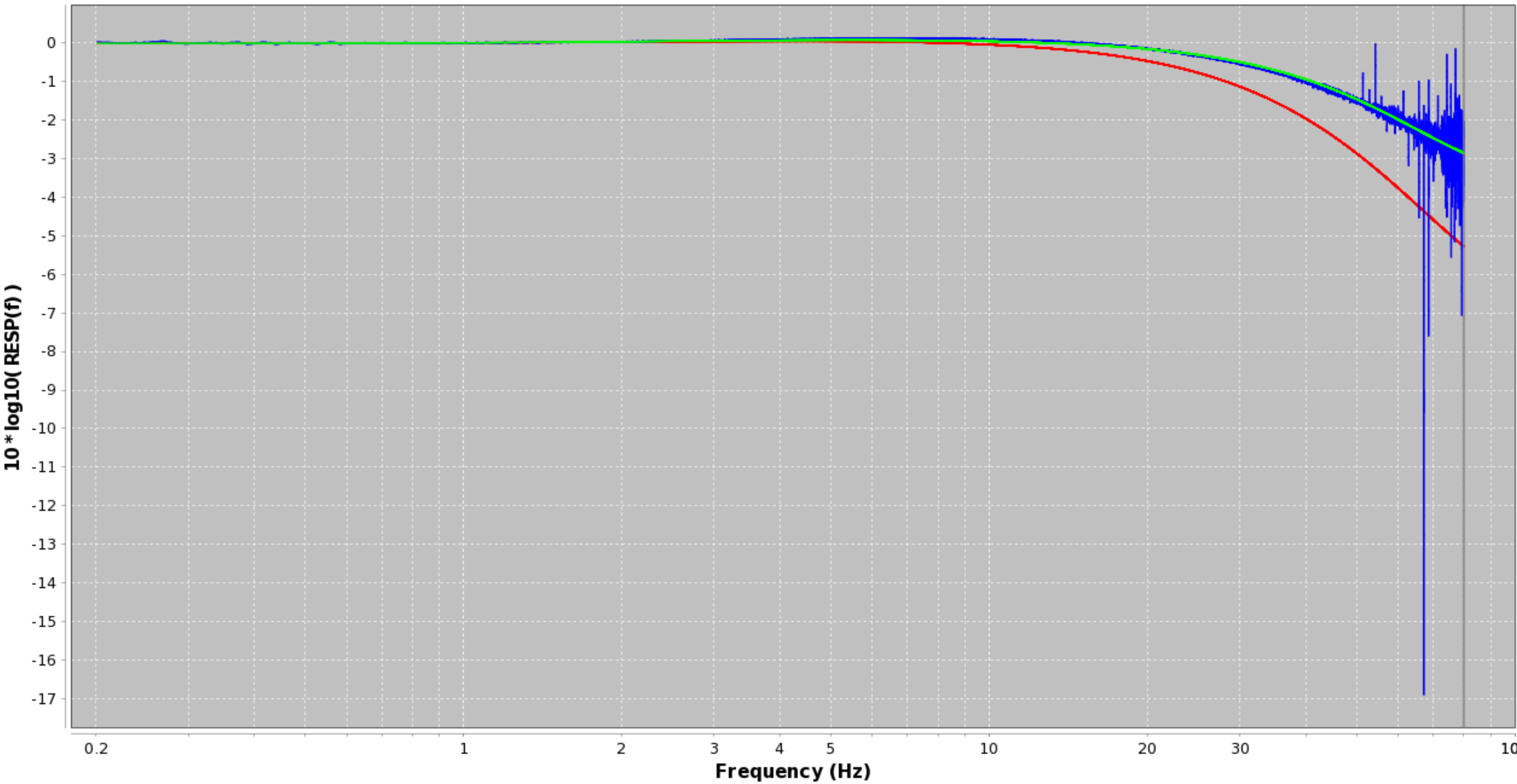


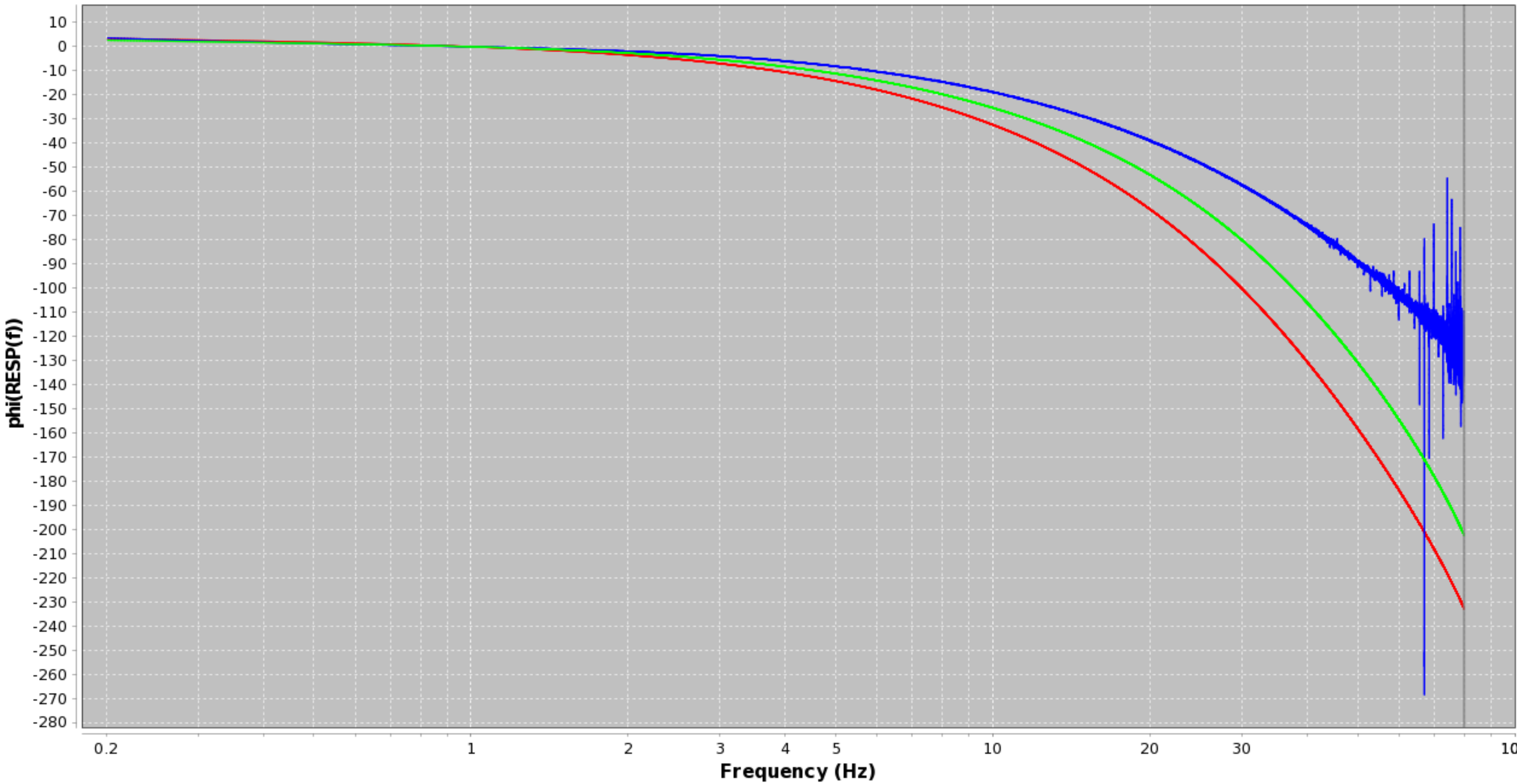
Randomized calibration (HIGH FREQ.)



<b>Initial poles:</b> -501.105 (0.01254), -501.105 (0.01254) -501.105 (0.01254), -501.105 (0.01254) -501.105 (0.01254), -501.105 (0.01254) -351.858 (0.01786), -22.3068 (0.28167) -22.3068 (0.28167), <b>Fit poles:</b> -585.80585 (0.01073), -585.80585 (0.01073) -585.80585 (0.01073), -585.80585 (0.01073) -585.80585 (0.01073), -585.80585 (0.01073) -354.78622 (0.01771), -16.97681 (0.3701) -16.97681 (0.3701),	<b>Initial zeros:</b> -351.858 (0.01786), -21.9911 (0.28571) -21.9911 (0.28571), <b>Fit zeros:</b> -296.91231 (0.02116), -16.72156 (0.37575) -16.72156 (0.37575),	<b>Residuals:</b> Initial (nom. resp curve): 2599.9510313311525 Best fit: 667.1985507864966
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NUMBER OF ITERATIONS: 28

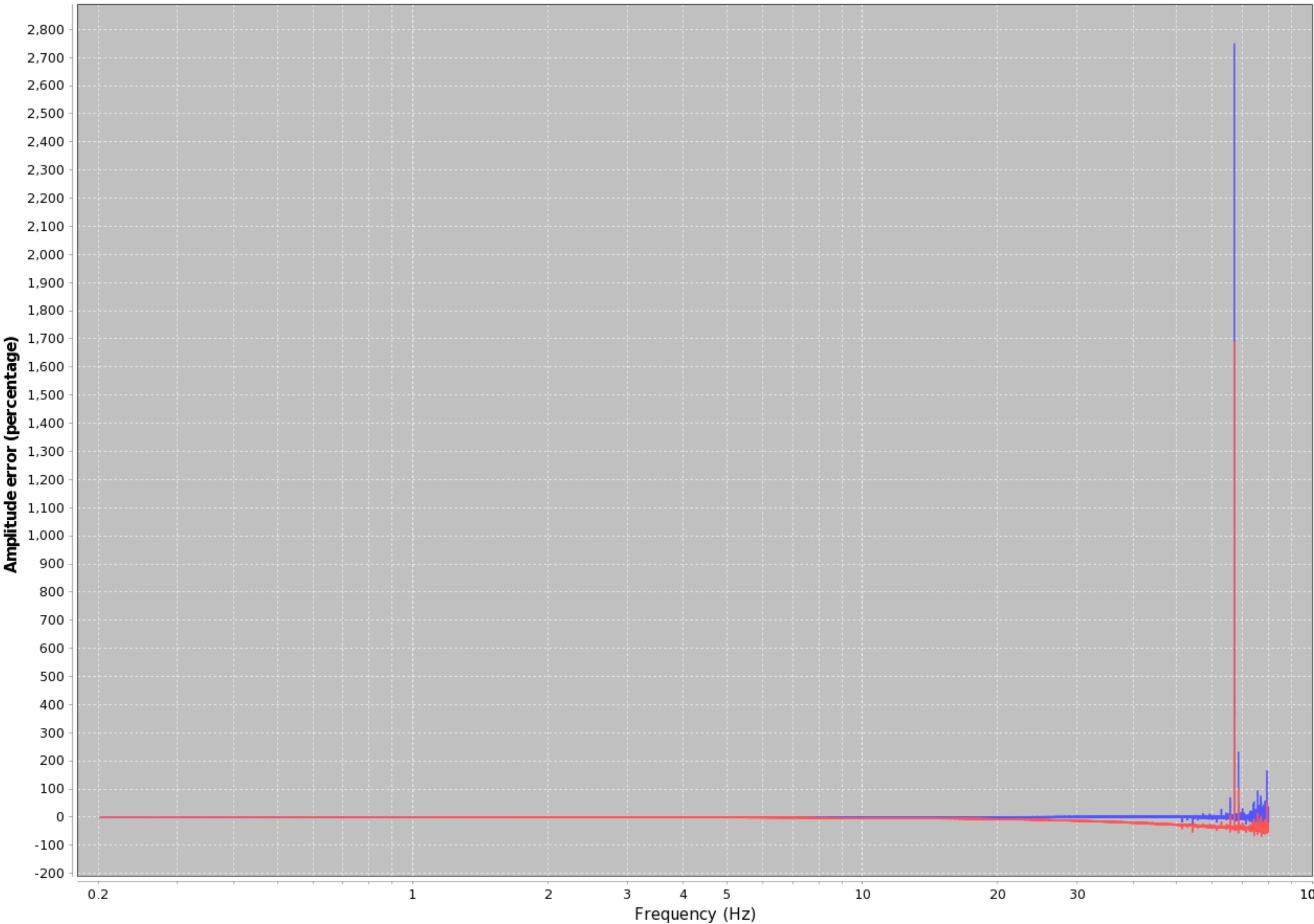
Randomized calibration (HIGH FREQ.)



<b>Initial poles:</b> -501.105 (0.01254), -501.105 (0.01254) -501.105 (0.01254), -501.105 (0.01254) -501.105 (0.01254), -501.105 (0.01254) -351.858 (0.01786), -22.3068 (0.28167) -22.3068 (0.28167), <b>Fit poles:</b> -585.80585 (0.01073), -585.80585 (0.01073) -585.80585 (0.01073), -585.80585 (0.01073) -585.80585 (0.01073), -585.80585 (0.01073) -354.78622 (0.01771), -16.97681 (0.3701) -16.97681 (0.3701),	<b>Initial zeros:</b> -351.858 (0.01786), -21.9911 (0.28571) -21.9911 (0.28571), <b>Fit zeros:</b> -296.91231 (0.02116), -16.72156 (0.37575) -16.72156 (0.37575),	<b>Residuals:</b> Initial (nom. resp curve): 2599.9510313311525 Best fit: 667.1985507864966
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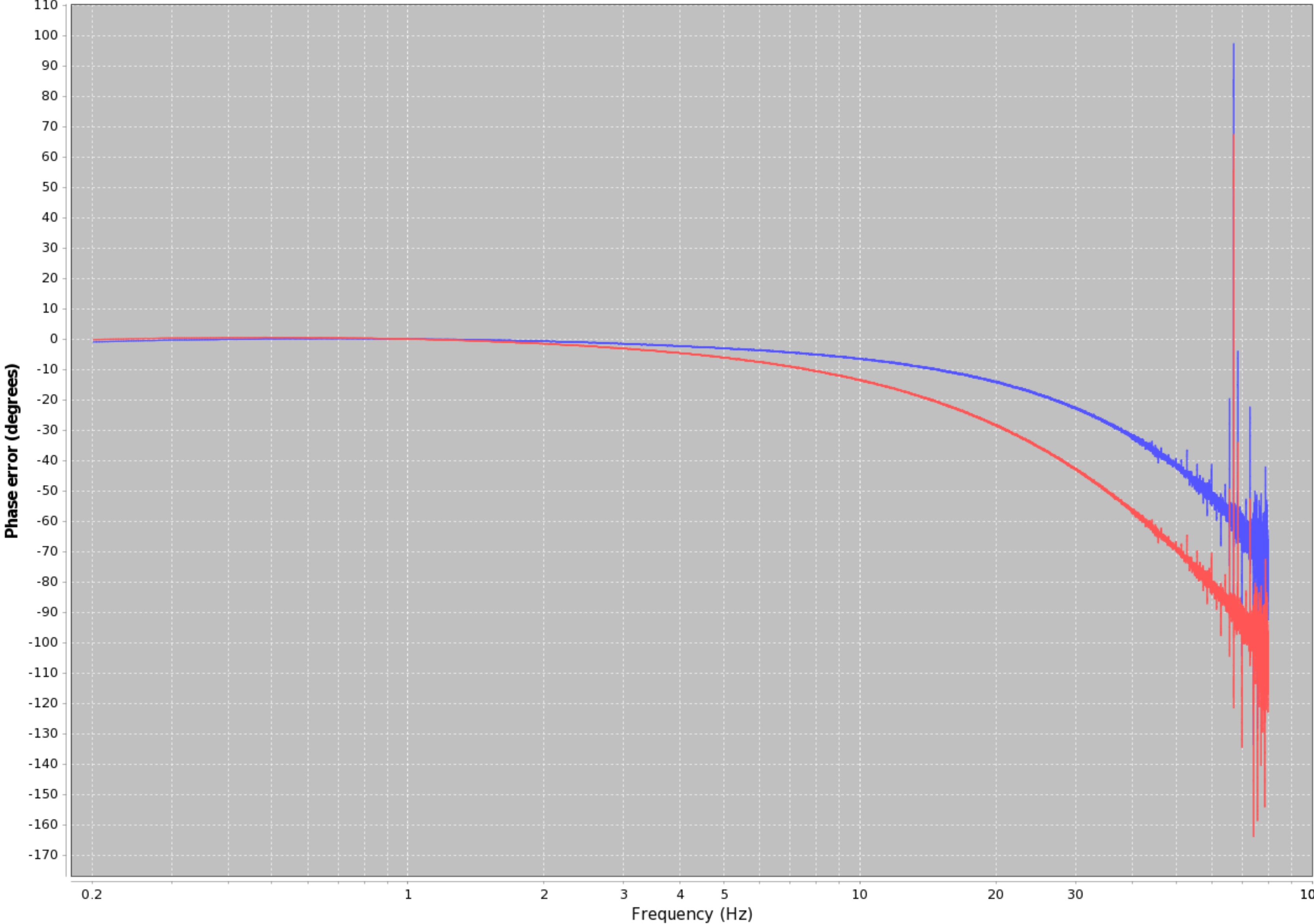
NUMBER OF ITERATIONS: 28

Randomized calibration



Percent error of init. amplitude Percent error of fit amplitude

Randomized calibration



Diff. with init phase Diff with fit phase

Initial poles:

-501.105 (0.01254), -501.105 (0.01254)  
-501.105 (0.01254), -501.105 (0.01254)  
-501.105 (0.01254), -501.105 (0.01254)  
-351.858 (0.01786), -22.3068 (0.28167)  
-22.3068 (0.28167),

Fit poles:

-585.80585 (0.01073), -585.80585 (0.01073)  
-585.80585 (0.01073), -585.80585 (0.01073)  
-585.80585 (0.01073), -585.80585 (0.01073)  
-354.78622 (0.01771), -16.97681 (0.3701)  
-16.97681 (0.3701),

Initial zeros:

-351.858 (0.01786), -21.9911 (0.28571)  
-21.9911 (0.28571),

Fit zeros:

-296.91231 (0.02116), -16.72156 (0.37575)  
-16.72156 (0.37575),

Residuals:

Initial (nom. resp curve): 2599.9510313311525

Best fit: 667.1985507864966

Iteration count from solver: 28

Input filenames, with SEED and RESP files paired as appropriate:

IU\_CCM\_10\_BC1

IU\_CCM\_10\_EHZ

RESP.IU.CCM.10.BHZ

Residuals weighting:

Amplitude: 7977.814777435791

Phase: 0.33415428890411153

Time of report generation:

2017.313.19:00:18

Data start time:

2017.151.22:28:59

Data end time:

2017.151.22:44:00

POLE VARIABLES, AS CSV:

Init	Fit	Diff	Mean	PctDiff
-501.105	-585.8059	+84.7009	-543.4554	-14.4589
+0	+0	+0	+0	+0
-501.105	-585.8059	+84.7009	-543.4554	-14.4589
+0	+0	+0	+0	+0
-501.105	-585.8059	+84.7009	-543.4554	-14.4589
+0	+0	+0	+0	+0
-501.105	-585.8059	+84.7009	-543.4554	-14.4589
+0	+0	+0	+0	+0
-501.105	-585.8059	+84.7009	-543.4554	-14.4589
+0	+0	+0	+0	+0
-501.105	-585.8059	+84.7009	-543.4554	-14.4589
+0	+0	+0	+0	+0
-351.858	-354.7862	+2.9282	-353.3221	-0.8253
+0	+0	+0	+0	+0
-22.3068	-16.9768	-5.33	-19.6418	+31.3957
+0	+0	+0	+0	+0
-22.3068	-16.9768	-5.33	-19.6418	+31.3957
+0	+0	+0	+0	+0

ZERO VARIABLES, AS CSV:

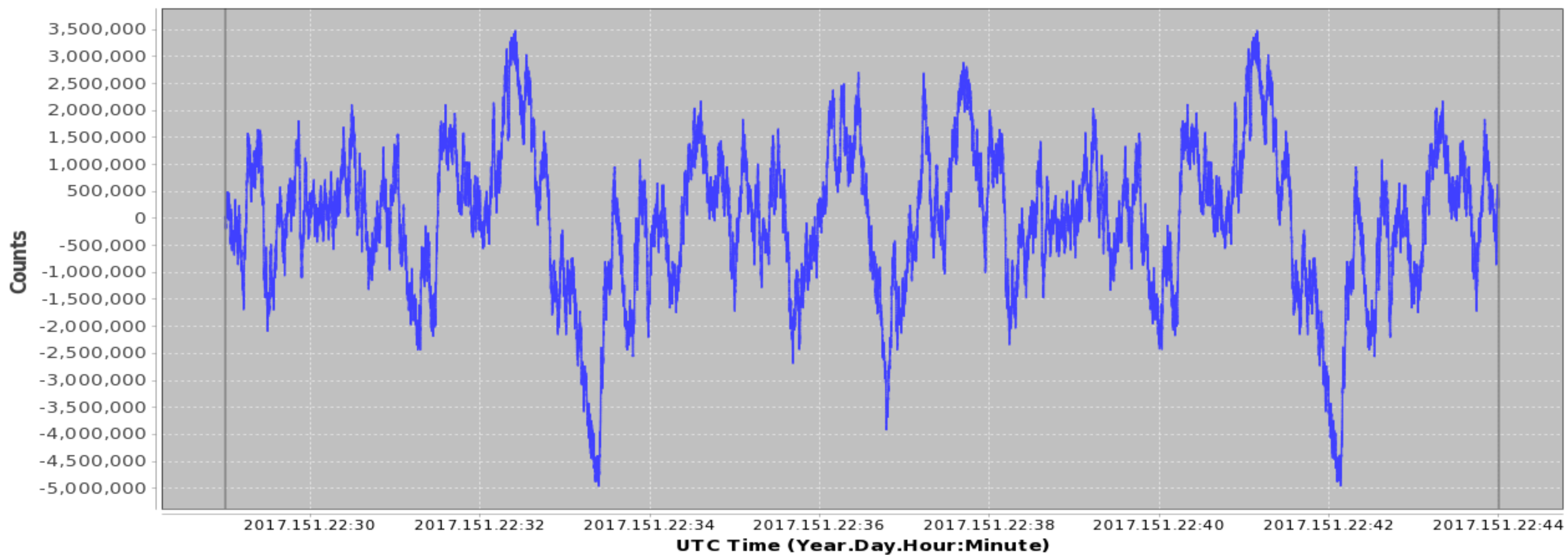
Init	Fit	Diff	Mean	PctDiff
-351.858	-296.9123	-54.9457	-324.3852	+18.5057
+0	+0	+0	+0	+0
-21.9911	-16.7216	-5.2695	-19.3563	+31.5135
+0	+0	+0	+0	+0
-21.9911	-16.7216	-5.2695	-19.3563	+31.5135
+0	+0	+0	+0	+0



**IU\_CCM\_10\_BC1 (200.0 Hz)**



**IU\_CCM\_10\_EHZ (200.0 Hz)**



Response name: RESP.IU.CCM.10.BHZ

Gain stage values:

0: 1,993,130,000

1: 1,188

2: 1,677,720

3: 1

Normalization: 9.82411E12

Normalization frequency (Hz): 0.02

Transfer function is LAPLACIAN

Response input units: velocity (m/s)

Response zeros:

0: 0

1: 0

2: -21.9911

3: -21.9911

4: -351.858

5: -605.071

6: -521.504 - 960.699i

7: -521.504 + 960.699i

Response poles:

0: -0.0123 + 0.0121i

1: -0.0123 - 0.0121i

2: -22.3068

3: -22.3068

4: -351.858

5: -501.105

6: -501.105

7: -501.105

8: -501.105

9: -501.105

10: -501.105

11: -121.58 + 647.231i

12: -121.58 - 647.231i