

100000 α particles flown 180 times

 α initial position distribution:

 $N_x(0.00, 4.56) \times N_y(-0.00, 4.56) \times N_z(97.30, 4.91)$ [mm]

 α average direction:

(0.00, -0.00, -0.00) (normalized)

 0.121 ± 0.001 % of them reached the Si detector.

Based on calculated solid angle = 0.105995 %