



Quality Assurance in the Basque Country AWS Mesonet

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Basque Country Automatic Weather Stations Mesonet measures more than 130000 observations daily from its 85 Automatic Weather Stations (AWS). It becomes clear that automated software is an indispensable tool for quality assurance (QA) of this mesoscale surface observing network.

The literature on QA methods is very prolific. It is common to find in it a characteristic sequence of validation procedures: range, step, internal, persistence, spatial. The success of the checks depends largely on the thresholds used. Several articles offer generic ones, but it is crucial to adapt them to the specifics conditions of the country.

This work describes the development of QA system for AWS data employed in Basque Meteorology Agency (EUSKALMET). It specifically details automated routines developed for real-time data validation and associated flags. In that sense, reports become a key role for communication of mesonet problems between QA meteorologists and field technicians.