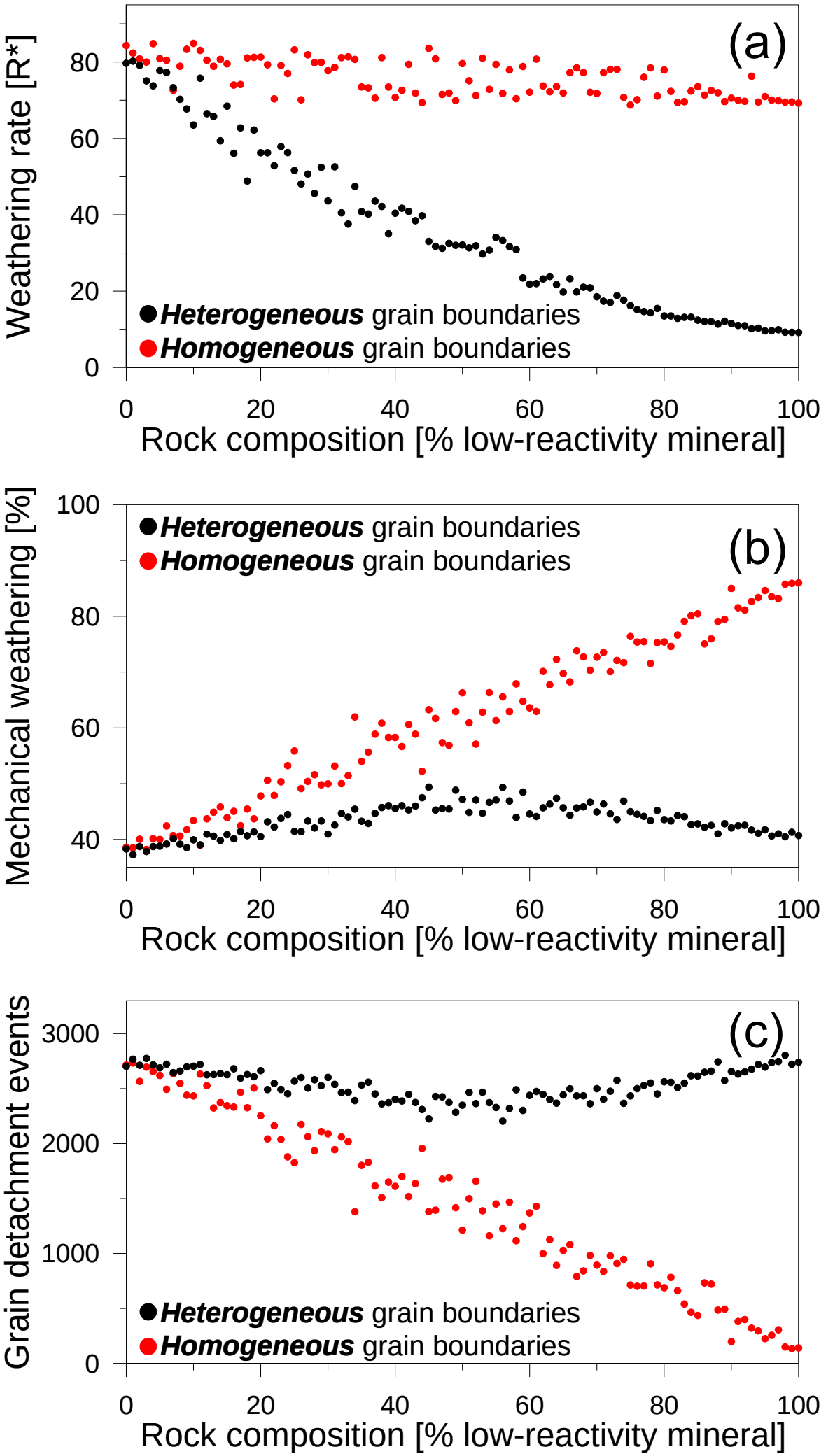
(a)
Weathering rate [R*]
0
20
40
60
80
Heterogeneous grain boundaries
Homogeneous grain boundaries
0
20
40
60
80
100
Rock composition [% low-reactivity mineral]
(b)
Mechanical weathering [%]
40
60
80
100
Heterogeneous grain boundaries
Homogeneous grain boundaries
0
20
40
60
80
100
Rock composition [% low-reactivity mineral]
(c)
Grain detachment events
0
1000
2000
3000
Heterogeneous grain boundaries
Homogeneous grain boundaries
0
20
40
60
80
100
Rock composition [% low-reactivity mineral]