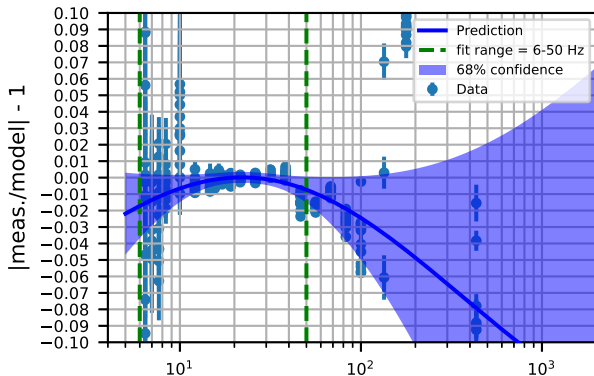
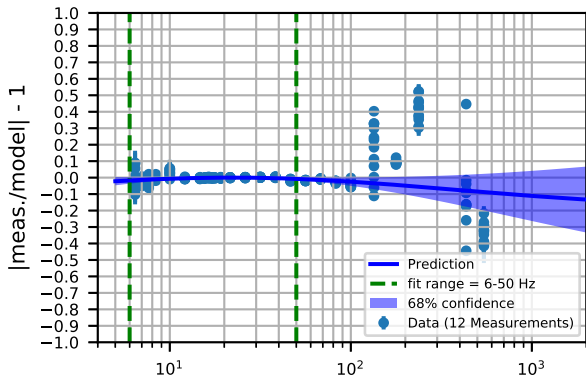
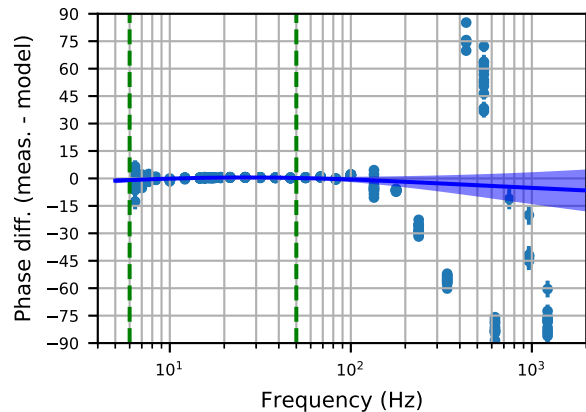


# Gaussian Process Regression for Unknown Systematic Error

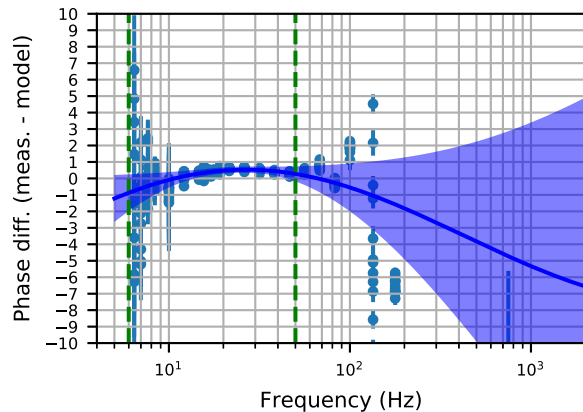
## H1, ETMX UIM Actuation Function Measurement Residuals with 2020-01-03 Model



UIM: Posterior kernel  $0.316^{**2} * \text{RBF}(\text{length\_scale}=1.51) + 0.949^{**2}$

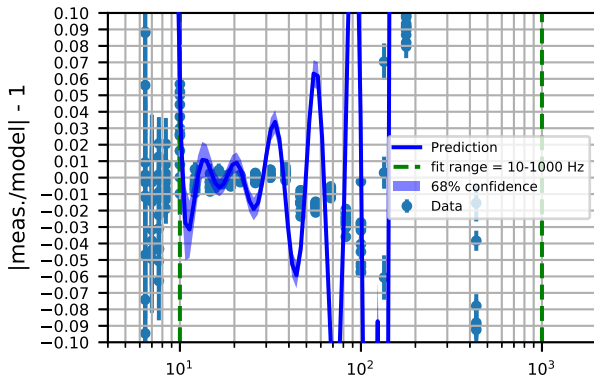
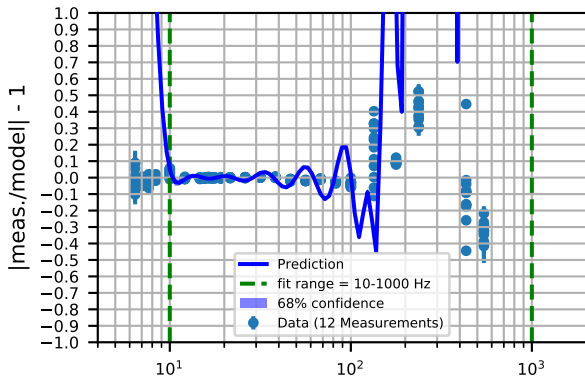


Log-likelihood = 775.207, fit range = 6-50 Hz



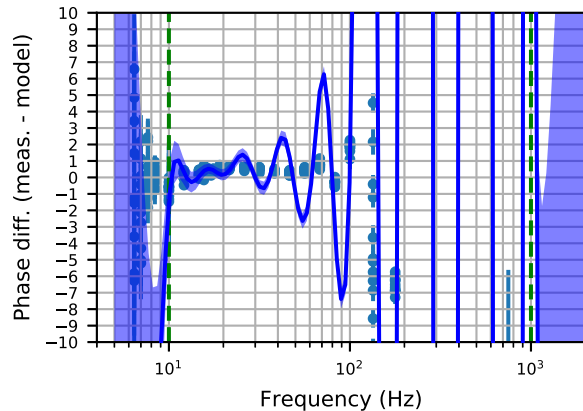
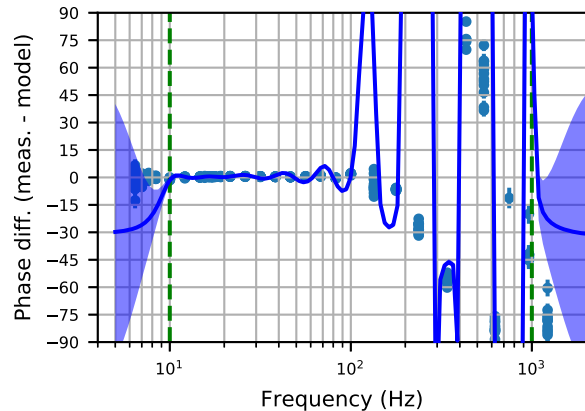
# Gaussian Process Regression for Unknown Systematic Error

## H1, ETMX UIM Actuation Function Measurement Residuals with 2020-01-03 Model



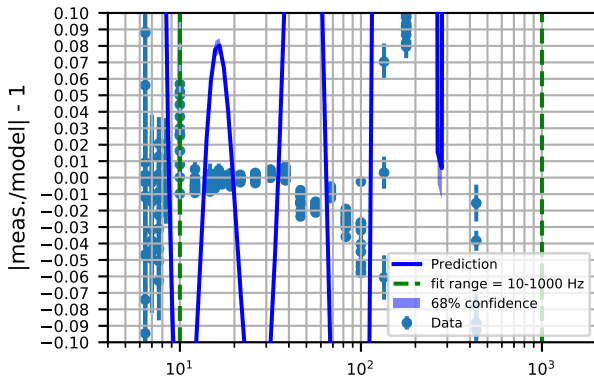
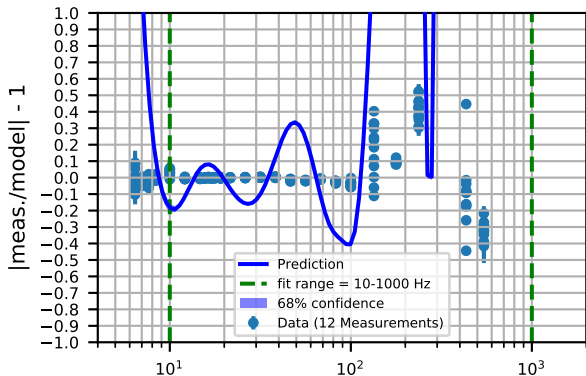
UIM: Posterior kernel  $1.41**2 * \text{RBF}(\text{length\_scale}=0.18) + 1.05**2$

Log-likelihood = -1357198.212, fit range = 10-1000 Hz



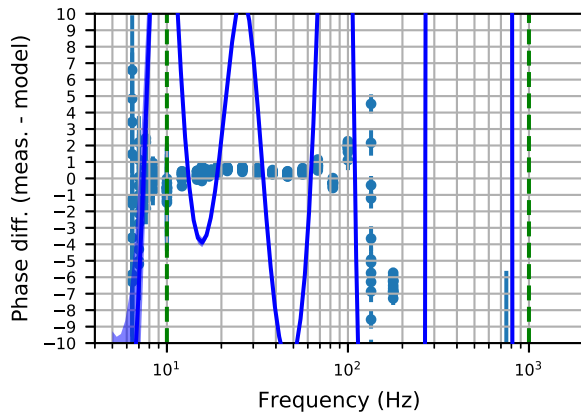
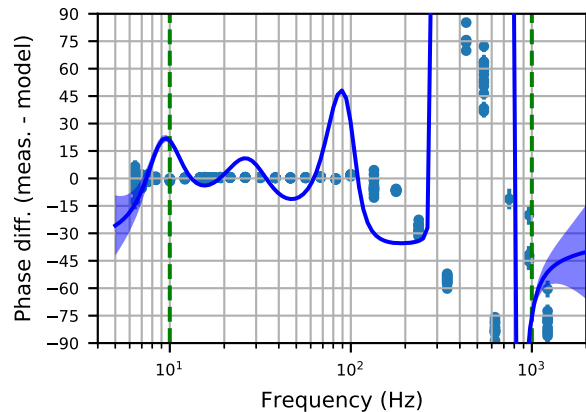
# Gaussian Process Regression for Unknown Systematic Error

## H1, ETMX UIM Actuation Function Measurement Residuals with 2020-01-03 Model



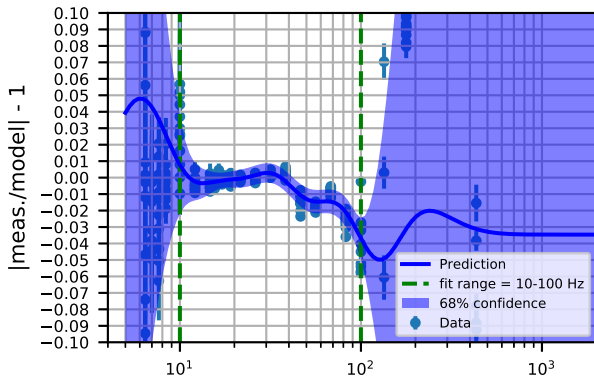
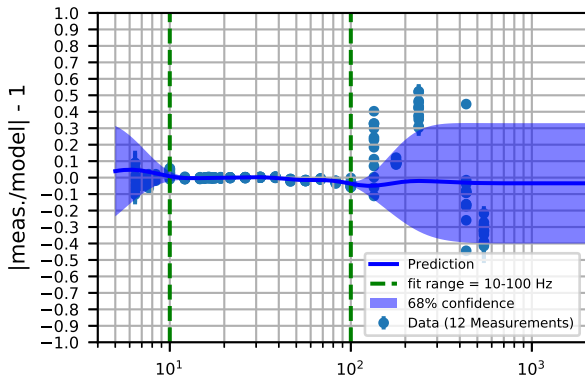
UIM: Posterior kernel  $1.41**2 * \text{RBF}(\text{length\_scale}=0.48) + 1.05**2$

Log-likelihood = -2322794.360, fit range = 10-1000 Hz



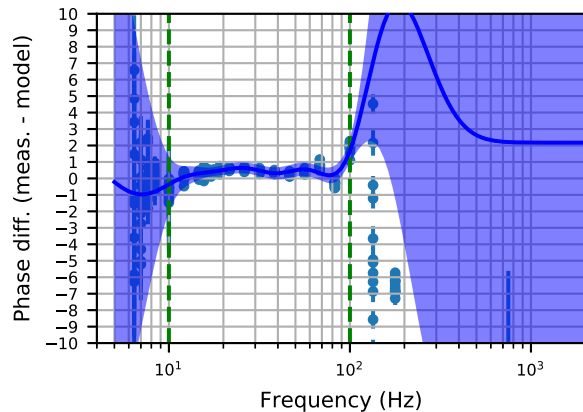
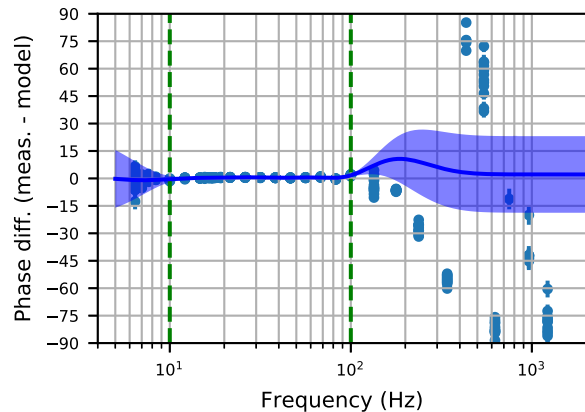
# Gaussian Process Regression for Unknown Systematic Error

## H1, ETMX UIM Actuation Function Measurement Residuals with 2020-01-03 Model



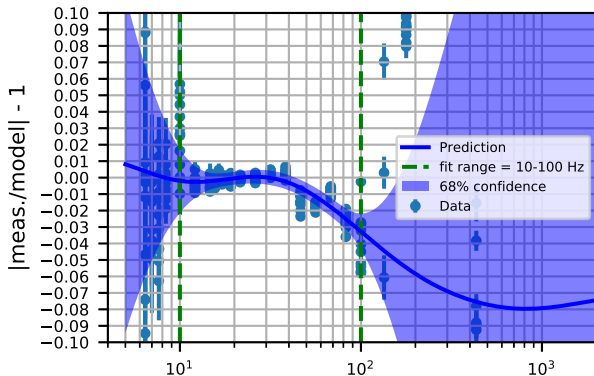
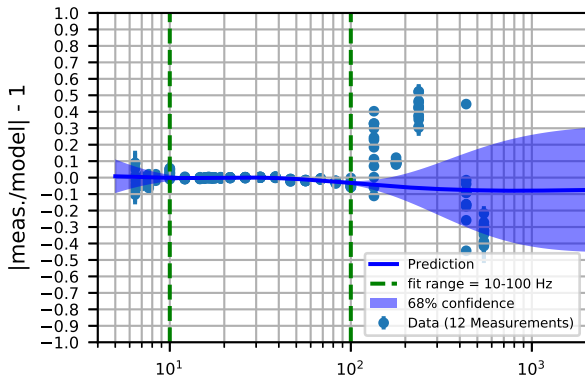
UIM: Posterior kernel  $0.316^{**2} * \text{RBF}(\text{length\_scale}=0.22) + 0.949^{**2}$

Log-likelihood = 870.475, fit range = 10-100 Hz



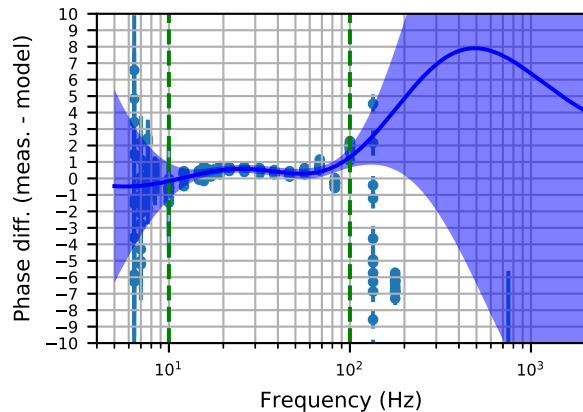
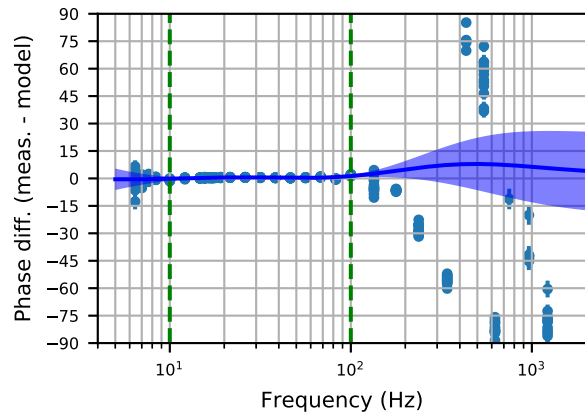
# Gaussian Process Regression for Unknown Systematic Error

## H1, ETMX UIM Actuation Function Measurement Residuals with 2020-01-03 Model



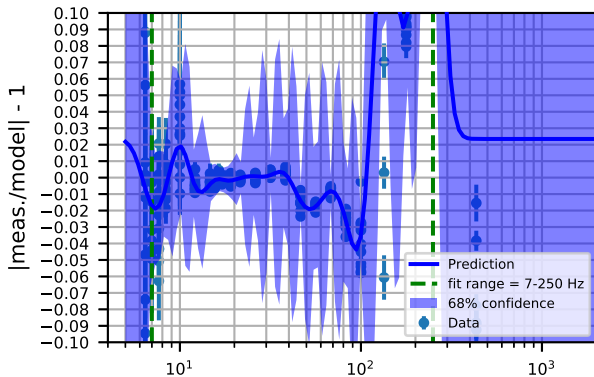
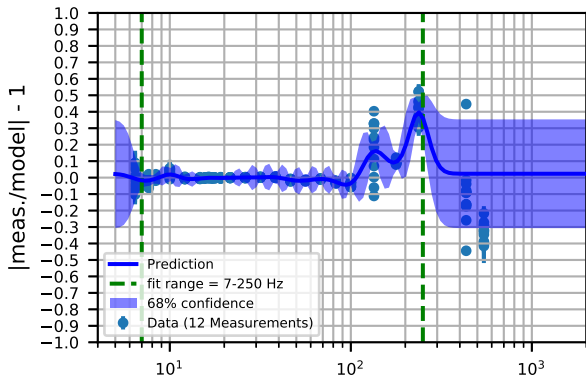
UIM: Posterior kernel  $0.316^{**2} * \text{RBF}(\text{length\_scale}=0.52) + 0.949^{**2}$

Log-likelihood = 887.087, fit range = 10-100 Hz



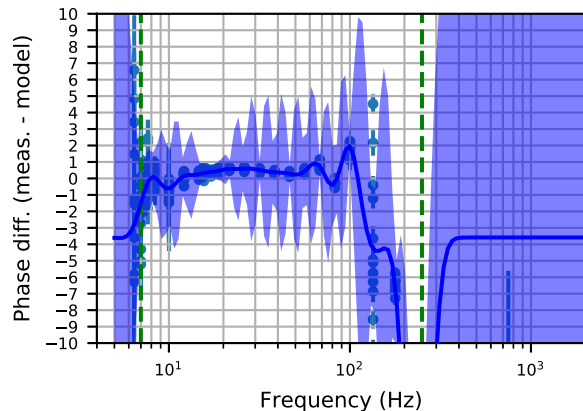
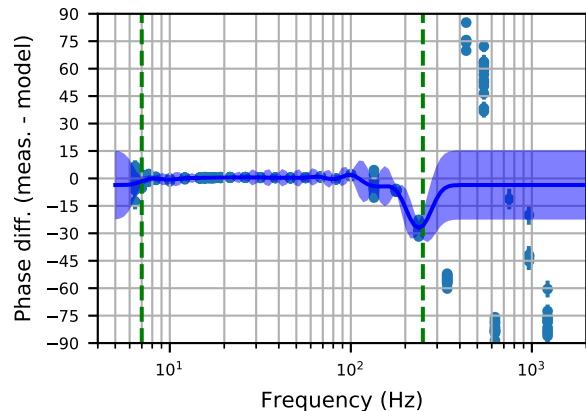
# Gaussian Process Regression for Unknown Systematic Error

## H1, ETMX UIM Actuation Function Measurement Residuals with 2020-01-03 Model



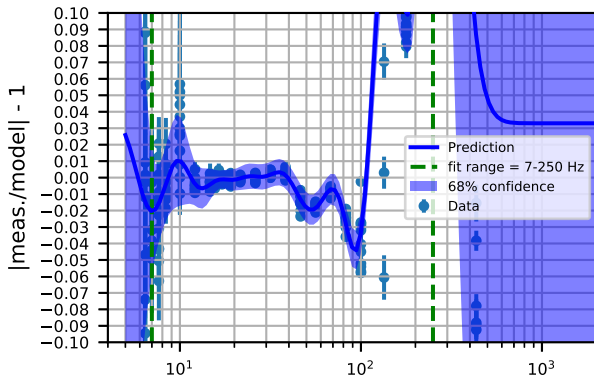
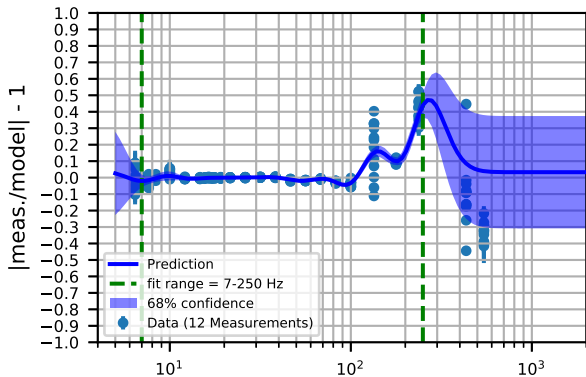
UIM: Posterior kernel  $0.316^{**2} * \text{RBF}(\text{length\_scale}=0.06) + 0.949^{**2}$

Log-likelihood = 946.423, fit range = 7-250 Hz



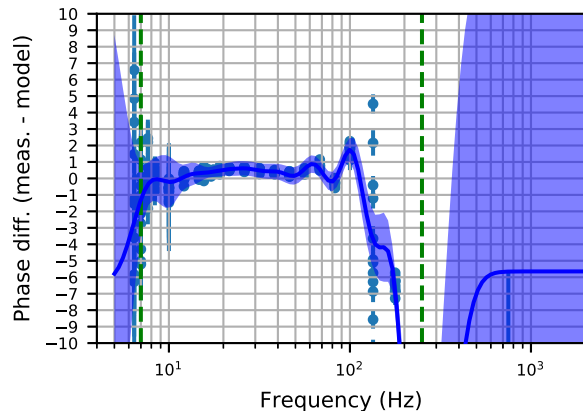
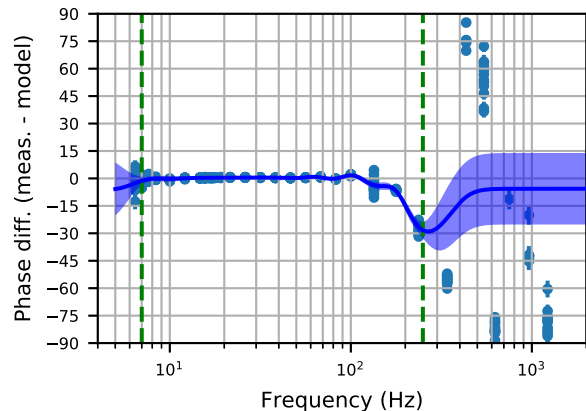
# Gaussian Process Regression for Unknown Systematic Error

## H1, ETMX UIM Actuation Function Measurement Residuals with 2020-01-03 Model



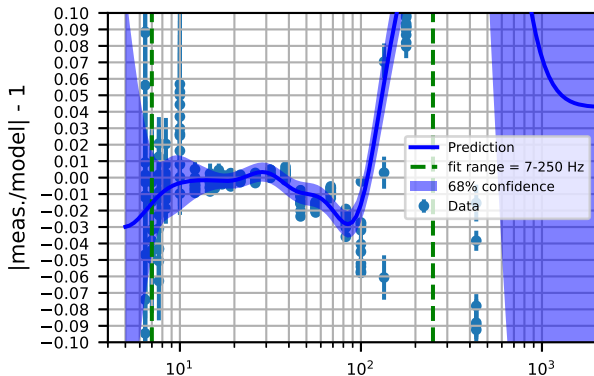
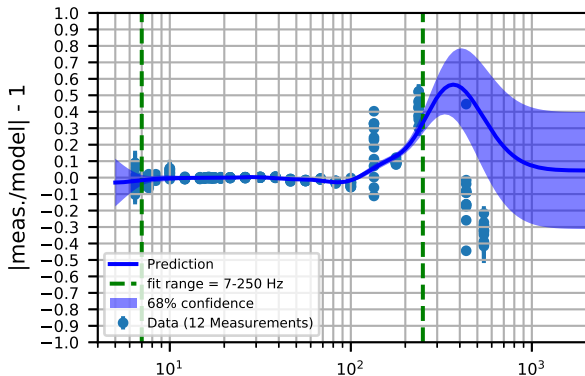
UIM: Posterior kernel  $0.316^{**2} * \text{RBF}(\text{length\_scale}=0.12) + 0.949^{**2}$

Log-likelihood = 976.483, fit range = 7-250 Hz



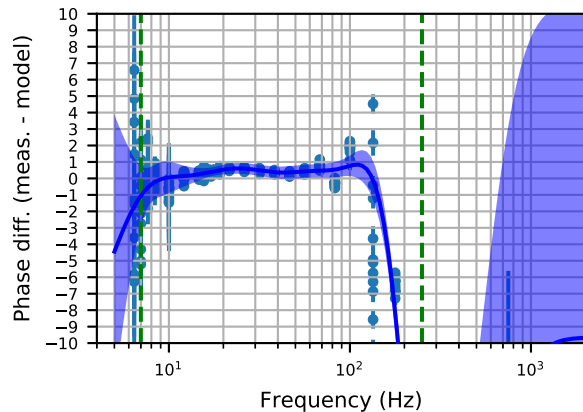
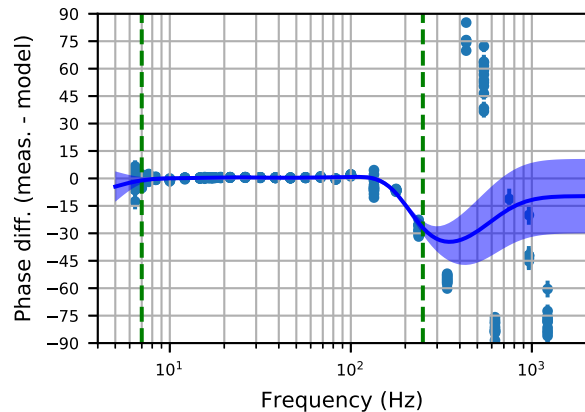
# Gaussian Process Regression for Unknown Systematic Error

## H1, ETMX UIM Actuation Function Measurement Residuals with 2020-01-03 Model



UIM: Posterior kernel  $0.316^{**2} * \text{RBF}(\text{length\_scale}=0.22) + 0.949^{**2}$

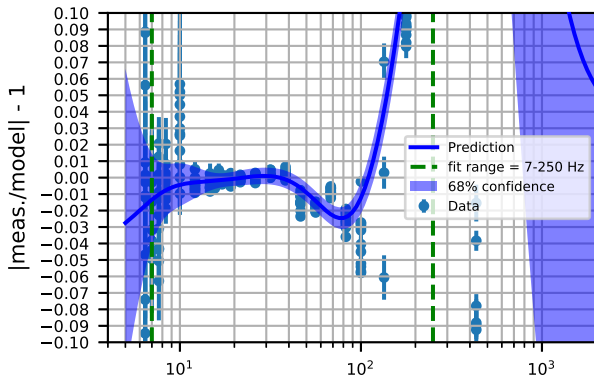
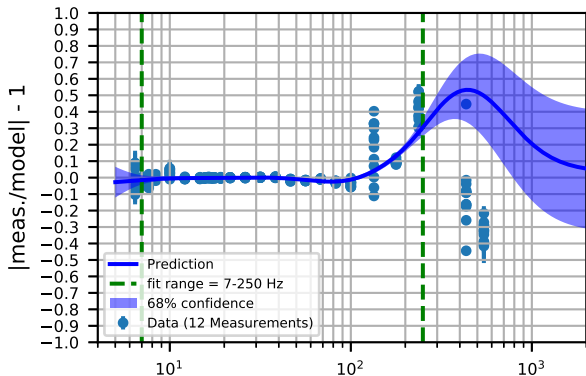
Log-likelihood = 987.747, fit range = 7-250 Hz





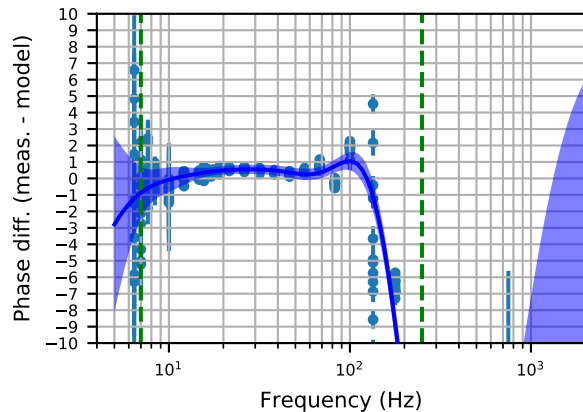
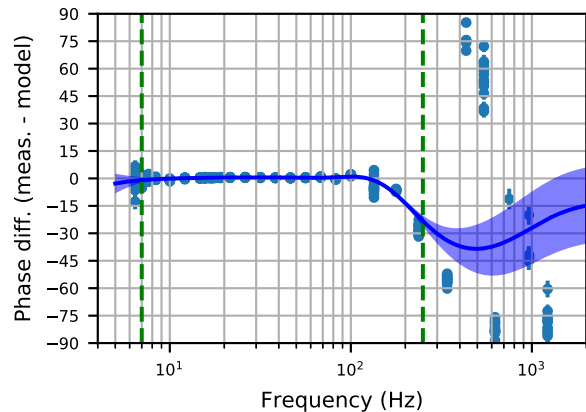
# Gaussian Process Regression for Unknown Systematic Error

## H1, ETMX UIM Actuation Function Measurement Residuals with 2020-01-03 Model



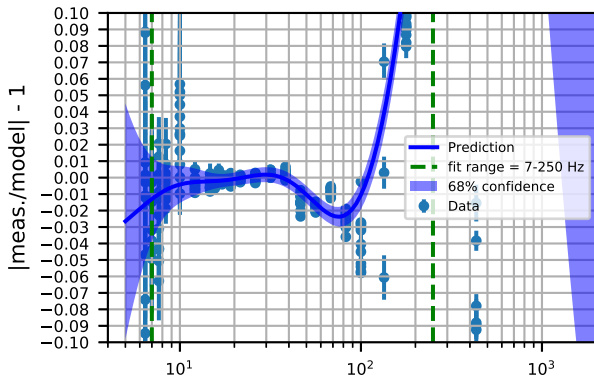
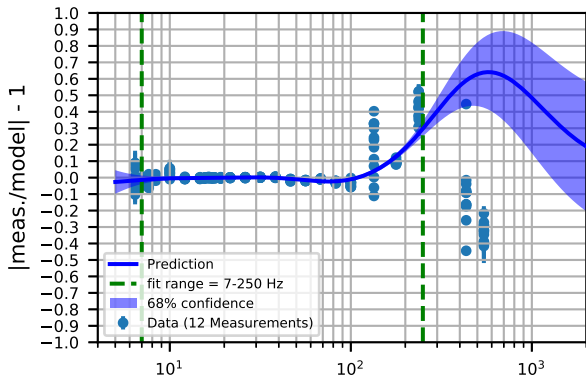
UIM: Posterior kernel  $0.316^{**2} * \text{RBF}(\text{length\_scale}=0.32) + 0.949^{**2}$

Log-likelihood = 994.875, fit range = 7-250 Hz



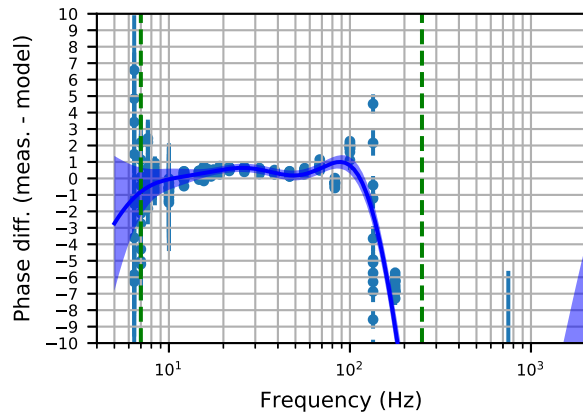
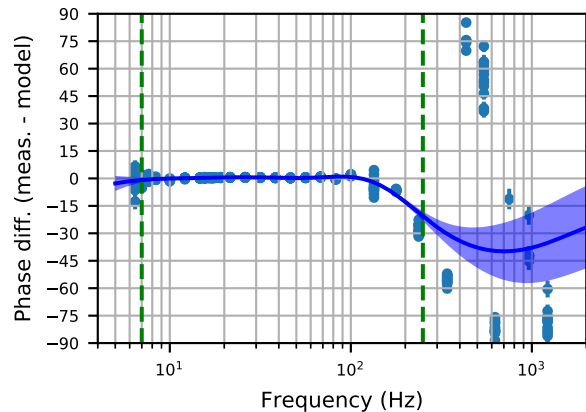
# Gaussian Process Regression for Unknown Systematic Error

## H1, ETMX UIM Actuation Function Measurement Residuals with 2020-01-03 Model



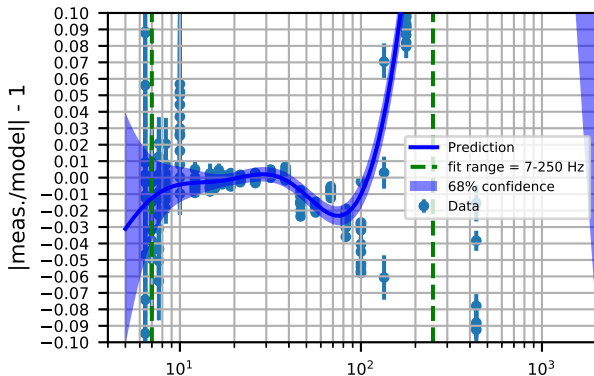
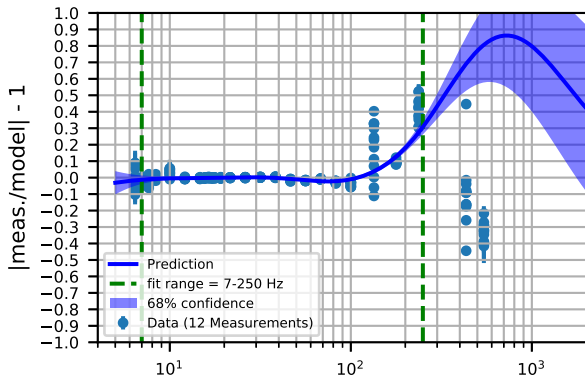
UIM: Posterior kernel  $0.346**2 * \text{RBF}(\text{length\_scale}=0.42) + 0.949**2$

Log-likelihood = 997.195, fit range = 7-250 Hz



# Gaussian Process Regression for Unknown Systematic Error

## H1, ETMX UIM Actuation Function Measurement Residuals with 2020-01-03 Model



UIM: Posterior kernel  $0.465**2 * \text{RBF}(\text{length\_scale}=0.48) + 0.949**2$

Log-likelihood = 997.296, fit range = 7-250 Hz

