Data normalization

(1) Smaw - SLAP

(2) $\delta^{18}O_{O_2}$ vs $\delta^{18}O_{CO_2(known)}$ correction ($\lambda = 0.528$)

(3) calculation of mineral $\delta^{17}O$, $\delta^{18}O$, $\Delta'^{17}O$ using ${}^{17}\alpha^{90C}_{M-O_2(wost.IAEA603)}$, ${}^{18}\alpha^{90C}_{M-O_2(wost.IAEA603)}$

(4) temporal drift correction using $\Delta'^{17}O_{\text{mineral standards (wostbrock-IAEA603)}}$

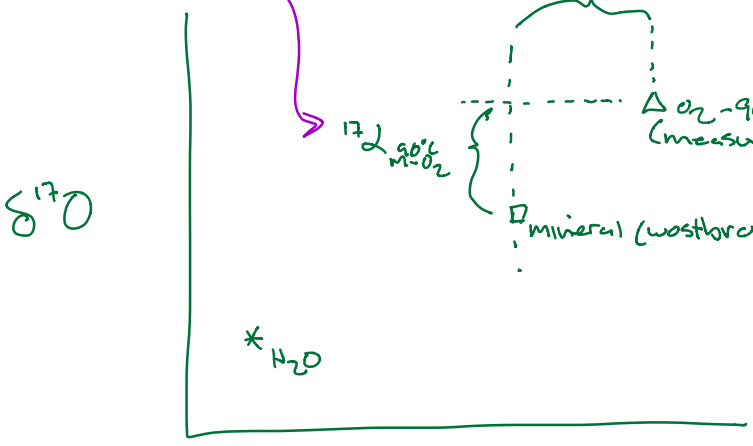
determine using analyses of IAEA-603, NBS-19, NBS-18
- this is a 1-time calc and fixed value. we do not calculate this for each session.
- i.e. materials that have "wostbrock" mineral $\Delta'^{17}O$ values

The session-level normalization is carried out in Step 4.

Calc of α_{M-O_2} values

we calculate ${}^{17}\alpha^{90C}_{M-O_2}$ value that makes $\Delta'^{17}O$ mineral = wostbrock value.

${}^{18}\alpha^{90C}_{M-O_2}$ ← we calc. given defined $\delta^{18}O$ values of standards and measured $\delta^{18}O_{O_2}$



Do for
- IAEA 603
- NBS-19 *
- NBS-18 *

*use judgment for crappy sessions.