



# **INT Chart & ENC Schemes Web Catalogue**

**User Manual**

version 3.0.0

August 2019

## Preface

International hydrographic Organization (IHO) has built a database of S-11 Part B and developed a web service in order to efficiently provide the current status of charts that coastal states produce and distribute for users.

This service helps not only mariners but chart users to search charts in various ways and to display them on several base maps. In this way, mariners and users will be quickly and easily able to search charts and get relevant information. In addition, this database has been updated with the cooperation of coastal states.

This user's manual provides basic structure of the system and description of various functions. Please do not hesitate to contact us if you have further questions regarding the web catalogue service and if you think we could make any improvements.

Contact point

IHO Secretariat ([info@iho.int](mailto:info@iho.int))

This user's manual consists of nine items as below.

1. Screen composition
2. Map Control
3. Base Map
4. Additional Layers
5. Speed Search
6. Advanced Search
7. Download Search for INT Paper/ENC
8. Recommended specifications for using web services

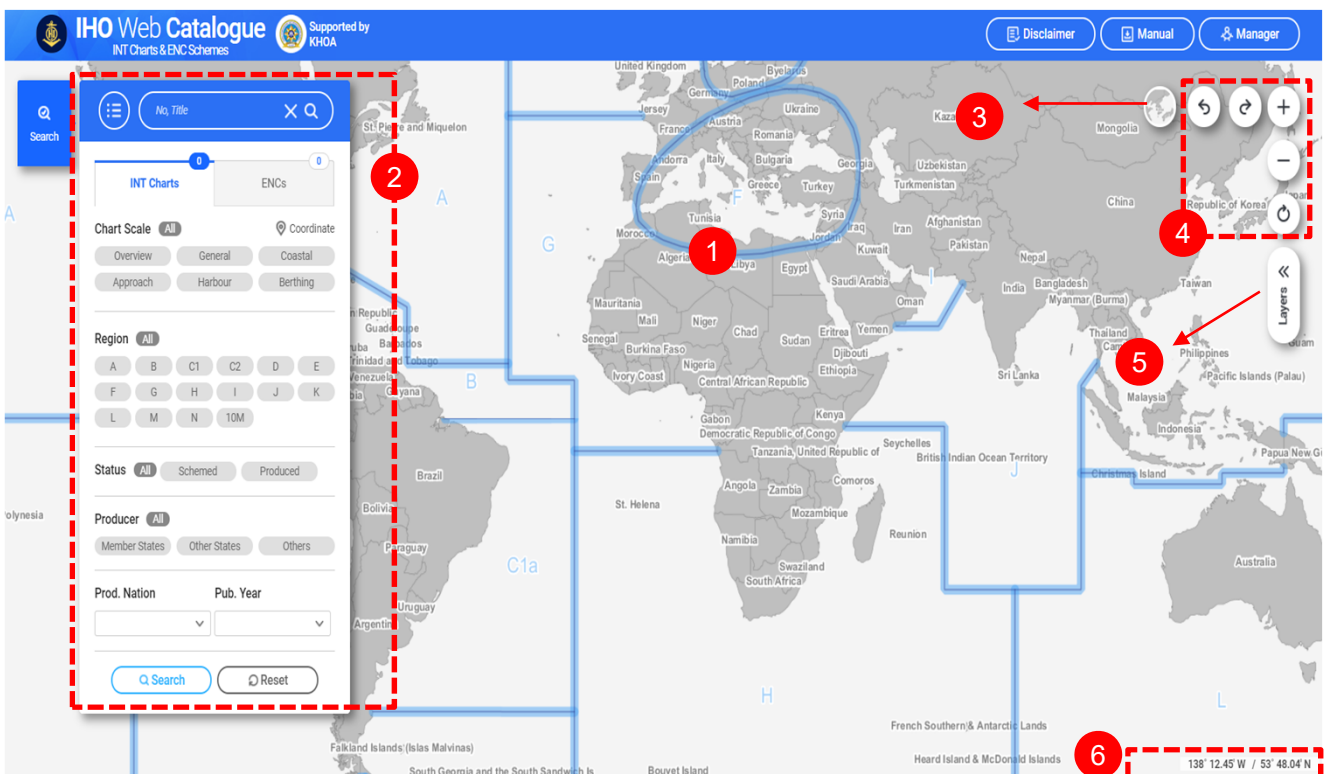
### Acknowledgements

On behalf of the IHO Member States, the International Hydrographic Bureau would like to thank the Korea Hydrographic and Oceanographic Administration of the Republic of Korea for giving active support in transforming S-11 Part B Catalogue of INT Charts from an analogue into a database format, and in developing its web services and management system.

## 1. Screen composition

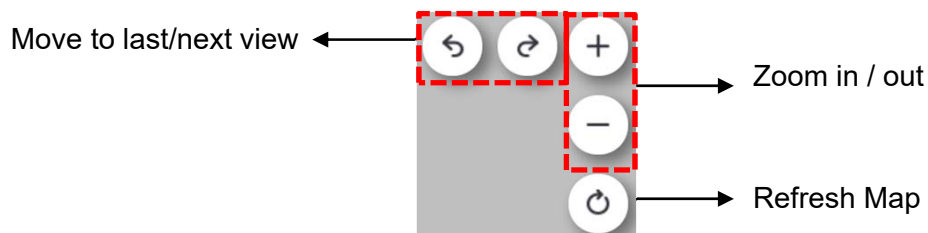
International hydrographic Organization (IHO) has built a database of S-11 Part B and developed

- ① Map Viewer : Display base map and chart information
- ② Chart Search : Display the conditions to search chart catalogue
- ③ Base Map : choose various back ground maps
- ④ Map Control : Zoom in/out and last/next view
- ⑤ Additional Layer
- ⑥ Coordinate information



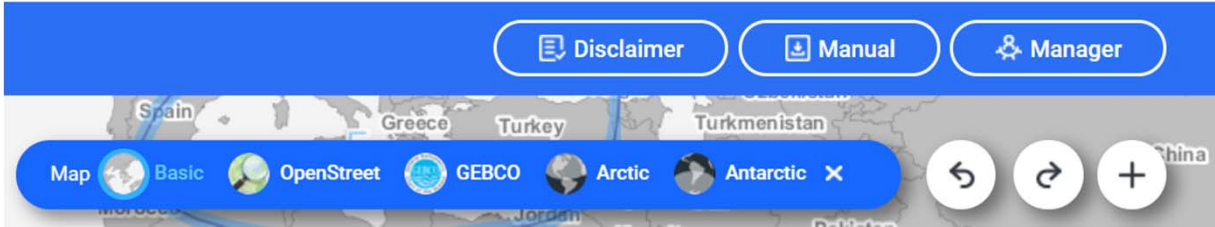
## 2. Map Control

Map control is composed of Last and Next view, Refresh, Move of map, Information view.

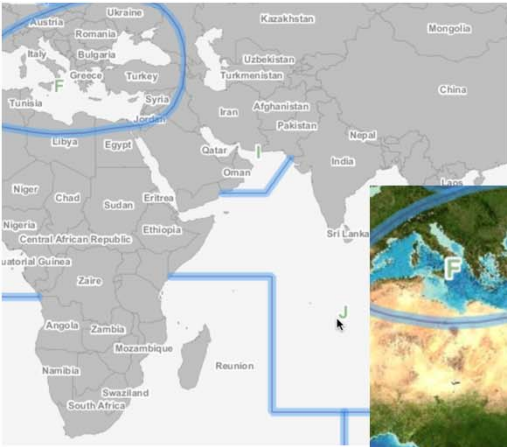


### 3. Base Map

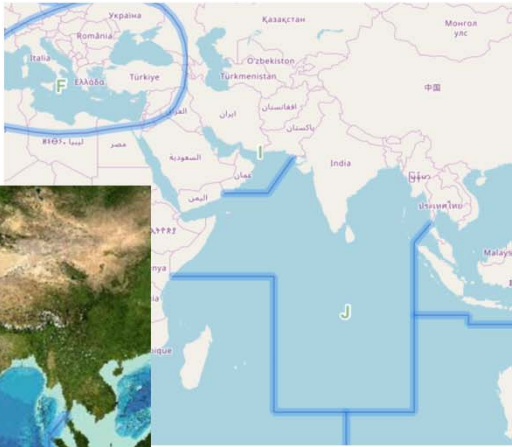
Some types of maps such as Basic Map(Base map), OpenStreet Map, GEBCO Map, Arctic/Antarctic Map are provided.



Basic Map



OpenStreet Map



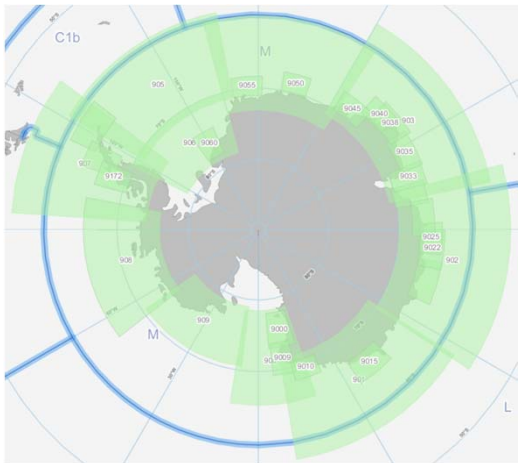
GEBCO Map



Arctic Map



Antarctic Map



### 4. Additional Layers

Some types of maps such as WORLD Map(Base map), STREETS Map(Google map), SATELITE Map(Google SATELITE map), BATHYMETRY Map(esri map) are provided.



**Changeable layer (Color, Opacity...)**

Intarea Default  
 Intarea  50% T

INT Charts	Default	ENCs - Scheme	Default	ENCs - Catalogue	Default
<input type="checkbox"/> Overview	<input checked="" type="checkbox"/> 50% T	<input type="checkbox"/> Overview	<input checked="" type="checkbox"/> 50% T	<input type="checkbox"/> Overview	<input checked="" type="checkbox"/> 50% T
<input checked="" type="checkbox"/> General	<input checked="" type="checkbox"/> 50% T	<input type="checkbox"/> General	<input checked="" type="checkbox"/> 50% T	<input checked="" type="checkbox"/> General	<input checked="" type="checkbox"/> 50% T
<input type="checkbox"/> Coastal	<input checked="" type="checkbox"/> 50% T	<input type="checkbox"/> Coastal	<input checked="" type="checkbox"/> 50% T	<input type="checkbox"/> Coastal	<input checked="" type="checkbox"/> 50% T
<input type="checkbox"/> Approach	<input checked="" type="checkbox"/> 50% T	<input type="checkbox"/> Approach	<input checked="" type="checkbox"/> 50% T	<input type="checkbox"/> Approach	<input checked="" type="checkbox"/> 50% T
<input type="checkbox"/> Harbour	<input checked="" type="checkbox"/> 50% T	<input type="checkbox"/> Harbour	<input checked="" type="checkbox"/> 50% T	<input type="checkbox"/> Harbour	<input checked="" type="checkbox"/> 50% T
<input type="checkbox"/> Berthing	<input checked="" type="checkbox"/> 50% T	<input type="checkbox"/> Berthing	<input checked="" type="checkbox"/> 50% T	<input type="checkbox"/> Berthing	<input checked="" type="checkbox"/> 50% T

Color  
Opacity  
TEXT On/Off  
Layer On/Off

**Immutable layer(Not shp, img...)**

Port Default

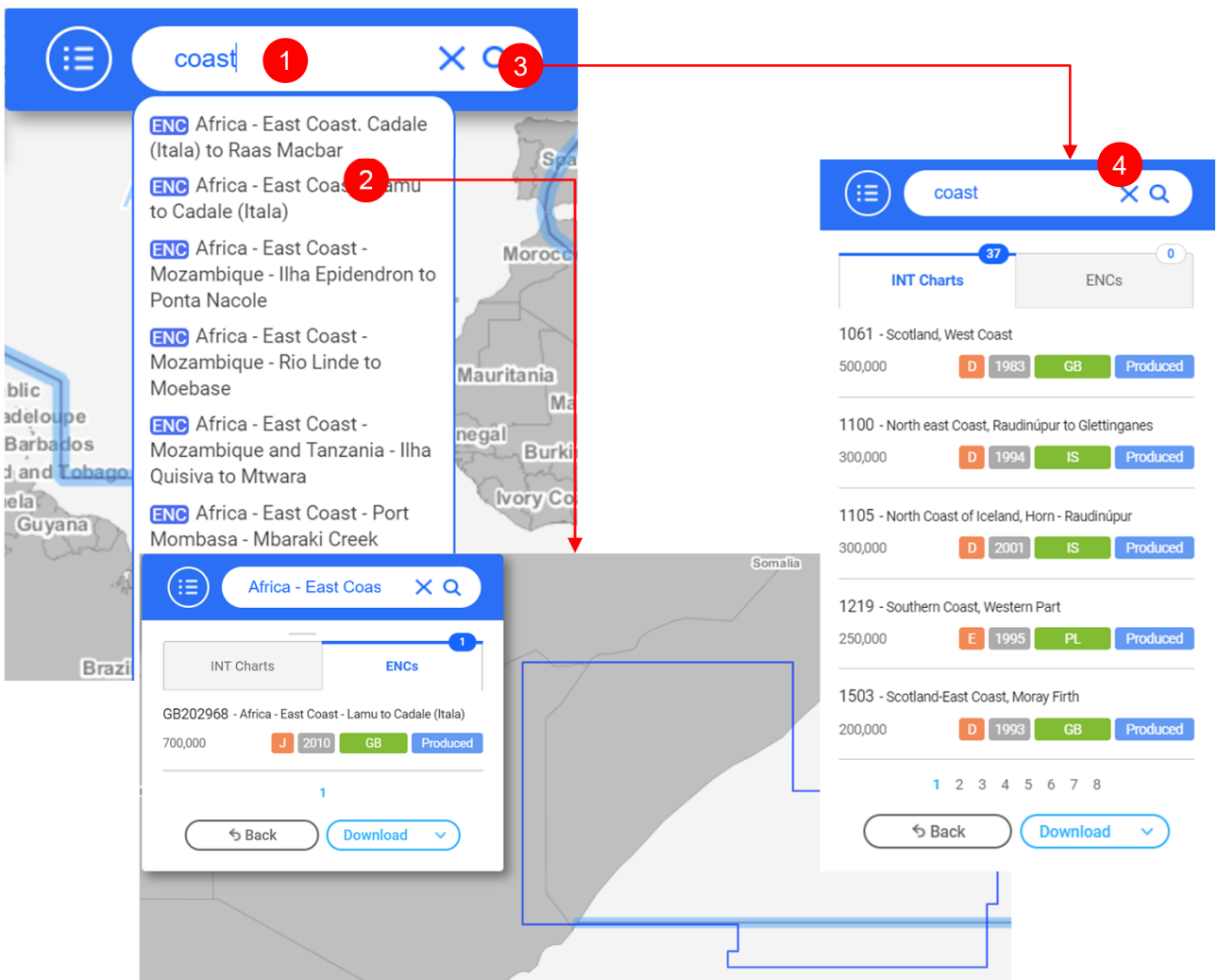
<input type="checkbox"/> Large	<input checked="" type="radio"/>
<input type="checkbox"/> Medium	<input type="radio"/>
<input type="checkbox"/> Small	<input type="radio"/>
<input type="checkbox"/> Very Small	<input type="radio"/>

\* Note : World ENC was provided by IHO  
 Port information used WPI(World Port Index) of NGA(National Geospatial-Intelligence Agency, USA)

## 5. Speed Search

Quickly search by INT chart and ENC's with chart title and number.

- ① Text Box : Type the word you want to search for.
- ② Quick List : When typing, click the list to Show
- ③ Search button : Run a search by clicking the Enter or Search button after typing a search term. Displays the number of search results per tab, and then click the tab to display the list of results
- ④ Reset button : Click the X button to initialize the search results and search terms.



The screenshot illustrates the search process in four steps:

- Step 1:** The search term 'coast' is entered into the search box.
- Step 2:** A dropdown list of search results is displayed, including titles like 'Africa - East Coast. Cadale (Itala) to Raas Macbar'.
- Step 3:** The search button (magnifying glass icon) is clicked to execute the search.
- Step 4:** The search results are displayed, showing a list of charts with details such as title, scale, and status. The 'Africa - East Coast' results are highlighted.

The search results for 'Africa - East Coast' are as follows:

Chart Number	Title	Scale	Country	Status
GB202968	Africa - East Coast - Lamu to Cadale (Itala)	700,000	GB	Produced
1061	Scotland, West Coast	500,000	GB	Produced
1100	North east Coast, Raudinúpur to Glettinganes	300,000	IS	Produced
1105	North Coast of Iceland, Horn - Raudinúpur	300,000	IS	Produced
1219	Southern Coast, Western Part	250,000	PL	Produced
1503	Scotland-East Coast, Moray Firth	200,000	GB	Produced



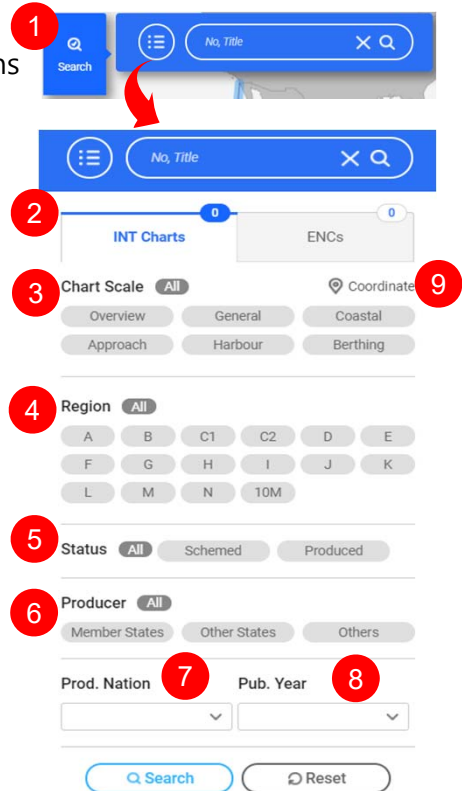
## 6. Advanced Search

Search by applying detailed search conditions such as INT Area, Chart Scale, Producer Nation, and Publication Year as well as search terms

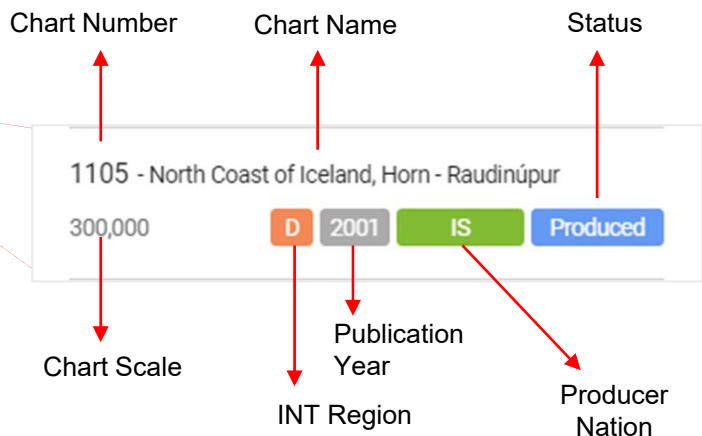
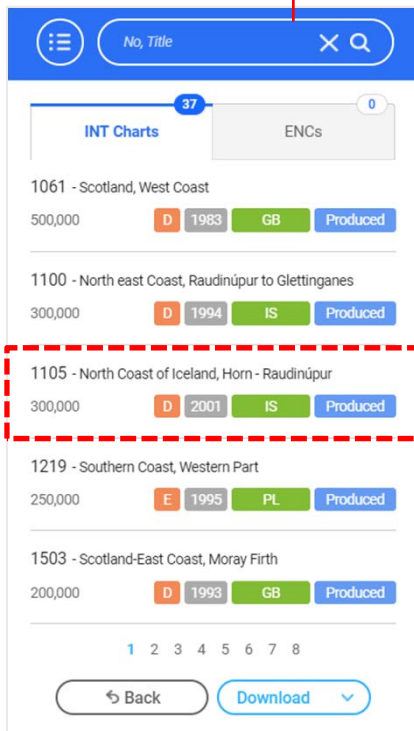
### 1) Search for INT Paper/INT ENC Chart

Searching for INT chart/ENCs with various search conditions

- ① Advanced Search button : View to search option
- ② INT Paper/ENC Menu : INT Chart type to search
- ③ Chart Scale : Six band of INT Chart scale
- ④ Region : INT Region
- ⑤ Status : status option
- ⑥ Producer : S-100 Registry Producer Code Register option
- ⑦ Producer Nation(Depending on the selected Region above)
- ⑧ Publication Year(Depending on the selected Region above)
- ⑨ Route option



Reset search option

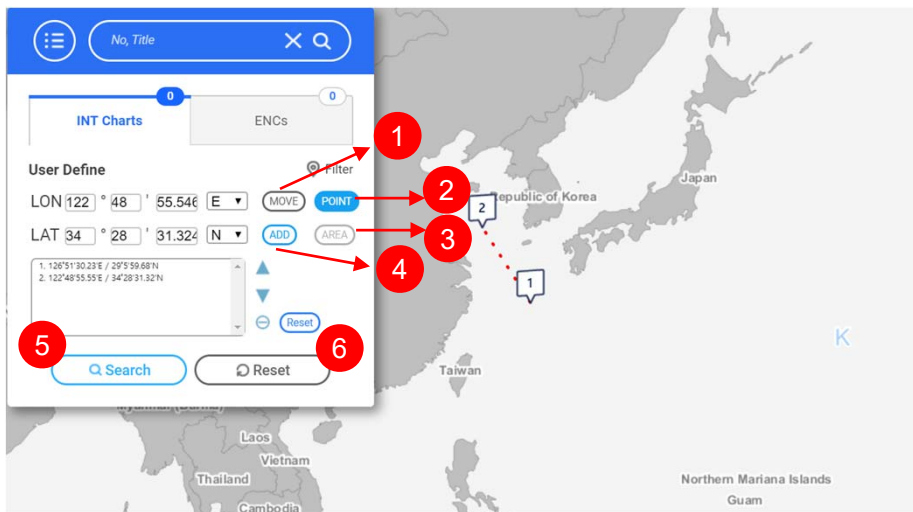


## 2) Search for INT Chart using Route

Make a route on the map and search for the corresponding INT charts /ENCs.

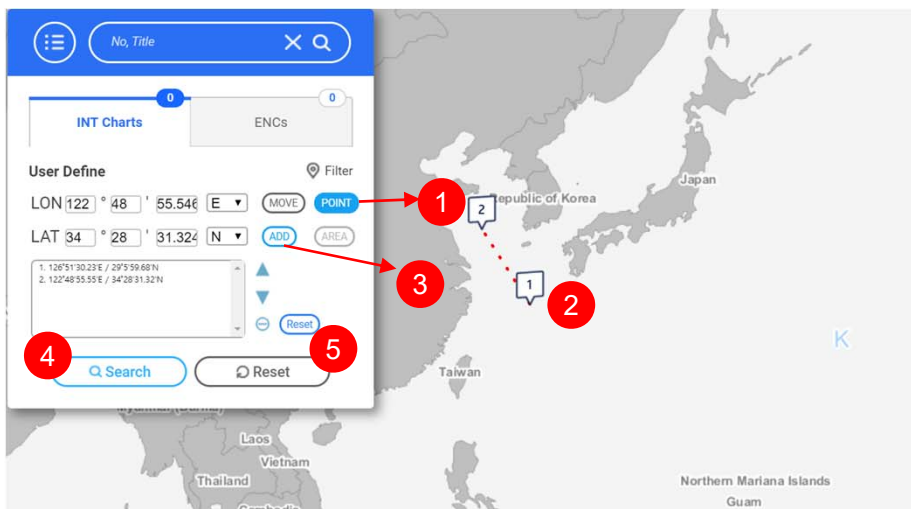
Set Way Point with Coordinate Input

- 1) Move: Move to the point which is set in the boxes of LON/LAT
- 2) Point option : click the Point button on the INT chart/ENC menu
- 3) Area option : click the Area button on the INT chart/ENC menu(activate when more than 3 points)
- 4) Add: Add LON/LAT coordinate to the search list
- 5) Search : Search by clicking Search button after setting the list of LON/LAT coordinate
- 6) Reset : Initialize the windows of SEARCH Option and CHART List



Set Way Point with the Mouse

- ① Point : Turn on Point button
- ② Map : The coordinate will be entered when clicking the left button of the mouse in the Map Viewer
- ③ Add : Add on to the list of coordinate search by clicking Add
- ④ Search : Search by clicking Search button after setting the list of LON/LAT coordinate
- ⑤ Reset : Initialize the windows of SEARCH Option and CHART List

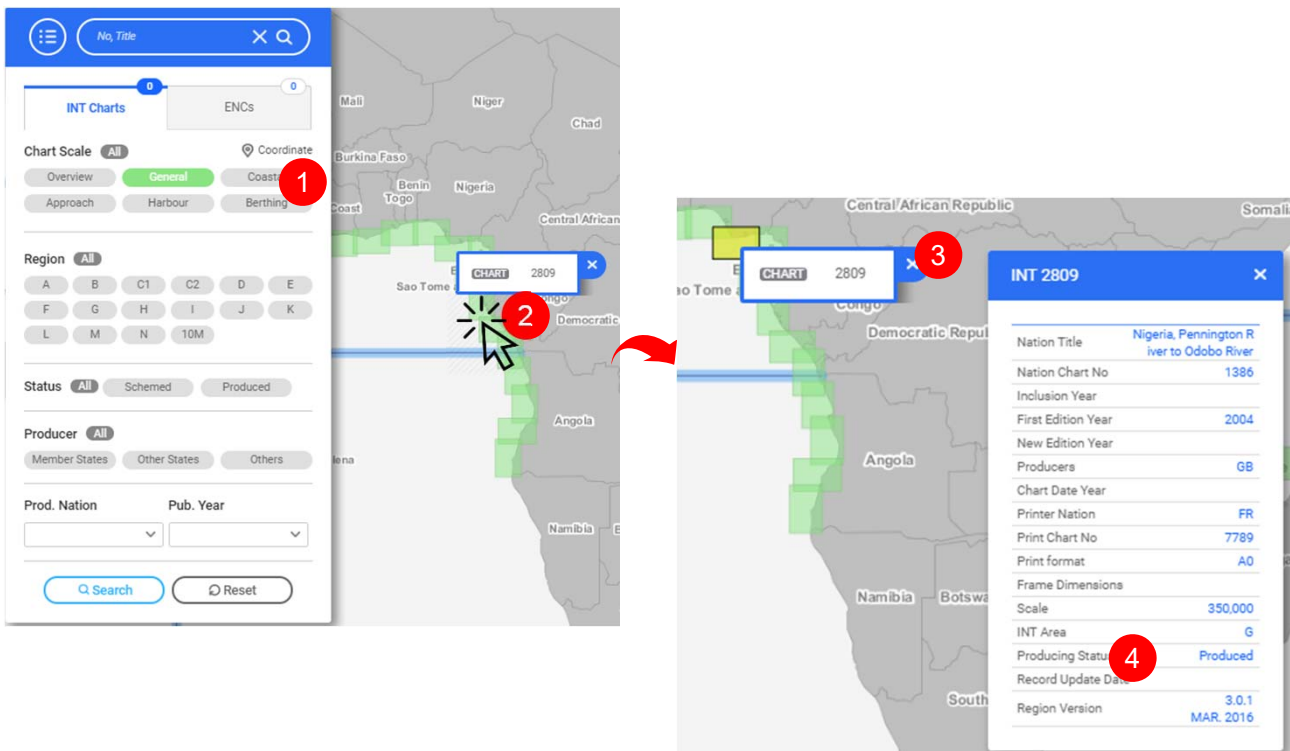




## 5) Search using Click on Map

Search by clicking on a point with your mouse

- ① Layer : Turn on the layer you want to search.
- ② Map : Search by clicking on the mouse in the map window
- ③ List : Click the List
- ④ Information Detail : Show Details



The screenshot illustrates the search process in four steps:

- 1**: The 'General' layer is selected in the 'Chart Scale' filter.
- 2**: A mouse cursor clicks on a point on the map, which is highlighted with a green box and labeled 'CHART 2809'.
- 3**: A list of search results is displayed, showing 'CHART 2809' as the selected item.
- 4**: The detailed information for 'INT 2809' is shown in a pop-up window.

INT 2809	
Nation Title	Nigeria, Pennington River to Odobo River
Nation Chart No	1386
Inclusion Year	
First Edition Year	2004
New Edition Year	
Producers	GB
Chart Date Year	
Printer Nation	FR
Print Chart No	7789
Print format	A0
Frame Dimensions	
Scale	350,000
INT Area	G
Producing Status	Produced
Record Update Date	
Region Version	3.0.1 MAR. 2016

## 7. Download Search result for INT Paper/ENC

Search results from the INT charts / ENCs can be downloaded in various formats

- XLS : Download details about the INT Charts/ENCs list in Micro soft Excel file format

Tag	INTRegion	INTChartNumber	PanelID	Producers	NatChartNumber	INT TITLE / TITRE	S.Limit	N.Limit	W.Limit	E.Limit	Scale	Scale
	J	7005		GB	143	Jazrat a l'r to Bab el Mandeb	12°27.36'N	16°0.00'N	4°5.39'E	4°30.00'E	400,000	14"
	J	7110		GB	100	Ras Durbo to Ras Binnah	11°0.00'N	13°1.50'N	5°26.00'E	5°35.00'E	350,000	
	J	7142		GB	12	Gulf of Agaba	27°0.00'N	29°36.00'N	3°0.00'E	3°40.00'E	350,000	28"
	J	7380		GB	3	Chagos Archipelago	7°50.00'S	4°34.70'S	7°39.20'E	7°50.00'E	360,000	
	J	7425		BD	35001	Malancha River to Saint Martin's Island	20°30.00'N	22°33.00'N	89°6.00'E	92°24.00'E	350,000	21"
	J	7430		GB	817	Elephant point to Manauung (Cheduba) Island	18°25.05'N	21°31.04'N	9°30.83'E	9°52.82'E	350,000	19"
	J	7433		GB	818	Burma, Cheduba Island to Cape Nagrais	15°40.06'N	19°10.05'N	9°30.00'E	9°41.82'E	350,000	19"

- PDF : Download the INT charts/ENCs list in PDF format according to S-11 Part B template

Region J / 3.0.1 - NOV. 2017

INT No.	Prod.	National No.	TITLE / TITRE	CHART LIMITS / LIMITES DE LA CARTE				Date	Scale / Echelle	
				South/Sud	North/Nord	West/Ouest	East/Est		1 :	Lat
7005	GB	143	Jazrat a l'r to Bab el Mandeb	12°27.36'N	16°0.00'N	4°5.39'E	4°30.00'E	01/13	400 000	14°20.00'N
7110	GB	100	Ras Durbo to Ras Binnah	11°0.00'N	13°1.50'N	5°26.00'E	5°35.00'E	94/	350 000	
7142	GB	12	Gulf of Agaba	27°0.00'N	29°36.00'N	3°0.00'E	3°40.00'E	11/	350 000	28°30.00'N
7380	GB	3	Chagos Archipelago	7°50.00'S	4°34.70'S	7°39.20'E	7°50.00'E	12/	360 000	
7425	BD	35001	Malancha River to Saint Martin's Island	20°30.00'N	22°33.00'N	89°6.00'E	92°24.00'E	01/10	350 000	21°30.00'N
7430	GB	817	Elephant point to Manauung (Cheduba) Island	18°25.05'N	21°31.04'N	9°30.83'E	9°52.82'E	09/	350 000	19°0.00'N
7433	GB	818	Burma, Cheduba Island to Cape Nagrais	15°40.06'N	19°10.05'N	9°30.00'E	9°41.82'E	99/09	350 000	19°0.00'N

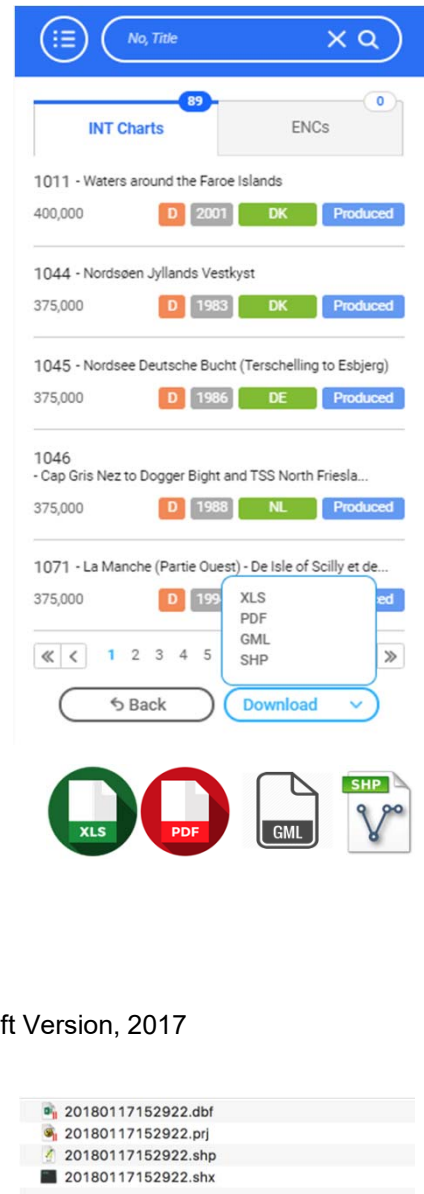
( ) published as national chart / publiée en tant que carte nationale

- GML: Download the INT charts/ENCs List in GML format according to S-128 structure

```
<S128:DataSet xmlns:S128="http://www.iala-aism.org/S128/gml/1.0" xmlns:S100="http://www.iho.int/s100gml/1.0" xmlns:S100EXT="http://www.iho.int/s100gml/1.0+EXT" xmlns:xlink="http://www.w3.org/1999/xlink" xmlns:s100 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocation="http://www.iala-aism.org/S128/
  <gml:boundedBy>...</gml:boundedBy>
  <DatasetIdentificationInformation>...</DatasetIdentificationInformation>
  <DatasetStructureInformation>...</DatasetStructureInformation>
  <member>...</member>
  <member>...</member>
  <member>...</member>
  <S128:PaperChart gml:id="ID0006">
    <textPlaceCorner/>
    <featureName>
      <displayName>true</displayName>
      <name>7005</name>
    </featureName>
  </S128:PaperChart>
  <geometry>
```

\* Note : S-128 Draft Version, 2017

- SHP : Download details about the INT charts/ENCs list in the Shape file (shp,dbf,shx,prj) format



The screenshot shows a search results page for 'INT Charts' and 'ENCs'. It lists several chart entries with their titles, scales, and production dates. For each entry, there are buttons for 'Download' and 'Produced'. A dropdown menu is open, showing options for 'XLS', 'PDF', 'GML', and 'SHP'. Below the search results, there are icons for XLS, PDF, GML, and SHP. At the bottom, there is a list of files for download, including '20180117152922.dbf', '20180117152922.prj', '20180117152922.shp', and '20180117152922.shx'.

## 8. Web service recommended specification

This web service recommends the following usage environment.

- ① Web Browser : Internet Explorer 10, Microsoft Edge, Chrome, Firefox, Safari
- ② Graphic Resolution : 1920 x 1200