

CHAPTER 9

CONCLUSION

This *Soil Moisture Data Quality Guidance* document provides recommendations to network operators on collecting and reporting accurate soil moisture data. It is designed to standardize long-term soil moisture data being collected by diverse networks, using different kinds of soil moisture sensors and operating across varied landscapes. The document was developed based on a review of existing literature and in consultation with network operators, data users, and soil moisture experts. The document introduces a Data Quality Tiering system that quantifies the quality of soil moisture data produced by different networks using measurable parameters. The tiering system standardizes data reported by different networks and can be applied by existing, as well as new networks. It can also be used by different stakeholders to determine the tier of data that works for them.

It should be stressed that this document attempts to describe current best practices in the context of a field that is continuing to evolve and mature. The intention is to provide an initial path forward to harmonize existing and upcoming in situ soil moisture datasets. These are intended to be “living guidelines” and the NCSMMN community will continue review and update the document as necessary over time.