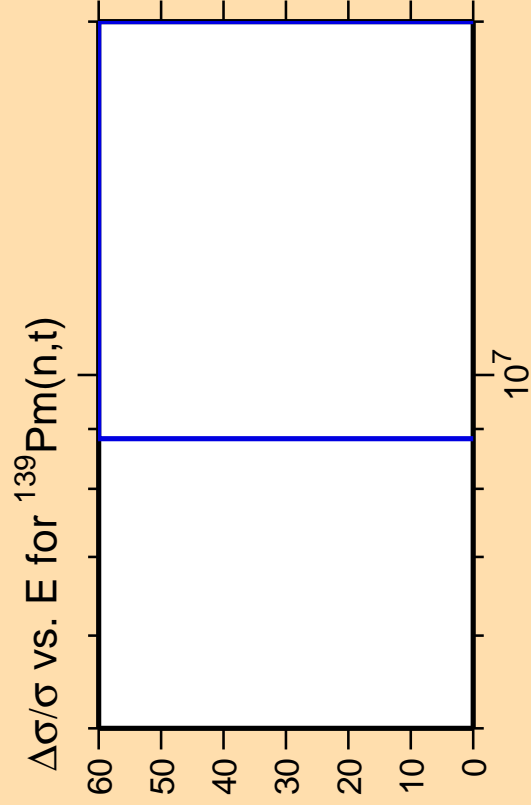


$\sigma$  vs.  $E$  for  $^{139}\text{Pm}(n,d)$



Correlation Matrix

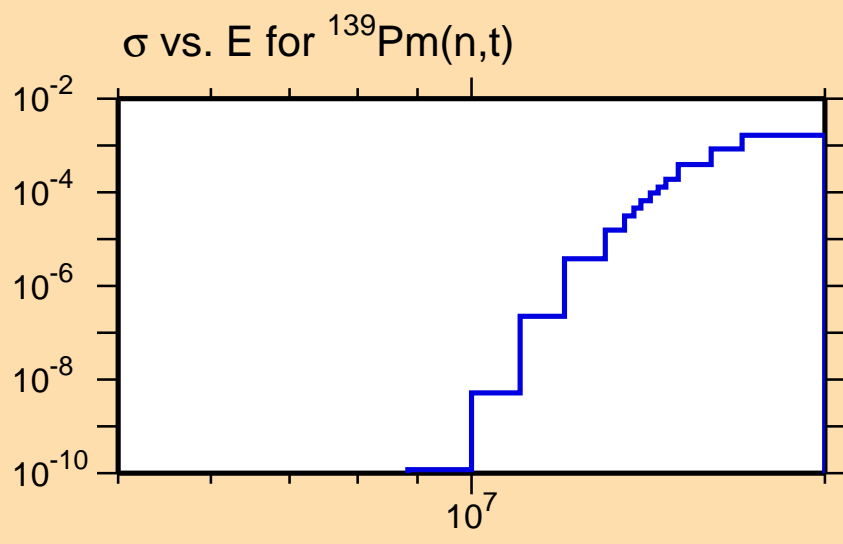




Ordinate scales are % relative standard deviation and barns.

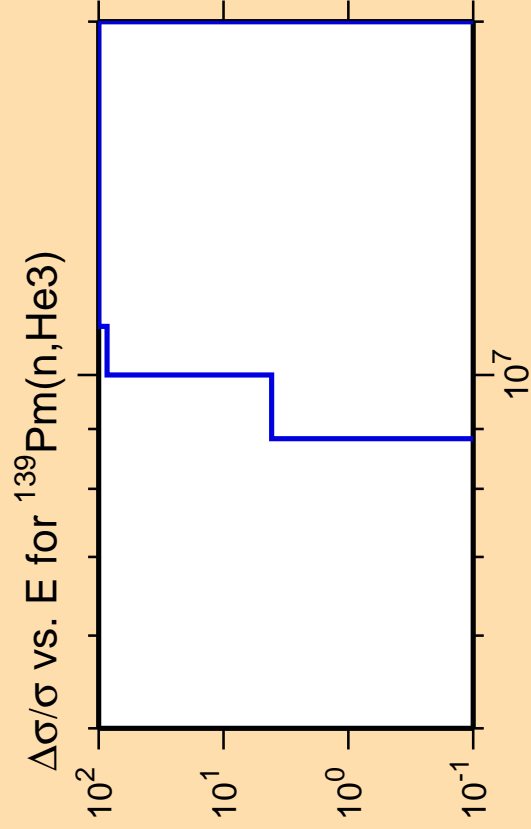
Abscissa scales are energy (eV).

Warning: some uncertainty data were suppressed.



Correlation Matrix

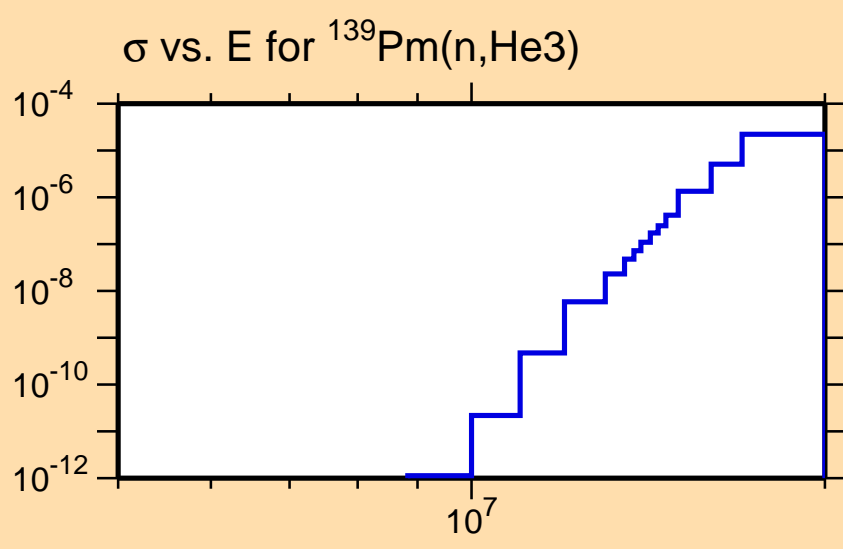




Ordinate scales are % relative standard deviation and barns.

Abscissa scales are energy (eV).

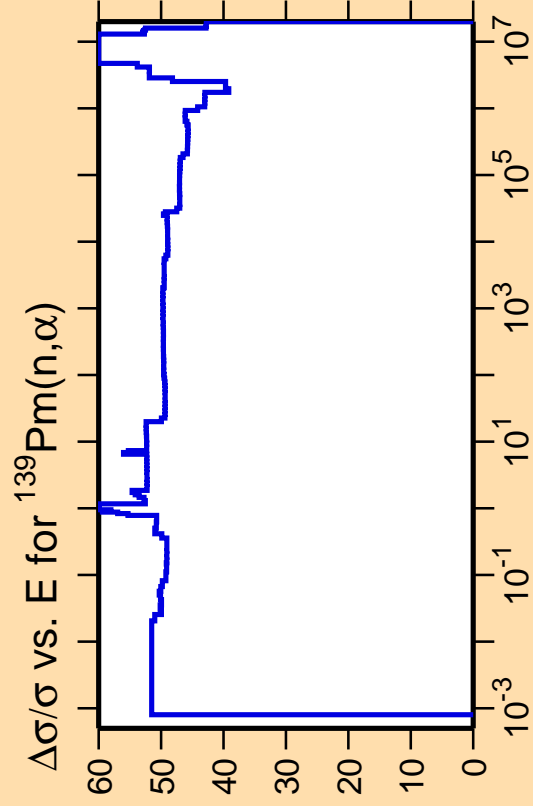
Warning: some uncertainty data were suppressed.



Correlation Matrix



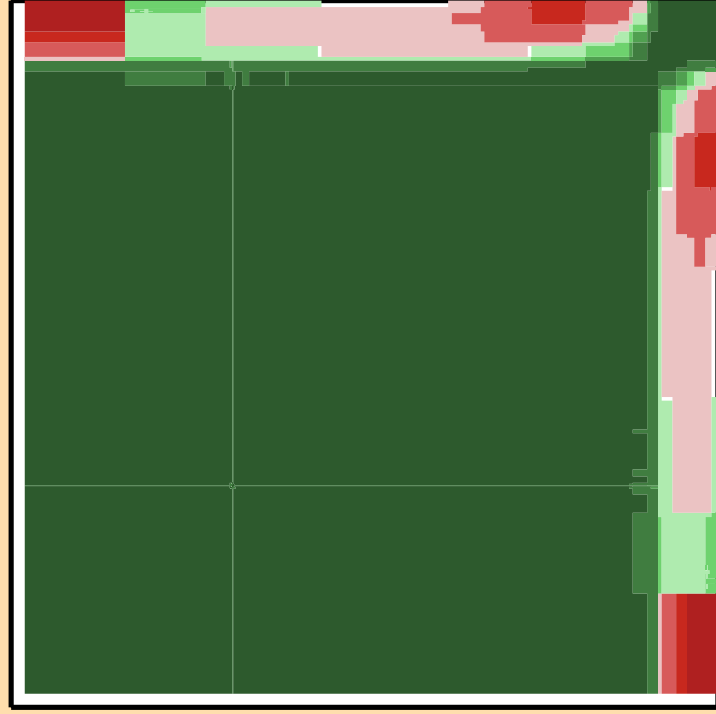
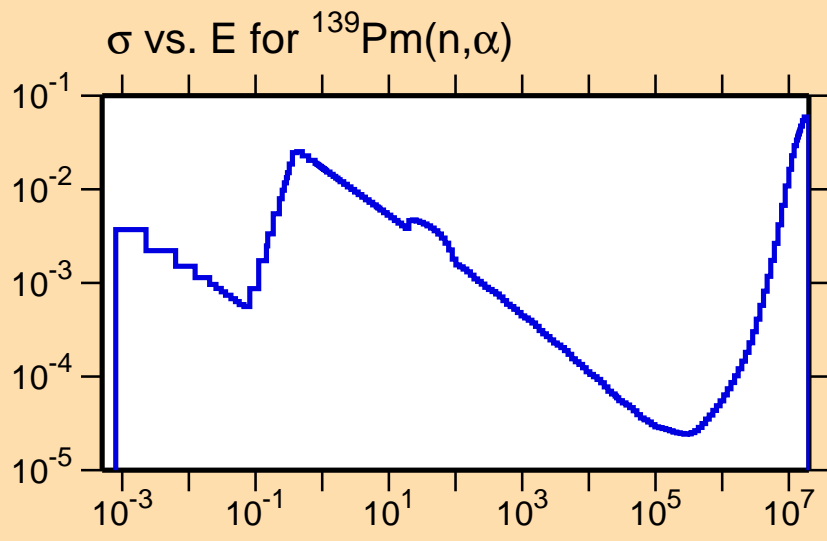




Ordinate scales are % relative standard deviation and barns.

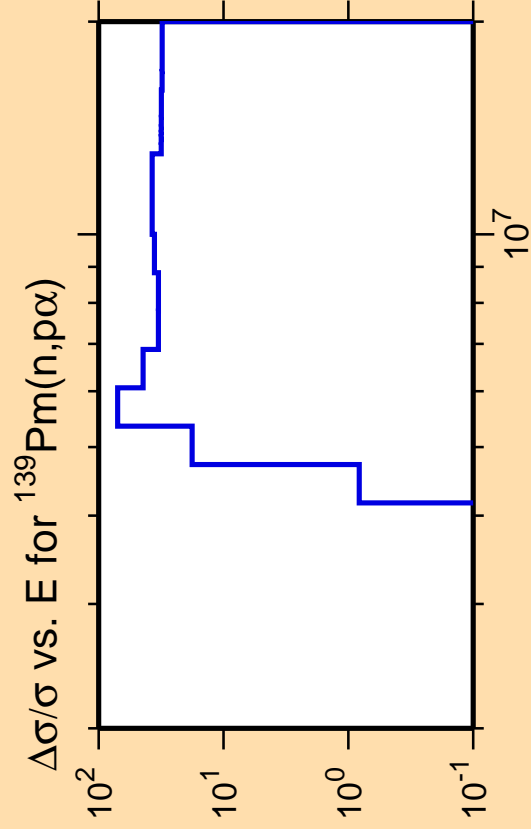
Abscissa scales are energy (eV).

Warning: some uncertainty data were suppressed.



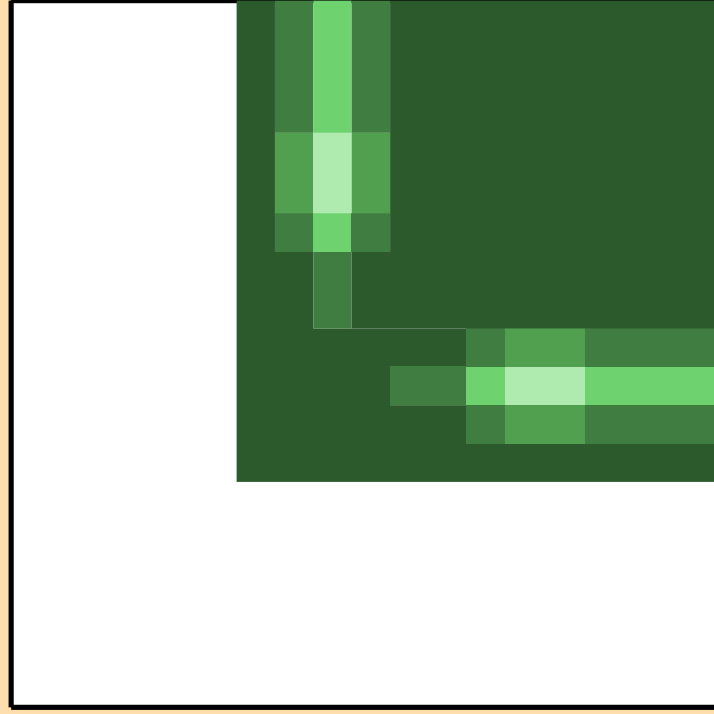
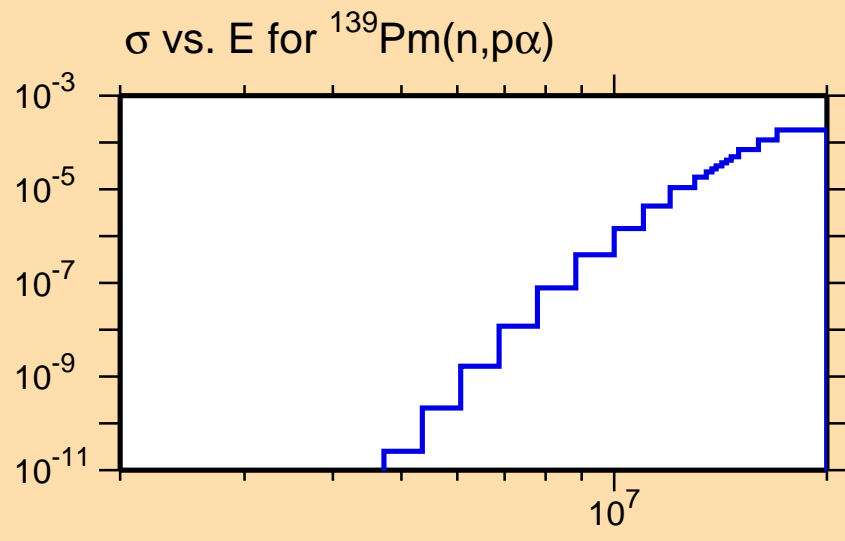
Correlation Matrix





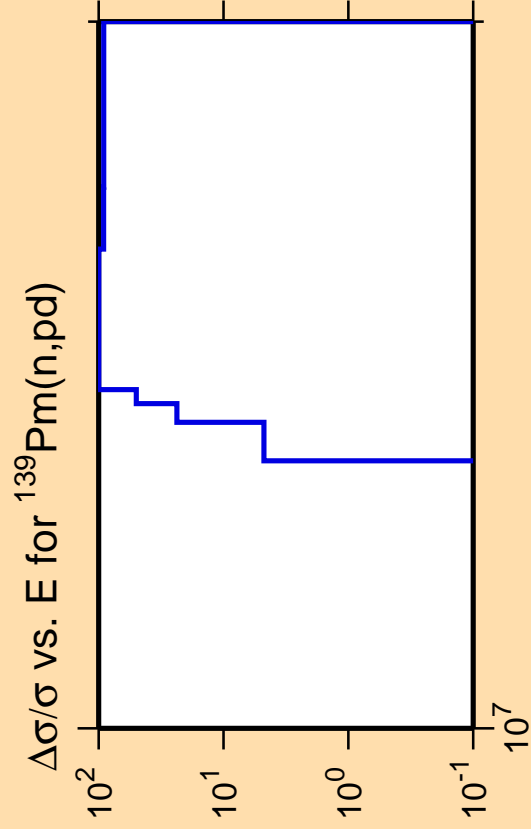
Ordinate scales are % relative standard deviation and barns.

Abscissa scales are energy (eV).



Correlation Matrix

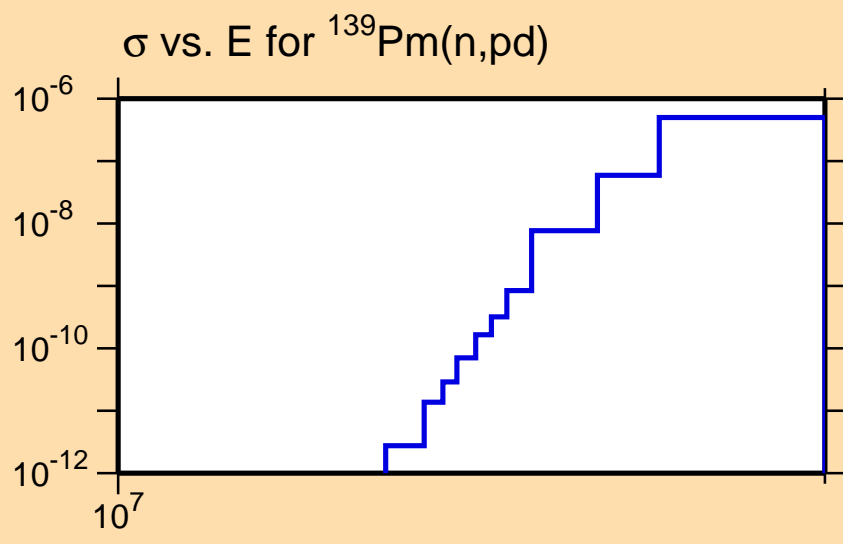




Ordinate scales are % relative standard deviation and barns.

Abscissa scales are energy (eV).

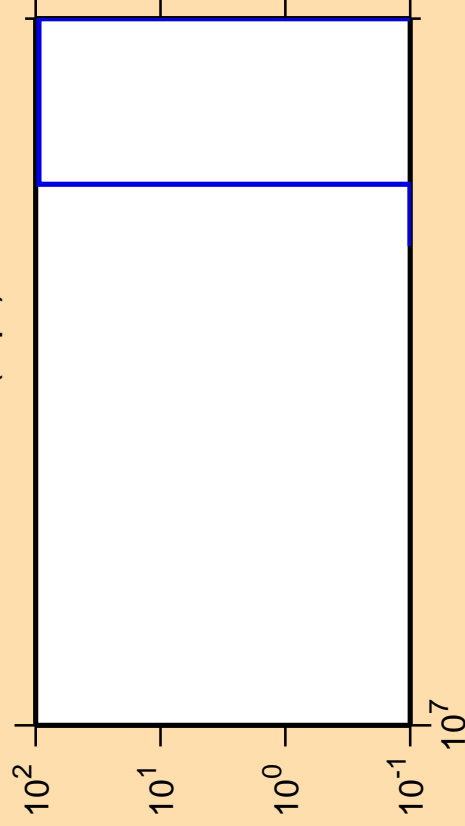
Warning: some uncertainty data were suppressed.



Correlation Matrix



$\Delta\sigma/\sigma$  vs. E for  $^{139}\text{Pm}(n,pt)$

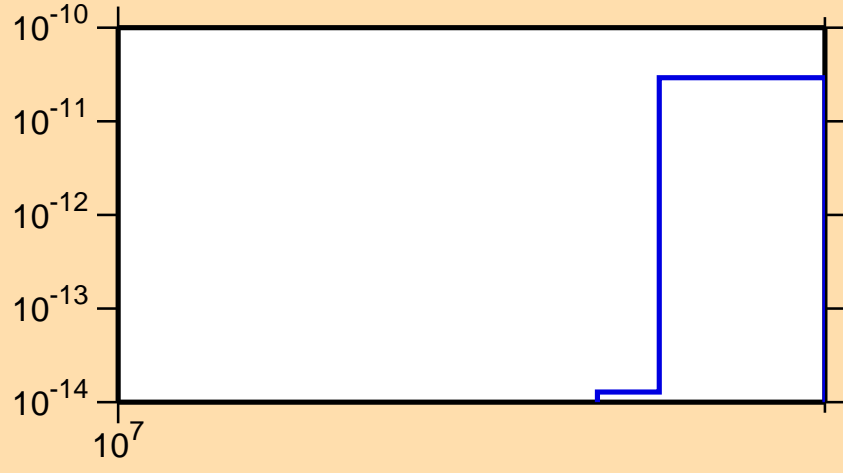


Ordinate scales are % relative standard deviation and barns.

Abscissa scales are energy (eV).

Warning: some uncertainty data were suppressed.

$\sigma$  vs. E for  $^{139}\text{Pm}(n,pt)$



$10^7$

$10^{-10}$

$10^{-11}$

$10^{-12}$

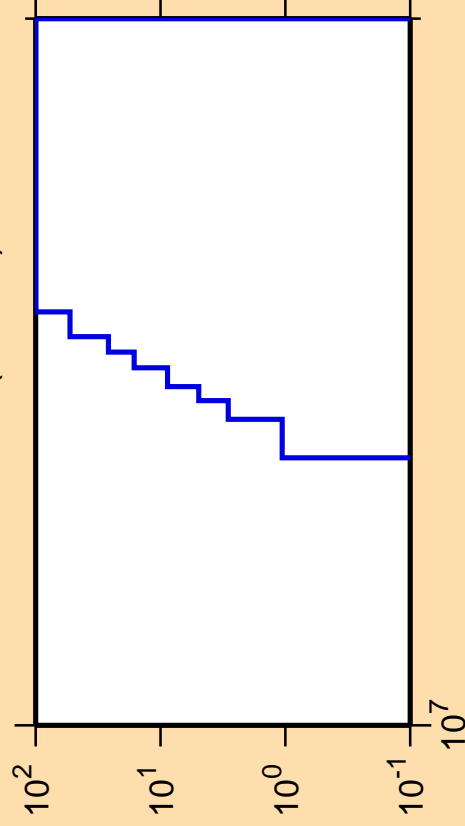
$10^{-13}$

$10^{-14}$

Correlation Matrix



$\Delta\sigma/\sigma$  vs. E for  $^{139}\text{Pm}(\text{mt117})$

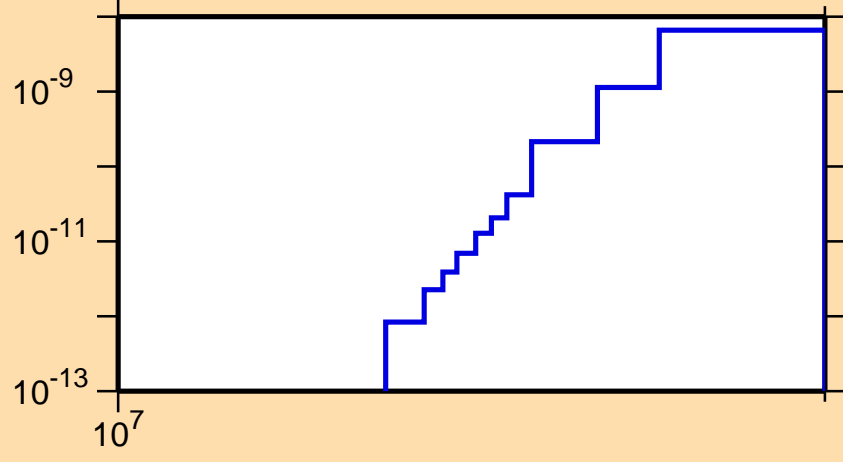


Ordinate scales are % relative standard deviation and barns.

Abscissa scales are energy (eV).

Warning: some uncertainty data were suppressed.

$\sigma$  vs. E for  $^{139}\text{Pm}(\text{mt117})$



10<sup>7</sup>

10<sup>-13</sup>

10<sup>-11</sup>

10<sup>-9</sup>

10<sup>7</sup>

Correlation Matrix



-1.0

-0.8

-0.6

-0.4

-0.2

0.0

1.0

0.8

0.6

0.4

0.2

0.0