![VMAP Standards Community e.V. logo]

1st VMAP User Meeting 2024

VMAP WORKING GROUP – SENSOR DATA STORAGE

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Figure 1 shows a representation of the measurement procedure with comprehensive aspects of measurement data. The data are formally divided into two categories. The elements depicted in red are standardized data sets. On the one hand, these include the full measurement result, consisting of the measured value and the measurement uncertainty, and on the other hand, measurement

Figure 1 : Comprehensive measurement data in a measurement procedure with datasets (red) and metadata (green).

points, to which the measurement result is assigned. Additional information about the measurement, such as descriptions of the measurement setup, the measurement object, influencing factors, and post-processing methods, is shown in green.

The suggested MEASUREMENT group is divided into four subgroups, each containing different parts of the data for a given measurement procedure. Each procedure is therefore assigned to its own group <n>, with <n> being a reference index. Figure 2 shows how the measurement data concept is integrated into VMAP alongside simulations. Measurements that have been taken for comparison purposes can thus be stored together with the respective simulation model.

A suggestion of how datasets, addressing uncertainties and statistics in measurement results, could be integrated into the VMAP structure is depicted in Figure 3.
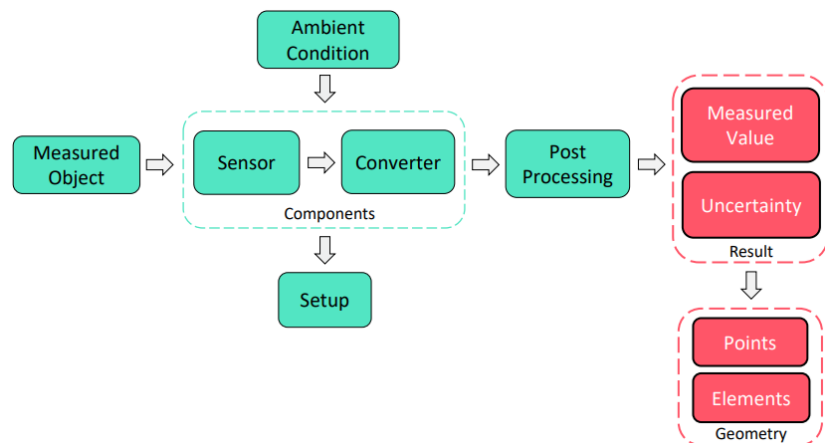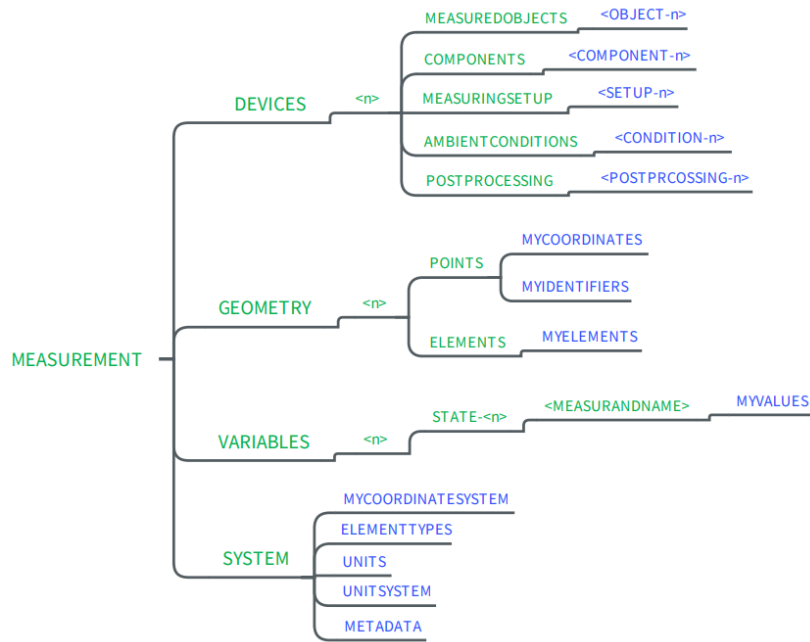
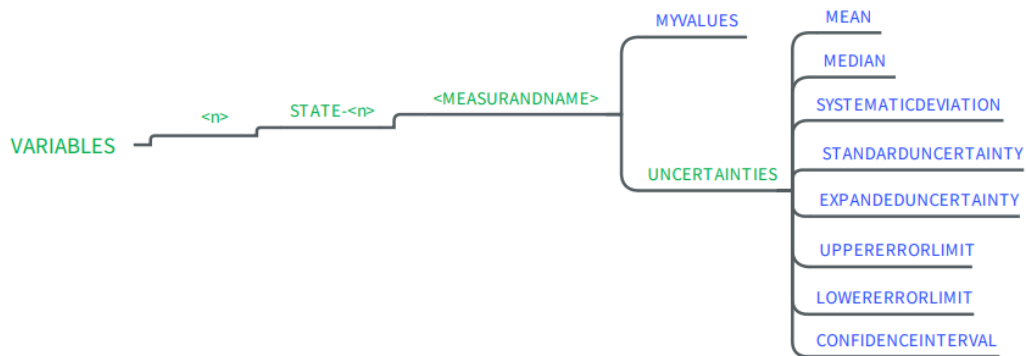*Figure 2: Suggested VMAP structure for measurement data.*

Figure 3: Proposal for including uncertainties of measurement results.