

Supplementary Material

to

Controls on Li partitioning and isotopic fractionation in inorganic calcite.

by

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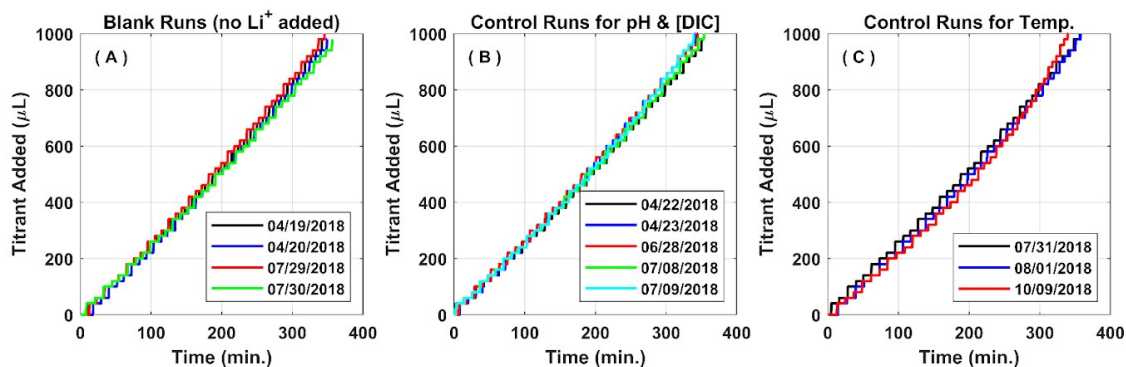


Figure S1: Comparison of the titration records for the blank (no LiCl added to experimental solutions: Panel A) and control experiments (with LiCl added: Panels B and C). The data are presented by the date when the calcite precipitation experiments were performed. The control experiments were revisited on many occasions throughout the study duration. They are grouped by the phases when the focus was given to the pH and [DIC] variation experiments (Panel B) and the temperature variation experiments (Panel C). The average of individual titrant dosing rates in $\mu\text{L}/\text{min}$ for all experiments compiled in panels A, B, and C was 2.83 ± 0.06 , 2.88 ± 0.07 , and 2.85 ± 0.08 ($\pm 1\sigma$ SD), respectively.

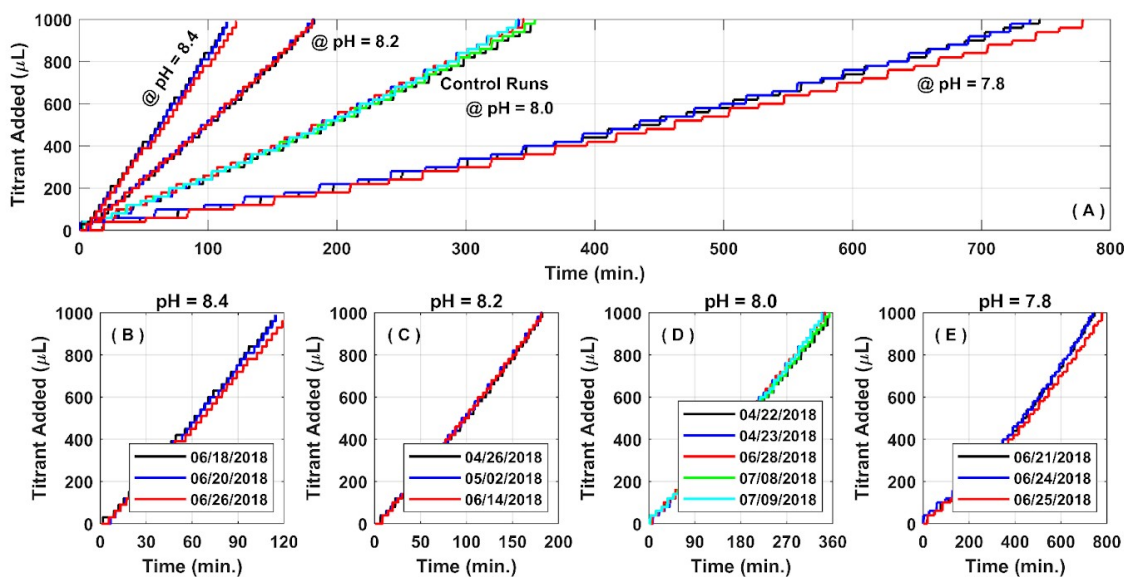


Figure S2: Comparison of the titration records for the calcite precipitation experiments performed at various solution pH values. With the increase in solution pH, calcite precipitation experiments progressed more rapidly.

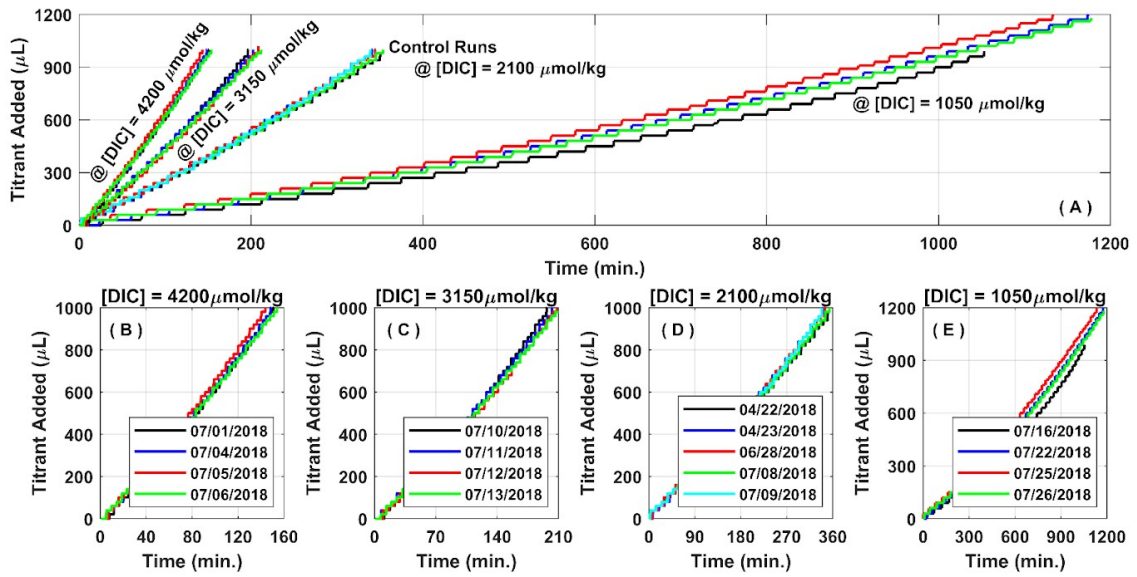


Figure S3: Comparison of the titration records for the calcite precipitation experiments performed at various [DIC]. With the increase in solution [DIC], calcite precipitation experiments progressed more rapidly.

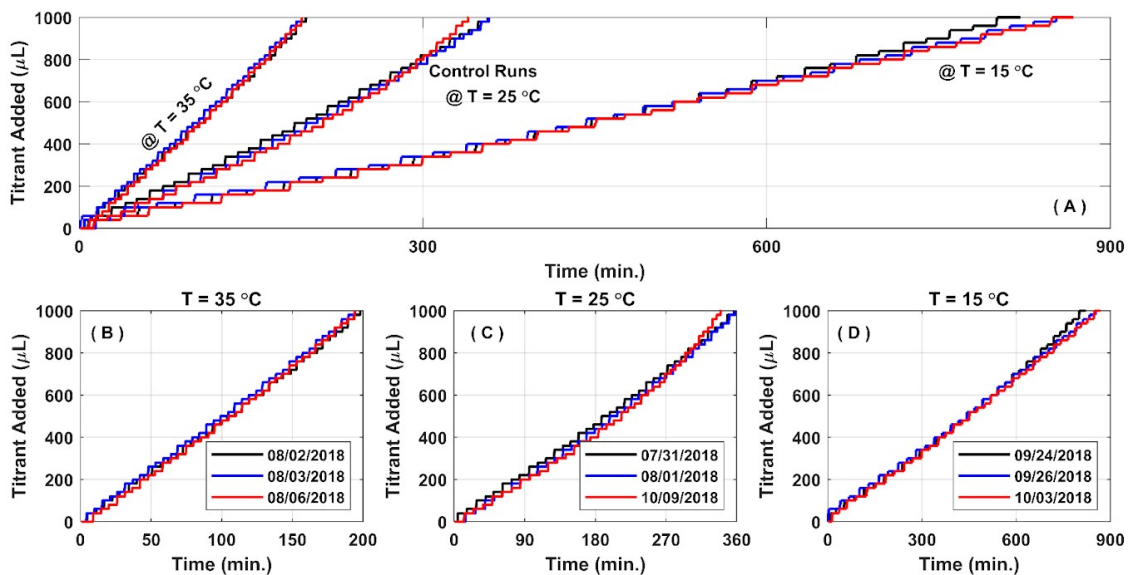


Figure S4: Comparison of the titration records for the calcite precipitation experiments performed at temperature. With the increase in temperature, calcite precipitation experiments progressed more rapidly.

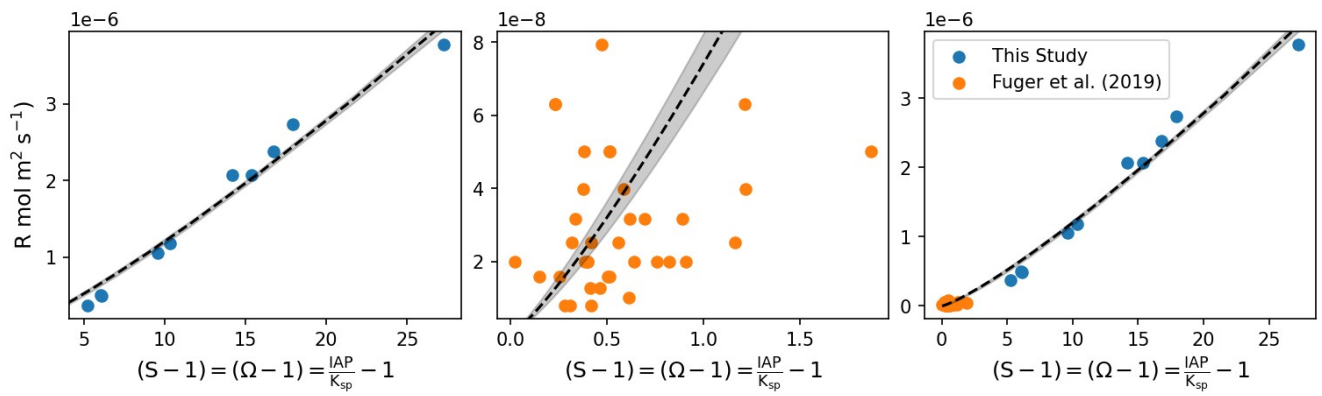


Figure S5: The relationship between solution saturation and reported precipitation rate in This Study and Fuger et al. (2019, 2022).