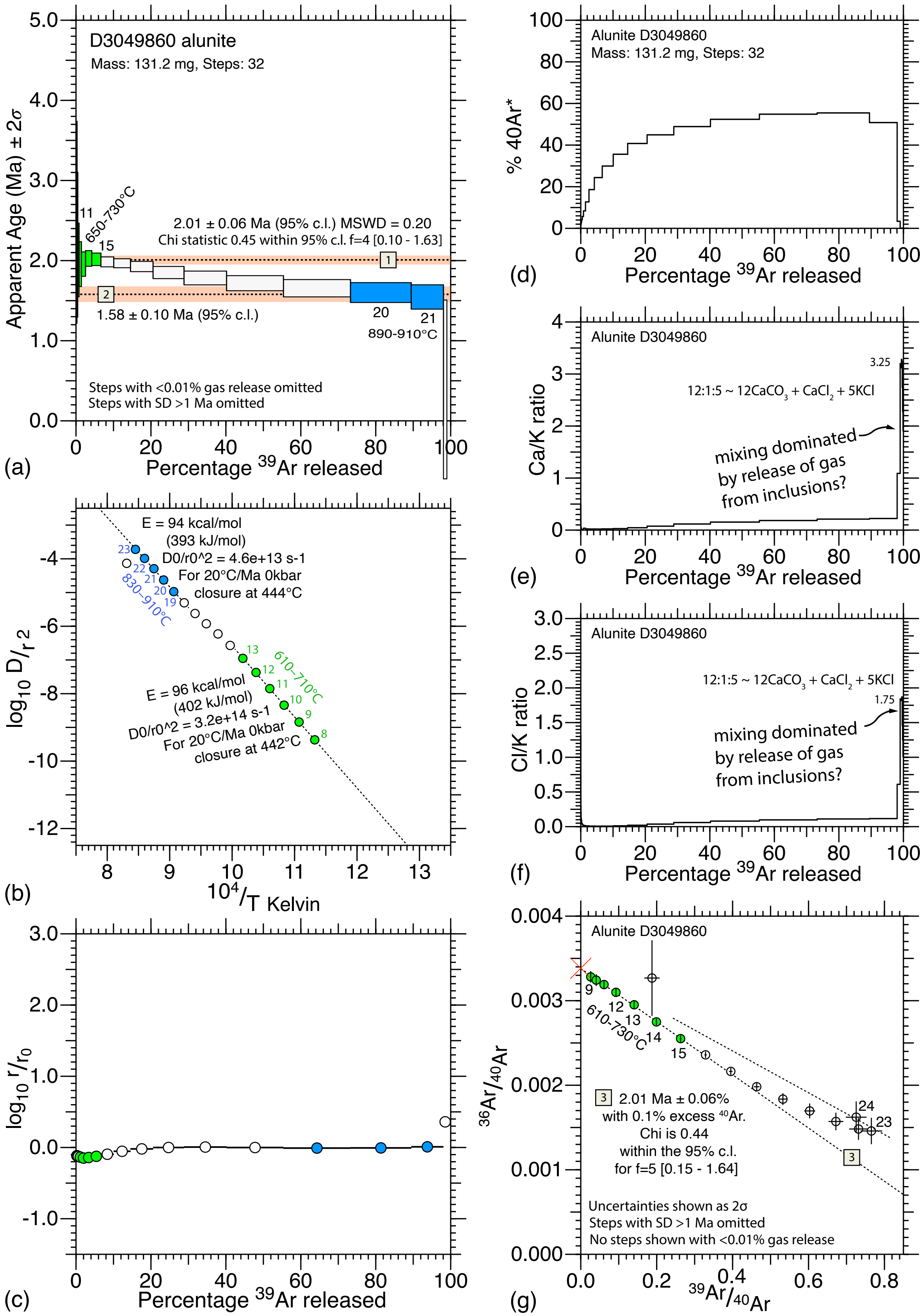
D3049860 alunite
Mass: 131.2 mg, Steps: 32
Apparent Age (Ma) ± 2σ
2.01 ± 0.06 Ma (95% c.l.) MSWD = 0.20
Chi statistic 0.45 within 95% c.l. f=4 [0.10 - 1.63]
1.58 ± 0.10 Ma (95% c.l.)
650-730°C
890-910°C
Steps with <0.01% gas release omitted
Steps with SD >1 Ma omitted
Percentage 39Ar released
(a)
E = 94 kcal/mol
(393 kJ/mol)
D0/r0^2 = 4.6e+13 s-1
For 20°C/Ma 0kbar
closure at 444°C
830-910°C
E = 96 kcal/mol
(402 kJ/mol)
D0/r0^2 = 3.2e+14 s-1
For 20°C/Ma 0kbar
closure at 442°C
610-710°C
log10 D/r2
10^4/T Kelvin
(b)
log10 r/r0
Percentage 39Ar released
(c)
Alunite D3049860
Mass: 131.2 mg, Steps: 32
% 40Ar*
Percentage 39Ar released
(d)
Alunite D3049860
12:1:5 ~ 12CaCO3 + CaCl2 + 5KCl
3.25
mixing dominated
by release of gas
from inclusions?
Ca/K ratio
Percentage 39Ar released
(e)
Alunite D3049860
12:1:5 ~ 12CaCO3 + CaCl2 + 5KCl
1.75
mixing dominated
by release of gas
from inclusions?
Cl/K ratio
Percentage 39Ar released
(f)
Alunite D3049860
610-730°C
3 2.01 Ma ± 0.06%
with 0.1% excess 40Ar.
Chi is 0.44
within the 95% c.l.
for f=5 [0.15 - 1.64]
Uncertainties shown as 2σ
Steps with SD >1 Ma omitted
No steps shown with <0.01% gas release
36Ar/40Ar
39Ar/40Ar
(g)