Supplementary Material: Fluid Redox Fingerprint of the $CaCO_3$+Antigorite Dehydration Reaction in Subducted Metacarbonate Sediments

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Table S1 *Polynomial equations, and T(K) applicability boundaries, used to model the prograde BIU P-T path in phase diagram calculations. Multiple equations are required to reproduce the complex shape of the BIU P-T path*

	T(K) MIN	T(K) MAX	P -T PATH POLYNOMIAL EQUATIONS
1° SEGMENT	785	802	P (bar)= - 11623430.4685661 + 45373.8600314168 x T(K) - 59.0614453375069 x T(K)^2 + 0.025671244010 x T(K)^3
2° SEGMENT	802	835	P (bar) = 129829108.681766 - 475218.325922058 x T(K) + 579.495527018783 x T(K)^2 - 0.235373837137392 x T(K)^3

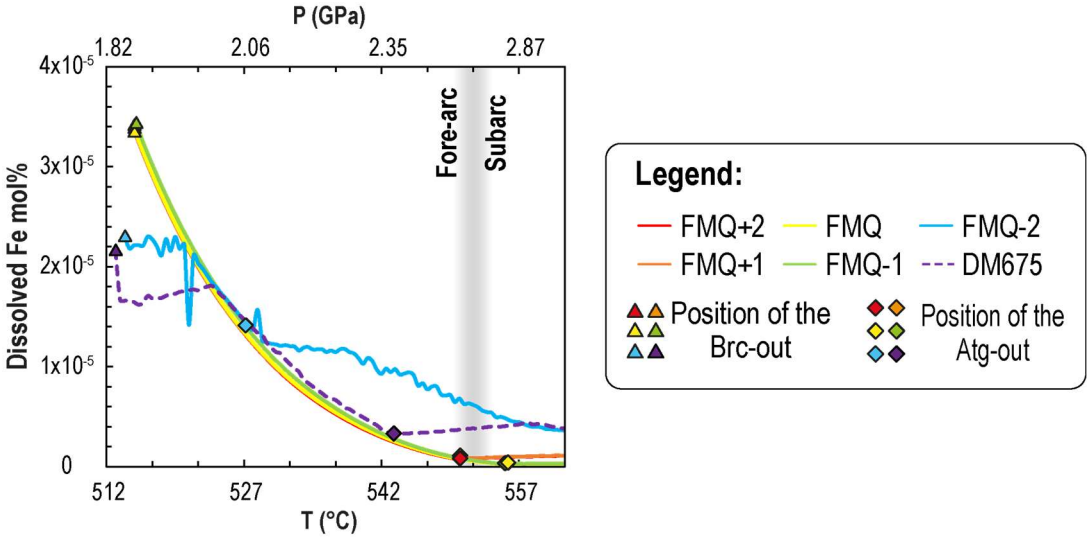

Figure S1 *Dissolved Fe in the fluid phase as a function of T, P and* fO_2

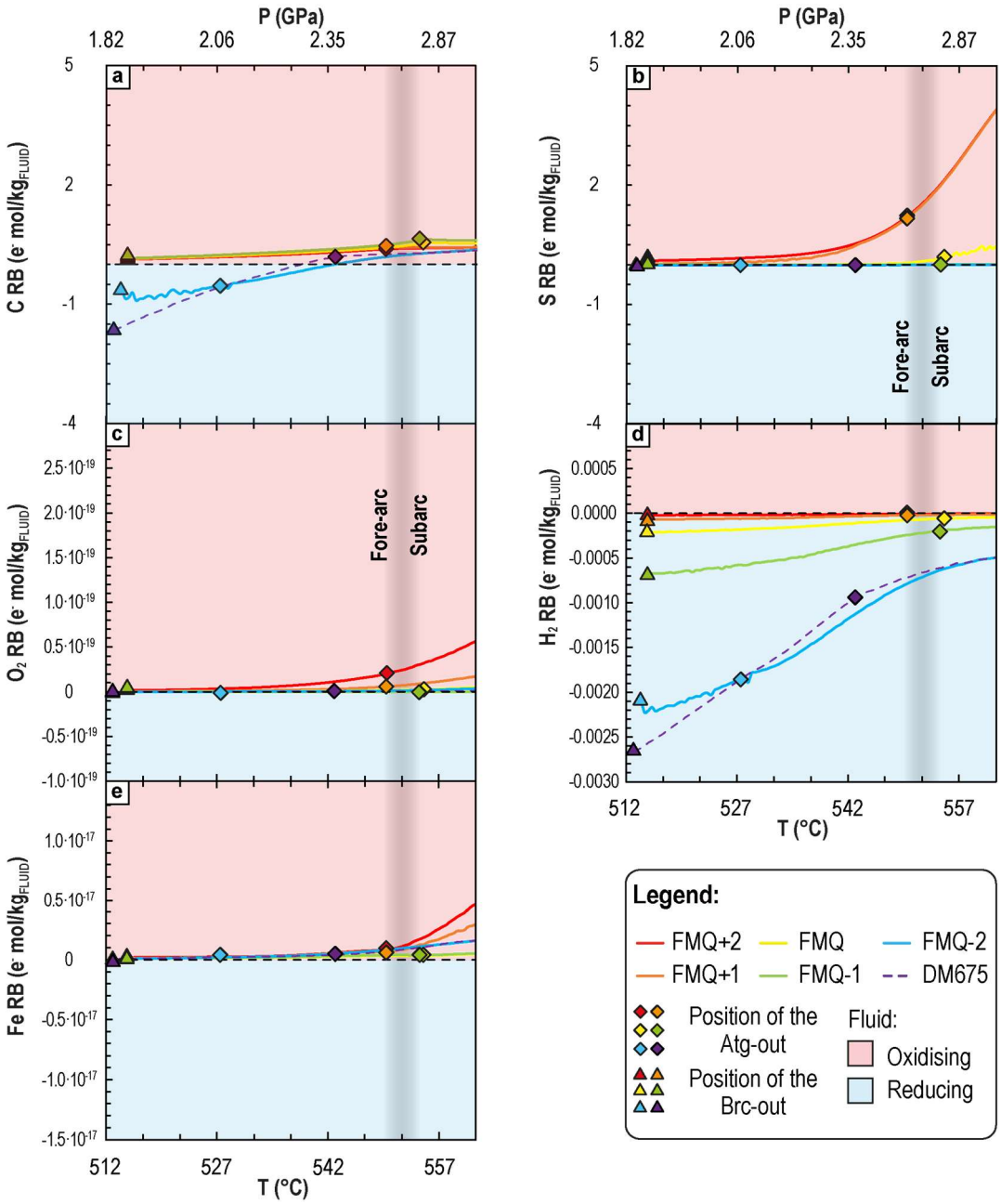

Figure S2 *Calculated specific redox budgets for C, S, O_2, H_2 and Fe as a function of T, P and fO_2*