Scalable dynamic-data Citation Methodology

The Challenge:
Supporting accurate citation of data subjected to change, for the efficient processing of data and linking from publications.

What is the solution?
The Dynamic Data Citation Working Group developed a simple, scalable mechanism that allows the precise, machine-actionable identification of arbitrary sub selections of data at a given point in time irrespective of any subsequent addition, deletion or modification.

Produced by: Data Citation (WGDC) WG
https://rd-alliance.org/groups/data-citation-wg.html
What is the impact?

The main impact is on the reproducibility of work: it allows databases to be dynamically updated as needed, while users can still retrieve the data as it was at a specific point in time, providing valuable semantic information on the way the specific dataset was constructed. As data gets migrated to new representations, the queries to extract the specific cited subset can be migrated accordingly, ensuring stability across technological changes enhancing data interoperability, sharing and re-use.