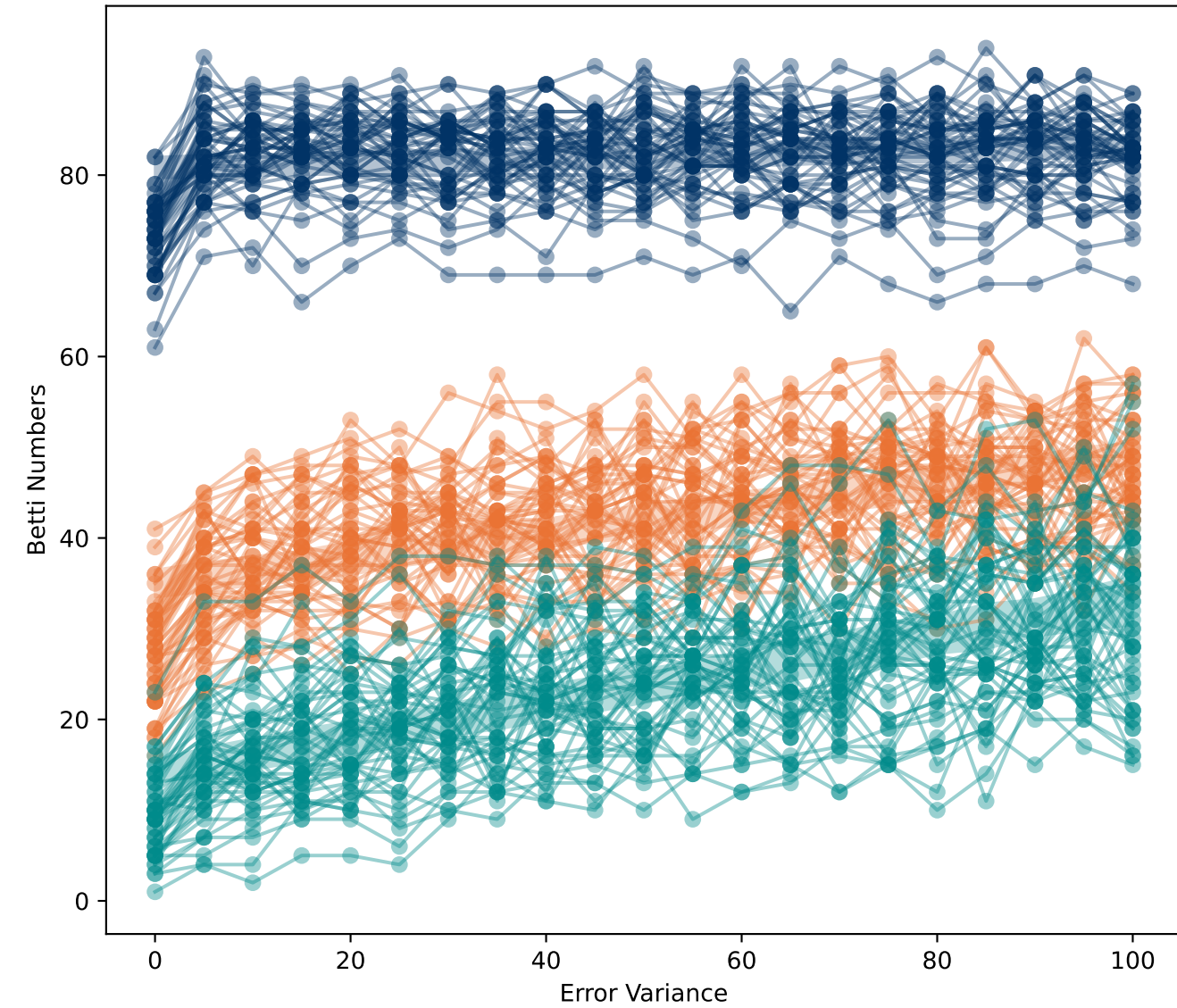


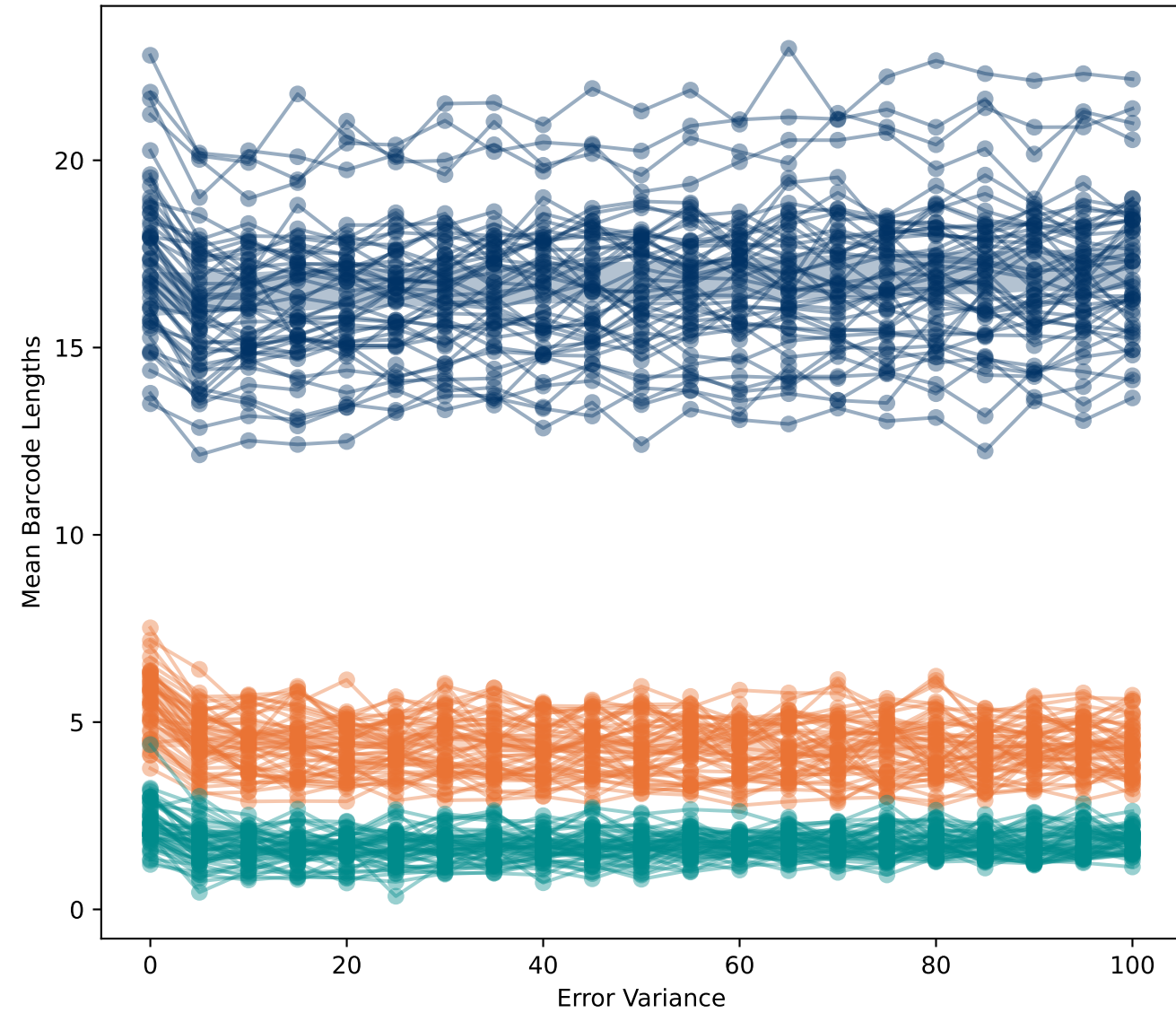
# Topological Quantities at Varying Errors

$H_0$   $H_1$   $H_2$

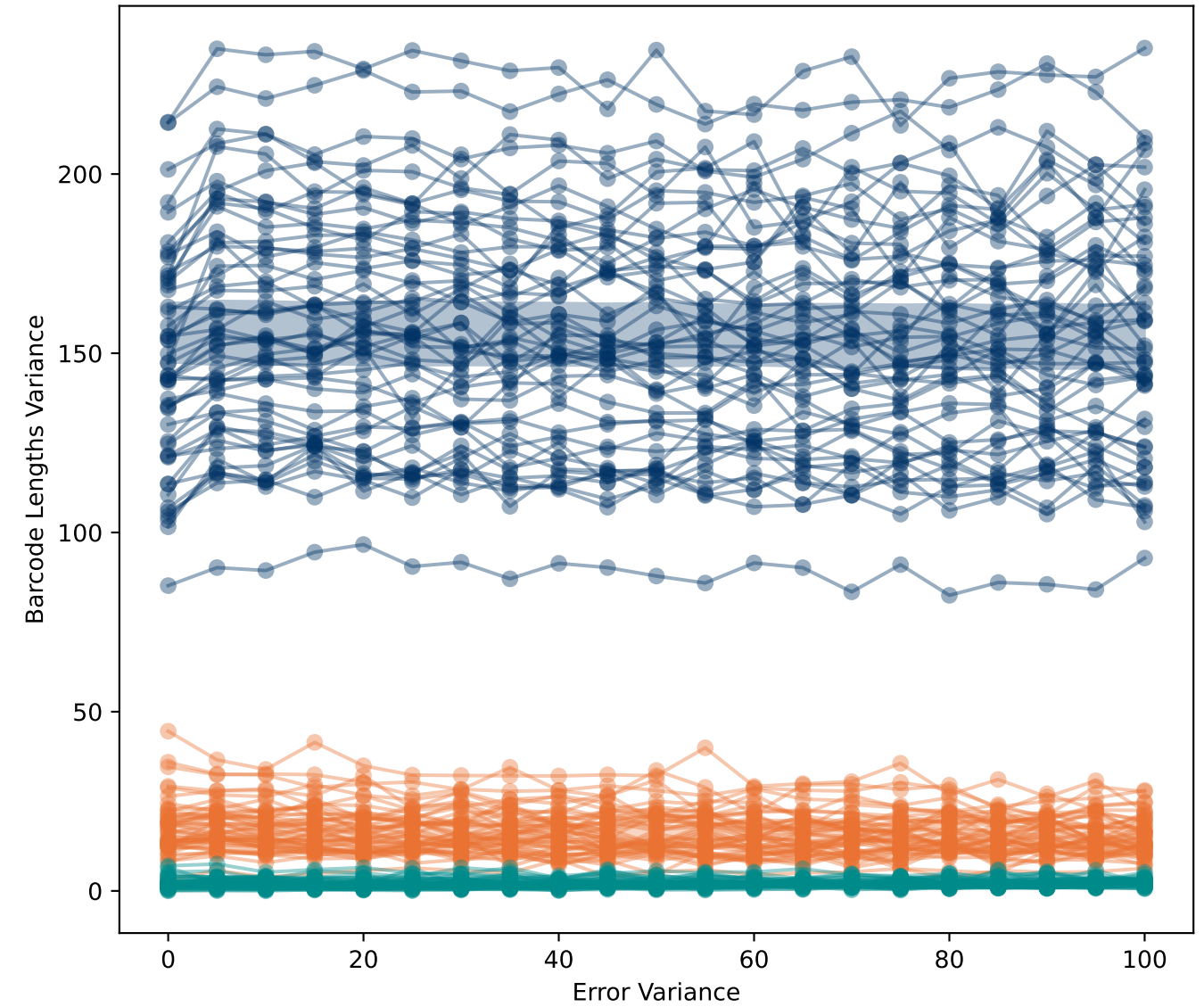
## Betti Numbers vs. Error Variance



## Barcode Length Mean vs. Error Variance



## Barcode Length Variance vs. Error Variance

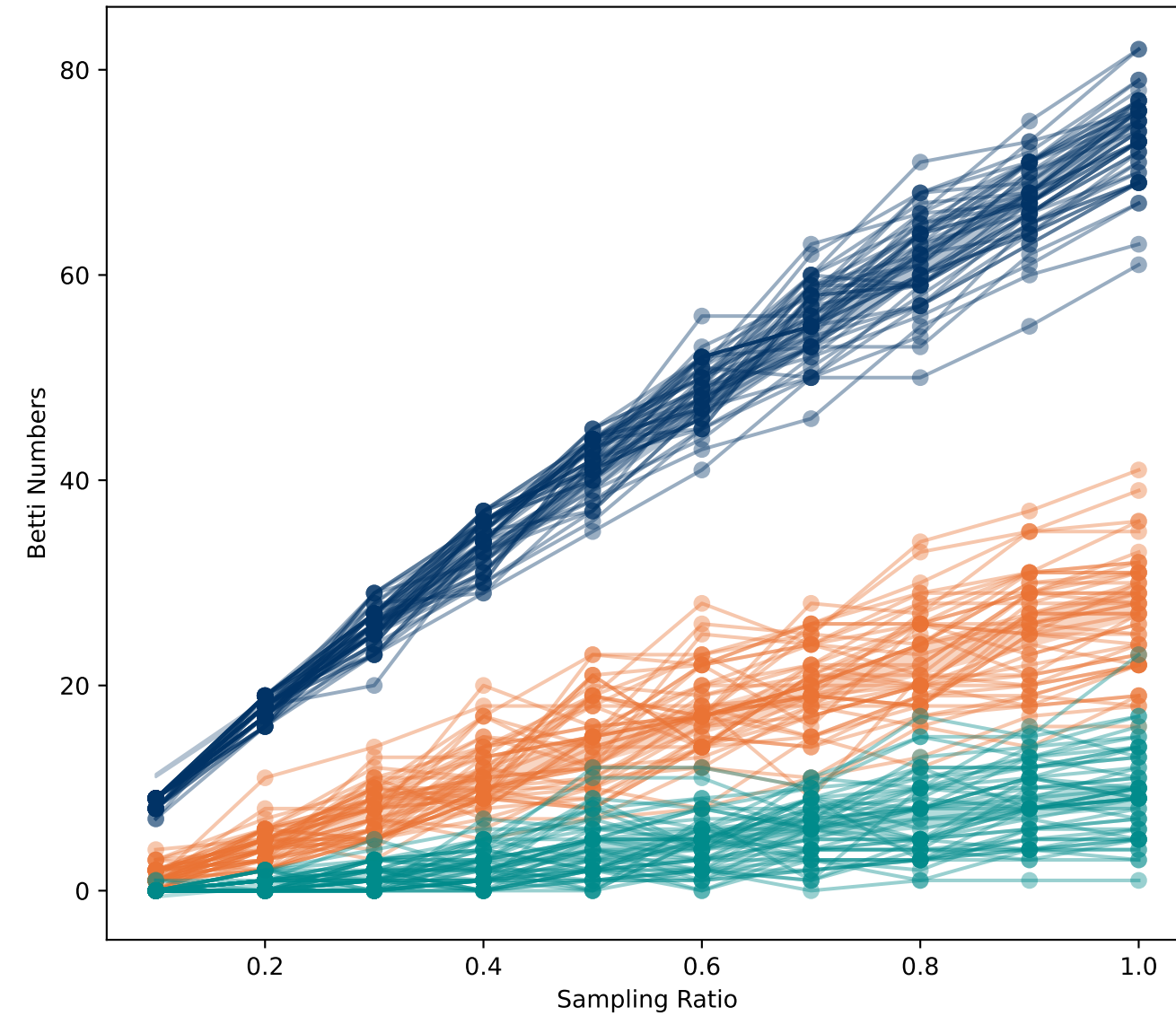




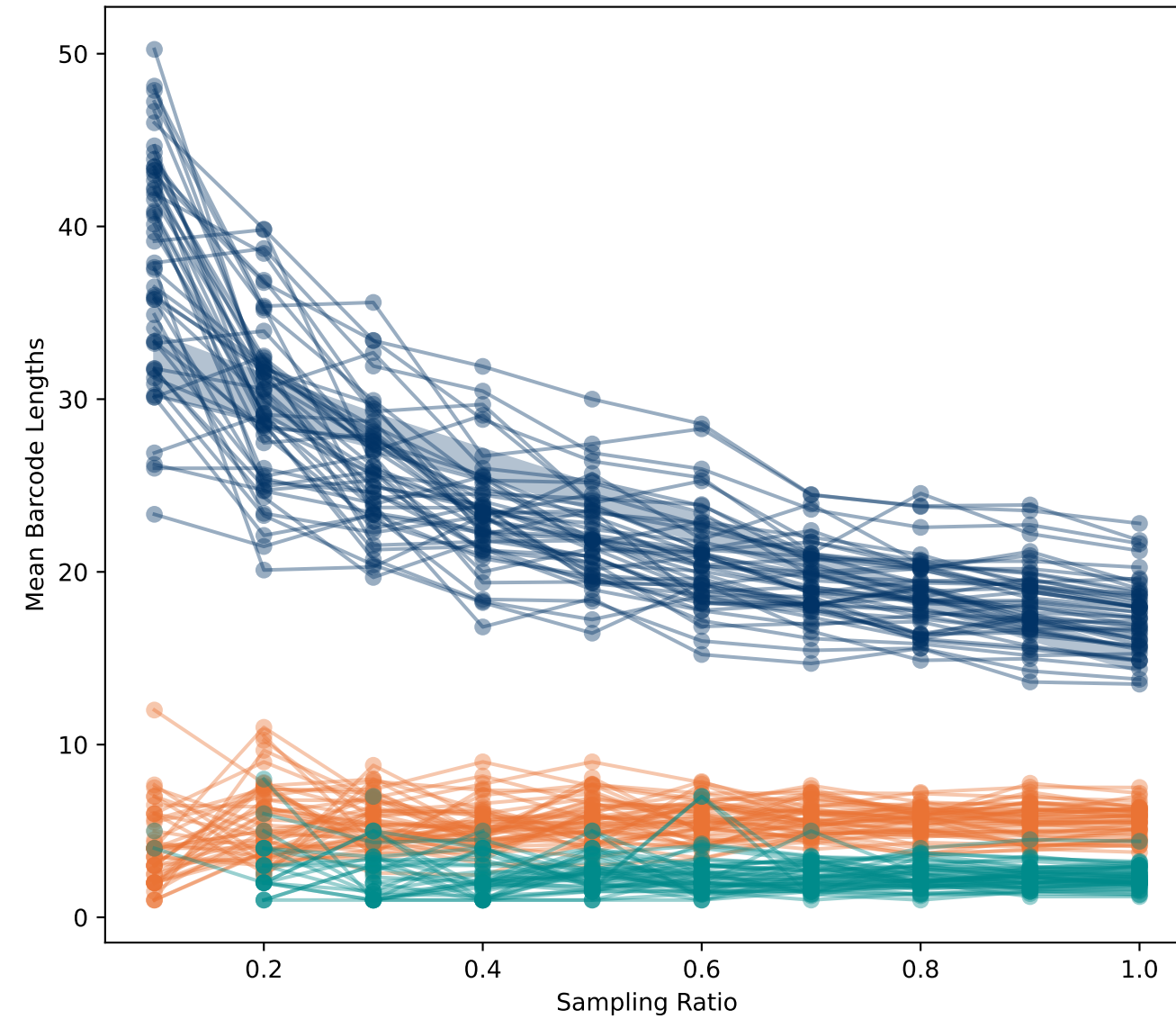
# Topological Quantities at Varying Sampling Ratios

$H_0$   $H_1$   $H_2$

## Betti Numbers vs. Sampling Ratio



## Barcode Length Mean vs. Sampling Ratio



## Barcode Length Variance vs. Sampling Ratio

