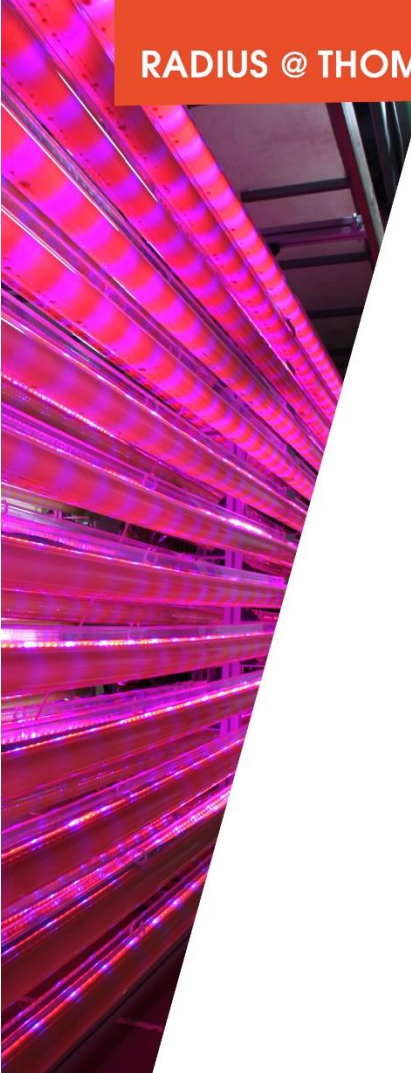




RADIUS @ THOMAS MORE

› Maestro



DEPARTEMENT
LANDBOUW
& VISSERIJ

Evert Lataire
UGent

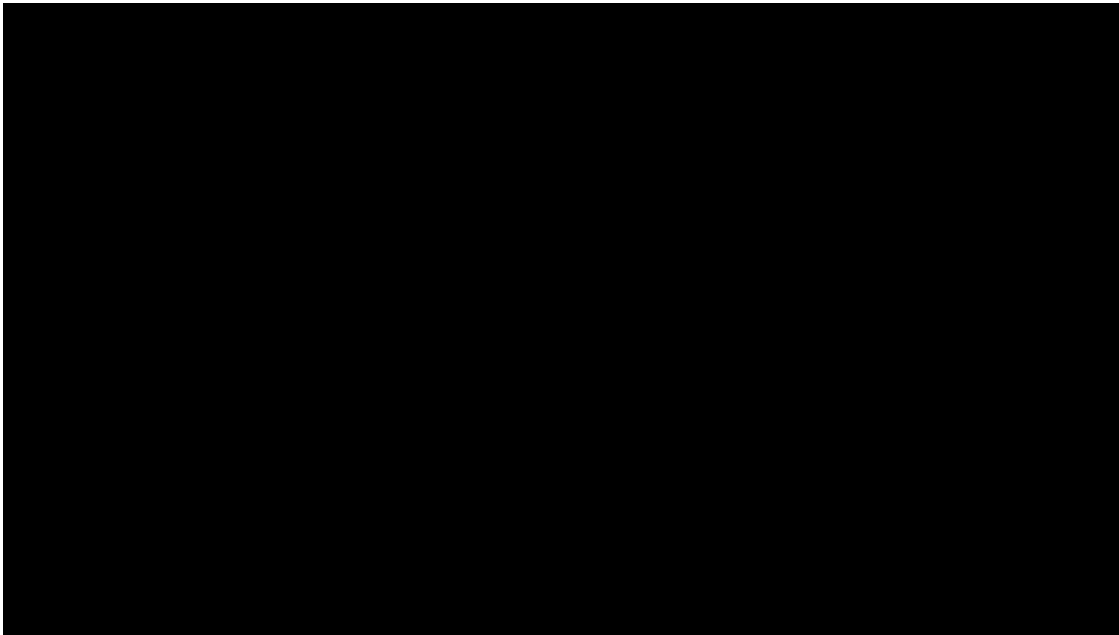
Elfde Vlaams Aquacultuursymposium:
Nieuwe eiwitten voor de aquacultuur

Vlaams
Aqua
cultuur
platform

THOMAS
MORE | University of
Applied
Sciences

Afdeling Maritieme Techniek

- **Universiteit Gent**
 - **Faculteit ingenieurswetenschappen en architectuur**
 - **Vakgroep Civiele Techniek**
 - **Afdeling Maritieme Techniek**



<https://www.youtube.com/c/UGentMaritimeTechnology>)

ALS HET MAAR DRIJFT



Aquaculture



PV panels, FOWT



load bearing glass

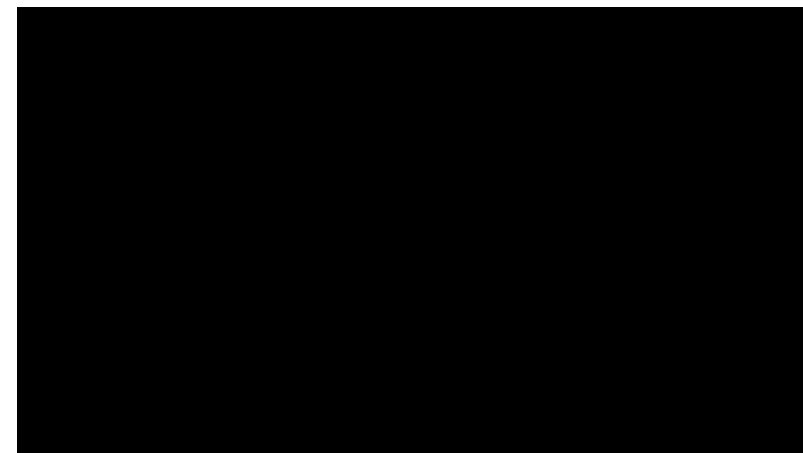
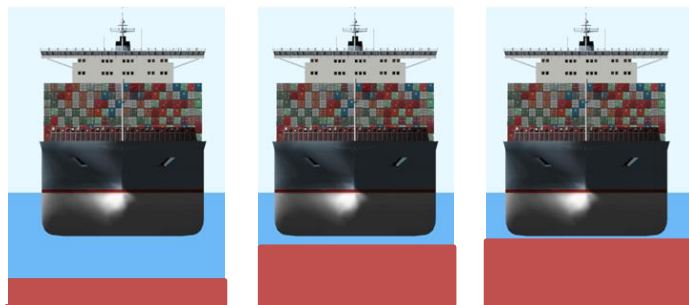
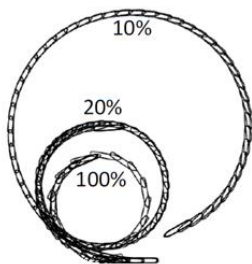
<https://maritiem.ugent.be>



<https://www.youtube.com/c/UGentMaritimeTechnology>

Afdeling Maritieme Techniek

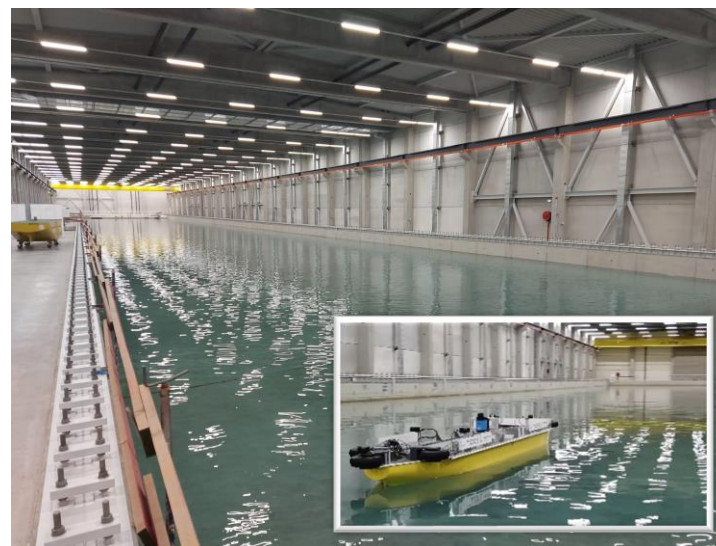
Echt niche: Manoeuvreergedrag van schepen in ondiep en beperkt vaarwater



Antwerpen (85m x 7m)



Oostende (175m x 20m)



Outline

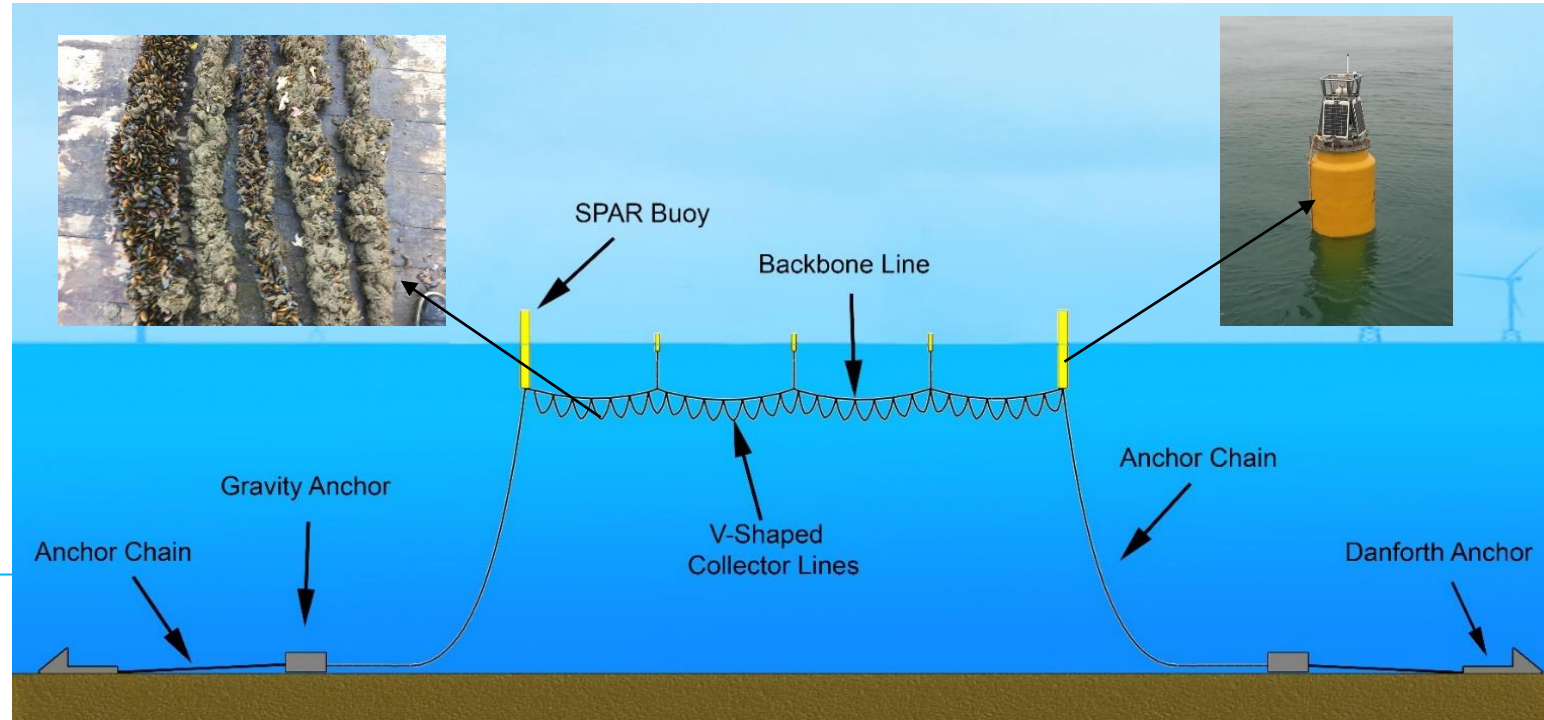
1. Afdeling Maritieme Techniek, UGent
2. Projecten
3. **Hydrodynamische berekeningen**

Project: Edulis (2017 - 2019)



“Offshore mussel culture in wind farms”

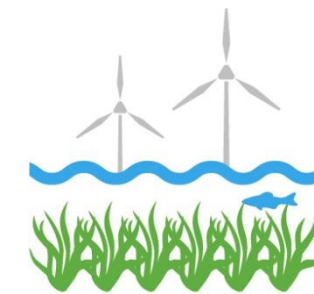
<http://edulis.ugent.be>



Wier en Wind (2019 – 2022)

“Large-scale seaweed farm with automated cultivation system in the North Sea”

<https://www.grensregio.eu/projecten/wier-wind>



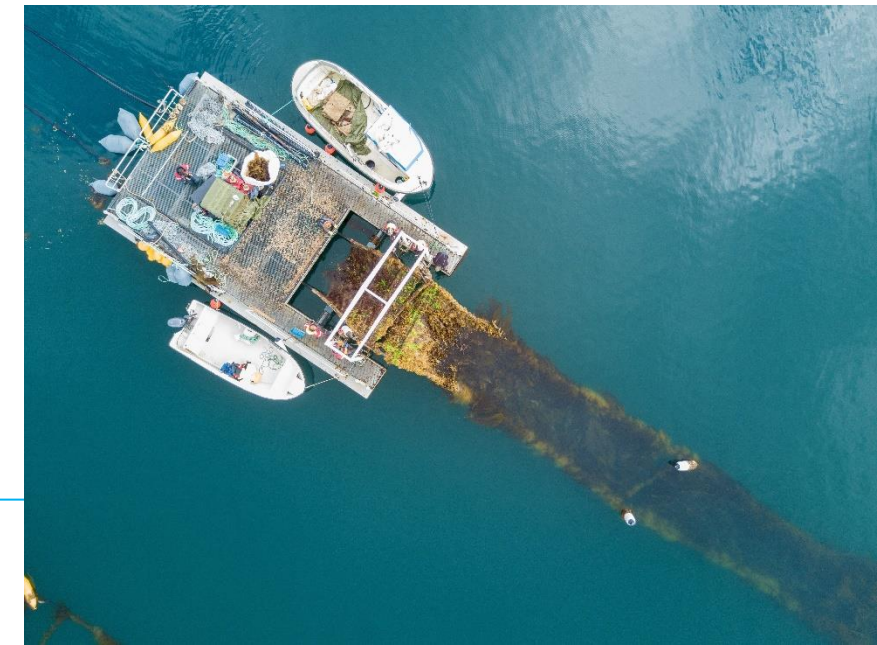
WIER & WIND



Interreg
Vlaanderen-Nederland
Europees Fonds voor Regionale Ontwikkeling



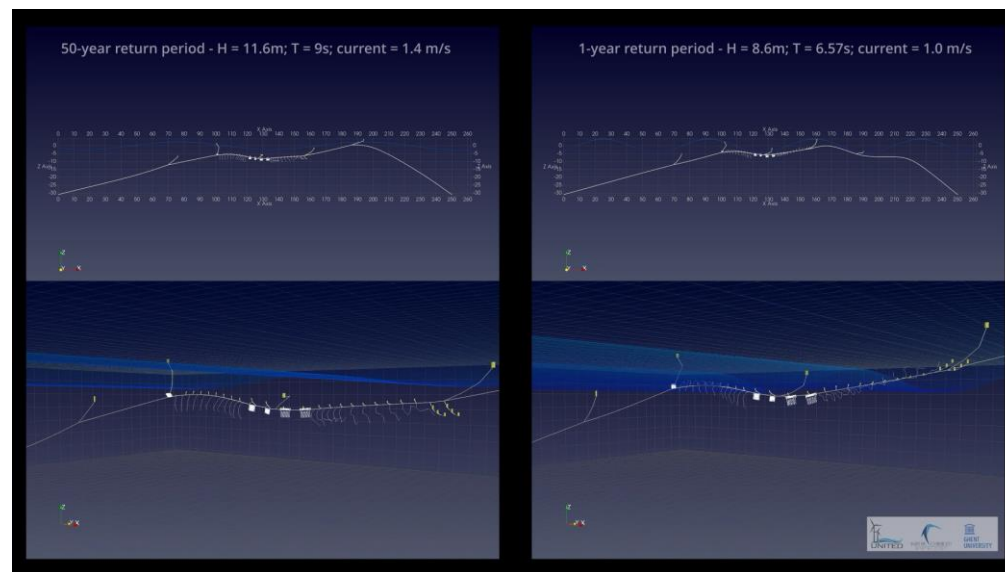
**WIER
& WIND**



UNITED (2020 – 2023)

“Multi-use of the marine space, offshore and near-shore: pilot demonstrators”

<https://www.h2020united.eu>



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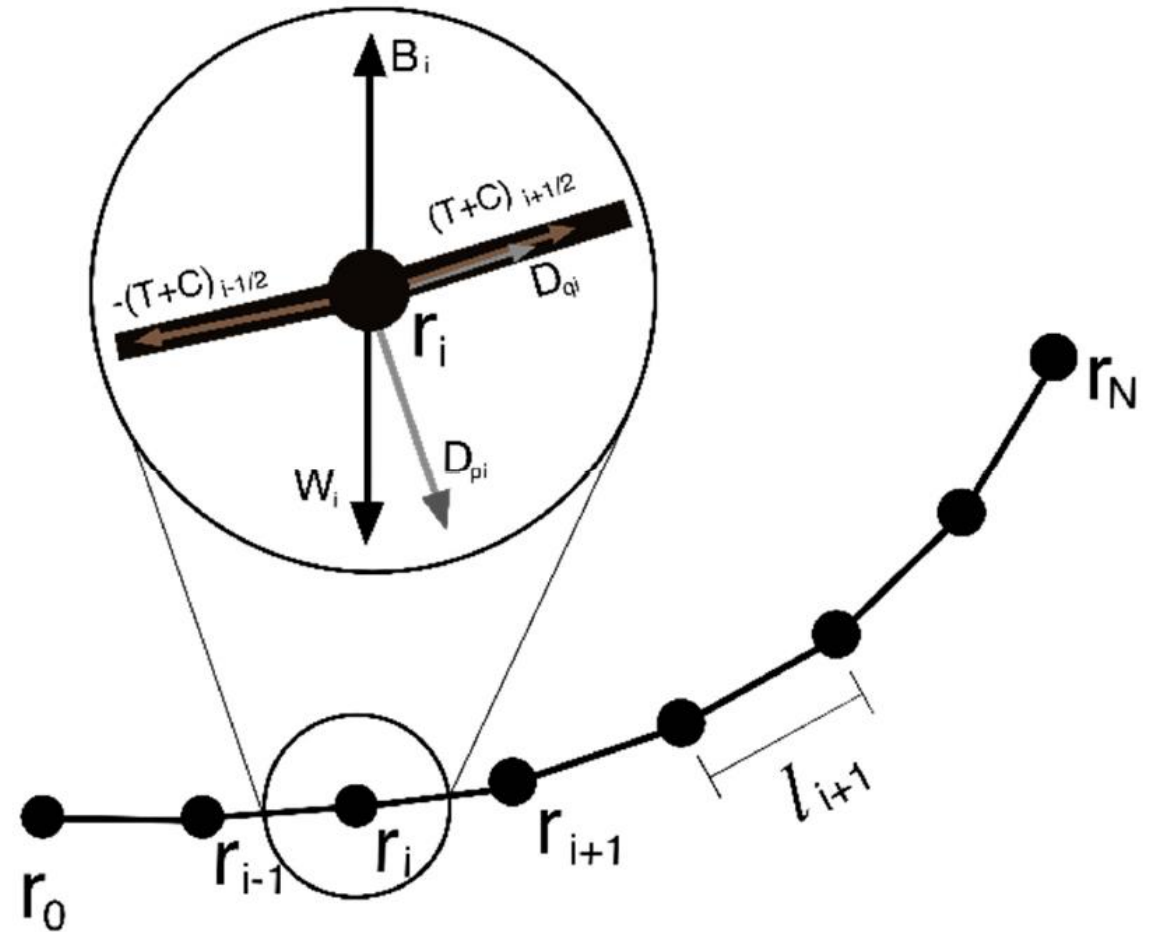


Outline

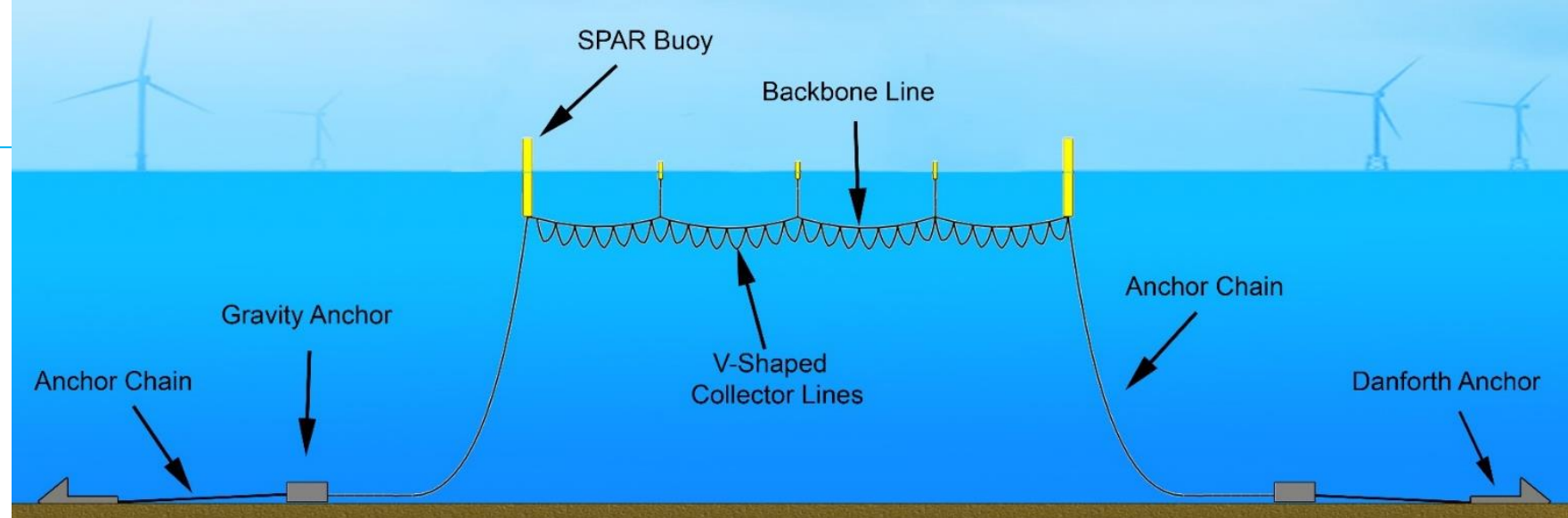
1. Afdeling Maritieme Techniek, UGent
2. Projecten
3. **Hydrodynamische berekeningen**

MoorDyn

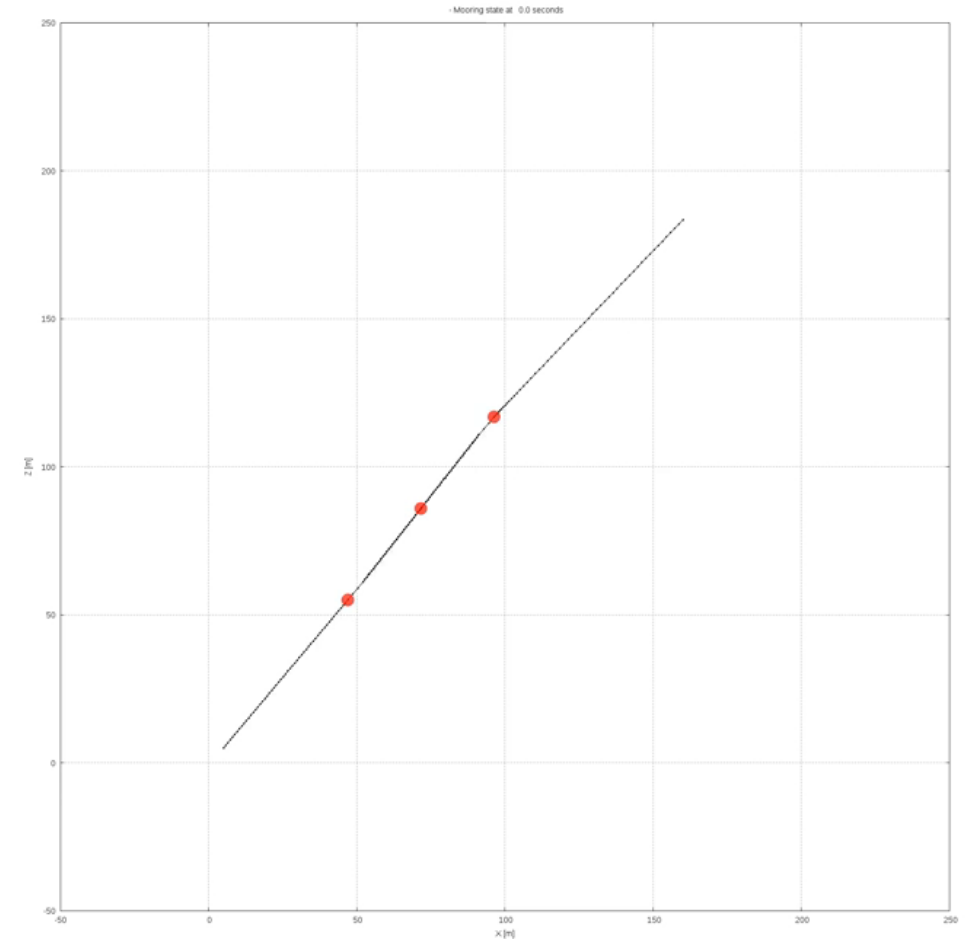
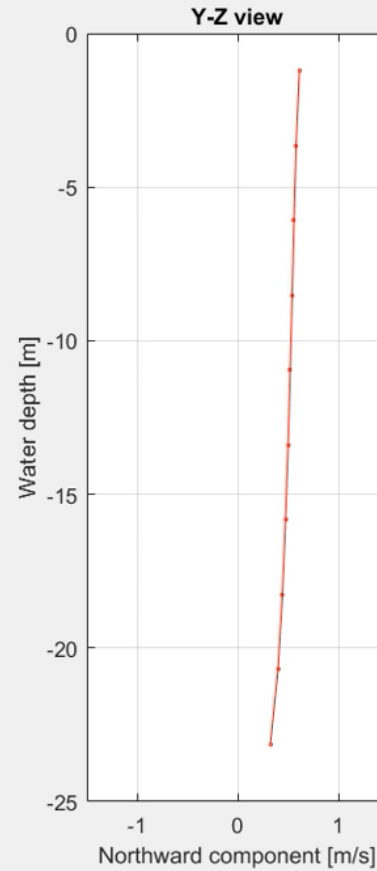
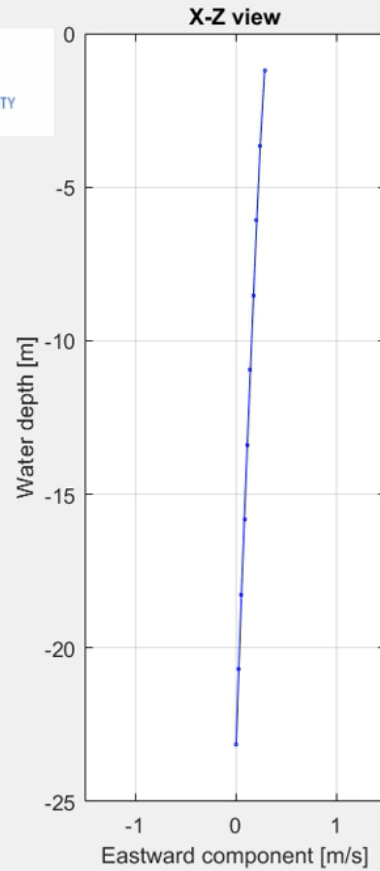
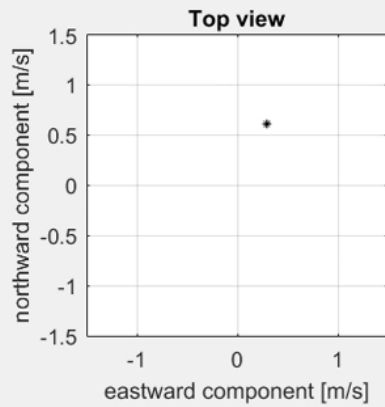
1. Time-domain mooring dynamic solver
2. Lumped-mass approach [1, 2]
 - N number of segments
 - N+1 number of nodes
3. Hydrodynamics through Morison
 - Only body's acceleration and velocity
4. Fairlead(s) prescribed motions/external driver
 - Spring-damper soil model



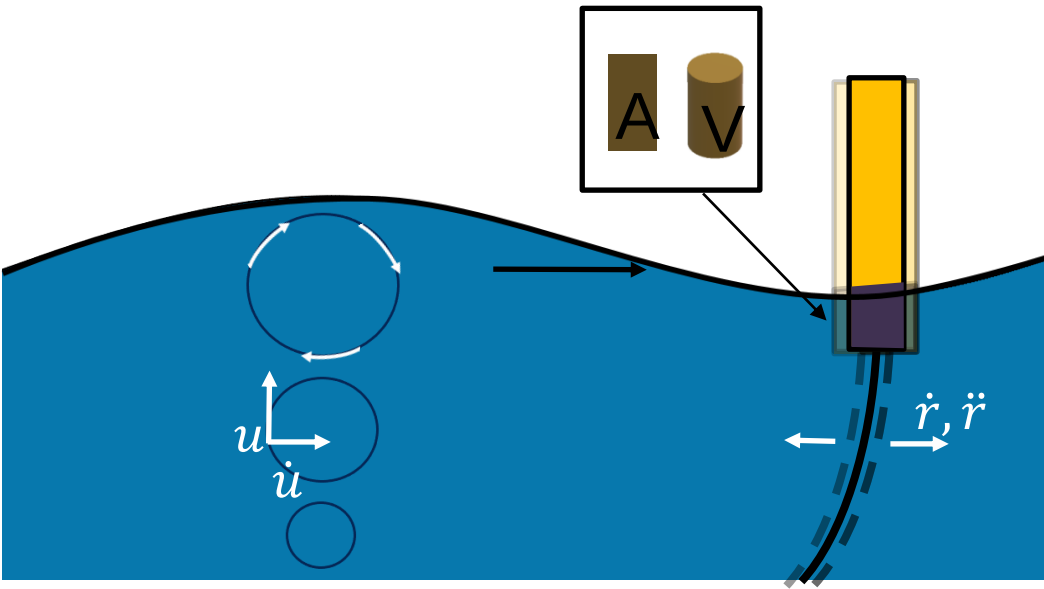
golven



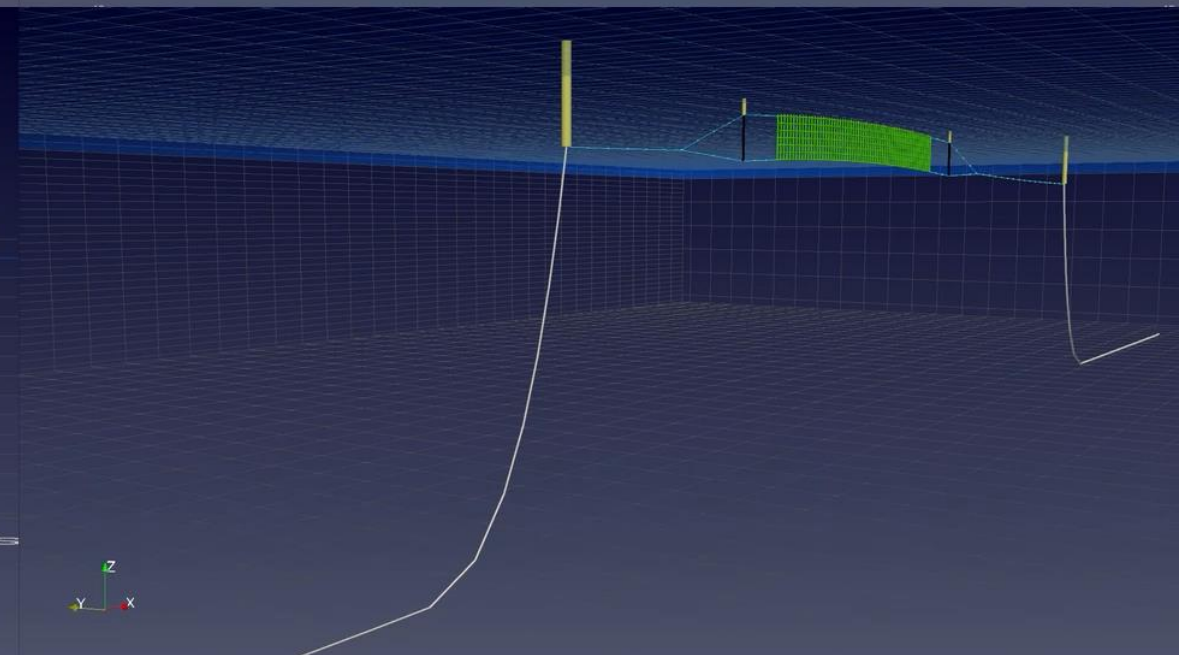
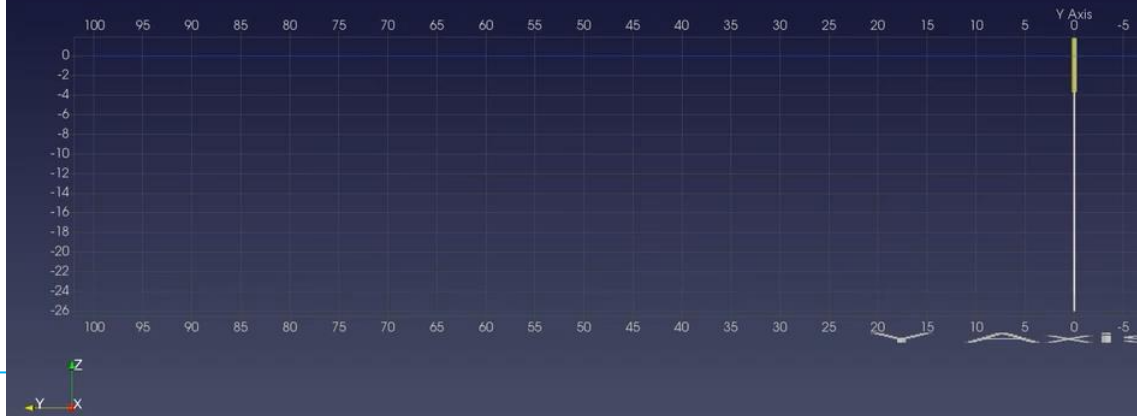
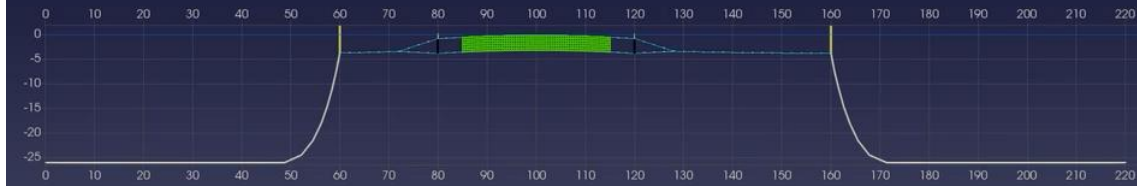
Invloed van getijstroming



MoorDyn adaptations: waves and buoy



4. Other application: UNIFIED seaweed net



Outline

1. Afdeling Maritieme Techniek, UGent
2. Projecten
3. Hydrodynamische berekeningen

MARITIME TECHNOLOGY DIVISION

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www.maritiem.ugent.be

www.shallowwater.be