

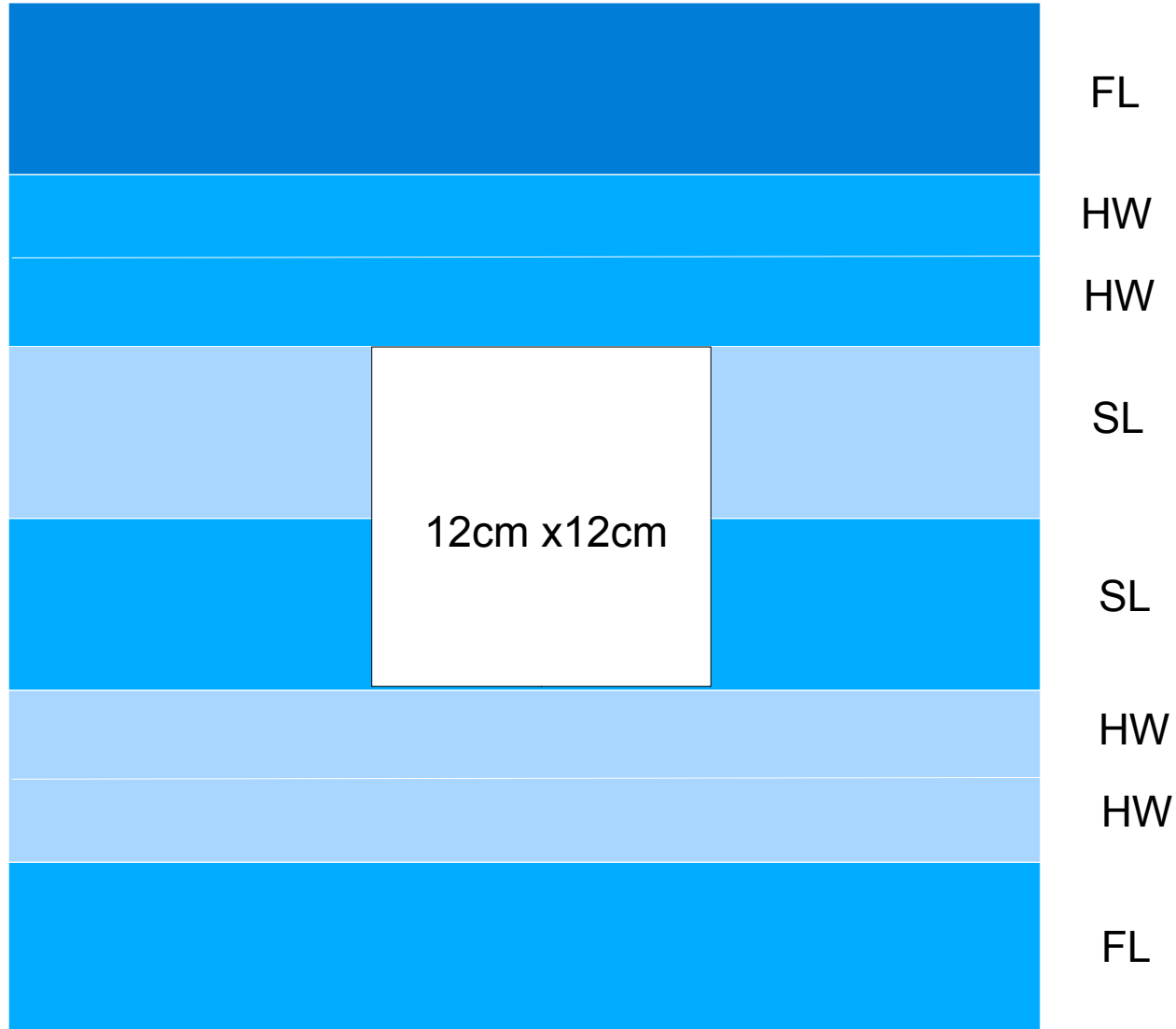
Ideas for TOF Improvements

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TOF Beam Region

TOF plane (252cm x 252cm)

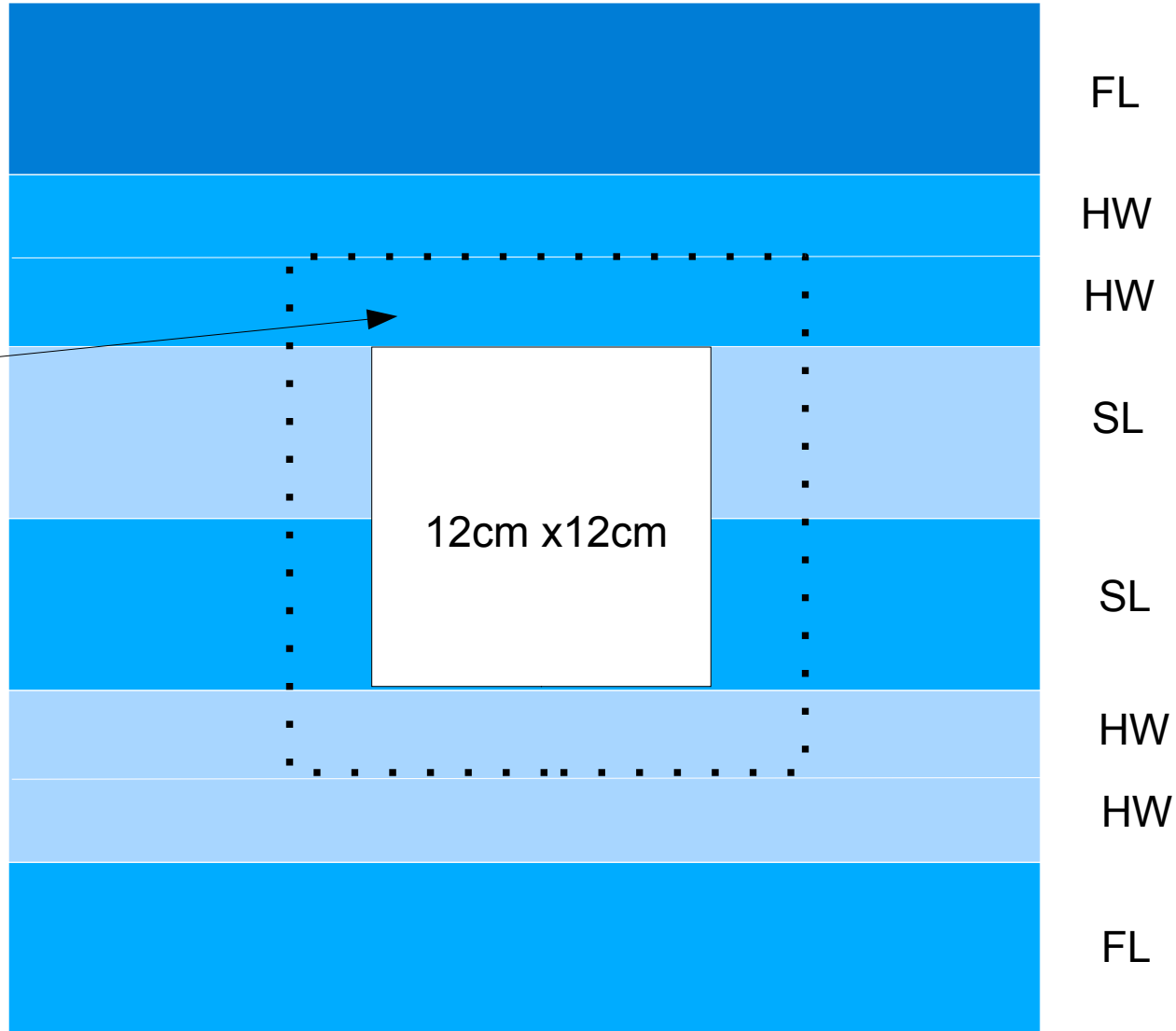
38 Full Length paddles 4 Half Width paddles 4 Short Length paddles



TOF Beam Region

TOF plane (252cm x 252cm)

38 Full Length paddles 4 Half Width paddles 4 Short Length paddles



Region of highest EM background

Also region where physics tracks likely have highest momentum and are likely out of the TOF PID reach

TOF Beam Region

TOF plane (252cm x 252cm)

36-Full Length paddles

6-Half Width paddles

12-Half Width Short Length paddles

Change to a TOF Plane

Remove

2 FL paddle

4 SL paddles

(8 PMTs)

Add

2 HW paddles

12 HWSL paddles

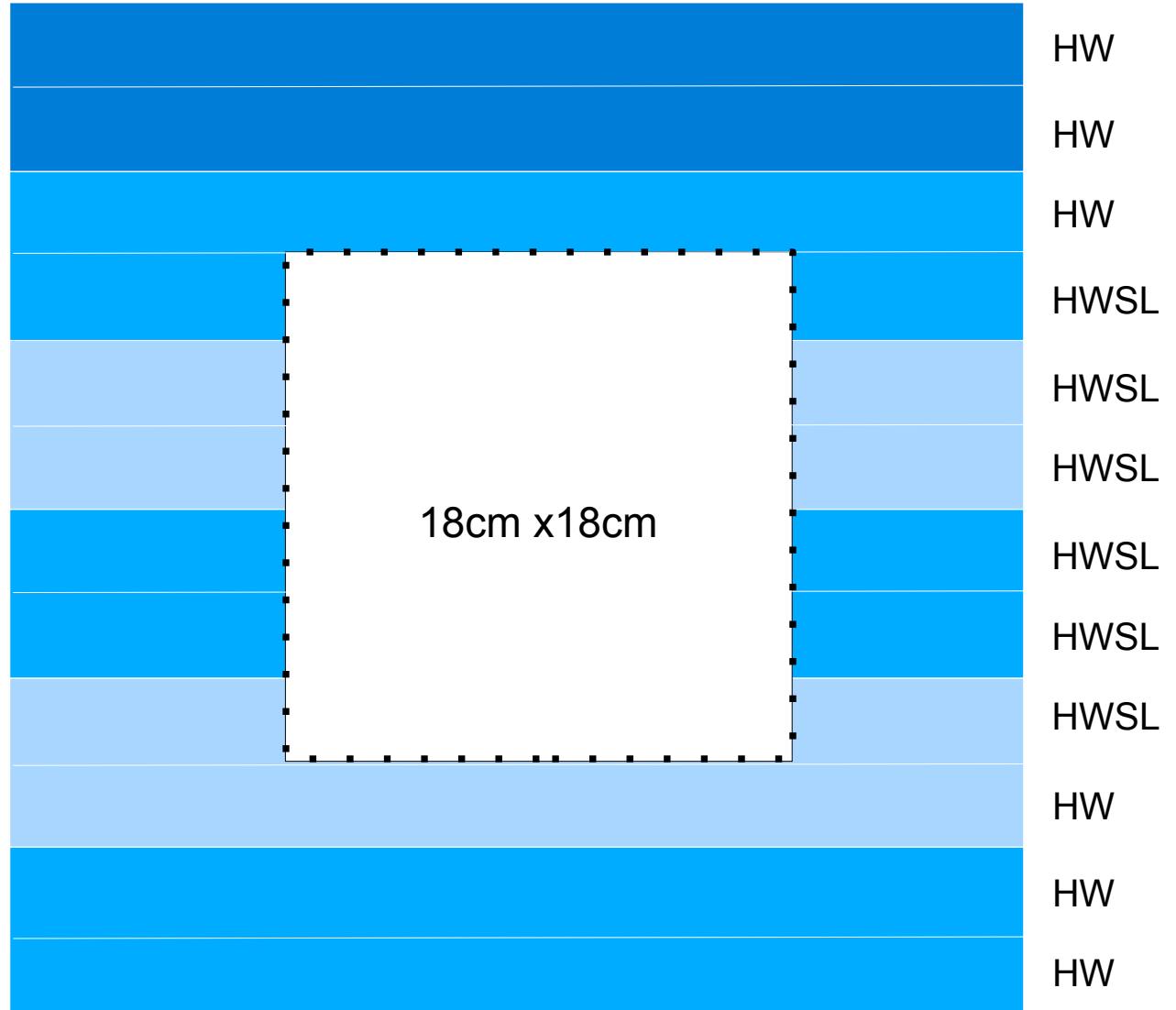
(16 PMTs)

Total TOF changes

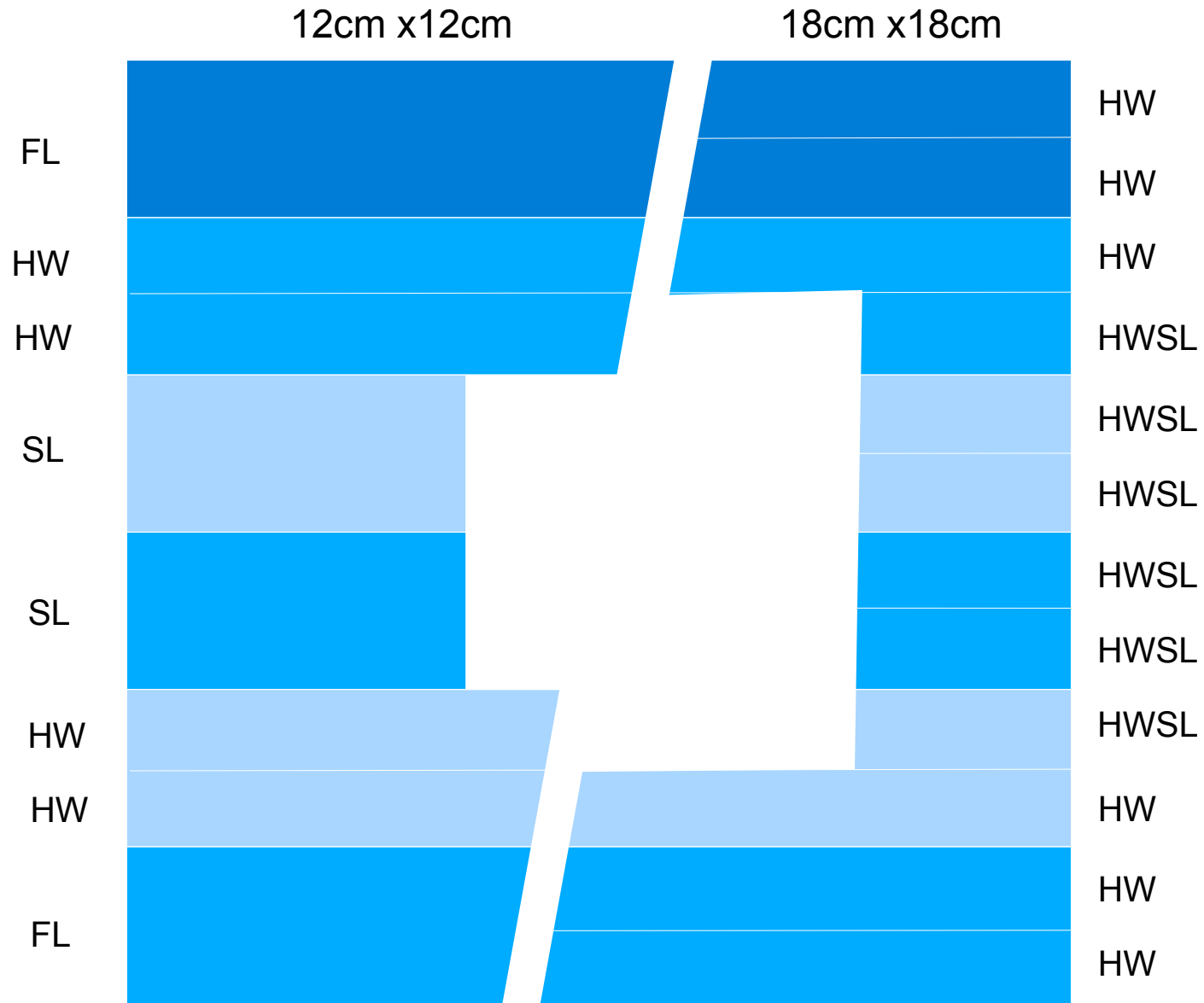
+ 4 FL paddles

+ 24 HWSL paddles

+ 8 readout channels



TOF Beam Region



TOF Track Momenta

Run 11555

solenoid_current: 1200

beam_current: 47

Independent/Hist_DetectorMatching/TimeBased/TOFPoint/PVsTheta_HasHit

