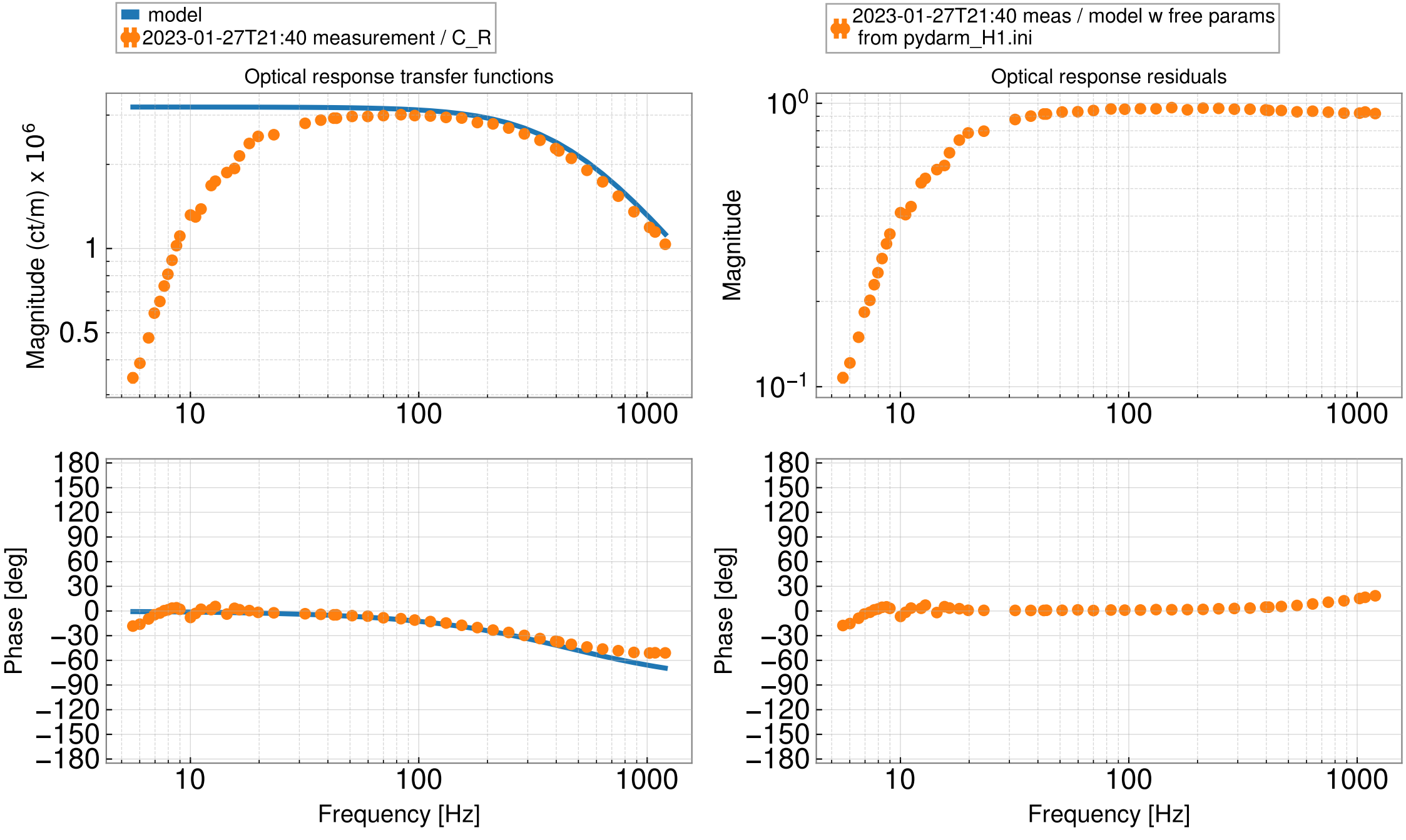
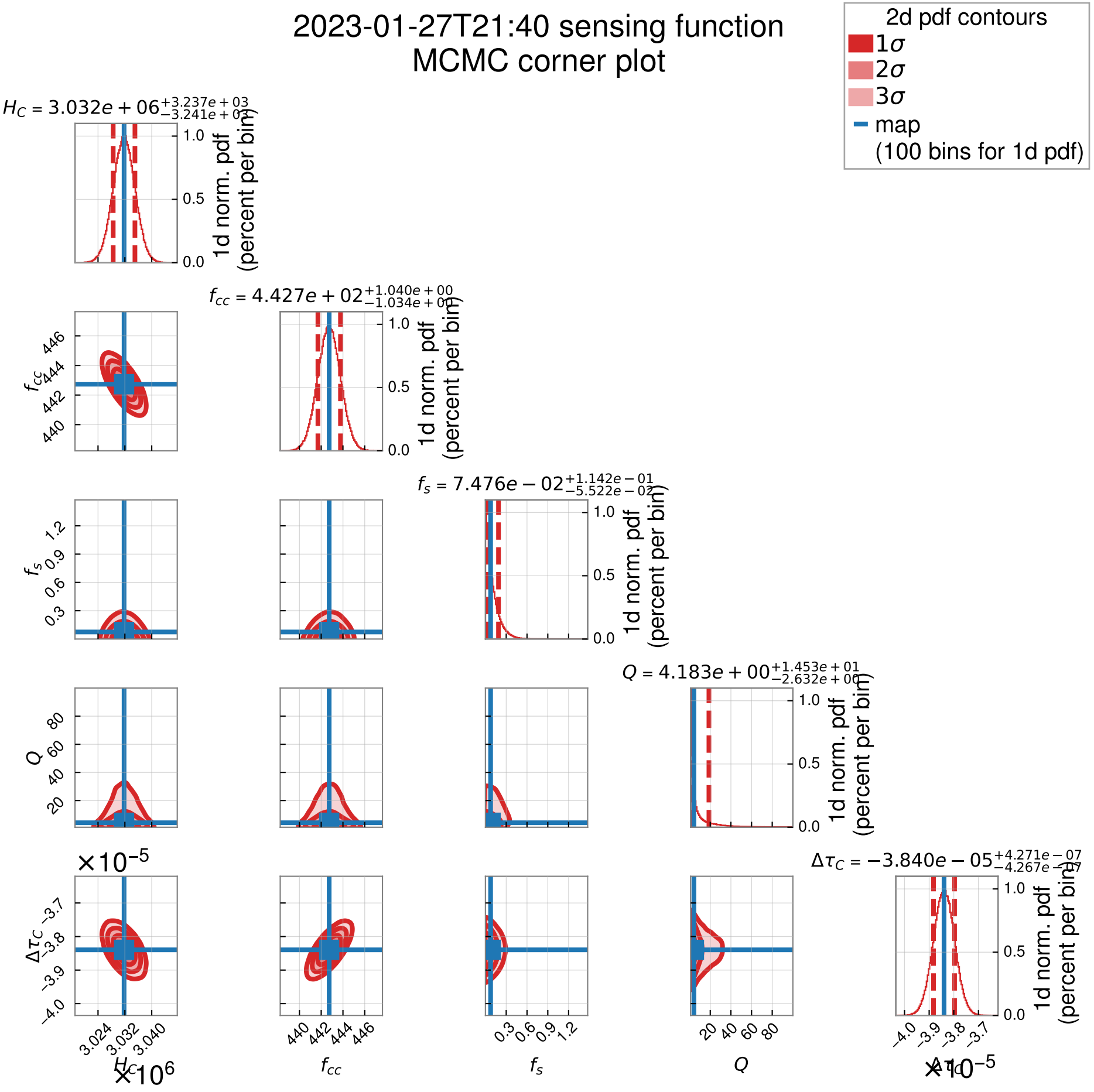
H1 sensing model history

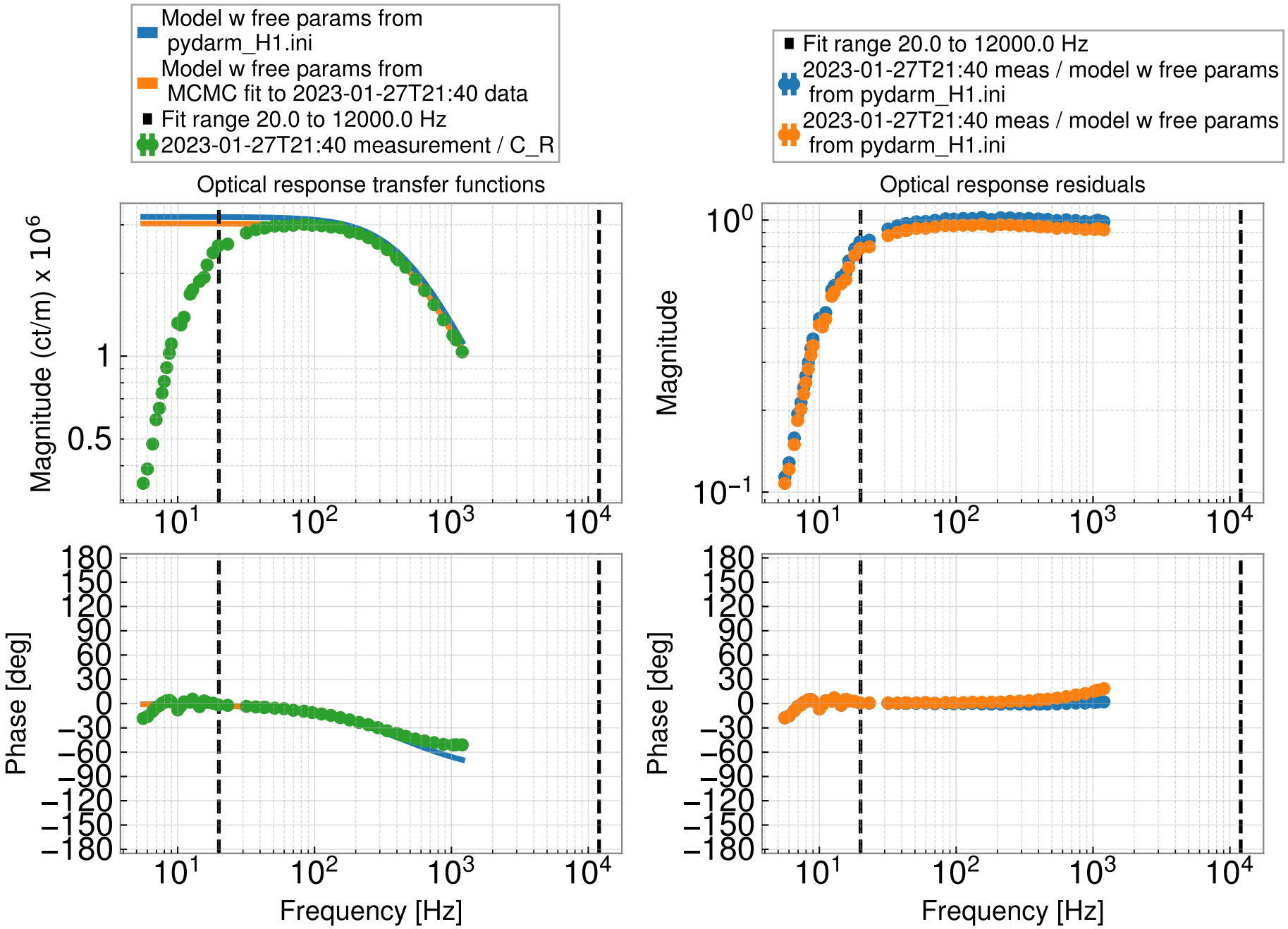
All fixed parameters are drawn from pydarm_H1.ini



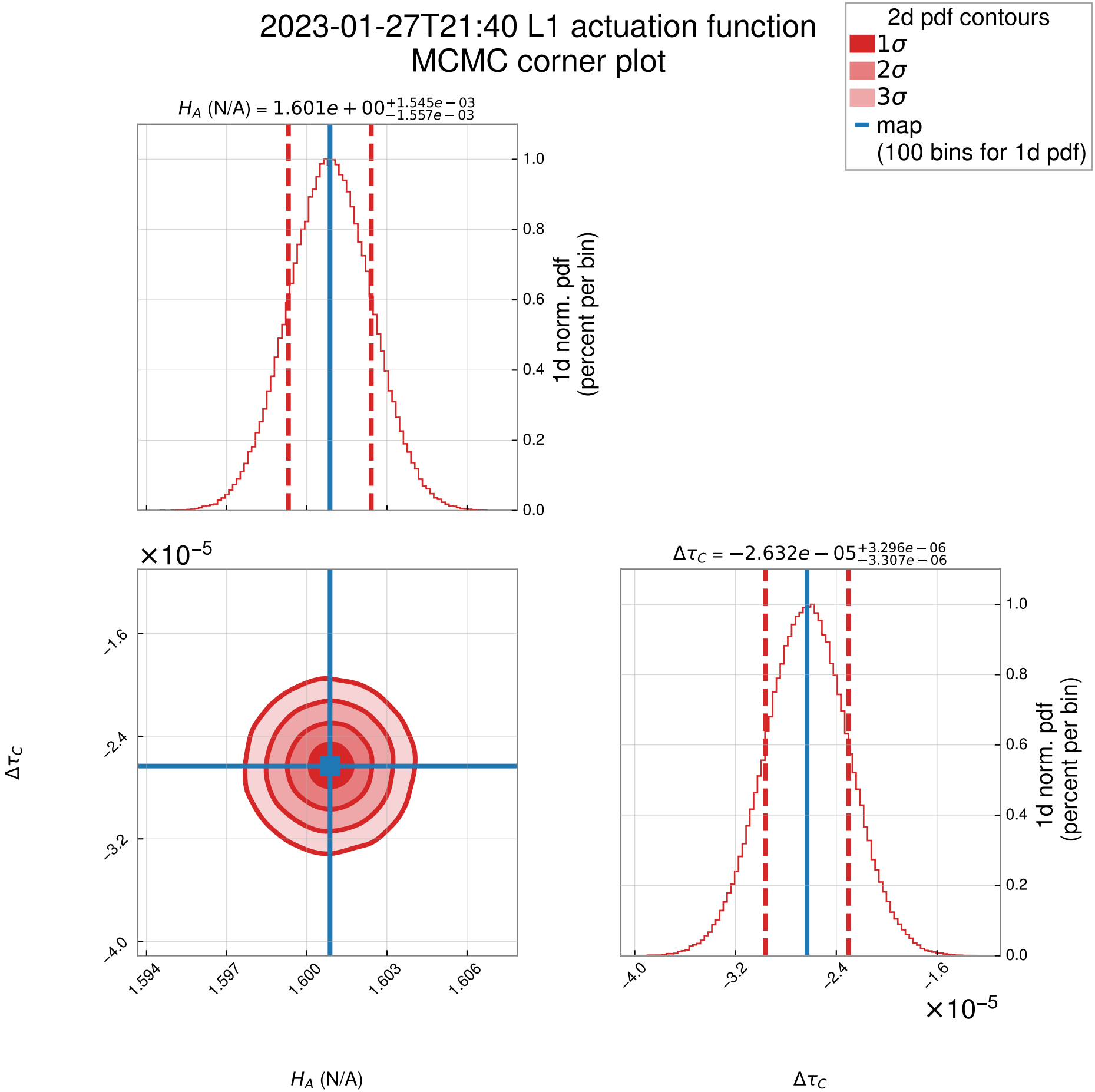

2023-01-27T21:40 sensing function
MCMC corner plot
2d pdf contours
1σ
2σ
3σ
map
(100 bins for 1d pdf)
$H_C = 3.032e+06^{+3.237e+03}_{-3.241e+03}$
$f_{cc} = 4.427e+02^{+1.040e+00}_{-1.034e+00}$
$f_s = 7.476e-02^{+1.142e-01}_{-5.522e-02}$
$Q = 4.183e+00^{+1.453e+01}_{-2.632e+00}$
$\Delta\tau_C = -3.840e-05^{+4.271e-07}_{-4.267e-07}$
1d norm. pdf (percent per bin)
f_{cc}
f_s
Q
$\Delta\tau_C$
$\times 10^{6}$
$\times 10^{-5}$

H1 sensing model MCMC summary

All fixed parameters are drawn from pydarm_H1.ini

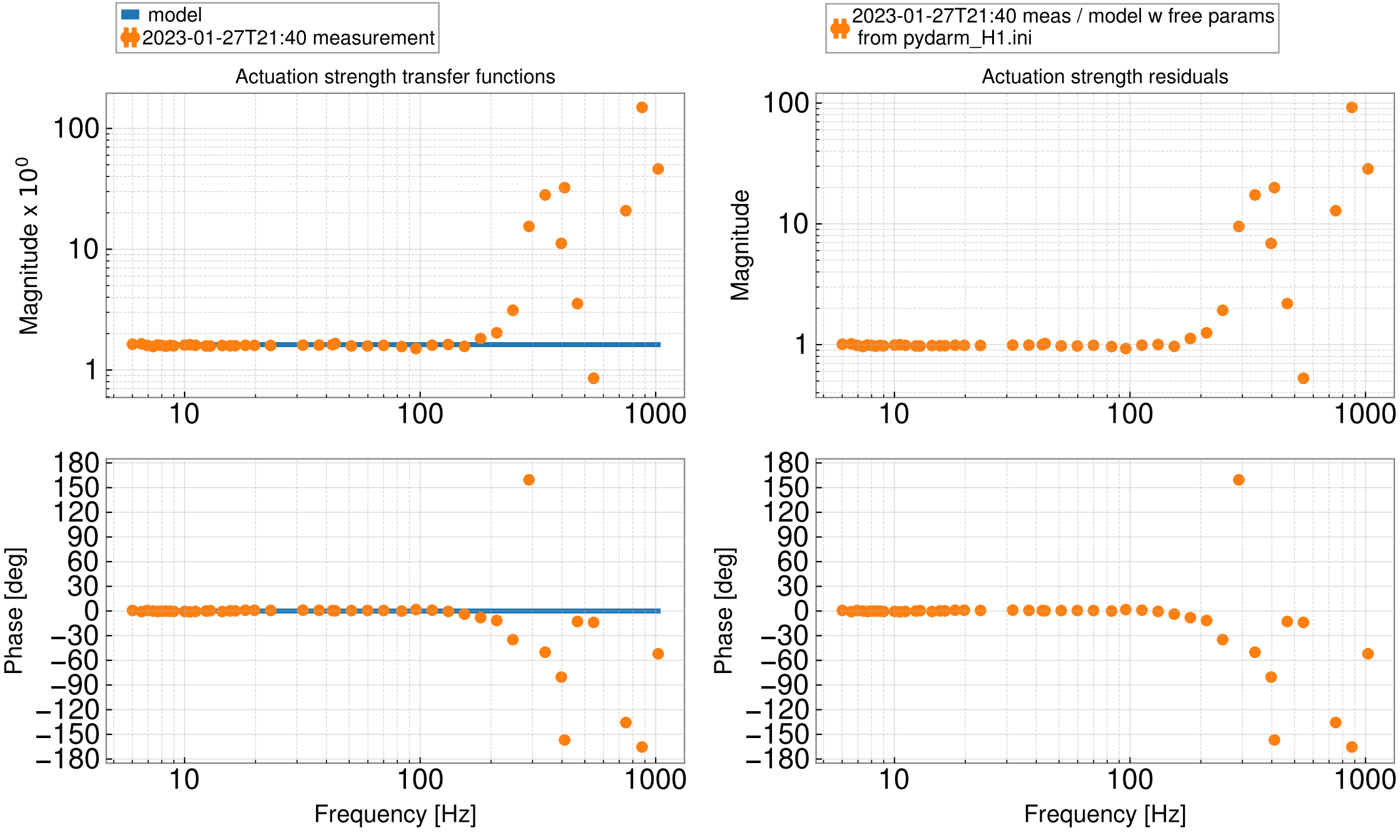


Parameter (value +/-)	value	+	-
Optical gain, H_c (ct/m)	3.032e+06	3237 (0.00%)	3241 (0.00%)
Cavity_pole, f_cc (Hz)	442.7	1.04 (0.00%)	1.034 (0.00%)
Detuned SRC spring frequency, f_s (Hz)	0.07476	0.1142 (1.53%)	0.05522 (0.74%)
Detuned SRC spring quality factor, Q_s	4.183	14.53 (3.47%)	2.632 (0.63%)
Residual time delay, tau_c (s)	-3.84e-05	4.271e-07 (-0.01%)	4.267e-07 (-0.01%)
kappa_c	0.9457	0.00101 (0.00%)	0.001011 (0.00%)

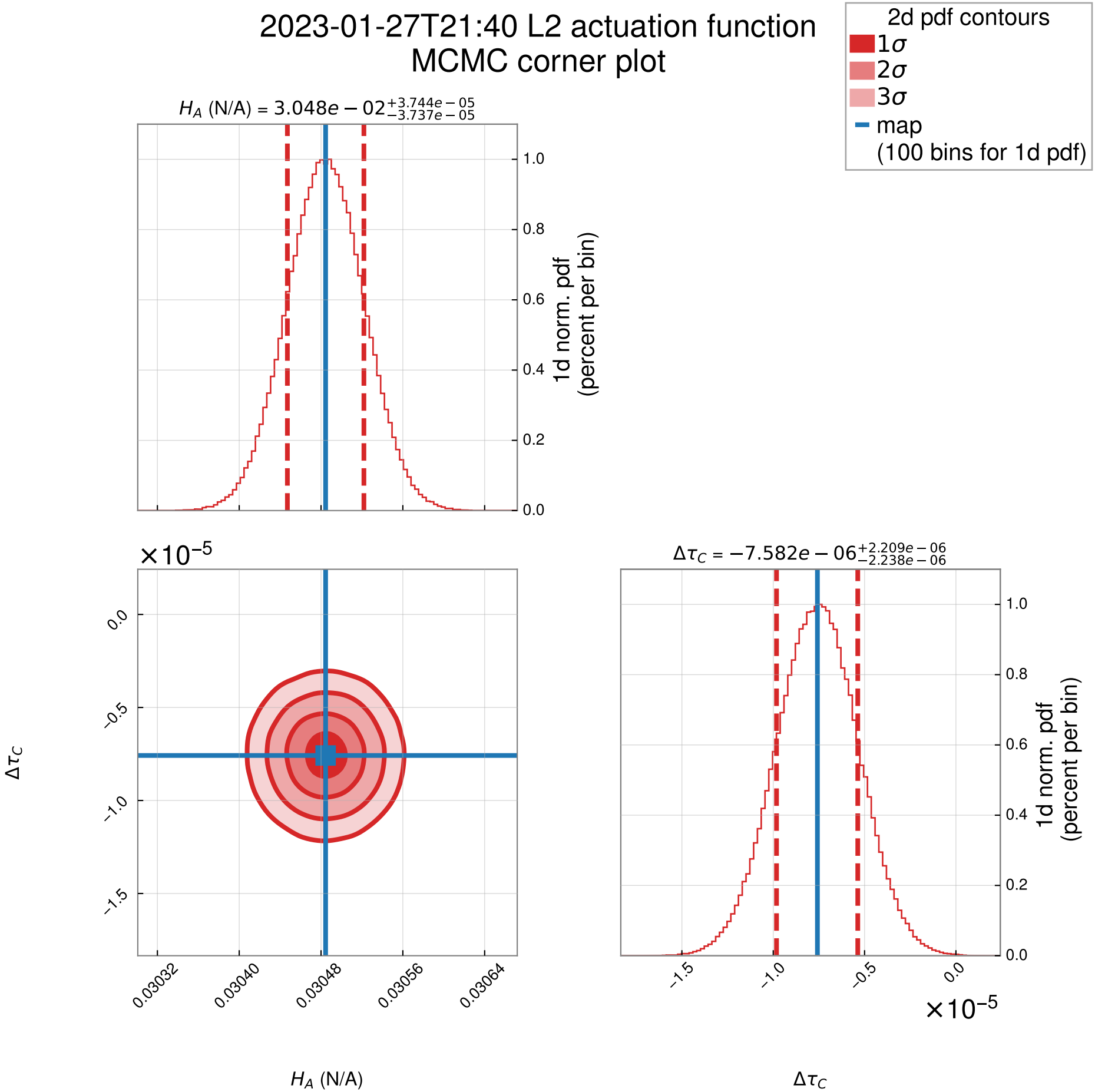

2023-01-27T21:40 L1 actuation function
MCMC corner plot
2d pdf contours
1σ
2σ
3σ
map
(100 bins for 1d pdf)
H_A (N/A) = $1.601e+00^{+1.545e-03}_{-1.557e-03}$
1d norm. pdf
(percent per bin)
$\times 10^{-5}$
$\Delta\tau_C$ = $-2.632e-05^{+3.296e-06}_{-3.307e-06}$
H_A (N/A)
$\Delta\tau_C$

H1SUSETMX L1 actuation model history

All fixed parameters are drawn from pydarm_H1.ini

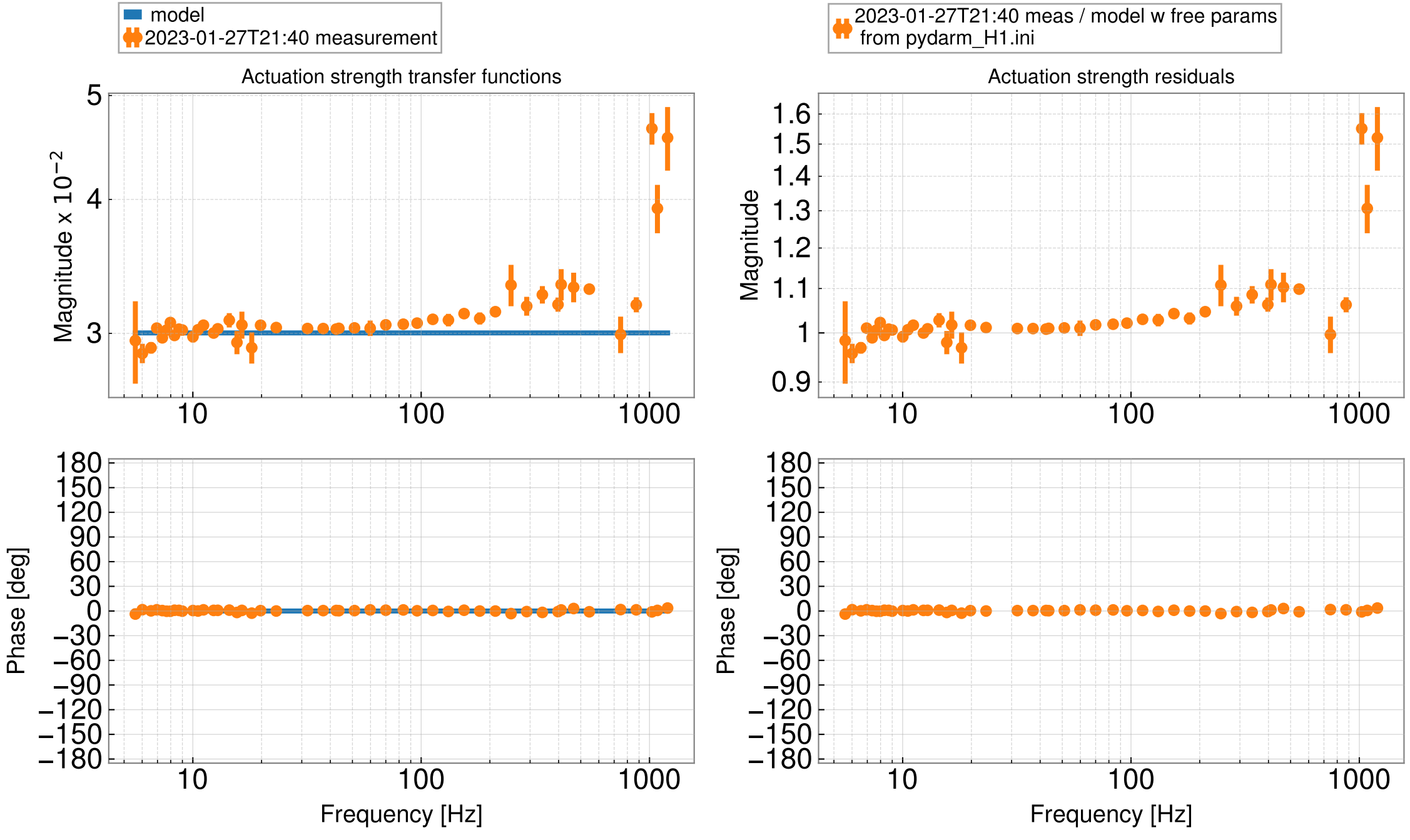


2023-01-27T21:40 L2 actuation function MCMC corner plot

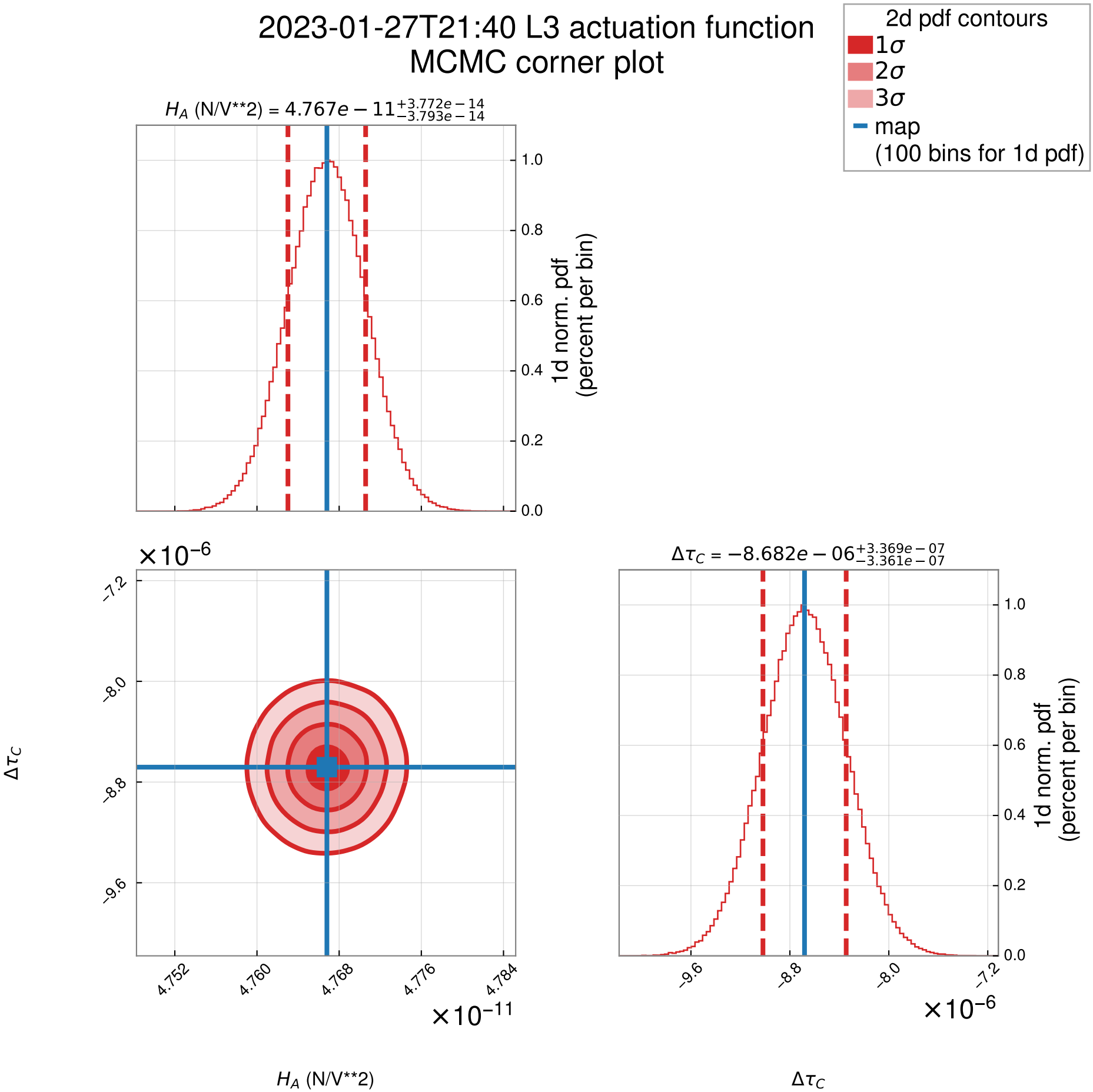


H1SUSETMX L2 actuation model history

All fixed parameters are drawn from pydarm_H1.ini

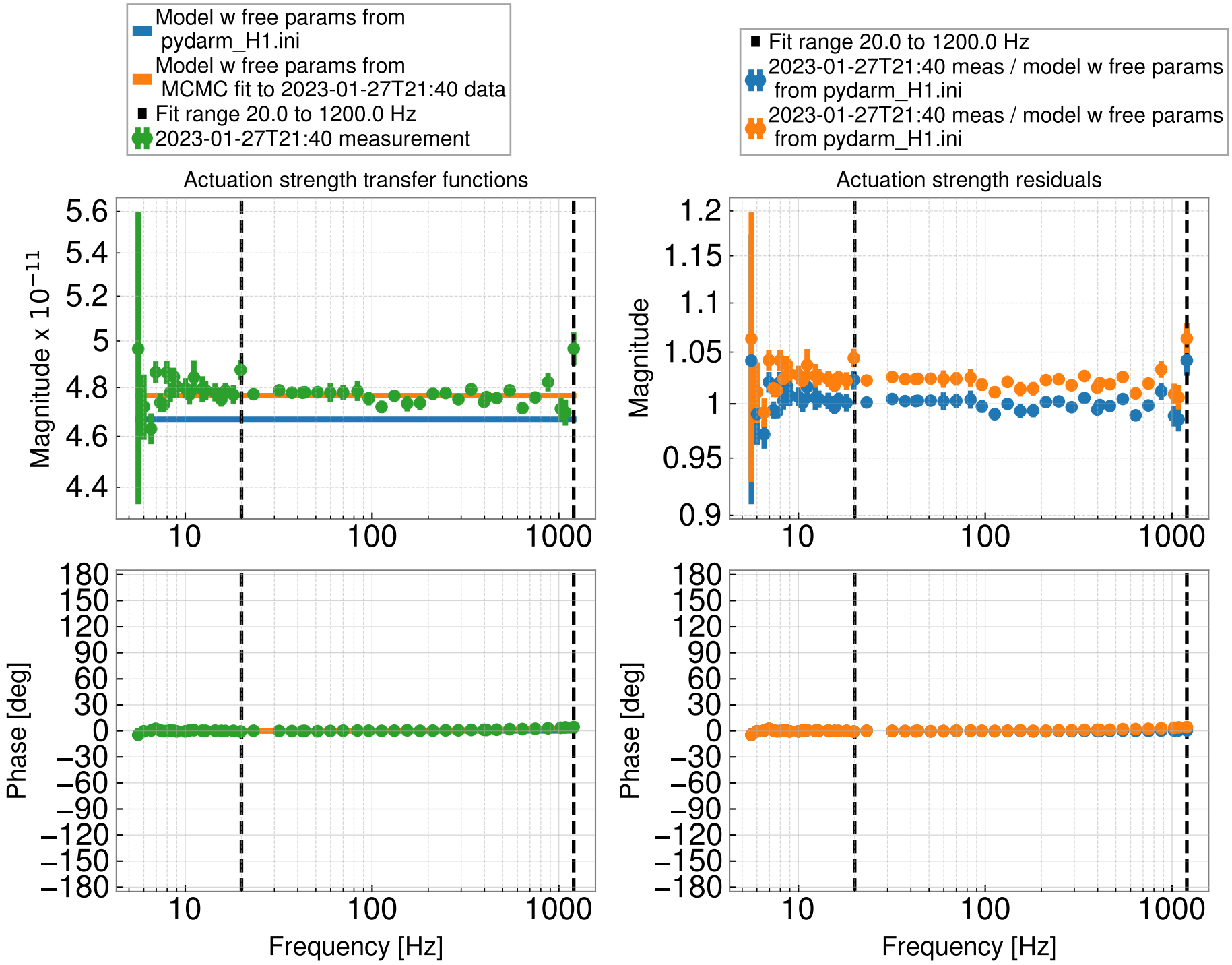


2023-01-27T21:40 L3 actuation function MCMC corner plot



H1SUSETMX L3 actuation model MCMC summary

All fixed parameters are drawn from pydarm_H1.ini



Parameter (value +/-)	value	+	-
Gain, H_A (N/V**2)	4.767e-11	3.772e-14 (0.00%)	3.793e-14 (0.00%)
Residual time delay, tau_c (s)	-8.682e-06	3.369e-07 (-0.04%)	3.361e-07 (-0.04%)
Gain, H_A (N/ct)	5.09e-12	4.027e-15 (0.00%)	4.05e-15 (0.00%)

H1SUSETMX L3 actuation model history

All fixed parameters are drawn from pydarm_H1.ini