



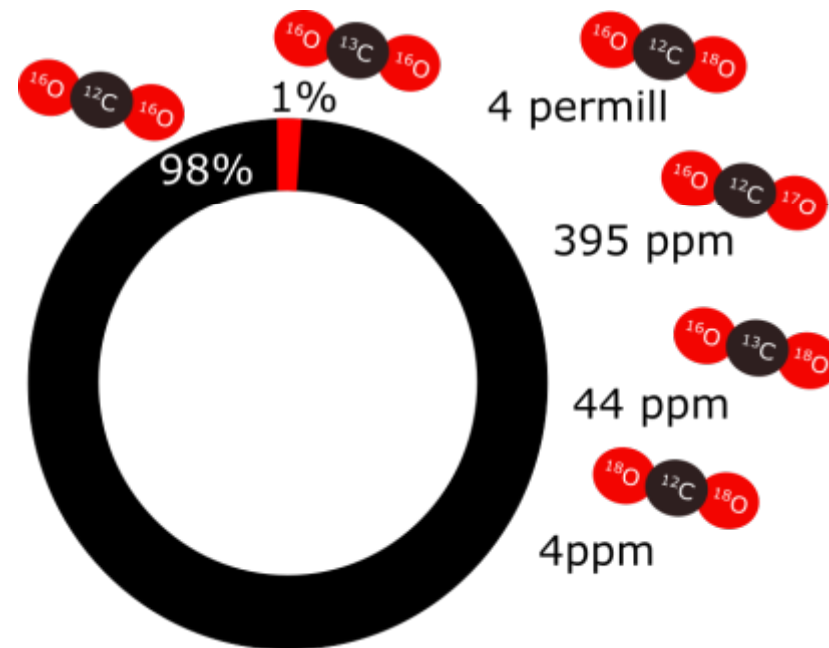
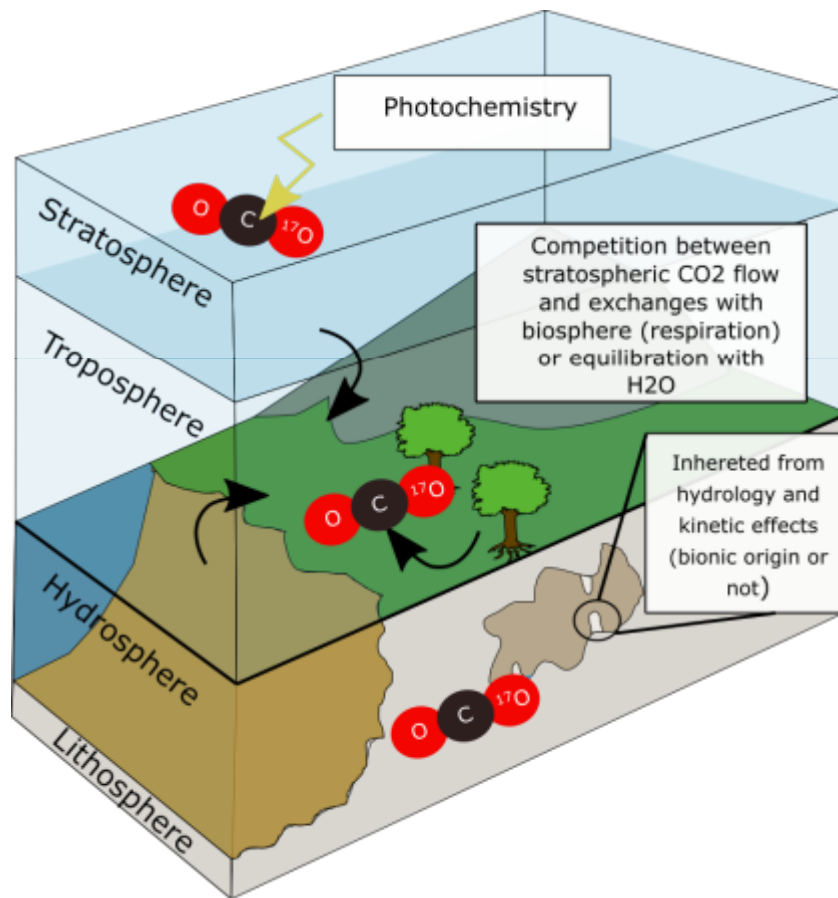
LSCE



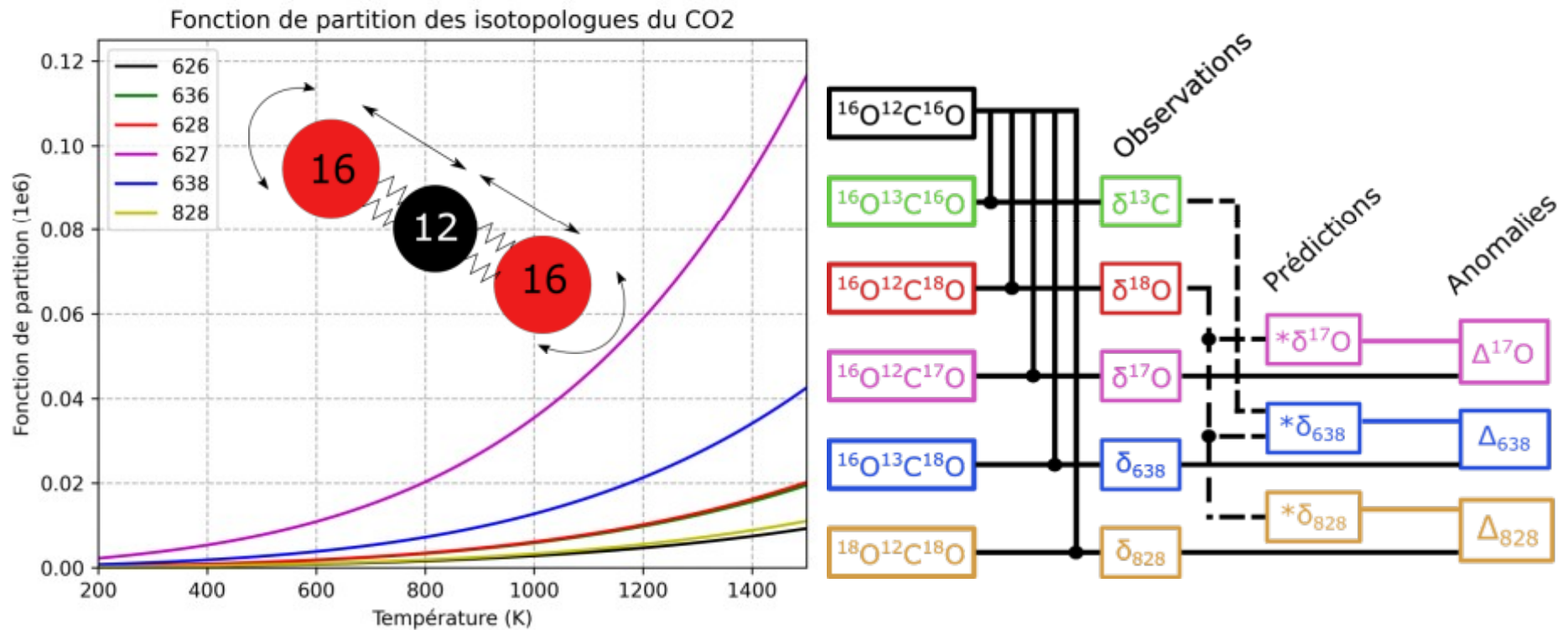
La technique VCOF-CRDS: mesures d'anomalies isotopiques de molécules d'intérêt géochimique

J. Chaillot*, M. Daëron, S. Kassi

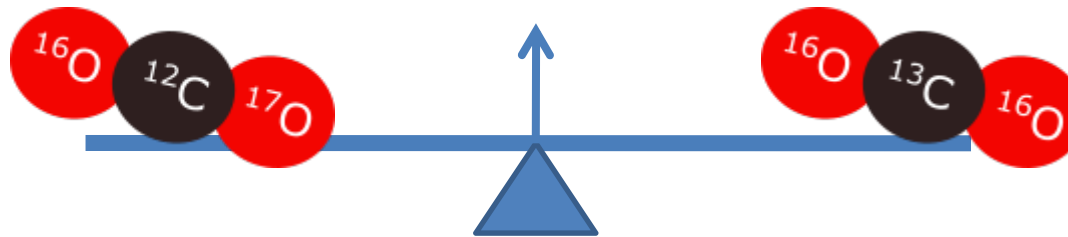
Pourquoi les anomalies?



Definitions des anomalies



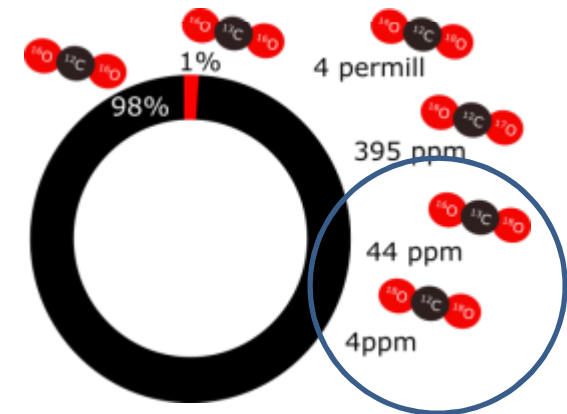
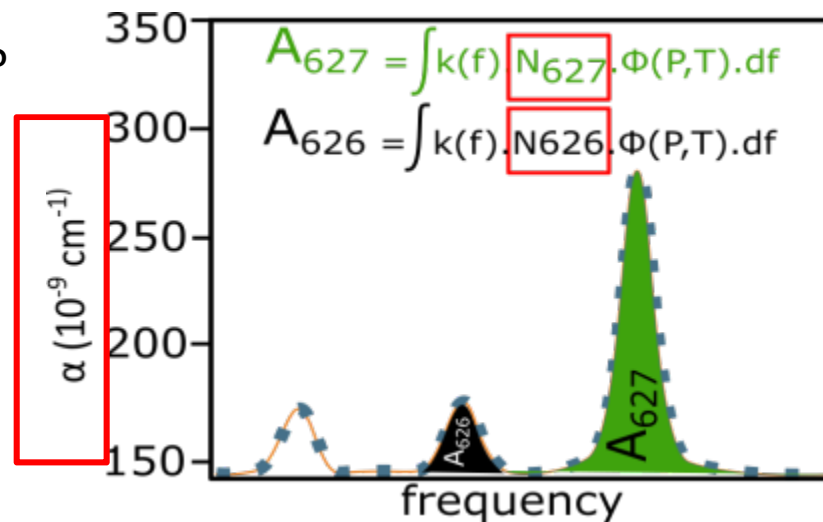
Les défis de la mesure optique



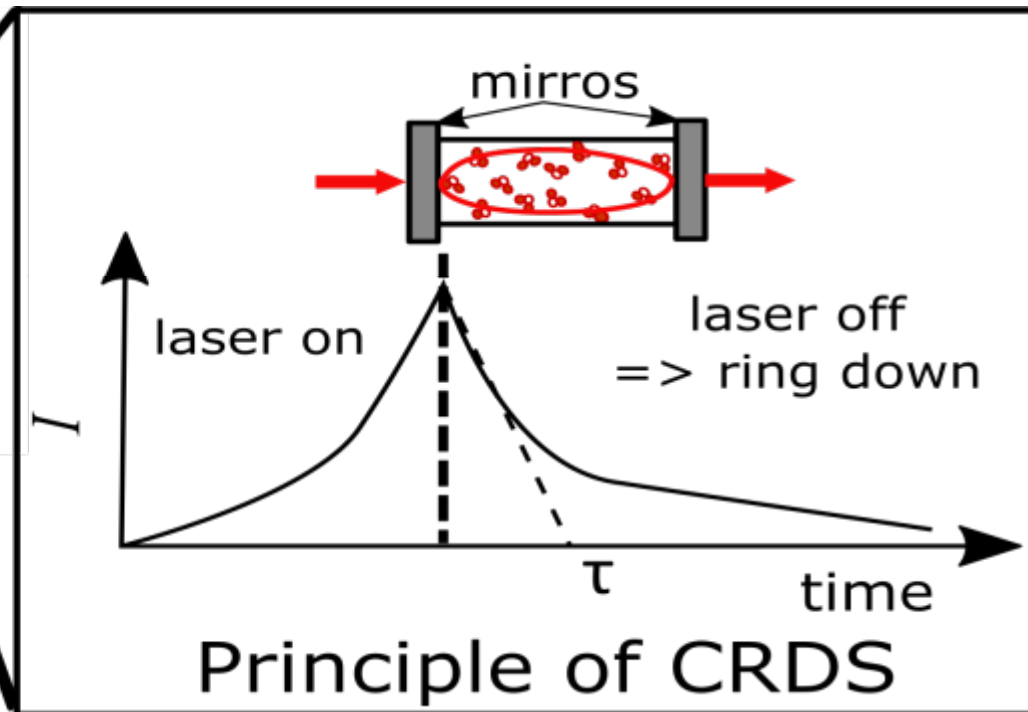
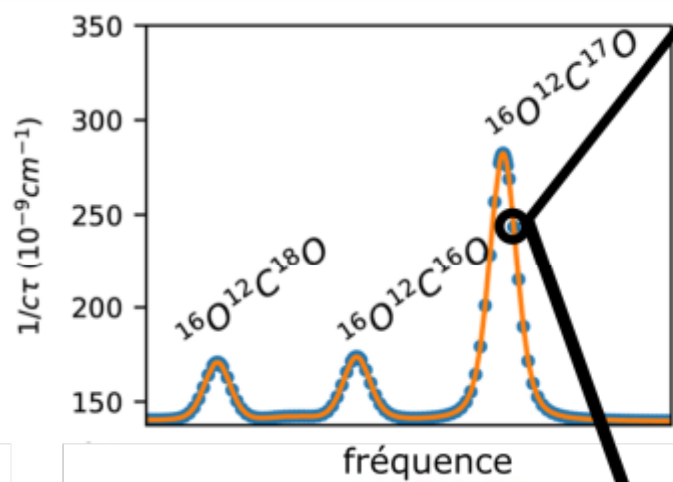
10ppm de précision?

$$\alpha \sim 10^{-7} \text{ cm}^{-1}$$

$$\varepsilon(\alpha) \sim 10^{-12} \text{ cm}^{-1}$$

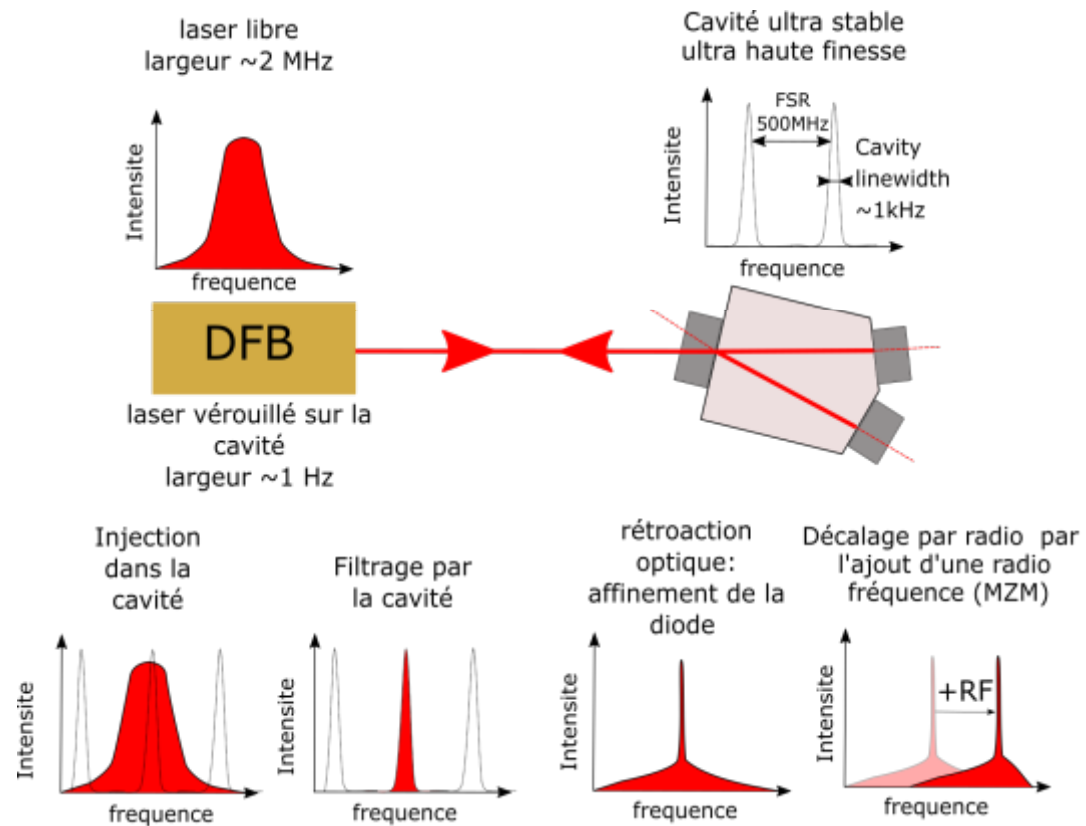


L'axe Y: la CRDS

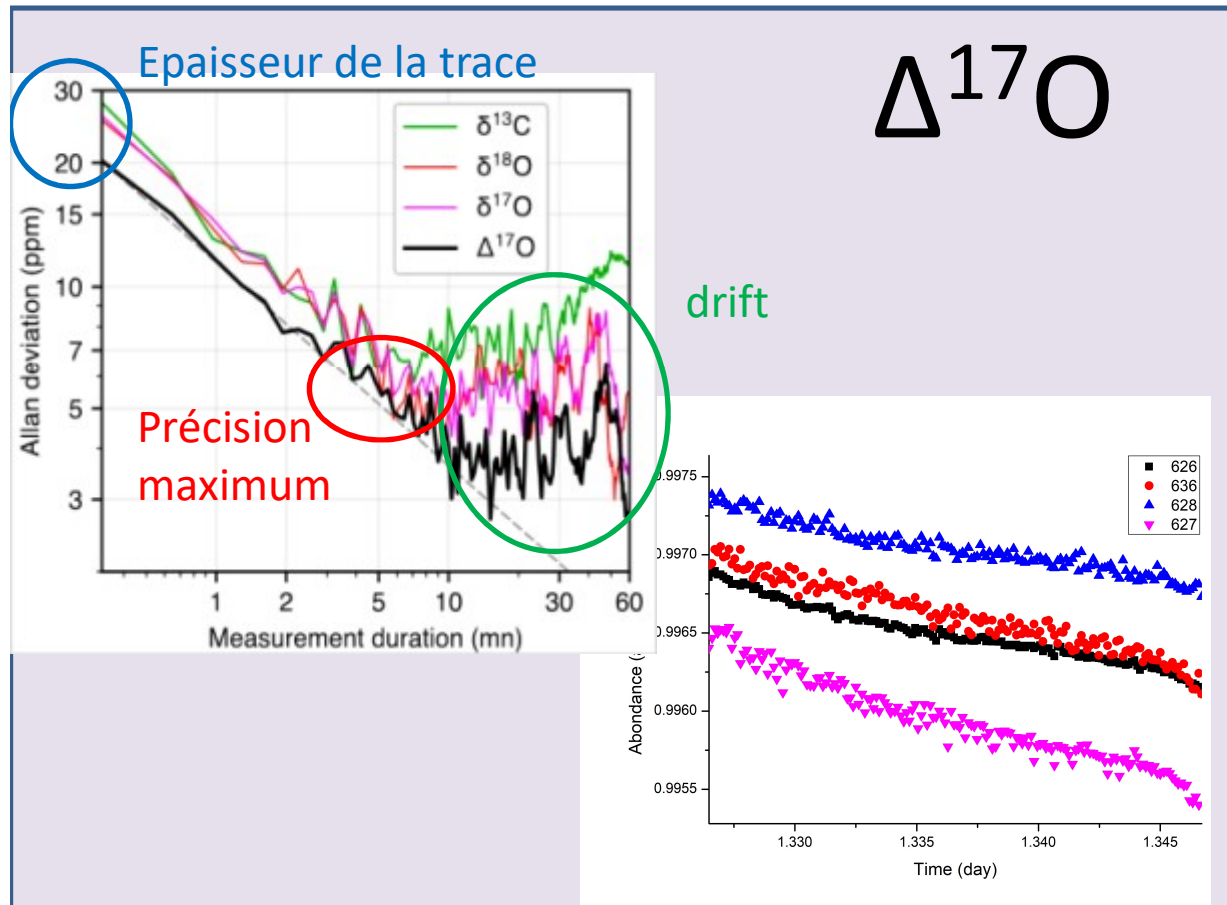


$$\epsilon(\alpha) \sim 5 \cdot 10^{-13} \text{ cm}^{-1}$$

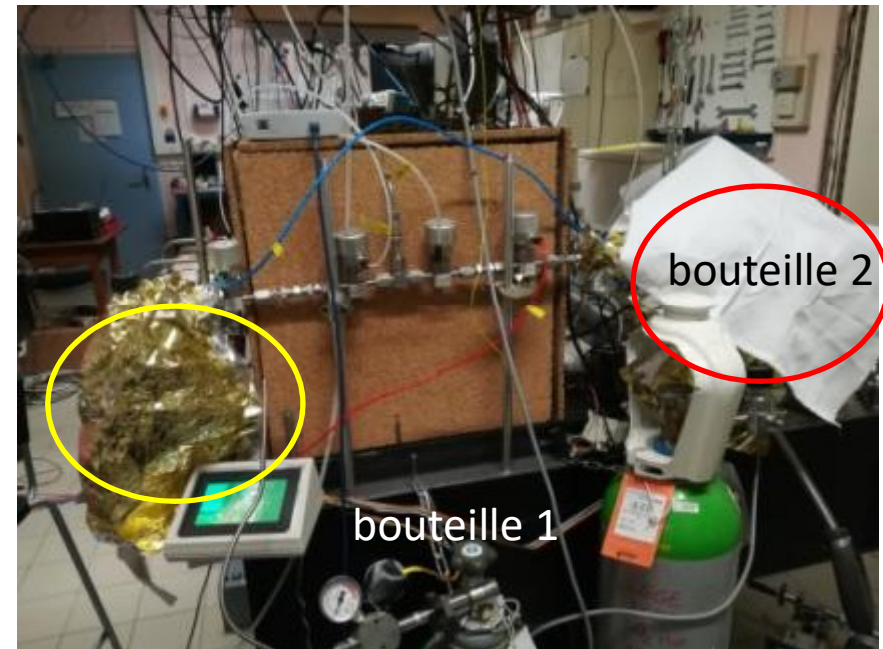
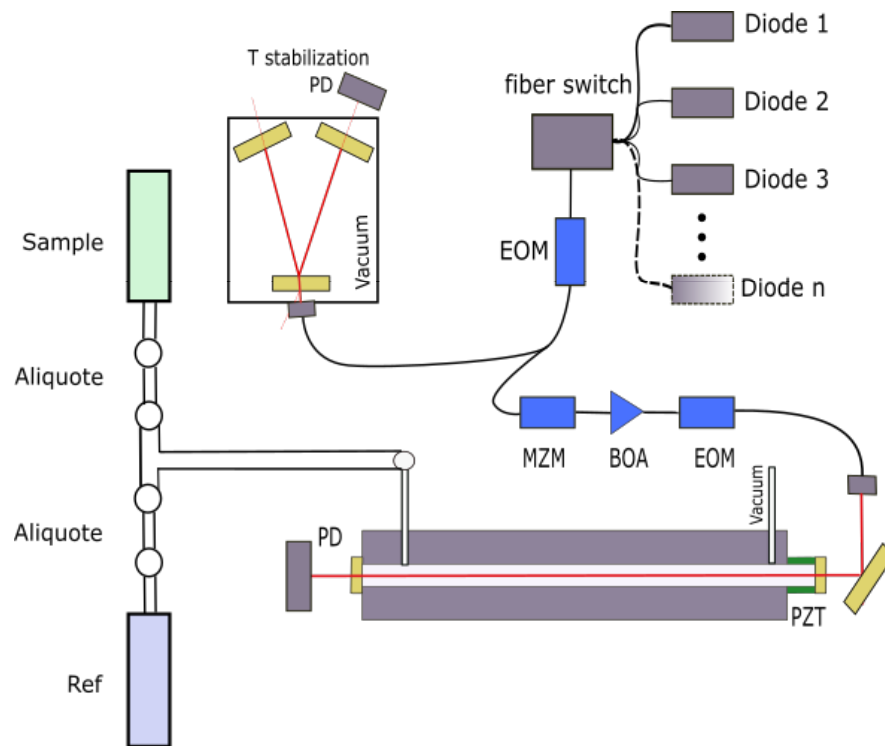
L'axe X: la VCOF



Précision interne de la VCOF-CRDS



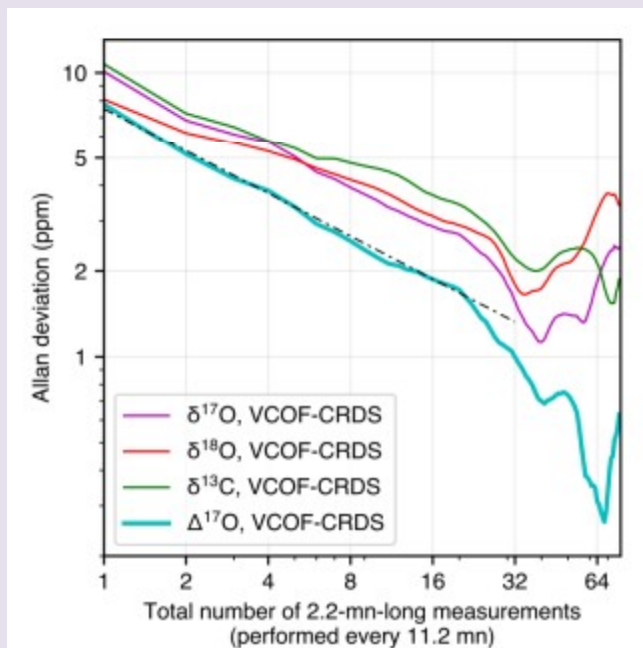
Précision externe de la VCOF-CRDS



Précision externe de la VCOF-CRDS

$\Delta^{17}\text{O}$

-10 ppm entre deux injections bouteilles (14 ppm pour des carbonates)
-2 ppm en moyennant sur 16 mesures => bruit aléatoire



Exactitude de la VCOF-CRDS

