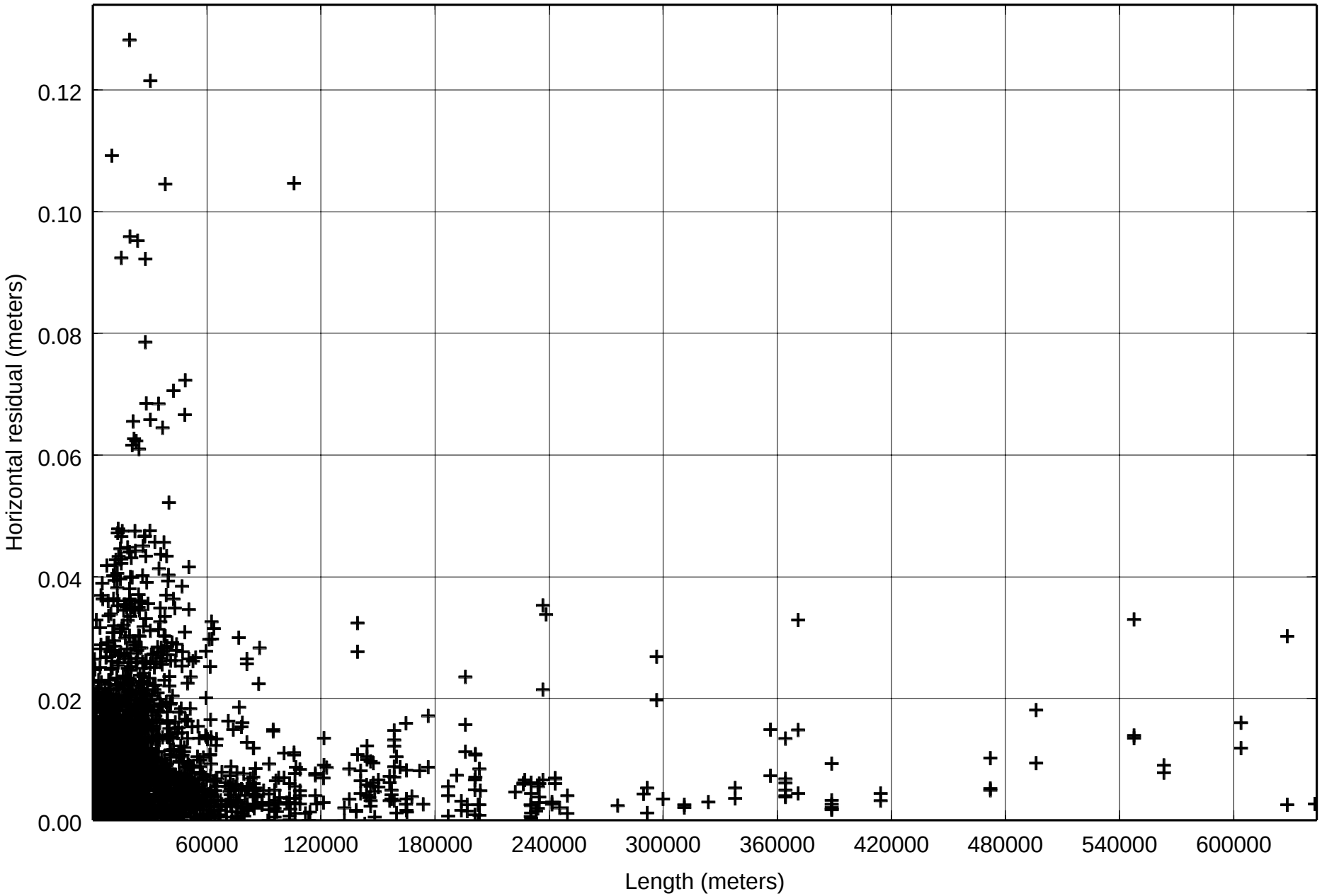MICHIGAN FINAL FREE Horizontal Residuals