

# Factmaps and other services - «What's New»

## 2025.05.27

Factmaps (API)

- New layers:
  - Plays(540) A play is a geographically defined area where several geological factors occur together so that producible petroleum can be detected. It only contains plays that are publicly available, that the Norwegian Offshore Directorate believes in, and that have a valid outline.
  - sbm\_block(807) Geographic division 15x20'. Division is done in WGS84 geographic coordinate system. Construction of the division is done from the corner points, lines between corner points are densified as PARALLELS and MERIDIAN lines. Used as area descriptor enabling referencing area with "Block name". Only available inside the opening area for sea bed minerals.
  - sbm\_quadrant (808) Geographic division 1x1°. Division is done in WGS84 geographic coordinate system. Construction of the division is done from the corner points, lines between corner points are densified as PARALLELS and MERIDIAN lines. Used as area descriptor enabling referencing area with "Quadrant name". Only available inside the opening area for sea bed minerals.
  - sbm\_occurence (901) Table including discovered seabed minerals occurrences.
  - sbm\_play\_resource\_estimate\_area (902) Table showing areas used for estimation purposes on seabed minerals. Divided into play models for sulphides and manganese crust.
- Changed layers:
  - Layer 620 has been renamed to "Announced blocks hst" and now contains all historic announced blocks on the NCS, not only APA.
  - o All layers containing data from seabed mineral surveys are now clipped on the NCS
  - Sbm\_sample\_points(452), the data type of sbmMethod and sbmSampleType changed to string.

### Factmaps (map)

- Updated all widgets to the newest ArcGIS Experience builder version.
- Layer and draw widgets has additional functionality enabled
- Filter tool has been renamed analysis
- A "Near me" widget has been added to the analysis tools, for a geographic search of nearby features
- Coordinate conversion now properly handles both ED50 and WGS84 coordinates. Pick a datum before entering coordinates to get the correct map drawing.

### Downloadables

- Added sbm\_block, sbm\_quadrant and play\_current\_public to the downloadable FGDB. See descriptions above.

## 2025.03.20

### Factmaps (API)

- Introducing a dataservice. The dataservice contains all our public data. This dataservice will in time replace datacrawling from factpages, please check it out and give us feedback at <u>factweb@sodir.no</u>. The dataservice

will be available at <u>https://factmaps.sodir.no/api/rest/services/DataService/data</u> with metadata available at <u>https://factmaps.sodir.no/api/rest/services/DataService/metadata</u>

### Factmaps (map)

- Updated symbology for discovery layers to avoid it sometimes render with wrong symbology.

### Downloadables

- Added new table: licence\_area\_licenced\_count. Polygon feature layer that shows how many times an area has been licensed.

## 2025.01.29

### Factmaps (map)

- Our new FactMaps will come out of beta, and be available here: <u>https://factmaps.sodir.no/map</u>
- The old FactMaps will still be available until May: <u>https://factmaps.sodir.no/factmaps/3\_0/</u> (see Factmaps 3.0 REST/OGC).
- New layers:
  - SBM surveys(450) Group layer for seabed mineral surveys
  - Sample point (452) Point samles from sbm surveys
  - Survey Line (453) Survey lines from sbm surveys
  - Survey Area (454) Survey areas from sbm surveys
  - Survey subareas (455) Survey subareas from sbm surveys
  - APA open hst (620) Blocks available in previous APA rounds at the application locking date each year.
- Exploration wellbores (204) and Development wellbores (205) no longer contains wellbores without an entry date. These are still available in the layer Wellbores, all (201).

### Factmaps (API)

- We are moving our REST-api to a new URL to reflect a modernization to our infrastructure. The API will be available come release-day at <a href="http://factmaps.sodir.no/api/rest">http://factmaps.sodir.no/api/rest</a>.
- New URL to our factmaps service in ED50 UTM32: <u>https://factmaps.sodir.no/api/rest/services/Factmaps/FactMapsED50UTM32/MapServer</u>
- New URL to our factmaps service in WGS84: <u>https://factmaps.sodir.no/api/rest/services/FactMapsWGS84/MapServer</u>
- Both services are also available as WMS, WFS, OGCFeatures and ESRI featureserver.
- The content of the new and old API should be identical.
- Schema changes:
  - o Added global unique ID to many layers

### Factmaps 3.0 REST/OGC

The service called Factmaps 3.0 REST/OGC will be deprecated and will no longer be available come May. This means all URL's containing <a href="https://factmaps.sodir.no/arcgis">https://factmaps.sodir.no/arcgis</a>. No new layers will be added to this service in this or upcoming releases, but the data will be updated as before as long as the service is available. We recommend all users to change their URL's long before May to our new service.

## Factmaps (Staging)

- Our "staging" REST-api will be available until May to let any users who are using this be able to change their URL's. The new service is identical to the staging environment that has been available since October.

### Downloadables

New tables available in the FGDB:

- SBM\_SAMPLE\_POINT
- SBM\_SURVEY\_LINE
- SBM\_SURVEY\_SUB\_AREA
- SBM\_SURVEY\_AREA
- LICENSING\_ACTIVITY\_APA\_OPEN\_HST

### 2024.10.01

### Factmaps (Staging)

- New version of The FactMaps built on a different platform is available for beta testing here: <u>https://factmaps.sodir.no/FactmapsBeta/</u>
- New Staging-version of our REST-API. We are changing the backend of our REST-API to more modern technologies and will also change some of the structure of the API. Esri FeatureServer will now be available for use in addition to MapServer, WMS and OGC as before.
   URL for the new STAGING-REST-API for testing: <u>https://factmaps.sodir.no/staging/rest/services</u>

Please contact us on <u>factweb@sodir.no</u> for any feedback on the new FactMaps or staging API-environment.

### Factmaps 3.0 REST/OGC

- Areastatus is now offered in the FactMaps with layer-ID 805 with a new data model.
  - Current Areastatus offered here: <u>https://factmaps.sodir.no/arcgis/rest/services/Themes/AreaStatus 1 0/MapServer</u> will still be available, but will no longer be updated.
- New geology layer: Assumed maximum extent of sedimentary rocks which may contain petroleum, layer-ID
  706 in the FactMaps
- New layer: Licencing\_activity\_apa\_gross\_hst, layer-ID 619
- Updated some column names to make the more consistent, see table in the bottom.

#### Downloadables

- New tables available in the downloadable FGDB:
  - o Areastatus
  - Str\_sedimentboundaries
  - Licencing\_activity\_apa\_gross\_hst
- Updated column names to make the more consistent, see table in the bottom.

TableName	Old column name	New column name	FactMaps LayerID
wellbore_paly_slide	wlbNPDID_wellbore	wlbNpdidWellbore	257
wellbore_oil_sample	wlbNPDID_wellbore	wlbNpdidWellbore	256
wellbore_mud	wlbNPDID_wellbore	wlbNpdidWellbore	255
wellbore_log	wlbNPDID_wellbore	wlbNpdidWellbore	218
wellbore_history	wlbNPDID_wellbore	wlbNpdidWellbore	254
wellbore_dst	wlbNPDID_wellbore	wlbNpdidWellbore	253

wellbore_casing_and_lot	wlbNPDID_wellbore	wlbNpdidWellbore	251	
licence_document_area_pol y	prlNPDID_licence	prlNpdidLicence	658	
licence_document	prlNPDID_licence	prlNpdidLicence	-	
discovery_poly_hst	NPDID_owner	dscNpdidOwner	505/504	
discovery	NPDID_owner	dscNpdidOwner	503	
licence_area_poly_hst	NPDID_block	blcNpdidBlock	617	
field_fld_part_rel	NPDID_field	fldNpdidField	513	
field_pdo_hst	fldNPDIDField	fldNpdidField	518	
afex_area_area_poly_pnt_hs t	NPDID_afex_area	afxNpdidAfexArea	-	
bsns_arr_area_area_poly_hs t	NPDID_licence	prlNpdidLicence	607	
bsns_arr_area_area_poly_pn t_hst	NPDID_bsns_arr_area	baaNpdidBsnsArrArea	-	
discovery_poly_hst	date_updated	dscDateUpdated	505/504	
wellbore	wlbDrillingFacilityFixedOrMov eable	wlbDrillingFacilityFixedOr Move	203/204/205/207/206 /201	

### 2024.03.15

### Bugfix:

- "SODIR"-CSV-files will now have the proper datetime format as "NPD"-CSV-files: %Y-%m-%d %H:%M:%S
- Shapefiles with missing integer-values will now have the value 0 instead of <null>
- Removed all accidental lineshifts in CSV-files

### 2024.03.11

### Bugfix:

- Features without geometries in geometry feature classes will now be written as empty geometrires instead of with a geometry of <null>
- Shape files will once again be available in epsg: 4230 from the new URL factmaps.sodir.no

### 2024.02.27

### Factmaps 3.0

- New table Field PDO History
  - Overview of which Plans for Development and Operation (PDO) have been submitted for the field.

#### Factmaps 3.0 REST/OGC

- Updated production method for REST-services. Content should not differ beyond reported changes here.
- New table Field PDO History (ID: 518)
- Bugfixes:
  - REST Attribute wlbEwDesDeg corrected to wlbEwDecDeg, applies to layerID 201, 203, 204, 205, 206, 207
  - o REST Attribute FACTWAREHOUSE\_DBO\_BLOCK\_AREA corrected to blcArea, applies to layerID 802

- o REST Attribute blcMainAreamain\_area to blcMainArea
- REST Attribute res\_incl\_in\_disc\_fact\_page\_url corrected to dscResInclInDiscoveryFactPageUrl, applies to layerID 503, 504, 505
- REST Attribute fixed\_or\_moveable corrected to wlbDrillingFacilityFixedOrMoveable, applies to layerID 201, 203, 204, 205, 206, 207

### Downloadables

- Removed table in downloadable FGDB utlyste\_blk\_tothist. replaced with licencing\_activity\_announced\_hst in a previous update
- FGDB new table Field\_pdo\_hst
- Bugfixes:
  - FGDB Attribute fldNpdidField is available again in the Discovery table in downloadable file geodatabase

#### 2024.01.02

#### Downloadables

- New URL for downloadable files (sodir.no)
- Updated production method for downloadable files. Content should not differ beyond reported changes here.
- We will no longer support updated \*.lyr files for Arcmap in the downloadable FGDB, we are now supporting \*.lyrx files for ArcGIS Pro instead

### 2023.04.13

#### Factmaps 3.0

- New layer Discovery, history by HC type
  - All deposits including current and historical outlines by hydrocarbon type. Full attribute set from *Discovery, all by main HC type (504)*
- Added attributes, see REST/OGC updates
- Minor adjustments

#### Factmaps 3.0 REST/OGC

#### New layer:

- Discovery, history – by HC type (ID:<u>505</u>)

#### Updated layer:

- Discovery, all by HC type (ID: 503)
  - New layer name, *Discovery, active by HC type (ID: 503),* no change in ID.
  - Extended attributes, from *Discovery*, all by main HC type (ID: 504)
- Facility and pipelines (ID: 300, all layers),
  - fclSlotCapacityGross
  - fclSlotCapacityNet

#### Will be removed:

- EL Exploitation licence current with geometry (ID: 619)
  - substitute exists: CO2 licence current with geometry (ID: 626)
- EL Exploitation licence, all (ID: 620)
  - Substitute exists: CO2 licence, all (ID: 627)

### Factmaps 3.0 ED50\_z32 OGC

Correction of layerID's for Hydrocarbon-classes

- Hydrocarbon, 858  $\rightarrow$  500
  - Field by status, 855  $\rightarrow$  502
  - Discovery, all by HC type, 856  $\rightarrow$  503
  - Discovery, all by main HC type, 857  $\rightarrow$  504

## Downloadables

## FGDB

- New table: DISCOVERIES\_POLY\_HST
  - All Discovery areas based on hydrocarbon type. The table will also include historical data through ongoing data maintenance.
- DISCOVERY\_MAP\_REFERENCE will be removed in future. Discovery\_poly\_hst is the enriched alternative.
- FACILITY new attributes
  - fclSlotCapacityGross
  - fclSlotCapacityNet
- SEIS\_ACQUISITION new attribute
  - $\circ$  seaSensorWidth

## 2022.12.14

## Factmaps 3.0 REST/OGC/FGDB

- Changes in datatypes on some attributes, see table below

Id	Table	Attribute	Old	New
1	licence_area_poly_hst	prlAreaPolyPK	int	varchar(40)
2	licence_area_poly_pnt_hst	licence_area_poly_hst_ID	int	varchar(40)

## 2022.09.07

## Factmaps 3.0

- New group "CO2 licences" under "Licencing". Layers for EL Exploitation licence under "Business Arrangement Area" are removed.
- New layer under Wellbores CO2-storage wellbores
- New layer under Licence document, showing statusreports

## Factmaps 3.0 REST/OGC

## New:

- Layer: CO2 licences, current with geometry (ID:626)
- Layer: CO2 licences, all (ID:626)
- Layer: CO2 storage (ID:207)
- Layer: Licence\_document (ID:658)

## Removal (will be removed 2022.12.15)

- Layer: EL Exploitation licence current with geometry (ID: 619)
- Layer: EL Exploitation licence, all (ID: 620)

## Updated:

- Layers for BLOCK, QUADRANT and SUBAREAS have been updated along the outer limit of NCS.

- Amended erroneous layer id's in FactMaps\_ogc/3\_0\_ED50\_z32 -service
  - o Wellbores
  - o Surveys
  - Licencing\Production licences

LayerID's now correspond with related REST and OGC-services

### Downloadables

- FGDB, removed Featureclass UTLYSTE\_BLK\_TOTHIST. Substituted with LICENCING\_ACTIVITY\_ANNOUNCED\_HST
- FGDB, removed Featureclass JM\_STUDY\_AREA\_OPENINGPROCESS
- FGDB, removed Featureclass SEIS\_ACQUISITION\_LINE
- FGDB New table: LICENCE\_DOCUMENT\_AREA\_POLY

## 2022.03.12

### Factmaps 3.0 REST/OGC/FGDB

- Changes in datatypes on some attributes, see table below

Id	Table	Attribute	Old	New
1	licence_additional_area	licence_additional_area_ID	varchar(39)	varchar(80)
2	licence_area_poly_hst	license_s NOT NULL		NULL
3		license_area_poly_s	NOT NULL	NULL
4	licence_area_poly_pnt_hst	licence_area_poly_pnt_hst_ID	int	varchar(40)
5		license_area_poly_hst_s	NOT NULL	NULL
6		license_area_poly_pnt_hst_s	NOT NULL	NULL
7	licence_licensee_hst	licence_licensee_hst_ID	int	varchar(40)
8		license_s	NOT NULL	NULL
9		license_company_name_s	NOT NULL	NULL
10		license_ownership_s	NOT NULL	NULL
11	licence_oper_hst	licence_oper_hst_ID	int	varchar(40)
12		license_s	NOT NULL	NULL
13		company_s	NOT NULL	NULL
14		license_oper_s	NOT NULL	NULL
15	licence_phase_hst	licence_phase_hst_ID	int	varchar(40)
16		license_s	NOT NULL	NULL
17	licence_task	licence_task_ID	int	varchar(40)
18		licence_task_ref_ID	int	varchar(40)
19		license_task_s	NOT NULL	NULL
20	licence_transfer_hst	licence_transfer_hst_ID	int	varchar(40)
21		license_s	NOT NULL	NULL
22		company_s	NOT NULL	NULL

#### 2021.12.13

### Factmaps 3.0 REST/OGC

- Layer 200 Wellbore. New attributes related to drillpermit
- Layer 400 Seismic. New attribute with live webmaplink for ongoing surveys

#### Themes

- Themes\CO2...
  - Updated: Skade\_fm\_2019

- Updated: Utsira\_fm\_2019
- New: Sognefjord\_fm\_2019

### Downloadables

- FGDB for CCS.

### 2021.01.14

### Downloadables

- Shapefiles for Seabedminerals.

### 2020.11.09 - Factmaps

New wellbore layer, "Other wellbores", with layer ID=206 added. This is a filtering of layer ID=201 where: w**IbWellType = 'OTHER'** 

## 2020.03.09 - Factmaps

New wellbore layer, "All wellbores", with layer ID=201 added. Different filtering to reproduce existing layers (203-205) can be used:

- 203 wlbWellType = 'EXPLORATION' AND wlbEntryDate IS NOT NULL AND wlbCompletionDate IS NULL AND wlbStatus = 'DRILLING'
- 204 wlbWellType = 'EXPLORATION'
- 205 wlbWellType = 'DEVELOPMENT' AND wlbEntryDate IS NOT NULL

## 2019.10.14 - Factmaps

Added mappingtable for new and old downloadable csv/shape - *Attributemapping\_new\_to\_old\_datasets.zip* Zipfile includes spreadsheet with mapping and a readme-file.

## 2019.10.01 - Factmaps

### Survey – shape download, additional info:

 seaMultiLines.zip was removed with the launch of 3.x. The data can now be found in seaArea.zip. Filter for *'polygon\_ki = '2D linje'* and *net\_or\_gro = 'net'* to get surveylines.

### REST – service

- On-the-fly conversion to geographic WGS84-coordinates adjusted to use esri's *ED\_1950\_To\_WGS\_1984\_18* - *Europe - common offshore* transformation.

### OGC - services

- ED50-service now supports on-the-fly conversion to geographic WGS84-coordinates using esri's
  ED\_1950\_To\_WGS\_1984\_18 Europe common offshore transformation(ED50 geographic on-the-fly was already supported)
- Due to problems in 3<sup>rd</sup> party clients, all auxillary-tables without geometries have been dropped.

### 2019.06.27 - Factmaps

Changed layer names on certain layers, 'layer ID' unchanged. Some layers would report about layer name ambiguity, i.e. "Licensees" and "Licensees (History)" in certain applications. Also added feature type relation in auxiliary tables, i.e. "Function" to "Facility – Function". Mapping table in this document has been updated.

### 2019.06.06 - Factmaps

All new version of factmaps launched.

- OGC-compliant WFS-service in WGS84-UTM32 (EPSG:32632)
- Restructured layers and added new auxiliary layers, see mapping table below.
- New LayerId-concept related features have a number in the corresponding series.

Other	100	
Wellbores	200	
Facilities and pipelin	ies300	
Surveys		400
Hydrocarbon	500	
Licensing	600	
Geology	700	
Borders and areas	800	

## Mapping table old vs. new services

Factmaps 2.0 (gis.npd.no)		Factmaps 3.0 (factmaps.npd.no)		
LayerName	LayerID	LayerName	LayerID	Comment
Wellbores	2	Wellbores	200	comment
Active exploration wellbores	5	Active exploration wellbores	200	
•	4	Exploration wellbores	203	
Wellbores, exploration		Development wellbores	204	
Wellbores, development	3			
	-	All wellbores	201	New, 2020.03.09
Facilities, fixed	0	All facilities	307	
		Facilities and pipelines	300	
		Facilities, in place	304	
		Facilities, not in place	306	New, 2019.06.06
Pipelines	1	Pipelines	311	
Surveys		Surveys	400	
Seismic surveys	7	Seismic surveys	401	
Seismic surveys, pending	8	Seismic surveys, pending	403	
Seismic surveys, planned	9	Seismic surveys, planned	404	
Seismic surveys, ongoing	10	Seismic surveys, ongoing	405	
Seismic surveys, paused	11	Seismic surveys, paused	406	
Seismic surveys, cancelled	12	Seismic surveys, cancelled	407	
		Seismic surveys, finished	421	New 2019.06.06
Electromagnetic surveys	13	Electromagnetic surveys	408	
EM, pending	14	EM surveys, pending	409	
EM, planned	15	EM surveys, planned	410	
EM, ongoing	16	EM surveys, ongoing	411	
EM, paused	17	EM surveys, paused	412	
EM, cancelled	18	EM surveys, cancelled	413	
· · · ·		EM surveys, finished	422	New, 2019.06.06
Other surveys	19	Other surveys	414	- ,
Other surveys, pending	20	Other surveys, pending	415	
Other surveys, planned	21	Other surveys, planned	416	
Other surveys, ongoing	22	Other surveys, ongoing	417	
Other surveys, paused	23	Other surveys, paused	418	
Other surveys, cancelled	24	Other surveys, cancelled	419	
other surveys, cancelled	27	Other surveys, finished	423	New, 2019.06.06
All surveys (for search)	25	All surveys	420	11000, 2019.00.00
Fields and discoveries	25	Hydrocarbon	500	Renamed, 2019.06.06
Fields, status	20	Field by status	502	Renamed, 2019.00.00
		,	502	Now 2010 06 06
Discoveries included in fields	28	Discovery, all - by HC type	503	
Discoveries not included in fields	29			Included in "Discovery, all - by HC type (503)"
Discoveries, all	30	Discovery, all - by main HC type	504	
Licensing	31	Licensing	600	
- 0		Predefined areas	602	New group for APA, 2019.06.06
Licensing, APA gross	32	APA gross	603	
Licensing, APA open	33	APA open	604	
		Business arrangement area	605	New group for BAA, 2019.06.06

			<u> </u>	
		BAA - Business arrangement	606	
		area - all current with		
		geometry	607	New, 2019.06.06
Licencing, Business Arrangement	24	BAA - Business arrangement,	607	
Area	34	all	600	
		AFEX - Area Fee Exemption, all	609	
		- current with geometry		New, 2019.06.06
Licencing, Area Fee Exemption	35		610	
		Production licences	611	
Licencing, Area with stratigraphic		Production licence, current -	612	
licencing	36	stratigraphic		
		Production licence, all -	613	
		stratigraphic		New, 2019.06.06
Production licence current, by		Production licence all -	614	
operator	37			
		Production licence, current by	615	
		block and operator		New, 2019.06.06
		Production licence, all -	616	
Production licence current	38	current with geometry		
Production licence all	39	Production licence, all	617	
Licencing, Announced blocks	40	Announced blocks	618	
		EL - Exploitation licence -	619	
		current with geometry		New, 2019.06.06
		EL - Exploitation licence, all	620	New, 2019.06.06
Geology	41	Geology	700	
Faults and boundaries	42	Faults and boundaries	702	
Structural elements	43	Structural elements	702	
	45	Domes 1997	704	New 2010.06.06
Developer en el curso e				New, 2019.06.06
Borders and areas	44	Borders and areas	800	
Quadrants	45	Quadrants	803	
Blocks	46	Blocks	802	
Sub areas	47	Sub areas	804	
		Company	101	New auxiliary table (not OGC), 2019.06.06
		Facility - Function	351	New auxiliary table (not OGC), 2019.06.06
		Field - Activity status - History	511	New auxiliary table (not OGC), 2019.06.06
		Field - Image	512	New auxiliary table (not OGC), 2019.06.06
		Field - Parts relation	513	New auxiliary table (not OGC), 2019.06.06
		Field - Extends into	514	New auxiliary table (not OGC), 2019.06.06
		Field - Reserves	515	New auxiliary table (not OGC), 2019.06.06
		Field - Operator - History		New auxiliary table (not OGC), 2019.06.06
		Field - Owner - History	517	New auxiliary table (not OGC), 2019.06.06
		Discoveries - History	531	-
		-		New auxiliary table (not OGC), 2019.06.06
		Discovery - Reserves	532	New auxiliary table (not OGC), 2019.06.06
		Licence - Operator	650	New auxiliary table (not OGC), 2019.06.06
		Licence - Phases	651	New auxiliary table (not OGC), 2019.06.06
		Licence - Tasks	652	New auxiliary table (not OGC), 2019.06.06
		Licence - Transfers	653	New auxiliary table (not OGC), 2019.06.06
		Licensing activity	654	New auxiliary table (not OGC), 2019.06.06
		Licencees	655	New auxiliary table (not OGC), 2019.06.06
		Licencees - History	656	New auxiliary table (not OGC), 2019.06.06
		Licence - Additional areas	657	New auxiliary table (not OGC), 2019.06.06
		Wellbore - Log	218	New auxiliary table (not OGC), 2019.06.06
		Wellbore - Casing and leak-off	210	
		tests	201	New auxiliary table (not OGC), 2019.06.06
		Wellbore - CO2	252	New auxiliary table (not OGC), 2019.06.06
		Wellbore - Drill stem tests	252	
		(DST)	203	New auxiliary table (pot OCC) 2010 05 05
		Wellbore - History	2E /	New auxiliary table (not OGC), 2019.06.06
			254	New auxiliary table (not OGC), 2019.06.06
		Wellbore - Drilling Mud	255	New auxiliary table (not OGC), 2019.06.06
		Wellbore - Oil sample	256	New auxiliary table (not OGC), 2019.06.06
		Wellbore - PalynoLogical	257	
		slides Survey	402	New auxiliary table (not OGC), 2019.06.06 New auxiliary table (not OGC), 2019.06.06