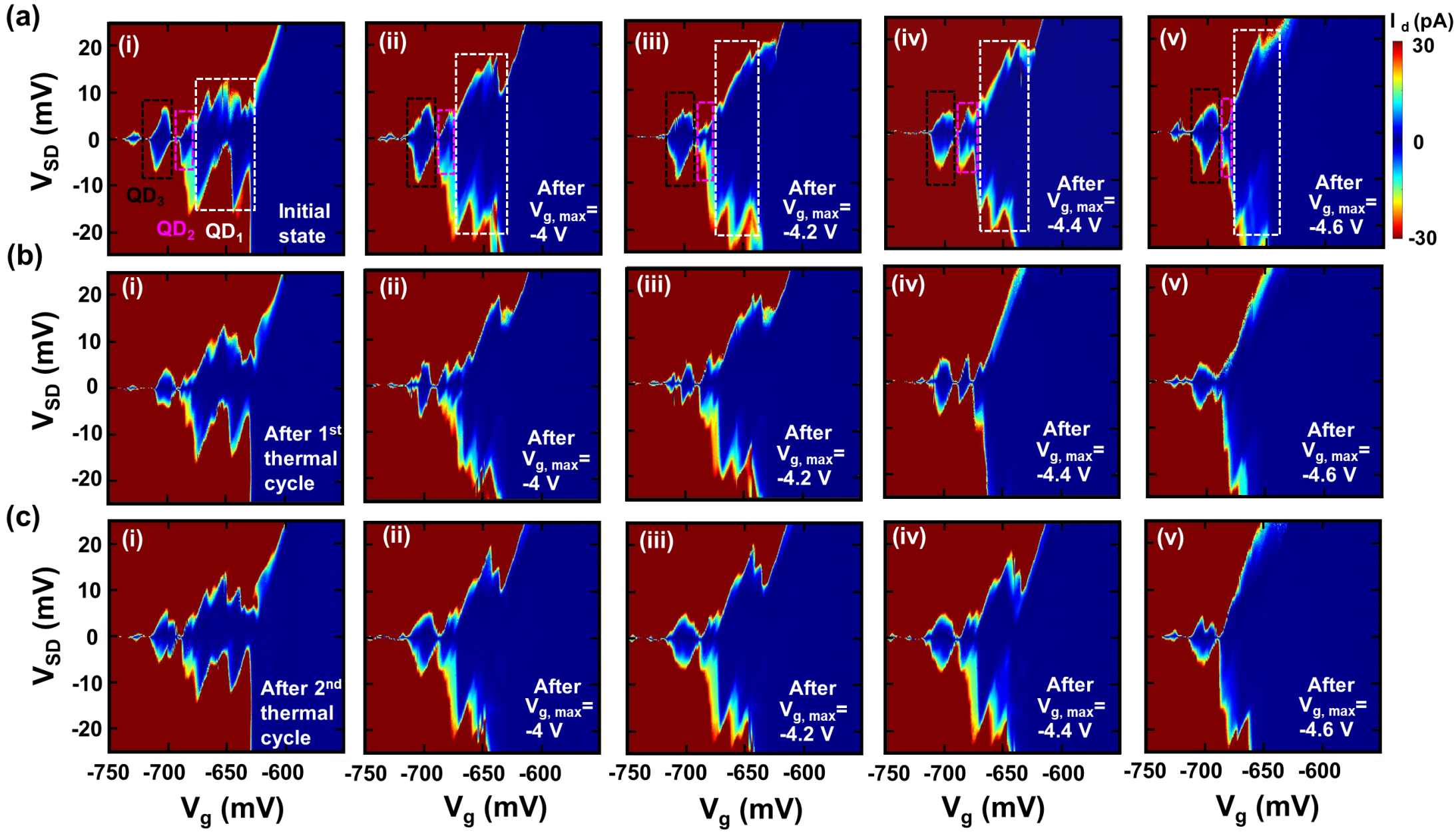
(a)
(b)
(c)
(i)
(ii)
(iii)
(iv)
(v)
V_{SD} (mV)
V_g (mV)
I_d (pA)
30
0
-30
20
10
0
-10
-20
-750
-700
-650
-600
QD_3
QD_2
QD_1
Initial state
After $V_{g, max}$= -4 V
After $V_{g, max}$= -4.2 V
After $V_{g, max}$= -4.4 V
After $V_{g, max}$= -4.6 V
After 1st thermal cycle
After 2nd thermal cycle