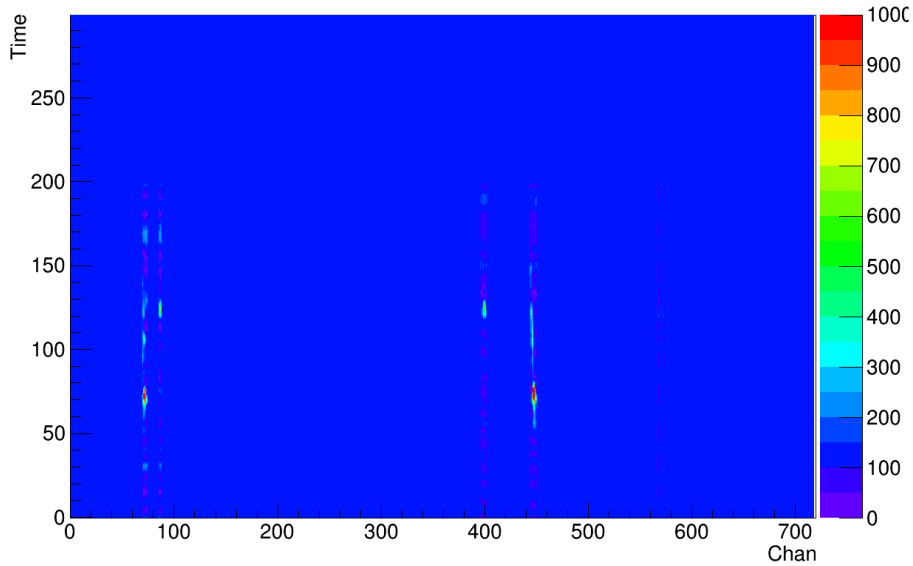


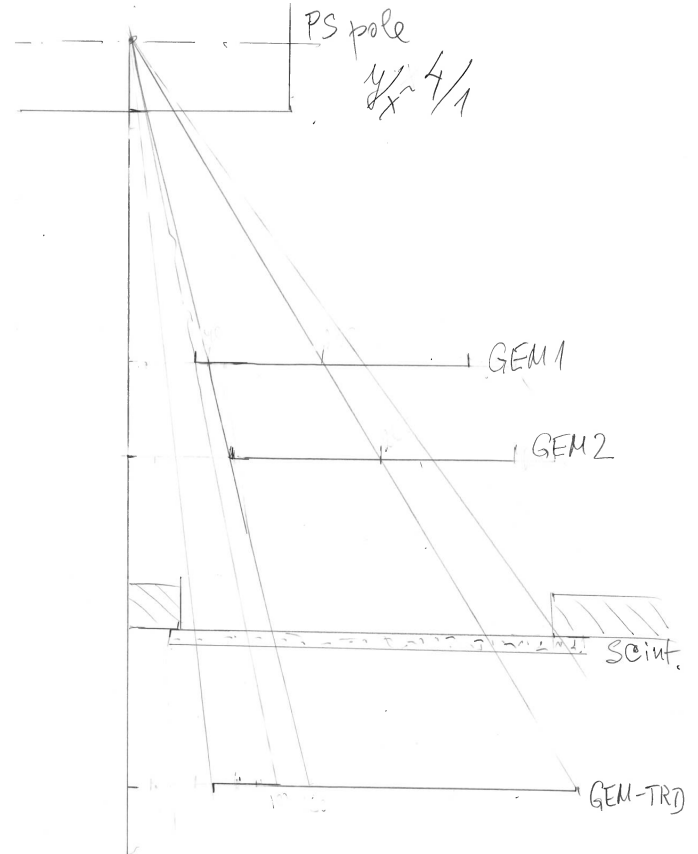
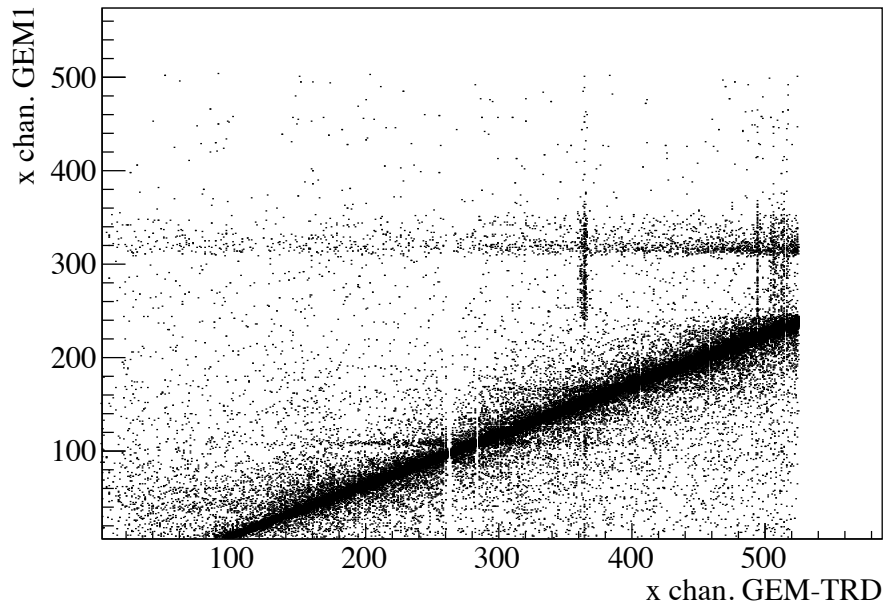
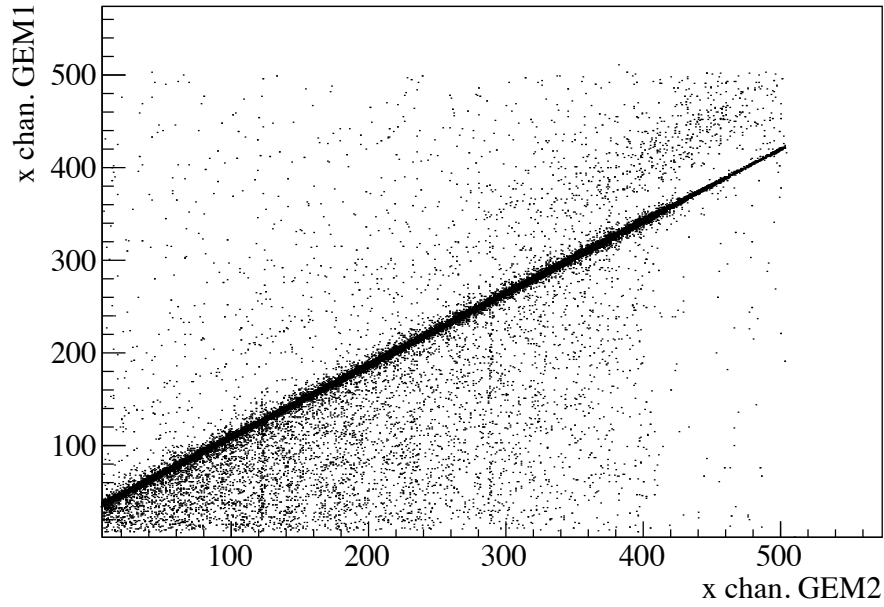
GEM-TRD test at PS, March 11-15, 2024

roctrd1:F125_display_x

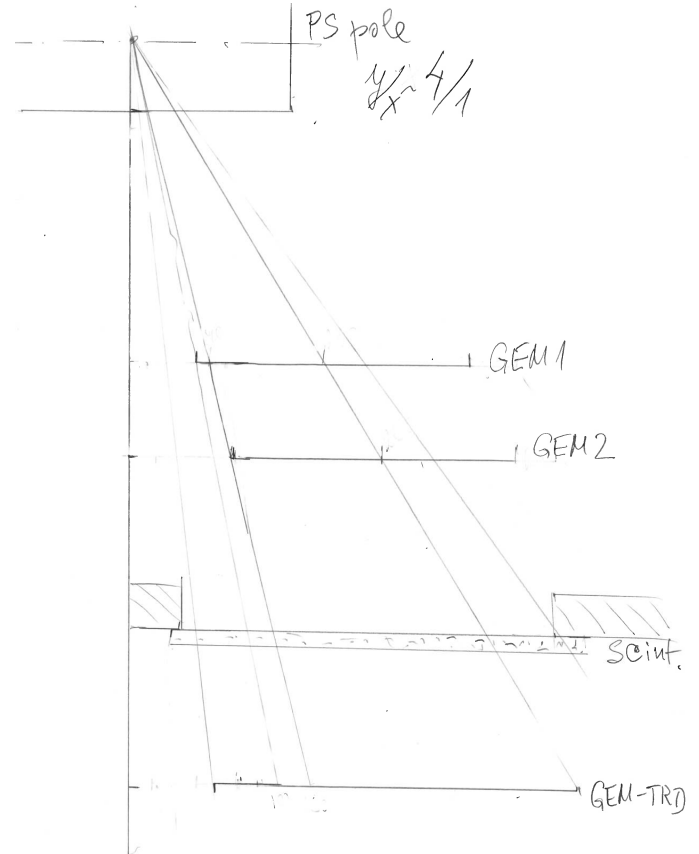
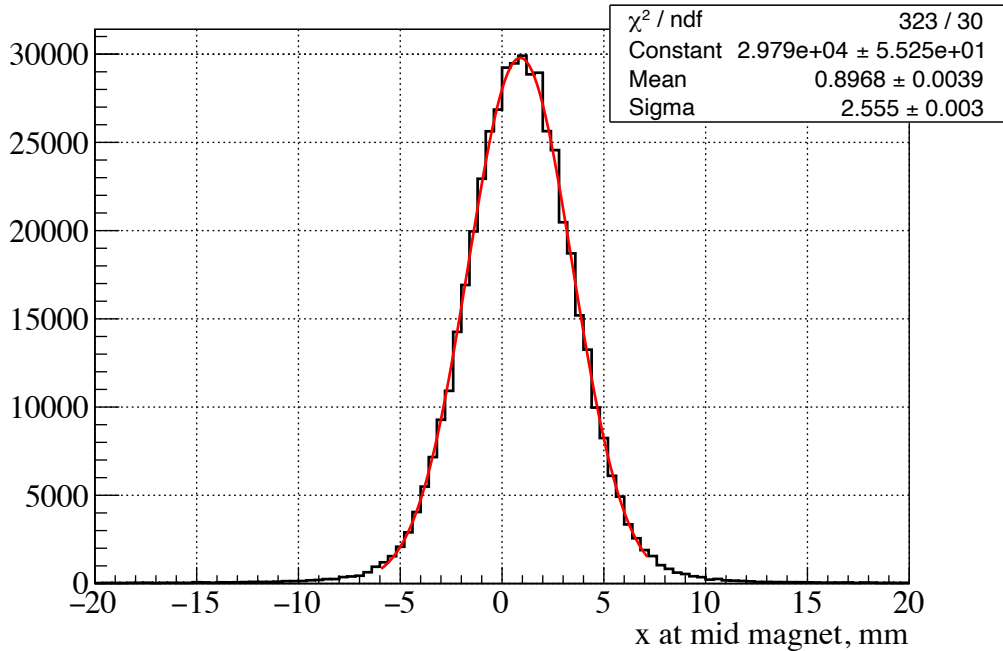
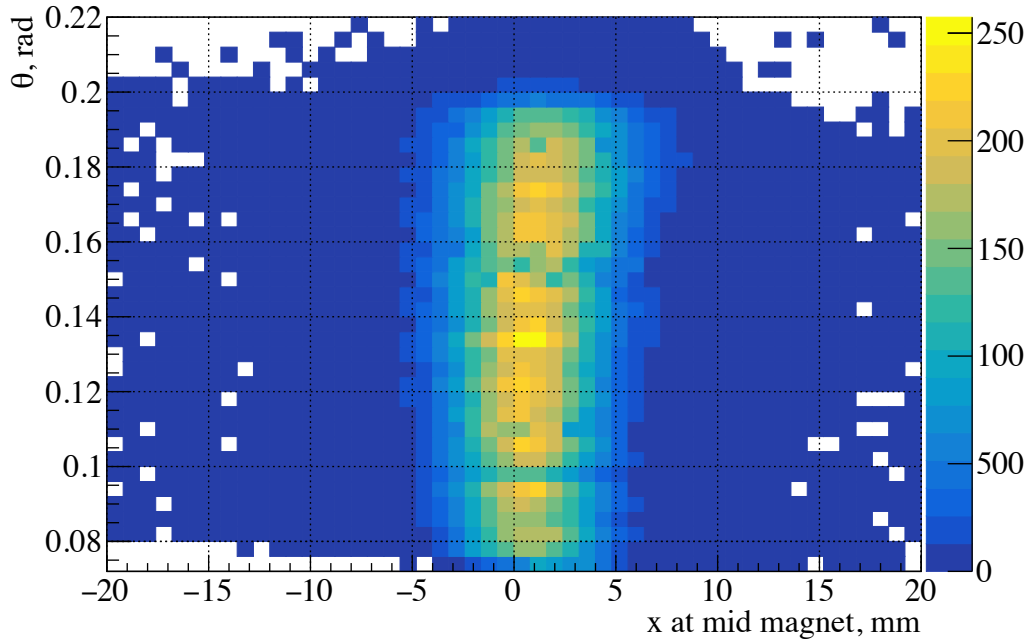


- *GEM-TRD - 528x720 mm² active area*
- *648 channels readout*

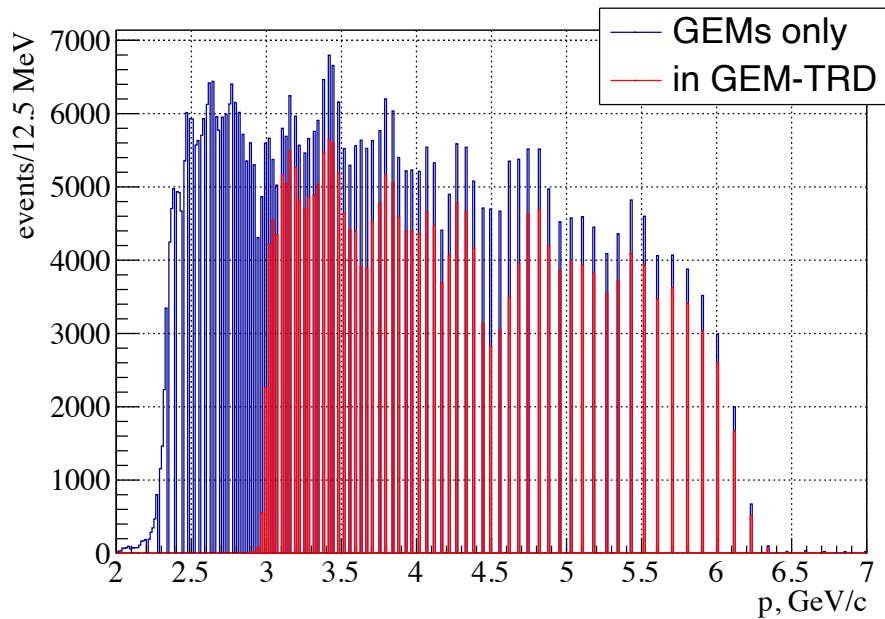
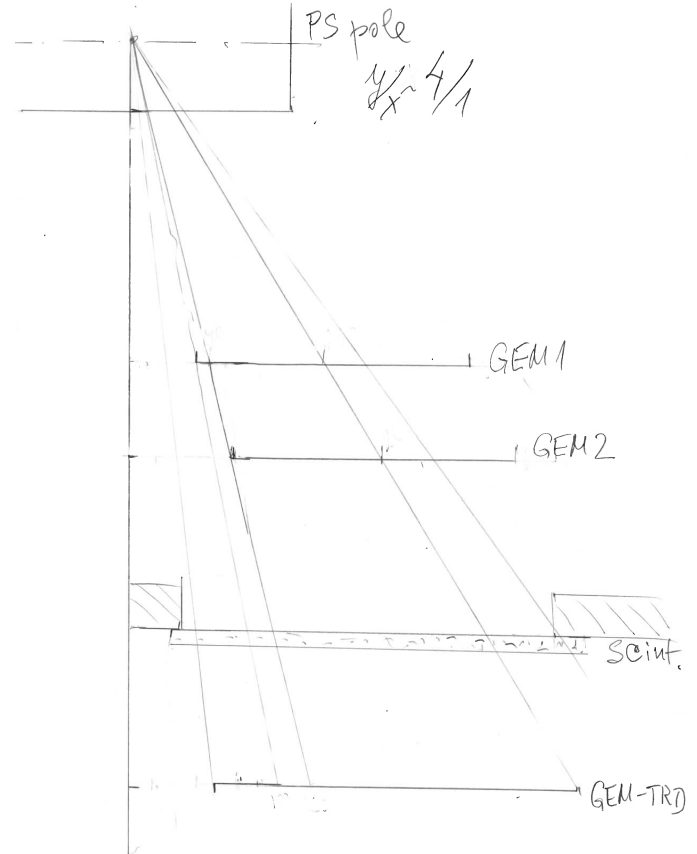
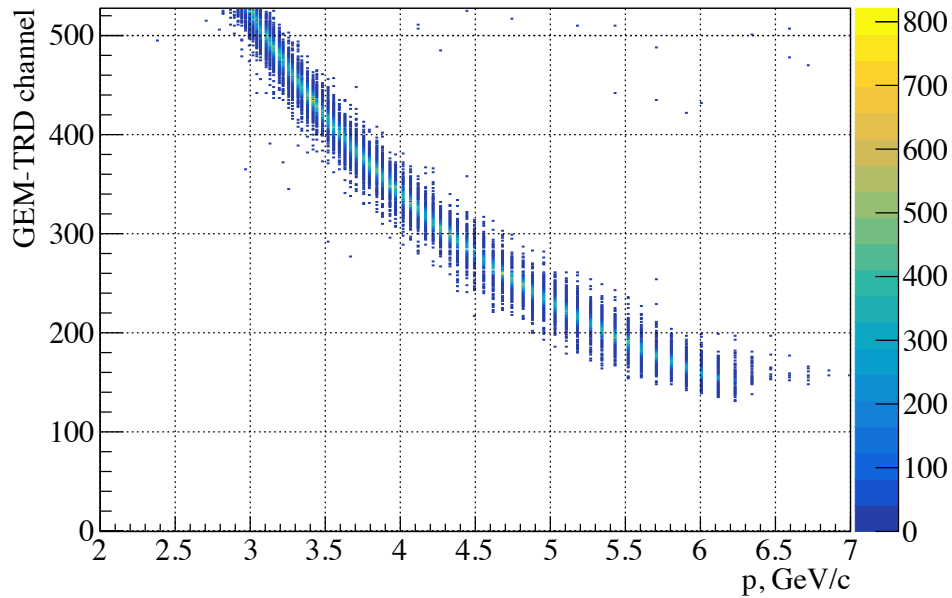
GEM-TRD test - geometry



GEM-TRD test - beam spot

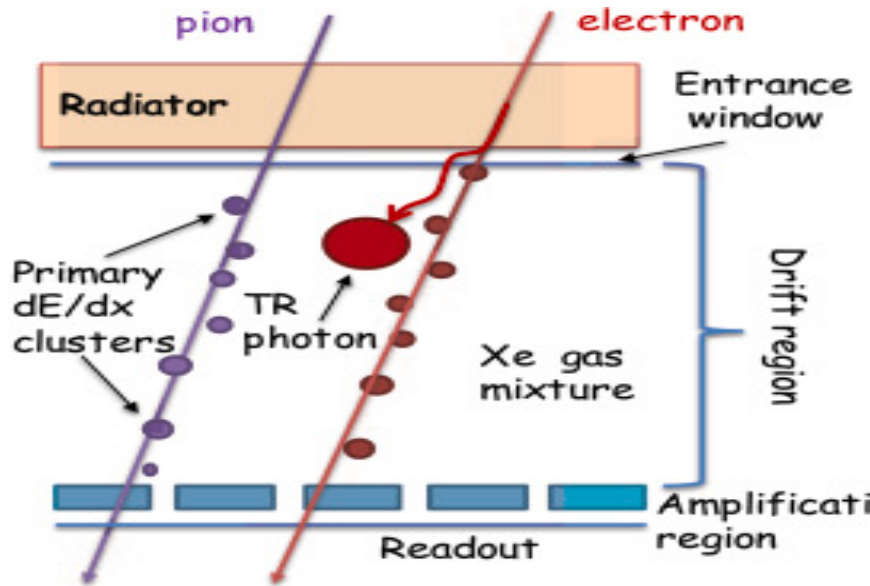


GEM-TRD test - momentum range

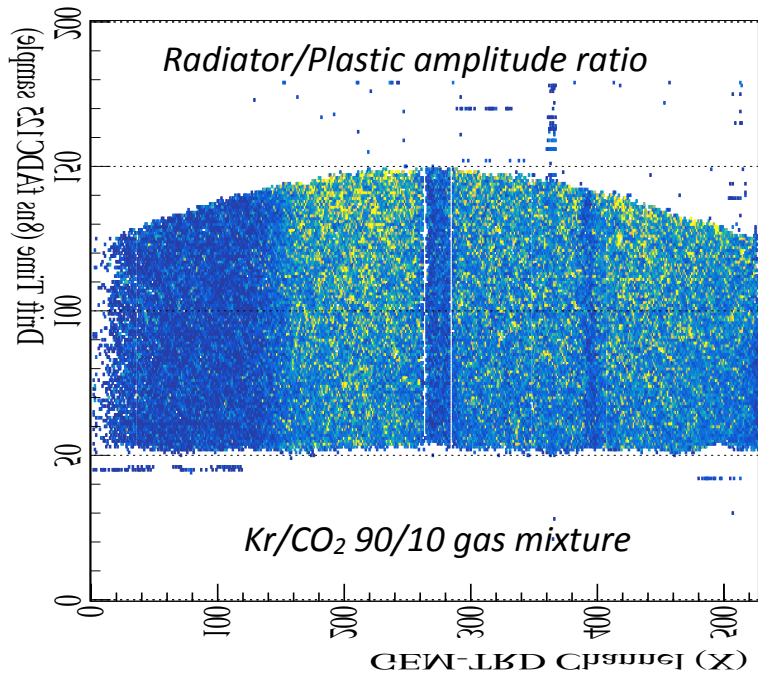


Assuming PS magnet field integral:
 $1.66\text{T} \times 0.9\text{m} = 1.5\text{Tm}$

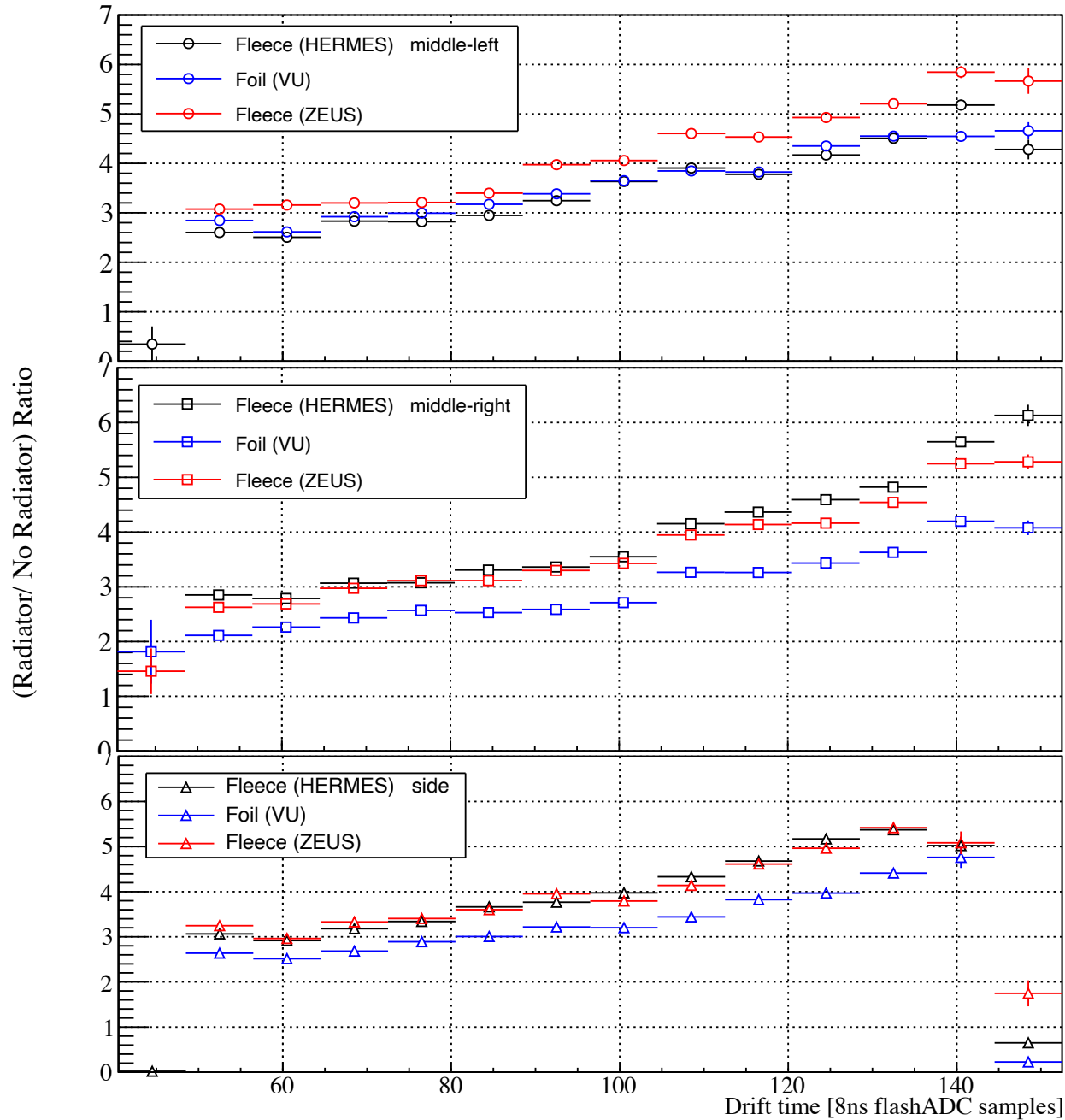
GEM-TRD test - radiator comparison



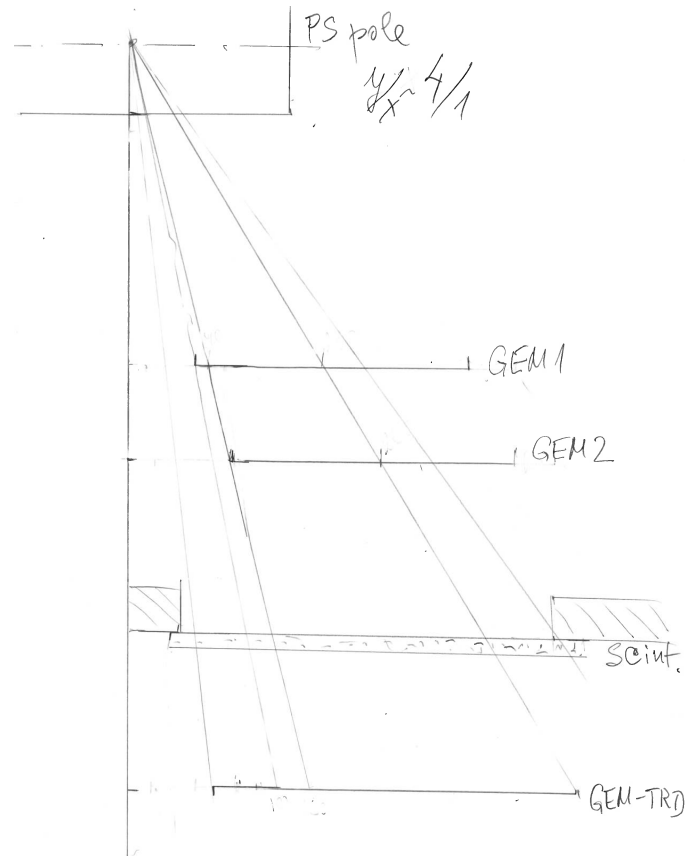
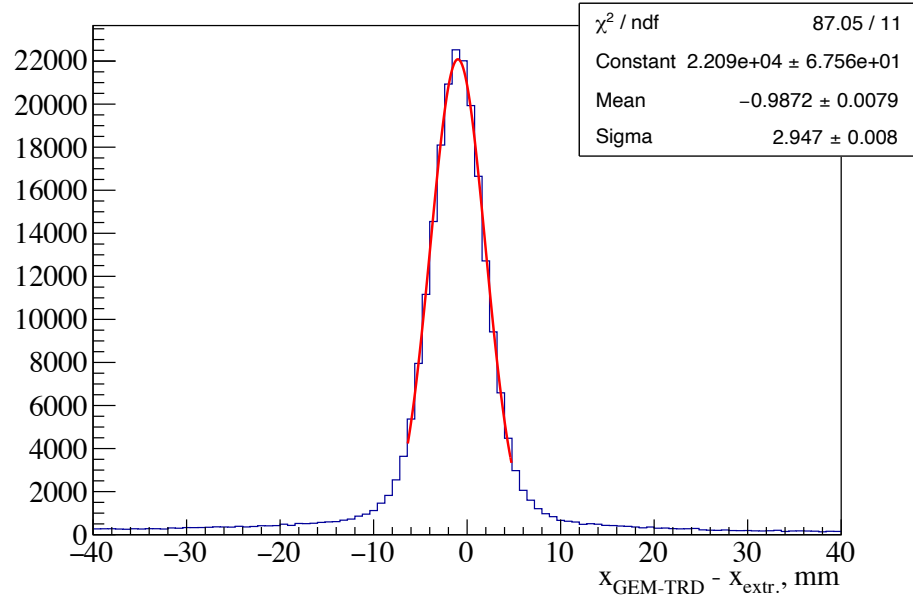
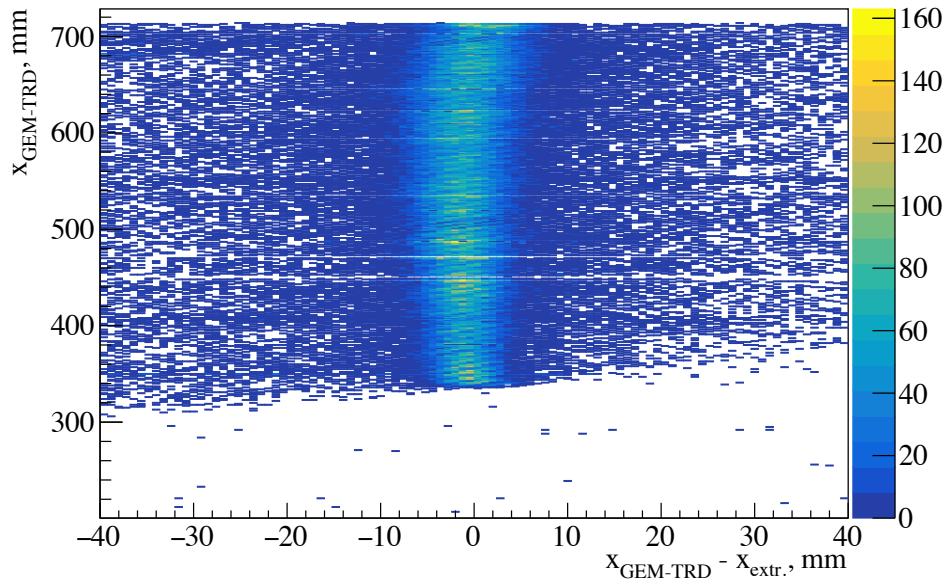
10 different radiator configurations tested



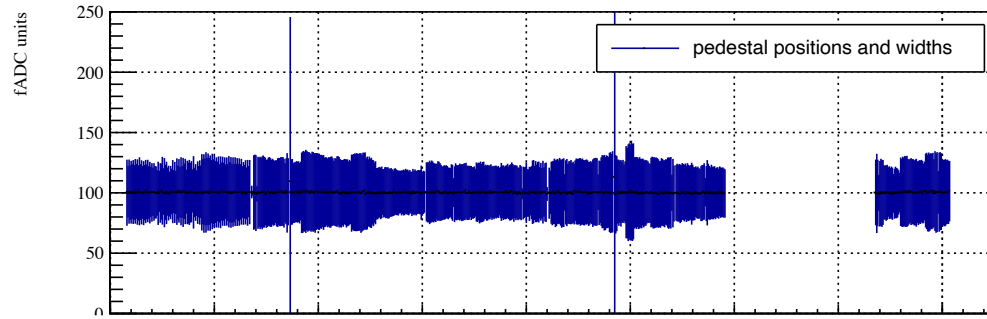
GEM-TRD test - radiator comparison



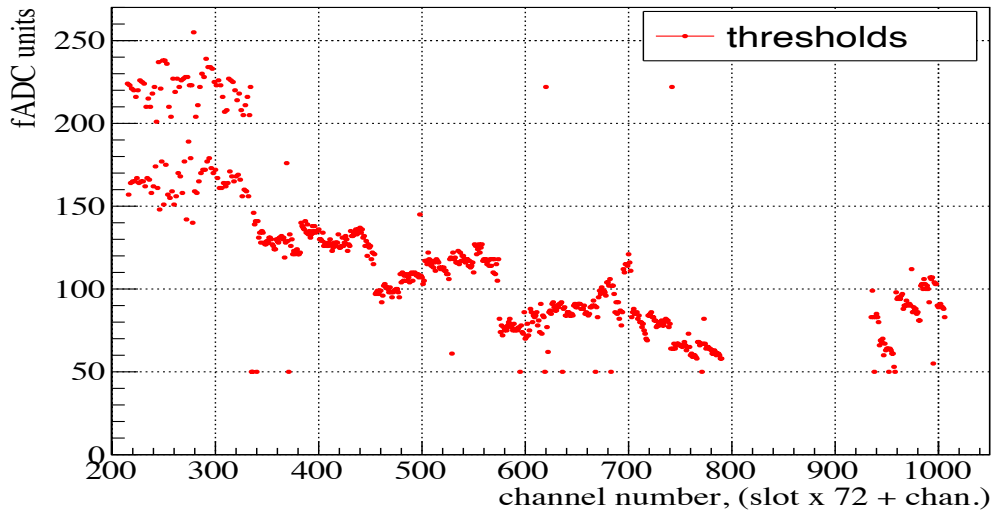
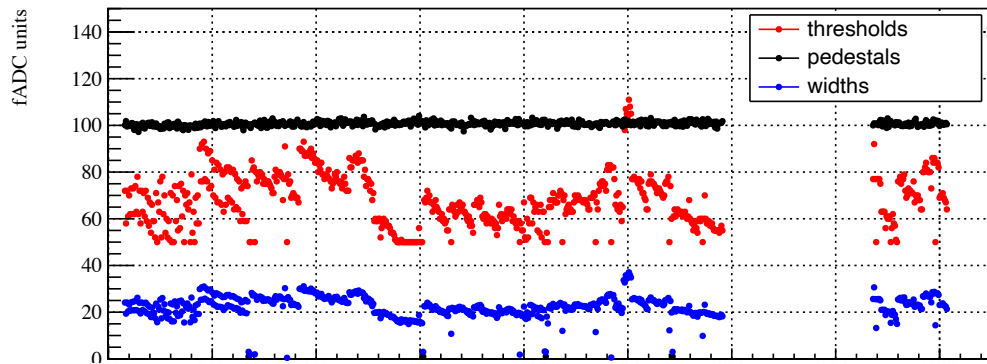
GEM-TRD test - resolution



GEM-TRD test - noise

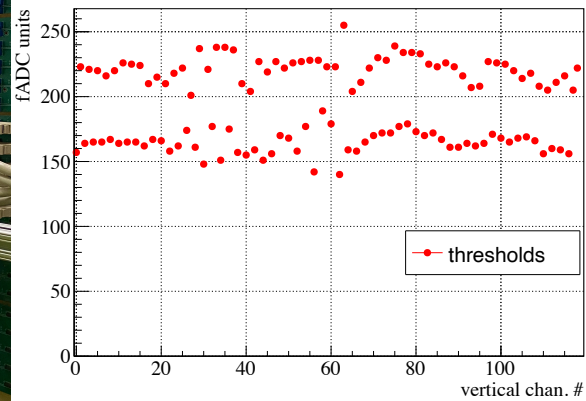
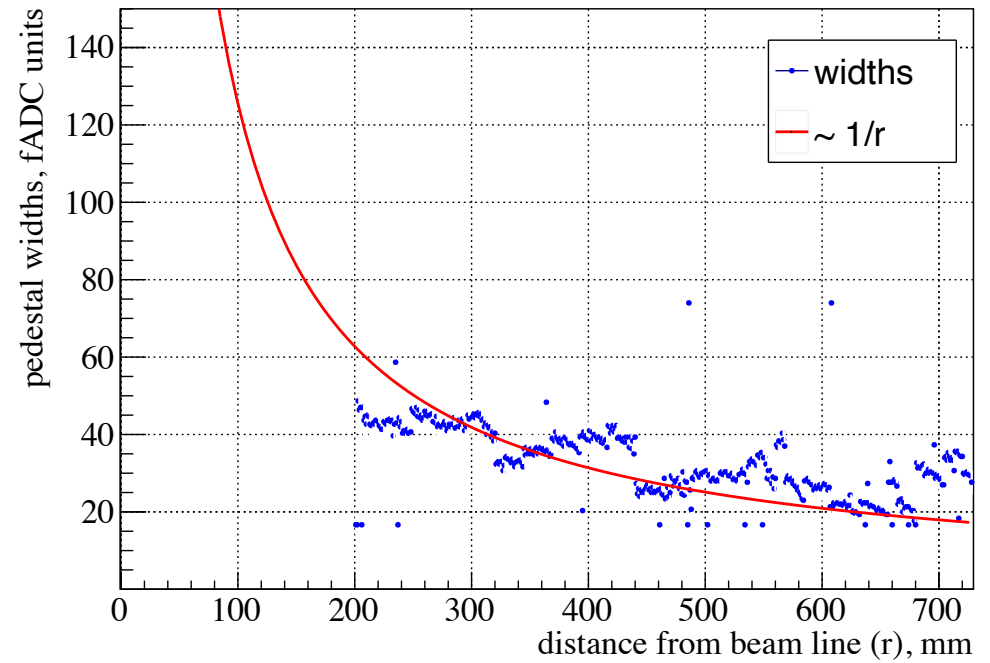
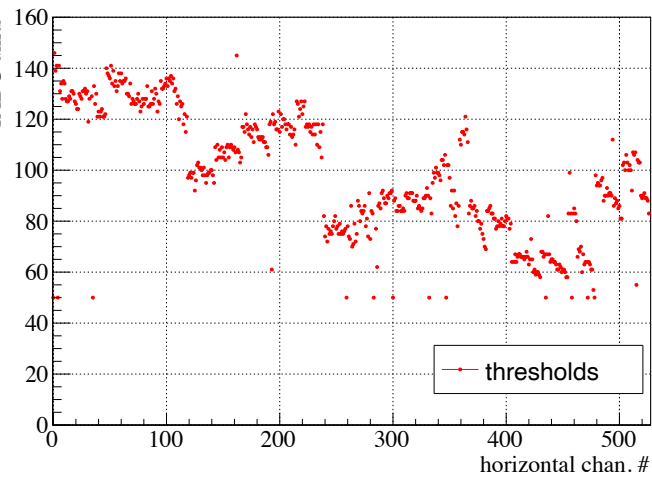


*before/after
beam test*

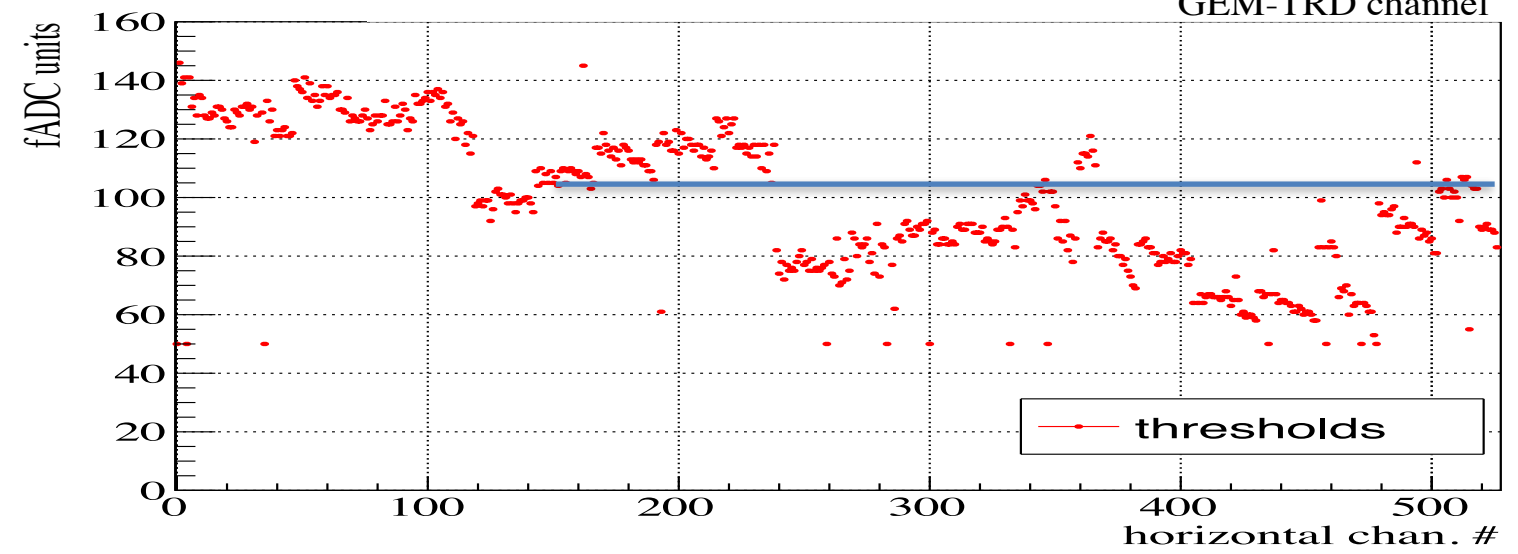
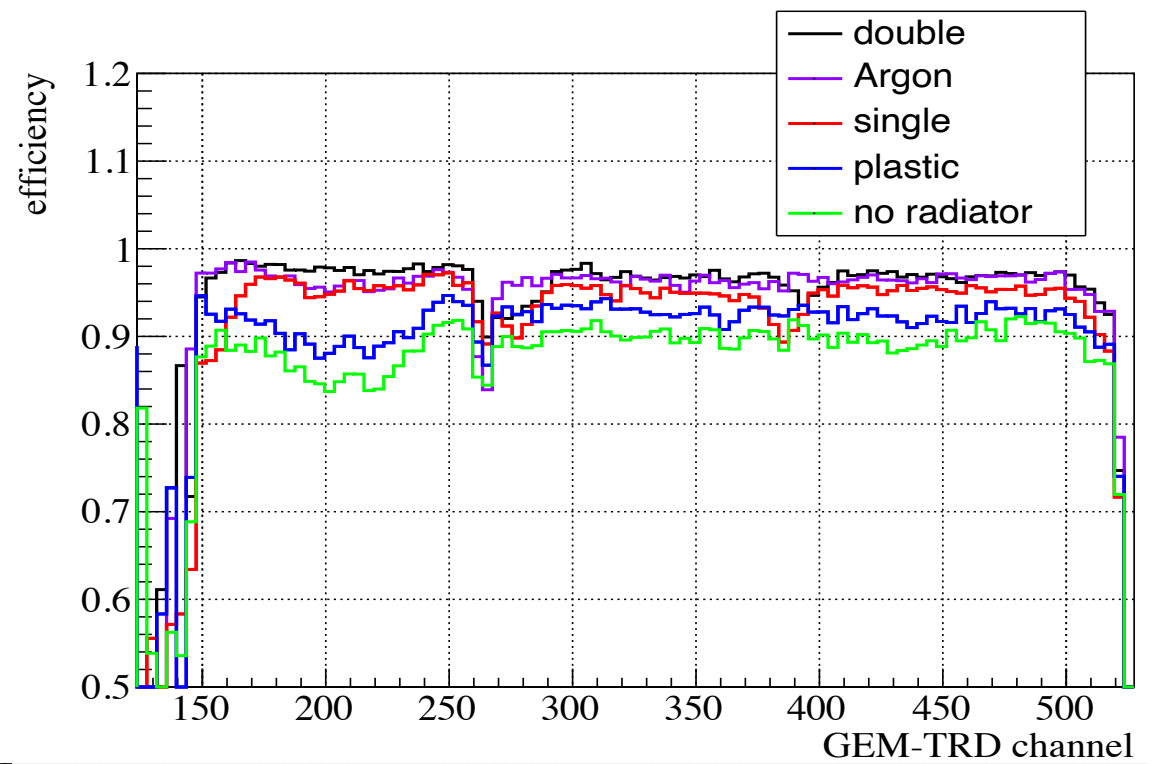
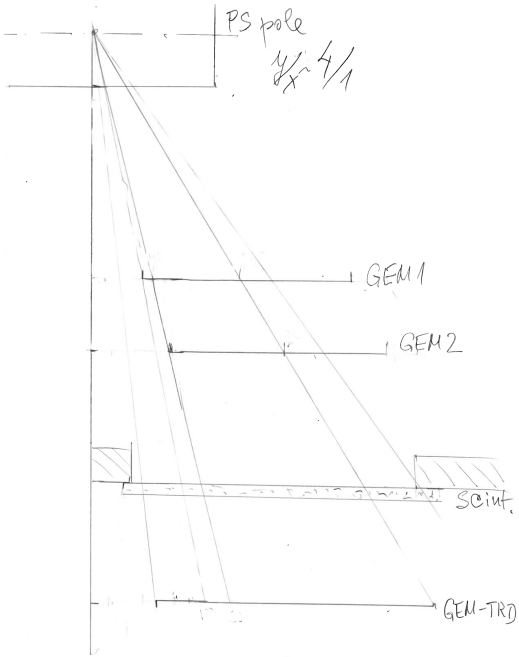


*during
beam test*

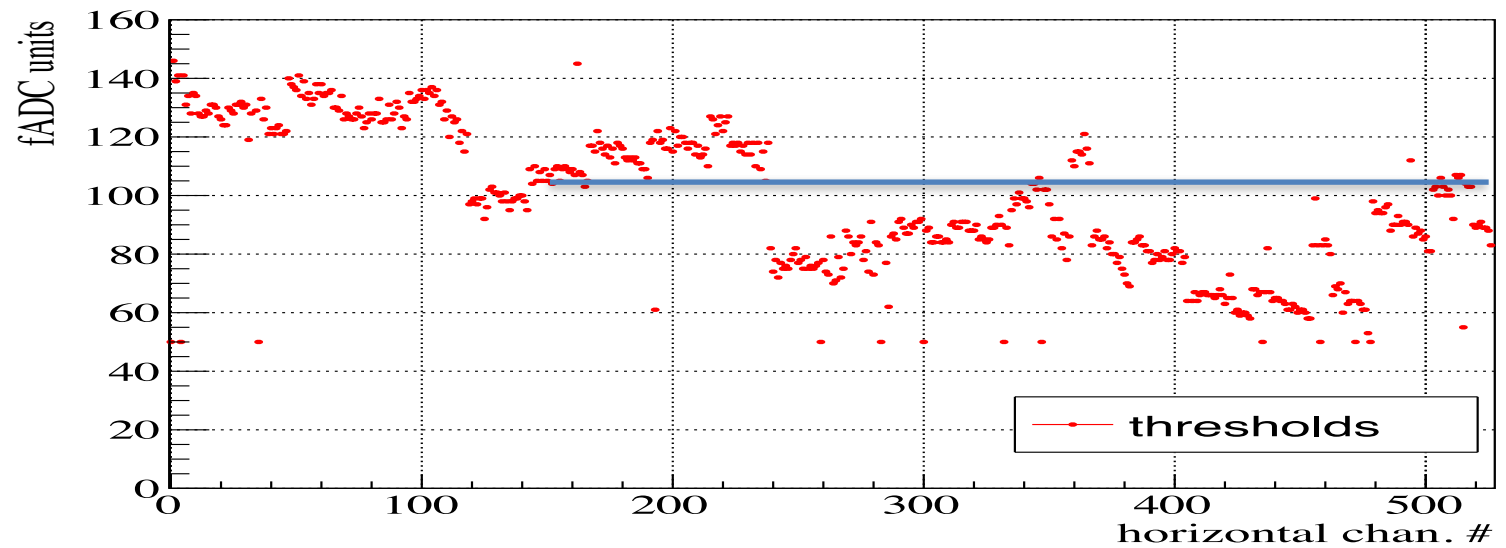
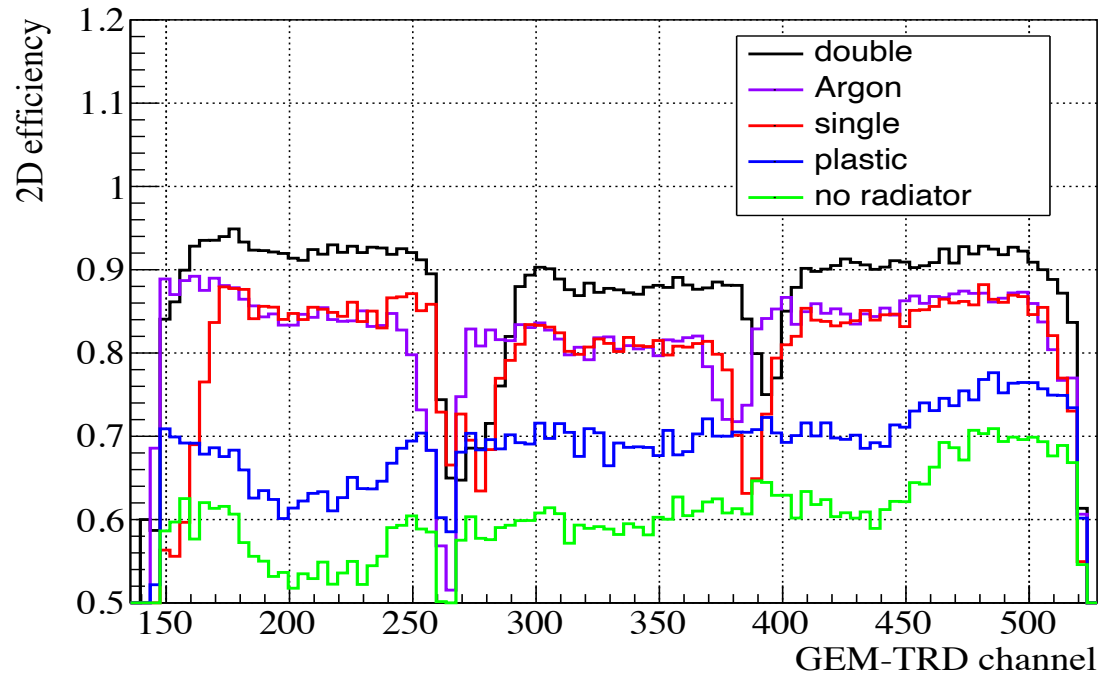
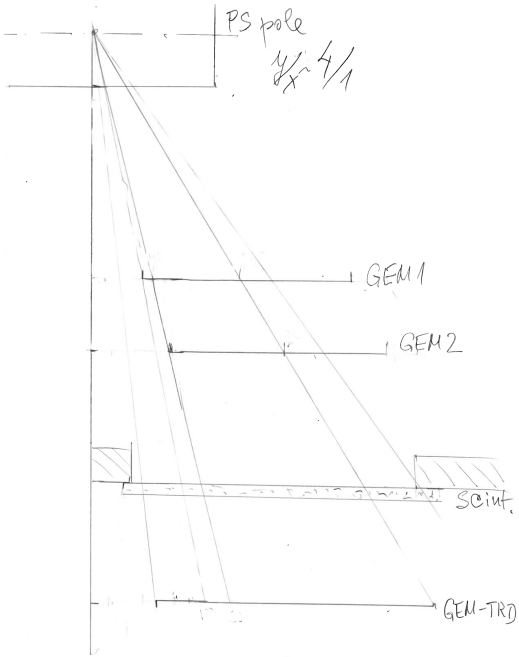
GEM-TRD test - noise



GEM-TRD test - efficiency



GEM-TRD test - 2D efficiency



GEM-TRD test - noise studies

