

RMSE Calculation

An image was georeferenced using two different georeferencing methods and 6 control points. An Excel sheet has been provided that has the correct coordinates of the control points (Correct X and Correct Y) and the predicted coordinates from each georeferencing process (Predicted X and Predicted Y). These coordinates are in UTM Zone 17 North and referenced against the NAD 83 datum. The units are in meters. Using Excel and the provided data, please answer the following questions:

1. What is the $RMSE_x$ for Result 1?
2. What is the $RMSE_y$ for Result 1?
3. What is the total RMSE for Result 1?
4. What is the $RMSE_x$ for Result 2?
5. What is the $RMSE_y$ for Result 2?
6. What is the total RMSE for Result 2?
7. Based on your analysis, which method, Result 1 or Result 2, did the best job georeferencing this image?