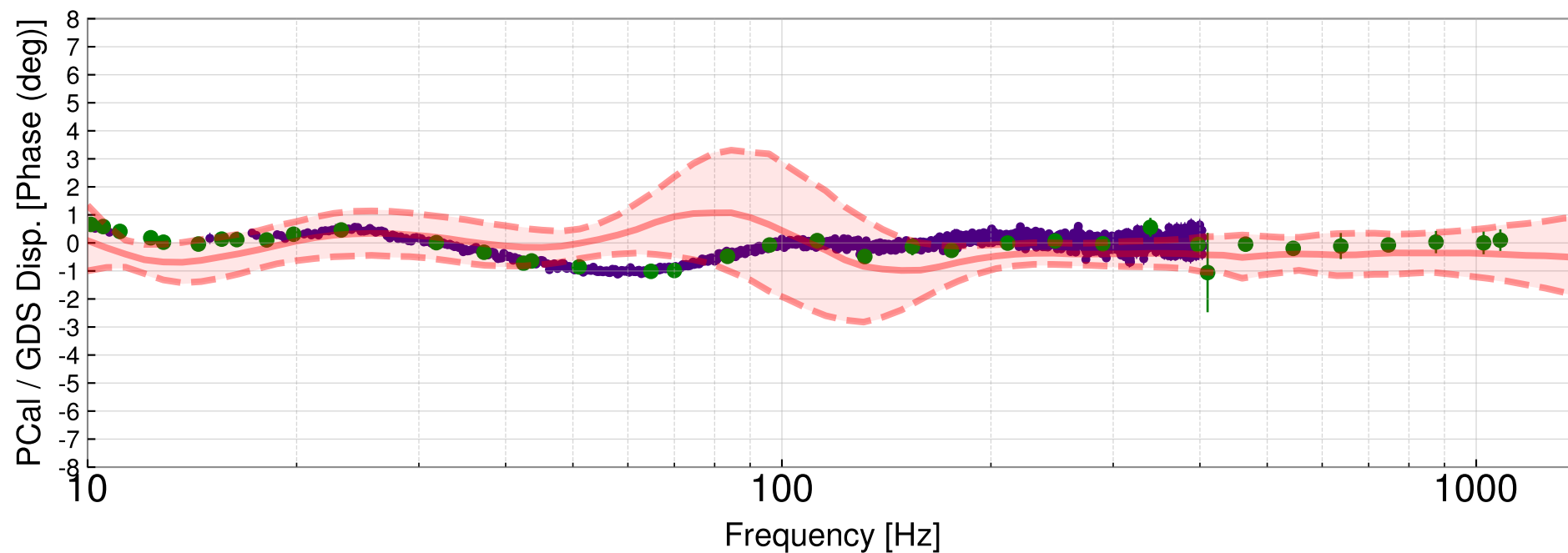
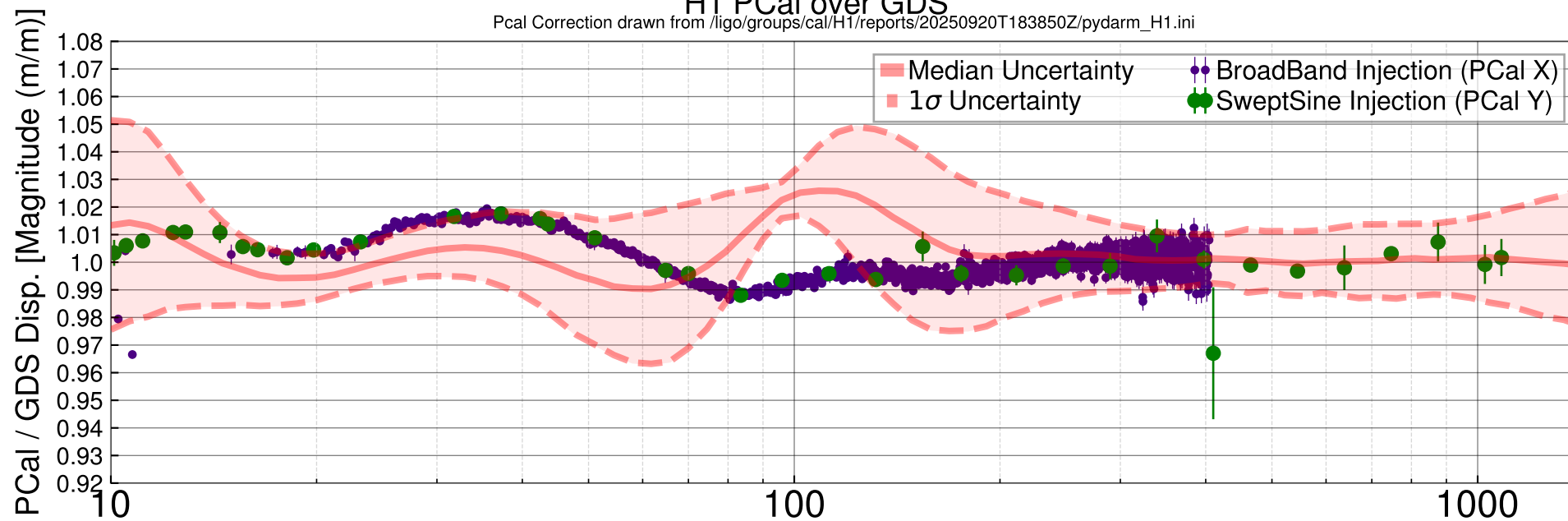


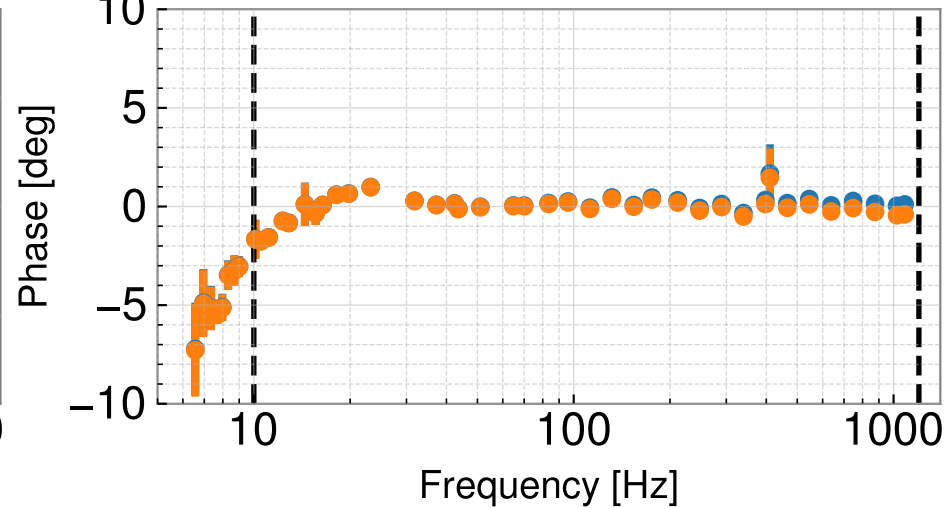
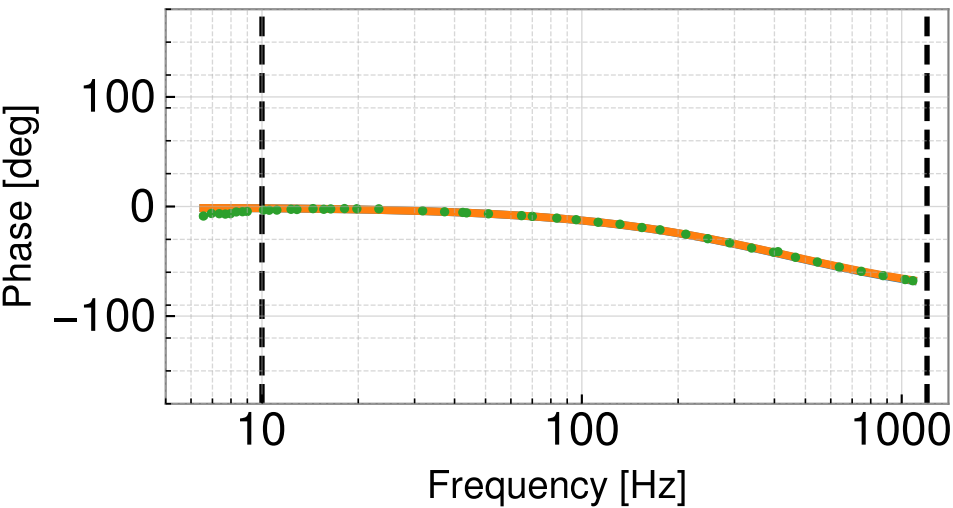
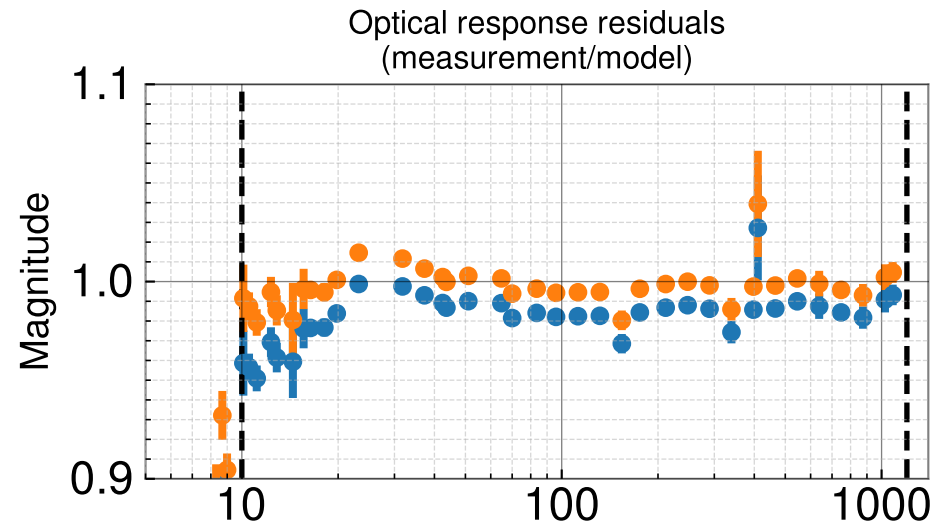
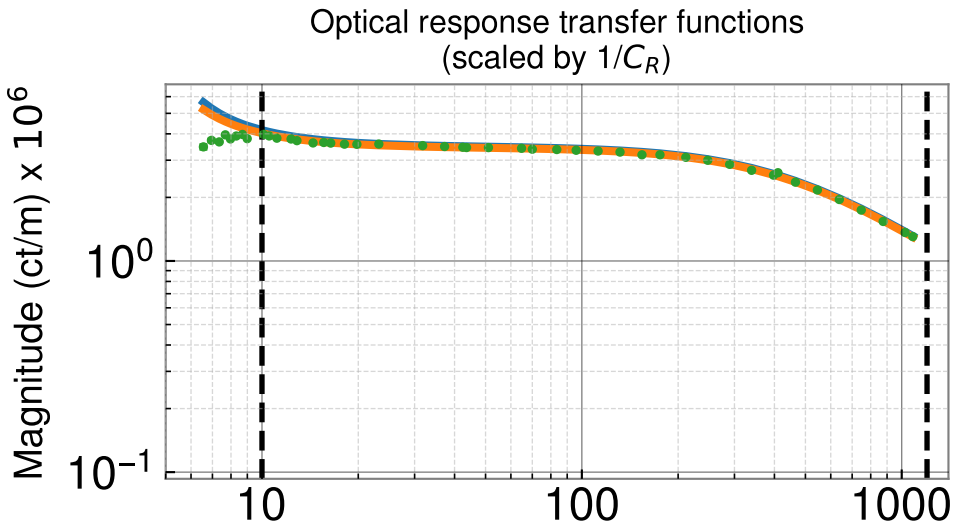
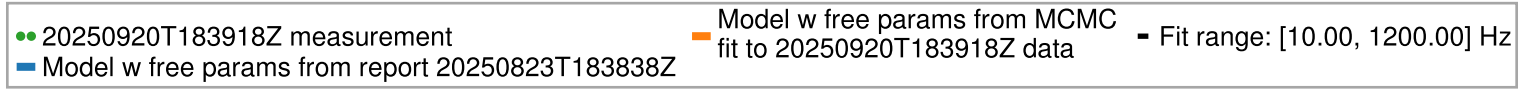
H1 PCal over GDS

Pcal Correction drawn from /ligo/groups/cal/H1/reports/20250920T183850Z/pydarm_H1.ini



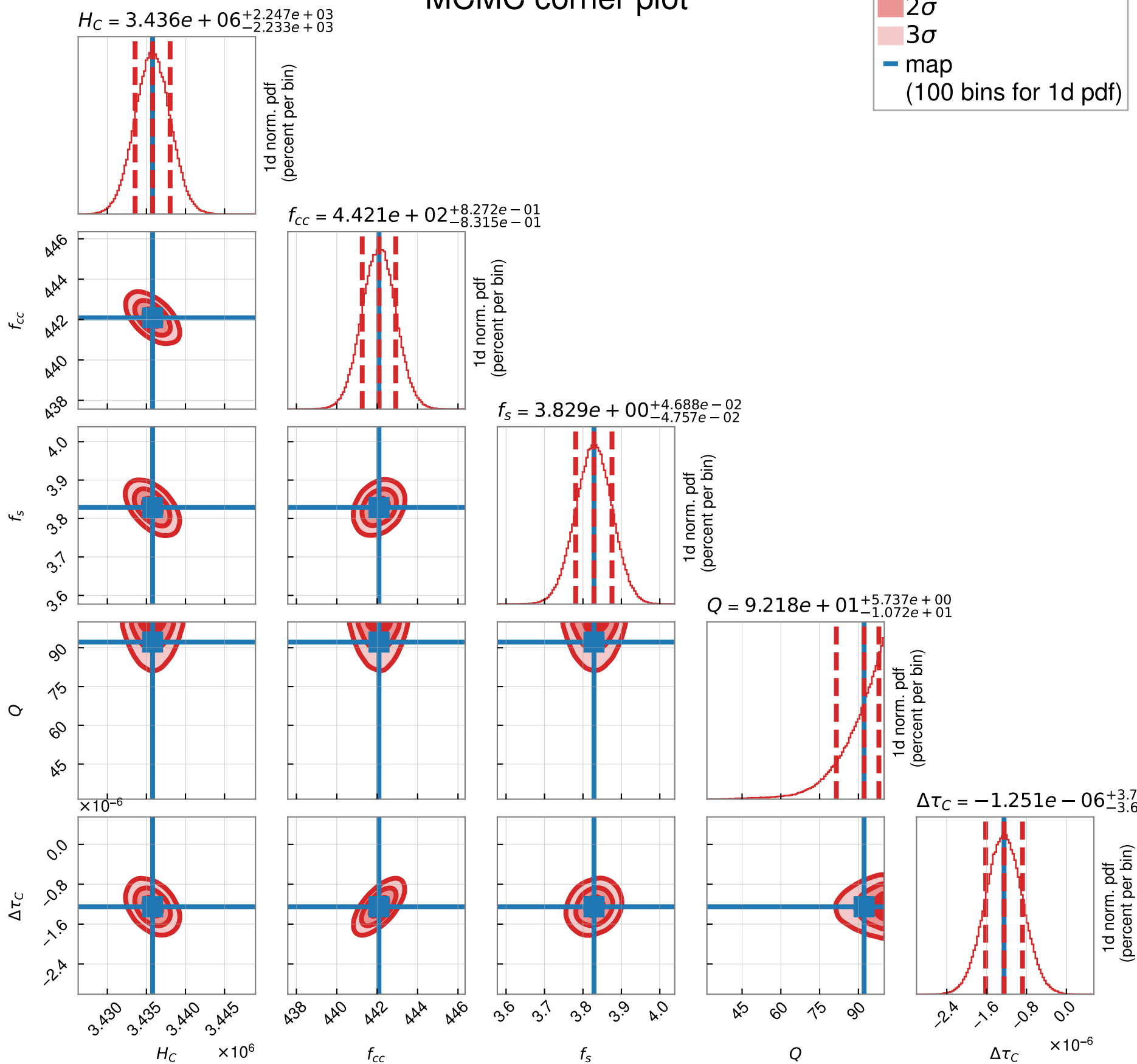
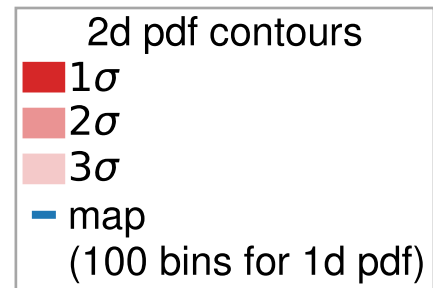
H1 sensing model MCMC summary

All fixed parameters drawn from /ligo/groups/cal/H1/reports/20250920T183850Z/pydarm_H1.ini



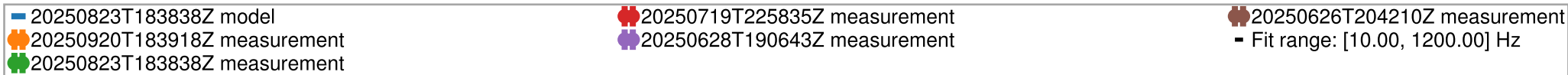
Parameter	(value +/-) value	+	-
Optical gain, H_c (ct/m)	3.436e+06	2247 (0.07%)	2233 (0.06%)
Cavity_pole, f_cc (Hz)	442.1	0.8272 (0.19%)	0.8315 (0.19%)
Detuned SRC spring frequency, f_s (Hz)	3.829	0.04688 (1.22%)	0.04757 (1.24%)
Detuned SRC spring quality factor, Q_s	92.18	5.737 (6.22%)	10.72 (11.63%)
Residual time delay, tau_c (s)	-1.251e-06	3.704e-07 (-29.60%)	3.687e-07 (-29.47%)

20250920T183918Z sensing function MCMC corner plot

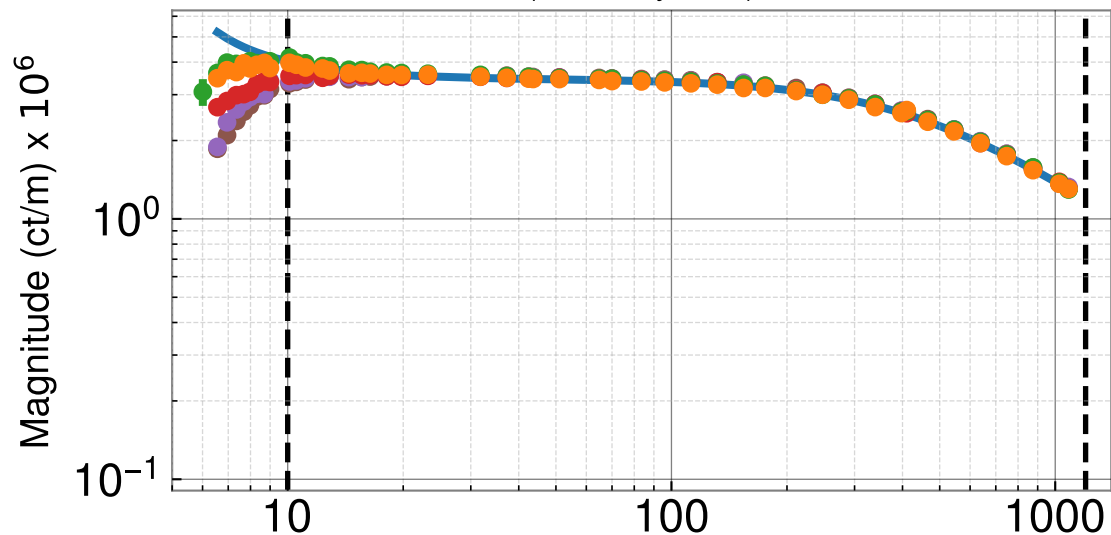


H1 sensing model history (last 9 measurements)

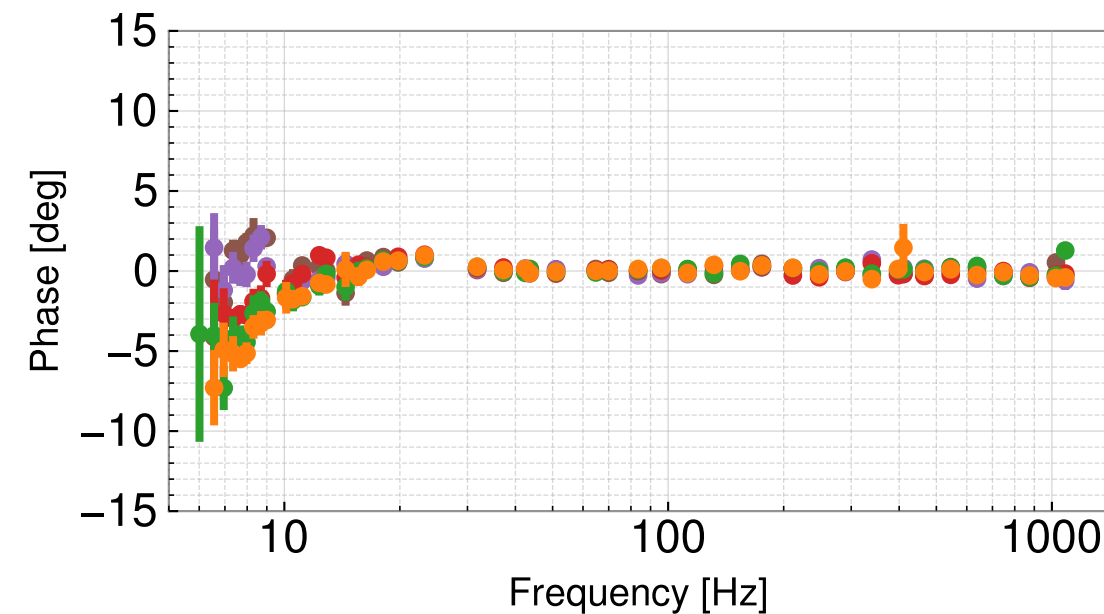
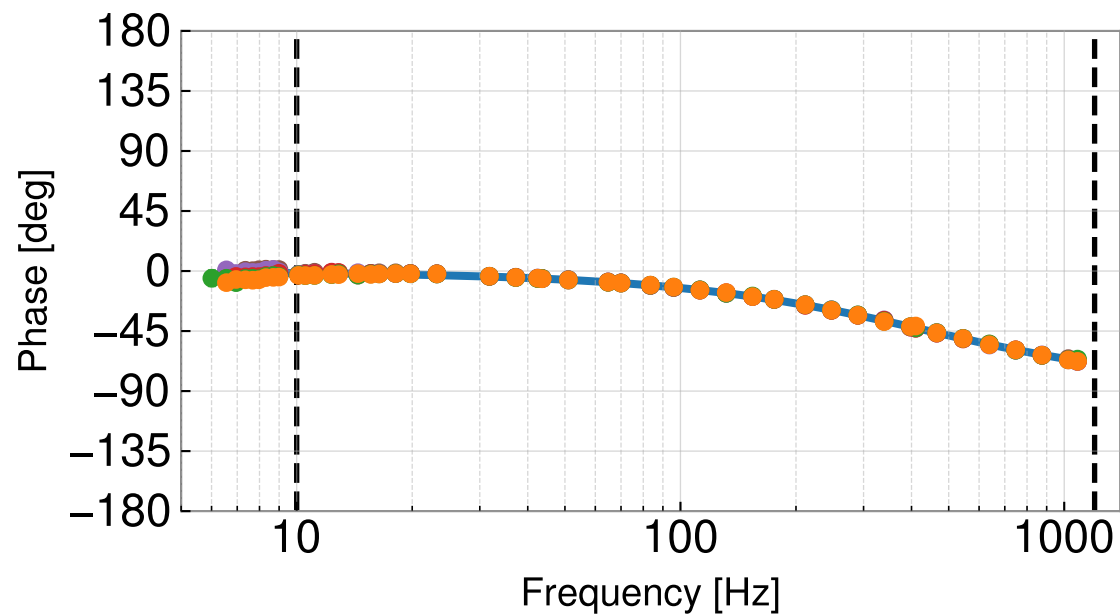
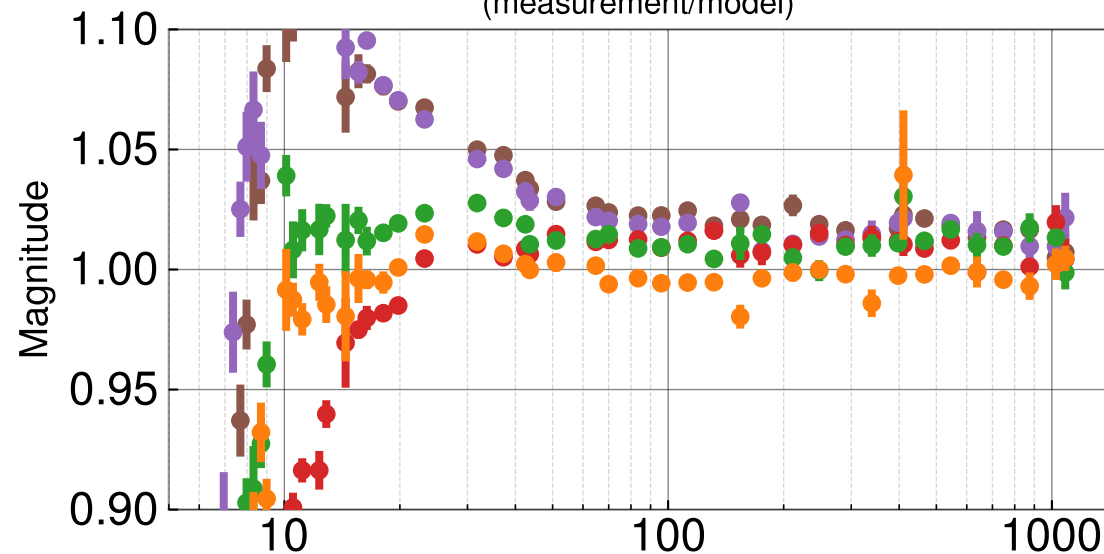
All fixed parameters drawn from /ligo/groups/cal/H1/reports/20250920T183850Z/pydarm_H1.ini



Optical response transfer functions
(scaled by $1/C_R$)

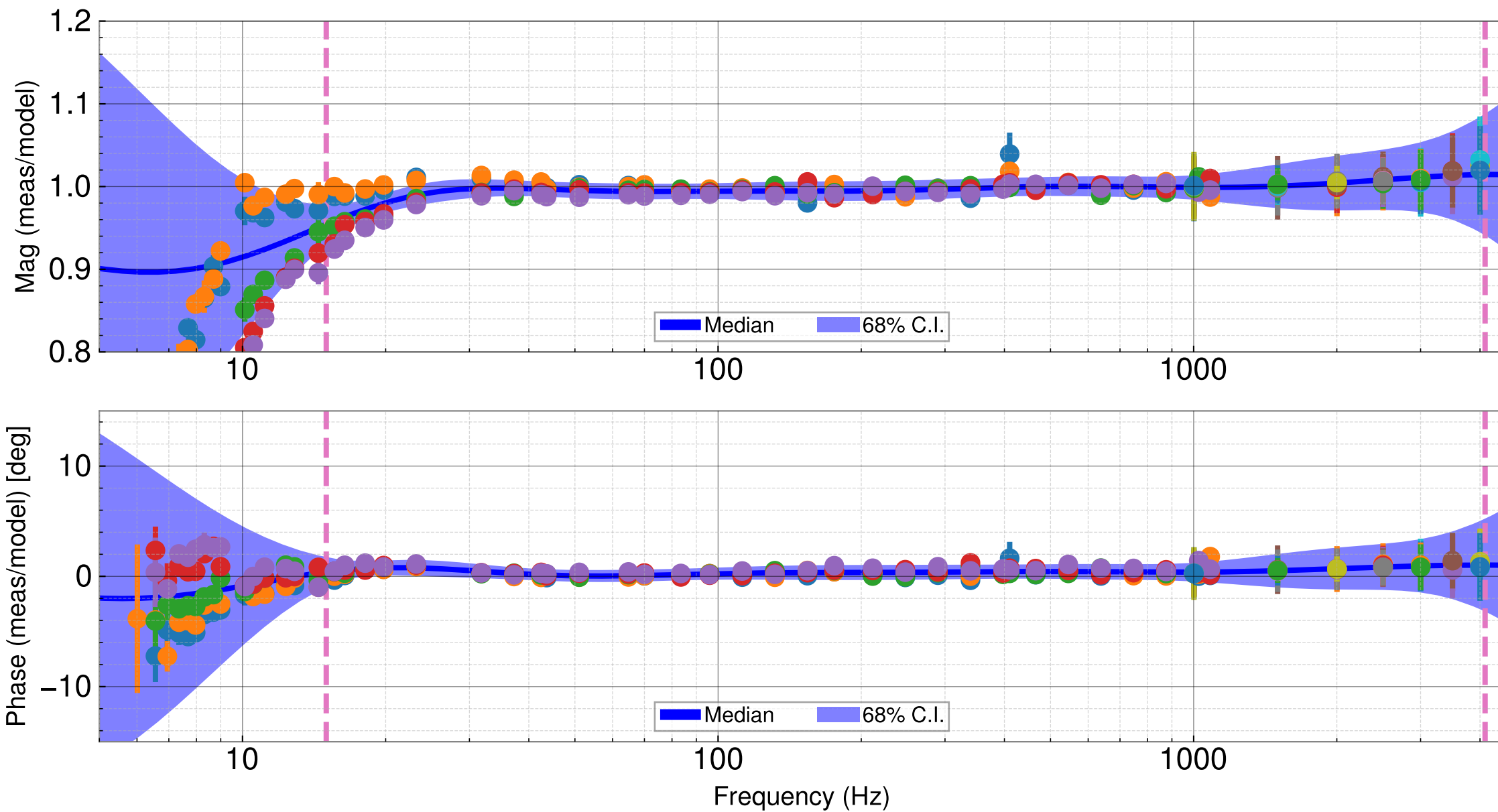


Optical response residuals
(measurement/model)



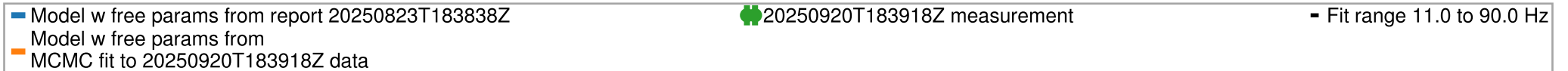
Sensing GPR

meas. 20250920T183918Z of report 20250920T183850Z
meas. 20250823T183906Z of report 20250823T183838Z
meas. 20250719T225903Z of report 20250719T225835Z
meas. 20250626T204238Z of report 20250626T204210Z
meas. 20250628T190710Z of report 20250628T190643Z

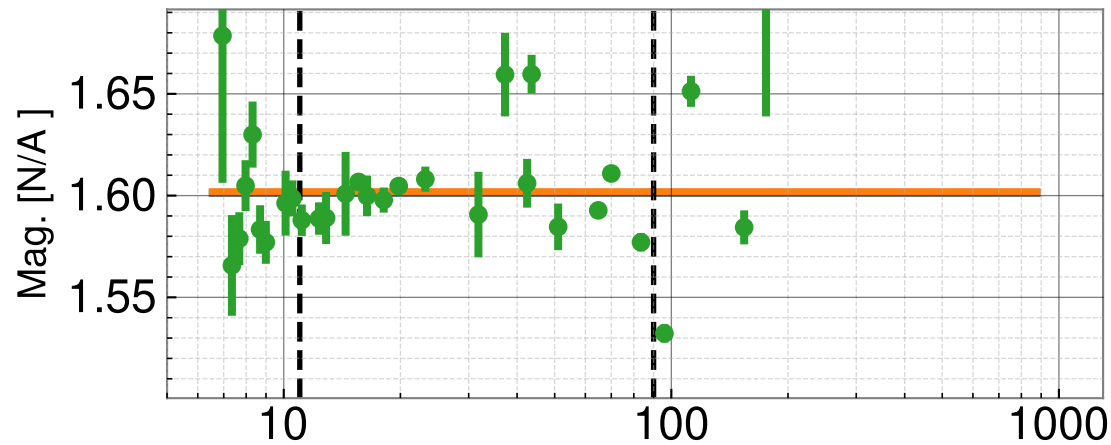


H1SUSEX L1 actuation model MCMC summary

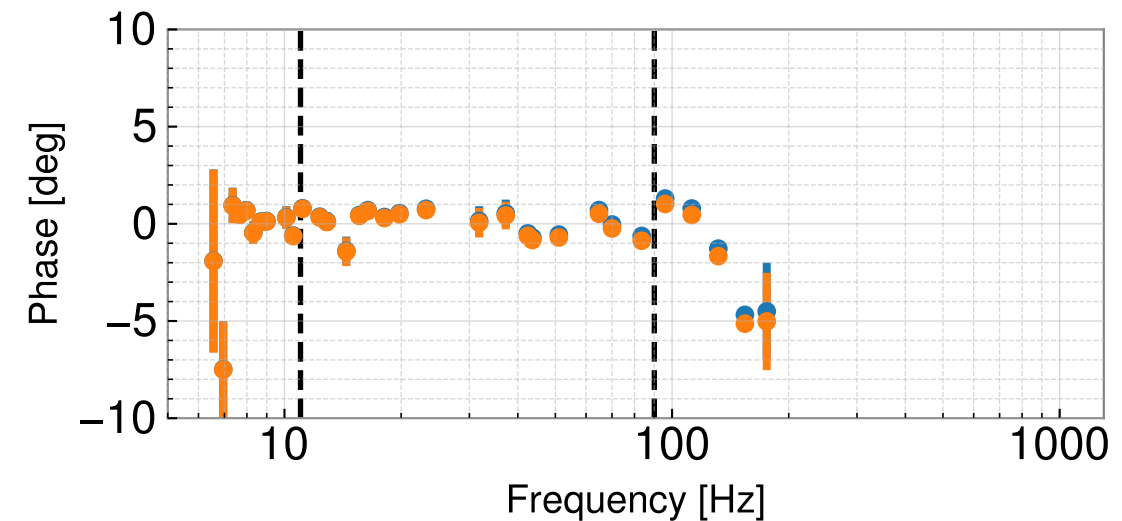
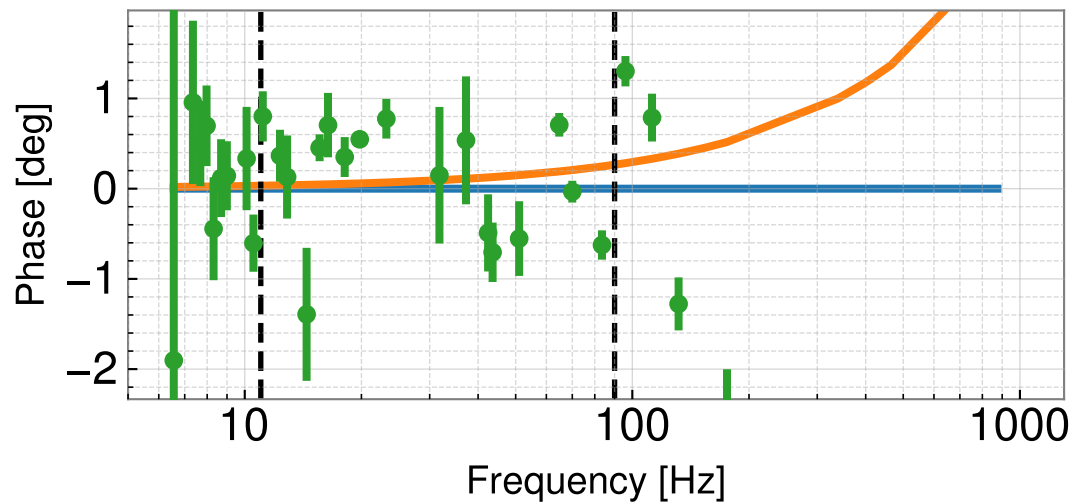
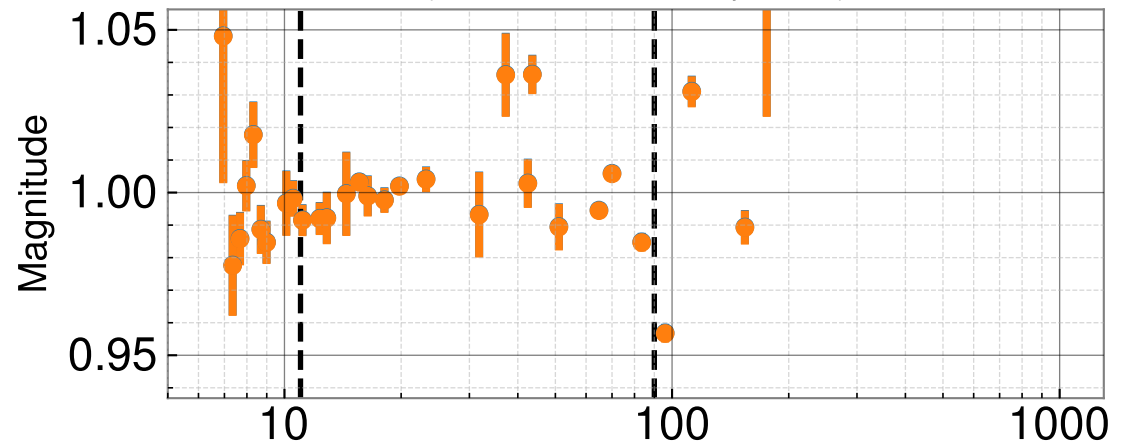
All fixed parameters drawn from /ligo/groups/cal/H1/reports/20250920T183850Z/pydarm_H1.ini



Actuation strength transfer functions
(scaled by H_{ref})

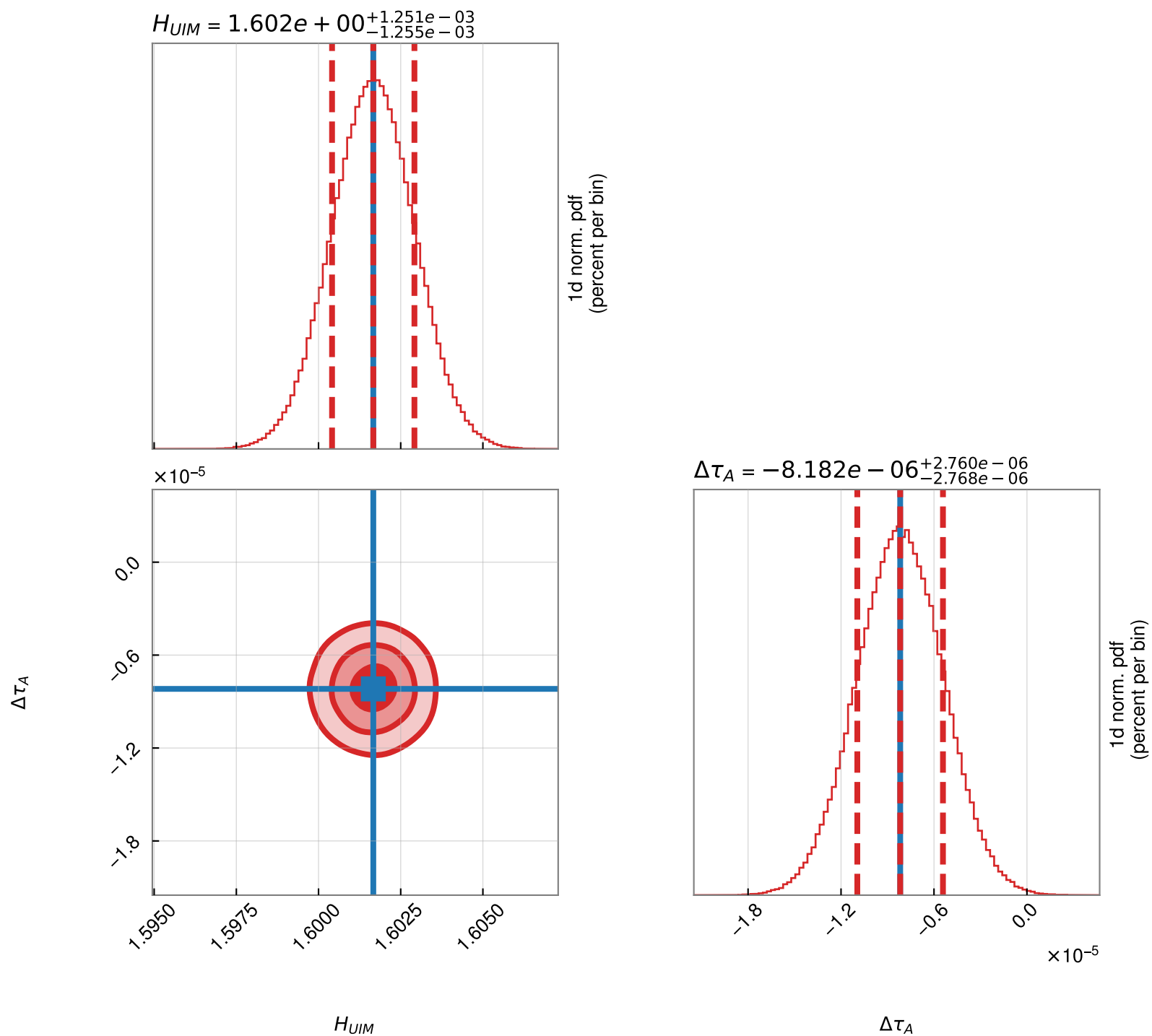
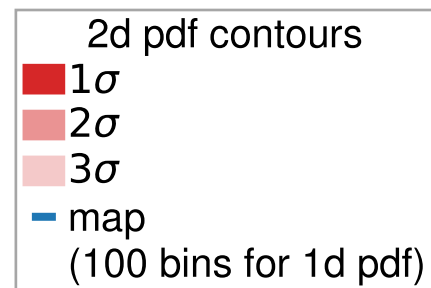


Actuation strength residuals
(meas./model w. free params)



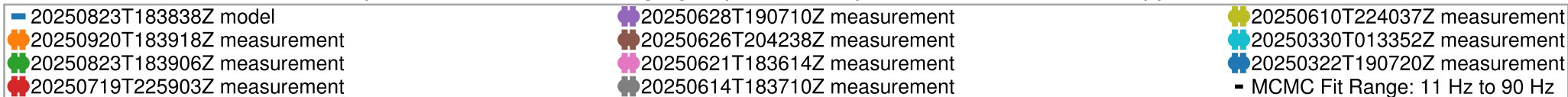
Parameter	(value +/-)	value	+	-
Actuation Gain, Hau (N/A)	1.602	0.001251 (0.08%)	0.001255 (0.08%)	
Residual time delay, tau A (s)	-8.182e-06	2.76e-06 (-33.74%)	2.768e-06 (-33.83%)	

20250920T183918Z EX L1 actuation MCMC corner plot

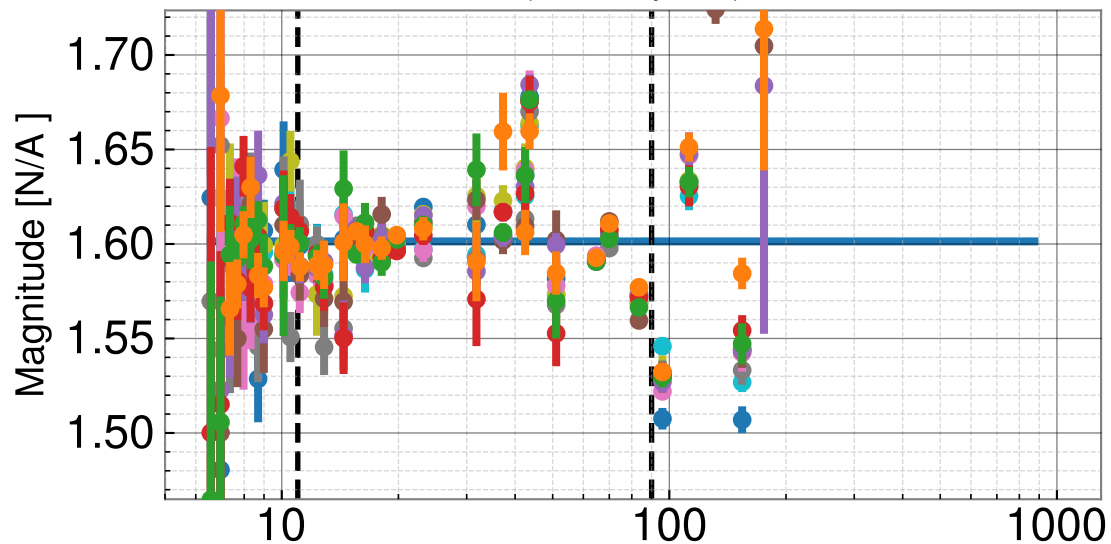


H1SUSEX L1 actuation model history (last 9 measurements)

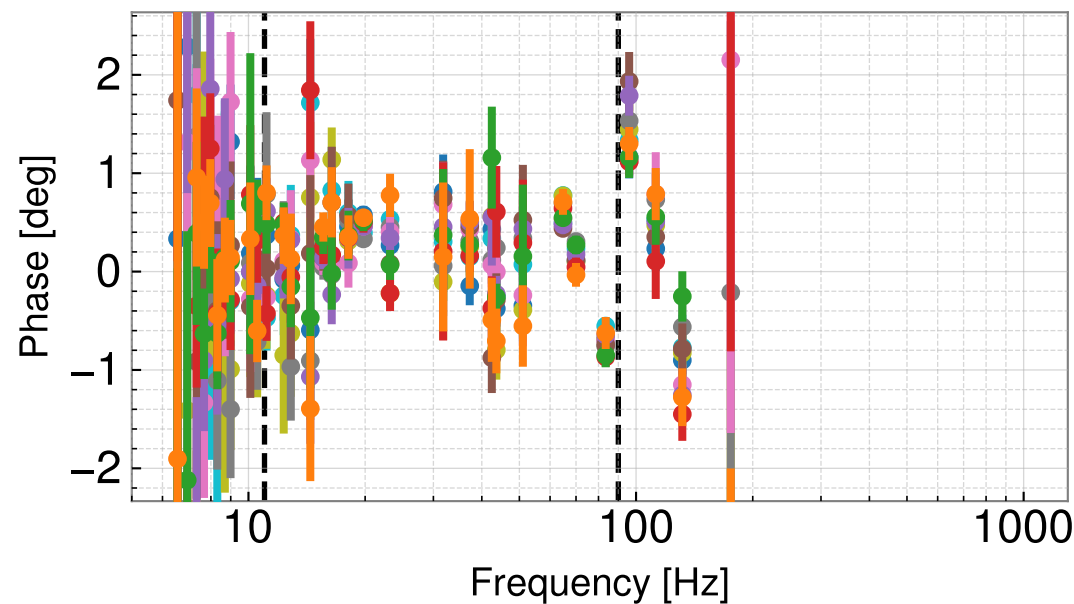
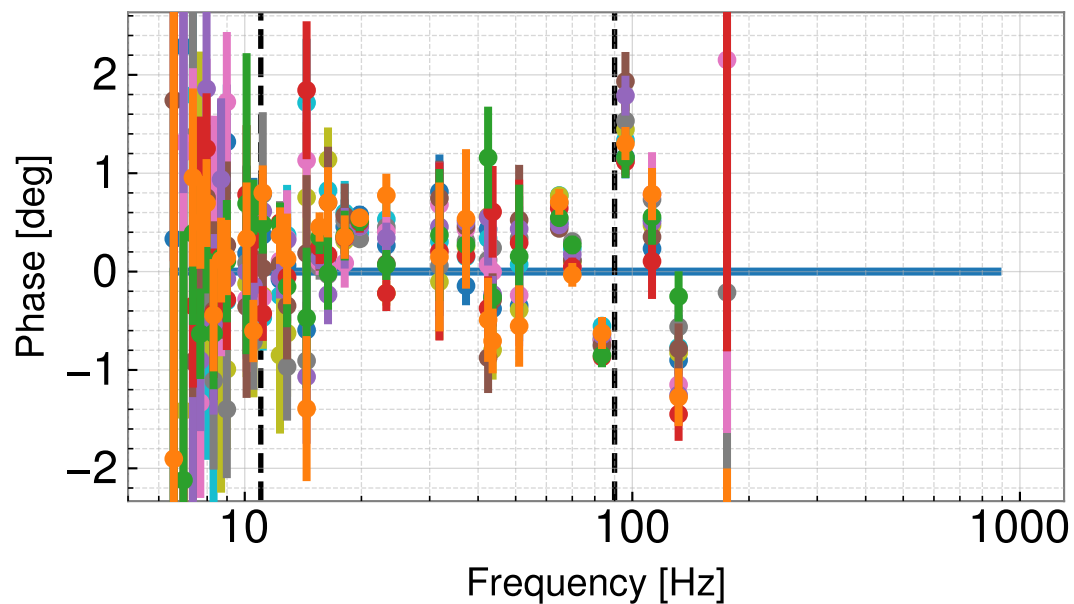
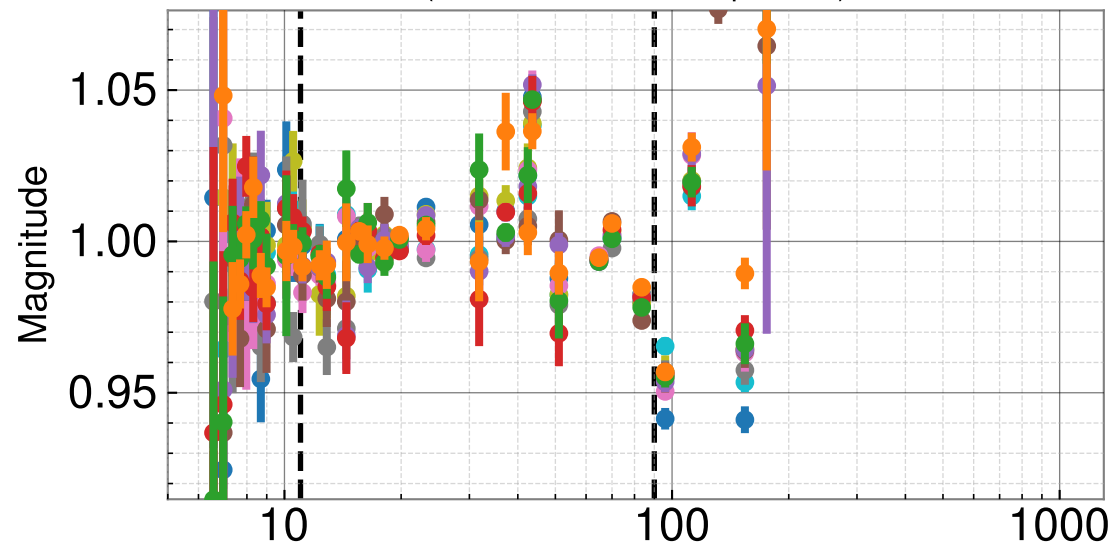
All fixed parameters drawn from /ligo/groups/cal/H1/reports/20250920T183850Z/pydarm_H1.ini



Actuation strength transfer functions
(scaled by H_{ref})



Actuation strength residuals
(meas./model w. free params)

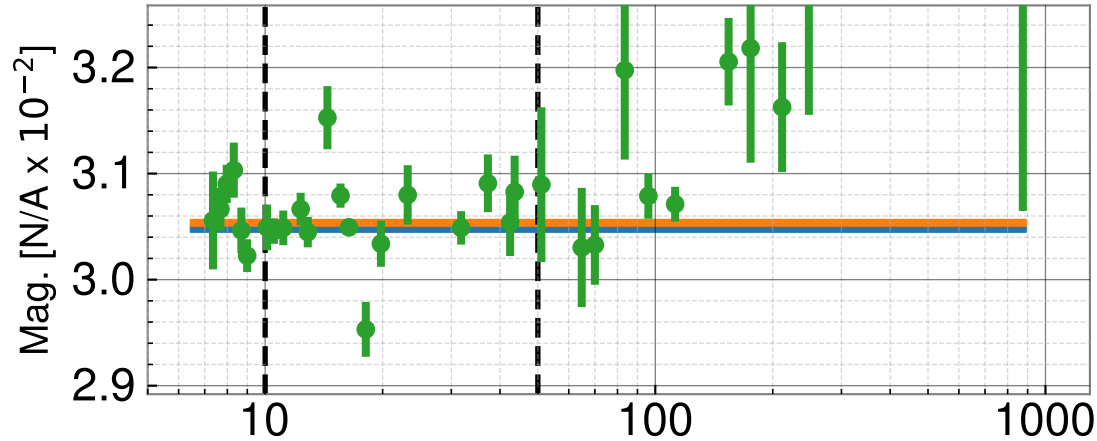


H1SUSEX L2 actuation model MCMC summary

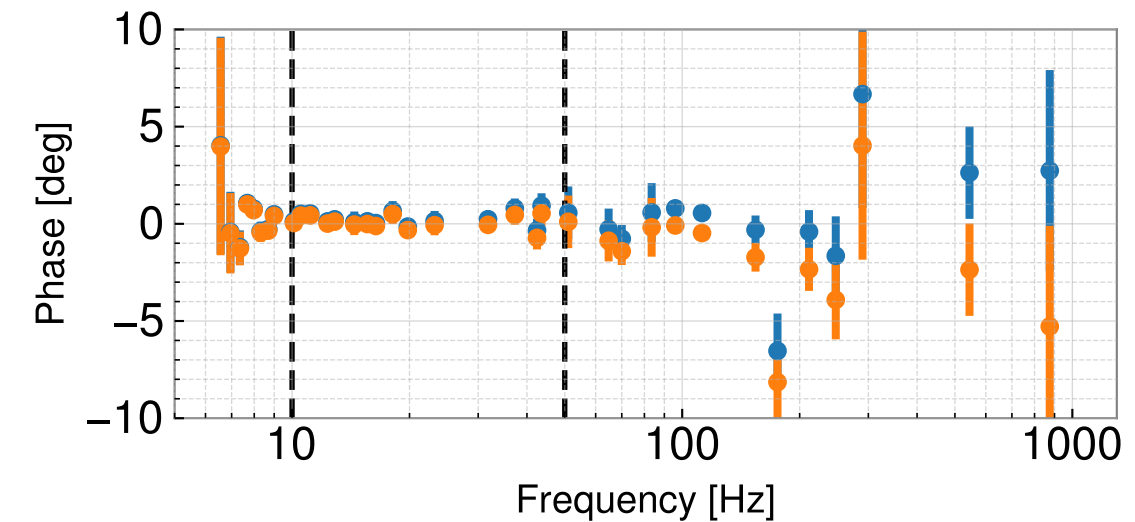
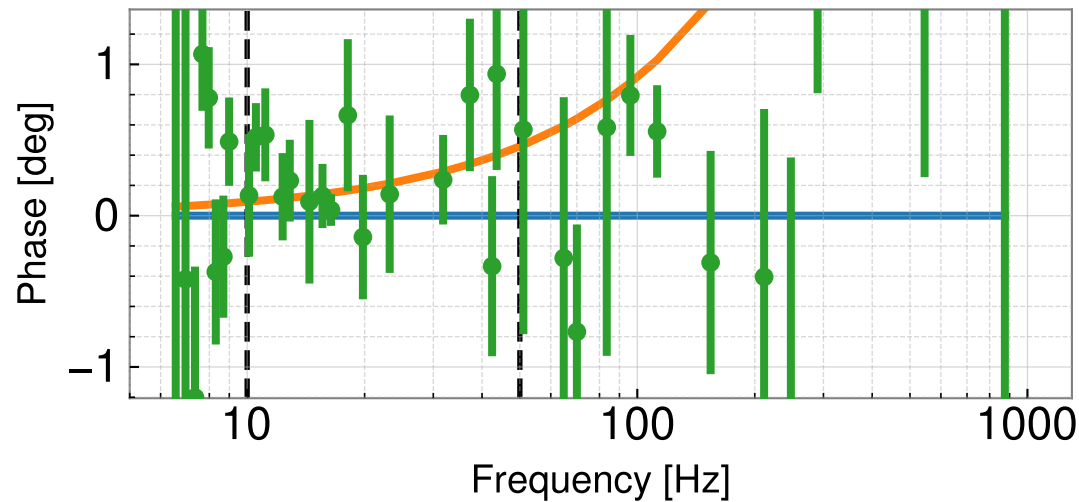
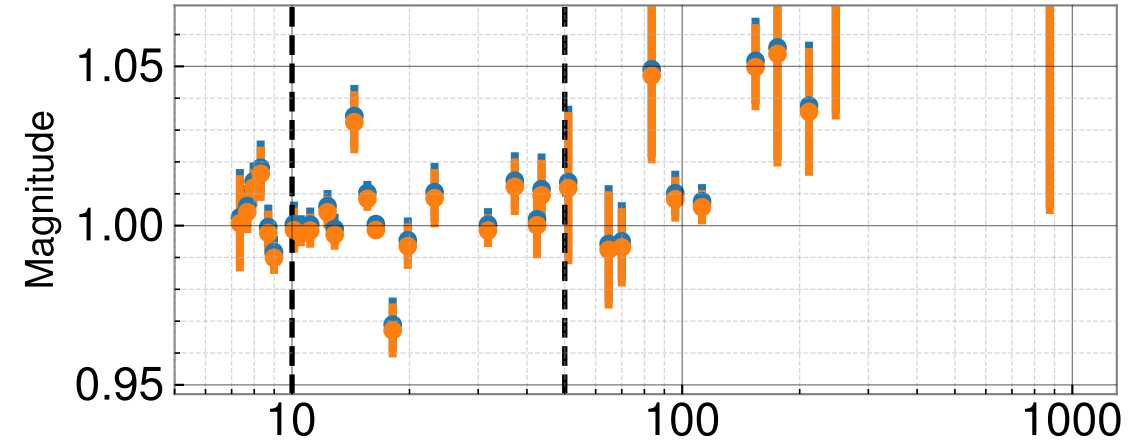
All fixed parameters drawn from /ligo/groups/cal/H1/reports/20250920T183850Z/pydarm_H1.ini



Actuation strength transfer functions
(scaled by H_{ref})

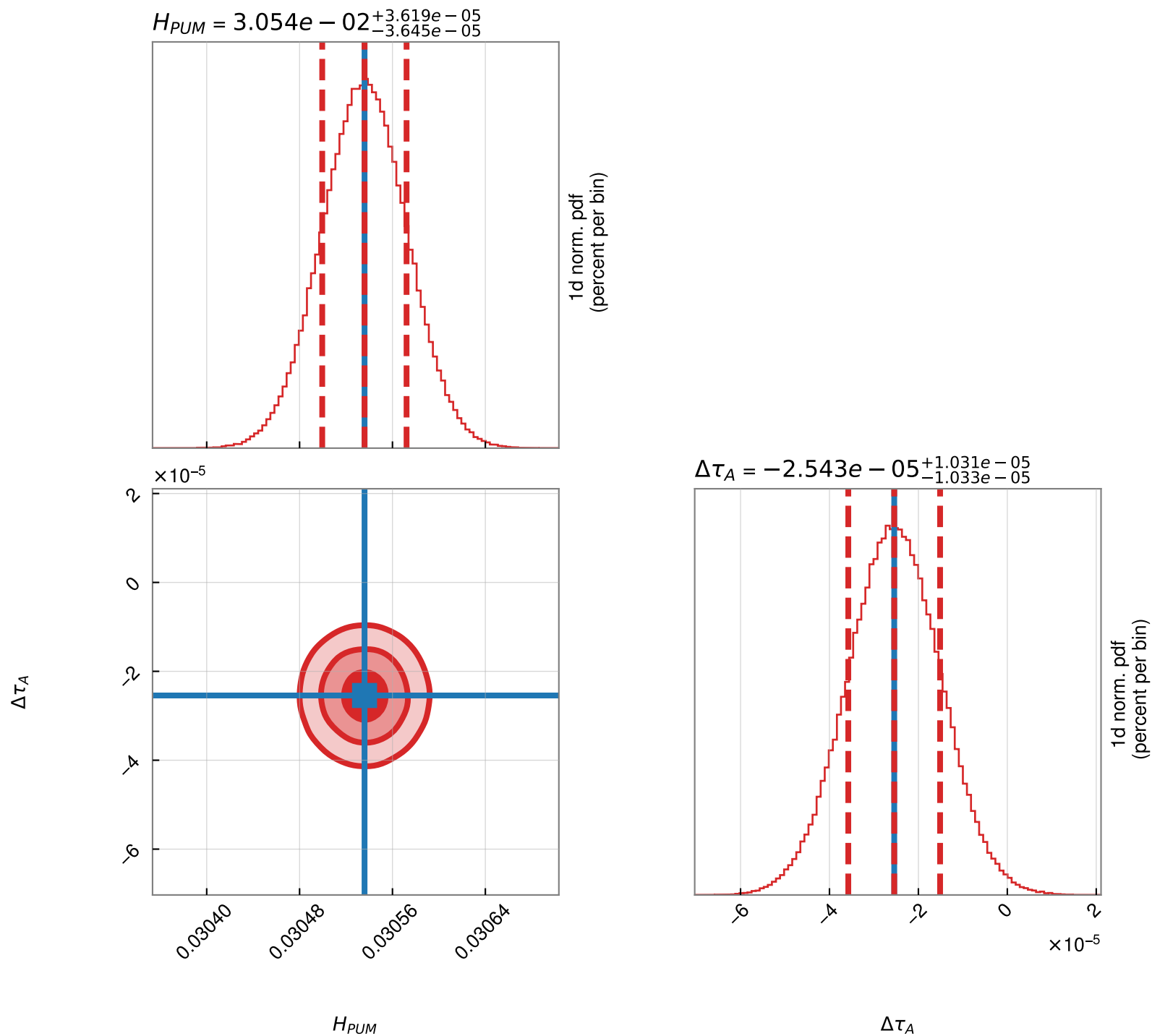
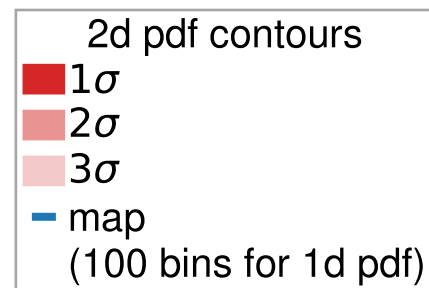


Actuation strength residuals
(meas./model w. free params)



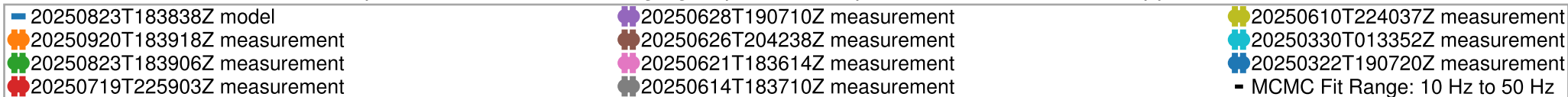
Parameter	(value +/-)	value	+	-
Actuation Gain, Hap (N/A)	0.03054		3.619e-05 (0.12%)	3.645e-05 (0.12%)
Residual time delay, tau_A (s)	-2.543e-05		1.031e-05 (-40.55%)	1.033e-05 (-40.63%)

20250920T183918Z EX L2 actuation MCMC corner plot

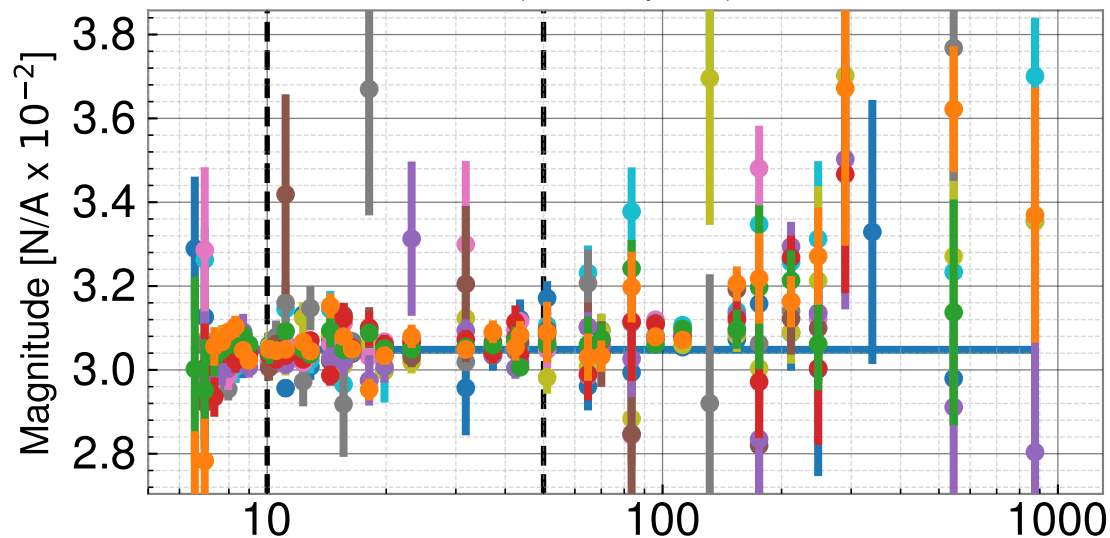


H1SUSEX L2 actuation model history (last 9 measurements)

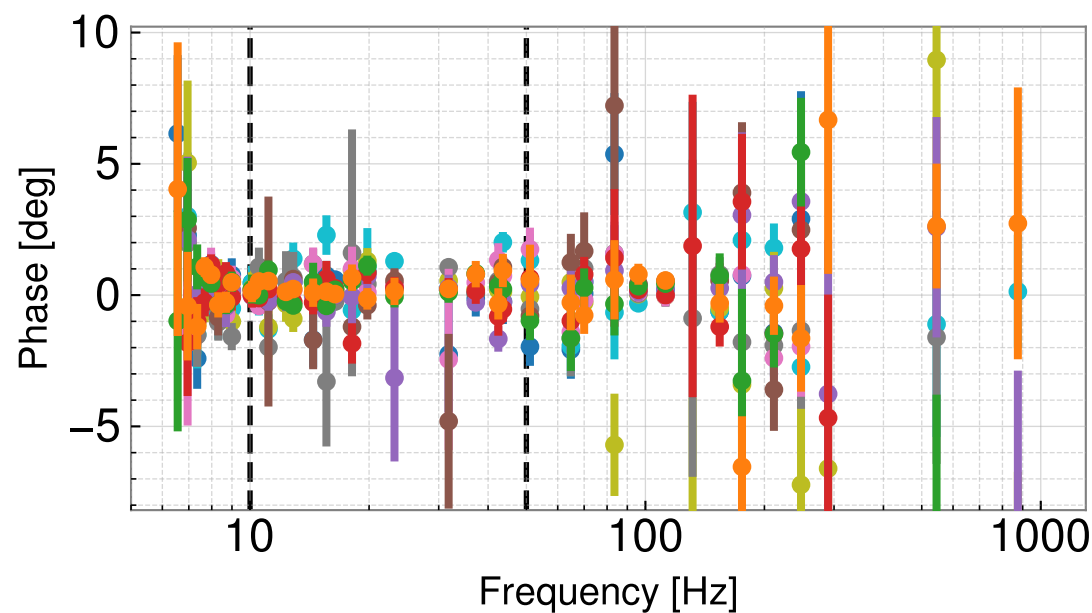
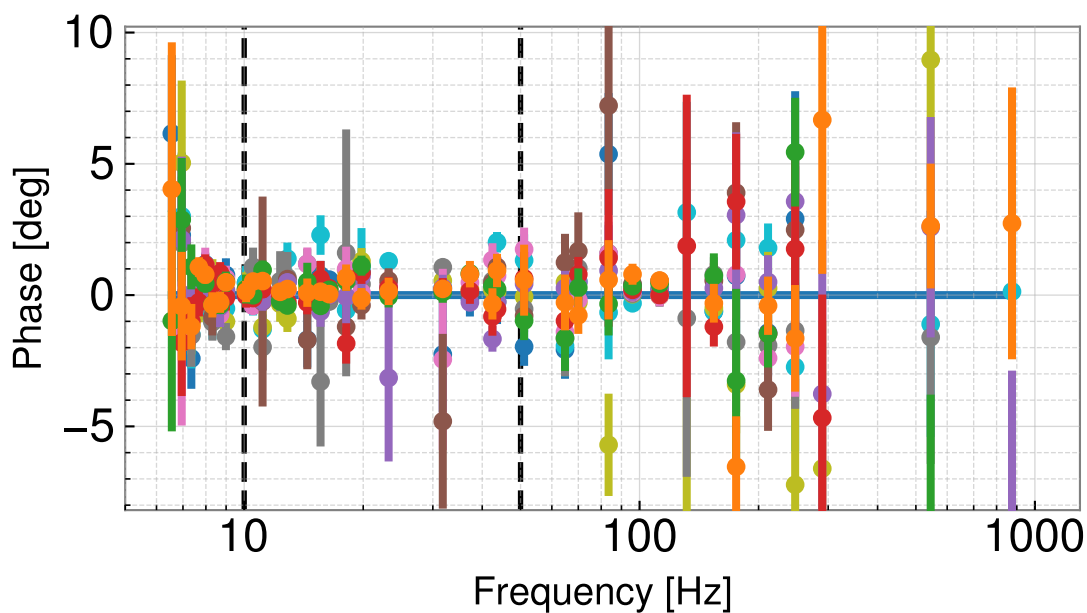
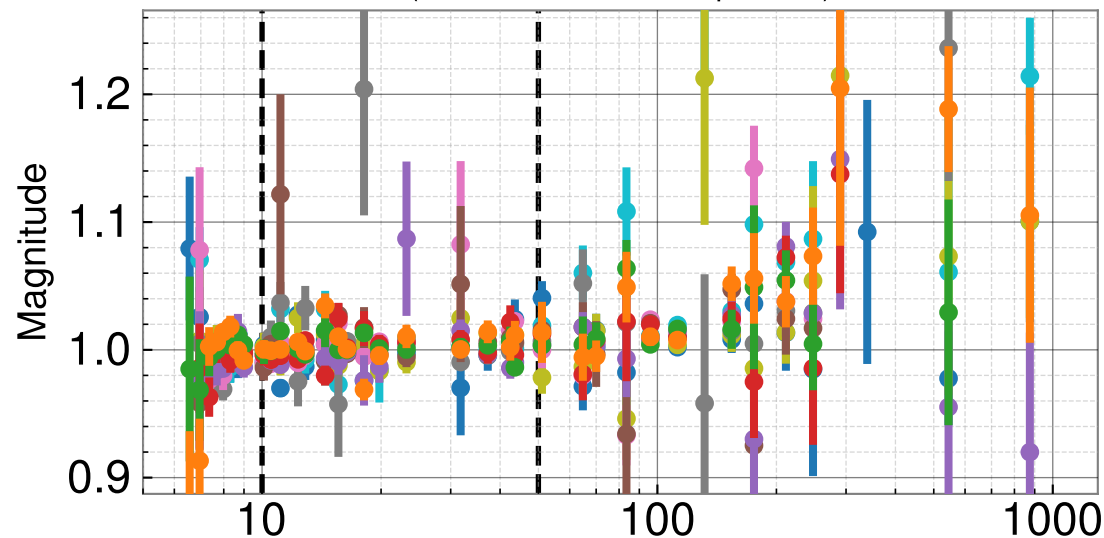
All fixed parameters drawn from `/ligo/groups/cal/H1/reports/20250920T183850Z/pydarm_H1.ini`



Actuation strength transfer functions
(scaled by H_{ref})

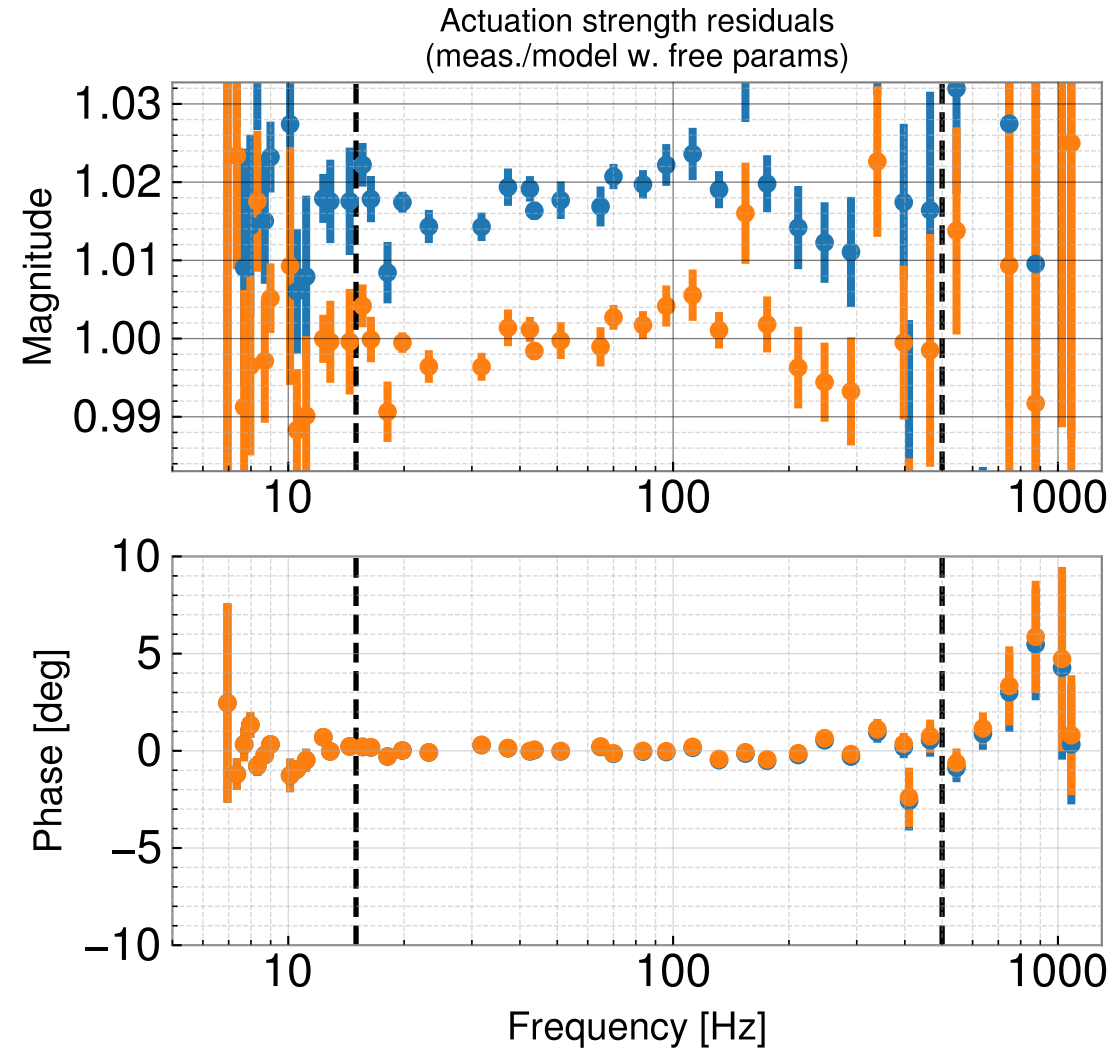
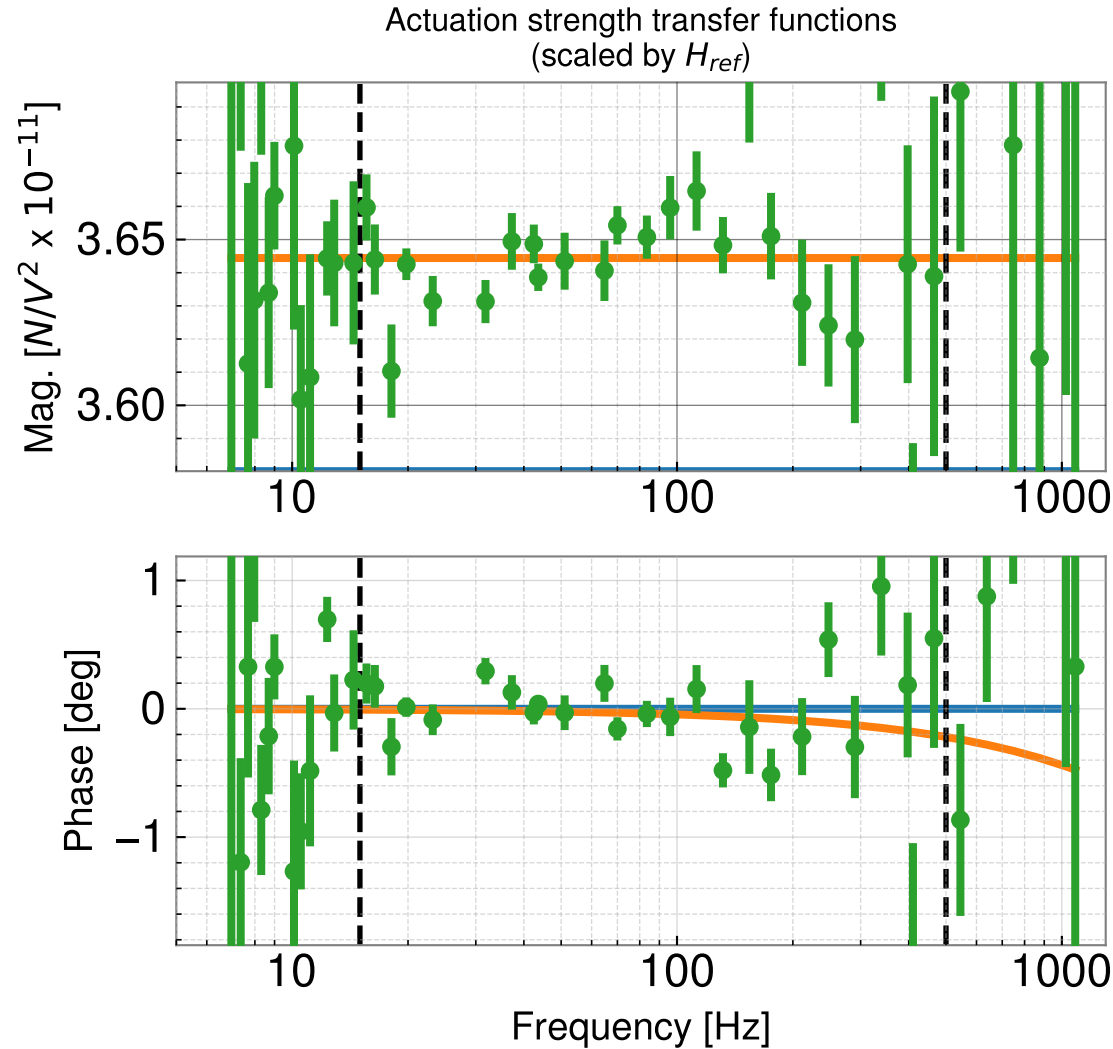


Actuation strength residuals
(meas./model w. free params)



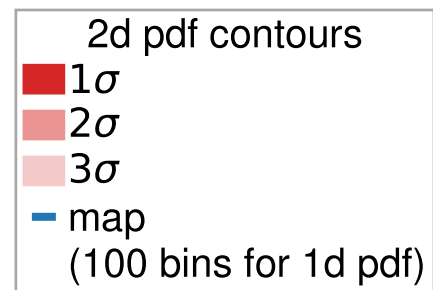
H1SUSEX L3 actuation model MCMC summary

All fixed parameters drawn from /ligo/groups/cal/H1/reports/20250920T183850Z/pydarm_H1.ini

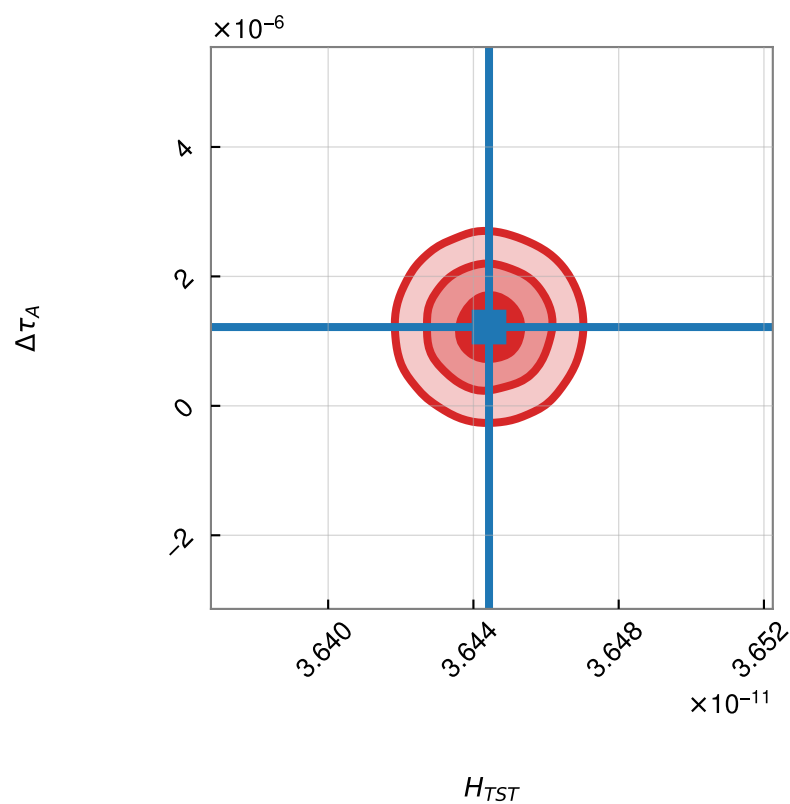
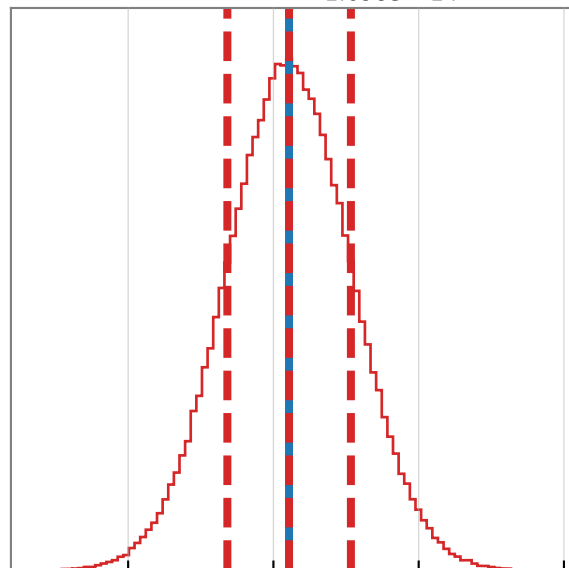


Parameter	(value +/-)	value	+	-
Actuation Gain, Hat (N/V^{**2})	3.644e-11		1.704e-14 (0.05%)	1.698e-14 (0.05%)
Residual time delay, tau_A (s)	1.217e-06		9.584e-07 (78.73%)	9.633e-07 (79.13%)

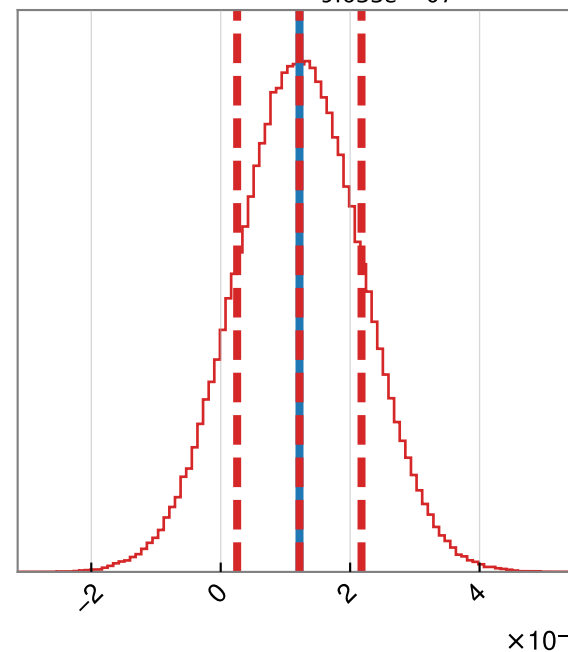
20250920T183918Z EX L3 actuation MCMC corner plot



$$H_{TST} = 3.644e - 11^{+1.704e - 14}_{-1.698e - 14}$$



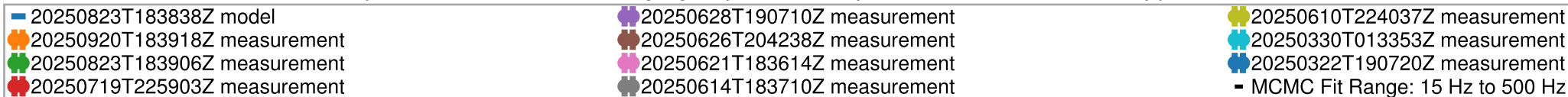
$$\Delta\tau_A = 1.217e - 06^{+9.584e - 07}_{-9.633e - 07}$$



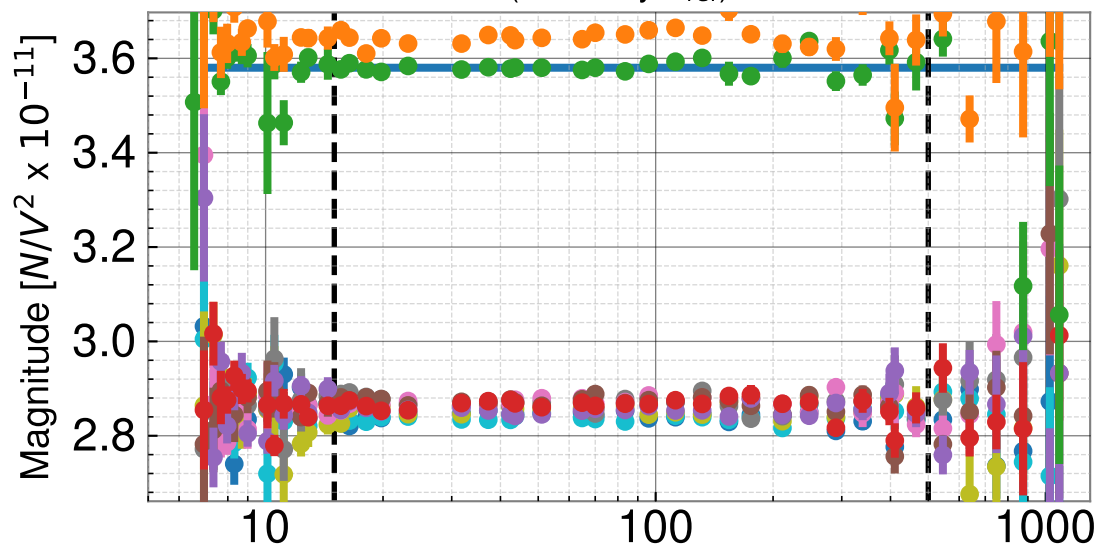
$\Delta\tau_A$

H1SUSEX L3 actuation model history (last 9 measurements)

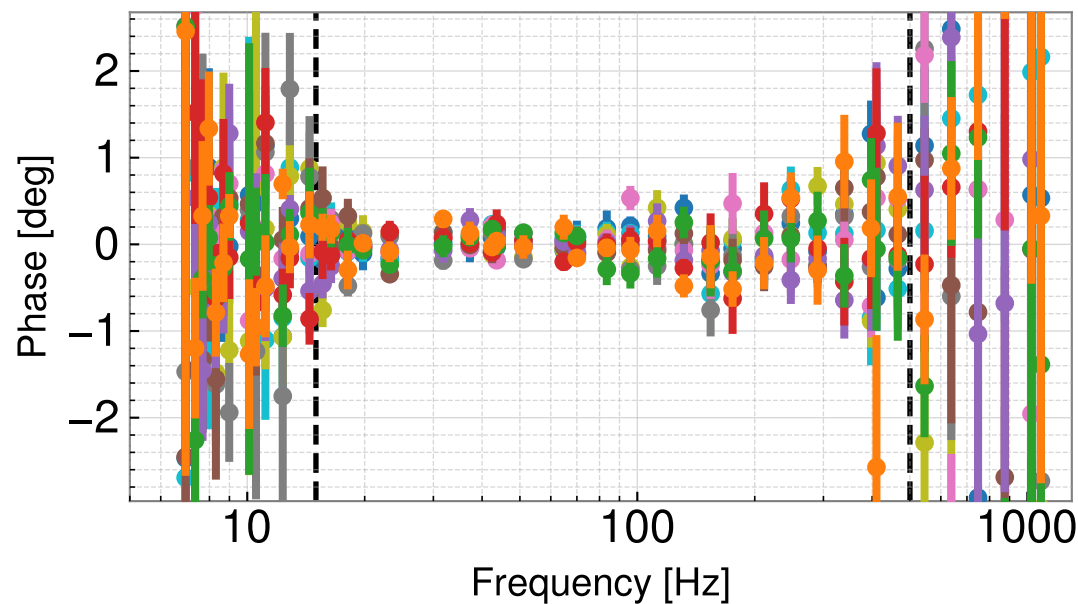
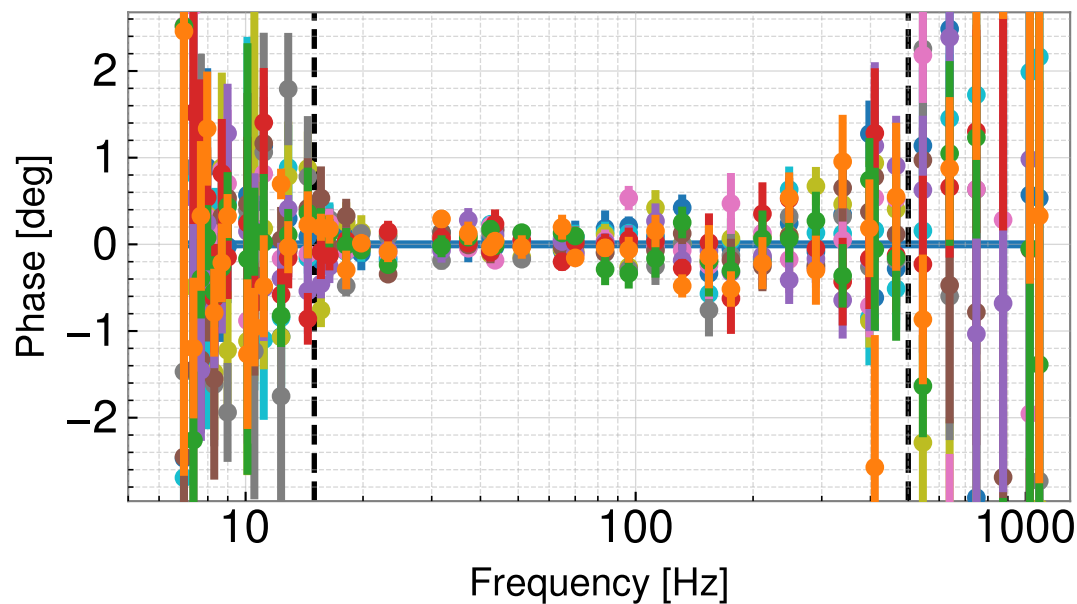
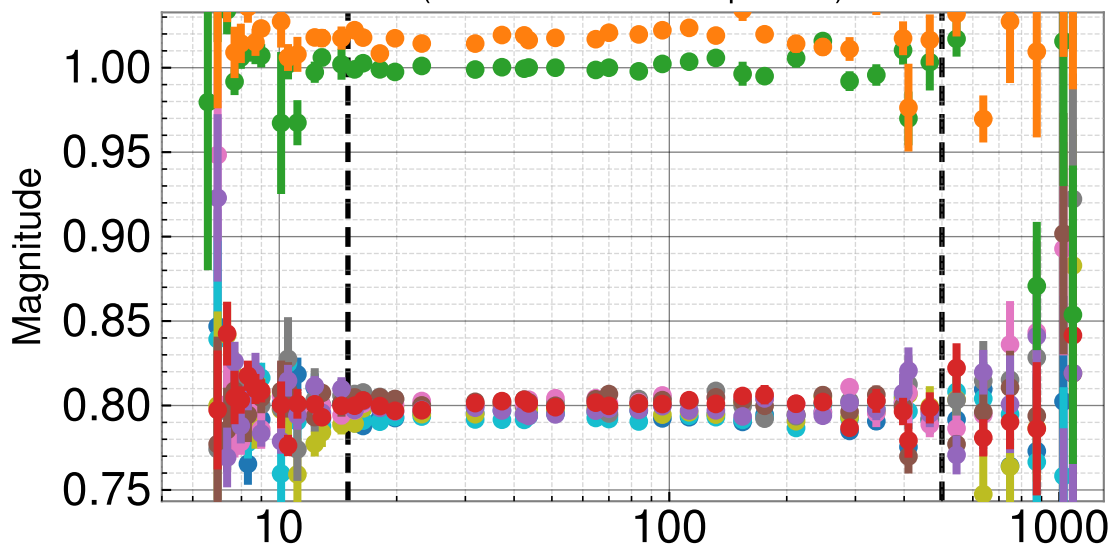
All fixed parameters drawn from /ligo/groups/cal/H1/reports/20250920T183850Z/pydarm_H1.ini



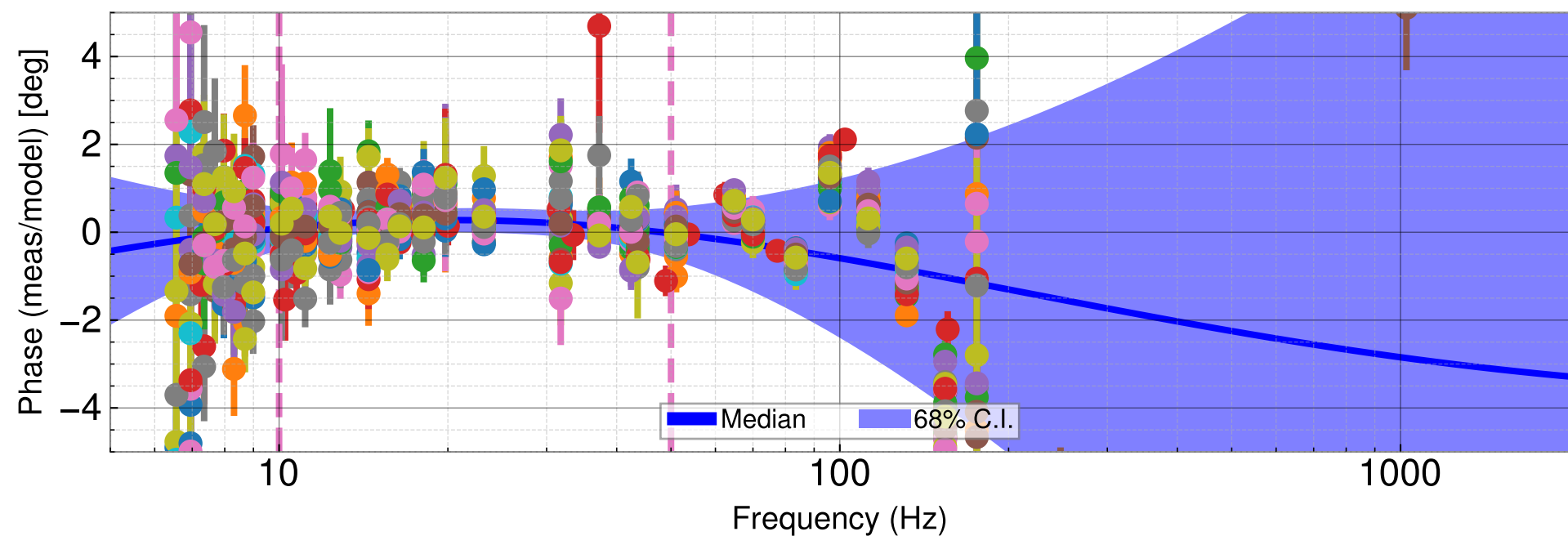
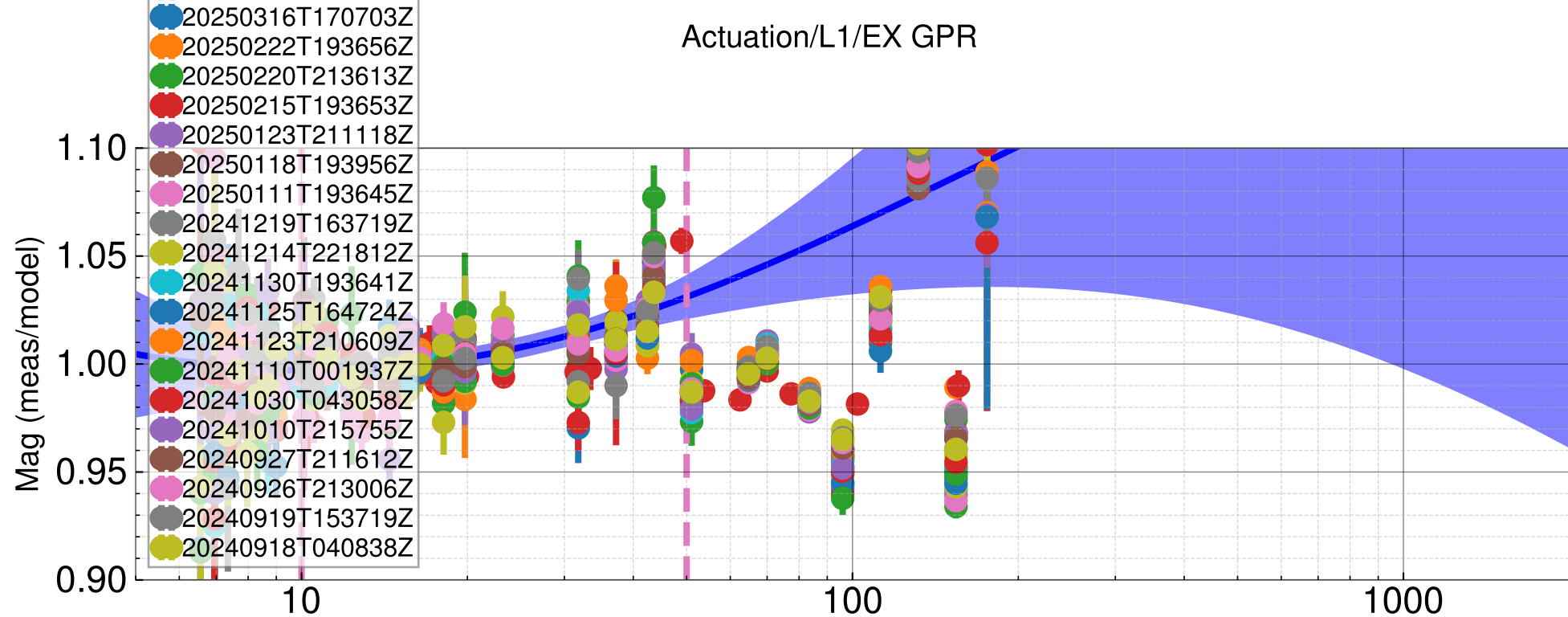
Actuation strength transfer functions
(scaled by H_{ref})



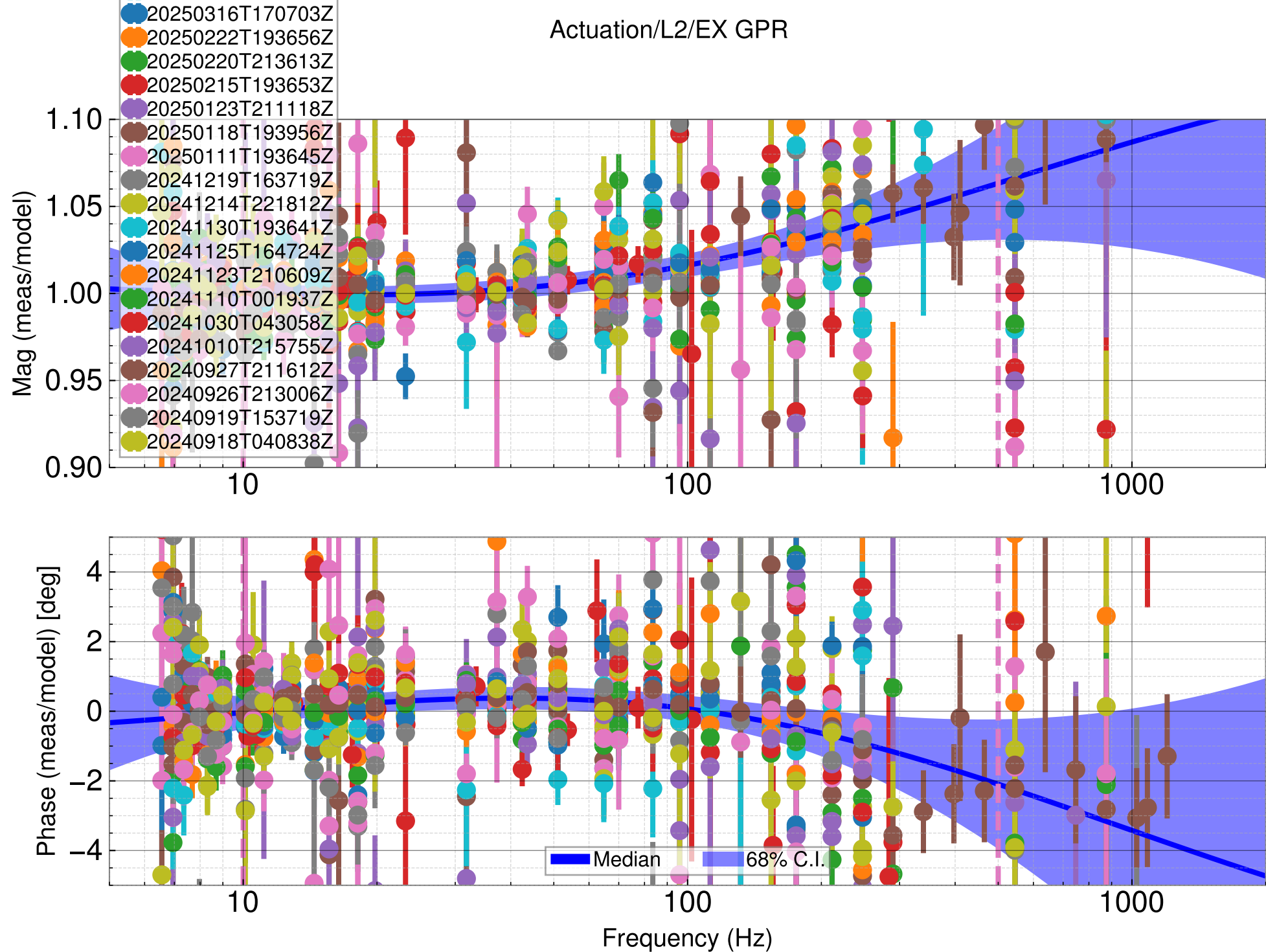
Actuation strength residuals
(meas./model w. free params)



Actuation/L1/EX GPR



Actuation/L2/EX GPR



Actuation/L3/EX GPR

