



NMDC

NORWEGIAN MARINE DATA CENTRE (NMDC)

D6.3 APPLICATION DOCUMENTATION

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Version 3.0
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Dissemination Level: Public

Versions

Version	Date	Comment	Responsible
Version 0.1	2014-06-25	Outline and documentation of web-based metadata exploration tool v1	Armin Pobitzer
Version 0.2	2014-06-27	Update after input from FFI (Nina Nordlund) and IMR (Helge Sagen)	Armin Pobitzer
Version 1.0	2014-06-30	Final version for delivery	Armin Pobitzer
Version 1.1	2014-10-27	Updated version after comments from internal review	Armin Pobitzer
Version 2.0	2015-06-30	Updated version for delivery	Armin Pobitzer
Version 3.0	2016-06-30	Updated version for delivery	Armin Pobitzer

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1. INTRODUCTION

1.1 Background

This document is meant to gather information on how to use the single applications to be developed in *WP6 Applications*. The document only comprises applications available to the general public at the time of publication of this document. The document will be updated every 12 month.

1.2 Purpose

The purpose of this document is to provide the following information on single applications:

- how to access the application
- documentation of the user interface
- where to find source code and documentation (if released)

The material in this document refers to the applications as of 30.06.2016.

1.3 Audience

The intended audience of this document are end users of the respective applications.

1.4 Applicable documents

[1] NMDC, Workpackage Description WP6, Version 5

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2 WEB-BASED METADATA EXPLORATION TOOL (CMR)

The web-based metadata exploration tool is a combination of a server/web-client solution that allows the user to visually explore the data sets available in NMDC, making use of discovery metadata.

2.1 Access

The current version of the web-based metadata exploration tool is openly accessible through the URL <http://nmdc.nodc.no>. The service is in an experimental stage, and some downtime has to be expected.

2.2 User interface description

Figure 1 shows the user interface of the current version of the prototype. Its main components are a map (1), a side panel (2), the layer control (3), the selection popup (4), the overview map (5), the amount of area inside-slider (6) and the navigation controls (7). The functionality of each of the components is described in the respective paragraphs of this section. A step-by-step description of the use of the web-based metadata exploration tool can be found in D6.5 *WP6 – Tutorial material* [2].

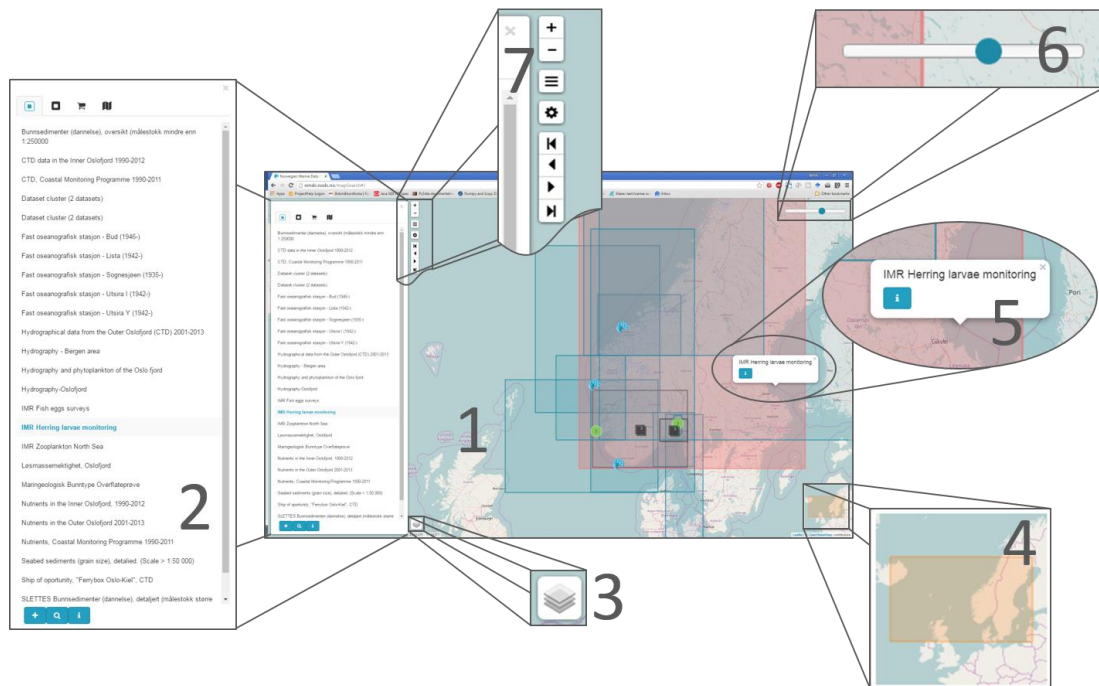


Figure 1: User interface of the web-based metadata exploration tool (as of 30.06.2015). The interface consists of the following main components: the map (1), the side panel (2), the layer control (3), the selection popup (4), the overview map (5), the amount of area inside-slider (7) and the navigation controls (7). The map (1), the layer control (3), the area inside-slider (6), and the navigation controls (7) are always visible. The visibility of the side panel (2) and the selection popup (5) are user controlled. The overview map (4) is visible depending on the zoom level and size of the browser window.

2.2.1 MAP

The map is the main search interface. The shown map segment is used to query for data sets within these extension, modulated by the **amount of area inside** slider.

If the slider is all the way to the right, only data sets properly contained in the visible map segment are shown. Moving the slider to the left relaxes this requirement to a certain amount of the data being inside the shown map segment. If the slider is all the way to the left, all data sets intersecting, but not fully containing the map segment are shown.

Clicking on the map selects the data set with the smallest area containing the click location. Selection triggers a popup (**selection popup**). The visible map segment is adjusted by zooming and panning. A new map segment can trigger an update the side panel, depending on its current content.

2.2.2 SIDE PANEL

The side panel can contain either a list (**content inside, related content, selected items, WMS items**), **details**, or **settings**.

The lists contain data sets described in the NMDC metadata data base connected to the map segment currently shown in the map view. There are two types of connec-

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tions, **content** and **related**. The list shows the data sets fulfilling one of the relations, depending on the user's selection (first two tabs in the upper left of the side panel).

The list shows the titles of all data sets contained in the map segment currently displayed in the map view and fulfilling the selected relation. The **selected item** list collects data sets selected with the **add** button (plus symbol) for bookmarking. Elements in the **selected item** list can be cleared with the **delete selected icon** button (x symbol). The **selected item** list can be shared via email using the **MailTo** button (share icon).

Clicking on an item in the list selects the corresponding data set, triggers a popup in the map, and highlights the dataset's geographical extension. The user can zoom in on the dataset by clicking on the **zoom** button (magnifying glass).

Details about the selected dataset are displayed by clicking on **details** (i symbol). Also single data sets can be shared via email using the **MailTo** button (share icon).

If a dataset is associated to a WMS service, an **add as wms-layer(s)** button (hollow map symbol) appears. The user can add the layers provided by this service to the map by clicking the button. Each added WMS service will appear in the **WMS items** list. Only layers from a single WMS service can be shown in the map at a time. The layers of which service to show is selected by clicking in the **WMS items** list. After adding a new service, this service will be selected automatically. Individual layers of a WMS service are controlled from the **layer control**.

2.2.3 LAYER CONTROL

The **layer control** manages two aspects of the **map**, the background or base map to be shown and the overlay layers. The user can choose one base map and toggle the display of all overlay layers.

The overlay layers consist of a data set overlay, containing the visible NMDC data sets, and WMS layers from one WMS service, if added.

2.2.4 SELECTION POPUP

The selection popup shows the title of the selected and highlighted dataset. Datasets can be selected in the **side panel** by clicking in the list, or by clicking on the **map**.

Clicking the **details button** in the popup will open the **side panel**, if not already visible, and display the data set's metadata.

2.2.5 OVERVIEW MAP

The overview map shows the position of the currently visible map segment on a more zoomed out miniature map. If the zoom level of the main map is low, this ele-

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ment is not visible. The same is the case if the browser window is too small, e.g. on smartphones.

2.2.6 AMOUNT OF AREA INSIDE SLIDER

The amount of area inside slider controls how much the search criterion “data set inside the shown segment” is relaxed. Setting the slider all the way to the right means no relaxation of the criterion, i.e. only datasets completely inside the map segment are shown. The ratio of the area inside the segment is 1 (hence the slider value). Smaller ratio indicate that a part of the dataset can be outside the shown map segment.

2.2.7 NAVIGATION CONTROLS

The navigation controls consist (top to bottom) of zooming controls (+/- symbols), a button to open the side panel, the setting button (gear wheel symbol) and arrow buttons with undo, redo selection functionality. The arrow buttons can be used to navigate back and forth between different map segments. The double arrow button can be used to the oldest and newest available map segment.

2.3 Source code availability and documentation

No source code released for this prototype version.