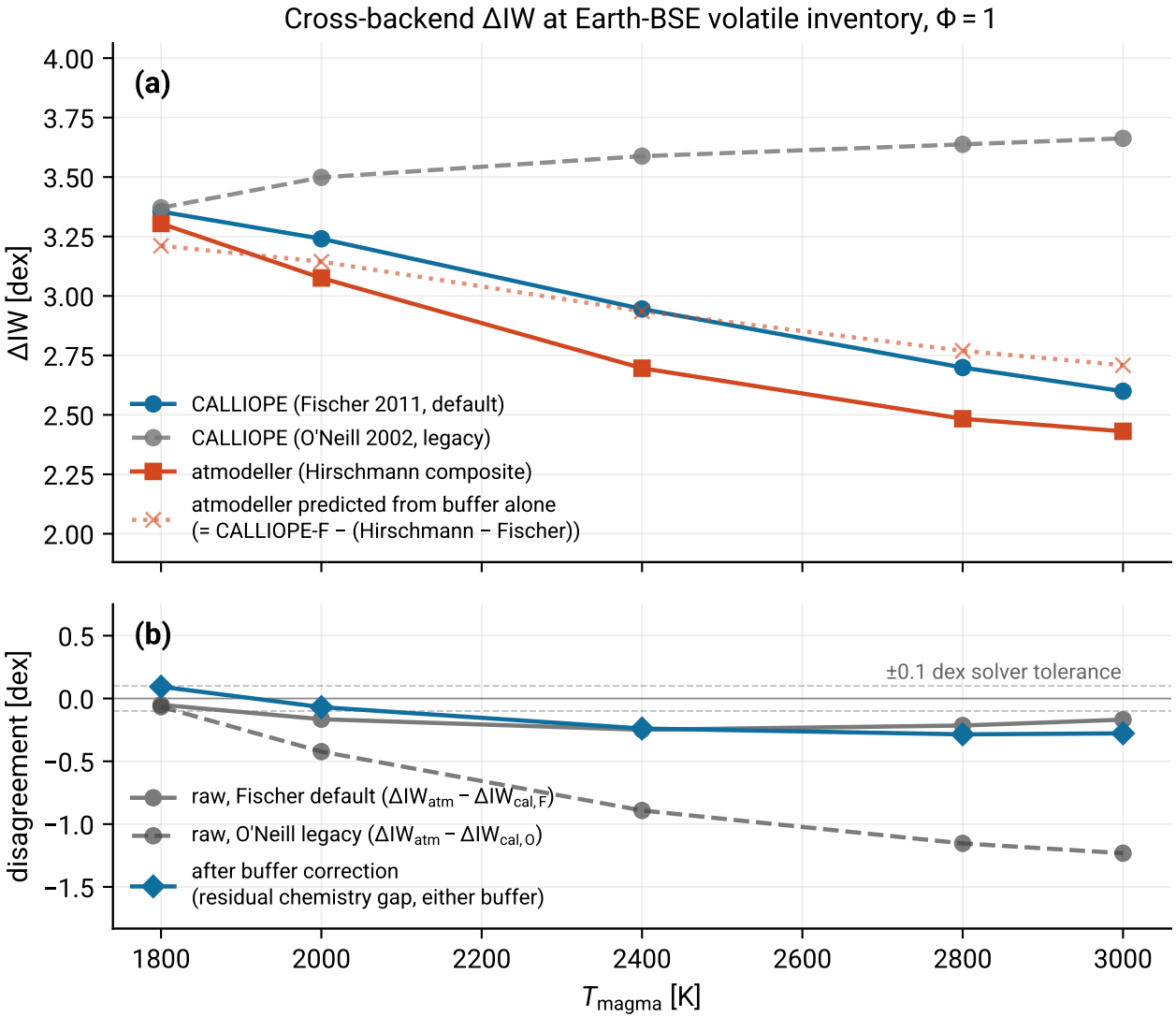
Cross-backend ΔIW at Earth-BSE volatile inventory, Φ = 1
(a)
ΔIW [dex]
4.00
3.75
3.50
3.25
3.00
2.75
2.50
2.25
2.00
CALLIOPE (Fischer 2011, default)
CALLIOPE (O'Neill 2002, legacy)
atmodeller (Hirschmann composite)
atmodeller predicted from buffer alone
(= CALLIOPE-F − (Hirschmann − Fischer))
(b)
disagreement [dex]
0.5
0.0
−0.5
−1.0
−1.5
±0.1 dex solver tolerance
raw, Fischer default (ΔIW_atm − ΔIW_cal,F)
raw, O'Neill legacy (ΔIW_atm − ΔIW_cal,O)
after buffer correction
(residual chemistry gap, either buffer)
1800
2000
2200
2400
2600
2800
3000
T_magma [K]