



**SSD Holder position:  $(z_0, x_0) = (24, 30.8)$  [mm]**

**100000  $\alpha$  particles flown 180 times**

**$\alpha$  initial position distribution:**

$$N_x(3.50, 0.00) \times N_y(0.01, 13.64) \times N_z(-0.00, 13.64) \text{ [mm]}$$

**$\alpha$  average direction:**

$$(0.50, -0.00, 0.00) \text{ (normalized)}$$

**$0.00 \pm 0.00$  % of them reached the Si detector.**

**Based on calculated solid angle = 0.338982 %**