

NIWC quick look of CHS beta dataset

S-102PT6-05.2	09Oct	Discussion about CHS beta S-102 V2.1 dataset
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The S-102 Feature catalogue defines the “application schema” in an S-100 product construct. Attribute code “depth” is not contained in CSAR sample datasets (on the IHO website). It contains “elevation” instead of “depth”. This does not match the Feature Catalogue schema for S-102.

This encoding schema does not support machine readability at the Feature Catalogue level (which defines a product application schema in an S-100 sense). This is a recurring problem for all product encodings except ISO8211 (S-101). Additional examples and clarification are needed at the S-100 level for HDF5 products (and GML products).

The screenshot shows an XML editor window titled "S-102FC_2.0.0_20191025.xml". The XML content is as follows:

```
11 <S100CI:CI_Organisation>
12 <S100CI:name>International Hydrographic Organization</S100CI:name>
13 <S100CI:contactInfo>
14 <S100CI:phone>
15 <S100CI:number>(377) 93.10.81.00</S100CI:number>
16 <S100CI:numberType>voice</S100CI:numberType>
17 </S100CI:phone>
18 <S100CI:phone>
19 <S100CI:number>(377) 93.10.81.40</S100CI:number>
20 <S100CI:numberType>fax</S100CI:numberType>
21 </S100CI:phone>
22 <S100CI:address>
23 <S100CI:administrativeArea>4b quai Antoine 1</S100CI:administrativeArea>
24 <S100CI:country>Principaute de Monaco</S100CI:country>
25 <S100CI:electronicMailAddress>info@iho.int</S100CI:electronicMailAddress>
26 </S100CI:address>
27 <S100CI:onlineResource>
28 <S100CI:linkage>www.iho.int</S100CI:linkage>
29 </S100CI:onlineResource>
30 </S100CI:contactInfo>
31 </S100CI:CI_Organisation>
32 </S100CI:party>
33 </S100FC:producer>
34 <S100FC:classification>unclassified</S100FC:classification>
35 <S100FC:S100_FC_SimpleAttributes>
36 <S100FC:S100_FC_SimpleAttribute>
37 <S100FC:name>Depth</S100FC:name>
38 <S100FC:definition>the vertical distance from a given water level to the BOTTOM.</S100FC:definition>
39 <S100FC:code>depth</S100FC:code>
40 <S100FC:alias>DEPTH</S100FC:alias>
41 <S100FC:valueType>real</S100FC:valueType>
42 </S100FC:S100_FC_SimpleAttribute>
43 <S100FC:S100_FC_SimpleAttribute>
44 <S100FC:name>uncertainty</S100FC:name>
45 <S100FC:definition>The interval (about a given value) that will contain the true value of the measurement at a specific confiden
46 <S100FC:code>uncertainty</S100FC:code>
47 <S100FC:remarks>Represents a +/- value defining the possible range of associated depth expressed a positive number</S100FC:rema
48 <S100FC:valueType>real</S100FC:valueType>
49 </S100FC:S100_FC_SimpleAttribute>
50 </S100FC:S100_FC_SimpleAttributes>
51 <S100FC:S100_FC_FeatureTypes>
```

A "Find" dialog box is open over the XML content. The search term "depth" is entered in the "Find what:" field. The "Find Next" button is highlighted. Other options in the dialog include "Replace", "Find in Files", "Mark", "Backward direction", "Match whole word only", "Match case", "Wrap around", "Search Mode" (Normal, Extended, Regular expression), and "Transparency" (On losing focus, Always).

Sample dataset from NOAA on left compared to CSAR dataset on right: "elevation" should be "depth", in accordance with Feature Catalogue definition above.

HDFView 2.14

File Window Tools Help

Recent Files C:\ISPOR\KIPNT\DATA\IS-10220200617_FromBarry\NBS_US5NYCBH_20200429.bag.noaa_axes_lon_lat.h5

values at /BathymetryCoverage/BathymetryCoverage.001/Group_001 [NBS_US5NYCBH_2020...

Table

	0	1	2	3
0	1000000.0	1000000.0	1000000.0	1000000.0
1	1000000.0	1000000.0	1000000.0	1000000.0
2	1000000.0	1000000.0	1000000.0	1000000.0
3	1000000.0	1000000.0	1000000.0	1000000.0
4	1000000.0	1000000.0	1000000.0	1000000.0
5	1000000.0	1000000.0	1000000.0	1000000.0
6	1000000.0	1000000.0	1000000.0	1000000.0
7	1000000.0	1000000.0	1000000.0	1000000.0
8	1000000.0	1000000.0	1000000.0	1000000.0
9	1000000.0	1000000.0	1000000.0	1000000.0
10	1000000.0	1000000.0	1000000.0	1000000.0
11	1000000.0	1000000.0	1000000.0	1000000.0
12	1000000.0	1000000.0	1000000.0	1000000.0
13	1000000.0	1000000.0	1000000.0	1000000.0
14	1000000.0	1000000.0	1000000.0	1000000.0
15	1000000.0	1000000.0	1000000.0	1000000.0
16	1000000.0	1000000.0	1000000.0	1000000.0
17	1000000.0	1000000.0	1000000.0	1000000.0
18	1000000.0	1000000.0	1000000.0	1000000.0
19	1000000.0	1000000.0	1000000.0	1000000.0
20	1000000.0	1000000.0	1000000.0	1000000.0
21	1000000.0	1000000.0	1000000.0	1000000.0
22	1000000.0	1000000.0	1000000.0	1000000.0
23	1000000.0	1000000.0	1000000.0	1000000.0
24	1000000.0	1000000.0	1000000.0	1000000.0
25	1000000.0	1000000.0	1000000.0	1000000.0
26	1000000.0	1000000.0	1000000.0	1000000.0
27	1000000.0	1000000.0	1000000.0	1000000.0
28	1000000.0	1000000.0	1000000.0	1000000.0
29	1000000.0	1000000.0	1000000.0	1000000.0
30	1000000.0	1000000.0	1000000.0	1000000.0
31	1000000.0	1000000.0	1000000.0	1000000.0
32	1000000.0	1000000.0	1000000.0	1000000.0
33	1000000.0	1000000.0	1000000.0	1000000.0
34	1000000.0	1000000.0	1000000.0	1000000.0
35	1000000.0	1000000.0	1000000.0	1000000.0

values (20488, 2)
Compound/Vdata, 2102 x 1615
Number of attributes = 0

File Window Tools Help

Recent Files C:\Temp\102_v2_1\102CA0064700N07080W.csar.h5

102CA0064700N07080W.csar.h5

BathymetryCoverage at /Group_F [102CA0064700N07080W.csar.h5 in C:\Temp\102_v2_1]

Table

	0	1	2	3
0	-12.759565	1000000.0	-12.740952	1000000.0
1	-12.621702	1000000.0	-12.701477	1000000.0
2	-12.74915	1000000.0	-12.732972	1000000.0
3	-12.785939	1000000.0	-12.774528	1000000.0
4	-12.66122	1000000.0	-12.727227	1000000.0
5	1000000.0	1000000.0	1000000.0	1000000.0
6	1000000.0	1000000.0	1000000.0	1000000.0
7	-12.593305	1000000.0	1000000.0	-12.610334
8	1000000.0	1000000.0	-12.681419	1000000.0
9	1000000.0	1000000.0	1000000.0	1000000.0
10	1000000.0	1000000.0	1000000.0	1000000.0
11	1000000.0	1000000.0	1000000.0	1000000.0
12	-12.578602	1000000.0	1000000.0	1000000.0
13	1000000.0	1000000.0	1000000.0	1000000.0
14	1000000.0	1000000.0	1000000.0	1000000.0
15	-12.629782	1000000.0	1000000.0	1000000.0
16	1000000.0	1000000.0	1000000.0	1000000.0
17	1000000.0	1000000.0	-12.569873	1000000.0
18	-12.689951	1000000.0	1000000.0	1000000.0
19	1000000.0	1000000.0	1000000.0	1000000.0
20	1000000.0	1000000.0	1000000.0	1000000.0
21	-12.505078	1000000.0	1000000.0	1000000.0
22	1000000.0	1000000.0	1000000.0	1000000.0
23	-12.614208	1000000.0	1000000.0	1000000.0
24	-12.836277	1000000.0	1000000.0	1000000.0
25	1000000.0	1000000.0	1000000.0	1000000.0
26	-12.896373	1000000.0	1000000.0	1000000.0
27	1000000.0	1000000.0	1000000.0	1000000.0
28	1000000.0	1000000.0	-12.93646	1000000.0
29	1000000.0	1000000.0	-12.806545	1000000.0
30	-12.996599	1000000.0	1000000.0	1000000.0
31	1000000.0	1000000.0	1000000.0	1000000.0
32	-12.886675	1000000.0	1000000.0	1000000.0
33	1000000.0	1000000.0	1000000.0	1000000.0
34	1000000.0	1000000.0	1000000.0	-12.945797
35	1000000.0	1000000.0	-12.796856	1000000.0

values (16696, 2)
Compound/Vdata, 1001 x 1002
Number of attributes = 0