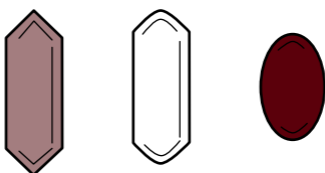


Select zircon for analysis:



Step 1. Select grain geometry and GEM category

Tetragonal

Ellipsoid

Step 2. Measure the grain's length, maximum width, and minimum width

Step 3. Calculate the 2D values

Step 4. Correct the 2D V , isotope-specific F_T , and R_{FT} values according to grain geometry

Example:

$$V_{GCM} = V_{2D} \times \text{correction}$$

Step 5. Assign uncertainties to V_{GCM} , isotope-specific $F_{T,GCM}$, and $R_{FT,GCM}$ according to grain geometry (all parameters) and maximum width ($F_{T,GCM}$)

Example:

$$V_{GCM} \pm 1\sigma \text{ uncertainty \%}$$

Step 6. Calculate derived parameters (mass, eU, corrected ZHe date) and propagate uncertainties