

Hadron Runs

Charged Particles – Good Tracks in Si

Be Target= In

13.5 GeV/c A-line

rate=30 pps

tagger magnet=0.

rad=0%

Particles/pulse=1.0

$\theta_z = 0^\circ$ (use Beamzilla text display for angle and position readouts)

The little pictures are looking down on the tower from above (ie: the TV view=LR mirror Matlab)

$\theta_y = 0^\circ$ ($x_{\text{beamzilla}} = 7.$, $y_{\text{beamzilla}} = 7.$)

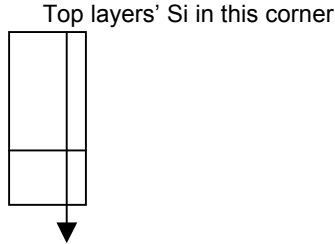
Runs : 443 to 453, 596 to 599

687, 688, 689, 691 to 701, 705, 706

time = 2 days

$x_{\text{tracker front face}} = -7.$ cm

$y_{\text{tracker front face}} = -7.$ cm



$\theta_y = +30^\circ$ ($x_{\text{beamzilla}} = -20.$, $y_{\text{beamzilla}} = 7.$)

Runs : 528, 530 to 535 (where 530 to 532 had bad ACD)

761, 762, 763, 767 to 774, 787, 788, 793 to 798

time = 2 days

$x_{\text{calorim front face}} = 0.$ cm

$y_{\text{calorim front face}} = -7.$ cm



$\theta_y = +60^\circ$ ($x_{\text{beamzilla}} = -34.8.$, $y_{\text{beamzilla}} = 7.$)

Runs : 506, 507, 514 to 527

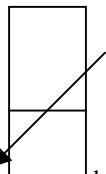
(520 to 524 ? , 525 to 547 had bad ACD)

800 to 822 , 804 (bad run)

time = 2 days

$x_{\text{calorim front face}} = 0.$ cm

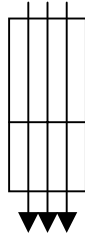
$y_{\text{calorim front face}} = -7.$ cm



$\theta_y = 0^\circ$ ($x_{\text{beamzilla}} = \text{many}$, $y_{\text{beamzilla}} = \text{many}$)

Put the beam in the center of each of the 25 Si strip detectors for 1.5 hours each.

time = 2 days



Run #	$x_{\text{beamzilla}}$ [cm]	$y_{\text{beamzilla}}$ [cm]	Hours
655	-12.8	12.8	
656	-6.4	12.8	
657	0.	12.8	
658	6.4	12.8	
659	12.8	12.8	
660	13.8	6.4	
661	7.4	6.4	
662	1.0	6.4	
663,664	-5.4	6.4	
665	-11.8	6.4	
666	-11.8	0.	
667,668	-5.4	0.	
669 to 674	1.0	0.	
675	7.4	0.	
676	13.8	0.	
677	13.8	-6.4	
678	7.4	-6.4	
679	1.0	-6.4	
680	-5.4	-6.4	
681	-11.8	-6.4	
682	-11.8	-12.8	
683	-5.4	-12.8	
684	1.0	-12.8	
685	7.4	-12.8	
686	13.8	-12.8	

Charged Particles – Bad Tracks in Si - Problematic cosmics the software must reject

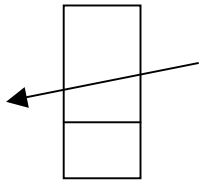
Be Target= In
13.5 GeV/c A-line
rate=30 pps
tagger magnet=0.
rad=0%
Particles/pulse=1.0

$\theta_z = 0^\circ$ (use Beamzilla text display for angle and position readouts)
The little pictures are looking down on the tower from above (ie: the TV view=LR mirror Matlab)
Layers are numbered 0 (bottommost) to 15 (topmost). Superglast layers=2,3,4.

$\theta_y = +80^\circ$ ($x_{\text{beamzilla}} = -63.0$, $y_{\text{beamzilla}} = 7.$) Runs : **455 to 457, 502, 503, 505, 647 to 652, 654, 847, 848, 850, 861 to 865, 868, 869**

Enter tracker layer 6, exit layer 5

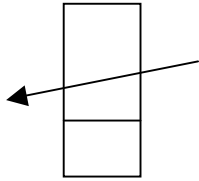
time = 2 days



$\theta_y = +80^\circ$ ($x_{\text{beamzilla}} = -56.5$, $y_{\text{beamzilla}} = 7.$) Runs : **470 to 473, 600, 601, 603 to 606, 608 to 611, 613 to 617**

Enter tracker superglast layer 4, exit superglast layer 3

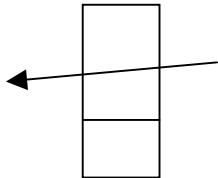
time = 2 days



$\theta_y = +85^\circ$ ($x_{\text{beamzilla}} = -68.0$, $y_{\text{beamzilla}} = 7.$) Runs : **459 to 469, 823 to 828, 831 to 837, 839, 842**

Hit tracker layer 7

time = 2 days

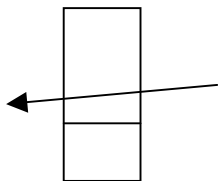


$\theta_y = +85^\circ$ ($x_{\text{beamzilla}} = -62.0$, $y_{\text{beamzilla}} = 7.$)

Runs : 874 to 877, 618, 621 to 635, 638, 639, 641, 644

Hit tracker layer 4 (topmost Superglast layer)

time = 2 days

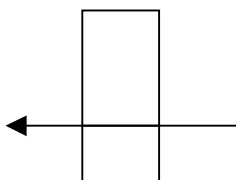


$\theta_y = 90^\circ$ ($x_{\text{beamzilla}} = -41.5$, $y_{\text{beamzilla}} = 0.$)

Runs : 478, 479, 499 to 501, 544, 548

Enter between Tracker and Calorimeter

time = .5 day

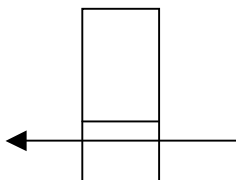


$\theta_y = 90^\circ$ ($x_{\text{beamzilla}} = -36.6$, $y_{\text{beamzilla}} = 0.$)

Runs : 480, 481, 494, 495, 498, 542

Enter top layer of calorimeter

time = .5 day

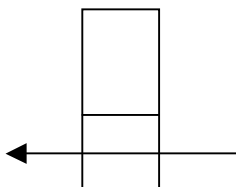


$\theta_y = 90^\circ$ ($x_{\text{beamzilla}} = -27.6$, $y_{\text{beamzilla}} = 0.$)

Runs 482, 483, 492, 493, 536, 537, 539

Enter middle layer of calorimeter

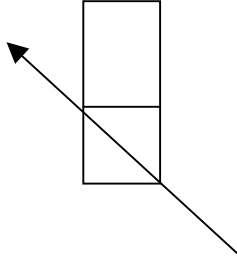
time = .5 day



$\theta_y = 127^\circ$ ($x_{\text{beamzilla}} = -22.$, $y_{\text{beamzilla}} = 0.$) Runs : 484, 486, 491,
no tagger for 549,550,553 (13.5 GeV e+)

Enter back corner of calorimeter, exit the opposite calorimeter corner without hitting tracker

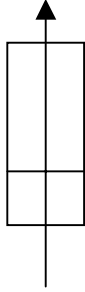
time = .5 day



$\theta_y = 180^\circ$ ($x_{\text{beamzilla}} = 0.$, $y_{\text{beamzilla}} = 0.$) Runs : 487 to 480 (13.5 GeV e+)
901, 902

Enter center of back of calorimeter.

time = .5 day



$\theta_y = 0^\circ$ ($x_{\text{beamzilla}} = 1.2$, $y_{\text{beamzilla}} = -0.2$) Runs : 903 to 909 (13.5 GeV e+)
937 to 944 (13.5 GeV e+)
916 (13.5 GeV photons, 9% X0)
919, 920 (5 GeV photons, 2.7 % X0)

Enter center of tracker.

time = .5 day

