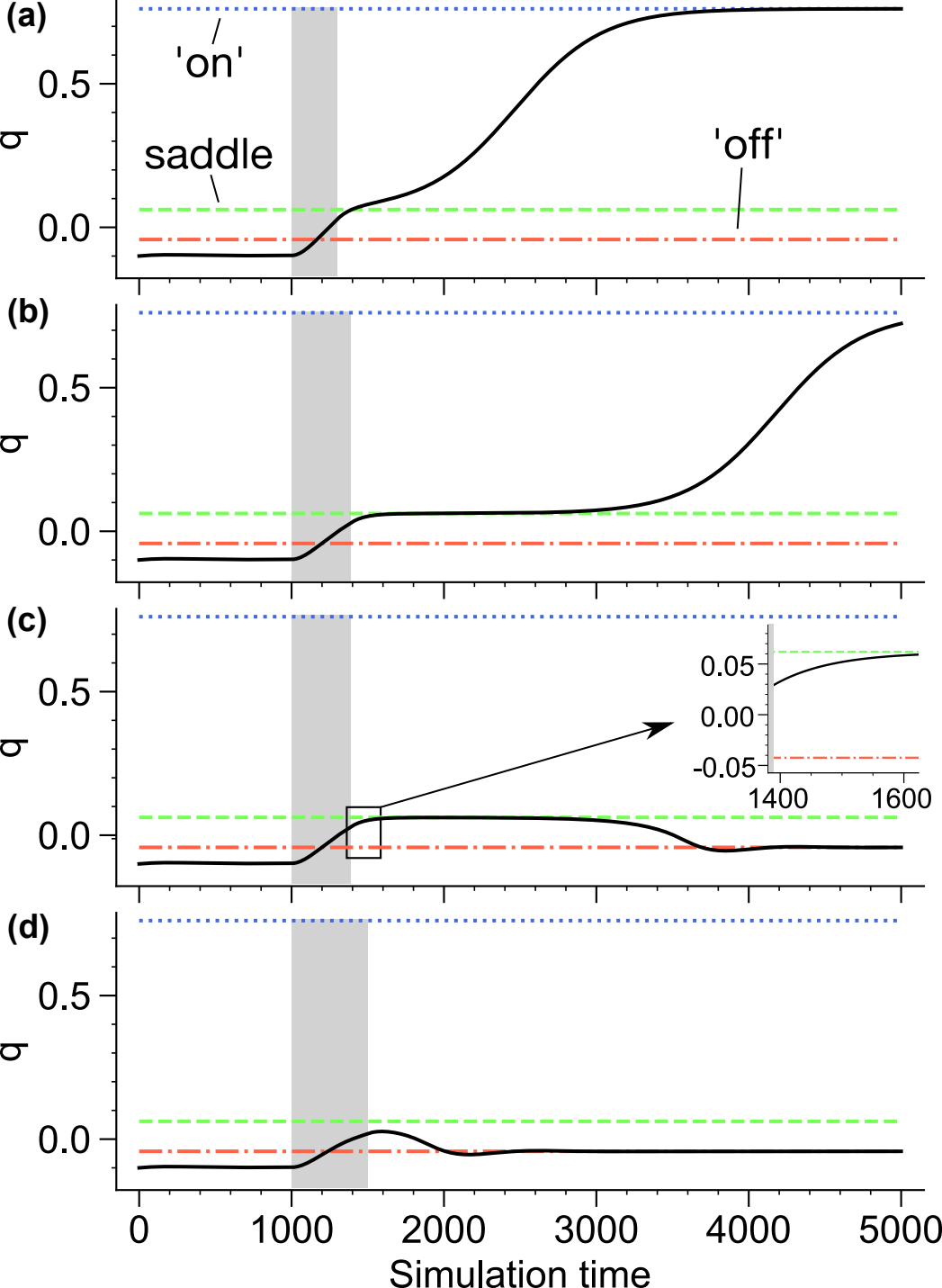
(a)
'on'
saddle
'off'
q
0.5
0.0
(b)
q
0.5
0.0
(c)
q
0.5
0.0
0.05
0.00
-0.05
1400
1600
(d)
q
0.5
0.0
0
1000
2000
3000
4000
5000
Simulation time