Inhambane Bay

Drifting buoy metadata

Version 1.0

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# Background

WIGOS metadata serve the following purpose :

« Observational metadata are essential as they enable users of observations to assess their suitability for the intended application, and managers of observing systems to monitor and control their systems and networks. Members benefit from sharing observational metadata which describe quality of observations and provide information about stations and networks used to collect those observations. » (WIGOS Manual, WMO Pub. 1160).

These metadata do not cover discovery metadata, defined in the Manual on the WMO Information System (WMO-No. 1060). Requirements for these discovery metadata are not considered further here. It is reminded that « for all WIGOS observations they make available internationally, Members shall record and retain the observational metadata specified as mandatory in the WIGOS Metadata Standard defined in Appendix 2.4. ».

Note the important requirement that metadata should be kept for as long as the corresponding data are retained. This means that the scheme adopted for the WIGOS metadata standard for data reported by drifting buoys must adhere to this principle. This important founding principle is adopted by resorting to a WIGOS identifier which is unique and cannot be re-used.

Drifting buoy metadata should be as complete as possible so they can serve data exploitation in large repositories such as the Marine Climate Data System (MCDS) Global Data Assembly Centres (GDAC).

# Mapping

The following table lists the following attributes :

* **First column: Proposed drifter metadata** content, from one or several of the following existing information:
* existing values in the code WIGOS table (shown in bold and green),
* BUFR sequence definition (B),
* JCOMMOPS database (J),
* AOML GDP metadata (A),
* E-SURFMAR buoy metadata database (E).

The origins of related entries are indicated in parentheses.  
Note that sometimes several sources have to be reconciled.

* **Second column: WMO Pub. 1160 Appendix 2.4 (WIGOS metadata standard)**,  
  where elements can be mandatory (M), conditional (C), or optional (O).  
  “Not available”, “unknown” or “not applicable” are valid values of the WIGOS Metadata Standard.

,,,,, ,,

Report type:,Route,,,,,,

,,,,,,,

Device:,BOYA\_01,,,,,,

Group:,,,,,,,

Period:,'2017-07-21 09:43:00 - '2017-07-21 14:30:00,,,,,,

,,,,,,,

Valid,Time,Latitude,Longitude,Altitude,Speed(Km/h),Address,Attributes

1,2017-07-21 09:43:28,-23.792458,35.386703,0 m,0.6 ,Unnamed Road. Inhambane. MZ,battery=87 hdop=355.7 ip=197.218.83.149 distance=1.76 totalDistance=1.0659886039E8

1,2017-07-21 09:44:03,-23.792482,35.386692,0 m,0.6 ,Unnamed Road. Inhambane. MZ,battery=87 hdop=355.7 ip=197.218.83.149 distance=2.9 totalDistance=1.0659886329E8

|  |  |  |  |
| --- | --- | --- | --- |
| *WMO Pub. 1160 Appendix 2.4 : WIGOS Metadata Standard, separated by category* | | | |
| *Id* | *Name* | *Definition* | *MCO* |
| Observed variable | | | |
| Valid |  |  |  |
| Time |  | Exemple: 2017-07-21 09:43:28 | M\* |
| Latitude |  | -23.792458 | C\* |
| ,Longitude, |  | 35.386703 | M\* |
| Altitude, |  | 0 m | M\* |
| Speed(Km/h), |  | 0.6 | O |
| Address |  | Unnamed Road. Inhambane. | M\* |
| Attributes |  | MZ,battery=87 hdop=355.7 ip=197.218.83.149 distance=1.76 totalDistance=1.0659886039E8 | M |
| Data processing and reporting | | | |