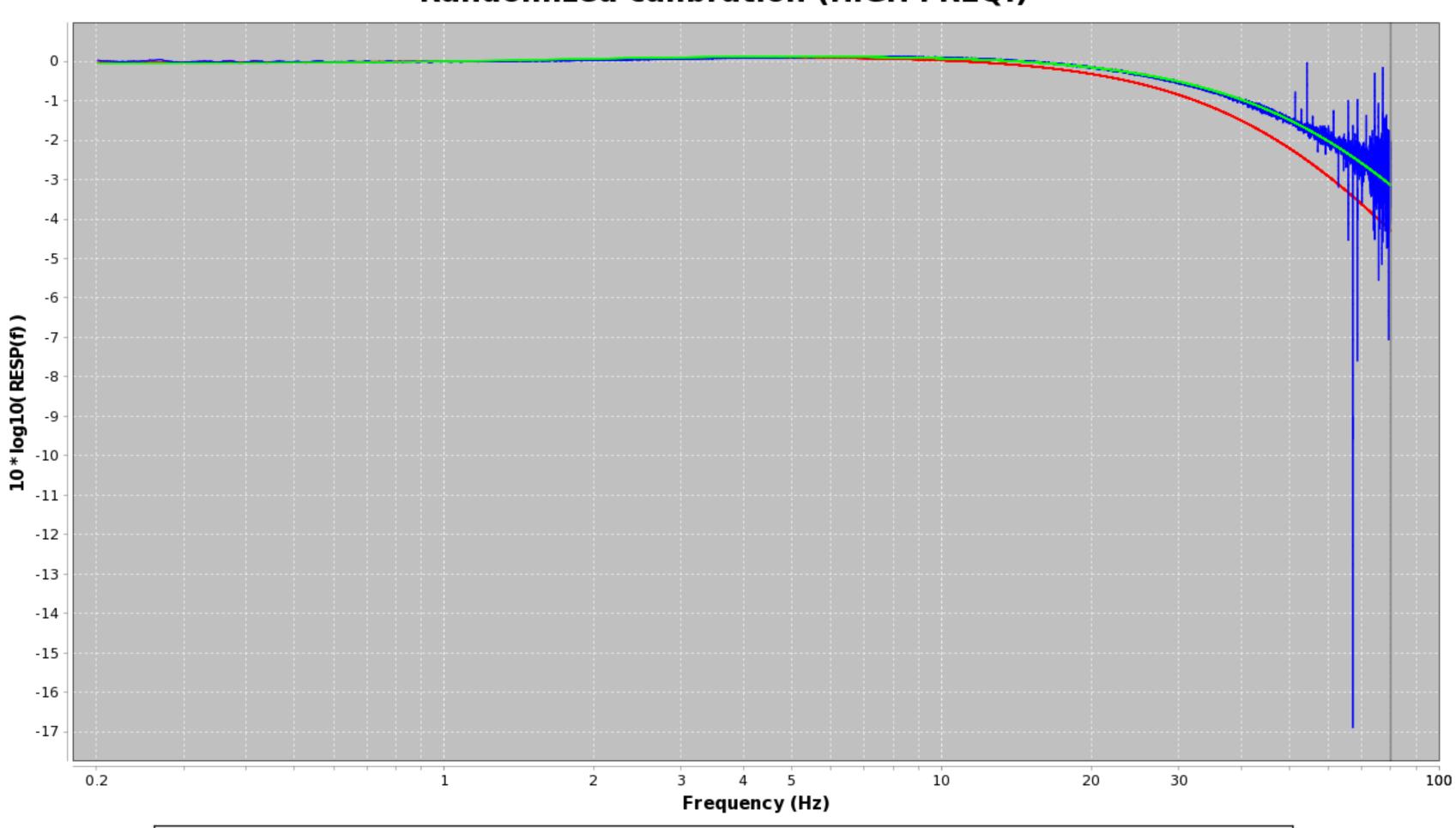
Randomized calibration (HIGH FREQ.)



Initial param (STS-2.5_Q330HR_BH_40_nocoil) magnitude — Calc. resp. (IU_CCM_10_EHZ) magnitude — Fit resp. magnitude Initial poles: **Initial zeros:**

-16.041 (0.3917), -16.041 (0.3917) -327.354 - 74.1416i (0.01872), -327.354 + 74.1416i (0.01872)

Fit poles:

-11.13935 (0.56405), -11.13935 (0.56405) -410.69305 - 65.62584i (0.01511), -410.69305 + 65.62584i (0.01511)

Residuals: Initial (nom. resp curve): 1368.9920917622676

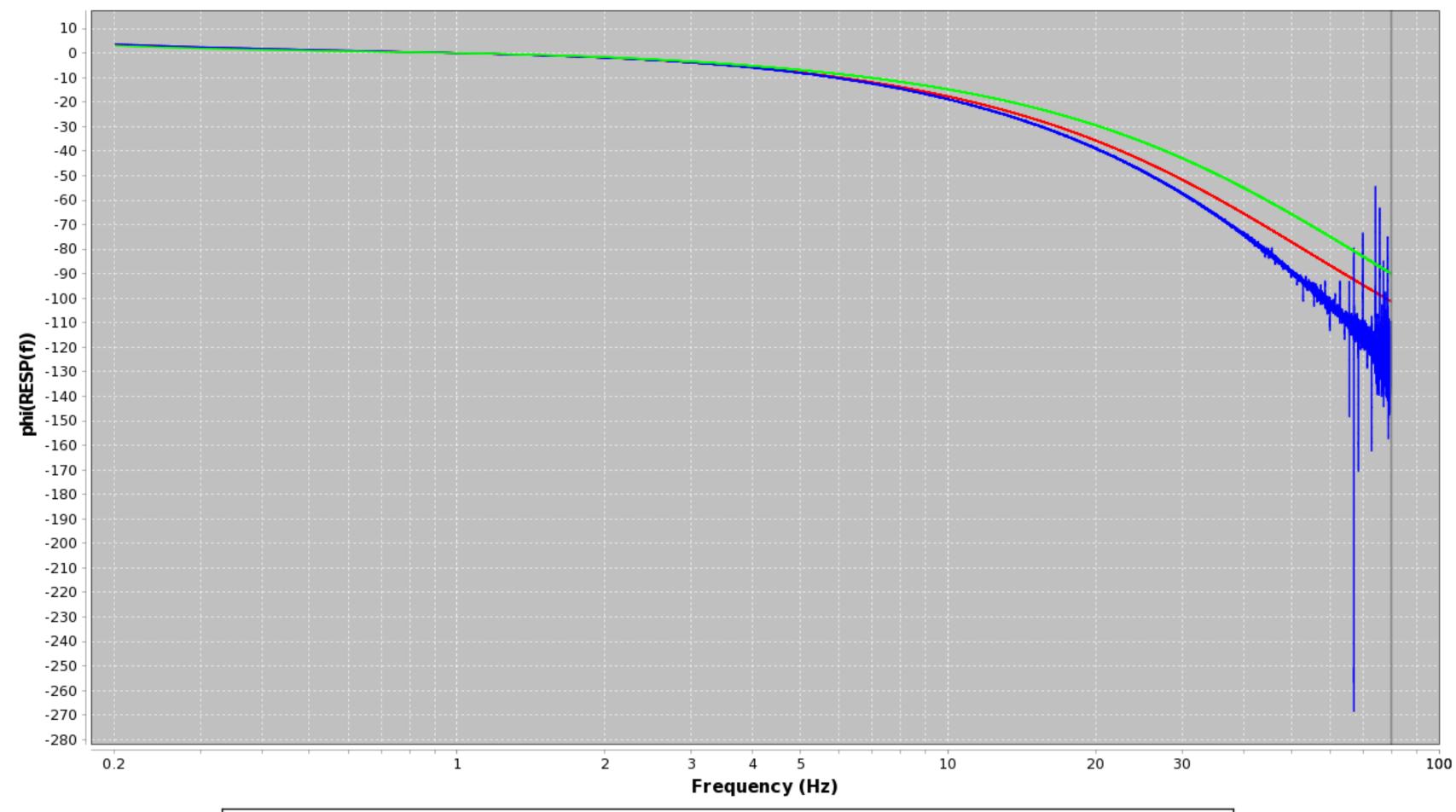
Best fit: 522.5000519020307

NUMBER OF ITERATIONS: 56

-15.708 (0.4), -15.708 (0.4)

Fit zeros: -10.86789 (0.57814), -10.86789 (0.57814)

Randomized calibration (HIGH FREQ.)



Initial param (STS-2.5_Q330HR_BH_40_nocoil) phase — Calc. resp. (IU_CCM_10_EHZ) phase — Fit resp. phase

Initial poles: -16.041 (0.3917), -16.041 (0.3917)

-15.708 (0.4), -15.708 (0.4)

Initial zeros:

-327.354 - 74.1416i (0.01872), -327.354 + 74.1416i (0.01872)

Fit zeros: -10.86789 (0.57814), -10.86789 (0.57814)

Fit poles: -11.13935 (0.56405), -11.13935 (0.56405)

-410.69305 - 65.62584i (0.01511), -410.69305 + 65.62584i (0.01511)

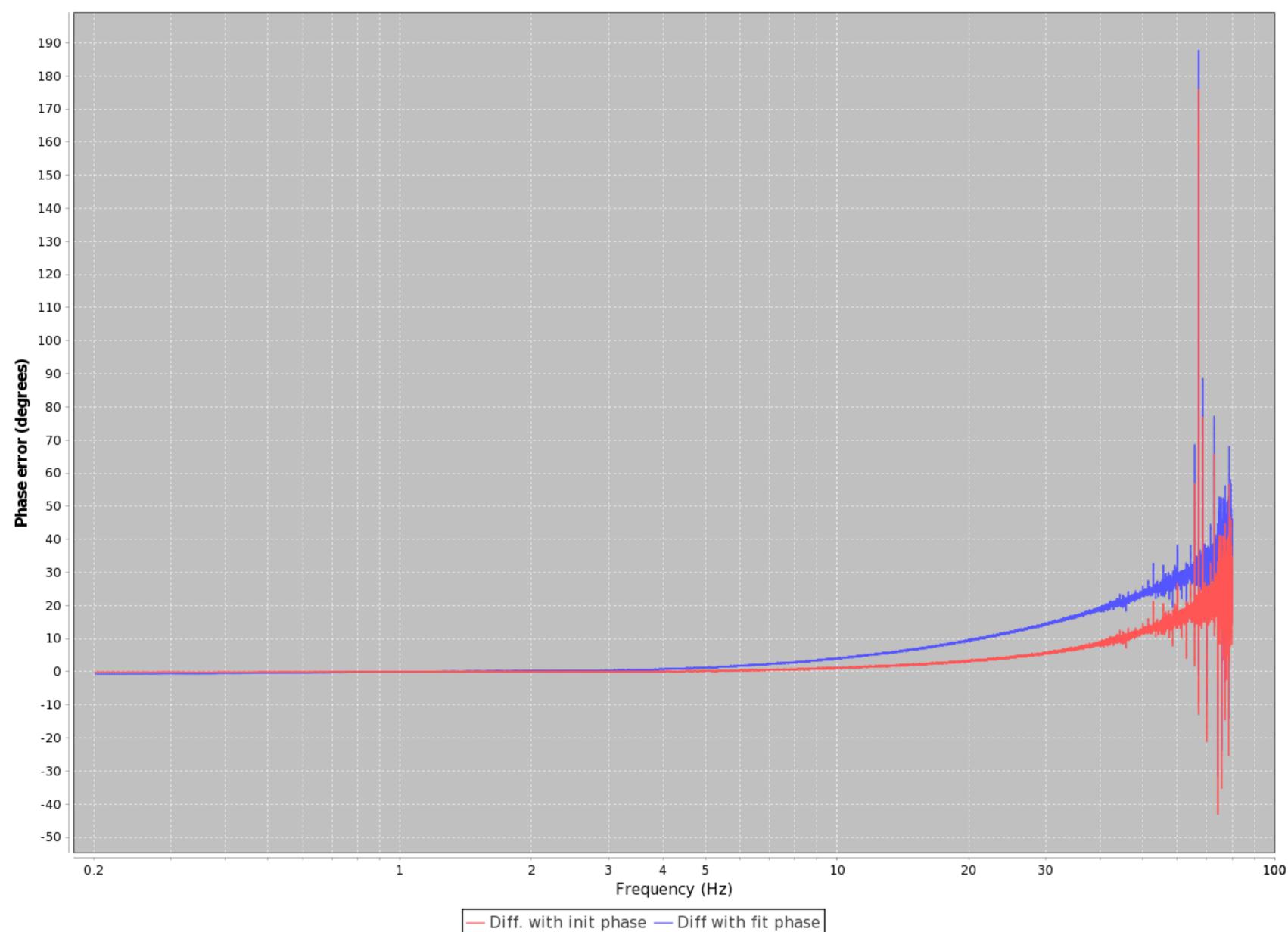
Residuals:

Initial (nom. resp curve): 1368.9920917622676

Best fit: 522.5000519020307

NUMBER OF ITERATIONS: 56

Randomized calibration 2,800 2,700 2,600 2,500 2,400 2,300 2,200 2,100 2,000 1,900 1,800 1,700 Amplitude error (percentage) 1,500 1,400 1,300 1,100 1,000 900 800 700 600 500 400 300 200 100 0 -100 100 0.2 10 20 30 2 3 5 1 4 Frequency (Hz) - Percent error of init. amplitude — Percent error of fit amplitude Randomized calibration 190 180 170 160 150 140 130

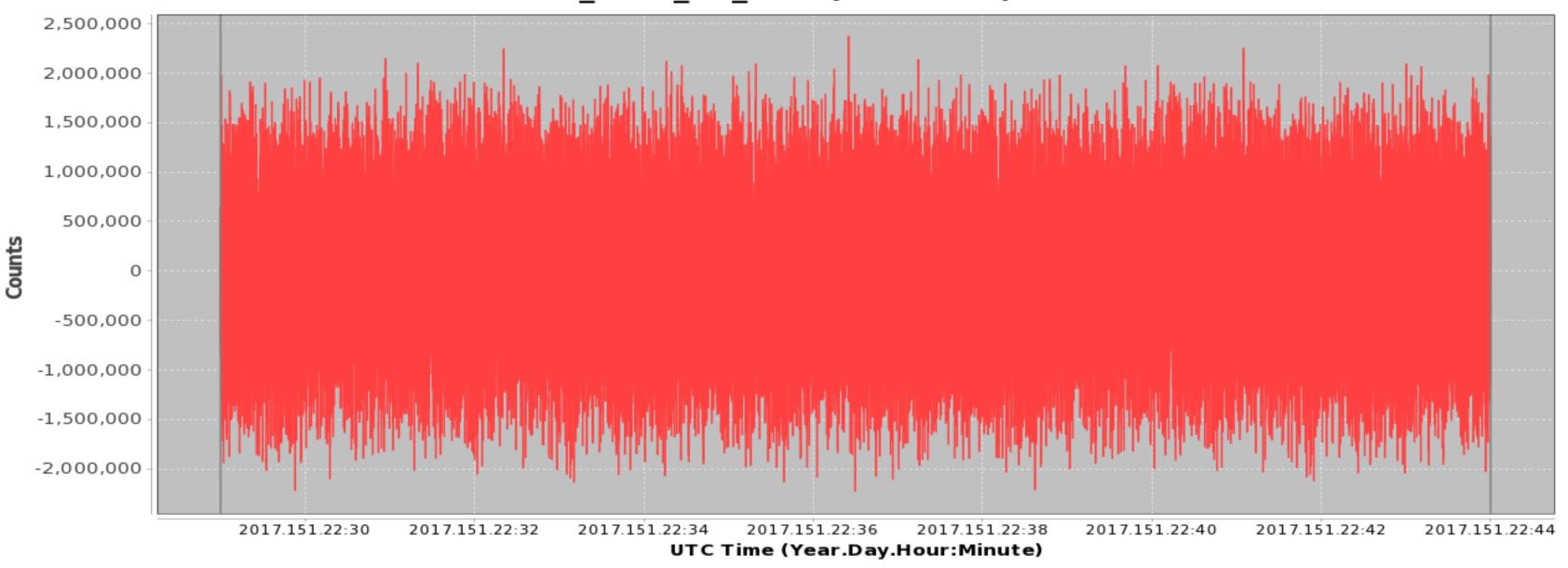


```
Initial poles:
-16.041 (0.3917), -16.041 (0.3917)
-327.354 - 74.1416i (0.01872), -327.354 + 74.1416i (0.01872)
Fit poles:
-11.13935 (0.56405), -11.13935 (0.56405)
-410.69305 - 65.62584i (0.01511), -410.69305 + 65.62584i
(0.01511)
Initial zeros:
-15.708 (0.4), -15.708 (0.4)
Fit zeros:
-10.86789 (0.57814), -10.86789 (0.57814)
Residuals:
Initial (nom. resp curve): 1368.9920917622676
Best fit: 522.5000519020307
Iteration count from solver: 56
Input filenames, with SEED and RESP files paired as appropriate:
IU_CCM_10_BC1
IU CCM 10 EHZ
STS-2.5_Q330HR_BH_40_nocoil
Residuals weighting:
    Amplitude: 7977.814777435791
    Phase: 0.33415428890411153
Time of report generation:
2017.313.18:59:30
Data start time:
2017.151.22:28:59
Data end time:
2017.151.22:44:00
```

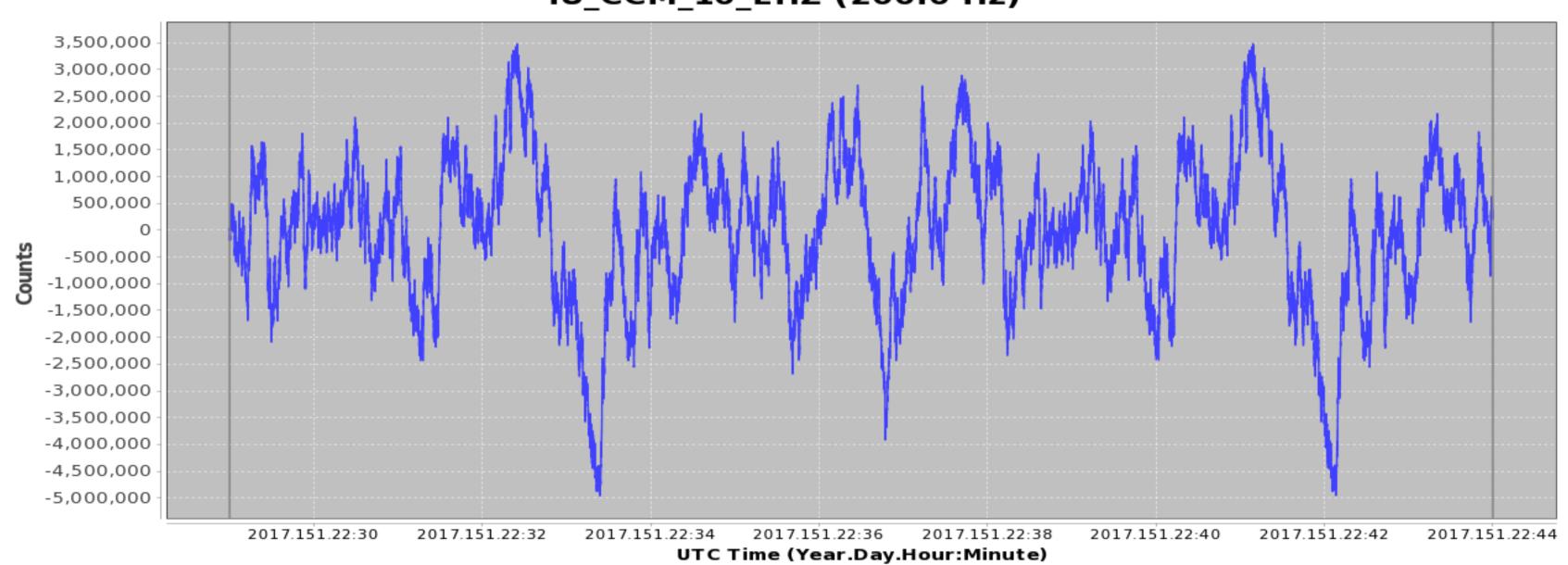
POLE VARIABLES, AS CSV:

Init	Fit	Diff	Mean	PctDiff
-16.041	-11.1393	-4.9017	-13.5902	+44.0031
+0	+0	+0	+0	+0
-16.041	-11.1393	-4.9017	-13.5902	+44.0031
+0	+0	+0	+0	+0
-327.354	-410.693	+83.339	-369.0235-20.2923	
-74.1416	-65.6258	-8.5158	-69.8837	+12.9762
ZERO VARIABLES, AS CSV:				
Init	Fit	Diff	Mean	PctDiff
-15.708	-10.8679	-4.8401	-13.2879	+44.5359
+0	+0	+0	+0	+0
-15.708	-10.8679	-4.8401	-13.2879	+44.5359
+0	+0	+0	+0	+0

IU_CCM_10_BC1 (200.0 Hz)



IU_CCM_10_EHZ (200.0 Hz)



Response name: STS-2.5_Q330HR_BH_40_nocoil

Gain stage values:

0: 2,516,581,500

1: 1,500

2: 1,677,721

Normalization: 180579.920306

Normalization frequency (Hz): 1.0

Transfer function is LAPLACIAN

Response input units: velocity (m/s)

Response zeros:

0: 0

1: 0

2: -15.708

3: -15.708

4: -630.203

Response poles:

0: -0.037 + 0.037i

1: -0.037 - 0.037i

2: -16.041

3: -16.041

4: -327.354 - 74.1416i

5: -327.354 + 74.1416i

6: -973.894