Screen for outliers, calculate weighted mean stats and MSWD, single population?? = $s\_{x}$

(propagate variability in

common-Pb composition)

$$sm1\*^{2}+ε^{2}=sm1\*^{'}^{2}$$

$$sm1\*'$$

8. Propagate systematic uncertainties

1. ratio uncertainty RM ($s\_{y}$)
2. long term variance of validation material ($ε$’)
3. 
4. model common-Pb ratio uncertainty ()

7. Data population age

(n > 1, e.g. igneous popn)

7. Individual age

(n = 1, e.g. detrital spot)

5. Normalise data using reference material (RM) and

 determine excess scatter (using RM) resulting in

 MSWD = 1, add to each data point

(Correct for common-Pb (1))

Subtract gas blanks

$$s\_{x}^{2}+s\_{y}^{2}+ε'^{2}+l^{2}(+γ^{2})=stotal^{2}$$

At signal integration level

{

3. Correct for LIEF

2. Calculate ratios

Measure peaks

1. Measure gas blank

4. Calculate ratio mean

$$sm1\*$$

Reduction workflow

Uncertainty workflow

*s*blank

6. Correct for common-Pb (2) and propagate uncertainty