Czym jest reprodukowalność artykułu naukowego?

Repeatability (Same team, same experimental setup): The results can be obtained by the same team using the same procedure, under the same operating conditions on multiple trials. For computational experiments, this means that a researcher can reliably repeat her own computation.

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Replicability (Different team, same experimental setup): The results can be obtained by a different team using the same procedure, under the same operating conditions on multiple trials. For computational experiments, this means that an independent group can obtain the same result using the author's own artefacts.

Daniel Méndez Fernández and Daniel Graziotin and Stefan Wagner and Heidi Seibold , Open Science in Software Engineering. 2019, arXiv e-print 1904.06499

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Reproducibility (Different team, different experimental setup): The results can be obtained by a different team on multiple trials. For computational experiments, this means that an independent group can obtain the same result using artefacts which they develop completely independently.

		Data	
		Same	Different
Analysis	Same	Reproducible	Replicable
	Different	Robust	Generalisable

Goodman, Steven N. and Fanelli, Daniele and Ioannidis, John P. A. What does research reproducibility mean? 2016. Science Translational Medicine 8, 341. URL https://stm.sciencemag.org/content/8/341/341ps12

Gentleman and Temple Lang (2007):

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LeVeque (2009):
"The idea of 'reproducible research' in scientific computing is to archive and make publicly available all the codes used to create a paper's figures or tables, preferably in such a manner that readers can download the codes and run them to reproduce the results."

From: DATA 598 A Wi 20: Special Topics In Data Science: Reproducibility for Data Science
week 1 slides

Co może być reprodukowalne?

Jak zmierzyć reprodukowalność?