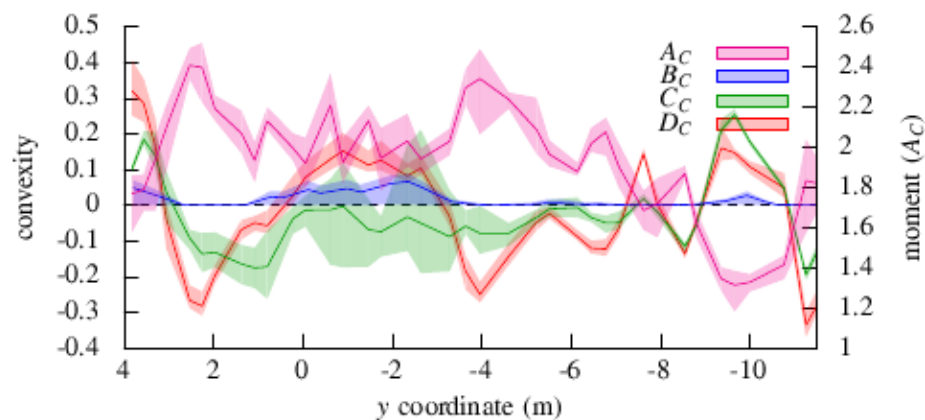


# Consistent Pile-Shape Quantification for Autonomous Wheel Loaders

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- Experimental comparison of several algorithms for quantifying pile shapes.
- Evaluate consistency w.r.t. viewpoint and sensor configuration.
- Extensions of previous algorithms.
- Novel method for segmenting pile from background in point-cloud data.
- Propose to use quadric fitting for estimating relevant pile quantities.



Application shown above,  
variance of convexity measures  
illustrated below.