

# LNG TANKER/TERMINAL

## Unloading Operations of CASE C

Type	LNG
Client	ICCT

### Campaign information

Pilot operator	Søren Jørgensen
Site location	
Sampling date	
Start time	12:08:27 PM
End time	3:05:13 PM
Number of walls	6
Reporting date	10/4/2023
Approved by	Jörg Beecken (Research Manager)
Lab address	Teknikerbyen 5, DK-2830 Virum

### Total emissions rate

Target gas	CH <sub>4</sub>
Average emission	32.44 kg/h
Uncertainty	± 12.05 kg/h
Measured fraction	N/A %
Notes	

**32.44 kg/h**

Average emissions rate





### Client information

Client	ICCT
Address	1500 K Street NW, Suite 650, Washington DC 20005
Contact person	Bryan Comer
Email	bryan.comer@theicct.org

### Site information

Product	CH <sub>4</sub>
Gas flow	N/A kg/h
Data provider	N/A

Notes: N/A



## Measurement campaign

Sampling plan ref. #207

### Atmospheric specs ranges

Temperature	19.3 - 20.4 °C
Mean wind velocity	5.2 - 6.3 m/s
Mean wind direction	191 - 201 °North

### Measurement data

Wall ID	Start time	End time	Mean wind velocity (m/s)	Mean wind (°North)
408	12:08:27 PM	12:30:04 PM	5.2	191
409	12:42:38 PM	1:03:55 PM	5.5	193
410	1:16:41 PM	1:36:02 PM	6.3	199
411	1:51:25 PM	2:10:28 PM	5.9	191
412	2:19:26 PM	2:38:37 PM	6.3	199
413	2:46:05 PM	3:05:13 PM	5.7	201

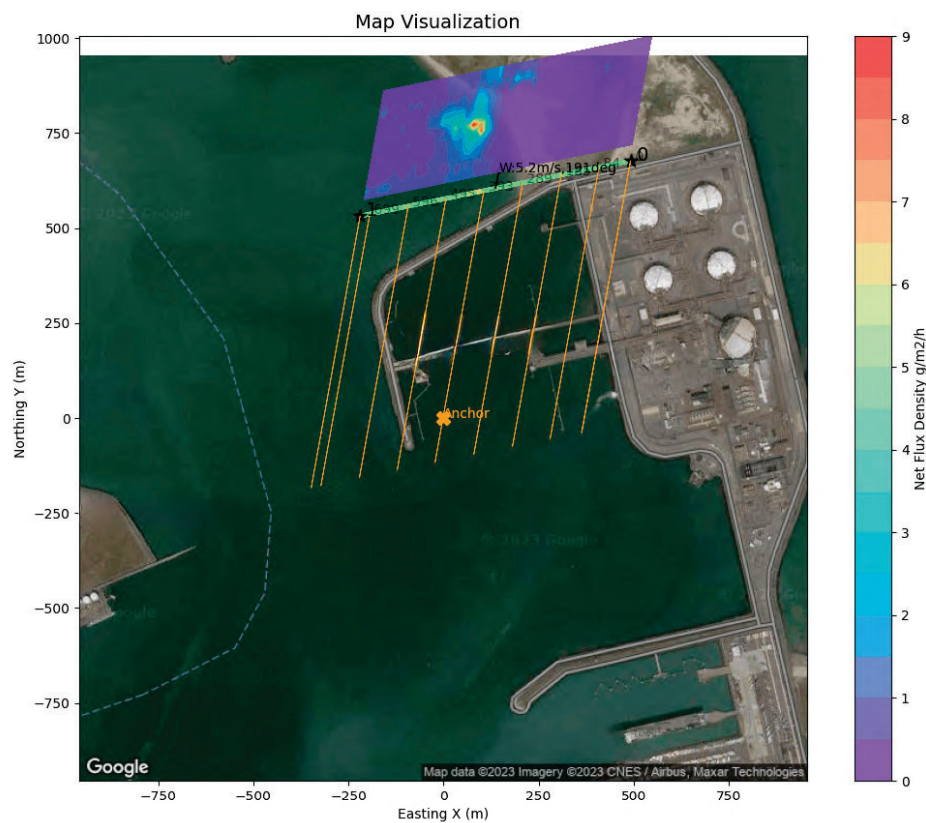
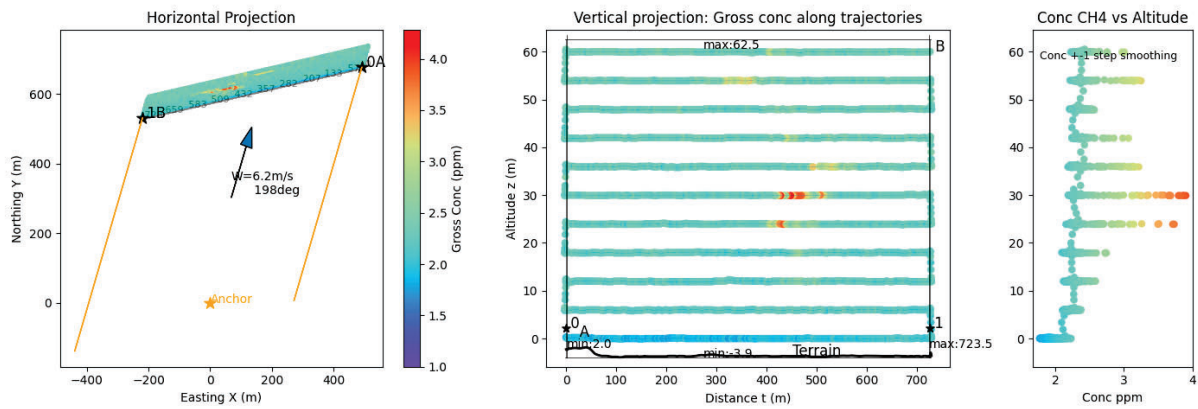
Wall ID	CH <sub>4</sub> emissions (kg/h)	Notes
408	23.68	
409	36.04	
410	40.45	
411	33.61	
412	34.05	
413	26.80	

Average emission	32.44 kg/h
Uncertainty	± 12.05 kg/h
Standard deviation	6.16 kg/h

## Result visualization 408

CH<sub>4</sub> emissions rate

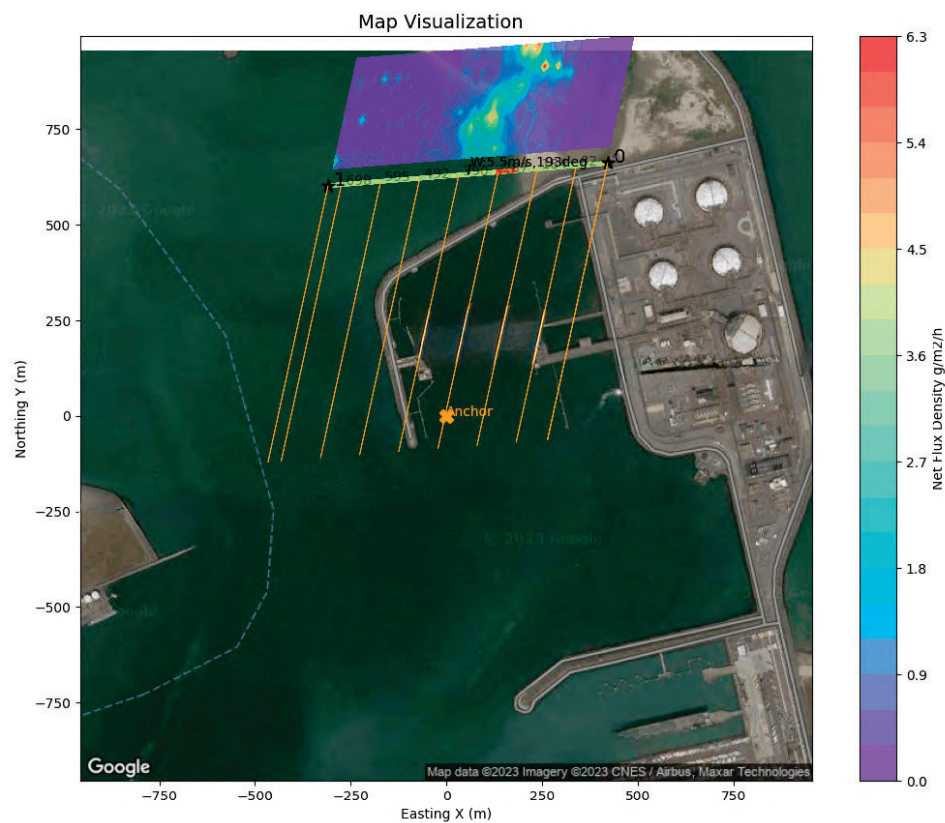
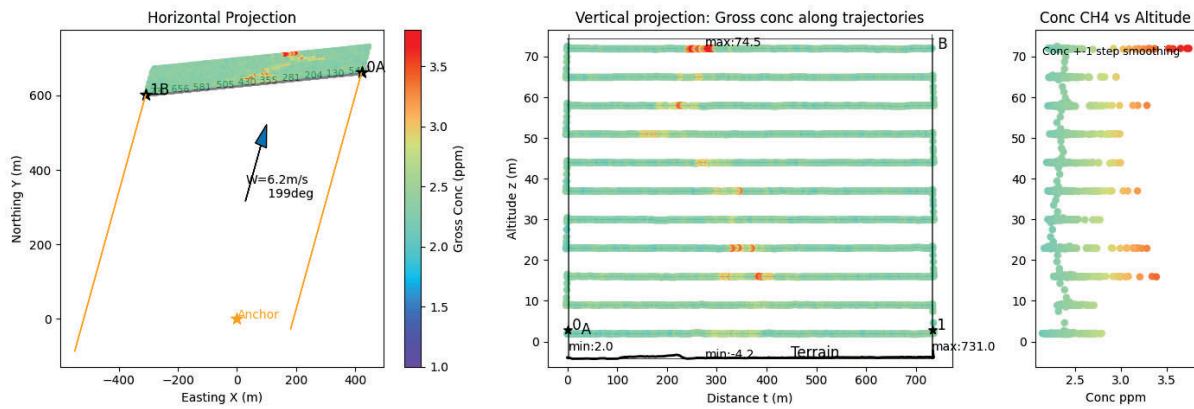
23.68 kg/h



## Result visualization 409

CH<sub>4</sub> emissions rate

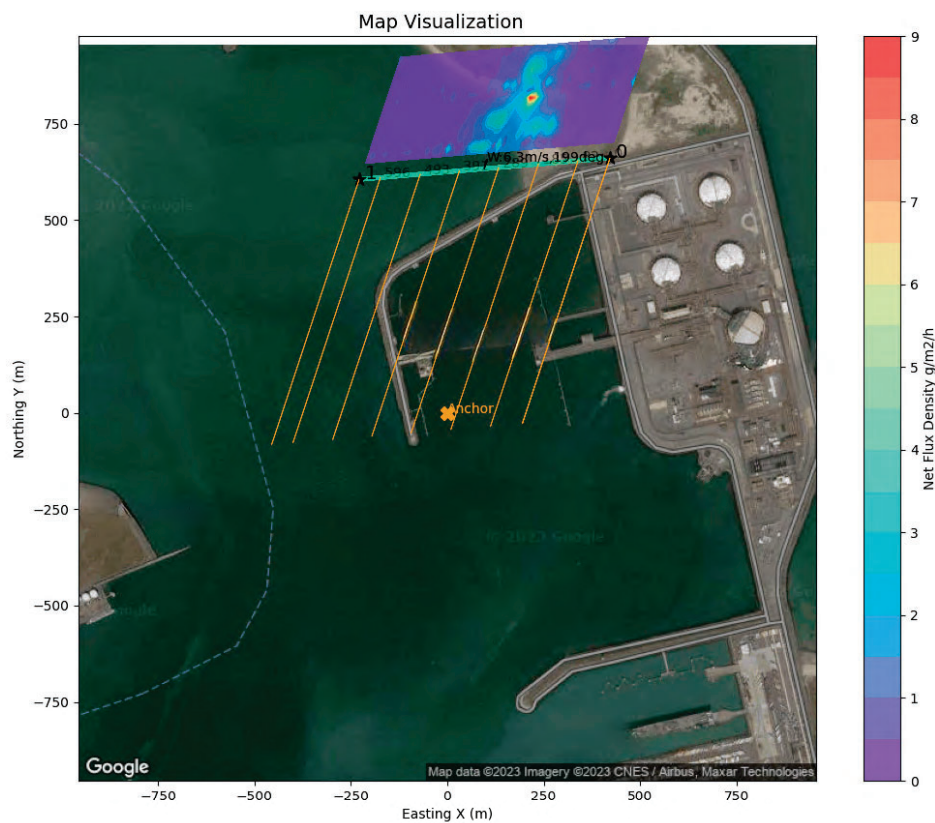
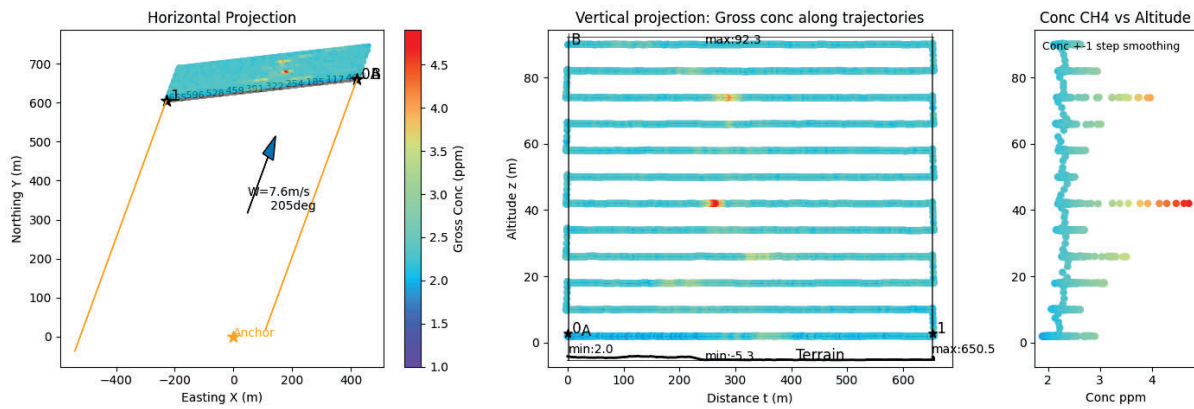
36.04 kg/h



## Result visualization 410

CH<sub>4</sub> emissions rate

40.45 kg/h

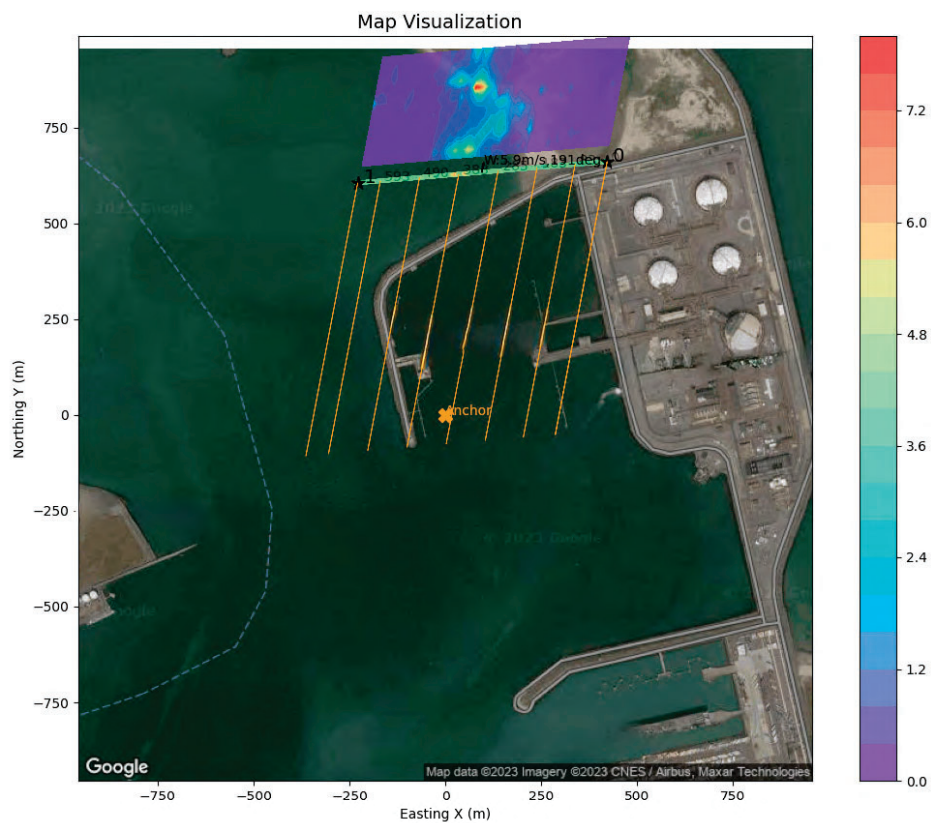
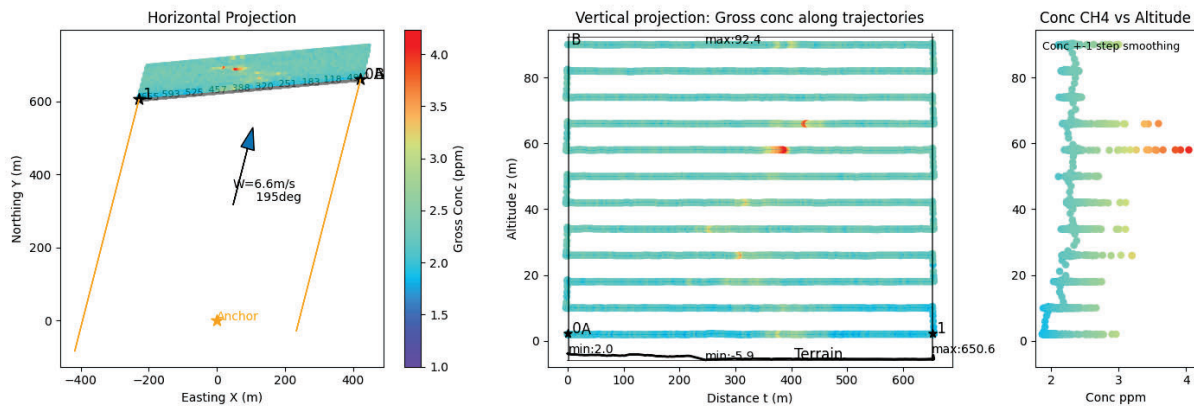




## Result visualization 411

CH<sub>4</sub> emissions rate

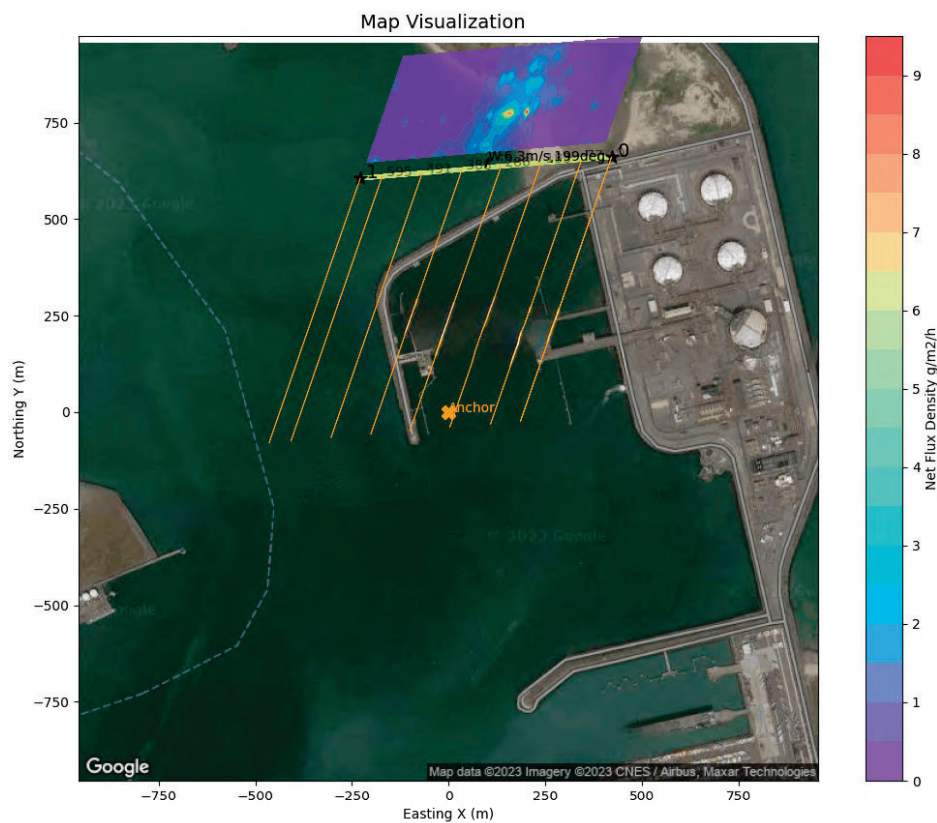
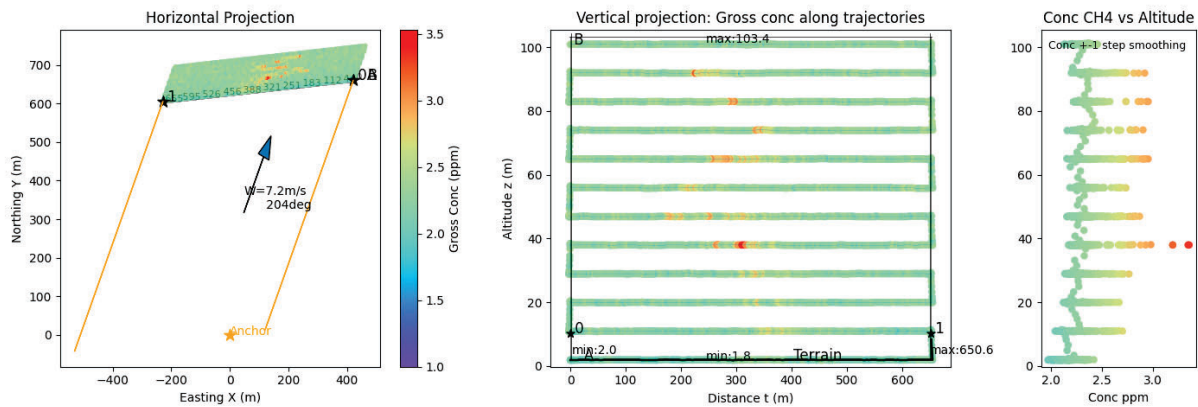
33.61 kg/h



## Result visualization 412

CH<sub>4</sub> emissions rate

34.05 kg/h

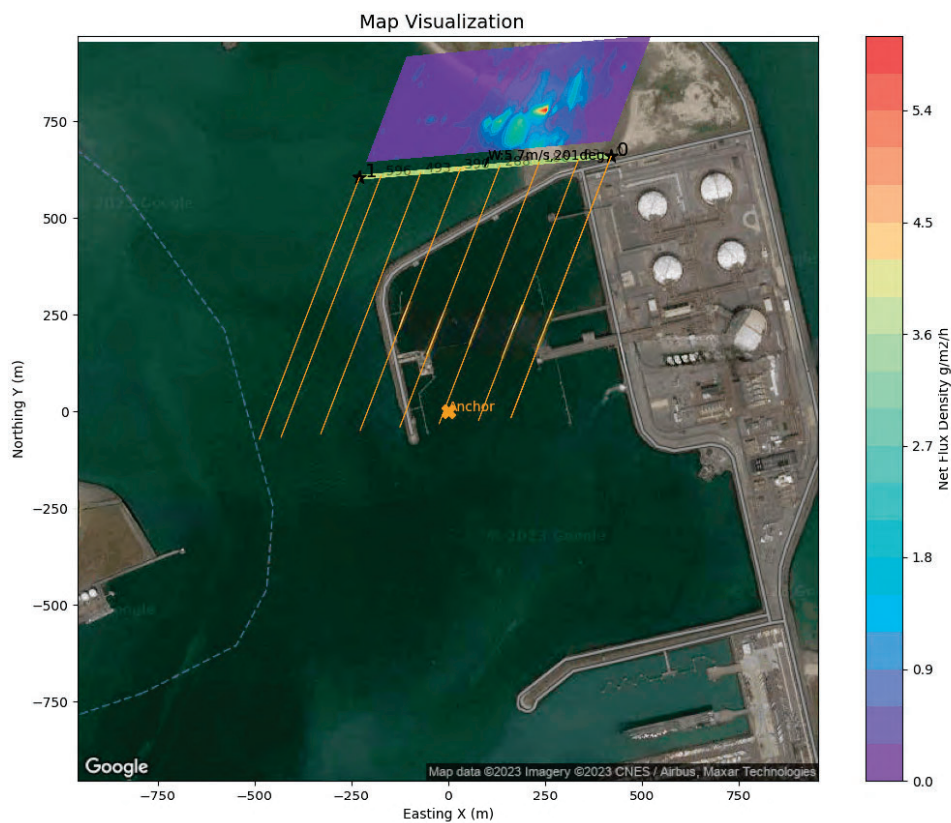
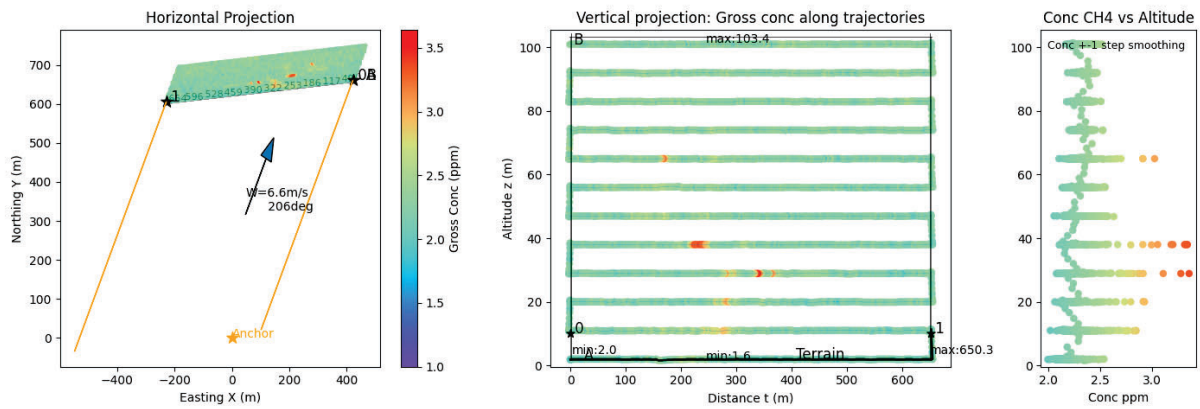




## Result visualization 413

CH<sub>4</sub> emissions rate

26.80 kg/h





## Methodology

### Methodology

This test report is based on results collected using the The Drone Flux Measurement (DFM) Method, developed by Explicit ApS, to quantify fugitive gas emissions downwind from one or more target sources. Details on the method and its validation are available upon request.

### Uncertainty

Uncertainties apply on the evaluation of the test results. These derive from a method uncertainty budget established by FORCE Technology according to ISO/IEC Guide 98-3:2008 and are expressed at 95% confidence.

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