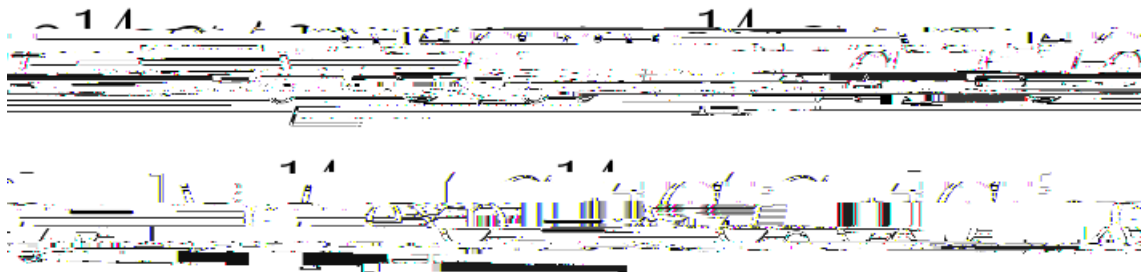


P

$$\frac{dP}{dt} = -\lambda P$$

$$P = P_0 e^{-\lambda t}$$

P



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P

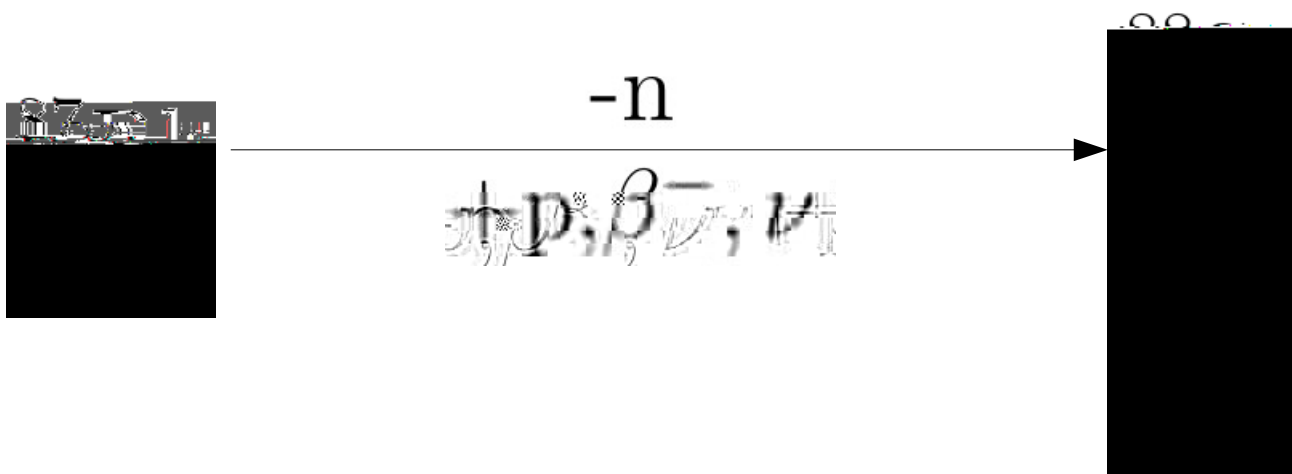
$$P = P_0 \exp[-\lambda t]$$

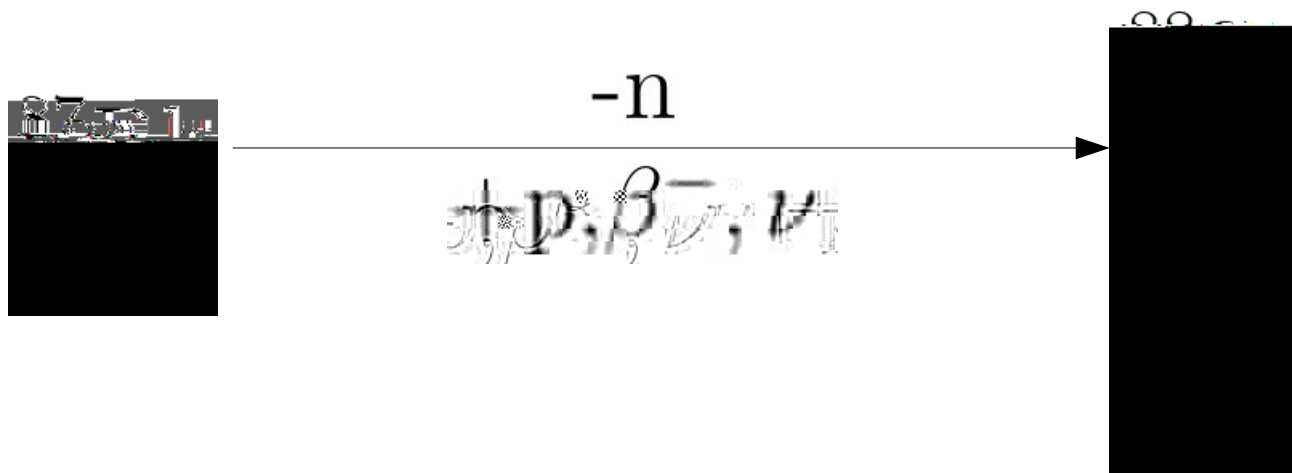
$$P = P(P + D) \exp[-\lambda t]$$

$$D \exp[\lambda t] = P \exp[\lambda t] + P = P$$

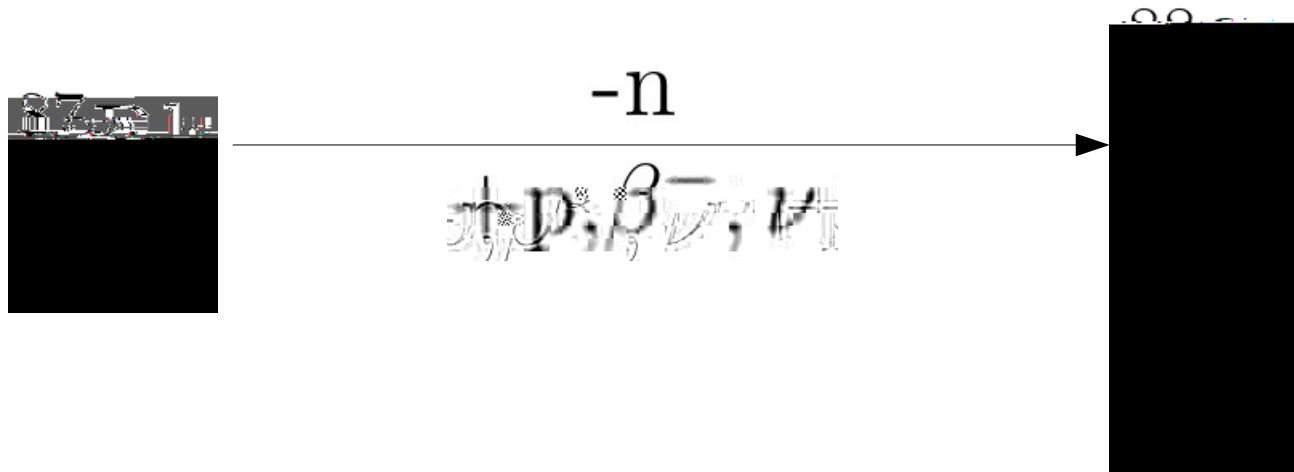
$$(D = P)(\exp[\lambda t] - 1) = P$$

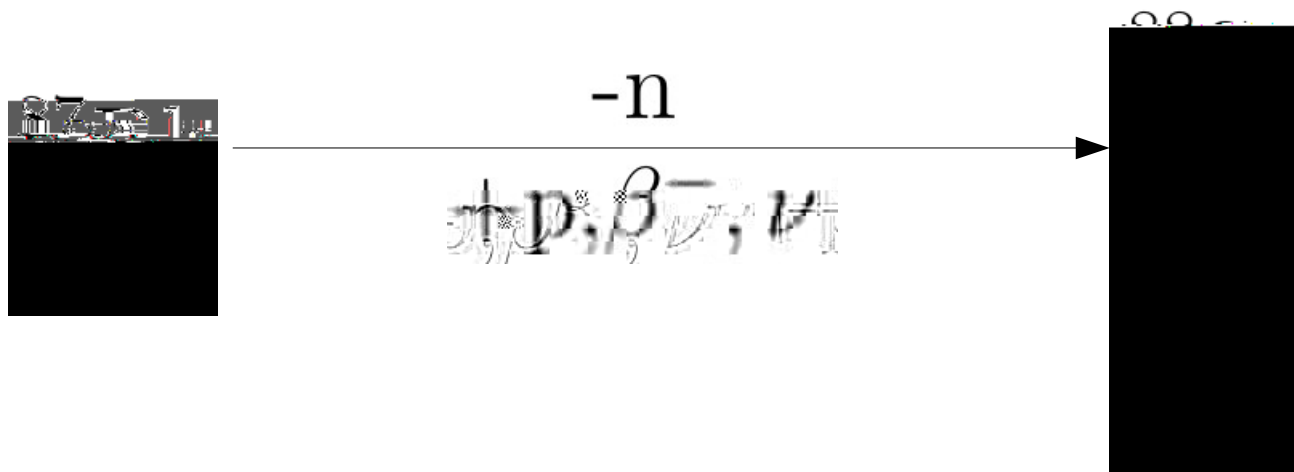
$$D = \frac{P}{\exp[\lambda t] - 1}$$

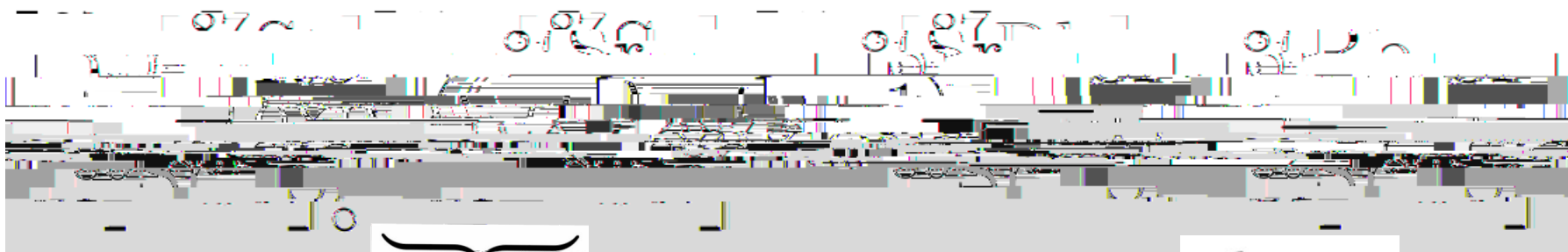
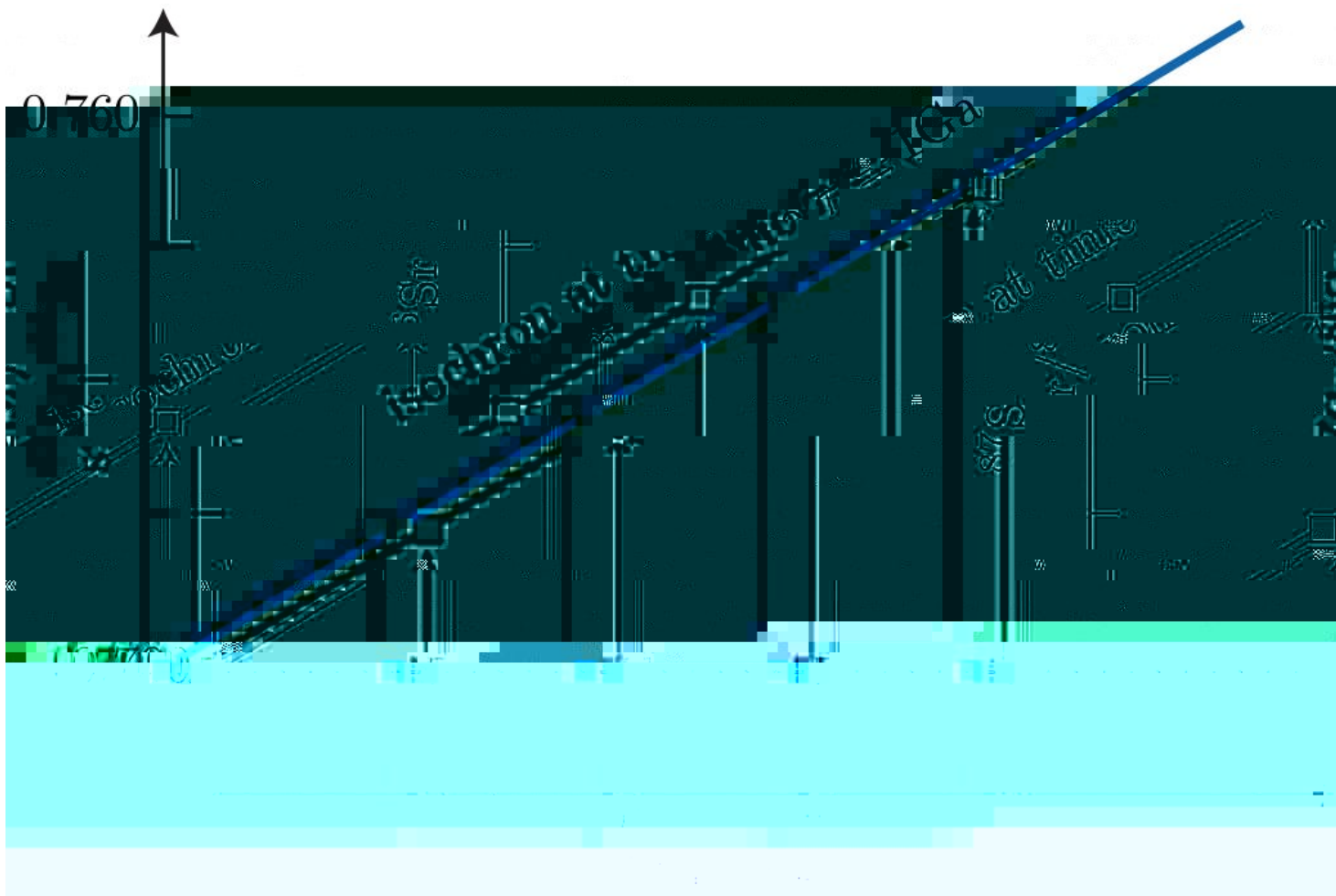




$$^{87}\text{Sr} = ^{87}\text{Rb}(\exp[\lambda t] - 1)$$

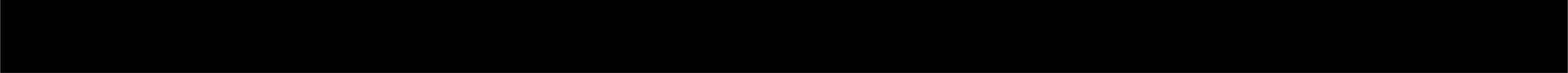


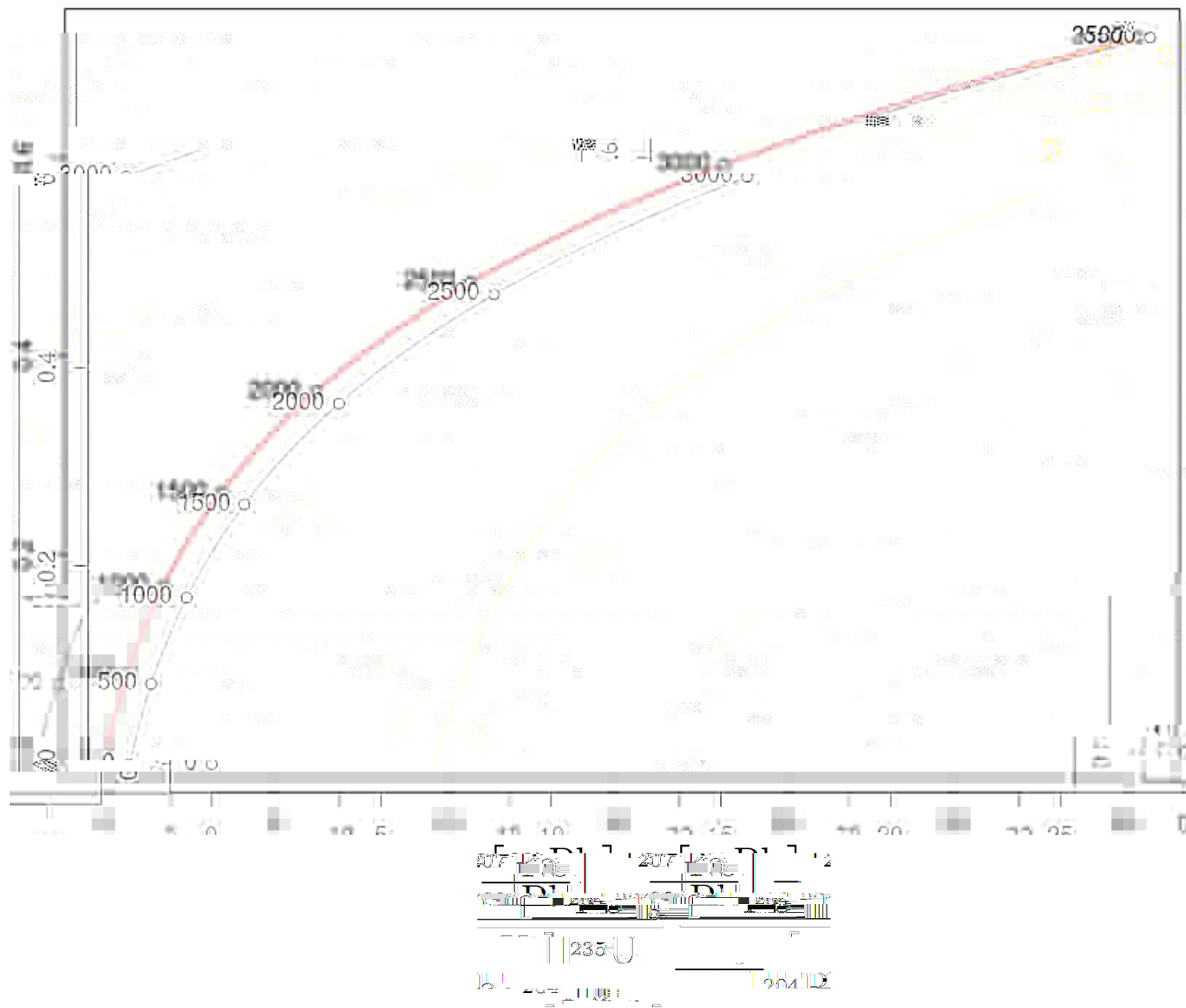




interest

slope









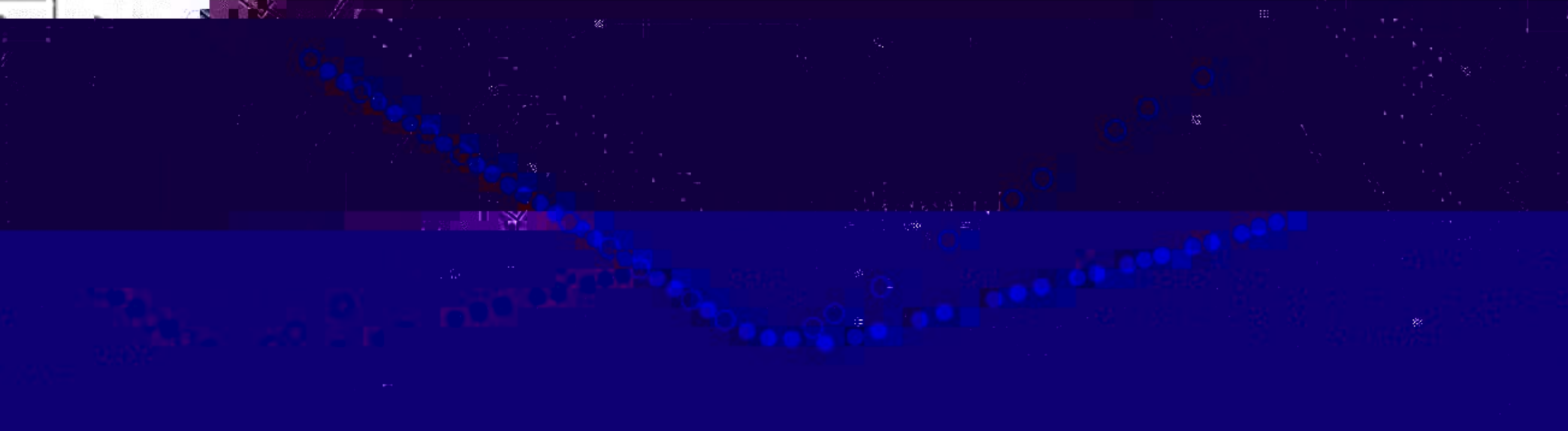
ION SOURCE

COLLECTOR

Filament

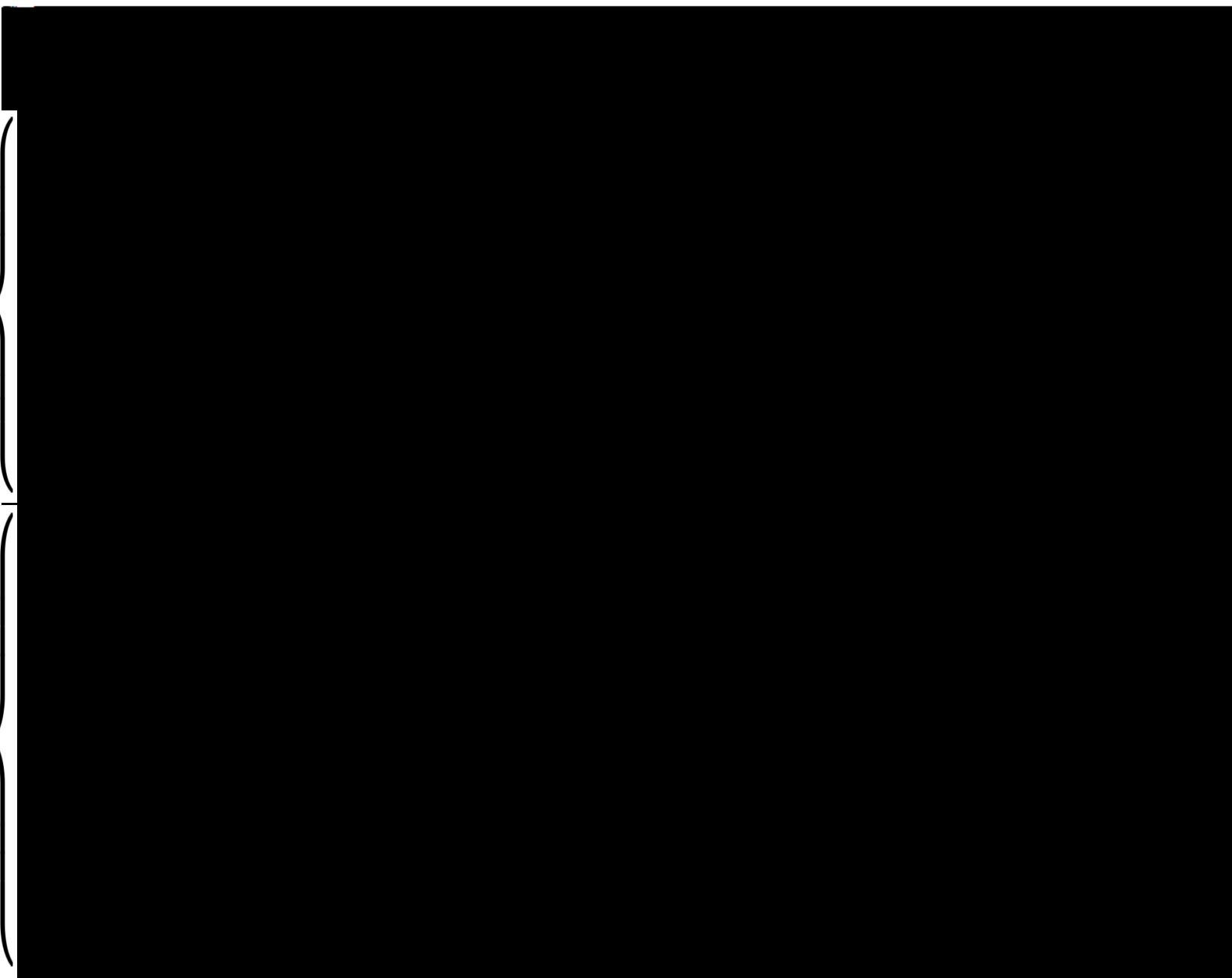
Faraday cup

Amplifier



blank

signal



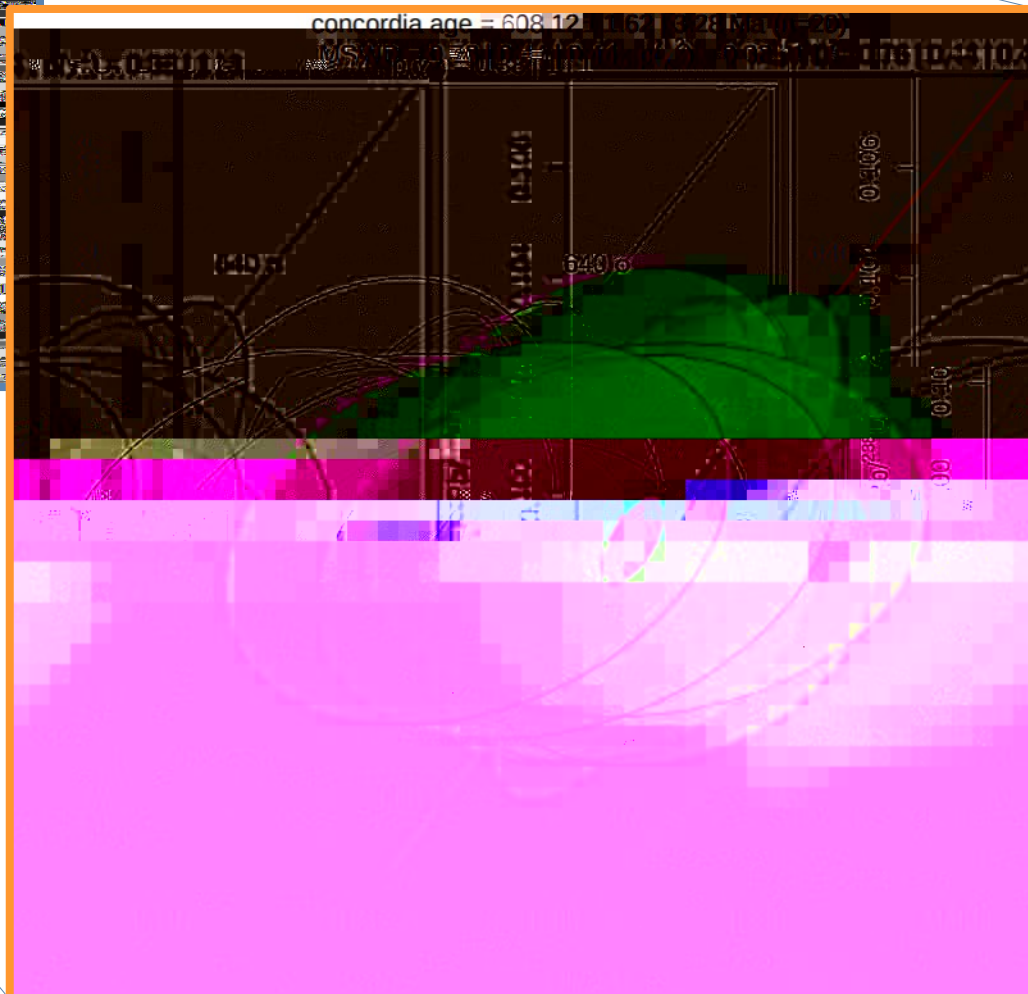
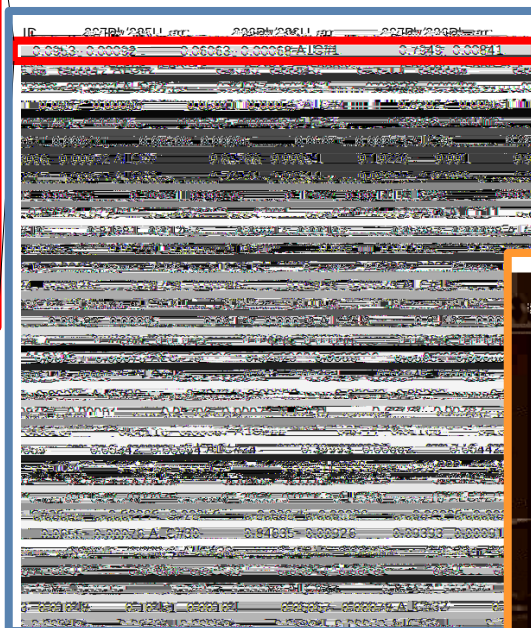
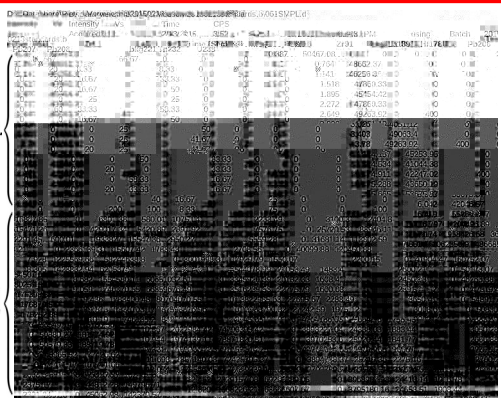
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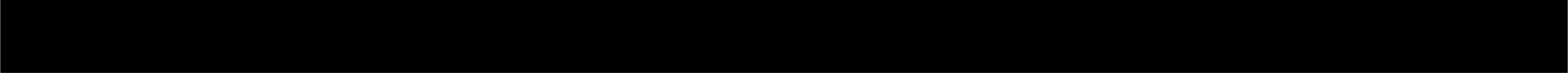
signal



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signal





ET\_Redux

IsoplotR

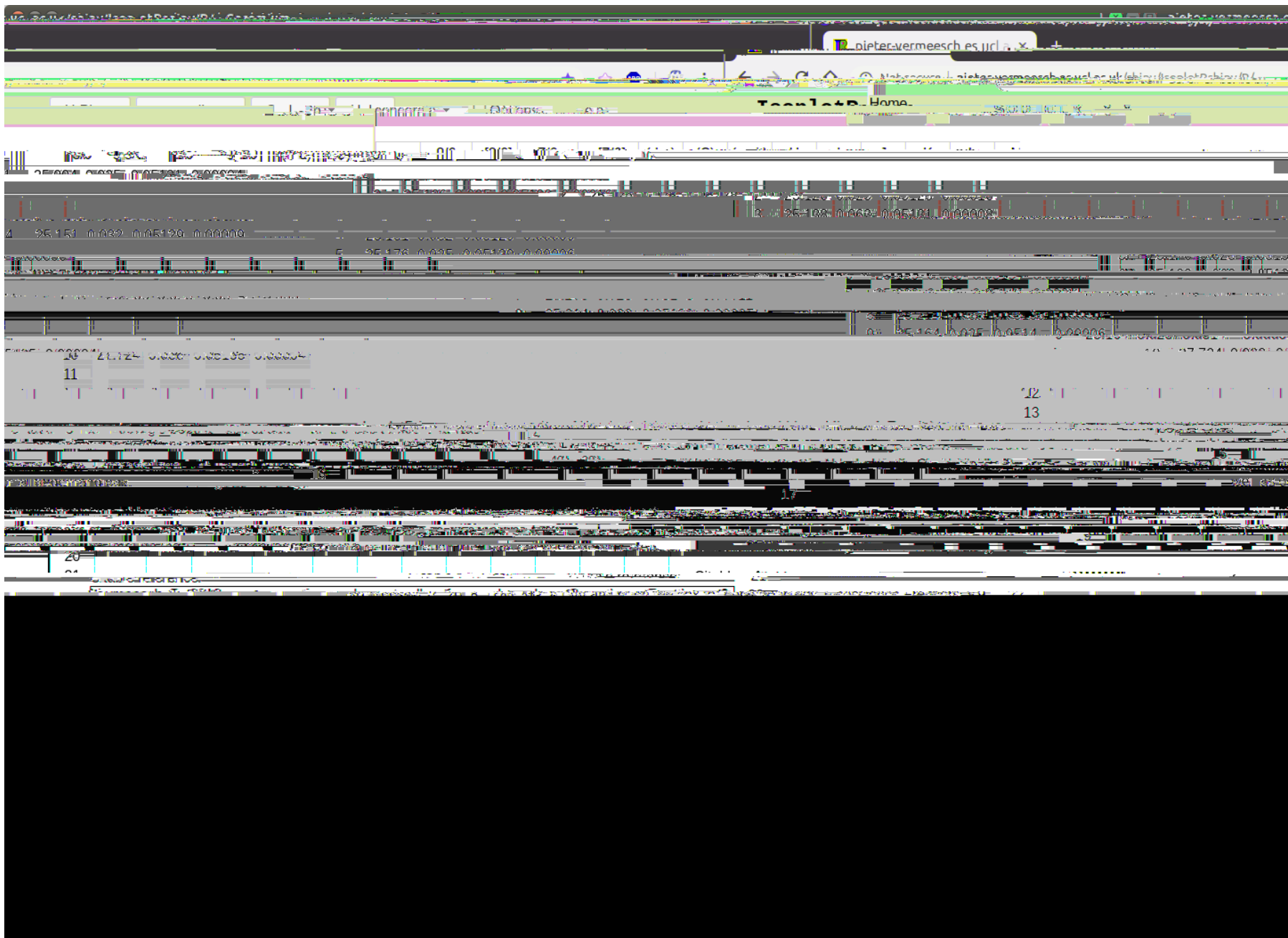
PyChron

Ar - Ar\_Redux

IsoplotRgui

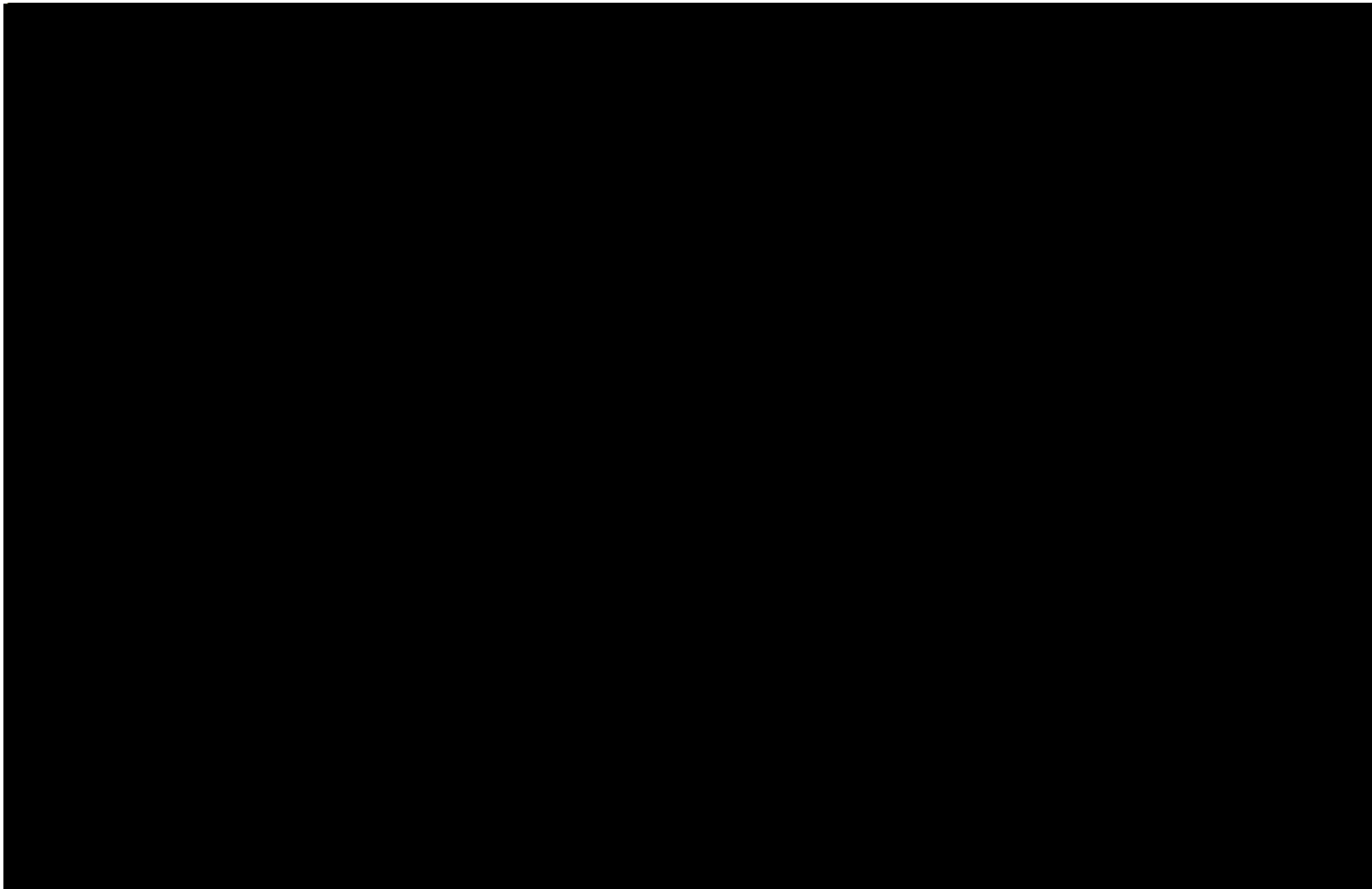








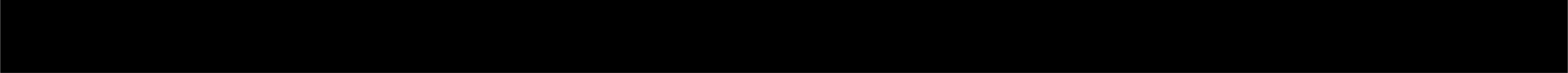




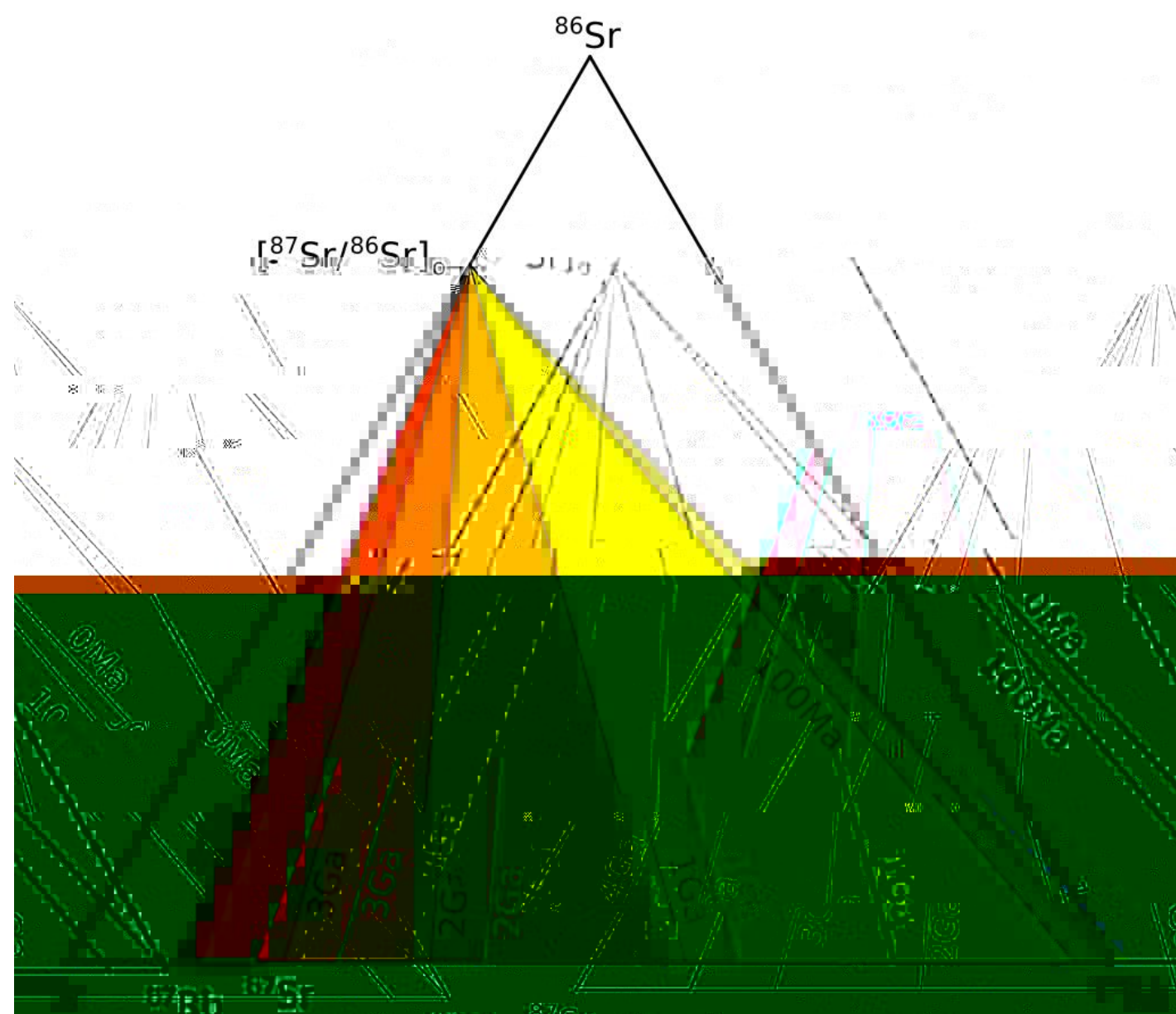


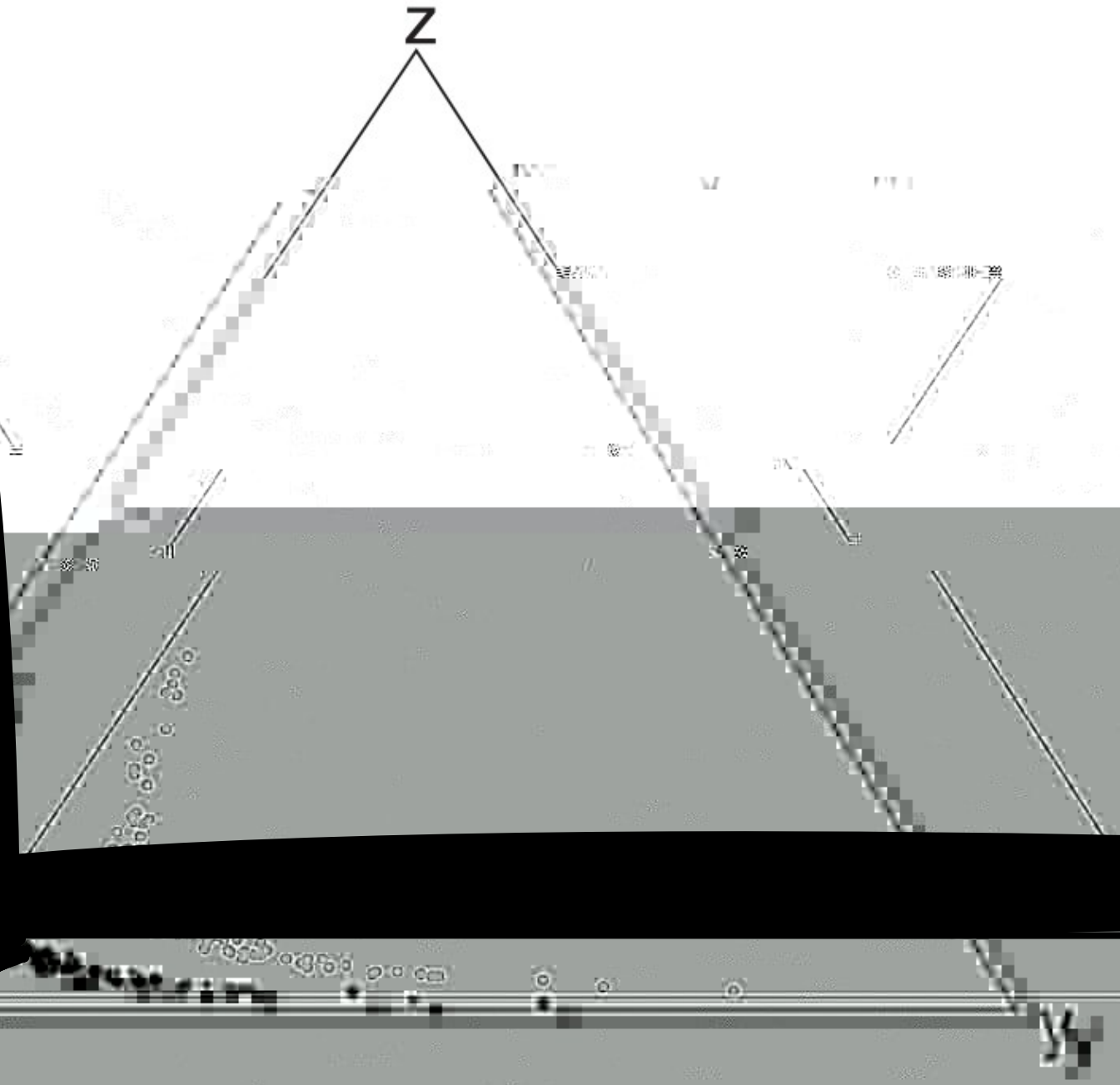
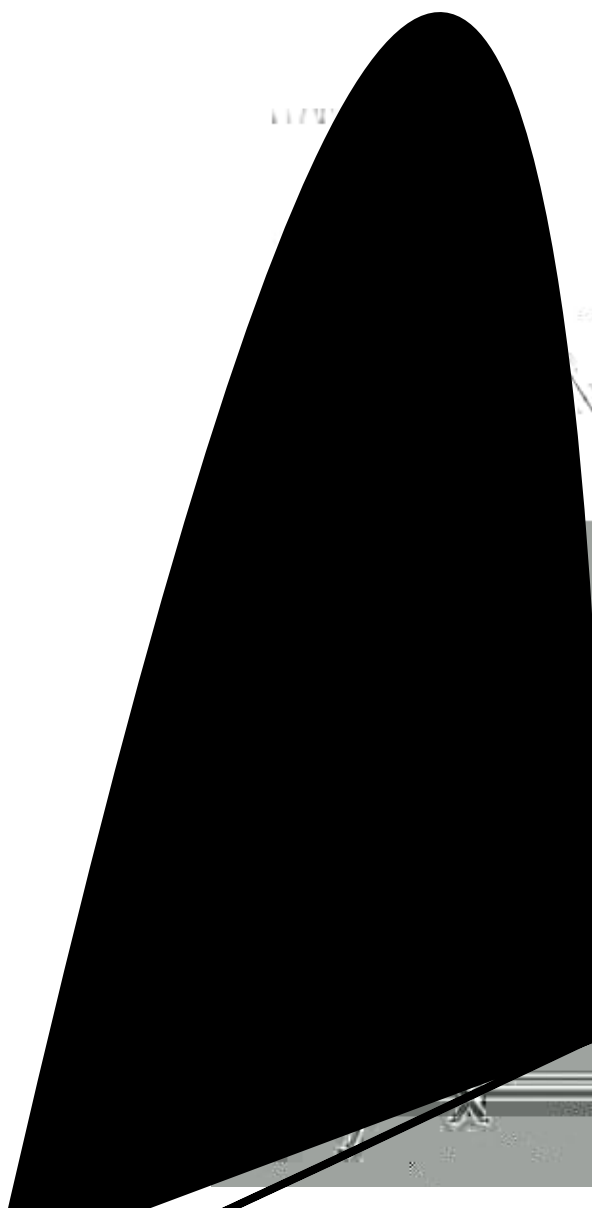


1. Isotopic measurements are compositional data
2. Error correlations are commonplace in geochronology







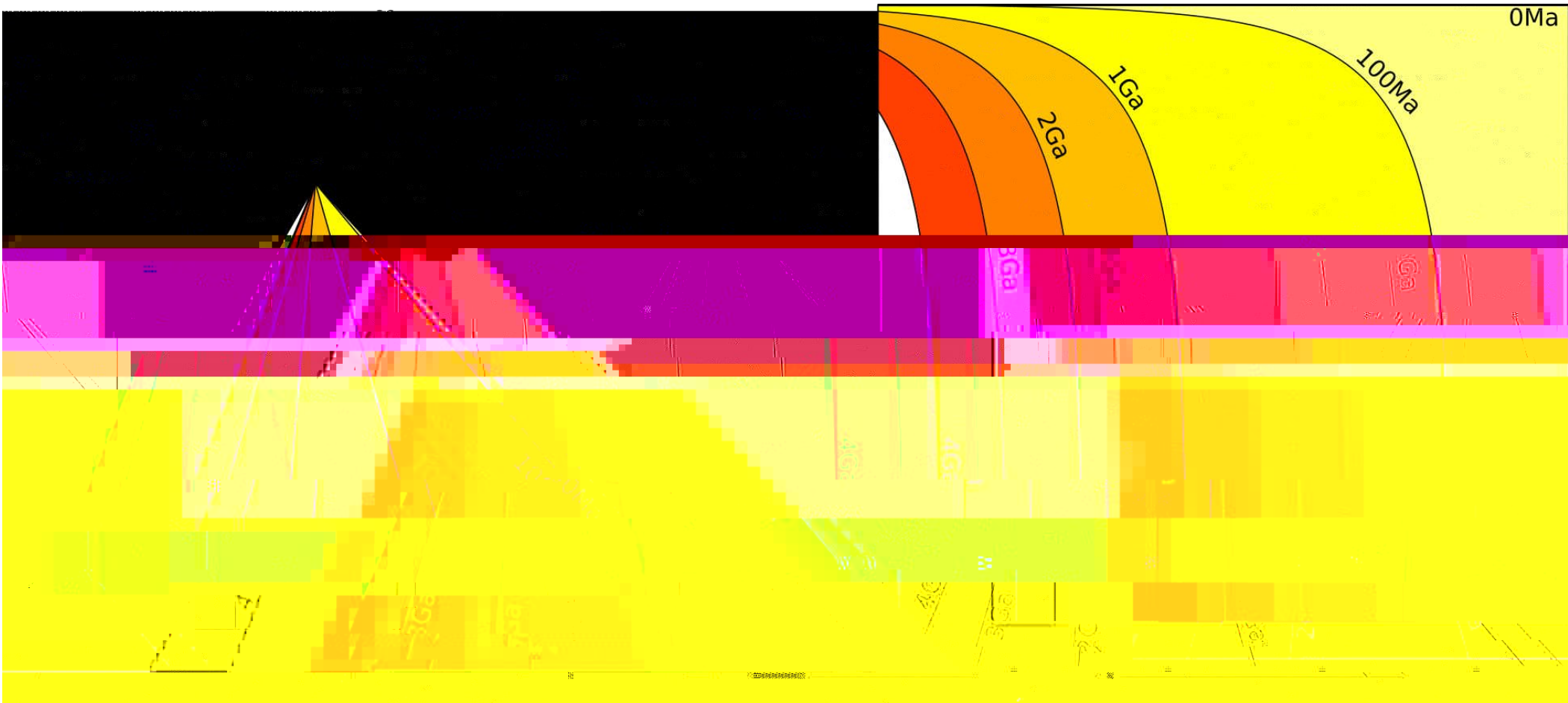


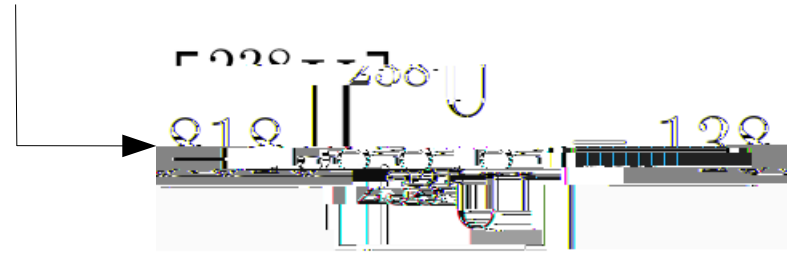
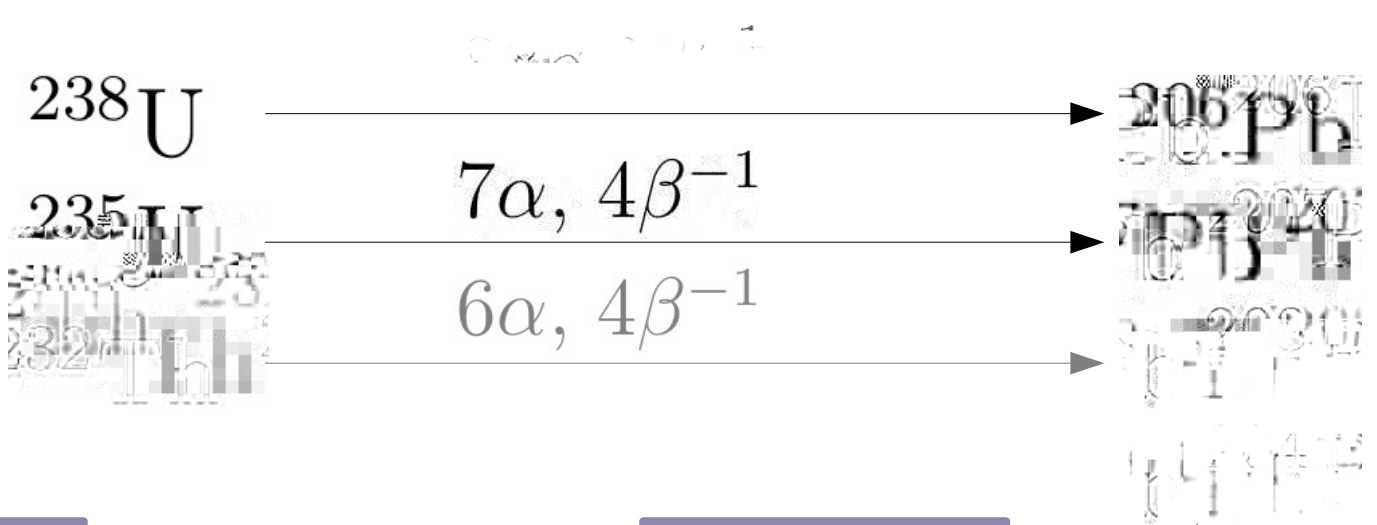








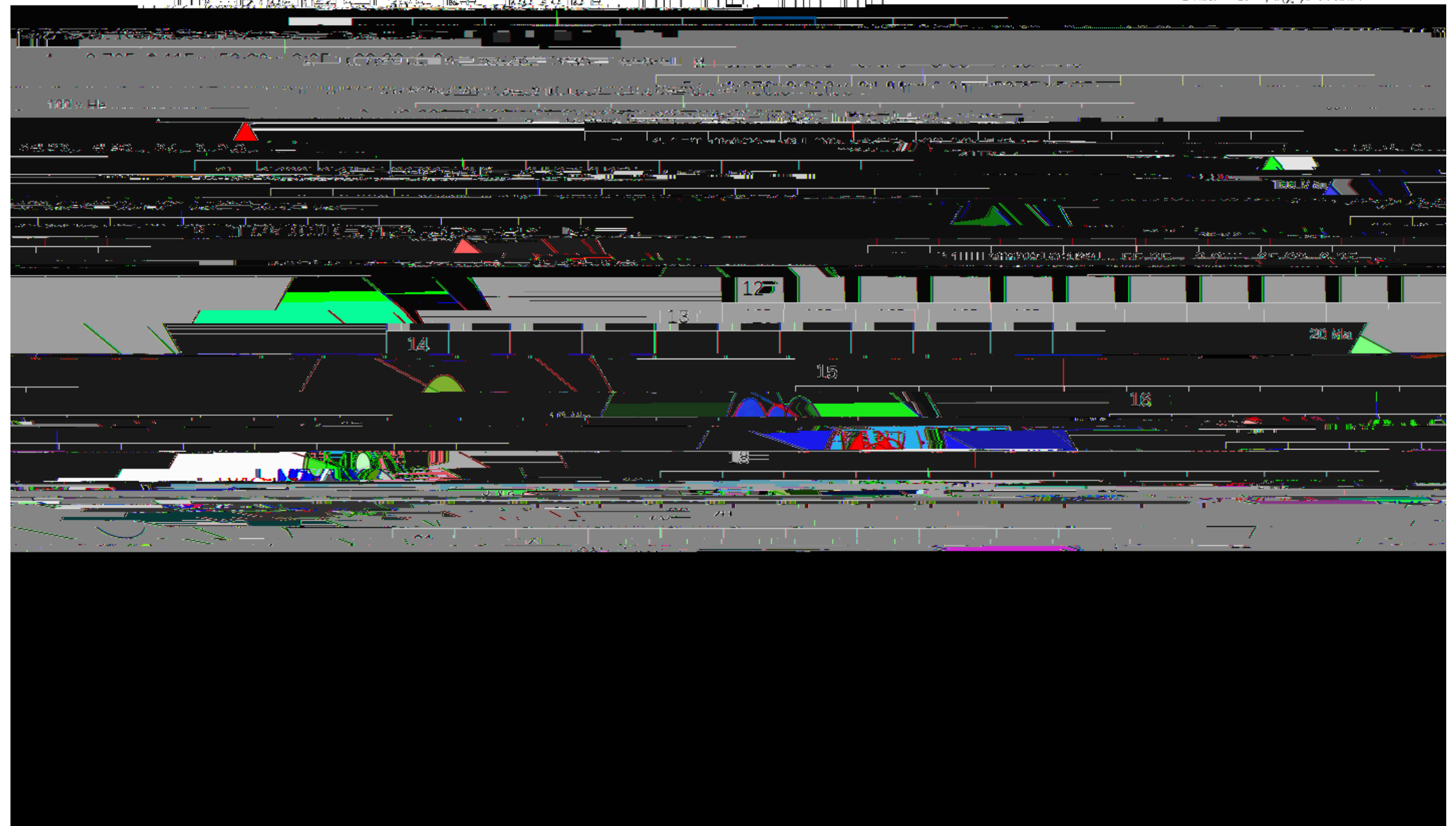








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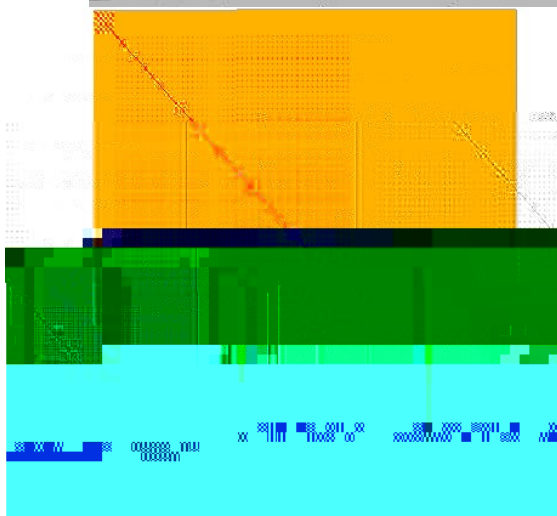


\$"

1. Isotopic measurements are compositional data
2. Error correlations are commonplace in geochronology



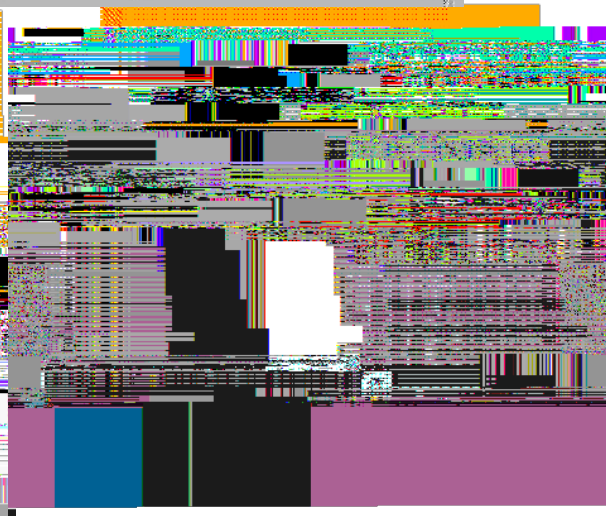
$$\sigma_{z^2}^2 = \begin{bmatrix} \frac{\partial f}{\partial x} & \frac{\partial f}{\partial y} \end{bmatrix} \begin{bmatrix} \sigma_{xx}^2 & \text{cov}(x,y) \\ \text{cov}(x,y) & \sigma_{yy}^2 \end{bmatrix} \begin{bmatrix} \frac{\partial f}{\partial x} \\ \frac{\partial f}{\partial y} \end{bmatrix}$$



Blank correction



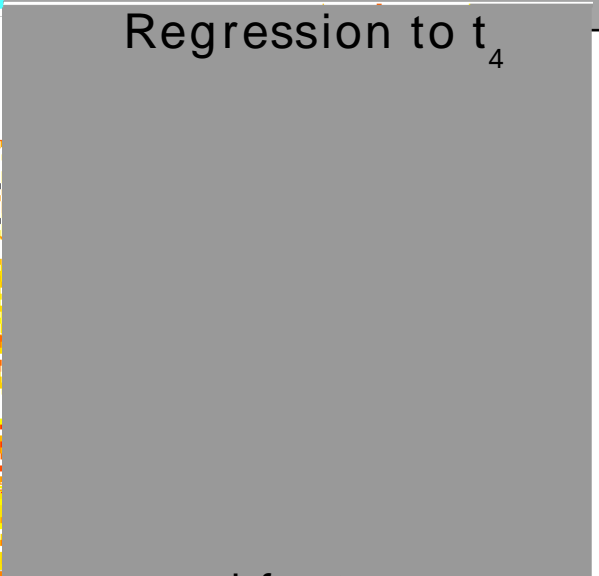
Regression to  $t_4$



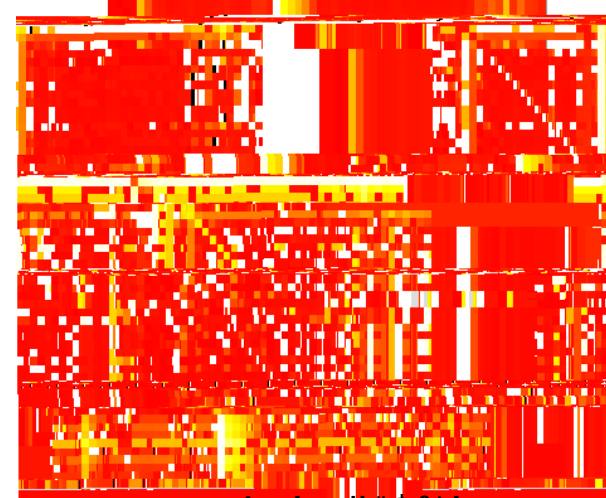
Decay correction



Interference correction



J-factor



4 ! r'#\$%! r



