

Start-to-end CeC Simulations

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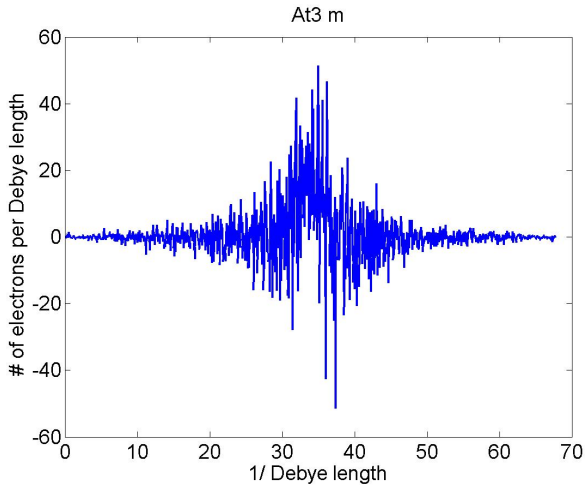
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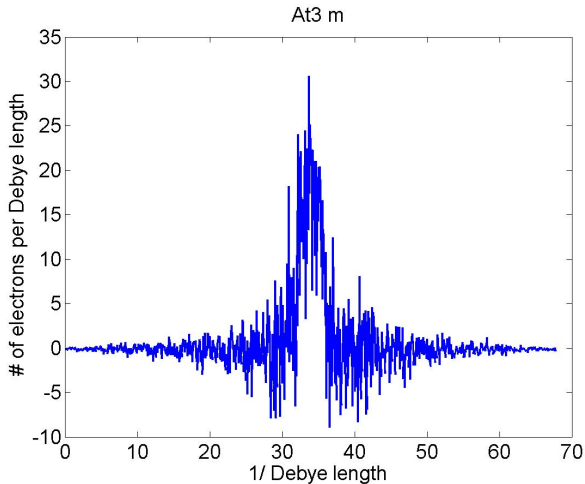
- Let GENESIS generate particles for 400 slices with correct shot noise
- Take 5 slices for modulator simulations (background beam and modulated beam) with quadrupoles
- Replace 5 slices into GENESIS for FEL simulation (background beam and modulated beam)
- Take 5 slices from output of GENESIS as the input of kicker simulation (background beam and modulated beam) with quadrupoles

- Number of real electrons per slice : 2.83×10^7
- $n_{\text{part}} = 16384$
- $n_{\text{part}} = 131072$
- $n_{\text{part}} = 1048576$

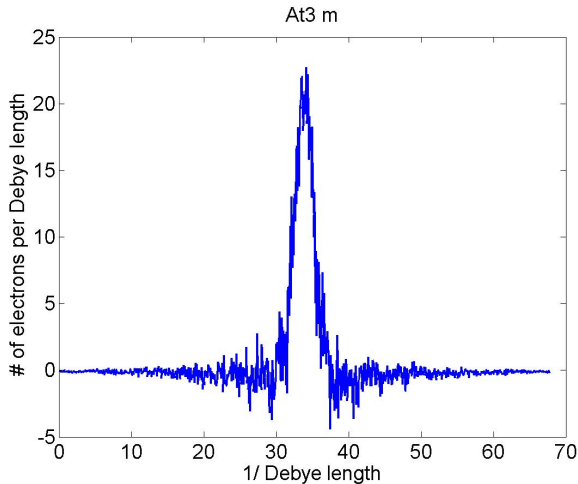
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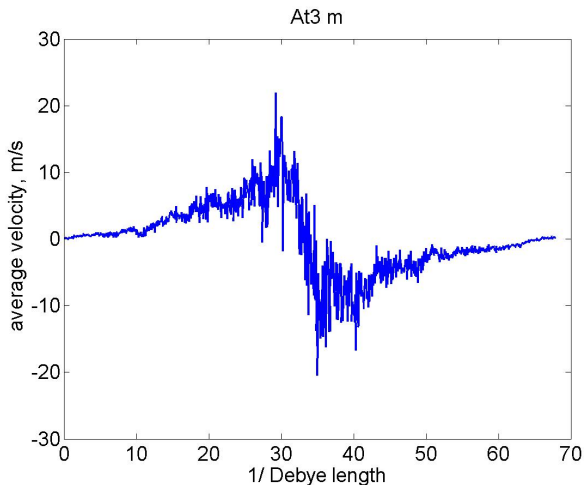
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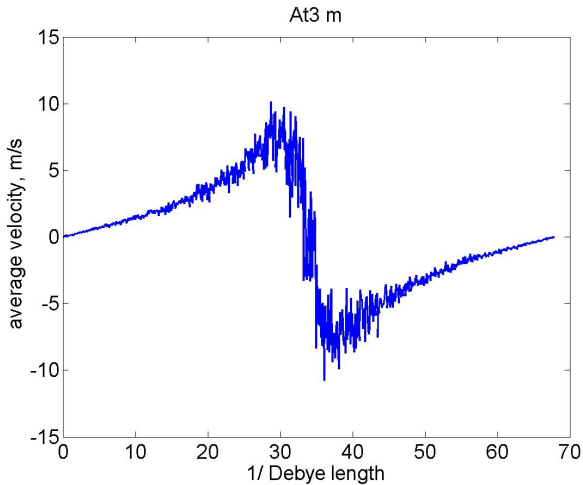
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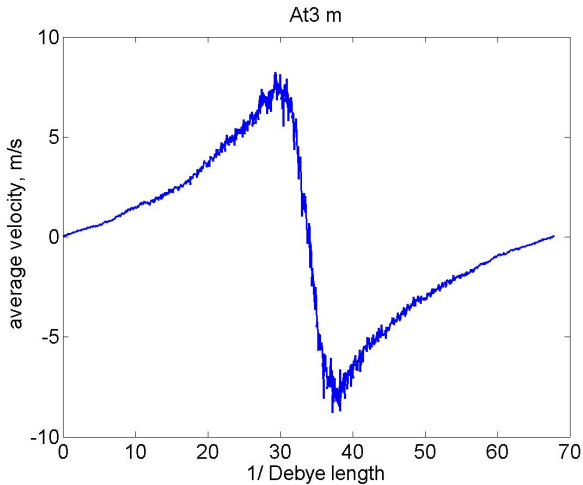
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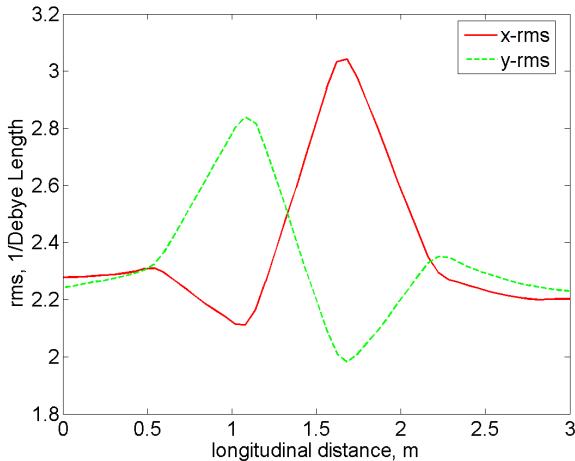
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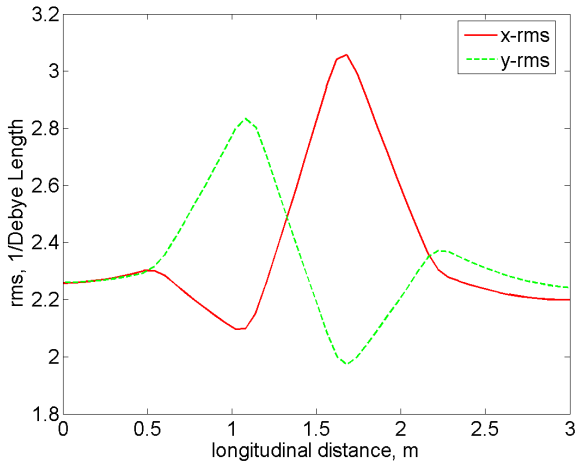
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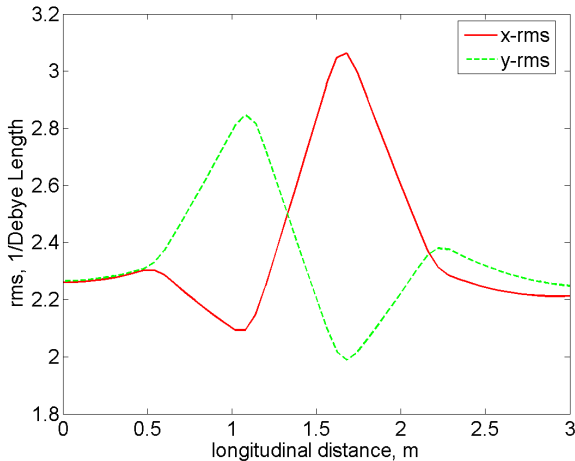
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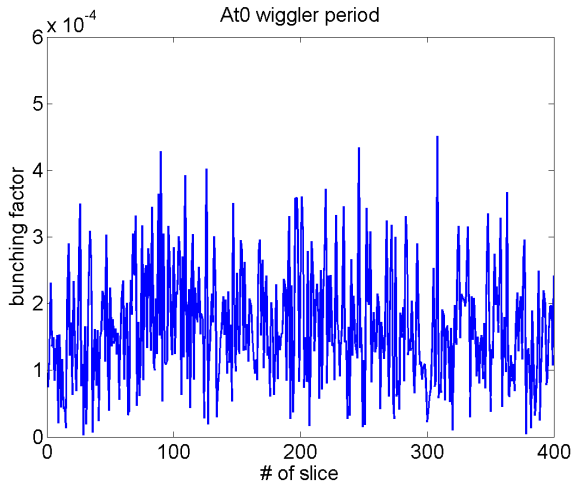
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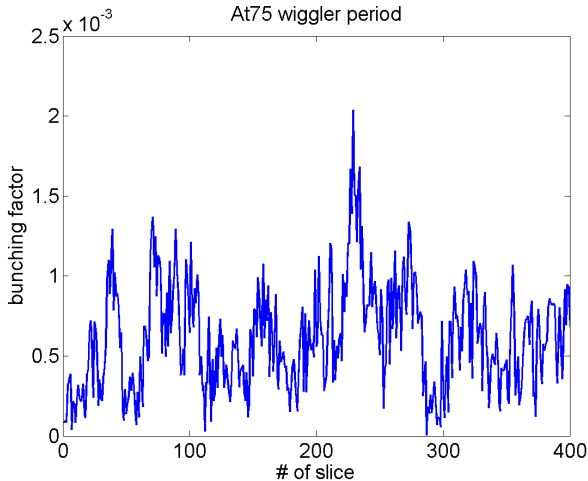
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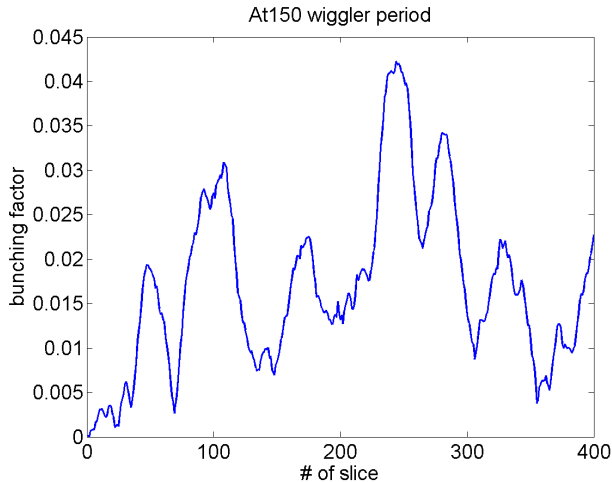
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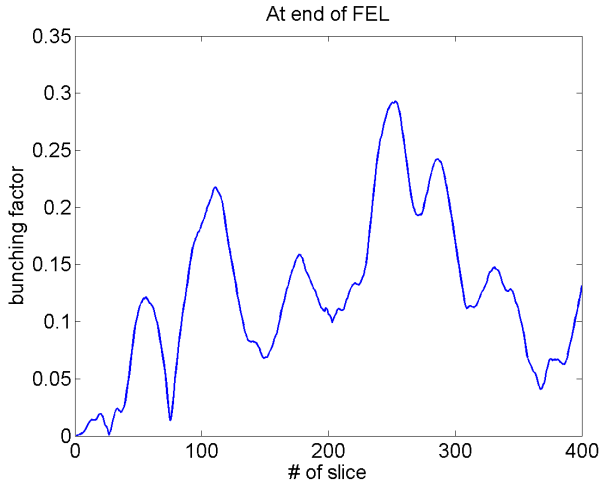
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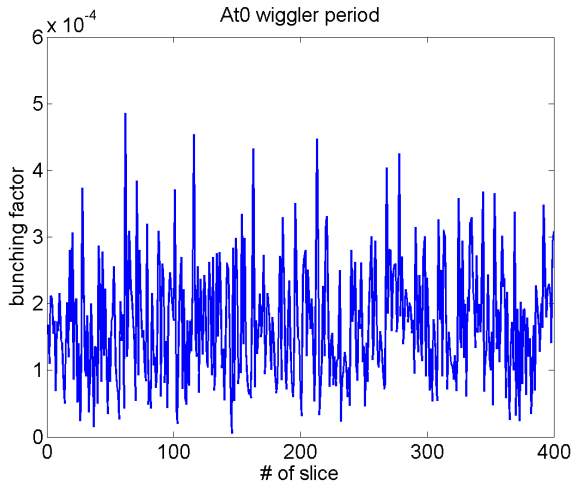
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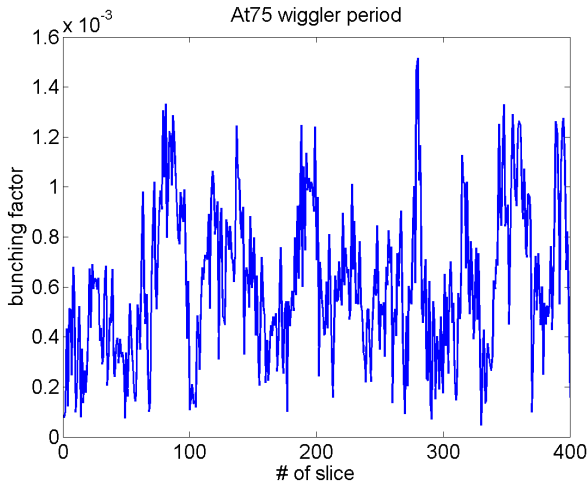
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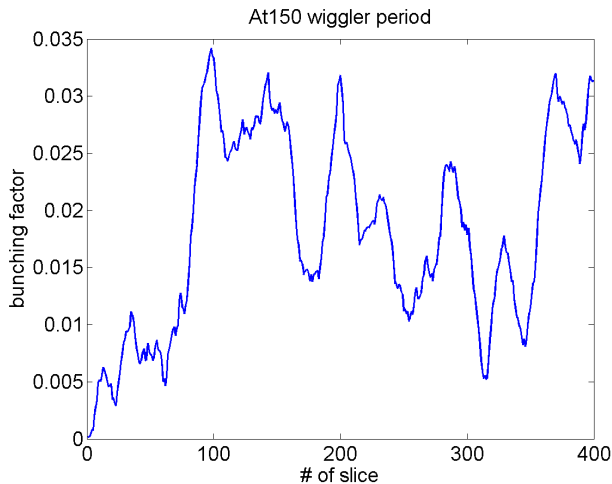
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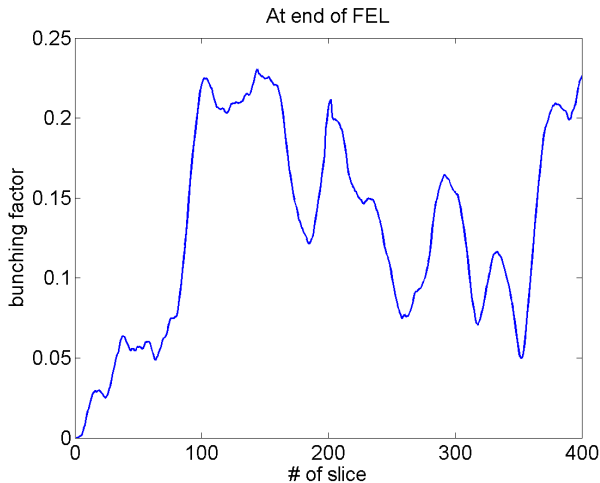
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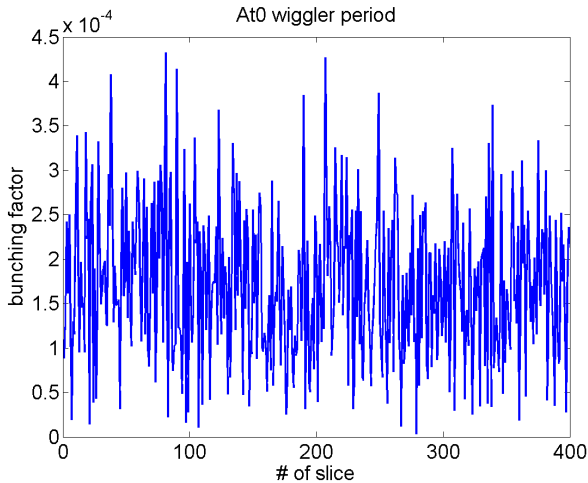
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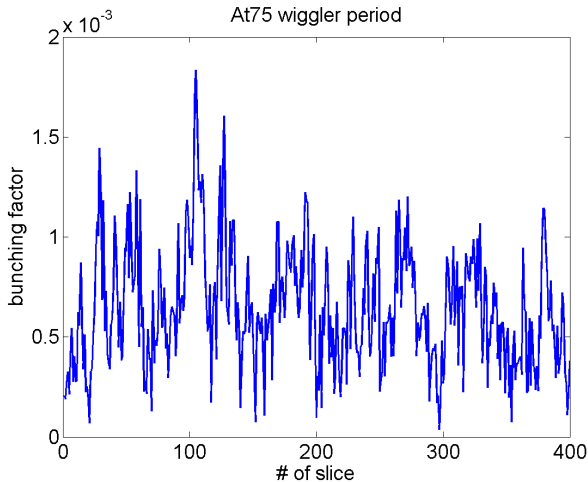
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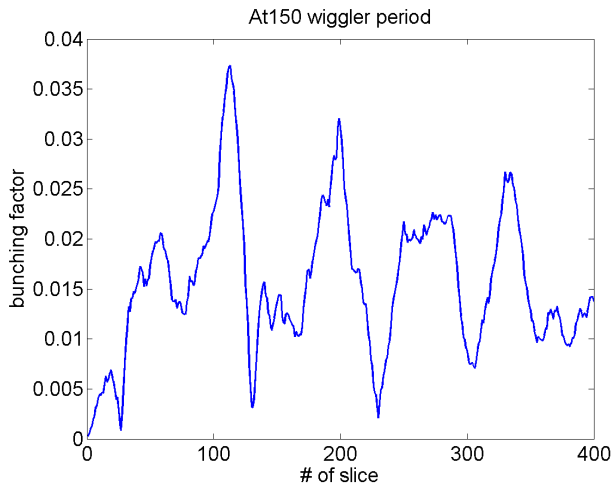
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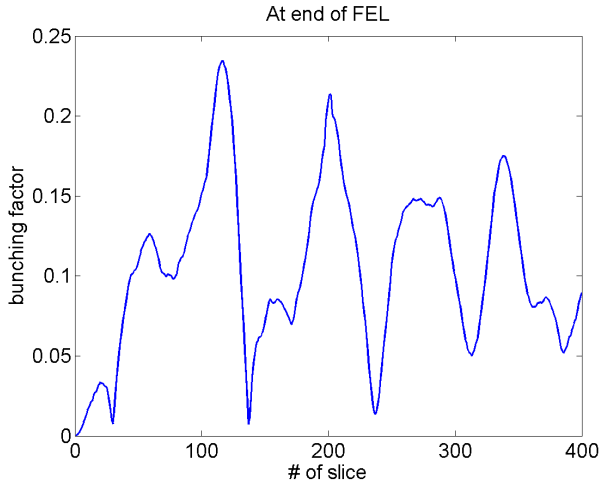
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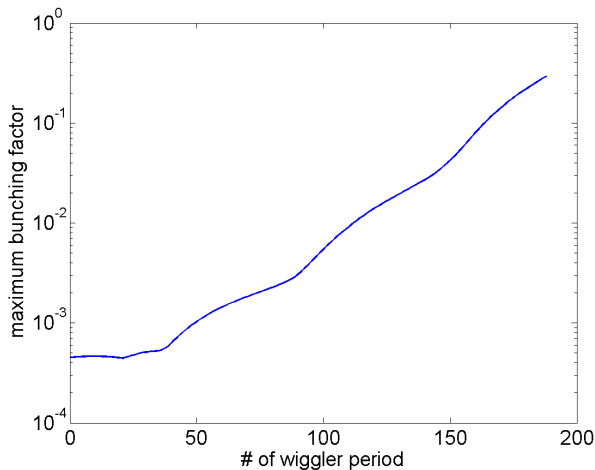
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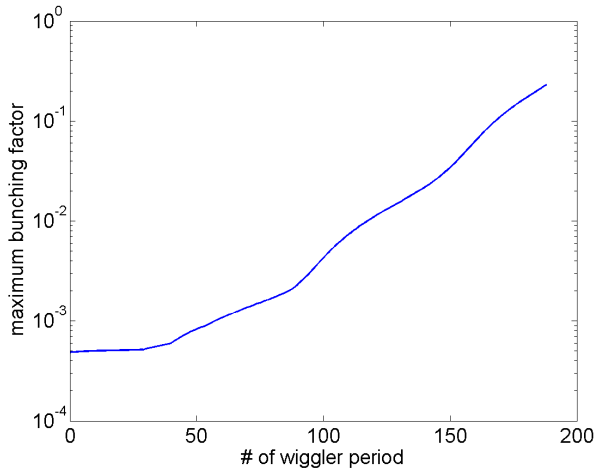
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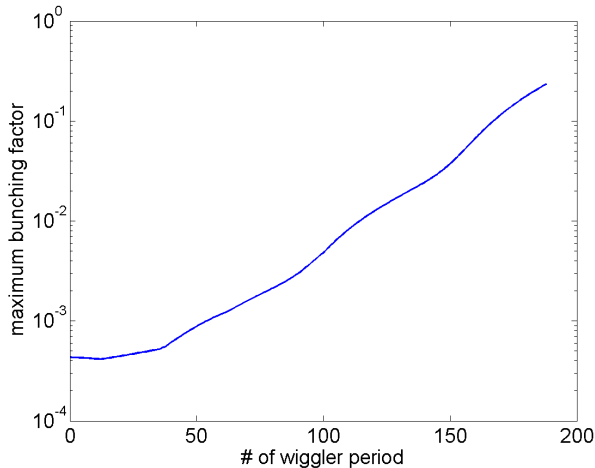
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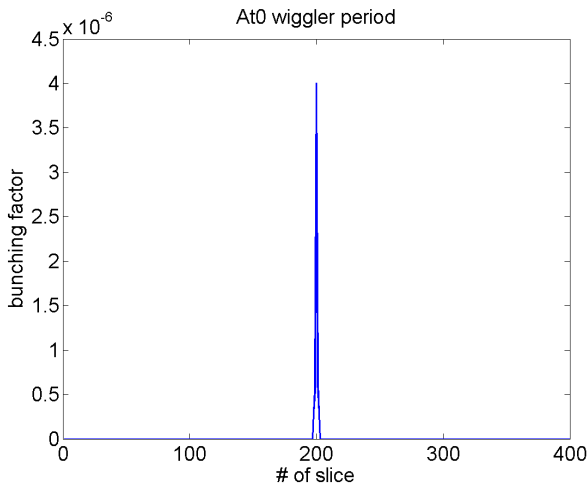
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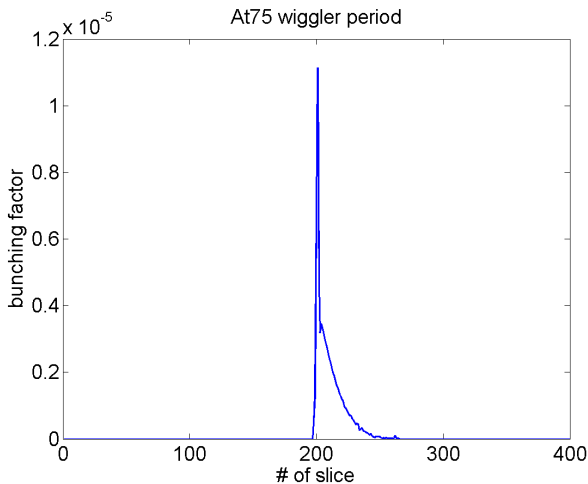
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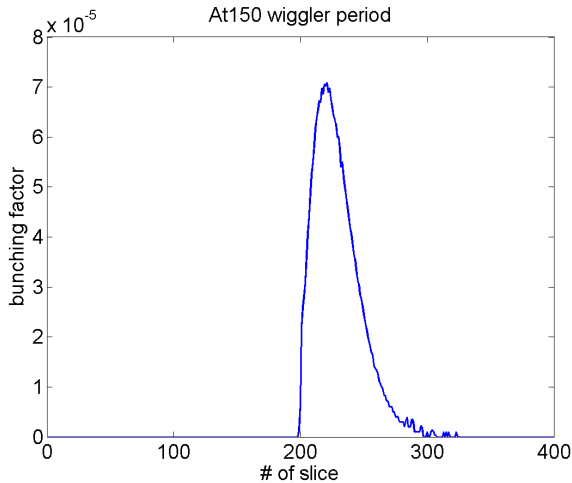
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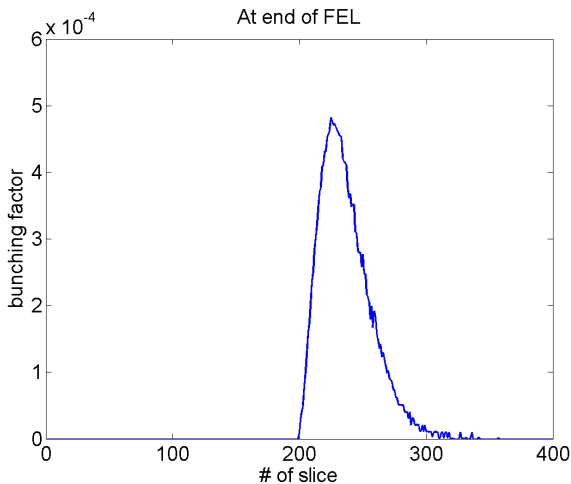
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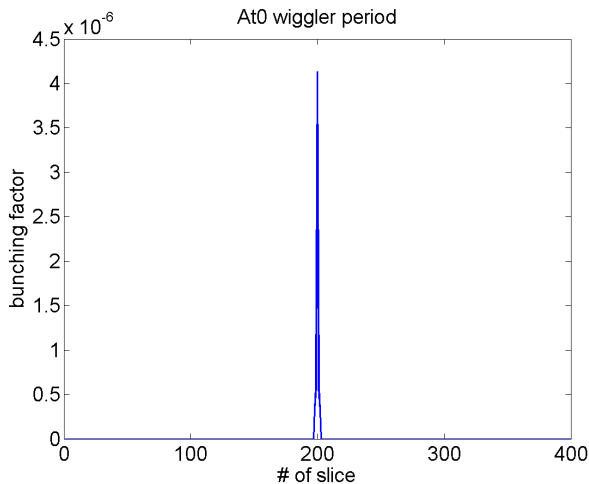
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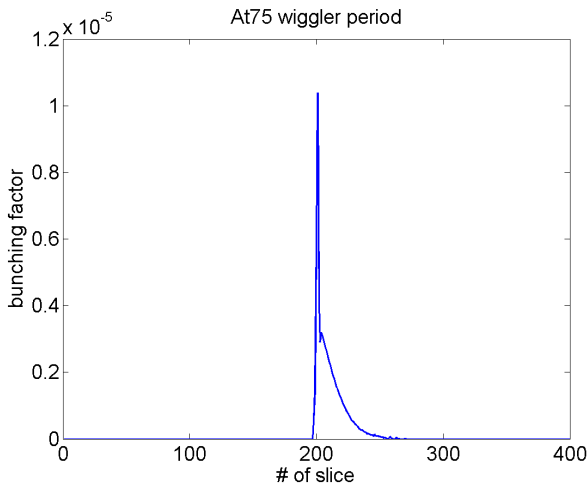
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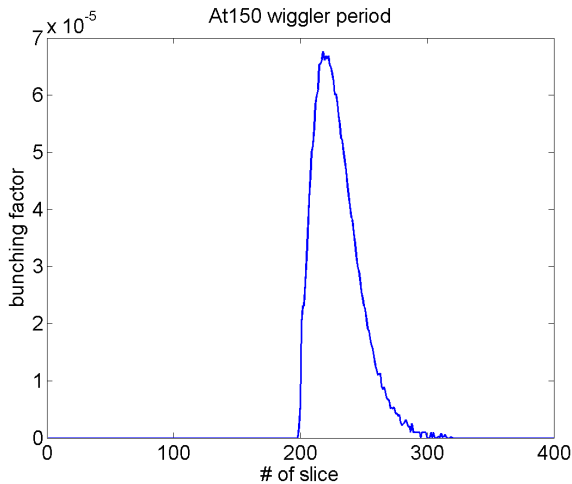
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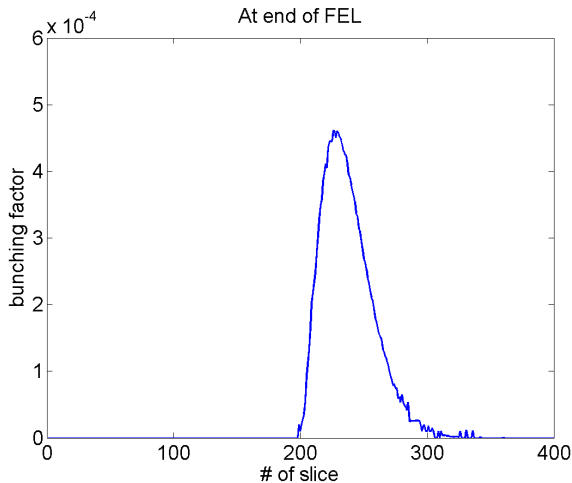
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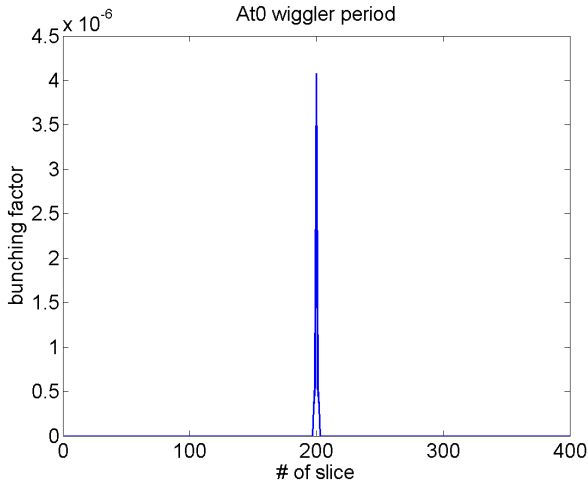
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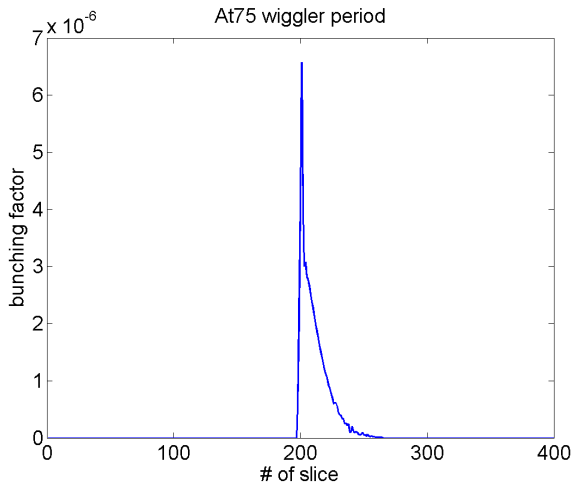
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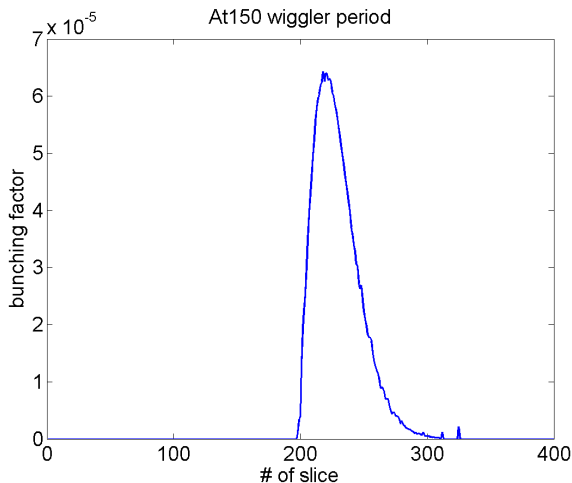
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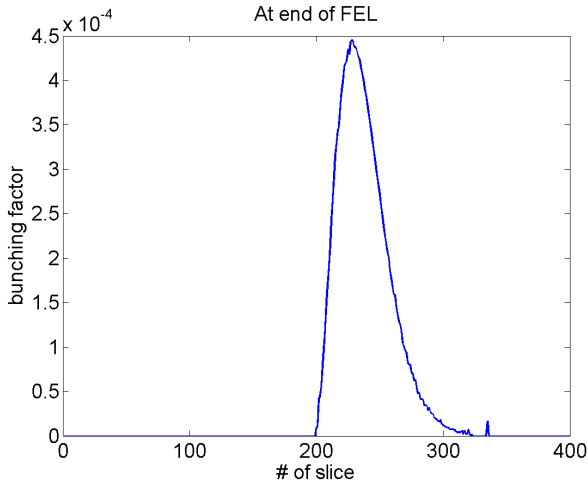
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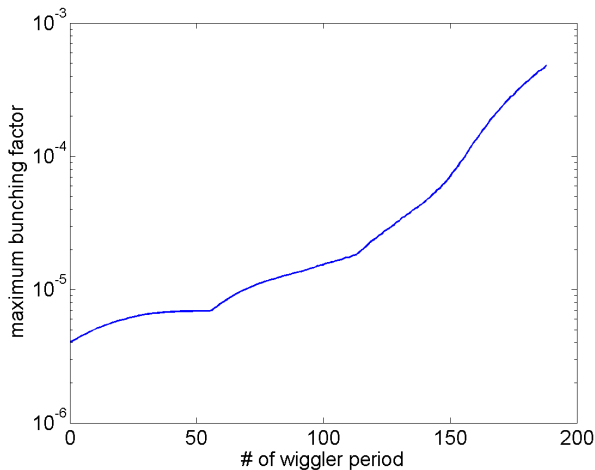
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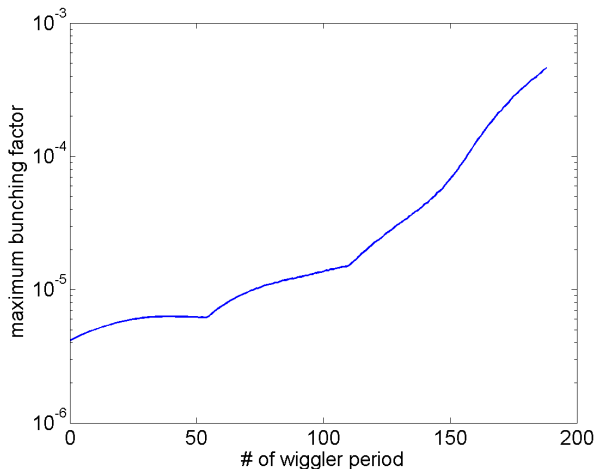
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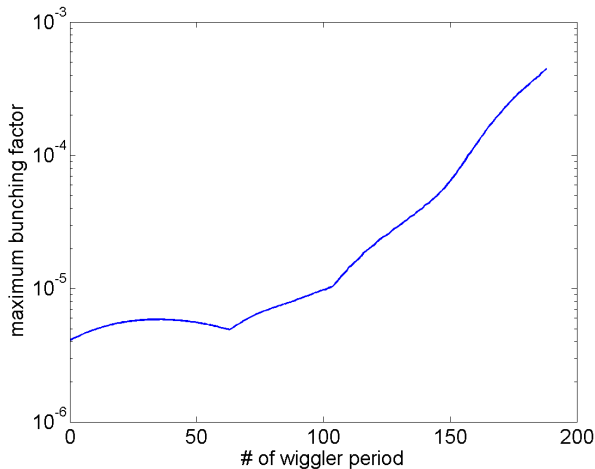
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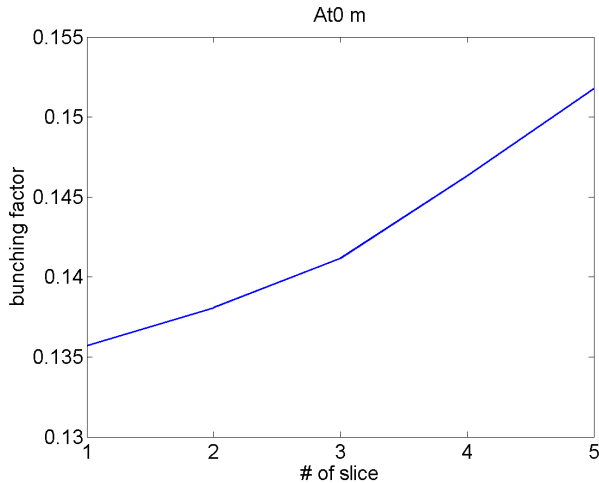
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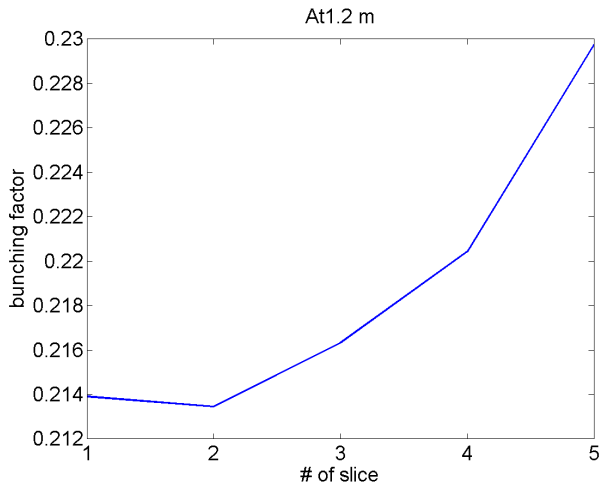
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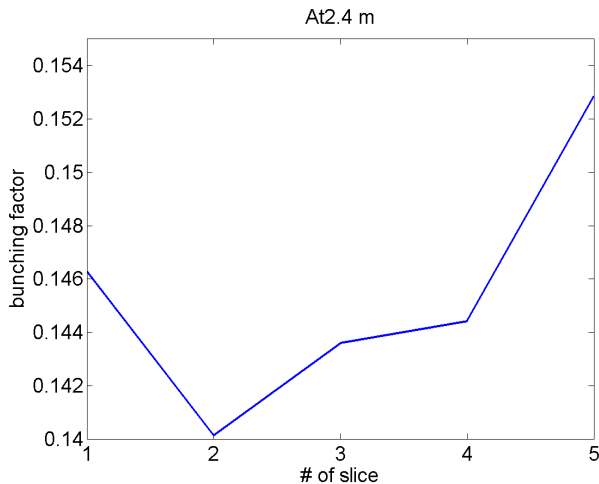
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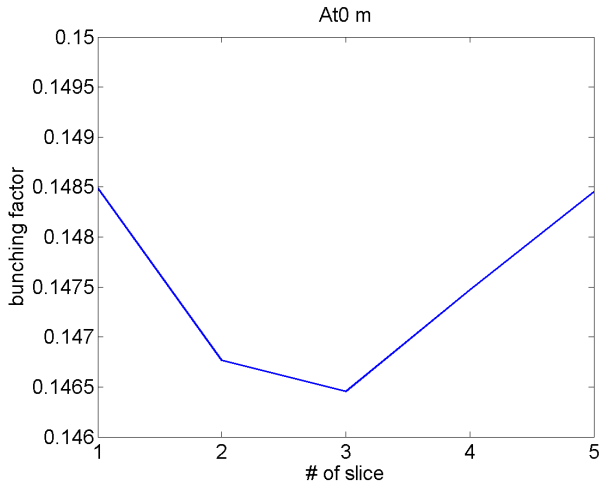
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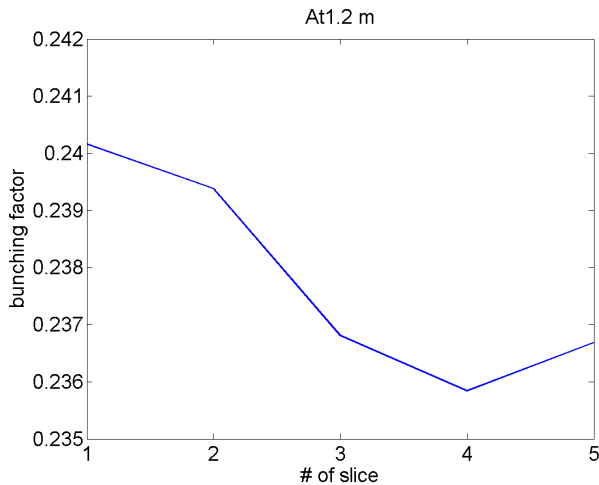
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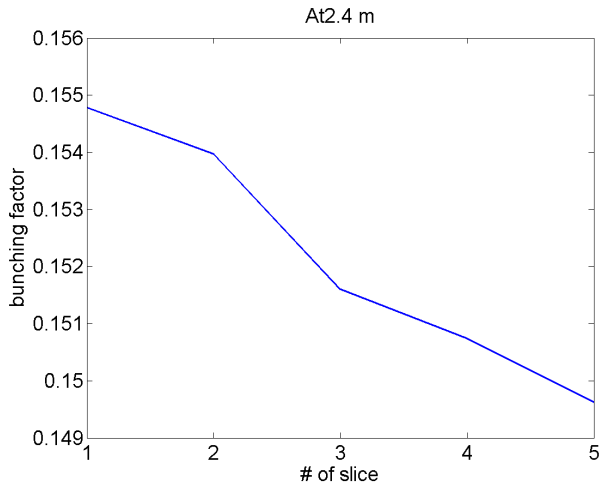
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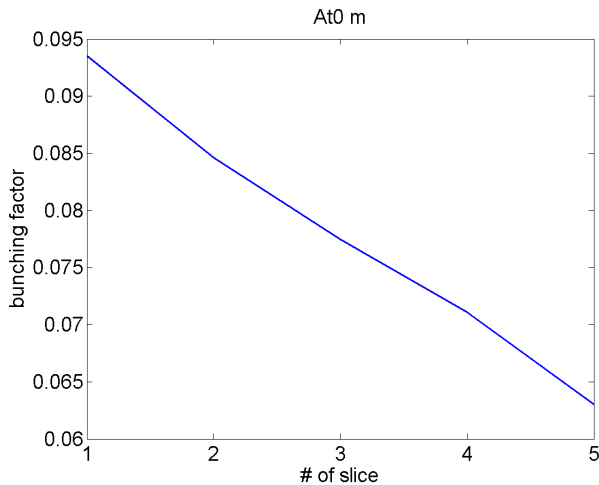
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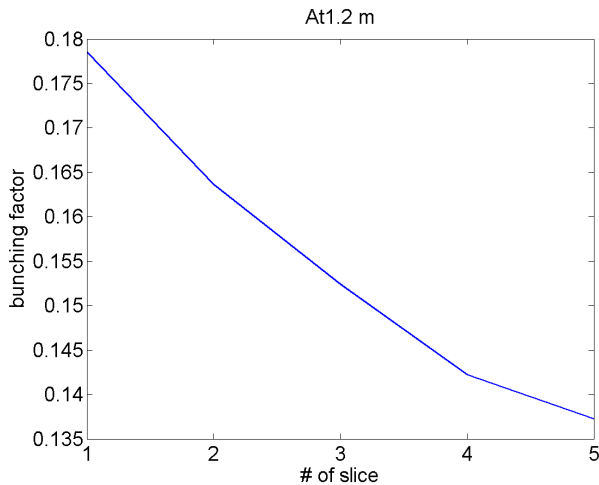
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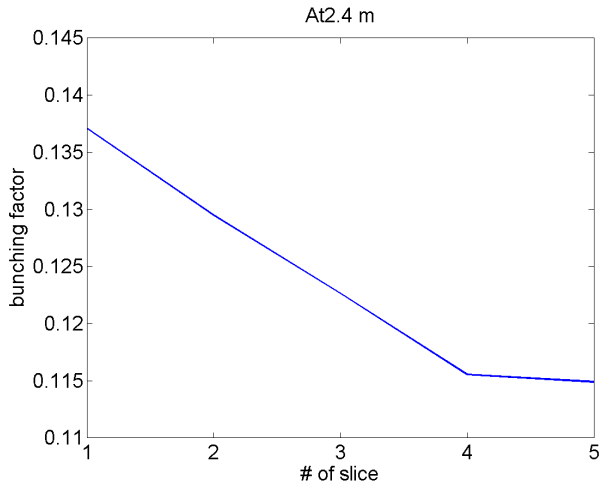
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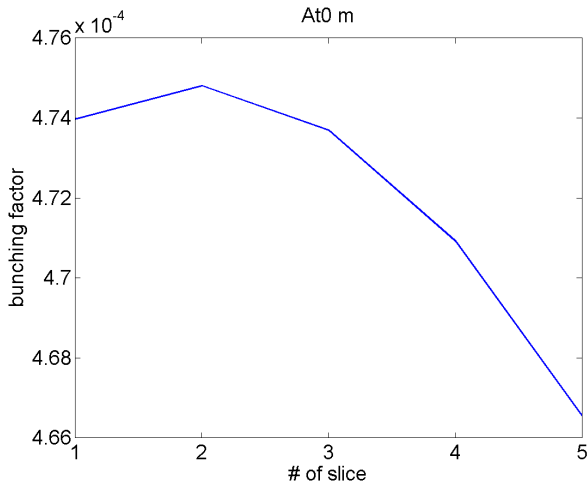
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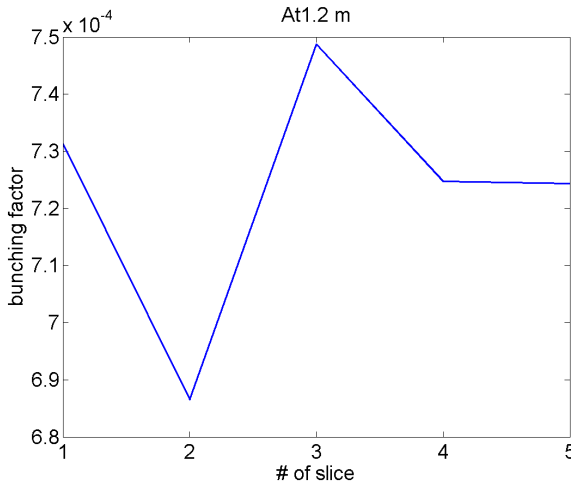
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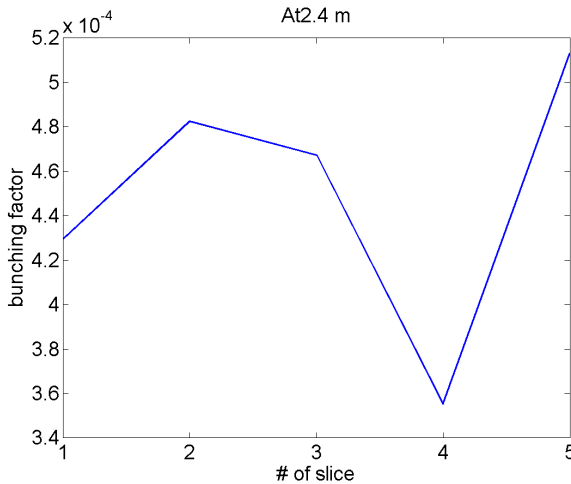
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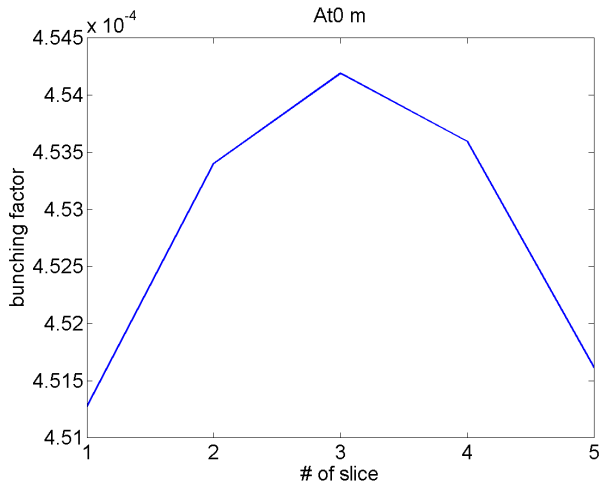
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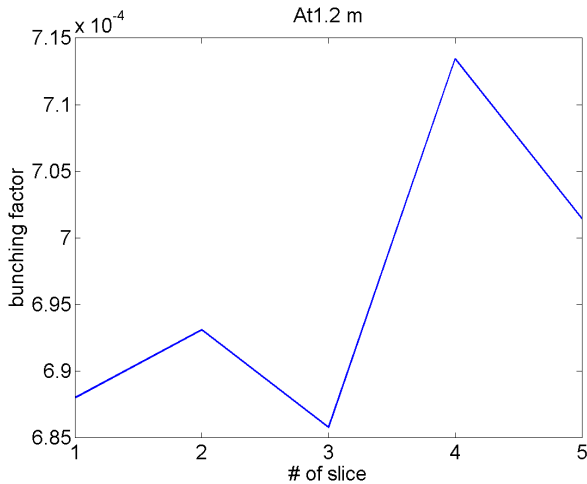
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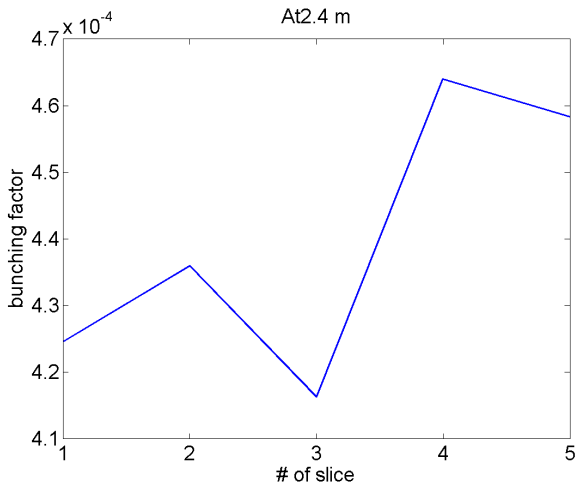
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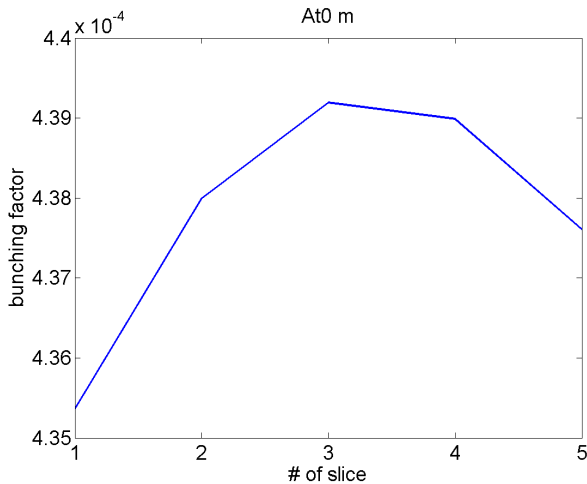
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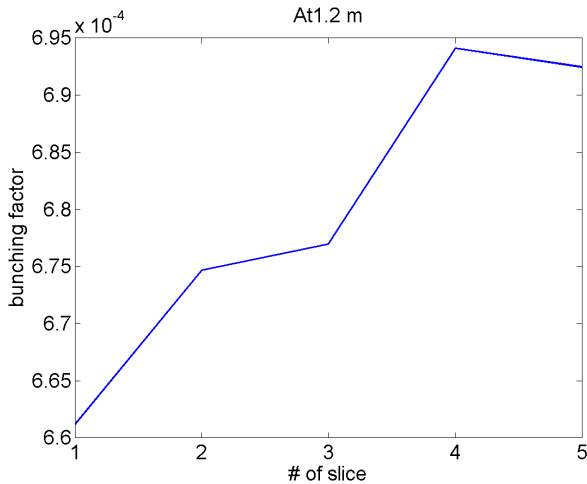
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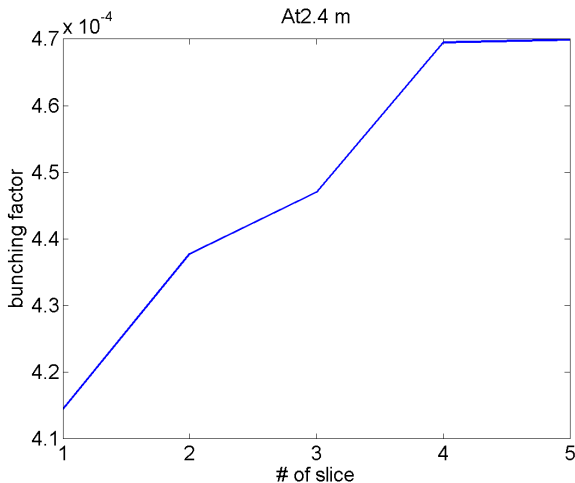
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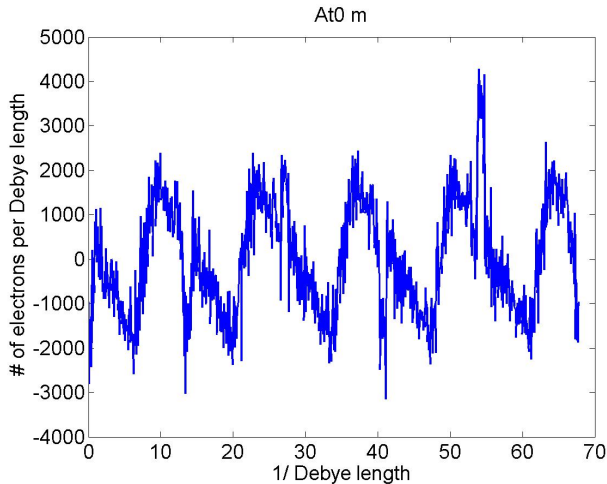
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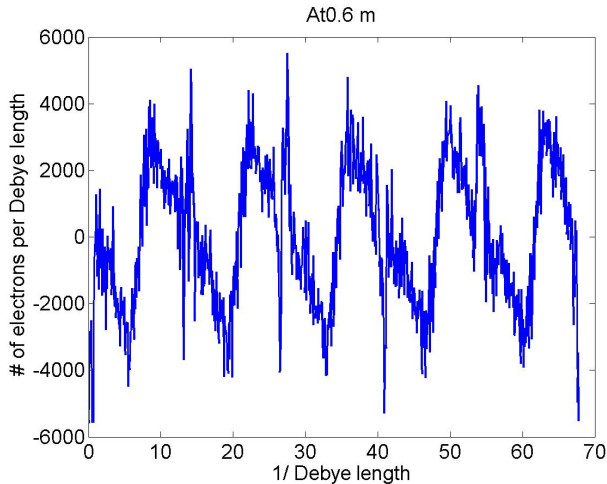
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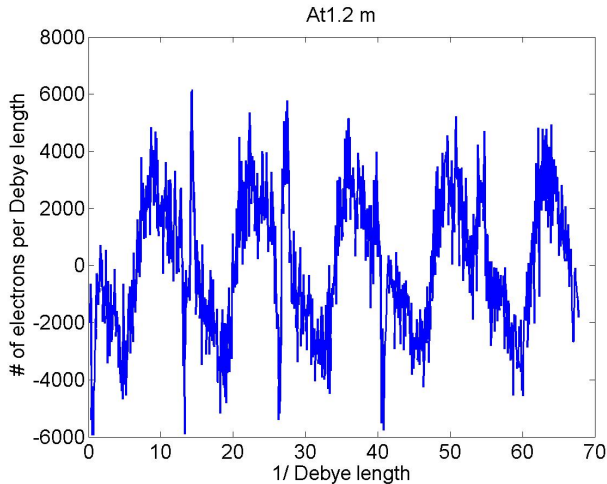
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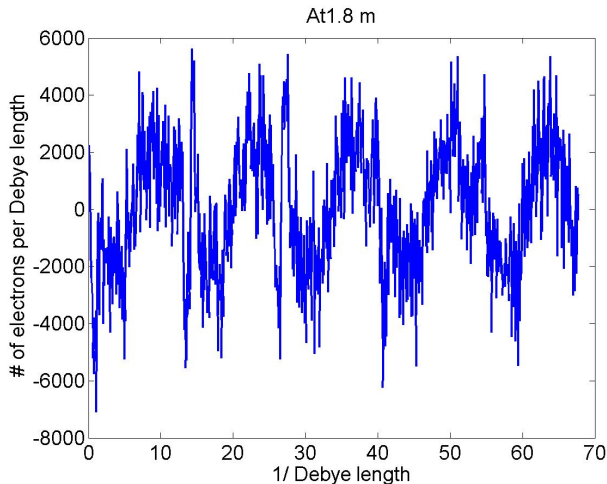
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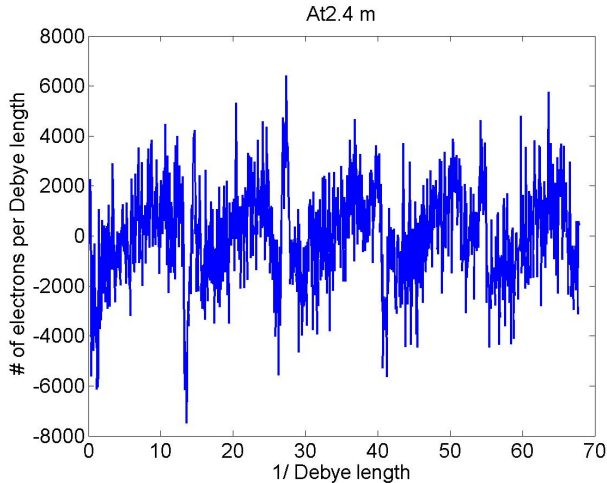
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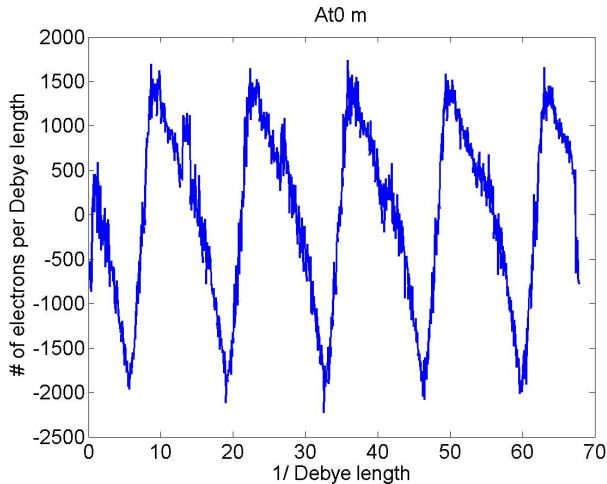
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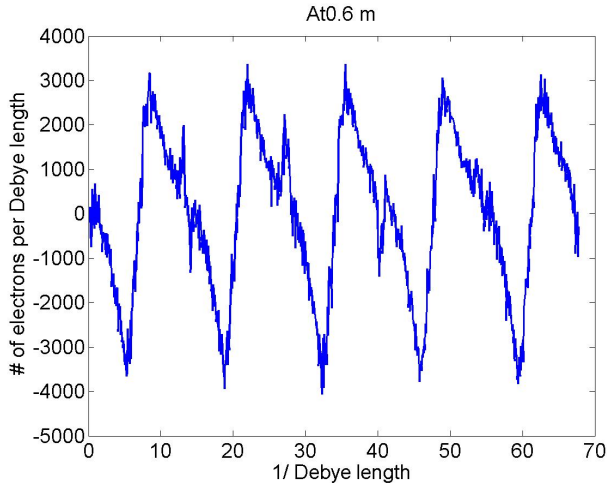
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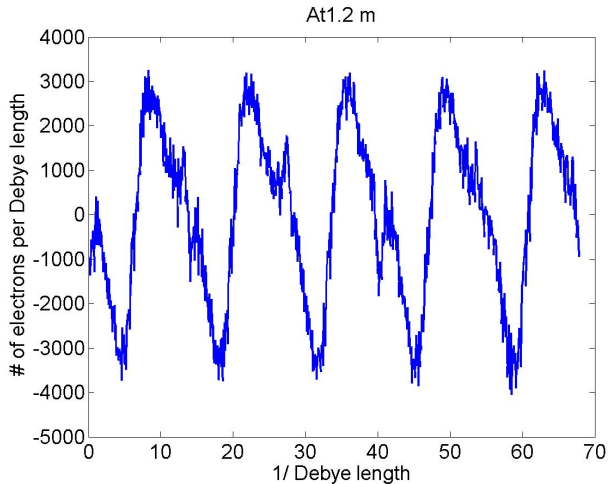
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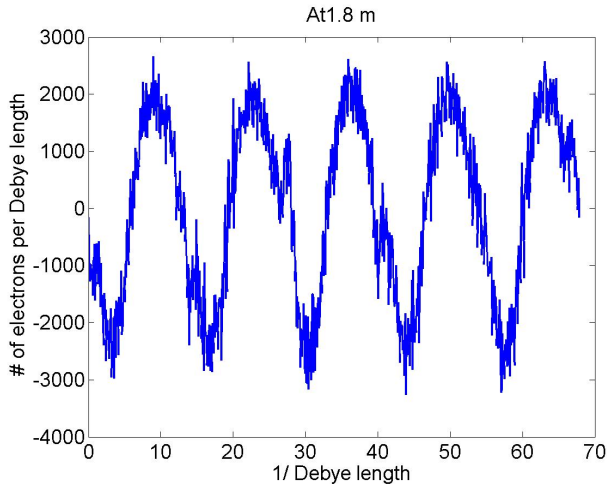
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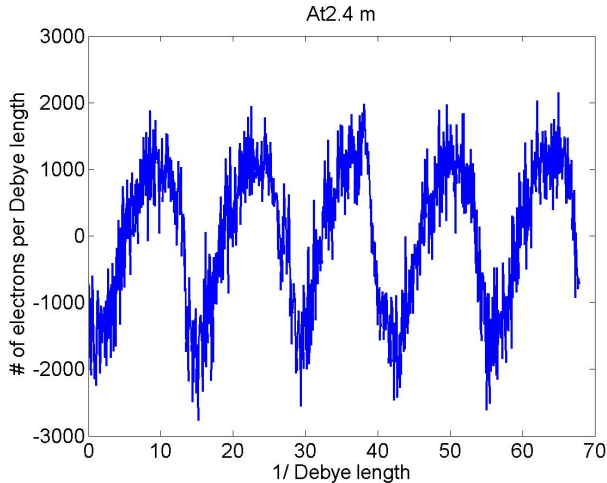
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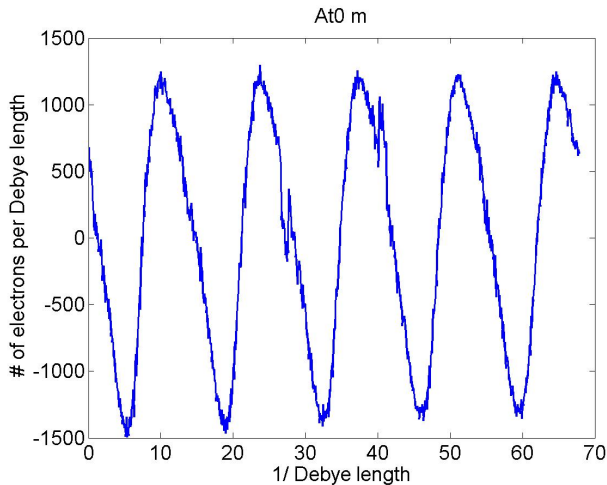
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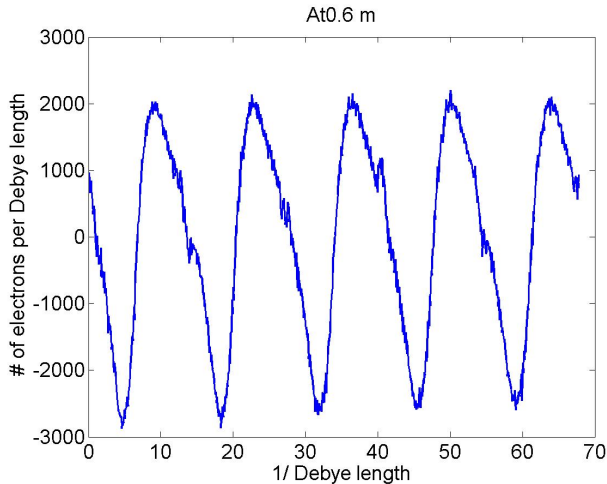
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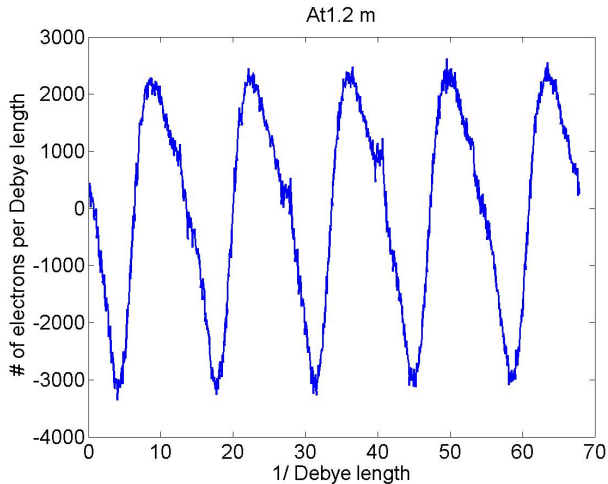
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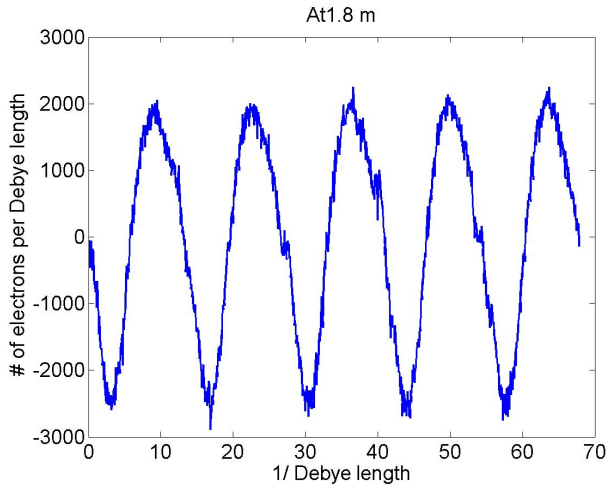
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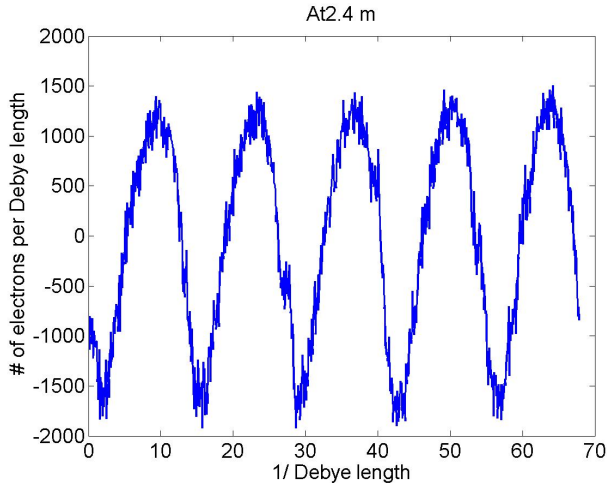
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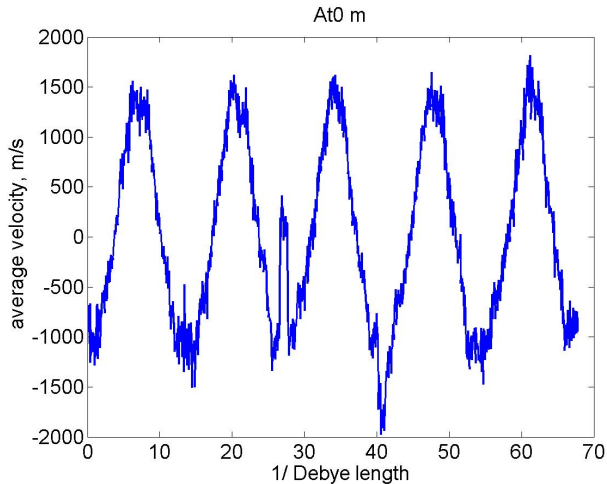
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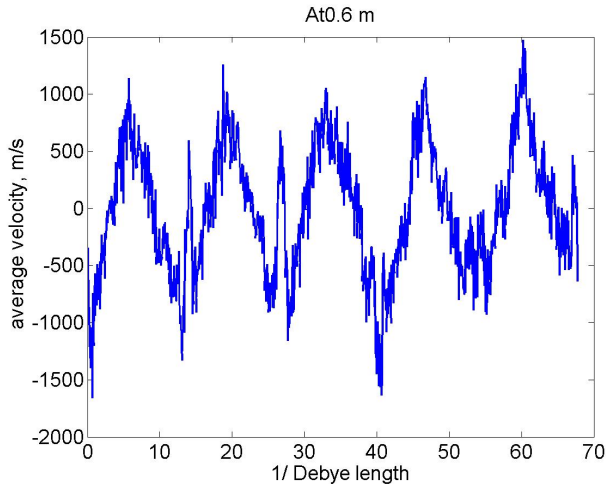
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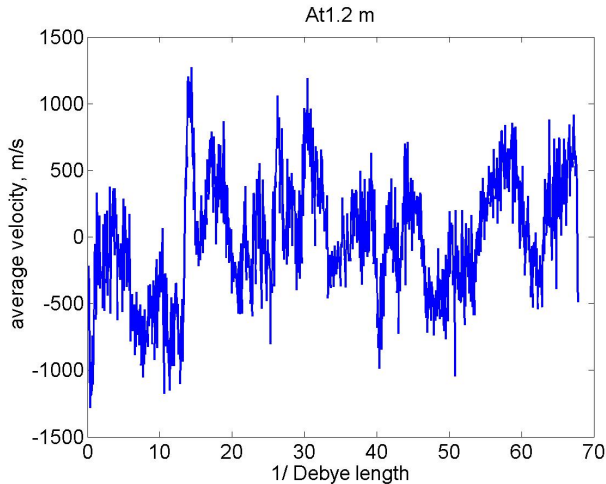
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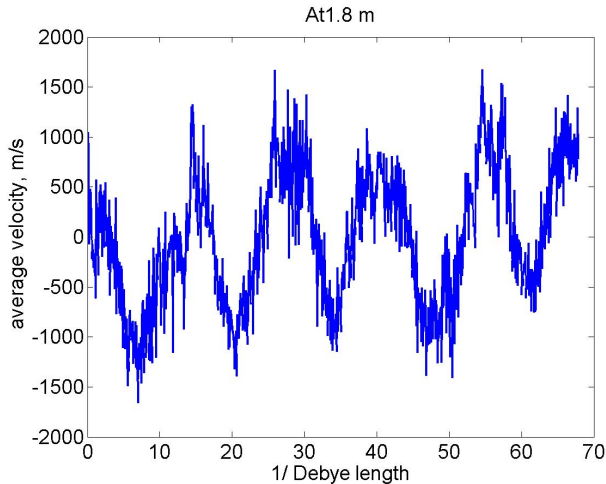
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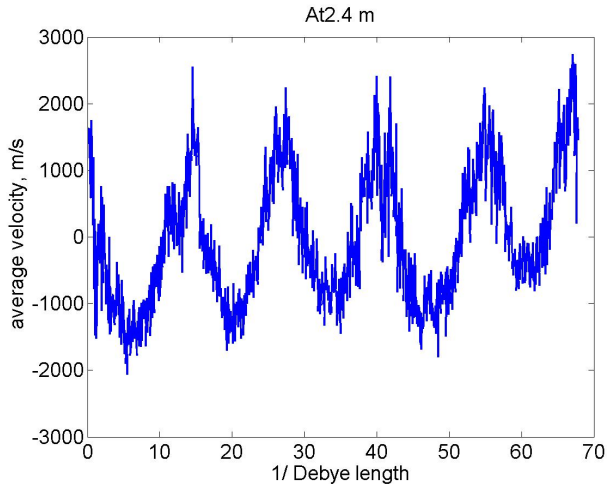
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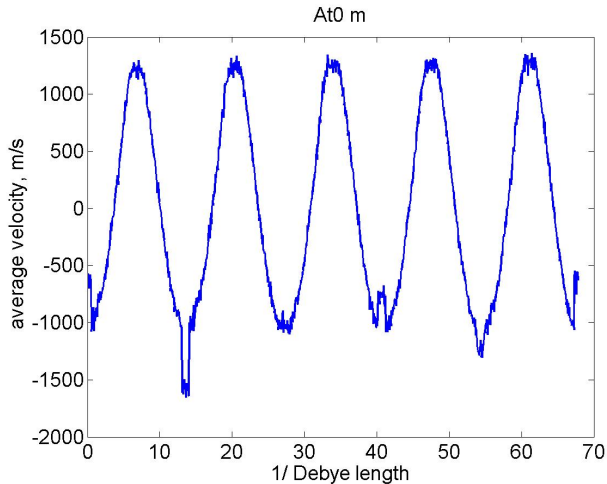
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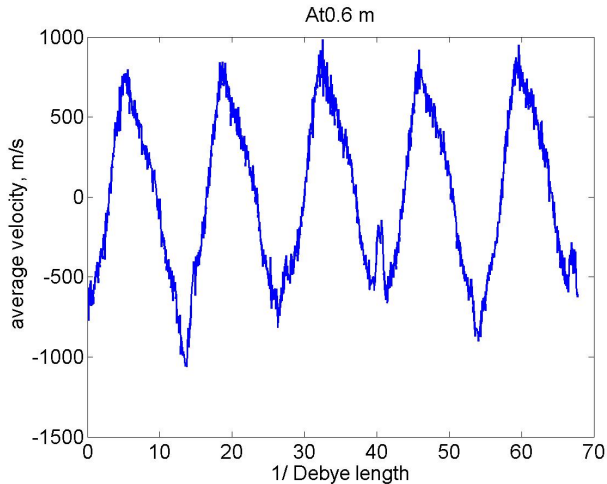
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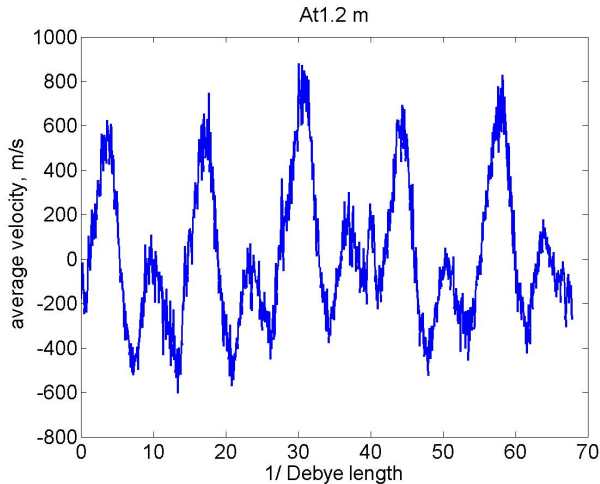
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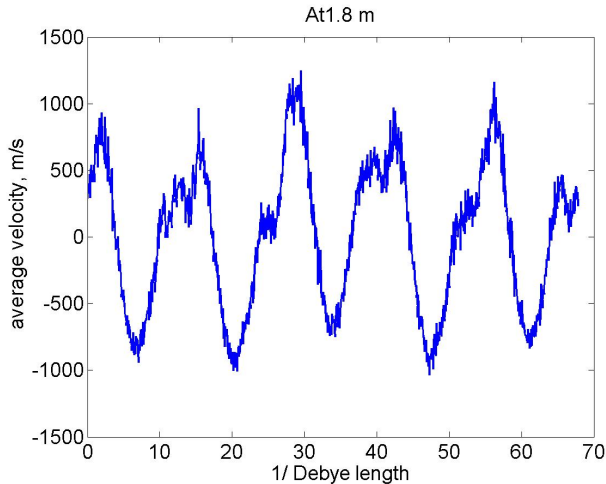
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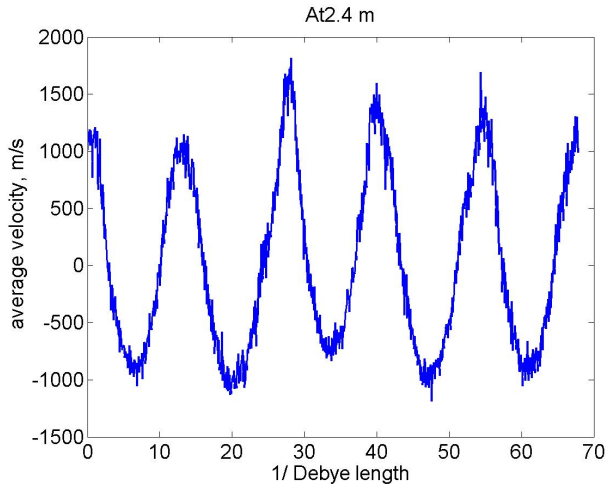
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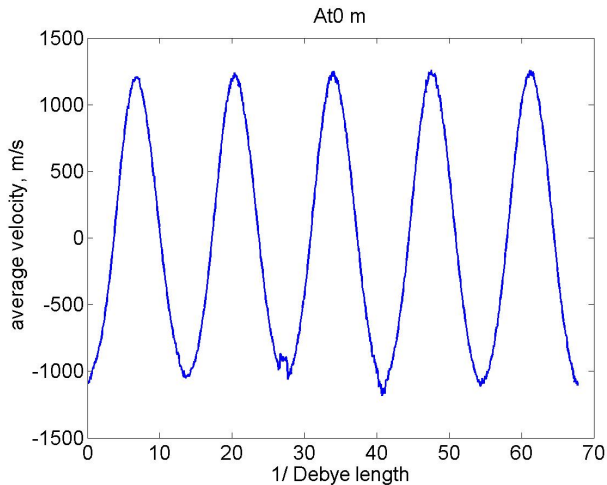
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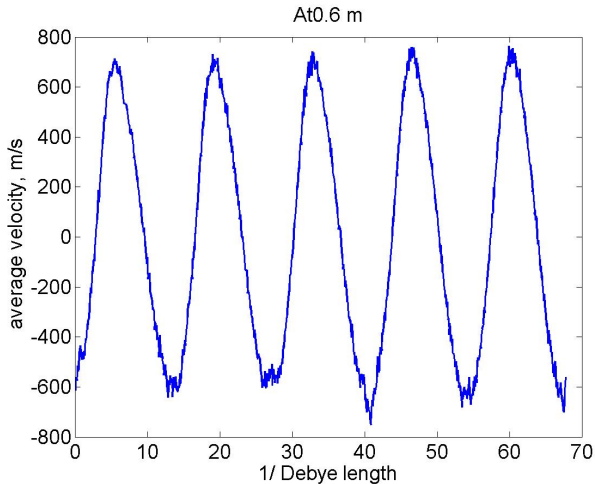
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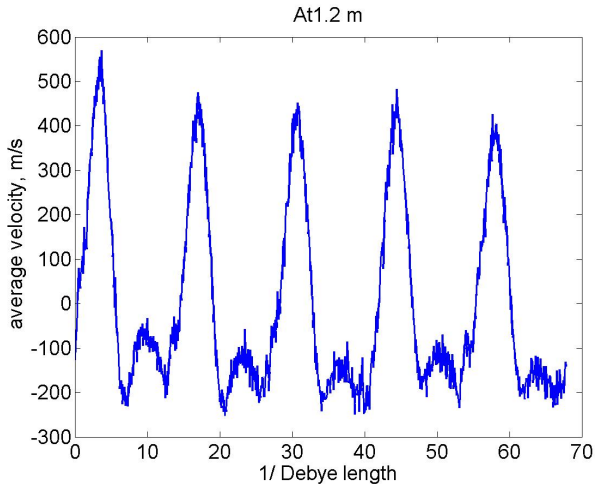
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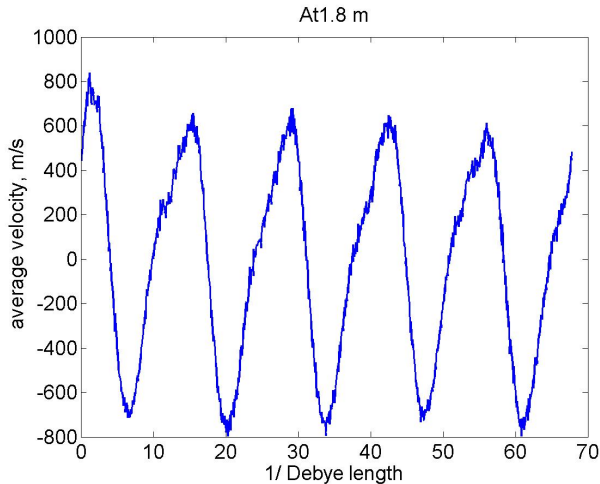
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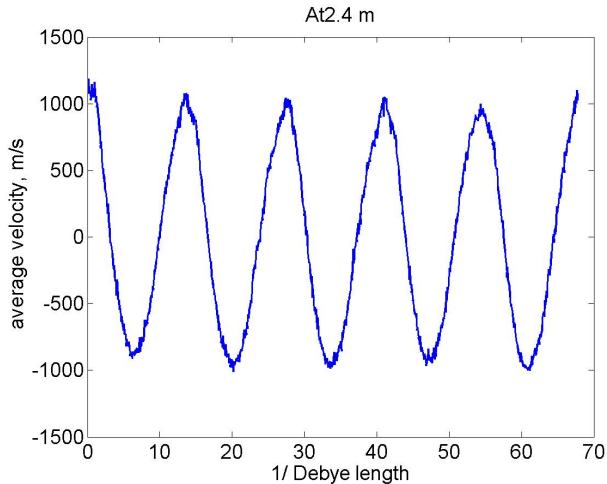
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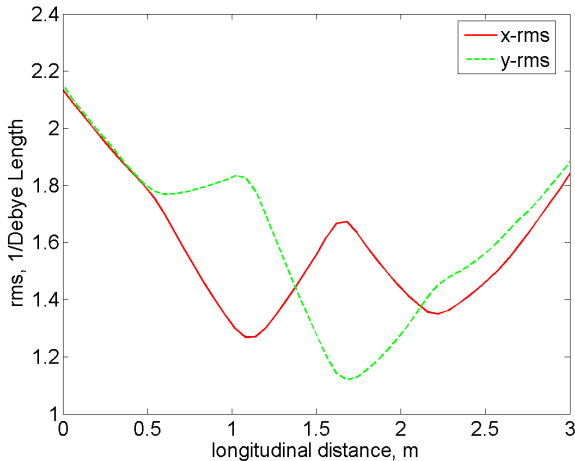
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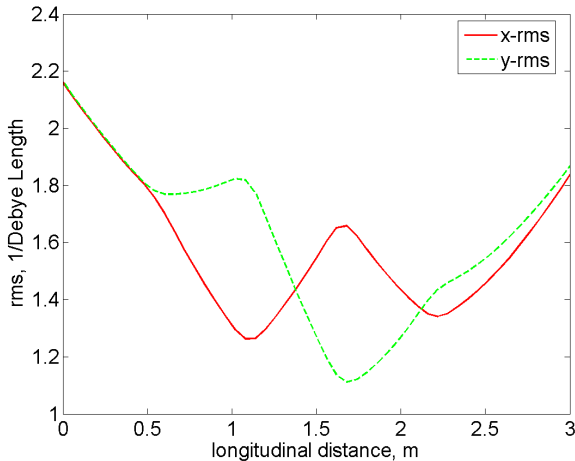
$n_{\text{part}}=1e+6$



$n_{\text{part}}=1e+4$



$n_{\text{part}}=1e+5$



$n_{\text{part}}=1e+6$

