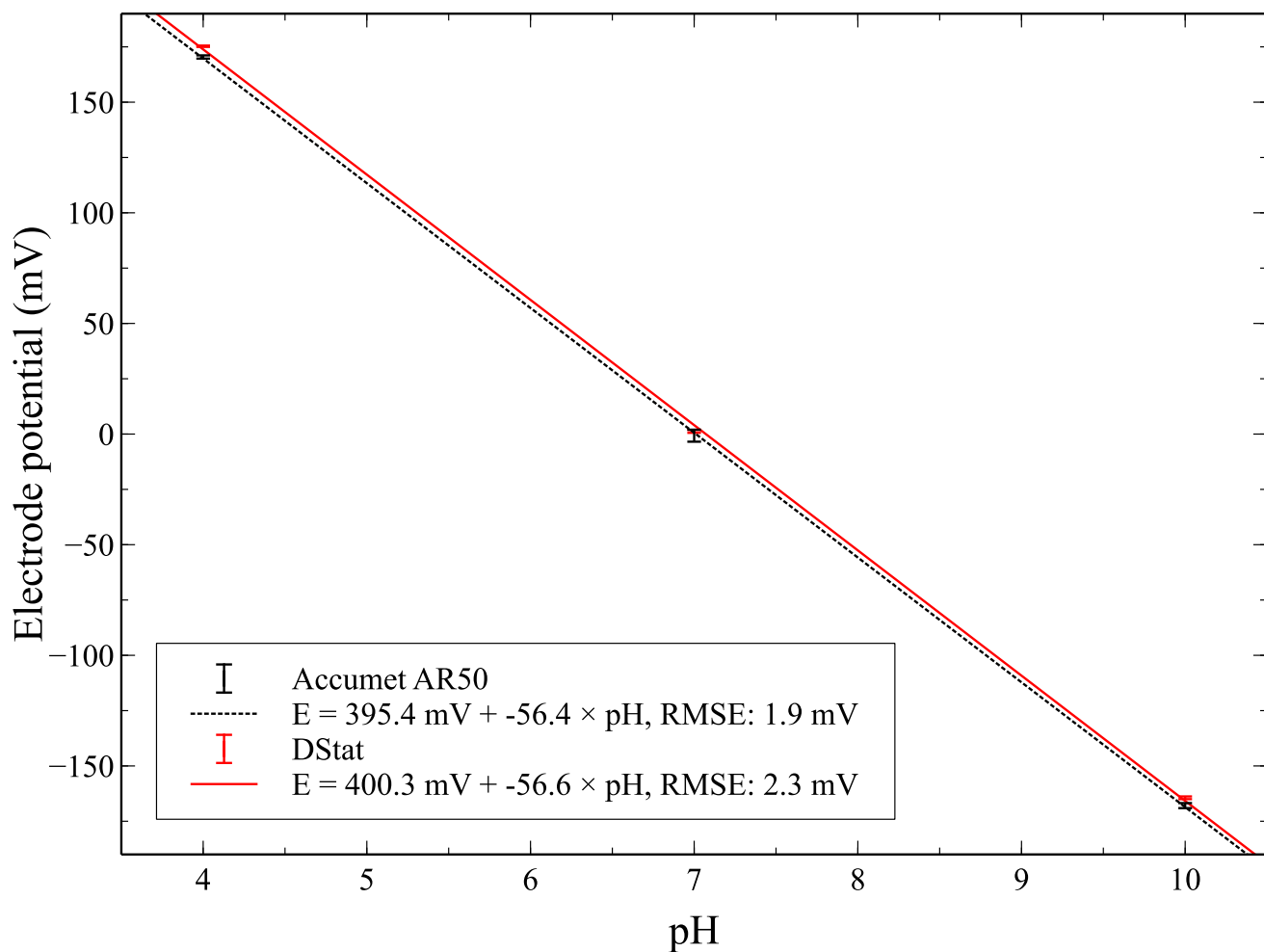


## S4: Potentiometry

pH 3, 7, and 11 calibration standards were purchased from Fisher Scientific Company (Ottawa ON, CA). pH measurements of each standard were collected using a combination glass pH electrode with integrated Ag/AgCl reference electrode (Beckman Coulter Canada, Mississauga ON, CA) with DStat and an Accumet AR50 benchtop meter (Thermo Fisher Scientific, Waltham MA, USA). The results are shown in Fig. A.



**Figure A. Comparison of DStat and Accumet AR50 measurements of pH standard solutions with a combination glass pH electrode.** Error bars are  $\pm 1$  s.d. ( $n=3$ ). Accumet AR50 measurements are plotted as black bars and DStat measurements as red bars. Linear least squares fit for the Accumet AR50 is shown as a dashed black line and DStat's is shown as a solid red line. RMSE: Root Mean Square Error