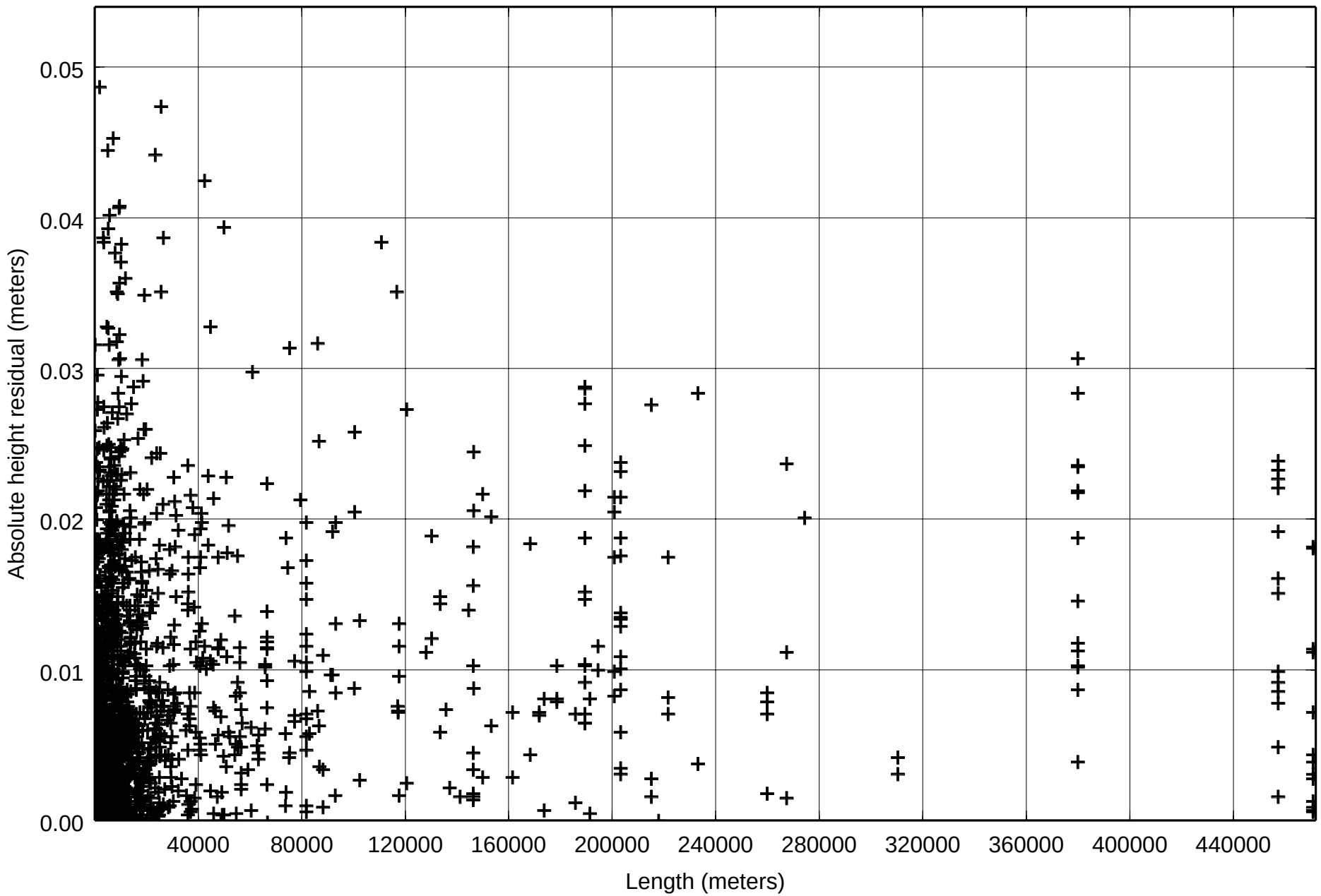VERMONT FINAL CONSTRAINED Height Residuals