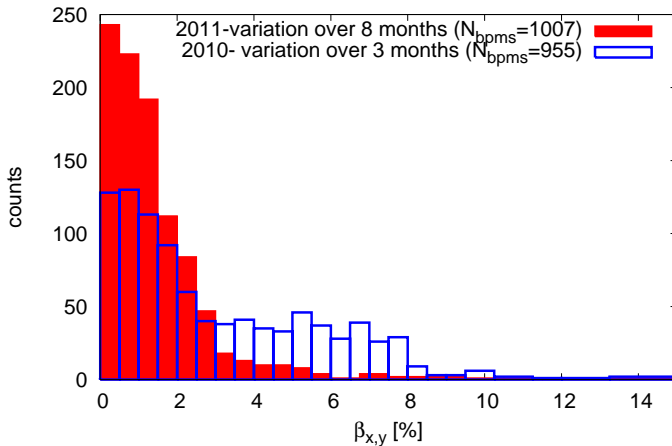


Optics correction near half integer tunes

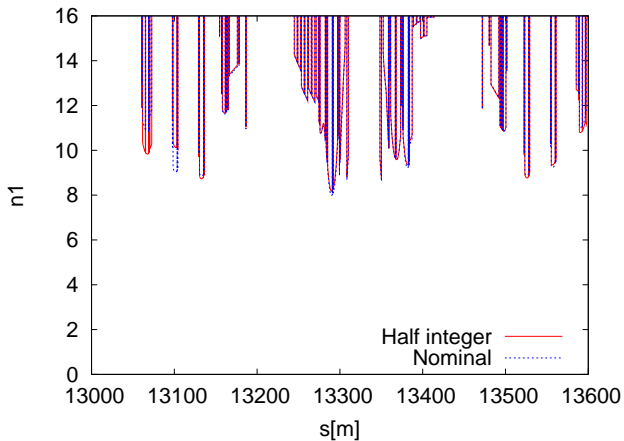
R. Calaga, E. Maclean, T. Persson, P. Skowronski, R. Steinhagen, R. Tomás
García, G. Vanbavinckhove and S. White

November 8, 2011

Measurement at injection, nominal optics:

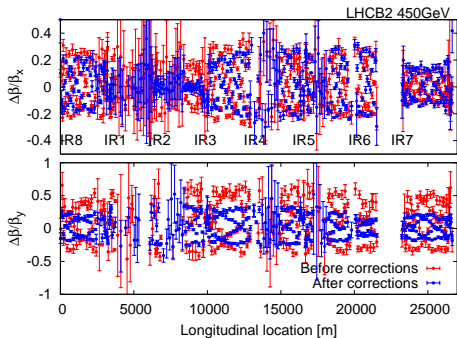
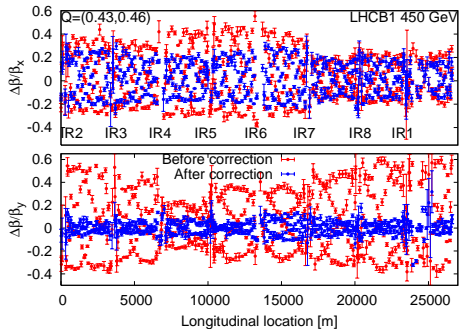


Aperture around IP_5 :



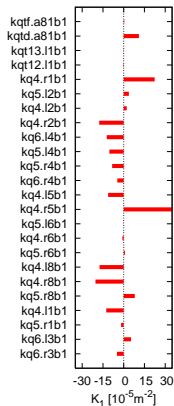
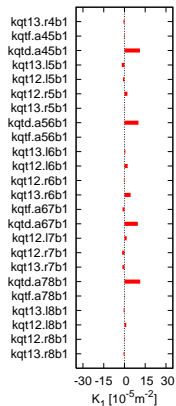
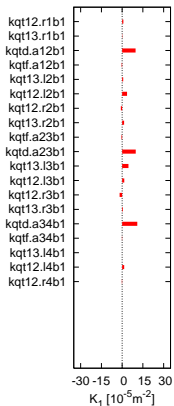
Optics - $Q_x = 0.43, Q_y = 0.46$ Measurement and correction- $Q_x = 0.43, Q_y = 0.46$ Stopband- $Q_x = 0.43, Q_y = 0.46$

Summary



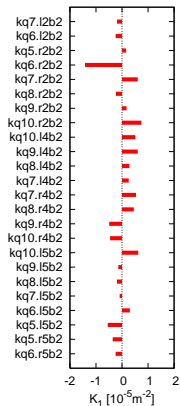
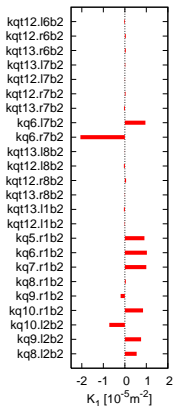
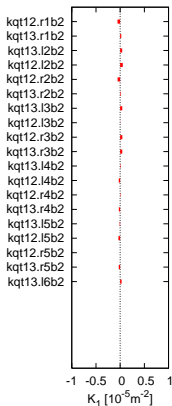
Optics - $Q_x = 0.43, Q_y = 0.46$ Measurement and correction- $Q_x = 0.43, Q_y = 0.46$ Stopband- $Q_x = 0.43, Q_y = 0.46$

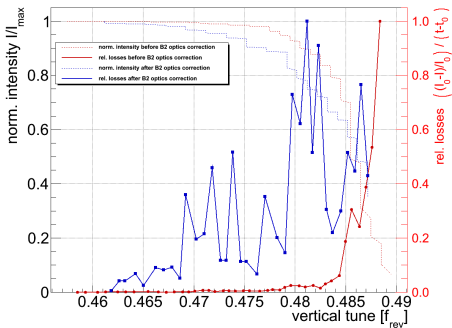
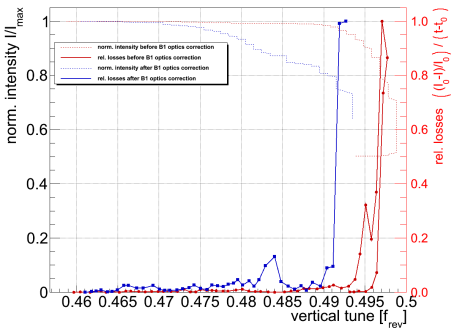
Summary



Optics - $Q_x = 0.43$, $Q_y = 0.46$ Measurement and correction- $Q_x = 0.43$, $Q_y = 0.46$ Stopband- $Q_x = 0.43$, $Q_y = 0.46$

Summary





- Improved optics stability at injection in 2011.
- Optics measurement and correction near half integer has been demonstrated.
- Iteration would be needed to further decrease the β -beat.
- Measurements of the Montague function, amplitude detuning and non-linear chromaticity measurements should be conducted to understand the stop band.