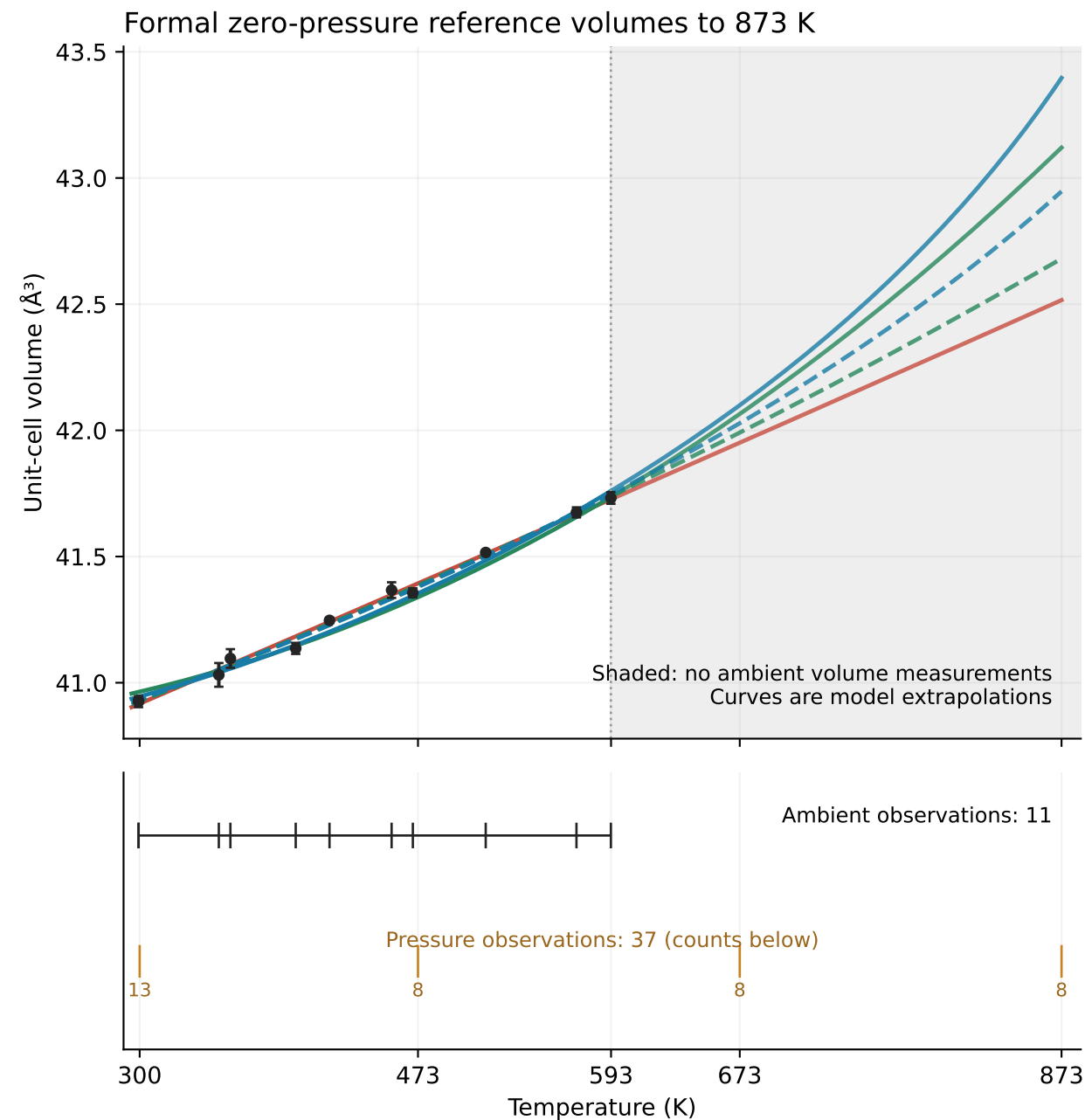
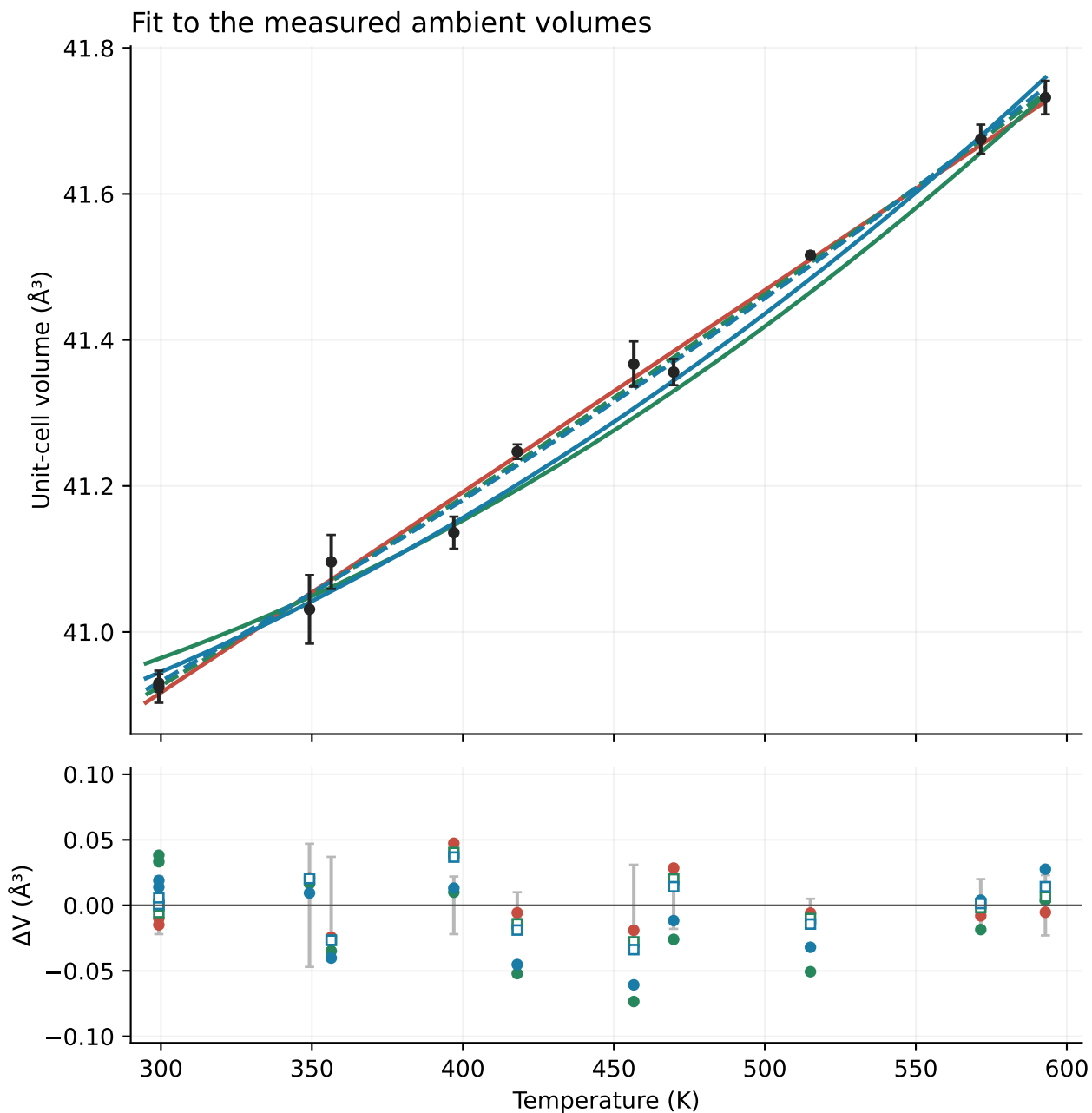


Brucite: ambient-only expansion fits versus joint P-V-T fits

- Ambient Table 1 observations + reported errors
- Published ambient expansion law
- Green: joint empirical fit (48 rows)
- Empirical: ambient-only fit (11 rows; previous purple law)
- MGD: joint fit (48 rows)
- MGD: ambient-only thermal refit (fixed joint K, K', q)



Solid green/blue: the same joint-fit parameters used in the previous P-V comparison; both include all 11 ambient + 37 pressure rows.
Dashed: optimize only ambient-volume residuals; MGD holds joint K300, K'300 and q fixed and reaches the theta lower bound (10 K).
 ΔV = calculated – observed ambient volume; grey bars show reported errors. Our refits use unweighted volume residuals; red retains published coefficients.
Above 592.9 K ambient V is unmeasured; Fukui reports ambient dehydration at 600.6 K. High-pressure data do not establish stable ambient brucite there.