

Sea detuning sweep report (Ga sea / Al rare)

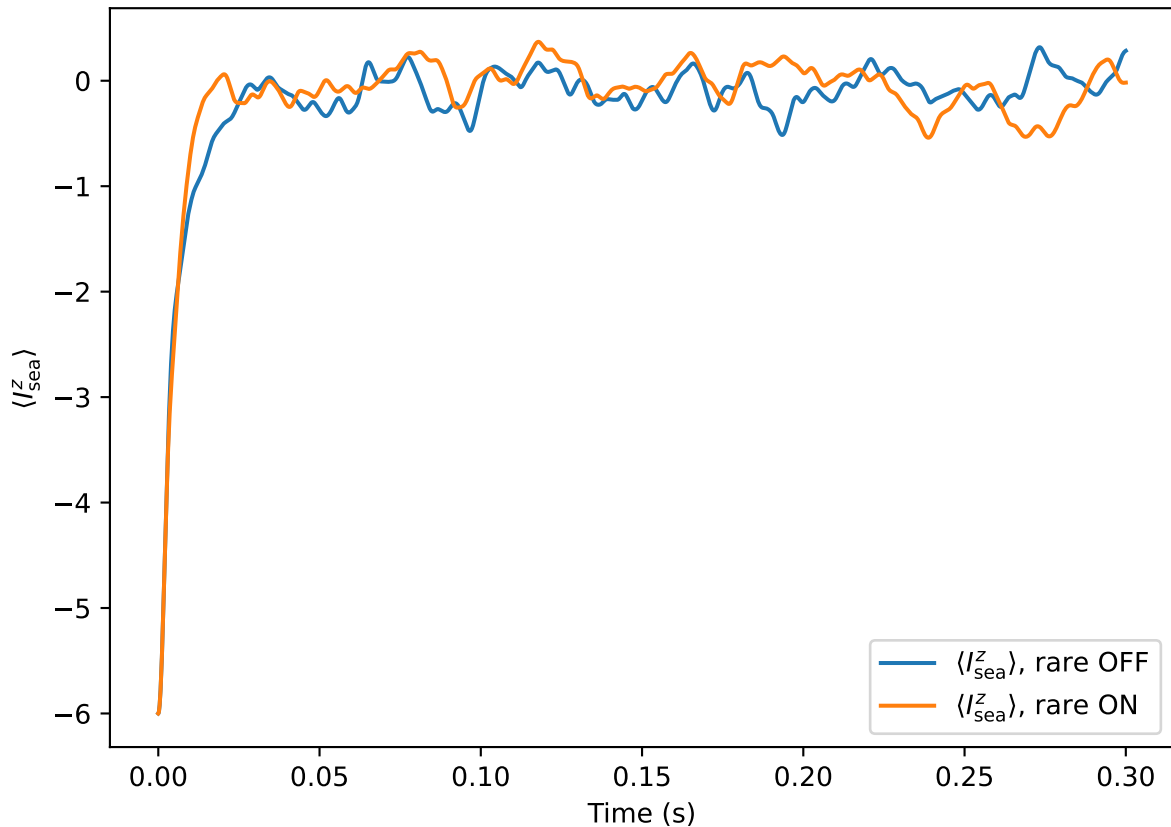
Global parameters (constant across sweep):

f_Az (sea Larmor)	= 39.062 MHz
f_Rz (rare Larmor)	= 33.308 MHz
f1A (sea Rabi)	= 0.020 kHz
f1R (rare Rabi)	= 20.000 kHz
gamma_sea	= $8.181\text{e}+07 \text{ rad}\cdot\text{s}^{-1}\cdot\text{T}^{-1}$
gamma_rare	= $6.976\text{e}+07 \text{ rad}\cdot\text{s}^{-1}\cdot\text{T}^{-1}$
B0_common	= 3.000 T
B1_sea	= $1.536\text{e}-06 \text{ T}$
B1_rare	= $1.801\text{e}-03 \text{ T}$
dipolar_scale_SI	= $1.055\text{e}-41$
shell_scale	= 0.300 nm
t_final	= $3.000\text{e}-01 \text{ s}$
steps	= 20000
n_sea	= 12
phi_sea	= 1.571 rad
phi_rare	= 1.571 rad
sea_spin_type	= 1/2
rare_spin_type	= 1/2

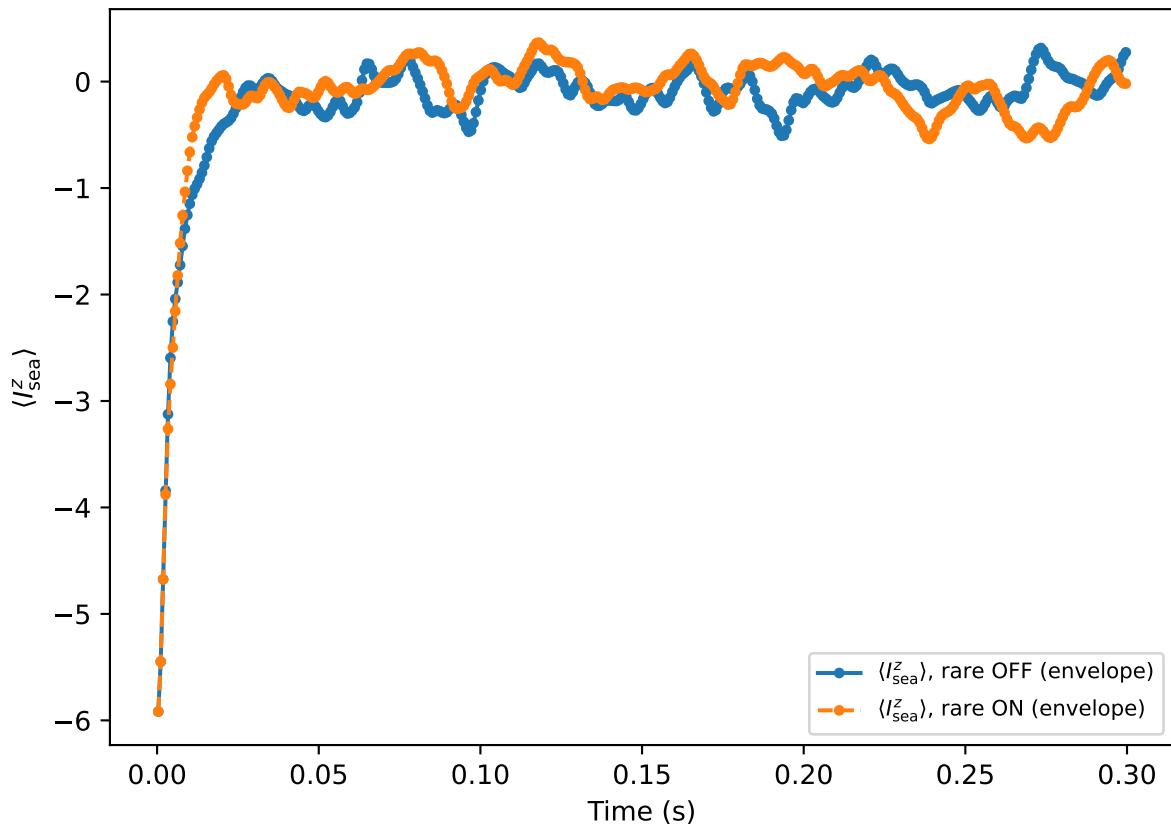
Sea detunings ($\delta_A = f_{Az} - f_{rf,A}$) in Hz:

+0.0, +1.1, +2.2, +3.3, +4.4, +5.6, +6.7, +7.8, +8.9, +10.0

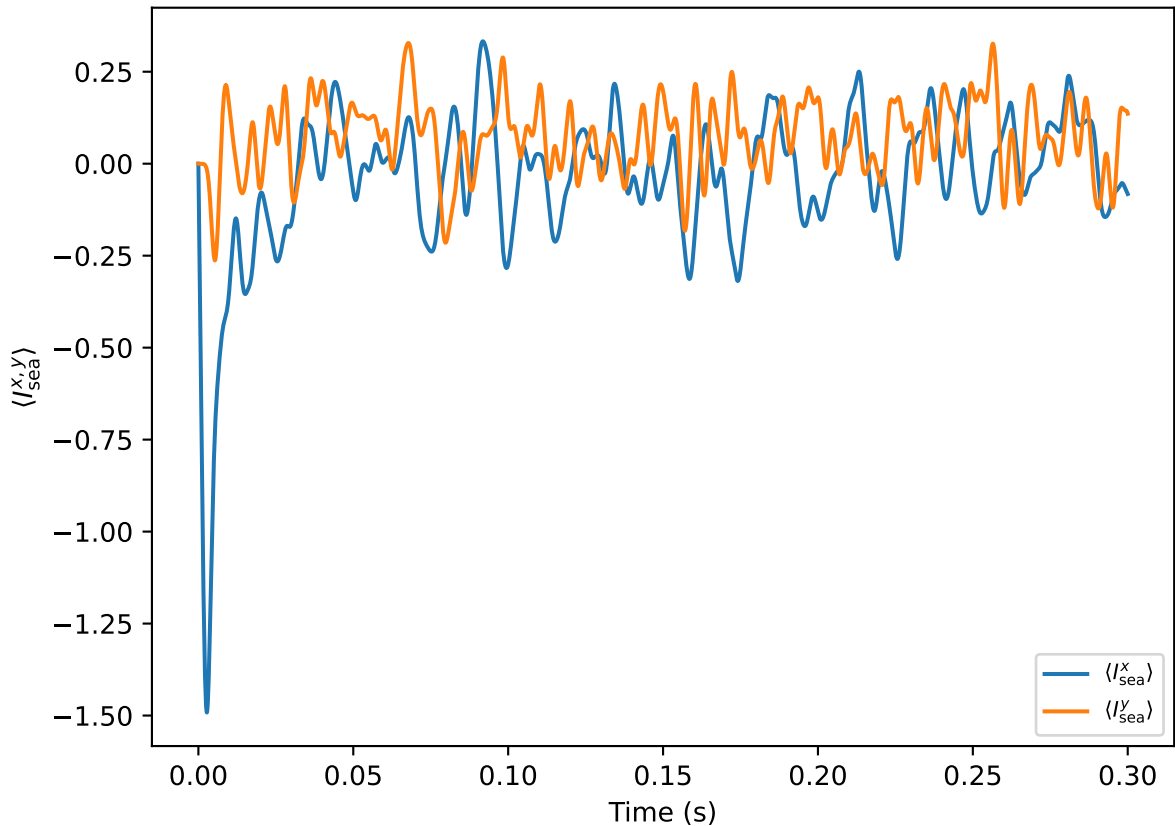
$\delta_A = +0.0$ Hz



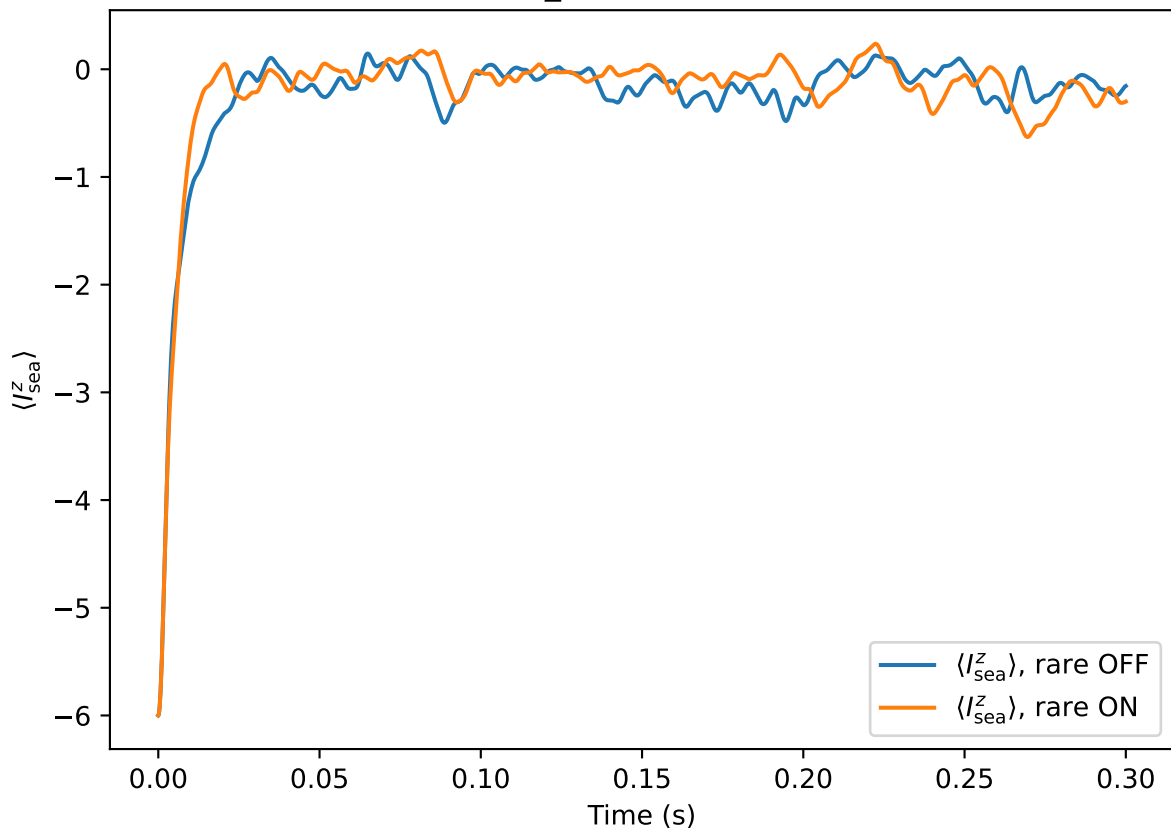
$\delta_A = +0.0$ Hz (pseudo T_1 envelope)



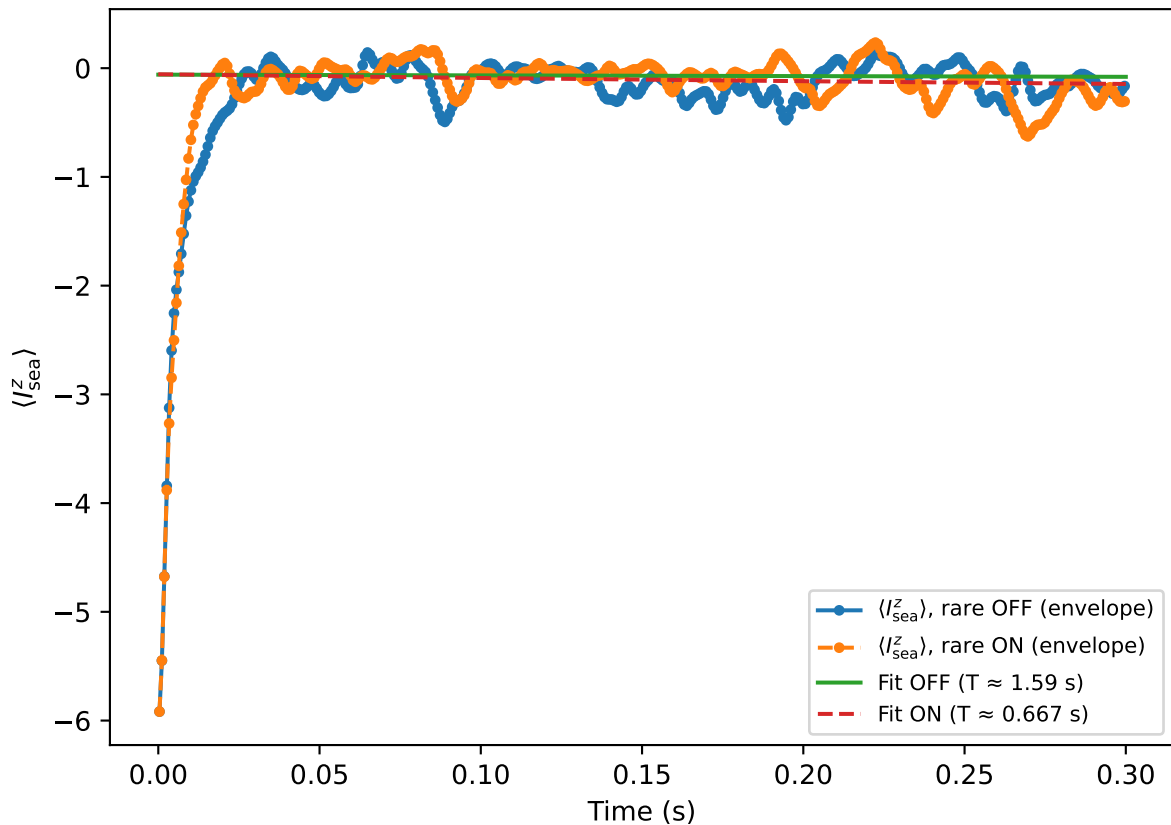
$\delta_A = +0.0$ Hz (rare drive OFF)



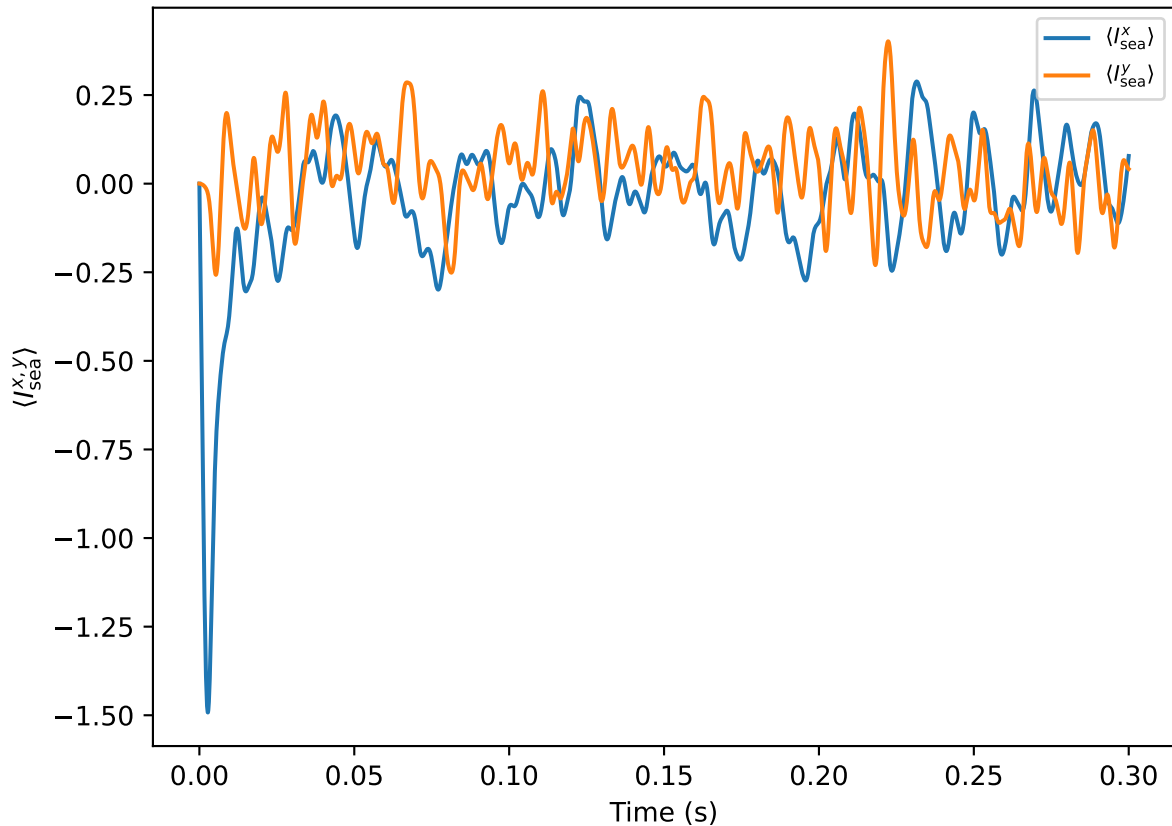
$\delta_A = +1.1$ Hz



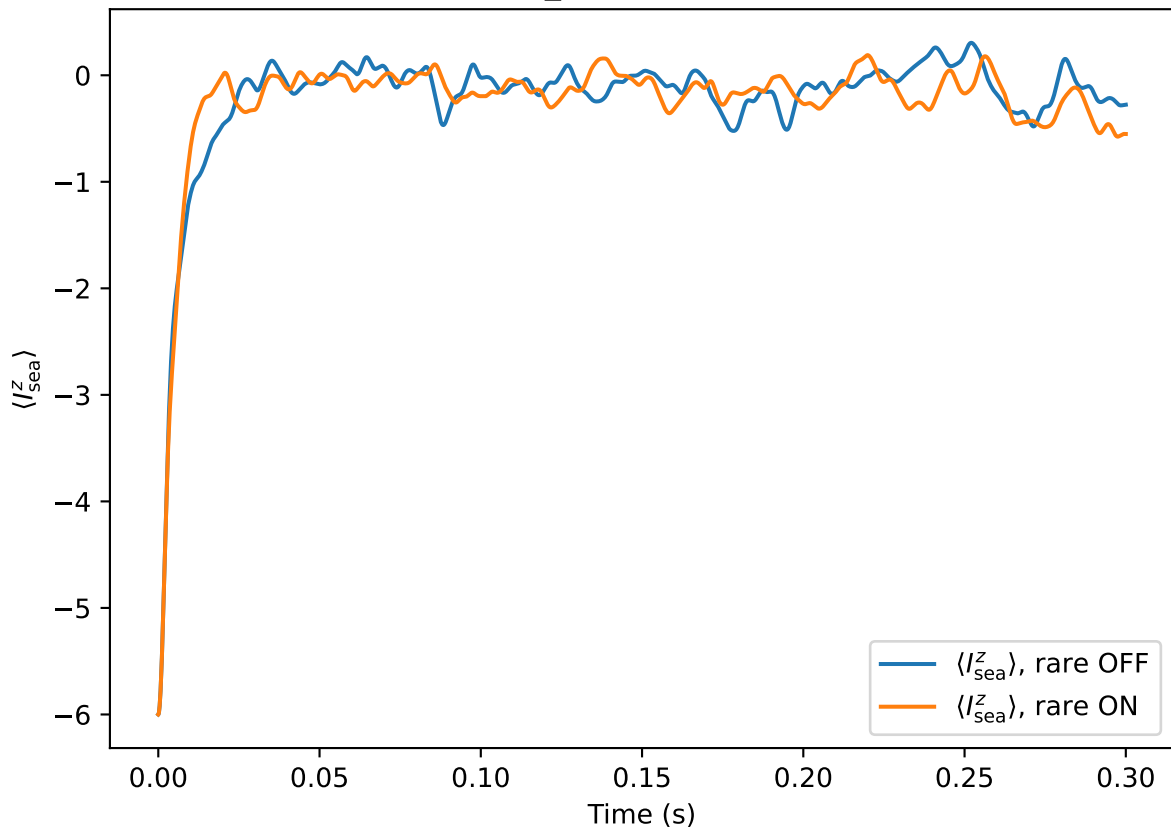
$\delta_A = +1.1$ Hz (pseudo T_1 envelope)



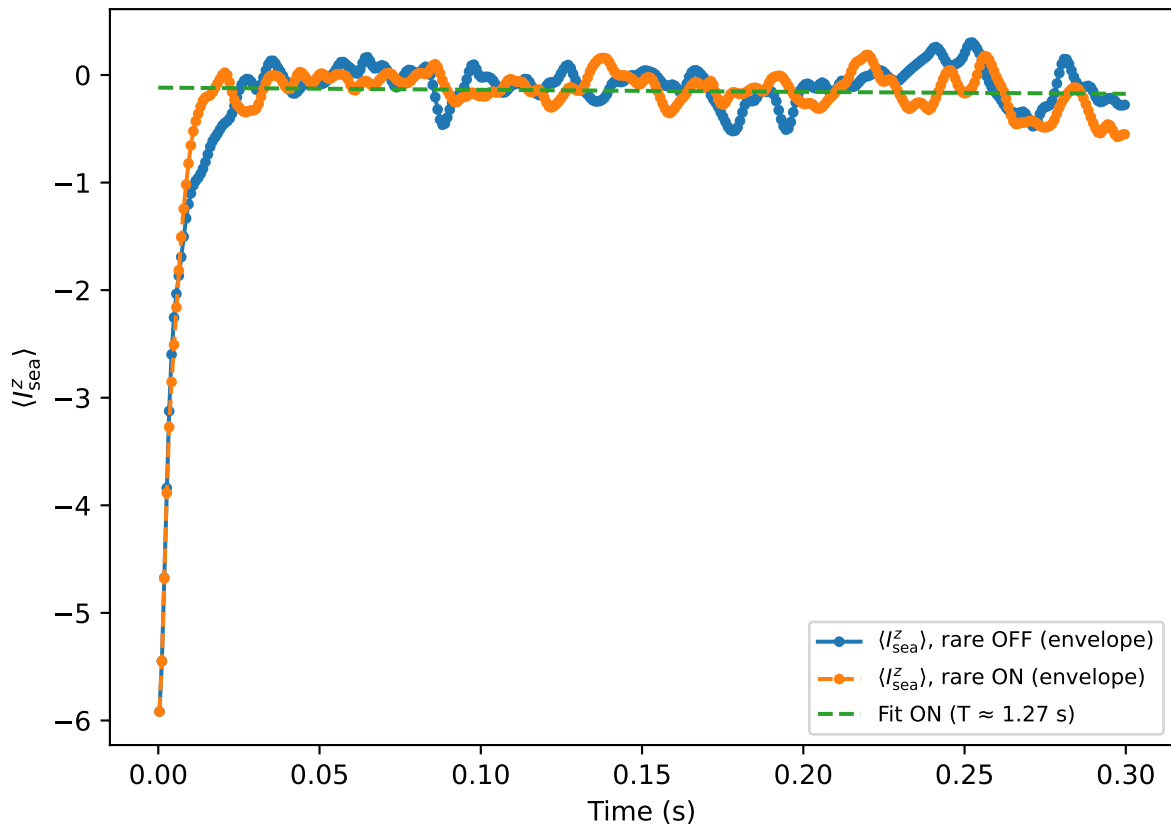
$\delta_A = +1.1$ Hz (rare drive OFF)



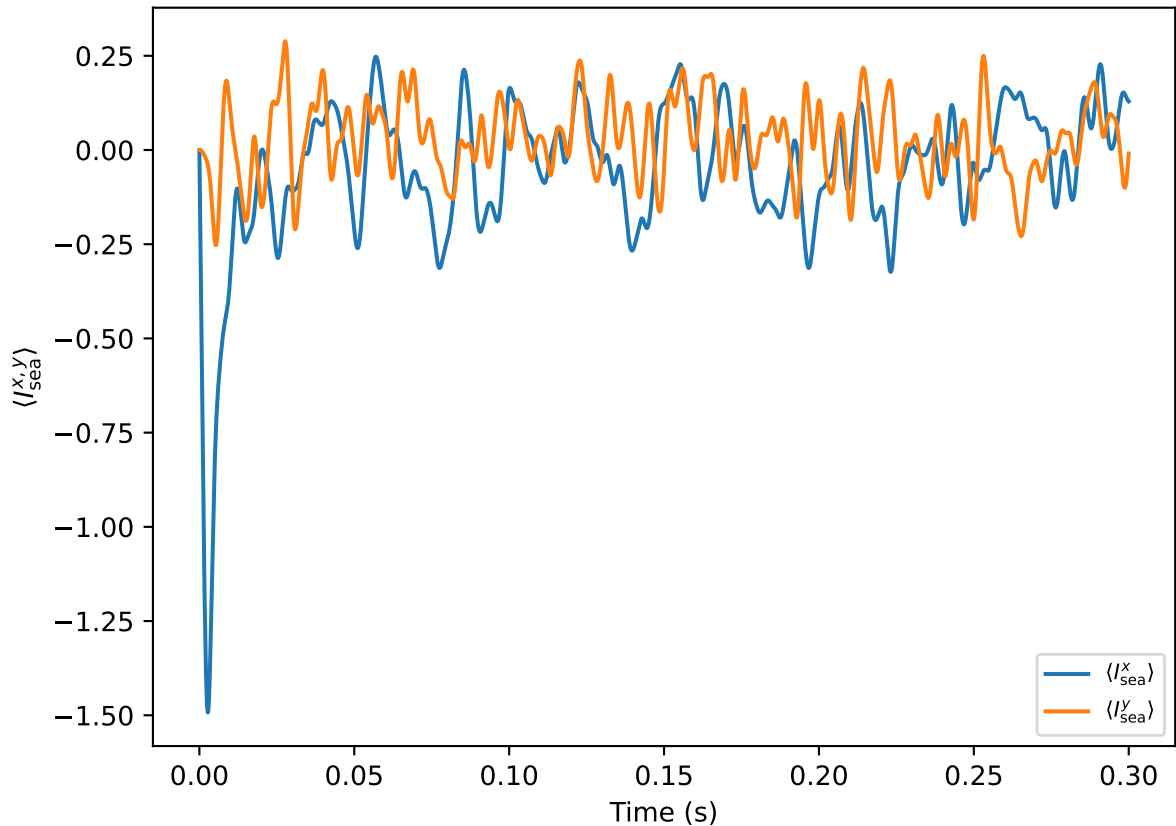
$\delta_A = +2.2$ Hz



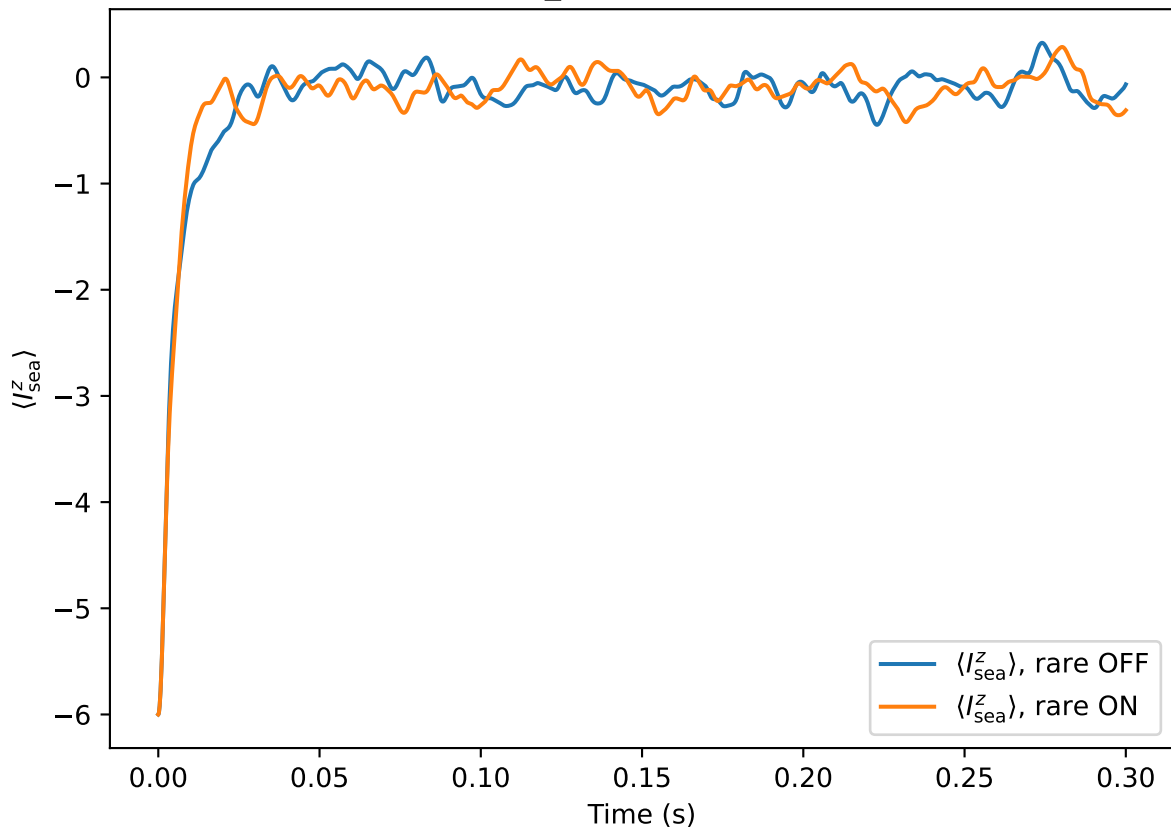
$\delta_A = +2.2$ Hz (pseudo T_1 envelope)



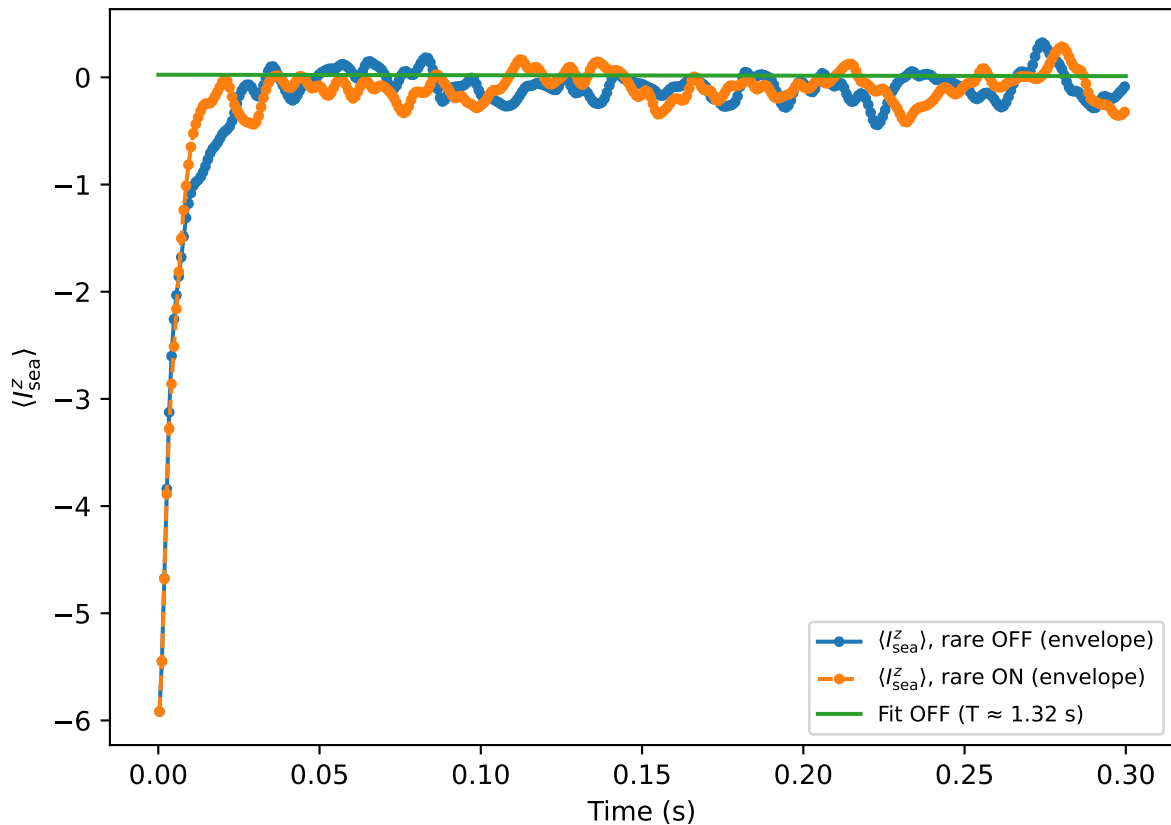
$\delta_A = +2.2$ Hz (rare drive OFF)



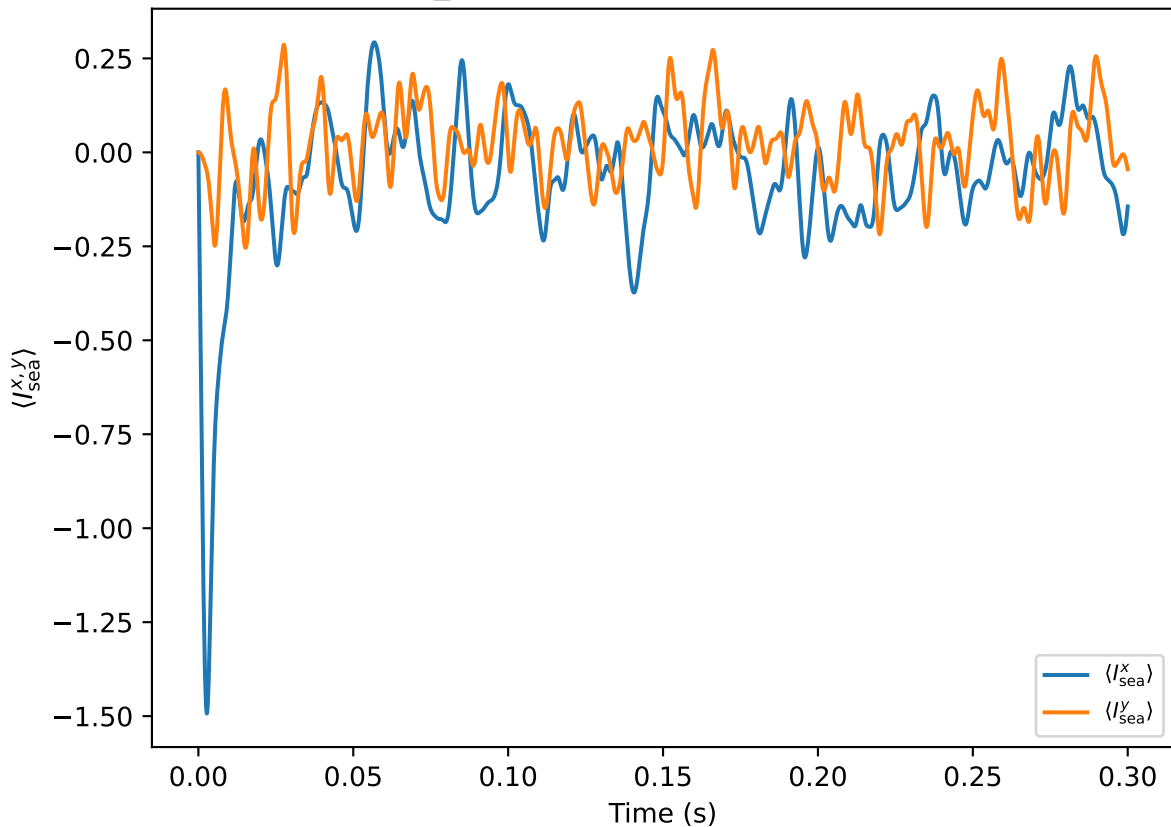
$\delta_A = +3.3$ Hz



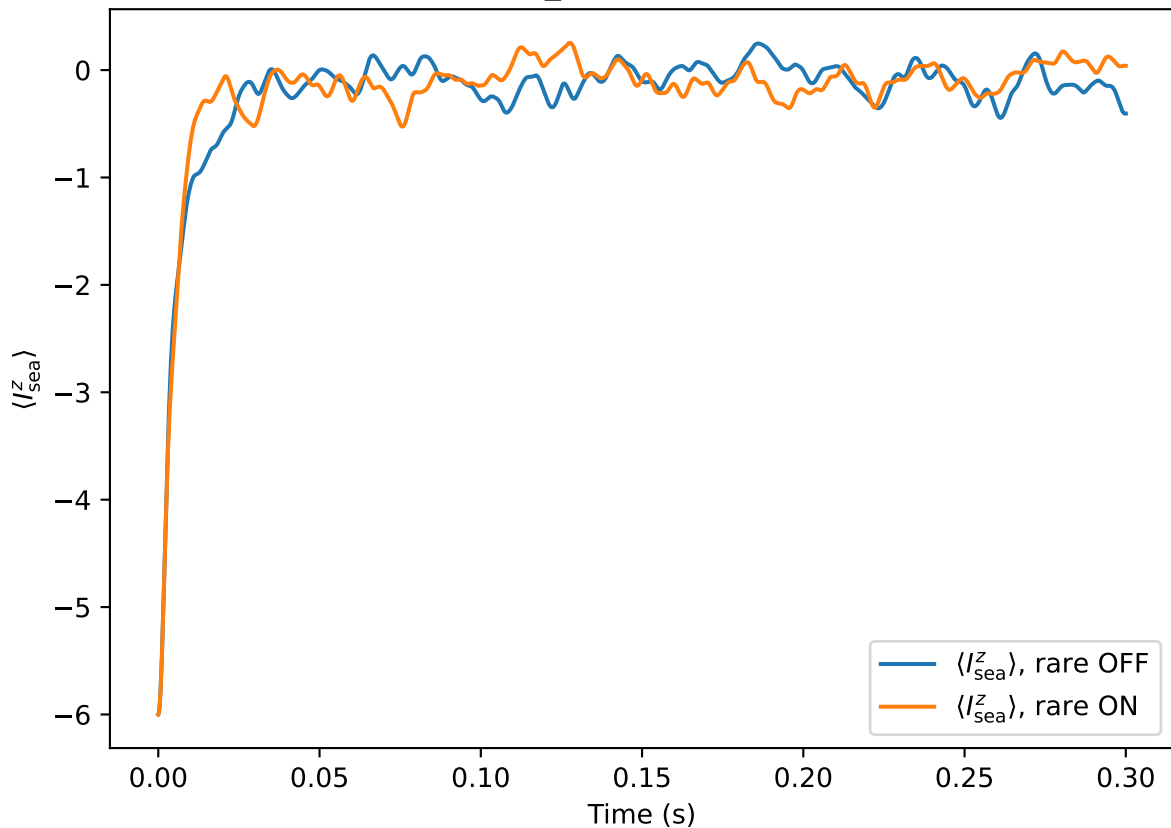
$\delta_A = +3.3$ Hz (pseudo T_1 envelope)



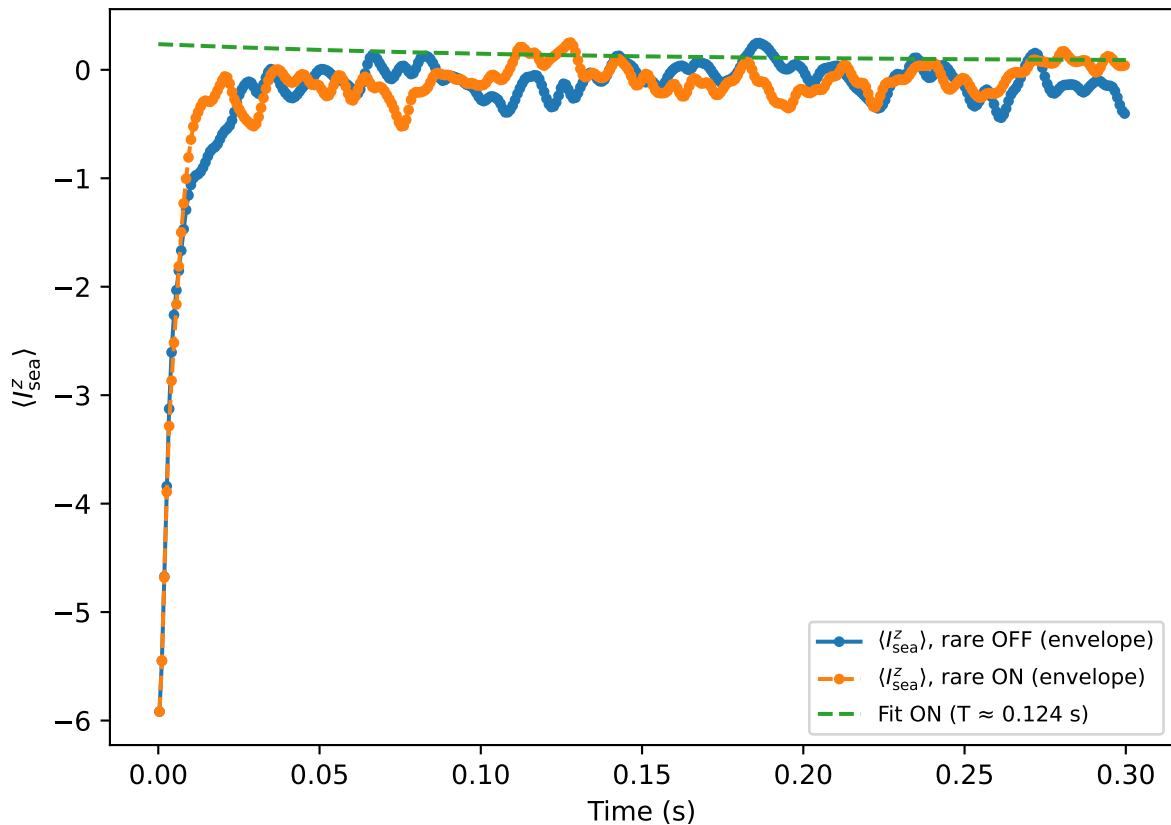
$\delta_A = +3.3$ Hz (rare drive OFF)



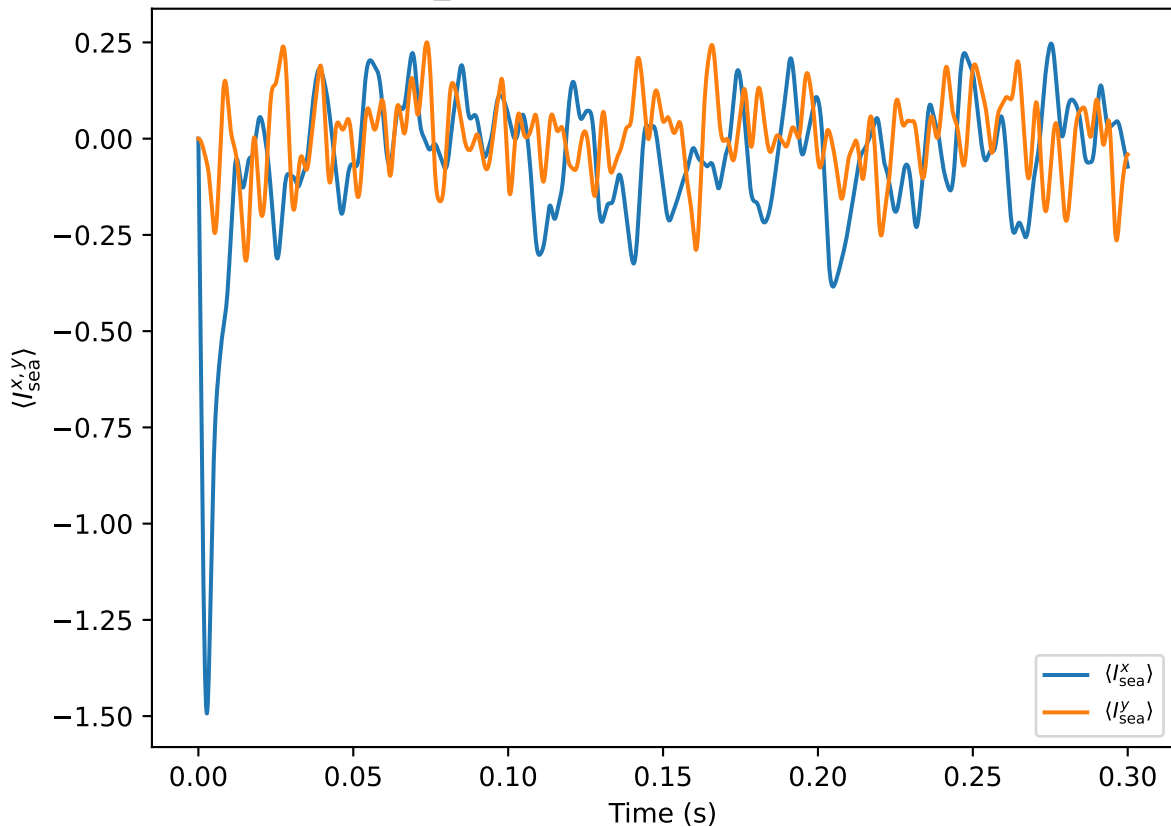
$\delta_A = +4.4$ Hz



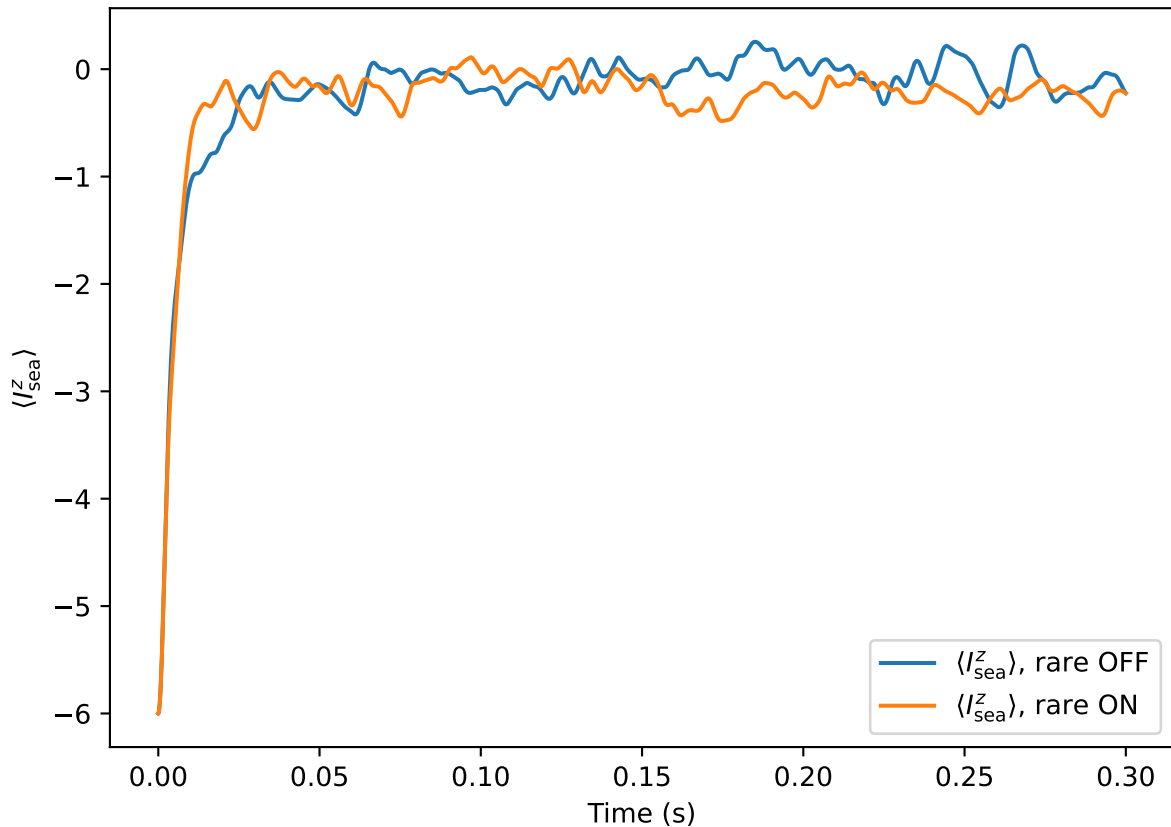
$\delta_A = +4.4$ Hz (pseudo T_1 envelope)



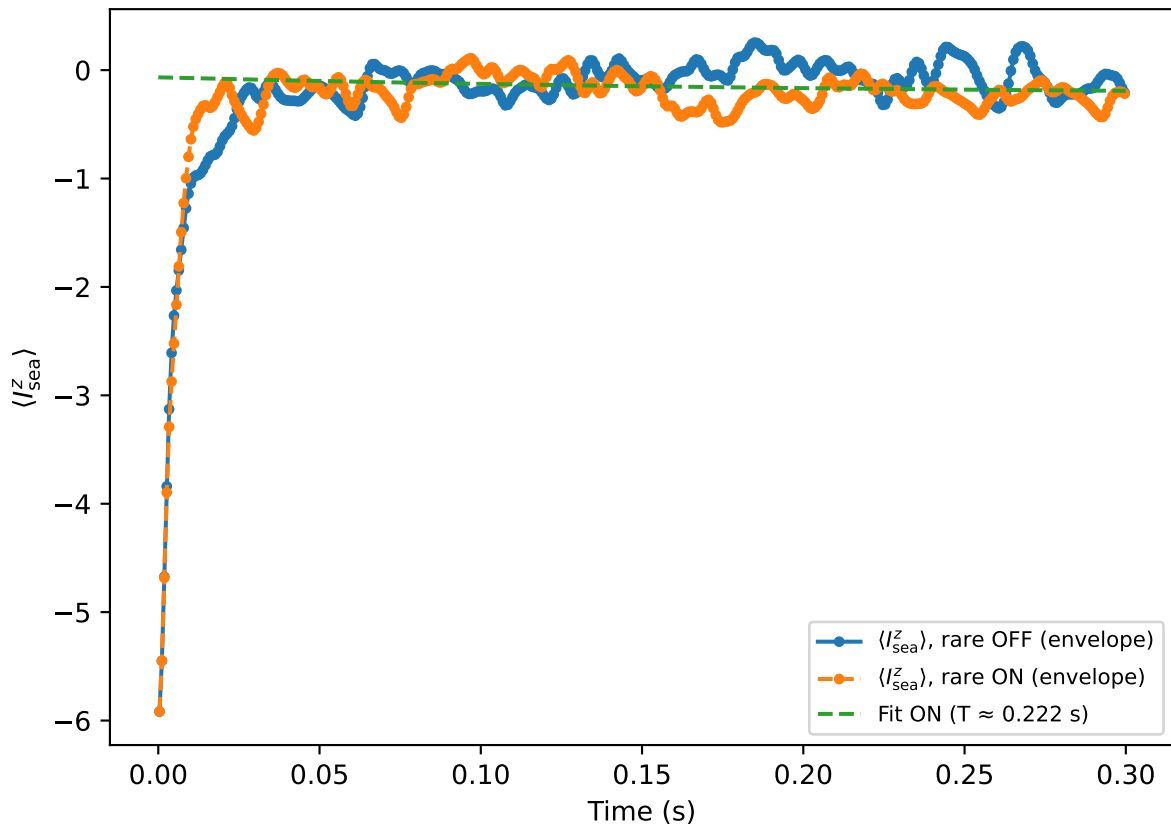
$\delta_A = +4.4$ Hz (rare drive OFF)



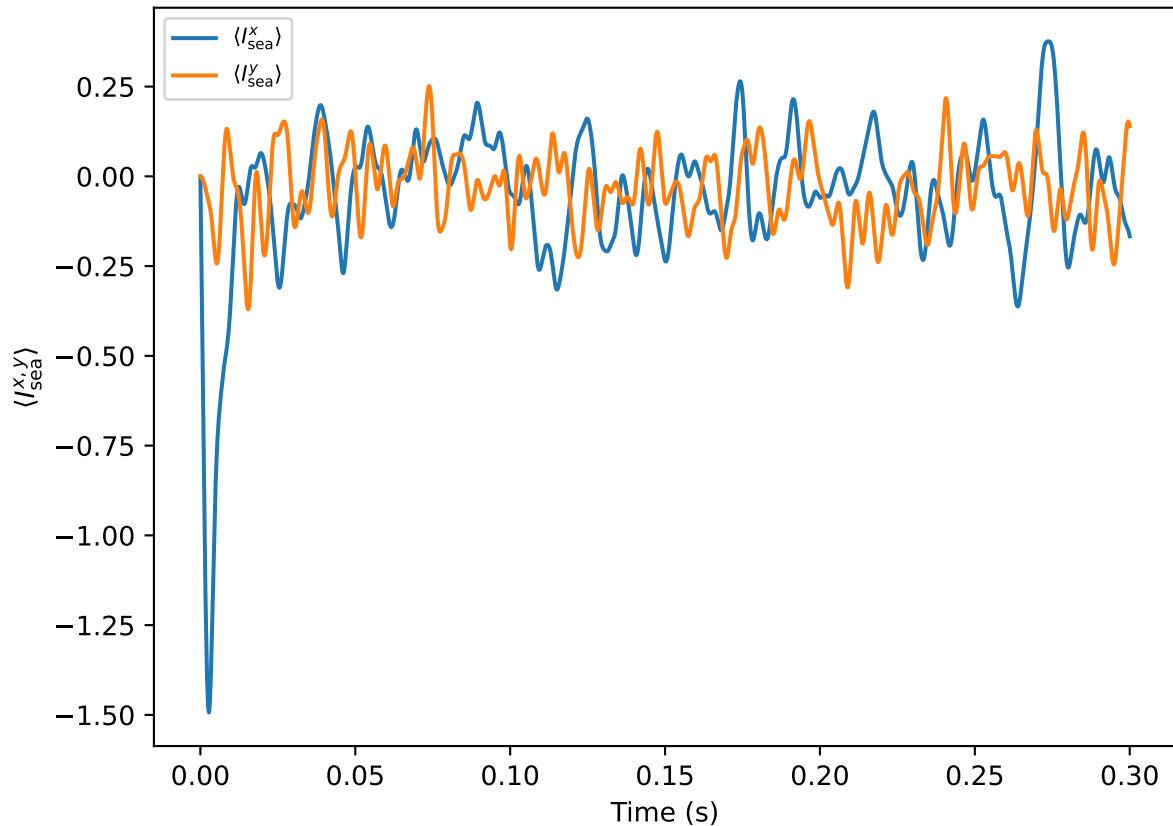
$\delta_A = +5.6$ Hz



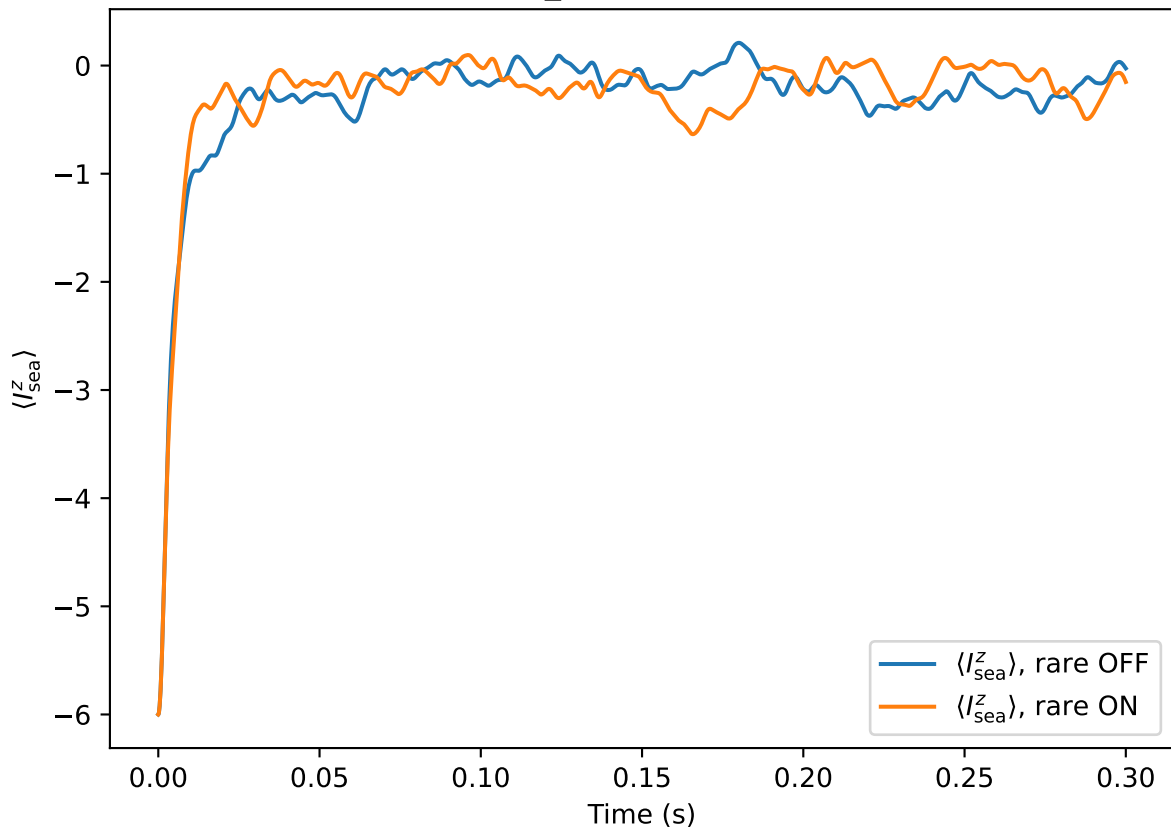
$\delta_A = +5.6$ Hz (pseudo T_1 envelope)



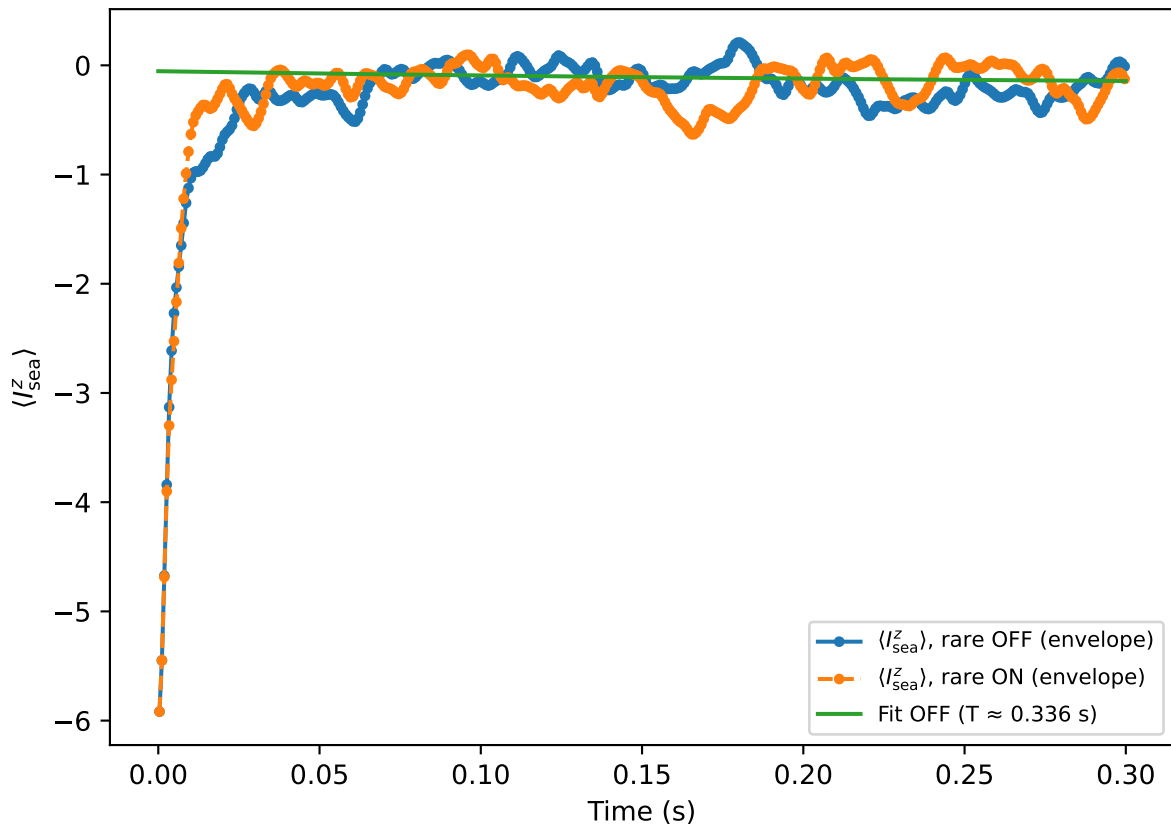
$\delta_A = +5.6$ Hz (rare drive OFF)



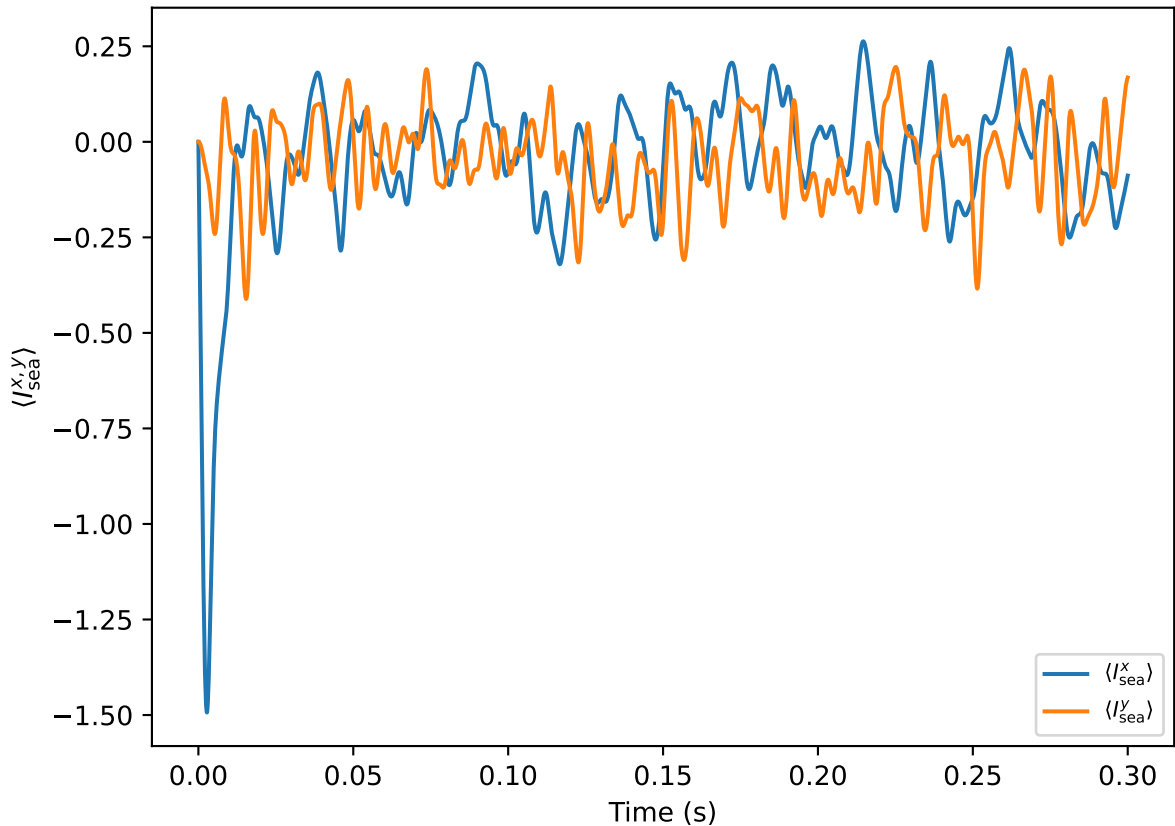
$\delta_A = +6.7$ Hz



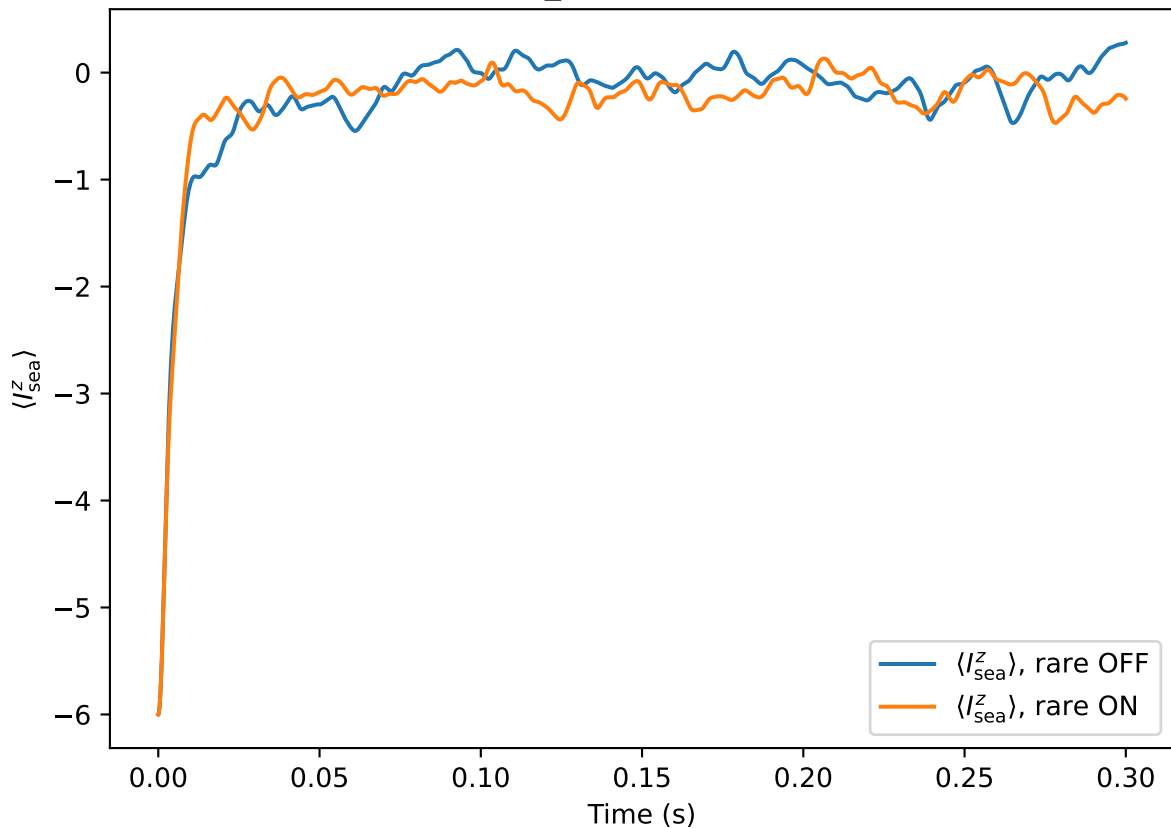
$\delta_A = +6.7$ Hz (pseudo T_1 envelope)



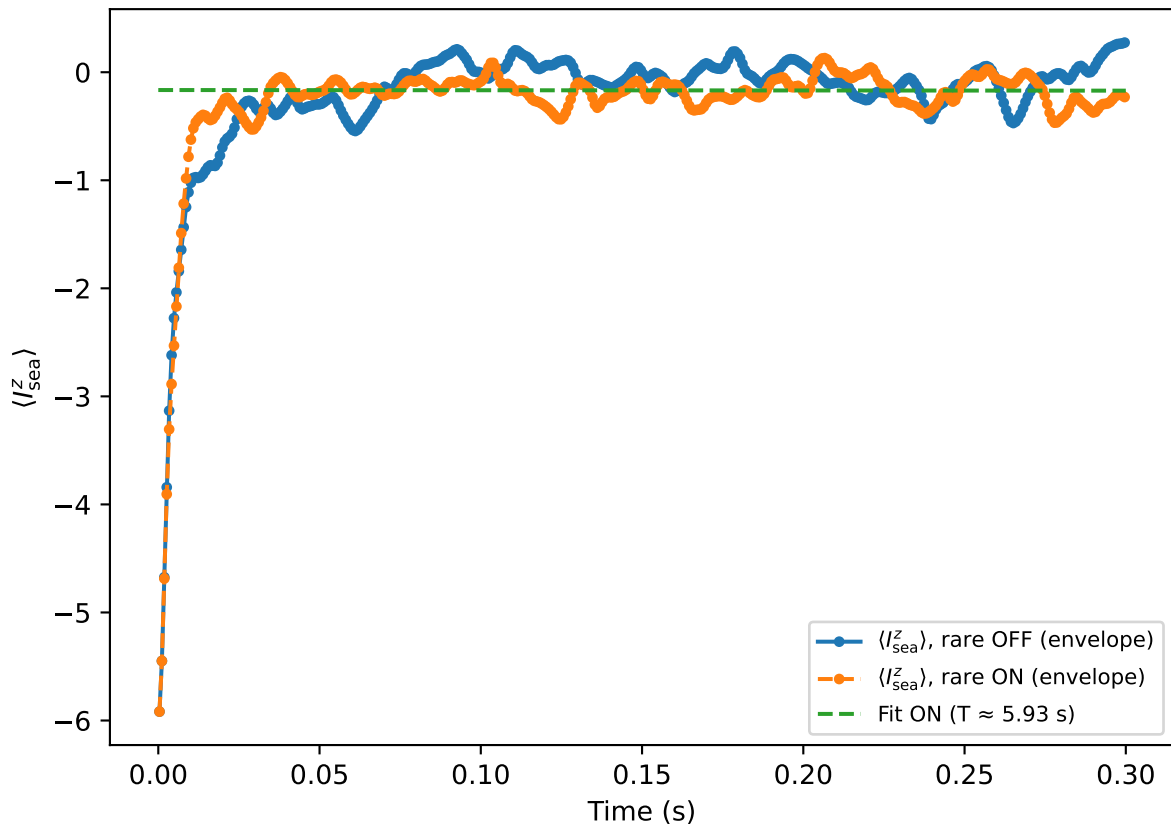
$\delta_A = +6.7$ Hz (rare drive OFF)



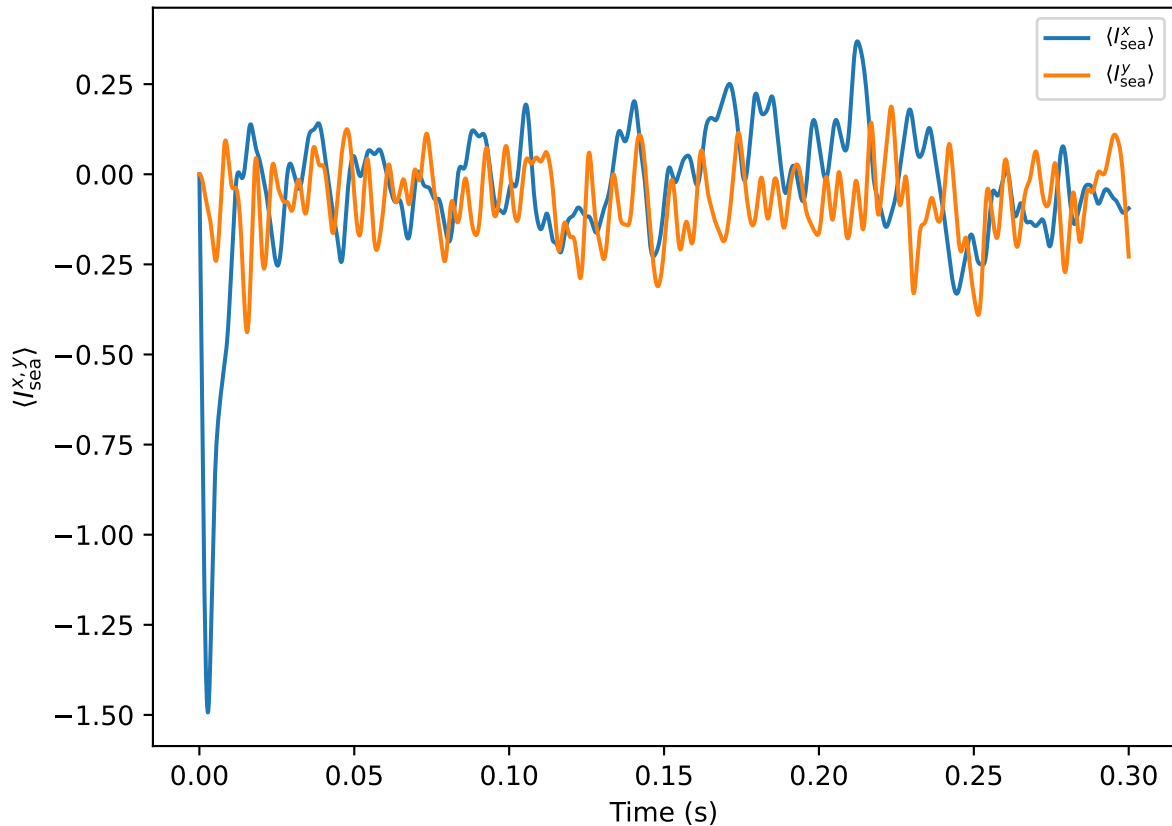
$\delta_A = +7.8$ Hz



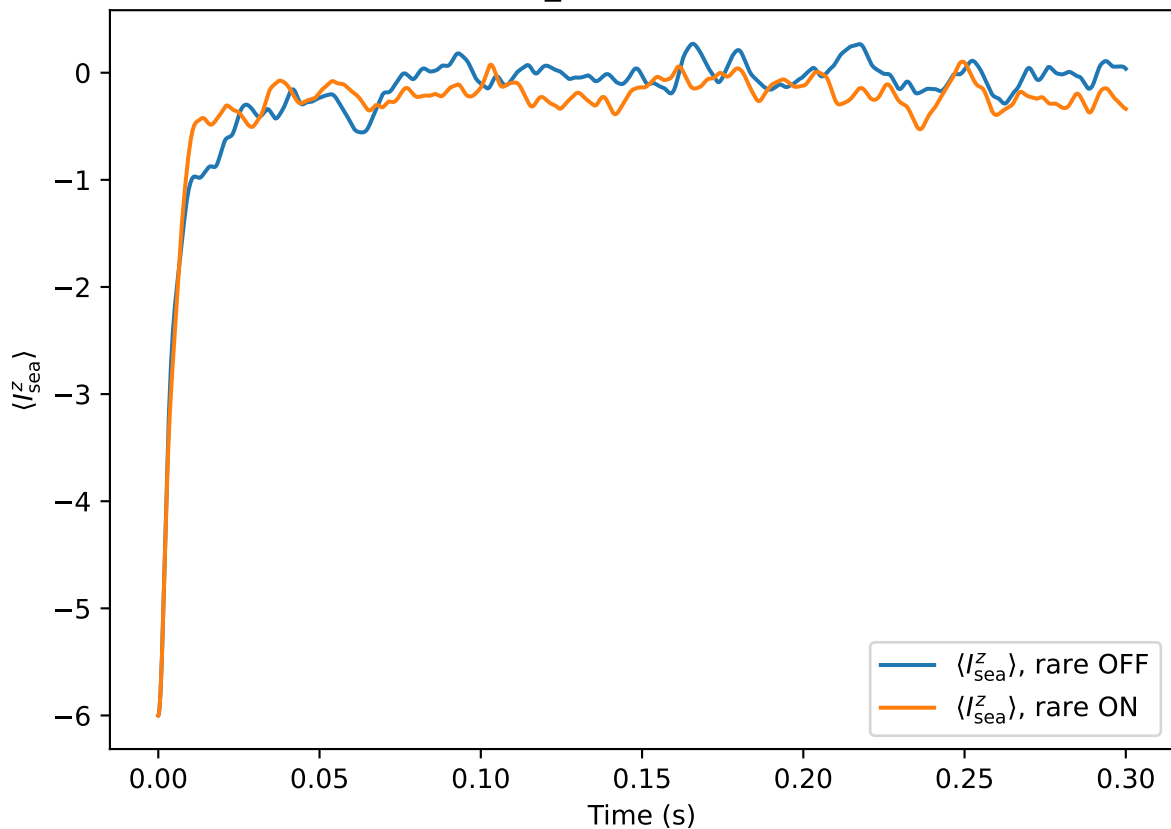
$\delta_A = +7.8$ Hz (pseudo T_1 envelope)



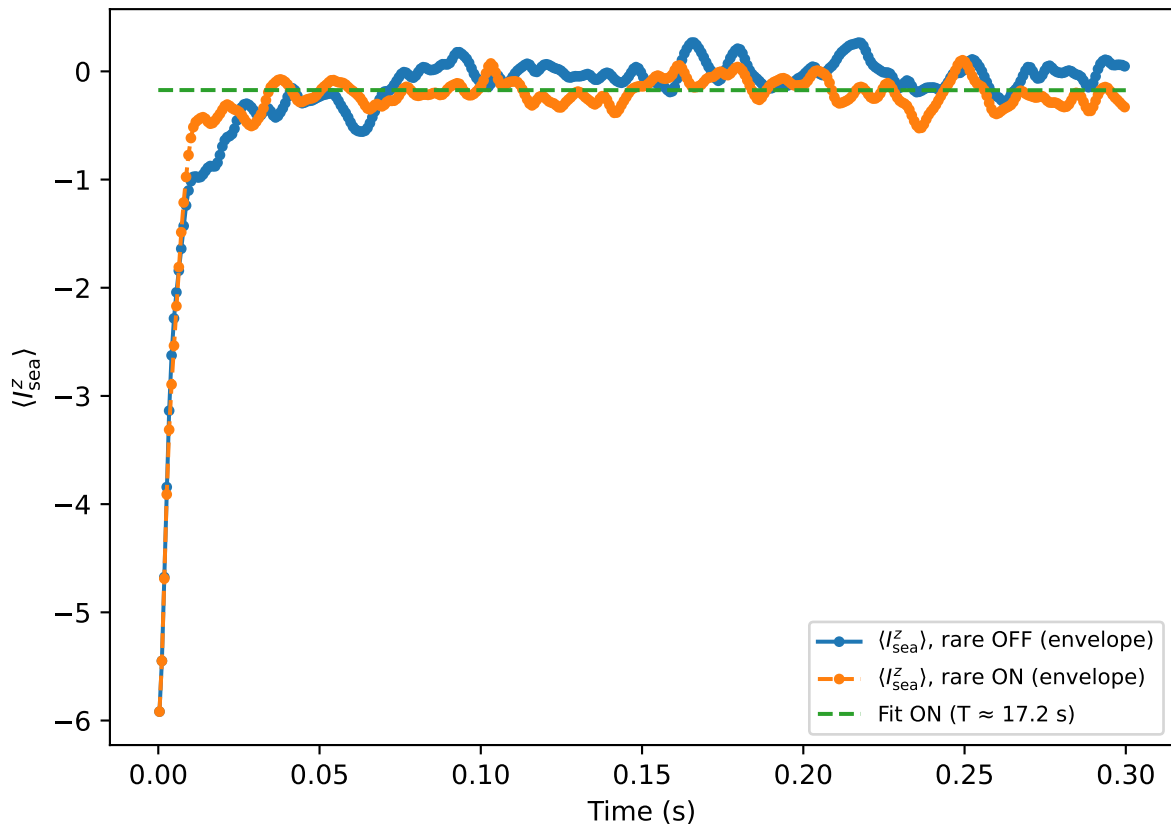
$\delta_A = +7.8$ Hz (rare drive OFF)



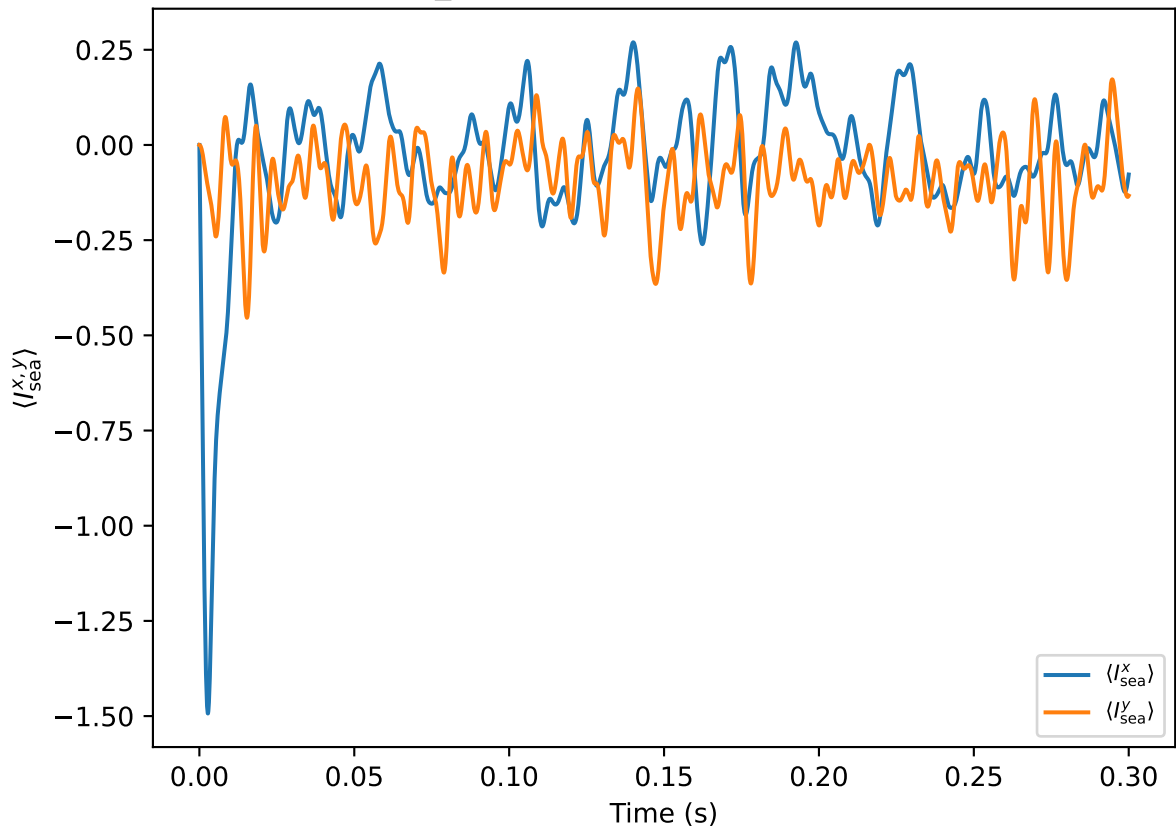
$\delta_A = +8.9$ Hz



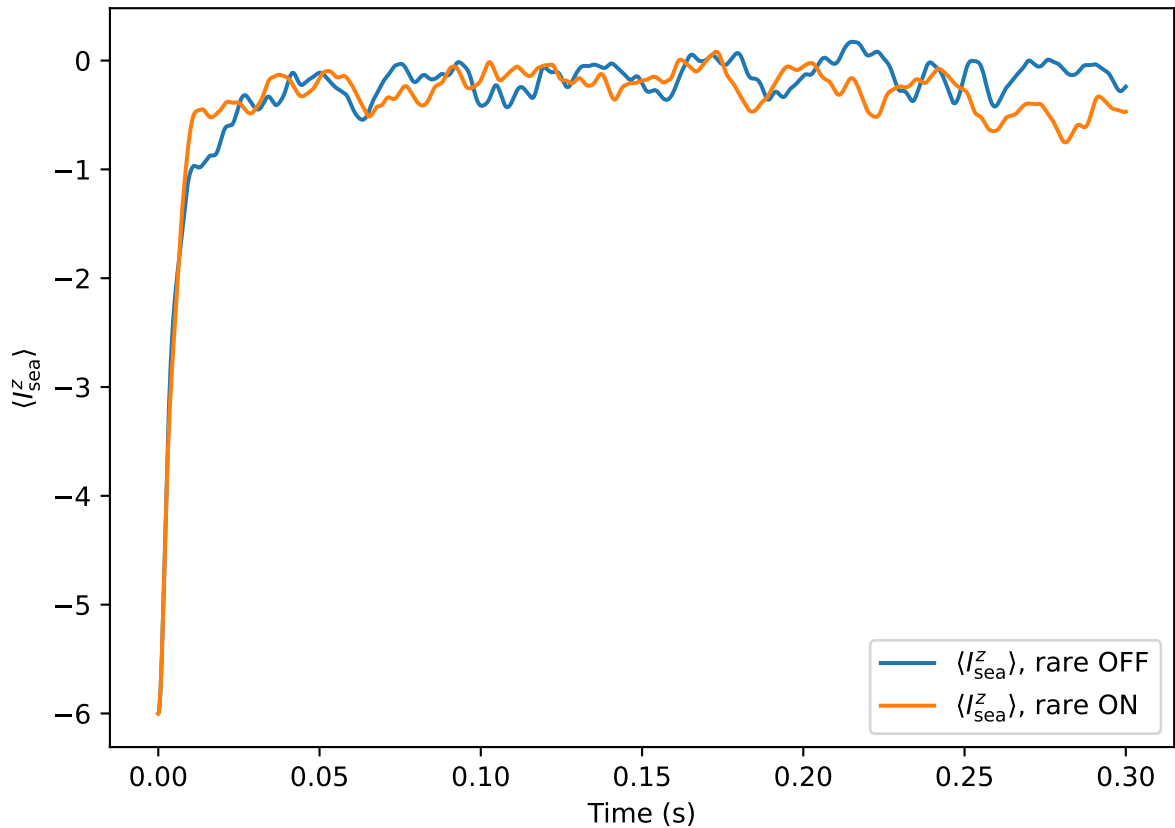
$\delta_A = +8.9$ Hz (pseudo T_1 envelope)



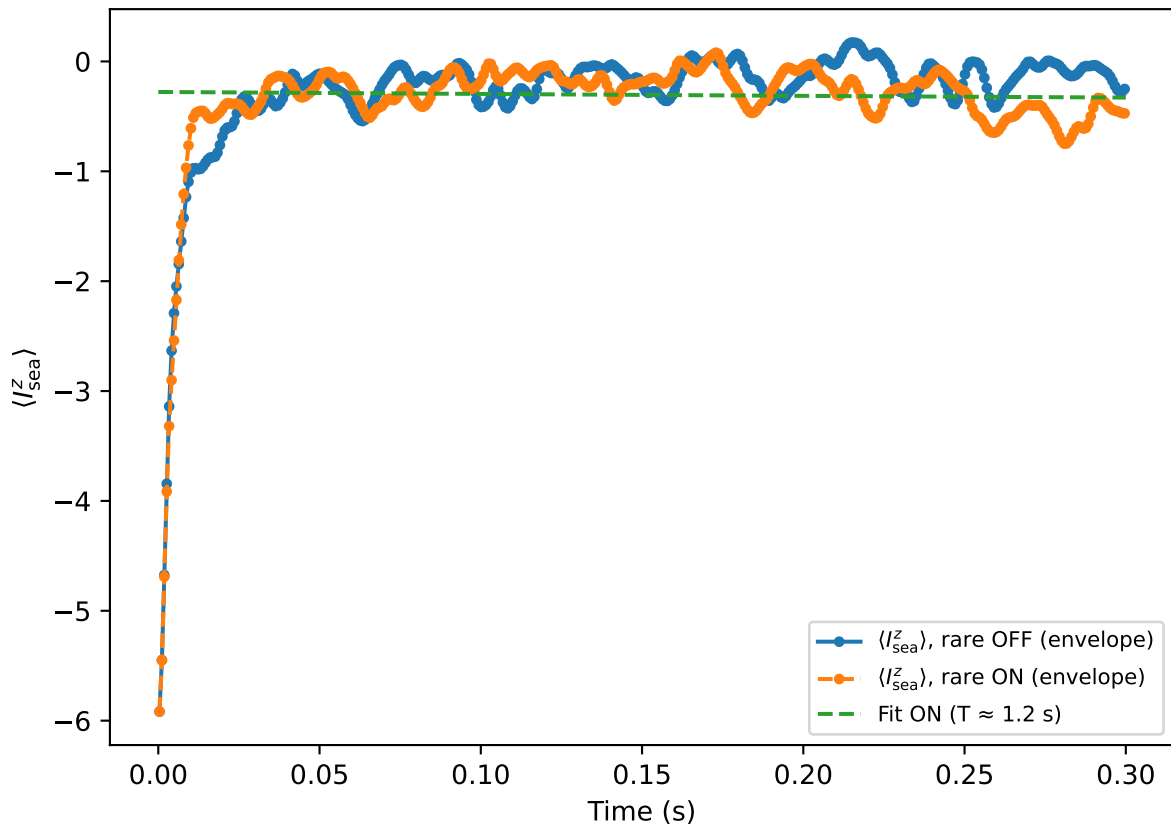
$\delta_A = +8.9$ Hz (rare drive OFF)



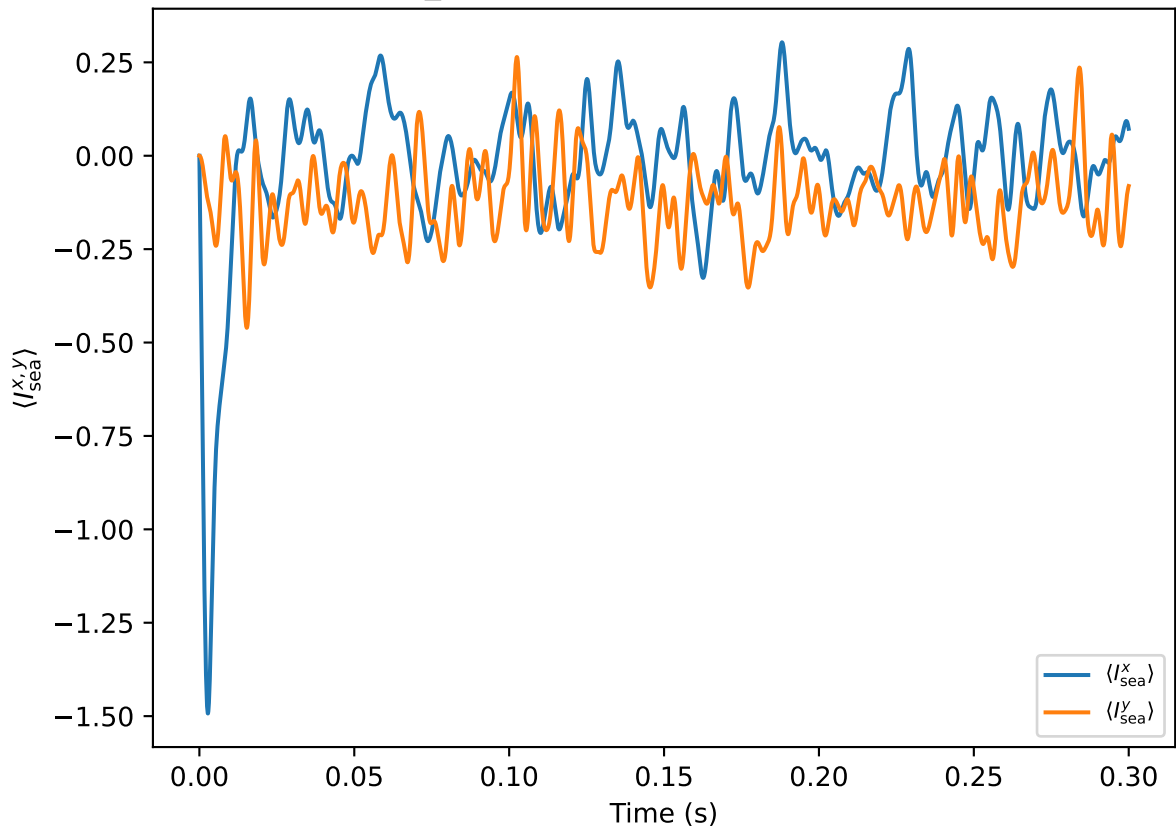
$\delta_A = +10.0$ Hz



$\delta_A = +10.0$ Hz (pseudo T_1 envelope)



$\delta_A = +10.0$ 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

+0.0	NA	NA
+1.1	1.59	0.667
+2.2	NA	1.27
+3.3	1.32	NA
+4.4	NA	0.124
+5.6	NA	0.222
+6.7	0.336	NA
+7.8	NA	5.93
+8.9	NA	17.2
+10.0	NA	1.2