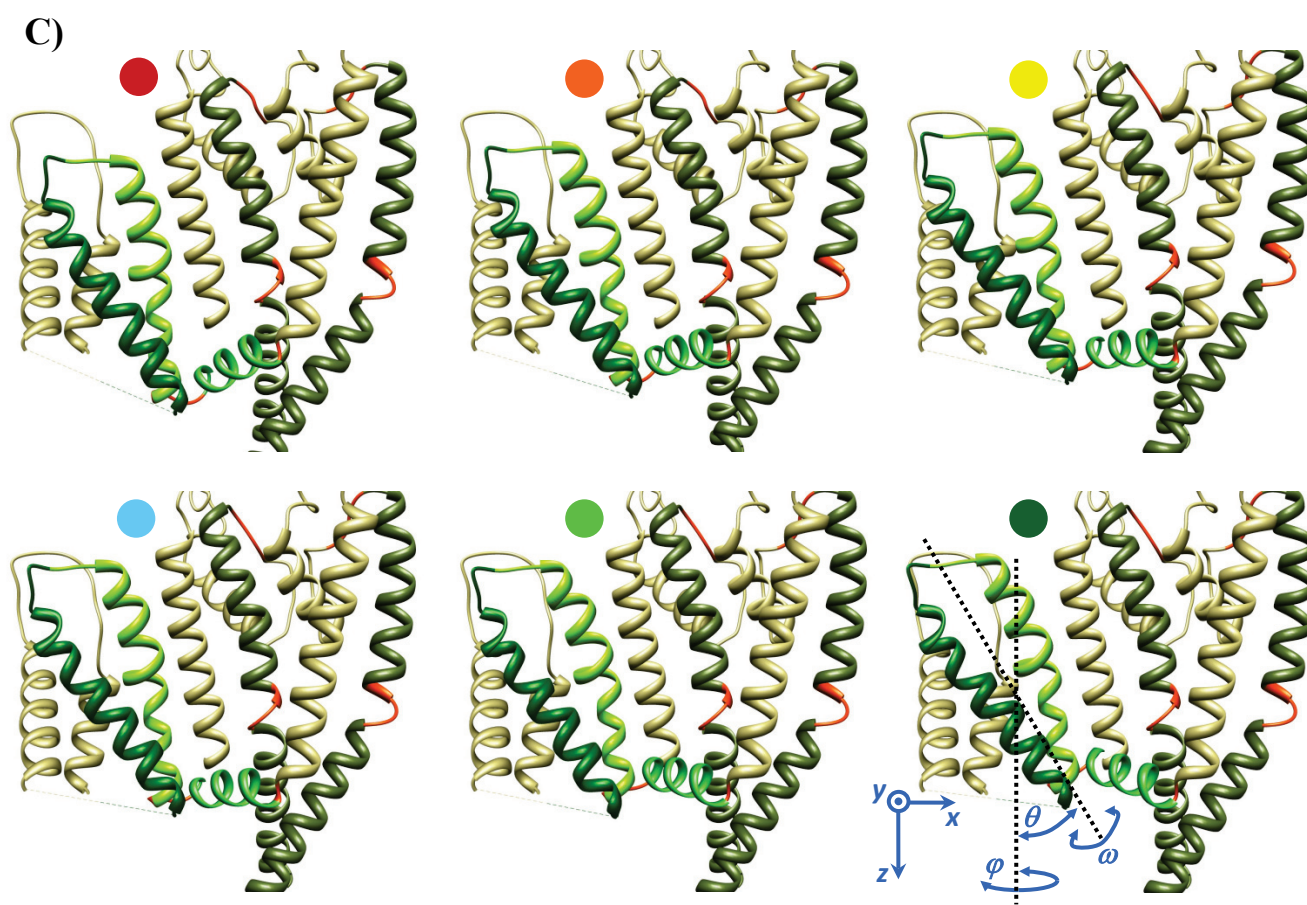
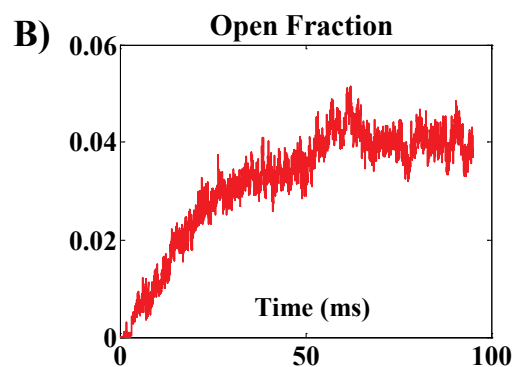
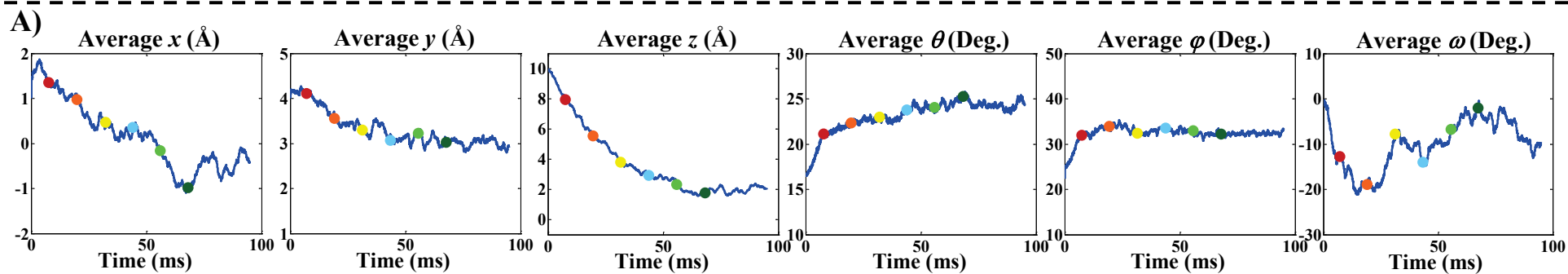


## Supplementary Figure S4: Average Variations of the Voltage Sensor Degrees of Freedom during Activation



**Figure S4**

A) Average variations of the 6 voltage sensor degrees of freedom over 110 activation trajectories in response to step depolarization from -100 mV to +50 mV. All 110 trajectories start from the same conformation at the deep closed state, consequently the first few ms of the trajectory may be biased toward the starting structure. B) Average open fraction of the S6 conformations along the 110 activation trajectories. C) Representative conformations for the points marked along the average trajectory in panel A.