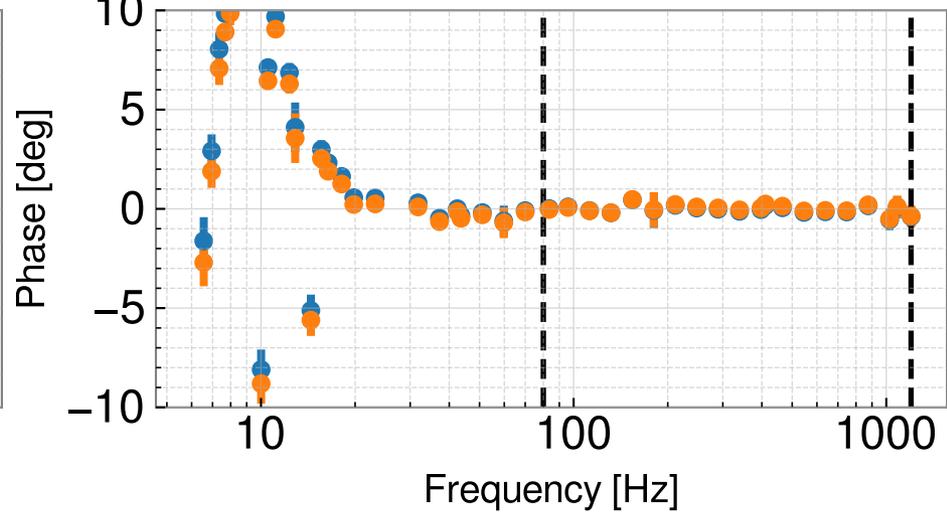
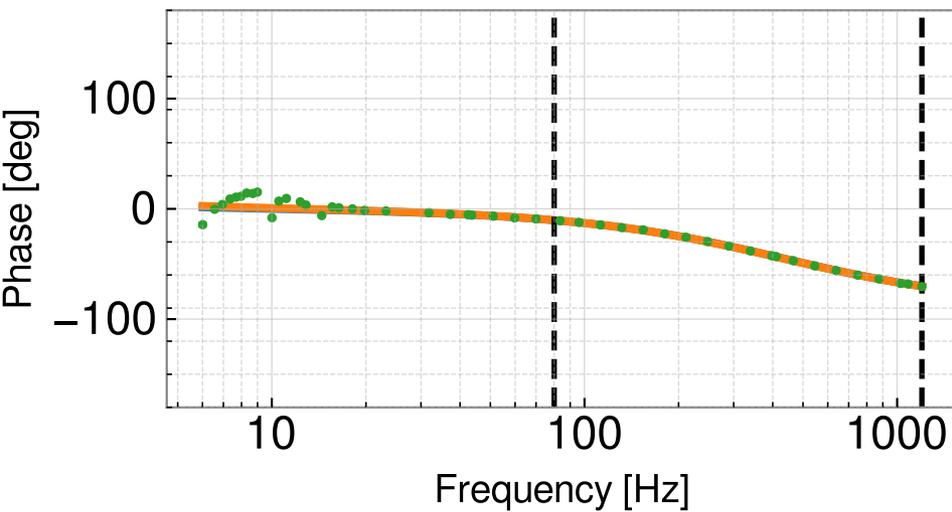
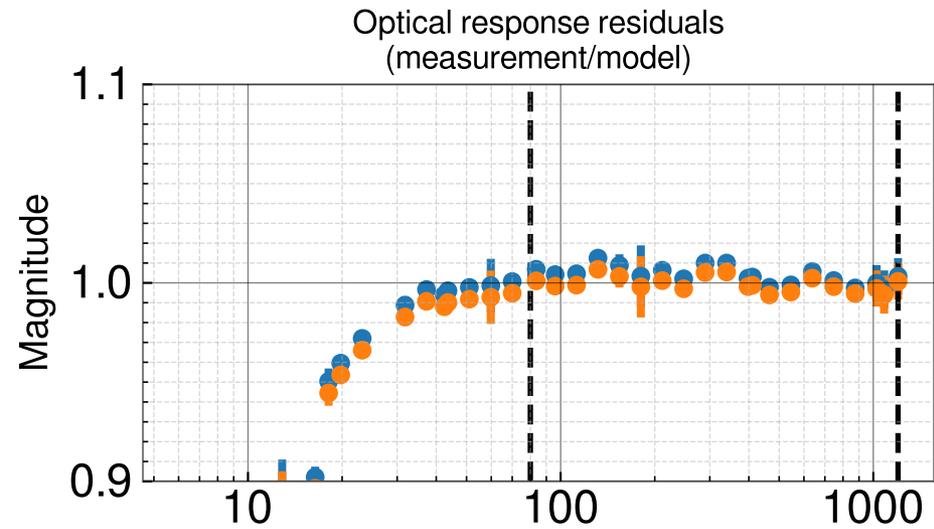
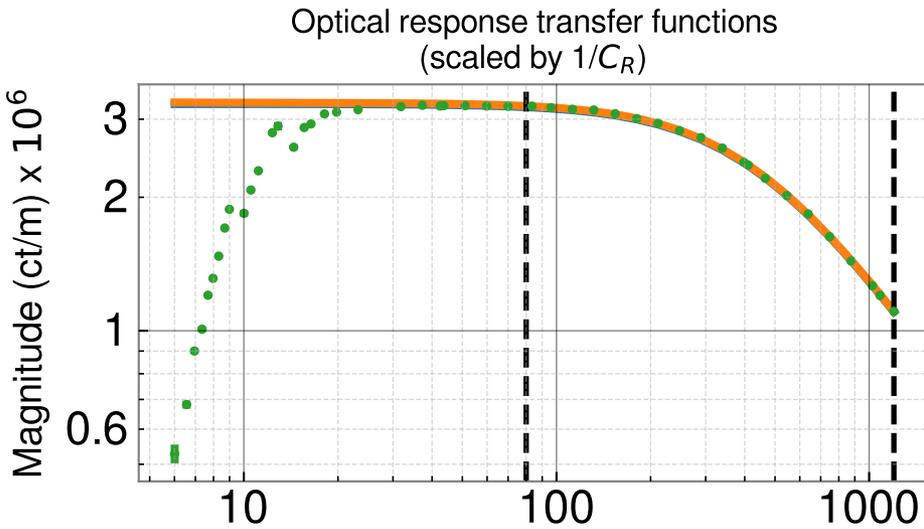
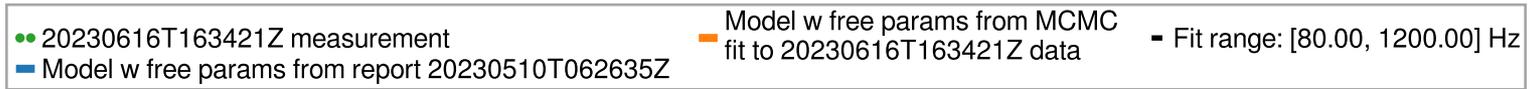


H1 sensing model MCMC summary

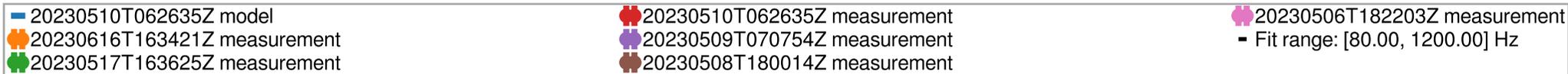
All fixed parameters drawn from /ligo/groups/cal/H1/reports/20230616T161654Z/pydarm_H1.ini



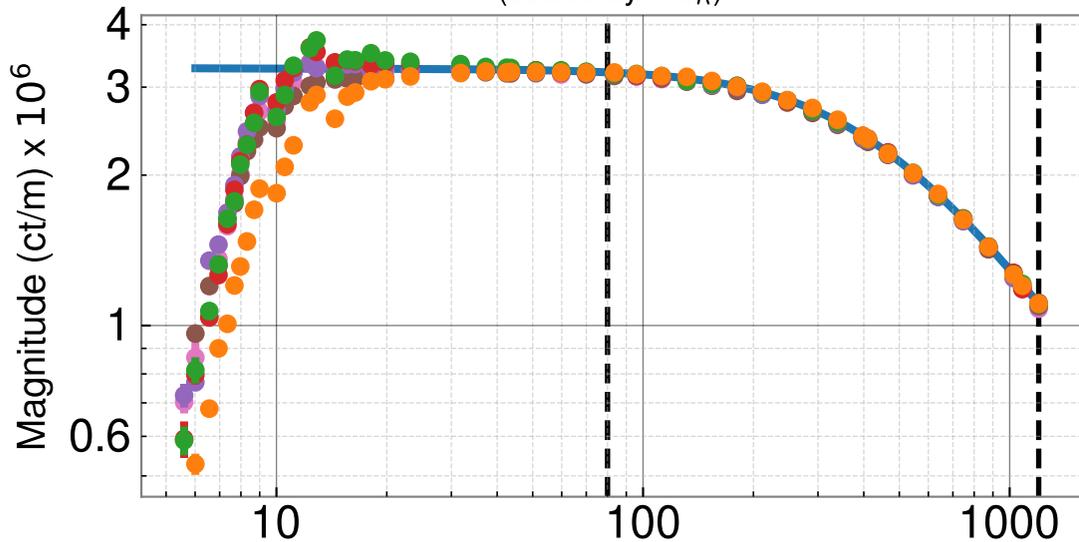
Parameter	(value +/-) value	+	-
Optical gain, H_c (ct/m)	3.267e+06	3079 (0.09%)	3642 (0.11%)
Cavity_pole, f_cc (Hz)	431.3	1.028 (0.24%)	0.9473 (0.22%)
Detuned SRC spring frequency, f_s (Hz)	-0.3649	3.056 (-837.47%)	2.133 (-584.50%)
Detuned SRC spring quality factor, Q_s	1.006	6.032 (599.45%)	8.517 (846.46%)
Residual time delay, tau_c (s)	-7.787e-08	3.834e-07 (-492.30%)	3.836e-07 (-492.60%)

H1 sensing model history

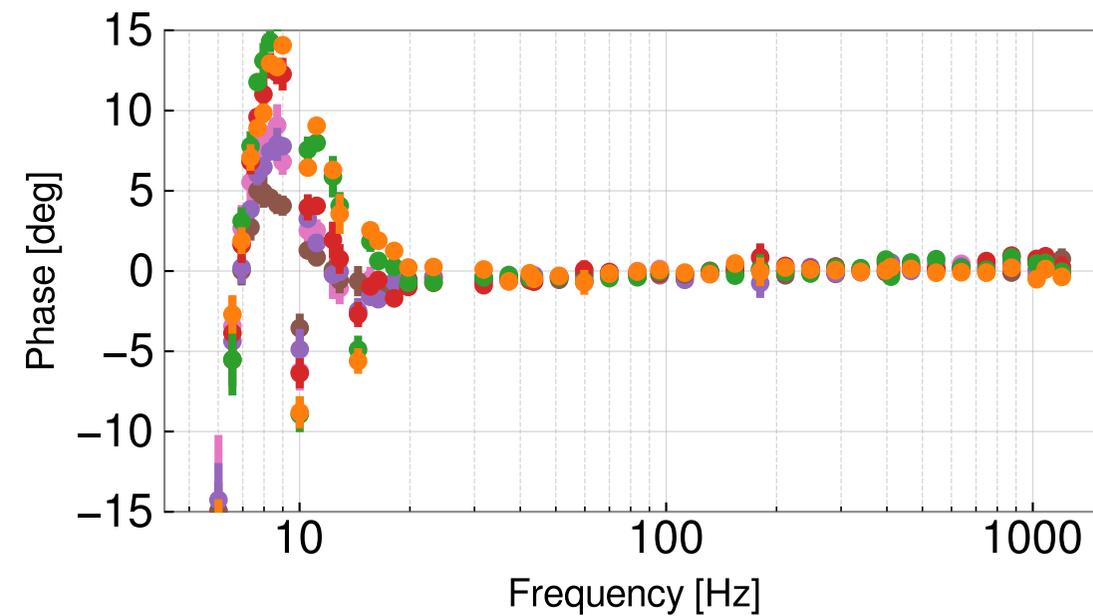
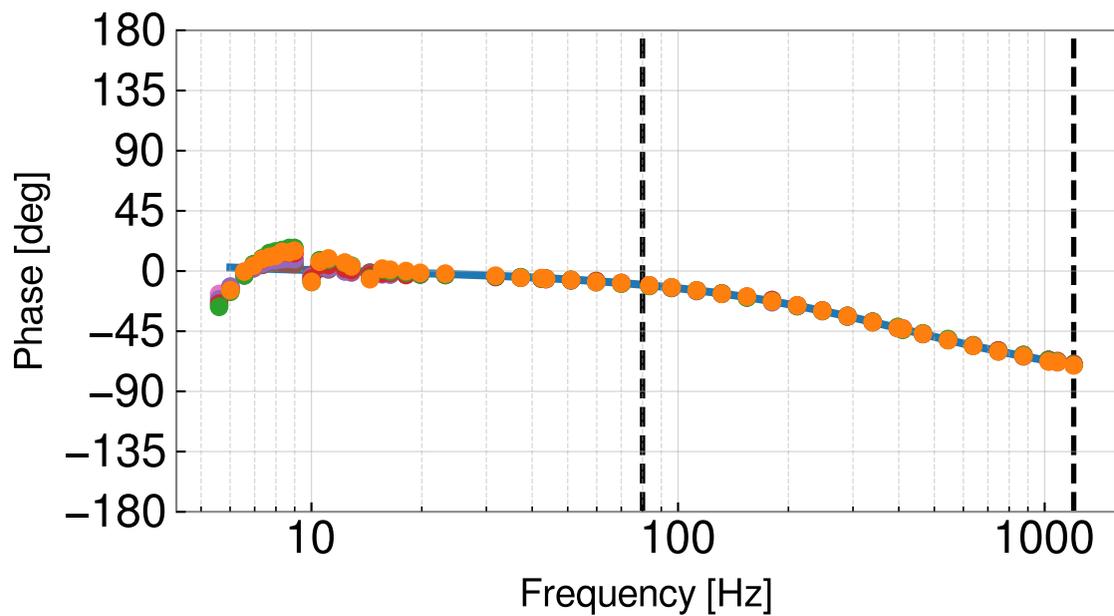
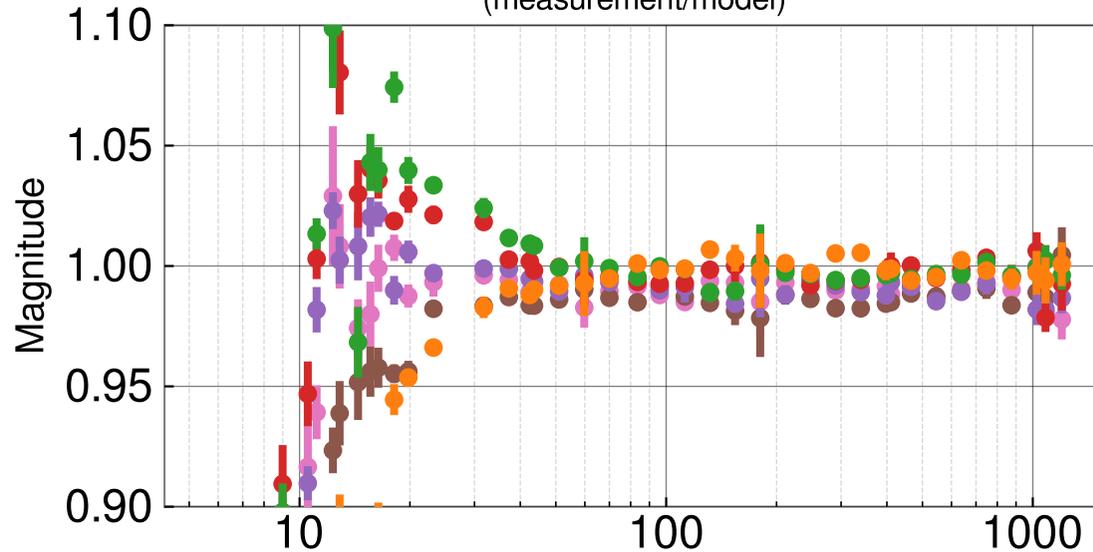
All fixed parameters drawn from /ligo/groups/cal/H1/reports/20230616T161654Z/pydarm_H1.ini



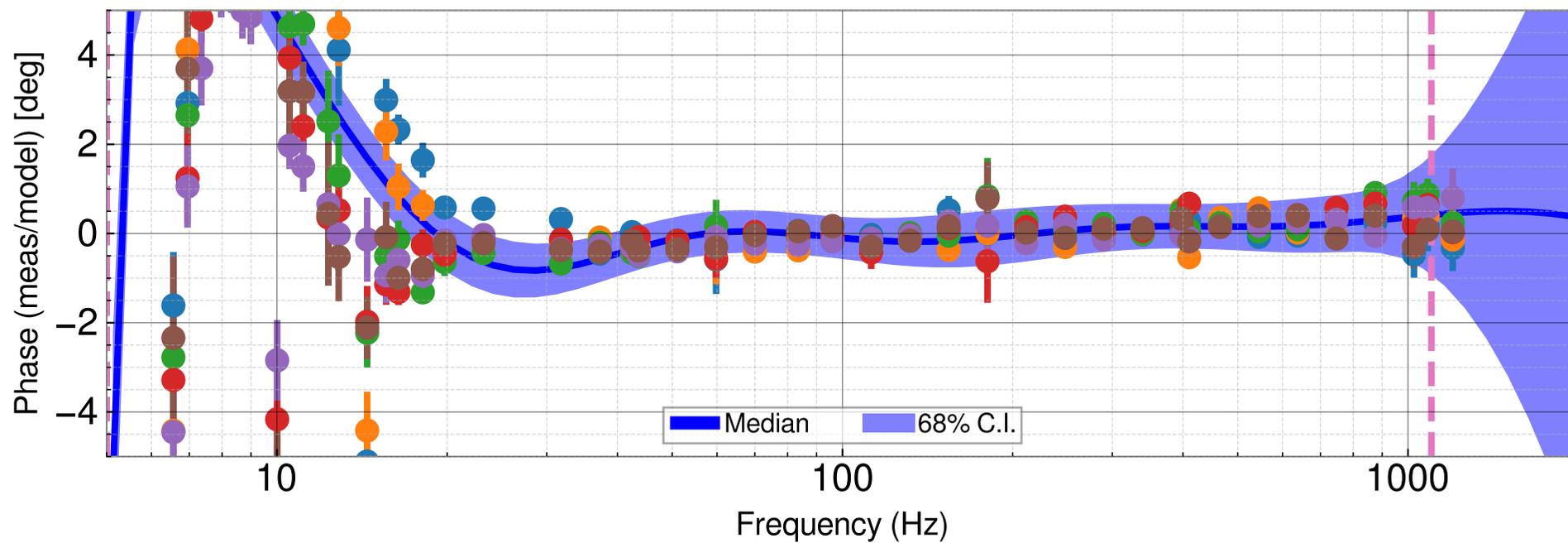
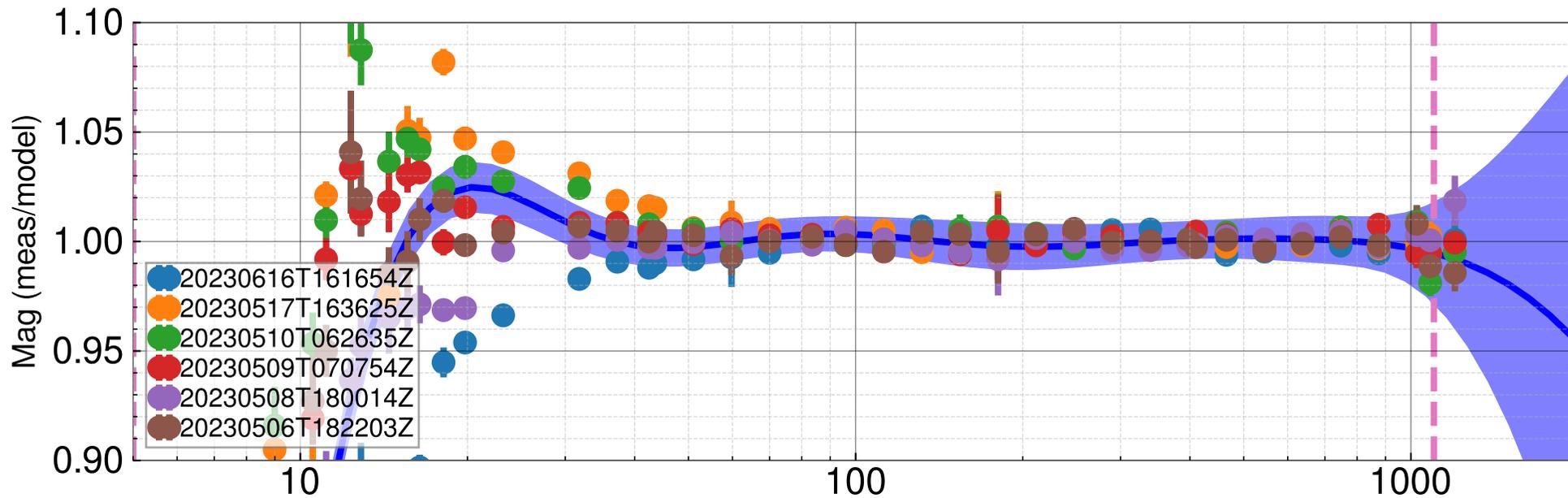
Optical response transfer functions
(scaled by $1/C_R$)



Optical response residuals
(measurement/model)



Sensing GPR

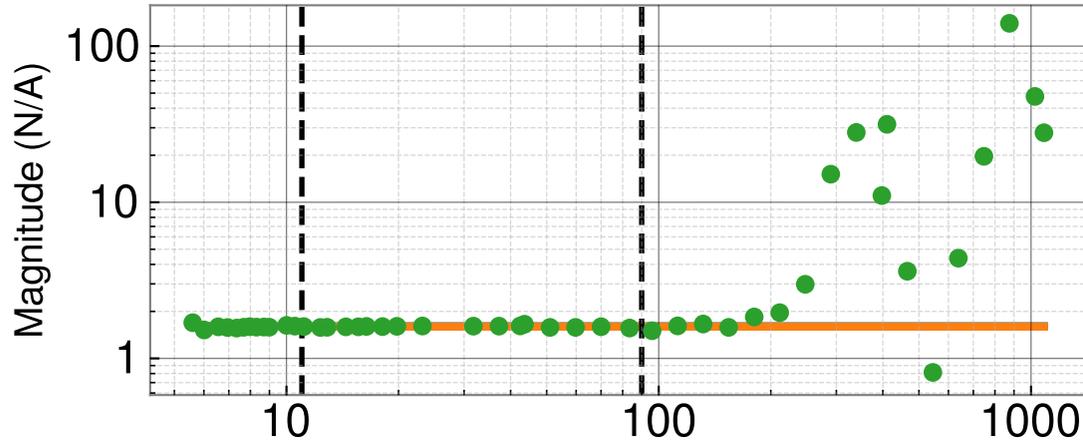


H1SUSEX L1 actuation model MCMC summary

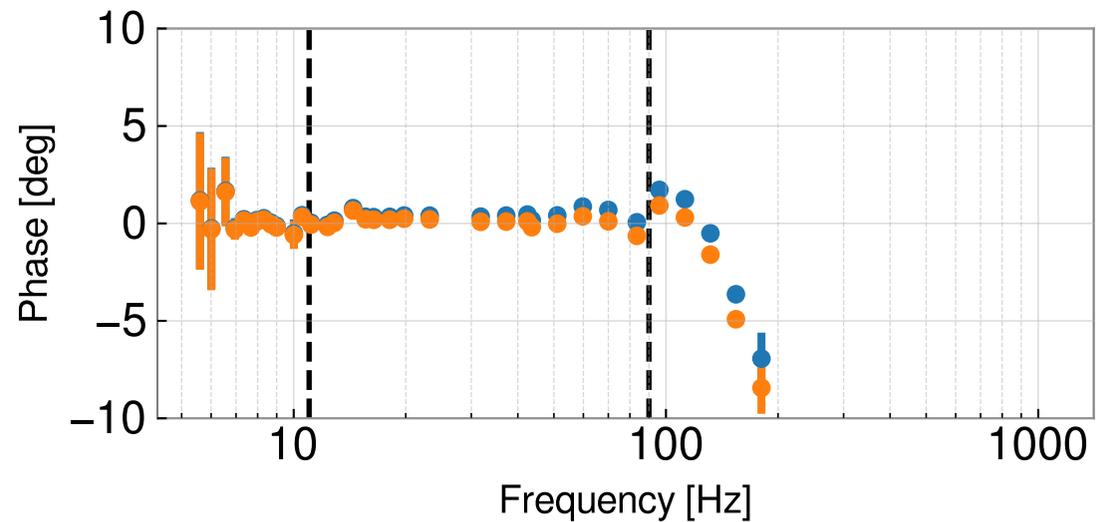
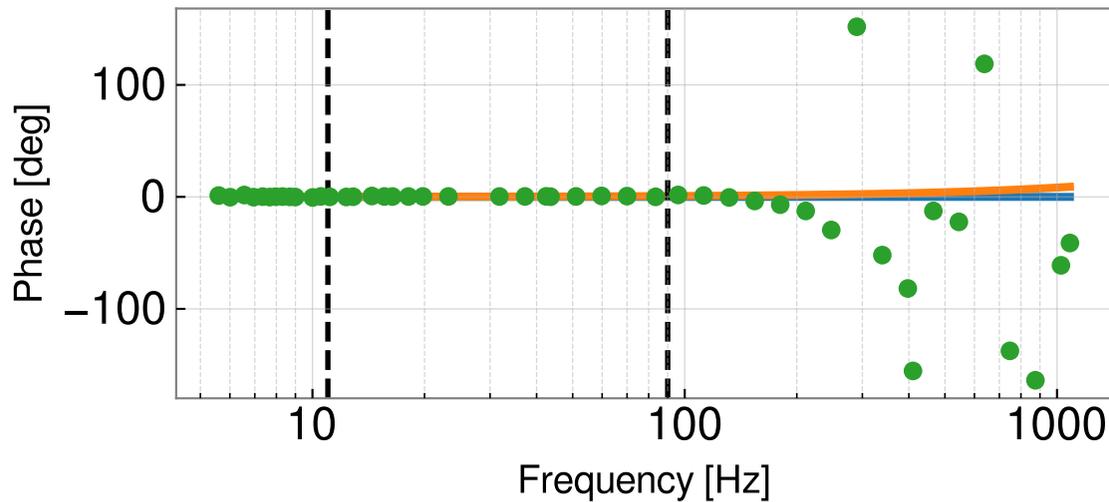
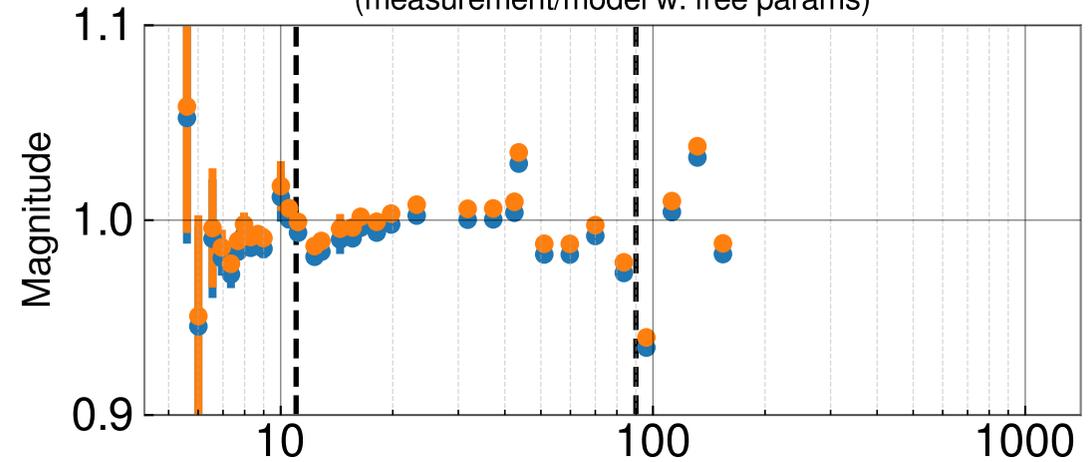
All fixed parameters drawn from /ligo/groups/cal/H1/reports/20230616T161654Z/pydarm_H1.ini



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

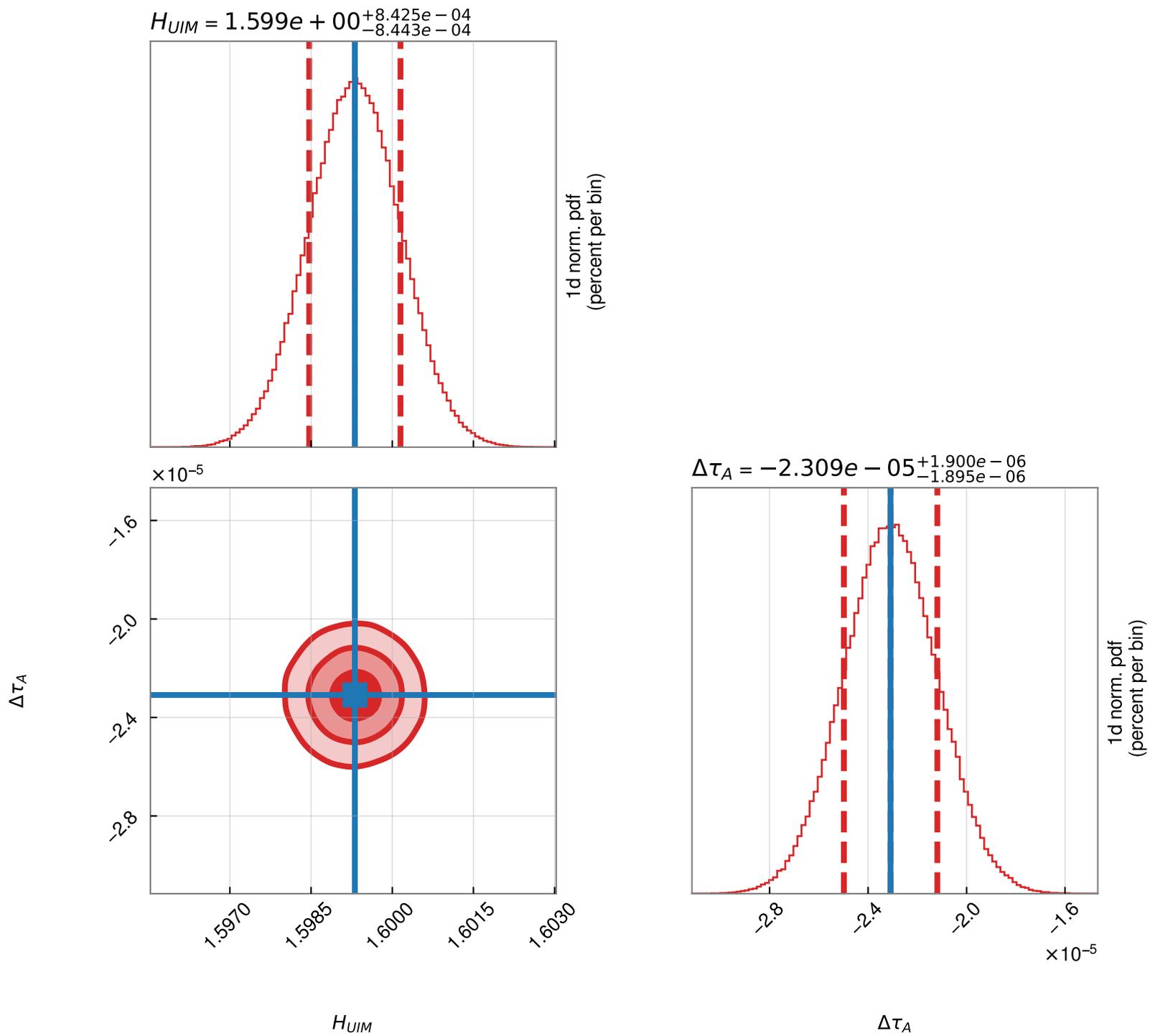
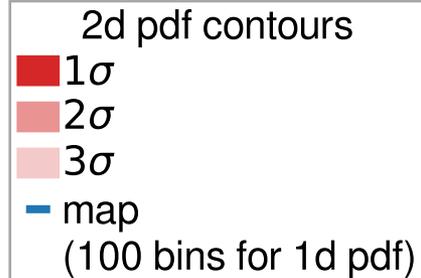


Actuation strength residuals
(measurement/model w. free params)



Parameter	(value +/-) value	+	-
Actuation Gain, Hau (N/A)	1.599	0.0008425 (0.05%)	0.0008443 (0.05%)
Residual time delay, tau_A (s)	-2.309e-05	1.9e-06 (-8.23%)	1.895e-06 (-8.21%)

20230517T154837Z EX L1 actuation MCMC corner plot

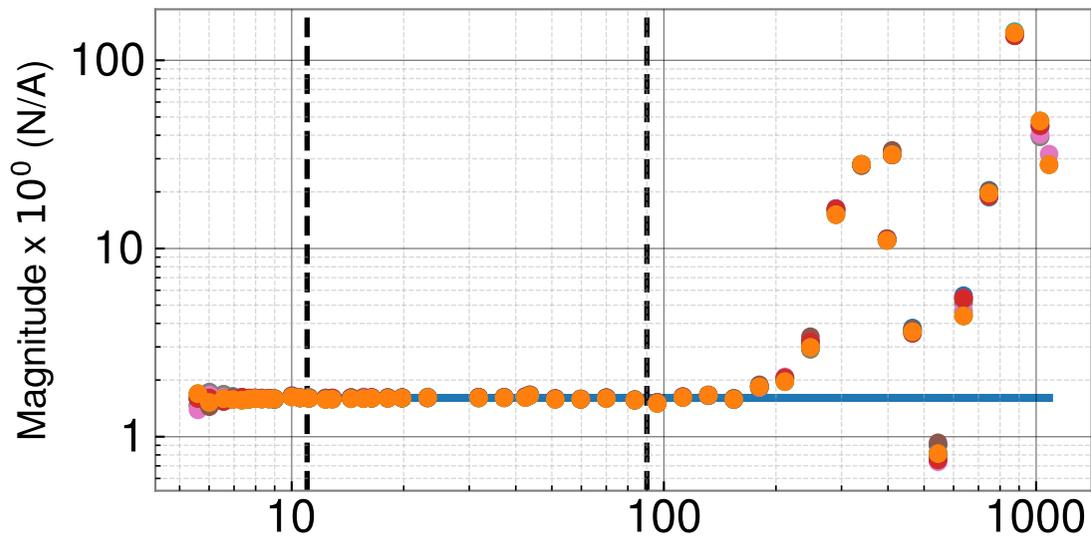


H1 SUSEX L1 actuation model history

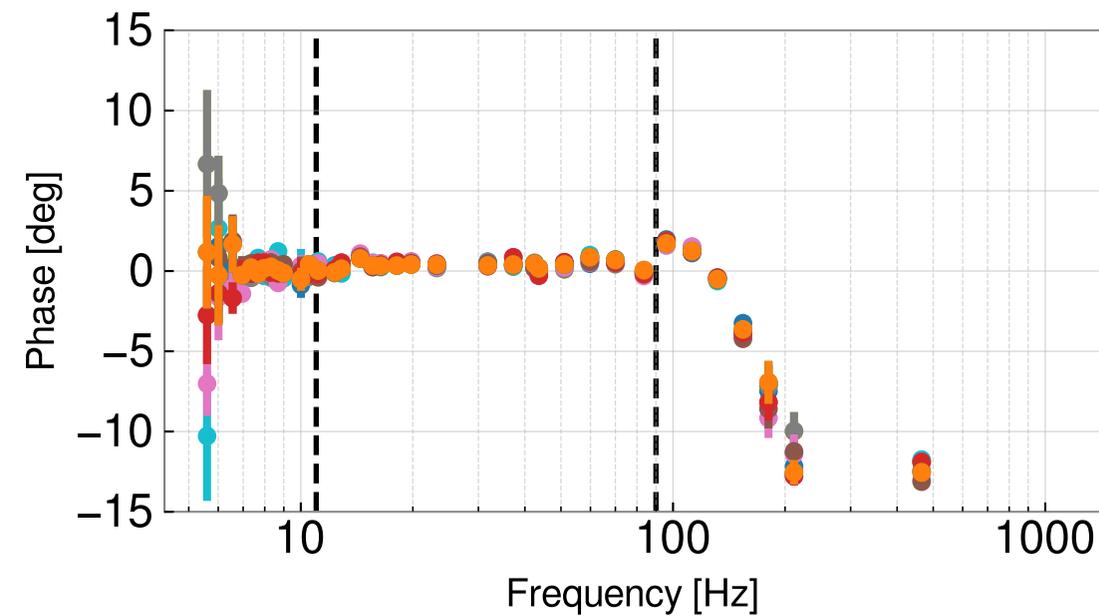
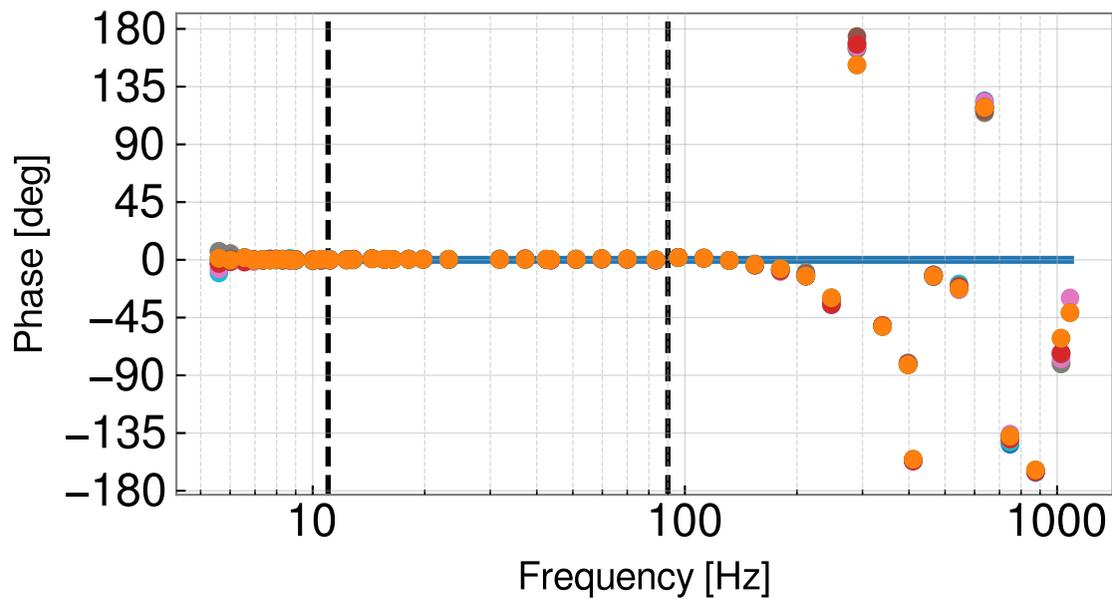
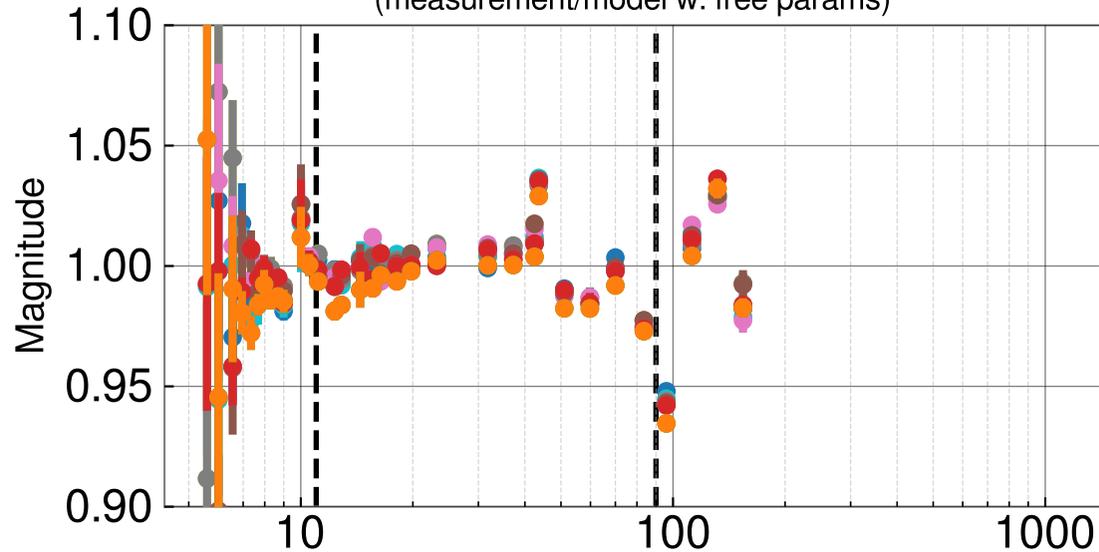
All fixed parameters drawn from `/ligo/groups/cal/H1/reports/20230616T161654Z/pydarm_H1.ini`



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



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

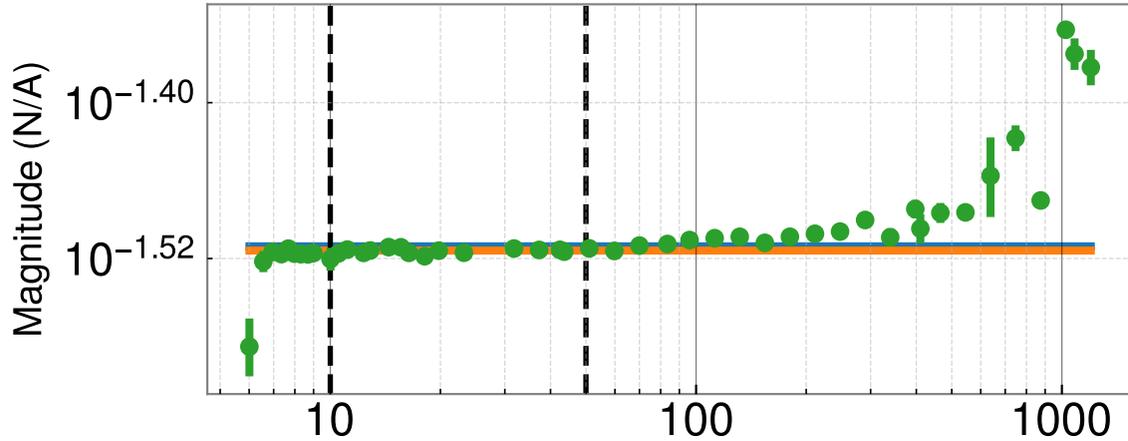


H1SUSEX L2 actuation model MCMC summary

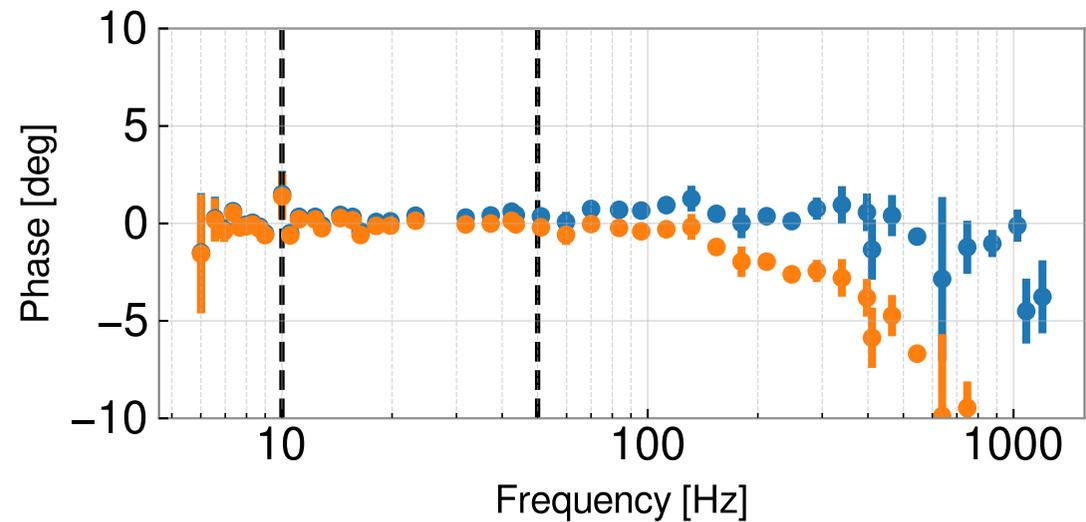
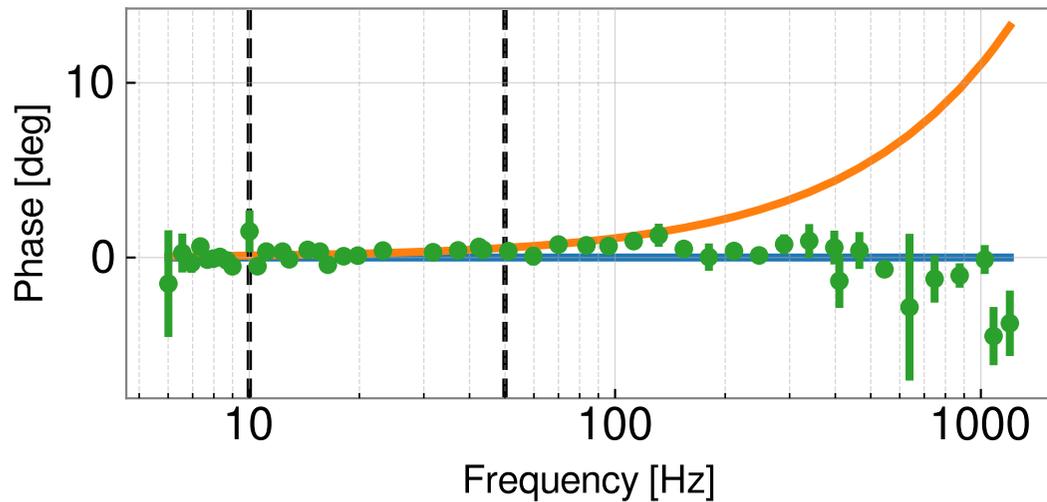
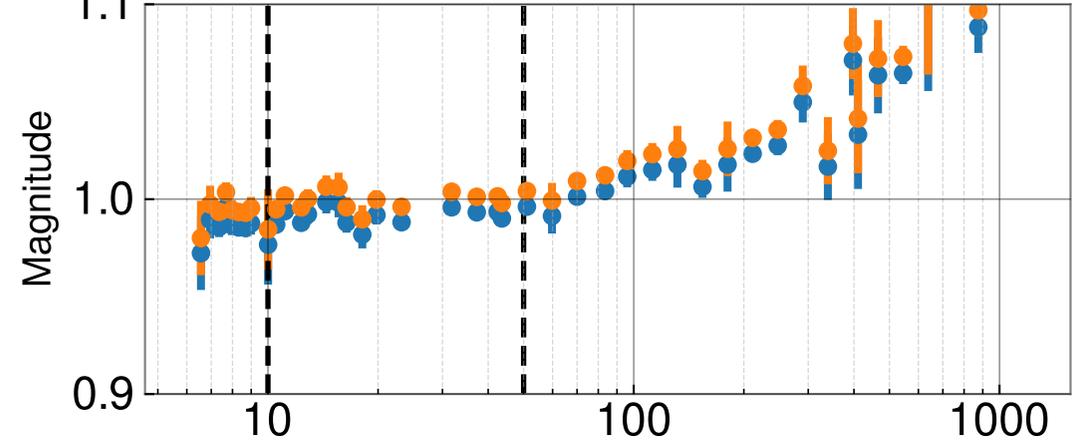
All fixed parameters drawn from /ligo/groups/cal/H1/reports/20230616T161654Z/pydarm_H1.ini



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

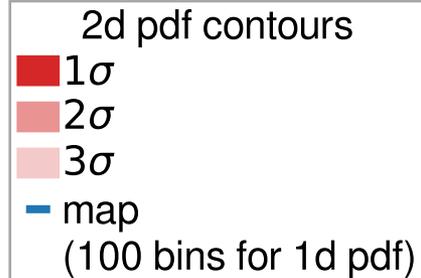


Actuation strength residuals
(measurement/model w. free params)

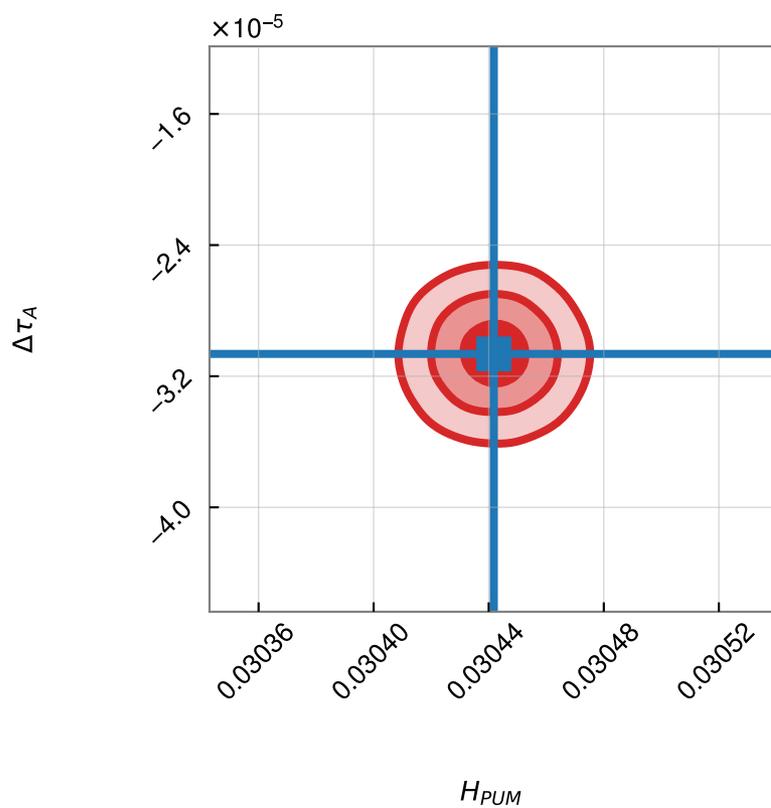
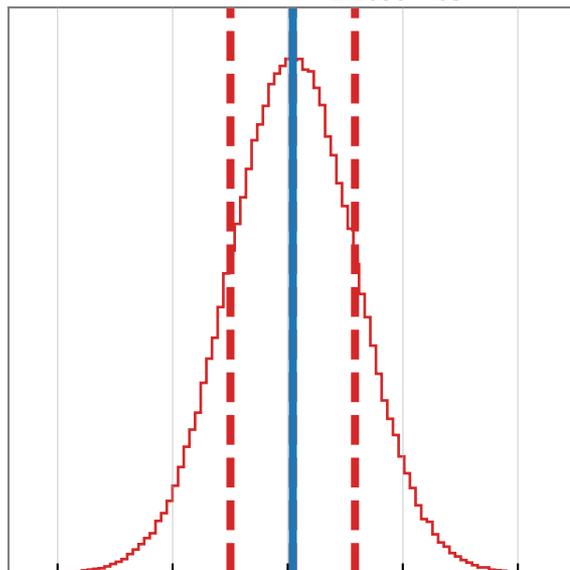


Parameter	(value +/-) value	+	-
Actuation Gain, Hap (N/A)	0.03044	2.161e-05 (0.07%)	2.169e-05 (0.07%)
Residual time delay, tau_A (s)	-3.064e-05	3.563e-06 (-11.63%)	3.583e-06 (-11.69%)

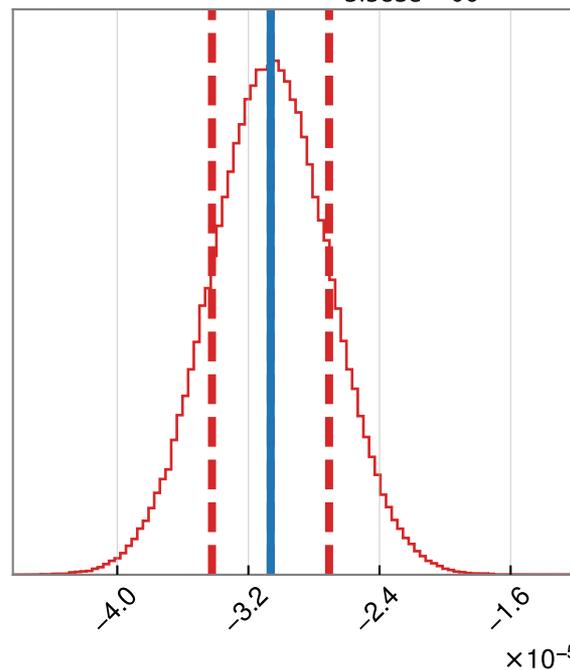
20230517T161131Z EX L2 actuation MCMC corner plot



$$H_{PUM} = 3.044e - 02^{+2.161e - 05}_{-2.169e - 05}$$



$$\Delta\tau_A = -3.064e - 05^{+3.563e - 06}_{-3.583e - 06}$$

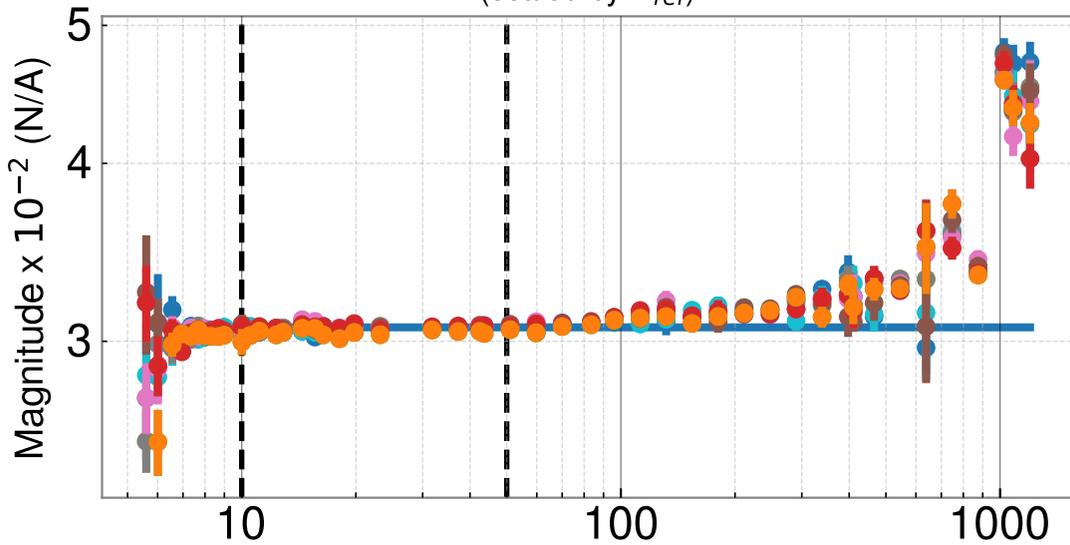


H1 SUSEX L2 actuation model history

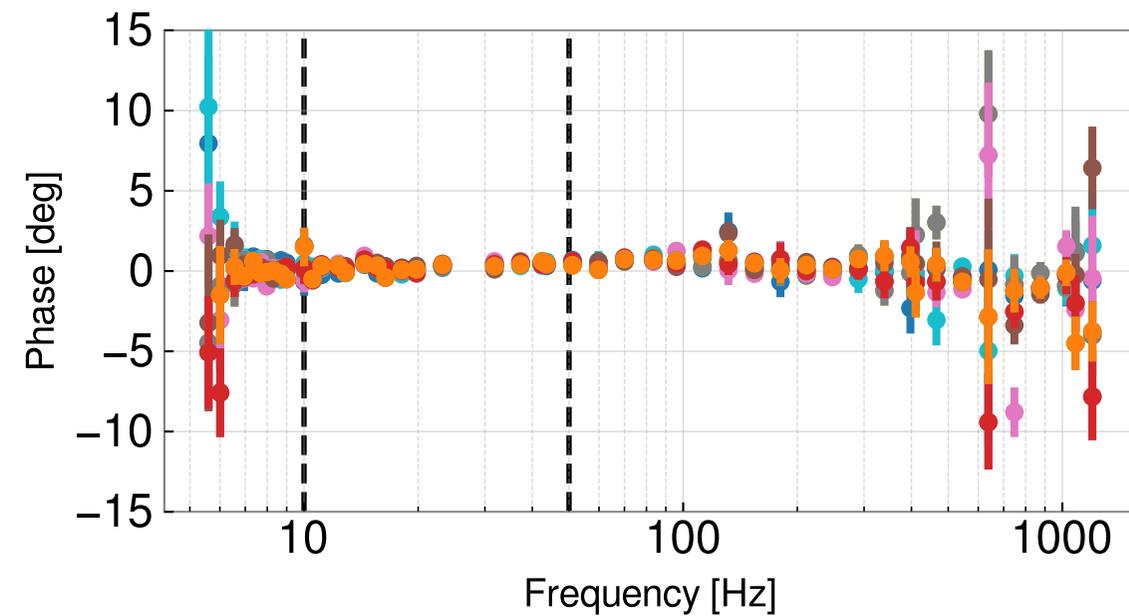
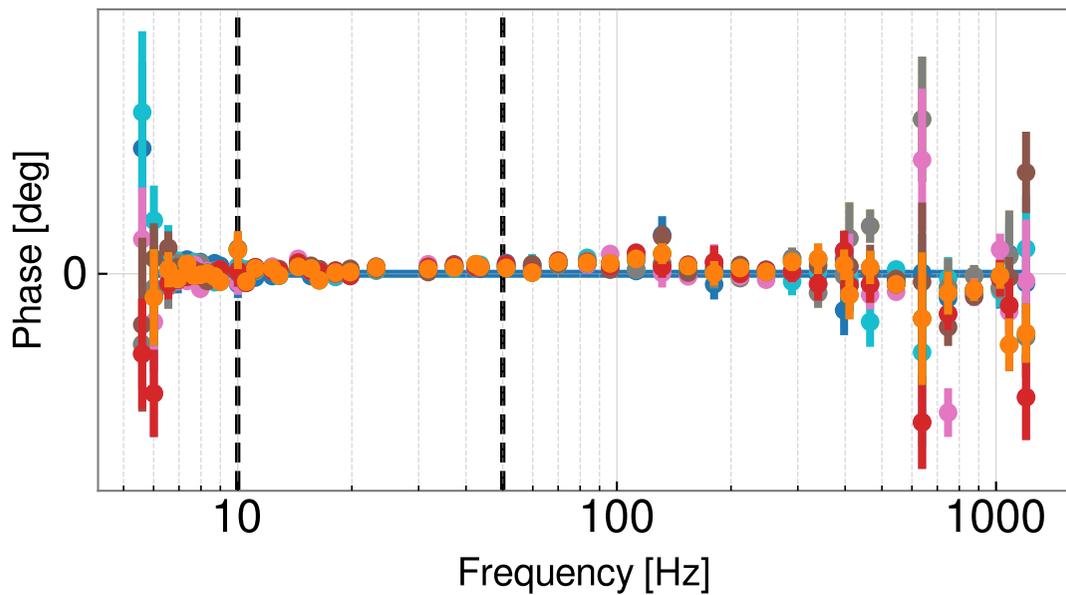
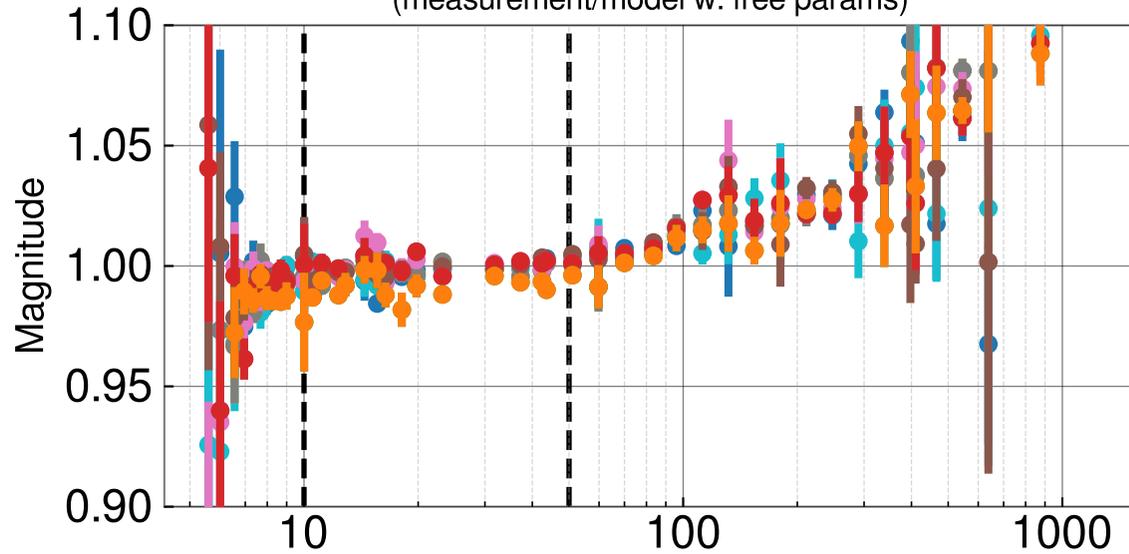
All fixed parameters drawn from `/ligo/groups/cal/H1/reports/20230616T161654Z/pydarm_H1.ini`



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



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

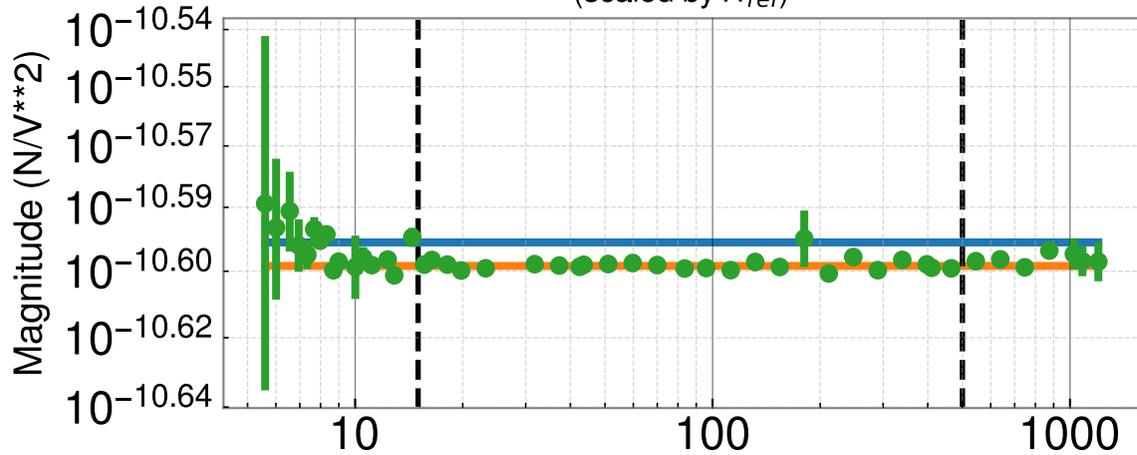


H1SUSEX L3 actuation model MCMC summary

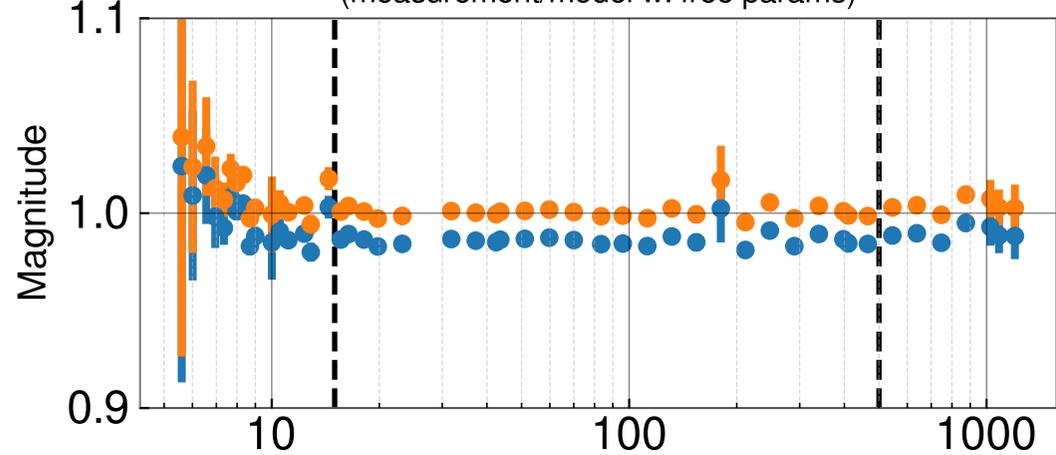
All fixed parameters drawn from /ligo/groups/cal/H1/reports/20230616T161654Z/pydarm_H1.ini



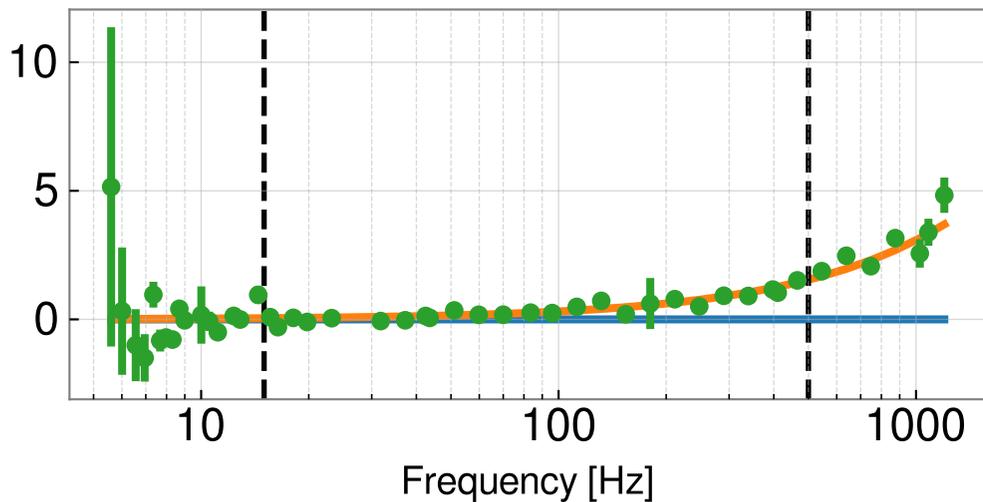
Actuation strength transfer functions
(scaled by H_{ref})



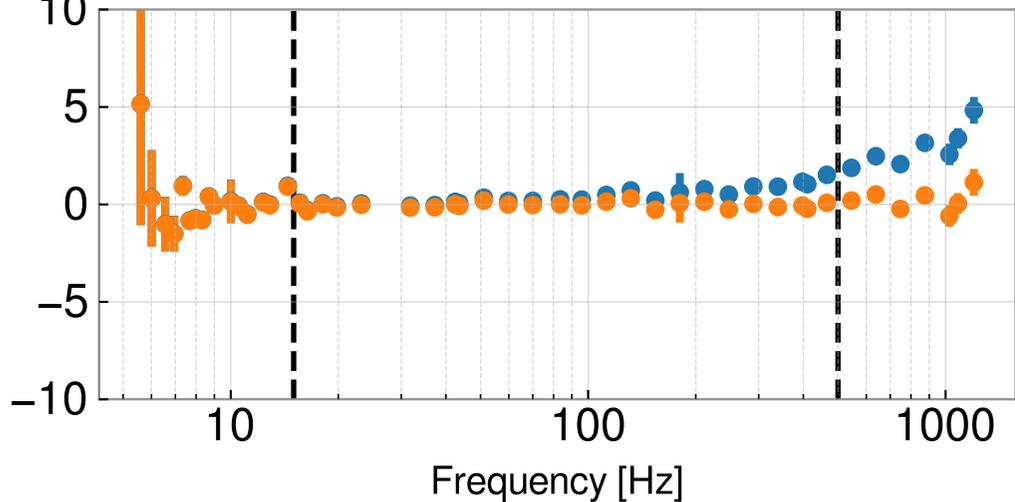
Actuation strength residuals
(measurement/model w. free params)



Phase [deg]

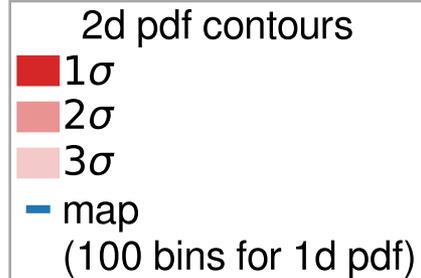


Phase [deg]

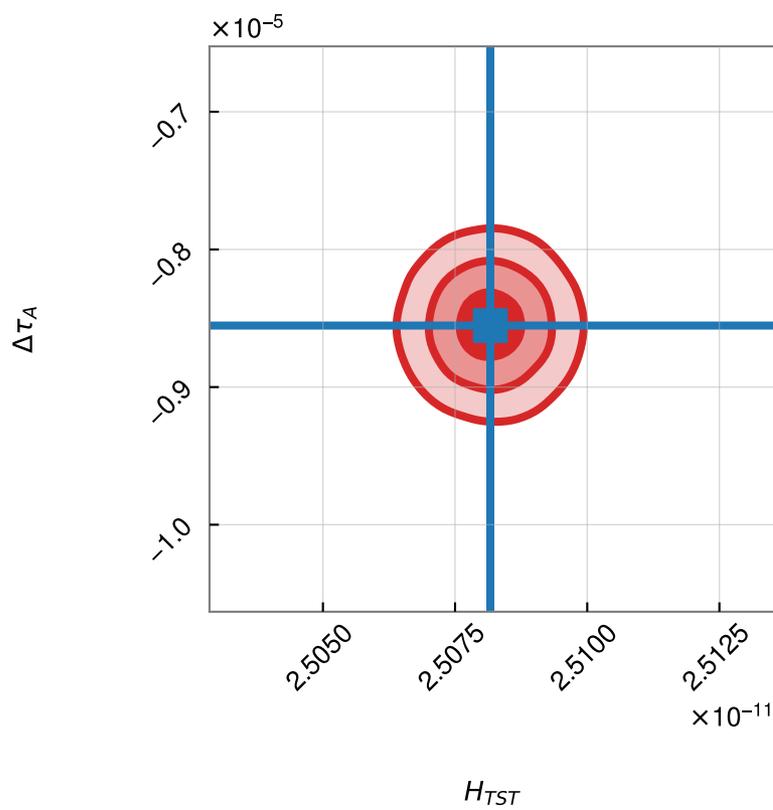
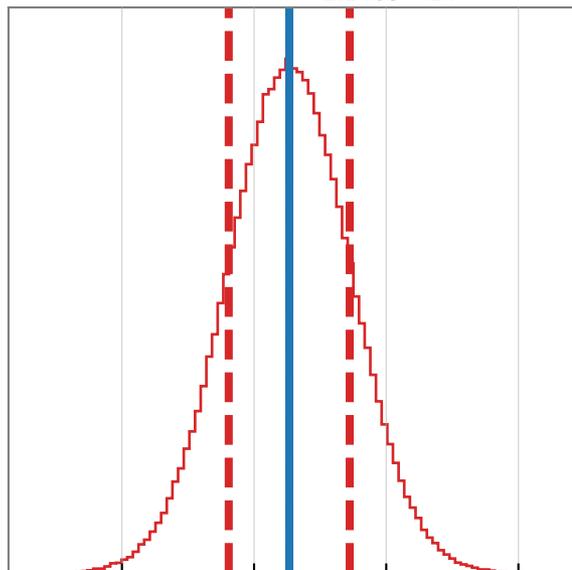


Parameter	(value +/-) value	+	-
Actuation Gain, Hat (N/V^{**2})	2.508e-11	1.142e-14 (0.05%)	1.146e-14 (0.05%)
Residual time delay, tau_A (s)	-8.553e-06	4.601e-07 (-5.38%)	4.588e-07 (-5.36%)

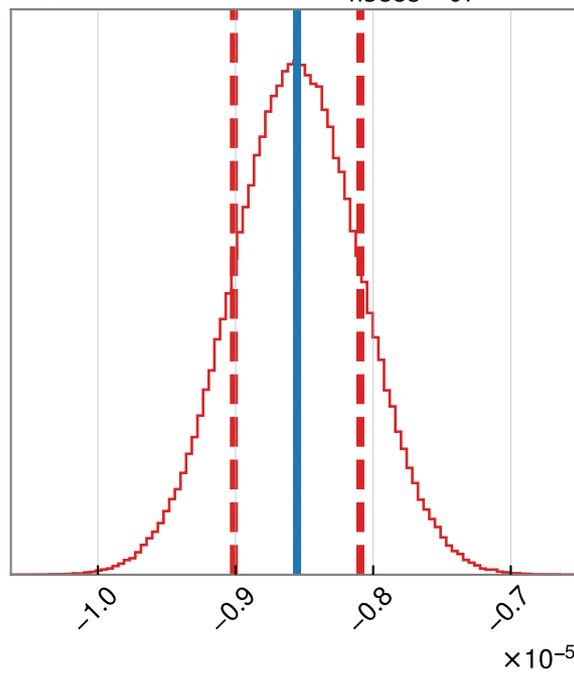
20230517T163635Z EX L3 actuation MCMC corner plot



$$H_{TST} = 2.508e - 11^{+1.142e - 14}_{-1.146e - 14}$$



$$\Delta\tau_A = -8.553e - 06^{+4.601e - 07}_{-4.588e - 07}$$

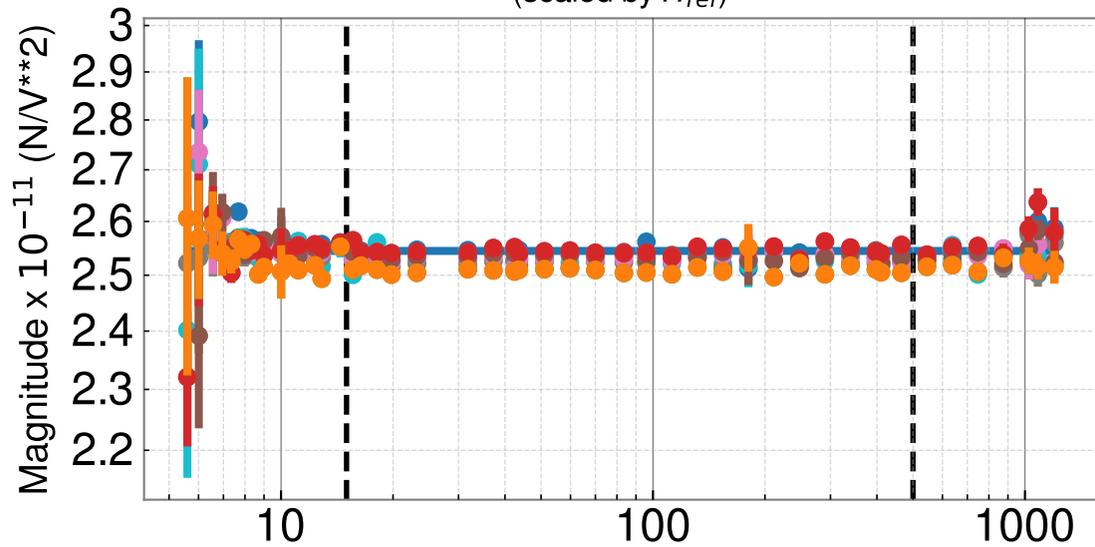


H1 SUSEX L3 actuation model history

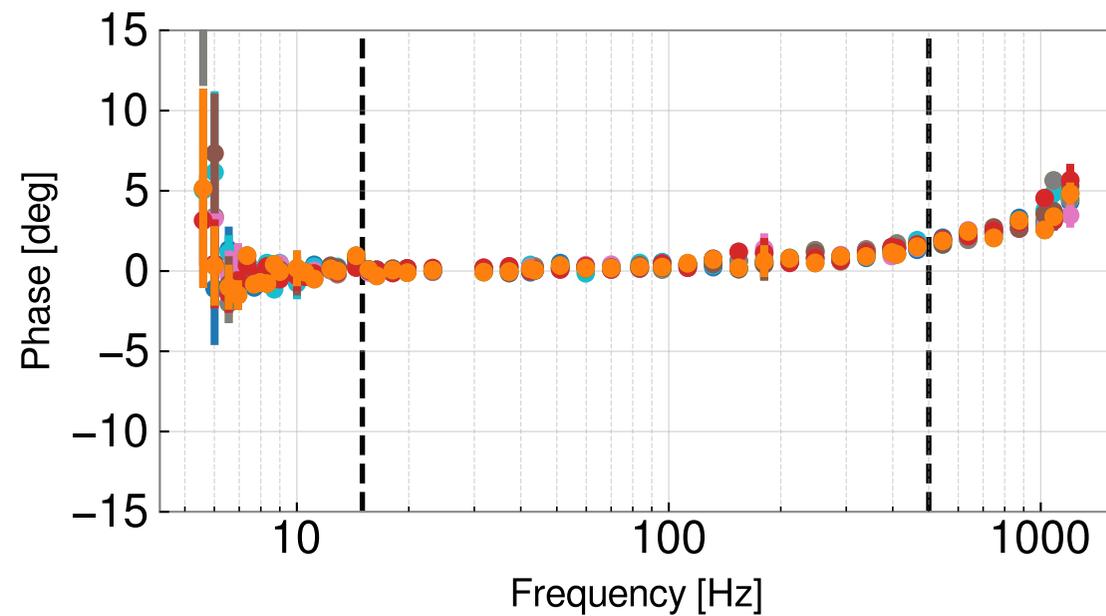
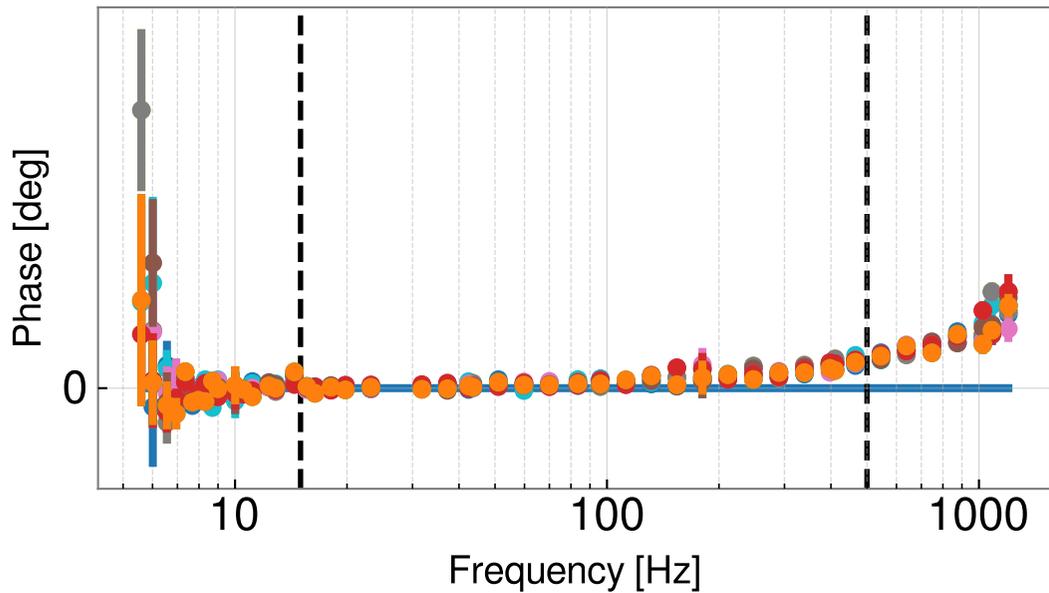
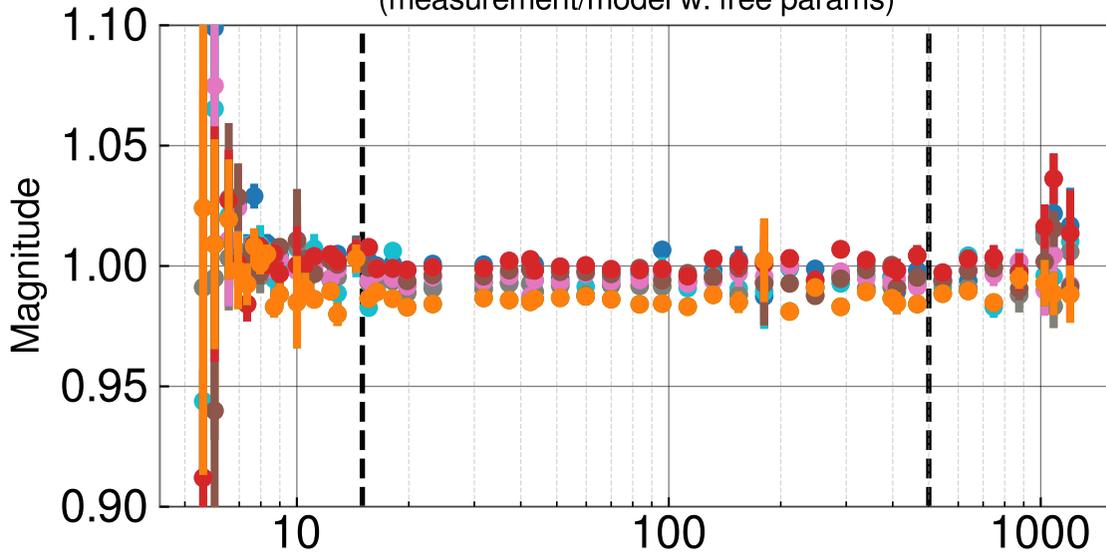
All fixed parameters drawn from `/ligo/groups/cal/H1/reports/20230616T161654Z/pydarm_H1.ini`



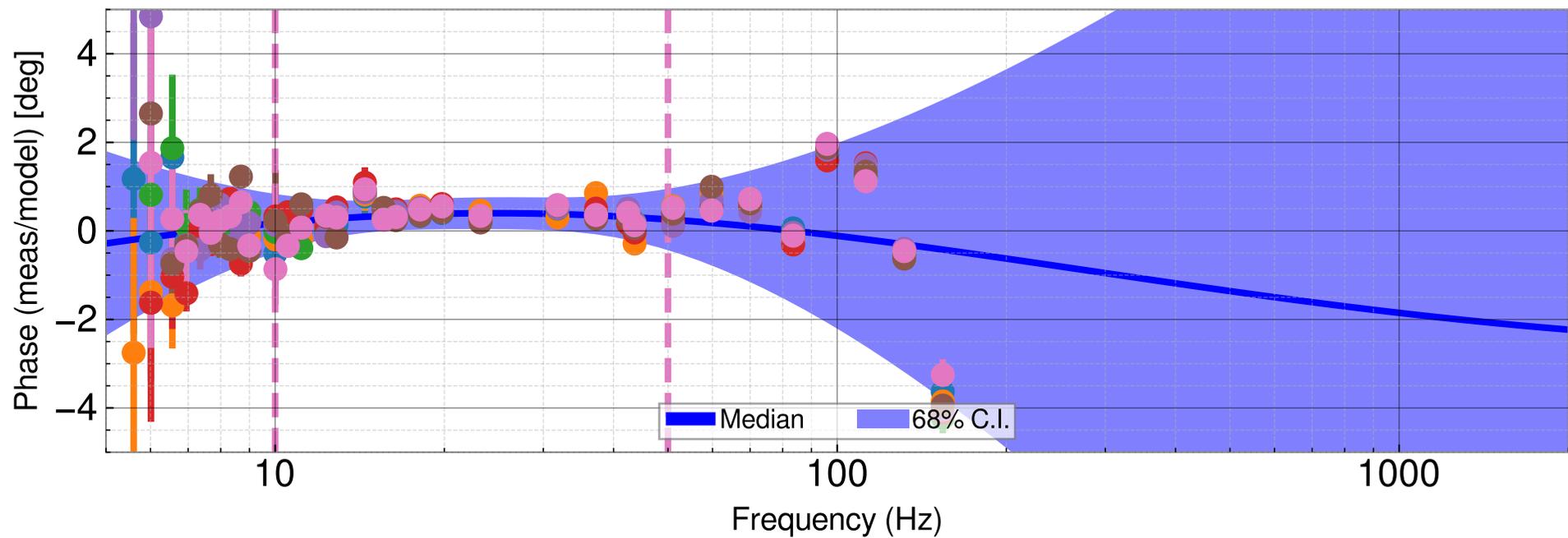
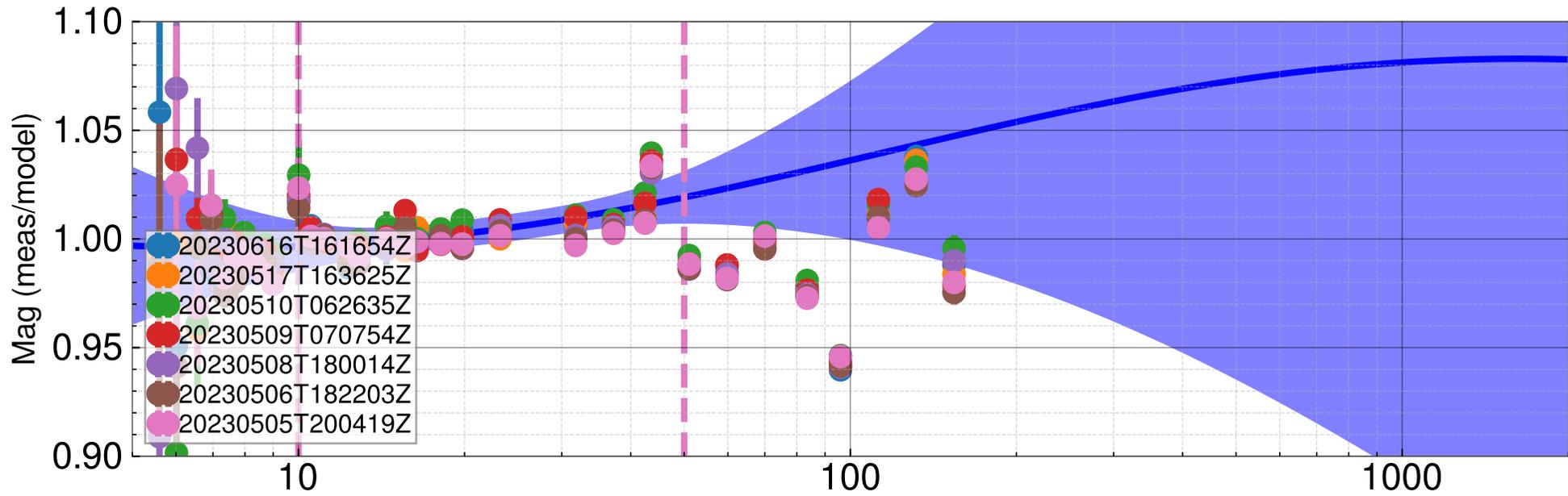
Actuation strength transfer functions
(scaled by H_{ref})



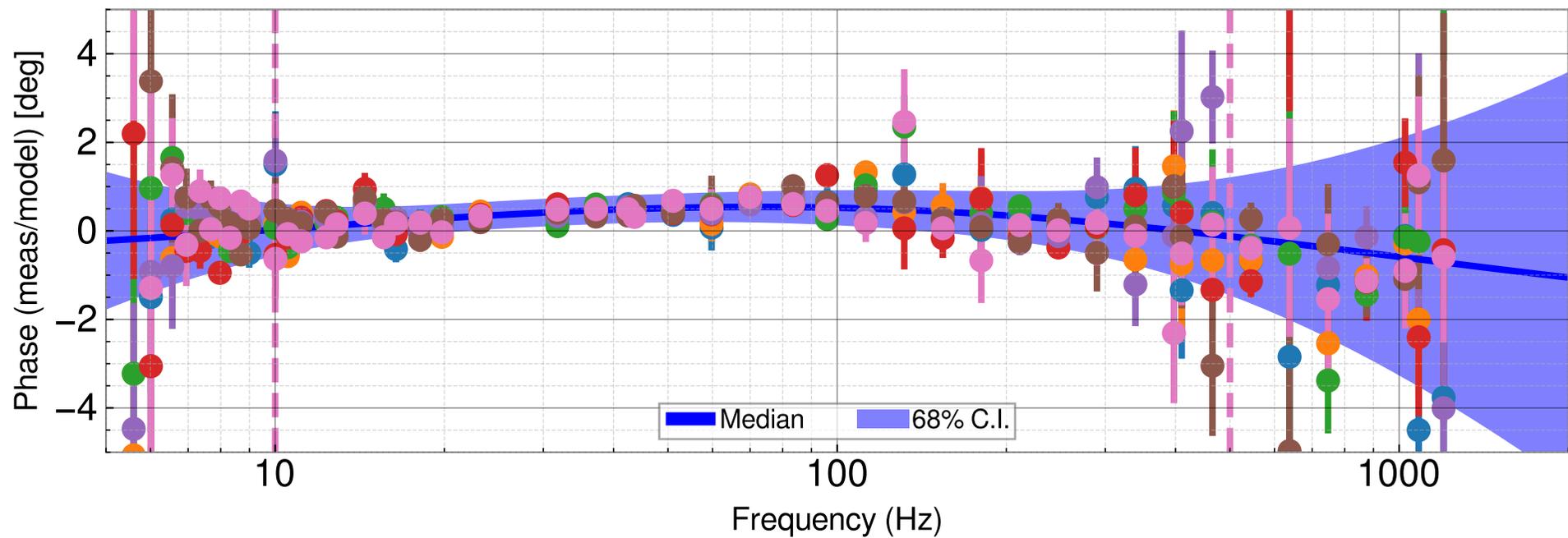
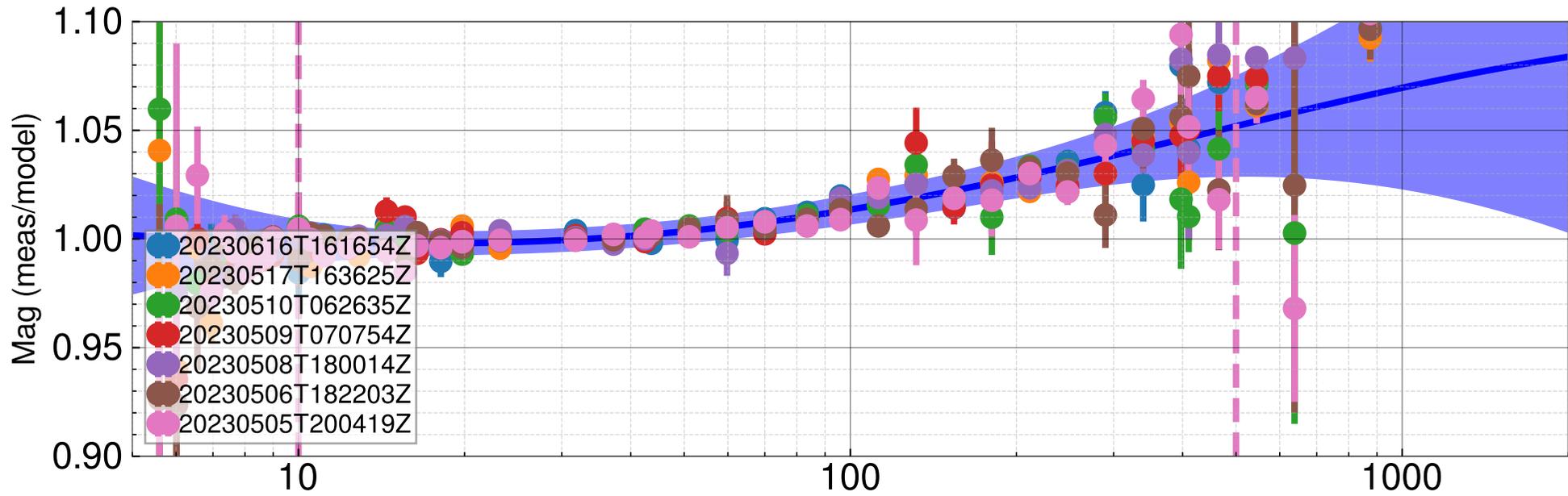
Actuation strength residuals
(measurement/model w. free params)



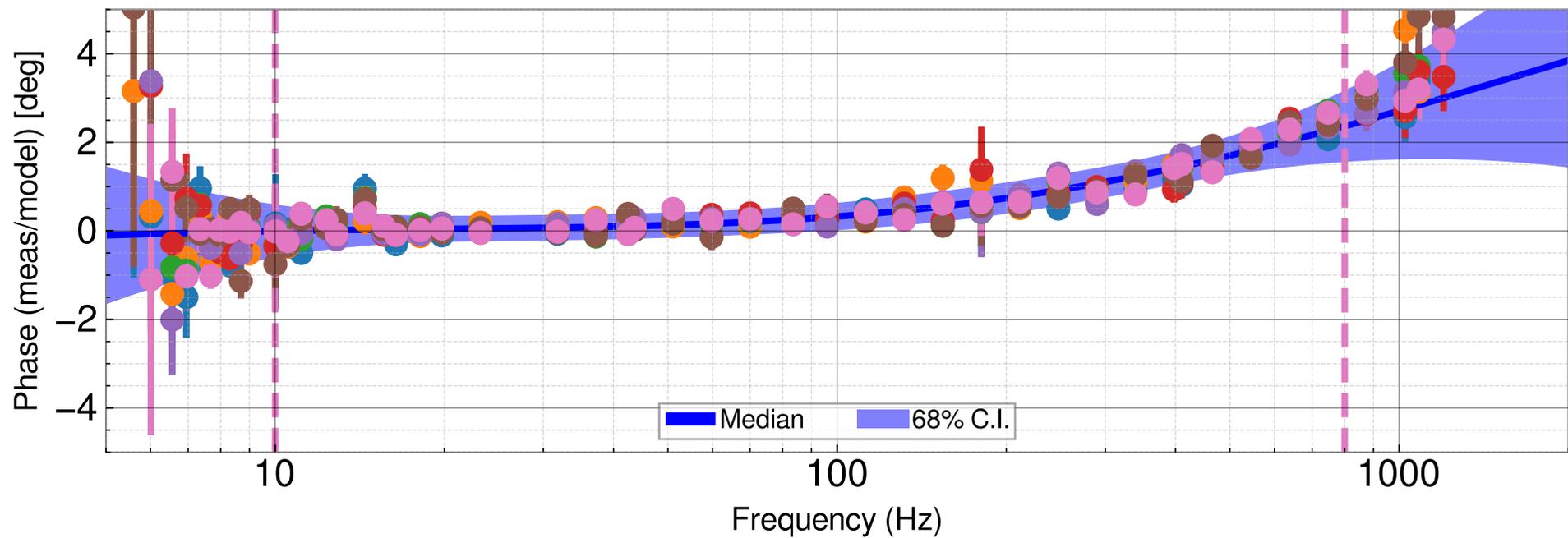
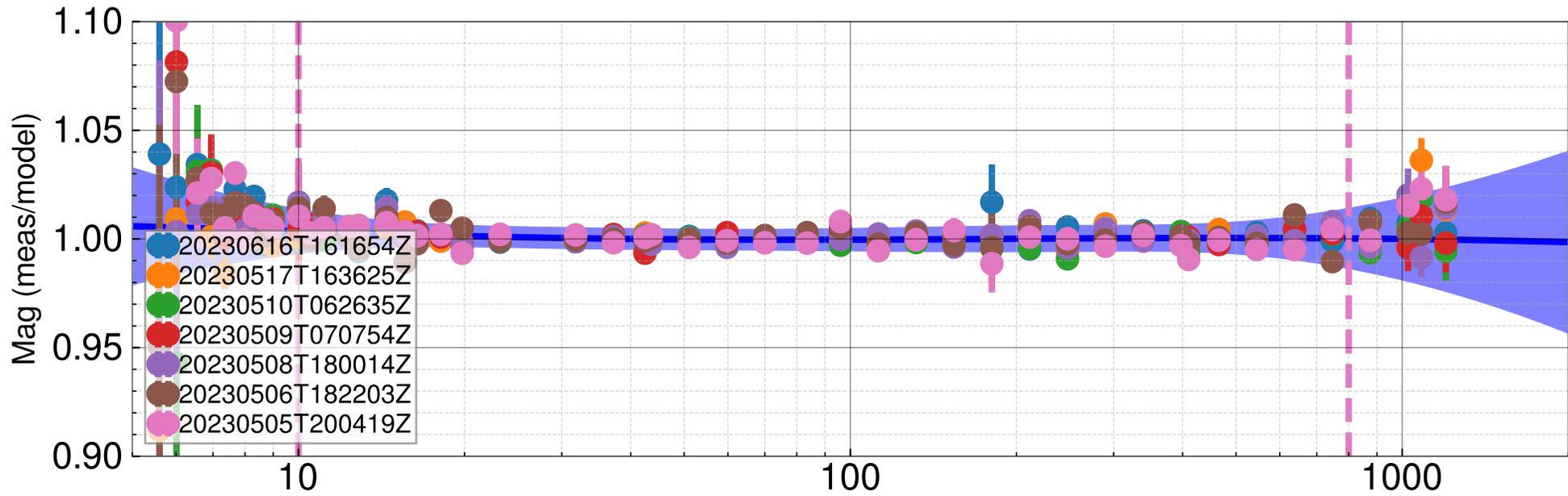
Actuation/L1/EX GPR



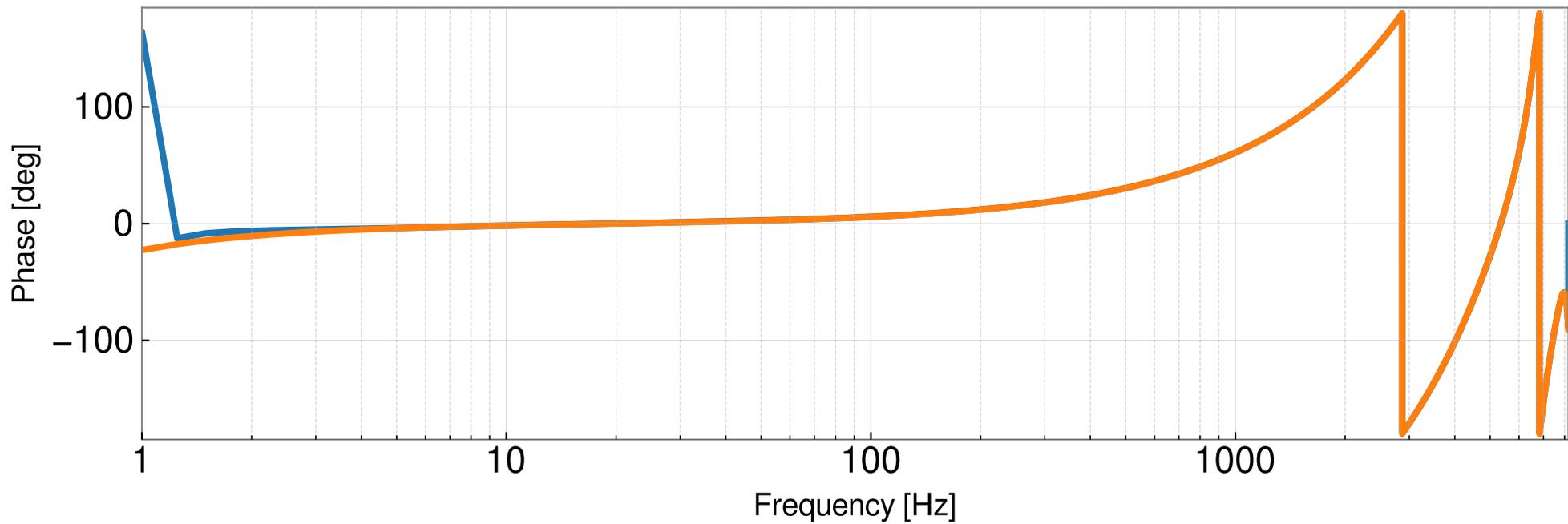
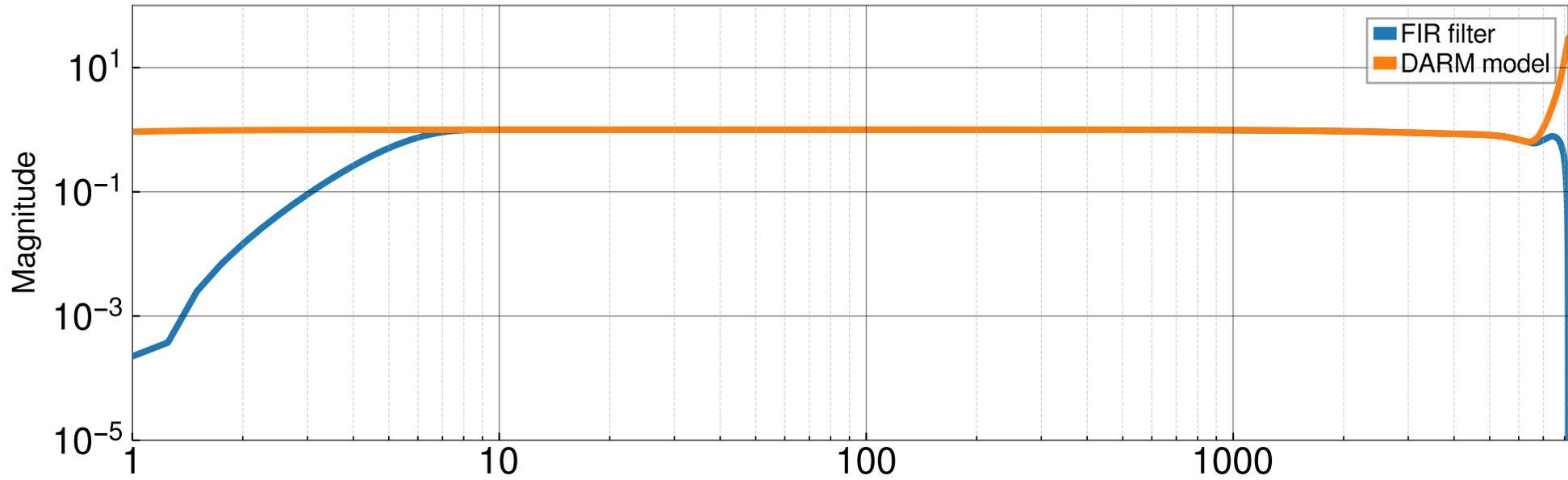
Actuation/L2/EX GPR



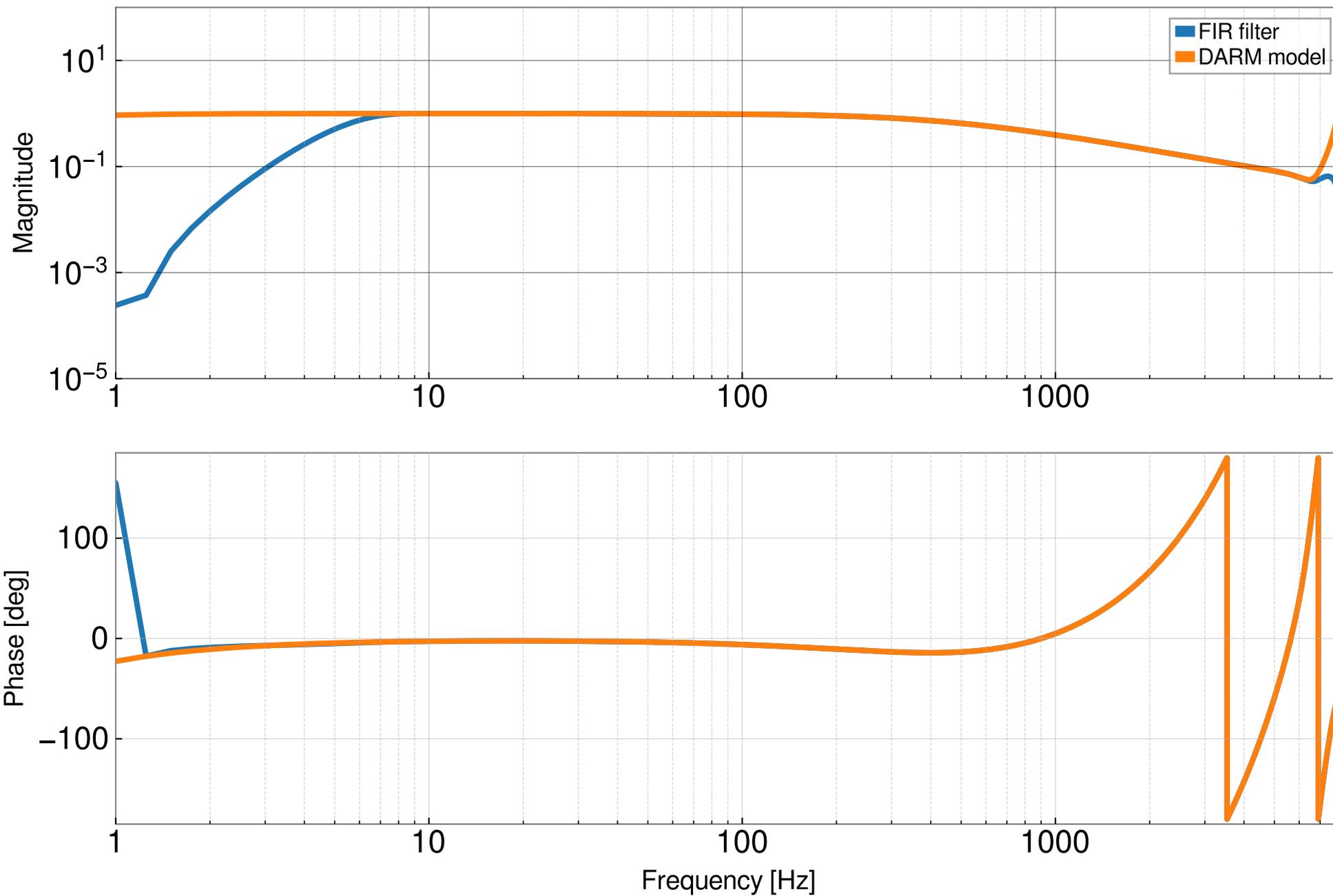
Actuation/L3/EX GPR



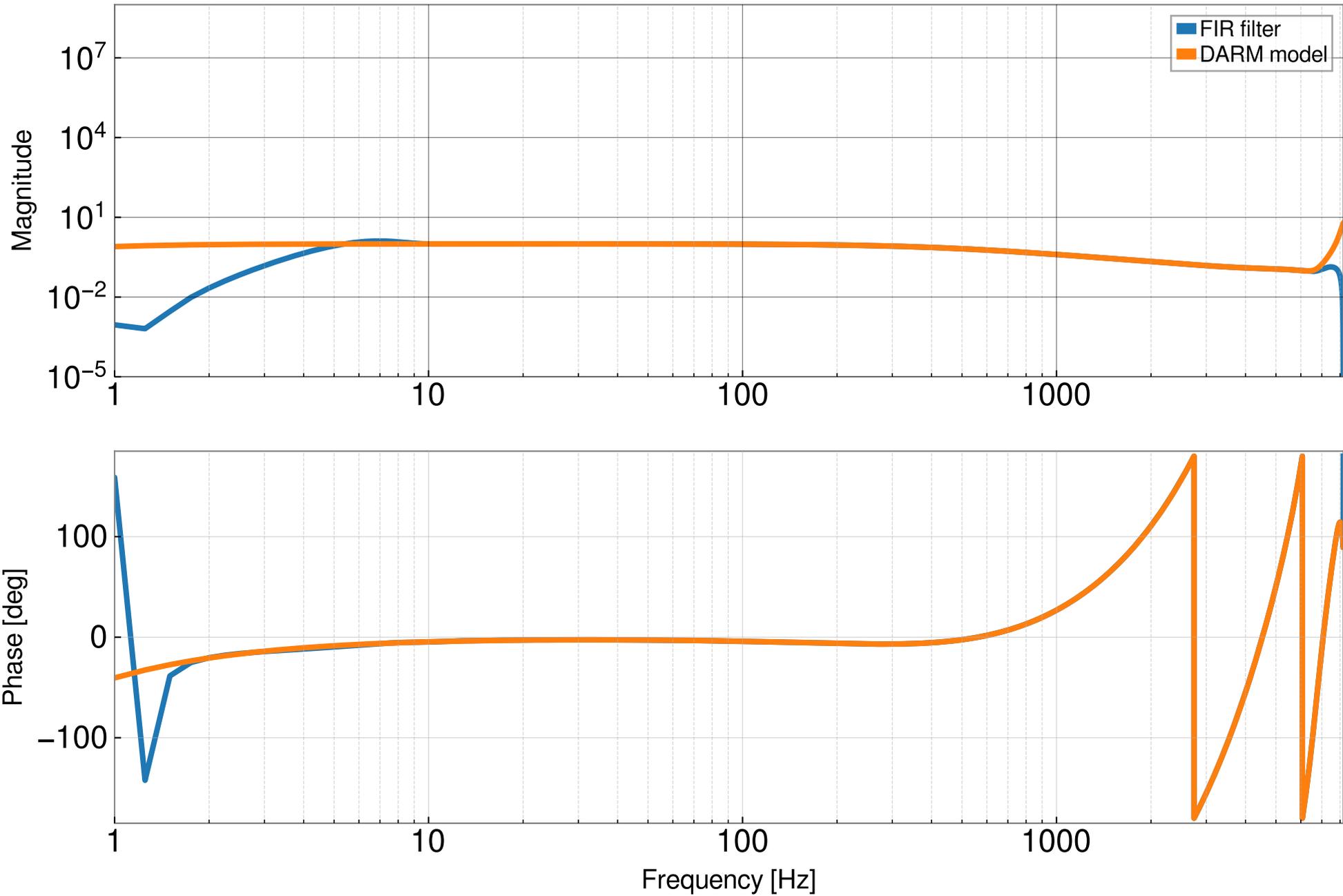
Residual corrections comparison (gstlal_compute_strain_C00_filters_H1)



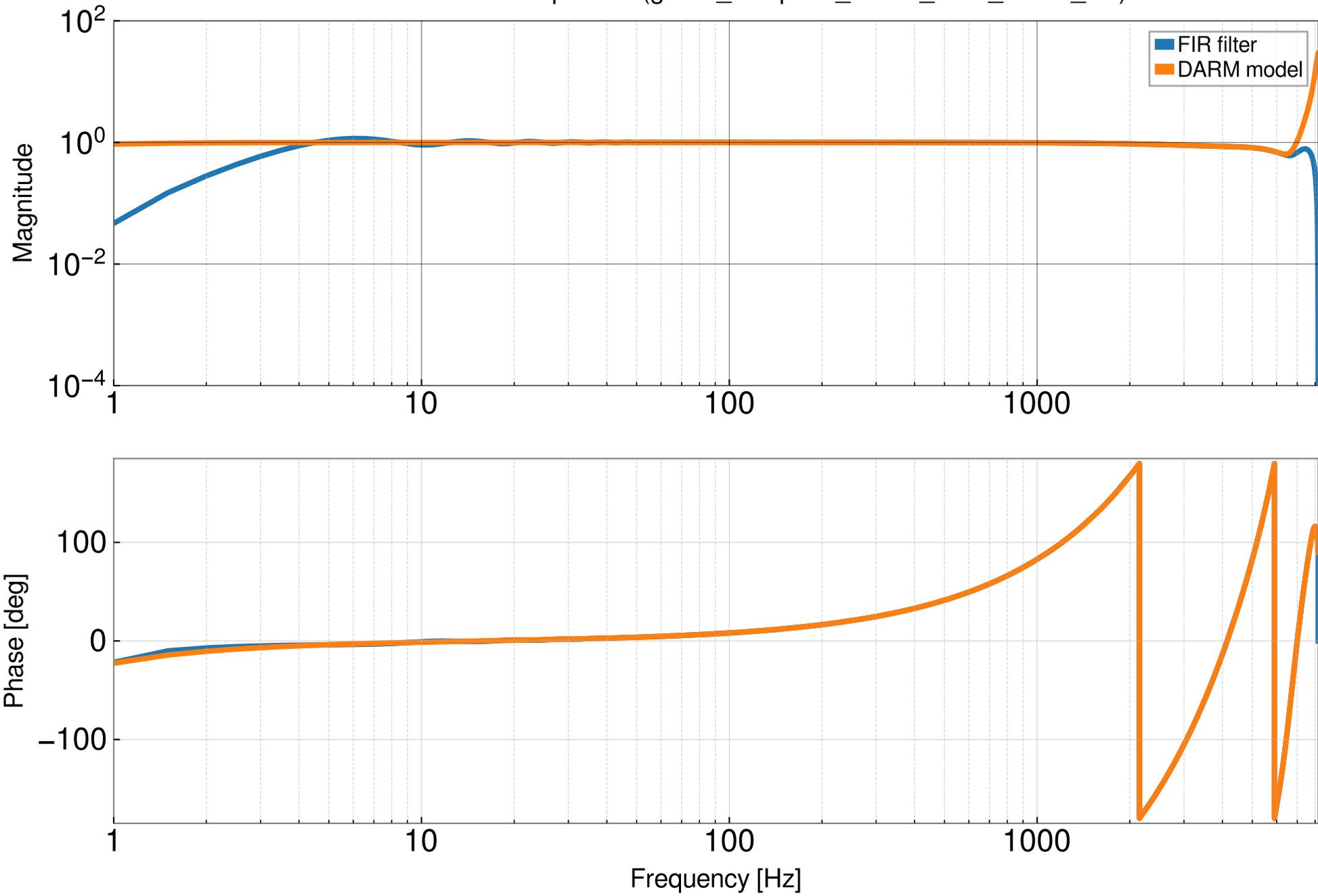
Res Corr No CC Pole comparison (gstlal_compute_strain_C00_filters_H1)



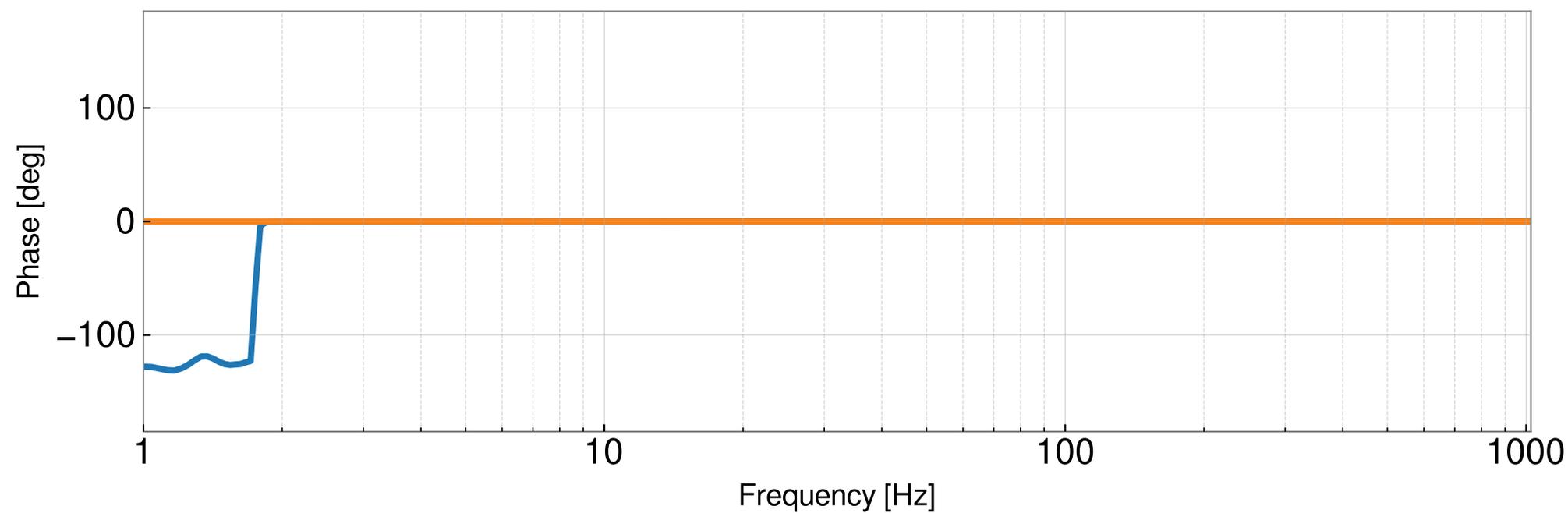
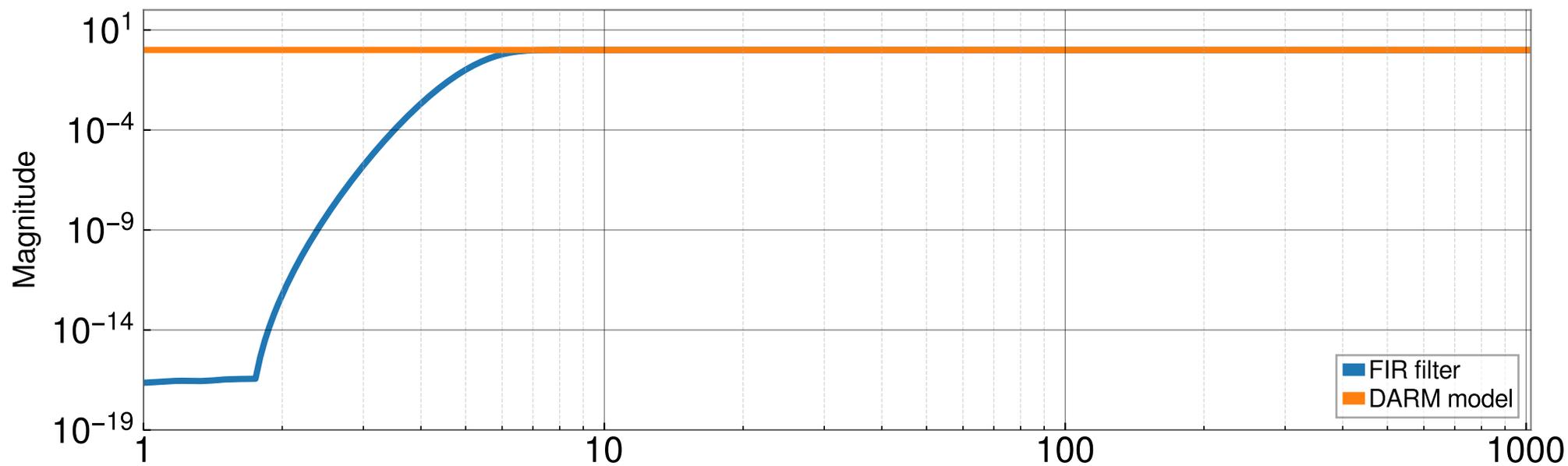
Res Corr No Pole comparison (gstlal_compute_strain_C00_filters_H1)



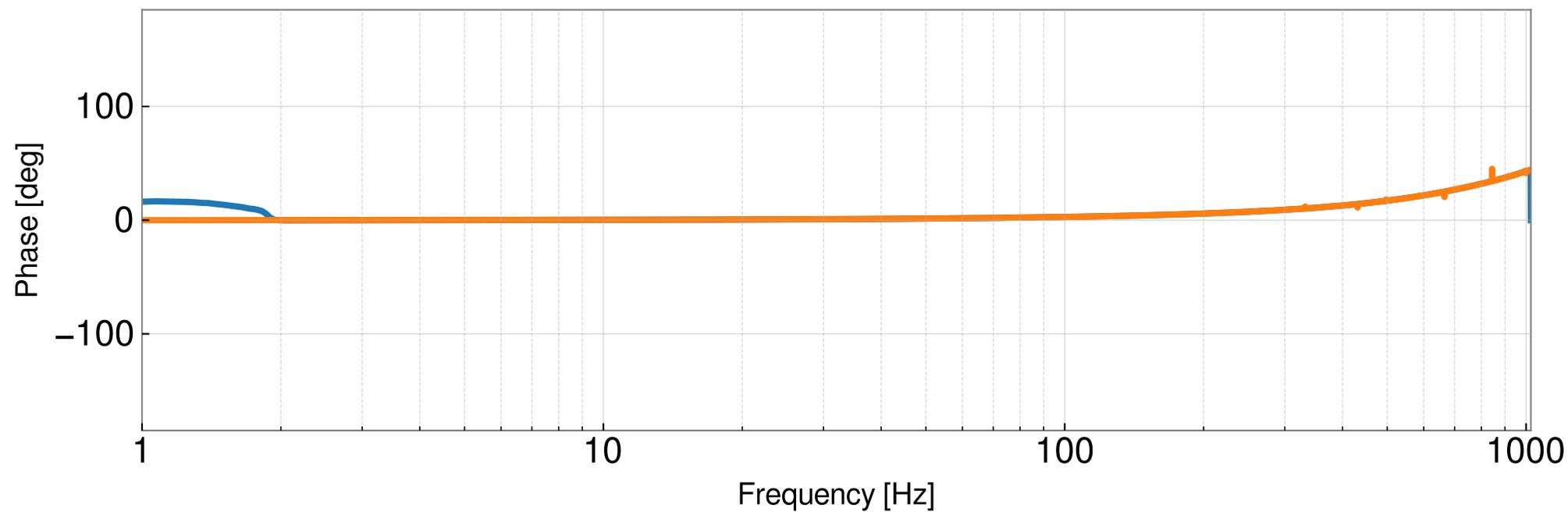
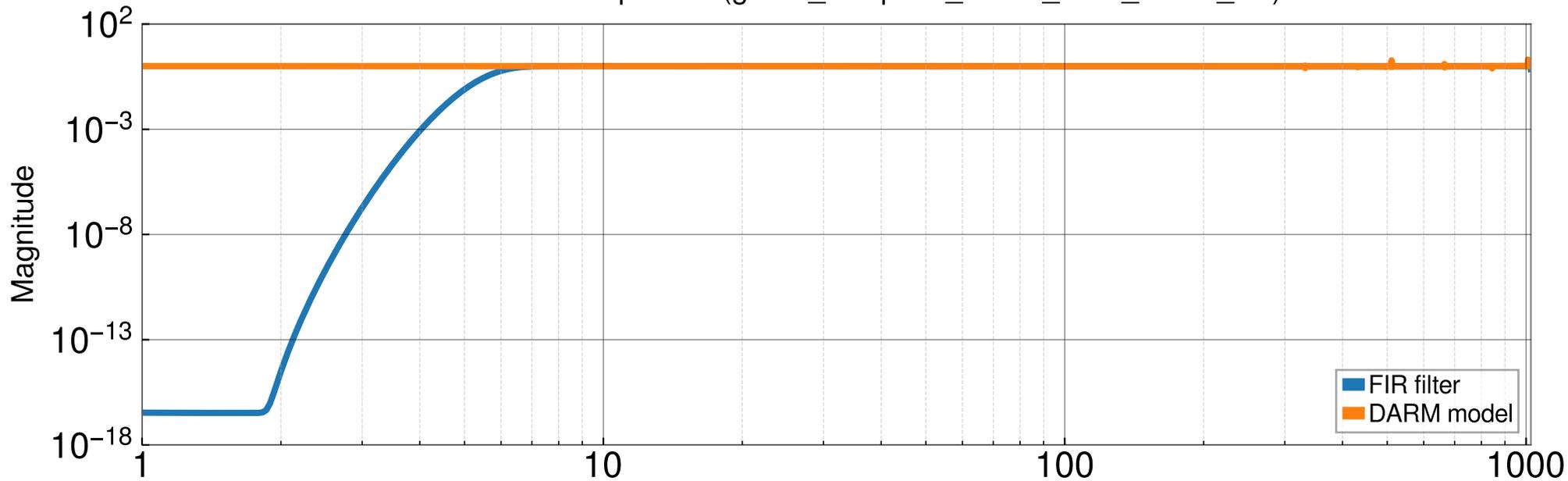
Nonsens corrections comparison (gstlal_compute_strain_C00_filters_H1)



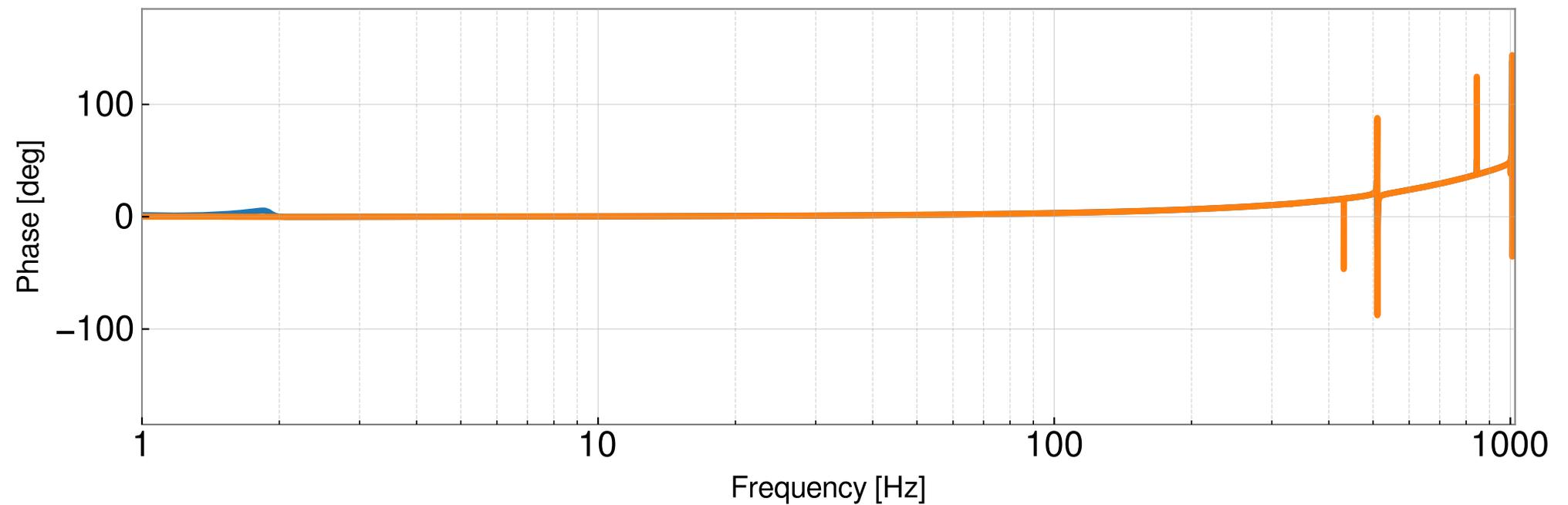
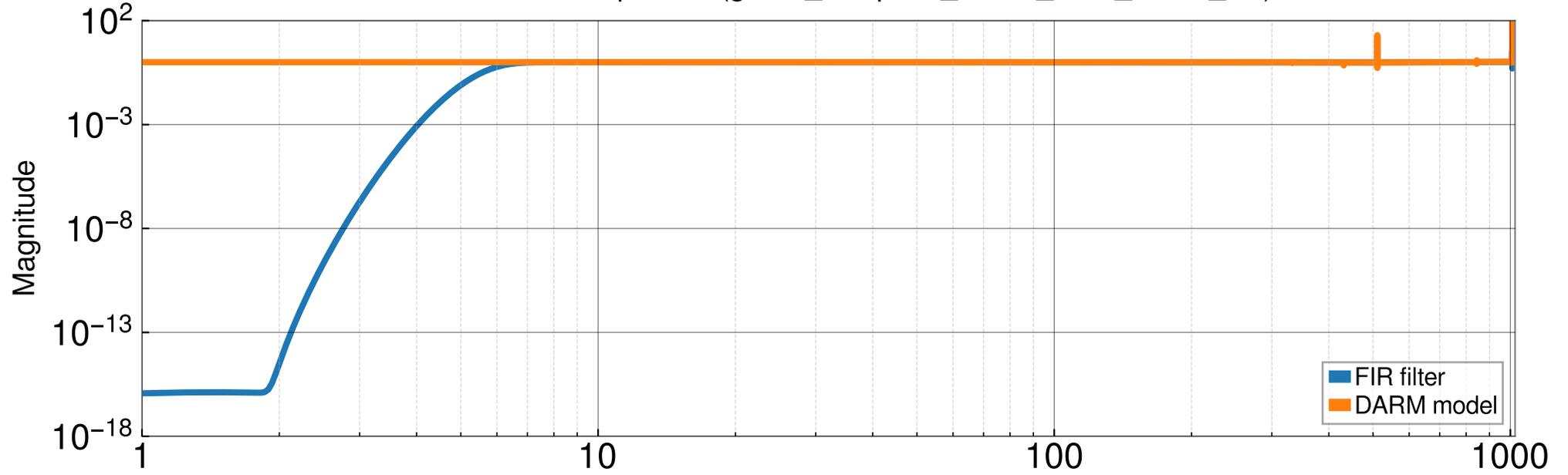
Residual corrections highpass comparison (gstlal_compute_strain_C00_filters_H1)



TST corrections comparison (gstlal_compute_strain_C00_filters_H1)



PUM corrections comparison (gstlal_compute_strain_C00_filters_H1)



UIM corrections comparison (gstlal_compute_strain_C00_filters_H1)

