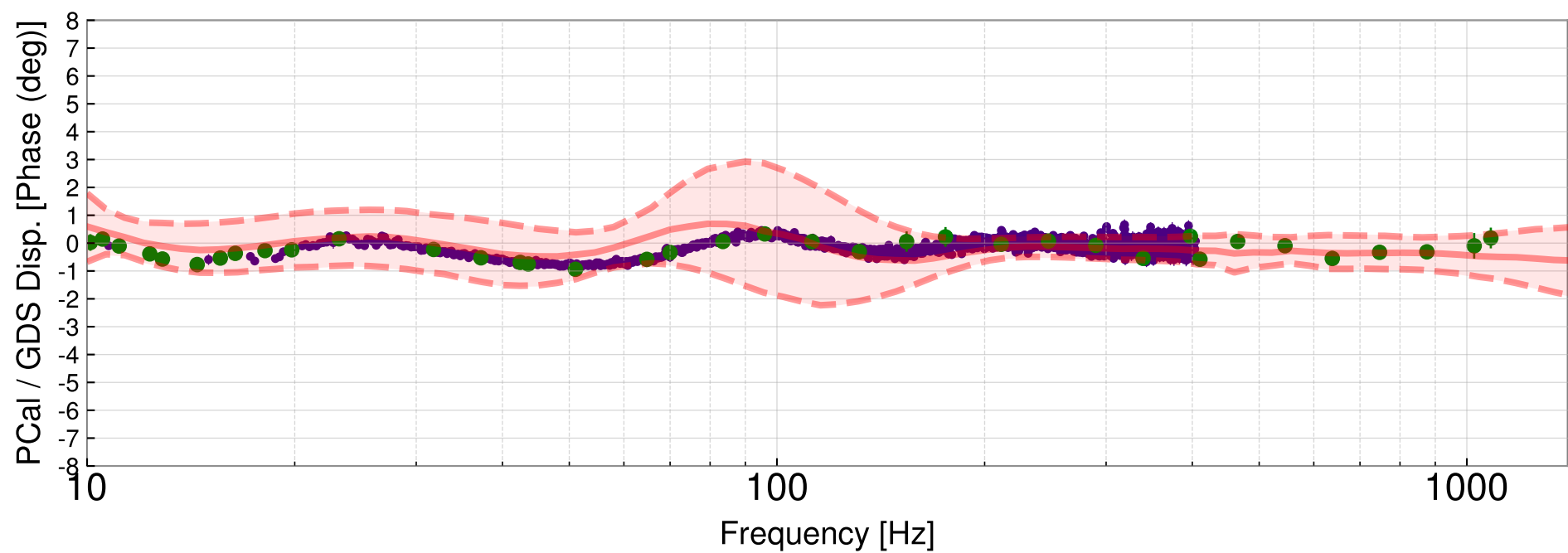
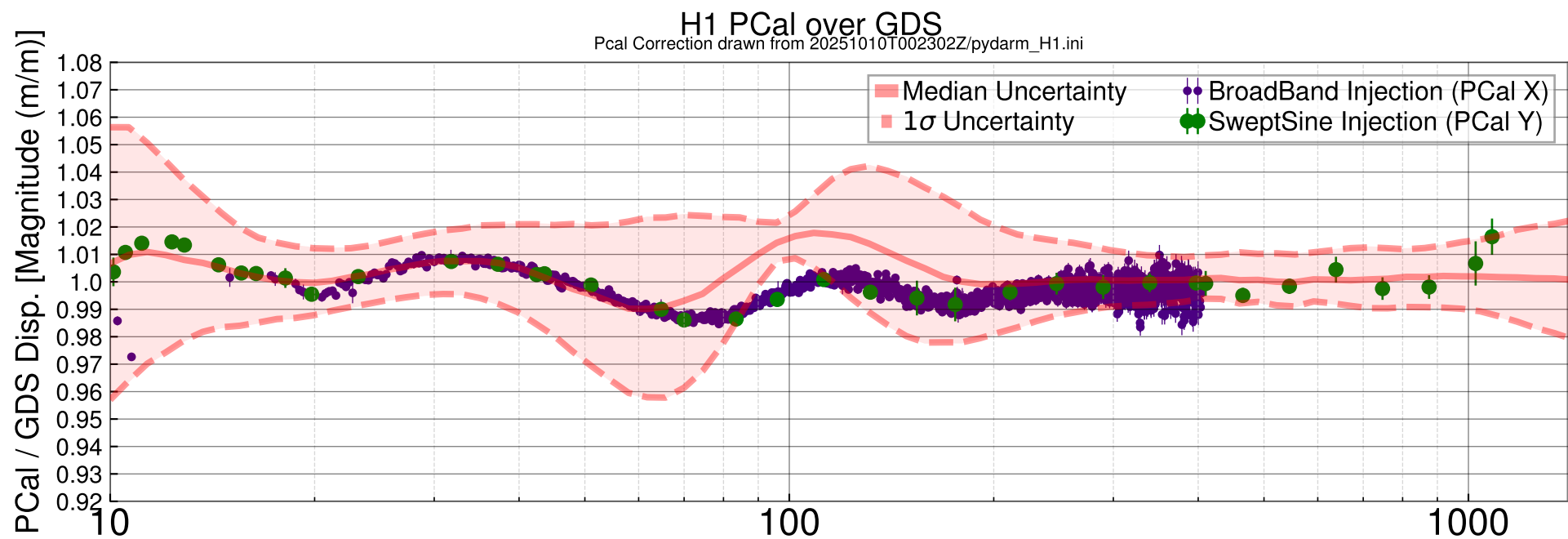
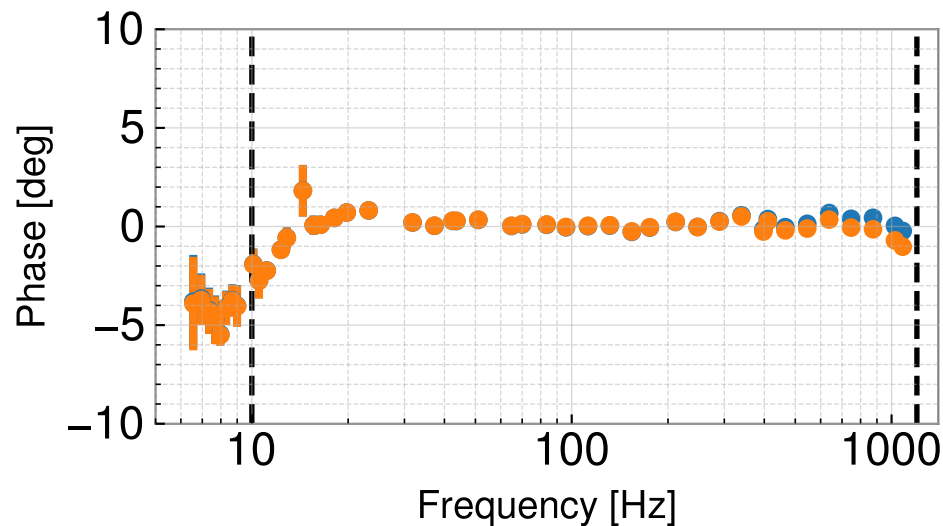
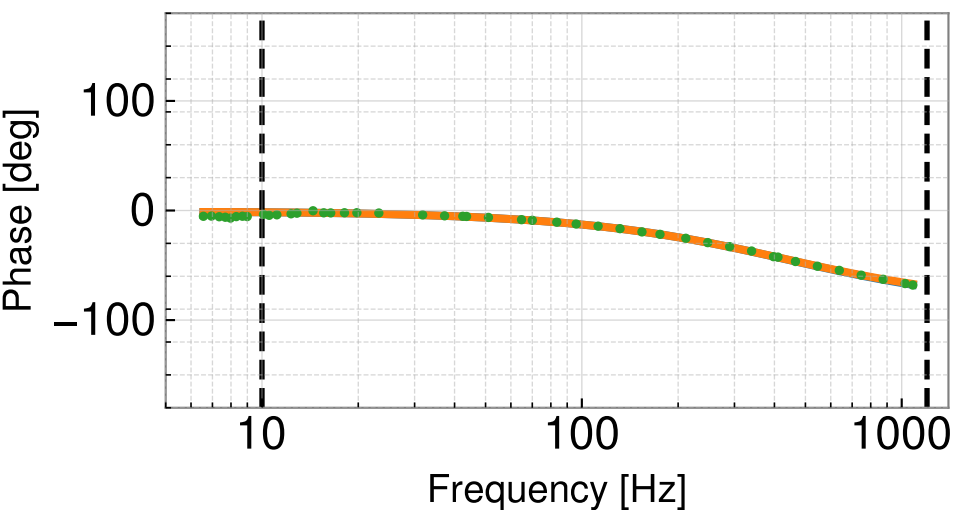
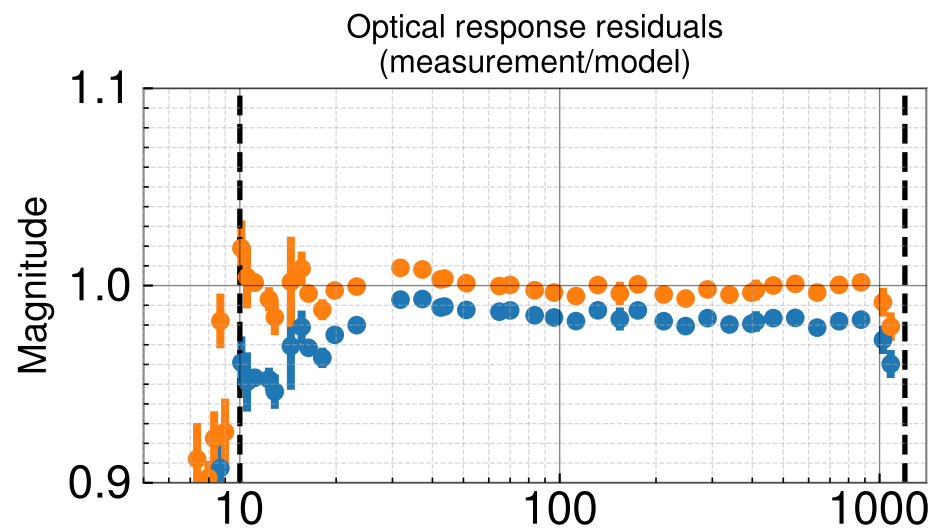
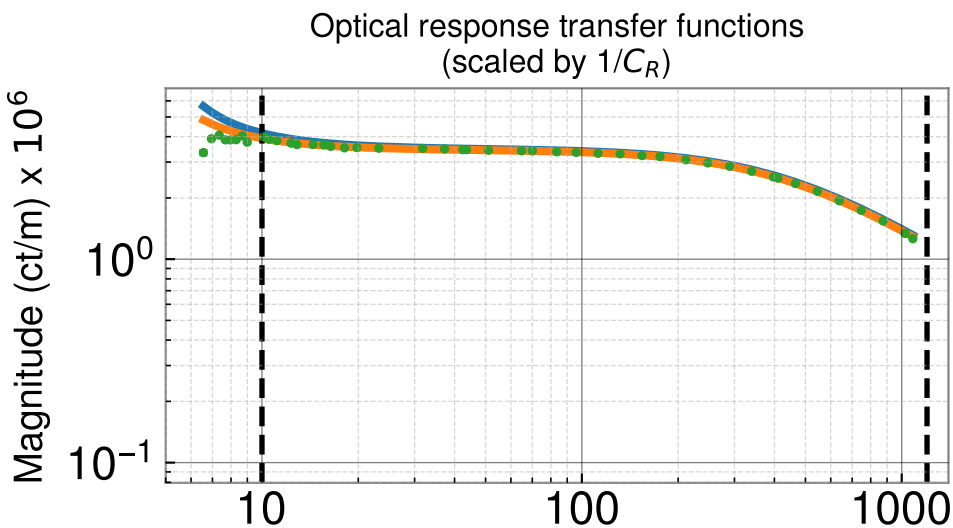
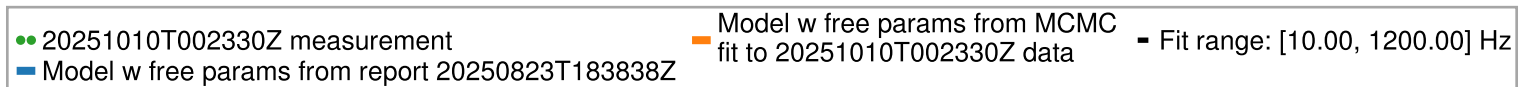




H1 sensing model MCMC summary

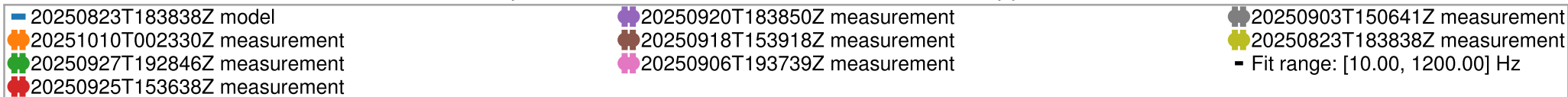
All fixed parameters drawn from 20251010T002302Z/pydarm_H1.ini



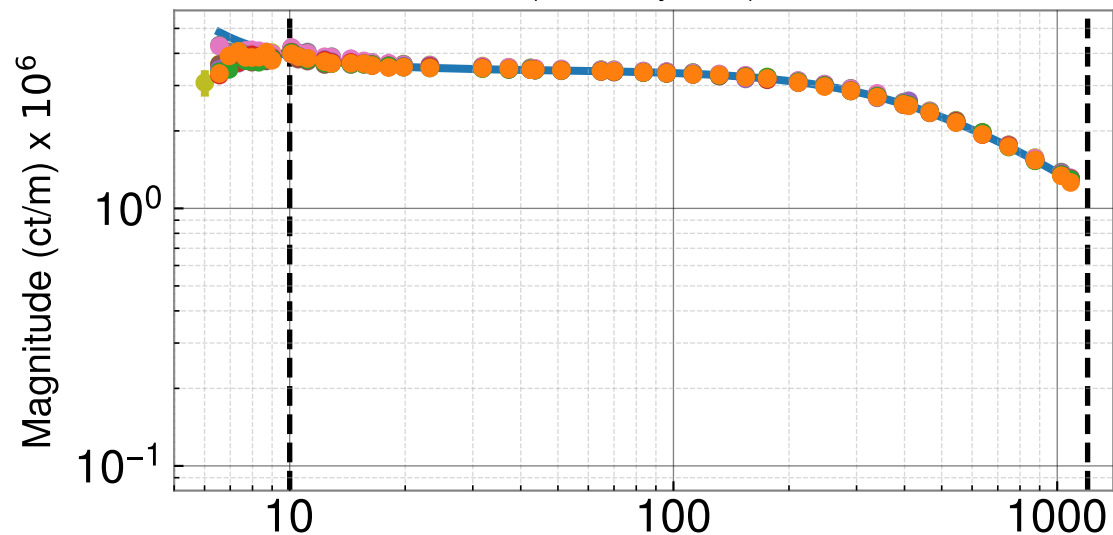
Parameter	(value +/-) value	+	-
Optical gain, H_c (ct/m)	3.437e+06	1948 (0.06%)	1952 (0.06%)
Cavity_pole, f_{cc} (Hz)	437.8	0.7948 (0.18%)	0.7891 (0.18%)
Detuned SRC spring frequency, f_s (Hz)	3.525	0.04864 (1.38%)	0.04925 (1.40%)
Detuned SRC spring quality factor, Q_s	85.34	10.37 (12.15%)	15.33 (17.96%)
Residual time delay, τ_c (s)	-2.499e-06	3.726e-07 (-14.91%)	3.721e-07 (-14.89%)

H1 sensing model history (last 9 measurements)

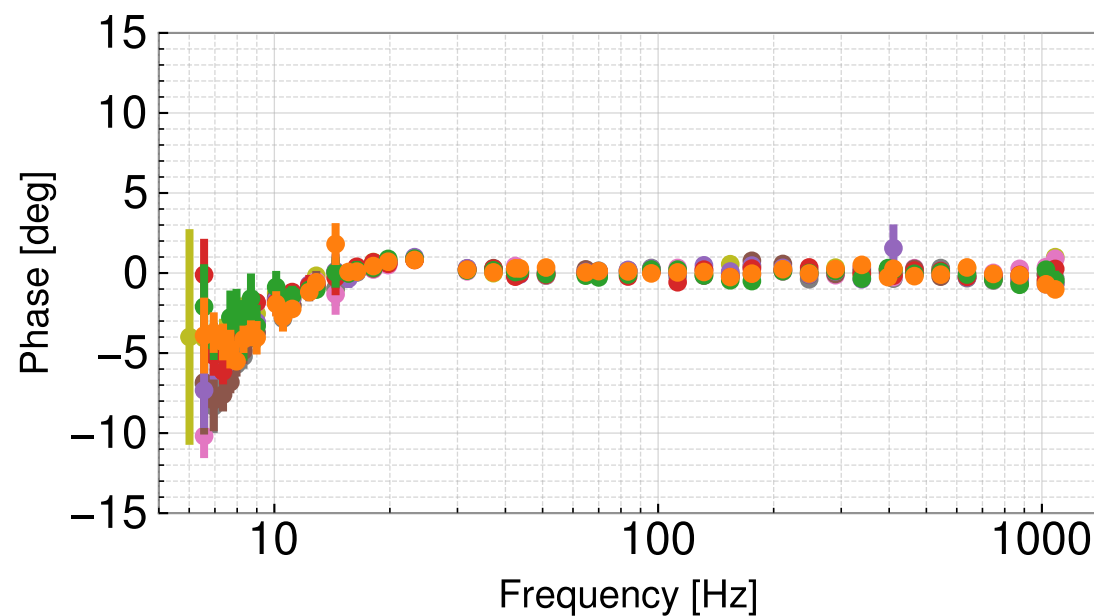
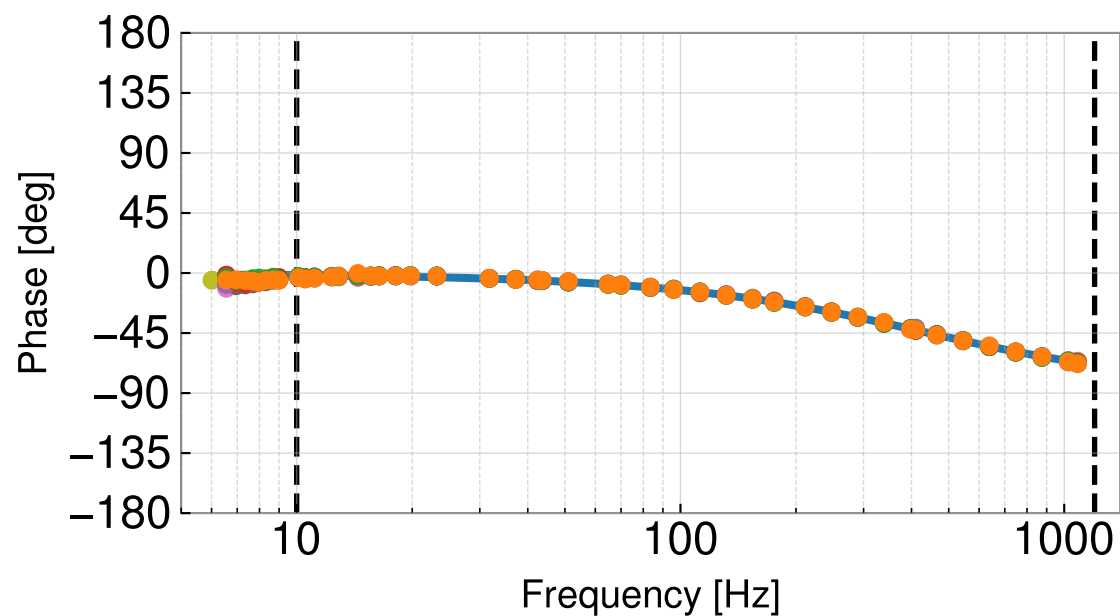
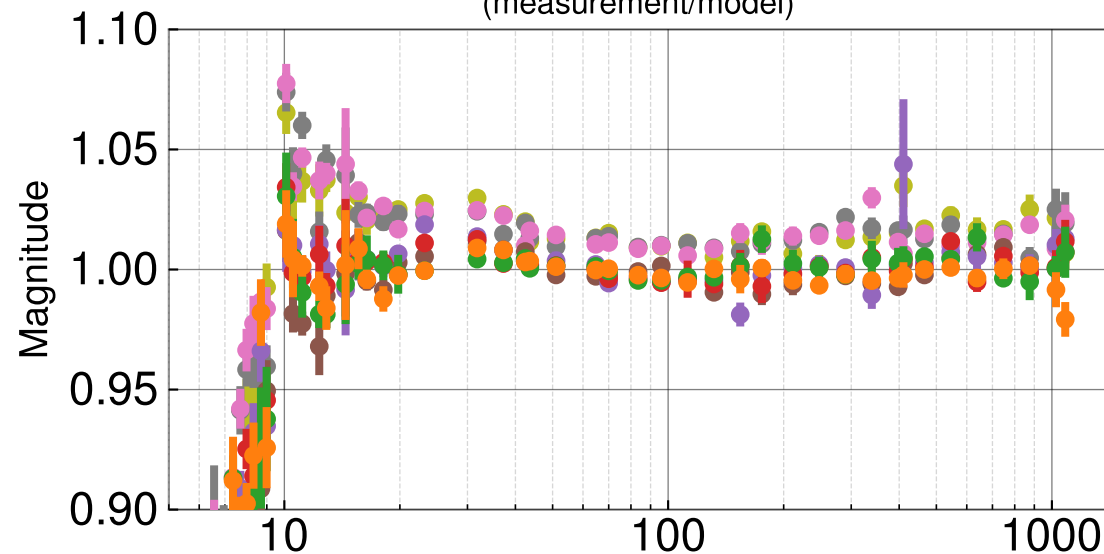
All fixed parameters drawn from 20251010T002302Z/pydarm_H1.ini



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

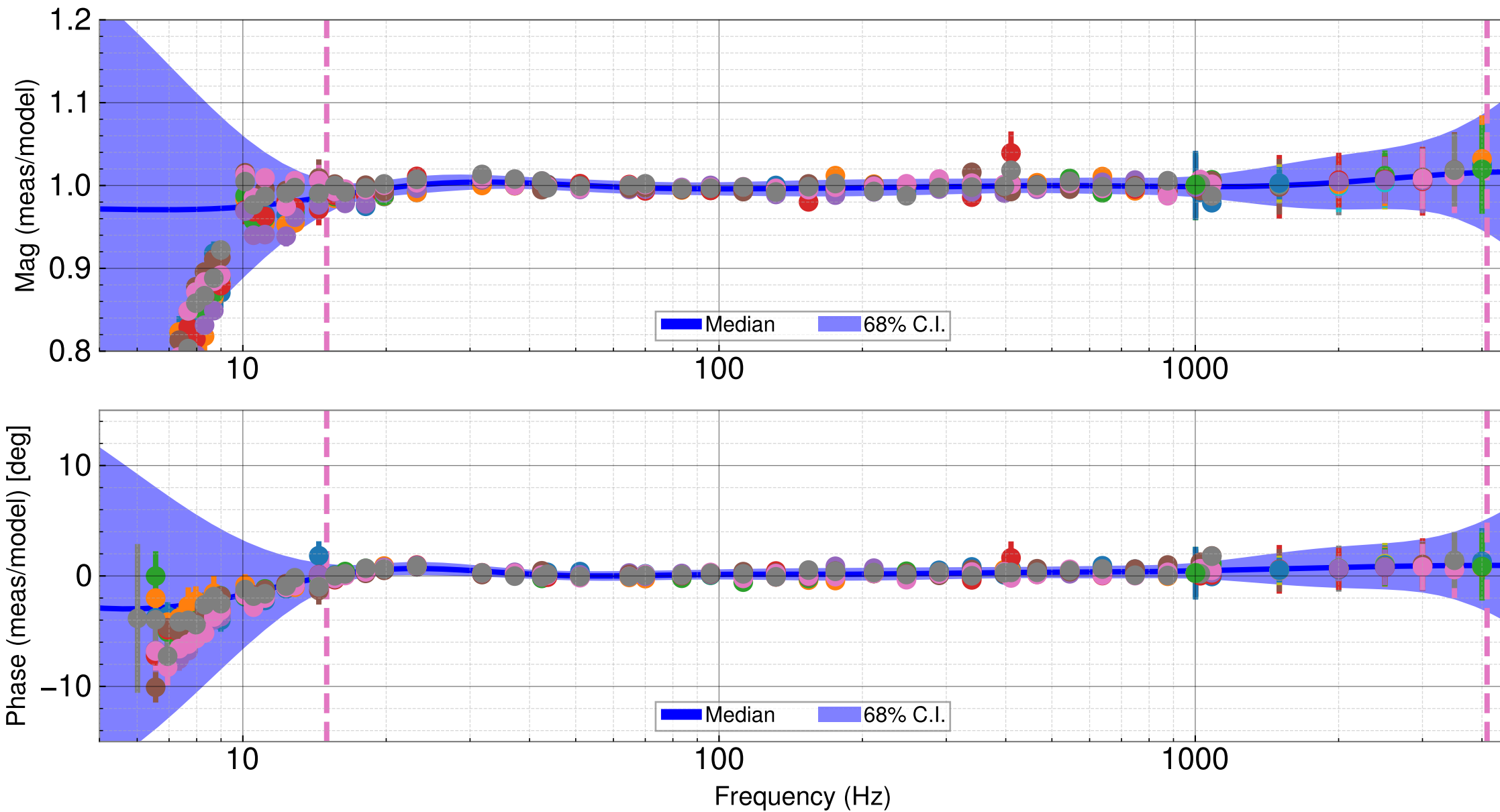


Optical response residuals
(measurement/model)



Sensing GPR

meas. 20251010T002330Z of report 20251010T002302Z
meas. 20250927T192913Z of report 20250927T192846Z
meas. 20250925T153706Z of report 20250925T153638Z
meas. 20250920T183918Z of report 20250920T183850Z
meas. 20250918T153945Z of report 20250918T153918Z
meas. 20250906T193807Z of report 20250906T193739Z
meas. 20250903T150709Z of report 20250903T150641Z
meas. 20250823T183906Z of report 20250823T183838Z

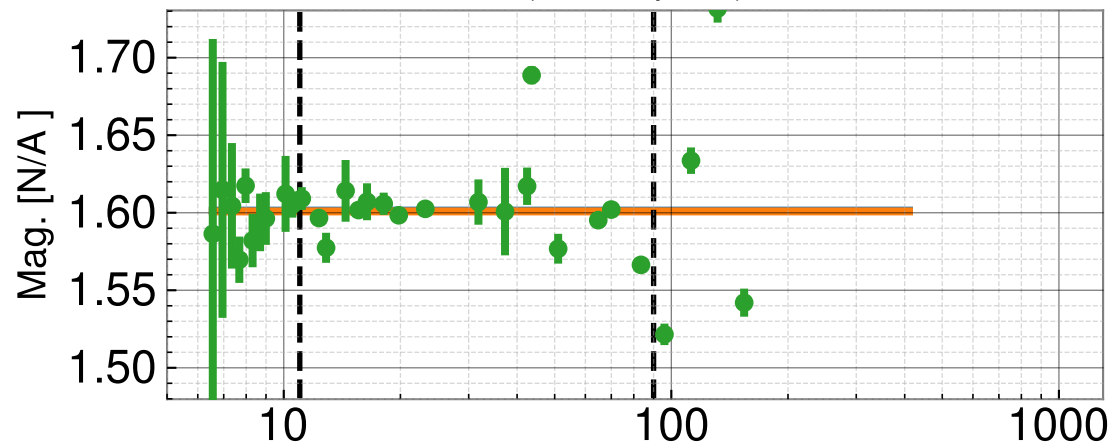


H1SUSEX L1 actuation model MCMC summary

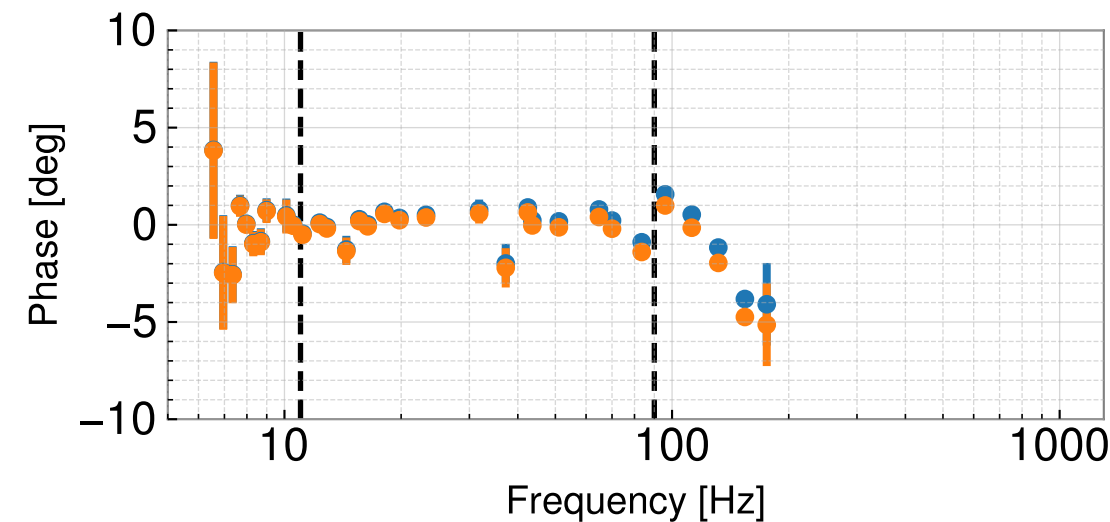
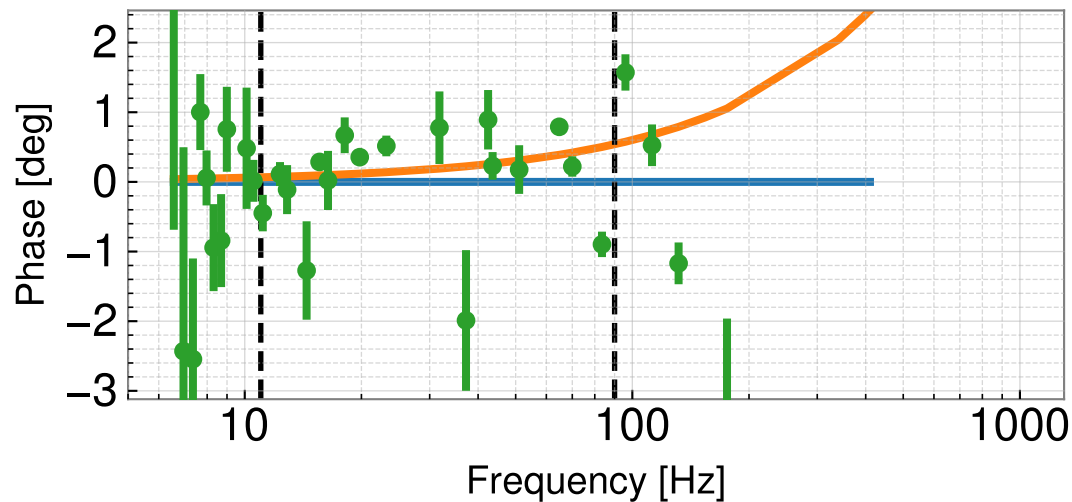
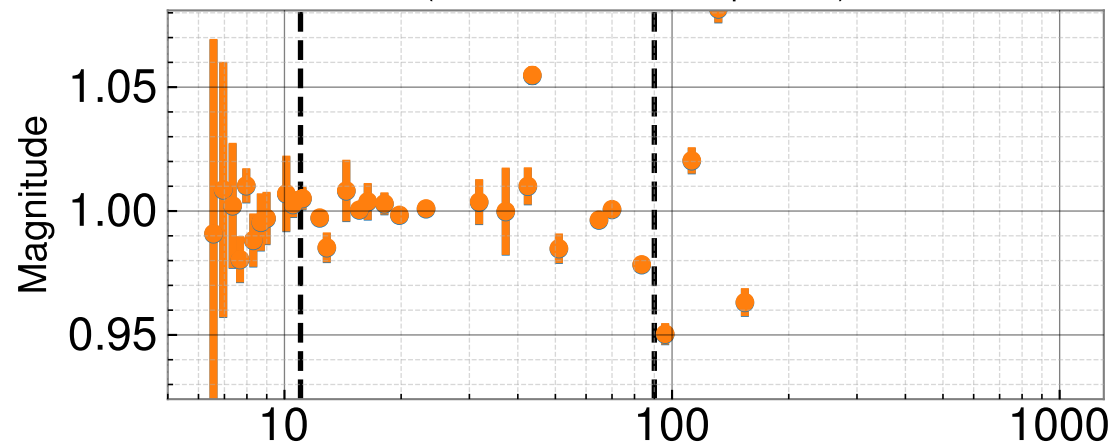
All fixed parameters drawn from 20251010T002302Z/pydarm_H1.ini

— Model w free params from report 20250823T183838Z
— Model w free params from
— MCMC fit to 20251010T002330Z data
■ 20251010T002330Z measurement
— Fit range 11.0 to 90.0 Hz

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

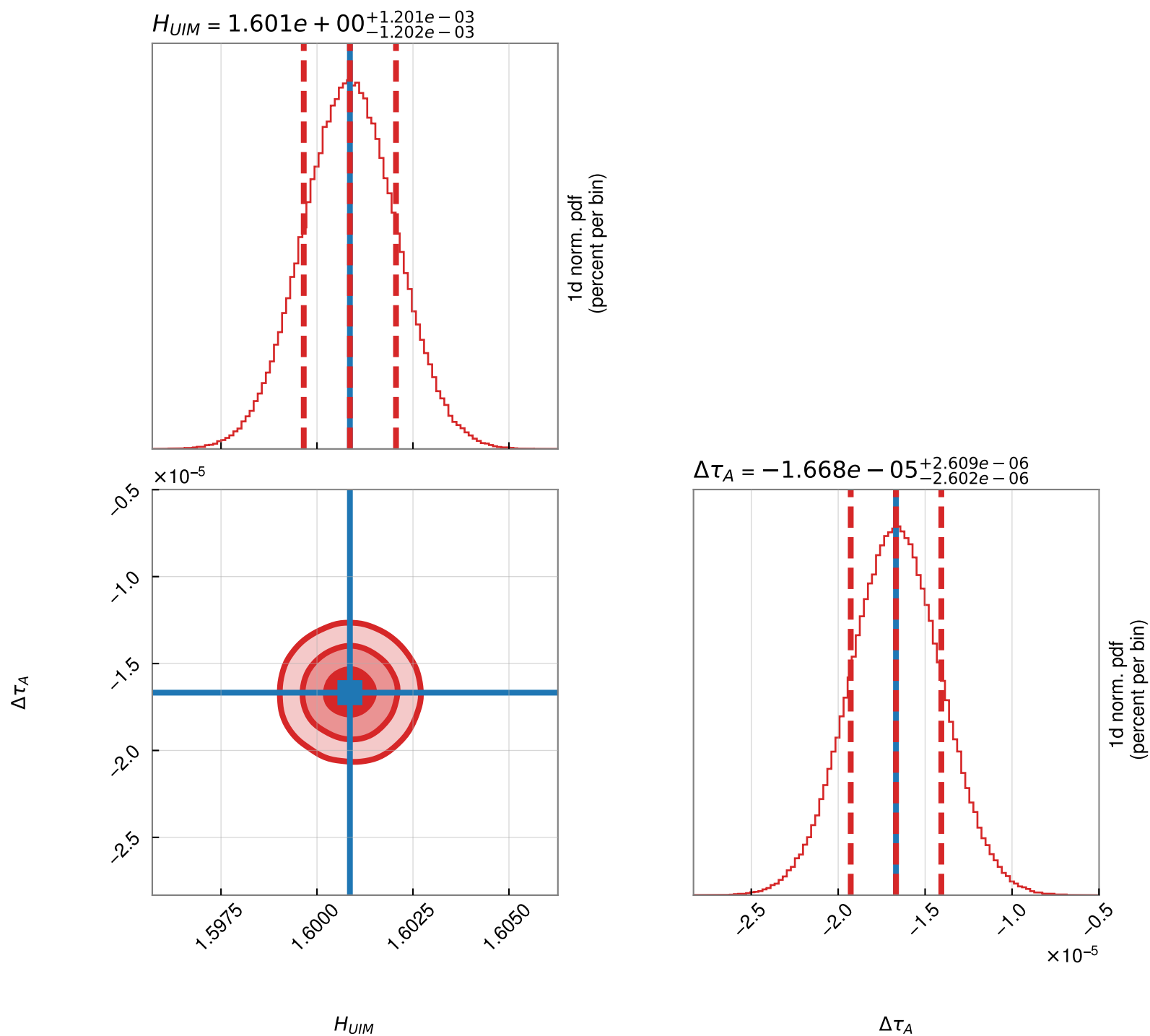
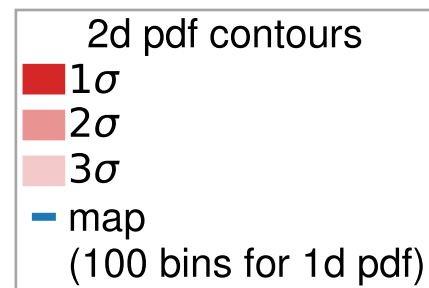


Actuation strength residuals
(meas./model w. free params)



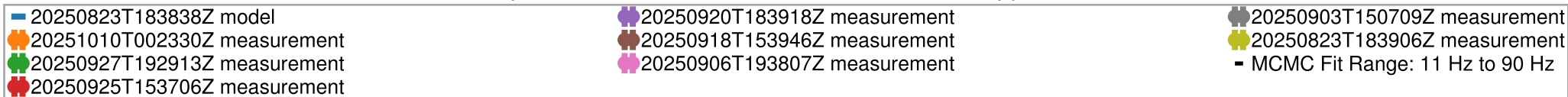
Parameter	(value +/-) value	+	-
Actuation Gain, Hau (N/A)	1.601	0.001201 (0.08%)	0.001202 (0.08%)
Residual time delay, tau_A (s)	-1.668e-05	2.609e-06 (-15.64%)	2.602e-06 (-15.61%)

20251010T002330Z EX L1 actuation MCMC corner plot

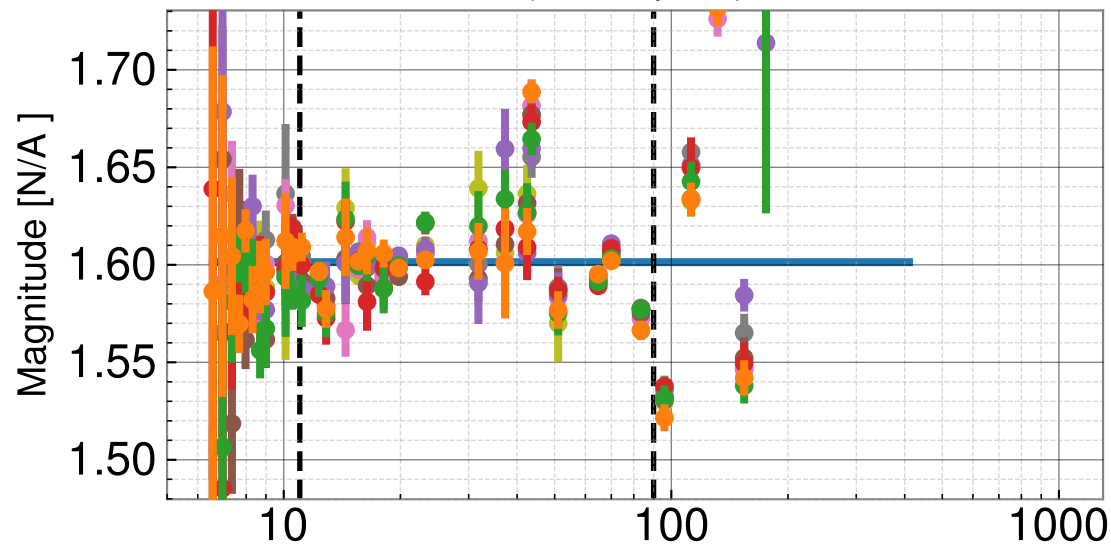


H1SUSEX L1 actuation model history (last 9 measurements)

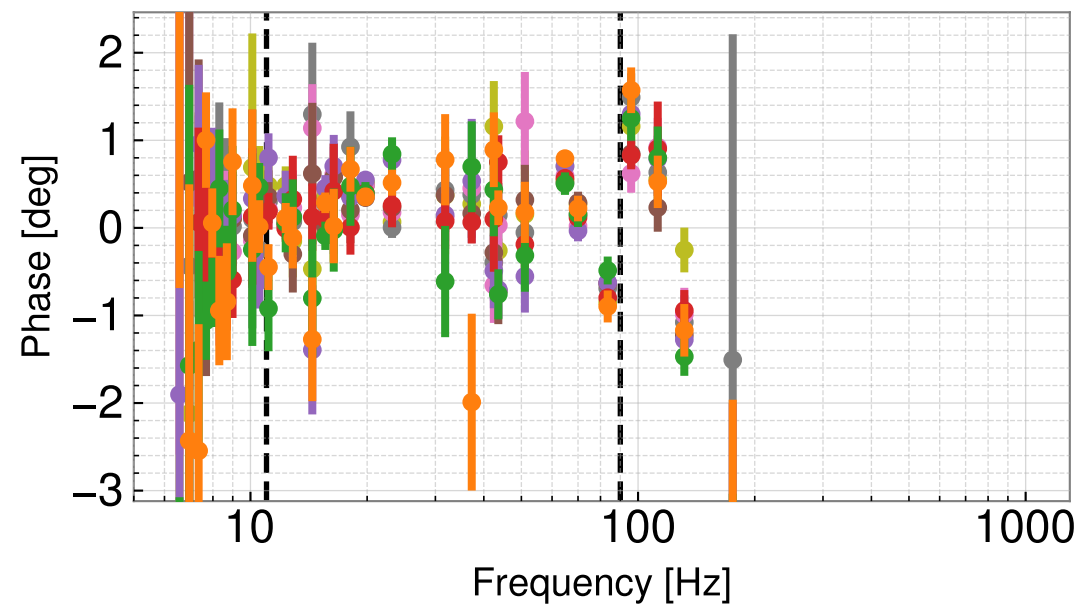
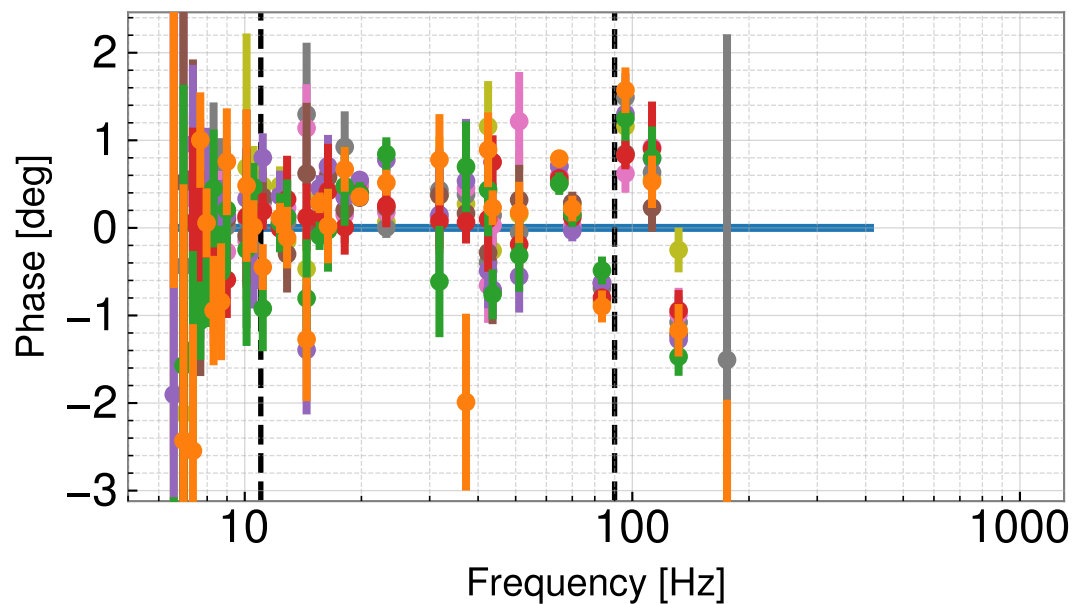
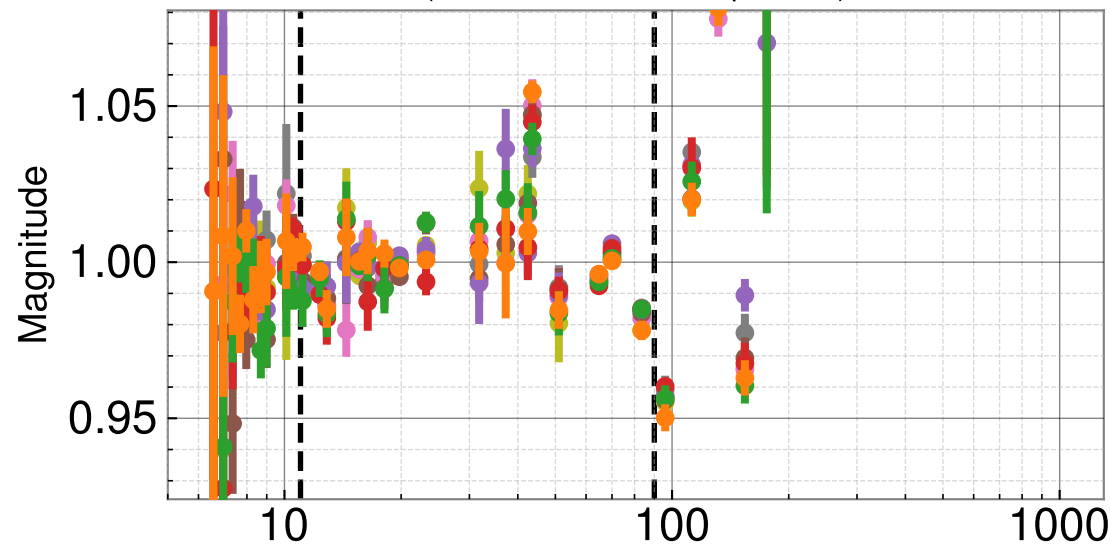
All fixed parameters drawn from 20251010T002302Z/pydarm_H1.ini



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



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



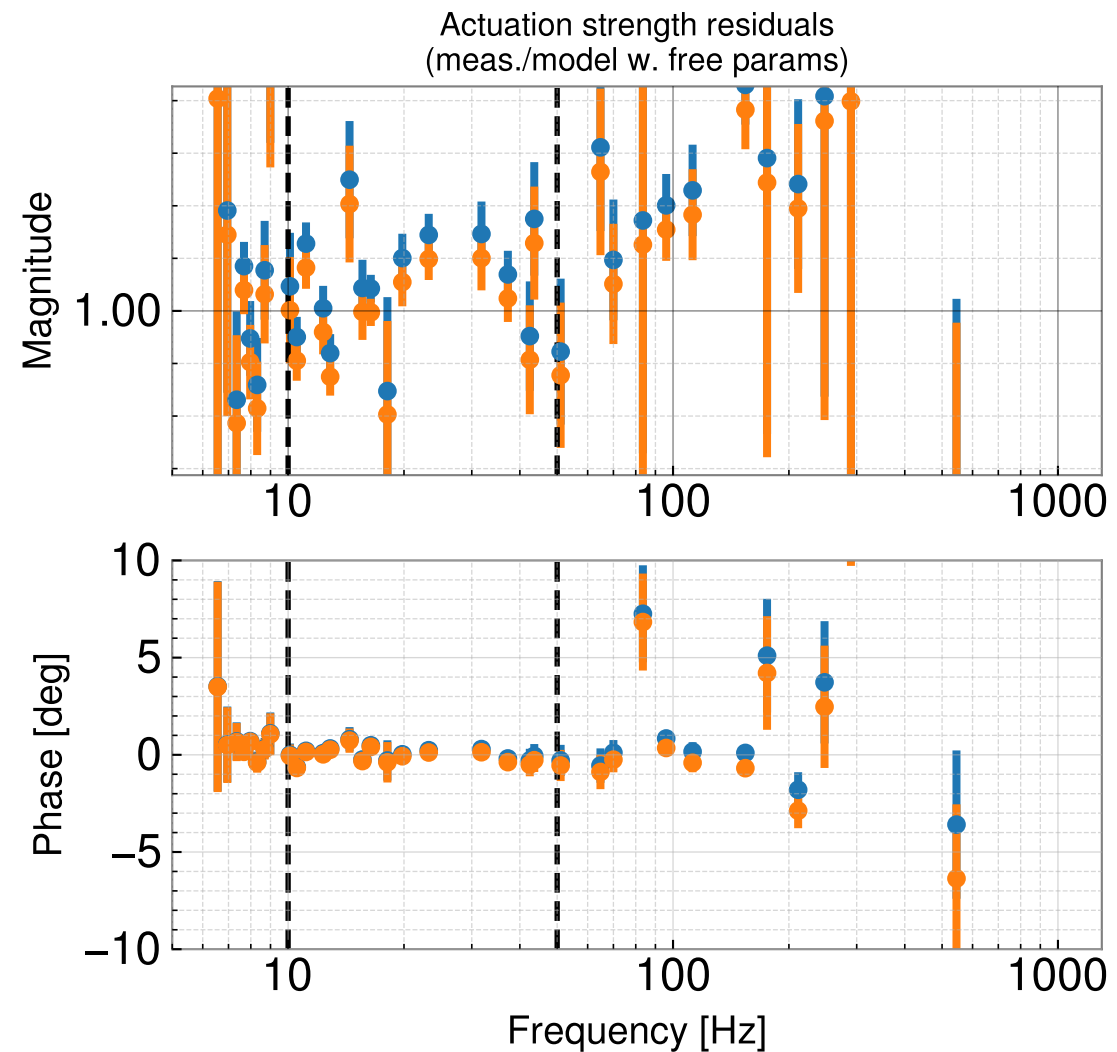
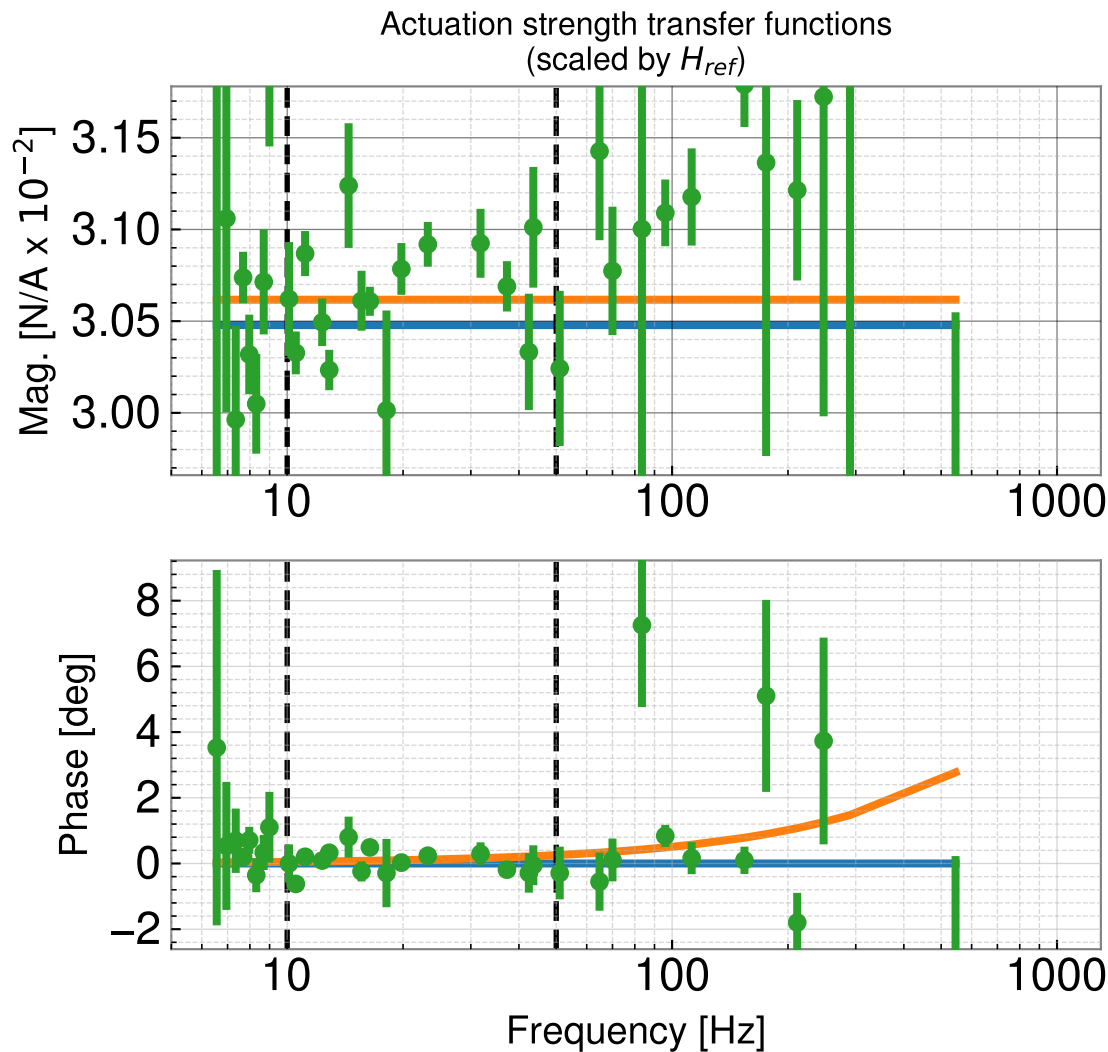
H1SUSEX L2 actuation model MCMC summary

All fixed parameters drawn from 20251010T002302Z/pydarm_H1.ini

— Model w free params from report 20250823T183838Z
— Model w free params from
— MCMC fit to 20251010T002330Z data

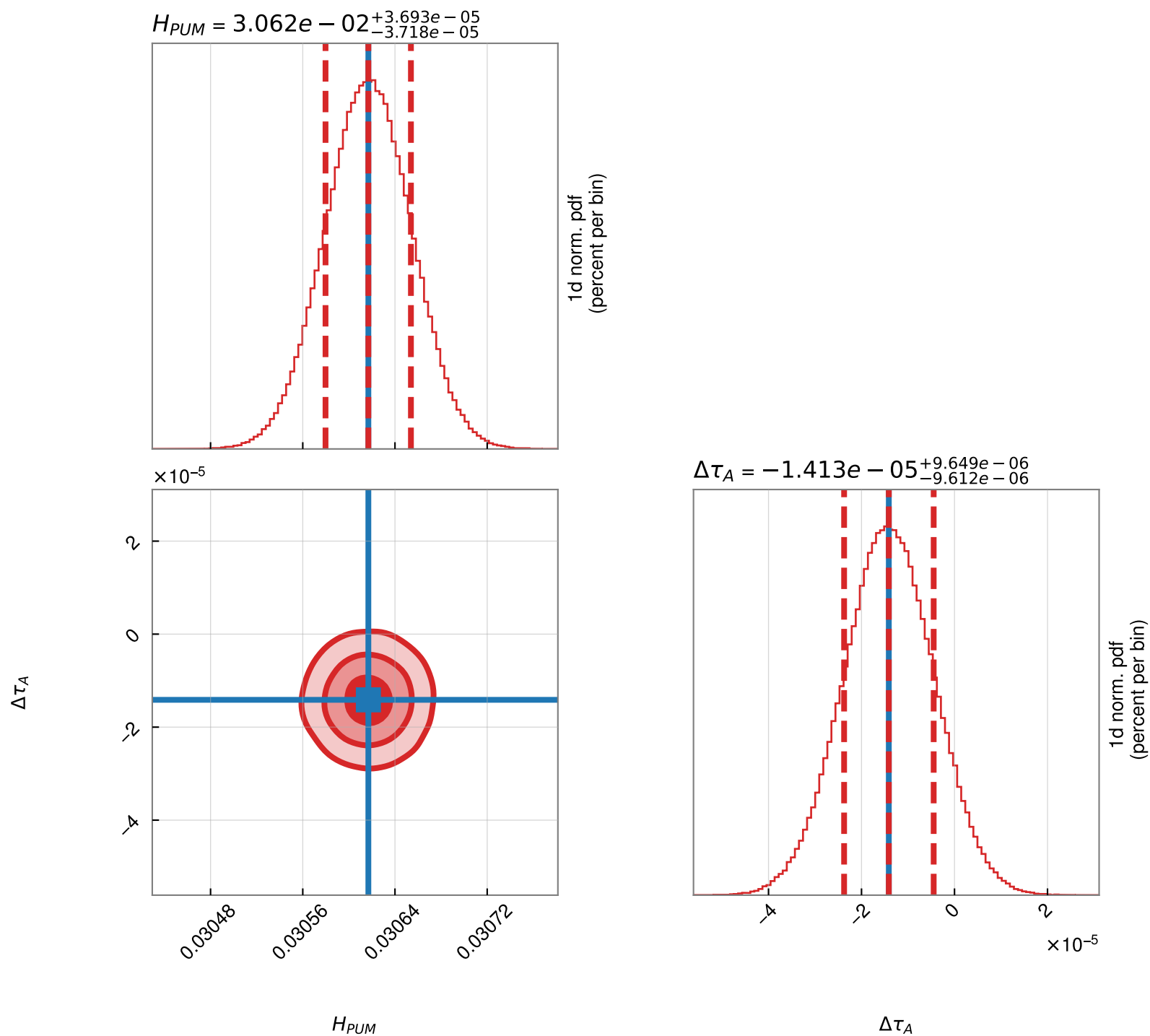
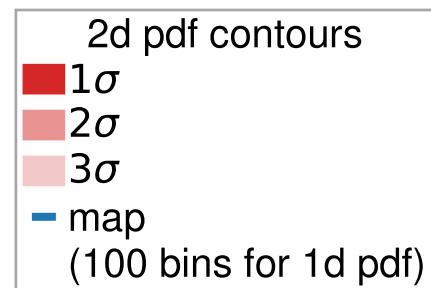
■ 20251010T002330Z measurement

— Fit range 10.0 to 50.0 Hz



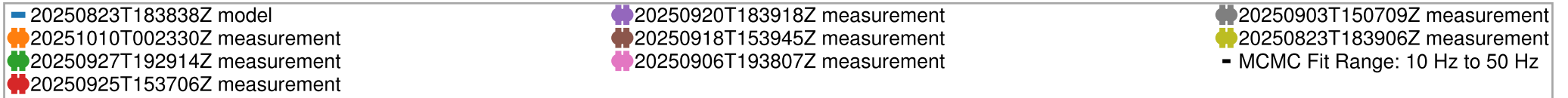
Parameter	(value +/-) value	+	-
Actuation Gain, Hap (N/A)	0.03062	3.693e-05 (0.12%)	3.718e-05 (0.12%)
Residual time delay, tau_A (s)	-1.413e-05	9.649e-06 (-68.29%)	9.612e-06 (-68.03%)

20251010T002330Z EX L2 actuation MCMC corner plot

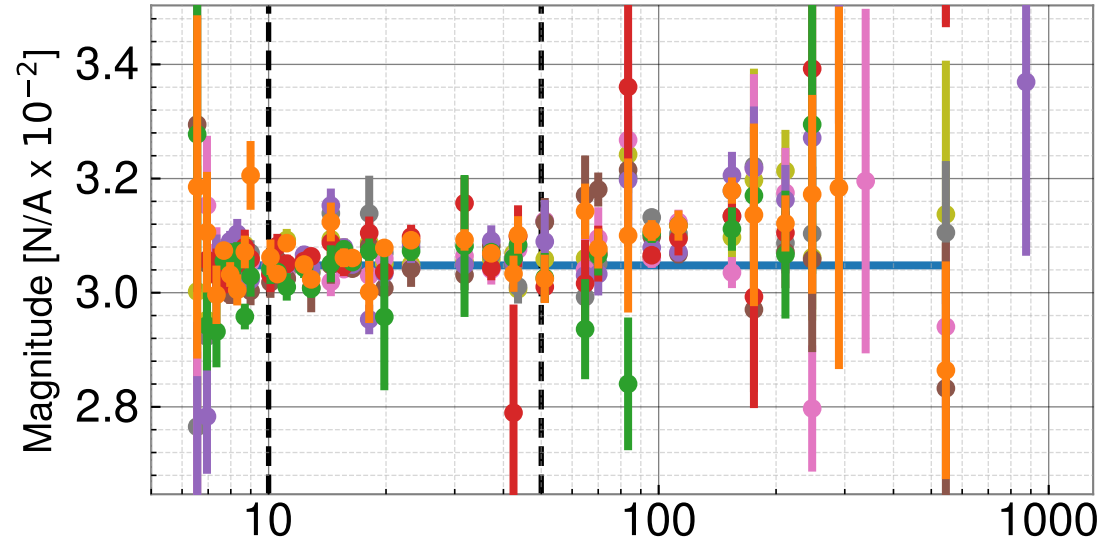


H1SUSEX L2 actuation model history (last 9 measurements)

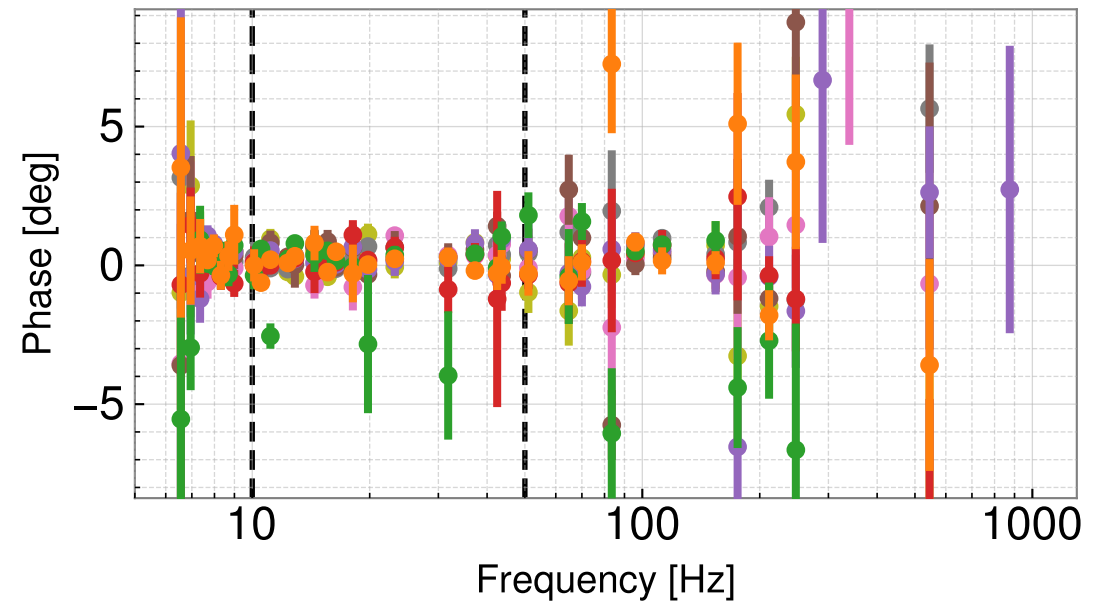
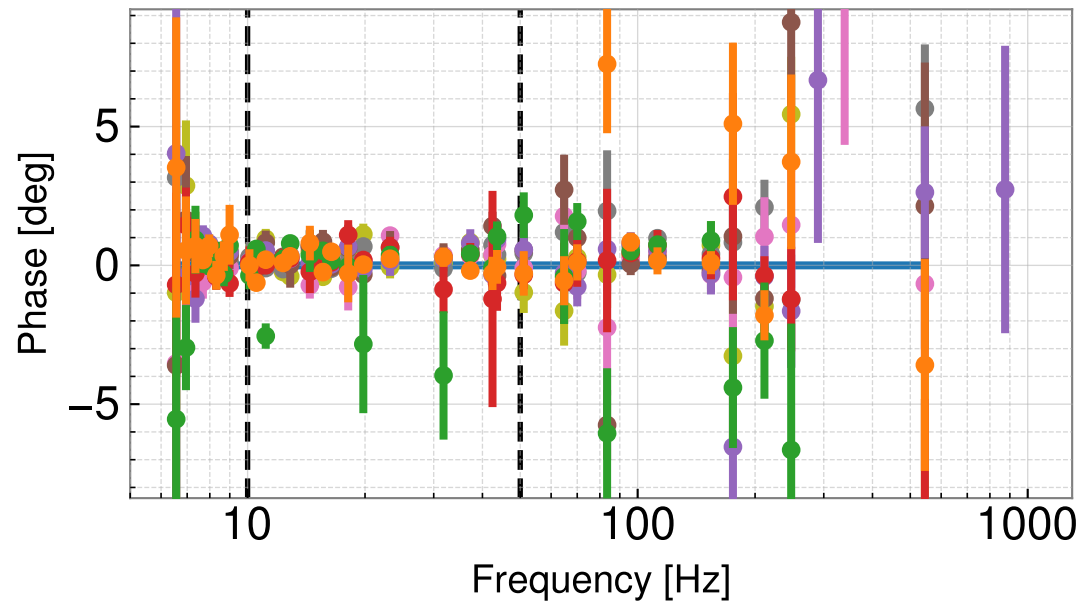
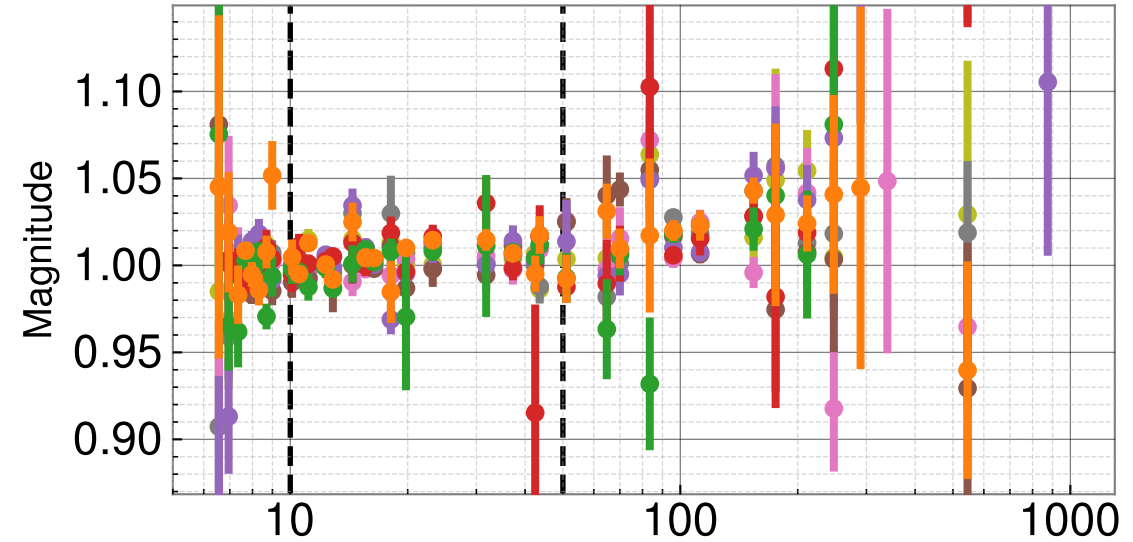
All fixed parameters drawn from 20251010T002302Z/pydarm_H1.ini



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

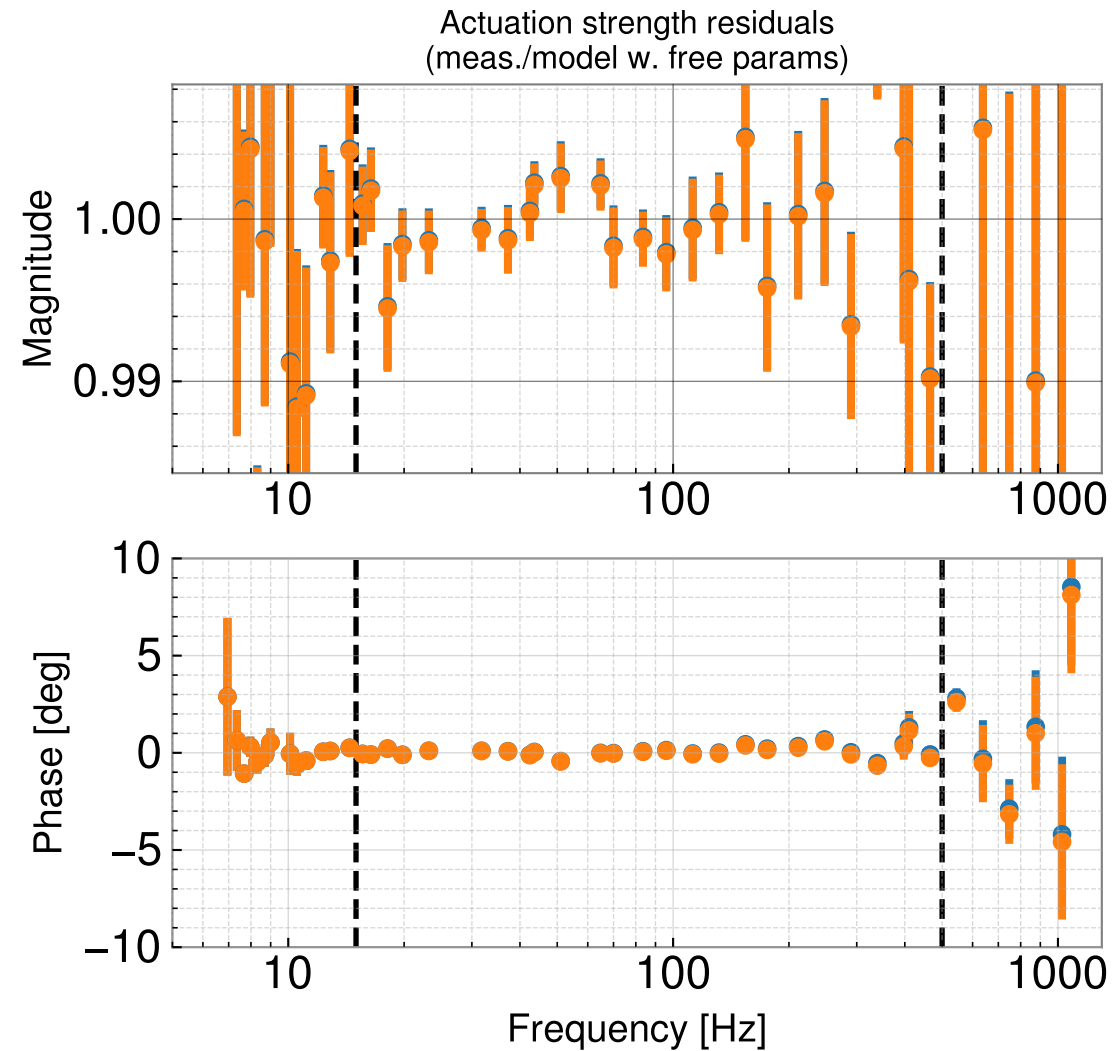
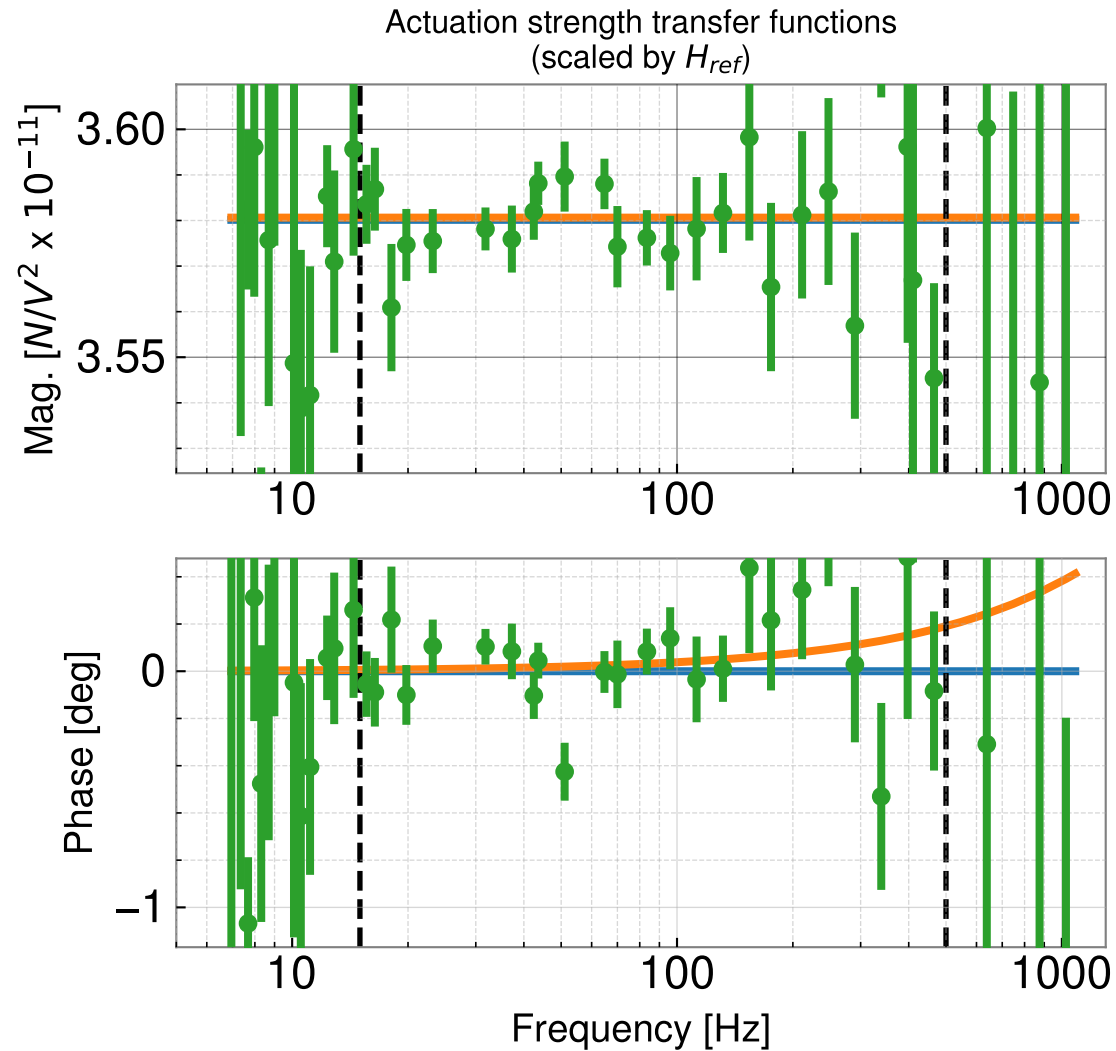
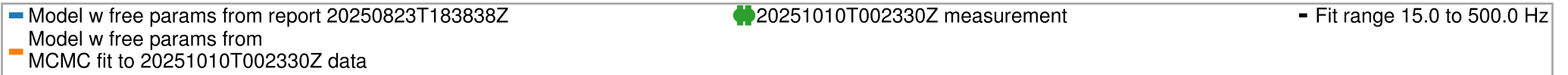


Actuation strength residuals
(meas./model w. free params)



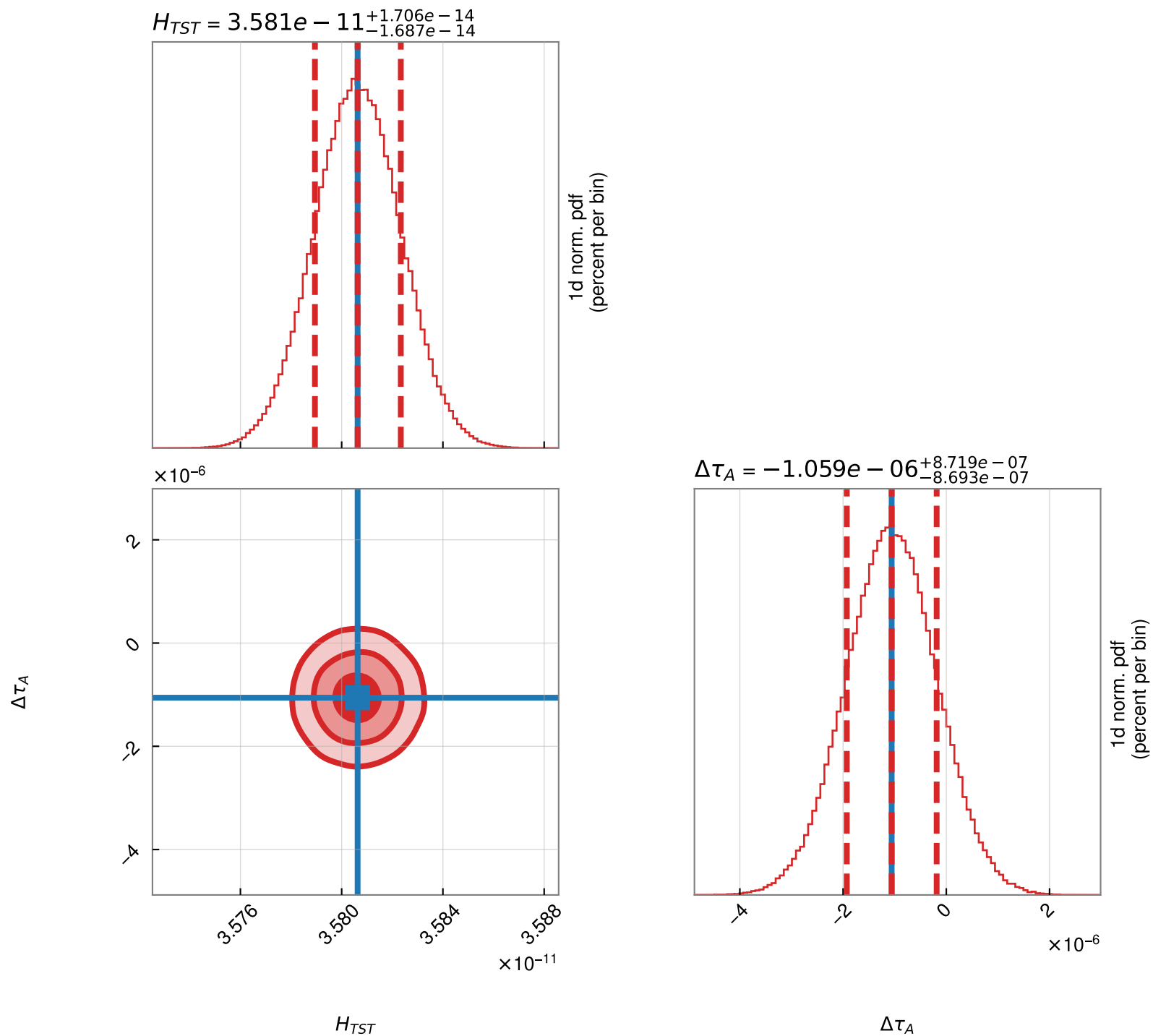
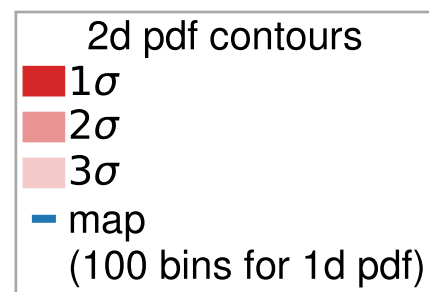
H1SUSEX L3 actuation model MCMC summary

All fixed parameters drawn from 20251010T002302Z/pydarm_H1.ini



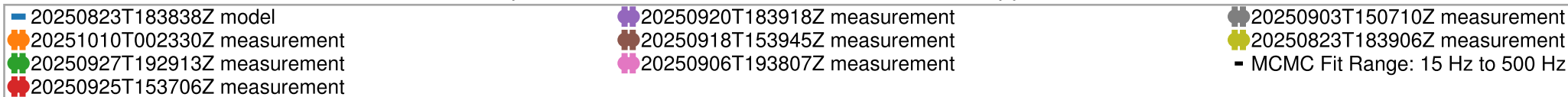
Parameter	(value +/-) value	+	-
Actuation Gain, Hat (N/V^2)	3.581e-11	1.706e-14 (0.05%)	1.687e-14 (0.05%)
Residual time delay, tau_A (s)	-1.059e-06	8.719e-07 (-82.34%)	8.693e-07 (-82.09%)

20251010T002330Z EX L3 actuation MCMC corner plot

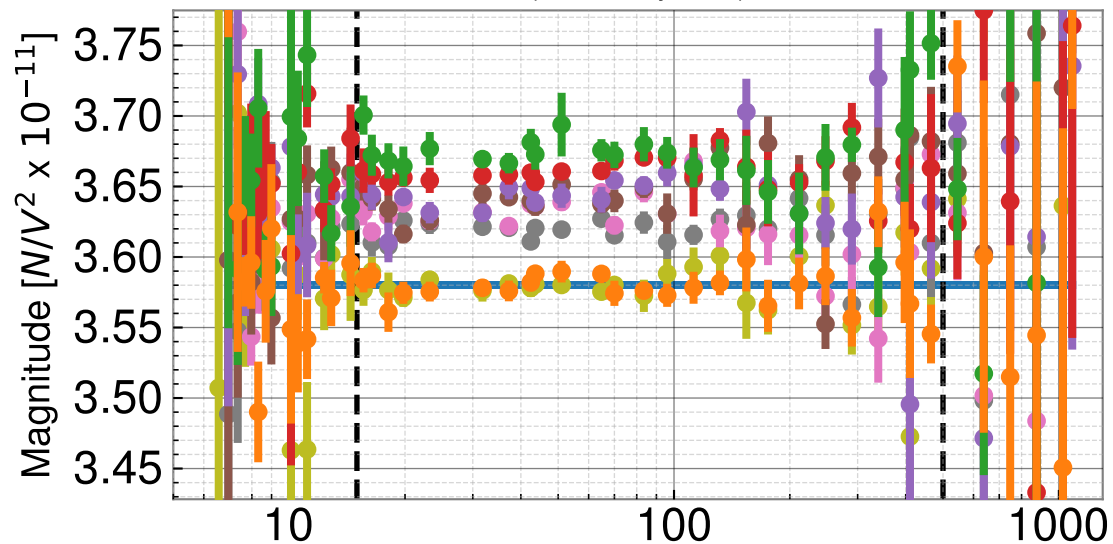


H1SUSEX L3 actuation model history (last 9 measurements)

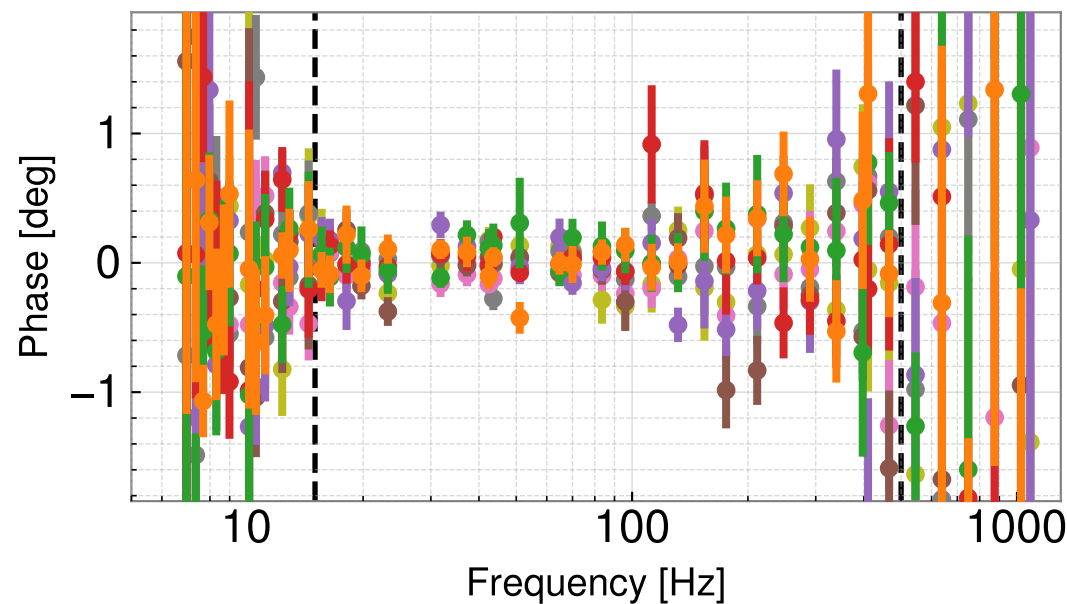
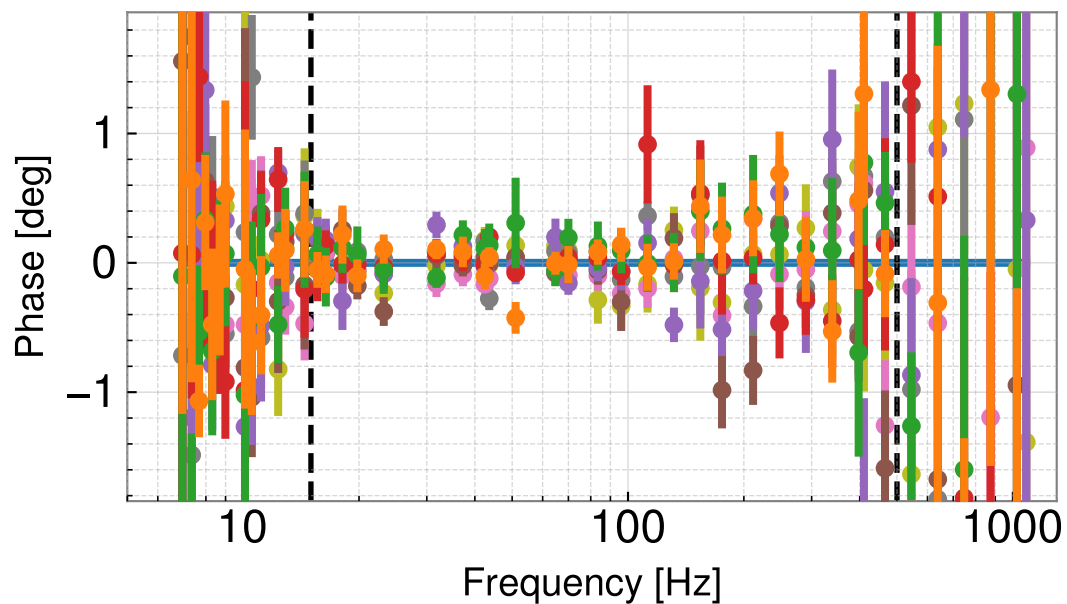
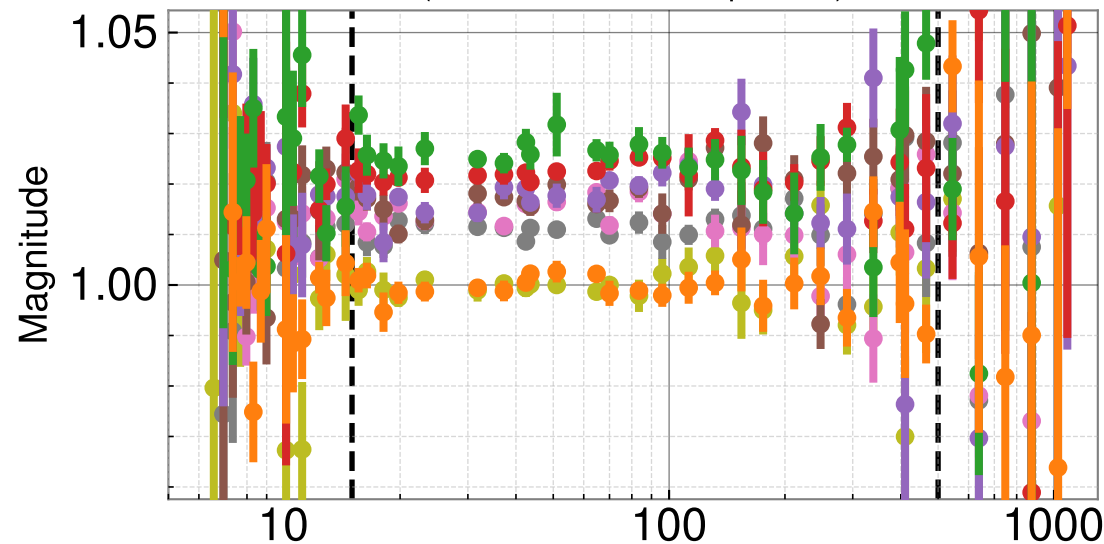
All fixed parameters drawn from 20251010T002302Z/pydarm_H1.ini



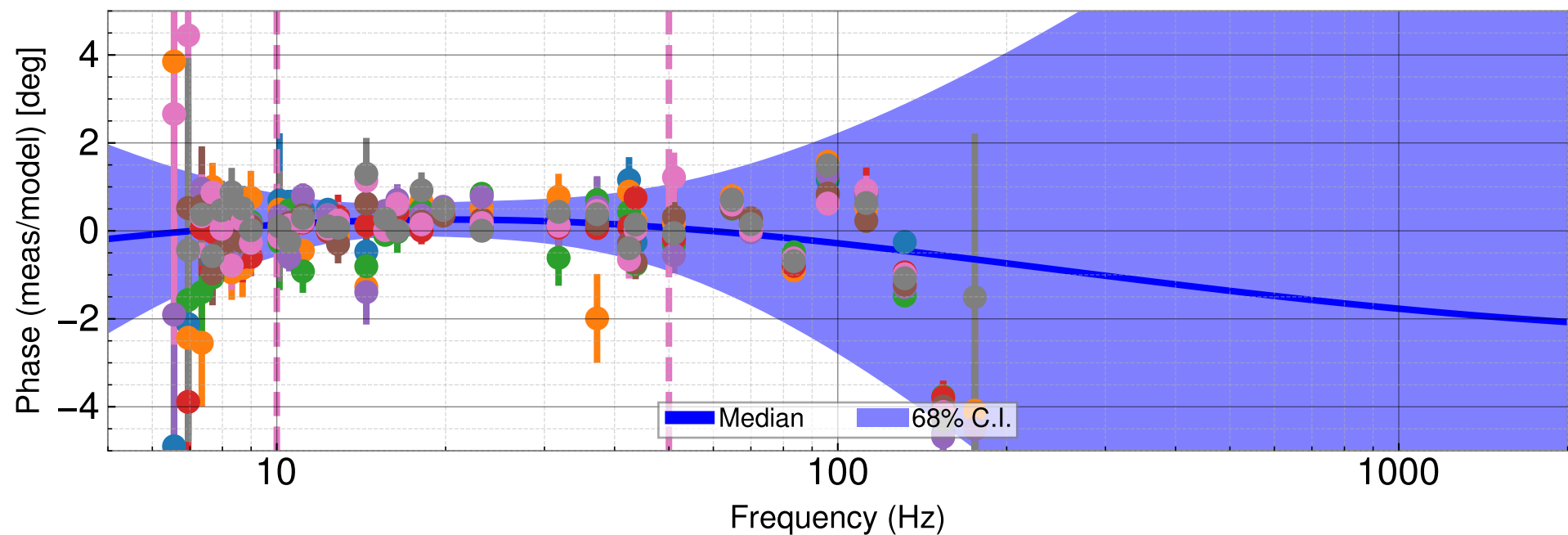
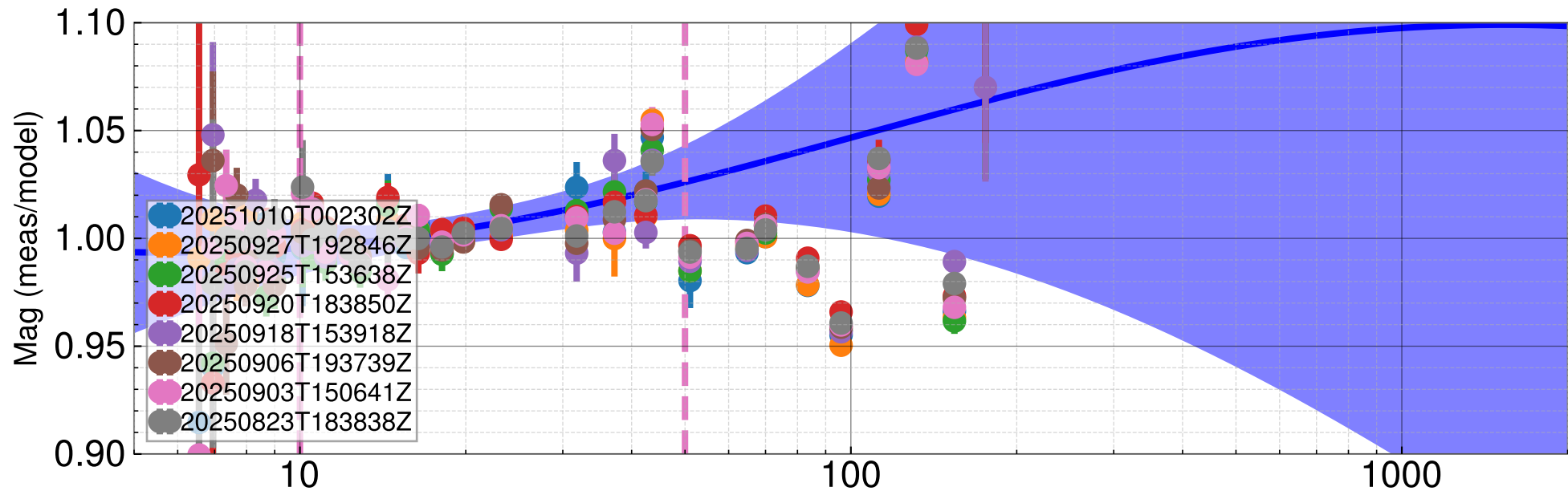
Actuation strength transfer functions
(scaled by H_{ref})



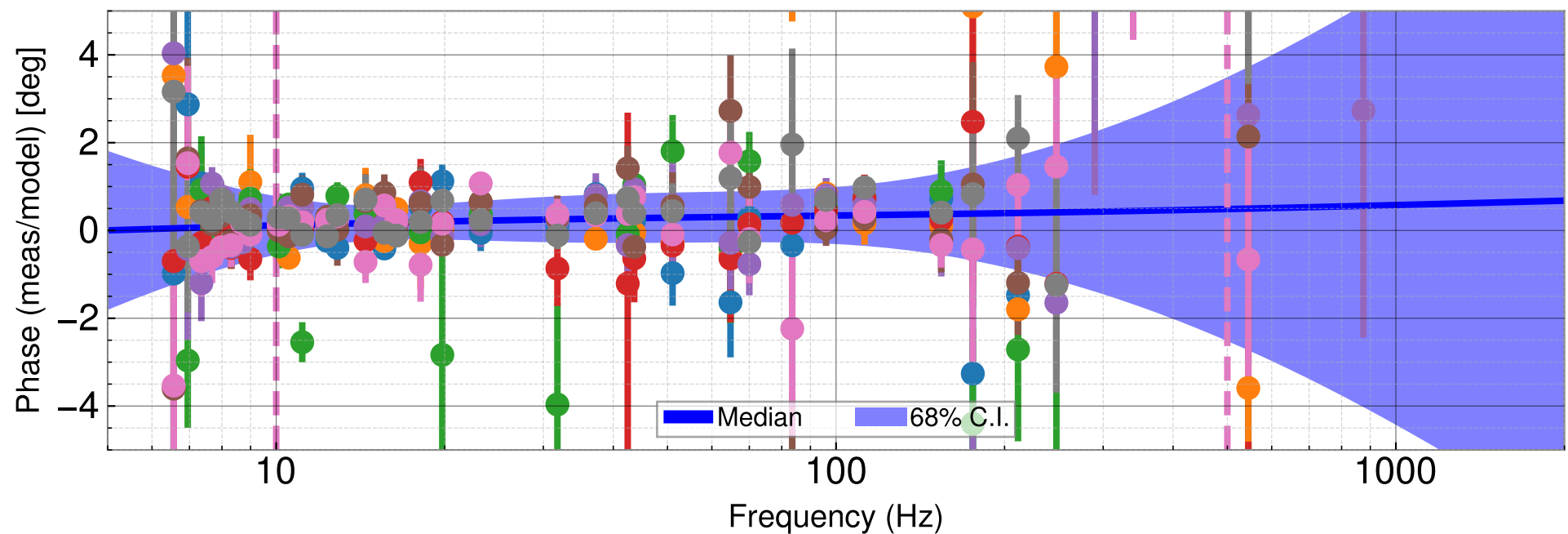
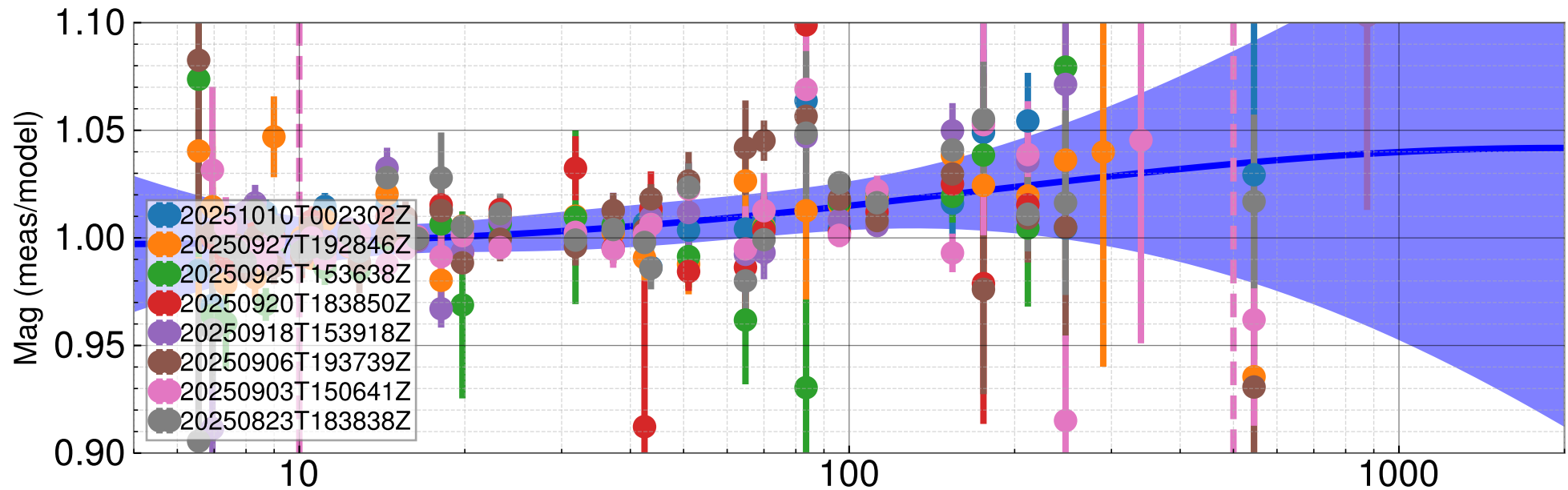
Actuation strength residuals
(meas./model w. free params)



Actuation/L1/EX GPR



Actuation/L2/EX GPR



Actuation/L3/EX GPR

