

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

100000  $\alpha$  particles flown 180 times

 $\boldsymbol{\alpha}$  initial position distribution:

 $N_x(3.50, 0.00) \times N_v(-0.00, 14.11) \times N_z(0.01, 14.11)$  [mm]

 $\alpha$  average direction:

(0.50, -0.00, 0.00) (normalized)

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

Based on calculated solid angle = 0.0218257 %