

Q&A submitted under the phase of publication of results from the preliminary site investigations

Question 1.

In the installation reports from Fugro, the history of the floating Lidars is very clear, as well as the dates of servicing, repairs, and replacement of units.

Example of a report:

North Sea - Offshore wind farm\2100 Metocean\2103 LiDAR Buoy Monthly Measurement Reports\2103_2_13 Lot 2 Month 13\C75486-R-013(02)-Monthly Report Lot 2-NovDec22.pdf

Table 1-2 shows a log of the deployments at Lot 2.

Table 1-2 Deployments at Lot 2

Deployment	Station	Buoy S. no.	LiDAR #	Start time (UTC)	End time (UTC)	Status
D01-SWLB	Lot 2	WS181	ZX759	2021-11-15 15:30	2022-10-26 07:20	Recovered for service
D02-SWLB	Lot 2 B	WS170	ZX585	2022-07-13 05:20	2022-11-30 10:00	Recovered for service
D03-SWLB	Lot 2	WS181	ZX759	2022-11-30 10:50		ongoing

However, sometimes the same file is shared by two different units according to the table (because it has timestamps that belong to WS181 for example, and also timestamps that correspond to WS170).

Example:

North Sea - Offshore wind farm\2100 Metocean\2101 LiDAR Buoy Measurements (data)\2101_2_8 Lot 2 Month 8\Energinet_Lot2_SWLB_20221028 July 2022 CurrentData.csv

```
LOCATION: Energinet Lot2_SWLB
SYSTEM SERIAL: WS170
TIMESTAMP (ISO-8601) UTC;AqDir00
2022-06-15T15:30:00Z; 287.645510; ;
2022-06-15T15:40:00Z; 295.069340; ;
2022-06-15T15:50:00Z; 305.321290; ;
2022-06-15T16:00:00Z; 302.846680; ;
2022-06-15T16:10:00Z; 306.912110; ;
2022-06-15T16:20:00Z; 311.331050; ;
2022-06-15T16:30:00Z; 316.751000; ;
```

Although the SYSTEM SERIAL is WS170, timestamps start on 2022-06-15 (before WS170 was deployed, as the table in the installation report states that the deployment was on 2022-07-13).

Shall I assume that the timestamps before 2022-07-13 belong to WS181? Or should I directly ignore it?

I've encountered many cases like this one, that is why I thought it was a good idea to ask you before making any assumptions.

Answer 1.

Data files for the MetOcean measurement campaign are generated by month of measurement from first deployment, e.g. first month of measurement is referred to as 'Month 1', irrespective of the calendar months. Service carried out during the measurement campaign is described in the monthly report for the month where the service is carried out and any change of instrumentation is listed (e.g. replacement of faulty instrument, swap of LiDAR buoys etc.). Since data files are generated by month, they can contain data collected using one or more measuring systems.

Example:

The data file 'Energinet_Lot2_SWLB_20221028 July 2022 CurrentData.csv', which contains current measurements for Lot 2, Month 8, has been generated on the basis of measurements by:

LiDAR buoy WS181 from 2022-06-15 15:30:00 to 2022-07-13 9:50:00

LiDAR buoy WS170 from 2022-07-13 10:00:00 to 2022-07-15 9:30:00

Unfortunately, the tag 'SYSTEM SERIAL' in file header does not reflect the above and it only refers to LiDAR buoy WS170, but the data file is valid and no part should be ignored. The correct tag is 'WS181 (2022-06-15 15:30:00 – 2022-07-13 9:50:00), WS170 (2022-07-13 10:00:00 – 2022-07-15 9:30:00)'. The 'SYSTEM SERIAL' tag will be checked for all data files and amended (if necessary).