



Spatial Data Quality

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Dates: June 2-13, 2025

Target audience: Staff of national mapping agencies, researchers, academics, students, private companies

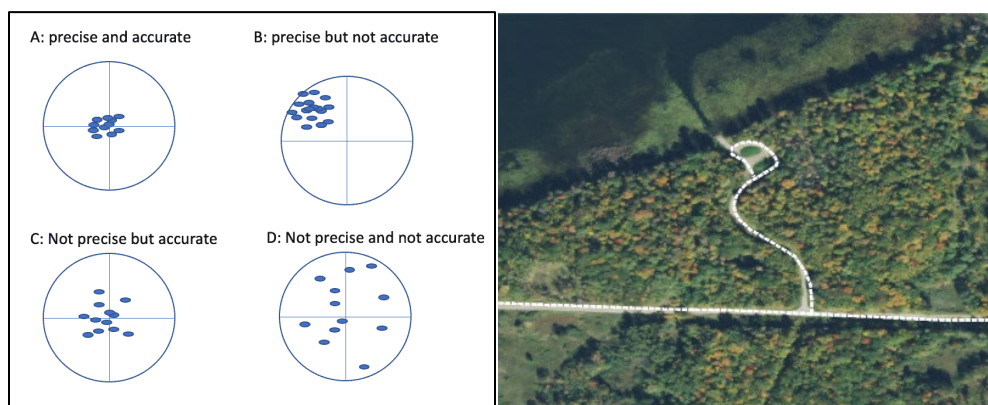
Preconditions: Participants are expected to be familiar with the geospatial information systems (GIS) and geospatial data processing tools. Experiences in geospatial data acquisition and geospatial database management are welcome.

Course objectives: The geospatial landscape has experienced significant transformation, with the volume of geolocated data expanding rapidly. Geospatial data now plays a vital role in sectors such as urban planning, environmental management, and transportation. However, data quality can vary

widely, from highly precise and detailed datasets to more basic maps that may contain inaccuracies or outdated information. The importance of spatial data quality cannot be overstated. Key aspects like accuracy, completeness, and consistency are critical in minimising errors and maximising the value of spatial data across various applications. For national mapping and cadastral agencies, maintaining high standards of spatial data quality is crucial for ensuring the dependability of the information used in decision-making. The concept of "fitness for purpose" further emphasises the need to evaluate how well data meets specific user requirements. Understanding and assessing these quality elements is essential for geospatial professionals.

To gain better insights into spatial data quality, EuroGeographics Quality KEN and EuroSDR will organise a course that is fully dedicated to this topic.

Topics tackled: spatial data quality, spatial data quality management, quality elements, quality evaluation, quality assurance, innovative approaches to data quality evaluation and assurance



Data quality assessment – positional precision and accuracy.

The course is structured into four modules, spread over two weeks. Each module includes a lecture covering relevant theories followed by a practical tutorial, lasting 2-3 hours in total. We will explore different data quality elements and methods, look into visualisation challenges, and explore innovative technologies to help determine spatial data quality.

The course distinguishes four modules*:

- (i) **Spatial data quality management fundamentals**
- (ii) **Spatial data quality management:** specification, requirements and metadata
- (iii) **Quality assurance and evaluation,** including measures, methods, usability, trust
- (iv) **Visualisation of quality in dashboards and crowdsourcing**

**A detailed description will be added by the end of November*



Data quality assessment and visualization (Mertens K., 2022).