
Factmaps and other services – «What's New»

2025.11.26

FactMaps (API)

Bugfix:

- Fixed FldDescriptionText on layer 7102 incorrectly having a field length of 3.
- Fixed FldDescriptionText on layer 7001 incorrectly having a field length of 3.
- Fixed seaProgressNotesDescription on layer 4011 incorrectly having a field length of 3.
- Fixed IsuDescription on layer 2100 incorrectly having a field length of 3.
- Fixed wlbHistory on layer 5050 incorrectly having a field length of 3.

Factmaps (map)

- Updated experience builder version

2025.09.25

Factmaps (API)

New layer:

- csd_injection(9001) – Table with injection data from carbon storage facilities offshore.

Changed layers:

- Seis_acquisition – Changed column name from seaAssumedRestatDate -> seaRestartAssumedDate
- seis_acquisition_weekly_done – Changed column names seaAccDoneBoatKm -> seaDoneBoatKmACC and seaAccDoneCdpKm -> seaDoneCdpKmAcc
- Field: added column wlbCompletionDate
- Company: added column cmpShortName

Factmaps (map)

- Changed symbology sea bed mineral data to better reflect the Deep Sea Survey app

Downloadables

- New table: csd_injection

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 denified 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 denified 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.
 - 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 factweb@sodir.no. The dataservice will be available at <https://factmaps.sodir.no/api/rest/services/DataService/data> with metadata available at <https://factmaps.sodir.no/api/rest/services/DataService/metadata>

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: <https://factmaps.sodir.no/map>
- The old FactMaps will still be available until May: https://factmaps.sodir.no/factmaps/3_0/ (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 <http://factmaps.sodir.no/api/rest>.
- New URL to our factmaps service in ED50 UTM32:
<https://factmaps.sodir.no/api/rest/services/Factmaps/FactMapsED50UTM32/MapServer>
- New URL to our factmaps service in WGS84:
<https://factmaps.sodir.no/api/rest/services/Factmaps/FactMapsWGS84/MapServer>
- 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:
 - 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 <https://factmaps.sodir.no/arcgis>. 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:
<https://factmaps.sodir.no/FactmapsBeta/>
- 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: <https://factmaps.sodir.no/staging/rest/services>

Please contact us on factweb@sodir.no 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.
 - o Current Areastatus offered here:
https://factmaps.sodir.no/arcgis/rest/services/Themes/AreaStatus_1_0/MapServer 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_apg_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
 - o Str_sedimentboundaries
 - o Licencing_activity_apg_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_poly	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_hst	NPDID_afex_area	afxNpdidAfexArea	-
bsns_arr_area_area_poly_hst	NPDID_licence	prlNpdidLicence	607
bsns_arr_area_area_poly_pnt_hst	NPDID_bsns_arr_area	baaNpdidBsnsArrArea	-
discovery_poly_hst	date_updated	dscDateUpdated	505/504
wellbore	wlbDrillingFacilityFixedOrMoveable	wlbDrillingFacilityFixedOrMove	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 geometries 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
 - o *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:
 - o 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 blcMainAreain_area to blcMainArea
 - o REST - Attribute res_incl_in_disc_fact_page_url corrected to dscResInclInDiscoveryFactPageUrl, applies to layerID 503, 504, 505
 - o 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_tohist. replaced with licencing_activity_announced_hst in a previous update
- FGDB new table – Field_pdo_hst
- Bugfixes:
 - o 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*
 - o 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: [505](#))*

Updated layer:

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

Will be removed:

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

Factmaps 3.0 ED50_z32 OGC

Correction of layerID's for Hydrocarbon-classes

- Hydrocarbon, 858 → 500
 - o Field by status, 855 → 502
 - o Discovery, all - by HC type, 856 → 503
 - o Discovery, all - by main HC type, 857 → 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
 - o fclSlotCapacityGross
 - o fclSlotCapacityNet
- SEIS_ACQUISITION – new attribute
 - o 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
 - o Licencing\Production licences

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

Downloadables

- FGDB, removed Featureclass UTLYSTE_BLK_TOTDIST. 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...
 - o Updated: Skade_fm_2019
 - o Updated: Utsira_fm_2019
 - o 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:

wlbWellType = '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 3rd 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 pipelines	300
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	
Active exploration wellbores	5	Active exploration wellbores	203	
Wellbores, exploration	4	Exploration wellbores	204	
Wellbores, development	3	Development wellbores	205	
		All wellbores	201	New, 2020.03.09
Facilities, fixed	0	All facilities	307	

		Facilities and pipelines	300	New, 2019.06.06
		Facilities, in place	304	New, 2019.06.06
		Facilities, not in place	306	New, 2019.06.06
Pipelines	1	Pipelines	311	
Surveys	6	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, finished	423	New, 2019.06.06
All surveys (for search)	25	All surveys	420	
Fields and discoveries	26	Hydrocarbon	500	Renamed, 2019.06.06
Fields, status	27	Field by status	502	
Discoveries included in fields	28	Discovery, all - by HC type	503	New 2019.06.06
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	
		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
		BAA - Business arrangement area - all current with geometry	606	New, 2019.06.06
Licensing, Business Arrangement Area	34	BAA - Business arrangement, all	607	
		AFEX - Area Fee Exemption, all - current with geometry	609	New, 2019.06.06
Licensing, Area Fee Exemption	35	AFEX - Area Fee Exemption, all	610	
		Production licences	611	
Licensing, Area with stratigraphic licencing	36	Production licence, current - stratigraphic	612	
		Production licence, all - stratigraphic	613	New, 2019.06.06
Production licence current, by operator	37	Production licence all - current by operator	614	
		Production licence, current by block and operator	615	New, 2019.06.06
Production licence current	38	Production licence, all - current with geometry	616	
Production licence all	39	Production licence, all	617	
Licensing, Announced blocks	40	Announced blocks	618	
		EL - Exploitation licence - current with geometry	619	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	704	
		Domes 1997	705	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	516	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 tests	251	New auxiliary table (not OGC), 2019.06.06
		Wellbore - CO2	252	New auxiliary table (not OGC), 2019.06.06
		Wellbore - Drill stem tests (DST)	253	New auxiliary table (not OGC), 2019.06.06
		Wellbore - History	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 slides	257	New auxiliary table (not OGC), 2019.06.06
		Survey	402	New auxiliary table (not OGC), 2019.06.06