*Background*

*Initial Idea: add the components of data quality (lineage, accuracy, consistency, resolution and completeness) to the observation model*

*Concepts added: lineage (borrowed from [1]), accuracy (borrowed from [2]) and resolution (borrowed from [2])*

*New concepts added*

* *as:SamplingFeature, as:SamplingFeatureCollection, as:Lineage (for their definition, see [1])*
* *ssn:MeasurementProperty, ssn:Accuracy, ssn:Resolution(for their definition, see [2])*

*New relations added*

*as:collection*

* association which links a SF\_SamplingFeatureCollection to member SF\_SamplingFeatures

*as:design*

* association which links a SF\_SamplingFeature to an OM\_Observation that was made utilizing the sampling feature

*as:hasAttribute*

* association between a feature and its attribute (or property)

*as:intention*

* association which links the SF\_SamplingFeature to the feature which the sampling feature was designed to sample

*References*

*[1] OGC Abstract Specification Topic 20 (available at* <https://portal.opengeospatial.org/files/?artifact_id=41579> )

[2] *Semantic Sensor Network Ontology (available at* [*http://www.w3.org/2005/Incubator/ssn/ssnx/ssn*](http://www.w3.org/2005/Incubator/ssn/ssnx/ssn)*)*