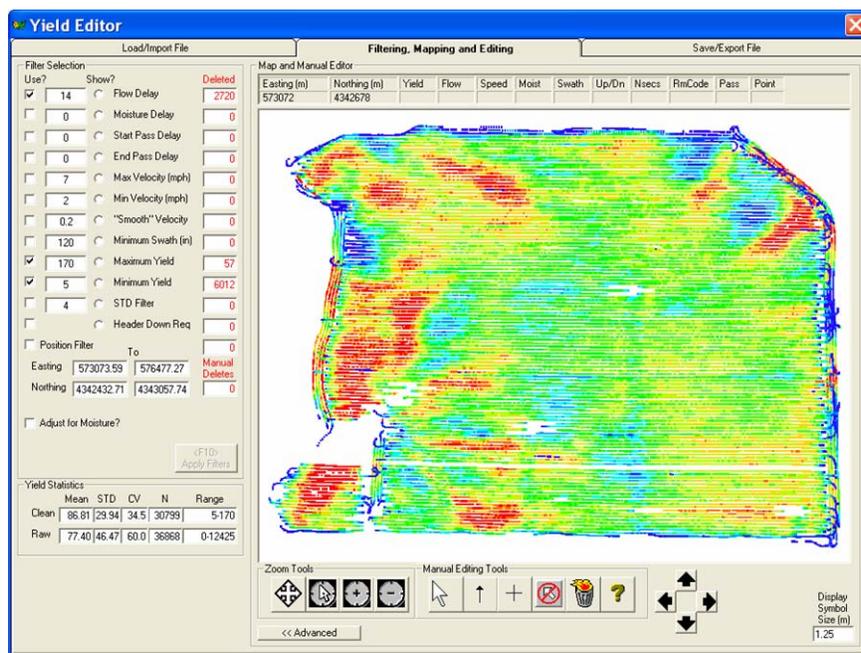# Yield Editor:
Software for Removing Errors from Crop Yield Maps

Yield maps are a key component of precision agriculture, used both in developing and evaluating precision management strategies. Unfortunately, yield monitors produce complex datasets that often contain a large number of errors. These errors should be removed, as they may cause serious problems when yield data are used for research and analysis tasks. Even when yield maps are merely used in an interpretive fashion, or to visualize patterns in the data, the conclusions drawn by the user may be adversely affected by these error sources. *To help yield map users remove errors from their maps, we developed the Yield Editor,* *interactive software that incorporates several automated filters and also allows the user to manually remove bad data*. Tests of Yield Editor on several datasets showed its usefulness and provided information about the relative importance of the various filter types. This research is a step toward a standardized procedure to clean yield data, a result that would improve data quality for both researchers and producers involved in precision agriculture. Improved yield map data will allow more accurate development and assessment of precision management strategies for improved farm profitability and environmental protection.

Sudduth, K.A., and Drummond, S.T. Yield editor: Software for removing errors from crop yield maps. Agronomy Journal. 99:1471-1482. 2007. http://www.ars.usda.gov/sp2UserFiles/Place/36221500/cswq-0372-sudduth.pdf

Contact the author: Ken Sudduth, ken.sudduth@ars.usda.gov, 573-882-1114x303

Download the Yield Editor software from the web at:
http://www.ars.usda.gov/services/software/download.htm?softwareid=20&modecode=36-20-15-00

80 Years of Soil and Water Conservation Research
Cropping Systems and Water Quality Research Unit, Columbia MO

USDA ars — Agricultural Research Service
the in-house research arm of the U. S. Department of Agriculture

USDA is an equal opportunity provider and employer