



Kartverket

National report Norway

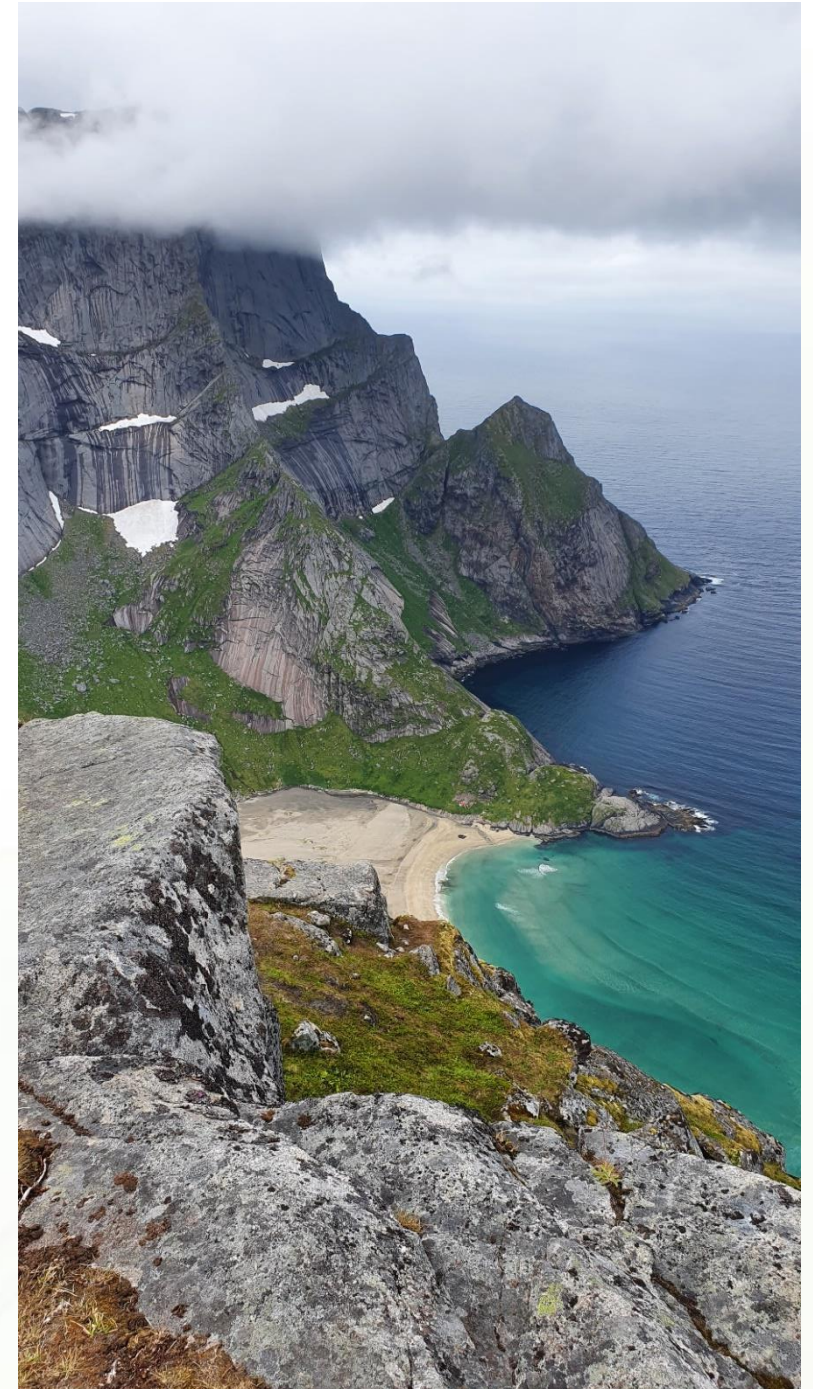
SAIHC19

29 – 31 August 2023, Mauritius



Highlights

- Norwegian Mapping Authority celebrates 250 years
- Marine Base Maps pilot project successfully completed
- Status S-100 implementation
- HYDRIS, our new production line in development
- Office location / constellation





Marine Base Maps for the Coastal Zone Norway

Is all about gathering detailed information and boosting the knowledge of the sea bed and marine coastal systems along Norway's coast - for a sustainable ocean economy.

Marine Grunnkart pilotprosjekt 2020-2022

Stavanger



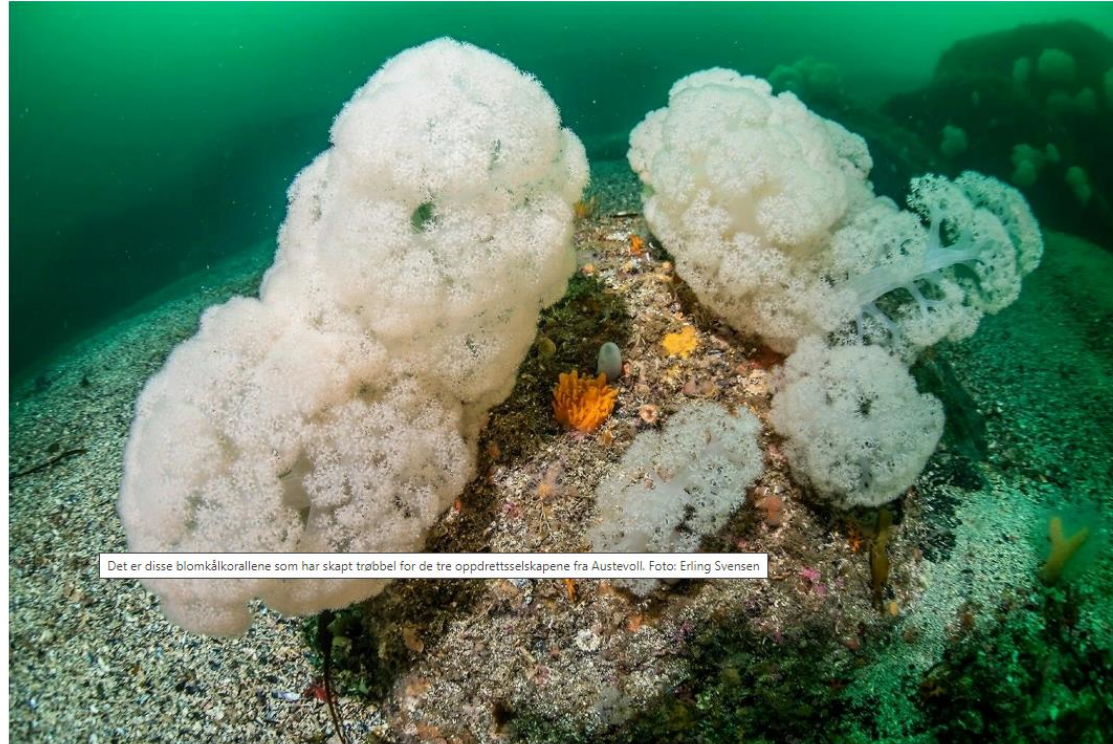
Ålesund og Giske



Skjervøy og Kvænangen



Consequences of lack of baseline knowledge



Det er disse blomkålkorallene som har skapt trøbbel for de tre oppdrettsselskapene fra Austevoll. Foto: Erling Svensen

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Tapte rettssak om blomkålkoraller

De tre oppdrettsselskapene Troland Lakseoppdrett, Austevoll Melaks og Langøylaks har tappt rettssaken der de ble nektet å drive oppdrett grunnet funn av blomkålkoraller.

From the Norwegian Environmental Department:

This lawsuit shows that had adequate baseline knowledge (bathymetry, geology, biology) been accessible before aquaculture industry applied for new locations, permission would not have been given and costs would have been saved

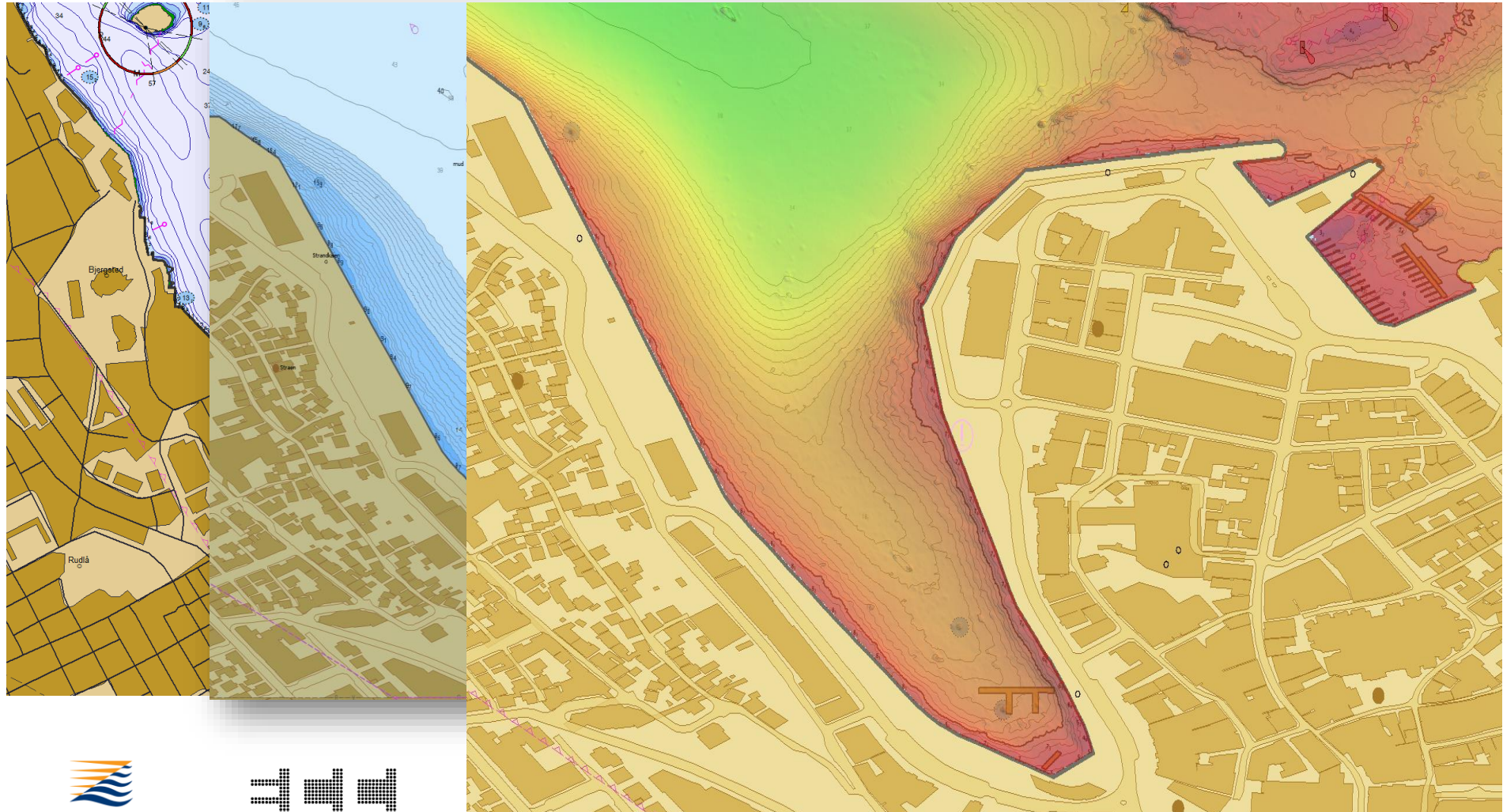
Coastal Zone Management in Stavanger

Access to marine basemaps has greatly improved the knowledge base for decision making.

Fisheries Directorate



New digital nautical charts



S-102





Elevation model

Water level

Cadaastre

Point cloud of port

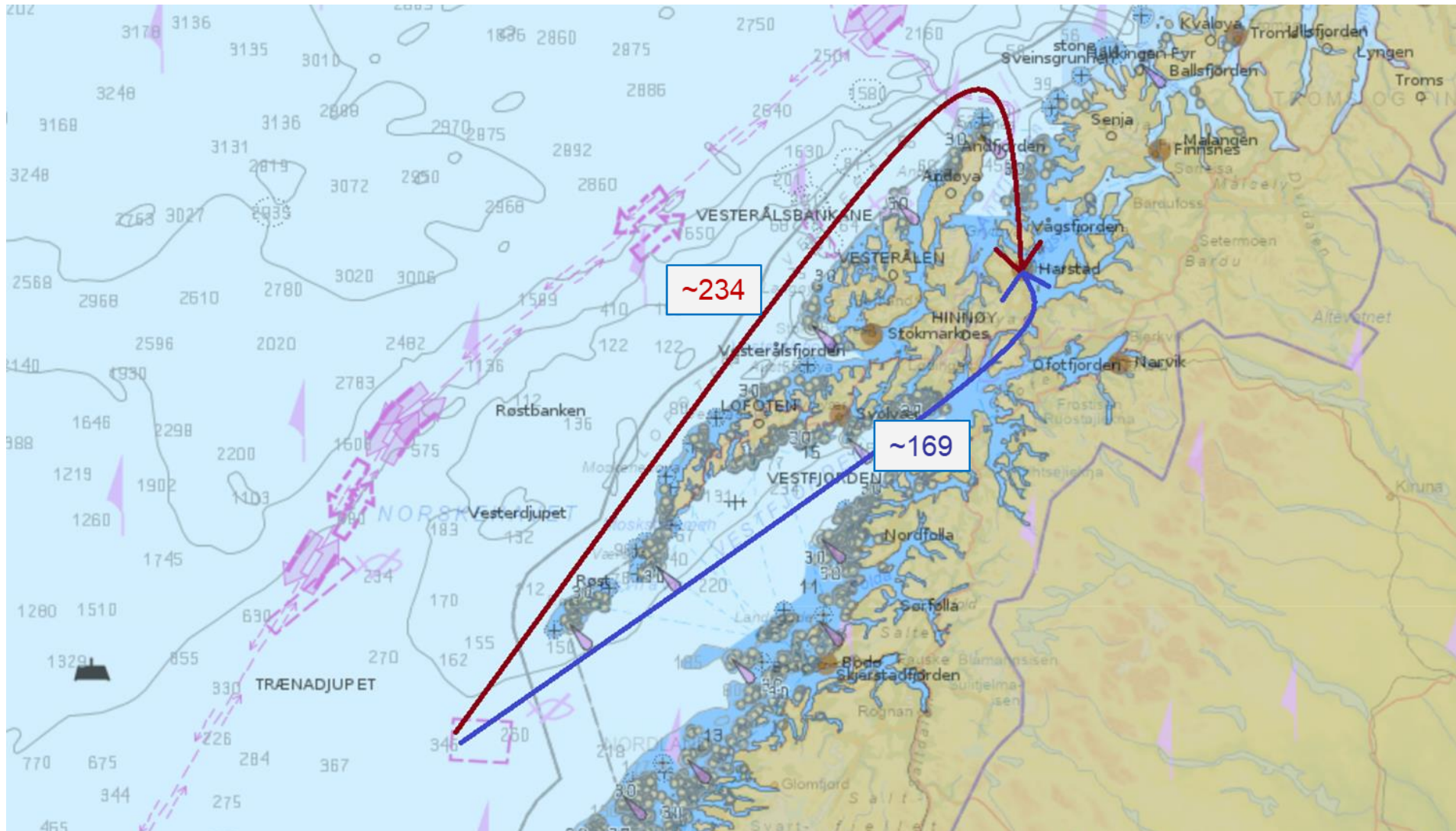
Standarized port data

Vegetation

Detailed bathymetry

Data from the Norwegian Mapping Authority / the Norwegian Hydrographic Office

Combination of S-102, S-104 and S-111, resulted in 65Nm shorter route, saving 2 tonns of LNG AND 5.5 TONNS OF co2





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HYDRIS

(Hydrographic Information System)



HYDRIS goals and vision

Vision

"HYDRIS is going to give the Sea Division technological boost and make reliable marine geodata easily accessible in a user-friendly and efficient way "

Goals 2026

Of all the available data,
80% is automatically
produced

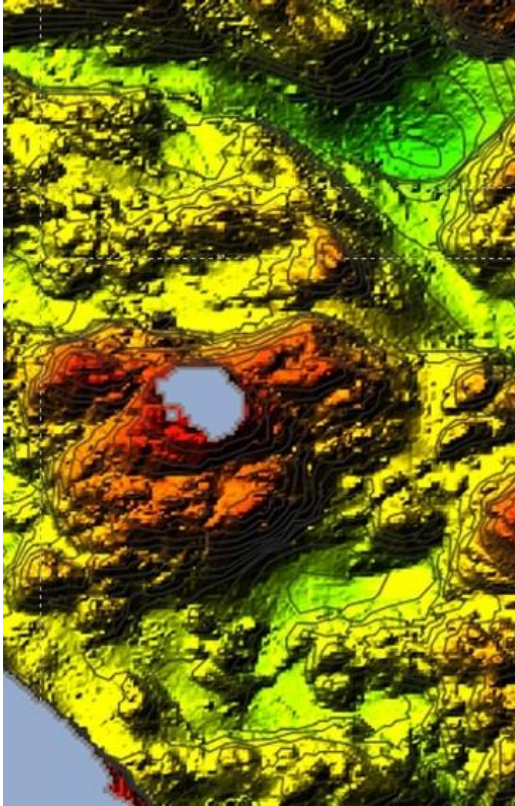
HYDRIS will make it
possible for the internal and
external users to make use
of our data in a modern way

HYDRIS will give us a technological boost and make reliable marine geodata easily accessible in a user-friendly and efficient way.

The new solution will be based on a modern technological platform that supports:

- FAIR principles emphasizing machine-actionability
- support a more efficient nautical production
- multiple/various digitization and data sharing solutions
- fast data access and effective bathymetric production (short processing time / increased automation)
- layered services and functional structure (allowing algorithmic, AI/ML, production etc. processes to run on top off the data)
- an integrated metadata management
- management of complete and original data (no or minimum generalization required)
- integrated product and data sharing solutions (machine-to-machine, APIs, etc.).

New data management system – What's new?



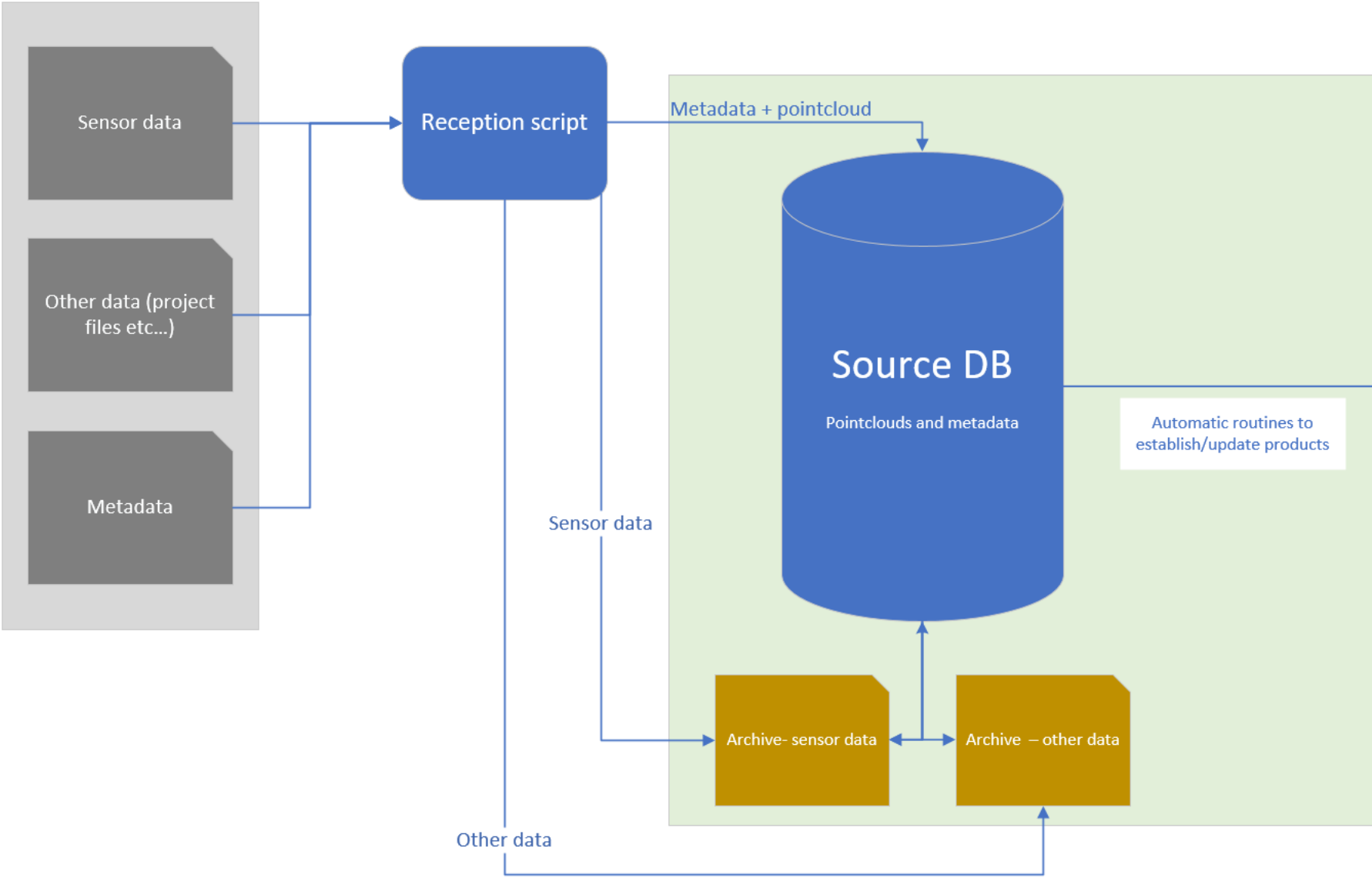
Hybas (old system):

- File based system (Linux)
- Archive (file server)
- Outdated access solution

«Hydris» (new system):

- Database («Kilden») for point clouds and new metadata management
- System is rigged to be able to automate processes; Python scripting, Process designer, Automation hub
- New and supported system (commercial off-the-shelf (COTS))
- Improved security
- New and improved archive (file server)
- Modern user-friendly system for access

New data management solution



Questions?

