

**10<sup>th</sup> DQWG Meeting  
Brest, France, 7-9 July 2015**

**Paper for Consideration by DQWG**

**S-111 Meta data attributes**

<b>Submitted by:</b>	NOAA - USA
<b>Executive Summary:</b>	Creation of new attributes for the meta feature object Quality of Non-Bathymetric data
<b>Related Documents:</b>	S-111
<b>Related Projects:</b>	S-100; S-101;

### **Introduction / Background**

Surface current team, a sub group of the Tidal, Water Level and Current working group (TWCWG) has been tasked with modeling the data quality Meta data for the Surface Current Product Specification (S-111). It has been suggested by DQWG that the Meta feature Quality of Non-Bathymetric data can be used for this product specification. For this object to be used in this product specification two new attributes need to be added to the S-100 feature registry. These attributes are Time uncertainty and Speed uncertainty.

### **Analysis/Discussion**

The feature SURFACE CURRENT in the Product Specification that will be supported by the Meta feature Quality of Non-Bathymetric data is gridded and will have a time and speed attribute (amongst others). The present data quality model does not support uncertainty for time or speed. Therefore the additions of the following attributes are needed: time uncertainty to support the attribute currentTime and speed uncertainty to support currentSpeed.

### **Conclusions**

Two new attributes timeUncertainty and speedUncertainty are required to be added to the S-100 feature registry to support the Surface Current Product Specification (S-111).

### **Recommendations**

Add new attributes to the S-100 registry with definitions.

### **Action Required of DQWG**

DQWG is invited to:

- discuss this proposal and update definitions, units, resolutions and examples of attributes if needed.
- consider the proposal and provide comments to TWCWG
- submit a proposal to the S-100 WG to update the S-100 feature registry

## ANNEX A:

New Float List Type Attributes supporting the recommendations

### Speed uncertainty

**Speed uncertainty:** IHO Definition: The best estimate of the speed uncertainty

Unit: Knots

Resolution: 0.1 kn

Format: xx.x

Example: 1.2 for an error of 1.2 kn

Remarks:

- The interval, in kn, containing 95% of errors.

### Time uncertainty

**Time uncertainty:** IHO Definition: The best estimate of the time uncertainty

Unit: hours, minutes, seconds

Resolution: 00:00:01

Format: hh:mm:ss

Example: 00:00:10 for an error of 10 seconds

Remarks:

The interval containing 95% of errors.