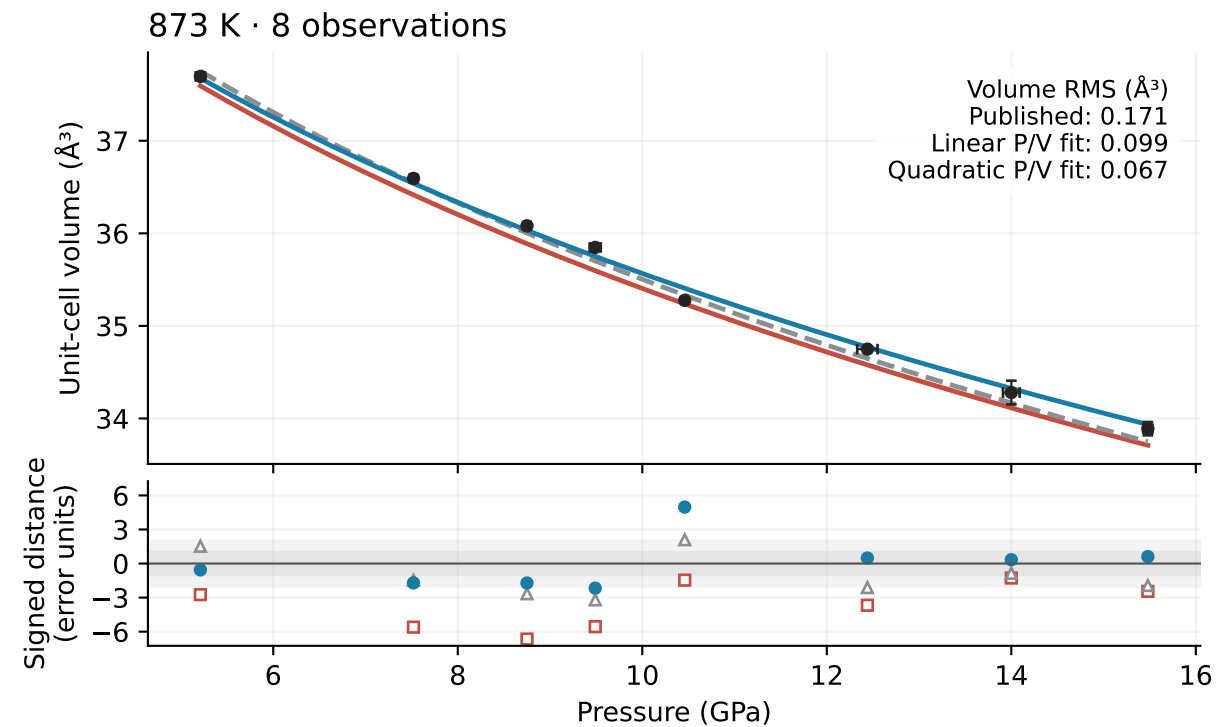
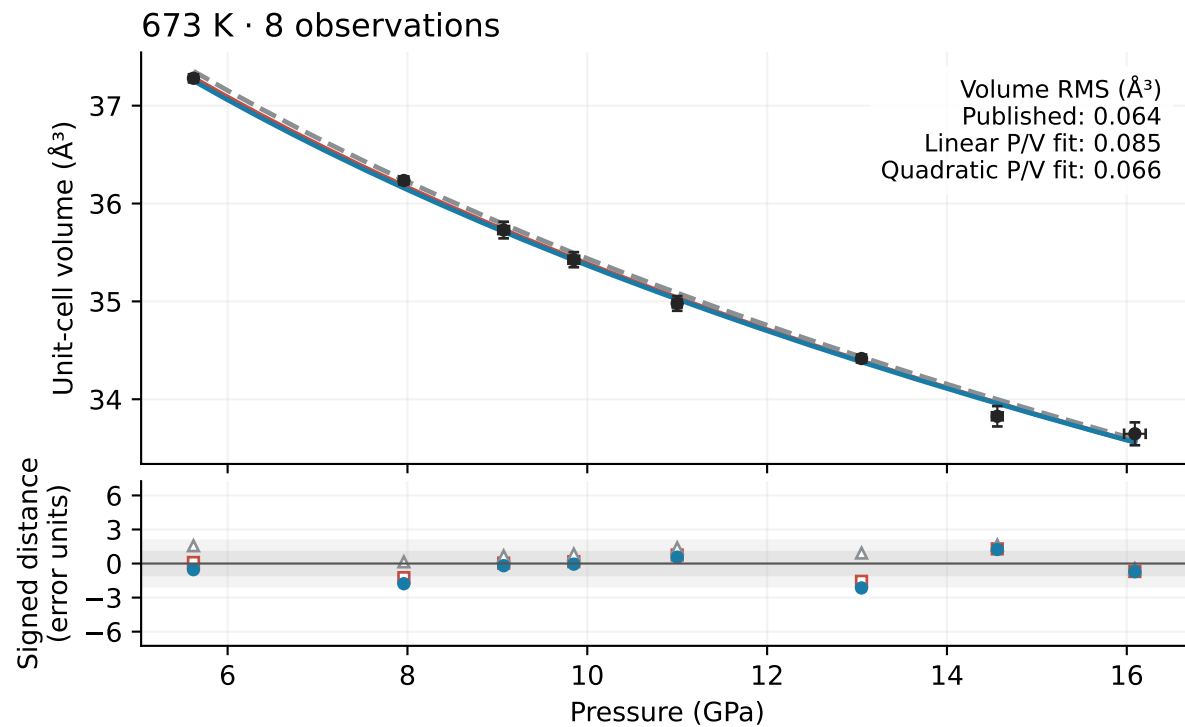
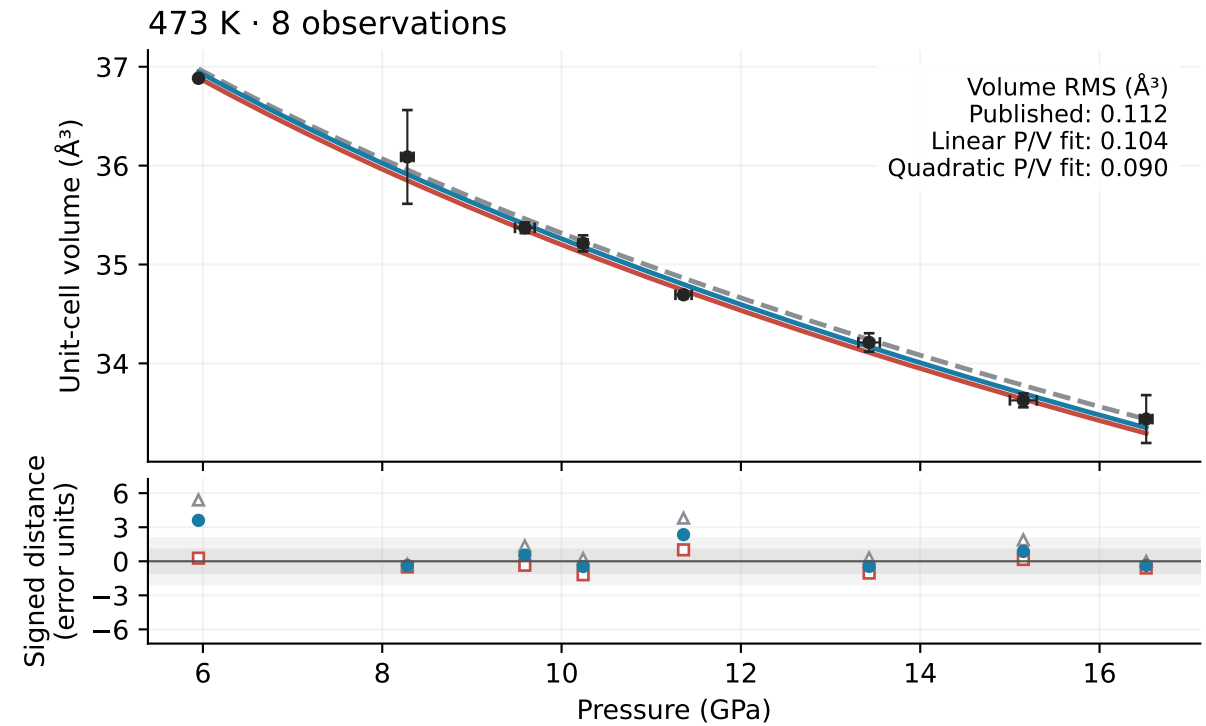
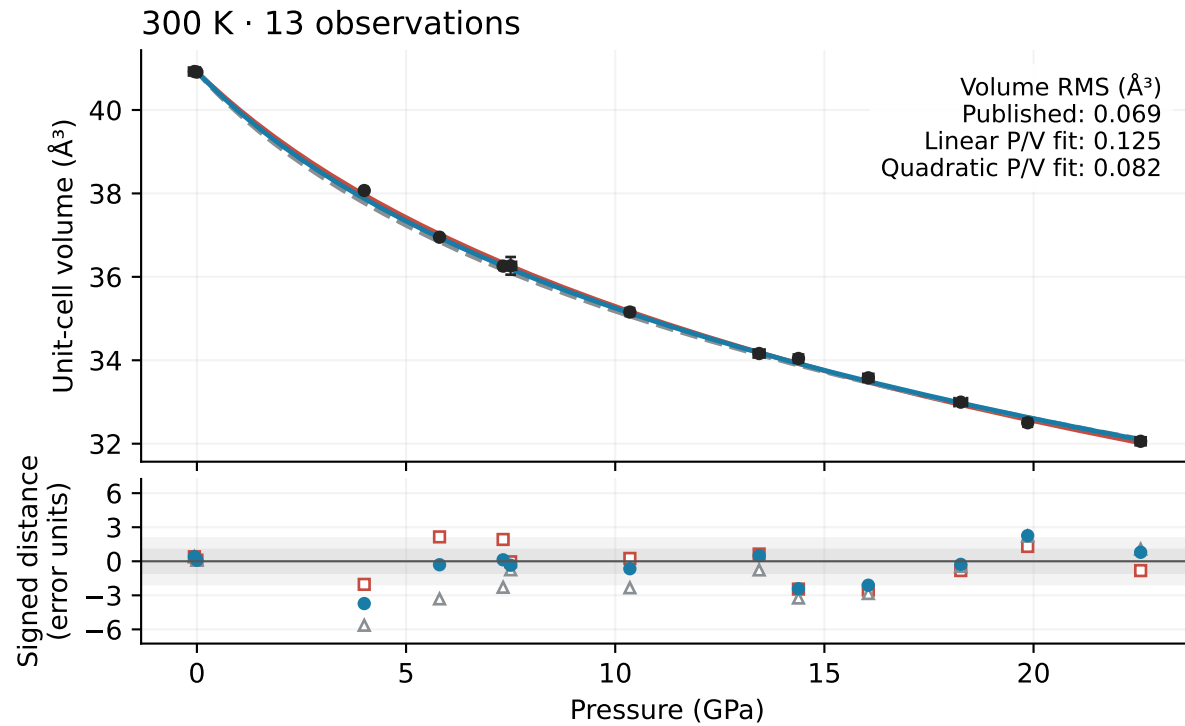


Brucite: quadratic versus linear temperature dependence of both moduli

- Published Table 4 observations + reported P/V errors
- Joint quadratic $K_0(T)$, $K'(T)$: both P/V errors, fixed ambient expansion
- - Joint linear $K_0(T)$, $K'(T)$: same P/V errors and fixed expansion
- Published individual isotherms: original expansion + tabulated moduli



Same 37 P-V-T rows, exact P/V errors-in-variables objective, and fixed ambient $V_0(T)$; only modulus temperature dependence changes.
Linear: $\chi^2 = 173.41$, 4 global parameters, dof = 33, reduced $\chi^2 = 5.25$. Quadratic: $\chi^2 = 98.09$, 6 parameters, dof = 31, reduced $\chi^2 = 3.16$.
Lower panels: signed orthogonal distance in reported P/V error units; shaded bands are ± 1 and ± 2 . Model and ambient-law uncertainty not shown.
Only four temperatures constrain the quadratic form. In-sample diagnostic comparison; source phase/calibration limits persist, catalog unchanged.