# Followup to 4/2/09 Presentation of the 3D Model of the Injector Cryomodule Entrance Shield

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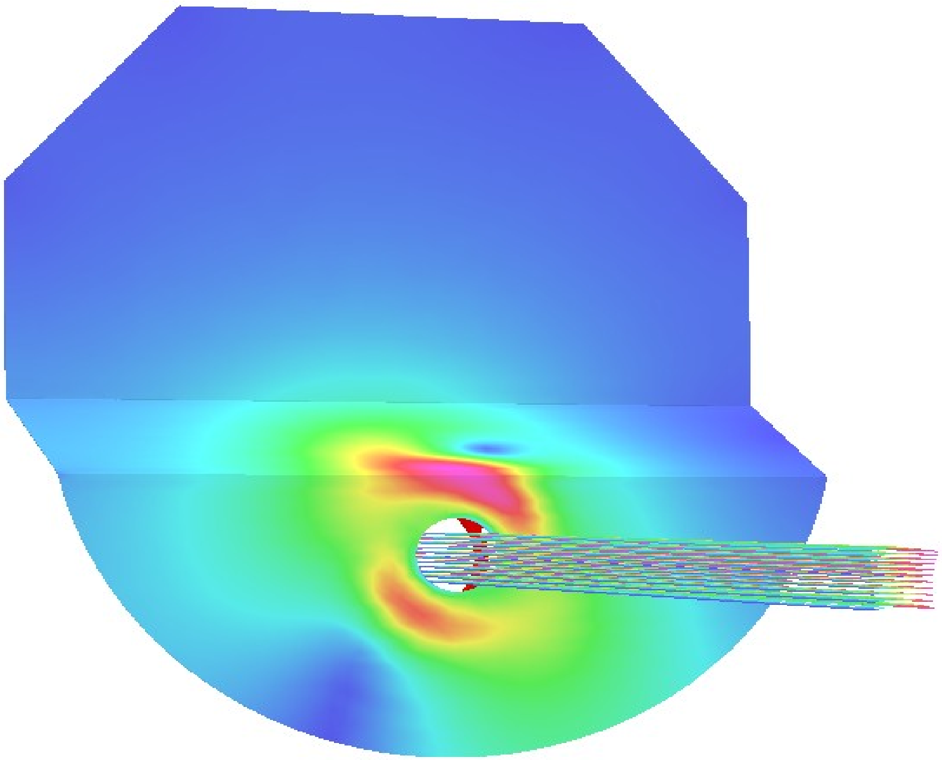
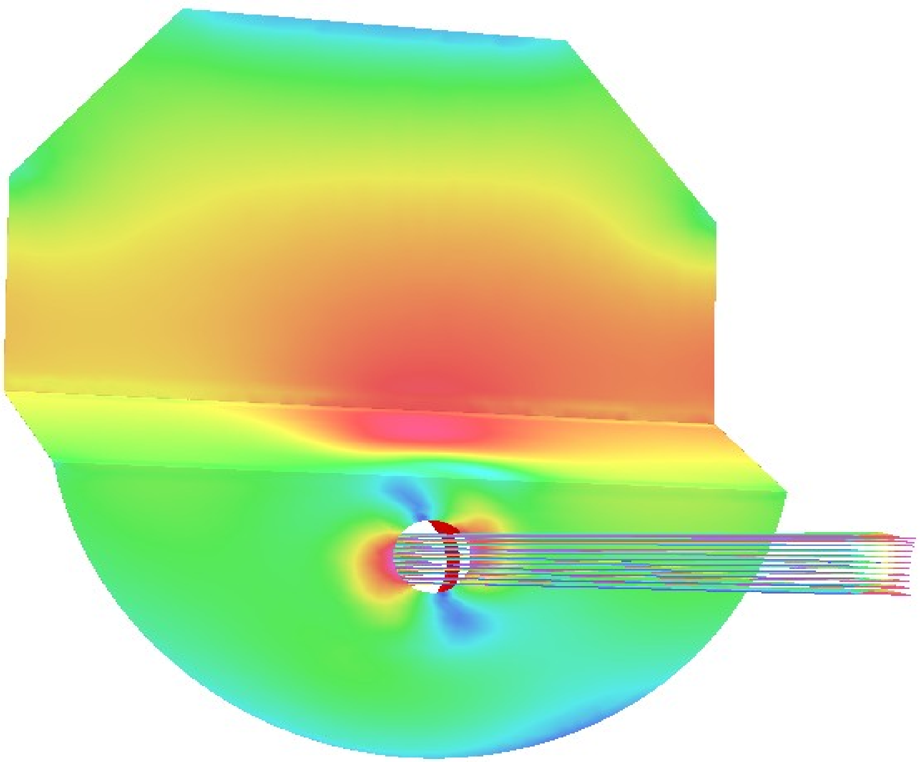
*3 April 2009*

***Kicker coil polarities corrected***

***External field included***



***Without external field***



***With 0.5 gauss vertical external field***

# Field Components on Beam Axis Without External Field

*100 Amps in both horizontal and vertical corrector coils.*

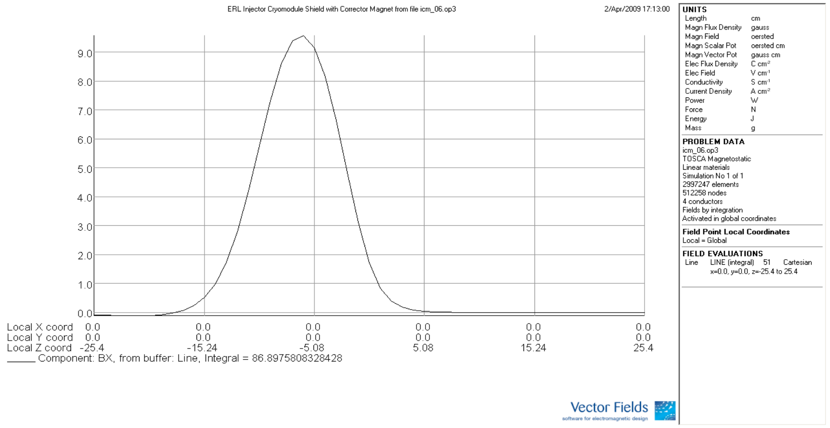
*Shield at Z = 0 cm*

*-25 < Z < 25 cm*

***Horizontal Component***

***$0 < B_X < 10$ gauss***

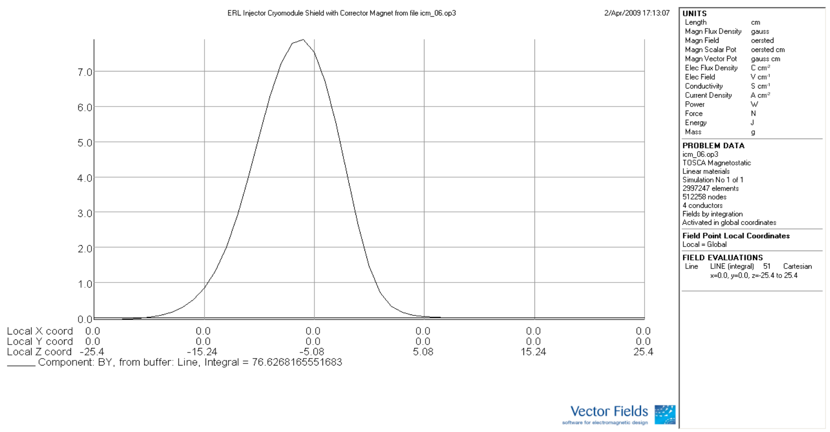
***Integral: 87 gauss-cm***

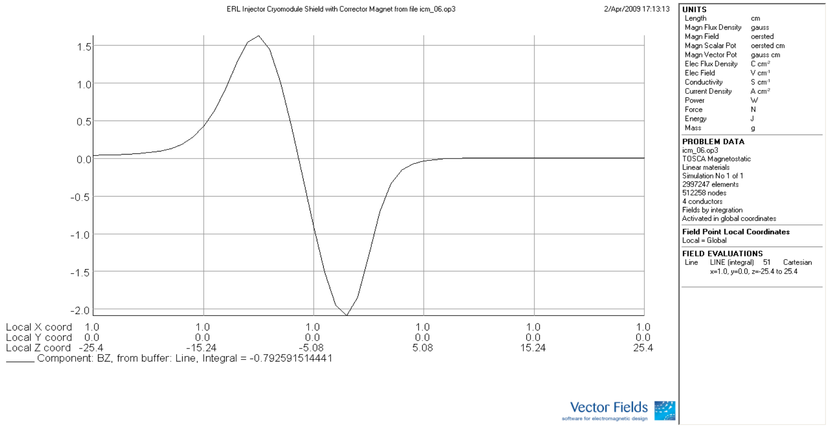



***Vertical Component***

***$0 < B_Y < 8$ gauss***

***Integral: 77 gauss-cm***




***Longitudinal Component***

***$-2.1 < B_Z < 1.6$ gauss***

***Integral: -0.8 gauss-cm***

# Field Components on Beam Axis With 0.5 Gauss Vertical External Field

*100 Amps in both horizontal and vertical corrector coils.*

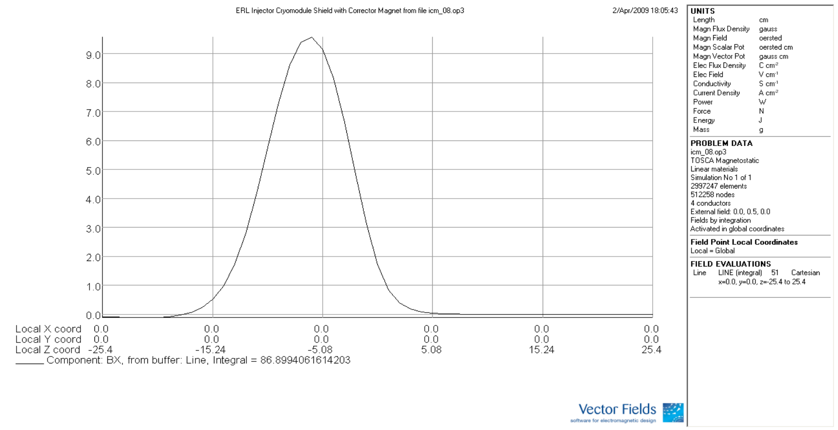
*Shield at Z = 0 cm*

*-25 < Z < 25 cm*

## *Horizontal Component*

*$0 < B_X < 10$ gauss*

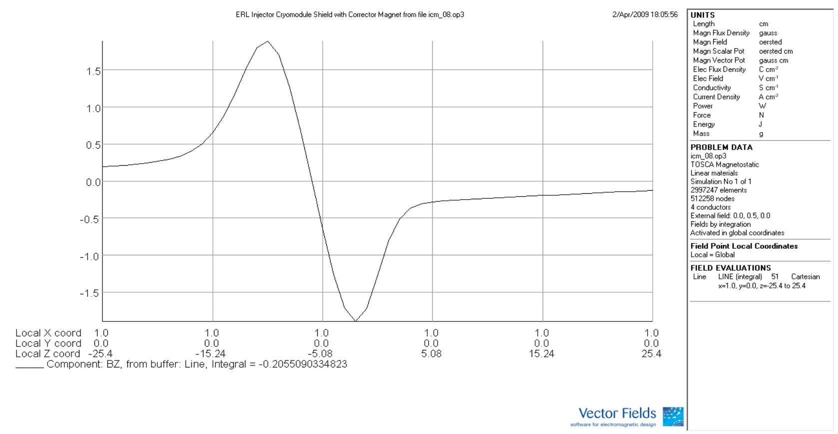
*Integral: 87 gauss-cm*

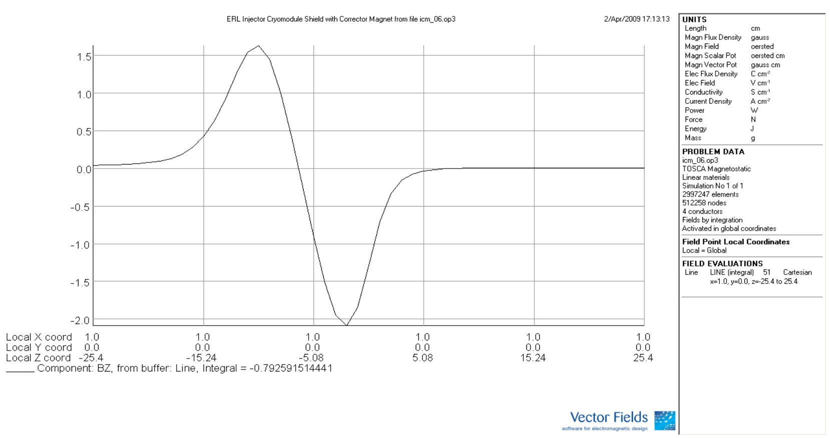



## *Vertical Component*

*$0 < B_Y < 8$ gauss*

*Integral: 92 gauss-cm*




## *Longitudinal Component*

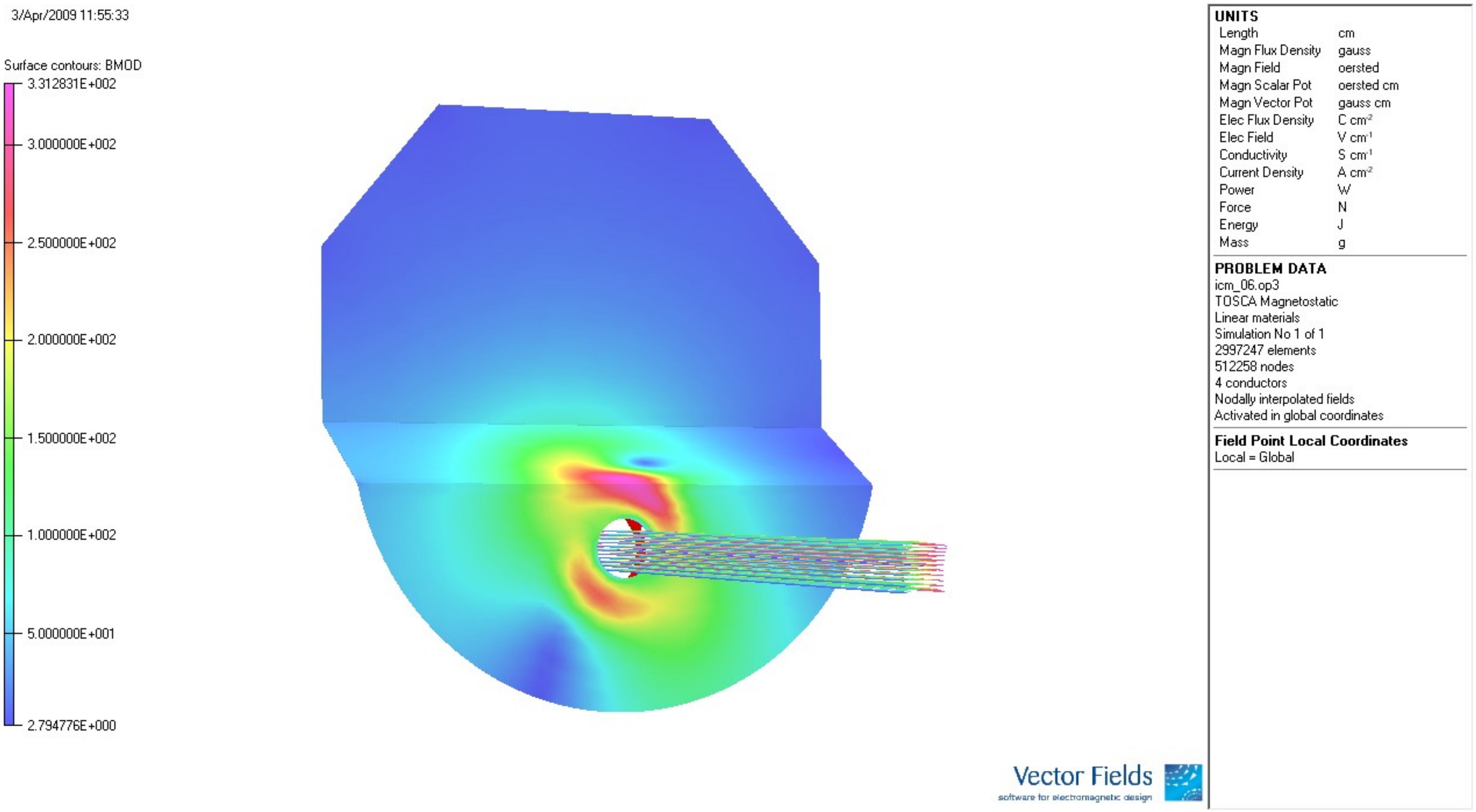
*$-1.8 < B_Z < 1.8$ gauss*

*Integral: -0.2 gauss-cm*

# Electron Tracking Without External Field

***250 keV electrons***

***11 x 11 entrance grid over 2 x 2 cm tracked for 75 cm***



# Electron Tracking
# With 0.5 Gauss Vertical External Field

*250 keV electrons*

*11 x 11 entrance grid over 2 x 2 cm tracked for 75 cm*