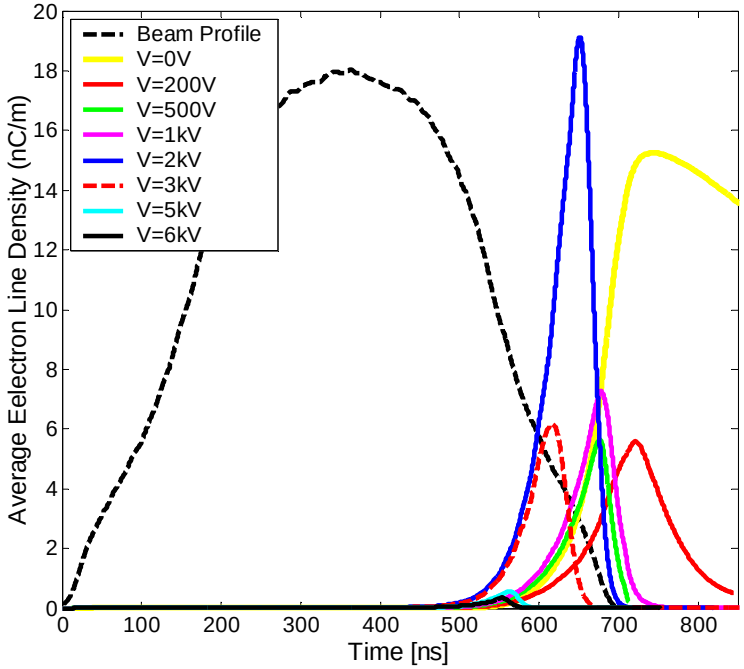
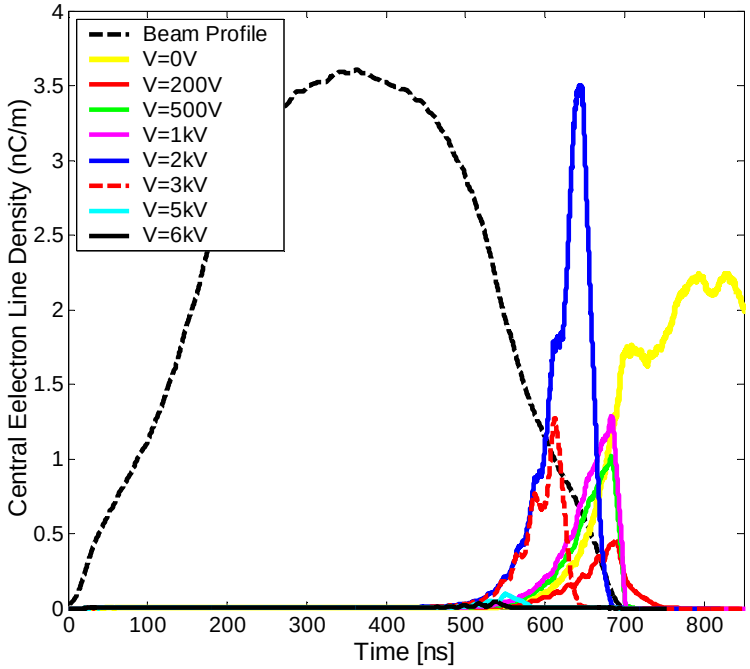
Electrode clearing effect vs Clearing voltage --I

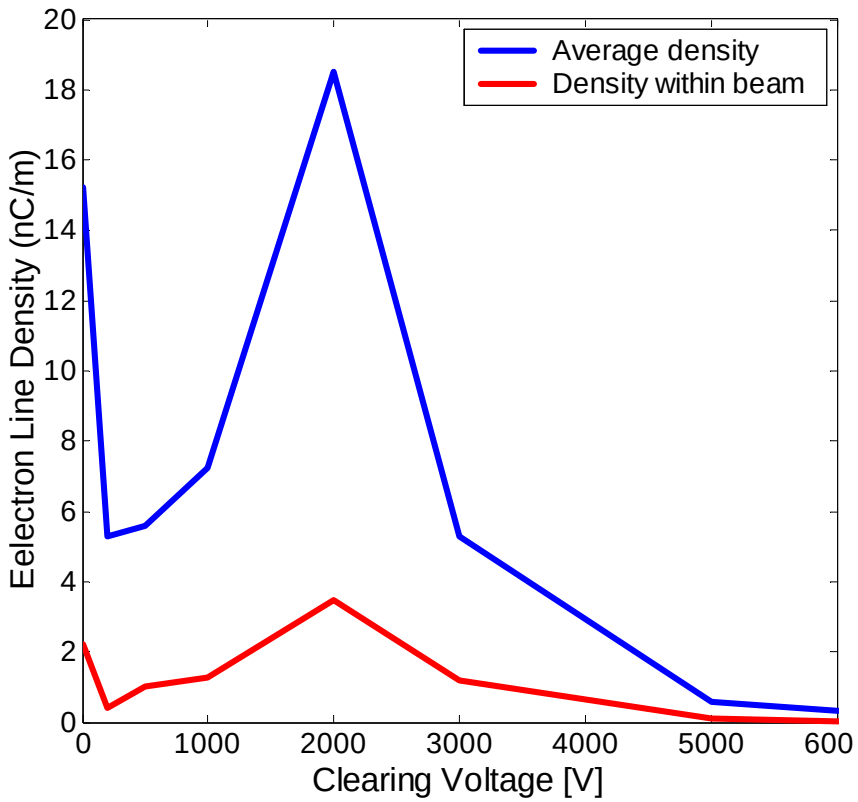
- **Vertical Uniform clearing field**
- **Complicated relationship between clearing field and its effect**
- **Clearing field can cause the particle polarized toward the clearing field direction. As a result, it cause strong multipacting near the positive electrode.**

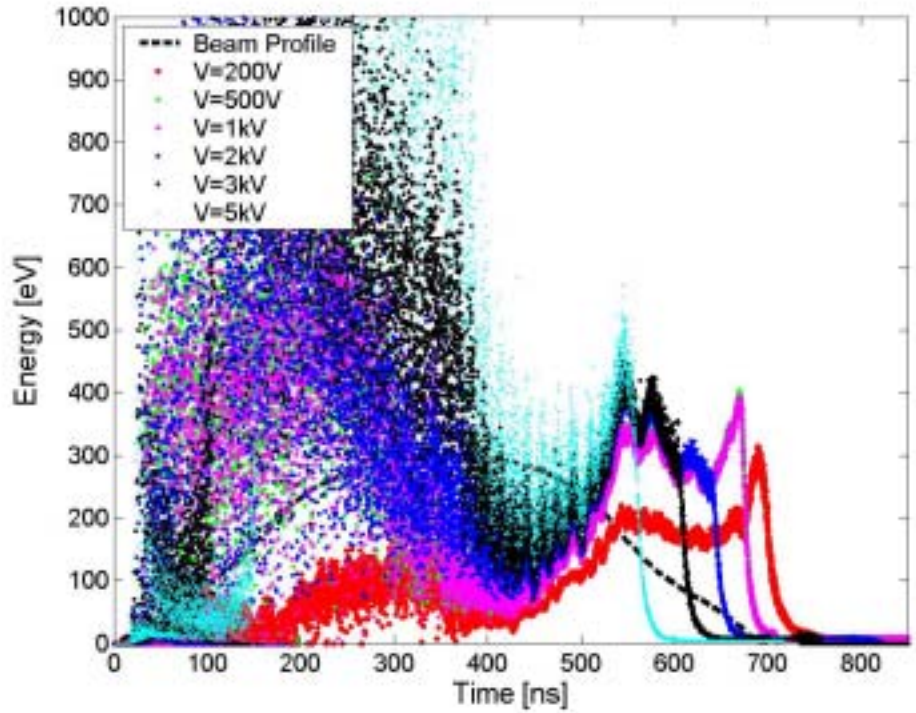




Simulated e-cloud density for SNS with various clearing fields

Electrode clearing effect vs Clearing voltage --2

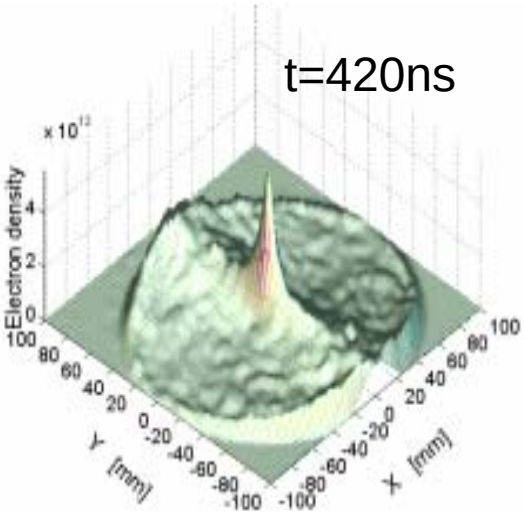


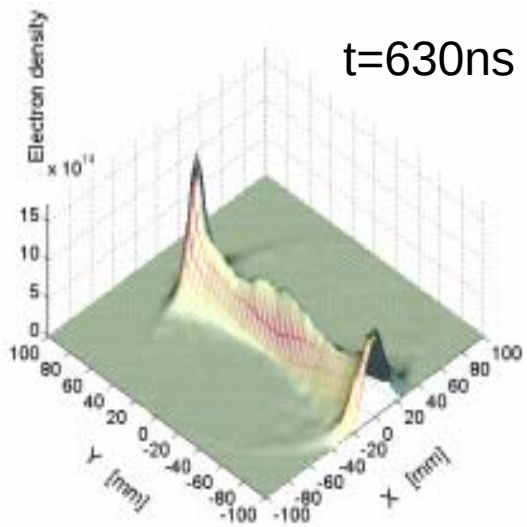


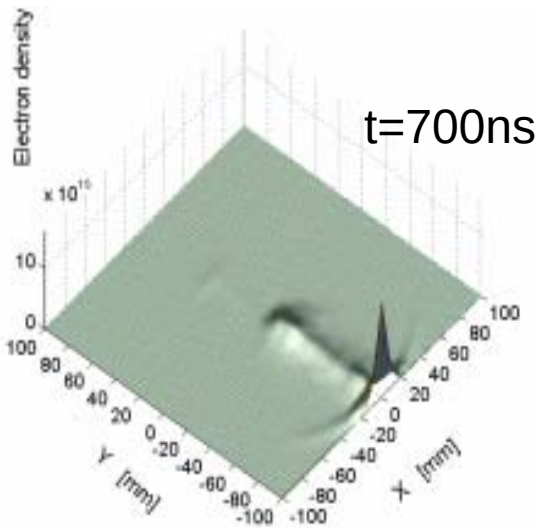
e-cloud density vs clearing fields **Electron energy when it hit the wall**

- **Why a strong multipacting at 2kV ??**

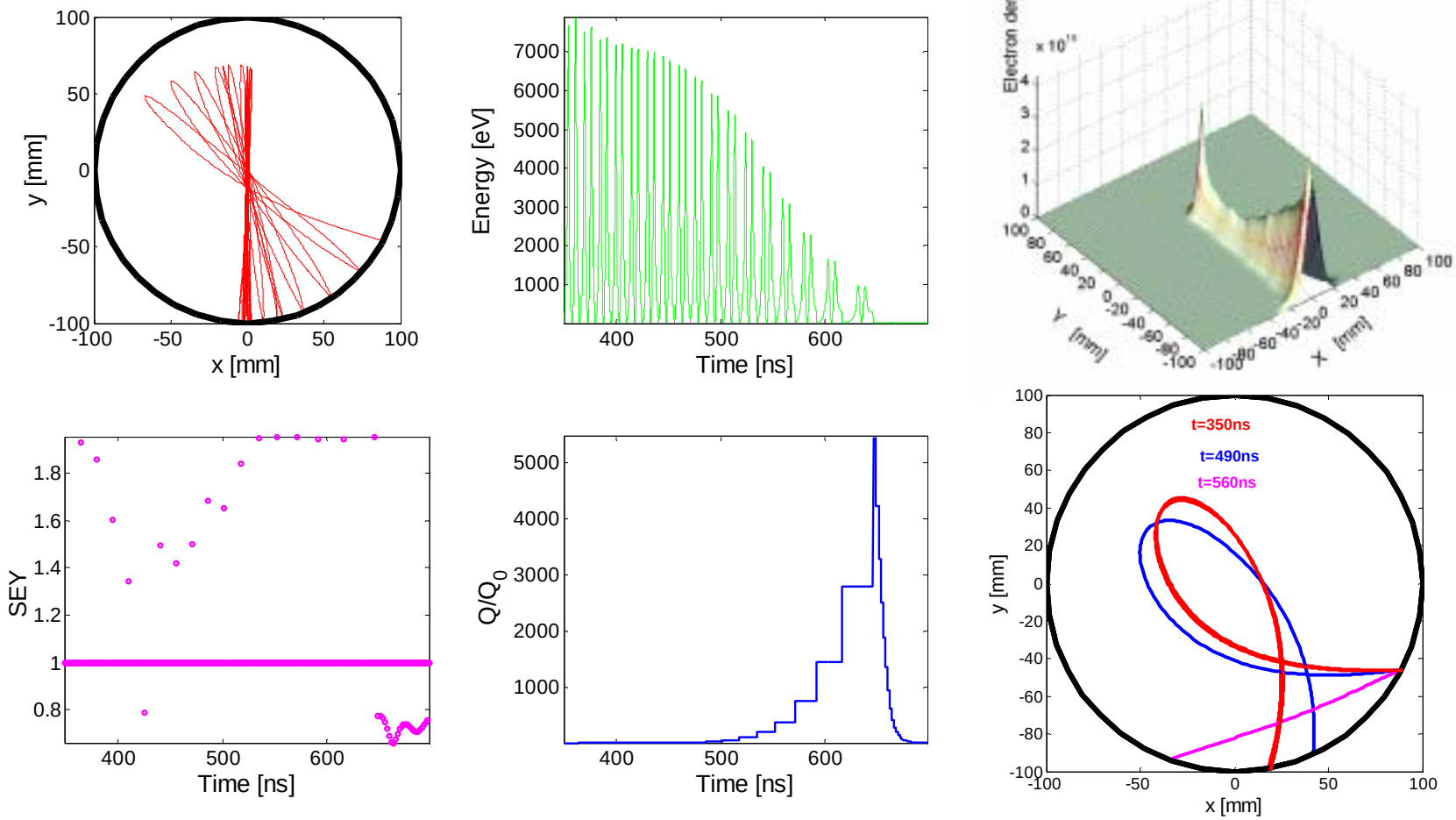
E-cloud distribution at different time for 500V clearing field







Clearing field may cause strong multipacting



- **Strong multipacting happens only near the middle of the electrode surface (y~-R, |x|<20mm) (V=2kV)**