

LNG TANKER/TERMINAL

Unloading Operation of CASE A

Type	LNG
Client	ICCT

Campaign information

Pilot operator	Søren Jørgensen
Site location	
Sampling date	
Start time	2:58:02 PM
End time	5:48:50 PM
Number of walls	5
Reporting date	10/4/2023
Approved by	Jörg Beecken (Research Manager)
Lab address	Teknikerbyen 5, DK-2830 Virum

Total emissions rate

Target gas	CH ₄
Average emission	15.09 kg/h
Uncertainty	± 2.29 kg/h
Measured fraction	N/A %
Notes	

15.09 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 ₄
Gas flow	N/A kg/h
Data provider	N/A

Notes: N/A



Measurement campaign

Sampling plan ref. #207

Atmospheric specs ranges

Temperature	21.9 - 22.7 °C
Mean wind velocity	2.6 - 5.2 m/s
Mean wind direction	51 - 68 °North

Measurement data

Wall ID	Start time	End time	Mean wind velocity (m/s)	Mean wind (°North)
392	2:58:02 PM	3:15:53 PM	4.8	55
393	3:37:55 PM	3:55:50 PM	5.2	61
394	4:07:00 PM	4:24:55 PM	3.5	51
395	4:33:24 PM	4:52:39 PM	2.6	53
396	5:30:45 PM	5:48:50 PM	3.1	68

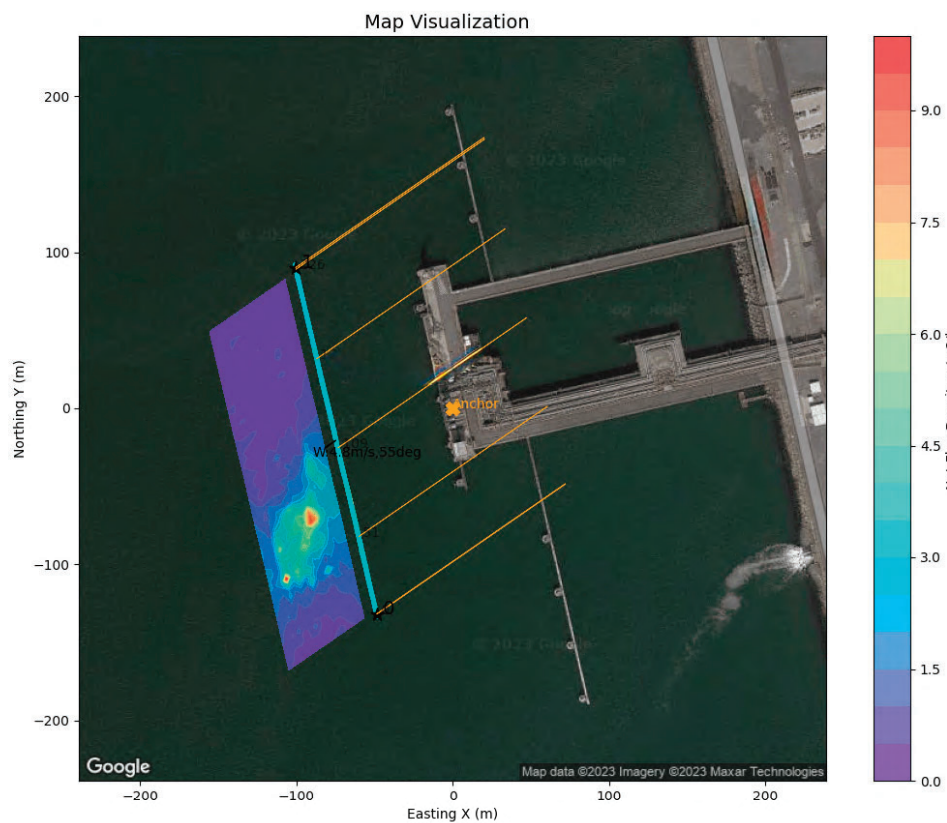
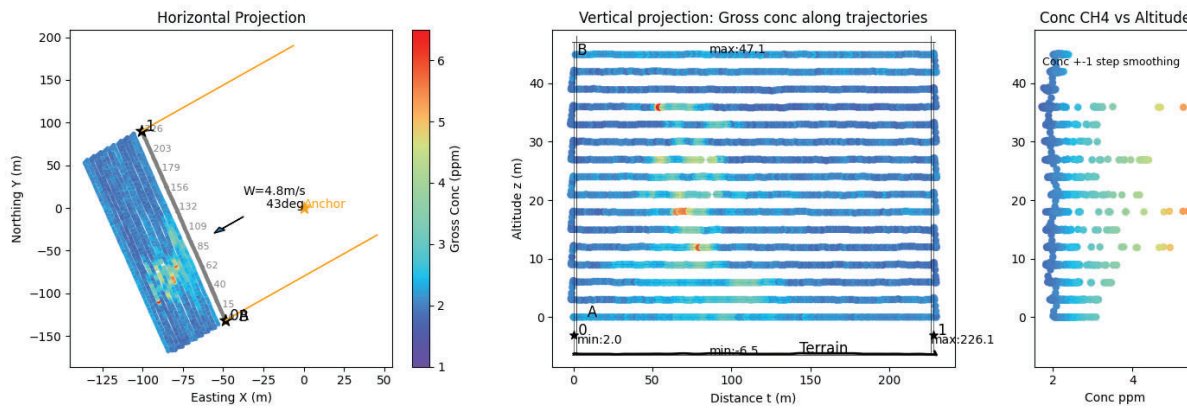
Wall ID	CH ₄ emissions (kg/h)	Notes
392	14.37	
393	14.42	
394	20.78	
395	10.94	
396	14.94	

Average emission	15.09 kg/h
Uncertainty	± 2.29 kg/h
Standard deviation	3.56 kg/h

Result visualization 392

CH₄ emissions rate

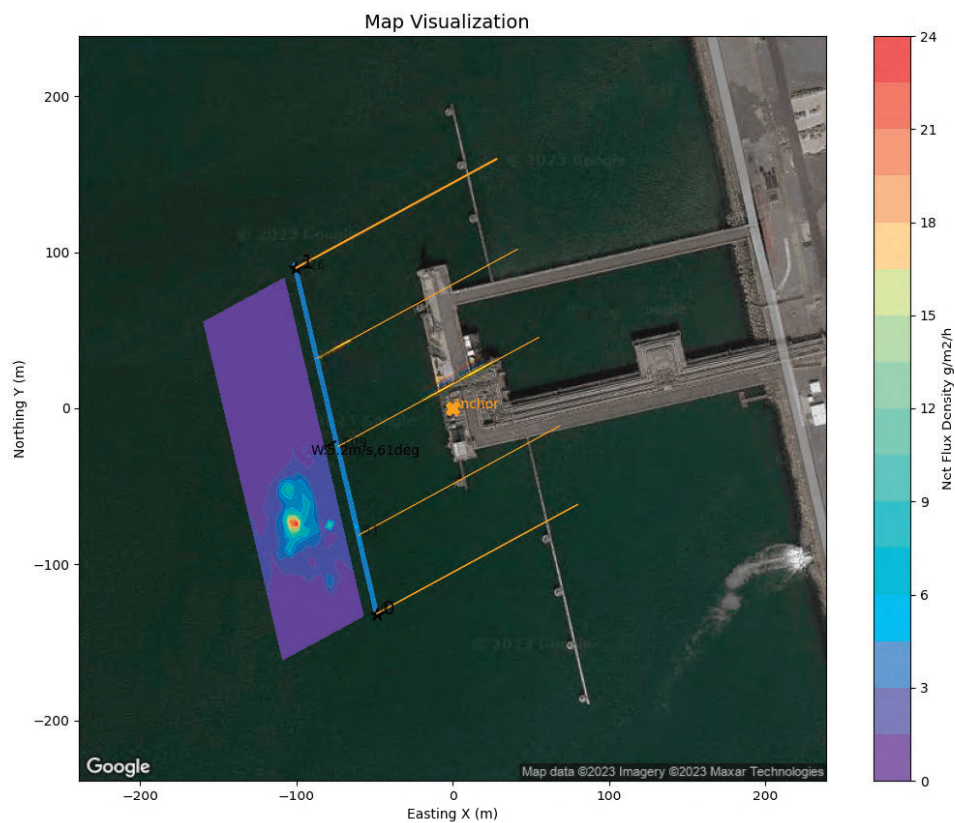
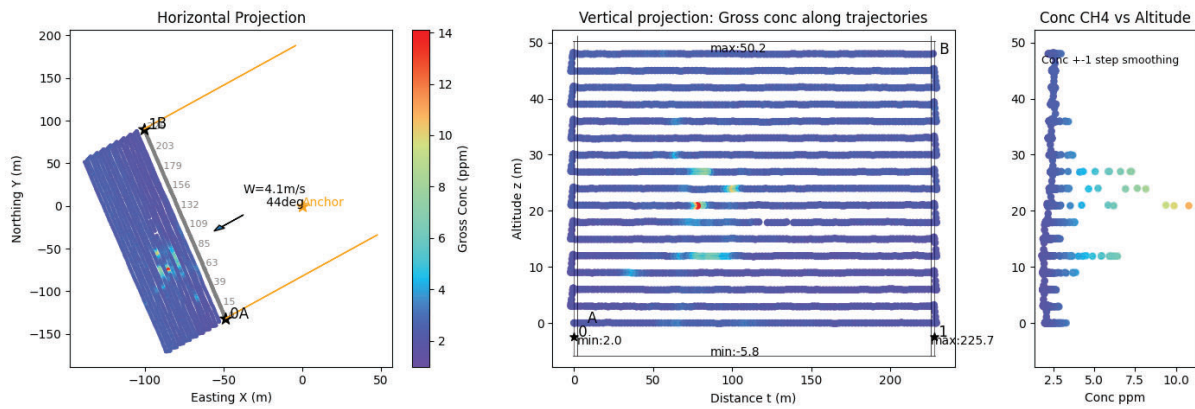
14.37 kg/h



Result visualization 393

CH₄ emissions rate

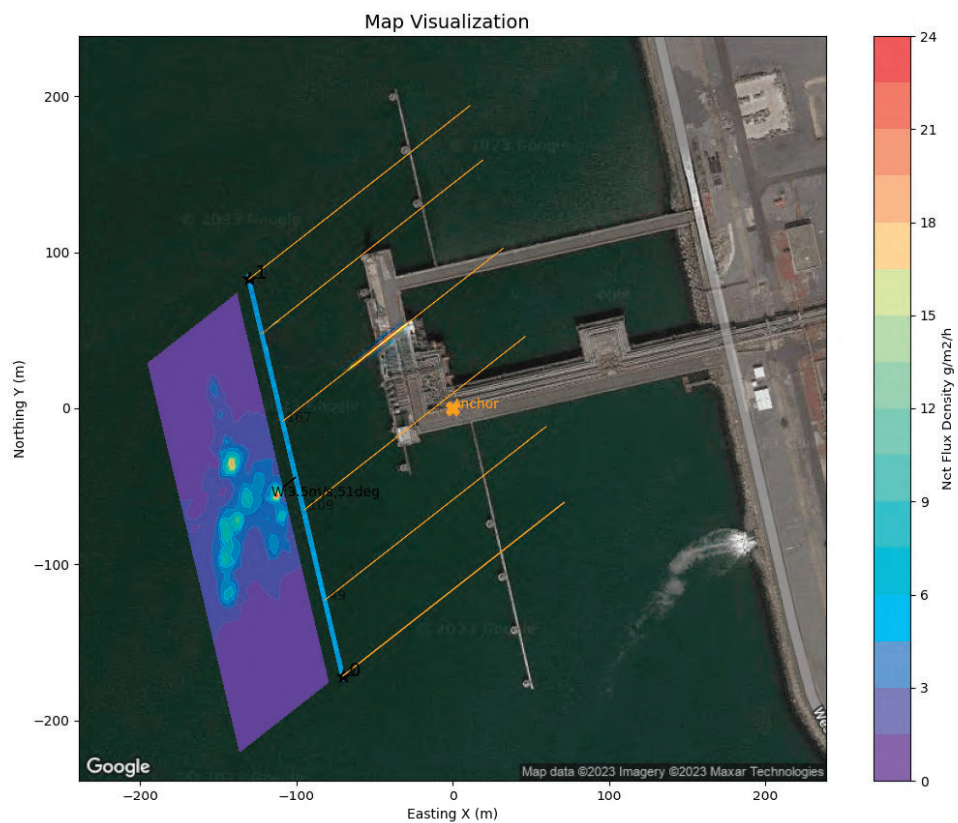
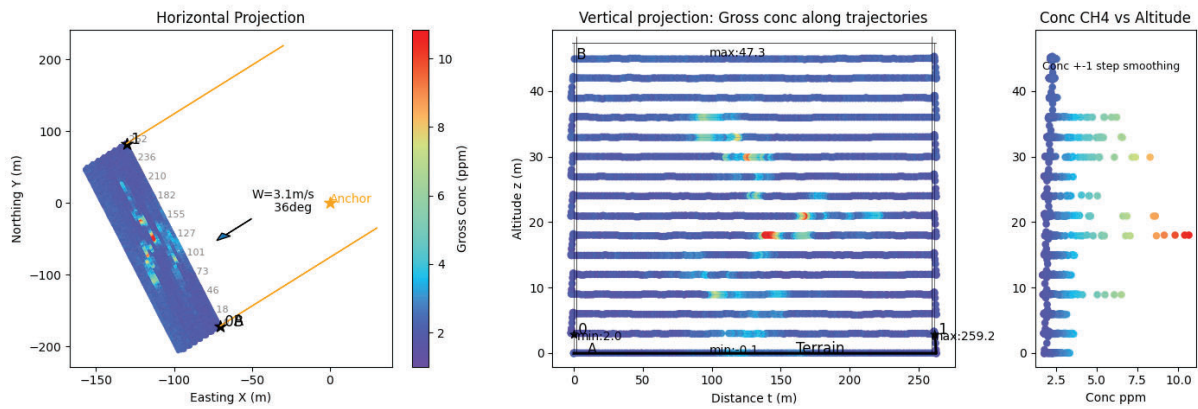
14.42 kg/h



Result visualization 394

CH₄ emissions rate

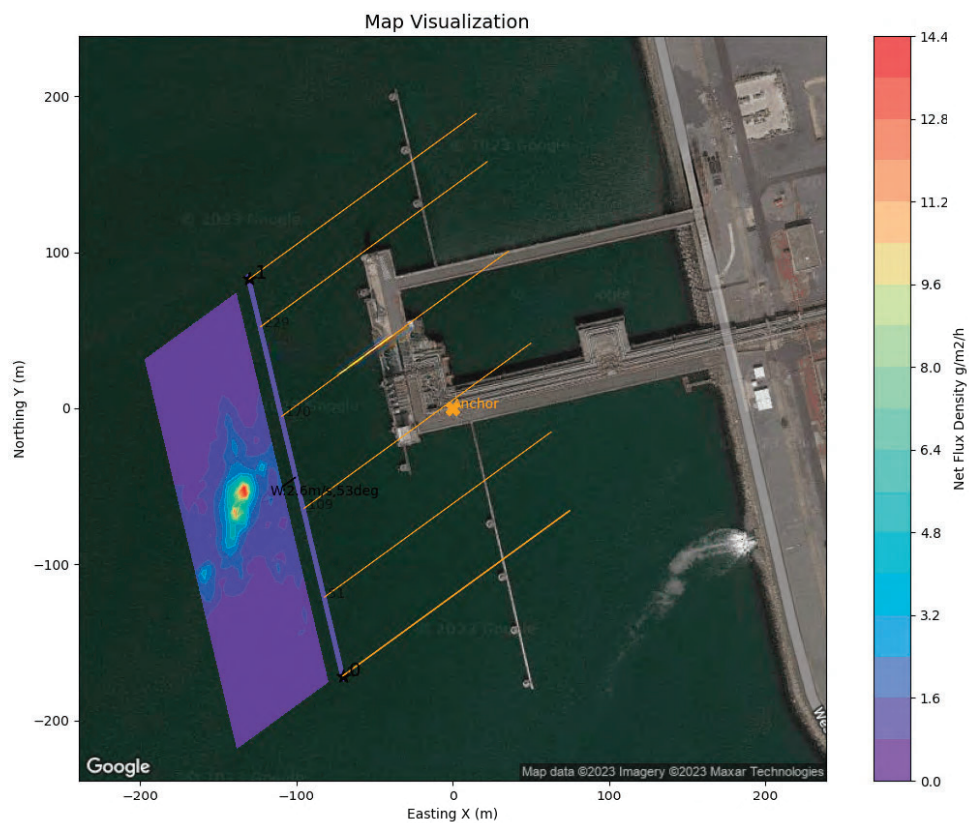
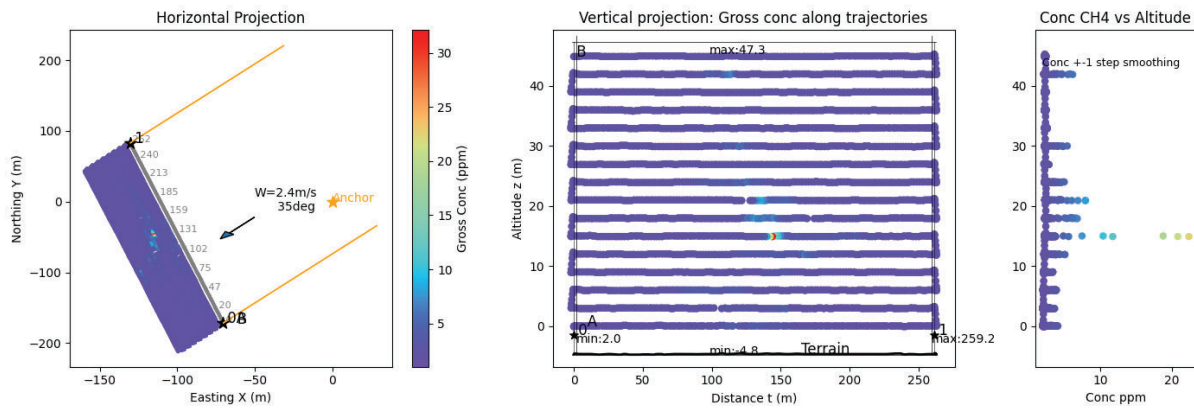
20.78 kg/h



Result visualization 395

CH₄ emissions rate

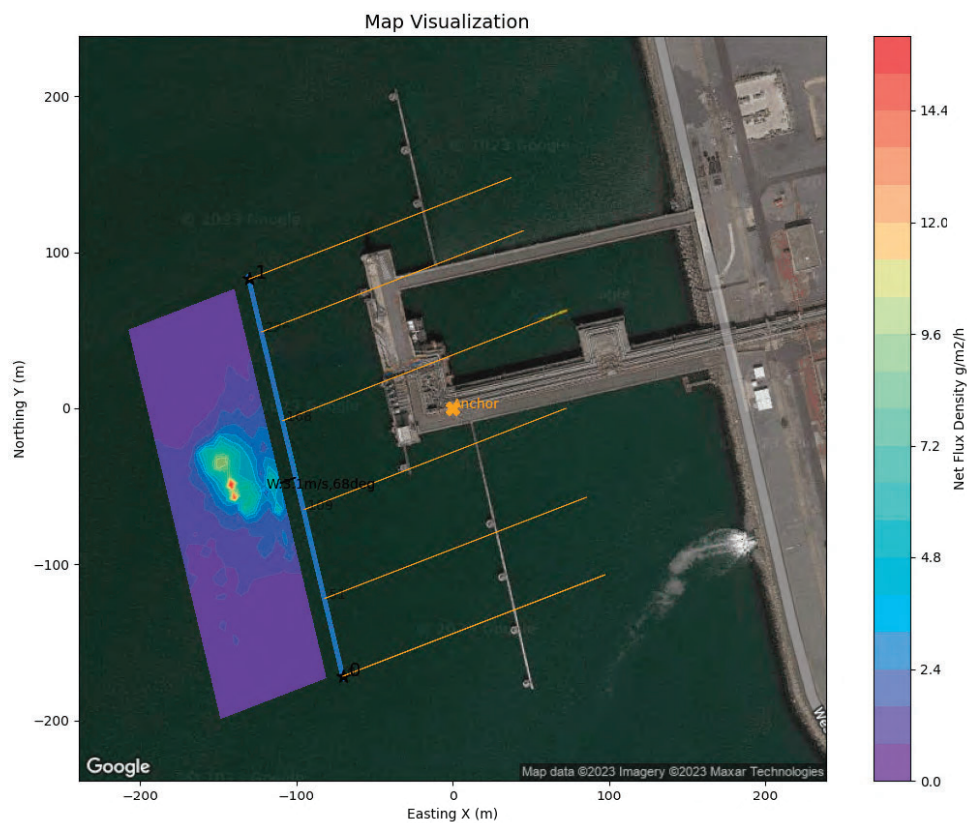
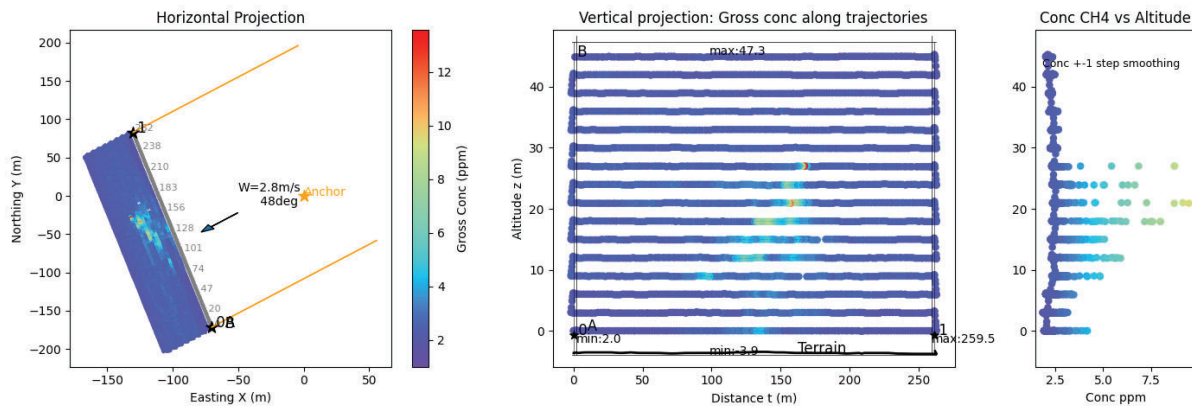
10.94 kg/h



Result visualization 396

CH₄ emissions rate

14.94 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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