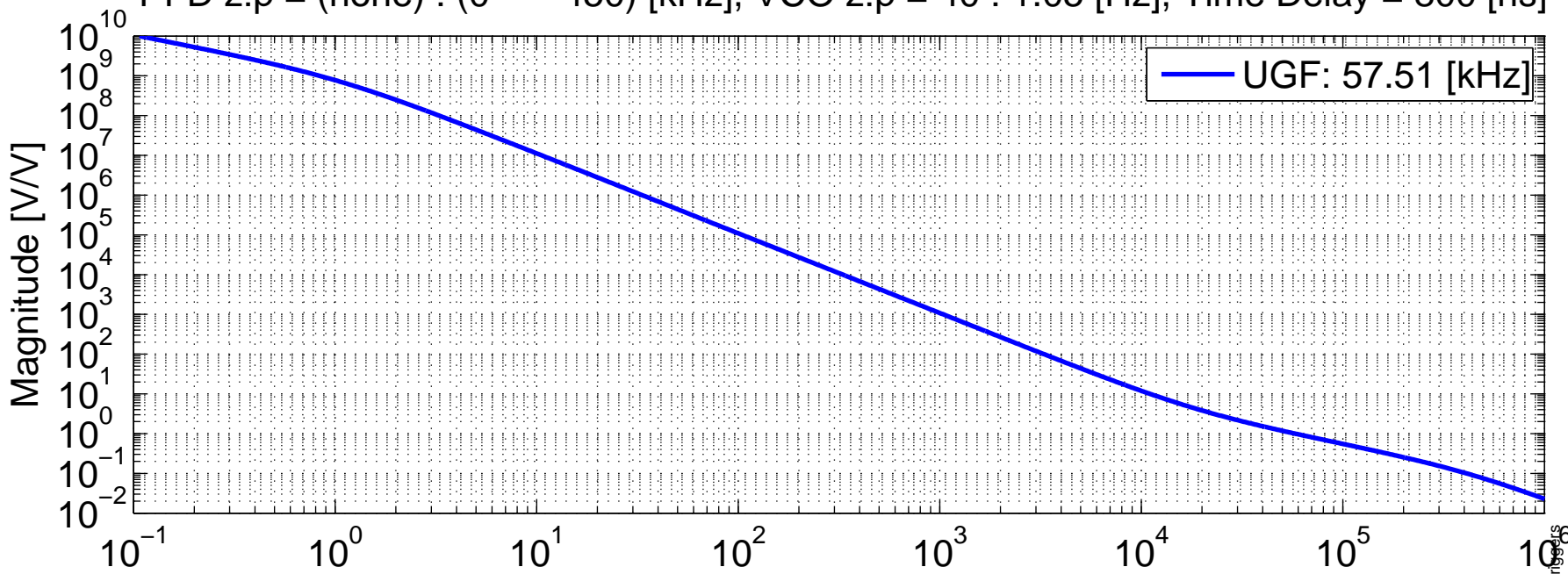
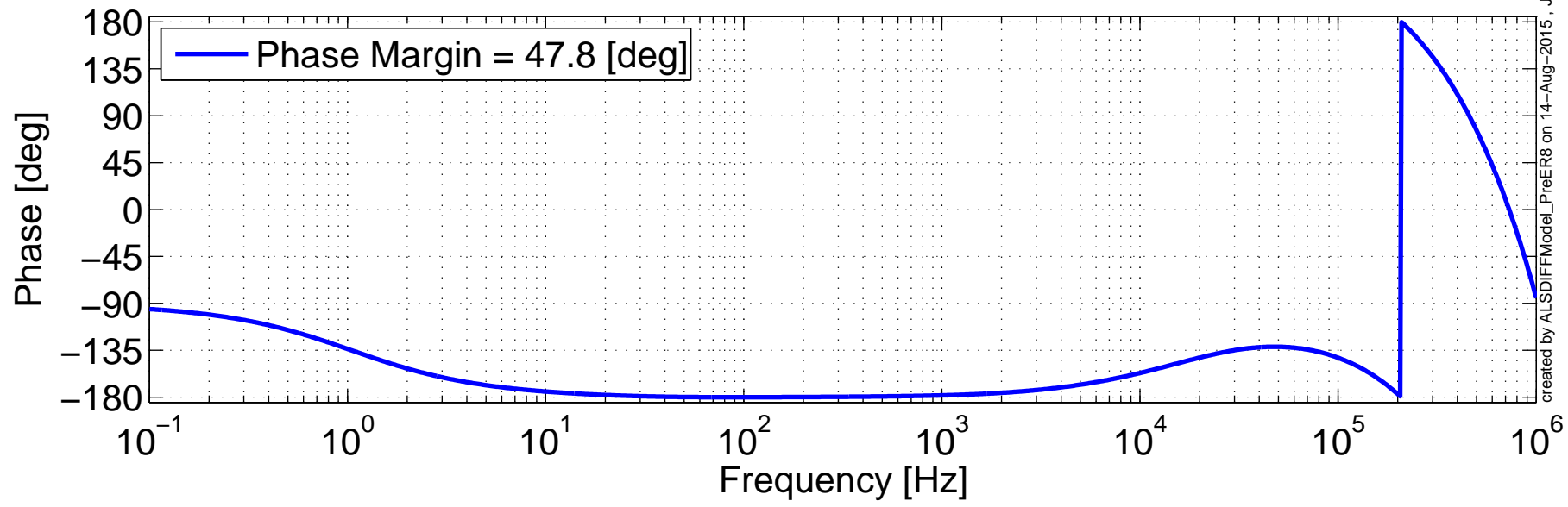


2015-08-09 H1 ALS DIFF PLL OLGTF Final Model

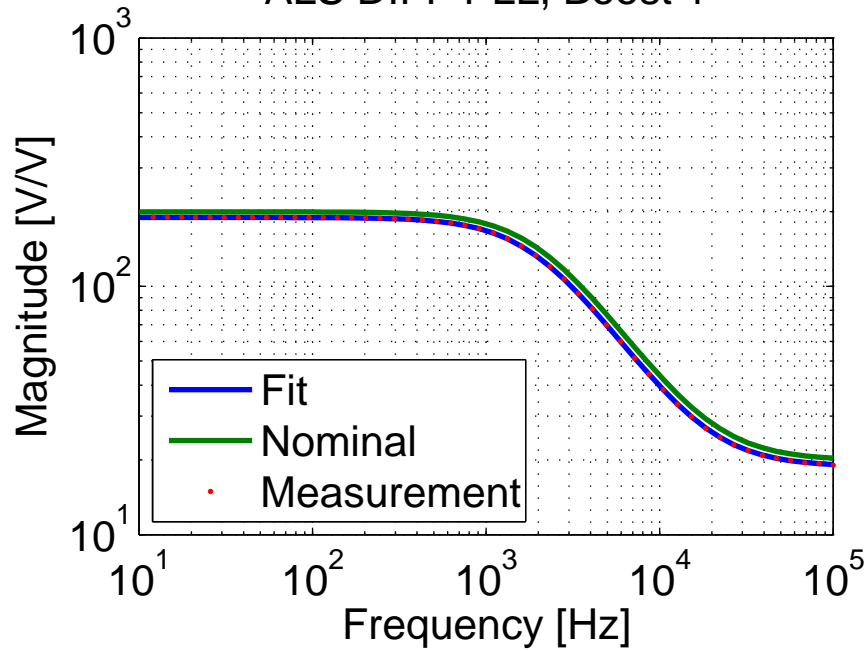
PFD z:p = (none) : (0 450) [kHz], VCO z:p = 40 : 1.05 [Hz], Time Delay = 800 [ns]



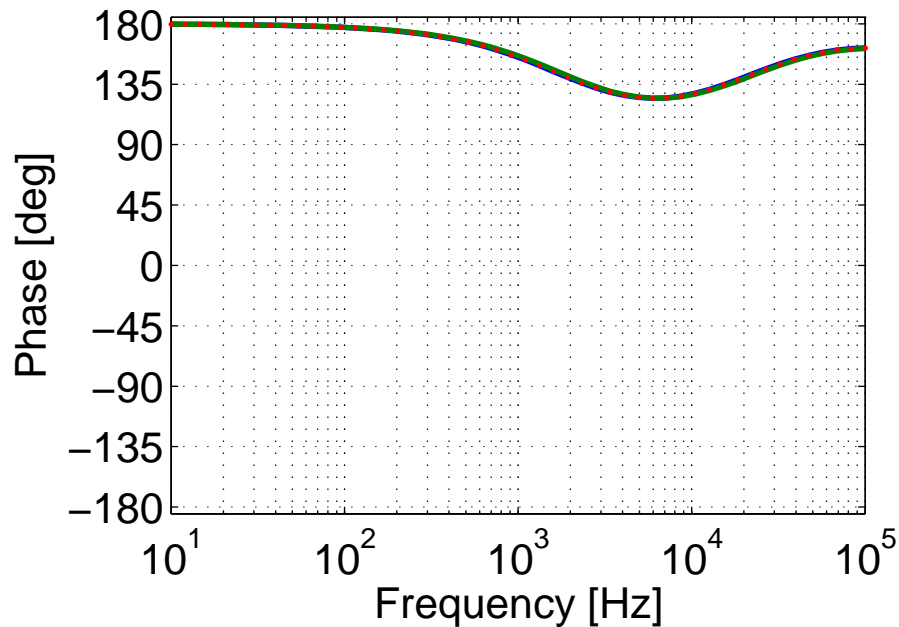
PLL: Common Gain: 25.5 [dB]  
Boost 1 z:p:k = (19000 Hz):(1890 Hz): 0 [dB]  
Boost 2 z:p:k = (1950 Hz):(38.55 Hz): -0.2 [dB]



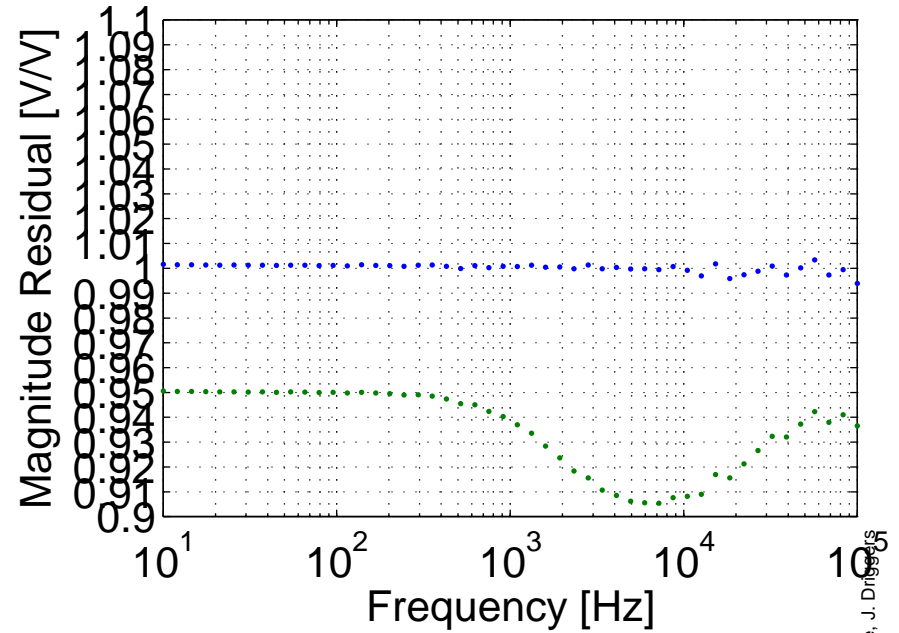
ALS DIFF PLL, Boost 1



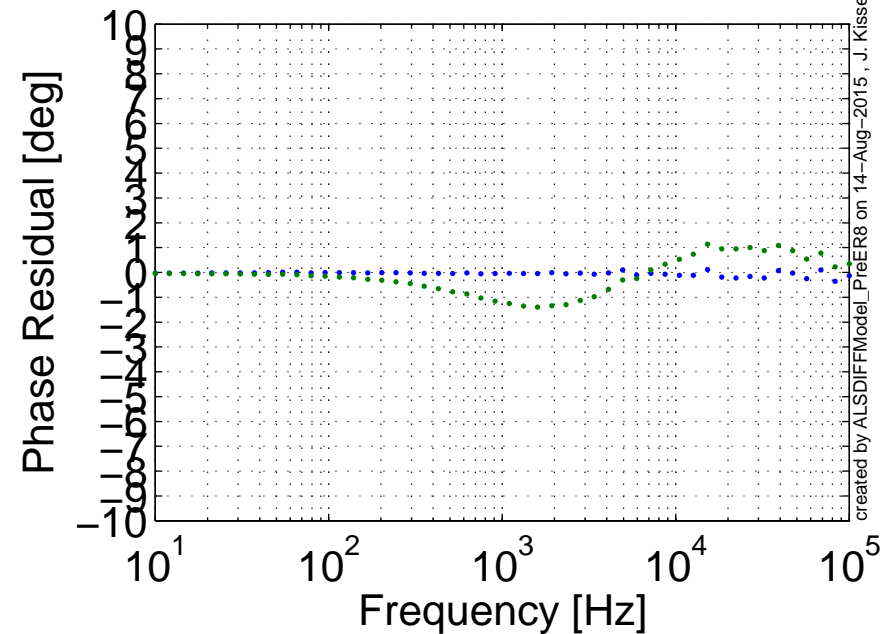
Fit z:p:k = 19000 Hz : 1890 Hz : 0 dB  
Nominal z:p:k = 20000 Hz : 2000 Hz : 0 dB



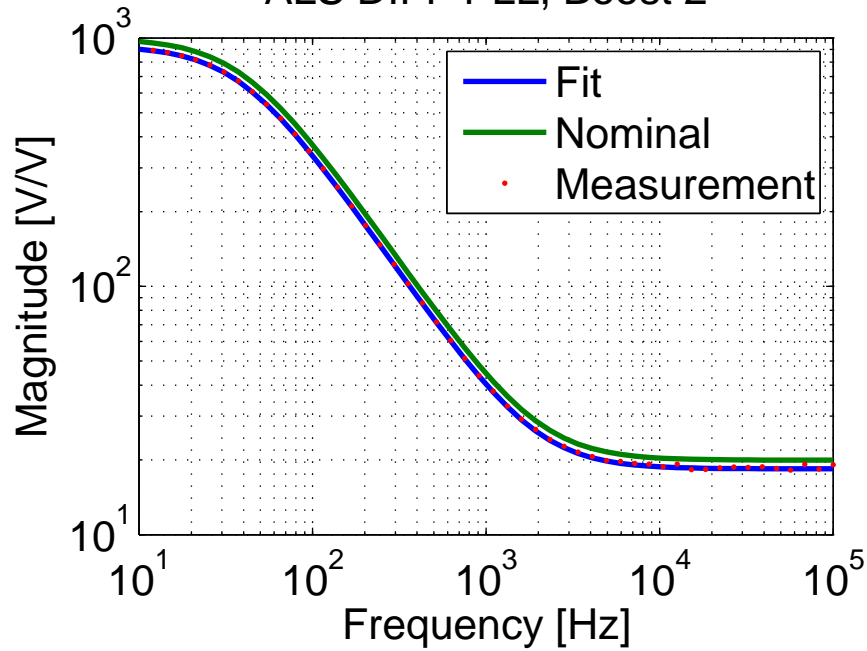
Meas / Model



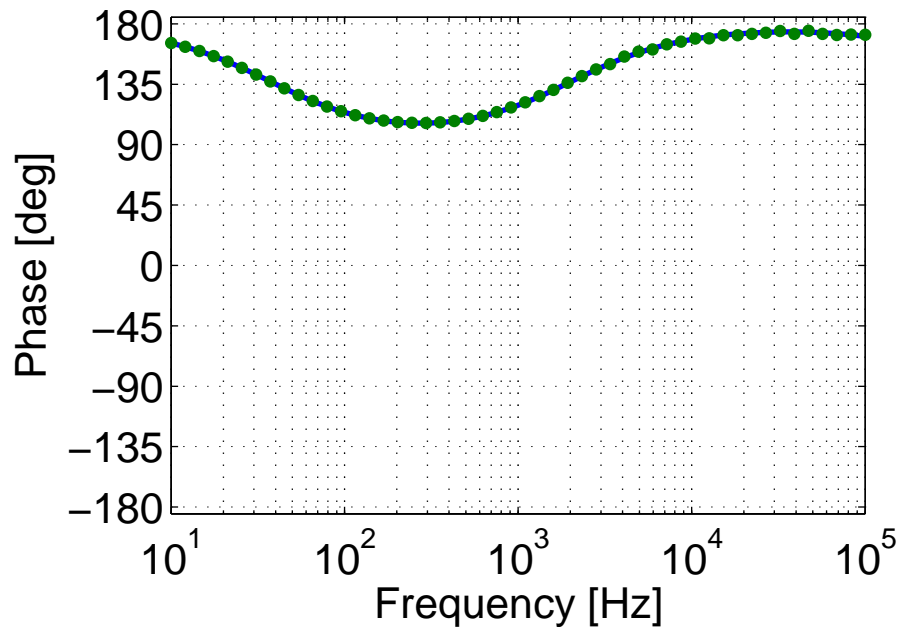
Model Common Gain: 25.5 dB(V/V)  
Fit Time Delay: 230 [ns]



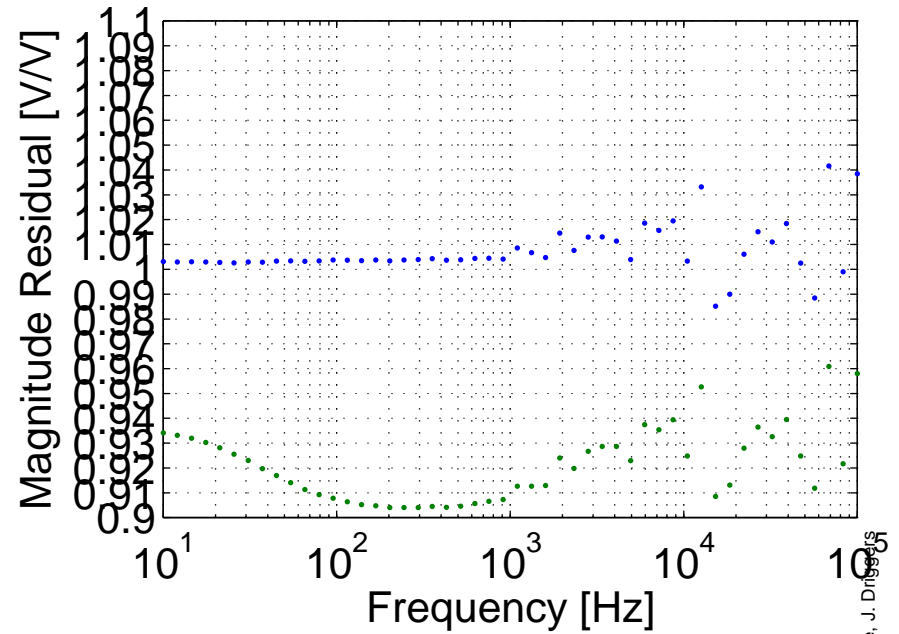
ALS DIFF PLL, Boost 2



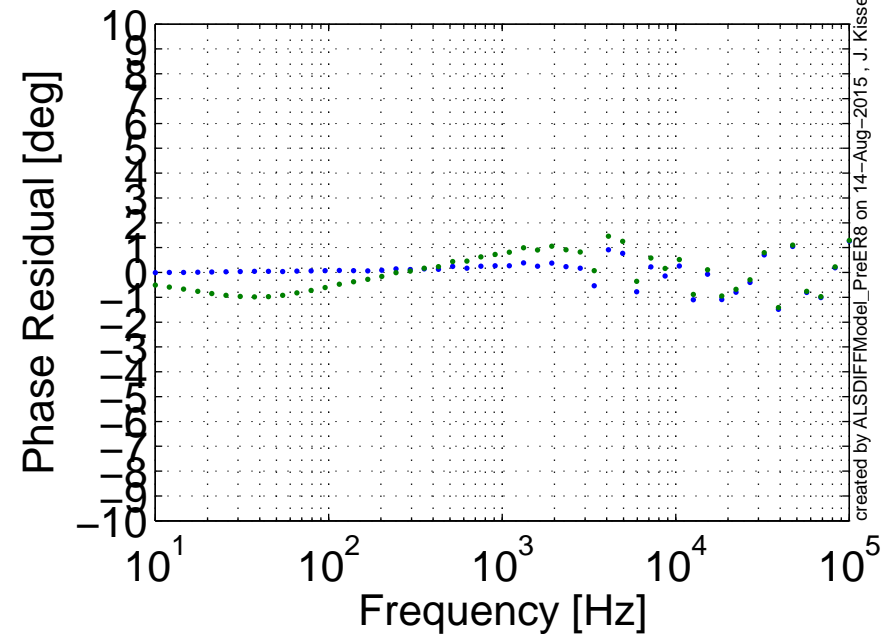
Fit z:p:k = 1950 Hz : 38.55 Hz : -0.2 dB  
Nominal z:p:k = 2000 Hz : 40 Hz : 0 dB

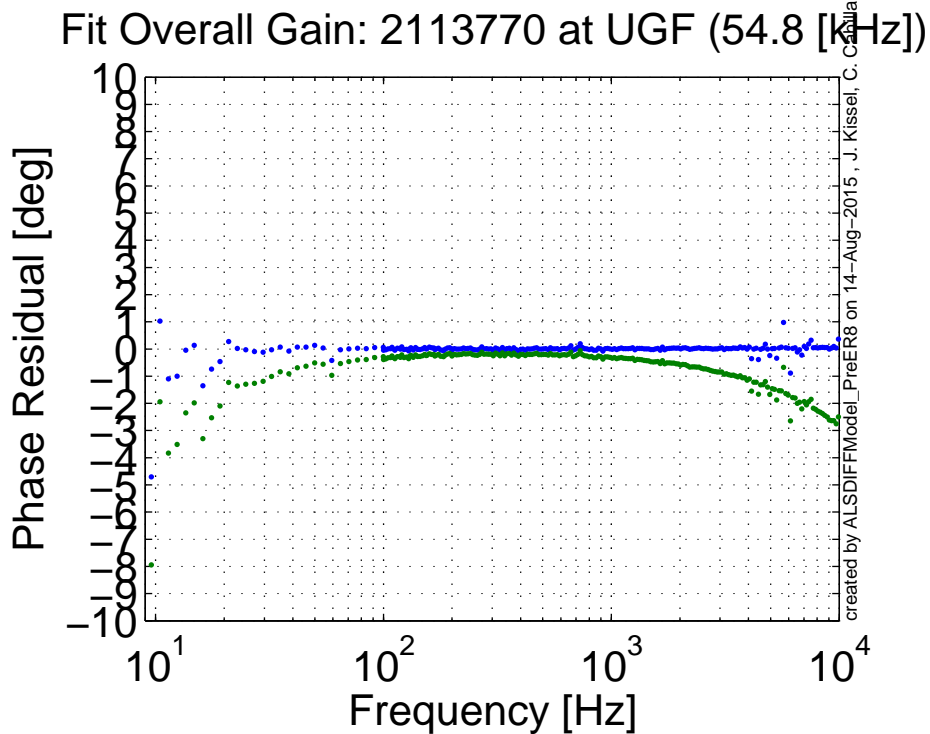
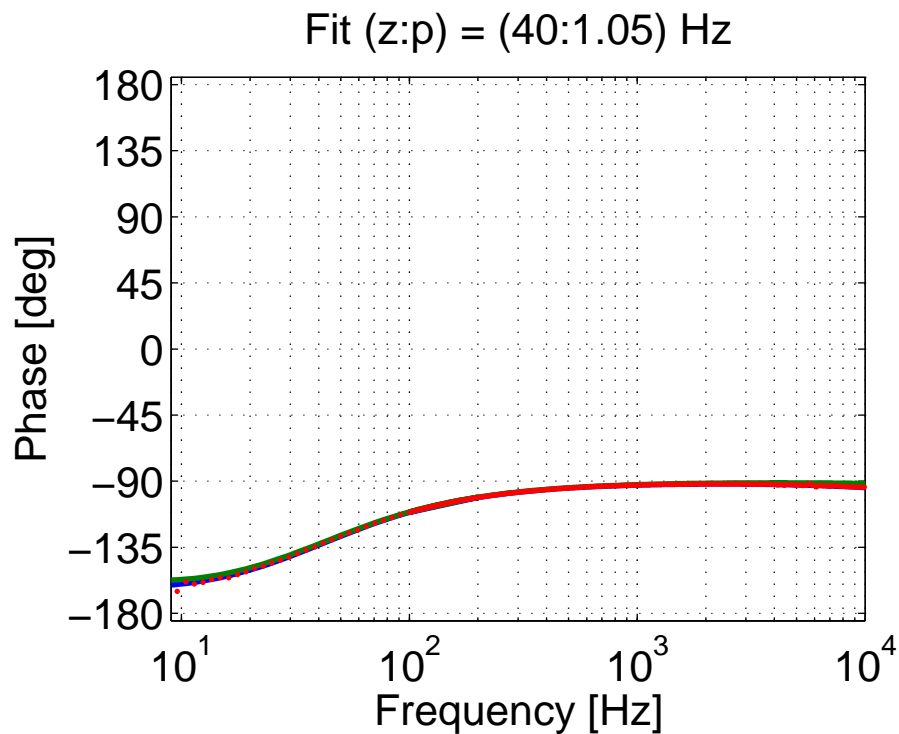
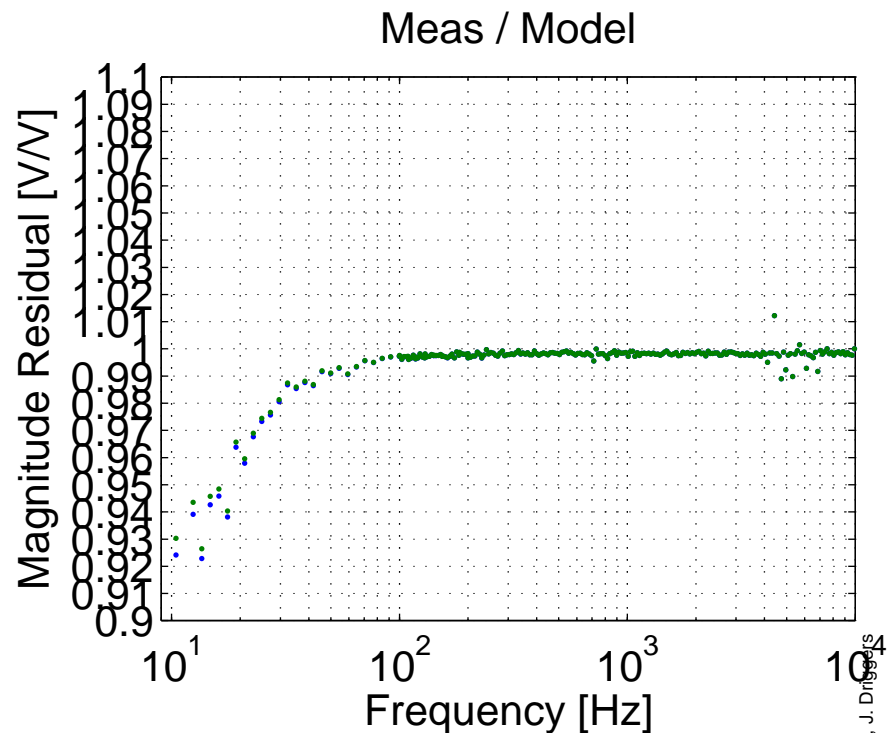
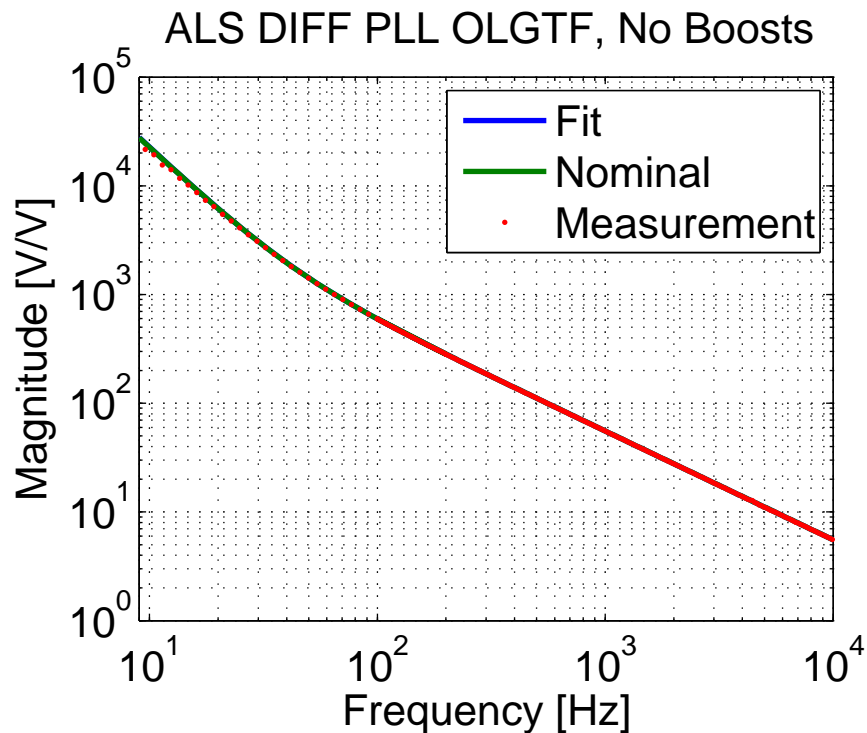


Meas / Model



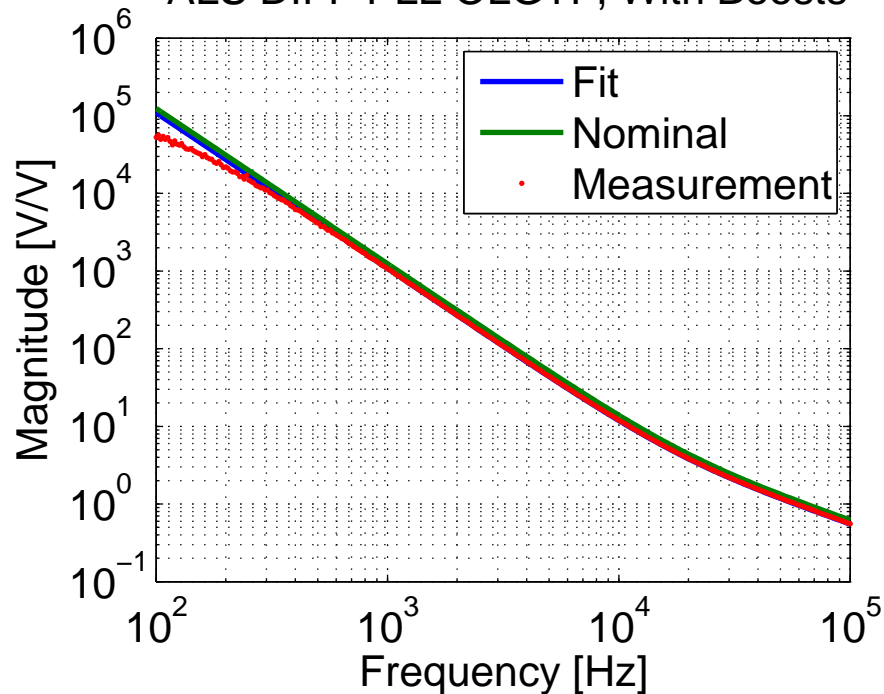
Model Common Gain: 25.5 dB(V/V)  
Fit Time Delay: 230 [ns]



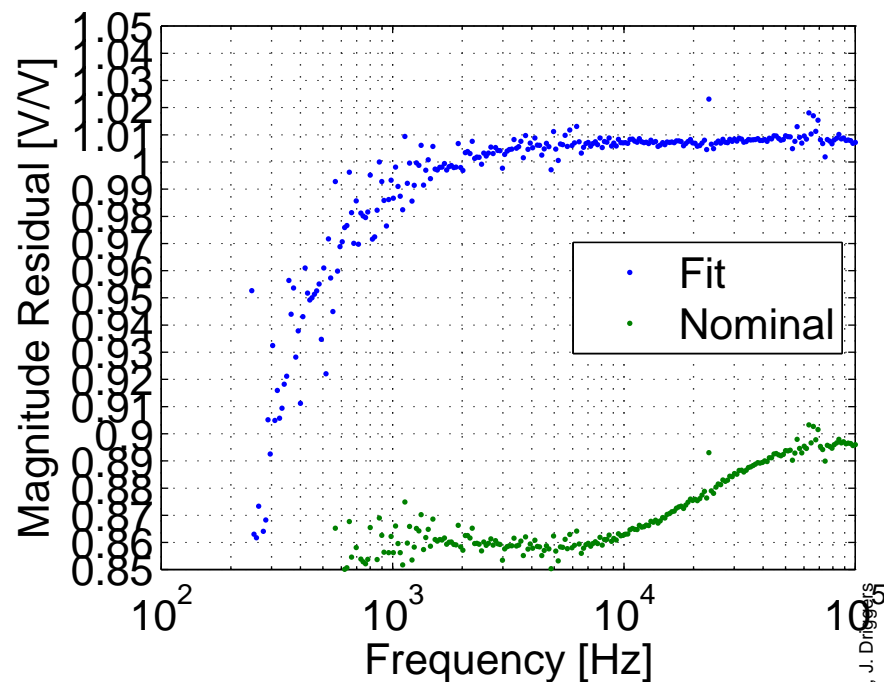


created by ALSDIFFModel\_PreER8 on 14-Aug-2015, J. Kissel, C. Callane, J. Driggs

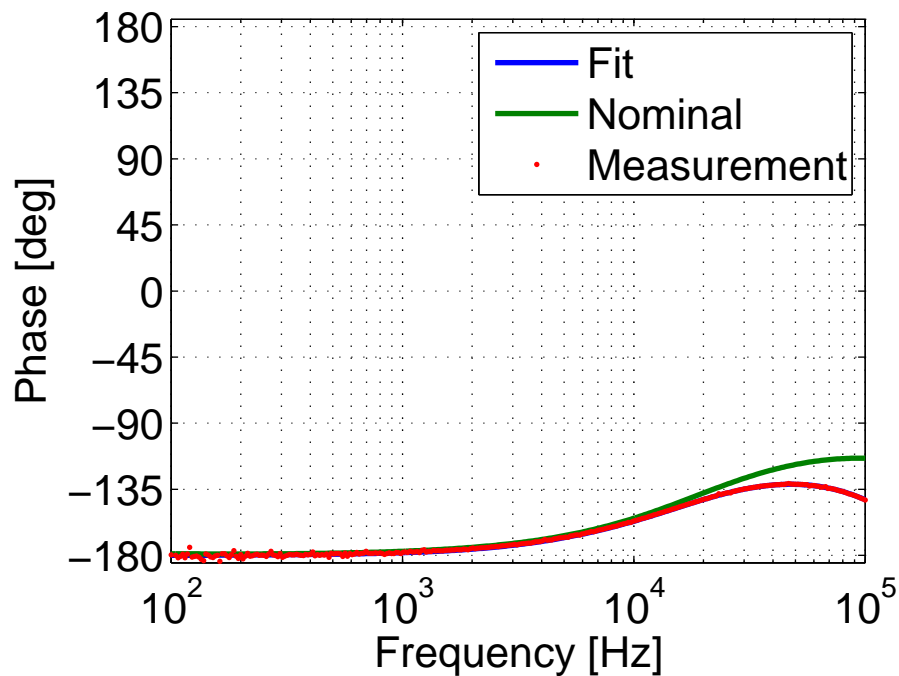
ALS DIFF PLL OLGTF, With Boosts



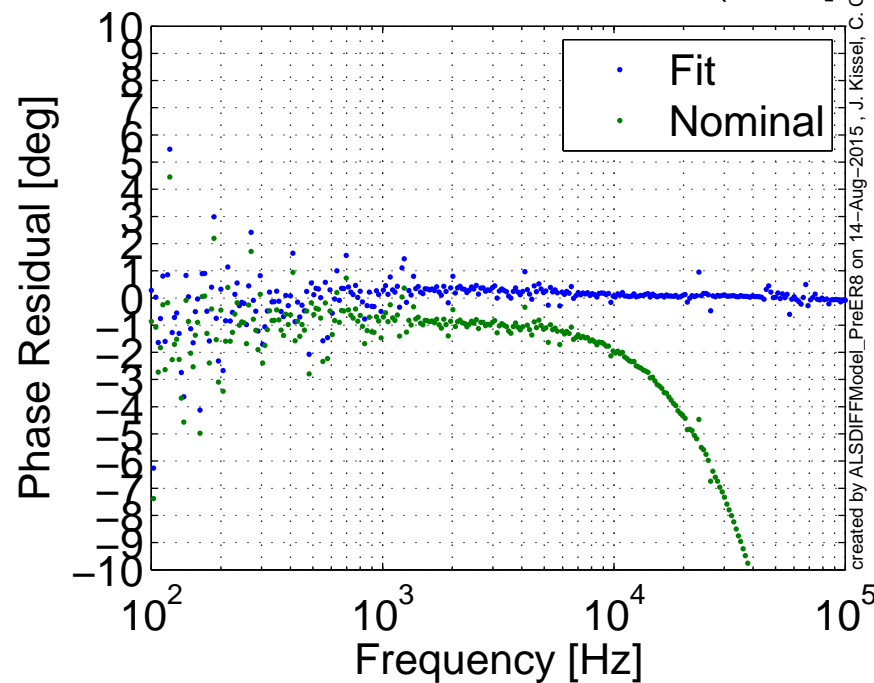
Meas / Model



Fit (z:p) = (40:1.05) Hz

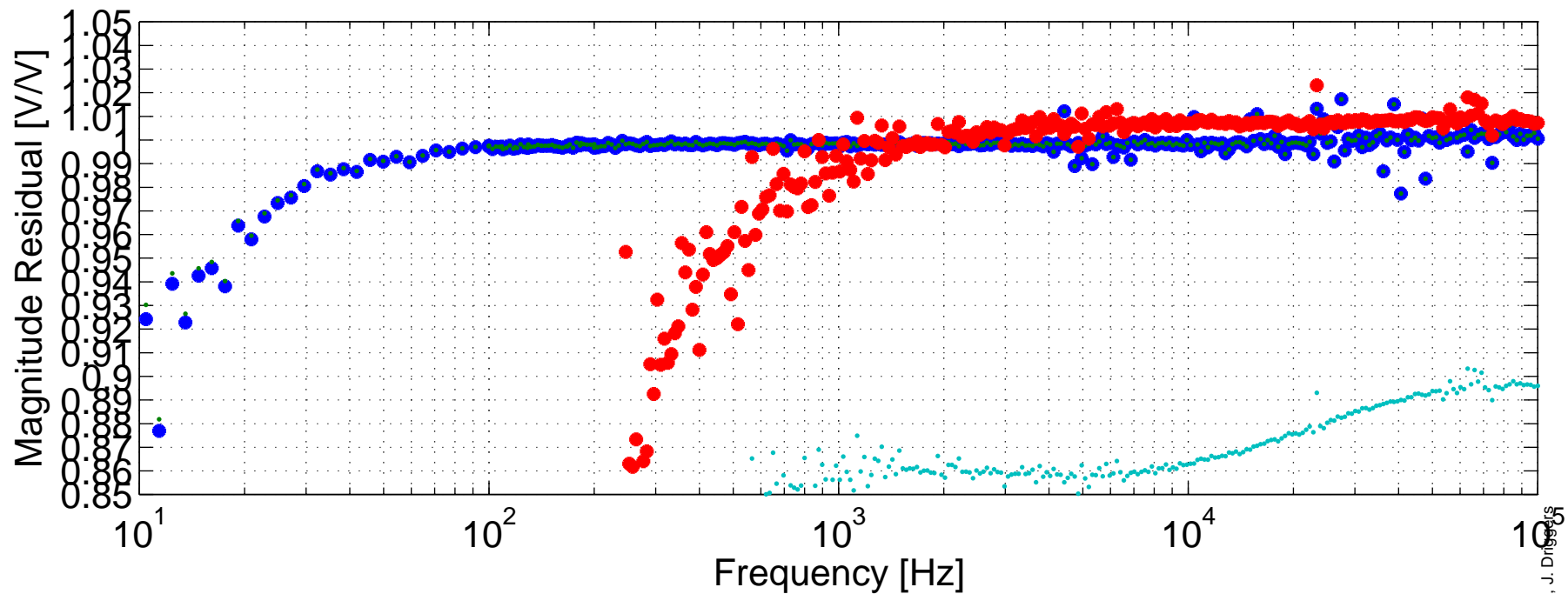


Fit Overall Gain: 2113770 at UGF (54.8 [kHz])

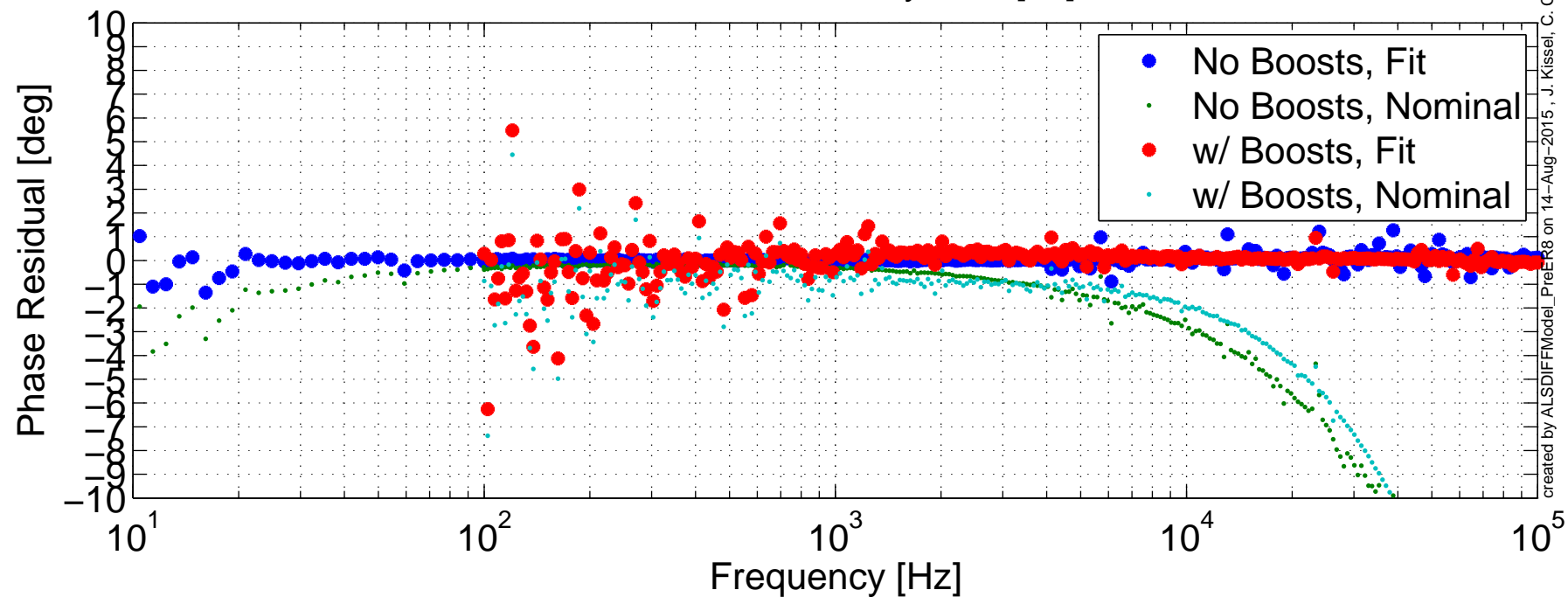


created by ALSDIFFModel\_PrefR8 on 14-Aug-2015, J. Kissel, C. Galliane, J. Dinger

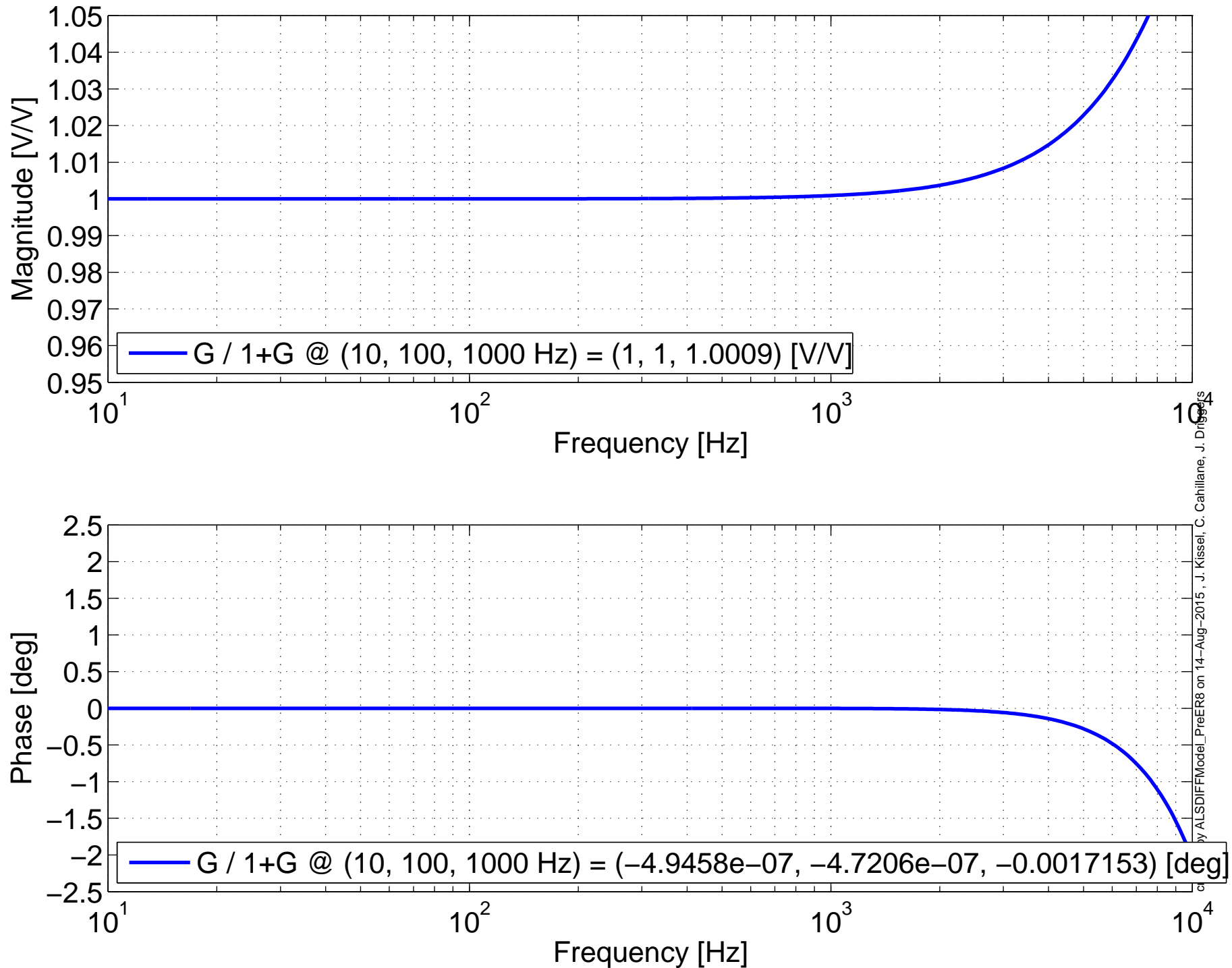
# ALS DIFF PLL OLGTF Residual Comparison Meas / Model



OLGTF Time Delay: 800 [ns]



# 2015-08-09 H1 ALS DIFF PLL CLGTF, G / (1+G) Model



by ALSDIFFModel\_PreER8 on 14-Aug-2015, J. Kissel, C. Cahillane, J. Dingels