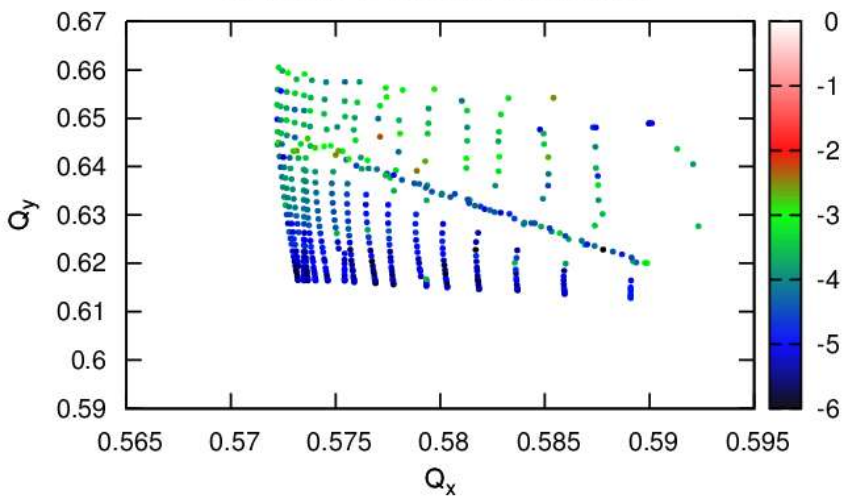
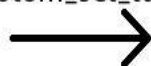


Change of fractional tune of ctf_12wig_v4c to improve frequency map

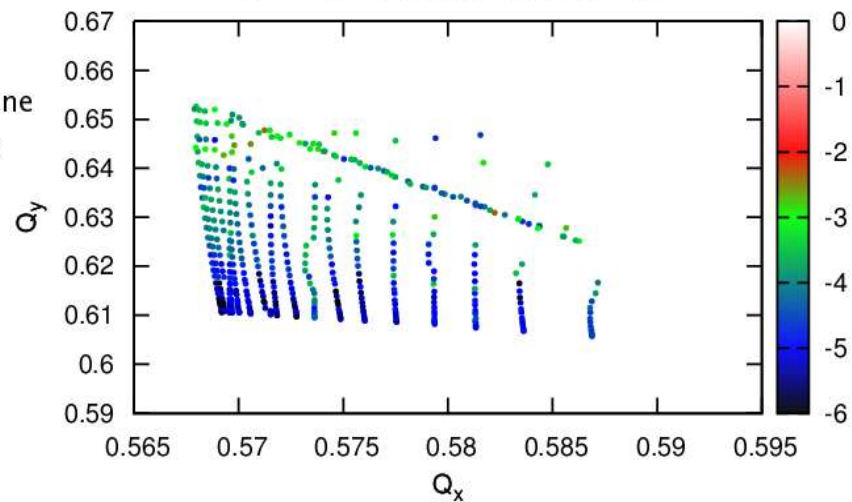
ctf-12wig-v4c-572614 frequency map



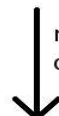
custom_set_tune



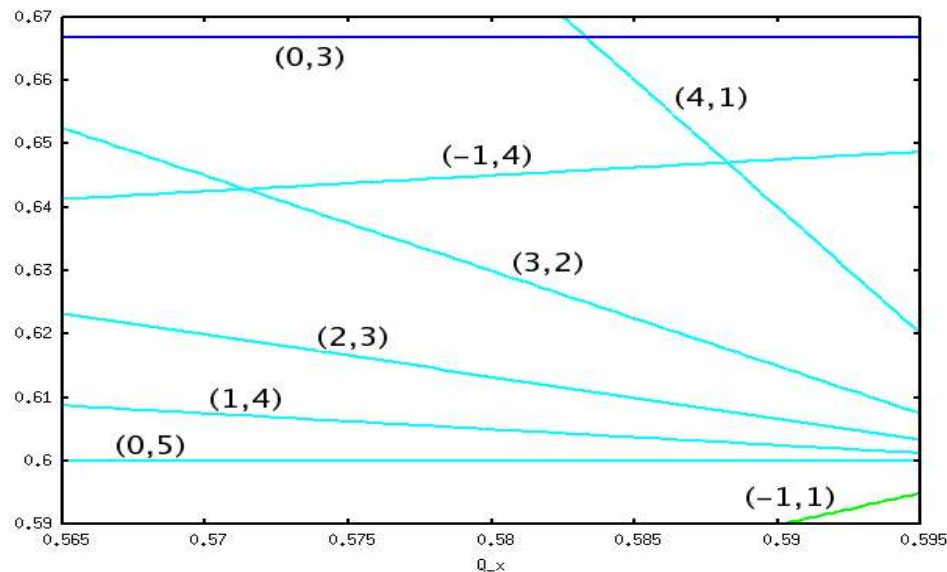
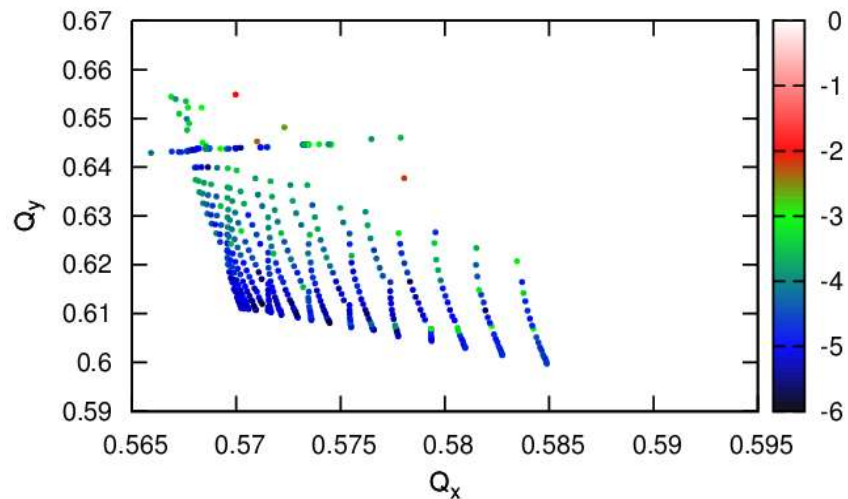
ctf-12wig-v4c-568608 frequency map



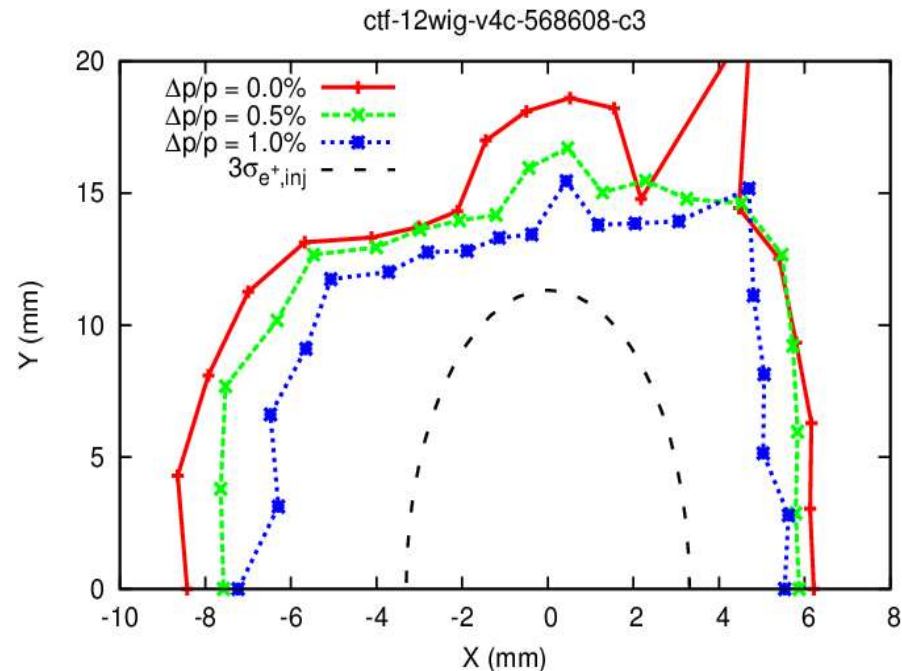
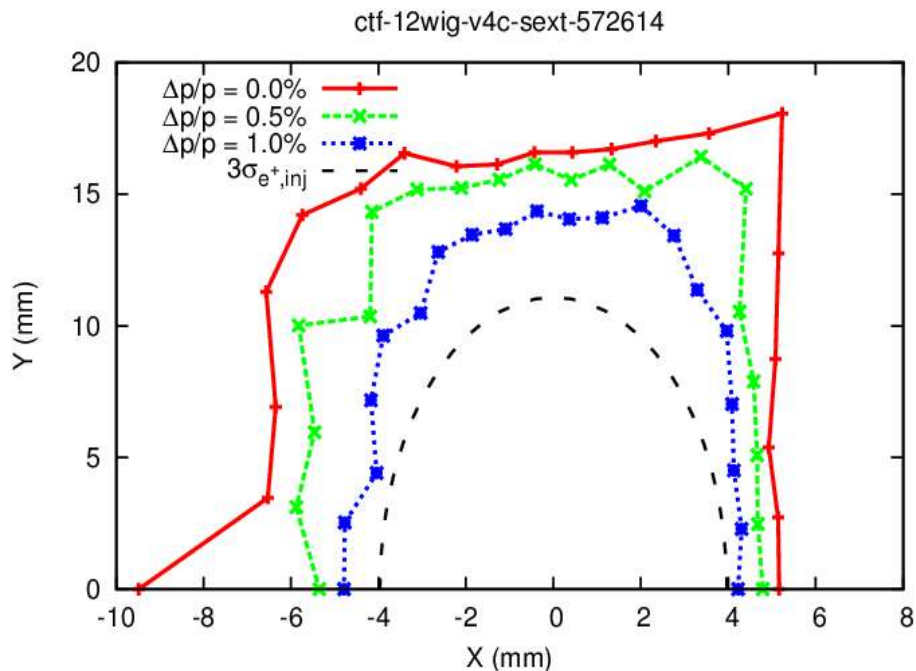
retune quadrupoles
optimize sextupoles



ctf-12wig-v4c-568608-c3 frequency map



Dynamic aperture of retuned lattice



Dynamic Aperture Area in units of 1-Sigma Ellipses*

Energy Spread	$Q_x=.572$ $Q_y=.614$	$Q_x=.568$ $Q_y=.608$	Gain
1.0%	14.06	23.02	64%
0.5%	19.56	27.9	43%
0.0%	25.16	32.68	30%

*injected emittance: $e_a=1.0\mu\text{m}$ $e_b=0.5\mu\text{m}$