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WITHDRAWN: Use of Variable Thresholds in Post-Correlation PIV Outlier Correction¹ DANA DABIRI, ADI SALEHUDDIN, University of Washington — While PIV has successfully proven to be a valuable velocity measurement technique, it has still been susceptible to producing outliers due to a variety of reasons. Many methods of correcting these post-correlation outliers have been proposed with varying degrees of success. This paper proposes a method of correction using automated variable thresholds to identify and replace outliers. This method varies the threshold depending on the velocity around the node of interest, and utilizing statistical properties such as averages, and standard deviations to identify the local threshold value. This allows the threshold to better accommodate the changes in the velocity profile of a specific region. This method will be applied to simulated velocity profiles containing outliers, and the results will be compared with a fixed threshold method.

¹http://www.aps.org/meet/DFD04/baps/abs/S330.html

Dana Dabiri University of Washington

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