

GEOSTOR TP 4 seismic monitoring - progress report Sept. 2023 -

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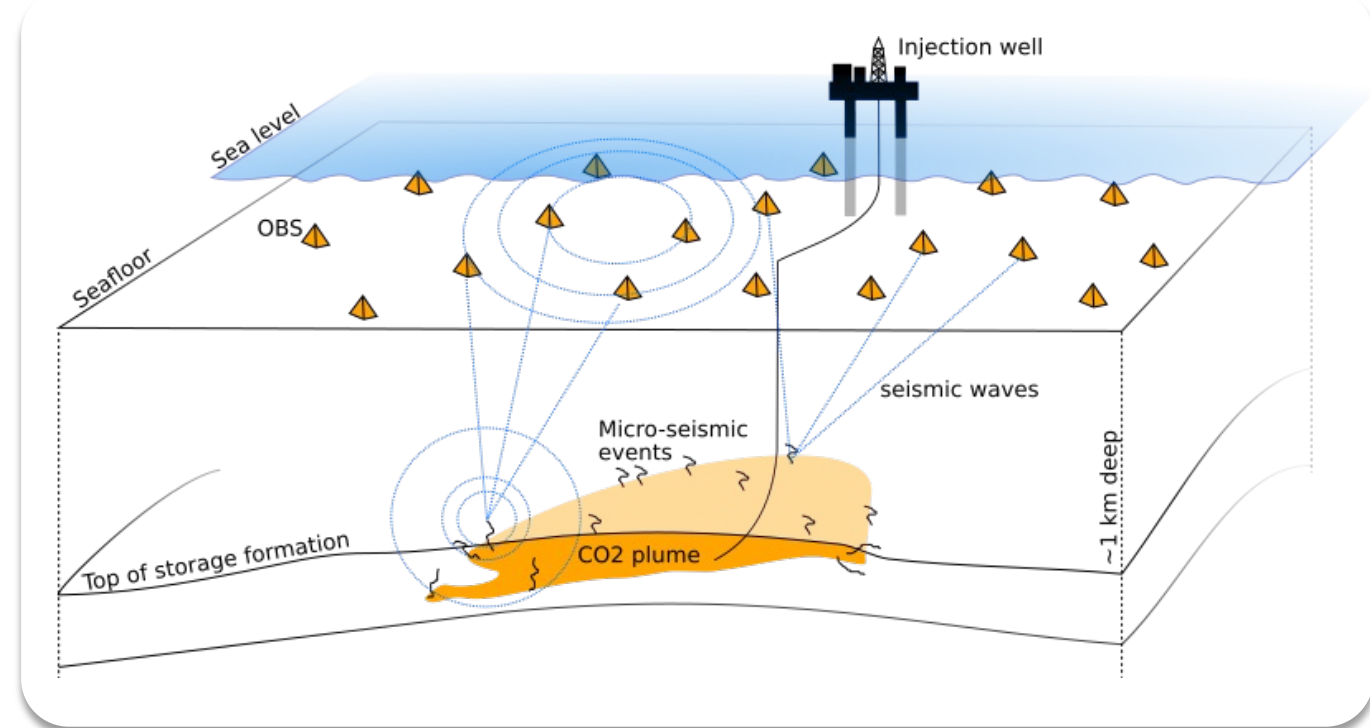


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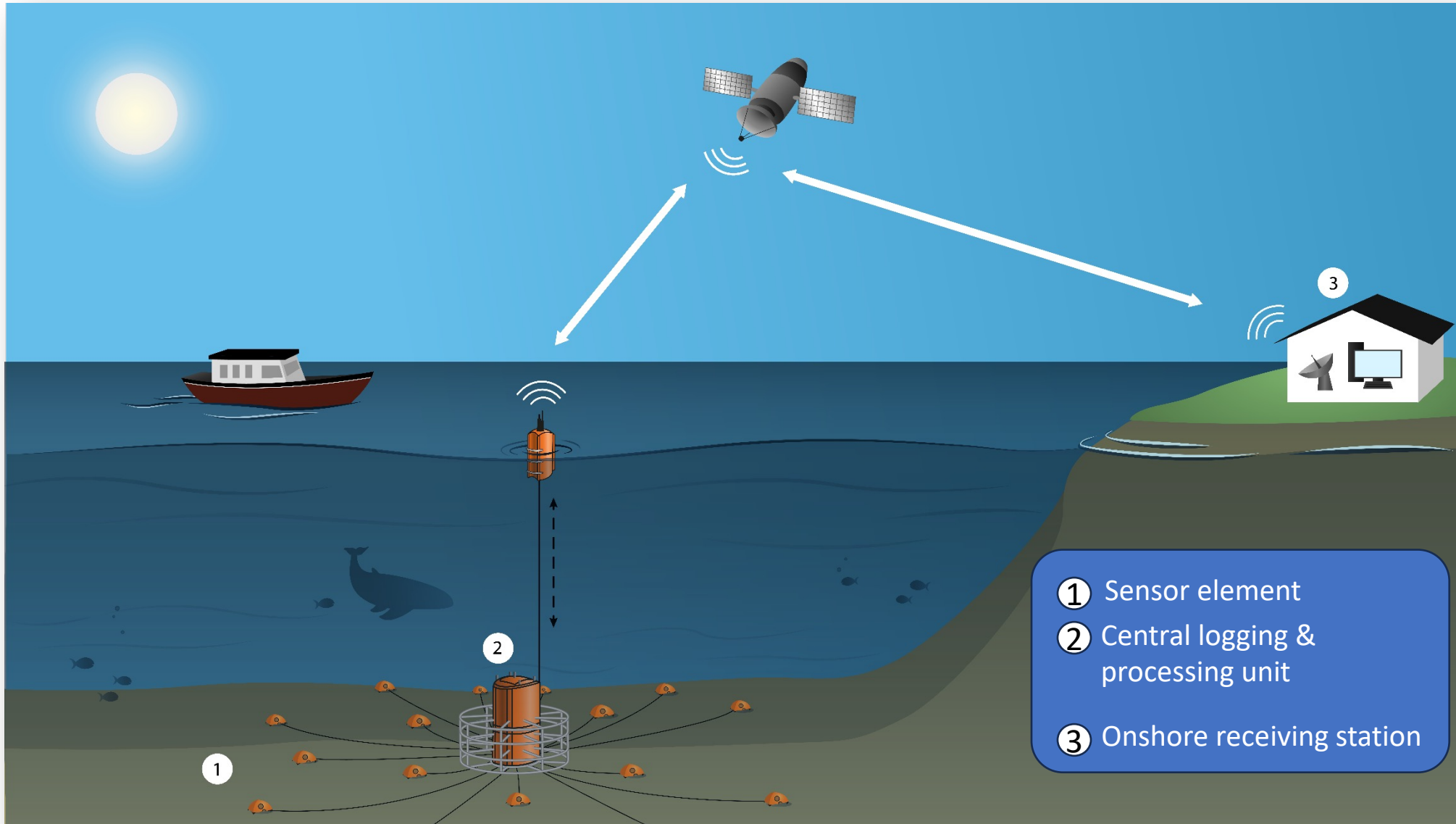
TP4: seismic monitoring - overview:

- Develop a system for passive reservoir monitoring, based on the deployment of ocean bottom seismometers (OBS).
- Due to its passive nature, the system is environmental friendly and minimum invasive.
- System will utilize the vibrations originating from the injection process itself & small-magnitude earthquakes.
- The system can track the injected CO₂-plume in the storage formation.

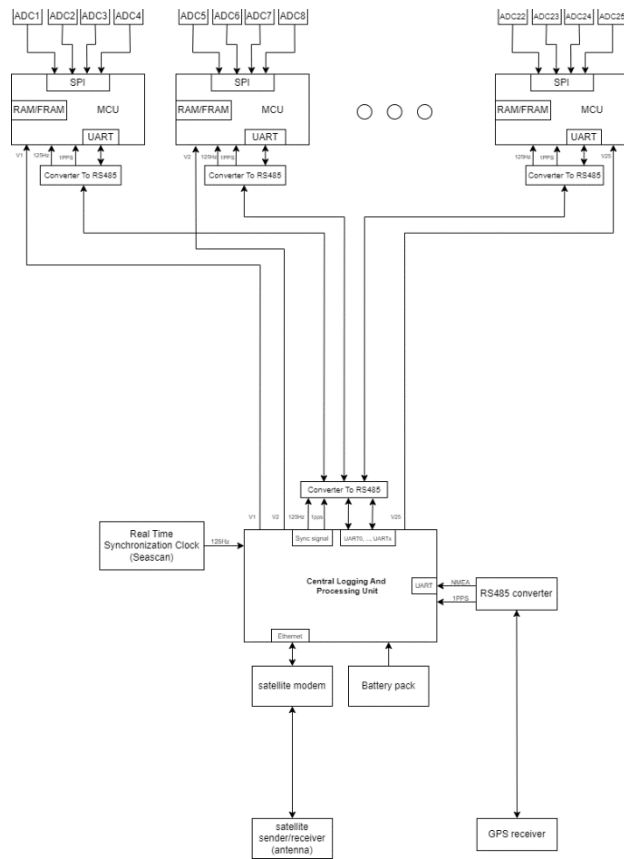


- The system will produce vast amounts of data, that need rapid processing, analysis and visualization. Experts in computational science are necessary to accomplish this and to facilitate up-scaling of this system.

K.U.M. Highlights: Draft concept of the monitoring system hardware








Conceptualization of the central logging & processing unit

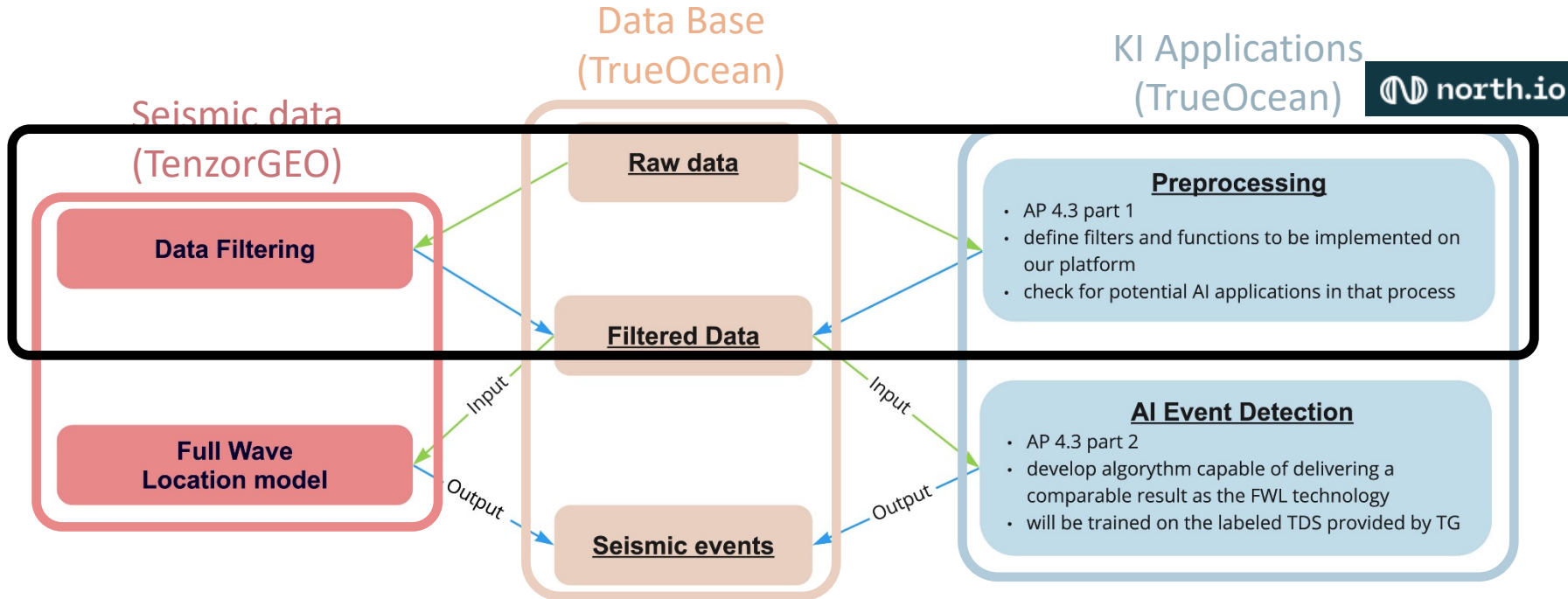


Example schematics of the electronics

Duties include:

-  Data aggregation
-  Processing
-  Data storage
-  Control unit/interface
-  Satellite communication

TrueOcean: AI-assisted processing and computing methods (WP4.2 & WP4.3) – Highlights



- Automatise filtering methods
 - Preprocessing module in TrueOcean
 - Identify best practices for marine data

