

Open access is not only a form of publishing such that research papers become available to the large public free of charge, it also refers to a trend in science that the act of doing research becomes more open and transparent. Collected or generated research data as well as procedures are published alongside a research paper.

Increasingly, scientific results are generated by numerical manipulation of data that were already collected, and may involve simulation experiments that are entirely carried out computationally. Reproducibility of research findings, the ability to repeat experimental procedures and confirm previously found results, is at the heart of the scientific method. As opposed to the collection of experimental data in labs or nature, computational experiments lend themselves very well for reproduction. Some of the reasons why scientists do not publish data and computational procedures that allow reproduction will be hard to change, e.g. privacy concerns in the data, fear for embarrassment or of losing a competitive advantage. Others reasons however involve technical aspects, and include the lack of standard procedures to publish such information and the lack of benefits after publishing them. We aim to resolve these two technical aspects.