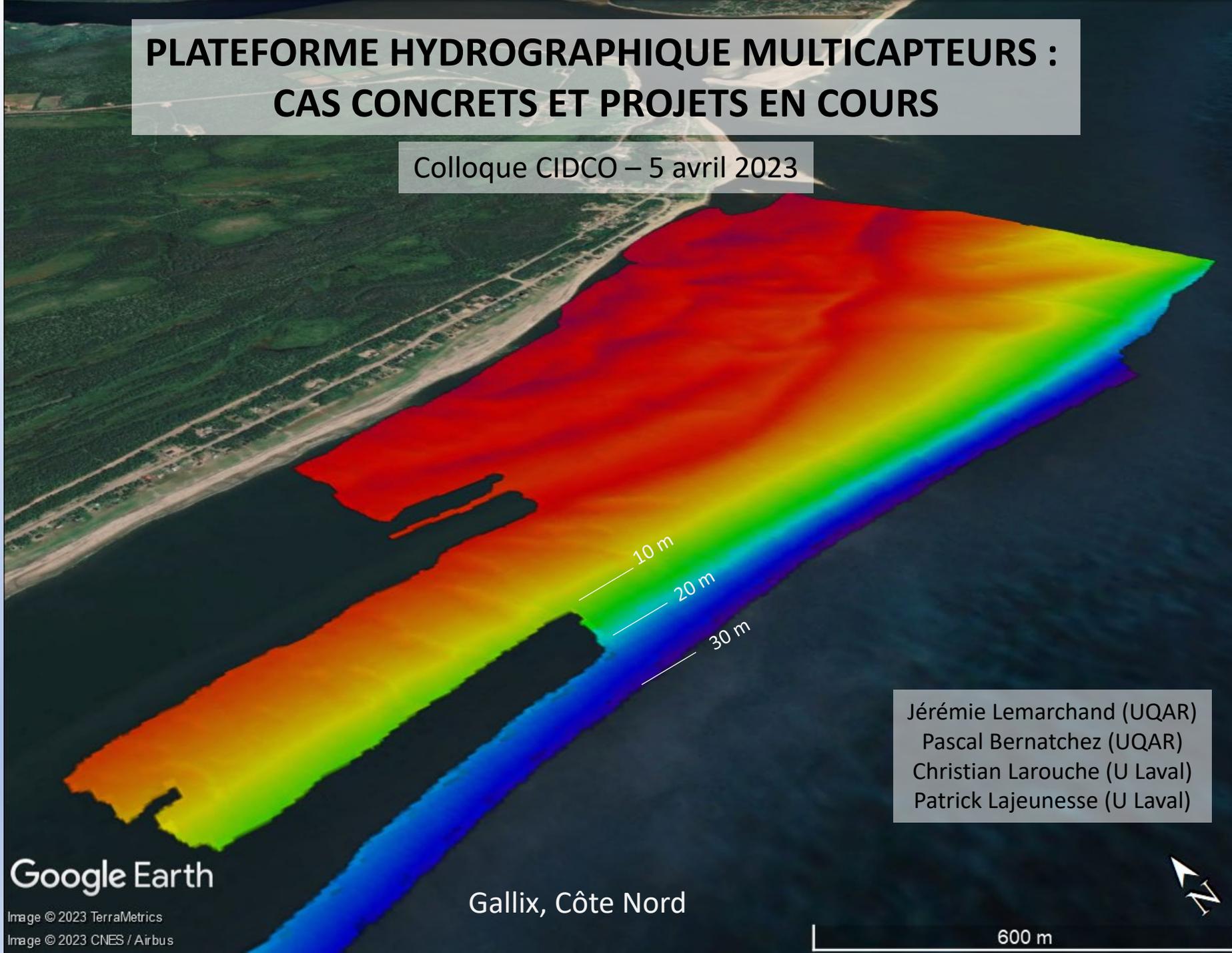


# PLATEFORME HYDROGRAPHIQUE MULTICAPTEURS : CAS CONCRETS ET PROJETS EN COURS

Colloque CIDCO – 5 avril 2023



Jérémie Lemarchand (UQAR)  
Pascal Bernatchez (UQAR)  
Christian Larouche (U Laval)  
Patrick Lajeunesse (U Laval)

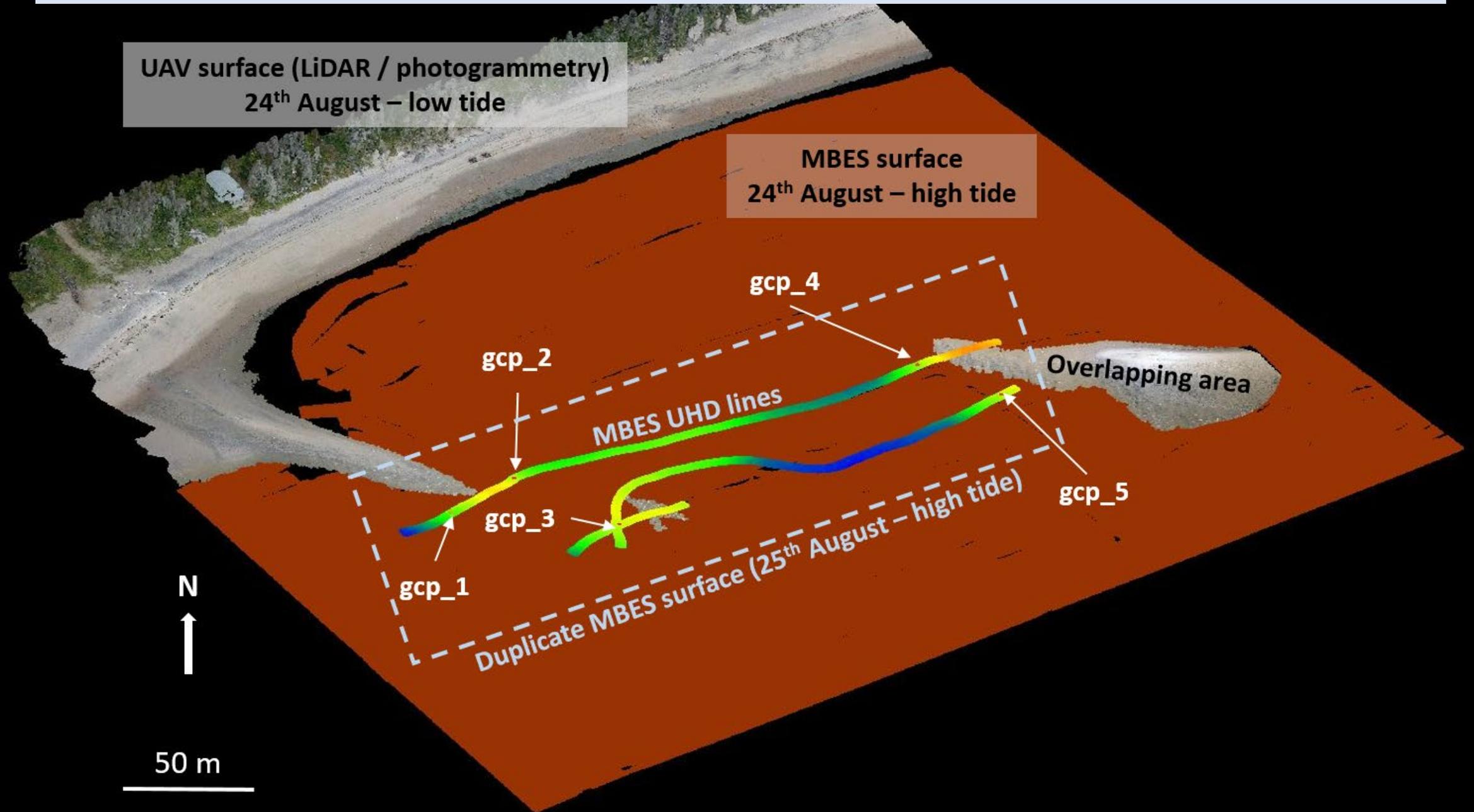
Google Earth

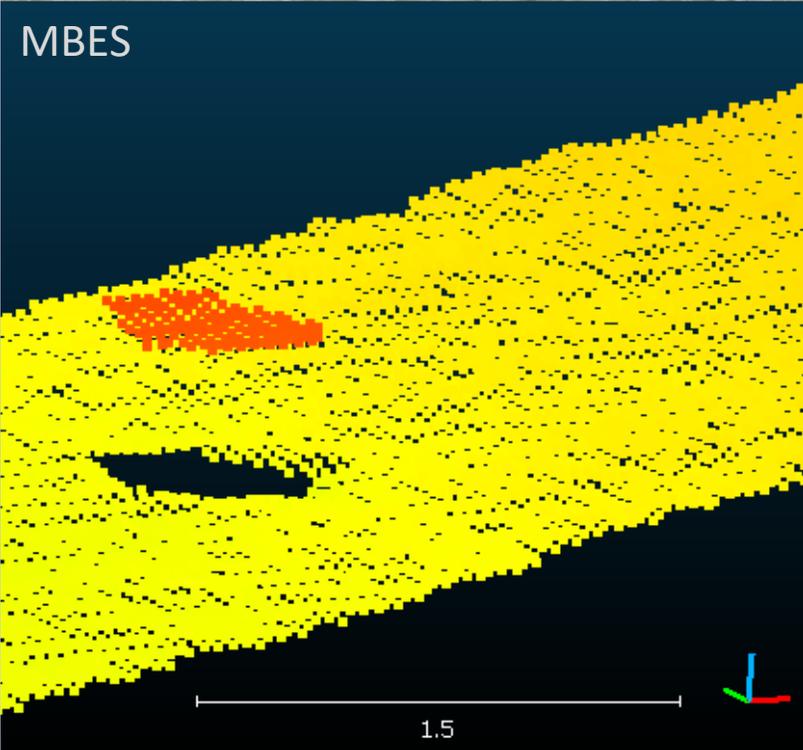
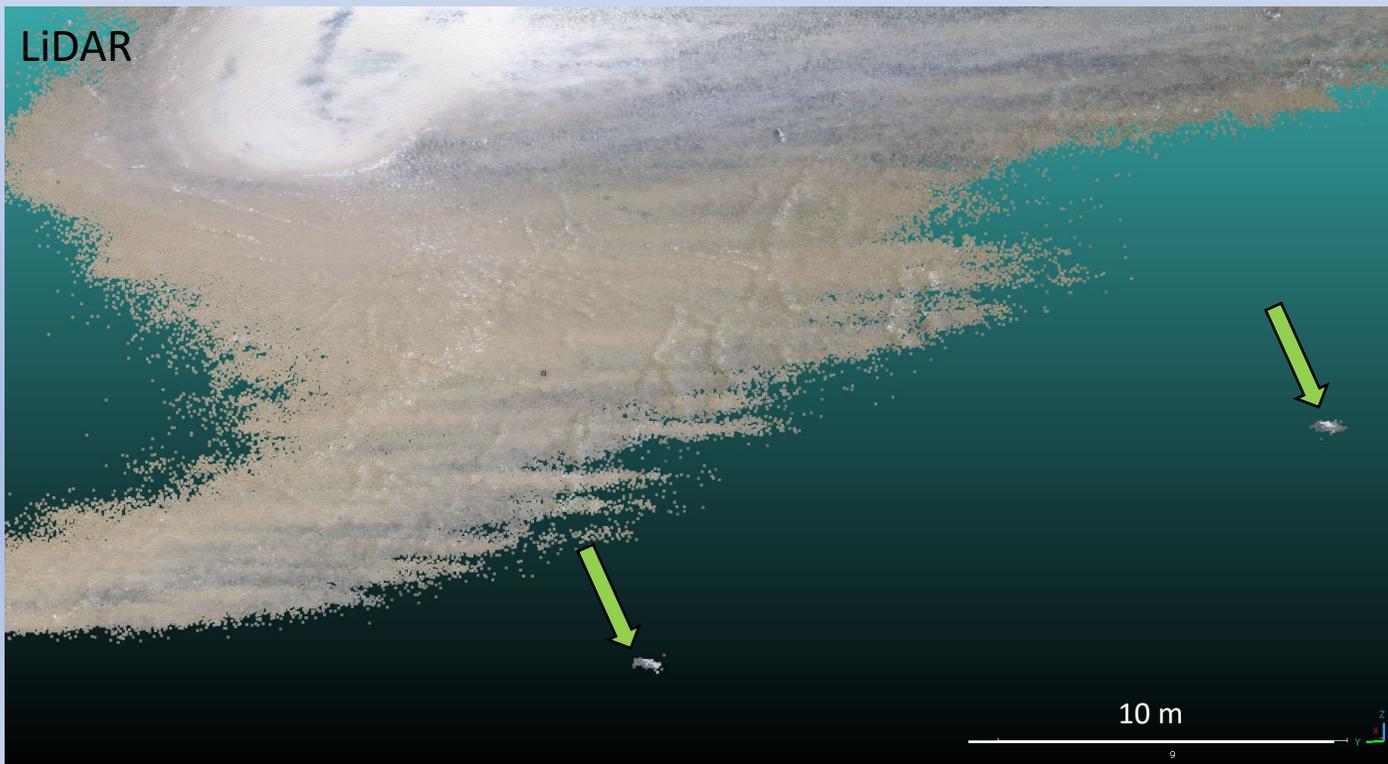
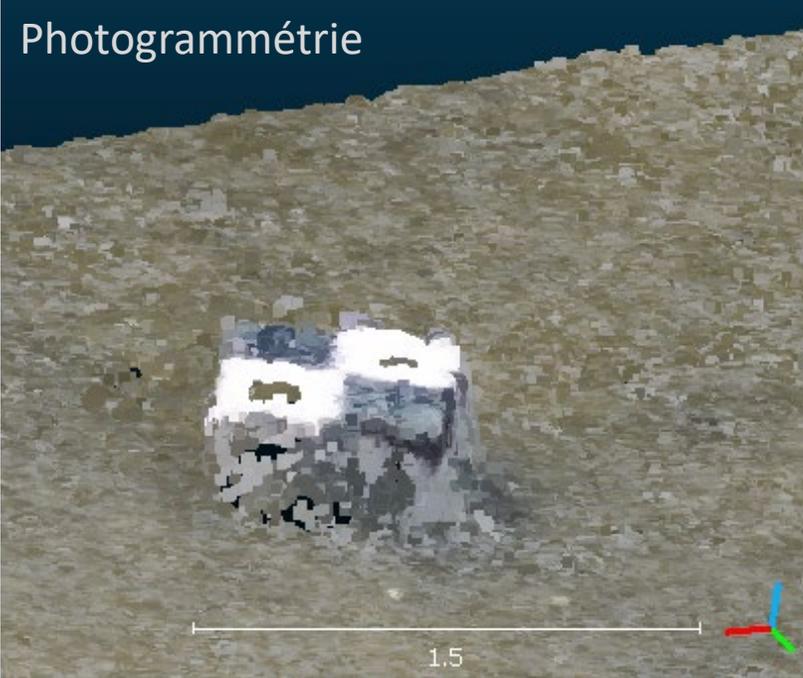
Image © 2023 TerraMetrics  
Image © 2023 CNES / Airbus

Gallix, Côte Nord

600 m

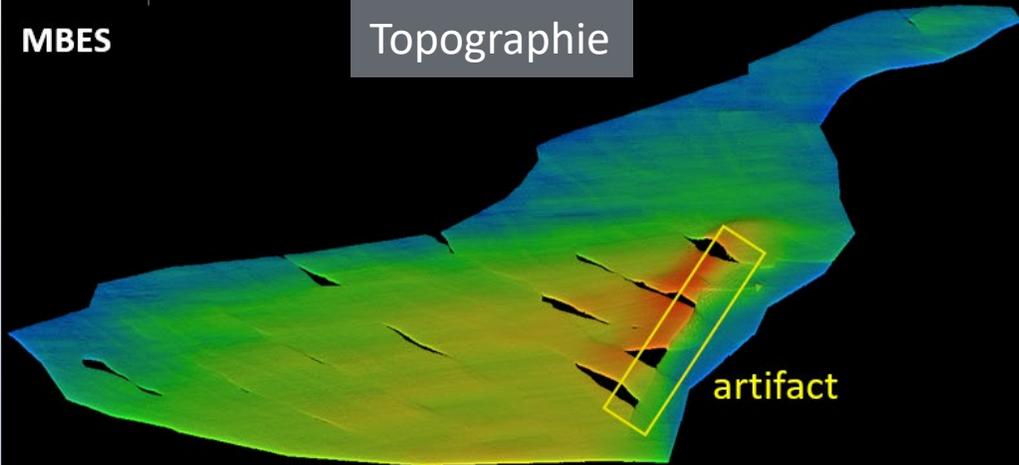
# I – COMPARAISON AVEC DONNÉES TERRESTRES LiDAR ET PHOTOGRAMMÉTRIQUES



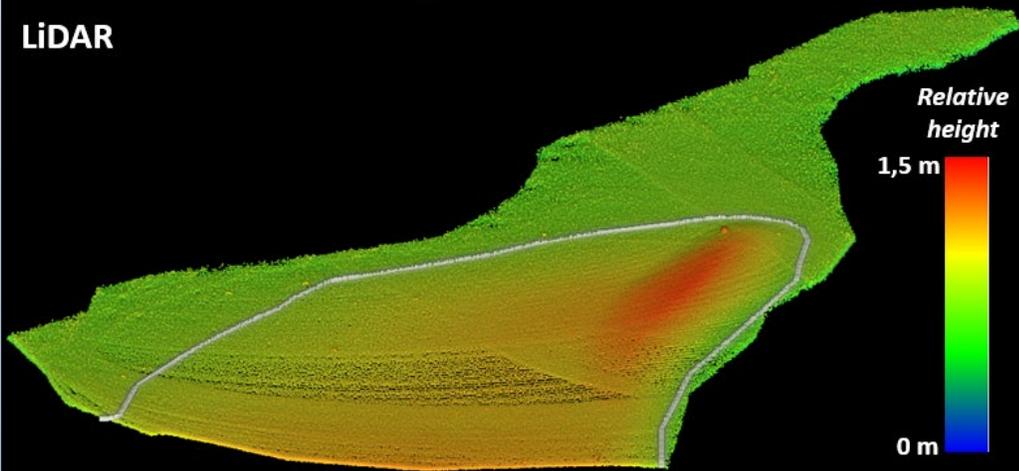


MBES

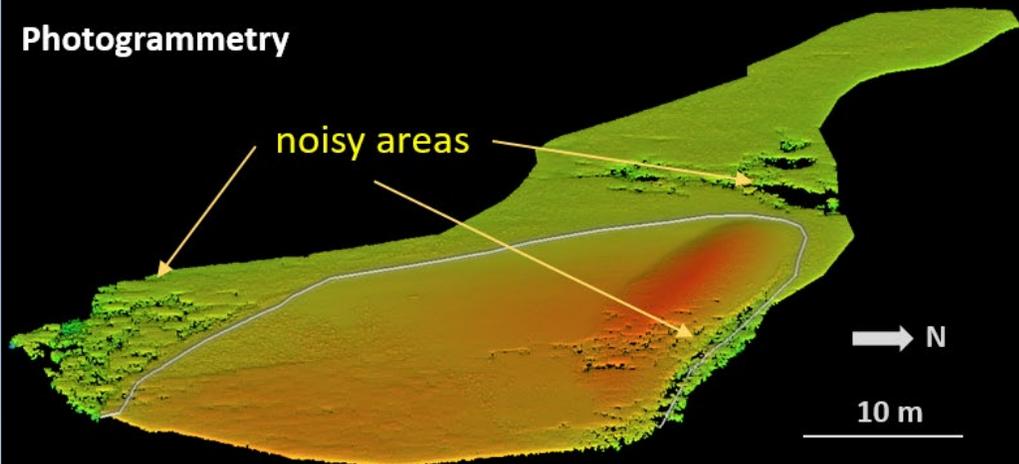
Topographie



LiDAR

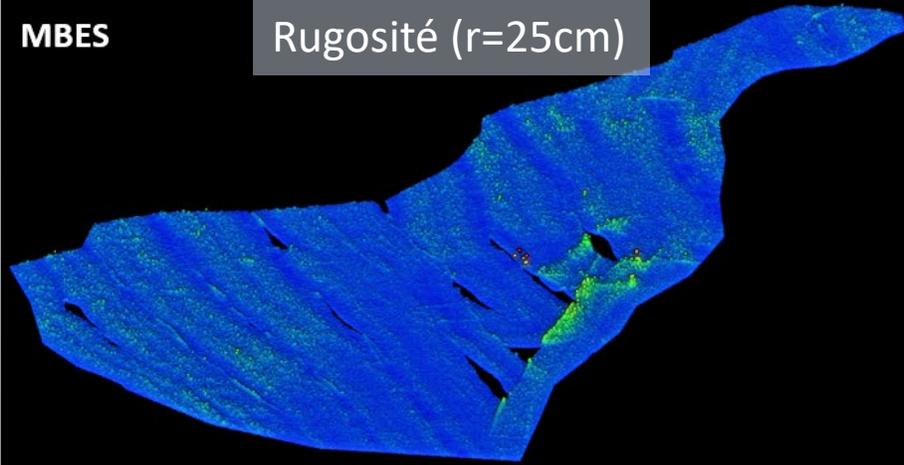


Photogrammetry

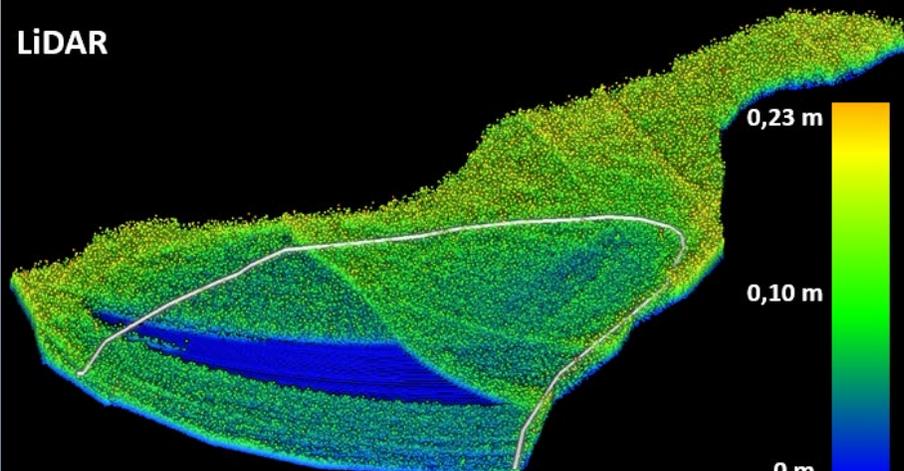


MBES

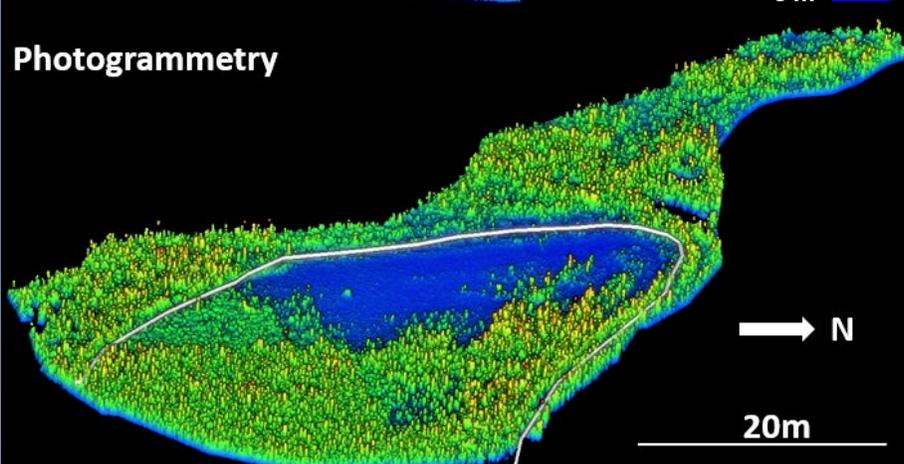
Rugosité (r=25cm)



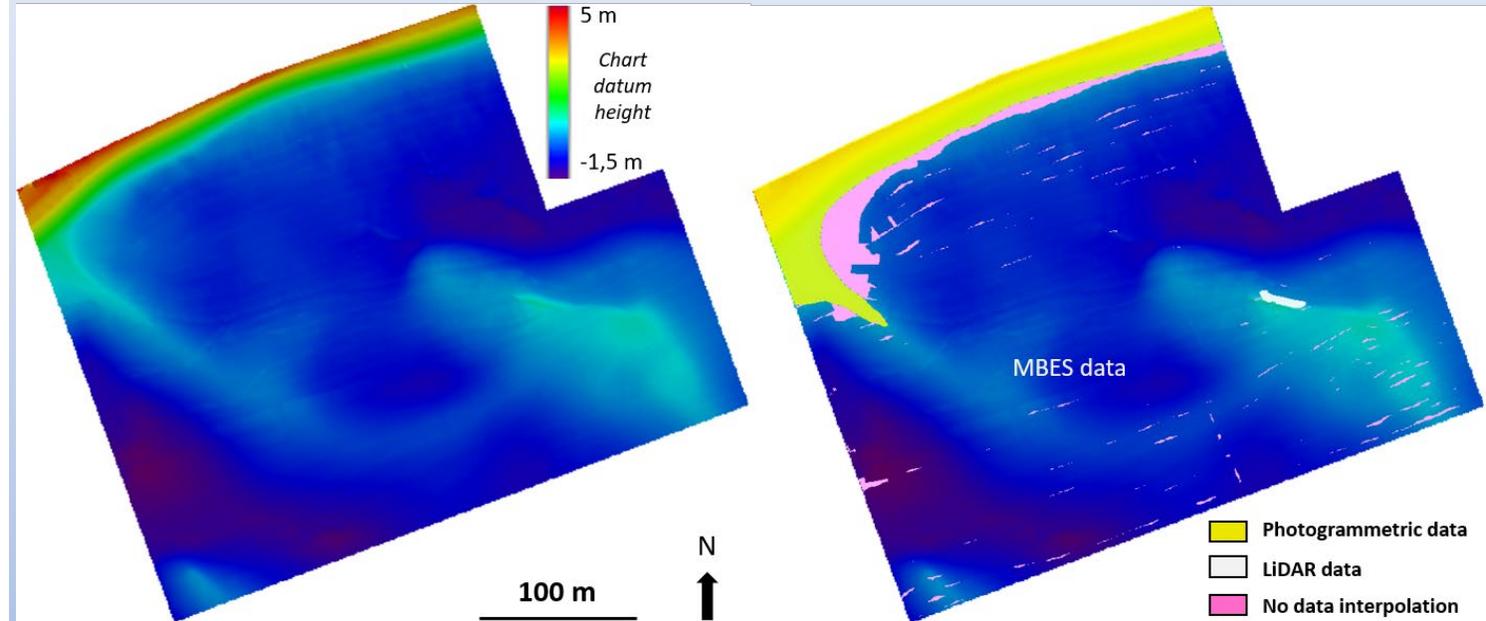
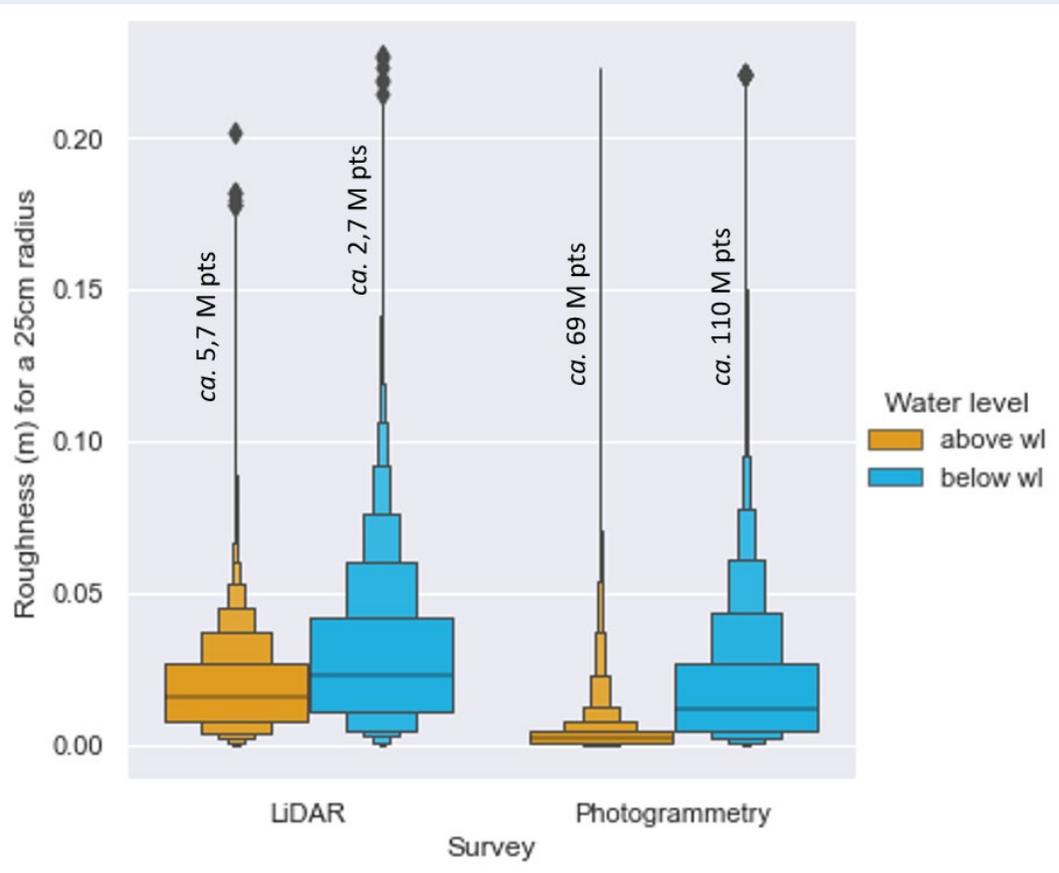
LiDAR



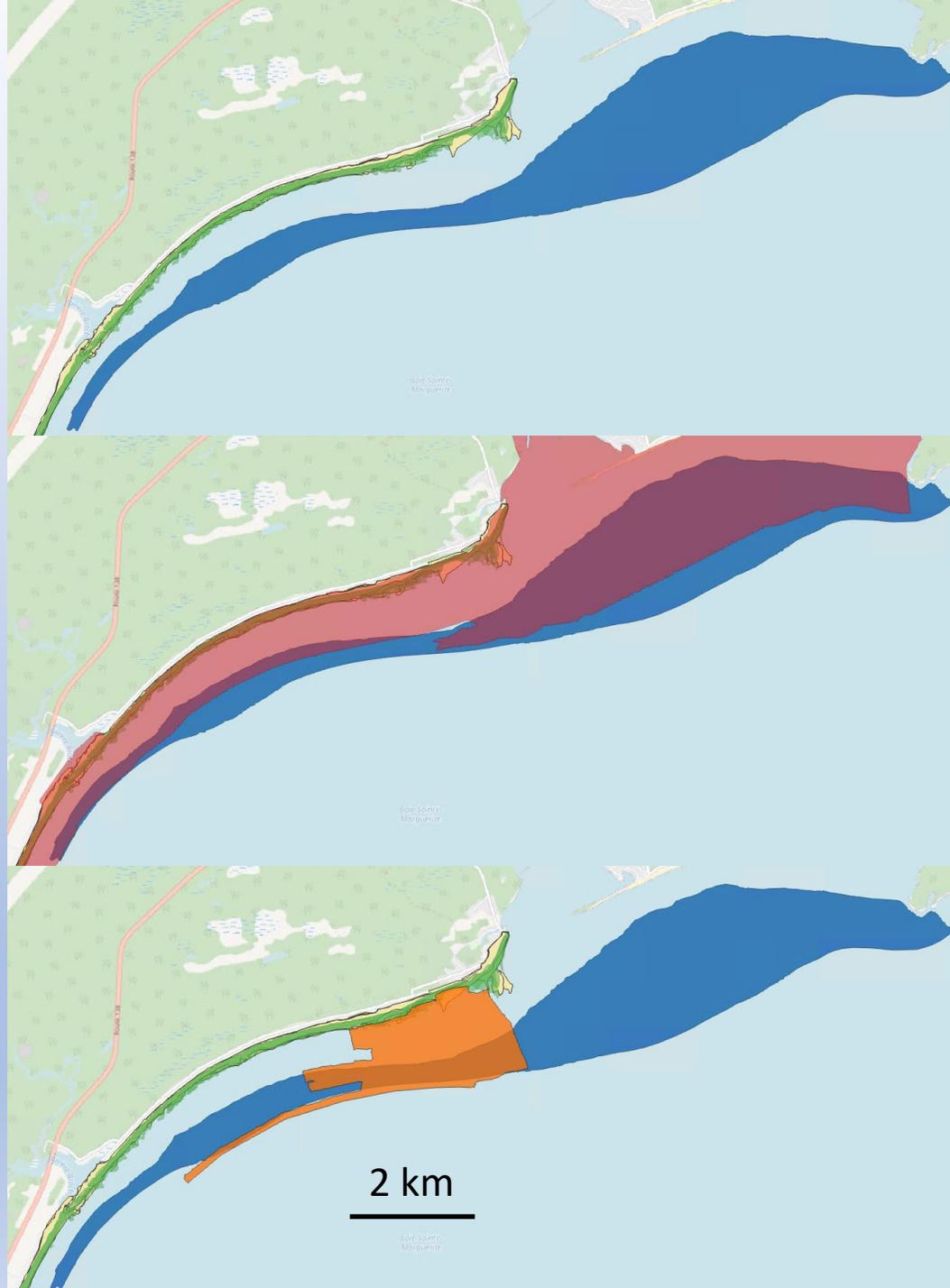
Photogrammetry



# CONSTRUCTION DE DEM TOPOBATHYMÉTRIQUES



**INTÉGRATION À  
DIFFÉRENTES ÉCHELLES  
TEMPORELLES ET  
SPATIALES**



**LiDAR aéroporté** 2006/2008/2014  
2017/2021

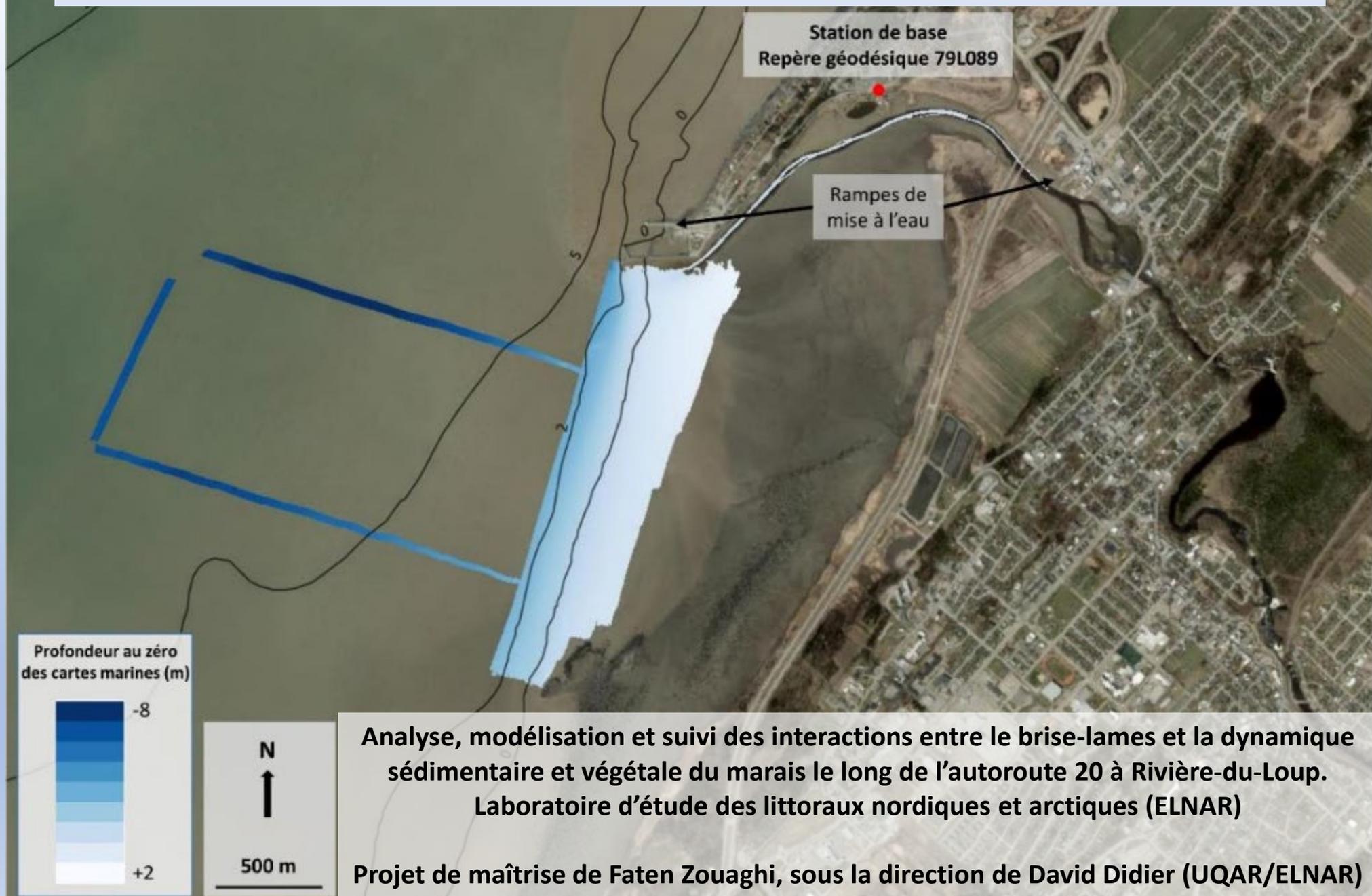
**LiDAR véhicule  
terrestre (LDGIZC)** 2017/2020

**Bathy MBES  
(LEH/CEN)** 2017

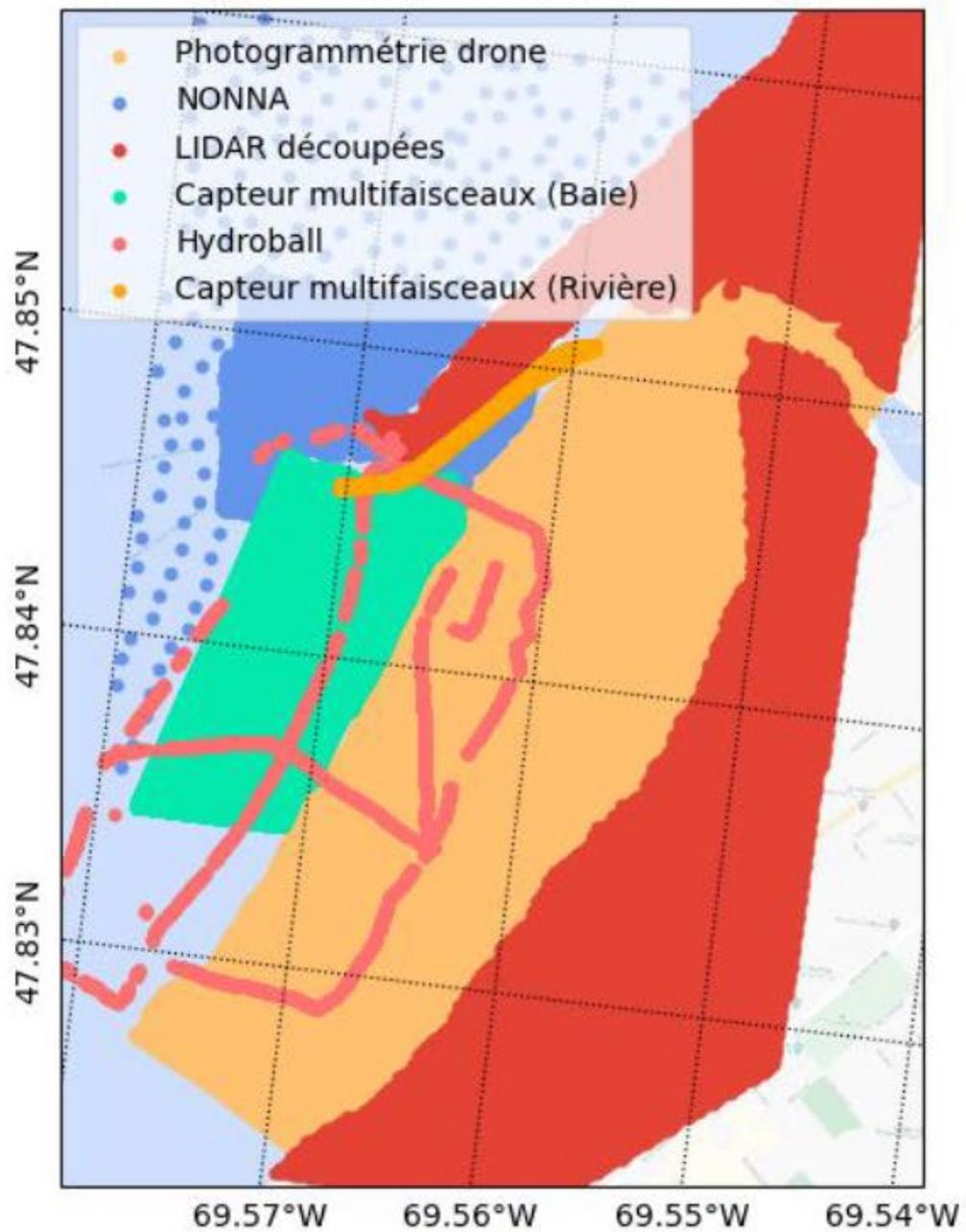
**LiDAR topobathy aéroporté** 2015/2017

**Bathy MBES motomarine** 2021

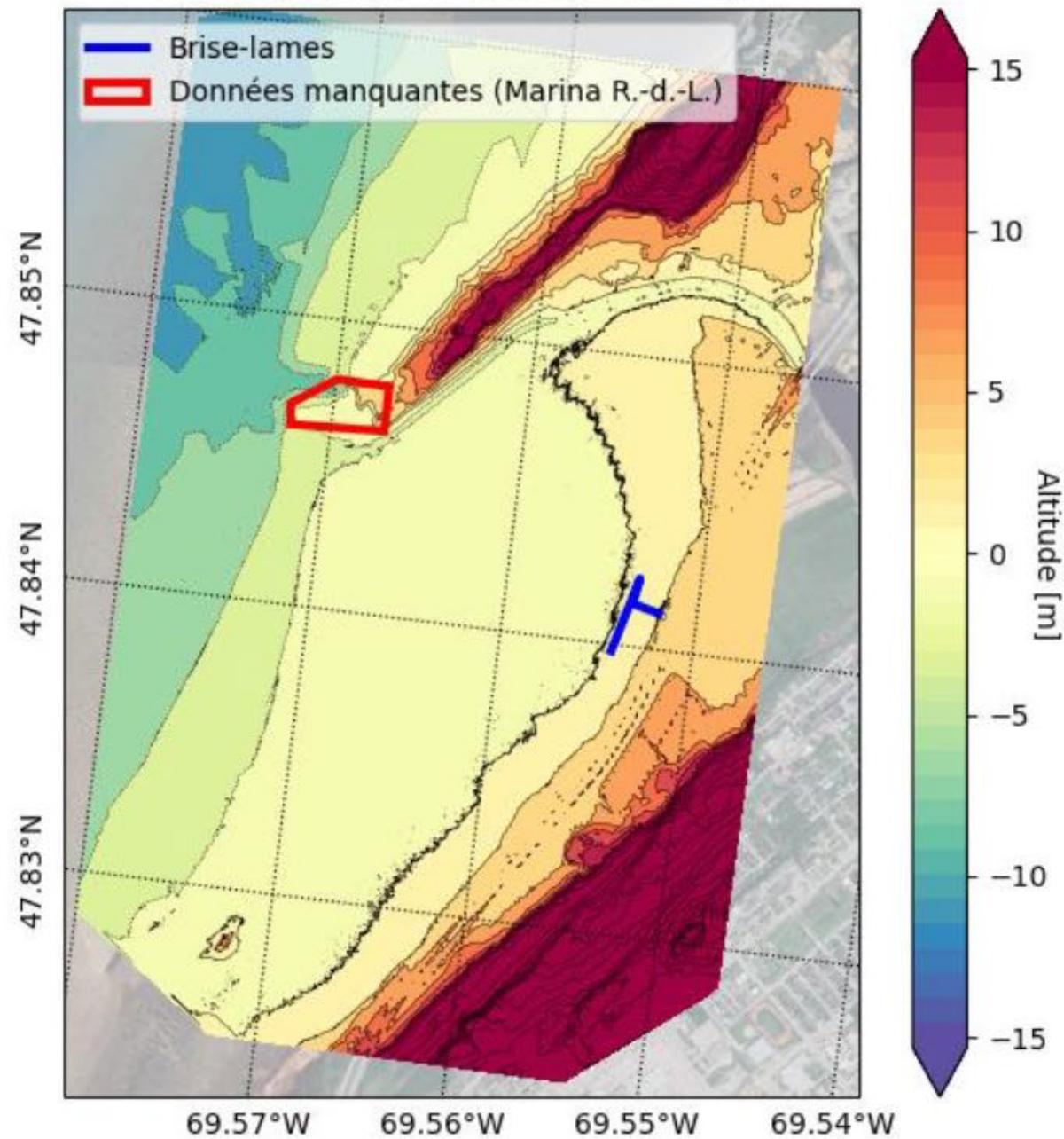
## II – SUIVI D'IMPACT DE MESURES DE PROTECTION : RIVIÈRE-DU-LOUP



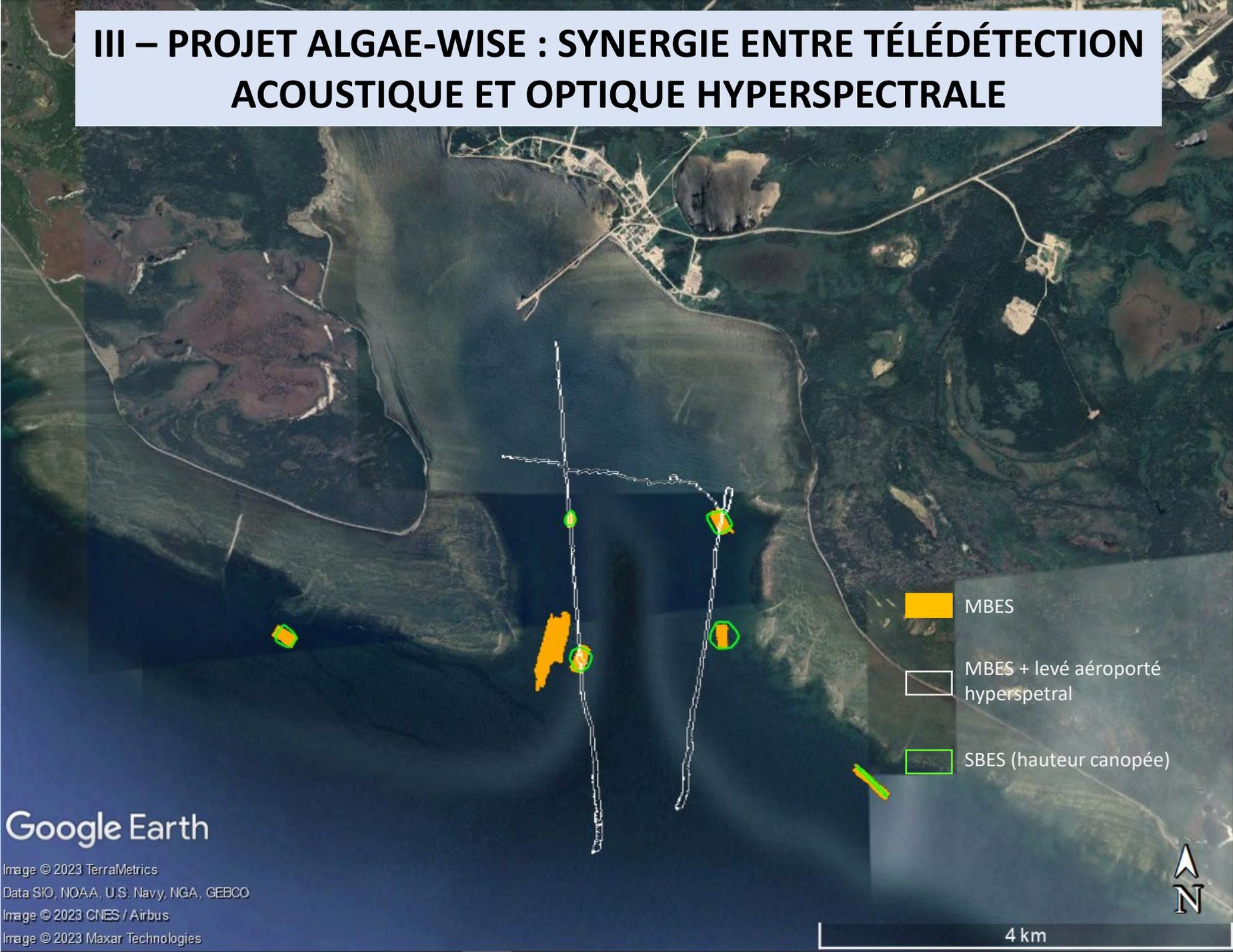
### Illustration des différents jeux de données



### Interpolation finale post-débiaisage

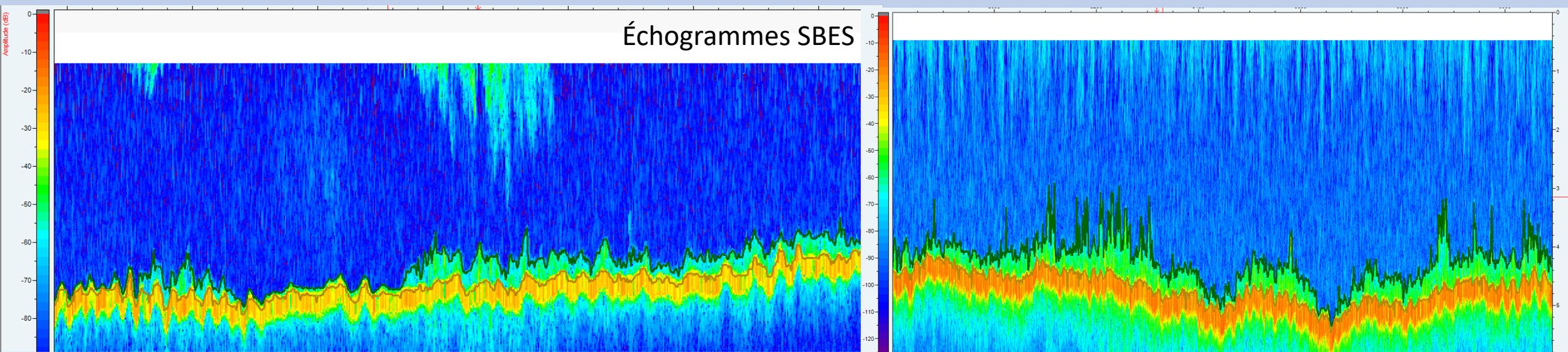
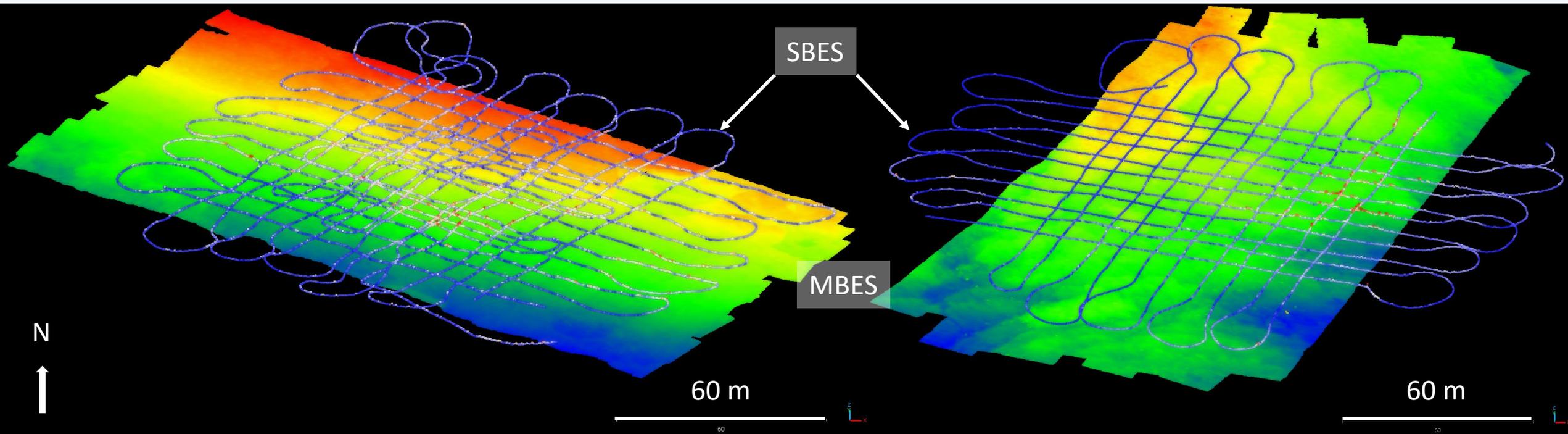


# III – PROJET ALGAE-WISE : SYNERGIE ENTRE TÉLÉDÉTECTION ACOUSTIQUE ET OPTIQUE HYPERSPECTRALE



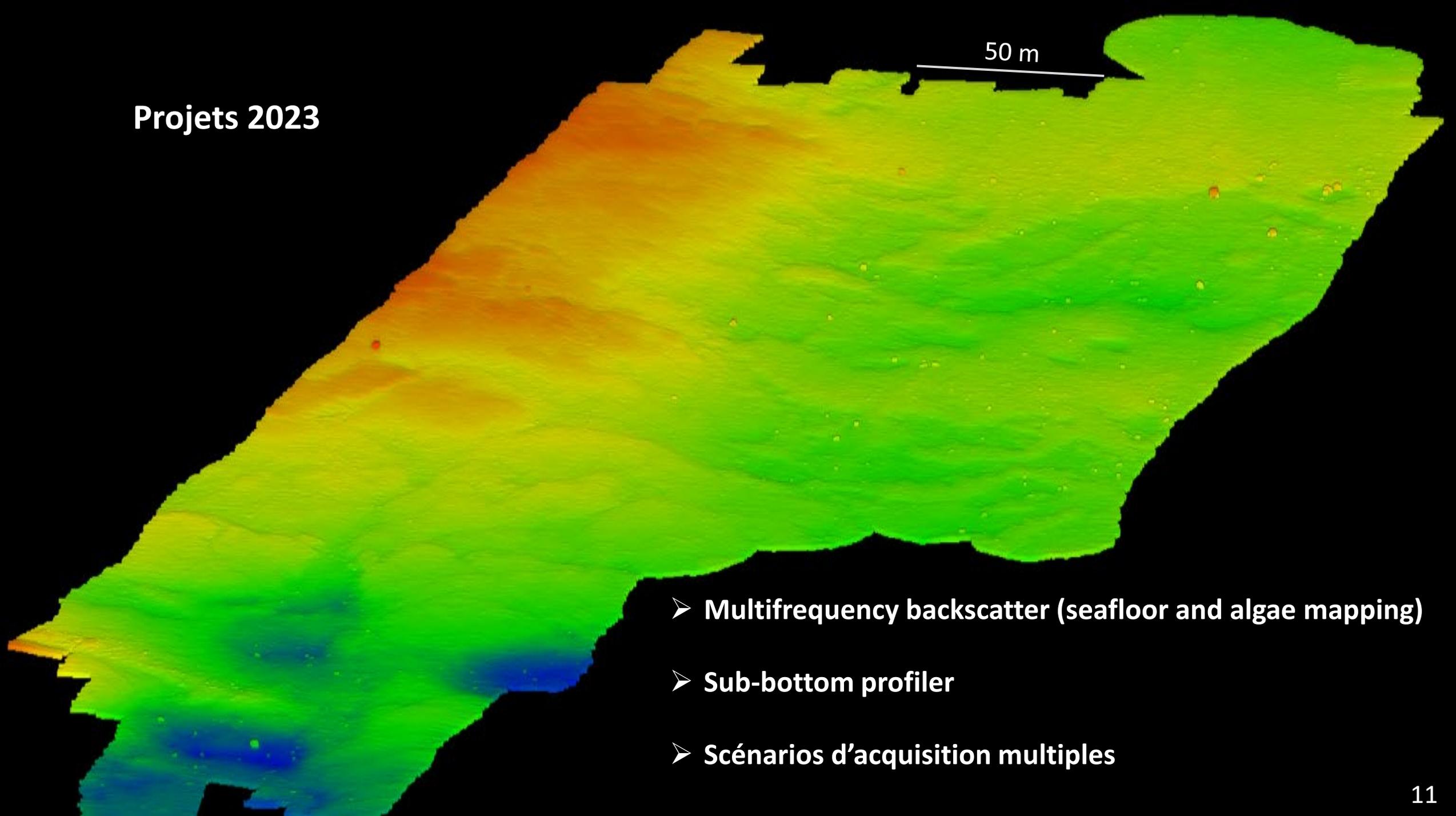
Google Earth

Image © 2023 TerraMetrics  
Data SIO, NOAA, U.S. Navy, NGA, GEBCO  
Image © 2023 CNES / Airbus  
Image © 2023 Maxar Technologies



## Projets 2023

50 m



- **Multifrequency backscatter (seafloor and algae mapping)**
- **Sub-bottom profiler**
- **Scénarios d'acquisition multiples**