stacking simulations
for e+ Compton source
- update 3

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new approach:

- continuous stacking, also < 80 MHz, e.g. 20 MHz
    (Omori san, Variola san)
- possibly low energy collimation

80 MHz: 2550 injections over 5100 turns (every 2nd turn), followed by 5155 turns (~100 ms) damping; damping time 6.4 ms;

80 MHz: σ_z=9 mm, $\sigma_{\delta 0}$=2x10^{-4}: 80.9% loss

σ_z=9 mm, $\sigma_{\delta 0}$=1x10^{-4}: 80.2% loss

σ_z=4.5 mm, $\sigma_{\delta 0}$=1x10^{-4}: 80.1% loss

20 MHz: inject every 6th turn

σ_z=9 mm, $\sigma_{\delta 0}$=2x10^{-4}: 80.5% loss

σ_z=9 mm, $\sigma_{\delta 0}$=1x10^{-4}: 80.1% loss

Q_s~0.084, 1/(#turns in 1 damping time)~0.0034