

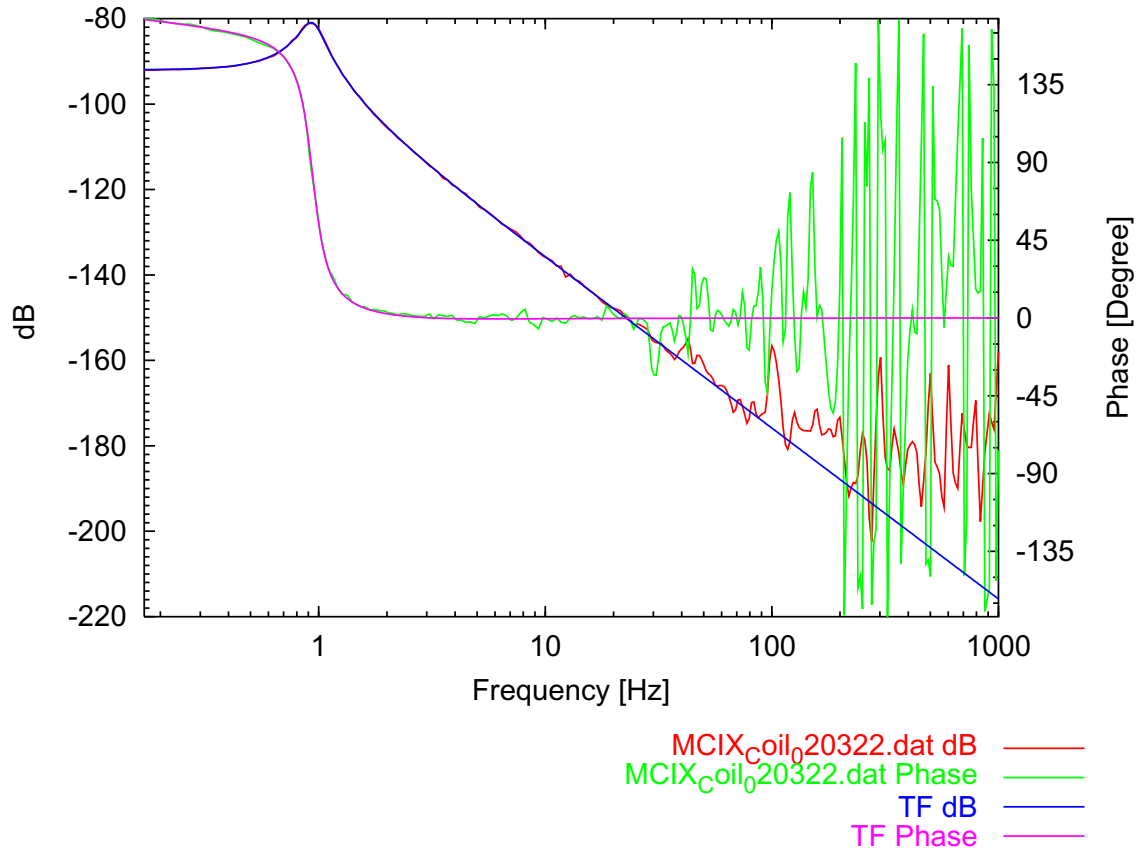
Recycling1: Mode Cleaner Suspensions Transfer Functions

National Astronomical Observatory, TAMA project

Koji Arai, Shuichi Sato, Ryu Takahashi

March 22, 2002

MC End Length Coil



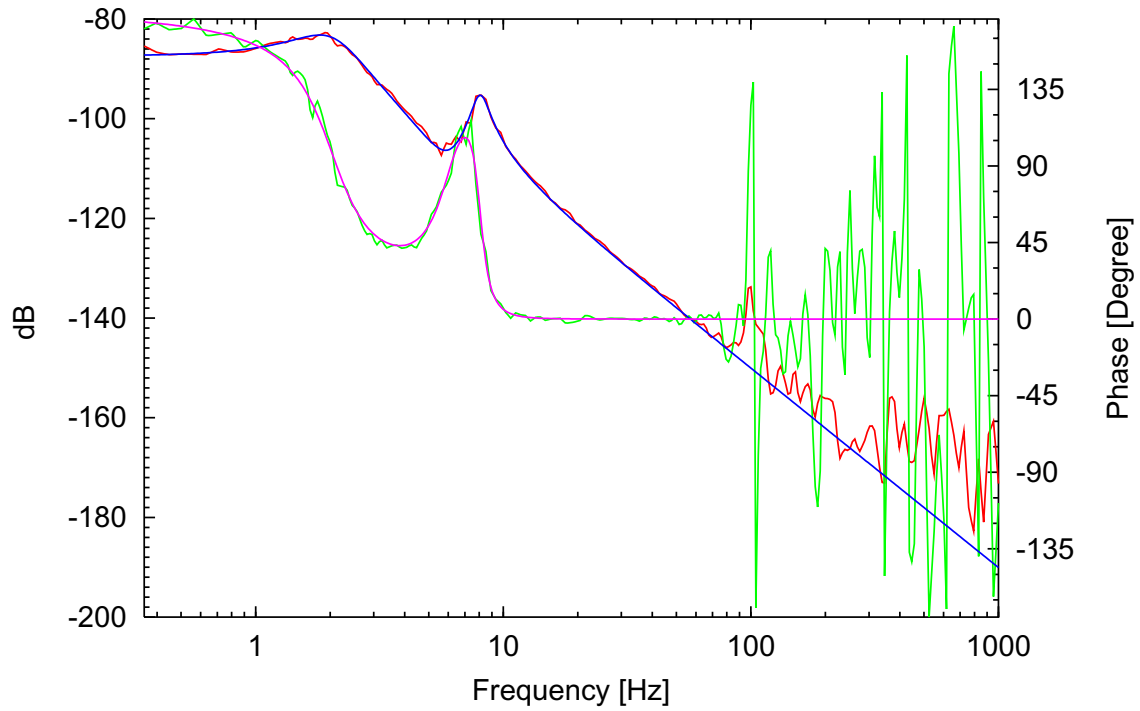
Filename: MCEX_Coil_020322.dat

Measured: 2002/03/22

Actuator: Coil (4 Coils with Nagano coil driver)

	f0	Q
pole	939.87163m	4.3530106
pole	947.72667m	367.38762m
zero	1.1145385	387.49295m
factor	-25.254918u	

MC End Pitch Coil



MCEP_Coil_020311.dat dB ———
MCEP_Coil_020311.dat Phase ———
TF dB ———
TF Phase ———

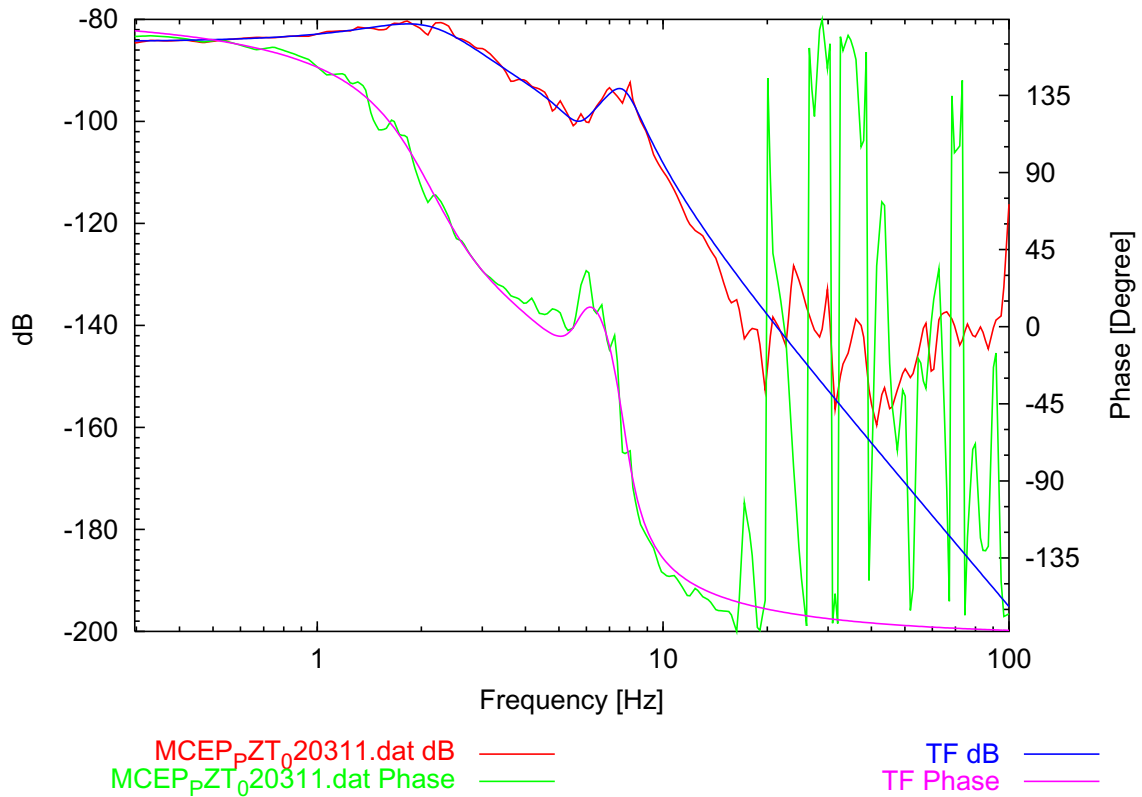
Filename: MCEP_Coil_020311.dat

Measured: 2002/03/11

Actuator: Coil (4 Coils with Nagano coil driver)

	f0	Q
pole	2.0466229	1.5943678
pole	8.059635	6.3411699
zero	6.0700594	2.4026094
factor	-42.506616u	

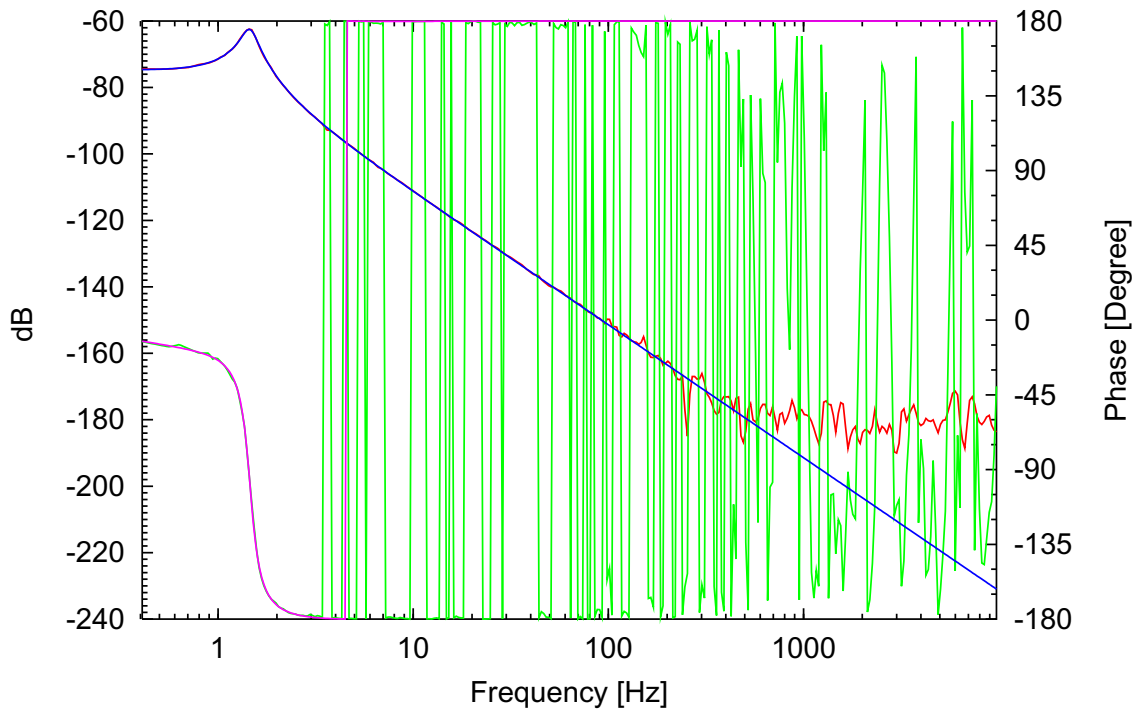
MC End Pitch PZT



Filename: MCEP_PZT_020311.dat
Measured: 2002/03/11
Actuator: PZT (Mestek PZT Driver)

	f0	Q
pole	2.1269348	1.326709
pole	5.9583319	2.0097598
pole	7.6722461	4.4615904
zero	5.7402054	4.0047428
factor	-60.693616u	

MC End Yaw Coil



MCEY_Coil_020311.dat dB ———
MCEY_Coil_020311.dat Phase ———
TF dB ———
TF Phase ———

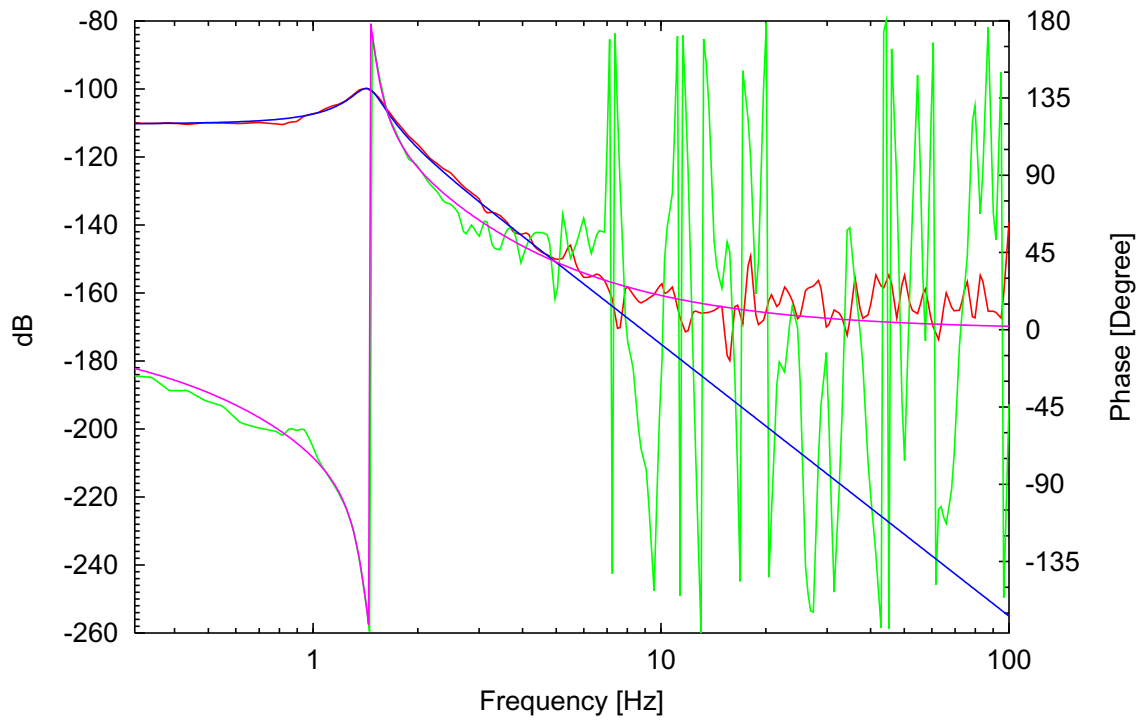
Filename: MCEY_Coil_020311.dat

Measured: 2002/03/11

Actuator: Coil (4 Coils with Nagano coil driver)

	f0	Q
pole	534.44418m	485.24956m
pole	1.456837	5.4219486
zero	653.04922m	463.36663m
factor	188.89545u	

MC End Yaw PZT

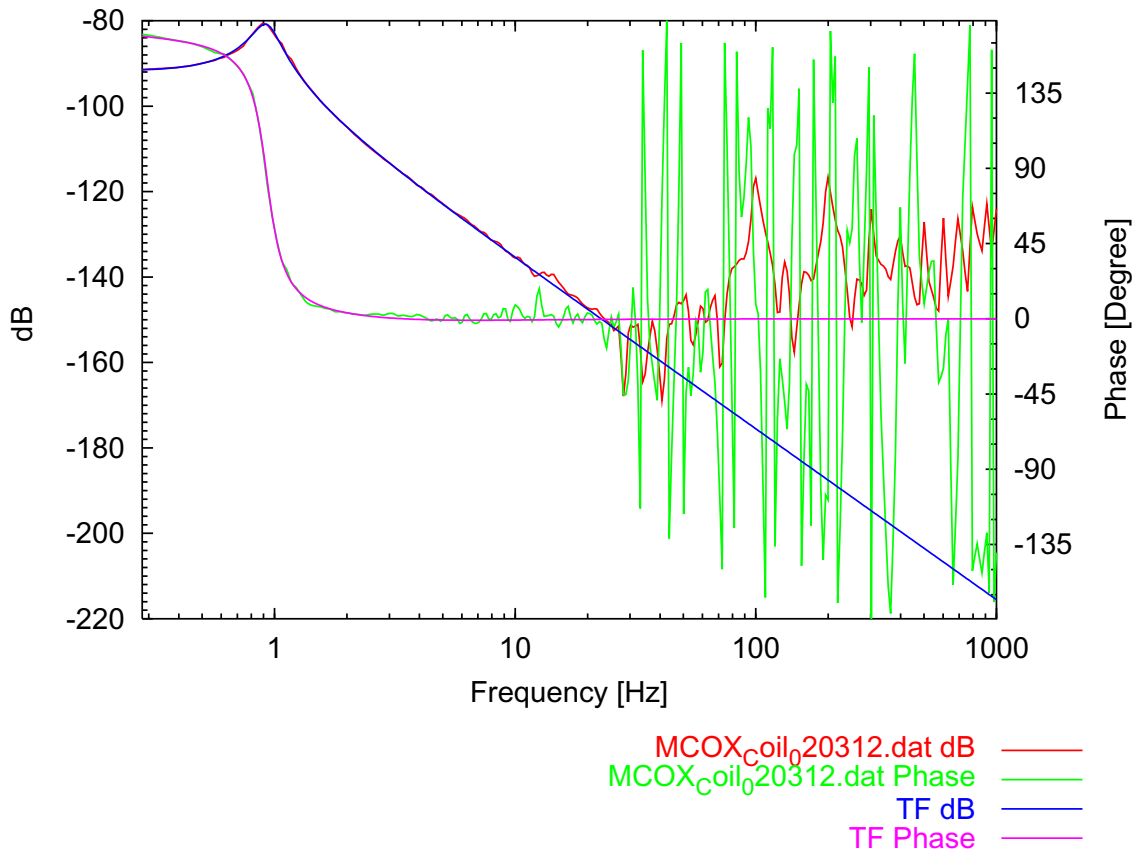


MCEY_pZT₀20311.dat dB ——— TF dB ———
MCEY_pZT₀20311.dat Phase ——— TF Phase ———

Filename: MCEY_PZT_020311.dat
Measured: 2002/03/11
Actuator: PZT (Mestek PZT Driver)

	f0	Q
pole	1.4439085	5.626777
pole	1.6698353	513.39449m
factor	3.048375u	

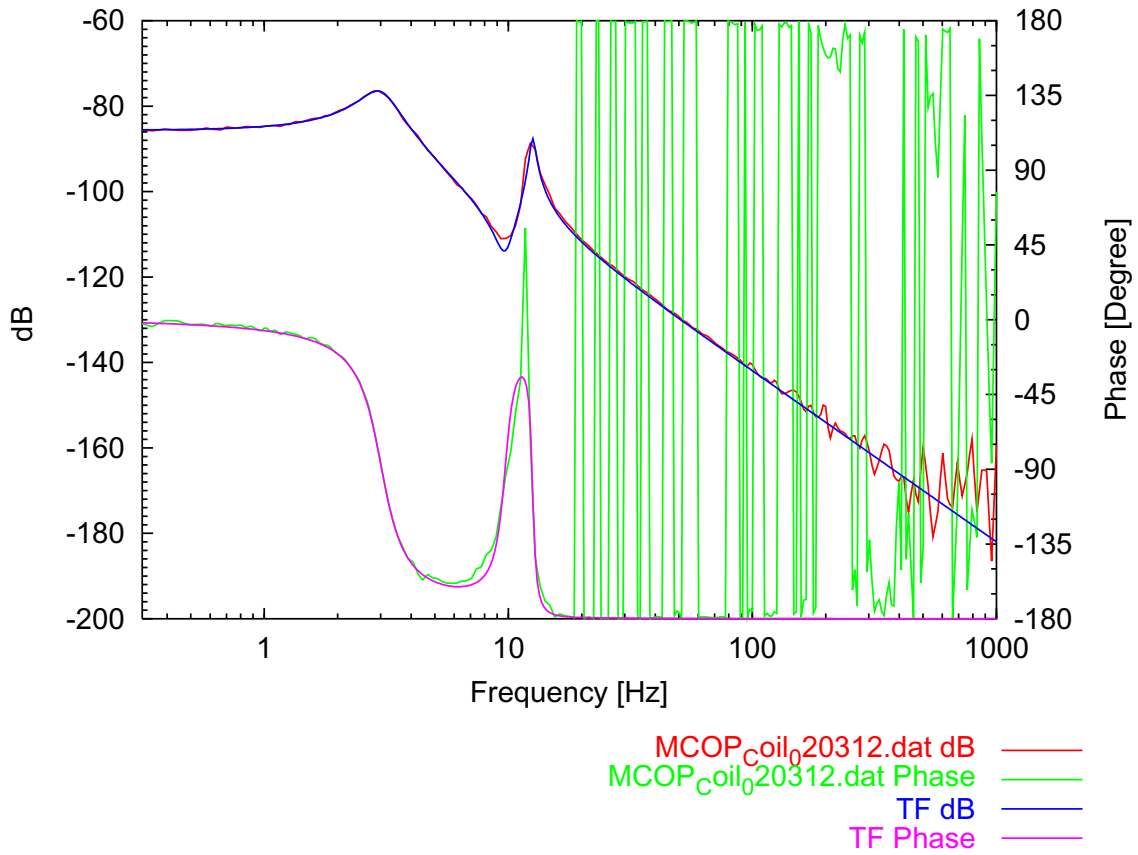
MC Output Length Coil



Filename: MCOX_Coil_020312.dat
 Measured: 2002/03/12
 Actuator: Coil (4 Coils with Nagano coil driver)

	f0	Q
pole	928.92605m	4.1502754
pole	972.4361m	291.69326m
zero	1.1341272	304.92914m
factor	-26.371895u	

MC Output Pitch Coil



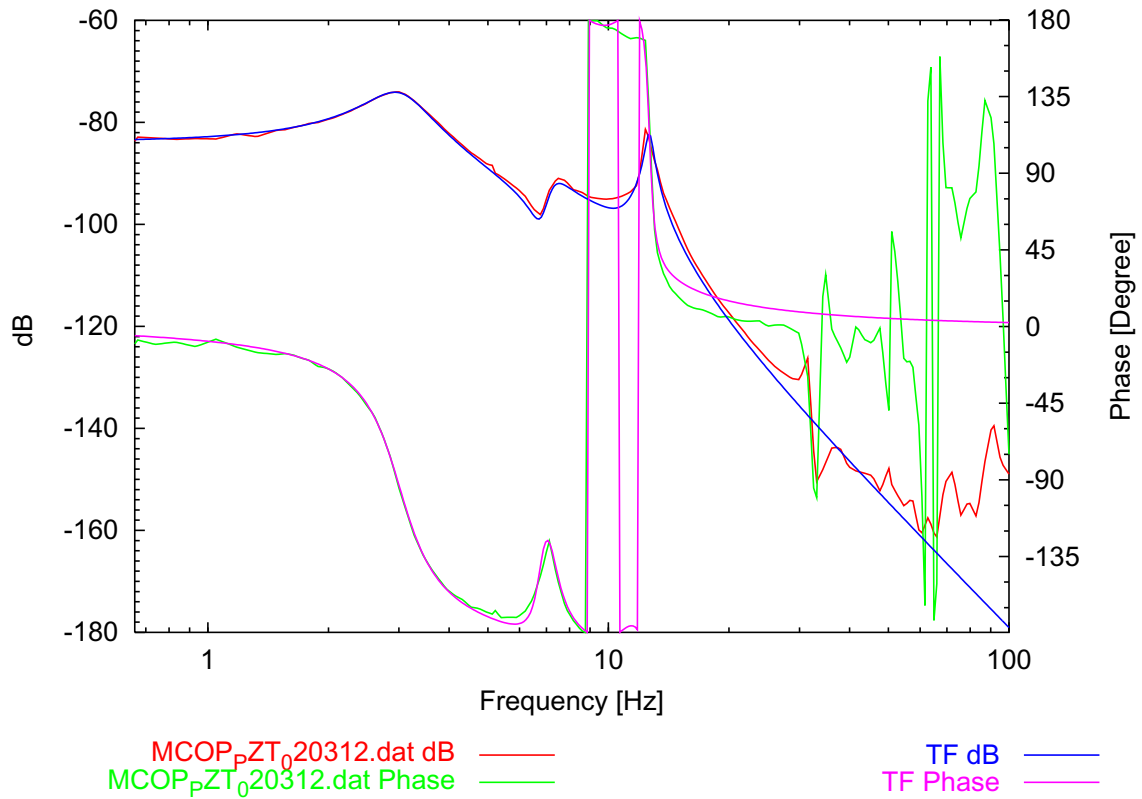
Filename: MCOP_Coil_020312.dat

Measured: 2002/03/12

Actuator: Coil (4 Coils with Nagano coil driver)

	f0	Q
pole	3.009588	2.9483983
pole	12.574568	18.675202
zero	9.7051927	6.7065769
factor	52.219797u	

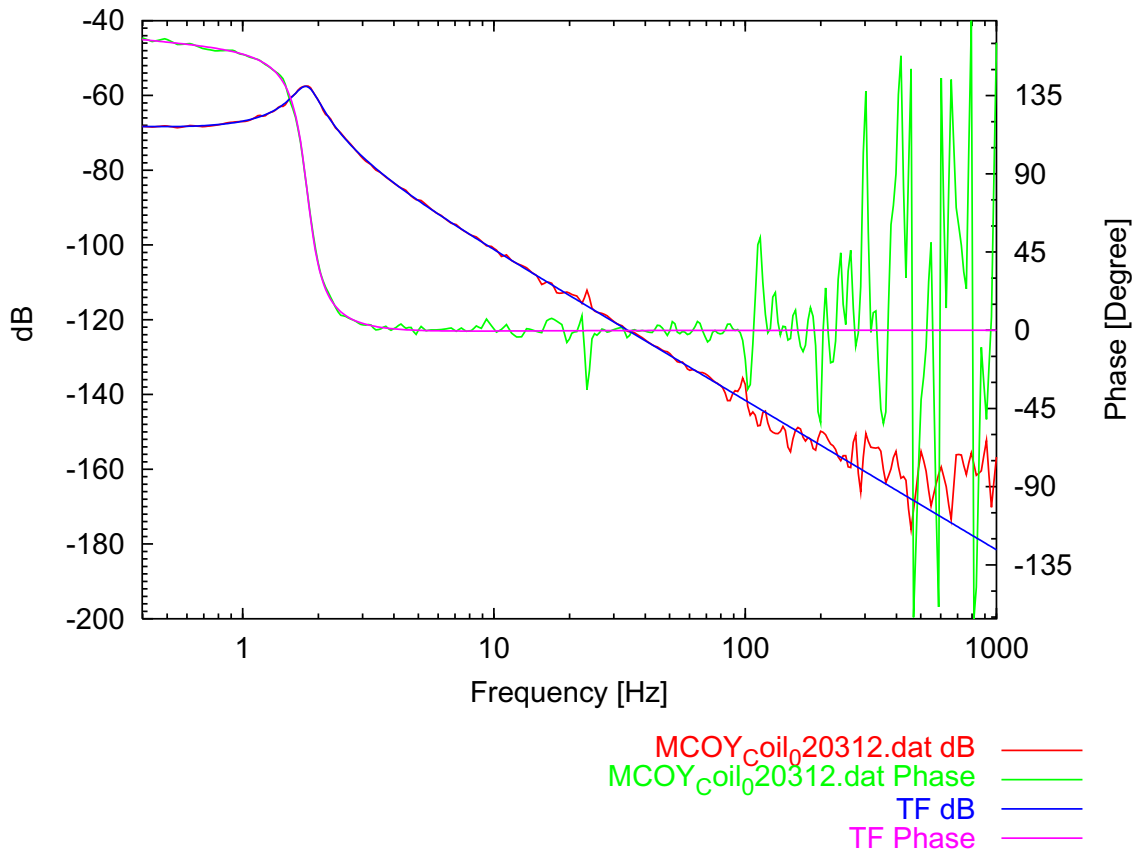
MC Output Pitch PZT



Filename: MCOP_PZT_020312.dat
 Measured: 2002/03/12
 Actuator: PZT (Mestek PZT Driver)

	f0	Q
pole	3.0122128	2.9444916
pole	7.2238749	6.9249083
pole	11.181193	2.0868646
pole	12.655065	22.22763
zero	11.039147	3.3993993
zero	6.7843257	9.7586571
factor	64.744357u	

MC Output Yaw Coil



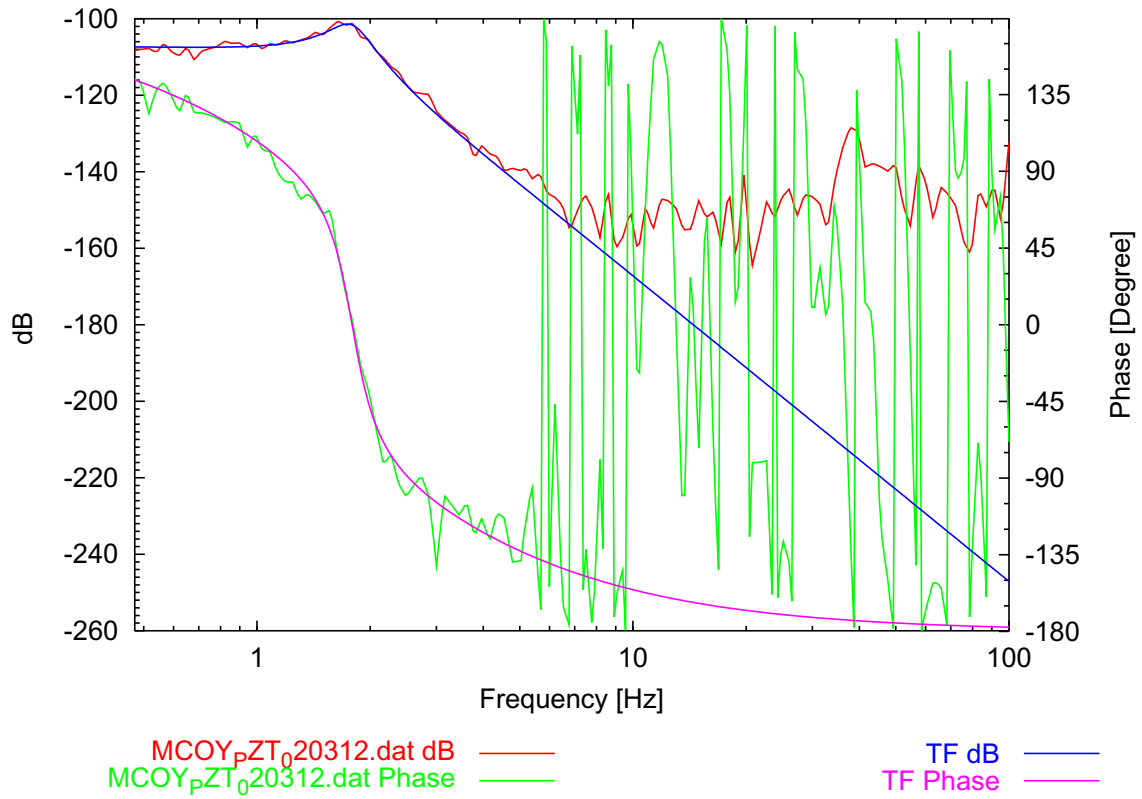
Filename: MCOY_Coil_020312.dat

Measured: 2002/03/12

Actuator: Coil (4 Coils with Nagano coil driver)

	f0	Q
pole	1.8052214	4.5237924
pole	687.38346m	404.17603m
zero	874.99505m	397.63238m
factor	-415.83737u	

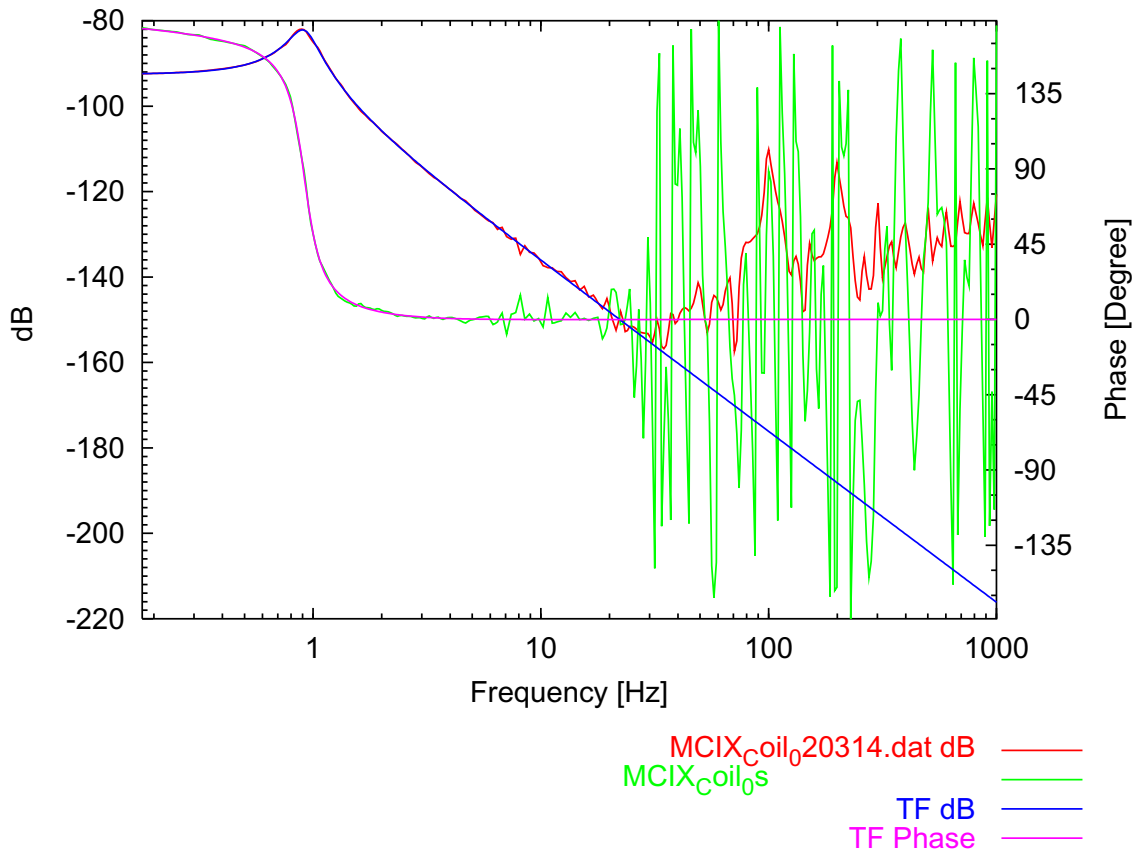
MC Output Yaw PZT



Filename: MCOY_PZT_020312.dat
 Measured: 2002/03/12
 Actuator: PZT (Mestek PZT Driver)

	f0	Q
pole	1.793454	4.2288358
pole	1.7659898	452.08406m
factor	-4.3985047u	

MC Input Length Coil

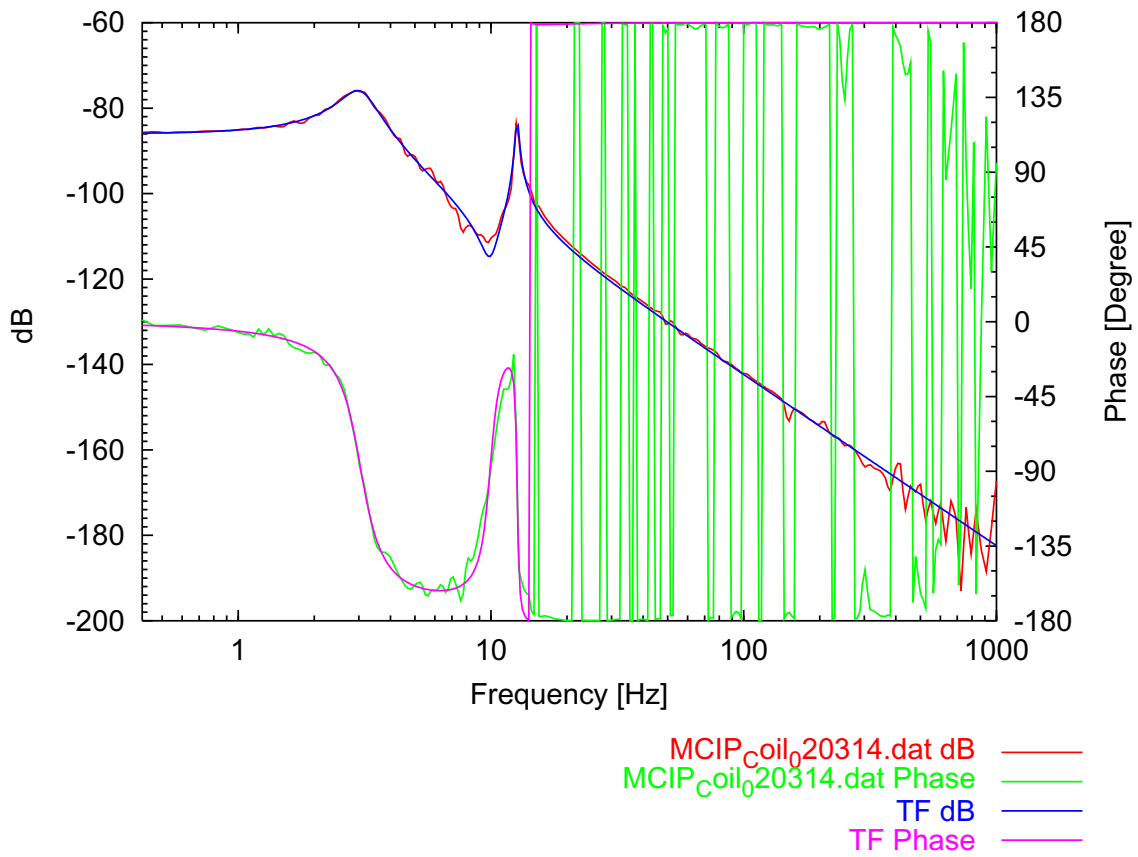


Filename: MCIX_Coil_020314.dat
 Measured: 2002/03/14
 Actuator: Coil (4 Coils with Nagano coil driver)

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f0      Q
pole 916.55464m 3.7396141
pole 1.0954509 383.6037m
zero 1.2322656 394.5955m
factor -23.509984u
    
```

MC Input Pitch Coil



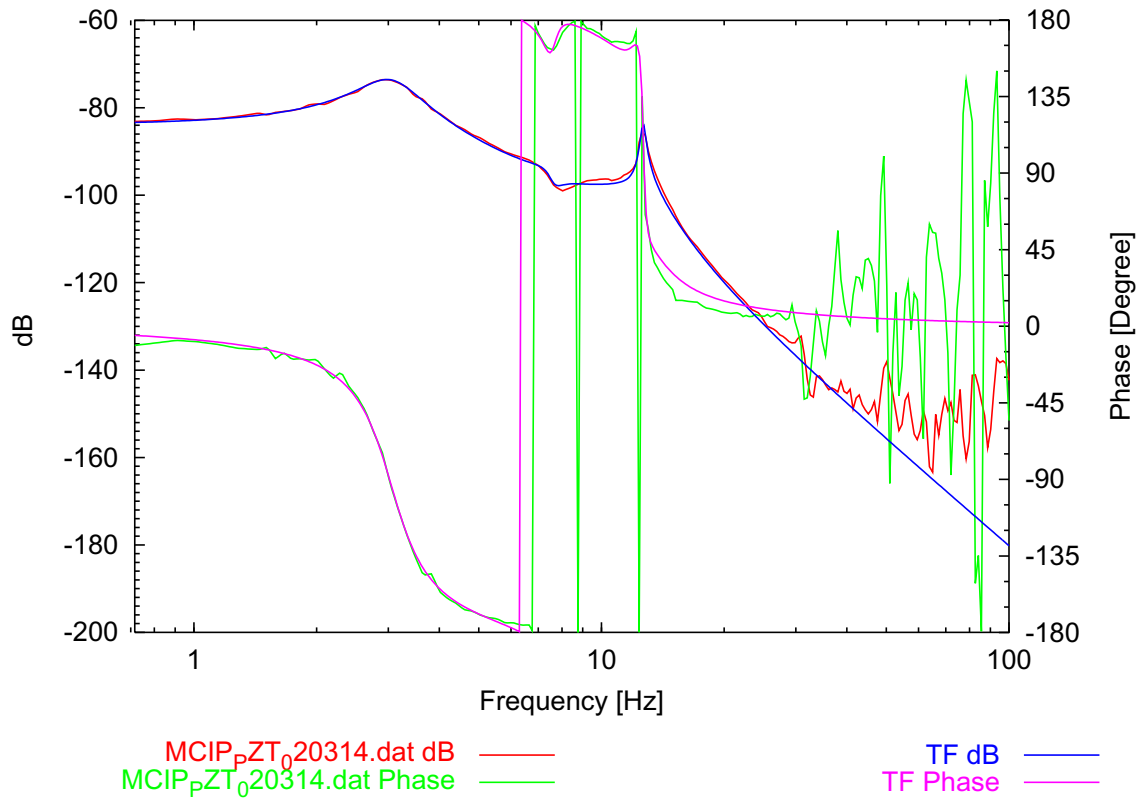
Filename: MCIP_Coil_020314.dat

Measured: 2002/03/14

Actuator: Coil (4 Coils with Nagano coil driver)

	f0	Q
pole	3.0448514	3.2930683
pole	12.693103	36.155702
zero	9.9389823	7.2118225
factor	50.05049u	

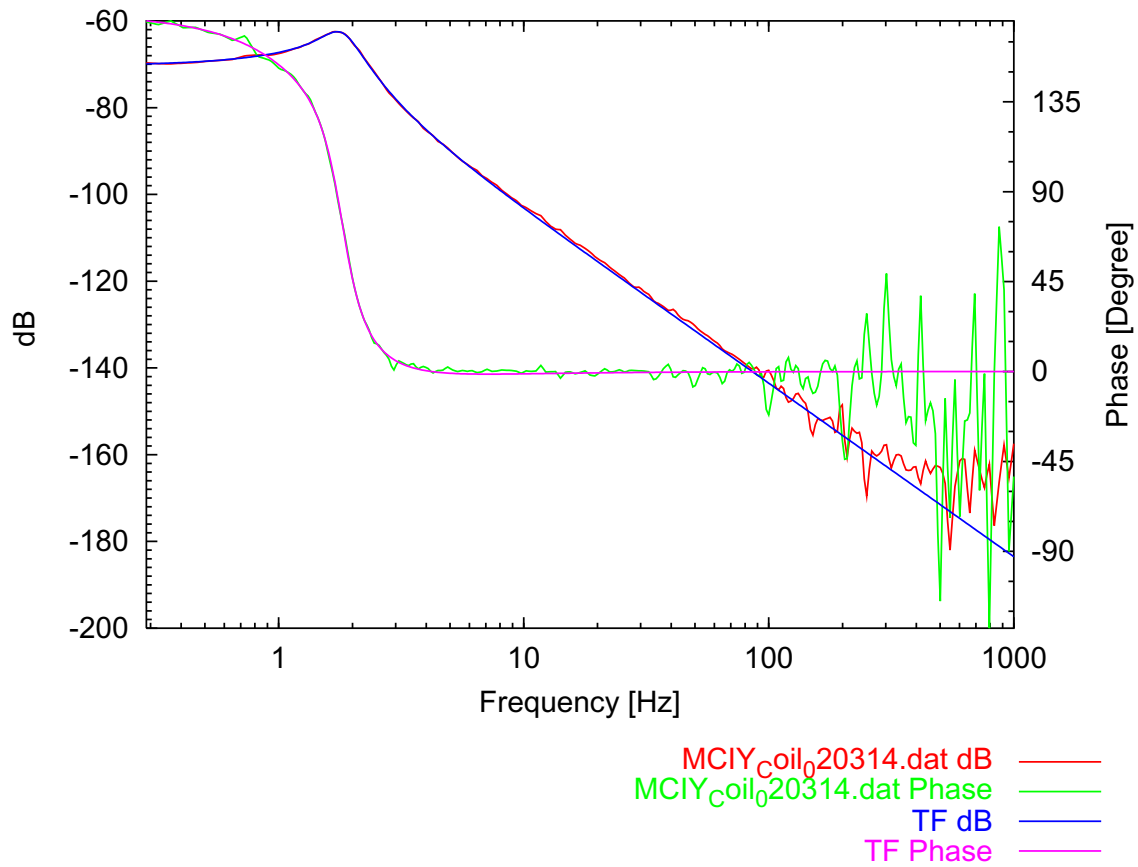
MC Input Pitch PZT



Filename: MCIP_PZT_020314.dat
 Measured: 2002/03/14
 Actuator: PZT (Mestek PZT Driver)

	f0	Q
pole	3.0501777	3.0550962
pole	7.5133189	9.1034555
pole	12.620182	3.2918264
pole	12.657557	36.369421
zero	12.392609	7.2781207
zero	7.6259643	11.268051
factor	64.239707u	

MC Input Yaw Coil



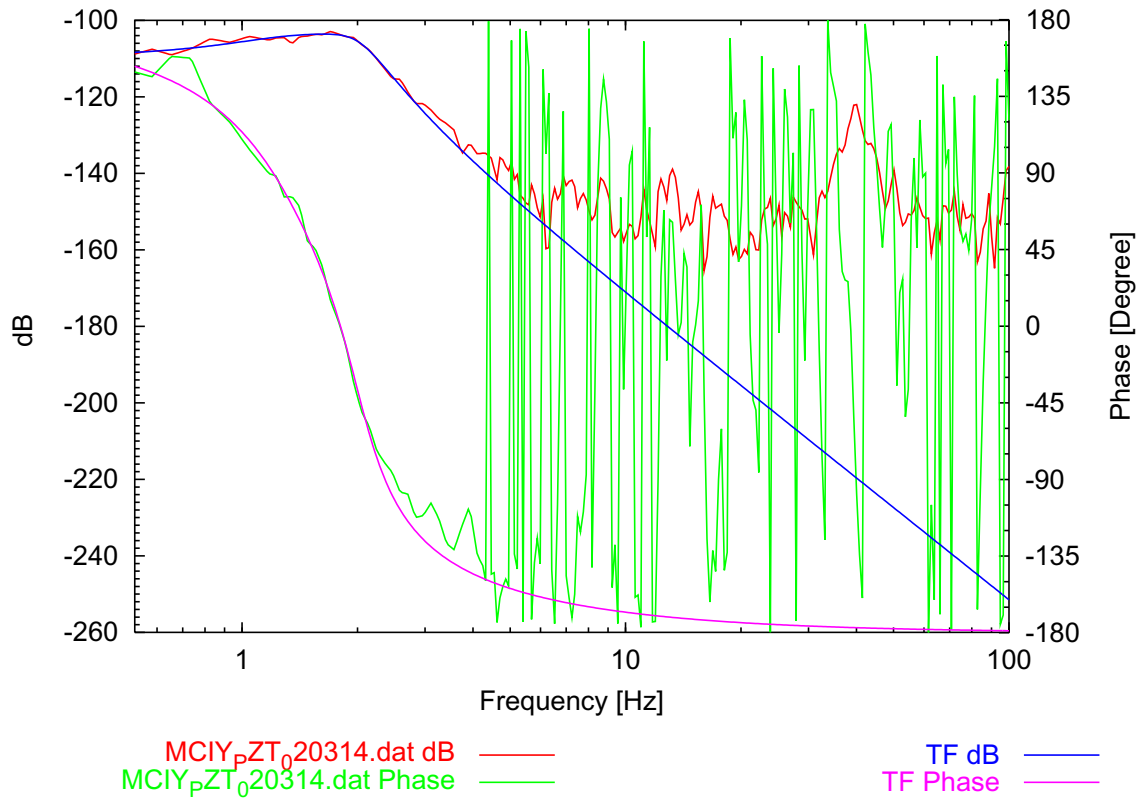
Filename: MCIY_Coil_020314.dat

Measured: 2002/03/14

Actuator: Coil (4 Coils with Nagano coil driver)

	f0	Q
pole	1.8176493	2.7264257
pole	1.1614413	615.91842m
zero	1.4347652	513.81512m
factor	-307.86906u	

MC Input Yaw PZT



Filename: MCIY_PZT_020314.dat
Measured: 2002/03/14
Actuator: PZT (Mestek PZT Driver)

	f0	Q
pole	2.0024576	2.5900212
pole	1.4191184	1.1075894
factor	-3.3046421u	