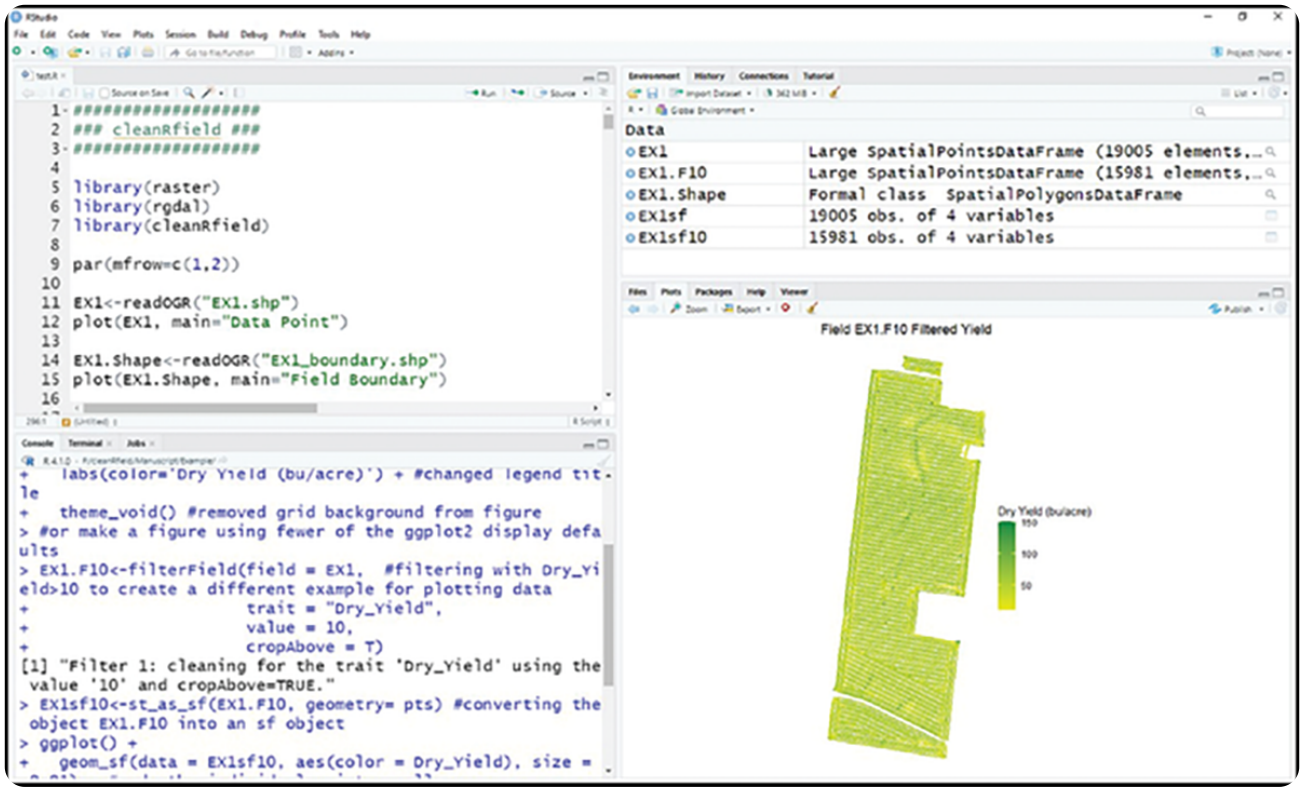
Science Societies

New free tool processes yield estimates more efficiently

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A screenshot from RStudio with a yield map shown in the lower righthand plot pane. The script in the upper left shows portions of the example code. Image courtesy of Emma Matcham.

Yield monitors for estimating grain crops, silage corn, cotton, and many other crops are useful for farm record-keeping or on-farm research data collection. However, even after calibrating equipment, they are prone to errors. Removing erroneous data points can improve yield estimates, but current practices for doing so are time intensive and cumbersome.

Using the computer language R, researchers have created new open-source code called cleanRfield that more efficiently processes yield maps and other spatial agricultural data and offers advantages over current data-cleaning solutions. In a scientific note recently published in *Agronomy Journal*, the research team describes the new tool and provides an integrative pipeline to evaluate and visualize data. Most notably, cleanRfield can read and interpret a broader range of input data formats, automatically delineate field boundaries, and batch process data from multiple fields.

This new tool is being distributed under the GNU General Public License 2, and a detailed tutorial is available at **https://github.com/filipematias23/cleanRfield**. Since its release, cleanRfield has been used by crop advisers and researchers to efficiently process yield monitor data, especially for on-farm research trials.

Dig deeper

Matcham, E.G., Matias, F., Luck, B.D., & Conley, S.P. (2022). Filtering, editing, and cropping yield maps in an R environment with the package cleanRfield. *Agronomy Journal*, *114*, 1672–1679. **https://doi.org/10.1002/agj2.21055**

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