

Sea detuning sweep report (Ga sea / Al rare)

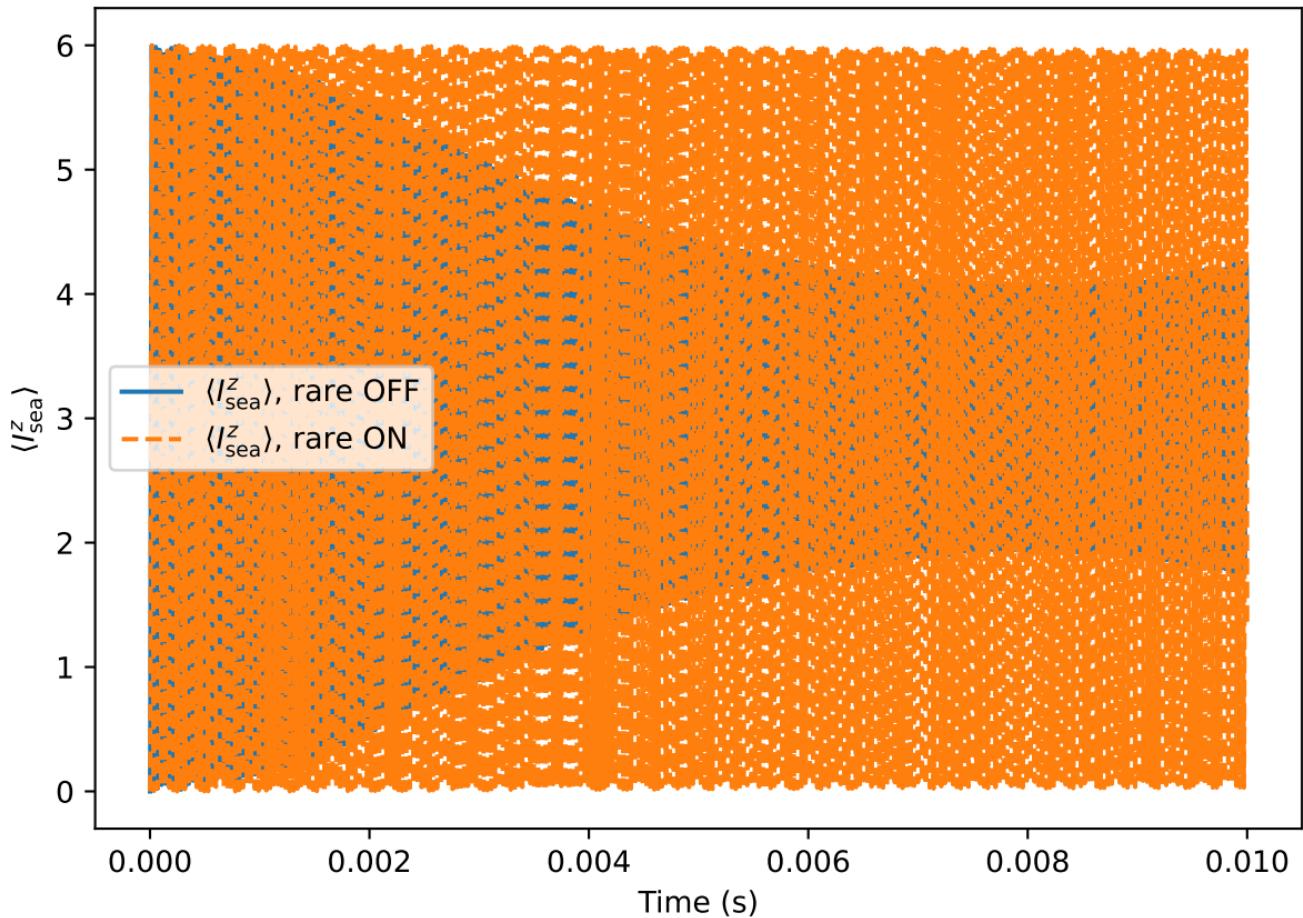
Global parameters (constant across sweep):

f_Az (sea Larmor)	= 34.062 MHz
f_Rz (rare Larmor)	= 33.308 MHz
f1A (sea Rabi)	= 20.000 kHz
f1R (rare Rabi)	= 10.000 kHz
gamma_sea	= 7.134e+07 rad·s <sup>-1</sup> ·T <sup>-1</sup>
gamma_rare	= 6.976e+07 rad·s <sup>-1</sup> ·T <sup>-1</sup>
B0_common	= 3.000 T
B1_sea	= 1.761e-03 T
B1_rare	= 9.007e-04 T
dipolar_scale_SI	= 1.055e-41
shell_scale	= 0.300 nm
t_final	= 1.000e-02 s
steps	= 4000
n_sea	= 12
phi_sea	= 0.000 rad
phi_rare	= 0.000 rad

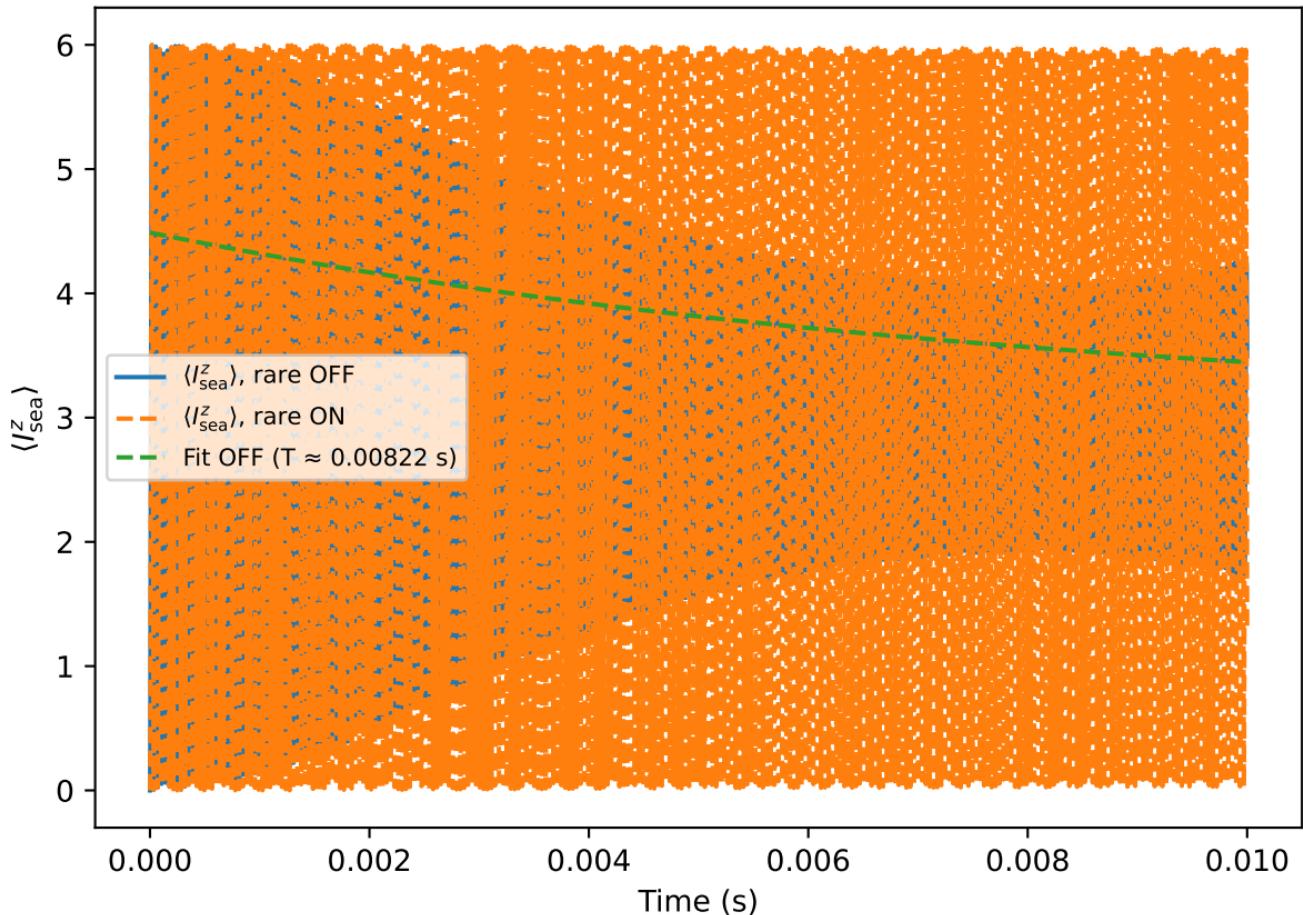
Sea detunings ( $\delta_A = f_{Az} - f_{rf,A}$ ) in Hz:

-20000.0, -10000.0, +0.0, +10000.0, +20000.0

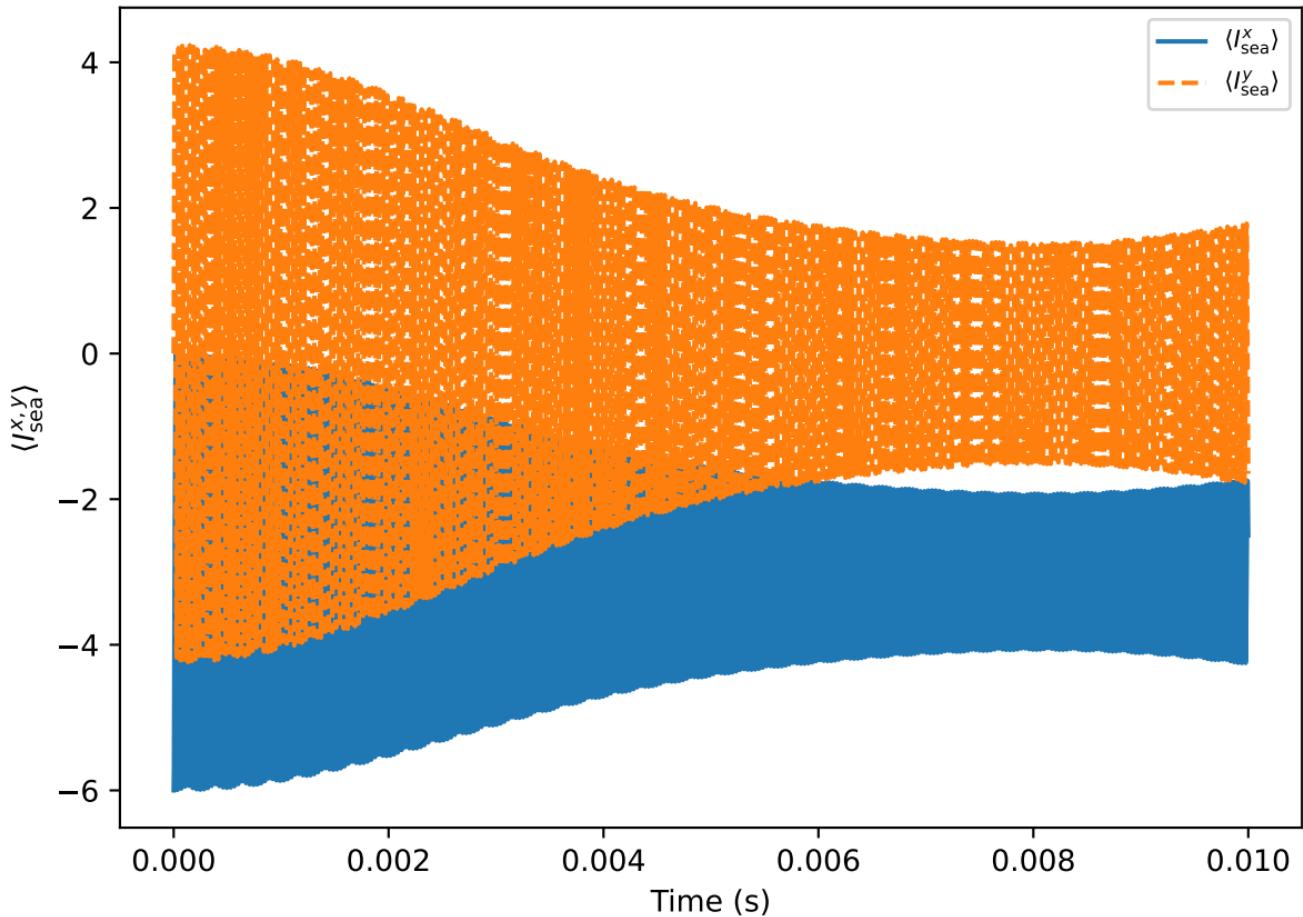
$$\delta_A = -20000.0 \text{ Hz}$$



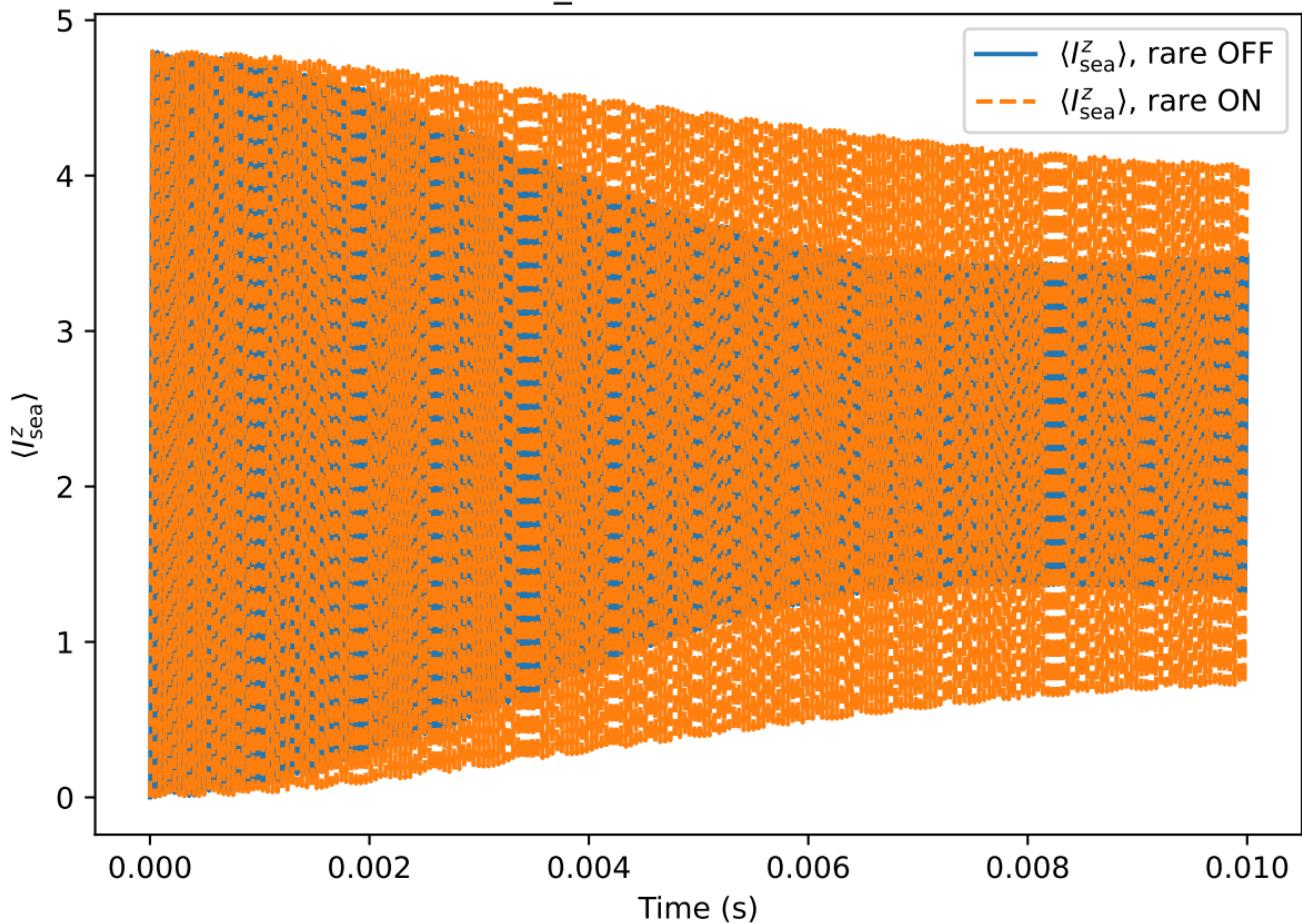
$\delta_A = -20000.0$  Hz (with T-fit overlays)

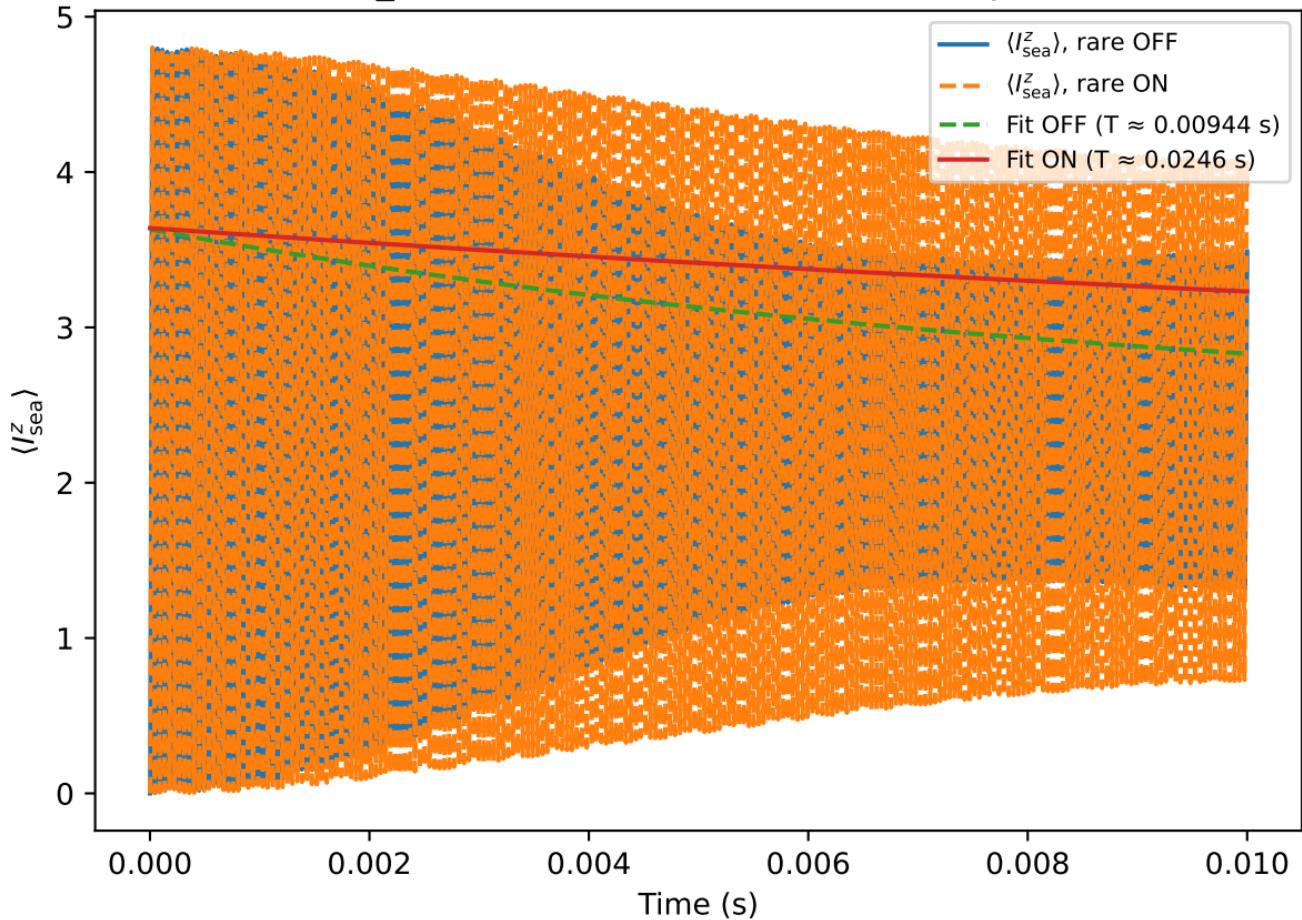


$\delta_A = -20000.0$  Hz (rare drive OFF)

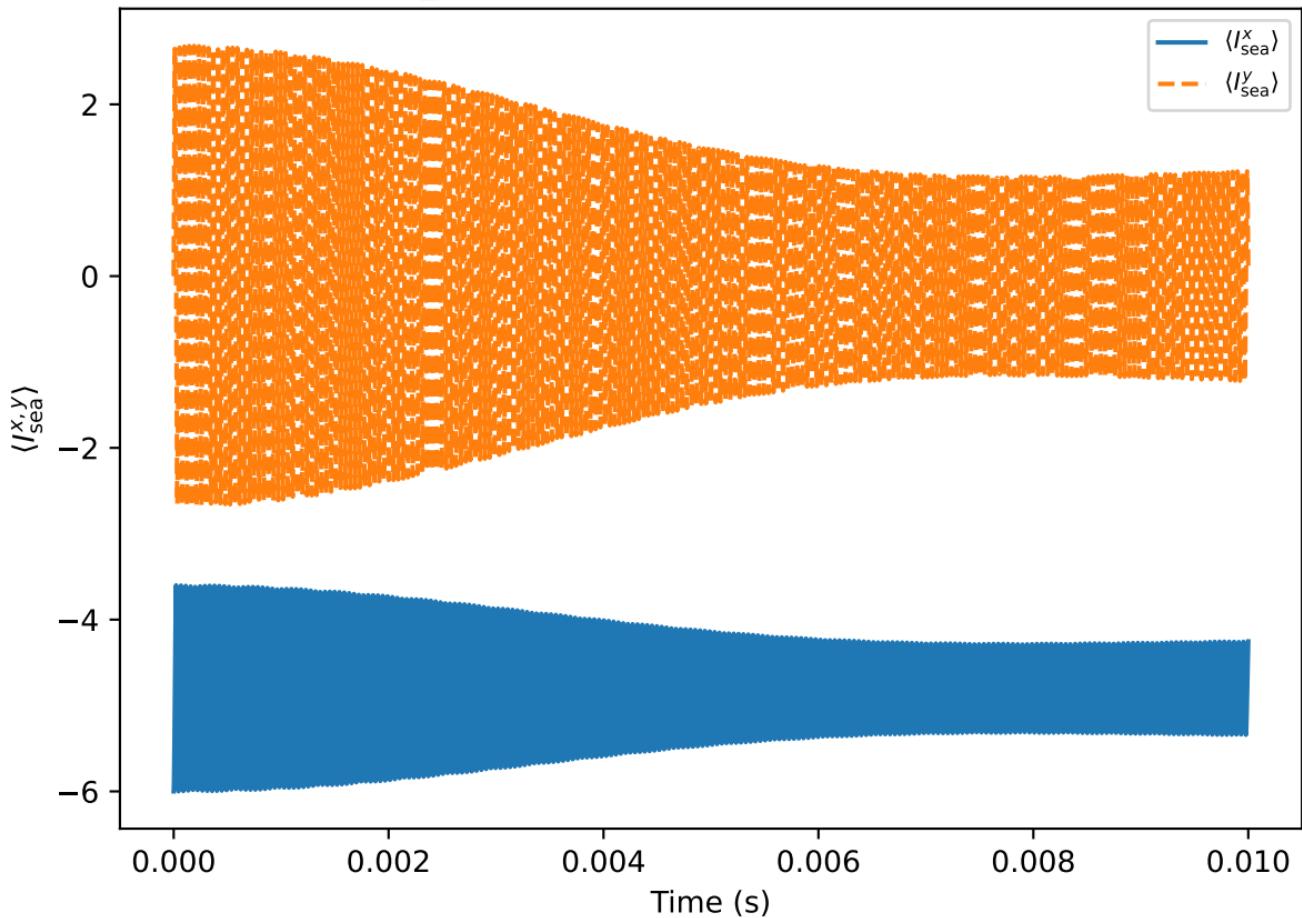


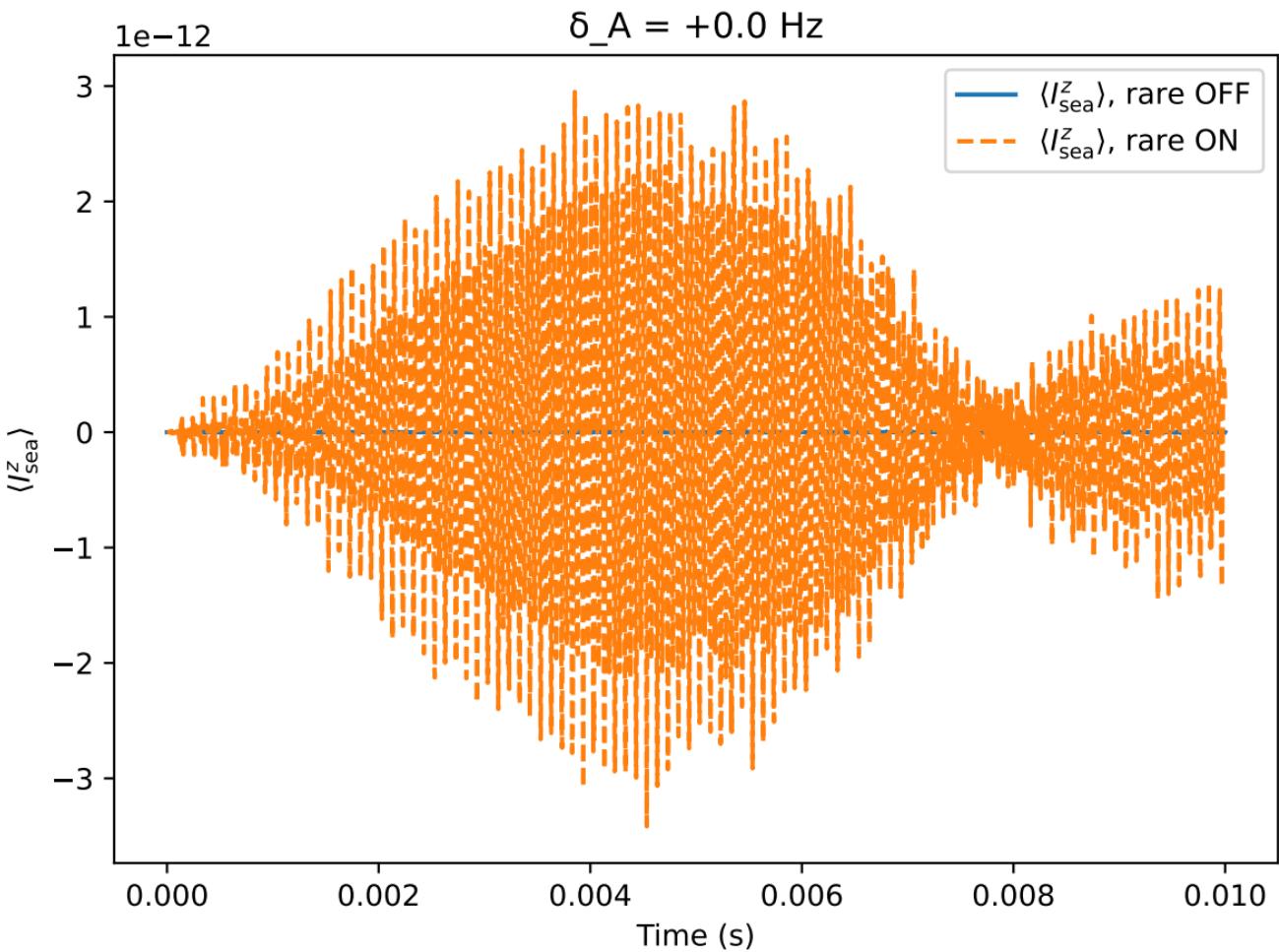
$\delta_A = -10000.0$  Hz

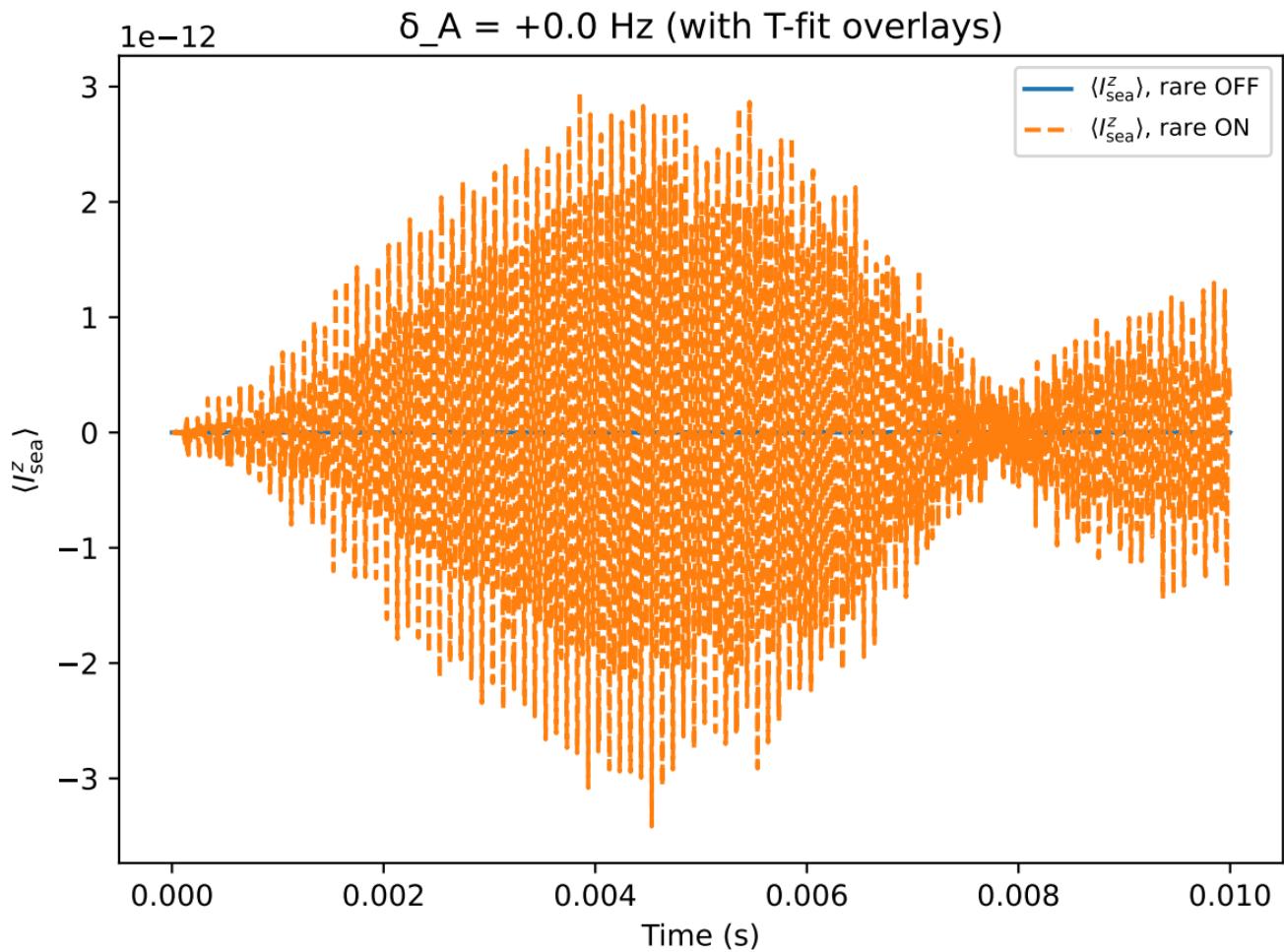


$\delta_A = -10000.0$  Hz (with T-fit overlays)

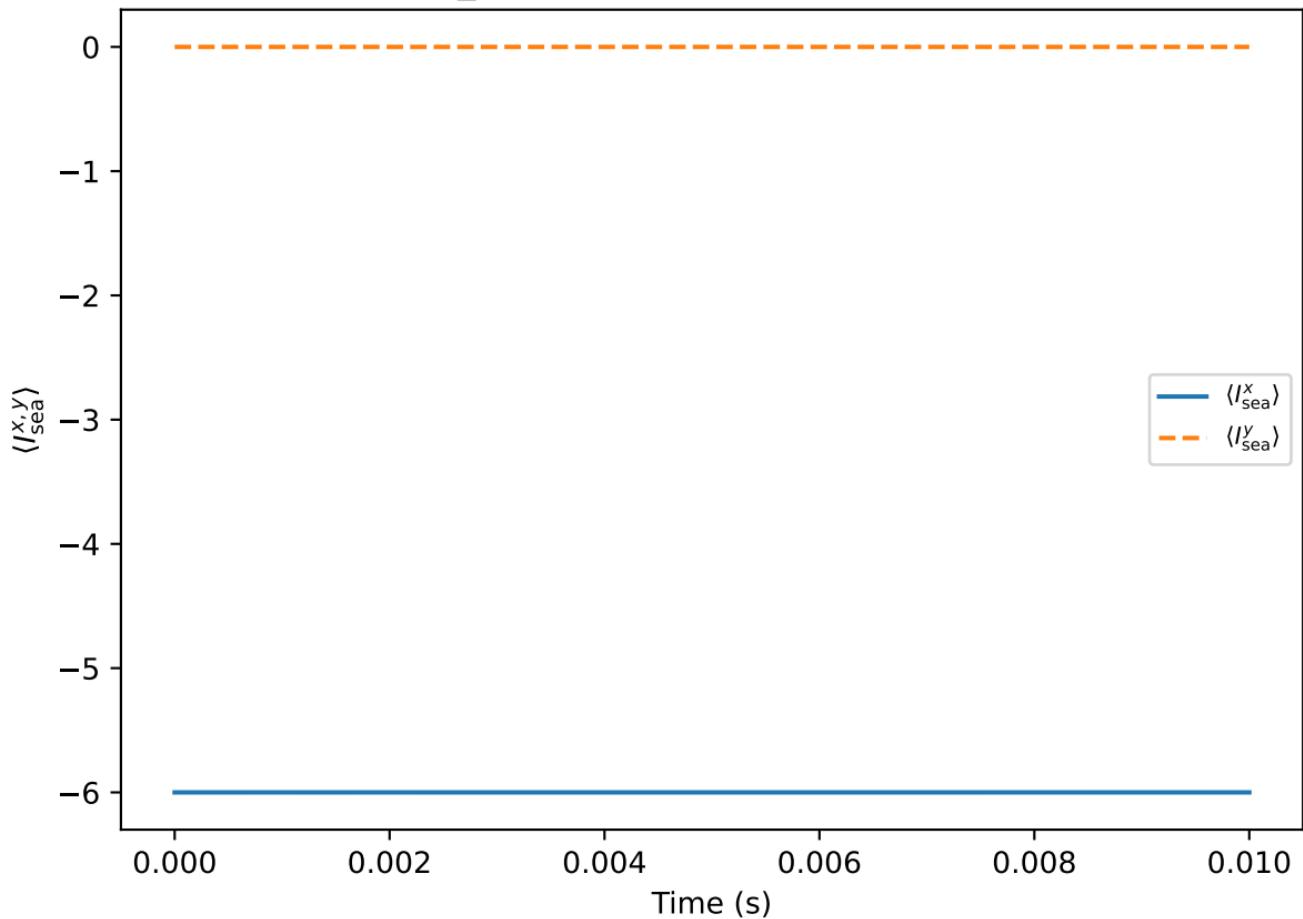
$\delta_A = -10000.0$  Hz (rare drive OFF)



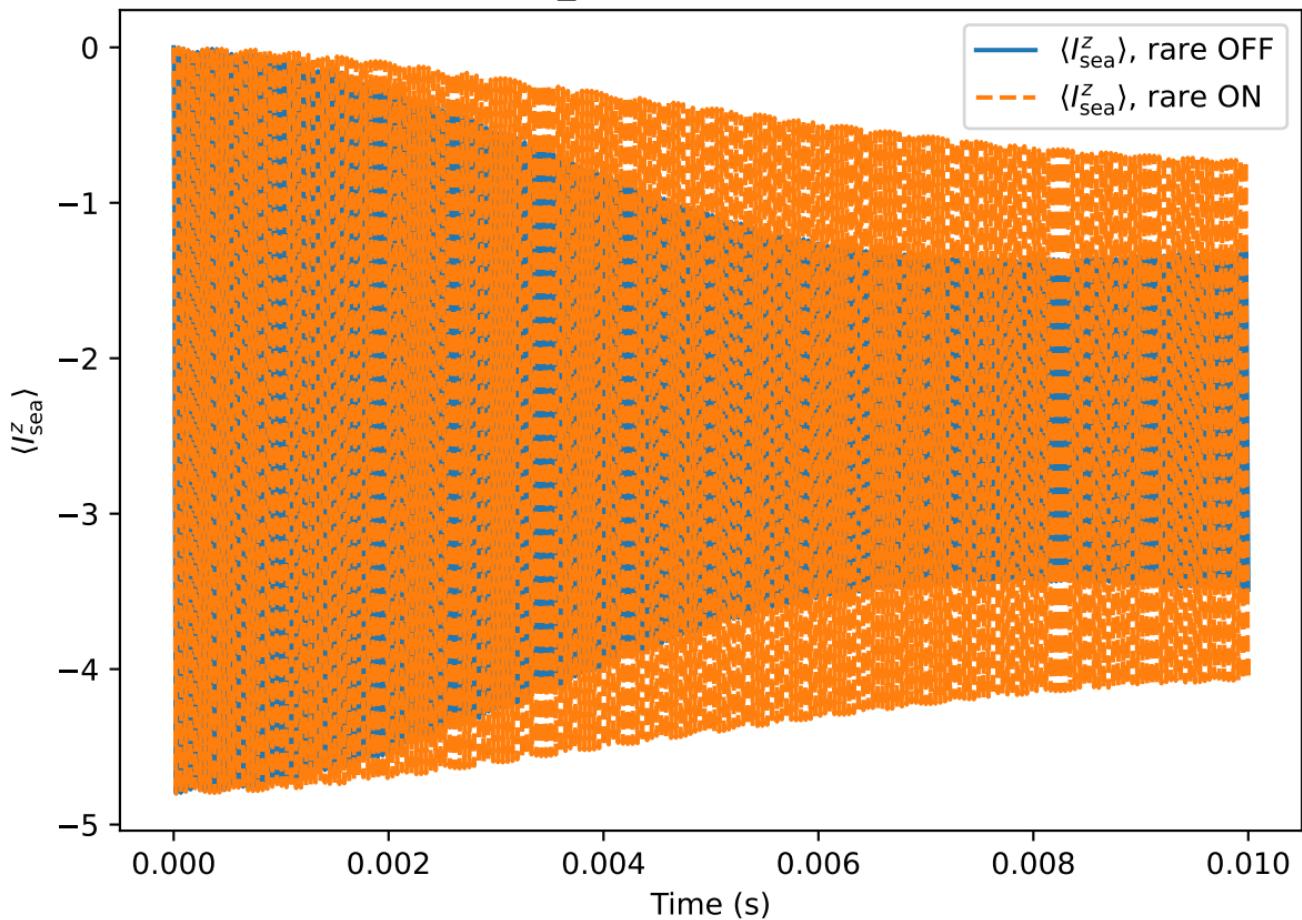


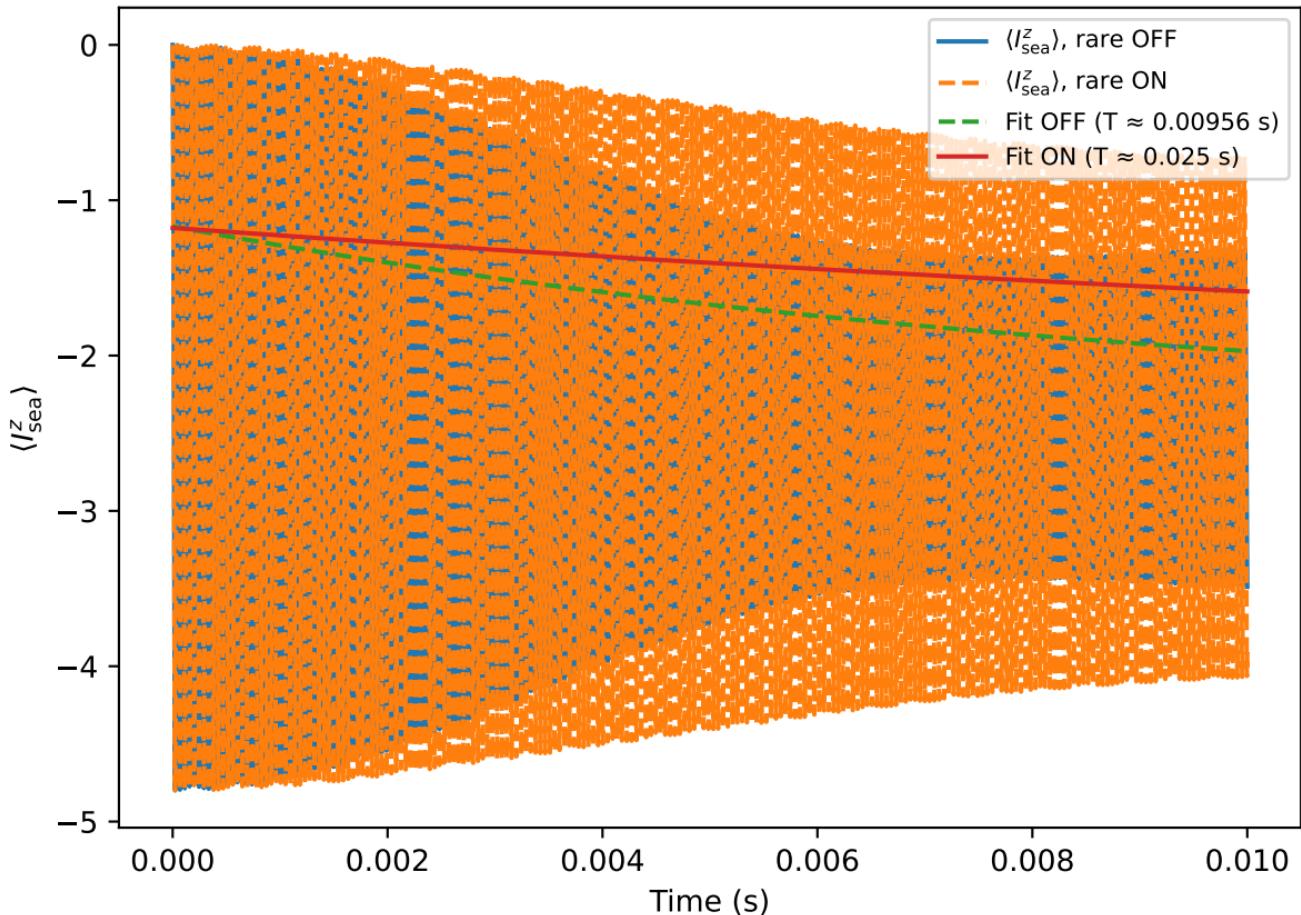


$\delta_A = +0.0 \text{ Hz}$  (rare drive OFF)

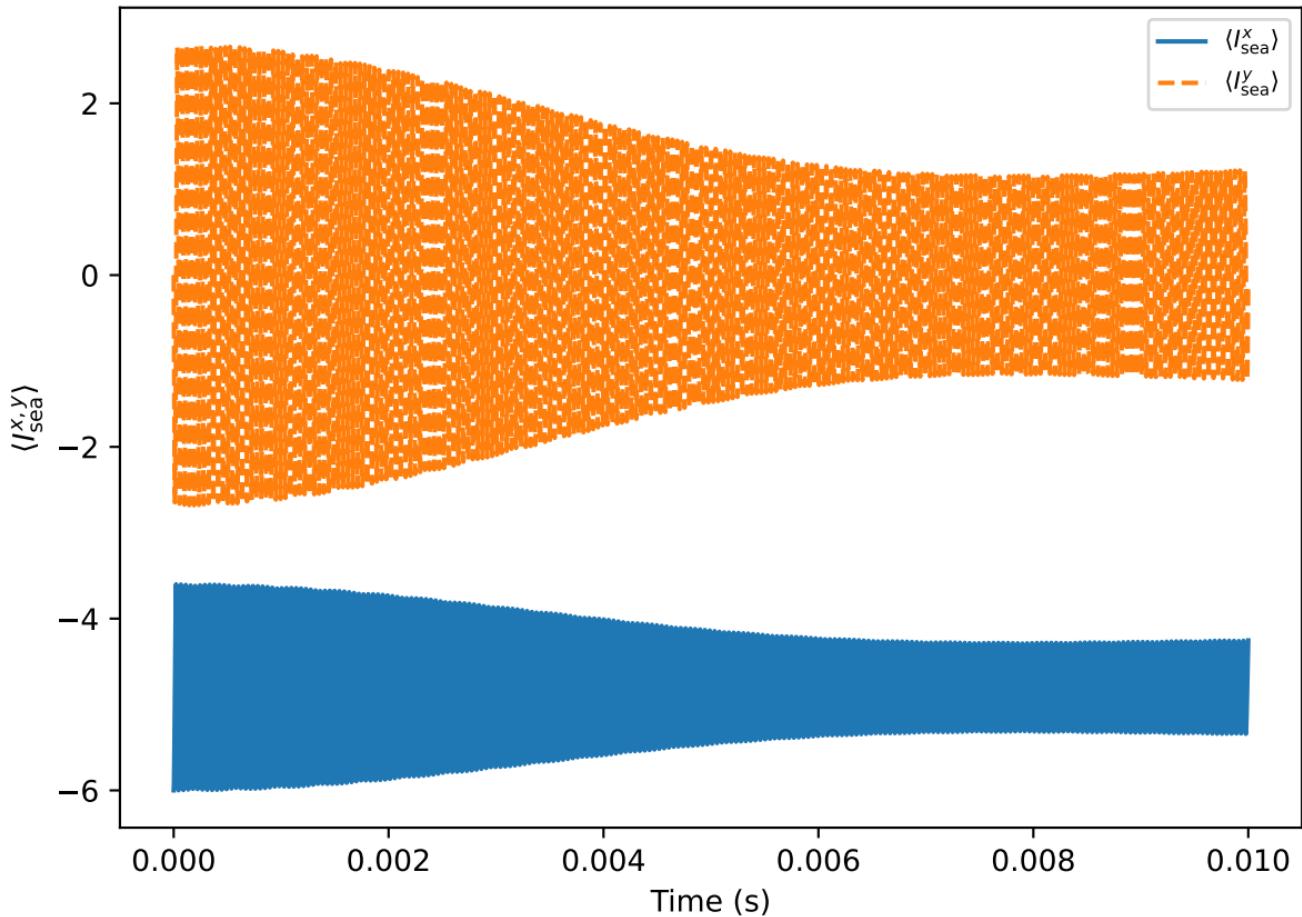


$$\delta_A = +10000.0 \text{ Hz}$$

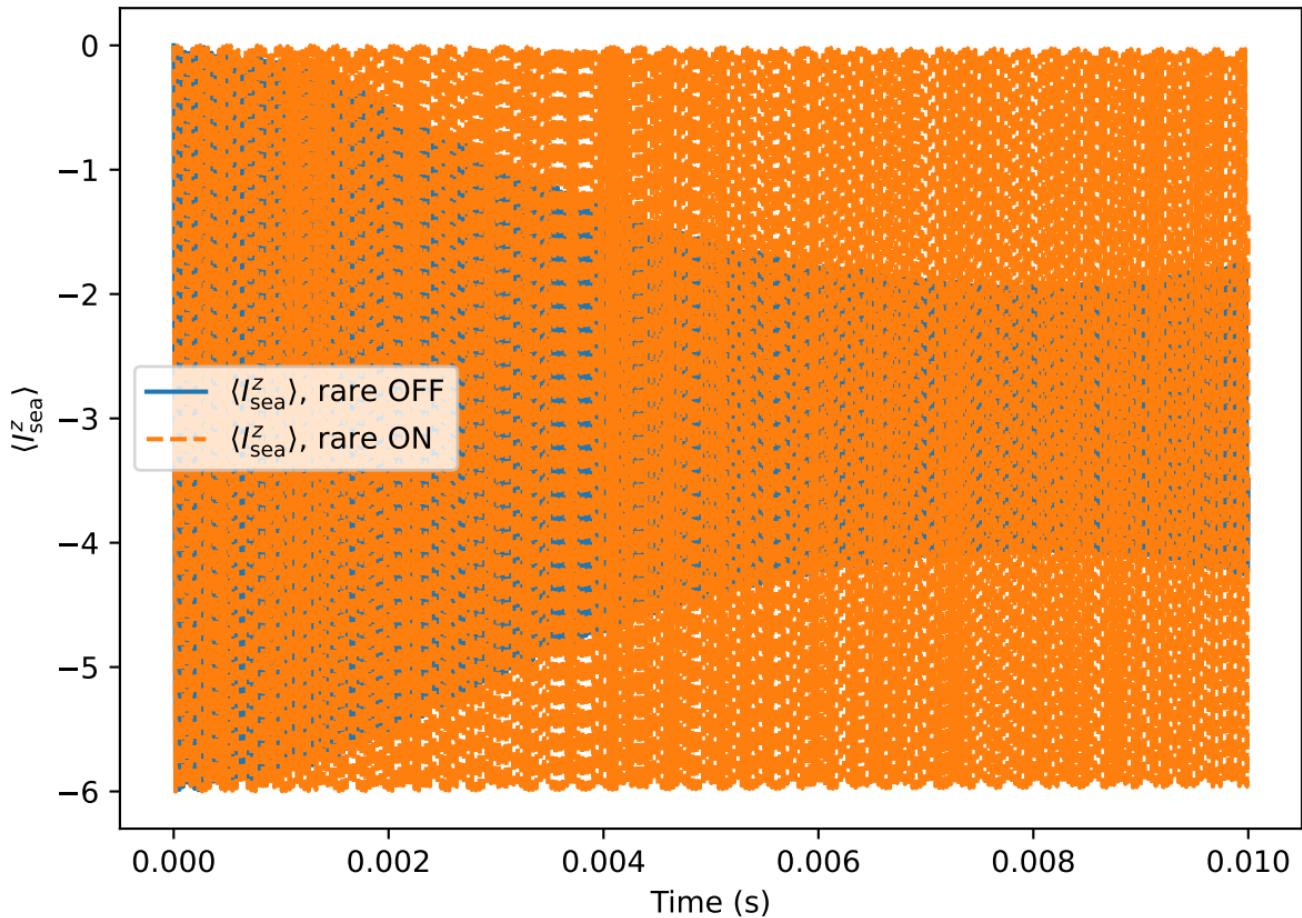


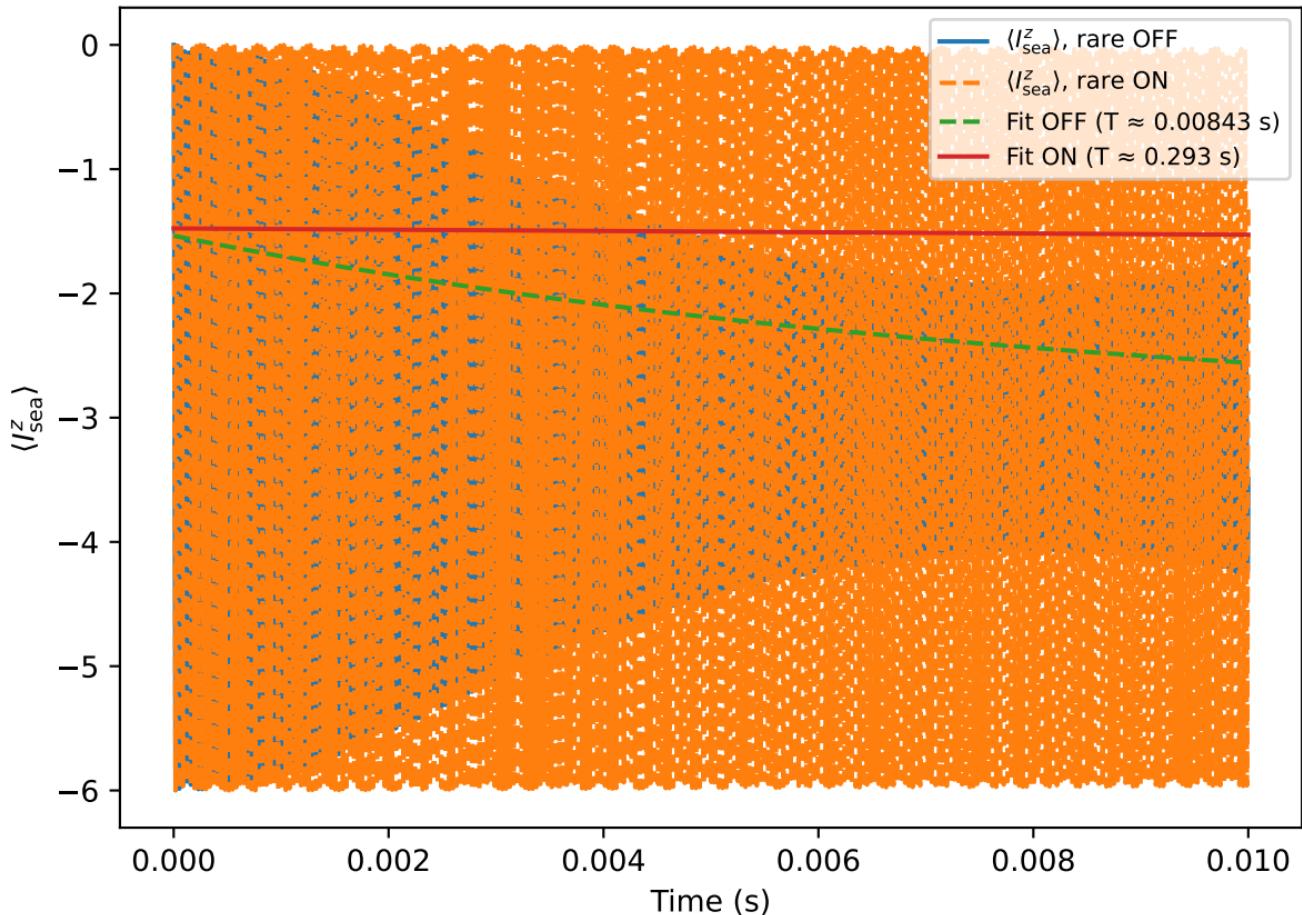
$\delta_A = +10000.0 \text{ Hz (with T-fit overlays)}$ 

$\delta_A = +10000.0$  Hz (rare drive OFF)

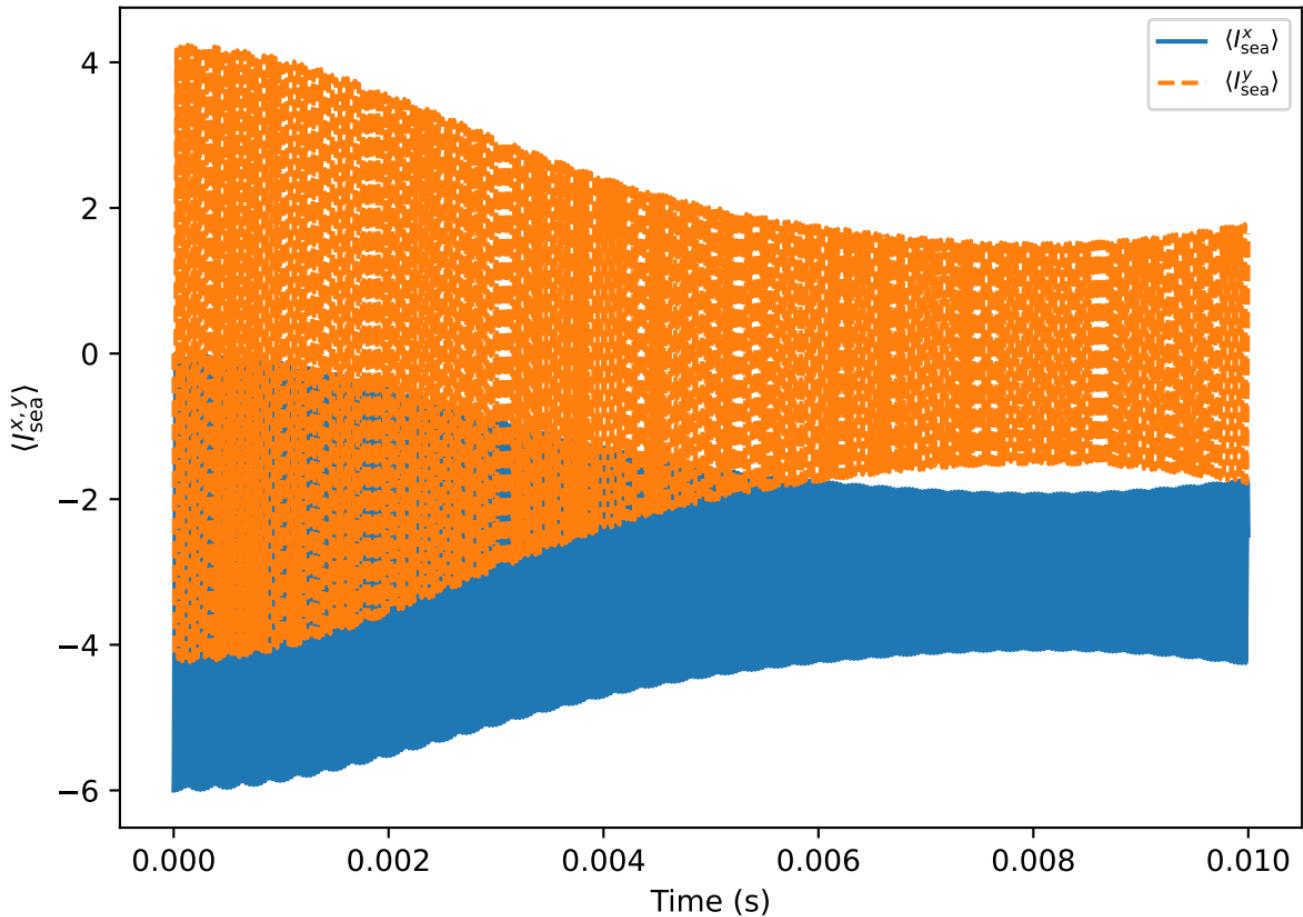


$$\delta_A = +20000.0 \text{ Hz}$$



$\delta_A = +20000.0 \text{ Hz (with T-fit overlays)}$ 

$\delta_A = +20000.0$  Hz (rare drive OFF)



T-like decay fits from  $\langle I^z_{\text{sea}} \rangle$  traces

delta_Hz	T_Iz_sea_off	T_Iz_sea_on
-20000.0	0.00822	NA
-10000.0	0.00944	0.0246
+0.0	NA	NA
+10000.0	0.00956	0.025
+20000.0	0.00843	0.293