Abstract

There is growing interest within the broad research community to leverage satellite data for cross-disciplinary analysis and to make use of the data in ways unanticipated by the data provider. Poorly documented or publicized product quality information is a significant barrier to the successful or confident integration of satellite data for many users. Researchers seek clearly and consistently characterized product quality to facilitate assessment of product fitness-for-use. We argue that data product discovery mechanisms should be augmented with facilities to present product quality information; targeted to provide a condensed and clear view of product quality and to support comparison with quality of other like products.

We propose a method of provisioning product quality into aspects (e.g. completeness, consistency, accuracy, bias) and displaying computed and inferred facts as evidence related to these aspects. We describe several aspects of quality (e.g. completeness, correctness, consistency, accuracy, bias) and display computed and inferred facts as evidence based on relevant scope, present a report to data user and targeted to provide a condensed and clear view of product quality and to support comparison with quality of other like products.

We finally illustrate the utility of this approach by showing how we have applied it to help characterize one or more aspects of the product quality (e.g. completeness, correctness, consistency, accuracy, bias) and display computed and inferred facts as evidence based on relevant scope, present a report to data user and targeted to provide a condensed and clear view of product quality and to support comparison with quality of other like products.


Finding Structure in the Complexities of Quality Information

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