# DATADAPTIVE

# **Product Summary**

The MNR Snapshot is a product that contains records extracted from the Marine Noise Registry database on 26/06/2019.

The <u>Marine Noise Registry</u> (MNR) is a service developed by Defra and the Joint Nature Conservation Committee (JNCC) to record human activities in UK seas that produce loud, low to medium frequency (10Hz - 10kHz) impulsive noise. Development of the MNR was a commitment made in the <u>UK Marine Strategy</u>. More information is available on the JNCC website.

The source data files were released by JNCC in response to a Freedom of Information request, with permission for use under the <a href="Open Government Licence">Open Government Licence</a>. Please see the Docs folder for related correspondence.

Datadaptive has restructured and collated the data to support easier desktop analysis of the MNR records. The collated data is presented in both Excel and Shapefile formats.

# **Background reading**

The MNR Snapshot is a complex dataset and effective use of the data is likely to require some underpinning knowledge. The following references are a starting point:

Merchant, N. D. et al. <u>Underwater noise levels in UK waters</u>. Sci. Rep. 6, 36942; doi: 10.1038/srep36942 (2016)

Understanding underwater noise, a blog post by Amy Wardlaw of MMO (18/08/2016)

**Underwater noise** (OSPAR)

#### **Related datasets**

JNCC also publishes annual GIS outputs based on data extracted from the MNR:

Outputs for 2015
Outputs for 2016
Outputs for 2017

Datadaptive has visualised these annual outputs on an interactive map.

The Oil and Gas Authority and Marine Management Organisation publish spatial data related to many of the human activities covered by the MNR.

#### **Data quality statement**

Datadaptive has taken reasonable care in recompiling and preparing the data. However the accuracy and currency of the data is mainly dependent on the source data.

Datadaptive understands that the JNCC release includes all records in the MNR at the date of extract with the exception of:

- data in the 'appuser' and 'orguser' tables,
- data in the contact fields in the 'organisation' table, and
- data in the 'organisation\_name' field of the 'organisation' table where it refers to an
  individual rather than an organisation due to the activities recorded being linked to
  solo-operator companies or personal projects.

This data was either outside the scope of the information request or redacted from the release because it is personal data.

Please read the JNCC document on MNR activity data caveats and limitations, contained in the Docs folder. Most of the MNR data is presented on a coarse spatial scale and cannot be used by itself to measure the impact of underwater noise on marine species. Activity data for some noise events is not recorded in the MNR. In particular please note that the MNR Snapshot includes records for draft and proposed activities which are subject to change until the activity application is closed.

**Data formats** 

The MNR Snapshot data is supplied as tables in an Excel workbook and as

vector data in ESRI Shapefile format.

Licensing

The data may be re-used under the terms of the Open Government Licence 3.0.

**Attribution** 

If you re-use this data in a product or application you must use the following

attribution statement:

Data collated by Datadaptive. Contains JNCC and Oil and Gas Authority data © Crown

copyright and database right 2019.

The Oil and Gas Authority is included in the attribution statement because the JNCC release includes block codes and other information derived from the UK

oil and gas licensing grid maintained by OGA.

**Pricing** 

Free

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**File Specifications** 

The JNCC source data files are provided in the Docs folder, along with a copy of the MNR database schema that shows the table relationships.

v1.1 20190724 3

#### **Tabular data**

The XLSX folder contains an Excel workbook MNR\_SNAPSHOT\_20190626\_COLLATED with four data tables as described below. These tables have been collated by Datadaptive from the source data files.

The workbook also contains a data dictionary with descriptions of each column in the data tables. This data dictionary is adapted from JNCC documentation.

#### MNR\_ACT

This table contains 1,614 activity records that describe draft, proposed and closed plans for marine noise activities including the data range and producer.

Use the ACTID column to match these records to location records in the MNR\_LOC table. An activity record may be linked to more than one location record, and some activity records are not linked to any location records.

#### MNR\_LOC

This table contains 9,925 location records from activity applications, and includes geometry objects in well-known text (WKT) format. Each location record includes one of three types of geometry: a point, a polygon, or a block code.

Use the ACTID column to match these records to activity records in the MNR\_ACT table. An activity record may be linked to more than one location record.

Use the LOCID column to match these records to date records in the MNR\_DATE table. A location record may be linked to more than one date record.

#### MNR\_DATE

This table contains 30,010 date records from close-out reports.

Use the LOCID column to match these records to date records in the MNR\_DATE table. A location record may be linked to more than one date record.

#### **OG\_BLOCKS**

This table contains 4,407 records for UK oil and gas licensing grid blocks.

Use the BLOCKCD column to match these records to location records in the MNR LOC table, where ENTTYPE is "Block code" in the MNR LOC table.

#### **GIS** data

The SHP folder contains four spatial data layers in Shapefile format as dsecribed below. These layers have been created by Datadaptive from information in the collated tabular files. Please note that (with the exception of the OG\_BLOCKS layer) some geometry objects may overlap with other geometry objects in the same layer.

The SHP folder also contains data dictionaries in Excel format with descriptions of each field in the attribute tables. These data dictionaries are adapted from JNCC documentation.

# MNR\_ACTLOC\_20190626\_BLOCKS

This layer contains 6,030 geometry objects created from data in the WKT column of the MNR\_LOC table, attributed with data from both the MNR\_LOC and MNR\_ACT tables, where ENTTYPE in the MNR\_LOC table is "Block code".

### MNR\_ACTLOC\_20190626\_POINTS

This layer contains 3,678 geometry objects created from data in the WKT column of the MNR\_LOC table, attributed with data from both the MNR\_LOC and MNR\_ACT tables, where ENTTYPE in the MNR\_LOC table is "Point".

#### MNR\_ACTLOC\_20190626\_POLYGONS

This layer contains 217 geometry objects created from data in the WKT column of the MNR\_LOC table, attributed with data from both the MNR\_LOC and MNR\_ACT tables, where ENTTYPE in the MNR\_LOC table is "Polygon".

## OG\_BLOCKS

This layer contains 4,407 geometry objects created from data in the WKT column of the OG\_BLOCKS table, attributed with other data from the OG\_BLOCKS table.