MINISTÈRE DE LA TRANSITION ÉNERGÉTIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Document reference				***Issue information***	
Project	**Package**	**Issuer**	**Chrono**	**Revision**	**Status**
MED	*-*	*TEC*	*57*	*1*	*A*
Title	***MED_TEC_57_Factual report - UXO survey - OWF Zone 3 AO6 area***				

Additional Metadata	**Discipline**	**Document Type**	**System**	**Activity**
	GPY	*Factual report*	*-*	*UXO survey*
	Contract	**Acceptance Class**	**Dossier**	**Alternative ref.**
	AO6-AO7	*-*	*-*	*-*
	Confidentiality	**Print format**	**Subcontractor**	**Contractor ref.**
	Restricted	*A4*	*-*	*-*

Date	Rev	Status	Reason for revision	Issued by	Checked by	Approved by
14/07/2023	*0*	*IFR*	*Issued*	*BMC*	*MH*	*FLM*
22/12/2023	*1*	*B*	*Revision after client's comments*	*BMC*	*MH*	*FLM*
10/01/2024	*1*	*A*	*Approved*	*BMC*	*MH*	*FLM*

Change Log

TECNOAMBIENTE
A TRADEBE COMPANY

MINISTÈRE
DE LA TRANSITION
ÉNERGÉTIQUE
Liberté
Égalité
Fraternité

MED_AO6 AREA – OWF ZONE 3
UXO SURVEY

MED_TEC_57_FACTUAL REPORT - UXO SURVEY - OWF ZONE 3 AO6 AREA

PROJECT No.
113401341

FACTUAL REPORT

No. OF PAGES
73

REV	DATE	DESCRIPTION	BY	CHK	ENG	PM	CLIENT
1	*10/01/2024*	*Approved*	*BMC*	*MH*	*JW*	*FLM*	*DGEC*
1	*22/12/2023*	*Revision after client's comments*	*BMC*	*MH*	*JW*	*FLM*	*DGEC*
0	*14/07/2023*	*Issued*	*BMC*	*MH*	*FLM*	*CPC*	*DGEC*

CONTENTS

LIST OF FIGURES

LIST OF TABLES

ABBREVIATIONS

ADCP	Acoustic Doppler Current Profiler
Ch	Channel
cm	Centimetre
CMP	Common Mid-Point
C-O	Computed Minus Observed
CoG	Centre of Gravity
CRP	Central Reference Point
DEMOB	Demobilisation
DGEC	Direction générale de l'énergie et du climat
DP	Dynamic Positioning
DPO	Dynamic Positioning Officer
DPR	Daily production report
EP	Environmental Protection
FLO	Fisheries Liaison Officer

ABBREVIATIONS

GNSS	Global Navigation Satellite System
GPS	Global Positioning System
GRS	Geodetic Reference System
GSO	Geophysical Services Offshore
h	Hour
IMO	International Maritime Organization
J	Joule
JNCC	Joint Nature Conservation Committee
kHz	Kilohertz
LAT	Low Astronomical Tide
m	Meters
min	Minutes
MBES	Multibeam echosounder
mm	Millimetre
MOB	Mobilisation
MRU	Motion Reference Unit
MBES	Multibeam Echosounder System
POB	Personnel On Board
PAM	Passive Acoustic Monitoring
PPP	Precise Point Positioning
PPSU	Pulse Power Supply Unit
QA-QC	Quality Assurance – Quality Control
RTE	Réseau de Transport d'Électricité
RTK	Real Time Kinematics
s	Second
SHOM	Service Hydrographique et Océanographique de la Marine
SN	Serial Number
SRF	Ship's Reference Frame
SBP	Sub-Bottom Profiler
SVP	Sound Velocity Profiler
SVS	Sound Velocity Sensor
SSS	Side Scan Sonar
TBC	To be confirmed

ABBREVIATIONS

TTS	TTSurvey Ltd (Seismic equipment hire company)
UHR	Ultra-High Resolution
UTC	Coordinated Universal Time
UTM	Universal Transverse Mercator
UXO	Unexploded Ordnance
VSAT	Very-Small-Aperture Terminal
WB	Water Bottom
WD	Water Depth
WGS84	World Geodetic System 1984
WT	Work time
ZH	Hydrographic Zero or Hydrographic Datum

1. INTRODUCTION

This report together with the supporting appendix, describes the results of the UXO survey conducted by Tecnoambiente with the S/V Geo Focus in the Zone 3 offshore windfarm area (OWF) at MED_AO6 area (Mediterranean). Both the survey vessel and the equipment used for this task have been shared with the rest of offshore windfarm areas (Zones 1, 2, 3 and 4 OWF) and the Offshore Substation areas (Zone 1, 2 and 3 OSS).

The objective of the site survey was to perform an UXO survey over the proposed UXO GI points (Borehole locations) over the area of interest, comprising MBES, SSS and SBP datasets.

The purpose of this survey was to:

- To define the final location of the GI points on the proposed box
- To detect MBES, SSS and SBP contacts
- To review proposed borehole locations for geohazards

The main objective of this was to provide the ALARP certificates necessary for a subsequent geotechnical investigation to be conducted within the zone. The survey proved to be a success and all objectives were met as detailed herein.

2. SCOPE OF WORK

2.1. SURVEY AREA

The areas of interest are located in the Gulf of Lion off the French Mediterranean coast. These areas are 4 offshore windfarm (Zone 1 OWF, Zone 2 OWF, Zone 3 OWF and Zone 4 OWF) and 3 offshore substations (Zone 1 OSS, Zone 2 OSS and Zone 3 OSS) which are under investigation in this project (Figure 2-1).

The area of relevance in this report is Zone 3, located off the coast of Perpignan. This survey area is divided in two sites (Figure 2-2):

- Offshore Substation (OSS) (4.23 km^2)
  - *Dimensions: 1.06 km x 3.98 km*
  - *Bathymetric range: -94 m to -99 m (Vertical reference Bathyelli v2 ZH)*

- **Windfarm area (OWF) (363.12 km^2)**
  - ***Dimensions:* 27.18km x 20.60 km.**
  - ***Bathymetric range:* -84 m to -115 m *(Vertical reference Bathyelli v2 ZH)***

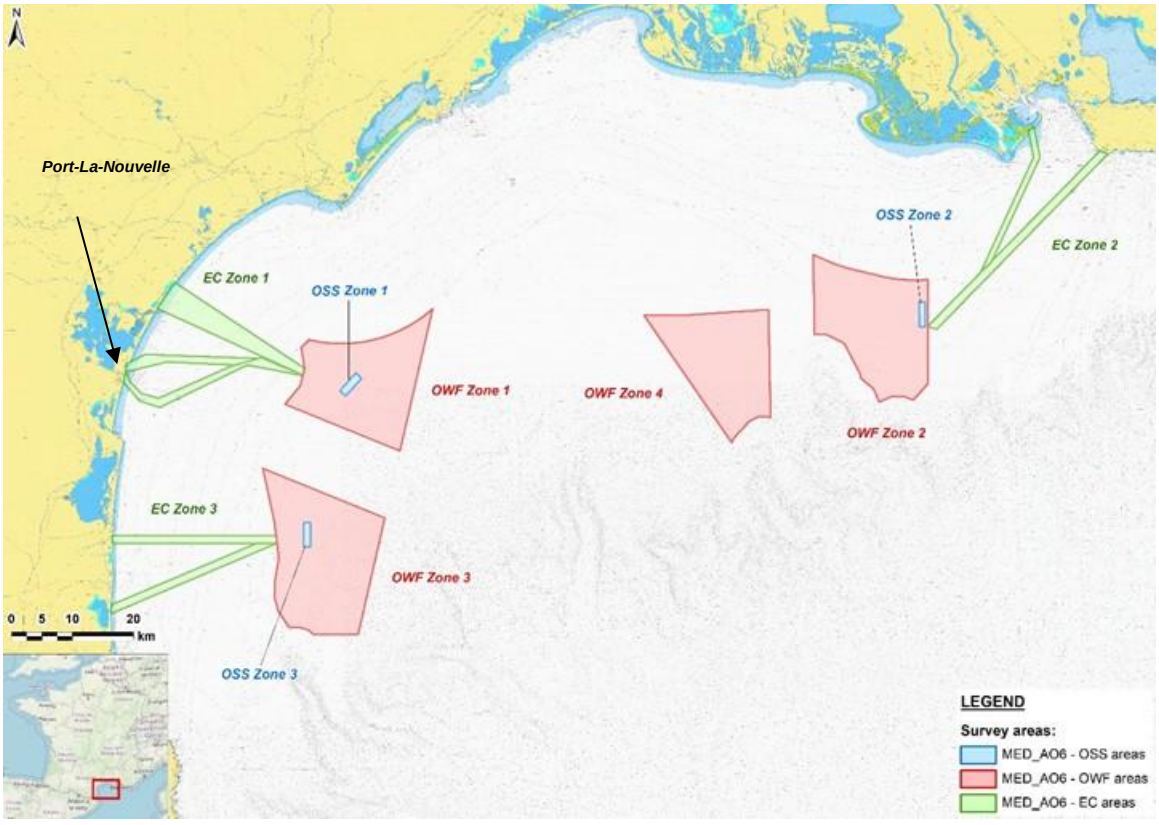


Figure 2-1: MED_AO6 survey area.

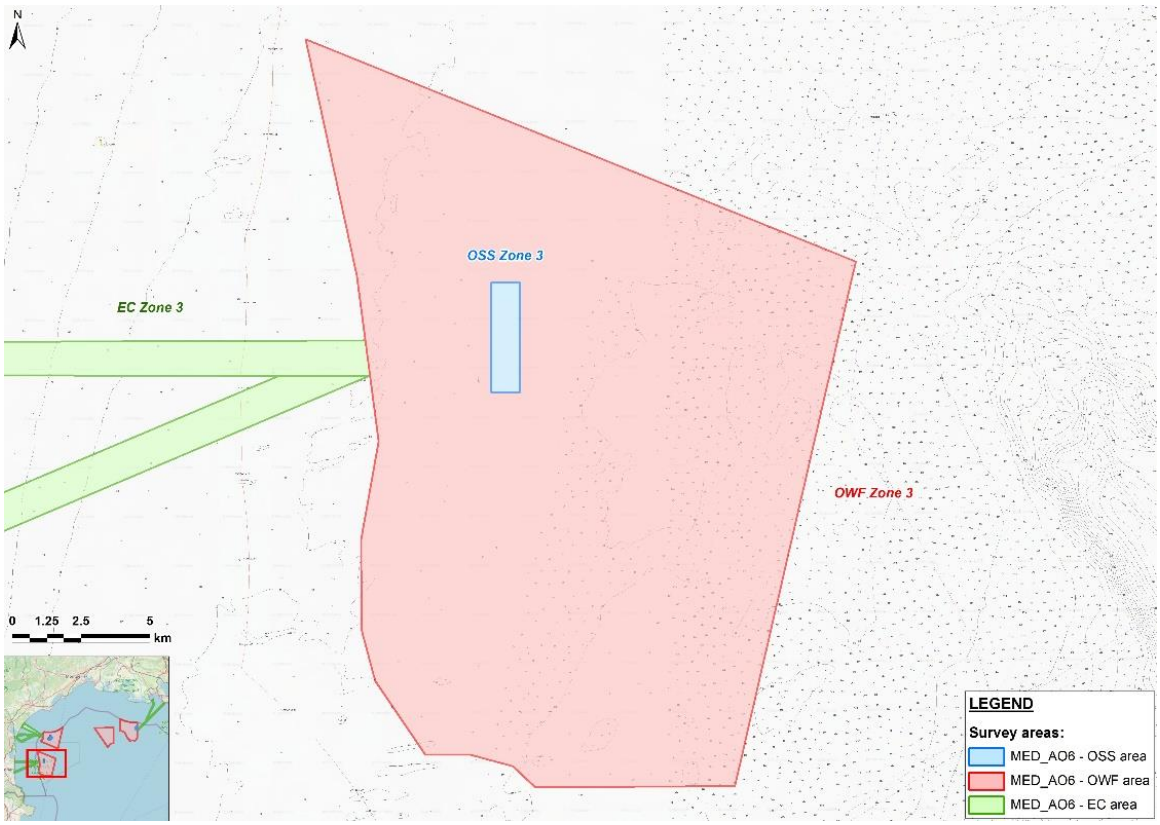


Figure 2-2: Windfarm area (OWF) and Offshore Substation (OSS) in the MED_AO6 Zone 3 Survey area.

2.2. SURVEY PLAN

The AO6 Zone 3 OWF contains 20 base UXO boxes and 13 alternative boxes. A lineplan of 3 lines with 30 meters spacing was performed to acquire the required geophysical data on each UXO box.

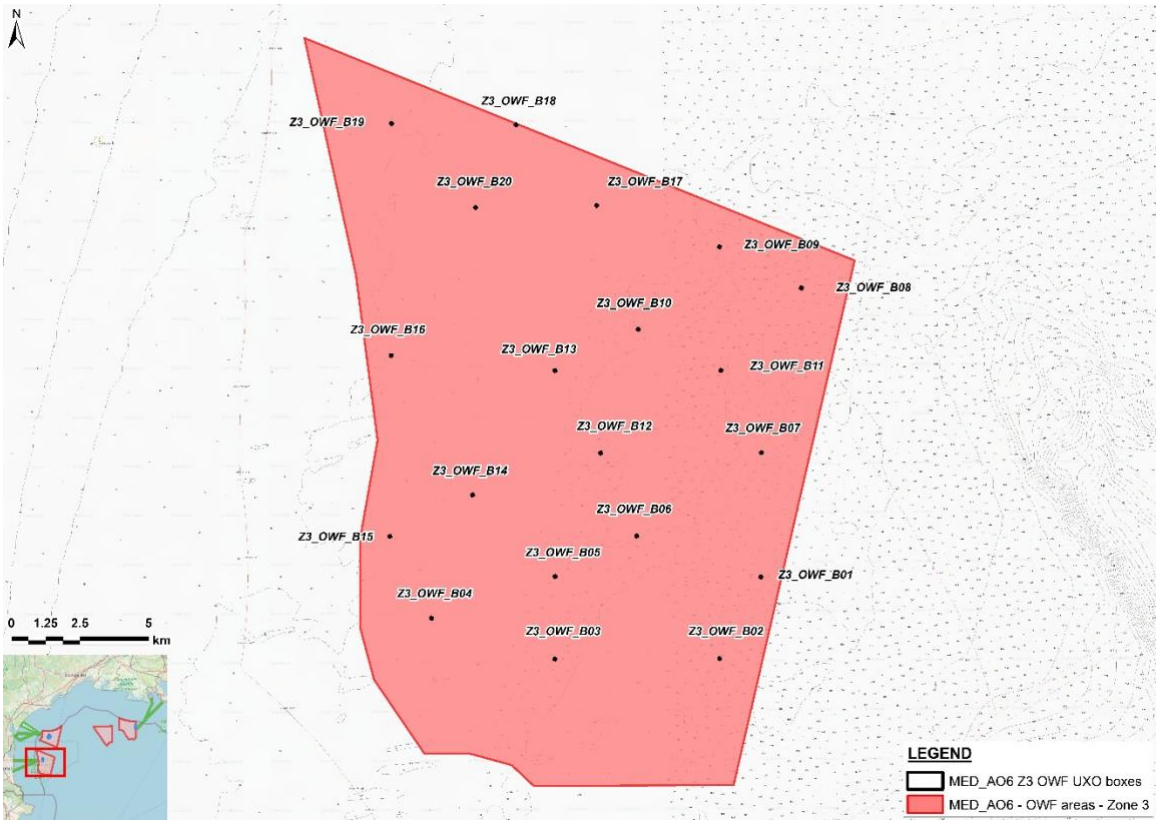


Figure 2-3: MED_AO6 Zone 3 OWF UXO boxes locations.

Each of the UXO boxes comprises an area of approximately 30m x 30m, with a run in / run out length of 400 metres utilised to optimise the acquisition of the geophysical data.

Figure 2-4 provides an example of the UXO survey boxes and Figure 2-5 illustrates the survey line plan for the different UXO risk locations (Please refer to section 2.4).

Figure 2-6 shows the general lineplan for UXO boxes at the survey area.

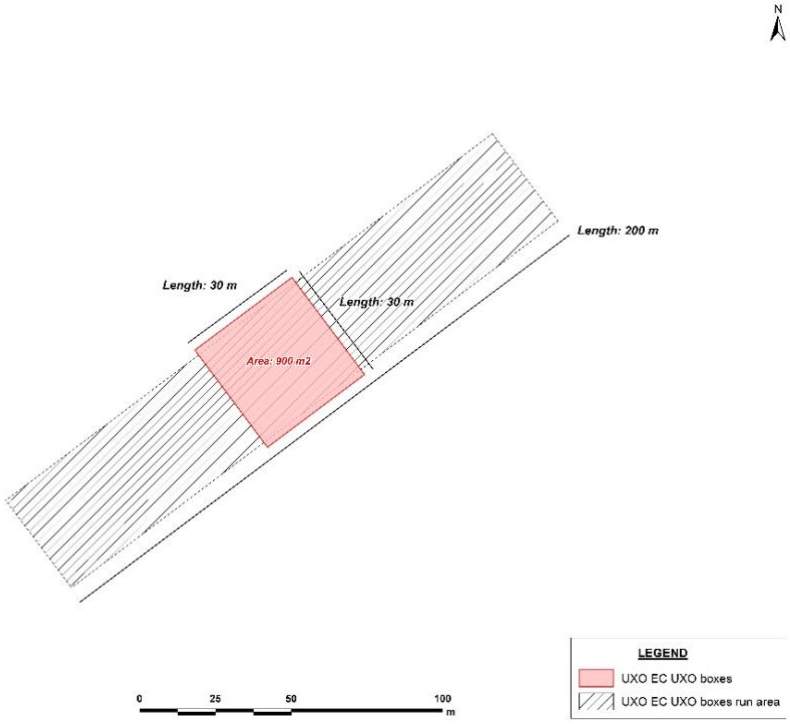


Figure 2-4: Example of UXO boxes dimensions.

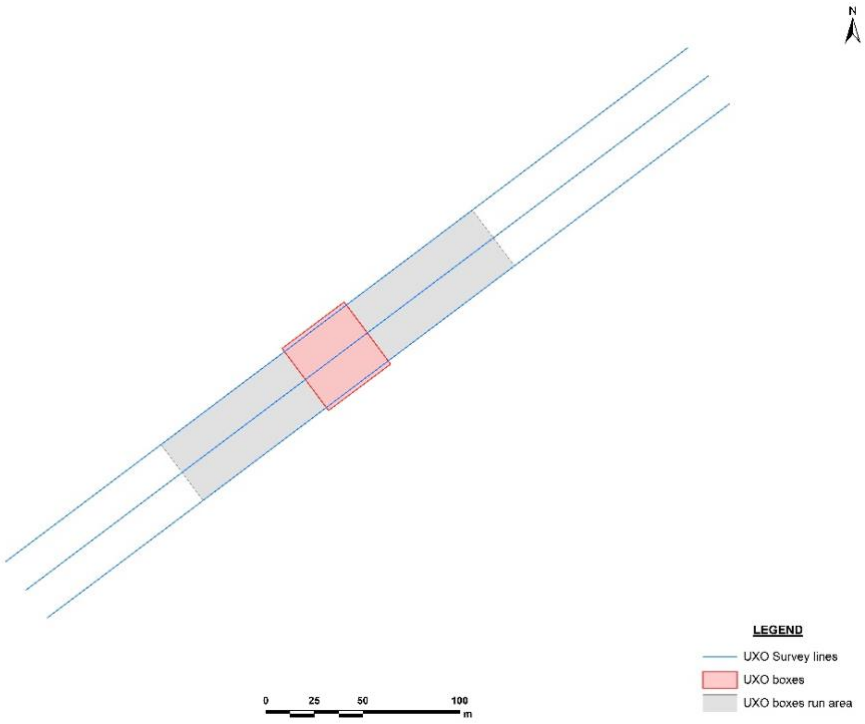


Figure 2-5: Example of UXO boxes survey line plan for the UXO Low and Medium risk locations.

Table 1: Summary for the number of UXO boxes in the MED_AO6 OWF Z3 area.

SUMMARY OF NUMBER OF UXO BOXES ON SITE		
Operation	**Unit**	**#**
MED_AO6 OWF Z3 GI Locations (UXO boxes)	*No*	20
TOTAL	***No***	**20**

Table 2: Summary for the survey line plan of the UXO boxes in the MED_AO6 OWF Z3 area.

SUMMARY OF LINEPLAN FOR THE UXO BOXES ON SITE		
Operation	**Unit**	**Length**
MED_AO6 OWF Z3 GI Locations (UXO boxes)	*km*	39.6
TOTAL	***km***	**39.6**

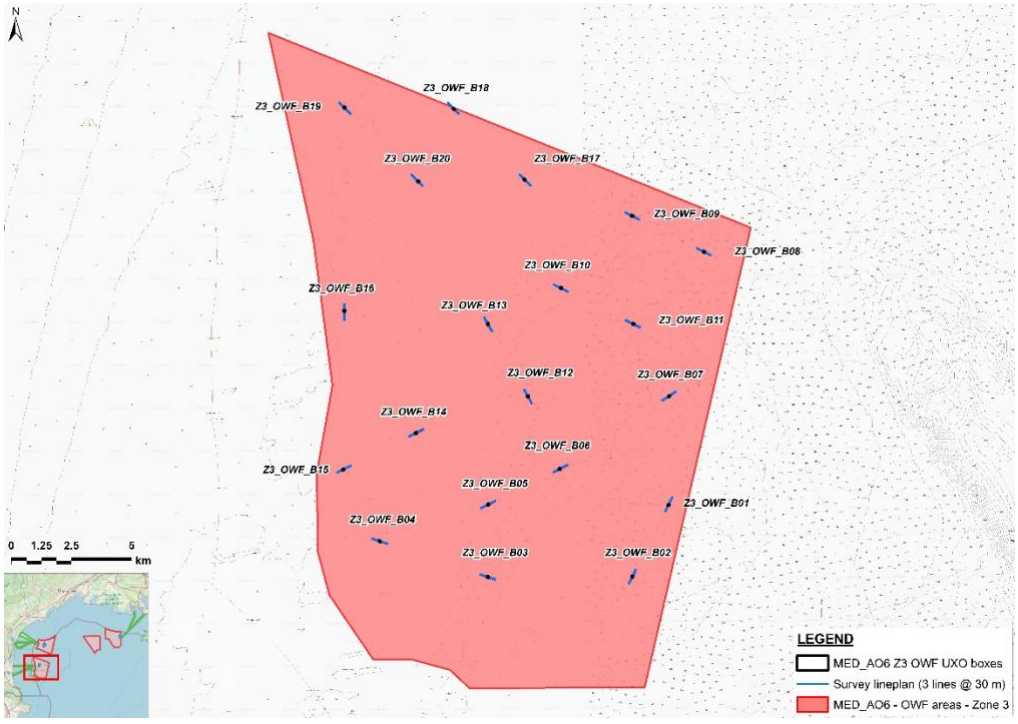


Figure 2-6: MED_AO6 Zone 3 OWF UXO survey plan.

2.3. UXO RISK ANALYSIS

During the survey planning of this project, 6-Alpha associates conducted a risk analysis of the presence of UXO elements in the MED_AO6 work area. The "Unexploded Ordnance Threat and Risk Assessment" document detailed a zonation of the work zone into three categories: Low, Medium and High risk. This zonation is presented in the figure below.

As agreed with the client, based on the risk presented by 6-Alpha in its study, it was established that:

- In areas whose UXO risk is Low or Medium, data acquisition for UXO detection would be performed with MBES, SSS and SBP.
- In areas with High UXO risk, data acquisition for UXO detection would be performed with MBES, SSS and MAG.

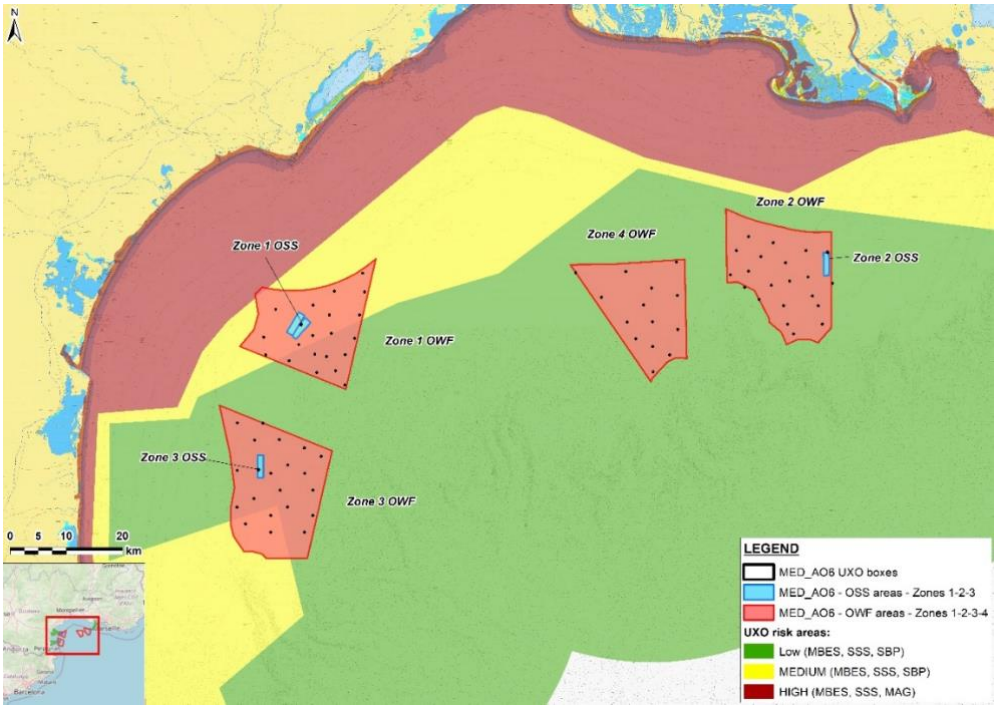


Figure 2-7: UXO risk analysis for the MED_AO6 OWF and OSS survey areas.

It is observed in the zonation that the working areas of the OWF Z1-Z2-Z3-Z4 and OSS Z1-Z2-Z3 are located in low and medium UXO risk areas.

3. SURVEY CONTROL

3.1. GEODETIC PARAMETERS

3.1.1. Survey datum

These parameters are detailed below.

Table 3: Datum parameters table

DATUM	
Survey Datum:	WGS 84
Spheroid	GRS 1980
Semi-Major Axis (a)	6378137.000000000
Semi-Minor Axis (b)	6356752.314245179
Inverse Flattening (1/f)	1/298.257223563

Table 4: Projection parameters table.

PROJECTION	
Projection	UTM
False Easting	500000
False Northing	0
Latitude of Origin	0º00’00.000000’’
Central Meridian	3º00’00.000000’’
UTM Zone	31 N
Scale Factor on CM	0.9996
Units:	Meters

3.1.2. Vertical datum

The vertical datum used in the QINSy software is Bathyelli v2.0 ZH geoid published by the SHOM in December 2018. The Bathyelli v2.0 ZH (SHOM 2018) is a surface based on the GRS 1980 spheroid, and it is a set of surfaces each of which defines the separation of one vertical datum from the WGS84 ellipsoid to the vertical maritime reference Hydrographic Datum or Hydrographic Zero. These ellipsoidal heights are given in meters.

This geoid covers the intersection between the SHOM tidal model and the different tidal zones of France.

For the survey area MED_AO6 Z3, the corrections to hydrographic zero are made by tidal observations of the port Port-La Nouvelle (43º01’ N – 03º 04’ E). For informative purposes, the difference between the hydrographic zero and the LAT reference level for this port is 0.34 m, according to the study by SHOM "*Références Altimétriques Maritimes. Ports de France métropolitaine et d'outre-mer"* of 2019.

3.1.3. Tidal reduction

To carry out the survey as accurately as possible, Tecnoambiente is receiving MarineStar PPP corrections by satellite signal. When using an accurate GNSS system, the tidal corrections are carried out in real-time through QINSy computations, as it is shown in the following figure.

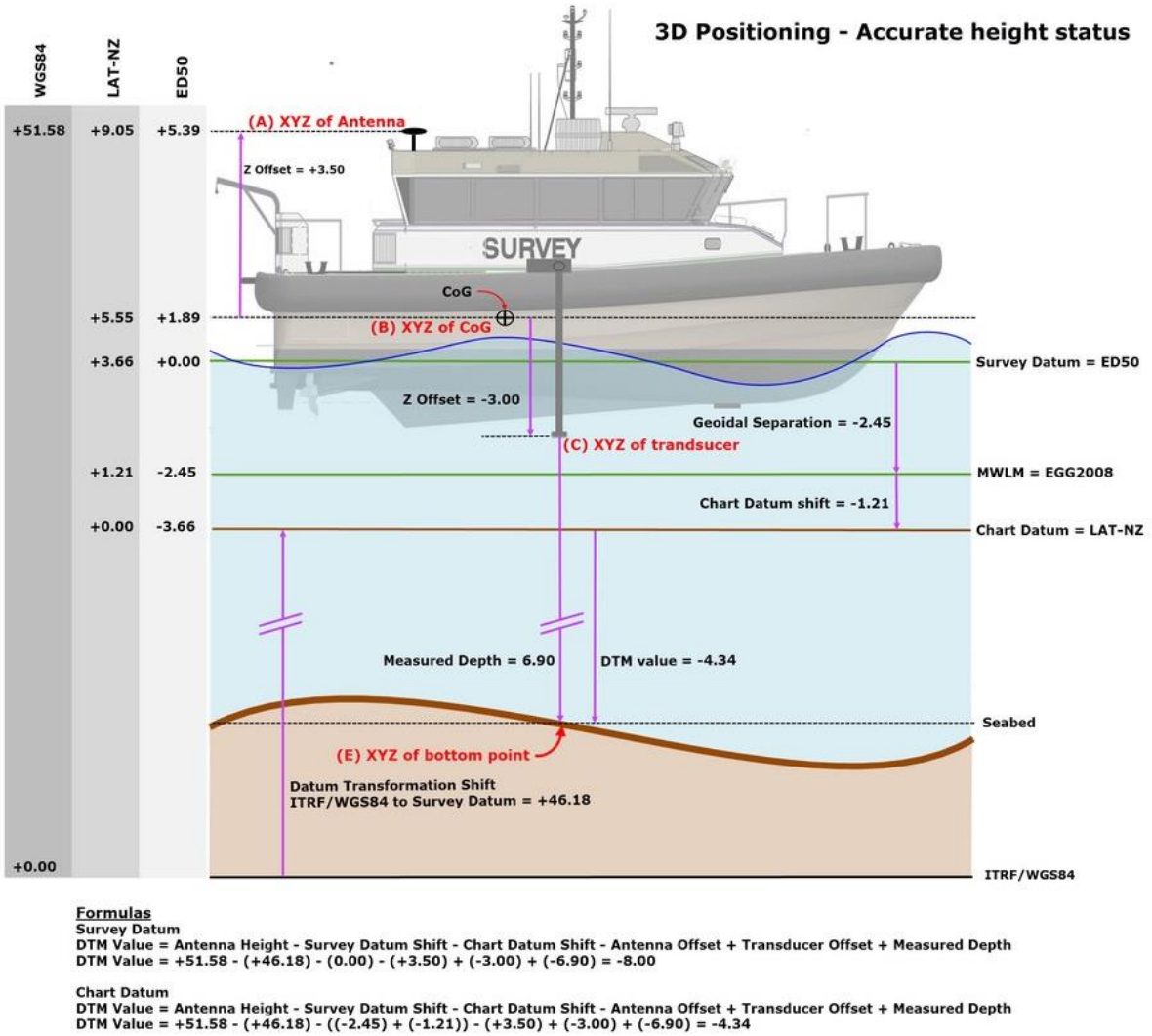


Figure 3-1: QINSy's method for accurate tide calculation.

In the event that corrections drop out they can be applied in post processing.

4. QA/QC CHECK

The processed values obtained from the onboard processing team during the survey were checked before the ALARP certificate phase. This quality control check of the input data validated the quality of the processing method.

Below are presented the QA/QC checks made for the measurements:

- QC0: Check of the geophysical value
- QC1: Check of the sensor position
- QC2: Check of the altitude of sensor and dynamic coverage
- QC3: Check of the noise
- QC4: Check of the speed and sampling frequency

5. METHODOLOGY

5.1. MBES BATHYMETRY

5.1.1. Data acquisition

The main objective of the MBES data acquisition is to identify pUXO in the ALARP box areas and buffer zones, therefore, the total coverage of the study area was not necessary. Due to this the project lines have been designed with a spacing of 30 meters.

During the data acquisition, the vessel's master must follow the previously programmed routes of the project lines, governed by the indications of the computer screen (Helmsmann indicator), which is shown, by means of visual and audible alarms, when it separates from its course more than a specified amount (variable according to weather conditions in the area, but never more than 2.5 metres from the theoretical line), and also when there is a problem in a peripheral, such as the loss of GPS corrections.

While the master follows the navigation lines, the acquisition module of the hydrography program captures all the position data sent by the GPS, as well as the soundings sent by the multibeam sounder for each transmission pulse, as well as the values of the heading, wave height, roll and head angles sent by the MRU.

Parallel to the data entry, the data acquired by the equipment and peripherals is synchronized. This process is carried out by QINSy itself, complemented by the input of the time and the pulse per second (PPS) provided by the MRU, so that all the data is time synchronised.

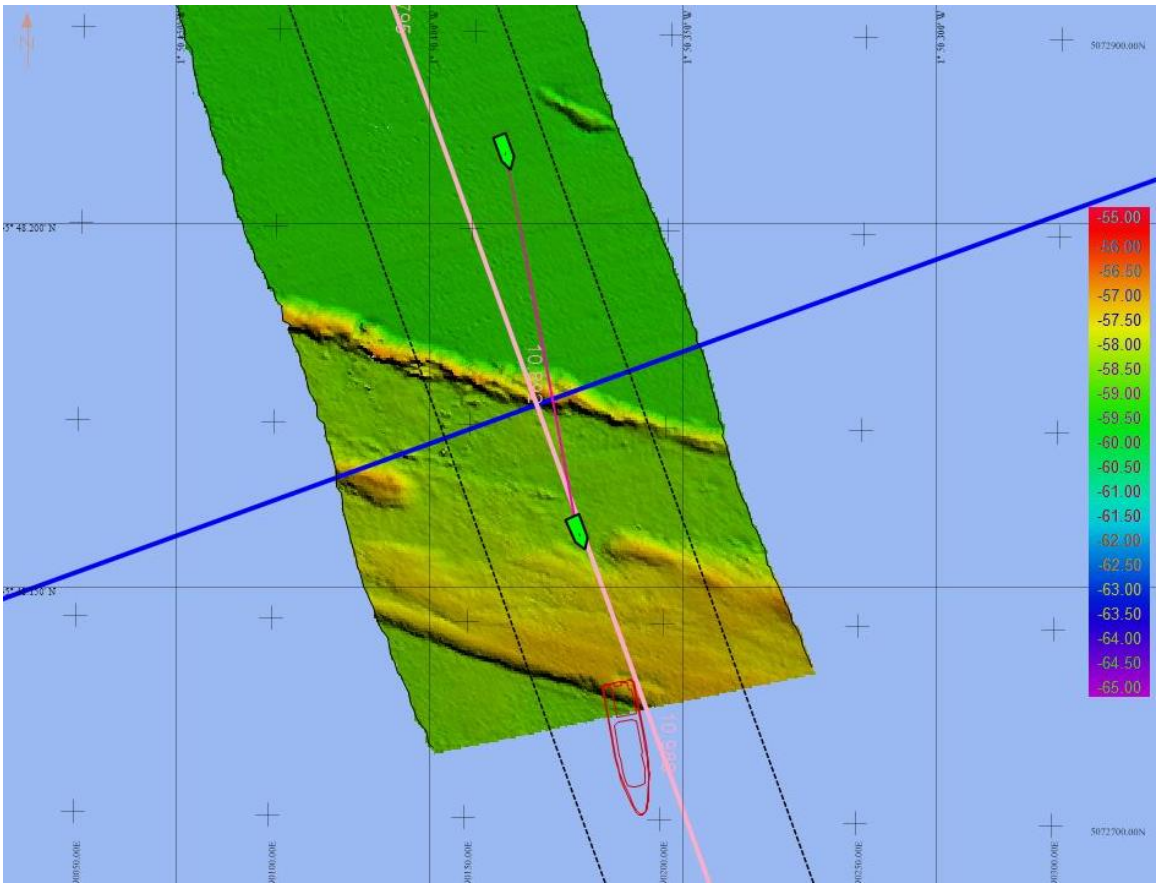


Figure 5-1: MBES bathymetry data acquisition with the QINSy software.

5.1.2. Data processing

A single head Kongsberg EM 2040 high resolution MBES system that is permanently installed on the Geo Focus vessel was used to produce digital terrain models (DTMs).

Along the processing phase of the acquired data, the lines on the screen are processed in order to manually match the height of the bathymetric lines and also correct the noise that appears in the records, noise produced by multiple factors such as, multipath in position, air bubbles, motor interference of the vessel etc. in the digital register of soundings.

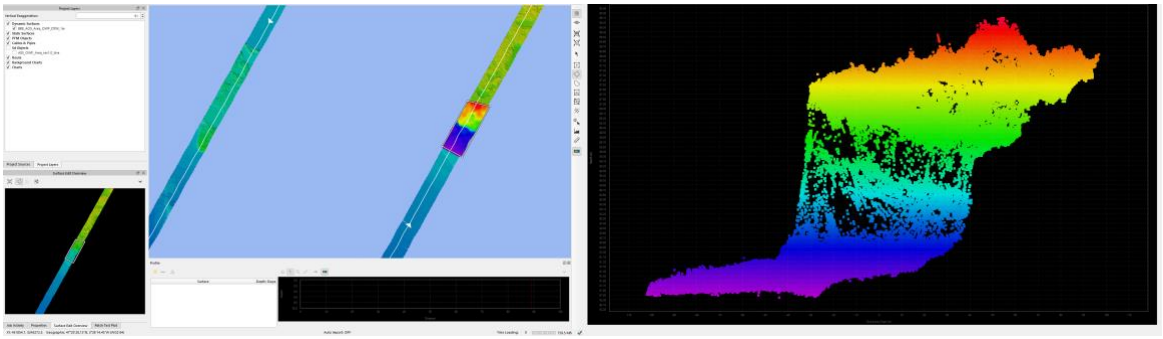


Figure 5-2: Processing screen of MBES bathymetry data with the Qimera software.

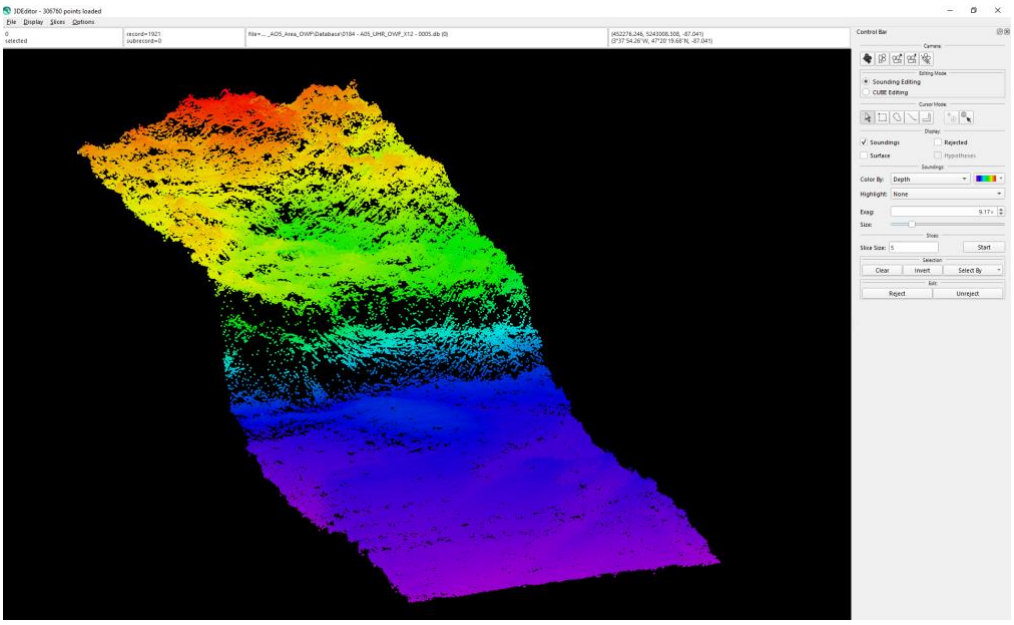


Figure 5-3: 3D image of the MBES bathymetry processing.

Once the possible existing errors in the records have been deleted, a digital model of the terrain with 0.5 x 0.5 m grid size has been made with a minimum cell size to obtain the maximum resolution of the background.

The general MBES processing workflow is presented in the following figure.

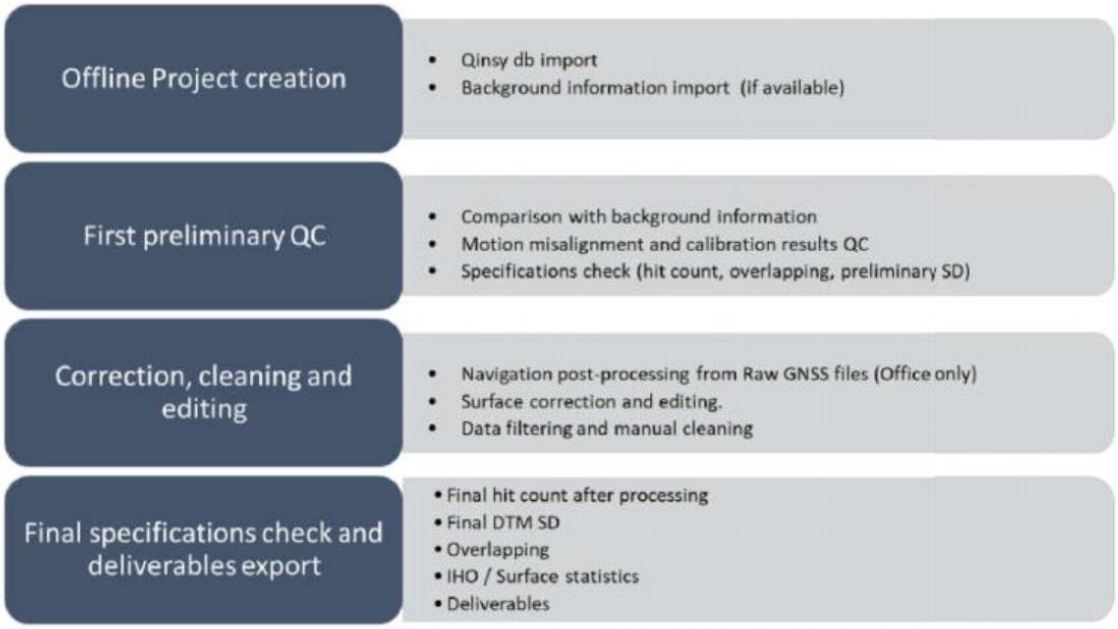


Figure 5-4: MBES bathymetry processing overview.

5.1.3. Target picking

The target picking was done using a GIS platform to detect and digitize the contacts present over the seabed surface.

5.2. SIDE SCAN SONAR

5.2.1. Data acquisition

The objective of this phase of data acquisition is the detection of possible sonar targets lying on the seabed. Due to the total coverage requirements of the seabed within each of the UXO boxes, a survey line spacing of 40 metres was utilised.

A side scan sonar system comprises a processing unit connected through a cable to a wet unit that transmits and receives acoustic energy. Side scan sonar can determine seabed morphology and configuration by means of acoustic signals. It can also determine its composition, identifying different seabed strata as hard (rocky or consolidated), soft or sedimentary, as well as identifying areas of seagrass.

Side scan sonar systems can work in different frequency ranges: systems working in high frequencies, (between 500 kHz and 900kHz) offer higher resolution but lower ranges, with systems working in low frequencies (100 kHz), offer lower resolution but higher ranges. For this survey, a frequency of 900KHz was utilised. The reflection of the signal coming from the seabed is detected by the same transducers, amplified and transmitted to the control unit, and recorded and displayed on the computer screen, providing an acoustic map. With this data, it is possible to identify different seabed morphologies, together with the visualization of any seabed objects.

When the vessel is underway, the winch operator can start deploying cable until the fish gets to the desired working depth of about 6 m above the seabed.

5.2.2. Data processing

Once the SSS data were acquired and then exported into JSF format, the files are imported into the SonarWiz 7 software. Channels 3 and 4 were used for recording the high frequency data.

After data importation into the SonarWiz 7 software, an initial navigation correction was made for each imported file, applying smoothing filters to avoid errors in the heading of the tow fish. The track position was smoothed using a mean value of 300 pings.

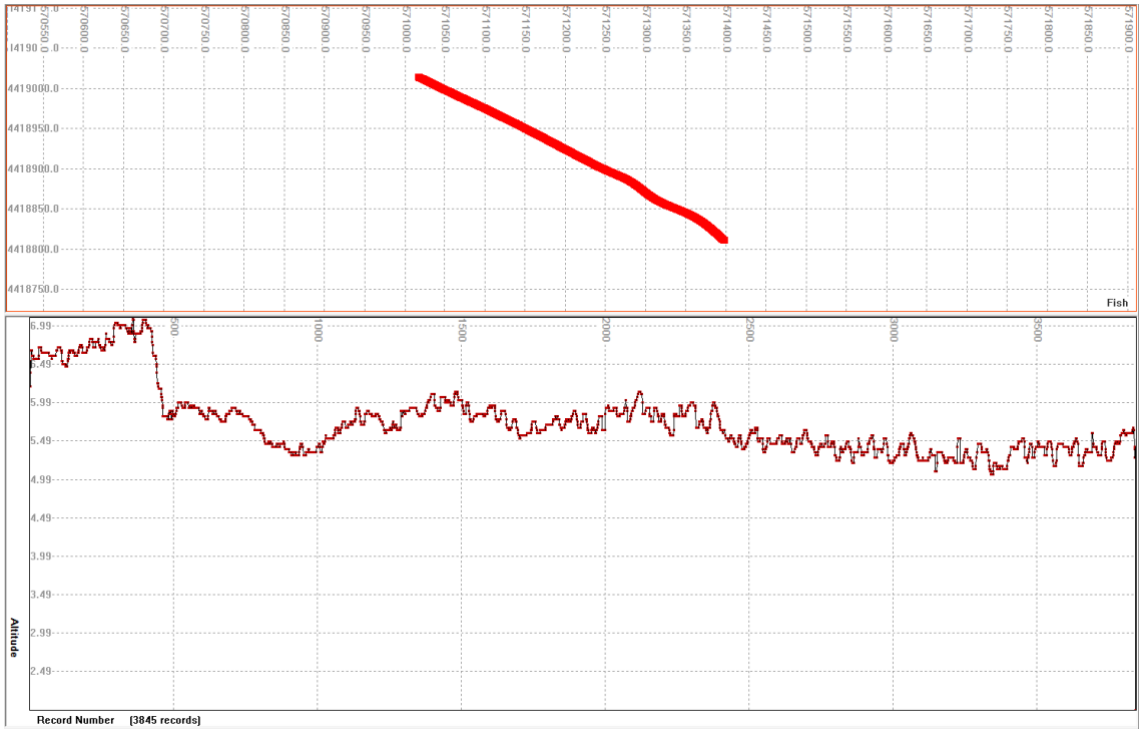


Figure 5-5: Navigation editor in SonarWiz 7.

After the aforementioned corrections were implemented, the water column for each file was eliminated, by applying the bottom-tracking acquired during the survey, as shown in Figure 5-6. If bottom-tracking of the tow fish failed during the survey, it was done automatically by applying filters or by drawing the seabed manually during post-processing. This enables slant range corrections for the digital data to be as accurate as possible.

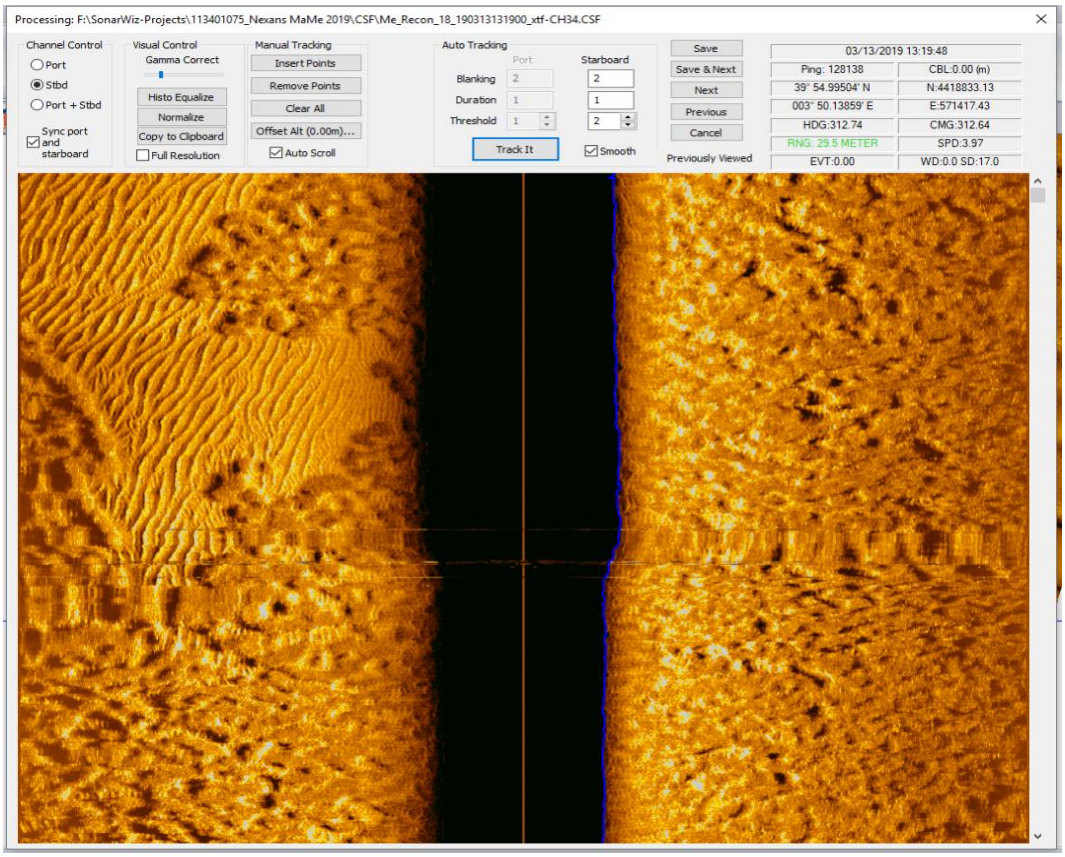


Figure 5-6: Bottom tracking processing drawn in blue in the SonarWiz software.

The following steps during SSS processing in the SonarWiz 7 software are the application and enabling of the EGN filter, and the enabling of the de-stripe filter.

At this point during data processing, a processed MBES geotiff is imported into the project. Using the MBES information, rotations to the SSS file are applied, in order to match feature orientations seen in the MBES data. Where necessary, a move offset can be applied to the SSS file, in order to match features within the MBES data.

The final processing step is the export of the sonar files into a GIS software package, where all of the information is integrated and a sonar mosaic is generated. This is carried out by converting the JSF files into 32bits RGB Geotiff images, to obtain georeferenced images of the processed data, with a resolution of 0.1 m.

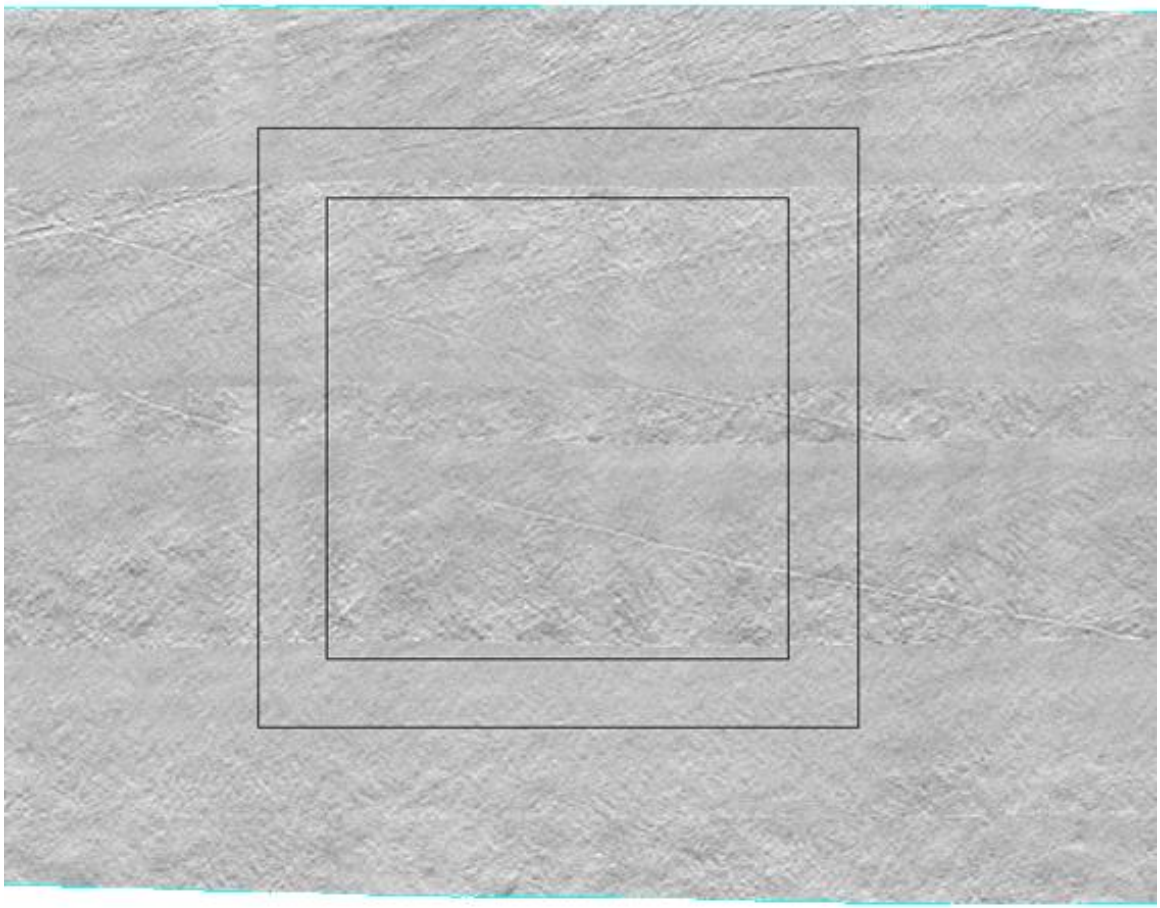


Figure 5-7: Example of an UXO box 32bits RGB SSS Mosaic with a resolution of 0.1 m.

5.2.3. Target picking

The picking of the targets was carried out on the sonograms with the “Digitizing View” tool.

When an object is detected, it is targeted, and its width and length is directly measured. The height is calculated based on the shadow on the sonogram. These measurements are performed on the processing software (SonarWiz).

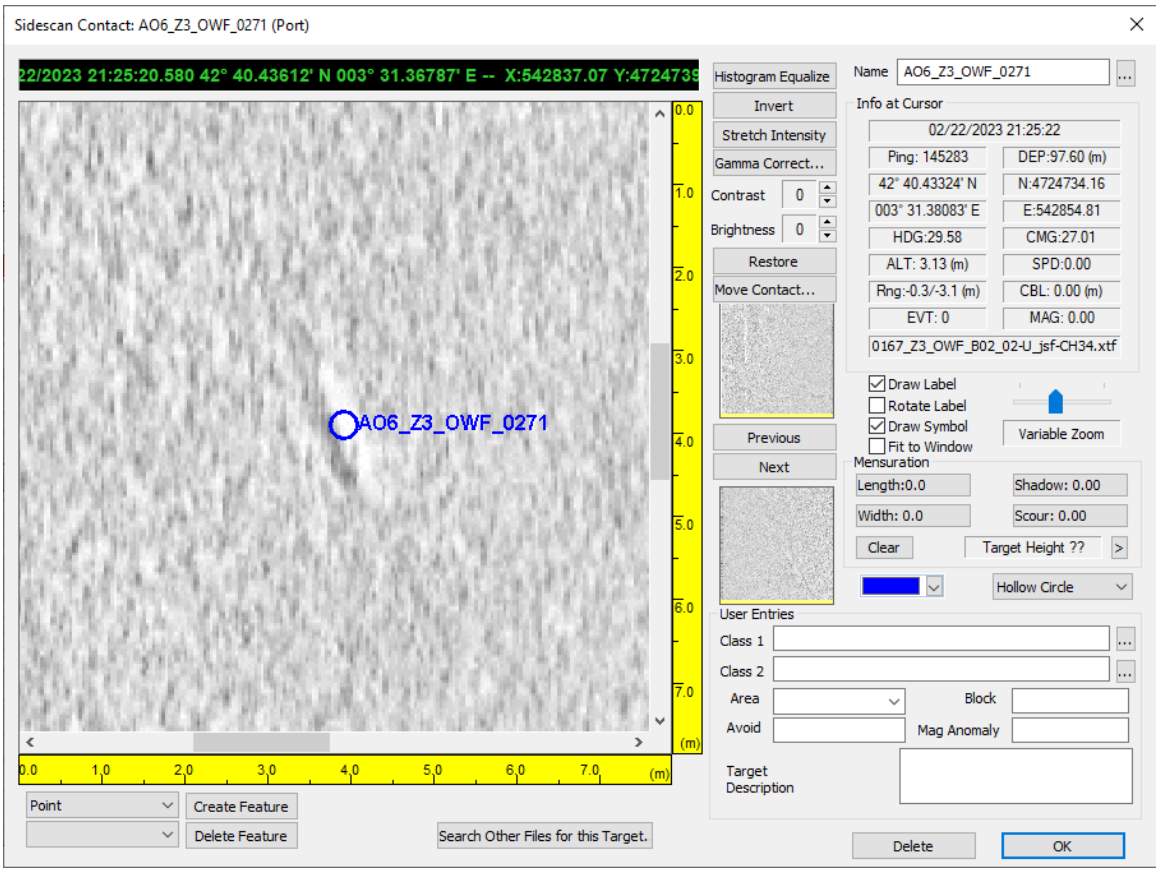


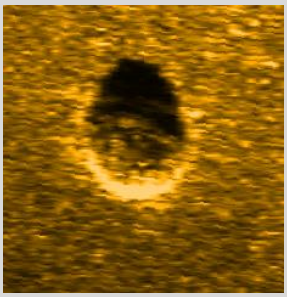
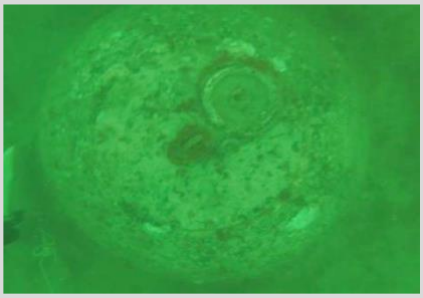
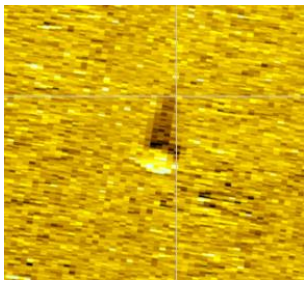
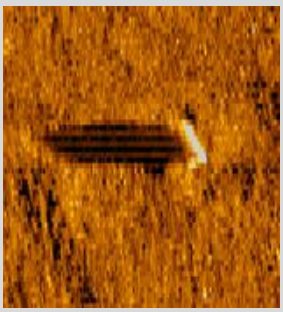
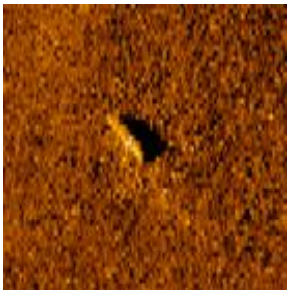
Figure 5-8: SonarWiz targeting tool.

Detection has been performed for all the objects/anomalies/obstructions that were detected during the observation of the sonograms. To prevent to pick too many targets of geological origin, it has been decided to pick:

- Objects that are isolated within a quiet and/or sandy environment.
- Objects that have an unusual shape or that looks hand-made or non-natural.

Below, in Table 5, a bibliographic comparison of detected sonographies is presented, showing the similarities between boulders and UXO.

Table 5: Comparison of sonar image of UXO and boulders using SonarWiz.

Sonar image	Photography	Identification
		**RMAK Mine** ***(Cherbourg)***
		**Boulder** ***(Normandie)***
		**BM1000** ***(Normandie)***
		**Boulder** ***(Normandie)***

5.3. SUB-BOTTOM PROFILER

5.3.1. Data acquisition

The objective during SBP data acquisition was to detect possible UXO below the seabed. Due to this, the project lines were designed with a line spacing of 30 metres.

An SBP system comprises a processing unit, which is connected through a cable to the equipment that transmits and receives acoustic energy. Seismic systems operate according to the principle by which transmitted seismic-acoustic energy affects an acoustic interface, being partially reflected by this surface. An acoustic interface is that area of the subsoil through which there is some contrast in acoustic impedance (acoustic impedance is defined as the product of the density of the medium by the propagation speed of compressional sonic waves (p waves)). Reflection is obtained by variations in acoustic impedance, which is a measure of the acoustic contrast of the materials on each side of the interface.

There are two properties that characterize any seismic system: penetration and resolution. These two properties have an inverse relationship:

- **Penetration**: Is the maximum depth at which a reflector can be detected. It depends on the power and frequency of the emitted signal; a lower frequency corresponds to a longer wavelength and greater penetration. At each interface, the amount of energy transmitted to the next decreases by an amount equal to that which has been reflected.

- **Resolution**: Is the minimum distance at which 2 consecutive reflectors can be identified, for a given frequency signal. The higher the frequency, the higher the resolution. A horizontal resolution can be considered when there are changes in the acoustic response in the horizontal plane.

SBP data was acquired using an Innomar SES 2000 compact, with a frequency of 8 kHz, 1 cycle of pulse, 20 m of sweep and a 4-8 Hz trigger rate. This SBP system was heave and

roll compensated. Navigation and real time sensor height were received directly from Qinsy. Data was recorded in 16-bit format.

5.3.2. Data processing

All sub-bottom profiler data processing was carried out using SonarWiz software. The files were heave and tidally corrected, to ensure that the SBP data matched up with corresponding MBES data. Frequency filtering and a TVG were also applied and then pre-processed SEGY files exported. SEGY files were then imported into Seisee software, for final QC. The SBP data were deemed to be of good quality, throughout the survey.

Onboard SBP processing and quality control workflow was performed as follows:

i. Importing raw files (.JSF files in the case of Edgetech equipment) or converting raw files to SEG-Y format, through SES Converter (in the case of Innomar compact) and import them into the SonarWiz software.
ii. Navigation Quality Control, looking for stable navigation, without peaks and gaps.
iii. Bottom tracking, Gain configuration and frequency filtering.
iv. Ticking off SBP lines against the online log, to make sure a complete data set was present
v. Tide and heave correction and verification, with a pre-processed bathymetric grid. With this bathymetric grid, the separation offsets of the SBP data were observed against the real multibeam seabed, and this was applied to give a 3D reference to the SBP data.

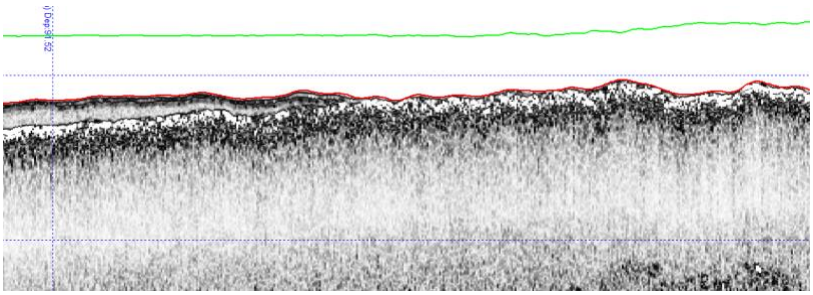


Figure 5-9: Example of a SBP profile before applying tides, heave and swell and referencing to a bathymetric grid.

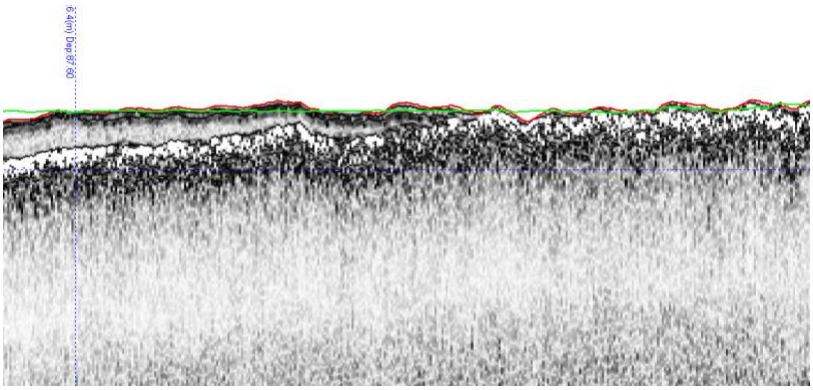


Figure 5-10: Example of a SBP profile after applying tides, heave and swell and referencing to a bathymetric grid.

5.3.3. Target picking

The processed profiles are then visualized in SonarWiz, where the dynamic color scale is adjusted, in order to visualize the data at greater depths by playing on with the contrasts. The "Target Picker" tool allows data acquisition by pointing points along the profiles.

The pointed data is then exported into a grid (x, y, z) and can be added in the map of the project. For each pointed target, a ".gif" file is exported in order to clearly see the picked target over the SBP profile.

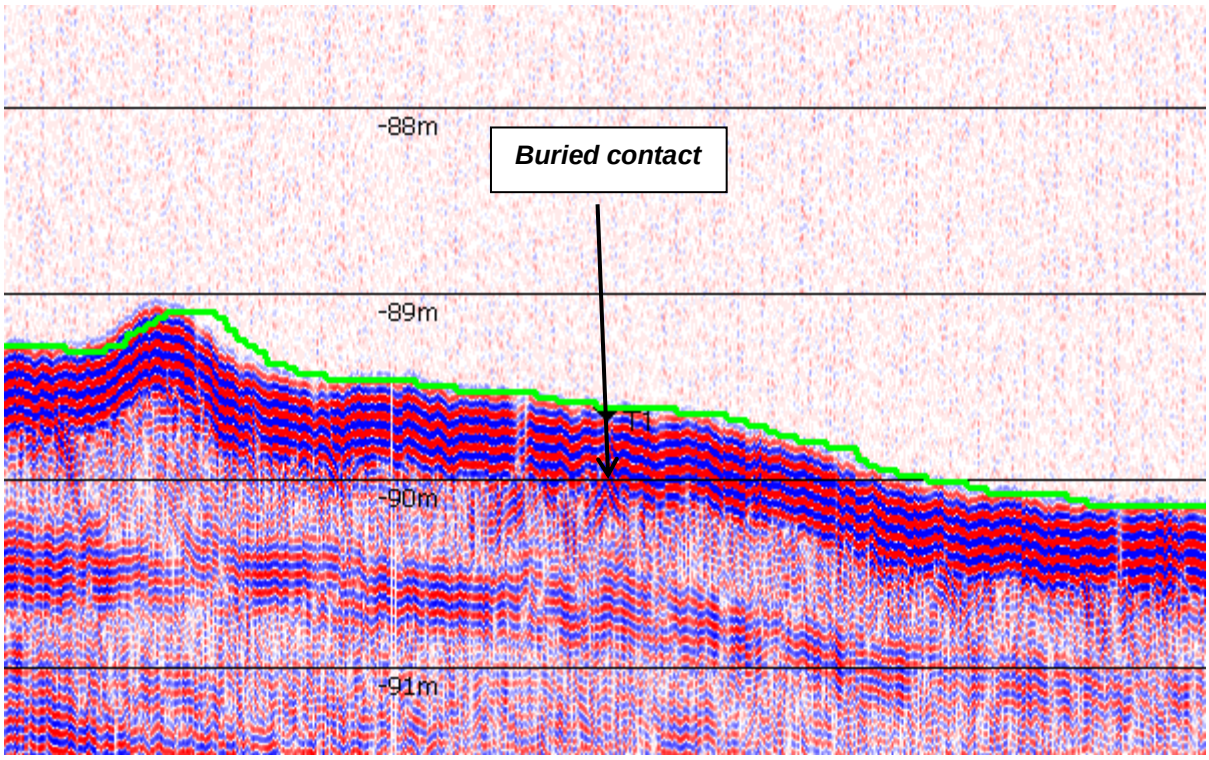


Figure 5-11: Target example along a SBP profile.

This analysis of the profile allows the identification of punctual objects, but not specifically ferromagnetic elements. It can therefore be difficult to distinguish anthropogenic elements from geological elements (boulders, gravel, coarser sediments, etc.).

It has been selected contacts that could be characteristic of buried punctual objects. Contacts causing refraction hyperbolas, particularly intense reflectors, isolated and contrasting within the surrounding sediments, atypical reflectors such as sloping or angular reflectors.

6. RESULTS

6.1. TARGET PICKING

Sidescan sonar anomalies were picked all along the sidescan sonar lines, and not only in the vicinity of the UXO boxes. Sidescan sonar anomalies are listed in the APPENDIX II – TARGET LIST.

6.2. DISCRIMINATION OF pUXO TARGETS

The identification of punctual objects has been made but cannot specify if there are ferromagnetic elements. It can therefore be difficult to distinguish anthropogenic elements from geological elements (boulders, gravel, coarser sediments, etc.).

Any anomaly can therefore correspond to a potential UXO

7. AVOIDANCE DISTANCES

Following the analysis, we are looking for as low as reasonably practicable (ALARP), areas that can be considered clear of any pUXO. The avoidance criteria has been defined following the UXO threat and risk assessment with geotechnical investigation risk mitigation strategy recognised and the desktop studies (**Ref. 01**):

Thus, the avoidance distance can be calculated as follows (Figure 7-1):

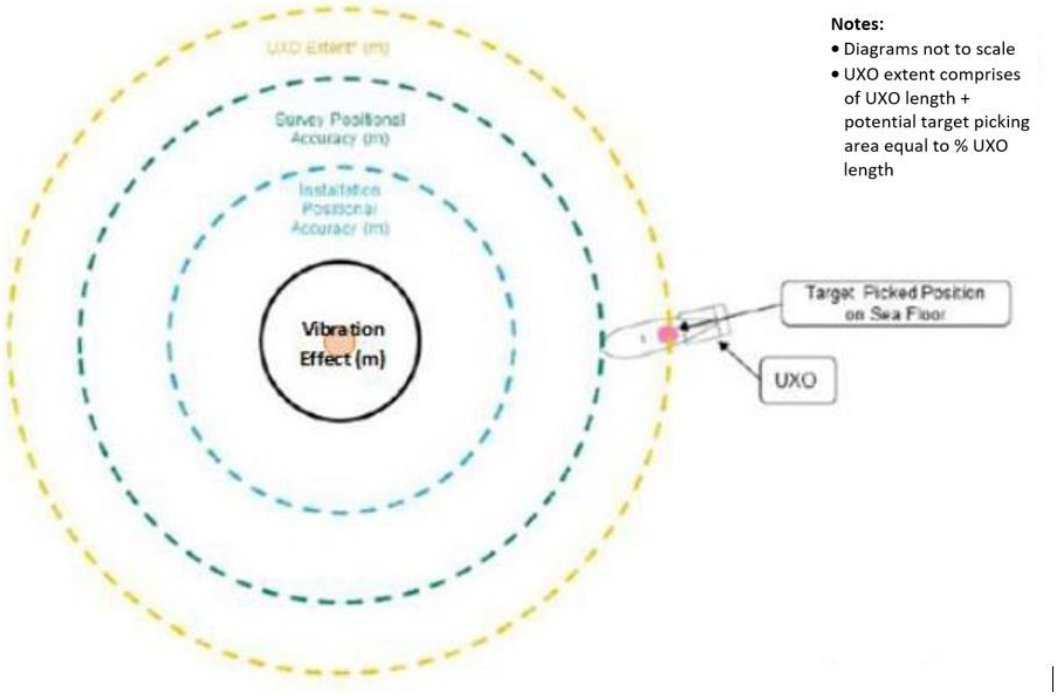


Figure 7-1: Avoidance distances.

Avoidance distance = Geotechnical tool width + Vibration effect distance + Geotechnical tool positioning accuracy + UXO survey accuracy + Ammunition length

The effect of the generation of seismic waves during vibro-driving or pile driving has to take in account in the case of geotechnical drilling or pile driving. The machines generate a wide variety of seismic waves (pressure, Rayleigh shear) (*Study report DRS17-164706-11171B, INERIS*) that can trigger UXO detonation. This effect should not be considered for other geotechnical work such as jack up or anchor installation.

For the **OWF area**, the **15 m buffer** has been applied as avoidance distance according to the document delivered by 6 Alpha Associates Limited (**Ref. 01**).

A safety buffer of 15 m is to be employed from any isolated anomaly.

This was achieved through geospatial processing by QGIS software.

First, the areas that could not be considered as white areas are mapped, grouping the pUXO targets (MBES, SSS and SBP contacts) and potential saturated areas. Afterwards, the "avoidance areas" are mapped with an avoidance zone of 15 meters (a 15 m safety buffer around the anomaly) away from all the potential UXO (pUXO) anomalies or any saturated or excluded areas. This avoidance area is also applied from the edge of the dataset inwards the center of the survey area.

Then the free space between these avoidance areas and the detection surface and the survey limits is mapped, and a workable area is obtained.

8. CONCLUSION

ALARP areas of 18.000 m^2 has been found for the 20 GI locations. An alternative location has been found for 13 positions and has been indicated in grey in Table 6.

Table 6: Final GI box locations.

ID	GI box	UTM X	UTM Y	Original coordinates and distance (m)
1	Z3_OWF_B01	544417.00	4727831.00	544423.90 4727858.24 27.54 m
2	Z3_OWF_B02	542916.00	4724853.00	-
3	Z3_OWF_B03	536916.00	4724837.00	-
4	Z3_OWF_B04	532420.00	4726325.00	-
5	Z3_OWF_B05	536922.00	4727847.00	-
6	Z3_OWF_B06	539894.00	4729325.00	539929.26 4729347.36 42.06 m
7	Z3_OWF_B07	544438.00	4732357.00	-
8	Z3_OWF_B08	545891.00	4738356.00	545881.67 4738363.53 12.90 m
9	Z3_OWF_B09	542909.00	4739853.00	-
10	Z3_OWF_B10	539952.00	4736850.00	539955.66 4736846.45 5.09 m
11	Z3_OWF_B11	542961.00	4735353.00	542929.41 4735366.72 31.56 m
12	Z3_OWF_B12	538576.00	4732342.00	-
13	Z3_OWF_B13	536916.00	4735347.00	536921.14 4735340.61

ID	GI box	UTM X	UTM Y	Original coordinates and distance (m)
				11.38 m
14	Z3_OWF_B14	533914.00	4730819.00	533935.81 4730832.92 21.99 m
15	Z3_OWF_B15	530902.00	4729307.50	530929.22 4729325.39 29.87 m
16	Z3_OWF_B16	530949.00	4735899.00	530950.50 4735851.87 49.74 m
17	Z3_OWF_B17	538435.00	4741361.00	538466.90 4741342.57 36.04 m
18	Z3_OWF_B18	535498.00	4744295.00	535473.56 4744333.47 43.49 m
19	Z3_OWF_B19	530959.00	4744346.00	530976.16 4744320.22 29.14 m
20	Z3_OWF_B20	534020.00	4741284.00	533964.72 4741333.36 70.91 m

9. REFERENCES

In accordance with:

- Letter the "*Inspection des poudres et explosifs*" of the French Ministry of Defence and the *"Direction générale du Travail"* of the French Ministry of Labour of September 18th, 2013, relating to pyrotechnic clearance carried out on civil land.
- Decree No. 2014-381 of March 28, 2014, regulatory part Art. R.733-1 to 16 and legislative part Art. L. 733-1 to 3.

In reference to:

- Decree No. 2005-1325 of October 26, 2005, amended from the Ministry of Defence relating to the safety rules applicable during work in the context of a pyrotechnic clearance site and the two implementing decrees.

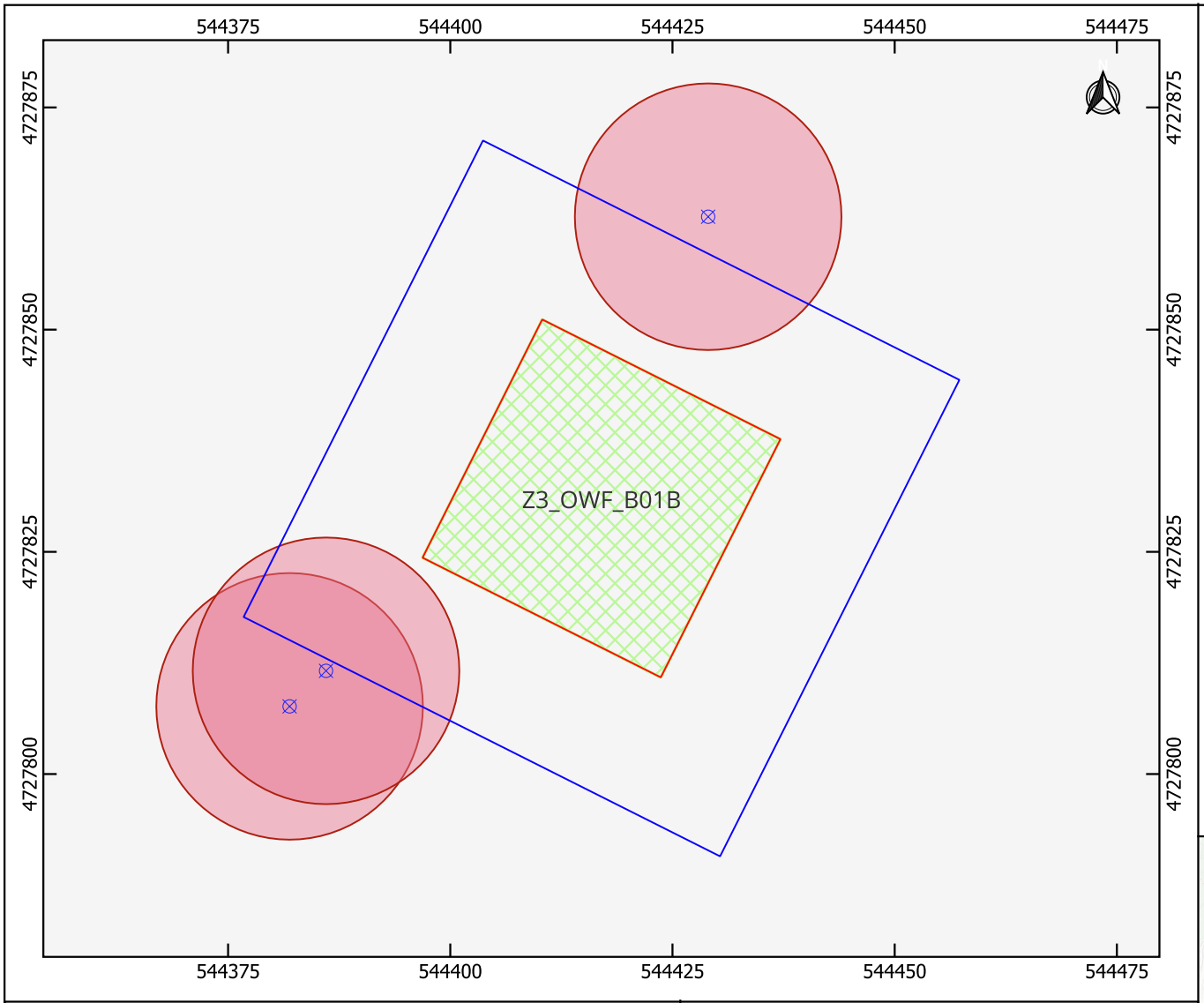
Ref.01. Unexploded Ordnance Threat and Risk Assessment: *9797_UXOTARA_AO6 Mediterranean_DNV_V1.*

Ref.02. Travaux sous-marins – Rapport final : RTE Midi Provence – Détection sous-marine Magnétométrique REV2 – Géomines

Ref.03. Etude historique pyrotechnique – RTE Projet Midi Provence – Géomines

Ref.04. 002GR17-JFM – Elenkhos Special Risks & consulting – Rapport d'évaluation des risques sur munitions non explosées

APPENDIX I – ALARP CERTIFICATE MAPS



ANNEXE A: Z3_OWF_B01B
ALARP CERTIFICATE GIS

Scale: 1/750 Date: 2023-03-20

Geodesy : WGS 84 - UTM 31N Version: V0

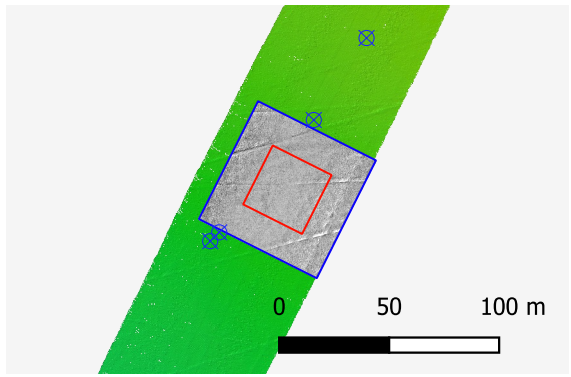
0 10 20 30 40 m

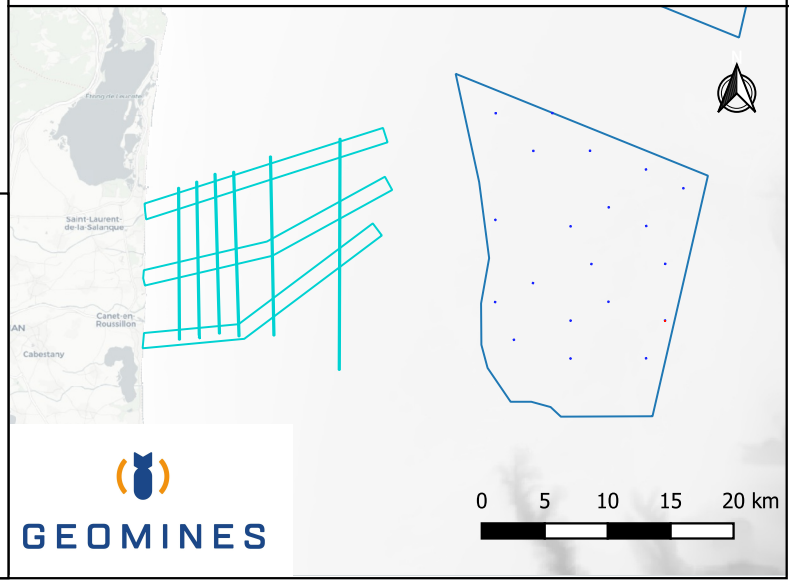
Alternate location
x=544417,y=4727831

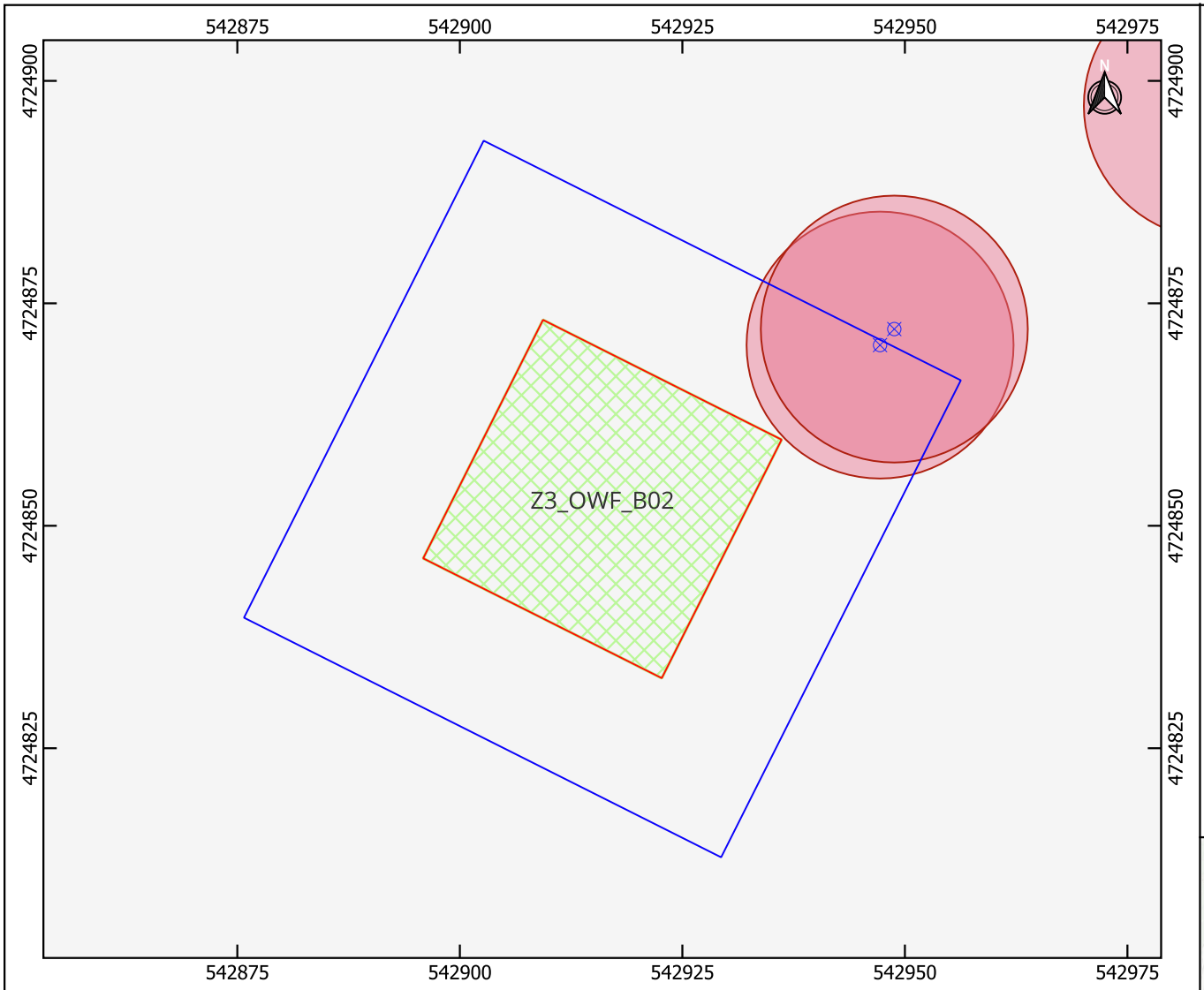
OWF Zone 3
- Geotechnical Boxes OWF zone 3
- Survey extent

Concession
- Zone Parc AO6
- Zone corridors AO6

ALARP
- AO6_Z3_OWF_SSS_targets
- AO6_Z3_OWF_SBP_targets
- AO6_Z3_OWF_ALARP
- AO6_Z3_OWF_avoidance







ANNEXE A: Z3_OWF_B02
ALARP CERTIFICATE GIS

Scale: 1/750
Date: 2023-03-20
Geodesy : WGS 84 - UTM 31N
Version: V0

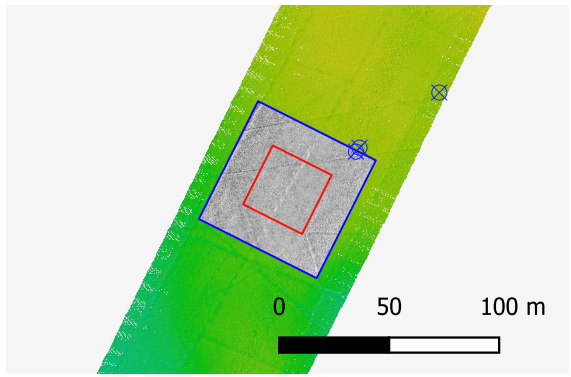
0 10 20 30 40 m

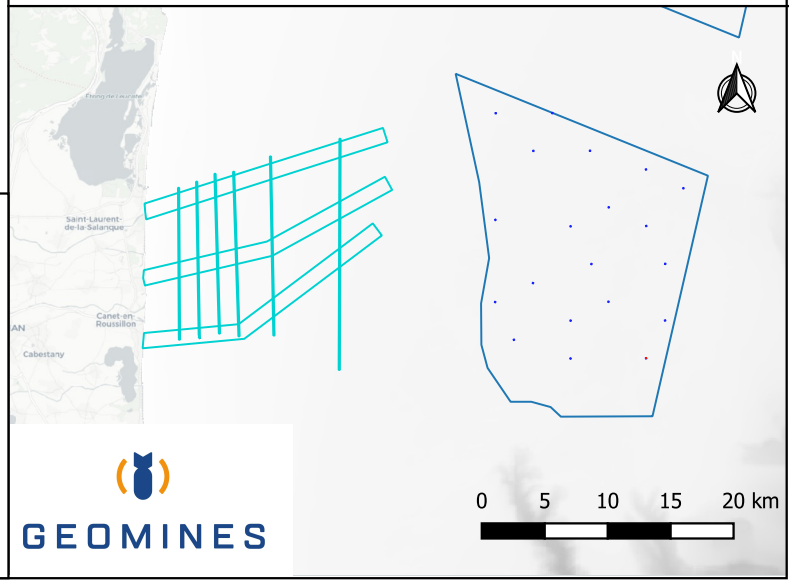
Original location
x=542916,y=4724853

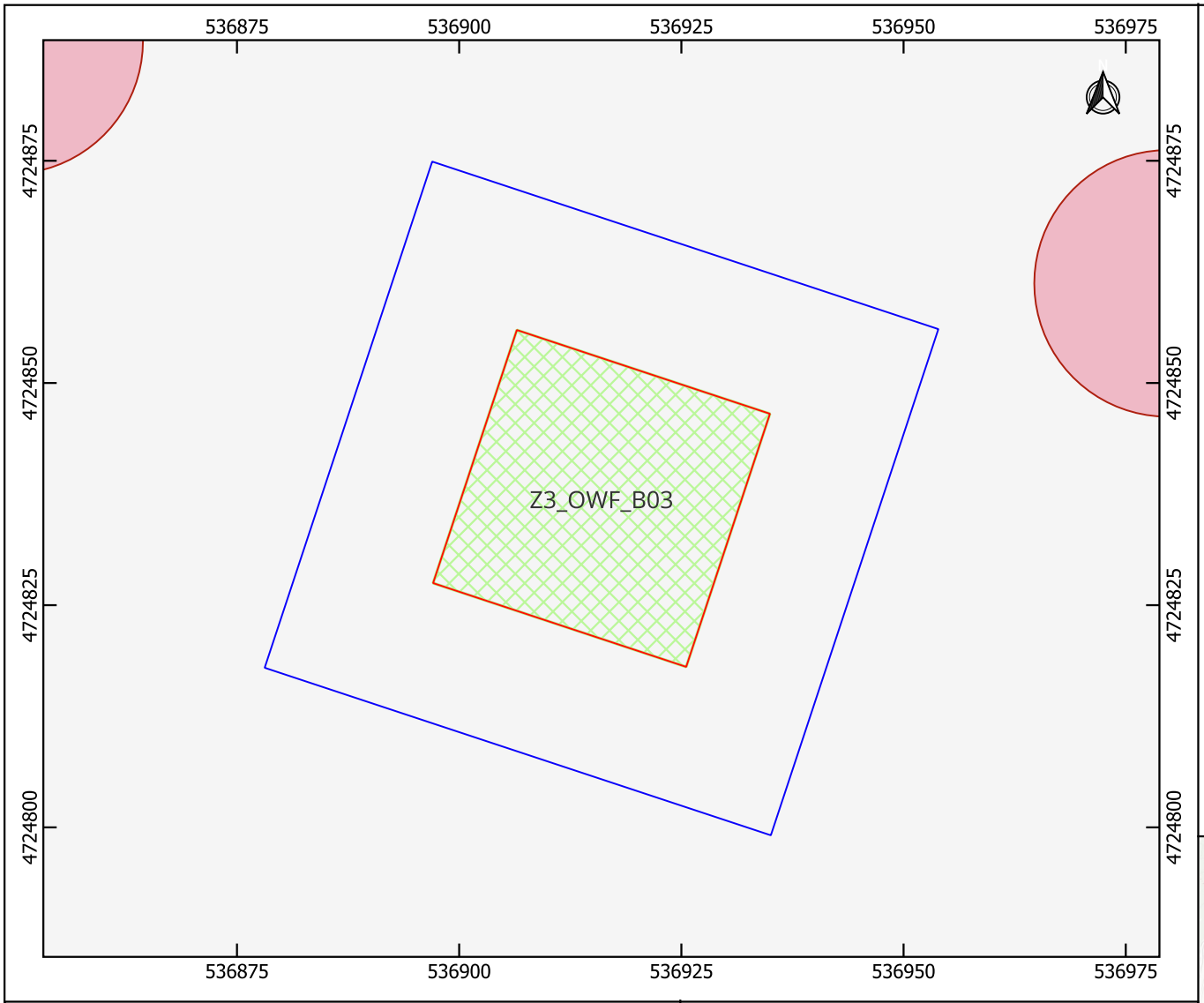
OWF Zone 3
- Geotechnical Boxes OWF zone 3
- Survey extent

Concession
- Zone Parc AO6
- Zone corridors AO6

ALARP
- AO6_Z3_OWF_SSS_targets
- AO6_Z3_OWF_SBP_targets
- AO6_Z3_OWF_ALARP
- AO6_Z3_OWF_avoidance







ANNEXE A: Z3_OWF_B03
ALARP CERTIFICATE GIS

Scale: 1/750 Date: 2023-03-20

Geodesy : WGS 84 - UTM 31N Version: V0

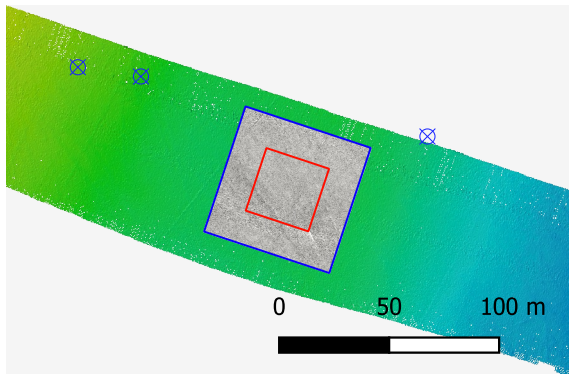
0 10 20 30 40 m

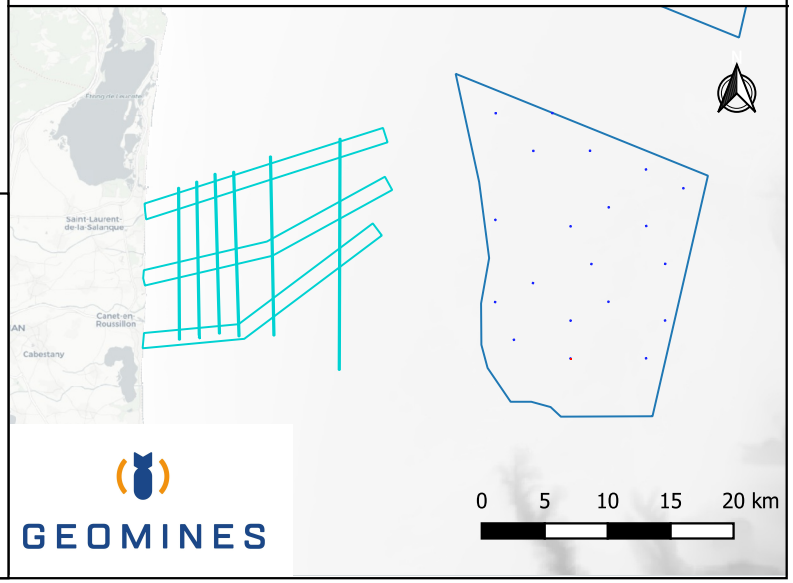
Original location
x=536916,y=4724837

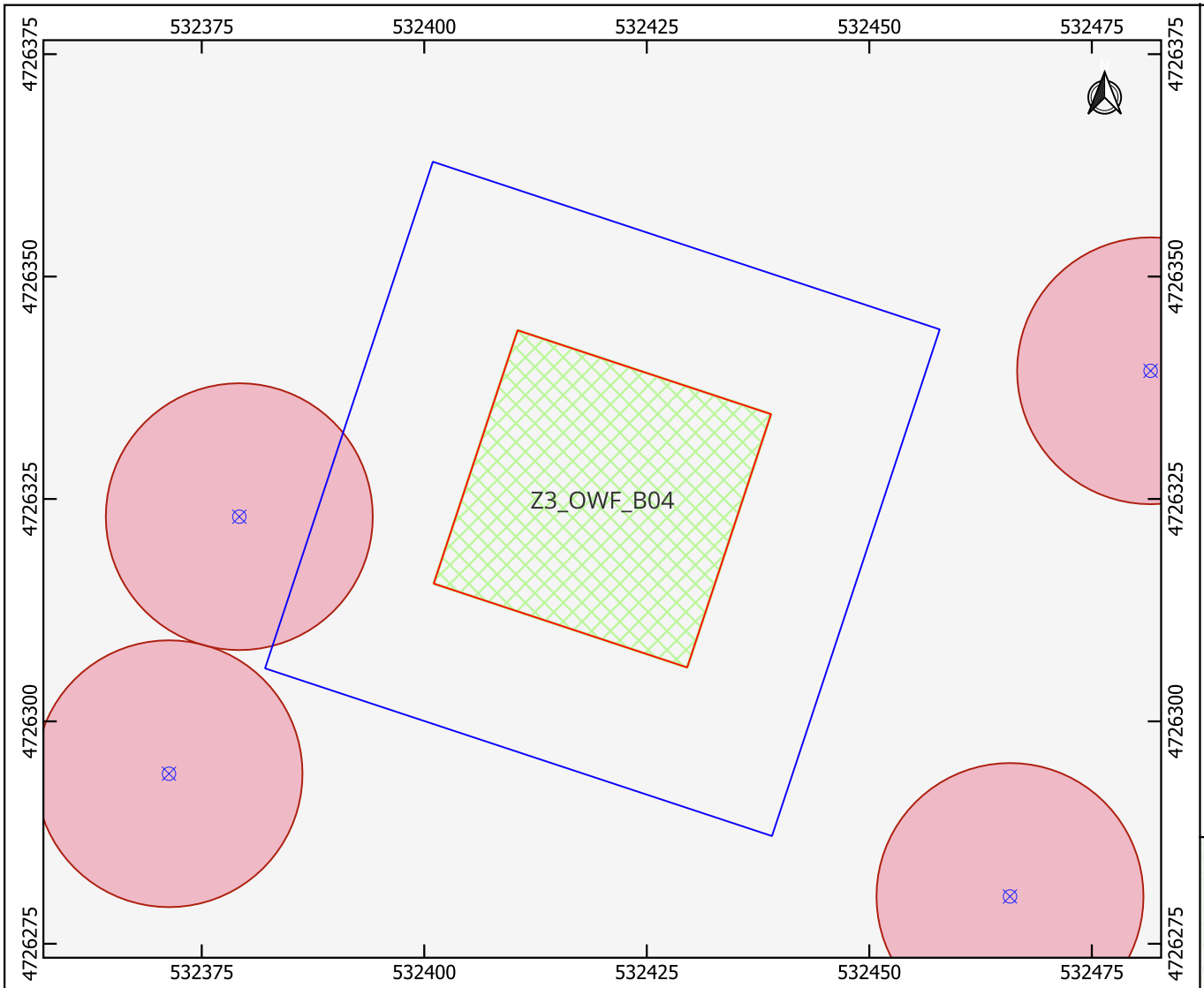
OWF Zone 3
- Geotechnical Boxes OWF zone 3
- Survey extent

Concession
- Zone Parc AO6
- Zone corridors AO6

ALARP
- AO6_Z3_OWF_SSS_targets
- AO6_Z3_OWF_SBP_targets
- AO6_Z3_OWF_ALARP
- AO6_Z3_OWF_avoidance







ANNEXE A: Z3_OWF_B04
ALARP CERTIFICATE GIS

Scale: 1/750 Date: 2023-03-20

Geodesy : WGS 84 - UTM 31N Version: V0

0 10 20 30 40 m

original location

x=532420,y=4726325

OWF Zone 3

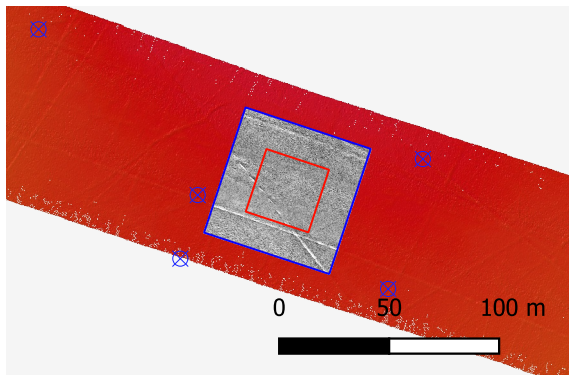
- Geotechnical Boxes OWF zone 3
- Survey extent

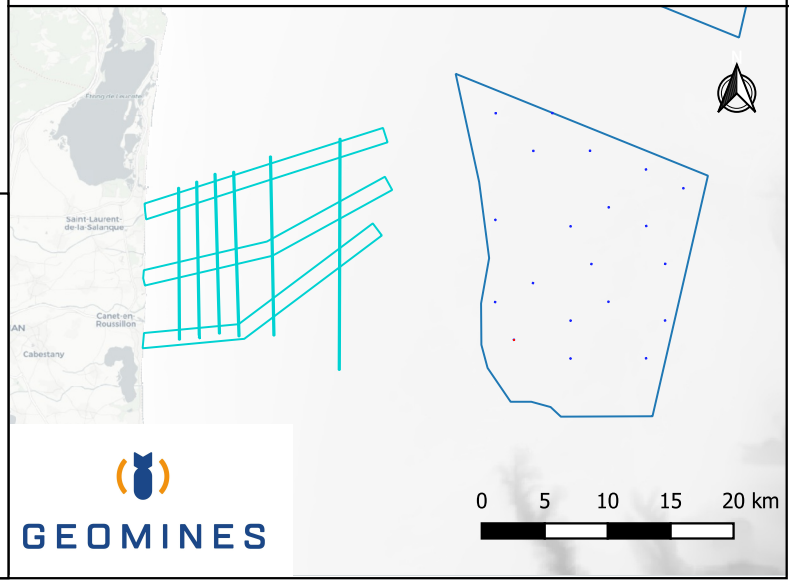
Concession

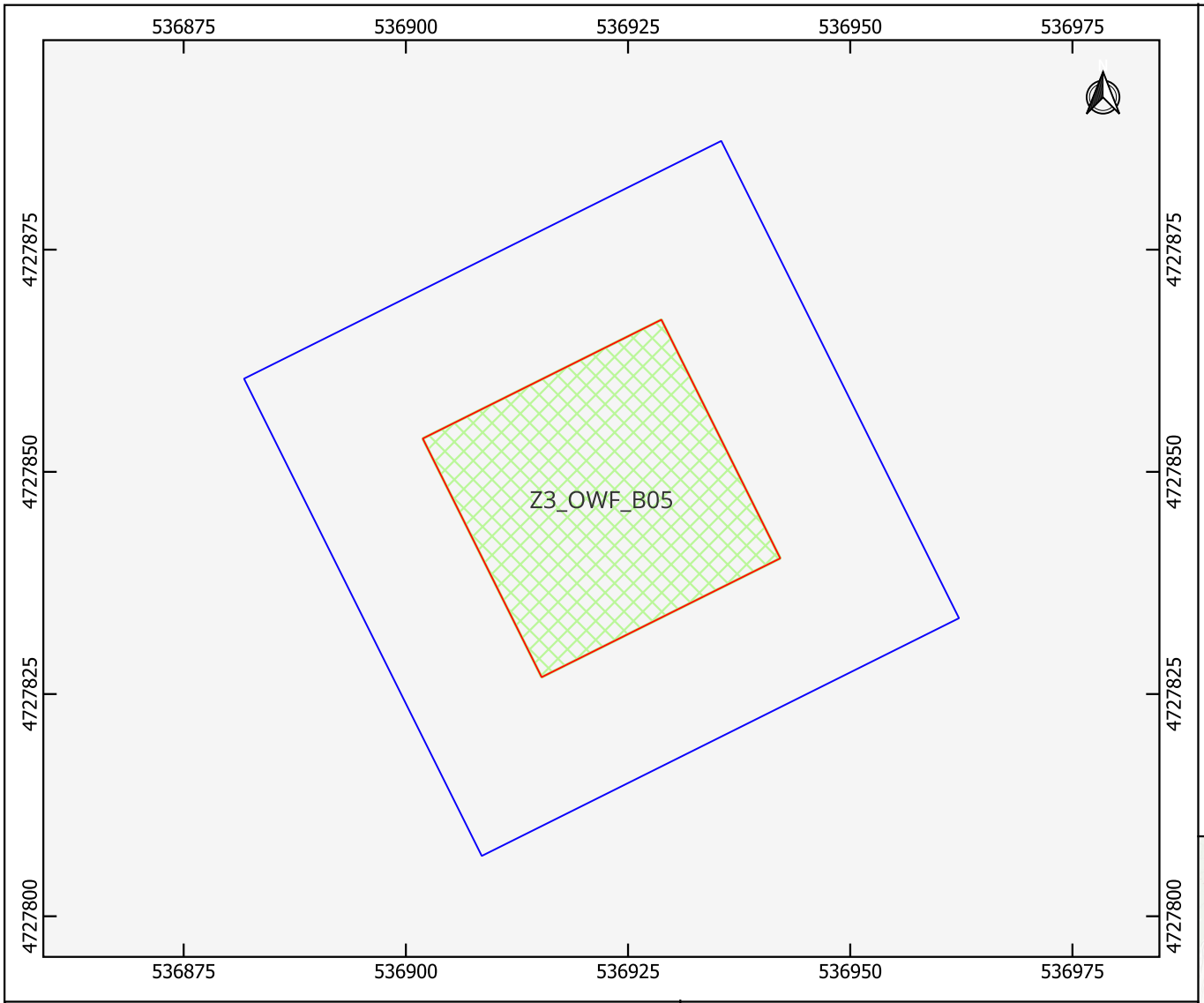
- Zone Parc AO6
- Zone corridors AO6

ALARP

- AO6_Z3_OWF_SSS_targets
- AO6_Z3_OWF_SBP_targets
- AO6_Z3_OWF_ALARP
- AO6_Z3_OWF_avoidance







ANNEXE A: Z3_OWF_B05
ALARP CERTIFICATE GIS

Scale: 1/750
Date: 2023-03-20
Geodesy : WGS 84 - UTM 31N
Version: V0

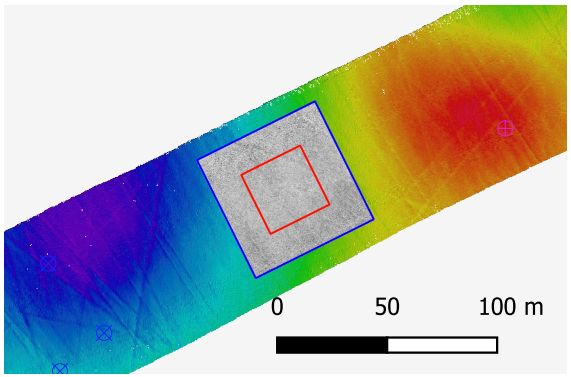
0 10 20 30 40 m

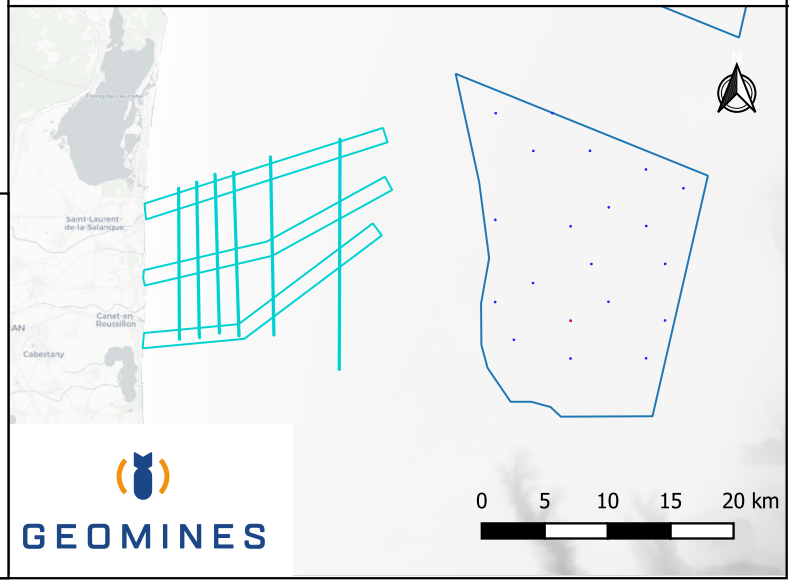
Original location
x=536922,y=4727847

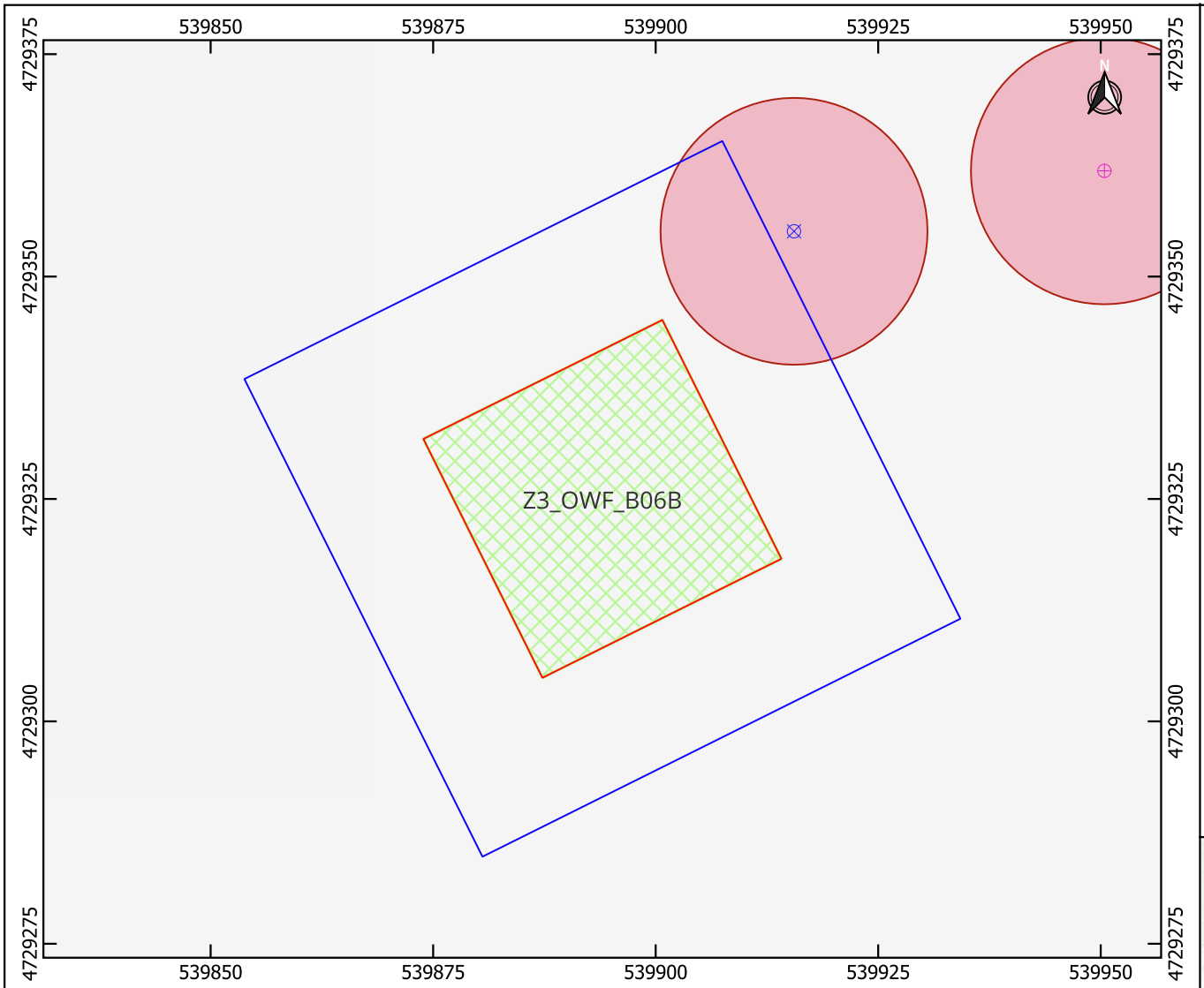
OWF Zone 3
- Geotechnical Boxes OWF zone 3
- Survey extent

Concession
- Zone Parc AO6
- Zone corridors AO6

ALARP
- AO6_Z3_OWF_SSS_targets
- AO6_Z3_OWF_SBP_targets
- AO6_Z3_OWF_ALARP
- AO6_Z3_OWF_avoidance







OWF Zone 3

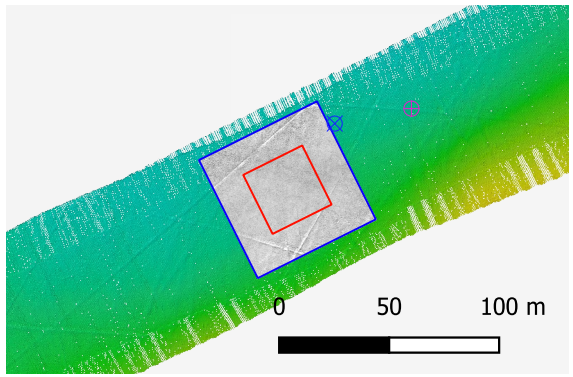
- Geotechnical Boxes OWF zone 3
- Survey extent

Concession

- Zone Parc AO6
- Zone corridors AO6

ALARP

- AO6_Z3_OWF_SSS_targets
- AO6_Z3_OWF_SBP_targets
- AO6_Z3_OWF_ALARP
- AO6_Z3_OWF_avoidance



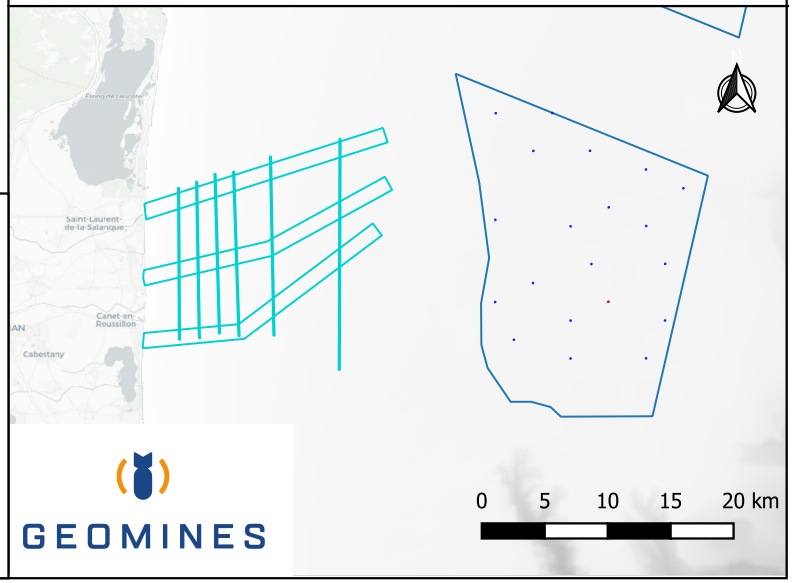
MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE

ANNEXE A: Z3_OWF_B06B
ALARP CERTIFICATE GIS

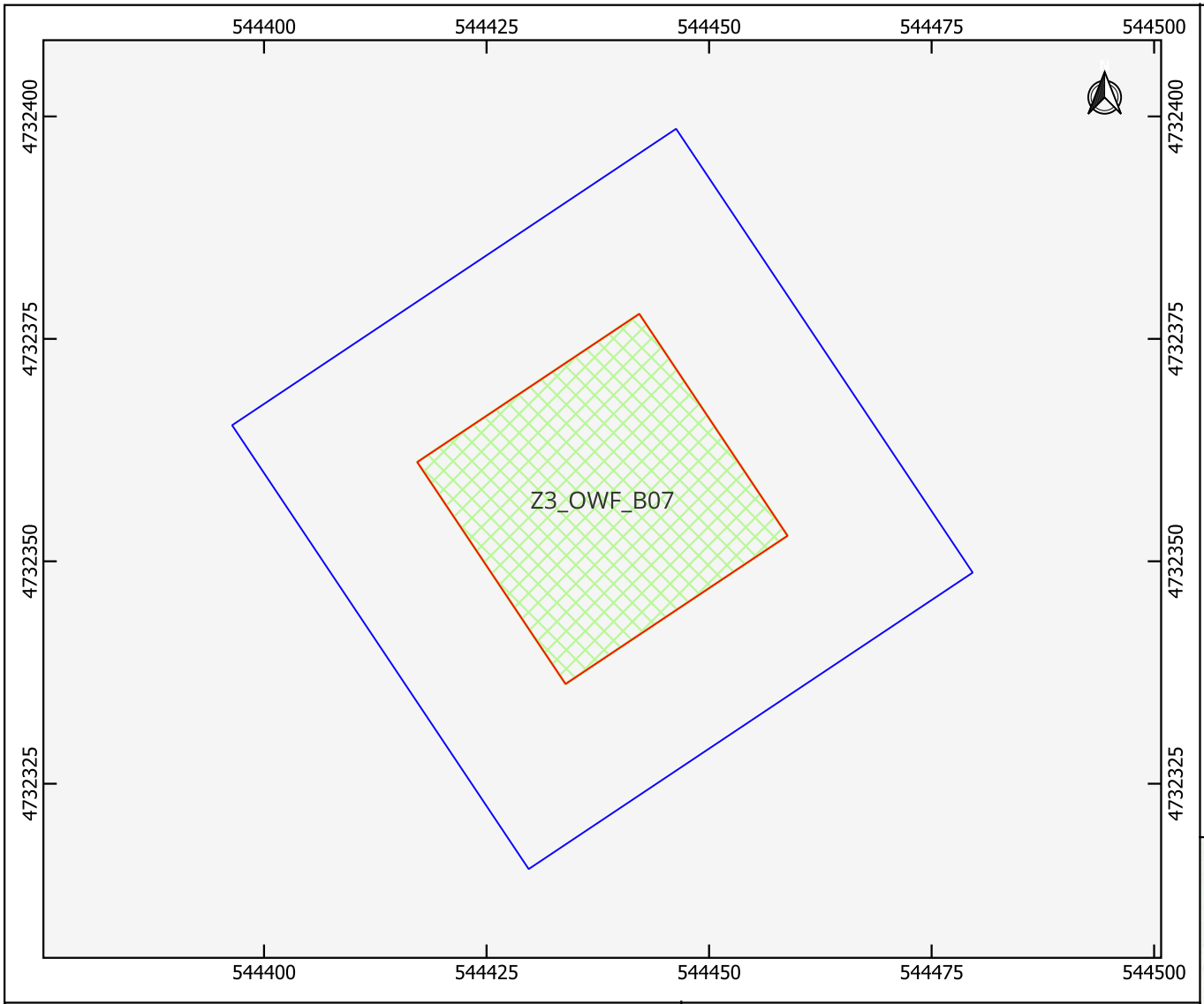
Scale: 1/750
Date: 2023-03-20
Geodesy : WGS 84 - UTM 31N
Version: V0

0 10 20 30 40 m

Alternate location
x=539894,y=4729325



GEOMINES



ANNEXE A: Z3_OWF_B07
ALARP CERTIFICATE GIS

Scale: 1/750
Date: 2023-03-20
Geodesy : WGS 84 - UTM 31N
Version: V0

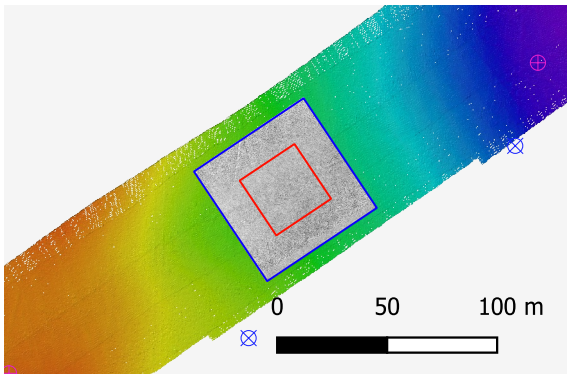
0 10 20 30 40 m

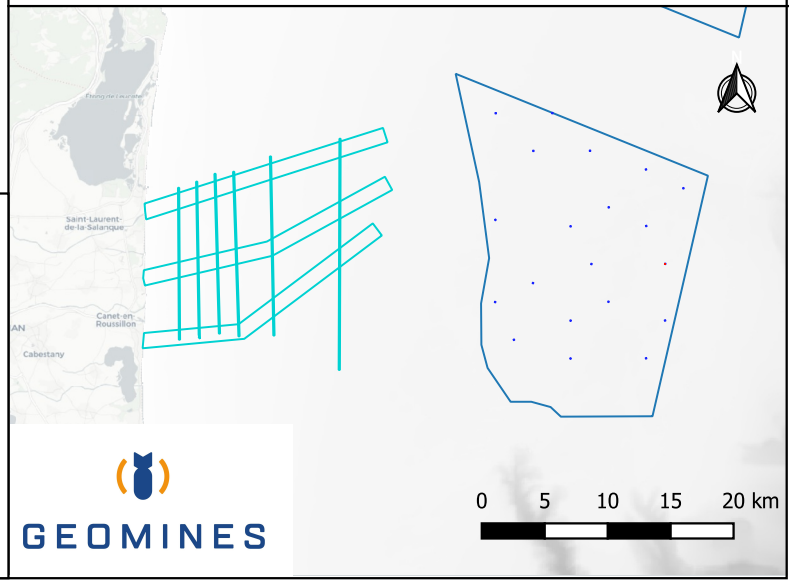
Original location
x=544438,y=4732357

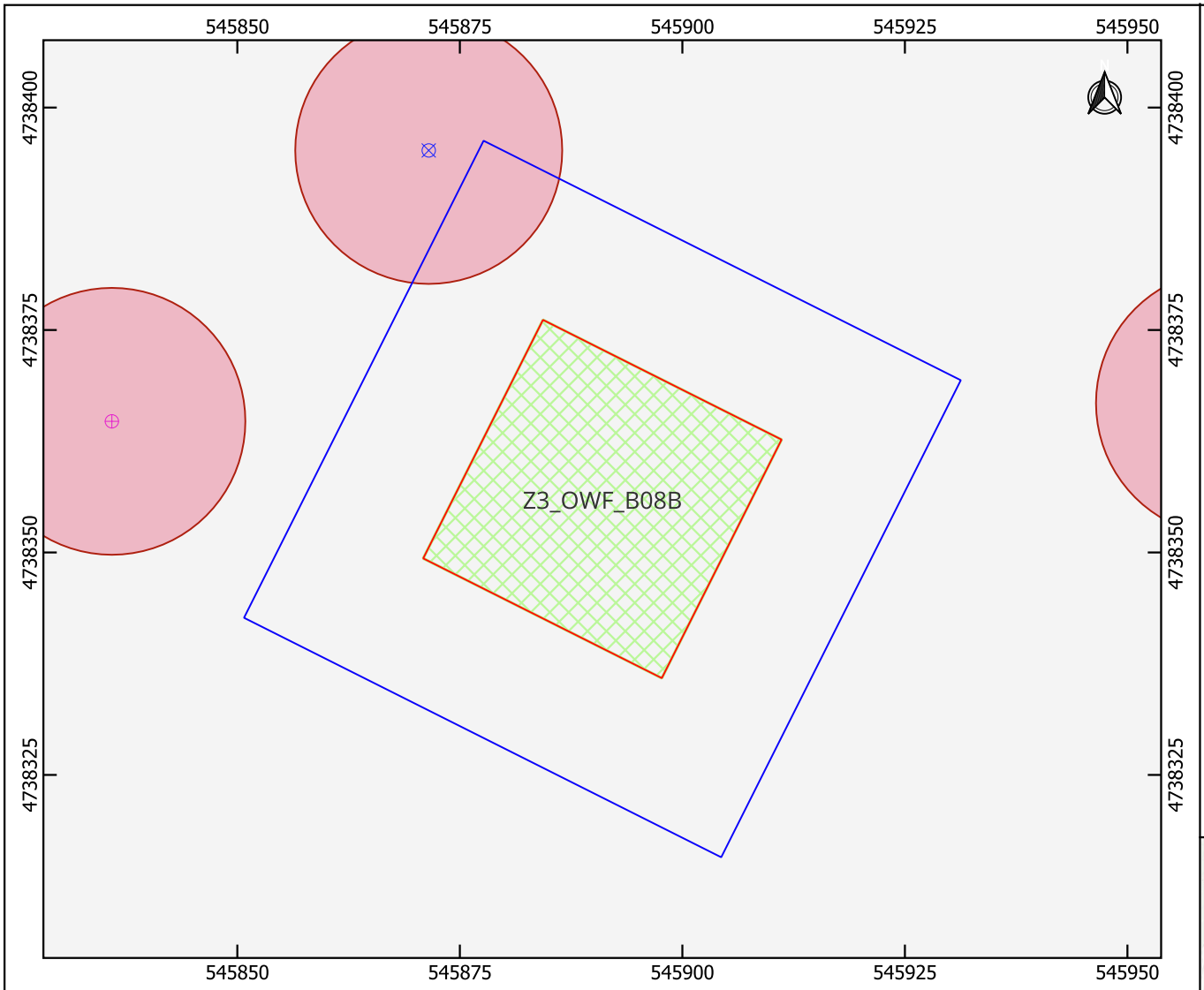
OWF Zone 3
- Geotechnical Boxes OWF zone 3
- Survey extent

Concession
- Zone Parc AO6
- Zone corridors AO6

ALARP
- AO6_Z3_OWF_SSS_targets
- AO6_Z3_OWF_SBP_targets
- AO6_Z3_OWF_ALARP
- AO6_Z3_OWF_avoidance







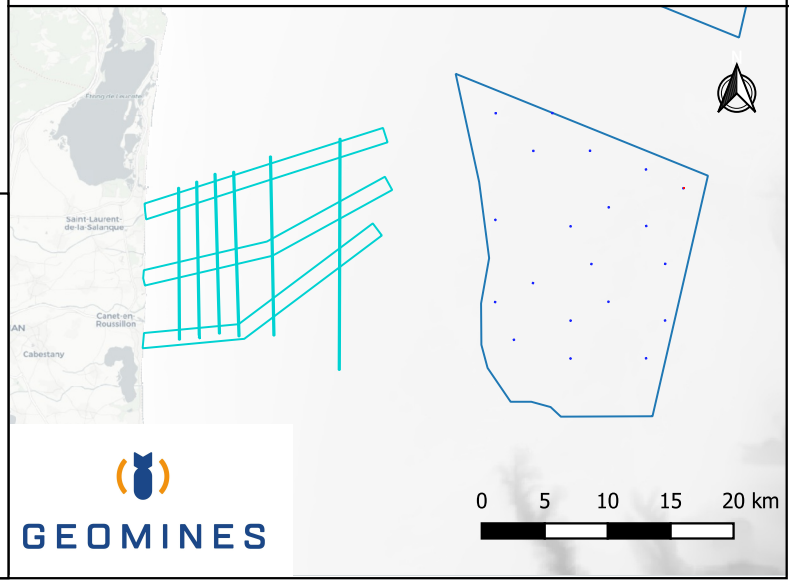
ANNEXE A: Z3_OWF_B08B
ALARP CERTIFICATE GIS

Scale: 1/750 Date: 2023-03-20

Geodesy : WGS 84 - UTM 31N Version: V0

0 10 20 30 40 m

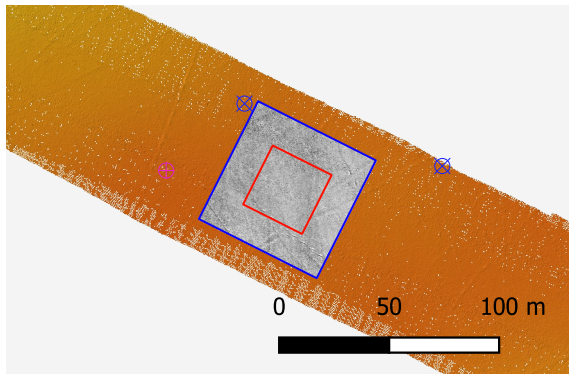
Alternate location
x=545891,y=4738356

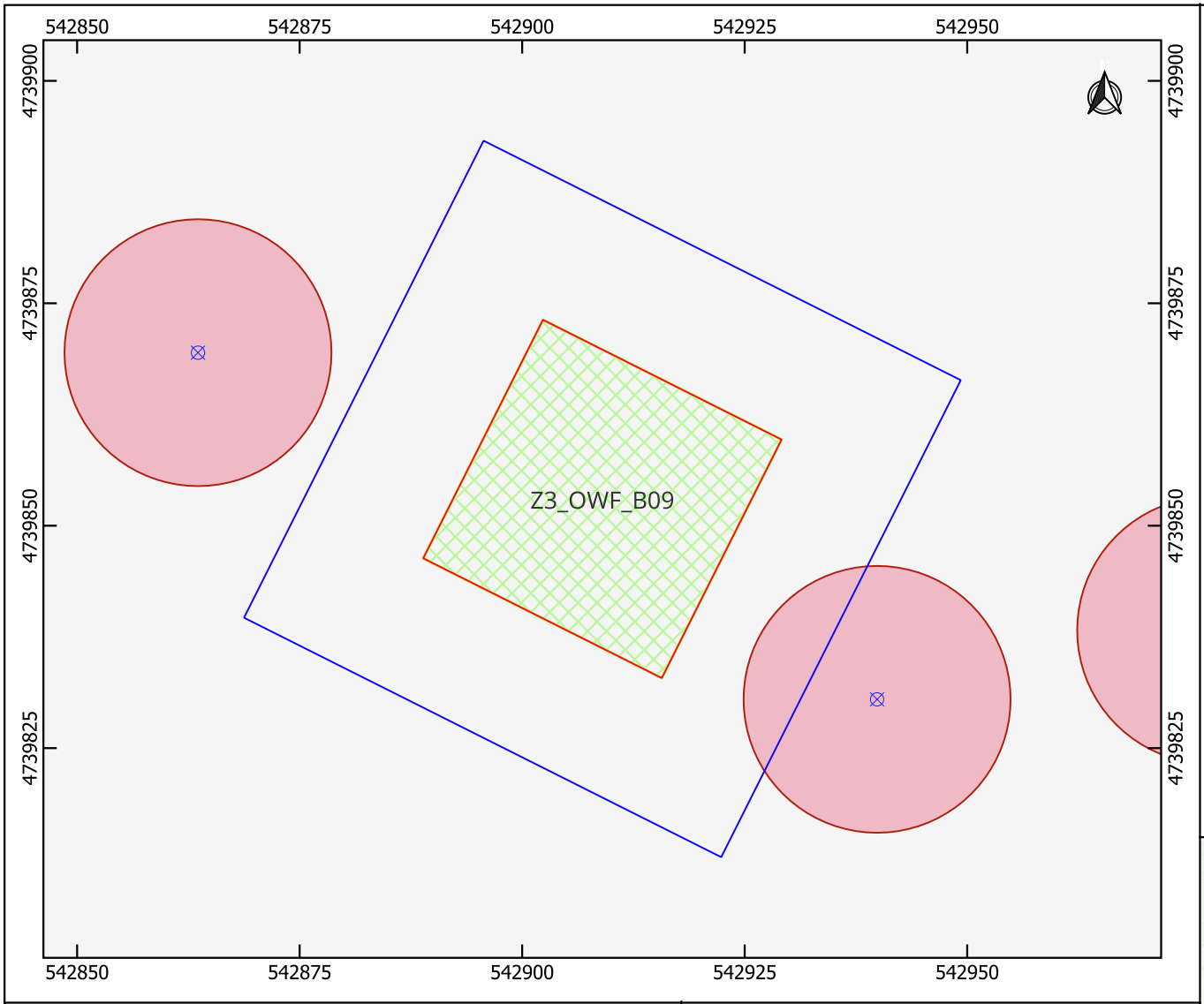


OWF Zone 3
- Geotechnical Boxes OWF zone 3
- Survey extent

Concession
- Zone Parc AO6
- Zone corridors AO6

ALARP
- AO6_Z3_OWF_SSS_targets
- AO6_Z3_OWF_SBP_targets
- AO6_Z3_OWF_ALARP
- AO6_Z3_OWF_avoidance





ANNEXE A: Z3_OWF_B09
ALARP CERTIFICATE GIS

Scale: 1/750 Date: 2023-03-20

Geodesy : WGS 84 - UTM 31N Version: V0

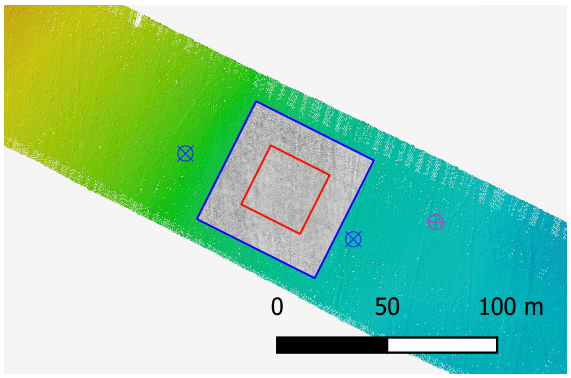
0 10 20 30 40 m

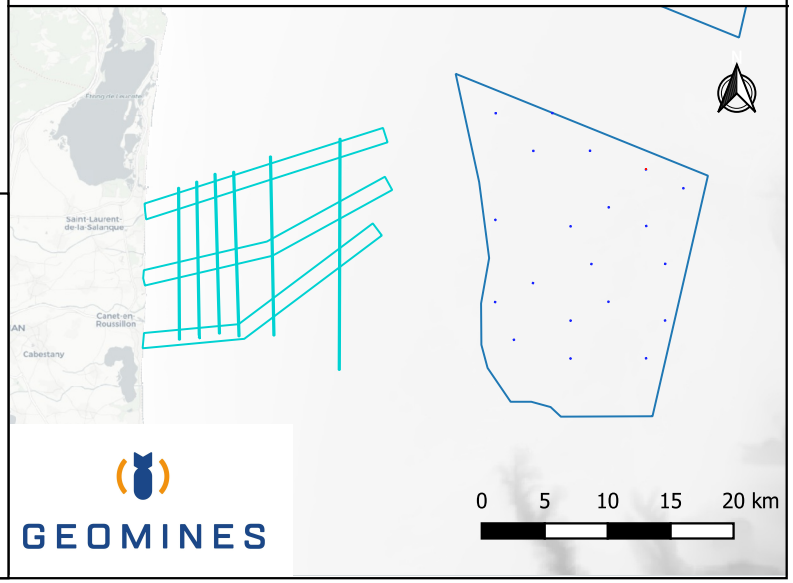
Original location
x=542909,y=4739853

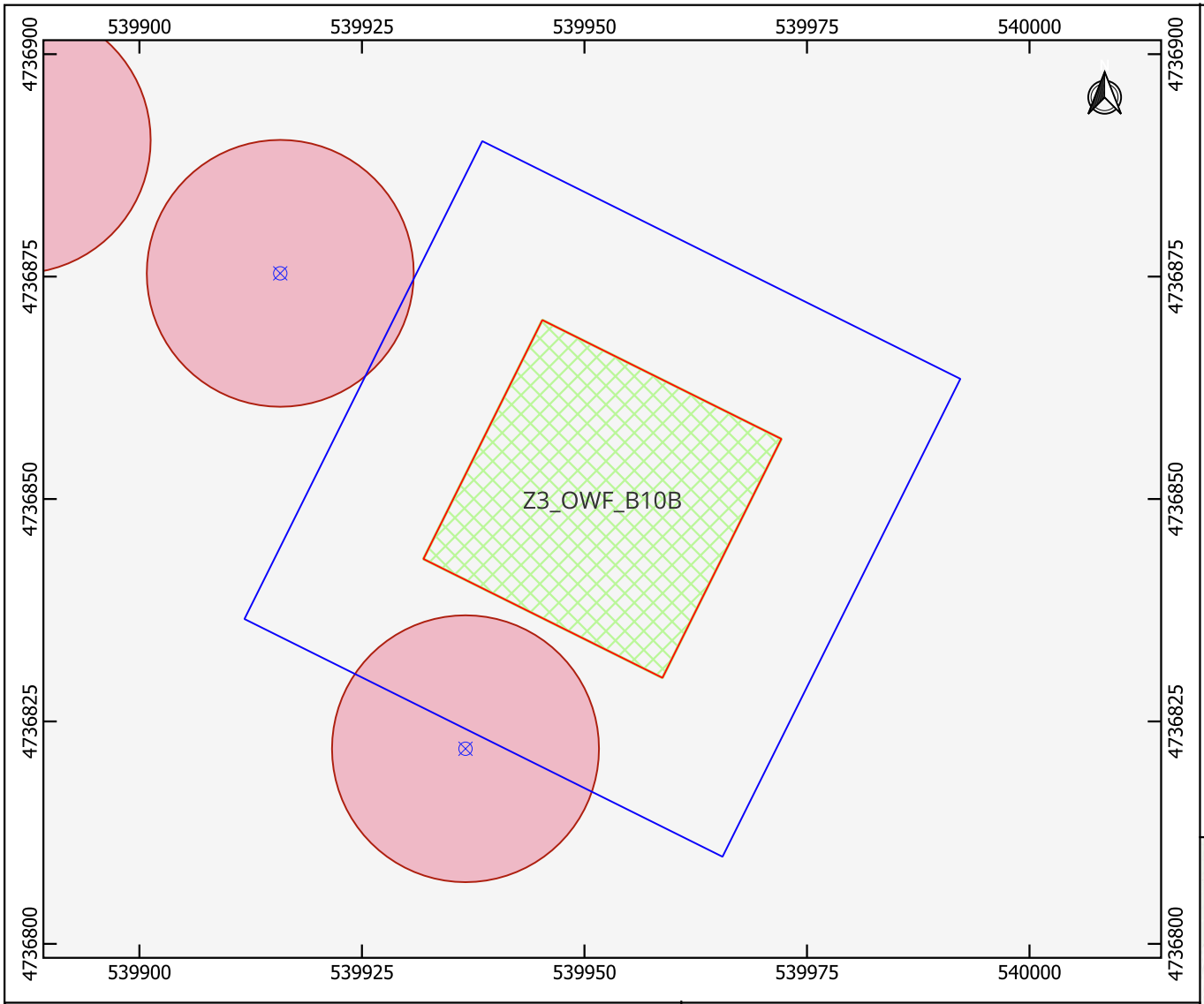
OWF Zone 3
- Geotechnical Boxes OWF zone 3
- Survey extent

Concession
- Zone Parc AO6
- Zone corridors AO6

ALARP
- AO6_Z3_OWF_SSS_targets
- AO6_Z3_OWF_SBP_targets
- AO6_Z3_OWF_ALARP
- AO6_Z3_OWF_avoidance







ANNEXE A: Z3_OWF_B10B
ALARP CERTIFICATE GIS

Scale: 1/750
Date: 2023-03-20
Geodesy : WGS 84 - UTM 31N
Version: V0

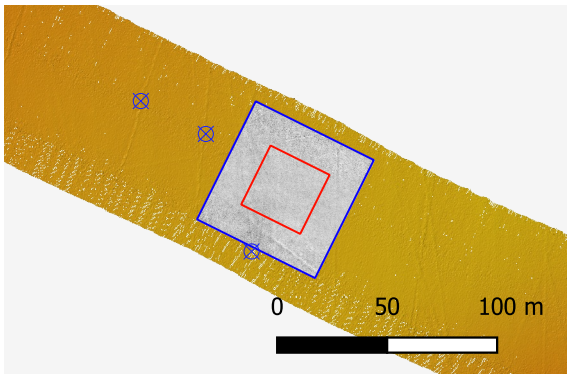
0 10 20 30 40 m

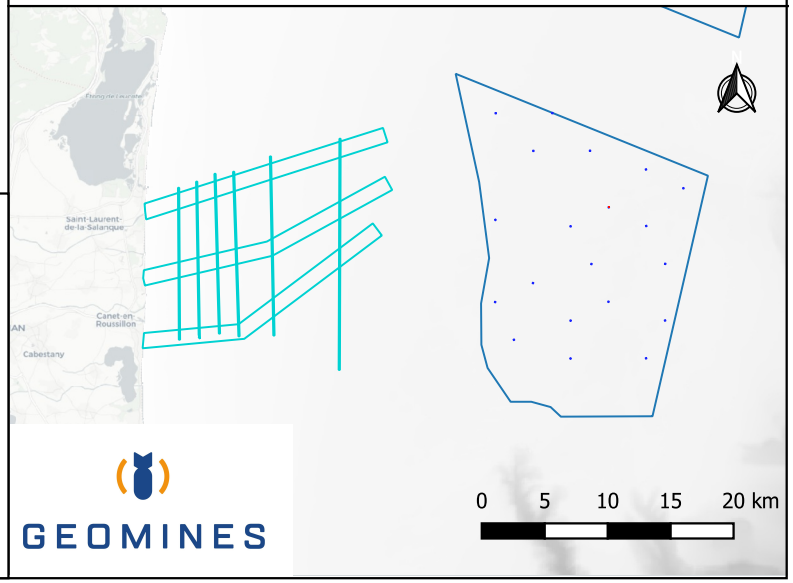
Alternate location
x=539952,y=4736850

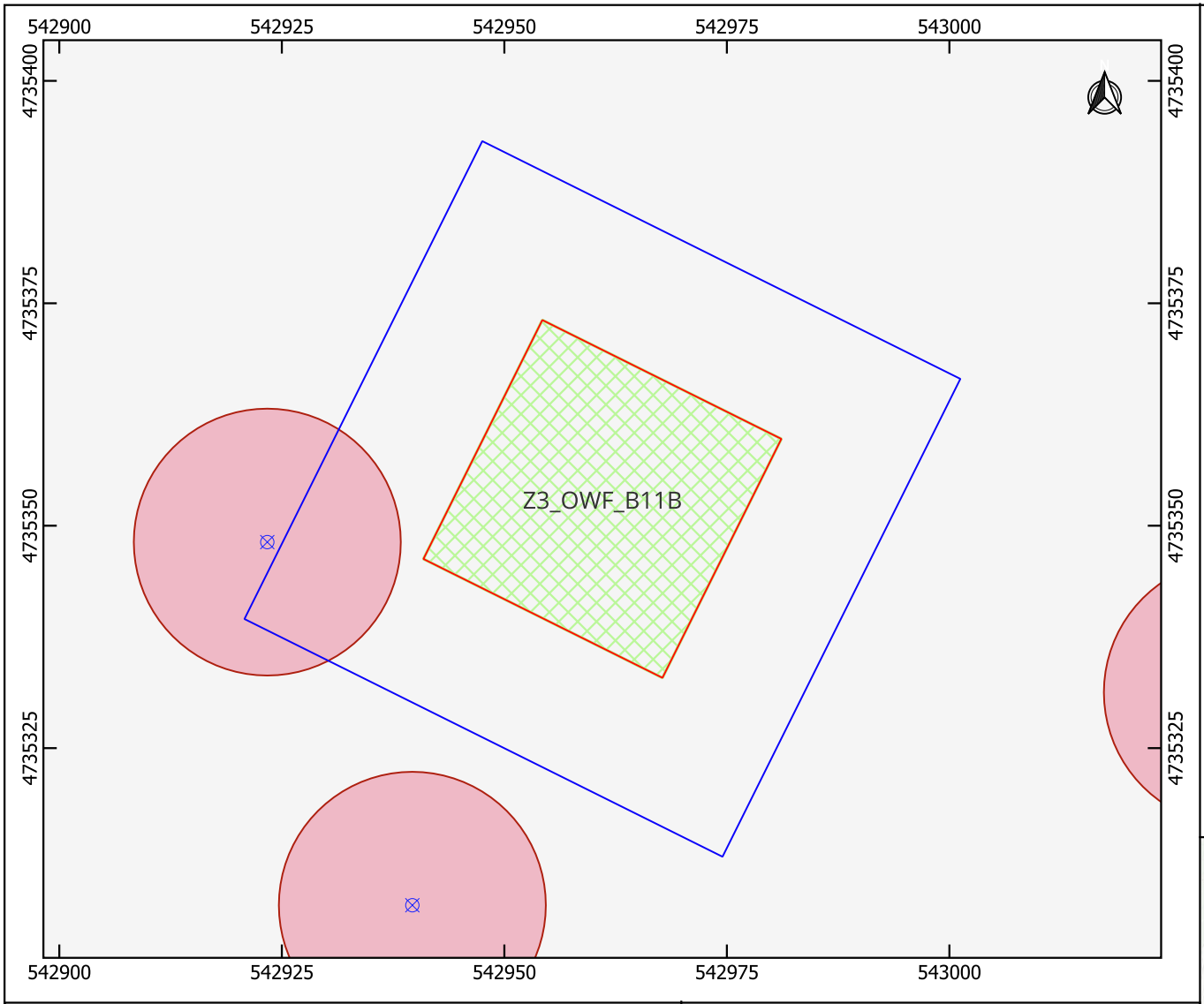
OWF Zone 3
- Geotechnical Boxes OWF zone 3
- Survey extent

Concession
- Zone Parc AO6
- Zone corridors AO6

ALARP
- AO6_Z3_OWF_SSS_targets
- AO6_Z3_OWF_SBP_targets
- AO6_Z3_OWF_ALARP
- AO6_Z3_OWF_avoidance







ANNEXE A: Z3_OWF_B11B
ALARP CERTIFICATE GIS

Scale: 1/750 Date: 2023-03-20

Geodesy : WGS 84 - UTM 31N Version: V0

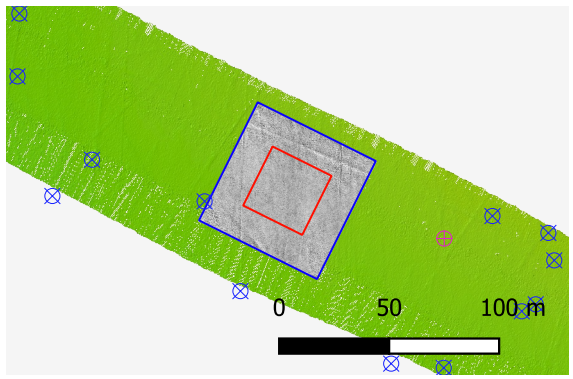
0 10 20 30 40 m

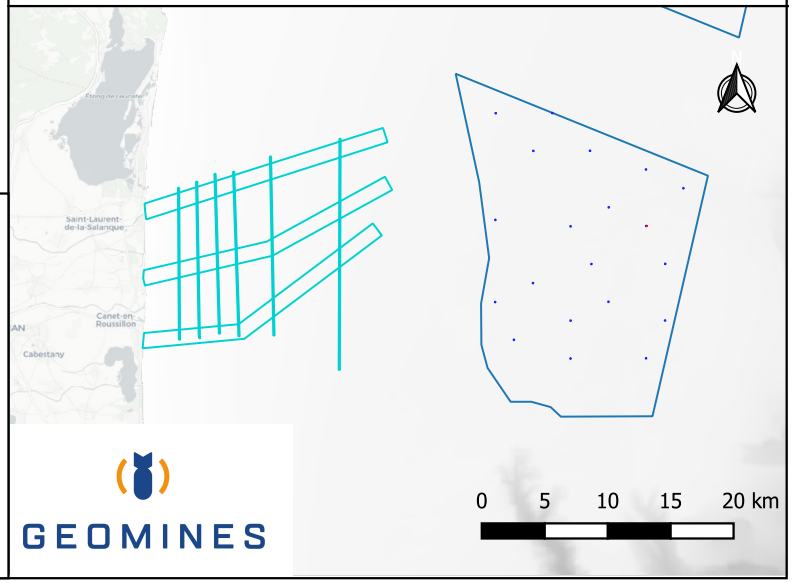
Alternate location
x=542961,y=4735353

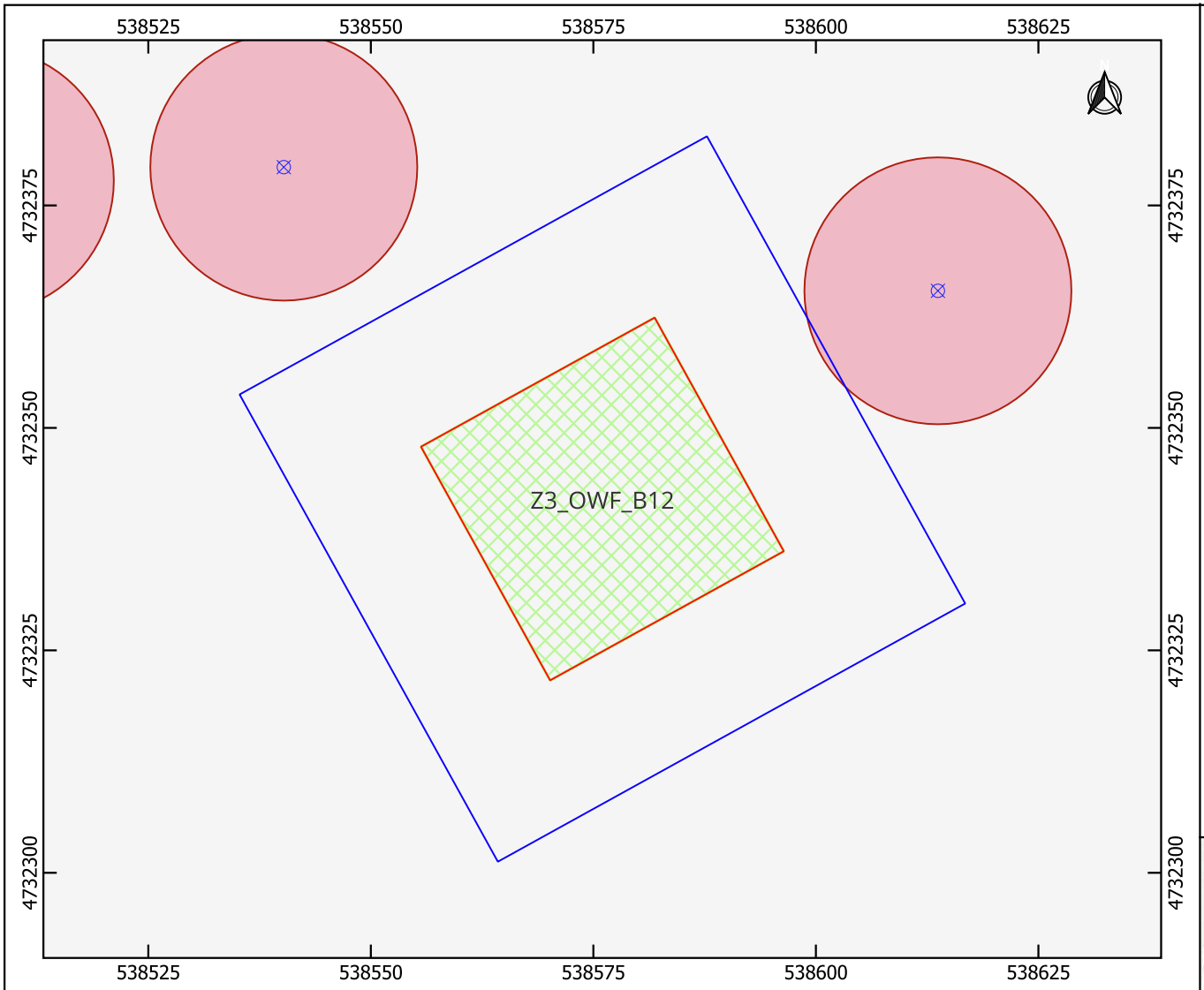
OWF Zone 3
- Geotechnical Boxes OWF zone 3
- Survey extent

Concession
- Zone Parc AO6
- Zone corridors AO6

ALARP
- AO6_Z3_OWF_SSS_targets
- AO6_Z3_OWF_SBP_targets
- AO6_Z3_OWF_ALARP
- AO6_Z3_OWF_avoidance







ANNEXE A: Z3_OWF_B12
ALARP CERTIFICATE GIS

Scale: 1/750 Date: 2023-03-20

Geodesy : WGS 84 - UTM 31N Version: V0

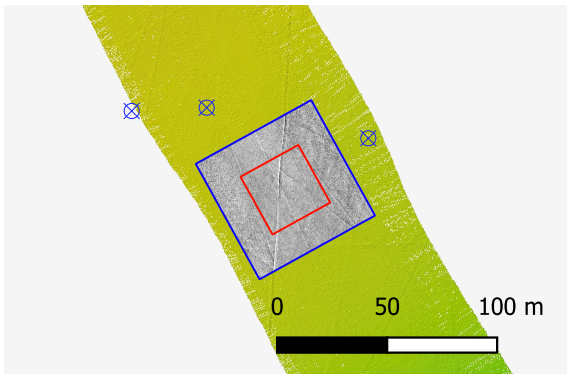
0 10 20 30 40 m

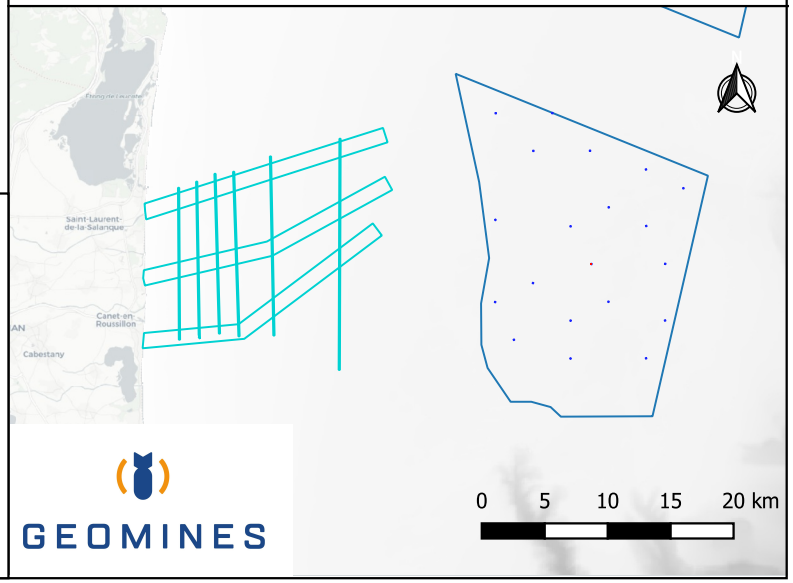
Original location
x=538576,y=4732342

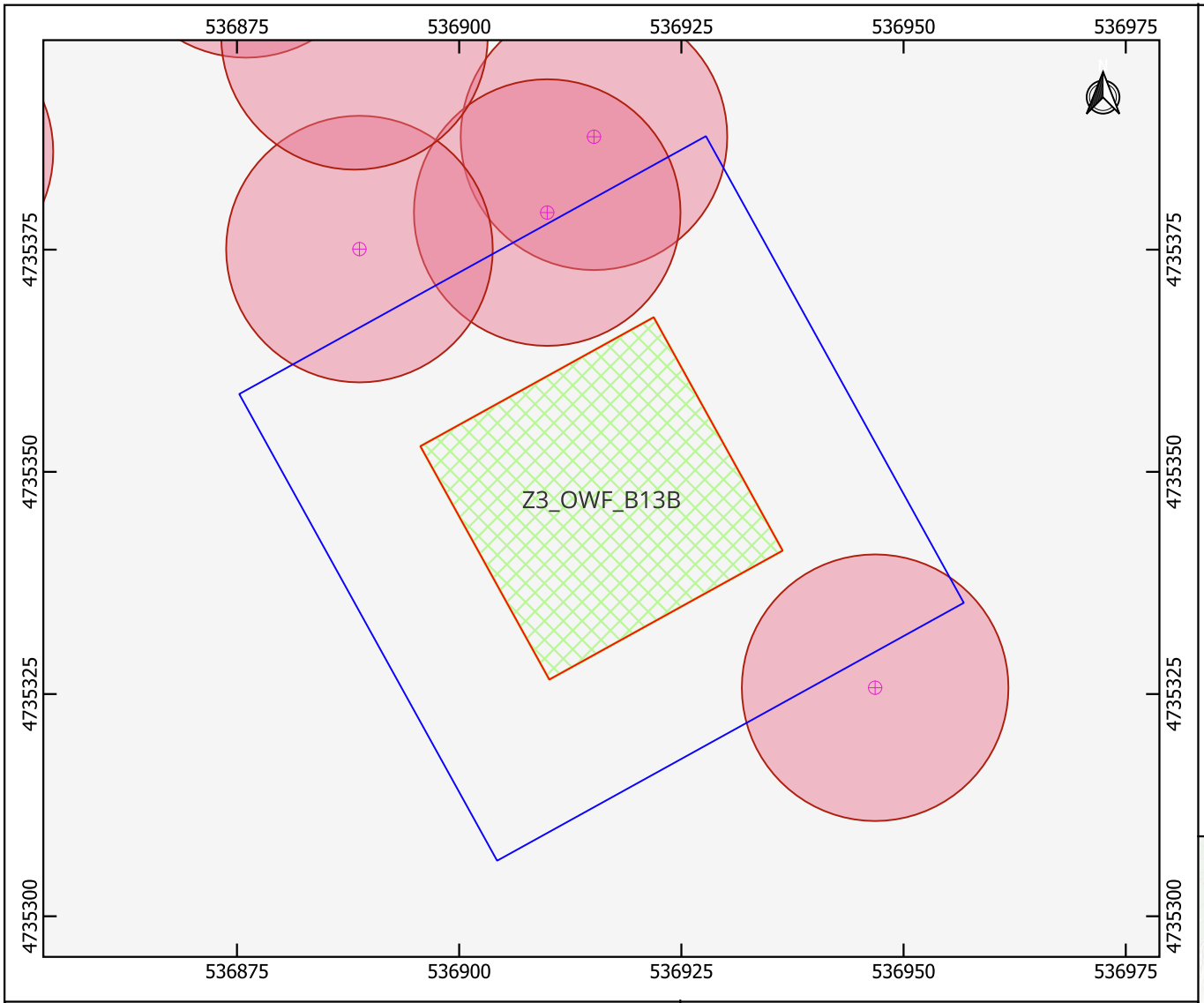
OWF Zone 3
- Geotechnical Boxes OWF zone 3
- Survey extent

Concession
- Zone Parc AO6
- Zone corridors AO6

ALARP
- AO6_Z3_OWF_SSS_targets
- AO6_Z3_OWF_SBP_targets
- AO6_Z3_OWF_ALARP
- AO6_Z3_OWF_avoidance







ANNEXE A: Z3_OWF_B13B
ALARP CERTIFICATE GIS

Scale: 1/750 Date: 2023-03-20

Geodesy : WGS 84 - UTM 31N Version: V0

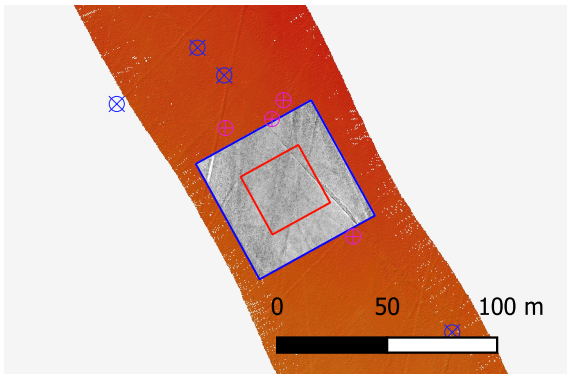
0 10 20 30 40 m

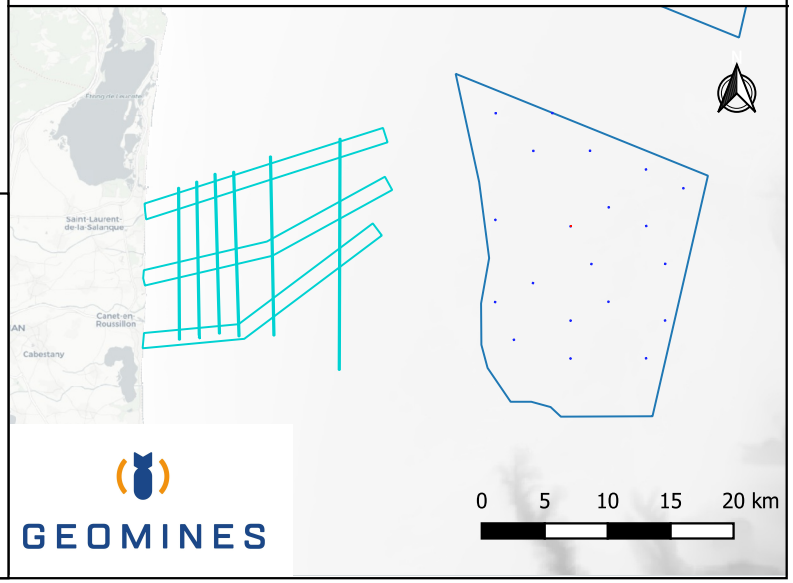
Alternate location
x=536916,y=4735347

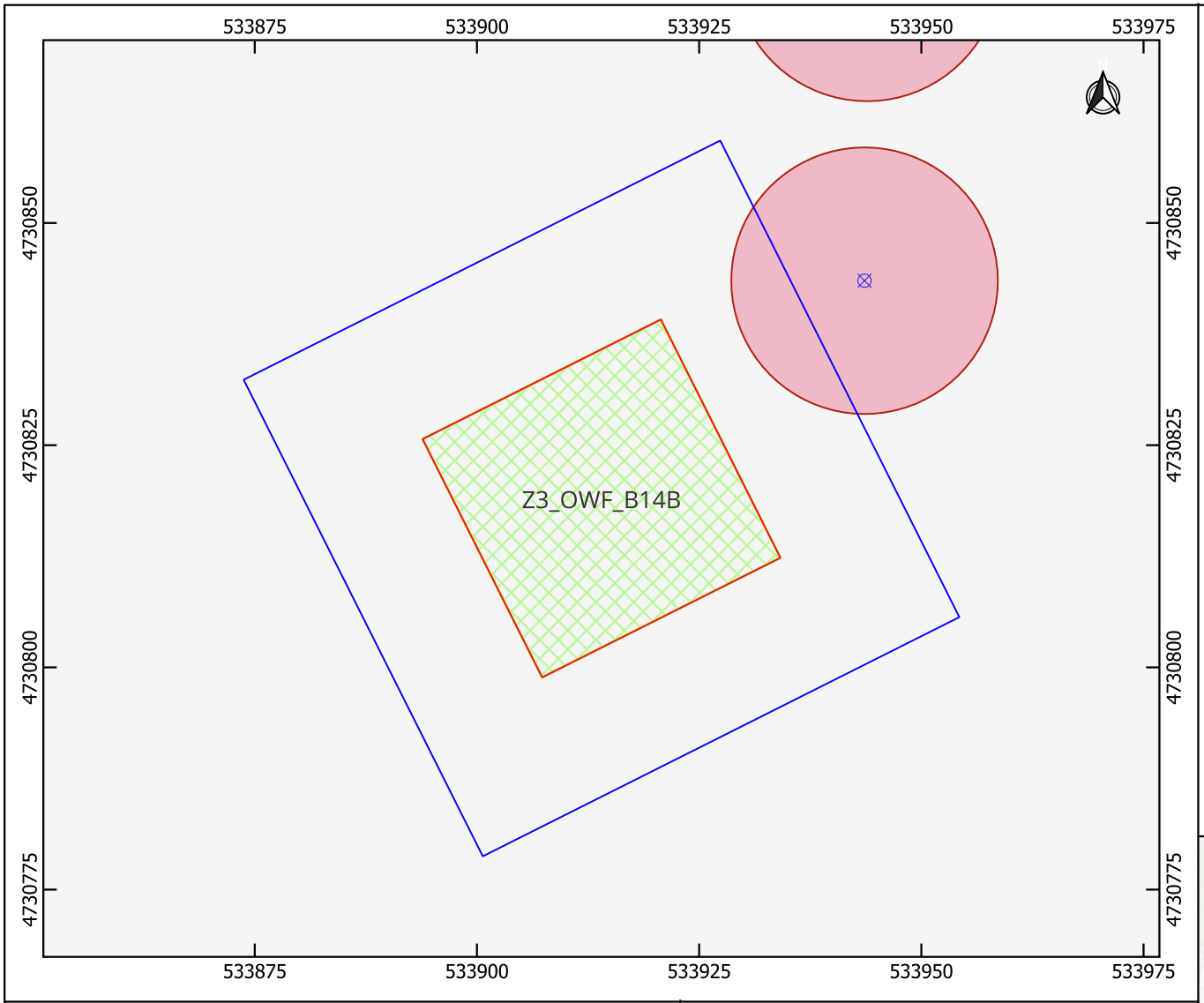
OWF Zone 3
- Geotechnical Boxes OWF zone 3
- Survey extent

Concession
- Zone Parc AO6
- Zone corridors AO6

ALARP
- AO6_Z3_OWF_SSS_targets
- AO6_Z3_OWF_SBP_targets
- AO6_Z3_OWF_ALARP
- AO6_Z3_OWF_avoidance







ANNEXE A: Z3_OWF_B14B
ALARP CERTIFICATE GIS

Scale: 1/750
Date: 2023-03-20
Geodesy : WGS 84 - UTM 31N
Version: V0

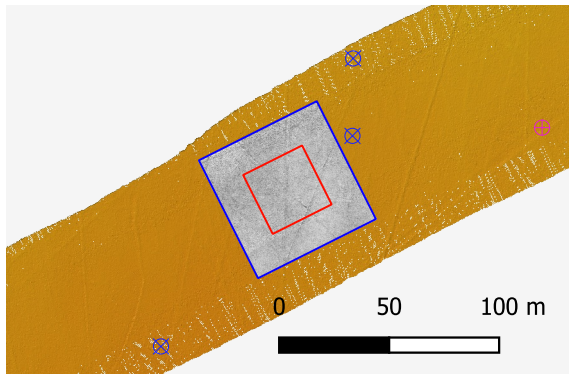
0 10 20 30 40 m

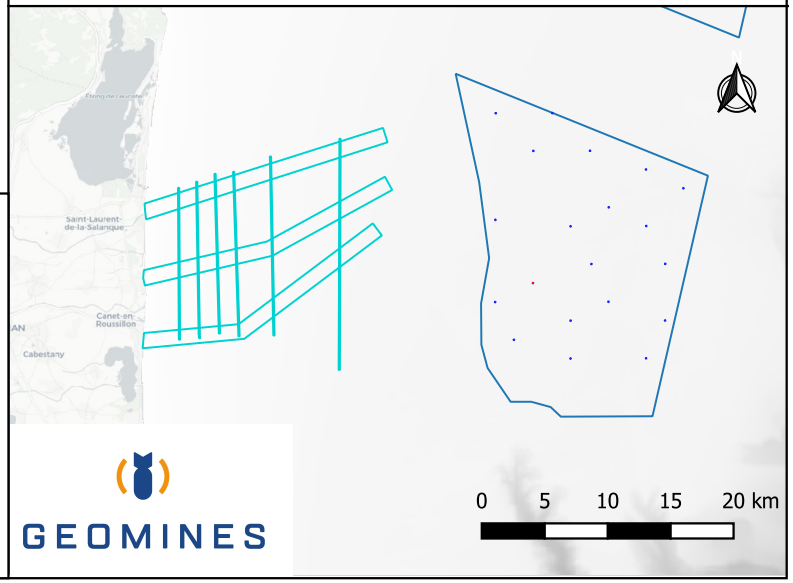
Alternate location
x=533914,y=4730819

OWF Zone 3
- Geotechnical Boxes OWF zone 3
- Survey extent

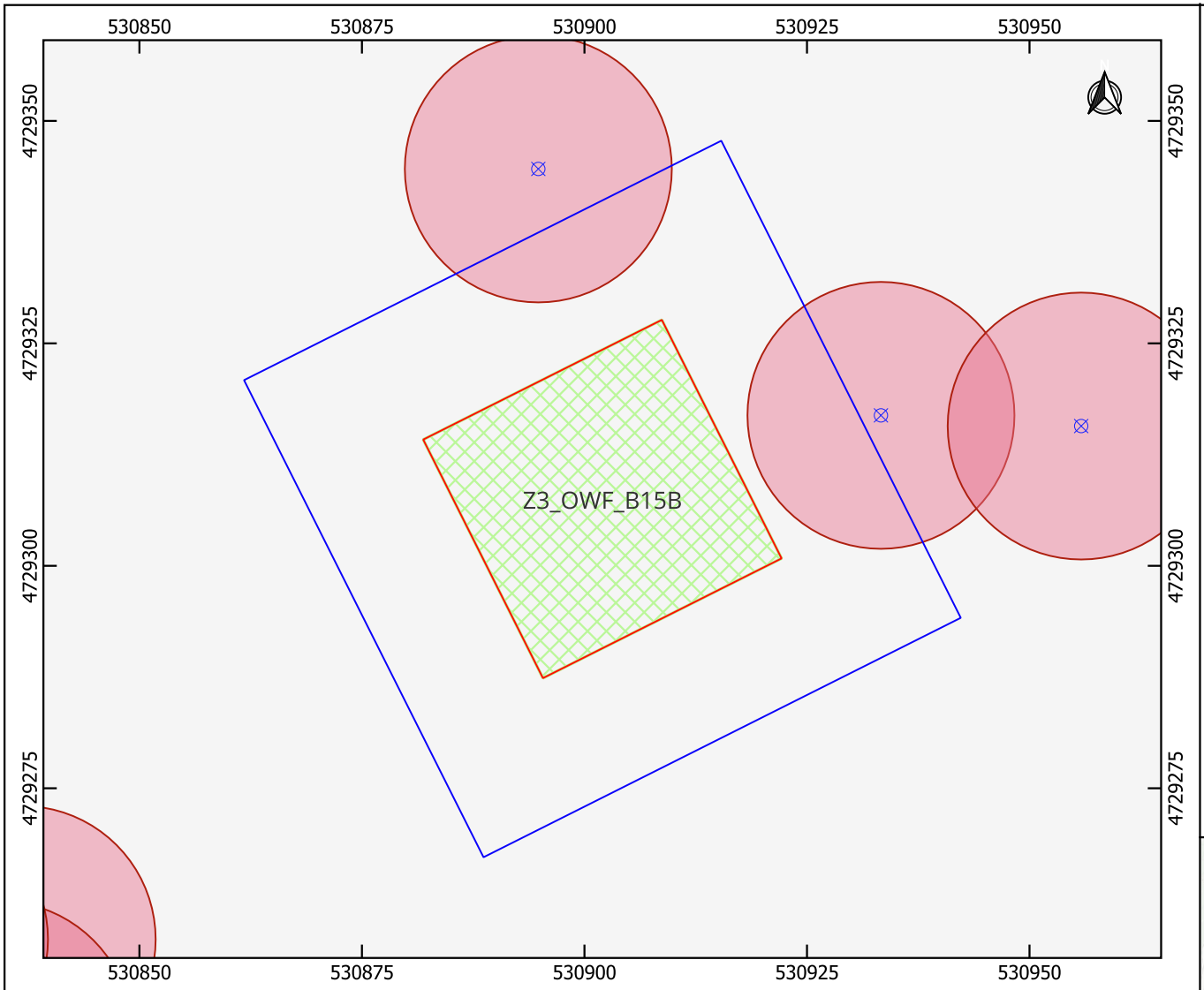
Concession
- Zone Parc AO6
- Zone corridors AO6

ALARP
- AO6_Z3_OWF_SSS_targets
- AO6_Z3_OWF_SBP_targets
- AO6_Z3_OWF_ALARP
- AO6_Z3_OWF_avoidance





GEOMINES



ANNEXE A: Z3_OWF_B15B
ALARP CERTIFICATE GIS

Scale: 1/750 Date: 2023-03-20

Geodesy : WGS 84 - UTM 31N Version: V0

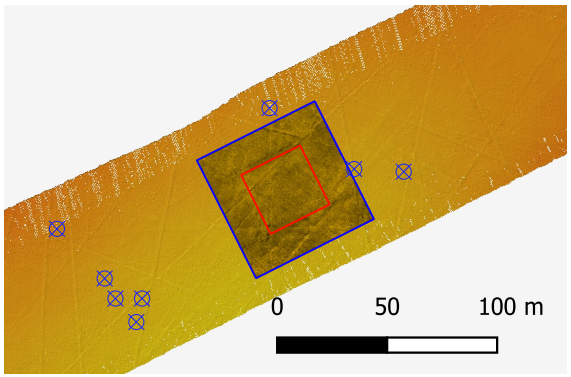
0 10 20 30 40 m

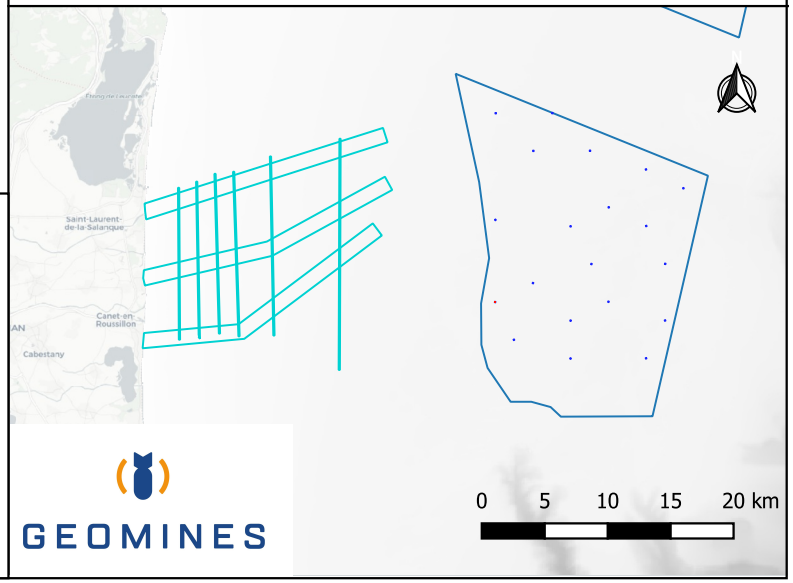
Alternate location
x=530902,y=4729307.5

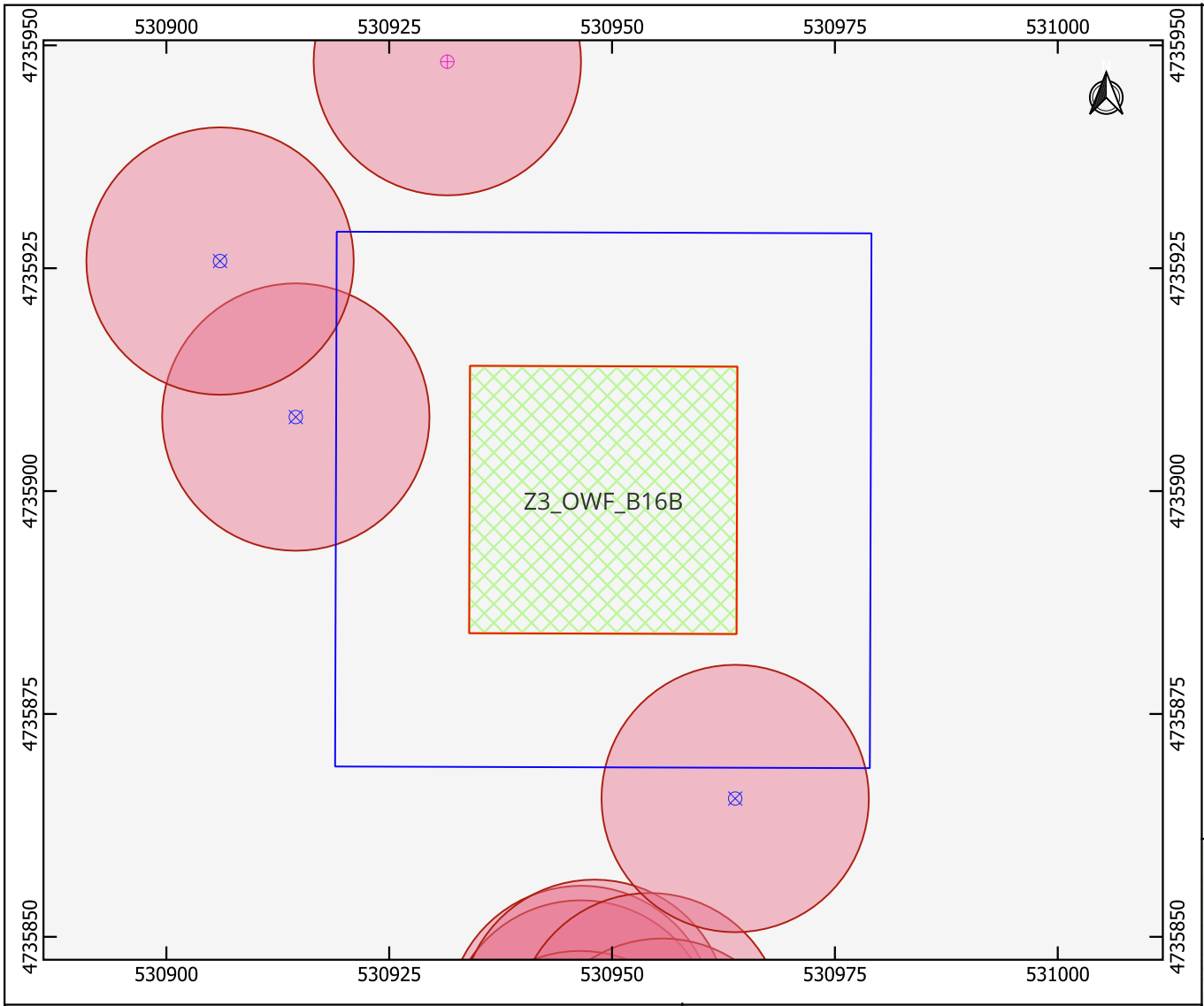
OWF Zone 3
- Geotechnical Boxes OWF zone 3
- Survey extent

Concession
- Zone Parc AO6
- Zone corridors AO6

ALARP
- AO6_Z3_OWF_SSS_targets
- AO6_Z3_OWF_SBP_targets
- AO6_Z3_OWF_ALARP
- AO6_Z3_OWF_avoidance







ANNEXE A: Z3_OWF_B16B
ALARP CERTIFICATE GIS

Scale: 1/750 Date: 2023-03-20

Geodesy : WGS 84 - UTM 31N Version: V0

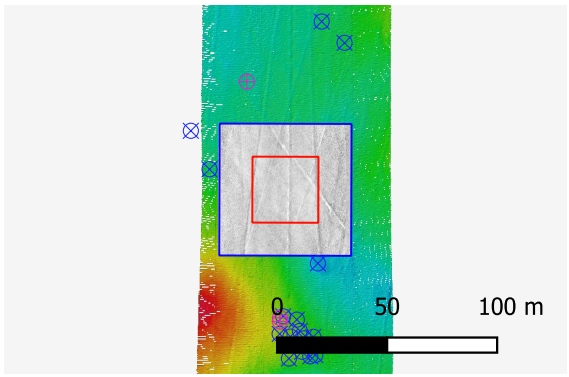
0 10 20 30 40 m

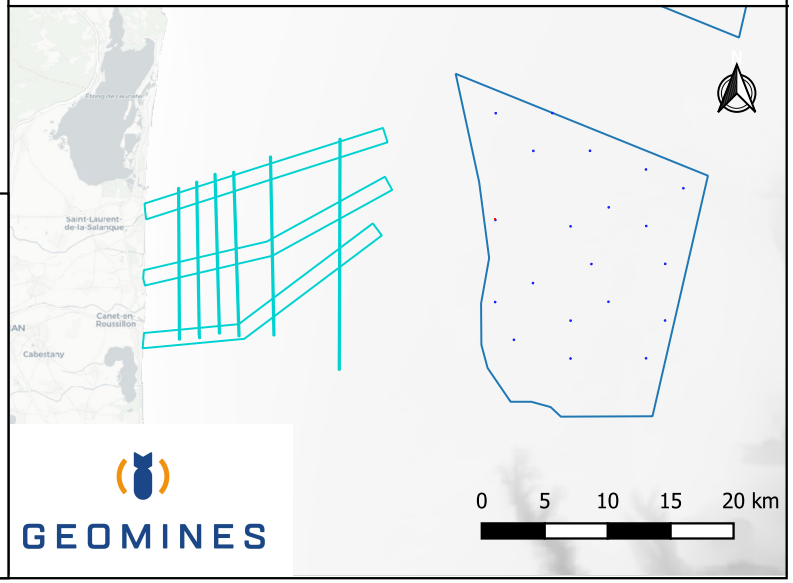
Alternate location
x=530949,y=4735899

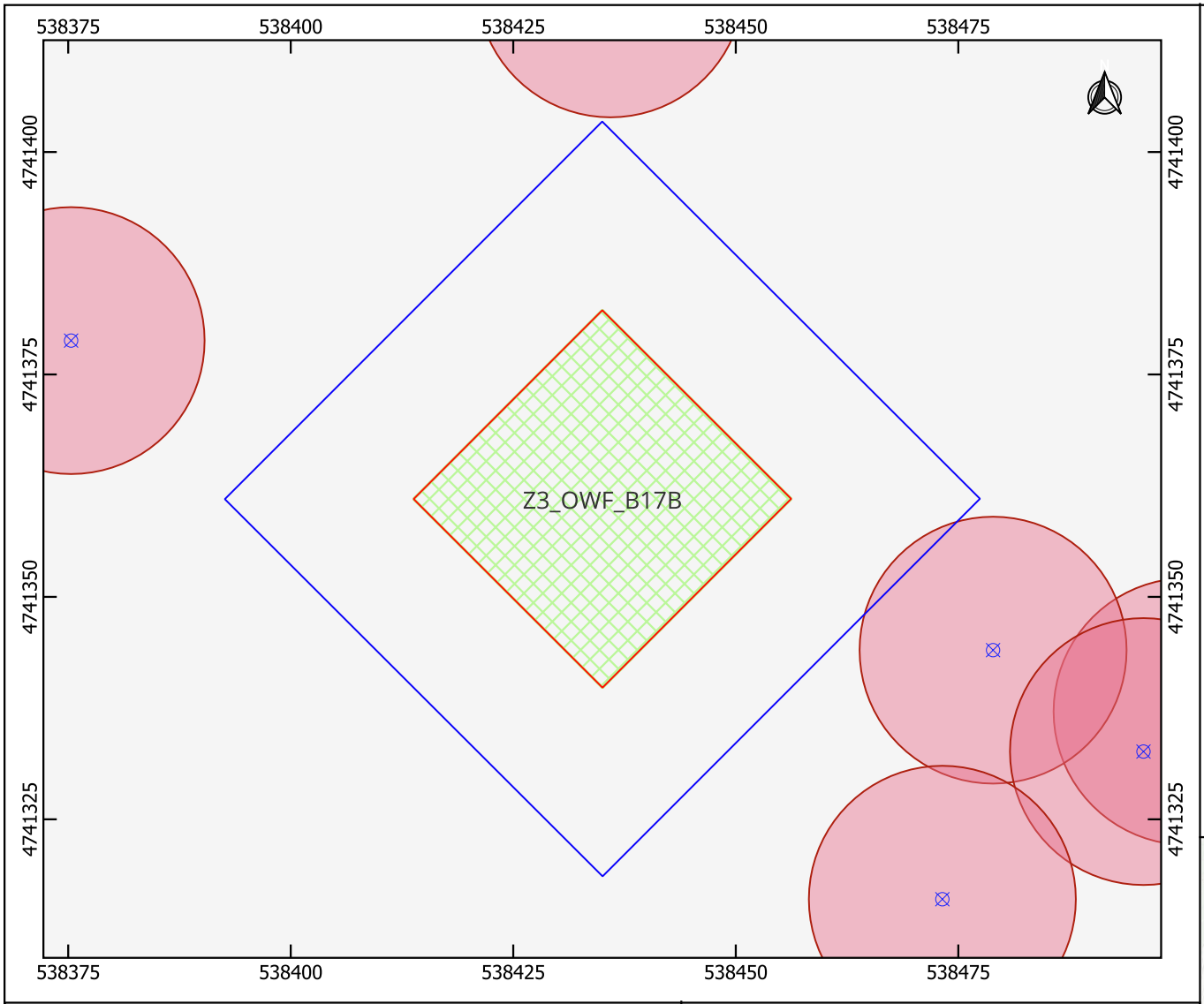
OWF Zone 3
- Geotechnical Boxes OWF zone 3
- Survey extent

Concession
- Zone Parc AO6
- Zone corridors AO6

ALARP
- AO6_Z3_OWF_SSS_targets
- AO6_Z3_OWF_SBP_targets
- AO6_Z3_OWF_ALARP
- AO6_Z3_OWF_avoidance







ANNEXE A: Z3_OWF_B17B
ALARP CERTIFICATE GIS

Scale: 1/750 Date: 2023-03-20

Geodesy : WGS 84 - UTM 31N Version: V0

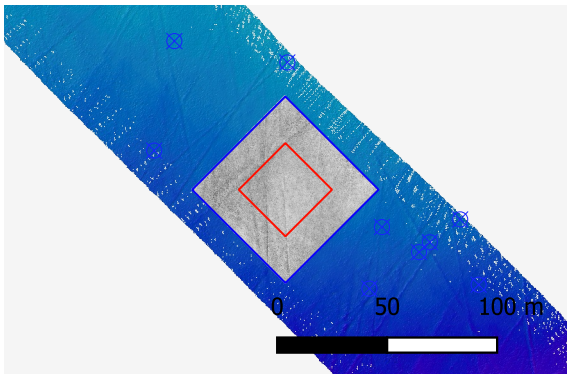
0 10 20 30 40 m

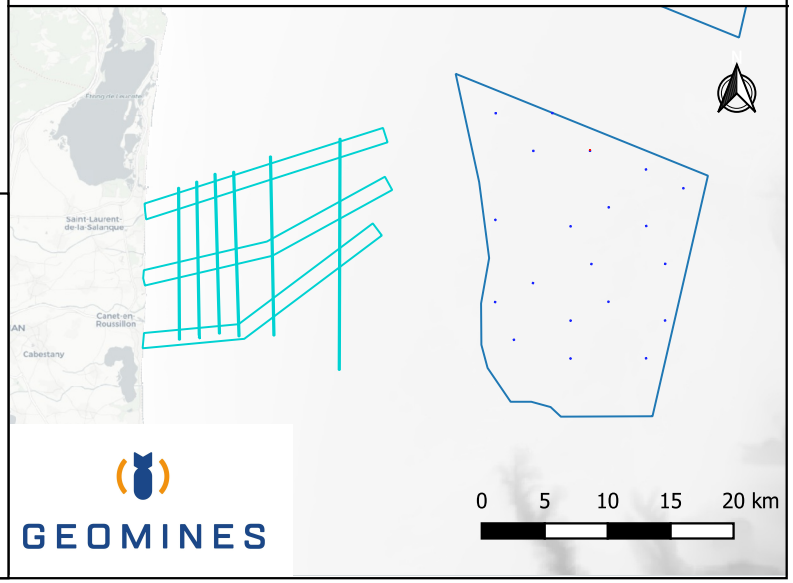
Alternate location
x=538435,y=4741361

OWF Zone 3
- Geotechnical Boxes OWF zone 3
- Survey extent

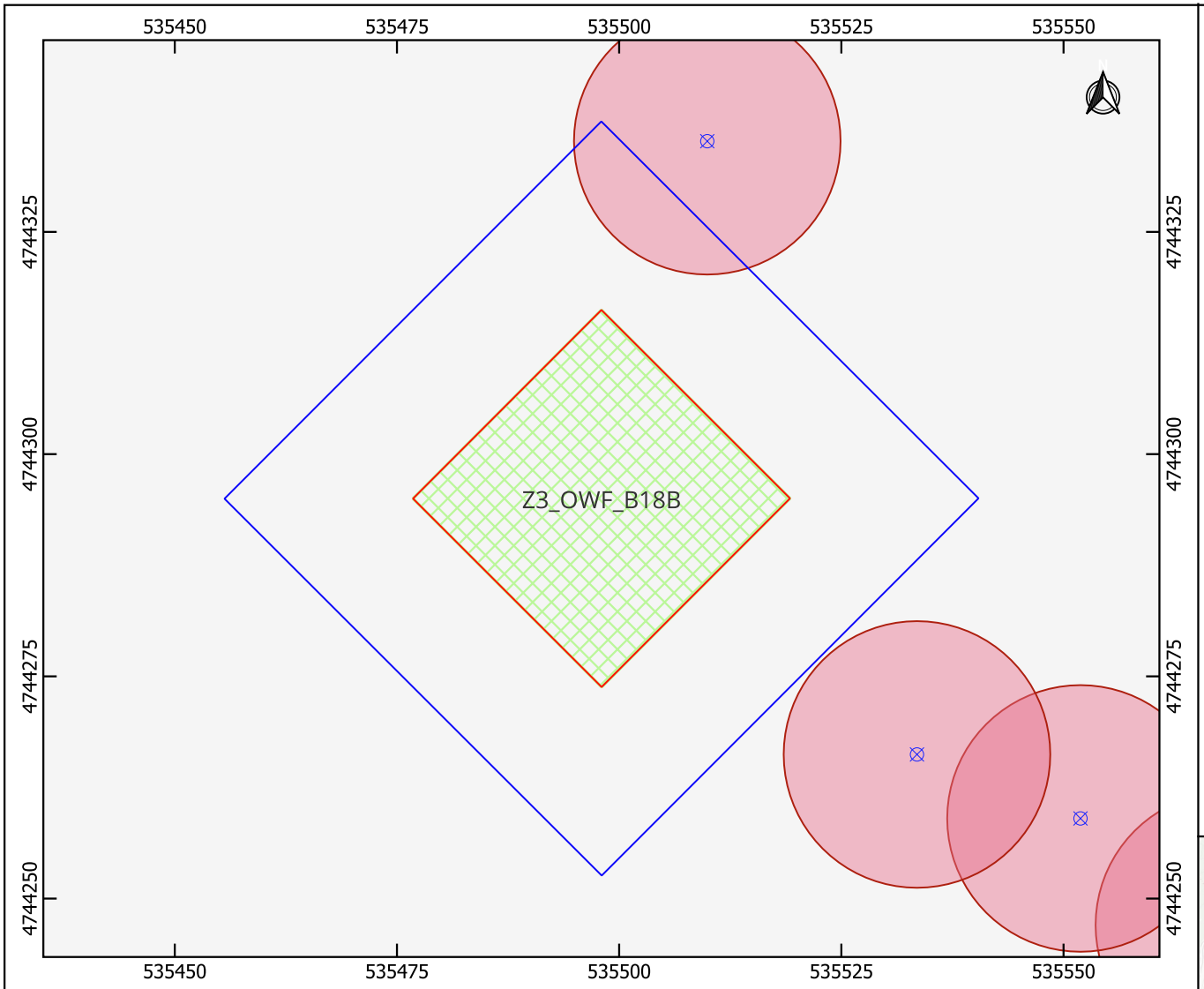
Concession
- Zone Parc AO6
- Zone corridors AO6

ALARP
- AO6_Z3_OWF_SSS_targets
- AO6_Z3_OWF_SBP_targets
- AO6_Z3_OWF_ALARP
- AO6_Z3_OWF_avoidance





GEOMINES



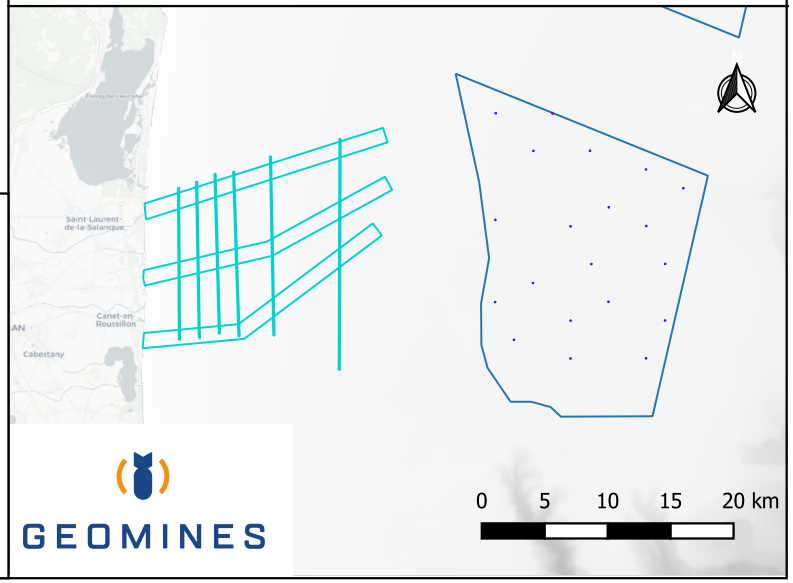
ANNEXE A: Z3_OWF_B18B
ALARP CERTIFICATE GIS

Scale: 1/750 Date: 2023-03-20

Geodesy : WGS 84 - UTM 31N Version: V0

0 10 20 30 40 m

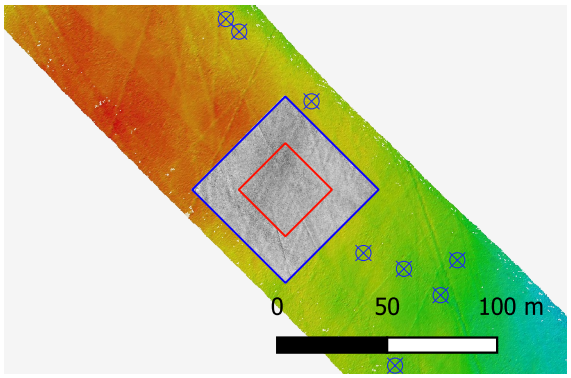
Alternate location
x=535498,y=4744295

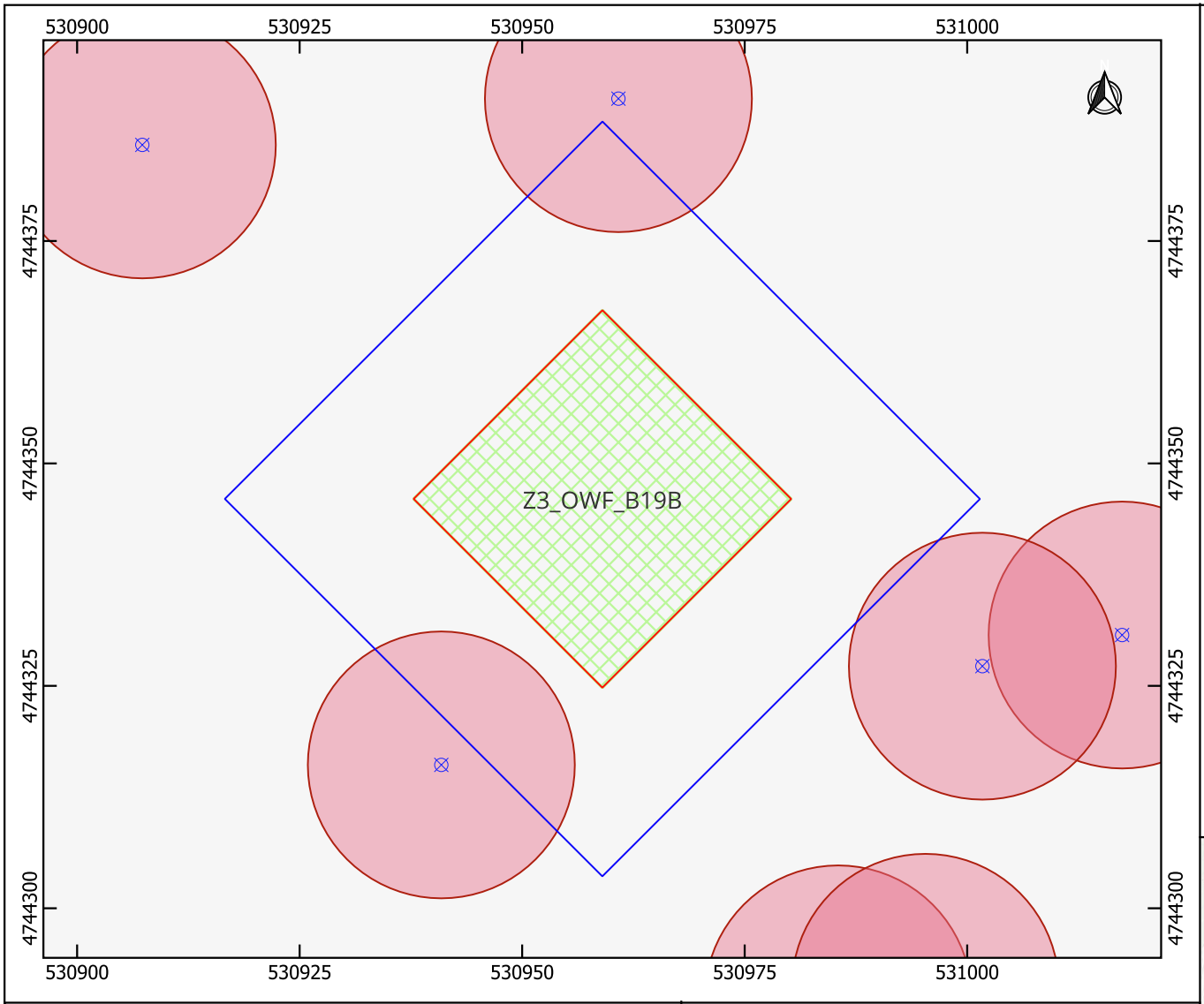


OWF Zone 3
- Geotechnical Boxes OWF zone 3
- Survey extent

Concession
- Zone Parc AO6
- Zone corridors AO6

ALARP
- AO6_Z3_OWF_SSS_targets
- AO6_Z3_OWF_SBP_targets
- AO6_Z3_OWF_ALARP
- AO6_Z3_OWF_avoidance





ANNEXE A: Z3_OWF_B19B
ALARP CERTIFICATE GIS

Scale: 1/750 Date: 2023-03-20

Geodesy : WGS 84 - UTM 31N Version: V0

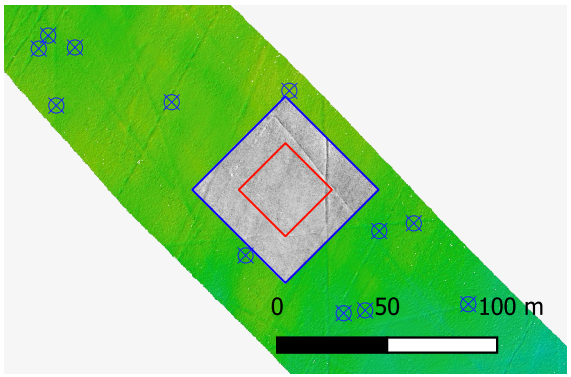
0 10 20 30 40 m

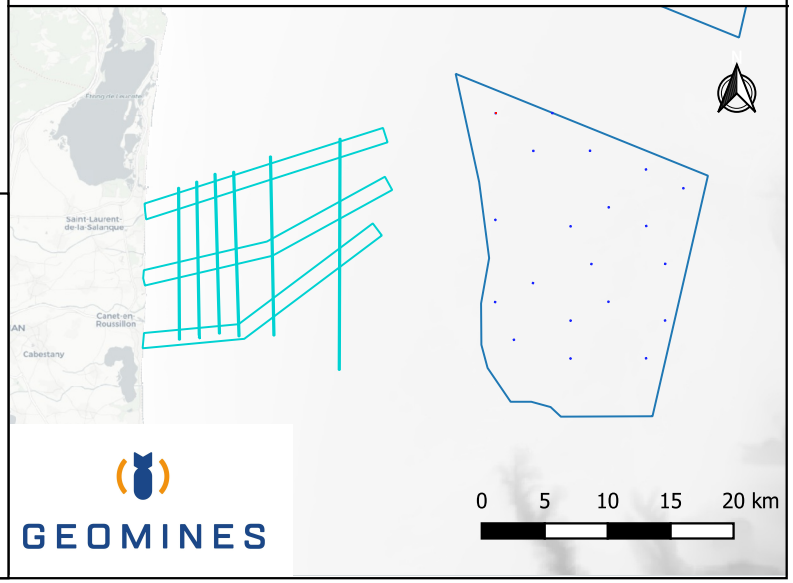
Alternate location
x=530959,y=4744346

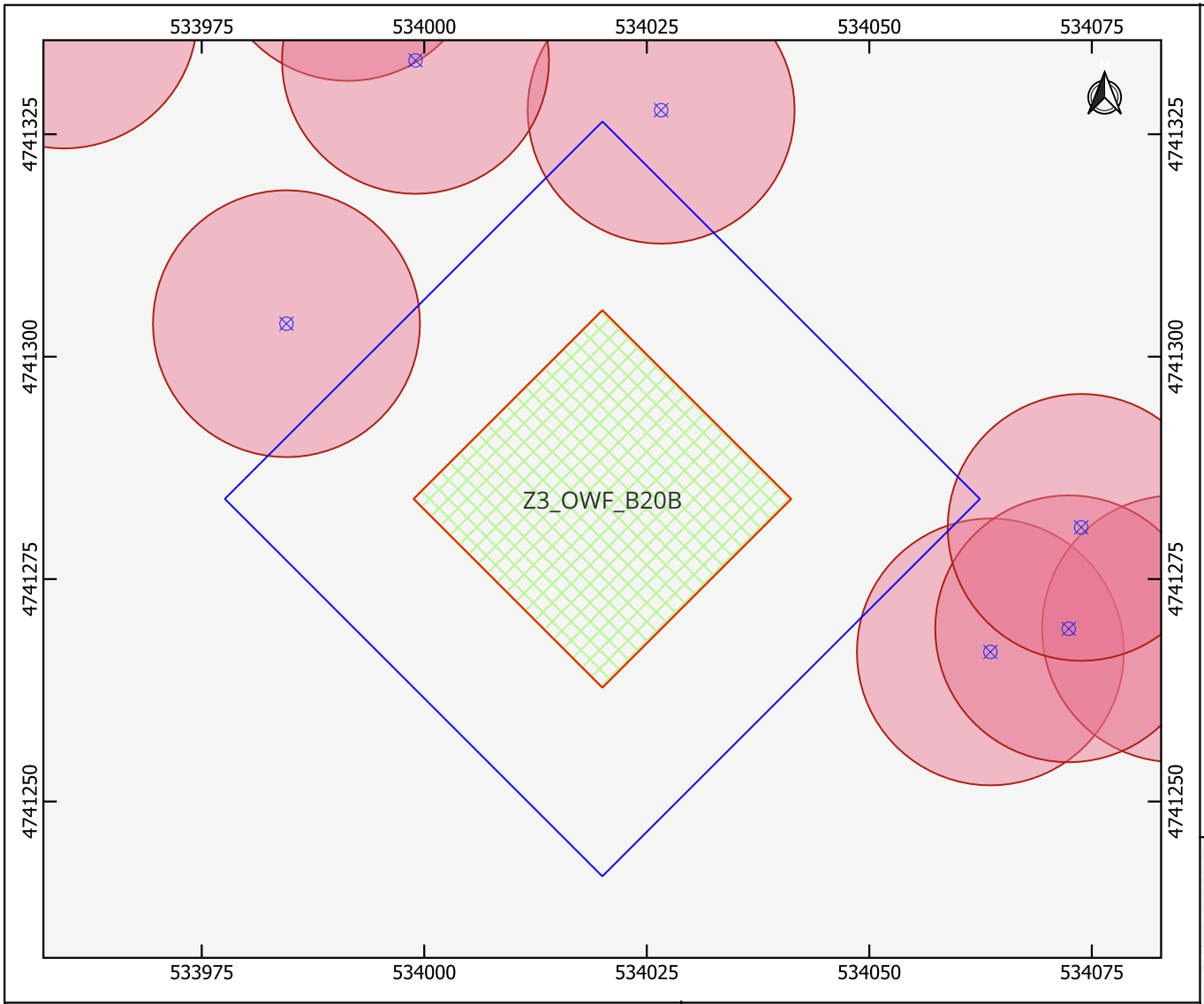
OWF Zone 3
- Geotechnical Boxes OWF zone 3
- Survey extent

Concession
- Zone Parc AO6
- Zone corridors AO6

ALARP
- AO6_Z3_OWF_SSS_targets
- AO6_Z3_OWF_SBP_targets
- AO6_Z3_OWF_ALARP
- AO6_Z3_OWF_avoidance







ANNEXE A: Z3_OWF_B20B
ALARP CERTIFICATE GIS

Scale: 1/750 Date: 2023-03-20

Geodesy : WGS 84 - UTM 31N Version: V0

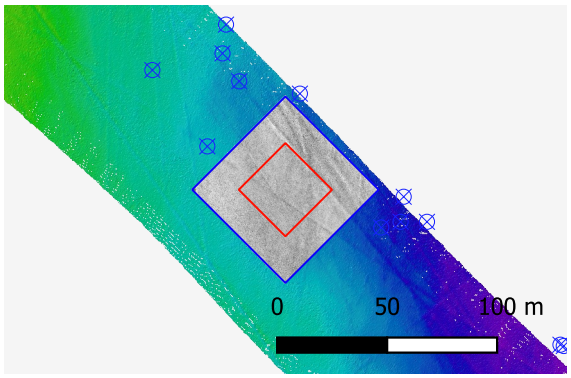
0 10 20 30 40 m

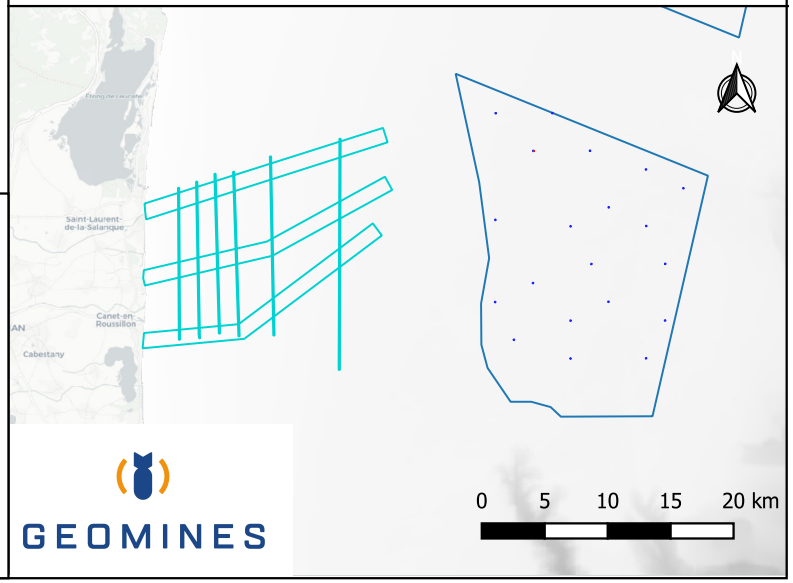
Alternate location
x=534020,y=4741284

OWF Zone 3
- Geotechnical Boxes OWF zone 3
- Survey extent

Concession
- Zone Parc AO6
- Zone corridors AO6

ALARP
- AO6_Z3_OWF_SSS_targets
- AO6_Z3_OWF_SBP_targets
- AO6_Z3_OWF_ALARP
- AO6_Z3_OWF_avoidance





APPENDIX II – TARGET LIST

SIDE SCAN SONAR TARGETS

#	Name	X	Y
1	AO6_Z3_B01_42	544274.9	4727555
2	AO6_OWF_Z3_B12_1	538393.1	4732657.7
3	AO6_OWF_Z3_B12_10	538692.3	4732117.3
4	AO6_OWF_Z3_B12_11	538797.4	4732014.6
5	AO6_OWF_Z3_B12_12	538799.8	4732014.1
6	AO6_OWF_Z3_B12_13	538813.1	4732003.9
7	AO6_OWF_Z3_B12_14	538822.9	4731884.6
8	AO6_OWF_Z3_B12_15	538874.5	4731802.4
9	AO6_OWF_Z3_B12_16	538910.5	4731707.7
10	AO6_OWF_Z3_B12_17	538691.4	4732078.3
11	AO6_OWF_Z3_B12_18	538405.1	4732657.8
12	AO6_OWF_Z3_B12_19	538477.3	4732430.7
13	AO6_OWF_Z3_B12_2	538447.7	4732655.4
14	AO6_OWF_Z3_B12_20	538506.1	4732377.8
15	AO6_OWF_Z3_B12_21	538653.3	4732219.3
16	AO6_OWF_Z3_B12_22	538649.9	4732218.3
17	AO6_OWF_Z3_B12_23	538666.9	4732104.1
18	AO6_OWF_Z3_B12_24	538751.8	4731935
19	AO6_OWF_Z3_B12_25	538866.8	4731829.2
20	AO6_OWF_Z3_B12_3	538491.9	4732584.3
21	AO6_OWF_Z3_B12_4	538457.2	4732540.4
22	AO6_OWF_Z3_B12_5	538477.2	4732511.2
23	AO6_OWF_Z3_B12_6	538540.2	4732379.3
24	AO6_OWF_Z3_B12_7	538613.7	4732365.4
25	AO6_OWF_Z3_B12_8	538618.6	4732240.7
26	AO6_OWF_Z3_B12_9	538680.3	4732216.3
27	AO6_OWF_Z3_B13_1	536840.1	4735552.1
28	AO6_OWF_Z3_B13_10	537086	4735075.4
29	AO6_OWF_Z3_B13_11	536815.2	4735480.1
30	AO6_OWF_Z3_B13_12	536827.3	4735560.8
31	AO6_OWF_Z3_B13_13	536825.4	4735572.4
32	AO6_OWF_Z3_B13_14	536726.1	4735639.4
33	AO6_OWF_Z3_B13_15	536704.8	4735771
34	AO6_OWF_Z3_B13_16	536684.4	4735812.1
35	AO6_OWF_Z3_B13_17	536792.6	4735480.5
36	AO6_OWF_Z3_B13_18	536876	4735411.6
37	AO6_OWF_Z3_B13_19	536888.2	4735399

#	Name	X	Y
38	AO6_OWF_Z3_B13_2	536833.4	4735549.5
39	AO6_OWF_Z3_B13_20	536839.3	4735386
40	AO6_OWF_Z3_B13_21	537018.3	4735171
41	AO6_OWF_Z3_B13_22	537026.3	4735149.9
42	AO6_OWF_Z3_B13_23	537057.3	4735044.9
43	AO6_OWF_Z3_B13_24	537088.5	4735043.6
44	AO6_OWF_Z3_B13_25	537190.4	4734856.9
45	AO6_OWF_Z3_B13_26	537203	4734850.5
46	AO6_OWF_Z3_B13_3	536898.4	4735444.8
47	AO6_OWF_Z3_B13_4	536991.9	4735282.1
48	AO6_OWF_Z3_B13_5	537029.6	4735216.2
49	AO6_OWF_Z3_B13_6	537030	4735216.8
50	AO6_OWF_Z3_B13_7	537240.5	4734735.2
51	AO6_OWF_Z3_B13_8	537064.3	4735036
52	AO6_OWF_Z3_B13_9	537054.9	4735049.4
53	AO6_OWF_Z3_B14_1	533592.2	4730699.6
54	AO6_OWF_Z3_B14_10	533666.3	4730652.6
55	AO6_OWF_Z3_B14_11	533856.5	4730747.7
56	AO6_OWF_Z3_B14_12	533943.6	4730843.5
57	AO6_OWF_Z3_B14_13	534086	4730910.3
58	AO6_OWF_Z3_B14_14	534140.7	4730930.6
59	AO6_OWF_Z3_B14_15	534203.6	4730925
60	AO6_OWF_Z3_B14_16	534246.5	4731002.5
61	AO6_OWF_Z3_B14_17	534047.1	4730860.9
62	AO6_OWF_Z3_B14_18	533700.2	4730687.9
63	AO6_OWF_Z3_B14_19	533646.6	4730664.1
64	AO6_OWF_Z3_B14_2	533627.4	4730714.4
65	AO6_OWF_Z3_B14_20	533464	4730569.6
66	AO6_OWF_Z3_B14_21	533361.9	4730525.5
67	AO6_OWF_Z3_B14_3	533718.7	4730760.8
68	AO6_OWF_Z3_B14_4	533943.9	4730878.7
69	AO6_OWF_Z3_B14_5	534155.2	4731000.5
70	AO6_OWF_Z3_B14_6	534264.7	4731049.4
71	AO6_OWF_Z3_B14_7	534410	4731123.1
72	AO6_OWF_Z3_B14_8	533669.2	4730708.9
73	AO6_OWF_Z3_B14_9	533665	4730703.7
74	AO6_OWF_Z3_B15_1	530677.5	4729192.2
75	AO6_OWF_Z3_B15_10	531270.5	4729476.8
76	AO6_OWF_Z3_B15_11	531278	4729486.3

#	Name	X	Y
77	AO6_OWF_Z3_B15_12	531330.8	4729501.5
78	AO6_OWF_Z3_B15_13	531344.2	4729513.5
79	AO6_OWF_Z3_B15_14	531353.6	4729554
80	AO6_OWF_Z3_B15_15	531418.7	4729606
81	AO6_OWF_Z3_B15_16	531172.4	4729463.7
82	AO6_OWF_Z3_B15_17	530955.8	4729315.7
83	AO6_OWF_Z3_B15_18	530836.8	4729258
84	AO6_OWF_Z3_B15_19	530834.2	4729247.3
85	AO6_OWF_Z3_B15_2	530819.8	4729267.1
86	AO6_OWF_Z3_B15_20	530798.1	4729289.7
87	AO6_OWF_Z3_B15_21	530644.9	4729216.1
88	AO6_OWF_Z3_B15_22	530458.4	4729111.6
89	AO6_OWF_Z3_B15_23	530321.2	4728990.8
90	AO6_OWF_Z3_B15_24	530321.4	4728986.5
91	AO6_OWF_Z3_B15_25	530609.4	4729125.8
92	AO6_OWF_Z3_B15_26	530673.1	4729207.1
93	AO6_OWF_Z3_B15_3	530687.1	4729248.6
94	AO6_OWF_Z3_B15_4	530824.7	4729258
95	AO6_OWF_Z3_B15_5	530894.8	4729344.6
96	AO6_OWF_Z3_B15_6	530933.3	4729316.9
97	AO6_OWF_Z3_B15_7	531125.7	4729403.7
98	AO6_OWF_Z3_B15_8	531153.1	4729464.1
99	AO6_OWF_Z3_B15_9	531168.8	4729481.5
100	AO6_OWF_Z3_B16_1	530941.2	4736233.9
101	AO6_OWF_Z3_B16_10	530948	4735841.4
102	AO6_OWF_Z3_B16_11	530944	4735808
103	AO6_OWF_Z3_B16_12	530947.8	4735802.3
104	AO6_OWF_Z3_B16_13	530992.7	4735716.4
105	AO6_OWF_Z3_B16_14	530940.5	4735707.2
106	AO6_OWF_Z3_B16_15	530946.1	4735698.4
107	AO6_OWF_Z3_B16_16	530938.9	4735705.1
108	AO6_OWF_Z3_B16_17	530947.6	4735692.8
109	AO6_OWF_Z3_B16_18	530951.9	4735687
110	AO6_OWF_Z3_B16_19	530955.3	4735690.8
111	AO6_OWF_Z3_B16_2	530953.8	4736047.4
112	AO6_OWF_Z3_B16_20	530946.8	4735680.8
113	AO6_OWF_Z3_B16_21	530939.1	4735682
114	AO6_OWF_Z3_B16_22	530979.9	4735519.1
115	AO6_OWF_Z3_B16_23	530976.4	4735516.7

#	Name	X	Y
116	AO6_OWF_Z3_B16_24	530941.9	4735423.9
117	AO6_OWF_Z3_B16_25	530940.2	4735408.6
118	AO6_OWF_Z3_B16_26	530972.9	4735379.3
119	AO6_OWF_Z3_B16_27	530976.9	4735385.7
120	AO6_OWF_Z3_B16_28	530972.9	4735385.3
121	AO6_OWF_Z3_B16_29	530968.4	4735365
122	AO6_OWF_Z3_B16_3	530957.4	4735831.4
123	AO6_OWF_Z3_B16_30	530964.2	4735367.8
124	AO6_OWF_Z3_B16_31	530963.9	4735356.3
125	AO6_OWF_Z3_B16_32	530967.1	4735342.8
126	AO6_OWF_Z3_B16_33	530926	4735205.8
127	AO6_OWF_Z3_B16_34	530976.2	4735555.9
128	AO6_OWF_Z3_B16_35	530954.4	4735680.8
129	AO6_OWF_Z3_B16_36	530929.8	4735697.8
130	AO6_OWF_Z3_B16_37	530926.7	4735705.5
131	AO6_OWF_Z3_B16_38	530933.4	4735700.6
132	AO6_OWF_Z3_B16_39	530925.5	4735692
133	AO6_OWF_Z3_B16_4	530956.6	4735814.8
134	AO6_OWF_Z3_B16_40	530920.6	4735711.4
135	AO6_OWF_Z3_B16_41	530924.2	4735695.5
136	AO6_OWF_Z3_B16_42	530925	4735693.8
137	AO6_OWF_Z3_B16_43	530918.7	4735717.2
138	AO6_OWF_Z3_B16_44	530920	4735721.6
139	AO6_OWF_Z3_B16_45	530937.5	4735713.1
140	AO6_OWF_Z3_B16_46	530924.9	4735716.4
141	AO6_OWF_Z3_B16_47	530932.5	4735716.6
142	AO6_OWF_Z3_B16_48	530925.7	4735715.5
143	AO6_OWF_Z3_B16_49	530930.8	4735707.4
144	AO6_OWF_Z3_B16_5	530949.2	4735811.4
145	AO6_OWF_Z3_B16_50	530921.5	4735705.2
146	AO6_OWF_Z3_B16_51	530924.2	4735712.8
147	AO6_OWF_Z3_B16_52	530935	4735790.2
148	AO6_OWF_Z3_B16_53	530939.5	4735793
149	AO6_OWF_Z3_B16_54	530934.7	4735785.5
150	AO6_OWF_Z3_B16_55	530958.6	4735808.3
151	AO6_OWF_Z3_B16_56	530962.6	4735823.8
152	AO6_OWF_Z3_B16_57	530961.7	4735832.1
153	AO6_OWF_Z3_B16_58	530965.5	4735809.5
154	AO6_OWF_Z3_B16_59	530959.9	4735827.8

#	Name	X	Y
155	AO6_OWF_Z3_B16_6	530948.5	4735806.6
156	AO6_OWF_Z3_B16_60	530963.8	4735865.5
157	AO6_OWF_Z3_B16_61	530975.9	4735965.8
158	AO6_OWF_Z3_B16_62	530965.5	4735975.5
159	AO6_OWF_Z3_B16_63	530931.1	4736095.1
160	AO6_OWF_Z3_B16_64	530926	4736357.5
161	AO6_OWF_Z3_B16_65	530960.5	4736434.1
162	AO6_OWF_Z3_B16_66	530944.5	4736429.7
163	AO6_OWF_Z3_B16_67	530944.7	4736451.9
164	AO6_OWF_Z3_B16_68	530929.2	4736439.6
165	AO6_OWF_Z3_B16_69	530925.7	4736463.3
166	AO6_OWF_Z3_B16_7	530960.3	4735823.2
167	AO6_OWF_Z3_B16_70	530927.8	4736462
168	AO6_OWF_Z3_B16_71	530976.6	4736561.2
169	AO6_OWF_Z3_B16_72	530906	4735925.8
170	AO6_OWF_Z3_B16_73	530914.5	4735908.3
171	AO6_OWF_Z3_B16_74	530946.4	4735833.4
172	AO6_OWF_Z3_B16_75	530951.3	4735832.2
173	AO6_OWF_Z3_B16_76	530955.6	4735834.8
174	AO6_OWF_Z3_B16_77	530954.2	4735839.9
175	AO6_OWF_Z3_B16_78	530957.9	4735794.1
176	AO6_OWF_Z3_B16_79	530907.1	4735716.3
177	AO6_OWF_Z3_B16_8	530950.6	4735822.2
178	AO6_OWF_Z3_B16_80	530906	4735719
179	AO6_OWF_Z3_B16_81	530916.6	4735703.9
180	AO6_OWF_Z3_B16_82	530905.9	4735721.8
181	AO6_OWF_Z3_B16_9	530956.6	4735825.3
182	AO6_OWF_Z3_B17_1	538694	4741128.7
183	AO6_OWF_Z3_B17_10	538659.2	4741148.9
184	AO6_OWF_Z3_B17_11	538605.6	4741163.3
185	AO6_OWF_Z3_B17_12	538596.4	4741160
186	AO6_OWF_Z3_B17_13	538591.1	4741159.2
187	AO6_OWF_Z3_B17_14	538591.1	4741164
188	AO6_OWF_Z3_B17_15	538603.4	4741166.5
189	AO6_OWF_Z3_B17_16	538600.8	4741166.2
190	AO6_OWF_Z3_B17_17	538588.7	4741165.1
191	AO6_OWF_Z3_B17_18	538578.3	4741175.1
192	AO6_OWF_Z3_B17_19	538523	4741232.2
193	AO6_OWF_Z3_B17_2	538647.7	4741154.8

#	Name	X	Y
194	AO6_OWF_Z3_B17_20	538384.5	4741428.6
195	AO6_OWF_Z3_B17_21	538375.3	4741378.8
196	AO6_OWF_Z3_B17_22	538255.8	4741497.6
197	AO6_OWF_Z3_B17_23	538194.5	4741621.2
198	AO6_OWF_Z3_B17_24	538218.6	4741537.8
199	AO6_OWF_Z3_B17_25	538223.7	4741547.9
200	AO6_OWF_Z3_B17_26	538249	4741555
201	AO6_OWF_Z3_B17_27	538249.4	4741553.6
202	AO6_OWF_Z3_B17_28	538246.6	4741555.8
203	AO6_OWF_Z3_B17_29	538278.9	4741494.5
204	AO6_OWF_Z3_B17_3	538651.2	4741153.7
205	AO6_OWF_Z3_B17_30	538478.9	4741344
206	AO6_OWF_Z3_B17_31	538500.7	4741337.1
207	AO6_OWF_Z3_B17_32	538495.8	4741332.6
208	AO6_OWF_Z3_B17_33	538656.3	4741177.5
209	AO6_OWF_Z3_B17_34	538665.3	4741168.1
210	AO6_OWF_Z3_B17_35	538673.6	4741160.2
211	AO6_OWF_Z3_B17_36	538643	4741130.1
212	AO6_OWF_Z3_B17_37	538639.5	4741143.5
213	AO6_OWF_Z3_B17_38	538654.1	4741179.5
214	AO6_OWF_Z3_B17_39	538657.8	4741174.9
215	AO6_OWF_Z3_B17_4	538649.3	4741166
216	AO6_OWF_Z3_B17_40	538670.5	4741161.2
217	AO6_OWF_Z3_B17_41	538802.6	4740974.7
218	AO6_OWF_Z3_B17_42	538908.9	4740930.1
219	AO6_OWF_Z3_B17_43	538914.9	4740858
220	AO6_OWF_Z3_B17_44	538697.1	4741099
221	AO6_OWF_Z3_B17_45	538694.1	4741103.2
222	AO6_OWF_Z3_B17_46	538685.5	4741176.9
223	AO6_OWF_Z3_B17_47	538679.7	4741163.7
224	AO6_OWF_Z3_B17_48	538685.2	4741161.2
225	AO6_OWF_Z3_B17_49	538643.9	4741154.2
226	AO6_OWF_Z3_B17_5	538645.6	4741174.6
227	AO6_OWF_Z3_B17_50	538675.1	4741185.7
228	AO6_OWF_Z3_B17_51	538682.8	4741182.2
229	AO6_OWF_Z3_B17_52	538673.6	4741180.3
230	AO6_OWF_Z3_B17_53	538684.9	4741168.1
231	AO6_OWF_Z3_B17_54	538675.6	4741181.3
232	AO6_OWF_Z3_B17_55	538668.1	4741179.8

#	Name	X	Y
233	AO6_OWF_Z3_B17_56	538650.1	4741162.6
234	AO6_OWF_Z3_B17_57	538648.8	4741195.8
235	AO6_OWF_Z3_B17_58	538641.2	4741155.6
236	AO6_OWF_Z3_B17_59	538577.8	4741218.3
237	AO6_OWF_Z3_B17_6	538644.7	4741178.2
238	AO6_OWF_Z3_B17_60	538602.5	4741250.7
239	AO6_OWF_Z3_B17_61	538522.9	4741317.8
240	AO6_OWF_Z3_B17_62	538514.5	4741347.5
241	AO6_OWF_Z3_B17_63	538473.2	4741316
242	AO6_OWF_Z3_B17_64	538435.9	4741418.9
243	AO6_OWF_Z3_B17_65	538416.2	4741446.4
244	AO6_OWF_Z3_B17_66	538282	4741511.9
245	AO6_OWF_Z3_B17_67	538077.4	4741780.3
246	AO6_OWF_Z3_B17_7	538646.4	4741178.6
247	AO6_OWF_Z3_B17_8	538659.6	4741162
248	AO6_OWF_Z3_B17_9	538656.1	4741160
249	AO6_OWF_Z3_B18_1	535059	4744803.9
250	AO6_OWF_Z3_B18_10	535551.9	4744259
251	AO6_OWF_Z3_B18_11	535533.5	4744266.2
252	AO6_OWF_Z3_B18_12	535509.9	4744335.2
253	AO6_OWF_Z3_B18_13	535477	4744366.9
254	AO6_OWF_Z3_B18_14	535470.9	4744372.6
255	AO6_OWF_Z3_B18_15	535455.4	4744393.3
256	AO6_OWF_Z3_B18_16	535419.1	4744444.1
257	AO6_OWF_Z3_B18_17	535416.3	4744440.8
258	AO6_OWF_Z3_B18_18	535391.9	4744452.4
259	AO6_OWF_Z3_B18_19	535273.1	4744523.8
260	AO6_OWF_Z3_B18_2	535051	4744749
261	AO6_OWF_Z3_B18_20	535265.7	4744573.3
262	AO6_OWF_Z3_B18_21	535191.8	4744665.1
263	AO6_OWF_Z3_B18_22	535180	4744675.1
264	AO6_OWF_Z3_B18_23	535263.7	4744564.7
265	AO6_OWF_Z3_B18_24	535261.9	4744562.9
266	AO6_OWF_Z3_B18_25	535269	4744569.1
267	AO6_OWF_Z3_B18_26	535267.8	4744501.8
268	AO6_OWF_Z3_B18_27	535382.8	4744455
269	AO6_OWF_Z3_B18_28	535450.1	4744382.7
270	AO6_OWF_Z3_B18_29	535588.7	4744182.1
271	AO6_OWF_Z3_B18_3	530623.3	4744622.8

#	Name	X	Y
272	AO6_OWF_Z3_B18_30	535665.4	4744162.7
273	AO6_OWF_Z3_B18_31	535790	4744049
274	AO6_OWF_Z3_B18_32	535547.9	4744215
275	AO6_OWF_Z3_B18_33	535568.6	4744247
276	AO6_OWF_Z3_B18_34	535324.4	4744432.4
277	AO6_OWF_Z3_B18_35	535250.9	4744569.3
278	AO6_OWF_Z3_B18_36	535216.8	4744544.1
279	AO6_OWF_Z3_B18_37	535255.3	4744564.5
280	AO6_OWF_Z3_B18_38	535190.8	4744553.3
281	AO6_OWF_Z3_B18_39	535195	4744547.2
282	AO6_OWF_Z3_B18_4	535765.7	4744090.4
283	AO6_OWF_Z3_B18_40	533993	4741359.1
284	AO6_OWF_Z3_B18_41	533991.4	4741346
285	AO6_OWF_Z3_B18_42	533957.1	4741382.2
286	AO6_OWF_Z3_B18_43	533959.5	4741338.4
287	AO6_OWF_Z3_B18_44	533999	4741333.3
288	AO6_OWF_Z3_B18_5	535751.1	4744097.3
289	AO6_OWF_Z3_B18_6	535609.5	4744182.8
290	AO6_OWF_Z3_B18_7	535628.1	4744163.6
291	AO6_OWF_Z3_B18_8	535600	4744184.1
292	AO6_OWF_Z3_B18_9	535576.2	4744262.9
293	AO6_OWF_Z3_B19_10	530995.3	4744291.1
294	AO6_OWF_Z3_B19_11	530987.8	4744244.6
295	AO6_OWF_Z3_B19_12	530992.9	4744240.1
296	AO6_OWF_Z3_B19_13	531014	4744215.7
297	AO6_OWF_Z3_B19_14	531081.3	4744212.5
298	AO6_OWF_Z3_B19_15	531065.1	4744168.3
299	AO6_OWF_Z3_B19_19	531191.4	4744042.5
300	AO6_OWF_Z3_B19_2	530658	4744586.5
301	AO6_OWF_Z3_B19_20	531268	4743962.6
302	AO6_OWF_Z3_B19_21	531312	4743968.2
303	AO6_OWF_Z3_B19_22	531319.9	4743983.2
304	AO6_OWF_Z3_B19_23	531379.1	4743922.6
305	AO6_OWF_Z3_B19_24	531348	4743876.7
306	AO6_OWF_Z3_B19_25	531454.3	4743844
307	AO6_OWF_Z3_B19_26	531436.5	4743859.6
308	AO6_OWF_Z3_B19_27	531001.7	4744327.2
309	AO6_OWF_Z3_B19_28	530940.9	4744316.1
310	AO6_OWF_Z3_B19_29	530851.1	4744416.1

#	Name	X	Y
311	AO6_OWF_Z3_B19_3	530663.7	4744570.1
312	AO6_OWF_Z3_B19_30	530846.8	4744410.2
313	AO6_OWF_Z3_B19_31	530813.2	4744507.3
314	AO6_OWF_Z3_B19_32	530635.9	4744623.1
315	AO6_OWF_Z3_B19_33	530716.7	4744572.8
316	AO6_OWF_Z3_B19_34	530882.7	4744470.7
317	AO6_OWF_Z3_B19_35	530863.3	4744410.7
318	AO6_OWF_Z3_B19_36	530960.8	4744391
319	AO6_OWF_Z3_B19_37	531017.4	4744330.7
320	AO6_OWF_Z3_B19_38	531042.2	4744293.9
321	AO6_OWF_Z3_B19_39	531055.4	4744238.4
322	AO6_OWF_Z3_B19_4	530662	4744586.3
323	AO6_OWF_Z3_B19_40	531142.3	4744188.2
324	AO6_OWF_Z3_B19_41	531146.6	4744195
325	AO6_OWF_Z3_B19_42	531124.9	4744161.2
326	AO6_OWF_Z3_B19_43	531245.8	4744101.1
327	AO6_OWF_Z3_B19_44	531237.3	4744109.3
328	AO6_OWF_Z3_B19_45	531260.8	4744072.3
329	AO6_OWF_Z3_B19_46	531383.7	4743887.7
330	AO6_OWF_Z3_B19_47	531456.9	4743827.6
331	AO6_OWF_Z3_B19_48	534415.7	4740935.8
332	AO6_OWF_Z3_B19_49	534396.4	4740954.2
333	AO6_OWF_Z3_B19_5	530678.9	4744615.6
334	AO6_OWF_Z3_B19_6	530718.6	4744523
335	AO6_OWF_Z3_B19_7	530854.8	4744384.3
336	AO6_OWF_Z3_B19_8	530907.3	4744385.8
337	AO6_OWF_Z3_B19_9	530985.5	4744289.8
338	AO6_OWF_Z3_B20_50	534380.2	4740960.8
339	AO6_OWF_Z3_B20_51	534299.2	4741048.1
340	AO6_OWF_Z3_B20_52	534255.1	4741097.6
341	AO6_OWF_Z3_B20_53	534152.8	4741147.5
342	AO6_OWF_Z3_B20_54	534146.6	4741212.9
343	AO6_OWF_Z3_B20_55	534145.1	4741213.5
344	AO6_OWF_Z3_B20_56	534113.6	4741178.4
345	AO6_OWF_Z3_B20_57	534084.4	4741269.4
346	AO6_OWF_Z3_B20_58	534072.4	4741269.4
347	AO6_OWF_Z3_B20_59	534063.6	4741266.8
348	AO6_OWF_Z3_B20_60	534073.8	4741280.8
349	AO6_OWF_Z3_B20_61	533984.5	4741303.7

#	Name	X	Y
350	AO6_OWF_Z3_B20_62	534026.6	4741327.7
351	AO6_OWF_Z3_B20_63	533912.6	4741378.4
352	AO6_OWF_Z3_B20_64	533828.5	4741517.8
353	AO6_OWF_Z3_B20_65	533742.9	4741540.2
354	AO6_OWF_Z3_B20_66	533723.9	4741562.9
355	AO6_OWF_Z3_B20_67	533709.9	4741568.4
356	AO6_OWF_Z3_B20_68	534139.6	4741123
357	AO6_OWF_Z3_B20_69	534125.8	4741137
358	AO6_OWF_Z3_B20_70	533763	4741584.5
359	AO6_OWF_Z3_B20_71	533722.8	4741569.5
360	AO6_OWF_Z3_B20_72	533681.6	4741649.2
361	AO6_OWF_Z3_B20_73	533644.8	4741636.2
362	AO6_OWF_Z3_B20_74	533661	4741667.6
363	AO6_OWF_Z3_B20_75	533627	4741713.3
364	AO6_OWF_Z3_B20_76	533635.9	4741700.5
365	AO6_Z3_B01__12	544589.3	4728117.3
366	AO6_Z3_B01__13	544495.1	4728042.6
367	AO6_Z3_B01__14	544527.1	4728006
368	AO6_Z3_B01__15	544247.6	4727538.1
369	AO6_Z3_B01__16	544387.5	4727720.2
370	AO6_Z3_B01__17	544381.9	4727807.6
371	AO6_Z3_B01__18	544386	4727811.6
372	AO6_Z3_B01__19	544523.5	4728080.9
373	AO6_Z3_B01__20	544568.7	4728161.4
374	AO6_Z3_B01_03	544311.8	4727628.8
375	AO6_Z3_B01_04	544304.3	4727632.5
376	AO6_Z3_B01_05	544320.7	4727662.2
377	AO6_Z3_B01_06	544429	4727862.7
378	AO6_Z3_B01_07	544453	4727900
379	AO6_Z3_B01_08	544466	4727923.1
380	AO6_Z3_B01_09	544477.9	4728065.3
381	AO6_Z3_B01_10	544547.2	4728085.8
382	AO6_Z3_B01_11	544576.5	4728252
383	AO6_Z3_B02__1	543023.6	4725002.9
384	AO6_Z3_B02__10	542985.8	4724966.8
385	AO6_Z3_B02__11	543124.3	4725260.8
386	AO6_Z3_B02__12	536655.7	4724962.7
387	AO6_Z3_B02__2	542948.8	4724872.1
388	AO6_Z3_B02__3	542947.2	4724870.3

#	Name	X	Y
389	AO6_Z3_B02__4	542883.2	4724750.5
390	AO6_Z3_B02__5	542777.4	4724553.8
391	AO6_Z3_B02__6	542749.2	4724551.6
392	AO6_Z3_B02__7	542903.5	4724744.6
393	AO6_Z3_B02__8	542985.1	4724897.2
394	AO6_Z3_B02__9	542769.9	4724537.9
395	AO6_Z3_B03_10	537250.8	4724735.1
396	AO6_Z3_B03_2	536820.7	4724892.7
397	AO6_Z3_B03_3	536849.4	4724888.5
398	AO6_Z3_B03_4	537067.3	4724782.3
399	AO6_Z3_B03_5	537105.1	4724800.7
400	AO6_Z3_B03_6	537143.1	4724796.8
401	AO6_Z3_B03_7	537135.3	4724812.6
402	AO6_Z3_B03_8	536979.7	4724861.2
403	AO6_Z3_B03_9	536708.7	4724871.7
404	AO6_Z3_B04_1	532140.9	4726458.5
405	AO6_Z3_B04_10	532153	4726394.5
406	AO6_Z3_B04_11	532127.2	4726375.6
407	AO6_Z3_B04_12	532371.3	4726294.1
408	AO6_Z3_B04_13	532634.7	4726210.1
409	AO6_Z3_B04_14	532638.3	4726218.2
410	AO6_Z3_B04_15	532690.7	4726189.5
411	AO6_Z3_B04_2	532228.9	4726425.1
412	AO6_Z3_B04_3	532281.1	4726408.3
413	AO6_Z3_B04_4	532306.8	4726398.4
414	AO6_Z3_B04_5	532481.6	4726339.4
415	AO6_Z3_B04_6	532465.8	4726280.3
416	AO6_Z3_B04_7	532379.2	4726323
417	AO6_Z3_B04_8	532156.5	4726387.6
418	AO6_Z3_B04_9	532163.8	4726384.4
419	AO6Z3_B01_02	544253.9	4727613.2
420	AO6_Z3_OWF_0274	539653.787	4737020.471
421	AO6_Z3_OWF_0275	539349.548	4737135.924
422	AO6_Z3_OWF_0271	542589.158	4735531.035
423	AO6_Z3_OWF_0272	542587.591	4735543.574
424	AO6_Z3_OWF_0286	542667.732	4739985.719
425	AO6_Z3_OWF_0271	539886.24	4736890.333
426	AO6_Z3_OWF_0272	539915.803	4736875.361
427	AO6_Z3_OWF_0273	539936.617	4736821.918

#	Name	X	Y
428	AO6_Z3_OWF_0282	543210.373	4739674.853
429	AO6_Z3_OWF_0283	543205.771	4739661.029
430	AO6_Z3_OWF_0284	543163.547	4739681.057
431	AO6_Z3_OWF_0285	543148.722	4739751.69
432	AO6_Z3_OWF_0278	542625.226	4740049.77
433	AO6_Z3_OWF_0279	542548.034	4740067.868
434	AO6_Z3_OWF_0280	542617.91	4740026.214
435	AO6_Z3_OWF_0281	543072.71	4739741.792
436	AO6_Z3_OWF_0285	543073.934	4735301.324
437	AO6_Z3_OWF_0286	543109.38	4735228.373
438	AO6_Z3_OWF_0287	543236.94	4735172.53
439	AO6_Z3_OWF_0288	543285.986	4735190.573
440	AO6_Z3_OWF_0281	543008.208	4735274.338
441	AO6_Z3_OWF_0282	543032.107	4735272.437
442	AO6_Z3_OWF_0283	543067.589	4735298.139
443	AO6_Z3_OWF_0284	543053.465	4735258.481
444	AO6_Z3_OWF_0277	542729.211	4735418.465
445	AO6_Z3_OWF_0278	542822.749	4735424.022
446	AO6_Z3_OWF_0279	542854.113	4735350.597
447	AO6_Z3_OWF_0280	542939.644	4735307.323
448	AO6_Z3_OWF_0273	542669.043	4735503.659
449	AO6_Z3_OWF_0274	542681.898	4735496.347
450	AO6_Z3_OWF_0275	542664.605	4735455.859
451	AO6_Z3_OWF_0276	542698.715	4735432.582
452	AO6_Z3_OWF_0280	544706.339	4732495.963
453	AO6_Z3_OWF_0281	544680.293	4732539.958
454	AO6_Z3_OWF_0282	544727.376	4732506.356
455	AO6_Z3_OWF_0271	546068.983	4738253.23
456	AO6_Z3_OWF_0276	544388.159	4732263.797
457	AO6_Z3_OWF_0277	544421.269	4732289.491
458	AO6_Z3_OWF_0278	544542.538	4732376.956
459	AO6_Z3_OWF_0279	544625.351	4732437.349
460	AO6_Z3_OWF_0272	544145.902	4732109.006
461	AO6_Z3_OWF_0273	544263.231	4732184.45
462	AO6_Z3_OWF_0274	544293.601	4732258.639
463	AO6_Z3_OWF_0275	544366.116	4732249.542
464	AO6_Z3_OWF_0292	540133.132	4729488.424
465	AO6_Z3_OWF_0293	540193.107	4729462.879
466	AO6_Z3_OWF_0294	540237.94	4729487.593

#	Name	X	Y
467	AO6_Z3_OWF_0271	544106.33	4732081.536
468	AO6_Z3_OWF_0274	542939.865	4739830.47
469	AO6_Z3_OWF_0275	542863.557	4739869.442
470	AO6_Z3_OWF_0276	542818.046	4739953.341
471	AO6_Z3_OWF_0277	542711.096	4739943.198
472	AO6_Z3_OWF_0280	545633.375	4738486.797
473	AO6_Z3_OWF_0271	543169.748	4739716.72
474	AO6_Z3_OWF_0272	543141.556	4739728.644
475	AO6_Z3_OWF_0273	543049.899	4739785.079
476	AO6_Z3_OWF_0276	545542.98	4738505.562
477	AO6_Z3_OWF_0277	545871.486	4738395.178
478	AO6_Z3_OWF_0278	546084.598	4738238.909
479	AO6_Z3_OWF_0279	546015.507	4738244.655
480	AO6_Z3_OWF_0272	545961.464	4738366.779
481	AO6_Z3_OWF_0273	545758.094	4738418.34
482	AO6_Z3_OWF_0274	545697.875	4738500.235
483	AO6_Z3_OWF_0275	545602.242	4738501.626
484	AO6_Z3_OWF_0301	542743.847	4735502.671
485	AO6_Z3_OWF_0302	542785.973	4735424.182
486	AO6_Z3_OWF_0303	542802.576	4735418.529
487	AO6_Z3_OWF_0304	542838.247	4735404.99
488	AO6_Z3_OWF_0297	542790.656	4735464.976
489	AO6_Z3_OWF_0298	542674.388	4735468.6
490	AO6_Z3_OWF_0299	542417.856	4735668.643
491	AO6_Z3_OWF_0300	542681.781	4735537.803
492	AO6_Z3_OWF_0293	543285.772	4735157.51
493	AO6_Z3_OWF_0294	543082.379	4735321.311
494	AO6_Z3_OWF_0295	542872.153	4735367.09
495	AO6_Z3_OWF_0296	542839.097	4735433.582
496	AO6_Z3_OWF_0289	543190.041	4735244.842
497	AO6_Z3_OWF_0290	543444.534	4735140.5
498	AO6_Z3_OWF_0291	543381.676	4735117.921
499	AO6_Z3_OWF_0292	543302.445	4735202.082
500	AO6_Z3_OWF_0305	542923.345	4735348.148
501	AO6_Z3_OWF_0306	543054.265	4735341.486
502	AO6_Z3_OWF_0307	543079.699	4735333.796
503	AO6_Z3_OWF_0272	539403.58	4729101.188
504	AO6_Z3_OWF_0273	539413.411	4729107.063
505	AO6_Z3_OWF_0274	539501.699	4729146.886

#	Name	X	Y
506	AO6_Z3_OWF_0275	539596.931	4729137.882
507	AO6_Z3_OWF_0278	536839.561	4727781.874
508	AO6_Z3_OWF_0279	536819.509	4727764.465
509	AO6_Z3_OWF_0280	536696.977	4727709.684
510	AO6_Z3_OWF_0271	539316.875	4729057.625
511	AO6_Z3_OWF_0274	537052.058	4727940.359
512	AO6_Z3_OWF_0275	537072.744	4727949.06
513	AO6_Z3_OWF_0276	537110.316	4727967.116
514	AO6_Z3_OWF_0277	537100.004	4727961.759
515	AO6_Z3_OWF_0271	536486.675	4727658.084
516	AO6_Z3_OWF_0272	536673.924	4727750.811
517	AO6_Z3_OWF_0273	536814.172	4727813.43
518	AO6_Z3_OWF_0288	539602.366	4729174.842
519	AO6_Z3_OWF_0289	539732.747	4729300.213
520	AO6_Z3_OWF_0290	540070.436	4729404.453
521	AO6_Z3_OWF_0291	540100.498	4729475.771
522	AO6_Z3_OWF_0284	540167.94	4729486.794
523	AO6_Z3_OWF_0285	539753.304	4729284.214
524	AO6_Z3_OWF_0286	539726.205	4729273.292
525	AO6_Z3_OWF_0287	539569.876	4729217.027
526	AO6_Z3_OWF_0280	540302.192	4729487.683
527	AO6_Z3_OWF_0281	540549.417	4729617.04
528	AO6_Z3_OWF_0282	540307.382	4729502.454
529	AO6_Z3_OWF_0283	540219.078	4729454.403
530	AO6_Z3_OWF_0276	539591.248	4729147.625
531	AO6_Z3_OWF_0277	539750.883	4729231.386
532	AO6_Z3_OWF_0278	539915.53	4729355.083
533	AO6_Z3_OWF_0279	540070.658	4729370.7