

Through partnerships with Spire and Theyr, Syroco leverages maritime weather and routing optimisation for reducing ship emissions

Spire's space-powered weather forecasting and Theyr's AI-driven voyage optimisation are now available for all users of Syroco EfficientShip to optimise routing and configuration of ships, reducing fuel consumption and carbon emissions

October 12, 2023 - Syroco, the Climate Tech startup that supports the energy transition of maritime transportation, announced today that it is partnering with Spire, a global provider of space-based data, analytics and services, and Theyr, a technology company specialising in AI voyage optimisation solutions.

Under the terms of the partnerships, Theyr will be delivering to the Syroco EfficientShip digital twin platform their state of the art, multi objective performance optimisation algorithms, and Spire their highly accurate metocean (weather and sea conditions) data. Leveraging these complementary embedded technologies, the digital twin platform computes optimised routes that reduce fuel consumption and emissions while accounting for constraints such as expected time of arrival.

Space powered weather data

With the world's largest constellation of 100+ multipurpose satellites that use radio occultation technology, Spire captures precise atmospheric measurements and delivers high-quality weather data to enhance forecasting accuracy. Spire has revolutionised the way weather information is gathered, offering high-quality observations and predictions of metocean data.

Advanced Voyage Optimisation based on a Genetic Algorithm

Theyr's route optimisation is the first AI-based multi-objective optimisation engine for the shipping industry, capable of simultaneously optimising for objectives that include time, fuels and emissions. Using high fidelity metocean data, the solution's genetic algorithms result from a decade of academic research and development from the AI team at the

University of Southampton and the Alan Turing Institute. Their's solution features a unique modular design for third-party integration.

Alex Caizergues, Chief Executive Officer and Co-founder of Syroco, explained: "Syroco has chosen to partner with best-in-class technology providers to deliver weather-optimised routes to our users. Integrating Their's routing engine and Spire's space-powered weather data with Syroco EfficientShip, we are able to offer a world-class multiobjective voyage optimisation solution that produces actionable insights for ship operation and has a measurable impact on fuel consumption and emissions."

Peter Mantel, Chief Commercial Officer of Their, added: "It has been an absolute pleasure to work closely with our partners by integrating Syroco's high-fidelity digital twins of ships and Spire's Weather Data Services into our T-VOS Voyage Optimisation Performance Engine, which is now commercially available in the Syroco EfficientShip digital platform. This is an excellent example of how industry can partner to deliver operational efficiencies and significantly reduce the carbon footprint for each voyage."

Mike Eilts, General Manager of Weather and Earth Intelligence at Spire, further added: "Accurate weather information is critical to optimising maritime routes and reducing fuel consumption and emissions. By integrating our weather data into Syroco's platform, we're taking a significant step toward ensuring safer and more efficient voyages while significantly contributing to environmental sustainability."

About Syroco

Syroco is a Climate Tech startup that supports the energy transition of maritime transportation by providing fleet owners and operators with a platform to evaluate and improve the efficiency and impact of ships. Using pioneering challenges as a driver for innovation, the startup was born from the complementary expertise of its founders in the scaling of hypergrowth startups, data and artificial intelligence, naval architecture and racing boat design, extreme sports and offshore racing.

Visit Syroco on <https://syro.co>, follow Syroco on Twitter: <https://twitter.com/SyrocoLab> and on LinkedIn: <https://www.linkedin.com/company/syroco>.

Syroco press contacts:

Alix Bourgeois - alix@agence-op.fr - +33 6 07 55 25 52

Anaise Vion - anaise@agence-op.fr - +33 6 78 39 99 78

About Spire Global, Inc.

Spire (NYSE: SPIR) is a global provider of space-based data, analytics and space services, offering unique datasets and powerful insights about Earth so that organisations can make decisions with confidence in a rapidly changing world. Spire builds, owns, and operates a fully deployed satellite

constellation that observes the Earth in real time using radio frequency technology. The data acquired by Spire's satellites provides global weather intelligence, ship and plane movements, and spoofing and jamming detection to better predict how their patterns impact economies, global security, business operations and the environment. Spire also offers Space as a Service solutions that empower customers to leverage its established infrastructure to put their business in space. Spire has nine offices across the U.S., Canada, UK, Luxembourg, Germany and Singapore. To learn more, visit spire.com.

Spire Global press contacts:

Sarah Freeman - Communications Manager - Sarah.Freeman@spire.com

Benjamin Hackman - Head of Investor Relations - Benjamin.Hackman@spire.com

About Theyr

The T-VOS Optimisation Engine has been developed in partnership with the University of Southampton and the Alan Turing Institute. It utilises a world class multi-objective genetic algorithm that optimises voyages simultaneously for safety, weather, departure and arrival times, fuel, and carbon footprint, allowing one to select optimal routes and voyages.

Website: <https://theyr.com/>

Theyr press contacts:

Eszter Honti - Marketing Manager - Tel: 44 (0) 207 396 1006 - esther.honti@theyr.com

Peter Mantel - Chief Commercial Officer - peter.mantel@theyr.com