

# Updates

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HPS SVT Meeting, 09/01/15

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# Field Map for 2015 Engineering Run

- Received updated field maps from JLab
- 3D field maps simulated with TOSCA corrected with Primex measurements for fringes by Greg Kalicy ([gkalicy@jlab.org](mailto:gkalicy@jlab.org))
- Needed to scale field to our running conditions and unfold into all four quadrants
- Created new detector
  - HPS-EngRun2015-Nominal-v2-fieldmap
  - Still need to address issue of file location
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# Alignment

- Last week had held layer 4 fixed. Investigated fixing layers 5 and 6.
- Report on constraining layer 6 and deriving translations for other layers with respect to the harp scan wire and hits in layer 6 (hole module).

# Current Corrections axial stereo (L4)

■ L1t	0.103	-0.063
■ L2t	0.111	-0.066
■ L3t	0.097	-0.059
■ L4t_hole	0.	0.
■ L4t_slot	0.	0.
■ L5t_hole	-0.028	0.020
■ L5t_slot	0.	0.
■ L6t_hole	-0.036	0.027
■ L6t_slot	0.	0.

consistent with translation of all three layers ?

# Current Corrections axial stereo (L6)

■ L1t	0.104	-0.041
■ L2t	0.110	-0.044
■ L3t	0.104	-0.044
■ L4t_hole	0.036	-0.027
■ L4t_slot	0.	0.
■ L5t_hole	0.020	-0.019
■ L5t_slot	0.	0.
■ L6t_hole	0.	0.
■ L6t_slot	0.	0.

consistent with translation of all three layers ?

# Current Corrections axial stereo (L4)

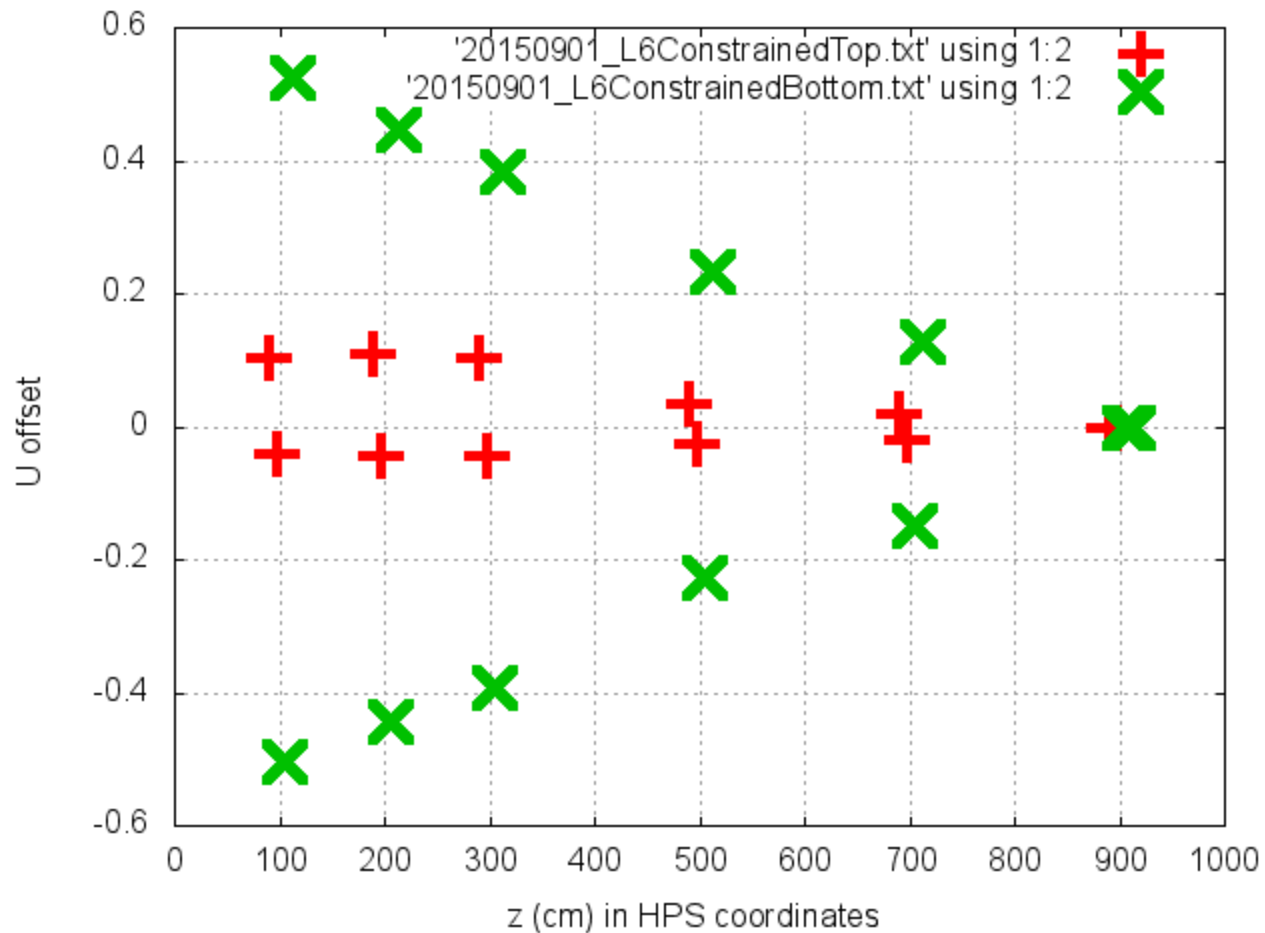
■ L1b	0.332	-0.327
■ L2b	0.252	-0.264
■ L3b	0.182	-0.204
■ L4b_hole	0.	0.
■ L4b_slot	0.	0.
■ L5b_hole	-0.133	0.108
■ L5b_slot	0.	0.
■ L6b_hole	-0.259	0.254
■ L6b_slot	0.	0.

consistent with  
rotation of  
all three layers ?

# Current Corrections axial stereo (L6)

■ L1b	0.525	-0.505
■ L2b	0.448	-0.444
■ L3b	0.382	-0.392
■ L4b_hole	0.232	-0.226
■ L4b_slot	0.	0.
■ L5b_hole	0.128	-0.148
■ L5b_slot	0.	0.
■ L6b_hole	0.	0.
■ L6b_slot	0.	0.

# Sensor Offsets wrt Layer 6





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# Next Steps

- Put the shifts into detector description
  - Still deciding how to best do this...
- Run some field-on Fee events
  - check momentum and  $\chi^2$
- Run some field-on Møller events
  - check vertex position and mass