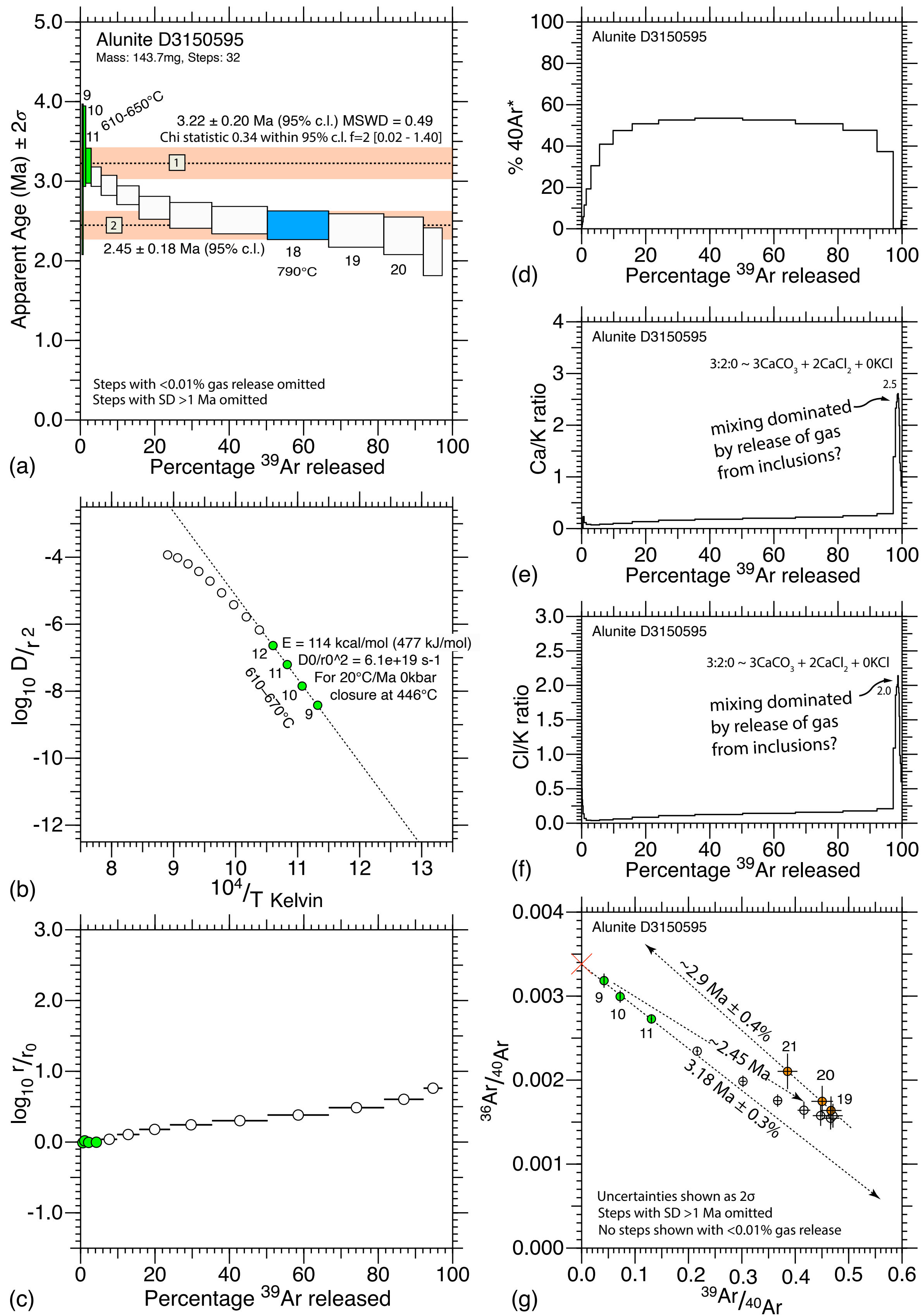
Alunite D3150595
Mass: 143.7mg, Steps: 32
3.22 ± 0.20 Ma (95% c.l.) MSWD = 0.49
Chi statistic 0.34 within 95% c.l. f=2 [0.02 - 1.40]
610-650°C
2.45 ± 0.18 Ma (95% c.l.)
790°C
Steps with <0.01% gas release omitted
Steps with SD >1 Ma omitted
Apparent Age (Ma) ± 2σ
Percentage 39Ar released
(a)
Alunite D3150595
% 40Ar*
Percentage 39Ar released
(d)
Alunite D3150595
3:2:0 ~ 3CaCO3 + 2CaCl2 + 0KCl
mixing dominated by release of gas from inclusions?
Ca/K ratio
Percentage 39Ar released
(e)
E = 114 kcal/mol (477 kJ/mol)
D0/r0^2 = 6.1e+19 s-1
For 20°C/Ma 0kbar closure at 446°C
610-670°C
log10 D/r2
10^4/T Kelvin
(b)
Alunite D3150595
3:2:0 ~ 3CaCO3 + 2CaCl2 + 0KCl
mixing dominated by release of gas from inclusions?
Cl/K ratio
Percentage 39Ar released
(f)
log10 r/r0
Percentage 39Ar released
(c)
Alunite D3150595
~2.9 Ma ± 0.4%
~2.45 Ma
3.18 Ma ± 0.3%
Uncertainties shown as 2σ
Steps with SD >1 Ma omitted
No steps shown with <0.01% gas release
36Ar/40Ar
39Ar/40Ar
(g)