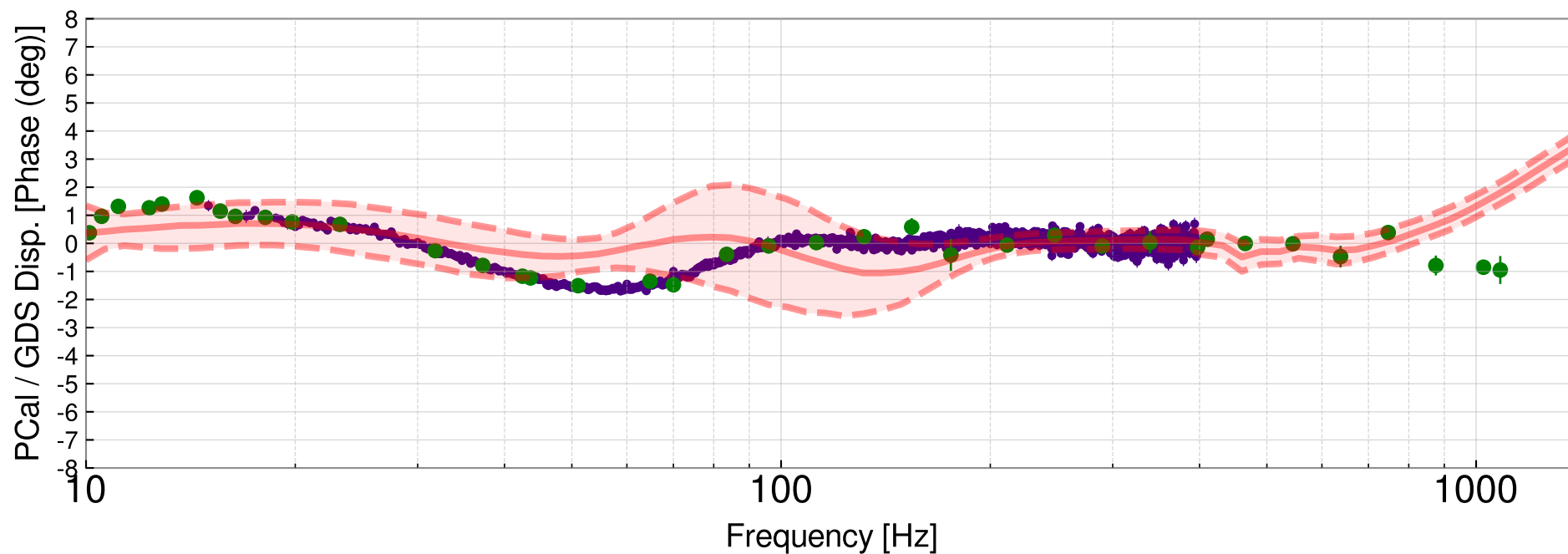
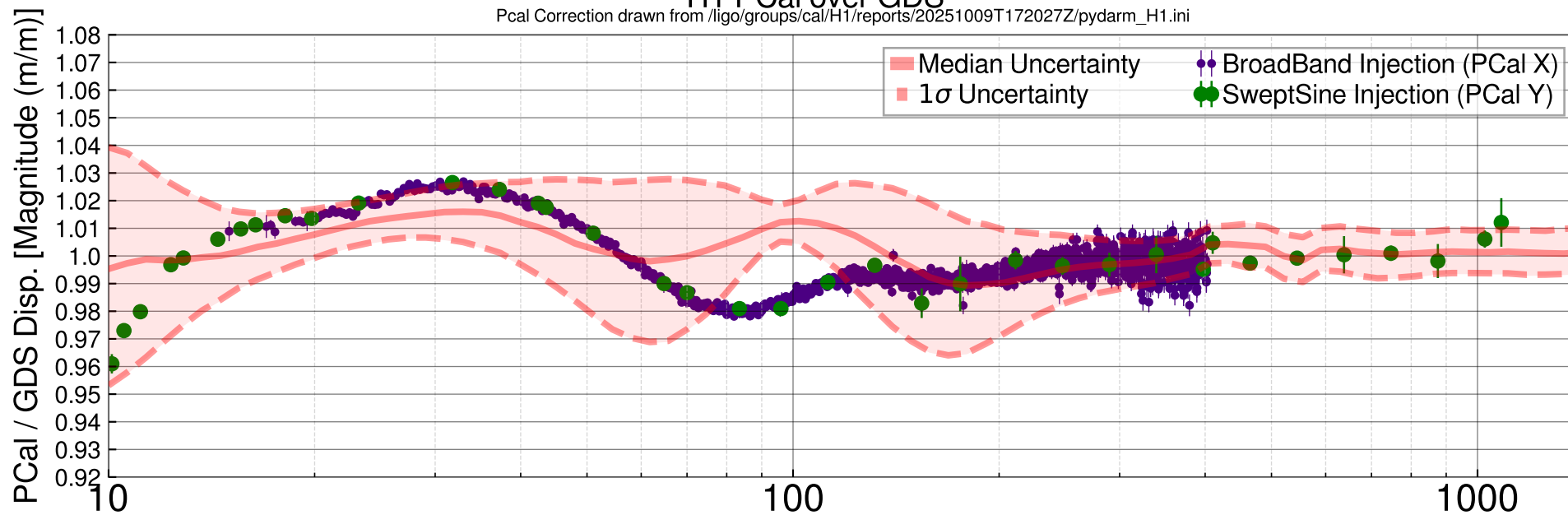


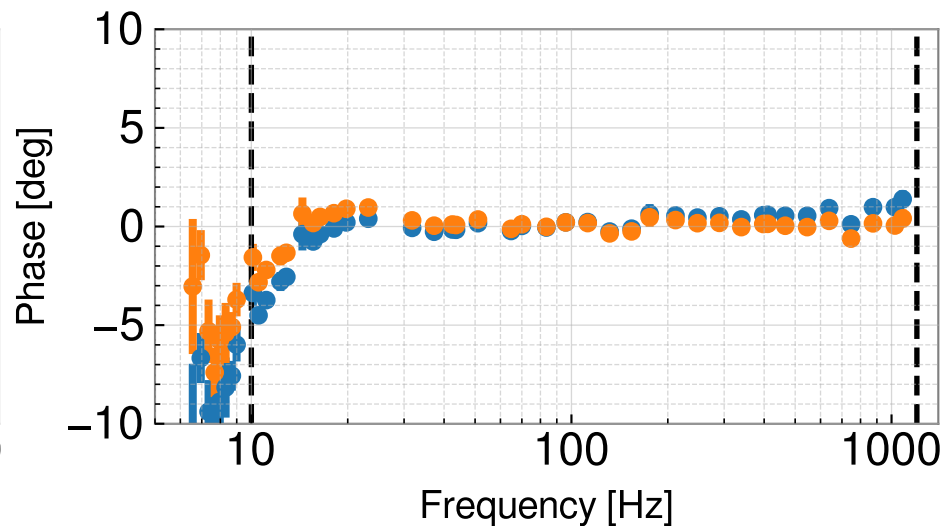
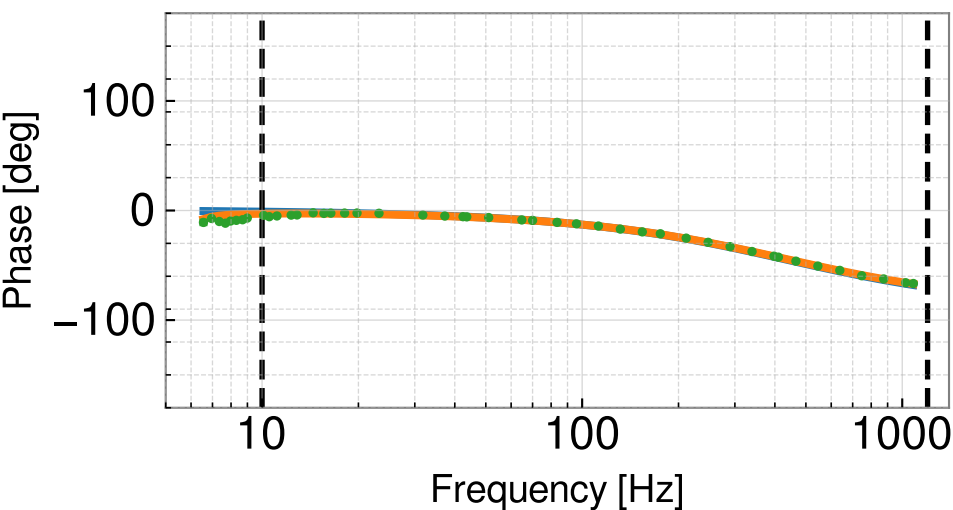
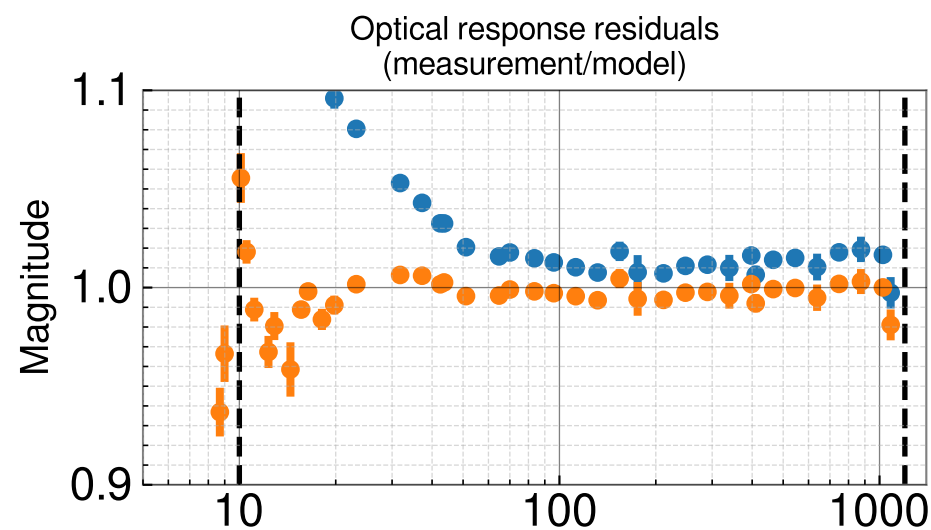
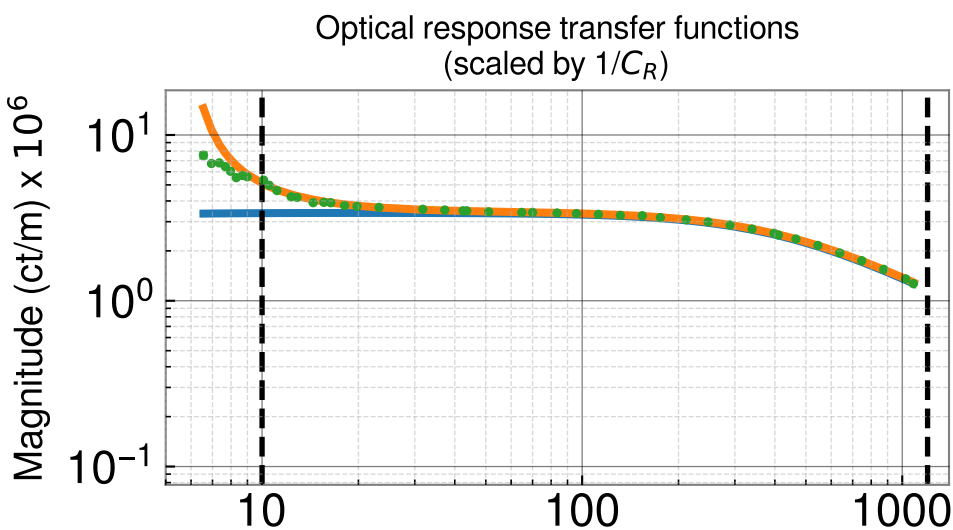
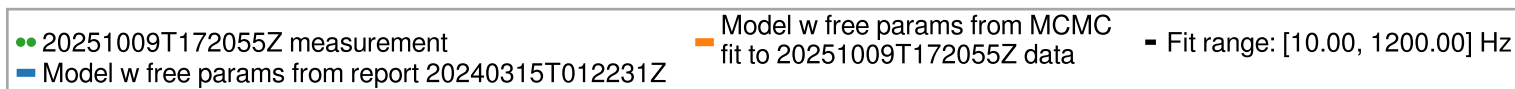
H1 PCal over GDS

Pcal Correction drawn from /ligo/groups/cal/H1/reports/20251009T172027Z/pydarm_H1.ini



H1 sensing model MCMC summary

All fixed parameters drawn from /ligo/groups/cal/H1/reports/20251009T172027Z/pydarm_H1.ini

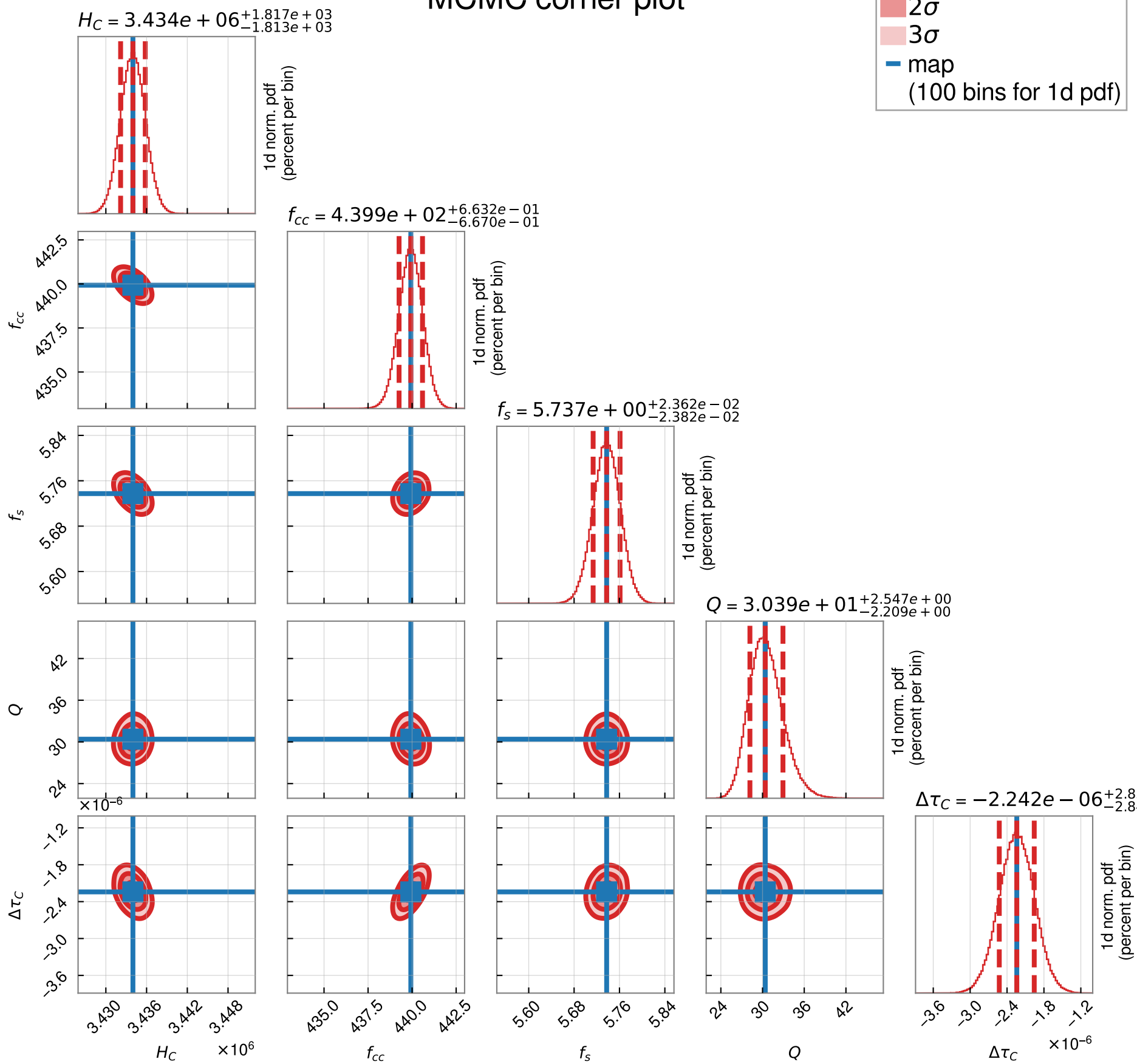


Parameter	(value +/-) value	+	-
Optical gain, H_c (ct/m)	3.434e+06	1817 (0.05%)	1813 (0.05%)
Cavity_pole, f_cc (Hz)	439.9	0.6632 (0.15%)	0.667 (0.15%)
Detuned SRC spring frequency, f_s (Hz)	5.737	0.02362 (0.41%)	0.02382 (0.42%)
Detuned SRC spring quality factor, Q_s	30.39	2.547 (8.38%)	2.209 (7.27%)
Residual time delay, tau_c (s)	-2.242e-06	2.839e-07 (-12.67%)	2.847e-07 (-12.70%)

2d pdf contours

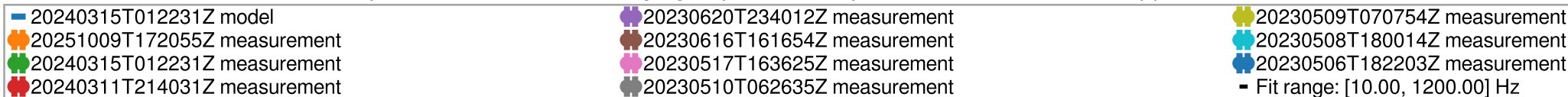
- 1σ
- 2σ
- 3σ
- map

(100 bins for 1d pdf)

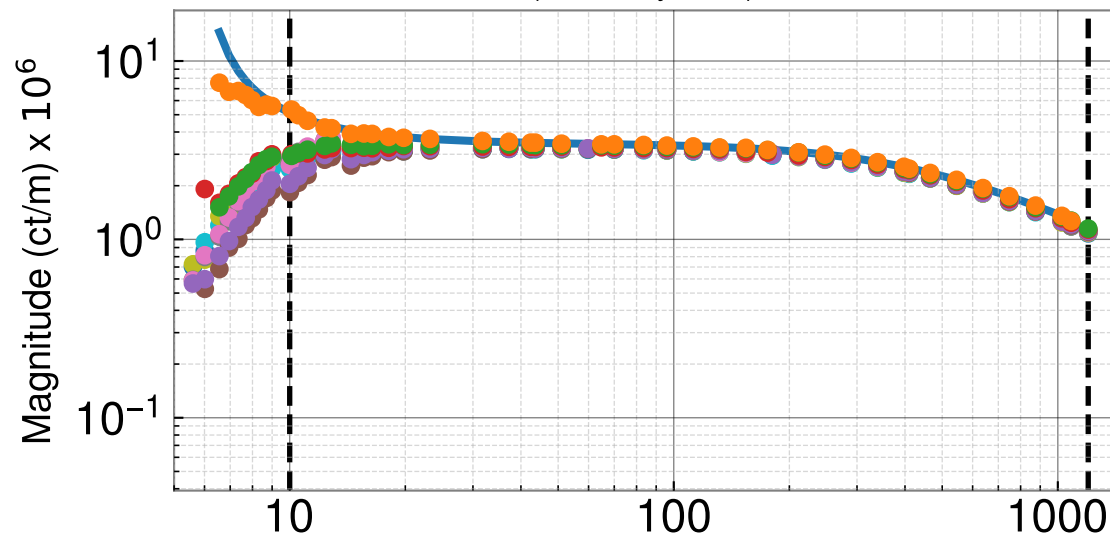


H1 sensing model history (last 9 measurements)

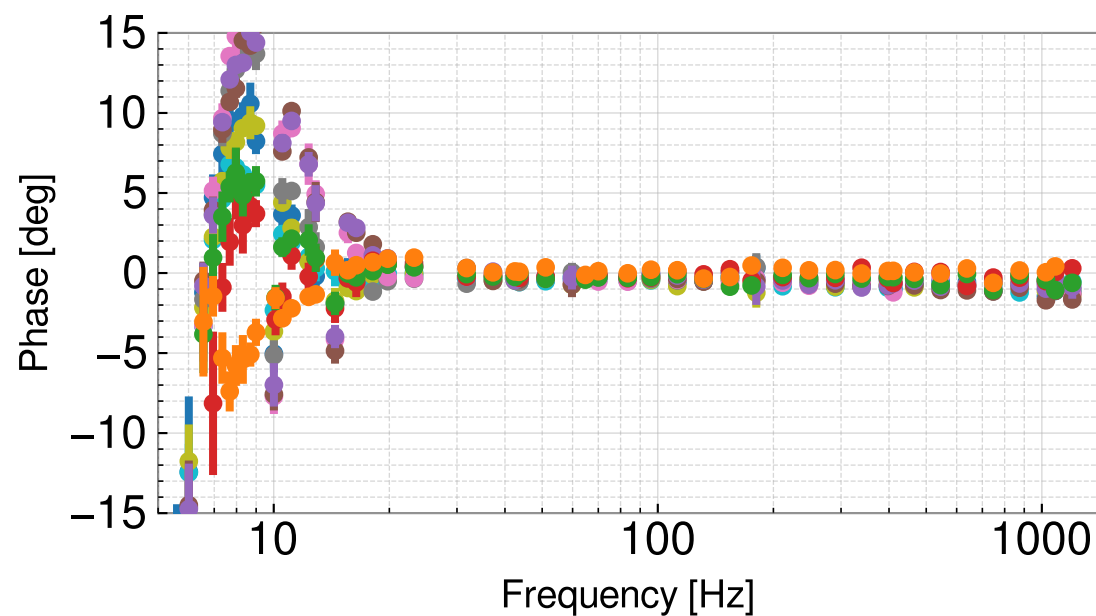
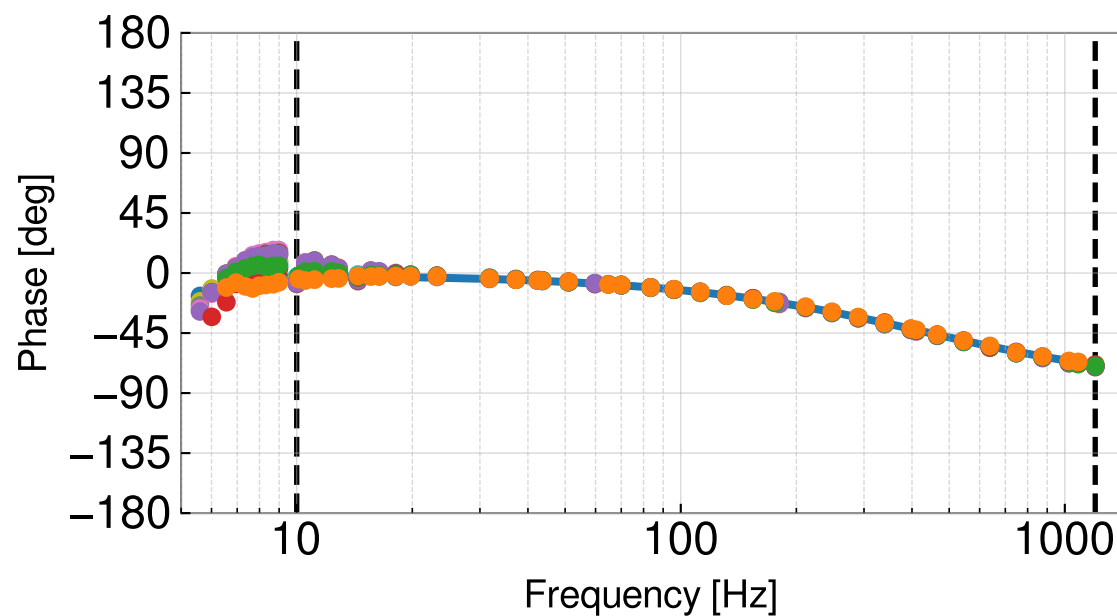
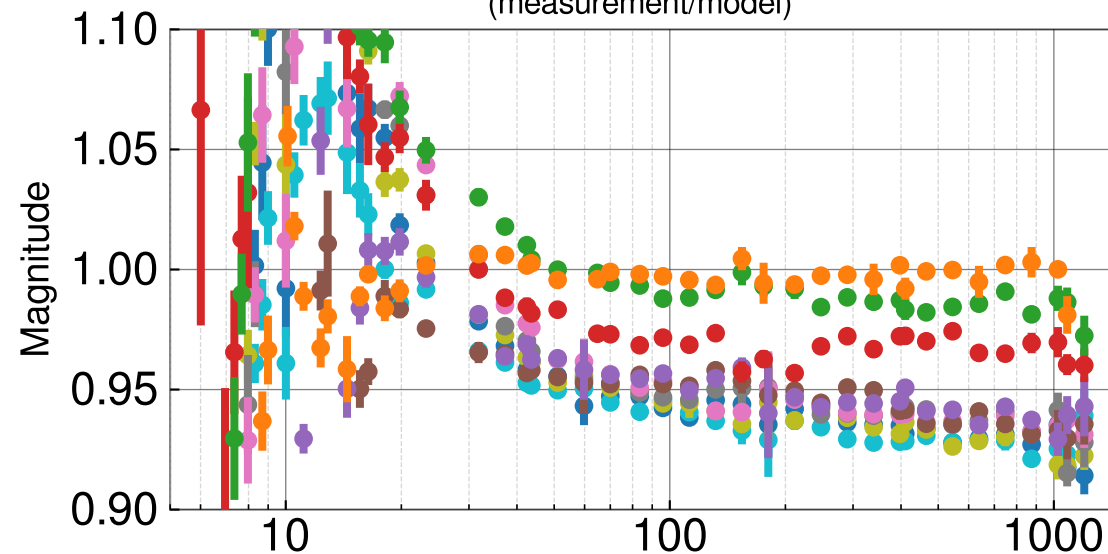
All fixed parameters drawn from `/ligo/groups/cal/H1/reports/20251009T172027Z/pydarm_H1.ini`



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

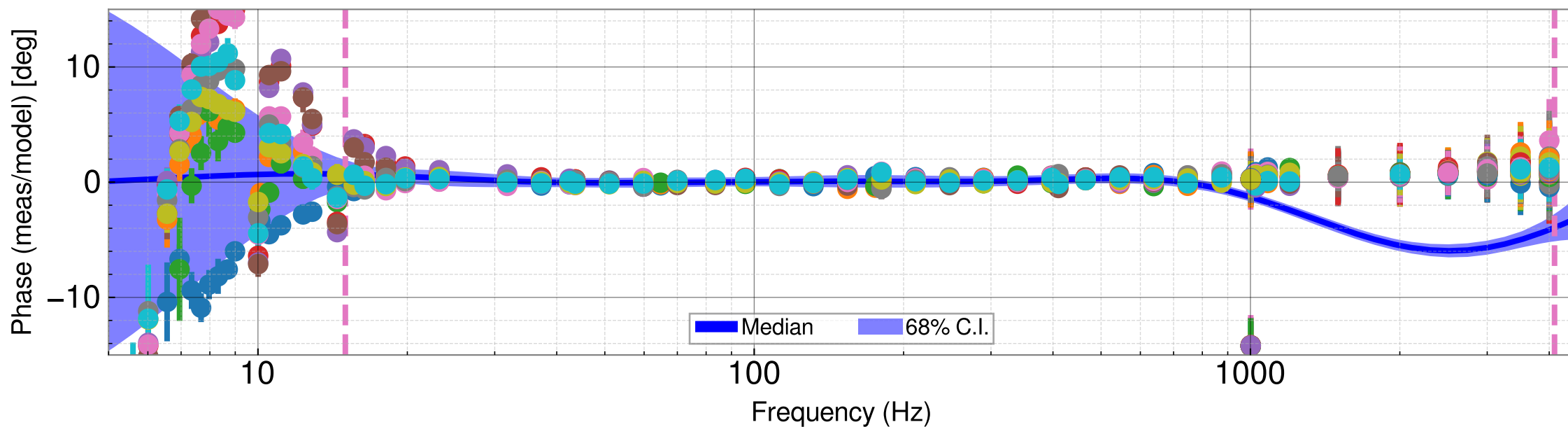
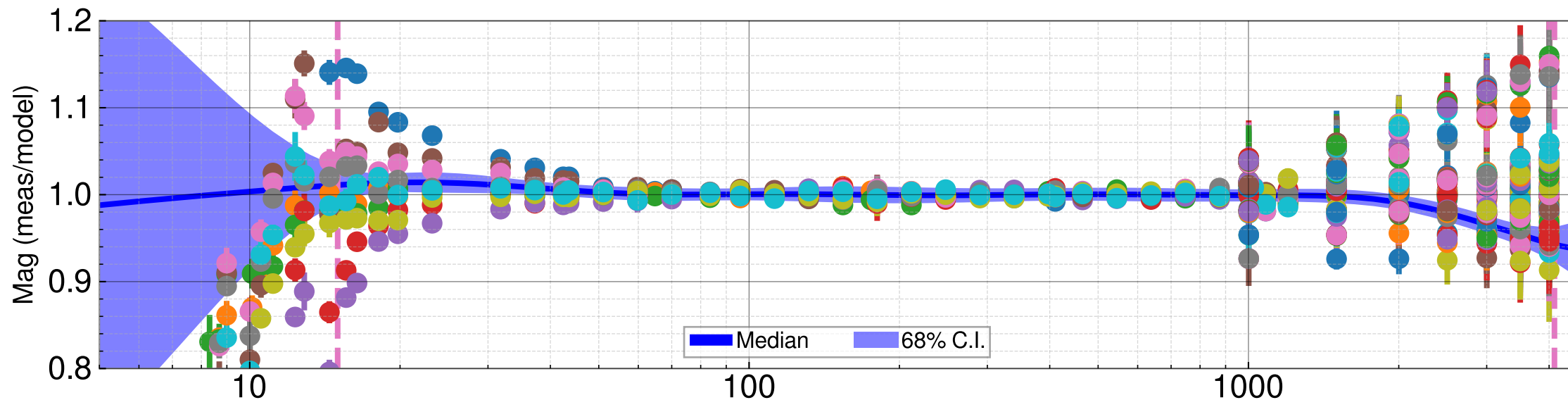


Optical response residuals
(measurement/model)



Sensing GPR

meas. 20251009T172055Z of report 20251009T172027Z
 meas. 20240315T012251Z of report 20240315T012231Z
 meas. 20240311T214051Z of report 20240311T214031Z
 meas. 20230620T235739Z of report 20230620T234012Z
 meas. 20230616T163421Z of report 20230616T161654Z
 meas. 20230517T154006Z of report 20230517T163625Z
 meas. 20230508T170355Z of report 20230508T180014Z
 meas. 20230509T061135Z of report 20230509T070754Z
 meas. 20230510T064402Z of report 20230510T062635Z
 meas. 20230506T172544Z of report 20230506T182203Z

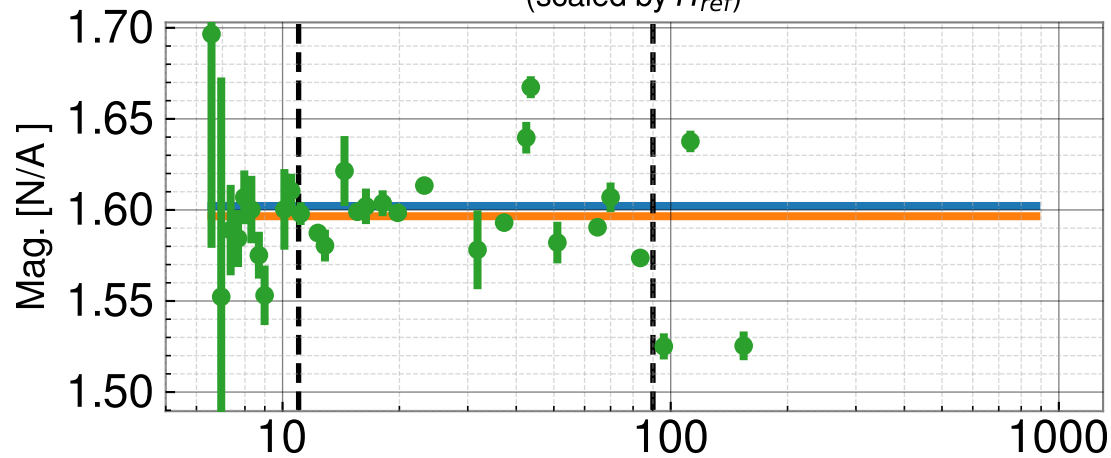


H1SUSEX L1 actuation model MCMC summary

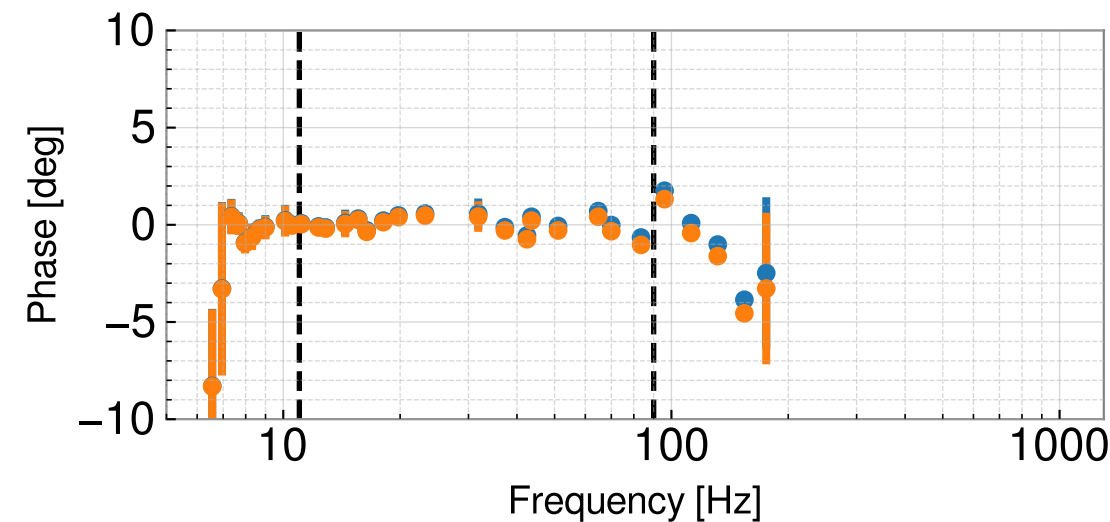
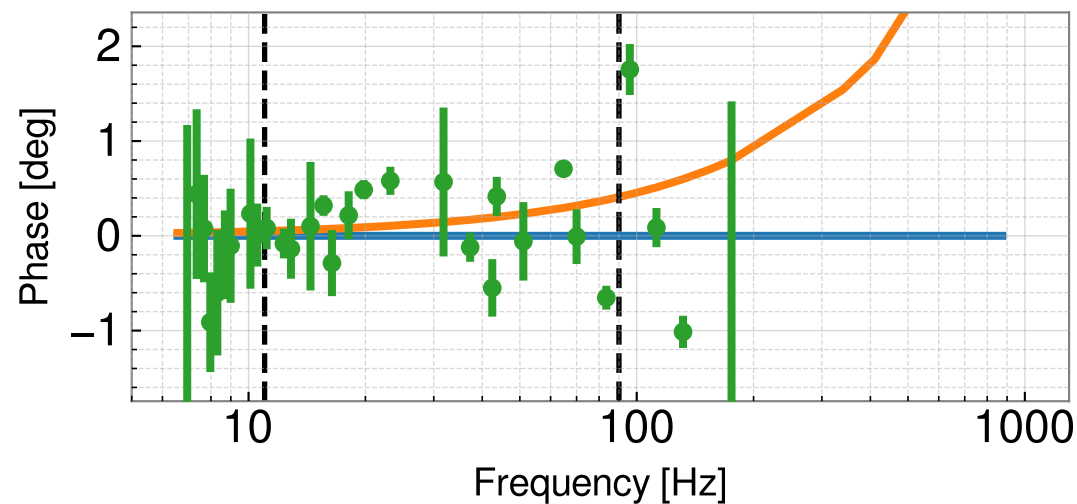
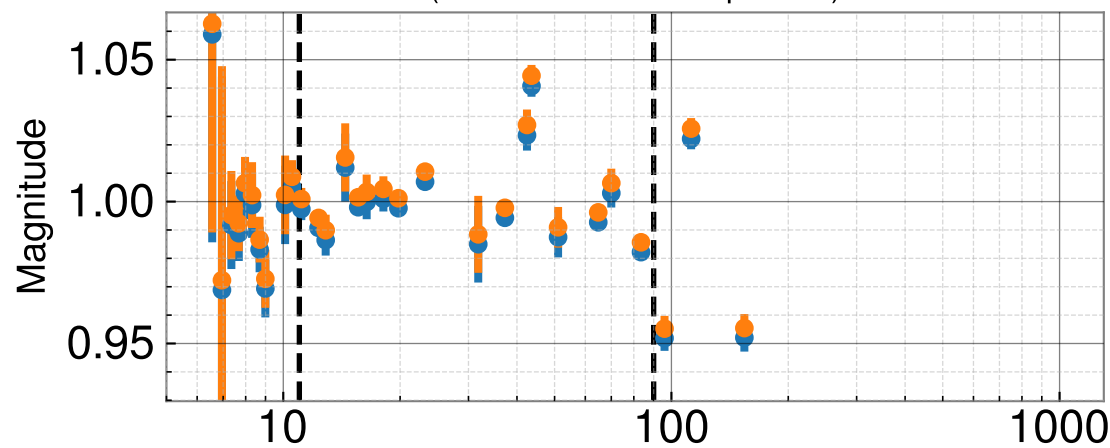
All fixed parameters drawn from /ligo/groups/cal/H1/reports/20251009T172027Z/pydarm_H1.ini

— Model w free params from report 20240315T012231Z
— Model w free params from
— MCMC fit to 20251009T172055Z data
■ 20251009T172055Z measurement
■ Fit range 11.0 to 90.0 Hz

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

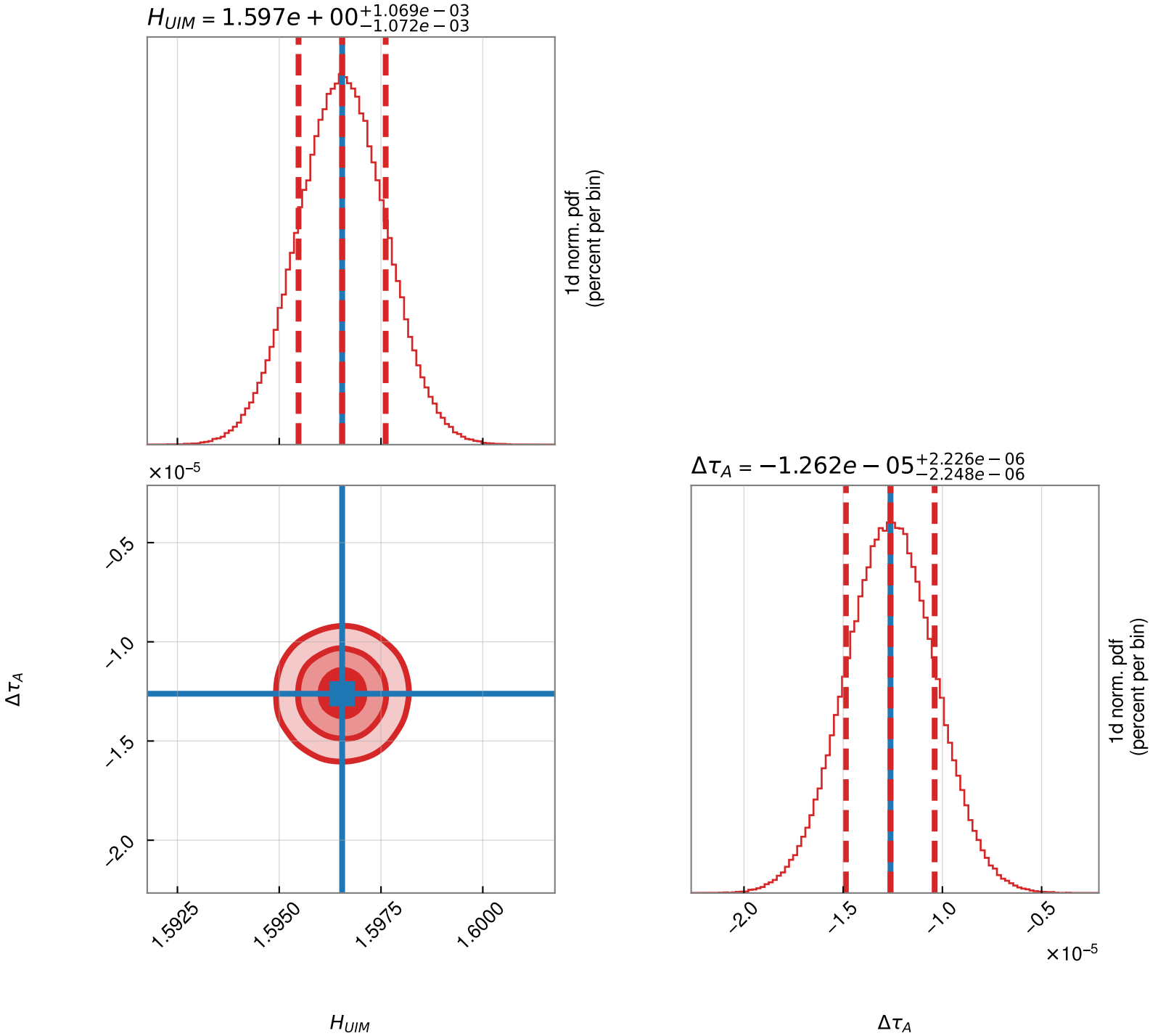
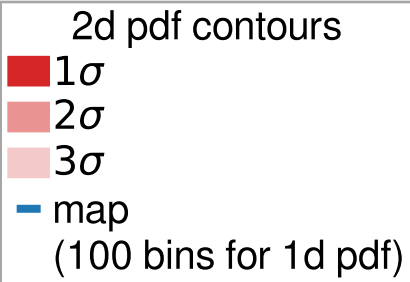


Actuation strength residuals
(meas./model w. free params)



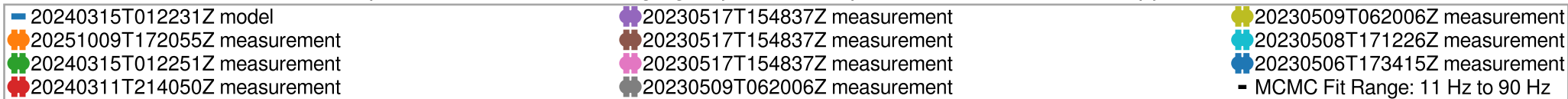
Parameter	(value +/-) value	+	-
Actuation Gain, Hau (N/A)	1.597	0.001069 (0.07%)	0.001072 (0.07%)
Residual time delay, tau_A (s)	-1.262e-05	2.226e-06 (-17.64%)	2.248e-06 (-17.82%)

20251009T172055Z EX L1 actuation
MCMC corner plot

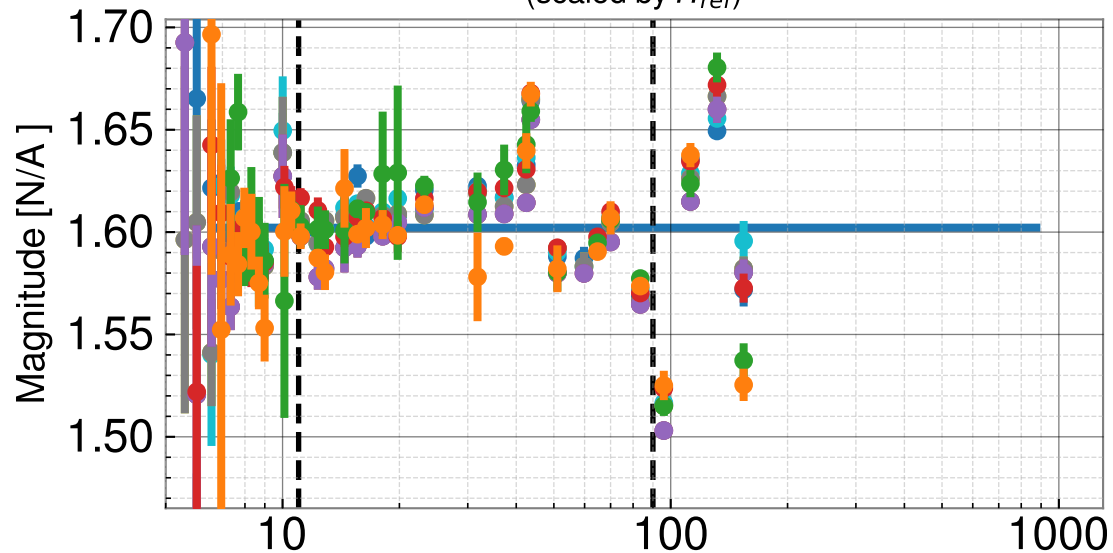


H1SUSEX L1 actuation model history (last 9 measurements)

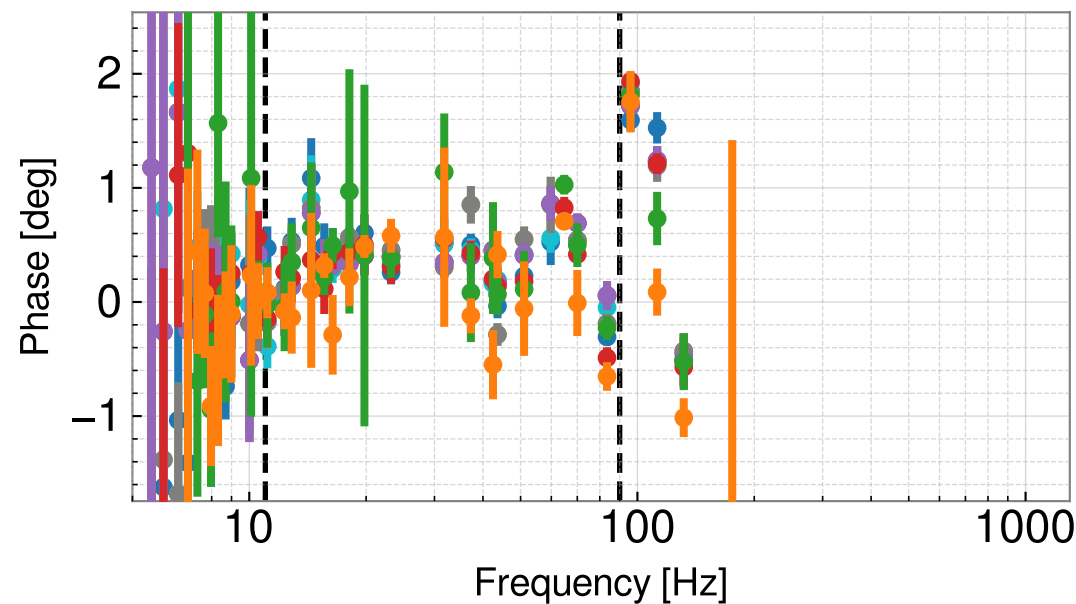
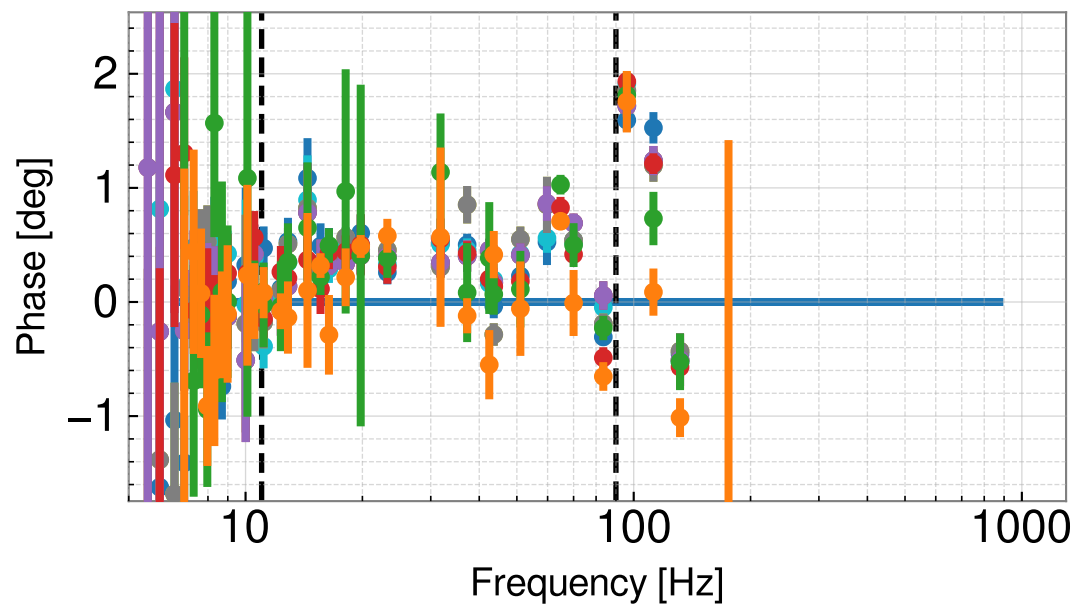
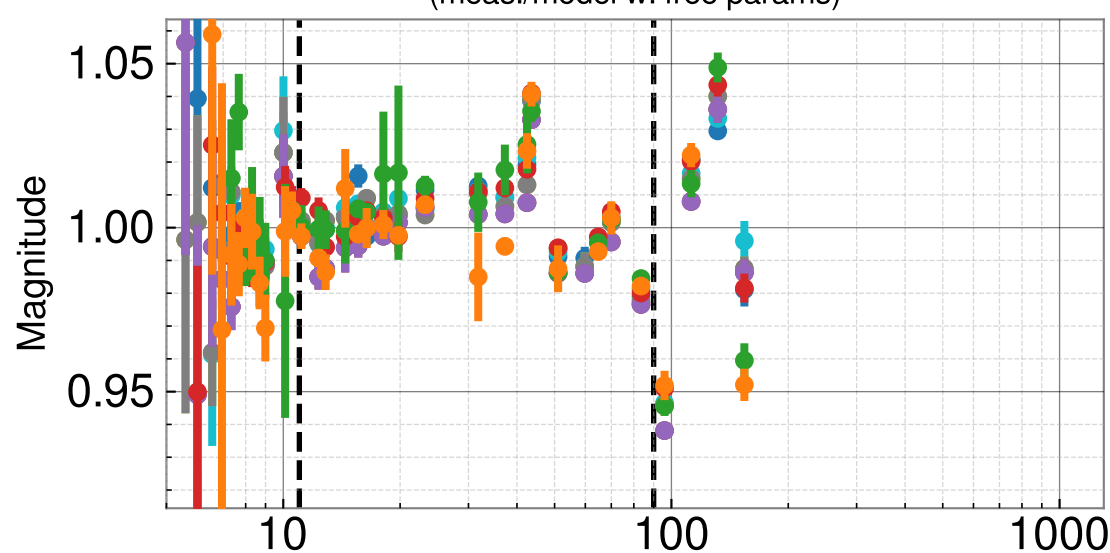
All fixed parameters drawn from /ligo/groups/cal/H1/reports/20251009T172027Z/pydarm_H1.ini



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



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

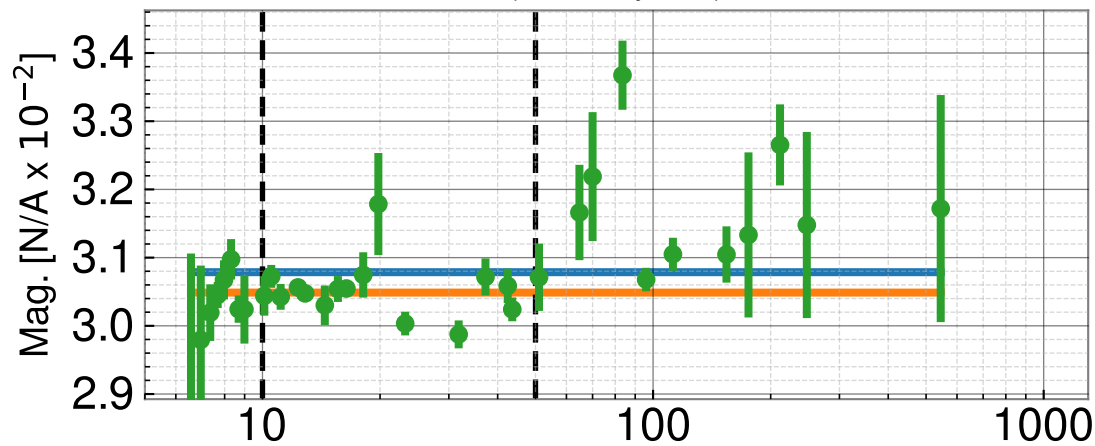


H1SUSEX L2 actuation model MCMC summary

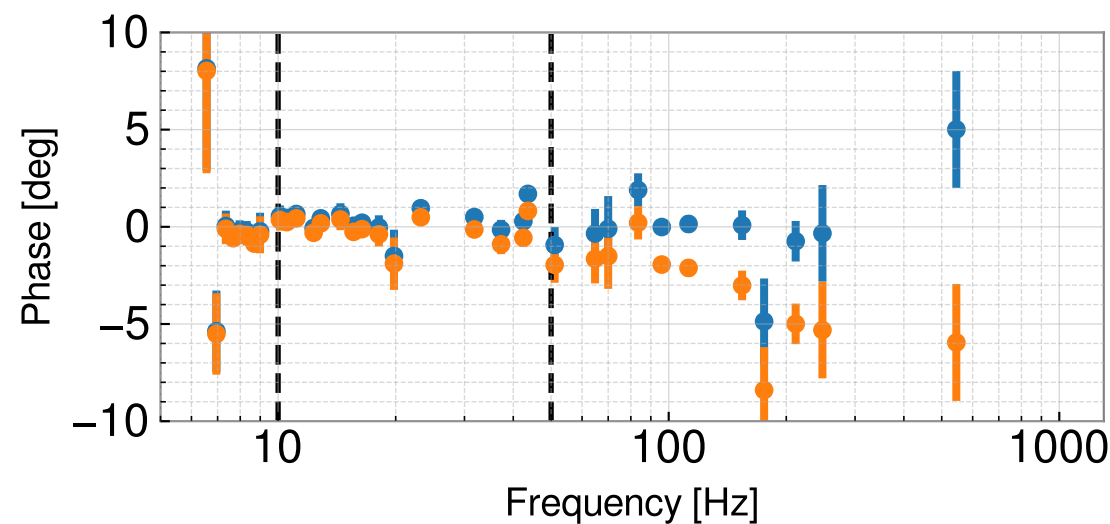
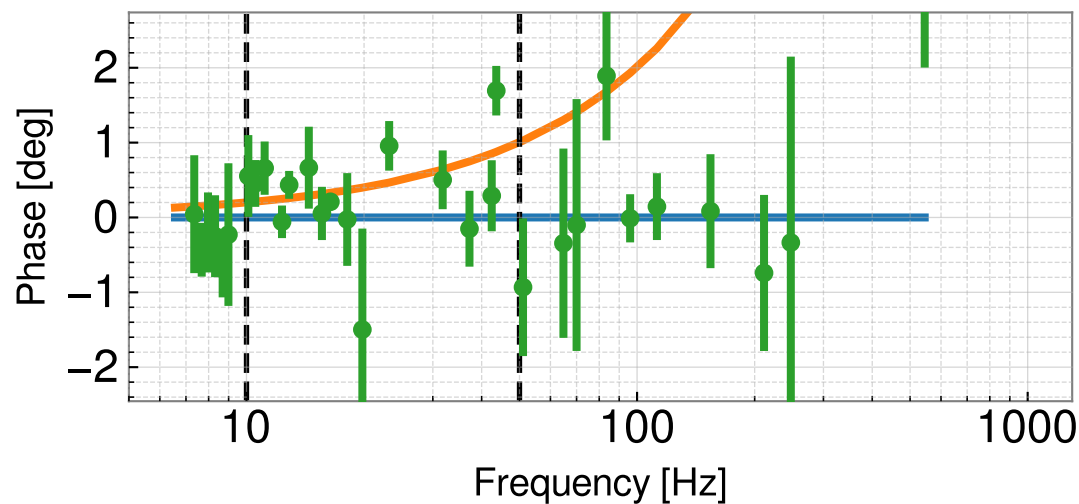
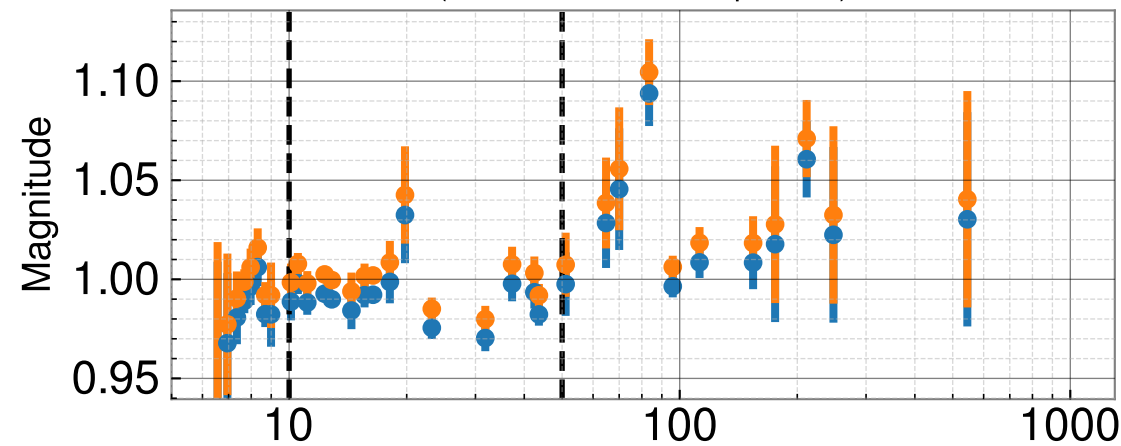
All fixed parameters drawn from /ligo/groups/cal/H1/reports/20251009T172027Z/pydarm_H1.ini



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

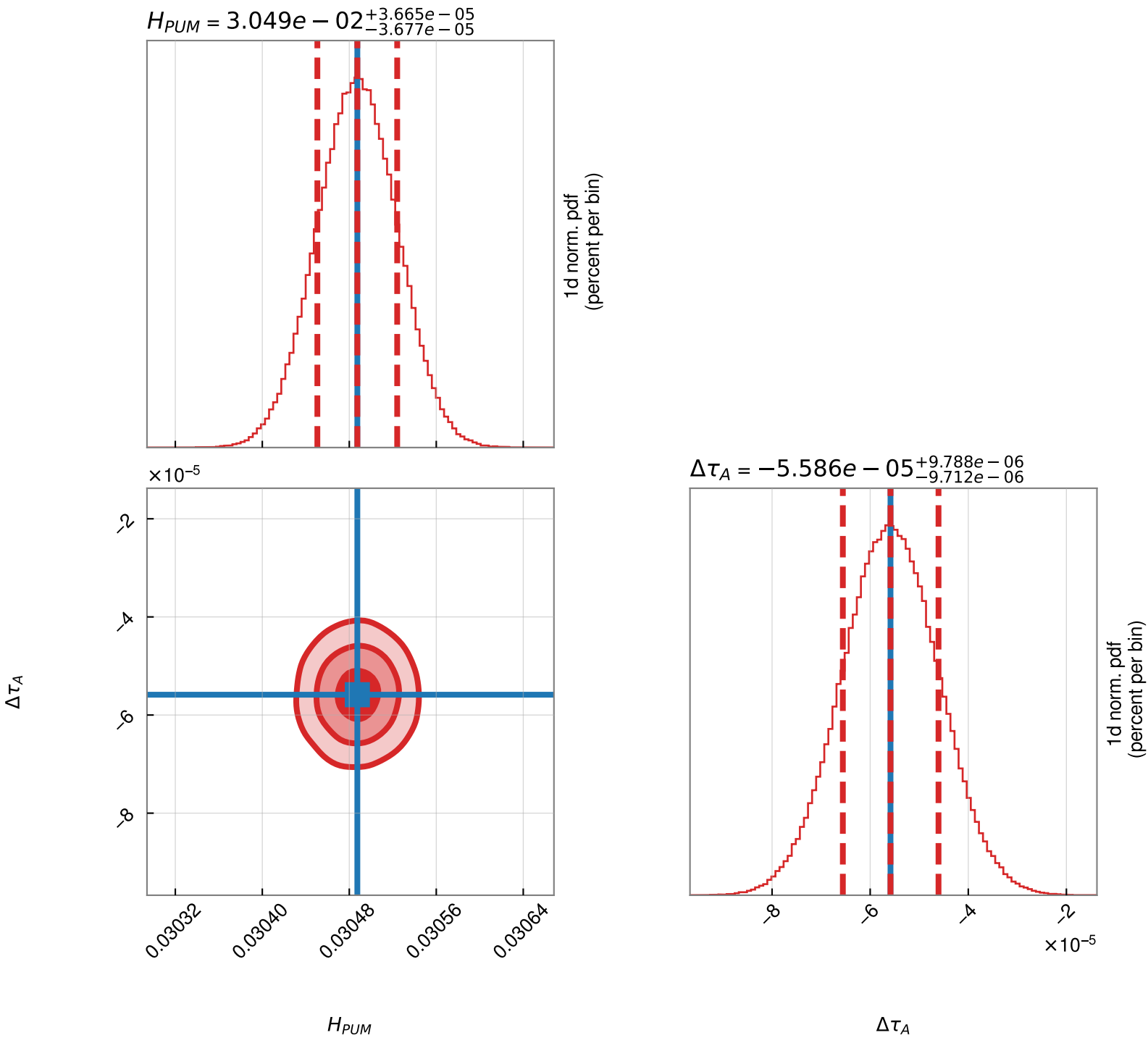
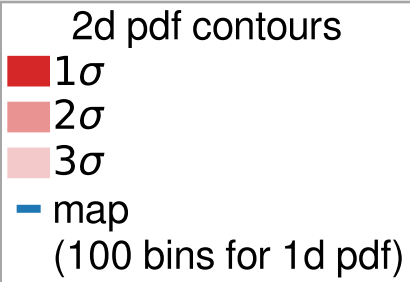


Actuation strength residuals
(meas./model w. free params)



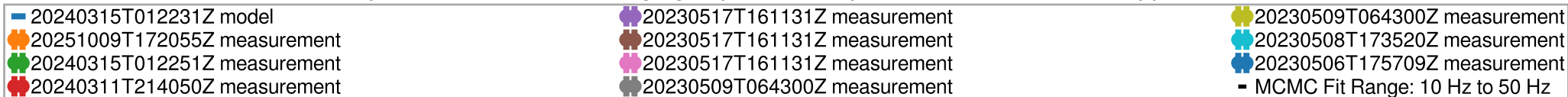
Parameter	(value +/-) value	+	-
Actuation Gain, Hap (N/A)	0.03049	3.665e-05 (0.12%)	3.677e-05 (0.12%)
Residual time delay, tau_A (s)	-5.586e-05	9.788e-06 (-17.52%)	9.712e-06 (-17.39%)

20251009T172055Z EX L2 actuation
MCMC corner plot

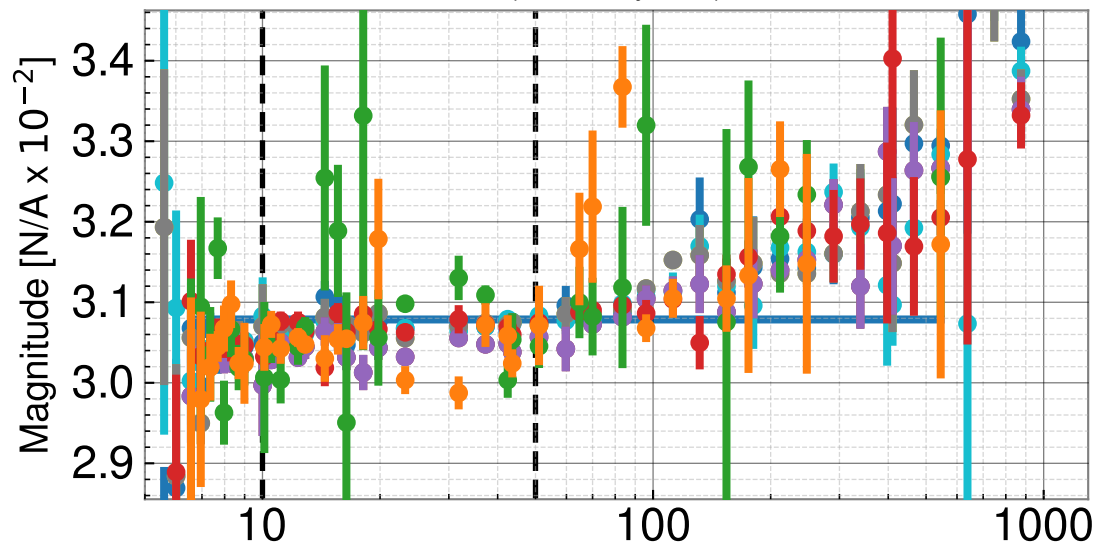


H1SUSEX L2 actuation model history (last 9 measurements)

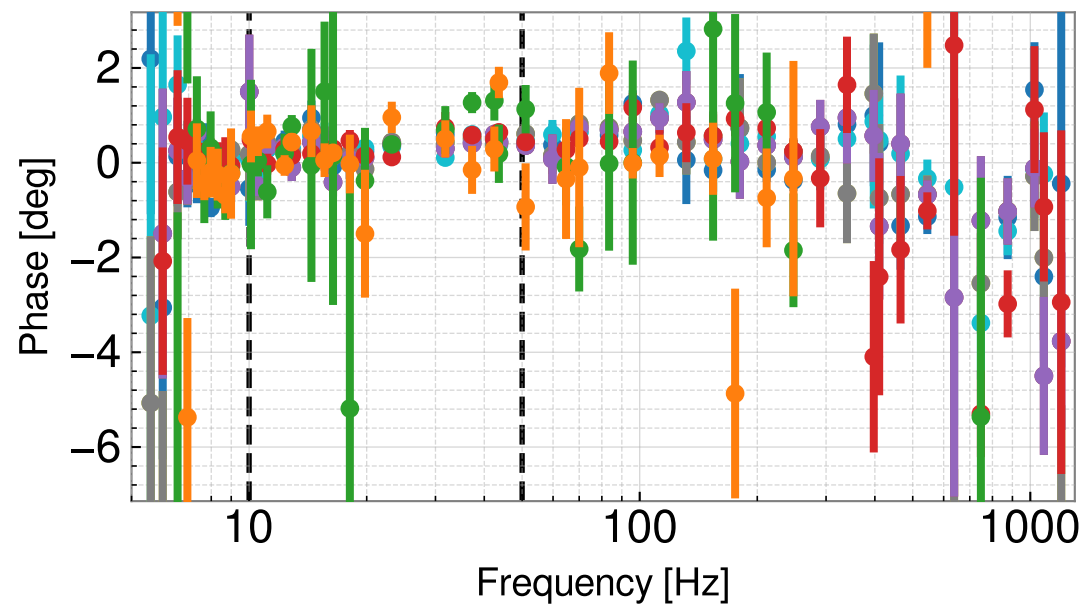
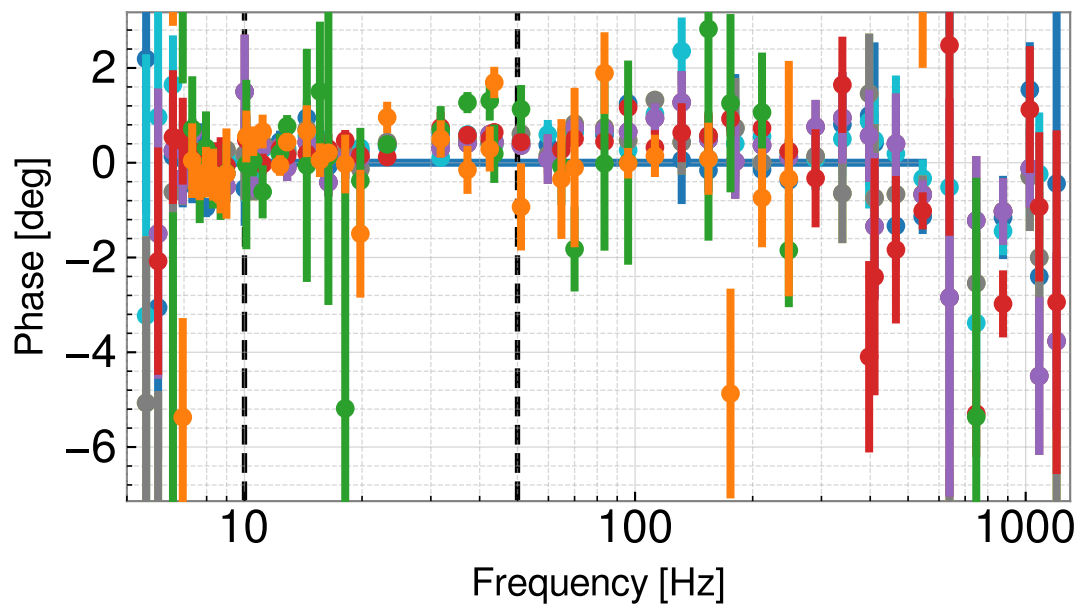
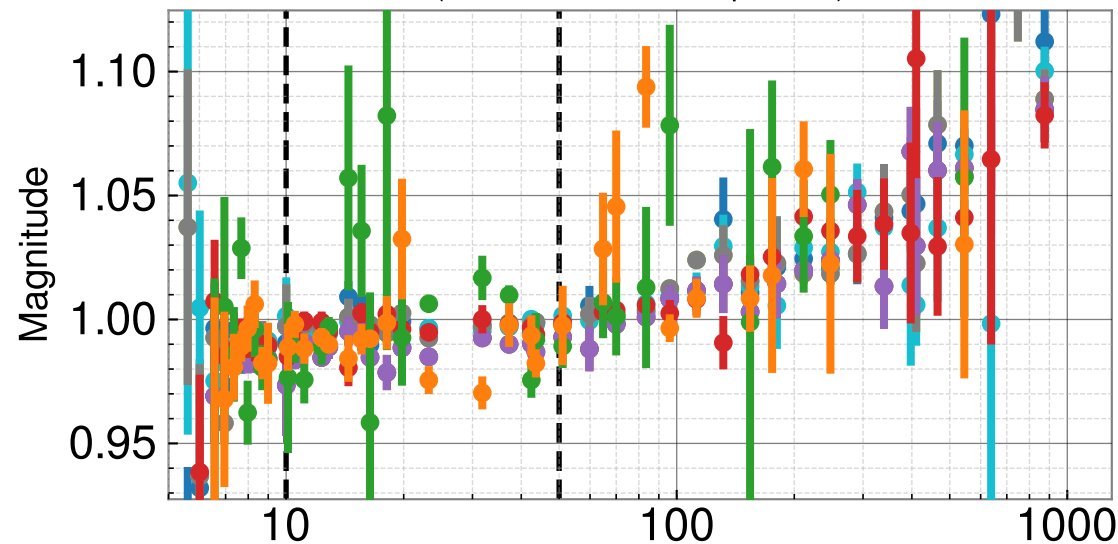
All fixed parameters drawn from /ligo/groups/cal/H1/reports/20251009T172027Z/pydarm_H1.ini



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

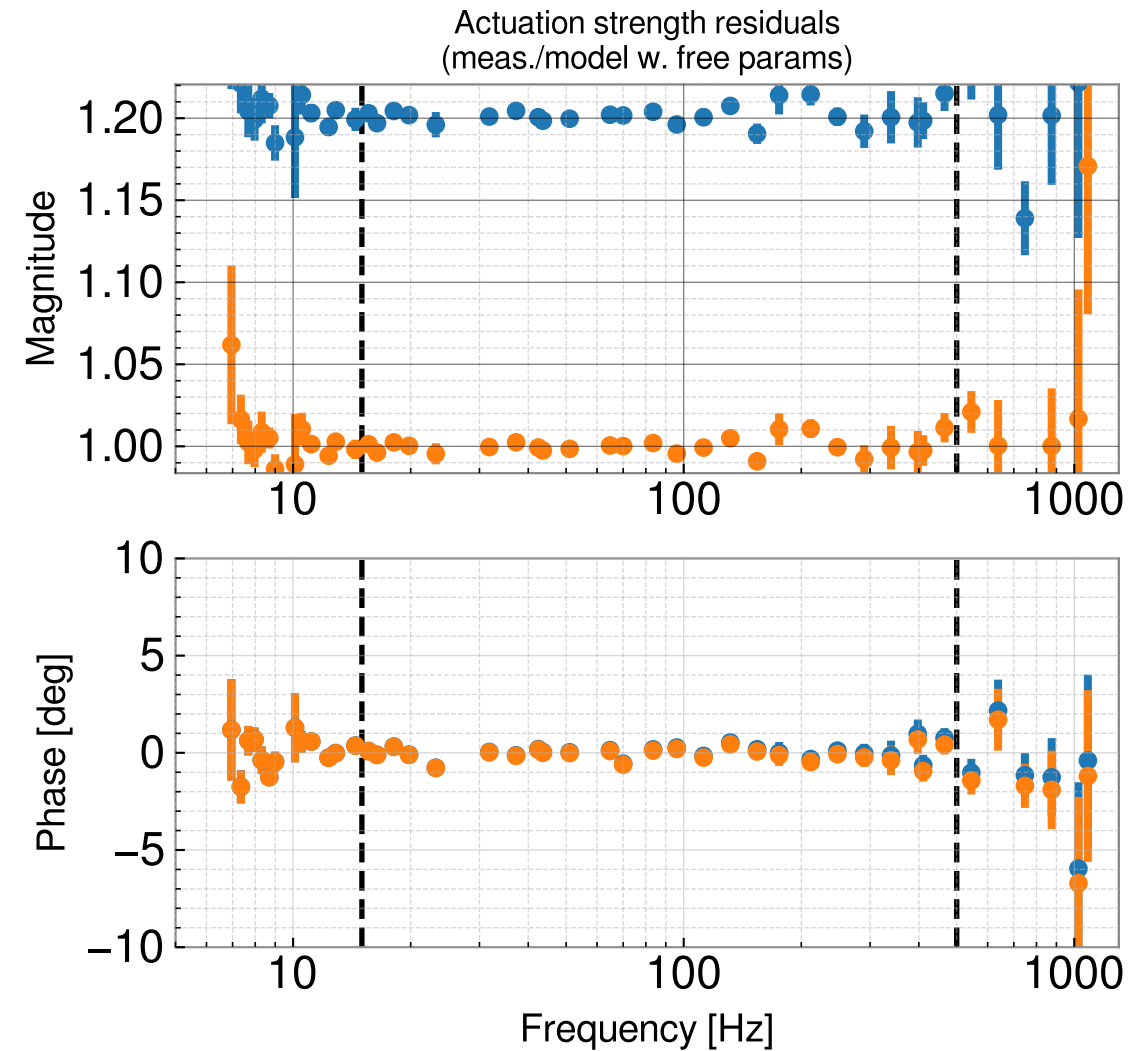
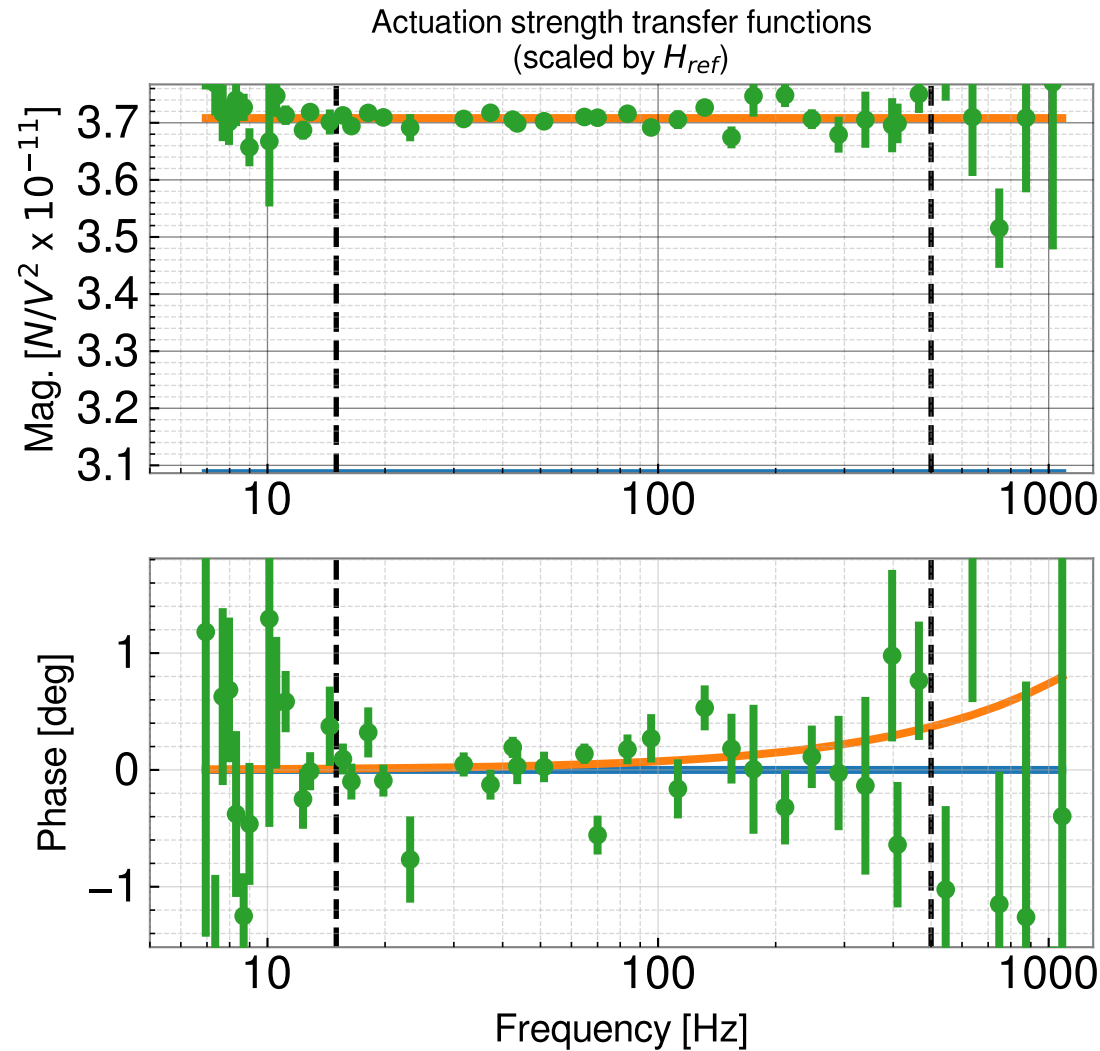


Actuation strength residuals
(meas./model w. free params)



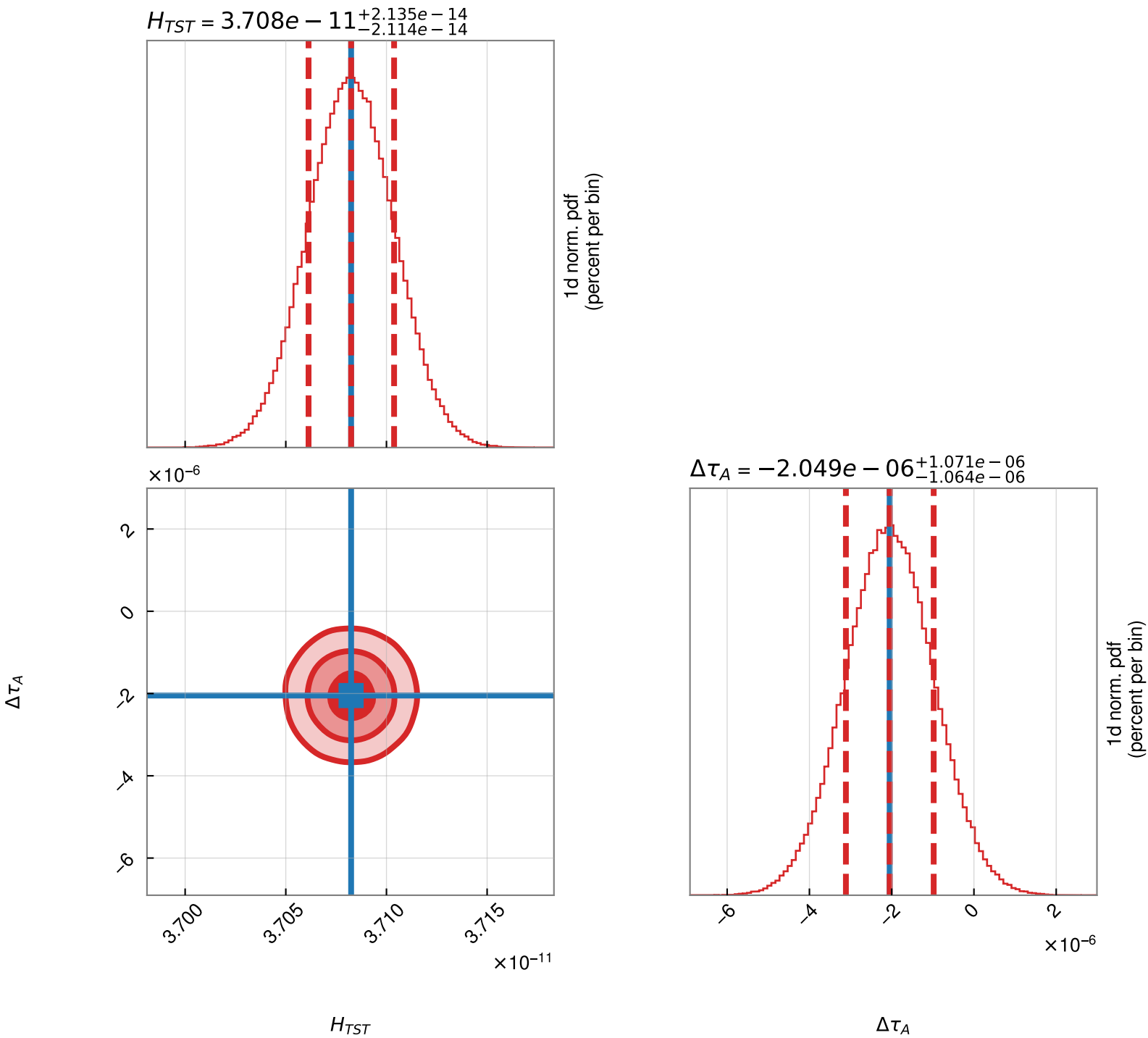
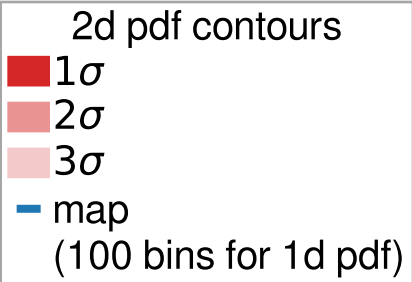
H1SUSEX L3 actuation model MCMC summary

All fixed parameters drawn from /ligo/groups/cal/H1/reports/20251009T172027Z/pydarm_H1.ini



Parameter	(value +/-)	value	+	-
Actuation Gain, Hat (N/V^{**2})	3.708e-11		2.135e-14 (0.06%)	2.114e-14 (0.06%)
Residual time delay, tau_A (s)	-2.049e-06		1.071e-06 (-52.24%)	1.064e-06 (-51.92%)

20251009T172055Z EX L3 actuation
MCMC corner plot

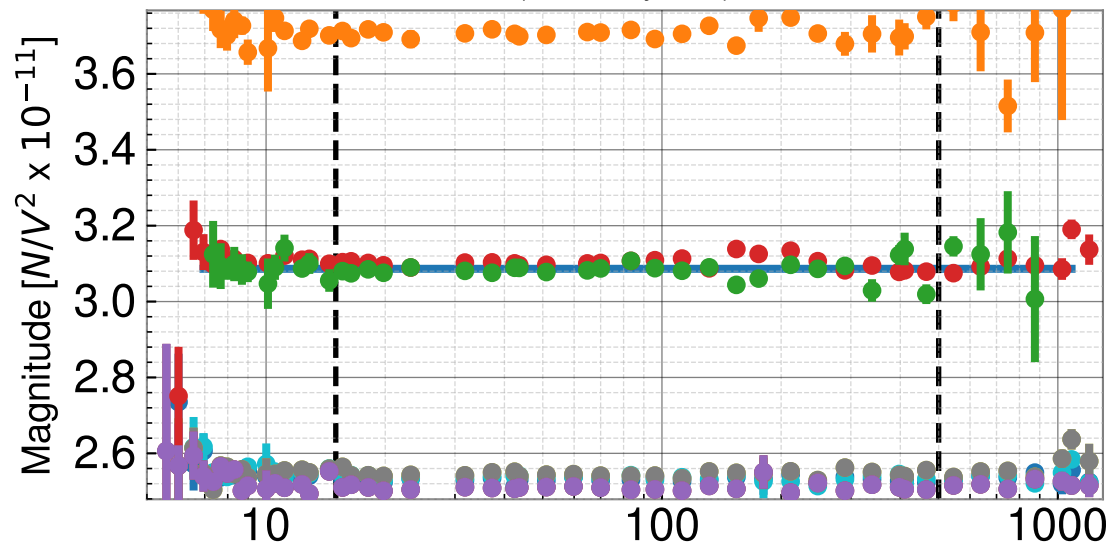


H1SUSEX L3 actuation model history (last 9 measurements)

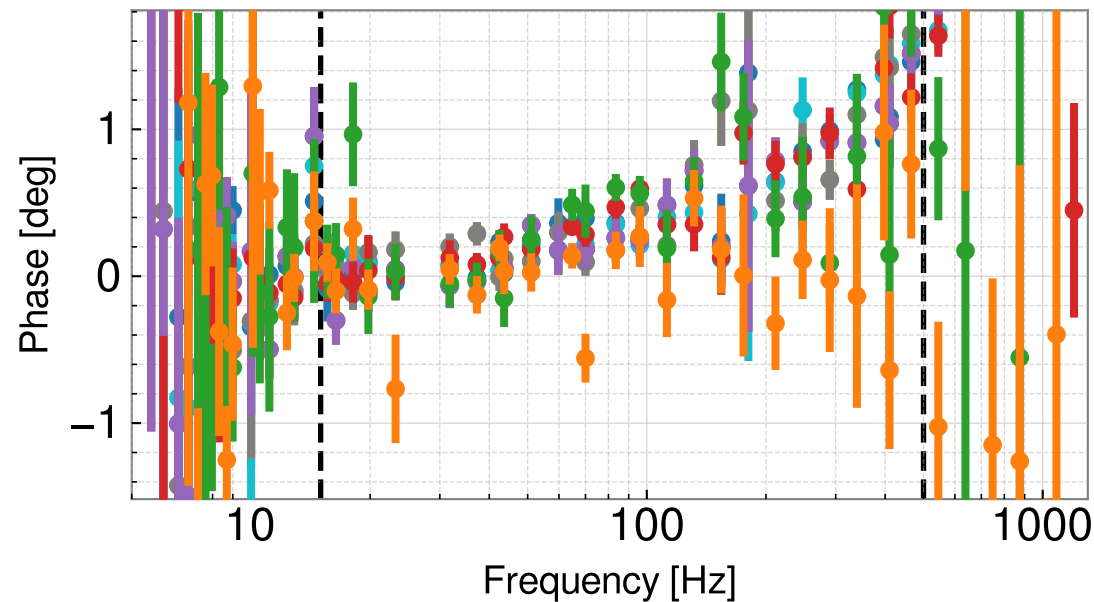
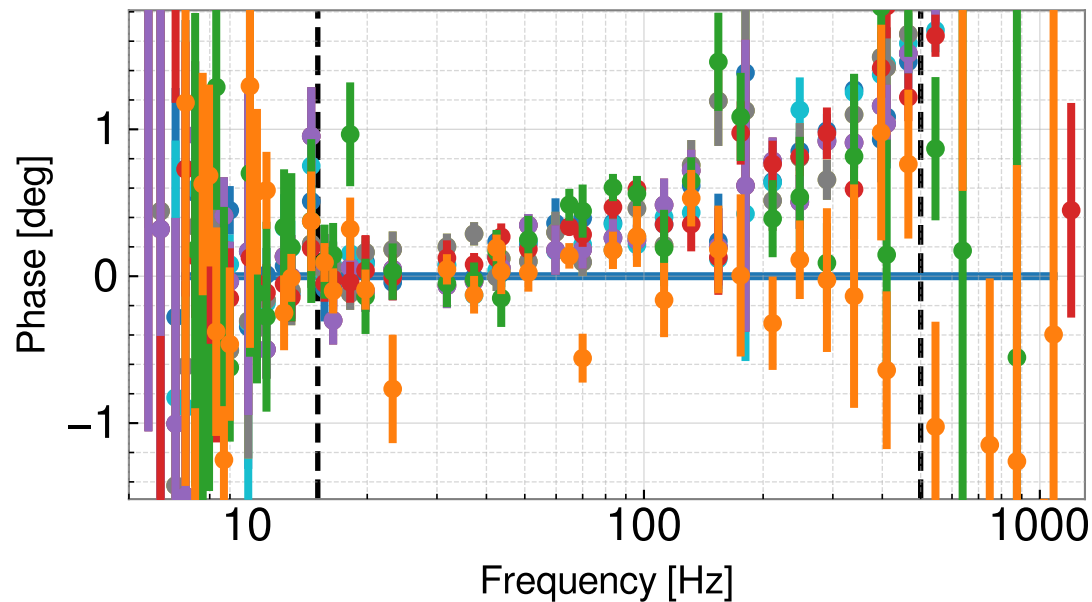
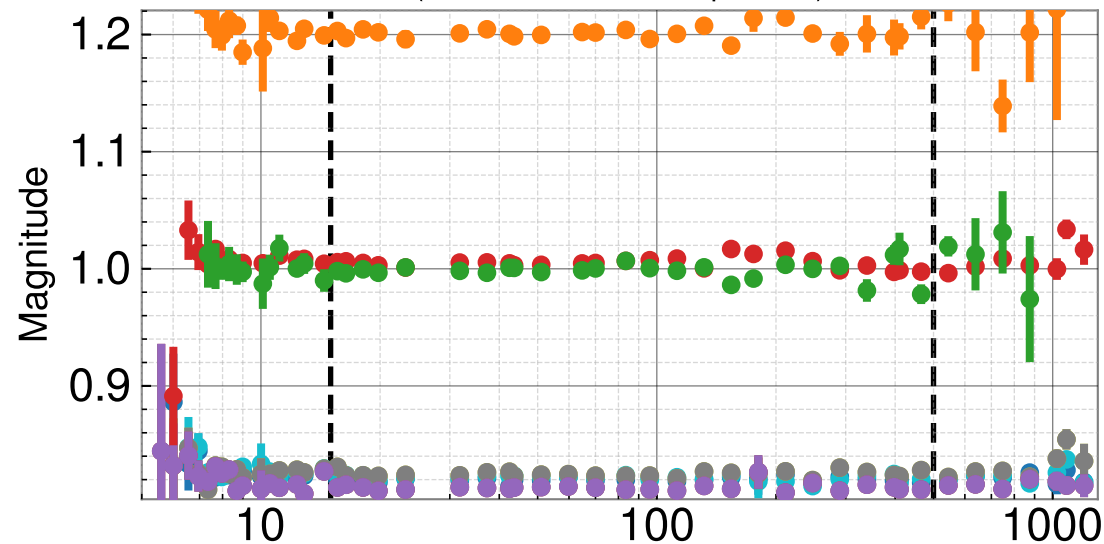
All fixed parameters drawn from /ligo/groups/cal/H1/reports/20251009T172027Z/pydarm_H1.ini



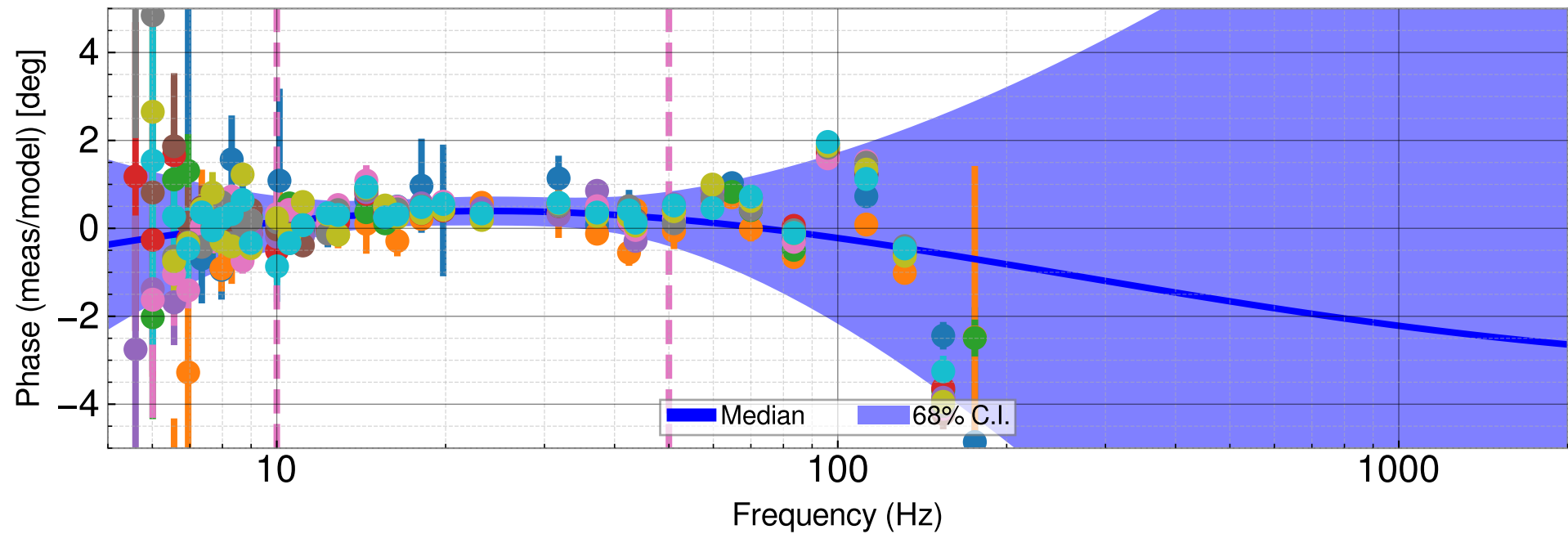
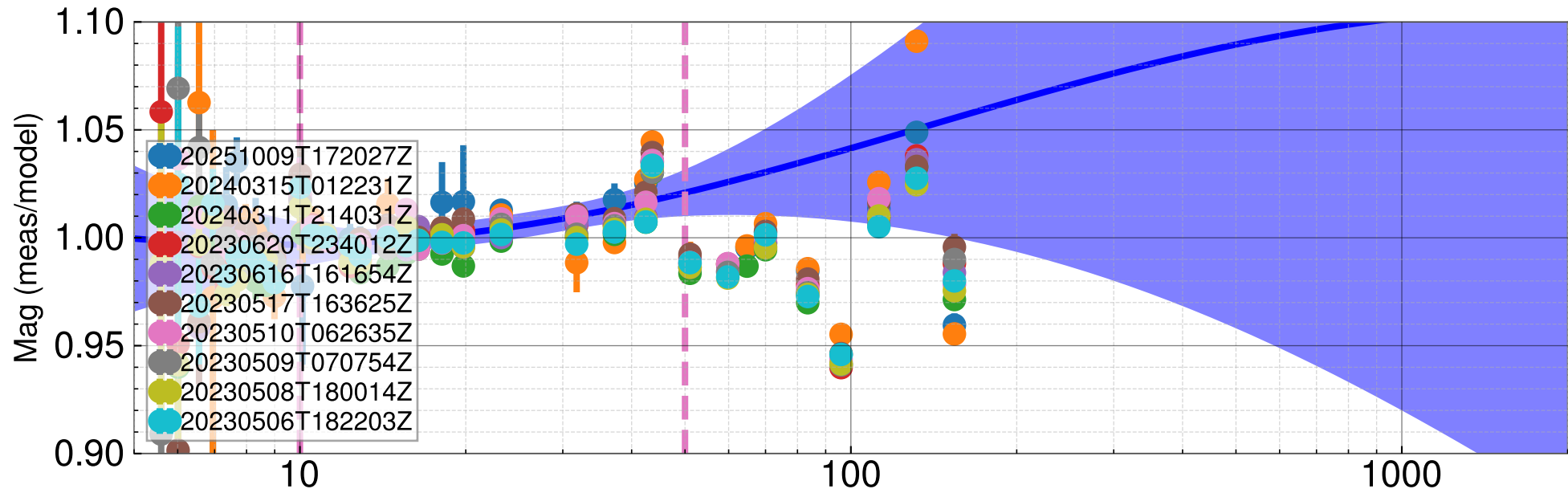
Actuation strength transfer functions
(scaled by H_{ref})



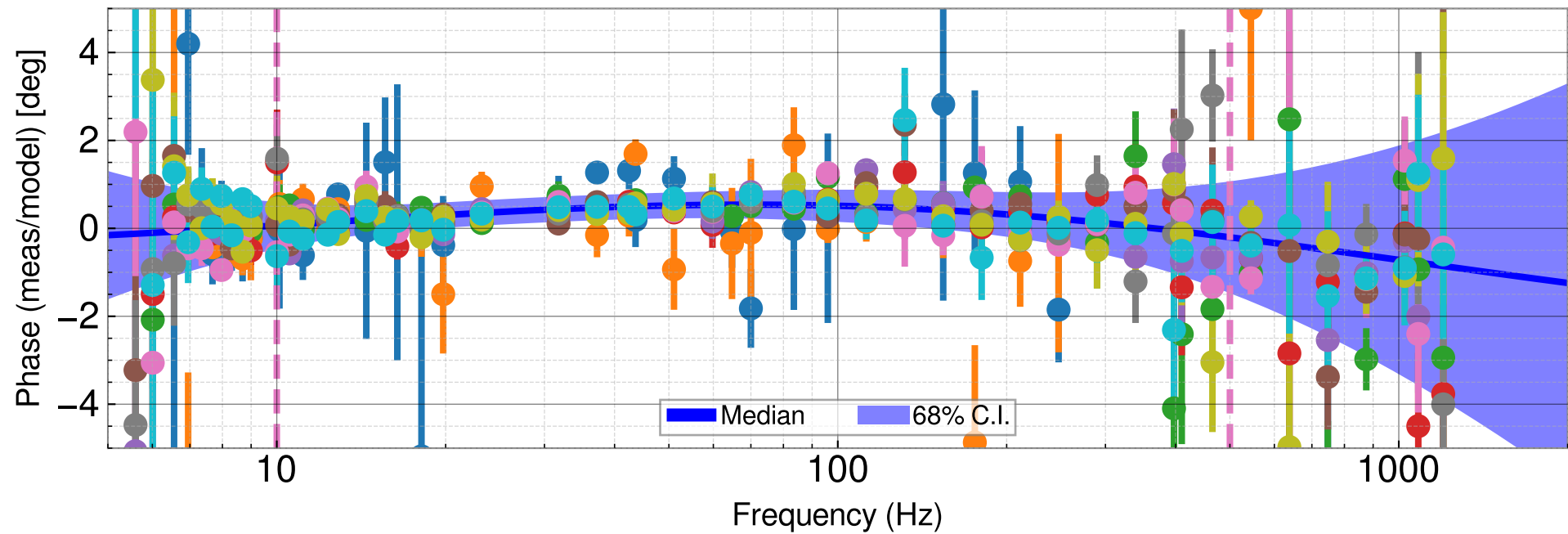
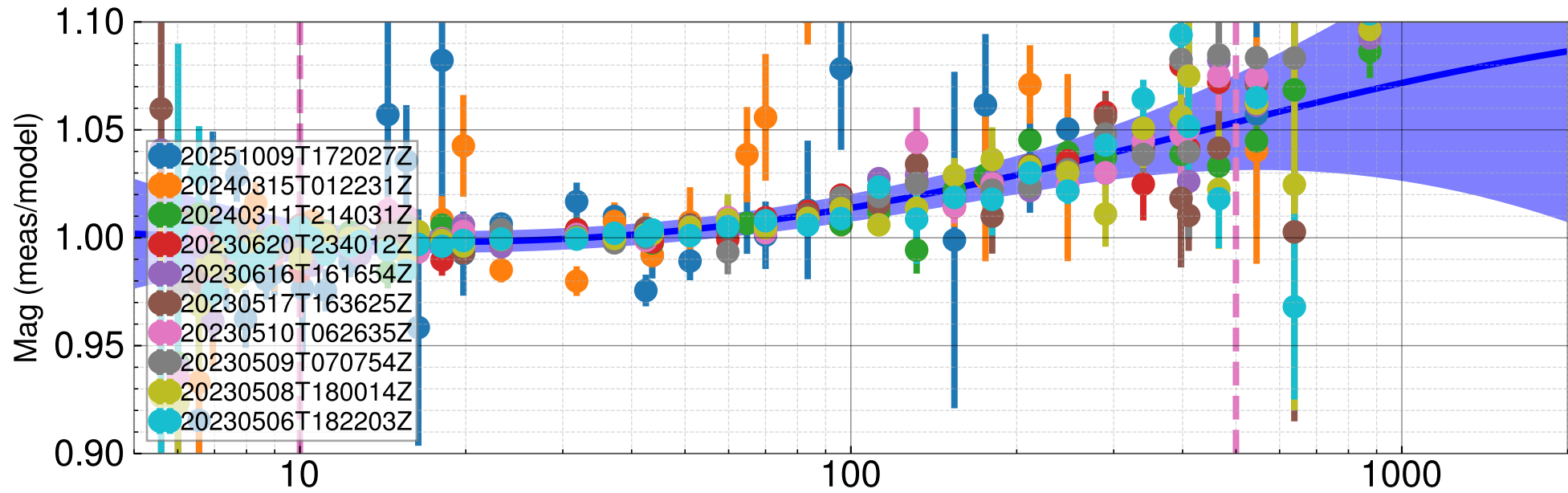
Actuation strength residuals
(meas./model w. free params)



Actuation/L1/EX GPR



Actuation/L2/EX GPR



Actuation/L3/EX GPR

