oceanbox.io
redefining oceanography

Ocean Intelligence

What's artificial about it?

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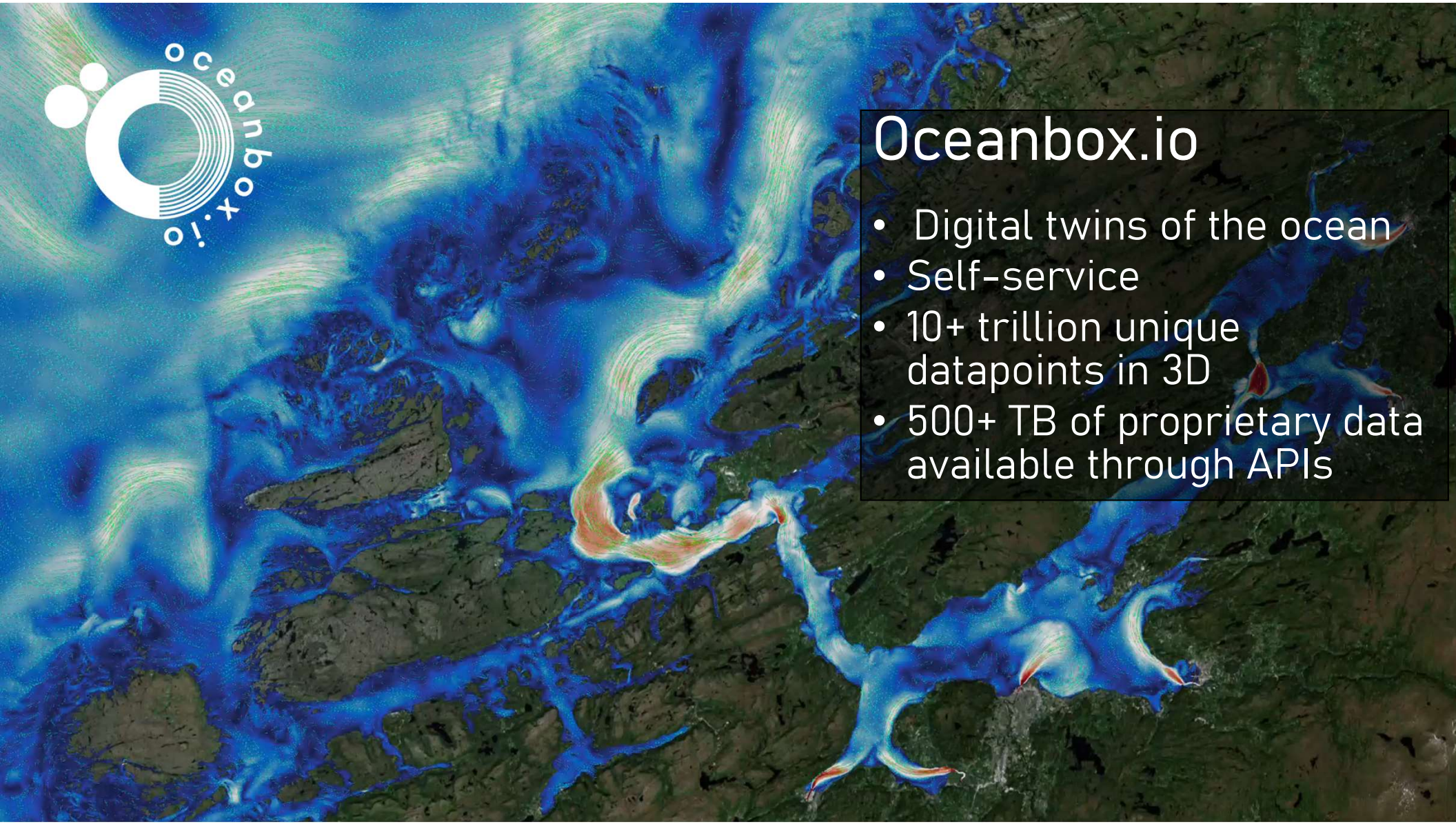
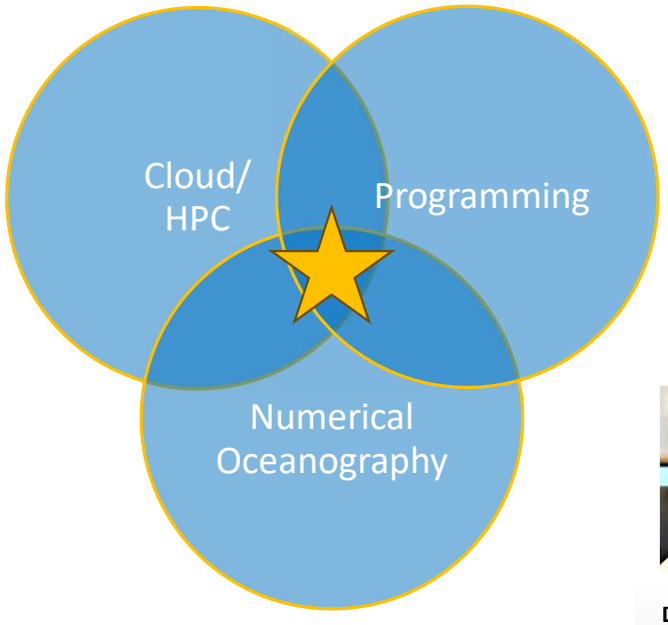
04.06.2025


oceanbox.io
Oceanbox.io
• Digital twins of the ocean
• Self-service
• 10+ trillion unique datapoints in 3D
• 500+ TB of proprietary data available through APIs

THE OCEANBOX TEAM



Dr. Ole Anders Nøst
CSO
More than 30 years of experience in dynamic Oceanography. Since 2010 he has worked on developing a high-resolution ocean model for the coast of Norway

Dr. Frank Gaardsted
Senior Oceanographer
PhD in Oceanography and Marine Ecology. Has worked more than 10 years with numerical modelling connected to coastline oceanography

Dr. Isabella Rosso
Senior Oceanographer
Isa has a PhD in oceanography from The Australian National University and 6 years of experience from the Scripps Institute in California

Hilde S. Iversen
CMO
Master of Economics. Worked 5 years with data analytics, business intelligence and marketing in Serit

Dr. Jonas Juselius
CTO
Quantum Chemist with more than 20 years of experience with HPC, numerical modelling, agile software development and functional programming

Dr. Stig Rune Jensen
Senior Scientist
Quantum Chemist and expert in numerical methods and modelling. HPC-specialist within parallel programming and GPGPU.

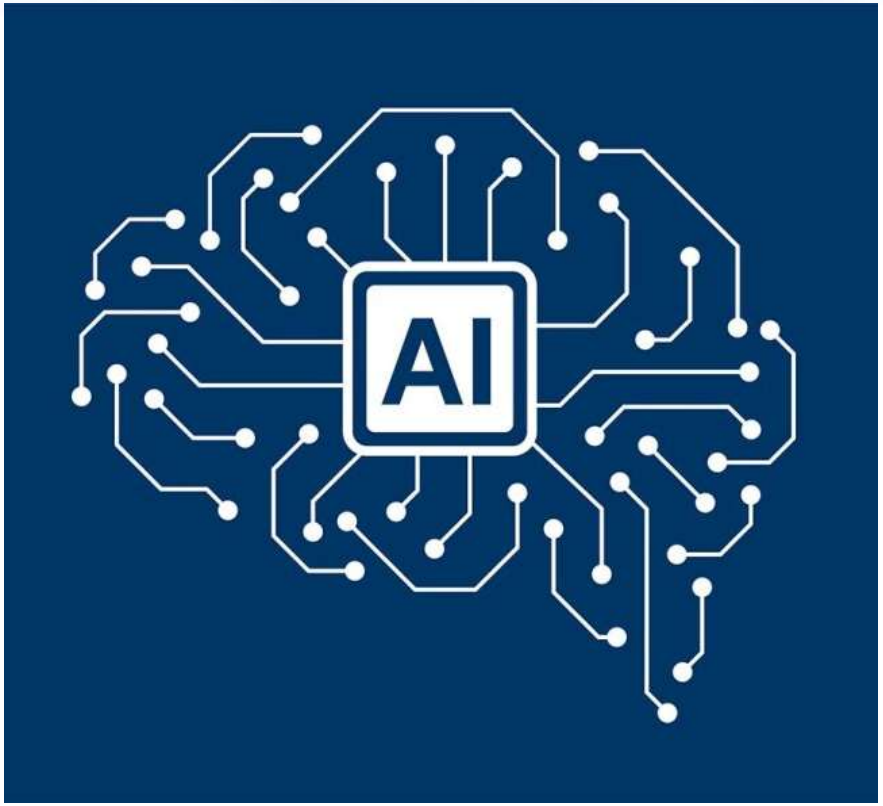
Dr. Radovan Bast
Senior Scientist
Theoretical Chemist from Marburg and Strasbourg. Has extensive experience with numerical modelling. Author of the «CMake Cookbook»

Moritz Jörg
Software Developer
Master of Computer Science. Experienced programmer and DevOps engineer who also knows his way around Kubernetes

Svenn A. Hanssen
CEO
Computer Scientist with more than 25 years experience with strategic tech leadership, SaaS and innovation in public and private sector

AI TRAITS

- Pose questions and get qualified answers
- Real-life outcome is what matters
- **What** is more important than **how**
- Speed and efficiency matters
- No data, no model



AI CONCEPTUALLY

DATA

+

ANNOTATIONS

+

TRAINING

Black box

OI CONCEPTUALLY

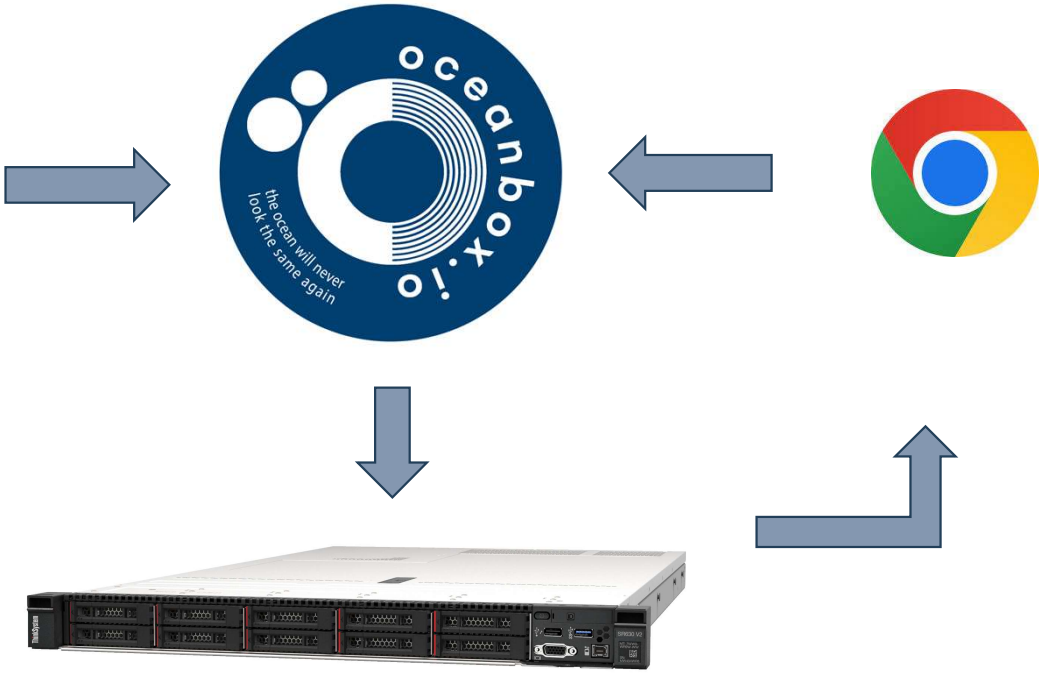
$$\frac{\partial L}{\partial q} - \frac{d}{d t}\left(\frac{\partial L}{\partial \dot{q}}\right) = 0.$$

+

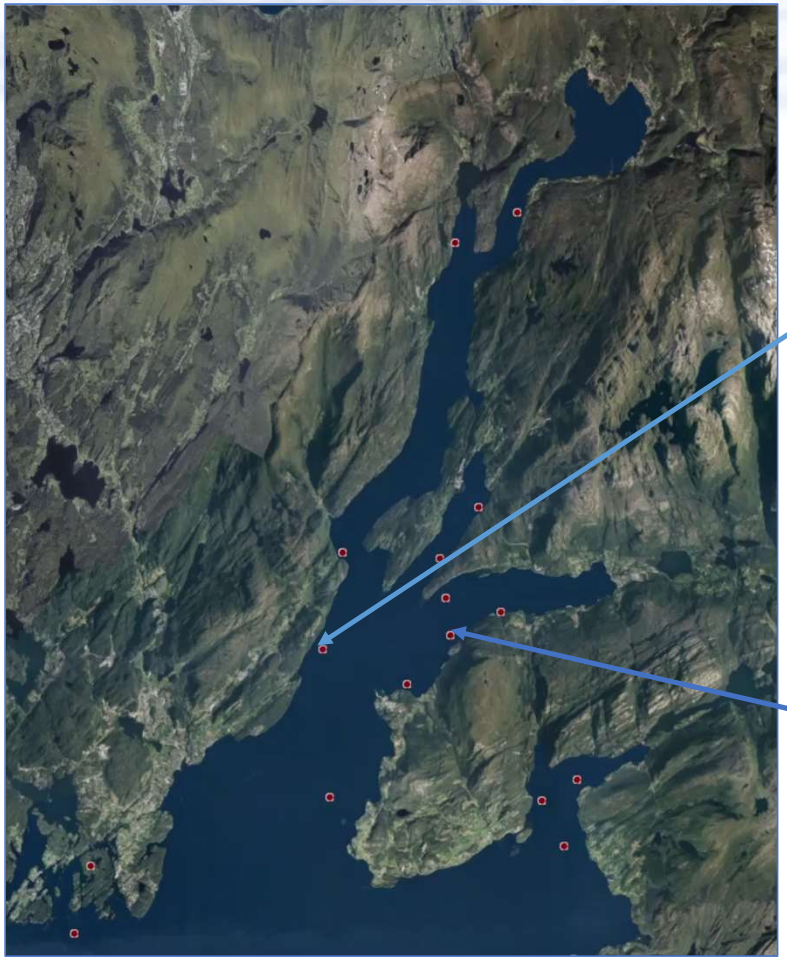
$$\rho\left(\frac{\partial \mathbf{v}}{\partial t} + \mathbf{v}\cdot\nabla\mathbf{v}\right) = -p + \nabla\cdot\mathsf{T} + \mathbf{f}$$

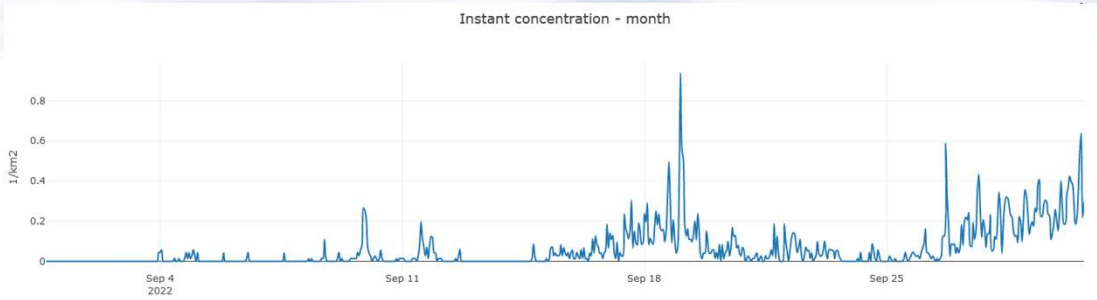
+

BOUNDARY DATA
Ocean, weather, river



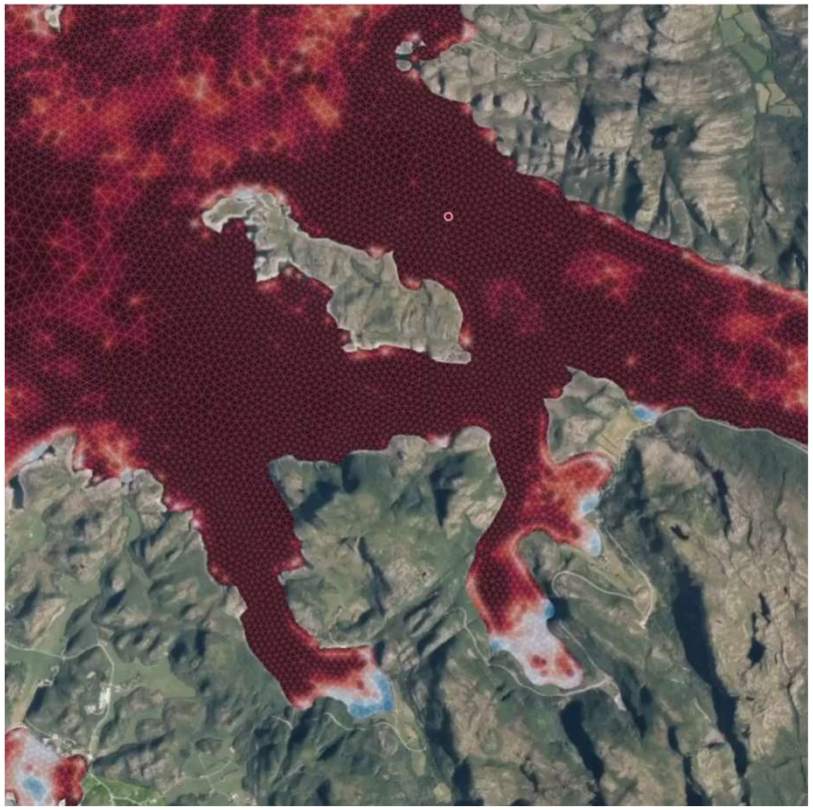
PATHOGEN PATHWAYS





DOWNWELLING AND THE TRANSPORT OF SALMON LICE

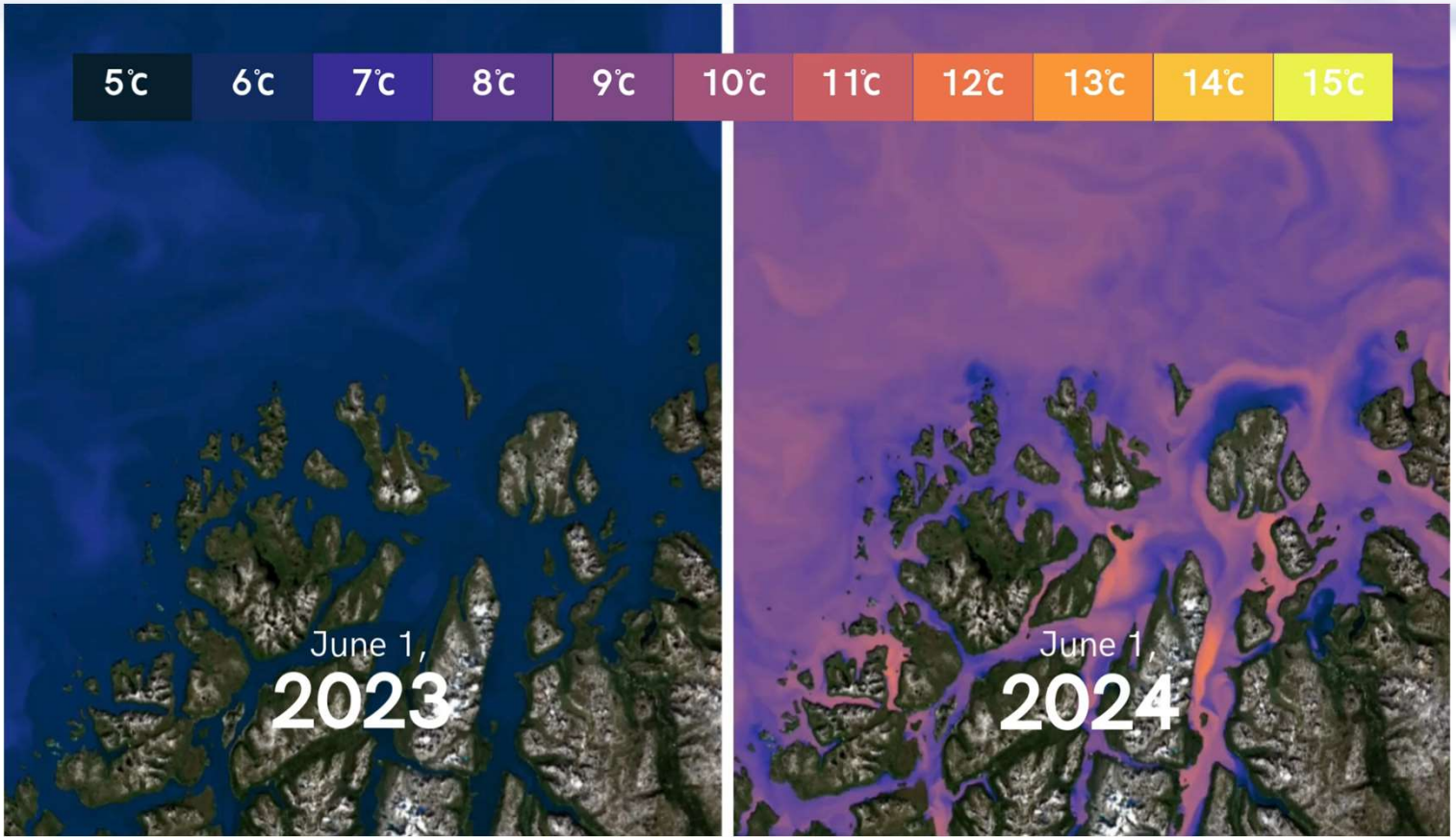
Lus > 25m



Lus < 25m

DEPOSITION OF SEDIMENTS AND AZE CONTOURS

SEA TEMPERATURES IN THE ARCTIC

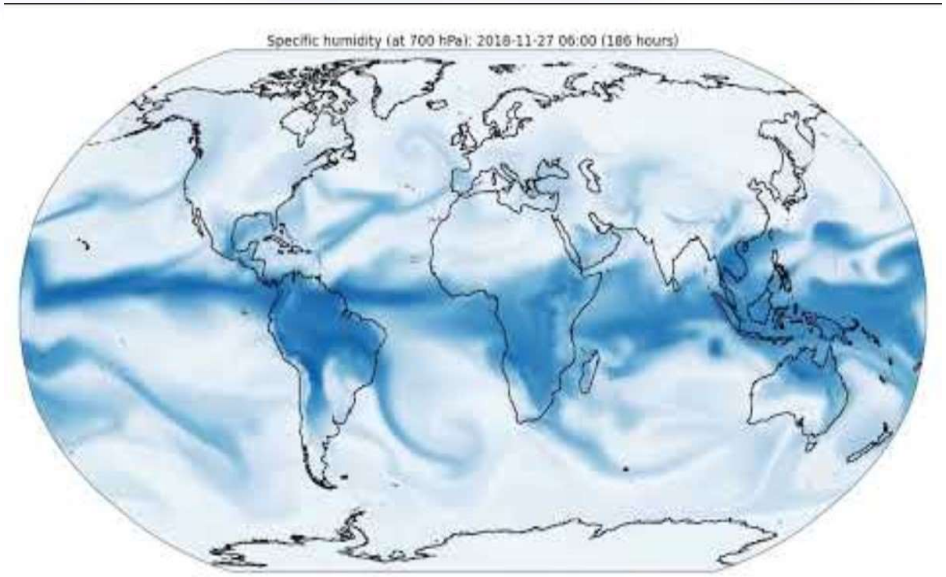


WHAT CAN AI DO FOR US IN THE FUTURE?

Oceanbox is generating the datasets for future AI models:

- Local corrections
- Predictions
- Insights
- Faster more cost-effective modeling

All models are artificial, and intelligence is called for when we apply them.



Google DeepMind's GraphCast (11/2023)

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