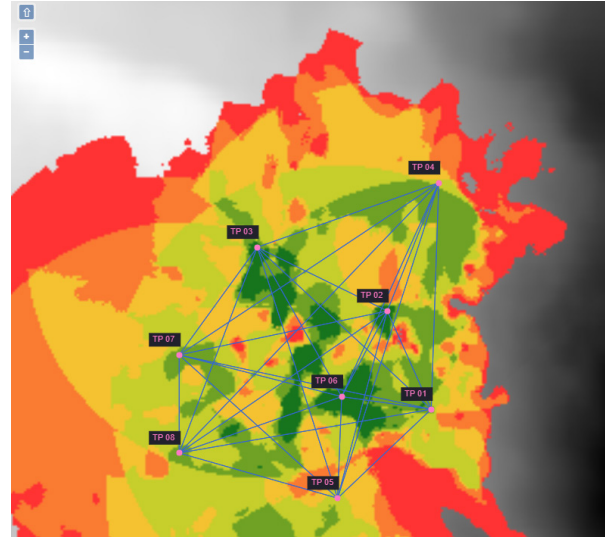


# Delph Subsea Positioning Software

## LBL Array Planning module

Delph Subsea Positioning is an intuitive and dynamic software used for the preparation, the operation and the post-processing of Exail subsea positioning products.

The LBL Array Planning module is dedicated to the preparation of LBL jobs. The software analyses acoustic propagation by taking into account the Digital Terrain Model and the Sound Velocity Profile. It produces real time visibility map for LBL acoustic transponders and transceivers.



### FEATURES

- Manage Sound Velocity profile
- Display DTM
- Drag and drop transponders
- Display visibility map
- Display acoustic line of sight between transponders
- Automatic report generation

### BENEFITS

- Easy and intuitive
- Real time computation
- Does not require any acoustic knowledge
- Cost effective

### CHARACTERISTICS

- Supported platform: Win10 x64
- Processor: Intel Core i5 2 Ghz
- Memory: 4 Go

### SOUND VELOCITY PROFILE

- Edit a Sound Velocity from a data base (selection of location and date)
- Import a Sound Velocity profile from a file (field selection tool)
- Optimisation algorithm
- Different models for conversion of CTD to SV
- Export file

### VISIBILITY MAP

- Import of a Digital Terrain Model
- Import of a Sound Velocity profile
- Import of a field layout
- Import of structures
- Creation or import transponder list
- Flying mode: constant depth or altitude
- Selection of transponder height
- Acoustic line of sight between transponders
- Automatic report with transponders positions, depth and line of sight between transponders

### INPUT FILE FORMAT

- .xyz or .tif (geotiff) for DTM
- .txt for SV
- DXF for field layout

### COMPATIBILITY

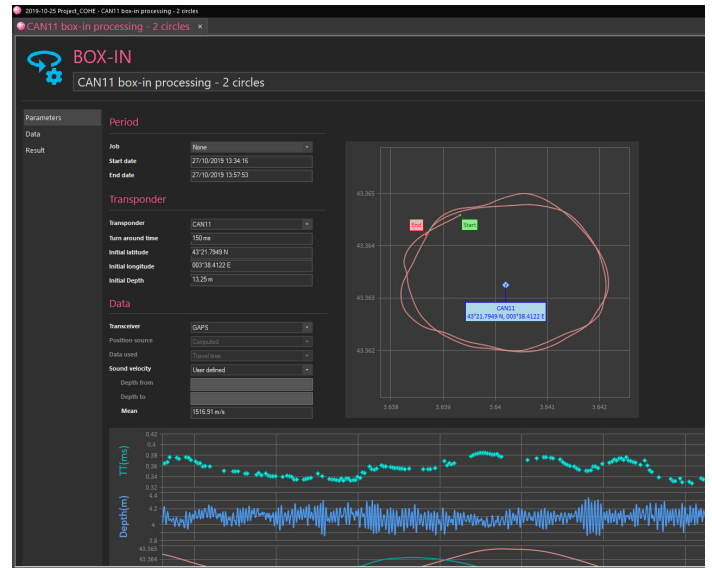
- Ramses
- Canopus transponder

# Delph Subsea Positioning Software

## Operations module

Delph Subsea Positioning is an intuitive and dynamic software used for the preparation, the operation and the post-processing of Exail subsea positioning products.

The operations module runs state-of-the-art algorithms for the calibration of LBL array and produces automatic calibration reports.



## FEATURES

- Manage projects
- Interface to Exail transceivers
- Configure Exail transceivers
- Collect data from transceivers (boxin)
- Collect data from transponders (mutual calibration)
- Monitor data and watch status
- Filter data
- Run LBL calibration algorithms
- Display calibration results
- Produce calibration reports

## BENEFITS

- Easy and intuitive
- Does not require any acoustic knowledge
- Full LBL calibration tools

## CHARACTERISTICS

- Supported platform: Win10 x64
- Processor: Intel Core i5 2 Ghz
- Memory: 4 Go

## COMPATIBILITY

- Ramses
- Gaps
- Canopus transponder

## BOX-IN RESULTS

### INFORMATION

Name	Date
CAN11 box-in processing - 2 circles	20/11/2019 22:10:31

### DATA USED

Start	End
27/10/2019 13:34:16	27/10/2019 13:57:53

Position source	Data type	#Acoustic
computed	travel-time	196

### SETTINGS

Transceiver	Value	Transponder	Value
Type	gaps-iv	Type	canopus-mf
Name	GAPS	Name	CAN11
Serial number		Serial number	
Average sound velocity	1516.91 m/s	Turn around time	150 ms

### RESULT

Transponder Box-in	Latitude	Longitude	Depth
Initial	43°21'7949 N	003°38'4122 E	13.25 m
Calculated	43°21'795802 N	3°38'413079 E	13.668 m
Initial - Calculated	1.671 m	1188 m	0.418024 m

