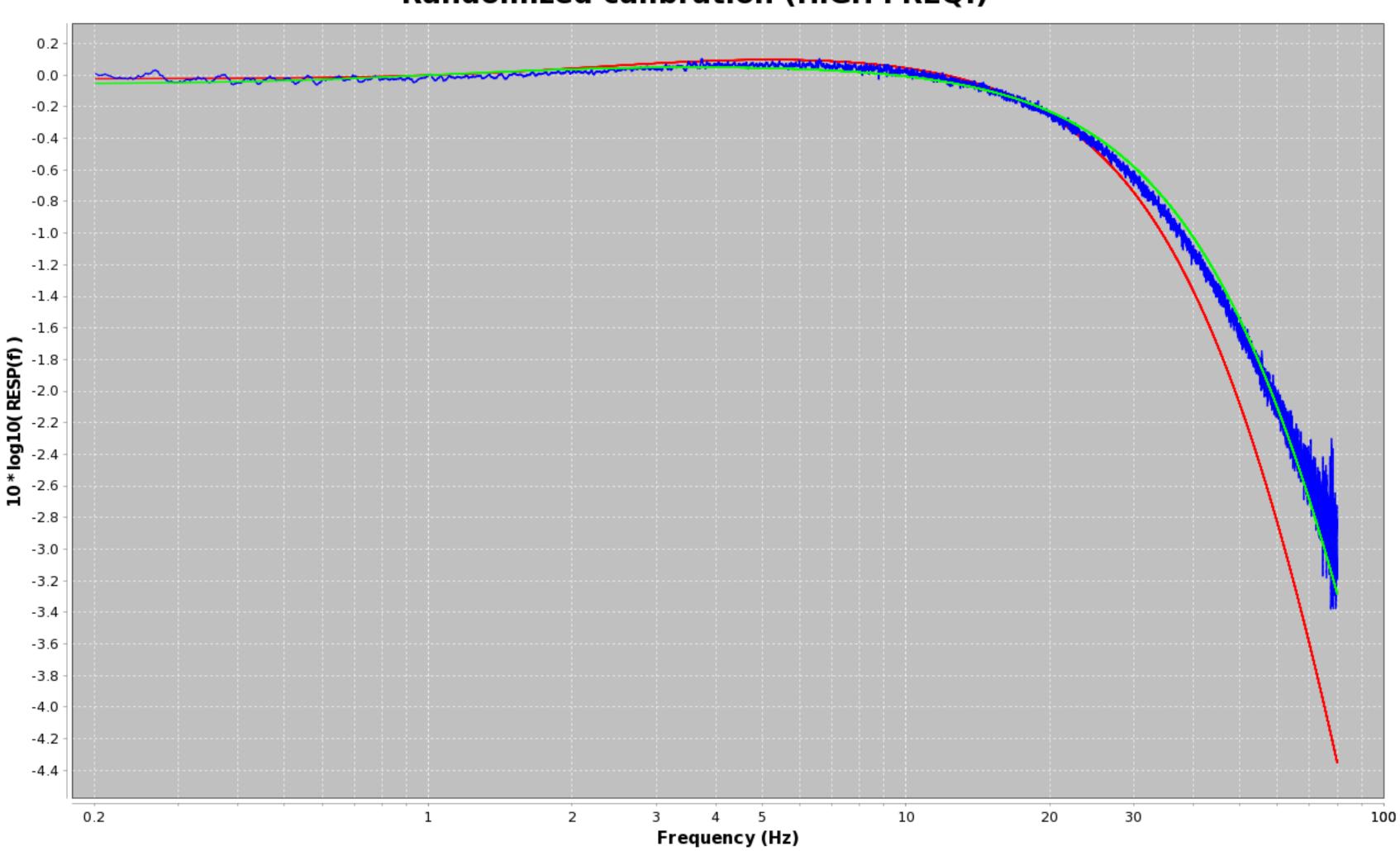
# Randomized calibration (HIGH FREQ.)

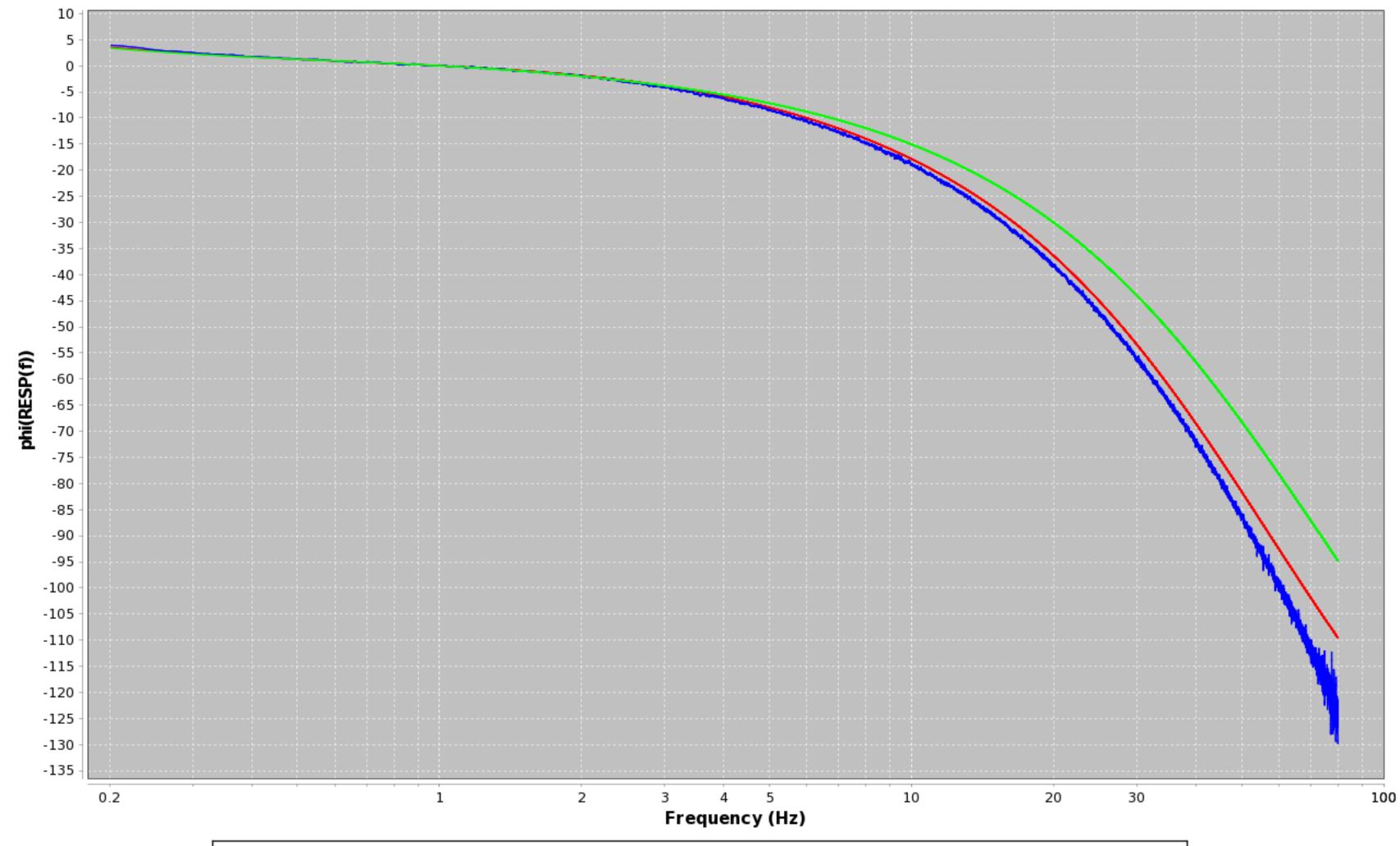


— Initial param (STS-5A\_Q330HR\_BH\_40\_nocoil) magnitude — Calc. resp. (IU\_COLA\_10\_EHZ) magnitude — Fit resp. magnitude

Initial poles: -16.047 (0.39155 s); -16.047 (0.39155 s) -339.3 + 115.6i; -339.3 - 115.6i (0.01753 s) Fit poles: Initial zeros: -15.708 (0.4 s) -15.708 (0.4 s); Fit zeros: Residuals: Initial (nom. resp curve): 1161.9607059074615 Best fit: 341.2497644058233

-7.00435 (0.89704 s); -7.00435 (0.89704 s) -6.90327 (0.91018 s) -458.40248 - 60.74799i; -458.40248 + 60.74799i (0.01359 s) -6.90327 (0.91018 s); NUMBER OF ITERATIONS: 19

# Randomized calibration (HIGH FREQ.)



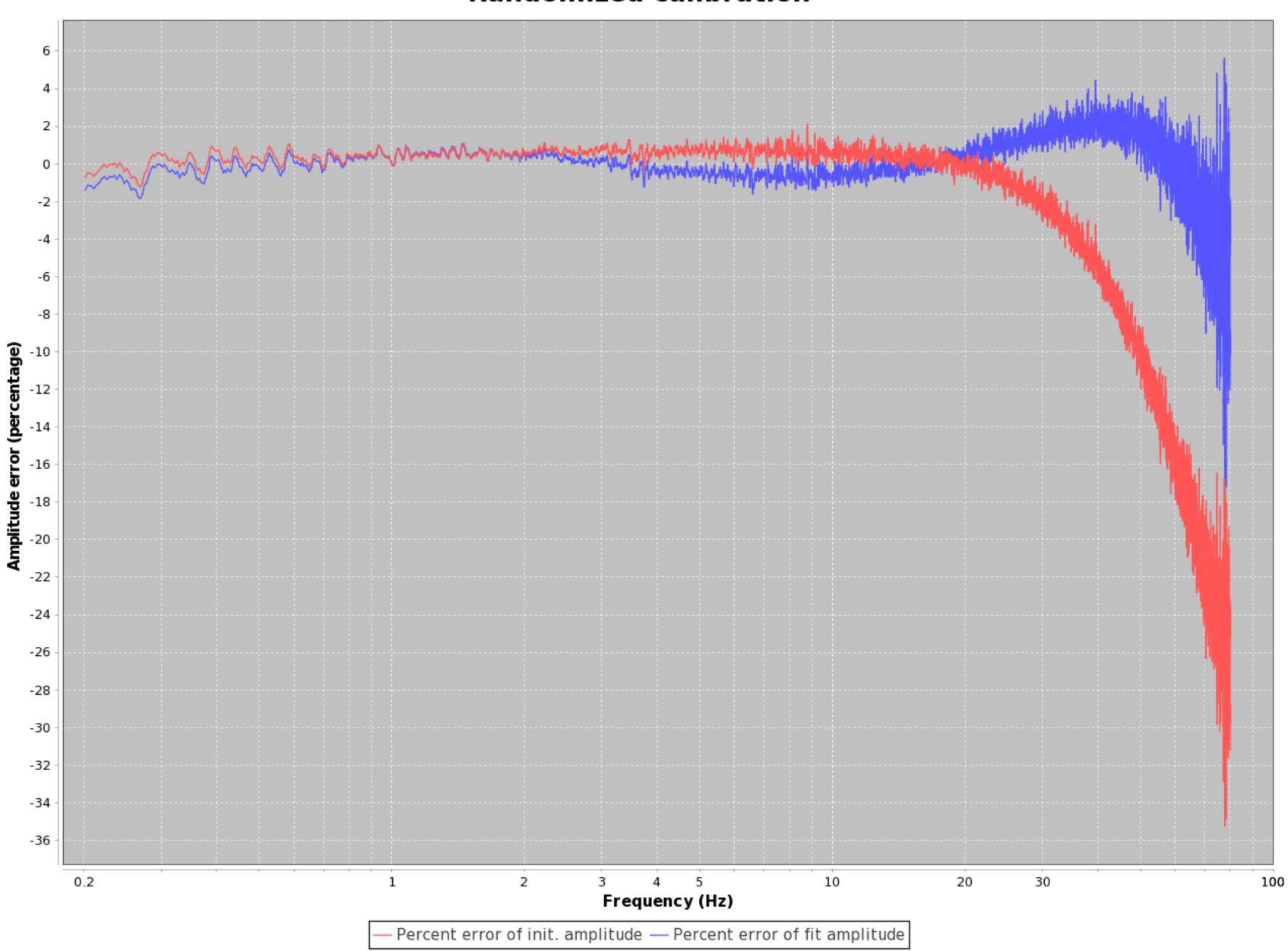
— Initial param (STS-5A\_Q330HR\_BH\_40\_nocoil) phase — Calc. resp. (IU\_COLA\_10\_EHZ) phase — Fit resp. phase

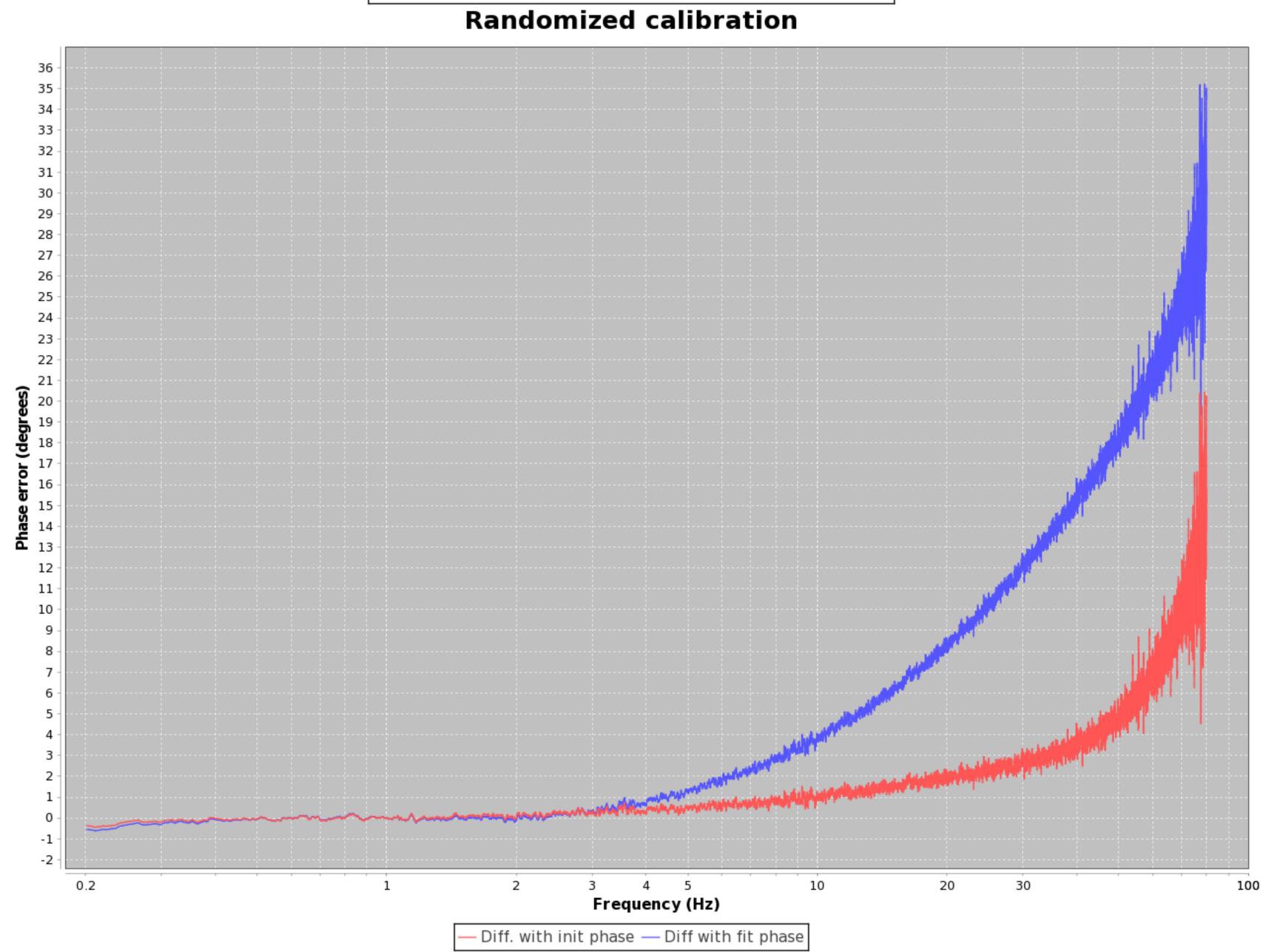
Initial poles: -16.047 (0.39155 s); -16.047 (0.39155 s) -339.3 + 115.6i; -339.3 - 115.6i (0.01753 s) Fit poles:

Initial zeros: -15.708 (0.4 s) -15.708 (0.4 s); Residuals: Initial (nom. resp curve): 1161.9607059074615 Best fit: 341.2497644058233

Fit poles: Fit zeros: -7.00435 (0.89704 s); -7.00435 (0.89704 s) -6.90327 (0.91018 s) -458.40248 - 60.74799i; -458.40248 + 60.74799i (0.01359 s) -6.90327 (0.91018 s); NUMBER OF ITERATIONS: 19

# **Randomized calibration**





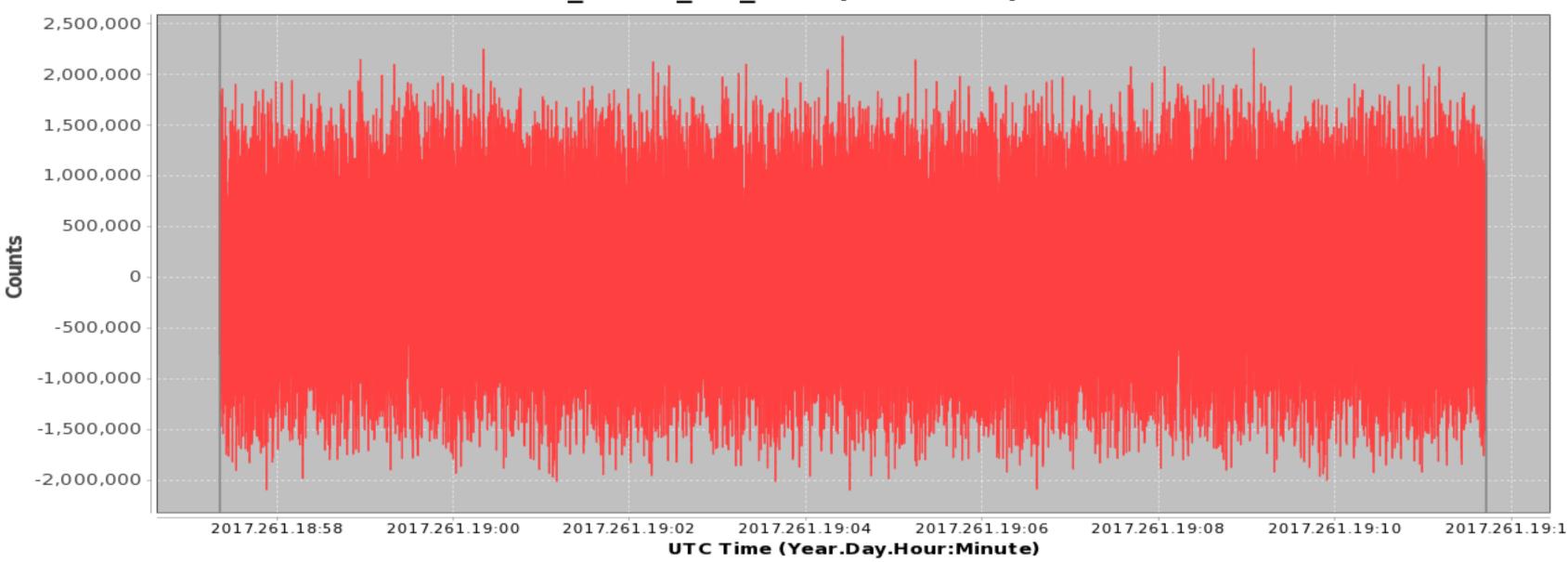
```
Initial poles:
-16.047 (0.39155 s); -16.047 (0.39155 s)
-339.3 + 115.6i; -339.3 - 115.6i (0.01753 s)
Fit poles:
-7.00435 (0.89704 s); -7.00435 (0.89704 s)
-458.40248 - 60.74799i; -458.40248 + 60.74799i (0.01359 s)
Initial zeros:
-15.708 (0.4 s)
-15.708 (0.4 s);
Fit zeros:
-6.90327 (0.91018 s)
-6.90327 (0.91018 s);
Residuals:
Initial (nom. resp curve): 1161.9607059074615
Best fit: 341.2497644058233
Iteration count from solver: 19
Input filenames, with SEED and RESP files paired as appropriate:
IU COLA CB BC1
IU_COLA_10_EHZ
STS-5A_Q330HR_BH_40_nocoil
Residuals weighting:
    Amplitude: 9716.163816854092
    Phase: 0.437881558258781
Time of report generation:
2017.268.15:30:01
Data start time:
2017.261.18:57:21
Data end time:
2017.261.19:11:42
```

### POLE VARIABLES, AS CSV:

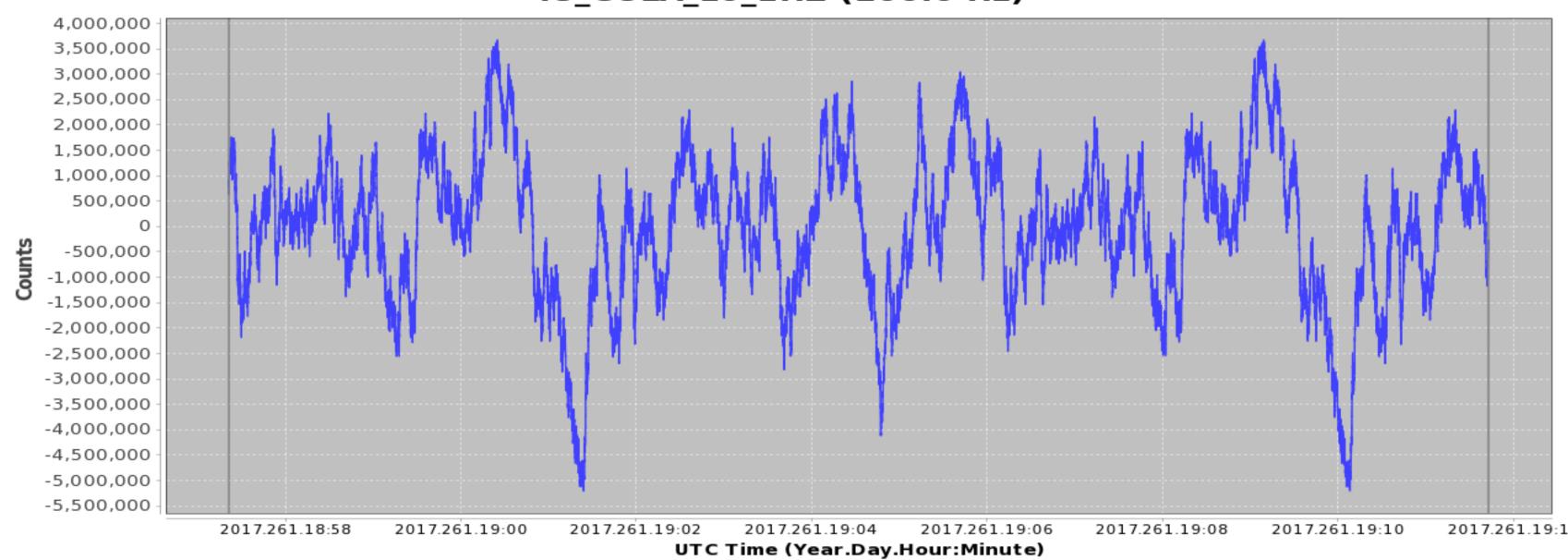
Init	Fit	Diff	Mean	PctDiff
-16.047	-7.0044	-9.0426	-11.5257	+129.1004
+0	+0	+0	+0	+0
-16.047	-7.0044	-9.0426	-11.5257	+129.1004
+0	+0	+0	+0	+0
-339.3	-458.4025+119.1025-398.8512-25.9821			
+115.6	+60.748	+54.852	+88.174	+90.2944
ZERO VARIABLES, AS CSV:				
Init	Fit	Diff	Mean	PctDiff
-15.708	-6.9033	-8.8047	-11.3056	+127.5445
+0	+0	+0	+0	+0
-15.708	-6.9033	-8.8047	-11.3056	+127.5445

+0 +0 +0 +0 +0

# IU\_COLA\_CB\_BC1 (200.0 Hz)



## IU\_COLA\_10\_EHZ (200.0 Hz)



Response name: STS-5A\_Q330HR\_BH\_40\_nocoil

Gain stage values:

0: 2,516,581,500

1: 1,500

2: 1,677,721

Normalization: 133352.839525

Normalization frequency (Hz): 0.05

Transfer function is LAPLACIAN

Response input units: velocity (m/s)

Response zeros:

0: 0

1: 0

2: -15.708

3: -15.708

4: -961.33

#### Response poles:

0: -0.037 - 0.037i

1: -0.037 + 0.037i

2: -16.047

3: -16.047

4: -339.3 + 115.6i

5: -339.3 - 115.6i

6: -961.33